Attachments

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ATTACHMENT A:

Conceptual Stage Relocation Plan

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CONCEPTUAL STAGE RELOCATION PLAN

Project:

South Pleasant View Road / CTH M
At Mid Town Road
Town of Verona, Dane County

Prepared for:

City of Madison and
MSA Professional Services
2901 International Lane, Ste 300
Madison, WI 53704

Prepared by:

G. J. Miesbauer and Associates, Inc.
P.O. Box 470, Belleville, WI 53508
Phone (608) 424-3330
gjmiesbauer.com

October 31, 2014

G.J. Miesbauer & Associates, Inc.
RIGHT OF WAY ACQUISITION SPECIALISTS

PURPOSE

The purpose of this Conceptual Stage Relocation Plan is to conform to the project planning requirements of 49 CFR Part 24C and Section 32 Wisconsin Statutes. The intent is to address each proposed alignment alternative to assess potential impacts to individuals and businesses being displaced and identify any divisive or disruptive impacts to neighborhoods, community facilities or to the economic vitality of the area. The Conceptual Stage Relocation Plan will provide:

- A detailed estimate of residential entities to be displaced.
- A detailed estimate of probable relocation costs, i.e. relocation assistance cost, replacement costs, moving costs, etc.
- Provide assurance that any displacement of an individual or business will be conducted in compliance with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970, as amended.

Project Description

South Pleasant View Road/CTH M is a principal arterial servicing the southwest side of Madison and the city of Verona. The CTH M corridor is currently a rural, two-lane facility, with traffic signals located at the intersections of CTH PD and Mid Town Road. Current and future projected traffic and bicycle/pedestrian demand have made the existing facility functionally obsolete. The current single lane geometry and signalized intersections do not have enough capacity to accommodate existing and forecasted traffic volumes safely. Intersections and other access points are failing on an operational level, with severe backups and delays during peak travel hours.

The proposed project is located in Dane County, Wisconsin in the Cities of Madison and Verona and the Towns of Verona and Middleton. The proposed action seeks to expand CTH M from a two-lane highway to a four-lane urban arterial with a raised median and multiuse path. Intersection improvements are proposed for the CTH M/Midtown Road and CTH M/CTH PD intersections. The length of the project is 2.9 miles.

The project purpose is to:

- provide a safe and serviceable corridor that is convenient for area businesses, residents and the traveling public
- deliver acceptable operating conditions for existing and future traffic volumes while accommodating future planned growth along the corridor and in the immediate vicinity
- provide well-designed intersections that minimize impacts to the local surrounding landscape

G.J. Miesbauer & Associates, Inc.
RIGHT OF WAY ACQUISITION SPECIALISTS

Project Description

Project Map

Demographic Information on Communities Affected

Location		Dane County	Town of Verona
Population		488,073	1948
Race %	White	81.9%	95.5%
	African American	5.1%	0.8%
	Native American	0.3%	0.2%
	Asian	4.7%	0%
	Hispanic	5.9%	1.5%
	Other	2.1%	0.8%
Age Profile	Under 20 yrs	24.7%	24.8%
	21 to 39	32.5%	16.4%
	40 to 59	27.3%	36.6%
	Over 60	15.5%	22.2%
Persons per household		2.33	2.61

This table indicates race percentages and age profiles for Dane County as a whole and also for the Town of Verona. The statistics show a high degree of uniformity between the county and the municipality. Therefore, it is concluded that the potential displacees should be successful in finding replacement housing in neighborhoods with similar characteristics to their current locations. Information was obtained from the 2010 U.S. Census Bureau.

Divisive or Disruptive Effects and Other Impacts on the Communities and Neighborhoods

There appears to be no unusual circumstances regarding the potential relocations. This project will have a very minimal effect on the communities that remain after the relocation process. In addition, no significant disruption effects should exist, with the possible exception of the construction period. No known concentrations of predominant ethic minority, elderly, or handicapped people are located within the study area.

Estimate of Relocation Displacements, Discussion of Potential Problems and Solutions

This project has the potential of impacting one residential property to the extent to cause their relocation. See the attached exhibit for a project plan view showing the potential impact to the property. The property is residential in nature and improved with a single family home. The specifics of the property is detail below.

Residential Properties:

Address	Status	Home size	# of bdrms	Assessed Value	Replacement Housing Payment/Interest and closing	Moving Actual / Fixed
6987 Midtown Road	Owner Occupied	2300	3	$203,500	$31,000 / $5,000	$2,150 / $5,000

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Inventory of Residential Replacement Properties

The local real estate market has been reviewed. This review included a survey of homes for sale from the South Central Wisconsin Multiple Listing Service and homes recently sold from the South Central Wisconsin Multiple Listing Service. Statistics from the Wisconsin Department of Revenue was also reviewed.

Residential Displacement:

The subject property is improved with a 1928 1 ½ story brick school house converted into a single family, 3 bedroom home, 2300 sq. ft., with 6 total rooms and 2 full baths with a detached garage. The site is situated on a corner intersection and is a 1.3 acre, wooded residential zoned lot.

2014 Property records for the Town of Verona, Dane County assessment:

Land:	$69,800
Improvements:	$133,700 (House value is 129,300, Garage value is $4,400)
Total Value:	$203,500

A study of 3, 4, and 5 bedroom homes the Towns of Verona found a total of 86 recently sold with a median price of $474,790 with an average of 93 days on the market. A October 2014 Multiple Listing Service search of all active 3 and 4 bedroom homes of 2000 square feet to 2300 square feet in the subject area and surrounding townships found 9 listings with a median price of $550,000. It is estimated seven 3 and 4 bedrooms single family homes in the subject area will be available at the time of displacement.

The age, condition and assessment value of the 1 single family home to be acquired will require payment of the $31,000 maximum replacement housing payment to relocate the displaced persons affected by the improvement project. The replacement housing payment for properties located on larger than the typical residential lot and/or have oversized garages or agricultural use buildings will be based on a “carved out” value. No personal interviews of displacees were conducted for this plan. Each displacee will be interviewed to prepare the Acquisition Stage Relocation plan as required by State and Federal Law.

Residential Relocation Displacements

Number	Bedrooms	Size	Assessed Value
1	3	2300	$203,500

Available Replacement Housing

Number	Bedrooms	Size	Price Range
7	3 and 4	2000+	$390,000 to $747,000

G.J. Miesbauer & Associates, Inc.
RIGHT OF WAY ACQUISITION SPECIALISTS

Pictures of Subject Property

Project Assurances

The City of Madison acquisition and relocation program will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 as amended as well as the final rule of Chapter Adm 92 and Section 32 of Wisconsin Statues. In addition and pursuant to the requirements of Section 32.05 (8), Wisconsin Statutes, the following project assurances are given:

1. No person(s) occupying real property will be required to move from a dwelling or business or farm operation until the City of Madison has made a comparable replacement property available to the occupant(s).
2. The City of Madison relocation program for this project will be realistic and adequate to provide orderly, timely and efficient relocation of the displaced persons.

Relocation Services for Residential Displacees

In addition to maintaining necessary records and performing various other administrative functions, the relocation specialists will offer and provide the following assistance to all displacees:

1. Counsel each individual and family with regard to their specific rehousing needs, resulting in each securing replacement housing that is decent, safe and sanitary (DSS); adequate for their needs; suitably located; and within their financial means.
2. Continually gather data commensurate with the relocatee's needs and advise them accordingly. Provide current and continuing information on the availability and prices of comparable DSS listings and rental housing. Appointments will be made as well as other arrangements for the inspection of referral housing. Inspections will be made of those units where relocatees indicate a desire to rent or purchase in order to formally certify their adequacy. Inspections will also conclude if referral housing is DSS.
3. Assist prospective homeowners in obtaining mortgage financing and aid in the preparation and submission of offers to purchase. Assist in obtaining related documents, e.g. credit reports, appraisals, surveys, etc.
4. Advise prospective tenants on lease arrangements, tenant/landlord responsibilities, security deposit practices, range of rents for replacement properties, etc.
5. Provide information about and referrals to local welfare and social service assistance agencies when it appears a need for such services is present.
6. Provide information on school district boundaries and the routing and scheduling of public transportation.

7. Make personal contacts with each displacee regularly for the purpose of discussing and providing leads, referrals and all other matters regarding rehousing that may be of interest to the relocatees and necessary for their successful relocation. Visitation will be geared to the complexity and specific need of the given relocation, and will be repeated regularly to assure that the rehousing responsibilities are discharged completely and fully in compliance with the spirit and intent of the program.
8. Provide assistance with the completion of claim forms for relocation payments that each displacee may be eligible.
9. Assist in making moving arrangements, including the transfer of utility service.
10. Provide all required written notices, delivered by personal contact whenever feasible, to insure full understanding of eligibility requirements, payment options, project information, and other notices required by law, regulations or otherwise appropriate.
11. Advise each displacee of grievance procedures, arrangement and agencies involved.

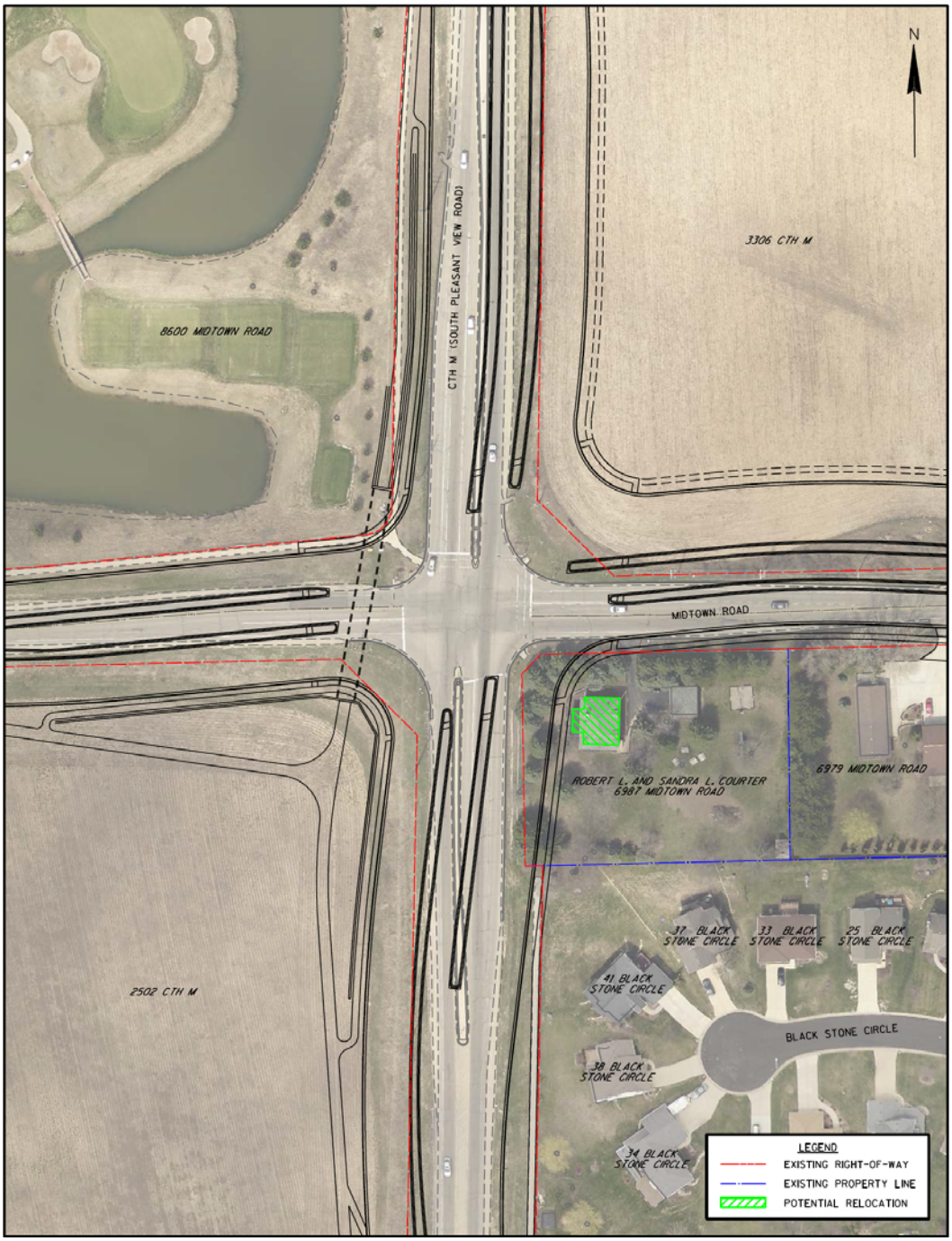
Summary of Estimated Relocation Payments
(based on estimates and maximums allowed)

Total Replacement Housing Payments	$31,000
Total Residential Moving Payments	$ 5,000
Total Incidental and Closing Costs	$ 5,000

Total Relocation Payments $41,000

G.J. Miesbauer & Associates, Inc.
RIGHT OF WAY ACQUISITION SPECIALISTS

Exhibit – Project Plan View



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ATTACHMENT B:

Other Agency Coordination

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State of Wisconsin
Governor Scott Walker

Department of Agriculture, Trade and Consumer Protection
Ben Brancel, Secretary

December 23, 2014

Paul Chellevold
SRF Consulting Group, Inc.
901 Deming Way, Suite 101
Madison, WI 53717

Dear Paul Chellevold:

Re: Project ID: 5992-09-81
Project Name: CTH M (Pleasant View Rd): Cross County Rd to Prairie Hill Rd
County: Dane

The Department of Agriculture, Trade, and Consumer Protection (DATCP) has reviewed the notification and any supplemental information you have provided concerning the potential need for an agricultural impact statement (AIS) for the above project. We have determined that an AIS will not be prepared for this project.

Please note that if the proposed project or project specifications are altered in any way which could be construed as increasing the potential adverse effects of the project on agriculture or on any farm operation, the DATCP should be renotified. Questions on the AIS program can be directed to me at the above address or by dialing 608/224-4646.

Sincerely,

Alice Halpin
Agricultural Impact Program

DATCP ID: #4029

SHERIFF DAVID J. MAHONEY

DANE COUNTY SHERIFF'S OFFICE

JEFF HOOK, Chief Deputy
(608) 284-6167

JANICE L. TETZLAFF
Captain, Executive Services
(608) 284-6175

TIMOTHY F. RITTER
Captain, Support Services
(608) 284-6186

JEFFREY A. TEUSCHER
Captain, Security Services
(608) 284-6165

RICHELLE J. ANHALT
Captain, Field Services
(608) 284-6870

March 13, 2012

William H. Dunlop, PE
SRF Consulting Group, Inc.
901 Deming Way, Suite 302
Madison, WI 53717-1979

Subject: Project ID 5992-09-81

Mr. Dunlop:

Thank you for taking the time to discuss the upcoming road construction project on South Pleasant View/CTH M, Prairie Hill Rd to Cross Country Rd.

Based on our phone conversation I did check our crash location records and noted that there were no factors that stuck out to me. Also, understand that some of these locations are located in Madison and Verona. With a large amount of population growth theses intersections have seen a huge amount of increase in traffic flow.

Any improvements in these areas would be a benefit to the citizens who drive these highly congested routes.

Of course during construction, traffic flow and the availability of emergency vehicle access is always a concern. It appears from our conversation that these issues have also been considered.

Please feel free to contact me with any other questions or concerns.

Thank you,

Sgt. Robert J. Lurquin

Sgt. Robert. J. Lurquin
Dane County Sheriff's Office
Field Services Division
284-6876

Paul Chellevold

To: William Dunlop
Subject: RE: South Pleasant View Road/County M, Prairie Hill Road to Cross Country Road (project ID:5992-09-81)

From: Murphy, Matthew D -FS [mailto:mdmurphy@fs.fed.us]
Sent: Wednesday, March 07, 2012 1:30 PM
To: William Dunlop
Subject: South Pleasant View Road/County M, Prairie Hill Road to Cross Country Road (project ID:5992-09-81)

Mr. Dunlop:

The US Forest Service Region 9 Engineering has no comments regarding project ID 5992-09-81.

Thank you.

Matthew D. Murphy, PE
Regional Transportation Engineer
US Forest Service
Eastern Region - Region 9
626 East Wisconsin Ave.
Milwaukee, WI 53202
(414) 297-1546

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ATTACHMENT C:

WDNR Correspondence

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State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
South Central Region Headquarters
3911 Fish Hatchery Road
Fitchburg WI 53711-5397

Scott Walker, Governor
Cathy Stepp, Secretary
Mark Aquino, Regional Director
Telephone 608-275-3266
FAX 608-275-3338
TTY Access via relay - 711

WISCONSIN
DEPT. OF NATURAL RESOURCES

March 13, 2012

William H. Dunlop, PE
SRF Consulting
901 Deming Way, Suite 302
Madison, WI 53717

Subject: Initial Comment letter Project ID 5992-09-81. CTH M/South Pleasant View Road, Prairie Hill Road to Cross Country Road, Dane County.

Dear Mr. Dunlop:

We have received the information you provided for the proposed reconstruction of County Highway M between Prairie Hill Road and Cross Country Road in Dane County. According to your proposal, the project involves a reconstruction of CTH M including additional lanes in both directions. The roadway currently has a rural, two-lane roadway. Intersections at Midtown Road and County Highway PD will be reconstructed although a preferred alternative has not been selected.

Our initial comments on the project as proposed are as follows:

Public Lands and Trails

- According to Section 6(f) of the federal Land and Water Conservation (L&WC) Act, lands acquired with L&WC funds that are taken by a highway project must be replaced with other property of equal market value and equivalent usefulness and location. **The Ice Age National Scenic Trail** crosses CTH M within the project limits. Land and Water Conservation Act (L&WC) funds were used to acquire parcels located between CTH M and CTH PD for the Ice Age Trail. A loss or take of this trail as a result of this project will require working through the 6(f) process. I can help you coordinate this process.

  There is an additional U.S. Dept. of Transportation "Section 4(f)" process for federally funded transportation projects that impact various types of public parks, wildlife refuges, and recreation areas. We can provide more information on these programs if it becomes necessary.

  It is my understanding that coordination is ongoing between the Ice Age Trail Alliance and the CTH M project proponents regarding the Ice Age Trail crossing of CTH M. I have been told that the current plan is for a shared underpass of CTH M for the Ice Age Trail and a bike trail. Currently there is an easement for the Ice Age Trail on the west side of CTH M on the UW Turf Grass property. Ice Age Alliance staff have communicated to me the need to have an easement amendment in place so that the new crossing lines up adequately with the easement.

  There are City of Madison and Dane County parks located along the corridor, some of which have received DNR grants. A taking or loss of these lands would require working through the processes described above.

Wetlands

- A review of the project site shows that wetlands are present within the project corridor along CTH M, including at the intersections of CTH M with Midtown Road and CTH M and CTH PD.

A wetland delineation report for the project corridor dated November 2011 has been submitted to the Department. Since the report was submitted after the end of the 2011 growing season, I have not been able to field verify the wetland boundaries. I will review the report during the coming growing season and provide comments or concurrence at that time.

This is a sensitive area and will require strict adherence to the sequencing process (i.e., avoid, minimize, mitigate). Please provide us with the exact location and acreage of wetland impact after avoidance and minimization efforts are accomplished. The remaining unavoidable impacts will be evaluated to determine if they will be mitigated on-site or at a bank site at the appropriate ratio.

We will able to issue water quality certification for this project after agreement on the necessary measures to protect and/or mitigate the wetland losses.

Stormwater

- The regional storm water detention ponds at Raymond and Highpoint Roads, named the Far West Confluence Ponds, were given a 30.19(1) permit for construction in 2004. The Far West Confluence Ponds are a series of four ponds, constructed for the purpose of providing regional storm water management, and achieve more than the required 40% TSS removal. After discussions with Wendy Braun from WisDOT and Eric Rortvedt, WDNR Storm Water Engineer, we determined that it is appropriate for the City of Madison to take credit for these ponds in order to meet the required storm water treatment for this major reconstruction project.

- **There is a sensitive Kettle wetland** located southwest of the intersection of CTH M with CTH PD/McKee Road. Any increase in stormwater runoff volume within this feature's watershed has the potential to negatively affect this wetland as well as adjacent landowners and other resources. I ask that you consider stormwater infiltration and other stormwater volume control options in the design process. Also consider exploring opportunities to cooperate with adjacent landowners regarding stormwater volume control. We have been contacted by Jon Radloff with Montgomery Associates Resource Solutions, LLC, representing the landowner of the kettle wetland. He may be reached at (608) 839-4422.

Other considerations

- A review of the Natural Heritage Inventory Database indicates no known endangered, threatened, nor special concern species within the project limits.

- Badger Mill Creek intersects with CTH M at two locations within this project area. Culvert extensions or replacements should be set in such a manner that it does not cause fragmentation and allows aquatic organisms to migrate up- and downstream during low-flow conditions. This requires that the invert be at least 1 foot below the final stream bed. In addition, the structure should be rocked on both the upstream and downstream margins, as well as the downstream face in the water. The desired end-result is that during high-flow conditions, the currents don't cause a large pool to develop downstream of the edge of the structure, which creates an impassable barrier to aquatic organisms during low flows in the fall.

- All contracts should include language to address any wells present in areas of highway construction. NR 812.26 requires that all unused wells shall be properly abandoned. The contractual language should clearly state that wells in the construction area shall be identified prior to the start of construction. All wells in the construction area must be properly abandoned before any grading work is started, and wells discovered during grading work must also be properly abandoned in accordance with NR 812.26. If the contractor fails to properly abandon a well, and the well is graded over, the remedy will include excavating the casing, drilling out the well, and properly abandoning the well. The DNR strongly recommends hiring a licensed well-driller or pump-installer to assess wells in the construction area and to conduct the well-abandonments prior to

grading. The cost of correction of an improperly abandoned well or retrieving dropped pumping hardware from a well can far exceed the cost of a professional well abandonment.

- If an asphalt plant is to be utilized, it must be able to meet the air quality standards of the State of Wisconsin. If a portable facility is to be installed, the contractor must first submit a "Notice of Intent" to relocate the portable source. The site that is utilized for the asphalt plant must be properly treated to prevent erosion. Appropriately sized stilling basins should be provided that will intercept runoff and allow ample time for the suspended material to settle out before any water is discharged. If any gravel washing is to be completed on-site, we will want to see a plan for erosion control for this site before the project is started.

  If the portable plant is located in an area that is currently undisturbed or not part of an existing quarry, an air management permit may be required from this Department. Also, we will want to see a restoration plan for this site.

  If a portable concrete "batch plant" is utilized, a high capacity well will probably be required. The contractor should be aware that plan approval for the high capacity well will be required from this Department. Furthermore, following completion of the project, the well must be properly abandoned pursuant to NR 141.25, Wis. Adm. Code.

- If dewatering is required for any reason, the water must be pumped into a properly sized and constructed settling basin before the clean/filtered water is allowed to enter any waterway or wetland. The "clean/filtered" water must be free of suspended solids and contaminants. A properly designed and constructed settling basin will take into consideration the amount of space for construction, desired pumping speed, number/size of pump(s) likely to be used, and the sedimentation rate of soils to be encountered. ***See DNR Technical Standard 1061 for method selection by soil type.***

- If burning of brush will occur as part of this project, the contractor should be informed that it is illegal to burn materials other than clean wood. In addition, permit may be required to burn any material during the wildland fire season. The contact for questions about burning during an air quality advisory is:

  Tom Roushar; Air Management Section, South Central Region, Fitchburg, WI 53711, and (608) 273-5603

  Burning permits can be obtained from the local DNR ranger or fire warden.

- Spoil material should be stockpiled on **uplands an adequate distance from the stream** and any open water created by excavation. Filter fabric silt fence should be installed between spoil material and the stream and between the entire disturbed area and the waterway.

- If any borrow areas are necessary for this project, we will expect appropriate erosion control measures be applied to the borrow areas during and following construction. Following completion of the project the borrow areas should be restored, properly seeded, mulched, and protected from the effects of erosion.

- Properly installed temporary and/or permanent ditch checks should be installed in areas of moderate velocity runoff. Clean aggregate dikes should be installed in ditch lines of moderate to high velocity runoff during and after construction. Ditch lines should also be protected with <u>erosion bales, stone, or comparable materials,</u> (not silt fence), and erosion mat (according to DOT specifications) in conjunction with seeding. If erosion mat is used along stream banks, it should be biodegradable and non-netted, or if netted, constructed more loosely so that small animals are able to work their way through (e.g., Class I Urban Type A, Class I Urban Type B, or if necessary for shear stress, Class II Type C). Long-term netted mats cause animals to become entrapped

while moving in and out of the stream." **Avoid the use of fine mesh matting that is tied or bonded at the mesh intersection such that the openings between the mesh are fixed in size."**

- Seed mixtures and seeding practices must conform to the standards in the section on seeding in the manual entitled, "Standard Specifications for Highway and Structure Construction" (WISDOT Publication).

- All equipment must be properly cleaned and disinfected to address the spread of invasive species and viruses. Special provisions should require contractors to implement the following before and after mobilizing in-water equipment to prevent the spread of **Viral Hemorrhagic Septicemia** and other invasive species.
    1. Inspect boats, trailers, tracked vehicles, silt or turbidity barrier, pumps, barges, boots etc. and Remove aquatic plants, animals and mud
    2. Drain all water from boats, motors, pumps, equipment and any other area where water may be trapped
    3. Dispose of debris in the trash prior to leaving the area
    4. Follow disinfection protocols described at http://dnr.wi.gov/fish/vhs

To get up to date information on invasive species and infested waters go to
http://www.dnr.state.wi.us/invasives/

- As long as these and other appropriate measures are taken to control erosion during and immediately following construction, this Department will certify that this project is following appropriate erosion control measures.

Thank you for the opportunity to review and comment on this project in its planning stages.

Sincerely,

Eric Heggelund

Eric Heggelund
Environmental Analysis & Review Specialist
Telephone: (608) 275-3301

Cc: Jennifer Fredrickson, WisDOT
Brian Taylor, WisDOT
Russ Anderson, WDNR
Lavane Hessler, WDNR
Dana White-Quam, WDNR
Jon Radloff, Montgomery Associates Resource Solutions, LLC

From: Heggelund, Eric P - DNR [mailto:Eric.Heggelund@wisconsin.gov]
Sent: Wednesday, April 04, 2012 2:14 PM
To: William Dunlop
Cc: Fredrickson, Jennifer - DOT; Taylor, Brian F - DOT; Kolb, Simone E MVP
Subject: Wetland delineation for 5992-09-81 CTH M Dane County

Bill,

I reviewed the wetland delineation report dated November 2011 and provided by MSA (field work conducted Aug. 2011).

I do not believe the man-made pond by the golf course in the northwest quadrant of CTH M and Mid Town Road is a wetland (see figure 4A), but I am not sure if this will make a difference in the project or if you are going to impact this area. You can provide a new map without this area identified as wetland or leave it as is. Other than that I think the report is ok.

Please consider this e-mail to be my concurrence with the wetland delineation report. Let me know if you have any questions or need anything else.

Eric

Eric P. Heggelund
Environmental Analysis & Review Specialist
Wisconsin Department of Natural Resources
(☎) **phone:** (608) 275-3301
(☎) **fax:** (608) 275-3338
(✉) **e-mail:** eric.heggelund@wisconsin.gov
Website: dnr.wi.gov
Find us on Facebook: www.facebook.com/WIDNR

Paul Chellevold

From: Heggelund, Eric P - DNR <Eric.Heggelund@wisconsin.gov>
Sent: Monday, April 11, 2016 11:38 AM
To: Paul Chellevold
Subject: RE: CTH M - South Pleasant View Road - NLEB Coordination

Paul,

Thank you for providing the recent information on this project. Let me know if you decide that an updated comment letter (original March 12, 2012) is needed. We have reviewed that letter and do not have any changes at this time. I understand that coordination is continuing with regard to the Dane County Parks (stewardship funded) and Ice-Age Trail facilities.

As requested, the Wisconsin Natural Heritage Inventory (NHI Portal) database was reviewed on April 11, 2016 for the presence of Northern Long-Eared Bat (NLEB) occurrences along the CTH M project 5992-09-81 corridor between Verona and Madison in Dane County. The NHI Portal contains all current Northern Long-eared Bat roost sites and hibernacula in Wisconsin. The NHI Portal contains verified survey results from WI DNR, FWS, and private organizations and is updated on a weekly basis. The NHI Portal was consulted for this project and it was determined that this project is more than 1/4 mile from a known maternity roost tree AND is more than 1/4 mile from a known hibernacula.

Let me know if you need anything else,

Eric

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Eric Heggelund
Phone: 608-275-3301
Eric.heggelund@wisconsin.gov

From: Paul Chellevold [mailto:PChellevold@srfconsulting.com]
Sent: Friday, April 08, 2016 3:48 PM
To: Heggelund, Eric P - DNR
Subject: CTH M - South Pleasant View Road - NLEB Coordination

Hi Eric,

Per our phone conversation this afternoon, I have attached the WDNR coordination that we have to date (four years old) for the CTH M project, as well as a location map. The preferred alternative at the County PD/County M intersection is the westbound underpass (see attached).

I also am in need of a NHI review/update especially as it pertains to the Northern Long-eared Bat roost sites and hibernacula in Wisconsin.

I have provided an FTP link of the draft EA if you need to reference it for anything else.

https://srfconsulting.filetransfers.net/downloadFilePublic.php?filePassId=25d8282d808340143ae2646a8a133e63

Please let me know if there is any other information you need at this time.

Thank you so much for putting attention to this project.

Paul

Paul Chellevold, AICP, GISP
Senior Transportation Planner
SRF Consulting Group, Inc. | 901 Deming Way, Suite 101 |Madison, WI 53717
Main: 608-298-5405 |
pchellevold@srfconsulting.com| www.srfconsulting.com

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ATTACHMENT D:

Section 106 Coordination

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12-0939/DA

SECTION 106 REVIEW ARCHAEOLOGICAL/HISTORICAL INFORMATION

Wisconsin Department of Transportation
DT1635 6/2014

RECEIVED AUG 20 2015 BY:

SHPO WISCONSIN DIVISION FHWA

For instructions, see FDM Chapter 26.

I. PROJECT INFORMATION

☒ Amended Submittal *(include new information only)*

Project ID 5992-09-81	Highway – Street Local Street	County Dane County
Project Termini South Pleasant View Road/CTH M - (Prairie Hill Rd. to Cross Country Rd.)		Region – Office Southwest Region - Local Program
Regional Project Engineer – Project Manager Karen Richardson, P.E. (Kjohnson Engineers, Southwest Region - Local Program Management Consultant		(Area Code) Telephone Number (608) 829-3858
Consultant Project Engineer – Project Manager MSA Professional Services, Inc. - Jason DiPiazza, PE		(Area Code) Telephone Number (608)242-6640
Archaeological Consultant Cultural Resource Management, University of Wisconsin Milwauakee (work also done by: Great Lakes Archaelogical Research Center, Inc.)		(Area Code) Telephone Number (414) 229-3078
Architecture/History Consultant Cultural Resource Management, University of Wisconsin Milwauakee (work also done by: Great Lakes Archaelogical Research Center, Inc.)		(Area Code) Telephone Number (414) 229-3078
Date of Need March 1, 2015		SHSW Number 12-0939/DA
Return a Signed Copy of This Form to karenrichardson@kjohnsonengineers.com		

RECEIVED APR 29 2015 FHWA WISCONSIN DIVISION

II. PROJECT DESCRIPTION

Project Length	Land to be Acquired: Fee Simple	Land to be Acquired: Easement
3 miles	30.1 acres	8.0 acres

Distance as measured from existing centerline	Existing	Proposed	Other Factors	Existing	Proposed
Right-of-Way Width No Change	-	-	Terrace Width No Change	-	-
Shoulder No Change	-	-	Sidewalk Width No Change	-	-
Slope Intercept No Change	-	-	Number of Lanes No Change	-	-
Edge of Pavement No Change	-	-	Grade Separated Crossing Added structures	None	4
Back of Curb Line No Change	-	-	Vision Triangle acres	-	-
Realignment	N/A	See Mapping	Temporary Bypass acres	N/A	N/A
Other – List:	N/A	N/A	Stream Channel Change	☐ Yes	☒ No
Attach Map(s) that Depict "Maximum" Impacts.	☒ Yes	☐ No	Tree Topping and/or Grubbing	☒ Yes	☐ No

Brief Narrative Project Description: Include all ground disturbing activities. For archaeology, include plan view map indicating the maximum area of ground disturbance and/or new right-of-way, whichever is greater. Include all temporary, limited and permanent easements. For amendments (e.g. design refinements, scope changes, etc) description should only include new/added project actions and materials.

The preferred alternative design at the intersection of CTH PD intersection has been modified. Raymond Road will no longer connect with CTH PD near the CTH PD/CTH M intersection. To maintain connectivity, a new street alignment will connect Raymond Road to Meriter Way. This connection is through a cultivated field. The amended submittal enclosed is an update to the archaeological survey that includes the area of the new street connection and an updated exhibit showing the intersection design.

The slope intercepts included in the original submittal have not changed significantly, except in the area of the CTH PD intersection due to the change to the intersection design.

☐ Add continuation sheet, if needed.

SECTION 106 REVIEW ARCHAEOLOGICAL/HISTORICAL INFORMATION *(continued)*

Wisconsin Department of Transportation DT1635

III. CONSULTATION

How has notification of the project been provided to:

- ☐ Property Owners
  - ☐ Public Information Meeting Notice
  - ☐ Letter - Required for Archaeology
  - ☐ Telephone Call
  - ☐ Other:
- ☐ Historical Societies/Organizations
  - ☐ Public Information Meeting Notice
  - ☐ Letter
  - ☐ Telephone Call
  - ☐ Other:
- ☐ Native American Tribes
  - ☐ Public Info. Mtg. Notice
  - ☐ Letter
  - ☐ Telephone Call
  - ☐ Other:

Attach one copy of the base letter, list of addresses and comments received. For history include telephone memos as appropriate.

IV. AREA OF POTENTIAL EFFECTS – APE

ARCHAEOLOGY: Area of potential effect for archaeology is the existing and proposed ROW, temporary and permanent easements. Agricultural practices do not constitute a ground disturbance exemption.

HISTORY: Describe the area of potential effects for buildings/structures.

The APE was updated to include all properties adjacent to the expanded project corridor. No additional properties were added as a result of the expanded APE.

V. PHASE I – ARCHAEOLOGICAL OR RECONNAISSANCE HISTORY SURVEY NEEDED

ARCHAEOLOGY	HISTORY
☒ Archaeological survey **is needed**	☐ Architecture/History survey **is needed**
☐ Archaeological survey **is not needed**	☒ Architecture/History survey **is not needed** Within APE amended area
☐ Screening list (date)	☐ Screening list (date)
☐ Burial site in project area, Wis. Stat. 157.70 applies	☐ No structures or buildings of any kind within APE
	☐ Non-Survey History Documentation attached

VI. SURVEY COMPLETED

ARCHAEOLOGY	HISTORY
☒ **NO** archaeological sites(s) identified – ASFR attached	☐ **NO** buildings/structures identified – Report attached
☐ **NO** potentially eligible site(s) in project area – Phase I Report attached	☐ Potentially eligible buildings/structures identified in the APE – Report attached
☐ Potentially eligible site(s) identified-Phase I Report attached	☐ Avoided through redesign
☐ Avoided through redesign	☐ Previously listed/eligible property identified in the APE – Report attached
☐ Phase II conducted – go to VII (Evaluation)	
☐ Phase I Report – Cemetery/cataloged burial documentation	

VII. DETERMINATION OF ELIGIBILITY (EVALUATION) COMPLETED

☐ No arch site(s) eligible for NRHP – Phase II Report attached	☐ No buildings/structure(s) eligible for NRHP – DOE attached
☐ Arch site(s) eligible for NRHP – Phase II Report attached	☐ Building/structure(s) eligible for NRHP – DOE attached
☐ Site(s) eligible for NRHP – DOE attached	

VIII. COMMITMENTS/SPECIAL PROVISIONS – must be included with special provisions language

☐ Per Wis. Stat. 157.70 obtain burial authorization from WHS one year prior to construction.

IX. PROJECT DECISION

☒ No historic properties (historical or archaeological) in the APE.

☐ No historic properties (historical or archaeological) affected.

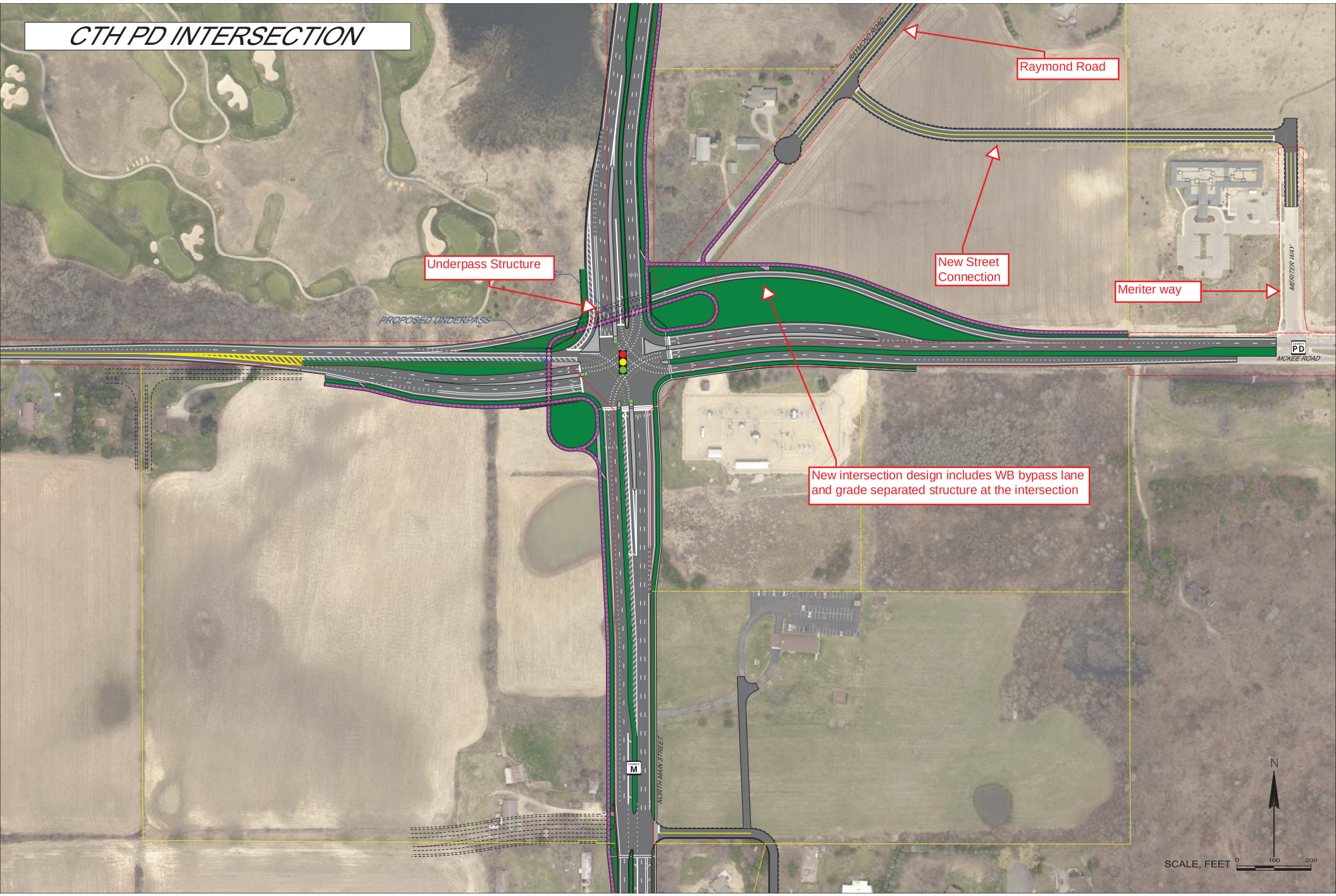
☐ Historic properties (historical and/or archaeological) may be affected by project;

- ☐ Go to Step 4: Assess affects and begin consultation on affects.
- ☐ Documentation for Determination of No Adverse Effects is included with this form. WisDOT has concluded that this project will have No Adverse Effect on historic properties. Signature by SHPO below indicates SHPO concurrence in the DNAE and concludes the Section 106 Review process for this project.

(*) for APE expansion. MOA in place for original project APE

X. SIGNATURES

X [signature] 3/5/15	X [signature] 4/27/15	X [signature] Sept 25 2015
(Regional Project Manager Signature) (Date – m/d/yy)	(WisDOT Historic Preservation Officer Signature) (Date – m/d/yy)	(State Preservation Officer Signature) (Date – m/d/yy)
X [signature] 1-22-15		
(Consultant Project Manager Signature) (Date – m/d/yy)		


CTH PD INTERSECTION
Raymond Road
New Street Connection
Meriter way
Underpass Structure
PROPOSED UNDERPASS
New intersection design includes WB bypass lane and grade separated structure at the intersection
RAYMOND ROAD
MERITER WAY
MCKEE ROAD
NORTH MAIN STREET
COUNTY PD
COUNTY M
N
SCALE, FEET 0 100 200

ARCHAEOLOGICAL SURVEY FIELD REPORT

Wisconsin Department of Transportation
DT1978 6/2007 (Replaces ED864)

PROJECT INFORMATION

Project ID	Highway/Street	County	SHSW Compliance Number
5992-09-81	CTH M	Dane	

Project Termini	Project Size
	miles 24.1 acres

Township(s)	Town/Range	Sections
Verona	T6N R8E	3

Project Type

☒ Reconstruction ☐ Reconditioning ☐ Bridge ☐ Wetland Mitigation ☐ Other

Landowners Contacted - If No, Explain	Permits Obtained - If Yes, Attach
☒ Yes ☐ No	☐ Yes ☒ No

LITERATURE SEARCH

Previously Reported Sites in Project Area	Archaeology and Records Literature Search	Cemetery in Project Area
☐ Yes ☒ No	☒ Attached	☐ Yes ☒ No

FIELDWORK

Dates of Field Work	Crew Size	Area Surveyed
12/3/2013	3	24.1 acres

SURVEY TECHNIQUES - Attach project plans showing survey coverage.

☒ Shovel Testing	☐ Surface Collection	☒ Other - Describe Soil Coring of disturbed area 5.0 acres at 15 meter intervals. Visual inspection of impervious surfaces, 2.2 acres.
2.7 acres 15 meter interval	14.2 acres 5 meter interval	

Describe Visibility

Visibility within the corn field averaged 30%, with downed corn partially obscuring the surface.

LAND USE – Describe. Also, attach map, showing location.

Were there area(s), which were not surveyed? If yes, show on project plans and explain.

☐ Yes ☒ No

Were there area(s), which were extensively impacted? If yes, show on project plans and explain.

☒ Yes ☐ No There are paved surface, a building, and a large graded area around the Meriter Clinic.

Comments

ISOLATED FINDS – Describe. Also, attach map, showing location.

NA

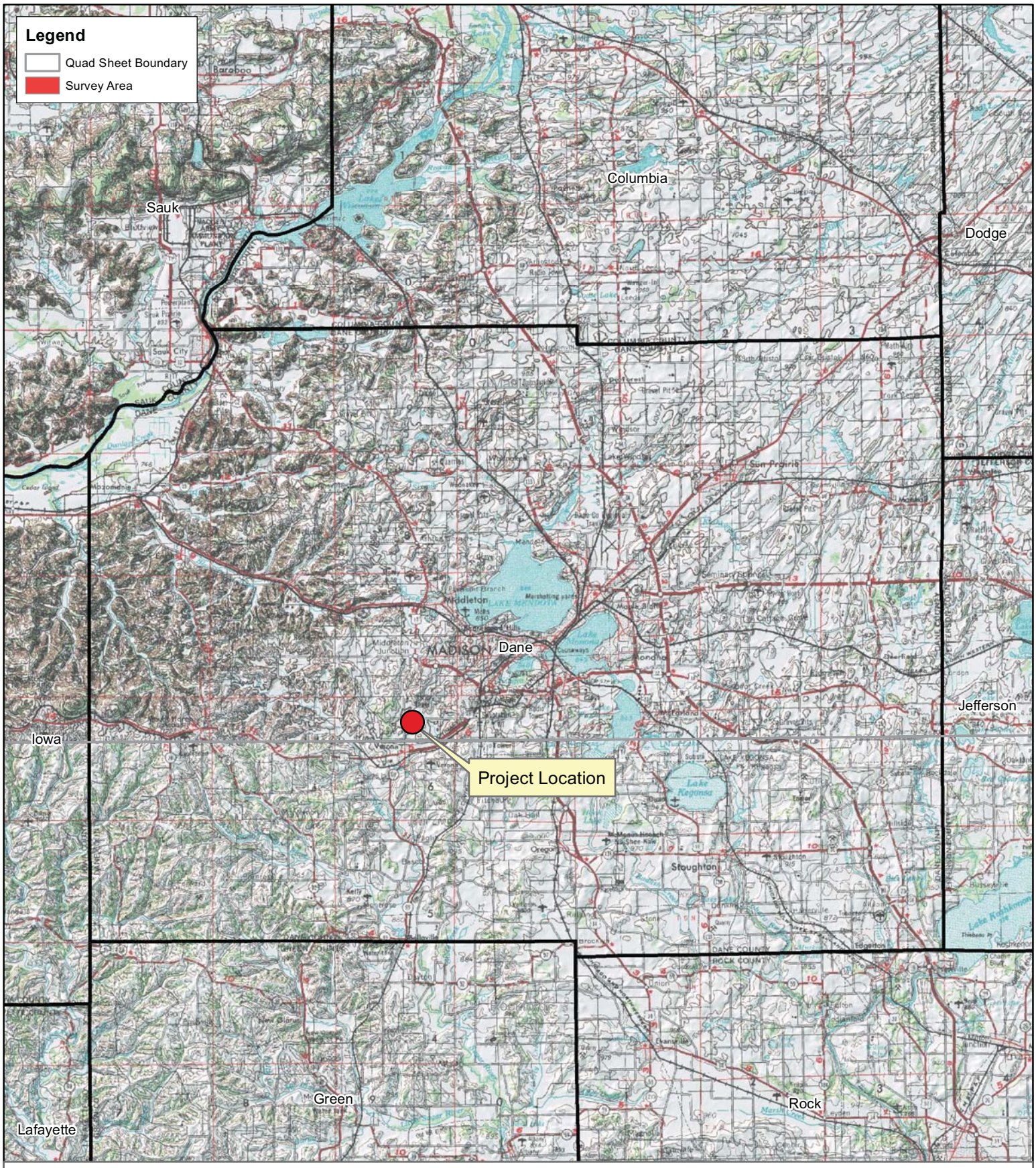
I certify that the literature search and all fieldwork conducted for this report was done according to the Wisconsin Archeological Survey Guidelines. No archeological sites were identified in the project area.

Great Lakes Archaeological Research Center, Inc.
(Print Name of Firm or Institution)

Richard H. Kubicek, MS, RPA
(Print Name of Archaeologist)

(Signature of Archaeologist) (Date)

Note: Current archaeological methods may not detect buried sites or burial areas. If artifacts, or human remains are discovered during construction, immediately stop construction in that area and notify the Wisconsin Department of Transportation, Bureau of Equity & Environmental Services.



Location of CTH M Project Area in Dane County, Wisconsin

WisDOT ID# 5992-09-81
GLARC #13.165

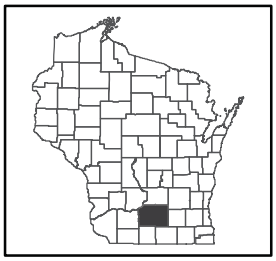
Data: USGS Madison and Rockford 1:250k Quadrangle Maps, GLARC Inc.

0 4 8 16
Miles

0 5 10 20
Kilometers

1:400,000

N



Location of Dane County, WI

Archaeological Survey Coverage Map for CTH M in Dane County, Wisconsin

WisDOT ID# 5992-09-81
GLARC #13.165

Data: ESRI, Microsoft, WHS, GLARC Inc.

0 150 300 600
Feet

0 50 100 200
Meters

1:3,000

N

Location in Dane County, WI

Photo 1: In progress pedestrian survey of a corn field, facing north.

Photo 2: In progress shovel testing of a grassy field, facing south.

Photo 3: Grassy field and corn field after survey, facing west.

Photo 4: View of utility line in grassy field, facing north.

ARCHAEOLOGICAL LITERATURE AND RECORDS REVIEW

Wisconsin Department of Transportation

DT1459 3/2003

PROJECT INFORMATION

Project ID	Highway/Street	County	SHSW Compliance Number
5992-09-81	CTH M	Dane	

Project Termini

Township(s)	Town/Range	Sections
Verona	T6N R8E	3

USGS Quadrangle(s)
Dane

SOURCES RESEARCHED

☐ See Continuation Sheet

☒ OSA USGS Maps
☒ WI Land Economic Inventory (WLEI)
☒ Burial Sites Office
☒ Previous Surveys
☒ County History
☒ Archival Maps: GLO
☒ CEB Atlas
☒ CEB Manuscripts

Publisher	Year	Publisher	Year
Leonard W. Gay	1899	CM Foote & Co	1895
Thrift Press	1931	Rockford Map Publishers, Inc.	1947

☐ Other

SITES IN PROJECT AREA

☐ See Continuation Sheet

Total Number of Sites	Prehistoric	Historic	Cemeteries/Burials
	0	0	0

Code	Type	Affiliation
#47 -		
#47 -		
#47 -		

SITES WITHIN ONE MILE OF THE PROJECT AREA

☒ See Continuation Sheet

Total Number of Sites	Prehistoric	Historic	Cemeteries/Burials
	4	1	0

Code	Type	Affiliation
#47 DA-0692	Campsite, village	Late Archaic, Early Woodland, Middle Woodland, Historic Euro-American
#47 DA-1371	Lithic Scatter	Unknown Prehistoric
#47 DA-1420	Lithic Scatter	Unknown Prehistoric

☐ Sites Reported in the Project Area ☒ Sites Reported Within One Mile ☒ No Sites Reported in the Project Area

Research Conducted by	Date
Richard H. Kubicek MS, RPA	11/29/2013

I certify that the literature search was done according to the Wisconsin Survey Guidelines.

Richard H. Kubicek MS, RPA
(Print Name of Archaeologist)

Great Lakes Archaeological Research Center, Inc.
(Print Name of Firm or Institution)

(Signature of Archaeologist)

12/17/2013
(Date)

SOURCES RESEARCHED (Continued)

Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year

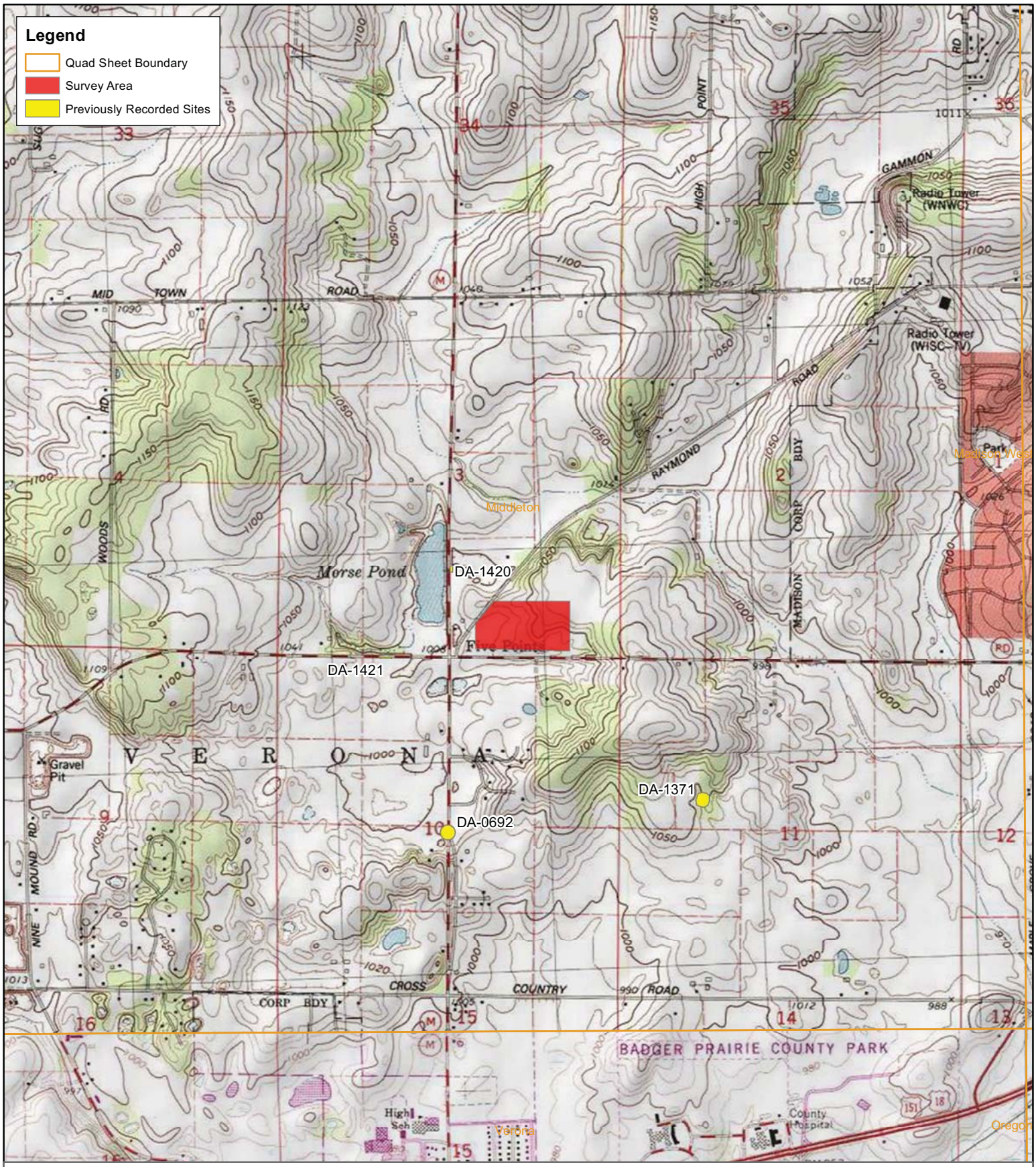
SITES IN PROJECT AREA (Continued)

	Code	Type	Affiliation
#47	-		
#47	-		
#47	-		
#47	-		
#47	-		
#47	-		
#47	-		
#47	-		
#47	-		

SITES WITHIN ONE MILE OF THE PROJECT AREA (Continued)

Total Number of Sites	Prehistoric	Historic	Cemeteries/Burials
	4	1	0

	Code	Type	Affiliation
#47	DA-1420	Lithic Scatter	Unknown Prehistoric
#47	-		
#47	-		
#47	-		
#47	-		
#47	-		
#47	-		
#47	-		
#47	-		



Previously Recorded Archaeological Sites within One Mile of CTH M in Dane County, Wisconsin

WisDOT ID# 5992-09-81
GLARC #13.165

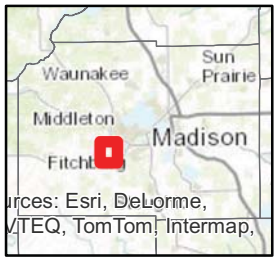
Data: USGS Middleton and Verona 1:24k Quadrangle Maps, WHS, GLARC Inc.

0 1,000 2,000 4,000
Feet

0 250 500 1,000
Meters

1:24,000

N



Location in Dane County, WI

BIBLIOGRAPHY OF ARCHAEOLOGICAL REPORT FORM

WHS/SHSW # _____ COUNTY: Dane

AUTHORS: Richard H. Kubicek

REPORT TITLE: Archaeological Survey Field Report for a Phase I Survey along CTH M in Dane County, Wisconsin

DATE OF REPORT (MONTH AND YEAR): 12/17/2013

SERIES/NUMBER: _____

PLACE OF PUBLICATION: Great Lakes Archaeological Research Center, Milwaukee, WI

LOCATIONAL INFORMATION [LEGAL DESCRIPTION OF SURVEY AREA (T-R-S)]
T6N R8E Section 3

U.S.G.S. QUAD MAP(S): Dane

SITE(S) INVESTIGATED: 0

ACRES INVESTIGATED: 24.1 AGENCY # WisDOT

INVESTIGATION TECHNIQUES COMPLETED (Check all that apply.)

- ☐ Avocational Survey
- ☐ Faunal Analysis
- ☐ Historical Research
- ☐ Literature Background Research
- ☐ Monitoring
- ☐ Phase II
- ☐ Phase III-Corridor Only
- ☐ Remote Sensing
- ☐ Surface Survey (Intensive)
- ☐ Vandalism
- ☐ Other: _____
- ☐ Chance Encounter
- ☐ Floral Analysis
- ☐ Interview/Informant
- ☐ Major Excavation
- ☐ Osteological Analysis
- ☐ Phase II-Corridor Only
- ☒ Records/Background
- ☒ Shovel Testing/Probing (Inten)
- ☐ Test Excavation
- ☒ Walk Over (Reconnaissance)
- ☒ Controlled Surface Collection
- ☐ Geomorphology
- ☐ Land Use History
- ☐ Mechanical Stripping
- ☐ Phase I-Surface Survey
- ☐ Phase III
- ☐ Records/Background (Pred. Model)
- ☐ Soil Core
- ☐ Traditional Knowledge
- ☐ Unknown

ABSTRACT: ☐ Included in report ☐ Written in space below

On December 3rd, 2013, a crew from GLARC (Richard Kubicek, Nicholas Weber, and Rachael Schutlz) surveyed 24.1 acres between Raymond Rd., and McKee Rd., in the Township of Verona. Prefield research indicated no previously reported sites in the project area, and no potential historic sites were identified. Field survey methods included 2.7 acres shovel tested in 15 meter interval transects, 14.2 acres pedestrian surveyed at 5 meter intervals with 30% visibility in a downed corn field, 5.0 acres of disturbed/developed land subjected to 15 meter interval soil coring, and 2.2 acres of impervious surfaces that were visually inspected. No cultural materials were identified.

Office of the State Archaeologist BAR # _____

(DOE March 2011)

Wisconsin Historical Society
Determination of Eligibility Form

RECEIVED
SEP 18 2012
DIV HIST PRES

WisDOT Project ID #: 5992-09-81

WHS #: 12-0939/DA

Property Name(s): Gordon School

Address/Location: 6987 Midtown Rd.

City & County: Town of Verona, Dane County **Zip Code:** 53719

Town: 6N **Range:** 8E **Section:** 3

Date of Construction: 1929

WisDOT Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this request for Determination of Eligibility:

___Meets the National Register of Historic Places criteria.
_x_Does not meet the National Register of Historic Places criteria.

for **Rebecca Burkel, WisDOT Historic Preservation Officer** 9/13/12 **Date**

State Historic Preservation Office

In my opinion, the property:

___Meets the National Register of Historic Places criteria.
X Does not meet the National Register of Historic Places criteria.

Michael E. Stevens, State Historic Preservation Officer Oct 5, 2012 **Date**

Comments (FOR AGENCY USE ONLY):

Division of Historic Preservation
Wisconsin Historical Society
816 State Street
Madison, WI 53706

(DOE March 2011)

Wisconsin Historical Society
Determination of Eligibility Form

RECEIVED
NOV 27 2012
DIV HIST PRES

WisDOT Project ID #: 5992-09-81

WHS #: 12-0939/DA

Property Name(s): Schroeder-Stickelberg-Thompson Farmstead

Address/Location: 8300 Raymond Rd.

City & County: Town of Verona, Dane County **Zip Code:** 53719

Town: 6N **Range:** 8E **Section:** 3

Date of Construction: c.1875-C.1890, c.1900, c.1910, c.1920, c.1940

WisDOT Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this request for Determination of Eligibility:

[X] Meets the National Register of Historic Places criteria.
[ ] Does not meet the National Register of Historic Places criteria.

Rebecca Burkel 11/26/12

Rebecca Burkel, WisDOT Historic Preservation Officer **Date**

State Historic Preservation Office

In my opinion, the property:

_X_ Meets the National Register of Historic Places criteria.
___ Does not meet the National Register of Historic Places criteria.

12/6/12

Michael E. Stevens, State Historic Preservation Officer **Date**

Comments (FOR AGENCY USE ONLY):
"Outhouses" are listed in WHPD under "privy"

Division of Historic Preservation
Wisconsin Historical Society
816 State Street
Madison, WI 53706

C:\Users\HISTORY1\Desktop\Schroeder-Stickelberg DOE revisions\October 2012 revisions\8300 Raymond Rd. - DOE.docx

Rachel Burnham

From: Gail Klein <gklein@glarc.com>
Sent: Sunday, April 21, 2013 3:03 PM
To: Jason DiPiazza
Cc: Jennifer Haas
Subject: RE: WisDOT ID 5992-09-81 CTH M, City of Madison, Dane County

Follow Up Flag: Follow up
Flag Status: Flagged

I don't think there would necessarily be any real benefit to meeting at the property at this point, unless there are stakeholders who aren't familiar with the existing conditions there. It might also be more of a logistical challenge to have the meeting onsite, depending on how many people would be attending. A location closer to the site, as you said, might not be a bad idea though.

--Gail

> Thanks Jennifer - I will get an email out but let's push for that
> April 29th date.
>
> Gail: Do you think meeting onsite or closer to the site would be
> beneficial now that we don't have to worry about SHPO attending?
>
> Jason
>
> From: Jennifer Haas [mailto:jhaas@glarc.com]
> Sent: Friday, April 19, 2013 8:50 AM
> To: Jason DiPiazza
> Cc: Gail Klein
> Subject: RE: WisDOT ID 5992-09-81 CTH M, City of Madison, Dane County
>
> I would still hold the consultation meeting, to demonstrate that the
> process was finalized. We can schedule the meeting and it can be brief.
> Jennifer
>
> Jennifer R. Haas, President
> Great Lakes Archaeological Research Center, Inc.
> PO Box 511549
> Milwaukee, WI 53203
> (414) 481-2093
> www.glarc.com<http://www.glarc.com>
>
> From: Jason DiPiazza [mailto:jdipiazza@msa-ps.com]
> Sent: Thursday, April 18, 2013 9:33 PM
> To: Gail Klein (gklein@glarc.com<mailto:gklein@glarc.com>); Jennifer
> Haas
> (jhaas@glarc.com<mailto:jhaas@glarc.com>)

> Subject: FW: WisDOT ID 5992-09-81 CTH M, City of Madison, Dane County
>
> Gail & Jennifer
>
> Please read the response from Kimberly. It doesn't look like they are
> willing to meet until they have all the final documents. I feel as
> though am "official" consultation meeting seems somewhat unnecessary
> given the property owner's lack of interest in the historical aspect
> of the property. All of the other stakeholders are fully aware of
> what is going on. Maybe a short meeting with the property owner
> onsite would be best and we can prepare our recommendations in an MOA and send to CRT/SHPO?
> Please advise,
>
> Thank you,
>
> Jason
>
>
> From: Cook, Kimberly A - WHS
> [mailto:Kimberly.Cook@wisconsinhistory.org]<mailto:[mailto:Kimberly.Co
> ok@wisconsinhistory.org]>
> Sent: Thursday, April 18, 2013 1:43 PM
> To: Jason DiPiazza; Cloud, Lynn - DOT; Emily Pettis; Greg Rainka
> (Greg.Rainka@meadhunt.com<mailto:Greg.Rainka@meadhunt.com>); Kennedy,
> Jason - DOT
> Subject: RE: WisDOT ID 5992-09-81 CTH M, City of Madison, Dane County
>
> Thank you for the invite. We will be happy to meet with you to
> discuss any of the remaining issues after we have had the opportunity
> to review the D for C. I have been in contact with Jason Kennedy of
> the CRT regarding this project and the materials necessary for review
> and are prepare to move forward with consultation once we have
> received everything. So that includes the D for C, a draft MOA if you
> have one available, and any materials regarding the utilities-concern.
> Jason and the CRT team will be able to provide you with guidance on what to prepare.
>
> I look forward to reviewing the materials. Based on what I have seen
> so far, the mitigation measures should be fairly standard.
>
> Thank you,
>
> Kimberly Zunker Cook
> Wisconsin Historical Society
> Division of Historic Preservation and Public History Room 300
> 816 State Street
> Madison, WI 53706
> 608-264-6493
>
> Collecting, Preserving and Sharing Stories Since 1846
> From: Jason DiPiazza [mailto:jdipiazza@msa-ps.com]
> Sent: Wednesday, April 17, 2013 1:37 PM
> To: Draeger, Jim R - WHS; Cook, Kimberly A - WHS; Banker, Sherman J -

> WHS
> Cc: Amanda Arnold; Chris Petykowski
> (CPetykowski@cityofmadison.com<mailto:CPetykowski@cityofmadison.com>);
> Ron Rieder
> (ron.rieder@ci.verona.wi.us<mailto:ron.rieder@ci.verona.wi.us>);
> Pam Dunphy (dunphy@co.dane.wi.us<mailto:dunphy@co.dane.wi.us>); Karen
> Richardson; Brad Vosters
> (bvosters@atcllc.com<mailto:bvosters@atcllc.com>); Gail Klein
> (gklein@glarc.com<mailto:gklein@glarc.com>); Jennifer Haas
> (jhaas@glarc.com<mailto:jhaas@glarc.com>); Paul M. Chellevold
> (PChellevold@srfconsulting.com<mailto:PChellevold@srfconsulting.com>)
> Subject: WisDOT ID 5992-09-81 CTH M, City of Madison, Dane County
>
> WisDOT ID 5992-09-81
> City of Madison, South Pleasant View Road (Cross Country Road -
> Prairie Hill Road) CTH M Dane County
>
> The City of Madison, in cooperation with Dane County and the City of
> Verona, is developing plans to reconstruct CTH M , a critical arterial
> on the west side of Madison. This project includes federal funding
> and is being funded through the WisDOT Local Program. Within the
> project APE, there is a historic property that the design team has
> been instructed to assess affects and conduct consultation on affects.
> The Section 106 form was signed by your office on December 6, 2012 (Attached).
>
> A draft D for C has been completed and is currently being reviewed by
> the Cultural Resources Team (CRT) at WisDOT. We plan to hold our
> consultation meeting to complete the D for C document and prepare the
> MOA in the next few weeks. We ask that SHPO be represented at this
> consultation meeting as all of the other stakeholders have been
> closely involved with the project from the beginning. To facilitate
> SHPO's participation in the consultation meeting, we propose to hold the meeting at the Wisconsin
> Historical Society, or at a nearby location. Below are proposed meeting
> times that will work for the stakeholders in this project and historic
> property. Could you please respond if any of these dates will work
> for you and if a meeting room at the Historical Society is available.
>
> Monday, April 29, afternoon
>
> Wednesday May 8, anytime
>
> Friday May 10, 1:00 PM
>
> Thank you in advance for your assistance,
>
> Jason
>
>
>
> [cid:image001.gif@01CE3E6F.8AEB4710]
>
> Jason DiPiazza, PE | Team Leader

> MSA Professional Services, Inc.
> (608) 242-7779
>
>
>

Rachel Burnham

From: Kennedy, Jason - DOT <Jason1.Kennedy@dot.wi.gov>
Sent: Wednesday, July 03, 2013 7:57 AM
To: Jason DiPiazza; 'Petykowski, Christopher'; Pam Dunphy (dunphy@co.dane.wi.us); Ron Rieder (ron.rieder@ci.verona.wi.us); Amanda Arnold; Karen Richardson; Brad Vosters (bvosters@atcllc.com); Gail Klein (gklein@glarc.com); Great Lakes Archaeological Research Ctr Inc; bigleymh@gmail.com; Paul Chellevold; Cain, Douglas - DOT
Subject: RE: CTH M (S. Pleasant View Road) - 8300 Raymond Road Property

Jason,

Thank you for the update. At this time feel free to proceed with using three farmsteads as agreed upon with the City of Madison, however please remember SHPO may comment on the number of farmsteads they feel is an appropriate mitigation for the project and resource and may ask for additional farmsteads to be surveyed.

Let me know if there are any additional questions.

Jason Kennedy

Environmental Analysis & Review Specialist
Cultural Resources

Wisconsin Department of Transportation
Bureau of Technical Services | Environmental Process & Documentation Section
Hill Farms Room 451
Phone: 608.267.6693 | E-mail: jason1.kennedy@dot.wi.gov

From: Jason DiPiazza [mailto:jdipiazza@msa-ps.com]
Sent: Tuesday, July 02, 2013 5:05 PM
To: Kennedy, Jason - DOT; 'Petykowski, Christopher'; Pam Dunphy (dunphy@co.dane.wi.us); Ron Rieder (ron.rieder@ci.verona.wi.us); Amanda Arnold; Karen Richardson; Brad Vosters (bvosters@atcllc.com); Gail Klein (gklein@glarc.com); Great Lakes Archaeological Research Ctr Inc; bigleymh@gmail.com; Paul M. Chellevold (PChellevold@srfconsulting.com); Cain, Douglas - DOT
Subject: RE: CTH M (S. Pleasant View Road) - 8300 Raymond Road Property

Jason K,

Your review and comment is certainly valid. After discussing this issue with the City of Madison, who is the primary funding provider for mitigation, we recommend proceeding with a survey of three of the "best" farmsteads in the region surrounding the Schroeder-Stickelberg-Thompson Farmstead as determined by a qualified architectural historian.

Please let me know if this will satisfy your comment.

Amanda: Please provide any input that the Town of Verona Board may have on this matter after the Board meets tonight.

Gail: Please update the D for C and MOA accordingly.

Thank you all for your input,

Jason

Jason DiPiazza, PE | Team Leader
MSA Professional Services, Inc.
(608) 242-7779

From: Kennedy, Jason - DOT [mailto:Jason1.Kennedy@dot.wi.gov]
Sent: Wednesday, June 26, 2013 7:52 AM
To: 'Petykowski, Christopher'; Jason DiPiazza; Pam Dunphy (dunphy@co.dane.wi.us); Ron Rieder (ron.rieder@ci.verona.wi.us); Amanda Arnold; Karen Richardson; Brad Vosters (bvosters@atcllc.com); Gail Klein (gklein@glarc.com); Great Lakes Archaeological Research Ctr Inc; bigleymh@gmail.com; EBiemann@atclc.com; Paul M. Chellevold (PChellevold@srfconsulting.com); Cain, Douglas - DOT
Subject: RE: CTH M (S. Pleasant View Road) - 8300 Raymond Road Property

Jason

After looking more in-depth, a review of aerial imagery indicates that few farmsteads are still extant within a one mile radius of the Schroeder-Stickelberg-Thompson Farmstead. This area appears to mostly contain modern suburban development, a golf course, and parks, and it's therefore very possible there are no other farmsteads that meet survey criteria. Instead, one suggestion is to survey a specific portion of the town of Verona. Since the Schroeder-Stickelberg-Thompson Farmstead is located near the north boundary of the town of Verona, the survey area could be the entire northern half of the town, say between Midtown and Valley Roads. Another suggestion is to survey the five or ten "best" farmsteads in all of the town, as determined by a qualified architectural historian.

Let me know if you have any additional questions.
Jason K.

Jason Kennedy

Environmental Analysis & Review Specialist
Cultural Resources

Wisconsin Department of Transportation
Bureau of Technical Services | Environmental Process & Documentation Section
Hill Farms Room 451
Phone: 608.267.6693 | E-mail: jason1.kennedy@dot.wi.gov

From: Petykowski, Christopher [mailto:CPetykowski@cityofmadison.com]
Sent: Tuesday, June 25, 2013 1:34 PM
To: 'Jason DiPiazza'; Pam Dunphy (dunphy@co.dane.wi.us); Ron Rieder (ron.rieder@ci.verona.wi.us); Amanda Arnold; Karen Richardson; Brad Vosters (bvosters@atcllc.com); Gail Klein (gklein@glarc.com); Great Lakes Archaeological Research Ctr Inc; bigleymh@gmail.com; Kennedy, Jason - DOT; EBiemann@atclc.com; Paul M. Chellevold (PChellevold@srfconsulting.com)
Subject: RE: CTH M (S. Pleasant View Road) - 8300 Raymond Road Property

The change seems reasonable to me. Im OK with it.
Chris

Chris Petykowski, P.E.

Principal Engineer
City of Madison - Engineering Division
210 Martin Luther King Jr. Blvd. Rm 115
Madison, WI 53703
ph: 608-267-8678
fx: 608-264-9275
email: cpetykowski@cityofmadison.com

From: Jason DiPiazza [mailto:jdipiazza@msa-ps.com]
Sent: Tuesday, June 25, 2013 1:29 PM
To: Petykowski, Christopher; Pam Dunphy (dunphy@co.dane.wi.us); Ron Rieder (ron.rieder@ci.verona.wi.us); Amanda Arnold; Karen Richardson; Brad Vosters (bvosters@atcllc.com); Gail Klein (gklein@glarc.com); Great Lakes Archaeological Research Ctr Inc; bigleymh@gmail.com; Kennedy, Jason - DOT (Jason1.Kennedy@dot.wi.gov); EBiemann@atclc.com; Paul M. Chellevold (PChellevold@srfconsulting.com)
Subject: CTH M (S. Pleasant View Road) - 8300 Raymond Road Property

WisDOT Project ID 5992-09-81
S. Pleasant View Road, City of Madison
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

RE: Consultation and Mitigation of Impacts to historically significant property – 8300 Raymond Road

WisDOT Environmental Services Section has reviewed the Documentation for Consultation (D for C) and Memorandum of Agreement (MOA) for addressing negative impacts to the NRHP listing eligible property located at 8300 Raymond Road, also referred to as the Schroeder-Stickelberg-Thompson Farmstead. These documents include mitigation measures discussed in April at a consultation meeting.

Following comments from WisDOT ESS, the project team is proposing a change to the mitigation measures discussed at the April consultation meeting. This change consists of the replacement of the written description mitigation option with a new mitigation measure in the form of a survey and inventory of historic farmsteads within one mile of the Schroeder-Stickelberg-Thompson Farmstead. This would include a field survey of historic farmsteads within a one mile radius, following the Farmstead Survey Methodology as outlined in the WisDOT Survey Manual. All historic farmsteads identified in this survey will be documented with photographs and sketch maps and records will be created in the Wisconsin Historic Preservation Database (WHPD). In addition, photographic documentation of the Schroeder-Stickelberg-Thompson Farmstead will remain a primary mitigation measure, as discussed at April's consultation meeting.

Please respond with any comments or concerns about this change to the mitigation measures that are proposed above.

Thank you,

Jason

Jason DiPiazza, PE | Team Leader
MSA Professional Services, Inc.
(608) 242-7779

Rachel Burnham

From: Karen Richardson <karenrichardson@kjohnsonengineers.com>
Sent: Tuesday, August 26, 2014 2:39 PM
To: Jason DiPiazza
Cc: Chris Petykowski (CPetykowski@cityofmadison.com)
Subject: FW: WisDOT 5992-09-81, CTH M Widening, Dane County - FHWA comments on S106 documents

Jason,

Fyi and use; please share with your subs.

Karen
Karen Richardson, P.E.
Kjohnson Engineers, Inc.
SW Region Local Program Management Consultant
(608) 829-3858

From: Kennedy, Jason - DOT [mailto:Jason1.Kennedy@dot.wi.gov]
Sent: Tuesday, August 26, 2014 2:30 PM
To: Karen Richardson
Cc: 'Greg Rainka'
Subject: FW: WisDOT 5992-09-81, CTH M Widening, Dane County - FHWA comments on S106 documents

Karen,

Please see FHWA comments and address as appropriate. Ensure the previous SHPO comments I sent also get included.
Thank you,
Jason

From: ian.chidister@dot.gov [mailto:ian.chidister@dot.gov]
Sent: Tuesday, August 26, 2014 12:11 PM
To: Kennedy, Jason - DOT
Cc: Wisner, Frederick - DOT (NC Region)
Subject: WisDOT 5992-09-81, CTH M Widening, Dane County - FHWA comments on S106 documents

Jason-

I reviewed the updated D for C and MOA for the CTH M project this morning, and overall, I think the documentation is sufficient for coordination with ACHP. I'll be sending the notification of adverse effects to them this afternoon or tomorrow morning. Even though the documentation is sufficient for coordination, I do have a few comments that will need to be addressed prior to the final MOA and NEPA document approval, see below:

Comments of the MOA
It doesn't appear that my minor editorial comments on the first draft of the MOA were incorporated into this second draft. In summary:

- Page 1, bottom of the page – remove the "and" at the end of the last "Whereas" clause immediately preceding the "Now, Therefore" clause.
- Page 3, "Dispute Resolution," subsection c. – either remove "It is…" at the beginning of the sentence or "…remain unchanged" at the end of the sentence; both are not needed.
- The MOA needs to be edited for spelling as it contains several misspelled words.

- I agree with SHPO's comments about revisions to the MOA stipulations and will look for these modifications in the final draft.

Comments on the Project – 4(f)

The D for C makes several references to the 4(f) implications of different project alternatives. I don't know how involved you will be in assembling the 4(f) documentation, but perhaps you can pass my comment along to the appropriate contact within EPDS (Fred Wisner?) and the project team. Since the preferred alternative mentioned in the D for C and MOA has an adverse effect on a Section 106 resource and will also result in a use of 4(f) property, the project team should make sure that there is not a 4(f) feasible and prudent avoidance alternative. I want to make sure that the 4(f) evaluation and analysis is proceeding parallel to the 106 consultation so that we don't commit to an alternative that will not be acceptable from a 4(f) standpoint. This does not need to be discussed in the 106 documentation – it's primarily a concern for our 4(f) evaluation, but this is the right time in project development to check-in on this issue.

I'll forward you a copy of our correspondence with ACHP once we've sent it. If you have any questions about my comments on the project, don't hesitate to contact me.

Thanks,

Ian Chidister
Environmental Program Manager
WI Division, Federal Highway Administration, 525 Junction Road, Suite 8000, Madison, WI 53717
phone: 608-829-7503 | fax: 608-662-2121 | email: ian.chidister@dot.gov

Rachel Burnham

From: Jason1.Kennedy@dot.wi.gov
Sent: Tuesday, September 17, 2013 12:11 PM
To: ian.chidister@dot.gov
Subject: FW: WisDOT 5992-09-81 / WHS 12-0939 DA CTH M - Schroeder-Stickleberg House MOA

Ian,

FYI on comments from SHPO on CTH M MOA mitigation. I have passed them onto the project team, but wanted to keep you in the loop.

Thank you,
Jason

From: Cook, Kimberly A - WHS
Sent: Tuesday, September 17, 2013 11:19 AM
To: Kennedy, Jason - DOT; Greg Rainka
Cc: Cloud, Lynn - DOT
Subject: RE: WisDOT 5992-09-81 / WHS 12-0939 DA CTH M - Schroeder-Stickleberg House MOA

I have reviewed the MOA for the above project and have two comments. In Stipulation 2, please remove "three to five", and subset i can be simplified to say "Town of Verona". We would like to request a full farmstead survey of the township. This is a great mitigation measure, but it should be something that can useful for future planning purposes. Simply picking out a few potentially eligible farmsteads does not provide any context, will create confusion in methodology (what if there are more than 5 eligible properties? What if there are none?), and has increased potential to require duplication of effort on future road projects in the area. A proper survey based on our already established survey guidelines will not only cut down on confusion regarding the product, but can be used for all manner of future projects.

Thank you,

Kimberly Zunker Cook
Wisconsin Historical Society
Division of Historic Preservation and Public History
Room 300
816 State Street
Madison, WI 53706
608-264-6493

Collecting, Preserving and Sharing Stories Since 1846

SECTION 106 REVIEW
ARCHAEOLOGICAL/HISTORICAL INFORMATION

Wisconsin Department of Transportation
DT1635 11/2006

For instructions, see FDM Chapter 26

I. PROJECT INFORMATION

Project ID 5992-09-81	Highway - Street Local Street	County Dane County
Project Termini South Pleasant View Road/CTH M - (Prairie Hill Road to Cross County Road)		Region - Office Southwest Region - Local Program
Regional Project Engineer - Project Manager Karen Richardson, P.E., Kjohnson Engineers, Southwest Region - Local Program Management Consultant		Area Code - Telephone Number (608) 829-3858
Consultant Project Engineer - Project Manager MSA Professional Services, Inc. - Jason DiPiazza, PE		Area Code - Telephone Number (608) 242-7779
Archaeological Consultant Great Lakes Archaeological Research Center Inc.		Area Code - Telephone Number (414) 481-2093
Architecture/History Consultant Great Lakes Archaeological Research Center Inc.		Area Code - Telephone Number (414) 481-2093
Date of Need July 1, 2012		SHSW #
Return a signed copy of this form to: karenrichardson@kjohnsonengineers.com		

II. PROJECT DESCRIPTION

Project Length 3 miles	Land to be Acquired: Fee Simple 15 acres	Land to be Acquired: Easement 10 acres

Distance as measured from existing centerline	Existing	Proposed	Other Factors	Existing	Proposed
Right-of-Way Width measured from existing centerline	43'-170'	48'-170'	Terrace Width	None	8' (typical)
Shoulder measured from existing centerline	Varies 16'-42'	N/A	Sidewalk Width	Varies 5'-6'	Varies 5'-10'
Slope Intercept measured from existing centerline	N/A	25'-170'	Number of Lanes	2	4-6
Edge of Pavement measured from existing centerline	14'-36'	8'-60'	Grade Separated Crossing pedestrian and bike path underpasses	none	3 (CTH PD, Midtown Road, & Flagstone Drive)
Back of Curb Line measured from existing centerline	N/A	11'-63'	Vision Triangle acres	N/A	N/A
Realignment	N/A	0-56'	Temporary Bypass acres	N/A	N/A
Other - List:	N/A	N/A	Stream Channel Change	☐ Yes	☒ No
Attach Map(s) that depict "maximum" impacts.	☒ Yes	☐ No	Tree topping and/or grubbing	☒ Yes	☐ No

Brief Narrative Project Description - Include all ground disturbing activities. For archaeology, include plan view map indicating the maximum area of ground disturbance and/or new right-of-way, whichever is greater. Include all temporary, limited and permanent easements.

The City of Madison, in conjunction with the City of Verona and Dane County propose improvements to South Pleasant View Road (CTH M) from Cross Country Road to Prairie Hill Road, a distance of approximately 3 miles. The improvements consist of expanding South Pleasant View Road initially from 2 to 4-lanes with provisions to accommodate 6-lanes in the future. The proposed project includes expansion of the roadway to a multi-lane urban arterial with a raised median, bike lanes, a multi-use path, and sidewalk. The proposed action is part of a multi-phase project to reconstruct the CTH M corridor, including reconstruction of the CTH PD and Mid Town Road intersections.

III. CONSULTATION

How has notification of the project been provided to:

- ☒ Property Owners
  - ☒ Public Information Meeting Notice
  - ☒ Letter - Required for Archaeology
  - ☐ Telephone Call
  - ☐ Other:
- ☒ Historical Societies/Organizations
  - ☐ Public Information Meeting Notice
  - ☐ Letter
  - ☒ Telephone Call
  - ☒ Other: Email
- ☒ Native American Tribes
  - ☒ Public Info. Mtg. Notice
  - ☒ Letter
  - ☐ Telephone Call
  - ☐ Other:

*Attach one copy of the base letter, list of addresses and comments received. For history include telephone memos as appropriate.

IV. AREA OF POTENTIAL EFFECTS - APE

ARCHAEOLOGY: Area of potential effect for archaeology is the existing and proposed ROW, temporary and permanent easements. Agricultural practices do not constitute a ground disturbance exemption.

HISTORY: Describe the area of potential effects for buildings/structures.

An APE was established that included all properties adjacent to the project corridor. All resources at least 40 years old that possessed a degree of historic integrity were examined.

V. PHASE I ARCHEOLOGICAL OR RECONNAISSANCE HISTORY SURVEY NEEDED

ARCHAEOLOGY	HISTORY
☒ Archaeological survey **is needed**	☒ Architecture/History survey **is needed**
☐ Archaeological survey **is not needed** - Provide justification ☐ Screening list (date).	☐ Architecture/History survey **is not needed** ☐ No structures or buildings of any kind within APE ☐ Screening list (date).

VI. SURVEY COMPLETED

ARCHAEOLOGY	HISTORY
☐ **NO** archaeological sites(s) identified - ASFR attached	☐ **NO** buildings/structures identified - A/HSF attached
☐ **NO** potentially eligible site(s) in project area - Phase I Report attached	☒ Potentially eligible buildings/structures identified in the APE - A/HSF attached
☒ Potentially eligible site(s) identified-Phase I Report attached ☐ Avoided through redesign * ☒ Phase II conducted – go to VII (Evaluation).	☐ Potentially eligible buildings/structures avoided – documentation attached
☐ Phase I Report attached - Cemetery/cataloged burial documentation	

VII. DETERMINATION OF ELIGIBILITY (EVALUATION) COMPLETED

* ☒ No arch site(s) eligible for NRHP - Phase II Report attached	☐ No buildings/structure(s) eligible for NRHP - DOE attached
☐ Arch site(s) eligible for NRHP - Phase II Report attached	☒ Building/structure(s) eligible for NRHP - DOE attached
☐ Site(s) eligible for NRHP - DOE attached	

VIII. COMMITMENTS/SPECIAL PROVISIONS – must be included with special provisions language

* Responses apply to Phase II conducted at the Ellefson Site (47DA1420)

A Phase II evaluation is under-way at the Endres archaeology site (47DA1421).

See the attached letter to Jim Becker, dated 4/26/12.

IX. PROJECT DECISION

- ☐ No historic properties (historical or archaeological) in the APE.
- ☐ No historic properties (historical or archaeological) affected.
- ☒ Historic properties (historical and/or archaeological) may be affected by project;
  - ☒ Go to Step 4: Assess affects and begin consultation on affects
  - ☐ Documentation for Determination of No Adverse Effects is included with this form. WIDOT has concluded that this project will have No Adverse Effect on historic properties. Signature by SHPO below indicates SHPO concurrence in the DNAE and concludes the Section 106 Review process for this project.

(Regional Project Manager)	(WIDOT Historic Preservation Officer)	(State Historic Preservation Officer)
(Date)	(Date)	(Date)
(Consultant Project Manager)		
5/10/12 (Date)		

List of Attachments

1. Project location map
2. Project overview
3. Project Detail Sheets – Area of Potential Effect
4. Section 106 – Archaeology survey notification letter (including addresses)
5. Native American notification letter
6. Public Information Meeting invite letter
7. Public notice for Public Information Meeting
8. Letter to WisDOT Bureau of Technical Services, Environmental Process & Documentation Section – Section 106 Submittal Exception Justification

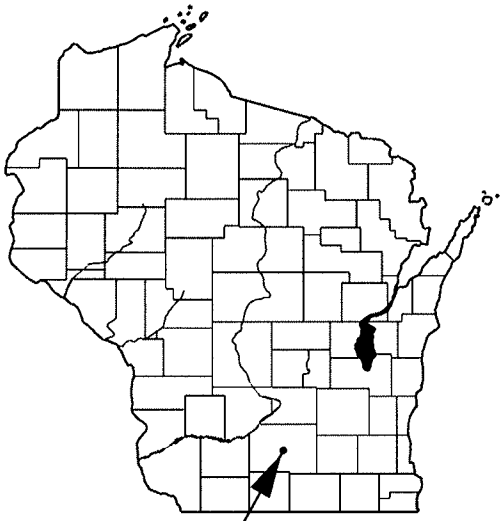
Supporting Documents

1. Architecture/History Survey Cover Sheet
2. Archaeological Report of Investigation 781
3. Wisconsin Historical Society Determination of Eligibility Form – Schroeder-Stickelberg-Thompson Farmstead
4. Wisconsin Historical Society Determination of Eligibility Form – Gordon School
5. County Historical Society contact letter

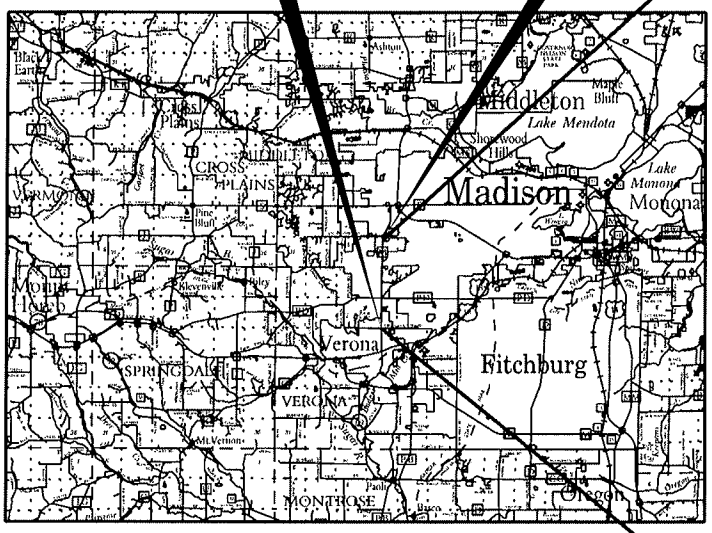
PROJECT LOCATION MAP

PROJECT I.D. 5992-09-81
CITY OF MADISON, S. PLEASANT VIEW ROAD
(CROSS COUNTRY ROAD - PRAIRIE HILL ROAD)
CTH M
DANE COUNTY

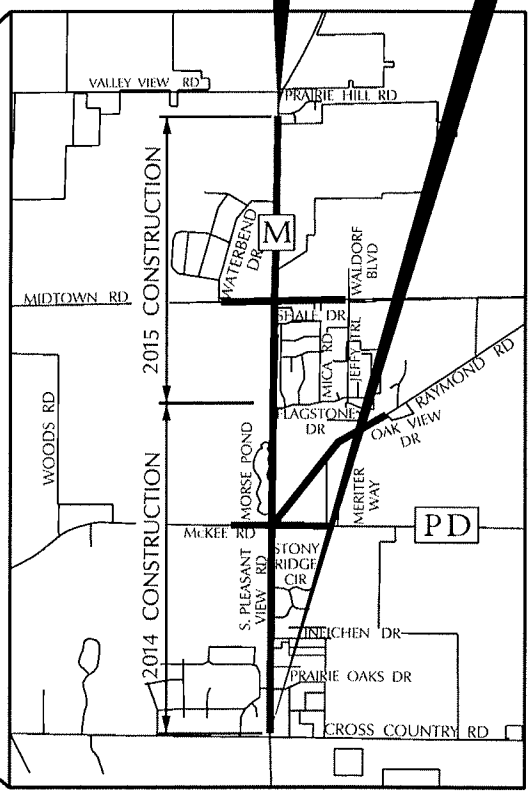
N



PROJECT LOCATION
DANE COUNTY



PROJECT LOCATION



MSA
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TRANSPORTATION • MUNICIPAL • REMEDIATION
DEVELOPMENT • ENVIRONMENTAL
2901 International Lane, Suite 300 Madison, WI 53704-3133
608-242-7779 1-800-446-0679 Fax: 608-2421-5664

PROJECT NO:00373030	HWY:CTH M	COUNTY:DANE	AREA OF POTENTIAL EFFECT OVERVIEW	SHEET	E

FILE NAME : P:\370s\373\00373030\CADD\Plansht s\APE\APE Total Project.dgn PLOT DATE : 5/11/2012 PLOT BY : jdolens PLOT NAME : PLOT SCALE : 1:1050

WISDOT/CADDS SHEET 42

APE Total Project.dgn 5/11/2012 6:52:20 AM jdolens

2

PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	AREA OF POTENTIAL EFFECT	SHEET	E

2

2

PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	AREA OF POTENTIAL EFFECT	SHEET	E

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APE 16.dgn 5/11/2012 7:11:28 AM jdolens

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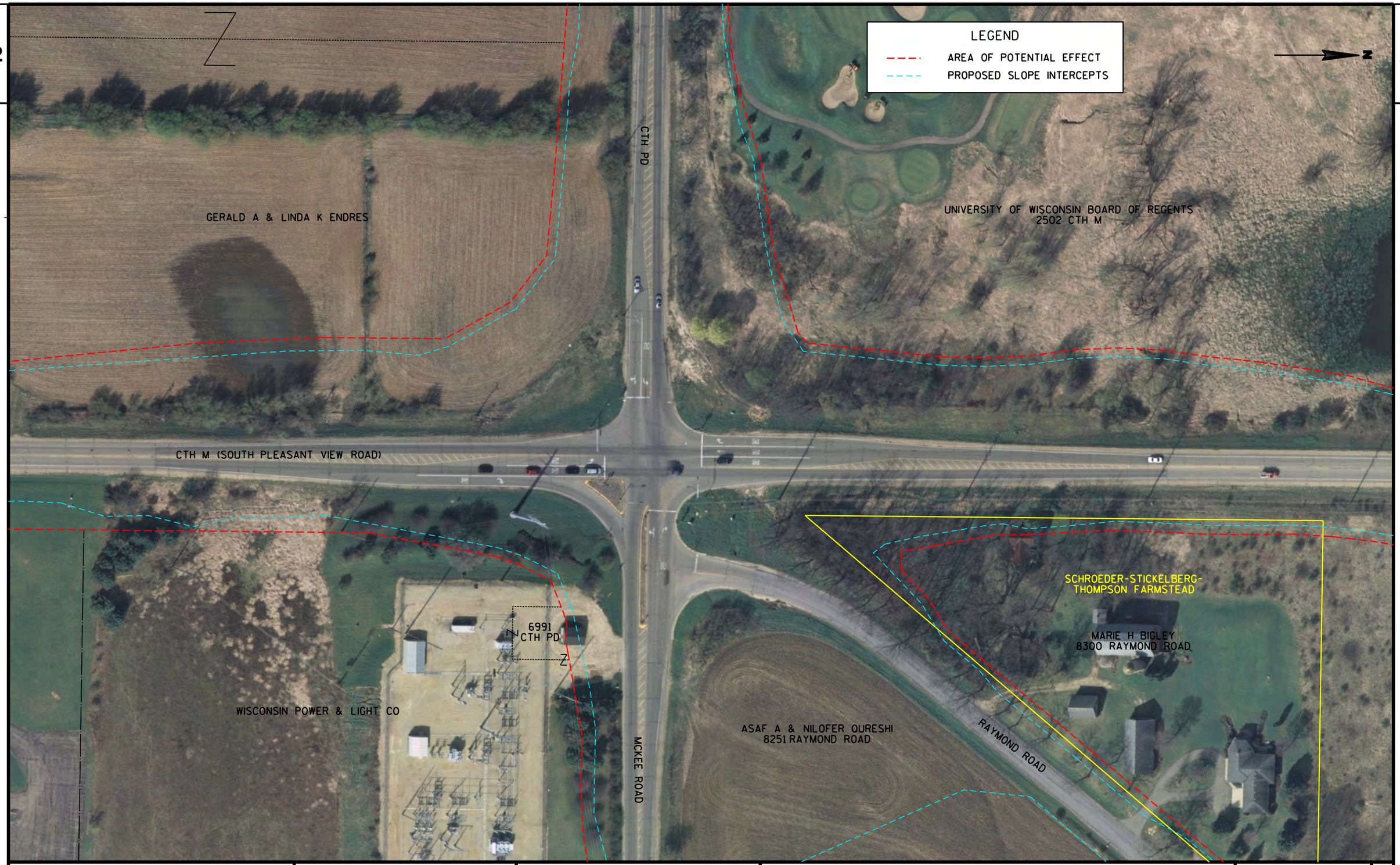

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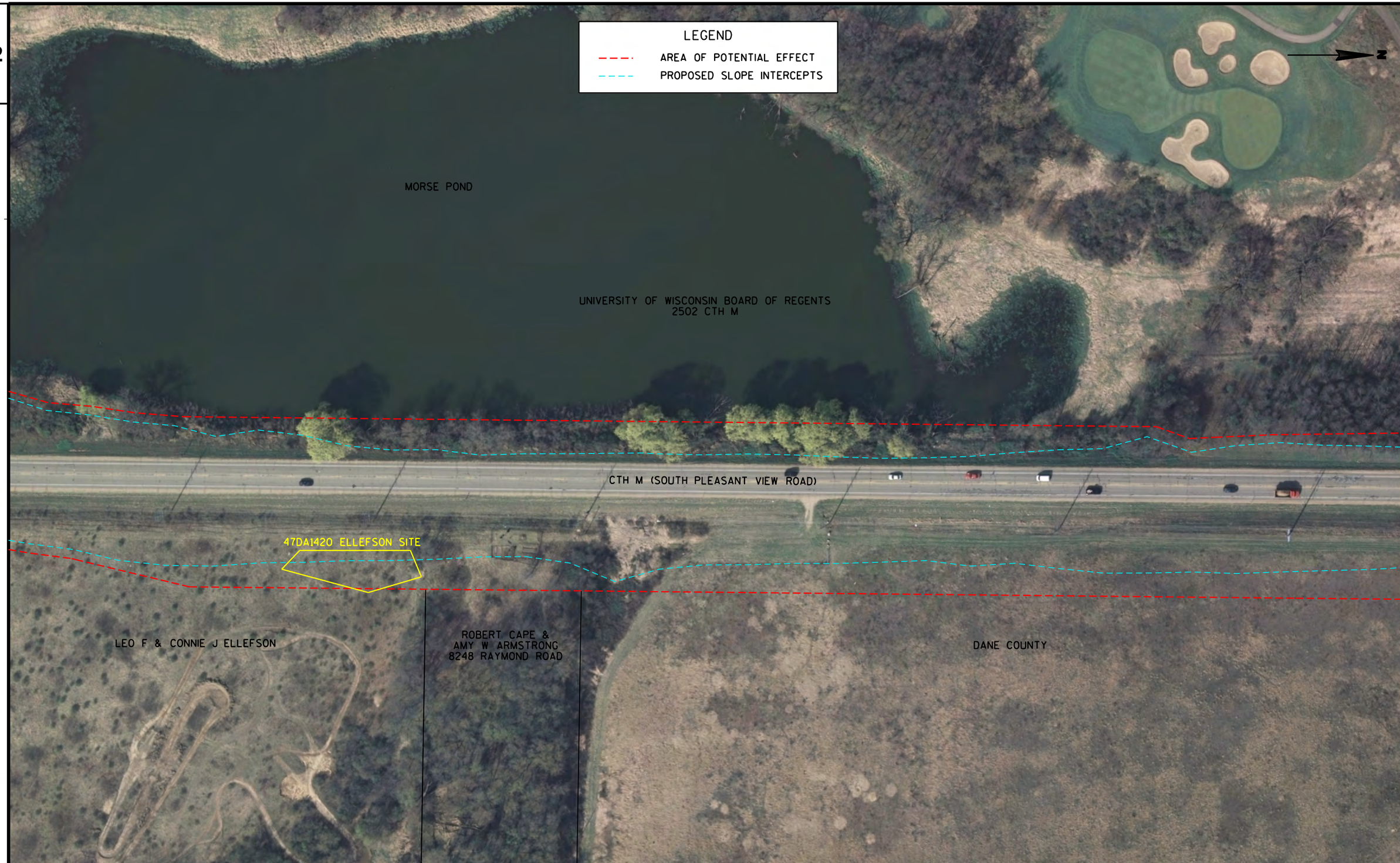

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APE 09.dgn 5/11/2012 7:11:39 AM jdolens

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PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	AREA OF POTENTIAL EFFECT	SHEET	E

2

2

PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	AREA OF POTENTIAL EFFECT	SHEET	E

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APE 07.dgn 5/11/2012 7:11:45 AM jdolens

2

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PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	AREA OF POTENTIAL EFFECT	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

APE 03.dgn 5/11/2012 7:11:50 AM jdolens

2

2

PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	AREA OF POTENTIAL EFFECT	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

APE 02.dgn 5/11/2012 7:11:54 AM jdolens

2

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PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	AREA OF POTENTIAL EFFECT	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

APE 01.dgn 5/11/2012 7:12:01 AM jdolens

2

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PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	AREA OF POTENTIAL EFFECT - CTH PD (MCKEE ROAD)	SHEET	E

2

2

PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	AREA OF POTENTIAL EFFECT - CTH PD (MCKEE ROAD)	SHEET	E

2

2

PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	AREA OF POTENTIAL EFFECT - CTH PD (MCKEE ROAD)	SHEET	E

2

2

PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	AREA OF POTENTIAL EFFECT - RAYMOND ROAD	SHEET	E

2

2

PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	AREA OF POTENTIAL EFFECT - RAYMOND ROAD	SHEET	E

2

2

PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	AREA OF POTENTIAL EFFECT - MIDTOWN ROAD	SHEET	E

2

2

PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	AREA OF POTENTIAL EFFECT - MIDTOWN ROAD	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

APE 05.dgn 5/11/2012 7:12:22 AM jdolens

2

PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	AREA OF POTENTIAL EFFECT - MIDTOWN ROAD	SHEET	E

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Department of Public Works
City Engineering Division
608 266 4751

Robert F. Phillips, P.E.
City Engineer

City-County Building, Room 115
210 Martin Luther King, Jr. Boulevard
Madison, Wisconsin 53703
FAX 608 264 9275
Textnet 866 704 2315
www.cityofmadison.com

Assistant City Engineer
Michael R. Dailey, P.E.

Principal Engineers
Christina M. Bachmann, P.E.
John S. Fahrney, P.E.
Gregory T. Fries, P.E.
Christopher J. Petykowski, P.E.

Facilities & Sustainability
Jeanne E. Hoffman, Manager
James C. Whitney, A.I.A.

Operations Supervisor
Kathleen M. Cryan

GIS Manager
David A. Davis, R.L.S.

Financial Officer
Steven B. Danner-Rivers

Hydrogeologist
Brynn Bemis

BIGLEY, MARIE
8300 RAYMOND RD.
MADISON, WI 53719-5055

May 24, 2011

Dear MARIE BIGLEY:

SUBJECT: South Pleasant View Road
(Prairie Hill Road – Cross Country Road)
CTH M
Dane County

The City of Madison, in conjunction with Dane County, City of Verona, Town of Verona, and Town of Middleton, will be conducting archaeological surveys for a future improvement of CTH M (Pleasant View Road) between Cross Country Road and Prairie Hill Road. Construction is currently planned to begin in 2014.

In compliance with Section 106 of the National Historic Preservation Act, it has been determined that the proposed project has the potential to effect historic and cultural resources in the project area. Surveys are being done to identify these resources within the area on properties adjacent to CTH M and intersecting side roads, including CTH PD (McKee Road), Midtown Road, and Raymond Road.

Crews will begin work about May 31, 2011 and take approximately five weeks to complete. Great Lake Archaeological Research Center (GLARC) will be representing the City of Madison for these operations. GLARC archaeologists will conduct pedestrian surveys and shovel test pits to determine the presence/ absence of archaeological resources within the project area. If GLARC needs to enter upon or across your property to conduct the survey, they will make every effort to contact you prior to entry.

Questions regarding the survey operations may be directed to GLARC while in the field by contacting Katherine Shillinglaw at 414-481-2093, or by contacting Chris Petykowski at the City of Madison at 608-267-8678.

Sincerely,

Robert F. Phillps, P.E. City Engineer

RFP:rpo

enc: Project Location Map

cc: Alder Lisa Subeck
Alder Steve King
Alder Paul Skidmore
County Board Supervisor Melanie Hampton
County Board Supervisor Ronn Ferrell
County Board Supervisor Dave Ripp
County Board Supervisor Mike Willett
Chris Petykowski, City of Madison
Matt Veldran, Dane County Public Works and Transportation Committee Chair
Pamela Dunphy, Dane County
Ron Reider, City of Verona
David Shaw, Town of Middleton
Rose Johnson, Town of Verona
Katherine Shillinglaw, Great Lake Archaeological Research Center
Jason DiPiazza, MSA Professional Services
Bill Biesmann, Kjohnson Engineers

November 16, 2011

Subject: 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Dear Property Owner or Business Owner:

You are invited to attend a public information meeting regarding the reconstruction of County Highway M (CTH M) between Cross Country Road and Prairie Hill Road.

The meeting will take place at the Verona Senior Center, 108 Paoli Street, Verona, WI on Thursday, December 8 from 6 pm until 8 pm. Representatives of the City of Madison, the City of Verona, and Dane County will be available to discuss the proposed project and address any questions or concerns. A short presentation will begin at 6:30 pm and include a basic overview of project concepts and design alternatives. Project staff will be available before and after the presentation to answer questions and provide additional information regarding the project.

Persons with a concern for, or knowledge about historic buildings and structures and archaeological sites are encouraged to attend this meeting. You can also provide comments to city or county representatives or any of the project design team members. Contact information is listed below.

The proposed project is scheduled for 2014 and 2015 construction. The CTH M project limits are from the intersection of Cross Country Road and CTH M to the intersection of Prairie Hill Road and CTH M. McKee Road (CTH PD) will also be reconstructed from approximately 1500' west of the CTH M intersection to Meriter Way. Similarly, Mid Town Road will be reconstructed from Waterbend Drive to Waldorf Boulevard. Finally, Raymond Road will be reconstructed from the CTH PD intersection to the Meriter Hospital driveway. A project location map is attached. Key project features include:

- Reconstruction of CTH M into an urban arterial corridor
- Intersection improvements at McKee Road (CTH PD) and Mid Town Road
- Bicycle and pedestrian facility improvements including sidewalks, bike lanes, paths, and underpasses.
- Storm sewer, sanitary sewer, and water main construction
- Street lighting

Property owners who have private storm sewer laterals or private utilities within the highway right-of-way are urged to attend the meeting or contact Jason DiPiazza with MSA Professional Services at (608) 242-6640 or jdipiazza@msa-ps.com.

If you have questions, concerns, or information that may assist in the development of this project, we encourage you to attend the meeting. Hearing impaired people may request an interpreter at the meeting by contacting Jason DiPiazza with MSA Professional Services. If we can provide additional

November 16, 2011

information, you can contact either Jason DiPiazza with MSA Professional Services, Rob Phillips with the City of Madison, or Ron Rieder with the City of Verona.

Sincerely,

Robert F. Phillips, P.E.
City of Madison
City Engineer
(608) 266-4751
rphillips@cityofmadison.com

Ron Rieder
City of Verona
Director of Public Works
(608) 848-6695
ron.rieder@ci.verona.wi.us

Pamela J. Dunphy, P.E.
Dane County Highway De
Assistant Commissioner
(608) 266-4036
dunphy@co.dane.wi.us

Enc.

NOTICE OF PUBLIC INFORMATIONAL MEETING FOR:
County Highway M Reconstruction Planning

The City of Madison, the City of Verona, and Dane County are proposing to reconstruct County Highway M (CTH M) from Cross Country Road to Prairie Hill Road. Reconstruction is scheduled for 2014 and 2015.

A public informational meeting will be held on December 8, 2011 from 6 pm to 8 pm at the Verona Senior Center, 108 Paoli Street, Verona, WI. The meeting will be conducted in an open house format; the public is encouraged to attend. A short presentation will begin at 6:30 pm and include an overview of project concepts and design alternatives. City of Madison, Verona, and Dane County staff and project design staff will be available before and after the presentation to answer questions, explain exhibits, and provide additional information regarding the project.

Persons with a concern for or knowledge about historic buildings and structures or archaeological sites are encouraged to attend this meeting or provide comments to the City of Madison, the City of Verona, Dane County, or MSA Professional Services, Inc.

Hearing impaired people may request an interpreter at the meeting by contacting Jason DiPiazza with MSA Professional Services. Citizens who are unable to attend the meeting, or would like more information can contact Jason DiPiazza at 1-800-446-0679. Written comments regarding the project can be mailed to Jason DiPiazza, MSA Professional Services, 2901 International Lane, Suite 300, Madison, WI 53704.

MSA
PROFESSIONAL SERVICES
TRANSPORTATION • MUNICIPAL
DEVELOPMENT • ENVIRONMENTAL

April 26, 2012

Jim Becker
WisDOT Bureau of Technical Services, Environmental Process & Documentation Section
4802 Sheboygan Avenue
P.O. Box 7910
Madison, WI 53707-7910

Re: Section 106 Submittal Exception Justification
ID 5992-09-81
City of Madison, S. Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Dear Mr. Becker:

The initial archaeology survey, completed during the Identification step of the Section 106 process for the above referenced project, located a potentially eligible historical site near the proposed western limit of the project along CTH PD (McKee Road), an intersecting side street (site 47DA1421 Endres Site). The project design team and local sponsors determined that this site could be avoided entirely as it is at the very limit of the proposed improvements for this project. Thus, a Phase II Archaeology Evaluation was not completed. Section 106 documentation for this project is included with this letter, noting the presence of this site.

The project sponsor and project design team have since concluded that a Phase II Archaeology Evaluation should now be completed for this site to aid in locating future improvement projects on CTH PD that are planned. The future improvement project will expand the existing two-lane rural highway to a four-lane divided arterial. If the Endres site is determined to be historically significant, the future improvements will be designed to avoid the site. This design for avoiding the site will require that the current project design accommodate the future design. Thus, a Phase II Archaeology evaluation is being completed at this time to determine if avoidance is necessary.

We understand that including the Phase II Archaeology Evaluation of the Endres site in the Section 106 submittal for the current project is preferred for WisDOT and SHPO review. However we are requesting an exception to review the Section 106 submittal without a completed Phase II Archaeology Evaluation for the Endres site. As you consider this request, please note the following:

- The Phase II Archaeology Evaluation for the Endres site will be completed prior to completion of the FONSI for the referenced project. Discussion of the site and outcome of the evaluation will be included in the Environmental Document.
- If the Section 106 submittal is delayed until the evaluation can be completed for the Endres site, the project schedule will be delayed and threaten the ability to construct the project as scheduled

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in 2014. This project is a critical improvement to a major transportation connection for western Dane County.

- The evaluation and required reporting for the Endres site will be submitted to WisDOT Environmental Services Section and SHPO for review upon completion. It will be submitted with intention of including it with the Section 106 and Environmental Documentation for the referenced project.
- The final design of the referenced project will be designed to avoid the Endres site regardless of the outcome of the evaluation. This is due to the location of the site at the limits of the construction.
- If the evaluation determines the site is historically significant, the final design for the referenced project will be such that the Endres site can be avoided when the future improvement project for CTH PD is designed.
- The evaluation report for this site will be available and included with Section 106 documentation for the future improvement project on CTH PD.

We hope that this submittal is acceptable and that you can see we are doing our due diligence to consider the environmental and historical resource impacts of not only the referenced project, but future improvement projects as well. Thank you for your consideration. Please do not hesitate to contact either myself at (608) 242-7779 or our archaeological consultant, Kathy Shillinglaw with Great Lakes Archaeological Research Center, Inc. at (414) 481-2093 for any further information or questions.

Sincerely,

MSA Professional Services, Inc.

Jason DiPiazza, P.E.
Project Manager

JTD
Enc: Project Location Map
Proposed improvement diagram
Endres Site location map (from the Section 106 submittal)

cc: Chris Petykowski, P.E. Principal Engineer, City of Madison Engineering
Ron Rieder, Director of Public Works, City of Verona
Pam Dunphy, P.E., Assistant Commissioner, Dane County Department of Public Works
Karen Richardson, P.E., Kjohnson Engineers, Local Program Management Consultant

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ATTACHMENT E:

Initiated Contact Letters

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November 16, 2011

Subject: 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Dear Property Owner or Business Owner:

You are invited to attend a public information meeting regarding the reconstruction of County Highway M (CTH M) between Cross Country Road and Prairie Hill Road.

The meeting will take place at Verona City Center, 111 Lincoln Street, Verona, WI in the Council Chambers, on Thursday, December 8 from 6:00 PM until 8:00 PM. Representatives of the City of Madison, the City of Verona, and Dane County will be available to discuss the proposed project and address any questions or concerns. A short presentation will begin at 6:30 PM and include a basic overview of project concepts and design alternatives. Project staff will be available before and after the presentation to answer questions and provide additional information regarding the project.

Persons with a concern for, or knowledge about historic buildings and structures and archaeological sites are encouraged to attend this meeting. You can also provide comments to city or county representatives or any of the project design team members. Contact information is listed below.

The proposed project is scheduled for 2014 and 2015 construction. The CTH M project limits are from the intersection of Cross Country Road and CTH M to the intersection of Prairie Hill Road and CTH M. McKee Road (CTH PD) will also be reconstructed from approximately 1500' west of the CTH M intersection to Meriter Way. Similarly, Mid Town Road will be reconstructed from Waterbend Drive to Waldorf Boulevard. Finally, Raymond Road will be reconstructed from the CTH PD intersection to the Meriter Hospital driveway. A project location map is attached. Key project features include:

- Reconstruction of CTH M into an urban arterial corridor
- Intersection improvements at McKee Road (CTH PD) and Mid Town Road
- Bicycle and pedestrian facility improvements including sidewalks, bike lanes, paths, and underpasses.
- Storm sewer, sanitary sewer, and water main construction
- Street lighting

Property owners who have private storm sewer laterals or private utilities within the highway right-of-way are urged to attend the meeting or contact Jason DiPiazza with MSA Professional Services at (608) 242-6640 or jdipiazza@msa-ps.com.

If you have questions, concerns, or information that may assist in the development of this project, we encourage you to attend the meeting. Wheelchair accessibility is available at this meeting site. Hearing impaired people may request an interpreter at the meeting by contacting Jason DiPiazza with MSA Professional Services. If we can provide additional information, you can contact either Jason

DiPiazza with MSA Professional Services, Chris Petykowski with the City of Madison, or Ron Rieder with the City of Verona.

Sincerely,

Chris Petykowski, P.E.	Ron Rieder	Pamela Dunphy, P.E.
City of Madison Principal Engineer (608) 267-8678 cpetykowski@cityofmadison.com	City of Verona Director of Public Works (608) 848-6801 ron.rieder@ci.verona.wi.us	Dane County Highway Dept. Assistant Commissioner (608) 266-4036 dunphy@co.dane.wi.us

Enc.

May 4, 2012

Subject: 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Dear Property Owner or Business Owner:

You are invited to attend a public information meeting regarding the reconstruction of County Highway M (CTH M) between Cross Country Road and Prairie Hill Road.

The meeting will take place at the Verona Senior Center, 108 Paoli Street, Verona, WI on Thursday, May 24th from 6 pm until 8 pm. Representatives of the City of Madison, the City of Verona, and Dane County will be available to discuss the proposed project and address any questions or concerns. A short presentation will begin at 6:30 pm and include a basic overview of project concepts and the recommended design alternatives. Project staff will be available before and after the presentation to answer questions and provide additional information regarding the project.

Persons with a concern for, or knowledge about historic buildings and structures and archaeological sites are encouraged to attend this meeting. You can also provide comments to city or county representatives or any of the project design team members. Contact information is listed below.

The proposed project is now scheduled for 2015 and 2016 construction. The CTH M project limits are from the intersection of Cross Country Road and CTH M to the intersection of Prairie Hill Road and CTH M. McKee Road (CTH PD) will also be reconstructed from approximately 1500' west of the CTH M intersection to Meriter Way. Similarly, Mid Town Road will be reconstructed from Waterbend Drive to Waldorf Boulevard. Finally, Raymond Road will be reconstructed from the CTH PD intersection to the Meriter Hospital driveway. A project location map is attached. Key project features include:

- Reconstruction of CTH M into an urban arterial corridor
- Intersection improvements at McKee Road (CTH PD) and Mid Town Road. The recommended design alternative includes a roundabout at McKee Road and a signalized intersection at Midtown Road.
- Bicycle and pedestrian facility improvements including sidewalks, bike lanes, paths, and underpasses.
- Storm sewer, sanitary sewer, and water main construction
- Street lighting

Property owners who have private storm sewer laterals or private utilities within the highway right-of-way are urged to attend the meeting or contact Jason DiPiazza with MSA Professional Services at (608) 242-6640 or jdipiazza@msa-ps.com.

Built on Tradition... Inspired by Excellence

December 19, 2011 SRF No. 0107334

«Sal» «First» «Last»
«Title»
«Organization»
«Street»
«City_State_Zip»

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)

Dear «Sal» «Last»:

The purpose of this letter is to request your input on and, if appropriate at this time, your general concurrence with the subject project. The City of Madison, along with the City of Verona and Dane County, is studying proposed improvements of South Pleasant View Road/County M (Project ID: 5992-09-81) between Prairie Hill Road and Cross Country Road in Dane County, Wisconsin. This transportation improvement project is funded by a combination of federal and local funds.

The objective of this project is to improve this vital regional transportation corridor by reconstructing County M and to enhance and/or create bicycle/pedestrian facilities throughout the project area. The project includes two major intersections, Midtown Road and County PD/McKee Road. The corridor is currently a rural, two-lane facility, with traffic signals located at the County PD/McKee Road and Midtown Road intersections. Current and projected traffic volumes show that the facility is functionally obsolete. Intersections and other access points fail on an operational level with severe backups and delays during peak travel hours.

Phased construction is planned for the southern section of the corridor in 2014 from Cross Country Road to 2,500 feet north of County PD/McKee Road (a distance of 1.47 miles). The northern portion of the corridor from 2,500 feet north of the County PD/McKee Road intersection to Prairie Hill Road (a distance of 1.47 miles) is scheduled for construction starting in 2015.

This transportation improvement project consists of several elements including an environmental assessment (EA) in accordance with the Wisconsin Facilities Design Manual (FDM) and Chapter TRANS400 of the Wisconsin Administrative Code. As part of the agency/utility coordination and environmental review process, we are seeking your comments to identify various environmental needs and issues that should be considered as part of the project. Given the importance of this transportation facility to the area and region, as well as the number of factors that must be considered as part of the project, your input is vital in avoiding, minimizing, or mitigating potentially negative impacts to the environment, as well as maximizing benefits for the public and users of the highway. The area of potential impact may include anything within ½ mile of the study area.

To assist you in providing comments, we have developed a scoping package that includes the following items:

1. Project location map
2. Project summary
3. Anticipated project timeline/schedule
4. List of agencies with which coordination/contact is occurring concurrently
5. A business reply envelope

If you feel we should be seeking comment from additional agencies/utilities not included on the list included with this packet, please let us know and we will contact them.

We are requesting written comments by Friday, January 27, 2012. If you would like to discuss this project in person at any time prior to January 27th, please feel free to contact us. Also, if you have any questions or require any additional information, please contact us. Our point of contact for this project is Bill Dunlop (wdunlop@srfconsulting.com) at 608.829.0010.

We have provided a business reply envelope for your convenience in submitting comments. Comments and other documents can also be mailed to:

William H. Dunlop, PE
SRF CONSULTING GROUP, INC.
901 Deming Way, Suite 302
Madison, WI 53717-1979

Thank you in advance for your cooperation.

Sincerely,

SRF CONSULTING GROUP, INC.

William H. Dunlop, PE (WI)
Senior Associate

Attachments:

1. Project location map
2. Project summary
3. Timeline/schedule
4. List of agencies
5. Business reply envelope

cc: Jason DiPiazza, MSA Professional Services
Chris Petykowski, City of Madison
Ron Rieder, City of Verona
Pam Dunphy, Dane County

H:\Projects\7334\EP\20111219_AgencyCoordinationLetterFinal.docx

SRF Consulting Group, Inc.
ENGINEERS
PLANNERS
DESIGNERS

SRF No. 107334004A

February 17, 2012

<<Sal>> <<First>> <<Last>>
<<Title>>
<<Organization>>
<<Street>>
<<City_State_Zip>>

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)

Dear <<Sal>> <<Last>>:

I am writing to follow up on the initial letter dated December 19, 2011 that was sent to you regarding the South Pleasant View Road/County M Project (Project ID: 5992-09-81). As part of the environmental assessment documentation required for this project we are requesting your input and, if appropriate at this time, your general concurrence with the project. The City of Madison, along with the City of Verona and Dane County, has been studying and is now moving forward with the development of the design of proposed improvements of South Pleasant View Road/County M between Prairie Hill Road and Cross Country Road in Dane County, Wisconsin.

The corridor is approximately 3 miles in length and is currently a rural, two-lane facility, with traffic signals located at the County PD/McKee Road and Midtown Road intersections. Current and projected traffic volumes show that the facility is functionally obsolete. Intersections and other access points fail on an operational level with severe backups and delays during peak travel hours.

The preferred alternative has been identified for the County M corridor. The project will provide improved facilities for bikes and pedestrians and the existing roadway will be reconstructed into a four-lane roadway with accommodations for six-lanes of traffic in the future if needed. The Midtown Road intersection would be improved and expanded as a signalized intersection. County PD/McKee Road would be reconstructed as a roundabout.

Phased construction is planned for the southern section of the corridor in 2014 from Cross Country Road to 2,500 feet north of County PD/McKee Road (a distance of 1.47 miles). The northern portion of the corridor from 2,500 feet north of the County PD/McKee Road intersection to Prairie Hill Road (a distance of 1.47 miles) is scheduled for construction starting in 2015.

To assist you in providing comments, we have included the following items:

1. Project location map
2. Preferred Alternative at County PD
3. Preferred Alternative at Midtown Road
4. A business reply envelope

In order to meet the project schedule, we are requesting written comments by Friday, March 16, 2012. If you would like to discuss this project or have any questions at any time prior to this date, please feel free to contact me. I can be reached by phone at 608.829.0010 or by email at wdunlop@srfconsulting.com.

We have provided a business reply envelope for your convenience in submitting comments. Comments and other documents can also be mailed to:

William H. Dunlop, PE
SRF CONSULTING GROUP, INC.
901 Deming Way, Suite 302
Madison, WI 53717-1979

Thank you in advance for your cooperation.

Sincerely,

SRF CONSULTING GROUP, INC.

William H. Dunlop, PE (WI)
Senior Associate

Attachments:

1. Project location map
2. Preferred Alternative at County PD
3. Preferred Alternative at Midtown Road
4. Business reply envelope

cc: Jason DiPiazza, MSA Professional Services
Chris Petykowski, City of Madison
Ron Rieder, City of Verona
Pam Dunphy, Dane County

SRF Consulting Group, Inc. | ENGINEERS PLANNERS DESIGNERS

October 21, 2014 SRF No. 0107334

<<Sal>><<First>><<Last>>
<<Title>>
<<Organization>>
<<Street>>
<<City_State_Zip>>

SUBJECT: COUNTY M/ SOUTH PLEASANT VIEW ROAD,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)

Dear <<Sal>><<Last>>:

A letter was sent in December of 2011 to inform you of this project and to request your input on the subject project. Work has continued on the project and preferred alternatives have been developed. This letter is to update you on the status of the project and allow you to provide any additional input you may have.

The City of Madison, along with the City of Verona and Dane County, is studying proposed improvements of County M/ South Pleasant View Road (Project ID: 5992-09-81) between Prairie Hill Road and Cross Country Road in Dane County, Wisconsin. This transportation improvement project is funded by a combination of federal and local funds.

The objective of this project is to improve this vital regional transportation corridor by reconstructing County M and to enhance and/or create bicycle/pedestrian facilities throughout the project area. The corridor is currently a rural, two-lane facility, with traffic signals located at the County PD/McKee Road and Midtown Road intersections. Current and projected traffic volumes show that the existing two-lane facility is functionally obsolete. Intersections and other access points fail on an operational level with severe backups and delays during peak travel hours.

The proposed reconstruction will provide four to six travel lanes along the corridor and provide improved facilities for bikes and pedestrians. The proposed alternative includes a signalized intersection at Midtown Road and a westbound underpass at CTH PD. The underpass is in essence a traffic signal alternative with one of the traffic flows (CTH PD westbound through movement) removed from the intersection. In addition to the intersection improvements and lane expansion, other work includes storm sewer, sanitary sewer, water main, lighting, and utility relocations.

Construction timing has been pushed back from the original schedule. Phased construction is now planned for the southern section of the corridor in 2015 from Cross Country Road to 2,500 feet north of County PD/McKee Road (a distance of 1.47 miles). The northern section of the corridor from 2,500 feet north of the County PD/McKee Road intersection to Prairie Hill Road (a distance of 1.47 miles) is scheduled for construction starting in 2016.

This transportation improvement project consists of several elements including an environmental assessment (EA) in accordance with the Wisconsin Facilities Design Manual (FDM) and Chapter

TRANS400 of the Wisconsin Administrative Code. Given the importance of this transportation facility to the area and region, as well as the number of factors that must be considered as part of the project, your input is vital in avoiding, minimizing, or mitigating potentially negative impacts to the environment, as well as maximizing benefits for the public and users of the highway. The area of potential impact may include anything within ½ mile of the study area.

To assist you in providing additional comments, we have included the following items:

1. Project location map
2. Preferred alternatives for intersections (CTH PD and Midtown)
3. Corridor Segments (North and South)

We are requesting written comments by Friday, November 21, 2014. Comments and other documents can be emailed to jdipiazza@msa-ps.com or sent to:

Jason DiPiazza, PE
Project Manager
MSA PROFESSIONAL SERVICES, INC.
2901 International Ln Suite 300
Madison, WI 53704

Thank you in advance for your continued cooperation.

Sincerely,

SRF CONSULTING GROUP, INC.

Paul Chellevold, AICP
Senior Planner

Attachments:
1. Project location map
2. Preferred alternatives for intersections
3. A business reply envelope

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ATTACHMENT F:

Documentation for Consultation

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DOCUMENTATION FOR CONSULTATION

Project ID 5992-09-81
WHS# 12-0939/DA
Cross Country Road to Prairie Hill Road
CTH M (South Pleasant View Rd)
Dane County

1. Description of the Undertaking

The project is located in the Cities of Madison and Verona and the Towns of Verona and Middleton in Dane County, Wisconsin. The proposed action is the expansion of CTH M from a two-lane highway to a four-lane urban arterial with a raised median and a multiuse path. Intersection improvements are proposed for the CTH M – Midtown Road and CTH M – CTH PD intersections. The length of the project is 2.9 miles. See Attachment 1 for a project map.

The purpose of the project is to

- Provide a safe and serviceable corridor that is convenient for area businesses, residents, and the traveling public, including motor vehicles, bicycles, pedestrians, and transit vehicles
- Deliver acceptable operating conditions for existing and future traffic volumes
- Accommodate future planned growth along the project corridor and in the immediate vicinity
- Provide well-designed intersections that minimize impacts to the local surrounding landscape

CTH M/South Pleasant View Road (called CTH M hereafter) is a principal arterial servicing the southwest side of Madison and the City of Verona. The CTH M corridor is currently a rural, two-lane facility, with traffic signals located at the intersections of CTH PD/McKee Rd (called CTH PD hereafter) and Midtown Road. Current and future projected traffic and bicycle/pedestrian demand have made the existing facility functionally obsolete. Intersections and other access points are failing on an operational level, with severe backups and delays during peak travel hours.

The existing pavement on CTH M is substandard. The score indicates routine maintenance is required to fill cracks and seal coat the roadway. The current single lane geometry and signalized intersections do not have enough capacity to safely accommodate existing and forecasted traffic volumes.

Corridor Importance: CTH M is on the National Highway System. The CTH M corridor is a critical north/south roadway connecting the city of Madison and the city of Verona. The Functional Classification System (2011) Map of Dane County, WI identifies CTH M as a principal arterial. CTH M is one of a few north/south principal arterials in south central Dane County with the next closest located over three miles away (US 18/151/Verona Road).

Roadway Operations: CTH M is a roadway with significant local and regional importance. See Attachment 2-A for current and projected traffic counts. CTH M is classified by the Madison Metropolitan and Dane County Regional Transportation Plan Update as a very congested roadway. Major capacity improvements are one of the congestion management strategies identified by the Madison Area Transportation Planning Board. Capacity improvements include construction of additional through traffic lanes, eliminating at-grade intersections, and constructing new roadways.[1]

The Highway Capacity Manual defines Level of Service (LOS) for signalized intersections as a function of the average vehicle control delay. LOS is determined by the average delay time by a vehicle in seconds; for signalized at-grade intersections, this ranges from LOS A (less than 10 seconds delay per vehicle) to LOS F (more than 80 seconds delay per vehicle). The current LOS during peak hours at the CTH M – CTH PD intersection is at LOS F. LOS F describes a road for which travel time cannot be predicted with breakdown in vehicular flow, where every vehicle moves in lockstep with the vehicle in front of it.[2] With the increased traffic projections, improvements are necessary to improve roadway operations. If improvements are not implemented, the delay will worsen and the level of service will remain LOS F with even longer delays. Congestion will continue to increase and other streets within the system will become negatively affected.

Bicycles/Pedestrians: The project area currently lacks consistent and effective bike lanes. According to the Dane County Map for Bicyclists (2012), CTH M rates as a 'least suitable roadway with paved shoulders'. Currently, there are no sidewalks between Flagstone Drive and Prairie Oaks Drive and limited or no bicycle facilities along CTH M from Valley View Road to Cross Country Road.

Existing traffic volumes along the roadway make it unsafe for pedestrians and bicyclists to utilize the shoulder. Constructing a multi-use path as well as expanded bike lanes will provide safer accommodations for alternate mode users of all abilities. The proposed facilities will tie into existing bike lanes and sidewalks at each terminus and provide safe and efficient grade-separated crossings at Flagstone Drive, Midtown Road, and CTH PD.

Buses: There are no current routes on the corridor; however, routes are anticipated in the future. The city of Verona and Epic Systems Corporation are currently working with Metro Transit to improve the commuter express service to the Epic campus (located approximately 1.5 miles southwest of the CTH M – Cross Country Road intersection). The nearest Madison Metro Route (Route 73) serves CTH M north of Watts Road, approximately 1.5 miles north of the project area. A few school bus routes use the CTH M corridor, but there are no scheduled stopping points on CTH M.

Continuity: The project limits at the south termini connect to a four-lane urban facility at the intersection of Cross Country Road. The project limits at the north termini connect to a four-lane urban facility just south of the Valley View Road intersection. By expanding to a four-lane facility between the two sections, CTH M will provide a continuous and consistent four-lane corridor, reducing conflicts caused by merging vehicles. The project will tie into existing facilities including medians, bike lanes, and sidewalks.

---

[1] *2035 Regional Transportation Plan Update, March 2012.*

[2] *Highway Capacity Manual and AASHTO Geometric Design of Highways and Streets*

Project Termini: The proposed project limits are Prairie Oaks Drive in the City of Verona to Prairie Hill Road in the City of Madison for a total project length of 2.9 miles. The project is part of the overall CTH M corridor improvement plan that extends north from Prairie Hill Road to Mineral Point Road (CTH S). This project will tie into the already completed phase of the CTH M corridor improvement plan at Valley View Road. Attachment 2-B shows the completed segment, Pleasant View Road/Valley View Road phase (green) that the proposed project will tie into. The CTH M & S phase (blue) is currently being constructed. The proposed project addressed in this document, labeled Mid Town Road and CTH PD is shown in orange and red colors. The CTH PD (red) segment is planned for construction beginning in 2015 and the Mid Town Road (orange) project segment is planned for construction beginning in 2016.

2. Description of Steps Taken to Identify Historic Properties

A. Architectural/Historical Resources

1. Previously Recorded Properties

An archival and literature search of the Wisconsin Historic Preservation Database (WHPD) and the National Register of Historic Places (NRHP) was conducted to identify previously recorded architectural/historical properties within the Area of Potential Effects (APE). No previously recorded properties were identified.

2. Architectural/Historical Survey

The literature research also focused on the historic development of the Cities of Madison and the Towns of Verona and Middleton in order to obtain information specific to the history of the immediate project area. All buildings within the APE were reviewed for any apparent architectural and/or historical integrity that warranted survey. Two historic properties were identified during the survey, including one building and one farmstead containing nine historic resources. See Attachment 3 for location of properties relative to the project area. The properties are:

- 6987 Midtown Road (Gordon School)
- 8300 Raymond Road (Schroeder-Stickelberg-Thompson Farmstead)

Neither property is listed in the National Register of Historic Places (NRHP).

Determination of Eligibility (DOE) forms were prepared for both properties. The Schroeder-Stickelberg-Thompson Farmstead was determined eligible for listing in the NRHP. The Gordon School was determined to be not eligible for listing in the NRHP. The SHPO has concurred with both recommendations. See Attachments 4-A and 4-B for the approved DOE forms.

B. Archaeological Resources

1. Previously Recorded Properties

An archival and literature search was conducted to identify previously recorded archaeological and burial sites in the area. The initial identification reports were conducted for a one-mile area surrounding the project. Five archaeological sites had been previously reported within one mile of the project area.

2. Archaeological Field Investigations

A Phase 1 archaeological survey was conducted within the APE, defined as all areas of proposed ground disturbing activities, in May and June 2011 and April 2012. Standard archaeological procedures were followed according to *Guidelines for Public Archaeology in Wisconsin* (revised 1997), published by the Wisconsin Archaeology Survey and endorsed by the State Historic Preservation Office. The survey identified two properties that were considered potentially eligible for NRHP listing:

- Site 47DA1421 (Endres Site)
- Site 47DA1420 (Ellefson Site)

Subsequent Phase 2 evaluations determined these sites to be not eligible for listing in the National Register of Historic Places. See Attachments 4-C and 4-D for signed Section 106 forms.

3. Description of Affected Historic Properties

One historic property will be affected by the project:

8300 Raymond Road (Schroeder-Stickelberg-Thompson Farmstead)

The Schroeder-Stickelberg-Thompson Farmstead was determined to be eligible for listing in the National Register under *Criterion C: Architecture* as a representative of a mid-nineteenth-to-mid-twentieth-century farmstead containing an intect collection of historic outbuildings as well as a well-preserved historic farmhouse. The farmstead is located in a rural setting with a wooded area on the south side of the property (in the northwest quadrant of the CTH PD – CTH M intersection). CTH M is located along the west side of the property with Raymond Road located along the southeast side. Open, uncultivated land is located north of the property. University Ridge Golf Course and Morse Pond are located on the west side of CTH M, across from the farmstead. A cultivated agricultural field is located on the opposite side of Raymond Road from the farmstead.

The historic boundary of the Schroeder-Stickelberg-Thompson Farmstead consists of a triangle that encompasses all of the property's contributing resources and is delineated by existing tree lines and ROW along Raymond Road and CTH M. Beginning at the southernmost edge of the tree line around the property, the historic boundary runs north for 460 ft. along the edge of the tree line and the CTH M ROW (40 ft. east of the paved edge of CTH M). From there, the boundary turns east to run for 380 ft.; this is 25 ft. north of the northern edge of the contributing barn (no distinct tree line or other visual demarcation exists, and the northern tax parcel line was not used as the historic boundary so as to exclude a recently-constructed house). At that point,

the boundary runs southwest for 600 ft. along the Raymond Road ROW and the edge of the tree line (30 ft. northwest of the paved edge of Raymond Rd.).

See Attachments 5-A through 5-J.

4. Description of the Undertaking's Effects on Historic Properties

Proposed project activities adjacent to the Schroeder-Stickelberg-Thompson Farmstead include

- the reconfiguration of the CTH PD – CTH M intersection, including an underpass for CTH PD westbound traffic
- the widening of CTH M from a 2-lane rural cross-section with gravel shoulders to a 6-lane urban cross-section with street lighting and curb and gutter; CTH M will be raised approximately 10 feet from the existing center line in front of the historic farm house
- the construction of a multiuse path along the eastern edge of CTH M
- The construction of a retaining wall (up to 3 ft tall) between CTH M and the proposed multiuse path; this will include the removal or relocation of a driveway off of CTH M.
- the termination of Raymond Road southwest of the historic property's primary driveway; this will remove Raymond Road from the CTH PD – CTH M intersection. The remaining portion of Raymond Road will be removed and a multiuse path will be constructed across the southern tip of the historic property (parallel to CTH PD); this will connect with the proposed multiuse path along the eastern edge of CTH M. The northernmost Raymond Road driveway access will remain as it currently exists and the existing southernmost Raymond Road driveway entrance will be relocated to the proposed terminus of Raymond Road.
- the relocation of overhead electric transmission lines; ATC maintains the existing lines located within the CTH M ROW. New overhead lines will be located in the terrace area between the proposed multiuse path and CTH M.

See Attachments 6-A through 6-E.

The following Criteria of Adverse Effect apply to the project activities adjacent to the Schroeder-Stickelberg-Thompson Farmstead:

i. Physical destruction of or damage to all or part of the property.

A segment of the multiuse path will be located within the southern tip of the property's historic boundary. A portion of the the property will be lost due to acquisition of a 0.1 acre section of ROW at this location. The driveway off of CTH M will be removed or relocated approximately 150 to 200 feet north of its existing location. Temporary Limited Easement (TLE) will be required within the historic boundary parallel to the multiuse path along the western edge of the property, at the southern tip of the property (north of the proposed ROW acquisition), parallel to Raymond Road at the eastern edge of the property, and at the proposed location of the secondary driveway access off of Raymond Road. Overhead utility lines will cross over the southern tip of the property; tree removal will be required at the southern tip of the property to provide a clear space around the overhead lines. See Attachments 6-A through 6-D.

v. Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features.

CTH M will be widened with increased capacity and will be raised up to ten feet higher than the existing roadway in front of the historic farmhouse. The new roadway will include concrete curb and gutter and a raised median with added street lighting. Currently street lighting is confined to the CTH PD – CTH M intersection; new lights will be placed in the medians along CTH PD and CTH M. The existing utility poles with overhead lines along the east side of CTH M will be relocated north or south, but will not be moved any closer to the property; new poles will be of steel construction and will be 15 to 20 ft. taller and of a wider diameter than the existing wood poles. ATC will require an overhang easement below their overhead lines where these cross the southern tip of the property; vegetation within this easement will be limited to 15 feet in height. As a result, trees inside the historic boundary in this area will be removed. A multiuse path will be constructed along the east side of the roadway, in front of the farmhouse. The multiuse path will be located 30 feet from the front of the farmhouse. A retaining wall up to three feet in height will be constructed between CTH M and the multiuse path. The CTH M – CTH PD intersection will be reconstructed. A segment of the multiuse path in the northeast quadrant of the reconfigured intersection will be located inside the southern tip of the property's historic boundary, requiring ROW acquisition. Tree removal from this ROW acquisition is anticipated, however roadway elevations will be designed to prevent the need to remove individual trees in close proximity to the house; the large 24-inch diameter trees on the south and north sides of the house will remain. See Attachments 6-A through 6-E.

The reconfiguration of the CTH M – CTH PD intersection, the widening and raising of CTH M, and the construction of a pedestrian path and retaining wall in front of the property represents a substantial visual change that alters the historically rural setting of the farmstead.

5. Discussion of Project Alternatives

The adverse effects of the proposed project on the Schroeder-Stickelberg-Thompson Farmstead are caused primarily by the intersection control developed for the CTH M – CTH PD intersection. The property is located in the northeast quadrant of this intersection. The following intersection control alternatives were reviewed and analyzed during the investigation:

A. No Build

No action except normal maintenance would take place. No improvements would be made to the CTH M – CTH PD intersection. The pavement would not be replaced, nor would bicycle or pedestrian accommodations be provided. No right of way would be acquired. The adverse effect to the Schroeder-Stickelberg-Thompson Farmstead would be avoided as no part of the property would be destroyed for the reconstruction of the CTH M – CTH PD intersection or for the widening of CTH M.

The existing intersection configuration, road pavement, and roadway section would bear current and future traffic volumes, resulting in worsening congestion, mobility, and operational characteristics. Any future improvements would be limited to those that

attempt to maintain the current service levels, driving surface, and address safety concerns at spot locations. Although the No Build Alternative would avoid an adverse effect to Schroeder-Stickelberg-Thompson Farmstead, it would not address key purpose and need factors (lack of bicycle and pedestrian facilities and poor traffic operations) discussed in Section 1. This alternative was not chosen because of these operational concerns.

B. Signalized At-Grade Intersection

The Signalized At-Grade Intersection Alternative was designed with a curved alignment that shifted the road west to avoid the farmhouse entirely. This shift would be balanced with the impacts to the wetland and University Ridge Golf Course in the northwest quadrant of the intersection as these are also protected by Section 4(f).

The Signalized At-Grade Intersection Alternative did not meet the purpose and need of the project because it failed to provide acceptable levels of service for the high traffic volumes forecasted for this intersection. The traffic signal was estimated to reach its capacity within 10 to 15 years after construction and thus was dismissed as a viable alternative. See Attachment 7-A.

C. Multi-Lane Roundabout

The Multi-Lane Roundabout Alternative was designed with a curved alignment of CTH M to shift the road west to avoid the Schroeder-Stickelberg-Thompson farmhouse entirely (this shift would be balanced with the impacts to the wetland and University Ridge Golf Course in the northwest quadrant of the intersection as these properties are protected by Section 4(f)). The Multi-Lane Roundabout Alternative also included an underpass below the roundabout for the multiuse path that would be located along the east side of CTH M. The path would be designed with maximum grades and minimum radii on the northeast corner of the Schroeder-Stickelberg-Thompson Farmstead to minimize the impacts to the property. The acquisition of right-of-way (ROW) would be limited to the northwest corner of the property (which is outside the historic boundary) and the southwest corner of the property (within the historic boundary). Some temporary easements would be necessary for grading purposes. (Attachment 7-B)

The Multi-Lane Roundabout was originally selected as the preferred alternative. The traffic modeling software used indicated that the roundabout had the capacity to accommodate the design year traffic volumes. Since the time the intersection was modeled, WisDOT completed studies comparing traffic modeling with roundabouts in operation in Wisconsin and found that other modeling software better matched in-place operations. The updated traffic modeling software indicated that the traffic volumes forecast for this intersection would exceed the capacity of the roundabout, resulting in excessive delay and long vehicle queues. With the high volumes of traffic forecast for this intersection, the project stakeholders did not fully support this alternative. Representatives from Verona and Madison expressed concern that if the roundabout intersection reached and exceeded capacity, traffic would utilize streets through the adjacent neighborhoods which are not designed to accommodate high traffic volumes.

As a result of these concerns, two grade separated alternatives (specifically the CTH PD Westbound Underpass and Tight Diamond Interchange) were further developed and analyzed.

D. Continuous Flow Intersection (CFI)

A Continuous Flow Intersection (also known as Displaced Left Turn) is a hybrid intersection that utilizes signals in advance of the primary intersection. At these signals, left-turning vehicles cross over the opposing through-moving traffic so that when left-turning vehicles reach the primary intersection, they can turn left at the same time as the opposing through-moving traffic is passing through the intersection. This combination of the two movements at the primary intersection improves the efficiency of the intersection, resulting in greater capacity. The CFI was designed with a curved alignment that shifted the road west to avoid the farmhouse entirely. This shift would be balanced with the impacts to the wetland and University Ridge Golf Course in the northwest quadrant of the intersection as these properties are protected by section 4(f).

Although it had a greater capacity than the traditional traffic signal design, the Continuous Flow Intersection was larger and thus more costly for real estate and construction than signal and roundabout alternatives. In addition, the CFI Alternative did not provide sufficient pedestrian crossing time and would have been the first CFI in the Midwest so had the potential to be confusing to drivers. For these reasons, this alternative was not chosen and was not presented to the public as a possible alternative. See Attachment 7-C.

E. Grade Separated Jug-Handle

The Grade Separated Jug-Handle Alternative was designed to carry the high-volume northbound CTH M traffic over a bridge while a secondary road, the jug-handle, would provide access between the overhead northbound traffic and CTH PD. Separating the highest volume movement from the primary intersection allows the intersection to operate more efficiently. Three versions of the Grade Separated Jug-Handle Alternative were developed and are named after the quadrant in which the jug-handle secondary road is located: southwest, southeast, and northeast.

The northeast version of this alternative would have the greatest effect on the Schroeder-Stickelberg-Thompson Farmstead and was therefore dismissed prior to seeking public input (Attachment 7-D). The southeast version would have resulted in an active electrical substation in the middle of the jug-handle portion of the intersection; this would create access issues for this facility and was therefore dismissed as a viable alternative (Attachment 7-E). The southwest Grade Separated Jug-Handle Alternative would provide acceptable levels of service for traffic operations and was presented to the public (Attachment 7-F). This alternative did not receive strong support from the public due to the non-standard traffic flow configuration and potential driver confusion that this may cause. The southwest Grade Separated Jug-Handle Alternative was not chosen because it was the most costly alternative due to greater real estate needs, the high cost to build

the necessary bridge, and as it had the potential for greater impact to the viewshed and setting of the Schroeder-Stickelberg-Thompson Farmstead.

F. Tight Diamond Interchange

The Tight Diamond Interchange was designed with a curved alignment of CTH M to shift the road west to avoid the Schroeder-Stickelberg-Thompson farmhouse entirely (this shift would be balanced with the impacts to the wetland and University Ridge Golf Course in the northwest quadrant of the intersection as these properties are protected by Section 4(f)). The Tight Diamond Interchange is a grade separated interchange design. Four lanes of CTH M traffic (2 northbound, 2 southbound) are carried over an at-grade signalized intersection via a 4-lane bridge. Access to CTH M and CTH PD is via ramps that intersect CTH PD, similar to a freeway interchange. This intersection design has the greatest traffic capacity of all the intersections proposed because the two primary travel directions, northbound and southbound, are not interrupted by a traffic signal or other type of intersection control (i.e., roundabout). The CTH M alignment, bridge location, and ramp alignments were laid out to avoid the farmhouse, including the resulting relocation of utilities. (Attachment 7-G)

The Tight Diamond Interchange alternative was presented to the public, although not as the preferred alternative. It has the highest construction costs of all the alternatives due to the size of the bridge required to carry four lanes of traffic over a large signalized intersection. It also requires a significant amount of retaining wall to limit the overall footprint of the intersection. The walls add to the high construction cost and increase the visual impact of this design. Because of the high volume of traffic forecast to be turning on to and off of CTH M, turn lanes and ramps needed to be dual lane designs. The dual lane on-ramps required merging lanes which increased the footprint of CTH M north and south of the CTH PD intersection and would impact access to properties. Finally, the Tight Diamond alternative was not able to accommodate a grade separated crossing of both CTH M and CTH PD for pedestrians and bicyclists. Because of the number of drawbacks, the Tight Diamond alternative did not have full support from the City of Madison or the City of Verona. As a result, this design was not considered the preferred alternative.

G. CTH PD Westbound Underpass (Preferred Alternative)

The CTH PD Westbound Underpass Alternative was designed with a curved alignment of CTH M to shift the road west to avoid the Schroeder-Stickelberg-Thompson farmhouse entirely (this shift would be balanced with the impacts to the wetland and University Ridge Golf Course in the northwest quadrant of the intersection as these properties are protected by Section 4(f)). The CTH PD Westbound Underpass alternative is in essence the Traffic Signal Alternative with one of the traffic flows (the CTH PD westbound through movement) removed from the intersection. The Traffic Signal Alternative did not have the capacity for all the conflicting traffic flows, but by removing the westbound through movement from the intersection, more time can be allotted to other movements that would normally conflict with the westbound movement, specifically the eastbound left turn to northbound. The intersection functions by pulling the westbound through traffic away

from the westbound traffic stream, and sending it below CTH M. CTH M will cross a wide, short-span bridge with the westbound through traffic below. The rest of the intersection, including westbound traffic turning right or left onto CTH PD, will operate as it normally would at a traffic signalized intersection. (Attachment 7-H)

The CTH PD Westbound Underpass Alternative was designed with consideration given to the location of utilities that will need to be located within the roadwork. The intersection design was also developed to limit impacts to the adjacent electric utility substation and to adjacent properties. Bicycles and pedestrians are provided grade separated crossings of both CTH M and CTH PD. The intersection will have to be raised in order to accommodate passing westbound traffic below the intersection. The CTH PD Westbound Underpass Alternative received support from the City of Madison, the City of Verona, and Dane County as a viable solution and thus was presented to the public as the recommended alternative.

6. Discussion of Actions that Minimize or Mitigate Adverse Effect

The initial design for the project corridor centered the proposed corridor on the existing CTH M ROW line and included raised medians, 20 feet in width. This design was modified due to the location of 4(f), historic, and wetland resources on the north side of CTH PD. The current plan includes a curved alignment to fit the proposed corridor between the wetlands in the northwest quadrant of the CTH M – CTH PD intersection and the historic farmstead in the northeast quadrant. The existing plan also includes a median narrowed to a minimum width of 8 ft. in order to minimize impacts to the 4(f) resources.

A Memorandum of Agreement will be prepared which will provide measures to mitigate the adverse effects to the Schroeder-Stickelberg-Thompson Farmstead. Possible mitigation measures may include one or more of the following:

- Standard color digital photographic documentation of the property per National Park Service (NPS) standards
- Field survey of historic farmsteads in the Town of Verona with the creation of sketch maps and photographs of up to seven of the best-preserved and most intact examples; the addition of these properties to the Wisconsin Historic Preservation Database
- Incorporation of the property into an existing Dane County Historical Society project, database, or website

The current property owner is not interested in having the property listed in the National Register; for this reason, NRHP listing was not proposed as a potential mitigation measure. In addition, due to restraints resulting from the location of overhead utility lines at the southern end of the property, any effective vegetative screening is not a viable mitigation option.

7. Views of Consulting Parties and the Public

Throughout March of 2011, consultants from Great Lakes Archaeological Research Center, Inc. (GLARC) attempted to contact the Dane County Historical Society via phone and email messages to notify them of the project activity and solicit any input or concerns. No response was received. In March of 2011, GLARC also contacted the Madison Trust for Historic Preservation via email and received no response.

Initial Public Information Meetings were held on December 8, 2011 and May 24, 2012 to solicit input regarding the project. For each meeting, letters were sent to all property owners along the project corridor informing them of the meetings.

At the Public Information Meeting on December 8, 2011, the project scope and goals were presented and a comparison of intersection alternatives (traffic signals, roundabout, and southwest jug-handle) was provided. Attendees were given the opportunity to ask questions and express any concerns about the project vocally or in written form on comment sheets. No attendees expressed concern directly related to any historic properties. Several attendees expressed negative opinions of the roundabout alternative and of roundabouts in general, both at the meeting and on the comment sheets; one attendee voiced a desire for roundabout driving education for the public; several attendees expressed support for the roundabout during the meeting and on the comment sheets. Marie Bigley, the current owner of the Schroeder-Stickelberg-Thompson Farmstead, submitted a comment sheet expressing a negative opinion of roundabouts in general and questioning how easements along adjacent properties would be acquired. Concerns raised that were not related to the historic nature of the property will be addressed through the Environmental Assessment.

At the Public Information Meeting on May 23, 2012, the project scope and goals were reviewed and the preferred roundabout design was presented. Marie Bigley voiced concern about utilities, easements, and further encroachment onto their respective properties. Telephone conversations with Ms. Bigley were conducted on November 18, 2011 and February 7, 2012 in which her questions and concerns were addressed. Concerns raised that were not related to the historic nature of the property will be addressed through the Environmental Assessment.

Following the dismissal of the Multi-Lane Roundabout Alternative, an additional Public Information Meeting was held on March 12, 2014. At this meeting, the CTH PD Westbound Underpass Alternative and the Tight Diamond Interchange Alternative were presented, with the former as the preferred alternative. Attendees were given the opportunity to ask questions and express any concerns about the project vocally or in written form on comment sheets. Property owner, Marie Bigley, attended the meeting and discussed the different alternatives with the project team.

See Attachments 8-A through 8-X for information from the Public Information Meetings.

An initial Consultation Meeting was held on April 29, 2013. Those present included current property owner Marie Bigley, as well as representatives from MSA, ATC, Kjohnson Engineers, SRF Consulting, WisDOT Bureau of Technical Services (BTS), Great Lakes Archaeological Research Center, the City of Verona, and the City of Madison. Both SHPO and FHWA were invited to attend, but representatives from neither were present. Mrs. Bigley expressed concern over the proposed utility placement along CTH M and over proposed tree removal at the southern tip of the property. Representatives from ATC and MSA agreed to meet Mrs. Bigley at her property on May 15, 2013 to stake the proposed utility pole locations; it was determined that

proposed utility poles will not be located any closer to the historic property than the existing pole locations.

During the Consultation Meeting, in-kind tree replanting at the southern edge of the property (where possible in relation to overhead utility lines) was proposed as a mitigation measure; however after the May 15 meeting at the property, it was determined that planting trees taller than 15 ft. would not be feasible within the constraints of the proposed overhead utility line locations. For this reason, vegetative screening is not considered a viable mitigation measure as the planting of 15 ft. ornamental trees in place of the original walnut trees is not considered to be a substitution for and does not mitigate the loss of the much taller walnut trees that were an element of the historically rural setting of the property. Mrs. Bigley was present at this onsite meeting.

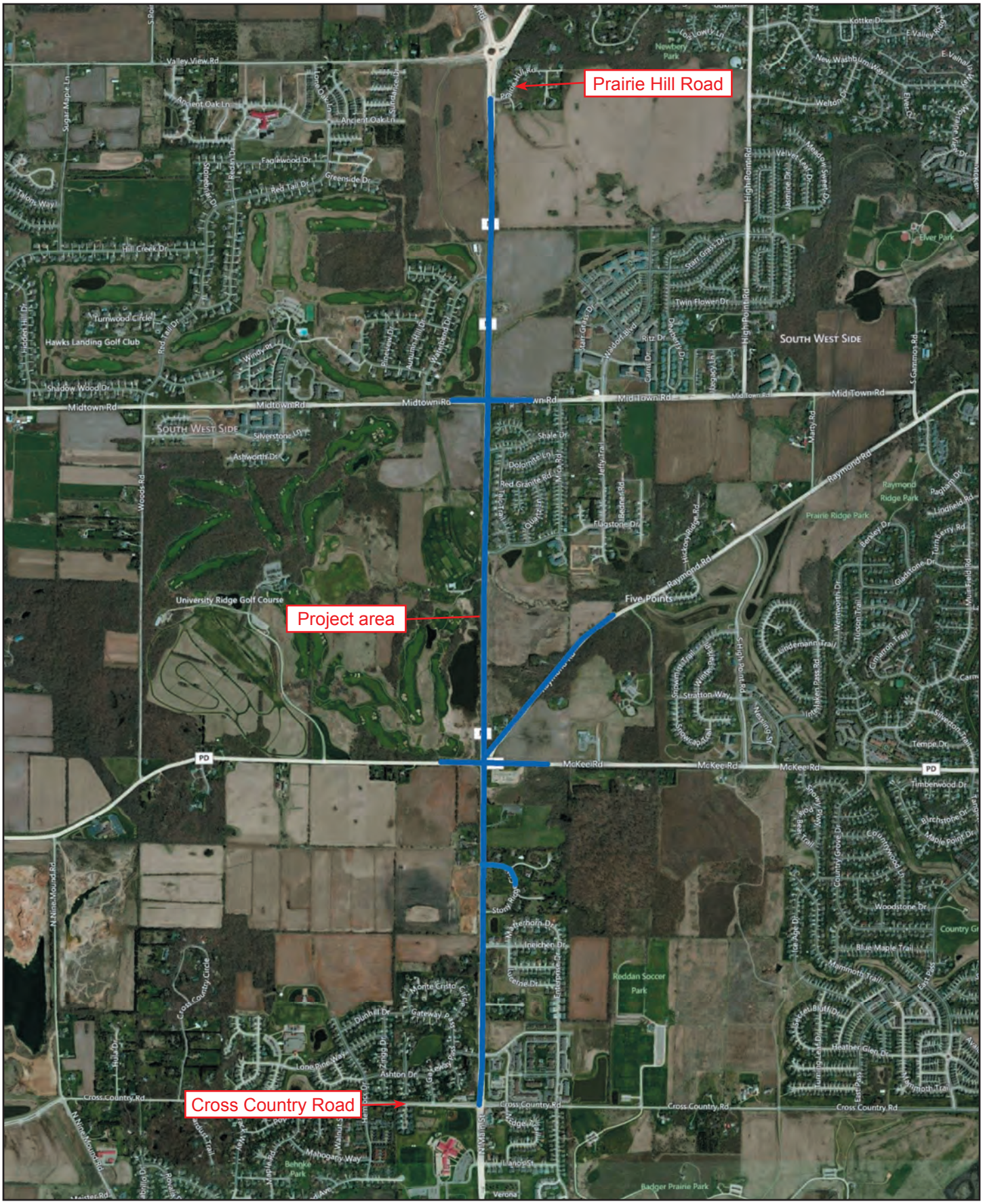
Those present at the Consultation Meeting agreed upon mitigation measures in the form of written and photographic documentation of the Schroeder-Stickelberg-Thompson Farmstead. Following review from WisDOT BTS, written documentation was removed as a mitigation measure and replaced with mitigation in the form of survey and inventory of three to five of the best-preserved and most-intact farmsteads in the Town of Verona. Photographic documentation will remain as a mitigation measure as well. This was confirmed through follow-up correspondence with stakeholders present at the April 2013 Consultation Meeting.

See Attachments 9-A and 9-B for information from the 2013 Consultation Meeting and Attachment 9-C for follow-up correspondence.

A second Consultation Meeting was held on April 14, 2014 in response to the change in the planned project activities. Those present included current property owner Marie Bigley, as well as representatives from MSA, Kjohnson Engineers, WisDOT BTS, University of Wisconsin Cultural Resources Management Services (formerly Great Lakes Archaeological Research Center), the City of Verona, and the City of Madison. Both SHPO and FHWA were invited to attend, but representatives from neither were present. During the Consultation Meeting, the proposed intersection plan was presented. Driveway access to the historic property from CTH M and Raymond Road was discussed, and Mrs. Bigley voiced her desire to retain the driveway if possible. Those present at the Consultation Meeting agreed upon mitigation measures in the form of photographic documentation of the property and a survey and inventory of three to five of the best-preserved and most-intact farmsteads in the Town of Verona (to include windshield survey coverage of the complete township, historic context report, and reconnaissance-level survey of three to five farmsteads that best represent the historic agricultural practices of the Town of Verona).

Following review of the previous Documentation for Consultation and Memorandum of Agreement for this project, SHPO suggested eliminating the photographic documentation mitigation measure and altering the survey mitigation measure from a survey of three to five of the best-preserved farmsteads to a survey of all farmsteads within the Town of Verona. In response, the photographic documentation mitigation measure has been eliminated and the survey mitigation measure has been expanded to include a windshield survey of the entire township as well as a historic context report, while completing a reconnaissance-level survey of up to seven of the best-preserved and most representative historic farmsteads.

See Attachments 9-D and 9-E for information from the 2014 Consultation Meeting.



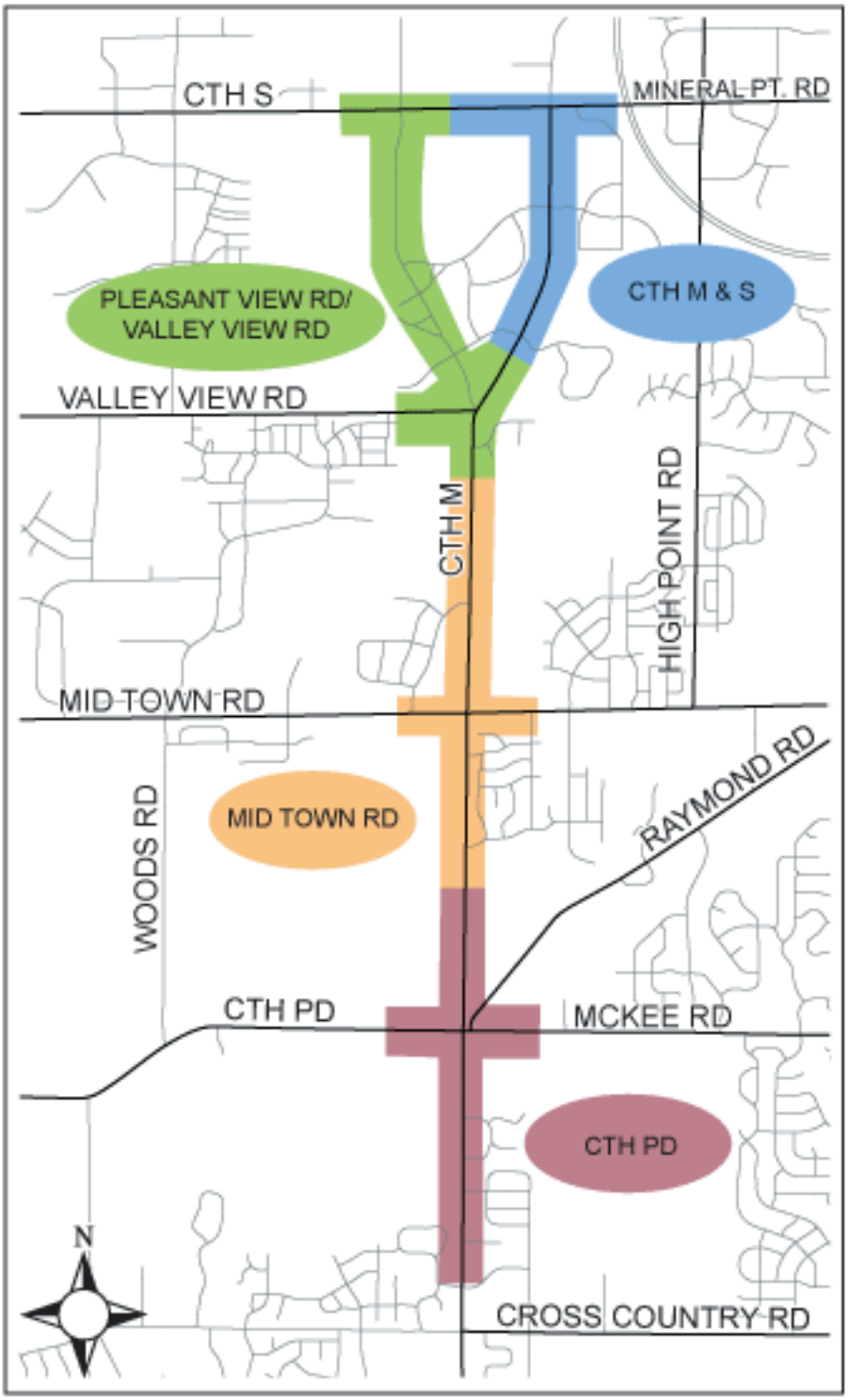
Attachment 1	Project Location	Aerial Image

Current and Project Traffic Counts, CTH M Project Corridor

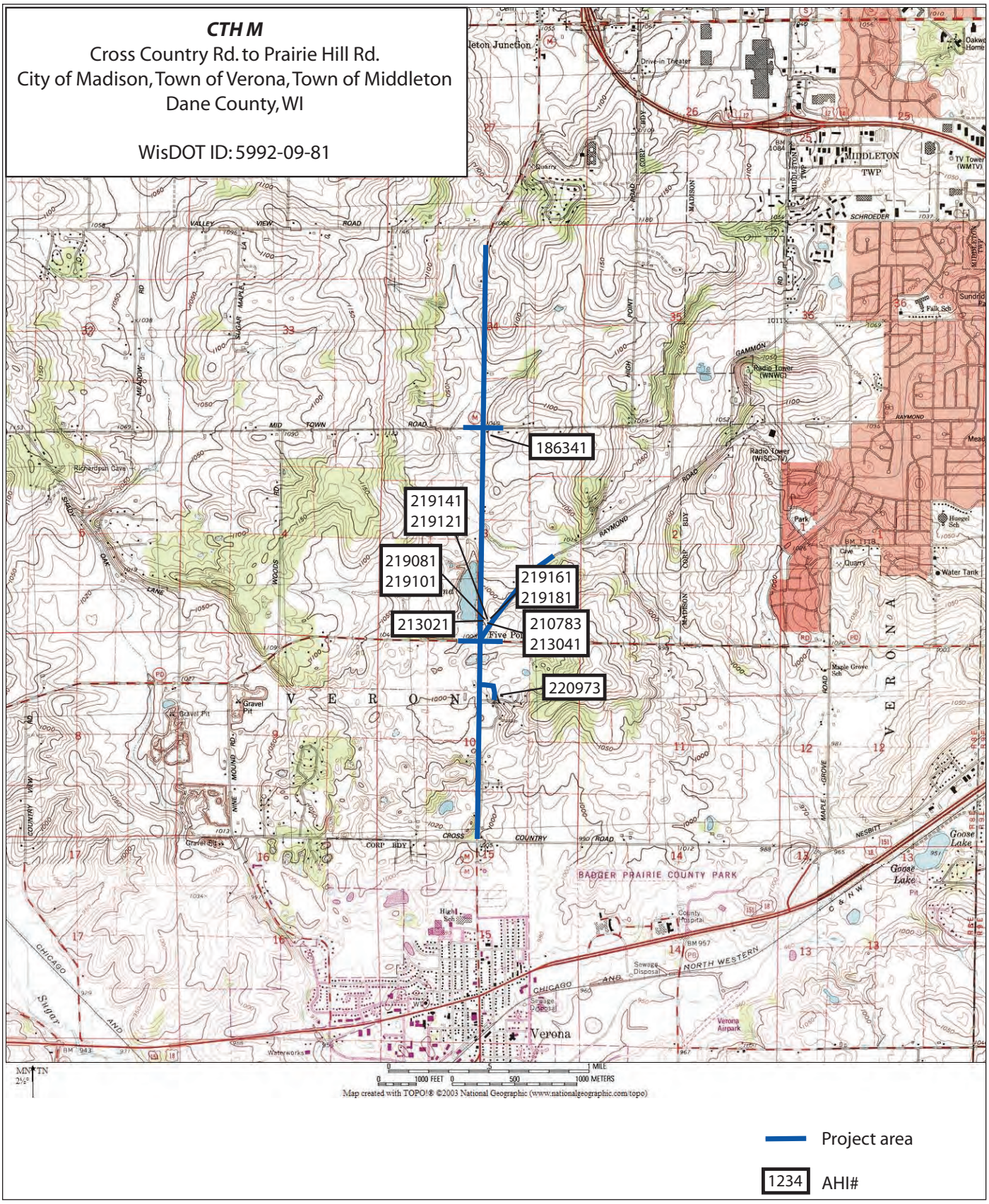
	Current Traffic Count*	2035 Traffic Projection Estimate**
Valley View Rd to Midtown Rd	21,100	49,300
Midtown Rd to CTH PD	20,800	41,700
CTH PD to Prairie Oaks Dr	11,200	25,200

*Traffic count for Valley View Rd to Midtown Rd and Midtown Rd to CTH PD from 2011; traffic count from CTH PD to Prairie Oaks Dr from 2010
**Determined by Traffic Forecasting Section, Bureau of State Highway Programs, Division of Transportation Investment Management

CTH M Transportation Improvement Program (TIP) Approved Construction Projects



Attachment **2-B**	Project Information	CTH M Construction Projects



Attachment 3	Surveyed Properties	

(DOE March 2011)

Wisconsin Historical Society
Determination of Eligibility Form

RECEIVED
SEP 18 2012
DIV HIST PRES

WisDOT Project ID #: 5992-09-81

WHS #: 12-0939/DA

Property Name(s): Gordon School
Address/Location: 6987 Midtown Rd.
City & County: Town of Verona, Dane County **Zip Code:** 53719
Town: 6N **Range:** 8E **Section:** 3
Date of Construction: 1929

WisDOT Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this request for Determination of Eligibility:

___Meets the National Register of Historic Places criteria.
_x_Does not meet the National Register of Historic Places criteria.

for 9/13/12
Rebecca Burkel, WisDOT Historic Preservation Officer **Date**

State Historic Preservation Office

In my opinion, the property:

___Meets the National Register of Historic Places criteria.
X Does not meet the National Register of Historic Places criteria.

Oct 5, 2012
Michael E. Stevens, State Historic Preservation Officer **Date**

Comments (FOR AGENCY USE ONLY):

Division of Historic Preservation
Wisconsin Historical Society
816 State Street
Madison, WI 53706

C:\Users\HISTORY1\Documents\My Dropbox\GLARC\CTH M, Madison\Gordon School DOE\Gordon School DOE.docx

Wisconsin Historical Society
Determination of Eligibility Form

(DOE March 2011)

RECEIVED
NOV 27 2012
DIV HIST PRES

WisDOT Project ID #: 5992-09-81

WHS #: 12-0939/DA

Property Name(s): Schroeder-Stickelberg-Thompson Farmstead
Address/Location: 8300 Raymond Rd.
City & County: Town of Verona, Dane County **Zip Code:** 53719
Town: 6N **Range:** 8E **Section:** 3
Date of Construction: c.1875-C.1890, c.1900, c.1910, c.1920, c.1940

WisDOT Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this request for Determination of Eligibility:

[X] Meets the National Register of Historic Places criteria.
[ ] Does not meet the National Register of Historic Places criteria.

Rebecca Burkel 11/26/12

Rebecca Burkel, WisDOT Historic Preservation Officer **Date**

State Historic Preservation Office

In my opinion, the property:

_X_ Meets the National Register of Historic Places criteria.
___ Does not meet the National Register of Historic Places criteria.

12/6/12

Michael E. Stevens, State Historic Preservation Officer **Date**

Comments (FOR AGENCY USE ONLY):
"Outhouses" are listed in WHPD under "privy"

Division of Historic Preservation
Wisconsin Historical Society
816 State Street
Madison, WI 53706

C:\Users\HISTORY1\Desktop\Schroeder-Stickelberg DOE revisions\October 2012 revisions\8300 Raymond Rd. - DOE.docx

SHPO

SECTION 106 REVIEW
ARCHAEOLOGICAL/HISTORICAL INFORMATION

Wisconsin Department of Transportation
DT1635 11/2006

For instructions, see FDM Chapter 26

I. PROJECT INFORMATION

Project ID 5992-09-81	Highway - Street Local Street	County Dane County
Project Termini South Pleasant View Road/CTH M - (Prairie Hill Road to Cross County Road)		Region - Office Southwest Region - Local Program
Regional Project Engineer - Project Manager Karen Richardson, P.E., Kjohnson Engineers, Southwest Region - Local Program Management Consultant		Area Code - Telephone Number (608) 829-3858
Consultant Project Engineer - Project Manager MSA Professional Services, Inc. - Jason DiPiazza, PE		Area Code - Telephone Number (608) 242-7779
Archaeological Consultant Great Lakes Archaeological Research Center Inc.		Area Code - Telephone Number (414) 481-2093
Architecture/History Consultant Great Lakes Archaeological Research Center Inc.		Area Code - Telephone Number (414) 481-2093
Date of Need August 1, 2012		SHSW# 12-0939/DA 1/2
Return a signed copy of this form to: karenrichardson@kjohnsonengineers.com		

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SEP 18 2012
DIV HIST PRES

II. PROJECT DESCRIPTION

Project Length 3 miles	Land to be Acquired: Fee Simple 15 acres	Land to be Acquired: Easement 10 acres

Distance as measured from existing centerline	Existing	Proposed	Other Factors	Existing	Proposed
Right-of-Way Width measured from existing centerline	43'-170'	48'-170'	Terrace Width	None	8' (typical)
Shoulder measured from existing centerline	Varies 16'-42'	N/A	Sidewalk Width	Varies 5'-6'	Varies 5'-10'
Slope Intercept measured from existing centerline	N/A	25'-170'	Number of Lanes	2	4-6
Edge of Pavement measured from existing centerline	14'-36'	8'-60'	Grade Separated Crossing pedestrian and bike path underpasses	none	3 (CTH PD, Midtown Road, & Flagstone Drive)
Back of Curb Line measured from existing centerline	N/A	11'-63'	Vision Triangle acres	N/A	N/A
Realignment	N/A	0-56'	Temporary Bypass acres	N/A	N/A
Other - List:	N/A	N/A	Stream Channel Change	☐ Yes	☒ No
Attach Map(s) that depict "maximum" impacts.	☒ Yes	☐ No	Tree topping and/or grubbing	☒ Yes	☐ No

Brief Narrative Project Description - Include all ground disturbing activities. For archaeology, include plan view map indicating the maximum area of ground disturbance and/or new right-of-way, whichever is greater. Include all temporary, limited and permanent easements.

The City of Madison, in conjunction with the City of Verona and Dane County propose improvements to South Pleasant View Road (CTH M) from Cross Country Road to Prairie Hill Road, a distance of approximately 3 miles. The improvements consist of expanding South Pleasant View Road initially from 2 to 4-lanes with provisions to accommodate 6-lanes in the future. The proposed project includes expansion of the roadway to a multi-lane urban arterial with a raised median, bike lanes, a multi-use path, and sidewalk. The proposed action is part of a multi-phase project to reconstruct the CTH M corridor, including reconstruction of the CTH PD and Mid Town Road intersections.

III. CONSULTATION

How has notification of the project been provided to:

- ☒ Property Owners
  - ☒ Public Information Meeting Notice
  - ☒ Letter - Required for Archaeology
  - ☐ Telephone Call
  - ☐ Other:
- ☒ Historical Societies/Organizations
  - ☐ Public Information Meeting Notice
  - ☐ Letter
  - ☒ Telephone Call
  - ☒ Other: Email
- ☒ Native American Tribes
  - ☒ Public Info. Mtg. Notice
  - ☒ Letter
  - ☐ Telephone Call
  - ☐ Other:

*Attach one copy of the base letter, list of addresses and comments received. For history include telephone memos as appropriate.

IV. AREA OF POTENTIAL EFFECTS - APE

ARCHAEOLOGY: Area of potential effect for archaeology is the existing and proposed ROW, temporary and permanent easements. Agricultural practices do not constitute a ground disturbance exemption.

HISTORY: Describe the area of potential effects for buildings/structures.
An APE was established that included all properties adjacent to the project corridor. All resources at least 40 years old that possessed a degree of historic integrity were examined.

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V. PHASE I ARCHEOLOGICAL OR RECONNAISSANCE HISTORY SURVEY NEEDED

ARCHAEOLOGY	HISTORY
☒ Archaeological survey is needed	☒ Architecture/History survey is needed
☐ Archaeological survey is not needed - Provide justification ☐ Screening list (date).	☐ Architecture/History survey is not needed ☐ No structures or buildings of any kind within APE ☐ Screening list (date).

VI. SURVEY COMPLETED

ARCHAEOLOGY	HISTORY
☐ NO archaeological sites(s) identified - ASFR attached ☐ NO potentially eligible site(s) in project area - Phase I Report attached ☒ Potentially eligible site(s) identified-Phase I Report attached ☐ Avoided through redesign ☒ Phase II conducted – go to VII (Evaluation). ☐ Phase I Report attached - Cemetery/cataloged burial documentation	☐ NO buildings/structures identified - A/HSF attached ☒ Potentially eligible buildings/structures identified in the APE - A/HSF attached ☐ Potentially eligible buildings/structures avoided – documentation attached

VII. DETERMINATION OF ELIGIBILITY (EVALUATION) COMPLETED

☒ No arch site(s) eligible for NRHP - Phase II Report attached	☐ No buildings/structure(s) eligible for NRHP - DOE attached
☐ Arch site(s) eligible for NRHP - Phase II Report attached	☒ Building/structure(s) eligible for NRHP - DOE attached
☐ Site(s) eligible for NRHP - DOE attached	

VIII. COMMITMENTS/SPECIAL PROVISIONS – must be included with special provisions language

Separate Phase II Arch Surveys were conducted at the Ellefson Site (47DA1420) and Endres site (47DA1421). See the included letters to Jim Becker, dated 4/26/12 and date 6/25/12.

IX. PROJECT DECISION

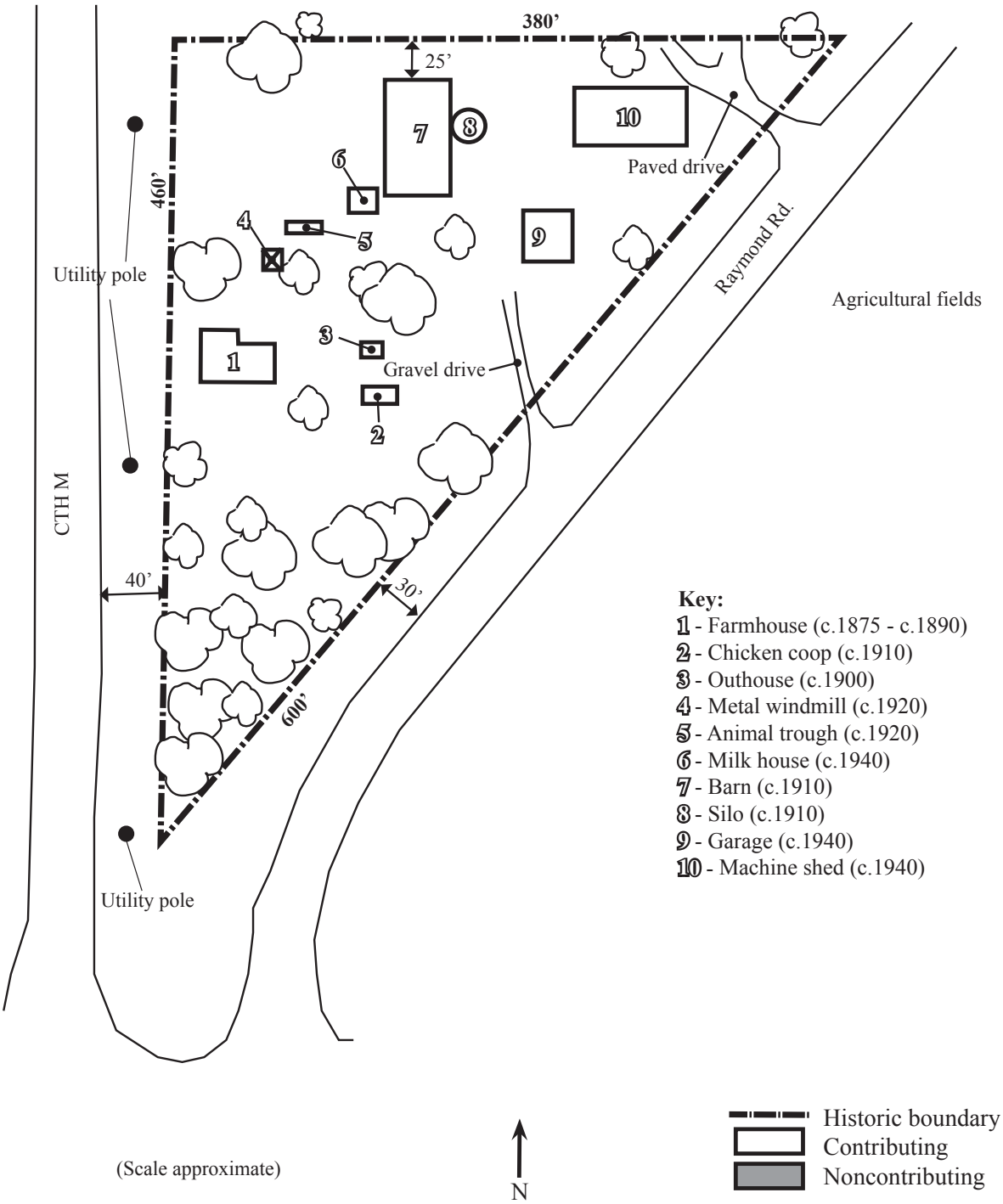
- ☐ No historic properties (historical or archaeological) in the APE.
- ☐ No historic properties (historical or archaeological) affected.
- ☒ Historic properties (historical and/or archaeological) may be affected by project;
  - ☒ Go to Step 4: Assess affects and begin consultation on affects
  - ☐ Documentation for Determination of No Adverse Effects is included with this form. WIDOT has concluded that this project will have No Adverse Effect on historic properties. Signature by SHPO below indicates SHPO concurrence in the DNAE and concludes the Section 106 Review process for this project.

12-0939/DA
pg 2/2

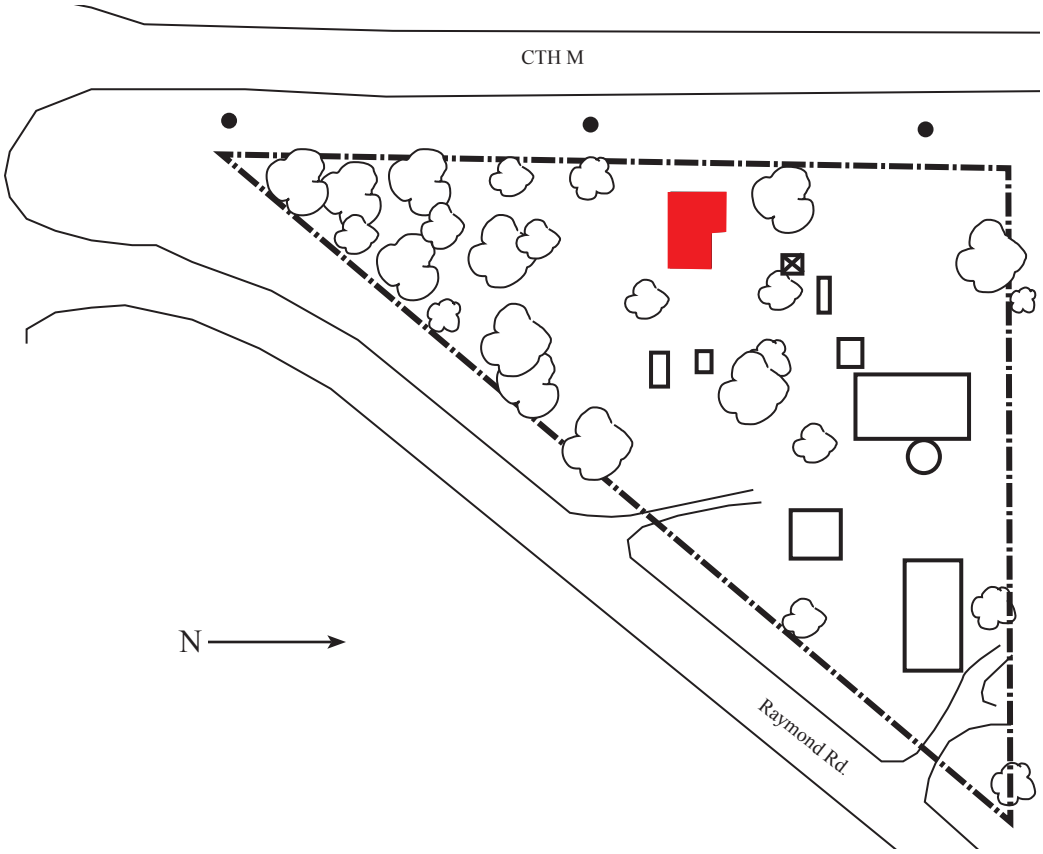
(Regional Project Manager) 8/27/2012 (Date)	for (WIDOT Historic Preservation Officer) 9/13/12 (Date)	(State Historic Preservation Officer) Dec 6 2012 (Date)
(Consultant Project Manager) 6/25/12 (Date)		

Attachment 4-D	SHPO Concurrence	Section 106 Form

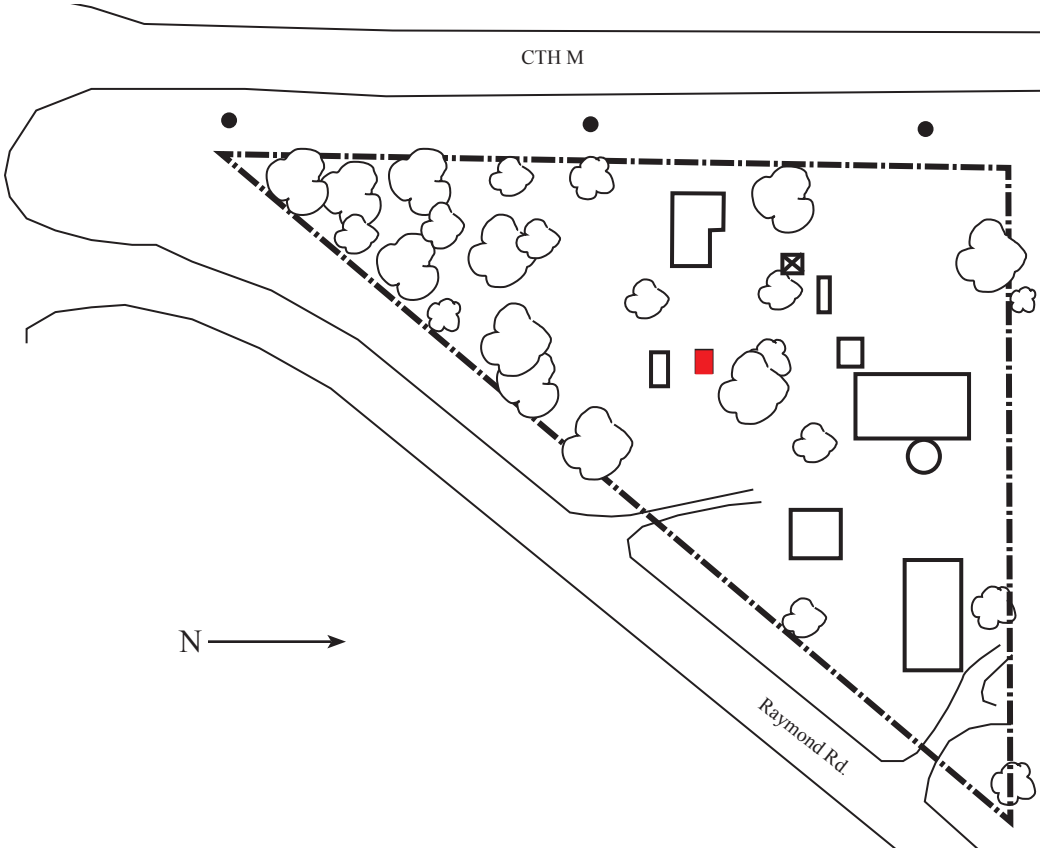
Schroeder-Stickelberg-Thompson Farmstead
8300 Raymond Rd.
Town of Verona
Dane County, WI
WisDOT ID: 5992-09-81



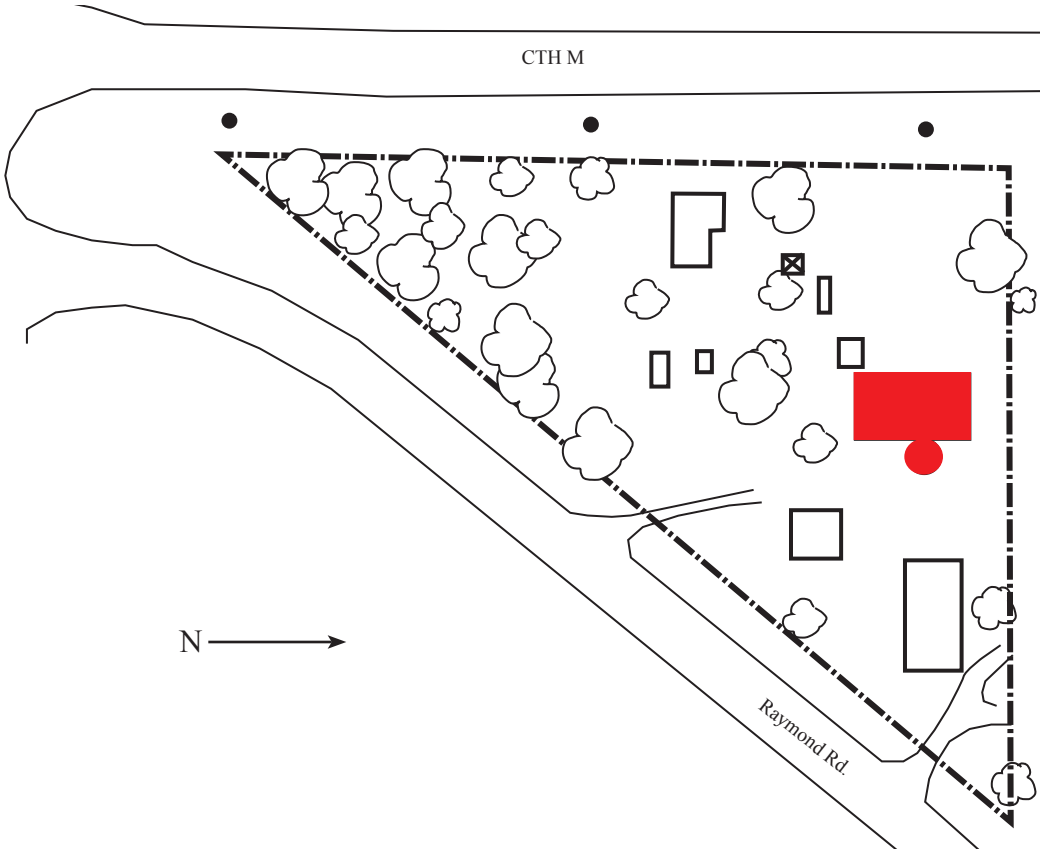
Attachment 5-A	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Historic Boundary Map



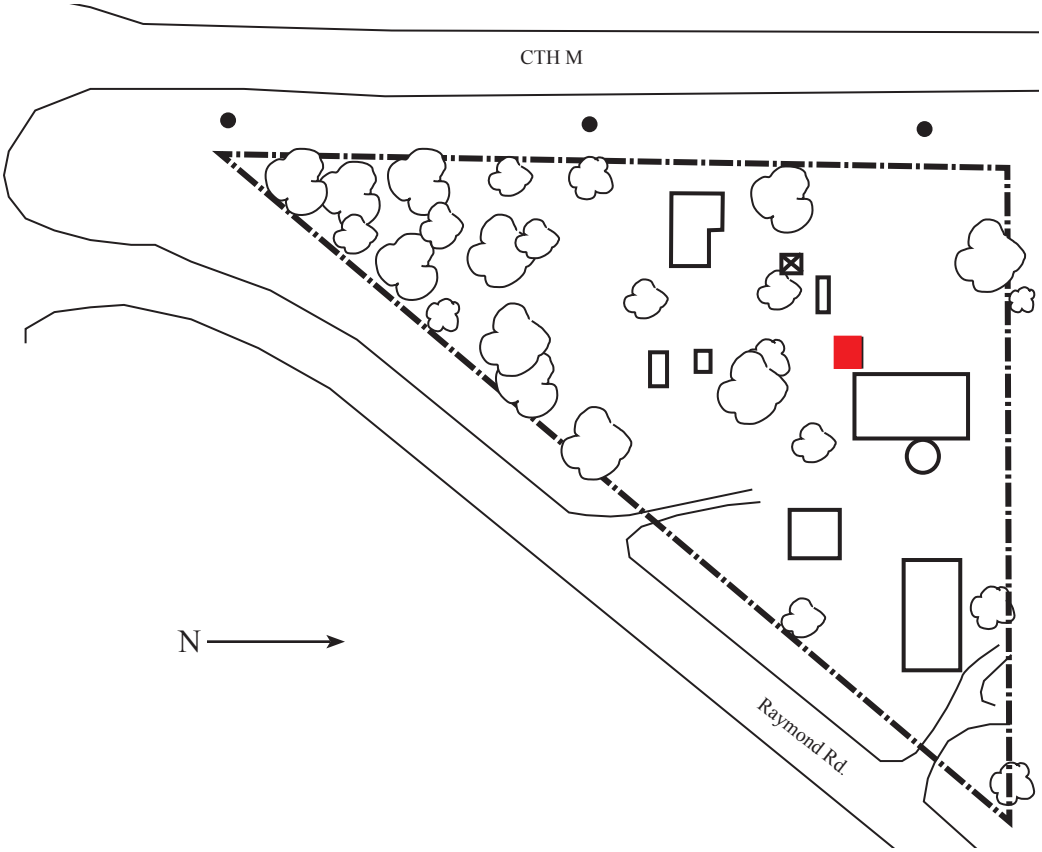
Attachment **5-B**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Farmhouse



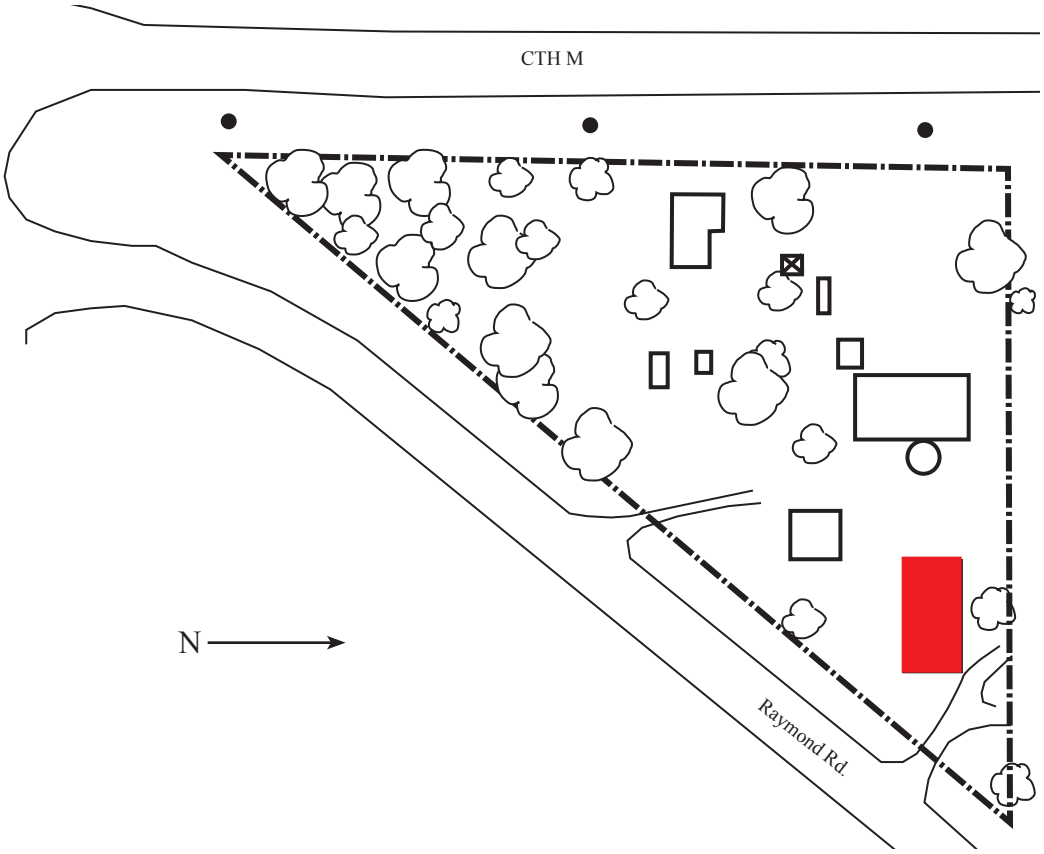
Attachment **5-C**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Outhouse



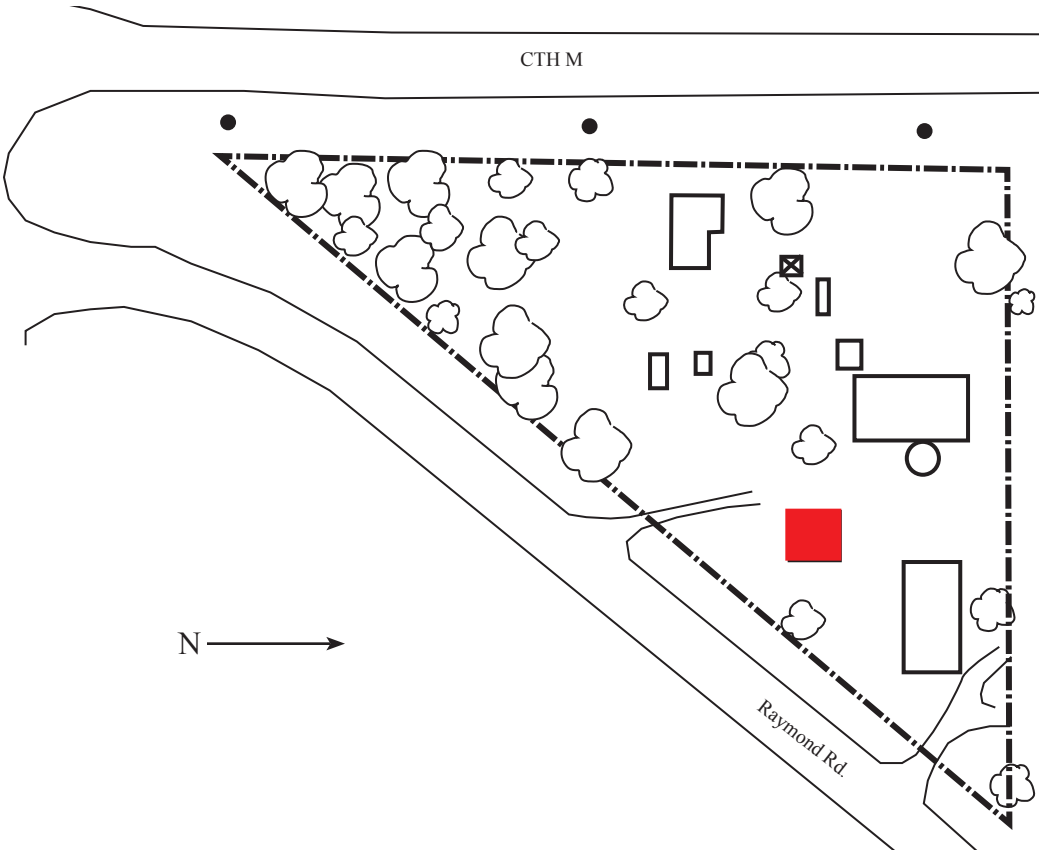
Attachment **5-D**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Barn and Silo



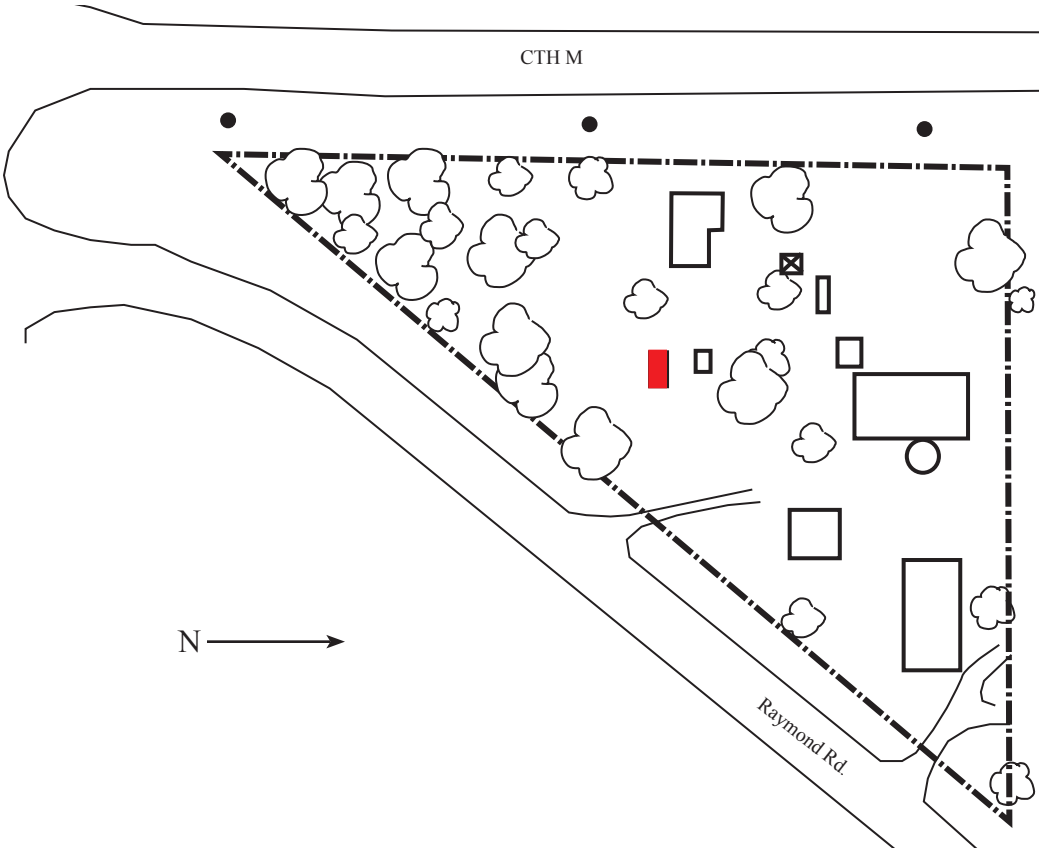
Attachment **5-E**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Milk House



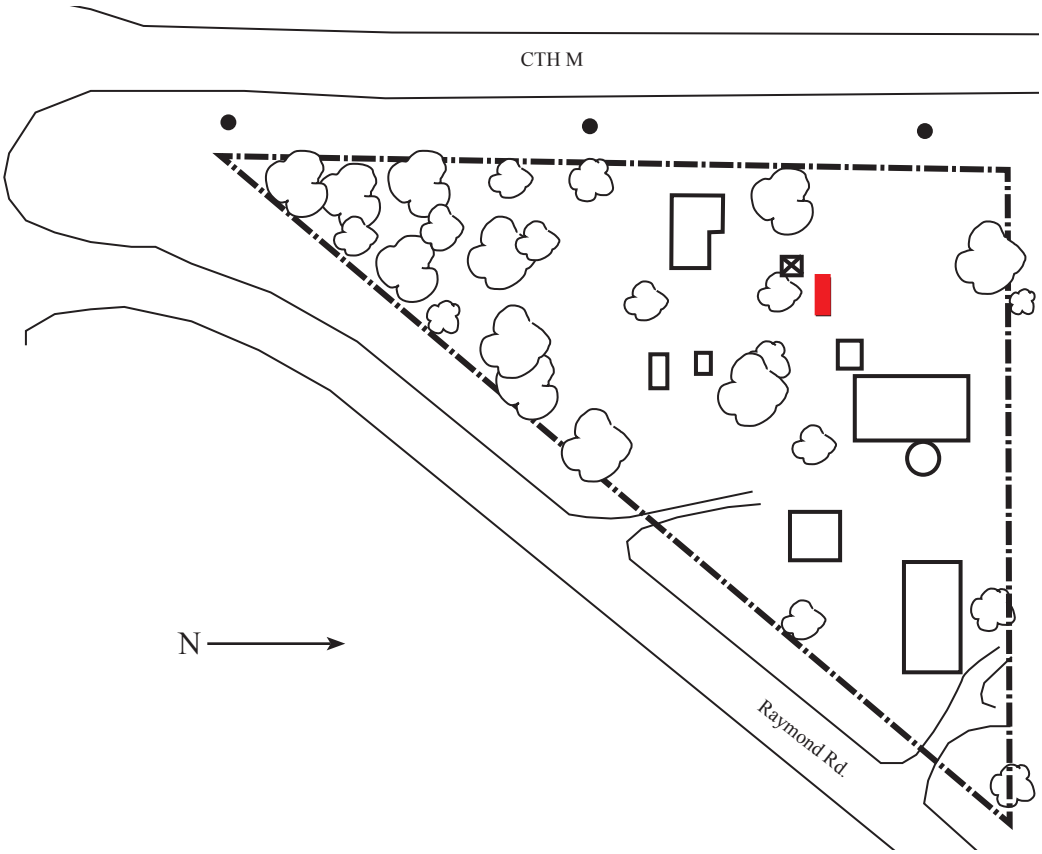
Attachment **5-F**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Machine Shed



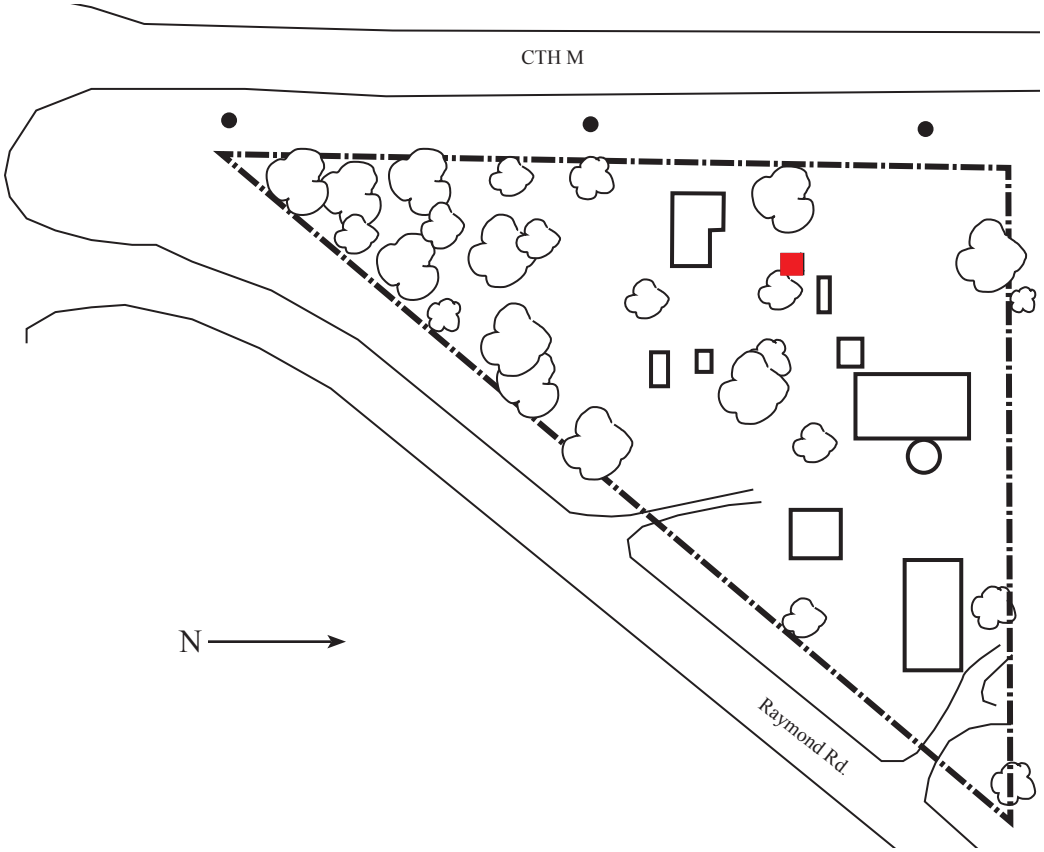
Attachment **5-G**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Garage



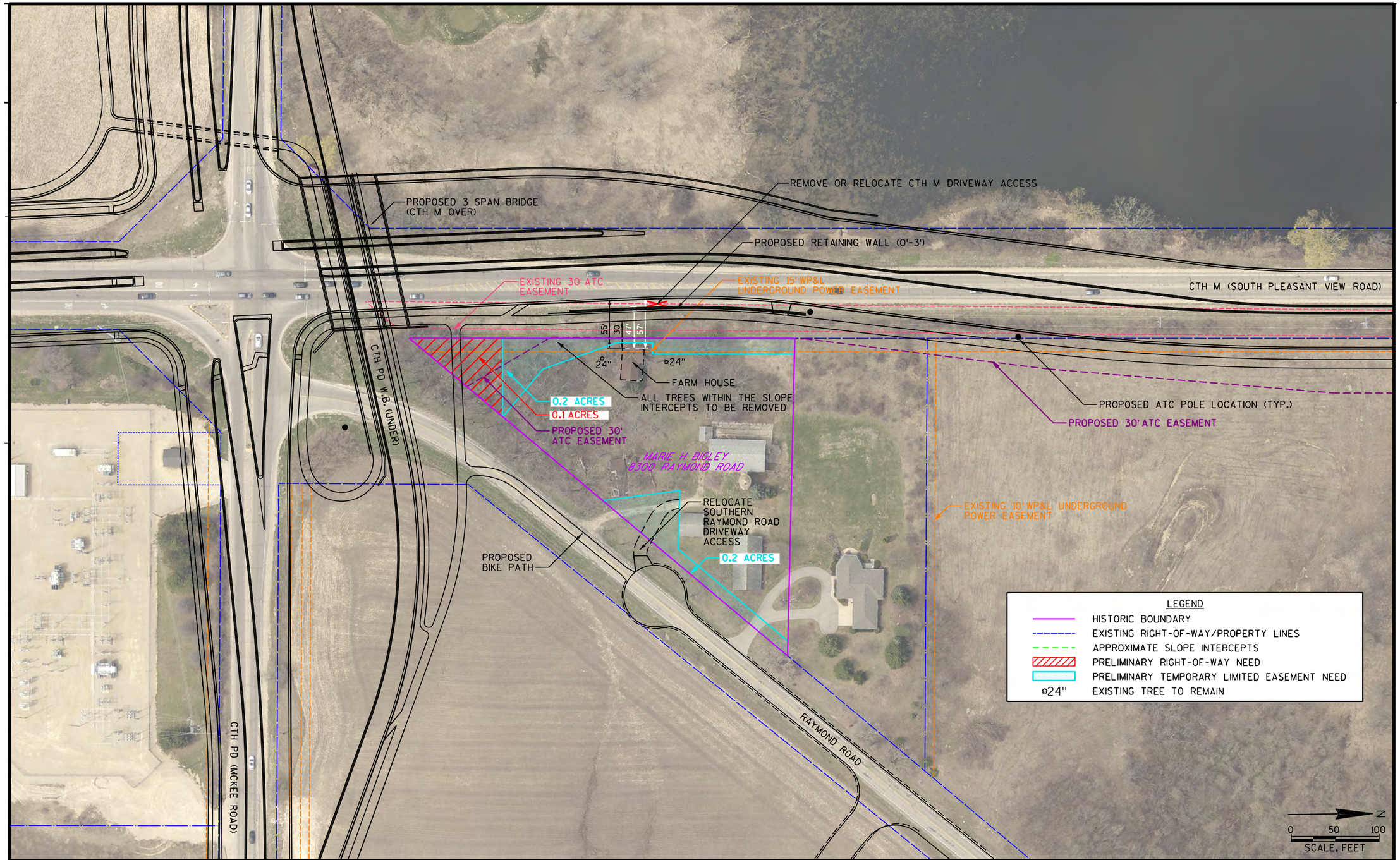
Attachment **5-H**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Chicken Coop



Attachment **5-I**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Animal Trough



Attachment **5-J**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Windmill



PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	8300 RAYMOND ROAD HISTORICAL PROPERTY EXHIBIT	SHEET	E

Attachment **6-A**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Proposed Activities

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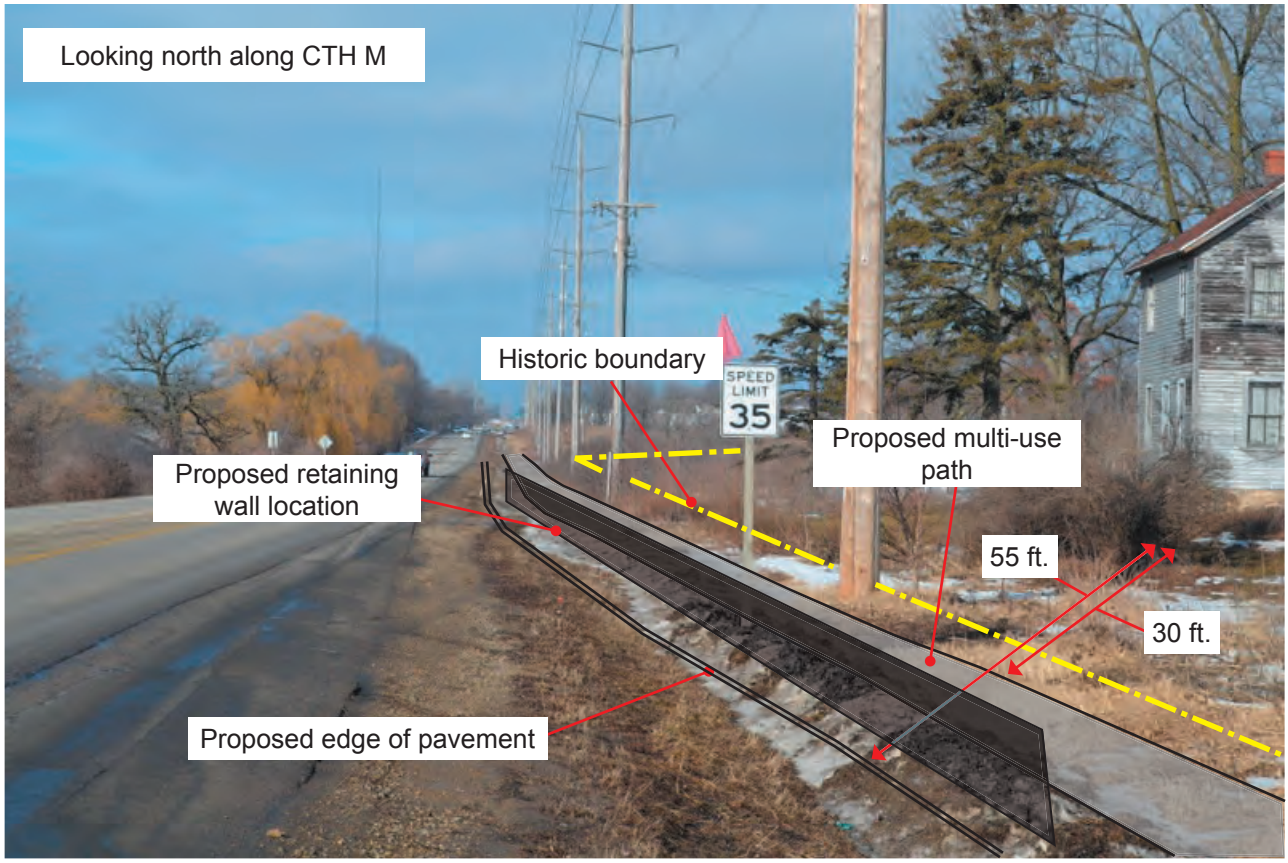
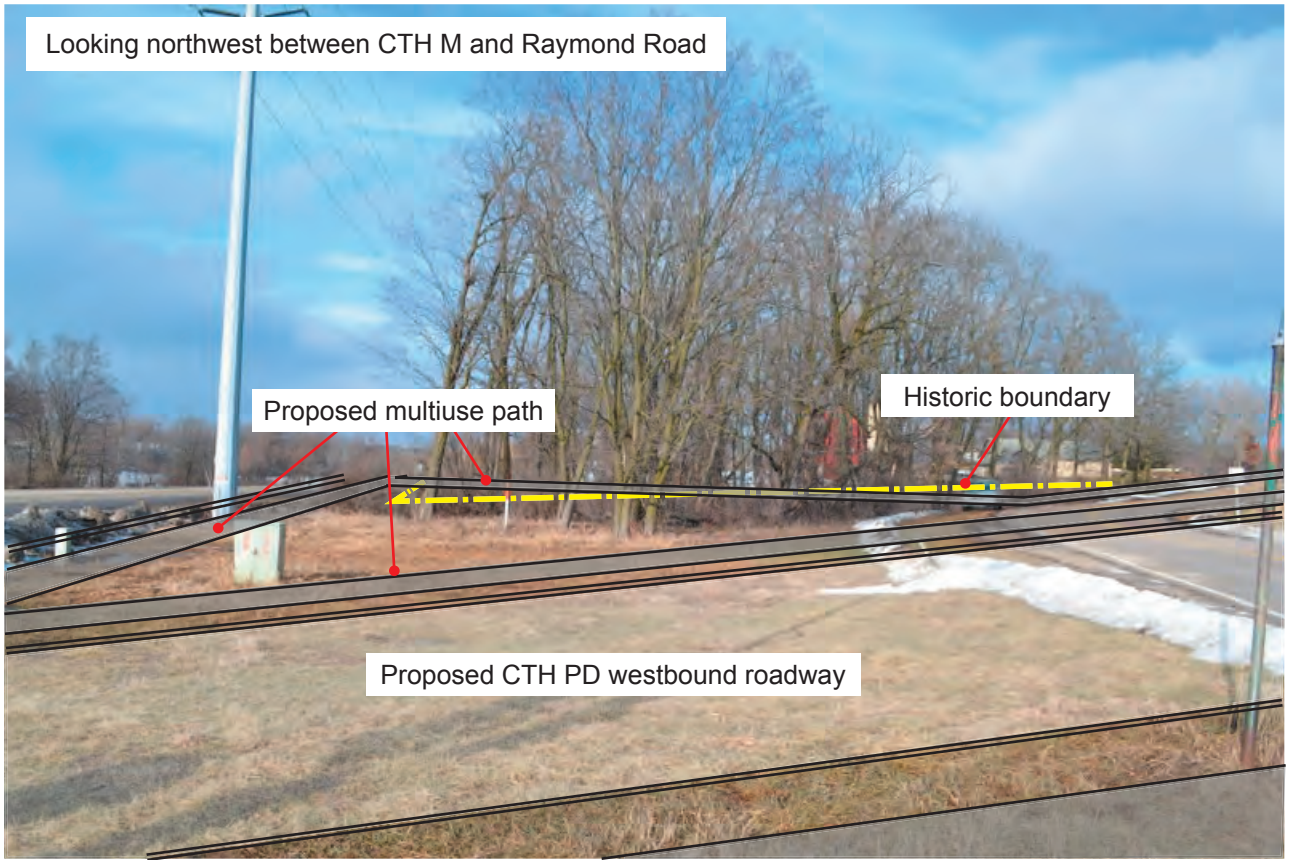
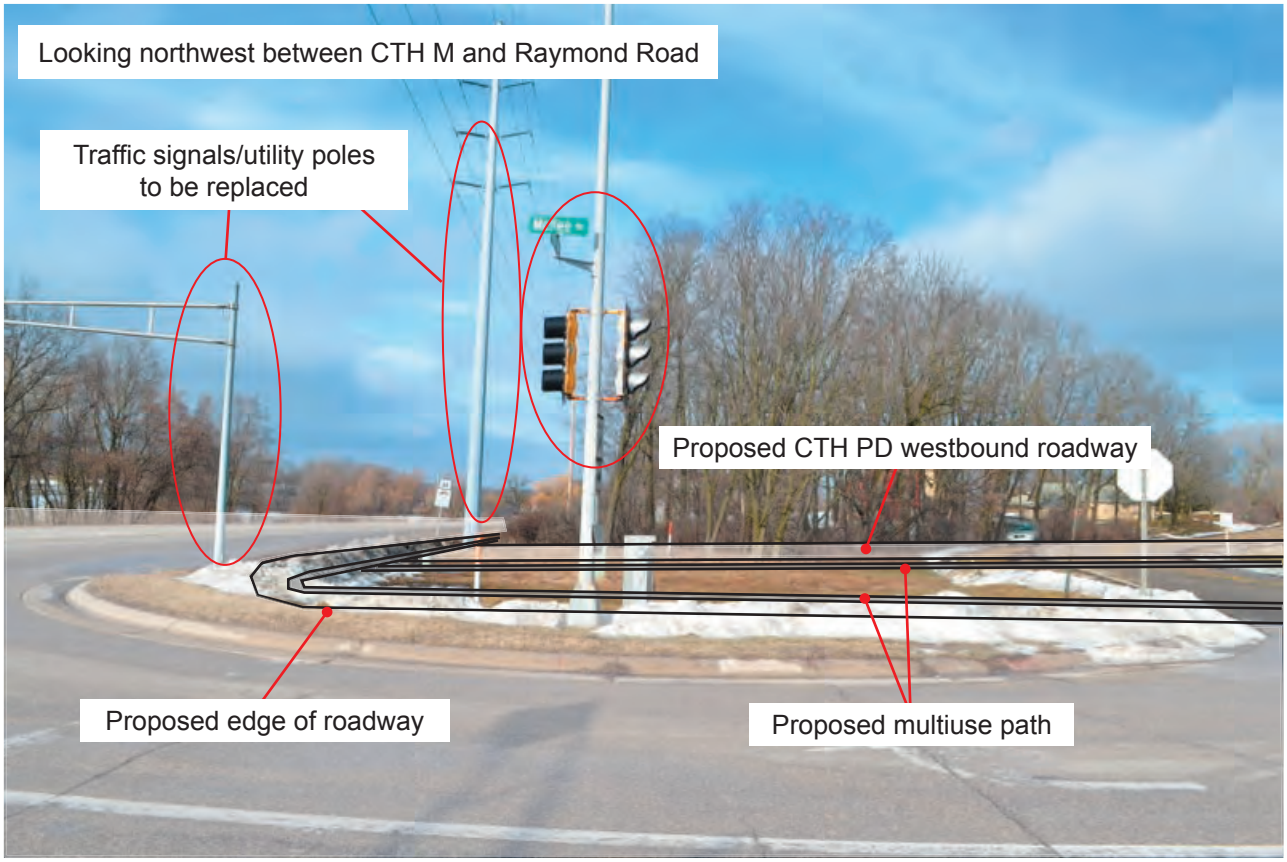
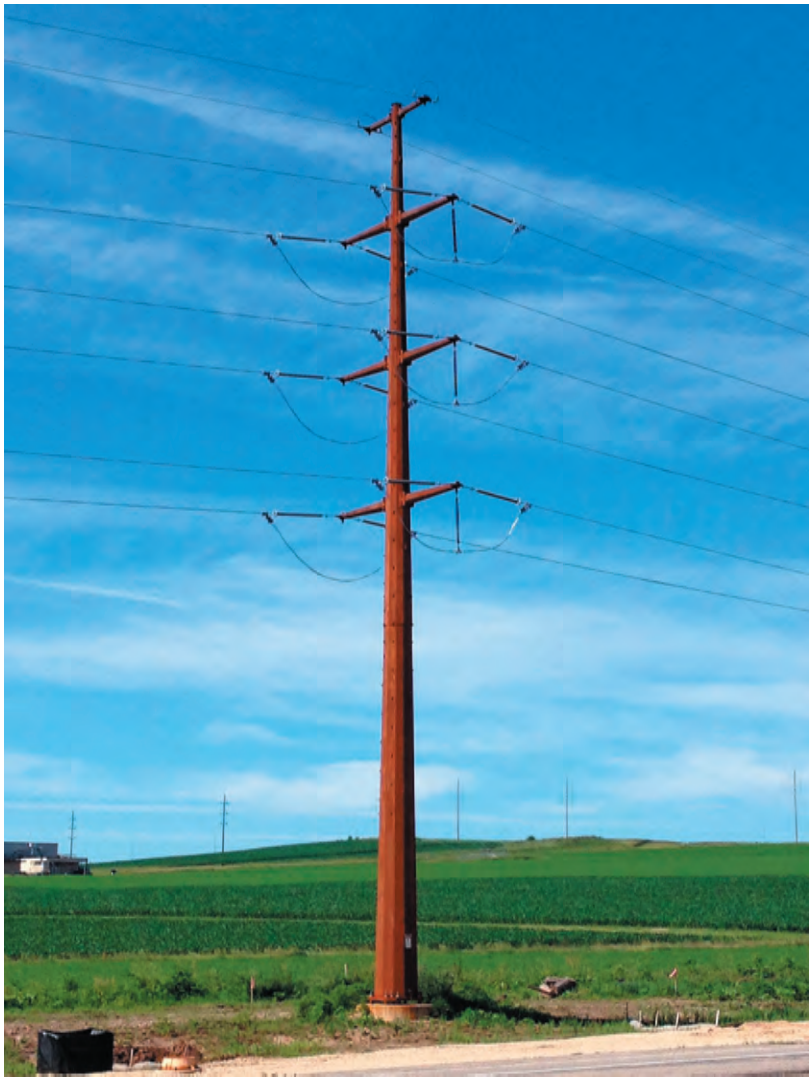




Attachment **6-B**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Existing/ Proposed Conditions



Attachment **6-C**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Existing/ Proposed Conditions



Attachment **6-D**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Proposed Utility Poles

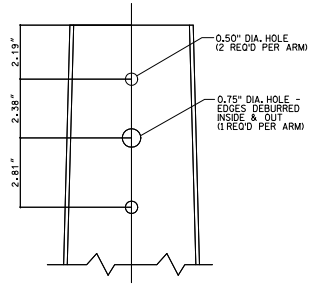
Attachment **6-E**

Schroeder-Stickelberg-Thompson Farmstead

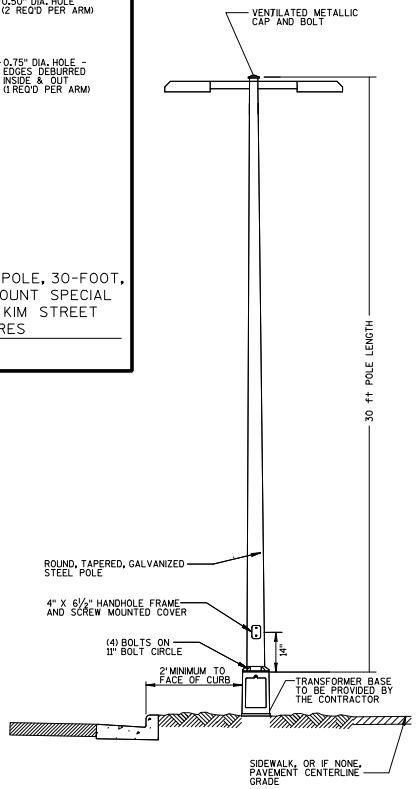
8300 Raymond Rd.

Proposed Street Lights

2



TYPICAL DETAIL OF STEEL POLE, 30-FOOT, (111) GAUGE DRILLING TO MOUNT SPECIAL (100, 150, OR 250) WATT KIM STREET LIGHTING FIXTURES

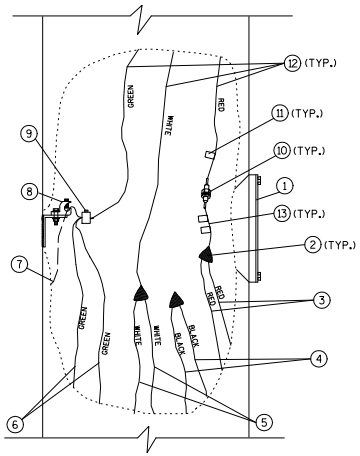


DETAIL FOR STEEL POLE, 30-FOOT, (11) GAUGE
SHOWN ABOVE WITH LIGHTING FIXTURES, SPECIAL, (100, 150, OR 250) WATT, HPS, KIM

2

1. HANDHOLE AND COVER
2. INSULATED SPLICE
3. INSULATED LIGHTING CKT CONDUCTORS FROM SYSTEM RACEWAY
4. ALTERNATE INSULATED LIGHTING CKT CONDUCTORS FROM SYSTEM RACEWAY PASSING THROUGH THIS POLE
5. LIGHTING CKT GROUNDED CONDUCTORS FROM SYSTEM RACEWAY
6. LIGHTING SYSTEM GROUNDING CONDUCTORS
7. #4 BARE EQUIPMENT GROUNDING CONDUCTOR TO GROUND ROD
8. HANDHOLE GROUNDING LUG
9. REVERSIBLE PRESSURE OR COMPRESSION GROUNDING CONNECTOR (NOT INSULATED)
10. FUSE ASSEMBLY, AS REQUIRED
11. CIRCUIT TAG
12. #12 AWG CONDUCTORS TO LUMINAIRE
13. 12" PIGTAIL BETWEEN SPLICE AND FUSE ASSEMBLY

SEE WISDOT SDD'S "NON FREEWAY LIGHTING UNIT POLE WIRING" (9E3-3) & "ELECTRICAL HANDHOLE WIRING" (10HL1-1) FOR ADDITIONAL INFORMATION NOT SHOWN ON THIS DETAIL.

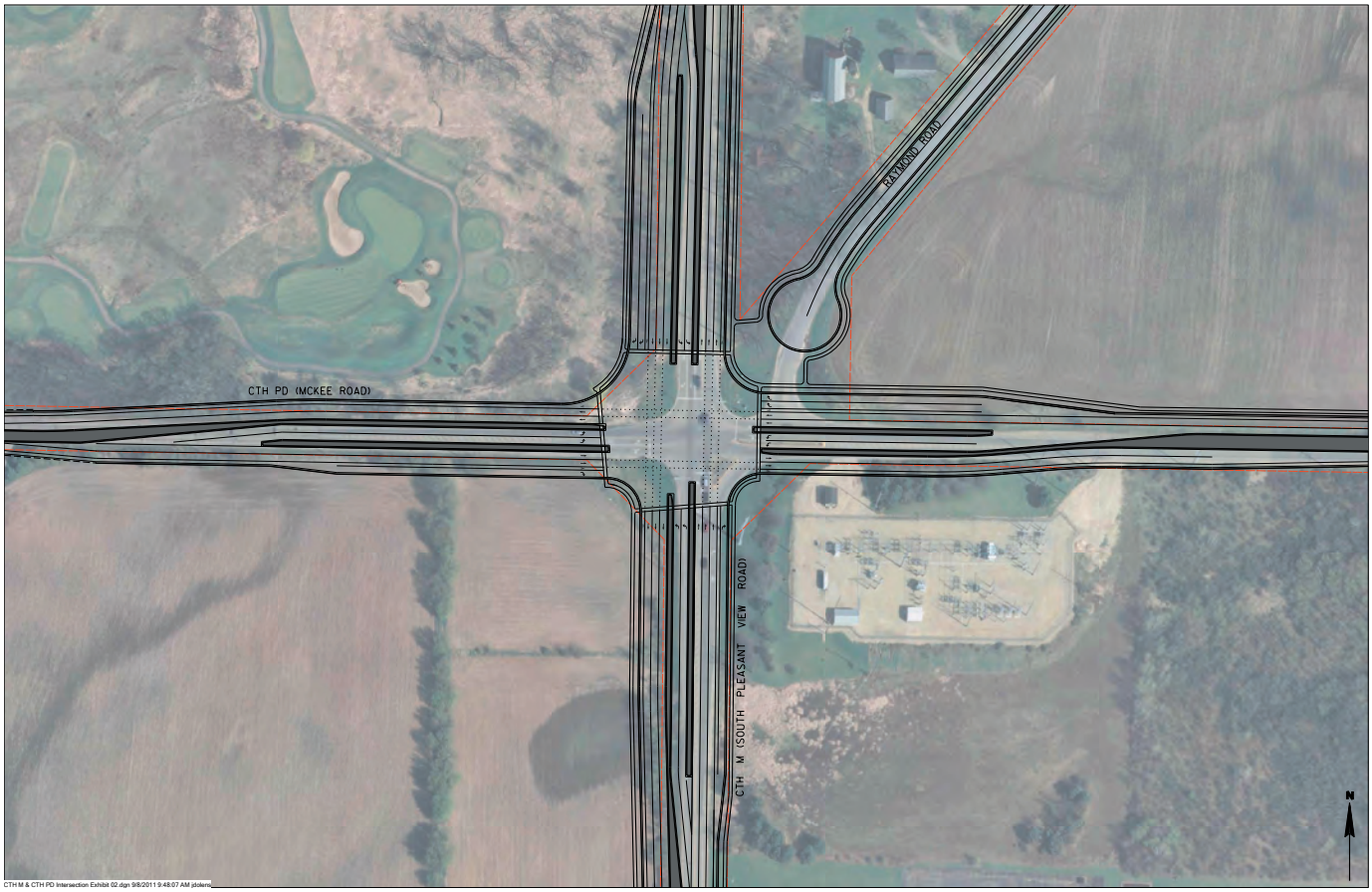


POLE WIRING DETAIL
NO SCALE

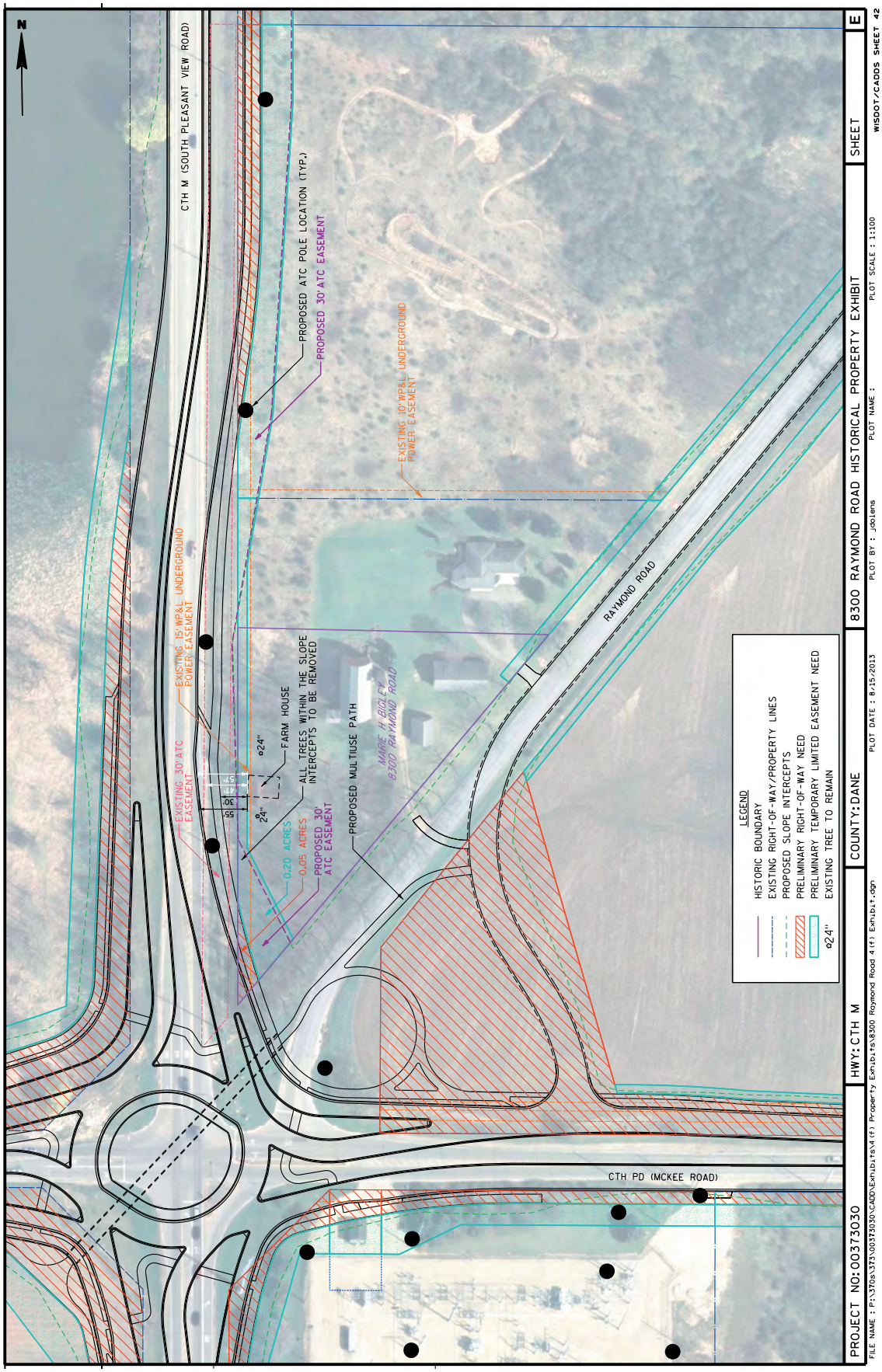
STREET LIGHTING GENERAL NOTES:

1. NO CIRCUIT CONDUCTOR SPLICES WILL BE ALLOWED IN PULL BOXES.
2. REMOVAL OF ALL AERIAL CABLE AND ABANDONMENT OF BELOW GRADE WIRING SHALL BE INCIDENTAL TO THE REMOVING LIGHTING UNITS & REMOVING CONCRETE BASES BID ITEMS.
3. CONTACT CITY FORESTRY 48-HOURS PRIOR TO INSTALLING STREET LIGHTS IF TREE TRIMMING IS NEEDED. NEW TREES SHALL HAVE A MINIMUM OFFSET OF 30' FROM ANY STREET LIGHT.
4. THE MINIMUM OFFSET FOR STREET LIGHT BASES FROM THE EDGE OF DRIVEWAYS SHALL BE:
   RESIDENTIAL - 5'
   COMMERCIAL - 10'
5. CHECK FOR OVERHEAD UTILITY CONFLICTS PRIOR TO CONSTRUCTING CONCRETE BASES.
6. INSTALL CONDUIT AT A DEPTH OF 12-INCHES BELOW SUBGRADE WHEN CROSSING ROADWAYS.
7. THE EXACT LOCATION OF THE LIGHTING CONTROL CABINETS SHALL BE DETERMINED IN THE FIELD BY THE CITY OF MADISON AND THE ENGINEER.
8. REFER TO STRUCTURE PLANS FOR ADDITIONAL ELECTRICAL WORK REQUIRED. THE INSTALLATION OF THE UNDERDECK LUMINAIRES WILL REQUIRE COORDINATION WITH THE STRUCTURE WORK.
9. CLEARLY LABEL UNUSED CONDUCTORS AS "SPARE" IN ALL CONDUIT RUNS CONTAINING UNUSED CONDUCTORS.

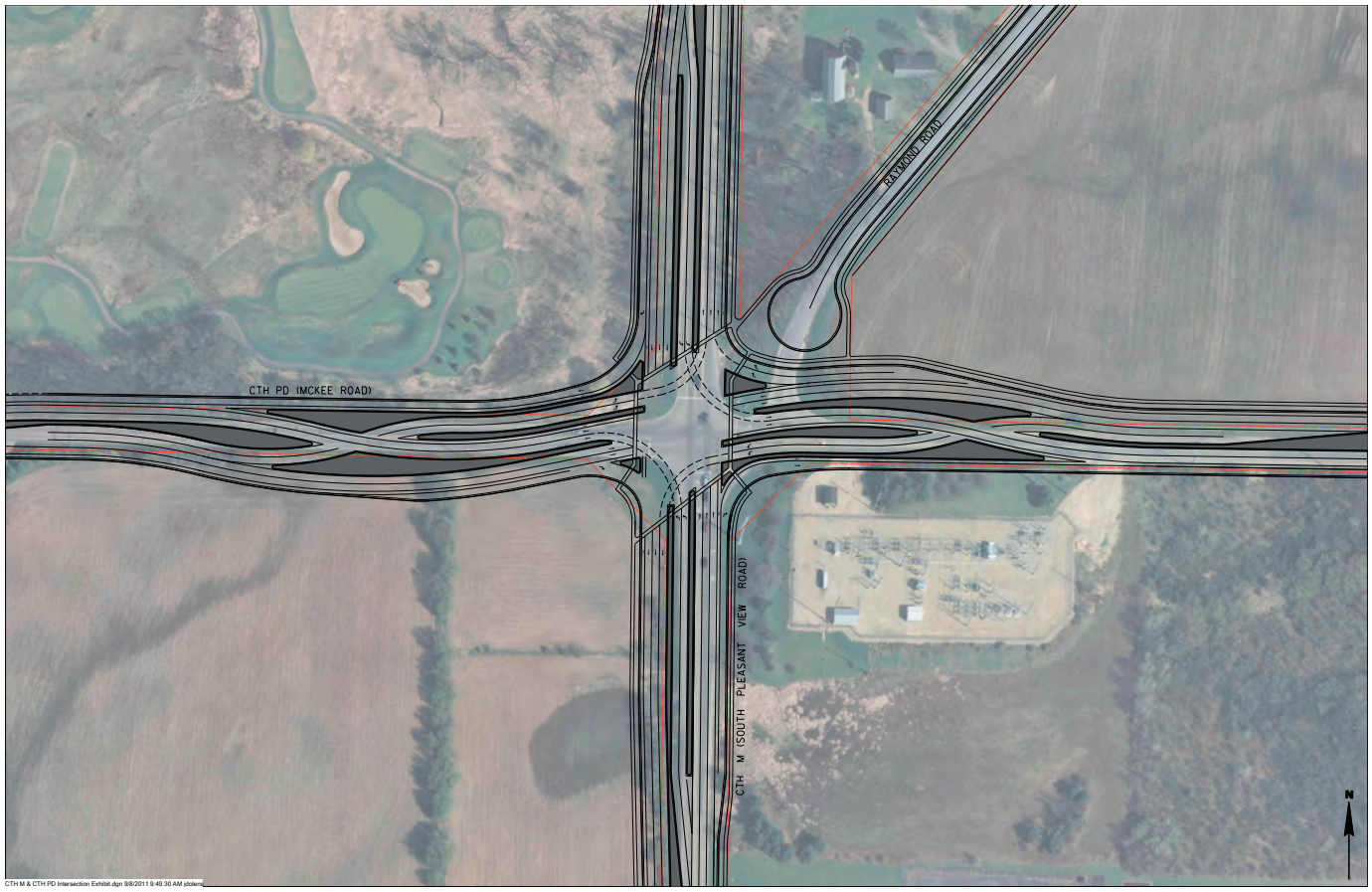
HWY: CTH M	COUNTY: DANE	CONSTRUCTION DETAILS	SHEET 42	E



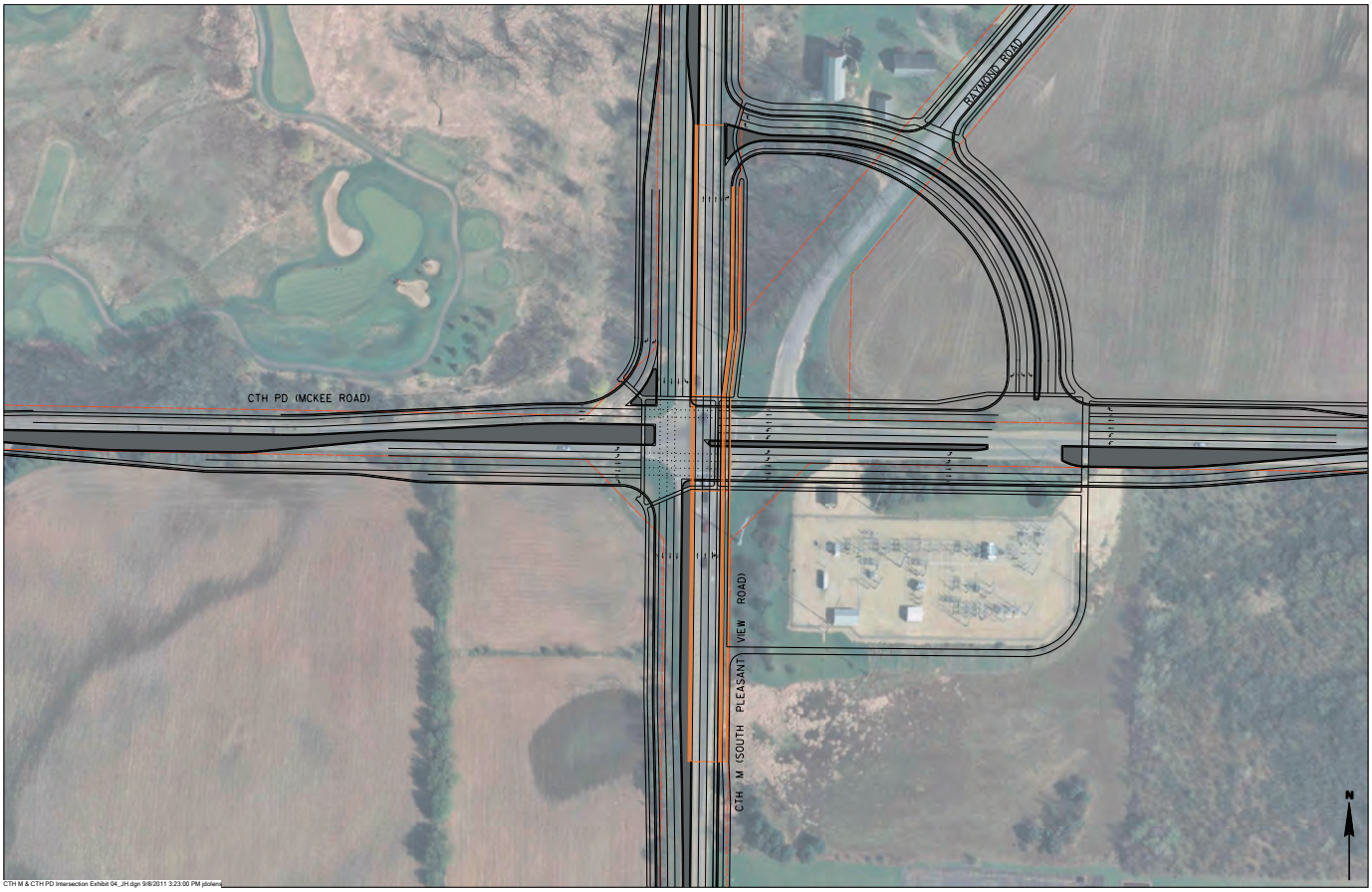
Attachment **7-A**	Project Alternative Traffic Signals	



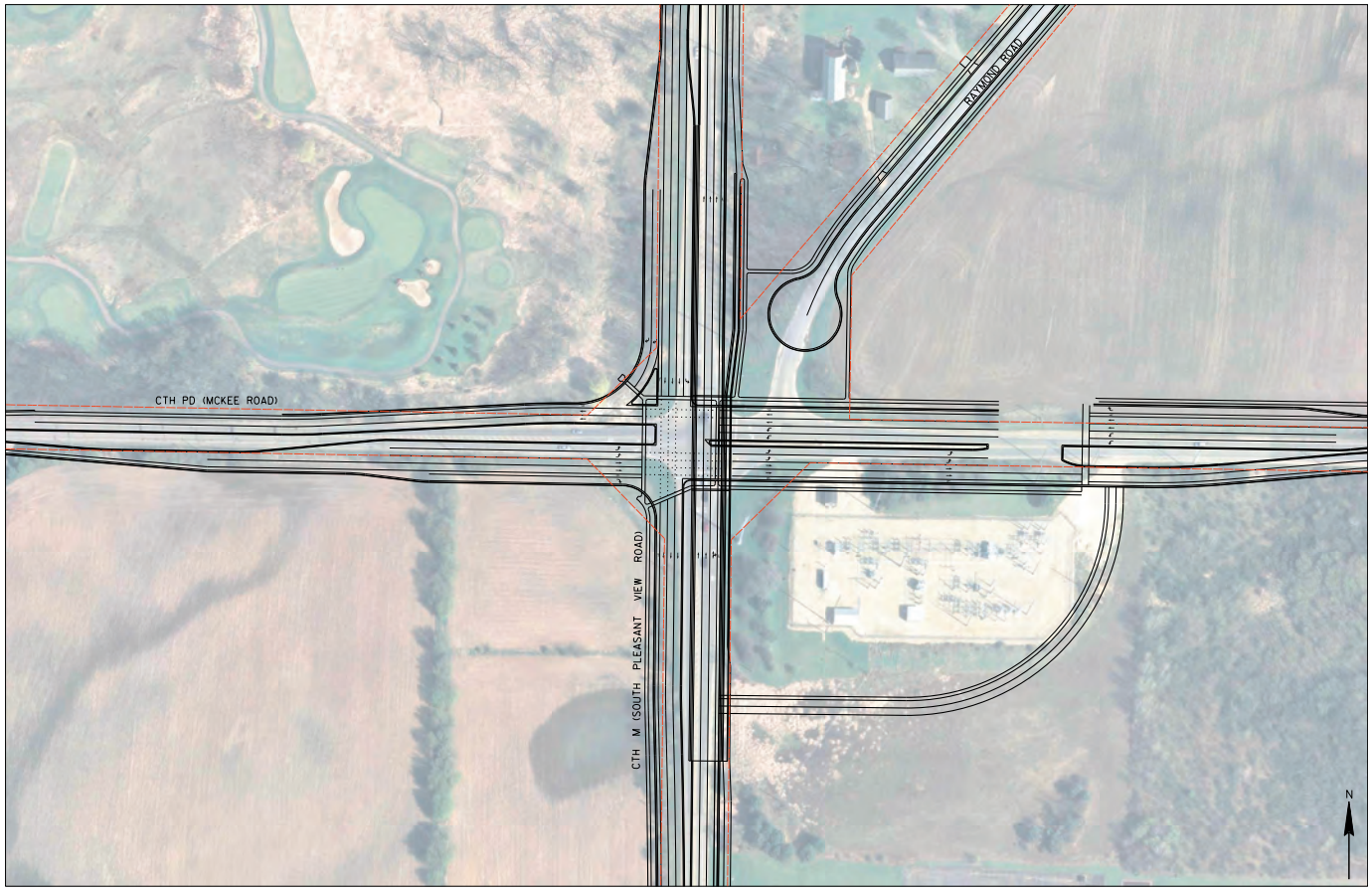
Attachment	Project Alternative	
7-B	Multi-Lane Roundabout	



Attachment	Project Alternative	
7-C	Continuous Flow Intersection	



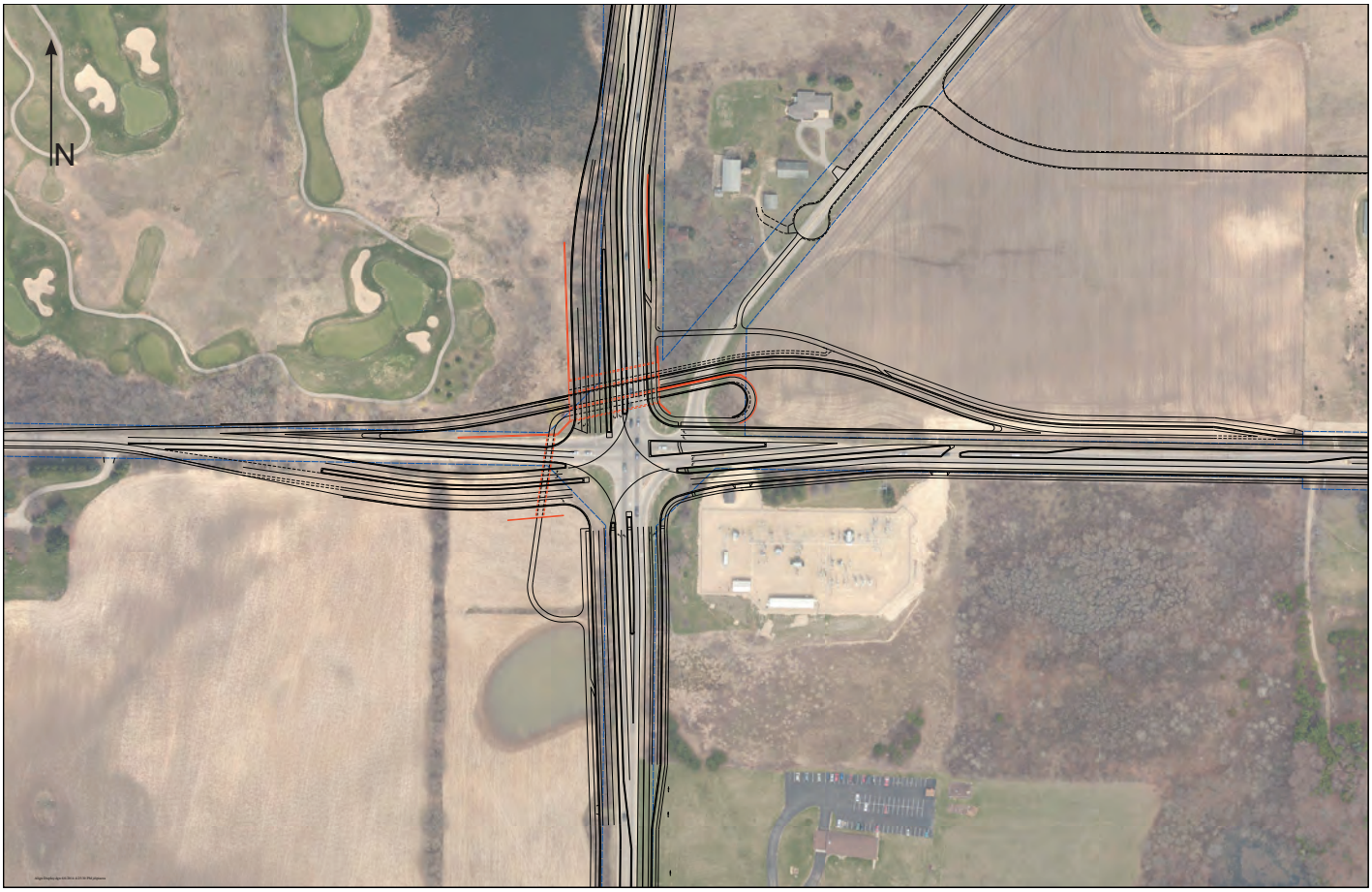
Attachment **7-D**	Project Alternative Grade-Separated Jug Handle (NE Quadrant)	



Attachment **7-E**	Project Alternative Grade-Separated Jug Handle (SE Quadrant)	

Attachment	Project Alternative	
7-F	Grade-Separated Jug Handle (SW Quadrant)	

Attachment **7-G**	Project Alternative Tight Diamond Interchange	



Attachment	Project Alternative	
7-H	CTH PD Westbound Underpass	

November 16, 2011

Subject: 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Dear Property Owner or Business Owner:

You are invited to attend a public information meeting regarding the reconstruction of County Highway M (CTH M) between Cross Country Road and Prairie Hill Road.

The meeting will take place at the Verona Senior Center, 108 Paoli Street, Verona, WI on Thursday, December 8 from 6 pm until 8 pm. Representatives of the City of Madison, the City of Verona, and Dane County will be available to discuss the proposed project and address any questions or concerns. A short presentation will begin at 6:30 pm and include a basic overview of project concepts and design alternatives. Project staff will be available before and after the presentation to answer questions and provide additional information regarding the project.

Persons with a concern for, or knowledge about historic buildings and structures and archaeological sites are encouraged to attend this meeting. You can also provide comments to city or county representatives or any of the project design team members. Contact information is listed below.

The proposed project is scheduled for 2014 and 2015 construction. The CTH M project limits are from the intersection of Cross Country Road and CTH M to the intersection of Prairie Hill Road and CTH M. McKee Road (CTH PD) will also be reconstructed from approximately 1500' west of the CTH M intersection to Meriter Way. Similarly, Mid Town Road will be reconstructed from Waterbend Drive to Waldorf Boulevard. Finally, Raymond Road will be reconstructed from the CTH PD intersection to the Meriter Hospital driveway. A project location map is attached. Key project features include:

- Reconstruction of CTH M into an urban arterial corridor
- Intersection improvements at McKee Road (CTH PD) and Mid Town Road
- Bicycle and pedestrian facility improvements including sidewalks, bike lanes, paths, and underpasses.
- Storm sewer, sanitary sewer, and water main construction
- Street lighting

Property owners who have private storm sewer laterals or private utilities within the highway right-of-way are urged to attend the meeting or contact Jason DiPiazza with MSA Professional Services at (608) 242-6640 or jdipiazza@msa-ps.com.

If you have questions, concerns, or information that may assist in the development of this project, we encourage you to attend the meeting. Hearing impaired people may request an interpreter at the meeting by contacting Jason DiPiazza with MSA Professional Services. If we can provide additional

information, you can contact either Jason DiPiazza with MSA Professional Services, Rob Phillips with the City of Madison, or Ron Rieder with the City of Verona.

Sincerely,

Robert F. Phillips, P.E.
City of Madison
City Engineer
(608) 266-4751
rphillips@cityofmadison.com

Ron Rieder
City of Verona
Director of Public Works
(608) 848-6695
ron.rieder@ci.verona.wi.us

Pamela J. Dunphy, P.E.
Dane County Highway De
Assistant Commissioner
(608) 266-4036
dunphy@co.dane.wi.us

Enc.

Names and addresses removed for privacy per WisDOT policy.

Public Information Meeting #1

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: December 8, 2011
Location: Verona City Center, 111 Lincoln Street

The information in this document (including names, addresses, phone numbers, e-mail addresses, and signatures) is not confidential, and may be subject to disclosure upon request, pursuant to the requirements of the Wisconsin open records law, sections 19.31—19.39 of the Wisconsin Statutes.

PIM Meeting Attendees

Name & Business Name (if applicable)	Street Address & Email or Phone Number
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
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[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

Names and addresses removed for privacy per WisDOT policy.

Public Information Meeting #1

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: December 8, 2011
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Name & Business Name (if applicable)	Street Address & Email or Phone Number
[redacted]	[redacted]
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[redacted]	[redacted]
[redacted]	[redacted]

Names and addresses removed for privacy per WisDOT policy.

Public Information Meeting #1

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Names and addresses removed for privacy per WisDOT policy.

Public Information Meeting #1

Project I.D. 5992-09-81
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(Cross Country Road – Prairie Hill Road)
CTH M
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Date: December 8, 2011
Location: Verona City Center, 111 Lincoln Street

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PIM Meeting Attendees

Name & Business Name (if applicable)	Street Address & Email or Phone Number
[redacted]	[redacted]
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[redacted]	[redacted]
[redacted]	[redacted]
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[redacted]	[redacted]

Names and addresses removed for privacy per WisDOT policy.

Public Information Meeting #1

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: December 8, 2011
Location: Verona City Center, 111 Lincoln Street

The information in this document (including names, addresses, phone numbers, e-mail addresses, and signatures) is not confidential, and may be subject to disclosure upon request, pursuant to the requirements of the Wisconsin open records law, sections 19.31—19.39 of the Wisconsin Statutes.

PIM Meeting Attendees

Name & Business Name (if applicable)	Street Address & Email or Phone Number
[redacted]	[redacted]
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Names and addresses removed for privacy per WisDOT policy.

Comment Form

City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County
Project I.D. 5992-09-81

Re PD + M: Am not a lover of "roundabouts", especially on such a busy corner. People always seem to get out of their correct lane on the "round" part — hence more opportunity for accidents. There is also the confusion in "yielding"

Why are you planning a pathway on the W side of M road to Moore Pond? It would be more of people could enjoy the pond, especially when the geese ducks are around — or just as a nice place to enjoy.

(TWO)

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Use back page if more space is required.
PLEASE PRINT

Name: [redacted]

Address: [redacted]

Email/Phone: [redacted]

Send to:
MSA Professional Services
2901 International Lane, Suite 300
Attn: Jason DiPiazza Madison WI 53704
Phone (800) 446-0679
jdipiazza@msa-ps.com

How do you go from 6 lanes (PD to Prairie Hill) to 4 lanes (M past PD)

What happens with the current road easements when you move into them - Do you then take new one ~~them~~ from the adjacent property? Who pays for that? owner? county? federal gov.?

Why don't you take off more on the E side of M across from Moose pond to allow for walks, etc.

Attachment 8-I	Public Information Meeting December 8, 2011	Marie Bigley Comment Sheet, p.2

May 4, 2012

Subject: 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Dear Property Owner or Business Owner:

You are invited to attend a public information meeting regarding the reconstruction of County Highway M (CTH M) between Cross Country Road and Prairie Hill Road.

The meeting will take place at the Verona Senior Center, 108 Paoli Street, Verona, WI on Thursday, May 24th from 6 pm until 8 pm. Representatives of the City of Madison, the City of Verona, and Dane County will be available to discuss the proposed project and address any questions or concerns. A short presentation will begin at 6:30 pm and include a basic overview of project concepts and the recommended design alternatives. Project staff will be available before and after the presentation to answer questions and provide additional information regarding the project.

Persons with a concern for, or knowledge about historic buildings and structures and archaeological sites are encouraged to attend this meeting. You can also provide comments to city or county representatives or any of the project design team members. Contact information is listed below.

The proposed project is now scheduled for 2015 and 2016 construction. The CTH M project limits are from the intersection of Cross Country Road and CTH M to the intersection of Prairie Hill Road and CTH M. McKee Road (CTH PD) will also be reconstructed from approximately 1500' west of the CTH M intersection to Meriter Way. Similarly, Mid Town Road will be reconstructed from Waterbend Drive to Waldorf Boulevard. Finally, Raymond Road will be reconstructed from the CTH PD intersection to the Meriter Hospital driveway. A project location map is attached. Key project features include:

- Reconstruction of CTH M into an urban arterial corridor
- Intersection improvements at McKee Road (CTH PD) and Mid Town Road. The recommended design alternative includes a roundabout at McKee Road and a signalized intersection at Midtown Road.
- Bicycle and pedestrian facility improvements including sidewalks, bike lanes, paths, and underpasses.
- Storm sewer, sanitary sewer, and water main construction
- Street lighting

Property owners who have private storm sewer laterals or private utilities within the highway right-of-way are urged to attend the meeting or contact Jason DiPiazza with MSA Professional Services at (608) 242-6640 or jdipiazza@msa-ps.com.

May 4, 2012

If you have questions, concerns, or information that may assist in the development of this project, we encourage you to attend the meeting. Persons with hearing impairment may request an interpreter at the meeting by contacting Jason DiPiazza with MSA Professional Services. If we can provide additional information, you can contact either Jason DiPiazza with MSA Professional Services, Rob Phillips with the City of Madison, or Ron Rieder with the City of Verona.

Sincerely,

Chris Petykowski, P.E.
City of Madison
Principal Engineer
(608) 267-8678
cpetykowski@cityofmadison.com

Ron Rieder
City of Verona
Director of Public Works
(608) 848-6695
ron.rieder@ci.verona.wi.us

Pamela J. Dunphy, P.E.
Dane County Highway Dept.
Assistant Commissioner
(608) 266-4036
dunphy@co.dane.wi.us

Enc.

Names and addresses removed for privacy per WisDOT policy.

Public Information Meeting #2

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: May 24, 2012
Location: Verona Senior Center, 108 Paoli Street, Verona, WI

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PIM Meeting Attendees

Name & Business Name (if applicable)	Street Address & Email or Phone Number
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

Attachment 8-L	Public Information Meeting May 24, 2012	Sign-In Sheet, p.1

Names and addresses removed for privacy per WisDOT policy.

Public Information Meeting #2

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: May 24, 2012
Location: Verona Senior Center, 108 Paoli Street, Verona, WI

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PIM Meeting Attendees

Name & Business Name (if applicable)	Street Address & Email or Phone Number
[redacted]	[redacted]
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[redacted]	[redacted]
[redacted]	[redacted]
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Names and addresses removed for privacy per WisDOT policy.

Public Information Meeting #2

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: May 24, 2012
Location: Verona Senior Center, 108 Paoli Street, Verona, WI

The information in this document (including names, addresses, phone numbers, e-mail addresses, and signatures) is not confidential, and may be subject to disclosure upon request, pursuant to the requirements of the Wisconsin open records law, sections 19.31—19.39 of the Wisconsin Statutes.

PIM Meeting Attendees

Name & Business Name (if applicable)	Street Address & Email or Phone Number
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[redacted]	[redacted]
[redacted]	[redacted]
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Names and addresses removed for privacy per WisDOT policy.

Public Information Meeting #2

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: May 24, 2012
Location: Verona Senior Center, 108 Paoli Street, Verona, WI

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PIM Meeting Attendees

Name & Business Name (if applicable)	Street Address & Email or Phone Number
[redacted]	[redacted]
[redacted]	[redacted]

Attachment 8-O	Public Information Meeting May 24, 2012	Sign-In Sheet, p.4

PHONE CONVERSATION RECORD

MSA PROFESSIONAL SERVICES
More ideas. Better solutions.

Project No.: 5992-09-81

Talked with:	Marie Bigley	**Time:**	11:30 a.m.
Of:	Property Owner - 8300 Raymond Road	**Phone No.:**	608.845.6312
Re:	Public Information Meeting – Invite Letter	**Date:**	November 18, 2011

☐ **Message** ☐ **Reply** ☐ **I placed call** ☒ **Party called**

Ms. Bigley called in response to the invite letter she received for the PIM on December 8, 2011. She has been in to see Chris Petykowski with her son regarding the project, but had some follow up questions regarding the invite letter. She wanted to know if the proposed sewer work on Raymond Road that was mentioned in the letter would include private hook ups for sewer and water. I indicated that the sewer work was for MMSD and is a large interceptor sewer, not for private hook up. I told her I didn't know if Madison had plans to get sewer and water towards her property but would check.

Ms. Bigley also asked if Raymond Road would become a cul-de-sac at CTH PD. I informed her that we are showing that to be the case in our preliminary designs.

Ms. Bigley plans to attend the PIM.

Action or follow-up necessary

Follow up with Madison regarding public sewer and water connections.

Signed _____
Jason DiPiazza, Project Manager

Offices in Illinois, Iowa, Minnesota, and Wisconsin
2901 International Lane, Suite 300, Madison, WI 53704-3133
(608) 242-7779 (800) 446-0679
FAX: (608) 242-5664 WEB ADDRESS: www.msa-ps.com

Attachment **8-P**	Property Owner Communication	

PHONE CONVERSATION RECORD

MSA PROFESSIONAL SERVICES
More ideas. Better solutions.

Project No.: 5992-09-81

Talked with:	Marie Bigley	**Time:**	11:30 AM
Of:	Property Owner - 8300 Raymond Road	**Phone No.:**	608.845.6312
Re:	CTH M project	**Date:**	February 7, 2012

☐ **Message** ☐ **Reply** ☐ **I placed call** ☒ **Party called**

Ms. Bigley called to ask some more questions. I provided her with updates on the Section 106 process: the documents are awaiting review and approval by the State Historical Preservation Office (SHPO). She is concerned that if her property is deemed historical (I corrected her that it was eligible to be listed as historical) that she will have more maintenance responsibilities. I told her that her property was hers to manage as she desires, however we have to recognize the opportunity for any future land owners, should there be one, to maintain and preserve the historical nature of the property.

I let her know that we will attempt to avoid impacts to any of her property, including tree removal.

Ms. Bigley asked about the utilities. I indicated we were working with the utility owners and that the overhead lines would have to move, but I didn't know where to yet. She is worried they will be on the front porch of her house. The buried electric is already very close.

Ms. Bigley will be in Texas for most of February and March. She does get her mail forwarded there so if she will still be there for the next public meeting she will at least know it occurred and she is free to call me with any questions she may have.

Action or follow-up necessary: None

cc: [cc:]
[cc:]

Signed _____
Jason DiPiazza, Project Engineer

Offices in Illinois, Iowa, Minnesota, and Wisconsin
2901 International Lane, Suite 300, Madison, WI 53704-3133
(608) 242-7779 (800) 446-0679
FAX: (608) 242-5664 WEB ADDRESS: www.msa-ps.com

Attachment **8-Q**	Property Owner Communication	

February 28, 2014

Subject: 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
County M
Dane County

Dear Property Owner or Business Owner:

You are invited to attend a public information meeting regarding the reconstruction of County M (South Pleasant View Road) between Cross Country Road and Prairie Hill Road.

The meeting will take place at the Verona Senior Center, 108 Paoli Street, Verona, WI on Wednesday, March 12 from 6 p.m. until 8 p.m. Representatives of the City of Madison, the City of Verona, and Dane County will be available to discuss the proposed project and address any questions or concerns. There will be a short presentation at 6 p.m. Project staff will be available before and after the presentation to answer questions and provide additional information regarding the project.

This meeting will update the public on changes to the recommended design of the intersection of Mckee Road (County PD) and County M. A roundabout design was recommended and approved by City of Madison and Verona resolutions in 2012; however since that time, continued development of roundabout design and capacity analysis, along with continued growth of traffic volume projections in the area have resulted in the consideration of two new alternatives for the County M and County PD intersection.

The proposed project is planned to begin construction in the fall of 2015 and continue through 2016. Key project features include:

- Reconstruction of County M into an urban arterial corridor
- Intersection improvements at McKee Road (County PD) and Mid Town Road.
- Bicycle and pedestrian facility improvements including sidewalks, bike lanes, paths, and underpasses.
- Storm sewer, sanitary sewer, and water main construction
- Street lighting

Property owners who have private storm sewer laterals or private utilities within the highway right-of-way are urged to attend the meeting or contact Jason DiPiazza with MSA Professional Services at (608) 242-6640 or jdipiazza@msa-ps.com. Persons with a concern for, or knowledge about historic buildings and structures and archaeological sites are encouraged to attend this meeting. You can also provide comments to city or county representatives or any of the project design team members. Contact information is listed below.

February 28, 2014

If you have questions, concerns, or information that may assist in the development of this project, we encourage you to attend the meeting. Persons with hearing impairment may request an interpreter at the meeting by contacting Jason DiPiazza with MSA Professional Services. If we can provide additional information, you can contact either Jason DiPiazza with MSA Professional Services, Chris Petykowski with the City of Madison, Ron Rieder with the City of Verona, or Pam Dunphy with Dane County Highway Department.

Sincerely,

Chris Petykowski, P.E.

City of Madison
Principal Engineer
(608) 267-8678
cpetykowski@cityofmadison.com

Ron Rieder

City of Verona
Director of Public Works
(608) 848-6695
ron.rieder@ci.verona.wi.us

Pamela J. Dunphy, P.E.

Dane County Highway Dept.
Assistant Commissioner
(608) 266-4036
dunphy@co.dane.wi.us

Names and addresses removed for privacy per WisDOT policy.

Public Information Meeting #3

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: March 12, 2014
Location: Verona Senior Center, 108 Paoli Street, Verona, WI

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PIM Meeting Attendees

Name & Business Name (if applicable)	Street Address & Email or Phone Number
[redacted]	[redacted]
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Names and addresses removed for privacy per WisDOT policy.

Public Information Meeting #3

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: March 12, 2014
Location: Verona Senior Center, 108 Paoli Street, Verona, WI

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Names and addresses removed for privacy per WisDOT policy.

Public Information Meeting #3

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: March 12, 2014
Location: Verona Senior Center, 108 Paoli Street, Verona, WI

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Names and addresses removed for privacy per WisDOT policy.

Public Information Meeting #3

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: March 12, 2014
Location: Verona Senior Center, 108 Paoli Street, Verona, WI

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PIM Meeting Attendees

Name & Business Name (if applicable)	Street Address & Email or Phone Number
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Names and addresses removed for privacy per WisDOT policy.

Public Information Meeting #3

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: March 12, 2014
Location: Verona Senior Center, 108 Paoli Street, Verona, WI

The information in this document (including names, addresses, phone numbers, e-mail addresses, and signatures) is not confidential, and may be subject to disclosure upon request, pursuant to the requirements of the Wisconsin open records law, sections 19.31—19.39 of the Wisconsin Statutes.

PIM Meeting Attendees

Name & Business Name (if applicable)	Street Address & Email or Phone Number
[redacted]	
[redacted]	[redacted]

April 12, 2013

Subject: 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Dear Ms. Bigley

The State Historical Preservation Office (SHPO) has concurred with the Wisconsin Department of Transportation's (WisDOT) finding that a portion of your property surrounding the original farmhouse has significant historic value. They have also concurred that the proposed CTH M reconstruction project referenced above will have an adverse effect on the setting of this historic resource. As required by Section 106 of the National Historic Preservation Act of 1966, the project will be required to mitigate any adverse effects that cannot be avoided.

An important step in developing a mitigation plan is to hold a consultation meeting with the project stakeholders, including you as the property owner. At this meeting, we will review the project design, the adverse effects that the proposed project would have on the historic resource, and develop a plan to mitigate these effects. Typical mitigation measures include, but are not limited to written and photographic documentation of the property, survey and inventory of other nineteenth and early twentieth century farmsteads in the immediate area, and incorporation of the property into an existing Dane County Historical Society project, database, or website.

We would like to have this meeting the week of April 28, 2013 or May 6, 2013. The meeting location will be in Madison, possibly at the Wisconsin Historical Society, 816 State Street. Gail Klein with Great Lakes Archaeological Research Center, Inc. will follow up with a phone call to you to coordinate a day and location that is convenient for you to attend this meeting. If you have any questions about the meeting, or would like to contact either of us directly to coordinate a meeting time, please give either of us a call. If you have any questions about the Section 106 process and how it relates to your property, please do not hesitate to contact either Gail or Jennifer Haas at Great Lakes Archaeological Research Center at the phone numbers below.

Thank you in advance for your time and assistance on this important project!

Contact info:

Jason DiPiazza, Project Manager
MSA Professional Services, Inc.
608-242-7779

Gail Klein
Great Lakes Archaeological
Research Center
541-285-0352.

Jennifer Haas
Great Lakes Archaeological
Research Center
414-481-2093

Sincerely,

Jason DiPiazza P.E., Project Manager, MSA Professional Services

Cc: Chris Petykowski, P.E. Principal Engineer, City of Madison Engineering
Pam Dunphy, P.E. Assistant Commissioner, Dane County Highway Dept.
Ron Rieder, Director of Public Works, City of Verona
Amanda Arnold AICP, Planner/Administrator, Town of Verona
Gail Klein, Great Lakes Archaeological Research Center
Karen Richardson, P.E., Kjohnson Engineers, LPMC

Attachment **9-A**	Consultation Meeting April 29, 2013	Invite letter

MSA
PROFESSIONAL SERVICES
TRANSPORTATION • MUNICIPAL
DEVELOPMENT • ENVIRONMENTAL

Sheet_____ of_____
Project_____ Comp. by_____
Date_____ Ckd. by_____
Proj. No._____

NAME	REPRESENTING
JASON DIAZZA	MSA
Chris Petykowski	City of Madison Engr.
RON RIEGER	City of VERONA
JENNIFER HAAS	GREAT LAKES ARCHAEOLOGICAL RESEARCH CENTER
Shirley Rigga	~~CE~~ friend - Bigley
Marie Bigley	Property owner
Jason Kennedy	WisDOT
BRAD VOSKERS	ATC
Erika Biemann	ATC
Karen Richardson	Kjohnson Engineers
Paul Chellevold	SRF Consulting

Attachment 9-B	Consultation Meeting April 29, 2013	Sign-In Sheet

From: Jason DiPiazza <jdipiazza@msa-ps.com>
Sent: Tuesday, June 25, 2013 1:29 PM
To: Chris Petykowski (CPetykowski@cityofmadison.com); Pam Dunphy (dunphy@co.dane.wi.us); Ron Rieder (ron.rieder@ci.verona.wi.us); Amanda Arnold; Karen Richardson; Brad Vosters (bvosters@atcllc.com); Gail Klein (gklein@glarc.com); Jennifer Haas (jhaas@glarc.com); bigleymh@gmail.com; Kennedy, Jason - DOT (Jason1.Kennedy@dot.wi.gov); EBiemann@atclc.com; Paul M. Chellevold (PChellevold@srfconsulting.com)
Subject: CTH M (S. Pleasant View Road) - 8300 Raymond Road Property

WisDOT Project ID 5992-09-81
S. Pleasant View Road, City of Madison
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

RE: Consultation and Mitigation of Impacts to historically significant property – 8300 Raymond Road

WisDOT Environmental Services Section has reviewed the Documentation for Consultation (D for C) and Memorandum of Agreement (MOA) for addressing negative impacts to the NRHP listing eligible property located at 8300 Raymond Road, also referred to as the Schroeder-Stickelberg-Thompson Farmstead. These documents include mitigation measures discussed in April at a consultation meeting.

Following comments from WisDOT ESS, the project team is proposing a change to the mitigation measures discussed at the April consultation meeting. This change consists of the replacement of the written description mitigation option with a new mitigation measure in the form of a survey and inventory of historic farmsteads within one mile of the Schroeder-Stickelberg-Thompson Farmstead. This would include a field survey of historic farmsteads within a one mile radius, following the Farmstead Survey Methodology as outlined in the WisDOT Survey Manual. All historic farmsteads identified in this survey will be documented with photographs and sketch maps and records will be created in the Wisconsin Historic Preservation Database (WHPD). In addition, photographic documentation of the Schroeder-Stickelberg-Thompson Farmstead will remain a primary mitigation measure, as discussed at April's consultation meeting.

Please respond with any comments or concerns about this change to the mitigation measures that are proposed above.

Thank you,

Jason

Jason DiPiazza, PE | Team Leader
MSA Professional Services, Inc.
(608) 242-7779

Attachment **9-C**	Consultation Meeting April 29, 2013	Follow-up Correspondence

From : Marie Bigley <bigleymh@gmail.com> Mon, Apr 07, 2014 12:41 AM

Subject : Re: County M Intersection at County PD (McKee Road) 1 attachment

To : Jason DiPiazza <jdipiazza@msa-ps.com>

Thank you for the info about the meeting in Verona. Yes, I will be able to attend and have put the time and date on my calendar. Marie

On Fri, Apr 4, 2014 at 2:21 PM, Jason DiPiazza <jdipiazza@msa-ps.com> wrote:

> Hello Marie,
>
> I hope all is well with you. I'm sorry I didn't get a chance to talk with you at the County M public meeting a couple weeks ago. I saw you there but wasn't able to break away from folks to come talk to you. I did have a couple conversations with your renter, Mr. Puntillo however.
>
> I'm writing to you today to see if you are available to meet regarding the project on April 14th at 10:00 AM. For your convenience, we can meet at the Verona City Hall as we did the last time we met. We would like to go over the changes we made at the intersection that you saw at the public meeting and compare these impacts to those of the roundabout that we were previously showing.
>
> Please let me know if this meeting time and place will work for you. As always, if you have any questions, please don't hesitate to call me: 608-242-6640 is my direct line. I'll give you a call on Monday to make sure you got this message if I haven't heard from you by then.
>
> Thank you in advance for your time Marie. Take care and see you soon,
>
> Jason
>
> **Jason DiPiazza, PE** | Team Leader
> MSA Professional Services, Inc.
> (608) 242-7779

Attachment 9-D	Consultation Meeting April 14, 2014	Invitation

ID 5992-09-81
S. Pleasant View Road Reconstruction
(Prairie Hill Road to Cross Country Road)
CTH M

Documentation for Consultation – April 14, 2014

ATTENDEES

	Name / Representing	Email and Phone Number
1.	Kathy Shillingford, UWM	kshill@uwm.edu 414-559-5092
2.	Jennifer Haas, UWM-GLARC	haasjr@uwm.edu 414-229-3078
3.	Pam Dunphy, Dane Co. Hwy	dunphy@countyofdane.com 2606-4036
4.	Ron Rieder, City of Verona	RON.RIEDER@CI.VERONA.WI.US 848-6801
5.	Karen Richardson, KJohnson Engineers	karenrichardson@kjohnsonengineers.com 829-3850
6.	Marie Bigley	bigleymh@gmail.com 845-6312
7.	Jason Kennedy	Jason.l.Kennedy@dot.wisconsin.gov
8.	Jason DiPiazza - MSA	jdipiazza@msa-ps.com 242-7779
9.	Gail Klein, GLARC	grklein@uwm.edu
10.	Chris Petykowski, City of Madison	cpetykowski@cityofmadison.com 267-8678
11.		
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MSA PROFESSIONAL SERVICES
TRANSPORTATION • MUNICIPAL • REMEDIATION
DEVELOPMENT • ENVIRONMENTAL

Attachment 9-E	Consultation Meeting April 14, 2014	Sign-in Sheet

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ATTACHMENT G:

US Army Corps of Engineers (COE) Coordination

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Paul Chellevold

From: Jason DiPiazza <jdipiazza@msa-ps.com>
Sent: Monday, May 23, 2016 3:17 PM
To: Paul Chellevold
Subject: FW: WisDOT ID 5992-09-81 City of Madison, S. Pleasant View Road (UNCLASSIFIED)

Resending for documentation in the EA

-----Original Message-----
From: Jason DiPiazza
Sent: Tuesday, September 11, 2012 4:17 PM
To: Kolb, Simone E MVP <Simone.E.Kolb@usace.army.mil>
Subject: RE: WisDOT ID 5992-09-81 City of Madison, S. Pleasant View Road (UNCLASSIFIED)

Thanks Simone - I just dropped off the report in the mail. We won't be submitting the 401/404 permitting until next spring at the earliest, I'm just trying to keep on top of things. If time allows this fall/winter for a review we can discuss any issues at that time.

Thank you,

Jason

-----Original Message-----
From: Kolb, Simone E MVP [mailto:Simone.E.Kolb@usace.army.mil]
Sent: Tuesday, September 11, 2012 4:12 PM
To: Jason DiPiazza
Subject: RE: WisDOT ID 5992-09-81 City of Madison, S. Pleasant View Road (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Thanks, you should not wait for concurrence to submit the application. We have received so many delineations lately that we may not have the opportunity to review it until we have an application and if there are complications necessitating a site visit, we may not be able to make that site visit until spring, depending on how quickly we can process this summer's workload.

-----Original Message-----
From: Jason DiPiazza [mailto:jdipiazza@msa-ps.com]
Sent: Tuesday, September 11, 2012 2:33 PM
To: Kolb, Simone E MVP
Subject: FW: WisDOT ID 5992-09-81 City of Madison, S. Pleasant View Road

Hi Simone,

Checking in on you regarding the email below. My apologies for sending this to the wrong contact. We are looking for initial concurrence on the wetland boundaries for the subject project. Eric Heggelund with WDNR has reviewed and concurred with the boundaries. I will place the report in the mail today to your attention.

Jason

-----Original Message-----
From: Marshall, Stacy L MVP [mailto:Stacy.L.Marshall@usace.army.mil]
Sent: Wednesday, September 05, 2012 8:33 AM
To: Jason DiPiazza
Cc: Kolb, Simone E MVP; Heggelund, Eric P - DNR
Subject: FW: WisDOT ID 5992-09-81 City of Madison, S. Pleasant View Road

Hi Jason,

I am the project manager for Rock, Dodge, Jefferson and Walworth counties in Southeast Wisconsin.

I am forwarding your message to the correct Corps PM for Dane County; Simone Kolb. She has been copied on this message, so you will have her contact information for future reference.

I'm also including a link to the St. Paul District regulatory staff for your use.

http://www.mvp.usace.army.mil/regulatory/default.asp?pageid=1716

Thank you!
Stacy

In order to provide better service to our customers, please complete the customer survey at the link below.

http://per2.nwp.usace.army.mil/survey.html

Stacy L. Marshall
Biologist/Project Manager - St. Paul District, Waukesha Field Office (Rock, Dodge, Jefferson, and Walworth counties)
United States Army Corps of Engineers
20711 Watertown Road, Suite F
Waukesha, WI 53186

Phone: 262-717-9540, ext. 5
FAX: 262-717-9549

-----Original Message-----
From: Jason DiPiazza [mailto:jdipiazza@msa-ps.com]
Sent: Wednesday, September 05, 2012 7:50 AM
To: Marshall, Stacy L MVP
Subject: WisDOT ID 5992-09-81 City of Madison, S. Pleasant View Road

ID 5992-09-81

City of Madison, South Pleasant View Road

(Cross Country Road - Prairie Hill Road)

CTH M

Dane County

Good morning Stacy,

The subject project is a WisDOT SW Region local program project. It is a rural to urban highway conversion on the SW side of Madison (project location map attached). We are anticipating wetland impacts with the project and have completed a wetland delineation report. Eric Heggelund at WDNR has concurred with the report, however realized you have not seen it yet. We aren't quite to the Section 404 permit process, but anticipate submitting for that within the next year. I will place a copy of the report in the mail for you today.

Jason

Jason DiPiazza, PE | Team Leader
MSA Professional Services, Inc.
(608) 242-7779

Classification: UNCLASSIFIED
Caveats: NONE

DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
180 FIFTH STREET EAST, SUITE 700
ST. PAUL MINNESOTA 55101-1678

REPLY TO
ATTENTION

Operations
Regulatory (2011-05501-SEK)

Mr. William Dunlop
SRF Consulting Group, Inc.
901 Deming Way, Suite 302
Madison, WI 53717-1979

Dear Mr. Dunlop:

We have received your letter of December 19, 2011, requesting Corps comments on the CTH M project from Prairie Hill Road to Cross Country Road. The project site is located in Sec. 34., T. 7N. R. 8E., and Sec. 3 and 10, T. 6N. R. 8E., Dane County, Wisconsin.

Based upon the information included in your letter, it is likely that the project would require a Department of the Army permit for the discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act (CWA Section 404). Waters of the United States include navigable waters, their tributaries, and adjacent wetlands (33 CFR § 328.3). CWA Section 301(a) prohibits discharges of dredged or fill material into waters of the United States, unless the work has been authorized by a Department of the Army permit under Section 404. Information about the Corps permitting process can be obtained online at http://www.mvp.usace.army.mil/regulatory.

The Corps' evaluation of a Section 404 permit application involves multiple analyses, including (1) evaluating the proposal's impacts in accordance with the National Environmental Policy Act (NEPA) (33 CFR part 325), (2) determining whether the proposal is contrary to the public interest (33 CFR § 320.4), and (3) in the case of a Section 404 permit, determining whether the proposal complies with the Section 404(b)(1) Guidelines (Guidelines) (40 CFR part 230).

The Guidelines specifically require that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences" (40 CFR § 230.10(a)). Time and money spent on the proposal prior to applying for a Section 404 permit cannot be factored into the Corps' decision whether there is a less damaging practicable alternative to the proposal.

Printed on Recycled Paper

We recommend a pre-application consultation meeting with the Corps during the design phase in order to obtain information regarding the data, studies or other information that will be necessary for the permit evaluation process

For further information or to request a pre-application consultation meeting, please contact Simone Kolb at (262) 717-9539, the Corps' project manager for Dane County.

Sincerely,

Simone Kolb

for Tamara E. Cameron
Chief, Regulatory Branch

Copy furnished:

WDNR, Dan Hunt
WDNR, Amanda Cushman

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ATTACHMENT H:

Natural Resource Conservation Service (NRCS) Coordination

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SRF Consulting Group, Inc. | ENGINEERS PLANNERS DESIGNERS

January 20, 2012 SRF No. 0107334

Mr. Jeremy Ziegler
Area Resource Soil Scientist
NATURAL RESOURCES CONSERVATION SERVICE
451 West North Street
Juneau, WI 53039-1120

SUBJECT: FARMLAND PROTECTION POLICY ACT COMPLIANCE - (FORM AD-1006)

Dear Mr. Ziegler:

The City of Madison, along with the City of Verona and Dane County, is studying proposed improvements of South Pleasant View Road/CTH M (Project ID: 5992-09-81) between Prairie Hill Road and Cross Country Road in Dane County, Wisconsin.

The objective of this project is to improve this vital regional transportation corridor by reconstructing CTH M to four lanes. The project includes two major intersections, Midtown Road and CTH PD/McKee Road. The corridor is currently a rural, two-lane facility, with traffic signals located at the CTH PD/McKee Road and Midtown Road intersections.

Two alternatives at each major intersection are being considered:

1) CTH M and Midtown Road – at-grade signalized intersection and a roundabout
2) CTH M and CTH PD/McKee Road – a roundabout and a split-grade jug handle

In accordance with the Farmland Protection Policy Act (FPPA), I am submitting the required AD-1006 Form for your review.

I have provided project maps for the corridor to assist in your evaluation. If you have any questions or concerns, please feel free to contact me anytime at 608.829.0010 or by email at: pchellevold@srfconsulting.com.

Thank you for your cooperation.

Sincerely,

SRF CONSULTING GROUP, INC.

Paul Chellevold

Paul Chellevold, GISP
Transportation Planner

cc: Jason DiPiazza, MSA Professional Services
Bill Dunlop, SRF Consulting Group, Inc.

Paul Chellevold

From: Ziegler, Jeremy - NRCS, Juneau, WI [Jeremy.Ziegler@wi.usda.gov]
Sent: Tuesday, February 21, 2012 3:04 PM
To: Paul Chellevold
Cc: Jason DiPiazza; William Dunlop
Subject: RE: South Pleasant View Road/CTH M (Project ID: 5992-09-81) - AD1006 Compliance

Paul,

Since, the site assessment scores are less than 60 points the project is **not subject** to the Farmland Protection Policy Act. Thank you for the opportunity to comment on this project. If you have any further questions, please feel free to contact me at any time.

Jeremy Ziegler
Area Resource Soil Scientist-SE WI
USDA-NRCS
451 West Noth Street
Juneau, WI 53039-1120
920-386-9999 ext. 122
Gov cell 920-210-9007

From: Paul Chellevold [mailto:PChellevold@srfconsulting.com]
Sent: Tuesday, February 21, 2012 2:24 PM
To: Ziegler, Jeremy - NRCS, Juneau, WI
Cc: Jason DiPiazza; William Dunlop
Subject: South Pleasant View Road/CTH M (Project ID: 5992-09-81) - AD1006 Compliance

Mr. Ziegler,

I am writing to follow up on my initial letter to you dated January 20, 2012 regarding the South Pleasant View Road/County M Project (Project ID: 5992-09-81) AD-1006 Farmland Rating form.

Our initial coordination efforts were through Bob Murphy in a letter dated December 19, 2011. Mr. Murphy determined that there are no NRCS easements involved with this corridor project, however, the AD-1006 form for Farmland Protection Policy Act (FPPA) compliance should go through you. I have attached his response for and the initial letter to Mr. Murphy for your reference.

I have also attached the completed AD-1006 form and letter I previously submitted to you on January 20, 2012.

Please let me know if I can be of any assistance or if you have any questions or concerns.

Thanks,

Paul

Paul M. Chellevold, GISP
Transportation Planner
SRF Consulting Group, Inc.
pchellevold@srfconsulting.com
main: 608.829.0010
901 Deming Way, Suite 302, Madison, WI 53717
www.srfconsulting.com

Paul Chellevold

From: William Dunlop
Sent: Friday, January 20, 2012 8:35 AM
To: Paul Chellevold
Subject: FW: WisDOT Project ID 5992-09-81, Dane County

Bill
Bill Dunlop, PE - (WI, MN, IL, VA)
SRF Consulting Group, Inc.
main: 608.829.0010. | wdunlop@srfconsulting.com
fax: 608.831.4245 | mobile: 217.649.1236
901 Deming Way, Suite 302, Madison, WI 53717-1979
www.srfconsulting.com

From: Murphy, Robert - NRCS, Madison, WI [mailto:Robert.Murphy@WI.usda.gov]
Sent: Tuesday, January 17, 2012 8:35 AM
To: William Dunlop
Cc: Ziegler, Jeremy - NRCS, Juneau, WI
Subject: WisDOT Project ID 5992-09-81, Dane County

Re: WisDOT Project ID 5992-09-81
South Pleasant View Road/County M, Prairie Hill Road to Cross Country Road
Dane County

William,

Environmental Assessments are typically reviewed by NRCS to determine if any NRCS easements are affected, and for compliance with the Farmland Protection Policy Act (FPPA).

NRCS State Office staff in Madison has reviewed your December 19, 2011 letter and supporting information with respect to NRCS easements. There are no NRCS easements involved with this corridor project.

However, there was no attached AD-1006 form for Farmland Protection Policy Act (FPPA) compliance.
Information relative to FPPA and the AD-1006 form can be found on our website:
http://www.wi.nrcs.usda.gov/technical/soil/fppa.html and
http://www.wi.nrcs.usda.gov/technical/soil/comply.html

Please fill out the appropriate parts of the AD-1006 and mail it to:
Jeremy Ziegler, Area Resource Soil Scientist
Natural Resources Conservation Service
451 West North Street
Juneau, WI. 53039-1120
I will forward your December 19, 2011 letter and attachments to Jeremy Ziegler, RSS, Juneau, WI.

For future reference on other Wisconsin projects, our four Area Resource Soil Scientists are the primary contacts. Project information and the AD-1006 form or NRCS-CPA-106 form *(corridors)* for FPPA compliance should be mailed

directly to the Resource Soil Scientist for the area with the majority of the project acreage. Contact information and a Resource Soil Scientist service area map are on the Wisconsin NRCS website:
http://www.wi.nrcs.usda.gov/technical/soil/rss_primary_regions.html

For more general questions, please contact me.

Thanks,

Bob Murphy
Assistant State Soil Scientist
USDA, Natural Resources Conservation Service
8030 Excelsior Drive
Madison, Wisconsin 53717
608-662-4422 ext 202
email: robert.murphy@wi.usda.gov

U.S. DEPARTMENT OF AGRICULTURE | Form AD-1006

FARMLAND CONVERSION IMPACT RATING

PART 1 *(To be completed by Federal Agency)*	1. Date of Land Evaluation Request January 20, 2012	2. Sheet 1 of 1
3. Name of Project South Pleasant View Road (CTH M)	4. Federal Agency Involved MSA Professional Services, SRF Consulting Group Inc.	
5. Proposed Land Use Highway	6. County and State Dane County, WI	7. Type of Project: Corridor ☒ Other ☒ Expansion
PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS	2. Person Completing the NRCS parts of this form
3. Does the site or corridor contain prime, unique ,statewide or local important farmland? Yes ☐ No ☐ (If no, the FPPA does not apply - Do not complete additional parts of this form)		4. Acres Irrigated / 5. Average Farm Size
6. Major Crop(s)	7. Farmable Land in Government Jurisdiction Acres: %	8. Amount of Farmland As Defined in FPPA Acres: %
9. Name of Land Evaluation System Used	10. Name of Local Site Assessment System	11. Date Land Evaluation Returned by NRCS

PART III *(To be completed by Federal Agency)*		Alternative Site Rating			
		Site A *	Site B *	Site C *	Site D *
A. Total Acres To Be Converted Directly		6.3	5.3	5.7	7.5
B. Total Acres To Be Converted Indirectly, Or To Receive Services					
C. Total Acres in Site					
PART IV *(To be completed by NRCS) Land Evaluation Information*					
A. Total Acres Prime and Unique Farmland					
B. Total Acres Statewide and Local Important Farmland					
C. Percentage of Farmland in County or Local Govt. Unit to be Converted					
D. Percentage of Farmland in Govt. Jurisdiction with Same or Higher Relative Value					
PART V *(To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland to be Serviced or Converted (Scale of 0 - 100 Points)*					
PART VI *(To be completed by Federal Agency) Corridor or Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b & c))*	Max. Points Corridor / Other				
1. Area in Nonurban Use	15 / 15	9	9	9	10
2. Perimeter in Nonurban Use	10 / 10	4	4	4	4
3. Percent of Site Being Farmed	20 / 20	8	8	8	9
4. Protection Provided by State and Local Government	20 / 20	0	0	0	0
5. Distance from Urban Built-up area	0 / 15	5	5	5	5
6. Distance to Urban Support Services	0 / 15	0	0	0	0
7. Size of Present Farm Unit Compared to Average	10 / 10	8	8	8	8
8. Creation of Non-Farmable Farmland	25 / 10	0	0	2	5
9. Availability of Farm Support Services	5 / 5	5	5	5	5
10. On-Farm Investments	20 / 20	13	13	13	13
11. Effects of Conversion on Farm Support Services	25 / 10	0	0	0	0
12. Compatibility with Existing Agricultural Use	10 / 10	0	0	0	0
TOTAL CORRIDOR OR SITE ASSESSMENT POINTS	160	52	52	54	59
PART VII *(To be completed by Federal Agency)*					
Relative Value of Farmland (from Part V above)	100				
Total Corridor or Site Assessment (From Part VI above or a local site assessment)	160	52	52	54	59
TOTAL POINTS *(Total of above 2 lines)*	260				

PART VIII *(To be completed by Federal Agency after final alternative is chosen)*

1. Corridor or Site Selected:	2. Date of Selection:	3. Was A Local Site Assessment Used? Yes ☐ No ☐

4. Reason For Selection:

Signature of person completing the Federal Agency parts of this form:	DATE

Wisconsin substitute form AD-1006 6-9-97 Completion instructions: http://www.wi.nrcs.usda.gov/soil/prime/prinotes.html

* total does not include an additional 0.8 acres of mainline right of way throughout the corridor

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request January 12, 2015
Name of Project South Pleasant View Road (CTH M)	Federal Agency Involved MSA Professional Services
Proposed Land Use Highway Reconstruction	County and State Dane County, Wisconsin
PART II *(To be completed by NRCS)*	Date Request Received By NRCS / Person Completing Form:

Does the site contain Prime, Unique, Statewide or Local Important Farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)*	YES ☐ NO ☐	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %	Amount of Farmland As Defined in FPPA Acres: %	
Name of Land Evaluation System Used	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS	

PART III *(To be completed by Federal Agency)*	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	7.8	6.1		
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site				
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide Important or Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)				

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	Maximum Points	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)	9	9		
2. Perimeter In Non-urban Use	(10)	4	4		
3. Percent Of Site Being Farmed	(20)	9	8		
4. Protection Provided By State and Local Government	(20)	0	0		
5. Distance From Urban Built-up Area	(15)	5	5		
6. Distance To Urban Support Services	(15)	0	0		
7. Size Of Present Farm Unit Compared To Average	(10)	8	8		
8. Creation Of Non-farmable Farmland	(10)	2	2		
9. Availability Of Farm Support Services	(5)	5	5		
10. On-Farm Investments	(20)	10	10		
11. Effects Of Conversion On Farm Support Services	(10)	0	0		
12. Compatibility With Existing Agricultural Use	(10)	0	0		
TOTAL SITE ASSESSMENT POINTS	160	52	51	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)*	100	0	0	0	0
Total Site Assessment *(From Part VI above or local site assessment)*	160	52	51	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	52	51	0	0

Site Selected: Site A (WB Underpa	Date Of Selection January, 14, 2015	Was A Local Site Assessment Used? YES ☐ NO ☑

Reason For Selection:

* Total does not include 0.8 acres of farmland right of way needed for non-intersection properties along the corridor.

Name of Federal agency representative completing this form:	Date:

(See Instructions on reverse side)

Form AD-1006 (03-02)

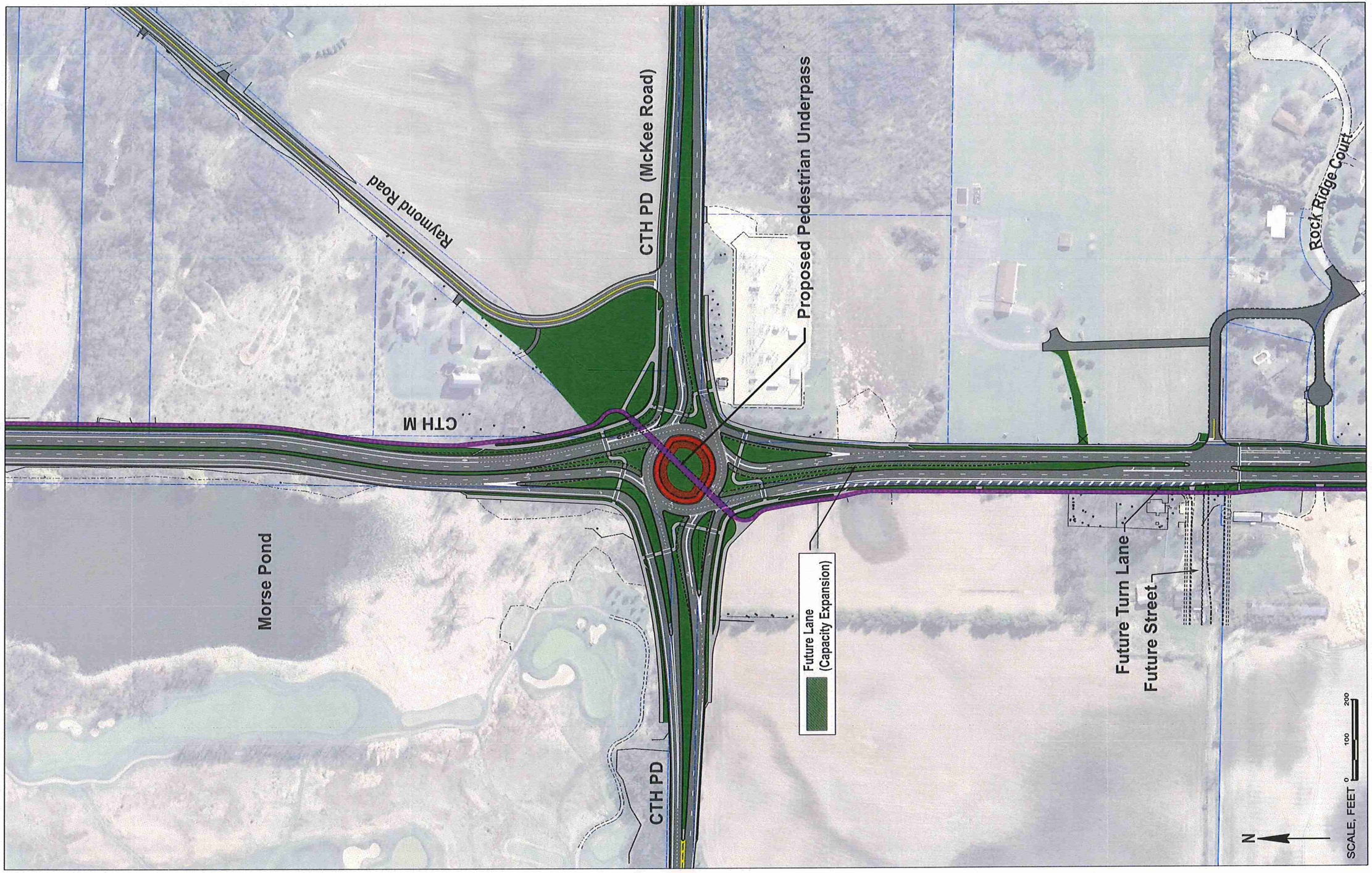
Autumn Hill Dr
Waterbend Dr
Royal Oaks Dr
CTH M
Site A
Proposed Underpass
Future Turn Lane
(Capacity Expansion)
Future Turn Lane
(Capacity Expansion)
Mid Town Rd
Mid Town Rd
Residential Relocation Required
Future Turn Lane
(Capacity Expansion)
Black Stone Circle
Shale Drive
Dolomite Lane
Talc Trail
Red Granite Road
Marble Circle
Quartz Lane
CTH M
N
SCALE, FEET 0 100 200

Site B

Figure 20 – Option B-3: Roundabout

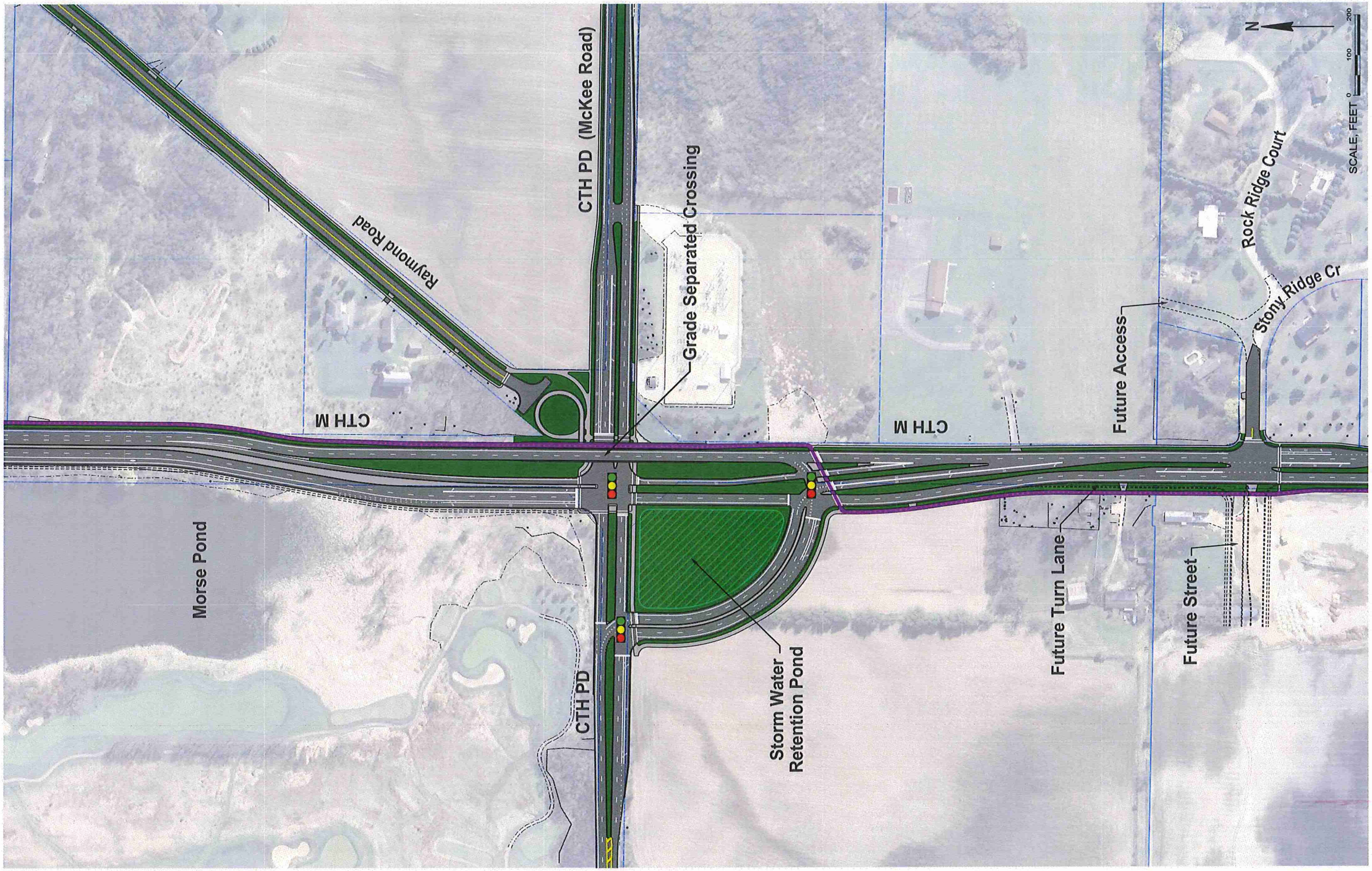
Site C

Figure 16 – Option A-5: Multi-lane Roundabout



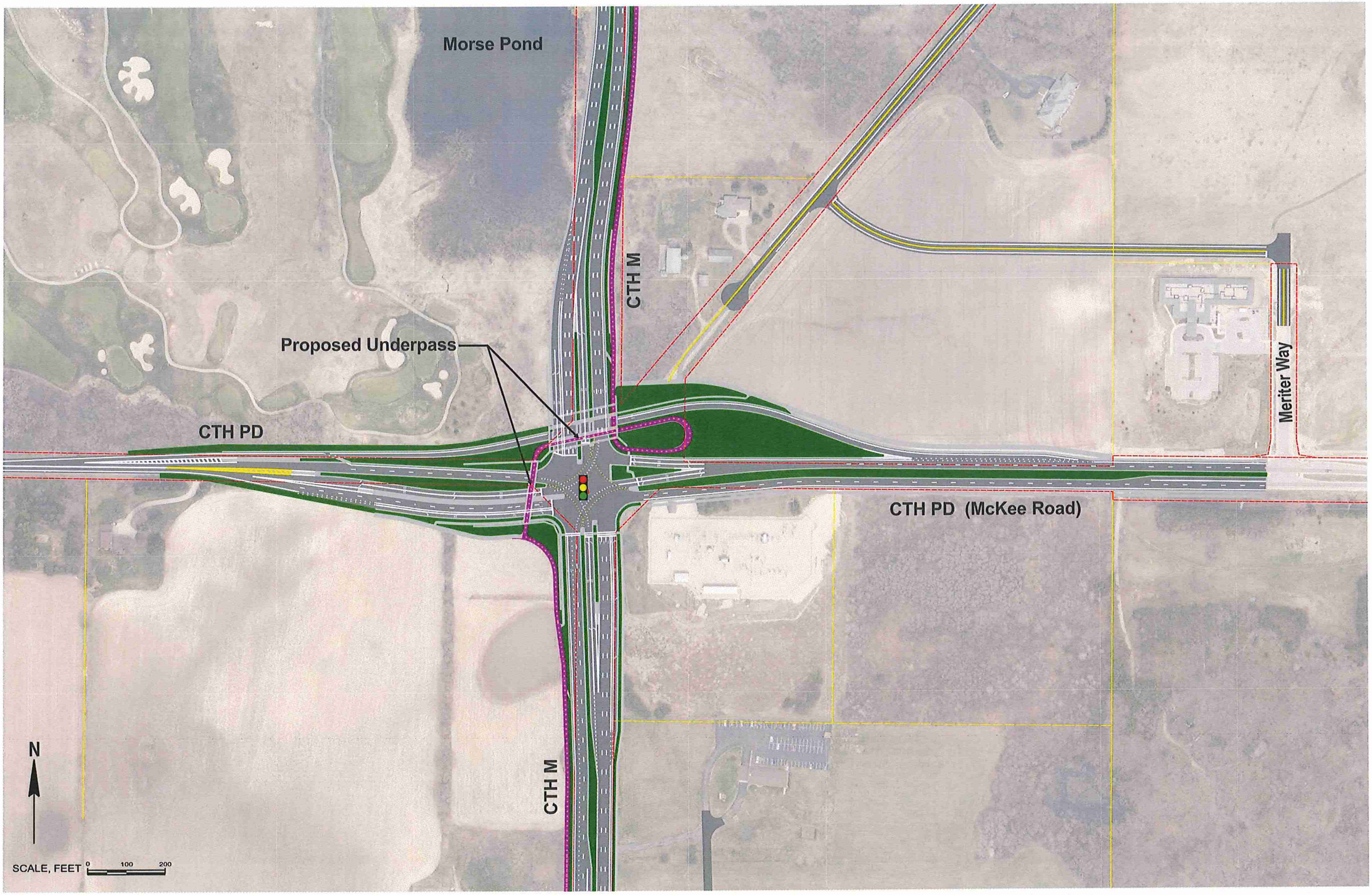
Site D

Figure 15 – Option A-4.4: Southwest Jug-Handle Intersection



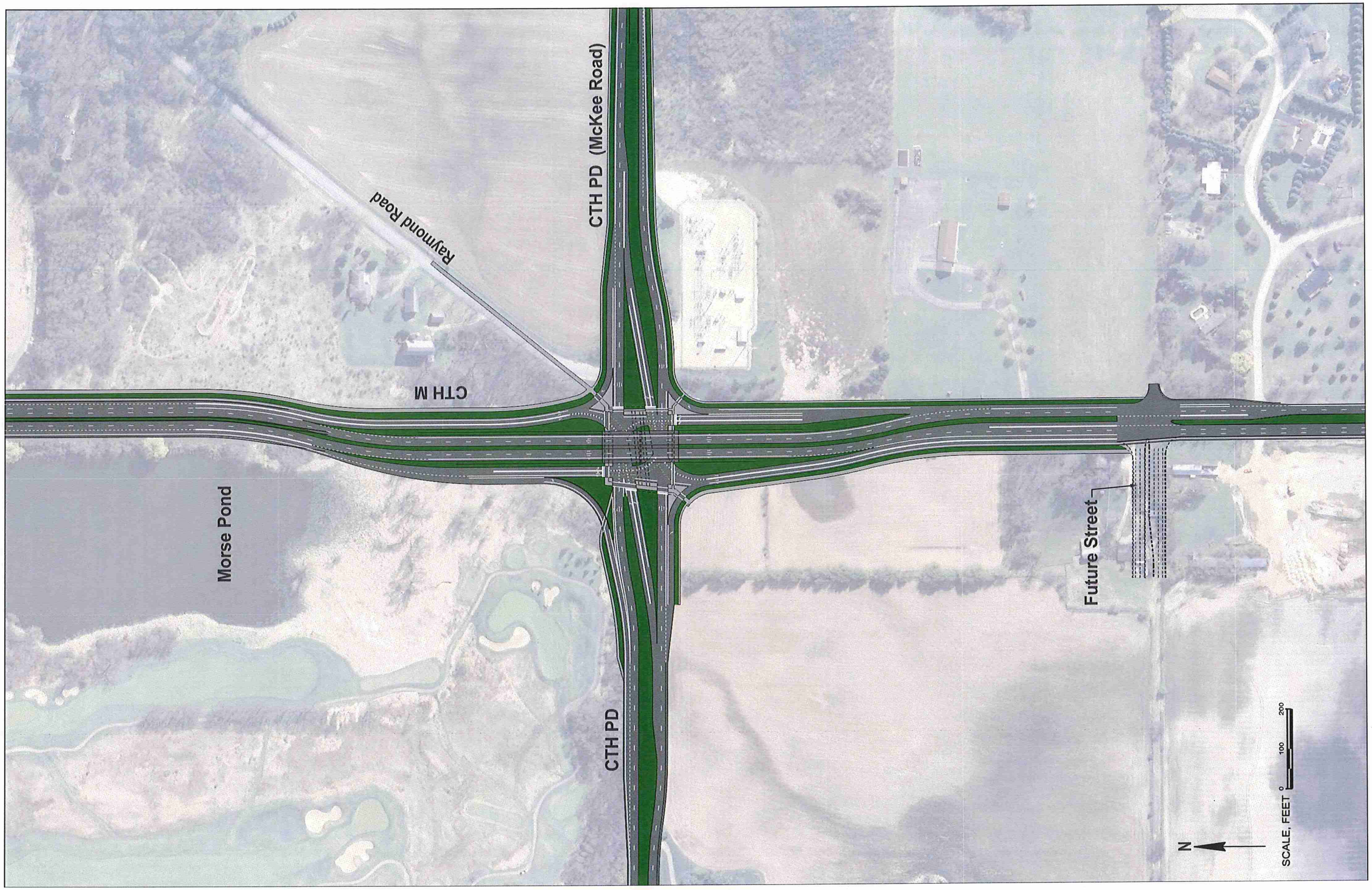
Site AA

Figure 18 – Option A-7: Westbound Underpass



Site BB

Figure 17 – Option A-6: Tight Diamond



Paul Chellevold

From: Chase Kieler <Ckieler@msa-ps.com>
Sent: Tuesday, January 27, 2015 10:31 AM
To: Paul Chellevold
Cc: Jason DiPiazza
Subject: RE: For Farmland Conversion Impact Rating

Paul,

I filled in the blanks below. Is this all you need? Any responses to the other attachments as well? Let me know if you need anything else or if I need to break any acreages down differently.

Thanks,
Chase

-----Original Message-----
From: Paul Chellevold [mailto:PChellevold@srfconsulting.com]
Sent: Tuesday, January 27, 2015 9:25 AM
To: Chase Kieler
Subject: For Farmland Conversion Impact Rating

Chase,

Per our phone conversation, please update the acreage impacts for all of the alternatives below. You can respond directly to this email.

All Alternatives:

1) For all alternatives, what are the impacts on the mainline (not including intersections): _9_____ acres
-Note: On Basic sheet 5, all alternatives have the both the intersection ROW acreage and the mainline ROW acreage built in. The 9 acres here is somewhat subjective based on where you end each alternative's intersection limits, but it should be a decent estimate for mainline alone.

Midtown Road:

2) What are the ROW impacts for the following Midtown Road Alternatives?

Roundabout ____12.3___ acres

Traffic Signal __13.0_____ acres

3) What are the impacts to the Theis Property for the Midtown Road Alternatives?

Theis Roundabout ___2.6____ acres (impact to property at intersection only, not total property impact)

Theis Traffic Signal __2.8?_____ acres (impact to property at intersection only, not total property impact)

4) What are the impacts to the Board of Regents Property for the Midtown Road Alternatives?

Board of Regents Roundabout __2.7_____ acres (impact to property at intersection only, not total property impact)

Board of Regents Traffic Signal __3.5 _____ acres (impact to property at intersection only, not total property impact)

CTH PD Alternatives:

5) What are the ROW impacts for the following CTH PD Intersection Alternatives (note - all numbers below have mailine ROW acreages built in)

CTH PD - Roundabout ___15.5___ acres

CTH PD - SW Jug Handle ___17.8_____ acres

CTH PD - Tight Diamond __14.2_____ acres

CTH PD - Westbound Underpass___17.1____ acres

6) What are the ROW impacts for the Endres Property for the CTH PD Alternatives

Endres CTH PD - Roundabout __2.7____ acres

Endres CTH PD - SW Jug Handle ___5.6_____ acres

Endres CTH PD - Tight Diamond __3.9_____ acres

Endres CTH PD - Westbound Underpass__4.4_____ acres

6) What are the ROW impacts for the Quereshi Property for the CTH PD Alternatives

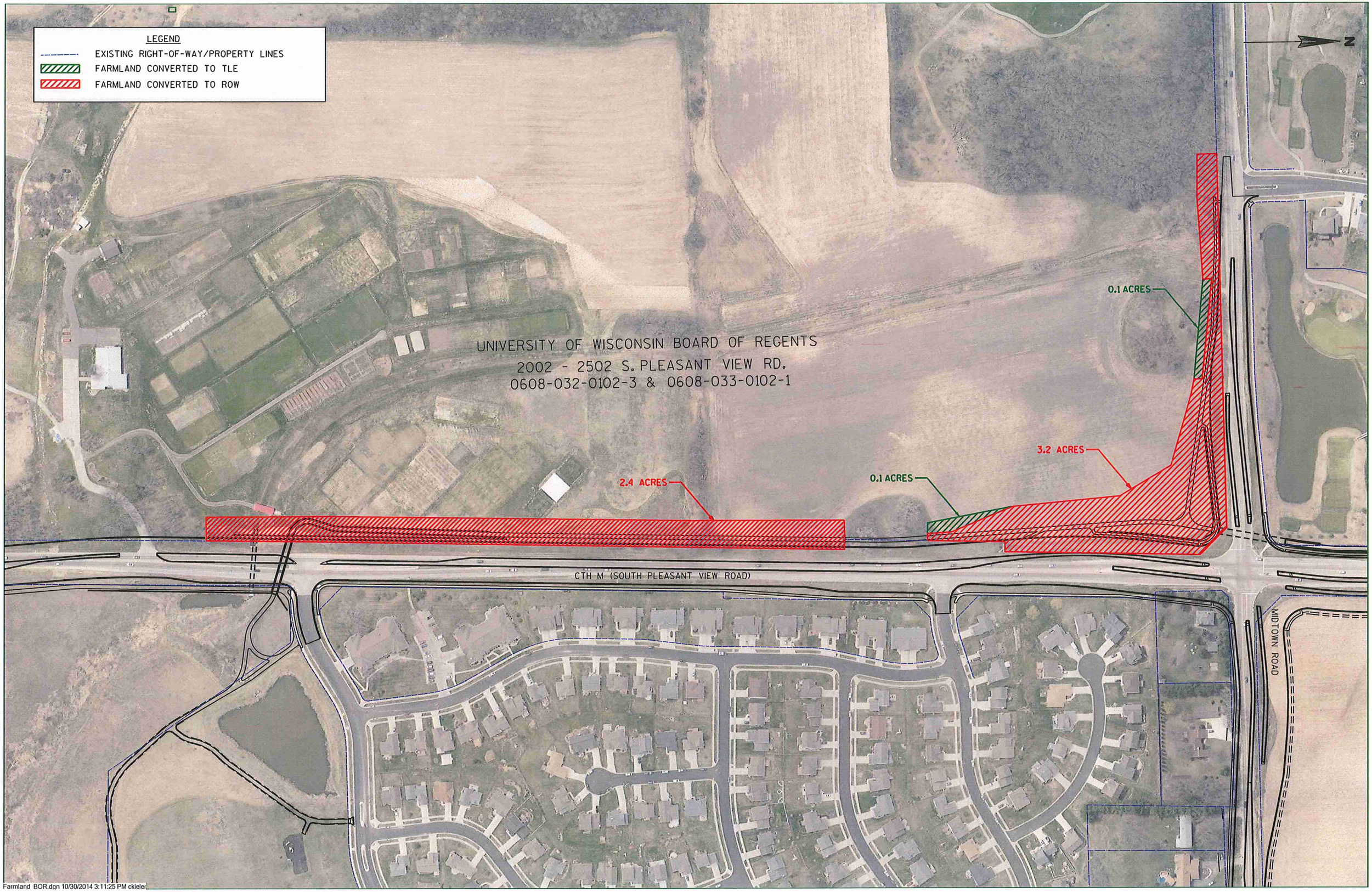
Quereshi CTH PD - Roundabout ____3.0__ acres

Quereshi CTH PD - SW Jug Handle ___1.9_____ acres

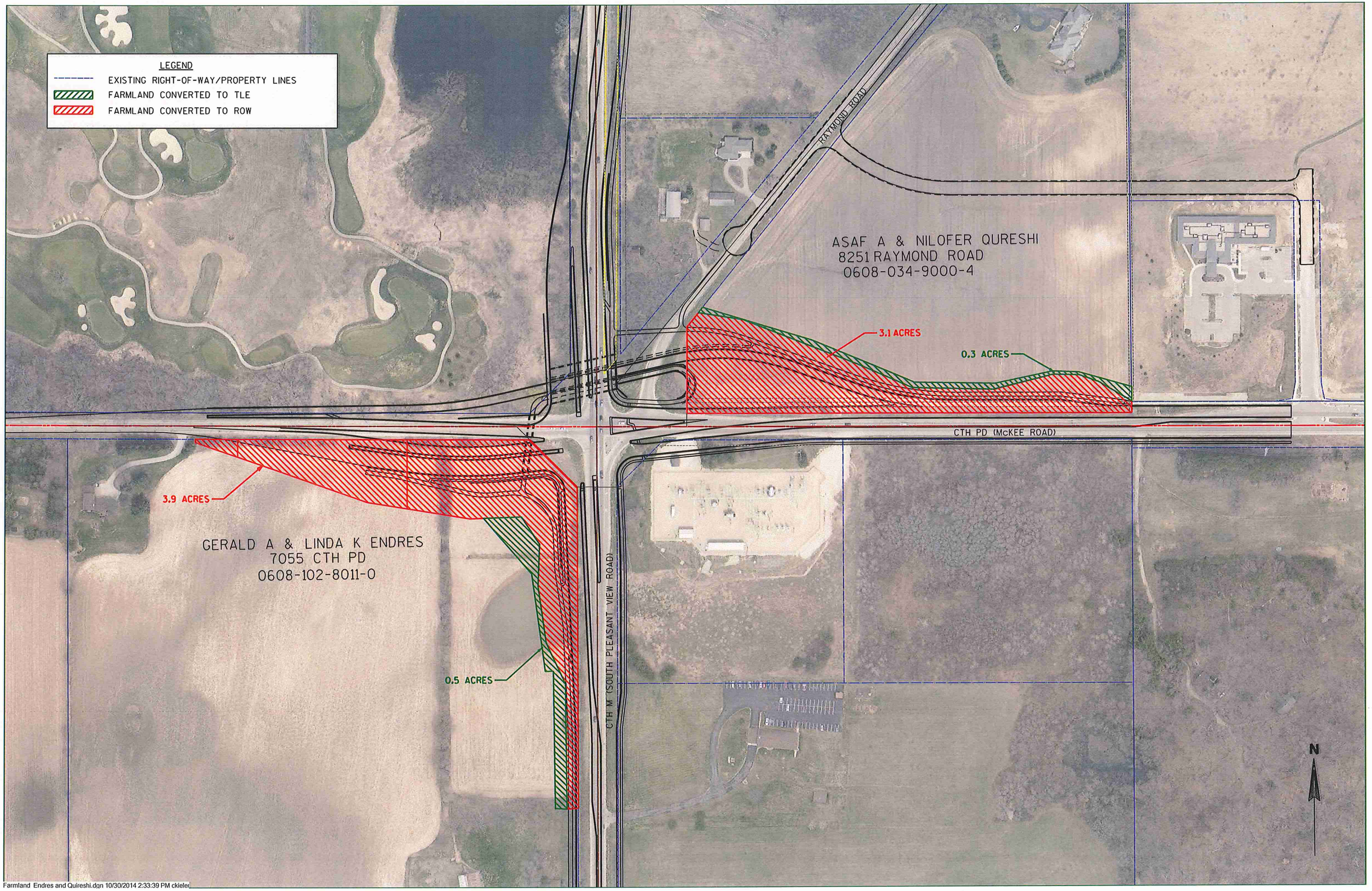
Quereshi CTH PD - Tight Diamond ____2.2___ acres

Quereshi CTH PD - Westbound Underpass___3.4____ acres

Other- Schroeder - Stickelberg - Farmstead (Bigley)+
Vetter, Midthun, and High-Spring Limited Partnership ~ 0.8 acres



Farmland_BOR.dgn 10/30/2014 3:11:25 PM ckieler



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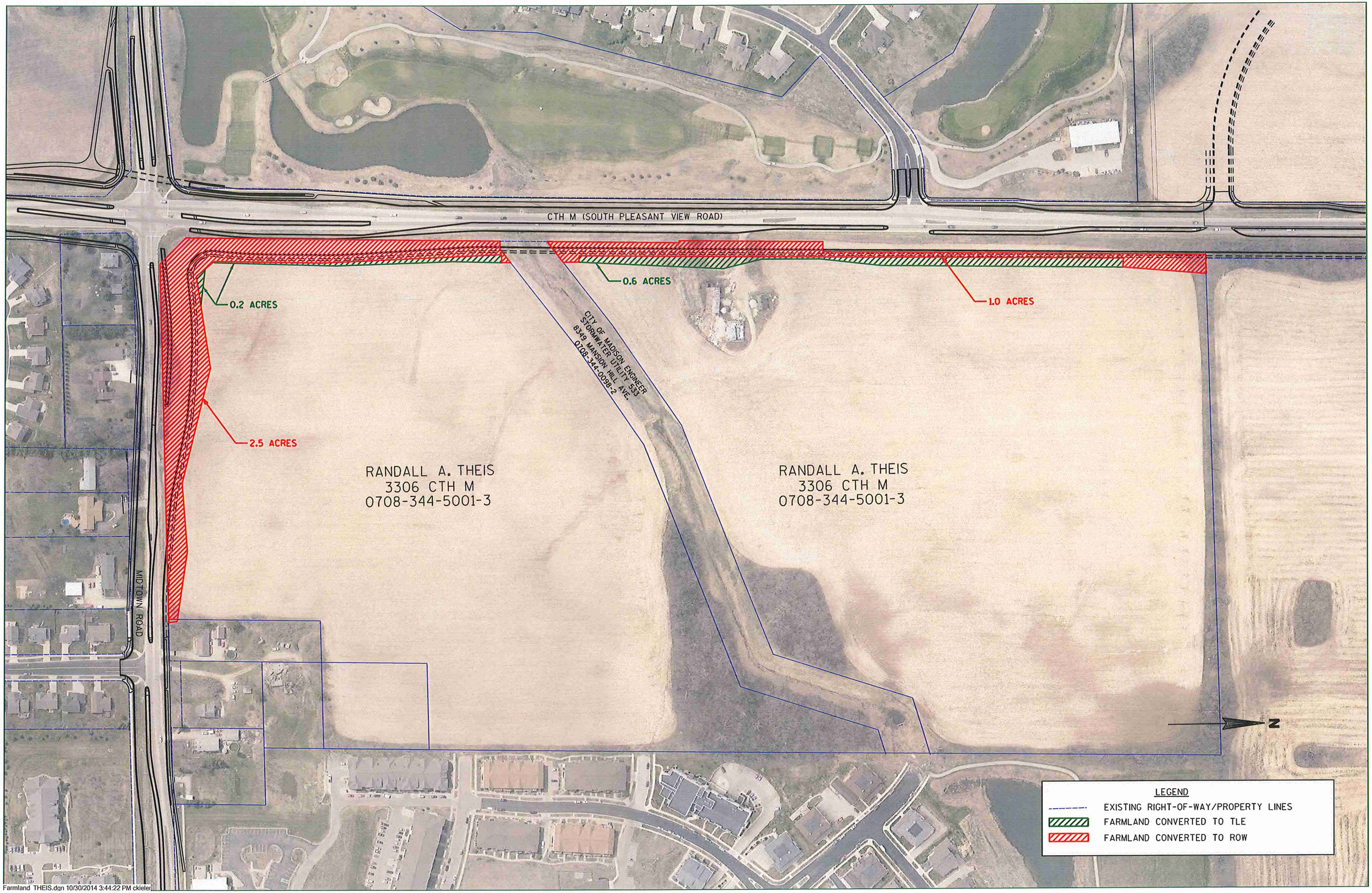
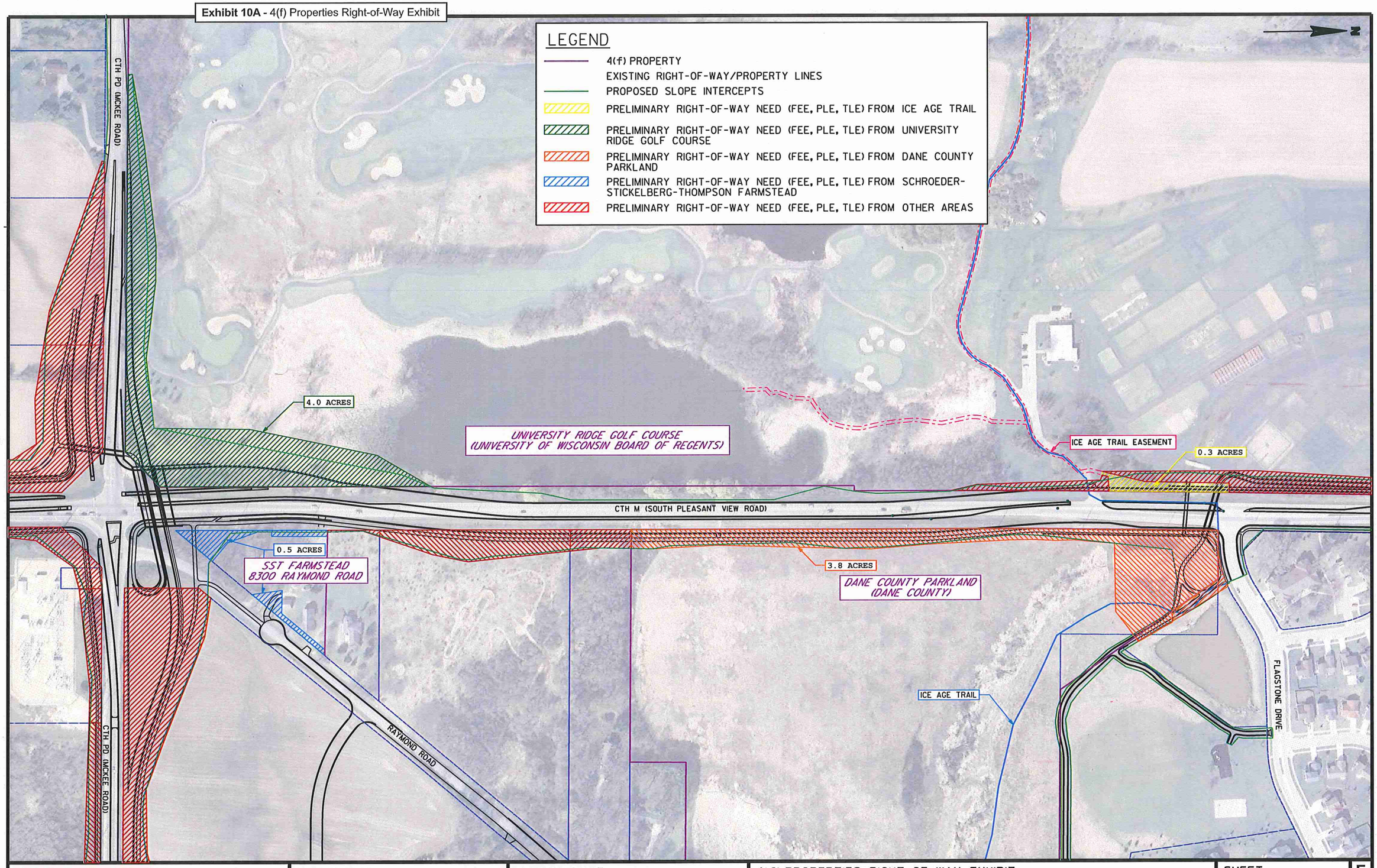


Farmland THEIS.dgn 10/30/2014 3:44:22 PM ckieler

Exhibit 10A - 4(f) Properties Right-of-Way Exhibit



PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	4(f) PROPERTIES RIGHT-OF-WAY EXHIBIT	SHEET	E

Exhibit 10B - 4(f) Properties: University Ridge Golf Course

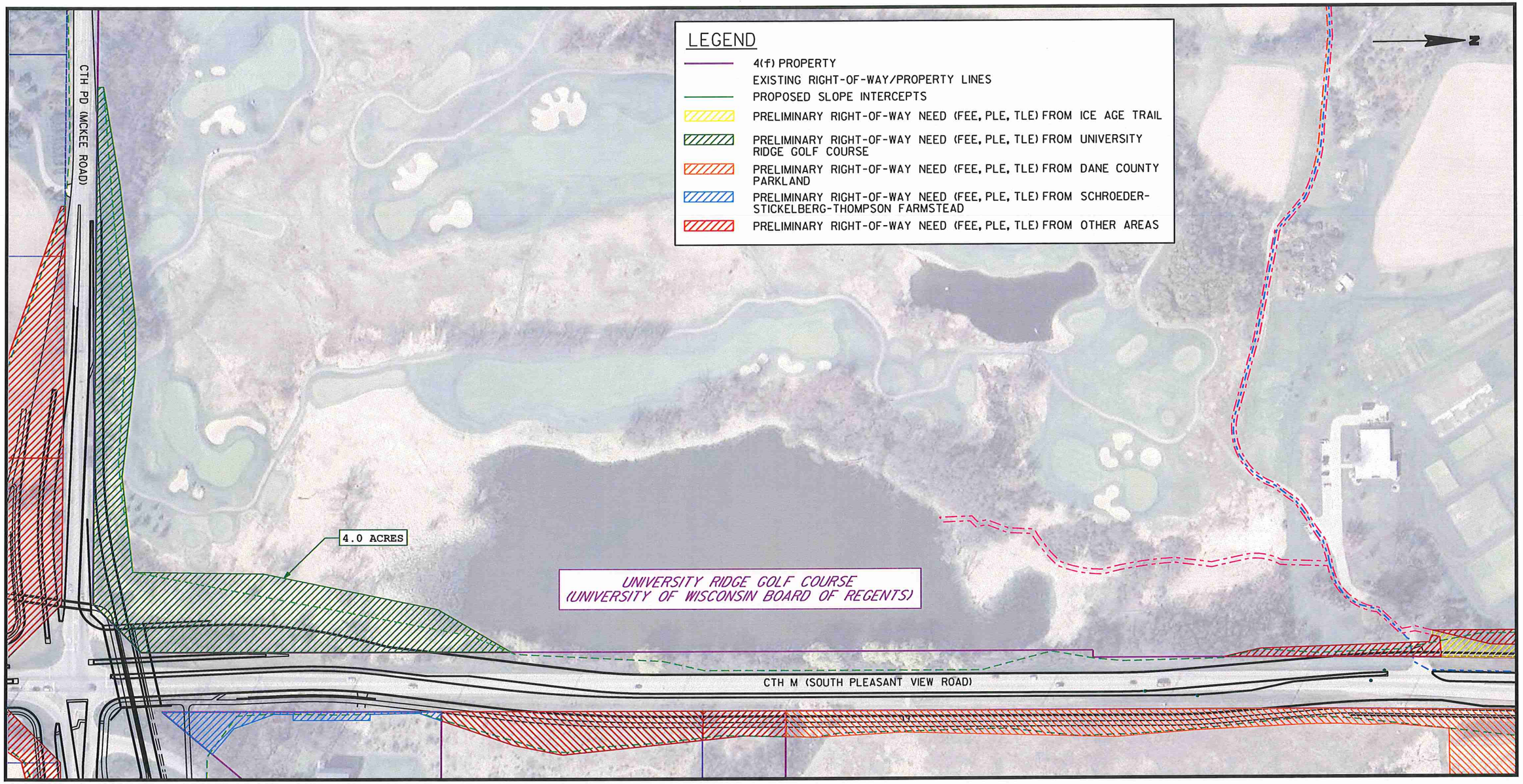


Exhibit 10C - 4(f) Properties: Dane County Parkland

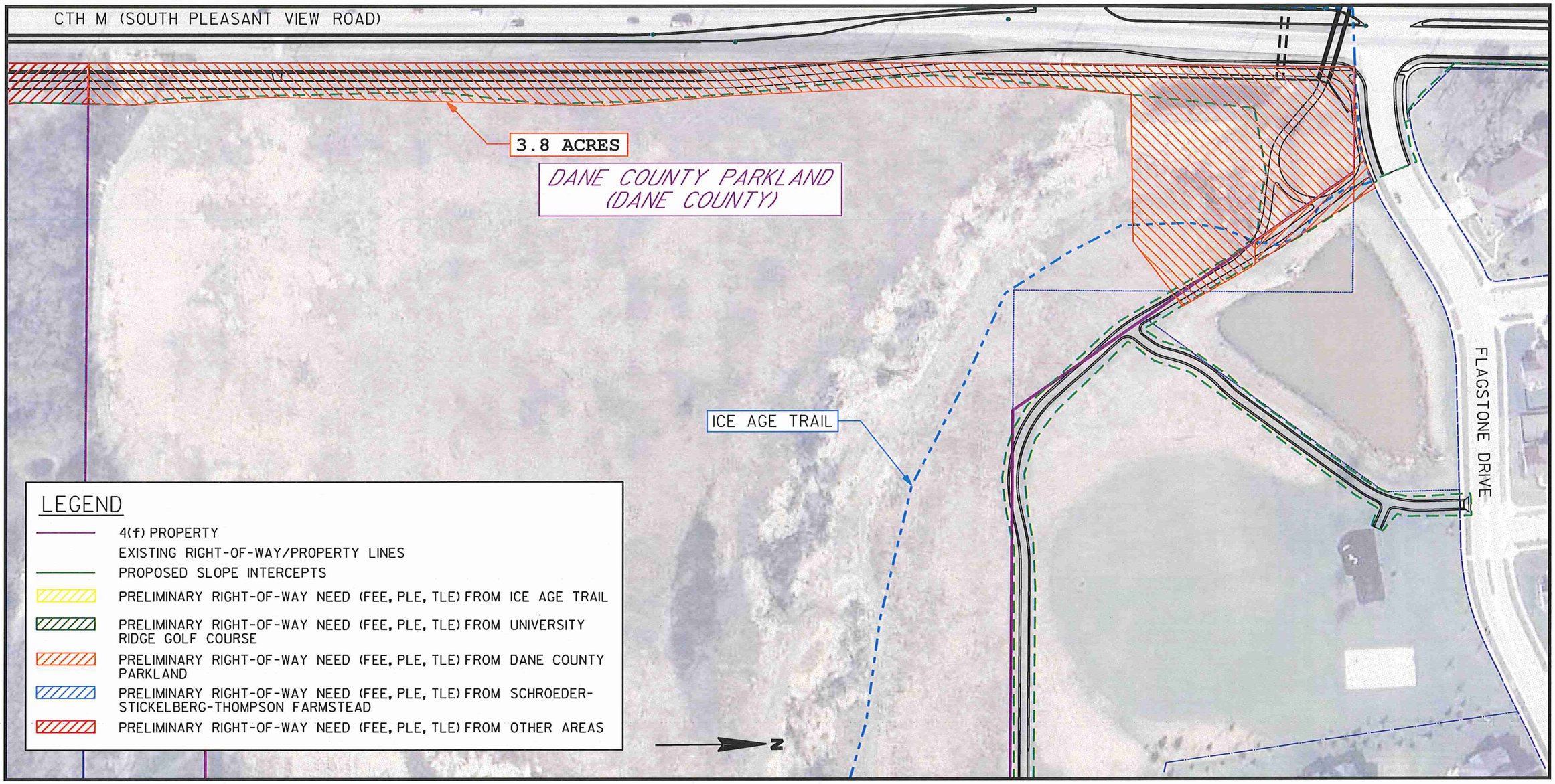


Exhibit 10D - 4(f) Properties: Ice Age National Scenic Trail

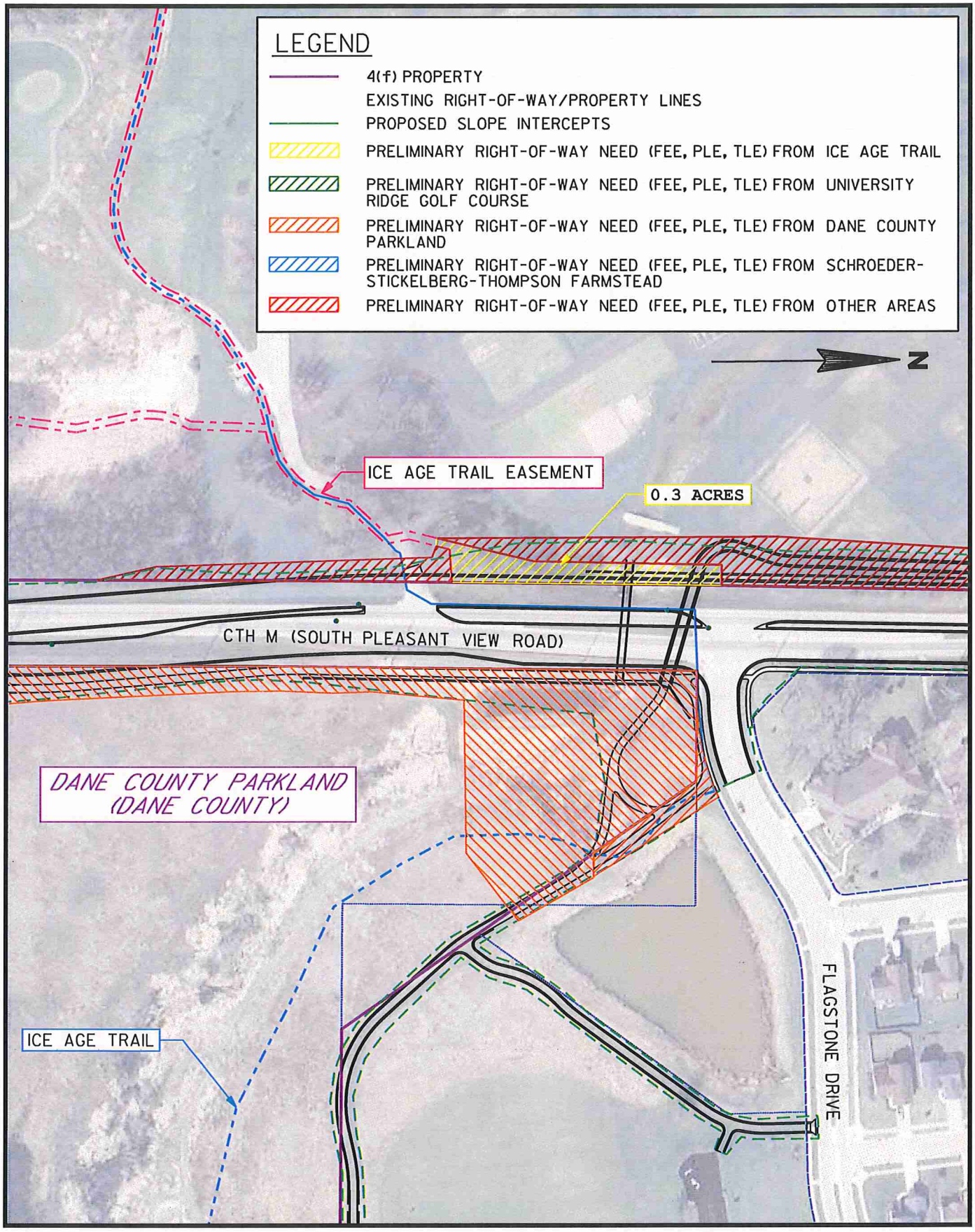


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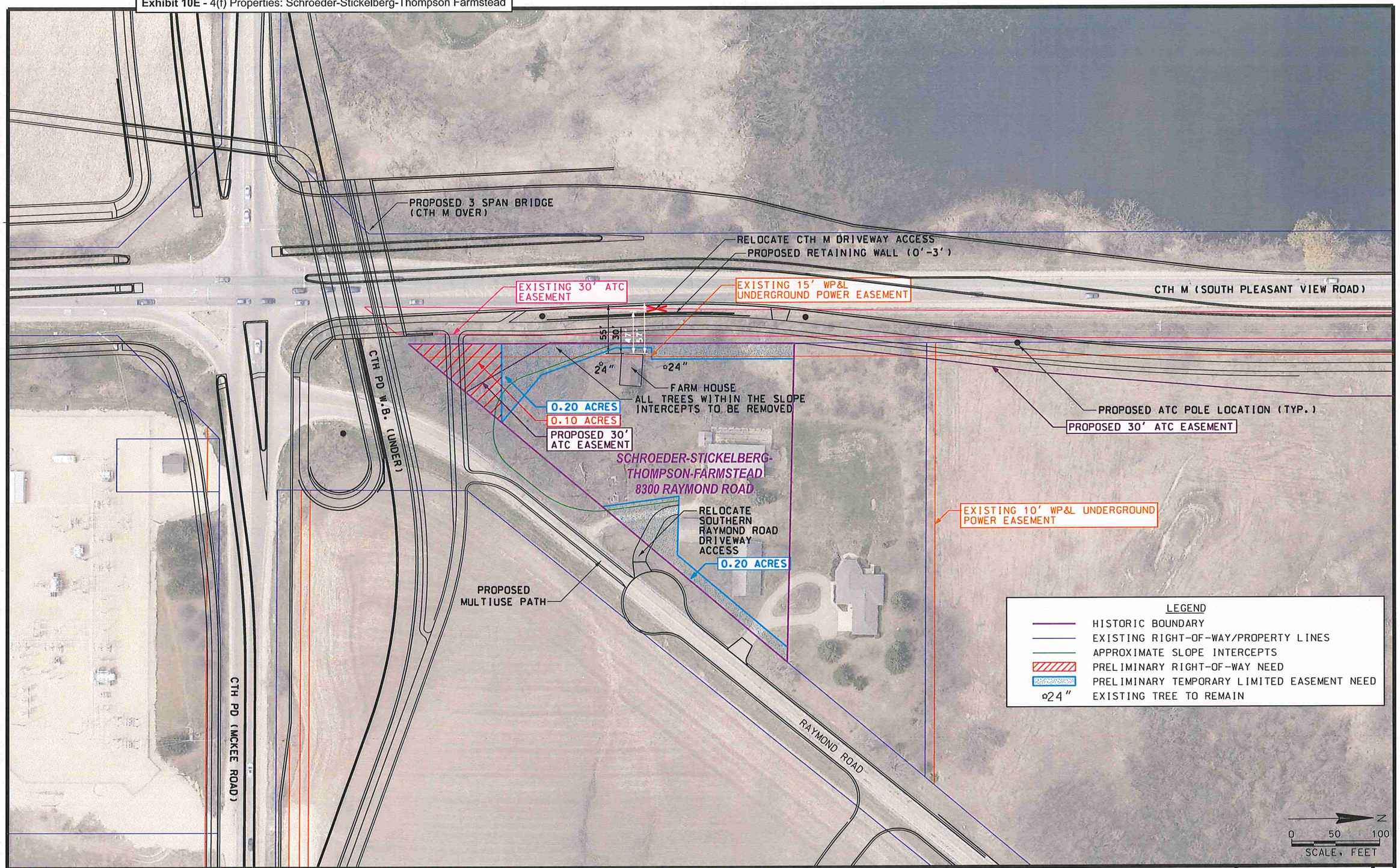
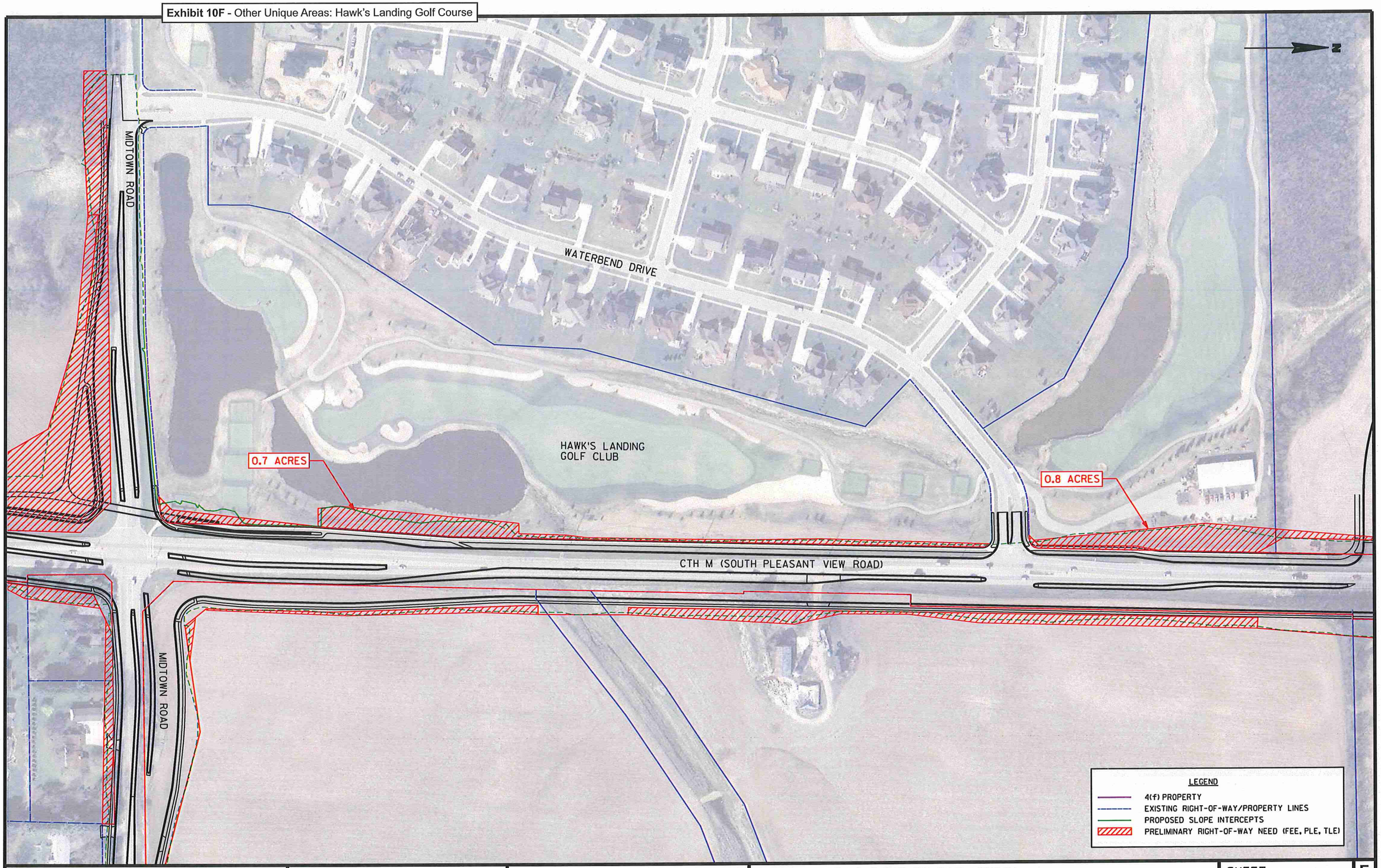
Exhibit 10E - 4(f) Properties: Schroeder-Stickelberg-Thompson Farmstead



PROJECT NO: 0373030	HWY: CTH M	COUNTY: DANE	8300 RAYMOND ROAD HISTORICAL PROPERTY EXHIBIT	SHEET	E

Exhibit 10F - Other Unique Areas: Hawk's Landing Golf Course



PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	HAWK'S LANDING RIGHT-OF-WAY EXHIBIT	SHEET	E

AD-1006 Farm [illegible] Calculations

South Pleasant View Road - (CTH M)

Owner	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8	Area 9	Total
High Spring Limited Partnership	572060	1632197	1749946	265348	1697699	1146122	424726	620379	1079097	210.91
Ruth Vetter	1614945	1647392	207501	1087573						104.62
Randall Theis	1555920	1421707								68.35
UW-Wisconsin Board of Regents*	4301402	4798298	2324667	2764372	3127585	6248580	985950			563.61
Dennis Midthun	1663786									38.19
Gerald A Endres	400278	410783	393773	413833						37.16
										1,022.84ac

Areas calculated are (sq ft)

Average size farm in WI = 194 acres

Average size farm in Project = 170 acres ~ 87 percent of state average (UW-Board of Regents) property included

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ATTACHMENT I:

US Fish and Wildlife Service Coordination

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Paul Chellevold

To: Jason DiPiazza (jdipiazza@msa-ps.com)
Subject: FW: Request to Initiate Informal Section 7 Consultation - NLEB Coordination for CTH M Reconstruction - ID: 5992-09-81

From: Horton, Andrew [mailto:andrew_horton@fws.gov]
Sent: Thursday, May 26, 2016 10:38 AM
To: Paul Chellevold <PChellevold@srfconsulting.com>
Subject: Re: Request to Initiate Informal Section 7 Consultation - NLEB Coordination for CTH M Reconstruction - ID: 5992-09-81

Paul,

I updated the form with those minor adjustments on the 27th of April and I received that data on the 25th. So, the 30-days have expired and you may proceed with the project. Thank you for your coordination on this.

- Andrew

Andrew Horton
Twin Cities Ecological Services Field Office
U.S. Fish and Wildlife Service
4101 American Blvd East
Bloomington, MN 55425-1665
(952) 252-0092, ext. 208 **(New Phone Number!)**

From: Horton, Andrew [mailto:andrew_horton@fws.gov]
Sent: Wednesday, April 27, 2016 9:07 AM

To: Paul Chellevold <PChellevold@srfconsulting.com>
Subject: Re: Request to Initiate Informal Section 7 Consultation - NLEB Coordination for CTH M Reconstruction - ID: 5992-09-81

Thank you, I have updated the consultation form.

- Andrew

Andrew Horton

Twin Cities Ecological Services Field Office

U.S. Fish and Wildlife Service

4101 American Blvd East

Bloomington, MN 55425-1665

(952) 252-0092, ext. 208 **(New Phone Number!)**

On Mon, Apr 25, 2016 at 11:08 AM, Paul Chellevold <PChellevold@srfconsulting.com> wrote:

Andrew,

Please see the note below from the project manager.

Paul

////////////

Including tree lines between roadway and farm fields, wooded residential properties, and groupings of trees with more than a couple mature trees, I estimate 15 acres.

Jason

////////////

From: Horton, Andrew [mailto:andrew_horton@fws.gov]
Sent: Friday, April 22, 2016 10:11 AM
To: Paul Chellevold <PChellevold@srfconsulting.com>
Subject: Re: Request to Initiate Informal Section 7 Consultation - NLEB Coordination for CTH M Reconstruction - ID: 5992-09-81

Paul, do you have an estimate of the total acres of forested habitat that will be removed?

- Andrew

Andrew Horton

Twin Cities Ecological Services Field Office

U.S. Fish and Wildlife Service

4101 American Blvd East

Bloomington, MN 55425-1665

(952) 252-0092, ext. 208 **(New Phone Number!)**

On Wed, Apr 20, 2016 at 9:19 AM, Paul Chellevold <PChellevold@srfconsulting.com> wrote:

Dear Mr. Horton,

WisDOT is submitting the following information and determination to fulfill Section 7(a)(2) responsibilities under the ESA pertaining to potential impacts to the northern long-eared bat (NLEB).

WisDOT intends to rely on the programmatic biological opinion developed for the final 4(d) rule and this submittal to satisfy our Section 7(a)(2) responsibilities, as outlined in the streamlined consultation framework.

In accordance with the final 4(d) rule issued for the NLEB, WisDOT and the WDNR has determined that the proposed activity, described in greater detail below, will not result in prohibited take of the NLEB. The activity involves tree removal; but will not occur within ¼ mile of a known hibernacula, nor will he activity remove a known maternity roost tree from June 1, - July 31.

Per the Northern Long-Eared Bat – Final 4(d) Rule Guidance, I have completed the steps required to identify other known species within the project area. Please refer to the Official Species List PDF, along with the Past WDNR_USFWS Coordination PDF attached. In addition to the NLEB, five other threatened and endangered species have been identified. The WDNR determined that there is no effect to the other species based on their review of the National Heritage Inventory Portal.

WisDOT Local Program Management Consultants have reviewed the attached materials for this project. If you have any questions, please don't hesitate to contact me at 608-298-5405, or by email at pchellevold@srfconsulting.com.

Paul Chellevold, AICP, GISP

Associate

SRF Consulting Group, Inc. | 901 Deming Way, Suite 101 |Madison, WI 53717

Main: 608-298-5405 |

pchellevold@srfconsulting.com| www.srfconsulting.com

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Green Bay ES Field Office
2661 Scott Tower Drive
New Franken, Wisconsin 54229-9565
Telephone 920/866-1717 FAX 920/866-1710
http://www.fws.gov/midwest/GreenBay

To: William Dunlop **USFWS Project ID:** 12-TA-0177

Regarding your: ☑ Letter ☐ E-mail ☐ FAX **Dated:** February 21, 2012

RE: Project ID 5992-09-81, South Pleasant View Road/County M, Dane County, Wisconsin

Pursuant to the **Endangered Species Act of 1973,** the **Fish and Wildlife Coordination Act,** and the **Migratory Bird Treaty Act**, the U.S. Fish and Wildlife Service (Service) has reviewed the information provided for the project noted above. Our comments follow (see checked boxes below).

☑ Due to the project location, no federally-listed, proposed, or candidate species, or designated critical habitat occurs within the project area. We recommend checking our website (http://www.fws.gov/midwest/GreenBay/) every 6 months from the date of this letter to ensure that listed species presence/absence information for the proposed project is current.

☐ If migratory birds are known to nest on any structures (*e.g.,* bridges) which may be disturbed by project construction, activities should begin (and be concluded) before the initiation of the breeding season for those species or after the breeding has concluded. Alternatively, the structures can be *tightly screened* before the breeding season (May 1 through August 30) to prevent nesting. If you will not be able to begin construction prior to or after the breeding season, please contact our office.

☑ Under the Migratory Bird Treaty Act of 1918, as amended, it is unlawful to take, capture, kill, or possess migratory birds, their nests, eggs, and young. If migratory birds are known to nest on any structures or habitat which may be disturbed by project construction, activities (e.g., tree removal) should begin and be completed before the initiation of the breeding season for those species or after breeding has concluded. Generally, we recommend that any habitat disturbance occur before May 1 or after August 30 to minimize potential impacts to migratory birds, but please be aware that some species may initiate nesting before May 1.

☐ We recommend, when possible, that bridges and abutments be designed and constructed in such a way as to allow terrestrial wildlife to pass under the bridge without entering the river during normal flow conditions. This may require lengthening the bridge, limitations on the use of exposed riprap, modifications to the surface of the riprap (e.g., grouting the surface or filling with soil or other natural materials), or modifications in the substrate and/or slope at the base of the abutments, as some wildlife species cannot or prefer not to traverse areas of riprap.

☐ The Service supports and encourages the maintenance or creation of habitat connectivity wherever possible. As such, we recommend installing bridges or culverts that do not impede the movement of water, sediments, or aquatic species along existing waterways. Specifically, we strongly recommend replacing failing culverts with bridges or bottomless culverts where possible. At minimum, we recommend new culverts be set at a zero slope, with a width that matches bank flow.

☑ We note that the project area includes wetlands. In refining and selecting project alternatives, efforts should be made to select an alternative that does not adversely impact wetlands. If no other alternative is feasible and it is clearly demonstrated that project construction resulting in wetland disturbance or loss cannot be avoided, a wetland mitigation plan should be developed that identifies measures proposed to minimize adverse impacts and replace lost wetland habitat values and other wetland functions and values.

USFWS Contact(s): Jill Utrup **Phone Number:** 920-866-1734

For the Field Supervisor: _____ **Date:** March 13, 2012

ATTACHMENT J:

Native American Tribes Coordination

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Division of Transportation
System Development
Southwest Region
2101 Wright Street
Madison, WI 53704-2583

RECEIVED
MAR - 6 2015
BY:

Scott Walker, Governor
Mark Gottlieb, P.E., Secretary
Internet: www.dot.wisconsin.gov

Telephone: 608-246-3800
Teletypewriter (TTY): 608-246-5385
Facsimile (FAX): 608-246-7996

March 4, 2015

«FirstName»
«Last_Name»
«Company»
«Address1»
«Address2»
«CityState» «PostalCode»

RE: Project I.D. 5992-09-81
South Pleasant View Road, City of Madison
(Cross Country Road to Prairie Hill Road)
CTH M
Dane County

Dear «Salutation»:

The City of Madison, the City of Verona, and Dane County, in conjunction with the Wisconsin Department of Transportation (WisDOT), are in the process of developing plans for a proposed project located in Dane County on South Pleasant View Road between Cross Country Road in the City of Verona and Prairie Hill Drive in the City of Madison. The project, which is being designed by MSA Professional Services, Inc., will consist of reconstructing the existing two lane, undivided rural highway as a four to six lane urban arterial street, including curb and gutter, a raised median, sidewalk, multi-modal paths, and street lighting. A bridge will be constructed at the intersection of County Highway M (CTH M) and County Highway PD (CTH PD) to carry westbound CTH PD traffic below CTH M. Box culverts will be constructed at the intersections of CTH M with CTH PD, Flagstone Drive, and Mid Town Road to cross the multi-modal path below the intersections.

A letter regarding this project was sent to you in November 2011 regarding this project. Since that time, the project's area of potential effect (APE) has been expanded to account for an increased roadway footprint in the northeast quadrant of the CTH M and CTH PD intersection. See the attached project location map and the updated cultural resource investigation study map for the location of this APE expansion. The cultural resource investigation study was updated to include the APE. Historical properties as defined in 36 CFR 800 were not identified in the expanded APE. On March 12, 2014, a Public Information Meeting was held at the Verona Senior Center to familiarize interested parties with the project.

We would be pleased to receive any comments regarding this project or information you wish to share pertaining to cultural resources located in the area. If your tribe would like to become a consulting party under Section 106 of the National Historic Preservation Act or if you would like to receive additional information regarding this proposed project, please contact:

Lynn Cloud; DTSD, Bureau of Technical Services, Environmental Services Section; 4802 Sheboygan Avenue; Room 451; Madison, Wisconsin 53707 (608) 266-0099.

Sincerely,

Mark Sponem JD

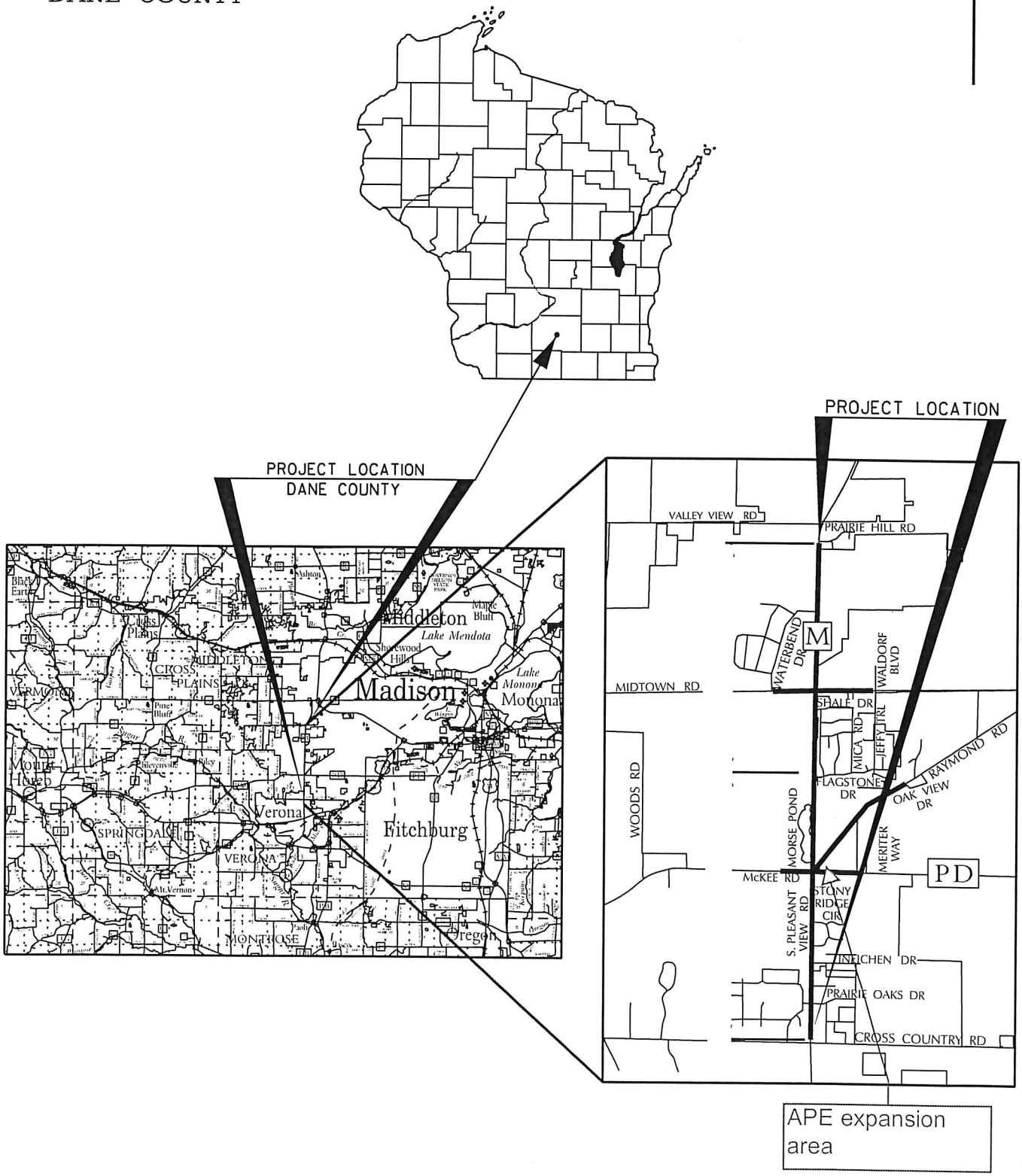
Mark Sponem, P.E.
Southwest Region Local Program Project Manager

cc: Rebecca Burkel, DTSD, Bureau of Technical Services, Environmental Services Section
Karen Richardson, P.E., Kjohnson Engineers, Southwest Region Local Program Management Consultant
Jason DiPiazza, MSA Professional Services, Inc.

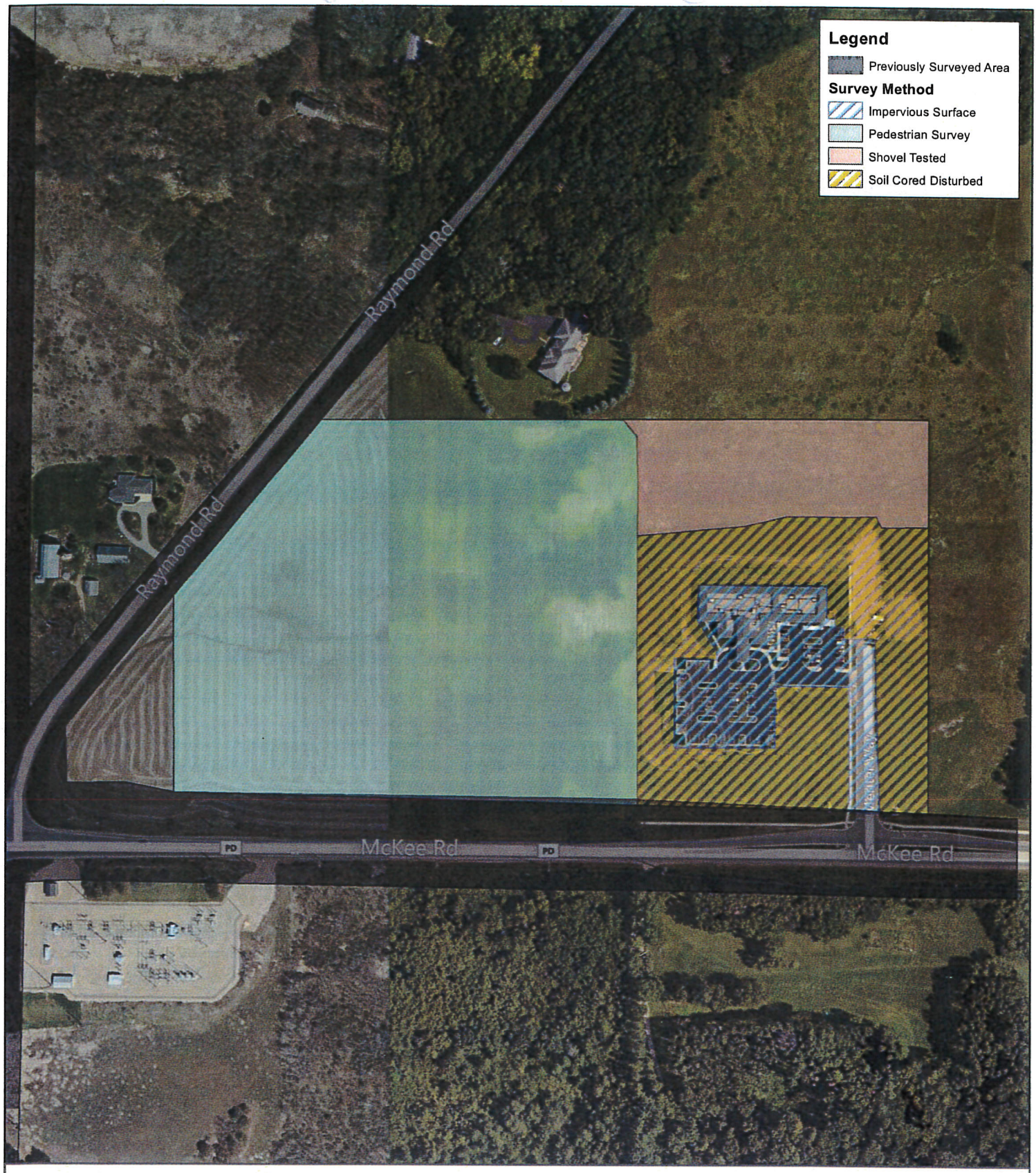
375

PROJECT LOCATION MAP

PROJECT I.D. 5992–09–81
CITY OF MADISON, S. PLEASANT VIEW ROAD
(CROSS COUNTRY ROAD – PRAIRIE HILL ROAD)
CTH M
DANE COUNTY



Project Location Map.dgn 8/8/2011 2:53:33 PM jdipiazza



Archaeological Survey Coverage Map for CTH M in Dane County, Wisconsin

WisDOT ID# 5992-09-81
GLARC #13.165

Data: ESRI, Microsoft, WHS, GLARC Inc.

0 150 300 600
Feet

0 50 100 200
Meters

1:3,000

N

Location in Dane County, WI

Native American Notifications

Bad River Band of Lake Superior Chippewa Indians of Wisconsin
Attn: Edith Leoso, THPO
P.O. Box 39
Odanah, WI 54861

Forest County Potawatomi Community of Wisconsin
Attn: Melissa Cook, THPO
Tribal Office
P.O. Box 340
Crandon, WI 54520

Ho-Chunk Nation
Attn: William Quackenbush, THPO
Executive Offices
P.O Box 667
405 Airport Road
Black River Falls, WI 54615

Menominee Indian Tribe of Wisconsin
Attn: Dave Grignon, THPO
P.O. Box 910
Keshena, WI 54135

Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin
Attn: Larry Balber, THPO
88385 Pike Road, Highway 13
Bayfield, WI 54814

Sac and Fox Nation of Oklahoma
Attn: Sandra Massey, NAGPRA Rep.
RR 2, Box 246
Stroud, OK74079

Sac and Fox Nation of Missouri in Kansas and Nebraska
Attn: Edmore Green
305 North Main
Reserve, KS 66434

Sac and Fox of the Mississippi in Iowa
Attn: Jonathan Buffalo, NAGPRA Rep.
349 Meskwaki Road
Tama, IA 52339-9629

Prairie Band Potawatomi Nation
Attn: Hattie Mitchell, NHPA Rep.
16281 Q Road
Mayetta, KS 66509

Lac Vieux Desert Band of Lake Superior Chippewa Indians
Attn: giiwegiizhigookway Martin, THPO
Ketegitigaaning Ojibwe Nation
P.O. Box 249
Watersmeet, MI 49969

March 4, 2015

Division of Transportation System Development
Southwest Region
2101 Wright Street
Madison, WI 53704-2583

Scott Walker, Governor
Mark Gottlieb, P.E., Secretary
Internet: www.dot.wisconsin.gov

Telephone: 608-246-3800
Teletypewriter (TTY): 608-246-5385
Facsimile (FAX): 608-246-7996

November 17, 2011

«FirstName»
«Company»
«Last Name»
«Address1»
«Address2»
«CityState» «PostalCode»

RECEIVED
NOV 18 2011

ID 5992-09-81
CTH M, City of Madison
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Dear «Salutation»:

The City of Madison, City of Verona, and Dane County, in conjunction with the Wisconsin Department of Transportation (WisDOT) are in the process of developing plans for a proposed project located on County Highway M (CTH M) in Dane County between Cross Country Road in Verona and Prairie Hill Drive in Madison. Total project length is approximately 3 miles. The project, which is being designed by MSA Professional Services, Inc. will consist of reconstructing the existing two lane, undivided rural highway as a four lane divided highway with an urban cross section, including curb and gutter, sidewalk, bike paths, and a raised median. Additional auxiliary lanes will be included for buses and turning vehicles, as well as bike lanes throughout the corridor.

On Thursday December 8, 2011 from 6 to 8 p.m., a public information meeting will be held at the Verona Senior Center, 108 Paoli Street, Verona, Wisconsin to familiarize interested parties with the project. Cultural resource investigation studies are in progress for the above project. These investigations will enable WisDOT to determine whether historical properties as defined in 36 CFR 800 are located in the project area. Other environmental studies will also be conducted and include; endangered species survey, contaminated material investigations, soil testing and right-of-way surveys. Information obtained from these studies will assist the engineers in the design to avoid, minimize or mitigate the proposed project's effect upon cultural and natural resources.

We would be pleased to receive any comments regarding this project or information you wish to share pertaining to cultural resources located in the area. If your tribe would like to become a consulting party under Section 106 of the National Historic Preservation Act or if you would like to receive additional information regarding this proposed project, please contact:

Lynn Cloud; DTSD, Bureau of Technical Services, Environmental Services Section; 4802 Sheboygan Avenue; Room 451; Madison, Wisconsin 53707 (608) 266-0099.

Sincerely,

Brenda Schoenfeld KBR

Brenda Schoenfeld, P.E.
Southwest Region Local Program Project Manager

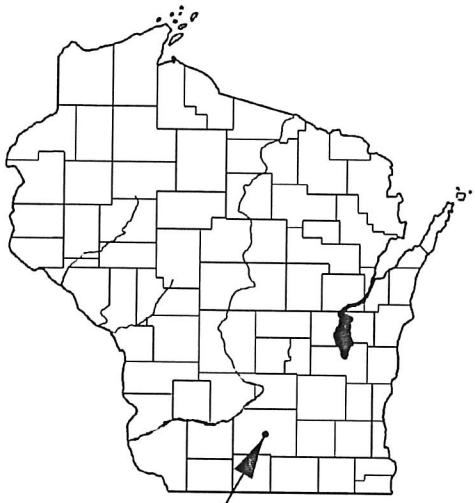
cc: Rebecca Burkel, DTSD, Bureau of Technical Services, Environmental Services Section
Kjohnson Engineers, Southwest Region Local Program Management Consultant
Jason DiPiazza, MSA Professional Services, Inc.

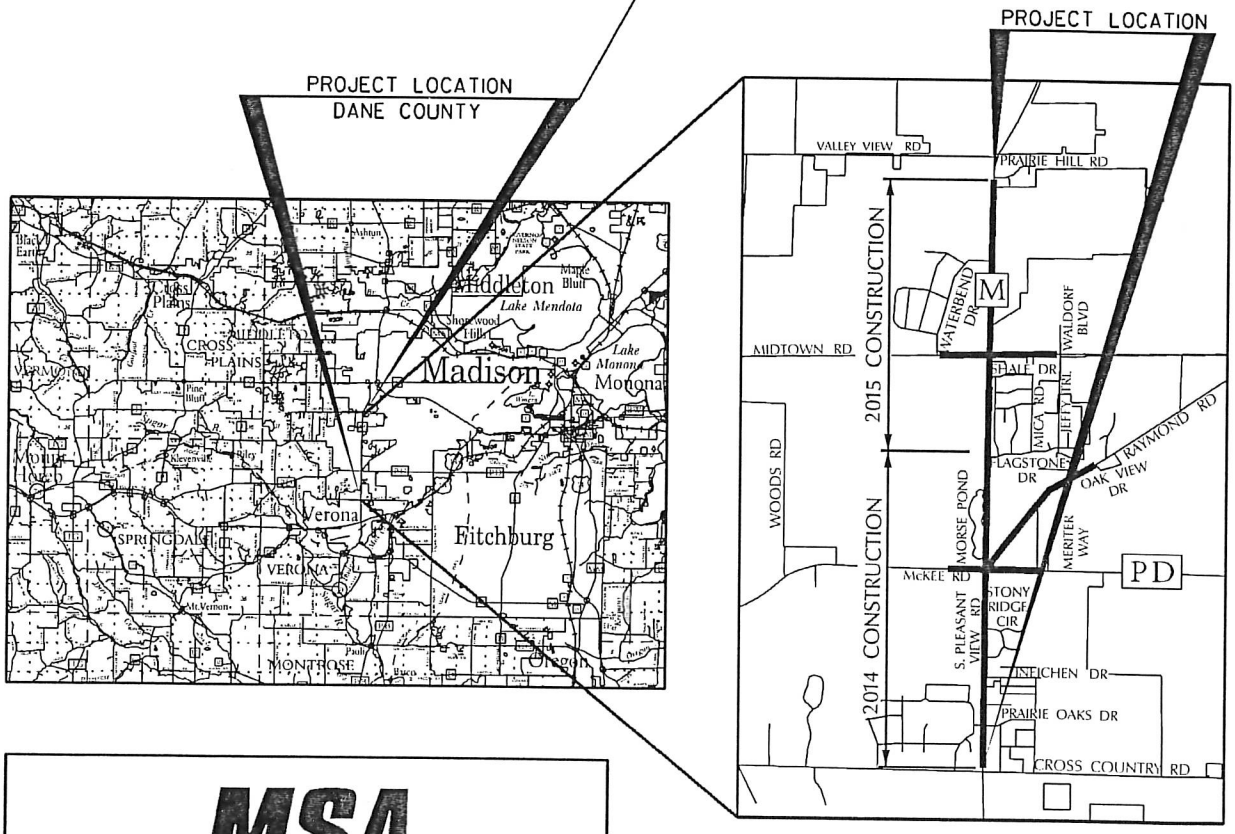
Attachment: Project Location Map

PROJECT LOCATION MAP

PROJECT I.D. 5992-09-81
CITY OF MADISON, S. PLEASANT VIEW ROAD
(CROSS COUNTRY ROAD - PRAIRIE HILL ROAD)
CTH M
DANE COUNTY

N





MSA
PROFESSIONAL SERVICES
TRANSPORTATION • MUNICIPAL • REMEDIATION
DEVELOPMENT • ENVIRONMENTAL
2901 International Lane, Suite 300 Madison, WI 53704-3133
608-242-7779 1-800-446-0679 Fax: 608-2421-5664

Native American Notifications

Bad River Band of Lake Superior Chippewa Indians of Wisconsin
Attn: Edith Leoso, THPO
P.O. Box 39
Odanah, WI 54861

Forest County Potawatomi Community of Wisconsin
Attn: Mike Alloway
P.O. Box 340
Crandon, WI 54520

Ho-Chunk Nation
Attn: William Quackenbush, THPO
P.O Box 667
405 Airport Road
Black River Falls, WI 54615

Menominee Indian Tribe of Wisconsin
Attn: Dave Grignon, THPO
P.O. Box 910
Keshena, WI 54135

Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin
Attn: Larry Balber, THPO
88385 Pike Road, Highway 13
Bayfield, WI 54814

Sac and Fox Nation of Oklahoma
Attn: Sandra Massey, NAGPRA Rep.
RR 2, Box 246
Stroud, OK 74079

Sac and Fox Nation of Missouri in Kansas and Nebraska
Attn: Jane Nioce
305 North Main
Reserve, KS 66434

Sac and Fox of the Mississippi in Iowa
Attn: Jonathan Buffalo, NAGPRA Rep.
349 Meskwaki Road
Tama, IA 52339-9629

Prairie Band Potawatomi Nation
Attn: Chairman Steve Ortiz, NHPA Rep.
16281 Q Road
Mayetta, KS 66509

Lac Vieux Desert Band of Lake Superior Chippewa Indians
Attn: giiwegiizhigookway Martin, THPO
P.O. Box 249
Watersmeet, MI 49969

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ATTACHMENT K:

Indirect Effects Prescreening

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WisDOT's Pre-Screening Worksheet for EA and ER Projects

For Determining the Need to Conduct a Detailed Indirect Effects Analysis

The factors listed below are not in any order of importance.

Factors to Consider

1. Project Design Concepts and Scope
2. Project Purpose and Need
3. Project Type (Categorical Exclusions, etc.)
4. Facility Function (Current and Planned—principal arterial, rural arterial, etc.)
5. Project Location
6. Improved Travel Times to an Area
7. Local Land Use and Planning Considerations
8. Population and Demographic Considerations
9. Rate of Urbanization
10. Public Concerns

1. Project Design Concepts and Scope

Do the project design concepts include any one of the following?

• Additional thru travel lanes (expansion)

Yes. Expansion from two lanes to a minimum of four lanes to address capacity need. Congestion Management Process for the Madison Metropolitan Planning Area has identified the corridor as either "very congested" or "congested". The existing facility does not function adequately due to existing traffic volumes and the limits of the existing geometry.

• New alignment

No. Slight parallel shifts of existing alignment, but project will not create a new corridor.

• New and/or improved interchanges and access

Yes. No interchanges exist within the project, however, the project includes improved intersections at two locations and access changes.

• Bypass alternatives

No. Other north/south corridors in the area are constrained and no other alternative alignments exist in this area.

2. Project Purpose and Need

Does the project purpose and need include:

• Economic development –in part or full (i.e. improved access to a planned industrial park, new interchange for a new warehouse operation).

No. Project need is driven by current operational deficiencies and increased future projected traffic and bicycle/pedestrian demand and existing facility deficiency. Because

of constrained parallel routes, traffic volume on this roadway will increase regardless of roadway improvement. In the project area, the existing County M alignment provides the most direct north-south connection available. Parallel l routes include constraints such as indirection from County M, residential land use, access concerns, noise, pavement design, and limited roadway capacity.

3. Project Type

• What is the project document "type":

The project is an expansion project.

The project requires an Environmental Assessment (**EA**). No negative indirect effects warranting indirect effects analysis were identified.

4. Facility Function

What is the primary function of the existing facility? What is the proposed facility?

The existing facility is a critical north/south roadway connecting the City of Madison and the City of Verona.

The existing facility is classified as a **rural principal arterial**

The proposed facility will be classified as an **urban principal arterial.**

5. Project Location (Location can be a combination.)

The project is located in Dane County, Wisconsin in the Cities of Madison and Verona and the Towns of Verona and Middleton.

• Urban (within an Metropolitan Planning Area) - **Yes**

• Suburban (part of larger metropolitan/regional area, may or may not be part of a metropolitan planning area) - **Yes**

• Small community (population under 5000) - **Yes**

• Rural with scattered development - **Yes**

• Rural, primarily farming/agricultural area - **No**

6. Improved travel times to an area or region

• Will the proposed project provide an improvement of 5 or more minutes? (Based on research, improvements in travel time can impact the attractiveness of an area for new development.)

No. The corridor length is less than 3 miles.

7. Land Use and Planning

• What are the existing land use types in project area?

The current land uses within the project area include agricultural, residential, and institutional with both rural and urban landscapes. The area has a wide variety of residential uses comprising of four neighborhood organizations, rural residential neighborhoods, multi-family homes, and apartment buildings. Facilities along the corridor include two golf courses, a turf research facility, parkland, an electrical substation, a church, and vacant open space.

Current land cover percentage within ½ mile of the project area is:

- Recreation – 30%
- Residential – 30%
- Vacant/Agriculture/Open Lands – 25%
- Commercial – 5%
- Woodlands – 4%
- Water – 3%
- Institutional/Government – 2%
- Communication/Utilities – 1%

• What do the local plans, neighborhood plans, and regional plans, indicate for future changes in land use?

This project is sponsored by the City of Madison, in conjunction with Dane County and the City of Verona, and in cooperation with the Towns of Verona and Middleton. The County M corridor improvements are compatible with the goals of the cities, county, and township. Project management has met with city planning staff to coordinate local and regional plans and zoning regulations.

The City of Madison has developed neighborhood plans on the knowledge that County M will be designed and reconstructed to meet current and future traffic needs with an urban cross section. The future traffic needs were provided by the Madison Area MPO Travel Demand Model which analyzes future population, household, employment, school enrollment, and any other traffic generators (with input from the development patterns suggested by these neighborhood plans) to calculate a forecast traffic demand.

Four neighborhood development plans (NDP) anticipate growth adjacent to the County M corridor that includes additional single family and multi-family housing, parks, mixed use and commercial development.

One planned development adjacent to the project corridor is the University Research Park Phase II development at Junction Road and County M. This University of Wisconsin project promotes the new urbanist design, which strives for environmentally friendly, walkable neighborhoods with small lot sizes. The planned site is approximately 270 acres bordered by Mineral Point and South Pleasant View Roads and County M. The expansion will include 64-sites for science and technology buildings and a mix of commercial and residential land uses. The development will support approximately 8,000 jobs at full build-out.

Epic Systems Corporation is located on the far west side of the City of Verona south of County PD, approximately 1.5 miles west of County M. The company currently employs 9,400+ and attracts approximately 1,000 contractors and an additional 1,000 visitors per day at the Verona campus. This development is projected to continue to grow and upon full build-out, the Verona campus could reach 11,000 employees.

There are commercial generators on both terminus. To the north, there are several big-box and chain retail stores for regional shopping tips. To the south, the main downtown area of the City of Verona has several shopping areas and a “main street” corridor with restaurants, grocery store, and stores.

• What types of permitted uses are indicated in the local zoning?

There are a variety of permitted uses, including suburban and traditional residential, conservancy, parks and recreation, mixed-use, and employment districts. Specific zoning districts include:

- Urban Mixed Use District
- Conservancy
- Parks and Recreation
- Suburban Residential Consistent District 1
- Suburban Residential - Consistent District 2
- Suburban Residential - Consistent District 3
- Suburban Residential - Varied District 2
- RE – Recreational
- Rural District 3
- Rural Residential 1
- Neighborhood Residential
- Suburban Office
- Neighborhood Office
- Planned Unit Development

The project is being built on existing alignment and will not result in the direct change of any zoning regulations. The project is compatible with current and planned zoning and development within the project area.

• Would the project potentially conflict with plans in the project area? (e.g., capacity expansion in areas in which agricultural preservation is important to local government(s)?)

No. Improvements will support existing plans in the area.

Urban service areas are those areas in and around existing communities which are most suitable for urban development and capable of being provided with a full range of urban services. The urban service area boundaries represent the outer limits of planned urban growth over a long-term planning period. The project corridor is within this urban service area. Because of the amount of vacant and agricultural land in the project area, substantial development is planned and outlined in the various regional, city, and local plans. The County M project will support these plans.

8. Population/Demographic Changes

• Have the population changes over past 5, 10 and 20 years been high, medium, low growth rate vs. state average over same period? (i.e. USDA defines high growth in rural areas as greater than annual population growth of 1.4 %.)

	Census Population		
Municipality	**1990**	**2000**	**2010**
City of Madison	190,766	208,054	233,209
City of Verona	5,374	7,052	10,619
Town of Verona	2,137	2,153	1,948
Town of Middleton	3,628	4,594	5,877

The Cities of Madison and Verona, and the Town of Middleton are experiencing growth rates above the statewide average for 5, 10, and 20-year periods.

The Town of Verona has experienced a decline in population over the same periods. As is the case with many towns in Wisconsin, land is projected to be annexed to nearby cities through boundary agreements. The town is currently working on developing a boundary agreement with the City of Madison and the City of Verona. As development pressure continues in the area, land is anticipated to be converted into the city, impacting the town acreage and tax base. This will likely impact population, converting current town residents to either the City of Verona or the City of Madison.

• What are the projections for the future for population? (Use Wisconsin DOA projections.)

	WisDOA Population Projections		
Municipality	**2020**	**2030**	**2040**
City of Madison	251,550	270,350	281,150
City of Verona	12,800	15,070	16,850
Town of Verona	2,020	2,085	2,095
Town of Middleton	6,695	7,635	8,330

• Have there been considerable changes for population demographics and employment over the past 10 – 20 or more years?

There has not been a significant change in demographics for the municipalities listed since the year 2000. Population by race for each of the municipalities was compared from 2000, and 2010. Percentages remained relatively consistent.

	Percentage Population by race (White)	
Municipality	**2000**	**2010**
City of Madison	84	78.9
City of Verona	97.5	93.3
Town of Verona	96.7	96.3
Town of Middleton	97.8	95.2

	Percentage Population by race (Black)	
Municipality	**2000**	**2010**

City of Madison	5.8	7.2
City of Verona	0.6	1.3
Town of Verona	0.6	0.8
Town of Middleton	0.4	0.6

	Percentage Population by race (Hispanic)	
Municipality	**2000**	**2010**
City of Madison	4.1	6.8
City of Verona	0.7	2.4
Town of Verona	1	1.5
Town of Middleton	0.7	1.6

The Madison MPO Travel Demand Model indicated there were 278,193 employees in Dane County in 2005. In 2010, the amount of employees increased to 313,718. In 2050, approximately 483,722 employees will be working in Dane County.

9. Rate of Urbanization

• Does the project study area contain proposed new developments?

Yes.

The University Research Park Phase II is a proposed development at Junction Road and County M. This University of Wisconsin project promotes the new urbanist design, which strives for environmentally friendly, walkable neighborhoods with small lot sizes. The planned site is approximately 270 acres bordered by Mineral Point and South Pleasant View Roads and County M. The expansion will include 64-sites for science and technology buildings and a mix of commercial and residential land uses. The development will support approximately 8,000 jobs at full build-out.

• What are the main changes in developed area vs. undeveloped areas over the past 5, 10 and 20 years?

Development in the area has been increasing consistently. This corridor connects urban centers and a large portion of undeveloped area have steadily converted to residential land use of varying density.

• Have there been significant conversions of agricultural land uses to other land use types, such as residential or industrial?

As the urban areas of the City of Madison and the City of Verona grow, agriculture and vacant lands have been converted to mainly residential areas as population grows and development occurs. Neighborhood development plans in this area account for growth and future development in the project area. The improvements that are a part of this project are responding to these plans.

10. Public, State and/or Federal Agency Concerns

• Have local officials, federal and/or state agencies, property owners, stakeholders or others raised concerns related to potential indirect effects from the project? (e.g., land use changes, “sprawl”, increase traffic, loss of farmland, etc.)

The City of Madison, in conjunction the City of Verona and Dane County, and in cooperation with the Towns of Verona and Middleton, are project sponsors and have been involved throughout the project process. The project is consistent will all regional, city, and local plans.

Many meetings were held with local municipalities, stakeholder groups, and the public. Stakeholder groups included, Ice Age Trail Alliance, OJ Noer Turf Research Facility, University Ridge Golf Course, Dane County Parks, Wisconsin Bike Federation, Madison Metropolitan Sewerage District, and American Transition Company.

A significant majority of interested parties agree that this project is desired, warranted, and necessary. No concerns were recorded regarding indirect effects from the project.

Conclusion

Identify whether or not the results of this prescreening of potential indirect effects indicates a detailed indirect effects analysis is required.

☒ No

Through screening analysis using WisDOT’s pre-screening for indirect effects procedure and FDM guidance on indirect effects, it is concluded that the factors of the project, its location and other conditions do not warrant further detailed analysis of the potential for indirect effects. The project will not have the likelihood to result in *significant* indirect effects as defined by NEPA. This conclusion was based on the evaluation of the preceding 10 pre-screening factors including project design concepts and scope; project purpose and need; project type; facility function (current and planned); project location; improved travel times to an area; local land use and planning considerations; population and demographic considerations; rate of urbanization; and public/agency concerns. Therefore, further evaluation of indirect effects in a detailed analysis is not warranted. If changes are made to the project design and alternatives, this screening will be re-examined for sufficiency.

☐ Yes

Through screening analysis using WisDOT’s pre-screening for indirect effects procedure and FDM guidance on indirect effects, it is concluded that the factors of the project, its location and other conditions warrant further detailed analysis of the potential for indirect effects.

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ATTACHMENT L:

Cumulative Effects Analysis

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Cumulative Effects Analysis

SCOPING FOR THE CUMULATIVE EFFECTS ANALYSIS

1. Identify the significant issues associated with the proposed action and define the assessment;

   There are no significant issues regarding public and agency concerns. The project is not anticipated to cause direct impacts or indirect effects to any resources, thus the project will not contribute to a cumulative effect analyses on those resources either.

2. Establish geographic scope for the analysis;

   The geographic scope for analysis is generally within ¼ mile of the proposed roadway. All community and neighborhood development plans are considered in the analysis. Because this project is a reconstruction of an existing roadway and storm water from the roadway will be captured by curb and gutter and gravity piped to storm water ponds for the City of Madison, the geographic scope for storm water effects expand outside the identified project area.

3. Establish timeframe for analysis (into future);

   Dane County's future land use layer (2014) was used to identify projected development adjacent to the corridor. Cumulative effects from future land use need to be monitored moving forward and appropriate WisDOT staff will determine if a further cumulative effects analysis is warranted as the corridor develops in the future.

   WisDOT traffic forecasts were developed beyond a twenty year horizon to assist in determining growth in the project area and assist with identifying potential problematic areas.

4. Identify other actions affecting the natural, historic, cultural resources, ecosystems and human communities of concern;

   Existing land use plans and future development plans indicate various developments including various retail, residential, and research opportunities adjacent to the corridor.

   These developments have been previously reviewed and adopted and no additional changes in land use are anticipated as a result of the proposed action. The expanded roadway will serve the future developments.

DESCRIBING THE AFFECTED ENVIRONMENT

5. Characterize resources identified in scoping in terms of their response to change and capacity to withstand stress;

   Expanding CTH M from a two-lane roadway to a four to six-lane facility will accommodate future year 2037 traffic projections, meeting the project purpose and need to provide a safe and serviceable corridor for all modes of transportation while delivering acceptable operating conditions.

   No significant impacts to existing environmental resources will result from the proposed action.

6. Characterize the stresses affecting these resources and their relation to regulatory thresholds;

The proposed project follows the existing and future land use and neighborhood development plans. Planned growth has been identified within this project boundary. The design of the roadway minimizes environmental impacts to the greatest extent possible while still accommodating planned future growth.

No past, present, or future environmental justice issues were identified.

7. Define a baseline condition for the resources.

No significant resources were identified so baseline conditions were not determined.

DETERMINING THE ENVIRONMENTAL CONSEQUENCES

8. Identify the important cause and effect relationships between human activities including the proposed project and resources;

The proposed project expands the existing roadway to accommodate the existing and proposed traffic volumes. This improvement does not alter the current use of the facility and no causal relationships with any resources exist as a result of the project.

9. Determine the magnitude and significance of cumulative effects to those resources identified in the analysis;

All efforts were made to shift intersection and roadway impacts to avoid any sensitive resources.

10. Modify or add alternatives to avoid, minimize or mitigate significant cumulative effects;

All possible planning and sound engineering judgment was used to determine where intersection and mainline expansion should be constructed. Numerous agencies, and officials assisted with the development of alternatives and had opportunities to comment through all phases of the project.

11. Monitor the cumulative effects of the selected alternative and adapt management.

Cumulative effects such as changing future land use will be monitored moving forward and appropriate WisDOT staff will determine if a further cumulative effects analysis is warranted as the corridor develops in the future.

CONCLUSION

No significant cumulative effects exist within this project. Minor impacts to existing wetlands will occur as a result of the proposed roadway expansion.

ATTACHMENT M:

Determination of Eligibility Form for Schroeder-Stickelberg-Thompson Farmstead

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(DOE March 2011)

Wisconsin Historical Society
Determination of Eligibility Form

WisDOT Project ID #: 5992-09-81

WHS #:

Property Name(s): Schroeder-Stickelberg-Thompson Farmstead
Address/Location: 8300 Raymond Rd.
City & County: Town of Verona, Dane County **Zip Code:** 53719
Town: 6N **Range:** 8E **Section:** 3
Date of Construction: c.1875-C.1890, c.1900, c.1910, c.1920, c.1940

WisDOT Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this request for Determination of Eligibility:

[X] Meets the National Register of Historic Places criteria.
[ ] Does not meet the National Register of Historic Places criteria.

Rebecca Burkel, WisDOT Historic Preservation Officer **Date**

State Historic Preservation Office

In my opinion, the property:

___Meets the National Register of Historic Places criteria.
___Does not meet the National Register of Historic Places criteria.

Michael E. Stevens, State Historic Preservation Officer **Date**

Comments (FOR AGENCY USE ONLY):

Division of Historic Preservation
Wisconsin Historical Society
816 State Street
Madison, WI 53706

Classification:

Ownership		Type of Property:			# of Contributing	# of Non-Contributing
x	private	8	building(s)	-->	7	1
	public		site	-->	0	0
If public, specify:		1	structure	-->	1	0
		1	object	-->	1	0
			district	Total:	9	0

Function/Use:

Historic Function(s): DOMESTIC / Single dwelling = house; AGRICULTURE / Animal facility = barn

Current Function(s): VACANT / NOT IN USE

Architectural Style(s): Side-gabled; astylistic utilitarian

Criteria:

	A (history)	**Areas of Significance:**	Architecture
	B (important persons)	**Period of Significance:**	c.1875 – c.1940
x	C (architecture/eng.)	**Significant Dates:**	c.1875 – c.1890, c.1900, c.1910, c.1920, c.1940
	D (archaeology)	**Significant Person:**	N/A
		Cultural Affiliation:	N/A
		Architect/Builder:	Unknown

Criteria Considerations:

	A (owned by religious institution)		E (reconstruction)
	B (moved)		F (commemorative)
	C (birthplace/grave)		G (<50 years old)
	D (cemetery)		

ATTACHMENT CHECKLIST

[x] Historic boundary map
[x] Labeled, professionally printed color photographs
[x] USGS map with UTM coordinates

Property Info:

Acreage of Property: Approximately 2.1 acres

UTM Reference: See map

Zone	Easting	Northing

Verbal Boundary Description:

The historic boundary of the Schroeder-Stickelberg-Thompson Farmstead consists of a triangle that encompasses all of the property's contributing resources and is delineated by existing tree lines and ROW along Raymond Road and CTH M. Beginning at the southernmost edge of the tree line around the property, the historic boundary runs north for approximately 460 ft. along the edge of the tree line and the CTH M ROW (approximately 40 ft. east of the paved edge of CTH M). From there, the boundary turns east to run for approximately 380 ft.; this is 25 ft. north of the northern edge of the contributing barn (no distinct tree line or other visual demarcation exists, and the northern tax parcel line was not used as the historic boundary so as to exclude a recently-constructed house). At that point, the boundary runs southwest for approximately 600 ft. along the Raymond Road ROW and the edge of the tree line (approximately 30 ft. northwest of the paved edge of Raymond Rd.).

Boundary Justification:

The historic boundary has been delineated to encompass the property's nine contributing resources: the house, barn, milk house, garage, machine shed, windmill, outhouse, chicken coop, and animal trough. The boundary coincides with the location of existing tax parcel boundary lines on the west and southeast sides. The western and southeastern boundary lines also coincide with the existing ROW and the tree line that begins north of the CTH M – Raymond Rd. intersection. The northern boundary has been delineated to provide a 25 ft. buffer around the northernmost resource while excluding the only modern building from the historic boundary.

Methodology:

(Describe the steps taken to identify and evaluate the historic property, including research, consultation with BEES, and previous eligibility recommendations)

The property was identified as potentially eligible for the National Register as part of a survey of the historic and architectural resources along the CTH M project corridor. Site visits were conducted in March, May, and September of 2011 and July of 2012, at which time photographs were taken and the property was viewed. Information about the property was gathered from historical materials in the Madison Public Library, Wisconsin Historical Society Library and Archives, and from an interview with Marie Bigley, the current property owner. This information was used to complete this form.

Narrative Description:
(Describe the property in two pages or less.)

The Schroeder-Stickelberg-Thompson Farmstead consists of 7 contributing buildings (a side-gabled house, bank barn with attached silo, milk house, garage, machine shed, outhouse, chicken coop), 1 contributing structure (windmill), and 1 contributing object (animal trough).

House (c.1875)
This side-gabled house was constructed c.1875 – c.1890. It is irregular in plan with a stone foundation, clapboard walls, and an asphalt-shingled gable roof with wide overhanging eaves. The building consists of the primary side-gabled mass and a secondary (rear), side-gabled building mass. A red brick chimney protrudes from the roof peak of the primary building mass.

The west (front) elevation of the house is symmetrical in plan with a central doorway and one 2-over-2 double-hung window on each side. The door is accessed via a concrete stoop with metal railings on each side. At the second story are two 2-over-2 double-hung windows that are located above the first-story windows.

The south elevation of the primary building mass contains two 2-over-2 double-hung windows at the first and second stories. The secondary building mass contains a hipped-roof porch at the first story and two 2-over-2 double-hung windows at the second story. The porch enclosed by a clapboard half-wall with screened upper.

The east (rear) elevation of the house contains a boarded-up window at the first story, a 2-over-2 double-hung window at the second story, and a small louvered wood ventilation panel at the attic level (just below the gable).

The north elevation of the primary building mass contains one 2-over-2 double-hung window at the first story and two 2-over-2 double-hung windows at the second story. The north elevation of the secondary building mass contains a shed-roofed, 1-story projecting bay at the first story; this bay contains a single door and two 2-over-2 double-hung windows. Above the projecting bay, at the second story, are two 2-over-2 double-hung windows.

The interior of the building consists of an entry vestibule, kitchen and pantry, dining room, parlor, and sitting room on the first floor and five bedrooms and a small closet/dressing room on the second floor. The narrow entry vestibule contains a set of wooden steps leading to a full cellar below. The cellar has an earthen floor with fieldstone walls that have been reinforced in some areas with a support wall of concrete block. The entry vestibule leads to the kitchen which contains two exterior doors, one leading to the entry vestibule on the north side, the other leading to a screened porch on the south side of the house. The kitchen leads to a small dining room with a wide opening that leads to the sitting room where the front door is located. Just off of the sitting room, through another wide opening is a smaller parlor. A winding wooden staircase is located between the sitting room and dining room; this leads to the second

floor where five small bedrooms are located. Opposite the second-floor landing is a small bedroom. To the left of the landing, a door opens into a small bedroom where a second door leads to another small bedroom; here, the chimney shaft from the kitchen stove runs the height of the room and has a metal pipe cover over the stovepipe opening. To the right of the second-floor stair landing are two additional bedrooms with a small closet in the narrow hall space between.

Every room in the house contains the original lath and plaster walls and ceilings. Original wooden plank flooring can be seen on both the first and second floors, although sections of it are currently obscured by removable linoleum and narrow-gauge wood flooring. Most of the rooms retain their original baseboards, simple trim, and four-panel doors. The spatial relationship between rooms appears to be intact on both floors. Because the house has never been fitted with plumbing, there has been no need to adjust the original floor plan to accommodate water lines or interior bathrooms.

Bank barn and silo (c.1910)
This astylistic utilitarian bank barn was constructed c.1910. It is rectangular in plan with a poured concrete foundation wall, board and batten siding, and an asphalt-shingled gambrel roof. The south elevation contains a central sliding barn door at ground level. Small multi-pane windows are located on either side of the door and at the second story. Small six-pane windows are located just below each gable end. An earthen ramp leads to a sliding barn door at the center of the east elevation.

A poured concrete silo is located on the east side of the barn and is connected below grade so that silage can be emptied into the lower portion of the barn. The silo has a domed concrete roof with raised ventilator.

Milk house (c.1940)
The astylistic utilitarian milk house was constructed c.1940. It is rectangular in plan with concrete block walls and a front-gabled asphalt-shingled roof with a metal ventilator. The front elevation faces east and is symmetrical in plan with a central wooden door. The wall below each gable end is clad in horizontal boards. Small glass block windows are located in the north and south walls.

Garage (c.1940)
The astylistic utilitarian garage was constructed c.1940. It is rectangular in plan with concrete block walls and a front-gabled asphalt-shingled roof. The front elevation faces east and is symmetrical in plan with two single-bay composition wood garage doors. The wall below each gable end is clad in horizontal boards. Small glass block windows are located in the north and south walls. A single pedestrian door is located in the south wall.

Machine shed (c.1940)
The astylistic utilitarian machine shed was constructed c.1940. It is rectangular in plan with concrete walls and a front-gabled asphalt-shingled roof. The front elevation faces east and is symmetrical in plan with a central sliding door of vertical board construction. The wall below each gable end is clad in vertical boards. Small glass block windows are located in the north and south walls.

Windmill (c.1920)

The windmill was constructed c.1920 and is of metal construction. The original wind/hand pump below the windmill has been replaced by an electric pump.

Outhouse (c.1900)
The astylistic utilitarian outhouse was constructed c.1900. It is rectangular in plan with a newer concrete foundation, clapboard walls with vertical wood corner boards, and a metal shed roof. The front elevation faces west and is asymmetrical in plan with a central horizontal board door and a small open window for ventilation.

Chicken coop (c.1910)
The astylistic utilitarian chicken coop was constructed c.1910. It is rectangular in plan with horizontal board walls and a metal shed roof. Open walls are located along the south elevation; an open doorway and window are located in the west elevation. The chicken coop is in disrepair and is no longer functional for storage or animal habitation.

Animal trough (c.1920)
The animal trough is a rectangular poured concrete structure with a metal water pipe that runs across the length of the trough. It is located just northeast of the windmill.

Narrative Statement of Significance:
(Describe the context in which you have evaluated the property and give a summary statement of significance, preferably in no more than two pages.)

CRM Context Chapters: Vol. II – Architecture
Vol. II – Agriculture

The Schroeder-Stickelberg-Thompson Farmstead was initially identified as potentially eligible for National Register listing under *Criterion C: Architecture* as a representative of a distinct property type: a mid-nineteenth-to-mid-twentieth-century farmstead. The period of significance for the property is from c.1875 to c.1940, the first and last years of contributing building construction. Because the property contains an intact collection of historic outbuildings and because of the remarkably high degree of integrity of the historic farmhouse in comparison with nearby farmsteads in Verona Township, the Schroeder-Stickelberg-Thompson Farmstead is considered eligible for listing under *Criterion C*.

Historic Context
The first European-American settlement in Dane County occurred in the late 1820s in the area of present-day Madison. As settlement increased over the next decade, the territorial legislature formed Dane County in 1836. The next decades saw the formation and adjustment of the county's 34 individual townships. When Madison was established in 1846, the community of Verona – named after the town in

New York where the area's first settlers were from – was a part of the expansive Madison Township. One year later, however, the Wisconsin territorial legislature created the town of Verona as a separate entity.[1] Until well into the twentieth century, Verona was known as a primarily agricultural township.[2] Farming in the area consisted initially of wheat production, until the failure of wheat crops in the mid-to-late eighteenth century. Since then, dairying has been the leading agricultural concern.[3] The Schroeder-Stickelberg-Thompson Farmstead would likely have followed this pattern.

Property History

Caspar Schroeder emigrated from Germany with his wife Margaret and five children in 1851. Initially, the family rented land elsewhere in Verona for a period of time, but by 1861, the Schroeders had purchased 160 acres of land in Section 3 where they built a house and began farming. The main side-gabled building mass of the existing farmhouse was likely built by the Schroeder family c.1875.[4] By 1890, the Schroeders had sold the property to Fred Stickelberg (Steckelberg) who constructed the rear addition, giving the house its current form.[5] It is also probable that the Stickelbergs constructed the outhouse just east of the house (c.1910) as well as building new agricultural buildings.

The dairy barn, silo, and chicken coop were constructed c.1910, followed by the windmill and animal trough around 1920. The Stickelbergs owned the property until 1927 when it was sold to Olai and Elizabeth Thompson. In 1934, the Thompson property was foreclosed upon, but the family was able to keep or buy back the farm as it remained in their ownership until 1986. An interview with the current owner indicated that the machine shed may have been constructed as part of a public works project in the 1930s, although concrete evidence to this effect has not been found; aerial photographs suggest that the machine shed was constructed after 1937. The Thompsons constructed the milk house and garage around 1940; these were the last contributing resources constructed on the property. In 1986, following the death of Elizabeth Thompson, the property was sold to John Q. Hodgson. Mr. Hodgson constructed the "new" house the following year. Following Mr. Hodgson's death in 1996, the property was deeded to his daughter and current owner, Marie Bigley.[6] The same year, Ms. Bigley had the barn and old house reroofed (both with in-kind diamond-pattern asphalt shingles).

Architectural Context

Side Gabled vernacular houses were constructed in Wisconsin beginning in the 1840s. The style generally features a rectangular plan with a gently-pitched gable roof and a height of one to three stories. Clapboard siding is typical of the style, although masonry versions are not uncommon. Additions typically were added to the rear elevation and took the form of one-story shed-roofed constructions or

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[1] "City History," Middleton Area Historical Society, http://www.ci.middleton.wi.us/City/history/history.htm (accessed March 15, 2011).
[2] *Verona Area History, 1847-1972: Quasquicentennial* (Verona, WI: Verona Press, 1972), np.
[3] "City History," Middleton Area Historical Society, http://www.ci.middleton.wi.us/City/history/history.htm (accessed March 15, 2011).
[4] *Biographical Review of Dane County, WI,* vol. I (Chicago: Biographical Review Publishing Co., 1893), 218-220.

[5] *Biographical Review of Dane County, WI,* vol. I (Chicago: Biographical Review Publishing Co., 1893), 218-220.
[6] Property ownership information gathered from materials in the Dane County Deeds and Records Office, Madison, WI.

perpendicular building masses that created an overall T- or L-shaped plan (as with the Schroeder-Stickelberg House).[7] As with other vernacular forms, ornamentation is kept to a minimum.

In addition to the Schroeder-Stickelberg-Thompson farmhouse, 433 Side Gabled houses have been recorded in WHPD in Dane County; of these 96 are listed in the National Register of Historic Places. In addition to the outbuildings and other structures at the Schroeder-Stickelberg-Thompson Farmstead, the following comparable building types have been recorded in WHPD in Dane County:[8]

Building style/type	Previously recorded	NRHP listed
Chicken coops (small animal buildings)	26	1
Outhouses	N/A	N/A
Windmills	2	0
Animal troughs	N/A	N/A
Milk houses	3	1
Bank barns	18	0
Concrete silos	3	1
Garages	48	7
Machine sheds	9	2

None of the previously recorded machine sheds or milk houses are of concrete or concrete block construction; 13 of the previously recorded garages are of concrete block construction. Because "outhouse" and "animal trough" are not searchable building types in WHPD, an accurate number of these recorded buildings/structures is not available.

WHPD does not contain records for any other farmsteads in the Township of Verona, but a brief survey of farmsteads within one mile of 8300 Raymond Rd. suggests that the number and function of the Schroeder-Stickelberg-Thompson outbuildings is fairly common, although the concrete construction of three of the outbuildings is less typical. Comparable farmsteads within a one mile radius are located at 7153 CTH PD and 3213 Marty Rd. The farmstead at 7153 CTH PD contains an American Foursquare house (c.1920), a large barn complex (c.1900-1950) with two concrete silos (c.1915), a poultry house (c.1915), a garage (c.1940), a small animal barn (c.1920), and a modern pole barn; the majority of these outbuildings are of frame construction with board siding, with the exception of a small pumphouse which appears to be constructed of silo tile. The farmstead at 3213 Marty Rd. contains a Gabled Ell house (c.1890) with attached garage, a modern machine shed/garage, two modern pole barns, a historic barn (c.1900) with concrete silo (c.1915), two small animal barns (c.1920), and several small metal silos (c.1940s-1970s). The majority of these outbuildings are of frame construction with board siding. A farmstead at 6893 Midtown Rd. contains an American Foursquare house (c.1915), a historic barn (c.1920 with modern concrete foundation walls) with concrete silo (c.1920) and two small animal barns (c.1940); in comparison to the other farmsteads, this property has a relatively low number of comparable resources.

A comparison of these farmsteads indicates that the collection of resources at 8300 Raymond Rd. is distinctive due to the age and high degree of integrity of the historic farmhouse. The farmhouse at 7153

[7] Barbara Wyatt, *Cultural Resource Management in Wisconsin* (Madison, WI: State Historical Society of Wisconsin, 1986), 3-3.

[8] While WHPD is certainly not a record of every historic building in the state and does not necessarily reflect the number of historic properties in a given area, it does indicate the presence of (or lack of) previously identified resource types.

CTH PD has a diminished degree of integrity due to the enclosure of the front porch and modern windows and doors throughout. The farmhouse at 3213 Marty Rd. has a modern garage addition as well as a sizable addition along the south elevation that impacts the primary façade. Rather than a historic farmhouse that has been updated with each new generation, the Schroeder-Stickelberg-Thompson farmhouse has not had any apparent modifications outside of the historic era. Although its exterior form is common in Dane County, its interior spaces remain relatively unchanged since the late nineteenth century; consequently, the house possesses remarkable integrity of feeling, primarily because of the compact, small-scaled rooms with their original plaster, trim, doors, and windows as well as the intact floor plan, proportions, and building materials.

In conclusion, the Schroeder-Stickelberg-Thompson Farmstead is considered eligible for NRHP listing under *Criterion C* based on a comparison of nearby farmsteads that suggests that the collection of historic agricultural resources retains an especially high degree of integrity due to the well-preserved farmhouse and the intact collection of historic outbuildings that illustrate the property's evolution from the turn of the century through the 1940s.

Bibliography:

Biographical Review of Dane County, WI. Vol. I. Chicago: Biographical Review Publishing Co., 1893.

History of Dane County, Wisconsin. Chicago: Western Historical Company, 1880.

Keyes, Elisha W. *History of Dane County*. Chicago: Western Historical Association, 1906.

Ruff, Allen. Forward*! A History of Dane: The Capital County*. Cambridge, WI: Woodhenge Press, 2000.

State Historical Society of Wisconsin. *Wisconsin Domesday Book: Town Studies*. Madison, WI: State Historical Society of Wisconsin, 1924.

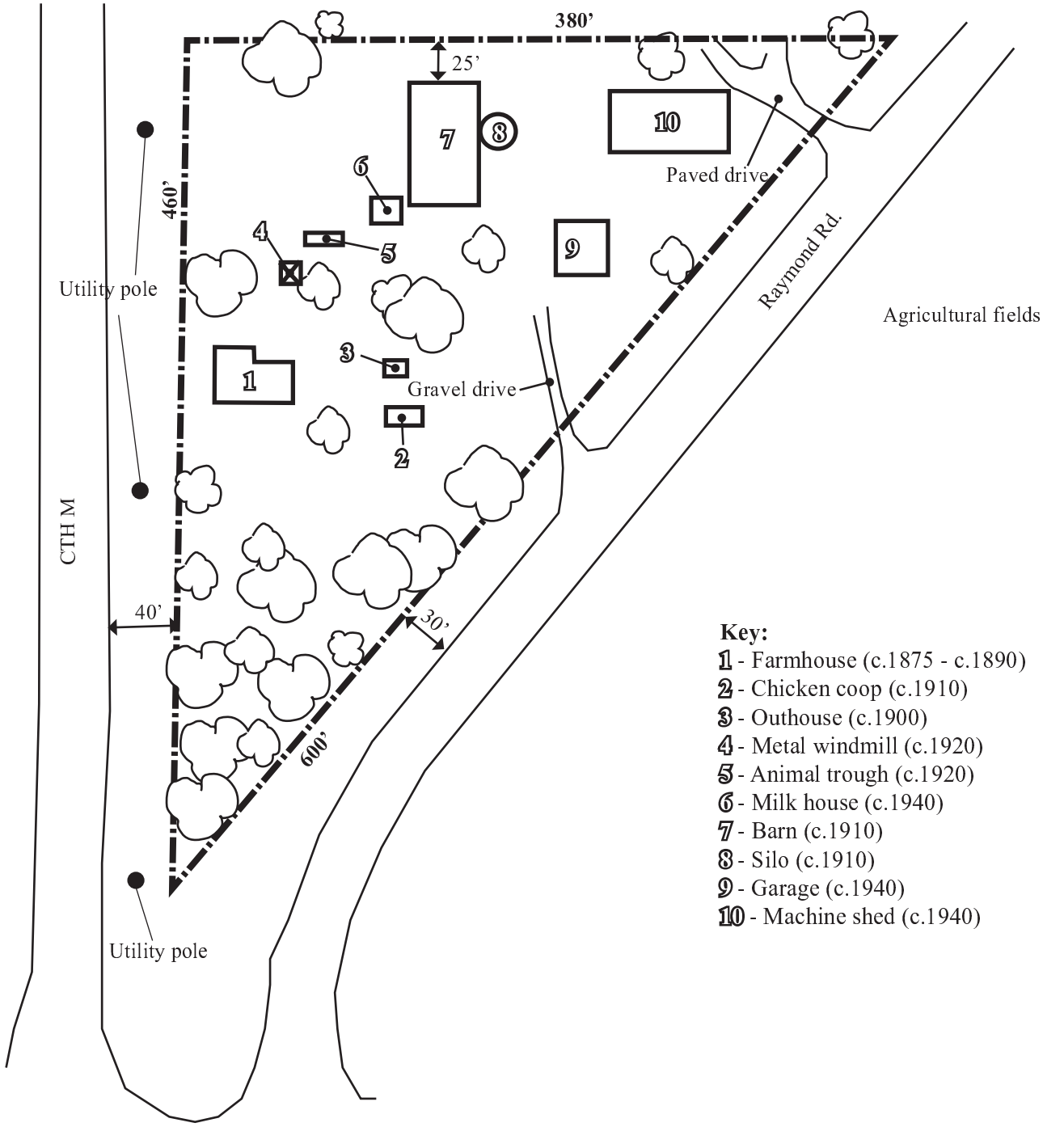
Wisconsin Historic Aerial Image Finder. University of Wisconsin. http://maps.sco.wisc.edu/WHAIFinder/# (Accessed May 30, 2011).

Wyatt, Barbara, ed. *Cultural Resource Management in Wisconsin*. Madison, WI: State Historical Society of Wisconsin, 1986.

Determination of Eligibility Prepared By:

Name & Company:	Gail R. Klein, Great Lakes Archaeological Research Center, Inc.				
Address:	PO Box 511549			Phone:	414-481-2093
City:	Milwaukee	State:	WI	Zip:	53203
Email:	jhaas@glarc.com			Date:	September 19, 2011
Sub-contracting to:					
Address:				Phone:	
City:		State:		Zip:	
Email:				Date:	

Schroeder-Stickelberg-Thompson Farmstead
8300 Raymond Rd.
Town of Verona
Dane County, WI
WisDOT ID: 5992-09-81

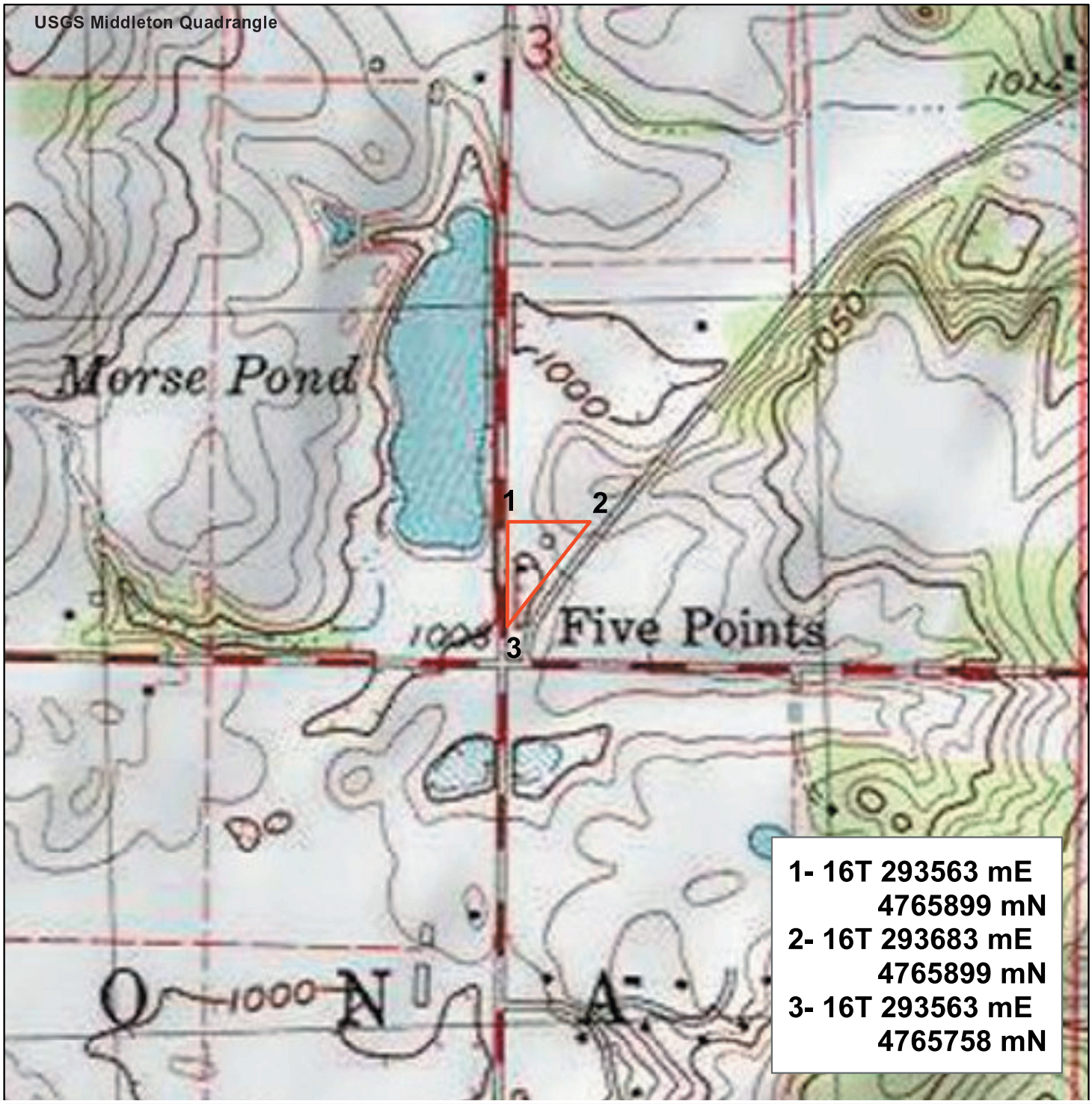


Key:
1 - Farmhouse (c.1875 - c.1890)
2 - Chicken coop (c.1910)
3 - Outhouse (c.1900)
4 - Metal windmill (c.1920)
5 - Animal trough (c.1920)
6 - Milk house (c.1940)
7 - Barn (c.1910)
8 - Silo (c.1910)
9 - Garage (c.1940)
10 - Machine shed (c.1940)

(Scale approximate)

N

Historic boundary
Contributing
Noncontributing



Schroeder-Stickelberg-Thompson Farmstead
8300 Raymond Road
Town of Verona
Dance County, WI

WisDOT ID 5992-09-81

Great Lakes Archaeological Research Center, Inc.

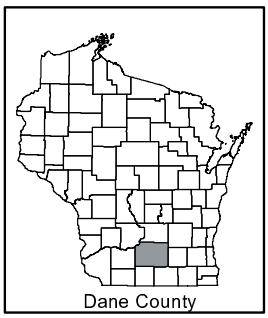
Mapped: 12 October 2012, KES

0 80 160 320 Meters

0 250 500 1,000 Feet

1:10,000

N



<u>Schroeder-Stickelberg-Thompson Farmstead</u>
8300 Raymond Rd.
Town of Verona
Dane County, WI

Photographed by GLARC
September 26, 2011 and July 31, 2012
Digital images on file at GLARC

Photo 1 of 23
West (front) elevation, looking southeast
213021a

Photo 2 of 23
North elevation, looking south
213021b

Photo 3 of 23
East and south elevations, looking northwest
213021c

Photo 4 of 23
South elevation, looking north
213021d

Photo 5 of 23
Interior, cellar wall
213021e

Photo 6 of 23
Interior, entry vestibule lath and plaster ceiling
213021f

Photo 7 of 23
Interior, kitchen looking toward dining room
213021g

Photo 8 of 23
Interior, kitchen looking toward pantry
213021h

Photo 9 of 23
Interior, living room looking toward dining room
213021i

Photo 10 of 23
Interior, living room looking toward front door and parlor
213021j

Photo 11 of 23
Interior, stairs
213021k

Photo 12 of 23
Interior, second floor landing looking straight
213021l

Photo 13 of 23
Interior, second floor landing looking east
213021m

Photo 14 of 23
Interior, second floor looking toward landing
213021n

Photo 15 of 23
Interior, easternmost bedroom detail
213021o

Photo 16 of 23
West and south elevations of outhouse, looking northeast
210783

Photo 17 of 23
North and east elevation of barn and silo, looking southwest
219141a

Photo 18 of 23
East and south elevations of milk house, looking northwest
219121

Photo 19 of 23
West and south elevations of machine shed, looking northeast
219181

Photo 20 of 23
South and east elevations of garage, looking northwest
219161

Photo 21 of 23
West elevation of chicken coop, looking east
213041

Photo 22 of 23
Animal trough, looking northwest
219101

Photo 23 of 23
Windmilll, looking northwest
219081

Photo 1 of 23

Photo 2 of 23

Photo 3 of 23

Photo 4 of 23

Photo 5 of 23

Photo 6 of 23

Photo 7 of 23

Photo 8 of 23

Photo 9 of 23

Photo 10 of 23

Photo 11 of 23

Photo 12 of 23

Photo 13 of 23

Photo 14 of 23

Photo 15 of 23

Photo 16 of 23

Photo 17 of 23

Photo 18 of 23

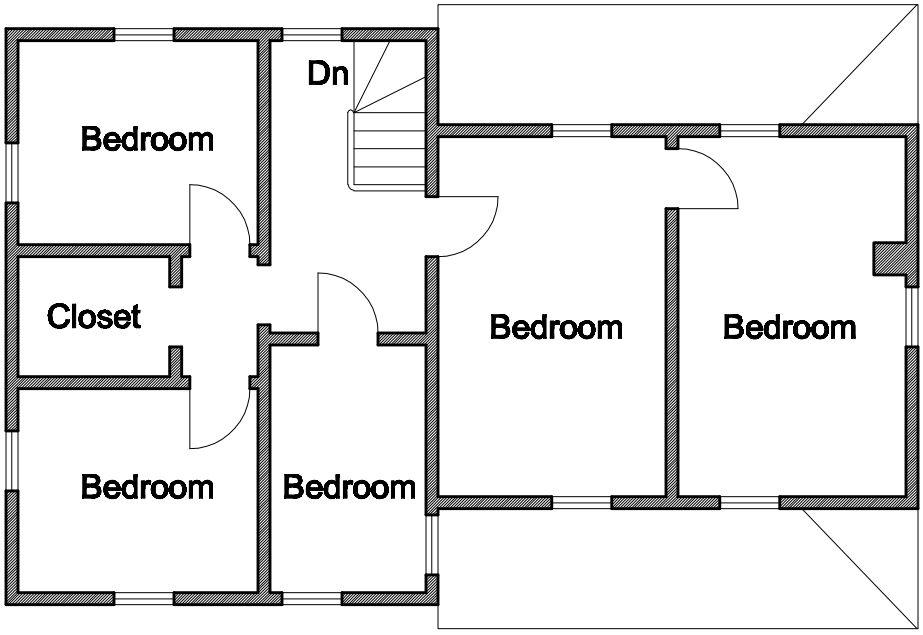
Photo 19 of 23

Photo 20 of 23

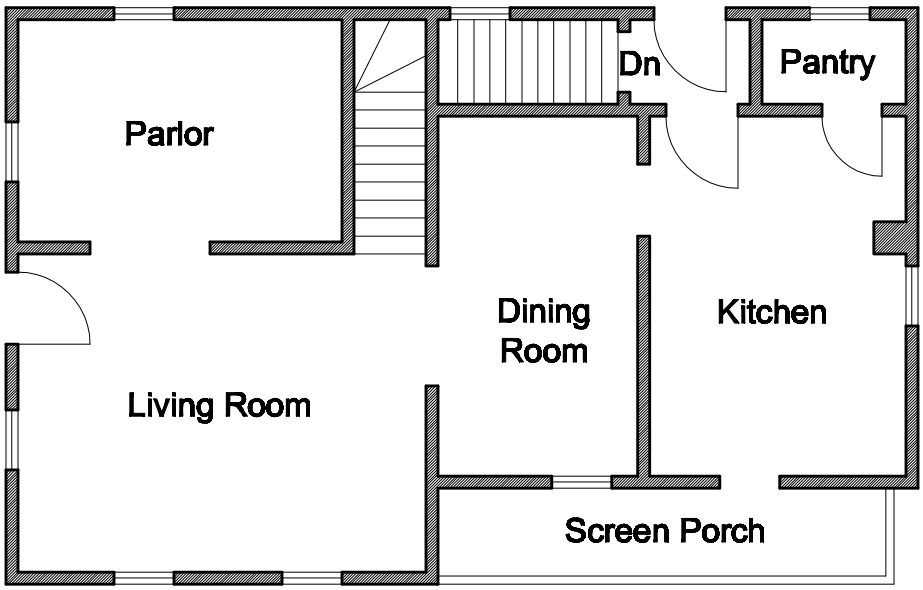
Photo 21 of 23

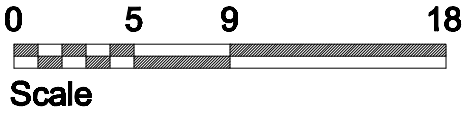
Photo 22 of 23

Photo 23 of 23



Second Floor Plan
(approximate)





First Floor Plan
(approximate)

Schroeder-Stickelberg-Thompson Farmhouse
8300 Raymond Rd.
Town of Verona
Dane County, WI

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ATTACHMENT N:

Determiniation of Eligibility Form for Gordon School

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(DOE March 2011)

Wisconsin Historical Society
Determination of Eligibility Form

WisDOT Project ID #: _____

WHS #: _____

Property Name(s): Gordon School
Address/Location: 6987 Midtown Rd.
City & County: Town of Verona, Dane County **Zip Code:** 53719
Town: 6N **Range:** 8E **Section:** 3
Date of Construction: 1929

WisDOT Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this request for Determination of Eligibility:

___Meets the National Register of Historic Places criteria.
_x_Does not meet the National Register of Historic Places criteria.

Rebecca Burkel, WisDOT Historic Preservation Officer **Date**

State Historic Preservation Office

In my opinion, the property:

___Meets the National Register of Historic Places criteria.
___Does not meet the National Register of Historic Places criteria.

Michael E. Stevens, State Historic Preservation Officer **Date**

Comments (FOR AGENCY USE ONLY):

Division of Historic Preservation
Wisconsin Historical Society
816 State Street
Madison, WI 53706

Classification:

Ownership		Type of Property:			# of Contributing	# of Non-Contributing
x	private	x	building(s)	-->	1	1
	public		site	-->	0	0
If public, specify:			structure	-->	0	0
			object	-->	0	0
			district	Total:	1	1

Function/Use:

Historic Function(s): EDUCATION / School = schoolhouse

Current Function(s): DOMESTIC / Single dwelling = residence

Architectural Style(s): One-story Cube

Criteria:

x A (history)

B (important persons)

C (architecture/eng.)

D (archaeology)

Areas of Significance: Education

Period of Significance: 1929 – 1966

Significant Dates: 1929

Significant Person: N/A

Cultural Affiliation: N/A

Architect/Builder: Unknown

Criteria Considerations:

A (owned by religious institution)

B (moved)

C (birthplace/grave)

D (cemetery)

E (reconstruction)

F (commemorative)

G (<50 years old)

ATTACHMENT CHECKLIST

[x] Historic boundary map
[x] Labeled, professionally printed color photographs
[x] USGS map with UTM coordinates

Property Info:

Acreage of Property:	1.3 acres		
UTM Reference:	16	293670	4757377
	Zone	Easting	Northing

Verbal Boundary Description:

The historic boundary of the Gordon School consists of a rectangle with a rounded northwest corner. Beginning at a point immediately east of the fence along Midtown Rd. where the eastern tree-line ends, the boundary runs south along the property's eastern tree-line for approximately 187 ft. From there, the boundary turns west to run for approximately 238 ft. along the property's southern tree-line. At that point, the boundary runs north for approximately 179 ft. following the fence along CTH M. Following the curve of the fence at the CTH M – Midtown Rd. intersection, the boundary turns eastward to run for another 231 ft. following the fence along Midtown Rd. to the point of beginning.

Boundary Justification:

The historic boundary has been delineated to encompass the school building (the only contributing resource) and the surrounding schoolyard that was historically associated with the property and to provide an appropriate setting. The south and east sides of the historic boundary coincide with the existing tax parcel boundaries and are visually delineated by the existing tree-line. The north and west sides of the historic boundary are slightly outside of the existing tax parcel boundaries so as to be visually defined by the existing rail fence along CTH M and Midtown Rd. Because the fence was constructed outside of the period of significance, it is not considered a contributing resource.

Methodology:

(Describe the steps taken to identify and evaluate the historic property, including research, consultation with BEES, and previous eligibility recommendations)

The property was identified as potentially eligible for the National Register as part of a survey of the historic and architectural resources along the CTH M project corridor in Dane County. The building had not been previously surveyed and had no previous eligibility recommendations. A site visit was conducted in June of 2011, at which time photographs were taken and the property was viewed. Information about the property was gathered from an interview with the current property owner and from historical materials in the Madison Public Library, Wisconsin Historical Society Library and Archives, and the Verona Public Library. This information was used to complete this form.

Access to view the interior of the building was denied by the current property owner, Robert L. Courter, although Mr. Courter did provide a description of the interior via telephone on June 13, 2011. This information was added to the narrative description below.

Narrative Description:
(Describe the property in two pages or less.)

The Gordon School is a One-story Cube building constructed in 1929. The building is rectangular in plan with a concrete foundation, red brick walls, and an asphalt-shingled hipped roof.

The front (west) elevation is symmetrical in plan with a projecting front entry bay in the center of the elevation. Centered in the entry bay is a pair of wooden doors with two vertical glazed panels in their top halves. A rectangular, single-pane transom is located above the doors. Above this, a limestone panel reads “1929 / JT. DIST. NO. 11”. One narrow 1-over-1 window is located on each side of the front doors within the entry bay. A soldier course of bricks wraps around the entry bay below the windows to interrupt the running-bond pattern of the rest of the bay. A pair of 1-over-1 windows is locate on each side of the entry bay (the southernmost pair is slightly smaller with a wooden panel above); below these are hinged basement windows at ground level. A small rectangular skylight window is located in the center of the western roof slope. Just north of this is a red brick chimney.

The south elevation is asymmetrical in plan and contains one small 1-over-1 window near the southeast corner. A gabled dormer is located in the center of the elevation; the dormer contains a pair of 1-over-1 windows and is clad in board and batten siding. A small rectangular skylight window is located just east of the dormer.

The rear (east) elevation is asymmetrical in plan with a single door near the southeast corner and two banks of four 1-over-1 windows with decorative louvered wood panels above. The windows and louvered panels replace the taller windows that were originally located in this elevation. The door is accessed via a concrete stoop with metal railing that runs parallel to the house. Two gabled dormers are located in the east elevation; each dormer contains one 1-over-1 window and is clad in board and batten siding.

The north elevation is asymmetrical in plan and contains three small window openings. The easternmost two are covered with louvered wooden panels. The westernmost window is a single-pane awning window.

East of the Gordon School is a noncontributing 2-bay garage. The garage was constructed c.1970 and has a concrete foundation, board and batten walls, and an asphalt-shingled hipped roof. Two vinyl overhead garage doors cover the opening of each bay.

Although access to the interior of the Gordon School building was denied, current owner Robert Courter confirmed that since they purchased the property in 1978, the interior space no longer reflects its original function (rather than a large, central open space, the main floor of the building has been divided into smaller separate rooms). According to Mr. Courter, the only interior features that remain from the building’s days as a schoolhouse are sections of original hardwood flooring.

Name and location: Gordon School, Town of Verona, Dane County, WI

Narrative Statement of Significance:

(Describe the context in which you have evaluated the property and give a summary statement of significance, preferably in no more than two pages.)

CRM Context Chapters: Vol. II – Architecture
Vol. III – Education

The Gordon School was initially recommended as potentially eligible under National Register *Criterion A: Education* for its association with the history of public education in Dane County and the Township of Verona. The period of significance for the property is from 1929 (the year of construction) to 1966 (the last year the school operated before it was closed due to district consolidation). The Gordon School is in good condition, but retains only a low-to-moderate degree of integrity due to its alteration to a private residence more than 30 years ago. Because of its diminished integrity and relatively short-lived function as a public school, and because no information was found to suggest that the building has any special significance to the history of public education in Dane County or the Township of Verona, the property is not considered eligible for listing under *Criterion A*.

The property was also evaluated under *Criterion C: Architecture* as an example of a distinct property type: i.e., an early twentieth-century one-room schoolhouse. However, because of the interior and exterior alterations to the building, it no longer possesses a sufficient degree of integrity to be considered an exemplary representative of this building type. For this reason, the Gordon School was not considered eligible for listing under *Criterion C*.

Historic Context

Dane County, Wisconsin is located about 24 miles north of the Illinois-Wisconsin border and covers an area of approximately 1,238 square miles. The first European-American settlement in Dane County occurred in the late 1820s in the area of present-day Madison. The Wisconsin territorial legislature formed Dane County in 1836; the next decades saw the formation and adjustment of the county's 34 individual townships, including Verona Township.[1] Until well into the twentieth century, Verona was known as a small town with much outlying farmland.[2]

In the earliest days of Wisconsin's history, schools were commonly supported by the informal cooperation of neighbors before an official district was organized. Such organization often grew out of settlers' desires to build a schoolhouse and was funded primarily by private donations. At the time of Wisconsin's statehood in 1848, the new state constitution provided for a free public school system supported by local taxes and interest from a state school fund.[3] This made Wisconsin the first state to provide a system of

[1] "City History," Middleton Area Historical Society, http://www.ci.middleton.wi.us/City/history/history.htm (accessed March 15, 2011).
[2] *Verona Area History, 1847-1972: Quasquicentennial* (Verona, WI: Verona Press, 1972), np.
[3] Barbara Wyatt, ed., *Cultural Resource Management in Wisconsin*, Vol. III (State Historical Society of Wisconsin, 1986), 1-1.

free, universal primary education.[4] The first school building in Verona Township was most likely the Patton School; originally of log construction and replaced by a stone building in 1845. Two other log schoolhouses were built in the 1840s.

In September of 1859, members of Joint School District No. 11 elected to construct a school at the northwest corner of what was then Isaac S. Newton's acreage; this new school building was the first Gordon School.[5] Additional school buildings were constructed as needed through the nineteenth and early twentieth centuries. The first Gordon School was a wooden, one-room schoolhouse at the corner of Midtown Rd. and CTH M. On September 14, 1928, a tornado hit the building; although no children were seriously hurt, the schoolhouse was destroyed. In 1929, a new brick schoolhouse with a full basement was built at the site of the previous Gordon School.[6]

Property History

As part of Joint District No. 11, the Gordon School was constructed in 1929 on an acre of land in the northwestern corner of what had by that time become William Grabaudt, Jr.'s 128-acre farm. Erected at the site of the earlier Gordon School, the new building cost $7,000 with an additional $400 spent to equip the building with furniture and other supplies. The school's first teacher and principal was Florence Seeley who earned $100 per month for her services. In its first year of operation, the school had 11 students who ranged in age from 7 to 13 (first through eighth grade). All of the Gordon School students lived within two miles of the school building.[7]

In the 1950s, due to the post-war growth of the area's population, schools throughout Verona became overcrowded and old buildings were replaced or were given sizable additions. In 1962, district consolidation was proposed; however, because the proposal was opposed by the area's rural schools, it was initially declined. In 1964, consolidation was finally approved and 12 area districts, including Joint District No.11 (the Gordon School), merged with the local high school. In 1965, the new school district began selling the abandoned rural schoolhouses at a public auction. After the end of the 1965-66 school year, with a total enrollment of 11 students, the Gordon School closed.[8] In 1969, it was sold to Richard Shutter who converted it to a private residence. The current owners, Robert and Sandy Courter purchased the property in 1978.[9]

Architectural Context

One-story Cube buildings typically have boxy, diminutive proportions with square or rectangular plans and a low-hipped or pyramidal roof. Decorative elements are rare as One-story Cube buildings are generally low-cost, utilitarian structures. This vernacular style was popular in Wisconsin between about 1870 and 1930.[10] Some early-twentieth-century schoolhouses utilized the One-story Cube style (and variations thereof) because of the style's simplicity, practicality, and low construction cost.

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[4] Ibid., 2-5.
[5] Karl Curtis, *A Sesquicentennial History of Verona: 1847 – 1997* (Verona, WI: Verona Press, 1997), 11.
[6] Ibid., 41 – 42.
[7] Dane County Superintendent of Schools, Annual reports of school districts: 1912-1965 (Madison, WI: Wisconsin Historical Society Archives.
[8] Curtis, *A Sesquicentennial History*, 48 – 49.
[9] Dane County Office of Deeds and Records. Madison, WI.
[10] Wyatt, *CRMP*, 3-8.

In addition to the Gordon School, 34 other one-to-six-room schools have been recorded in WHPD in Dane County (seven of which are One-story Cube buildings). Of these 34, one is listed in the National Register of Historic Places: the Waubesa School in McFarland.

Many of Wisconsin's earliest – and smallest – schools were abandoned after World War II when school district consolidation became a priority throughout the state.[11] In 1938, Wisconsin had 6,181 working one-room schoolhouses; by 1962 the number had dropped to only 156. The last one-room school in Wisconsin was officially closed at the end of the 1969-1970 school year.[12]

Although the Gordon School is in good condition, it retains only a low-to-moderate degree of integrity due to its alteration to a private residence more than 30 years ago. Because of its diminished integrity and because no information was found to suggest special importance to the history of public education in Dane County or Verona Township, the property is not considered to possess a sufficient level of local significance in the area of *Education* to render it eligible for listing under *Criterion A*.

[11] Ibid., 1-8.
[12] Ibid., 2-9.

Name and location: Gordon School, Town of Verona, Dane County, WI

Bibliography:

Curtis, Karl. *A Sesquicentennial History of Verona: 1847 – 1997*. Verona, WI: Verona Press, 1997.

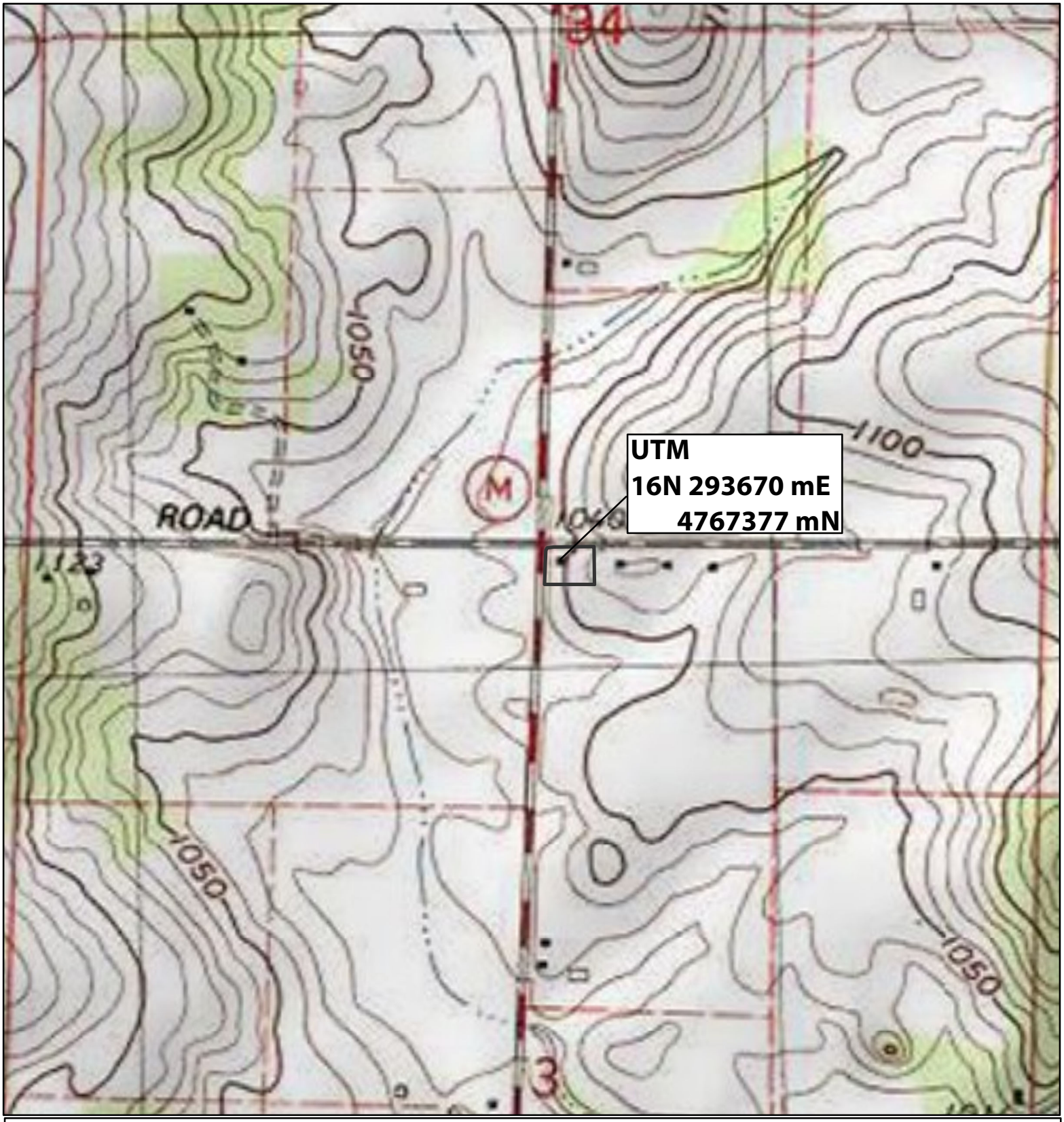
Dane County Superintendent of Schools. Annual reports of school districts: 1912-1965. Madison, WI: Wisconsin Historical Society Archives.

Verona Area History, 1847-1972: Quasquicentennial. Verona, WI: Verona Press, 1972.

Wyatt, Barbara, ed. *Cultural Resource Management in Wisconsin*. Madison, WI: State Historical Society of Wisconsin, 1986.

Determination of Eligibility Prepared By:

Name & Company:	Gail R. Klein, Great Lakes Archaeological Research Center, Inc.				
Address:	PO Box 511549			Phone:	414-481-2093
City:	Milwaukee	State:	WI	Zip:	53203
Email:	gklein@glarc.com			Date:	June 23, 2011
Sub-contracting to:					
Address:				Phone:	
City:		State:		Zip:	
Email:				Date:	



Gordon School
6987 Midtown Road

Great Lakes Archaeological
Research Center, Inc.
GLARC Project 11.003

WisDOT ID 5992-09-81

Mapped: 20 December 2011

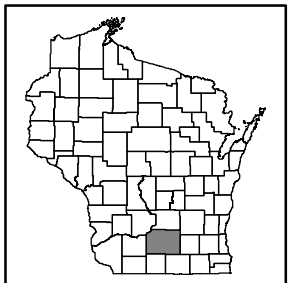
Data Sources: USGS, GLARC.

0 40 80 160
Meters

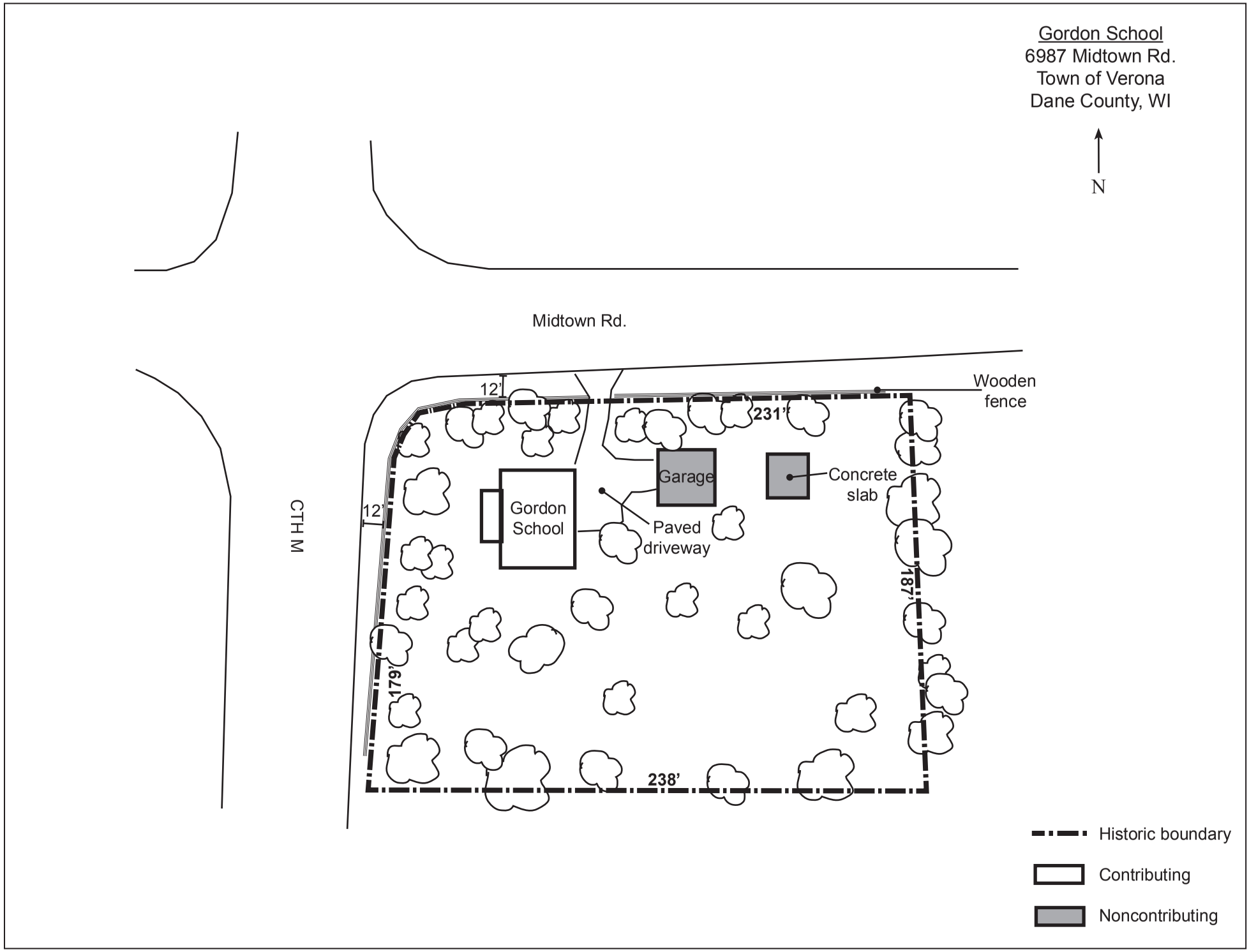
0 175 350 700
Feet

1:8,060

N



Dane County


Gordon School
6987 Midtown Rd.
Town of Verona
Dane County, WI
N
Midtown Rd.
CTH M
12'
12'
231'
187'
179'
238'
Wooden fence
Garage
Concrete slab
Gordon School
Paved driveway
Historic boundary
Contributing
Noncontributing

<u>Gordon School</u>
6987 Midtown Rd.
Town of Verona
Dane County, WI

Photographed by GLARC
June 17, 2011
Digital images on file at GLARC

Photo 1 of 7
West (front) elevation, looking east
186341a

Photo 2 of 7
West and south elevations, looking northeast
186341b

Photo 3 of 7
South elevation, looking north
186341c

Photo 4 of 7
East elevation, looking west
186341d

Photo 5 of 7
East and north elevations, looking southwest
186341e

Photo 6 of 7
North elevation, looking southeast
186341f

Photo 7 of 7
West elevation of garage, looking east
186341g

Photo 1 of 7

Photo 2 of 7

Photo 3 of 7

Photo 4 of 7

Photo 5 of 7

Photo 6 of 7

Photo 7 of 7

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ATTACHMENT O:

GLARC Archaeological Investigation Coordination

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GREAT LAKES
ARCHAEOLOGICAL RESEARCH CENTER, INC.

Gerald and Linda Endres
7055 County Highway PD
Verona, WI 53593

April 6, 2012

Mr. and Mrs. Endres,

The City of Verona and Dane County will be conducting additional archaeological investigations on your land for a proposed highway project on CTH M.

The archaeological study is being done in compliance with state and federal laws that serve to protect natural and cultural resources such as archeological sites. This field investigation is needed to ensure existing resources can be identified and avoided by the project to the extent that is practical. Earlier this year, archaeological studies conducted on your property identified archaeological sites and deposits within the project area. Further study is therefore required on your property and will consist of the following methodology.

The site is located in the plowed field. Methodology in a plowed field includes stripping the top plowed area off to reveal the undisturbed subsoil. We will be determining if there are in cultural features in the subsoil, if there are, the "features" will be excavated by a team of archaeologists.

This involves carefully removing the soil in layers and passing it through mesh screen. All cultural materials are retrieved for analysis. Following this process all excavation units and soils removed will be refilled. All materials recovered during the excavation will be documented and recorded. Results of the fieldwork and laboratory analysis will be compiled into a descriptive report detailing the results of the study.

The investigations will be concentrated within areas indicated as possible future highway right of way. The studies are being conducted to determine the extent and condition of any archaeological remains that are present.

All excavations will be refilled by Great Lakes Archaeological Research Center, Inc. The investigations will take place during April or May of 2012.

If you have questions or desire additional information concerning the archaeological survey, please contact me (Great Lakes Archaeological Research Center, Inc.) at (414) 481- 2093. Questions regarding proposed design plans for the project will not be answered by

P.O. BOX 511549.MILWAUKEE.WI.53203.414.481.2093.414.273.1410 FAX

archaeological personnel. Please address such questions to Ron Rieder of the City of Verona at (608) 848-6801.

Thank you for your assistance.

Sincerely,

Katherine Shillinglaw
Great Lakes Archaeological Research Center, Inc.

Cc: Jason DiPiazza, MSA
Pam Dunphy, Dane County Department of Public Works, Highway and Transportation
Ron Rieder, City of Verona

GREAT LAKES
ARCHAEOLOGICAL RESEARCH CENTER, INC.

Jason DiPiazza
MSA
2901 International Lane, Suite 300
Madison, WI 53704-3133

March 23, 2011

RE: CTH M WisDOT ID 5992-09-81
Prairie Hill Rd. to Cross Country Rd.
Dane County, WI

Dear Mr. DiPiazza,

During the course of researching the CTH M project, I contacted the county historical society and preservation organization. This memo documents my correspondence.

In March of 2011, I communicated with the Dane County Historical Society via email and phone messages and the Madison Trust for Historic Preservation via email to notify them of the project activity and ask for any input or concerns regarding the project. Neither group identified any additional historic resources or expressed concern about the project.

Sincerely,

Gail Klein

Gail Klein
Architectural Historian

P.O. BOX 511549.MILWAUKEE.WI.53203.414.481.2093.414.273.1410 FAX

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Phase I and II Archaeological Investigations for CTH M, Dane County, Wisconsin

Authored By: Katherine E. Shillinglaw, M.S., Project Manager
with Rhiannon Jones, M.A., Archaeologist

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WisDOT ID 5992-09-81
GLARC ROI 781
GLARC Project No.11.003

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Disclaimer and Warranty

Information contained in this report should be considered confidential and only used to comply with requirements of the National Historic Preservation Act of 1966 as amended or Wisconsin Statutes 44.40 and 157.70. The looting or destruction of historic properties may be subject to legal fines, imprisonment, and/or penalties.

The research conducted in this report was authorized and funded by the Federal Highway Administration and WisDOT in compliance with Sections 106 and 110 of the National Historic Preservation Act of 1966 as amended. The research was conducted in compliance with the Se*cretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation* as amended and annotated, the Wisconsin Archaeological Survey's *Guidelines for Public Archaeology in Wisconsin* as revised in 1997, and Chapters 44.40 and 157.70 of the Wisconsin Statutes.

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Management Summary

In May and June 2011, Great Lakes Archaeological Research Center, Inc. (GLARC) conducted Phase I archaeological investigation for the CTH M project in Dane County, Wisconsin. Archaeological investigations were completed for MSA Professional Services, the Wisconsin Department of Transportation, and the Federal Highway Administration under the auspices of WisDOT Project ID 5992-09-81.

The Phase I archaeological survey identified two archaeological sites within the CTH M project area, site 47DA1421 (Endres site), is a lithic scatter of an unknown prehistoric affiliation. The site was determined to be potentially eligible for the National Register of Historic Places (NRHP). This determination was based on types and qualities of the materials collected, which suggested that the site may be a campsite and/or resource processing locale that could generate important information about the prehistoric lifeways in the area. It was decided that the project would be redesigned to avoid the site.

Site 47DA1420 (Ellefson site), is a lithic scatter of an unknown prehistoric affiliation. The site was determined to be potentially eligible for the National Register of Historic Places (NRHP). This determination was based on the types and density of high quality chipped flaking debris and a notched point base. In addition, the Phase I survey showed that the site likely had an intact soil horizon, suggesting that the site may produce important data for understanding the regional prehistory. A Phase 2 site evaluation was conducted between October 24th and November 4th, 2011 and encompassed 21 m^2, or about 1 percent of the site area. In was determined during the Phase 2 that the site was once under cultivation, as plow scars were encountered in the test units and pre- and post-contact cultural material was found mixed together within the plow zone. Relatively few artifacts were recovered, with the pre-contact assemblage consisting entirely of non-diagnostic lithic material.

Site 47DA1420 is recommended as not eligible for listing on the National Register of Historic Places. The site produced little cultural material and lacks vertical integrity. It was likely truncated on the western side by CTH M.

Based on these data and the planned avoidance of 47DA1421, the CTH M will not have an adverse effect on sites 47DA1420 or 47DA1421. No further work is recommended.

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Part I: Project Background

Introduction

In May and June 2011, Great Lakes Archaeological Research Center, Inc. (GLARC) conducted Phase I archaeological investigation for CTH M in Dane County, Wisconsin. Archaeological investigations were completed for MSA Professional Services, the Wisconsin Department of Transportation, and the Federal Highway Administration under the auspices of WisDOT Project ID 5992-09-81.

The Phase I archaeological survey identified two archaeological sites within the CTH M project area, site 47DA1421 (Endres site), is a lithic scatter of an unknown prehistoric affiliation. The site was determined to be potentially eligible for the National Register of Historic Places (NRHP). This determination was based on types and qualities of the materials collected, which suggested that the site may be a campsite and/or resource processing locale that could generate important information about the prehistoric lifeways in the area. It was decided that the project would be redesigned to avoid the site.

Site 47DA1420 (Ellefson site), is a lithic scatter of an unknown prehistoric affiliation. The site was determined to be potentially eligible for the National Register of Historic Places (NRHP). This determination was based on the types and density of high quality chipped flaking debris and a notched point base. In addition, the Phase I survey showed that the site likely had an intact soil horizon, suggesting that the site may produce important data for understanding the regional prehistory. A Phase 2 site evaluation was conducted between October 24th and November 4th, 2011 and encompassed 21 m^2, or about 1 percent of the site area. In was determined during the Phase 2 that the site was once under cultivation, as plow scars were encountered in the test units and pre- and post-contact cultural material was found mixed together within the plow zone. Relatively few artifacts were recovered, with the pre-contact assemblage consisting entirely of non-diagnostic lithic material. Site 47DA1420 is recommended as not eligible for listing on the National Register of Historic Places. The site produced little cultural material and lacks vertical integrity. It was likely truncated on the western side by CTH M.

The archaeological investigations detailed in this document were carried out on behalf of MSA Professional Services, the Federal Highway Administration (FHWA) and WisDOT to address responsibilities for identifying, recording, and managing cultural resources as stipulated under Section 106 of the National Historic Preservation Act of 1966 (P.L. 89-665) as amended and 36 CFR, part 800, which serves to implement the Act, as well as Wisconsin Statutes 44.40 and 157.70. The methods and techniques utilized during the course of investigations conform to the standards and guidelines set forth by the National Park Service in the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (1983) and by the Wisconsin Archaeological Survey in *Guidelines for Public Archaeology in Wisconsin, as Revised* (Kolb and Stevenson 1997). Archaeological materials, field notes, and supporting documentation are currently located at the Great Lakes Archaeological Research Center, located at 1408 North 5th Street in Milwaukee, Wisconsin.

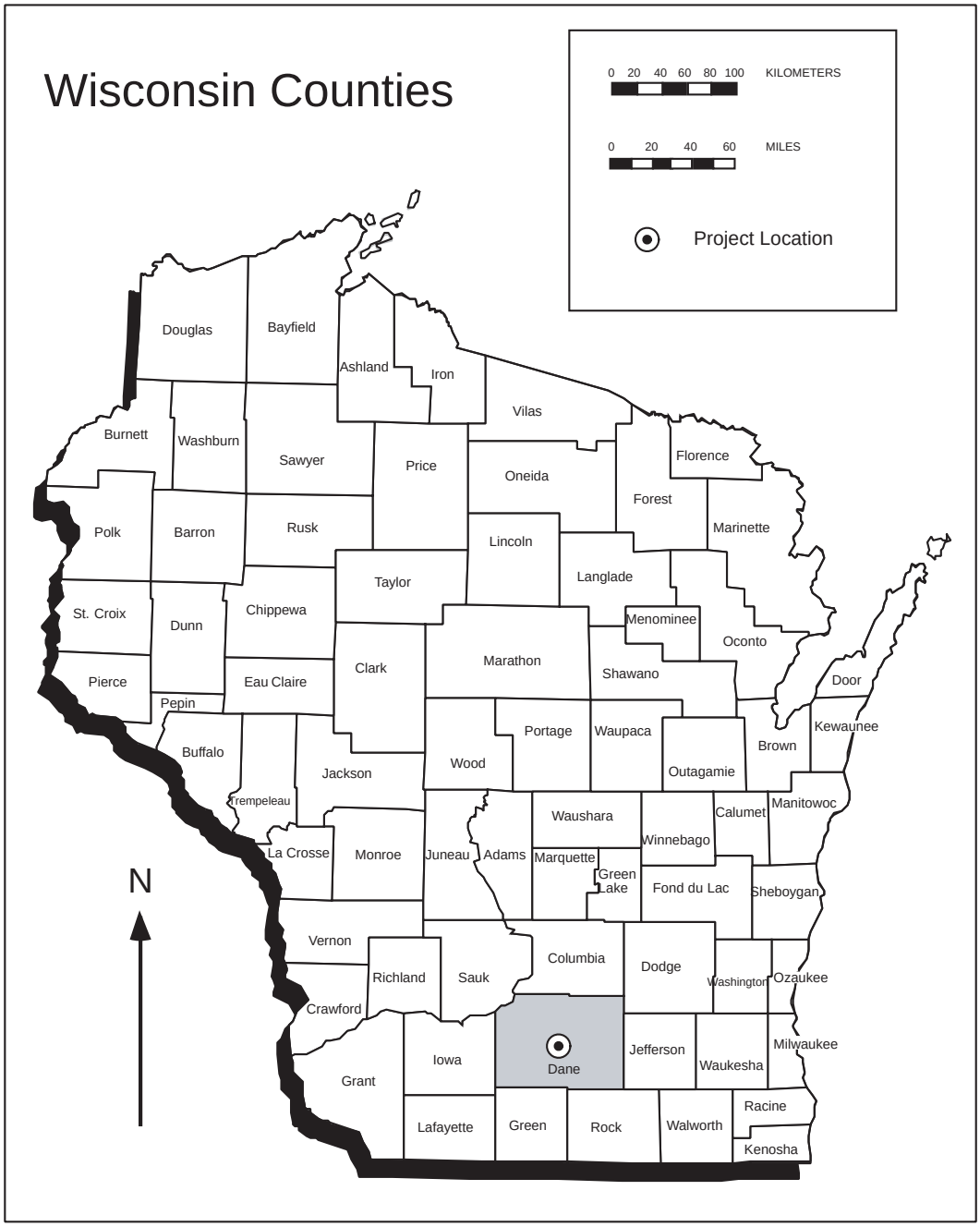

Figure 1.1 Location of the project in Dane County, Wisconsin

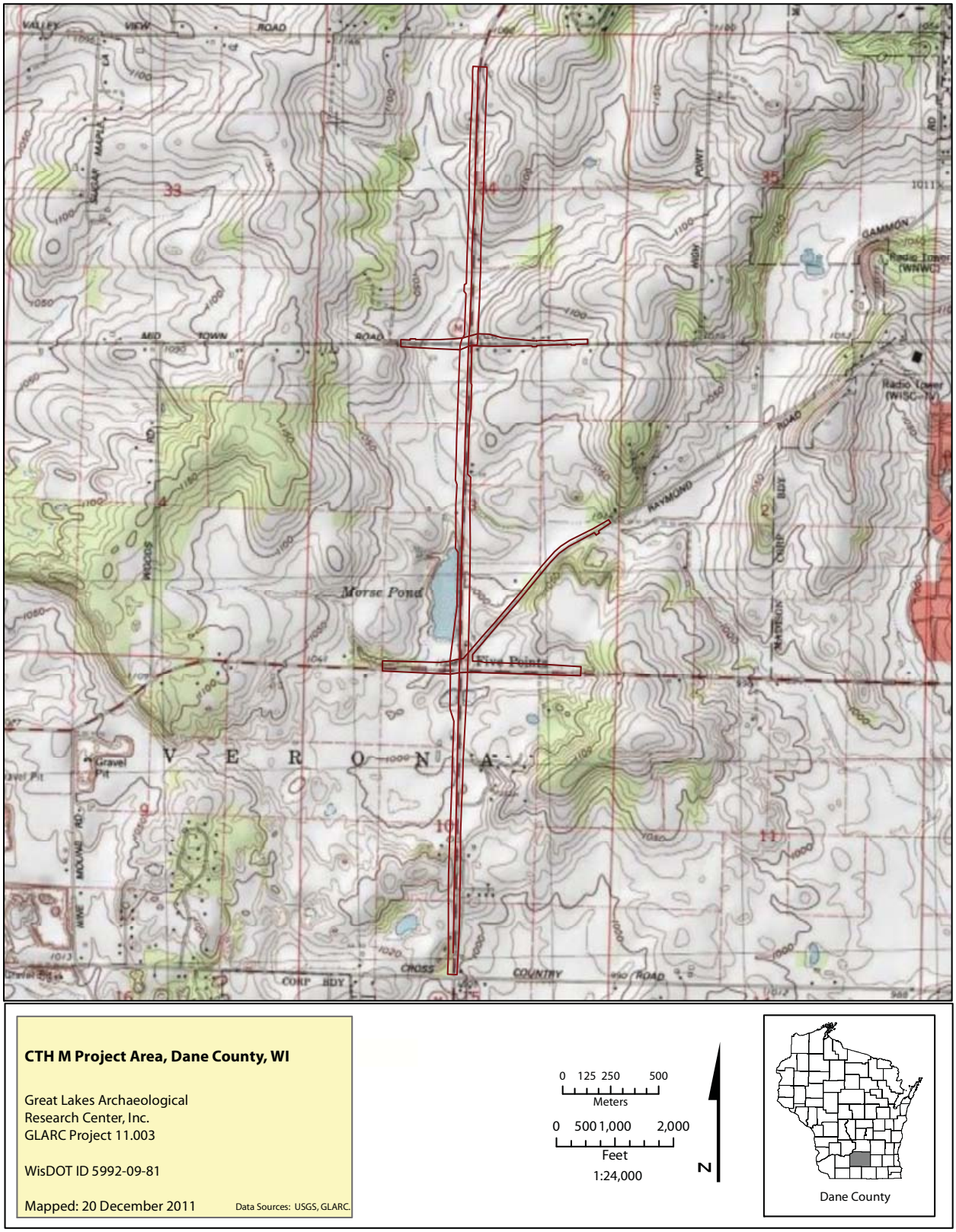

Figure 1.2 Location of the considered alignments within the CTH M project area.

Project Description and Location

The project area is located in Town 7 North, Range 8 East, Section 34 and Town 6 North, Range 8 East, Sections 3 and 10, Dane County, Wisconsin (Figure 1.1, 1.2). The study area is located on the west side of Madison, between Prairie Hill Road and Cross Country Road.

Report Organization

This report is organized in five parts. Part I provides the project background and identifies the project location. Part II provides background on the environmental and cultural setting of the project area. Methodology for the archives and literature review and field survey is detailed in Part III. Part IV presents the results of the archives and literature review. Part V provides the results of the Phase I Survey field survey. Part VI provides the results of the Phase 2 evaluation. Finally, Part VII of the report summarizes the research with a review of the results, and states the cultural resource management recommendations. References Cited and Appendices follow Part VII.

Part II: Environmental and Cultural Setting

Environmental Setting

This section provides an overview of the environmental context for the CTH M project area. The physical setting, including glacial history and physiography is first discussed, followed by a summary of climate, soils, and floral/faunal resources. The following narrative is intended as a summary of the environmental setting of the project area. More in depth discussions can be found in Chamberlin (1877), Martin (1965) , Curtis (1959), Paull and Paull (1977) and in various Wisconsin Geological and Natural History Survey Bulletins. The narrative is intended to provided context for the archaeological study of the CTH M project area.

Glacial History and Physiography

The project area is located within the Eastern Ridges and Lowlands physiographic province as defined by Martin (1965) (Figure 2.1). The topography of the province is influenced by cuestas, or ridges of resistant Paleozoic sedimentary rock flanked by lowlands developed on less resistant bedrock (Paull and Paull 1977). Specifically, the project can be placed within the Black River and Magnesian Cuesta, a subdivision of the Eastern Ridges and Lowlands. This cuesta is low and narrow and formed by resistant Lower Magnesian limestone. It varies greatly in altitude and width. In discussing the area near Madison Martin notes:

> In Dane county near Madison is a hilly region whose subsurface topography (is)...related to four rock formations, the Cambrian or Potsdam sandstone, Lower Magnesian limestone, St. Peter sandstone, and the Galena-Black River limestone, in addition to the unconsolidated, overlying glacial drift. The four rock formations all dip southward at angles of less than half a degree, so that for purposes of topographic description the structure may be spoken of as essentially horizontal. The texture of the rock formations is summarized by saying that two resistant formations, the Galena-Black River and Lower Magnesian, alternate with two weak formations, the St. Peters and Potsdam (1965:221).

The processes that have acted upon these formations are (a) normal erosion agencies—weathering, stream work, and to a lesser degree, underground water and wind—and (b) glacial agencies—rasping and melting ice that deposited till and released massive amounts of water, forming glacial-stream and lake deposits (1965:221). Glaciation had the most dramatic topographic effects on the project environs. The project area is located on a rolling landscape within the Four-Lakes region of Dane County. The topography was formed when huge quantities of water that flowed out of the retreating glaciers were forced to cut through pre-glacial valleys and, as a result made the valleys deeper and created Glacial Lake Yahara. The great glacial lake eventually receded, forming the “Four Lakes” in the Yahara River flowage, including Lake Mendota, Lake Monona, Lake Waubesa, and Lake Kegonsa.

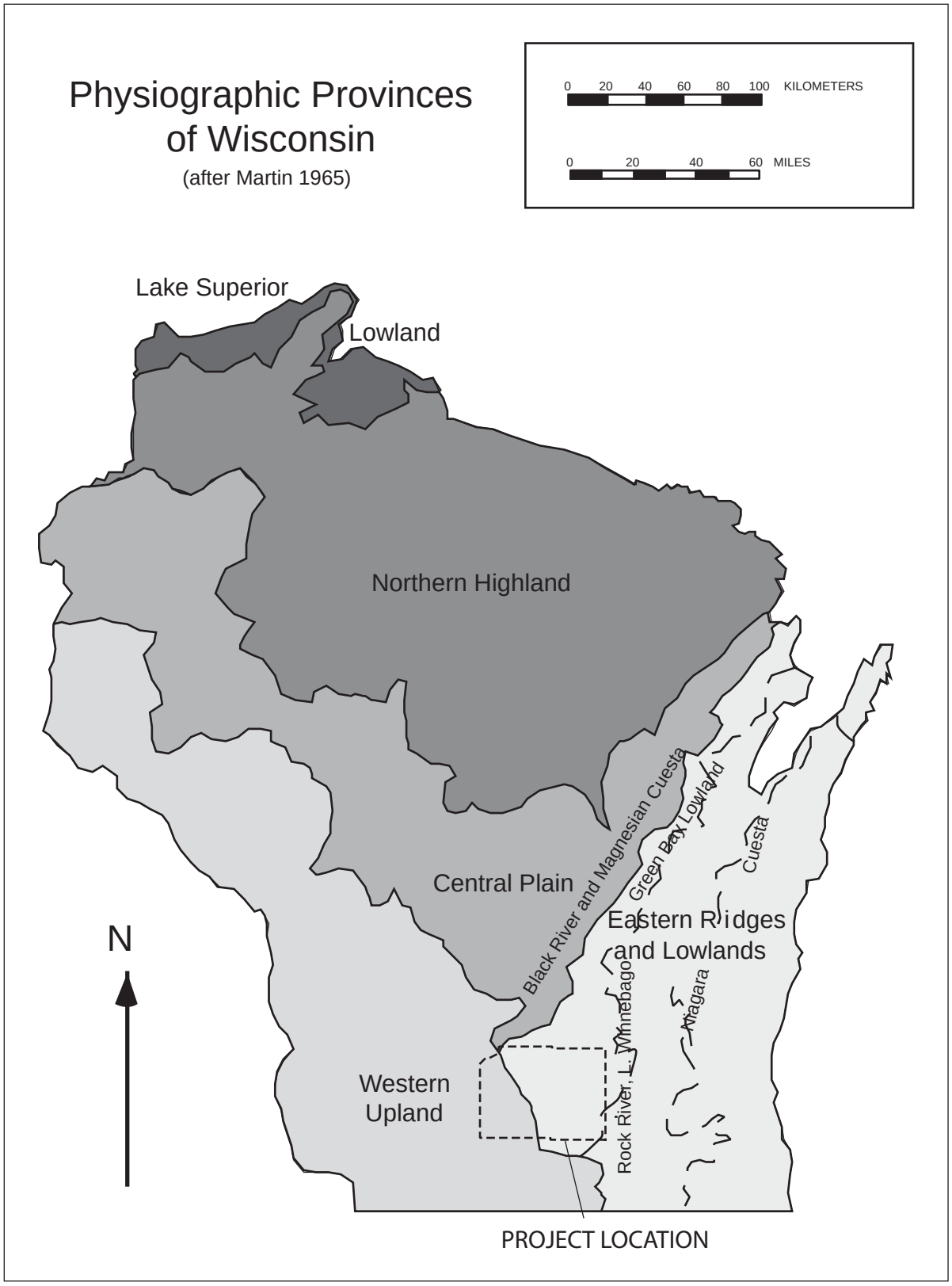

Figure 2.1. Project location relative to the physiographic provinces of Wisconsin.

Vegetation

Prior to nineteenth century logging and cultivation, the oak savanna (or oak opening) was the most common savanna type south and west of the tension zone in Wisconsin (Curtis 1959:326). Goldstein and Kind (1987:18-19) note that the vegetation of southeastern Wisconsin was dominated by upland vegetation (75%), followed by lowland vegetation (19%), and standing water (6%). Typical upland vegetation consisted of burr oak and occasional black oak and white oak within a mesic prairie floristic community, while swamp oak within a wet-mesic prairie environment dominated the lowland community (Curtis 1959:326) (Figure 2.2).

Oak Savanna

The oak savanna was one of the most widespread presettlement plant communities in southeastern and south central Wisconsin (Curtis 1959:326). Although trees form an important component of the oak savanna plant community, they are found in such a low density that grasses and other herbaceous species are the dominant plants of the community. Upland areas within the oak savannah typically consist of bur oaks interspersed among prairie grass species, although black oak and white oak are also present. In lowland areas, the swamp white oak is commonly found spread among wet-mesic prairie grasses. Curtis (1959:461-462), among others, has suggested that the oak openings found in Wisconsin may have been purposely maintained through the burning of grasslands by both prehistoric and historic Native American residents. The suppression of prairie fires by Euro-American settlers led to a closing in of the oak savanna across much of the state as grassland areas were invaded by young oak trees.

Prairie

Prairies are plant communities that are dominated by grass species rather than trees. Within Wisconsin, true prairie communities are found southwest of the tension zone that divides the two floristic provinces of the state (Curtis 1959:262). The prairie plant community is noted for its great diversity of species. A study of the remnant prairies of Wisconsin (Curtis and Greene 1949) found species present that were well adapted to dry, thin soils of limestone ridges and steep hillsides, others that were abundant in areas with deep loamy soils and good drainage, and still other species that were common to low inundated flatlands and poorly drained soils. Early settlers commented on the vastness of Wisconsin's prairies, oftentimes referring to them as rolling oceans of grasses (Curtis and Greene 1949; Ruggles 1835; Smith 1927). Several of the larger and more important prairies in Wisconsin were given distinctive names by early settlers. These include: Barnes Prairie in Racine County; Walworth Prairie in Walworth County; Rock Prairie in Rock County; Arlington Prairie in Columbia and Dane counties; Sauk Prairie in Sauk County; the Military Ridge Prairie, extending from Verona nearly to the Mississippi River; and the Star Prairie in St. Croix County.

Soils

Soils of the project region are varied, and the types of soils present in a given area are largely dependent on the local geomorphology. Generally, the soils of the project area are those formed on the Southeastern Upland (Hole 1976). The topography of the region features a rolling landscape created by glacial features such as morianes, cuastas, drumlins, and depressions. Interspersed are hundreds of lakes and wetlands. Approximately one-third of the region has well-drained soils, one-third has excessively drained soils, about 12% has moderately drained soils, about 10% has peat and muck soils, and about 15% has lowland wet mineral soils . The surface is estimated to be approximately 13,000 years old in most of the region, though silting in of lowland bogs and marshes has been accelerating since the advent of land

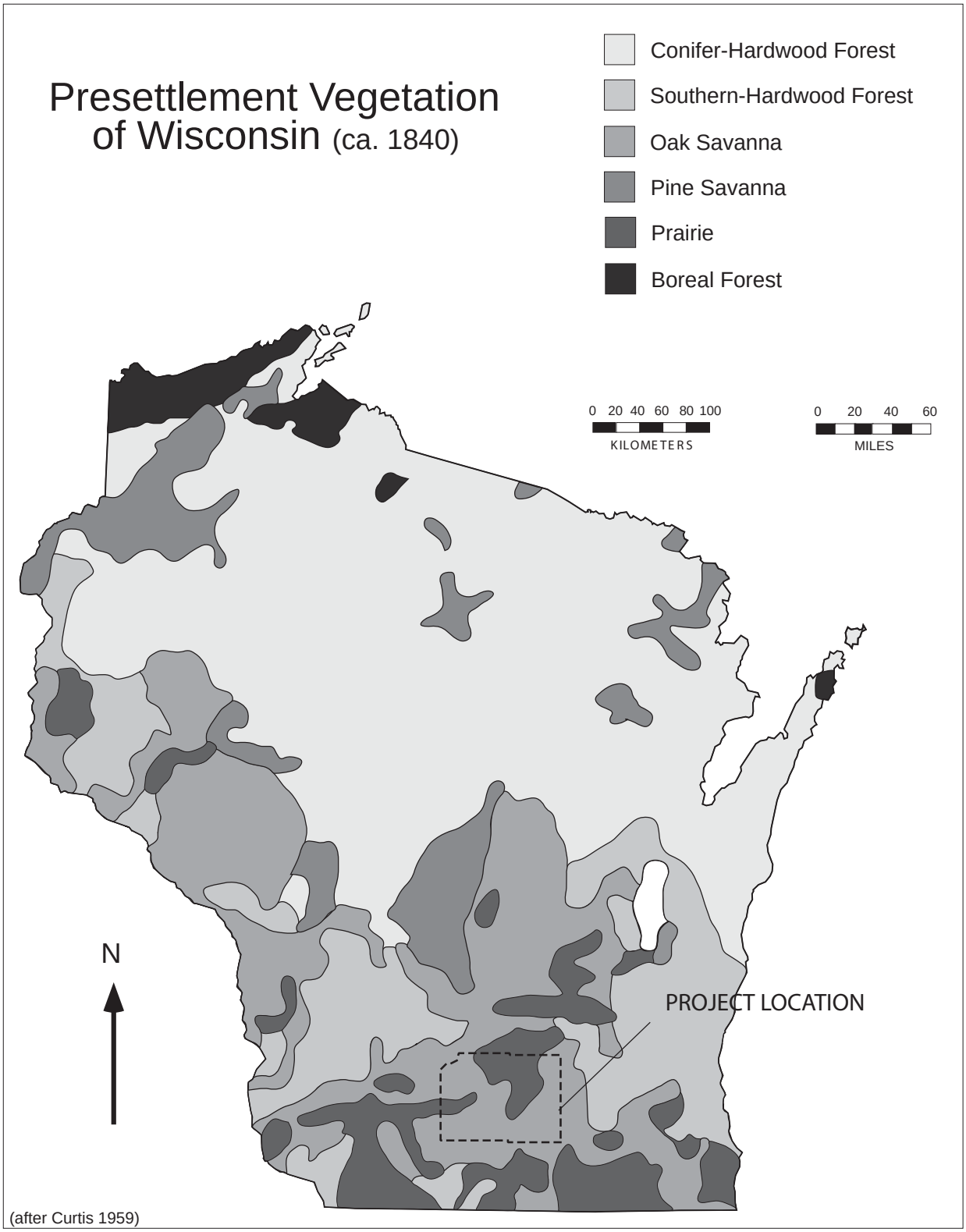

Figure 2.2 Presettlement vegetation of the project area.

clearing and full-scale farming during the mid-1800s, resulting in areas of much younger "made land". Most of the regions bedrock is buried under glacial till (Hole 1976:61). A detailed report of the regions soil variability is beyond the scope of this project. A reference map and key of soil types coincident with the project area has been included (Figure 2.3). Soils vary between well drained and moderately well drained, deep silt loams underlain by sandy loam glacial till (Dodge-St. Charles-McHenry) and well drained, poor;y drained, and somewhat excessively drained, moderately deep and deep loams, loamy sands, and fine sandy loams that are underlain by silt , sand, and gravel formed in outwash material (Bativia-Houghton-Dresden) Detailed information on soil taxonomy and properties of the region can be found in Hole (1976:61-70) and in Glocker and Patzer (1978).

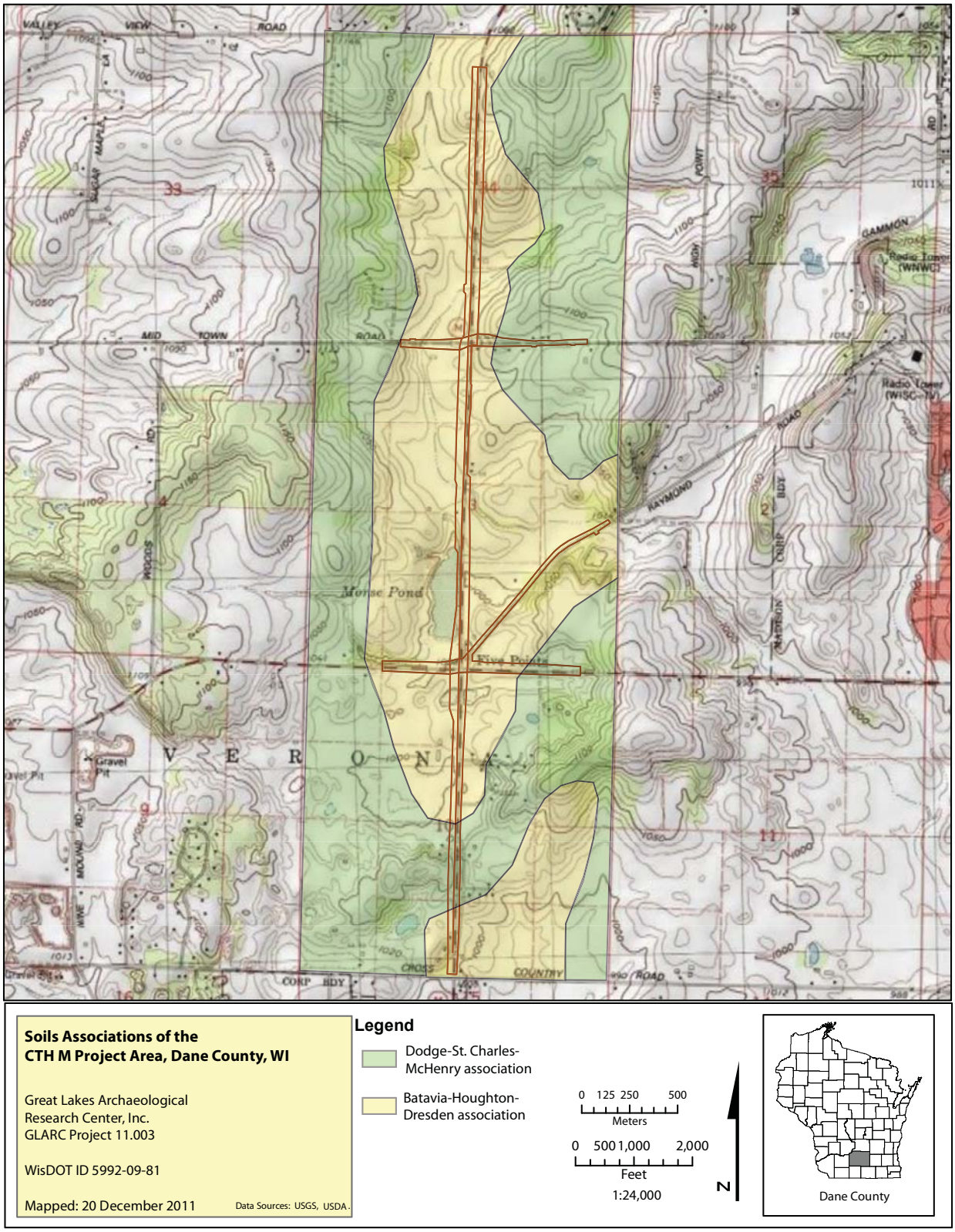

Figure 2.3 General soil map of project area.

Cultural Setting

Paleoindian Tradition

Early Paleoindian Stage (13,000 - 10,000 BC)

The earliest inhabitants of the Four Lakes area are believed to be the descendents of the first humans to inhabit the North American continent. Anthropological research has posited theories of who these early immigrants were, how they traveled to the New World, and the timing of their migration (Anderson and Gillam 2000; Fladmark 1979; Greenberg et al. 1986; Haynes 1964, 1969; Hoffecker et al. 1993; Martin 1973; Meltzer 1995, 1997). Two widely argued origins for the earliest immigrants are far eastern Asia and Europe, with theorized modes of travel including ocean crafts skirting either the Pacific or Atlantic coastlines from Asia or Europe, or overland, traversing the Bearing Land Bridge from Asia during interstitial warm periods between glaciations.

There is a debate on whether the previously acknowledged Clovis peoples were the first to reach North America, or whether there were earlier immigrants. Controversial research conducted in Kenosha and Racine Counties has led Overstreet (1991; 1994) to suggest that the earliest occupation of southern Wisconsin may date to 13,000 BP, pre-dating Clovis. The Chesrow complex was originally defined as falling late within the Early Paleoindian stage on the basis of excavations at the Chesrow site and surface collections at nearby sites in Kenosha County in southeastern Wisconsin. Though the complex has not been securely dated, Overstreet has argued for an early date based on the recovery of mammoth and mastodon remains bearing butchery marks, dated to 12,100-12,600 BP, on the same landforms and within the same geographic constraints as Chesrow complex material (R. J. Mason 1986; Overstreet 1991; 1993).

The early Paleoindian Fluted Point complexes (Clovis, Gainey and Folsom) have been securely dated to between 11,500 BP and 10,000 BP. The fluted point complexes are distinguished by the presence of lanceolate projectile points, commonly manufactured of fine and exotic materials, which have been carefully thinned at the base by the removal of long, deep flakes extending along the blade producing a distinctive, fluted appearance. Points belonging to the Clovis complex, dating 11,500-11,000 BP, have flute scars that extend less than one-third of their length. Folsom points (produced ca. 10,000 BP) have broad flute scars that extend nearly the entire length of the point. Gainey points fall between the two both morphologically and temporally (Stoltman 1991).

Evidence for early Paleoindian occupation of Dane County is abundant, though confined for the most part to surface finds of projectile points. Fluted points in the county have been recovered from the Horseshoe Ridge Site-47DA325 (Sanborn and Eaton 1980), the Havey Site-47DA13 (Nero 1955), the Skare Site-47DA10 (Ritzenthaler 1967a, b, 1970), the Johnson Site-47DA15 (Wendt 1985), Eagle Heights Field-47DA413 (Wendt 1985), the Boltz Site-47DA419 (Wendt 1985), the Marquis Site-47DA7 (Maher 1959), and the Bollig Site-47DA429 (Wendt 1985). Early Paleoindian peoples have been stereotyped as big-game hunters specializing in mammoth and mastodon. There is evidence that megafauna were hunted by humans in Wisconsin, but resource extraction was likely more adaptable. The repeated association of Paleoindian sites with the confluences of water courses and larger water bodies suggests efforts to gain strategic advantage for big game ambush and drive-type hunting strategies as well as concern for the availability of small game and aquatic resources (Wendt 1985).

Late Paleoindian Stage (10,000 – 7000 BC)

The late Paleoindian stage is characterized by the use of long, slender, lanceolate blades without fluting, and stemmed projectile points. The quality of flaking on some late Paleoindian points has been described by some researchers as high art. Most examples in east central Wisconsin were manufactured of orthoquartzite and fall within the Agate Basin, Alberta, Eden and Scottsbluff types. Basal grinding on those points is frequent and usually heavy (Mason 1997).

In Dane County, Late Paleoindian sites tend to be located in the same locations as Early Paleoindian sites. Late Paleoindian projectile points have been recovered from the Horseshoe Ridge Site-47DA325 (Sanborn and Eaton 1980), the Havey Site-47DA13 (Nero 1955), the Skare Site-47DA10 (Ritzenthaler 1967a, b, 1970), the Johnson Site-47DA15 (Wendt 1985), Airport Village-47DA2 (Baerreis 1953a), Eagle Heights Field-47DA413 (Wendt 1985), Observatory Hill Mounds -47DA571 (MacKinnon 1985), the Boltz Site-47DA419 (Wendt 1985), the Marquis Site-47DA7 (Maher 1959), the Hurskamp Site-47DA379 (Wendt 1985), the Acker Site-47DA414 (Wendt 1985), the Bollig Site-47DA429 (Wendt 1985), and the Bollweg Site-47DA430 (Wendt 1985).

While late Paleoindian life ways have consistently been described as focused on a continuance of earlier big-game hunting strategies, evidence from other parts of Wisconsin suggest that late Paleoindian peoples practiced a broad range of subsistence activities (Kuehn 1998). Unfortunately, there have not been any published excavations of Late Paleoindian sites in the Four Lakes area and as a consequence, very little can be said of Late Paleoindian subsistence or settlement strategies. It is presumed that in the Late Paleoindian stage, social structure was probably based on small groups of related individuals, who moved frequently on the landscape and preferentially occupied lakeshores and stream banks near the outlets of lakes (Mason 1997).

Archaic Tradition

Early Archaic Stages (8000/5500 BC – 4000 BC)

The Early Archaic is characterized by the presence of formally diverse diagnostic projectile types such as Hardin Barbed, St. Charles, a variety of Bifurcated Base points and Thebes. Subsistence practices remained focused on hunting and gathering, although what was being hunted changed with the disappearance of the large Pleistocene fauna and what was being gathered certainly reflected a post-glacial biotic regime brought about by climatic change. Social organization is hypothesized as being similar to the Paleoindian period, and Stoltman has argued that technologically, there is no clear line between the Early Archaic stage and the late Paleoindian stage other than that based on lithic typologies (Stoltman 1986, 1997).

Wendt (1985) has reported that a number of sites in the Four Lakes area have produced Early Archaic projectile points including Hardin Barbed points from 47DA10 – Skare site and 47DA429-Bollig site. Bifurcated Base points are known from 47DA325-Horseshoe Ridge, 47DA13-Havey, 47DA419-Boltz, 47DA429-Bollig and 47DA430-Bollweg. The pattern of site reuse continued through the Early Archaic, probably because of their ideal settings for taking advantage of a wide variety of resources (Wendt 1985:259).

Middle Archaic Stage (6000/4000 BC – 1500/1200 BC)

The Middle Archaic stage in Wisconsin saw a number of technological innovations, including the first use of ground stone technology and copper metallurgy. The stage has primarily been identified with technological developments that culminated in the Old Copper industry (Martin 1999; Martin and Pleger 1999; Pleger 2000; Stoltman 1997). In the past, the Old Copper industry was treated as a separate manifestation of the Middle Archaic (the Old Copper Culture). However, recent research indicates that the use of copper technology is not limited to the Middle Archaic and as such, the term "Old Copper Culture" has ceased to be useful as a taxonomic designation. The Middle Archaic stage in the Four Lakes area is represented by the cluster of side-notched points diagnostic of the Middle Archaic stage in the Midwest (Raddatz, Godar, Madison, Matanzas, Reigh) (Stoltman 1997).

Raddatz points have been reported from 47DA736-Murphy (Hamilton et al. 1995), 47DA325-Horseshoe Ridge, 47DA10-Skare site, 47DA419-Boltz, 47DA7-Marquis, 47DA379-Hurskamp, and 47DA414-Acker. Despite the long duration of the Middle Archaic stage, relatively little is known of the actual lifeways of Middle Archaic people in the Four Lakes area. Excavations at 47DA736-Murphy suggest that there were two Middle Archaic occupations at the site, one between 4045-3375 BC and a later one between 3675 and 3375 BC (Hamilton et al. 1995). The full range of lithic tool manufacture was represented in the lithic assemblage from the Middle Archaic component of the site and Hamilton et al. suggest that activities at the site were extensive in duration and complexity (Hamilton et al. 1995:88). Floral remains from the site indicate that hickory nuts and walnuts were being processed during the later Middle Archaic occupation at the site based on the ratio of nutshell to wood charcoal (Egan 1995).

It was with the emergence of the Old Copper industry that long-range trade networks between territorial groups were first established. The establishment of formal cemeteries hints that group mobility was at a fairly low level and cultural boundaries between groups were beginning to form. The eastern Old Copper burial assemblages contain goods that may have signaled individual status—copper headdresses and jewelry of exotic marine shell (Stoltman 1997). If so, Wisconsin was home to one of the earliest socially complex societies in the Upper Great Lakes.

Late Archaic Stage (1500/1200 BC – 500/100 BC)

The arrival of the Late Archaic stage in southwestern Wisconsin is signaled by the appearance of new projectile point types, a decline in the use of copper and a lack of identifiable cemeteries (Stoltman 1997). Late Archaic projectile points are generally small, stemmed, side or corner-notched dart points. Few other artifacts diagnostic of this phase have been identified. The beginning of the stage seems to coincide with changes in the climate and environment. Starting around 3500 BP, oak savanna seems to have partially given way to closed oak forest, as weather grew cooler and wetter. The impact of this environmental shift on Late Archaic populations is not well understood, despite the excavation of several well-stratified rockshelter and cave sites. Based on regional studies of site distributions, single component Late Archaic sites appear to be quite rare in Wisconsin. Typically, Late Archaic Preston Notched or Durst Points are found at multi-component sites, often in disturbed contexts. The Late Archaic stage is the first to be well represented in south-central Wisconsin. Sites have been located over a broad range of environmental and topographical zones. Based on excavations to date, it would appear that the Late Archaic stage represents a transition between the extremely mobile, small band strategies of the Paleoindian, Early Archaic and Middle Archaic stages and the less-mobile, seasonally dispersed populations of the Woodland tradition.

Based on stratigraphic excavations at the Preston and Durst Rockshelters in Grant and Sauk Counties and projectile point differences, Stoltman (1997) has defined the Preston and Durst phases for southern Wisconsin.

Preston Phase (1500 – 1000 BC)

The earlier of the two phases has been designated the Preston phase after deposits identified at the Preston Rockshelter in Grant County (Stoltman 1997). The diagnostic projectile point also takes its name from the rockshelter – Preston Notched. This is a small side or corner notched point type with analogs in the Riverton Culture of southern Illinois (Merom Expanding Stem and Trimble Side-notched types) (Winters 1969) and in the Burnt-Rollways phase of northern Wisconsin (Salzer 1974). These distinctive projectile points were identified in levels stratigraphically above Raddatz materials and below Durst levels at both the Preston (Stoltman 1997) and Durst Rockshelters (Wittry 1958). Since these points were formally defined, a number of surface collections and excavations have produced stylistically identical points. Unfortunately, the excavations have not been in stratified contexts and have failed to produce additional temporal information.

Two sites in the Four Lakes Area have produced Preston Notched projectile points, 47DA5-Blackhawk Village (Baerreis 1953b) and 47DA459-Beach site (Salkin 1986). In both instances the points were recovered from multi-component sites and were designated as Monona Stemmed Points as they were described prior to the formulation of the Preston Notched type. Due to the fact that the Preston Notched type has only recently been defined, there are few sites that include this type name in their artifact assemblage discussions. Future research on the frequency of Preston Notched points in the region will rest on re-visiting many of the old excavation reports and redefining previously identified points.

Durst Phase (1000 – 500 BC)

The Durst phase is the youngest of the Late Archaic phases. Durst phase sites are identifiable largely by the presence of Durst Stemmed points. Durst Stemmed points are small expanding-stemmed points with weak shoulders and ovate blades. They take their name from the Durst Rockshelter, where they were found in levels above Raddatz and Preston points (Stoltman 1997; Wittry 1958). Although Durst Stemmed points are found frequently throughout the Driftless Area, almost no specifics are known of Durst phase lifeways.

Some of the better known sites with Durst Stemmed points in the Four Lakes area include Horseshoe Ridge Site-47DA325 (Sanborn and Eaton 1980), the Havey Site-47DA13 (Nero 1955), the Skare Site-47DA10 (Ritzenthaler 1967a, 1967b, 1970), the Johnson Site-47DA15 (Wendt 1985), Stevens-47DA123 (Christiansen III 2001), the Boltz Site-47DA419 (Wendt 1985), the Marquis Site-47DA7 (Maher 1959), the Hurskamp Site-47DA379 (Wendt 1985), the Acker Site-47DA414, the Bollig Site-47DA429 (Wendt 1985), and the Bollweg Site-47DA430 (Wendt 1985).

Woodland Tradition

Early Woodland Stage (300 BC – AD 100)

The Early Woodland stage in south-central Wisconsin encompasses two distinct cultural phases. Residents of the area during the Early Woodland stage appear to be a variant of the Marion culture, a widespread phenomenon with participants across the northern Eastern Woodlands (Esarey 1986; Green

and Schermer 1988; Munson 1982). In many areas, the Marion culture is associated with Red Ochre ceremonialism. In some areas of Wisconsin Red Ochre mortuary sites may represent a leap in socio-political complexity. The quantity and quality of grave goods is far greater than that found in Old Copper cemeteries. Burials were typically in-the-flesh internments placed in a flexed posture with pits in natural ridges, knolls, and occasionally within artificially constructed mounds. Some bundle burials, cremations, and extended in-the-flesh inhumations are known. Red ochre (powdered hematite), sometimes mixed with red sand, was liberally sprinkled over corpses and their associated grave goods during the course of burial ceremonies. Large caches of exotic and finely fashioned burial goods were placed with the remains of both adults and children—a pattern usually associated with the emergence of hereditary status differences (Stevenson et al. 1997).

The Marion culture is responsible for the introduction of ceramic technology into Wisconsin. Marion Thick pottery is grit-tempered, cord-paddled inside and out, and took a distinctive conical or "flowerpot" form. Kramer Stemmed projectile points are the only other artifact diagnostic of Early Woodland habitation sites.

Lake Farms Phase (250 BC – AD 100)

The latter part of the Early Woodland saw an evolution in pottery technology and a minor switch from square stemmed projectile points to Waubesa Contracting Stem points, diagnostic of the Lake Farms phase in the Madison area. Lake Farms phase ceramics are sand or grit-tempered, cord-marked jars with relatively thin walls and slightly everted upper rim profiles. Decoration is applied directly over cord-marking in the form of bosses, incising, fingernail impressions, and cord-wrapped-stick impressions. This material is closely related to that produced by the Black Sand culture in Illinois.

Excavations of Lake Farms phase sites in the Four Lakes area, primarily the Canoe (47DA457) and Beach (47DA459) sites, on Lake Waubesa, indicate that late Early Woodland peoples may have lived in large warm-season camps surrounded by specialized resource processing and extraction sites (Salkin 1986). The large camps would have broken up in the winter, as individual families spread out across the landscape. Though many Lake Farms phase sites are located near shallow lakes and marshes, recovered faunal remains are curiously lacking in aquatic species.

Middle Woodland Stage (AD 100 – 500)

Waukesha Phase (AD 100 – 300)

The Middle Woodland stage in the Four Lakes Area is poorly known although there is some evidence to suggest Waukesha phase activity (Salzer nd; Stevenson et al. 1997). Waukesha phase pottery is characterized by grit tempering and smooth exterior surfaces decorated using a wide variety of techniques. Ceramic types include several indigenous variants of more classic Illinois Havana wares. Types such as Kegonsa Stamped and Shorewood Cord Roughened appear to be regional variants of Naples Stamped. Havana types typically associated with the Waukesha phase include Havana Zoned, Neteler Crescent Stamped and classic Hopewell ware (Goldstein 1992). Projectile point types dating to the Waukesha phase are commonly either corner notched or stemmed and include the Snyders, Steuben, Monona Stemmed and Norton types.

What is known of the Waukesha phase people in the Four Lakes area comes from excavations at the Outlet site (47DA3) located where the Yahara River exits Lake Monona. Excavations conducted by

Whiteford (1949), and Bakken (1950) indicate that Waukesha phase peoples, like their contemporaries in southwestern Wisconsin and Illinois, interred their dead in rectangular pits covered by large conical mounds. The interments at the Outlet site exhibited a wide variety of treatments including extended, flexed, bundled, and/or cremated. Two skulls from the 1948 excavations had white clay masks that had been applied to the faces of the dead shortly before interment. The primary burial in Mound 5 contained a single expanding stemmed Hixton silicified sandstone biface measuring 231 mm. This artifact is similar in morphology to objects recovered from Trempealeau phase burials in southwestern Wisconsin (Baerreis and Bender 1984; McKern 1931). This is, however, a rare occurrence as typically mortuary goods have not been found associated with Waukesha phase burials.

Waukesha phase habitation sites indicate a continued emphasis on hunting and gathering, with increased use of aquatic resources. Lippold (1973) has suggested that Waukesha phase peoples had begun to live in semi-sedentary communities supported in part by shellfish harvesting.

Late Woodland Stage (AD 500 – 1050)

The Late Woodland stage in the eastern United States has often been viewed in the past as a transitional phenomenon by a number of researchers (Griffin 1964; 1967; Phillips 1970; Phillips et al. 1951; Prufer 1964; Williams 1963). This, however, is not the case for Wisconsin where even the earliest archaeological researchers were aware of, and intrigued by, monumental earthworks that dotted the landscape (Lapham 1855; McKern 1928, 1929, 1930; Peet 1890). As research on the Late Woodland has progressed, it has become clear that while the Late Woodland stage is transitional in some aspects, others indicate a unique and well-developed stage with a complexity that is expressed not in material goods, but in ceremonialism and ritual. In other words, it does not represent a decline between two climaxes, but rather reorganization and consolidation of regional and macroregional networks that laid the groundwork for larger sociopolitical units. The early portion of the Late Woodland was, in essence, a continuation of the lifeways that had been gradually developing over the last thousand years. People continued to hunt, gather and fish, live in small groups and practice a seasonal round (Arzigian 1987; Storck 1974; Theler 1987).

Some transitional aspects of the Late Woodland stage relate to changes in subsistence strategies, settlement patterns and technology. It has become increasingly clear in the last 20 years that sometime around AD 850 maize began to play a more significant role in the diet of some Late Woodland groups (Arzigian 1987). Certainly by 1000 BP, maize had become a mainstay for a number of contemporaneous peoples who occupied the Wisconsin landscape. The adoption of more intensive horticultural economies apparently had profound affects on settlement patterns as sedentism become more prevalent among Native American peoples (Dirst 1988, 1995; Richards 1992; Salkin 1987, 1993). The establishment of permanent villages at a number of locations in the eastern portion of Wisconsin confirms the impact that the rigors of maintaining a maize-based diet had. Population appears to have increased during the Late Woodland, presumably as a result of changes in diet and settlement patterns.

Prior to 1987, the Late Woodland stage in Wisconsin was synonymous with the Effigy Mound Culture. As it is recognized today, the Effigy Mound culture is used as an umbrella term that incorporates at least two phases, the Horicon phase in south-central Wisconsin (Salkin 1987, 1993), the Eastman phase in southwestern Wisconsin (Stoltman 1990), and several phases not yet completely defined in northwestern and north-central Wisconsin.

The distribution of Effigy Mound culture sites is predominantly in the southern three-quarters of Wisconsin with additional sites in northern Illinois, northeastern Iowa and southeastern Minnesota. Site

types include rock shelters, caves, multi-seasonal open-air villages, short-term encampments, seasonal resource exploitation camps and the highly visible effigy mound mortuary complexes typically located on elevated terraces near waterways, marshes and lakes. Very little is known of Effigy Mound domestic architecture, although three shallow oval basins excavated at the Sanders site (47Wp26) (Hurley 1975) suggest that small oval wigwam type houses were utilized. In addition, several "keyhole" shaped structures with associated Madison ware ceramics were recently excavated at the Statz site in Dane County (Meinholz and Kolb 1997).

The primary technological innovation of the stage was the widespread adoption of the bow and arrow. The bow and arrow were introduced into Wisconsin circa AD 700, and small arrow points are the most abundant projectile points found in archaeological sites occupied after that date. Lithics from Late Woodland stage sites in the Four Lakes area are often made from local Prairie du Chien and Galena cherts and on occasion, from one of the silicified sandstones found in northwestern Wisconsin. The lithic tool kit appears to be generalized with a high proportion of utilized and retouched flakes relative to more formal patterned tools. Drills, endscrapers and spokeshaves are known from rockshelter and open-air sites. Projectile points seem to be present in three forms: triangular, small corner-notched and small, stemmed points. It seems likely that the triangular points (Madison Triangular points) and small corner-notched points (Klunk points) are part of a bow and arrow delivery system, while the small stemmed points may represent spear or atl-atl points.

Analysis of faunal and floral remains from rock shelters, caves and open-air sites indicate that a variety of local resources were consumed by Effigy Mound builders, including deer, small mammals, fish, fowl, mollusks, nuts, as well as starchy and oily seed bearing plants (Arzigian 1987; Benn 1980; Berwick 1975; Emerson 1979; Lippold 1973; Parmalee 1959; Storck 1974; Theler 1987). Though there is evidence that maize was utilized in the Driftless Area to some extent (Arzigian 1987; Stoltman 1990), no maize has yet been reported from Horicon phase sites (Salkin 1987, 1993).

By definition, Effigy Mound culture mortuary sites contain one or more earthen, animal-shaped effigy mounds. Mound shapes include "panthers", birds, waterfowl, bears, canines, deer, buffalo, "turtles" and humans (Birmingham and Eisenberg 2000; McKern and Ritzenthaler 1949; Rowe 1956). Effigy Mound peoples also constructed long "linear" mounds and small conical mounds. Unlike earlier Red Ochre and Hopewellian mounds, these mounds were generally low, contained few, if any, grave goods and contained the remains of only a single individual, though some mounds with multiple interments and some with none at all are known. Articulated and bundle burials, cremations, pit burials, primary mound floor and primary mound fill burials were all common. The only consistency in burial regime was the placement of the corpse near the "heart" of the effigy (Stevenson et al. 1997). Though many excavated Late Woodland mounds contain burial features, not all do. This has led several researchers to suggest that the importance of the mounds lay in the process and ceremonies accompanying their construction and not only in their use as burial markers (Mallam 1976).

Recent research suggests that there are patterns to the distributions of certain types of mounds that indicate an east to west geographical division (Birmingham and Eisenberg 2000). This division seems to reflect differing terrain, resource bases, and perhaps social affiliations and cosmologies. As an example, bear-shaped mounds are more frequently found in the western portion of the state, while the east is dominated by "panther" and "turtle" shaped mounds (forms similar to historic iconography depicting water spirits). Bird mounds, while found throughout the area occupied by Effigy Mound builders, are most abundant in the higher elevations of the Driftless Area. The association of specific animals with high and low elevations fits within a pan-eastern Native American tradition concerning a tripartite division of the world into the "Upper World" (order, fire, lightning/thunder, warfare, birds), "Middle World" (this world, balance) and "Lower World" (chaos, water, springs and caves, healing and fertility, bears and water spirits) (Birmingham and

Eisenberg 2000; Hall 1997; Hudson 1976). Local landscape features also appear to have played a role in the structure of individual mound groups. "Panther" or Water Spirit mounds are often found near springs and deep lakes, features identified as portals to the underworld in the cosmology of eastern Native Americans. It appears that the Native Americans who built the effigy mounds were creating a symbolic landscape through the construction of various types of mounds.

Horicon Phase (AD 700 – 1200)

Several major changes in material culture and ceremonial practices differentiate the Middle Woodland Waukesha phase from the Late Woodland Horicon phase. First, the people of the Horicon phase are considered to be part of the Effigy Mound Culture because they buried their dead in animal shaped effigy mounds. Second, cord and fabric impressed ceramics (Madison Cord-Impressed, Madison-Fabric-Impressed) dominate Horicon phase ceramic assemblages. These two types taken together are the principal components of Madison Ware ceramics which are generally globular in form, grit-tempered, and almost always in the form of large jars, although several smaller bowl-like vessels are known from a number of sites. Exteriors are cordmarked with decoration being confined to the inner lip, outer lip, lip surface, and the exterior rim to the neck of the vessel. Rims may be incurving, flared or straight. When decoration is present, it is usually in the form of single or multiple cord impressions in linear bands or geometric patterns.

Salkin has argued that Horicon phase peoples utilized large habitation sites for socializing and ceremonial purposes and then occupied small sites at other times of the year (Salkin 1993). The size and distribution of sites has been used as support for a band-level hunting and gathering lifestyle for the Effigy Mound peoples (Mallam 1976; Salkin 1987).

Effigy mound groups and habitation sites are ubiquitous around the Four Lakes area of Dane County. It is difficult to find a location adjacent to either of the four lakes, the Yahara River or any of the tributaries of the drainage that do not contain effigy or other types of mounds as well as habitation sites. The Four Lakes area is considered to be one of several "super clusters" of mounds and earthworks in Wisconsin (Birmingham and Eisenberg 2000).

Terminal Late Woodland (AD 800 – 1200)

Sometime around 1,100 BP, significant changes took place on the landscape of southern Wisconsin. A few ceramic vessels in east central Wisconsin were produced with a distinctive folded rim, which produced the appearance of a "collar" around the pot. Though used in small amounts at first, collared pottery became more popular and replaced the earlier Madison ware entirely by 950 B.P. The resulting Point Sauble and Aztalan Collared types are the diagnostic hallmarks of the terminal Late Woodland stage. At the same time that this ceramic transition was taking place, maize was introduced into the Late Woodland diet in increasing amounts. By 1,000 B.P. fully horticultural societies had arisen and the first sedentary villages in Wisconsin were occupied (Stevenson et al 1997). Some of these early villages were fortified with post palisades (Salkin 1993). This set of changes signaled the onset of the Terminal Late Woodland in southern Wisconsin. In the eastern part of the state (east of the Driftless Area), the terminal Woodland has been called the Kekoskee phase (Salkin 1987, 1993).

There are strong indications that the socio-political dynamics of southern Wisconsin became more complicated as sedentism took hold and diverse cultural groups either developed within, or moved into, southern Wisconsin. By AD 1050, the terminal Late Woodland town of Aztalan was occupied by a group of

Cahokian Middle Mississippians and Oneota settlements were springing up in northwestern, northeastern and southeastern Wisconsin.

In the Four Lakes area, collared ceramics have been recovered from excavations at 47DA12-Dietz Site, 47DA424-Stricker Pond, 47DA642-Statz and 47DA36-Murphy. The Dietz site provided evidence of maize consumption in the form of charred cobs while the Statz site appears to have served as a relatively long term habitation site. At least two pairs of structures are associated with the ceramics. All four structures are keyhole in shape and at the time of occupation were overlooking a marsh. Stricker Pond and Dietz are also located immediately adjacent to marshy areas. Based on the limited sample of Kekoskee phase sites, it appears that site location preference was oriented towards environments where a variety of aquatic resources could be procured and were off of major waterways. This may be due in part to increased hostilities in the region as demonstrated by evidence for violent conflict at a number of sites throughout the region (examples include Aztalan, the Highsmith site, Weisner III, IV, Camp Indianola, etc.).

Mississippian Tradition

Middle Mississippian (1000 – 1250 AD)

Evidence of a Middle Mississippian presence in southern Wisconsin is confined to only a handful of sites, which has led researchers to the conclusion that it is largely an intrusive presence. Middle Mississippian peoples were different from surrounding Late Woodland groups in a number of ways. First, they were a fully sedentary agricultural people depending on maize, beans and squash. Second, they appear to have had a ranked society that was organized around chiefly authority. Third, they constructed monumental architecture that included platform temple mounds, large bastioned palisades and specialized public buildings. Fourth, they utilized a very specialized ceramic technology that included the use of crushed freshwater clamshell as a tempering agent. In addition to this new temper, they also made a wider variety of vessel forms that included jars, water bottles, plates, and bowls that were occasionally slipped with red, black, white or brown pigments. The diagnostic Middle Mississippian ceramic types are Powell Plain and Ramey Incised. Lithic technology was based around a generalized core reduction strategy and the typical projectile point was a small, thin, notched or multi-notched triangular point.

Middle Mississippian peoples, or at the very least, ideas, were present in southern Wisconsin sometime between A.D. 1000 and A.D. 1050. It is thought that Middle Mississippian people took at least two routes north, one to the west along the Mississippi River trench and a second from Illinois via the Rock River. The eastern route brought Middle Mississippian peoples into contact with Late Woodland Kekoskee phase people who had already settled at several locations. It appears that some type of relationship was established with these people and the small village of Aztalan metamorphosed into a 22-acre mixed Kekoskee/Middle Mississippian village with three platform mounds. Middle Mississippian presence is seen at several other sites in the form of trade goods and locally made imitations of Powell Plain and/or Ramey Incised. Evidence for a Middle Mississippian presence in Wisconsin ceases shortly after A.D. 1250 when portions of Aztalan were apparently burnt.

Oneota (1000 - 1600 AD.)

Some Late Woodland communities appear to have adopted elements of Mississippian material culture and ideology, and evolved into a group of related cultures termed the Oneota. Oneota peoples adopted many

elements of Mississippian material culture, including the manufacture of smooth surfaced, shell-tempered pottery decorated with trailed geometric and curvilinear motifs, and a heavy reliance on maize horticulture. Like the terminal Late Woodland peoples of eastern Wisconsin, they inhabited large, sometimes fortified, sedentary villages. Oneota material culture was variable, due in part to the differing responses of local groups to Mississippian ideology and technology. The geographic distribution of Oneota villages was discontinuous, as not every Late Woodland stage group accepted new ideas (Overstreet 2000).

The sudden pre-occupation with fortification systems that developed with the emergence of sedentary societies may be due in part to the close proximity that the culturally dissimilar terminal Late Woodland, emergent Oneota and Middle Mississippians found themselves in. However, while terminal Late Woodland and Middle Mississippian sites in the area are frequently fortified, only a single fortified Emergent Oneota site has been noted to date.

Subsistence revolved around fishing, shellfish harvesting, hunting and trapping of aquatic mammals and a horticultural system involving corn, beans and squash. Shell middens, shellfish processing areas, garden beds and rock piles produced during field clearance are common both near and within habitation areas. Wild mast crops, such as hickory, walnut, butternut, acorn and hazelnut were collected, and there is evidence that deer and elk were hunted (Overstreet 1997).

Historic Period

Native Americans (AD 1600 - present)

Oneota culture appears to have persisted into the Historic period, based on excavations at the Astor site in modern Green Bay. Items of European manufacture were found there in association with Oneota shell-tempered ceramics. Fragments of brass kettles, a glass bead and a clasp knife were recovered from the site, along with a grit-tempered Bell Type I pot (C. I. Mason 1986; Wittry 1963). Bell Type I pottery has been associated with the Pottawatomie and Mesquakie. The ethnic affiliations of the Oneota communities have not yet been established, but their geographic location and material culture of the eastern Classic Oneota matches early European descriptions of the “Ouinipigou” (Winnebago/Ho-Chunk). It appears that Oneota populations had declined by Euroamerican contact (presumably due to epidemic disease and an increase in regional conflict) and contact had been established with the Mesquakie, Pottawatomie and other groups being pushed westward by disturbances resulting from Euro-American colonization (Hall 1962; Overstreet 1997).

These disturbances, coupled with an increasing reliance on items of European manufacture, resulted in a cessation of pottery and stone tool manufacture. As a result, it is very difficult in most cases to link historically known Native American residents of Wisconsin to pre-Euroamerican cultural complexes. The association of the Ho-Chunk with the eastern Oneota, though tentative, still remains the strongest to date.

The early Historic period, in a formal sense, is traditionally said to begin in 1634, when Jean Nicolet is believed to have landed at Red Banks on the shore of Green Bay (though Hall and other researchers have questioned whether this location is correct (Hall 1993)). Nicolet had been sent as an envoy to the Ho-Chunk nation with the intent of establishing a peace treaty between their nation and the Ottawa, in order to facilitate the flow of furs into French territory. As competition for those furs between native tribes and European groups increased, warfare and population movement accelerated. War parties from eastern fur-trading tribes began to attack the Ho-Chunk, whom Nicolet had failed to convince of the benefits of trade with the French. These parties carried epidemic diseases with them, and the resulting outbreaks killed nearly two-thirds of the Ho-Chunk (Lurie 1978).

In 1649 the Huron abandoned their traditional lands, opening a passage along the northern shore of Lake Huron and along the islands spanning the straits between Lakes Superior and Michigan and into Green Bay. Pressure supplied by Iroquois raiders pushed refugees such as the Mesquakie, Sauk, Kickapoo, Mascouten, Illinois and Miami eastward into Wisconsin (Mason 1988). Other groups, including the Chippewa and the Huron themselves, moved along the southern shore of Lake Superior on their way eastward.

The Ho-Chunk began a push westward during this period, moving from Green Bay to the Lake Winnebago area. Though their major villages were located in eastern Wisconsin, the Ho-Chunk traveled regularly into the Driftless Area, and across the Mississippi for buffalo hunts. The following decades were witness to the partial recovery of the Ho-Chunk population. By the 1800s, villages and campsites were established across southern Wisconsin. During their period of expansion, the Ho-Chunk successfully adopted elements of the more mobile Algonquian lifestyle and became prosperous participants in the fur trade (Lurie 1960, 1978). They also began to mine lead in the Driftless Area, putting themselves at the center of a developing regional trade network of raw lead and ammunition (Kay 1977; Spector 1977). This activity, though economically advantageous in the short-term, inevitably drew the attention of white settlers and led to conflict between the Ho-Chunk and Euro-Americans who wished to claim the lead district for themselves.

In 1829 and 1832, treaties were drawn up calling for the Ho-Chunk to abandon title to the lead district and relocate west of the Mississippi. A third treaty, drafted in 1837, stipulated the removal of the Ho-Chunk to Iowa from their remaining territory in Wisconsin. The Ho-Chunk, suffering through another round of catastrophic epidemic disease, largely ignored these treaties, and the U.S. government began a series of forced relocations in the 1840s (Lurie 1978). Many of the deported Ho-Chunk returned to Wisconsin at the first opportunity (settling in the Wisconsin, Baraboo and Fox River valleys) (Lawson 1907). In 1875, the Indian Homestead Act was passed, allowing the Ho-Chunk to remain in Wisconsin by purchasing homesteads. These homesteads, located in the poorest areas of the state, served as “home bases” while the Ho-Chunk traveled to seasonal gatherings on the Mississippi River near La Crosse and served as itinerant workers in cranberry bogs, cherry groves and blueberry fields (Wyatt 1986).

By the late 1880s, Ho-Chunk settlement was concentrated around Black River Falls, Stevens Point, Tomah and Hatfield, and many homesteaders had lost their lands at the expiration of the 20 year tax-free period on their property. Despite these hardships and upheavals, many Ho-Chunk retained the practice of traveling on a seasonal round, periodically moving to favored winter fishing and hunting grounds. The following years saw a diminishment of this custom, as the Ho-Chunk began to participate in the tourism industry, seek factory jobs and practice commercial agriculture (Wyatt 1986).

Ho-Chunk villages in the Four Lakes region are not documented prior to the 1830s. Prior to that time, Ho-Chunk settlement was concentrated between Portage and Green Bay, and down the Rock River. By 1830, five villages had been established in the Four Lakes area: Old Turtle’s village on the north shore of Lake Mendota, the Four Lakes village in the area of modern Tenny Park on the Isthmus, Broken Arm’s village on the south shore of Lake Monona, Spotted Arm’s village on the south shore of Lake Waubesa and Mammothe’s village on the south shore of Lake Kegonsa. By the time of Black Hawk’s retreat along the Isthmus in 1832, only the two northernmost villages were still occupied, and a smallpox epidemic had spread through the Yahara and lower Rock River valleys (Tanner 1987).

Historical Background

For over two-hundred years the fur trade was the focus of economic interest in Wisconsin. Incentives to its prosecution were intimately related to motives that inspired missionaries and secular explorers. Fur traders often initiated contacts with Indians, founded the first settlements, and expanded routes of travel in Wisconsin. Lacking the economic impetus of the fur trade, there would have been considerably fewer Europeans in Wisconsin during the seventeenth, eighteenth, and early nineteenth centuries (Smith 1973).

Regional Development

The French (1730-1763)

During this time the French opened posts throughout the interior of the Western Great Lakes country and adopted from the Indians the technology and patterns of operation which remained characteristic of the fur trade until its closing days. In Wisconsin, the period of French control saw the opening of direct trade with the Indians of the Western Great Lakes and with the Sioux, and the emergence of this tribe as one of the major fur suppliers in the area (Kellogg 1925). Documentation of the French presence in Wisconsin provides no evidence for French activity in the south central region of the state.

The British (1763-1816)

Subsequent to 1763, the Western Great Lakes was divided between British (after 1783, American) and Spanish sovereignty. The fur trade was shared among British and French traders. Some of the latter were based in Canada, others in Louisiana. After 1790 British traders penetrated the Great Plains and traded as far west as the upper Missouri and the Saskatchewan Plains (Kellogg 1935). While the British were actively involved in the fur trade in Wisconsin, their presence was confined primarily to the major waterways including Lakes Michigan and Superior, and the Fox-Wisconsin and Mississippi rivers.

The Americans (1816-1850)

These years saw the emergence of St. Louis as a major trade and transportation center and its replacement of Mackinac as the main supply point for the Western Great Lakes fur trade. They also saw the creation of a near monopoly in the area by the American Fur Company, the decline of the fur trade before the advance of settlement, and the establishment of successful entrepreneurs who collected United States Indian Treaty money.

After the Black Hawk War of 1832, fur trade became less important and settlement of the area began in earnest. Soon traders began viewing the wilderness as developing frontier rather than a place solely for Indians and fur-bearing animals. Many traders became interested in lumbering, banking, general merchandising, road construction, steamboat lines, railroad development, and land speculation (Wyatt 1986). As early as the 1820s lead mining attracted settlers to southwestern Wisconsin. Despite the success enjoyed by many, others who could not support themselves as miners turned to farming. As locally available good farmland was acquired, individuals sought fertile land in the counties of south central Wisconsin, such as Dane County.

Dane County History

Dane County was established in December of 1836, but the Euro-American presence in the area has been suggested to be as early as 1793 when a guide for Major Long claimed to have visited the area (Butterfield 1880). In 1836, Dane County was formed from the western part of Milwaukee County and the eastern part of Iowa County but not organized as a separate county until three years later. The county was named by Governor Doty in honor of Nathaniel Dane who, in 1787, introduced the ordinance creating the Northwest Territory. The land comprising the county was ceded by the Winnebago in two treaties, one in 1829 and the other in 1832. Ebenezer Brigham, credited with being the first settler in Dane County, had passed through the area in 1829 and was interested in it for its potential mineral resources rather than its agricultural possibilities. Dane County encompasses 1,235 square miles and incorporates 35 townships within its political boundaries.

When Madison was selected to be the site of the capitol in November of 1836, only thirty people were residing in what is now Dane County (Butterfield 1880). The government surveying of the county was executed between 1830 and 1839 (Keyes 1906). Following the inception of Madison as the state capitol, settlement began to increase dramatically. In 1840 the population of Dane County was 314 but by the end of the Civil War the population grew to 43,992 (Park 1877). Pioneer settlement was facilitated by an early road system. In 1838 Congress appropriated funds for construction of three federal roads in Wisconsin Territory. One of these, the Milwaukee-Mississippi road was constructed between Milwaukee and a point opposite Dubuque by way of Madison. Governor Henry Dodge emphasized the importance of this road to the Territory:

> Its completion would facilitate settlement, and aid in development of its agricultural, mineral and commercial resources and make transportation of the mails safe and facilitate the march or movement of troops and the transportation of necessary munitions of war from our Lake border to our most exposed frontier on the Mississippi, should it become necessary to meet a savage enemy (Karn 1959:40).

Other secondary roads directed north and south were rapidly constructed during the 1840s and 1850s. The territorial roads served as economic links between the rich agricultural lands and the shipping centers. These roads were traveled by pioneer settlers, many of whom settled farmsteads along the routes.

Population growth in Dane County was due, in large part, to the influx of immigrants, primarily Norwegians and Germans, during the 1840s and 1850s. These immigrant pioneers were predominantly farmers seeking economic opportunity in the fertile land of south central Wisconsin. In Dane County, as throughout Wisconsin, both Norwegians and Germans clustered in settlements according to their religious and provincial origins.

Like other Dane County pioneer farmers, the Germans grew wheat as the primary crop. However, even during the period of 1840-1890 when wheat reigned as Wisconsin's primary cash crop, German farmers grew other crops. When the wheat market collapsed they turned to dairy farming. German farmers, particularly in eastern and southern Wisconsin, assumed an integral role in the transition from a grain based economy to dairy-based agriculture (Wyatt 1986).

In the wake of wheat's decline, Dane County farmers turned to other cash crops, the most lucrative of which was tobacco. This area of the state was the first to realize economic success from the cultivation of tobacco which was introduced as early as the mid-1840s. However, it was not until the 1850s that tobacco was cultivated on a commercial scale. By the 1880s it was commonly grown throughout southern Dane, Rock, and Jefferson counties. Despite a fluctuating market over the past century, tobacco cultivation continues to play a major role in agricultural production in Dane County.

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Part III: Research Methodology

Introduction

The methods and techniques employed during archaeological investigations were consistent with current professional standards relating to historic and archaeological conservation and preservation jointly endorsed by the Wisconsin Historical Society (WHS) and the Wisconsin Archaeological Survey (Kolb and Stevenson 1997). Furthermore, the methods and techniques utilized in this study meet or exceed the standards established by the United States Secretary of Interior (National Park Service, United States Department of the Interior 1983). Finally, these investigations were designed to fulfill the mandate of Section 106 of the National Historic Preservation Act of 1966 (P.L. 89-665) as amended and 36 CFR, part 800 which serves to implement the act.

Two distinct phases of work were conducted prior to preparation of the written report: (1) pre-field literature and archives research, and (2) field inventory. Specific methods, techniques, and sources are detailed in the following narrative.

Archival and Literature Search

Pre-field research entails a comprehensive review of the data housed at Great Lakes Archaeological Research Center, regional libraries and historical societies, and at the Wisconsin Historical Society in Madison, Wisconsin. Archives and serial file systems are also searched for site-specific information. Published literature sources consulted include: *The Wisconsin Archeologist*, a quarterly journal of the Wisconsin Archeological Society published since 1901; *The Wisconsin Magazine of History*, the journal of the Wisconsin Historical Society; *The Wisconsin Historical Collections* consisting of 20 volumes published between the years 1903 and 1920; and the *Bulletin of the Public Museum of the City of Milwaukee*, several of which detail archaeological investigations conducted in various Wisconsin localities.

Unpublished sources subjected to scrutiny are represented by four different formats: (1) serial entry files; (2) map files; (3) manuscript files; and (4) archaeological survey reports. Two serial file systems were consulted. The first of these is the Wisconsin Archaeological Site Inventory (ASI) files, copies of which are housed at the Anthropology Section, Milwaukee Public Museum and the Museum Division, Wisconsin Historical Society. This file consists of an inventory of previously reported archaeological sites from both prehistoric and historic times and provides information relating to site locations, cultural affiliation, artifacts, and literature sources. The second file consulted is the Historic Preservation Division inventory file housed at the Historic Preservation Division, Wisconsin Historical Society. This file includes both archaeological sites and standing structures that have been identified as possessing architectural and/or historical significance.

Several map files were reviewed. They include: (1) The Charles E. Brown Archaeological Atlas; (2) the General Land Office survey records; (3) the Trygg map files; and (4) local plat and deed maps. The Charles E. Brown Archaeological Atlas provides the locations of sites on county plat maps. The prehistoric and historic sites include camps, villages, mounds, springs, rock art, workshops, quarries, cemeteries, trails, and various other types of archaeological manifestations reported to Brown during his long tenure as editor of *The Wisconsin Archeologist* and as the curator of the Wisconsin Historical Society Museum. The General Land Office (GLO) records consist of plats and survey notes that may provide information regarding presettlement vegetation, topography, and aquatic features, all important variables in determining potential

site locations. In addition, dependent on the interests of individual land surveyors, cultural information such as the locations of Indian trails, camps and villages, maple sugar processing stations ("sugar bushes"), pioneer settlements, and early industrial improvements such as mills, roads, and early homes and farmsteads are frequently noted on these maps. Both map files are housed at the Archives Division, Wisconsin Historical Society and the latter is available on microfilm at various repositories. The Trygg map file is a privately published composite of the GLO land survey records. While the Trygg maps are less detailed in scale than the GLO plats, the file is an important source for understanding the chronology and magnitude of regional development during the late historic period (ca. 1850). Finally, early plats and topographic maps were reviewed to assess historical settlement and development of the project environs.

Manuscript files investigated include the Charles E. Brown manuscript files and the State Archaeologist's county files. Both of these are housed at the Museum Division, Wisconsin Historical Society. The Brown manuscripts consist of 50 years of notes, correspondence, sketches, maps, and other data relating to historic and prehistoric archaeological sites. The county files include reports (unpublished), photographs, sketch maps, letters, and information derived from the Museum's highway archaeology program.

Phase I Field Methodology

Methods and techniques of Phase I archaeological survey are determined primarily by ground cover conditions and surficial geology of a particular project area. Three different survey techniques were employed during the course of archaeological investigations: (1) visual inspection; (2) pedestrian survey (surface collection); and (3) systematic shovel probe testing.

Visual Inspection

Visual inspection is commonly employed to provide an initial assessment of a project area. Portions of the project area that are not surveyable by conventional means are identified, and may include disturbed construction sites, heavily developed commercial or residential zones, paved or massively graveled or filled surfaces, inundated locales, and deeply ditched roadsides. Visual inspection is also used to identify areas suitable for other survey techniques, such as pedestrian survey or shovel probe testing.

Pedestrian Survey

Pedestrian survey is employed in areas where the ground surface is neither disturbed nor obscured by vegetation (where more than 20 percent of the surface is exposed). When conducting pedestrian survey, field crews traverse survey areas along predetermined transects, generally spaced at 5 m intervals, and inspect the ground surface for cultural materials. When identified, find-spots are marked in the field and added to project mapping.

Shovel Probe Testing

Shovel probe testing is a technique utilized to sample areas where the earth's surface is masked by vegetation (less than 20 percent surface visibility), fill, natural sediments, or other materials. It is a labor-intensive technique which results in only a small fraction of the site area being sampled for cultural remains and thus has certain limitations. The technique entails excavating a series of small units placed along predetermined transects or in grid form with specified intervals between units. These intervals do not exceed 15 m (50') and, dependent on the specific purposes or data needs, intervals between probes may be reduced. Pits approximately 35-45 cm in diameter are dug and the spoil is screened through 1/4" hardware

cloth to determine the presence or absence of cultural debris. Upon examination of the stratigraphy and inspection of the screen contents, shovel probe pits are back-filled. Excavation depths of shovel probes will vary depending on local soil conditions, ranging from a few centimeters to 50-80 centimeters. Probes typically penetrate the A horizon and are carried into the B horizon.

Site Mapping

Using a transit (and/or compass) and metric tapes, a total station unit, or a handheld GPS unit, a site map is established for each archaeological site discovered during survey. A small monument is placed as a site datum point and is assigned coordinates. Positive shovel tests, test excavation units, surface finds, and backhoe trenches are documented on the site map and entered into a geographic information system (GIS).

Field Data Management

A variety of records are generated and maintained as part of the archaeological evaluation process. Daily field notes are recorded that describe field conditions, research activities, and cultural resources. General and detailed maps of parcels and sites are drafted or adapted to show associated natural and cultural features, and to record field coverage techniques. Additional documentation includes shovel probe forms, sketch maps, photographs, and logs. Materials recovered from field investigations are recorded with their provenience data and a unique identifying number, which are marked on the artifact storage bag. At the completion of field research all documentation and artifacts are reviewed at the Great Lakes Archaeological Research Center for processing, analysis, and interpretation.

Phase II Evaluation Methodology

Mapping and Unit Location

After an arbitrary site datum was established (N5000 E3000) at Site 47DA1420, a site grid was laid out using a Zeiss Elta R50 total station TDS Recon data collector running TDS Survey Pro software. Control points were established outside of the proposed ROW. Units were laid out along the site grid using measuring tapes. The positive Phase I shovel tests were re-located and were mapped using a Mobile Mapper 6 GPS receiver. Post-field manipulations of survey data was accomplished using TDS Foresight DXM software and ESRI ArcGIS.

Test Unit Excavation

The archaeological evaluations included the completion of 1 x 1 m and 1 x 2 m test excavation units at site 47DA1420. These units were excavated by hand using shovels and trowels in arbitrary 10 centimeter levels below the modern ground surface. A unit datum was established for each unit at the corner with the highest surface elevation and was sometimes located above the modern ground surface. Depths were typically recorded in cm below surface (cmbs). All units were excavated to at least 40 cmbs, with one unit excavated to 50 cmbs. The subsoil generally began above 40 cmbs and very few artifacts were recovered from between 30 and 40 cmbs. All level matrix was dry-screened through ¼ inch hardware mesh.

Field Data Management

Standard field documentation was completed including: supervisor's field log, unit summary forms, unit level forms, unit plan and profile drawings, digital color photographs, and photography log sheets. The general progress of the excavation, field conditions, and observations were recorded in field notes maintained by the field supervisor. Upon completion of the fieldwork, all documentation was removed to GLARC's archaeological lab for review, processing, analysis, and interpretation.

Site Clean Up and Backfilling

With the exception of the site datum and control points, all nails, flagging, equipment, and refuse were removed from the project areas after the completion of fieldwork. All excavated areas were backfilled with soil removed during the excavations.

Laboratory Procedures and Data Interpretation and Organization

Following completion of the fieldwork portion of a project, a variety of project related activities are carried out at the GLARC laboratory and office facility. In the laboratory, artifacts are washed, sorted, inventoried, labeled, analyzed, and interpreted. Analyses of pre-contact lithic materials follow conventional typologies, while post-contact items are identified using standard references and hardware catalogues. Analysis based upon widely cited typologies and references insures that materials are described in terms comparable with existing data, and will be understood by other researchers. In addition to artifact analysis, post-field work tasks included film processing, verifying photographic logs, reviewing notes and maps, and preparing a final report of investigation for publication.

Miscellaneous Lithic Tool Analysis

Non-diagnostic chipped stone or expedient lithic tools were identified within the artifact assemblage. These were separated into two general categories: flake tools (expedient tools consisting of utilized or slightly retouched flakes), and other chipped stone tools (non-projectile point tools displaying more extensive unifacial or bifacial re-working than flake tools). Size, weight, and raw materials were noted for all tools and the nature and extent of the working edge(s) was described for each.

Debitage/Lithic Waste

The debitage assemblage was assessed for raw material, presence of cortex, likelihood of heat treatment, and size. The presence of cortex can indicate a flake was produced early in the knapping sequence for the creation of a new tool, as opposed to during tool finishing or re-sharpening, the latter potentially taking place far from where the tool was first manufactured. Size grading involved three nested screens of differing sizes comprised of Size Grade 1 (25.0 mm), Size Grade 2 (12.5 mm), and Size Grade 3 (5.6 mm). Flakes smaller than 5.6 mm were placed in a "<G3" size category. Larger size materials were hand manipulated

through the Size Grade 1 and Size Grade 2 (G1 and G2) screens. The smaller size grade (G3) was gently shaken. For debitage, size grading may indicate the particular lithic-working stages that occurred at a site, as initial core reduction will produce larger pieces of debitage while small flakes are created during chipped stone tool finishing and retouch (Ahler 1989). Using cherts from southern Illinois and Missouri, Ahler compared size-grade frequency by weight of flakes for different reduction techniques (1989). Different types of chert and other raw materials occur in southern Wisconsin and debitage size grade distributions cannot be assumed to be exactly the same with different materials, but these data can provide a starting point for analysis of the Site 47DA1420 debitage assemblage.

Post-Contact Materials

Post-contact artifacts were divided into a number of categories that describe material, form, and function. Ceramics were classified by ware, glaze, and decoration. Nails were divided into square cut and wire types as these two forms can be used as temporal markers (although only machine cut nails were recovered from site 47DA1420). All post-contact materials were counted and tabulated as part of the overall artifact assemblage.

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Part IV: Results of the Archival and Literature Research

An archival and literature review of the project areas was conducted to identify and document previously recorded archaeological and burial sites within one mile of the CTH M project area. There are four previously reported sites located within one mile of the CTH M project area (Figure 4.1; Table 4.1). One site, 47DA0692 is within the CTH M project area (Figure 4.1; Table 4.1).The site reported to be located 75-150 feet east of CTH M between CTH PD and Cross County Road. The Einichen site (47DA0692) is a prehistoric possible cold season encampment and a historic debris scatter.

No evidence of 47DA0692 was found during the Phase I field investigation. Ninety-eight percent of the sites mapped boundaries are disturbed soils or paved. Only two percent of the soils lie within a cultivated field and was surveyed. No cultural materials were found in this location. It is likely that the CTH M and more recent development has destroyed the site. No further work in this site location is recommended.

Table 4.1 Previously Reported Archaeological and Burial Sites within One-Mile of the CTH M Project Area

Site Number	Site Name	Site Type	Cultural Study Unit	Town Range Section
47DA0308	YOUNGS HALLOCK	1. Campsite/village	1. Unknown Prehistoric	7, 8, E, 35
47DA0692	EINICHEN	1. Campsite/village	1. Historic Euro-American 2. Unknown Prehistoric	6, 8, E, 10
47DA1371	Verona Ice Age Trail	1. Lithic scatter	1. Unknown Prehistoric	6, 8, E, 11
47DA1420	Ellefson	1. Lithic scatter	1. Unknown Prehistoric	6, 8, E, 3
47DA1421	Endres	1. Lithic scatter	1. Unknown Prehistoric	6, 8, E, 10

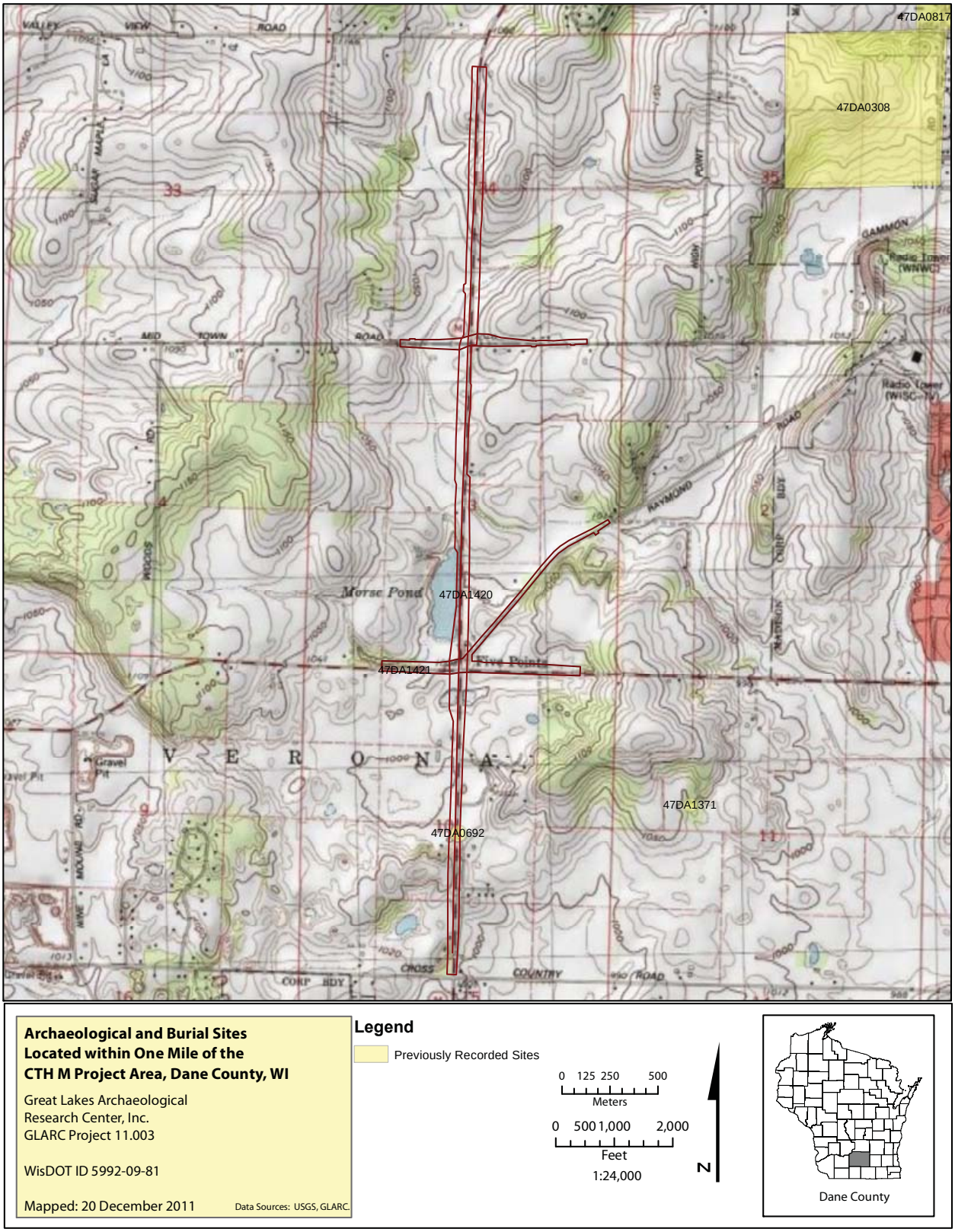

Figure 4.1 Previously reported archaeological and burial sites within one-mile of the CTH M project area.

Part V: Results of the Phase I Field Investigations

Phase I archaeological investigations were conducted on from May 31 to June 6th, 2011 for the CTH M project area. The archaeological investigations identified two archaeological sites within the CTH M project area. Phase I survey coverage, a description of the site, and recommendations are provided below.

Phase I Survey Coverage

Phase I archaeological investigations were conducted along the CTH M (Figure 5.1, Table 5.1, Appendix A). Survey consisted of visual inspection, shovel testing at a 15 meter interval, and pedestrian survey. A total of 106.61 acres were surveyed for the CTH M survey. Of this, 15.17 acres were shovel tested, 16.74 acres were subjected to pedestrian survey, 1.03 acres were wetland, and 73.67 acres were determined to not contain intact soils (Appendix A).

Table 5.1 Survey Coverage Acreage Totals

Survey Type	Acreage
Impenetrable Surface	27.89 acres
Pedestrian Survey	16.74 acres
Shovel Tested	15.17 acres
Visual Inspection Disturbed	45.78 acres
Wetland	1.03 acres
Total	106.61 acres

Archaeological Sites Identified in the CTH M Project Area

47DA1420 (Ellefson Site)

Site 47DA1420 defines a lithic scatter of a prehistoric affiliation (Figure 5.2). The site is in the SW of Section 3, Township 6 North, Range 8 East and is situated east side of CTH M north of County Highway PD. CTH M is located immediately to the west with Morse Pond on the other side of the road. The site likely continued further west to the edge of the pond but was destroyed by CTH M. The total square meters of the Ellefson site encompasses approximately 550 square meters, all of which is within the proposed right of way.

The site is a subsurface lithic scatter in a former cultivated field that was fallow and overgrown at the time of survey in 2011 (Appendix B). Artifacts collected during the Phase I survey include 15 waste flakes, three flake tools, and one projectile point base of varying chert types (Appendix C).

Surface collection along CTH M, Dane County, Wisconsin

Shovel testing along CTH M, Dane County, Wisconsin

Figure 5.1 Representative photos of Phase I survey along CTH M corridor.

Based on the types and densities of the materials and the appearance of intact soils, the site was determined to be potentially eligible for the NRHP for it's ability to produce important data for the understanding of prehistory. It was recommended that the site either be avoided or a Phase II evaluation be conducted to determine if the site meets the criteria for listing on the NRHP. A Phase II survey was conducted in October 2011. Phase II will be completed in 2012.

47DA1421 (Endres Site)

Site 47DA1421 consists of a small lithic scatter of an unknown prehistoric affiliation identified in a plowed agricultural field (Figure 5.3). The site is in the NW, NE, NW of Section 10, Township 6 North, Range 8 East and is located approximately 280 meters west from the southwest corner of the CTH M and CTH PD intersection, approximately 15 meters south of CTH PD. The site is located on the north edge of a plowed agricultural field to the south of CTH PD. The total square meters of the Endres site encompasses approximately 209 square meters, all of which is within the proposed right of way.

The site is a lithic scatter in a cultivated field that was planted in corn at the time of survey in 2011 (Appendix B). Artifacts collected during the Phase I survey include two flake tools and one waste flake Oneota Prairie du Chien and Galena chert (Appendix C).

Based on the types and densities of the materials suggest that the site may be a campsite and/or resources processing locale that could generate important information about the prehistoric patterns in the area. As such, the site was determined to be potentially eligible for the NRHP for it's ability to produce important data for the understanding of prehistory. It was recommended that the site either be avoided or a Phase II evaluation be conducted to determine if the site meets the criteria for listing on the NRHP. It was determined that the site will be avoided though redesign.

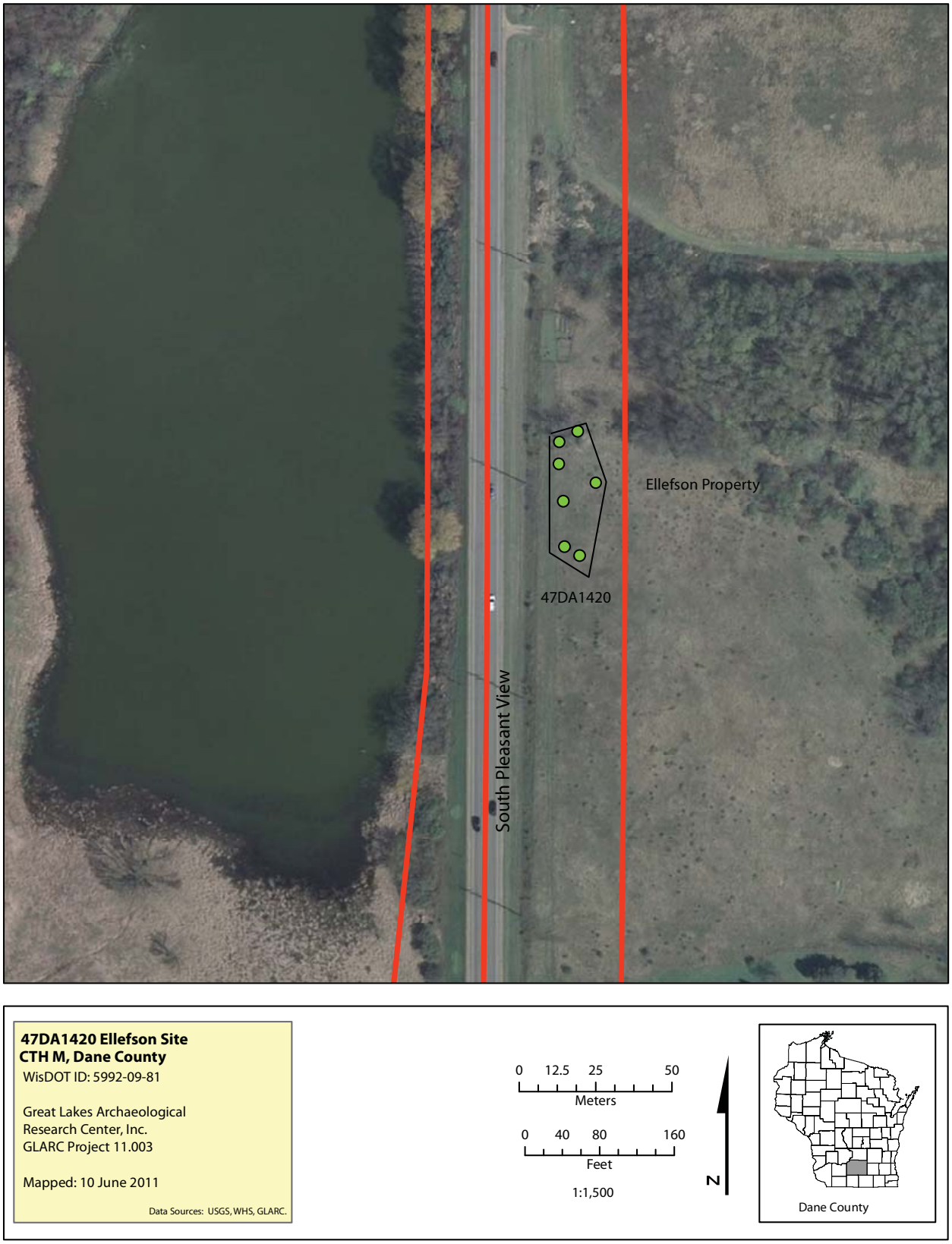

Figure 5.2 Location of the Ellefson site (47DA1420) relative to the CTH M corridor.

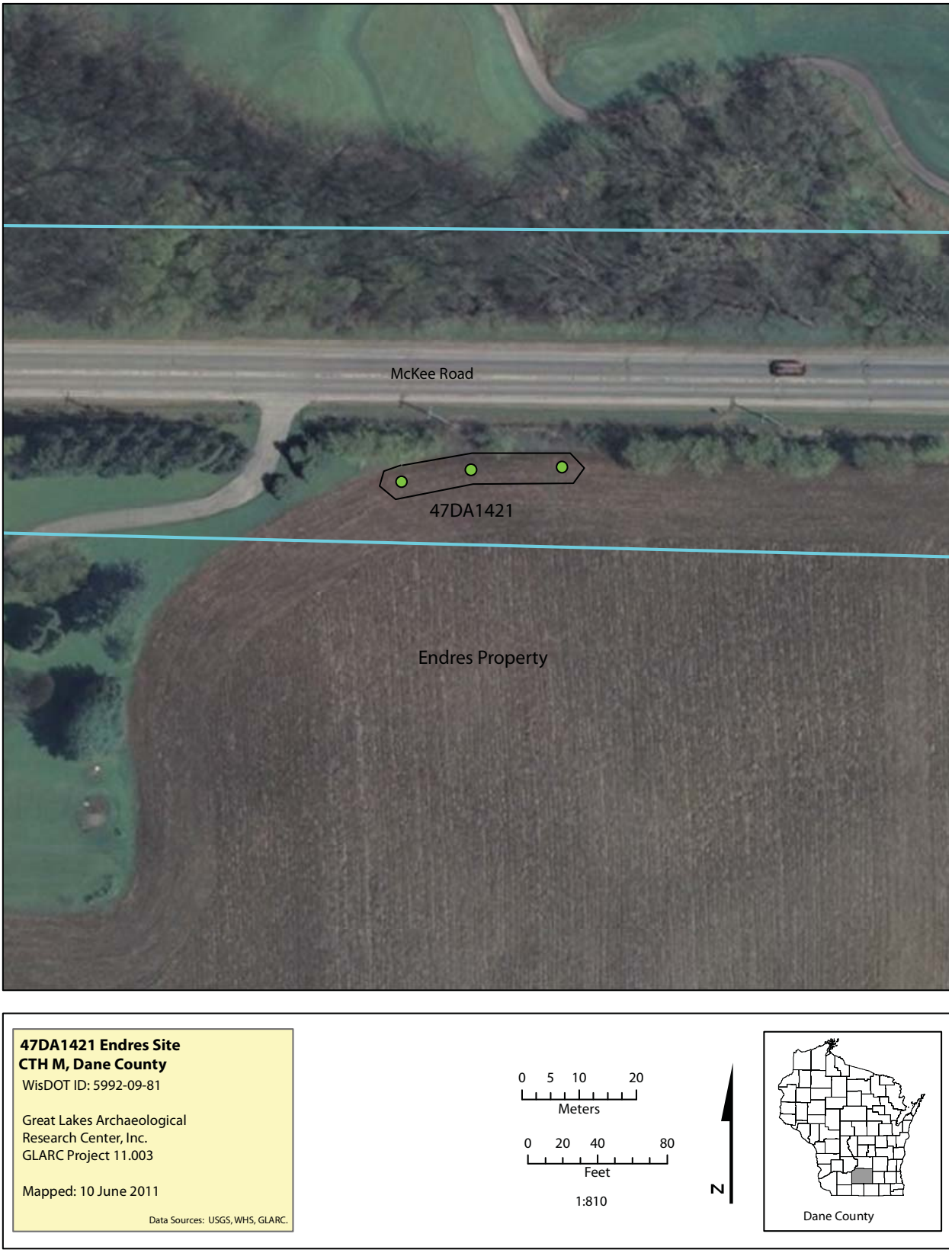

Figure 5.3 Location of the Endres site (47DA1421) relative to the CTH M corridor.

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Part V1: Results of the Phase II Evaluation Ellefson Site 47DA1420

Introduction

After a number of lithic waste flakes and a projectile point base were recovered during Phase I shovel testing, Phase II investigations were conducted at site 47DA1420. Phase II test unit excavation was conducted between October 24th and November 4th, 2011 and encompassed 21 m^2, or about 4 percent of the site area (Figure 6.1). Thirteen test units were excavated to a depth of at least 40 cmbs. The site was once under cultivation, as plow scars were encountered in the test units and pre- and post-contact cultural material was found mixed together within the plow zone. Originally, a 5 percent sample was going to be excavated, but since relatively few artifacts were recovered, with the pre-contact assemblage consisting entirely of non-diagnostic lithic material, excavation was stopped at a 4 percent sample.

Site Location and Setting

Site 47DA1420 is located along the east side of CTH M about 350 m north of County Highway PD (McKee Road) (Figure 6.2). It is about two miles north of the intersection of CTH M and Verona Avenue in Verona, southwest of Madison. Morse Pond lies on the opposite side of CTH M. Just north of the site is a depression that would have been connected to the basin of the pond before the county road was built and may have been filled with water during wetter times. Morse Pond is the deepest point of a larger basin or valley with a drainage outlet on its western side (Figure 6.2). The drainage passes just north of the depression, flowing west and then south to Mill Creek, a tributary of the Sugar River in the Rock River watershed. The land rises up on all sides of the site to ridges up to 200 feet above the level of Morse Pond. The site itself is located between 20 and 30 feet above the pond. Site 47DA0692, catalogued as a small Late Archaic to Middle Woodland encampment with a post-contact debris scatter, is located on the relatively low ridge along the southern end of the valley about three-quarters of a mile south of 47DA1420. No other sites have been recorded within the valley, but two pre-contact sites are recorded just outside of it.

CTH M abuts the eastern side of Morse Pond and the pond edge was likely altered by the construction of the road. In the area of site 47DA1420, there is a ditch on the east side of CTH M. From there, the land slopes up sharply to the east, climbing out of a road cut. The modern ground surface then flattens out before starting to gently rise again at the eastern edge of the site. A line of utility poles is situated along CTH M in the slope above the ditch. The site is on the northern edge of a former agricultural field that has been left fallow for some time. Plow scars and evidence of soil disturbance were encountered during test unit excavation. At the time of these investigations, the old field supported tall grass and weeds with some substantial bushes and saplings. Older trees and larger bushes grow in and along the edge of the depression to the north.

Within two miles of the site, at least half of the land is still covered by cultivated fields or patches of woods, but the area is becoming increasingly developed. There are numerous recent housing developments in the immediate vicinity, including one to the north about 575 m from the site. Across CTH M, beyond Morse Pond, is University Ridge Golf Course.

Before excavation

During excavation

After excavation

Figure 6.1 Representative photos of excavations at the Ellefson site (47DA1420).

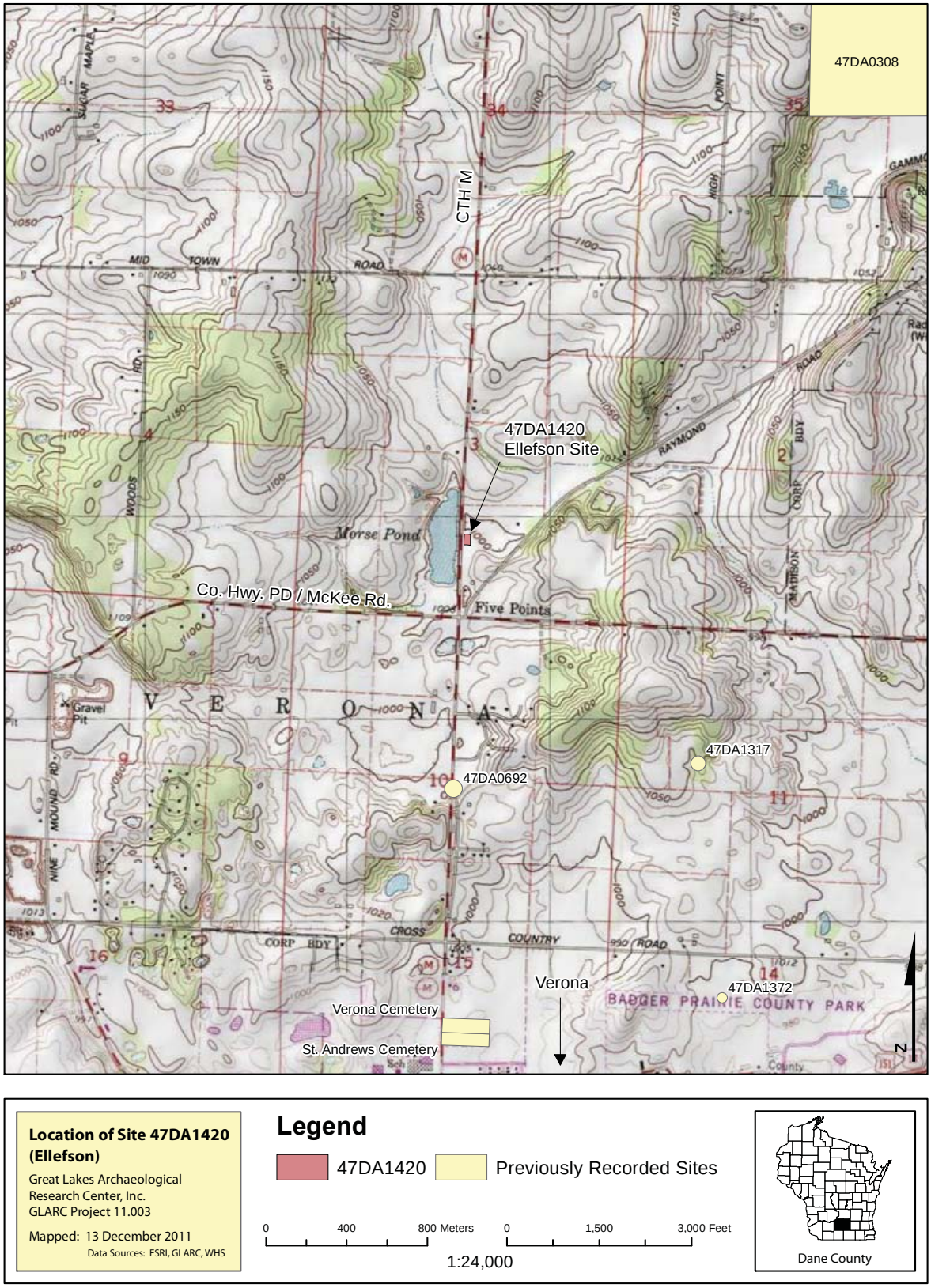


Figure 6.2 Location of the Ellefson site (47DA1420), Dane County, Wisconsin.

Test Unit Excavation

A total of 21 m^2 were excavated by hand at site 47DA1420 to a depth of at least 40 cm below the modern ground surface. This was accomplished through thirteen test units, eight of which were 1 x 2 m and five of which were 1 x 1 m in size. These were dispersed throughout the site. Eight test units were excavated on or very close to the locations of positive Phase I shovel tests. The other five test units were excavated to test the remaining areas of the site.

Before excavation began, a site datum (N5000 E3000) was established a few meters east of a utility pole near the northwest corner of the site. The pole is on the slope down to the ditch along the site of CTH M and the site datum represented the westward limit of where excavation was possible. A buried electrical line was flagged along a north-south line about 1 m east of the site datum. Test units were excavated between the eastern edge of the proposed ROW and a line 3 m east of the buried electrical cable, and between the estimated location of a property boundary at the northern end of the site (N5010) near the edge of the depression and an arbitrary site boundary 30 m south of the site datum (Figure 6.3). This southern boundary was about 6.5 m south of the southernmost positive Phase I shovel test (Shovel Test 6 South Bracket). The property boundary north of the site was eventually determined to be about 5 m north of the northernmost shovel test (Shovel Test 4 North Bracket). At the time of field work, however, this shovel test was thought to be on the far side of the property line and test units did not come within 9.5 m of this boundary.

Excavation was conducted in 10 cm arbitrary levels. All test units were excavated to 40 cm below the modern ground surface (cmbs) except for Test Unit 2, which was excavated to 50 cmbs after a flake was recovered from Level 4 (30-40 cmbs). Level 5 (40-50 cmbs) of Test Unit 2 was culturally sterile. Four subsequent units produced cultural material from Level 4, but this consisted of only debitage with no more than three pieces per unit. No additional levels were excavated in these units.

Soils

The soil at site 47DA1420 is Kegonsa silt loam with 2 to 6 percent slopes. Kegonsa soils are well-drained and generally level. They are found on outwash plain benches, forming in outwash and loess and supporting prairie and hardwood forest. The plow zone of a representative profile of this soil was 18 cm thick and was a very dark grayish brown (10YR3/2) silt loam. The remainder of the A horizon was 13 cm thick and a brown (10YR5/3) silt loam. The uppermost portion of the B horizon extended down to 43 cmbs and consisted of dark brown (10YR4/3) silty clay loam. Kegonsa silt loam with 2 to 6 percent slopes is found on stream valley benches (Glocker and Patzer 1978: 39-40).

To the west of the site and within the depression to the north is an area of Dresden silt loam with 6 to 12 percent slopes, eroded. Soils of the Dresden series are well-drained, gently sloping soils formed on stream valley benches. The representative soil profile for this series had an A horizon very similar to that of the Kegonsa series described above. The uppermost portion of the B horizon only extends down to 35 cmbs and is yellowish brown (10YR5/4), a color similar to what was observed during excavation (Glocker and Patzer 1978: 24).

In the thirteen test units, the Ap horizon was generally 20 cm thick, although it extended down to about 35 cmbs in Unit 12. This horizon consisted of a dark brown (10YR3/3) to dark yellowish brown (10YR4/4) clay loam (Figure 6.4). The B horizon below was a dark yellowish brown (10YR4/6 to yellowish brown (10YR5/8) clay loam to loamy clay. Sometimes the transition between these two horizons was quite distinct but at other times, such as in Test Unit 13, it was very gradual. Test Unit 13 also had a relatively dark

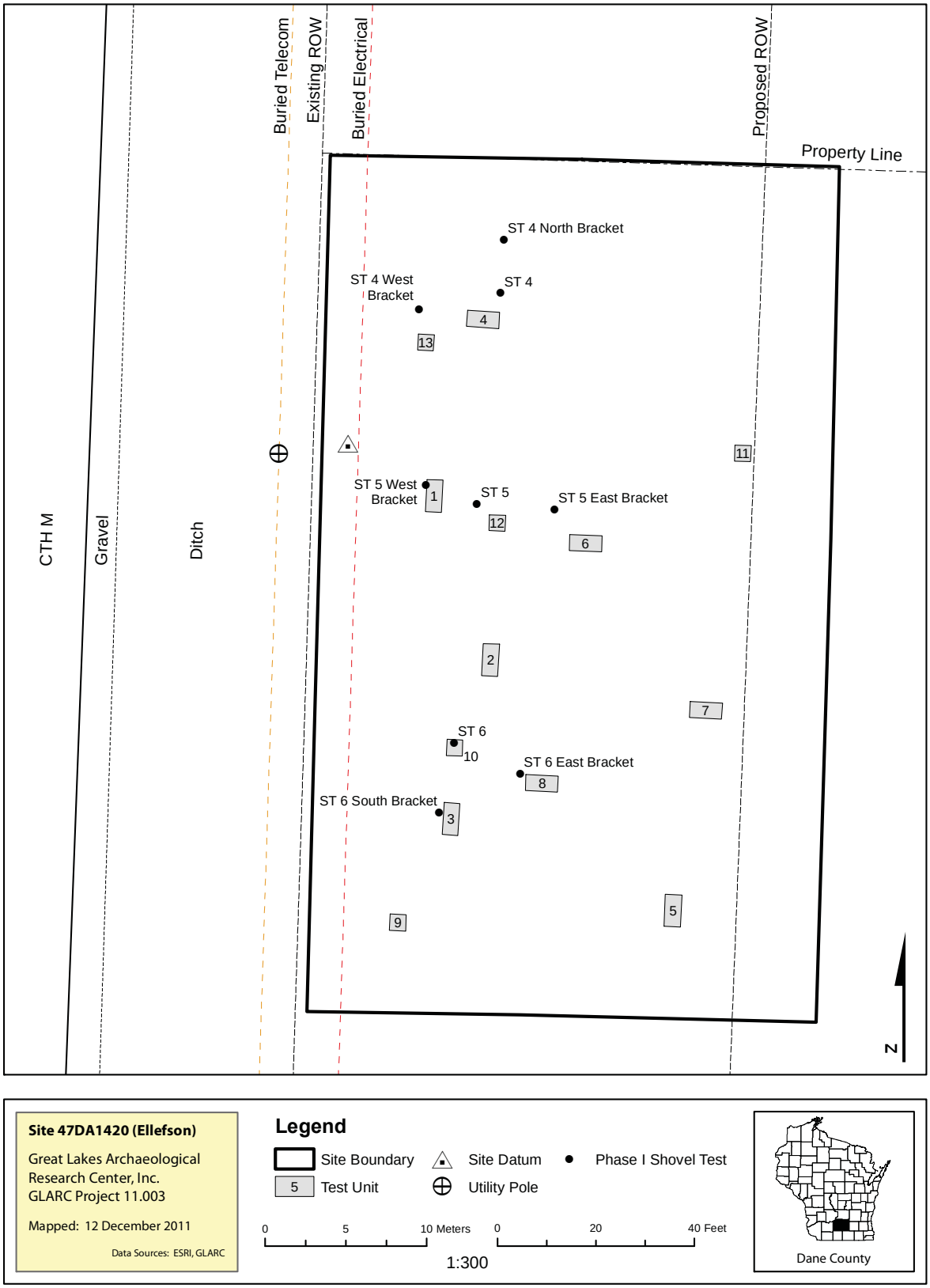


Figure 6.3 Site map of Ellefson site (47DA1420), Dane County, Wisconsin.

(10YR4/4) B horizon. Test Units 7 and 10 had a 5 to 10 cm thick mottled A/B horizon. In some units, the B horizon contained a noticeable amount of gravel. In Test Unit 2, an increase in gravel with depth appeared to mark the beginning of a B2 horizon in the northwest corner of the unit at 45 cmbs. Test Unit 2 was the only unit excavated below 40 cmbs.

Test Units 3, 7, 10, and 12 and possibly 11 and 13 revealed plow scars. Usually these were visible in planview as linear features near the A and B horizon boundary (Figure 6.4). The north wall of Unit 12 also revealed evidence of plowing just above the B horizon. These scars were consistently oriented east-west.

Cultural Assemblage

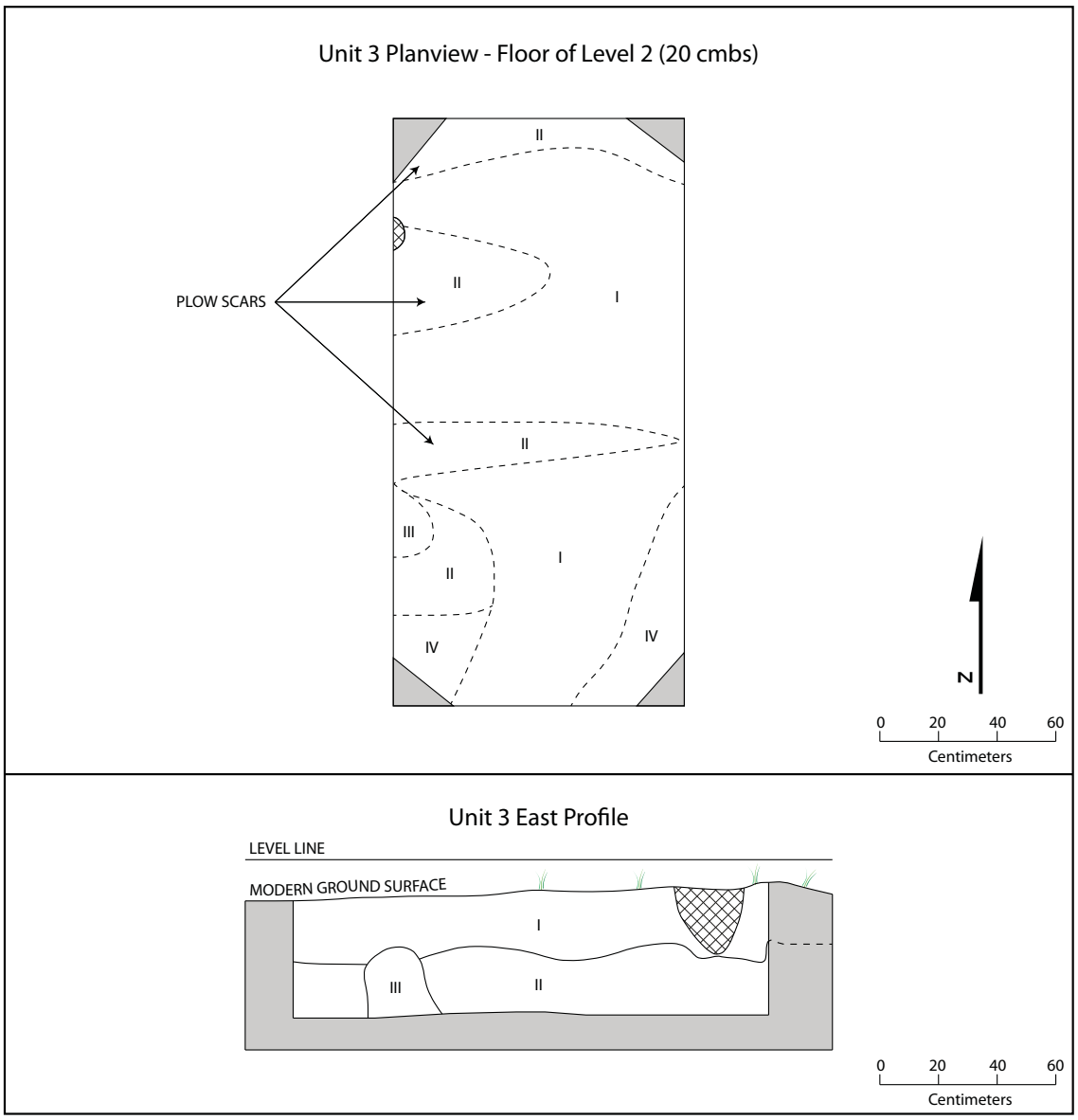
Relatively little cultural material was recovered during the Phase II investigations. The pre-contact cultural assemblage consists entirely of lithic materials. None of these artifacts are diagnostic and chipped stone tools are limited to an incipient biface and five flake tools. The post-contact assemblage was even smaller and consisted of miscellaneous refuse commonly found at the edges of cultivated fields.

Artifact Distribution

The horizontal distribution of artifacts does not reveal any significant patterning, but given the small size of the site and the fact that it has been disturbed by plowing, this is not surprising. The unit with the highest density of pre-contact materials was Test Unit 2, with 20.5 artifacts per square meter. Units that produced between ten and twenty pre-contact artifacts per square meter were located east and south of Test Unit 2, including Test Units 5, 7, and 11 along the eastern edge of the explored portion of the site. All other units yielded less than ten pre-contact artifacts per square meter. These low-density units were clustered in the northwest corner of the site. Test Unit 2 does not appear to have been the center of an artifact cluster, as some of the nearby units had significantly lower artifact densities, such as Test Units 10, 6, and 12. Densities of post-contact artifacts were extremely low, with no more than two items recovered per square meter in any unit. Post-contact artifact distribution did not follow the same pattern as pre-contact artifacts, with some units that had a high pre-contact density producing no post-contact material.

The cultural deposit encountered during the Phase II investigations was relatively shallow, with the vast majority of artifacts located between the modern ground surface and a depth of 30 cm. The vertical distribution of artifacts demonstrates the presence of a plow zone, as pre- and post-contact materials were found mixed together in Levels 1 through 3 (0-30 cmbs). Level 4 (30-40 cmbs), in the B horizon, was devoid of post-contact material but produced very few pre-contact artifacts and was culturally sterile in all but five units.

Site-wide, pre-contact material was concentrated in Level 2 (10-20 cmbs), which produced 135 lithic artifacts. Levels 1 and 3 yielded fifty-two and thirty-nine lithics, respectively. Level 4 (30-40 cmbs) produced only nine pre-contact artifacts. Post-contact material was limited to Levels 1, 2, and 3. Of the seventeen post-contact artifacts recovered, one was from Level 1 (0-10 cmbs), ten were from Level 2 (10-20 cmbs) which produced the most pre-contact artifacts, and six were from Level 3 (20-30 cmbs).



47DA1420 Ellefson
Unit 3 Planview and East Profile

Great Lakes Archaeological Research Center, Inc. Project 11.003

Mapped 27 October, 2011, TSG, AMW

Legend

——	Definite Boundary	I	Ap horion, clay loam, 10YR3/3
- - -	Indefinite Boundary	II	B horizon, loamy clay, 7.5YR4/6
	Unexcavated	III	Hard clay, mottled 10YR5/6 and 7.5YR 4/6
	Phase I Shovel Test (ST 6 North Braacket)	IV	Clay loam, mottled 10YR3/3 and 7.5YR4/6

Figure 6.4 Unit 3 planview and profile, Ellefson site (47DA1420), Dane County, Wisconsin.

Pre-Contact Assemblage

Pre-contact materials recovered during the Phase II investigations were limited to non-diagnostic lithic artifacts. This assemblage encompasses one incipient biface, five flake tools, and 229 waste flakes. The incipient biface is very roughly flaked along one edge only. It is made of pinkish Galena chert that may have been heat treated. The unworked edge has a thick band of cortex. This tool was recovered from Level 2 (10-20 cmbs) of Test Unit 8, which overlapped Phase I Shovel Test 6 East bracket. This shovel test had been positive for a single flake. In addition to the biface, Test Unit 2 yielded three flake tools (discussed below), thirty-eight pieces of debitage, one nail, and one piece of slag.

The flake tools include a spokeshave, two retouched flakes, and two utilized flakes. The spokeshave was recovered from Level 2 (10-20 cmbs) of Test Unit 11. This 1 x 1 m unit was located near the northeastern corner of the site and was the easternmost unit excavated. In addition to the spokeshave, Test Unit 11 produced fifteen waste flakes and a nail. This flake tool is made of untreated Galena chert, is Size Grade 2, and weighs 3.28 g. It was made from a flake with cortex on the striking platform. The semi-circular spokeshave indentation is about 7 mm across and 2 mm deep. The flake edge to either side of the indentation appears to be utilized.

One retouched flake and both of the utilized flakes were recovered from Level 2 (10-20 cmbs) of Test Unit 2, which also produced the incipient biface discussed above. The other retouched flake was recovered from Level 2 (10-20 cmbs) of Test Unit 3. The retouched flake from Test Unit 2 is made of Oneota Prairie du Chien chert containing numerous flaws. It has no cortex and does not appear to have been heat treated. It consists of a very irregular flake with unifacial retouch along one edge, and is Size Grade 2 and weighs 6.45 g. The retouched flake from Test Unit 3 is a size G2 flake that weighs 13.34 g. Cortex covers the dorsal face and one edge of the flake. The other edge has unifacial retouch on the ventral side and may also exhibit some use wear. This flake is of pale pink Silurian chert and may have been heat treated. Of the two utilized flakes, one is size G1 and the other is G2. The larger flake, weighing 16.11 g, is pink, heat treated, Shakopee Prairie du Chien chert. Two edges display fairly deep use wear indentations. The smaller flake, weighing 3.54 g, is Oneota Prairie du Chien chert and has cortex on what may have been the striking platform. The distal edge is pointed with use wear on both edges.

In total, 239 pieces of lithic debitage were recovered from the site during the Phase II investigations. By weight, the size distribution of the flakes is as follows: 15% G1, 57% G2, 27% G3, and 1% <G3. By count, 1% of the flakes were G1 (n=2), 18% G2 (n=42), 70% G3 (n=160), and 11% <G3 (n=25).

Determinations of raw material type, heat treatment, and the presence or absence of cortex were not made for the twenty-five flakes smaller than Size Grade 3. The remaining 204 flakes represented four local chert types: Oneota Prairie du Chien, Shakopee Prairie du Chien, Galena chert, and Silurian chert. Three flakes were made of chert that could not be identified, including one flake that consisted mostly of cortex. Also present were three flakes of unidentifiable lithic materials.

By weight, 58% of the 204 flakes size G3 and larger consists of Oneota Prairie du Chien chert (n=185.41 g), 18% of Shakopee Prairie du Chien chert (n=58.54 g), 12% of Galena chert (n=36.74 g), and 9% of Silurian chert (n=29.82 g). The three unidentified chert flakes weigh 3.41 g together and the four flakes of unidentified material weigh a total of 7.39 g. By count the raw material distribution is very similar with 53% Oneota (n=108), 21% Shakopee (n=42), 19% Galena (n=38), and 5% Silurian (n=10). A minority (10% by count, 25% by weight) of the flakes size G3 and larger had at least some cortex intact. Roughly half of the waste flake assemblage appears to have been heat treated.

In Ahler's experiments with Crescent chert, the flake size distribution by weight for soft hammer biface production most closely resembles the flake size distribution for Site 47DA1420 (Ahler 1989: 107). The incipient biface described above further supports that biface production occurred here. It is not certain that this is the only type of chipped stone tool production that occurred at the site, of course, as the debitage assemblage is small and the site likely once extended further east and west than the portion explored within the proposed ROW.

The pre-contact assemblage is suggestive of a small-scale, temporary campsite or resource-extraction site. Proximity to what likely would have usually been a pond may have made this location useful for hunting waterfowl and deer. Both the size distribution of the debitage assemblage and the presence of an incipient biface suggests biface production occurred at the site. The spokeshave and other flake tools suggest other activities such as woodworking and food processing took place at site 47DA1420 as well.

Post-Contact Assemblage

In total, seventeen pieces of post-contact material were recovered during the Phase II investigations. This consisted of five whiteware sherds, two earthenware sherds, three fragments of container glass, six nails, and one piece of slag. This material was thinly distributed throughout the site, with no more than four post-contact artifacts recovered from a single unit. Five test units did not yield post-contact material at all. The vertical distribution of post-contact artifacts illustrates the presence of a plow zone, as only one post-contact item was found in Level 1 (0-10 cmbs) but slightly larger amounts were recovered from Levels 2 and 3 (10-30 cmbs). Each of these two levels produced about the similar numbers of post-contact artifacts and these were intermixed with pre-contact artifacts, which were also recovered from Level 1.

Of the five whiteware sherds, one each was recovered from Level 2 (10-20 cmbs) of Test Units 5 and 6, and three were recovered from Level 3 (20-30 cmbs) of Test Unit 7. One of the sherds from Test Unit 7 includes a partial transfer print maker's mark on one side. This is from the mark of a manufacturer that used the British Royal Coat of Arms in their mark design. The only extant portion of the mark is part of the head of the crowned lion. Numerous potters in the U.K. and other countries used the Coat of Arms and it is not possible to determine with certainty which manufacturer is represented by this mark given how little of it remains.

The earthenware body sherds have a dark yellow glaze. It is not known what type of vessel these sherds are from. These artifacts were recovered from Level 2 (10-20 cmbs) of Test Unit 10. The container glass fragments were all recovered from Level 2 (10-20 cmbs) of Test Unit 3. Two of the glass fragments are aqua-tinted and the third fragment is from a brown bottle. The nails are all complete cut nails and weigh 26.06 g all together. Machine cut nails are likely to date to between 1830 and 1890 (Adams 2002: 66, 70). The nails were distributed among Test Units 1, 2, 3, 5, and 10, and were found in Levels 2 through 3 (10-30 cmbs).

The post-contact assemblage from site 47DA1420 is suggestive of the mid-to-late nineteenth century and may include material from the twentieth century. It likely represents a residential/agricultural context given the assortment of domestic debris and hardware and the proximity of the Schroeder-Stickelberg-Thompson Farmstead to the south. The farmhouse dates to around 1860.

Discussion and Recommendations

Site 47DA1420 represents a small, sparse, sub-surface lithic scatter of unknown pre-contact association. This scatter was likely generated by a small, temporary campsite or resource-extraction site, or possibly a series of such small-scale occupations. Chipped stone tool production occurred here, as evidenced by the debitage and incipient biface. The size distribution of the debitage assemblage is consistent with soft-hammer biface production, although this conclusion was reached from a relatively small sample size. The spokeshave and flake tools suggest activities other than stone tool production occurred here as well. The pre-contact artifact scatter most likely extended to the edge of Morse Pond at one time, but the construction of CTH M destroyed the western part of the site and altered the shore of the pond. Morse Pond lies in the lowest point of the surrounding valley and a pond or wetland may have been located here throughout much of the area's post-glacial history. Site 47DA1420 may have been a convenient location for hunting waterfowl or deer, although no faunal remains were recovered during the Phase II test excavations. Plowing of the area may have adversely affected the preservation of faunal remains.

The small post-contact assemblage from site 47DA1420 represents debris from a residential/agricultural context most likely related to the nearby Schroeder-Stickelberg-Thompson Farmstead to the south. The farmhouse dates to around 1860, and the artifact assemblage is consistent with a post-1860 context. Post contact artifacts include machine-cut nails and whiteware sherds (one with part of an unidentifiable transfer print maker's mark). None of these artifacts are diagnostic to a specific use, maker, or narrow range of time.

Site 47DA1420 has been disturbed by plowing. East-west oriented plow scars were observed in the floor and walls of multiple test units. At the time of the Phase II investigations, the property had been left fallow for a number of years. Most artifacts were recovered from the plow zone where pre- and post-contact materials were mixed. Therefore, the site has little to know vertical integrity. Although artifact density differed from test unit to test unit, no meaningful horizontal patterning was observed.

A total of 21 m^2 were excavated at Site 47DA1420 during the Phase II investigations. This was divided among thirteen units between 1 x 1 m and 1 x 2 m in size, all of which were excavated to at least 40 cm below the surface, which brought the floor of each unit below the plow zone and into the subsoil. Very few artifacts were recovered from below 30 cmbs. The cultural assemblage consists of 238 pre-contact stone artifacts (one incipient biface, five flake tools, and 232 pieces of debitage) and seventeen post-contact artifacts likely dating from the mid-1800s through early 1900s. The pre-contact chipped stone tools are not temporally or culturally diagnostic.

Site 47DA1420 is recommended as not eligible for listing on the National Register of Historic Places. The site produced little cultural material and lacks vertical integrity. It was likely truncated on the western side by CTH M. No diagnostic artifacts were recovered. In the post-contact era, the property has changed hands multiple times and is not known to be associated with any significant people or events. No further work is recommended for site 47DA1420 and neither mitigation nor avoidance is deemed necessary.

Part VI: Summary and Recommendations

In May and June 2011, Great Lakes Archaeological Research Center, Inc. (GLARC) conducted Phase I archaeological investigation and Phase II evaluation for CTH M in Dane County, Wisconsin. Archaeological investigations were completed for MSA Professional Services, the Wisconsin Department of Transportation, and the Federal Highway Administration under the auspices of WisDOT Project ID 5992-09-81.

The Phase I archaeological survey identified two archaeological sites within the CTH M project area, site 47DA1421 (Endres site), is a lithic scatter of an unknown prehistoric affiliation. The site was determined to be potentially eligible for the National Register of Historic Places (NRHP). This determination was based on types and qualities of the materials collected, which suggested that the site may be a campsite and/or resource processing locale that could generate important information about the prehistoric lifeways in the area. It was decided that the project would be redesigned to avoid the site.

Site 47DA1420 (Ellefson site), is a lithic scatter of an unknown prehistoric affiliation. The site was determined to be potentially eligible for the National Register of Historic Places (NRHP). This determination was based on the types and density of high quality chipped flaking debris and a notched point base. In addition, the Phase I survey showed that the site likely had an intact soil horizon, suggesting that the site may produce important data for understanding the regional prehistory. A Phase 2 site evaluation was conducted between October 24th and November 4th, 2011 and encompassed 21 m^2, or about 1 percent of the site area. In was determined during the Phase 2 that the site was once under cultivation, as plow scars were encountered in the test units and pre- and post-contact cultural material was found mixed together within the plow zone. Relatively few artifacts were recovered, with the pre-contact assemblage consisting entirely of non-diagnostic lithic material.

Site 47DA1420 is recommended as not eligible for listing on the National Register of Historic Places. The site produced little cultural material and lacks vertical integrity. It was likely truncated on the western side by CTH M.

Based on these data and the planned avoidance of 47DA1421, the CTH M will not have an adverse effect on sites 47DA1420 or 47DA1421. No further work is recommended.

The archaeological investigations detailed in this document were carried out on behalf of MSA Professional Services, the Federal Highway Administration (FHWA) and WisDOT to address responsibilities for identifying, recording, and managing cultural resources as stipulated under Section 106 of the National Historic Preservation Act of 1966 (P.L. 89-665) as amended and 36 CFR, part 800, which serves to implement the Act, as well as Wisconsin Statutes 44.40 and 157.70. The methods and techniques utilized during the course of investigations conform to the standards and guidelines set forth by the National Park Service in the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (1983) and by the Wisconsin Archaeological Survey in *Guidelines for Public Archaeology in Wisconsin, as Revised* (Kolb and Stevenson 1997). Archaeological materials, field notes, and supporting documentation are currently located at the Great Lakes Archaeological Research Center, located at 1408 North 5th Street in Milwaukee, Wisconsin.

These results notwithstanding, it should be noted that current conventional archaeological survey techniques are inadequate to determine the presence of deeply buried archaeological or paleontological deposits. Though the probability is unlikely, in the event that archaeological or paleontological materials

are encountered during the course of the project, all construction in the area of the discovery should be halted.

If archaeological or paleontological materials are encountered immediate consultation to insure compliance with (1) 36 CFR 800.11, The Regulations of the Advisory Council on Historic Preservation Governing the 106 Process; or (2) S. 44.40, Wis. Stats, may be obtained by contacting:

The Compliance Section

Historic Preservation Division

State Historical Society of Wisconsin

Phone #: 608-262-2970

and

Wisconsin Department of Transportation

Bureau of Equity and Environment

Phone #: 608-261-0137

If human remains are encountered immediate consultation to insure compliance with S. 157.70, Wis. Stats may be obtained by contacting:

The Burial Sites Preservation Office

Historic Preservation Division

State Historical Society of Wisconsin

Phone #: 1-800-342-7834

and

Wisconsin Department of Transportation

Bureau of Equity and Environment

Phone #: 608-261-0137

References Cited

Adams, William H.
2002 Machine Cut Nails and Wire Nails: American Production and Use for Dating 19th Century and Early-20th Century Sites. Historical Archaeology 36(4): 66-88.

Ahler, S. A.
1989b Mass Analysis of Flaking Debris: Studying the Forest Rather Than the Tree. In Alternative Approaches to Lithic Analysis, edited by D. Henry and G. H. Odell, pp. 85-118. Archaeological Papers of the American Anthropological Association, No.1, Washington, D.C.

Anderson, D. G. and J. C. Gillam
2000 Paleoindian Colonization of the Americas: Implications from an Examination of Physiography, Demography, and Artifact Distribution. *American Antiquity* 65(1):43-66.

Arzigian, C.
1987 The Emergence of Horticultural Economies in Southwestern Wisconsin. In Emergent Horticultural Economies of the Eastern Woodlands, edited by W. F. Keegan. *Occasional Paper No*. 7. Southern Illinois University at Carbondale, Center for Archaeological Investigations, Carbondale, Illinois.

Baerreis, D. A.
1953a The Airport Village Site, Dane County. *The Wisconsin Archeologist* 34(3):149-164.

1953b The Blackhawk Village Site, Dane County (Da5), *Wisconsin. Journal of the Iowa Archeological Society* 2(4):5-20.

Baerreis, D. A. and M. M. Bender
1984 The Outlet Site (47 DA 3): Some Dating Problems and a Reevaluation of the Presence of Corn in the Diet of Middle and Late Woodland Peoples in Wisconsin. *Midcontinental Journal of Archaeology* 9(2):143-154.

Bakken, C. T.
1950 Preliminary Investigations at the Outlet Site. *The Wisconsin Archeologist* 31(2):43-66.

Benn, D. W.
1980 *Hadfield Cave: A Perspective on Late Woodland Culture in Northeast Iowa*. Report 13, Office of the State Archaeologist. The University of Iowa, Iowa City, IA.

Berwick, D. E.
1975 Analysis of the Vertebrate Fauna of the Lawrence I Rockshelter (VE154), Vernon County, Wisconsin. M.A. Thesis, University of Wisconsin, Madison.

Birmingham, R. A. and L. E. Eisenberg
2000 *Indian Mounds of Wisconsin.* University of Wisconsin Press, Madison.

Breen,W.H.
1988 Walter Breen's Complete Encyclopedia of U.S. and Colonial Coins. Doubleday, New York.

Brown, C. E.
1909 "Additions to the Record of Wisconsin Antiquities, III." *The Wisconsin Archeologist* OS 8(4): 113-138.

Butterfield, Consul Willshire
1880 *History of Dane County, Wisconsin ... preceded by a history of Wisconsin, statistics of the state, and an abstract of its laws and constitution and of the Constitution of the United States*. Western Historical Company, Chicago.

Chamberlin, T. C.
1877 *Geology of Wisconsin--Survey of 1873-1877. volumes I-V*. Published under the direction of the Chief Geologist by the Commissioners of Public Printing, Madison.

Christiansen III, G. W.
2001 A Phase I Archaeological Survey of 16 Acres Within the University of Wisconsin-Madison's Picnic point, City of Madison, Dane County, Wisconsin. *Archaeological Research Incorporated Reports of Investigations Number* 64, Middleton, Wisconsin.

Curtis, J. T.
1959 *The Vegetation of Wisconsin-An Ordination of Plant Communities*. The University of Wisconsin Press, Madison.

Curtis, J. T. and H. C. Greene
1949 "A Study of Relic Wisconsin Prairies by the Species-Presence Method." *Ecology* 30(1): 83-92.

Dirst, V.
1988 *Research in Pursuit of the Past at Governor Nelson State Park, Dane County, Wisconsin*. Bureau of Parks and Recreation, Department of Natural Resources, State of Wisconsin Publication No. PR502, Madison.

1995 *Stockbridge Harbor: A Late Woodland Village on Lake Winnebago.* Bureau of Property Management, Wisconsin Department of Natural Resources, Madison.

Egan, K. C.
1995 Floral Analysis at the River Quarry (47DA768) and Murphy/S. Ziegler II (47Da-739/965) Sites. In *Archaeological Investigations of the Alternate Corridor Alignments for the Proposed Reconstruction of U.S.H. 12 Between Middleton and Sauk City, Dane County, Wisconsin*, edited by K. Hamilton, D. Tennessen, S. Slessman and M. Baumann. Museum Archaeology Program Research Report in Archaeology Number 46, Madison.

Emerson, T. E.
1979 Prehistoric Seasonal Exploitation of the White-Tailed Deer in the Driftless Area of Wisconsin: An Example from Brogley Rockshelter (47-Gt-156). *The Wisconsin Archeologist* 60(3):278-292.

Esarey, D.
1986 Red Ochre Mound Building and Marion Phase Associations: A Fulton County, Illinois Perspective. In *Early Woodland Archaeology*, edited by K. B. Farnsworth and T. E. Emerson, pp. 231-243. Center for American Archaeology Press, Kampsville.

Fladmark, K. R.
1979 Routes: Alternate Migration Corridors for Early Man in North America. *American Antiquity* 44(1):55-69.

Goldstein, L.G. and R. Kind
1987 Early Vegetation of the Region. *The Southeastern Wisconsin Archaeology Program: 1986-1987 and Project Summary*, University of Wisconsin, Milwaukee, Archaeological Research Laboratory, Report of Investigations, No. 88.

Goldstein, L. G.
1992 Study Unit: Middle Woodland in Southeastern Wisconsin. University of Wisconsin-Milwaukee, *Archaeological Laboratories Report* No 112.

Glocker, C. L. and R. A. Patzner
1978 *Soil Survey of Dane County*. State of Wisconsin, U.S.D.A. Soil Conservation Service and the Department of Agriculture.

Green, W. and S. Schermer
1988 The Turkey River Mound Group (13CT1). In *Archaeological and Paleoenvironmental Studies in the Turkey River Valley, Northeastern Iowa*, edited by W. Green. Office of the State Archaeologist University of Iowa Press, Iowa City.

Greenberg, J. H., C. G. I. Turner and S. L. Zegura
1986 The Settlement of the Americas. A Comparison of the Linguistic, Dental and Genetic Evidence. *Current Anthropology* 27:477-497.

Griffin, J. B.
1964 The Northeast Woodlands Area. In *Prehistoric Man in the New World*., edited by J. D. Jennings and E. Norbeck, pp. 223-258. University of Chicago Press,, Chicago.

1967 Eastern North American Archaeology: A Summary. *Science* 156:175-191.

Hall, R. L.
1962 *The Archaeology of Carcajou Point*. 2 vols. University of Wisconsin Press, Madison.

1993 Red Banks, Oneota, and the Winnebago: Views From a Distant Rock. *The Wisconsin Archeologist* 74(1-4):10-79.

1997 *An Archaeology of the Soul: North American Indian Belief and Ritual.* University of Illinois Press, Urbana and Chicago.

Hamilton, K., D. Tennessen, S. Slessman and M. Baumann
1995 Archaeological Investigations of the Alternate Corridor Alignments for the Proposed Reconstruction of U.S.H. 12 between Middleton and Sauk City, Dane County, Wisconsin. R*esearch Report in Archaeology* 46. Museum Archaeology Program, Madison.

Haynes, C. V., Jr.
1964 Fluted Projectile Point: Their Age and Dispersion. *American Antiquity* 145:1408-1413.

1969 The Earliest Americans. *Science* 166:709-715.

Hoffecker, J. F., W. R. Powers and T. Goebel
1993 Colonization of Beringia and the Peopling of the New World. *Science* 259:46-53.

Hole, F. D.
1976 *The Soils of Wisconsin*. The University of Wisconsin Press, Madison.

Hudson, C.
1976 *The Southeastern Indians*. The University of Tennessee Press, Knoxville.

Hurley, W. M.
1975 An Analysis of Effigy Mound Complexes in Wisconsin. *Anthropological Papers No*. 59, Museum of Anthropology, University of Michigan, Ann Arbor.

Johns, L.A.
1992 *Final Report of the Dane County Indian Mounds Identification Project.* Dane County Parks Commission, Madison.

Karn, E. D.
1959 *Roadmaking in Wisconsin Territory*. Department of History. University of Wisconsin, Madison.

Kay, J.
1977 *The Land of LaBaye: The Ecological Impact of the Green Bay Fur Trade, 1634-1836*. Unpublished Ph.D. Dissertation, Department of Anthropology, University of Wisconsin-Madison.

Kellogg, L. P.
1925 *The French Régime in Wisconsin and the Northwest*. State Historical Society of Wisconsin, Madison.

1935 *The British Regime in Wisconsin and the Northwest*. State Historical Society of Wisconsin, Madison.

Keyes, J. E. W.
1906 *History of Dane County.* Western Historical Association, Madison.

Kolb, J. and C. Stevenson
1998 *Guidelines for Public Archaeology In Wisconsin, as Revised*. Wisconsin Archaeological Survey, Madison.

Kuehn, S. R.
1998 New Evidence for Late Paleoindian - Early Archaic Subsistence Behaviour in the Western Great Lakes. *American Antiquity* 63(3):457-476.

Lapham, I. A.
1855 The Antiquities of Wisconsin as Surveyed and Described. *Smithsonian Contributions to Knowledge* 4. Smithsonian Institution, Washington, D.C.

Lawson, P. V.
1907 Habitat of the Winnebago, 1632-1832. *Proceedings of the State Historical Society of Wisconsin, 1906*, Madison.

Lippold, L. K.
1973 Animal Resource Utilization at Wisconsin Effigy Mound Sites. *The Wisconsin Archeologist* 54(3):135-152.

Lurie, N. O.
1960 Winnebago Prehistory. In *Culture in History: Essays in Honor of Paul Radin*, edited by D. Jenness, pp. 790-808. Columbia University Press, New York.

1978 Winnebago. *Handbook of North American Indians.* Edited by B. Trigger. 15:690-709. Smithsonian Institution.

MacKinnon, J. J.
1985 *Report of the University of Wisconsin-Madison Campus Prehistoric Mound Assessment Project.* Office of the State Archaeologist, Wisconsin Historical Society, Madison.

Maher, R. F.
1959 Six Mile Creek: A Non-Pottery Site on Lake Mendota. *The Wisconsin Archeologist* 40(1):19-25.

Mallam, R. C.
1976 The Iowa Mound Builders: *An American Myth* 23:145-175.

Martin, L.
1965 *The Physical Geography of Wisconsin*. Third Edition. University of Wisconsin Press, Madison.

Martin, P. S.
1973 The Discovery of America. *Science* 179:969-974.

Martin, S. R.
1999 *Wonderful Power: The Story of Ancient Copper Working in the Lake Superior Basin.* Wayne State University Press, Detroit, Michigan.

Martin, S. R. and T. C. Pleger
1999 The Complex Formerly Known as Culture: The Taxonomic Puzzle of “Old Copper”. In *Taming the Taxonomy:Toward a New Understanding of Great Lakes Archaeology*, edited by R. F. Williamson and C. M. Watts, pp. 61-70. Eastend Books and the Ontario Archaeological Society, Toronto.

Mason, C. I.
1986 The Historic Period in Wisconsin Archaeology. In *Introduction to Wisconsin Archaeology,* edited by W. Green, J. B. Stoltman and A. B. Kehoe. The Wisconsin Archeologist. vol. 67(3-4):181-206.

1988 *Introduction to Wisconsin Indians: Prehistory to Statehood.* Sheffield Publishing Company, Salem.

Mason, R. J.
1986 The PaleoIndian Tradition. *The Wisconsin Archeologist* 67(3-4):181-206.

1997 The Paleoindian Tradition. *The Wisconsin Archeologist* 78(1-2):78-111.

McKern, W. C.
1928 The Neal and McClaughry Mound Group. *Bulletin of the Public Museum of the City of Milwaukee*, Vol. 3, No. 2.

1929 Archaeological Fieldwork in La Crosse, Vernon, and Crawford Counties. *Year Book of the Public Museum of the City of Milwaukee* 9:7-26.

1930 The Kletzien and Nitschke Mound Groups. *Bulletin of the Public Museum of the City of Milwaukee*, 3(4).

1931 A Wisconsin Variant of the Hopewell Culture. *Bulletin of the Public Museum of the City of Milwaukee* No. 10(2):189-329.

McKern, W. C. and R. Ritzenthaler
1949 A Trait List of the Effigy Mound Aspect. *The Wisconsin Archeologist* 30(2):39-48.

McLachlan, W. G.
1914 The Mounds of the Lake Waubesa Region. *The Wisconsin Archeologist* OS 12(4): 107-166

1925 The Lake Kegonsa Region. *The Wisconsin Archeologist* OS 4(1): 181-206.

Meinholz, N. and J. Kolb
1997 The Statz Site: A Late Woodland and Archaic Workshop in Dane County, Wisconsin. *Archaeology Research Series Number 5*. Museum Archaeology Program, State Historical Society of Wisconsin, Madison.

Meltzer, D. J.
1995 Clocking the First Americans. *Annual Review of Anthropology* 24:21-45.

1997 Monte Verde and the Pleistocene Peopling of the Americas. *Science* 276(5313):754-755.

Munson, P. J.
1982 Marion, Black Sand, Morton, Havana Relationships: An Illinois Valley Perspective. *The Wisconsin Archeologist* 63(1):1-17.

Nero, R.
1955 Surface Indications of a Possible Early Archaic Camp-Site in Wisconsin. *The Wisconsin Archeologist* 36(4):128-146.

Overstreet, D. F.
1991 Paleoindian Study Unit: Region 9, Southeastern Wisconsin. *The Wisconsin Archeologist* 72(3-4): 265-366.

1993 *Chesrow: A Paleoindian Complex in the Southern Lake Michigan Basin.* Great Lakes Archaeological Press, Milwaukee.

1994 FY 1995 S & P, Ice Age Landscapes of Racine and Kenosha Counties, Wisconsin. Great Lakes Archaeological Research Center, Inc. *Report of Investigations* 366. Milwaukee, WI.

1997 Oneota Prehistory and History. *The Wisconsin Archeologist* 78(1-2):250-297.

2000 Cultural Dynamics of the Late Prehistoric Period in Southern Wisconsin. In, *Mounds, Modoc, and Mesoamerica: Papers in Honor of Melvin L. Fowler*., edited by S. R. Ahler. Illinois State Museum Scientific Papers No. 28, Springfield.

Park, W. J.
1877 Madison, Dane County and surrounding towns; being a history and guide to places of scenic beauty and historical note ... early intercourse of the settlers with the indians ... with a complete list of county supervisors and officers, and legislative members. W. J. Park & Co, Madison, WI.

Parmalee, P. W.
1959 Animal Remains from the Raddatz Rockshelter, SK5, Wisconsin. *The Wisconsin Archeologist* 40(2):83-90.

Paull, R. K. and R. A. Paull
1977 *Geology of Wisconsin and Upper Michigan--Including Parts of Adjacent States*. Kendal/Hunt Publishing Company, Dubuque, Iowa.

Peet, S. D.
1890 *Prehistoric America--Vol. 2, Emblematic Mounds and Animal Effigies.* American Antiquarian Office, Chicago.

Phillips, P.
1970 Archaeological Survey in the Lower Yazoo Basin, Mississippi, 1949-1955. *Papers of the Peabody Museum of Archaeology and Ethnology* No. 60. Peabody Museum.

Phillips, P., J. A. Ford and J. B. Griffin
1951 Archaeological Survey in the Lower Mississippi Alluvial Valley, 1940-1947. *Peabody Museum Papers*, Vol. 25, Harvard University, Cambridge.

Pleger, T. C.
2000 Old Copper and Red Ocher Social Complexity. *Midcontinental Journal of Archaeology* 25(2):169 - 190.

Prufer, O. H.
1964 Ohio Hopewell Ceramics: An Analysis of Extant Collections. Museum of Anthropology, *University of Michigan Anthropological Papers No*. 34. University of Michigan, Ann Arbor, Michigan.

Richards, J. D.
1992 *Ceramics and Culture at Aztalan, A Late Prehistoric Village in Southeast Wisconsin*. Unpublished Ph.D. dissertation, Department of Anthropology, University of Wisconsin-Milwaukee.

Riggs, R.E., and D.M. Seurer
1981 *Highway Archaeology in Wisconsin: the 1980 Field Season*. Wisconsin Department of Transportation: Archaeological Report 4. Madison.

Ritzenthaler, R.
1967a A Cache of Paleoindian Gravers from the Kouba Site. *The Wisconsin Archeologist* 48(3):261-262.

1967b A Probable Paleoindian Site in Wisconsin. *American Antiquity* 32(2):227-229.

1970 Clovis and Sandia-Like Points From Dane County, Wisconsin. *The Wisconsin Archeologist* 51(1):35-36.

Rowe, C.
1956 The Effigy Mound Culture in Wisconsin. *Milwaukee Public Museum Publications in Anthropology* No. 3., Milwaukee, Wisconsin.

Ruggles, D.
1835 "Geological and miscellaneous notice of the region around Fort Winnebago, Michigan Territory." *American Journal of Science* 30(1).

Salkin, P. H.
1986 The Lake Farms Phase: The Early Woodland Stage As Seen From The Lake Farms Archaeological District. In *Early Woodland Archeology*, edited by K. B. Farnsworth and T. E. Emerson, pp. 92-120. Center for American Archaeology Press, Kampsville, IL.

1987 A Reevaluation of the Late Woodland Stage in Southeastern Wisconsin. W*isconsin Academy Review* 33(2):75-79.

1993 Mitigation Excavations in the Kekoskee Archeological District in Dodge County. Archaeological Consulting and Services *Report of Investigations* No. 700, Verona, WI.

Salzer, R. J.
1974 The Wisconsin North Lakes Project: A Preliminary Report. In *Aspects of Upper Great Lakes Anthropology-Essays in Honor of Lloyd A. Wilford*, edited by E. Johnson, pp. 40-54. Publications of the Minnesota Historical Society, St. Paul.

nd *The Waukesha Focus: Hopewell In Southeastern Wisconsin.* Unpublished Manuscript, The Logan Museum, Beloit College, Beloit.

Sanborn, M. P. and S. J. Eaton
1980 Surface Collections at Horseshoe Ridge. *The Wisconsin Archeologist* 61(4):330-346.

Seurer, D.M., and J.T. Penman
1981 *Highway Archaeology in Wisconsin: The 1981 Field Season*. Wisconsin Department of Transportation: Archaeological Report 6. Madison.

Smith, A. E.
1973 *The History of Wisconsin, Volume 1: From Exploration to Statehood*. State Historical Society of Wisconsin, Madison.

Smith, W. R.
1927 *Incidents of a Journey from Pennsylvania to Wisconsin Territory, In 1837*. Chicago, Wright Howes.

Spector, J.
1977 Winnebago Indians and Lead Mining: A Case Study of the Ethnohistoric Approach in Archaeology. *Midcontinental Journal of Archaeology* 2(1):131-137.

Stevenson, C., R. F. Boszhardt, M. C. R., P. H. Salkin, T. C. Pleger, J. L. Theler and C. Arzigian
1997 The Woodland Tradition, edited by R. A. Birmingham, Carol I. Mason and James B. Stoltman, pp. 140-201. *The Wisconsin Archeologist* 78(1-2).

Stoltman, J. B.
1986 The Archaic Tradition. *The Wisconsin Archeologist* 67(3-4):207-238.

1990 The Woodland Tradition in the Prairie Du Chien Locality. In *The Woodland Tradition in the Western Great Lakes: Papers Presented to Elden Johnson*., edited by G. Gibbon. Publications in Anthropology No. 4. University of Minnesota, Minneapolis.

1991 A Reconsideration of Fluted Point Diversity in Wisconsin. *The Wisconsin Archeologist* 72(3-4):245-264.

1997 The Archaic Tradition. *The Wisconsin Archeologist* 78(1-2):112-139.

Storck, P. L.
1974 Some Aspects of Effigy Mound Subsistence and Settlement Patterns during the Late Woodland Period in Wisconsin. *Arctic Anthropology* 11(Supplement):272-279.

Tanner, H. H.
1987 *Atlas of Great Lakes Indian History*. University of Oklahoma Press, Norman, OK.

Theler, J. L.
1987 *Woodland Tradition Economic Strategies.* Report 117, Office of the State Archaeologist, University of Iowa, Iowa City.

Wendt, D.
1985 Paleoindian Site Distribution in the Yahara River Basin of Wisconsin. *The Wisconsin Archeologist* 66(3):243-264.

Whiteford, A. H.
1949 A Report on the Outlet Site on Lake Monona. *The Wisconsin Archeologist* 30(1):22-35.

Williams, S.
1963 The Eastern United States. In *Early Indian Farmers and Villages and Communities*, edited by W. Haag, pp. 267-325. National Park Service, Washington D.C.

Winters, H. D.
1969 The Riverton Culture. Illinois State Museum *Report of Investigations No.* 13. Illinois State Museum, Springfield.

Wittry, W. L.
1958 *Archaeological Studies of Five Wisconsin Rockshelters*. Ph.D. dissertation, University of Wisconsin, Madison.

1963 The Bell Site, Wn 9: An Early Historic Fox Village. *The Wisconsin Archeologist* 44(1):1-58.

Wyatt, B.
1986 *Cultural Resource Management in Wisconsin: Volume 2, A Manual for Historic Properties.* Historic Preservation Division, State Historical Society of Wisconsin.

APPENDIX A: SITE FORMS

Wisconsin Archeological Site Inventory Form

CODE #47-DA-1420 COUNTY: Dane

SITE NAME (limit 25 characters) Ellefson

FIELD NUMBER(S): 11.003-02

OTHER NAME: _____

Locational Information (See Appendix B)

CIVIL TOWN(S) Verona

TOWN # 6 North RANGE # 8 East SECTION #3

QUARTER-SECTIONS (at least 3): SW,SW,NW,SE

QUARTER-SECTION GRID ALIGNMENT (edge and corner): SW

OTHER LEGAL DESCRIPTION: French or Government Lot# _____

| ADDITIONAL TRS DATA: |
| |
| TOWN # _____ North RANGE # _____ E or W SECTION # _____ |
| |
| QUARTER-SECTIONS (at least 3) _____ |
| |
QUARTER-SECTION GRID ALIGNMENT (edge and corner)_____ |

UTM COORDINATES: (110)Zone 16N (112) Easting 293598 (114) Northing 4766084 (See Appendix C)

Method: Interpolated from USGS QUAD: X GPS Field _____

USGS 7.5' QUADRANGLE MAP NAME Middleton

GEOGRAPHIC LOCATION & RELATION TO LANDSCAPE FEATURES East side of CTH M north of County Highway PD. The site is across from Morse Pond, just south of a depression .

SITE/FEATURE DESCRIPTION: The site is a subsurface lithic scatter in a former cultivated field that was fallow and overgrown at the time of survey in 2011. CTH M is located immediately to the west with Morse Pond on the other side of the road. The site likely continued further west to the edge of the pond but was destroyed by CTH M. Most artifacts were recovered from a plow zone.

SITE TYPE(S): (Check all that apply. See Appendix D)

☐ Cabin/homestead	☐ HCM concentration	☐ Rock art
☐ Cache/pit/hearth	☐ Ice House	☐ Rock feature/petroform
☐ Campsite/village	☐ Isolated find	☐ School
☐ Cave/rockshelter	☐ Kiln	☐ Shell midden
☐ CCC/WPA site	☐ Kill site/bone bed	☐ Shipwreck
☐ Cemetery/burials	☒ Lithic scatter	☐ Sugar bush
☐ Church	☐ Logging camp	☐ Trading/fur post
☐ Corn hills/garden beds	☐ Military site	☐ Traditional Cultural Property
☐ Cultural Site	☐ Mill/sawmill	

☐ Dam/historic earthwork ☐ Mound(s)- conical ☐ Transportation site
☐ Dock/pier/crib ☐ Mound(s)- effigy ☐ Tower
☐ Enclosure/earthworks ☐ Mound(s)- linear ☐ Workshop site
☐ Experimental ☐ Mound(s)- other ☐ Unknown
☐ Farmstead ☐ Paleontological Other: _____
☐ Fish weir/trap ☐ Quarry/mine
☐ Foundation/depression ☐ Redeposited artifacts

****

For SHSW office use: HP-00-000 (rev. 12/16/2002)
CHK'D☐ GIS ☐ GIS CHK'D ☐ ENTER ☐ ENTRY CHK'D ☐ ASI#_____

CULTURE(S):(Check all that apply. See Appendix D in manual. Using certainty of affiliation: 1= definite, 2= probable, 3= possible)

_____ Paleo-Indian _____Woodland _____ Upper Miss./Oneota
_____ Early Paleo-Indian _____ Initial Woodland _____ Late Pre-contact
_____ Late Paleo-Indian _____Early Woodland _____ Post-Contact American Indian
_____ Archaic _____ Middle Woodland _____ Euro-American
_____ Early Archaic _____ Late Woodland _____ Unknown / Indeterminate
_____ Middle Archaic _____ Terminal Woodland _____ Unknown post—contact
_____Late Archaic _____ Middle Miss. X_____Unknown pre—contact
Other:_____

INVESTIGATION TYPE(S) COMPLETED: (Check all that apply.)

☐ Avocational Survey ☐ Major excavation ☐ Post hole digger
☐ Chance Encounter ☐ Mechanical Stripping ☐ Records/Background
☐ Controlled Surface Collection ☐ Monitoring ☐ Records (pred. model)
☐ Faunal Analysis ☐ Osteological analysis ☐ Remote Sensing
☐ Floral Analysis ☒ Phase I ☐ Soil core
☐ Geomorphology ☐ Phase II ☐ Surface Survey (int)
☐ Historical Research ☒ Phase II-corridor only ☒ Shovel Testing/Probing (Int)
☐ Interview/informant ☐ Phase III ☒ Test excavation
☐ Land Use History ☐ Phase III-corridor only ☐ Traditional Knowledge
☐ Vandalism ☐ Walk Over (Reconn.) ☐ Unknown
Other

PHASE/TRIBE/ETHNIC GROUP(S): (Enter all that apply. Please check Appendix F.)
_____

Site recorded For -

☒ Compliance SHSW# _____ Agency Number City of Madison Project #00373030
☐ State, Non-Compliance SHSW# _____
☐ State Regional Program, Region _____ Year _____ SHSW# _____
☐ Survey & Planning # _____ SHSW # _____
☐ THPO SHSW# _____ Burial Sites Regional Program SHSW# _____
☐ Avocational SHSW#_____ ISTEA/TEA 21: _____ SHSW# _____
☐ SMART GROWTH: ☐ SHSW# _____ Other _____ SHSW# _____

Environmental Information

Natural Divisions: 1010 ELEVATION (Feet above sea level)
(See Appendix G.)

DRAINAGE SYSTEM: ☐Black R. ☒Rock R. ☐Illinois R. ☐Fox R. (South)
(Check One) ☐Chippewa R. ☐St. Croix R. ☐L. Michigan ☐Fox R. (North)
(See Appendix H) ☐Green Bay ☐Wisconsin R. ☐L. Superior ☐Mississippi R.

DRAINAGE--TRIBUTARY OR SMALL LAKE Mill Creek

NEAREST WATER SOURCE NAME: Morse Pond

NEAREST WATER TYPE(S): (Check one)
☐ Perennial steam/river ☒ Lake/pond ☐ Marsh
☐ Intermittent stream ☐ Floodplain lake/oxbow ☐ Spring
☐ Artificial ☐ Relict/extinct

SOIL(S): Kegonsa silt loam, 2 to 6 percent slopes

ADDITIONAL ENVIRONMENTAL DATA

SITE DIMENSIONS: _____ ☐ feet OR ☐ meters (check one)
or
SITE AREA: 0.41 ☒ acres OR ☐ hectares (check one)

MODERN LAND USE (AT LAST UPDATE): (Check one or two.)

☒ Cultivation ☐ Marked cemetery ☐ Pasture/grassland
☐ Forest ☐ Recreational ☐ Residential
☐ Industrial/commercial ☐ Submerged
☒ Transportation corridor Name/Number: County Trunk Highway M
☐ Energy corridor Name:
☐ Impoundment Name: _____
Other: _____ _____ Unknown

DEGREE OF DISTURBANCE (AT LAST UPDATE): (Check one.)

☐ Minimal(0-25%) ☐ Moderate(25-50%) ☒ Heavy(50-75%) ☐ Completely destroyed ☐ Unknown

THREATS TO SITE: (Prioritize; 1, 2, ,3)
Development: 2____ residential, urban _____residential, rural
_____ Industrial/commercial urban _____Industrial/commercial rural
_____Energy corridor Name: _____
_____ impoundment Name: _____
1____ transportation corridor Name: _____
Resource Use: _____ logging _____ mining _____ quarrying _____agricultural _____recreational
Vandalism: _____ looting _____ defacing _____ collecting
Natural: _____erosion _____ bioturbation Other: _____

Artifact / Archival Information _____

ARTIFACT/RECORDS REPOSITORY (See Appendix I.): UWM

MATERIAL CLASS(ES): (Check all that apply.)

☐ Aboriginal ceramics ☐ Ground/pecked stone
☒ Euro-American ceramics ☐ Historic building material
☐ Faunal remains ☐ Houses/Structures
☐ Features ☐ Human bone
☐ Fire-altered rock ☒ Metal
☐ Floral remains ☒ Other chipped stone
☒ Glass ☐ Projectile points
☐ Other: _____ ☐ Standing Structures

MATERIAL TYPE(S) Lithic debitage, some flake tools and possible bifaces. No diagnostic materials. Raw materials are local types.

DATES: _____

DATING METHOD(S): ☒ Artifact style/cross-dating ☒ Site type

☐ Informant/Oral History ☐ Traditional Knowledge
☐ Thermoluminescence DATE: _____ ☐ Other: _____
☐ Historic records
☐ Radiocarbon DATE: _____

Investigator/Reporter Information:

NAME OF INVESTIGATOR(S)	AFFILIATION((See Appendix I.)	DATE(S) OF INVESTIGATION
Zak Stencil	GLARC	31 May – 7 June 2011
Rhiannon Jones	GLARC	24 October – 4 November 2011

NAME OF SITE REPORTER Rhiannon Jones AFFILIATION (See Appendix I.) GLARC

DATE SITE REPORTED 8 December 2011

BIBLIOGRAPHIC REFERENCES: 2011Shillinglaw and Jones, Phase I and II Archaeological Investigations, County Trunk Highway M, Dane County, Wisconsin. ROI 781. Great Lakes Archaeological Research Center, Milwaukee.

Investigator's Recommendation- Check all that apply.

☐ No recommendation offered	☒ No Additional Investigation
☐ Additional Background Search	☐ Redesign-avoid
☐ Phase I / Field Verify	☐ Catalogue as burial site
☐ Phase II	☐ Protect During Construction
☐ Phase II-corridor only	☐ Preserve in place
☐ Phase III	☐ Covenant
☐ Phase III-corridor only	☐ Floral Analysis
☐ Faunal Analysis	☐ Osteological analysis
☐ Remote Sensing	☐ Geomorphology
☐ Historical research	☐ Monitor
☐ Complete NRHP Nomination	☐ Oral History/Informant
☐ Traditional Knowledge	☐ Unknown
☐ Other: _____	

Comments: After a Phase II investigation, it is recommended that this site is not eligible for listing on the National Register of Historic Places.

Ownership Information:
OWNERSHIP TYPE: (Check all that apply) ☐Public-Federal ☐Public-State ☐Public-Local ☒ Private ☐ Indian Lands-Trust ☐ Indian Lands-Allotted ☐ Unknown

OWNER'S NAME(S) Jason M Ellefson
OWNER'S ADDRESS(ES) 7611 Discovery Drive, Middleton, WI 53562
YEAR OWNERSHIP DETERMINED 2011

National Register (NRHP) and State Register (SRHP) STATUS.

☐ Not Evaluated ☐ Determined Eligible – in DOE process	Date: _____
☐Determined Eligible – in nomination process	Date: _____
☐ Boundary Change ☐ Boundary Decreased ☐ Boundary Increased	Date: _____
☐District (Name): _____ Multiple Properties: _____	
☐Traditional Cultural Property: _____	Date: _____

Wisconsin ASI Continuation Sheet

Please use this space for other sections of the form, or for any additional notes or comments.

Wisconsin Archeological Site Inventory Form

CODE #47-DA-1421 COUNTY: Dane

SITE NAME (limit 25 characters) Endres

FIELD NUMBER(S): 11.003-01

OTHER NAME: _____

Locational Information (See Appendix B)

CIVIL TOWN(S) Verona

TOWN # 6 North RANGE # 8 East SECTION #10

QUARTER-SECTIONS (at least 3): NW, NE, NW

QUARTER-SECTION GRID ALIGNMENT (edge and corner): Northwest Corner, North Edge

OTHER LEGAL DESCRIPTION: French or Government Lot# _____

| ADDITIONAL TRS DATA: |
|
| TOWN # _____ North RANGE # _____ E or W SECTION # _____ |
|
| QUARTER-SECTIONS (at least 3) _____ |
|
QUARTER-SECTION GRID ALIGNMENT (edge and corner)_____ |

UTM COORDINATES: (110)Zone 16N (112) Easting 293263 (114) Northing 4765712 (See Appendix C)

Method: Interpolated from USGS QUAD: ____ GPS Field X

USGS 7.5' QUADRANGLE MAP NAME Middleton

GEOGRAPHIC LOCATION & RELATION TO LANDSCAPE FEATURES: The Endres site is located approximately 280 meters west from the southwest corner of the CTH M and CTH PD intersection, approximately 15 meters south of CTH PD. The site is located on the north edge of a plowed agricultural field to the south of CTH PD.

SITE/FEATURE DESCRIPTION: The Endres site consists of a small lithic scatter identified in a plowed agricultural field. Pedestrian survey was completed in the 90 percent visibility field at a 5 meter interval. The lithic scatter contained 2 pieces of lithic debitage and a utilized end scraper. The area near the scatter was resurveyed at a 2 meter interval, no further cultural material was identified.

SITE TYPE(S): (Check all that apply. See Appendix D)

☐ Cabin/homestead	☐ HCM concentration	☐ Rock art
☐ Cache/pit/hearth	☐ Ice House	☐ Rock feature/petroform
☐ Campsite/village	☐ Isolated find	☐ School
☐ Cave/rockshelter	☐ Kiln	☐ Shell midden
☐ CCC/WPA site	☐ Kill site/bone bed	☐ Shipwreck
☐ Cemetery/burials	☒ Lithic scatter	☐ Sugar bush
☐ Church	☐ Logging camp	☐ Trading/fur post
☐ Corn hills/garden beds	☐ Military site	☐ Traditional Cultural

☐ Cultural Site ☐ Mill/sawmill Property
☐ Dam/historic earthwork ☐ Mound(s)- conical ☐ Transportation site
☐ Dock/pier/crib ☐ Mound(s)- effigy ☐ Tower
☐ Enclosure/earthworks ☐ Mound(s)- linear ☐ Workshop site
☐ Experimental ☐ Mound(s)- other ☐ Unknown
☐ Farmstead ☐ Paleontological Other: _____
☐ Fish weir/trap ☐ Quarry/mine
☐ Foundation/depression ☐ Redeposited artifacts

****

For SHSW office use: HP-00-000 (rev. 12/16/2002)
CHK'D☐ GIS ☐ GIS CHK'D ☐ ENTER ☐ ENTRY CHK'D ☐ ASI#_____

CULTURE(S):(Check all that apply. See Appendix D in manual. Using certainty of affiliation: 1= definite, 2= probable, 3= possible)

_____ Paleo-Indian _____Woodland _____ Upper Miss./Oneota
_____ Early Paleo-Indian _____ Initial Woodland _____ Late Pre-contact
_____ Late Paleo-Indian _____Early Woodland _____ Post-Contact American Indian
_____ Archaic _____ Middle Woodland _____ Euro-American
_____ Early Archaic _____ Late Woodland _____ Unknown / Indeterminate
_____ Middle Archaic _____ Terminal Woodland _____ Unknown post—contact
_____Late Archaic _____ Middle Miss. 1 Unknown pre—contact
Other:_____

INVESTIGATION TYPE(S) COMPLETED: (Check all that apply.)

☐ Avocational Survey ☐ Major excavation ☐ Post hole digger
☐ Chance Encounter ☐ Mechanical Stripping ☒ Records/Background
☒ Controlled Surface Collection ☐ Monitoring ☐ Records (pred. model)
☐ Faunal Analysis ☐ Osteological analysis ☐ Remote Sensing
☐ Floral Analysis ☒ Phase I ☐ Soil core
☐ Geomorphology ☐ Phase II ☒ Surface Survey (int)
☐ Historical Research ☐ Phase II-corridor only ☒ Shovel Testing/Probing (Int)
☐ Interview/informant ☐ Phase III ☐ Test excavation
☐ Land Use History ☐ Phase III-corridor only ☐ Traditional Knowledge
☐ Vandalism ☐ Walk Over (Reconn.) ☐ Unknown
Other

PHASE/TRIBE/ETHNIC GROUP(S): (Enter all that apply. Please check Appendix F.)
_____

Site recorded For -

☒ Compliance SHSW# _____ Agency Number : WisDOT ID: 0037-30-30
☐ State, Non-Compliance SHSW# _____
☐ State Regional Program, Region _____ Year _____ SHSW# _____
☐ Survey & Planning # _____ SHSW # _____
☐ THPO SHSW# _____ Burial Sites Regional Program SHSW# _____
☐ Avocational SHSW#_____ ISTEA/TEA 21: _____ SHSW# _____
☐ SMART GROWTH: ☐ SHSW# _____ Other _____ SHSW# _____

Environmental Information

Natural Divisions: 934 FAMSL ELEVATION (Feet above sea level)
(See Appendix G.)

DRAINAGE SYSTEM:	☐Black R.	☒Rock R.	☐Illinois R.	☐Fox R. (South)
(Check One)	☐Chippewa R.	☐St. Croix R.	☐L. Michigan	☐Fox R. (North)
(See Appendix H)	☐Green Bay	☐Wisconsin R.	☐L. Superior	☐Mississippi R.

DRAINAGE--TRIBUTARY OR SMALL LAKE Sugar River

NEAREST WATER SOURCE NAME: Morse Pond

NEAREST WATER TYPE(S): (Check one)
☐ Perennial steam/river ☒ Lake/pond ☐ Marsh
☐ Intermittent stream ☐ Floodplain lake/oxbow ☐ Spring
☐ Artificial ☐ Relict/extinct

SOIL(S): DrD2, Dresden Loam, 12-20 percent slopes, Eroded

ADDITIONAL ENVIRONMENTAL DATA

SITE DIMENSIONS: 35m by 7m ☐ feet OR ☒ meters (check one)
or
SITE AREA: .06 ☒ acres OR ☐ hectares (check one)

Or NOT DETERMINED

MODERN LAND USE (AT LAST UPDATE): (Check one or two.)

☒ Cultivation ☐ Marked cemetery ☐ Pasture/grassland
☐ Forest ☐ Recreational ☐ Residential
☐ Industrial/commercial ☐ Submerged
☐ Transportation corridor Name/Number: _____
☐ Energy corridor Name:
☐ Impoundment Name: _____
Other: _____ _____ Unknown

DEGREE OF DISTURBANCE (AT LAST UPDATE): (Check one.)

☐ Minimal(0-25%) ☐ Moderate(25-50%) ☒ Heavy(50-75%) ☐ Completely destroyed ☐ Unknown

THREATS TO SITE: (Prioritize; 1, 2, ,3)
Development: _____ residential, urban _____residential, rural
_____ Industrial/commercial urban _____Industrial/commercial rural
_____Energy corridor Name: _____
_____ impoundment Name: _____
2 transportation corridor Name: CTH PD
Resource Use: _____ logging _____ mining _____ quarrying 1 agricultural _____recreational
Vandalism: _____ looting _____ defacing _____ collecting
Natural: _____erosion _____ bioturbation Other: _____

Artifact / Archival Information _____

ARTIFACT/RECORDS REPOSITORY (See Appendix I.): GLARC- Will be returned to landowner

MATERIAL CLASS(ES): (Check all that apply.)

☐ Aboriginal ceramics ☐ Ground/pecked stone
☐ Euro-American ceramics ☐ Historic building material
☐ Faunal remains ☐ Houses/Structures
☐ Features ☐ Human bone
☐ Fire-altered rock ☐ Metal
☐ Floral remains ☒ Other chipped stone
☐ Glass ☐ Projectile points
☐ Other: _____ ☐ Standing Structures

MATERIAL TYPE(S) Lithic debitage and one utilized scraper, no diagnostic artifacts. All are local material types.

DATES: None

DATING METHOD(S): ☐ Artifact style/cross-dating ☐ Site type
☐ Informant/Oral History ☐ Traditional Knowledge
☐ Thermoluminescence DATE: _____ ☐ Other: _____
☐ Historic records
☐ Radiocarbon DATE: _____

Investigator/Reporter Information:

NAME OF INVESTIGATOR(S)	AFFILIATION((See Appendix I.)	DATE(S) OF INVESTIGATION
Zachary Stencil	GLARC	6/3/ 2011
Katherine Littrell	GLARC	6/3/ 2011

NAME OF SITE REPORTER Katherine Shillinglaw, M,S. RPA AFFILIATION (See Appendix I.) GLARC

DATE SITE REPORTED 12/19/2011

BIBLIOGRAPHIC REFERENCES: 2011Shillinglaw and Jones, Phase I and II Archaeological Investigations, County Trunk Highway M, Dane County, Wisconsin. ROI 781. Great Lakes Archaeological Research Center, Milwaukee.

Investigator's Recommendation- Check all that apply.

☐ No recommendation offered	☐ No Additional Investigation
☐ Additional Background Search	☒ Redesign-avoid
☐ Phase I / Field Verify	☐ Catalogue as burial site
☐ Phase II	☐ Protect During Construction
☐ Phase II-corridor only	☐ Preserve in place
☐ Phase III	☐ Covenant
☐ Phase III-corridor only	☐ Floral Analysis
☐ Faunal Analysis	☐ Osteological analysis
☐ Remote Sensing	☐ Geomorphology
☐ Historical research	☐ Monitor
☐ Complete NRHP Nomination	☐ Oral History/Informant
☐ Traditional Knowledge	☐ Unknown
☐ Other: _____	

Comments: _____

Ownership Information:
OWNERSHIP TYPE: (Check all that apply) ☐Public-Federal ☐Public-State ☐Public-Local ☒ Private ☐ Indian Lands-Trust ☐ Indian Lands-Allotted ☐ Unknown

OWNER'S NAME(S) Gerald A. Endres
OWNER'S ADDRESS(ES) 7055 County Highway PD, Verona, WI, 53593
YEAR OWNERSHIP DETERMINED 2011

National Register (NRHP) and State Register (SRHP) STATUS.
☒ Not Evaluated ☐ Determined Eligible – in DOE process Date: _____
☐Determined Eligible – in nomination process Date: _____
☐ Boundary Change ☐ Boundary Decreased ☐ Boundary Increased Date: _____
☐District (Name): _____ Multiple Properties: _____
☐Traditional Cultural Property: _____ Date: _____

Wisconsin ASI Continuation Sheet

Please use this space for other sections of the form, or for any additional notes or comments.

Appendix B: Inventory

Phase I Endres, June 3, 2011

Tuesday, December 20, 2011
10:36:33 AM

Lot Number		Surface	Era	Type	Detail	Trait 1	Trait 2	Trait 3	Trait 4	Trait 5	Size	Count	Weight (g)
11.003-0048	1	Piece Plot 1	Pre-Contact	Lithic	Formal Tool	Scraper	Complete	Oneota PDC	Cortex	Heat Treated	2	1	11.67
11.003-0049	1	Piece Plot 2	Pre-Contact	Lithic	Flake Tool	Utilized	Complete	Galena Chert	Cortex	Heat Treated	3	1	0.97
11.003-0050	1	Piece Plot 3	Pre-Contact	Lithic	Waste Flake			Oneota PDC	Cortex	Indeterminate	3	1	1.24

3

Phase I Ellefson, June 2, 2011

Tuesday, December 20, 2011
10:35:16 AM

Lot Number		Transect	Shovel Test	Bracket	Era	Type	Detail	Trait 1	Trait 2	Trait 3	Trait 4	Trait 5	Size	Count	Weight (g)
11.003-0039	1	1	4		Pre-Contact	Lithic	Waste Flake			Galena Chert	Cortex	Indeterminate	3	1	0.44
11.003-0040	1	1	4	West	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	3	1	0.26
11.003-0041	1	1	4	North	Pre-Contact	Lithic	Flake Tool	Utilized	Complete	Galena Chert	No Cortex	Heat Treated	3	1	1.25
11.003-0042	1	1	5		Pre-Contact	Lithic	Flake Tool	Retouched	Complete	Unidentifed Chert	No Cortex	Indeterminate	3	1	0.57
11.003-0042	2	1	5		Pre-Contact	Lithic	Waste Flake			Galena Chert	Cortex	Heat Treated	3	2	1.41
11.003-0043	1	1	5	East	Pre-Contact	Lithic	Flake Tool	Retouched	Complete	Unidentifed Chert	No Cortex	Indeterminate	3	1	0.93
11.003-0043	2	1	5	East	Pre-Contact	Lithic	Waste Flake			Galena Chert	Cortex	Indeterminate	3	1	0.26
11.003-0043	3	1	5	East	Pre-Contact	Lithic	Waste Flake			Galena Chert	Cortex	Heat Treated	3	1	0.13
11.003-0043	4	1	5	East	Pre-Contact	Lithic	Waste Flake			Unidentified Chert	No Cortex	Indeterminate	3	1	0.14
11.003-0044	1	1	5	West	Pre-Contact	Lithic	Formal Tool	Projectile Point	Fragment	Galena Chert	Cortex	Heat Treated	3	1	0.64
11.003-0044	2	1	5	West	Pre-Contact	Lithic	Waste Flake			Oneota PDC	Cortex	Indeterminate	3	1	0.64
11.003-0044	3	1	5	West	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Indeterminate	3	1	0.1
11.003-0045	1	1	6		Pre-Contact	Lithic	Waste Flake			Galena Chert	Cortex	Indeterminate	3	2	0.88
11.003-0045	2	1	6		Pre-Contact	Lithic	Waste Flake			Galena Chert	No Cortex	Heat Treated	3	1	0.85
11.003-0046	1	1	6	East	Pre-Contact	Lithic	Waste Flake			Galena Chert	No Cortex	Heat Treated	3	1	0.23
11.003-0047	1	1	6	South	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Indeterminate	3	1	0.37
11.003-0047	2	1	6	South	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	Cortex	Heat Treated	3	1	0.47

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Phase II Ellefson, October 23 - November 4, 2011

Tuesday, December 20, 2011
10:38:14 AM

Lot Number		Unit	Level	Era	Type	Detail	Trait 1	Trait 2	Trait 3	Trait 4	Trait 5	Size	Count	Weight (g)
11.003-0001	1	1	1	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Indeterminate	3	1	0.8
11.003-0002	1	1	2	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	Cortex	Indeterminate	3	1	0.72
11.003-0002	2	1	2	Pre-Contact	Lithic	Waste Flake			Oneota PDC	Cortex	Indeterminate	3	1	0.42
11.003-0002	3	1	2	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	3	2	0.44
11.003-0002	4	1	2	Pre-Contact	Lithic	Waste Flake			Galena Chert	No Cortex	Heat Treated	3	3	0.61
11.003-0003	1	1	3	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	2	1	2.65
11.003-0003	2	1	3	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	3	1	0.58
11.003-0003	3	1	3	Pre-Contact	Lithic	Waste Flake			Galena Chert	No Cortex	Heat Treated	3	1	0.58
11.003-0003	4	1	3	Post-Contact	Metal	Nail	Unidentified	Fragment					1	3.03
11.003-0004	1	2	1	Pre-Contact	Lithic	Waste Flake			Galena Chert	Cortex	Heat Treated	2	1	2.99
11.003-0004	2	2	1	Pre-Contact	Lithic	Waste Flake			Galena Chert	No Cortex	Heat Treated	2	2	7.59
11.003-0004	3	2	1	Pre-Contact	Lithic	Waste Flake			Oneota PDC	Cortex	Heat Treated	2	1	5.71
11.003-0004	4	2	1	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	2	1	2.14
11.003-0004	5	2	1	Pre-Contact	Lithic	Waste Flake			Silurian	Cortex	Indeterminate	3	2	2.64
11.003-0004	6	2	1	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Indeterminate	3	2	1.35
11.003-0004	7	2	1	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Indeterminate	3	1	1.6

Lot Number	Unit	Level	Era	Type	Detail	Trait 1	Trait 2	Trait 3	Trait 4	Trait 5	Size	Count	Weight (g)
11.003-0004	8	2	1	Pre-Contact	Lithic	Waste Flake					<G3	1	0.15
11.003-0004	9	2	1	Post-Contact	Metal	Slag						1	0.83
11.003-0005	1	2	2	Pre-Contact	Lithic	Flake Tool	Retouched	Complete	Oneota PDC	No Cortex	Indeterminate	2	1	6.45
11.003-0005	2	2	2	Pre-Contact	Lithic	Flake Tool	Utilized	Complete	Shakopee PDC	No Cortex	Heat Treated	1	1	16.11
11.003-0005	3	2	2	Pre-Contact	Lithic	Flake Tool	Utilized	Complete	Oneota PDC	Cortex	Indeterminate	2	1	3.54
11.003-0005	4	2	2	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	2	1	3.94
11.003-0005	5	2	2	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	3	6	7.73
11.003-0005	6	2	2	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Indeterminate	3	2	1.75
11.003-0005	7	2	2	Pre-Contact	Lithic	Waste Flake			Unidentified Chert	Cortex	Heat Treated	2	1	3.98
11.003-0005	8	2	2	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	Cortex	Heat Treated	3	1	1.22
11.003-0005	9	2	2	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Heat Treated	3	4	0.81
11.003-0005	10	2	2	Pre-Contact	Lithic	Waste Flake			Galena Chert	No Cortex	Heat Treated	3	2	1.11
11.003-0005	11	2	2	Pre-Contact	Lithic	Waste Flake					<G3	3	0.37
11.003-0006	1	2	3	Pre-Contact	Lithic	Waste Flake			Oneota PDC	Cortex	Indeterminate	2	1	20.76
11.003-0006	2	2	3	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	3	3	2.32
11.003-0006	3	2	3	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Indeterminate	3	1	0.34
11.003-0006	4	2	3	Pre-Contact	Lithic	Waste Flake					<G3	1	0.07
11.003-0006	5	2	3	Post-Contact	Metal	Nail	Cut	Complete				1	3.51

Lot Number	Unit	Level	Era	Type	Detail	Trait 1	Trait 2	Trait 3	Trait 4	Trait 5	Size	Count	Weight (g)
11.003-0007	1	2	4	Pre-Contact	Lithic	Waste Flake		Oneota PDC	No Cortex	Indeterminate	2	1	2.41
11.003-0008	1	3	2	Pre-Contact	Lithic	Flake Tool	Retouched/Utilized	Complete	Silurian	Cortex	Heat Treated	2	1	13.34
11.003-0008	2	3	2	Pre-Contact	Lithic	Waste Flake		Shakopee PDC	No Cortex	Heat Treated	3	2	0.38
11.003-0008	3	3	2	Pre-Contact	Lithic	Waste Flake		Shakopee PDC	No Cortex	Indeterminate	3	1	0.3
11.003-0008	4	3	2	Pre-Contact	Lithic	Waste Flake		Galena Chert	Cortex	Indeterminate	2	1	7.5
11.003-0008	5	3	2	Pre-Contact	Lithic	Waste Flake		Oneota PDC	No Cortex	Heat Treated	3	4	1.36
11.003-0008	6	3	2	Pre-Contact	Lithic	Waste Flake		Oneota PDC	No Cortex	Indeterminate	3	10	4.91
11.003-0008	7	3	2	Pre-Contact	Lithic	Waste Flake		Galena Chert	No Cortex	Heat Treated	3	2	1.06
11.003-0008	8	3	2	Pre-Contact	Lithic	Waste Flake					<G3	4	0.64
11.003-0008	9	3	2	Post-Contact	Glass	Container		Aqua				2	3.04
11.003-0008	10	3	2	Post-Contact	Glass	Container	Bottle	Brown				1	0.66
11.003-0009	1	3	3	Pre-Contact	Lithic	Waste Flake		Shakopee PDC	No Cortex	Heat Treated	3	1	1.75
11.003-0009	2	3	3	Pre-Contact	Lithic	Waste Flake		Oneota PDC	No Cortex	Heat Treated	2	1	1.97
11.003-0009	3	3	3	Pre-Contact	Lithic	Waste Flake		Oneota PDC	No Cortex	Indeterminate	3	1	0.26
11.003-0009	4	3	3	Pre-Contact	Lithic	Waste Flake		Silurian	No Cortex	Indeterminate	2	1	2.42
11.003-0009	5	3	3	Pre-Contact	Lithic	Waste Flake		Silurian	No Cortex	Indeterminate	3	1	0.76
11.003-0009	6	3	3	Post-Contact	Metal	Nail	Cut	Complete				1	6.38
11.003-0010	1	4	2	Pre-Contact	Lithic	Waste Flake		Shakopee PDC	No Cortex	Heat Treated	3	1	0.28

Lot Number	Unit	Level	Era	Type	Detail	Trait 1	Trait 2	Trait 3	Trait 4	Trait 5	Size	Count	Weight (g)
11.003-0010	2	4	2	Pre-Contact	Lithic	Waste Flake		Oneota PDC	No Cortex	Heat Treated	3	1	0.33
11.003-0010	3	4	2	Pre-Contact	Lithic	Waste Flake		Oneota PDC	No Cortex	Indeterminate	3	3	2.71
11.003-0010	4	4	2	Pre-Contact	Lithic	Waste Flake		Galena Chert	No Cortex	Heat Treated	3	1	0.11
11.003-0011	1	4	3	Pre-Contact	Lithic	Waste Flake		Shakopee PDC	No Cortex	Heat Treated	1	1	26.92
11.003-0011	2	4	3	Pre-Contact	Lithic	Waste Flake		Galena Chert	No Cortex	Heat Treated	3	1	0.14
11.003-0011	3	4	3	Pre-Contact	Lithic	Waste Flake		Oneota PDC	No Cortex	Indeterminate	3	2	0.53
11.003-0012	1	4	4	Pre-Contact	Lithic	Waste Flake		Oneota PDC	No Cortex	Heat Treated	3	2	0.36
11.003-0013	1	5	1	Pre-Contact	Lithic	Waste Flake		Galena Chert	No Cortex	Heat Treated	3	3	1.09
11.003-0013	2	5	1	Pre-Contact	Lithic	Waste Flake		Oneota PDC	No Cortex	Indeterminate	3	4	3.22
11.003-0013	3	5	1	Pre-Contact	Lithic	Waste Flake		Shakopee PDC	No Cortex	Heat Treated	3	1	0.23
11.003-0013	4	5	1	Pre-Contact	Lithic	Waste Flake		Silurian	No Cortex	Heat Treated	3	1	0.15
11.003-0014	1	5	2	Pre-Contact	Lithic	Waste Flake		Oneota PDC	No Cortex	Heat Treated	2	1	2.68
11.003-0014	2	5	2	Pre-Contact	Lithic	Waste Flake		Oneota PDC	No Cortex	Indeterminate	3	8	7.09
11.003-0014	3	5	2	Pre-Contact	Lithic	Waste Flake		Shakopee PDC	No Cortex	Indeterminate	3	2	0.68
11.003-0014	4	5	2	Pre-Contact	Lithic	Waste Flake		Galena Chert	No Cortex	Heat Treated	3	2	0.95
11.003-0014	5	5	2	Pre-Contact	Lithic	Waste Flake		Galena Chert	No Cortex	Indeterminate	3	1	0.14
11.003-0014	6	5	2	Pre-Contact	Lithic	Waste Flake					<G3	4	0.27
11.003-0014	7	5	2	Post-Contact	Ceramic	Whiteware	Undecorated	Body Sherd				1	0.18

Lot Number	Unit	Level	Era	Type	Detail	Trait 1	Trait 2	Trait 3	Trait 4	Trait 5	Size	Count	Weight (g)
11.003-0014	8	5	2	Post-Contact	Metal	Nail	Cut	Complete				1	10.04
11.003-0014	9	5	2	Post-Contact	Metal	Nail	Unidentified	Fragment				1	1.5
11.003-0014	10	5	2	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	3	4	1.99
11.003-0015	1	5	3	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Indeterminate	3	2	2.08
11.003-0015	2	5	3	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Indeterminate	2	2	6.62
11.003-0015	3	5	3	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Indeterminate	3	1	0.25
11.003-0016	1	6	1	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Heat Treated	3	2	1.47
11.003-0016	2	6	1	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	3	1	0.51
11.003-0016	3	6	1	Pre-Contact	Lithic	Waste Flake			Galena Chert	No Cortex	Indeterminate	3	3	1.89
11.003-0017	1	6	2	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	2	1	8.71
11.003-0017	2	6	2	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Indeterminate	3	1	0.83
11.003-0017	3	6	2	Pre-Contact	Lithic	Waste Flake			Galena Chert	No Cortex	Heat Treated	3	1	1
11.003-0017	4	6	2	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	3	1	0.47
11.003-0017	5	6	2	Pre-Contact	Lithic	Waste Flake						<G3	1	0.11
11.003-0017	6	6	2	Post-Contact	Ceramic	Whiteware	Undecorated	Body Sherd					1	0.5
11.003-0018	1	6	3	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	2	1	4.61
11.003-0018	2	6	3	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Indeterminate	3	1	0.36
11.003-0018	3	6	3	Pre-Contact	Lithic	Waste Flake			Galena Chert	No Cortex	Heat Treated	2	1	2.28

Lot Number	Unit	Level	Era	Type	Detail	Trait 1	Trait 2	Trait 3	Trait 4	Trait 5	Size	Count	Weight (g)
11.003-0018	4	6	3	Pre-Contact	Lithic	Waste Flake			Galena Chert	No Cortex	Heat Treated	3	3	0.69
11.003-0019	1	6	4	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Indeterminate	2	1	2.9
11.003-0019	2	6	4	Pre-Contact	Lithic	Waste Flake						<G3	1	0.11
11.003-0020	1	7	1	Pre-Contact	Lithic	Waste Flake			Oneota PDC	Cortex	Indeterminate	2	1	17.52
11.003-0020	2	7	1	Pre-Contact	Lithic	Waste Flake			Oneota PDC	Cortex	Indeterminate	3	1	1.82
11.003-0020	3	7	1	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	2	1	3.59
11.003-0020	4	7	1	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	3	4	3.86
11.003-0020	5	7	1	Pre-Contact	Lithic	Waste Flake			Silurian	No Cortex	Heat Treated	2	1	3.38
11.003-0020	6	7	1	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Heat Treated	3	2	0.66
11.003-0020	7	7	1	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Heat Treated	<G3	1	0.03
11.003-0021	1	7	2	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Indeterminate	1	1	22.22
11.003-0021	2	7	2	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	2	2	6.06
11.003-0021	3	7	2	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Indeterminate	3	5	1.99
11.003-0021	4	7	2	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Indeterminate	2	1	1.9
11.003-0021	5	7	2	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Heat Treated	3	1	0.54
11.003-0021	6	7	2	Pre-Contact	Lithic	Waste Flake			Silurian	No Cortex	Indeterminate	3	1	0.15
11.003-0022	1	7	3	Pre-Contact	Lithic	Waste Flake			Oneota PDC	Cortex	Indeterminate	2	1	6.05
11.003-0022	2	7	3	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Indeterminate	2	1	2.06

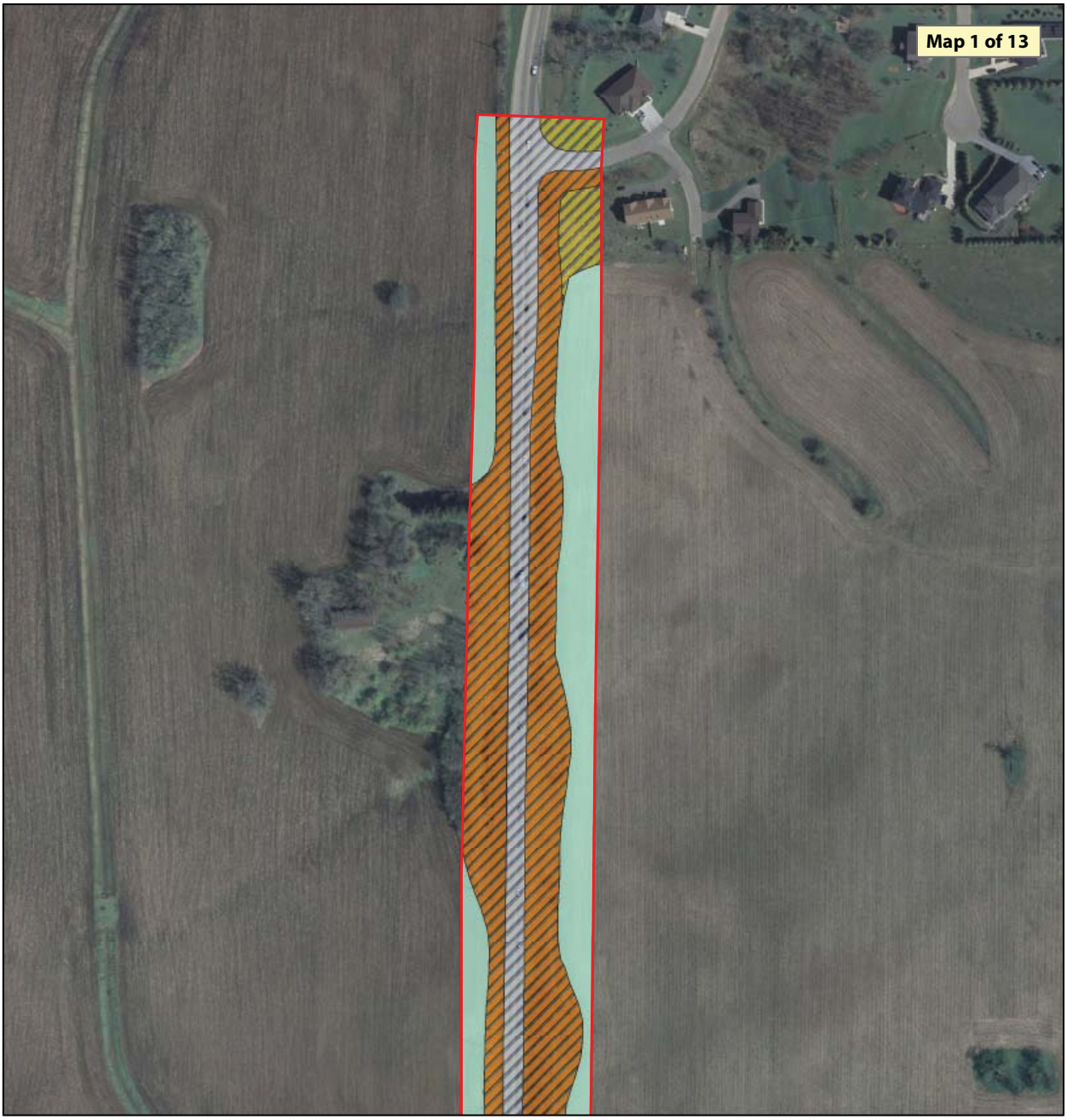
Lot Number	Unit	Level	Era	Type	Detail	Trait 1	Trait 2	Trait 3	Trait 4	Trait 5	Size	Count	Weight (g)
11.003-0022	3	7	3	Post-Contact	Ceramic	Whiteware	Undecorated	Basal Sherd				1	3.03
11.003-0022	4	7	3	Post-Contact	Ceramic	Whiteware	Undecorated	Body Sherd				2	3.13
11.003-0023	1	8	1	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	Cortex	Indeterminate	3	1	0.55
11.003-0023	2	8	1	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Heat Treated	3	2	1.19
11.003-0023	3	8	1	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	3	3	0.96
11.003-0024	1	8	2	Pre-Contact	Lithic	Formal Tool	Biface	Complete	Galena Chert	Cortex	Heat Treated	2	1	17.19
11.003-0024	2	8	2	Pre-Contact	Lithic	Waste Flake			Galena Chert	Cortex	Heat Treated	2	1	1.52
11.003-0024	3	8	2	Pre-Contact	Lithic	Waste Flake			Unidentified Chert	Cortex	Indeterminate	2	1	2.5
11.003-0024	4	8	2	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	2	1	1.18
11.003-0024	5	8	2	Pre-Contact	Lithic	Waste Flake			Galena Chert	No Cortex	Indeterminate	2	1	3.01
11.003-0024	6	8	2	Pre-Contact	Lithic	Waste Flake			Galena Chert	Cortex	Indeterminate	3	1	0.66
11.003-0024	7	8	2	Pre-Contact	Lithic	Waste Flake			Unidentified	Cortex	Indeterminate	3	3	1.16
11.003-0024	8	8	2	Pre-Contact	Lithic	Waste Flake			Galena Chert	No Cortex	Heat Treated	3	2	0.42
11.003-0024	9	8	2	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	3	4	1.34
11.003-0024	10	8	2	Pre-Contact	Lithic	Waste Flake			Unidentified Chert	No Cortex	Indeterminate	3	1	0.91
11.003-0024	11	8	2	Pre-Contact	Lithic	Waste Flake						<G3	6	0.71
11.003-0025	1	8	3	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Heat Treated	3	2	0.28
11.003-0026	1	8	4	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Indeterminate	2	1	3.54

Lot Number		Unit	Level	Era	Type	Detail	Trait 1	Trait 2	Trait 3	Trait 4	Trait 5	Size	Count	Weight (g)
11.003-0026	2	8	4	Pre-Contact	Lithic	Waste Flake			Oneota PDC	Cortex	Indeterminate	3	1	0.8
11.003-0026	3	8	4	Pre-Contact	Lithic	Waste Flake						<G3	1	0.17
11.003-0028	1	9	3	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	3	1	0.13
11.003-0028	2	9	3	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Indeterminate	3	1	0.39
11.003-0029	1	9	4	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Heat Treated	2	1	0.95
11.003-0027	1	9	2	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	Cortex	Indeterminate	2	1	2.14
11.003-0027	2	9	2	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Indeterminate	3	2	0.29
11.003-0027	3	9	2	Pre-Contact	Lithic	Waste Flake						<G3	2	0.21
11.003-0030	1	10	1	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	3	1	0.16
11.003-0031	1	10	2	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Heat Treated	3	1	0.57
11.003-0031	2	10	2	Post-Contact	Ceramic	Earthenware		Body Sherd		Grog			2	8.49
11.003-0031	3	10	2	Post-Contact	Metal	Nail	Cut	Complete					1	4.6
11.003-0032	1	10	3	Pre-Contact	Lithic	Waste Flake			Galena Chert	No Cortex	Heat Treated	3	1	0.39
11.003-0033	1	11	1	Pre-Contact	Lithic	Waste Flake			Silurian	No Cortex	Indeterminate	2	1	4.64
11.003-0033	2	11	1	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Heat Treated	2	1	0.73
11.003-0033	3	11	1	Pre-Contact	Lithic	Waste Flake			Galena Chert	No Cortex	Indeterminate	3	1	0.12
11.003-0033	4	11	1	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Indeterminate	3	1	0.3
11.003-0033	5	11	1	Pre-Contact	Lithic	Waste Flake			Oneota PDC	Cortex	Indeterminate	3	1	0.16

Lot Number		Unit	Level	Era	Type	Detail	Trait 1	Trait 2	Trait 3	Trait 4	Trait 5	Size	Count	Weight (g)
11.003-0034	1	11	2	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Heat Treated	2	1	5.25
11.003-0034	2	11	2	Pre-Contact	Lithic	Waste Flake			Silurian	No Cortex	Indeterminate	2	1	2.79
11.003-0034	3	11	2	Pre-Contact	Lithic	Flake Tool	Spokeshave	Complete	Oneota PDC	No Cortex	Indeterminate	2	1	3.28
11.003-0034	4	11	2	Pre-Contact	Lithic	Waste Flake			Galena Chert	No Cortex	Heat Treated	3	2	0.58
11.003-0035	1	11	3	Pre-Contact	Lithic	Waste Flake			Silurian	No Cortex	Heat Treated	2	1	12.89
11.003-0035	2	11	3	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Indeterminate	2	2	8.84
11.003-0036	1	12	1	Pre-Contact	Lithic	Waste Flake			Shakopee PDC	No Cortex	Indeterminate	3	1	0.2
11.003-0036	2	12	1	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Heat Treated	3	1	0.22
11.003-0037	1	12	2	Pre-Contact	Lithic	Waste Flake			Galena Chert	No Cortex	Heat Treated	3	1	0.31
11.003-0037	2	12	2	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Indeterminate	3	1	0.28
11.003-0038	1	13	2	Pre-Contact	Lithic	Waste Flake			Oneota PDC	No Cortex	Indeterminate	3	1	0.78

153

Appendix C: Survey Coverage



CTH M
Archaeological Survey Coverage

WisDOT ID: 5992-09-81

Great Lakes Archaeological Research Center, Inc. Project 11.003

Mapped: 16 December 2011, NJW

Data Sources: ESRI, GLARC.

Legend

- 11.003 Project Area
- Pedestrian Survey
- Shovel Tested
- Impenetrable Surface
- Soil Cored Disturbed
- Visual Inspection Disturbed
- Wetland

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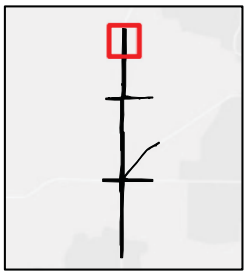

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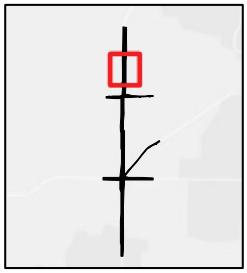

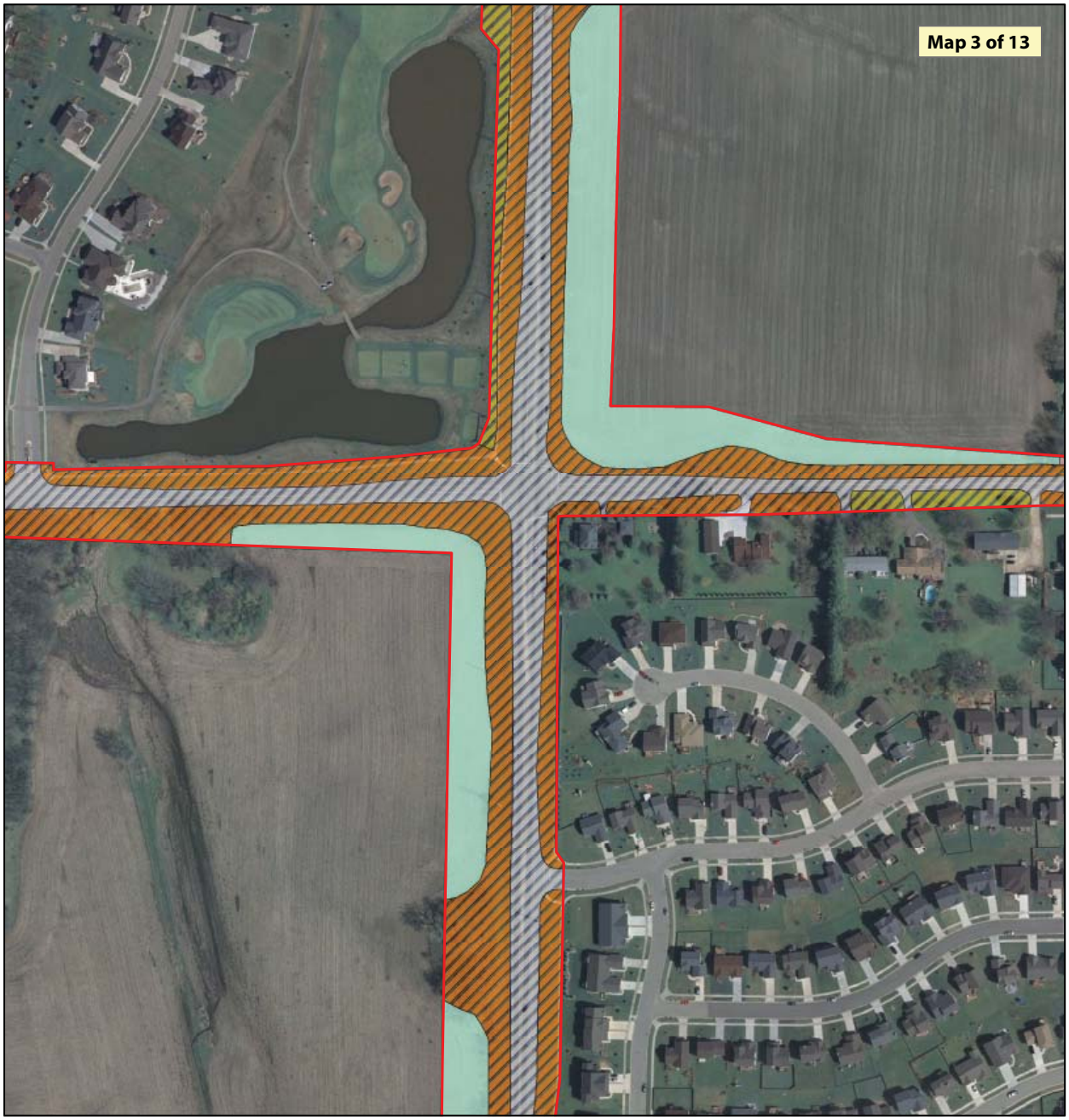

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Great Lakes Archaeological Research Center, Inc. Project 11.003

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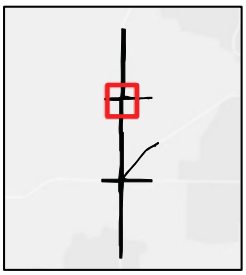

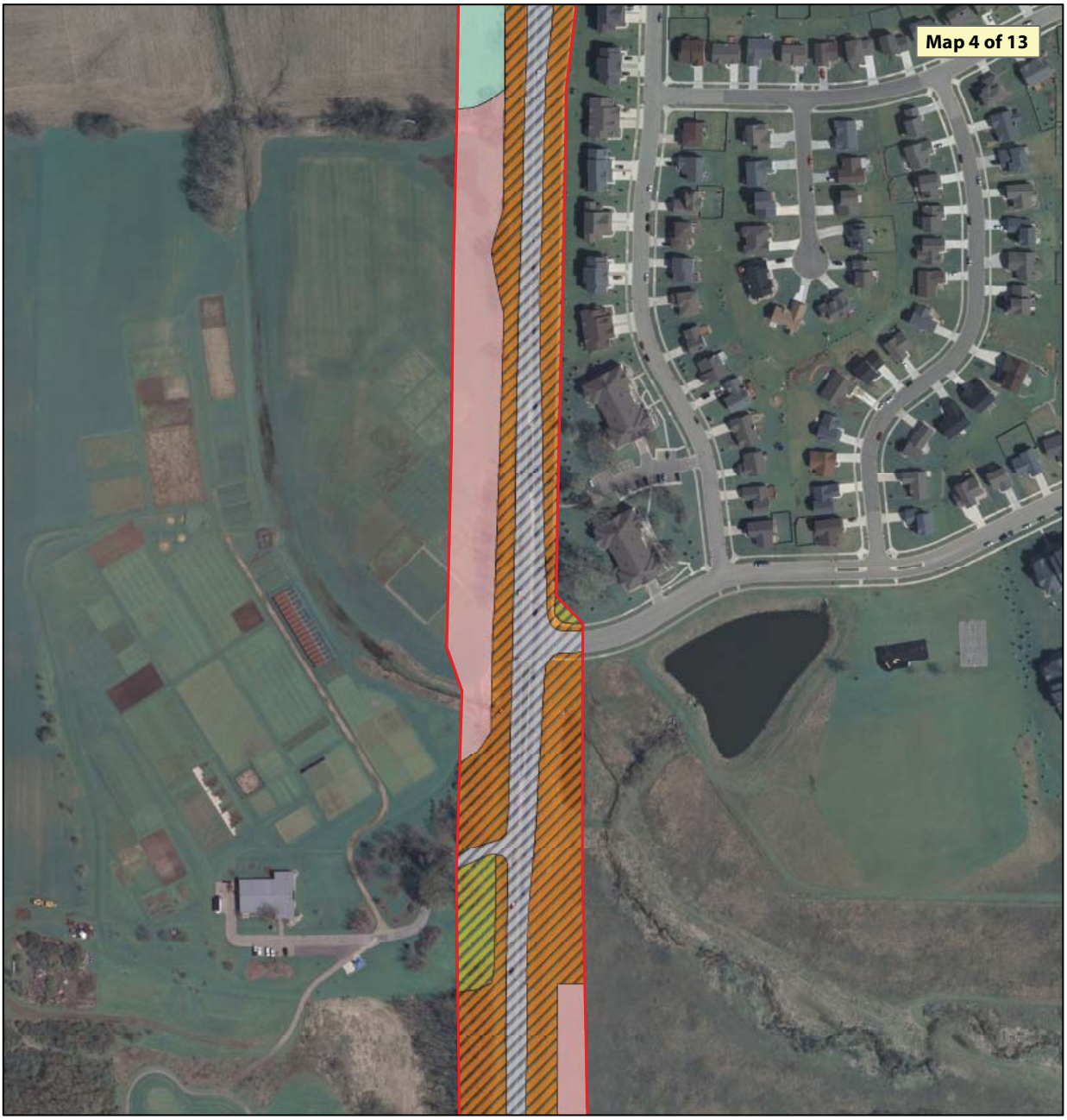

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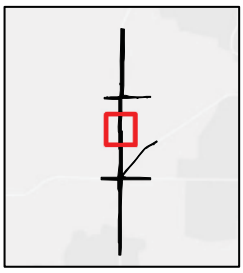

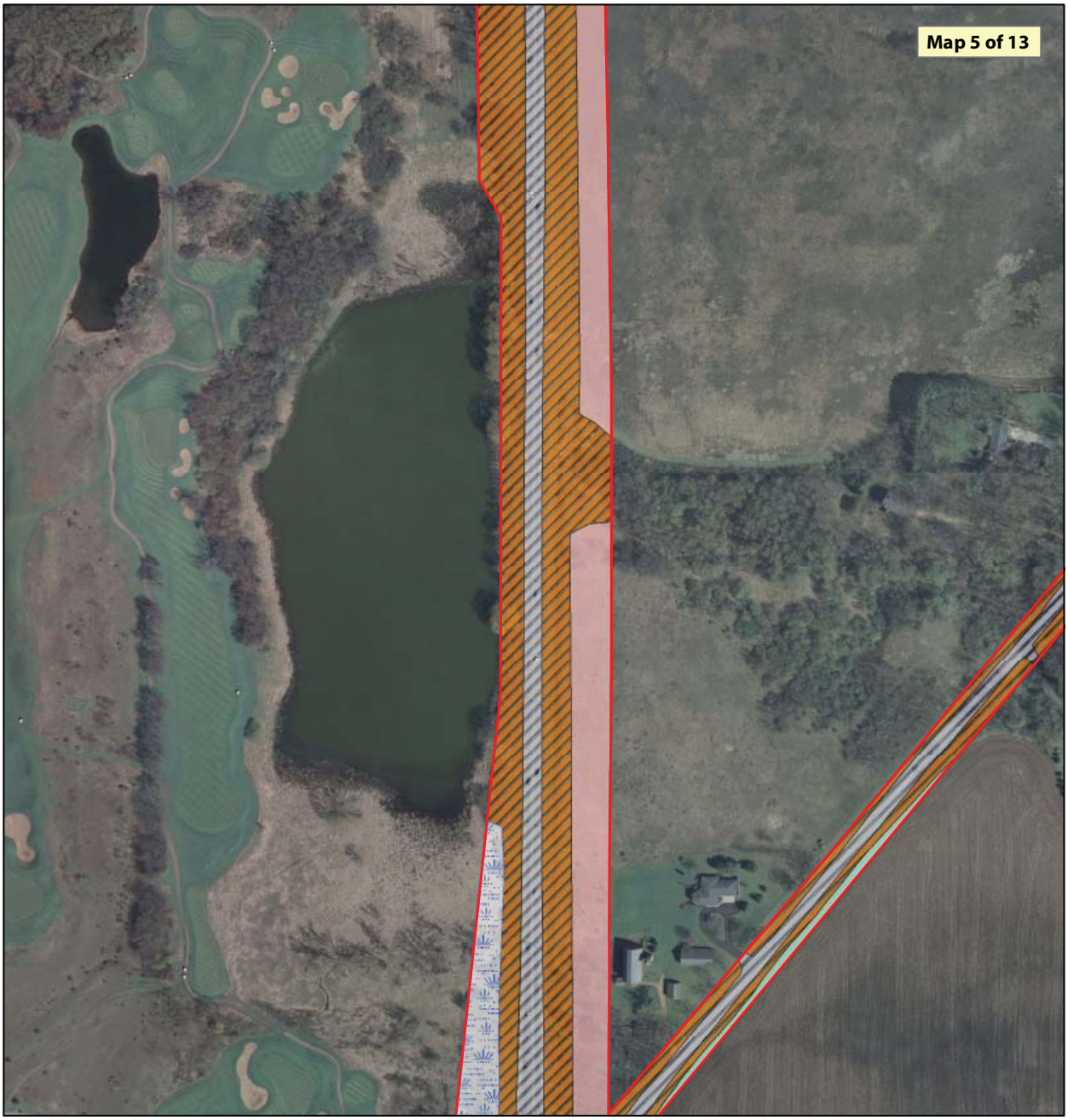

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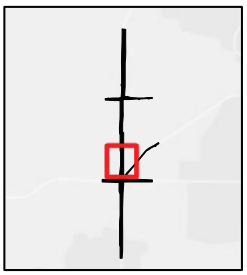

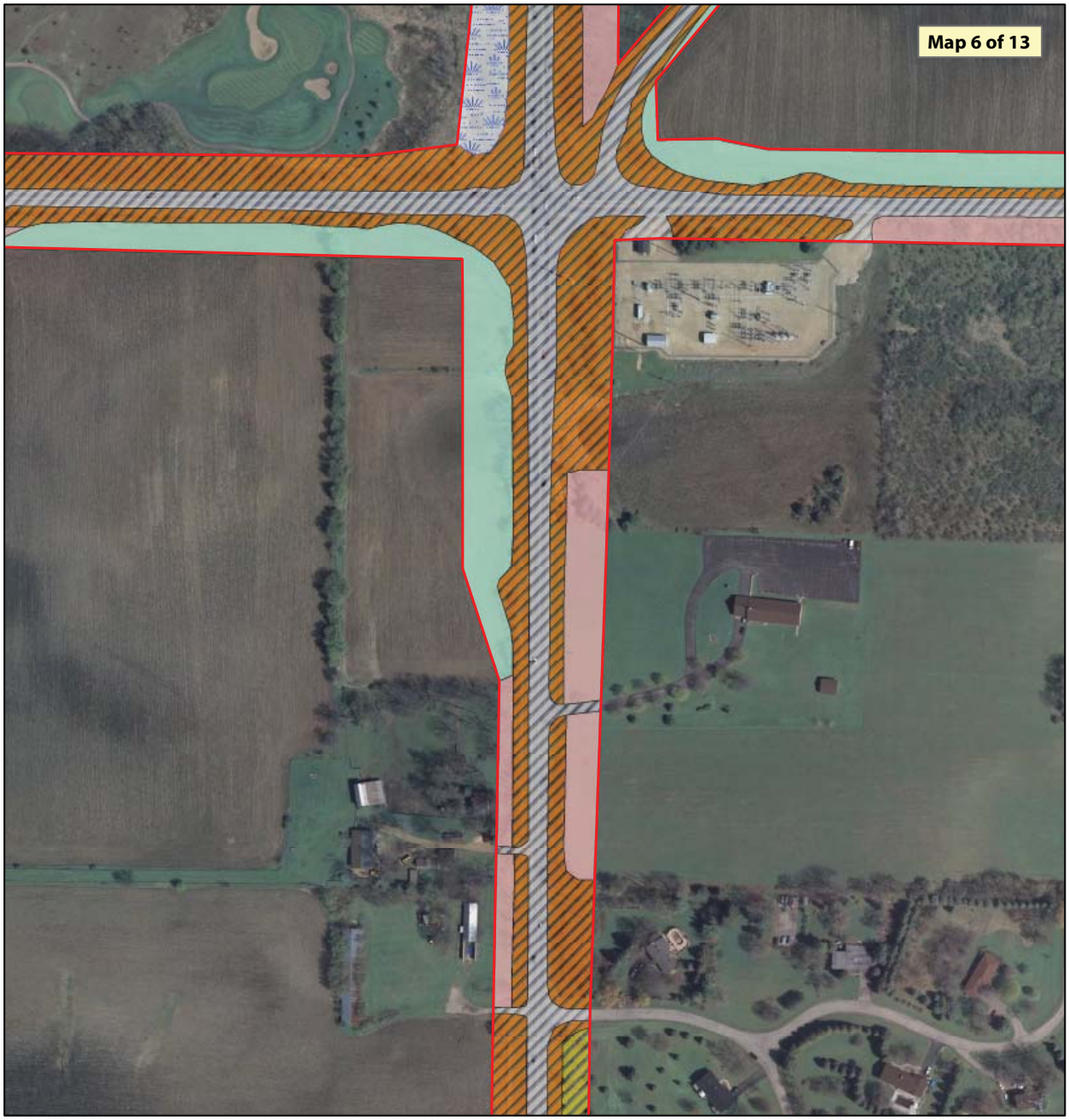

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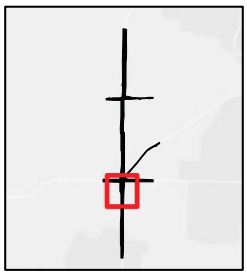

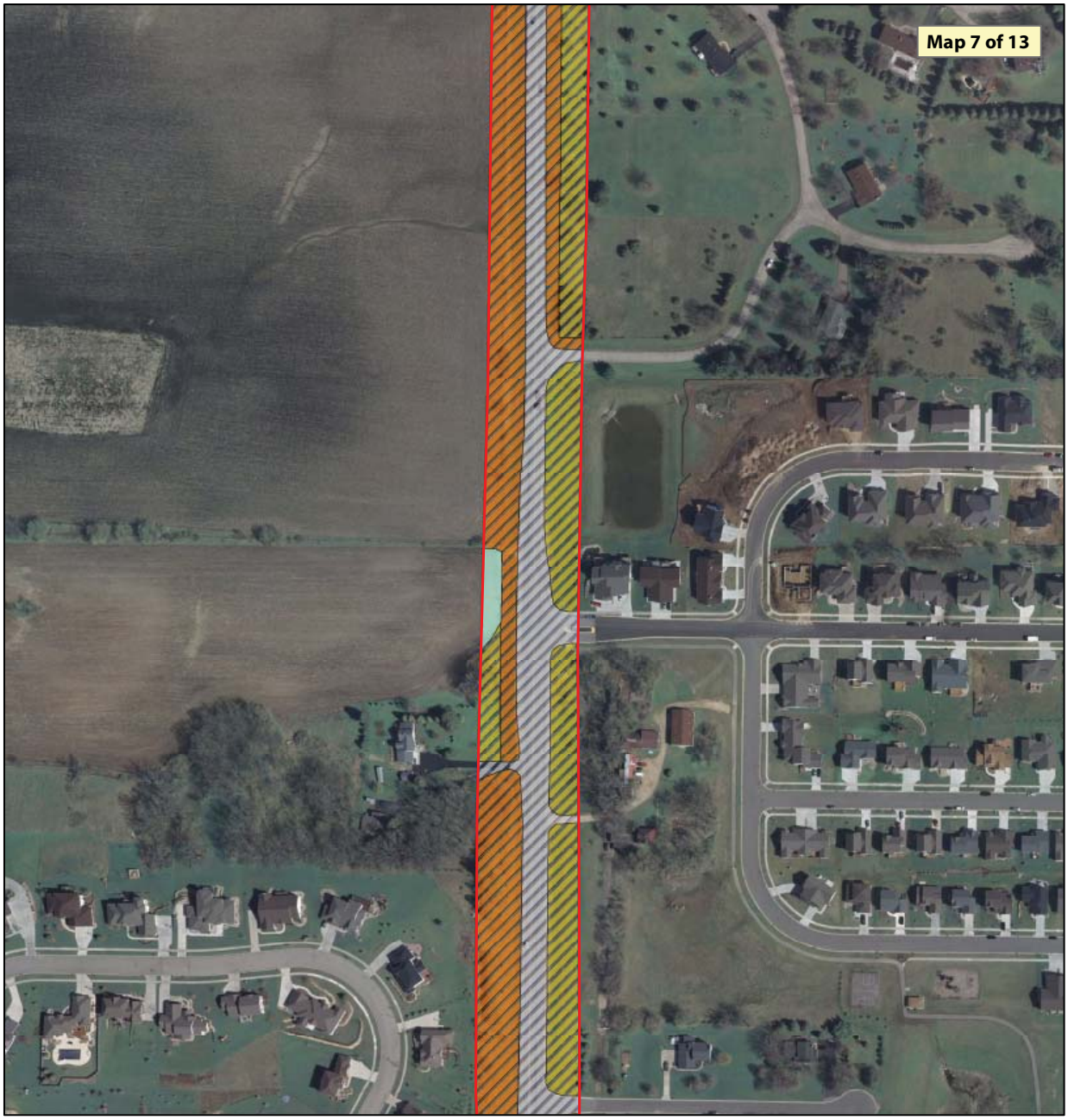

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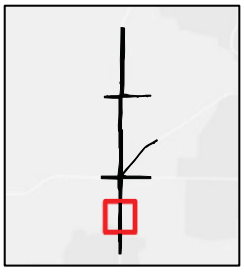

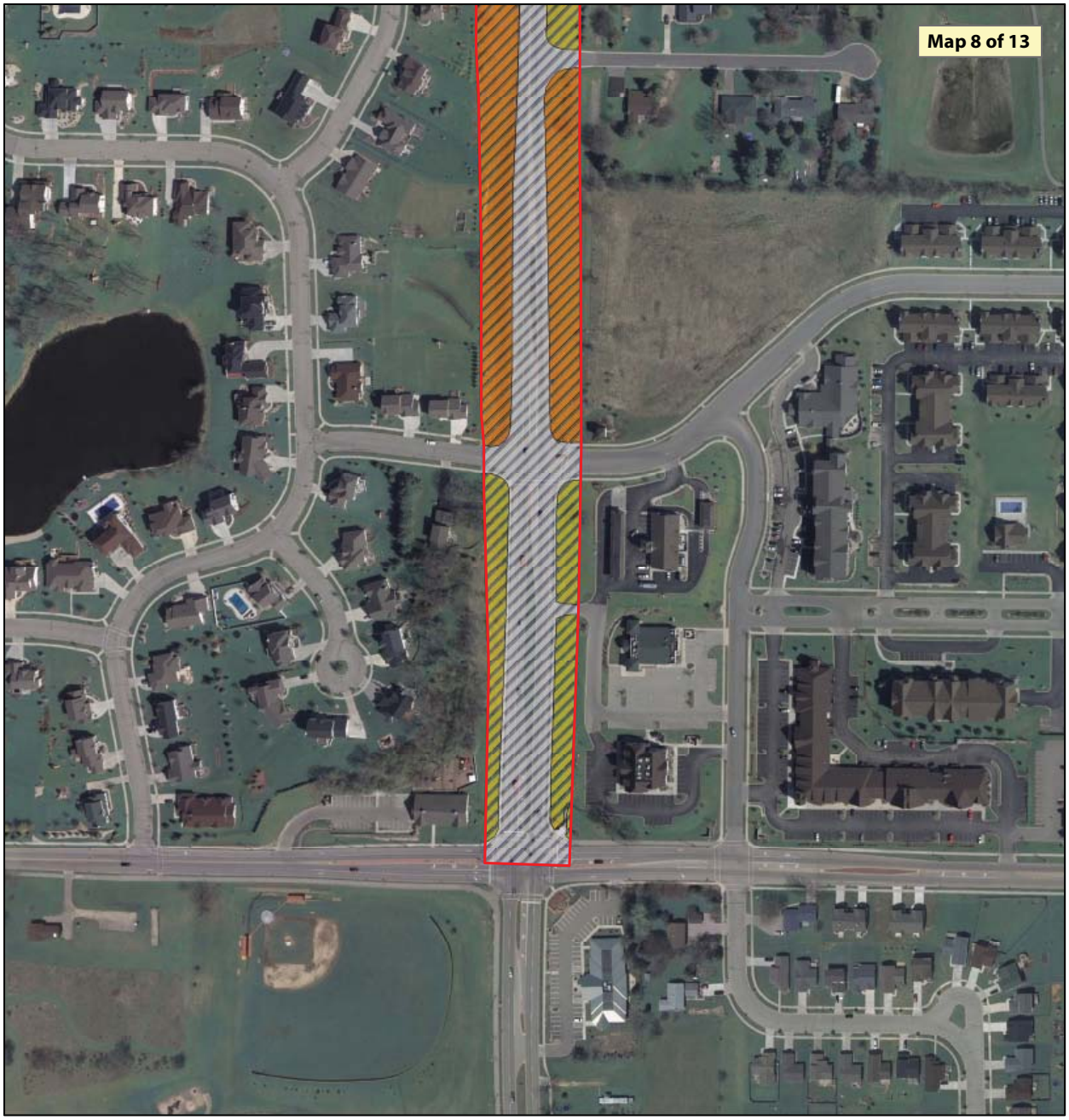

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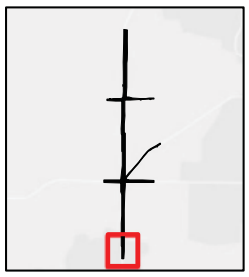

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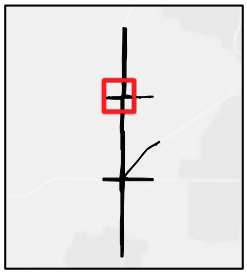

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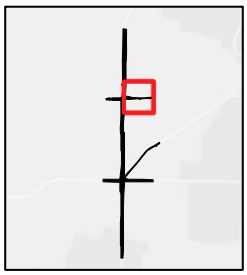

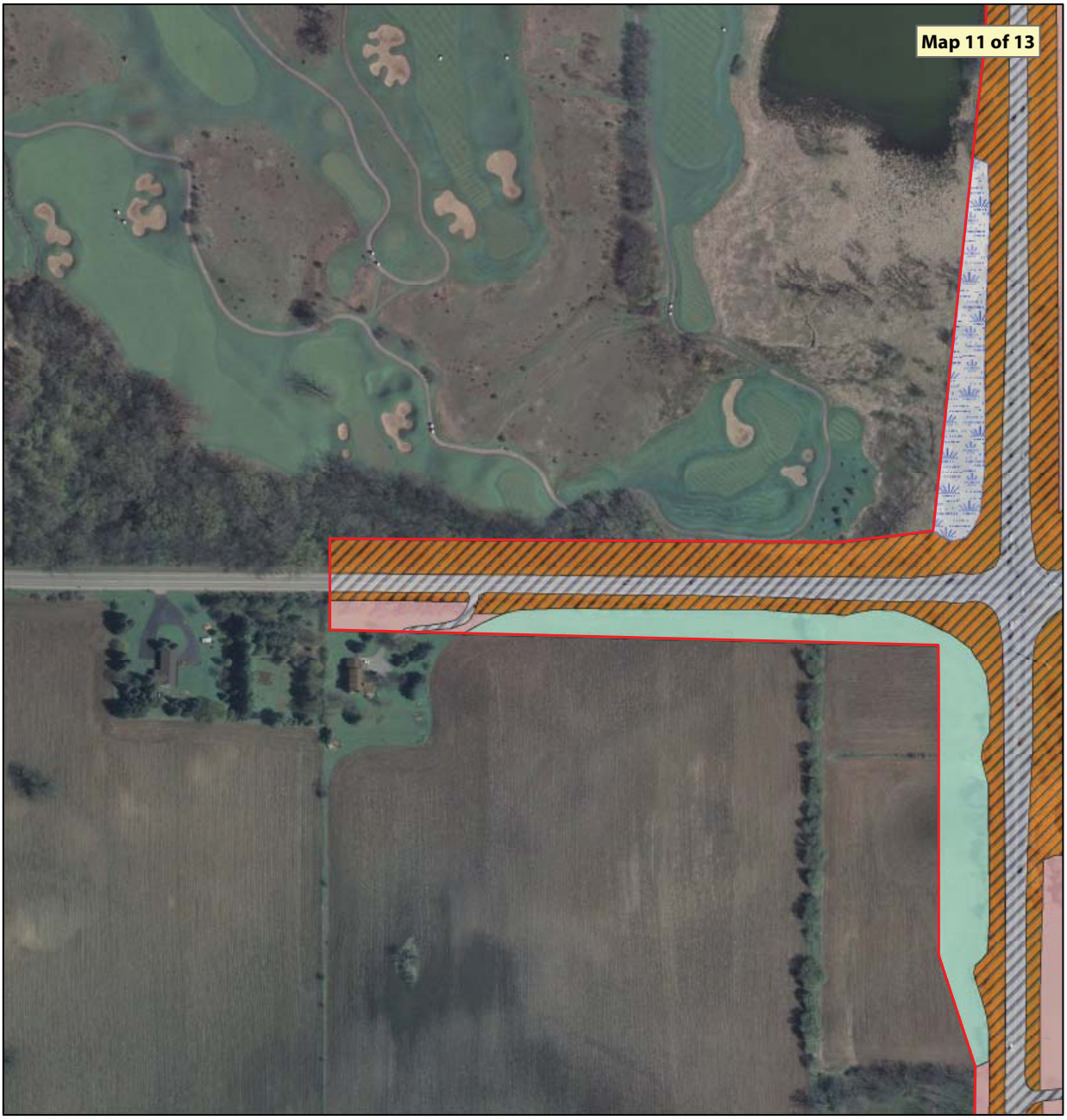

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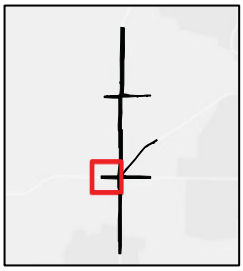

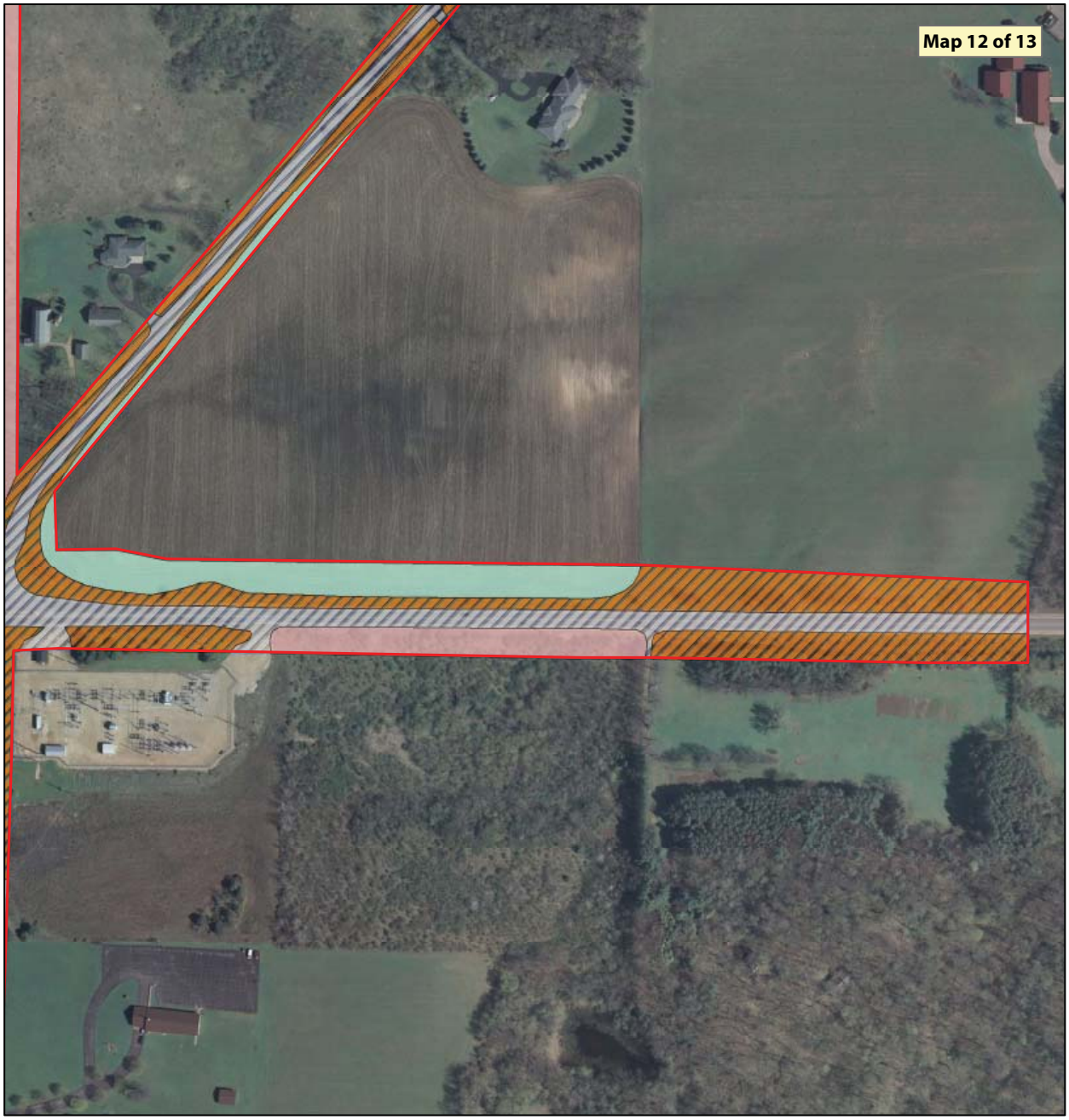

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Great Lakes Archaeological Research Center, Inc. Project 11.003

Mapped: 16 December 2011, NJW

Data Sources: ESRI, GLARC.

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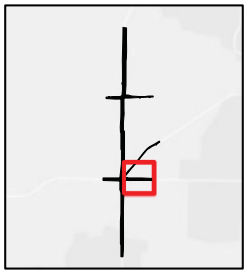

CTH M
Archaeological Survey Coverage

WisDOT ID: 5992-09-81

Great Lakes Archaeological Research Center, Inc. Project 11.003

Mapped: 16 December 2011, NJW

Data Sources: ESRI, GLARC.

Legend

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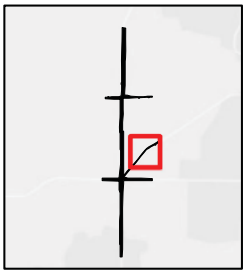

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APPENDIX D: PERMITS

WISCONSIN PUBLIC LANDS FIELD ARCHAEOLOGICAL PERMIT, 2011
REQUIRED TO CONDUCT ARCHAEOLOGY ON ALL NON-FEDERAL PUBLIC LAND UNDER WIS. § 44.47
Wisconsin Historical Society

Name/Organization/Contact: Katherine Shillinglaw Telephone 414-481-2093 PLP 11-112

Address PO Box 511549 City Milwaukee State WI Zip Code 53203

E-mail Address kshillinglaw@glarc.com FAX# 414-273-1410

Institutional Affiliation Great Lakes Archaeological Research Center, Inc. Occupation Archaeologist

Location of work:
Highway: Hwy/Rd Verona Military Ridge Park & Ride Lot County Dane

Project Begin: _____ Project End: _____

Other Projects: County _____ Civil Town _____ Town _____ Range _____ Section _____

Quarter Sections (minimum 3) _____

Name of Park, Wildlife Area _____ Site Name: _____ Site Number _____

Type of fieldwork: (circle) ***Phase I/Survey*** Phase II/Testing Phase III/Excavation Other

Purpose of the fieldwork: (circle) ***Federal Compliance*** ***State Compliance*** Education Other

Period of field work beginning on October 17, 2011 and ending on December 31, 2011

What institution will curate recovered artifacts, notes, and records? UW-Milwaukee
(Curation agreement must be on file with WHS)

Signature of Archaeologist _____ Date 10-17-2011
Print name: Katherine Shillinglaw
☐ continuation sheet/or see attachments
Maps and/or Letters of explanation can accompany this application

Landowner or custodian name (print) Dane County Phone 224-3731

Signature of Landowner Kim Crossen Director Land&Water Resources Dept. Date 10-17-11

DO NOT WRITE BELOW THIS LINE

Permit Approved _____ Date 17 Oct 2011
John H. Broihahn
State Archaeologist
Wisconsin Historical Society
FAX: 608-264-6504 / PH 608-264-6496
Email: john.broihahn@wisconsinhistory.org

Conditions:
1) Two copies of the final report must be submitted to the Division of Historic Preservation – Public History.
2) All artifacts, notes and records must be curated in an appropriate facility that is staffed by trained personnel.

This permit does not cover work within cataloged and uncataloged burial sites. Please contact Sherman Banker at (608) 264-6507 or by e-mail at sherman.banker@wisconsinhistory.org

This permit does NOT cover removal of human remains under Wis. §157.70

PLP 11-044

WISCONSIN PUBLIC LANDS FIELD ARCHAEOLOGICAL PERMIT, 2011
REQUIRED TO CONDUCT ARCHAEOLOGY ON ALL NONFEDERAL PUBLIC LAND UNDER WIS. § 44.47
Wisconsin Historical Society

Name/Organization/Contact Katherine Shillinglaw Telephone 414-481-2093

Address PO Box 511549 City Milwaukee State WI Zip Code 53203

E-mail Address kshillinglaw@glarc.com FAX# 414-273-1410

Institutional Affiliation Great Lakes Archaeological Research Center, Inc. Occupation Project Manager

Location of work:
Highway: Hwy/Rd CTH M County Dane
Project Begin: Prairie Hill Road Project End: Cross Country Road

Other Projects: County ____ Civil Town ____ Town ____ Range ____ Section ____

Quarter Sections (minimum 2) ____

Name of Park, Wildlife Area ____ Site Name: ____ Site Number ____

Type of fieldwork: (circle) X Phase I/Survey Phase II/Testing Phase III/Excavation Other

Purpose of the fieldwork: (circle) X Federal Compliance X State Compliance Education Other

Period of field work beginning on May 25, 2011 and ending on June 30, 2011

What institution will curate recovered artifacts, notes, and records? UW-Milwaukee
(Curation agreement must be on file with WHS)

Signature of Archaeologist ____ Date 5/18/2011

Print name Katherine E. Shillinglaw ☒ continuation sheet or see attachments

Maps and/or Letters of explanation can accompany this application

Landowner or custodian name (print) City of Verona (Ron Reider) Phone ron.rieder@ci.verona.wi.us

Signature of Landowner ____ Date 5/23/2011

DO NOT WRITE BELOW THIS LINE

Permit Approved ____ (LDE) Date 5/24/11

John H. Broihahn
State Archaeologist
Wisconsin Historical Society
FAX: 608-264-6504 / PH 608-264-6496
Email: john.broihahn@wisconsinhistory.org

Conditions:
1) Two copies of the final report must be submitted to the Division of Historic Preservation – Public History.
2) All artifacts, notes and records must be curated in an appropriate facility that is staffed by trained personnel.

This permit does not cover work within catalaged and uncataloged burial sites. Please contact Sherman Banker at (608) 264-6507 or by e-mail at sherman.banker@wisconsinhistory.org

This permit does NOT cover removal of human remains under Wis. § 157.70.

PLP-11-051

WISCONSIN PUBLIC LANDS FIELD ARCHAEOLOGICAL PERMIT, 2011
REQUIRED TO CONDUCT ARCHAEOLOGY ON ALL NON-FEDERAL PUBLIC LAND UNDER WIS. § 44.47
Wisconsin Historical Society

Name/Organization/Contact Katherine Shillinglaw Telephone 414-481-2093

Address PO Box 511549 City Milwaukee State WI Zip Code 53203

E-mail Address kshillinglaw@glarc.com FAX# 414-273-1410

Institutional Affiliation Great Lakes Archaeological Research Center, Inc. Occupation Project Manager

Location of work:
Highway: Hwy/Rd CTH M (Utility 533) and 7997 Raymond Road County Dane
Project Begin: Prairie Hill Road Project End: Cross Country Road

Other Projects: County _____ Civil Town _____ Town _____ Range _____ Section _____

Quarter Sections (minimum 3) _____

Name of Park, Wildlife Area _____ Site Name: _____ Site Number _____

Type of fieldwork (circle) X Phase I/Survey Phase II/Testing Phase III/Excavation Other

Purpose of the fieldwork: (circle) X Federal Compliance X State Compliance Education Other

Period of field work beginning on May 25, 2011 and ending on June 30, 2011

What institution will curate recovered artifacts, notes, and records? UW-Milwaukee
(Curation agreement must be on file with WHS)

Signature of Archaeologist _____ Date 5/18/2011

Print name Katherine E. Shillinglaw

☒ continuation sheet or see attachments

Maps and/or Letters of explanation can accompany this application

Landowner or custodian name (print) City of Madison (Chris Petykowski) Phone 608-267-8678

Signature of Landowner _____ Date 5/24/11

DO NOT WRITE BELOW THIS LINE

Permit Approved John H. Broihahn (LEB) Date 5/24/11

John H. Broihahn
State Archaeologist
Wisconsin Historical Society
FAX: 608-264-6504 / PH 608-264-6496
Email: john.broihahn@wisconsinhistory.org

Conditions:

1) Two copies of the final report must be submitted to the Division of Historic Preservation – Public History.
2) All artifacts, notes and records must be curated in an appropriate facility that is staffed by trained personnel.

This permit does not cover work within cataloged and uncataloged burial sites. Please contact Sherman Banker at (608) 264-6507 or by e-mail at sherman.banker@wisconsinhistory.org

This permit does NOT cover removal of human remains under Wis. § 157.70.

PLP 11-050

WISCONSIN PUBLIC LANDS FIELD ARCHAEOLOGICAL PERMIT, 2011
REQUIRED TO CONDUCT ARCHAEOLOGY ON ALL NON-FEDERAL PUBLIC LAND UNDER WIS. § 44.47
Wisconsin Historical Society

Name/Organization/Contact: Katherine Shillinglaw Telephone: 414-481-2093

Address: PO Box 511549 City: Milwaukee State: WI Zip Code: 53203

E-mail Address: kshillinglaw@glarc.com FAX#: 414-273-1410

Institutional Affiliation: Great Lakes Archaeological Research Center, Inc. Occupation: Project Manager

Location of work:
Highway: Hwy/Rd: CTH M County: Dane
Project Begin: Prairie Hill Road Project End: Cross Country Road

Other Projects: County____ Civil Town____ Town____ Range____ Section____

Quarter Sections (minimum 3)____

Name of Park, Wildlife Area____ Site Name:____ Site Number____

Type of fieldwork: (circle) X Phase I/Survey Phase II/Testing Phase III/Excavation Other

Purpose of the fieldwork: (circle) X Federal Compliance X State Compliance Education Other

Period of field work beginning on May 25, 2011 and ending on June 30, 2011

What institution will curate recovered artifacts, notes, and records? UW-Milwaukee
(Curation agreement must be on file with WHS)

Signature of Archaeologist ____ Date: 5/18/2011

Print name: Katherine E. Shillinglaw ☒ continuation sheet or see attachments

Maps and/or Letters of explanation can accompany this application

Landowner or custodian name (print): UW-Madison Board of Regents Phone: 608-262-2324

Signature of Landowner: Jane S. Radke, Secretary of the Board Date: 5/24/2011

DO NOT WRITE BELOW THIS LINE

Permit Approved: John H. Broihahn (LOE) Date: 5/24/11

John H. Broihahn
State Archaeologist
Wisconsin Historical Society
FAX: 608-264-6504 / PH 608-264-6496
Email: john.broihahn@wisconsinhistory.org

Conditions:

1) Two copies of the final report must be submitted to the Division of Historic Preservation – Public History.
2) All artifacts, notes and records must be curated in an appropriate facility that is staffed by trained personnel.

This permit does not cover work within cataloged and uncataloged burial sites. Please contact Sherman Banker at (608) 264-6507 or by e-mail at sherman.banker@wisconsinhistory.org

This permit does NOT cover removal of human remains under Wis. § 157.70.

Appendix E: Bibliography Of Archaeological Report Form

BIBLIOGRAPHY OF ARCHAEOLOGICAL REPORT FORM

WHS/SHSW # ____ COUNTY: Dane

AUTHORS: Shillinglaw, Katherine E. and Rhiannon M. Jones

REPORT TITLE: Phase I and II Archaeological Investigations for CTH M, Dane County, Wisconsin

DATE OF REPORT (MONTH AND YEAR): December 2011

SERIES/NUMBER: ROI 781

PLACE OF PUBLICATION: Great Lakes Archaeological Research Center, Milwaukee, WI

LOCATIONAL INFORMATION [LEGAL DESCRIPTION OF SURVEY AREA (T-R-S)]
T7N/R8E/Section 34 and T6N/R8E/Section 3 and 10

U.S.G.S. QUAD MAP(S): Middleton

SITE(S) INVESTIGATED: 47DA1420, 47DA1421, and 47DA0692

ACRES INVESTIGATED: 106.61 AGENCY # WisDOT 5992-09-81

INVESTIGATION TECHNIQUES COMPLETED (Check all that apply.)

☐ Avocational Survey	☐ Chance Encounter	☒ Controlled Surface Collection
☐ Faunal Analysis	☐ Floral Analysis	☐ Geomorphology
☐ Historical Research	☐ Interview/Informant	☐ Land Use History
☒ Literature Background Research	☐ Major Excavation	☐ Mechanical Stripping
☐ Monitoring	☐ Osteological Analysis	☒ Phase I-Surface Survey
☐ Phase II	☒ Phase II-Corridor Only	☐ Phase III
☐ Phase III-Corridor Only	☐ Records/Background	☐ Records/Background (Pred. Model)
☐ Remote Sensing	☒ Shovel Testing/Probing (Inten)	☐ Soil Core
☐ Surface Survey (Intensive)	☐ Test Excavation	☐ Traditional Knowledge
☐ Vandalism	☐ Walk Over (Reconnaissance)	☐ Unknown
☐ Other: _____		

ABSTRACT: ☒ Included in report ☐ Written in space below

Office of the State Archaeologist BAR # _____

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Phase II Archaeological Investigations of the Endres Site (47DA1421), Dane County, Wisconsin

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Disclaimer and Warranty

Information contained in this report should be considered confidential and only used to comply with requirements of the National Historic Preservation Act of 1966 as amended or Wisconsin Statutes 44.40 and 157.70. The looting or destruction of historic properties may be subject to legal fines, imprisonment, and/or penalties.

The research conducted in this report was authorized and funded by the Federal Highway Administration and WisDOT in compliance with Sections 106 and 110 of the National Historic Preservation Act of 1966 as amended. The research was conducted in compliance with the Se*cretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation* as amended and annotated, the Wisconsin Archaeological Survey's *Guidelines for Public Archaeology in Wisconsin* as revised in 1997, and Chapters 44.40 and 157.70 of the Wisconsin Statutes.

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Management Summary

In May and June 2011 and April 2012, Great Lakes Archaeological Research Center, Inc. (GLARC) conducted Phase I archaeological investigation for the CTH M project in Dane County, Wisconsin. Archaeological investigations were completed for MSA Professional Services, the Wisconsin Department of Transportation, and the Federal Highway Administration under the auspices of WisDOT Project ID 5992-09-81.

The Phase I archaeological survey identified two archaeological sites within the CTH M project area, site 47DA1421 (Endres site) and 47DA1420 (Ellefson site). At that time it was determined that Endres site (47DA1421) would be avoided and the Ellefson site (47DA1420) underwent a Phase II evaluation. Based on the site evaluation 47DA1420 was recommended as not eligible for listing on the National Register of Historic Places. The site produced little cultural material and lacks vertical integrity. It was likely truncated on the western side by CTH M.

Since the completion of the Phase I survey and the Phase II at the Ellefson site, it was decided to complete the evaluation of the Endres site to assist in future designing and construction planning. On May 22, 2012, Phase II archaeological investigations were carried out at 47DA1421.

To determine the eligibility of 47DA1421, mechanical excavation was carried out at the site to check for subsurface cultural features. No features were observed and only two additional waste flakes were recovered from the surface and the backdirt.

Based on the results of the Phase II evaluation of 47DA1421, the site is not eligible for listing on the National Register of Historic Places and the CTH M project will not have an adverse effect on the pre-contact archaeological record in the area. No further work is recommended at site 47DA1421.

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Part I: Project Background

Introduction

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Since the completion of the Phase I survey and the Phase II at the Ellefson site, WisDOT and the City of Verona decided to complete the evaluation of the Endres site to assist in future designing and construction planning. On May 22, 2012, Phase II archaeological investigations were carried out at 47DA1421.

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The archaeological investigations detailed in this document were carried out on behalf of MSA Professional Services, the Federal Highway Administration (FHWA) and WisDOT to address responsibilities for identifying, recording, and managing cultural resources as stipulated under Section 106 of the National Historic Preservation Act of 1966 (P.L. 89-665) as amended and 36 CFR, part 800, which serves to implement the Act, as well as Wisconsin Statutes 44.40 and 157.70. The methods and techniques utilized during the course of investigations conform to the standards and guidelines set forth by the National Park Service in the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (1983) and by the Wisconsin Archaeological Survey in *Guidelines for Public Archaeology in Wisconsin, as Revised* (Kolb and Stevenson 1997). Archaeological materials, field notes, and supporting documentation are currently located at the Great Lakes Archaeological Research Center, located at 1408 North 5th Street in Milwaukee, Wisconsin.

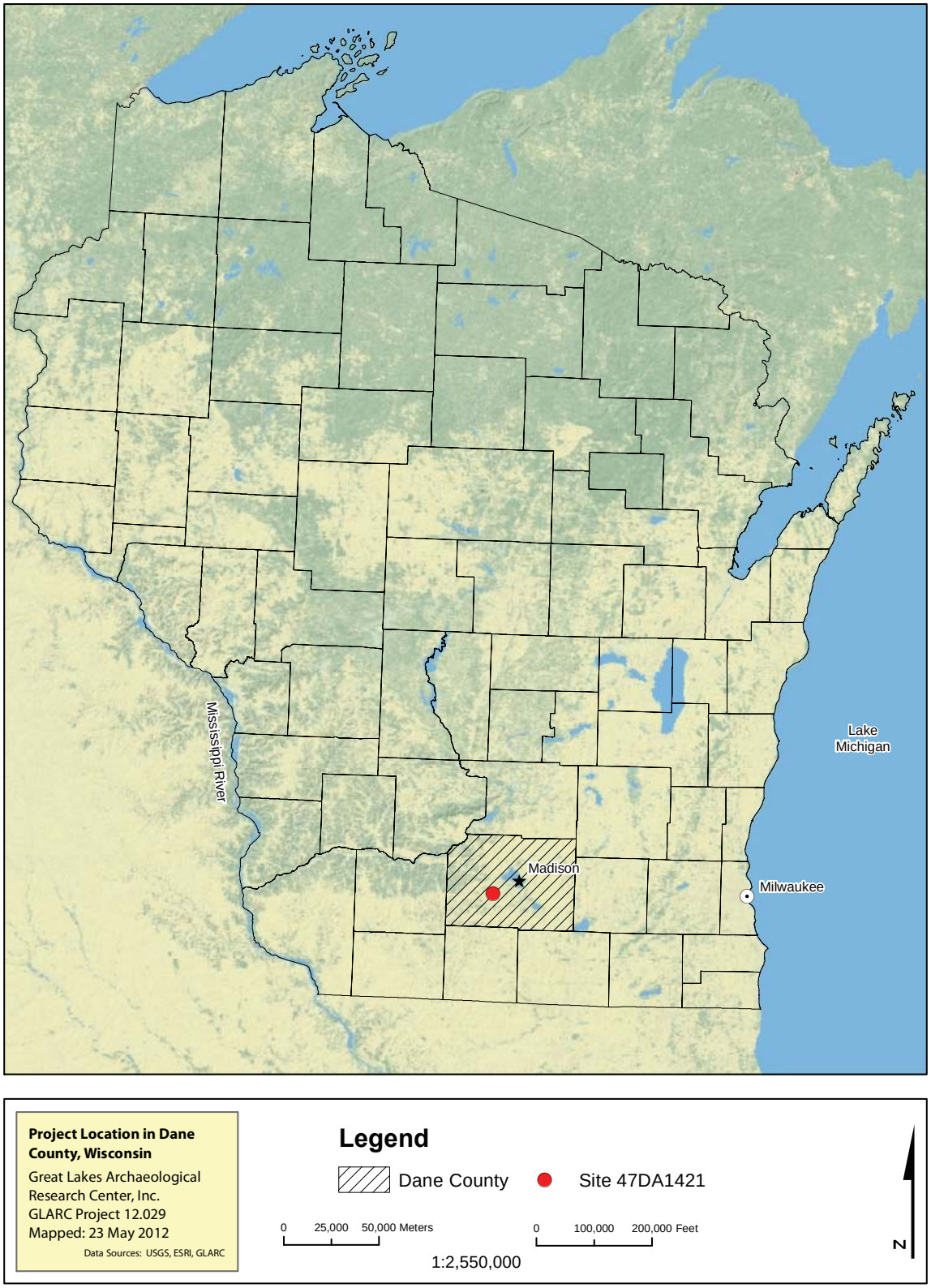

Figure 1.1 Location of the project in Dane County, Wisconsin.

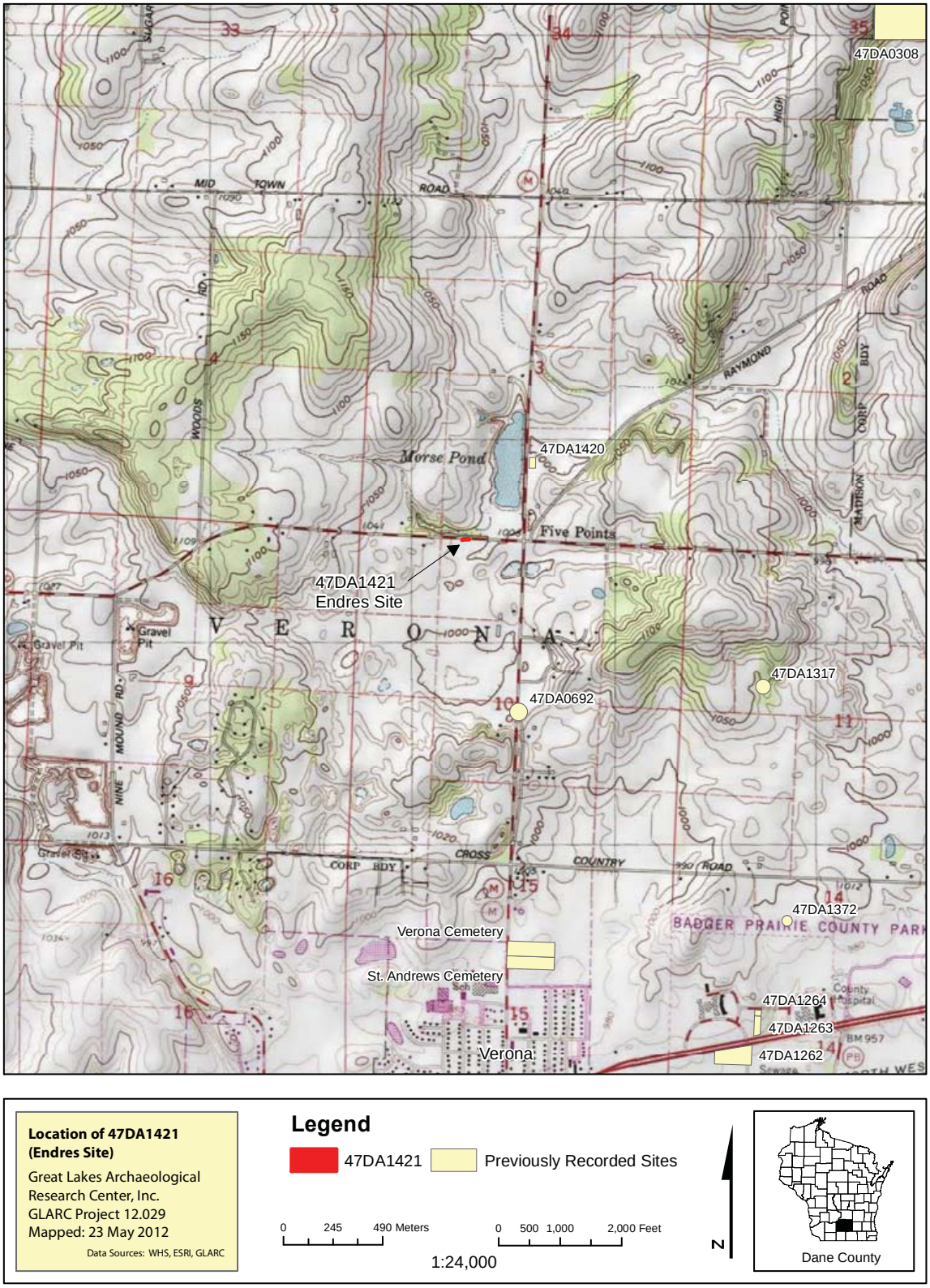

Figure 1.2 Location of the Endres Site, Dane County, Wisconsin.

Project Description and Location

The project area is located in the NW/NE/NW of Section 10, Township 6 North, Range 8 East and is located approximately 280 meters west of the southwest corner of the CTH M and CTH PD (McKee Road) intersection, approximately 15 meters south of CTH PD (Figure 1.2). The site is located on the north edge of a plowed agricultural field to the south of CTH PD/McKee Road. The site encompasses approximately 245 m^2, all of which is potentially within the proposed right of way of the CTH M project and a future project to reconstruct CTH PD/McKee Road. The site had been planted in corn a few weeks prior to the time of the Phase II evaluations. The corn plants were still small at this time and the ground surface had about 90 percent visibility. Every effort was made to minimize the impact on the crops in this field.

Report Organization

This report is organized in five parts. Part I provides the project background and identifies the project location. Part II provides background on the environmental and cultural setting of the project area. Methodology for the archives and literature review and field survey is detailed in Part III. Part IV presents the results of the archives and literature review. Part V provides the results of the Phase II evaluation. Finally, Part VI of the report summarizes the research with a review of the results, and states the cultural resource management recommendations. References Cited and Appendices follow Part VI.

Part II: Environmental and Cultural Setting

Environmental Setting

This section provides an overview of the environmental context for the project area. The physical setting, including glacial history and physiography is first discussed, followed by a summary of climate, soils, and floral/faunal resources. The following narrative is intended as a summary of the environmental setting of the project area. More in depth discussions can be found in Chamberlin (1877), Martin (1965) , Curtis (1959), Paull and Paull (1977) and in various Wisconsin Geological and Natural History Survey Bulletins. The narrative is intended to provided context for the archaeological study of the CTH M project area.

Glacial History and Physiography

The project area is located within the Eastern Ridges and Lowlands physiographic province as defined by Martin (1965) (Figure 2.1). The topography of the province is influenced by cuestas, or ridges of resistant Paleozoic sedimentary rock flanked by lowlands developed on less resistant bedrock (Paull and Paull 1977). Specifically, the project can be placed within the Black River and Magnesian Cuesta, a subdivision of the Eastern Ridges and Lowlands. This cuesta is low and narrow and formed by resistant Lower Magnesian limestone. It varies greatly in altitude and width. In discussing the area near Madison Martin notes:

> In Dane county near Madison is a hilly region whose subsurface topography (is)...related to four rock formations, the Cambrian or Potsdam sandstone, Lower Magnesian limestone, St. Peter sandstone, and the Galena-Black River limestone, in addition to the unconsolidated, overlying glacial drift. The four rock formations all dip southward at angles of less than half a degree, so that for purposes of topographic description the structure may be spoken of as essentially horizontal. The texture of the rock formations is summarized by saying that two resistant formations, the Galena-Black River and Lower Magnesian, alternate with two weak formations, the St. Peters and Potsdam (1965:221).

The processes that have acted upon these formations are (a) normal erosion agencies—weathering, stream work, and to a lesser degree, underground water and wind—and (b) glacial agencies—rasping and melting ice that deposited till and released massive amounts of water, forming glacial-stream and lake deposits (1965:221). Glaciation had the most dramatic topographic effects on the project environs. The project area is located on a rolling landscape within the Four-Lakes region of Dane County. The topography was formed when huge quantities of water that flowed out of the retreating glaciers were forced to cut through pre-glacial valleys and, as a result made the valleys deeper and created Glacial Lake Yahara. The great glacial lake eventually receded, forming the “Four Lakes” in the Yahara River flowage, including Lake Mendota, Lake Monona, Lake Waubesa, and Lake Kegonsa.

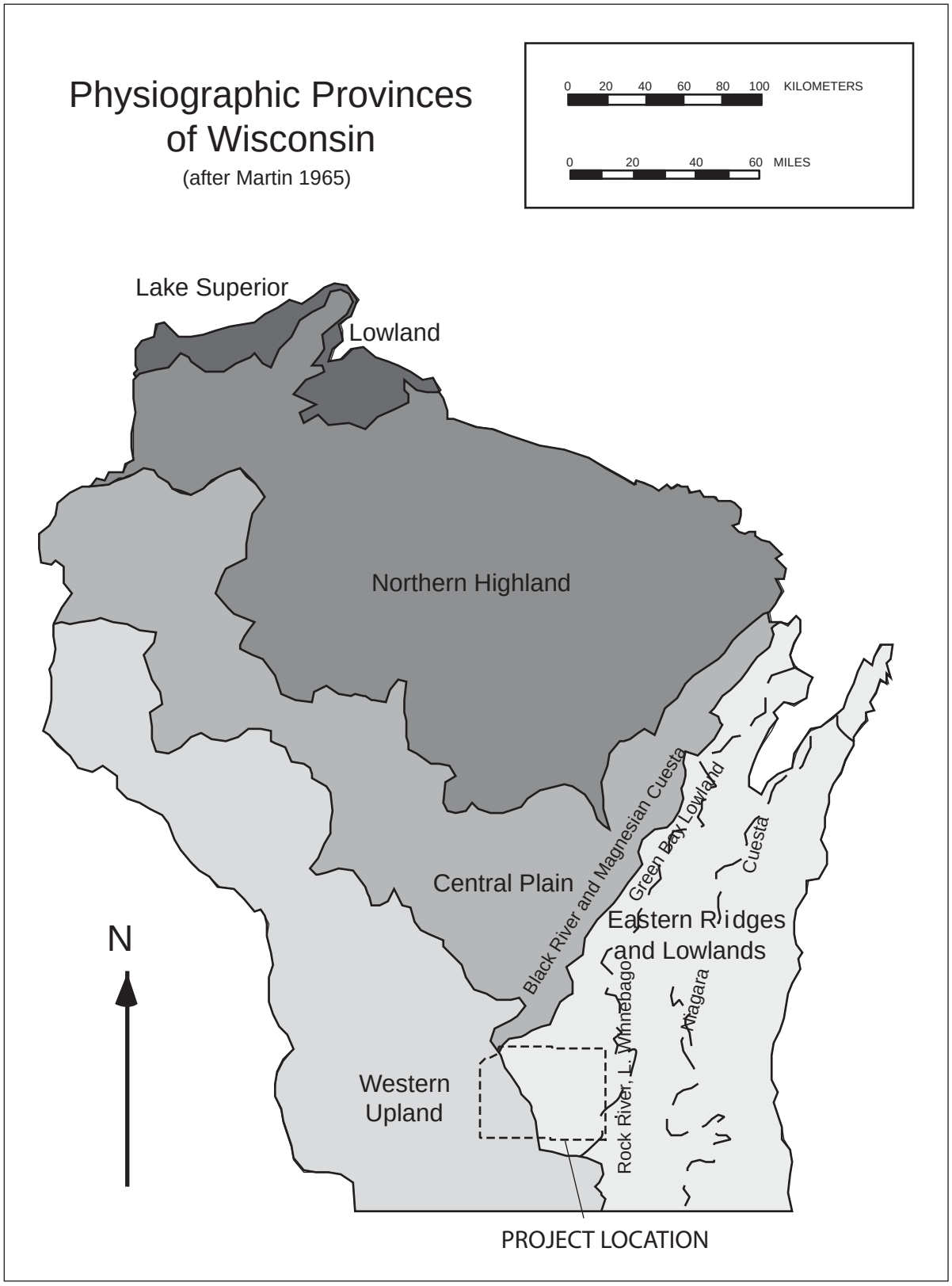

Figure 2.1. Project location relative to the physiographic provinces of Wisconsin.

Vegetation

Prior to nineteenth century logging and cultivation, the oak savanna (or oak opening) was the most common savanna type south and west of the tension zone in Wisconsin (Curtis 1959:326). Goldstein and Kind (1987:18-19) note that the vegetation of southeastern Wisconsin was dominated by upland vegetation (75%), followed by lowland vegetation (19%), and standing water (6%). Typical upland vegetation consisted of burr oak and occasional black oak and white oak within a mesic prairie floristic community, while swamp oak within a wet-mesic prairie environment dominated the lowland community (Curtis 1959:326) (Figure 2.2).

Oak Savanna

The oak savanna was one of the most widespread presettlement plant communities in southeastern and south central Wisconsin (Curtis 1959:326). Although trees form an important component of the oak savanna plant community, they are found in such a low density that grasses and other herbaceous species are the dominant plants of the community. Upland areas within the oak savannah typically consist of bur oaks interspersed among prairie grass species, although black oak and white oak are also present. In lowland areas, the swamp white oak is commonly found spread among wet-mesic prairie grasses. Curtis (1959:461-462), among others, has suggested that the oak openings found in Wisconsin may have been purposely maintained through the burning of grasslands by both prehistoric and historic Native American residents. The suppression of prairie fires by Euro-American settlers led to a closing in of the oak savanna across much of the state as grassland areas were invaded by young oak trees.

Prairie

Prairies are plant communities that are dominated by grass species rather than trees. Within Wisconsin, true prairie communities are found southwest of the tension zone that divides the two floristic provinces of the state (Curtis 1959:262). The prairie plant community is noted for its great diversity of species. A study of the remnant prairies of Wisconsin (Curtis and Greene 1949) found species present that were well adapted to dry, thin soils of limestone ridges and steep hillsides, others that were abundant in areas with deep loamy soils and good drainage, and still other species that were common to low inundated flatlands and poorly drained soils. Early settlers commented on the vastness of Wisconsin's prairies, oftentimes referring to them as rolling oceans of grasses (Curtis and Greene 1949; Ruggles 1835; Smith 1927). Several of the larger and more important prairies in Wisconsin were given distinctive names by early settlers. These include: Barnes Prairie in Racine County; Walworth Prairie in Walworth County; Rock Prairie in Rock County; Arlington Prairie in Columbia and Dane counties; Sauk Prairie in Sauk County; the Military Ridge Prairie, extending from Verona nearly to the Mississippi River; and the Star Prairie in St. Croix County.

Soils

Soils of the project region are varied, and the types of soils present in a given area are largely dependent on the local geomorphology. Generally, the soils of the project area are those formed on the Southeastern Upland (Hole 1976). The topography of the region features a rolling landscape created by glacial features such as morianes, cuastas, drumlins, and depressions. Interspersed are hundreds of lakes and wetlands. Approximately one-third of the region has well-drained soils, one-third has excessively drained soils, about 12% has moderately drained soils, about 10% has peat and muck soils, and about 15% has lowland wet mineral soils . The surface is estimated to be approximately 13,000 years old in most of the region, though silting in of lowland bogs and marshes has been accelerating since the advent of land clearing and full-

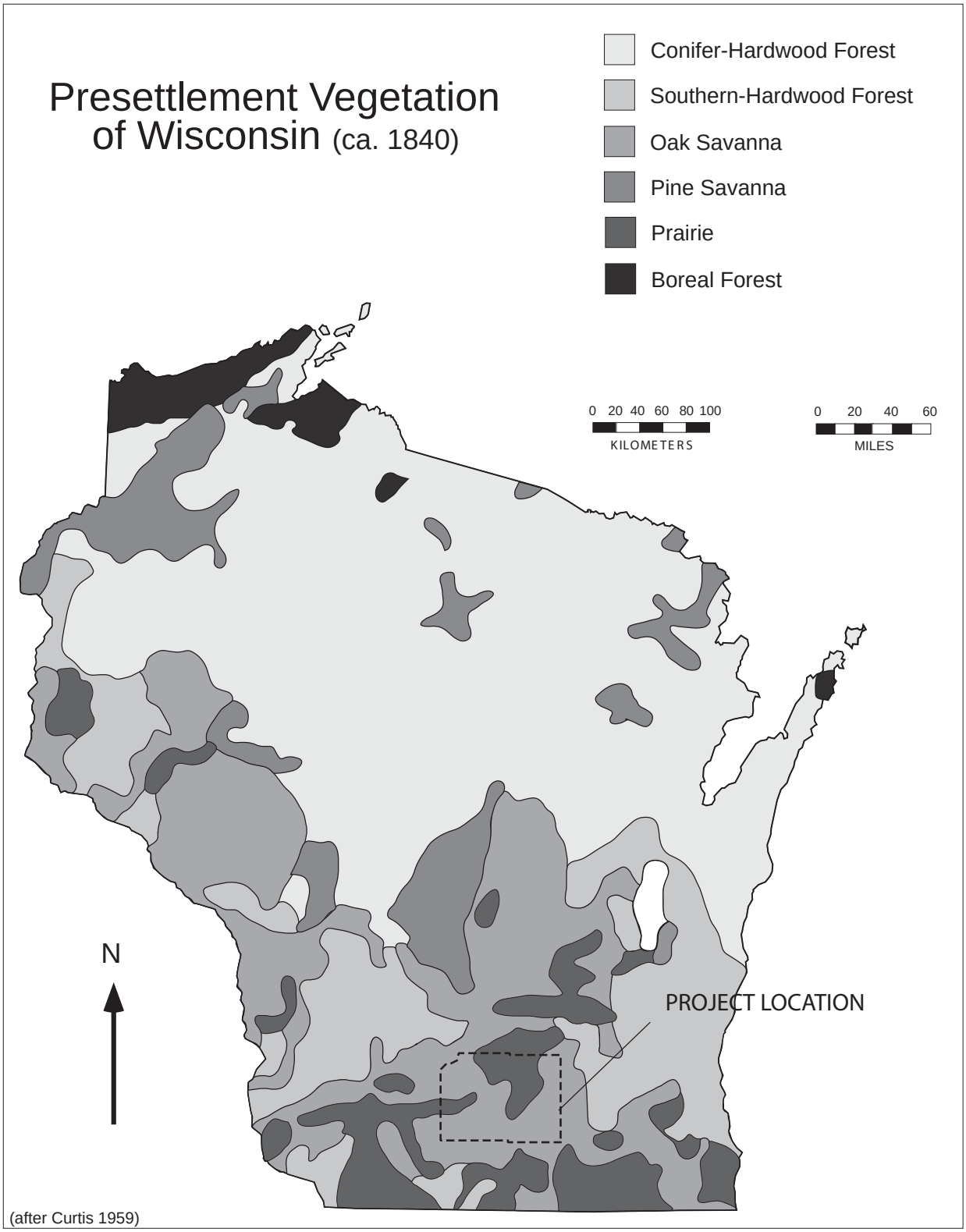

Figure 2.2 Presettlement vegetation of the project area.

scale farming during the mid-1800s, resulting in areas of much younger "made land". Most of the regions bedrock is buried under glacial till (Hole 1976:61). A detailed report of the regions soil variability is beyond the scope of this project. Soils vary between well drained and moderately well drained, deep silt loams underlain by sandy loam glacial till (Dodge-St. Charles-McHenry) and well drained, poor;y drained, and somewhat excessively drained, moderately deep and deep loams, loamy sands, and fine sandy loams that are underlain by silt , sand, and gravel formed in outwash material (Bativia-Houghton-Dresden) Detailed information on soil taxonomy and properties of the region can be found in Hole (1976:61-70) and in Glocker and Patzer (1978).

Cultural Setting

Paleoindian Tradition

Early Paleoindian Stage (13,000 - 10,000 BC)

The earliest inhabitants of the Four Lakes area are believed to be the descendents of the first humans to inhabit the North American continent. Anthropological research has posited theories of who these early immigrants were, how they traveled to the New World, and the timing of their migration (Anderson and Gillam 2000; Fladmark 1979; Greenberg et al. 1986; Haynes 1964, 1969; Hoffecker et al. 1993; Martin 1973; Meltzer 1995, 1997). Two widely argued origins for the earliest immigrants are far eastern Asia and Europe, with theorized modes of travel including ocean crafts skirting either the Pacific or Atlantic coastlines from Asia or Europe, or overland, traversing the Bearing Land Bridge from Asia during interstitial warm periods between glaciations.

There is a debate on whether the previously acknowledged Clovis peoples were the first to reach North America, or whether there were earlier immigrants. Controversial research conducted in Kenosha and Racine Counties has led Overstreet (1991; 1994) to suggest that the earliest occupation of southern Wisconsin may date to 13,000 BP, pre-dating Clovis. The Chesrow complex was originally defined as falling late within the Early Paleoindian stage on the basis of excavations at the Chesrow site and surface collections at nearby sites in Kenosha County in southeastern Wisconsin. Though the complex has not been securely dated, Overstreet has argued for an early date based on the recovery of mammoth and mastodon remains bearing butchery marks, dated to 12,100-12,600 BP, on the same landforms and within the same geographic constraints as Chesrow complex material (R. J. Mason 1986; Overstreet 1991; 1993).

The early Paleoindian Fluted Point complexes (Clovis, Gainey and Folsom) have been securely dated to between 11,500 BP and 10,000 BP. The fluted point complexes are distinguished by the presence of lanceolate projectile points, commonly manufactured of fine and exotic materials, which have been carefully thinned at the base by the removal of long, deep flakes extending along the blade producing a distinctive, fluted appearance. Points belonging to the Clovis complex, dating 11,500-11,000 BP, have flute scars that extend less than one-third of their length. Folsom points (produced ca. 10,000 BP) have broad flute scars that extend nearly the entire length of the point. Gainey points fall between the two both morphologically and temporally (Stoltman 1991).

Evidence for early Paleoindian occupation of Dane County is abundant, though confined for the most part to surface finds of projectile points. Fluted points in the county have been recovered from the Horseshoe Ridge Site-47DA325 (Sanborn and Eaton 1980), the Havey Site-47DA13 (Nero 1955), the Skare Site-47DA10 (Ritzenthaler 1967a, b, 1970), the Johnson Site-47DA15 (Wendt 1985), Eagle Heights

Field-47DA413 (Wendt 1985), the Boltz Site-47DA419 (Wendt 1985), the Marquis Site-47DA7 (Maher 1959), and the Bollig Site-47DA429 (Wendt 1985). Early Paleoindian peoples have been stereotyped as big-game hunters specializing in mammoth and mastodon. There is evidence that megafauna were hunted by humans in Wisconsin, but resource extraction was likely more adaptable. The repeated association of Paleoindian sites with the confluences of water courses and larger water bodies suggests efforts to gain strategic advantage for big game ambush and drive-type hunting strategies as well as concern for the availability of small game and aquatic resources (Wendt 1985).

Late Paleoindian Stage (10,000 – 7000 BC)

The late Paleoindian stage is characterized by the use of long, slender, lanceolate blades without fluting, and stemmed projectile points. The quality of flaking on some late Paleoindian points has been described by some researchers as high art. Most examples in east central Wisconsin were manufactured of orthoquartzite and fall within the Agate Basin, Alberta, Eden and Scottsbluff types. Basal grinding on those points is frequent and usually heavy (Mason 1997).

In Dane County, Late Paleoindian sites tend to be located in the same locations as Early Paleoindian sites. Late Paleoindian projectile points have been recovered from the Horseshoe Ridge Site-47DA325 (Sanborn and Eaton 1980), the Havey Site-47DA13 (Nero 1955), the Skare Site-47DA10 (Ritzenthaler 1967a, b, 1970), the Johnson Site-47DA15 (Wendt 1985), Airport Village-47DA2 (Baerreis 1953a), Eagle Heights Field-47DA413 (Wendt 1985), Observatory Hill Mounds -47DA571 (MacKinnon 1985), the Boltz Site-47DA419 (Wendt 1985), the Marquis Site-47DA7 (Maher 1959), the Hurskamp Site-47DA379 (Wendt 1985), the Acker Site-47DA414 (Wendt 1985), the Bollig Site-47DA429 (Wendt 1985), and the Bollweg Site-47DA430 (Wendt 1985).

While late Paleoindian life ways have consistently been described as focused on a continuance of earlier big-game hunting strategies, evidence from other parts of Wisconsin suggest that late Paleoindian peoples practiced a broad range of subsistence activities (Kuehn 1998). Unfortunately, there have not been any published excavations of Late Paleoindian sites in the Four Lakes area and as a consequence, very little can be said of Late Paleoindian subsistence or settlement strategies. It is presumed that in the Late Paleoindian stage, social structure was probably based on small groups of related individuals, who moved frequently on the landscape and preferentially occupied lakeshores and stream banks near the outlets of lakes (Mason 1997).

Archaic Tradition

Early Archaic Stages (8000/5500 BC – 4000 BC)

The Early Archaic is characterized by the presence of formally diverse diagnostic projectile types such as Hardin Barbed, St. Charles, a variety of Bifurcated Base points and Thebes. Subsistence practices remained focused on hunting and gathering, although what was being hunted changed with the disappearance of the large Pleistocene fauna and what was being gathered certainly reflected a post-glacial biotic regime brought about by climatic change. Social organization is hypothesized as being similar to the Paleoindian period, and Stoltman has argued that technologically, there is no clear line between the Early Archaic stage and the late Paleoindian stage other than that based on lithic typologies (Stoltman 1986, 1997).

Wendt (1985) has reported that a number of sites in the Four Lakes area have produced Early Archaic projectile points including Hardin Barbed points from 47DA10 – Skare site and 47DA429-Bollig site. Bifurcated Base points are known from 47DA325-Horseshoe Ridge, 47DA13-Havey, 47DA419-Boltz, 47DA429-Bollig and 47DA430-Bollweg. The pattern of site reuse continued through the Early Archaic, probably because of their ideal settings for taking advantage of a wide variety of resources (Wendt 1985:259).

Middle Archaic Stage (6000/4000 BC – 1500/1200 BC)

The Middle Archaic stage in Wisconsin saw a number of technological innovations, including the first use of ground stone technology and copper metallurgy. The stage has primarily been identified with technological developments that culminated in the Old Copper industry (Martin 1999; Martin and Pleger 1999; Pleger 2000; Stoltman 1997). In the past, the Old Copper industry was treated as a separate manifestation of the Middle Archaic (the Old Copper Culture). However, recent research indicates that the use of copper technology is not limited to the Middle Archaic and as such, the term "Old Copper Culture" has ceased to be useful as a taxonomic designation. The Middle Archaic stage in the Four Lakes area is represented by the cluster of side-notched points diagnostic of the Middle Archaic stage in the Midwest (Raddatz, Godar, Madison, Matanzas, Reigh) (Stoltman 1997).

Raddatz points have been reported from 47DA736-Murphy (Hamilton et al. 1995), 47DA325-Horseshoe Ridge, 47DA10-Skare site, 47DA419-Boltz, 47DA7-Marquis, 47DA379-Hurskamp, and 47DA414-Acker. Despite the long duration of the Middle Archaic stage, relatively little is known of the actual lifeways of Middle Archaic people in the Four Lakes area. Excavations at 47DA736-Murphy suggest that there were two Middle Archaic occupations at the site, one between 4045-3375 BC and a later one between 3675 and 3375 BC (Hamilton et al. 1995). The full range of lithic tool manufacture was represented in the lithic assemblage from the Middle Archaic component of the site and Hamilton et al. suggest that activities at the site were extensive in duration and complexity (Hamilton et al. 1995:88). Floral remains from the site indicate that hickory nuts and walnuts were being processed during the later Middle Archaic occupation at the site based on the ratio of nutshell to wood charcoal (Egan 1995).

It was with the emergence of the Old Copper industry that long-range trade networks between territorial groups were first established. The establishment of formal cemeteries hints that group mobility was at a fairly low level and cultural boundaries between groups were beginning to form. The eastern Old Copper burial assemblages contain goods that may have signaled individual status—copper headdresses and jewelry of exotic marine shell (Stoltman 1997). If so, Wisconsin was home to one of the earliest socially complex societies in the Upper Great Lakes.

Late Archaic Stage (1500/1200 BC – 500/100 BC)

The arrival of the Late Archaic stage in southwestern Wisconsin is signaled by the appearance of new projectile point types, a decline in the use of copper and a lack of identifiable cemeteries (Stoltman 1997). Late Archaic projectile points are generally small, stemmed, side or corner-notched dart points. Few other artifacts diagnostic of this phase have been identified. The beginning of the stage seems to coincide with changes in the climate and environment. Starting around 3500 BP, oak savanna seems to have partially given way to closed oak forest, as weather grew cooler and wetter. The impact of this environmental shift on Late Archaic populations is not well understood, despite the excavation of several well-stratified rockshelter and cave sites. Based on regional studies of site distributions, single component Late Archaic

sites appear to be quite rare in Wisconsin. Typically, Late Archaic Preston Notched or Durst Points are found at multi-component sites, often in disturbed contexts. The Late Archaic stage is the first to be well represented in south-central Wisconsin. Sites have been located over a broad range of environmental and topographical zones. Based on excavations to date, it would appear that the Late Archaic stage represents a transition between the extremely mobile, small band strategies of the Paleoindian, Early Archaic and Middle Archaic stages and the less-mobile, seasonally dispersed populations of the Woodland tradition.

Based on stratigraphic excavations at the Preston and Durst Rockshelters in Grant and Sauk counties and projectile point differences, Stoltman (1997) has defined the Preston and Durst phases for southern Wisconsin.

Preston Phase (1500 – 1000 BC)

The earlier of the two phases has been designated the Preston phase after deposits identified at the Preston Rockshelter in Grant County (Stoltman 1997). The diagnostic projectile point also takes its name from the rockshelter – Preston Notched. This is a small side or corner notched point type with analogs in the Riverton Culture of southern Illinois (Merom Expanding Stem and Trimble Side-notched types) (Winters 1969) and in the Burnt-Rollways phase of northern Wisconsin (Salzer 1974). These distinctive projectile points were identified in levels stratigraphically above Raddatz materials and below Durst levels at both the Preston (Stoltman 1997) and Durst Rockshelters (Wittry 1958). Since these points were formally defined, a number of surface collections and excavations have produced stylistically identical points. Unfortunately, the excavations have not been in stratified contexts and have failed to produce additional temporal information.

Two sites in the Four Lakes Area have produced Preston Notched projectile points, 47DA5-Blackhawk Village (Baerreis 1953b) and 47DA459-Beach site (Salkin 1986). In both instances the points were recovered from multi-component sites and were designated as Monona Stemmed Points as they were described prior to the formulation of the Preston Notched type. Due to the fact that the Preston Notched type has only recently been defined, there are few sites that include this type name in their artifact assemblage discussions. Future research on the frequency of Preston Notched points in the region will rest on re-visiting many of the old excavation reports and redefining previously identified points.

Durst Phase (1000 – 500 BC)

The Durst phase is the youngest of the Late Archaic phases. Durst phase sites are identifiable largely by the presence of Durst Stemmed points. Durst Stemmed points are small expanding-stemmed points with weak shoulders and ovate blades. They take their name from the Durst Rockshelter, where they were found in levels above Raddatz and Preston points (Stoltman 1997; Wittry 1958). Although Durst Stemmed points are found frequently throughout the Driftless Area, almost no specifics are known of Durst phase lifeways.

Some of the better known sites with Durst Stemmed points in the Four Lakes area include Horseshoe Ridge Site-47DA325 (Sanborn and Eaton 1980), the Havey Site-47DA13 (Nero 1955), the Skare Site-47DA10 (Ritzenthaler 1967a, 1967b, 1970), the Johnson Site-47DA15 (Wendt 1985), Stevens-47DA123 (Christiansen III 2001), the Boltz Site-47DA419 (Wendt 1985), the Marquis Site-47DA7 (Maher 1959), the Hurskamp Site-47DA379 (Wendt 1985), the Acker Site-47DA414, the Bollig Site-47DA429 (Wendt 1985), and the Bollweg Site-47DA430 (Wendt 1985).

Woodland Tradition

Early Woodland Stage (300 BC – AD 100)

The Early Woodland stage in south-central Wisconsin encompasses two distinct cultural phases. Residents of the area during the Early Woodland stage appear to be a variant of the Marion culture, a widespread phenomenon with participants across the northern Eastern Woodlands (Esarey 1986; Green and Schermer 1988; Munson 1982). In many areas, the Marion culture is associated with Red Ochre ceremonialism. In some areas of Wisconsin Red Ochre mortuary sites may represent a leap in socio-political complexity. The quantity and quality of grave goods is far greater than that found in Old Copper cemeteries. Burials were typically in-the-flesh internments placed in a flexed posture with pits in natural ridges, knolls, and occasionally within artificially constructed mounds. Some bundle burials, cremations, and extended in-the-flesh inhumations are known. Red ochre (powdered hematite), sometimes mixed with red sand, was liberally sprinkled over corpses and their associated grave goods during the course of burial ceremonies. Large caches of exotic and finely fashioned burial goods were placed with the remains of both adults and children—a pattern usually associated with the emergence of hereditary status differences (Stevenson et al. 1997).

The Marion culture is responsible for the introduction of ceramic technology into Wisconsin. Marion Thick pottery is grit-tempered, cord-paddled inside and out, and took a distinctive conical or "flowerpot" form. Kramer Stemmed projectile points are the only other artifact diagnostic of Early Woodland habitation sites.

Lake Farms Phase (250 BC – AD 100)

The latter part of the Early Woodland saw an evolution in pottery technology and a minor switch from square stemmed projectile points to Waubesa Contracting Stem points, diagnostic of the Lake Farms phase in the Madison area. Lake Farms phase ceramics are sand or grit-tempered, cord-marked jars with relatively thin walls and slightly everted upper rim profiles. Decoration is applied directly over cord-marking in the form of bosses, incising, fingernail impressions, and cord-wrapped-stick impressions. This material is closely related to that produced by the Black Sand culture in Illinois.

Excavations of Lake Farms phase sites in the Four Lakes area, primarily the Canoe (47DA457) and Beach (47DA459) sites, on Lake Waubesa, indicate that late Early Woodland peoples may have lived in large warm-season camps surrounded by specialized resource processing and extraction sites (Salkin 1986). The large camps would have broken up in the winter, as individual families spread out across the landscape. Though many Lake Farms phase sites are located near shallow lakes and marshes, recovered faunal remains are curiously lacking in aquatic species.

Middle Woodland Stage (AD 100 – 500)

Waukesha Phase (AD 100 – 300)

The Middle Woodland stage in the Four Lakes Area is poorly known although there is some evidence to suggest Waukesha phase activity (Salzer nd; Stevenson et al. 1997). Waukesha phase pottery is characterized

by grit tempering and smooth exterior surfaces decorated using a wide variety of techniques. Ceramic types include several indigenous variants of more classic Illinois Havana wares. Types such as Kegonsa Stamped and Shorewood Cord Roughened appear to be regional variants of Naples Stamped. Havana types typically associated with the Waukesha phase include Havana Zoned, Neteler Crescent Stamped and classic Hopewell ware (Goldstein 1992). Projectile point types dating to the Waukesha phase are commonly either corner notched or stemmed and include the Snyders, Steuben, Monona Stemmed and Norton types.

What is known of the Waukesha phase people in the Four Lakes area comes from excavations at the Outlet site (47DA3) located where the Yahara River exits Lake Monona. Excavations conducted by Whiteford (1949), and Bakken (1950) indicate that Waukesha phase peoples, like their contemporaries in southwestern Wisconsin and Illinois, interred their dead in rectangular pits covered by large conical mounds. The interments at the Outlet site exhibited a wide variety of treatments including extended, flexed, bundled, and/or cremated. Two skulls from the 1948 excavations had white clay masks that had been applied to the faces of the dead shortly before interment. The primary burial in Mound 5 contained a single expanding stemmed Hixton silicified sandstone biface measuring 231 mm. This artifact is similar in morphology to objects recovered from Trempealeau phase burials in southwestern Wisconsin (Baerreis and Bender 1984; McKern 1931). This is, however, a rare occurrence as typically mortuary goods have not been found associated with Waukesha phase burials.

Waukesha phase habitation sites indicate a continued emphasis on hunting and gathering, with increased use of aquatic resources. Lippold (1973) has suggested that Waukesha phase peoples had begun to live in semi-sedentary communities supported in part by shellfish harvesting.

Late Woodland Stage (AD 500 – 1050)

The Late Woodland stage in the eastern United States has often been viewed in the past as a transitional phenomenon by a number of researchers (Griffin 1964; 1967; Phillips 1970; Phillips et al. 1951; Prufer 1964; Williams 1963). This, however, is not the case for Wisconsin where even the earliest archaeological researchers were aware of, and intrigued by, monumental earthworks that dotted the landscape (Lapham 1855; McKern 1928, 1929, 1930; Peet 1890). As research on the Late Woodland has progressed, it has become clear that while the Late Woodland stage is transitional in some aspects, others indicate a unique and well-developed stage with a complexity that is expressed not in material goods, but in ceremonialism and ritual. In other words, it does not represent a decline between two climaxes, but rather reorganization and consolidation of regional and macroregional networks that laid the groundwork for larger sociopolitical units. The early portion of the Late Woodland was, in essence, a continuation of the lifeways that had been gradually developing over the last thousand years. People continued to hunt, gather and fish, live in small groups and practice a seasonal round (Arzigian 1987; Storck 1974; Theler 1987).

Some transitional aspects of the Late Woodland stage relate to changes in subsistence strategies, settlement patterns and technology. It has become increasingly clear in the last 20 years that sometime around AD 850 maize began to play a more significant role in the diet of some Late Woodland groups (Arzigian 1987). Certainly by 1000 BP, maize had become a mainstay for a number of contemporaneous peoples who occupied the Wisconsin landscape. The adoption of more intensive horticultural economies apparently had profound affects on settlement patterns as sedentism become more prevalent among Native American peoples (Dirst 1988, 1995; Richards 1992; Salkin 1987, 1993). The establishment of permanent villages at a number of locations in the eastern portion of Wisconsin confirms the impact that the rigors of maintaining a maize-based diet had. Population appears to have increased during the Late Woodland, presumably as a result of changes in diet and settlement patterns.

Prior to 1987, the Late Woodland stage in Wisconsin was synonymous with the Effigy Mound Culture. As it is recognized today, the Effigy Mound culture is used as an umbrella term that incorporates at least two phases, the Horicon phase in south-central Wisconsin (Salkin 1987, 1993), the Eastman phase in southwestern Wisconsin (Stoltman 1990), and several phases not yet completely defined in northwestern and north-central Wisconsin.

The distribution of Effigy Mound culture sites is predominantly in the southern three-quarters of Wisconsin with additional sites in northern Illinois, northeastern Iowa and southeastern Minnesota. Site types include rock shelters, caves, multi-seasonal open-air villages, short-term encampments, seasonal resource exploitation camps and the highly visible effigy mound mortuary complexes typically located on elevated terraces near waterways, marshes and lakes. Very little is known of Effigy Mound domestic architecture, although three shallow oval basins excavated at the Sanders site (47Wp26) (Hurley 1975) suggest that small oval wigwam type houses were utilized. In addition, several "keyhole" shaped structures with associated Madison ware ceramics were recently excavated at the Statz site in Dane County (Meinholz and Kolb 1997).

The primary technological innovation of the stage was the widespread adoption of the bow and arrow. The bow and arrow were introduced into Wisconsin circa AD 700, and small arrow points are the most abundant projectile points found in archaeological sites occupied after that date. Lithics from Late Woodland stage sites in the Four Lakes area are often made from local Prairie du Chien and Galena cherts and on occasion, from one of the silicified sandstones found in northwestern Wisconsin. The lithic tool kit appears to be generalized with a high proportion of utilized and retouched flakes relative to more formal patterned tools. Drills, endscrapers and spokeshaves are known from rockshelter and open-air sites. Projectile points seem to be present in three forms: triangular, small corner-notched and small, stemmed points. It seems likely that the triangular points (Madison Triangular points) and small corner-notched points (Klunk points) are part of a bow and arrow delivery system, while the small stemmed points may represent spear or atl-atl points.

Analysis of faunal and floral remains from rock shelters, caves and open-air sites indicate that a variety of local resources were consumed by Effigy Mound builders, including deer, small mammals, fish, fowl, mollusks, nuts, as well as starchy and oily seed bearing plants (Arzigian 1987; Benn 1980; Berwick 1975; Emerson 1979; Lippold 1973; Parmalee 1959; Storck 1974; Theler 1987). Though there is evidence that maize was utilized in the Driftless Area to some extent (Arzigian 1987; Stoltman 1990), no maize has yet been reported from Horicon phase sites (Salkin 1987, 1993).

By definition, Effigy Mound culture mortuary sites contain one or more earthen, animal-shaped effigy mounds. Mound shapes include "panthers", birds, waterfowl, bears, canines, deer, buffalo, "turtles" and humans (Birmingham and Eisenberg 2000; McKern and Ritzenthaler 1949; Rowe 1956). Effigy Mound peoples also constructed long "linear" mounds and small conical mounds. Unlike earlier Red Ochre and Hopewellian mounds, these mounds were generally low, contained few, if any, grave goods and contained the remains of only a single individual, though some mounds with multiple interments and some with none at all are known. Articulated and bundle burials, cremations, pit burials, primary mound floor and primary mound fill burials were all common. The only consistency in burial regime was the placement of the corpse near the "heart" of the effigy (Stevenson et al. 1997). Though many excavated Late Woodland mounds contain burial features, not all do. This has led several researchers to suggest that the importance of the mounds lay in the process and ceremonies accompanying their construction and not only in their use as burial markers (Mallam 1976).

Recent research suggests that there are patterns to the distributions of certain types of mounds that indicate an east to west geographical division (Birmingham and Eisenberg 2000). This division seems to

reflect differing terrain, resource bases, and perhaps social affiliations and cosmologies. As an example, bear-shaped mounds are more frequently found in the western portion of the state, while the east is dominated by "panther" and "turtle" shaped mounds (forms similar to historic iconography depicting water spirits). Bird mounds, while found throughout the area occupied by Effigy Mound builders, are most abundant in the higher elevations of the Driftless Area. The association of specific animals with high and low elevations fits within a pan-eastern Native American tradition concerning a tripartite division of the world into the "Upper World" (order, fire, lightning/thunder, warfare, birds), "Middle World" (this world, balance) and "Lower World" (chaos, water, springs and caves, healing and fertility, bears and water spirits) (Birmingham and Eisenberg 2000; Hall 1997; Hudson 1976). Local landscape features also appear to have played a role in the structure of individual mound groups. "Panther" or Water Spirit mounds are often found near springs and deep lakes, features identified as portals to the underworld in the cosmology of eastern Native Americans. It appears that the Native Americans who built the effigy mounds were creating a symbolic landscape through the construction of various types of mounds.

Horicon Phase (AD 700 – 1200)

Several major changes in material culture and ceremonial practices differentiate the Middle Woodland Waukesha phase from the Late Woodland Horicon phase. First, the people of the Horicon phase are considered to be part of the Effigy Mound Culture because they buried their dead in animal shaped effigy mounds. Second, cord and fabric impressed ceramics (Madison Cord-Impressed, Madison-Fabric-Impressed) dominate Horicon phase ceramic assemblages. These two types taken together are the principal components of Madison Ware ceramics which are generally globular in form, grit-tempered, and almost always in the form of large jars, although several smaller bowl-like vessels are known from a number of sites. Exteriors are cordmarked with decoration being confined to the inner lip, outer lip, lip surface, and the exterior rim to the neck of the vessel. Rims may be incurving, flared or straight. When decoration is present, it is usually in the form of single or multiple cord impressions in linear bands or geometric patterns.

Salkin has argued that Horicon phase peoples utilized large habitation sites for socializing and ceremonial purposes and then occupied small sites at other times of the year (Salkin 1993). The size and distribution of sites has been used as support for a band-level hunting and gathering lifestyle for the Effigy Mound peoples (Mallam 1976; Salkin 1987).

Effigy mound groups and habitation sites are ubiquitous around the Four Lakes area of Dane County. It is difficult to find a location adjacent to either of the four lakes, the Yahara River or any of the tributaries of the drainage that do not contain effigy or other types of mounds as well as habitation sites. The Four Lakes area is considered to be one of several "super clusters" of mounds and earthworks in Wisconsin (Birmingham and Eisenberg 2000).

Terminal Late Woodland (AD 800 – 1200)

Sometime around 1,100 BP, significant changes took place on the landscape of southern Wisconsin. A few ceramic vessels in east central Wisconsin were produced with a distinctive folded rim, which produced the appearance of a "collar" around the pot. Though used in small amounts at first, collared pottery became more popular and replaced the earlier Madison ware entirely by 950 B.P. The resulting Point Sauble and Aztalan Collared types are the diagnostic hallmarks of the terminal Late Woodland stage. At the same time that this ceramic transition was taking place, maize was introduced into the Late Woodland diet in increasing amounts. By 1,000 B.P. fully horticultural societies had arisen and the first sedentary villages

in Wisconsin were occupied (Stevenson et al 1997). Some of these early villages were fortified with post palisades (Salkin 1993). This set of changes signaled the onset of the Terminal Late Woodland in southern Wisconsin. In the eastern part of the state (east of the Driftless Area), the terminal Woodland has been called the Kekoskee phase (Salkin 1987, 1993).

There are strong indications that the socio-political dynamics of southern Wisconsin became more complicated as sedentism took hold and diverse cultural groups either developed within, or moved into, southern Wisconsin. By AD 1050, the terminal Late Woodland town of Aztalan was occupied by a group of Cahokian Middle Mississippians and Oneota settlements were springing up in northwestern, northeastern and southeastern Wisconsin.

In the Four Lakes area, collared ceramics have been recovered from excavations at 47DA12-Dietz Site, 47DA424-Stricker Pond, 47DA642-Statz and 47DA36-Murphy. The Dietz site provided evidence of maize consumption in the form of charred cobs while the Statz site appears to have served as a relatively long term habitation site. At least two pairs of structures are associated with the ceramics. All four structures are keyhole in shape and at the time of occupation were overlooking a marsh. Stricker Pond and Dietz are also located immediately adjacent to marshy areas. Based on the limited sample of Kekoskee phase sites, it appears that site location preference was oriented towards environments where a variety of aquatic resources could be procured and were off of major waterways. This may be due in part to increased hostilities in the region as demonstrated by evidence for violent conflict at a number of sites throughout the region (examples include Aztalan, the Highsmith site, Weisner III, IV, Camp Indianola, etc.).

Mississippian Tradition

Middle Mississippian (1000 – 1250 AD)

Evidence of a Middle Mississippian presence in southern Wisconsin is confined to only a handful of sites, which has led researchers to the conclusion that it is largely an intrusive presence. Middle Mississippian peoples were different from surrounding Late Woodland groups in a number of ways. First, they were a fully sedentary agricultural people depending on maize, beans and squash. Second, they appear to have had a ranked society that was organized around chiefly authority. Third, they constructed monumental architecture that included platform temple mounds, large bastioned palisades and specialized public buildings. Fourth, they utilized a very specialized ceramic technology that included the use of crushed freshwater clamshell as a tempering agent. In addition to this new temper, they also made a wider variety of vessel forms that included jars, water bottles, plates, and bowls that were occasionally slipped with red, black, white or brown pigments. The diagnostic Middle Mississippian ceramic types are Powell Plain and Ramey Incised. Lithic technology was based around a generalized core reduction strategy and the typical projectile point was a small, thin, notched or multi-notched triangular point.

Middle Mississippian peoples, or at the very least, ideas, were present in southern Wisconsin sometime between A.D. 1000 and A.D. 1050. It is thought that Middle Mississippian people took at least two routes north, one to the west along the Mississippi River trench and a second from Illinois via the Rock River. The eastern route brought Middle Mississippian peoples into contact with Late Woodland Kekoskee phase people who had already settled at several locations. It appears that some type of relationship was established with these people and the small village of Aztalan metamorphosed into a 22-acre mixed Kekoskee/Middle Mississippian village with three platform mounds. Middle Mississippian presence is seen at several other sites in the form of trade goods and locally made imitations of Powell Plain and/or Ramey Incised. Evidence for a Middle Mississippian presence in Wisconsin ceases shortly after A.D. 1250 when portions of Aztalan were apparently burnt.

Oneota (1000 - 1600 AD.)

Some Late Woodland communities appear to have adopted elements of Mississippian material culture and ideology, and evolved into a group of related cultures termed the Oneota. Oneota peoples adopted many elements of Mississippian material culture, including the manufacture of smooth surfaced, shell-tempered pottery decorated with trailed geometric and curvilinear motifs, and a heavy reliance on maize horticulture. Like the terminal Late Woodland peoples of eastern Wisconsin, they inhabited large, sometimes fortified, sedentary villages. Oneota material culture was variable, due in part to the differing responses of local groups to Mississippian ideology and technology. The geographic distribution of Oneota villages was discontinuous, as not every Late Woodland stage group accepted new ideas (Overstreet 2000).

The sudden pre-occupation with fortification systems that developed with the emergence of sedentary societies may be due in part to the close proximity that the culturally dissimilar terminal Late Woodland, emergent Oneota and Middle Mississippians found themselves in. However, while terminal Late Woodland and Middle Mississippian sites in the area are frequently fortified, only a single fortified Emergent Oneota site has been noted to date.

Subsistence revolved around fishing, shellfish harvesting, hunting and trapping of aquatic mammals and a horticultural system involving corn, beans and squash. Shell middens, shellfish processing areas, garden beds and rock piles produced during field clearance are common both near and within habitation areas. Wild mast crops, such as hickory, walnut, butternut, acorn and hazelnut were collected, and there is evidence that deer and elk were hunted (Overstreet 1997).

Historic Period

Native Americans (AD 1600 - present)

Oneota culture appears to have persisted into the Historic period, based on excavations at the Astor site in modern Green Bay. Items of European manufacture were found there in association with Oneota shell-tempered ceramics. Fragments of brass kettles, a glass bead and a clasp knife were recovered from the site, along with a grit-tempered Bell Type I pot (C. I. Mason 1986; Wittry 1963). Bell Type I pottery has been associated with the Pottawatomie and Mesquakie. The ethnic affiliations of the Oneota communities have not yet been established, but their geographic location and material culture of the eastern Classic Oneota matches early European descriptions of the “Ouinipigou” (Winnebago/Ho-Chunk). It appears that Oneota populations had declined by Euroamerican contact (presumably due to epidemic disease and an increase in regional conflict) and contact had been established with the Mesquakie, Pottawatomie and other groups being pushed westward by disturbances resulting from Euro-American colonization (Hall 1962; Overstreet 1997).

These disturbances, coupled with an increasing reliance on items of European manufacture, resulted in a cessation of pottery and stone tool manufacture. As a result, it is very difficult in most cases to link historically known Native American residents of Wisconsin to pre-Euroamerican cultural complexes. The association of the Ho-Chunk with the eastern Oneota, though tentative, still remains the strongest to date.

The early Historic period, in a formal sense, is traditionally said to begin in 1634, when Jean Nicolet is believed to have landed at Red Banks on the shore of Green Bay (though Hall and other researchers have questioned whether this location is correct (Hall 1993)). Nicolet had been sent as an envoy to the Ho-Chunk nation with the intent of establishing a peace treaty between their nation and the Ottawa, in order

to facilitate the flow of furs into French territory. As competition for those furs between native tribes and European groups increased, warfare and population movement accelerated. War parties from eastern fur-trading tribes began to attack the Ho-Chunk, whom Nicolet had failed to convince of the benefits of trade with the French. These parties carried epidemic diseases with them, and the resulting outbreaks killed nearly two-thirds of the Ho-Chunk (Lurie 1978).

In 1649 the Huron abandoned their traditional lands, opening a passage along the northern shore of Lake Huron and along the islands spanning the straits between Lakes Superior and Michigan and into Green Bay. Pressure supplied by Iroquois raiders pushed refugees such as the Mesquakie, Sauk, Kickapoo, Mascouten, Illinois and Miami eastward into Wisconsin (Mason 1988). Other groups, including the Chippewa and the Huron themselves, moved along the southern shore of Lake Superior on their way eastward.

The Ho-Chunk began a push westward during this period, moving from Green Bay to the Lake Winnebago area. Though their major villages were located in eastern Wisconsin, the Ho-Chunk traveled regularly into the Driftless Area, and across the Mississippi for buffalo hunts. The following decades were witness to the partial recovery of the Ho-Chunk population. By the 1800s, villages and campsites were established across southern Wisconsin. During their period of expansion, the Ho-Chunk successfully adopted elements of the more mobile Algonquian lifestyle and became prosperous participants in the fur trade (Lurie 1960, 1978). They also began to mine lead in the Driftless Area, putting themselves at the center of a developing regional trade network of raw lead and ammunition (Kay 1977; Spector 1977). This activity, though economically advantageous in the short-term, inevitably drew the attention of white settlers and led to conflict between the Ho-Chunk and Euro-Americans who wished to claim the lead district for themselves.

In 1829 and 1832, treaties were drawn up calling for the Ho-Chunk to abandon title to the lead district and relocate west of the Mississippi. A third treaty, drafted in 1837, stipulated the removal of the Ho-Chunk to Iowa from their remaining territory in Wisconsin. The Ho-Chunk, suffering through another round of catastrophic epidemic disease, largely ignored these treaties, and the U.S. government began a series of forced relocations in the 1840s (Lurie 1978). Many of the deported Ho-Chunk returned to Wisconsin at the first opportunity (settling in the Wisconsin, Baraboo and Fox River valleys) (Lawson 1907). In 1875, the Indian Homestead Act was passed, allowing the Ho-Chunk to remain in Wisconsin by purchasing homesteads. These homesteads, located in the poorest areas of the state, served as “home bases” while the Ho-Chunk traveled to seasonal gatherings on the Mississippi River near La Crosse and served as itinerant workers in cranberry bogs, cherry groves and blueberry fields (Wyatt 1986).

By the late 1880s, Ho-Chunk settlement was concentrated around Black River Falls, Stevens Point, Tomah and Hatfield, and many homesteaders had lost their lands at the expiration of the 20 year tax-free period on their property. Despite these hardships and upheavals, many Ho-Chunk retained the practice of traveling on a seasonal round, periodically moving to favored winter fishing and hunting grounds. The following years saw a diminishment of this custom, as the Ho-Chunk began to participate in the tourism industry, seek factory jobs and practice commercial agriculture (Wyatt 1986).

Ho-Chunk villages in the Four Lakes region are not documented prior to the 1830s. Prior to that time, Ho-Chunk settlement was concentrated between Portage and Green Bay, and down the Rock River. By 1830, five villages had been established in the Four Lakes area: Old Turtle’s village on the north shore of Lake Mendota, the Four Lakes village in the area of modern Tenny Park on the Isthmus, Broken Arm’s village on the south shore of Lake Monona, Spotted Arm’s village on the south shore of Lake Waubesa and Mammothe’s village on the south shore of Lake Kegonsa. By the time of Black Hawk’s retreat along the Isthmus in 1832, only the two northernmost villages were still occupied, and a smallpox epidemic had spread through the Yahara and lower Rock River valleys (Tanner 1987).

Historical Background

For over two-hundred years the fur trade was the focus of economic interest in Wisconsin. Incentives to its prosecution were intimately related to motives that inspired missionaries and secular explorers. Fur traders often initiated contacts with Indians, founded the first settlements, and expanded routes of travel in Wisconsin. Lacking the economic impetus of the fur trade, there would have been considerably fewer Europeans in Wisconsin during the seventeenth, eighteenth, and early nineteenth centuries (Smith 1973).

Regional Development

The French (1730-1763)

During this time the French opened posts throughout the interior of the Western Great Lakes country and adopted from the Indians the technology and patterns of operation which remained characteristic of the fur trade until its closing days. In Wisconsin, the period of French control saw the opening of direct trade with the Indians of the Western Great Lakes and with the Sioux, and the emergence of this tribe as one of the major fur suppliers in the area (Kellogg 1925). Documentation of the French presence in Wisconsin provides no evidence for French activity in the south central region of the state.

The British (1763-1816)

Subsequent to 1763, the Western Great Lakes was divided between British (after 1783, American) and Spanish sovereignty. The fur trade was shared among British and French traders. Some of the latter were based in Canada, others in Louisiana. After 1790 British traders penetrated the Great Plains and traded as far west as the upper Missouri and the Saskatchewan Plains (Kellogg 1935). While the British were actively involved in the fur trade in Wisconsin, their presence was confined primarily to the major waterways including Lakes Michigan and Superior, and the Fox-Wisconsin and Mississippi rivers.

The Americans (1816-1850)

These years saw the emergence of St. Louis as a major trade and transportation center and its replacement of Mackinac as the main supply point for the Western Great Lakes fur trade. They also saw the creation of a near monopoly in the area by the American Fur Company, the decline of the fur trade before the advance of settlement, and the establishment of successful entrepreneurs who collected United States Indian Treaty money.

After the Black Hawk War of 1832, fur trade became less important and settlement of the area began in earnest. Soon traders began viewing the wilderness as developing frontier rather than a place solely for Indians and fur-bearing animals. Many traders became interested in lumbering, banking, general merchandising, road construction, steamboat lines, railroad development, and land speculation (Wyatt 1986). As early as the 1820s lead mining attracted settlers to southwestern Wisconsin. Despite the success enjoyed by many, others who could not support themselves as miners turned to farming. As locally available good farmland was acquired, individuals sought fertile land in the counties of south central Wisconsin, such as Dane County.

Dane County History

Dane County was established in December of 1836, but the Euro-American presence in the area has been suggested to be as early as 1793 when a guide for Major Long claimed to have visited the area (Butterfield 1880). In 1836, Dane County was formed from the western part of Milwaukee County and the eastern part of Iowa County but not organized as a separate county until three years later. The county was named by Governor Doty in honor of Nathaniel Dane who, in 1787, introduced the ordinance creating the Northwest Territory. The land comprising the county was ceded by the Winnebago in two treaties, one in 1829 and the other in 1832. Ebenezer Brigham, credited with being the first settler in Dane County, had passed through the area in 1829 and was interested in it for its potential mineral resources rather than its agricultural possibilities. Dane County encompasses 1,235 square miles and incorporates 35 townships within its political boundaries.

When Madison was selected to be the site of the capitol in November of 1836, only thirty people were residing in what is now Dane County (Butterfield 1880). The government surveying of the county was executed between 1830 and 1839 (Keyes 1906). Following the inception of Madison as the state capitol, settlement began to increase dramatically. In 1840 the population of Dane County was 314 but by the end of the Civil War the population grew to 43,992 (Park 1877). Pioneer settlement was facilitated by an early road system. In 1838 Congress appropriated funds for construction of three federal roads in Wisconsin Territory. One of these, the Milwaukee-Mississippi road was constructed between Milwaukee and a point opposite Dubuque by way of Madison. Governor Henry Dodge emphasized the importance of this road to the Territory:

> Its completion would facilitate settlement, and aid in development of its agricultural, mineral and commercial resources and make transportation of the mails safe and facilitate the march or movement of troops and the transportation of necessary munitions of war from our Lake border to our most exposed frontier on the Mississippi, should it become necessary to meet a savage enemy (Karn 1959:40).

Other secondary roads directed north and south were rapidly constructed during the 1840s and 1850s. The territorial roads served as economic links between the rich agricultural lands and the shipping centers. These roads were traveled by pioneer settlers, many of whom settled farmsteads along the routes.

Population growth in Dane County was due, in large part, to the influx of immigrants, primarily Norwegians and Germans, during the 1840s and 1850s. These immigrant pioneers were predominantly farmers seeking economic opportunity in the fertile land of south central Wisconsin. In Dane County, as throughout Wisconsin, both Norwegians and Germans clustered in settlements according to their religious and provincial origins.

Like other Dane County pioneer farmers, the Germans grew wheat as the primary crop. However, even during the period of 1840-1890 when wheat reigned as Wisconsin's primary cash crop, German farmers grew other crops. When the wheat market collapsed they turned to dairy farming. German farmers, particularly in eastern and southern Wisconsin, assumed an integral role in the transition from a grain based economy to dairy-based agriculture (Wyatt 1986).

In the wake of wheat's decline, Dane County farmers turned to other cash crops, the most lucrative of which was tobacco. This area of the state was the first to realize economic success from the cultivation of tobacco which was introduced as early as the mid-1840s. However, it was not until the 1850s that tobacco was cultivated on a commercial scale. By the 1880s it was commonly grown throughout southern Dane, Rock, and Jefferson counties. Despite a fluctuating market over the past century, tobacco cultivation continues to play a major role in agricultural production in Dane County.

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Part III: Research Methodology

Archival and Literature Search

Pre-field research entails a comprehensive review of the data housed at Great Lakes Archaeological Research Center, regional libraries and historical societies, and at the Wisconsin Historical Society in Madison, Wisconsin. Archives and serial file systems are also searched for site-specific information. Published literature sources consulted include: The Wisconsin Archeologist, a quarterly journal of the Wisconsin Archeological Society published since 1901; The Wisconsin Magazine of History, the journal of the Wisconsin Historical Society; The Wisconsin Historical Collections consisting of 20 volumes published between the years 1903 and 1920; and the Bulletin of the Public Museum of the City of Milwaukee, several of which detail archaeological investigations conducted in various Wisconsin localities.

Unpublished sources subjected to scrutiny are represented by four different formats: (1) serial entry files; (2) map files; (3) manuscript files; and (4) archaeological survey reports. Two serial file systems were consulted. The first of these is the Wisconsin Archaeological Site Inventory (ASI) files, copies of which are housed at the Anthropology Section, Milwaukee Public Museum and the Museum Division, Wisconsin Historical Society. This file consists of an inventory of previously reported archaeological sites from both prehistoric and historic times and provides information relating to site locations, cultural affiliation, artifacts, and literature sources. The second file consulted is the Historic Preservation Division inventory file housed at the Historic Preservation Division, Wisconsin Historical Society. This file includes both archaeological sites and standing structures that have been identified as possessing architectural and/or historical significance.

Several map files were reviewed. They include: (1) The Charles E. Brown Archaeological Atlas; (2) the General Land Office survey records; (3) the Trygg map files; and (4) local plat and deed maps. The Charles E. Brown Archaeological Atlas provides the locations of sites on county plat maps. The prehistoric and historic sites include camps, villages, mounds, springs, rock art, workshops, quarries, cemeteries, trails, and various other types of archaeological manifestations reported to Brown during his long tenure as editor of The Wisconsin Archeologist and as the curator of the Wisconsin Historical Society Museum. The General Land Office (GLO) records consist of plats and survey notes that may provide information regarding pre-settlement vegetation, topography, and aquatic features, all important variables in determining potential site locations. In addition, dependent on the interests of individual land surveyors, cultural information such as the locations of Indian trails, camps and villages, maple sugar processing stations ("sugar bushes"), pioneer settlements, and early industrial improvements such as mills, roads, and early homes and farmsteads are frequently noted on these maps. Both map files are housed at the Archives Division, Wisconsin Historical Society and the latter is available on microfilm at various repositories. The Trygg map file is a privately published composite of the GLO land survey records. While the Trygg maps are less detailed in scale than the GLO plats, the file is an important source for understanding the chronology and magnitude of regional development during the late historic period (ca. 1850). Finally, early plats and topographic maps were reviewed to assess historical settlement and development of the project environs.

Manuscript files investigated include the Charles E. Brown manuscript files and the State Archaeologist's county files. Both of these are housed at the Museum Division, Wisconsin Historical Society. The Brown manuscripts consist of 50 years of notes, correspondence, sketches, maps, and other data relating to historic and prehistoric archaeological sites. The county files include reports (unpublished), photographs, sketch maps, letters, and information derived from the Museum's highway archaeology program.

Site Re-location and Mapping

Site 47DA1421 was relocated using the Phase I site map and taking measurements off of the nearby driveway and the edge of the field. Temporary marker stakes were placed in the corners of the site. After the site boundaries had been marked off, a smaller area within the site was marked for mechanical stripping. The Scope of Work for the Phase II evaluations stipulated mechanical excavation over 25% of the site area, or slightly more than 61 m2. The area designated for stripping was a 2.5 x 25 m trench (with a total area of 62.5 m2) that was located along the edge of the field, roughly centered between the east and west boundaries of the site. The location of an additional artifact found on the surface was recorded using a tape measure and working off of the marked corner of the site. Finished maps of the site and surrounding area were created after field work was completed using ESRI ArcGIS.

Pedestrian Survey

Although pedestrian survey had been conducted at the site in 2011 during the Phase I survey, 47DA1421 was briefly re-investigated through close (1 m or less) interval pedestrian survey at the outset of the Phase II evaluations. This survey was carried out to determine if any additional artifacts were present on the surface before the site was disturbed by mechanical excavation. Only one artifact, a chert waste flake, was located during this survey.

Mechanical Stripping

Backhoe trenching was conducted at site 47DA1421 (Endres) in order to identify truncated cultural features beneath the disturbed plow zone of the cultivated field. The Scope of Work for the Phase II evaluations at the site called for stripping of 25% of the 245 m^2 site, amounting to an excavated area of about 62 m^2. A trench measuring about 30 m long and between 2 and 2.5 m wide was investigated in this manner. Stripping was conducted with a small trackhoe using a 77 cm (30 in) wide smooth-edged bucket. Care was taken to avoid damaging more of the corn planted in the field than absolutely necessary. In general, surface disturbances were limited to the existing site boundaries. Using the trackhoe, the entire layer of topsoil (apparently consisting only of an Ap horizon) was removed, exposing the top of the lighter-colored B horizon below. The Ap horizon was about 35 cm deep and stripping reached a depth of between 35 and 50 cm below the modern ground surface. After mechanical stripping, the floor of the trench was shovel skimmed by hand to identify possible features.

Soil Profile

The soil profile observed in the wall of the mechanically excavated trench was observed and recorded. Soil color was determined using the Globe Soil Color Book (Visual Color Systems 2004) and texture by following the method outlined by Huddleston and Kling (1984:16-21).

Field Data Management

Standard field documentation was completed including: field notes, color digital photography, and a photography log. The general progress of the mechanical excavation, field conditions, and observations were recorded in field notes maintained by the field supervisor. Upon completion of the fieldwork, all documentation was removed to GLARC's archaeological lab for review, processing, analysis, and interpretation.

Site Clean Up and Backfilling

The stripped trench was backfilled as soon as it was determined that no cultural features were present. The backfilled surface was smoothed with the trackhoe, again avoiding more disturbance to crops and other vegetation than absolutely necessary. All stakes, flagging, equipment, and refuse were removed from the project area after the completion of fieldwork.

Laboratory Methods

Following completion of the fieldwork portion of a project, a variety of activities are carried out at the GLARC laboratory and office facility. In the laboratory, artifacts are washed, sorted, inventoried, labeled, analyzed, and interpreted. Analysis of the lithic waste flakes recovered during the Phase II evaluations consists of determining the size, weight, raw material, presence of cortex, and likelihood of heat-treatment for each flake, as well as checking for use wear or signs of re-working suggestive of an expedient flake tool. In addition to artifact analysis, post-field work tasks include photographic logs, reviewing notes and maps, and preparing a final report of investigation for publication

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Part IV: Results of the Archival and Literature Research

An archival and literature review was conducted to identify and document previously recorded archaeological and burial sites in the vicinity of site 47DA1421. There are three previously reported sites located within one mile of the site: 47DA0692, 47DA1317, and 47DA1420 (Figure 4.1; Table 4.1). Site 47DA0692, the Einichen site, is located along CTH M south of CTH PD and within the CTH M 2011-2012 Phase I survey area. It was reported as a possible pre-contact cold season encampment and historic debris scatter located 75-150 feet east of CTH M between CTH PD and Cross County Road. No evidence of 47DA0692 was found during the Phase I survey conducted in 2011. Ninety-eight percent of the mapped boundaries of the site encompass disturbed soils or pavement. The remaining 2% of the site lies within a cultivated field. No cultural materials were found in this location. It is likely the site was destroyed by the construction of CTH M (Shillinglaw and Jones 2012: 31).

Site 47DA1317 (Verona Ice Age Trail), located to the east of 47DA0692, is just barely within a one mile radius of 47DA1421. This site is a lithic scatter of unknown pre-contact affiliation. Finally, site 47DA1420 was identified in 2011 during the CTH M Phase I survey and defines a small, subsurface lithic scatter of unknown pre-contact affiliation. Phase II evaluations were conducted in October of 2011 with meager results. The site was recommended as not eligible for listing on the National Register of Historic Places.

Table 4.1 Previously Reported Archaeological and Burial Sites within One-Mile of the Endres Site Project Area

Site Number	Site Name	Site Type	Cultural Study Unit	Town Range Section
47DA0692	Einichen	Campsite/village	Historic Euro-American, Unknown Prehistoric	6, 8, E, 10
47DA1371	Verona Ice Age Trail	Lithic scatter	Unknown Prehistoric	6, 8, E, 11
47DA1420	Ellefson	Lithic scatter	Unknown Prehistoric	6, 8, E, 10

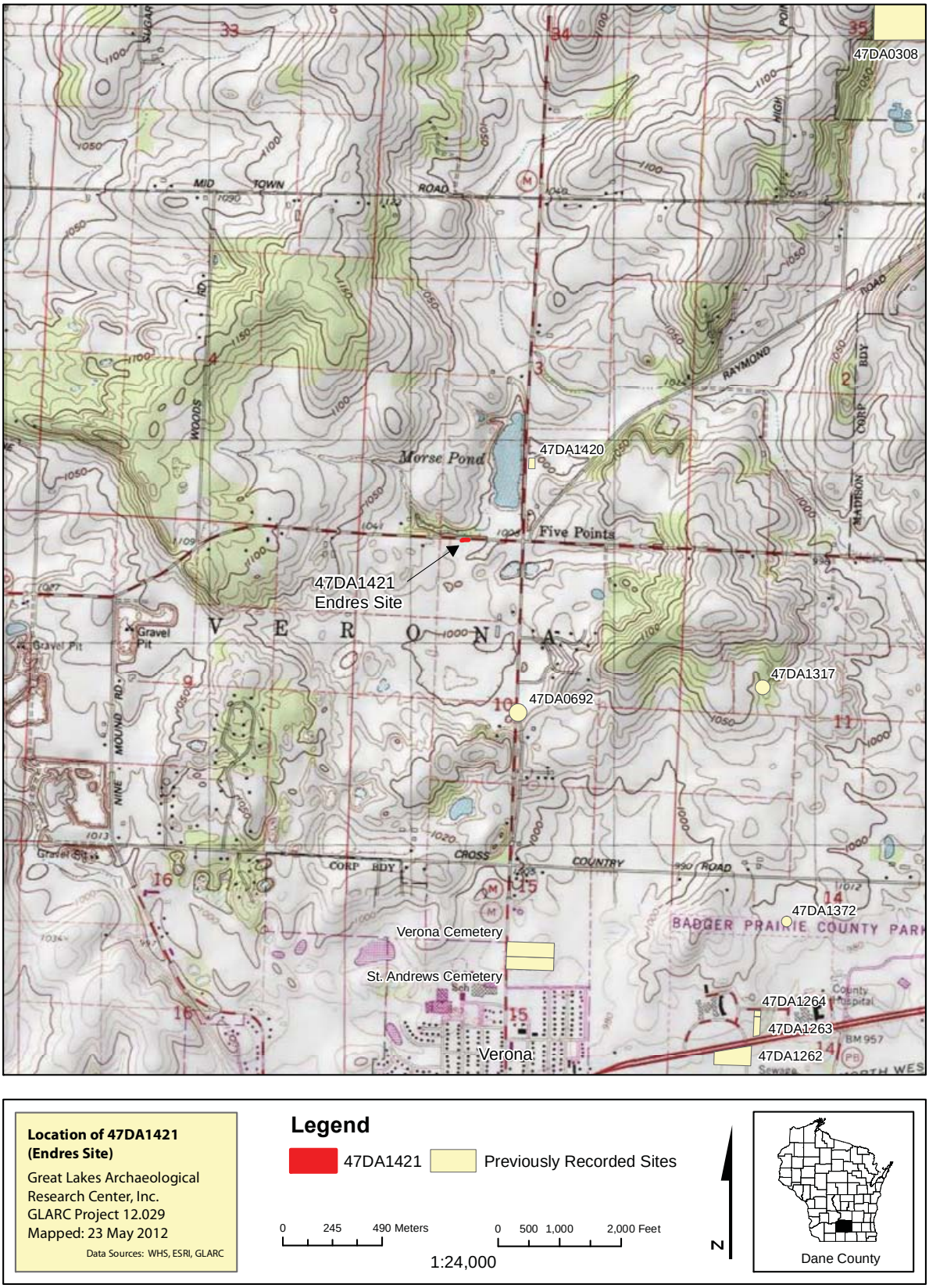

Figure 4.1 Previously reported archaeological and burial sites within one-mile of the Endres site.

Part V: Results of the Phase II evaluation of Endres Site 47DA1421

Phase II evaluations were conducted at 47DA1421 on May 22, 2012 (Figures 5.1, 5.2, and 5.3). The site was re-located and mechanical stripping was conducted to search for subsurface cultural features. No features were found and only two pieces of non-diagnostic cultural material were recovered.

Site Re-Location and Pedestrian Survey

The boundaries of the site were re-located by measuring distances off of the nearby driveway and the edge of the field. After the site boundaries had been marked off, a smaller area within the site was marked for mechanical stripping. Scope of Work for the Phase II evaluations stipulated mechanical excavation over 25 percent of the site area, or slightly more than 61 m2. The area designated for stripping was a 2.5 x 25 m trench (with a total area of 62.5 m2) that was located along the edge of the field, roughly centered between the east and west boundaries of the site. The actual stripped trench ended up being slightly larger than planned, measuring about 30 m long and between 2 and 2.5 m wide.

During site re-location, a chert waste flake was found on the modern ground surface near the southwest corner of the site. Following this surface find, close interval (1 m or less) pedestrian survey was conducted within the existing site boundaries, but no additional pre-contact artifacts were observed.

Mechanical Stripping

Mechanical stripping of the topsoil was generally conducted in at least two passes with the trackhoe bucket in a given location, rather than removing the entire A horizon at once. As the topsoil was peeled back, the crew watched for subsurface features manifesting as dark soil stains in the top of the B horizon. The removed topsoil was watched as it was deposited alongside of the trench to check for artifacts. Only one piece of debitage was recovered from the backdirt. No cultural features were observed in the stripped trench. Once the trench had been checked and photographed, it was backfilled using the trackhoe.

Soils

Site 47DA1421 is in an area of Grays silt loam, 2-6% slopes, eroded. This soil has a standard profile starting with a dark grayish-brown silt loam A horizon down to about 25 cmbs. This is underlain by a B horizon of dark yellowish brown silt loam or silty clay loam (Glocker and Patzer 1978: 34; USDA 2012). Much of the rest of the field to the east and south consists of Westville silt loam, 6-12% slopes, eroded; and Batavia silt loam, gravelly substratum, 0-25 slopes. Starting at the northern edge of the field and extending across the road is an area of Dresden silt loam, 12-20% slopes, eroded (USDA 2012).

A soil profile was recorded along the northern wall of the excavated trench. This profile revealed a dark grayish brown (10YR4/2) clay or clay loam Ap horizon that extended down to about 35 cm below the surface. The bottom of the Ap horizon was undulating and the lower 10 cm of the horizon could be considered an A/B horizon in places. Below this was a yellowish brown (10YR5/4) clay B horizon. Plow scars at the top of the B horizon were observed during mechanical stripping. These ran parallel to the edge of the field. A few rodent burrows were also observed.

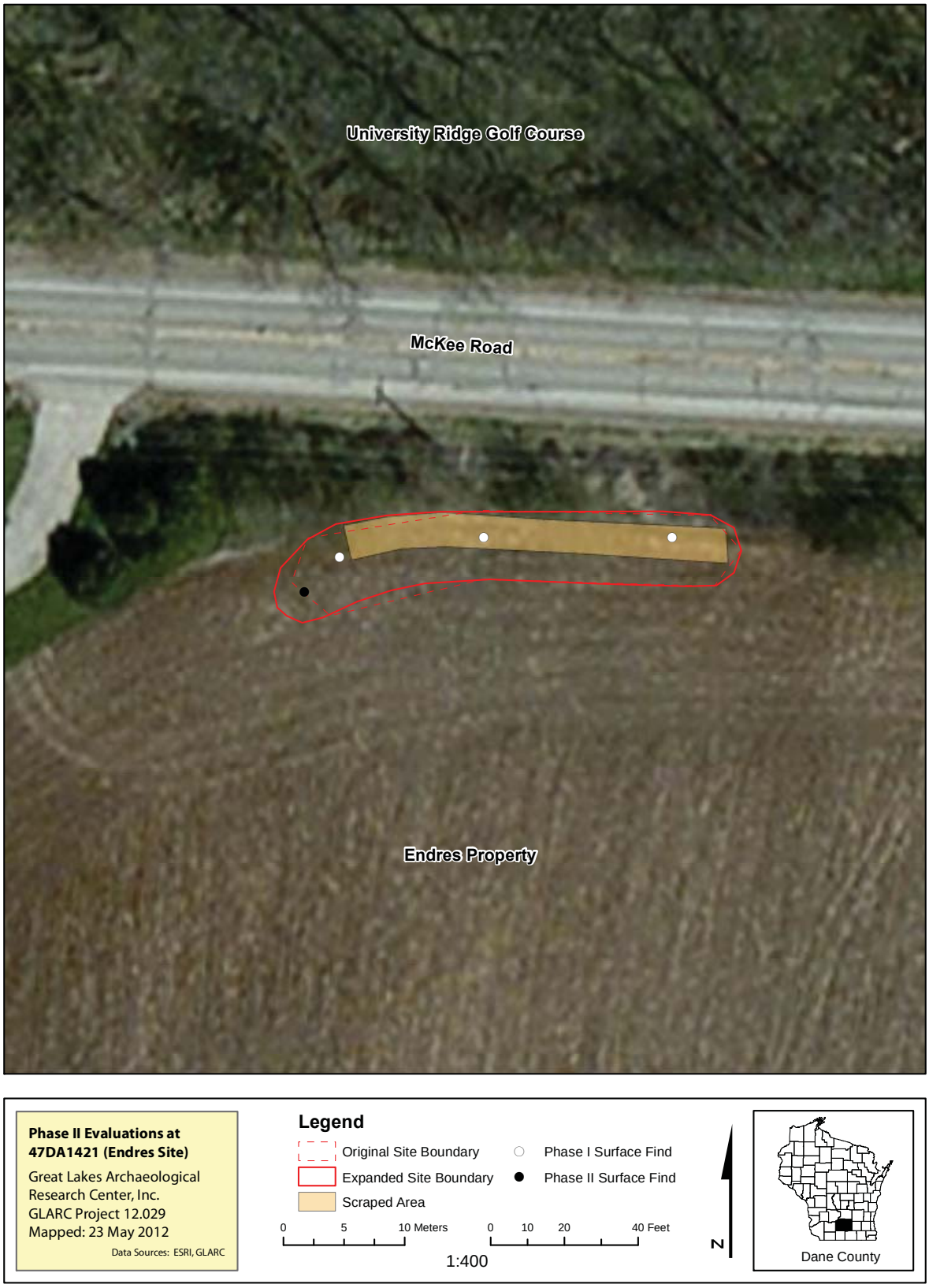

Figure 5.1 Location of Phase II at the Endres site.

Before

During

Figure 5.2 Representative photos of Phase II at Endres site- before (top) and during (bottom).

After

Figure 5.3 Representative photos of Phase II at Endres site- after excavations.

Cultural Assemblage

Two pieces of chert debitage were recovered during the Phase II evaluations. A thick, broken tertiary waste flake was recovered from the surface near the southwest corner of the site before mechanical stripping began and a piece of chert shatter was found in the backdirt about halfway through the stripping process. Both pieces of debitage are of Galena chert and are between 12.5 and 25.0 mm in their maximum dimensions. The flake from the surface is pink in color, suggesting the chert was heat-treated. The piece of shatter has cortex present. The flake weighs 7.13 g and the piece of shatter weighs 8.68 g. Neither piece of debitage shows signs of reworking or use wear nor is either artifact temporally diagnostic.

Discussion and Recommendations

Site 47DA1421 is a very small lithic scatter of unknown pre-contact affiliation comprising only five lithic artifacts, none of them diagnostic. All artifacts were found on the modern ground surface or within the Ap horizon. No cultural features were observed after the topsoil was mechanically removed from a portion of the site. Due to cultivation and the location of all recovered cultural materials within the plow zone, this site has no vertical integrity. Site 47DA1421 (Endres) is recommended as not eligible for listing on the National Register of Historic Places. No further work is recommended.

Part VI: Summary and Recommendations

On May 22, 2012, Phase II archaeological investigations were carried out at site 47DA1421 for the CTH M project in Dane County, Wisconsin. Archaeological investigations were completed for MSA Professional Services, the Wisconsin Department of Transportation, and the Federal Highway Administration under the auspices of WisDOT Project ID 5992-09-81.

The Phase I survey that had originally identified site 47DA1421 located three lithic artifacts on the modern surface of a cultivated field. Mechanical stripping during the Phase II evaluations failed to locate any subsurface cultural features. Two pieces of chert debitage were recovered at this time, one from the cultivated surface and one from the backdirt removed from the stripped trench. Site 47DA1421 is a small lithic scatter of unknown pre-contact affiliation. No diagnostic materials have been recovered from the site and no cultural features have been observed. All of the cultural material was found within the disturbed plow zone and as such the site has no vertical integrity.

Based on the results of the Phase II evaluation of 47DA1421, the site is not eligible for listing on the National Register of Historic Places and the CTH M project will not have an adverse effect on the pre-contact archaeological record in the area. No further work is recommended at site 47DA1421.

The archaeological investigations detailed in this document were carried out on behalf of MSA Professional Services, the Federal Highway Administration (FHWA) and WisDOT to address responsibilities for identifying, recording, and managing cultural resources as stipulated under Section 106 of the National Historic Preservation Act of 1966 (P.L. 89-665) as amended and 36 CFR, part 800, which serves to implement the Act, as well as Wisconsin Statutes 44.40 and 157.70. The methods and techniques utilized during the course of investigations conform to the standards and guidelines set forth by the National Park Service in the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (1983) and by the Wisconsin Archaeological Survey in *Guidelines for Public Archaeology in Wisconsin, as Revised* (Kolb and Stevenson 1997). Archaeological materials, field notes, and supporting documentation are currently located at the Great Lakes Archaeological Research Center, located at 1408 North 5th Street in Milwaukee, Wisconsin.

These results notwithstanding, it should be noted that current conventional archaeological survey techniques are inadequate to determine the presence of deeply buried archaeological or paleontological deposits. Though the probability is unlikely, in the event that archaeological or paleontological materials are encountered during the course of the project, all construction in the area of the discovery should be halted.

If archaeological or paleontological materials are encountered immediate consultation to insure compliance with (1) 36 CFR 800.11, The Regulations of the Advisory Council on Historic Preservation Governing the 106 Process; or (2) S. 44.40, Wis. Stats, may be obtained by contacting:

The Compliance Section

Historic Preservation Division

State Historical Society of Wisconsin

Phone #: 608-262-2970

and

Wisconsin Department of Transportation

Bureau of Equity and Environment

Phone #: 608-261-0137

If human remains are encountered immediate consultation to insure compliance with S. 157.70, Wis. Stats may be obtained by contacting:

The Burial Sites Preservation Office

Historic Preservation Division

State Historical Society of Wisconsin

Phone #: 1-800-342-7834

and

Wisconsin Department of Transportation

Bureau of Equity and Environment

Phone #: 608-261-0137

References Cited

Anderson, D. G. and J. C. Gillam
2000 Paleoindian Colonization of the Americas: Implications from an Examination of Physiography, Demography, and Artifact Distribution. *American Antiquity* 65(1):43-66.

Arzigian, C.
1987 The Emergence of Horticultural Economies in Southwestern Wisconsin. In Emergent Horticultural Economies of the Eastern Woodlands, edited by W. F. Keegan. *Occasional Paper No*. 7. Southern Illinois University at Carbondale, Center for Archaeological Investigations, Carbondale, Illinois.

Baerreis, D. A.
1953a The Airport Village Site, Dane County. *The Wisconsin Archeologist* 34(3):149-164.

1953b The Blackhawk Village Site, Dane County (Da5), *Wisconsin. Journal of the Iowa Archeological Society* 2(4):5-20.

Baerreis, D. A. and M. M. Bender
1984 The Outlet Site (47 DA 3): Some Dating Problems and a Reevaluation of the Presence of Corn in the Diet of Middle and Late Woodland Peoples in Wisconsin. *Midcontinental Journal of Archaeology* 9(2):143-154.

Bakken, C. T.
1950 Preliminary Investigations at the Outlet Site. *The Wisconsin Archeologist* 31(2):43-66.

Benn, D. W.
1980 *Hadfield Cave: A Perspective on Late Woodland Culture in Northeast Iowa*. Report 13, Office of the State Archaeologist. The University of Iowa, Iowa City, IA.

Berwick, D. E.
1975 Analysis of the Vertebrate Fauna of the Lawrence I Rockshelter (VE154), Vernon County, Wisconsin. M.A. Thesis, University of Wisconsin, Madison.

Birmingham, R. A. and L. E. Eisenberg
2000 *Indian Mounds of Wisconsin.* University of Wisconsin Press, Madison.

Brown, C. E.
1909 "Additions to the Record of Wisconsin Antiquities, III." *The Wisconsin Archeologist* OS 8(4): 113-138.

Butterfield, Consul Willshire
1880 *History of Dane County, Wisconsin ... preceded by a history of Wisconsin, statistics of the state, and an abstract of its laws and constitution and of the Constitution of the United States*. Western Historical Company, Chicago.

Chamberlin, T. C.

1877 *Geology of Wisconsin--Survey of 1873-1877. volumes I-V*. Published under the direction of the Chief Geologist by the Commissioners of Public Printing, Madison.

Christiansen III, G. W.
2001 A Phase I Archaeological Survey of 16 Acres Within the University of Wisconsin-Madison's Picnic point, City of Madison, Dane County, Wisconsin. *Archaeological Research Incorporated Reports of Investigations Number* 64, Middleton, Wisconsin.

Curtis, J. T.
1959 *The Vegetation of Wisconsin-An Ordination of Plant Communities*. The University of Wisconsin Press, Madison.

Curtis, J. T. and H. C. Greene
1949 "A Study of Relic Wisconsin Prairies by the Species-Presence Method." *Ecology* 30(1): 83-92.

Dirst, V.
1988 *Research in Pursuit of the Past at Governor Nelson State Park, Dane County, Wisconsin*. Bureau of Parks and Recreation, Department of Natural Resources, State of Wisconsin Publication No. PR502, Madison.

1995 *Stockbridge Harbor: A Late Woodland Village on Lake Winnebago*. Bureau of Property Management, Wisconsin Department of Natural Resources, Madison.

Egan, K. C.
1995 Floral Analysis at the River Quarry (47DA768) and Murphy/S. Ziegler II (47Da-739/965) Sites. In *Archaeological Investigations of the Alternate Corridor Alignments for the Proposed Reconstruction of U.S.H. 12 Between Middleton and Sauk City, Dane County, Wisconsin*, edited by K. Hamilton, D. Tennessen, S. Slessman and M. Baumann. Museum Archaeology Program Research Report in Archaeology Number 46, Madison.

Emerson, T. E.
1979 Prehistoric Seasonal Exploitation of the White-Tailed Deer in the Driftless Area of Wisconsin: An Example from Brogley Rockshelter (47-Gt-156). *The Wisconsin Archeologist* 60(3):278-292.

Esarey, D.
1986 Red Ochre Mound Building and Marion Phase Associations: A Fulton County, Illinois Perspective. In *Early Woodland Archaeology*, edited by K. B. Farnsworth and T. E. Emerson, pp. 231-243. Center for American Archaeology Press, Kampsville.

Fladmark, K. R.
1979 Routes: Alternate Migration Corridors for Early Man in North America. *American Antiquity* 44(1):55-69.

Goldstein, L.G. and R. Kind
1987 Early Vegetation of the Region. *The Southeastern Wisconsin Archaeology Program: 1986-1987 and Project Summary*, University of Wisconsin, Milwaukee, Archaeological Research Laboratory, Report of Investigations, No. 88.

Goldstein, L. G.
1992 Study Unit: Middle Woodland in Southeastern Wisconsin. University of Wisconsin-Milwaukee, *Archaeological Laboratories Report* No 112.

Glocker, C. L. and R. A. Patzner
1978 *Soil Survey of Dane County*. State of Wisconsin, U.S.D.A. Soil Conservation Service and the Department of Agriculture.

Green, W. and S. Schermer
1988 The Turkey River Mound Group (13CT1). In *Archaeological and Paleoenvironmental Studies in the Turkey River Valley, Northeastern Iowa*, edited by W. Green. Office of the State Archaeologist University of Iowa Press, Iowa City.

Greenberg, J. H., C. G. I. Turner and S. L. Zegura
1986 The Settlement of the Americas. A Comparison of the Linguistic, Dental and Genetic Evidence. *Current Anthropology* 27:477-497.

Griffin, J. B.
1964 The Northeast Woodlands Area. In *Prehistoric Man in the New World*., edited by J. D. Jennings and E. Norbeck, pp. 223-258. University of Chicago Press,, Chicago.

1967 Eastern North American Archaeology: A Summary. *Science* 156:175-191.

Hall, R. L.
1962 *The Archaeology of Carcajou Point*. 2 vols. University of Wisconsin Press, Madison.

1993 Red Banks, Oneota, and the Winnebago: Views From a Distant Rock. *The Wisconsin Archeologist* 74(1-4):10-79.

1997 *An Archaeology of the Soul: North American Indian Belief and Ritual.* University of Illinois Press, Urbana and Chicago.

Hamilton, K., D. Tennessen, S. Slessman and M. Baumann
1995 Archaeological Investigations of the Alternate Corridor Alignments for the Proposed Reconstruction of U.S.H. 12 between Middleton and Sauk City, Dane County, Wisconsin. R*esearch Report in Archaeology* 46. Museum Archaeology Program, Madison.

Haynes, C. V., Jr.
1964 Fluted Projectile Point: Their Age and Dispersion. *American Antiquity* 145:1408-1413.

1969 The Earliest Americans. *Science* 166:709-715.

Hoffecker, J. F., W. R. Powers and T. Goebel
1993 Colonization of Beringia and the Peopling of the New World. *Science* 259:46-53.

Hole, F. D.
1976 *The Soils of Wisconsin*. The University of Wisconsin Press, Madison.

Huddleston, J. H. and G. F. Kling
1984 *Manual for Judging Oregon Soils.* Oregon State University Extension Service, Corvallis, Oregon.

Hudson, C.
1976 *The Southeastern Indians*. The University of Tennessee Press, Knoxville.

Hurley, W. M.
1975 An Analysis of Effigy Mound Complexes in Wisconsin. *Anthropological Papers No*. 59, Museum of Anthropology, University of Michigan, Ann Arbor.

Johns, L.A.
1992 *Final Report of the Dane County Indian Mounds Identification Project.* Dane County Parks Commission, Madison.

Karn, E. D.
1959 *Roadmaking in Wisconsin Territory*. Department of History. University of Wisconsin, Madison.

Kay, J.
1977 *The Land of LaBaye: The Ecological Impact of the Green Bay Fur Trade, 1634-1836*. Unpublished Ph.D. Dissertation, Department of Anthropology, University of Wisconsin-Madison.

Kellogg, L. P.
1925 *The French Régime in Wisconsin and the Northwest*. State Historical Society of Wisconsin, Madison.

1935 *The British Regime in Wisconsin and the Northwest*. State Historical Society of Wisconsin, Madison.

Keyes, J. E. W.
1906 *History of Dane County.* Western Historical Association, Madison.

Kolb, J. and C. Stevenson
1998 *Guidelines for Public Archaeology In Wisconsin, as Revised*. Wisconsin Archaeological Survey, Madison.

Kuehn, S. R.
1998 New Evidence for Late Paleoindian - Early Archaic Subsistence Behaviour in the Western Great Lakes. *American Antiquity* 63(3):457-476.

Lapham, I. A.
1855 The Antiquities of Wisconsin as Surveyed and Described. *Smithsonian Contributions to Knowledge* 4. Smithsonian Institution, Washington, D.C.

Lawson, P. V.
1907 Habitat of the Winnebago, 1632-1832. *Proceedings of the State Historical Society of Wisconsin, 1906*, Madison.

Lippold, L. K.
1973 Animal Resource Utilization at Wisconsin Effigy Mound Sites. *The Wisconsin Archeologist* 54(3):135-152.

Lurie, N. O.
1960 Winnebago Prehistory. In *Culture in History: Essays in Honor of Paul Radin*, edited by D. Jenness, pp. 790-808. Columbia University Press, New York.

1978 Winnebago. *Handbook of North American Indians.* Edited by B. Trigger. 15:690-709. Smithsonian Institution.

MacKinnon, J. J.
1985 *Report of the University of Wisconsin-Madison Campus Prehistoric Mound Assessment Project.* Office of the State Archaeologist, Wisconsin Historical Society, Madison.

Maher, R. F.
1959 Six Mile Creek: A Non-Pottery Site on Lake Mendota. *The Wisconsin Archeologist* 40(1):19-25.

Mallam, R. C.
1976 The Iowa Mound Builders: *An American Myth* 23:145-175.

Martin, L.
1965 *The Physical Geography of Wisconsin*. Third Edition. University of Wisconsin Press, Madison.

Martin, P. S.
1973 The Discovery of America. *Science* 179:969-974.

Martin, S. R.
1999 *Wonderful Power: The Story of Ancient Copper Working in the Lake Superior Basin.* Wayne State University Press, Detroit, Michigan.

Martin, S. R. and T. C. Pleger
1999 The Complex Formerly Known as Culture: The Taxonomic Puzzle of "Old Copper". In *Taming the Taxonomy:Toward a New Understanding of Great Lakes Archaeology*, edited by R. F. Williamson and C. M. Watts, pp. 61-70. Eastend Books and the Ontario Archaeological Society, Toronto.

Mason, C. I.
1986 The Historic Period in Wisconsin Archaeology. In *Introduction to Wisconsin Archaeology,* edited by W. Green, J. B. Stoltman and A. B. Kehoe. The Wisconsin Archeologist. vol. 67(3-4):181-206.

1988 *Introduction to Wisconsin Indians: Prehistory to Statehood.* Sheffield Publishing Company, Salem.

Mason, R. J.
1986 The PaleoIndian Tradition. *The Wisconsin Archeologist* 67(3-4):181-206.

1997 The Paleoindian Tradition. *The Wisconsin Archeologist* 78(1-2):78-111.

McKern, W. C.
1928 The Neal and McClaughry Mound Group. *Bulletin of the Public Museum of the City of Milwaukee*, Vol. 3, No. 2.

1929 Archaeological Fieldwork in La Crosse, Vernon, and Crawford Counties. *Year Book of the Public Museum of the City of Milwaukee* 9:7-26.

1930 The Kletzien and Nitschke Mound Groups. *Bulletin of the Public Museum of the City of Milwaukee*, 3(4).

1931 A Wisconsin Variant of the Hopewell Culture. *Bulletin of the Public Museum of the City of Milwaukee* No. 10(2):189-329.

McKern, W. C. and R. Ritzenthaler
1949 A Trait List of the Effigy Mound Aspect. *The Wisconsin Archeologist* 30(2):39-48.

McLachlan, W. G.
1914 The Mounds of the Lake Waubesa Region. *The Wisconsin Archeologist* OS 12(4): 107-166

1925 The Lake Kegonsa Region. *The Wisconsin Archeologist* OS 4(1): 181-206.

Meinholz, N. and J. Kolb
1997 The Statz Site: A Late Woodland and Archaic Workshop in Dane County, Wisconsin. *Archaeology Research Series Number 5*. Museum Archaeology Program, State Historical Society of Wisconsin, Madison.

Meltzer, D. J.
1995 Clocking the First Americans. *Annual Review of Anthropology* 24:21-45.

1997 Monte Verde and the Pleistocene Peopling of the Americas. *Science* 276(5313):754-755.

Munson, P. J.
1982 Marion, Black Sand, Morton, Havana Relationships: An Illinois Valley Perspective. *The Wisconsin Archeologist* 63(1):1-17.

Nero, R.
1955 Surface Indications of a Possible Early Archaic Camp-Site in Wisconsin. *The Wisconsin Archeologist* 36(4):128-146.

Overstreet, D. F.
1991 Paleoindian Study Unit: Region 9, Southeastern Wisconsin. *The Wisconsin Archeologist* 72(3-4): 265-366.

1993 *Chesrow: A Paleoindian Complex in the Southern Lake Michigan Basin.* Great Lakes Archaeological Press, Milwaukee.

1994 FY 1995 S & P, Ice Age Landscapes of Racine and Kenosha Counties, Wisconsin. Great Lakes Archaeological Research Center, Inc. *Report of Investigations* 366. Milwaukee, WI.

1997 Oneota Prehistory and History. *The Wisconsin Archeologist* 78(1-2):250-297.

2000 Cultural Dynamics of the Late Prehistoric Period in Southern Wisconsin. In, *Mounds, Modoc, and Mesoamerica: Papers in Honor of Melvin L. Fowler*., edited by S. R. Ahler. Illinois State Museum Scientific Papers No. 28, Springfield.

Park, W. J.
1877 Madison, Dane County and surrounding towns; being a history and guide to places of scenic beauty and historical note ... early intercourse of the settlers with the indians ... with a complete list of county supervisors and officers, and legislative members. W. J. Park & Co, Madison, WI.

Parmalee, P. W.
1959 Animal Remains from the Raddatz Rockshelter, SK5, Wisconsin. *The Wisconsin Archeologist* 40(2):83-90.

Paull, R. K. and R. A. Paull
1977 *Geology of Wisconsin and Upper Michigan--Including Parts of Adjacent States*. Kendal/Hunt Publishing Company, Dubuque, Iowa.

Peet, S. D.
1890 *Prehistoric America--Vol. 2, Emblematic Mounds and Animal Effigies*. American Antiquarian Office, Chicago.

Phillips, P.
1970 Archaeological Survey in the Lower Yazoo Basin, Mississippi, 1949-1955. *Papers of the Peabody Museum of Archaeology and Ethnology* No. 60. Peabody Museum.

Phillips, P., J. A. Ford and J. B. Griffin
1951 Archaeological Survey in the Lower Mississippi Alluvial Valley, 1940-1947. *Peabody Museum Papers*, Vol. 25, Harvard University, Cambridge.

Pleger, T. C.
2000 Old Copper and Red Ocher Social Complexity. *Midcontinental Journal of Archaeology* 25(2):169 - 190.

Prufer, O. H.
1964 Ohio Hopewell Ceramics: An Analysis of Extant Collections. Museum of Anthropology, *University of Michigan Anthropological Papers No*. 34. University of Michigan, Ann Arbor, Michigan.

Richards, J. D.
1992 *Ceramics and Culture at Aztalan, A Late Prehistoric Village in Southeast Wisconsin*. Unpublished Ph.D. dissertation, Department of Anthropology, University of Wisconsin-Milwaukee.

Riggs, R.E., and D.M. Seurer
1981 *Highway Archaeology in Wisconsin: the 1980 Field Season*. Wisconsin Department of Transportation: Archaeological Report 4. Madison.

Ritzenthaler, R.

1967a A Cache of Paleoindian Gravers from the Kouba Site. *The Wisconsin Archeologist* 48(3):261-262.

1967b A Probable Paleoindian Site in Wisconsin. *American Antiquity* 32(2):227-229.

1970 Clovis and Sandia-Like Points From Dane County, Wisconsin. *The Wisconsin Archeologist* 51(1):35-36.

Rowe, C.

1956 The Effigy Mound Culture in Wisconsin. *Milwaukee Public Museum Publications in Anthropology* No. 3., Milwaukee, Wisconsin.

Ruggles, D.

1835 "Geological and miscellaneous notice of the region around Fort Winnebago, Michigan Territory." *American Journal of Science* 30(1).

Salkin, P. H.

1986 The Lake Farms Phase: The Early Woodland Stage As Seen From The Lake Farms Archaeological District. In *Early Woodland Archeology*, edited by K. B. Farnsworth and T. E. Emerson, pp. 92-120. Center for American Archaeology Press, Kampsville, IL.

1987 A Reevaluation of the Late Woodland Stage in Southeastern Wisconsin. W*isconsin Academy Review* 33(2):75-79.

1993 Mitigation Excavations in the Kekoskee Archeological District in Dodge County. Archaeological Consulting and Services *Report of Investigations* No. 700, Verona, WI.

Salzer, R. J.

1974 The Wisconsin North Lakes Project: A Preliminary Report. In *Aspects of Upper Great Lakes Anthropology-Essays in Honor of Lloyd A. Wilford*, edited by E. Johnson, pp. 40-54. Publications of the Minnesota Historical Society, St. Paul.

nd *The Waukesha Focus: Hopewell In Southeastern Wisconsin.* Unpublished Manuscript, The Logan Museum, Beloit College, Beloit.

Sanborn, M. P. and S. J. Eaton

1980 Surface Collections at Horseshoe Ridge. *The Wisconsin Archeologist* 61(4):330-346.

Seurer, D.M., and J.T. Penman

1981 *Highway Archaeology in Wisconsin: The 1981 Field Season*. Wisconsin Department of Transportation: Archaeological Report 6. Madison.

Shillinglaw, K. and R. Jones

2012 Phase I and II Archaeological Investigations for CTH M, Dane County, Wisconsin. Report of Investigation 781. Prepared for MSA Professional Services and the Wisconsin Department of Transportation. Great Lakes Archaeological Research Center, Milwaukee.

Smith, A. E.
1973 *The History of Wisconsin, Volume 1: From Exploration to Statehood*. State Historical Society of Wisconsin, Madison.

Smith, W. R.
1927 *Incidents of a Journey from Pennsylvania to Wisconsin Territory, In 1837*. Chicago, Wright Howes.

Spector, J.
1977 Winnebago Indians and Lead Mining: A Case Study of the Ethnohistoric Approach in Archaeology. *Midcontinental Journal of Archaeology* 2(1):131-137.

Stevenson, C., R. F. Boszhardt, M. C. R., P. H. Salkin, T. C. Pleger, J. L. Theler and C. Arzigian
1997 The Woodland Tradition, edited by R. A. Birmingham, Carol I. Mason and James B. Stoltman, pp. 140-201. *The Wisconsin Archeologist* 78(1-2).

Stoltman, J. B.
1986 The Archaic Tradition. *The Wisconsin Archeologist* 67(3-4):207-238.

1990 The Woodland Tradition in the Prairie Du Chien Locality. In *The Woodland Tradition in the Western Great Lakes: Papers Presented to Elden Johnson*., edited by G. Gibbon. Publications in Anthropology No. 4. University of Minnesota, Minneapolis.

1991 A Reconsideration of Fluted Point Diversity in Wisconsin. *The Wisconsin Archeologist* 72(3-4):245-264.

1997 The Archaic Tradition. *The Wisconsin Archeologist* 78(1-2):112-139.

Storck, P. L.
1974 Some Aspects of Effigy Mound Subsistence and Settlement Patterns during the Late Woodland Period in Wisconsin. *Arctic Anthropology* 11(Supplement):272-279.

Tanner, H. H.
1987 *Atlas of Great Lakes Indian History*. University of Oklahoma Press, Norman, OK.

Theler, J. L.
1987 *Woodland Tradition Economic Strategies.* Report 117, Office of the State Archaeologist, University of Iowa, Iowa City.

United States Department of Agriculture
2012 Soil Data Access. United States Department of Agriculture Natural Resources Conservation Service. Electronic resource: http://sdmdataaccess.nrcs.usda.gov/ [accessed May 2012].

Visual Color Systems
2004 The Globe Soil Color Book. Visual Color Systems.

Wendt, D.
1985 Paleoindian Site Distribution in the Yahara River Basin of Wisconsin. *The Wisconsin Archeologist* 66(3):243-264.

Whiteford, A. H.
1949 A Report on the Outlet Site on Lake Monona. *The Wisconsin Archeologist* 30(1):22-35.

Williams, S.
1963 The Eastern United States. In *Early Indian Farmers and Villages and Communities*, edited by W. Haag, pp. 267-325. National Park Service, Washington D.C.

Winters, H. D.
1969 The Riverton Culture. Illinois State Museum *Report of Investigations No.* 13. Illinois State Museum, Springfield.

Wittry, W. L.
1958 *Archaeological Studies of Five Wisconsin Rockshelters*. Ph.D. dissertation, University of Wisconsin, Madison.

1963 The Bell Site, Wn 9: An Early Historic Fox Village. *The Wisconsin Archeologist* 44(1):1-58.

Wyatt, B.
1986 *Cultural Resource Management in Wisconsin: Volume 2, A Manual for Historic Properties*. Historic Preservation Division, State Historical Society of Wisconsin.

Appendix A: Site Update

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Wisconsin ASI Update Form

Fill in the following information as it is presently recorded:

County: Dane

Site # 47DA1421 ASI # 91396 Burial Site #

Site Name: Endres Town/Range/Sec. T6N/R8E/Section 10

USGS Quad Name: Middleton

Please refer to the ASI form and provide the appropriate headings for the correction or new information. Examples of headings are: QUARTER SECTIONS, USGS MAP, and SITE DESCRIPTION. Provide a justification or reference for any new information. When appropriate, attach a sketch map and copy of USGS quad depicting map changes.

HEADING(S) AND NATURE OF CORRECTION/UPDATE: SITE DESCRIPTION

Site 47DA1421 is a very small lithic scatter of unknown pre-contact affiliation comprising only five lithic artifacts, none of them diagnostic. All artifacts were found on the modern ground surface or within the Ap horizon. No cultural features were observed after the topsoil was mechanically removed from a portion of the site. Due to cultivation and the location of all recovered cultural materials within the plow zone, this site has no vertical integrity. Site 47DA1421 (Endres) is recommended as not eligible for listing on the National Register of Historic Places. No further work is recommended.

Investigator: Rhiannon Jones Affiliation: GLARC Date: May 22, 2012
Update submitted by: Katherine Shillinglaw Affiliation: GLARC Date: May 24, 2012
****
(Leave this section blank-- for SHSW office use) HP-00-000 (rev. --/--/2000)

CHK'D☐ GIS Entry ☐ GIS Entry Checked ☐ ENTER____ ENTRY CHK'D ☐

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Appendix B: Bibliography of Archaeology Report

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BIBLIOGRAPHY OF ARCHAEOLOGICAL REPORT FORM

WHS/SHSW # ____ COUNTY: Dane

AUTHORS: Jones, Rhiannon M. and Katherine E. Shillinglaw

REPORT TITLE: Phase II Archaeological Investigations of the Endres Site (47DA1421), Dane County, Wisconsin

DATE OF REPORT (MONTH AND YEAR): May 2012

SERIES/NUMBER: 790

PLACE OF PUBLICATION: Great Lakes Archaeological Research Center, Milwaukee, WI

LOCATIONAL INFORMATION [LEGAL DESCRIPTION OF SURVEY AREA (T-R-S)]
T6N/R8E/Section 10

U.S.G.S. QUAD MAP(S): Middleton

SITE(S) INVESTIGATED: 47DA1421

ACRES INVESTIGATED: 47DA1421 AGENCY # WisDOT

INVESTIGATION TECHNIQUES COMPLETED (Check all that apply.)

☐ Avocational Survey	☐ Chance Encounter	☐ Controlled Surface Collection
☐ Faunal Analysis	☐ Floral Analysis	☐ Geomorphology
☐ Historical Research	☐ Interview/Informant	☐ Land Use History
☐ Literature Background Research	☐ Major Excavation	☐ Mechanical Stripping
☐ Monitoring	☐ Osteological Analysis	☐ Phase I-Surface Survey
☐ Phase II	☐ Phase II-Corridor Only	☐ Phase III
☒ Phase III-Corridor Only	☐ Records/Background	☐ Records/Background (Pred. Model)
☐ Remote Sensing	☐ Shovel Testing/Probing (Inten)	☐ Soil Core
☐ Surface Survey (Intensive)	☐ Test Excavation	☐ Traditional Knowledge
☐ Vandalism	☐ Walk Over (Reconnaissance)	☐ Unknown
☐ Other: _____		

ABSTRACT: ☒ Included in report ☐ Written in space below

Office of the State Archaeologist BAR # _____

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ATTACHMENT P:

Preliminary Construction Estimate

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PRELIMINARY TOTAL PROJECT COST ESTIMATE

	Delivery	Construction	Construction w/ Delivery
5992-09-85 S. Pleasant View Road (Roadway & Structures)	8%	$ 16,821,354	$ 18,167,062
5992-09-85 S. Pleasant View Road - (Utilities)	5%	$ 779,730	$ 818,717
5992-09-82 CTH PD and Raymond Road corridors (Roadway & Structures)	8%	$ 12,938,689	$ 13,973,784
5992-09-82 N. Main Street (Roadway & Structures)	8%	$ 5,697,675	$ 6,153,489
5992-09-82 N. Main Street - (Utilities)	5%	$ 653,543	$ 686,220
5992-09-82 MMSD Sewer	5%	$ 981,660	$ 1,030,743
	Construction S	$ 37,872,651	$ 40,830,015
	Real Estate Acquisition		$ 3,607,525
	Compensable Utilities		$ 1,000,000
	Design Engineering		$ 1,430,000
		TOTAL	**$ 46,867,540**

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ATTACHMENT Q:

Memorandum of Agreement

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Memorandum of Agreement

BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION AND
THE WISCONSIN STATE HISTORIC PRESERVATION OFFICER

Prepared pursuant to 36 CFR § 800.6(c)

Regarding
Wisconsin DOT Project ID: 5992-09-81
WHS# 12-0939/DA
CTH M (South Pleasant View Road)
Cross Country Road to Prairie Hill Road
Cities of Verona and Madison, Dane County

WHEREAS, the Federal Highway Administration (FHWA) has been requested to participate in the project to reconstruct CTH M from Cross Country Road to Prairie Hill Road in the Cities of Verona and Madison, Dane County, Wisconsin; and

WHEREAS, the FHWA is the lead agency on this project with responsibility for completing the requirements of Section 106; and

WHEREAS, the FHWA has established the Project's Area of Potential Effects (APE), as defined in 36 CFR § 800.16(d), to be all areas of proposed ground disturbance and all properties, inclusive of all buildings and structures, adjacent to the project corridor; and

WHEREAS, the FHWA, pursuant to 36 CFR § 800.4(c), has determined that the Schroeder-Stickelberg-Thompson Farmstead is eligible for inclusion in the National Register of Historic Places; and

WHEREAS, the FHWA has determined that the project will have an adverse effect on the Schroeder-Stickelberg-Thompson Farmstead; and

WHEREAS, the FHWA has consulted with the SHPO in accordance with Section 106 of the National Historic Preservation Act, 16, U.S.C. § 470 (NHPA), and its implementing regulations (36 CFR Part 800) to resolve the adverse effect of the project on historic properties; and

WHEREAS, the Wisconsin Department of Transportation (WisDOT) participated in the consultation and has been invited to concur in this MOA; and

WHEREAS, the City of Verona and City of Madison participated in the consultation and have been invited to concur in this MOA; and

WHEREAS, this undertaking is not on federal or tribal land as defined by the National Historic Preservation Act (NHPA); therefore, all inadvertent human remain discoveries will be addressed in accordance with Wisconsin s.s. 157.70; and

WHEREAS, post-review discoveries of non-human remain historic resources will be treated in accordance with 36 CFR 800.13(b);

NOW, THEREFORE, the FHWA and the Wisconsin SHPO agree that, upon execution of this MOA, and upon the FHWA's decision to proceed with the Project, the FHWA shall ensure that the following stipulations are implemented in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

The FHWA shall ensure that the following stipulation is carried out:

SURVEY AND INVENTORY OF SURROUNDING FARMSTEADS

a. Within three months of the MOA execution and before project letting, WisDOT or its agent will complete a field survey of up to seven of the best-preserved and finest representative historic farmsteads throughout the Town of Verona.
b. Survey boundaries will be Midtown Road to the north, Fitchrona Road to the east, Schaller Road to the south, and Spring Rose Road to the west.
c. A windshield survey of all farmsteads within the survey boundaries will be conducted to establish an architectural context and to identify up to seven of the best-preserved historic farmsteads in the Town of Verona. These farmsteads will be included with appropriate historic context information in a formal reconnaissance-level survey report.
d. Reconnaissance survey procedures will follow the farmstead survey methodology outlined in the WisDOT Survey Manual and will include
    1. One sketch map per surveyed farmstead
    2. One set of digital photographs of all historic resources per surveyed farmstead
e. WisDOT or its agent will submit copies of the survey and historic context report, sketch maps, and digital images to SHPO and the Dane County Historical Society.
f. Records for each of the surveyed farmsteads will be created and added to the Wisconsin Historic Preservation Database (WHPD).
g. The cost of this stipulation will be funded by the City of Madison, the City of Verona, and Dane County.

DISPUTE RESOLUTION

Should any signatory to this MOA (including any invited signatory), per 36 CFR 800.6(c)(1) and (2), object in writing at any time prior to termination to any actions proposed or the manner in which the terms of this MOA are implemented, WisDOT and FHWA shall consult with such party to resolve the objection. The objection must specify how the actions or manner of implementation is counter to the goals, objectives or specific stipulation of this MOA. If FHWA determines that such objection cannot be resolved, FHWA will:

a. Forward all documentation relevant to the dispute, including the FHWA's proposed resolution, to the Advisory Council on Historic Preservation (ACHP). The ACHP shall provide FHWA with its advice on the resolution of the objection within 30 days

of receiving adequate documentation. Prior to reaching a final decision on the dispute, FHWA shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP and signatories, and provide them with a copy of this written response. FHWA will then proceed according to its final decision.

b. If the ACHP does not provide its advice regarding the dispute within the 30 day period, FHWA may make a final decision on the dispute and proceed accordingly. Prior to proceeding, FHWA shall notify the parties to this MOA of its decision regarding the dispute.
c. It is FHWA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute.

AMENDMENT

Any signatory to this agreement may propose to the agency that the agreement be amended. Whereupon the agency shall consult with the other signatory parties [including invited signatories per 36 CFR 800.6(c))1) and (2)] to this agreement to consider such an amendment. 36 CFR 800.6(c)(1) and (7) shall govern the execution of any such amendment.

PROFESSIONAL QUALIFICATIONS

WisDOT shall ensure that all historic preservation work carried out pursuant to agreement is carried out by or under the supervision of a person or persons meeting at a minimum the Secretary of the Interior's Professional Qualifications Standards in the field of architectural history, as published in 36 CFR Part 61.

TERMINATION

If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other signatories to attempt to develop an amendment. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.

SUNSET CLAUSE

This agreement shall be null and void if its terms are not carried out within five (5) years from the date of the execution, unless the signatories agree in writing to an extension of carrying out its terms. Execution of this MOA by FHWA and the Wisconsin SHPO, and implementation of its

terms, evidences that FHWA has complied with Section 106 on the CTH M reconstruction project, and that FHWA has taken into account the effects of the Project on historic properties.

SIGNATORY PARTIES:

FEDERAL HIGHWAY ADMINISTRATION

BY: _____ Date: August 3, 2015
Ian Chidister,
Environmental Program Manager, FHWA

WISCONSIN STATE HISTORIC PRESERVATION OFFICER

BY: _____ Date: 8/24/15
Jim Draeger, State Historic Preservation Officer

INVITED SIGNATORIES:

WISCONSIN DEPARTMENT OF TRANSPORTATION

BY: Patricia M Trainer Date: 20 October 2015
for ~~Rebecca S. Burkel~~, Director, Bureau of Technical Services/
WisDOT Historic Preservation Officer

DANE COUNTY

BY: _____ Date: _____

CITY OF VERONA

BY: _____ Date: _____

CITY OF MADISON

BY: _____ Date: _____

INVITED SIGNATORIES:

WISCONSIN DEPARTMENT OF TRANSPORTATION

BY: _____ Date: _____
Rebecca S. Burkel, Director, Bureau of Technical Services/
WisDOT Historic Preservation Officer

DANE COUNTY

BY: _____ Date: 3/24/15

CITY OF VERONA

BY: _____ Date: _____

CITY OF MADISON

BY: _____ Date: _____

INVITED SIGNATORIES:

WISCONSIN DEPARTMENT OF TRANSPORTATION

BY: _____ Date: _____
Rebecca S. Burkel, Director, Bureau of Technical Services/
WisDOT Historic Preservation Officer

DANE COUNTY

BY: _____ Date: _____

CITY ~~OF VERONA~~

BY: _____ Date: 7-10-15

CITY OF MADISON

BY: _____ Date: _____

INVITED SIGNATORIES:

WISCONSIN DEPARTMENT OF TRANSPORTATION

BY: _____ Date: _____
Rebecca S. Burkel, Director, Bureau of Technical Services/
WisDOT Historic Preservation Officer

DANE COUNTY

BY: _____ Date: _____

CITY OF VERONA

BY: _____ Date: _____

CITY OF MADISON

BY: _____ Date: 4/3/15
Mayor

BY: Maribeth Witzel-Behl Date: 4-3-2015
City Clerk

ATTACHMENT R:

Agricultural Impact Notice

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AGRICULTURAL IMPACT NOTICE

Wisconsin Department of Transportation

DT1999 2003 (Replaces ED872)

Proposing Agency		
Project ID 5592-09-81	Highway South Pleasant View Road/CTH M	County Dane
Project Title South Pleasant View Road/CTH M		Project Length 2.86
Type and Status of Environmental Document Environmental Assessment		
Proposing Agency Wants to Review Pre-Publication Draft of AIS? ☐ Yes ☐ No		AIS Needed by What Date?

1. Project Description
   a. Describe existing facility - Include existing right of way width.

South Pleasant View Road/CTH M is a principal arterial servicing the southwest side of Madison and the City of Verona. The CTH M corridor is currently a rural, two- lane facility, with traffic signals located at the intersections of CTH PD and Midtown Road. The corridor in this study is approximately 3 miles in length. Current and future traffic and bicycle/pedestrian needs have made the facility functionally obsolete. Intersections and other access points are failing on an operational level, with severe backups and delays during peak travel hours.

The existing right of way varies along the corridor between 43-170 feet.

b. Describe proposed action - Include anticipated right of way width and any easements.

The City of Madison, in conjunction the City of Verona and Dane County is proposing roadway improvements to South Pleasant View Road (CTH M) from Cross Country Road to Prairie Hill Road, a distance of approximately 2.9 miles. The proposed improvements consist of expanding CTH M (South Pleasant View Road) initially from two to four lanes from Prairie Oaks Drive to Flagstone Drive with provisions to accommodate six lanes in the future. Flagstone Drive to Prairie Hill Road initially will be constructed with an additional northbound lane (three northbound lanes) and two southbound lanes, which will be able to accommodate a third southbound lane in the future if needed. The existing roadway has reached the end of its service life and requires expansion to meet the rapidly growing traffic volumes in the region. This action is part of a multi-phase project to reconstruct the CTH M corridor.

The proposed project will include reconstruction of two major intersections along CTH M.

CTH PD Intersection:

The CTH PD Westbound Underpass Alternative expands the existing traffic signal layout to include a westbound through movement. Removing this movement from the signal timing allows the intersection to accommodate the predicted future capacity. The intersection functions by pulling the westbound through traffic away from the westbound traffic stream and sending in below CTH M. CTH M will cross a wide, short-span bridge with the westbound through traffic below. The rest of the intersection, including westbound traffic turning right of left onto CTH PD, will operate as it normally would at a traffic signalized intersection.

A new multi-use path will be constructed to accommodate pedestrians and bicyclists. To the north of CTH PD, the path will be on the east side of CTH M. South of the intersection, the path will run along the west side of CTH M. An underpass will provide connectivity to the two paths.

Currently Raymond Road intersects CTH PD very close to CTH M. In order to increase safety and maneuverability, Raymond Road will be realigned to the east and access to CTH PD will be available at Meriter Way (1,800 feet east of the CTH M – CTH PD intersection).

The south segment of the project, including the CTH M – CTH PD intersection will require approximately 17.1 acres of right-of-way with the estimated total cost of 27.4 million.

The proposed action addresses the operational and safety concerns within the corridor. Traffic will move effectively and efficiently through the intersection and one less conflict point will exist due to the westbound underpass.

Midtown Road Intersection:

An At-Grade Signalized Intersection will be constructed at CTH M/Midtown Road. The intersection will follow the current at-grade signalized layout, but will be widened to improve capacity and allow for future expansion. To accommodate the design year volumes of vehicles travelling through this intersection, the alternative will require a large footprint with multiple turn-lanes in each direction.

Northbound CTH M will consist of dual left-turn lanes, a raised median, two through lanes, a bike lane, and an exclusive right-turn lane. Southbound CTH M will consist of dual left-turn lanes, a raised median, two through lanes, a restricted-use lane (bus lane), bike lane, and an exclusive right-turn lane. Eastbound CTH PD/McKee Road will consist of an exclusive left-turn lane, a raised median two through lanes, a bike lane, and an exclusive right-turn lane.
Westbound CTH PD/McKee Road will consist of an exclusive left-turn lane, a raised median two through lanes, a bike lane, and an exclusive right-turn lane.

Since the style of intersection makes it difficult for pedestrians and bicyclist to cross the road, an underpass located at the west side of the intersection under Midtown Road will provide safe and efficient crossing of the signalized intersection. A new sidewalk and multi-use path will be constructed serving the pedestrian and bicycle needs through the intersection. Crosswalks will be installed to provide at-grade crossings at all other segments of County M and Midtown Road. The intersection limits are between Waterbend Drive (west) to Waldorf Boulevard (east).

As part of the reconstruction, several intersecting side roads (intersections) will be improved including:

- Bering Drive/Prairie Oaks Drive/CTH M
- Harmony Drive
- Ineichen Drive
- Raymond Road
- Stony Ridge Circle (realigned)
- Flagstone Drive
- Shale Drive
- Waterbend Drive
- Prairie Hill Road

The proposed project includes expansion of the roadway, converting CTH M from an existing two lane rural highway to a multi-lane urban arterial with a raised median, bike lanes, a multi-use path, and sidewalks. The raised grass median will vary in width between 8-22-feet providing room for dedicated turn lanes. The corridor will receive extensive upgrades to street lighting and storm sewer construction.

One residential buildings will be acquired. Temporary limited easements will be required for grading purposes and excavation will be necessary for traffic signals, culverts, storm, sanitary sewer, water main construction and pedestrian underpasses.

The proposed right of way varies along the corridor between 48’-170’.

2. Alternatives considered - Identify the preferred alternative if any, and if other alternatives are no longer under consideration include the reasons why they are not proposed for adoption.

Preferred Alternative:

Reconstruct with Four to Five-Lanes: The current rural, two-lane design of CTH M cannot accommodate the current and growing traffic volumes. This alternative will increase capacity while addressing the operational and safety concerns within the corridor. Intersections will be improved to a design year LOS C with a roundabout option at CTH PD and a LOS D with an at-grade signalized intersection at Midtown Road. Traffic operations will improve throughout the corridor and will allow for future planned growth by consolidating driveways and local road access points and limiting access through strategic median breaks. This alternative will provide improved facilities for bikes and pedestrians as well as provide a continuous four to five-lane facilities from the City of Verona to the City of Madison, connecting to similar typical sections at both termini. The reconstruct with four-lane option will accommodate for 6-lanes of traffic in the future if needed.

The divided urban roadway will have a raised median throughout the corridor, curb and gutter, and street lighting. Restricted use lanes, for buses and right-turns from CTH PD/McKee Road/Valley View Road allow for capacity expansion by expanding to 6-lanes in the future if needed. Bike lanes and multi-use paths will be constructed along the entire corridor and sidewalks will be constructed in developed areas and graded for in undeveloped areas.

Westbound Underpass Intersection at CTH PD/CTH M: (PREFERRED ALTERNATIVE)
The CTH PD Westbound Underpass Alternative was designed with a curved alignment of CTH M to shift the road west to avoid the historic farmhouse. The shifting of the intersection to avoid the farmhouse will impact numerous wetlands in the southwest quadrant as well as increase property acquisition of another protected Section 4(f) property (University Ridge Golf Course) in the northwest quadrant. The CTH PD Westbound Underpass Alternative is in essence the Traffic Signal Alternative with one of the traffic flows (CTH PD westbound through movement) removed from the intersection. The Traffic Signal Alternative did not have the capacity for all the conflicting traffic flows, but by removing the westbound through movement from the intersection, more time can be allotted to other movements that would normally conflict with the westbound movement, specifically the eastbound left-turn to northbound. The intersection functions by pulling the westbound through traffic away from the westbound traffic stream and sending it below CTH M. CTH M will cross a wide, short-span bridge with the westbound through traffic below. The rest of the intersection, including westbound traffic turning right or left onto CTH PD, will operate as it normally would at a traffic-signalized intersection.

The CTH PD Westbound Underpass Alternative was designed with consideration of utilities that will need to be located within the vicinity. The intersection design was developed to limit impacts to the adjacent electrical utility substation and to adjacent properties. Bicycles and pedestrians are provided grade separated crossings of both CTH M and CTH PD. The intersection will have to be raised in order to accommodate westbound traffic below the intersection.

The westbound underpass intersection alternative will require approximately 17.1 acres of right-of-way with the estimated total cost of the construction at $27.4 million.

The CTH PD Westbound Underpass Alternative received support from the Cities of Madison and Verona and Dane County. This alternative addresses the purpose and need by providing facilities for pedestrians and bicycles while delivering acceptable operation conditions for future traffic volumes. It was presented to the public as the preferred alternative.

Alternatives Considered at CTH PD Intersection:
At CTH PD/McKee Road, seven alternatives were considered. They are:
- Roundabout Alternative
- Split-Grade Jug-Handle Alternative
- At-Grade Signalized Alternative
- Northeast Jug-Handle Intersection
- Continuous Flow Intersection (CFI)
- Tight Diamond Interchange
- Westbound Underpass

At-Grade Signalized Intersection at Midtown Road – CTH M: (PREFERRED ALTERNATIVE)
The At-Grade Signalized Intersection is the preferred alternative and will be constructed at CTH M/Midtown Road. The intersection will follow the current at-grade signalized layout, but will be widened to improve capacity and allow for future expansion. To accommodate the design year volumes of vehicles travelling through this intersection, the alternative will require a large footprint with multiple turn-lanes in each direction.

Northbound CTH M will consist of dual left-turn lanes, a raised median, three through lanes, a bike lane, and an exclusive right-turn lane. Southbound CTH M will consist of dual left-turn lanes, a raised median, two through lanes, a restricted-use lane (bus lane), bike lane, and an exclusive right-turn lane. Eastbound CTH PD/McKee Road will consist of an exclusive left-turn lane, a raised median two through lanes, a bike lane, and an exclusive right-turn lane. Westbound CTH PD/McKee Road will consist of an exclusive left-turn lane, a raised median two through lanes, a bike lane, and an exclusive right-turn lane.

Since the style of intersection makes it difficult for pedestrians and bicyclist to cross the road, an underpass located at the west side of the intersection under Midtown Road will provide safe and efficient crossing of the signalized intersection. A new sidewalk and multi-use path will be constructed serving the pedestrian and bicycle needs through the intersection. Crosswalks will be installed to provide at-grade crossings at all other segments of CTH M and Midtown Road.

This alternative addresses the operational and safety concerns within the corridor. The signalized intersection allows for a further build out in the future.

Alternatives Considered at CTH M/Midtown Road Intersection:
At CTH M/Midtown Road, three alternatives were considered. They are:
- At-Grade Signalized Intersection

- Roundabout Alternative
- Continuous Flow Intersection (CFI).

3. Maps and Exhibits
   a. Include a project location map showing the project's limits.
   b. Include an exhibit illustrating property lines, parcel numbers, and any roadway to be obliterated. The exhibit (township plat map, aerial photograph, layout sketch, contour map, etc.) should clearly present the pertinent information and be commensurate with the scope of the project and its apparent impact on farm operations.

Farm Operation Interests of 5 Acres or Less but more than 1 Acre

Project ID	Project Title
5592-09-81	South Pleasant View Road/CTH M

		Acres				
Parcel No.	Owner(s) (Include operator if diff. from owner)	Acquired	Fee S.	Ease.	Existing Farm Operation	Present Use/Remarks
	Gerald and Linda K. Endres	4.4	3.9	0.5	Yes	Present Use: Farmland Remarks: Intersection improvement and road expansion
	Asaf A. and Nilofer Quereshi	3.4	3.1	0.3	Yes	Present Use: Farmland Remarks: Intersection improvement and road rerouting
	Randall and Laverne Theis	4.3	3.5	0.8	Yes	Present Use: Farmland Remarks: Intersection improvement and road expansion

There are 4 additional farm acquisitions, each one an acre or less, that are categorically non-significant totaling 1.9 Acres		

Farm Operation Interest Over 5 Acres

Parcel Number	Project ID
0608-032-0102-3 and 0608-033-01202-1	5592-09-81
Owner	**Operator (If different from owner)**
University of Wisconsin Board of Regents	

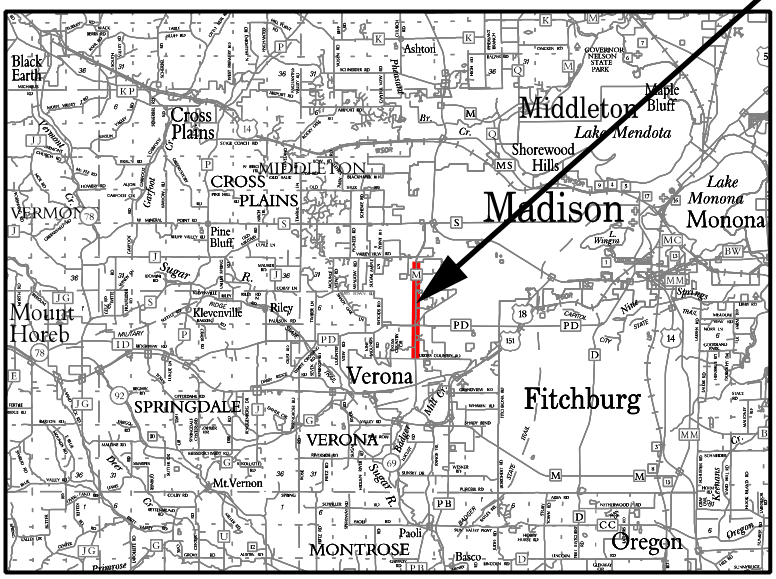
Type of Land	Acres			
	Before	Acquired		Remaining
		Fee Simple	Easement	
Cropland and pasture				
Woodland				
Land of undetermined or other use				
Total Acres of Farm Operation		5.6	0.2	

Description of farm operation and nature of acquisition - Discuss as appropriate any resulting severances, changes in access, expected changes in land use, effect on farm structures, effect on cattle or livestock passes or crossings, roadway obliteration (if any) etc.

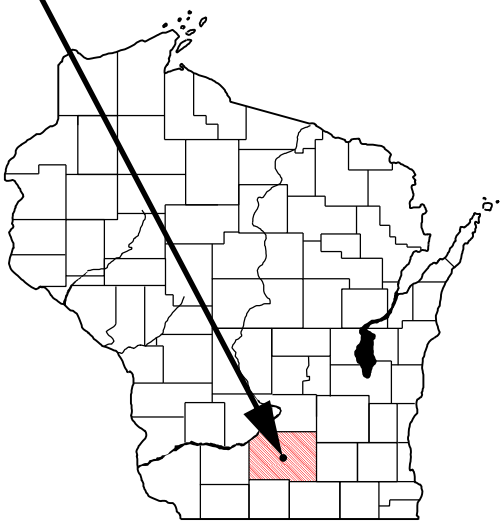
There are no farms operation acquisitions of 5 acres or more in the proposed project corridor.

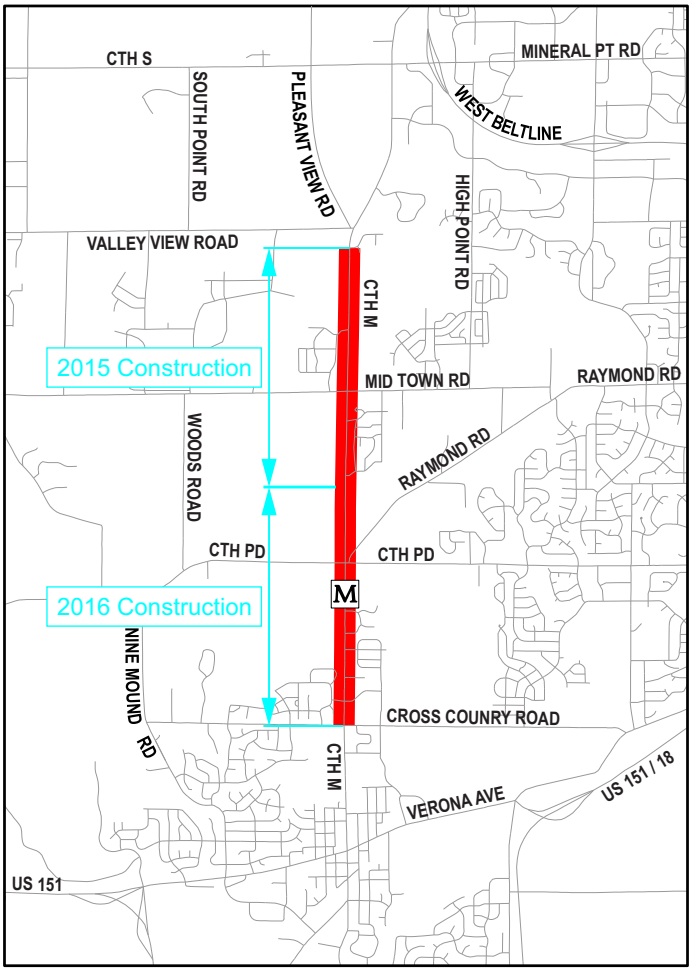
Exhibit 1 - Project Location Overview

PROJECT I.D. 5992-09-81
CITY OF MADISON, S. PLEASANT VIEW ROAD
(CROSS COUNTRY ROAD - PRAIRIE HILL ROAD)
CTH M
DANE COUNTY



PROJECT LOCATION
DANE COUNTY





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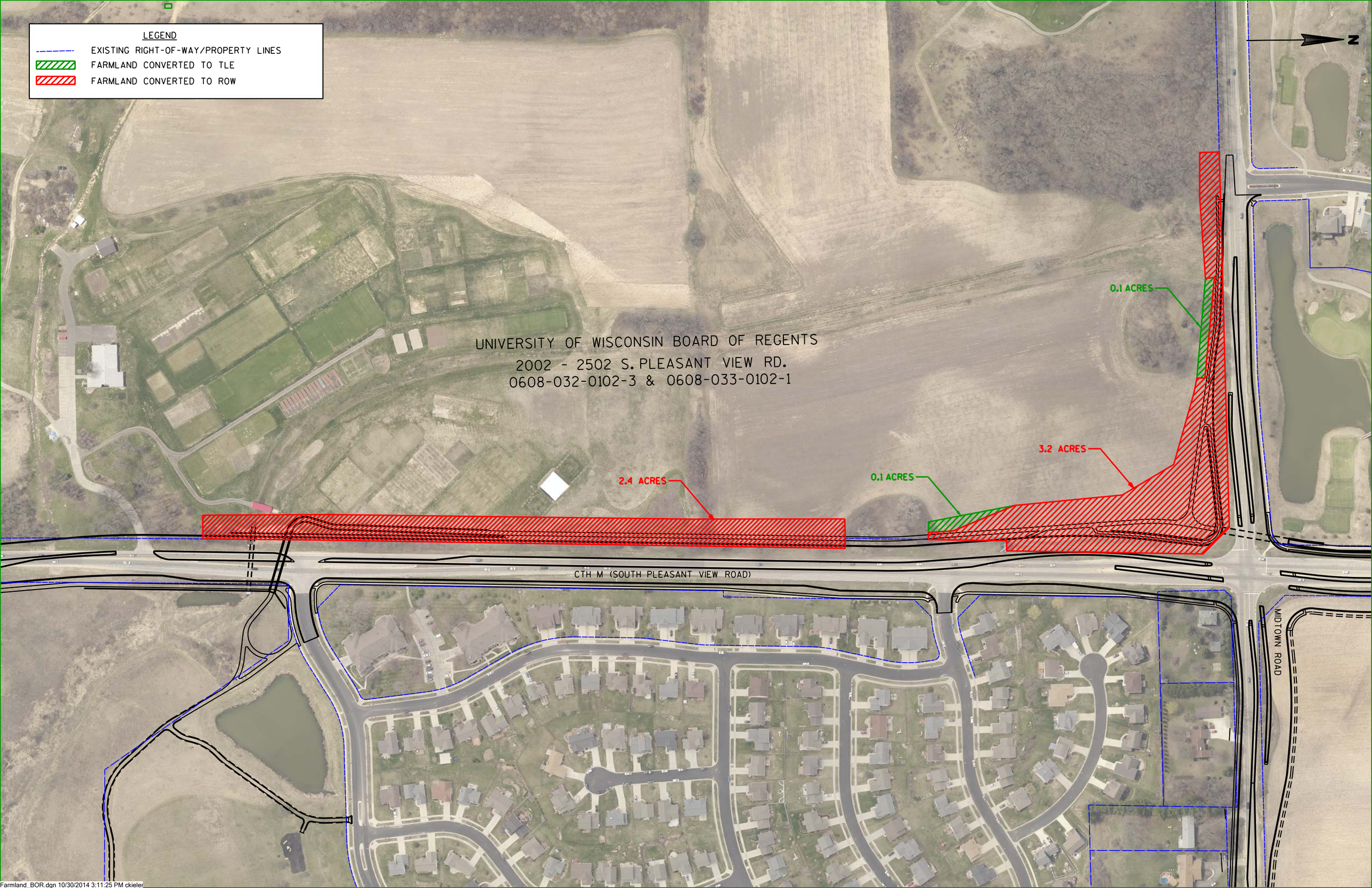

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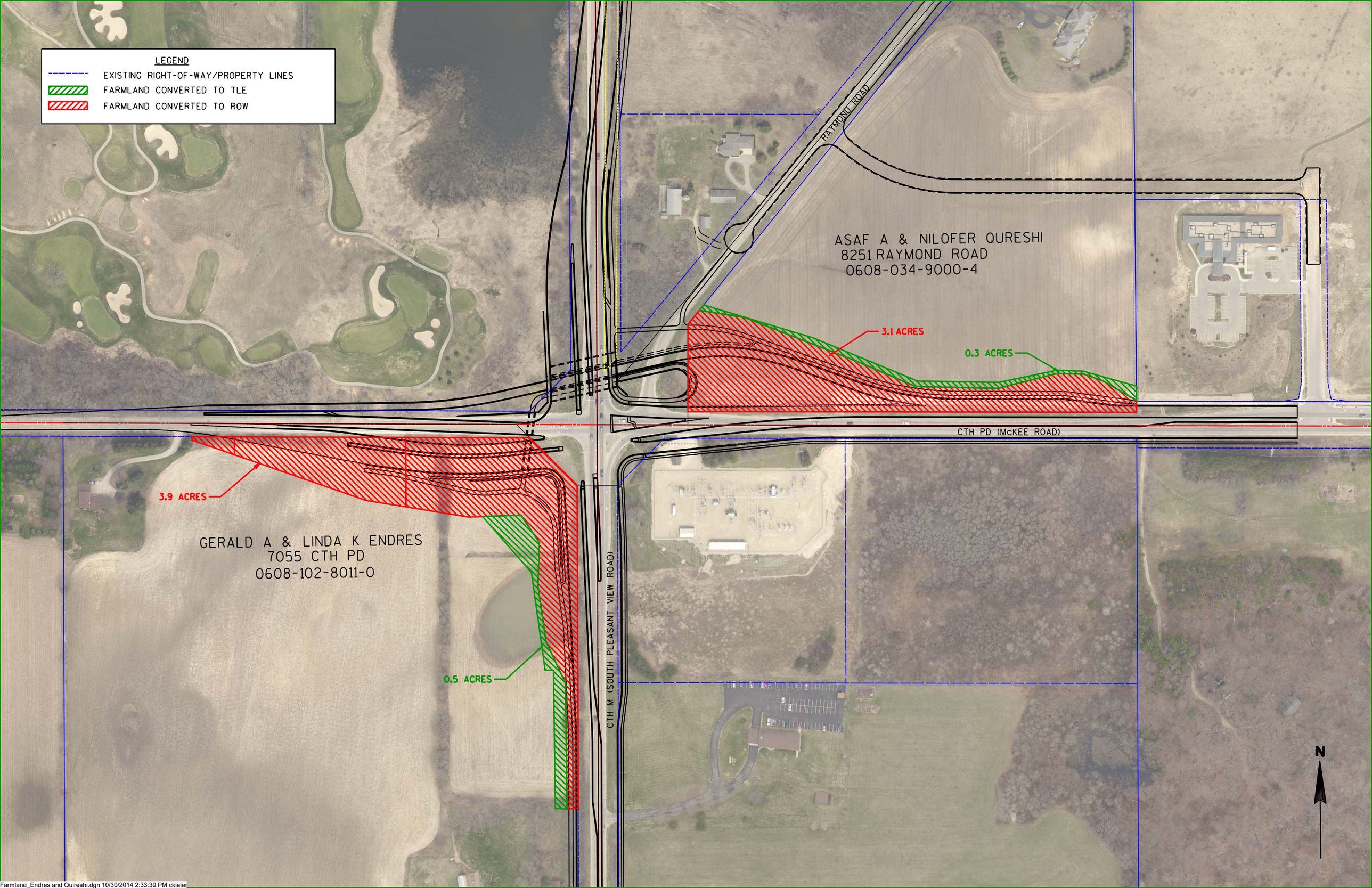

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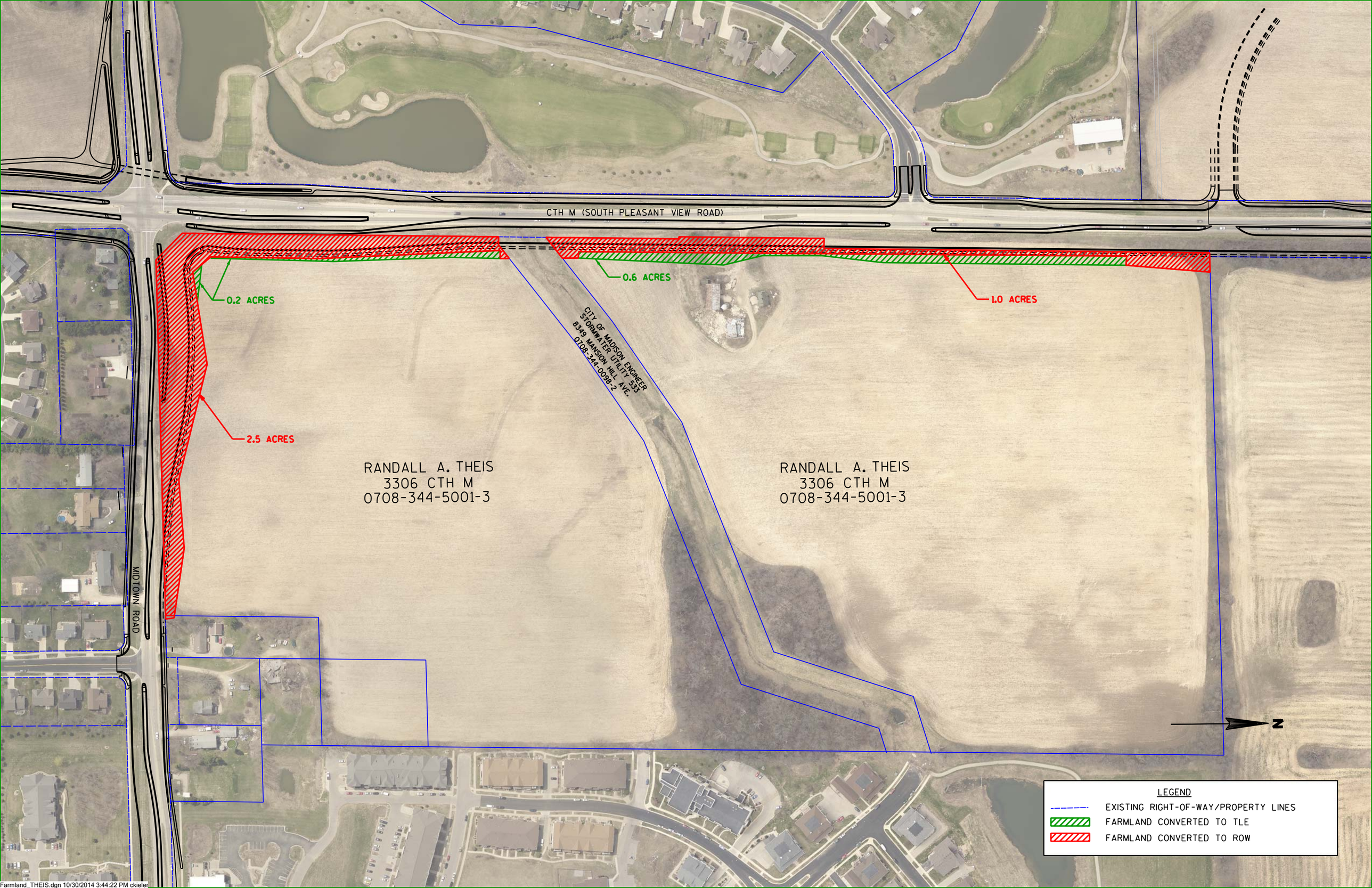

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ATTACHMENT S:

Schroeder-Stickelberg-Thompson Farmstead Correspondence

Additional coordination documentation for the Schroeder-Stickelberg-Thompson Farmstead can be found in Attachment F - Documentation for Consultation.

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PHONE CONVERSATION RECORD

		Project No.:	5992-09-81
Talked with:	Marie Bigley	**Time:**	11:30 a.m.
Of:	Property Owner - 8300 Raymond Road	**Phone No.:**	608.845.6312
Re:	Public Information Meeting – Invite Letter	**Date:**	November 18, 2011

☐ **Message** ☐ **Reply** ☐ **I placed call** ☒ **Party called**

Ms. Bigley called in response to the invite letter she received for the PIM on December 8, 2011. She has been in to see Chris Petykowski with her son regarding the project, but had some follow up questions regarding the invite letter. She wanted to know if the proposed sewer work on Raymond Road that was mentioned in the letter would include private hook ups for sewer and water. I indicated that the sewer work was for MMSD and is a large interceptor sewer, not for private hook up. I told her I didn't know if Madison had plans to get sewer and water towards her property but would check.

Ms. Bigley also asked if Raymond Road would become a cul-de-sac at CTH PD. I informed her that we are showing that to be the case in our preliminary designs.

Ms. Bigley plans to attend the PIM.

Action or follow-up necessary

Follow up with Madison regarding public sewer and water connections.

Signed _____
Jason DiPiazza, Project Manager

Offices in Illinois, Iowa, Minnesota, and Wisconsin
2901 International Lane, Suite 300, Madison, WI 53704-3133
(608) 242-7779 (800) 446-0679
FAX: (608) 242-5664 WEB ADDRESS: www.msa-ps.com

PHONE CONVERSATION RECORD

MSA PROFESSIONAL SERVICES
More ideas. Better solutions.

Project No.: 5992-09-81

Talked with:	Marie Bigley	**Time:**	11:30 AM
Of:	Property Owner - 8300 Raymond Road	**Phone No.:**	608.845.6312
Re:	CTH M project	**Date:**	February 7, 2012

☐ **Message** ☐ **Reply** ☐ **I placed call** ☒ **Party called**

Ms. Bigley called to ask some more questions. I provided her with updates on the Section 106 process: the documents are awaiting review and approval by the State Historical Preservation Office (SHPO). She is concerned that if her property is deemed historical (I corrected her that it was eligible to be listed as historical) that she will have more maintenance responsibilities. I told her that her property was hers to manage as she desires, however we have to recognize the opportunity for any future land owners, should there be one, to maintain and preserve the historical nature of the property.

I let her know that we will attempt to avoid impacts to any of her property, including tree removal.

Ms. Bigley asked about the utilities. I indicated we were working with the utility owners and that the overhead lines would have to move, but I didn't know where to yet. She is worried they will be on the front porch of her house. The buried electric is already very close.

Ms. Bigley will be in Texas for most of February and March. She does get her mail forwarded there so if she will still be there for the next public meeting she will at least know it occurred and she is free to call me with any questions she may have.

Action or follow-up necessary: None

cc: [cc:]
[cc:]

Signed _____
Jason DiPiazza, Project Engineer

Offices in Illinois, Iowa, Minnesota, and Wisconsin
2901 International Lane, Suite 300, Madison, WI 53704-3133
(608) 242-7779 (800) 446-0679
FAX: (608) 242-5664 WEB ADDRESS: www.msa-ps.com

April 12, 2013

Subject: 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Dear Ms. Bigley

The State Historical Preservation Office (SHPO) has concurred with the Wisconsin Department of Transportation's (WisDOT) finding that a portion of your property surrounding the original farmhouse has significant historic value. They have also concurred that the proposed CTH M reconstruction project referenced above will have an adverse effect on the setting of this historic resource. As required by Section 106 of the National Historic Preservation Act of 1966, the project will be required to mitigate any adverse effects that cannot be avoided.

An important step in developing a mitigation plan is to hold a consultation meeting with the project stakeholders, including you as the property owner. At this meeting, we will review the project design, the adverse effects that the proposed project would have on the historic resource, and develop a plan to mitigate these effects. Typical mitigation measures include, but are not limited to written and photographic documentation of the property, survey and inventory of other nineteenth and early twentieth century farmsteads in the immediate area, and incorporation of the property into an existing Dane County Historical Society project, database, or website.

We would like to have this meeting the week of April 28, 2013 or May 6, 2013. The meeting location will be in Madison, possibly at the Wisconsin Historical Society, 816 State Street. Gail Klein with Great Lakes Archaeological Research Center, Inc. will follow up with a phone call to you to coordinate a day and location that is convenient for you to attend this meeting. If you have any questions about the meeting, or would like to contact either of us directly to coordinate a meeting time, please give either of us a call. If you have any questions about the Section 106 process and how it relates to your property, please do not hesitate to contact either Gail or Jennifer Haas at Great Lakes Archaeological Research Center at the phone numbers below.

Thank you in advance for your time and assistance on this important project!

Contact info:

Jason DiPiazza, Project Manager
MSA Professional Services, Inc.
608-242-7779

Gail Klein
Great Lakes Archaeological
Research Center
541-285-0352.

Jennifer Haas
Great Lakes Archaeological
Research Center
414-481-2093

Sincerely,

Jason DiPiazza P.E., Project Manager, MSA Professional Services

Cc: Chris Petykowski, P.E. Principal Engineer, City of Madison Engineering
Pam Dunphy, P.E. Assistant Commissioner, Dane County Highway Dept.
Ron Rieder, Director of Public Works, City of Verona
Amanda Arnold AICP, Planner/Administrator, Town of Verona
Gail Klein, Great Lakes Archaeological Research Center
Karen Richardson, P.E., Kjohnson Engineers, LPMC

Attachment **9-A**	Consultation Meeting April 29, 2013	Invite letter

From : Marie Bigley <bigleymh@gmail.com> Mon, Apr 07, 2014 12:41 AM

Subject : Re: County M Intersection at County PD (McKee Road) 1 attachment

To : Jason DiPiazza <jdipiazza@msa-ps.com>

Thank you for the info about the meeting in Verona. Yes, I will be able to attend and have put the time and date on my calendar. Marie

On Fri, Apr 4, 2014 at 2:21 PM, Jason DiPiazza <jdipiazza@msa-ps.com> wrote:

> Hello Marie,
>
> I hope all is well with you. I'm sorry I didn't get a chance to talk with you at the County M public meeting a couple weeks ago. I saw you there but wasn't able to break away from folks to come talk to you. I did have a couple conversations with your renter, Mr. Puntillo however.
>
> I'm writing to you today to see if you are available to meet regarding the project on April 14th at 10:00 AM. For your convenience, we can meet at the Verona City Hall as we did the last time we met. We would like to go over the changes we made at the intersection that you saw at the public meeting and compare these impacts to those of the roundabout that we were previously showing.
>
> Please let me know if this meeting time and place will work for you. As always, if you have any questions, please don't hesitate to call me: 608-242-6640 is my direct line. I'll give you a call on Monday to make sure you got this message if I haven't heard from you by then.
>
> Thank you in advance for your time Marie. Take care and see you soon,
>
> Jason
>
> **Jason DiPiazza, PE** | Team Leader
> MSA Professional Services, Inc.
> (608) 242-7779

Attachment 9-D	Consultation Meeting April 14, 2014	Invitation

ATTACHMENT T:

Section 4(f) Documentation

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ATTACHMENT T-1:

University Ridge Golf Course

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Wisconsin
Federal Highway Administration
Finding of *De Minimis* Impact on Parks, Recreation Areas and Wildlife and Waterfowl Refuges

WISDOT ID: 5992-06-51
Route: CTH M
Termini: Cross County Road to Prairie Hill Road
City/County: Dane County

Name of 4(f) Resource: University Ridge Golf Course

Project description:

The state name for this project is South Pleasant View Road, City of Madison, County Highway M Reconstruction, Cross Country Road to Prairie Hill Road. This project involves a full reconstruction of the CTH M mainline and two intersections. An Environmental Assessment was conducted to satisfy NEPA requirements.

The CTH M corridor is a critical north/south roadway connecting the City of Madison and the City of Verona. The project limits are Cross Country Road to Prairie Hill Road, a distance of 2.9 miles. The proposed project is located in Dane County, Wisconsin in the cities of Madison and Verona and the towns of Verona and Middleton.

The proposed improvements include expansion of CTH M from a two-lane highway to a 4 to 6-lane arterial roadway with a raised median and a multi-use path. Improvements are proposed for the intersections of CTH M – Midtown Road and CTH M – CTH PD. This roadway is a principal arterial on the National Highways System (MAP-21).

The University Ridge Golf Course property is considered a Section 4(f) resource because it is owned, operated and managed by a public agency for the primary purpose of public recreation.

Approximately 3.4 acres of right of way needs to be acquired in the extreme southeast corner of the parcel in order to meet the design needs of the westbound underpass intersection located at CTH M – CTH PD.

The project impacts and proposed construction plans indicate that the impacts to the property will be minimal and will not alter or affect the use of any buildings, greens, tee boxes, and sand traps. These changes will not adversely affect the activities on this property. However, near the CTH M – CTH PD intersection, several trees and shrubs will be removed that border the property lines.

All attempts were made to minimize adverse effects to the golf course property and surrounding landscape. Specific measures taken include:

- Final design to avoid impacting cart path adjacent to green
- Minimize visual impact of the intersection by selecting Westbound Underpass as preferred alternative
- Coordination with University of Wisconsin Facilities Planning and Management staff on final design landscaping details to provide screening between the roadway and golf course while avoiding shade impacts on the green
- Reducing overall roadway width by using acceptable standards for cross-section elements including lane, median, and terrace widths.
- Payment of the fair market value of the land taken

The attached documentation shows the following:

1.
    a. *What the activities, features, and attributes are that qualify University Ridge Golf Course for protection under Section 4(f).*

    b. *What the transportation use of the Section 4(f) resource is.*

    c. *How this use does not adversely affect the activities, features, and attributes listed in 1.a., above. In making this determination, consideration may be given to any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project; and*

2. University of Wisconsin – Madison Board of Regents have been informed that FHWA may make a *de minimis* finding under 4(f) and may use the University of Wisconsin – Madison Board of Regents' written concurrence that the project does not adversely affect the activities, features, and attributes listed in 1.A., above that qualify the property for protection under Section 4(f) in making that finding; and

3. The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource.

4. There are no federal encumbrances [such as 6(f)] on University Ridge Golf Course.

This *de minimis* documentation was reviewed and recommended for approval by

July 18, 2016
Date

[Name], WisDOT Bureau of Technical Services
Steven W. Krebs

This *de minimis* documentation was reviewed and approved by

9/20/16
Date

[Name], Federal Highway Administration
PETER M. GARCIA

Cc: WISDOT Bureau of Technical Services / Environmental Services Section WISDOT Region

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WISCONSIN
UNIVERSITY OF WISCONSIN–MADISON

July 31, 2015

Jason DiPiazza, PE
Project Manager, MSA Professional Services, Inc.
2901 International Lane, Suite 300
Madison, WI 53704

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)
4(F) PROPERTY COORDINATION – UNIVERSITY RIDGE GOLF COURSE

Dear Mr. DiPiazza,

In my role as the Associate Vice Chancellor for Facilities Planning & Management, I am writing to you on behalf of the University Of Wisconsin Board Of Regents, University of Wisconsin Athletic Department, University Ridge golf course, and the O.J. Noer Turfgrass Research Facility with regards to the proposed actions of the subject project. After reviewing the above proposed project, ID 5992-09-81, County Highway M, Dane County and you allowing the public the opportunity to review and comment on the effects of the project, it is our opinion that this project will not have any significant adverse effects on university property.

It is our understanding that the City of Madison, City of Verona, and Dane County plan to reconstruct County Highway M (CTH M) and County Highway PD (CTH PD). This is a multi-phase, multi-year project to reconstruct the CTH M corridor. The operators of the University Ridge Golf Course, University of Wisconsin Athletic Department, the O.J. Noer Turfgrass Facility, and staff in Facilities Planning and Management have been consulted for their input in reviewing the potential impacts of the proposed action. It is understood that the following paragraphs represent the general concept of the proposed action and incorporate avoidance, minimization, and mitigation elements developed in cooperation with University officials. With this understanding, the University of Wisconsin-Madison believes the proposed action will have no permanent adverse physical impacts, nor will there be any interference with the protected activities, features, or attributes that make the University Ridge Golf Course eligible for Section 4(f) protection.

The proposed action includes constructing a widened, signalized urban intersection with curb and gutter, storm sewer, sanitary sewer, water service, and street lighting. The elevation of the roadway intersection will be raised and a bridge will be constructed on the north leg, allowing westbound through traffic on CTH PD to pass below the north leg (CTH M). A ten foot wide paved multi-use path will also be constructed below the bridge and continue through an underpass below the west leg of CTH PD, providing an off-highway paved path network between the cities of Verona, Madison, and Middleton. The proposed intersection design will require concrete retaining walls along CTH PD and CTH M in proximity to the University Ridge property to accommodate the raised roadway elevation. The intersection improvements will benefit the golf course by improving highway access to the facility, especially for major events.

Access to the golf course is located outside the project limits thus will not be directly impacted by the proposed action. As you have stated, access to the golf course and the turfgrass research facility will be maintained throughout construction. The project design team will work with University Ridge and University of Wisconsin Athletics staff to coordinate major athletic events that will be held during the anticipated construction time frame in 2017 and 2018.

Associate Vice Chancellor - Facilities Planning & Management
9th Floor WARF Building 610 Walnut Street Madison, Wisconsin 53726-2397
(608) 263-3000 FAX (608) 265-3139

The existing University Ridge gateway sign located on University Ridge Golf Course property near the intersection of CTH M and CTH PD is in conflict with the proposed construction. This sign was originally designed to be relocated in anticipation of the reconstructed and widened highway intersection. University Ridge staff anticipates financial compensation for the relocation of the sign outside proposed new highway right of way. We expect the project team to coordinate closely with the University Ridge staff on the relocation of this major entry sign.

The University understands that the proposed roadway expansion will also impact the O.J. Noer Turfgrass Research and Education Facility located adjacent to the golf course on University property. Though not a Section 4(f) protected resource, we concur with the proposed roadway expansion, and the resulting need to realign the Ice Age Trail within our facility to improve safety for trail users. By realigning the trail on our property, trail users will no longer be required to utilize the CTH M shoulder. We concur with the proposed realigned Ice Age Trail location and understand that new cross access easements provided to the trail authority will be required for the realigned portion of the trail. The project team may need to participate in those negotiations to facilitate approval. We also understand that, in order to facilitate this new public use on our property, the existing bridge structure will need some upgrades to maintain fall protection on the sides with respect to the handrails. We expect the project team or the City of Madison to financially compensate the University for the cost of those upgrades.

Project design staff will work with University Ridge Golf Course and UW Facilities Planning & Management staff to incorporate landscape vegetation screening elements into the design along CTH PD to provide screening between the golf course and highway. Depending on the proximity of the highway right-of-way to the fairway, we also may need to install netting to assure golf balls are not straying onto cars using the highway. If this is the case, the project should financially compensate the University for that work to assure safe use of the highway.

Approximately 2.0 acres of new highway right-of-way and 1.5 acres of temporary limited easement for construction staging, grading, and landscape restoration are needed from southeast corner of the University Ridge Golf Course to construct and maintain the proposed highway facility. The 2.0 acres of highway right-of-way represents 0.5 percent of the approximately 370-acre golf course area. Greens, fairways, buildings, and cart paths will not be impacted by either permanent or temporary property acquisition. We expect to negotiate directly with the City of Madison on the value of the needed lands for this project, both at the University Ridge and O.J. Noer facility, as well as for the UW Board of Regents property to the north along CTH M. Financial compensation to the University will be necessary.

To summarize, University officials, as a project stakeholder, have reviewed the proposed action and have been actively engaged in the projects public involvement process. The University understands that the Federal Highway Administration (FHWA) plans to make a De Minimis Section 4(f) determination regarding the impacts to the University Ridge Golf Course. The University concurs with that determination and anticipates that the proposed action will have no permanent adverse physical impacts, nor will there be any interference with the protected activities, features, or attributes that make the University Ridge Golf Course eligible for Section 4(f) protection.

Sincerely,

W. M. Elvey

William M. Elvey, P.E.
Associate Vice Chancellor, Facilities Planning & Management

XC: Gary A. Brown, PLA, FASLA – Director, Campus Planning & Landscape Architecture
Jason King, Associate Director, UW Athletics
G. Michael Gaspard, General Manager, University Ridge Golf Course
Thomas Schwabe, Superintendent, O.J. Noer Turfgrass Research Facility
Chris Petykowski, Civil Engineer, City of Madison

P:\FPM\Elvey Correspondence\CTH M response letter.docx

SRF Consulting Group, Inc. | ENGINEERS PLANNERS DESIGNERS

December 6, 2012 SRF No. 0107334

Mr. Gary Brown
Director of Planning and Construction
Campus Planning and Landscape Architecture
919 WARF Office Building
610 Walnut Street
Madison, WI 53726

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)
4(F) PROPERTY COORDINATION – UNIVERSITY RIDGE GOLF COURSE

Dear Mr. Brown:

The City of Madison, in conjunction with the City of Verona and Dane County, is proposing roadway improvements to South Pleasant View Road (CTH M) from Cross Country Road to Prairie Hill Road, a distance of approximately three miles. The proposed improvements consist of expanding South Pleasant View Road initially from two to four lanes from Prairie Oaks Drive to Flagstone Drive with provisions to accommodate six lanes in the future. Flagstone Drive to Prairie Hill Road initially will be constructed with an additional northbound lane (three northbound lanes) and two southbound lanes, which will be able to accommodate a third southbound lane in the future if needed. The proposed project also includes expansion of the roadway to a multi-lane urban arterial with a raised median, bike lanes, a multi-use path, and sidewalks.

This action is part of a multi-phase project to reconstruct the CTH M corridor, which includes reconstructing the Mid Town Road intersection and provision of a roundabout at the CTH PD intersection. To accommodate the CTH M roadway widening and proposed roundabout at CTH PD, approximately 2.5 acres of right-of-way will need to be acquired from the University Ridge Golf Course. The required property is located adjacent to CTH M along the southeastern edge of the golf course property (please see attached 4(f) Properties Exhibit).

The University Ridge Golf Course property is considered a Section 4(f) resource because it is owned, operated and managed by a public agency for the primary purpose of public recreation. An initial review of the project impacts and proposed construction plans indicate that the impacts to the property will be minimal and will not alter or affect the use of any buildings, greens, tee boxes, sand traps, or golf cart paths.

Under Section 4(f) of the U.S. Department of Transportation Act of 1966, the Federal Highway Administration (FHWA) "may not approve the use of land from a significant publicly-owned park, or recreation area" unless a determination is made that:

1) There is no feasible and prudent alternative to the use of land from the property
2) The action includes all possible planning to minimize harm to the property.

Federal law (SAFETEA-LU Section 6009(a)) amended Section 4(f) to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). FHWA has issued guidance for making *de minimis* impacts as follows:

1) An impact of a park, recreation area, or wildlife refuge may be determined to be de minimis if:
    a. The transportation use of the Section 4(f) resource, together with any impact, avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features and attributes that qualify the resource for protection under Section 4(f)
    b. The official with jurisdiction over the property are informed of FHWA's intent to make the *de minimis* impact finding based on their written concurrence that the project will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f); and
    c. The public has been afforded an opportunity to review and comment on the effects of the project

This letter serves to initiate official consultation and coordination with the University Ridge Golf Course property. Regulations within US Department of Transportation FHWA, Section 4(f) Policy Paper – July 20, 2012, require that the official with jurisdiction has been consulted and "has not objected." Specifically, the regulations require concurrence of the official with jurisdiction in the following situations:

1) Finding no adverse effects prior to making *de minimis* impact findings
2) Applying the exception for temporary occupancies
3) Applying the exception for transportation enhancement activities and mitigation activities

At this time, we are requesting your comments regarding the potential *de minimis* impact determination to the University Ridge Golf Course property. Following consideration of your comments and consideration of public comments, we will consult with FHWA and they will make the final Section 4(f) determination. FHWA will inform the official with jurisdiction of their determination.

Once the *de minimis* determination has been made, the official with jurisdiction must concur in writing that the project will not affect the activities, features, or attributes that make the property eligible for Section 4(f) protection. The final determination regarding the subject property will be included in the Final Environmental Assessment (EA) document.

If you have any questions about the Section 4(f) process or would like to set up a meeting to help clarify the process, please call me at (608) 829-5875 or contact me by email at pchellevold@srfconsulting.com.

Sincerely,

Paul M. Chellevold
Transportation Planner, SRF Consulting Group, Inc.

Enclosure

ATTACHMENT T-2:

Dane County Parkland

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Wisconsin
Federal Highway Administration
Finding of *De Minimis* Impact on Parks, Recreation Areas and Wildlife and Waterfowl Refuges

WISDOT ID: 5992-06-51
Route: CTH M
Termini: Cross County Road to Prairie Hill Road
City/County: Dane County

Name of 4(f) Resource: Dane County Parkland

Project description:

The state name for this project is South Pleasant View Road, City of Madison, County Highway M Reconstruction, Cross Country Road to Prairie Hill Road. This project involves a full reconstruction of the CTH M mainline and two intersections. An Environmental Assessment was conducted to satisfy NEPA requirements.

The CTH M corridor is a critical north/south roadway connecting the City of Madison and the City of Verona. The project limits are Cross Country Road to Prairie Hill Road, a distance of 2.9 miles. The proposed project is located in Dane County, Wisconsin in the cities of Madison and Verona and the Towns of Verona and Middleton.

The proposed improvements include expansion of CTH M from a two-lane highway to a 4 to 6-lane arterial roadway with a raised median and a multi-use path. Improvements are proposed for the intersections of CTH M – Midtown Road and CTH M – CTH PD. Improvements are proposed for the intersections of CTH M – Midtown Road and CTH M – CTH PD. This roadway is a principal arterial on the National Highways System (MAP-21).

The Dane County Parkland property is considered a Section 4(f) resource because it is a public park.

Acquisition of 2.4 acres is required from the Dane County Park beginning at the southern edge of the parcel to Flagstone Park. Two of the acres will be used as a temporary limited easement. One acre will be a permanent limited easement.

The required property is located adjacent to CTH M, along the western edge of the park. It consists of open prairie and will be restored to the same condition after construction. The project impacts and proposed construction plans indicate that the impacts to the property will be minimal and will not alter or affect the park's use.

Every attempt was made to minimize the land required for roadway, intersection, and pedestrian facilities. Specific measures taken include:

- Maintain and restore existing unpaved gated driveway on CTH M for staff access
- Assist in restoring and reseeding prairie areas
- Maintain the existing water storage area immediately south of the box culvert
- Provide grade-separated crossing at CTH M and Flagstone Drive that provides connectivity to the Ice Age National Scenic Trail
- Reducing overall roadway width by using acceptable standards for cross-section elements including lane, median, and terrace widths.
- Payment of the fair market value of the land and improvement taken

The attached documentation shows the following:

1.
    a. *What the activities, features, and attributes are that qualify Dane County Parkland for protection under Section 4(f).*

    b. *What the transportation use of the Section 4(f) resource is.*

    c. *How this use does not adversely affect the activities, features, and attributes listed in 1.a., above. In making this determination, consideration may be given to any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project; and*

2. Dane County Parks has/have been informed that FHWA may make a *de minimis* finding under 4(f) and may use the Dane County Parks' written concurrence that the project does not adversely affect the activities, features, and attributes listed in 1.A., above that qualify the property for protection under Section 4(f) in making that finding; and

3. The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource.

4. Dane County parkland was purchased through the Knowles-Nelson Stewardship program (State Stewardship Grant Program). This Ice Age – Payan Acquistion Stewardship Grant Property covers approximately 35 acres. All WDNR requirements relating to impacts to this land will be satisfied independent of this 4(f) determination.

This *de minimis* documentation was reviewed and recommended for approval by

July 18, 2016
Date

[Name], WisDOT Bureau of Technical Services
Steven W. Krebs

This *de minimis* documentation was reviewed and approved by

9/20/16
Date

[Name], Federal Highway Administration
PETER M. GARCIA

Cc: WISDOT Bureau of Technical Services / Environmental Services Section WISDOT Region

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Dane County Parks
Always in Season

Parks Division
Dane County Land & Water Resources Department

August 21, 2015

Jason DiPiazza, PE
Project Manager, MSA Professional Services, Inc.
2901 International Lane, Suite 300
Madison, WI 53704

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)
4(F) PROPERTY COORDINATION – UNIVERSITY RIDGE GOLF COURSE

Dear Mr. DiPiazza

In my role as the official with jurisdiction over the Dane County Park property, I am writing to you on behalf of the Dane County Park Commission with regards to the proposed actions of the subject project. After reviewing the above proposed project, ID 5992-09-81, CTH M, Dane County and allowing the public the opportunity to review and comment on the effects of the project, it is our opinion that this project will not have any adverse effects on the Dane County Park adjacent to the project area.

It is the understanding of the Dane County Park Commission, that the City of Madison, City of Verona, and Dane County plan to reconstruct County Highway M (CTH M) and Raymond Road in the vicinity of a Dane County Park. This is a multi-phase project to reconstruct the CTH M corridor. Dane County Park staff members have been consulted for their input in reviewing the potential impacts of the proposed action. It is understood that the following paragraphs represent the general concept of the proposed action and incorporate avoidance, minimization, and mitigation elements developed in cooperation with Dane County staff. With this understanding, the Dane County Park Commission believes the proposed action will have no permanent adverse physical impacts, nor will there be any interference with the protected activities, features, or attributes that make the Dane County Park eligible for Section 4(f) protection.

The proposed action includes constructing a widened, urban arterial roadway with curb and gutter, raised median, storm sewer, sanitary sewer, water service, and street lighting along the existing CTH M alignment. A ten foot wide paved multi-use path will be constructed parallel to CTH M along the east side of the highway. This path will connect to the existing Ice Age Junction Path constructed along the north edge of the park, with the connection point near the intersection of Flagstone Drive and CTH M. The Ice Age Junction Path and Ice Age National Scenic Trail will then cross below CTH M at the Flagstone Drive intersection through a box culvert. This underpass will service an off road trail system that will provide hiking and bicycling opportunities between the

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5201 Fen Oak Drive, Room 208, Madison, Wisconsin 53718 - PH: 608/224-3730, FAX: 608/224-3745
www.countyofdane.com/lwrd/parks

cities of Verona, Madison, and Middleton. The paved path is proposed to be constructed on a permanent limited easement designated for the construction and maintenance of a multi-use path. The City of Madison will be responsible for the maintenance of the paved path, which will be documented in a maintenance agreement between the City of Madison and Dane County.

Grading and construction of the multi-use path will impact restored prairie area along the western edge of the park. Within this prairie area is a fire break and maintenance path that is also used for hiking. Project design staff will coordinate with Dane County Park staff to include proven restoration grading design, seeding, and erosion control measures with the proposed work to restore the prairie area. The grading work will also include restoration of the fire break and maintenance path. The contractor that completes the work will be from a list of contractors approved by Dane County Parks. Dane County Park Staff will also be allowed to review and accept the work on behalf of Dane County.

Dane County Parks maintains a driveway and small parking area off CTH M for use by Parks maintenance personnel, vehicles, and equipment. The proposed action will include a new driveway opening and re-establishment of the parking area, along with a replacement gate and fence system with design and specification guidance from Dane County Parks Staff.

The existing drainage culvert carrying the Badger Mill Creek drainage way below CTH M near the Flagstone Drive intersection will be replaced with this project. The existing wetland scrape that was constructed at the end of this culvert will be partially filled as a result of the proposed action. Project staff will work with Dane County Parks Staff to design and incorporate grading and restoration elements to provide the grade and elevation characteristics of the existing scrape. The resulting wetland footprint will match the size of the existing wetland scrape.

Approximately 0.8 acres of new highway right-of-way, 0.8 acres of permanent limited easement, and 2.1 acres of temporary limited easement for construction staging, grading, and landscape restoration are needed from the west edge of the park to maintain the proposed highway facility. The 0.8 acres of highway right-of-way acquisition represents 1.7 percent of the approximately 47.8 acre park area. The City of Madison has set aside a minimum of 0.8 acres of land adjacent to the north edge of the park that will be maintained as recreation and open space area consistent with the recreational status of the Dane County Park. This dedication is consistent with the requirements of the state of Wisconsin funded Knowles-Nelson Stewardship Grant, which was used to purchase the park where the proposed multi-use path will be located, along CTH M. The proposed paved multi-use path will be constructed and maintained on the 0.8 acres of permanent easement. This easement and land use is consistent with the recreational status and use of the land thus replacement lands are not required in accordance with the requirements of the Knowles-Nelson grant funding.

The Raymond Road reconstruction portion of the project is a result of the need to construct a new City of Madison storm sewer system and Madison Metropolitan Sewage District (MMSD) sewer main below the Raymond Road corridor. Construction of the sewers and reconstruction of Raymond Road will require temporary limited easements for construction and grading along Raymond Road. In addition, MMSD will require a new permanent easement to connect to their existing sewer on easement within the park boundary. Disturbance of restored prairie area as result of this work will be restored with the same requirements as the restored prairie area along the CTH M and the proposed multi-use path.

Approximately 0.15 acre of permanent easement is required to complete the MMSD sewer, along with approximately 1.0 acre of temporary easement for construction and grading. No above ground improvements are required with this construction so it is consistent with the recreational status of the land.

To summarize, Dane County Parks officials, as project stakeholders, have reviewed the proposed action and have been actively engaged in the project's public involvement process. The Dane County Parks Commission understands that the Federal Highway Administration (FHWA) plans to make a De Minimis Section 4(f) determination regarding the impacts to the Dane County Park. The Dane County Parks Commission concurs with that determination and anticipates that the proposed action will have no permanent adverse physical impacts, nor will there be any interference with the protected activities, features, or attributes that make the Dane County Park eligible for Section 4(f) protection.

Sincerely,

William Lunney
Dane County Park Commission, Chair

Cc: Darren Marsh; Director, Dane County Parks Division
Kevin Thusius; Director of Land Conservation, Ice Age Trail Alliance
Chris Petykowski; P.E., City of Madison Engineering

EMAIL FROM DNR – NO JURISDICTION OVER ICE AGE NATIONAL SCENIC TRAIL

Jason,

I think the conversation below should answer your questions. Let me know if it does not or you need anything else. Brigit is the DNR state trails coordinator and Dana is the regional trails coordinator.

Eric

We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Eric Heggelund

Phone: 608-275-3301

Eric.heggelund@wisconsin.gov

From: Heggelund, Eric P - DNR
Sent: Wednesday, June 24, 2015 5:13 PM
To: Brown, Brigit E - DNR; White-Quam, Dana M - DNR
Subject: RE: Ice Age Trail - WDNR jurisdiction

Thanks Brigit,

The trail passes from a Dane County Park property to a UW property so I will tell them DNR does not need to sign off on the impact (building the underpass).

We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Eric Heggelund

Phone: 608-275-3301

Eric.heggelund@wisconsin.gov

From: Brown, Brigit E - DNR
Sent: Wednesday, June 24, 2015 5:09 PM
To: Heggelund, Eric P - DNR; White-Quam, Dana M - DNR
Subject: RE: Ice Age Trail - WDNR jurisdiction

If DNR owns the land at issue we do. If not, no.

We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Brigit E. Brown

Phone: (608) 266-2183

brigit.brown@wisconsin.gov

From: Heggelund, Eric P - DNR
Sent: Wednesday, June 24, 2015 4:40 PM
To: White-Quam, Dana M - DNR
Cc: Brown, Brigit E - DNR
Subject: FW: Ice Age Trail - WDNR jurisdiction

Hi Dana,

See Jason's questions below. I believe he is talking about a section of trail that crosses CTH M between Madison and Verona. DOT/Verona/Madison/Dane County are in the planning phases for adding lanes to CTH M and there will be an underpass of CTH M for the Ice Age Trail. They have already been working with IATA on this and possibly NPS. Do we need to sign off on this as well? What are the DNR interests/jurisdiction in this section of the IAT?

Thanks,

Eric

We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Eric Heggelund

Phone: 608-275-3301

Eric.heggelund@wisconsin.gov

From: Jason DiPiazza [mailto:jdipiazza@msa-ps.com]
Sent: Wednesday, June 24, 2015 4:27 PM
To: Heggelund, Eric P - DNR
Subject: Ice Age Trail - WDNR jurisdiction

Hi Eric,

Does Wisconsin DNR have any jurisdiction over the Ice Age Trail in Dane County? We know for sure Ice Age Trail Alliance and National Park Service does. We are trying to determine from whom we need a letter from indicating Section 4(f) de minimus concurrence from.

Thanks Eric,

Jason

Jason DiPiazza, PE | Team Leader
MSA Professional Services, Inc.
(608) 242-7779

SRF Consulting Group, Inc. | ENGINEERS PLANNERS DESIGNERS

December 6, 2012 SRF No. 0107334

Mr. Chris James
Park Planner
Dane County Parks Division
1 Fen Oak Court, Room 208
Madison, WI 53718

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)
4(F) PROPERTY COORDINATION – DANE COUNTY PARKLAND

Dear Mr. James:

The City of Madison, in conjunction with the City of Verona and Dane County, is proposing roadway improvements to South Pleasant View Road (CTH M) from Cross Country Road to Prairie Hill Road, a distance of approximately three miles. The proposed improvements consist of expanding South Pleasant View Road initially from two to four lanes from Prairie Oaks Drive to Flagstone Drive with provisions to accommodate six lanes in the future. Flagstone Drive to Prairie Hill Road initially will be constructed with an additional northbound lane (three northbound lanes) and two southbound lanes, which will be able to accommodate a third southbound lane in the future if needed. The proposed project also includes expansion of the roadway to a multi-lane urban arterial with a raised median, bike lanes, a multi-use path, and sidewalks.

This action is part of a multi-phase project to reconstruct the CTH M corridor, which includes reconstructing the Mid Town Road intersection and provision of a roundabout at the CTH PD intersection. To accommodate the CTH M roadway expansion, approximately 2.4 acres of right-of-way will need to be acquired from Dane County Parkland. The required property is located adjacent to CTH M, along the western edge of the park (please see attached 4(f) Properties Exhibit).

The Dane County Parkland property is considered a Section 4(f) resource since it is a park of state or local significance that are both publicly owned and open to the public. An initial review of the project impacts and proposed construction plans indicate that the impacts to the property will be minimal and will not alter or affect the park's use.

Under Section 4(f) of the U.S. Department of Transportation Act of 1966, the Federal Highway Administration (FHWA) "may not approve the use of land from a significant publicly-owned park, or recreation area" unless a determination is made that:

1) There is no feasible and prudent alternative to the use of land from the property
2) The action includes all possible planning to minimize harm to the property.

Federal law (SAFETEA-LU Section 6009(a)) amended Section 4(f) to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). FHWA has issued guidance for making *de minimis* impacts as follows:

1) An impact of a park, recreation area, or wildlife refuge may be determined to be de minimis if:
    a. The transportation use of the Section 4(f) resource, together with any impact, avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features and attributes that qualify the resource for protection under Section 4(f)
    b. The official with jurisdiction over the property are informed of FHWA's intent to make the *de minimis* impact finding based on their written concurrence that the project will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f); and
    c. The public has been afforded an opportunity to review and comment on the effects of the project

This letter is intended to serve as official consultation and coordination with the Dane County Parkland property. Regulations within US Department of Transportation FHWA, Section 4(f) Policy Paper – July 20, 2012, require a finding that the official with jurisdiction has been consulted and "has not objected." The regulations require concurrence of the official with jurisdiction in the following situations:

1) Finding there are no adverse effects prior to making *de minimis* impact findings
2) Applying the exception for temporary occupancies
3) Applying the exception for transportation enhancement activities and mitigation activities

At this time, we are requesting your comments regarding the potential *de minimis* impact determination to the Dane County Parkland property. Following consideration of your comments and consideration of public comments, we will consult with FHWA and they will make the final Section 4(f) determination. FHWA will inform the official with jurisdiction of their determination.

Once the *de minimis* determination has been made, the official with jurisdiction must concur in writing that the project will not affect the activities, features, or attributes that make the property eligible for Section 4(f) protection. The final determination regarding the subject property will be included in the Final Environmental Assessment (EA) document.

If you have any questions about the Section 4(f) process or would like to set up a meeting to help clarify the process, please call me at (608) 829-5875 or contact me by email at pchellevold@srfconsulting.com.

Sincerely,

Paul M. Chellevold
SRF Consulting Group, Inc.

Enclosure

Dane County Parks
Always in Season

Parks Division
Dane County Land & Water Resources Department

January 23, 2013

Mr. Paul Chellevold
SRF Consulting Group, Inc.
901 Deming Way, Suite 302
Madison, WI 53717

Re: South Pleasant View Road/CTH M
Project ID: 5992-09-81
Potential Impacts to Section 4(f) Park Lands and Ice Age National Scenic Trail

Dear Mr. Chellevold;

This letter is in response to your December 6th, 2012 request for comments on the proposed CTH M expansion project that is proposed to impact approximately 2.4 acres of Section 4(f) Dane County park lands. Dane County Parks also regularly partners with the Ice Age Trail Alliance on acquisition and implementation of the Ice Age National Scenic Trail (IANST) and the City of Madison on implementation of the Ice Age Junction bicycle pedestrian trail. These regional trails are a component of the 2012-17 Dane County Parks and Open Space Plan and therefore comments and proposed mitigation measures outlined below will pertain to both the trails and Section 4(f) County park lands.

Regarding potential impacts to the approximate 2.4 acres of Dane County park lands, we would ask that the following comments and proposed mitigation measures be considered within the *de minimis* impact review for the Environmental Document:

1-Maintain and restore the existing driveway on CTH M for staff access to manage prairie restoration areas. Dane County Parks would prefer this driveway entrance to be gated and not paved to discourage general public use.

2-Provide financial resources that will allow the Dane County Parks Naturalist to restore and reseed prairie areas that are disturbed during CTH M reconstruction activities.

3-Maintain the existing water storage area immediately south of the box culvert. The pond/wetland area was created through a partnership between Dane County Highway and the Dane County Naturalist and is used extensively by frogs. If this area is unable to be avoided by the proposed CTH M improvement project, consider creation of a wetland scrape in the southeast corner of the parcel as a mitigation measure.

4-Dane County Parks supports the addition of the proposed bicycle/pedestrian side path along CTH M that will provide connectivity to the Ice Age Junction Trail.

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www.countyofdane.com/lwrd/parks

Regarding potential impacts to the Ice Age National Scenic Trail and Ice Age Junction Trail, we would ask that the following comments and proposed mitigation measures be considered within the de minimis impact review for the Environmental Document:

1-Dane County Parks supports the construction of the proposed bicycle pedestrian underpass at the intersection of Flagstone Drive and CTH M. Both trails will greatly benefit from a separated grade crossing.

2-Install a dodge way and signage on the west side of the proposed underpass at the Ice Age National Scenic Trail to deter bicycle use. Coordinate design and installation with the Ice Age Trail Alliance.

3-Amend the existing easement the Ice Age Trail Alliance has with the University of Wisconsin-Madison as necessary to insure connectivity to the proposed underpass. Related, investigate a revised alignment of the Ice Age National Scenic Trail from the proposed underpass that would utilize the existing covered bridge at the O.J. Noer Turfgrass Facility.

Contact Chris James, Dane County Park Planner at 608.224.3763 if additional information is needed to clarify any of the above items and we would request that you continue to keep the Commission and Ice Age Trail Alliance updated on the FHWA review of these comments.

Sincerely;

William Lunney
Dane County Park Commission, Chair

Cc: Darren Marsh; Director, Dane County Parks Division
Kevin Thusius; Director of Land Conservation, Ice Age Trail Alliance
Jason DiPiazza; P.E., MSA Professional Services

ID 5992-09-81
S. Pleasant View Road Reconstruction
(Prairie Hill Road to Cross Country Road)
CTH M

Dane County Parks and IAT Meeting – September24, 2014

ATTENDEES

Name / Representing	Email and Phone Number
1. JASON DiPIAZZA MSA	jdi.piazza@msa-ps.com 608 242 6640
2. Kevin Thusius IATA	kevin@icegetrail.org
3. John MAdden Nat. Park Svc	john_madden@nps.gov
4. Pam Schuler, Nat. Park Ser.	pam_schuler@nps.gov
5. Tony Fernandez - City of Madison	AFernandez@cityofmadison.com
6. Chris Petykowski City of Madison	cpetykowski@cityofmadison.com 267-8678
7. JAN ZIMMERMANN DANE CO.	ZIMMERMANN.JAN@COUNTYOFDANE.COM 224-3761
8. CHRIS JAMES / DCP	JAMES@COUNTYOFDANE.COM 224-3763
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MSA
PROFESSIONAL SERVICES
TRANSPORTATION · MUNICIPAL · REMEDIATION
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ID 5992-09-81
S. Pleasant View Road Reconstruction
(Prairie Hill Road to Cross Country Road)
CTH M
Dane County

Dane County Parks and IAT Meeting

Wednesday September 24, 2014

Meeting Time: 8:30 AM
Meeting Location: City County Building, **Room 118 (Engineering Conference Room)**

AGENDA

Meeting focus: CTH M impacts and R/W needs from Dane County Parks and Ice Age Trail

I. Project Review/Recap	A. Limits/Scope/ Typical section/ Schedule	A. Review project
II. Project impacts to Dane County Park	A. R/W Needs	A. Wider section, R/W for roadway and ATC facilities
	B. Easement needs	B. Permanent Easement: Multi-use path Temporary Easement: Grading
	C. Drainage	C. Re-work of the small retention pond at the cross culvert
	D. Review impact mitigation letter	D. (handout)
	E. Utility impacts	E. ATC, Alliant Energy, TDS relocations anticipated
III. Project impacts to Ice Age Trail	A. Multi-use path tunnel	A. New crossing option for IAT users. Discuss how to tie into this path and crossing.
	B. Impacts to easement	B. Include easement for IAT on the Transportation Project Plat
	C. Use of OJ Noer Bridge	C. Discuss options within CTH M R/W

IV. Other?

MINUTES

(Also, see attached follow up email correspondence with notes from meeting attendees)

I.A.

Jason provided attendees with a brief recap of the project, overview of the design and design objectives and answered questions about the plan view layout.

II. A & B

The project will require real estate acquisition from Dane County Parks land. The current estimate is approximately 0.5 acres of highway right-of-way, 1 acre of permanent easement, and 1.5 acres of temporary easement for grading and construction needs. The permanent easement estimate is for construction and maintenance of the 10' multi-use path along the east side of CTH M. The path will be constructed on a 15' easement along the edge of the CTH M highway right-of-way. Chris James also requested that the prairie area be protected/isolated from the construction by temporary fencing (orange safety fence is acceptable).

ATC will be relocating their overhead power distribution poles into the terrace area between the multi-use path and CTH M roadway. The poles will be located in the CTH M highway R/W. This location will minimize the amount of aerial easement that ATC requires for their facilities.

Jan Zimmerman said she would research the grant funding that was used to fund the purchase of the Dane County Park land.

Chris James would like to see grading impacts to the restored prairie along the east side of CTH M completed under the guidance of Dane County Parks. The letter provided by Dane County Parks on January 23, 2013, requested funds to restore the disturbed prairie with Dane County or Dane County hired crews. The group developed on idea for the work to be completed by a Dane County Parks approved contractor with inspection and acceptance of the restored prairie area to be provided by Dane County Parks staff. Chris James noted that he could provide a list of 3 approved contractors and assist in developing the specs and design details for the restoration work. Chris James was also willing to review an "approved equal" contractor other than the 3 necessary for inclusion in the specs.

II. C

The group discussed impacts to the small pond at the east (outlet) end of the CTH M culvert crossing. The slope intercepts for the current roadway design would fill most of this pond. Chris James expressed a preference for grading and reestablishing the small pond near its current location with the project. This would be an aesthetic benefit for both the multi-use path and the Ice Age Trail. This alternative was preferred to constructing a retaining wall to maintain the pond its current location. Another alternative would be to construct a wetland scrape along the southeast edge of the park property. This was the alternative originally noted in the letter provided by Dane County Parks on January 23, 2013.

II. D See above for items in this letter that were discussed.

II. E. Specific utility impacts and relocations were not discussed.

III. A

The Ice Age Trail Alliance (IAT) is still agreeable to utilizing the multi-use path grade separation (box culvert) to cross below CTH M. They want to minimize the length of trail that is concurrent with the multi-use path and connections to the multi-use path should be as close to perpendicular as possible to prevent use of the IAT by bicycles.

The group discussed design concepts for the multi-use path box culvert. The group wanted to see options for reducing the skew of the crossing. This will shorten the tunnel and possibly allow for a natural light skylight to be incorporated in the design (tunnel must cross below a raised median). The reduced skew would put the west end closer to the IAT alignment through the OJ Noer Turf Research land. Jason and Chris Petykowski noted that the skew was designed this way to limit the amount of impact to OJ Noer. Reducing the skew (squaring up the path) may require more R/W from OJ Noer. This land cannot be condemned. Jason agreed to explore design alternatives that will reduce the skew.

Tony Fernandez reiterated the design standards for the box culvert:

1. Minimum of 9' high above the 10' wide path section (the clearance can be reduced along the edges for lights and structure haunches)
2. Minimum 14' wide
3. The preference is to have the path at an elevation of 1' above the 100 year flood elevation for the drainage way. At the 100' year flood elevation would be acceptable. Anything lower should be discussed. There are issues, especially with path clean up and maintenance if it is any lower.

IAT wants to include dodge ways at the locations where the IAT breaks off from the multi-use path. They don't have a standard design, but are happy with the one constructed where the IAT crosses Woods Road, which is a split rail fence design. MSA will investigate these details for including in the plan. MSA indicated that signage could be considered for inclusion in the plans. IAT signs should be 18x24 inches. Kevin Thusius and National Parks Service offered to help by providing the sign design and logos and review of the placement. Trail markers should also be included.

IAT indicated that standard pedestrian standards for grade should be used if possible.

III.B.

The group discussed how to address the IAT easement. IAT's preferences are:

1. Be located outside the CTH M R/W. Being located within the highway R/W requires the IAT to obtain permits for any trail maintenance work needed within the R/W
2. IAT does not want a separate easement from UW due to insurance and other regulatory issues required for each easement.
3. The easiest alternative in IAT's view is to update the current easement to relocate it outside the potential R/W location. MSA/City of Madison will follow up with real estate staff to see if this is a possibility. This will have to be document well in the EA to clearly note that this was not done to avoid having to acquire the IAT easement with the project.
4. Another alternative that should be explored is to have the City of Madison purchase easement along the CTH M R/W for IAT use. This will also have to be run by UW and real estate staff.

NOTE: The IAT did not use federal LWCF funds for purchasing the easement along CTH M.

III.C.

IAT would still like to utilize the OJ Noer bridge to cross the drainage way. Chris Petykowski indicated that he had talked to UW about this and didn't think it would be an issue.

OTHER

The group discussed the impacts to the IAT at the Raymond Road crossing. The City of Madison will reconstruct this crossing. The IAT crosses Raymond Road near where the drainage way crosses Raymond Road. The City of Madison will be reconstructing this structure which will affect the IAT crossing. IAT was agreeable to shifting their trail east to get up onto Raymond Road. This shift should be minimized to keep the IAT within Dane County Park land and still provide a wooded buffer between it and the future extension of Jeffy Trail (new City of Madison

Street that is budgeted for completion in 2015). The IAT will utilize the sidewalk on the Raymond Road bridge before crossing Raymond Road and continuing on parallel to the multi-use path (Ice Age Junction Path). Tony recommended that the IAT use the multi-use path crossing to keep roadway crossings to a minimum.

Chris James offered to IAT to use the recently constructed multi-use path bridge to cross the waterway. IAT would prefer to provide spur trail markings here for a future trail head parking area but keep the IAT separate from the multi-use path as long as possible. They anticipate a high volume of bike traffic on the multi-use path.

Document Number

State Bar of Wisconsin Form 1 - 2003

WARRANTY DEED

Document Name

DANE COUNTY
REGISTER OF DEEDS

DOCUMENT #
4230476

08/30/2006 03:34PM

Trans. Fee:
Exempt #: 2R

Rec. Fee: 7.00
Pages: 1

001929

THIS DEED, made between Ice Age Park and Trail Foundation, Inc. ("Grantor," whether one or more), and County of Dane, a Wisconsin municipal corporation ("Grantee," whether one or more).

Grantor, for a valuable consideration, conveys to Grantee the following described real estate, together with the rents, profits, fixtures and other appurtenant interests, in Dane County, State of Wisconsin ("Property") (if more space is needed, please attach addendum):
LOT ONE (1), CERTIFIED SURVEY MAP NO. 5016 RECORDED IN VOLUME 22 OF CERTIFIED SURVEY MAPS OF DANE COUNTY WISCONSIN, PAGES 225 AND 226 AS DOCUMENT NUMBER 1958301, IN THE TOWN OF VERONA, DANE COUNTY, WISCONSIN.

Recording Area

Name and Return Address
Gaylord Plummer
Dane County Land Acquisition
1 Fen Oak Court, Room 223
Madison, WI 53718

062-0608-034-8000-6

Parcel Identification Number (PIN)

This is not homestead property.
(is) (is not)

Grantor warrants that the title to the Property is good, indefeasible in fee simple and free and clear of encumbrances except: municipal and zoning ordinances and agreements entered under them, recorded easements for the distribution of utility and municipal services, recorded building and use restrictions and covenants, and general taxes levied in the year of closing.

Dated June 29, 2006

(SEAL) _____ (SEAL)
* Michael G. Wollmer, Vice President
* _____

(SEAL) _____ (SEAL)
* Christine Thisted White, Asst. Sec.
* _____

AUTHENTICATION

Signature(s) _____

authenticated on _____

*

TITLE: MEMBER STATE BAR OF WISCONSIN
(If not, _____
authorized by Wis. Stat. § 706.06)

THIS INSTRUMENT DRAFTED BY:
Gaylord R. Plummer
Dane County Real Estate Officer

ACKNOWLEDGMENT

STATE OF WISCONSIN)
) ss.
Dane COUNTY)

Personally came before me on 29 June 2006, the above-named Michael Wollmer and Christine Thisted White to me known to be the person(s) who executed the foregoing instrument and acknowledged the same.

*

Notary Public, State of Wisconsin
My Commission (is permanent) (expires: 2/21/2010)

(Signatures may be authenticated or acknowledged. Both are not necessary.)

NOTE: THIS IS A STANDARD FORM. ANY MODIFICATIONS TO THIS FORM SHOULD BE CLEARLY IDENTIFIED.

*Type name below signatures.

Arboretum Real Estate Services PO Box 259907, Madison WI 53725-9907 Phone: (608) 251-1535 Fax: (866) 615-2203 Heitke05.zfx
Gaylord Plummer
Produced with ZipForm™ by RE FormsNet, LLC 18025 Fifteen Mile Road, Clinton Township, Michigan 48035 www.zipform.com

ASSIGNMENT OF STEWARDSHIP GRANT AND MANAGEMENT CONTRACT

DANE COUNTY
REGISTER OF DEEDS

DOCUMENT #
4230475

08/30/2006 03:34PM

Trans. Fee:
Exempt #:

Rec. Fee: 7.00
Pages: 3

001926

Recording Area

For valuable consideration, the Ice Age Park and Trail Foundation ("IATPF" name used hereafter), hereby assigns to Dane County ("County" name used hereafter) all of the IAPTF's rights, interests, and obligations under a Stewardship Grant and Management Contract IAT2-34 ("Stewardship Contract") entered into by the IAPTF, recorded in the Office of the Register of Deeds for Dane County, on March 23, 2006, Page 270 through 278, as Document Number 4173485. The property to which this Stewardship Contract applies is described in Exhibit A, which is made part of this assignment by reference (the "Stewardship Property").

Dated this 28th day of June, 2006.

Ice Age Park & Trail Foundation

By: Christine Thisted white
Signature

Christine Thisted white
Christine Thisted, Executive Director

Name and Return Address:
Gaylord Plummer
Dane County Land Acquisition
1 Fen Oak Court
Madison WI 53718

Parcel Identification Number (PIN)

062/0608-034-8000-6

STATE OF WISCONSIN)
) ss.
DANE COUNTY)

Personally came before me this 28th day of June, 2006, the above named Christine Thisted White to me known to be the person who executed the foregoing instrument and acknowledged the same.

Julie McCutchin
Signature of Notary Public

Julie McCutchin
Printed Name of Notary Public
Notary Public, State of Wisconsin
My Commission (expires)(is) 10-4-2009

NOTARY PUBLIC
JULIE McCUTCHIN
STATE OF WISCONSIN

ACCEPTANCE OF ASSIGNMENT

The County, assignee in this assignment of the Stewardship Contract, hereby accepts the assignment and all of the IAPTF's rights, interests, and obligations in the Stewardship Contract. This is a perpetual assignment that runs with the Stewardship Property and binds all heirs, successors and assigns of the assignee.

The County acknowledges that it has received and reviewed the Stewardship Contract, dated January 25, 2006 through June 30, 2007, and Land Management Plan for the Stewardship Property. The County agrees that it shall abide by the provisions of the aforementioned Stewardship Contract and Land Management Plan and furthermore that it recognizes the long-term ownership and management responsibilities of the Stewardship Program and will comply with all applicable Stewardship laws and regulations pursuant to s. 23.096 and s. 23.17, Stats, and Chapter NR 51 of the Wisconsin Administrative Code. The County acknowledges notice that IAPTF acquired the "Stewardship Property" with Land and Water Conservation Funds pursuant to a Grant Agreement between the United States National Park Service("NPS" named hereafter) and the Wisconsin Department of Natural Resources ("DNR" named hereafter), Agreement number: GA6281-E-001 a copy of which is kept at the DNR office at 101 S. Webster Street, Madison, WI 3707-7921. The County further agrees to indemnify and hold the IAPTF, DNR and NPS harmless from any and all liability arising from the assignment of the Stewardship Contract or from the IAPTF's performance or non-performance of its obligations under the Stewardship Contract and any applicable laws and regulations.

3/7

Dated this 21st day of August, 2006.

Dane County

001927

By: _____
Signature

Kathleen Falk, Dane County Executive

STATE OF WISCONSIN)
) ss.
DANE COUNTY)

Personally came before me this 21st day of August, 2006, the above named Kathleen M. Falk to me known to be the person who executed the foregoing instrument and acknowledged the same.

Signature of Notary Public

Michelle A Woldt
Printed Name of Notary Public
Notary Public, State of Wisconsin
My Commission (expires) 9/20/09

APPROVAL OF ASSIGNMENT

The State of Wisconsin Department of Natural Resources, Grantor in the Stewardship Contract referenced above, hereby approves the assignment of the IAPTF rights, interests, and obligations in the Stewardship Contract to the County as set out above.

The Department's approval is contingent and effective upon the recording of this assignment in the Register of Deeds Office in DANE COUNTY, Wisconsin.

Dated this 28th day of JUNE, 2006.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

By: Mary L. Rothenmaier
Michelle Young, Director
Bureau of Community Financial Assistance

STATE OF WISCONSIN)
) sis.
DANE COUNTY)

Personally came before me this 28th day of June, 2006, the above named Mary L. Rothenmaier to me known to be the person who executed the foregoing instrument and acknowledged the same.

Signature of Notary Public

Julie McCutchin
Printed Name of Notary Public
Notary Public, State of Wisconsin
My Commission (expires)(is) 10-4-2009

NOTARY PUBLIC
JULIE McCUTCHIN
STATE OF WISCONSIN

DRAFTED BY THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Exhibit A - Legal Description
Stewardship Property

001928

Lot one (1) , certified survey map no. 5016 recorded in Volume 22 of certified survey maps of Dane County, Wisconsin, pages 225 and 226 as document number 1958301, in the Town of Verona, Dane County, Wisconsin

Except for:

That part of the NE ¼ of the SE ¼, Section 3, T6N, R8E, Town of Verona, Dane County, Wisconsin, lying northerly and westerly of Raymond Road and being more particularly described as follows: From the NE corner of the NE ¼ of the SE ¼ of said Section 3; thence along the north line thereof N 89°23'18" W, 67.52 feet to the northwesterly right-of-way line of Raymond Road and the POINT OF BEGINNING of the parcel herein described; thence continuing along said north line N 89°23'18" W, 451 feet; thence S 00°03'52" E, 250 feet to a point intersecting the northwesterly right-of-way line of Raymond Road; thence northeasterly along said right-of-way line to the POINT OF BEGINNING. The parcel contains approximately 1.29 acres.

DANE COUNTY
REGISTER OF DEEDS

DOCUMENT #
4173495

03/23/2006 11:06AM

Trans. Fee:
Exempt #:

Rec. Fee: 27.00
Pages: 9

000270

STEWARDSHIP GRANT AND MANAGEMENT CONTRACT FOR NON-PROFIT LAND ACQUISITION
Form 8700-304 (9/03) Page 1

State of Wisconsin
Department of Natural Resources
Box 7921
Madison, Wisconsin 53707-7921

Project Number:

IAT2F-34

Sponsor:

Ice Age Park and Trail Foundation

Project Title:

Ice Age Park and Trail Foundation-Heitke LUIHNK

Program Name:

Knowles-Nelson Stewardship Program
Land & Water Conservation Fund – Ice Age Trail Acquisition

Grant Period: (Period during which grant funds will be encumbered and available for payment to the Sponsor under this Stewardship Grant and Management Contract, hereinafter referred to as the "Contract".)

January 25, 2006 through June 30, 2007

Project Scope:

Fee simple acquisition of approximately 9.8 acres of property in Dane County, Wisconsin, which is described in the legal description attached hereto as Exhibit A and made part of this Contract by reference (hereinafter referred to as the "Stewardship Property").

All references herein to the "Stewardship Property" shall also be deemed to be a reference to the Land & Water Conservation Fund Ice Age Trail property.

Recording Area

Name and Return Address

Ice Age Park and Trail Foundation
2453 Atwood Ave, Suite 206
Madison, WI 53704

Parcel Identification Number (PIN)

062-0608-034-8000-6

All obligations, terms, conditions and restrictions imposed by this Contract shall be deemed to be covenants and restrictions running with the Stewardship Property, and shall be effective limitations on the use of the Stewardship Property from the date of recording of this Contract, and shall bind the parties hereto and their respective personal representatives, successors and assigns, in perpetuity.

By acceptance of this Contract, the Sponsor, for itself and its successors and assigns, hereby covenants and agrees not to convey, sell, lease, assign or mortgage the Stewardship Property or convert it to uses inconsistent with this Contract without the prior written approval of the Secretary of the Wisconsin Department of Natural Resources, his designee or successor. The Sponsor further agrees that all rights, title and interests in and to the Stewardship Property shall vest in the State of Wisconsin without necessity of reentry, if the Sponsor, its successors or assigns, violates any essential provision described in paragraphs 1 or 2 of this contract.

Project Costs:

Total Cost of Grant Project	$416,500.00
Stewardship Grant Award	$208,250.00
LWCF – Ice Age Trail Grant Award	$155,576.44

The following documents are hereby incorporated into and made part of this Contract by reference:

1. Chapter NR 51, Wisconsin Administrative Code
2. Grant Application and Attachments
3. LWCF Ice Age Trail Acquisition Grant Agreement Number GA6281-E-0001

9/27

TERMS AND CONDITIONS OF THE CONTRACT

000271

This Contract is entered into by and between the Sponsor and the State of Wisconsin Department of Natural Resources (hereinafter referred to as "Department"), in accordance with s. 23.096, Wis. Stats., for the purpose of awarding a Stewardship grant and in accordance with Titles I and VIII of the Department of the Interior and Related Agencies Appropriations Act, 2001 of October 11, 2000 and Section 135 of Title 1, Division B, Appendix D of the Consolidated Appropriations Act, 2001, of December 21, 2000, for the purpose of awarding a Land & Water Conservation Fund Grant, and for establishing conditions of management for the Stewardship Property acquired with the grant funds.

The Department and Sponsor mutually agree to the following terms and conditions:

Essential Provisions:

1. If the Sponsor violates any of the following conditions of this Contract, which are identified as essential in Ch. NR 51.07(3), Wis. Adm. Code, pursuant to s. 23.096(5), Wis. Stats., and fails to correct the condition within six months after written notification to the Sponsor from the Department, all title, right and interest in the Stewardship Property held by the Sponsor shall vest in the State of Wisconsin without the necessity of reentry or legal judgment:

   a. Conversion of the Stewardship Property to any use other than that specified in this Contract and the Land Management Plan without the prior written approval of the Department is prohibited.

   b. Sale or conveyance of the Stewardship Property, or any interest in the Stewardship Property, to a third party without the prior written approval of the Department is prohibited. If the Department does approve a conveyance to a third party, all Stewardship conditions imposed by this Contract and the Land Management Plan shall remain with the Stewardship Property. Any transfer or sale of the Stewardship Property in fee may only be to a nonprofit conservation organization qualified for Stewardship grants, pursuant to ss. 23.096 and 23.0955(1), Wis. Stats., or to a local, state or federal unit of government. Any subsequent owner shall execute an *Assignment of Stewardship Grant and Management Contract,* which states that it has received and reviewed this Contract and the Land Management Plan and shall abide by their provisions. Department approval of any transfer is not valid until the *Assignment of Stewardship Grant and Management Contract* has been signed by the Department and recorded in the Office of the Register of Deeds in the county where the Stewardship Property is located.

   c. The Sponsor shall not allow any leases, mortgages, permits or encumbrances of any kind on the Stewardship Property without the prior written approval of the Department. The Department may take actions necessary to avoid the placement of liens, judgments or encumbrances against the Stewardship Property.

   d. The Sponsor shall pay, before delinquency, all taxes, assessments, fees, and charges of whatever description levied on or assessed against the Stewardship Property by competent authority.

   e. The Sponsor shall at all times maintain its tax-exempt status and be a qualified organization within the meaning of Section 170(h)(3) of the Internal Revenue Code. The Sponsor shall notify the Department of any changes in, or challenges to, its tax-exempt status or to its mission of acquiring property for conservation purposes.

   f. The Stewardship Property may not be closed to the public unless approved in writing by the Department.

2. If the Sponsor dissolves or ceases to exist, all title, right and interest held by the Sponsor in and to the Stewardship Property shall vest in the state, without the necessity of reentry, unless a transfer under paragraph 1.b. above is approved by the Department.

Grant and Financial Provisions:

3. In consideration of the covenants made by the Sponsor herein, the Department promises to obligate to the Sponsor the amount specified on Page 1 as the "Grant Award" and will tender to the Sponsor that portion of the obligation that is required to pay the Department's share of costs, based upon the Department providing up to 50 percent of eligible acquisition costs, as defined in NR 51.002(1), not to exceed the amount of cash needed to cover those costs. The Sponsor hereby promises to execute the project described herein in accordance with the conditions of this Contract and manage the Stewardship Property in accordance with the conditions of the Land Management Plan.

4. Failure by the Sponsor to comply with the terms of this Contract shall not cause the suspension of all obligations of the Department hereunder if, in the judgment of the Department, such failure was due to no fault of the Sponsor. In such case, any amount required to settle at minimum cost any irrevocable obligations properly incurred shall be eligible for assistance under this Contract, at the Department's discretion.

5. If the Sponsor receives federal, local government or other state funding for acquisition of the Stewardship Property, either before or after this Contract is executed, the Sponsor shall notify the Department of this fact. The Sponsor agrees that funds received from all government sources shall not exceed 100% of the amount of cash needed to cover eligible acquisition costs.

6. Grant payments may not be disbursed to the Sponsor until the following conditions have been met to the satisfaction of the Department:

   a. The value of the Stewardship Property has been certified by the Department according to Department valuation guidelines.

   b. The Department has approved an Environmental Inspection Report for the Stewardship Property.

   c. The Department has approved title insurance or other evidence of marketable title for the Stewardship Property.

   d. The Department has approved a Land Management Plan for the Stewardship Property.

   e. The Sponsor has submitted a claim for payment supported by appropriate evidence of cost, which meets Department accounting standards.

   f. This Contract has been recorded with the Register of Deeds in the County in which the Stewardship Property is located or the Department has approved an escrow closing under Ch. NR 51.08(4), Wis. Adm. Code.

   g. A warranty deed has been executed and recorded with the Register of Deeds in the County in which the Stewardship Property is located or the Department has approved an escrow closing under Ch. NR 51.08(4), Wis. Adm. Code.

7. The Sponsor shall maintain financial and accounting records for the grant in accordance with generally accepted accounting principles and practices for a period of four years after the final grant payment has been made. These records may be reviewed by state officials.

8. One-half of all receipts from the sale of any structures, improvements or personal property that was included in the appraisal for the Stewardship Property shall be reimbursed to the Department.

9. Income accruing to the Stewardship Property shall be used to further the objectives of the project as stated in this Contract or to further the objectives of another Stewardship project. However, if the Stewardship Property is entered into the County Forest Law Program, income derived from that program shall be distributed according to s. 28.11, Wis. Stats.

10. Reasonable entrance, service or user's fees may be charged and retained by the Sponsor to defray operation and maintenance costs subject to Department review and approval. If such fees do not exceed the fees charged for daily entrance to state parks, Department fee approval is not required.

11. The Sponsor shall keep the Stewardship Property free of any liens arising out of any work performed for, materials furnished to, or obligations incurred by the Sponsor.

General Provisions:

12. The Sponsor agrees to comply with all applicable state, local and federal statutes and regulations in fulfilling the terms of this Contract, including, but not limited to, general and special zoning, land use permit requirements, disabled access, environmental quality, and historical and archaeological preservation. In particular, the Sponsor agrees to comply with the provisions of s. 23.096, Wis. Stats., and Ch. NR 51, Wis. Adm. Code and with ss.32.19 to 32.27, Wis. Stats., and Ch. NR 202 relating to relocation. In the event there are any inconsistencies between the statutes and code and this Contract, the statutes and code shall govern.

13. If any provision of this Contract is determined by a court to be invalid, the validity of the remaining provisions shall not be affected thereby.

14. This Contract, together with any referenced parts and attachments, constitutes the entire Contract, and any previous communications or agreements pertaining to the subject matter of this Contract are hereby superseded.

15. Any ambiguities in this Contract shall be construed in a manner that best effectuates the protection of the natural values of the Stewardship Property.

16. The Sponsor may rescind this Contract in writing at any time before expending grant funds. After the Sponsor has expended grant funds, this Contract and the Land Management Plan may be rescinded, modified, or amended only by mutual agreement in writing, except that time extensions of the "Grant Period" may be granted by the Department without the requirement of the Sponsor's signature.

17. This Contract shall be recorded by the Sponsor in the Office of the Register of Deeds in the County where the Stewardship Property is located, and the interests of the State under this Contract shall thereby be placed in the chain of title. The Department may re-record this Contract or any other document necessary to protect its rights under the Contract.

18. No portion of the Stewardship Property shall in the future be used to satisfy land area requirements for other property not subject to this Contract for the purpose of determining building density, lot coverage or open space requirements under otherwise applicable laws, regulations or ordinances controlling land use and building density. Development rights have been encumbered or extinguished by this Contract, and may not be transferred to any other property pursuant to a transferable development rights program, cluster development arrangement or otherwise.

19. The Department agrees that the Sponsor shall have sole control over the method, hours worked, time and manner of any performance under this Contract other than as specifically provided herein. The Department reserves the right only to inspect the Stewardship Property for the purpose of ensuring that management is progressing in compliance with this Contract. The Department takes no responsibility for supervision or direction of the performance of this Contract by the Sponsor or the Sponsor's employees or agents. The Sponsor is an independent contractor for all purposes, not an employee or agent of the Department. The Department further agrees that it will exercise no control over the selection and dismissal of the Sponsor's employees or agents.

20. The Sponsor shall not discriminate against any person in the use and enjoyment of the Stewardship Property on the basis of age, race, creed, color, handicap, marital status, conviction record, arrest record, sex, national origin, ancestry, sexual orientation or membership in the national guard, state defense force, or any other reserve component of the military forces of the United States or this state.

21. Except for claims or costs arising out of the acts or omissions of the Department, its officers, employees and agents, the Sponsor agrees to save, keep harmless, defend and indemnify the Department and all its officers, employees and agents, against any and all liability claims, costs of whatever kind and nature, for injury to or death of any person or persons, and for loss or damage to any property (state or other) occurring directly or indirectly in connection with or in any way arising out of the occupancy, use, service, operation or performance of work in connection with this Contract or omissions of Sponsor's employees, agents or representatives.

22. In certain cases described in this Contract, the Sponsor is required to obtain written approval from the Department prior to undertaking an action. Whenever such approval is required, the Sponsor shall notify the Department in writing. The request for approval shall describe the nature, scope, design, location, size, timetable, and any other material aspect of the proposed action in sufficient detail to permit the Department to make an informed judgment as to its consistency with the terms and purpose of this Contract. The Department shall approve, conditionally approve, or deny the Sponsor's request in writing within sixty days (60) days of receipt of the written request. The Department may withhold its approval if it lacks sufficient information to reach an informed decision, or if it determines, in its sole discretion, that the proposal violates the purpose of this Contract and impairs the natural resource values of the Stewardship Property.

23. The Sponsor warrants that it has complied with all necessary requirements to do business in the State of Wisconsin, that it is a qualified tax exempt organization within the meaning of Section 170(h)(3) of the Internal Revenue Code, and that the persons executing this Contract are authorized to act on its behalf.

Land Management Plan:

24. Purpose. Pursuant to s. 23.17, Wis. Stats., the primary purpose of this Contract and the Land Management Plan is to permanently preserve a corridor for the Ice Age National Scenic Trail; to assure that the natural, conservation and open space values of the Stewardship Property are protected in perpetuity; and to confine the use of the Stewardship Property to activities that are consistent with these objectives.

25. Management Responsibilities of the Sponsor. The Sponsor is responsible for operation of the Stewardship Property and for providing adequate management and maintenance in a manner consistent with the purpose described above and with the requirements and conditions of this Contract and the Land Management Plan.

26. Management Rights of the Department. The Department, its officers, employees and agents may enter the Stewardship Property in order to monitor compliance with this Contract and the Land Management Plan or carry out any management activity necessary to ensure the public's rights and safety.

    If the Sponsor fails to fulfill its responsibilities under the terms of this Contract, the Department shall have the right, but not the obligation, to undertake land management activities on the Stewardship Property in accordance with the terms of the Land Management Plan. Before undertaking such responsibility, the Department shall provide the Sponsor with six (6) months prior written notice of the land management activity required and give the Sponsor the opportunity to perform that activity within the six-month period, or within a reasonable time thereafter if more time is needed due to weather constraints.

27. Revisions. Changes or revisions to the Land Management Plan may be made with written agreement of the Sponsor and Department.

28. Land Management Conditions and Requirements. Any activity on or use of the Stewardship Property that is inconsistent with the purpose of the project as described in paragraph 24 is prohibited. Without limiting the generality of the foregoing, the following activities and uses are expressly prohibited:

    a. Animals. There shall be no introduction of any wild animals onto the Stewardship Property without the prior written approval of the Department. There shall be no captive wild animal farm, bird hunting preserve, farm raised deer farm, wild fur farm or dog club training license, established or licensed on the Stewardship Property. The Sponsor shall not allow horses, cattle, or other livestock on the Stewardship Property for grazing or other purposes, except as permitted under Paragraph 29.

    b. Dumping. There shall be no temporary or permanent storage or placement of trash, soil, gravel, ashes, treated sewage, manure piles, hazardous or toxic substances, abandoned vehicles or machinery, or any other unsightly or offensive materials on, under or in the Stewardship Property, except that brush or other plant material cut as the result of activities approved herein may be left on the Stewardship Property.

    c. Mining, Surface Alteration and Manipulation of Water. There shall be no topographic changes, extraction of subsurface materials, alteration of the natural landscape, or manipulation of any waters or shorelines of the Stewardship Property by excavation, filling, dredging, draining, tiling, ditching or any other means, except as permitted in Paragraph 29.

    d. Natural Materials. There shall be no damage, destruction or removal from the Stewardship Property of any natural features or natural materials, including, but not limited to, rocks, soil, minerals, dead wood and fossils, except as permitted in Paragraph 29.

    e. Rights-of-Way. No right-of-way shall be granted across the Stewardship Property in conjunction with any industrial, commercial or residential use of other land not protected by this Contract, except as permitted in paragraph 29.

    f. Soil Erosion. There shall be no use or activity that causes or is likely to cause significant soil erosion or significant pollution of any surface or sub-surface waters. Best management practices shall be employed to minimize soil erosion during and after construction of any permitted roads, trails, structures or other improvements.

    g. Spraying. Application of pesticides on the Stewardship Property is not allowed except as follows: (i) to control pests on an emergency basis when such control is necessary to protect public health, (ii) to control non-native or invasive species (iii) for habitat restoration purposes (iv) or for other purposes specifically described in Paragraph 29.

h. Structures, buildings and improvements. The placement or construction of any mobile or permanent building, structure or other improvement is prohibited, except as permitted below or in Paragraph 29.

1) Fences. The Sponsor may repair and maintain any existing fences on the Stewardship Property.

2) Signs and Interpretive Displays. The Sponsor may not erect, display or maintain any outdoor advertising structure, sign or billboard on the Stewardship Property; however, the Sponsor may erect signs and interpretive displays for the following purposes: to identify the property; to indicate that the Stewardship Property is under the protection of the Sponsor and to acknowledge the Stewardship Program; to commemorate or interpret the natural features or human history of the Stewardship Property; to regulate uses, mark the boundaries or provide directions. The placement, size, number and design of signs or interpretive displays shall not diminish the scenic character of the Stewardship Property.

3) Roads and Parking Lots. Any existing roads on the Stewardship Property may be maintained, but shall not be widened or improved and no new roads shall be constructed or established, except as specifically permitted in Paragraph 29. A small parking lot, commensurate in size with the public use of the Stewardship Property, may be constructed.

4) Trails. The Sponsor may clear, construct and maintain trails for firebreaks, walking, cross-country skiing and other non-motorized recreational activities. Other trail restrictions may be included in paragraph 29 below.

i. Vegetation. There shall be no disturbances of any aquatic vegetation, fallen trees or other natural features in any shallow waters on or directly adjacent to the Stewardship Property, except as specifically permitted under Paragraph 29. Furthermore, there shall be no introduction, removal, damage, mowing, plowing, cutting, trimming or otherwise altering of any trees, shrubs, or other plants on the Stewardship Property, except as permitted in Paragraph 29 or as follows:

1) to remove non-native and invasive vegetation
2) to prevent or control insects, diseases, fire, personal injury or property damage
3) to construct and maintain any roads, trails or other structures permitted herein
4) to enhance wildlife habitat or restore and maintain native biological communities
5) to construct firebreaks for prescribed burning.
6) Collecting mushrooms, berries and nuts is permitted, provided that any collecting is carried out in a manner that maintains a sustainable growth and reproduction cycle for the plants.

j. Vehicles. There shall be no operation of any vehicle on the Stewardship Property, including, but not limited to, bicycles, snowmobiles, dune buggies, motorcycles, all-terrain vehicles, cars and trucks, except as follows: (i) in emergency situations, (ii) for maintenance of the Stewardship Property and habitat and resource management activities, (iii) for disabled access on existing roads and trails that are normally vehicle-accessible, with a permit issued by the Sponsor, or (iv) as permitted in Paragraph 29.

29. Other Management Conditions:

a. The Sponsor shall acknowledge the state's assistance and federal assistance in acquiring ownership of the Stewardship Property, and provide notice of public access to the Stewardship Property, by placement of signs on the Stewardship Property that have been approved by the Department and the National Park Service.

b. The Ice Age National Scenic Trail shall pass through the Property. The Trail shall be built to conform to standards for the Ice Age Trail, as outlined in the 2001 *Ice Age National Scenic Trail: A Handbook for Trail Construction, Design and Maintenance,* which was written by the National Park Service, Department and Ice Age Park and Trail Foundation. The Ice Age Trail is a foot trail, for walkers, hikers, snowshoers and where appropriate cross-country skiers.

c. The Sponsor shall be responsible for the construction, maintenance, operation, fencing and signing of the Ice Age Trail on the Stewardship Property and for keeping the Trail open for public use. Necessary maintenance shall include, but not be limited to, grading, landscaping and controlling vegetative growth on the Trail and in other use areas to keep the Trail in a good state of usefulness and sightliness.

d. Recreational uses such as hiking, nature appreciation and educational activities that do not degrade the natural features of the Stewardship Property will be encouraged. Pursuant to NR 51.75(4), there shall be no hunting unless specifically authorized by the Department.

Special Terms and Conditions:

30. The primary uses of the Property will be hiking, scientific research, nature appreciation and education.

31. The Trail shall be offered to the National Park Service for certification as a component of the Ice Age National Scenic Trail, and if it qualifies, shall be certified as part of the Ice Age National Scenic Trail.

32. The Stewardship Property shall be offered to the Department for dedication under s. 3.293, Wis. Stats., and if it is accepted shall be dedicated a State Ice Age Trail Area.

33 This project is being funded in part with funds from the National Park Service. An agreement between the National Park Service (NPS) and Department, signed by the Department on March 12, 2003, and the NPS on March 31, 2003, contains provisions for administration of funds and activities authorized under National Park Service Land Acquisition and State Assistance, in Title I and VIII, of the Interior and Related Agencies Appropriations Action, 2001, of October 11, 2000, and Section 135 of Title I, Division B, Appendix D of the Consolidate Appropriations Act, 2001, of December 21, 2000, including the following provisions which are hereby incorporated into this Contract.:

a. The Sponsor agrees that the property shall not, without the express written approval of the NPS, be converted to other than preservation/recreational use, but shall be maintained in the public trust for preservation/recreational use in perpetuity.

b. All deeds for real property acquired with assistance under this Contract shall contain the following covenant ensuring the protection of the land for Ice Age National Scenic Trail purposes in perpetuity.

"The Grantee hereby acknowledges that the property conveyed by this document has been acquired with Federal assistance from the Land and Water Conservation Fund and such property shall not be converted to other than preservation/recreation uses related to the Ice Age National Scenic Trail without the prior written approval of the National Park Service."

c. The Sponsor hereby agrees that, as soon as practicable subsequent to closing, title to the Stewardship Property shall be transferred by donation to either (1) the Wisconsin Department of Natural Resources or (2) with written approval from the National Park Services, to another appropriate public agency.

Signed this 30th day of January, 2006.

ICE AGE PARK AND TRAIL FOUNDATION

Christine Thisted White

Signature of Sponsor Representative

Christine Thisted White

Typed or Printed Name of Sponsor Representative

STATE OF WISCONSIN)
) ss.
DANE COUNTY)

Personally came before me this 30th day of January, 2006, the above named Christine Thisted White to me known to be the person who executed the foregoing instrument and acknowledged the same.

NOTARY PUBLIC JULIE McCUTCHIN STATE OF WISCONSIN

Julie McCutchin

Signature of Notary Public

Julie McCutchin

Typed or Printed Name of Notary Public
Notary Public, State of Wisconsin
My Commission (expires)(is) 10-4-2009

Signed this 25 day of January, 2006

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

BY Kimberlee Wright for
Michele A. Young, Director
Bureau of Community Financial Assistance

STATE OF WISCONSIN)
) ss.
Dane COUNTY)

Personally came before me this 25th day of January, 2006, the above named Kimberlee Wright to me known to be the person who executed the foregoing instrument and acknowledged the same.

NOTARY PUBLIC JULIE McCUTCHIN STATE OF WISCONSIN

Julie McCutchin

Signature of Notary Public

Julie McCutchin

Typed or Printed Name of Notary Public
Notary Public, State of Wisconsin
My Commission (expires)(is) 10-4-2009

THIS INSTRUMENT WAS DRAFTED BY THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Exhibit A – Legal Description

Lot one (1) , certified survey map no. 5016 recorded in Volume 22 of certified survey maps of Dane County, Wisconsin, pages 225 and 226 as document number 1958301, in the Town of Verona, Dane County, Wisconsin

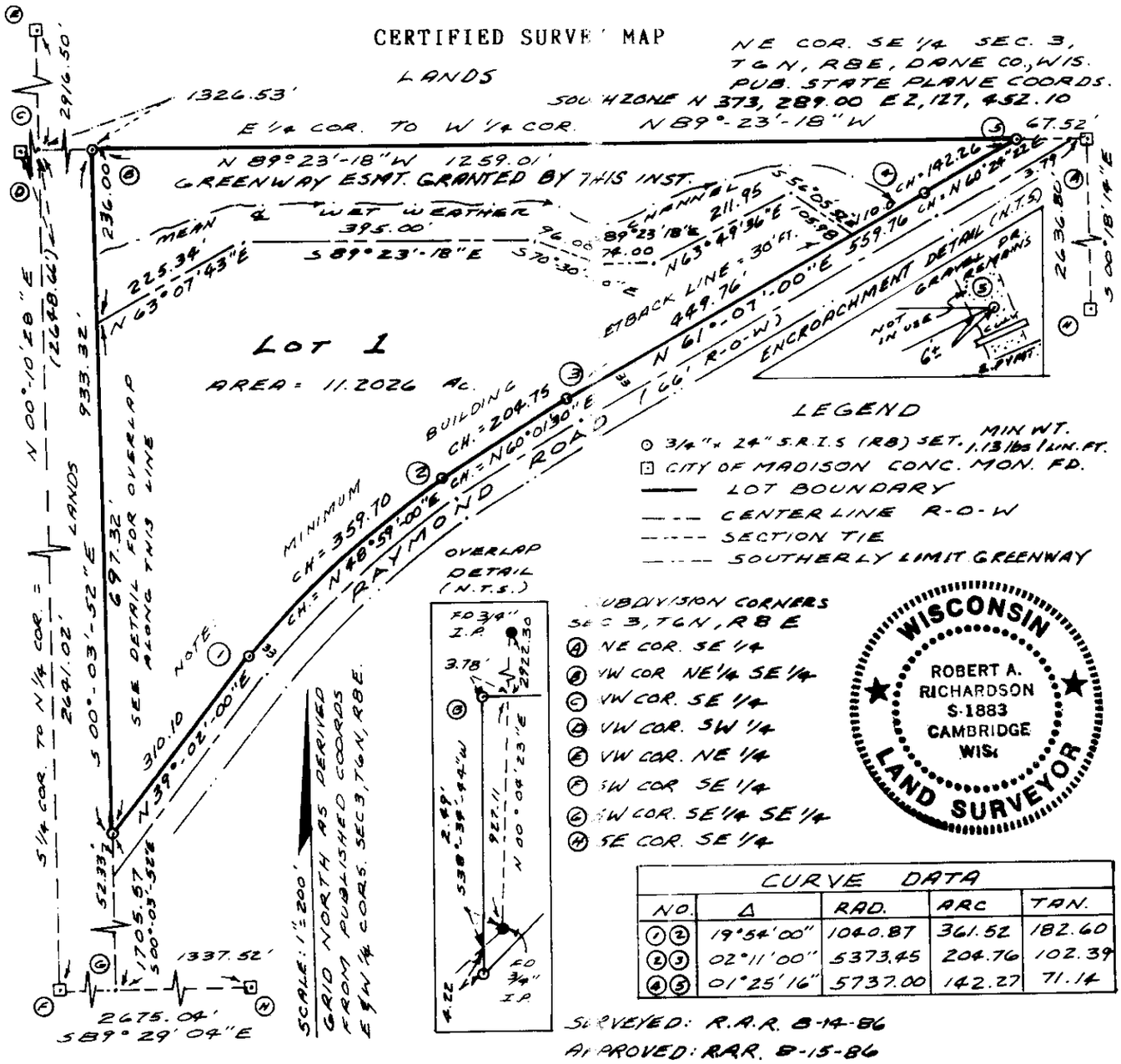
Except for:

That part of the NE ¼ of the SE ¼, Section 3, T6N, R8E, Town of Verona, Dane County, Wisconsin, lying northerly and westerly of Raymond Road and being more particularly described as follows: From the NE corner of the NE ¼ of the SE ¼ of said Section 3; thence along the north line thereof N 89°23'18" W, 67.52 feet to the northwesterly right-of-way line of Raymond Road and the POINT OF BEGINNING of the parcel herein described; thence continuing along said north line N 89°23'18" W, 451 feet; thence S 00°03'52" E, 250 feet to a point intersecting the northwesterly right-of-way line of Raymond Road; thence northeasterly along said right-of-way line to the POINT OF BEGINNING. The parcel contains approximately 1.29 acres.

CERTIFIED SURVEY MAP

LANDS

NE COR. SE 1/4 SEC. 3, T6N, R8E, DANE CO., WIS.
PUB. STATE PLANE COORDS.
SOUTH ZONE N 373,289.00 E 2,127,452.10



CURVE DATA				
NO.	Δ	RAD.	ARC	TAN.
(1)(2)	19°54'00"	1040.87	361.52	182.60
(2)(3)	02°11'00"	5373.45	204.76	102.39
(4)(5)	01°25'16"	5737.00	142.27	71.14

SURVEYED: R.A.R. 8-14-86
APPROVED: R.A.R. 8-15-86

Prepared by: The Landmark Survey Group, Inc., 6320 Monona Drive, Madison, WI 53716

Surveyed For: Daniel & Helane VanDerSteen, 6224 Raymond Rd., Madison, WI 53711

Location: Part of the NE 1/4 of the SE 1/4 of Section 3, T6N, R8E, Dane County, WI

Notes: (1) Lot 1 as shown above existed as a separate and distinct tract prior to the drafting of this instrument; therefore, no subdivision of lands is intended or created hereby.
(2) This instrument is being recorded as a certified survey map solely for administrative filing purposes and for granting a greenway easement to the City of Madison in accordance with its powers of extraterritorial jurisdiction.
(3) This instrument was drafted by Robert A. Richardson.

CERTIFICATION:
I, Robert A. Richardson, a Land Surveyor duly registered in the State of Wisconsin, do hereby certify that I have surveyed and mapped the lands described and shown hereon in full compliance with Chapt. 236.34 of the Wisconsin Statutes and in accordance with information furnished, and that such survey and map are true and correct to the best of my knowledge and belief.

R.A.R. 8-18-86
Robert A. Richardson, RLS S-1883

REGISTER OF DEED'S CERTIFICATE:
Received for record this 20 day of August, 19 86 at 1:20 o'clock, P.M. and recorded in Volume 22 of CERTIFIED SURVEY MAPS of Dane County, on Page 225 & 226.

Carol R. Mahoke
Register of Deeds by: Darlene M. Duckert Deputy

DOCUMENT NO. 1958301

CERTIFIED SURVEY MAP NO. 5016 VOLUME 22 PAGE 225

6.00

Description:

That part of the NE 1/4 of the SE 1/4, Section 3, T6N, R8E, Dane County, Wisconsin, lying northerly and westerly of Raymond Road and being more particularly described as follows: From the NE corner of the NE 1/4 of the SE 1/4 of said Section 3, run thence along the north line thereof N 89° 23' 18" W, 67.52 ft to the northwesterly R-O-W line of Raymond Road and the POINT OF BEGINNING of the parcel herein described; thence continuing along the same N 89° 23' 18" W, 1259.01 ft to the NW corner of said NE 1/4 of said SE 1/4; thence S 00° 03' 52" E, 933.32 ft along the West line of said 1/4 1/4 section to a point in the aforesaid Northwesterly R-O-W line of Raymond Road; thence turn and run with said R-O-W line the following 5 courses and distances: N 39° 02' 00" E, 310.10 ft to a point of curvature; thence along the arc of a curve deflecting to the right, said curve having a radius of 1040.87 ft, a central angle of 19° 54' 00" and a chord which bears N 48° 59' 00" E, 359.70 ft to a point of compound curvature; thence along the arc of a curve deflecting to the right, said curve having a radius of 5373.45 ft, a central angle of 02° 11' 00" and a chord which bears N 60° 01' 30" E, 204.75 ft, to a point of tangency; thence N 61° 07' 00" E, 559.76 ft, to a point of curvature; thence along the arc of a curve deflecting to the left, said curve having a radius of 5747.00 ft, a central angle of 01° 25' 16" and a chord which bears N 60° 24' 22" E, 142.26 ft to the POINT OF BEGINNING.

APPROVED FOR RECORDING PER Dane County ~~Agriculture, Forestry, Planning, and Water Resources~~ Agriculture, Environment & Land Records Committee action of August 19, 1986.

Norbert Scribner #3748

Norbert Scribner, authorized representative

GREENWAY EASEMENT AS SHOWN HEREON APPROVED AND ACCEPTED PER action of the City of Madison Engineering Department August 19, 1986

Arnold E Miller

APPROVED FOR RECORDING PER action of owners (mortgagees) August 15, 1986

Daniel E VanDer Stoep

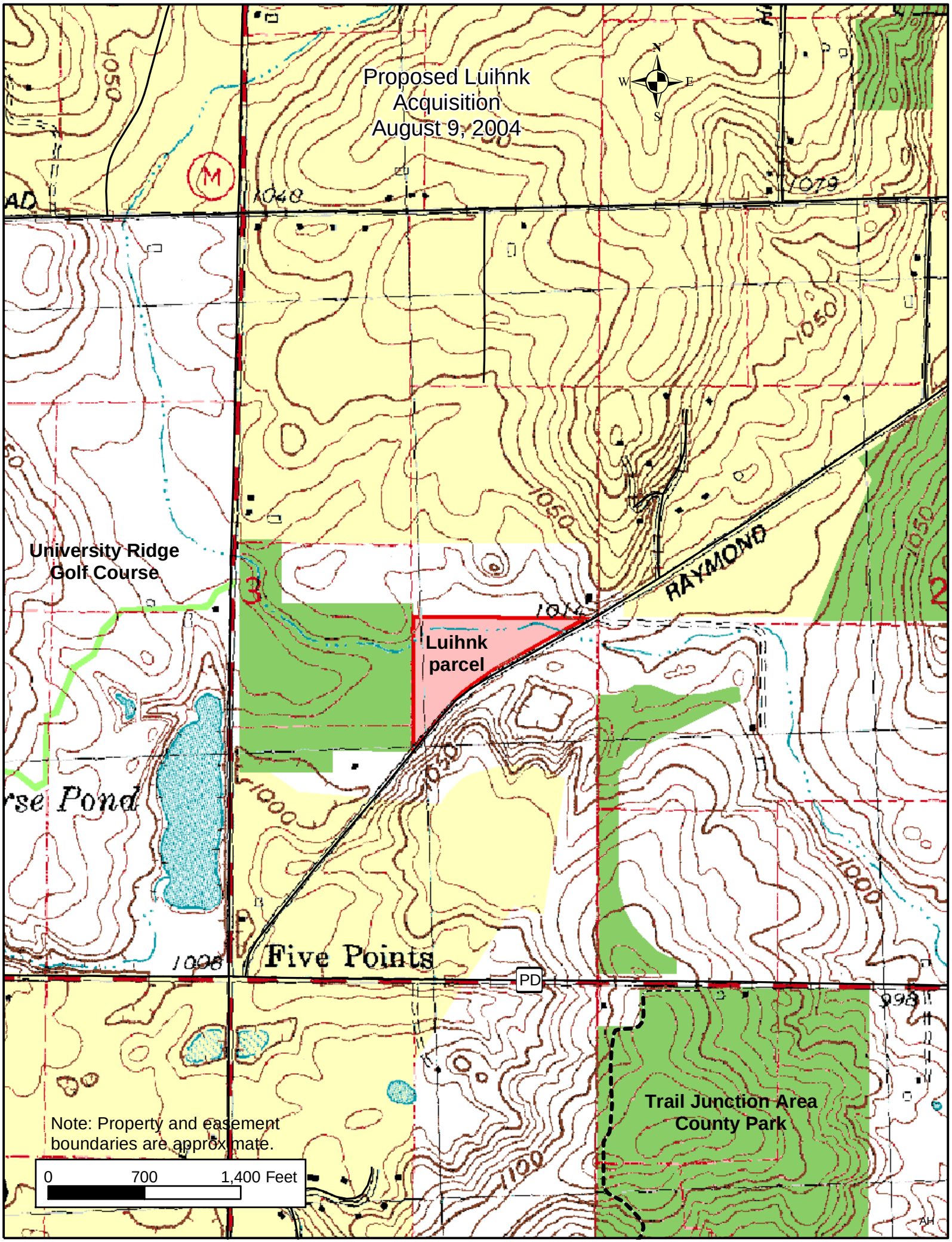
Helene G VanDer Stoep

APPROVED FOR RECORDING PER action of State Bank of Cross Plains (mortgagor) Aug 15, 1986

Gary DiPiazza AVP

DOCUMENT NO. 1958301

CERTIFIED SURVEY MAP NO. 6016 VOLUME 22 PAGE 226


Proposed Luihnk
Acquisition
August 9, 2004
N
W
E
S
University Ridge
Golf Course
Luihnk
parcel
RAYMOND
Five Points
PD
Trail Junction Area
County Park
Note: Property and easement
boundaries are approximate.
0
700
1,400 Feet

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Document Number

STATE BAR OF WISCONSIN FORM 2 - 1998

WARRANTY DEED

DANE COUNTY
REGISTER OF DEEDS

3249568

09-08-2000 1:20 PM

Trans. Fee EXEMPT #2
Rec. Fee 12.00
Pages 2

000670

Recording Area

Name and Return Address
ARDEN T. SANDSNES
ROYAL OAK ENGINEERING INC
5610 MEDICAL CIRCLE SUITE 6
MADISON WI 53719

This Deed, made between Dane County, a Wisconsin municipal corporation Grantor, and Midtown Madison Corp. Grantee.

Grantor, for a valuable consideration, conveys and warrants to Grantee the following described real estate in Dane County, State of Wisconsin:

See attached Exhibit A

0608 034 8501 0
Parcel Identification Number (PIN)

This is not homestead property.
(is) (is not)

Exceptions to warranties: Municipal and zoning ordinances; recorded easements; recorded building and use restrictions and covenants; and taxes, general and special, levied or assessed on or after January 1, 2000.

Dated this 6th day of September, 2000.

DANE COUNTY
By:
* Joseph T. Parisi, County Clerk
* Joseph T. Parisi

*
*

AUTHENTICATION

Signature(s) of Joseph T. Parisi

authenticated this 6th day of September, 2000

* Judith K. Nowak
TITLE: ~~MEMBER STATE BAR OF WISCONSIN~~
(If not, Notary Public, Wisconsin
authorized by § 706.06, Wis. Stats.)

THIS INSTRUMENT WAS DRAFTED BY

Thomas J. Sobota

(Signatures may be authenticated or acknowledged. Both are not necessary.)

ACKNOWLEDGMENT

STATE OF WISCONSIN)
) ss.
Dane County.)

Personally came before me this 6th day of Sept, 2000 the above named Joseph T. Parisi

to me known to be the person — who executed the foregoing instrument and acknowledged the same.

* Arden T. Sandsnes
Notary Public, State of Wisconsin
My Commission is permanent. (If not, state expiration date: 08-13, 2002)

*Names of persons signing in any capacity must be typed or printed below their signature.

WARRANTY DEED

STATE BAR OF WISCONSIN
FORM No. 2-1998

Produced with ZipForm™ by Vertisoft Inc. 18025 Fifteen Mile Road, Clinton Township, Michigan 48035, (800) 383-9805

Boardman, Suhr, Curry & Field LLP PO Box 927 Madison WI 53701-0927 Phone: 608 257-9521 Fax: 608 283-1709

07632160.UFD

2/12

EXHIBIT A

000671

Part of the Southwest 1/4 of the Northeast 1/4 of Section 03, Township 06 North, Range 08 East, Town of Verona, Dane County, Wisconsin, more fully described as follows:

Commencing at the North 1/4 corner of said Section 03;

Thence S 00°10'11" W, 2366.63 feet along the North-South 1/4 line of said Section 03;

Thence S 89°23'35" E, 208.31 feet to the point of beginning of this description;

Thence continue S 89°23'35" E, 160.02 feet;

Thence S 00°33'45" W, 226.89 feet;

Thence N 34°37'00" W, 277.74 feet to the point of beginning of this description.

Said parcel contains 18,153 square feet.

STATE BAR OF WISCONSIN FORM 2 - 1998

WARRANTY DEED

Document Number

DANE COUNTY
REGISTER OF DEEDS

3249567

09-08-2000 1:20 PM

Trans. Fee 21.00

Rec. Fee 12.00
Pages 2

000668

Recording Area

Name and Return Address
ARDEN T. SANDSNES
ROYAL OAK ENG
5610 MEDICAL CIRCLE #6
MADISON, WI 53719

0608 034 8501 0
Parcel Identification Number (PIN)

This is not homestead property.
(is) (is not)

This Deed, made between Midtown Madison Corp.

Grantor,

and Dane County, a Wisconsin municipal corporation

Grantee.

Grantor, for a valuable consideration, conveys and warrants to Grantee the following described real estate in Dane County, State of Wisconsin:

See attached Exhibit A

Exceptions to warranties: Municipal and zoning ordinances; recorded easements; recorded building and use restrictions and covenants; and taxes, general and special, levied or assessed on or after January 1, 2000.

Dated this 6th day of Sept, 2000.

MIDTOWN MADISON CORP.

By:

* David M. Roark, Authorized Agent

*

*

*

AUTHENTICATION

Signature(s) of David M. Roark

authenticated this 6th day of Sept, 2000

* ARDEN T. SANDSNES

TITLE: ~~MEMBER STATE BAR OF WISCONSIN~~
(If not, Notary Public, Wisconsin
authorized by § 706.06, Wis. Stats.)

THIS INSTRUMENT WAS DRAFTED BY

Thomas J. Sobota

(Signatures may be authenticated or acknowledged. Both are not necessary.)

ACKNOWLEDGMENT

STATE OF WISCONSIN)
) ss.
DANE County.)

Personally came before me this 6th day of Sept, 2000 the above named DAVID ROARK

to me known to be the person ——— who executed the foregoing instrument and acknowledged the same.

* ARDEN T. SANDSNES
Notary Public, State of Wisconsin
My Commission is permanent. (If not, state expiration date: Oct 13, 2002.)

*Names of persons signing in any capacity must be typed or printed below their signature.

WARRANTY DEED

STATE BAR OF WISCONSIN
FORM No. 2-1998

Produced with ZipForm™ by Vertisoft Inc. 18025 Fifteen Mile Road, Clinton Township, Michigan 48035, (800) 383-9805

Boardman, Suhr, Curry & Field LLP PO Box 927 Madison WI 53701-0927 Phone: 608 257-9521 Fax: 608 283-1709

05145702.UFD

1/2

EXHIBIT A

Part of the Southwest 1/4 of the Northeast 1/4 of Section 03, Township 06 North, Range 08 East, City of Madison, Dane County, Wisconsin, more fully described as follows:

Commencing at the North 1/4 corner of said Section 03;
Thence S 00°10'11" W, 2366.63 feet along the North-South 1/4 line of said Section 03;
Thence S 89°23'35" E, 368.33 feet;
Thence S 00°33'45" W, 226.89 feet to the point of beginning of this description;
Thence S 34°37'00" E, 277.74 feet;
Thence N 89°23'32" W, 160.02 feet;
Thence ~~continue~~ N 00°33'45" E, 226.89 feet to the point of beginning of this description.

Said parcel contains 18,153 square feet.

DOCUMENT NO.

2633737

STATE BAR OF WISCONSIN FORM 1—1982
WARRANTY DEED

THIS SPACE RESERVED FOR RECORDING DATA

REGISTER OF DEEDS
DANE COUNTY WI

94 SEP 23 PM 2:54

V28480P 21

RETURN TO Douglas Haag
Dane County Parks Department
4318 Robertson Road
Madison, WI 53714

This Deed, made between Wisconsin Capital Land Fund, L.P., Grantor, and Dane County, Grantee,

Witnesseth, That the said Grantor, for a valuable consideration of One Dollar ($1.00) and additional consideration conveys to Grantee the following described real estate in Dane County, State of Wisconsin:

Tax Parcel No:

See Exhibit A attached hereto and made a part hereof.

TRANSFER
$ 799.20 N
FEE PAID

By acceptance of this deed, the grantee, for itself and its successors and assigns hereby covenants and agrees not to sell, lease, assign or mortgage the premises herein described without the prior written approval of the Secretary of the Wisconsin Department of Natural Resources, his or her designee or successor.

This is not homestead property.
(~~is~~ (is not)

Together with all and singular the hereditaments and appurtenances thereunto belonging;
And Grantor warrants that the title is good, indefeasible in fee simple and free and clear of encumbrances except municipal and zoning ordinances, recorded easements for public utilities serving the property, recorded building and use restrictions and covenants, general taxes for 1994 and future years
and will warrant and defend the same.

Dated this 22 day of September 19 94

WISCONSIN CAPITAL LAND FUND, L.P.

By: Intervest Midwest Real Estate Corporation, its authorized agent

By: Barry L. Lazarus, President

(SEAL)

*

(SEAL)

*

(SEAL)

*

(SEAL)

*

AUTHENTICATION

Signature(~~s~~) of Barry L. Lazarus

authenticated this 22 day of Sept, 19 94

Jesse S. Ishikawa

* Jesse S. Ishikawa

TITLE: MEMBER STATE BAR OF WISCONSIN

(If not, authorized by § 706.06, Wis. Stats.)

THIS INSTRUMENT WAS DRAFTED BY

Jesse S. Ishikawa
Michael, Best & Friedrich
P.O. Box 1806, Madison, WI 53701-1806

(Signatures may be authenticated or acknowledged. Both are not necessary.)

ACKNOWLEDGMENT

STATE OF WISCONSIN } ss.
County.

Personally came before me this day of , 19 the above named

to me known to be the person who executed the foregoing instrument and acknowledge the same.

*

Notary Public County, Wis.
My Commission is permanent. (If not, state expiration date: , 19)

*Names of persons signing in any capacity should be typed or printed below their signatures.

EXHIBIT A

A parcel of land located in the Southwest 1/4 of the Northeast 1/4 and in the Northwest 1/4 of the Southeast 1/4 of Section 3, Town 6 North, Range 8 East, Town of Verona, Dane County, Wisconsin, to-wit: Commencing at the North quarter corner of said Section 3; thence N 88 degrees 53'11" E, 54.44 feet to the South quarter corner of Section 34, Town 7 North, Range 8 East; thence N 88 degrees 51'59" E, 1,271.00 feet; thence S 00 degrees 08'41" W, 2,860.83 feet to the point of beginning; thence continuing S 00 degrees 08'41" W, 96.00 feet; thence S 00 degrees 03'26" E, 980.78 feet; thence N 89 degrees 28'19" W, 598.68 feet; thence S 00 degrees 31'41" W, 162.80 feet; thence N 89 degrees 28'19" W, 670.56 feet; thence N 00 degrees 11'23" E, 1,145.20 feet; thence N 01 degree 13'47" E, 550.02 feet; thence S 89 degrees 23'26" E, 297.72 feet; thence S 00 degrees 36'34" W, 453.83 feet; thence S 89 degrees 23'26" E, 961.53 feet to the point of beginning.

147/147A

839-8545

EXHIBIT A

001043

?

Lazarus p.2 4 notes

Plat of Survey

SURVEYORS CERTIFICATE
STATE of WISCONSIN)
COUNTY of DANE) ss.

I hereby certify that this survey is in compliance with Chapter 236.34 of Wisconsin Statutes.

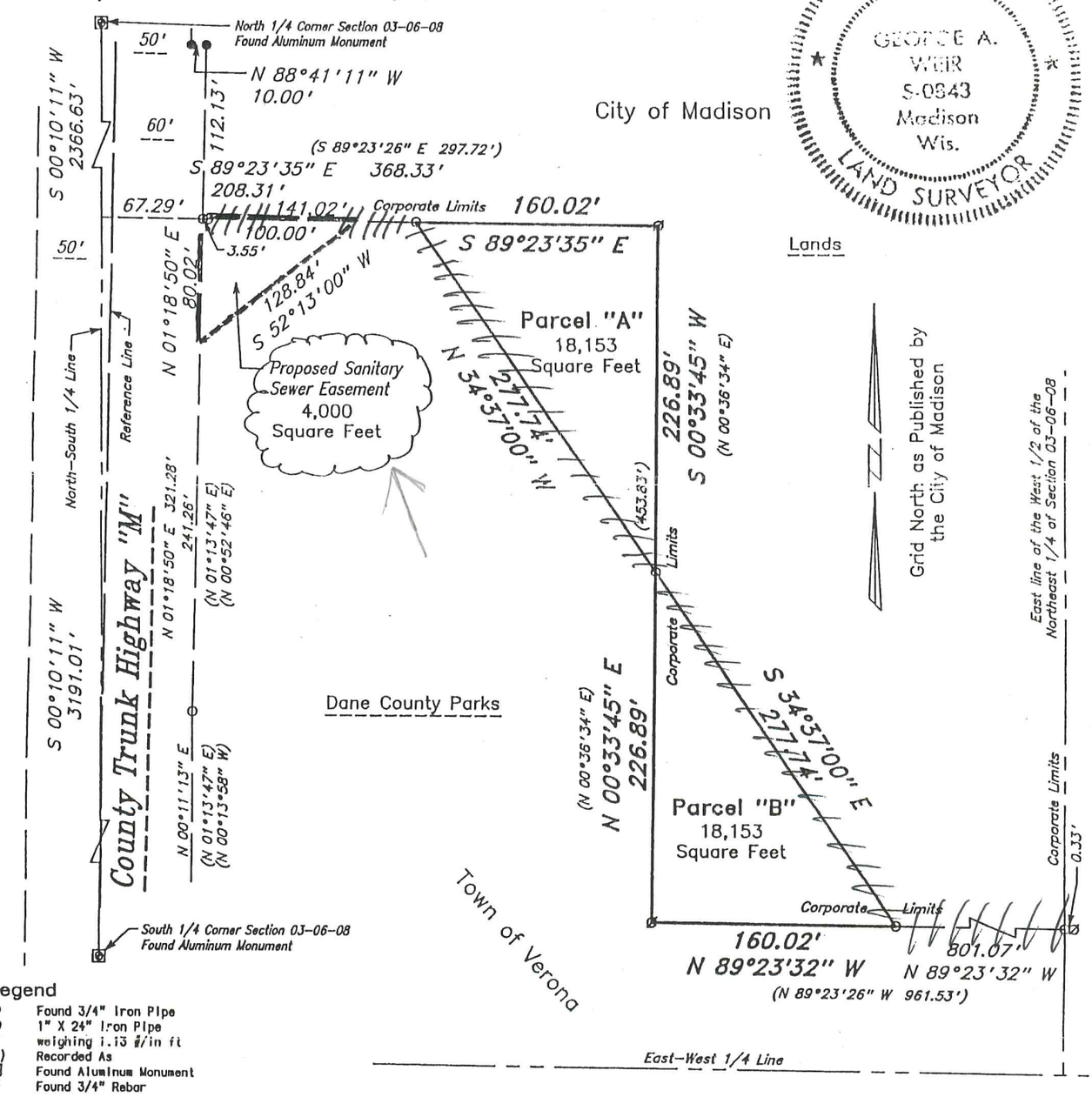
I further certify that I have surveyed and mapped the lands described hereon, and that this map is a correct representation in accordance with the information furnished.

George A Weir Nov 24, 00

George A. Weir, Professional Land Surveyor, S-0843

Royal Oak Engineering, Inc.
&
George A. Weir, Land Surveyor
5610 Medical Circle, Suite 6
Madison, Wisconsin 53719
Phone (608) 274-0500
Fax (608) 274-4530

WISCONSIN GEORGE A. WEIR S-0843 Madison Wis. LAND SURVEYOR



Legend
- ● Found 3/4" Iron Pipe
- O 1" X 24" Iron Pipe weighing 1.13 #/in ft
- ( ) Recorded As
- ⊠ Found Aluminum Monument
- Ø Found 3/4" Rebar

0 50 100 200
Scale 1" = 100'

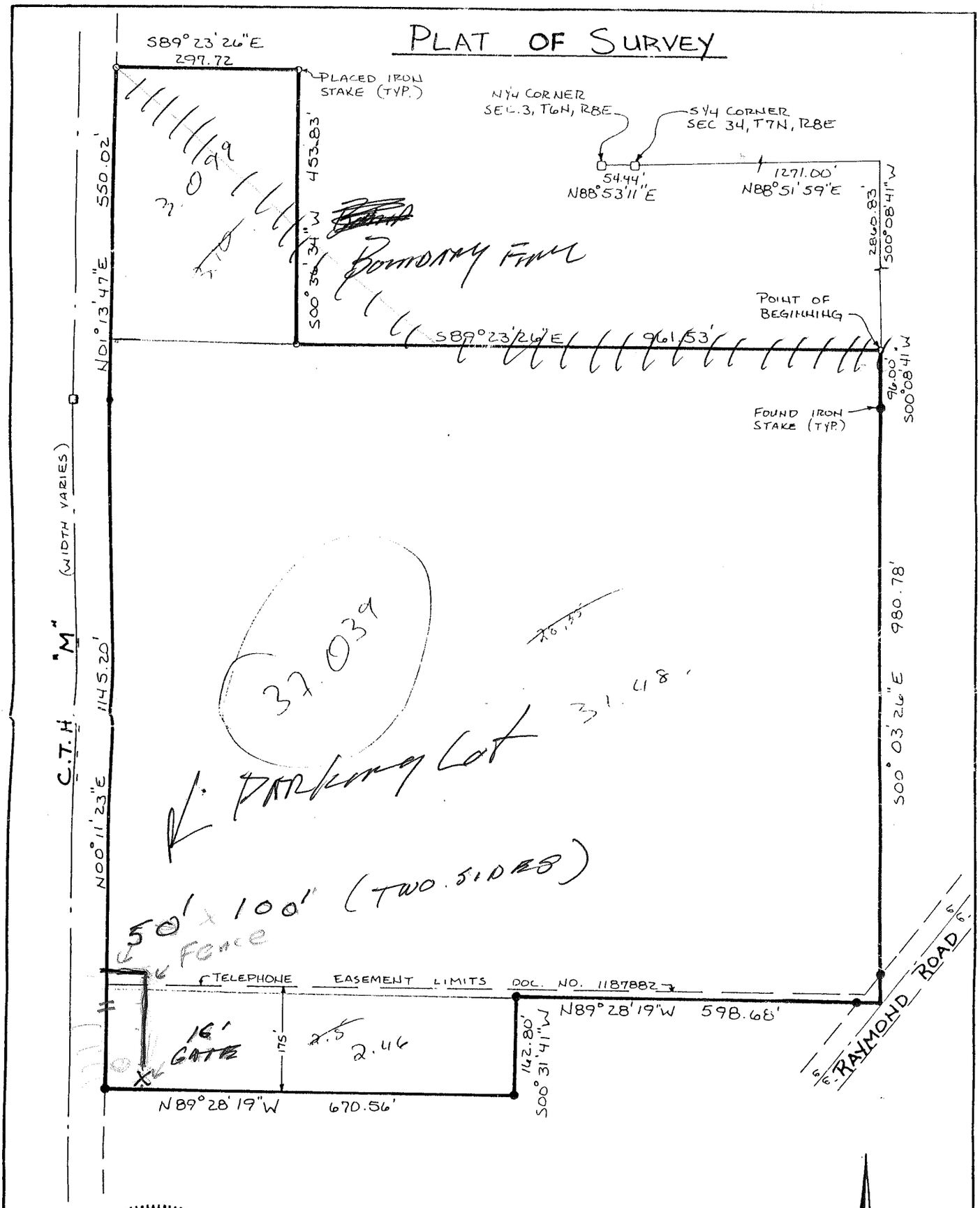
Surveyed By RP, EWS
Drawn By RP
Checked By
Approved By
Date of Survey March 23, 2000
Field Book 873 Pgs 1
Dir /data/dane/verona/
Dir cont. section03
Data Level(s) PLAT
File Name 14194

Office Map No. 14194
Sheet 1 of 2 Sheet(s)

FOR: Mr. David Roark
ADDRESS: 1009 South Whitney Way
Madison, Wisconsin 53711

DESCRIPTION-LOCATION: Part of the Southwest 1/4 of the Northeast 1/4 of Section 03, Township 06 North, Range 08 East, City of Madison and Town of Verona, Dane County, Wisconsin

PLAT OF SURVEY



WISCONSIN
RICHARD G. RASMUSSEN
S-1034
Madison
Wis.
LAND SURVEYOR

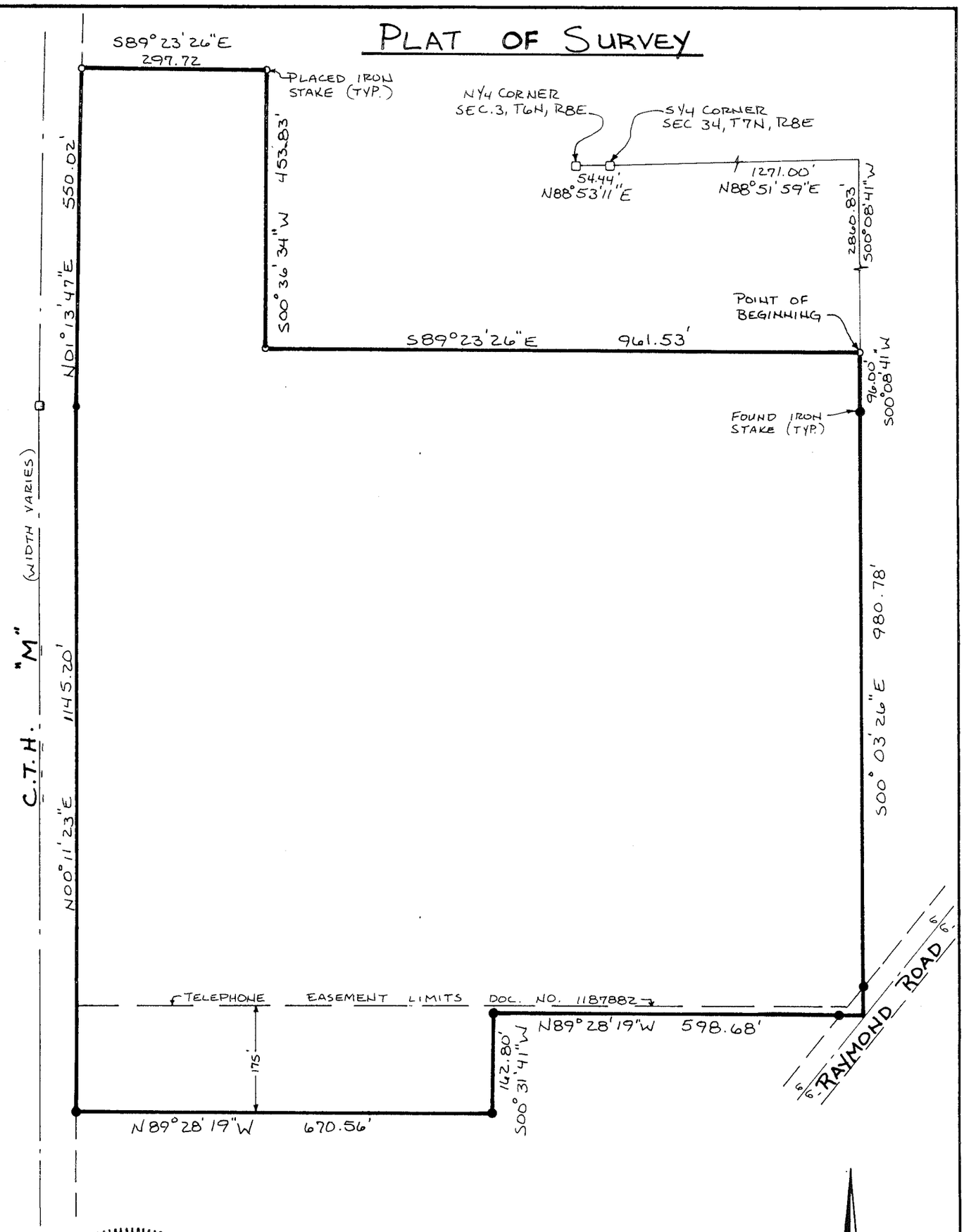
D'ONOFRIO KOTTKE AND ASSOCIATES, INC.
7530 WESTWARD WAY
MADISON, WISCONSIN 53717
PHONE: 608-833-7530

DATE: 9-12-94

SCALE: 1" = 200'

F.N.: 94-02-180

PLAT OF SURVEY



WISCONSIN
RICHARD G. RASMUSSEN
S-1034
Madison
Wis.
LAND SURVEYOR

D'ONOFRIO KOTTKE AND ASSOCIATES, INC.
7530 WESTWARD WAY
MADISON, WISCONSIN 53717
PHONE: 608-833-7530

DATE: 9-12-94

SCALE: 1" = 200'

F.N.: 94-02-180

LANDS TO BE ACQUIRED BY DANE COUNTY FOR PARK PURPOSES

A parcel of land located in the SW 1/4 of the NE 1/4 and in the NW 1/4 of the SE 1/4 of Section 3, T6N, R8E, Town of Verona, Dane County, Wisconsin, To-wit: Commencing at the north quarter corner of said Section 3; thence N88°53'11"E, 54.44 feet to the south quarter corner of Section 34, T7N R8E, thence N88°51'59"E, 1,271.00 feet; thence S00°08'41"W, 2,860.83 feet to the point of beginning; thence continuing S00°08'41"W, 96.00 feet; thence S00°03'26"E, 980.78 feet; thence N89°28'19"W, 598.68 feet; thence S00°31'41"W, 162.80 feet; thence N89°28'19"W, 670.56 feet; thence N00°11'23"E, 1,145.20 feet; thence N01°13'47"E, 550.02 feet; thence S89°23'26"E, 297.72 feet; thence S00°36'34"W, 453.83 feet; thence S89°23'26"E, 961.53 feet to the point of beginning. Containing 37.000 acres.

Note: This parcel is encumbered by a "blanket" easement including the entire parcel granted to Wisconsin, Power & Light (Volume 130, Misc. Page 27 as Document No. 598968).

SURVEYOR'S CERTIFICATE

I have surveyed the above described property and the map hereon is a true representation thereof and shows the size and location of the property, its exterior boundaries, the location and dimensions of all visible structures thereon, fences apparent easements and roadways and visible encroachments, if any. This survey is made the exclusive use of the present owners of the property, and also those who purchase, mortgage, or guarantee the title thereto within one (1) year from date hereof; and as to them I certify the accuracy of said survey and map.

Dated at Madison, Wisconsin, this 12 day of SEPTEMBER, 1994.

Richard G. Rasmussen, S-1034
Registered Land Surveyor

Surveyed For:

Dane County Park Commission
4318 Robertson Road
Madison, WI 53714

WISCONSIN
RICHARD G.
RASMUSSEN
S-1034
Madison
Wis.
LAND SURVEYOR

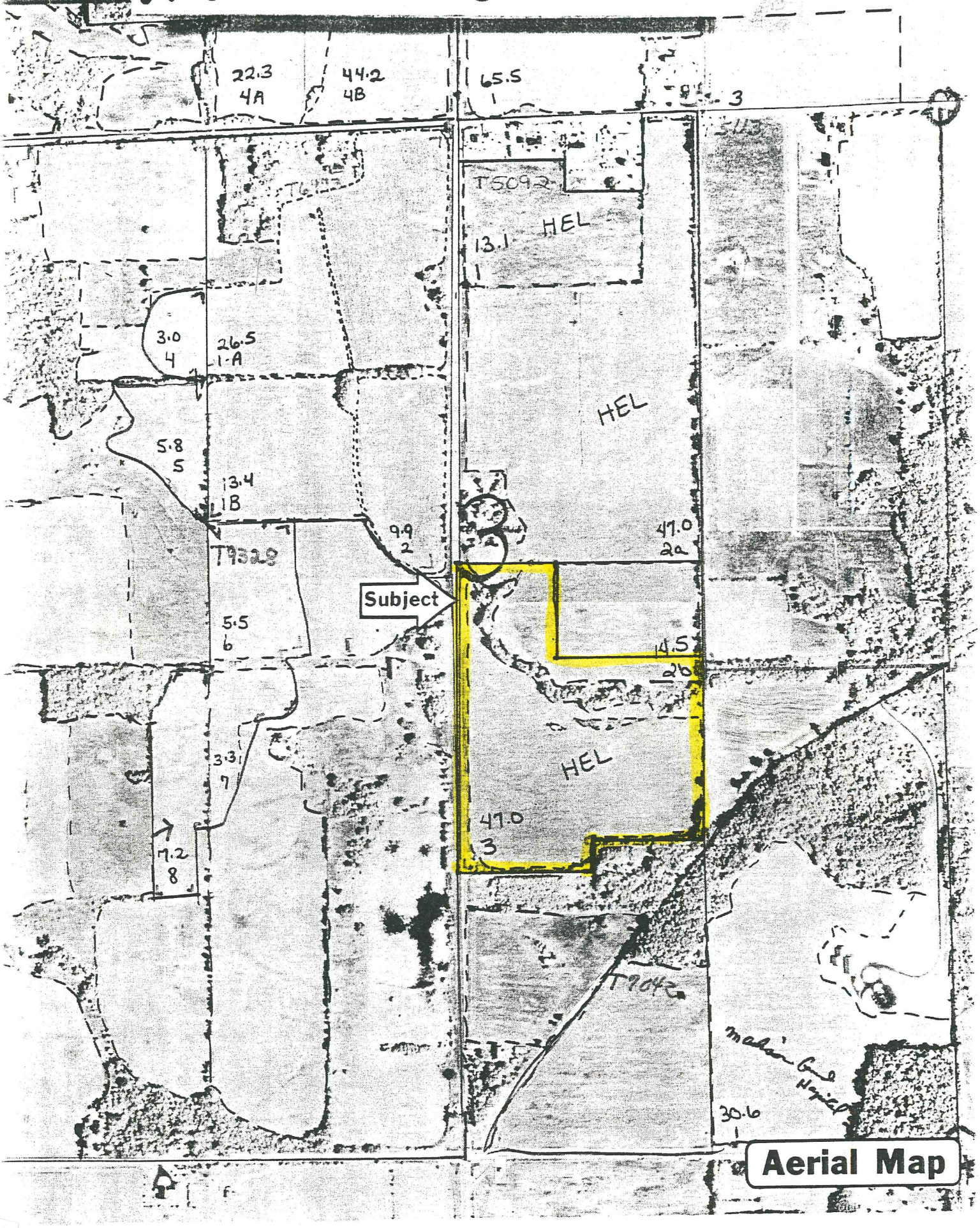
D'ONOFRIO KOTTKE
AND ASSOCIATES, INC.
7530 WESTWARD WAY
MADISON, WISCONSIN 53717
PHONE: 608-833-7530

DATE: 9-12-94

F.N.: 94-02-180

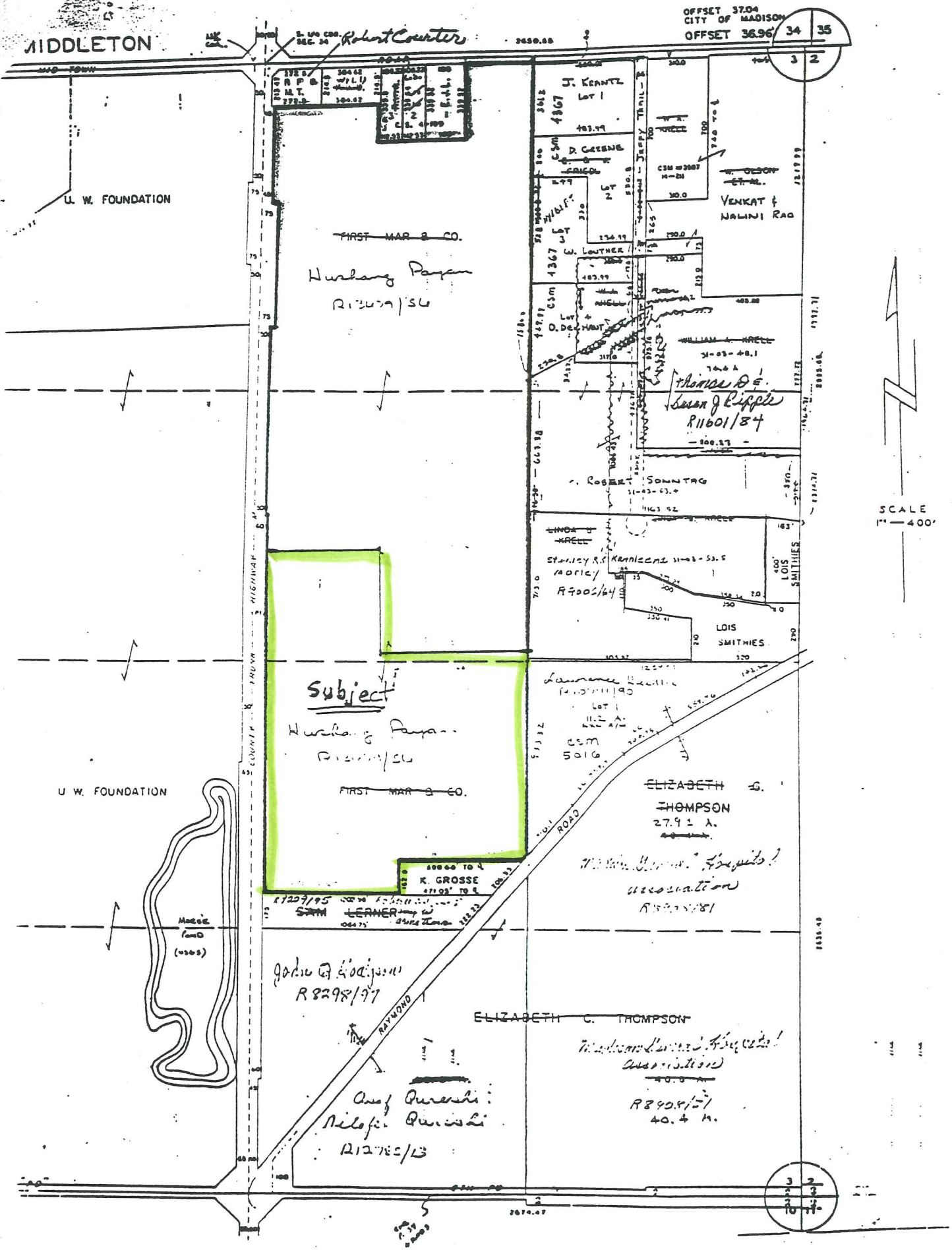
Verona

87 J·10 3 6 8



Aerial Map

C.3 T.6N. R.8E. Exhibit A



Section Map

State of Wisconsin
Department of Natural Resources
Box 7921
Madison, Wisconsin 53704

YOUR COPY

RECREATION AIDS GRANT AGREEMENT
OR PROJECT FUNDING AGREEMENT
8700-65 Rev. 9-93

Sponsor:	Project Number:
Dane County	UGS - 42

Project Title:

Dane County, Ice Age - Payan Acquisition

Period Covered By this Agreement:	Name of Program:
Date of approval through June 30, 1997	Urban Green Space Program

Project Scope and Description of Project:

The Dane County will participate in the Urban Green Space Program by providing the following items:

Dane County will purchase approximately 35 acres of land for public outdoor recreation purposes.

Project Cost:

Total Cost:	$ 266,400
Fund Support:	50%
State Aid Amount:	$ 133,200
Sponsor Share:	$ 133,200

The following documents are hereby incorporated into and made part of this agreement:

1. Chapter NR 50 , Wisconsin Administrative Code
2. Recreation Aids Application

1. The State of Wisconsin Department of Natural Resources (Department) and the Sponsor mutually agree to perform this agreement in accordance with the Urban Green Space Program and with the project proposal, application, terms, promises, conditions, plans, specifications, estimates, procedures, maps, and assurances attached hereto and made a part hereof.

2. The Department hereby promises, in consideration of the covenants and agreements made by the Sponsor herein, to obligate to the sponsor the amount of $133,200, and to tender to the Sponsor that portion of the obligation which is required to pay the Department's share of the costs based upon the state providing 50 percent of the eligible project costs. The Sponsor hereby promises, in consideration of the promises made by the Department herein, to execute the project described herein in accordance with this agreement.

3. The Sponsor agrees to comply with all applicable Wisconsin Statutes and Wisconsin Administrative Codes in fulfilling terms of this agreement. In particular, the Sponsor agrees to comply with the provisions of Chapter NR 50, Wis. Adm. Code, attached hereto and made a part hereof.

4. The Department agrees that the Sponsor shall have sole control of the method, hours worked, and time and manner of any performance under this agreement other than as specifically provided herein. The department reserves the right not only to inspect the job site or premises for the sole purpose of insuring that the performance is progressing or has been completed in compliance with the agreement. The Department takes no responsibility of supervision or direction of the performance of the agreement to be performed by the Sponsor or the sponsor's employees or agents. The Sponsor is an Independent Contractor for all purposes, not an employee or agent of the Department. The Department further agrees that it will exercise no control over the selection and dismissal of the Sponsor's employees or agents

5. This agreement, together with any referenced parts and attachments, shall constitute the entire agreement and previous communications or agreements pertaining to the subject matter of this agreement are hereby superseded. Any revisions, including cost adjustments, must be made by an amendment to this agreement or other written documentation, signed by both parties, prior to the termination date of the agreement. Time extensions to the agreement may be granted to the sponsor by the Department in writing without the requirements of Sponsor signature.

6. The sponsor may rescind this agreement in writing at any time prior to the starting of the project and before expending any funds. After the project has been started or funds expended, this agreement may be rescinded, modified, or amended only by mutual agreement in writing.

7. Failure by the Sponsor to comply with the terms of this agreement shall not cause the suspension of all obligations of the State hereunder if, in the judgement of the Secretary of the Department, such failure was due to no fault of the sponsor. In such case, any amount required to settle at minimum costs any irrevocable obligations properly incurred shall be eligible for assistance under this agreement, at the Department's discretion.

8. The Sponsor agrees, to save, keep harmless, defend and indemnify the Department and all its officers, employees and agents, against any and all liability claims, costs of whatever kind and nature, for injury to or death of any person or persons, and for loss or damage to any property (state or other) occurring in connection with or in any way incident to or arising out of the occupancy, use, service, operation or performance of work in connection with this agreement or omissions of Sponsor's employees, agents or representatives.

9. The Sponsor agrees to reimburse the Department of any and all funds the Department deems appropriate in the event the Sponsor fails to comply with the conditions of this agreement or project proposal as described, or fails to provide public benefits as indicated in the project application, proposal description or this agreement. In addition, should the Sponsor fail to comply with the conditions of this agreement, fail to progress due to nonappropriation of funds, or fail to progress with or complete the project to the satisfaction of the Department, all obligations of the Department under this agreement may be terminated, including further project cost payment.

- Other Conditions -

10. Property acquired or developed with assistance from this program shall not be converted to uses inconsistent with public outdoor recreation without the approval of this Department

11. All facilities constructed with assistance from this program must be accessible to persons with disabilities.

12. All existing overhead utility services if feasible shall be buried and any new utility services provided through this project must be installed underground.

13. The sponsor must assure compliance with the Historic Properties State Statute (s. 66.037) or have a clearance letter from the State Historic Preservation Officer.

14. The Sponsor agrees, to save, keep harmless, defend and indemnify the Department and all its officers, employees and agents, against any and all liability claims, costs of whatever kind and nature related to any and all environmental hazards associated with the purchase of property or rights in property that are purchased with Department grant funds, by the Sponsor.

15. The following special project terms and conditions were added to this agreement before it was signed by the parties hereto:

1. Acquisition of real property shall be in accordance with state guidelines for preparation of appraisals and relocation assistance.

2. The following clause must be entered in the deed: By the acceptance of this deed, the sponsor, for itself and its successors and assign, hereby covenants and agrees not to sell, lease, assign or mortgage the premises herein described without prior written approval of the Secretary of the Department of Natural Resources, his designee, or any successor.

The persons signing for the Sponsor represents both personally and as an agent of his or her principal that he or she is authorized to execute this agreement and bind his or her principal, either by a duly adopted resolution or otherwise.

By Kenneth L. Pa
(Signature)

Park Director
(Title)

12/2/94
(Date)

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
FOR THE SECRETARY

By Craig L. Karr
Craig L. Karr, Director
Bureau of Community Assistance

11-23-94
(Date)

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ATTACHMENT T-3:

Ice Age National Scenic Trail

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Wisconsin
Federal Highway Administration
Finding of *De Minimis* Impact on Parks, Recreation Areas and Wildlife and Waterfowl Refuges

WISDOT ID: 5992-06-51
Route: CTH M
Termini: Cross County Road to Prairie Hill Road
City/County: Dane County

Name of 4(f) Resource: Ice Age National Scenic Trail

Project description:

The state name for this project is South Pleasant View Road, City of Madison, County Highway M Reconstruction, Cross Country Road to Prairie Hill Road. This project involves a full reconstruction of the CTH M mainline and two intersections. An Environmental Assessment was conducted to satisfy NEPA requirements.

The CTH M corridor is a critical north/south roadway connecting the City of Madison and the City of Verona. The project limits are Cross Country Road to Prairie Hill Road, a distance of 2.9 miles. The proposed project is located in Dane County, Wisconsin in the cities of Madison and Verona and the Towns of Verona and Middleton.

The proposed improvements include expansion of CTH M from a two-lane highway to a 4 to 6-lane arterial roadway with a raised median and a multi-use path. Improvements are proposed for the intersections of CTH M – Midtown Road and CTH M – CTH PD. Improvements are proposed for the intersections of CTH M – Midtown Road and CTH M – CTH PD. This roadway is a principal arterial on the National Highways System (MAP-21).

This property is considered a Section 4(f) resource because it is part of the Ice Age National Scenic Trail and has been designated a recreation area. This property is also protected by Section 6(f).

To accommodate the CTH M roadway widening and the proposed pedestrian improvements near the CTH M – Flagstone Drive intersection, approximately 0.3 acres of right of way need to be acquired from the existing easement.

The Ice Age Trail crosses CTH M at-grade at the Flagstone Drive intersection connecting the Dane County Parkland parcel to the east and the University Ridge Golf Course Property to the west. The expansion of the roadway will impact the Ice Age Trail at this location regardless of where the roadway is constructed. Realigning the Ice Age Trail and providing a new connection under CTH M is necessary at Flagstone Drive.

Every attempt was made to minimize impacts to the Ice Age Trail easement. Specific measures taken include:

- Reduce the skew and provide grade-separated crossing at CTH M and Flagstone Drive that provides connectivity to the Ice Age National Scenic Trail
- Install a dodge way and signage on the west side of the proposed underpass at the Ice Age National Scenic Trail to deter bicycle use. Coordinate design and installation with the Ice Age Trail Alliance
- Minimize the length of trail that is concurrent with the multi-use path and connections to the multi-use path should be as close to perpendicular as possible to prevent use of the IAT by bicycles
- Amend the existing easement the Ice Age Trail Alliance has with the University of Wisconsin-Madison as necessary to insure connectivity to the proposed underpass
- Reducing overall roadway width by using acceptable standards for cross-section elements including lane, median, and terrace widths.

The attached documentation shows the following:

1.
    a. *What the activities, features, and attributes are that qualify Ice Age National Scenic Trail for protection under Section 4(f).*

    b. *What the transportation use of the Section 4(f) resource is.*

    c. *How this use does not adversely affect the activities, features, and attributes listed in 1.A., above. In making this determination, consideration may be given to any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project; and*

2. The Ice Age Trail Alliance has been informed that FHWA may make a *de minimis* finding under 4(f) and may use the Ice Age Trail Alliance's written concurrence that the project does not adversely affect the activities, features, and attributes listed in 1.A., above that qualify the property for protection under Section 4(f) in making that finding; and

3. The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource.

4. There are no federal encumbrances [such as 6(f)] on the Ice Age National Scenic Trail easement.

This *de minimis* documentation was reviewed and recommended for approval by

July 18, 2016
Date

[Name], WisDOT Bureau of Technical Services
Steven W. Krebs

This *de minimis* documentation was reviewed and approved by

9/20/16
Date

[Name], Federal Highway Administration
PETER M. GARCIA

Cc: WISDOT Bureau of Technical Services / Environmental Services Section WISDOT Region

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Kathleen M. Cryan
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Eric T. Pederson, P.S.
Financial Manager
Steven B. Danner-Rivers

September 8, 2015

National Park Service
Attn: Pamela Schuler, Manager, Ice Age NST
700 Rayovac Drive, Suite 100
Madison, WI 53711

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)
SECTION 4(F) PROTECTED RESOURCE –ICE AGE NATIONAL SCENIC TRAIL

The City of Madison, in partnership with the City of Verona and Dane County, is proposing roadway improvements to South Pleasant View Road/County Highway M (CTH M) from Cross Country Road to Prairie Hill Road, a distance of approximately three miles. The purpose of this proposed action is to address safety and operational deficiencies of the existing CTH M corridor, a National Highway System (NHS) route. Current and future projected traffic, bicycle, and pedestrian demand have mad the current facility functionally obsolete. The proposed action will provide a safe and serviceable corridor that is convenient for area businesses, residents, and the traveling public. This includes motor vehicles, bicyclists, pedestrians, and the potential for future transit routes. The proposed improvements consist of expanding CTH M from the existing two-lane rural highway to a multi-lane urban arterial roadway. Included with the proposed improvements are a raised median, curb and gutter, storm sewer, street lighting, sidewalks, and multi-use paths. The project will also include construction of a new storm sewer and sanitary sewer below Raymond Road, resulting in the reconstruction of Raymond Road as a rural highway. The culvert carrying Raymond Road over Badger Mill Creek will be reconstructed at the north end of the proposed sewer additions.

The proposed action is part of a multi-phase project to reconstruct the CTH M corridor, which includes reconstructing the Mid Town Road and CTH PD intersections. The action is also compatible with plans to reconstruct the CTH PD corridor, also an NHS route, as a four lane urban arterial.

The proposed action will impact the Ice Age National Scenic Trail (IANST). To accommodate the CTH M roadway improvements, approximately 0.3 acres of right-of-way will need to be acquired from an easement owned by the Ice Age Trail Alliance through University of Wisconsin owned property adjacent to CTH M. The 0.3 acres of easement impacted are located along the eastern edge of the OJ Noer-University of Wisconsin turf grass facility on the west side of CTH M, south of CTH M and Flagstone Drive intersection. The Ice Age Trail currently crosses CTH M at Flagstone Drive, and then follows this easement through the OJ Noer Turf Research Facility and University Ridge golf course. On the east side of CTH M, the IANST is located on Dane County Parkland where it continues east and crosses the proposed project at Raymond Road

near the existing drainage culvert over the Badger Mill Creek. This drainage culvert is proposed to be replaced with this project. Please see the enclosed exhibits that show the locations where the IANST crosses proposed highway improvement locations.

Project sponsors and design engineers have met with officials from the National Park Service, Ice Age Trail Alliance, and Dane County Parks to avoid, minimize, or mitigate effects of the highway improvements to the IANST in compliance with Section 4(f) requirements. These discussions have resulted in the following project elements that are also highlighted on the attached exhibits.

Ice Age National Scenic Trail (IANST) at CTH M & Flagstone Drive intersection:

- A box culvert underpass, approximately 150 feet in length and 14 feet wide, is proposed below CTH M to provide a grade separated crossing of CTH M for both the IANST and the City of Madison's Ice Age Junction paved multi-use path. This grade separated crossing will provide a safer crossing of CTH M for both trail and path users. The existing IANST alignment crosses CTH M at grade with no marked crosswalks or warning signs for vehicles. Trail users often walk along narrow shoulder of CTH M to reach the driveway for the OJ Noer Turf Resarch facility to reconnect with the IANST. The proposed underpass will include 24-hour lighting for safety.
- The IANST will run concurrently with the paved Ice Age Junction Path for approximately 400 feet, including the proposed underpass. IANST officials have indicated a desire to minimize this concurrent path distance to the extent practical. The design plans will include site grading and culvert pipe extensions to realign approximately 100 feet of the IANST to a perpendicular intersection with the paved path (desired by Ice Age Trail Alliance officials) and a shorter concurrent paved path length.
- Ice Age Trail Alliance officials have requested that the proposed project work include split rail (wood) fence "dodgeway" systems at the intersections of the IANST and paved path system to discourage bicycle and other prohibited uses of the IANST. The City of Madison has agreed to include "dodgeways" in the project plans. Ice Age Trail Alliance officials will provide design guidance and plan review of the "dodgeway" designs. The design will be similar to the split rail wood fence design in use where the Ice Age Trail crosses Woods Road west of the project limits.
- IANST officials have requested that the proposed project plans include signage marking the Ice Age Trail at the paved path intersections. National Park Service staff will provide sign design and specification guidance to the project team. The project plans will include trail route marker signs.
- City of Madison and project team staff will coordinate with University of Wisconsin officials and the Ice Age Trail Alliance to ensure that an update to the existing easement on University owned property is recorded. The proposed easement will be along the proposed CTH M right-of-way and will replace the existing easement already in place along CTH M. IANST officials prefer that the easement incorporates the maintenance vehicle bridge over Badger Mill Creek. The desire is to allow trail users access to the bridge to cross the creek. University officials have agreed to this use and will coordinate with project staff and Ice Age Trail officials on adding kick plates along the edge of the bridge. Ice Age Trail Alliance has indicated that 2x4 or 2x6 lumber along the edge, raised to allow drainage from the bridge surface is sufficient.

Ice Age National Scenic Trail (IANST) at Raymond Road:

- IANST officials would like the trail to cross Raymond Road as close to the existing alignment as possible. With the proposed structure, the trail will continue to cross from the northeast quadrant of the crossing to the southwest quadrant. Additional crosswalk markings for the Ice Age Junction paved path will not be provided for the IANST. IANST users will have access to the marked crosswalk for the adjacent Ice Age Junction Path. Sidewalk will be provided on both sides of Raymond Road across the culvert for both trail users and pedestrians accessing the Ice Age Junction Path.

- Raymond Road will be raised slightly, approximately one or two feet, to accommodate the proposed culvert structure. Ice Age Trail Alliance officials indicated a maximum approach grade to Raymond Road not to exceed 10% over a thirty foot distance.

Based on the coordination and involvement of National Park Service, Ice Age Trail Alliance, and Dane County Park officials during the project development process, and the impact minimization, adverse effect avoidance measures, and benefits to the IANST developed and proposed to be included in the project, a De Minimis Section 4(f) determination is planned to made by the Federal Highway Administration (FHWA) regarding the impacts to the Ice Age Trail National Scenic Trail. This letter requests formal concurrence from the National Park Service, as the official with jurisdiction, that the above referenced project will not have permanent adverse effects on the activities, features, or attributes that make the Ice Age National Scenic Trail eligible for Section 4(f) protection.

We ask for your formal concurrence at this time that the South Pleasant View Road Reconstruction Project (PROJECT ID: 5992-09-81) will not adversely affect the activities, features, or attributes that make the Ice Age Trail eligible for Section 4(f) protection by signing below:

I hereby acknowledge that the National Park Service, in partnership with the Ice Age Trail Alliance and Dane County Parks, has been afforded the opportunity for comment during project development and agree with efforts to mitigate and minimize adverse effects to the Ice Age National Scenic Trail. I further agree the project will not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection.

Sept 10 2015
Date

superintendent
National Park Service
John R. MAdden

Sincerely,

Robert F. Philips, P.E.
City Engineer

Enclosure

Cc: Kevin Thusius, Director of Land Conservation, Ice Age Trail Alliance
Chris James, Dane County Parks
Pam Dunphy, Deputy Commissioner, Dane County Public Works, Highway & Transportation
Karen Richardson, WisDOT Local Program Management Consultant
Jason DiPiazza (MSA Professional Services, Inc.)
Paul Chellevold, (SRF Consulting Group)

SRF Consulting Group, Inc.
ENGINEERS
PLANNERS
DESIGNERS

December 6, 2012 SRF No. 0107334

Mr. Anthony Fernandez
City Engineer
City-County Building, Room 115
210 Martin Luther King Jr. Boulevard
Madison, WI 53703

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)
4(F) PROPERTY COORDINATION – ICE AGE TRAIL

Dear Mr. Fernandez:

The City of Madison, in conjunction with the City of Verona and Dane County, is proposing roadway improvements to South Pleasant View Road (CTH M) from Cross Country Road to Prairie Hill Road, a distance of approximately three miles. The proposed improvements consist of expanding South Pleasant View Road initially from two to four lanes from Prairie Oaks Drive to Flagstone Drive with provisions to accommodate six lanes in the future. Flagstone Drive to Prairie Hill Road initially will be constructed with an additional northbound lane (three northbound lanes) and two southbound lanes, which will be able to accommodate a third southbound lane in the future if needed. The proposed project also includes expansion of the roadway to a multi-lane urban arterial with a raised median, bike lanes, a multi-use path, and sidewalks.

This action is part of a multi-phase project to reconstruct the CTH M corridor, which includes reconstructing the Mid Town Road intersection and provision of a roundabout at the CTH PD intersection. To accommodate the CTH M roadway expansion, approximately 0.3 acres of right-of-way will need to be acquired from the Ice Age Trail easement. The required property is located adjacent to CTH M, along the eastern edge of the OJ Noer turf grass facility just south of CTH M and Flagstone Drive intersection (please see attached 4(f) Properties Exhibit).

The Ice Age Trail property is considered a Section 4(f) resource since it has been designated as a recreation area by state or local agency and the official with jurisdiction. An initial review of the project impacts and proposed construction plans indicate that the impacts to the property will be minimal and will not alter or affect the park's use.

Under Section 4(f) of the U.S. Department of Transportation Act of 1966, the Federal Highway Administration (FHWA) "may not approve the use of land from a significant publicly-owned park, or recreation area" unless a determination is made that:

1) There is no feasible and prudent alternative to the use of land from the property
2) The action includes all possible planning to minimize harm to the property.

Federal law (SAFETEA-LU Section 6009(a)) amended Section 4(f) to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). FHWA has issued guidance for making *de minimis* impacts as follows:

1) An impact of a park, recreation area, or wildlife refuge may be determined to be de minimis if:
    a. The transportation use of the Section 4(f) resource, together with any impact, avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features and attributes that qualify the resource for protection under Section 4(f)
    b. The official with jurisdiction over the property are informed of FHWA's intent to make the *de minimis* impact finding based on their written concurrence that the project will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f); and
    c. The public has been afforded an opportunity to review and comment on the effects of the project

This letter is intended to serve as official consultation and coordination with the Ice Age Trail property. Regulations within US Department of Transportation FHWA, Section 4(f) Policy Paper – July 20, 2012, require a finding that the official with jurisdiction has been consulted and "has not objected." The regulations require concurrence of the official with jurisdiction in the following situations:

1) Finding there are no adverse effects prior to making *de minimis* impact findings
2) Applying the exception for temporary occupancies
3) Applying the exception for transportation enhancement activities and mitigation activities

At this time, we are requesting your comments regarding the potential *de minimis* impact determination to the Ice Age Trail property. Following consideration of your comments and consideration of public comments, we will consult with FHWA and they will make the final Section 4(f) determination. FHWA will inform the official with jurisdiction of their determination.

Once the *de minimis* determination has been made, the official with jurisdiction must concur in writing that the project will not affect the activities, features, or attributes that make the property eligible for Section 4(f) protection. The final determination regarding the subject property will be included in the Final Environmental Assessment (EA) document.

If you have any questions about the Section 4(f) process or would like to set up a meeting to help clarify the process, please call me at (608) 829-5875 or contact me by email at pchellevold@srfconsulting.com.

Sincerely,

Paul M. Chellevold
SRF Consulting Group, Inc.

Enclosure

January 27, 2012

Mr. Dunlop,

Please consider this email as the Ice Age Trail Alliance's (IATA) official comments regarding the South Pleasant Valley Rd/CTH M Project in Dane County.

First of all, the IATA appreciates the opportunity to comment on this project, and, our ability to meet previously with the City, County and MSA.

The IATA's comments revolve directly around the Ice Age National Scenic Trail (NST) crossing of CTH M. The Ice Age NST currently crossed at grade and we understand that the plans include an underpass crossing for the Ice Age NST and a bike path. The IATA strongly supports this portion of the plan. However, in order for the underpass to be useful for the Ice Age NST, it is vital the project include a mechanism for connecting the Ice Age NST with IATA's easement on the UW's Turf Grass Facility property. This will likely require an easement amendment. IATA requests that the necessary work required to be complete an easement amendment (or similar legal instrument) be performed by the City or the planners as part of the overall project.

Thank you for your time. If you have any questions or require further information, do not hesitate to ask.

Regard,
Kevin

Kevin Thusius
Director of Land Conservation

ICE AGE TRAIL
ALLIANCE

Ice Age Trail Alliance

2110 Main Street, Cross Plains, WI 53528
608-798-4453 x 26 (p) • 800-227-0046 (p) • 608-798-4460 (f)

Working since 1958 to create, support and protect the Ice Age National Scenic Trail
Please join or renew today at www.iceagetrail.org

ID 5992-09-81
S. Pleasant View Road Reconstruction
(Prairie Hill Road to Cross Country Road)
CTH M

Dane County Parks and IAT Meeting – September24, 2014

ATTENDEES

Name / Representing	Email and Phone Number
1. JASON DiPIAZZA MSA	jdi.piazza@msa-ps.com 608 242 6640
2. Kevin Thusius IATA	kevin@icegetrail.org
3. John MAdden Nat. Park Svc	john_madden@nps.gov
4. Pam Schuler, Nat. Park Ser.	pam_schuler@nps.gov
5. Tony Fernandez - City of Madison	AFernandez@cityofmadison.com
6. Chris Petykowski City of Madison	cpetykowski@cityofmadison.com 267-8678
7. JAN ZIMMERMANN DANE CO.	ZIMMERMANN.JAN@COUNTYOFDANE.COM 224-3761
8. CHRIS JAMES / DCP	JAMES@COUNTYOFDANE.COM 224-3763
9.	
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MSA
PROFESSIONAL SERVICES
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ID 5992-09-81
S. Pleasant View Road Reconstruction
(Prairie Hill Road to Cross Country Road)
CTH M
Dane County

Dane County Parks and IAT Meeting

Wednesday September 24, 2014

Meeting Time: 8:30 AM
Meeting Location: City County Building, **Room 118 (Engineering Conference Room)**

AGENDA

Meeting focus: CTH M impacts and R/W needs from Dane County Parks and Ice Age Trail

I. Project Review/Recap	A. Limits/Scope/ Typical section/ Schedule	A. Review project
II. Project impacts to Dane County Park	A. R/W Needs	A. Wider section, R/W for roadway and ATC facilities
	B. Easement needs	B. Permanent Easement: Multi-use path Temporary Easement: Grading
	C. Drainage	C. Re-work of the small retention pond at the cross culvert
	D. Review impact mitigation letter	D. (handout)
	E. Utility impacts	E. ATC, Alliant Energy, TDS relocations anticipated
III. Project impacts to Ice Age Trail	A. Multi-use path tunnel	A. New crossing option for IAT users. Discuss how to tie into this path and crossing.
	B. Impacts to easement	B. Include easement for IAT on the Transportation Project Plat
	C. Use of OJ Noer Bridge	C. Discuss options within CTH M R/W

IV. Other?

MINUTES

(Also, see attached follow up email correspondence with notes from meeting attendees)

I.A.

Jason provided attendees with a brief recap of the project, overview of the design and design objectives and answered questions about the plan view layout.

II. A & B

The project will require real estate acquisition from Dane County Parks land. The current estimate is approximately 0.5 acres of highway right-of-way, 1 acre of permanent easement, and 1.5 acres of temporary easement for grading and construction needs. The permanent easement estimate is for construction and maintenance of the 10' multi-use path along the east side of CTH M. The path will be constructed on a 15' easement along the edge of the CTH M highway right-of-way. Chris James also requested that the prairie area be protected/isolated from the construction by temporary fencing (orange safety fence is acceptable).

ATC will be relocating their overhead power distribution poles into the terrace area between the multi-use path and CTH M roadway. The poles will be located in the CTH M highway R/W. This location will minimize the amount of aerial easement that ATC requires for their facilities.

Jan Zimmerman said she would research the grant funding that was used to fund the purchase of the Dane County Park land.

Chris James would like to see grading impacts to the restored prairie along the east side of CTH M completed under the guidance of Dane County Parks. The letter provided by Dane County Parks on January 23, 2013, requested funds to restore the disturbed prairie with Dane County or Dane County hired crews. The group developed on idea for the work to be completed by a Dane County Parks approved contractor with inspection and acceptance of the restored prairie area to be provided by Dane County Parks staff. Chris James noted that he could provide a list of 3 approved contractors and assist in developing the specs and design details for the restoration work. Chris James was also willing to review an "approved equal" contractor other than the 3 necessary for inclusion in the specs.

II. C

The group discussed impacts to the small pond at the east (outlet) end of the CTH M culvert crossing. The slope intercepts for the current roadway design would fill most of this pond. Chris James expressed a preference for grading and reestablishing the small pond near its current location with the project. This would be an aesthetic benefit for both the multi-use path and the Ice Age Trail. This alternative was preferred to constructing a retaining wall to maintain the pond its current location. Another alternative would be to construct a wetland scrape along the southeast edge of the park property. This was the alternative originally noted in the letter provided by Dane County Parks on January 23, 2013.

II. D See above for items in this letter that were discussed.

II. E. Specific utility impacts and relocations were not discussed.

III. A

The Ice Age Trail Alliance (IAT) is still agreeable to utilizing the multi-use path grade separation (box culvert) to cross below CTH M. They want to minimize the length of trail that is concurrent with the multi-use path and connections to the multi-use path should be as close to perpendicular as possible to prevent use of the IAT by bicycles.

The group discussed design concepts for the multi-use path box culvert. The group wanted to see options for reducing the skew of the crossing. This will shorten the tunnel and possibly allow for a natural light skylight to be incorporated in the design (tunnel must cross below a raised median). The reduced skew would put the west end closer to the IAT alignment through the OJ Noer Turf Research land. Jason and Chris Petykowski noted that the skew was designed this way to limit the amount of impact to OJ Noer. Reducing the skew (squaring up the path) may require more R/W from OJ Noer. This land cannot be condemned. Jason agreed to explore design alternatives that will reduce the skew.

Tony Fernandez reiterated the design standards for the box culvert:

1. Minimum of 9' high above the 10' wide path section (the clearance can be reduced along the edges for lights and structure haunches)
2. Minimum 14' wide
3. The preference is to have the path at an elevation of 1' above the 100 year flood elevation for the drainage way. At the 100' year flood elevation would be acceptable. Anything lower should be discussed. There are issues, especially with path clean up and maintenance if it is any lower.

IAT wants to include dodge ways at the locations where the IAT breaks off from the multi-use path. They don't have a standard design, but are happy with the one constructed where the IAT crosses Woods Road, which is a split rail fence design. MSA will investigate these details for including in the plan. MSA indicated that signage could be considered for inclusion in the plans. IAT signs should be 18x24 inches. Kevin Thusius and National Parks Service offered to help by providing the sign design and logos and review of the placement. Trail markers should also be included.

IAT indicated that standard pedestrian standards for grade should be used if possible.

III.B.

The group discussed how to address the IAT easement. IAT's preferences are:

1. Be located outside the CTH M R/W. Being located within the highway R/W requires the IAT to obtain permits for any trail maintenance work needed within the R/W
2. IAT does not want a separate easement from UW due to insurance and other regulatory issues required for each easement.
3. The easiest alternative in IAT's view is to update the current easement to relocate it outside the potential R/W location. MSA/City of Madison will follow up with real estate staff to see if this is a possibility. This will have to be document well in the EA to clearly note that this was not done to avoid having to acquire the IAT easement with the project.
4. Another alternative that should be explored is to have the City of Madison purchase easement along the CTH M R/W for IAT use. This will also have to be run by UW and real estate staff.

NOTE: The IAT did not use federal LWCF funds for purchasing the easement along CTH M.

III.C.

IAT would still like to utilize the OJ Noer bridge to cross the drainage way. Chris Petykowski indicated that he had talked to UW about this and didn't think it would be an issue.

OTHER

The group discussed the impacts to the IAT at the Raymond Road crossing. The City of Madison will reconstruct this crossing. The IAT crosses Raymond Road near where the drainage way crosses Raymond Road. The City of Madison will be reconstructing this structure which will affect the IAT crossing. IAT was agreeable to shifting their trail east to get up onto Raymond Road. This shift should be minimized to keep the IAT within Dane County Park land and still provide a wooded buffer between it and the future extension of Jeffy Trail (new City of Madison

Street that is budgeted for completion in 2015). The IAT will utilize the sidewalk on the Raymond Road bridge before crossing Raymond Road and continuing on parallel to the multi-use path (Ice Age Junction Path). Tony recommended that the IAT use the multi-use path crossing to keep roadway crossings to a minimum.

Chris James offered to IAT to use the recently constructed multi-use path bridge to cross the waterway. IAT would prefer to provide spur trail markings here for a future trail head parking area but keep the IAT separate from the multi-use path as long as possible. They anticipate a high volume of bike traffic on the multi-use path.

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ATTACHMENT T-4:

Temporary Occupancy: Ice Age National Scenic Trail

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Christopher J. Petykowski, P.E.
Facilities & Sustainability
Jeanne E. Hoffman, Manager
Operations Manager
Kathleen M. Cryan
Mapping Section Manager
Eric T. Pederson, P.S.
Financial Manager
Steven B. Danner-Rivers

September 8, 2015

National Park Service
Attn: Pamela Schuler, Manager, Ice Age NST
700 Rayovac Drive, Suite 100
Madison, WI 53711

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)
SECTION 4(F) PROTECTED RESOURCE –ICE AGE NATIONAL SCENIC TRAIL

The City of Madison, in partnership with the City of Verona and Dane County, is proposing roadway improvements to South Pleasant View Road/County Highway M (CTH M) from Cross Country Road to Prairie Hill Road, a distance of approximately three miles. The purpose of this proposed action is to address safety and operational deficiencies of the existing CTH M corridor, a National Highway System (NHS) route. Current and future projected traffic, bicycle, and pedestrian demand have mad the current facility functionally obsolete. The proposed action will provide a safe and serviceable corridor that is convenient for area businesses, residents, and the traveling public. This includes motor vehicles, bicyclists, pedestrians, and the potential for future transit routes. The proposed improvements consist of expanding CTH M from the existing two-lane rural highway to a multi-lane urban arterial roadway. Included with the proposed improvements are a raised median, curb and gutter, storm sewer, street lighting, sidewalks, and multi-use paths. The project will also include construction of a new storm sewer and sanitary sewer below Raymond Road, resulting in the reconstruction of Raymond Road as a rural highway. The culvert carrying Raymond Road over Badger Mill Creek will be reconstructed at the north end of the proposed sewer additions.

The proposed action is part of a multi-phase project to reconstruct the CTH M corridor, which includes reconstructing the Mid Town Road and CTH PD intersections. The action is also compatible with plans to reconstruct the CTH PD corridor, also an NHS route, as a four lane urban arterial.

The proposed action will impact the Ice Age National Scenic Trail (IANST). To accommodate the CTH M roadway improvements, approximately 0.3 acres of right-of-way will need to be acquired from an easement owned by the Ice Age Trail Alliance through University of Wisconsin owned property adjacent to CTH M. The 0.3 acres of easement impacted are located along the eastern edge of the OJ Noer-University of Wisconsin turf grass facility on the west side of CTH M, south of CTH M and Flagstone Drive intersection. The Ice Age Trail currently crosses CTH M at Flagstone Drive, and then follows this easement through the OJ Noer Turf Research Facility and University Ridge golf course. On the east side of CTH M, the IANST is located on Dane County Parkland where it continues east and crosses the proposed project at Raymond Road

near the existing drainage culvert over the Badger Mill Creek. This drainage culvert is proposed to be replaced with this project. Please see the enclosed exhibits that show the locations where the IANST crosses proposed highway improvement locations.

Project sponsors and design engineers have met with officials from the National Park Service, Ice Age Trail Alliance, and Dane County Parks to avoid, minimize, or mitigate effects of the highway improvements to the IANST in compliance with Section 4(f) requirements. These discussions have resulted in the following project elements that are also highlighted on the attached exhibits.

Ice Age National Scenic Trail (IANST) at CTH M & Flagstone Drive intersection:

- A box culvert underpass, approximately 150 feet in length and 14 feet wide, is proposed below CTH M to provide a grade separated crossing of CTH M for both the IANST and the City of Madison's Ice Age Junction paved multi-use path. This grade separated crossing will provide a safer crossing of CTH M for both trail and path users. The existing IANST alignment crosses CTH M at grade with no marked crosswalks or warning signs for vehicles. Trail users often walk along narrow shoulder of CTH M to reach the driveway for the OJ Noer Turf Resarch facility to reconnect with the IANST. The proposed underpass will include 24-hour lighting for safety.
- The IANST will run concurrently with the paved Ice Age Junction Path for approximately 400 feet, including the proposed underpass. IANST officials have indicated a desire to minimize this concurrent path distance to the extent practical. The design plans will include site grading and culvert pipe extensions to realign approximately 100 feet of the IANST to a perpendicular intersection with the paved path (desired by Ice Age Trail Alliance officials) and a shorter concurrent paved path length.
- Ice Age Trail Alliance officials have requested that the proposed project work include split rail (wood) fence "dodgeway" systems at the intersections of the IANST and paved path system to discourage bicycle and other prohibited uses of the IANST. The City of Madison has agreed to include "dodgeways" in the project plans. Ice Age Trail Alliance officials will provide design guidance and plan review of the "dodgeway" designs. The design will be similar to the split rail wood fence design in use where the Ice Age Trail crosses Woods Road west of the project limits.
- IANST officials have requested that the proposed project plans include signage marking the Ice Age Trail at the paved path intersections. National Park Service staff will provide sign design and specification guidance to the project team. The project plans will include trail route marker signs.
- City of Madison and project team staff will coordinate with University of Wisconsin officials and the Ice Age Trail Alliance to ensure that an update to the existing easement on University owned property is recorded. The proposed easement will be along the proposed CTH M right-of-way and will replace the existing easement already in place along CTH M. IANST officials prefer that the easement incorporates the maintenance vehicle bridge over Badger Mill Creek. The desire is to allow trail users access to the bridge to cross the creek. University officials have agreed to this use and will coordinate with project staff and Ice Age Trail officials on adding kick plates along the edge of the bridge. Ice Age Trail Alliance has indicated that 2x4 or 2x6 lumber along the edge, raised to allow drainage from the bridge surface is sufficient.

Ice Age National Scenic Trail (IANST) at Raymond Road:

- IANST officials would like the trail to cross Raymond Road as close to the existing alignment as possible. With the proposed structure, the trail will continue to cross from the northeast quadrant of the crossing to the southwest quadrant. Additional crosswalk markings for the Ice Age Junction paved path will not be provided for the IANST. IANST users will have access to the marked crosswalk for the adjacent Ice Age Junction Path. Sidewalk will be provided on both sides of Raymond Road across the culvert for both trail users and pedestrians accessing the Ice Age Junction Path.

- Raymond Road will be raised slightly, approximately one or two feet, to accommodate the proposed culvert structure. Ice Age Trail Alliance officials indicated a maximum approach grade to Raymond Road not to exceed 10% over a thirty foot distance.

Based on the coordination and involvement of National Park Service, Ice Age Trail Alliance, and Dane County Park officials during the project development process, and the impact minimization, adverse effect avoidance measures, and benefits to the IANST developed and proposed to be included in the project, a De Minimis Section 4(f) determination is planned to made by the Federal Highway Administration (FHWA) regarding the impacts to the Ice Age Trail National Scenic Trail. This letter requests formal concurrence from the National Park Service, as the official with jurisdiction, that the above referenced project will not have permanent adverse effects on the activities, features, or attributes that make the Ice Age National Scenic Trail eligible for Section 4(f) protection.

We ask for your formal concurrence at this time that the South Pleasant View Road Reconstruction Project (PROJECT ID: 5992-09-81) will not adversely affect the activities, features, or attributes that make the Ice Age Trail eligible for Section 4(f) protection by signing below:

I hereby acknowledge that the National Park Service, in partnership with the Ice Age Trail Alliance and Dane County Parks, has been afforded the opportunity for comment during project development and agree with efforts to mitigate and minimize adverse effects to the Ice Age National Scenic Trail. I further agree the project will not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection.

Sept 10 2015
Date

superintendent
National Park Service
John R. MAdden

Sincerely,

Robert F. Philips, P.E.
City Engineer

Enclosure

Cc: Kevin Thusius, Director of Land Conservation, Ice Age Trail Alliance
Chris James, Dane County Parks
Pam Dunphy, Deputy Commissioner, Dane County Public Works, Highway & Transportation
Karen Richardson, WisDOT Local Program Management Consultant
Jason DiPiazza (MSA Professional Services, Inc.)
Paul Chellevold, (SRF Consulting Group)

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ATTACHMENT T-5:

Temporary Occupancy: Unnamed Path

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Operations Manager
Kathleen M. Cryan
Mapping Section Manager
Eric T. Pederson, P.S.
Financial Manager
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July 7, 2015

Jason DiPiazza, PE
Project Manager, MSA Professional Services, Inc.
2901 International Lane, Suite 300
Madison, WI 53704

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY HIGHWAY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)
4(F) PROPERTY COORDINATION – INEICHEN DRIVE RECREATIONAL PATH

Dear Mr. DiPiazza

In my role as the official with jurisdiction over the City of Madison's recreational path system, I am writing to you on behalf of the City of Madison with regards to the proposed actions of the subject project. After reviewing the above proposed project, ID 5992-09-81, CTH M, Dane County and allowing the public the opportunity to review and comment on the effects of the project, it is our opinion that this project will not have any adverse effects on the City of Madison's Ice Age Junction Path that currently terminates near the intersection of Flagstone Drive and CTH M.

As a representative of the City of Madison, a project sponsor, I have attended regular project design development meetings. It is understood that the following paragraphs represent the general concept of the proposed action and incorporate avoidance, minimization, and mitigation elements developed in cooperation with City of Madison officials. With this understanding, the City of Madison believes the proposed action will have no permanent adverse physical impacts, nor will there be any interference with the protected activities, features, or attributes that make the Ice Age Junction Path eligible for Section 4(f) protection.

The proposed action includes constructing a widened, urban arterial roadway with curb and gutter, raised median, storm sewer, sanitary sewer, water service, and street lighting along the existing CTH M alignment. A ten foot wide paved multi-use path will be constructed parallel to CTH M between Ineichen Drive and Waterbend Drive. The proposed project will include a grade separated crossing built for the Ice Age Junction Path to provide a safe crossing of the path below CTH M. The proposed project will also include a paved ten-foot wide path along the west side of CTH M that will extend the Ice Age Junction Path system to just past Waterbend Drive. Included in this stretch is a second graded separated crossing constructed for the path below the west leg of the Mid Town Road intersection. The paved path constructed with this project will end north of Waterbend Drive where it will be constructed as part of planned development at the north end of the proposed project. The proposed project will provide an off-highway paved path network between the cities of Verona, Madison, and Middleton.

The City of Madison has requested the inclusion of the proposed path with the project. Impacts to the existing path terminus will include a saw cut and minor regrading near the path. A spur path already exists providing path users a route to Flagstone Drive, which is a residential street suitable for bicycle riders. Permanent land acquisition is not required from the existing path location as it is located on City of Madison owned property.

To summarize, the City of Madison, as a project stakeholder, has reviewed the proposed action and has been actively engaged in the project's public involvement process. The City of Madison understands that the Federal Highway Administration (FHWA) plans to make a De Minimis Section 4(f) determination regarding the impacts to the Ice Age Junction Path. The City of Madison concurs with that determination and anticipates that the proposed action will have no permanent adverse physical impacts, nor will there be any interference with the protected activities, features, or attributes that make the Ice Age Junction Path eligible for Section 4(f) protection.

Sincerely,

Robert F. Phillips, P.E.
City Engineer

RFP: CJP

verona

CITY OF VERONA
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JULY 10, 2015

Jason DiPiazza, PE
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SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY HIGHWAY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)
4(F) PROPERTY COORDINATION – INEICHEN DRIVE RECREATIONAL PATH

Dear Mr. DiPiazza

In my role as the official with jurisdiction over the City of Verona's recreational path system, I am writing to you on behalf of the City of Verona with regards to the proposed actions of the subject project. After reviewing the above proposed project, ID 5992-09-81, CTH M, Dane County and allowing the public the opportunity to review and comment on the effects of the project, it is our opinion that this project will not have any adverse effects on the City of Verona recreational path along the south side of Ineichen Drive that terminates at the intersection of Ineichen Drive and CTH M.

As a representative of the City of Verona, a project sponsor, I have attended regular project design development meetings. It is understood that the following paragraphs represent the general concept of the proposed action and incorporate avoidance, minimization, and mitigation elements developed in cooperation with City of Verona officials. With this understanding, the City of Verona believes the proposed action will have no permanent adverse physical impacts, nor will there be any interference with the protected activities, features, or attributes that make the paved recreational path along Ineichen Drive eligible for Section 4(f) protection.

The proposed action includes constructing a widened, urban arterial roadway with curb and gutter, raised median, storm sewer, sanitary sewer, water service, and street lighting along the existing CTH M alignment. A ten foot wide paved multi-use path will be constructed parallel to CTH M between Ineichen Drive and Waterbend Drive. The proposed project will include an at-grade path crossing of CTH M at the Ineichen Drive intersection with CTH M to connect the proposed path with the existing paved path along the south side of Ineichen Drive. This path will connect to the existing ten foot paved Ice Age Junction Path constructed along the north edge of the Dane County Park, with the connection point near the intersection of Flagstone Drive and CTH M. The path will also connect with a planned path through proposed development in the southwest quadrant of the CTH M and Valley View Road intersection at the north end of the project limits. This path will provide an off-highway paved path network between the cities of Verona, Madison, and Middleton.

The City of Verona has requested the inclusion of the proposed path with the project, including the connection at Ineichen Drive. Impacts to the existing path along Ineichen Drive will include a saw and reconstruction of the curb ramp leading to the crosswalk across Ineichen Drive at CTH M. Permanent land acquisition is not required from the existing path location as it is located on street right-of-way for Ineichen Drive.

To summarize, the City of Verona, as a project stakeholder, has reviewed the proposed action and has been actively engaged in the project's public involvement process. The City of Verona understands that the Federal Highway Administration (FHWA) plans to make a De Minimis Section 4(f) determination regarding the impacts to the recreational path along Ineichen Drive. The City of Verona concurs with that determination and anticipates that the proposed action will have no permanent adverse physical impacts, nor will there be any interference with the protected activities, features, or attributes that make the recreational path along Ineichen Drive eligible for Section 4(f) protection.

Sincerely,

Ron Rieder
Director of Public Works, City of Verona

ATTACHMENT T-6:

Section 4(f) Evaluation

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FINAL

Individual Section 4(f) Evaluation for:

Schroeder-Stickelberg-Thompson Farmstead (Historic)

Determination of De minimis Impact to Section 4(f) Properties:

University Ridge Golf Course (Public)

Dane County Parkland (Un-named)

Ice Age Trail (U.S. National Parks Service (NPS) designated National Recreational Trail & a Wisconsin State Trail)

CTH M (MAP 21-National Highway System Route)

Dane County, Wisconsin

Project ID: 5992-09-81 (Design)
5992-09-82 (South Portion Construction)
5992-09-85 (North Portion Construction)

City of Madison, Dane County, Wisconsin
Section 34, T7N, R8E; Section 3, T6N, R8E; Section 10 T6N, R8E

9/20/16
Date Approved

Federal Highway Administration

Federal Highway Administration
Project Sponsor: City of Madison
(Federally Funded through WisDOT Surface Transportation Program - Urban)

April 15, 2016

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Appendix A: Exhibits

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- Dane County Map for Bicyclists – West, (2015) (Full Map of Figure 6)
- Madison Metro Transit Weekday Bus Routes (Full Map of Part of Figure 5)
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- Preliminary Right of Way Needs – Cross Country Road to Flagstone Drive
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- Ice Age Junction Path Exhibit (Larger Version of Figure 13, two pages)
- Plan and Profile: Ineichen Drive (Larger Version of Figure 14)
- Section 4(f) Properties Right of Way Exhibit – Roundabout Alternative (Larger Map of Figure 17)
- Section 4(f) Properties Right of Way Exhibit – SW Jug Handle (Larger Map of Figure 18)
- Section 4(f) Properties Right of Way Exhibit – Tight Diamond (Larger Map of Figure 19)
- Elevation View of Westbound Underpass Alternative (Larger Version of Figure 21)

Appendix B: MOA and Officials with Jurisdiction Letters

- Schroeder-Stickelberg-Thompson Farmstead (MOA Signed)
- University Ridge Golf Course (Jurisdiction Letter)
- Ice Age Trail (Jurisdiction Letter)
- Dane County Parkland (Jurisdiction Letter)
- Ice Age Junction Multi-Use Path – City of Madison (Jurisdiction Letter)
- Unnamed Multi-Use Path – City of Verona (Jurisdiction Letter)
- Federal Highway Administration (Concurrence Letter)
- United States Department of the Interior (Concurrence Letter)

Appendix C: Other Documented Correspondence

- Schroeder-Stickelberg-Thompson Farmstead
- University Ridge Golf Course
- Ice Age Trail
- Dane County Parkland
- Ice Age Junction Multi-Use Path – City of Madison
- Unnamed Multi-Use Path – City of Verona
- Other Correspondence

1 Introduction

1.1 Section 4(f)

The U.S. Department of Transportation's Section 4(f) law (49 USC 303) states that "the proposed transportation use of any land from a significant publicly owned public park, recreation area, wildlife and waterfowl refuge, or public or private historic site that is on or eligible for the National Register of Historic Places (NRHP), be avoided, if avoidance is feasible and prudent, before any U.S. DOT funding or approvals can be granted. Additionally, a full evaluation of measures to minimize harm to that property must be made and documented."

Section 4(f) applies only to the actions of agencies within the U.S. Department of Transportation, including the Federal Highway Administration (FHWA). While other agencies may have an interest in Section 4(f), the FHWA is responsible for Section 4(f) applicability determinations, evaluations, findings, and overall compliance for transportation projects.

1.2 Summary of Proposed Action and Section 4(f) Impacts

1.2.1 Purpose and Need

The overall purpose of the proposed action is to address the safety and operational deficiencies of the CTH M (South Pleasant View Road) a National Highway System (NHS) route, while minimizing impacts to the physical, natural, and human environment.

NHS routes are critical to the nation's economy, defense, and mobility providing a primary network for movement of goods and services throughout the nation. The NHS supplements the national interstate system. In this case, CTH M serves as an important route for the City of Madison, City of Verona and western Dane County. See Exhibit A for map of NHS routes.

Project needs supporting this purpose include:

- Transportation Demand & Improving Roadway Operational Capacity
- Intersection Safety and Operational Capacity
- Bicycle and Pedestrian Facilities and Accommodations
- Regional Multi-Use Path System Connectivity
- System Linkage & Route Importance
- Modal Interrelationships

See Section 2 for more information.

1.2.2 Description of Proposed Action

The City of Madison, in conjunction the City of Verona and Dane County, and in cooperation with the Towns of Verona and Middleton, is proposing roadway improvements to CTH M (South Pleasant View Road) from Cross Country Road to Prairie Hill Road, a distance of approximately 2.86 miles. The existing roadway has reached the end of its service life and requires expansion to meet the operational needs of this National Highway System (NHS) corridor.

It is anticipated that the proposed action will improve safety, mobility, connectivity and efficiency of not only this NHS route but this area's transportation network as well. This transportation network includes roadways, bicycle & pedestrian facilities, and mass transit. The proposed action is a stand-alone project with independent utility and logical termini, and does not preclude or foreclose future improvements or projects with respect to any future-abutting projects. Any future proposed abutting transportation improvements will require extensive environmental evaluation and public involvement.

The proposed improvements would consist of expanding CTH M (NHS route) from an existing two lane rural highway to a multi-lane urban arterial with bike lanes, a multi-use path and sidewalks. Raymond Road will be reconstructed as a rural street with a cul-de-sac. The proposed project includes reconstruction of two major intersections:

- CTH M – CTH PD (new grade separation)
- CTH M – Midtown Road (at-grade intersection reconstruction)

See section 2.3.9 Intersections for further discussion.

The expanded roadway cross section and reconfigured intersections will require approximately 52.3 total acres of real estate including:

- 24.8 acres of FEE
- 1.4 acres of Permanent Limited Easement (PLE)
- 26.1 acres of Temporary Limited Easement (TLE)

See Section 2 for more information.

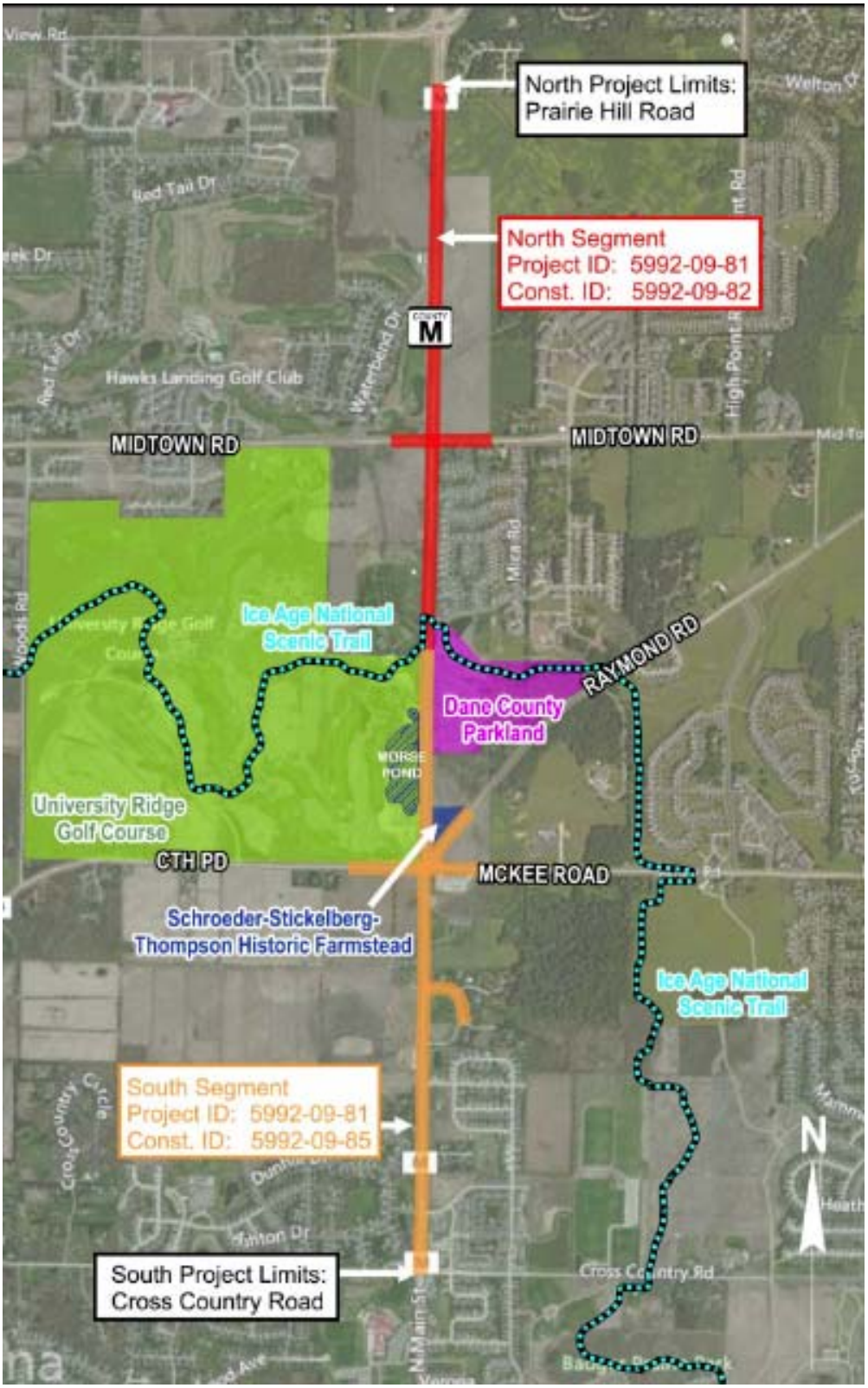
1.2.3 Description of Section 4(f) Resources

Table 1: Properties within CTH M corridor protected by Section 4(f)

Property	Official with Jurisdiction	Total Property Acreage	Type of Section 4(f) Evaluation	Activities/Uses on Property
Schroeder-Stickelberg-Thompson Farmstead	State Historical Preservation Office (SHPO)	4.2 acres	Individual Section 4(f)	Historic farmstead eligible for National Register of Historic Places
University Ridge Golf Course	University of Wisconsin Board of Regents	Approximately 560 acre parcel	De Minimis	Public Recreational Facility (Golf Course utilizes approximately 370 of these acres)
Ice Age Trail	Wisconsin U.S. National Parks Service (NPS)	Linear resource	De Minimis	Recreational Trail
Dane County Parkland	Dane County Parks Division	Approximately 47.8 acres	De Minimis	Open space (natural landscape)
Ice Age Junction Path	City of Madison (project sponsor) & Dane County Parks Division	Linear resource	Not Applicable All conditions for "Temporary Occupancy" listed in 23 CRF 774.13 (d) are satisfied.	Recreational path
Unnamed Path (adjacent to Ineichen Drive)	City of Verona (project participant)	Linear resource	Not Applicable All conditions for "Temporary Occupancy" listed in 23 CRF 774.13 (d) are satisfied.	Recreational path

In addition to the properties noted above in Table 1, this proposed action will acquire some property from a second golf course (Hawk's Landing Golf Course) which lies adjacent to CTH M. This course is privately owned and therefore Section 4(f) protection is not applicable.

Figure 1: Project Limits and Segmentation



1.2.4 Impacts to Section 4(f) Resources

Table 2: Impacts to Section 4(f) Resources

Property	Right-of-Way Impacts	Other Impacts
Schroeder-Stickelberg-Thompson Farmstead	0.6 acres of strip right-of-way • 0.15 acres of FEE • 0.45 acres of Temporary Limited Easement (temporary occupancy)	• Adversely effected per Wisconsin State Historic Preservation Office. See Exhibit B. • Relocation of properties southern driveway off of Raymond Road • Removal of CTH M driveway access • Removal of trees along CTH M right-of-way • Private utility relocations on and adjacent to parcel
University Ridge Golf Course	3.5 acres of strip right-of-way (from overall 370 acre portion of the UW owned property) • 2.0 acres of FEE • 1.5 acres of Temporary Limited Easement (temporary occupancy)	• Removal of several naturally occurring trees and shrubs bordering CTH M (not part of planned golf course landscaping) • Relocation of University Ridge welcome / gateway sign at intersection of CTH M and CTH PD
Ice Age Trail (IAT)	FEE acquisition of 0.3 acres of the IAT easement over the underlying OJ Noer Turf Grass Research and Education Facility land	• Alternation and realignment of existing IAT / CTH M crossing • Alternation and realignment of existing IAT along CTH M within University Property and Dane County Parkland. • Alternation and realignment of existing IAT crossing of Raymond Road at Badger Mill Creek
Dane County Parkland	4.8 acres of right-of-way acquisition • 0.8 acres of FEE • 1.0 acre of Permanent Limited Easement (0.2 acres from Raymond Road Area) • 3.0 acres of Temporary Limited Easement (0.9 acres from Raymond Road Area)	• Realignment of IAT within property. See notes related to this realignment in row above. • Extension of culvert pipes to accommodate relocation of IAT and Ice Age Junction Path extensions. • Grading and restoration of open prairie and fire break / maintenance path along CTH M property line. • Relocation of small pond / wetland scrape
Ice Age Junction Path	None	• Temporary occupancy of existing path during construction
Unnamed Path (adjacent to Ineichen Drive)	None	Temporary occupancy of existing path during construction

1.2.5 Alternatives

Many alternatives were evaluated for the CTH M (South Pleasant View Road) NHS corridor. As part of the corridor, existing high-volume intersections along this route were individually evaluated for specific intersection improvements.

Considerable evaluation of alternatives at the CTH M/CTH PD intersection was completed due to numerous resources near this high volume intersection. These resources included not only the two Section 4(f) resources (Schroeder-Stickelberg-Thompson Farmstead and University Ridge Golf Course) but also the Alliant Energy electrical substation which serves more than 11,000 residences and businesses in the area, no full Section 4(f) avoidance alternative is prudent or feasible. Seven separate intersection configuration at this location were analyzed. See Section 5 for additional information.

Evaluation of three of the most prudent and feasible alternatives were evaluated in more detail, which included a least overall harm analysis for the adjacent Section 4(f) resources. After numerous public involvement meetings, the Westbound Underpass Alternative was supported by the public and the city of Madison, Dane County, city of Verona and Town of Verona. This was chosen as the preferred alternative as it had the best balance of minimizing impacts to adjacent properties while meeting the projects purpose and need. See Section 7 for the full least overall harm analysis.

The preferred alternative meets the projects purpose and need, is feasible and prudent, and minimizes impacts to the maximum extent practicable of the adjacent Section 4(f) resources.

1.2.6 Measures to Minimize Harm

Unavoidable impacts to Section 4(f) properties will occur with the proposed action, with most occurring near the CTH M/CTH PD intersection where the University Ridge Golf Course and Schroeder-Stickelberg-Thompson (SST) Farmstead is located. See Section 8.

Specific design measures at this location to minimize harm were incorporated into the proposed design. This includes:

- Narrowing the CTH M median from desirable width (20 ft.) to minimum (8 ft.)
- Curving the roadway alignment to fit between specific features of the golf course and structures on the SST farmstead
- Minimizing tree removal on the SST farmstead property

1.2.7 Coordination to Date

Coordination has been completed with officials with jurisdiction over each individual Section 4(f) resource. All officials with jurisdiction have concurred with the proposed improvements. Local government officials from City of Madison as well as the City and Towns of Verona and Dane County have also concurred with the preferred alternative.

A summary of this coordination can be found in Section 9.

1.3 Background

The City of Madison (project sponsor), in conjunction with Dane County and the City of Verona, and in cooperation with the Towns of Verona and Middleton, proposes to improve the CTH M corridor to address existing safety and operational deficiencies for all roadway users. CTH M from Cross Country Road to Prairie Hill Road is currently a two-lane highway that connects the City of Madison to the City of Verona. See Figure 1 – Project Location Map. This project will utilize federal funds for the construction phase (ID 5992-09-82 & 5992-09-85) through the Wisconsin Department of Transportation's (WisDOT) Surface Transportation Program - Urban (STP-U) and therefore must meet federal and state requirements. See Figure 2 – Project Limits and Segmentation, and Table 2 below which describe the various project IDs.

The CTH M corridor is classified as a principal arterial and identified as a MAP-21 National Highway System (NHS) Route. See Appendix A – National Highway System: Madison, WI.

CTH M is located on the west side of the Madison urbanized area and a portion of the roadway runs parallel to US 12. As a National Highway System (NHS) route, CTH M is of great importance to the area's system linkage and as its role as an alternate route for US 12 (Beltline) during crashes and other emergencies that may cause major delays or closures on the west side of Madison. This portion of CTH M provides a connection between two other NHS Principal Arterial Routes – Mineral Point Road to the north, and McKee Road to the south. CTH M is a critical north/south roadway that provides connectivity between City of Middleton, City of Madison, City of Verona and surrounding townships. CTH M is vitally important to local and regional economies because of these positive attributes.

Figure 2: Project Location Map

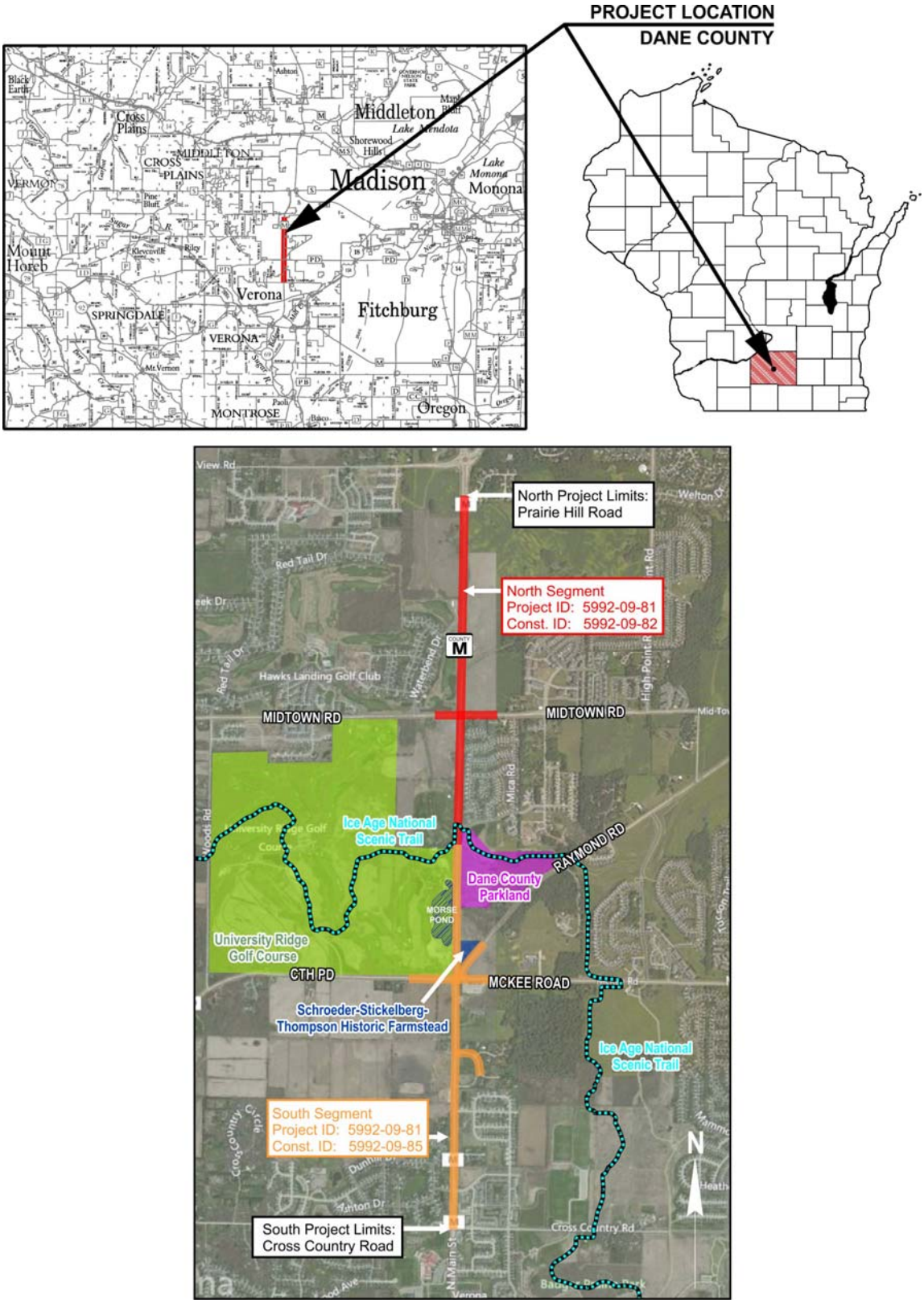


Table 2: Project Limits

The project limits for the proposed actions include:

Project ID	Type	Limits	Notes
5992-09-81	Design	Cross County Road – Prairie Hill Road	Red & Orange areas on Map (Figure 1)
5992-09-82	Construction	Cross County Road – 2,500' north of CTH PD/McKee Road	Orange area on map South Segment (Figure 1)
5992-09-85	Construction	2,500' north of CTH PD/McKee Road – Prairie Hill Road	Red area on map North Segment (Figure 1)

The northern segment will connect to the existing roundabout and facilities located at CTH M/Valley View Road. Both projects (ID 5992-09-82 & 5992-09-85) will be let together and constructed concurrently. Construction is planned to begin in 2017 and extend into 2018. The proposed projects are located in Dane County, Wisconsin in the cities of Madison and Verona and the Towns of Verona and Middleton.

Consultation and coordination with federal, state, tribal, and local stakeholders was undertaken and numerous meetings were held. Because of the large number of Section 4(f) resources impacted (six) along the corridor, extensive public involvement and preliminary engineering analysis were completed. This effort concluded that there is no prudent and feasible alternative to the full avoidance of all Section 4(f) resources. Documentation outlining all possible planning to minimize and mitigate the harm is incorporated into this document.

2 Description of Proposed Action and Purpose and Need

In this section, the project's purpose and need elements are outlined, followed by the proposed action that addresses the purpose and need.

2.1 Purpose

The overall purpose of the proposed action is to address the safety and operational deficiencies of the CTH M (NHS) corridor while minimizing impacts to the physical, natural, and human environment.

- Alleviate unacceptable congestion along the CTH M corridor
- Provide a safe and serviceable corridor that is convenient for area businesses, residents, and the traveling public. This includes motor vehicles, bicyclists, pedestrians, and future transit.
- Address current and future projected traffic and bicycle/pedestrian demand which have made the existing facility functionally obsolete

Intersections and other access points along CTH M are failing on an operational level which has created an unsafe corridor. There are vehicle crashes, near misses, severe traffic backups, and conflicts with vehicles, pedestrians, and bicyclists. This situation worsens during peak travel hours.

2.2 Need

The need for the proposed action includes:

2.2.1 Transportation Demand & Improving Roadway Operational Capacity

CTH M is a rural, two-lane facility categorized as a principal arterial. Traffic signals are located at the CTH M and CTH PD intersection and at the CTH M and Midtown Road intersection.

The design criteria for county trunk arterial roadways, including National Highway System Routes, is outlined in both the Wisconsin Department of Transportation Facilities Development Manual (FDM) and Wisconsin Administrative Code Trans 205.03. Once design traffic volumes reach counts over 15,000 average annual daily vehicles per day, the roadway should be evaluated for possible facility expansion. Current operations are failing at an unacceptable level for this two-lane roadway. Table 3 below lists the traffic volumes along CTH M. Based on these counts and other evaluations completed as part of the planning process for this potential action, a minimum of two lanes of through traffic in each direction are needed to accommodate both current and projected traffic.

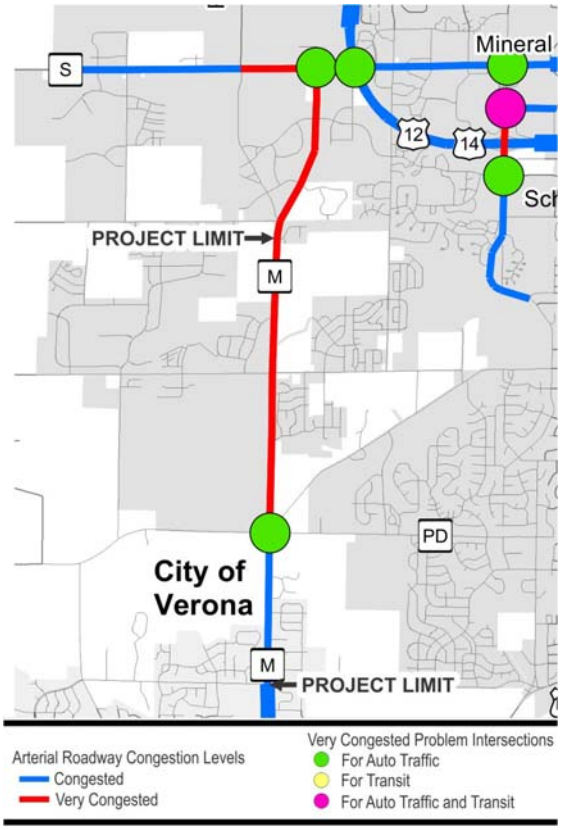
Table 3: Current and Projected Traffic Counts, CTH M Project Corridor

	Current Traffic Count	2037 Traffic Projection Estimate$
Valley View Road to Midtown Road	19,650#	36,000
Midtown Road to CTH PD	20,500†	34,250
CTH PD to Prairie Oaks Drive	14,300*	20,300

† 2015 Count
# 2013 Count
* 2012 Count
$ Traffic Projection Estimates determined by Madison Area Transportation Planning Board, November 16, 2015

The Madison Metropolitan and Dane County Regional Transportation Plan Update indicates there are 229 center lane miles of arterial roadways that are congested, and 74 miles that are very congested. The project segment of CTH M is classified in the 'very congested' category. See Figure 3 below. A full size map can be found in Appendix A – Congestion Levels, Madison Area, Dane County. In addition, the CTH M/CTH PD intersection is classified as a 'very congested problematic intersection' for auto traffic. There are no existing transit routes on this section of CTH M, but given the growth of the area, it is anticipated that transit routes will become desirable and viable on this section CTH M in the future.

Figure 3: Congestion Levels on CTH M as Identified in the Dane County Regional Transportation Plan



Congestion in this area has been an on-going issue for over 15 years. Several planning and congestion studies have been completed in the area including:

- "Regional Trends 2010 Dane County, Wisconsin" – Published 2011

  http://danedocs.countyofdane.com/webdocs/PDF/capd/2012_postings/Publications/2010_Regional_Trends_web.pdf

- "Congestion Management Process for the Madison Metropolitan Planning Area" – October 2011

  http://www.madisonareampo.org/planning/documents/CMP_11_Final_Report_Web.pdf

- The City of Verona's comprehensive plan which establishes a vision and serves as a long-term guide for future growth.

  http://www.ci.verona.wi.us/236/Comprehensive-Plan

Capacity improvements are one component of the congestion management strategies identified in the Madison Metropolitan and Dane County Regional Transportation Plan. These strategies include:

- Construction of additional through traffic lanes
- Eliminating at-grade intersections
- Expansion of bicycle and pedestrian facilities
- Future expansion of mass transit routes (Madison Metro Bus Service). See Intermodal relationship section 2.2.5.

2.2.2 Improving Intersection Safety and Operational Capacity

The Highway Capacity Manual defines level-of-service for signalized intersections as a function of the average vehicle control delay. Level of Service (LOS) is determined by the average delay time by vehicle in seconds. A vehicle's delay time (control delay) is calculated based on the type of intersection. The table below lists the control delay for all Levels of Service.

Table 4: Signalized At-Grade Intersection Level of Service

LOS	Control Delay per Vehicle (in seconds)
A	<10
B	10-20
C	20-35
D	35-55
E	55-80
F	>80

Source: TRB Highway Capacity Manual 2010 Level of Service

The acceptable LOS at controlled intersections is determined on a case-by-case basis dependent on the local land use, economic, and environmental impacts. The current Levels of Service at the two corridor intersections (CTH M – CTH PD and CTH M – Midtown Road) are at LOS F during peak hours.

LOS F describes a road for which travel time cannot be predicted and breakdown occurs in vehicular flow. Every vehicle moves in lockstep with the vehicle in front of it. LOS F is generally considered unacceptable.

Traffic is projected to increase indicating improvements are necessary to improve roadway operations. If improvements are not implemented, the delay will worsen and the level of service will remain LOS F with even longer delays. Congestion will continue to increase and other streets within this system will have to absorb the overflow due to the facility failed capacity limitations.

This level of congestion is a safety deficiency and is a contributing factor of vehicle crashes at the CTH M corridor's intersections.

Crashes that occurred on the corridor in a five-year period between 2009 and 2013 were identified and evaluated in Table 5 below. The table shows a comparison of the CTH M project section to the Wisconsin statewide average for County Trunk Highways. While CTH M is below the statewide average for overall crashes and crash rates causing injury if no action is taken, the incidence of crashes is likely to increase with more traffic.

Table 5: Crash Rates 2009 – 2013, CTH M Project Section and Statewide Average for County Trunk Highways[1]

	CTH M Project Section	Statewide*
Overall Crash Rate (excludes deer)	76 per 100 MVM	96 per 100 MVM
Crash Rate with Injury	18 per 100 MVM	37 per 100 MVM
Crash Rate with Fatality	0 per 100 MVM	1.2 per 100 MVM

Source: WisDOT 2012 Statewide Average Crash Rates, November 2013

*Rural County Trunk Highways

The intersection of CTH M and CTH PD recorded 24 crashes, and the intersection of CTH M and Midtown Road recorded 20 crashes. The statewide average for intersection crash rate is 1.5 crashes per million entering vehicles (MEV). The intersection crash rate for the two project intersections is nearly a third of the statewide average (0.54 crashes per MEV for the CTH M and CTH PD intersection and 0.41 crashes per MEV for the CTH M and Midtown Road intersection.)

There was no reported bicyclist or pedestrian crashes between the years of 2009 and 2013. This, in part, is likely due to low usage of the roadway by bicycles and pedestrians due to the lack of dedicated bicycle and pedestrian facilities or accommodations along the corridor.

2.2.3 Bicycle and Pedestrian Facilities and Accommodations

CTH M Facilities & Accommodations (Bike and Ped)

The project corridor (NHS route) has on-street bicycle accommodation by way of 4-foot wide paved shoulders. Bicycle accommodations are underutilized because of the high traffic volume and narrow lane and shoulder widths. Pedestrian facilities are available via sidewalks from north of Waterbend Drive to Flagstone Drive, however, most of the corridor lacks these facilities. The lack of pedestrian connections make these facilities ineffective in any useable form along CTH M from Flagstone Drive to Prairie Oaks Drive.

According to the Dane County Map for Bicyclist (2015), CTH M (NHS route) rates as a 'least suitable roadway with paved shoulders'. The full map can be found in Appendix A – Dane County Bicycle Map – West, 2015. High traffic volumes along the roadway make it unsafe for pedestrians and bicyclists to utilize either the travel lanes or the shoulder. Safer accommodations for alternate mode users of all abilities are needed along this corridor.

Currently there are very limited sidewalk facilities along this portion of the CTH M corridor. Sidewalks exist along the CTH M corridor:

[1], *UW-TOPS Lab, June 2014*

- On both the east and west sides from Cross County Road to Bering Drive/Prairie Oaks Drive (approximately 670 feet)
- On the east side from Flagstone Drive to a point approximately 200 feet south of Midtown Road (approximately 2,060 feet)
- On the west side from Midtown Road to a point approximately 500 feet north of Waterbend Drive (approximately 2,390 feet)
- On the west side from Valley View road to a point approximately 800 feet south (approximately 850 feet)

Due to the lack of pedestrian facilities, pedestrians are forced to either find other routes or walk along the shoulder of the CTH M corridor.

Ice Age Trail

Currently, Ice Age Trail users must cross CTH M at the Flagstone Drive intersection to continue east or west on the Ice Age Trail. Additionally, a short segment of the Ice Age Trail then runs concurrently along the toe of the CTH M embankment. Most trail users however choose to walk along the narrow shoulder of CTH M (NHS Route), south from the Flagstone Drive intersection approximately 500 feet to near the driveway to the OJ Noer Turf Research Education Facility. This route provides users with a crossing of the Badger Mill Creek drainage swale. The route creates an existing unsafe scenario for Ice Age Trail users by forcing the trail users to walk within the clear zone of an important NHS route. Because of the importance of this NHS route, there is a need to reduce pedestrian conflicts on the roadway.

2.2.4 Regional Multi-Use Path System Connectivity

The existing portion of the Ice Age Junction Multi-Use Path extends from Flagstone Drive south and east to Raymond Road. See Appendix A – Area Trails and Multi-Use Paths. The CTH M portion of the Ice Age Junction Path will ultimately connect the Military Ridge State Trail in the city of Verona to the multi-use path network in both the cities of Madison and Middleton. Portions of this path have previously been constructed including two path sections near the CTH M corridor:

- One path section is located north of the project corridor between Valley View Road and CTH S (Mineral Point Road)
- The second path section currently extends from south of CTH PD to the Flagstone Drive/CTH M intersection. This portion is located off-road east of the CTH M corridor.

The proposed action will include connecting these two path segments as well as extend a paved path connection from the City of Verona along CTH M to the Ice Age Junction Path, connecting at Flagstone Drive.

The proposed action objectives were identified through various transportation (bicycle and pedestrian) studies and public involvement. There is overall public support for constructing a multi-use trail connection along this corridor.

Another paved path exists along the south side of Ineichen Drive extending from CTH M east to and through Harmony Hills Park. The proposed action includes a paved path connection from this path to the Ice Age Junction Path at Flagstone Drive.

2.2.5 System Linkage & Route Importance

The Functional Class system (2011) Map of Dane County, WI identifies CTH M as a principal arterial. Roadways with this classification serve major economic activity centers and provide interregional traffic mobility.

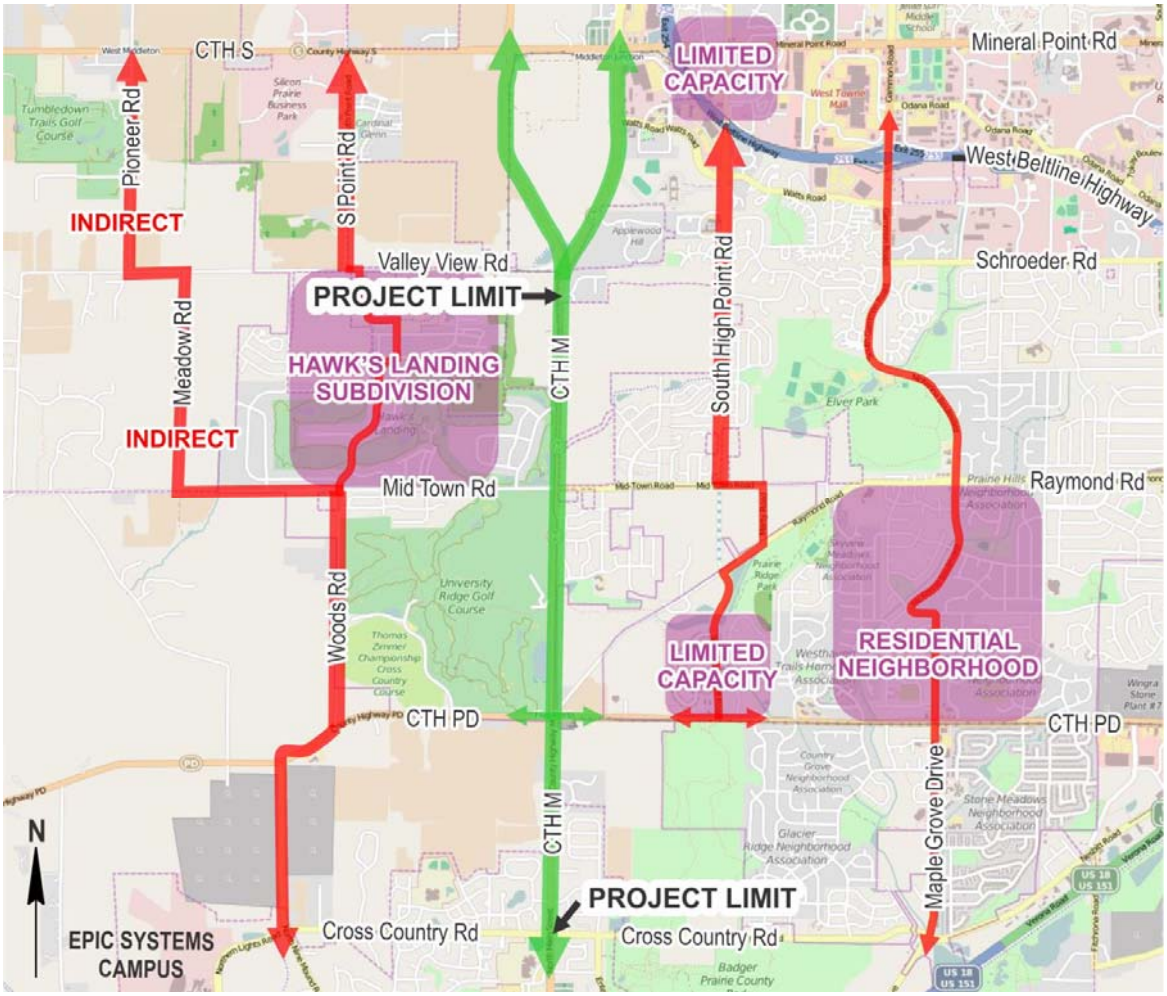
The CTH M corridor is classified as a principal arterial and as previously mentioned in the Chapter 1, identified as a MAP-21 National Highway System (NHS) Principal Arterial Route. See Appendix A – National Highway System: Madison, WI.

The linkage and route importance of this corridor is highlighted in the Madison area's planning document and City of Verona Comprehensive Plans. Links to these planning documents can be found in section 2.2.1.

CTH M is located on the west side of the Madison urbanized area and runs parallel for a portion of US 12. As a National Highway System (NHS) route, CTH M is of great importance to the area's system linkage and as its role as an alternate route for US 12 (Beltline) during crashes and other emergencies that may cause major delays or closures on the west side of Madison. This portion of CTH M provides a connection between two other NHS Principal Arterial Routes – Mineral Point Road to the north, and McKee Road to the south. CTH M is a critical north/south roadway that provides connectivity between City of Middleton, City of Madison, City of Verona and surrounding townships. CTH M is vitally important to local and regional economies because of these positive attributes.

Figure 4 below shows the various north/south corridors in the area and the constraints of each route. Constraints include indirect routes, residential neighborhoods, and limited roadway capacity.

Figure 4: North/South Connector Routes



Source: Created by City of Madison Engineering Department and presented at Public Involvement Meeting – December 8, 2011

The project limit at the south termini connects to a four-lane urban facility at the intersection of Cross Country Road. The project limit at the north termini (Prairie Hill Road) connects to a four-lane urban facility just south of the Valley View Road intersection. By expanding to a four-lane facility between the two sections, safety will be improved on CTH M by:

- providing a continuous and consistent four-lane corridor and cross section
- reducing conflicts caused by merging vehicles
- tying into existing facilities including medians, bike lanes, and sidewalks
- meeting drivers expectations with a consistent cross section

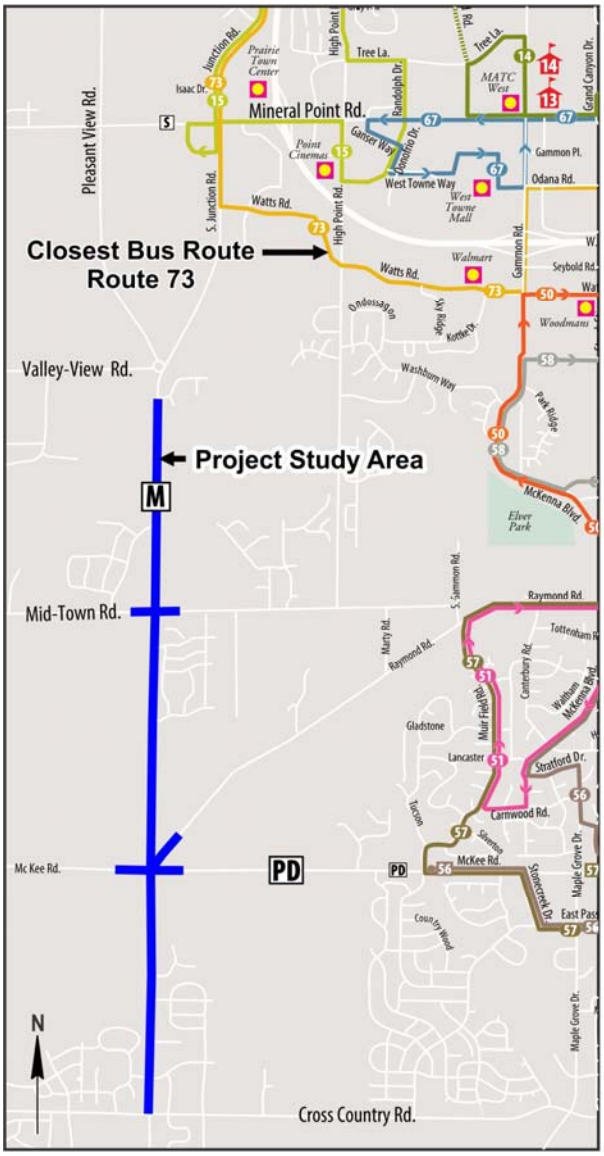
2.2.6 Modal Interrelationships

There are no permanent current bus routes on the corridor; however, supplemental school bus service is provided. On weekdays, many area middle and high school students use Metro to get to and from school. To avoid overcrowding, Metro provides weekday service. These routes operate on days that the Madison School District classes are in session.

Additional routes are anticipated in the future. Metro Transit route planners will provide locations to include paved sidewalk terraces and bus pull outs for transit stops. The City of Verona and Epic Systems Corporation are currently working with Metro Transit to improve the commuter express service for employees to the Epic System corporate campus (employed 9,400+ people in 2015). The campus is 1.5 miles west of the project on Cross Country Road and the nearest Madison Metro Route (Route 73) serves CTH M north of Watts Road, approximately 1.5 miles north of the project area. Figure 5: Madison Metro Transit Weekday and Supplemental School Day Service Maps – Southwest Side

As noted above, several school bus routes utilize the CTH M corridor, but because of high traffic volumes and the unsafe conditions, there are no scheduled stopping points along CTH M.

Figure 5: Madison Metro Transit Weekday and Supplemental School Day Service Maps – Southwest Side



Madison Metro Transit Weekday Service

Supplemental School Day Service

Source: Madison Metro 2015

2.3 Proposed Action

The City of Madison, in conjunction the City of Verona and Dane County, and in cooperation with the Towns of Verona and Middleton, is proposing roadway improvements to CTH M (South Pleasant View Road) from Cross Country Road to Prairie Hill Road, a distance of approximately 2.86 miles. The existing roadway has reached the end of its service life and requires expansion to meet the operational needs of this National Highway System (NHS) corridor.

It is anticipated that the proposed action will improve safety, mobility, connectivity and efficiency of not only this NHS route but this area's transportation network as well. This transportation network includes roadways, bicycle & pedestrian facilities, and mass transit. The proposed action is a stand-alone project with independent utility and logical termini, and does not preclude or foreclose future improvements or projects with respect to any future-abutting projects. Any future proposed abutting transportation improvements will require extensive environmental evaluation and public involvement.

2.3.1 Roadway Improvements

The proposed improvements consist of expanding CTH M (NHS route) from an existing two lane rural highway to a multi-lane urban arterial with bike lanes, a multi-use path and sidewalks. Raymond Road will be reconstructed as a rural street with a cul-de-sac. The proposed project includes reconstruction of two major intersections:

- CTH M – CTH PD (grade separation)
- CTH M – Midtown Road

See section 2.3.9 Intersections for further discussion.

The expanded roadway cross section and intersections will require approximately 52.3 total acres of real estate including:

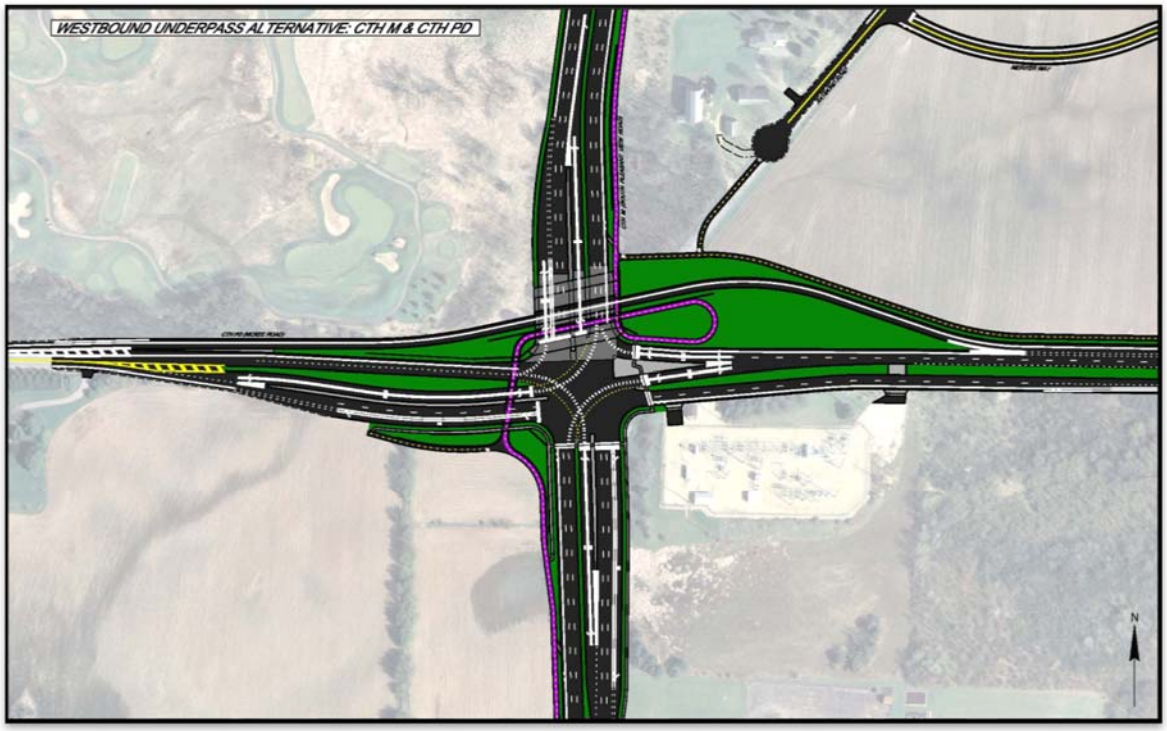
- 24.8 acres of FEE
- 1.4 acres of Permanent Limited Easement (PLE)
- 26.1 acres of Temporary Limited Easement (TLE)

See Right of Way – Cross Country Road to Flagstone Drive and Right of Way – Flagstone Drive Prairie Hill Road exhibits which can be found in Appendix A.

2.3.1.1 Intersections

The project proposes to replace the existing at-grade signalized intersections at CTH PD/McKee Road with a new westbound underpass alternative. See Figure 6 below. A larger version of this map can be found in Appendix A – CTH PD Intersection – Westbound Underpass Alternative. The CTH M/Midtown Road intersection will remain a signalized intersection, but will be expanded and improved. The CTH M/Midtown Road intersection will not affect any Section 4(f) properties.

Figure 6: Westbound Underpass Alternative: CTH M & CTH PD



The CTH PD Westbound Underpass Alternative expands the existing traffic signal layout to include grade separation (bridge) for the westbound through movement. Removing this movement from the signal timing allows the intersection to accommodate the predicted future capacity needs. The intersection functions by pulling the westbound through traffic away from the westbound traffic stream and sending traffic below CTH M. CTH M will cross a wide, short-span bridge with the westbound through traffic below. The rest of the intersection, including westbound traffic turning right or left onto CTH PD, will operate as it normally would at a traffic signalized intersection.

A new multi-use path will be constructed to accommodate pedestrians and bicyclists. To the north of CTH PD, the path will be on the east side of CTH M. South of the intersection; the path will run along the west side of CTH M. An underpass will provide connectivity to the two path sections.

Currently Raymond Road intersects CTH PD very close to CTH M. In order to increase safety and maneuverability, Raymond Road will be reconstructed to a cul-de-sac near the driveways of the Schroeder-Stickelberg-Thompson Farmstead. A new "T" intersection with a new unnamed road will connect Raymond Road to Meriter Way, which intersects with CTH PD/McKee Road 1,800 feet east of the CTH M – CTH PD intersection.

The proposed action addresses the operational and safety concerns within the corridor. Traffic will move effectively and efficiently through the intersection and one less conflicting traffic movement (three fewer conflict points) will exist due to the westbound underpass.

2.3.2 Bicycle and Pedestrian Facilities

The proposed new and reconfigured Americans with Disabilities Act (ADA) compliant bicycle and pedestrian facilities for this project will complete connectivity with the existing and planned network of ADA compliant non-motorized facilities. With the existing and proposed 10-foot paved path and 5-foot sidewalk construction, continuous ADA compliant pedestrian and bicycle accommodation will be provided throughout the corridor.

2.3.2.1 Bike Lanes

Existing

CTH M, CTH PD and Midtown Road have paved shoulders that vary in width from three to four feet to accommodate bicycles. The paved shoulders are not marked as bike lanes.

Proposed

The preferred alternative includes proposed signed and marked bike lanes on all collector and arterial streets reconstructed with this project. This includes:

- CTH M from Cross County Road to Prairie Hill Road
- CTH PD from the west project limits to Meriter Way
- Midtown Road from Waterbend Drive to Waldorf Boulevard
- Raymond Road from Meriter Way to Oak View Drive

2.3.2.2 Bike/Multi-use Paths

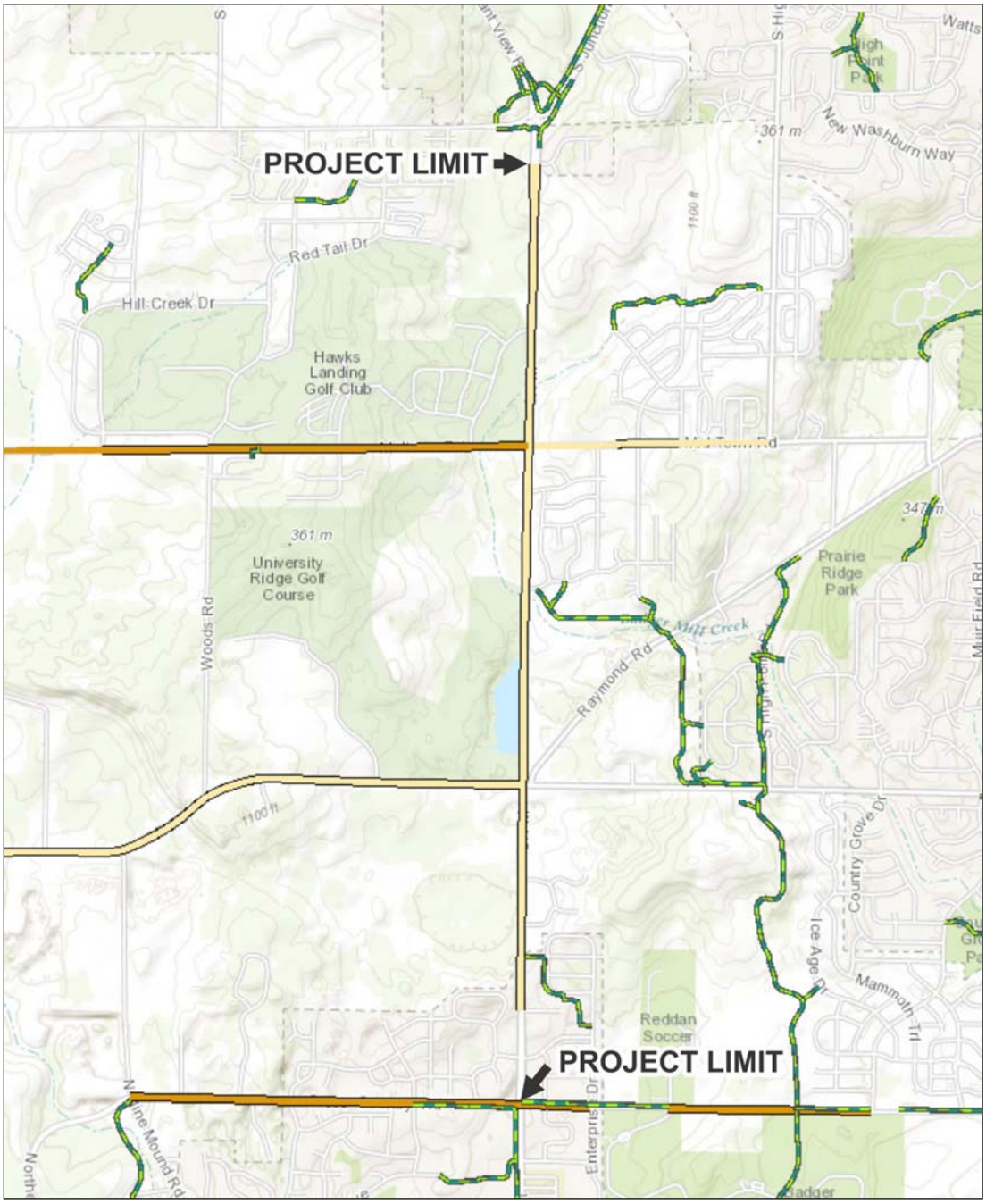
Existing

Currently there are no multi-use paths parallel to CTH M within the corridor. However, there are several paved paths that exist in the area that will be connected or improved as part of this project. Figure 7 below shows where existing multi-use paths exist within the project area. A full size map (Dane County Map for Bicyclists – West, (2015)) can be found in Appendix A.

- Paved paths for the Ice Age Junction Path (City of Madison) currently exist east of the project limits near the intersection of Flagstone Drive and CTH M. This existing portion of the Ice Age Junction path extends from Flagstone Drive south and east to CTH PD, crossing Raymond Road. The Ice Age Junction Path connects to several other paths in the area including the Military Ridge State Trail. See Appendix A – Area Trails and Multi-Use Paths.

- A paved path exists along the south side of Ineichen Drive extending from CTH M east to and through Harmony Hills Park.

Figure 7: Existing Multi-Use Paths within the CTH M Project Area



Source: Dane County GIS Mapping (DCI Map)

Proposed

As part of the proposed action, improvements to the following multi-use paths are proposed. See Figure 8. A larger version can be found in Appendix A:

- New construction and extensions of the City of Madison's planned Ice Age Junction Path are proposed as part of this project (10-foot paved)

A 10-foot wide paved multi-use path will be constructed in the following areas:

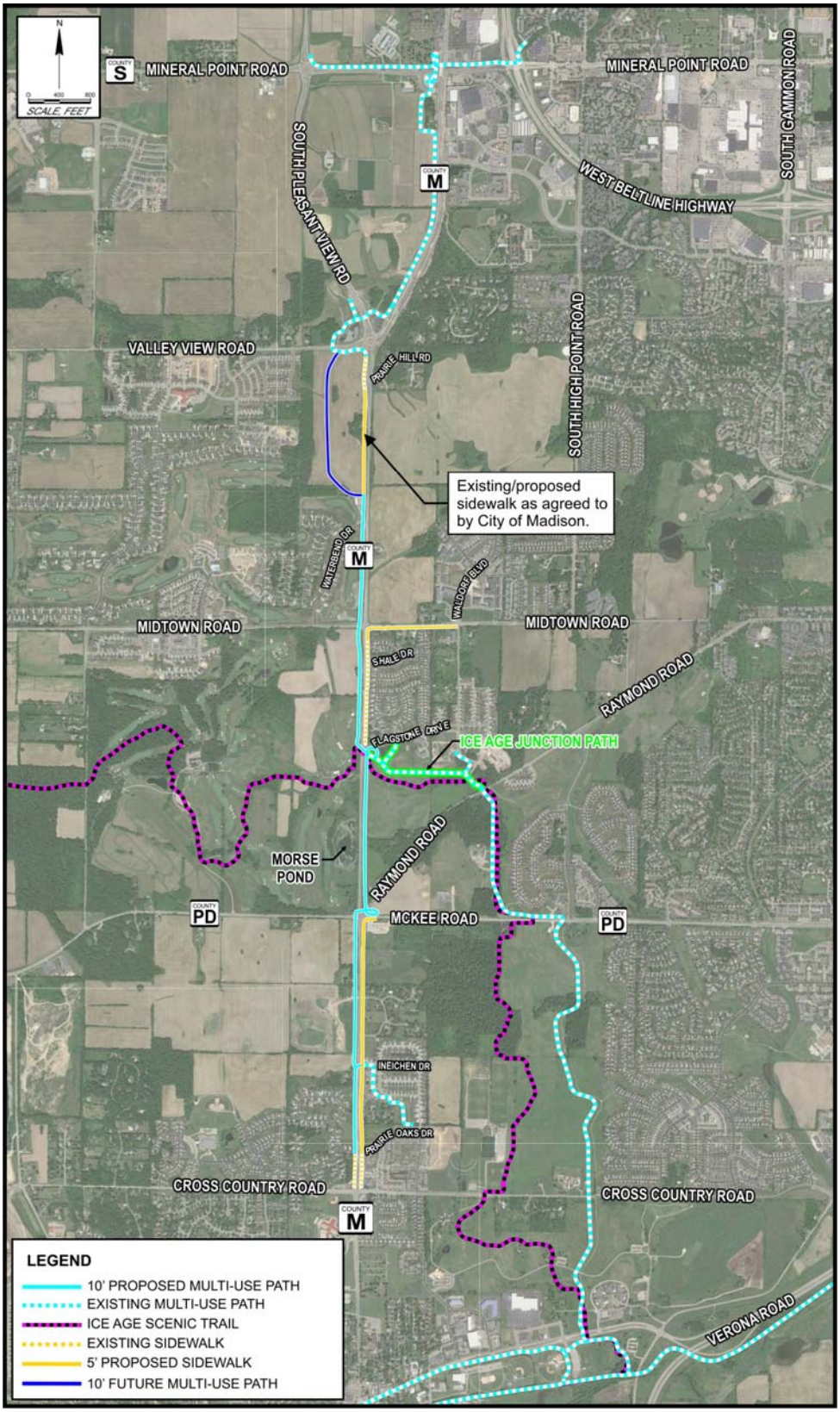
- Along the west side of CTH M from Prairie Oaks Drive north to CTH PD
- Along the east side of CTH M from CTH PD to Flagstone Drive
- Along the west side of CTH M from Flagstone Drive to approximately 500 feet north of Waterbend Drive at a planned future cross street location. At the end of the path, a 5-foot sidewalk will continue north to meet the existing sidewalk. In the future, the 10-foot path will be extended north through the UW research park and will tie into the existing path at Valley View Road, which continues on the west side of CTH M. A bicycle crossing will be provided at the end of the path to allow northbound cyclists to access the bicycle lanes until this future path is constructed.
- Along the south side of CTH PD from CTH M to the west limits of CTH PD. The path will end and tie into the existing paved shoulders on CTH PD until a future project can continue the path.
- Along the north side of CTH PD from CTH M to Meriter Way

To provide safe crossings where the proposed route crosses major roadways grade separated structures will be added. This includes:

- An approximate 150-foot long underpass structure below the west leg of the CTH M and CTH PD intersection.
- A three span bridge on the north leg of the CTH M/CTH PD intersection. The multi-use path will pass below CTH M under the south span of the bridge.
- An approximate 150-foot long underpass structure is proposed near the Flagstone Drive intersection. This underpass will carry both the Ice Age Junction path and the Ice Age Trail below CTH M.
- An approximate 190-foot long underpass structure is proposed below the west leg of the Midtown Road and CTH M intersection.

The Ice Age Junction Path and Verona connector paths between CTH PD and Waterbend Drive will be maintained by the City of Madison as part of their city-wide system of multi-use paved paths. The City of Verona will maintain paved multi-use paths constructed south of CTH PD.

Figure 8: Area Trails and Multi-Use Paths



2.3.3 Future Planned Bicycle Improvements

The proposed action and its preferred alternative have considered these planned improvements and are compatible with the following planned facilities.

Ice Age Junction Path – University Research Park Area

- A future 10-foot paved multi-use path will be constructed along the future Boyer Street in this area between the CTH M – Valley View Roundabout and Waterbend Drive.
- This facility is outlined as part of the University Research Park area of the Pioneer Neighborhood Development Plan http://www.cityofmadison.com/planning/ndp/Pioneer%20Adopted%20Plan.pdf and will provide connectivity between this project's shared use path and the existing shared use path north of the project area.

CTH PD Path

- The path along the south side of CTH PD will be continued west concurrently with anticipated reconstruction of CTH PD west of CTH M.
- The path along the north side of CTH PD will extend east from Meriter Way, eventually reconnecting with the Ice Age Junction Path where it crosses CTH PD
- The CTH PD path is included based on direction provided by City of Madison and Verona staff who are participating in developing the scope and design plans for reconstruction of CTH PD east and west of the project limits.

The proposed action including its multi-use path, is an independent utility, and does not preclude or foreclose future improvements or projects with respect to any future-abutting multi-use paths or other transportation project.

2.3.4 Consistency with Regional Bicycle Transportation Plans

City of Madison – These improvements are consistent with the Madison Metropolitan Area and Dane County Bicycle Transportation Plan. This plan outlines the priority regional shared use paths as revised in March of 2015.

http://www.madisonareampo.org/planning/documents/prioritized_regional_bike_paths.pdf

City of Verona – These improvements are consistent with transportation component (Chapter 3) of the City of Verona's comprehensive plan showing bicycle related improvements in the area which establishes a vision and serves as a long-term guide for future growth. Links to this plan can be found at the link below:

http://www.ci.verona.wi.us/236/Comprehensive-Plan

2.3.5 Sidewalks

Existing:

Currently there are very limited sidewalk facilities along this portion of the CTH M corridor. Sidewalks exist along the CTH M corridor:

- On both the east and west sides from Cross County Road to Bering Drive/Prairie Oaks Drive
- On the east side from Flagstone Drive to a point approximately 200 feet south of Midtown Road.
- On the west side from Midtown Road to a point approximately 500 feet north of Waterbend Drive
- On the west side from Valley View road to a point approximately 800 feet south.

Proposed:

Pedestrians are permitted to use the paved multi-use path system described above. ADA compliant sidewalks are also proposed along sections of the project to supplement the path system at the following locations:

CTH M

- Both sides of CTH M between Bering Drive/Prairie Oaks Drive and Ineichen Drive. The proposed ADA compliant sidewalk will serve as an extension of existing sidewalk along CTH M to connect the north neighborhoods with schools and city center to the south.
- East side of CTH M from Ineichen Drive to CTH PD. The multi-use path system is on the west side of CTH M in this area.
- No proposed sidewalk from CTH PD to Flagstone Drive, pedestrians will be served by the multi-use path on the east side of CTH M. Due to steep grades and limited space between Morse Pond and CTH M, construction of a sidewalk on the west side of CTH M north of CTH PD is neither prudent nor feasible as it would require adding considerable fill to Morse Pond.
- From Flagstone Drive to Midtown Road, existing sidewalk on the east side will be maintained with spot replacement and improvement as needed due to utility construction and grade changes. The multi-use path system is on the west side of CTH M in this area. New sidewalk will be constructed from the end of the existing sidewalk to Midtown Road.
- From Midtown Road to approximately 500 feet north of Waterbend Drive, pedestrians will be served by the multi-use path. Sidewalk will be constructed

between the end of the multi-use path north of Waterbend Drive and connect with existing sidewalk along the west side of CTH M that extends south from Valley View Road. Sidewalk along the east side of CTH M is planned for when development and demand require it. Constructing the sidewalk on the east side of CTH M with the project would not be prudent due to limited and widespread development.

CTH PD

Pedestrian accommodation will be provided along CTH PD with the preferred alternative via the multi-use paved paths on the south side of CTH PD, west of the CTH M intersection and along the north side of CTH PD, east of the CTH M intersection. Sidewalks would not be prudent and are not proposed along CTH PD due to limited and widespread development.

Midtown Road

Pedestrian accommodation along Midtown Road will be provided by existing sidewalk that will be maintained on the north side of Midtown Road, west of the intersection with CTH M. New sidewalk construction is proposed on the south side of Midtown Road through the project limits. New sidewalk construction will be planned for on the north side of Midtown Road east of the CTH M intersection, however construction of the sidewalk will be completed with planned development of the area north and east of the intersection. Constructing the sidewalk on the north side of Midtown Road, east of CTH M, would not be prudent due the limited and widespread development.

2.3.6 Future Planned Pedestrian Facilities

The proposed action and its preferred alternative have considered these planned improvements and are compatible with the following planned facilities.

- North of Midtown Road, sidewalk is planned and grading will be completed, however sidewalk is not warranted to be constructed along the east side of CTH M and north side of Midtown Road. This sidewalk will be constructed with future development. Pedestrians in this section of CTH M will be served by the multi-use path on the west side of CTH M. Pedestrians on Midtown Road will be served by sidewalk on the south side of Midtown Road.

WisDOT is required to provide oversight of the proposed action because Federal or State transportation program dollars are being incorporated into this local project through WisDOT's STP-urban program.

Because of this oversight role, WisDOT invokes its policy to incorporate safe and convenient walking and bicycling accommodations and/or facilities into transportation projects when prudent and feasible.

If said evaluation shows bicycle or pedestrian accommodations or facilities to be neither prudent nor feasible, the Department must document an appropriate exception to its "Complete Streets" policy.

Department policy for other project actions, such as pavement resurfacing or reconditioning projects, requires an evaluation to include bicycle and pedestrian accommodations or facilities where possible/practical within the scope of the project. In addition, certain bicycle and pedestrian design practices are required when applicable, e.g., American with Disabilities Act (ADA) compliant curb ramps and bicycle-acceptable landscaping or storm drainage grates.

2.3.7 Pedestrian/Recreational Trails

The Ice Age Trail crosses CTH M and Raymond Road within the limits of the proposed action. This trails' primary purpose is recreational and its use is restricted to foot traffic only. The preferred alternative includes a grade separated crossing at the trail crossing location to improve safety. A small portion of the existing trail will be realigned to accommodate the roadway improvements. This realigned portion will provide added safety benefits by providing a grade separated crossing of CTH M at Flagstone Drive, a bridge crossing of Badger Mill Creek via easement from the University of Wisconsin OJ Noer Turf Research Facility, and a sidewalk along Raymond Road where the trail crosses Badger Mill Creek.

2.3.8 Corridor Utility Upgrades

Upgraded lighting, storm sewer, sanitary sewer, and new water mains will be provided along the project.

2.3.8.1 Water Main

City of Verona

The city plans to construct a new water main along CTH M between Prairie Oaks Drive/Bering Drive and CTH PD (4,500 feet). The water main will also be extended west from CTH M along CTH PD to the west project limits.

City of Madison

The proposed action includes construction of a new water main along CTH M between CTH PD and Flagstone Drive (3,200 feet) and between Shale Drive and Prairie Hill Road (5,300 feet).

The proposed action includes new water main along CTH PD from CTH M to Meriter Way (1,800 feet).

Existing water main on Midtown Road is anticipated to be reconstructed due to conflicts with proposed roadway improvements.

2.3.8.2 Sanitary Sewer

Madison Metropolitan Sewer District (MMSD) (serves both city of Madison & Verona)

The proposed action includes construction of a new sanitary sewer from the intersection of CTH M and CTH PD along Raymond Road, connecting to their existing sewer below Dane County Park land north and west of Raymond Road.

City of Verona

The city of Verona plans to construct a new sanitary sewer along CTH M from Prairie Oaks Drive/Bering Drive to CTH PD (4,500 feet). This sewer will connect with MMSD's sewer collector proposed for Raymond Road.

2.4 Summary

The project meets the overall purpose and needs of the proposed action and is consistent with local, city and regional planning efforts. This includes:

- Madison Metropolitan Area and Dane County Regional Transportation Plan Update 2035
- Dane County Regional Transportation Plan 2030
- Madison Metropolitan Area & Dane County Transportation Improvement Program (TIP) (2012-2016)
- High Point-Raymond Neighborhood Development Plan (Raymond Road design under commission review, see page 2-29) (city of Madison)
- Midtown Neighborhood Development Plan (city of Madison)
- Pioneer Neighborhood Development Plan
- University of Wisconsin – Madison Research Park (within the Pioneer Neighborhood)
- North Neighborhood Development Plan (city of Verona)

- Wisconsin Department of Transportation's Statewide Transportation Improvement Program (STIP)
- Madison Area Transportation Improvement Program (TIP)

The proposed action and its preferred alternative will not preclude, foreclose, or restrict consideration of alternatives for any abutting transportation facilities (e.g. bicycle, pedestrian, or roadway).

3 Description of Section 4(f) Properties

There are six Section 4(f) resources within the proposed project limits (see Table 1). Four Section 4(f) properties will require permanent impacts (see Appendix A – Section 4(f) Property Exhibits), and two properties will have temporary occupancies.

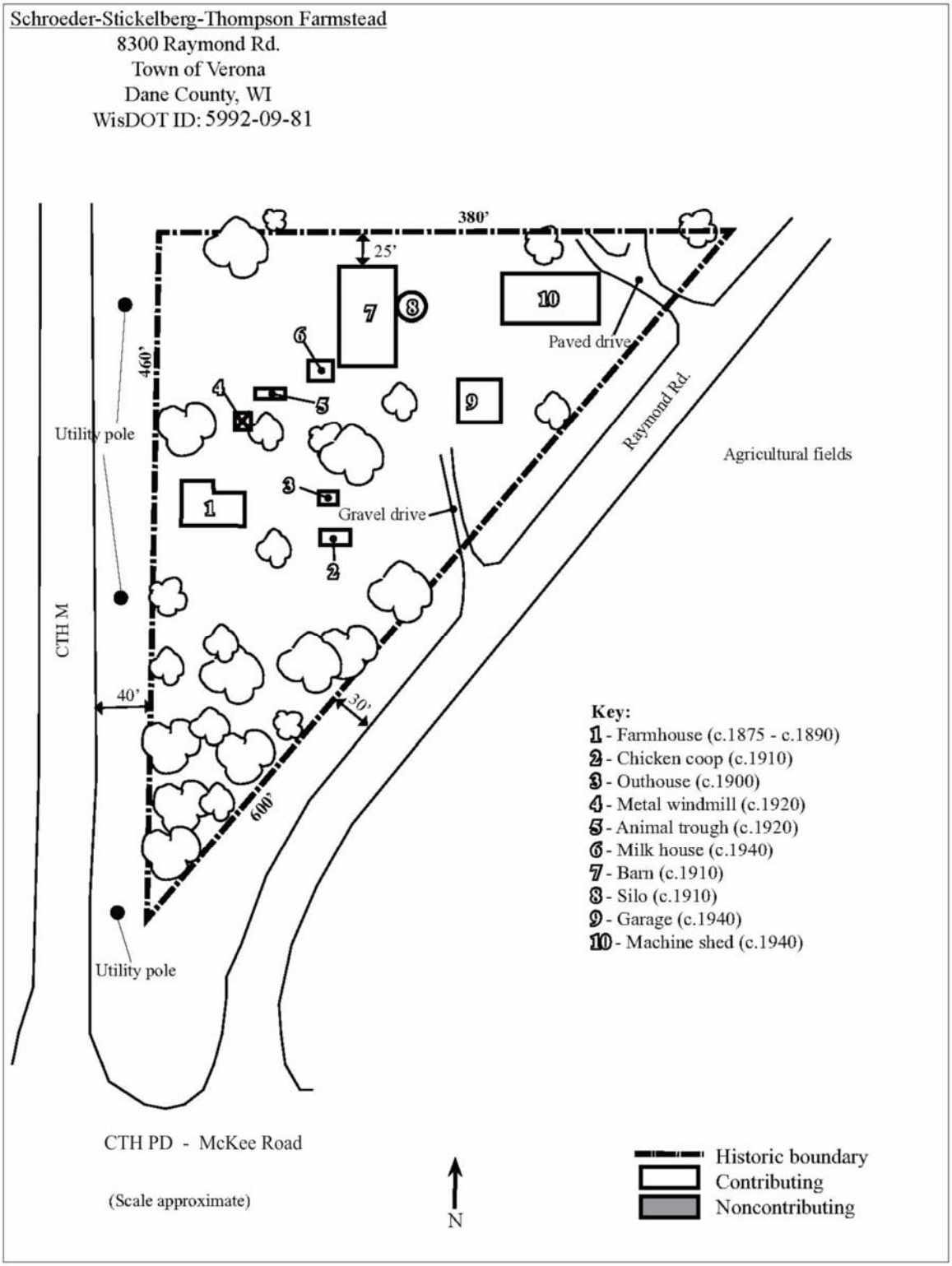
3.1 Schroeder-Stickelberg-Thompson Farmstead - (Historic Property)

This property is privately owned historic farmstead which is eligible for listing on the National Registry of Historic Places (NRHP). The property is located at 8300 Raymond Road in the northeast quadrant of the CTH M and CTH PD intersection. This property contains a farmhouse (c.1875 – c.1890), windmill, animal trough and seven contributing buildings. These contributing buildings include:

- Chicken coop (c.1910)
- Privy (outhouse) (c.1900)
- Milk house (c.1940)
- Barn (c.1910)
- Silo (c.1910)
- Garage (c.1940)
- Machine shed (c.1940)

The historic farmstead is located in a rural setting bordered by wooded area on the south side of the property (in the northeast quadrant of the CTH PD – CTH M intersection). There is a newer home owned by the same owner that is currently occupied as a single family home, but it is located outside the historic boundary. The driveway to this modern home does cross the historic boundary. This site qualifies as a Section 4(f) resource as it is eligible for inclusion in the National Register of Historic Places. Figure 9 below shows the historic farmstead property, its boundaries, and the Section 4(f) contributing resources.

Figure 9: Schroeder-Stickelberg-Thompson Farmstead - (Historic Property)



The historic boundary of the farmstead consists of a triangle that encompasses all of the property's contributing resources and is delineated by existing tree lines and ROW along Raymond Road and CTH M. This includes:

- Western Boundary: Beginning at the southernmost edge of the tree line around the property, the historic boundary runs north for 460 feet along the edge of the tree line and the CTH M ROW (40 feet east of the paved edge of CTH M).
- Northern Boundary: From the western edge, the boundary runs east for 380 feet; this is 25 feet north of the northern edge of the contributing barn (no distinct tree line or other visual demarcation exists, and the northern tax parcel line was not used as the historic boundary so as to exclude a recently-constructed house).
- Eastern Boundary: From the northern edge, the boundary runs southwest for 600 feet along the Raymond Road ROW and the edge of the tree line (30 feet northwest of the paved edge of Raymond Road).

An individual Section 4(f) evaluation is required for the Schroeder-Stickelberg-Thompson Farmstead.

An Individual Section 4(f) Evaluation is required when there are adverse impacts to a property that is a public owned park, recreation area, wildlife or waterfowl refuge, or private or public historic site. The proposed intersection and roadway reconstruction project will require the use of the land within the Section 4(f) property which results in impacts greater than those determined as de minimis. A Programmatic Section 4(f) Evaluation cannot be applied to this situation because it does not fit the common fact pattern as defined by FHWA. Because a de minimis or programmatic evaluation is not appropriate for this site, an Individual Section 4(f) Evaluation is required for the Schroeder-Stickelberg-Thompson Farmstead.

3.2 University Ridge Golf Course - (Public Recreation Facility)

The overall University of Wisconsin property is approximately 560 acres and is located in the northwest quadrant of the CTH M and CTH PD intersection. This property has several different uses including:

Table 6: University of Wisconsin Property

	Approximate Acreage	R/W Needed	Section 4(f) Protected
University Ridge Golf Course	370	Yes	Yes
OJ Noer Turf Grass Research and Education Facility	30	Yes	No
Thomas Zimmer Cross Country Course	90	No	N/A – No R/W needed
Other (Agricultural, Woodland Buffer, etc.)	70	Yes	No

The University of Wisconsin property is located along the west side of existing CTH M from CTH PD to Midtown Road. The University Ridge Golf Course qualifies as a Section 4(f)

property because it is a golf course that is owned, operated, and managed by a public agency (University of Wisconsin –Board of Regents), and is open to the public with its main function as recreation. See the course's website (http://www.universityridge.com/) for more information.

The course derived its name from the landscape features left by the last retreating glacier. The course sits on the terminal moraine, where the Wisconsin Glacier stopped, forming the backbone of the ridge that separates the land into groups of rolling hills and valleys. The natural ridge dictated course construction with the designers following the contours of the land creating a natural setting that overlooks the city of Madison. Course designer Robert Trent Jones, Jr., considered to be among one of world's foremost golf course architects, had broad versatility in mind when designing the course. At the same time, he was extremely conscious of preserving the integrity of the land to bring out its natural beauty. Over the last decade University Ridge has received national attention and has become a top 50 public course in the country. The superior service and pristine course conditions have brought forth numerous awards and other recognitions. University Ridge has been a top-10 golf course in Wisconsin since the doors opened in 1991.

The golf course property borders both CTH M and CTH PD within the project limits. Specific features on the course in proximity to the roadway include Morse Pond and hole #3.

Morse Pond is within the course property next to CTH M. This is a natural pothole pond. The Wisconsin Department of Natural Resources (WDNR) does not list this resource as an outstanding, exceptional, or impaired waterbody. The WDNR has also indicated that this pond has little recreational value due to the turbid water quality, soft bottom, and shallow depths that result in severe winter kill conditions. This pond does provide aesthetic value to the golf course and though not designed to be a stormwater management facility, it has defaulted to that use.

Due to the minor impacts of the proposed action, a de minimis level Section 4(f) determination is appropriate for the University Ridge property. However, due to its proximity to the Schroeder-Stickelberg-Thompson farm, discussion of impacts to this resource are included with the farmsteads evaluation since slight variations of each alternative result in varying levels of impact to one Section 4(f) resource or the other.

3.3 Ice Age National Scenic Trail - (Recreation Trail)

The Ice Age National Scenic Trail, established in 1980, is a 1,200 mile path consisting mostly of hiking trails that stretch across Wisconsin. It is one of only eleven National Scenic Trails in the United States. Its western end is located in Interstate State Park on the St. Croix River in Polk County. The eastern end is located in Potawatomi State Park on Green Bay in Door County.

NPS designated National Scenic Trails are established to provide access to natural beauty and allow for the pursuit of outdoor recreation. The trail is maintained by the Ice Age Trail Alliance, and its inclusion as a National Scenic Trail also puts it under the jurisdiction of the U.S. National Park Service.

The Ice Age Trail is located along the west side of CTH M, near and on the University of Wisconsin Board of Regents OJ Noer Turf Grass Research and Education Facility, continuing through the University Ridge Golf Course. See Area Trails and Multi-Use Paths Exhibit in Appendix A. The Ice Age Trail is located on University of Wisconsin property via easement.

On the east side of CTH M, the Ice Age Trail travels through Dane County Parkland (though no specific easement exists). The Ice Age Trail crosses Raymond Road at the existing Badger Mill Creek culvert and continues south towards CTH PD. Impacts to the property along CTH M are shown with yellow hatching in the Section 4(f) Properties Right of Way Exhibit in Appendix A and along Raymond Road in the Section 4(f) Properties Right of Way – All Build Alternatives Exhibit in Appendix A. Due to the impacts of the proposed action, a de minimis level Section 4(f) determination has been prepared for the Ice Age Trail.

3.4 Dane County Parkland - (Unnamed Recreational Area)

The 47.8 acre property is located along the east side of CTH M between CTH PD and Flagstone Drive and it abuts Flagstone Park, a city of Madison neighborhood park. The park also borders Raymond Road at the east end of the park. A portion of the Ice Age National Scenic Trail is located on this land. Title search information does not show a specific easement location for the IAT through the Dane County parkland. The rest of the parkland is naturally occurring and restored landscape. There is a small wooded area on the east side of the property; the rest is open prairie. The park qualifies for Section 4(f) because the property is used for recreational purposes. Impacts to the property along CTH M are shown with orange hatching in the Section 4(f) Properties Right of Way Exhibit in Appendix A and along Raymond Road in the Section 4(f) Properties Right of Way Exhibit – All Alternatives Exhibit in Appendix A.

Due to the impacts of the proposed action, a de minimis level Section 4(f) evaluation has been prepared for the Dane County Parkland.

A de minimis impact is one that, after taking into account any measures to minimize harm, results in a determination that the project would not adversely affect the activities, features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f). Based on the proposed impacts due to project improvements, Determination of a De Minimis Impact to a Section 4(f) Property reports were prepared for University Ridge Golf Course, Ice Age Trail, and Dane County Parkland.

3.5 Ice Age Junction Multi-Use Path, City of Madison

The Ice Age Junction Multi-use Path is operated and maintained by the City of Madison. The CTH M portion of the Ice Age Junction multi-use path will ultimately connect the Military Ridge State Trail in the city of Verona to the multi-use path network in both the cities of Madison and Middleton. Portions of this path have previously been constructed including two path segments near the CTH M corridor:

- One path segment is located north of the project corridor between Valley View Road and CTH S (Mineral Point Road)
- The second path segment currently extends from south of CTH PD to the Flagstone Drive. This portion is located off-road east of the CTH M corridor.

The proposed action will include connecting these two path segments as well as extend the Ice Age Junction Path south of Flagstone Drive along CTH M. See Area Trails and Multi-Use Paths exhibit in Appendix A.

3.6 Unnamed Multi-Use Path, City of Verona

The City of Verona's bicycle and pedestrian facilities network includes an existing path located along the south side of Ineichen Drive that currently ends at the CTH M/Ineichen Drive intersection. This path extends from CTH M east and south through a small developing subdivision and Harmony Hills Park before intersecting Enterprise Drive. See Area Trails and Multi-Use Paths exhibit in Appendix A.

4 Description of Use and Impacts on the Section 4(f) Resources

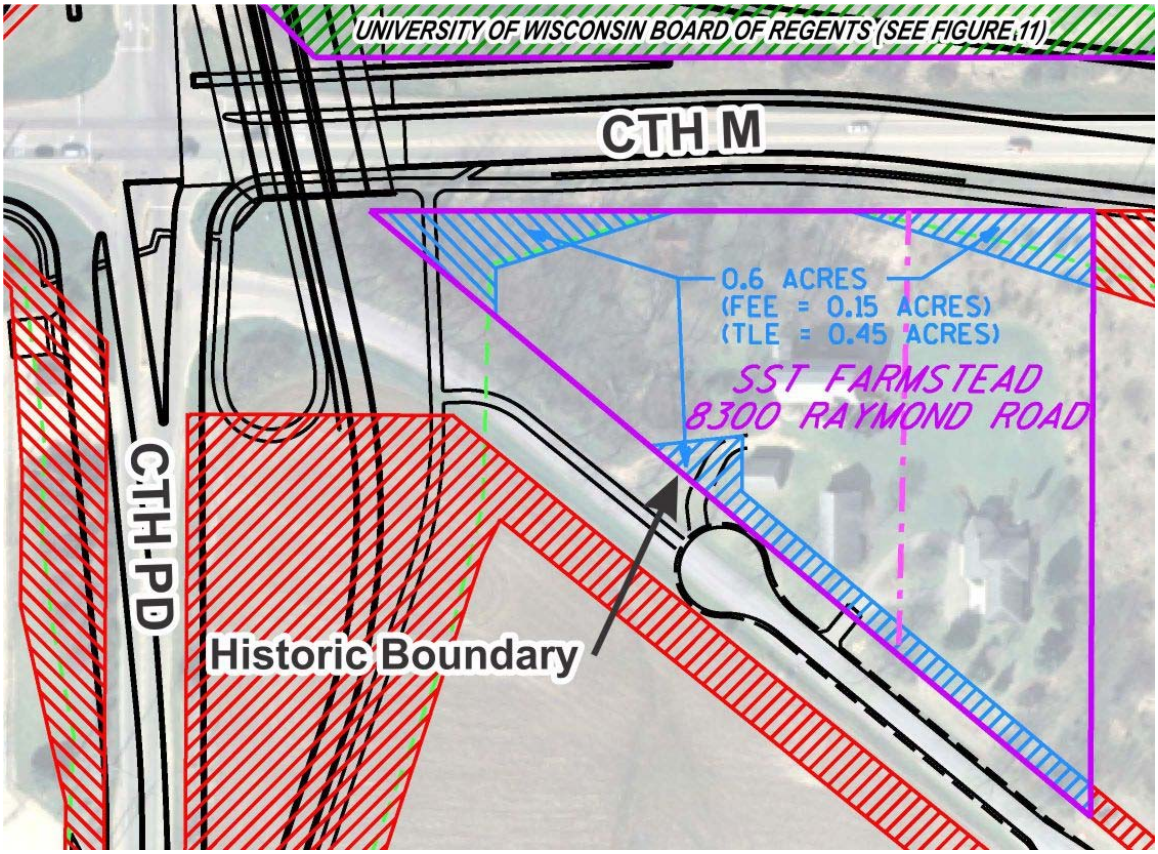
This section discusses the use and impacts on the Section 4(f) resources for the alternative carried forward for consideration. It is important to note that all considered alternatives had very similar impacts to the Schroeder-Stickelberg-Thompson Farmstead (SST).

The proposed action's preferred alternative, The Westbound Underpass, would include the following uses of Section 4(f) resources:

4.1 Schroeder-Stickelberg-Thompson Farmstead (SST)

The proposed action will have an impact on the Schroeder-Stickelberg-Thompson Historic Farmstead (4.2 acres), and requires a full Section 4(f) evaluation.

Figure 10: Schroeder-Stickelberg-Thompson Farmstead Impacts



A description of use and impacts are listed below:

- Acquisition of 0.6 acres of strip right of way, see Figure 10: Schroeder-Stickelberg-Thompson Farmstead – Impacts
    - 0.15 acres of FEE (permanent right of way)
    - 0.45 acres of Temporary Limited Easement (TLE) – (temporary occupancy)
- Relocation of the historic farmsteads southern Raymond Road driveway access.
- Removal or relocation of the historic farmsteads CTH M driveway access
- Removal of trees along CTH M right of way (western property line)
- See Figure 9 in Section 3.1 for further evaluation and documentation showing the historic farmstead property, its boundaries, and the Section 4(f) contributing resources.
- Existing private utilities within the project limits on this property will need to be relocated. This relocation will require new utility easements along the SST farmstead.

More information can be found in the executed Memorandum of Agreement in Appendix B.

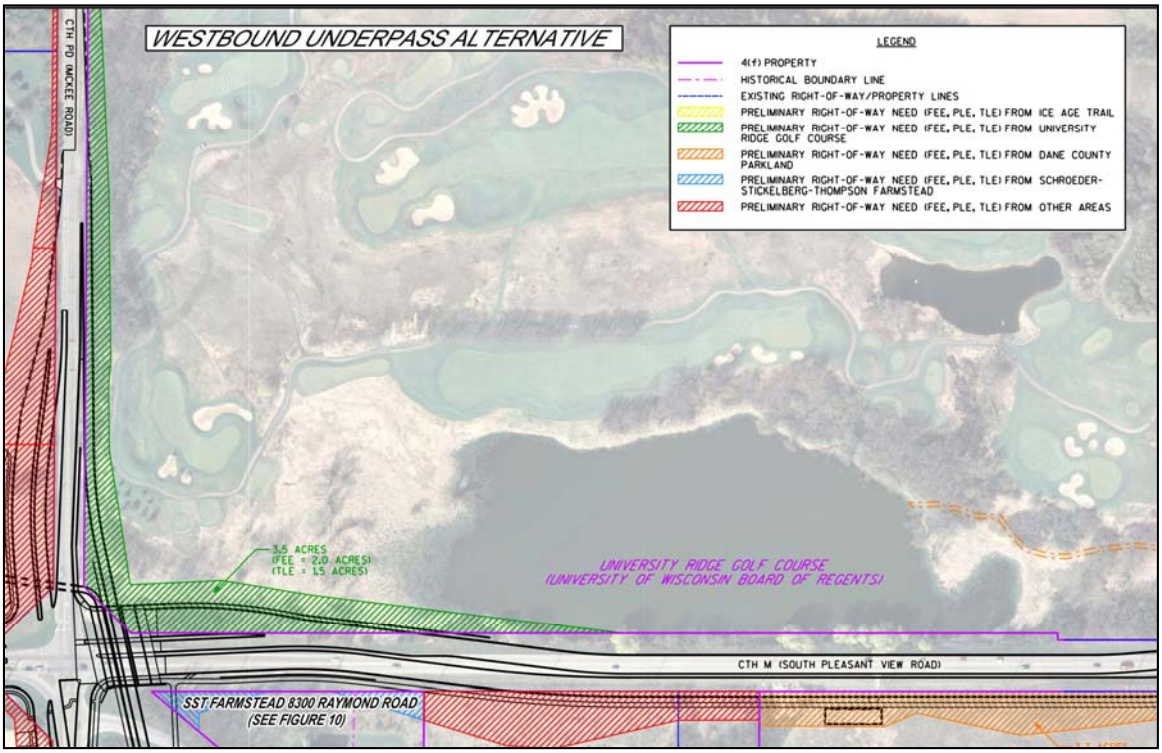
4.2 University Ridge Golf Course

The proposed action will have an impact on the University Ridge Golf Course and require a de minimis Section 4(f) determination. See Figure 11 below. A full map of right of way impacts can be found in Appendix A – Section 4(f) Properties Right of Way Exhibit: Westbound Underpass Alternative. A description of use and impacts are listed below:

- Acquisition of 3.5 acres of strip right of way from overall 370 acre portion of the UW owned property that supports the golf course (including fairways, greens, tees, cart paths, maintenance paths, maintenance sheds, club house, and maintenance buildings).
    - 2.0 acres of FEE
    - 1.5 acres of TLE (temporary occupancy)
- Removal of several trees and shrubs that border the CTH M right of way (east property line). These trees and shrubs are naturally occurring and not part of the planned golf course landscaping.
- Relocation of the University Ridge welcome/gateway sign at the intersection of CTH M and CTH PD.
- Impacts from the proposed action will not alter or affect the use golf course features, attributes or activities including the property's natural pond.

- The Official with Jurisdiction over the golf course property, University of Wisconsin Board of Regents, is supportive of the proposed action and concurs that impacts from the proposed action will not result in any adverse effect to the activities, features, or attributes that qualify the property for protection under Section 4(f). See Appendix B.

Figure 11: University Ridge Golf Course Impacts



4.2.1 Measures used to Minimize and Mitigate Effects

CTH M is located between University Ridge Golf Course to the west, and a historic farmstead property and Dane County parkland to the east. All properties are protected by Section 4(f). Every attempt was made to minimize the land required for roadway, intersection, bicycle and pedestrian facilities.

All attempts were made to minimize adverse effects to the golf course property and surrounding landscape. Specific measures taken include:

- Shift the CTH PD intersection south to minimize impact on the golf course and farmstead. The shift south was limited by the constraints of the electrical power substation on the southeast quadrant of the intersection.
- Narrow the overall roadway width using minimum desirable median and travel lane widths

- Minimize visual impact of the intersection by limiting roadway profile changes and selecting the Westbound Underpass Alternative as the preferred alternative. The roadway bridge in this alternative has the lowest overall height and thus the least visual impact on the golf course.
- Restore and landscape disturbed areas. Consult with University officials on the landscape restoration plan. The plan may include planting to provide visual screening between the road and golf course.
- Payment of the fair market value of the land and improvements taken or relocated

4.3 Ice Age Trail

The proposed action will have an impact on the Ice Age Trail and require a de minimis Section 4(f) determination. Impacts to the trail along CTH M are shown with yellow hatching in the Section 4(f) Properties Right of Way Exhibit – Westbound Underpass Alternative in Appendix A and along Raymond Road in the Section 4(f) Properties Right of Way – All Build Alternatives Exhibit in Appendix A. A description of use and impacts are listed below:

- On the University of Wisconsin owned property, the Ice Age Trail (IAT) has an easement for the Ice Age Trail over the land owned in FEE by the University of Wisconsin Board of Regents. The proposed action will require FEE acquisition of 0.3 acres of the IAT easement over the underlying OJ Noer Turf Grass Research and Education Facility land.

  NOTE: The affected portion of the Ice Age Trail is not located on the University Ridge Golf Course but is on the turf research facility adjacent to the golf course.

- Alteration and realignment of the existing IAT/CTH M crossing to improve roadway safety by eliminating this at-grade crossing.
  - Construction of a pedestrian trail underpass beneath CTH M will remove the need for pedestrians and trail users to cross CTH M at Flagstone Drive at grade.

- Alteration and realignment of the existing IAT Trail along CTH M within the University property and Dane County parkland.
  - Realign the trail along the west side of CTH M within University Property. The trail will continue to follow the toe of the CTH M highway embankment.
  - The OJ Noer Turf Grass Research and Education Facility will allow trail users to utilize the bridge over the Badger Mill Creek drainage swale. This will require an updated easement between IAT and the

University Board of Regents for the trail realignment, which the project sponsor will assist in facilitating.
  - Realign the trail along the east side of CTH M (unnamed Dane County Parkland) to promote the use of the proposed CTH M pedestrian underpass.

- Alteration and realignment of the existing IAT Trail at the crossing of Raymond Road at Badger Mill Creek.
  - The Ice Age Trail will have access to a sidewalk alongside Raymond Road, over a replacement structure for the Badger Mill Creek culvert. Trail users will be able to cross Raymond road near or within the marked and signed Raymond Road crossing in place for the crossing of the Ice Age Junction Multi-use Path.

- The Official with Jurisdiction over the Ice Age Trail (National Park Service) and their local partner (Ice Age Trail Alliance) is supportive of the proposed action and concur that impacts from the proposed action will not result in any adverse effect to the activities, features, or attributes that qualify the property for protection under Section 4(f). See Appendix B.

4.3.1 Measures used to Minimize and Mitigate Effects

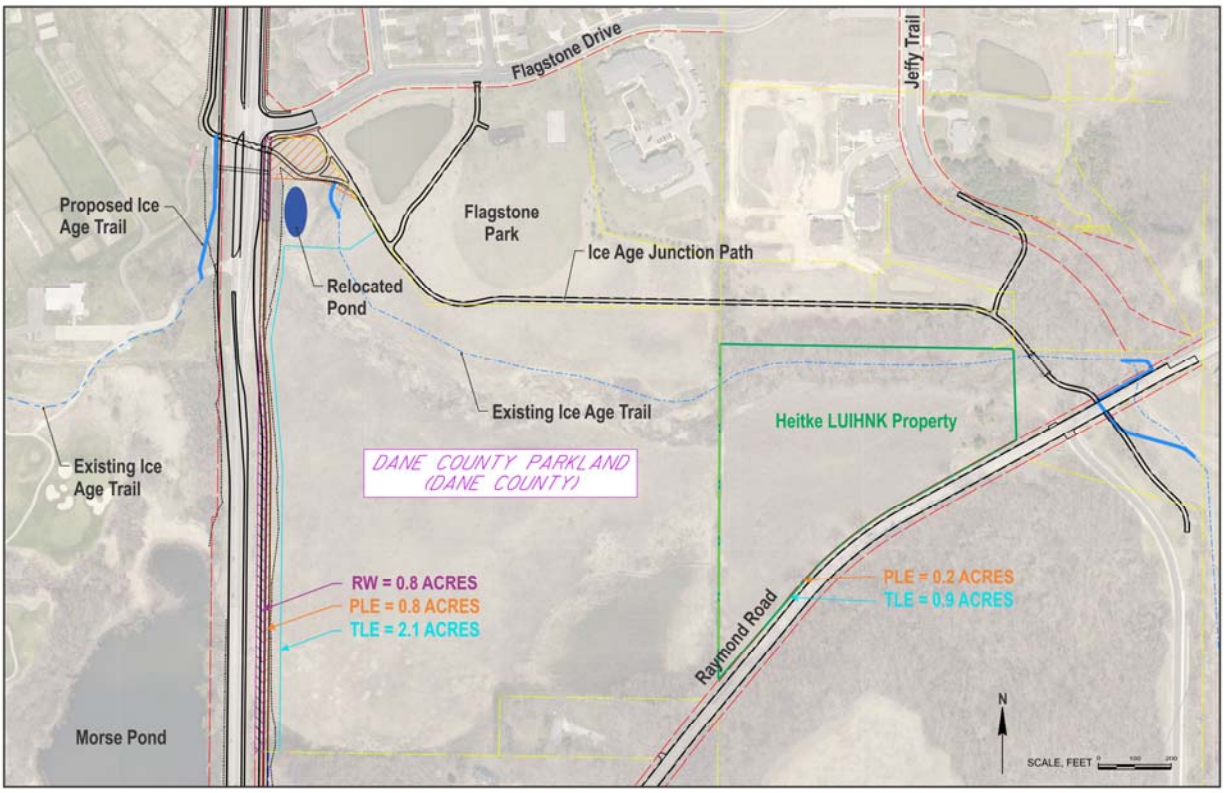
- Restoration and landscaping of disturbed areas under the guidance and direction provided by Ice Age Trail Alliance, National Park Service, and Dane County Park officials.
- Incorporation of trail alignment and construction design features to reduce or minimize impacts to the Section 4(f) property. Details of these features are included in the correspondence letter signed by the National Park Service in Appendix B:
- City of Madison has agreed to work with and include these design features in the project plans, thus they are funded by the project sponsors and not the Ice Age Trail.
  - Coordination is ongoing with IAT official to assist in redefining and updating the recording of their existing easement with the University of Wisconsin Board of Regents to keep the trail easement at the edge of the proposed CTH M right of way. The proposed easement will encompass the University owned bridge over the Badger Mill Creek drainage swale to provide IAT users a dry crossing. The University of Wisconsin has been consulted on including this bridge in the easement and is supportive of the Ice Age Trail's use of the structure. See correspondence from the University of Wisconsin in Appendix B.

4.4 Dane County Parkland

The proposed action will have an impact on the 48-acre Dane County Parkland property and require a de minimis Section 4(f) determination (see Figure 12 below). A full map of right of way impacts can be found in Appendix A – Section 4(f) Properties Right of Way Exhibit: Westbound Underpass Alternative and along Raymond Road in the Section 4(f) Properties Right of Way – All Build Alternatives Exhibit in Appendix A. A description of use and impacts are listed below:

- Acquisition of approximately 4.8 acres
    - 0.8 acre of FEE
    - 1.0 acre of PLE (0.2 acres from Raymond Road area, see Figure 12)
    - 3.0 acres of TLE (0.9 acres from Raymond Road area, see Figure 12)
- Realignment of Ice Age Trail
- Extension of culvert pipes from City of Madison owned stormwater pond to accommodate relocation of Ice Age Trail and construction of the paved Ice Age Junction Path extension.
- Grading and restoration of open prairie and a fire break/maintenance path, and dispersed recreational use along the CTH M edge of the property. Some hikers use the maintenance/fire break path for recreation use.
- Relocation of a small pond/wetland scrape.
- Temporary construction easements for grading and excavation along Raymond Road within the Dane County Park. Permanent easement will be acquired to provide a connection between the new MMSD sewer below Raymond Road and the existing sewer on easement through the park. Raymond Road will be reconstructed after completion of the sewer construction to a rural cross section. Permanent acquisition of land for the road reconstruction is not required.
- The Official with Jurisdiction over the parkland (Dane County Parks), is supportive of the proposed action and concurs that impacts from the proposed action will not result in any adverse effect to the activities, features, or attributes that qualify the property for protection under Section 4(f). See Appendix B.

Figure 12: Dane County Parkland Property Impacts



4.4.1 Measures used to Minimize and Mitigate Effects

- Reduce the overall width of the roadway by using the minimum desirable lane and median widths
- Minimize grading impact to construct the roadway by adjusting roadway profile
- Replace facilities impacted by the project including a driveway and gated fence
- Restore and landscape disturbed areas using design and specification guidance provided by Dane County Parks
- Incorporate design features and habitat features where necessary to reduce or minimize impacts to the Section 4(f) property. This includes:
    - Dane County Park staff indicated that the park area impacted is a restored prairie area. Park areas that are disturbed on a temporary basis for grading will be restored to the prairie condition. Dane County Park staff will provide construction specifications for this work including slope, soil, seeding, and erosion control requirements as well as a list of qualified contractors capable of completing the work. Dane County Park staff will provide construction oversight assistance during the restoration effort.

- Per request by Park staff, onsite replacement will be utilized for a wetland scrape impacted by the project. The wetland scrape is located near Flagstone Drive at the outlet of a cross culvert beneath CTH M. These wetland impacts will be replaced in kind and size by the project.

4.5 Ice Age Junction Path - (Temporary Occupancy)

The Ice Age Junction Path (linear resource), owned and maintained by the City of Madison (project sponsor), is a paved multi-use facility on the west side of Madison that will eventually provide connectivity for the west side of Madison. When complete, this path will provide a connection from the Military Ridge State Trail in the city of Verona to the cities of Middleton and Madison. Currently, one portion of this existing path ends near the Flagstone Drive/CTH M intersection.

As part of the proposed action, an extension to this path will be constructed tying into a stub of the existing path that currently is a dead end. See the Ice Age Junction Path Exhibit in Appendix A. An existing spur path through Flagstone Park provides path users an outlet to Flagstone Drive, a residential street suitable for bicycle access. Since this stub currently does not connect to any access point, the proposed action will not impact trail users during construction. The proposed project will complete this connection and provide connectivity to the overall Ice Age Junction Path once construction of the proposed action is complete.

The proposed action will also impact the path where it crosses Raymond Road. Raymond Road will be reconstructed to accommodate new sewer utilities and a new culvert over Badger Mill Creek. See the Section 4(f) Property Right of Way Exhibit – All Alternatives in Appendix A. Path sections removed as a result of the sewer construction and Raymond Road reconstruction will be re-paved in kind. Pavement crosswalk markings, crossing warning signs on Raymond Road, and detectable warning fields for pedestrians at the crossing will be replaced in kind. The Raymond Road profile will be adjusted as necessary to provide the appropriate sight distance and improve safety for the crossing. During construction, path users will be re-routed to a temporary path to minimize or eliminate the need to close the path.

There will be temporary occupancy of the path during construction. Temporary occupancy may result when the existing trail is connected to the new extension near Flagstone Drive and if any unanticipated construction related emergencies occur. Temporary occupancy is required at the Raymond Road path crossing. This temporary occupancy of the land would not be adverse for Section 4(f) purposes. Any temporary occupancy of the path would not constitute a Section 4(f) use as the following conditions listed in 23 Code of Federal Regulations (CFR) 774.13 (d) would be satisfied:

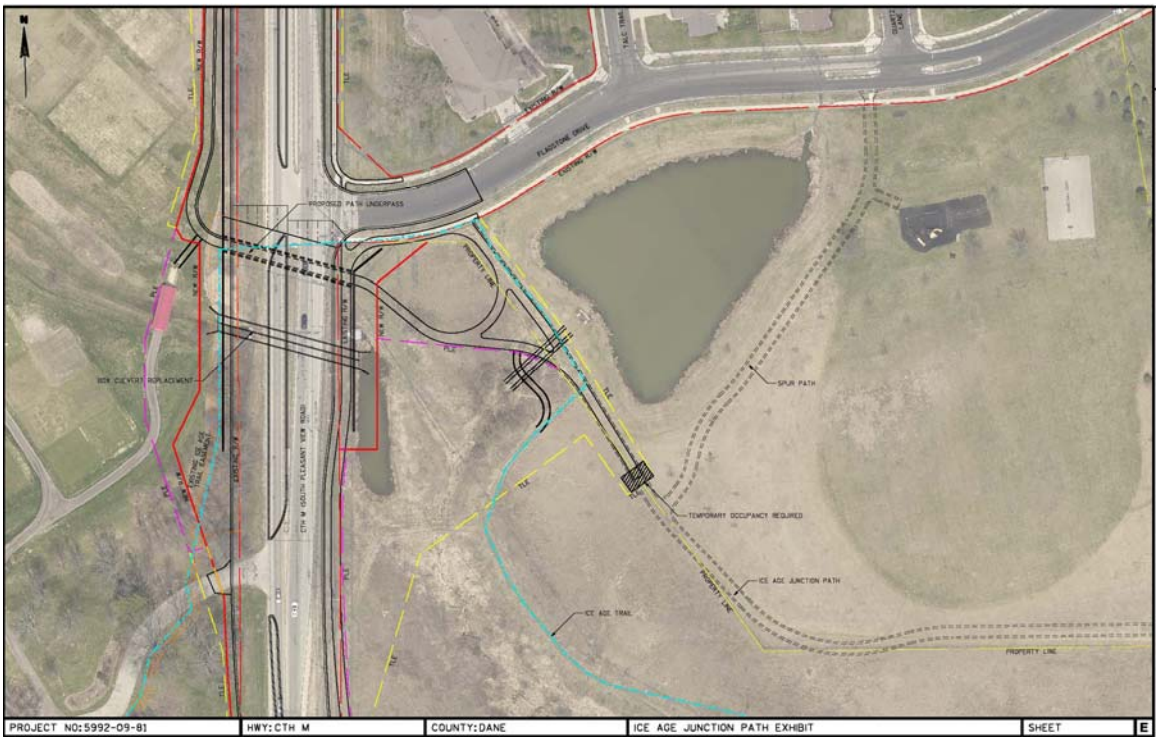
1. Currently the Ice Age Junction Path ends at the Flagstone Park at the intersection of Flagstone Drive and Quartz Lane. Any temporary occupancy will occur on a short (approx. 25 feet) dead end stub on the Ice Age Junction Path near Flagstone Drive.

See Figure 13 below. A larger version can be found in Appendix A – Ice Age Junction Path Exhibit (two pages). The remainder of the previously constructed Ice Age Junction Path will remain open and there will be no interruption.

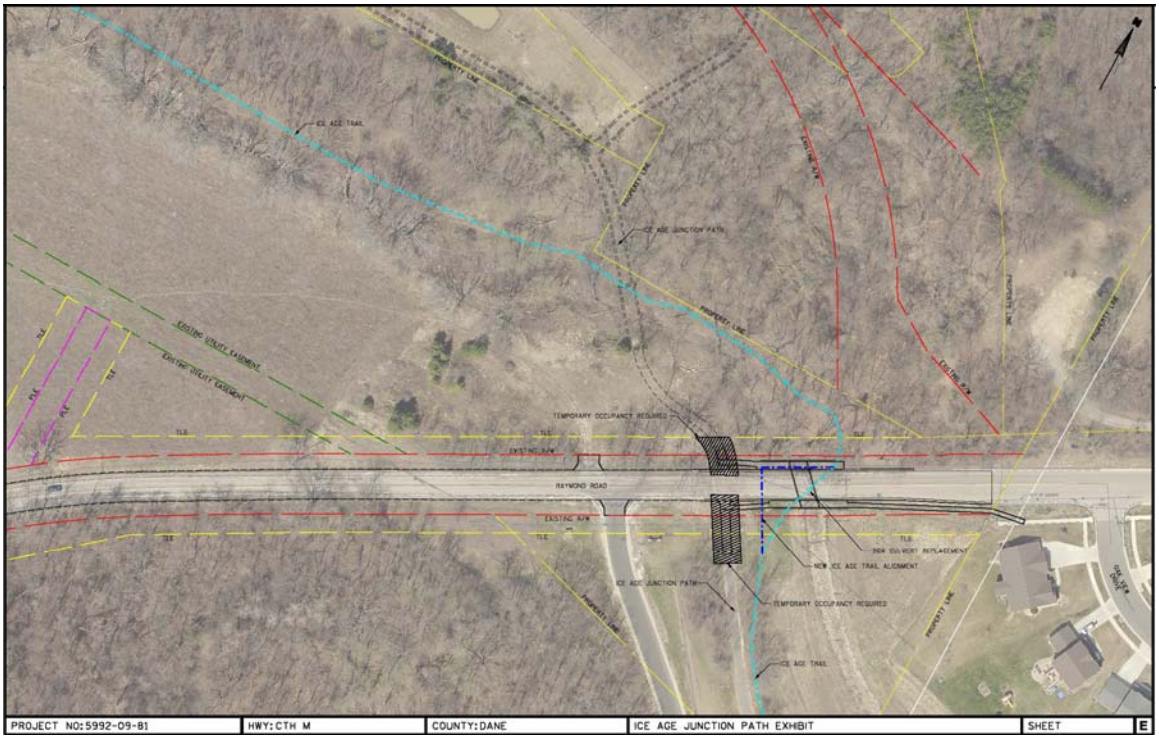
2. The path crossing at Raymond Road will be reconstructed in kind. Closures of the path to accommodate construction activities will be minimized or eliminated by use of a temporary path connection. See the Section 4(f) Property Right of Way Exhibit – All Alternatives in Appendix A.
3. All work on this Section 4(f) resource is minor (landscaping, short path segment construction, & connecting to existing path ends) and any change to the Section 4(f) recreational facility is minimal.
4. There are no anticipated permanent adverse physical impacts, or interference with the Section 4(f) resource's (Path) protected activities, features, or attributes.
5. Any open land or the trail that may be disturbed will be landscaped or restored to a condition as good as or better than what exists currently.
6. The City of Madison is the project sponsor and the path owner and agrees there will be no permanent adverse physical impacts to the trail nor will there be interference with the protected activities, features, or attributes of the Section 4(f) property. See Appendix B.

Figure 13: Ice Age Junction Path Impacts

At Flagstone Drive:



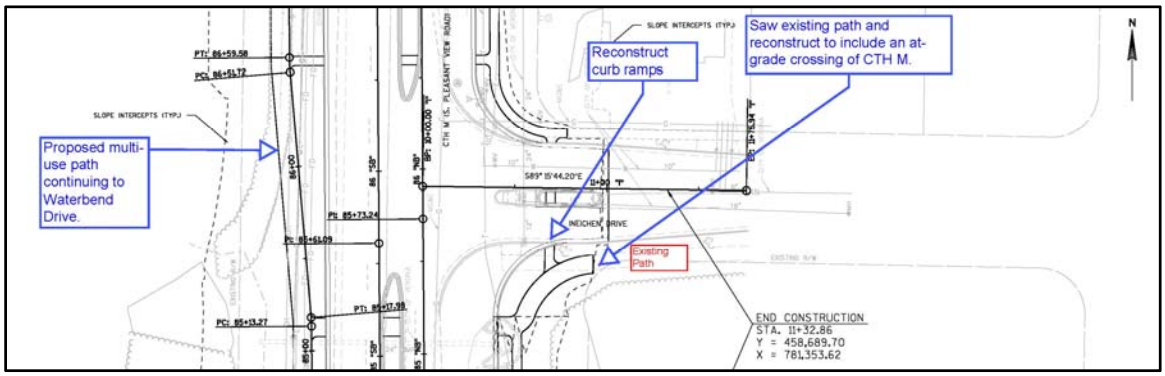
At Raymond Road:



4.6 City of Verona Unnamed Path - (Temporary Occupancy)

This unnamed path (linear resource) is owned and maintained by the City of Verona (project participant), is a paved multi-use facility. This paved path exists along the south side of Ineichen Drive extending from CTH M east to and through Harmony Hills Park. See Figure 14 below. A larger version can be found in Appendix A - Plan and Profile: Ineichen Drive.

Figure 14: Unnamed Path Impacts



At the Ineichen Drive/CTH M intersection, this path currently connects to Ineichen Drive and then ends. As part of the proposed action, an extension to this path will be constructed to provide access across CTH M connecting to the proposed multi-use path in this area. Once completed, this extension will provide connectivity from this path to other multi-use facilities in the area. See Area Trails and Multi-use Paths exhibit in Appendix A.

There may be temporary occupancy of the path end during construction. Temporary occupancy may result when the existing path is connected to the new extension and if any unanticipated construction related emergencies occur. However, this temporary occupancy of the land would not be adverse for Section 4(f) purposes. Any temporary occupancy would not constitute a Section 4(f) use as the following conditions listed in 23 Code of Federal Regulations (CFR) 774.13 (d) would be satisfied:

1. Currently this unnamed city of Verona Path ends at the Ineichen Drive/CTH M intersection. The remainder of the previously constructed Path will remain open and there will be no interruption.
2. All work on and adjacent to this Section 4(f) resource is minor (i.e. landscaping & connecting the existing path termini) and if any change to the Section 4(f) recreational facility would occur, it would be minimal.
3. There are no anticipated permanent adverse physical impacts, or interference with the Section 4(f) resource's (Path) protected activities, features, or attributes.
4. Any open land or the trail that may be disturbed will be landscaped or restored to a condition as good as or better than what exists currently.
5. The City of Verona is the project participant and the path owner and agrees there will be no permanent adverse physical impacts to the trail nor will there be interference with the protected activities, features, or attributes of the Section 4(f) property. See Appendix B.

5 Avoidance Alternative

The proposed action includes improvements along the CTH M corridor from Cross County Road to Prairie Hill Road. The proposed action along this corridor will be an expansion from 2-lanes to 4-lanes, with additional travel and auxiliary lanes along CTH M for a total of six pavement lanes north of CTH PD.

Within the limits of the proposed action is the CTH M/CTH PD intersection. Concerns at this intersection include operational deficiencies, safety, adjacent Section 4(f) resources (northwest and northeast quadrants), and the location of Alliant Energy regional electrical substation (southeast quadrant).

The CTH M/CTH PD/Raymond Road intersection is currently surrounded by:

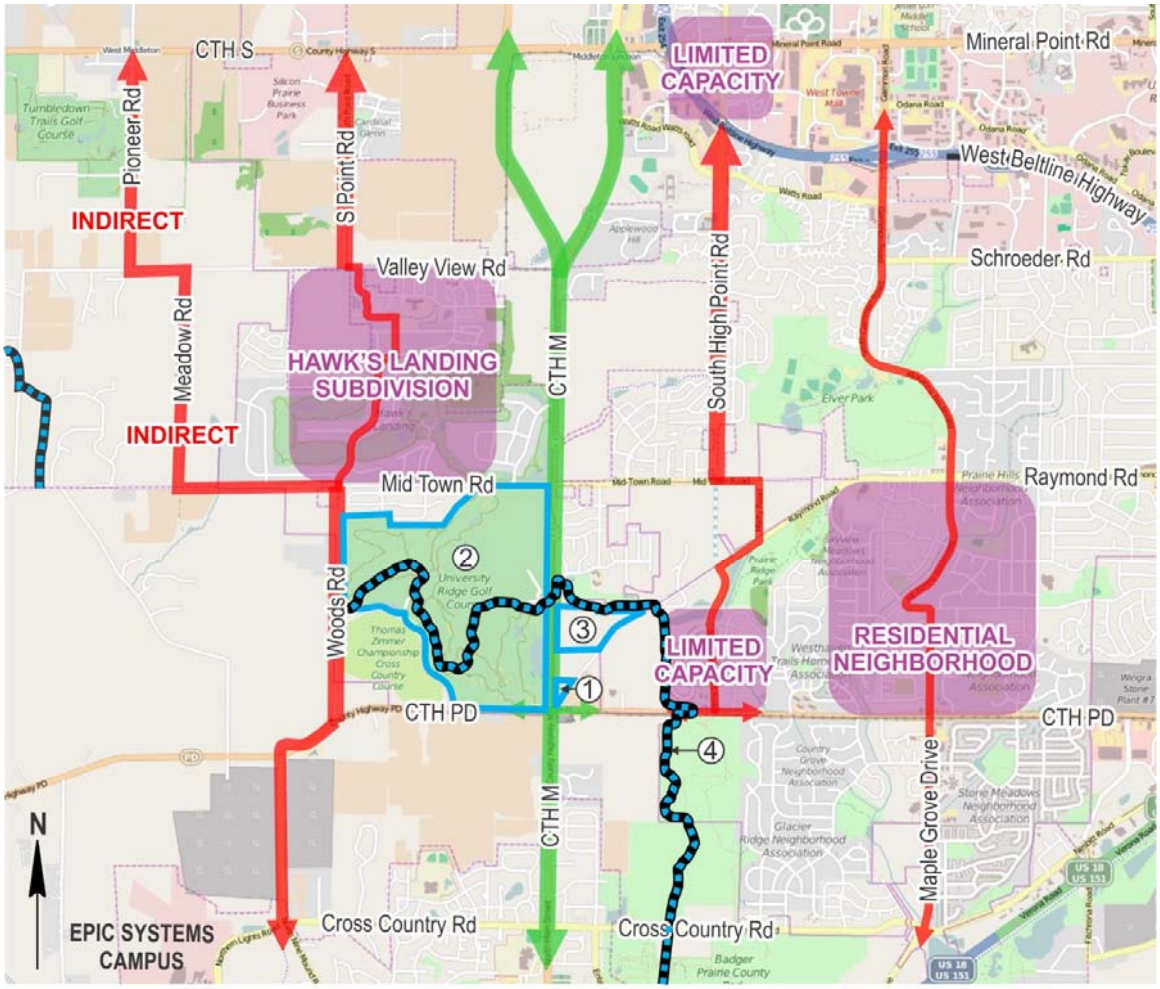
- Northwest Quadrant – University Ridge Golf Course, a Section 4(f) Resource
- Northeast Quadrant – This quadrant is split by Raymond Road.
    - Northern portion – Historic Schroeder-Stickelberg-Thompson Farm, a Section 4(f) Resource, 4.2 acre lot
    - Southern portion – Privately owned 22 acre lot. Zoned Rural Homes District-4 (see Figure 15 below)
- Southwest Quadrant – Privately owned 8.4 acre undeveloped lot. Zoned Rural Homes District-3
- Southeast Quadrant – Parcel owned by Alliant Energy (Wisconsin Power & Light) and contains a large electrical distribution substation

See Figure 16: CTH M/CTH PD Intersection Properties

Because of the location of two Section 4(f) Properties bordering CTH M north of CTH PD, and the purpose and need of the project requiring a widening of the CTH M roadway, an avoidance alternative using the existing alignment is not possible. Figure 16: North-South Corridor Routes illustrates the constraints of north-south travel in the project area. The areas outlined in blue are Section 4(f) properties identified as part of this project. The dotted blue line is the National Ice Age Scenic Trail, a linear resource. It is not possible to identify an alignment that would avoid impacting a Section 4(f) resource.

Figure 15: CTH M/CTH PD Intersection Properties

Figure 16: North-South Corridor Routes



① Schroeder-Stickelberg-Thompson Farmstead
② University Ridge Golf Course
③ Dane County Parkland
④ Ice Age National Scenic Trail

The Alliant Energy substation is located adjacent to both CTH M and CTH PD at this intersection. Roadway expansion within the fenced area of this facility would result in the need to relocate the entire substation. This substation serves approximately 11,000 residential and commercial customers in Verona and Madison and is expected to increase by 400 to 500 customers annually. This substation also serves Epic Systems, which has 9,400+ employees and whose electric usage is equivalent to approximately 2,800 homes. Relocation of this substation is neither feasible nor prudent due to the extensive costs (estimated upwards of $50 million).

View from Raymond Road looking south into the southeast quadrant of the CTH M/CTH PD intersection and the Alliant Energy parcel

Because of the high density of Section 4(f) resources at the CTH M/CTH PD intersection, it is impossible to avoid impacting a Section 4(f) resource still while meeting the project's purpose and need.

6 Intersection Alternatives

The following alternatives for the reconstruction of the CTH M – CTH PD intersection were considered during the preliminary design process. Each was evaluated for its feasibility, prudence, how well it met the purpose and need, and degree to which each alternative minimized impacts to the Section 4(f) resources in the project corridor. They included:

- No-Build
- Signalized At-Grade Intersection
- Continuous Flow Intersection (CFI)
- Multi-Lane Roundabout Intersection*
- Jug-Handle Intersection (jug-handle alternatives at each quadrant were considered)*
- Tight Diamond Interchange*
- Westbound Underpass Intersection*

*Viable alternatives carried forward in this document

Current traffic volumes have made the existing facility functionally obsolete. Future projected traffic will only worsen this condition. Existing intersections and other access points along the corridor are failing on an operational level, with severe backups and delays occurring during peak travel hours. The current roadway does not provide adequate bicycle or pedestrian facilities for users. In order to provide a safe and serviceable corridor that is convenient for area businesses, residents, and the traveling public including motor vehicles, bicyclists, pedestrians, and transit, the existing roadway will need to be expanded.

This expanded roadway will require reconfigured intersections. Intersection safety, functionality, geometry, and congestion will be addressed. The intersection at CTH M /CTH PD is experiencing a substantial increase in vehicular traffic in recent years as southwest Madison and the Verona areas continue to grow. There is long delay on the southbound to westbound movement in the AM peak hour and the eastbound to northbound movement in the PM peak hour. This intersection currently operates at LOS F and delays would likely increase in future years as traffic continues to grow.

There are several design challenges with improving the intersection.

- The historic Schroeder-Stickelberg-Thompson Farmstead resides in the northeast quadrant of the CTH M/CTH PD intersection

- The property on the northwest quadrant is owned by University of Wisconsin Board of Regents (University Ridge Golf Course), another Section 4(f) protected property
- The property in the southeast quadrant is owned by Alliant Energy (Wisconsin Power and Light) and contains a regional electrical substation that is neither prudent nor feasible to move

It will not be possible to construct an alternative to meet the level of service (LOS), and capacity requirements without expanding the right of way into these properties.

When investigated, several of the alternatives were considered not feasible and/or prudent including the Signalized At-Grade Alternative, Continuous Flow Intersection, and the Jug Handle Alternatives in the northwest, northeast, and southeast quadrants.

The no-build option is outlined below, as well four build alternatives.

6.1 No-Build Alternative

In part because this road is a National Highway System facility, this alternative would not meet the purpose and need and would be neither prudent nor feasible. This alternative, if selected, would not address safety, congestion, operational needs, system connectivity (including the lack of connected bicycle and pedestrian facilities), or corridor functionality. Any future improvements would be limited to those that attempt to maintain the current service levels, driving surface, and address safety concerns at spot locations. No other action except normal maintenance would take place.

The existing 2-lane NHS facility and associated at-grade signalized intersections would remain and there would be improvement to safety or correction of congestion. The intersection configurations, road pavement, and roadway section would bear future traffic volumes, resulting in worsening congestion, mobility, and operational characteristics. The intersections would continue to operate at LOS F, with increased congestion and crashes as traffic increases in future years. As traffic volumes increase, users would typically take more risks when entering the traffic stream. There would continue to be limited bike and pedestrian facilities along the corridor. Driver's expectations for a consistent corridor will not be met resulting in safety and operational concerns related to merging from 4-lanes to 2-lanes at each termini.

No right of way would be acquired or construction costs incurred as a result of this alternative. Adverse effects to the historic Schroeder-Stickelberg-Thompson Farmstead, University Ridge Golf Course, Ice Age National Scenic Trail, and Dane County Parkland would be avoided and no temporary impacts to the Ice Age Junction Path or unnamed path near Ineichen Drive would occur in the short term. Any potential safety or capacity improvement project at the intersection would likely have an adverse effect on the property at a future date.

Although the No-Build Alternative would avoid an adverse effect to Schroeder-Stickelberg-Thompson Farmstead, it would not address key purpose and need factors including lack of bicycle and pedestrian facilities and poor traffic operations.

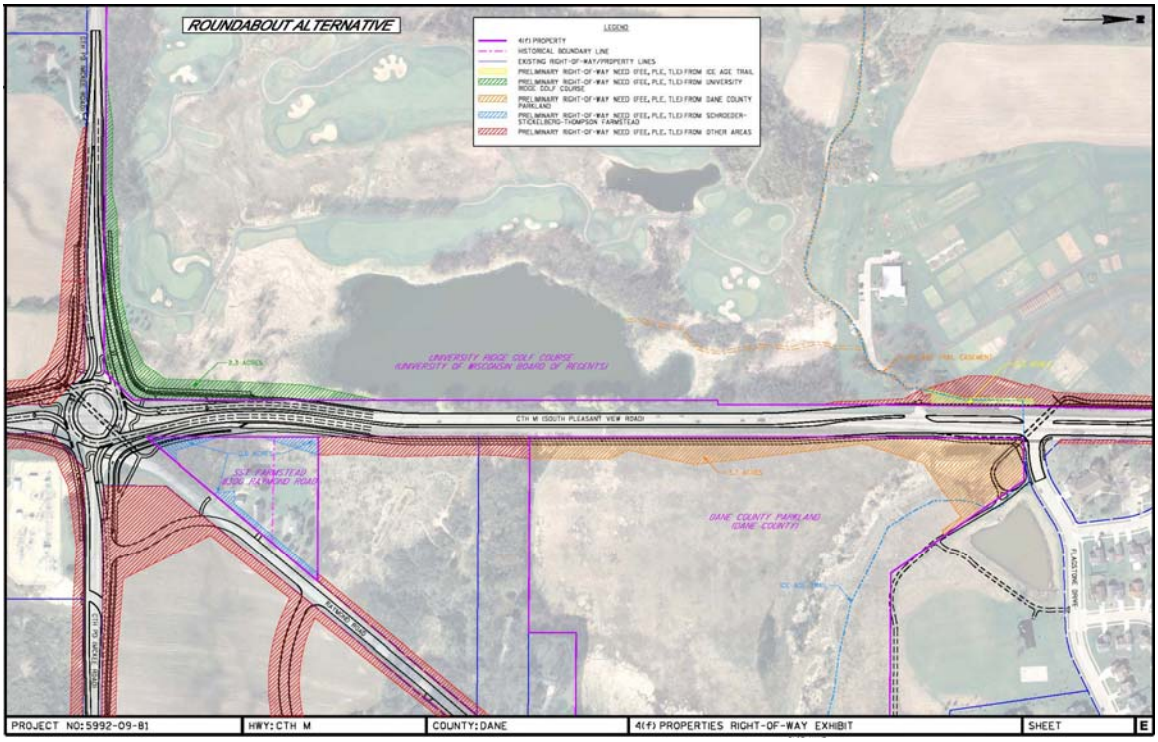
The No Build Alternative is neither prudent nor feasible and does not meet the purpose and need for the project. However this alternative does serve as a baseline for a comparison of impacts related to the Preferred Alternative.

6.2 Multi-Lane Roundabout Alternative at CTH M/CTH PD

The Multi-Lane Roundabout Alternative was designed with a curved alignment of CTH M to shift the road west to reduce impacts to the historic Schroeder-Stickelberg-Thompson Farmstead and avoid Morse Pond on the Section 4(f) protected University Ridge Golf Course property. Six travel lanes were included to carry the forecasted design year traffic volumes.

The Multi-Lane Roundabout Alternative also includes an underpass below the roundabout for the Ice Age Junction Path connection to Verona. This would provide a grade separated crossing of both CTH M and CTH PD at the intersection, See Figure 17 below for an overview. The full exhibit can be found in Appendix A – Section 4(f) Properties Right of Way Exhibit – Roundabout Alternative.

Figure 17: Multi-Lane Roundabout Alternative



The acquisition of highway Right of Way (FEE) would be limited to the northwest corner of the property (which is outside the historic boundary) and the southwest corner of the property

(within the historic boundary). Some temporary easements would be necessary for grading and landscaping purposes.

Raymond Road will be reconstructed as a two lane rural roadway as a result of the proposed MMSD sanitary sewer addition and to provide storm sewer pipe to send roadway stormwater to a regional stormwater pond. The paved shoulders along Raymond Road will be wide enough for bicycle accommodation. There aren't any existing pedestrian facilities nor a need to include them due to widespread, limited development on Raymond Road

Initially the Multi-lane Roundabout Alternative was considered a viable alternative and garnered support during early public involvement. However, it was later eliminated because it was not considered prudent.

The initial traffic modeling software used to analyze the intersection indicated that the roundabout had the capacity to accommodate the design year traffic volumes. Since the time the intersection was initially modeled, WisDOT completed studies comparing roundabout traffic modeling software with existing roundabouts in operation throughout Wisconsin and found that other modeling software better matched roundabout operations. The updated traffic modeling software indicated that the traffic volumes forecast for this intersection would exceed the capacity of the roundabout, resulting in excessive delay and long vehicle queues. If this alternative were constructed, the LOS at the intersection would NOT be improved for design year traffic volumes and would operate at level of service (LOS) F. This modeled roundabout LOS F equals the existing LOS F.

With the high volumes of traffic forecasted for this intersection, and the resulting lack of improvement to the overall level of service (F), the project stakeholders no longer fully supported this alternative. Representatives from the cities of Verona and Madison expressed concern that if the roundabout intersection reached and exceeded capacity, traffic would continue to utilize streets through the adjacent neighborhoods which are not designed to accommodate high traffic volumes.

Increasing the footprint of the roundabout to address level of service concerns is not feasible. The multi-lane roundabout alternative was designed for three circulating lanes. Roundabouts with more circulating lanes are not common and the operational efficiency and safety aspects of a roundabout with more than three circulating lanes have not been studied. A larger footprint would also not be prudent as it would require more right of way and have greater impacts to human, physical, and natural environment. An expanded footprint of the roundabout would potentially necessitate relocation of the Alliant Energy substation and would have greater impacts to the University Ridge Golf Course and historic farmstead property.

6.3 Southwest Jug-Handle Alternative

A Split-Grade Jug-Handle Alternative was designed to carry the high-volume northbound CTH M traffic over a bridge while a secondary road, the jug-handle, would provide access between the overhead northbound traffic and CTH PD. The Ice Age Junction Path paved path connection to Verona crosses CTH M at grade at the southern signalized intersection within the alternative. The paved path connection then crosses CTH PD on the bridge structure along the east side of CTH M. See Figure 18 below for an overview. The full exhibit can be found in Appendix A – Section 4(f) Properties Right of Way Exhibit – SW Jug Handle Alternative. Separating the highest volume movement from the primary intersection allows the intersection to operate more efficiently.

Three versions of the Split-Grade Jug-Handle Alternative were initially developed and studied and are named after the quadrant in which the jug-handle secondary road is located:

Northeast Option

The northeast option of this alternative would have the greatest effect on the historic Schroeder-Stickelberg-Thompson Farmstead and was therefore dismissed prior to seeking public input because it was not prudent.

Southeast Option

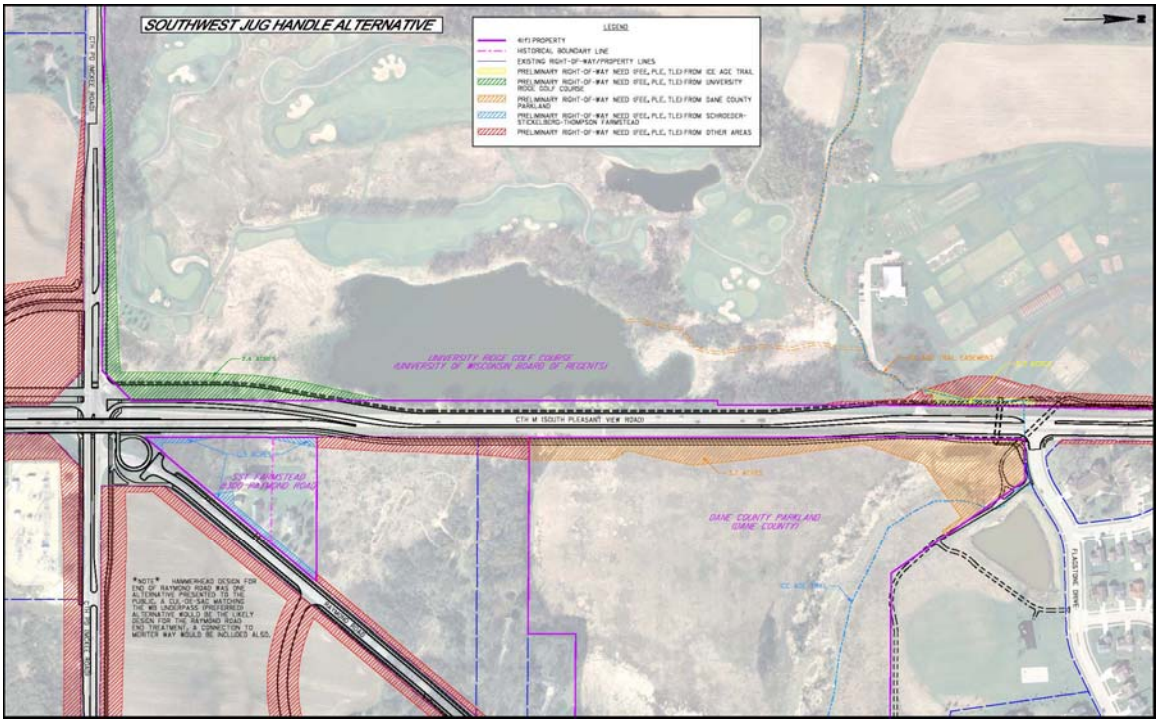
The southeast option would have resulted in an Alliant Energy electrical substation in the middle of the jug-handle portion of the intersection design. This substation serves approximately 11,000 residential and commercial customers in the southwest Madison area including the cities Verona and Madison. Usage from this substation is expected to increase by 400 to 500 customers annually. This substation also serves Epic Systems, Inc., which has 9,400+ employees and whose electric usage is equivalent to approximately 2,800 homes.

Having this substation within the intersections footprint would create a hazardous situation for both roadway users and utility employees. To avoid this safety hazard, the entire substation would need to be relocated (cost estimated to exceed $50 million). This intersection layout was dismissed prior to seeking public input because it was neither prudent nor feasible.

Southwest Option

The southwest option would provide acceptable levels of service for traffic operations (C) and was presented to the public.

Figure 18: Southwest Jug-Handle



This alternative has several drawbacks including:

- Impacts to the viewshed of historic property
- Large real estate needs
- Driver confusion due to unexpected movements (i.e. perform a left turn when the intended direction of travel is north to east, which is a right hand turn)

With this alternative, Raymond Road access to CTH PD will be removed and restored via a new roadway connection to Meriter Way, east of the CTH M and CTH PD intersection. Raymond Road will be reconstructed as a two lane rural roadway as a result of the proposed MMSD sanitary sewer addition and to provide storm sewer pipe to send roadway stormwater to a regional stormwater pond. The paved shoulders along Raymond Road will be wide enough for bicycle accommodation. A proposed short multi-use path connection will connect the end of Raymond Road with the multi-use paved path along CTH M and along CTH PD. There aren't any existing pedestrian facilities on Raymond Road nor a need to include them due to widespread, limited development.

This alternative did not receive strong support from the public due to the non-standard traffic flow configuration and potential driver confusion that this may cause. The southwest Split-Grade Jug-Handle Alternative was not chosen because it is not prudent. This was due to high real estate needs, high construction costs (bridge), and the alternative had greater impacts to the human physical and natural environment. Part of those impacts included a greater effect to the viewshed and setting to the historic Schroeder-Stickelberg-Thompson Farmstead. This

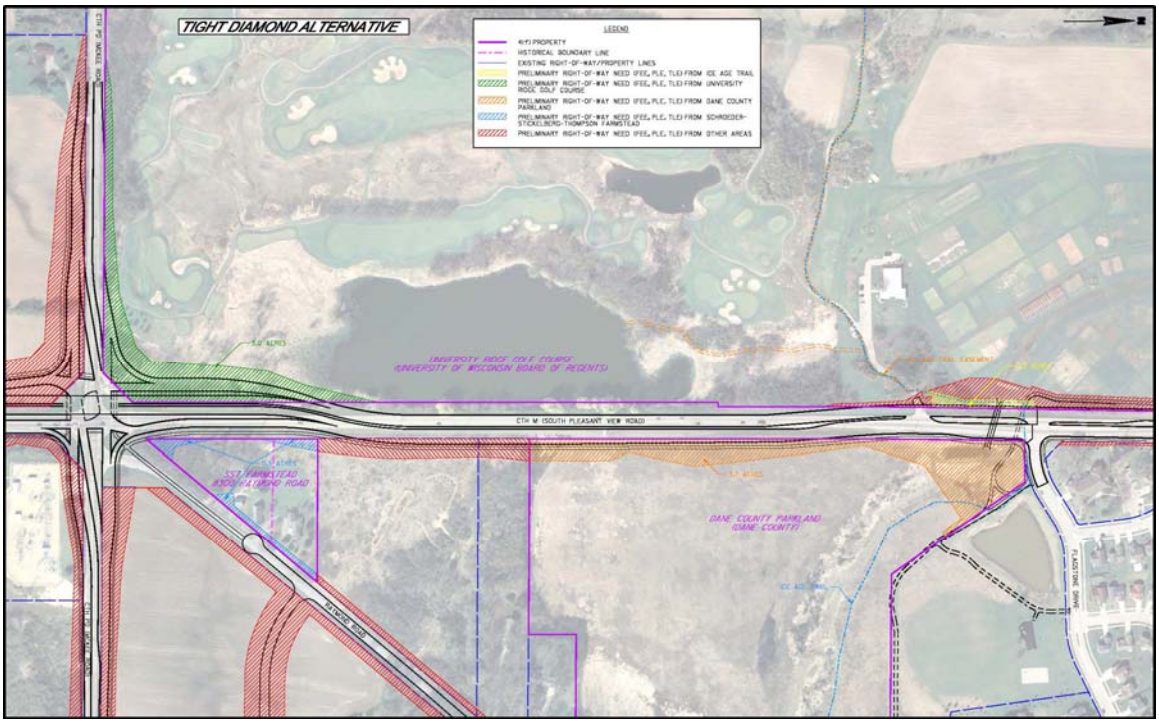
alternative also did not have full grade separation for the multi-use path crossing CTH M between the west and east side of the highway.

6.4 Tight Diamond Interchange Alternative

The Tight Diamond Interchange Alternative was designed with an alignment of CTH M that shifts the road west to reduce impacts the historic Schroeder-Stickelberg-Thompson Farmstead. The paved path connection from Verona to the Ice Age Junction Path would cross the intersection at grade. No grade separation for this path crossing is feasible without building a secondary structure. See Figure 19 below for an overview. The full exhibit can be found in Appendix A – Section 4(f) Properties Right of Way Exhibit – Tight Diamond.

The Tight Diamond Interchange is a grade separated interchange design. Four lanes of CTH M traffic (two northbound, two southbound) are carried over an at-grade signalized intersection via a 4-lane bridge. Access to CTH M and CTH PD is via ramps that intersect CTH PD, similar to a freeway interchange. This intersection design has the greatest traffic capacity (LOS C) of all the intersection alternatives proposed. With this alternative, the two primary travel directions, northbound and southbound, are not interrupted by a traffic signal or other type of intersection control (i.e., roundabout).

Figure 19: Tight Diamond Interchange



As part of this alternative, the CTH M alignment, bridge location, and ramp alignments were laid out to avoid and minimize impacts to the historic farmstead property. The design also

avoided the electrical substation. While impacts to the Schroeder-Stickelberg-Thompson Farmstead property were minimized, right of way within the historic boundary is required.

With this alternative, Raymond Road access to CTH PD will be removed and restored via a new roadway connection to Meriter Way, east of the CTH M and CTH PD intersection. Raymond Road will be reconstructed as a two lane rural roadway as a result of the proposed MMSD sanitary sewer addition and to provide storm sewer pipe to send roadway stormwater to a regional stormwater pond. The paved shoulders along Raymond Road will be wide enough for bicycle accommodation. A proposed short multi-use path connection will connect the end of Raymond Road with the multi-use paved path along CTH M and along CTH PD. There aren't any existing pedestrian facilities nor a need to include them due to widespread, limited development on Raymond Road

This alternative would result in the greatest improvement to overall level of service at this intersection and was presented to the public. However, this alternative does have substantial impacts to the human, physical and natural environment. These impacts include:

- High structure costs due to the size of the bridge required to carry four lanes of traffic over a large signalized intersection.
- Substantial impacts to viewshed in the area (including the historic farmstead) due to the need for retaining walls to limit the overall footprint of the intersection
- Because of the high volume of traffic forecast to be turning on to and off of CTH M, turn lanes and ramps needed to be dual lane designs. The dual lane entrance-ramps required merging lanes which would increase the footprint of CTH M north and south of the CTH PD intersection affecting numerous wetlands and restrict access off CTH M to planned development in Verona south of the intersection
- The Tight Diamond alternative was not able to accommodate a grade separated crossing of both CTH M and CTH PD for pedestrians and bicyclists accessing both sides of either roadway

Because of the number of drawbacks, the Tight Diamond alternative did not have full support from the City of Madison or the City of Verona.

This option does not provide grade separated bicycle and pedestrian facilities across both CTH M and CTH PD. Because of this and the issues with merging traffic, this alternative is not considered prudent.

6.5 Westbound Underpass Alternative – (Preferred Alternative)

The CTH PD Westbound Underpass Alternative was designed with a curved alignment of CTH M to shift the road west to reduce impacts to the historic Schroeder-Stickelberg-Thompson farmstead and Morse Pond.

The CTH PD Westbound Underpass alternative is similar to a traditional signalized intersection, except one of the traffic flows is removed. In this case, the CTH PD westbound flow was removed from the intersection utilizing an underpass. The paved path connection between Verona and the Ice Age Junction Path crosses the intersection below CTH M alongside the westbound CTH PD traffic flow, then crosses below CTH PD in a box culvert underpass. Full grade separated crossings are provided for the mulit-use path at the intersection. See Figure 20 below for an overview. The full exhibit can be found in Appendix A – Section 4(f) Properties Right of Way Exhibit – Westbound Underpass Alternative.

A traditional traffic signalized intersection would not have the traffic capacity to address all the conflicting traffic flows. However, by removing the westbound CTH PD through movement from the intersection, more time can be allotted to other movements that would normally conflict with the westbound CTH PD movement.

The proposed westbound underpass alternative functions by pulling the westbound traffic out of the at-grade intersection traffic stream and sending it under CTH M. See Figure 21 below for an overview showing an elevation view of the intersection. The full exhibit can be found in Appendix A – Elevation View of Westbound Underpass Alternative.

CTH M will cross a wide, short-span bridge with the westbound through traffic below. The rest of the intersection, including westbound traffic turning right or left onto CTH PD, will operate as it normally would at a typical traffic signalized intersection.

With this proposed traffic configuration, the level of service at this intersection will be improved from LOS F to LOS D.

Figure 20: Westbound Underpass Alternative

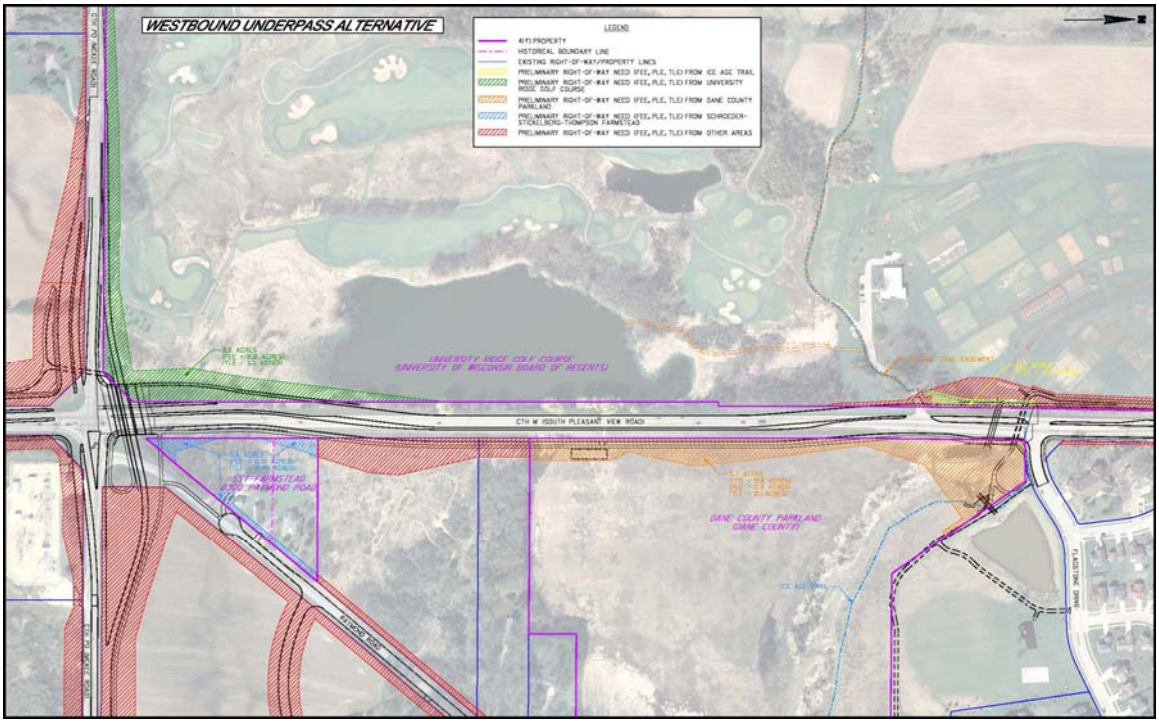
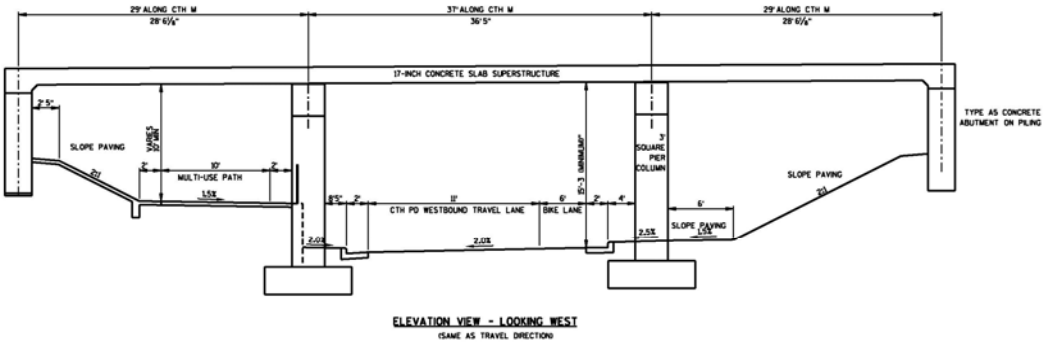


Figure 21: Elevation View of the Westbound Underpass Alternative



The intersection design was developed to limit impacts to the adjacent electric utility substation and to adjacent properties. Bicyclists and pedestrians are provided grade separated crossings of both CTH M and CTH PD. The intersection will be raised in order to accommodate passing westbound traffic below the intersection.

With this alternative, Raymond Road access to CTH PD will be removed and restored via a new roadway connection to Meriter Way, east of the CTH M and CTH PD intersection. Raymond Road will be reconstructed as a two lane rural roadway as a result of the proposed MMSD sanitary sewer addition and to provide storm sewer pipe to send roadway stormwater

to a regional stormwater pond. The paved shoulders along Raymond Road will be wide enough for bicycle accommodation. A proposed short multi-use path connection will connect the end of Raymond Road with the multi-use paved path along CTH M and along CTH PD. There aren't any existing pedestrian facilities nor a need to include them due to widespread, limited development on Raymond Road.

Raymond Road is under further study in the neighborhood planning process. In the future when this roadway is developed according the updated neighborhood plan, it will include pedestrian accommodations.

The CTH PD Westbound Underpass Alternative received support from the City of Madison, the City of Verona, and Dane County as a viable solution. It was also supported by the general public once presented at the Public Involvement meetings.

Table 7: Alternative Comparison Matrix

		ALTERNATIVE				
		No-Build	**Southwest Jug-Handle**	**Roundabout**	**Tight Diamond**	**PREFERRED Westbound Underpass**
*SST Farmstead Right of way (acres)	TLE	0	0.4	0.4	0.4	0.45
	FEE	0	0.1	0.2	0.1	0.15
Overall Project Right of way (acres)	TLE	0	26.3	24.5	24.6	26.1
	PLE	0	1.4	1.4	1.4	1.4
	FEE	0	24.6	22.2	23.6	24.8
Total Project Cost Estimate (Millions)	Real Estate	0	3.4	3.2	3.4	3.6
	Construction	0	34.6	32.0	36.5	37.5
Level-of-service (Traffic delay at CTH PD)		F	C	F	C	D
Meets project purpose and need?		No	Yes	No	Yes	Yes
Prudent		No	No	No	No	Yes
Feasible		No	Yes	Yes	Yes	Yes

*SST = Historic Schroeder, Stickelberg, Thompson Farmstead

7 Alternative with Least Overall Harm

FHWA has determined that there is no feasible and prudent avoidance alternative and the four remaining alternatives (including the Preferred Alternative) include all possible planning to minimize harm to the Section 4(f) properties resulting from such use. FHWA may approve only the alternative that causes the least overall harm in accordance with 23 CFR §774.3(c)(1). The three alternatives that meet the projects purpose and need, identified in Section V above are compared in the least harm analysis.

Three viable intersections alternatives were considered for the proposed action:

- Southwest Jug-Handle
- Tight Diamond
- Westbound Underpass.

Note all three above alternatives will cul-de-sac Raymond Road. Going forward, this location will only be referred to as CTH M/CTH PD intersection.

The least overall harm is determined by balancing the following factors in light of the statute's preservation purpose. The following seven items were evaluated for each above alternative:

1. The ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property.
2. The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection.
3. The relative significance of each Section 4(f) property; and
4. The views of the officials with jurisdiction over each Section 4(f) property
5. The degree to which each alternative meets the purpose and need for the project;
6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); and
7. Substantial differences in costs among the alternatives

A discussion of each alternative being considered with respect to the least harm factors is provided in the following sections.

Table 8: Quantitative Impact Summary to Section 4(f) Resources at CTH M/PD Intersection

		ALTERNATIVE		
		Southwest Jug-Handle	Tight Diamond	PREFERRED Westbound Underpass
Schroeder-Stickelberg-Thompson (SST) Historic Farmstead Right of way (acres)	TLE	0.4	0.4	0.45
	FEE	0.1	0.1	0.15
	Total	0.5	0.5	0.6
**University Ridge Golf Course Right of way (acres)	TLE	1.0	0.8	1.5
	FEE	1.4	2.2	2.0
	Total	2.4	3.0	3.5
Other Right of way (acres) at CTH PD intersection	TLE	5.7	4.2	5.0
	FEE	8.5	6.7	7.9
	Total	14.2	10.9	12.9
Overall Total Right of way at CTH PD intersection	Total	17.1	14.4	17.0

** = De Minimis Section 4(f) Impact only.

7.1 Southwest Jug-Handle Alternative

The Southwest Jug Handle Alternative was developed with a partial grade separation for the new multi-use path crossing at this intersection. While this alternative provides grade-separated pedestrian and bicycle facilities across CTH PD, it crosses CTH M at-grade at one of the signalized intersections. A grade separated crossing consisting of an underpass below CTH M was considered for this alternative; however, this would require maintaining the raised CTH M elevation further south of the intersection. This would increase the construction cost, right of way needs, and impact to the human, physical, and natural environment. The location of the considered underpass would be south of the CTH PD corridor, which would also be less desirable for connectivity along CTH PD. Due to these conditions, full grade separation for the multi-use path was not carried forward, resulting in the alternative only partially meeting the project purpose and need.

The Jug Handle Alternative has the largest permanent footprint to the human, physical, and natural environment as well as greatest overall real estate needs at the CTH PD intersection. Real estate needs from the historic farmstead specifically includes 0.4 acres for temporary limited easement (TLE), and 0.1 acres of permanent right of way (ROW). This is only 0.1 acre less than the preferred Westbound Underpass Alternative.

Preliminary concept development for the Jug Handle alternative indicated a higher roadway elevation on the bridge carrying traffic over the intersection. The span length of the bridge requires a girder design which adds over three feet of structure height as compared to the concrete slab bridge proposed for the Westbound Underpass Alternative. The higher elevation of the CTH M bridge profile, and the proximity of this bridge to the farmhouse on the SST farmstead would have a greater visual impact on the Section 4(f) property than the Westbound Underpass Alternative due to the required height of the walls and bridge structure.

A second bridge structure is proposed with this alternative to provide connectivity for the multi-use path system on CTH M and CTH PD. This structure is proposed adjacent to the SST farmstead in the existing Raymond Road right of way on the northeast corner of the intersection. This proposed structure would have further impact to the visual setting of the SST farmstead.

The City of Verona indicated that this design is less compatible with the North Neighborhood plan. The city's plan includes a new collector street connecting CTH M with Nine Mound Road to the west. The signalized intersection between CTH M and the jug handle roadway south of the CTH PD corridor (part of the Jug Handle design) would push the location of the intersection at CTH M for this new collector street south of the quarter section line, which is the planned location. The reason for the push is to maintain minimum quarter mile spacing between intersections.

Finally, the intersection layout is non-standard for four intersection movements which will not meet driver's expectations and increases driver confusion. This could lead to increased delay as driver's have to re-navigate the intersection and could cause more crashes. There is only one non-standard movement required to navigate the Westbound Underpass Alternative.

7.2 Tight Diamond Interchange Alternative

The Tight Diamond Interchange Alternative does not provide grade-separated pedestrian and bicycle facilities for crossing CTH M nor CTH PD and therefore does not meet part of the proposed action's purpose and need. Providing a multi-use path on the CTH M bridge over CTH PD would have resulted in an at-grade crossing of the ramps, an unsignalized path crossing. Because this design alternative is similar to a freeway interchange, the crossing would not be expected by drivers and is a safety concern with the high volume of vehicle traffic.

The only way to provide grade separated crossings would be to create a separate structure for the multi-use path which would greatly increase the footprint of the intersection and impact

to the human, physical, and natural environment, as well as the construction cost and real estate cost.

Preliminary concept development for the Tight Diamond alternative indicated a higher roadway elevation on the bridge carrying traffic over the intersection. The span length of the bridge requires a girder design which adds over three feet of structure height as compared to the concrete slab bridge proposed for the Westbound Underpass Alternative. The higher elevation of the CTH M bridge would have a greater visual impact on the Section 4(f) properties than the Westbound Underpass Alternative.

This alternative has the greatest visual impact due to bridge and retaining wall heights. It also only reduces the real estate impact to the Schroeder-Stickelberg-Thompson Farmstead by 0.1 acres (0.4 acres for TLE and 0.1 acres for ROW).

The Tight Diamond alternative creates access issues as expressed by the City of Verona. The dual lane southbound entrance ramp condition would create a three lane weave for southbound vehicles on CTH M looking to turn right and access the planned North Neighborhood development. A median barrier would prevent this weave condition and the resulting safety concerns, however would restrict this movement, forcing traffic to turn right at CTH PD in advance of the intersection. This was indicated as undesirable by City of Verona officials and thus did not receive full support from Verona officials.

7.3 Westbound Underpass Alternative – (Preferred Alternative)

The Westbound Underpass Alternative is the only alternative that provides a grade-separated pedestrian and bicycle crossing of CTH M. The intersection design is the closest to a traditional signalized intersection design, thereby reducing potential for driver confusion apparent in the Southwest Jug Handle Alternative. This alternative has the shortest height bridge and is more of an underpass condition as opposed to an overpass construction. This will reduce the height of the retaining walls and structure allowing this alternative to have the least visual impact to the SST farmstead. In addition, the wider opening of the bridge will be more inviting to bicyclists and pedestrians by allowing more natural light into the underpass. For property access, this alternative is the closest to meeting the City of Verona's north neighborhood plan. The intersection will provide acceptable operation conditions for future traffic volumes. Finally, this alternative was supported by the local officials with jurisdiction. This alternative requires 0.45 acres for TLE and 0.15 acres for ROW from the Schroeder-Stickelberg-Thompson Farmstead.

7.4 Quantitative Impact Summary

All of the build alternatives result in some harm to the historic Schroeder-Stickelberg-Thompson Farmstead and the University Ridge Golf Course. The identified harm is the adverse effect to the setting of the historic farmstead through substantial expansion of the highway facility and its associated retaining walls. The impacts to the golf course were

determined to be De Minimis in nature and consist of real estate acquisition (use) of Section 4(f) protected property. The following analysis summarizes how each alternative minimizes or mitigates the harm.

7.5 Least Harm Analysis Matrix

Note: The factors outlined below address impacts ONLY to the following Section 4(f) resources adjacent to the CTH M/CTH PD intersection:

- Historic Schroeder-Stickelberg-Thompson Farmstead due to the need for an individual Section 4(f) evaluation
- University Ridge Golf Course due to its proximity to the intersection and historic farmstead

The impacts to the following Section 4(f) resources have been determined to be either De Minimis (23 CFR 774.7(b)) or Temporary Occupancy (23 CFR 774.11):

- Ice Age Trail
- Unnamed Dane County Parkland
- Ice Age Junction Path
- Unnamed City of Verona Path,

Discussion of these Section 4(f) resources is not included in the least harm analysis as they are outside the footprint of the proposed reconfigured CTH M/CTH PD intersection which impacts the historic farmstead and golf course.

Table 9: Least Harm Analysis Matrix

	Southwest Jug-Handle	Tight Diamond	Westbound Underpass (PREFERRED)
Factor 1: The ability to mitigate adverse impacts to each Section 4(f) property.	SST Farmstead: All of the contributing features for Section 4(f) properties (buildings/ structures) are retained with any of the evaluated three least harm alternatives. Per Memorandum of Agreement (MOA) between Federal Highway Association (FHWA) and Wisconsin State Historic Preservation Office (SHPO), signed on August 24, 2015, mitigation of impacts resulting from the construction of the CTH M/CTH PD intersection will include the following: Within three months of the MOA execution and before project letting, WisDOT or its agent will complete a field survey of up to seven of the best-preserved and finest representative historic farmsteads throughout the Town of Verona. Survey boundaries will be Midtown Road to the north, Fitchrona Road to the east, Schaller Road to the south, and Spring Road to the west. A windshield survey of all farmsteads within the survey boundaries will be conducted to establish an architectural context and to identify up to seven of the best-preserved farmsteads in the Town of Verona. These farmsteads will be included with appropriate historic contexts information in a formal reconnaissance-level survey report. This will include one sketch map per surveyed farmstead and one set of digital photographs of all historic resources per surveyed farmstead. WisDOT, or its agent will submit copies of the survey and historic context report, sketch maps, and digital		

	Southwest Jug-Handle	Tight Diamond	Westbound Underpass (PREFERRED)
	images to SHPO and the Dane County Historical Society. Records for each of the surveyed farmsteads will be created and added to the Wisconsin Historic Preservation Database (WHPD). The cost of this stipulation will be funded by the City of Madison, City of Verona, and Dane County. The City of Madison, City of Verona, and Dane County are invited signatories on the MOA. See Appendix B for a copy of the signed MOA. University Ridge Golf Course Due to the location of the University Ridge Golf Course in the northwest quadrant, historic Schroeder-Stickelberg-Thompson Farmstead on the northeast quadrant of the CTH M – CTH PD intersection, and the Alliant Energy regional substation in the southeast quadrant, no matter the alternative, it is impossible to avoid impacts to both Section 4(f) properties while addressing the purpose and need of the proposed action. Mitigation of adverse effects for the golf course will include restoration of the landscape disturbed due to grading and utility construction and relocation of the golf course's welcome sign. Mitigation is similar for all three alternatives considered in this analysis.		
Factor 2: The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) for protection.	With all three alternatives, all of the contributing features (buildings/ structures) are retained for Section 4(f) properties. Physical impacts to properties are limited to land acquisition and vegetation/tree removal. Realignment to avoid any permanent real estate required from the historic SST Farmstead was not feasible due the location of Morse Pond and other features within the University Ridge Golf Course (also a Section 4(f) resource).		
	Adverse visible impacts to the setting of the properties include: A large overpass bridge structure (2-lanes of northbound CTH M traffic over CTH PD) parallel to the CTH M corridor - retaining walls and structural elements will be clearly visible from both of the properties. The bridge would be the closest roadway to the farmhouse on the SST farmstead property. A multi-use path ramp structure, located immediately south of the SST property.	Adverse visible impacts to the setting of the properties include: A large overpass bridge structure (4-lanes of CTH M over CTH PD) parallel to the CTH M corridor - retaining walls will separate the entrance ramp from mainline CTH M resulting in taller, longer walls to accommodate roadway grades. This results in greater impairment to the viewshed of the historic farmstead More retaining walls and structural elements would be visible from the properties than in the other alternatives	Adverse visible impacts to the setting of the properties include: An underpass bridge structure (1- lane of CTH PD below CTH M) parallel to CTH PD. The bridge is a three span structure with spans less than 40 feet. Retaining walls visible from the SST property do not separate parallel roadways, thus the length will be shorter and height. This causes less of a visual impairment to the viewshed than the other alternatives.
	With these two alternatives, the elevation of CTH M and the bridge structure would be higher adjacent to the properties than the WB underpass alternative.		
	For all three alternatives, due to the location of the University Ridge Golf Course in the northwest quadrant, the historic Schroeder-Stickelberg-Thompson Farmstead on the northeast quadrant, and the Alliant Energy regional substation in the southeast quadrant, the intersection alternatives were designed to balance the impacts to the Section 4(f) properties and the substation. Impacts to the historic farmstead were limited to land acquisition (primarily TLE), tree and shrub removal. Impacts to the golf course were limited to tree and shrub removal, sign relocation, and land acquisition. The project will not alter or affect the use of any buildings, greens, tee boxes, and sand traps. These impacts will not adversely affect the activities, features, and attributes to the University Ridge Golf Course property. See Appendix B for the University Board of Regents response letter. By taking the Alliant Energy Regional substation into account, the proposed action avoids its potential		

	Southwest Jug-Handle	Tight Diamond	Westbound Underpass (PREFERRED)
	relocation (estimated at approximately $50 million). See Section 5 for a picture of this property.		
Factor 3: The relative significance of each Section 4(f) property.	Historic Schroeder-Stickelberg-Thompson Farmstead: Eligible for National Register of Historical Places University Ridge Golf Course – Public Recreation		
Factor 4: The views of the officials with jurisdiction over each Section 4(f) property.			
Historic Farmstead	The official with jurisdiction for the historic Schroeder-Stickelberg-Thompson Farmstead is the State Historical Preservation Office (SHPO) and did not indicate a preference for a specific alternative.		
			City of Madison (project sponsor), City of Verona, and Dane County, as project funding participants, and as invited signatories in the MOA, concur with the preferred alternative.
University Ridge Golf Course			University Ridge Golf Course staff prefer this option based on the visual impact differences of the alternatives.
Factor 5: The degree to which each alternative meets the purpose and need for the project.	All three alternatives that were evaluated in the Least Harm Analysis meet the projects overall purpose and need of the project. However, some more fully address these needs than others.		

	Southwest Jug-Handle	Tight Diamond	Westbound Underpass (PREFERRED)
PURPOSE			
Provide Safe, serviceable corridor Address current & future traffic volumes Improve operations of failing intersections	Yes	Yes	Yes
NEED			
Transportation Demand	Yes	Yes	Yes
Capacity (Level of Service)	Yes (LOS C) Individual intersections operate at LOS C with design year traffic volumes; however more intersections are created with the design, reducing the overall LOS.	Yes (LOS C)	Yes (LOS D)
Bicycle and Pedestrian Accommodations	Yes, but incomplete grade separation at CTH M/CTH PD	Yes, but incomplete grade separation at CTH M/CTH PD	Yes
System Linkage	Yes	Yes	Yes
Modal Interrelationship	Provides bicycle and pedestrian facilities, however does not provide a complete grade separated crossing of the intersection for the multi-use path.	Provides bicycle and pedestrian facilities, however does not provide a complete grade separated crossing of the intersection for the multi-use path.	Provides bicycle and pedestrian facilities, and a complete grade separated crossing of the intersection for the multi-use path.
Factor 6: After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f).	Requires the most undeveloped rural residential (zoned RH-3) property in the southwest quadrant. Intersection was not able to be shifted southeast due to the Alliant Energy Regional substation in the southeast quadrant and the cost ($50 million) and effort to relocate.	Intersection was not able to be shifted south due to the electric substation in the southeast quadrant requiring substantial cost and effort to relocate ($50 million).	Intersection was not able to be shifted south due to the electric substation in the southeast quadrant requiring substantial cost and effort to relocate ($50 million).
Factor 7: Substantial differences in costs among the alternatives.	Intersection Cost: $11.8million Overall project Cost: $36.8 million	Intersection Cost: $12.0 million Overall project Cost: $37.0 Million	Intersection Cost: $12.6 million Overall project Cost: $37.5 million The tight diamond, jug handle, and the westbound underpass are not substantially different in costs, therefore costs was not a deciding factor between these alternative.

8 Measures to Minimize and Mitigate Harm on the Schroeder-Stickelberg-Thompson Historic Farmstead

The proposed project improvements adjacent to the historic Schroeder-Stickelberg-Thompson Farmstead include:

- The reconfiguration of the CTH M/CTH PD intersection, including an underpass for CTH PD westbound traffic
- The widening of CTH M from a two-lane cross-section with gravel shoulders to a 6-lane cross-section with street lighting and curb and gutter; CTH M will be raised approximately ten feet in elevation from the existing center line in front of the historic farm house
- The construction of a multi-use path along the eastern edge of CTH M including the relocation or removal of a driveway off of CTH M.
- The construction of a retaining wall (approximately three feet tall) between CTH M and the property.
- Removal or relocation of the historic farmsteads CTH M driveway access
- The termination of Raymond Road southwest of the property's primary residential driveway;

This will remove Raymond Road from the CTH M/CTH PD intersection. The remaining portion of Raymond Road will be removed and a multi-use path will be constructed across the southern tip of the historic property (parallel to CTH PD). This will connect with the proposed multi-use path along the eastern edge of CTH M. The northernmost Raymond Road driveway access will remain as it currently exists and the existing southernmost Raymond Road driveway entrance will be relocated to the proposed terminus of Raymond Road.

- The relocation of overhead electric transmission lines; ATC maintains the existing lines located within the CTH M ROW. New overhead lines will be located in the terrace area between the proposed multi-use path and CTH M.

The efforts are proposed to minimize and mitigate impacts to the historic Schroeder-Stickelberg-Thompson Farmstead.

8.1 Roadway Minimization Efforts

The initial design for the proposed CTH M corridor was centered within the existing CTH M highway right of way and included raised medians 20 feet in width (desirable design standard).

This design was modified due to the proximity of the University Ridge Golf Course and the historic SST farmstead to the CTH M/CTH PD intersection. To minimize impacts to the

historic farmstead, a curved roadway alignment was developed to fit between the University Ridge Golf Course, its wetlands and natural pond (Morse Pond) in the northwest quadrant of the CTH M/CTH PD intersection, and the historic SST Farmstead in the northeast quadrant. This proposed design also includes a median narrowed to a minimal width of eight feet (design minimum) in order to reduce impacts to the Section 4(f) resources.

8.2 Reduced Natural Environment Impacts

Tree removal on the historic SST Farmstead and University Ridge Golf Course related to the proposed action is anticipated; however roadway elevations and retaining walls will be designed to prevent the need to remove individual trees on the golf course planted adjacent to golf course features (tees/greens/hazards) and in close proximity to the farmstead house. The larger 24-inch diameter trees on the south and north sides of the house will remain. Efforts were made to minimize tree loss and to minimize impacts to mature trees to the extent feasible on both properties. However, due to an extensive network of overhead utilities in this area, tree height limitations will not allow for replacing trees in kind. Therefore, trees that are removed will not be replaced.

9 Coordination

Attachments with all public notices and relevant minutes for all meetings regarding recreational Section 4(f) resources can be found in Appendix C.

9.1 Schroeder-Stickelberg-Thompson Farmstead - (Historic Property)

The Official with Jurisdiction over this property is the Wisconsin State Historic Preservation Office (SHPO). Coordination and the role SHPO has taken include:

- SHPO was sent a letter on December 19, 2011 as part of the initial agency coordination process.
- SHPO reviewed historical survey and concurred that the Schroeder-Stickelberg-Thompson Farmstead meets the National Register of Historic Places listing criteria. SHPO provided concurrence with the Section 106 process and the project is moving forward with a decision that historic properties may be affected by the proposed action and the "assess affects" and begin consultation on affects. (See Attachment A - Section 106 Coordination).
- SHPO reviewed the Assessment of Effects and concurred with the finding that the proposed action will have an adverse effect on the SST Farmstead.
- SHPO was invited to the initial consultation meeting but declined to attend.
- SHPO reviewed the Documentation for Consultation and provided comments.
- SHPO reviewed the Memorandum of Agreement (MOA) and provided recommendations for mitigations that the rest of the signatories to the MOA agreed with.
- Section 106 form was updated to include intersection and footprint updates.
- Final Documentation for Consultation and Memorandum of Agreement were revised to incorporate comments and submitted to consulting parties for signatures. Documents are pending.
- The MOA was signed by SHPO on August 24, 2015 and can be found in Appendix B.

The project team met with the property owner of the historic Schroeder-Stickelberg-Thompson Farmstead on several occasions throughout the design process. Documentation of all meetings can be found in Attachment C - Schroeder-Stickelberg-Thompson Farmstead Correspondence and Documentation for Consultation.

- November 18, 2011 – Phone Call

- December 8, 2011 – Public Information Meeting #1
- February 7, 2012 – Phone Call
- May 24, 2012 – Public Information Meeting #2
- April 29, 2013 – Consultation Meeting #1
- May 15, 2013 – In Person Utility Meeting on Property
- March 12, 2014 – Public Information Meeting #3
- April 14, 2014 – Documentation for Consultation Meeting #2 – A second meeting was held to address the updated preferred alternative and its impacts to the farmstead.

9.2 University Ridge Golf Course

The Official with Jurisdiction over this property is the University Of Wisconsin Board Of Regents.

Coordination with University Ridge Golf Course has occurred throughout the planning process and is ongoing. A letter to the official with jurisdiction for the golf course property was sent December 6, 2012 to satisfy requirements of CFR Title 23, Chapter I, Subchapter H Part 774, Section 774.5). The letter served to initiate official consultation with the official with jurisdiction of the property and request comment regarding the potential de minimis impact determination to the property.

Three Public Information Meetings were held to inform the public of the proposed design and to gather input. The University Ridge Golf Course has been invited and encouraged to attend public meetings. The dates of the three information meetings were:

- December 8, 2011 – Public Information Meeting #1
- May 24, 2012 – Public Information Meeting #2
- March 12, 2014 – Public Information Meeting #3

Staff from University of Wisconsin Facilities Planning and Management and staff from University Ridge golf course met with the design team to discuss alternative designs for the intersection of CTH PD and CTH M. Staff indicated the WB underpass alternative was desirable from an aesthetic view point as the underpass structure would have less visual impact than an overpass structure. They indicated that the roadway design needs to avoid impacting the cart path adjacent to the green. They also noted a desire to work with the design team on final details of landscaping. There is a desire to provide some screening between the roadway and golf course; however trees may not be desirable due to the impacts of the shade on the growing conditions of the turf on the green. An earthen berm is preferred; however this will have to be balanced with impacts to the surrounding wetlands.

University Ridge Golf Course provided signed documentation indicating the project will not adversely affect the activities, features, or attributes of this property and concurs with the De Minimis Section 4(f) determination. The Official with Jurisdiction provided the letter on July 31, 2015. A copy of this letter can be found in Appendix B.

9.3 Ice Age Trail

The Official with Jurisdiction over this property is the US National Parks Service. The Ice Age Trail Alliance is the National Park Service's local trail partner. The trail passes through Dane County Park limits within the project area.

Staff from Dane County Parks, Ice Age Trail Alliance, and National Park Service met with project sponsors and design team staff on September 24, 2014 and on August 17, 2015 and discussed the following measures to minimize and mitigate impacts from the project on the Ice Age Trail.

Ice Age Trail at Flagstone Drive

Ice Age Trail Alliance staff confirmed previous coordination with City of Madison officials regarding a desire to relocate the Ice Age Trail crossing of CTH M to a proposed underpass below CTH M. Ice Age Trail Alliance staff provided design guidance requesting that connections between the Ice Age Trail and paved Ice Age Junction Path be as close as possible to minimize shared use of the paved path and that intersections between the two paths be at right angles to discourage bicycle riders from using the Ice Age Trail (prohibited use). Ice Age Alliance staff also requested route marker and "dodgeway" construction with the project to enhance route marking and Ice Age Trail user requirements. The "dodgeway" is an arrangement of fencing that discourages bicycle riders by routing access to the Ice Age Trail in a non-direct or non-linear route. They indicated the split rail wood fence "dodgeway" on the trail near Woods Road was a good example to use and should be used as a template. National Park Service staff will provide specifications for route markers to include in the plans.

Ice Age Trail officials indicated that Dane County Parks request to relocate the wetland scrape to the end of the cross culvert for Badger Mill Creek would be an enhancement to the Ice Age Trail by maintaining and improving natural habitat at this location.

Ice Age Trail Alliance and National Park Service staff indicated a preference for the project to assist Ice Age Trail Alliance in relocating the existing easement on University property to the edge of the CTH M embankment slope, wherever that would end up with the design. They prefer this location to a separate easement on highway right of way. They asked City of Madison staff to assist in coordination with the University of Wisconsin to allow Ice Age Trail users access on easement to the bridge constructed over the Badger Mill Creek.

Ice Age Trail officials indicated that the proposed improvements would be an enhancement to the trail system by providing a safer crossing of CTH M for trail users.

Ice Age Trail at Raymond Road

Ice Age Trail officials requested that any reconstruction work on the culvert crossing Raymond Road consider the Ice Age Trail crossing near that culvert. They desire to maintain a wooded buffer between the trail and proposed Jeffy Trail improvements that the City of Madison has planned (independent of the CTH M project). This will require minimal roadway profile changes on Raymond Road and inclusion of sidewalk along Raymond for the trail crossing (the Ice Age Trail crosses the culvert at Raymond Road). Ice Age Trail officials discussed re-routing the Ice Age Trail along the already constructed Ice Age Junction path to utilize the bridge on this path that crosses Badger Mill Creek, however they prefer to use the Raymond Road crossing as it requires a shorter shared use of the paved path.

9.4 Dane County Parkland

The Official with Jurisdiction over this property includes the Dane County Parks Division. The Wisconsin Department of Natural Resources has also been coordinated with due to past funding from the Knowles-Nelson Stewardship program.

A letter to the official with jurisdiction for the parkland was sent December 6, 2012 to satisfy requirements of CFR Title 23, Chapter I, Subchapter H Part 774, Section 774.5). The letter served to initiate official consultation with the official with jurisdiction of the property and request comment regarding the potential de minimis impact determination to the property.

A letter was received from Dane County Parks on January 23, 2013 providing comments on the proposed project. This letter outlined four comments and proposed mitigation measures to be considered in this review. They included:

1. Maintain and restore the existing driveway on CTH M for staff access to manage prairie restoration areas. Dane County Parks would prefer this driveway entrance to be gated and not paved to discourage general public use.
2. Provide financial resources that will allow the Dane County Parks Naturalist to restore and reseed prairie areas that are disturbed during CTH M reconstruction activities.
3. Maintain the existing water storage area immediately south of the box culvert. The pond/wetland area was created through a partnership between Dane County Highway and the Dane County Naturalist and is used extensively by frogs. If this area is unable to be avoided by the proposed CTH M improvement project, consider creation of a wetland scrape in the southeast corner of the parcel as a mitigation measure.
4. Dane County Parks supports the addition of the proposed bicycle/pedestrian side path along CTH M that will provide connectivity to the Ice Age Junction Path.
5. Several public information meetings were held inform the public of the proposed design and to gather input. Dane County Parks has been invited and encouraged to attend public meetings. The dates of the three information meetings were:

    - December 8, 2011 – Public Information Meeting #1
    - May 24, 2012 – Public Information Meeting #2

- March 12, 2014 – Public Information Meeting #3

A meeting was held on September 24, 2014 to address CTH M impacts and right of way needs from Dane County Parks and the Ice Age Trail for interested parties. A summary of the meeting discussion regarding the Dane County Parkland is provided below:

The project will require real estate acquisition from Dane County Parks land. The permanent easement estimate is for construction and maintenance of the 10-foot multi-use path along the east side of CTH M. The path will be constructed on a 15-foot easement along the edge of the CTH M highway right of way. Dane County Parks requested that the prairie area be protected/isolated from the construction by temporary fencing (orange safety fence is acceptable).

ATC will be relocating their overhead power transmission poles into the terrace area between the multi-use path and CTH M roadway. The poles will be located in the CTH M highway R/W. This location will minimize the amount of aerial easement that ATC requires from Dane County Parks for their facilities.

Dane County Parks would like to see the restored prairie area that is disturbed by grading be returned to a restored prairie condition. The restoration work shall be completed under the guidance of Dane County Parks. This was discussed at the September 24, 2014 meeting and it was determined that a more cost effective solution would be to utilize Dane County approved restoration contractors, under the guidance of Dane County staff. Dane County staff shall be consulted on the design and specifications of the restoration work.

The group discussed impacts to the small pond at the east (outlet) end of the CTH M culvert crossing. The slope intercepts for the current roadway design would fill most of this pond. Dane County Parks expressed a preference for grading and reestablishing the small pond near its current location with the project. This would be an aesthetic benefit for both the multi-use path and the Ice Age Trail. This alternative was preferred to constructing a retaining wall to maintain the pond in its current location. Another alternative would be to construct a wetland scrape along the southeast edge of the park property. This was the alternative originally noted in the letter provided by Dane County Parks on January 23, 2013.

A follow up meeting was held on May 13, 2015 and the above listed summary was confirmed. Wisconsin DNR staff were present at this meeting to provide guidance to project design staff and sponsors and the Dane County Parks Division on how the highway right of way acquisition from Dane County Park land, as well as the permanent easement required for the multi-use path, would need to conform to the requirements of the Knowles-Nelson conservation stewardship funding. The City of Madison has dedicated platted land adjacent to the northeast quadrant of the Dane County Park for replacement lands for the land purchased for highway right of way.

At the May 13, 2015 meeting, Dane County Parks staff and Wisconsin DNR staff were notified of Madison Metropolitan Sewerage District's (MMSD) desire to connect a proposed sanitary

sewer main that will be constructed below Raymond Road to an existing manhole within the park. MMSD owns and maintains a sewer easement through the park that includes this existing manhole. The proposed new sewer and the existing sewer cross land acquired with both Knowles-Nelson state conservation stewardship grant funds and federal LWCF funds. Wisconsin DNR staff indicated that the required temporary easements and permanent easements would not constitute a Section 4(f) use as conditions listed in 23 Code of Federal Regulations (CFR) 774.13 (d) would be satisfied. The temporary use is also compliant with Section 6(f) as no permanent above ground structures are required.

Dane County Parks provided documentation indicating the project will not adversely affect the activities, features, or attributes of this property. The letter can be found in Appendix B.

WisDOT has coordinated with the Federal Highway Administration (FHWA), State Historic Preservation Office (SHPO), as well as all other required federal, state, and local agencies as it pertains to Section 4(f) resources.

10 Section 4(f) Finding

The public has been afforded an opportunity to review and comment on the potential effects of the project on the protected activities, features, and attributes of the various Section 4(f) resources. See Appendix C for an overview of public involvement completed on the project.

In addition, the required coordination with the United States Department of Interior has occurred. The Department of Interior concurs with FHWA and WisDOT "on a determination of no feasible or prudent alternative to the preferred alternative" and "all measures to minimize harm to the historic property have been included." See Appendix B for the concurrence letter.

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SECTION 4(F) DETERMINATION REPORT

APPENDIX A:
Exhibits

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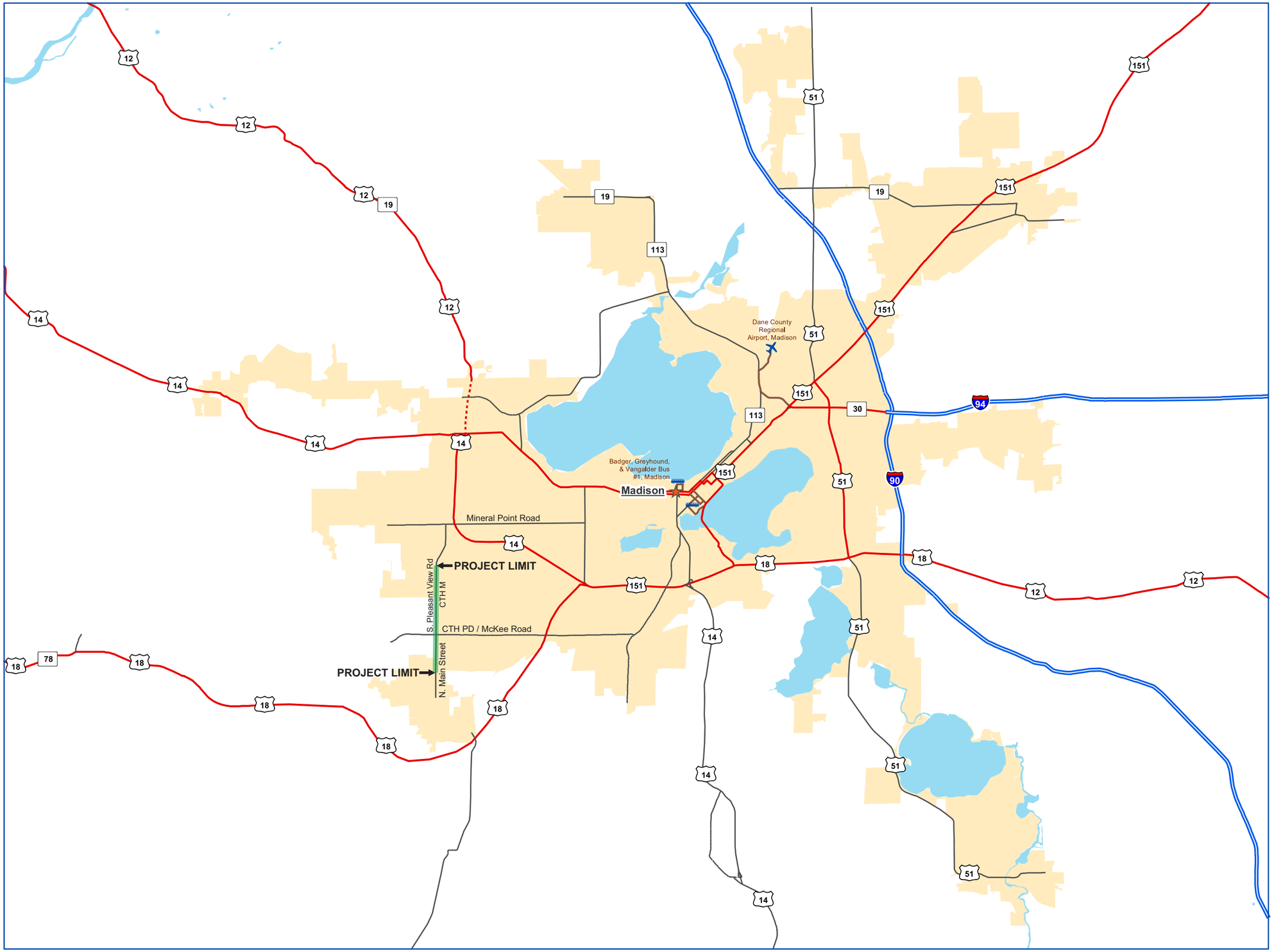
National Highway System: Madison, WI

U.S. Department of Transportation
Federal Highway Administration

- Eisenhower Interstate System
- Other NHS Routes
- Non-Interstate STRAHNET Route
- STRAHNET Connector
- Intermodal Connector
- Intermodal/STRAHNET Connector
- Unbuilt NHS Routes
- MAP-21 NHS Principal Arterials
- Census Urbanized Areas
- Department of Defense
- Water
- Airport
- Intercity Bus Terminal
- Ferry Terminal
- Truck/Pipeline Terminal
- Multipurpose Passenger Facility
- Port Terminal
- Truck/Rail Facility
- AMTRAK Station
- Public Transit Station



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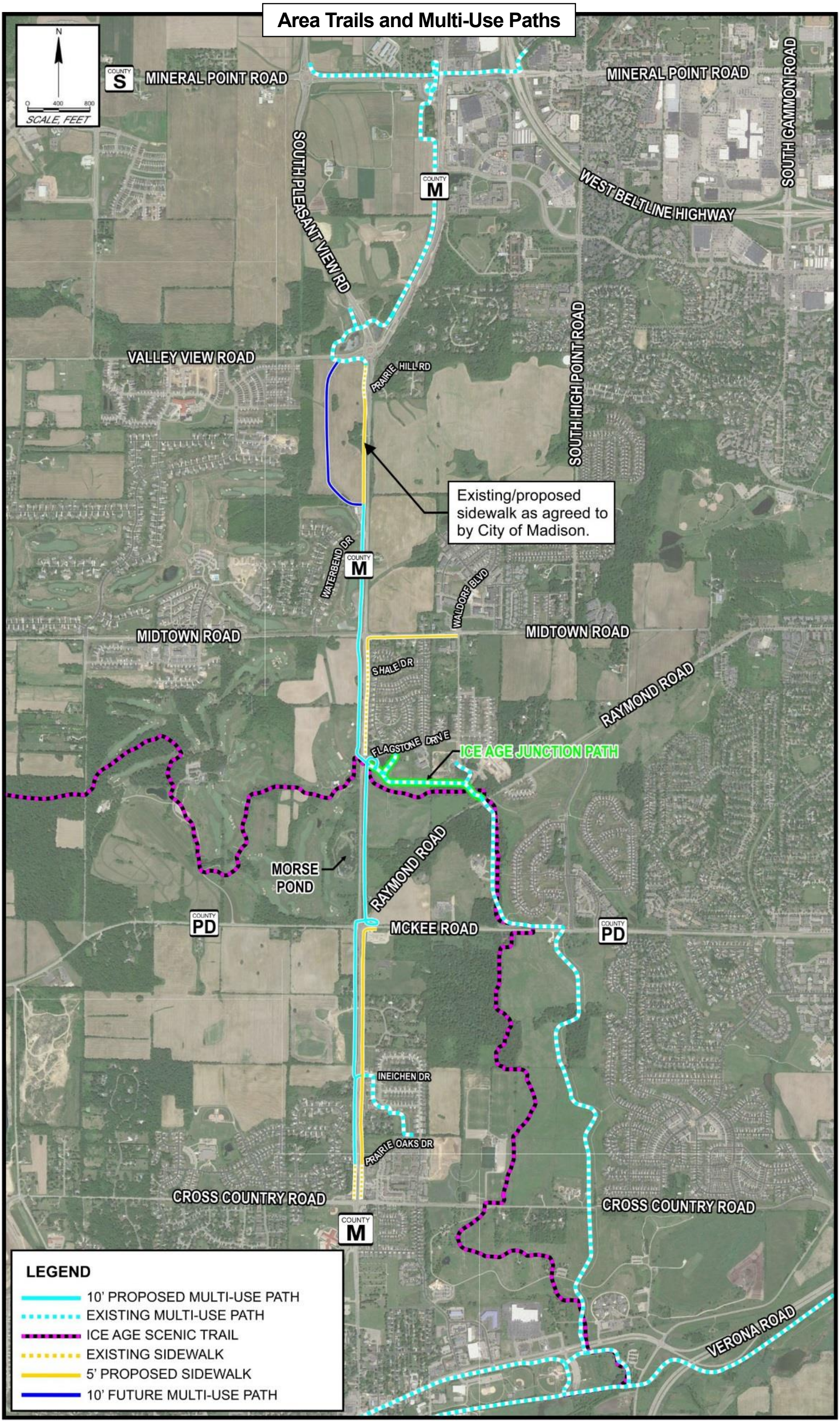
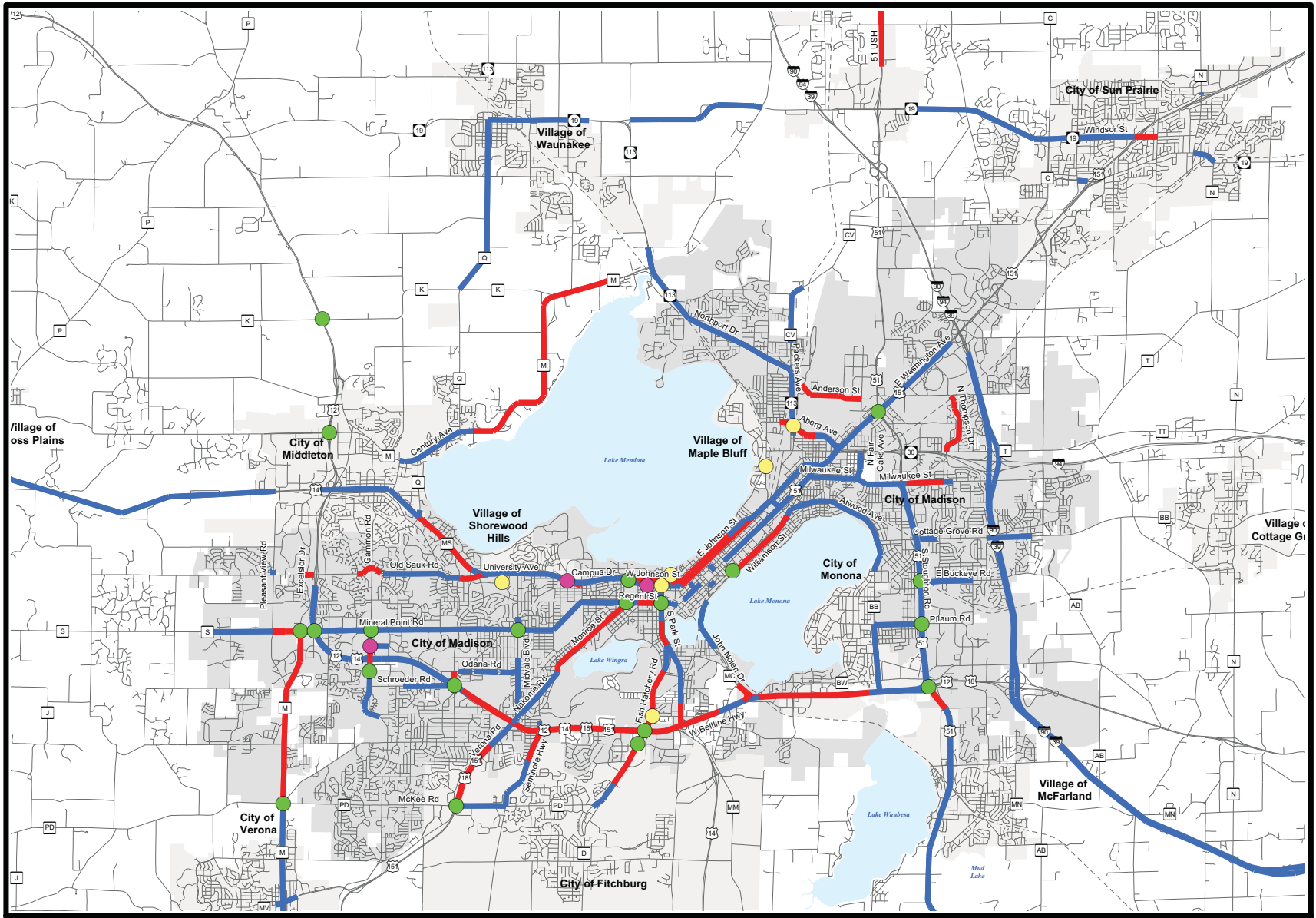
FHWA: March 25, 2015

Area Trails and Multi-Use Paths





2006 Congestion Levels
Madison Area, Dane County

Arterial Roadway Congestion Levels

- Congested
- Very Congested

Very Congested Problem Intersections

- For Auto Traffic
- For Transit
- For Auto Traffic and Transit

Prepared by staff to the:

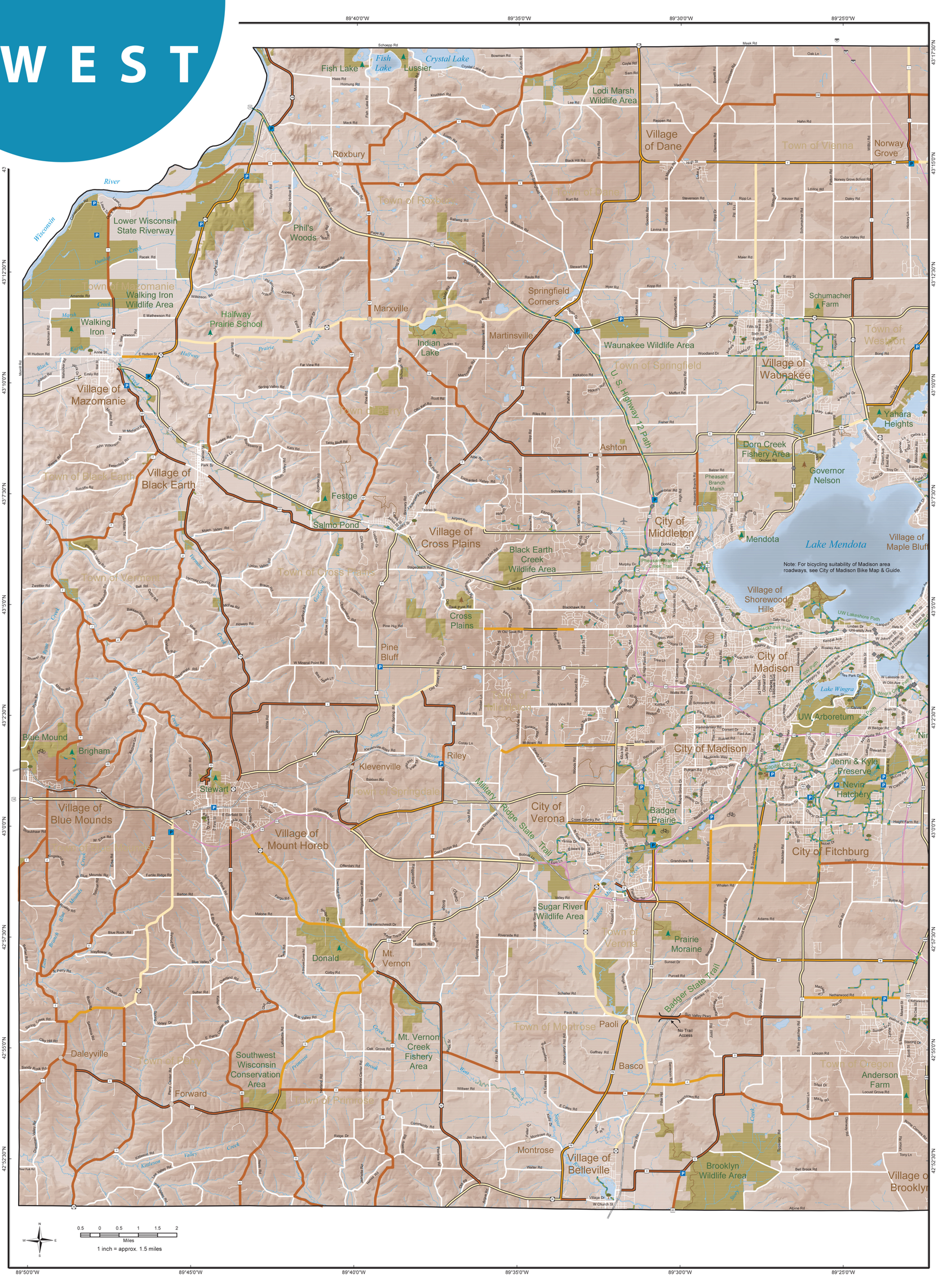
Madison Area T·P·B Transportation Planning Board
A Metropolitan Planning Organization (MPO)

Rev: 8/12/11

N

0 1 2
Miles

WEST



Dane County
BICYCLE MAP
2015

A cooperative effort by **Madison Area Transportation Planning Board** and **Dane County**

Welcome to the Dane County Bicycle Map

Dane County is a wonderful place to live, work and bike! Our rolling hills, farms and countryside, small towns and villages are terrific places to visit by bike. Many new bike paths and trails offer wonderful recreational opportunities for the whole family. And today, a growing number of people are choosing bicycling for their commute to work. Enjoy traveling on two wheels!

Joe Parisi, Dane County Executive
Sharon Corrigan, Dane County Board Chair
Al Matano, MPO Board Chair

About the Contributing Agencies

The Dane County Bicycle Map was prepared by staff for the Madison Area Transportation Planning Board – A Metropolitan Planning Organization (MPO). Funding for printing of the map was provided by the Dane County Department of Public Works, Highway and Transportation.

The Madison Area Transportation Planning Board is the designated policy body responsible for cooperative transportation planning and decision making for the Madison metropolitan planning area. The *2035 Regional Transportation Plan Update: Madison Metropolitan Area & Dane County (2012)*, adopted by the MPO, is an overall system-level plan that serves as a guide for transportation system planning and development in the region. The *Bicycle Transportation Plan: Madison Urban Area and Dane County (2000)* is an element of the regional transportation plan.

Scan this semacode with a hand held device to access the on-line version of this map

Contacts for Bicycling and Related Information

Government

City of Madison
- Division of Traffic Engineering ..... 608-266-4761 ..... www.cityofmadison.com/bikeMadison
- (for Madison area bike map and other info) ..... 608-266-4761 ..... traffic@cityofmadison.com
- Pedestrian-Bicycle ..... 608-267-1102 ..... smeiers@cityofmadison.com
- Pedestrian-Bicycle Safety Educator ..... 608-266-4474 ..... bikereg@cityofmadison.com
- Bicycle Registration Program ..... 608-266-4336 ..... recallaway@cityofmadison.com

Madison Area Transportation Planning Board ..... www.madisonareampo.org
- (for regional bicycle planning and facility funding info)

Dane County
- Dept. of Public Works, Highway & Transportation Department ..... 608-266-4261 ..... www.countyofdane.com/pwht
- (county road construction info and on road event permits) ..... 608-242-4576 ..... dane-parks@co.dane.wi.us
- Parks Department ..... www.countyofdane.com/lwrd/parks
- (county trails and parks info)

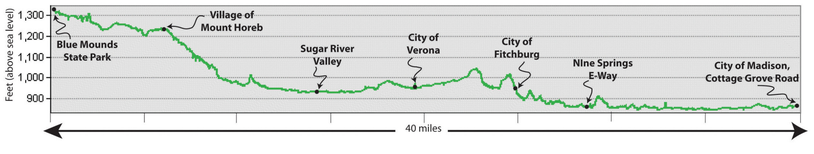
State of Wisconsin
- Department of Transportation
- Bicycle & Pedestrian Coordinator ..... 608-267-7757 ..... jill.mrotek@glenzinski@dot.wi.gov
- Pedestrian-Bicycle Safety Program Manager ..... 608-267-3154 ..... larry.corsi@dot.wi.gov
- Road Construction Information ..... 511 ..... www.511wi.gov ..... 1-800-432-8747 (in Madison, 608-266-2161) ..... www.travelwisconsin.com
- Department of Tourism ..... 1-888-936-7463 ..... dnr.wi.gov/topic/parks/activities/bike.html
- (bike tours, lodging info)
- Department of Natural Resources
- Bureau of Parks and Recreation
- (state trails and parks info)

Disclaimer

The user of this map bears full responsibility for his or her safety. Bicyclists should exercise good judgment and obey traffic laws on all roadways, regardless of the bicycle suitability rating on this map. The State, Dane County, cities, villages, and towns, and the agencies and individuals that have contributed to the development of this bicycle map are not responsible for the personal safety of bicyclists who use this map, and do not warrant the safety of the roads on this guide map for use by bicyclists.

The bicycle suitability information on this map can also be used by state, county, and local transportation planners and engineers to improve bicycle facilities, especially on roadways that are less suitable for bicycling and experiencing increasing motor vehicle traffic. Transportation planners and engineers should consult the *Bicycle Transportation Plan: Madison Urban Area and Dane County (2000)*, bicycle element of the *2035 Regional Transportation Plan Update: Madison Metropolitan Area & Dane County*, *Wisconsin Bicycle Facility Design Handbook* published by WisDOT, and any local community plans prior to making decisions on the design of roadway improvements to ensure consideration of bicyclists' needs.

Military Ridge State Trail/Capital City Trail Elevation Profile



Map Legend

- Most Suitable for Shared Bicycle/Motor Vehicle Use
- May be Suitable Depending on Individual Bicyclist's Skills Operating with Motor Vehicle Traffic
- Least Suitable for Shared Bicycle/Motor Vehicle Use
- Most Suitable Roadways with Paved Shoulders
- May be Suitable Roadways with Paved Shoulders
- Least Suitable Roadways with Paved Shoulders
- Local Roadway Connecting/Through Route*
- Local Roadway*
- Bicycles Prohibited or Not Recommended
- Paved Multi-Use Trail or Path
- Unpaved Multi-Use Trail or Path
- Multi-Use Trail or Path Under Construction (2015)
- Hiking Trail
- Railroad
- Public Lands
- Bicycle and Pedestrian Over/Underpass or Bridge
- State Park
- County Park
- Community/Neighborhood Park
- Mountain Biking Trails
- Bike Station
- Parking
- Park and Ride Lot

* assumed to be most suitable due to generally low traffic volumes and lower speeds than on county and state highways. Bike routes generally not signed outside the City of Madison area.

Data Sources:
Biking Suitability: Madison Area Transportation Planning Board (2015).
Bike Paths, Trails and Routes: Madison Area Transportation Planning Board (2015).
Streets: Dane County Land Information Office (2015).
Public Recreation Lands: DNR Managed Lands (2015), Dane County Parks (2015),
Dane County Parcels (2015).
Ice Age Trail: Ice Age Trail Alliance (2015).

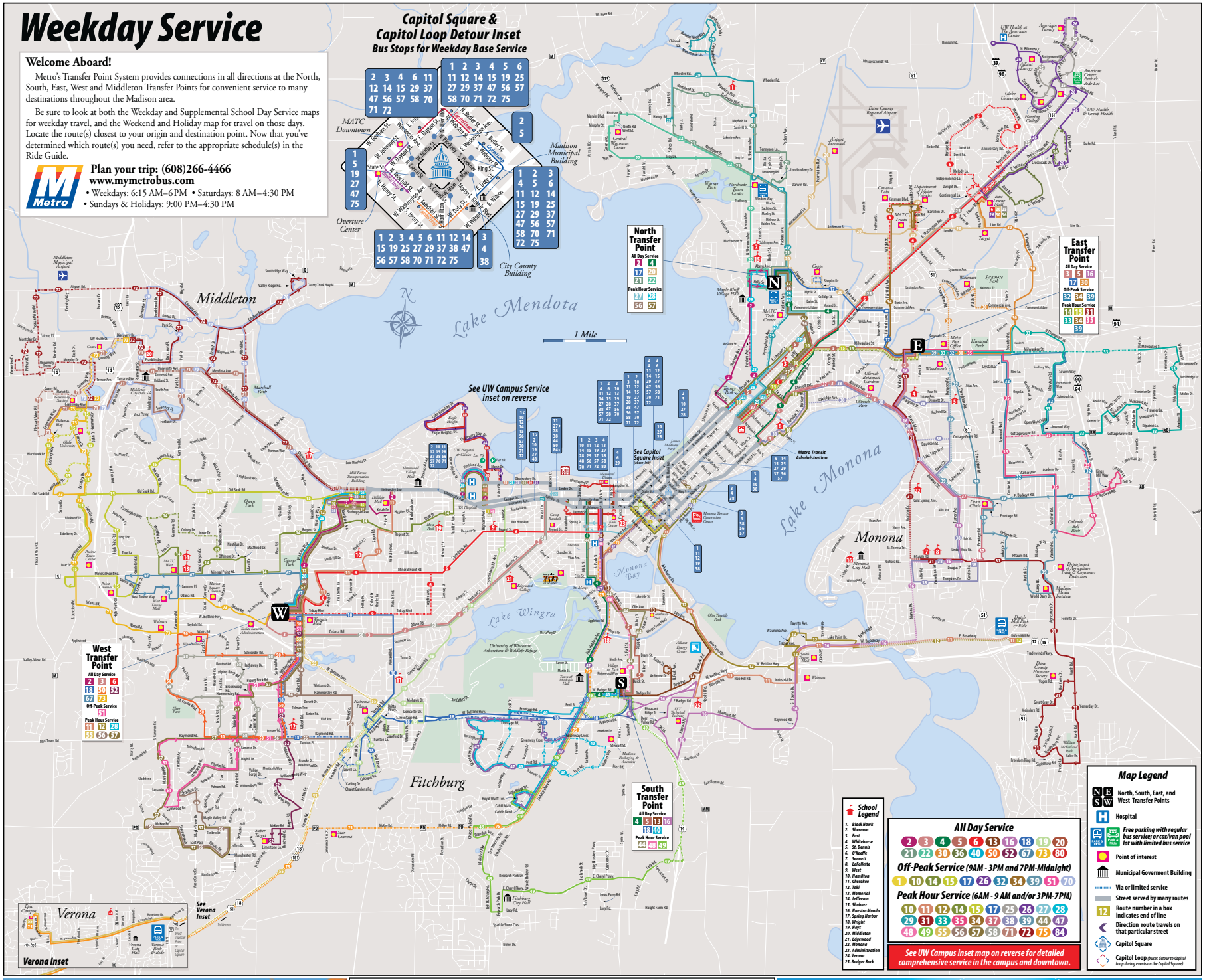
Weekday Service

Welcome Aboard!

Metro's Transfer Point System provides connections in all directions at the North, South, East, West and Middleton Transfer Points for convenient service to many destinations throughout the Madison area.

Be sure to look at both the Weekday and Supplemental School Day Service maps for weekday travel, and the Weekend and Holiday map for travel on those days. Locate the route(s) closest to your origin and destination point. Now that you've determined which route(s) you need, refer to the appropriate schedule(s) in the Ride Guide.

Plan your trip: (608)266-4466
www.mymetrobus.com
- Weekdays: 6:15 AM–6 PM • Saturdays: 8 AM–4:30 PM
- Sundays & Holidays: 9:00 PM–4:30 PM



Follow Metro on Twitter @mymetrobus

Track Your Bus!
Live arrival estimates to every stop.
mymetrobus.com/apps

Stay Informed!
Get personalized text and email alerts.
Sign up at mymetrobus.com/alert

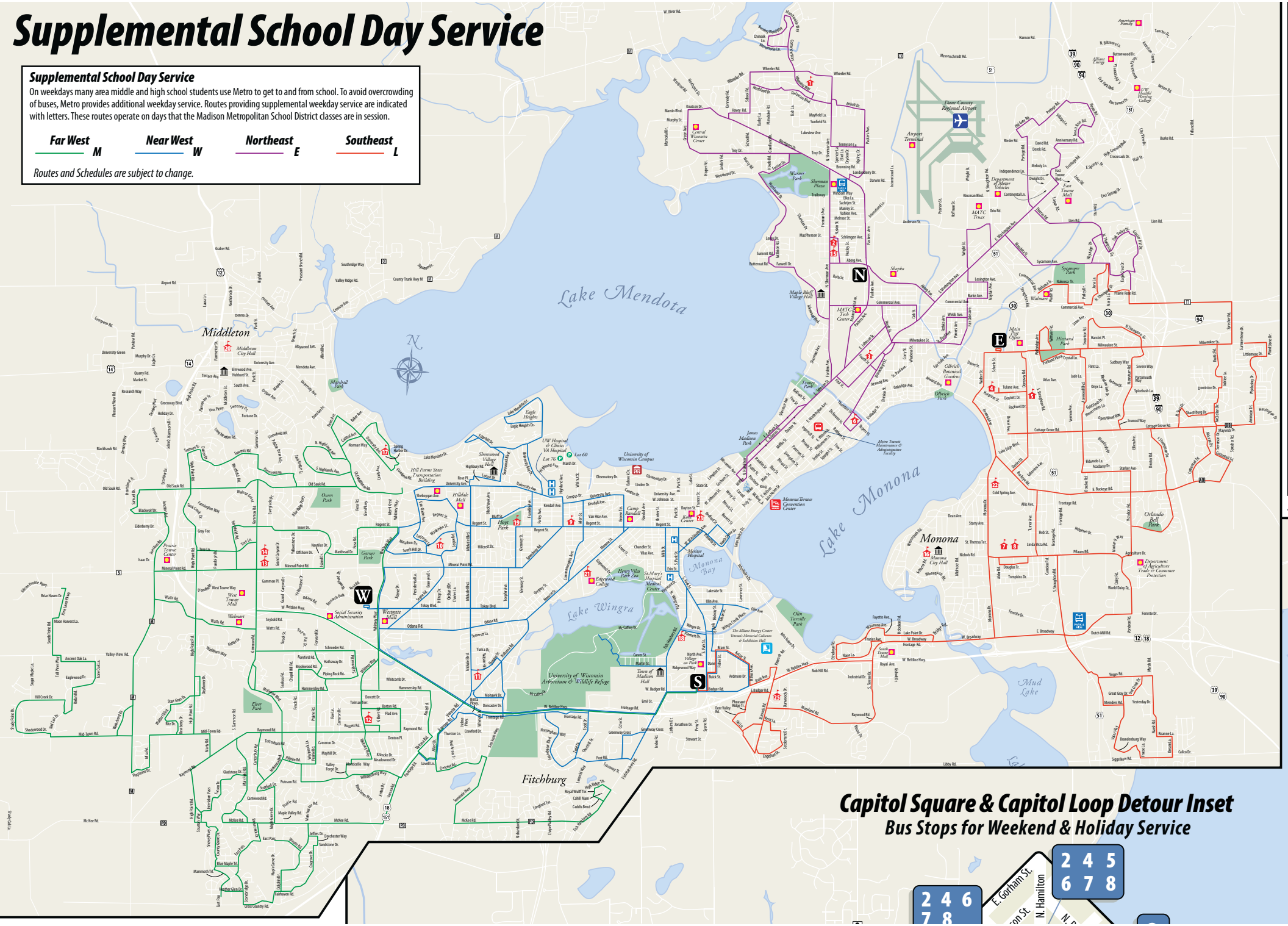
Supplemental School Day Service

Supplemental School Day Service

On weekdays many area middle and high school students use Metro to get to and from school. To avoid overcrowding of buses, Metro provides additional weekday service. Routes providing supplemental weekday service are indicated with letters. These routes operate on days that the Madison Metropolitan School District classes are in session.

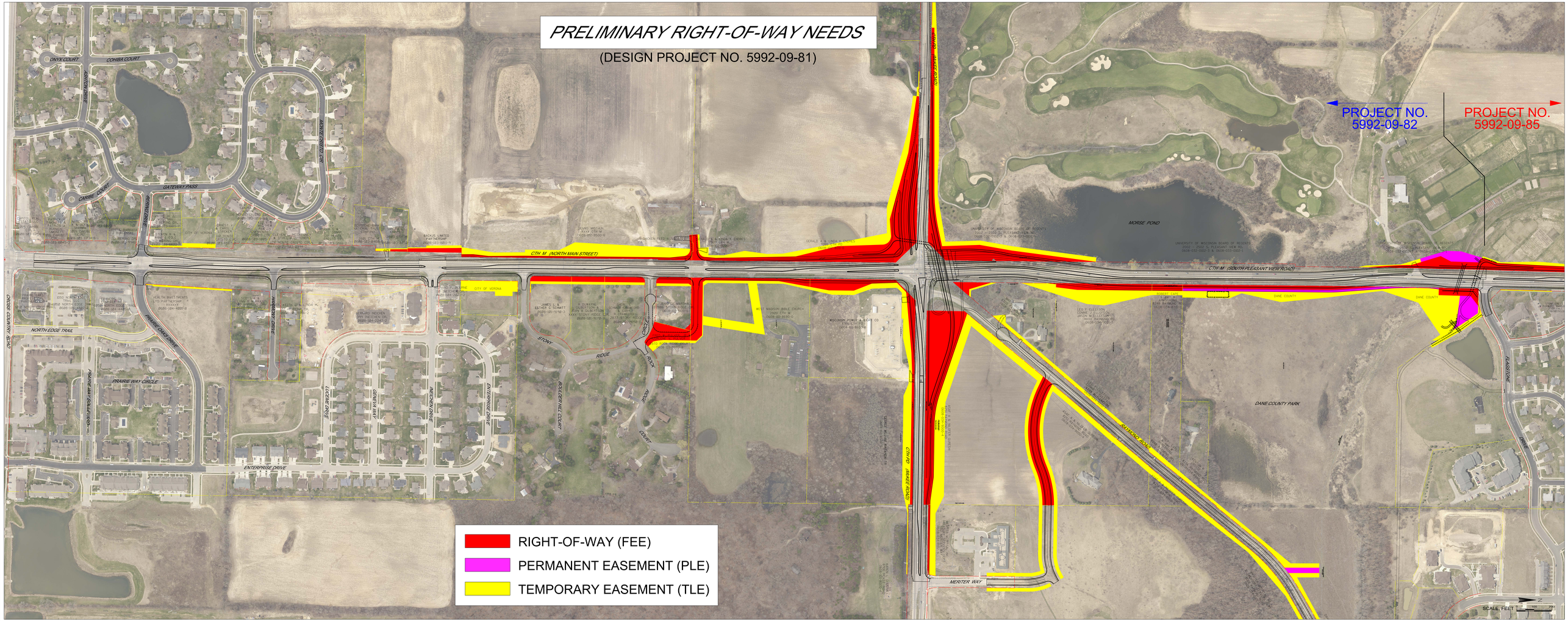
Far West	Near West	Northeast	Southeast
M	W	E	L

Routes and Schedules are subject to change.



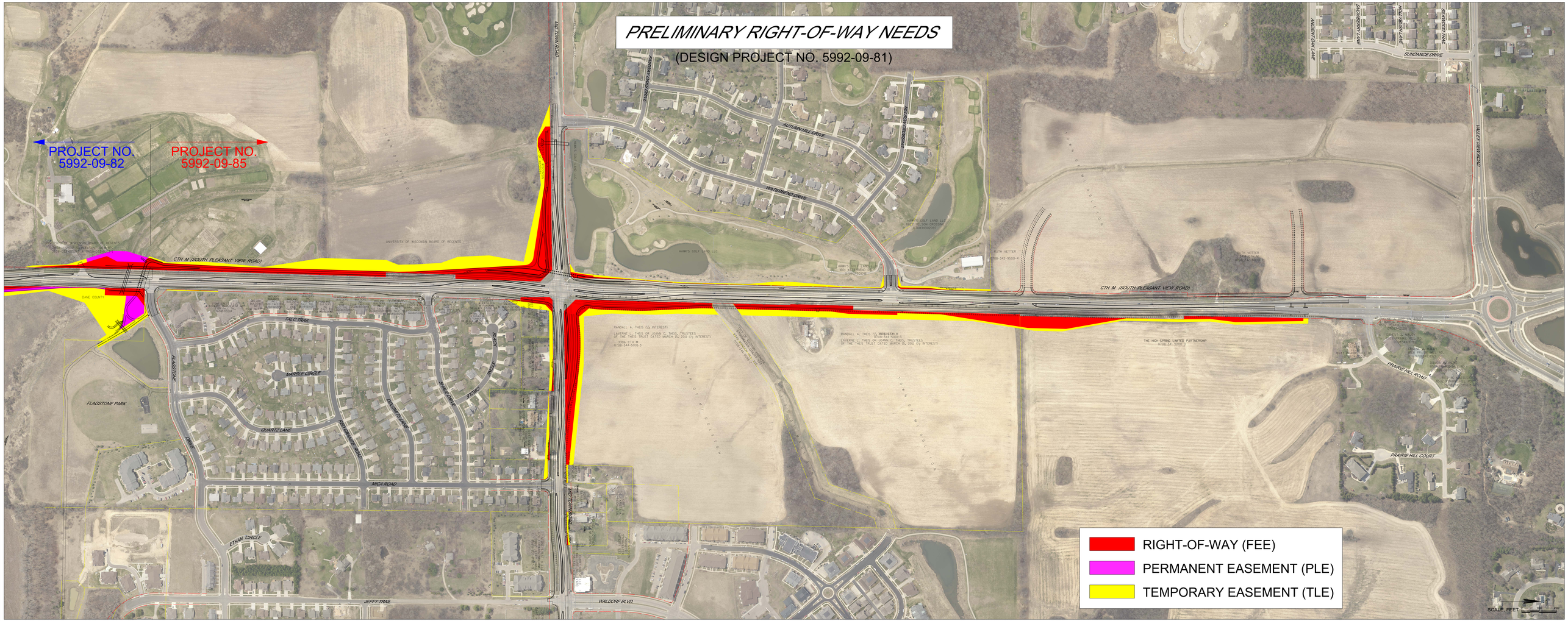
PRELIMINARY RIGHT-OF-WAY NEEDS

(DESIGN PROJECT NO. 5992-09-81)



PRELIMINARY RIGHT-OF-WAY NEEDS

(DESIGN PROJECT NO. 5992-09-81)



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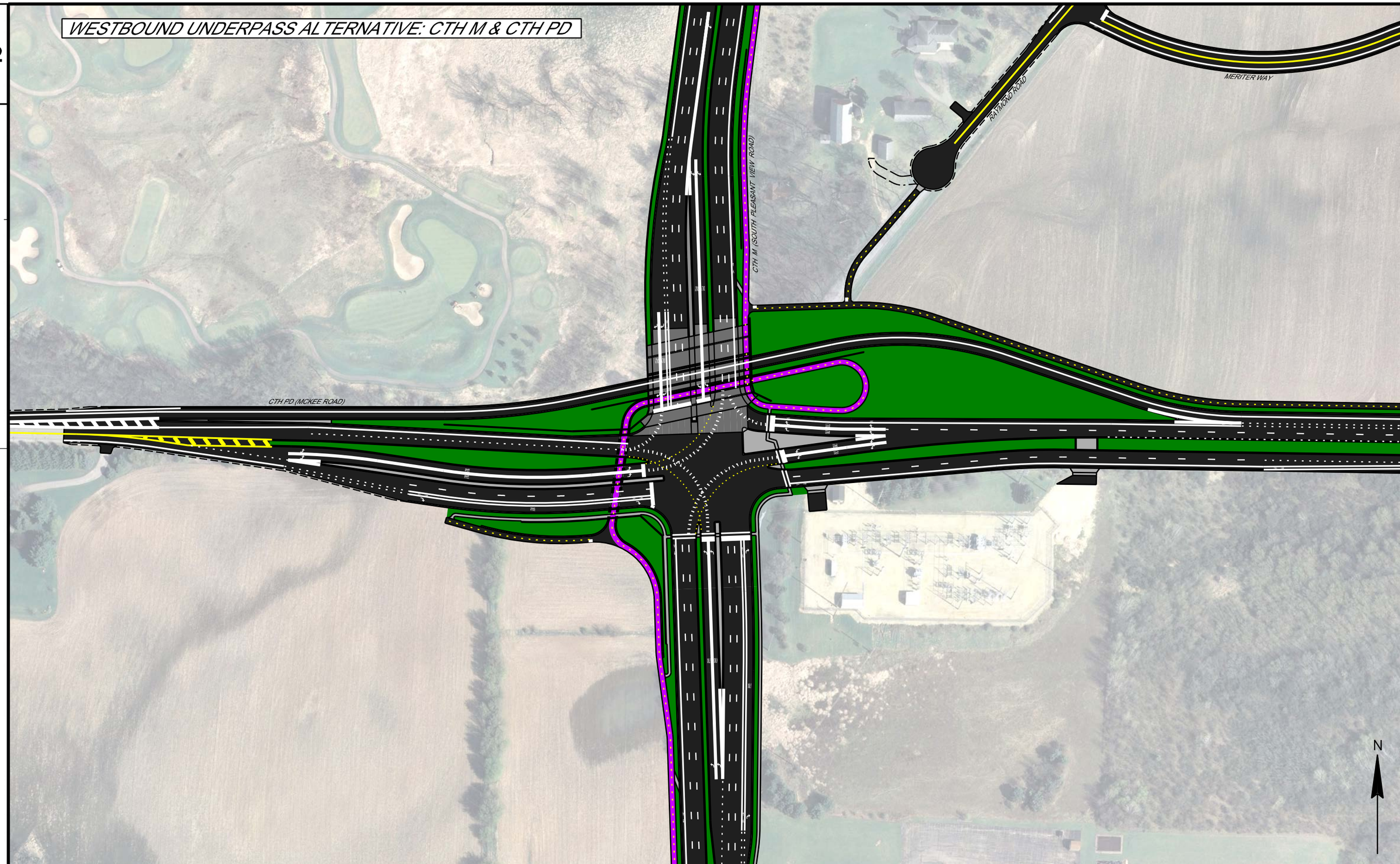
WESTBOUND UNDERPASS ALTERNATIVE: CTH M & CTH PD



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PROJECT NO:5992-09-81	HWY:CTH M	COUNTY:DANE	WESTBOUND UNDERPASS ALTERNATIVE: CTH M & CTH PD	SHEET	E

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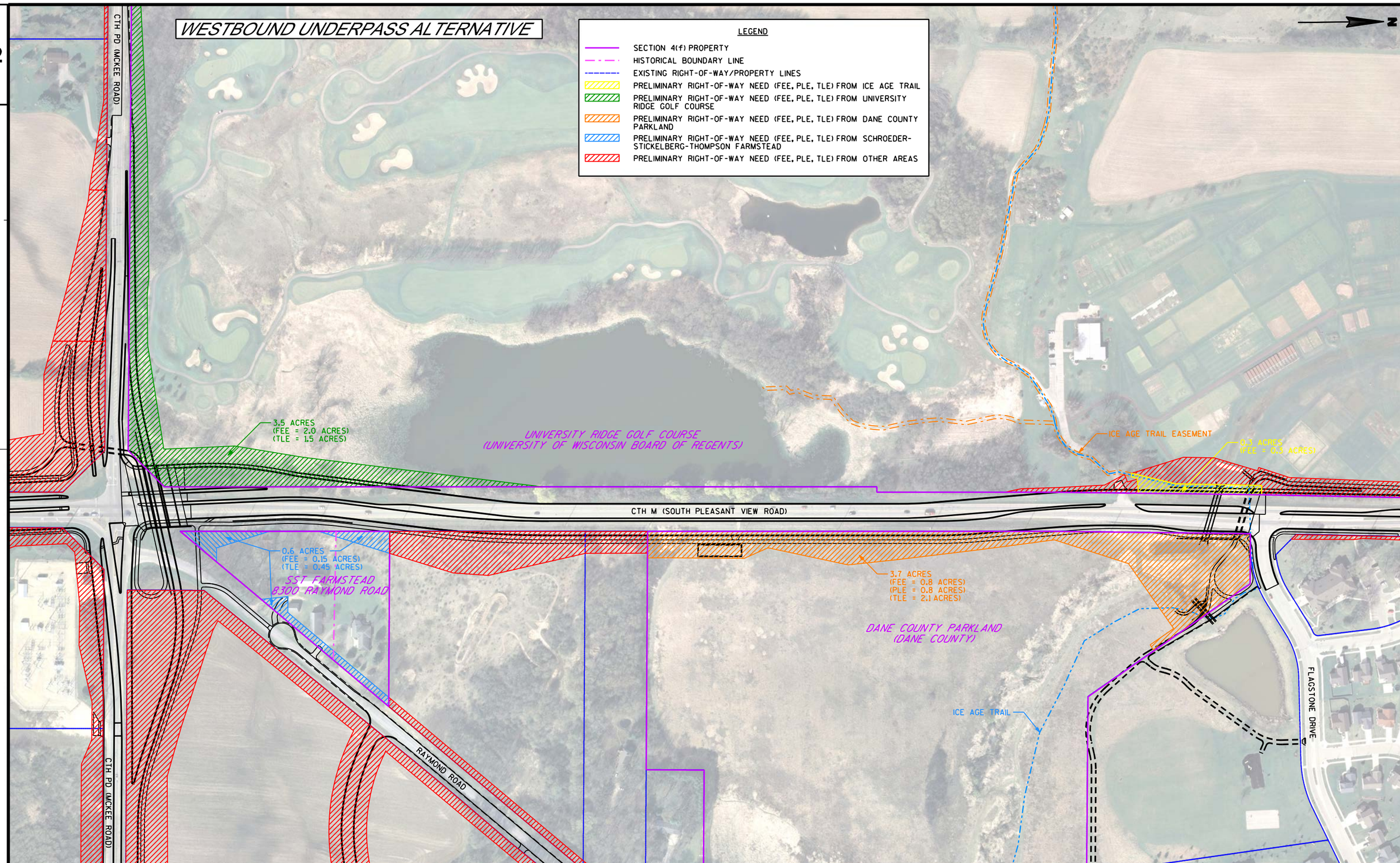
WISDOT/CADDS SHEET 42

WESTBOUND UNDERPASS ALTERNATIVE



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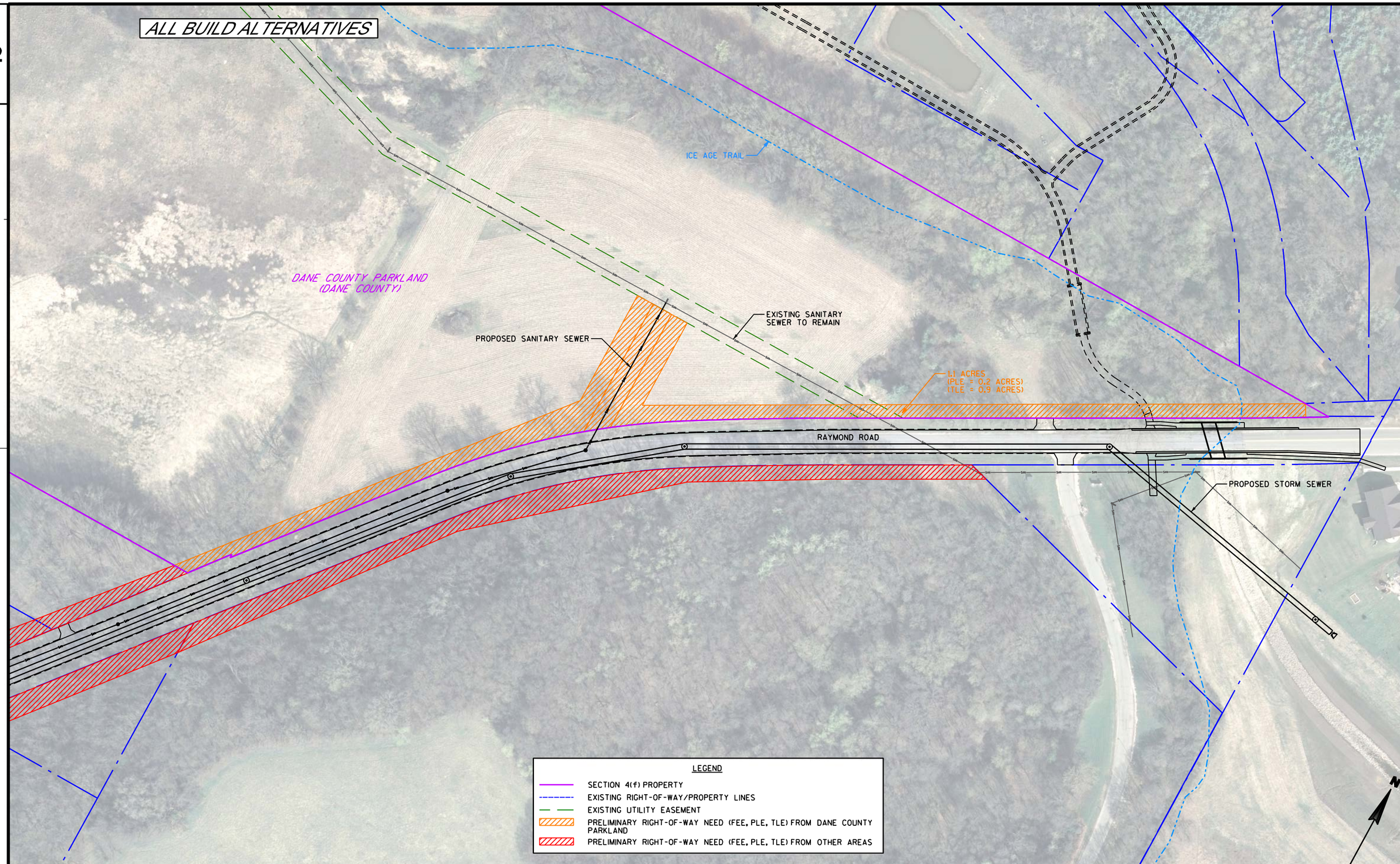
PROJECT NO: 5992-09-81	HWY: CTH M	COUNTY: DANE	SECTION 4(f) PROPERTIES RIGHT-OF-WAY EXHIBIT	SHEET	E

2



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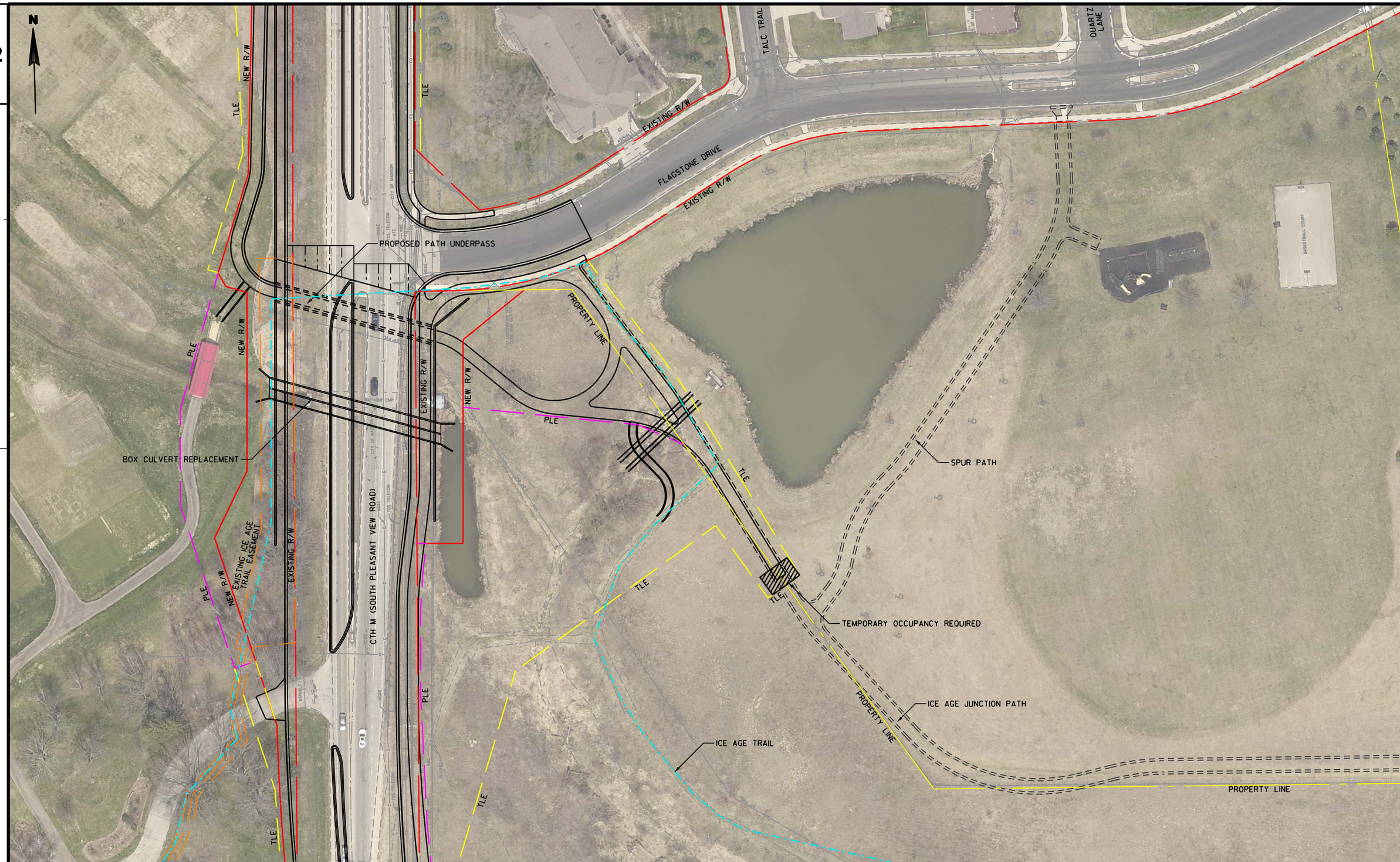
WISDOT/CADDS SHEET 42

2



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PROJECT NO:5992-09-81	HWY:CTH M	COUNTY:DANE	ICE AGE JUNCTION PATH EXHIBIT	SHEET	E

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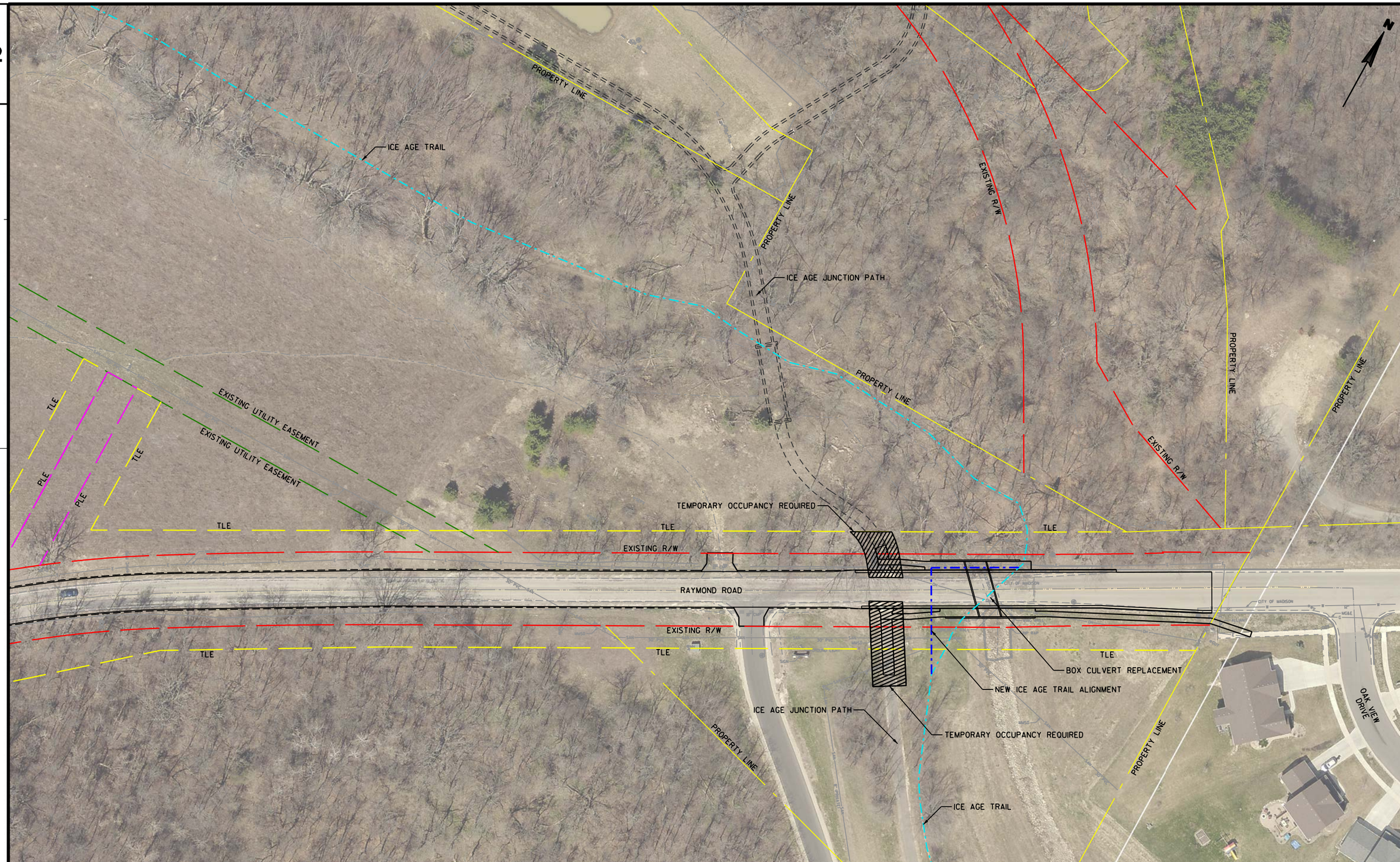
WISDOT/CADDS SHEET 42

2



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PROJECT NO:5992-09-81	HWY:CTH M	COUNTY:DANE	ICE AGE JUNCTION PATH EXHIBIT	SHEET	E

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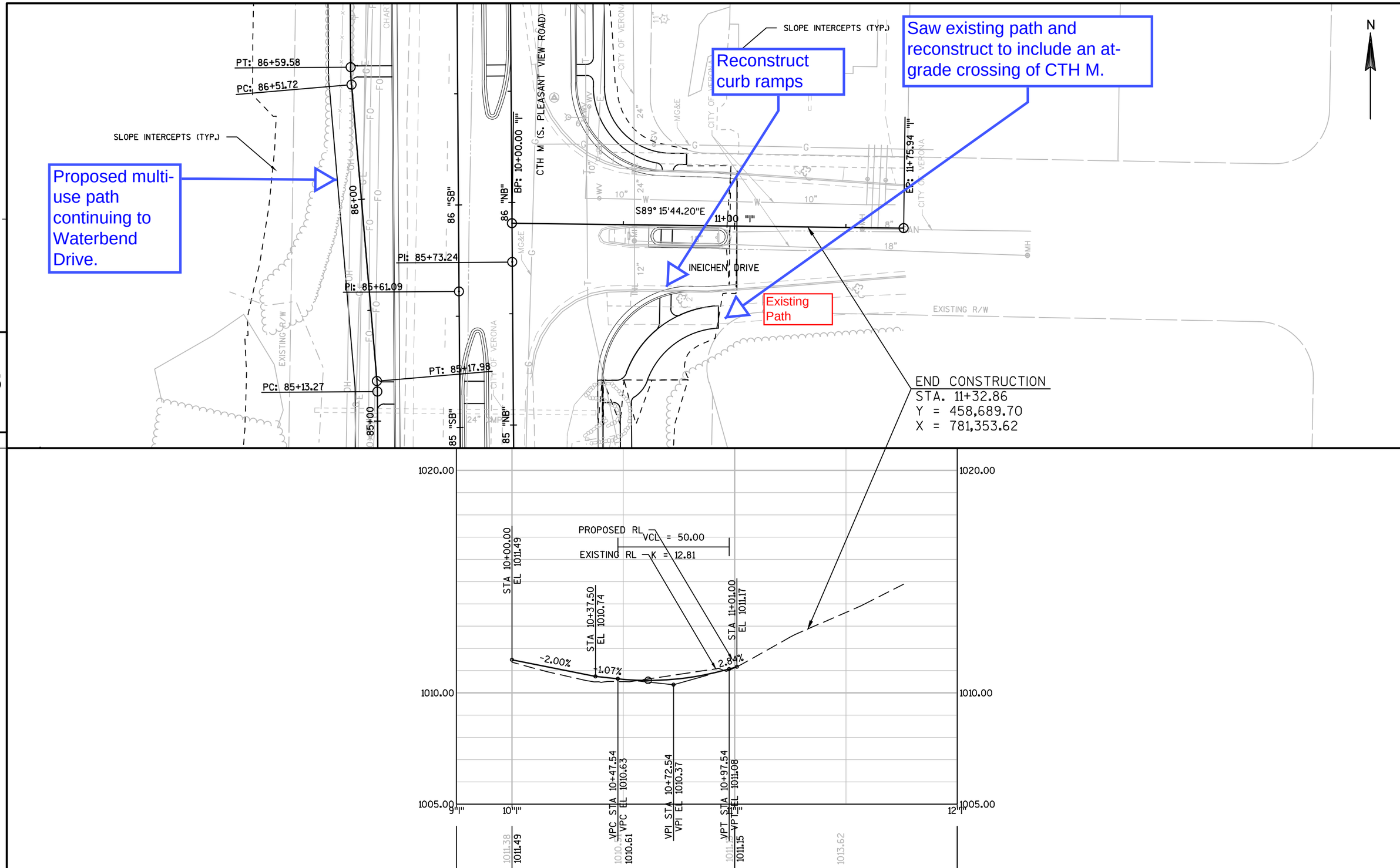
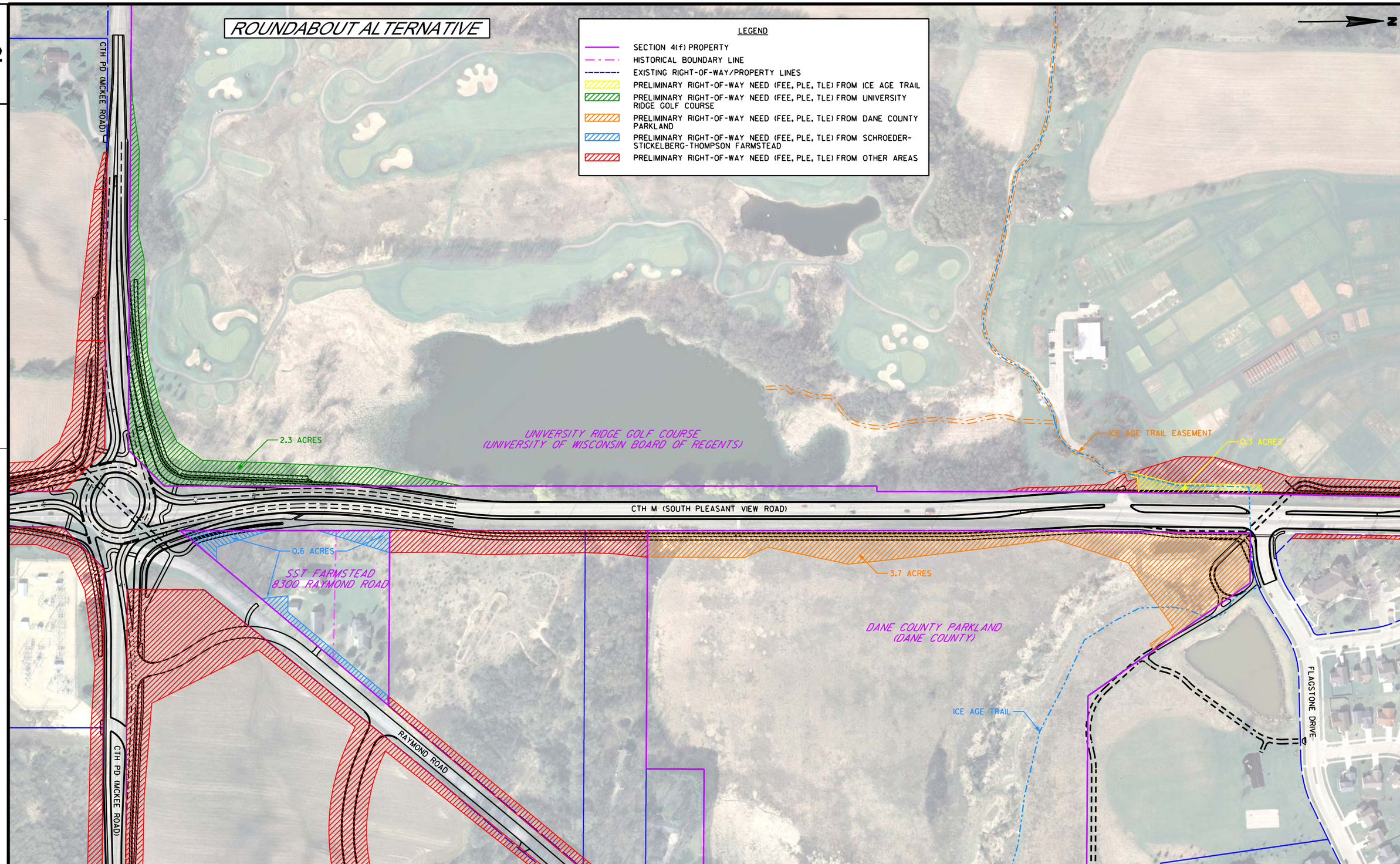
WISDOT/CADDS SHEET 42



PROJECT NO:5992-09-82	HWY:CTH M	COUNTY:DANE	PLAN AND PROFILE: INEICHEN DRIVE	SHEET	E

FILE NAME : P:\370S\373\00373030\CADDC3D\SHEETSPLAN\PLANANDPROFILE-SIDEROADS - 40 SCALE.DWG
LAYOUT NAME - PLANANDPROFILE-SIDEROADS - 40 SCALE - (50238)-PP
PLOT DATE : 6/10/2015 3:28 PM PLOT BY : MIKE JACOBS PLOT NAME : PLOT SCALE : 1:40_XREF



PROJECT NO:5992-09-81	HWY:CTH M	COUNTY:DANE	SECTION 4(f) PROPERTIES RIGHT-OF-WAY EXHIBIT	SHEET	E

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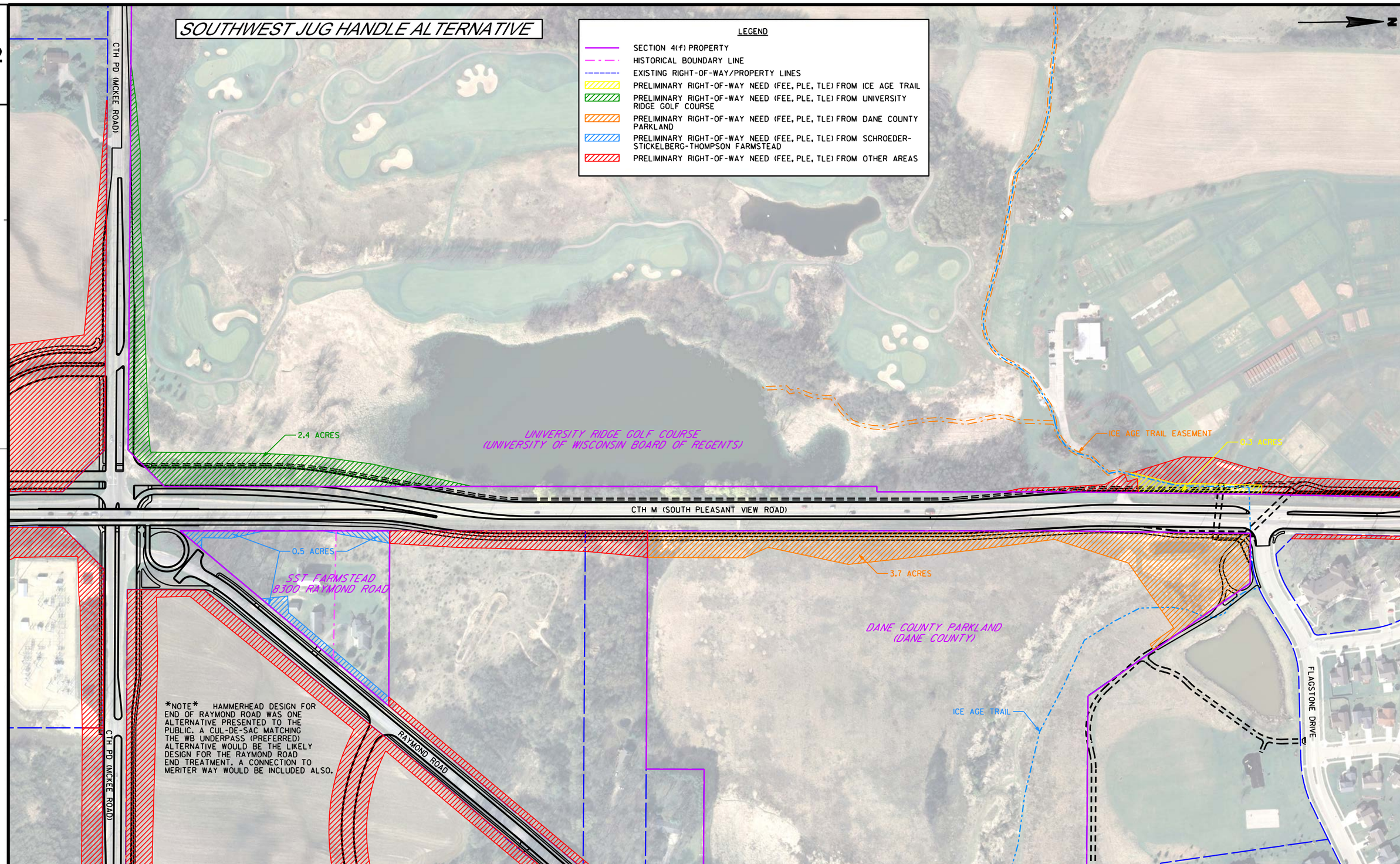
WISDOT/CADDS SHEET 42

SOUTHWEST JUG HANDLE ALTERNATIVE



PROJECT NO: 5992-09-81	HWY: CTH M	COUNTY: DANE	SECTION 4(f) PROPERTIES RIGHT-OF-WAY EXHIBIT	SHEET	E

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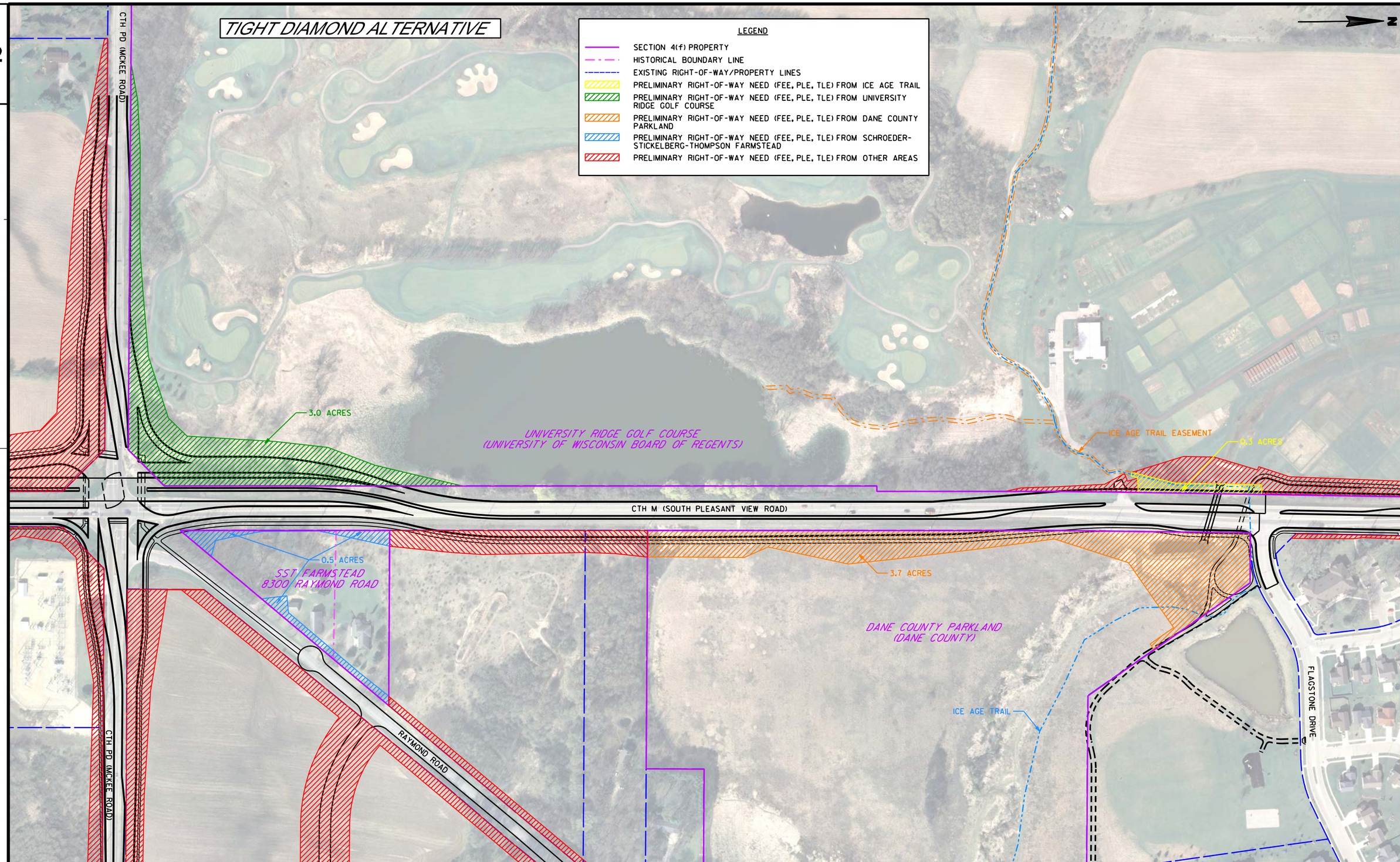
2

TIGHT DIAMOND ALTERNATIVE



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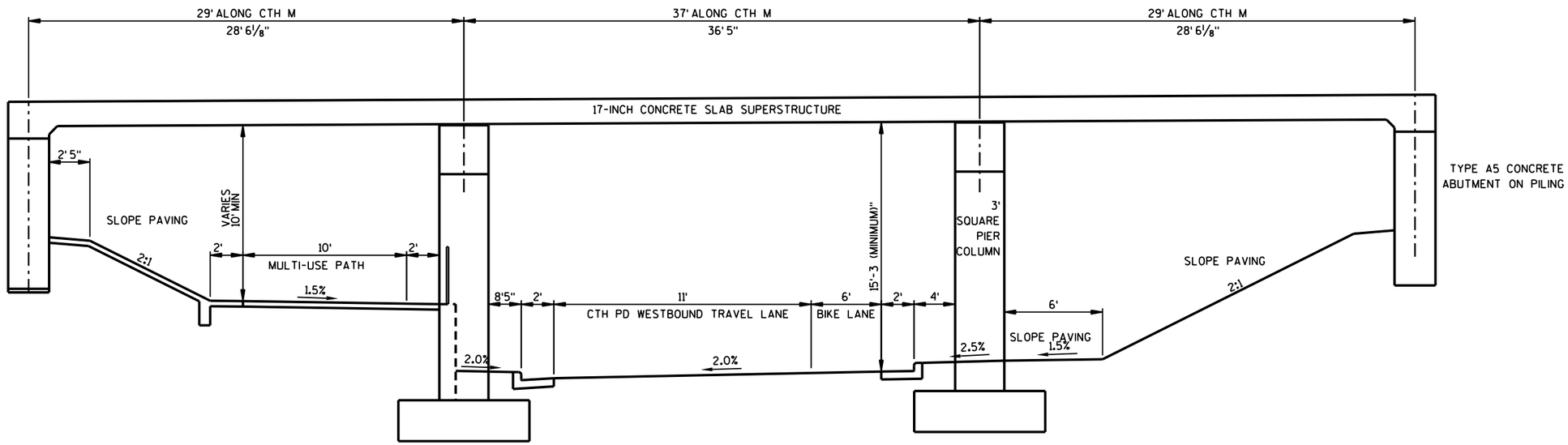
PROJECT NO:5992-09-81	HWY:CTH M	COUNTY:DANE	SECTION 4(f) PROPERTIES RIGHT-OF-WAY EXHIBIT	SHEET	E

FILE NAME : P:\370s\373\00373030\CADD\Exhibits\4(f) Property Exhibits\4(f) Right-of-Way Exhibit_Tight Diamond.dgn PLOT DATE : 9/24/2015 PLOT BY : jdolens PLOT NAME : PLOT SCALE : 1:250

WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER

XXXX-XX-XX



ELEVATION VIEW - LOOKING WEST

(SAME AS TRAVEL DIRECTION)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-XXXX

DRAWN BY XXX | PLANS CK'D. XXX

CROSS SECTIONS & STAGING DETAILS

SHEET 2 OF XX

FILE= B-45-XXXX.02.DGN
DATE=8/19/2015

373030_02 - One Crown Point.dgn 8/19/2015 1:41:18 PM jdipiazza

SECTION 4(F) DETERMINATION REPORT

APPENDIX B:

MOA and Officials with Jurisdiction Letters

Memorandum of Agreement

BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION AND
THE WISCONSIN STATE HISTORIC PRESERVATION OFFICER

Prepared pursuant to 36 CFR § 800.6(c)

Regarding
Wisconsin DOT Project ID: 5992-09-81
WHS# 12-0939/DA
CTH M (South Pleasant View Road)
Cross Country Road to Prairie Hill Road
Cities of Verona and Madison, Dane County

WHEREAS, the Federal Highway Administration (FHWA) has been requested to participate in the project to reconstruct CTH M from Cross Country Road to Prairie Hill Road in the Cities of Verona and Madison, Dane County, Wisconsin; and

WHEREAS, the FHWA is the lead agency on this project with responsibility for completing the requirements of Section 106; and

WHEREAS, the FHWA has established the Project's Area of Potential Effects (APE), as defined in 36 CFR § 800.16(d), to be all areas of proposed ground disturbance and all properties, inclusive of all buildings and structures, adjacent to the project corridor; and

WHEREAS, the FHWA, pursuant to 36 CFR § 800.4(c), has determined that the Schroeder-Stickelberg-Thompson Farmstead is eligible for inclusion in the National Register of Historic Places; and

WHEREAS, the FHWA has determined that the project will have an adverse effect on the Schroeder-Stickelberg-Thompson Farmstead; and

WHEREAS, the FHWA has consulted with the SHPO in accordance with Section 106 of the National Historic Preservation Act, 16, U.S.C. § 470 (NHPA), and its implementing regulations (36 CFR Part 800) to resolve the adverse effect of the project on historic properties; and

WHEREAS, the Wisconsin Department of Transportation (WisDOT) participated in the consultation and has been invited to concur in this MOA; and

WHEREAS, the City of Verona and City of Madison participated in the consultation and have been invited to concur in this MOA; and

WHEREAS, this undertaking is not on federal or tribal land as defined by the National Historic Preservation Act (NHPA); therefore, all inadvertent human remain discoveries will be addressed in accordance with Wisconsin s.s. 157.70; and

WHEREAS, post-review discoveries of non-human remain historic resources will be treated in accordance with 36 CFR 800.13(b);

NOW, THEREFORE, the FHWA and the Wisconsin SHPO agree that, upon execution of this MOA, and upon the FHWA's decision to proceed with the Project, the FHWA shall ensure that the following stipulations are implemented in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

The FHWA shall ensure that the following stipulation is carried out:

SURVEY AND INVENTORY OF SURROUNDING FARMSTEADS

a. Within three months of the MOA execution and before project letting, WisDOT or its agent will complete a field survey of up to seven of the best-preserved and finest representative historic farmsteads throughout the Town of Verona.
b. Survey boundaries will be Midtown Road to the north, Fitchrona Road to the east, Schaller Road to the south, and Spring Rose Road to the west.
c. A windshield survey of all farmsteads within the survey boundaries will be conducted to establish an architectural context and to identify up to seven of the best-preserved historic farmsteads in the Town of Verona. These farmsteads will be included with appropriate historic context information in a formal reconnaissance-level survey report.
d. Reconnaissance survey procedures will follow the farmstead survey methodology outlined in the WisDOT Survey Manual and will include
    1. One sketch map per surveyed farmstead
    2. One set of digital photographs of all historic resources per surveyed farmstead
e. WisDOT or its agent will submit copies of the survey and historic context report, sketch maps, and digital images to SHPO and the Dane County Historical Society.
f. Records for each of the surveyed farmsteads will be created and added to the Wisconsin Historic Preservation Database (WHPD).
g. The cost of this stipulation will be funded by the City of Madison, the City of Verona, and Dane County.

DISPUTE RESOLUTION

Should any signatory to this MOA (including any invited signatory), per 36 CFR 800.6(c)(1) and (2), object in writing at any time prior to termination to any actions proposed or the manner in which the terms of this MOA are implemented, WisDOT and FHWA shall consult with such party to resolve the objection. The objection must specify how the actions or manner of implementation is counter to the goals, objectives or specific stipulation of this MOA. If FHWA determines that such objection cannot be resolved, FHWA will:

a. Forward all documentation relevant to the dispute, including the FHWA's proposed resolution, to the Advisory Council on Historic Preservation (ACHP). The ACHP shall provide FHWA with its advice on the resolution of the objection within 30 days

of receiving adequate documentation. Prior to reaching a final decision on the dispute, FHWA shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP and signatories, and provide them with a copy of this written response. FHWA will then proceed according to its final decision.

b. If the ACHP does not provide its advice regarding the dispute within the 30 day period, FHWA may make a final decision on the dispute and proceed accordingly. Prior to proceeding, FHWA shall notify the parties to this MOA of its decision regarding the dispute.
c. It is FHWA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute.

AMENDMENT

Any signatory to this agreement may propose to the agency that the agreement be amended. Whereupon the agency shall consult with the other signatory parties [including invited signatories per 36 CFR 800.6(c))1) and (2)] to this agreement to consider such an amendment. 36 CFR 800.6(c)(1) and (7) shall govern the execution of any such amendment.

PROFESSIONAL QUALIFICATIONS

WisDOT shall ensure that all historic preservation work carried out pursuant to agreement is carried out by or under the supervision of a person or persons meeting at a minimum the Secretary of the Interior's Professional Qualifications Standards in the field of architectural history, as published in 36 CFR Part 61.

TERMINATION

If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other signatories to attempt to develop an amendment. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.

SUNSET CLAUSE

This agreement shall be null and void if its terms are not carried out within five (5) years from the date of the execution, unless the signatories agree in writing to an extension of carrying out its terms. Execution of this MOA by FHWA and the Wisconsin SHPO, and implementation of its

terms, evidences that FHWA has complied with Section 106 on the CTH M reconstruction project, and that FHWA has taken into account the effects of the Project on historic properties.

SIGNATORY PARTIES:

FEDERAL HIGHWAY ADMINISTRATION

BY: _____ Date: August 3, 2015
Ian Chidister,
Environmental Program Manager, FHWA

WISCONSIN STATE HISTORIC PRESERVATION OFFICER

BY: _____ Date: 8/24/15
Jim Draeger, State Historic Preservation Officer

INVITED SIGNATORIES:

WISCONSIN DEPARTMENT OF TRANSPORTATION

BY: Patricia M Trainer Date: 20 October 2015
for ~~Rebecca S. Burkel~~, Director, Bureau of Technical Services/
WisDOT Historic Preservation Officer

DANE COUNTY

BY: _____ Date: _____

CITY OF VERONA

BY: _____ Date: _____

CITY OF MADISON

BY: _____ Date: _____

INVITED SIGNATORIES:

WISCONSIN DEPARTMENT OF TRANSPORTATION

BY: _____ Date: _____
Rebecca S. Burkel, Director, Bureau of Technical Services/
WisDOT Historic Preservation Officer

DANE COUNTY

BY: _____ Date: 3/24/15

CITY OF VERONA

BY: _____ Date: _____

CITY OF MADISON

BY: _____ Date: _____

INVITED SIGNATORIES:

WISCONSIN DEPARTMENT OF TRANSPORTATION

BY: _____ Date: _____
Rebecca S. Burkel, Director, Bureau of Technical Services/
WisDOT Historic Preservation Officer

DANE COUNTY

BY: _____ Date: _____

CITY ~~OF VERONA~~

BY: _____ Date: 7-10-15

CITY OF MADISON

BY: _____ Date: _____

INVITED SIGNATORIES:

WISCONSIN DEPARTMENT OF TRANSPORTATION

BY: _____ Date: _____
Rebecca S. Burkel, Director, Bureau of Technical Services/
WisDOT Historic Preservation Officer

DANE COUNTY

BY: _____ Date: _____

CITY OF VERONA

BY: _____ Date: _____

CITY OF MADISON

BY: _____ Date: 4/3/15
Mayor

BY: Maribeth Witzel-Behl Date: 4-3-2015
City Clerk

WISCONSIN
UNIVERSITY OF WISCONSIN–MADISON

July 31, 2015

Jason DiPiazza, PE
Project Manager, MSA Professional Services, Inc.
2901 International Lane, Suite 300
Madison, WI 53704

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)
4(F) PROPERTY COORDINATION – UNIVERSITY RIDGE GOLF COURSE

Dear Mr. DiPiazza,

In my role as the Associate Vice Chancellor for Facilities Planning & Management, I am writing to you on behalf of the University Of Wisconsin Board Of Regents, University of Wisconsin Athletic Department, University Ridge golf course, and the O.J. Noer Turfgrass Research Facility with regards to the proposed actions of the subject project. After reviewing the above proposed project, ID 5992-09-81, County Highway M, Dane County and you allowing the public the opportunity to review and comment on the effects of the project, it is our opinion that this project will not have any significant adverse effects on university property.

It is our understanding that the City of Madison, City of Verona, and Dane County plan to reconstruct County Highway M (CTH M) and County Highway PD (CTH PD). This is a multi-phase, multi-year project to reconstruct the CTH M corridor. The operators of the University Ridge Golf Course, University of Wisconsin Athletic Department, the O.J. Noer Turfgrass Facility, and staff in Facilities Planning and Management have been consulted for their input in reviewing the potential impacts of the proposed action. It is understood that the following paragraphs represent the general concept of the proposed action and incorporate avoidance, minimization, and mitigation elements developed in cooperation with University officials. With this understanding, the University of Wisconsin-Madison believes the proposed action will have no permanent adverse physical impacts, nor will there be any interference with the protected activities, features, or attributes that make the University Ridge Golf Course eligible for Section 4(f) protection.

The proposed action includes constructing a widened, signalized urban intersection with curb and gutter, storm sewer, sanitary sewer, water service, and street lighting. The elevation of the roadway intersection will be raised and a bridge will be constructed on the north leg, allowing westbound through traffic on CTH PD to pass below the north leg (CTH M). A ten foot wide paved multi-use path will also be constructed below the bridge and continue through an underpass below the west leg of CTH PD, providing an off-highway paved path network between the cities of Verona, Madison, and Middleton. The proposed intersection design will require concrete retaining walls along CTH PD and CTH M in proximity to the University Ridge property to accommodate the raised roadway elevation. The intersection improvements will benefit the golf course by improving highway access to the facility, especially for major events.

Access to the golf course is located outside the project limits thus will not be directly impacted by the proposed action. As you have stated, access to the golf course and the turfgrass research facility will be maintained throughout construction. The project design team will work with University Ridge and University of Wisconsin Athletics staff to coordinate major athletic events that will be held during the anticipated construction time frame in 2017 and 2018.

Associate Vice Chancellor - Facilities Planning & Management
9th Floor WARF Building 610 Walnut Street Madison, Wisconsin 53726-2397
(608) 263-3000 FAX (608) 265-3139

The existing University Ridge gateway sign located on University Ridge Golf Course property near the intersection of CTH M and CTH PD is in conflict with the proposed construction. This sign was originally designed to be relocated in anticipation of the reconstructed and widened highway intersection. University Ridge staff anticipates financial compensation for the relocation of the sign outside proposed new highway right of way. We expect the project team to coordinate closely with the University Ridge staff on the relocation of this major entry sign.

The University understands that the proposed roadway expansion will also impact the O.J. Noer Turfgrass Research and Education Facility located adjacent to the golf course on University property. Though not a Section 4(f) protected resource, we concur with the proposed roadway expansion, and the resulting need to realign the Ice Age Trail within our facility to improve safety for trail users. By realigning the trail on our property, trail users will no longer be required to utilize the CTH M shoulder. We concur with the proposed realigned Ice Age Trail location and understand that new cross access easements provided to the trail authority will be required for the realigned portion of the trail. The project team may need to participate in those negotiations to facilitate approval. We also understand that, in order to facilitate this new public use on our property, the existing bridge structure will need some upgrades to maintain fall protection on the sides with respect to the handrails. We expect the project team or the City of Madison to financially compensate the University for the cost of those upgrades.

Project design staff will work with University Ridge Golf Course and UW Facilities Planning & Management staff to incorporate landscape vegetation screening elements into the design along CTH PD to provide screening between the golf course and highway. Depending on the proximity of the highway right-of-way to the fairway, we also may need to install netting to assure golf balls are not straying onto cars using the highway. If this is the case, the project should financially compensate the University for that work to assure safe use of the highway.

Approximately 2.0 acres of new highway right-of-way and 1.5 acres of temporary limited easement for construction staging, grading, and landscape restoration are needed from southeast corner of the University Ridge Golf Course to construct and maintain the proposed highway facility. The 2.0 acres of highway right-of-way represents 0.5 percent of the approximately 370-acre golf course area. Greens, fairways, buildings, and cart paths will not be impacted by either permanent or temporary property acquisition. We expect to negotiate directly with the City of Madison on the value of the needed lands for this project, both at the University Ridge and O.J. Noer facility, as well as for the UW Board of Regents property to the north along CTH M. Financial compensation to the University will be necessary.

To summarize, University officials, as a project stakeholder, have reviewed the proposed action and have been actively engaged in the projects public involvement process. The University understands that the Federal Highway Administration (FHWA) plans to make a De Minimis Section 4(f) determination regarding the impacts to the University Ridge Golf Course. The University concurs with that determination and anticipates that the proposed action will have no permanent adverse physical impacts, nor will there be any interference with the protected activities, features, or attributes that make the University Ridge Golf Course eligible for Section 4(f) protection.

Sincerely,

W. M. Elvey

William M. Elvey, P.E.
Associate Vice Chancellor, Facilities Planning & Management

XC: Gary A. Brown, PLA, FASLA – Director, Campus Planning & Landscape Architecture
Jason King, Associate Director, UW Athletics
G. Michael Gaspard, General Manager, University Ridge Golf Course
Thomas Schwabe, Superintendent, O.J. Noer Turfgrass Research Facility
Chris Petykowski, Civil Engineer, City of Madison

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Dane County Parks
Always in Season

Parks Division
Dane County Land & Water Resources Department

August 21, 2015

Jason DiPiazza, PE
Project Manager, MSA Professional Services, Inc.
2901 International Lane, Suite 300
Madison, WI 53704

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)
4(F) PROPERTY COORDINATION – UNIVERSITY RIDGE GOLF COURSE

Dear Mr. DiPiazza

In my role as the official with jurisdiction over the Dane County Park property, I am writing to you on behalf of the Dane County Park Commission with regards to the proposed actions of the subject project. After reviewing the above proposed project, ID 5992-09-81, CTH M, Dane County and allowing the public the opportunity to review and comment on the effects of the project, it is our opinion that this project will not have any adverse effects on the Dane County Park adjacent to the project area.

It is the understanding of the Dane County Park Commission, that the City of Madison, City of Verona, and Dane County plan to reconstruct County Highway M (CTH M) and Raymond Road in the vicinity of a Dane County Park. This is a multi-phase project to reconstruct the CTH M corridor. Dane County Park staff members have been consulted for their input in reviewing the potential impacts of the proposed action. It is understood that the following paragraphs represent the general concept of the proposed action and incorporate avoidance, minimization, and mitigation elements developed in cooperation with Dane County staff. With this understanding, the Dane County Park Commission believes the proposed action will have no permanent adverse physical impacts, nor will there be any interference with the protected activities, features, or attributes that make the Dane County Park eligible for Section 4(f) protection.

The proposed action includes constructing a widened, urban arterial roadway with curb and gutter, raised median, storm sewer, sanitary sewer, water service, and street lighting along the existing CTH M alignment. A ten foot wide paved multi-use path will be constructed parallel to CTH M along the east side of the highway. This path will connect to the existing Ice Age Junction Path constructed along the north edge of the park, with the connection point near the intersection of Flagstone Drive and CTH M. The Ice Age Junction Path and Ice Age National Scenic Trail will then cross below CTH M at the Flagstone Drive intersection through a box culvert. This underpass will service an off road trail system that will provide hiking and bicycling opportunities between the

Lyman F. Anderson Agriculture & Conservation Center
5201 Fen Oak Drive, Room 208, Madison, Wisconsin 53718 - PH: 608/224-3730, FAX: 608/224-3745
www.countyofdane.com/lwrd/parks

cities of Verona, Madison, and Middleton. The paved path is proposed to be constructed on a permanent limited easement designated for the construction and maintenance of a multi-use path. The City of Madison will be responsible for the maintenance of the paved path, which will be documented in a maintenance agreement between the City of Madison and Dane County.

Grading and construction of the multi-use path will impact restored prairie area along the western edge of the park. Within this prairie area is a fire break and maintenance path that is also used for hiking. Project design staff will coordinate with Dane County Park staff to include proven restoration grading design, seeding, and erosion control measures with the proposed work to restore the prairie area. The grading work will also include restoration of the fire break and maintenance path. The contractor that completes the work will be from a list of contractors approved by Dane County Parks. Dane County Park Staff will also be allowed to review and accept the work on behalf of Dane County.

Dane County Parks maintains a driveway and small parking area off CTH M for use by Parks maintenance personnel, vehicles, and equipment. The proposed action will include a new driveway opening and re-establishment of the parking area, along with a replacement gate and fence system with design and specification guidance from Dane County Parks Staff.

The existing drainage culvert carrying the Badger Mill Creek drainage way below CTH M near the Flagstone Drive intersection will be replaced with this project. The existing wetland scrape that was constructed at the end of this culvert will be partially filled as a result of the proposed action. Project staff will work with Dane County Parks Staff to design and incorporate grading and restoration elements to provide the grade and elevation characteristics of the existing scrape. The resulting wetland footprint will match the size of the existing wetland scrape.

Approximately 0.8 acres of new highway right-of-way, 0.8 acres of permanent limited easement, and 2.1 acres of temporary limited easement for construction staging, grading, and landscape restoration are needed from the west edge of the park to maintain the proposed highway facility. The 0.8 acres of highway right-of-way acquisition represents 1.7 percent of the approximately 47.8 acre park area. The City of Madison has set aside a minimum of 0.8 acres of land adjacent to the north edge of the park that will be maintained as recreation and open space area consistent with the recreational status of the Dane County Park. This dedication is consistent with the requirements of the state of Wisconsin funded Knowles-Nelson Stewardship Grant, which was used to purchase the park where the proposed multi-use path will be located, along CTH M. The proposed paved multi-use path will be constructed and maintained on the 0.8 acres of permanent easement. This easement and land use is consistent with the recreational status and use of the land thus replacement lands are not required in accordance with the requirements of the Knowles-Nelson grant funding.

The Raymond Road reconstruction portion of the project is a result of the need to construct a new City of Madison storm sewer system and Madison Metropolitan Sewage District (MMSD) sewer main below the Raymond Road corridor. Construction of the sewers and reconstruction of Raymond Road will require temporary limited easements for construction and grading along Raymond Road. In addition, MMSD will require a new permanent easement to connect to their existing sewer on easement within the park boundary. Disturbance of restored prairie area as result of this work will be restored with the same requirements as the restored prairie area along the CTH M and the proposed multi-use path.

Approximately 0.15 acre of permanent easement is required to complete the MMSD sewer, along with approximately 1.0 acre of temporary easement for construction and grading. No above ground improvements are required with this construction so it is consistent with the recreational status of the land.

To summarize, Dane County Parks officials, as project stakeholders, have reviewed the proposed action and have been actively engaged in the project's public involvement process. The Dane County Parks Commission understands that the Federal Highway Administration (FHWA) plans to make a De Minimis Section 4(f) determination regarding the impacts to the Dane County Park. The Dane County Parks Commission concurs with that determination and anticipates that the proposed action will have no permanent adverse physical impacts, nor will there be any interference with the protected activities, features, or attributes that make the Dane County Park eligible for Section 4(f) protection.

Sincerely,

William Lunney
Dane County Park Commission, Chair

Cc: Darren Marsh; Director, Dane County Parks Division
Kevin Thusius; Director of Land Conservation, Ice Age Trail Alliance
Chris Petykowski; P.E., City of Madison Engineering

Department of Public Works
Engineering Division
Robert F. Phillips, P.E., City Engineer
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Eric L. Dundee, P.E.
John S. Fahrney, P.E.
Christopher J. Petykowski, P.E.
Facilities & Sustainability
Jeanne E. Hoffman, Manager
Operations Manager
Kathleen M. Cryan
Mapping Section Manager
Eric T. Pederson, P.S.
Financial Manager
Steven B. Danner-Rivers

September 8, 2015

National Park Service
Attn: Pamela Schuler, Manager, Ice Age NST
700 Rayovac Drive, Suite 100
Madison, WI 53711

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)
SECTION 4(F) PROTECTED RESOURCE –ICE AGE NATIONAL SCENIC TRAIL

The City of Madison, in partnership with the City of Verona and Dane County, is proposing roadway improvements to South Pleasant View Road/County Highway M (CTH M) from Cross Country Road to Prairie Hill Road, a distance of approximately three miles. The purpose of this proposed action is to address safety and operational deficiencies of the existing CTH M corridor, a National Highway System (NHS) route. Current and future projected traffic, bicycle, and pedestrian demand have mad the current facility functionally obsolete. The proposed action will provide a safe and serviceable corridor that is convenient for area businesses, residents, and the traveling public. This includes motor vehicles, bicyclists, pedestrians, and the potential for future transit routes. The proposed improvements consist of expanding CTH M from the existing two-lane rural highway to a multi-lane urban arterial roadway. Included with the proposed improvements are a raised median, curb and gutter, storm sewer, street lighting, sidewalks, and multi-use paths. The project will also include construction of a new storm sewer and sanitary sewer below Raymond Road, resulting in the reconstruction of Raymond Road as a rural highway. The culvert carrying Raymond Road over Badger Mill Creek will be reconstructed at the north end of the proposed sewer additions.

The proposed action is part of a multi-phase project to reconstruct the CTH M corridor, which includes reconstructing the Mid Town Road and CTH PD intersections. The action is also compatible with plans to reconstruct the CTH PD corridor, also an NHS route, as a four lane urban arterial.

The proposed action will impact the Ice Age National Scenic Trail (IANST). To accommodate the CTH M roadway improvements, approximately 0.3 acres of right-of-way will need to be acquired from an easement owned by the Ice Age Trail Alliance through University of Wisconsin owned property adjacent to CTH M. The 0.3 acres of easement impacted are located along the eastern edge of the OJ Noer-University of Wisconsin turf grass facility on the west side of CTH M, south of CTH M and Flagstone Drive intersection. The Ice Age Trail currently crosses CTH M at Flagstone Drive, and then follows this easement through the OJ Noer Turf Research Facility and University Ridge golf course. On the east side of CTH M, the IANST is located on Dane County Parkland where it continues east and crosses the proposed project at Raymond Road

near the existing drainage culvert over the Badger Mill Creek. This drainage culvert is proposed to be replaced with this project. Please see the enclosed exhibits that show the locations where the IANST crosses proposed highway improvement locations.

Project sponsors and design engineers have met with officials from the National Park Service, Ice Age Trail Alliance, and Dane County Parks to avoid, minimize, or mitigate effects of the highway improvements to the IANST in compliance with Section 4(f) requirements. These discussions have resulted in the following project elements that are also highlighted on the attached exhibits.

Ice Age National Scenic Trail (IANST) at CTH M & Flagstone Drive intersection:

- A box culvert underpass, approximately 150 feet in length and 14 feet wide, is proposed below CTH M to provide a grade separated crossing of CTH M for both the IANST and the City of Madison's Ice Age Junction paved multi-use path. This grade separated crossing will provide a safer crossing of CTH M for both trail and path users. The existing IANST alignment crosses CTH M at grade with no marked crosswalks or warning signs for vehicles. Trail users often walk along narrow shoulder of CTH M to reach the driveway for the OJ Noer Turf Resarch facility to reconnect with the IANST. The proposed underpass will include 24-hour lighting for safety.
- The IANST will run concurrently with the paved Ice Age Junction Path for approximately 400 feet, including the proposed underpass. IANST officials have indicated a desire to minimize this concurrent path distance to the extent practical. The design plans will include site grading and culvert pipe extensions to realign approximately 100 feet of the IANST to a perpendicular intersection with the paved path (desired by Ice Age Trail Alliance officials) and a shorter concurrent paved path length.
- Ice Age Trail Alliance officials have requested that the proposed project work include split rail (wood) fence "dodgeway" systems at the intersections of the IANST and paved path system to discourage bicycle and other prohibited uses of the IANST. The City of Madison has agreed to include "dodgeways" in the project plans. Ice Age Trail Alliance officials will provide design guidance and plan review of the "dodgeway" designs. The design will be similar to the split rail wood fence design in use where the Ice Age Trail crosses Woods Road west of the project limits.
- IANST officials have requested that the proposed project plans include signage marking the Ice Age Trail at the paved path intersections. National Park Service staff will provide sign design and specification guidance to the project team. The project plans will include trail route marker signs.
- City of Madison and project team staff will coordinate with University of Wisconsin officials and the Ice Age Trail Alliance to ensure that an update to the existing easement on University owned property is recorded. The proposed easement will be along the proposed CTH M right-of-way and will replace the existing easement already in place along CTH M. IANST officials prefer that the easement incorporates the maintenance vehicle bridge over Badger Mill Creek. The desire is to allow trail users access to the bridge to cross the creek. University officials have agreed to this use and will coordinate with project staff and Ice Age Trail officials on adding kick plates along the edge of the bridge. Ice Age Trail Alliance has indicated that 2x4 or 2x6 lumber along the edge, raised to allow drainage from the bridge surface is sufficient.

Ice Age National Scenic Trail (IANST) at Raymond Road:

- IANST officials would like the trail to cross Raymond Road as close to the existing alignment as possible. With the proposed structure, the trail will continue to cross from the northeast quadrant of the crossing to the southwest quadrant. Additional crosswalk markings for the Ice Age Junction paved path will not be provided for the IANST. IANST users will have access to the marked crosswalk for the adjacent Ice Age Junction Path. Sidewalk will be provided on both sides of Raymond Road across the culvert for both trail users and pedestrians accessing the Ice Age Junction Path.

- Raymond Road will be raised slightly, approximately one or two feet, to accommodate the proposed culvert structure. Ice Age Trail Alliance officials indicated a maximum approach grade to Raymond Road not to exceed 10% over a thirty foot distance.

Based on the coordination and involvement of National Park Service, Ice Age Trail Alliance, and Dane County Park officials during the project development process, and the impact minimization, adverse effect avoidance measures, and benefits to the IANST developed and proposed to be included in the project, a De Minimis Section 4(f) determination is planned to made by the Federal Highway Administration (FHWA) regarding the impacts to the Ice Age Trail National Scenic Trail. This letter requests formal concurrence from the National Park Service, as the official with jurisdiction, that the above referenced project will not have permanent adverse effects on the activities, features, or attributes that make the Ice Age National Scenic Trail eligible for Section 4(f) protection.

We ask for your formal concurrence at this time that the South Pleasant View Road Reconstruction Project (PROJECT ID: 5992-09-81) will not adversely affect the activities, features, or attributes that make the Ice Age Trail eligible for Section 4(f) protection by signing below:

I hereby acknowledge that the National Park Service, in partnership with the Ice Age Trail Alliance and Dane County Parks, has been afforded the opportunity for comment during project development and agree with efforts to mitigate and minimize adverse effects to the Ice Age National Scenic Trail. I further agree the project will not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection.

Sept 10 2015
Date

superintendent
National Park Service
John R. MAdden

Sincerely,

Robert F. Philips, P.E.
City Engineer

Enclosure

Cc: Kevin Thusius, Director of Land Conservation, Ice Age Trail Alliance
Chris James, Dane County Parks
Pam Dunphy, Deputy Commissioner, Dane County Public Works, Highway & Transportation
Karen Richardson, WisDOT Local Program Management Consultant
Jason DiPiazza (MSA Professional Services, Inc.)
Paul Chellevold, (SRF Consulting Group)

Department of Public Works
Engineering Division
Robert F. Phillips, P.E., City Engineer
City-County Building, Room 115
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Facilities & Sustainability
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Mapping Section Manager
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Financial Manager
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July 7, 2015

Jason DiPiazza, PE
Project Manager, MSA Professional Services, Inc.
2901 International Lane, Suite 300
Madison, WI 53704

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY HIGHWAY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)
4(F) PROPERTY COORDINATION – INEICHEN DRIVE RECREATIONAL PATH

Dear Mr. DiPiazza

In my role as the official with jurisdiction over the City of Madison's recreational path system, I am writing to you on behalf of the City of Madison with regards to the proposed actions of the subject project. After reviewing the above proposed project, ID 5992-09-81, CTH M, Dane County and allowing the public the opportunity to review and comment on the effects of the project, it is our opinion that this project will not have any adverse effects on the City of Madison's Ice Age Junction Path that currently terminates near the intersection of Flagstone Drive and CTH M.

As a representative of the City of Madison, a project sponsor, I have attended regular project design development meetings. It is understood that the following paragraphs represent the general concept of the proposed action and incorporate avoidance, minimization, and mitigation elements developed in cooperation with City of Madison officials. With this understanding, the City of Madison believes the proposed action will have no permanent adverse physical impacts, nor will there be any interference with the protected activities, features, or attributes that make the Ice Age Junction Path eligible for Section 4(f) protection.

The proposed action includes constructing a widened, urban arterial roadway with curb and gutter, raised median, storm sewer, sanitary sewer, water service, and street lighting along the existing CTH M alignment. A ten foot wide paved multi-use path will be constructed parallel to CTH M between Ineichen Drive and Waterbend Drive. The proposed project will include a grade separated crossing built for the Ice Age Junction Path to provide a safe crossing of the path below CTH M. The proposed project will also include a paved ten-foot wide path along the west side of CTH M that will extend the Ice Age Junction Path system to just past Waterbend Drive. Included in this stretch is a second graded separated crossing constructed for the path below the west leg of the Mid Town Road intersection. The paved path constructed with this project will end north of Waterbend Drive where it will be constructed as part of planned development at the north end of the proposed project. The proposed project will provide an off-highway paved path network between the cities of Verona, Madison, and Middleton.

The City of Madison has requested the inclusion of the proposed path with the project. Impacts to the existing path terminus will include a saw cut and minor regrading near the path. A spur path already exists providing path users a route to Flagstone Drive, which is a residential street suitable for bicycle riders. Permanent land acquisition is not required from the existing path location as it is located on City of Madison owned property.

To summarize, the City of Madison, as a project stakeholder, has reviewed the proposed action and has been actively engaged in the project's public involvement process. The City of Madison understands that the Federal Highway Administration (FHWA) plans to make a De Minimis Section 4(f) determination regarding the impacts to the Ice Age Junction Path. The City of Madison concurs with that determination and anticipates that the proposed action will have no permanent adverse physical impacts, nor will there be any interference with the protected activities, features, or attributes that make the Ice Age Junction Path eligible for Section 4(f) protection.

Sincerely,

Robert F. Phillips, P.E.
City Engineer

RFP: CJP

verona

CITY OF VERONA
Public Works
Parks & Recreation
410 Investment Court
Verona, Wisconsin 53593-8749

Fax: (608) 845-5761
Telephone: (608) 845-6695

JULY 10, 2015

Jason DiPiazza, PE
Project Manager, MSA Professional Services, Inc.
2901 International Lane, Suite 300
Madison, WI 53704

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY HIGHWAY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)
4(F) PROPERTY COORDINATION – INEICHEN DRIVE RECREATIONAL PATH

Dear Mr. DiPiazza

In my role as the official with jurisdiction over the City of Verona's recreational path system, I am writing to you on behalf of the City of Verona with regards to the proposed actions of the subject project. After reviewing the above proposed project, ID 5992-09-81, CTH M, Dane County and allowing the public the opportunity to review and comment on the effects of the project, it is our opinion that this project will not have any adverse effects on the City of Verona recreational path along the south side of Ineichen Drive that terminates at the intersection of Ineichen Drive and CTH M.

As a representative of the City of Verona, a project sponsor, I have attended regular project design development meetings. It is understood that the following paragraphs represent the general concept of the proposed action and incorporate avoidance, minimization, and mitigation elements developed in cooperation with City of Verona officials. With this understanding, the City of Verona believes the proposed action will have no permanent adverse physical impacts, nor will there be any interference with the protected activities, features, or attributes that make the paved recreational path along Ineichen Drive eligible for Section 4(f) protection.

The proposed action includes constructing a widened, urban arterial roadway with curb and gutter, raised median, storm sewer, sanitary sewer, water service, and street lighting along the existing CTH M alignment. A ten foot wide paved multi-use path will be constructed parallel to CTH M between Ineichen Drive and Waterbend Drive. The proposed project will include an at-grade path crossing of CTH M at the Ineichen Drive intersection with CTH M to connect the proposed path with the existing paved path along the south side of Ineichen Drive. This path will connect to the existing ten foot paved Ice Age Junction Path constructed along the north edge of the Dane County Park, with the connection point near the intersection of Flagstone Drive and CTH M. The path will also connect with a planned path through proposed development in the southwest quadrant of the CTH M and Valley View Road intersection at the north end of the project limits. This path will provide an off-highway paved path network between the cities of Verona, Madison, and Middleton.

The City of Verona has requested the inclusion of the proposed path with the project, including the connection at Ineichen Drive. Impacts to the existing path along Ineichen Drive will include a saw and reconstruction of the curb ramp leading to the crosswalk across Ineichen Drive at CTH M. Permanent land acquisition is not required from the existing path location as it is located on street right-of-way for Ineichen Drive.

To summarize, the City of Verona, as a project stakeholder, has reviewed the proposed action and has been actively engaged in the project's public involvement process. The City of Verona understands that the Federal Highway Administration (FHWA) plans to make a De Minimis Section 4(f) determination regarding the impacts to the recreational path along Ineichen Drive. The City of Verona concurs with that determination and anticipates that the proposed action will have no permanent adverse physical impacts, nor will there be any interference with the protected activities, features, or attributes that make the recreational path along Ineichen Drive eligible for Section 4(f) protection.

Sincerely,

Ron Rieder
Director of Public Works, City of Verona

U.S. Department of Transportation
Federal Highway Administration

Wisconsin Division Office

525 Junction Road, Suite 8000
Madison, WI 53717
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Fax: (608) 662-2121
www.fhwa.dot.gov/widiv/

March 4, 2016

In Reply Refer To:
HDA-WI

Director, Office of Environmental Policy and Compliance
U. S. Department of the Interior
1849 C Street, NW (MS 2462-MIB)
Washington, DC 20240

SUBJECT: Request for Comments on Draft Section 4(f) Evaluation
CTH M, Cross County Road to Pleasant Hill Road, City of Madison, Dane County.

Dear Mr. Taylor:

This Project calls for the expansion of 2.8 miles of County Trunk Highway M through the City of Verona, WI, needed to deal with unacceptable delays. The 4(f) resources adjacent to the corridor were carefully considered during the evaluation. A separate environmental assessment is being processed to comply with NEPA.

We have reviewed the draft evaluation and believe there is no prudent and feasible alternative to the use of the 4(f) property and that the project will incorporate all possible planning to minimize harm. Prior to documenting our finding in a final section 4(f) evaluation, we will consider your comments, input from the public and other agencies, and comments from our internal legal sufficiency review.

Enclosed is a compact disc copy of the draft section 4(f) evaluation for the subject project. Please review the evaluation and return any comments within the 45 day time period provided by 23 CFR 774.5(a). If you have any questions about the project or documentation, please contact me at (608) 829-7513 or pete.garcia@dot.gov

Sincerely,

Peter M. Garcia, P.E.
Field Operations Engineer

Enclosure

ecc: Fred Wisner, WisDOT

United States Department of the Interior
Office of the Secretary
Washington, D.C. 20240

APR 1 2 2016

ER16/0152

Mr. Michael Davies
Division Administrator
Federal Highway Administration
Wisconsin Division
525 Junction Road, Suite 8000
Madison, Wisconsin 53717

Dear Mr. Davies:

The Department of the Interior (Department) has reviewed the Draft Section 4(f) Evaluation for County Highway (CTH) M, Cross Country Road to Pleasant Hill Road, City of Madison, Dane County, Wisconsin. The Department offers the following comments and recommendations for your consideration:

Section 4(f) Comments

This document considers effects to four identified properties in the project study area eligible to be considered under Section 4(f) of the Department of Transportation Act of 1966 (codified at 49 U.S.C. § 303 and 23 U.S.C. § 138) associated with the CTH M project (South Pleasant View Road). The South Pleasant View Road project area extends 2.86 miles from Cross Country Road to Pleasant Hill Road. The existing roadway has reached the end of its service life and requires expansion to meet the operational needs of this corridor. The proposed improvements consist of expanding CTH M from an existing two lane rural highway to a multi-lane urban arterial with bike lanes, a multi-use path, and sidewalks.

The draft Section 4(f) Evaluation, prepared by the Federal Highway Administration (FHWA) and the Wisconsin Department of Transportation (WisDOT), considered the impacts to the Schroeder-Stickelberg-Thompson Farmstead, the University Ridge Golf Course, the Ice Age National Scenic Trail, and Dane County Parkland, owned by the Dane County Parks Division. The impacts to the Golf Course, the Ice Age National Scenic Trail, and Dane County Parkland were determined to be at the *de minimis* level; the Department does not comment on *de minimis* determinations.

The FHWA and WisDOT determined that the project would have an adverse effect to the historic Schroeder-Stickelberg-Thompson Farmstead under Section 106 of the National Historic Preservation Act, as amended. A determination of an adverse effect under Section 106 constitutes a use under Section 4(f). At least one avoidance alternative was explored during the project development phase, but it was determined not feasible or prudent, nor did it meet the purpose and need of the project. The preferred alternative was determined to be the alternative with the least overall harm to Section 4(f) resources.

The Department would concur with the FHWA and the WisDOT on a determination of no feasible or prudent alternative to the preferred alternative, if built as proposed, which would result in impacts to eligible properties. We would also concur that all measures to minimize harm to the historic property have been included. The FHWA and WisDOT drafted a memorandum of agreement providing mitigation necessary for this property. That agreement was signed in August of 2015, and a copy appears in the draft Section 4(f) Evaluation.

The Department has a continuing interest in working with the FHWA and the WisDOT to ensure impacts to resources of concern to the Department are adequately addressed. For issues concerning Section 4(f) resources, please contact Regional Environmental Coordinator Nick Chevance, Midwest Regional Office, National Park Service, 601 Riverfront Drive, Omaha, Nebraska 68102, telephone 402-661-1844.

We appreciate the opportunity to provide these comments.

Sincerely,

Mary Josie Blanchard

Mary Josie Blanchard
Acting Director, Office of Environmental
Policy and Compliance

cc: Pete Garcia (pete.garcia@dot.gov)
NPS-MWR-PC (Chevance)

TRANSMITTED ELECTRONICALLY – NO HARD COPY TO FOLLOW

SECTION 4(F) DETERMINATION REPORT

APPENDIX C:

Other Documented Correspondence

SECTION 4(F) DETERMINATION REPORT

Schroeder-Stickelberg-Thompson Farmstead Correspondence & Documentation for Consultation

SECTION 106 REVIEW ARCHAEOLOGICAL/HISTORICAL INFORMATION

Wisconsin Department of Transportation
DT1635 6/2014

For instructions, see FDM Chapter 26.

I. PROJECT INFORMATION

☒ Amended Submittal *(include new information only)*

Project ID	Highway – Street	County
5992-09-81	Local Street	Dane County

Project Termini	Region – Office
South Pleasant View Road/CTH M - (Prairie Hill Rd. to Cross Country Rd.)	Southwest Region - Local Program

Regional Project Engineer – Project Manager	(Area Code) Telephone Number
Karen Richardson, P.E. (Kjohnson Engineers, Southwest Region - Local Program Management Consultant	(608) 829-3858

Consultant Project Engineer – Project Manager	(Area Code) Telephone Number
MSA Professional Services, Inc. - Jason DiPiazza, PE	(608)242-6640
Archaeological Consultant	(Area Code) Telephone Number
Cultural Resource Management, University of Wisconsin Milwauakee (work also done by: Great Lakes Archaelogical Research Center, Inc.)	(414) 229-3078
Architecture/History Consultant	(Area Code) Telephone Number
Cultural Resource Management, University of Wisconsin Milwauakee (work also done by: Great Lakes Archaelogical Research Center, Inc.)	(414) 229-3078
Date of Need	SHSW Number
March 1, 2015	

Return a Signed Copy of This Form to
karenrichardson@kjohnsonengineers.com

II. PROJECT DESCRIPTION

Project Length	Land to be Acquired: Fee Simple	Land to be Acquired: Easement
3 miles	30.1 acres	8.0 acres

Distance as measured from existing centerline	Existing	Proposed	Other Factors	Existing	Proposed
Right-of-Way Width No Change	-	-	Terrace Width No Change	-	-
Shoulder No Change	-	-	Sidewalk Width No Change	-	-
Slope Intercept No Change	-	-	Number of Lanes No Change	-	-
Edge of Pavement No Change	-	-	Grade Separated Crossing Added structures	None	4
Back of Curb Line No Change	-	-	Vision Triangle acres	-	-
Realignment	N/A	See Mapping	Temporary Bypass acres	N/A	N/A
Other – List:	N/A	N/A	Stream Channel Change	☐ Yes	☒ No
Attach Map(s) that Depict "Maximum" Impacts.	☒ Yes	☐ No	Tree Topping and/or Grubbing	☒ Yes	☐ No

Brief Narrative Project Description: Include all ground disturbing activities. For archaeology, include plan view map indicating the maximum area of ground disturbance and/or new right-of-way, whichever is greater. Include all temporary, limited and permanent easements. For amendments (e.g. design refinements, scope changes, etc) description should only include new/added project actions and materials.

The preferred alternative design at the intersection of CTH PD intersection has been modified. Raymond Road will no longer connect with CTH PD near the CTH PD/CTH M intersection. To maintain connectivity, a new street alignment will connect Raymond Road to Meriter Way. This connection is through a cultivated field. The amended submittal enclosed is an update to the archaeological survey that includes the area of the new street connection and an updated exhibit showing the intersection design.

The slope intercepts included in the original submittal have not changed significantly, except in the area of the CTH PD intersection due to the change to the intersection design.

☐ Add continuation sheet, if needed.

SECTION 106 REVIEW ARCHAEOLOGICAL/HISTORICAL INFORMATION *(continued)*

Wisconsin Department of Transportation DT1635

III. CONSULTATION

How has notification of the project been provided to:

- ☐ Property Owners
  - ☐ Public Information Meeting Notice
  - ☐ Letter - Required for Archaeology
  - ☐ Telephone Call
  - ☐ Other:
- ☐ Historical Societies/Organizations
  - ☐ Public Information Meeting Notice
  - ☐ Letter
  - ☐ Telephone Call
  - ☐ Other:
- ☐ Native American Tribes
  - ☐ Public Info. Mtg. Notice
  - ☐ Letter
  - ☐ Telephone Call
  - ☐ Other:

Attach one copy of the base letter, list of addresses and comments received. For history include telephone memos as appropriate.

IV. AREA OF POTENTIAL EFFECTS – APE

ARCHAEOLOGY: Area of potential effect for archaeology is the existing and proposed ROW, temporary and permanent easements. Agricultural practices do not constitute a ground disturbance exemption.

HISTORY: Describe the area of potential effects for buildings/structures.

The APE was updated to include all properties adjacent to the expanded project corridor. No additional properties were added as a result of the expanded APE.

V. PHASE I – ARCHAEOLOGICAL OR RECONNAISSANCE HISTORY SURVEY NEEDED

ARCHAEOLOGY

- ☒ Archaeological survey **is needed**
- ☐ Archaeological survey **is not needed**
  - ☐ Screening list (date)
  - ☐ Burial site in project area, Wis. Stat. 157.70 applies

HISTORY

- ☐ Architecture/History survey **is needed**
- ☒ Architecture/History survey **is not needed** Within APE amended area
  - ☐ Screening list (date)
  - ☐ No structures or buildings of any kind within APE
  - ☐ Non-Survey History Documentation attached

VI. SURVEY COMPLETED

ARCHAEOLOGY

- ☒ **NO** archaeological sites(s) identified – ASFR attached
- ☐ **NO** potentially eligible site(s) in project area – Phase I Report attached
- ☐ Potentially eligible site(s) identified-Phase I Report attached
  - ☐ Avoided through redesign
  - ☐ Phase II conducted – go to VII (Evaluation)
- ☐ Phase I Report – Cemetery/cataloged burial documentation

HISTORY

- ☐ **NO** buildings/structures identified – Report attached
- ☐ Potentially eligible buildings/structures identified in the APE – Report attached
  - ☐ Avoided through redesign
- ☐ Previously listed/eligible property identified in the APE – Report attached

VII. DETERMINATION OF ELIGIBILITY (EVALUATION) COMPLETED

- ☐ No arch site(s) eligible for NRHP – Phase II Report attached
- ☐ Arch site(s) eligible for NRHP – Phase II Report attached
- ☐ Site(s) eligible for NRHP – DOE attached
- ☐ No buildings/structure(s) eligible for NRHP – DOE attached
- ☐ Building/structure(s) eligible for NRHP – DOE attached

VIII. COMMITMENTS/SPECIAL PROVISIONS – must be included with special provisions language

- ☐ Per Wis. Stat. 157.70 obtain burial authorization from WHS one year prior to construction.

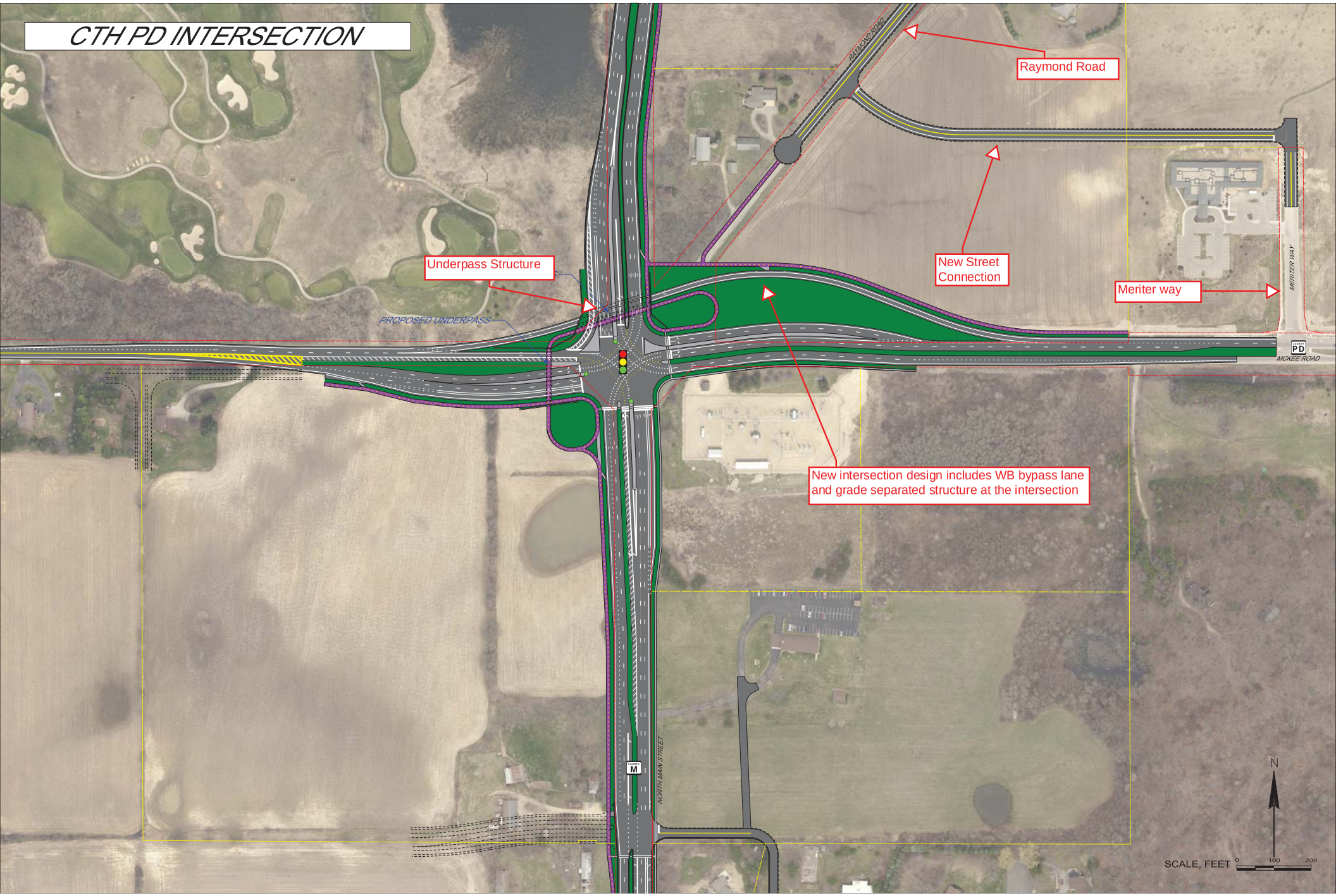
IX. PROJECT DECISION

- ☒ No historic properties (historical or archaeological) in the APE.
- ☐ No historic properties (historical or archaeological) affected.
- ☐ Historic properties (historical and/or archaeological) may be affected by project;
  - ☐ Go to Step 4: Assess affects and begin consultation on affects.
  - ☐ Documentation for Determination of No Adverse Effects is included with this form. WisDOT has concluded that this project will have No Adverse Effect on historic properties. Signature by SHPO below indicates SHPO concurrence in the DNAE and concludes the Section 106 Review process for this project.

X. SIGNATURES

X	X	X
(Regional Project Manager Signature) (Date – m/d/yy)	(WisDOT Historic Preservation Officer Signature) (Date – m/d/yy)	(State Preservation Officer Signature) (Date – m/d/yy)

X
(Consultant Project Manager Signature) (Date – m/d/yy)


CTH PD INTERSECTION
Raymond Road
New Street Connection
Meriter way
Underpass Structure
PROPOSED UNDERPASS
New intersection design includes WB bypass lane and grade separated structure at the intersection
RAYMOND ROAD
MERITER WAY
MCKEE ROAD
NORTH MAIN STREET
COUNTY PD
COUNTY M
N
SCALE, FEET 0 100 200

ARCHAEOLOGICAL SURVEY FIELD REPORT

Wisconsin Department of Transportation
DT1978 6/2007 (Replaces ED864)

PROJECT INFORMATION

Project ID	Highway/Street	County	SHSW Compliance Number
5992-09-81	CTH M	Dane	

Project Termini	Project Size
	miles 24.1 acres

Township(s)	Town/Range	Sections
Verona	T6N R8E	3

Project Type

☒ Reconstruction ☐ Reconditioning ☐ Bridge ☐ Wetland Mitigation ☐ Other

Landowners Contacted - If No, Explain	Permits Obtained - If Yes, Attach
☒ Yes ☐ No	☐ Yes ☒ No

LITERATURE SEARCH

Previously Reported Sites in Project Area	Archaeology and Records Literature Search	Cemetery in Project Area
☐ Yes ☒ No	☒ Attached	☐ Yes ☒ No

FIELDWORK

Dates of Field Work	Crew Size	Area Surveyed
12/3/2013	3	24.1 acres

SURVEY TECHNIQUES - Attach project plans showing survey coverage.

☒ Shovel Testing	☐ Surface Collection	☒ Other - Describe Soil Coring of disturbed area 5.0 acres at 15 meter intervals. Visual inspection of impervious surfaces, 2.2 acres.
2.7 acres 15 meter interval	14.2 acres 5 meter interval	

Describe Visibility

Visibility within the corn field averaged 30%, with downed corn partially obscuring the surface.

LAND USE – Describe. Also, attach map, showing location.

Were there area(s), which were not surveyed? If yes, show on project plans and explain.

☐ Yes ☒ No

Were there area(s), which were extensively impacted? If yes, show on project plans and explain.

☒ Yes ☐ No There are paved surface, a building, and a large graded area around the Meriter Clinic.

Comments

ISOLATED FINDS – Describe. Also, attach map, showing location.

NA

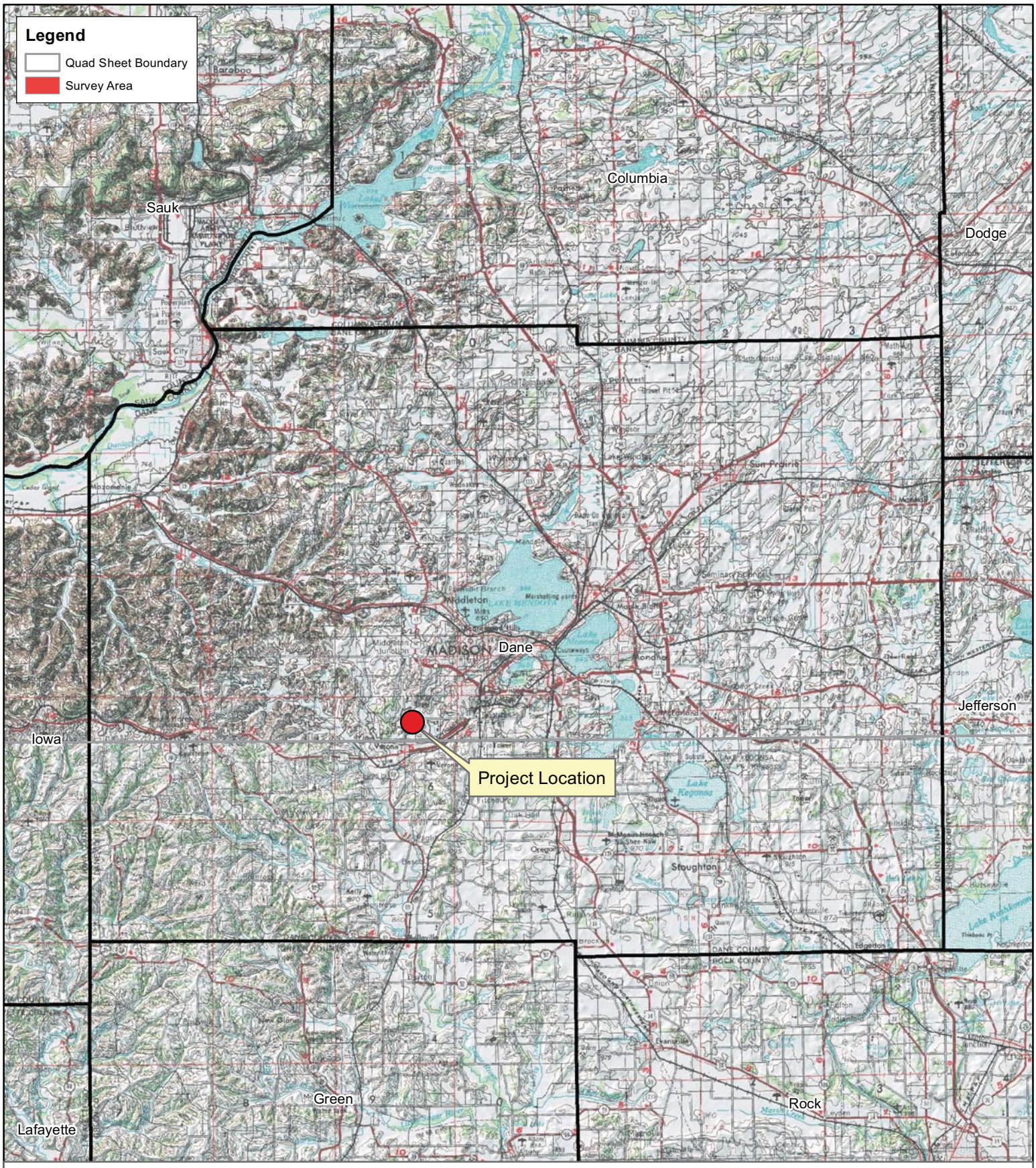
I certify that the literature search and all fieldwork conducted for this report was done according to the Wisconsin Archeological Survey Guidelines. No archeological sites were identified in the project area.

Great Lakes Archaeological Research Center, Inc.
(Print Name of Firm or Institution)

Richard H. Kubicek, MS, RPA
(Print Name of Archaeologist)

(Signature of Archaeologist) (Date)

Note: Current archaeological methods may not detect buried sites or burial areas. If artifacts, or human remains are discovered during construction, immediately stop construction in that area and notify the Wisconsin Department of Transportation, Bureau of Equity & Environmental Services.



Location of CTH M Project Area in Dane County, Wisconsin

WisDOT ID# 5992-09-81
GLARC #13.165

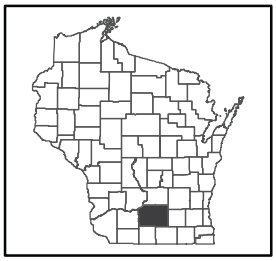
Data: USGS Madison and Rockford 1:250k Quadrangle Maps, GLARC Inc.

0 4 8 16
Miles

0 5 10 20
Kilometers

1:400,000

N



Location of Dane County, WI

Archaeological Survey Coverage Map for CTH M in Dane County, Wisconsin

WisDOT ID# 5992-09-81
GLARC #13.165

Data: ESRI, Microsoft, WHS, GLARC Inc.

0 150 300 600
Feet

0 50 100 200
Meters

1:3,000

N

Location in Dane County, WI

Photo 1: In progress pedestrian survey of a corn field, facing north.

Photo 2: In progress shovel testing of a grassy field, facing south.

Photo 3: Grassy field and corn field after survey, facing west.

Photo 4: View of utility line in grassy field, facing north.

ARCHAEOLOGICAL LITERATURE AND RECORDS REVIEW

Wisconsin Department of Transportation

DT1459 3/2003

PROJECT INFORMATION

Project ID	Highway/Street	County	SHSW Compliance Number
5992-09-81	CTH M	Dane	

Project Termini

Township(s)	Town/Range	Sections
Verona	T6N R8E	3

USGS Quadrangle(s)
Dane

SOURCES RESEARCHED

☐ See Continuation Sheet

☒ OSA USGS Maps
☒ WI Land Economic Inventory (WLEI)
☒ Burial Sites Office
☒ Previous Surveys
☒ County History
☒ Archival Maps: GLO
☒ CEB Atlas
☒ CEB Manuscripts

Publisher	Year	Publisher	Year
Leonard W. Gay	1899	CM Foote & Co	1895
Thrift Press	1931	Rockford Map Publishers, Inc.	1947

☐ Other

SITES IN PROJECT AREA

☐ See Continuation Sheet

Total Number of Sites	Prehistoric	Historic	Cemeteries/Burials
	0	0	0

Code	Type	Affiliation
#47 -		
#47 -		
#47 -		

SITES WITHIN ONE MILE OF THE PROJECT AREA

☒ See Continuation Sheet

Total Number of Sites	Prehistoric	Historic	Cemeteries/Burials
	4	1	0

Code	Type	Affiliation
#47 DA-0692	Campsite, village	Late Archaic, Early Woodland, Middle Woodland, Historic Euro-American
#47 DA-1371	Lithic Scatter	Unknown Prehistoric
#47 DA-1420	Lithic Scatter	Unknown Prehistoric

☐ Sites Reported in the Project Area ☒ Sites Reported Within One Mile ☒ No Sites Reported in the Project Area

Research Conducted by	Date
Richard H. Kubicek MS, RPA	11/29/2013

I certify that the literature search was done according to the Wisconsin Survey Guidelines.

Richard H. Kubicek MS, RPA
(Print Name of Archaeologist)

Great Lakes Archaeological Research Center, Inc.
(Print Name of Firm or Institution)

(Signature of Archaeologist)

12/17/2013
(Date)

SOURCES RESEARCHED (Continued)

Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year

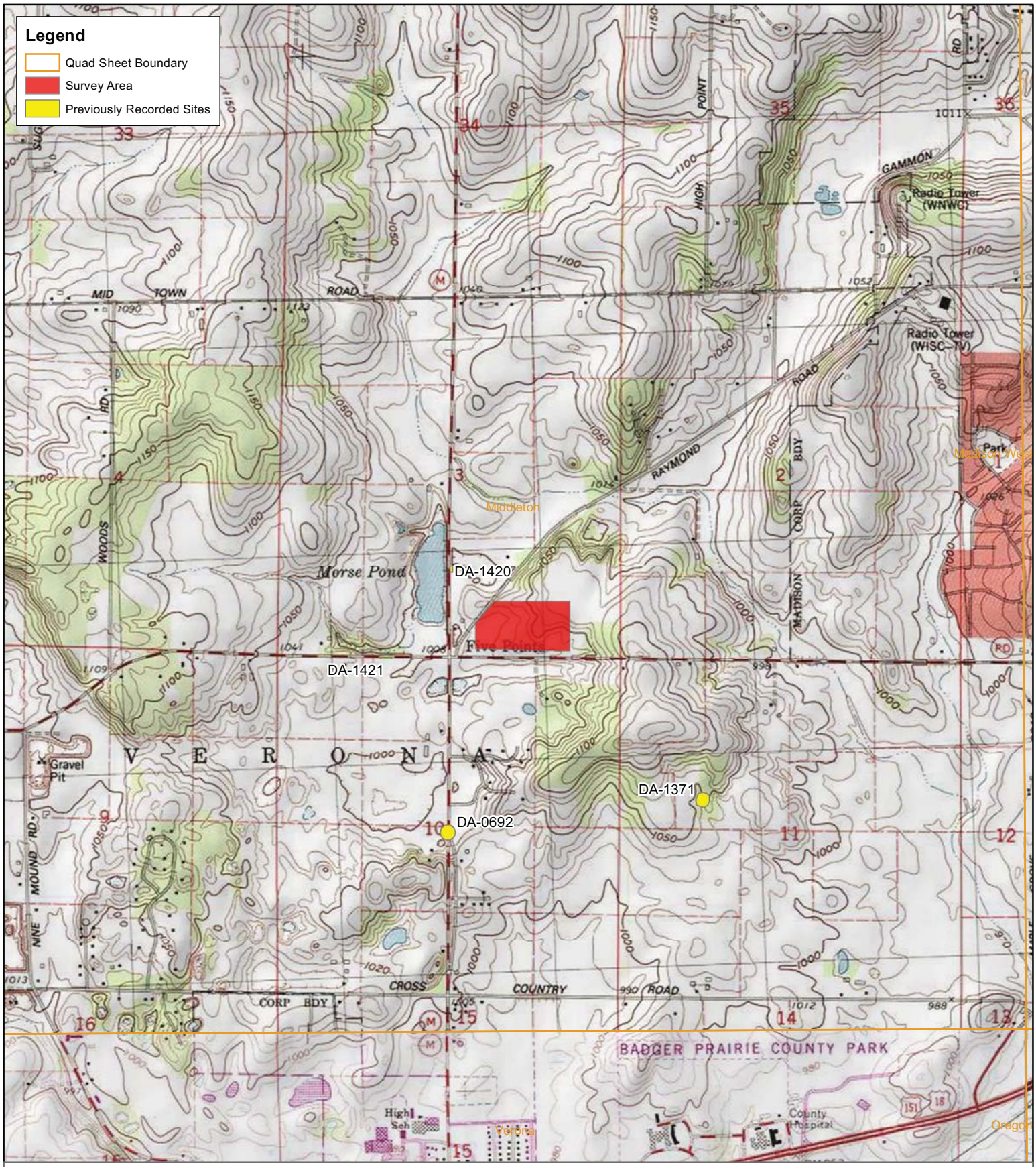
SITES IN PROJECT AREA (Continued)

	Code	Type	Affiliation
#47	-		
#47	-		
#47	-		
#47	-		
#47	-		
#47	-		
#47	-		
#47	-		
#47	-		

SITES WITHIN ONE MILE OF THE PROJECT AREA (Continued)

Total Number of Sites	Prehistoric	Historic	Cemeteries/Burials
	4	1	0

	Code	Type	Affiliation
#47	DA-1420	Lithic Scatter	Unknown Prehistoric
#47	-		
#47	-		
#47	-		
#47	-		
#47	-		
#47	-		
#47	-		
#47	-		



Previously Recorded Archaeological Sites within One Mile of CTH M in Dane County, Wisconsin

WisDOT ID# 5992-09-81
GLARC #13.165

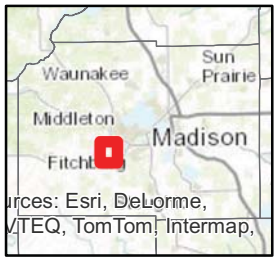
Data: USGS Middleton and Verona 1:24k Quadrangle Maps, WHS, GLARC Inc.

0 1,000 2,000 4,000
Feet

0 250 500 1,000
Meters

1:24,000

N



Location in Dane County, WI

BIBLIOGRAPHY OF ARCHAEOLOGICAL REPORT FORM

WHS/SHSW # _____ COUNTY: Dane

AUTHORS: Richard H. Kubicek

REPORT TITLE: Archaeological Survey Field Report for a Phase I Survey along CTH M in Dane County, Wisconsin

DATE OF REPORT (MONTH AND YEAR): 12/17/2013

SERIES/NUMBER: _____

PLACE OF PUBLICATION: Great Lakes Archaeological Research Center, Milwaukee, WI

LOCATIONAL INFORMATION [LEGAL DESCRIPTION OF SURVEY AREA (T-R-S)]
T6N R8E Section 3

U.S.G.S. QUAD MAP(S): Dane

SITE(S) INVESTIGATED: 0

ACRES INVESTIGATED: 24.1 AGENCY # WisDOT

INVESTIGATION TECHNIQUES COMPLETED (Check all that apply.)

- ☐ Avocational Survey
- ☐ Faunal Analysis
- ☐ Historical Research
- ☐ Literature Background Research
- ☐ Monitoring
- ☐ Phase II
- ☐ Phase III-Corridor Only
- ☐ Remote Sensing
- ☐ Surface Survey (Intensive)
- ☐ Vandalism
- ☐ Other: _____
- ☐ Chance Encounter
- ☐ Floral Analysis
- ☐ Interview/Informant
- ☐ Major Excavation
- ☐ Osteological Analysis
- ☐ Phase II-Corridor Only
- ☒ Records/Background
- ☒ Shovel Testing/Probing (Inten)
- ☐ Test Excavation
- ☒ Walk Over (Reconnaissance)
- ☒ Controlled Surface Collection
- ☐ Geomorphology
- ☐ Land Use History
- ☐ Mechanical Stripping
- ☐ Phase I-Surface Survey
- ☐ Phase III
- ☐ Records/Background (Pred. Model)
- ☐ Soil Core
- ☐ Traditional Knowledge
- ☐ Unknown

ABSTRACT: ☐ Included in report ☐ Written in space below

On December 3rd, 2013, a crew from GLARC (Richard Kubicek, Nicholas Weber, and Rachael Schutlz) surveyed 24.1 acres between Raymond Rd., and McKee Rd., in the Township of Verona. Prefield research indicated no previously reported sites in the project area, and no potential historic sites were identified. Field survey methods included 2.7 acres shovel tested in 15 meter interval transects, 14.2 acres pedestrian surveyed at 5 meter intervals with 30% visibility in a downed corn field, 5.0 acres of disturbed/developed land subjected to 15 meter interval soil coring, and 2.2 acres of impervious surfaces that were visually inspected. No cultural materials were identified.

Office of the State Archaeologist BAR # _____

(DOE March 2011)

Wisconsin Historical Society
Determination of Eligibility Form

RECEIVED
SEP 18 2012
DIV HIST PRES

WisDOT Project ID #: 5992-09-81

WHS #: 12-0939/DA

Property Name(s): Gordon School

Address/Location: 6987 Midtown Rd.

City & County: Town of Verona, Dane County **Zip Code:** 53719

Town: 6N **Range:** 8E **Section:** 3

Date of Construction: 1929

WisDOT Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this request for Determination of Eligibility:

___Meets the National Register of Historic Places criteria.
_x_Does not meet the National Register of Historic Places criteria.

for **Rebecca Burkel, WisDOT Historic Preservation Officer** 9/13/12 **Date**

State Historic Preservation Office

In my opinion, the property:

___Meets the National Register of Historic Places criteria.
X Does not meet the National Register of Historic Places criteria.

Michael E. Stevens, State Historic Preservation Officer Oct 5, 2012 **Date**

Comments (FOR AGENCY USE ONLY):

Division of Historic Preservation
Wisconsin Historical Society
816 State Street
Madison, WI 53706

(DOE March 2011)

Wisconsin Historical Society
Determination of Eligibility Form

RECEIVED
NOV 27 2012
DIV HIST PRES

WisDOT Project ID #: 5992-09-81

WHS #: 12-0939/DA

Property Name(s): Schroeder-Stickelberg-Thompson Farmstead

Address/Location: 8300 Raymond Rd.

City & County: Town of Verona, Dane County **Zip Code:** 53719

Town: 6N **Range:** 8E **Section:** 3

Date of Construction: c.1875-C.1890, c.1900, c.1910, c.1920, c.1940

WisDOT Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this request for Determination of Eligibility:

[X] Meets the National Register of Historic Places criteria.
[ ] Does not meet the National Register of Historic Places criteria.

Rebecca Burkel 11/26/12

Rebecca Burkel, WisDOT Historic Preservation Officer **Date**

State Historic Preservation Office

In my opinion, the property:

_X_ Meets the National Register of Historic Places criteria.
___ Does not meet the National Register of Historic Places criteria.

12/6/12

Michael E. Stevens, State Historic Preservation Officer **Date**

Comments (FOR AGENCY USE ONLY):
"Outhouses" are listed in WHPD under "privy"

Division of Historic Preservation
Wisconsin Historical Society
816 State Street
Madison, WI 53706

C:\Users\HISTORY1\Desktop\Schroeder-Stickelberg DOE revisions\October 2012 revisions\8300 Raymond Rd. - DOE.docx

Rachel Burnham

From: Gail Klein <gklein@glarc.com>
Sent: Sunday, April 21, 2013 3:03 PM
To: Jason DiPiazza
Cc: Jennifer Haas
Subject: RE: WisDOT ID 5992-09-81 CTH M, City of Madison, Dane County

Follow Up Flag: Follow up
Flag Status: Flagged

I don't think there would necessarily be any real benefit to meeting at the property at this point, unless there are stakeholders who aren't familiar with the existing conditions there. It might also be more of a logistical challenge to have the meeting onsite, depending on how many people would be attending. A location closer to the site, as you said, might not be a bad idea though.

--Gail

> Thanks Jennifer - I will get an email out but let's push for that
> April 29th date.
>
> Gail: Do you think meeting onsite or closer to the site would be
> beneficial now that we don't have to worry about SHPO attending?
>
> Jason
>
> From: Jennifer Haas [mailto:jhaas@glarc.com]
> Sent: Friday, April 19, 2013 8:50 AM
> To: Jason DiPiazza
> Cc: Gail Klein
> Subject: RE: WisDOT ID 5992-09-81 CTH M, City of Madison, Dane County
>
> I would still hold the consultation meeting, to demonstrate that the
> process was finalized. We can schedule the meeting and it can be brief.
> Jennifer
>
> Jennifer R. Haas, President
> Great Lakes Archaeological Research Center, Inc.
> PO Box 511549
> Milwaukee, WI 53203
> (414) 481-2093
> www.glarc.com<http://www.glarc.com>
>
> From: Jason DiPiazza [mailto:jdipiazza@msa-ps.com]
> Sent: Thursday, April 18, 2013 9:33 PM
> To: Gail Klein (gklein@glarc.com<mailto:gklein@glarc.com>); Jennifer
> Haas
> (jhaas@glarc.com<mailto:jhaas@glarc.com>)

> Subject: FW: WisDOT ID 5992-09-81 CTH M, City of Madison, Dane County
>
> Gail & Jennifer
>
> Please read the response from Kimberly. It doesn't look like they are
> willing to meet until they have all the final documents. I feel as
> though am "official" consultation meeting seems somewhat unnecessary
> given the property owner's lack of interest in the historical aspect
> of the property. All of the other stakeholders are fully aware of
> what is going on. Maybe a short meeting with the property owner
> onsite would be best and we can prepare our recommendations in an MOA and send to CRT/SHPO?
> Please advise,
>
> Thank you,
>
> Jason
>
>
> From: Cook, Kimberly A - WHS
> [mailto:Kimberly.Cook@wisconsinhistory.org]<mailto:[mailto:Kimberly.Co
> ok@wisconsinhistory.org]>
> Sent: Thursday, April 18, 2013 1:43 PM
> To: Jason DiPiazza; Cloud, Lynn - DOT; Emily Pettis; Greg Rainka
> (Greg.Rainka@meadhunt.com<mailto:Greg.Rainka@meadhunt.com>); Kennedy,
> Jason - DOT
> Subject: RE: WisDOT ID 5992-09-81 CTH M, City of Madison, Dane County
>
> Thank you for the invite. We will be happy to meet with you to
> discuss any of the remaining issues after we have had the opportunity
> to review the D for C. I have been in contact with Jason Kennedy of
> the CRT regarding this project and the materials necessary for review
> and are prepare to move forward with consultation once we have
> received everything. So that includes the D for C, a draft MOA if you
> have one available, and any materials regarding the utilities-concern.
> Jason and the CRT team will be able to provide you with guidance on what to prepare.
>
> I look forward to reviewing the materials. Based on what I have seen
> so far, the mitigation measures should be fairly standard.
>
> Thank you,
>
> Kimberly Zunker Cook
> Wisconsin Historical Society
> Division of Historic Preservation and Public History Room 300
> 816 State Street
> Madison, WI 53706
> 608-264-6493
>
> Collecting, Preserving and Sharing Stories Since 1846
> From: Jason DiPiazza [mailto:jdipiazza@msa-ps.com]
> Sent: Wednesday, April 17, 2013 1:37 PM
> To: Draeger, Jim R - WHS; Cook, Kimberly A - WHS; Banker, Sherman J -

> WHS
> Cc: Amanda Arnold; Chris Petykowski
> (CPetykowski@cityofmadison.com<mailto:CPetykowski@cityofmadison.com>);
> Ron Rieder
> (ron.rieder@ci.verona.wi.us<mailto:ron.rieder@ci.verona.wi.us>);
> Pam Dunphy (dunphy@co.dane.wi.us<mailto:dunphy@co.dane.wi.us>); Karen
> Richardson; Brad Vosters
> (bvosters@atcllc.com<mailto:bvosters@atcllc.com>); Gail Klein
> (gklein@glarc.com<mailto:gklein@glarc.com>); Jennifer Haas
> (jhaas@glarc.com<mailto:jhaas@glarc.com>); Paul M. Chellevold
> (PChellevold@srfconsulting.com<mailto:PChellevold@srfconsulting.com>)
> Subject: WisDOT ID 5992-09-81 CTH M, City of Madison, Dane County
>
> WisDOT ID 5992-09-81
> City of Madison, South Pleasant View Road (Cross Country Road -
> Prairie Hill Road) CTH M Dane County
>
> The City of Madison, in cooperation with Dane County and the City of
> Verona, is developing plans to reconstruct CTH M , a critical arterial
> on the west side of Madison. This project includes federal funding
> and is being funded through the WisDOT Local Program. Within the
> project APE, there is a historic property that the design team has
> been instructed to assess affects and conduct consultation on affects.
> The Section 106 form was signed by your office on December 6, 2012 (Attached).
>
> A draft D for C has been completed and is currently being reviewed by
> the Cultural Resources Team (CRT) at WisDOT. We plan to hold our
> consultation meeting to complete the D for C document and prepare the
> MOA in the next few weeks. We ask that SHPO be represented at this
> consultation meeting as all of the other stakeholders have been
> closely involved with the project from the beginning. To facilitate
> SHPO's participation in the consultation meeting, we propose to hold the meeting at the Wisconsin
> Historical Society, or at a nearby location. Below are proposed meeting
> times that will work for the stakeholders in this project and historic
> property. Could you please respond if any of these dates will work
> for you and if a meeting room at the Historical Society is available.
>
> Monday, April 29, afternoon
>
> Wednesday May 8, anytime
>
> Friday May 10, 1:00 PM
>
> Thank you in advance for your assistance,
>
> Jason
>
>
>
> [cid:image001.gif@01CE3E6F.8AEB4710]
>
> Jason DiPiazza, PE | Team Leader

> MSA Professional Services, Inc.
> (608) 242-7779
>
>
>

Rachel Burnham

From: Kennedy, Jason - DOT <Jason1.Kennedy@dot.wi.gov>
Sent: Wednesday, July 03, 2013 7:57 AM
To: Jason DiPiazza; 'Petykowski, Christopher'; Pam Dunphy (dunphy@co.dane.wi.us); Ron Rieder (ron.rieder@ci.verona.wi.us); Amanda Arnold; Karen Richardson; Brad Vosters (bvosters@atcllc.com); Gail Klein (gklein@glarc.com); Great Lakes Archaeological Research Ctr Inc; bigleymh@gmail.com; Paul Chellevold; Cain, Douglas - DOT
Subject: RE: CTH M (S. Pleasant View Road) - 8300 Raymond Road Property

Jason,

Thank you for the update. At this time feel free to proceed with using three farmsteads as agreed upon with the City of Madison, however please remember SHPO may comment on the number of farmsteads they feel is an appropriate mitigation for the project and resource and may ask for additional farmsteads to be surveyed.

Let me know if there are any additional questions.

Jason Kennedy

Environmental Analysis & Review Specialist
Cultural Resources

Wisconsin Department of Transportation
Bureau of Technical Services | Environmental Process & Documentation Section
Hill Farms Room 451
Phone: 608.267.6693 | E-mail: jason1.kennedy@dot.wi.gov

From: Jason DiPiazza [mailto:jdipiazza@msa-ps.com]
Sent: Tuesday, July 02, 2013 5:05 PM
To: Kennedy, Jason - DOT; 'Petykowski, Christopher'; Pam Dunphy (dunphy@co.dane.wi.us); Ron Rieder (ron.rieder@ci.verona.wi.us); Amanda Arnold; Karen Richardson; Brad Vosters (bvosters@atcllc.com); Gail Klein (gklein@glarc.com); Great Lakes Archaeological Research Ctr Inc; bigleymh@gmail.com; Paul M. Chellevold (PChellevold@srfconsulting.com); Cain, Douglas - DOT
Subject: RE: CTH M (S. Pleasant View Road) - 8300 Raymond Road Property

Jason K,

Your review and comment is certainly valid. After discussing this issue with the City of Madison, who is the primary funding provider for mitigation, we recommend proceeding with a survey of three of the "best" farmsteads in the region surrounding the Schroeder-Stickelberg-Thompson Farmstead as determined by a qualified architectural historian.

Please let me know if this will satisfy your comment.

Amanda: Please provide any input that the Town of Verona Board may have on this matter after the Board meets tonight.

Gail: Please update the D for C and MOA accordingly.

Thank you all for your input,

Jason

Jason DiPiazza, PE | Team Leader
MSA Professional Services, Inc.
(608) 242-7779

From: Kennedy, Jason - DOT [mailto:Jason1.Kennedy@dot.wi.gov]
Sent: Wednesday, June 26, 2013 7:52 AM
To: 'Petykowski, Christopher'; Jason DiPiazza; Pam Dunphy (dunphy@co.dane.wi.us); Ron Rieder (ron.rieder@ci.verona.wi.us); Amanda Arnold; Karen Richardson; Brad Vosters (bvosters@atcllc.com); Gail Klein (gklein@glarc.com); Great Lakes Archaeological Research Ctr Inc; bigleymh@gmail.com; EBiemann@atclc.com; Paul M. Chellevold (PChellevold@srfconsulting.com); Cain, Douglas - DOT
Subject: RE: CTH M (S. Pleasant View Road) - 8300 Raymond Road Property

Jason

After looking more in-depth, a review of aerial imagery indicates that few farmsteads are still extant within a one mile radius of the Schroeder-Stickelberg-Thompson Farmstead. This area appears to mostly contain modern suburban development, a golf course, and parks, and it's therefore very possible there are no other farmsteads that meet survey criteria. Instead, one suggestion is to survey a specific portion of the town of Verona. Since the Schroeder-Stickelberg-Thompson Farmstead is located near the north boundary of the town of Verona, the survey area could be the entire northern half of the town, say between Midtown and Valley Roads. Another suggestion is to survey the five or ten "best" farmsteads in all of the town, as determined by a qualified architectural historian.

Let me know if you have any additional questions.
Jason K.

Jason Kennedy

Environmental Analysis & Review Specialist
Cultural Resources

Wisconsin Department of Transportation
Bureau of Technical Services | Environmental Process & Documentation Section
Hill Farms Room 451
Phone: 608.267.6693 | E-mail: jason1.kennedy@dot.wi.gov

From: Petykowski, Christopher [mailto:CPetykowski@cityofmadison.com]
Sent: Tuesday, June 25, 2013 1:34 PM
To: 'Jason DiPiazza'; Pam Dunphy (dunphy@co.dane.wi.us); Ron Rieder (ron.rieder@ci.verona.wi.us); Amanda Arnold; Karen Richardson; Brad Vosters (bvosters@atcllc.com); Gail Klein (gklein@glarc.com); Great Lakes Archaeological Research Ctr Inc; bigleymh@gmail.com; Kennedy, Jason - DOT; EBiemann@atclc.com; Paul M. Chellevold (PChellevold@srfconsulting.com)
Subject: RE: CTH M (S. Pleasant View Road) - 8300 Raymond Road Property

The change seems reasonable to me. Im OK with it.
Chris

Chris Petykowski, P.E.

Principal Engineer
City of Madison - Engineering Division
210 Martin Luther King Jr. Blvd. Rm 115
Madison, WI 53703
ph: 608-267-8678
fx: 608-264-9275
email: cpetykowski@cityofmadison.com

From: Jason DiPiazza [mailto:jdipiazza@msa-ps.com]
Sent: Tuesday, June 25, 2013 1:29 PM
To: Petykowski, Christopher; Pam Dunphy (dunphy@co.dane.wi.us); Ron Rieder (ron.rieder@ci.verona.wi.us); Amanda Arnold; Karen Richardson; Brad Vosters (bvosters@atcllc.com); Gail Klein (gklein@glarc.com); Great Lakes Archaeological Research Ctr Inc; bigleymh@gmail.com; Kennedy, Jason - DOT (Jason1.Kennedy@dot.wi.gov); EBiemann@atclc.com; Paul M. Chellevold (PChellevold@srfconsulting.com)
Subject: CTH M (S. Pleasant View Road) - 8300 Raymond Road Property

WisDOT Project ID 5992-09-81
S. Pleasant View Road, City of Madison
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

RE: Consultation and Mitigation of Impacts to historically significant property – 8300 Raymond Road

WisDOT Environmental Services Section has reviewed the Documentation for Consultation (D for C) and Memorandum of Agreement (MOA) for addressing negative impacts to the NRHP listing eligible property located at 8300 Raymond Road, also referred to as the Schroeder-Stickelberg-Thompson Farmstead. These documents include mitigation measures discussed in April at a consultation meeting.

Following comments from WisDOT ESS, the project team is proposing a change to the mitigation measures discussed at the April consultation meeting. This change consists of the replacement of the written description mitigation option with a new mitigation measure in the form of a survey and inventory of historic farmsteads within one mile of the Schroeder-Stickelberg-Thompson Farmstead. This would include a field survey of historic farmsteads within a one mile radius, following the Farmstead Survey Methodology as outlined in the WisDOT Survey Manual. All historic farmsteads identified in this survey will be documented with photographs and sketch maps and records will be created in the Wisconsin Historic Preservation Database (WHPD). In addition, photographic documentation of the Schroeder-Stickelberg-Thompson Farmstead will remain a primary mitigation measure, as discussed at April's consultation meeting.

Please respond with any comments or concerns about this change to the mitigation measures that are proposed above.

Thank you,

Jason

Jason DiPiazza, PE | Team Leader
MSA Professional Services, Inc.
(608) 242-7779

Rachel Burnham

From: Karen Richardson <karenrichardson@kjohnsonengineers.com>
Sent: Tuesday, August 26, 2014 2:39 PM
To: Jason DiPiazza
Cc: Chris Petykowski (CPetykowski@cityofmadison.com)
Subject: FW: WisDOT 5992-09-81, CTH M Widening, Dane County - FHWA comments on S106 documents

Jason,

Fyi and use; please share with your subs.

Karen
Karen Richardson, P.E.
Kjohnson Engineers, Inc.
SW Region Local Program Management Consultant
(608) 829-3858

From: Kennedy, Jason - DOT [mailto:Jason1.Kennedy@dot.wi.gov]
Sent: Tuesday, August 26, 2014 2:30 PM
To: Karen Richardson
Cc: 'Greg Rainka'
Subject: FW: WisDOT 5992-09-81, CTH M Widening, Dane County - FHWA comments on S106 documents

Karen,

Please see FHWA comments and address as appropriate. Ensure the previous SHPO comments I sent also get included.
Thank you,
Jason

From: ian.chidister@dot.gov [mailto:ian.chidister@dot.gov]
Sent: Tuesday, August 26, 2014 12:11 PM
To: Kennedy, Jason - DOT
Cc: Wisner, Frederick - DOT (NC Region)
Subject: WisDOT 5992-09-81, CTH M Widening, Dane County - FHWA comments on S106 documents

Jason-

I reviewed the updated D for C and MOA for the CTH M project this morning, and overall, I think the documentation is sufficient for coordination with ACHP. I'll be sending the notification of adverse effects to them this afternoon or tomorrow morning. Even though the documentation is sufficient for coordination, I do have a few comments that will need to be addressed prior to the final MOA and NEPA document approval, see below:

Comments of the MOA
It doesn't appear that my minor editorial comments on the first draft of the MOA were incorporated into this second draft. In summary:

- Page 1, bottom of the page – remove the "and" at the end of the last "Whereas" clause immediately preceding the "Now, Therefore" clause.
- Page 3, "Dispute Resolution," subsection c. – either remove "It is…" at the beginning of the sentence or "…remain unchanged" at the end of the sentence; both are not needed.
- The MOA needs to be edited for spelling as it contains several misspelled words.

- I agree with SHPO's comments about revisions to the MOA stipulations and will look for these modifications in the final draft.

Comments on the Project – 4(f)

The D for C makes several references to the 4(f) implications of different project alternatives. I don't know how involved you will be in assembling the 4(f) documentation, but perhaps you can pass my comment along to the appropriate contact within EPDS (Fred Wisner?) and the project team. Since the preferred alternative mentioned in the D for C and MOA has an adverse effect on a Section 106 resource and will also result in a use of 4(f) property, the project team should make sure that there is not a 4(f) feasible and prudent avoidance alternative. I want to make sure that the 4(f) evaluation and analysis is proceeding parallel to the 106 consultation so that we don't commit to an alternative that will not be acceptable from a 4(f) standpoint. This does not need to be discussed in the 106 documentation – it's primarily a concern for our 4(f) evaluation, but this is the right time in project development to check-in on this issue.

I'll forward you a copy of our correspondence with ACHP once we've sent it. If you have any questions about my comments on the project, don't hesitate to contact me.

Thanks,

Ian Chidister
Environmental Program Manager
WI Division, Federal Highway Administration, 525 Junction Road, Suite 8000, Madison, WI 53717
phone: 608-829-7503 | fax: 608-662-2121 | email: ian.chidister@dot.gov

Rachel Burnham

From: Jason1.Kennedy@dot.wi.gov
Sent: Tuesday, September 17, 2013 12:11 PM
To: ian.chidister@dot.gov
Subject: FW: WisDOT 5992-09-81 / WHS 12-0939 DA CTH M - Schroeder-Stickleberg House MOA

Ian,

FYI on comments from SHPO on CTH M MOA mitigation. I have passed them onto the project team, but wanted to keep you in the loop.

Thank you,
Jason

From: Cook, Kimberly A - WHS
Sent: Tuesday, September 17, 2013 11:19 AM
To: Kennedy, Jason - DOT; Greg Rainka
Cc: Cloud, Lynn - DOT
Subject: RE: WisDOT 5992-09-81 / WHS 12-0939 DA CTH M - Schroeder-Stickleberg House MOA

I have reviewed the MOA for the above project and have two comments. In Stipulation 2, please remove "three to five", and subset i can be simplified to say "Town of Verona". We would like to request a full farmstead survey of the township. This is a great mitigation measure, but it should be something that can useful for future planning purposes. Simply picking out a few potentially eligible farmsteads does not provide any context, will create confusion in methodology (what if there are more than 5 eligible properties? What if there are none?), and has increased potential to require duplication of effort on future road projects in the area. A proper survey based on our already established survey guidelines will not only cut down on confusion regarding the product, but can be used for all manner of future projects.

Thank you,

Kimberly Zunker Cook
Wisconsin Historical Society
Division of Historic Preservation and Public History
Room 300
816 State Street
Madison, WI 53706
608-264-6493

Collecting, Preserving and Sharing Stories Since 1846

ID 5992-09-81
S. Pleasant View Road Reconstruction
(Prairie Hill Road – Cross Country Road)
CTH M
Dane County

Documentation for Consultation (D for C) Meeting – Meeting Notes

April 14, 2014, 10:00 AM

City of Verona City Hall, 111 Lincoln Street, Verona, WI

Purpose of Meeting: Update stakeholders with regards to the proposed design changes for the intersection of CTH M and CTH PD as it relates to the property at 8300 Raymond Road (the Schroeder-Stickelberg-Thompson Farmstead – WHS#12-0939/DA).

Jason started the meeting off with a recap of the project status. The design team and stakeholders (City of Verona, Madison, and Dane County) had reached the conclusion that the multi-lane roundabout design for the CTH M and CTH PD (S. Pleasant View Road and McKee Road) should no longer be the recommended or preferred alternative. This was a result of recent improvements and study of roundabout performance in Wisconsin and how the roundabout design would function with the traffic volumes projected.

The design team and stakeholders developed new alternative designs that included a full highway interchange and a modified traffic signal alternative referred to as the Westbound Underpass (WZB Underpass) design. The stakeholders concluded that the WB underpass design would meet the project's stated goals and would be the recommended alternative.

Jason explained to the group how the design would function and how it would be different than the roundabout design previously selected as the preferred alternative. Major differences include a grade separation (bridge) structure for carrying CTH M traffic over the westbound lanes of CTH PD. The original grade separation structure (box culvert) for the multi-use path will be shortened and cross only underneath the west leg of CTH PD. The multi-use path will use the bridge for CTH M traffic to provide a completely separated crossing of both CTH M and CTH PD.

The grade separation for traffic and bridge structure will require raising the profile elevation of CTH M in the vicinity of the intersection and the property at 8300 Raymond Road. The elevation to which the underpass traffic (CTH PD westbound) can be lowered is limited by the surrounding landscape and drainage opportunities.

The horizontal design of the new alternative on the north leg of the intersection was designed similarly to the roundabout design in that the roadway and relocated ATC poles would not move closer to the property at 8300 Raymond Road. However, the raised roadway profile and underpass roadway and sidewalk design will result in additional right-of-way and grading easement needs from the property. Most of the impacts will be seen along the south edge of the property in a stand of mature walnut trees.

To minimize impacts of the raised roadway profile, the design will depress the multi-use path along the east side of CTH M. A small retaining wall may be required to maintain positive drainage from the property to the west edge of the property line as exists today.

Other changes include how Raymond Road would access CTH PD. Raymond Road will be cut off from the intersection where it ties in today. It will be connected to Meriter Way to the east of the intersection where full access will be provided.

Concerns raised by Ms. Bigley, property owner:

- Mrs. Bigley is concerned about the raised profile of the roadway. CTH M is currently at an elevation below the first floor level of the old farm house. The new elevation of the roadway will be above this elevation. Jason indicated that all efforts are being made to develop a bridge design and roadway profile as low as possible. Any retaining walls used will be under 5 feet in height and the slopes along the roadway will be kept as flat as possible to allow for maintenance and minimize the feeling of the house being behind a wall.
- Mrs. Bigley wanted to know what the impact would be to the driveway access on CTH M from the property. This driveway will have to be either removed or moved to the north due to the grade change and retaining wall.
- Mrs. Bigley noted her concern about the loss of the walnut trees on the south side of the property. Some tree replanting can occur in the disturbed areas but large mature trees cannot be placed in the vicinity of ATC's overhead lines.
- Mrs. Bigley was concerned that the south driveway to the farmstead on Raymond Road did not connect to Raymond Road any more. The group agreed that Raymond Road could be extended to meet this driveway.

The group discussed previous comments on the MOA and how to address them. It was decided to propose a windshield survey of the Town of Verona and then an intensive survey of up to 5 of the best preserved farmsteads in the township.

The meeting convened with UWM (formerly GLARC staff) noting that they would update the D for C document and MOA with the results of the meeting and updated design info.

END

DOCUMENTATION FOR CONSULTATION

Project ID 5992-09-81
WHS# 12-0939/DA
Cross Country Road to Prairie Hill Road
CTH M (South Pleasant View Rd)
Dane County

1. Description of the Undertaking

The project is located in the Cities of Madison and Verona and the Towns of Verona and Middleton in Dane County, Wisconsin. The proposed action is the expansion of CTH M from a two-lane highway to a four-lane urban arterial with a raised median and a multiuse path. Intersection improvements are proposed for the CTH M – Midtown Road and CTH M – CTH PD intersections. The length of the project is 2.9 miles. See Attachment 1 for a project map.

The purpose of the project is to

- Provide a safe and serviceable corridor that is convenient for area businesses, residents, and the traveling public, including motor vehicles, bicycles, pedestrians, and transit vehicles
- Deliver acceptable operating conditions for existing and future traffic volumes
- Accommodate future planned growth along the project corridor and in the immediate vicinity
- Provide well-designed intersections that minimize impacts to the local surrounding landscape

CTH M/South Pleasant View Road (called CTH M hereafter) is a principal arterial servicing the southwest side of Madison and the City of Verona. The CTH M corridor is currently a rural, two-lane facility, with traffic signals located at the intersections of CTH PD/McKee Rd (called CTH PD hereafter) and Midtown Road. Current and future projected traffic and bicycle/pedestrian demand have made the existing facility functionally obsolete. Intersections and other access points are failing on an operational level, with severe backups and delays during peak travel hours.

The existing pavement on CTH M is substandard. The score indicates routine maintenance is required to fill cracks and seal coat the roadway. The current single lane geometry and signalized intersections do not have enough capacity to safely accommodate existing and forecasted traffic volumes.

Corridor Importance: CTH M is on the National Highway System. The CTH M corridor is a critical north/south roadway connecting the city of Madison and the city of Verona. The Functional Classification System (2011) Map of Dane County, WI identifies CTH M as a principal arterial. CTH M is one of a few north/south principal arterials in south central Dane County with the next closest located over three miles away (US 18/151/Verona Road).

Roadway Operations: CTH M is a roadway with significant local and regional importance. See Attachment 2-A for current and projected traffic counts. CTH M is classified by the Madison Metropolitan and Dane County Regional Transportation Plan Update as a very congested roadway. Major capacity improvements are one of the congestion management strategies identified by the Madison Area Transportation Planning Board. Capacity improvements include construction of additional through traffic lanes, eliminating at-grade intersections, and constructing new roadways.[1]

The Highway Capacity Manual defines Level of Service (LOS) for signalized intersections as a function of the average vehicle control delay. LOS is determined by the average delay time by a vehicle in seconds; for signalized at-grade intersections, this ranges from LOS A (less than 10 seconds delay per vehicle) to LOS F (more than 80 seconds delay per vehicle). The current LOS during peak hours at the CTH M – CTH PD intersection is at LOS F. LOS F describes a road for which travel time cannot be predicted with breakdown in vehicular flow, where every vehicle moves in lockstep with the vehicle in front of it.[2] With the increased traffic projections, improvements are necessary to improve roadway operations. If improvements are not implemented, the delay will worsen and the level of service will remain LOS F with even longer delays. Congestion will continue to increase and other streets within the system will become negatively affected.

Bicycles/Pedestrians: The project area currently lacks consistent and effective bike lanes. According to the Dane County Map for Bicyclists (2012), CTH M rates as a 'least suitable roadway with paved shoulders'. Currently, there are no sidewalks between Flagstone Drive and Prairie Oaks Drive and limited or no bicycle facilities along CTH M from Valley View Road to Cross Country Road.

Existing traffic volumes along the roadway make it unsafe for pedestrians and bicyclists to utilize the shoulder. Constructing a multi-use path as well as expanded bike lanes will provide safer accommodations for alternate mode users of all abilities. The proposed facilities will tie into existing bike lanes and sidewalks at each terminus and provide safe and efficient grade-separated crossings at Flagstone Drive, Midtown Road, and CTH PD.

Buses: There are no current routes on the corridor; however, routes are anticipated in the future. The city of Verona and Epic Systems Corporation are currently working with Metro Transit to improve the commuter express service to the Epic campus (located approximately 1.5 miles southwest of the CTH M – Cross Country Road intersection). The nearest Madison Metro Route (Route 73) serves CTH M north of Watts Road, approximately 1.5 miles north of the project area. A few school bus routes use the CTH M corridor, but there are no scheduled stopping points on CTH M.

Continuity: The project limits at the south termini connect to a four-lane urban facility at the intersection of Cross Country Road. The project limits at the north termini connect to a four-lane urban facility just south of the Valley View Road intersection. By expanding to a four-lane facility between the two sections, CTH M will provide a continuous and consistent four-lane corridor, reducing conflicts caused by merging vehicles. The project will tie into existing facilities including medians, bike lanes, and sidewalks.

---

[1] *2035 Regional Transportation Plan Update, March 2012.*

[2] *Highway Capacity Manual and AASHTO Geometric Design of Highways and Streets*

Project Termini: The proposed project limits are Prairie Oaks Drive in the City of Verona to Prairie Hill Road in the City of Madison for a total project length of 2.9 miles. The project is part of the overall CTH M corridor improvement plan that extends north from Prairie Hill Road to Mineral Point Road (CTH S). This project will tie into the already completed phase of the CTH M corridor improvement plan at Valley View Road. Attachment 2-B shows the completed segment, Pleasant View Road/Valley View Road phase (green) that the proposed project will tie into. The CTH M & S phase (blue) is currently being constructed. The proposed project addressed in this document, labeled Mid Town Road and CTH PD is shown in orange and red colors. The CTH PD (red) segment is planned for construction beginning in 2015 and the Mid Town Road (orange) project segment is planned for construction beginning in 2016.

2. Description of Steps Taken to Identify Historic Properties

A. Architectural/Historical Resources

1. Previously Recorded Properties

An archival and literature search of the Wisconsin Historic Preservation Database (WHPD) and the National Register of Historic Places (NRHP) was conducted to identify previously recorded architectural/historical properties within the Area of Potential Effects (APE). No previously recorded properties were identified.

2. Architectural/Historical Survey

The literature research also focused on the historic development of the Cities of Madison and the Towns of Verona and Middleton in order to obtain information specific to the history of the immediate project area. All buildings within the APE were reviewed for any apparent architectural and/or historical integrity that warranted survey. Two historic properties were identified during the survey, including one building and one farmstead containing nine historic resources. See Attachment 3 for location of properties relative to the project area. The properties are:

- 6987 Midtown Road (Gordon School)
- 8300 Raymond Road (Schroeder-Stickelberg-Thompson Farmstead)

Neither property is listed in the National Register of Historic Places (NRHP).

Determination of Eligibility (DOE) forms were prepared for both properties. The Schroeder-Stickelberg-Thompson Farmstead was determined eligible for listing in the NRHP. The Gordon School was determined to be not eligible for listing in the NRHP. The SHPO has concurred with both recommendations. See Attachments 4-A and 4-B for the approved DOE forms.

B. Archaeological Resources

1. Previously Recorded Properties

An archival and literature search was conducted to identify previously recorded archaeological and burial sites in the area. The initial identification reports were conducted for a one-mile area surrounding the project. Five archaeological sites had been previously reported within one mile of the project area.

2. Archaeological Field Investigations

A Phase 1 archaeological survey was conducted within the APE, defined as all areas of proposed ground disturbing activities, in May and June 2011 and April 2012. Standard archaeological procedures were followed according to *Guidelines for Public Archaeology in Wisconsin* (revised 1997), published by the Wisconsin Archaeology Survey and endorsed by the State Historic Preservation Office. The survey identified two properties that were considered potentially eligible for NRHP listing:

- Site 47DA1421 (Endres Site)
- Site 47DA1420 (Ellefson Site)

Subsequent Phase 2 evaluations determined these sites to be not eligible for listing in the National Register of Historic Places. See Attachments 4-C and 4-D for signed Section 106 forms.

3. Description of Affected Historic Properties

One historic property will be affected by the project:

8300 Raymond Road (Schroeder-Stickelberg-Thompson Farmstead)

The Schroeder-Stickelberg-Thompson Farmstead was determined to be eligible for listing in the National Register under *Criterion C: Architecture* as a representative of a mid-nineteenth-to-mid-twentieth-century farmstead containing an intect collection of historic outbuildings as well as a well-preserved historic farmhouse. The farmstead is located in a rural setting with a wooded area on the south side of the property (in the northwest quadrant of the CTH PD – CTH M intersection). CTH M is located along the west side of the property with Raymond Road located along the southeast side. Open, uncultivated land is located north of the property. University Ridge Golf Course and Morse Pond are located on the west side of CTH M, across from the farmstead. A cultivated agricultural field is located on the opposite side of Raymond Road from the farmstead.

The historic boundary of the Schroeder-Stickelberg-Thompson Farmstead consists of a triangle that encompasses all of the property's contributing resources and is delineated by existing tree lines and ROW along Raymond Road and CTH M. Beginning at the southernmost edge of the tree line around the property, the historic boundary runs north for 460 ft. along the edge of the tree line and the CTH M ROW (40 ft. east of the paved edge of CTH M). From there, the boundary turns east to run for 380 ft.; this is 25 ft. north of the northern edge of the contributing barn (no distinct tree line or other visual demarcation exists, and the northern tax parcel line was not used as the historic boundary so as to exclude a recently-constructed house). At that point,

the boundary runs southwest for 600 ft. along the Raymond Road ROW and the edge of the tree line (30 ft. northwest of the paved edge of Raymond Rd.).

See Attachments 5-A through 5-J.

4. Description of the Undertaking's Effects on Historic Properties

Proposed project activities adjacent to the Schroeder-Stickelberg-Thompson Farmstead include

- the reconfiguration of the CTH PD – CTH M intersection, including an underpass for CTH PD westbound traffic
- the widening of CTH M from a 2-lane rural cross-section with gravel shoulders to a 6-lane urban cross-section with street lighting and curb and gutter; CTH M will be raised approximately 10 feet from the existing center line in front of the historic farm house
- the construction of a multiuse path along the eastern edge of CTH M
- The construction of a retaining wall (up to 3 ft tall) between CTH M and the proposed multiuse path; this will include the removal or relocation of a driveway off of CTH M.
- the termination of Raymond Road southwest of the historic property's primary driveway; this will remove Raymond Road from the CTH PD – CTH M intersection. The remaining portion of Raymond Road will be removed and a multiuse path will be constructed across the southern tip of the historic property (parallel to CTH PD); this will connect with the proposed multiuse path along the eastern edge of CTH M. The northernmost Raymond Road driveway access will remain as it currently exists and the existing southernmost Raymond Road driveway entrance will be relocated to the proposed terminus of Raymond Road.
- the relocation of overhead electric transmission lines; ATC maintains the existing lines located within the CTH M ROW. New overhead lines will be located in the terrace area between the proposed multiuse path and CTH M.

See Attachments 6-A through 6-E.

The following Criteria of Adverse Effect apply to the project activities adjacent to the Schroeder-Stickelberg-Thompson Farmstead:

i. Physical destruction of or damage to all or part of the property.

A segment of the multiuse path will be located within the southern tip of the property's historic boundary. A portion of the the property will be lost due to acquisition of a 0.1 acre section of ROW at this location. The driveway off of CTH M will be removed or relocated approximately 150 to 200 feet north of its existing location. Temporary Limited Easement (TLE) will be required within the historic boundary parallel to the multiuse path along the western edge of the property, at the southern tip of the property (north of the proposed ROW acquisition), parallel to Raymond Road at the eastern edge of the property, and at the proposed location of the secondary driveway access off of Raymond Road. Overhead utility lines will cross over the southern tip of the property; tree removal will be required at the southern tip of the property to provide a clear space around the overhead lines. See Attachments 6-A through 6-D.

v. Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features.

CTH M will be widened with increased capacity and will be raised up to ten feet higher than the existing roadway in front of the historic farmhouse. The new roadway will include concrete curb and gutter and a raised median with added street lighting. Currently street lighting is confined to the CTH PD – CTH M intersection; new lights will be placed in the medians along CTH PD and CTH M. The existing utility poles with overhead lines along the east side of CTH M will be relocated north or south, but will not be moved any closer to the property; new poles will be of steel construction and will be 15 to 20 ft. taller and of a wider diameter than the existing wood poles. ATC will require an overhang easement below their overhead lines where these cross the southern tip of the property; vegetation within this easement will be limited to 15 feet in height. As a result, trees inside the historic boundary in this area will be removed. A multiuse path will be constructed along the east side of the roadway, in front of the farmhouse. The multiuse path will be located 30 feet from the front of the farmhouse. A retaining wall up to three feet in height will be constructed between CTH M and the multiuse path. The CTH M – CTH PD intersection will be reconstructed. A segment of the multiuse path in the northeast quadrant of the reconfigured intersection will be located inside the southern tip of the property's historic boundary, requiring ROW acquisition. Tree removal from this ROW acquisition is anticipated, however roadway elevations will be designed to prevent the need to remove individual trees in close proximity to the house; the large 24-inch diameter trees on the south and north sides of the house will remain. See Attachments 6-A through 6-E.

The reconfiguration of the CTH M – CTH PD intersection, the widening and raising of CTH M, and the construction of a pedestrian path and retaining wall in front of the property represents a substantial visual change that alters the historically rural setting of the farmstead.

5. Discussion of Project Alternatives

The adverse effects of the proposed project on the Schroeder-Stickelberg-Thompson Farmstead are caused primarily by the intersection control developed for the CTH M – CTH PD intersection. The property is located in the northeast quadrant of this intersection. The following intersection control alternatives were reviewed and analyzed during the investigation:

A. No Build

No action except normal maintenance would take place. No improvements would be made to the CTH M – CTH PD intersection. The pavement would not be replaced, nor would bicycle or pedestrian accommodations be provided. No right of way would be acquired. The adverse effect to the Schroeder-Stickelberg-Thompson Farmstead would be avoided as no part of the property would be destroyed for the reconstruction of the CTH M – CTH PD intersection or for the widening of CTH M.

The existing intersection configuration, road pavement, and roadway section would bear current and future traffic volumes, resulting in worsening congestion, mobility, and operational characteristics. Any future improvements would be limited to those that

attempt to maintain the current service levels, driving surface, and address safety concerns at spot locations. Although the No Build Alternative would avoid an adverse effect to Schroeder-Stickelberg-Thompson Farmstead, it would not address key purpose and need factors (lack of bicycle and pedestrian facilities and poor traffic operations) discussed in Section 1. This alternative was not chosen because of these operational concerns.

B. Signalized At-Grade Intersection

The Signalized At-Grade Intersection Alternative was designed with a curved alignment that shifted the road west to avoid the farmhouse entirely. This shift would be balanced with the impacts to the wetland and University Ridge Golf Course in the northwest quadrant of the intersection as these are also protected by Section 4(f).

The Signalized At-Grade Intersection Alternative did not meet the purpose and need of the project because it failed to provide acceptable levels of service for the high traffic volumes forecasted for this intersection. The traffic signal was estimated to reach its capacity within 10 to 15 years after construction and thus was dismissed as a viable alternative. See Attachment 7-A.

C. Multi-Lane Roundabout

The Multi-Lane Roundabout Alternative was designed with a curved alignment of CTH M to shift the road west to avoid the Schroeder-Stickelberg-Thompson farmhouse entirely (this shift would be balanced with the impacts to the wetland and University Ridge Golf Course in the northwest quadrant of the intersection as these properties are protected by Section 4(f)). The Multi-Lane Roundabout Alternative also included an underpass below the roundabout for the multiuse path that would be located along the east side of CTH M. The path would be designed with maximum grades and minimum radii on the northeast corner of the Schroeder-Stickelberg-Thompson Farmstead to minimize the impacts to the property. The acquisition of right-of-way (ROW) would be limited to the northwest corner of the property (which is outside the historic boundary) and the southwest corner of the property (within the historic boundary). Some temporary easements would be necessary for grading purposes. (Attachment 7-B)

The Multi-Lane Roundabout was originally selected as the preferred alternative. The traffic modeling software used indicated that the roundabout had the capacity to accommodate the design year traffic volumes. Since the time the intersection was modeled, WisDOT completed studies comparing traffic modeling with roundabouts in operation in Wisconsin and found that other modeling software better matched in-place operations. The updated traffic modeling software indicated that the traffic volumes forecast for this intersection would exceed the capacity of the roundabout, resulting in excessive delay and long vehicle queues. With the high volumes of traffic forecast for this intersection, the project stakeholders did not fully support this alternative. Representatives from Verona and Madison expressed concern that if the roundabout intersection reached and exceeded capacity, traffic would utilize streets through the adjacent neighborhoods which are not designed to accommodate high traffic volumes.

As a result of these concerns, two grade separated alternatives (specifically the CTH PD Westbound Underpass and Tight Diamond Interchange) were further developed and analyzed.

D. Continuous Flow Intersection (CFI)

A Continuous Flow Intersection (also known as Displaced Left Turn) is a hybrid intersection that utilizes signals in advance of the primary intersection. At these signals, left-turning vehicles cross over the opposing through-moving traffic so that when left-turning vehicles reach the primary intersection, they can turn left at the same time as the opposing through-moving traffic is passing through the intersection. This combination of the two movements at the primary intersection improves the efficiency of the intersection, resulting in greater capacity. The CFI was designed with a curved alignment that shifted the road west to avoid the farmhouse entirely. This shift would be balanced with the impacts to the wetland and University Ridge Golf Course in the northwest quadrant of the intersection as these properties are protected by section 4(f).

Although it had a greater capacity than the traditional traffic signal design, the Continuous Flow Intersection was larger and thus more costly for real estate and construction than signal and roundabout alternatives. In addition, the CFI Alternative did not provide sufficient pedestrian crossing time and would have been the first CFI in the Midwest so had the potential to be confusing to drivers. For these reasons, this alternative was not chosen and was not presented to the public as a possible alternative. See Attachment 7-C.

E. Grade Separated Jug-Handle

The Grade Separated Jug-Handle Alternative was designed to carry the high-volume northbound CTH M traffic over a bridge while a secondary road, the jug-handle, would provide access between the overhead northbound traffic and CTH PD. Separating the highest volume movement from the primary intersection allows the intersection to operate more efficiently. Three versions of the Grade Separated Jug-Handle Alternative were developed and are named after the quadrant in which the jug-handle secondary road is located: southwest, southeast, and northeast.

The northeast version of this alternative would have the greatest effect on the Schroeder-Stickelberg-Thompson Farmstead and was therefore dismissed prior to seeking public input (Attachment 7-D). The southeast version would have resulted in an active electrical substation in the middle of the jug-handle portion of the intersection; this would create access issues for this facility and was therefore dismissed as a viable alternative (Attachment 7-E). The southwest Grade Separated Jug-Handle Alternative would provide acceptable levels of service for traffic operations and was presented to the public (Attachment 7-F). This alternative did not receive strong support from the public due to the non-standard traffic flow configuration and potential driver confusion that this may cause. The southwest Grade Separated Jug-Handle Alternative was not chosen because it was the most costly alternative due to greater real estate needs, the high cost to build

the necessary bridge, and as it had the potential for greater impact to the viewshed and setting of the Schroeder-Stickelberg-Thompson Farmstead.

F. Tight Diamond Interchange

The Tight Diamond Interchange was designed with a curved alignment of CTH M to shift the road west to avoid the Schroeder-Stickelberg-Thompson farmhouse entirely (this shift would be balanced with the impacts to the wetland and University Ridge Golf Course in the northwest quadrant of the intersection as these properties are protected by Section 4(f)). The Tight Diamond Interchange is a grade separated interchange design. Four lanes of CTH M traffic (2 northbound, 2 southbound) are carried over an at-grade signalized intersection via a 4-lane bridge. Access to CTH M and CTH PD is via ramps that intersect CTH PD, similar to a freeway interchange. This intersection design has the greatest traffic capacity of all the intersections proposed because the two primary travel directions, northbound and southbound, are not interrupted by a traffic signal or other type of intersection control (i.e., roundabout). The CTH M alignment, bridge location, and ramp alignments were laid out to avoid the farmhouse, including the resulting relocation of utilities. (Attachment 7-G)

The Tight Diamond Interchange alternative was presented to the public, although not as the preferred alternative. It has the highest construction costs of all the alternatives due to the size of the bridge required to carry four lanes of traffic over a large signalized intersection. It also requires a significant amount of retaining wall to limit the overall footprint of the intersection. The walls add to the high construction cost and increase the visual impact of this design. Because of the high volume of traffic forecast to be turning on to and off of CTH M, turn lanes and ramps needed to be dual lane designs. The dual lane on-ramps required merging lanes which increased the footprint of CTH M north and south of the CTH PD intersection and would impact access to properties. Finally, the Tight Diamond alternative was not able to accommodate a grade separated crossing of both CTH M and CTH PD for pedestrians and bicyclists. Because of the number of drawbacks, the Tight Diamond alternative did not have full support from the City of Madison or the City of Verona. As a result, this design was not considered the preferred alternative.

G. CTH PD Westbound Underpass (Preferred Alternative)

The CTH PD Westbound Underpass Alternative was designed with a curved alignment of CTH M to shift the road west to avoid the Schroeder-Stickelberg-Thompson farmhouse entirely (this shift would be balanced with the impacts to the wetland and University Ridge Golf Course in the northwest quadrant of the intersection as these properties are protected by Section 4(f)). The CTH PD Westbound Underpass alternative is in essence the Traffic Signal Alternative with one of the traffic flows (the CTH PD westbound through movement) removed from the intersection. The Traffic Signal Alternative did not have the capacity for all the conflicting traffic flows, but by removing the westbound through movement from the intersection, more time can be allotted to other movements that would normally conflict with the westbound movement, specifically the eastbound left turn to northbound. The intersection functions by pulling the westbound through traffic away

from the westbound traffic stream, and sending it below CTH M. CTH M will cross a wide, short-span bridge with the westbound through traffic below. The rest of the intersection, including westbound traffic turning right or left onto CTH PD, will operate as it normally would at a traffic signalized intersection. (Attachment 7-H)

The CTH PD Westbound Underpass Alternative was designed with consideration given to the location of utilities that will need to be located within the roadwork. The intersection design was also developed to limit impacts to the adjacent electric utility substation and to adjacent properties. Bicycles and pedestrians are provided grade separated crossings of both CTH M and CTH PD. The intersection will have to be raised in order to accommodate passing westbound traffic below the intersection. The CTH PD Westbound Underpass Alternative received support from the City of Madison, the City of Verona, and Dane County as a viable solution and thus was presented to the public as the recommended alternative.

6. Discussion of Actions that Minimize or Mitigate Adverse Effect

The initial design for the project corridor centered the proposed corridor on the existing CTH M ROW line and included raised medians, 20 feet in width. This design was modified due to the location of 4(f), historic, and wetland resources on the north side of CTH PD. The current plan includes a curved alignment to fit the proposed corridor between the wetlands in the northwest quadrant of the CTH M – CTH PD intersection and the historic farmstead in the northeast quadrant. The existing plan also includes a median narrowed to a minimum width of 8 ft. in order to minimize impacts to the 4(f) resources.

A Memorandum of Agreement will be prepared which will provide measures to mitigate the adverse effects to the Schroeder-Stickelberg-Thompson Farmstead. Possible mitigation measures may include one or more of the following:

- Standard color digital photographic documentation of the property per National Park Service (NPS) standards
- Field survey of historic farmsteads in the Town of Verona with the creation of sketch maps and photographs of up to seven of the best-preserved and most intact examples; the addition of these properties to the Wisconsin Historic Preservation Database
- Incorporation of the property into an existing Dane County Historical Society project, database, or website

The current property owner is not interested in having the property listed in the National Register; for this reason, NRHP listing was not proposed as a potential mitigation measure. In addition, due to restraints resulting from the location of overhead utility lines at the southern end of the property, any effective vegetative screening is not a viable mitigation option.

7. Views of Consulting Parties and the Public

Throughout March of 2011, consultants from Great Lakes Archaeological Research Center, Inc. (GLARC) attempted to contact the Dane County Historical Society via phone and email messages to notify them of the project activity and solicit any input or concerns. No response was received. In March of 2011, GLARC also contacted the Madison Trust for Historic Preservation via email and received no response.

Initial Public Information Meetings were held on December 8, 2011 and May 24, 2012 to solicit input regarding the project. For each meeting, letters were sent to all property owners along the project corridor informing them of the meetings.

At the Public Information Meeting on December 8, 2011, the project scope and goals were presented and a comparison of intersection alternatives (traffic signals, roundabout, and southwest jug-handle) was provided. Attendees were given the opportunity to ask questions and express any concerns about the project vocally or in written form on comment sheets. No attendees expressed concern directly related to any historic properties. Several attendees expressed negative opinions of the roundabout alternative and of roundabouts in general, both at the meeting and on the comment sheets; one attendee voiced a desire for roundabout driving education for the public; several attendees expressed support for the roundabout during the meeting and on the comment sheets. Marie Bigley, the current owner of the Schroeder-Stickelberg-Thompson Farmstead, submitted a comment sheet expressing a negative opinion of roundabouts in general and questioning how easements along adjacent properties would be acquired. Concerns raised that were not related to the historic nature of the property will be addressed through the Environmental Assessment.

At the Public Information Meeting on May 23, 2012, the project scope and goals were reviewed and the preferred roundabout design was presented. Marie Bigley voiced concern about utilities, easements, and further encroachment onto their respective properties. Telephone conversations with Ms. Bigley were conducted on November 18, 2011 and February 7, 2012 in which her questions and concerns were addressed. Concerns raised that were not related to the historic nature of the property will be addressed through the Environmental Assessment.

Following the dismissal of the Multi-Lane Roundabout Alternative, an additional Public Information Meeting was held on March 12, 2014. At this meeting, the CTH PD Westbound Underpass Alternative and the Tight Diamond Interchange Alternative were presented, with the former as the preferred alternative. Attendees were given the opportunity to ask questions and express any concerns about the project vocally or in written form on comment sheets. Property owner, Marie Bigley, attended the meeting and discussed the different alternatives with the project team.

See Attachments 8-A through 8-X for information from the Public Information Meetings.

An initial Consultation Meeting was held on April 29, 2013. Those present included current property owner Marie Bigley, as well as representatives from MSA, ATC, Kjohnson Engineers, SRF Consulting, WisDOT Bureau of Technical Services (BTS), Great Lakes Archaeological Research Center, the City of Verona, and the City of Madison. Both SHPO and FHWA were invited to attend, but representatives from neither were present. Mrs. Bigley expressed concern over the proposed utility placement along CTH M and over proposed tree removal at the southern tip of the property. Representatives from ATC and MSA agreed to meet Mrs. Bigley at her property on May 15, 2013 to stake the proposed utility pole locations; it was determined that

proposed utility poles will not be located any closer to the historic property than the existing pole locations.

During the Consultation Meeting, in-kind tree replanting at the southern edge of the property (where possible in relation to overhead utility lines) was proposed as a mitigation measure; however after the May 15 meeting at the property, it was determined that planting trees taller than 15 ft. would not be feasible within the constraints of the proposed overhead utility line locations. For this reason, vegetative screening is not considered a viable mitigation measure as the planting of 15 ft. ornamental trees in place of the original walnut trees is not considered to be a substitution for and does not mitigate the loss of the much taller walnut trees that were an element of the historically rural setting of the property. Mrs. Bigley was present at this onsite meeting.

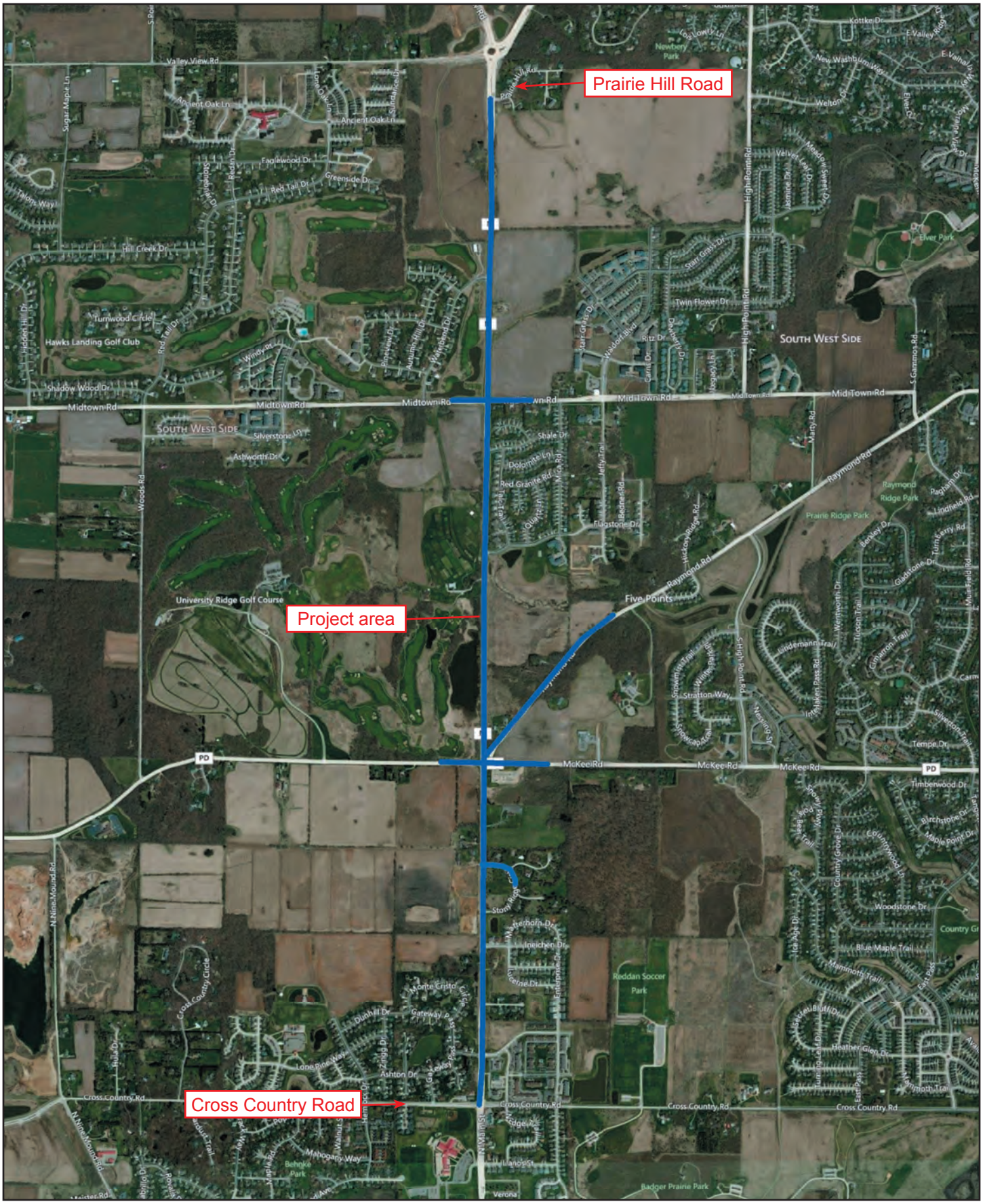
Those present at the Consultation Meeting agreed upon mitigation measures in the form of written and photographic documentation of the Schroeder-Stickelberg-Thompson Farmstead. Following review from WisDOT BTS, written documentation was removed as a mitigation measure and replaced with mitigation in the form of survey and inventory of three to five of the best-preserved and most-intact farmsteads in the Town of Verona. Photographic documentation will remain as a mitigation measure as well. This was confirmed through follow-up correspondence with stakeholders present at the April 2013 Consultation Meeting.

See Attachments 9-A and 9-B for information from the 2013 Consultation Meeting and Attachment 9-C for follow-up correspondence.

A second Consultation Meeting was held on April 14, 2014 in response to the change in the planned project activities. Those present included current property owner Marie Bigley, as well as representatives from MSA, Kjohnson Engineers, WisDOT BTS, University of Wisconsin Cultural Resources Management Services (formerly Great Lakes Archaeological Research Center), the City of Verona, and the City of Madison. Both SHPO and FHWA were invited to attend, but representatives from neither were present. During the Consultation Meeting, the proposed intersection plan was presented. Driveway access to the historic property from CTH M and Raymond Road was discussed, and Mrs. Bigley voiced her desire to retain the driveway if possible. Those present at the Consultation Meeting agreed upon mitigation measures in the form of photographic documentation of the property and a survey and inventory of three to five of the best-preserved and most-intact farmsteads in the Town of Verona (to include windshield survey coverage of the complete township, historic context report, and reconnaissance-level survey of three to five farmsteads that best represent the historic agricultural practices of the Town of Verona).

Following review of the previous Documentation for Consultation and Memorandum of Agreement for this project, SHPO suggested eliminating the photographic documentation mitigation measure and altering the survey mitigation measure from a survey of three to five of the best-preserved farmsteads to a survey of all farmsteads within the Town of Verona. In response, the photographic documentation mitigation measure has been eliminated and the survey mitigation measure has been expanded to include a windshield survey of the entire township as well as a historic context report, while completing a reconnaissance-level survey of up to seven of the best-preserved and most representative historic farmsteads.

See Attachments 9-D and 9-E for information from the 2014 Consultation Meeting.



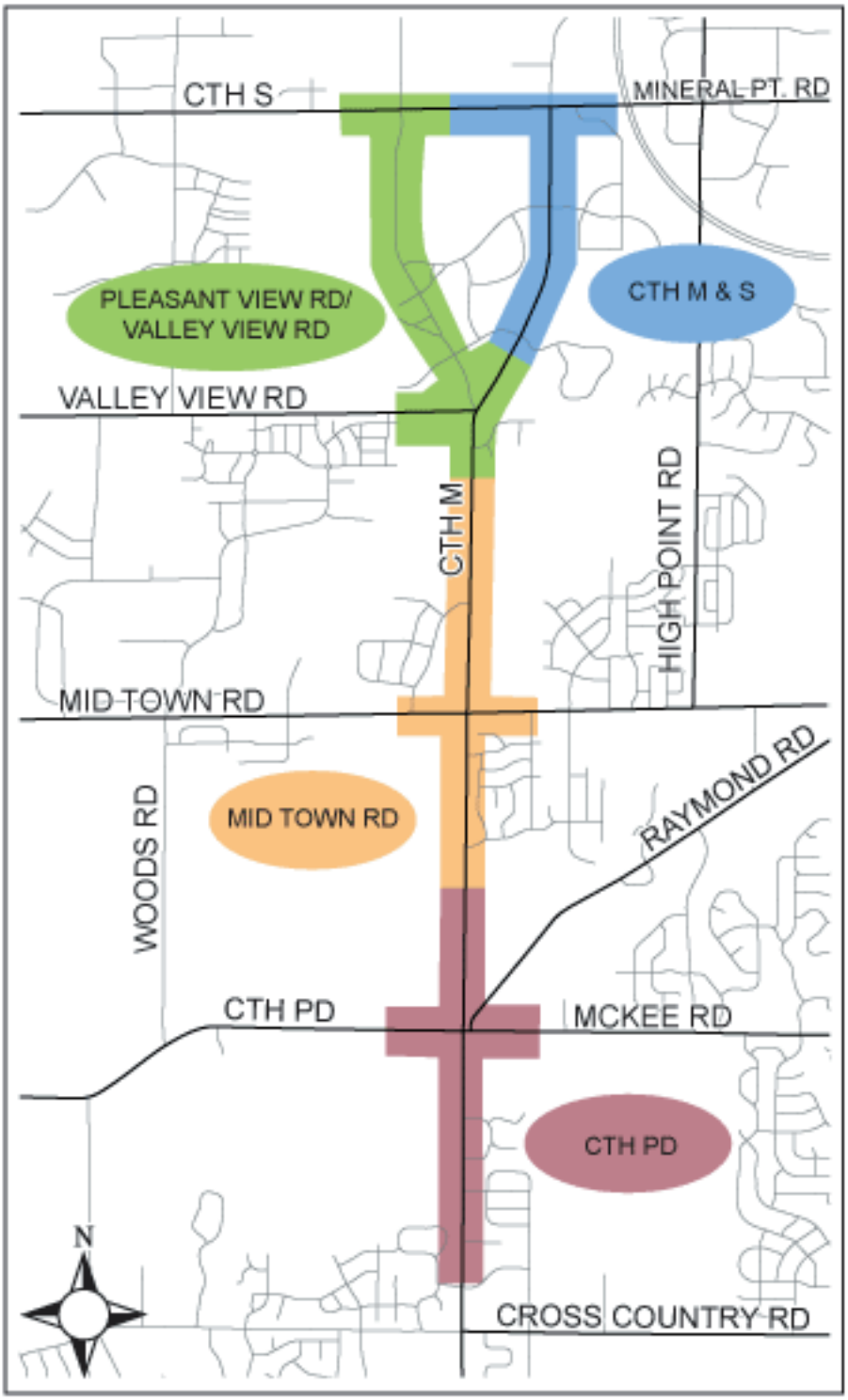
Attachment 1	Project Location	Aerial Image

Current and Project Traffic Counts, CTH M Project Corridor

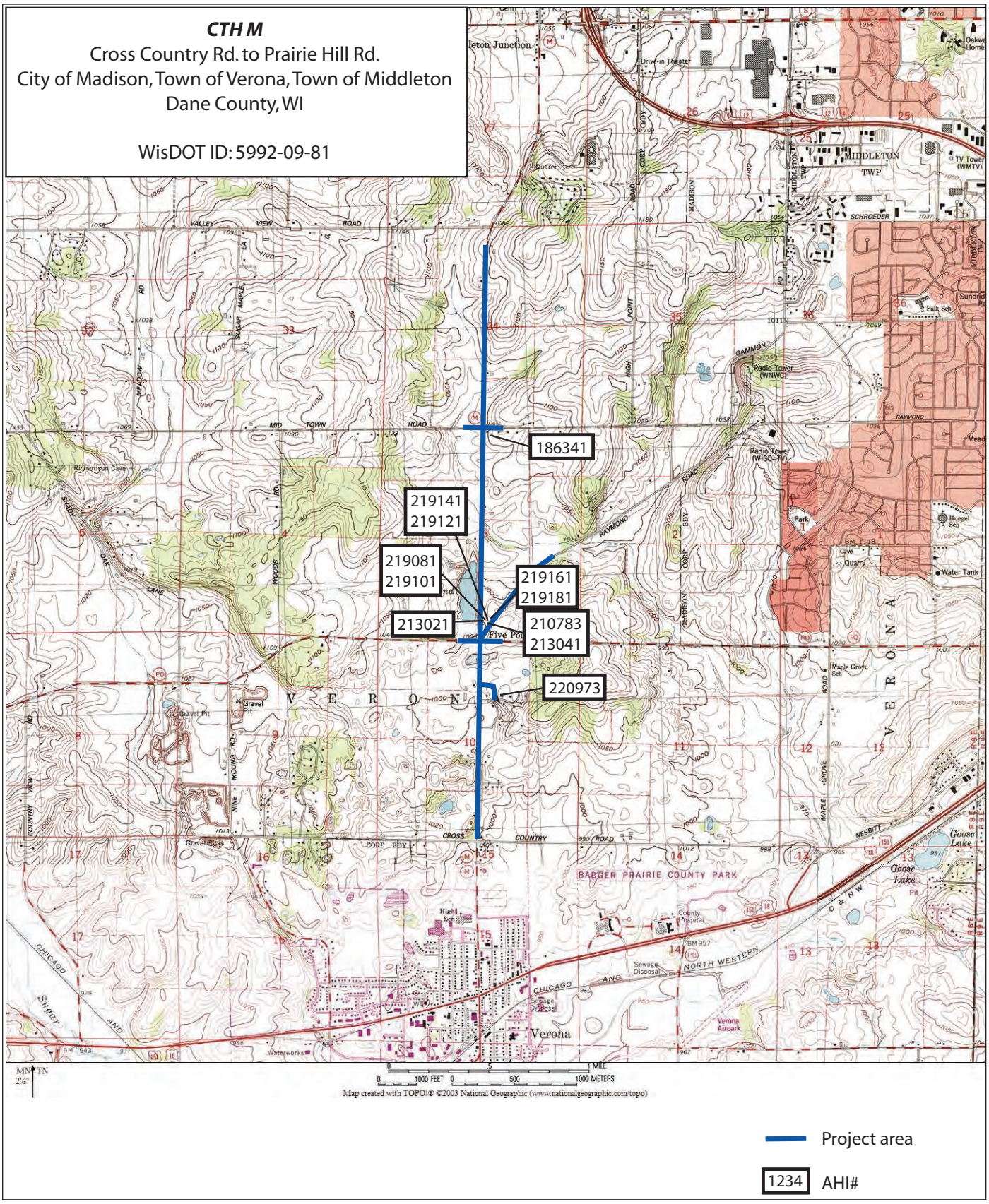
	Current Traffic Count*	2035 Traffic Projection Estimate**
Valley View Rd to Midtown Rd	21,100	49,300
Midtown Rd to CTH PD	20,800	41,700
CTH PD to Prairie Oaks Dr	11,200	25,200

*Traffic count for Valley View Rd to Midtown Rd and Midtown Rd to CTH PD from 2011; traffic count from CTH PD to Prairie Oaks Dr from 2010
**Determined by Traffic Forecasting Section, Bureau of State Highway Programs, Division of Transportation Investment Management

CTH M Transportation Improvement Program (TIP) Approved Construction Projects



Attachment **2-B**	Project Information	CTH M Construction Projects



Attachment 3	Surveyed Properties	

(DOE March 2011)

Wisconsin Historical Society
Determination of Eligibility Form

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DIV HIST PRES

WisDOT Project ID #: 5992-09-81

WHS #: 12-0939/DA

Property Name(s): Gordon School
Address/Location: 6987 Midtown Rd.
City & County: Town of Verona, Dane County **Zip Code:** 53719
Town: 6N **Range:** 8E **Section:** 3
Date of Construction: 1929

WisDOT Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this request for Determination of Eligibility:

___Meets the National Register of Historic Places criteria.
_x_Does not meet the National Register of Historic Places criteria.

for 9/13/12
Rebecca Burkel, WisDOT Historic Preservation Officer **Date**

State Historic Preservation Office

In my opinion, the property:

___Meets the National Register of Historic Places criteria.
X Does not meet the National Register of Historic Places criteria.

Oct 5, 2012
Michael E. Stevens, State Historic Preservation Officer **Date**

Comments (FOR AGENCY USE ONLY):

Division of Historic Preservation
Wisconsin Historical Society
816 State Street
Madison, WI 53706

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Wisconsin Historical Society
Determination of Eligibility Form

(DOE March 2011)

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WisDOT Project ID #: 5992-09-81

WHS #: 12-0939/DA

Property Name(s): Schroeder-Stickelberg-Thompson Farmstead
Address/Location: 8300 Raymond Rd.
City & County: Town of Verona, Dane County **Zip Code:** 53719
Town: 6N **Range:** 8E **Section:** 3
Date of Construction: c.1875-C.1890, c.1900, c.1910, c.1920, c.1940

WisDOT Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this request for Determination of Eligibility:

[X] Meets the National Register of Historic Places criteria.
[ ] Does not meet the National Register of Historic Places criteria.

Rebecca Burkel 11/26/12

Rebecca Burkel, WisDOT Historic Preservation Officer **Date**

State Historic Preservation Office

In my opinion, the property:

_X_ Meets the National Register of Historic Places criteria.
___ Does not meet the National Register of Historic Places criteria.

12/6/12

Michael E. Stevens, State Historic Preservation Officer **Date**

Comments (FOR AGENCY USE ONLY):
"Outhouses" are listed in WHPD under "privy"

Division of Historic Preservation
Wisconsin Historical Society
816 State Street
Madison, WI 53706

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SHPO

SECTION 106 REVIEW
ARCHAEOLOGICAL/HISTORICAL INFORMATION

Wisconsin Department of Transportation
DT1635 11/2006

For instructions, see FDM Chapter 26

I. PROJECT INFORMATION

Project ID 5992-09-81	Highway - Street Local Street	County Dane County
Project Termini South Pleasant View Road/CTH M - (Prairie Hill Road to Cross County Road)		Region - Office Southwest Region - Local Program
Regional Project Engineer - Project Manager Karen Richardson, P.E., Kjohnson Engineers, Southwest Region - Local Program Management Consultant		Area Code - Telephone Number (608) 829-3858
Consultant Project Engineer - Project Manager MSA Professional Services, Inc. - Jason DiPiazza, PE		Area Code - Telephone Number (608) 242-7779
Archaeological Consultant Great Lakes Archaeological Research Center Inc.		Area Code - Telephone Number (414) 481-2093
Architecture/History Consultant Great Lakes Archaeological Research Center Inc.		Area Code - Telephone Number (414) 481-2093
Date of Need August 1, 2012		SHSW# 12-0939/DA 1/2
Return a signed copy of this form to: karenrichardson@kjohnsonengineers.com		

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II. PROJECT DESCRIPTION

Project Length 3 miles	Land to be Acquired: Fee Simple 15 acres	Land to be Acquired: Easement 10 acres

Distance as measured from existing centerline	Existing	Proposed	Other Factors	Existing	Proposed
Right-of-Way Width measured from existing centerline	43'-170'	48'-170'	Terrace Width	None	8' (typical)
Shoulder measured from existing centerline	Varies 16'-42'	N/A	Sidewalk Width	Varies 5'-6'	Varies 5'-10'
Slope Intercept measured from existing centerline	N/A	25'-170'	Number of Lanes	2	4-6
Edge of Pavement measured from existing centerline	14'-36'	8'-60'	Grade Separated Crossing pedestrian and bike path underpasses	none	3 (CTH PD, Midtown Road, & Flagstone Drive)
Back of Curb Line measured from existing centerline	N/A	11'-63'	Vision Triangle acres	N/A	N/A
Realignment	N/A	0-56'	Temporary Bypass acres	N/A	N/A
Other - List:	N/A	N/A	Stream Channel Change	☐ Yes	☒ No
Attach Map(s) that depict "maximum" impacts.	☒ Yes	☐ No	Tree topping and/or grubbing	☒ Yes	☐ No

Brief Narrative Project Description - Include all ground disturbing activities. For archaeology, include plan view map indicating the maximum area of ground disturbance and/or new right-of-way, whichever is greater. Include all temporary, limited and permanent easements.

The City of Madison, in conjunction with the City of Verona and Dane County propose improvements to South Pleasant View Road (CTH M) from Cross Country Road to Prairie Hill Road, a distance of approximately 3 miles. The improvements consist of expanding South Pleasant View Road initially from 2 to 4-lanes with provisions to accommodate 6-lanes in the future. The proposed project includes expansion of the roadway to a multi-lane urban arterial with a raised median, bike lanes, a multi-use path, and sidewalk. The proposed action is part of a multi-phase project to reconstruct the CTH M corridor, including reconstruction of the CTH PD and Mid Town Road intersections.

III. CONSULTATION

How has notification of the project been provided to:

- ☒ Property Owners
  - ☒ Public Information Meeting Notice
  - ☒ Letter - Required for Archaeology
  - ☐ Telephone Call
  - ☐ Other:
- ☒ Historical Societies/Organizations
  - ☐ Public Information Meeting Notice
  - ☐ Letter
  - ☒ Telephone Call
  - ☒ Other: Email
- ☒ Native American Tribes
  - ☒ Public Info. Mtg. Notice
  - ☒ Letter
  - ☐ Telephone Call
  - ☐ Other:

*Attach one copy of the base letter, list of addresses and comments received. For history include telephone memos as appropriate.

IV. AREA OF POTENTIAL EFFECTS - APE

ARCHAEOLOGY: Area of potential effect for archaeology is the existing and proposed ROW, temporary and permanent easements. Agricultural practices do not constitute a ground disturbance exemption.

HISTORY: Describe the area of potential effects for buildings/structures.
An APE was established that included all properties adjacent to the project corridor. All resources at least 40 years old that possessed a degree of historic integrity were examined.

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V. PHASE I ARCHEOLOGICAL OR RECONNAISSANCE HISTORY SURVEY NEEDED

ARCHAEOLOGY	HISTORY
☒ Archaeological survey is needed	☒ Architecture/History survey is needed
☐ Archaeological survey is not needed - Provide justification ☐ Screening list (date).	☐ Architecture/History survey is not needed ☐ No structures or buildings of any kind within APE ☐ Screening list (date).

VI. SURVEY COMPLETED

ARCHAEOLOGY	HISTORY
☐ NO archaeological sites(s) identified - ASFR attached ☐ NO potentially eligible site(s) in project area - Phase I Report attached ☒ Potentially eligible site(s) identified-Phase I Report attached ☐ Avoided through redesign ☒ Phase II conducted – go to VII (Evaluation). ☐ Phase I Report attached - Cemetery/cataloged burial documentation	☐ NO buildings/structures identified - A/HSF attached ☒ Potentially eligible buildings/structures identified in the APE - A/HSF attached ☐ Potentially eligible buildings/structures avoided – documentation attached

VII. DETERMINATION OF ELIGIBILITY (EVALUATION) COMPLETED

☒ No arch site(s) eligible for NRHP - Phase II Report attached	☐ No buildings/structure(s) eligible for NRHP - DOE attached
☐ Arch site(s) eligible for NRHP - Phase II Report attached	☒ Building/structure(s) eligible for NRHP - DOE attached
☐ Site(s) eligible for NRHP - DOE attached	

VIII. COMMITMENTS/SPECIAL PROVISIONS – must be included with special provisions language

Separate Phase II Arch Surveys were conducted at the Ellefson Site (47DA1420) and Endres site (47DA1421). See the included letters to Jim Becker, dated 4/26/12 and date 6/25/12.

IX. PROJECT DECISION

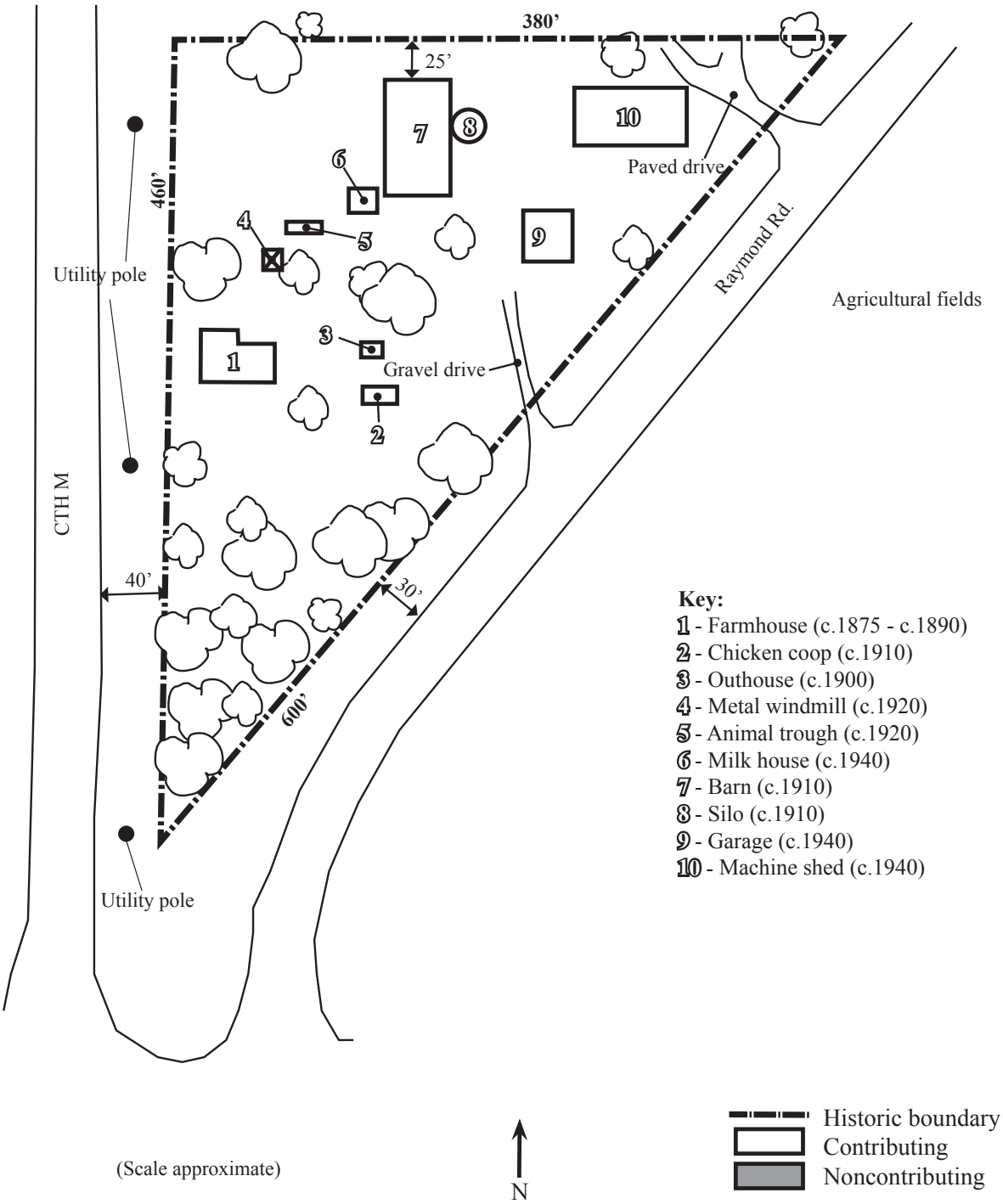
- ☐ No historic properties (historical or archaeological) in the APE.
- ☐ No historic properties (historical or archaeological) affected.
- ☒ Historic properties (historical and/or archaeological) may be affected by project;
  - ☒ Go to Step 4: Assess affects and begin consultation on affects
  - ☐ Documentation for Determination of No Adverse Effects is included with this form. WIDOT has concluded that this project will have No Adverse Effect on historic properties. Signature by SHPO below indicates SHPO concurrence in the DNAE and concludes the Section 106 Review process for this project.

12-0939/DA
pg 2/2

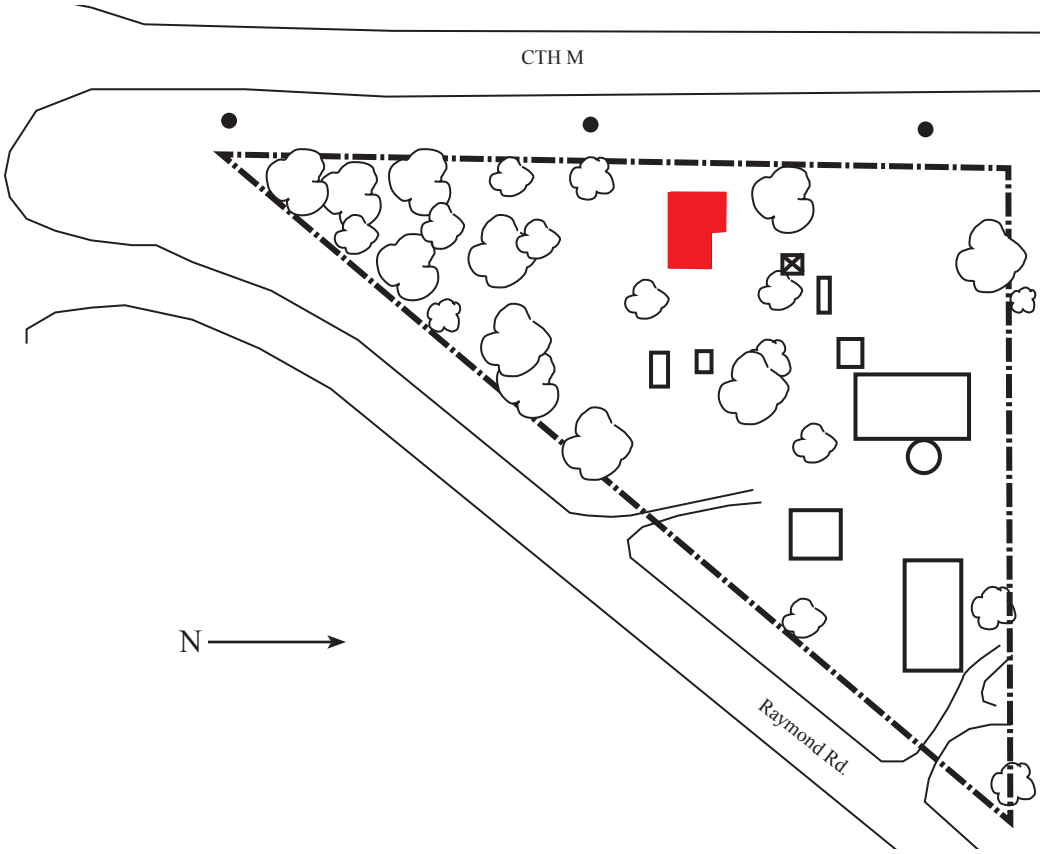
(Regional Project Manager) 8/27/2012 (Date)	for (WIDOT Historic Preservation Officer) 9/13/12 (Date)	(State Historic Preservation Officer) Dec 6 2012 (Date)
(Consultant Project Manager) 6/25/12 (Date)		

Attachment 4-D	SHPO Concurrence	Section 106 Form

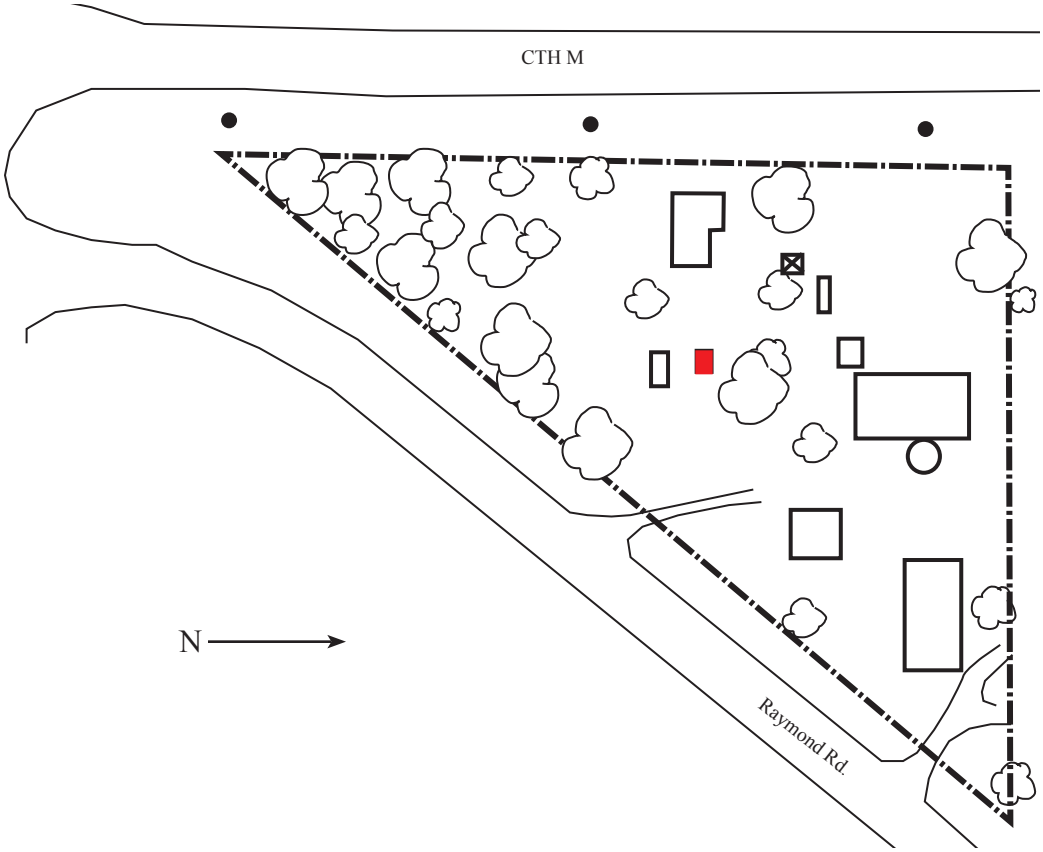
Schroeder-Stickelberg-Thompson Farmstead
8300 Raymond Rd.
Town of Verona
Dane County, WI
WisDOT ID: 5992-09-81



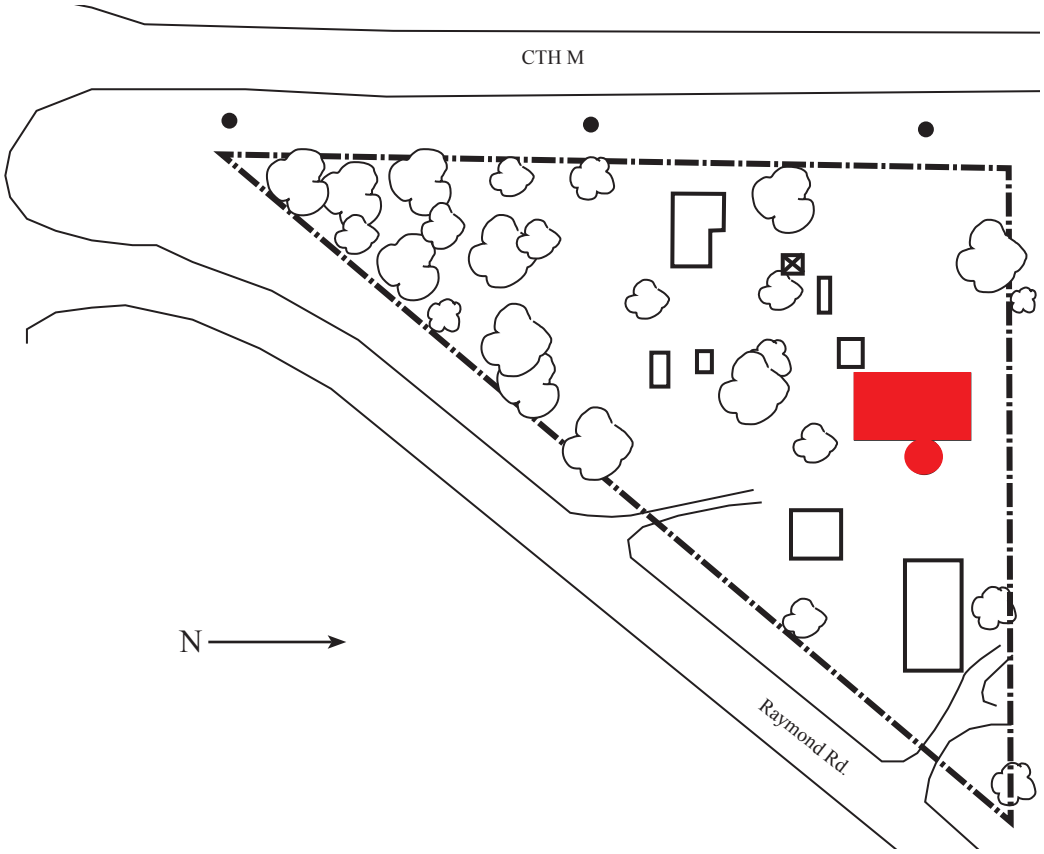
Attachment 5-A	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Historic Boundary Map



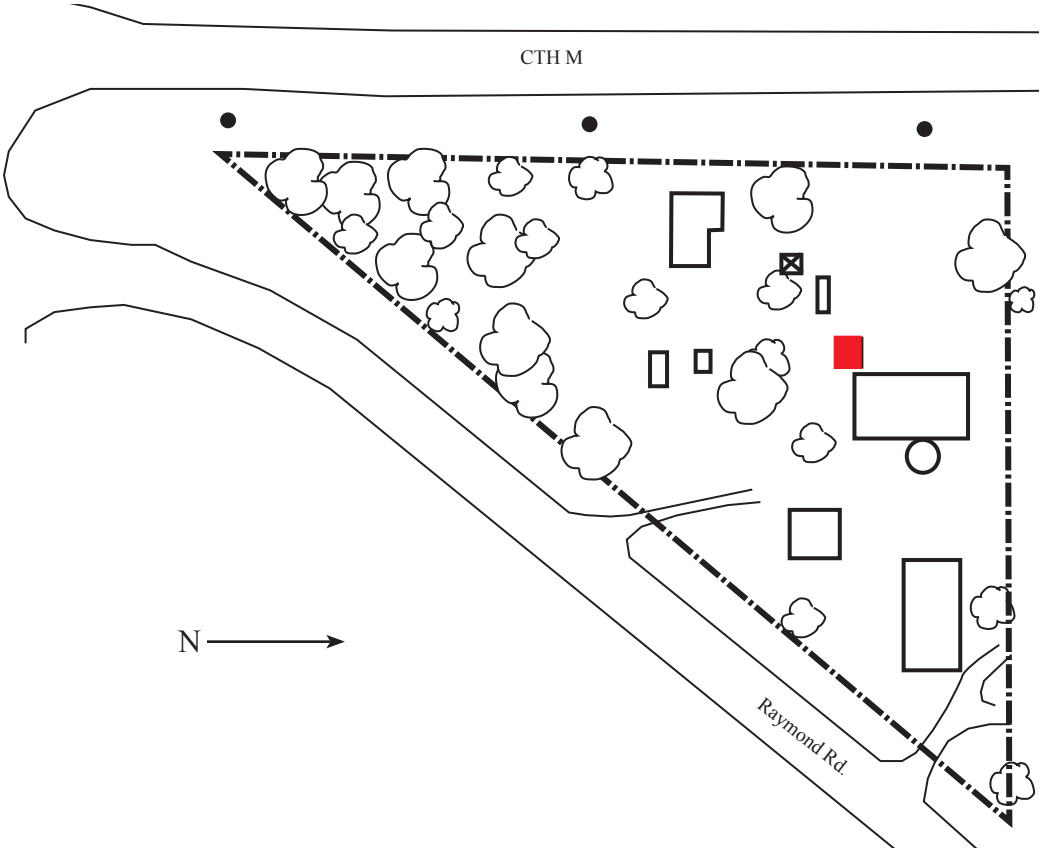
Attachment **5-B**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Farmhouse



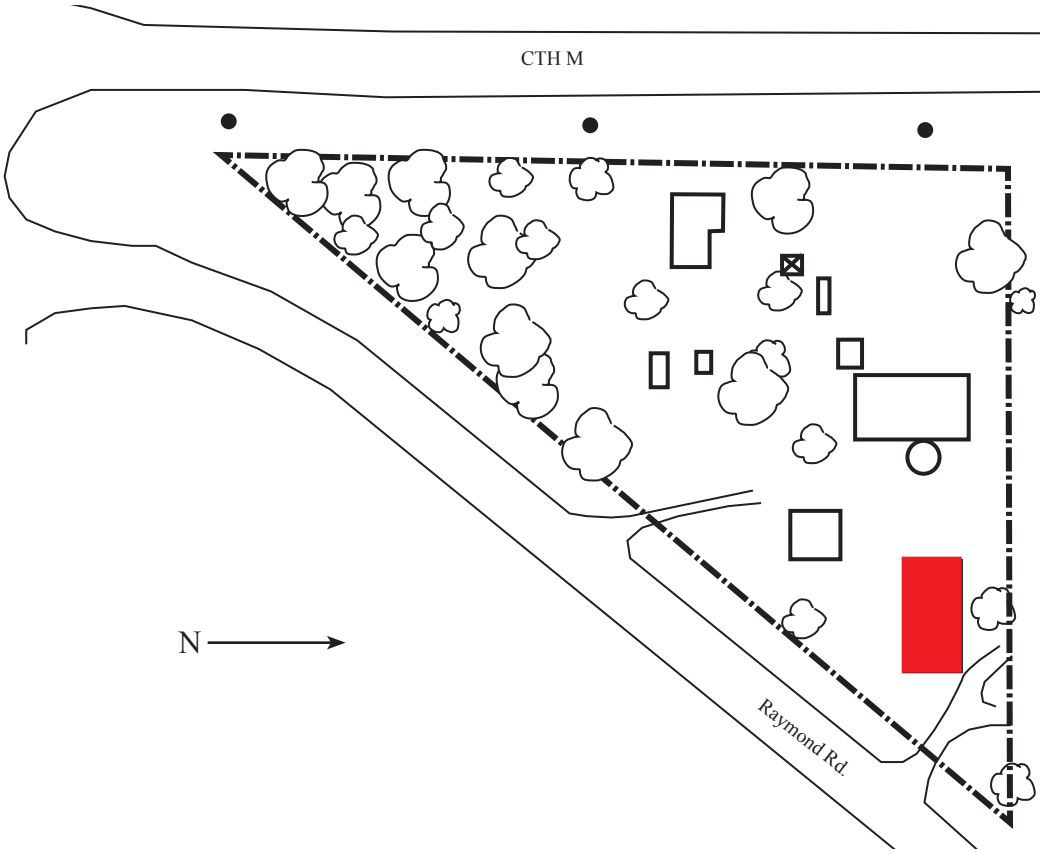
Attachment **5-C**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Outhouse



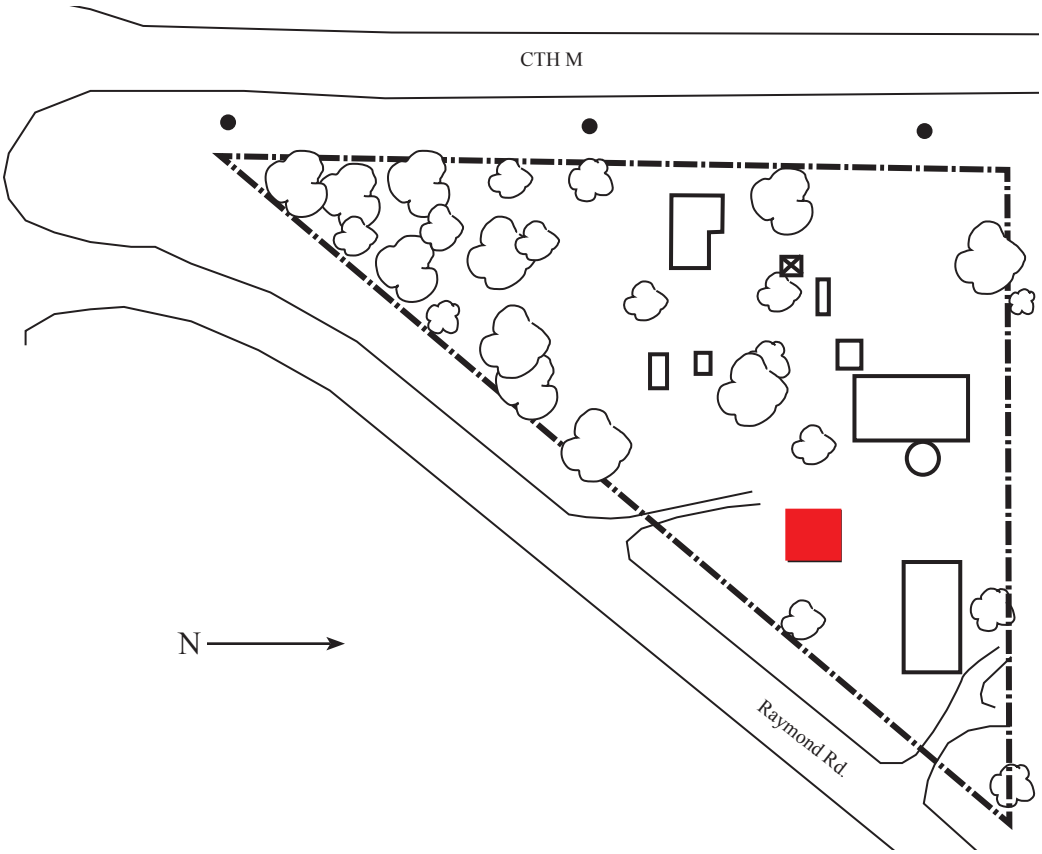
Attachment **5-D**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Barn and Silo



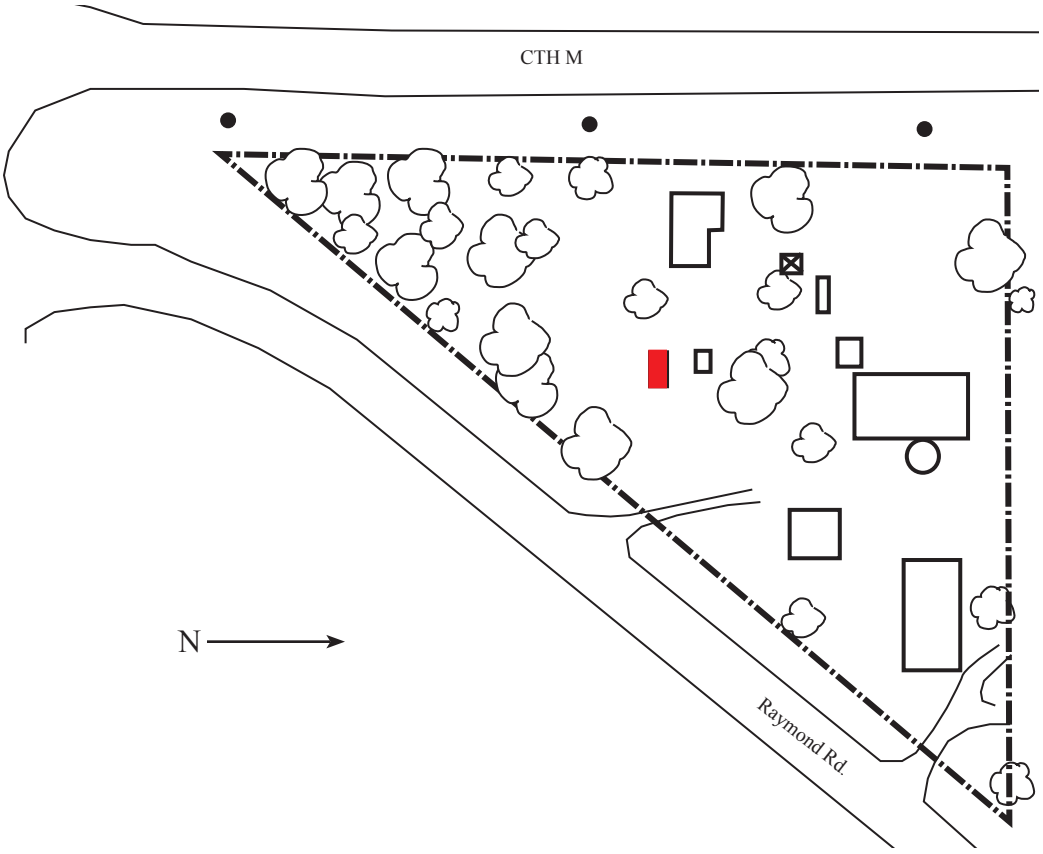
Attachment **5-E**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Milk House



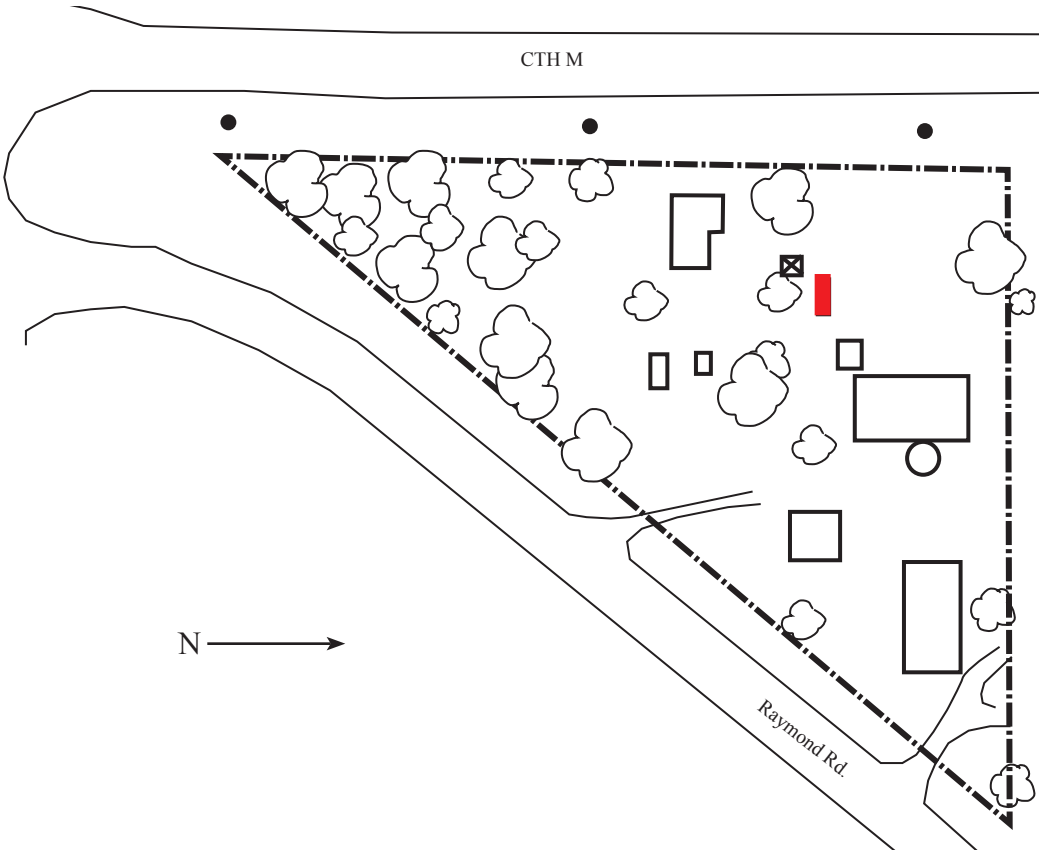
Attachment **5-F**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Machine Shed



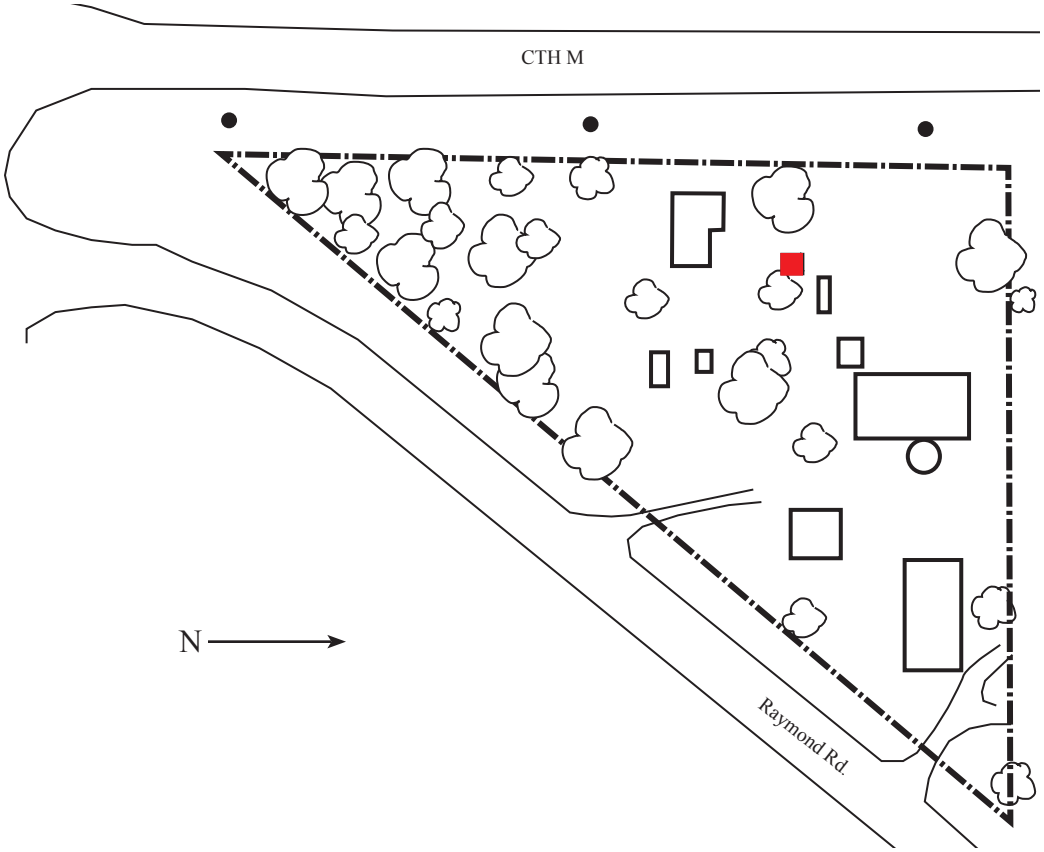
Attachment **5-G**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Garage



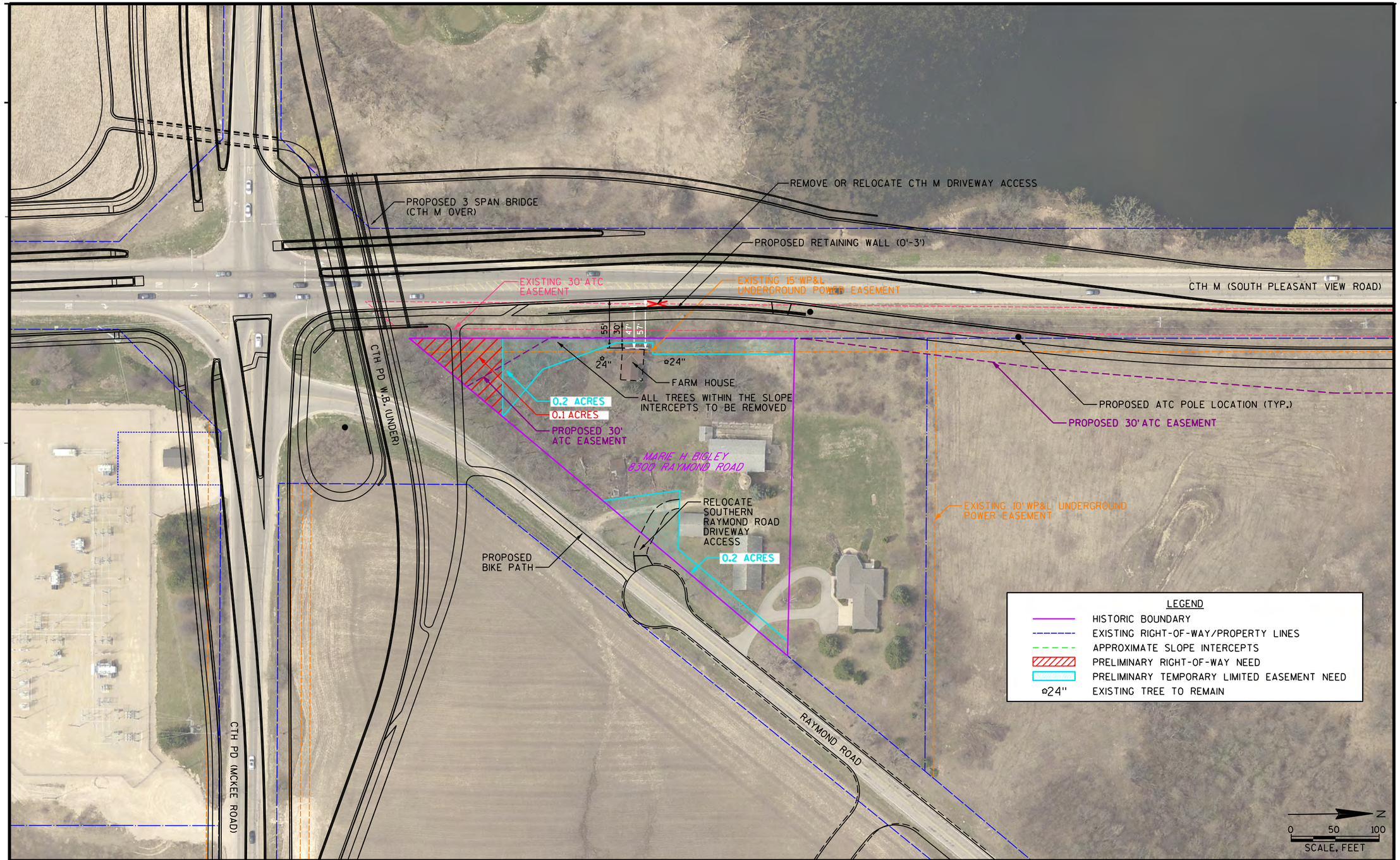
Attachment **5-H**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Chicken Coop



Attachment **5-I**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Animal Trough

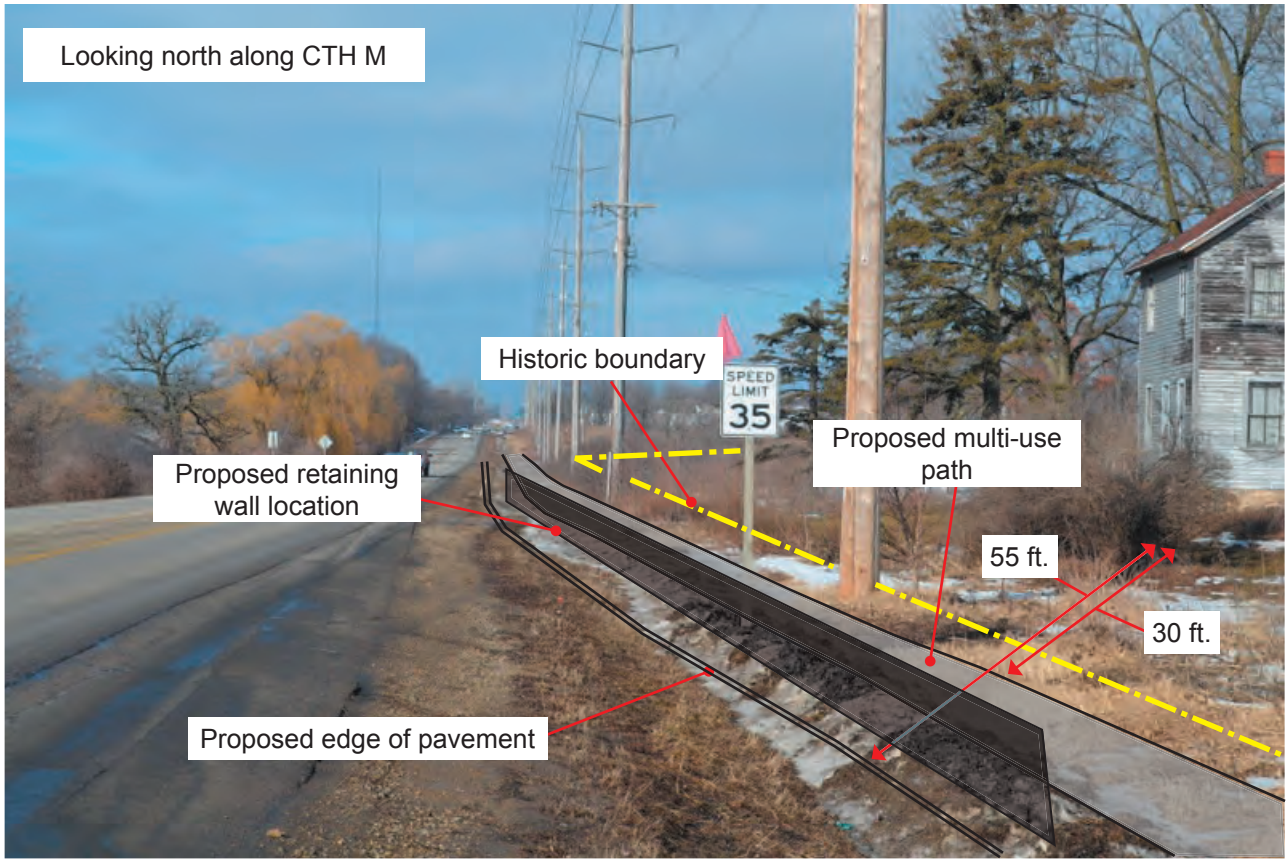


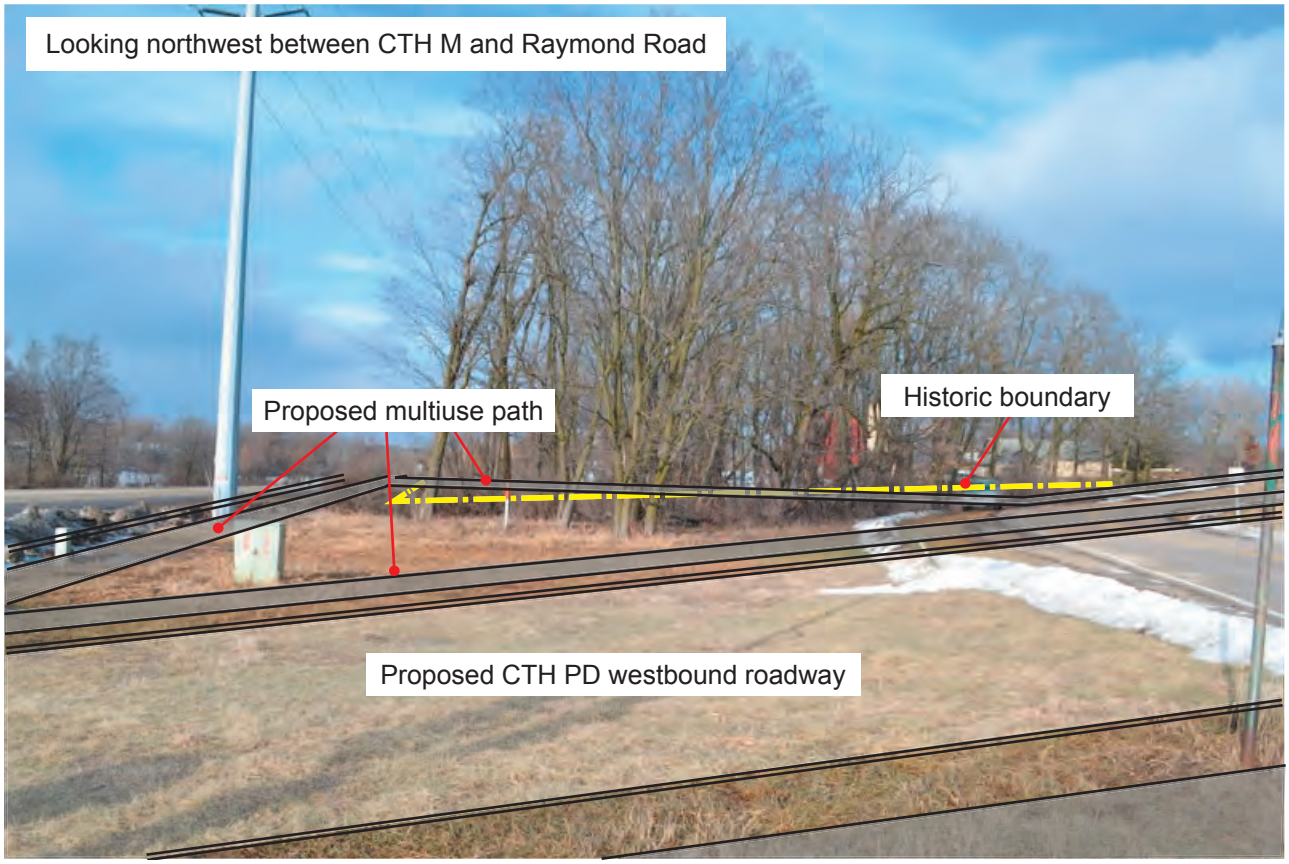
Attachment **5-J**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Windmill



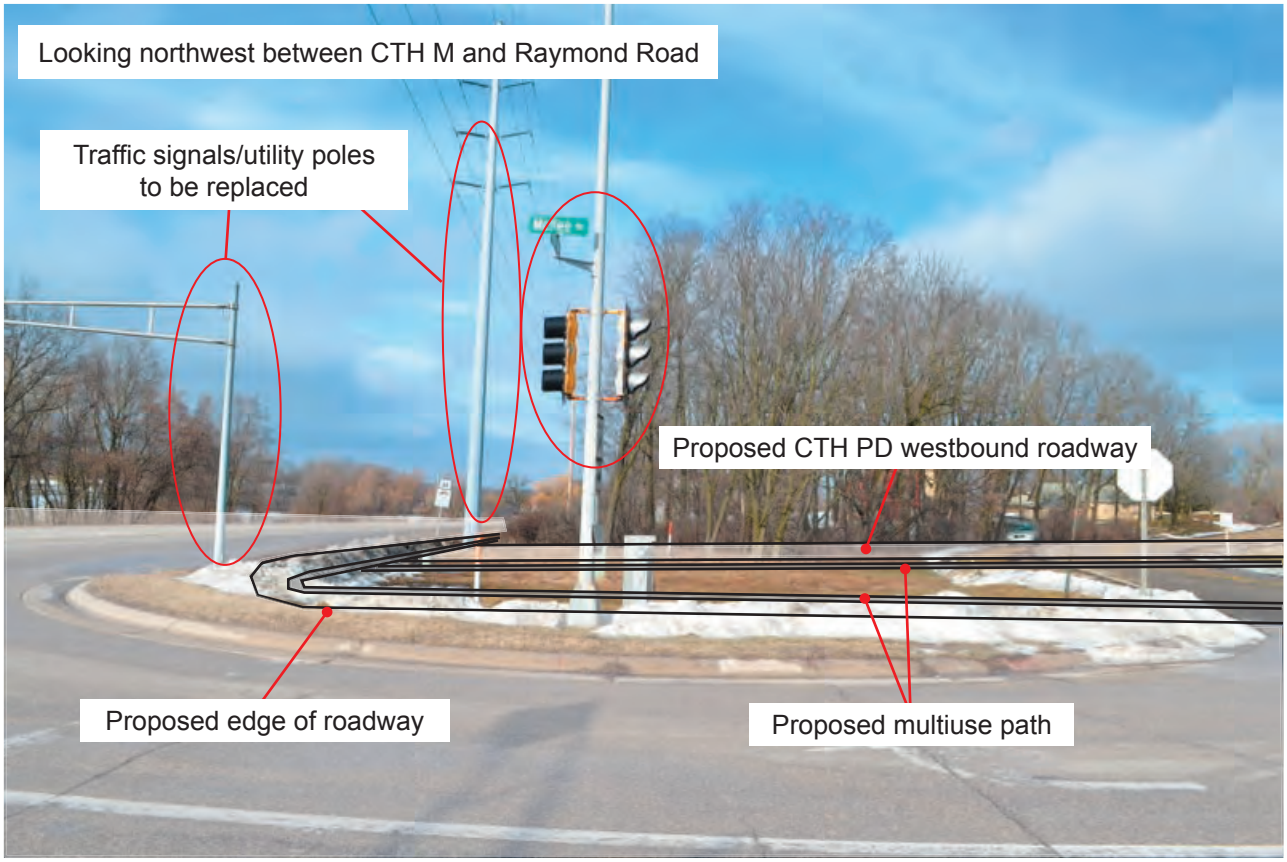
PROJECT NO: 00373030	HWY: CTH M	COUNTY: DANE	8300 RAYMOND ROAD HISTORICAL PROPERTY EXHIBIT	SHEET	E

Attachment **6-A**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Proposed Activities

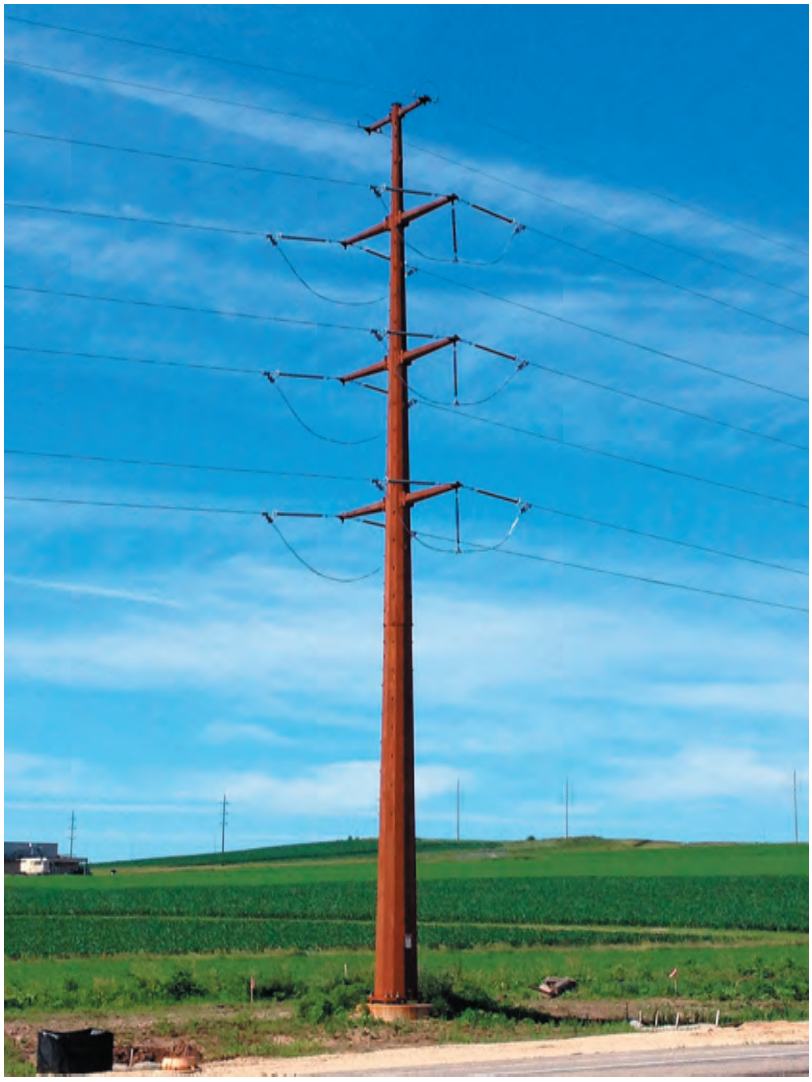




Attachment **6-B**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Existing/ Proposed Conditions



Attachment **6-C**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Existing/ Proposed Conditions



Attachment **6-D**	Schroeder-Stickelberg-Thompson Farmstead 8300 Raymond Rd.	Proposed Utility Poles

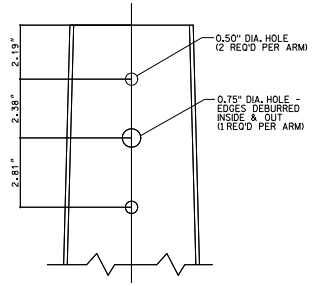
Attachment **6-E**

Schroeder-Stickelberg-Thompson Farmstead

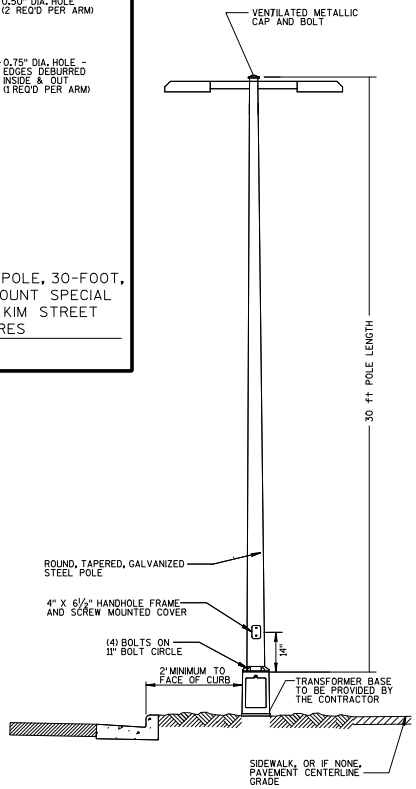
8300 Raymond Rd.

Proposed Street Lights

2



TYPICAL DETAIL OF STEEL POLE, 30-FOOT, (111) GAUGE DRILLING TO MOUNT SPECIAL (100, 150, OR 250) WATT KIM STREET LIGHTING FIXTURES

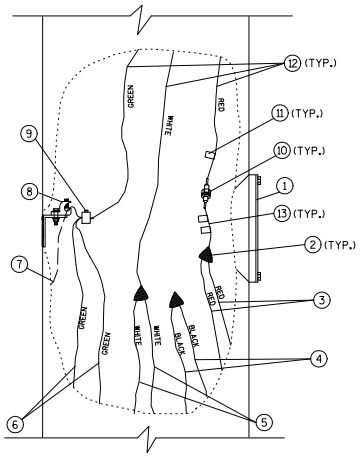


DETAIL FOR STEEL POLE, 30-FOOT, (11) GAUGE
SHOWN ABOVE WITH LIGHTING FIXTURES, SPECIAL, (100, 150, OR 250) WATT, HPS, KIM

2

1. HANDHOLE AND COVER
2. INSULATED SPLICE
3. INSULATED LIGHTING CKT CONDUCTORS FROM SYSTEM RACEWAY
4. ALTERNATE INSULATED LIGHTING CKT CONDUCTORS FROM SYSTEM RACEWAY PASSING THROUGH THIS POLE
5. LIGHTING CKT GROUNDED CONDUCTORS FROM SYSTEM RACEWAY
6. LIGHTING SYSTEM GROUNDING CONDUCTORS
7. #4 BARE EQUIPMENT GROUNDING CONDUCTOR TO GROUND ROD
8. HANDHOLE GROUNDING LUG
9. REVERSIBLE PRESSURE OR COMPRESSION GROUNDING CONNECTOR (NOT INSULATED)
10. FUSE ASSEMBLY, AS REQUIRED
11. CIRCUIT TAG
12. #12 AWG CONDUCTORS TO LUMINAIRE
13. 12" PIGTAIL BETWEEN SPLICE AND FUSE ASSEMBLY

SEE WISDOT SDD'S "NON FREEWAY LIGHTING UNIT POLE WIRING" (9E3-3) & "ELECTRICAL HANDHOLE WIRING" (10HL1-1) FOR ADDITIONAL INFORMATION NOT SHOWN ON THIS DETAIL.

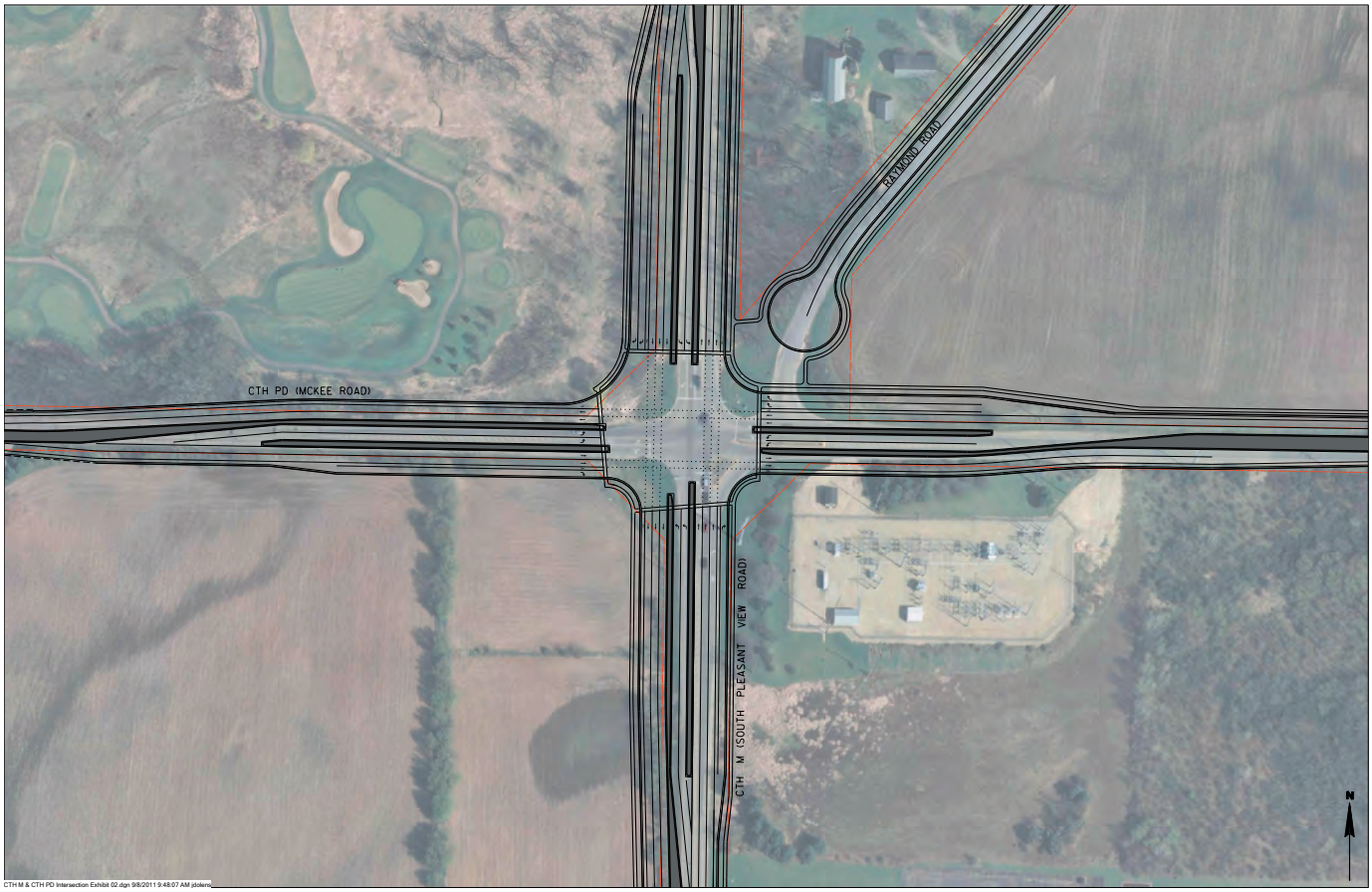


POLE WIRING DETAIL
NO SCALE

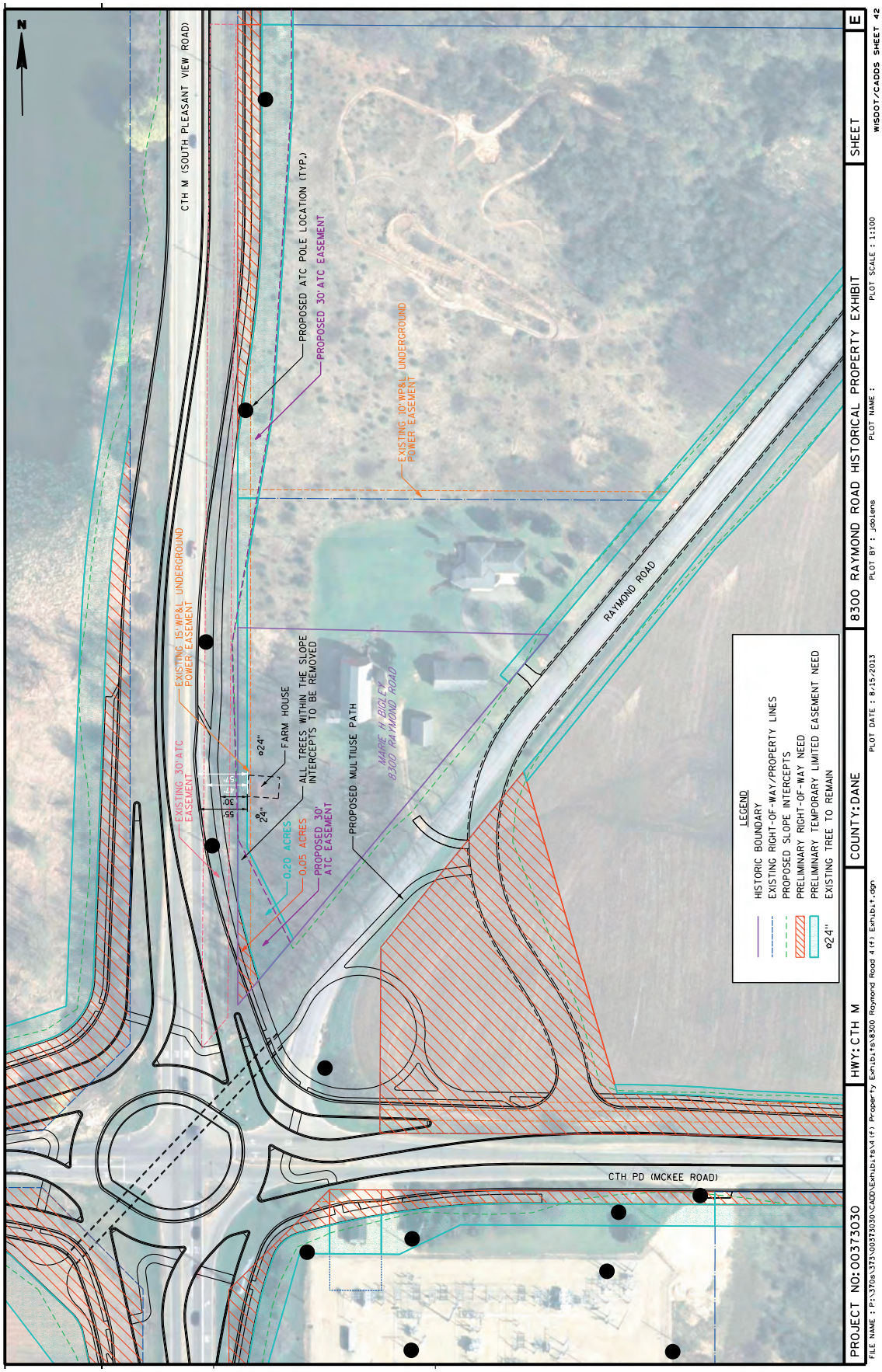
STREET LIGHTING GENERAL NOTES:

1. NO CIRCUIT CONDUCTOR SPLICES WILL BE ALLOWED IN PULL BOXES.
2. REMOVAL OF ALL AERIAL CABLE AND ABANDONMENT OF BELOW GRADE WIRING SHALL BE INCIDENTAL TO THE REMOVING LIGHTING UNITS & REMOVING CONCRETE BASES BID ITEMS.
3. CONTACT CITY FORESTRY 48-HOURS PRIOR TO INSTALLING STREET LIGHTS IF TREE TRIMMING IS NEEDED. NEW TREES SHALL HAVE A MINIMUM OFFSET OF 30' FROM ANY STREET LIGHT.
4. THE MINIMUM OFFSET FOR STREET LIGHT BASES FROM THE EDGE OF DRIVEWAYS SHALL BE:
   RESIDENTIAL - 5'
   COMMERCIAL - 10'
5. CHECK FOR OVERHEAD UTILITY CONFLICTS PRIOR TO CONSTRUCTING CONCRETE BASES.
6. INSTALL CONDUIT AT A DEPTH OF 12-INCHES BELOW SUBGRADE WHEN CROSSING ROADWAYS.
7. THE EXACT LOCATION OF THE LIGHTING CONTROL CABINETS SHALL BE DETERMINED IN THE FIELD BY THE CITY OF MADISON AND THE ENGINEER.
8. REFER TO STRUCTURE PLANS FOR ADDITIONAL ELECTRICAL WORK REQUIRED. THE INSTALLATION OF THE UNDERDECK LUMINAIRES WILL REQUIRE COORDINATION WITH THE STRUCTURE WORK.
9. CLEARLY LABEL UNUSED CONDUCTORS AS "SPARE" IN ALL CONDUIT RUNS CONTAINING UNUSED CONDUCTORS.

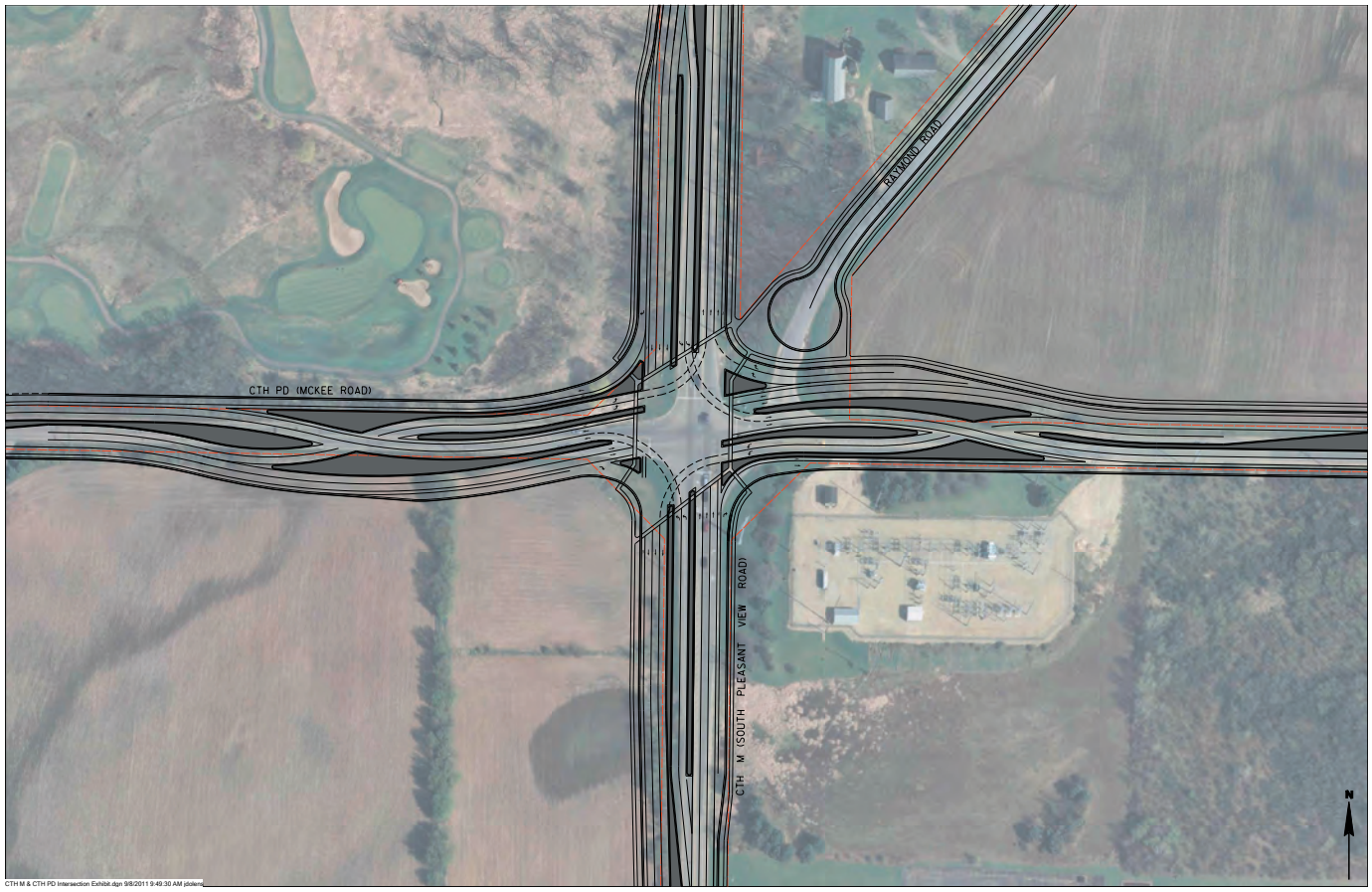
HWY: CTH M	COUNTY: DANE	CONSTRUCTION DETAILS	SHEET 42	E



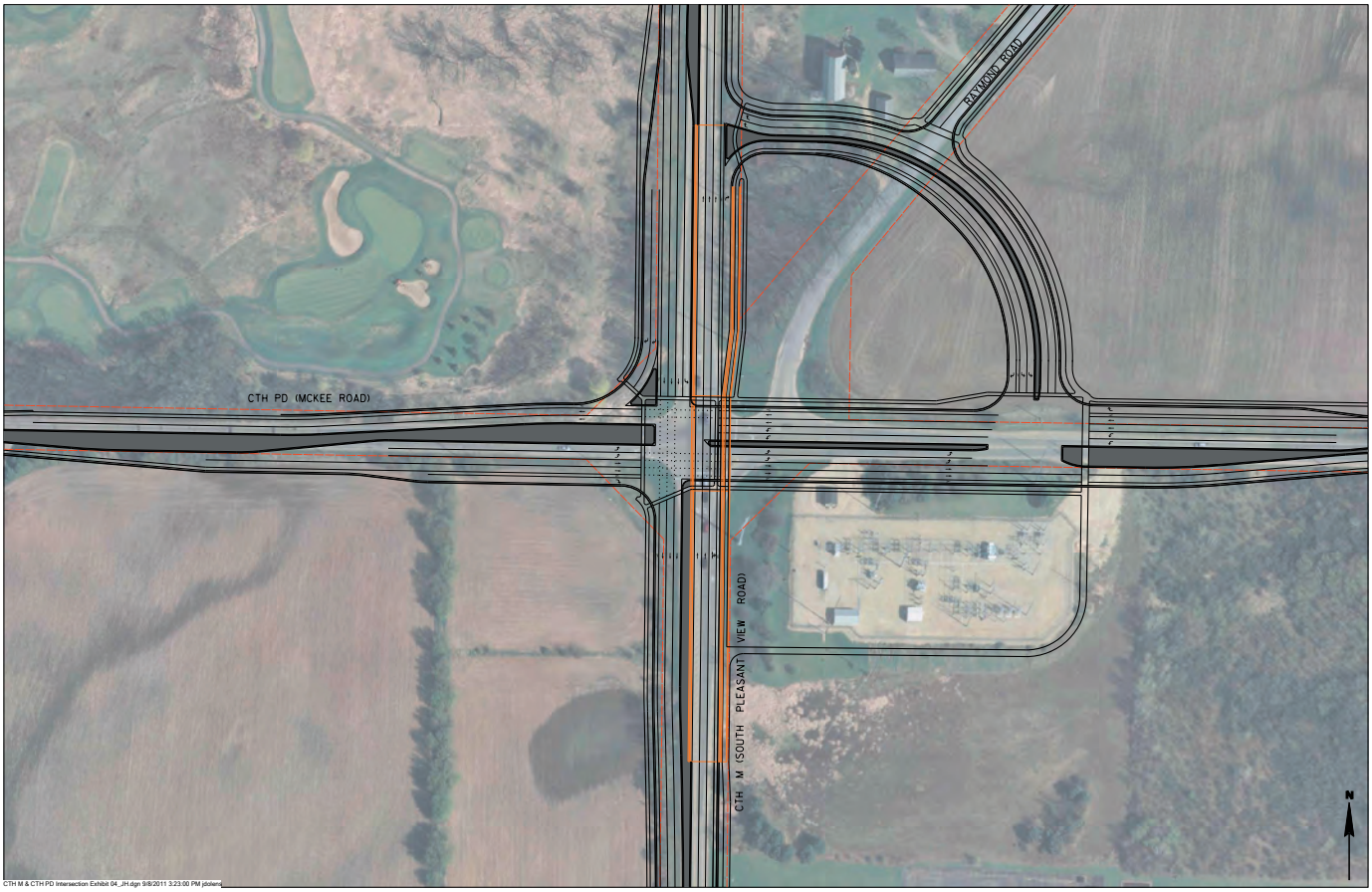
Attachment **7-A**	Project Alternative Traffic Signals	



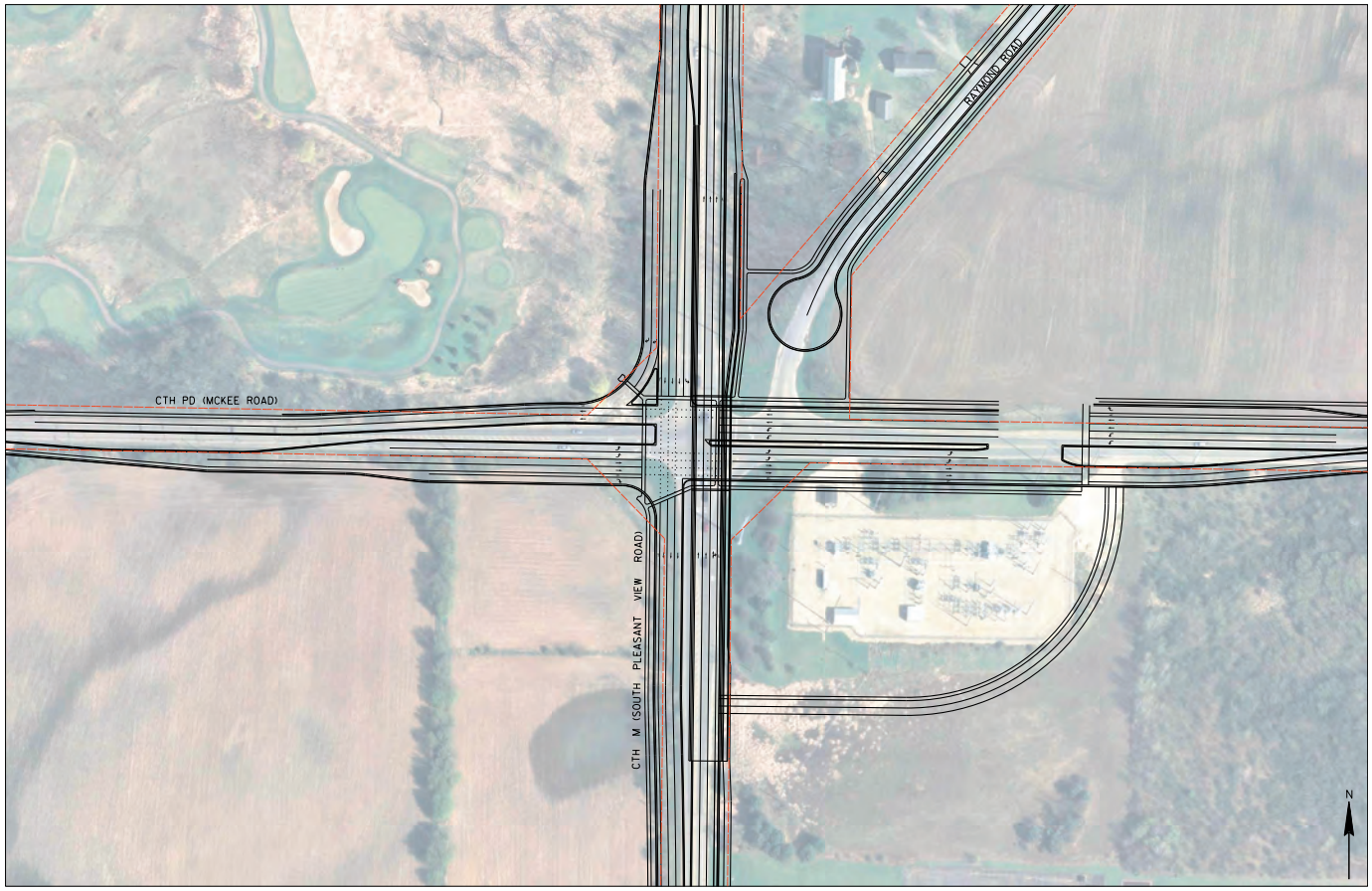
Attachment	Project Alternative	
7-B	Multi-Lane Roundabout	



Attachment	Project Alternative	
7-C	Continuous Flow Intersection	



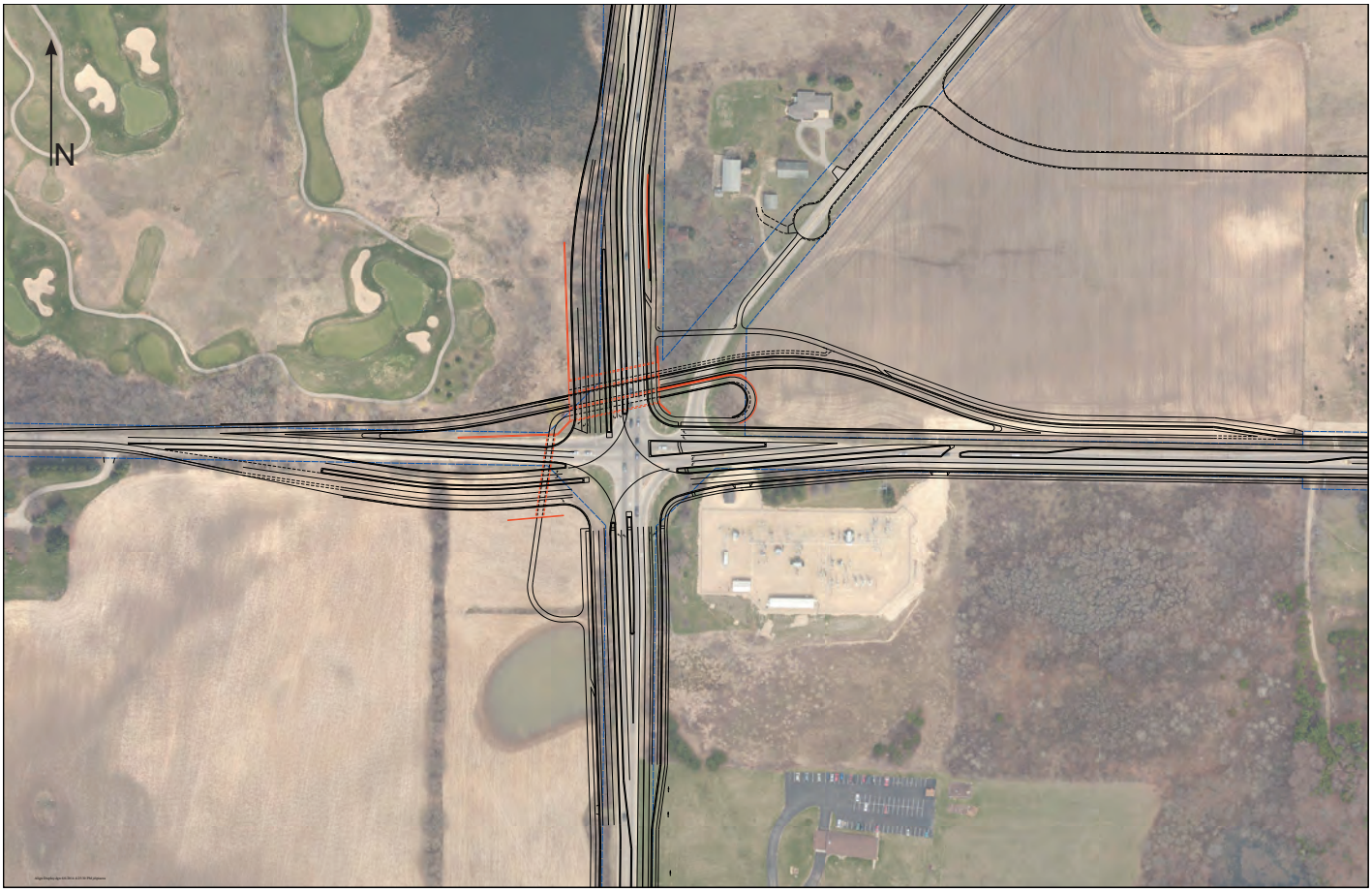
Attachment **7-D**	Project Alternative Grade-Separated Jug Handle (NE Quadrant)	



Attachment **7-E**	Project Alternative Grade-Separated Jug Handle (SE Quadrant)	

Attachment	Project Alternative	
7-F	Grade-Separated Jug Handle (SW Quadrant)	

Attachment **7-G**	Project Alternative Tight Diamond Interchange	



Attachment	Project Alternative	
7-H	CTH PD Westbound Underpass	

November 16, 2011

Subject: 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Dear Property Owner or Business Owner:

You are invited to attend a public information meeting regarding the reconstruction of County Highway M (CTH M) between Cross Country Road and Prairie Hill Road.

The meeting will take place at the Verona Senior Center, 108 Paoli Street, Verona, WI on Thursday, December 8 from 6 pm until 8 pm. Representatives of the City of Madison, the City of Verona, and Dane County will be available to discuss the proposed project and address any questions or concerns. A short presentation will begin at 6:30 pm and include a basic overview of project concepts and design alternatives. Project staff will be available before and after the presentation to answer questions and provide additional information regarding the project.

Persons with a concern for, or knowledge about historic buildings and structures and archaeological sites are encouraged to attend this meeting. You can also provide comments to city or county representatives or any of the project design team members. Contact information is listed below.

The proposed project is scheduled for 2014 and 2015 construction. The CTH M project limits are from the intersection of Cross Country Road and CTH M to the intersection of Prairie Hill Road and CTH M. McKee Road (CTH PD) will also be reconstructed from approximately 1500' west of the CTH M intersection to Meriter Way. Similarly, Mid Town Road will be reconstructed from Waterbend Drive to Waldorf Boulevard. Finally, Raymond Road will be reconstructed from the CTH PD intersection to the Meriter Hospital driveway. A project location map is attached. Key project features include:

- Reconstruction of CTH M into an urban arterial corridor
- Intersection improvements at McKee Road (CTH PD) and Mid Town Road
- Bicycle and pedestrian facility improvements including sidewalks, bike lanes, paths, and underpasses.
- Storm sewer, sanitary sewer, and water main construction
- Street lighting

Property owners who have private storm sewer laterals or private utilities within the highway right-of-way are urged to attend the meeting or contact Jason DiPiazza with MSA Professional Services at (608) 242-6640 or jdipiazza@msa-ps.com.

If you have questions, concerns, or information that may assist in the development of this project, we encourage you to attend the meeting. Hearing impaired people may request an interpreter at the meeting by contacting Jason DiPiazza with MSA Professional Services. If we can provide additional

information, you can contact either Jason DiPiazza with MSA Professional Services, Rob Phillips with the City of Madison, or Ron Rieder with the City of Verona.

Sincerely,

Robert F. Phillips, P.E.
City of Madison
City Engineer
(608) 266-4751
rphillips@cityofmadison.com

Ron Rieder
City of Verona
Director of Public Works
(608) 848-6695
ron.rieder@ci.verona.wi.us

Pamela J. Dunphy, P.E.
Dane County Highway De
Assistant Commissioner
(608) 266-4036
dunphy@co.dane.wi.us

Enc.

Public Information Meeting #1

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: December 8, 2011
Location: Verona City Center, 111 Lincoln Street

The information in this document (including names, addresses, phone numbers, e-mail addresses, and signatures) is not confidential, and may be subject to disclosure upon request, pursuant to the requirements of the Wisconsin open records law, sections 19.31—19.39 of the Wisconsin Statutes.

PIM Meeting Attendees

Name & Business Name (if applicable)	Street Address & Email or Phone Number
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
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Public Information Meeting #1

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: December 8, 2011
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Public Information Meeting #1

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
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Dane County

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Public Information Meeting #1

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
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Public Information Meeting #1

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: December 8, 2011
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Comment Form

City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County
Project I.D. 5992-09-81

Re PD + M: I'm not a lover of "roundabouts", especially on such a busy corner. People always seem to get out of their correct lane on the "round" part — hence more opportunity for accidents. There is also the confusion in "yielding"

Is there going to be a pathway on the W side of M north to Morse Pond? It would be nice if people could enjoy the pond, especially when the geese ducks are around — or just as a nice place to enjoy.

(TWL)

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Use back page if more space is required.
PLEASE PRINT

Name: [redacted]

Address: [redacted]

Email/Phone: [redacted]

Send to:
MSA Professional Services
2901 International Lane, Suite 300
Attn: Jason DiPiazza Madison WI 53704
Phone (800) 446-0679
jdipiazza@msa-ps.com

How do you go from 6 lanes (PD to Prairie Hill) to 4 lanes (M past PD)

What happens with the current road easements when you move into them - Do you then take new one ~~them~~ from the adjacent property? Who pays for that? owner? county? federal gov.?

Why don't you take off more on the E side of M across from Moose pond to allow for walks, etc.

Attachment 8-I	Public Information Meeting December 8, 2011	Marie Bigley Comment Sheet, p.2

May 4, 2012

Subject: 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Dear Property Owner or Business Owner:

You are invited to attend a public information meeting regarding the reconstruction of County Highway M (CTH M) between Cross Country Road and Prairie Hill Road.

The meeting will take place at the Verona Senior Center, 108 Paoli Street, Verona, WI on Thursday, May 24th from 6 pm until 8 pm. Representatives of the City of Madison, the City of Verona, and Dane County will be available to discuss the proposed project and address any questions or concerns. A short presentation will begin at 6:30 pm and include a basic overview of project concepts and the recommended design alternatives. Project staff will be available before and after the presentation to answer questions and provide additional information regarding the project.

Persons with a concern for, or knowledge about historic buildings and structures and archaeological sites are encouraged to attend this meeting. You can also provide comments to city or county representatives or any of the project design team members. Contact information is listed below.

The proposed project is now scheduled for 2015 and 2016 construction. The CTH M project limits are from the intersection of Cross Country Road and CTH M to the intersection of Prairie Hill Road and CTH M. McKee Road (CTH PD) will also be reconstructed from approximately 1500' west of the CTH M intersection to Meriter Way. Similarly, Mid Town Road will be reconstructed from Waterbend Drive to Waldorf Boulevard. Finally, Raymond Road will be reconstructed from the CTH PD intersection to the Meriter Hospital driveway. A project location map is attached. Key project features include:

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- Intersection improvements at McKee Road (CTH PD) and Mid Town Road. The recommended design alternative includes a roundabout at McKee Road and a signalized intersection at Midtown Road.
- Bicycle and pedestrian facility improvements including sidewalks, bike lanes, paths, and underpasses.
- Storm sewer, sanitary sewer, and water main construction
- Street lighting

Property owners who have private storm sewer laterals or private utilities within the highway right-of-way are urged to attend the meeting or contact Jason DiPiazza with MSA Professional Services at (608) 242-6640 or jdipiazza@msa-ps.com.

May 4, 2012

If you have questions, concerns, or information that may assist in the development of this project, we encourage you to attend the meeting. Persons with hearing impairment may request an interpreter at the meeting by contacting Jason DiPiazza with MSA Professional Services. If we can provide additional information, you can contact either Jason DiPiazza with MSA Professional Services, Rob Phillips with the City of Madison, or Ron Rieder with the City of Verona.

Sincerely,

Chris Petykowski, P.E.
City of Madison
Principal Engineer
(608) 267-8678
cpetykowski@cityofmadison.com

Ron Rieder
City of Verona
Director of Public Works
(608) 848-6695
ron.rieder@ci.verona.wi.us

Pamela J. Dunphy, P.E.
Dane County Highway Dept.
Assistant Commissioner
(608) 266-4036
dunphy@co.dane.wi.us

Enc.

Public Information Meeting #2

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: May 24, 2012
Location: Verona Senior Center, 108 Paoli Street, Verona, WI

The information in this document (including names, addresses, phone numbers, e-mail addresses, and signatures) is not confidential, and may be subject to disclosure upon request, pursuant to the requirements of the Wisconsin open records law, sections 19.31—19.39 of the Wisconsin Statutes.

PIM Meeting Attendees

Name & Business Name (if applicable)	Street Address & Email or Phone Number
[redacted]	[redacted]
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Attachment 8-L	Public Information Meeting May 24, 2012	Sign-In Sheet, p.1

Public Information Meeting #2

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: May 24, 2012
Location: Verona Senior Center, 108 Paoli Street, Verona, WI

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PIM Meeting Attendees

Name & Business Name (if applicable)	Street Address & Email or Phone Number
[redacted]	[redacted]
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Public Information Meeting #2

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: May 24, 2012
Location: Verona Senior Center, 108 Paoli Street, Verona, WI

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PIM Meeting Attendees

Name & Business Name (if applicable)	Street Address & Email or Phone Number
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Public Information Meeting #2

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: May 24, 2012
Location: Verona Senior Center, 108 Paoli Street, Verona, WI

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PIM Meeting Attendees

Name & Business Name (if applicable)	Street Address & Email or Phone Number
[redacted]	[redacted]
[redacted]	[redacted]

PHONE CONVERSATION RECORD

MSA PROFESSIONAL SERVICES
More ideas. Better solutions.

Project No.: 5992-09-81

Talked with:	Marie Bigley	**Time:**	11:30 a.m.
Of:	Property Owner - 8300 Raymond Road	**Phone No.:**	608.845.6312
Re:	Public Information Meeting – Invite Letter	**Date:**	November 18, 2011

☐ **Message** ☐ **Reply** ☐ **I placed call** ☒ **Party called**

Ms. Bigley called in response to the invite letter she received for the PIM on December 8, 2011. She has been in to see Chris Petykowski with her son regarding the project, but had some follow up questions regarding the invite letter. She wanted to know if the proposed sewer work on Raymond Road that was mentioned in the letter would include private hook ups for sewer and water. I indicated that the sewer work was for MMSD and is a large interceptor sewer, not for private hook up. I told her I didn't know if Madison had plans to get sewer and water towards her property but would check.

Ms. Bigley also asked if Raymond Road would become a cul-de-sac at CTH PD. I informed her that we are showing that to be the case in our preliminary designs.

Ms. Bigley plans to attend the PIM.

Action or follow-up necessary

Follow up with Madison regarding public sewer and water connections.

Signed _____
Jason DiPiazza, Project Manager

Offices in Illinois, Iowa, Minnesota, and Wisconsin
2901 International Lane, Suite 300, Madison, WI 53704-3133
(608) 242-7779 (800) 446-0679
FAX: (608) 242-5664 WEB ADDRESS: www.msa-ps.com

Attachment **8-P**	Property Owner Communication	

PHONE CONVERSATION RECORD

MSA PROFESSIONAL SERVICES
More ideas. Better solutions.

Project No.: 5992-09-81

Talked with:	Marie Bigley	**Time:**	11:30 AM
Of:	Property Owner - 8300 Raymond Road	**Phone No.:**	608.845.6312
Re:	CTH M project	**Date:**	February 7, 2012

☐ **Message** ☐ **Reply** ☐ **I placed call** ☒ **Party called**

Ms. Bigley called to ask some more questions. I provided her with updates on the Section 106 process: the documents are awaiting review and approval by the State Historical Preservation Office (SHPO). She is concerned that if her property is deemed historical (I corrected her that it was eligible to be listed as historical) that she will have more maintenance responsibilities. I told her that her property was hers to manage as she desires, however we have to recognize the opportunity for any future land owners, should there be one, to maintain and preserve the historical nature of the property.

I let her know that we will attempt to avoid impacts to any of her property, including tree removal.

Ms. Bigley asked about the utilities. I indicated we were working with the utility owners and that the overhead lines would have to move, but I didn't know where to yet. She is worried they will be on the front porch of her house. The buried electric is already very close.

Ms. Bigley will be in Texas for most of February and March. She does get her mail forwarded there so if she will still be there for the next public meeting she will at least know it occurred and she is free to call me with any questions she may have.

Action or follow-up necessary: None

cc: [cc:]
[cc:]

Signed _____
Jason DiPiazza, Project Engineer

Offices in Illinois, Iowa, Minnesota, and Wisconsin
2901 International Lane, Suite 300, Madison, WI 53704-3133
(608) 242-7779 (800) 446-0679
FAX: (608) 242-5664 WEB ADDRESS: www.msa-ps.com

Attachment **8-Q**	Property Owner Communication	

February 28, 2014

Subject: 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
County M
Dane County

Dear Property Owner or Business Owner:

You are invited to attend a public information meeting regarding the reconstruction of County M (South Pleasant View Road) between Cross Country Road and Prairie Hill Road.

The meeting will take place at the Verona Senior Center, 108 Paoli Street, Verona, WI on Wednesday, March 12 from 6 p.m. until 8 p.m. Representatives of the City of Madison, the City of Verona, and Dane County will be available to discuss the proposed project and address any questions or concerns. There will be a short presentation at 6 p.m. Project staff will be available before and after the presentation to answer questions and provide additional information regarding the project.

This meeting will update the public on changes to the recommended design of the intersection of Mckee Road (County PD) and County M. A roundabout design was recommended and approved by City of Madison and Verona resolutions in 2012; however since that time, continued development of roundabout design and capacity analysis, along with continued growth of traffic volume projections in the area have resulted in the consideration of two new alternatives for the County M and County PD intersection.

The proposed project is planned to begin construction in the fall of 2015 and continue through 2016. Key project features include:

- Reconstruction of County M into an urban arterial corridor
- Intersection improvements at McKee Road (County PD) and Mid Town Road.
- Bicycle and pedestrian facility improvements including sidewalks, bike lanes, paths, and underpasses.
- Storm sewer, sanitary sewer, and water main construction
- Street lighting

Property owners who have private storm sewer laterals or private utilities within the highway right-of-way are urged to attend the meeting or contact Jason DiPiazza with MSA Professional Services at (608) 242-6640 or jdipiazza@msa-ps.com. Persons with a concern for, or knowledge about historic buildings and structures and archaeological sites are encouraged to attend this meeting. You can also provide comments to city or county representatives or any of the project design team members. Contact information is listed below.

February 28, 2014

If you have questions, concerns, or information that may assist in the development of this project, we encourage you to attend the meeting. Persons with hearing impairment may request an interpreter at the meeting by contacting Jason DiPiazza with MSA Professional Services. If we can provide additional information, you can contact either Jason DiPiazza with MSA Professional Services, Chris Petykowski with the City of Madison, Ron Rieder with the City of Verona, or Pam Dunphy with Dane County Highway Department.

Sincerely,

Chris Petykowski, P.E.

City of Madison
Principal Engineer
(608) 267-8678
cpetykowski@cityofmadison.com

Ron Rieder

City of Verona
Director of Public Works
(608) 848-6695
ron.rieder@ci.verona.wi.us

Pamela J. Dunphy, P.E.

Dane County Highway Dept.
Assistant Commissioner
(608) 266-4036
dunphy@co.dane.wi.us

Public Information Meeting #3

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: March 12, 2014
Location: Verona Senior Center, 108 Paoli Street, Verona, WI

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PIM Meeting Attendees

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Public Information Meeting #3

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: March 12, 2014
Location: Verona Senior Center, 108 Paoli Street, Verona, WI

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Public Information Meeting #3

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: March 12, 2014
Location: Verona Senior Center, 108 Paoli Street, Verona, WI

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Public Information Meeting #3

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: March 12, 2014
Location: Verona Senior Center, 108 Paoli Street, Verona, WI

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PIM Meeting Attendees

Name & Business Name (if applicable)	Street Address & Email or Phone Number
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Public Information Meeting #3

Project I.D. 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Date: March 12, 2014
Location: Verona Senior Center, 108 Paoli Street, Verona, WI

The information in this document (including names, addresses, phone numbers, e-mail addresses, and signatures) is not confidential, and may be subject to disclosure upon request, pursuant to the requirements of the Wisconsin open records law, sections 19.31—19.39 of the Wisconsin Statutes.

PIM Meeting Attendees

Name & Business Name (if applicable)	Street Address & Email or Phone Number
[redacted]	
[redacted]	[redacted]

April 12, 2013

Subject: 5992-09-81
City of Madison, South Pleasant View Road
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

Dear Ms. Bigley

The State Historical Preservation Office (SHPO) has concurred with the Wisconsin Department of Transportation's (WisDOT) finding that a portion of your property surrounding the original farmhouse has significant historic value. They have also concurred that the proposed CTH M reconstruction project referenced above will have an adverse effect on the setting of this historic resource. As required by Section 106 of the National Historic Preservation Act of 1966, the project will be required to mitigate any adverse effects that cannot be avoided.

An important step in developing a mitigation plan is to hold a consultation meeting with the project stakeholders, including you as the property owner. At this meeting, we will review the project design, the adverse effects that the proposed project would have on the historic resource, and develop a plan to mitigate these effects. Typical mitigation measures include, but are not limited to written and photographic documentation of the property, survey and inventory of other nineteenth and early twentieth century farmsteads in the immediate area, and incorporation of the property into an existing Dane County Historical Society project, database, or website.

We would like to have this meeting the week of April 28, 2013 or May 6, 2013. The meeting location will be in Madison, possibly at the Wisconsin Historical Society, 816 State Street. Gail Klein with Great Lakes Archaeological Research Center, Inc. will follow up with a phone call to you to coordinate a day and location that is convenient for you to attend this meeting. If you have any questions about the meeting, or would like to contact either of us directly to coordinate a meeting time, please give either of us a call. If you have any questions about the Section 106 process and how it relates to your property, please do not hesitate to contact either Gail or Jennifer Haas at Great Lakes Archaeological Research Center at the phone numbers below.

Thank you in advance for your time and assistance on this important project!

Contact info:

Jason DiPiazza, Project Manager
MSA Professional Services, Inc.
608-242-7779

Gail Klein
Great Lakes Archaeological
Research Center
541-285-0352.

Jennifer Haas
Great Lakes Archaeological
Research Center
414-481-2093

Sincerely,

Jason DiPiazza P.E., Project Manager, MSA Professional Services

Cc: Chris Petykowski, P.E. Principal Engineer, City of Madison Engineering
Pam Dunphy, P.E. Assistant Commissioner, Dane County Highway Dept.
Ron Rieder, Director of Public Works, City of Verona
Amanda Arnold AICP, Planner/Administrator, Town of Verona
Gail Klein, Great Lakes Archaeological Research Center
Karen Richardson, P.E., Kjohnson Engineers, LPMC

Attachment **9-A**	Consultation Meeting April 29, 2013	Invite letter

MSA
PROFESSIONAL SERVICES
TRANSPORTATION • MUNICIPAL
DEVELOPMENT • ENVIRONMENTAL

Sheet_____ of_____
Project_____ Comp. by_____
Date_____ Ckd. by_____
Proj. No._____

NAME	REPRESENTING
JASON DIAZZA	MSA
Chris Petykowski	City of Madison Engr.
RON RIEGER	City of VERONA
JENNIFER HAAS	GREAT LAKES ARCHAEOLOGICAL RESEARCH CENTER
Shirley Rigga	~~CE~~ friend - Bigley
Marie Bigley	Property owner
Jason Kennedy	WisDOT
BRAD VOSKERS	ATC
Erika Biemann	ATC
Karen Richardson	Kjohnson Engineers
Paul Chellevold	SRF Consulting

Attachment 9-B	Consultation Meeting April 29, 2013	Sign-In Sheet

From: Jason DiPiazza <jdipiazza@msa-ps.com>
Sent: Tuesday, June 25, 2013 1:29 PM
To: Chris Petykowski (CPetykowski@cityofmadison.com); Pam Dunphy (dunphy@co.dane.wi.us); Ron Rieder (ron.rieder@ci.verona.wi.us); Amanda Arnold; Karen Richardson; Brad Vosters (bvosters@atcllc.com); Gail Klein (gklein@glarc.com); Jennifer Haas (jhaas@glarc.com); bigleymh@gmail.com; Kennedy, Jason - DOT (Jason1.Kennedy@dot.wi.gov); EBiemann@atclc.com; Paul M. Chellevold (PChellevold@srfconsulting.com)
Subject: CTH M (S. Pleasant View Road) - 8300 Raymond Road Property

WisDOT Project ID 5992-09-81
S. Pleasant View Road, City of Madison
(Cross Country Road – Prairie Hill Road)
CTH M
Dane County

RE: Consultation and Mitigation of Impacts to historically significant property – 8300 Raymond Road

WisDOT Environmental Services Section has reviewed the Documentation for Consultation (D for C) and Memorandum of Agreement (MOA) for addressing negative impacts to the NRHP listing eligible property located at 8300 Raymond Road, also referred to as the Schroeder-Stickelberg-Thompson Farmstead. These documents include mitigation measures discussed in April at a consultation meeting.

Following comments from WisDOT ESS, the project team is proposing a change to the mitigation measures discussed at the April consultation meeting. This change consists of the replacement of the written description mitigation option with a new mitigation measure in the form of a survey and inventory of historic farmsteads within one mile of the Schroeder-Stickelberg-Thompson Farmstead. This would include a field survey of historic farmsteads within a one mile radius, following the Farmstead Survey Methodology as outlined in the WisDOT Survey Manual. All historic farmsteads identified in this survey will be documented with photographs and sketch maps and records will be created in the Wisconsin Historic Preservation Database (WHPD). In addition, photographic documentation of the Schroeder-Stickelberg-Thompson Farmstead will remain a primary mitigation measure, as discussed at April's consultation meeting.

Please respond with any comments or concerns about this change to the mitigation measures that are proposed above.

Thank you,

Jason

Jason DiPiazza, PE | Team Leader
MSA Professional Services, Inc.
(608) 242-7779

Attachment **9-C**	Consultation Meeting April 29, 2013	Follow-up Correspondence

From : Marie Bigley <bigleymh@gmail.com> Mon, Apr 07, 2014 12:41 AM

Subject : Re: County M Intersection at County PD (McKee Road) 1 attachment

To : Jason DiPiazza <jdipiazza@msa-ps.com>

Thank you for the info about the meeting in Verona. Yes, I will be able to attend and have put the time and date on my calendar. Marie

On Fri, Apr 4, 2014 at 2:21 PM, Jason DiPiazza <jdipiazza@msa-ps.com> wrote:

> Hello Marie,
>
> I hope all is well with you. I'm sorry I didn't get a chance to talk with you at the County M public meeting a couple weeks ago. I saw you there but wasn't able to break away from folks to come talk to you. I did have a couple conversations with your renter, Mr. Puntillo however.
>
> I'm writing to you today to see if you are available to meet regarding the project on April 14th at 10:00 AM. For your convenience, we can meet at the Verona City Hall as we did the last time we met. We would like to go over the changes we made at the intersection that you saw at the public meeting and compare these impacts to those of the roundabout that we were previously showing.
>
> Please let me know if this meeting time and place will work for you. As always, if you have any questions, please don't hesitate to call me: 608-242-6640 is my direct line. I'll give you a call on Monday to make sure you got this message if I haven't heard from you by then.
>
> Thank you in advance for your time Marie. Take care and see you soon,
>
> Jason
>
> **Jason DiPiazza, PE** | Team Leader
> MSA Professional Services, Inc.
> (608) 242-7779

Attachment 9-D	Consultation Meeting April 14, 2014	Invitation

ID 5992-09-81
S. Pleasant View Road Reconstruction
(Prairie Hill Road to Cross Country Road)
CTH M

Documentation for Consultation – April 14, 2014

ATTENDEES

	Name / Representing	Email and Phone Number
1.	Kathy Shillingford, UWM	kshill@uwm.edu 414-559-5092
2.	Jennifer Haas, UWM-GLARC	haasjr@uwm.edu 414-229-3078
3.	Pam Dunphy, Dane Co. Hwy	dunphy@countyofdane.com 2606-4036
4.	Ron Rieder, City of Verona	RON.RIEDER@CI.VERONA.WI.US 848-6801
5.	Karen Richardson, KJohnson Engineers	karenrichardson@kjohnsonengineers.com 829-3850
6.	Marie Bigley	bigleymh@gmail.com 845-6312
7.	Jason Kennedy	Jason.l.Kennedy@dot.wisconsin.gov
8.	Jason DiPiazza - MSA	jdipiazza@msa-ps.com 242-7779
9.	Gail Klein, GLARC	grklein@uwm.edu
10.	Chris Petykowski, City of Madison	cpetykowski@cityofmadison.com 267-8678
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Attachment 9-E	Consultation Meeting April 14, 2014	Sign-in Sheet

SECTION 4(F) DETERMINATION REPORT

University Ridge Golf Course
Correspondence and Documentation

Wisconsin
Federal Highway Administration
Finding of *De Minimis* Impact on Parks, Recreation Areas and Wildlife and Waterfowl Refuges

WISDOT ID: 5992-06-51
Route: CTH M
Termini: Cross County Road to Prairie Hill Road
City/County: Dane County

Name of 4(f) Resource: University Ridge Golf Course

Project description:

The state name for this project is South Pleasant View Road, City of Madison, County Highway M Reconstruction, Cross Country Road to Prairie Hill Road. This project involves a full reconstruction of the CTH M mainline and two intersections. An Environmental Assessment was conducted to satisfy NEPA requirements.

The CTH M corridor is a critical north/south roadway connecting the City of Madison and the City of Verona. The project limits are Cross Country Road to Prairie Hill Road, a distance of 2.9 miles. The proposed project is located in Dane County, Wisconsin in the cities of Madison and Verona and the towns of Verona and Middleton.

The proposed improvements include expansion of CTH M from a two-lane highway to a 4 to 6-lane arterial roadway with a raised median and a multi-use path. Improvements are proposed for the intersections of CTH M – Midtown Road and CTH M – CTH PD. This roadway is a principal arterial on the National Highways System (MAP-21).

The University Ridge Golf Course property is considered a Section 4(f) resource because it is owned, operated and managed by a public agency for the primary purpose of public recreation.

Approximately 3.4 acres of right of way needs to be acquired in the extreme southeast corner of the parcel in order to meet the design needs of the westbound underpass intersection located at CTH M – CTH PD.

The project impacts and proposed construction plans indicate that the impacts to the property will be minimal and will not alter or affect the use of any buildings, greens, tee boxes, and sand traps. These changes will not adversely affect the activities on this property. However, near the CTH M – CTH PD intersection, several trees and shrubs will be removed that border the property lines.

All attempts were made to minimize adverse effects to the golf course property and surrounding landscape. Specific measures taken include:

- Final design to avoid impacting cart path adjacent to green
- Minimize visual impact of the intersection by selecting Westbound Underpass as preferred alternative
- Coordination with University of Wisconsin Facilities Planning and Management staff on final design landscaping details to provide screening between the roadway and golf course while avoiding shade impacts on the green
- Reducing overall roadway width by using acceptable standards for cross-section elements including lane, median, and terrace widths.
- Payment of the fair market value of the land taken

The attached documentation shows the following:

1.
    a. *What the activities, features, and attributes are that qualify University Ridge Golf Course for protection under Section 4(f).*

    b. *What the transportation use of the Section 4(f) resource is.*

    c. *How this use does not adversely affect the activities, features, and attributes listed in 1.a., above. In making this determination, consideration may be given to any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project; and*

2. University of Wisconsin – Madison Board of Regents have been informed that FHWA may make a *de minimis* finding under 4(f) and may use the University of Wisconsin – Madison Board of Regents' written concurrence that the project does not adversely affect the activities, features, and attributes listed in 1.A., above that qualify the property for protection under Section 4(f) in making that finding; and

3. The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource.

4. There are no federal encumbrances [such as 6(f)] on University Ridge Golf Course.

SRF Consulting Group, Inc. | ENGINEERS PLANNERS DESIGNERS

December 6, 2012 SRF No. 0107334

Mr. Gary Brown
Director of Planning and Construction
Campus Planning and Landscape Architecture
919 WARF Office Building
610 Walnut Street
Madison, WI 53726

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)
4(F) PROPERTY COORDINATION – UNIVERSITY RIDGE GOLF COURSE

Dear Mr. Brown:

The City of Madison, in conjunction with the City of Verona and Dane County, is proposing roadway improvements to South Pleasant View Road (CTH M) from Cross Country Road to Prairie Hill Road, a distance of approximately three miles. The proposed improvements consist of expanding South Pleasant View Road initially from two to four lanes from Prairie Oaks Drive to Flagstone Drive with provisions to accommodate six lanes in the future. Flagstone Drive to Prairie Hill Road initially will be constructed with an additional northbound lane (three northbound lanes) and two southbound lanes, which will be able to accommodate a third southbound lane in the future if needed. The proposed project also includes expansion of the roadway to a multi-lane urban arterial with a raised median, bike lanes, a multi-use path, and sidewalks.

This action is part of a multi-phase project to reconstruct the CTH M corridor, which includes reconstructing the Mid Town Road intersection and provision of a roundabout at the CTH PD intersection. To accommodate the CTH M roadway widening and proposed roundabout at CTH PD, approximately 2.5 acres of right-of-way will need to be acquired from the University Ridge Golf Course. The required property is located adjacent to CTH M along the southeastern edge of the golf course property (please see attached 4(f) Properties Exhibit).

The University Ridge Golf Course property is considered a Section 4(f) resource because it is owned, operated and managed by a public agency for the primary purpose of public recreation. An initial review of the project impacts and proposed construction plans indicate that the impacts to the property will be minimal and will not alter or affect the use of any buildings, greens, tee boxes, sand traps, or golf cart paths.

Under Section 4(f) of the U.S. Department of Transportation Act of 1966, the Federal Highway Administration (FHWA) "may not approve the use of land from a significant publicly-owned park, or recreation area" unless a determination is made that:

1) There is no feasible and prudent alternative to the use of land from the property
2) The action includes all possible planning to minimize harm to the property.

Federal law (SAFETEA-LU Section 6009(a)) amended Section 4(f) to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). FHWA has issued guidance for making *de minimis* impacts as follows:

1) An impact of a park, recreation area, or wildlife refuge may be determined to be de minimis if:
    a. The transportation use of the Section 4(f) resource, together with any impact, avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features and attributes that qualify the resource for protection under Section 4(f)
    b. The official with jurisdiction over the property are informed of FHWA's intent to make the *de minimis* impact finding based on their written concurrence that the project will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f); and
    c. The public has been afforded an opportunity to review and comment on the effects of the project

This letter serves to initiate official consultation and coordination with the University Ridge Golf Course property. Regulations within US Department of Transportation FHWA, Section 4(f) Policy Paper – July 20, 2012, require that the official with jurisdiction has been consulted and "has not objected." Specifically, the regulations require concurrence of the official with jurisdiction in the following situations:

1) Finding no adverse effects prior to making *de minimis* impact findings
2) Applying the exception for temporary occupancies
3) Applying the exception for transportation enhancement activities and mitigation activities

At this time, we are requesting your comments regarding the potential *de minimis* impact determination to the University Ridge Golf Course property. Following consideration of your comments and consideration of public comments, we will consult with FHWA and they will make the final Section 4(f) determination. FHWA will inform the official with jurisdiction of their determination.

Once the *de minimis* determination has been made, the official with jurisdiction must concur in writing that the project will not affect the activities, features, or attributes that make the property eligible for Section 4(f) protection. The final determination regarding the subject property will be included in the Final Environmental Assessment (EA) document.

If you have any questions about the Section 4(f) process or would like to set up a meeting to help clarify the process, please call me at (608) 829-5875 or contact me by email at pchellevold@srfconsulting.com.

Sincerely,

Paul M. Chellevold
Transportation Planner, SRF Consulting Group, Inc.

Enclosure

WISCONSIN
UNIVERSITY OF WISCONSIN–MADISON

July 31, 2015

Jason DiPiazza, PE
Project Manager, MSA Professional Services, Inc.
2901 International Lane, Suite 300
Madison, WI 53704

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)
4(F) PROPERTY COORDINATION – UNIVERSITY RIDGE GOLF COURSE

Dear Mr. DiPiazza,

In my role as the Associate Vice Chancellor for Facilities Planning & Management, I am writing to you on behalf of the University Of Wisconsin Board Of Regents, University of Wisconsin Athletic Department, University Ridge golf course, and the O.J. Noer Turfgrass Research Facility with regards to the proposed actions of the subject project. After reviewing the above proposed project, ID 5992-09-81, County Highway M, Dane County and you allowing the public the opportunity to review and comment on the effects of the project, it is our opinion that this project will not have any significant adverse effects on university property.

It is our understanding that the City of Madison, City of Verona, and Dane County plan to reconstruct County Highway M (CTH M) and County Highway PD (CTH PD). This is a multi-phase, multi-year project to reconstruct the CTH M corridor. The operators of the University Ridge Golf Course, University of Wisconsin Athletic Department, the O.J. Noer Turfgrass Facility, and staff in Facilities Planning and Management have been consulted for their input in reviewing the potential impacts of the proposed action. It is understood that the following paragraphs represent the general concept of the proposed action and incorporate avoidance, minimization, and mitigation elements developed in cooperation with University officials. With this understanding, the University of Wisconsin-Madison believes the proposed action will have no permanent adverse physical impacts, nor will there be any interference with the protected activities, features, or attributes that make the University Ridge Golf Course eligible for Section 4(f) protection.

The proposed action includes constructing a widened, signalized urban intersection with curb and gutter, storm sewer, sanitary sewer, water service, and street lighting. The elevation of the roadway intersection will be raised and a bridge will be constructed on the north leg, allowing westbound through traffic on CTH PD to pass below the north leg (CTH M). A ten foot wide paved multi-use path will also be constructed below the bridge and continue through an underpass below the west leg of CTH PD, providing an off-highway paved path network between the cities of Verona, Madison, and Middleton. The proposed intersection design will require concrete retaining walls along CTH PD and CTH M in proximity to the University Ridge property to accommodate the raised roadway elevation. The intersection improvements will benefit the golf course by improving highway access to the facility, especially for major events.

Access to the golf course is located outside the project limits thus will not be directly impacted by the proposed action. As you have stated, access to the golf course and the turfgrass research facility will be maintained throughout construction. The project design team will work with University Ridge and University of Wisconsin Athletics staff to coordinate major athletic events that will be held during the anticipated construction time frame in 2017 and 2018.

Associate Vice Chancellor - Facilities Planning & Management
9th Floor WARF Building 610 Walnut Street Madison, Wisconsin 53726-2397
(608) 263-3000 FAX (608) 265-3139

The existing University Ridge gateway sign located on University Ridge Golf Course property near the intersection of CTH M and CTH PD is in conflict with the proposed construction. This sign was originally designed to be relocated in anticipation of the reconstructed and widened highway intersection. University Ridge staff anticipates financial compensation for the relocation of the sign outside proposed new highway right of way. We expect the project team to coordinate closely with the University Ridge staff on the relocation of this major entry sign.

The University understands that the proposed roadway expansion will also impact the O.J. Noer Turfgrass Research and Education Facility located adjacent to the golf course on University property. Though not a Section 4(f) protected resource, we concur with the proposed roadway expansion, and the resulting need to realign the Ice Age Trail within our facility to improve safety for trail users. By realigning the trail on our property, trail users will no longer be required to utilize the CTH M shoulder. We concur with the proposed realigned Ice Age Trail location and understand that new cross access easements provided to the trail authority will be required for the realigned portion of the trail. The project team may need to participate in those negotiations to facilitate approval. We also understand that, in order to facilitate this new public use on our property, the existing bridge structure will need some upgrades to maintain fall protection on the sides with respect to the handrails. We expect the project team or the City of Madison to financially compensate the University for the cost of those upgrades.

Project design staff will work with University Ridge Golf Course and UW Facilities Planning & Management staff to incorporate landscape vegetation screening elements into the design along CTH PD to provide screening between the golf course and highway. Depending on the proximity of the highway right-of-way to the fairway, we also may need to install netting to assure golf balls are not straying onto cars using the highway. If this is the case, the project should financially compensate the University for that work to assure safe use of the highway.

Approximately 2.0 acres of new highway right-of-way and 1.5 acres of temporary limited easement for construction staging, grading, and landscape restoration are needed from southeast corner of the University Ridge Golf Course to construct and maintain the proposed highway facility. The 2.0 acres of highway right-of-way represents 0.5 percent of the approximately 370-acre golf course area. Greens, fairways, buildings, and cart paths will not be impacted by either permanent or temporary property acquisition. We expect to negotiate directly with the City of Madison on the value of the needed lands for this project, both at the University Ridge and O.J. Noer facility, as well as for the UW Board of Regents property to the north along CTH M. Financial compensation to the University will be necessary.

To summarize, University officials, as a project stakeholder, have reviewed the proposed action and have been actively engaged in the projects public involvement process. The University understands that the Federal Highway Administration (FHWA) plans to make a De Minimis Section 4(f) determination regarding the impacts to the University Ridge Golf Course. The University concurs with that determination and anticipates that the proposed action will have no permanent adverse physical impacts, nor will there be any interference with the protected activities, features, or attributes that make the University Ridge Golf Course eligible for Section 4(f) protection.

Sincerely,

W. M. Elvey

William M. Elvey, P.E.
Associate Vice Chancellor, Facilities Planning & Management

XC: Gary A. Brown, PLA, FASLA – Director, Campus Planning & Landscape Architecture
Jason King, Associate Director, UW Athletics
G. Michael Gaspard, General Manager, University Ridge Golf Course
Thomas Schwabe, Superintendent, O.J. Noer Turfgrass Research Facility
Chris Petykowski, Civil Engineer, City of Madison

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SECTION 4(F) DETERMINATION REPORT

Dane County Parkland
Correspondence and Documentation

Wisconsin
Federal Highway Administration
Finding of *De Minimis* Impact on Parks, Recreation Areas and Wildlife and Waterfowl Refuges

WISDOT ID: 5992-06-51
Route: CTH M
Termini: Cross County Road to Prairie Hill Road
City/County: Dane County

Name of 4(f) Resource: Dane County Parkland

Project description:

The state name for this project is South Pleasant View Road, City of Madison, County Highway M Reconstruction, Cross Country Road to Prairie Hill Road. This project involves a full reconstruction of the CTH M mainline and two intersections. An Environmental Assessment was conducted to satisfy NEPA requirements.

The CTH M corridor is a critical north/south roadway connecting the City of Madison and the City of Verona. The project limits are Cross Country Road to Prairie Hill Road, a distance of 2.9 miles. The proposed project is located in Dane County, Wisconsin in the cities of Madison and Verona and the Towns of Verona and Middleton.

The proposed improvements include expansion of CTH M from a two-lane highway to a 4 to 6-lane arterial roadway with a raised median and a multi-use path. Improvements are proposed for the intersections of CTH M – Midtown Road and CTH M – CTH PD. Improvements are proposed for the intersections of CTH M – Midtown Road and CTH M – CTH PD. This roadway is a principal arterial on the National Highways System (MAP-21).

The Dane County Parkland property is considered a Section 4(f) resource because it is a public park.

Acquisition of 2.4 acres is required from the Dane County Park beginning at the southern edge of the parcel to Flagstone Park. Two of the acres will be used as a temporary limited easement. One acre will be a permanent limited easement.

The required property is located adjacent to CTH M, along the western edge of the park. It consists of open prairie and will be restored to the same condition after construction. The project impacts and proposed construction plans indicate that the impacts to the property will be minimal and will not alter or affect the park's use.

Every attempt was made to minimize the land required for roadway, intersection, and pedestrian facilities. Specific measures taken include:

- Maintain and restore existing unpaved gated driveway on CTH M for staff access
- Assist in restoring and reseeding prairie areas
- Maintain the existing water storage area immediately south of the box culvert
- Provide grade-separated crossing at CTH M and Flagstone Drive that provides connectivity to the Ice Age National Scenic Trail
- Reducing overall roadway width by using acceptable standards for cross-section elements including lane, median, and terrace widths.
- Payment of the fair market value of the land and improvement taken

The attached documentation shows the following:

1.
    a. *What the activities, features, and attributes are that qualify Dane County Parkland for protection under Section 4(f).*

    b. *What the transportation use of the Section 4(f) resource is.*

    c. *How this use does not adversely affect the activities, features, and attributes listed in 1.a., above. In making this determination, consideration may be given to any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project; and*

2. Dane County Parks has/have been informed that FHWA may make a *de minimis* finding under 4(f) and may use the Dane County Parks' written concurrence that the project does not adversely affect the activities, features, and attributes listed in 1.A., above that qualify the property for protection under Section 4(f) in making that finding; and

3. The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource.

4. Dane County parkland was purchased through the Knowles-Nelson Stewardship program (State Stewardship Grant Program). This Ice Age – Payan Acquistion Stewardship Grant Property covers approximately 35 acres. All WDNR requirements relating to impacts to this land will be satisfied independent of this 4(f) determination.

EMAIL FROM DNR – NO JURISDICTION OVER ICE AGE NATIONAL SCENIC TRAIL

Jason,

I think the conversation below should answer your questions. Let me know if it does not or you need anything else. Brigit is the DNR state trails coordinator and Dana is the regional trails coordinator.

Eric

We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Eric Heggelund

Phone: 608-275-3301

Eric.heggelund@wisconsin.gov

From: Heggelund, Eric P - DNR
Sent: Wednesday, June 24, 2015 5:13 PM
To: Brown, Brigit E - DNR; White-Quam, Dana M - DNR
Subject: RE: Ice Age Trail - WDNR jurisdiction

Thanks Brigit,

The trail passes from a Dane County Park property to a UW property so I will tell them DNR does not need to sign off on the impact (building the underpass).

We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Eric Heggelund

Phone: 608-275-3301

Eric.heggelund@wisconsin.gov

From: Brown, Brigit E - DNR
Sent: Wednesday, June 24, 2015 5:09 PM
To: Heggelund, Eric P - DNR; White-Quam, Dana M - DNR
Subject: RE: Ice Age Trail - WDNR jurisdiction

If DNR owns the land at issue we do. If not, no.

We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Brigit E. Brown

Phone: (608) 266-2183

brigit.brown@wisconsin.gov

From: Heggelund, Eric P - DNR
Sent: Wednesday, June 24, 2015 4:40 PM
To: White-Quam, Dana M - DNR
Cc: Brown, Brigit E - DNR
Subject: FW: Ice Age Trail - WDNR jurisdiction

Hi Dana,

See Jason's questions below. I believe he is talking about a section of trail that crosses CTH M between Madison and Verona. DOT/Verona/Madison/Dane County are in the planning phases for adding lanes to CTH M and there will be an underpass of CTH M for the Ice Age Trail. They have already been working with IATA on this and possibly NPS. Do we need to sign off on this as well? What are the DNR interests/jurisdiction in this section of the IAT?

Thanks,

Eric

We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Eric Heggelund

Phone: 608-275-3301

Eric.heggelund@wisconsin.gov

From: Jason DiPiazza [mailto:jdipiazza@msa-ps.com]
Sent: Wednesday, June 24, 2015 4:27 PM
To: Heggelund, Eric P - DNR
Subject: Ice Age Trail - WDNR jurisdiction

Hi Eric,

Does Wisconsin DNR have any jurisdiction over the Ice Age Trail in Dane County? We know for sure Ice Age Trail Alliance and National Park Service does. We are trying to determine from whom we need a letter from indicating Section 4(f) de minimus concurrence from.

Thanks Eric,

Jason

Jason DiPiazza, PE | Team Leader
MSA Professional Services, Inc.
(608) 242-7779

SRF Consulting Group, Inc. | ENGINEERS PLANNERS DESIGNERS

December 6, 2012 SRF No. 0107334

Mr. Chris James
Park Planner
Dane County Parks Division
1 Fen Oak Court, Room 208
Madison, WI 53718

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)
4(F) PROPERTY COORDINATION – DANE COUNTY PARKLAND

Dear Mr. James:

The City of Madison, in conjunction with the City of Verona and Dane County, is proposing roadway improvements to South Pleasant View Road (CTH M) from Cross Country Road to Prairie Hill Road, a distance of approximately three miles. The proposed improvements consist of expanding South Pleasant View Road initially from two to four lanes from Prairie Oaks Drive to Flagstone Drive with provisions to accommodate six lanes in the future. Flagstone Drive to Prairie Hill Road initially will be constructed with an additional northbound lane (three northbound lanes) and two southbound lanes, which will be able to accommodate a third southbound lane in the future if needed. The proposed project also includes expansion of the roadway to a multi-lane urban arterial with a raised median, bike lanes, a multi-use path, and sidewalks.

This action is part of a multi-phase project to reconstruct the CTH M corridor, which includes reconstructing the Mid Town Road intersection and provision of a roundabout at the CTH PD intersection. To accommodate the CTH M roadway expansion, approximately 2.4 acres of right-of-way will need to be acquired from Dane County Parkland. The required property is located adjacent to CTH M, along the western edge of the park (please see attached 4(f) Properties Exhibit).

The Dane County Parkland property is considered a Section 4(f) resource since it is a park of state or local significance that are both publicly owned and open to the public. An initial review of the project impacts and proposed construction plans indicate that the impacts to the property will be minimal and will not alter or affect the park's use.

Under Section 4(f) of the U.S. Department of Transportation Act of 1966, the Federal Highway Administration (FHWA) "may not approve the use of land from a significant publicly-owned park, or recreation area" unless a determination is made that:

1) There is no feasible and prudent alternative to the use of land from the property
2) The action includes all possible planning to minimize harm to the property.

Federal law (SAFETEA-LU Section 6009(a)) amended Section 4(f) to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). FHWA has issued guidance for making *de minimis* impacts as follows:

1) An impact of a park, recreation area, or wildlife refuge may be determined to be de minimis if:
    a. The transportation use of the Section 4(f) resource, together with any impact, avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features and attributes that qualify the resource for protection under Section 4(f)
    b. The official with jurisdiction over the property are informed of FHWA's intent to make the *de minimis* impact finding based on their written concurrence that the project will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f); and
    c. The public has been afforded an opportunity to review and comment on the effects of the project

This letter is intended to serve as official consultation and coordination with the Dane County Parkland property. Regulations within US Department of Transportation FHWA, Section 4(f) Policy Paper – July 20, 2012, require a finding that the official with jurisdiction has been consulted and "has not objected." The regulations require concurrence of the official with jurisdiction in the following situations:

1) Finding there are no adverse effects prior to making *de minimis* impact findings
2) Applying the exception for temporary occupancies
3) Applying the exception for transportation enhancement activities and mitigation activities

At this time, we are requesting your comments regarding the potential *de minimis* impact determination to the Dane County Parkland property. Following consideration of your comments and consideration of public comments, we will consult with FHWA and they will make the final Section 4(f) determination. FHWA will inform the official with jurisdiction of their determination.

Once the *de minimis* determination has been made, the official with jurisdiction must concur in writing that the project will not affect the activities, features, or attributes that make the property eligible for Section 4(f) protection. The final determination regarding the subject property will be included in the Final Environmental Assessment (EA) document.

If you have any questions about the Section 4(f) process or would like to set up a meeting to help clarify the process, please call me at (608) 829-5875 or contact me by email at pchellevold@srfconsulting.com.

Sincerely,

Paul M. Chellevold
SRF Consulting Group, Inc.

Enclosure

Dane County Parks
Always in Season

Parks Division
Dane County Land & Water Resources Department

January 23, 2013

Mr. Paul Chellevold
SRF Consulting Group, Inc.
901 Deming Way, Suite 302
Madison, WI 53717

Re: South Pleasant View Road/CTH M
Project ID: 5992-09-81
Potential Impacts to Section 4(f) Park Lands and Ice Age National Scenic Trail

Dear Mr. Chellevold;

This letter is in response to your December 6th, 2012 request for comments on the proposed CTH M expansion project that is proposed to impact approximately 2.4 acres of Section 4(f) Dane County park lands. Dane County Parks also regularly partners with the Ice Age Trail Alliance on acquisition and implementation of the Ice Age National Scenic Trail (IANST) and the City of Madison on implementation of the Ice Age Junction bicycle pedestrian trail. These regional trails are a component of the 2012-17 Dane County Parks and Open Space Plan and therefore comments and proposed mitigation measures outlined below will pertain to both the trails and Section 4(f) County park lands.

Regarding potential impacts to the approximate 2.4 acres of Dane County park lands, we would ask that the following comments and proposed mitigation measures be considered within the *de minimis* impact review for the Environmental Document:

1-Maintain and restore the existing driveway on CTH M for staff access to manage prairie restoration areas. Dane County Parks would prefer this driveway entrance to be gated and not paved to discourage general public use.

2-Provide financial resources that will allow the Dane County Parks Naturalist to restore and reseed prairie areas that are disturbed during CTH M reconstruction activities.

3-Maintain the existing water storage area immediately south of the box culvert. The pond/wetland area was created through a partnership between Dane County Highway and the Dane County Naturalist and is used extensively by frogs. If this area is unable to be avoided by the proposed CTH M improvement project, consider creation of a wetland scrape in the southeast corner of the parcel as a mitigation measure.

4-Dane County Parks supports the addition of the proposed bicycle/pedestrian side path along CTH M that will provide connectivity to the Ice Age Junction Trail.

Lyman F. Anderson Agriculture & Conservation Center
5201 Fen Oak Drive, Room 208, Madison, WI 53718-8812 Phone: 608/224-3730 FAX: 608/224-3745
www.countyofdane.com/lwrd/parks

Regarding potential impacts to the Ice Age National Scenic Trail and Ice Age Junction Trail, we would ask that the following comments and proposed mitigation measures be considered within the de minimis impact review for the Environmental Document:

1-Dane County Parks supports the construction of the proposed bicycle pedestrian underpass at the intersection of Flagstone Drive and CTH M. Both trails will greatly benefit from a separated grade crossing.

2-Install a dodge way and signage on the west side of the proposed underpass at the Ice Age National Scenic Trail to deter bicycle use. Coordinate design and installation with the Ice Age Trail Alliance.

3-Amend the existing easement the Ice Age Trail Alliance has with the University of Wisconsin-Madison as necessary to insure connectivity to the proposed underpass. Related, investigate a revised alignment of the Ice Age National Scenic Trail from the proposed underpass that would utilize the existing covered bridge at the O.J. Noer Turfgrass Facility.

Contact Chris James, Dane County Park Planner at 608.224.3763 if additional information is needed to clarify any of the above items and we would request that you continue to keep the Commission and Ice Age Trail Alliance updated on the FHWA review of these comments.

Sincerely;

William Lunney
Dane County Park Commission, Chair

Cc: Darren Marsh; Director, Dane County Parks Division
Kevin Thusius; Director of Land Conservation, Ice Age Trail Alliance
Jason DiPiazza; P.E., MSA Professional Services

ID 5992-09-81
S. Pleasant View Road Reconstruction
(Prairie Hill Road to Cross Country Road)
CTH M

Dane County Parks and IAT Meeting – September24, 2014

ATTENDEES

Name / Representing	Email and Phone Number
1. JASON DiPIAZZA MSA	jdi.piazza@msa-ps.com 608 242 6640
2. Kevin Thusius IATA	kevin@icegetrail.org
3. John MAdden Nat. Park Svc	john_madden@nps.gov
4. Pam Schuler, Nat. Park Ser.	pam_schuler@nps.gov
5. Tony Fernandez - City of Madison	AFernandez@cityofmadison.com
6. Chris Petykowski City of Madison	cpetykowski@cityofmadison.com 267-8678
7. JAN ZIMMERMANN DANE CO.	ZIMMERMANN.JAN@COUNTYOFDANE.COM 224-3761
8. CHRIS JAMES / DCP	JAMES@COUNTYOFDANE.COM 224-3763
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MSA
PROFESSIONAL SERVICES
TRANSPORTATION · MUNICIPAL · REMEDIATION
DEVELOPMENT · ENVIRONMENTAL

ID 5992-09-81
S. Pleasant View Road Reconstruction
(Prairie Hill Road to Cross Country Road)
CTH M
Dane County

Dane County Parks and IAT Meeting

Wednesday September 24, 2014

Meeting Time: 8:30 AM
Meeting Location: City County Building, **Room 118 (Engineering Conference Room)**

AGENDA

Meeting focus: CTH M impacts and R/W needs from Dane County Parks and Ice Age Trail

I. Project Review/Recap	A. Limits/Scope/ Typical section/ Schedule	A. Review project
II. Project impacts to Dane County Park	A. R/W Needs	A. Wider section, R/W for roadway and ATC facilities
	B. Easement needs	B. Permanent Easement: Multi-use path Temporary Easement: Grading
	C. Drainage	C. Re-work of the small retention pond at the cross culvert
	D. Review impact mitigation letter	D. (handout)
	E. Utility impacts	E. ATC, Alliant Energy, TDS relocations anticipated
III. Project impacts to Ice Age Trail	A. Multi-use path tunnel	A. New crossing option for IAT users. Discuss how to tie into this path and crossing.
	B. Impacts to easement	B. Include easement for IAT on the Transportation Project Plat
	C. Use of OJ Noer Bridge	C. Discuss options within CTH M R/W

IV. Other?

MINUTES

(Also, see attached follow up email correspondence with notes from meeting attendees)

I.A.

Jason provided attendees with a brief recap of the project, overview of the design and design objectives and answered questions about the plan view layout.

II. A & B

The project will require real estate acquisition from Dane County Parks land. The current estimate is approximately 0.5 acres of highway right-of-way, 1 acre of permanent easement, and 1.5 acres of temporary easement for grading and construction needs. The permanent easement estimate is for construction and maintenance of the 10' multi-use path along the east side of CTH M. The path will be constructed on a 15' easement along the edge of the CTH M highway right-of-way. Chris James also requested that the prairie area be protected/isolated from the construction by temporary fencing (orange safety fence is acceptable).

ATC will be relocating their overhead power distribution poles into the terrace area between the multi-use path and CTH M roadway. The poles will be located in the CTH M highway R/W. This location will minimize the amount of aerial easement that ATC requires for their facilities.

Jan Zimmerman said she would research the grant funding that was used to fund the purchase of the Dane County Park land.

Chris James would like to see grading impacts to the restored prairie along the east side of CTH M completed under the guidance of Dane County Parks. The letter provided by Dane County Parks on January 23, 2013, requested funds to restore the disturbed prairie with Dane County or Dane County hired crews. The group developed on idea for the work to be completed by a Dane County Parks approved contractor with inspection and acceptance of the restored prairie area to be provided by Dane County Parks staff. Chris James noted that he could provide a list of 3 approved contractors and assist in developing the specs and design details for the restoration work. Chris James was also willing to review an "approved equal" contractor other than the 3 necessary for inclusion in the specs.

II. C

The group discussed impacts to the small pond at the east (outlet) end of the CTH M culvert crossing. The slope intercepts for the current roadway design would fill most of this pond. Chris James expressed a preference for grading and reestablishing the small pond near its current location with the project. This would be an aesthetic benefit for both the multi-use path and the Ice Age Trail. This alternative was preferred to constructing a retaining wall to maintain the pond its current location. Another alternative would be to construct a wetland scrape along the southeast edge of the park property. This was the alternative originally noted in the letter provided by Dane County Parks on January 23, 2013.

II. D See above for items in this letter that were discussed.

II. E. Specific utility impacts and relocations were not discussed.

III. A

The Ice Age Trail Alliance (IAT) is still agreeable to utilizing the multi-use path grade separation (box culvert) to cross below CTH M. They want to minimize the length of trail that is concurrent with the multi-use path and connections to the multi-use path should be as close to perpendicular as possible to prevent use of the IAT by bicycles.

The group discussed design concepts for the multi-use path box culvert. The group wanted to see options for reducing the skew of the crossing. This will shorten the tunnel and possibly allow for a natural light skylight to be incorporated in the design (tunnel must cross below a raised median). The reduced skew would put the west end closer to the IAT alignment through the OJ Noer Turf Research land. Jason and Chris Petykowski noted that the skew was designed this way to limit the amount of impact to OJ Noer. Reducing the skew (squaring up the path) may require more R/W from OJ Noer. This land cannot be condemned. Jason agreed to explore design alternatives that will reduce the skew.

Tony Fernandez reiterated the design standards for the box culvert:

1. Minimum of 9' high above the 10' wide path section (the clearance can be reduced along the edges for lights and structure haunches)
2. Minimum 14' wide
3. The preference is to have the path at an elevation of 1' above the 100 year flood elevation for the drainage way. At the 100' year flood elevation would be acceptable. Anything lower should be discussed. There are issues, especially with path clean up and maintenance if it is any lower.

IAT wants to include dodge ways at the locations where the IAT breaks off from the multi-use path. They don't have a standard design, but are happy with the one constructed where the IAT crosses Woods Road, which is a split rail fence design. MSA will investigate these details for including in the plan. MSA indicated that signage could be considered for inclusion in the plans. IAT signs should be 18x24 inches. Kevin Thusius and National Parks Service offered to help by providing the sign design and logos and review of the placement. Trail markers should also be included.

IAT indicated that standard pedestrian standards for grade should be used if possible.

III.B.

The group discussed how to address the IAT easement. IAT's preferences are:

1. Be located outside the CTH M R/W. Being located within the highway R/W requires the IAT to obtain permits for any trail maintenance work needed within the R/W
2. IAT does not want a separate easement from UW due to insurance and other regulatory issues required for each easement.
3. The easiest alternative in IAT's view is to update the current easement to relocate it outside the potential R/W location. MSA/City of Madison will follow up with real estate staff to see if this is a possibility. This will have to be document well in the EA to clearly note that this was not done to avoid having to acquire the IAT easement with the project.
4. Another alternative that should be explored is to have the City of Madison purchase easement along the CTH M R/W for IAT use. This will also have to be run by UW and real estate staff.

NOTE: The IAT did not use federal LWCF funds for purchasing the easement along CTH M.

III.C.

IAT would still like to utilize the OJ Noer bridge to cross the drainage way. Chris Petykowski indicated that he had talked to UW about this and didn't think it would be an issue.

OTHER

The group discussed the impacts to the IAT at the Raymond Road crossing. The City of Madison will reconstruct this crossing. The IAT crosses Raymond Road near where the drainage way crosses Raymond Road. The City of Madison will be reconstructing this structure which will affect the IAT crossing. IAT was agreeable to shifting their trail east to get up onto Raymond Road. This shift should be minimized to keep the IAT within Dane County Park land and still provide a wooded buffer between it and the future extension of Jeffy Trail (new City of Madison

Street that is budgeted for completion in 2015). The IAT will utilize the sidewalk on the Raymond Road bridge before crossing Raymond Road and continuing on parallel to the multi-use path (Ice Age Junction Path). Tony recommended that the IAT use the multi-use path crossing to keep roadway crossings to a minimum.

Chris James offered to IAT to use the recently constructed multi-use path bridge to cross the waterway. IAT would prefer to provide spur trail markings here for a future trail head parking area but keep the IAT separate from the multi-use path as long as possible. They anticipate a high volume of bike traffic on the multi-use path.

Document Number

State Bar of Wisconsin Form 1 - 2003

WARRANTY DEED

Document Name

DANE COUNTY
REGISTER OF DEEDS

DOCUMENT #
4230476

08/30/2006 03:34PM

Trans. Fee:
Exempt #: 2R

Rec. Fee: 7.00
Pages: 1

001929

THIS DEED, made between Ice Age Park and Trail Foundation, Inc. ("Grantor," whether one or more), and County of Dane, a Wisconsin municipal corporation ("Grantee," whether one or more).

Grantor, for a valuable consideration, conveys to Grantee the following described real estate, together with the rents, profits, fixtures and other appurtenant interests, in Dane County, State of Wisconsin ("Property") (if more space is needed, please attach addendum):
LOT ONE (1), CERTIFIED SURVEY MAP NO. 5016 RECORDED IN VOLUME 22 OF CERTIFIED SURVEY MAPS OF DANE COUNTY WISCONSIN, PAGES 225 AND 226 AS DOCUMENT NUMBER 1958301, IN THE TOWN OF VERONA, DANE COUNTY, WISCONSIN.

Recording Area

Name and Return Address
Gaylord Plummer
Dane County Land Acquisition
1 Fen Oak Court, Room 223
Madison, WI 53718

062-0608-034-8000-6

Parcel Identification Number (PIN)

This is not homestead property.
(is) (is not)

Grantor warrants that the title to the Property is good, indefeasible in fee simple and free and clear of encumbrances except: municipal and zoning ordinances and agreements entered under them, recorded easements for the distribution of utility and municipal services, recorded building and use restrictions and covenants, and general taxes levied in the year of closing.

Dated June 29, 2006

(SEAL) _____ (SEAL)
* Michael G. Wollmer, Vice President
* _____

(SEAL) _____ (SEAL)
* Christine Thisted White, Asst. Sec.
* _____

AUTHENTICATION

Signature(s) _____

authenticated on _____

*

TITLE: MEMBER STATE BAR OF WISCONSIN
(If not, _____
authorized by Wis. Stat. § 706.06)

THIS INSTRUMENT DRAFTED BY:
Gaylord R. Plummer
Dane County Real Estate Officer

ACKNOWLEDGMENT

STATE OF WISCONSIN)
) ss.
Dane COUNTY)

Personally came before me on 29 June 2006, the above-named Michael Wollmer and Christine Thisted White to me known to be the person(s) who executed the foregoing instrument and acknowledged the same.

*

Notary Public, State of Wisconsin
My Commission (is permanent) (expires: 2/21/2010)

(Signatures may be authenticated or acknowledged. Both are not necessary.)

NOTE: THIS IS A STANDARD FORM. ANY MODIFICATIONS TO THIS FORM SHOULD BE CLEARLY IDENTIFIED.

*Type name below signatures.

Arboretum Real Estate Services PO Box 259907, Madison WI 53725-9907 Phone: (608) 251-1535 Fax: (866) 615-2203 Heitke05.zfx
Gaylord Plummer
Produced with ZipForm™ by RE FormsNet, LLC 18025 Fifteen Mile Road, Clinton Township, Michigan 48035 www.zipform.com

ASSIGNMENT OF STEWARDSHIP GRANT AND MANAGEMENT CONTRACT

DANE COUNTY
REGISTER OF DEEDS

DOCUMENT #
4230475

08/30/2006 03:34PM

Trans. Fee:
Exempt #:

Rec. Fee: 7.00
Pages: 3

001926

Recording Area

For valuable consideration, the Ice Age Park and Trail Foundation ("IATPF" name used hereafter), hereby assigns to Dane County ("County" name used hereafter) all of the IAPTF's rights, interests, and obligations under a Stewardship Grant and Management Contract IAT2-34 ("Stewardship Contract") entered into by the IAPTF, recorded in the Office of the Register of Deeds for Dane County, on March 23, 2006, Page 270 through 278, as Document Number 4173485. The property to which this Stewardship Contract applies is described in Exhibit A, which is made part of this assignment by reference (the "Stewardship Property").

Dated this 28th day of June, 2006.

Ice Age Park & Trail Foundation

By: Christine Thisted white
Signature

Christine Thisted white
Christine Thisted, Executive Director

Name and Return Address:
Gaylord Plummer
Dane County Land Acquisition
1 Fen Oak Court
Madison WI 53718

Parcel Identification Number (PIN)

062/0608-034-8000-6

STATE OF WISCONSIN)
) ss.
DANE COUNTY)

Personally came before me this 28th day of June, 2006, the above named Christine Thisted White to me known to be the person who executed the foregoing instrument and acknowledged the same.

Julie McCutchin
Signature of Notary Public

Julie McCutchin
Printed Name of Notary Public
Notary Public, State of Wisconsin
My Commission (expires)(is) 10-4-2009

NOTARY PUBLIC
JULIE McCUTCHIN
STATE OF WISCONSIN

ACCEPTANCE OF ASSIGNMENT

The County, assignee in this assignment of the Stewardship Contract, hereby accepts the assignment and all of the IAPTF's rights, interests, and obligations in the Stewardship Contract. This is a perpetual assignment that runs with the Stewardship Property and binds all heirs, successors and assigns of the assignee.

The County acknowledges that it has received and reviewed the Stewardship Contract, dated January 25, 2006 through June 30, 2007, and Land Management Plan for the Stewardship Property. The County agrees that it shall abide by the provisions of the aforementioned Stewardship Contract and Land Management Plan and furthermore that it recognizes the long-term ownership and management responsibilities of the Stewardship Program and will comply with all applicable Stewardship laws and regulations pursuant to s. 23.096 and s. 23.17, Stats, and Chapter NR 51 of the Wisconsin Administrative Code. The County acknowledges notice that IAPTF acquired the "Stewardship Property" with Land and Water Conservation Funds pursuant to a Grant Agreement between the United States National Park Service("NPS" named hereafter) and the Wisconsin Department of Natural Resources ("DNR" named hereafter), Agreement number: GA6281-E-001 a copy of which is kept at the DNR office at 101 S. Webster Street, Madison, WI 3707-7921. The County further agrees to indemnify and hold the IAPTF, DNR and NPS harmless from any and all liability arising from the assignment of the Stewardship Contract or from the IAPTF's performance or non-performance of its obligations under the Stewardship Contract and any applicable laws and regulations.

3/7

Dated this 21st day of August, 2006.

Dane County

001927

By: _____
Signature

Kathleen Falk, Dane County Executive

STATE OF WISCONSIN)
) ss.
DANE COUNTY)

Personally came before me this 21st day of August, 2006, the above named Kathleen M. Falk to me known to be the person who executed the foregoing instrument and acknowledged the same.

Signature of Notary Public

Michelle A Woldt
Printed Name of Notary Public
Notary Public, State of Wisconsin
My Commission (expires) 9/20/09

APPROVAL OF ASSIGNMENT

The State of Wisconsin Department of Natural Resources, Grantor in the Stewardship Contract referenced above, hereby approves the assignment of the IAPTF rights, interests, and obligations in the Stewardship Contract to the County as set out above.

The Department's approval is contingent and effective upon the recording of this assignment in the Register of Deeds Office in DANE COUNTY, Wisconsin.

Dated this 28th day of JUNE, 2006.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

By: Mary L. Rothenmaier
Michelle Young, Director
Bureau of Community Financial Assistance

STATE OF WISCONSIN)
) sis.
DANE COUNTY)

Personally came before me this 28th day of June, 2006, the above named Mary L. Rothenmaier to me known to be the person who executed the foregoing instrument and acknowledged the same.

Signature of Notary Public

Julie McCutchin
Printed Name of Notary Public
Notary Public, State of Wisconsin
My Commission (expires)(is) 10-4-2009

NOTARY PUBLIC
JULIE McCUTCHIN
STATE OF WISCONSIN

DRAFTED BY THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Exhibit A - Legal Description
Stewardship Property

001928

Lot one (1) , certified survey map no. 5016 recorded in Volume 22 of certified survey maps of Dane County, Wisconsin, pages 225 and 226 as document number 1958301, in the Town of Verona, Dane County, Wisconsin

Except for:

That part of the NE ¼ of the SE ¼, Section 3, T6N, R8E, Town of Verona, Dane County, Wisconsin, lying northerly and westerly of Raymond Road and being more particularly described as follows: From the NE corner of the NE ¼ of the SE ¼ of said Section 3; thence along the north line thereof N 89°23'18" W, 67.52 feet to the northwesterly right-of-way line of Raymond Road and the POINT OF BEGINNING of the parcel herein described; thence continuing along said north line N 89°23'18" W, 451 feet; thence S 00°03'52" E, 250 feet to a point intersecting the northwesterly right-of-way line of Raymond Road; thence northeasterly along said right-of-way line to the POINT OF BEGINNING. The parcel contains approximately 1.29 acres.

DANE COUNTY
REGISTER OF DEEDS

DOCUMENT #
4173495

03/23/2006 11:06AM

Trans. Fee:
Exempt #:

Rec. Fee: 27.00
Pages: 9

000270

STEWARDSHIP GRANT AND MANAGEMENT CONTRACT FOR NON-PROFIT LAND ACQUISITION
Form 8700-304 (9/03) Page 1

State of Wisconsin
Department of Natural Resources
Box 7921
Madison, Wisconsin 53707-7921

Project Number:

IAT2F-34

Sponsor:

Ice Age Park and Trail Foundation

Project Title:

Ice Age Park and Trail Foundation-Heitke LUIHNK

Program Name:

Knowles-Nelson Stewardship Program
Land & Water Conservation Fund – Ice Age Trail Acquisition

Grant Period: (Period during which grant funds will be encumbered and available for payment to the Sponsor under this Stewardship Grant and Management Contract, hereinafter referred to as the "Contract".)

January 25, 2006 through June 30, 2007

Project Scope:

Fee simple acquisition of approximately 9.8 acres of property in Dane County, Wisconsin, which is described in the legal description attached hereto as Exhibit A and made part of this Contract by reference (hereinafter referred to as the "Stewardship Property").

All references herein to the "Stewardship Property" shall also be deemed to be a reference to the Land & Water Conservation Fund Ice Age Trail property.

Recording Area

Name and Return Address

Ice Age Park and Trail Foundation
2453 Atwood Ave, Suite 206
Madison, WI 53704

Parcel Identification Number (PIN)

062-0608-034-8000-6

All obligations, terms, conditions and restrictions imposed by this Contract shall be deemed to be covenants and restrictions running with the Stewardship Property, and shall be effective limitations on the use of the Stewardship Property from the date of recording of this Contract, and shall bind the parties hereto and their respective personal representatives, successors and assigns, in perpetuity.

By acceptance of this Contract, the Sponsor, for itself and its successors and assigns, hereby covenants and agrees not to convey, sell, lease, assign or mortgage the Stewardship Property or convert it to uses inconsistent with this Contract without the prior written approval of the Secretary of the Wisconsin Department of Natural Resources, his designee or successor. The Sponsor further agrees that all rights, title and interests in and to the Stewardship Property shall vest in the State of Wisconsin without necessity of reentry, if the Sponsor, its successors or assigns, violates any essential provision described in paragraphs 1 or 2 of this contract.

Project Costs:

Total Cost of Grant Project	$416,500.00
Stewardship Grant Award	$208,250.00
LWCF – Ice Age Trail Grant Award	$155,576.44

The following documents are hereby incorporated into and made part of this Contract by reference:

1. Chapter NR 51, Wisconsin Administrative Code
2. Grant Application and Attachments
3. LWCF Ice Age Trail Acquisition Grant Agreement Number GA6281-E-0001

9/27

TERMS AND CONDITIONS OF THE CONTRACT

000271

This Contract is entered into by and between the Sponsor and the State of Wisconsin Department of Natural Resources (hereinafter referred to as "Department"), in accordance with s. 23.096, Wis. Stats., for the purpose of awarding a Stewardship grant and in accordance with Titles I and VIII of the Department of the Interior and Related Agencies Appropriations Act, 2001 of October 11, 2000 and Section 135 of Title 1, Division B, Appendix D of the Consolidated Appropriations Act, 2001, of December 21, 2000, for the purpose of awarding a Land & Water Conservation Fund Grant, and for establishing conditions of management for the Stewardship Property acquired with the grant funds.

The Department and Sponsor mutually agree to the following terms and conditions:

Essential Provisions:

1. If the Sponsor violates any of the following conditions of this Contract, which are identified as essential in Ch. NR 51.07(3), Wis. Adm. Code, pursuant to s. 23.096(5), Wis. Stats., and fails to correct the condition within six months after written notification to the Sponsor from the Department, all title, right and interest in the Stewardship Property held by the Sponsor shall vest in the State of Wisconsin without the necessity of reentry or legal judgment:

   a. Conversion of the Stewardship Property to any use other than that specified in this Contract and the Land Management Plan without the prior written approval of the Department is prohibited.

   b. Sale or conveyance of the Stewardship Property, or any interest in the Stewardship Property, to a third party without the prior written approval of the Department is prohibited. If the Department does approve a conveyance to a third party, all Stewardship conditions imposed by this Contract and the Land Management Plan shall remain with the Stewardship Property. Any transfer or sale of the Stewardship Property in fee may only be to a nonprofit conservation organization qualified for Stewardship grants, pursuant to ss. 23.096 and 23.0955(1), Wis. Stats., or to a local, state or federal unit of government. Any subsequent owner shall execute an *Assignment of Stewardship Grant and Management Contract,* which states that it has received and reviewed this Contract and the Land Management Plan and shall abide by their provisions. Department approval of any transfer is not valid until the *Assignment of Stewardship Grant and Management Contract* has been signed by the Department and recorded in the Office of the Register of Deeds in the county where the Stewardship Property is located.

   c. The Sponsor shall not allow any leases, mortgages, permits or encumbrances of any kind on the Stewardship Property without the prior written approval of the Department. The Department may take actions necessary to avoid the placement of liens, judgments or encumbrances against the Stewardship Property.

   d. The Sponsor shall pay, before delinquency, all taxes, assessments, fees, and charges of whatever description levied on or assessed against the Stewardship Property by competent authority.

   e. The Sponsor shall at all times maintain its tax-exempt status and be a qualified organization within the meaning of Section 170(h)(3) of the Internal Revenue Code. The Sponsor shall notify the Department of any changes in, or challenges to, its tax-exempt status or to its mission of acquiring property for conservation purposes.

   f. The Stewardship Property may not be closed to the public unless approved in writing by the Department.

2. If the Sponsor dissolves or ceases to exist, all title, right and interest held by the Sponsor in and to the Stewardship Property shall vest in the state, without the necessity of reentry, unless a transfer under paragraph 1.b. above is approved by the Department.

Grant and Financial Provisions:

3. In consideration of the covenants made by the Sponsor herein, the Department promises to obligate to the Sponsor the amount specified on Page 1 as the "Grant Award" and will tender to the Sponsor that portion of the obligation that is required to pay the Department's share of costs, based upon the Department providing up to 50 percent of eligible acquisition costs, as defined in NR 51.002(1), not to exceed the amount of cash needed to cover those costs. The Sponsor hereby promises to execute the project described herein in accordance with the conditions of this Contract and manage the Stewardship Property in accordance with the conditions of the Land Management Plan.

4. Failure by the Sponsor to comply with the terms of this Contract shall not cause the suspension of all obligations of the Department hereunder if, in the judgment of the Department, such failure was due to no fault of the Sponsor. In such case, any amount required to settle at minimum cost any irrevocable obligations properly incurred shall be eligible for assistance under this Contract, at the Department's discretion.

5. If the Sponsor receives federal, local government or other state funding for acquisition of the Stewardship Property, either before or after this Contract is executed, the Sponsor shall notify the Department of this fact. The Sponsor agrees that funds received from all government sources shall not exceed 100% of the amount of cash needed to cover eligible acquisition costs.

6. Grant payments may not be disbursed to the Sponsor until the following conditions have been met to the satisfaction of the Department:

   a. The value of the Stewardship Property has been certified by the Department according to Department valuation guidelines.

   b. The Department has approved an Environmental Inspection Report for the Stewardship Property.

   c. The Department has approved title insurance or other evidence of marketable title for the Stewardship Property.

   d. The Department has approved a Land Management Plan for the Stewardship Property.

   e. The Sponsor has submitted a claim for payment supported by appropriate evidence of cost, which meets Department accounting standards.

   f. This Contract has been recorded with the Register of Deeds in the County in which the Stewardship Property is located or the Department has approved an escrow closing under Ch. NR 51.08(4), Wis. Adm. Code.

   g. A warranty deed has been executed and recorded with the Register of Deeds in the County in which the Stewardship Property is located or the Department has approved an escrow closing under Ch. NR 51.08(4), Wis. Adm. Code.

7. The Sponsor shall maintain financial and accounting records for the grant in accordance with generally accepted accounting principles and practices for a period of four years after the final grant payment has been made. These records may be reviewed by state officials.

8. One-half of all receipts from the sale of any structures, improvements or personal property that was included in the appraisal for the Stewardship Property shall be reimbursed to the Department.

9. Income accruing to the Stewardship Property shall be used to further the objectives of the project as stated in this Contract or to further the objectives of another Stewardship project. However, if the Stewardship Property is entered into the County Forest Law Program, income derived from that program shall be distributed according to s. 28.11, Wis. Stats.

10. Reasonable entrance, service or user's fees may be charged and retained by the Sponsor to defray operation and maintenance costs subject to Department review and approval. If such fees do not exceed the fees charged for daily entrance to state parks, Department fee approval is not required.

11. The Sponsor shall keep the Stewardship Property free of any liens arising out of any work performed for, materials furnished to, or obligations incurred by the Sponsor.

General Provisions:

12. The Sponsor agrees to comply with all applicable state, local and federal statutes and regulations in fulfilling the terms of this Contract, including, but not limited to, general and special zoning, land use permit requirements, disabled access, environmental quality, and historical and archaeological preservation. In particular, the Sponsor agrees to comply with the provisions of s. 23.096, Wis. Stats., and Ch. NR 51, Wis. Adm. Code and with ss.32.19 to 32.27, Wis. Stats., and Ch. NR 202 relating to relocation. In the event there are any inconsistencies between the statutes and code and this Contract, the statutes and code shall govern.

13. If any provision of this Contract is determined by a court to be invalid, the validity of the remaining provisions shall not be affected thereby.

14. This Contract, together with any referenced parts and attachments, constitutes the entire Contract, and any previous communications or agreements pertaining to the subject matter of this Contract are hereby superseded.

15. Any ambiguities in this Contract shall be construed in a manner that best effectuates the protection of the natural values of the Stewardship Property.

16. The Sponsor may rescind this Contract in writing at any time before expending grant funds. After the Sponsor has expended grant funds, this Contract and the Land Management Plan may be rescinded, modified, or amended only by mutual agreement in writing, except that time extensions of the "Grant Period" may be granted by the Department without the requirement of the Sponsor's signature.

17. This Contract shall be recorded by the Sponsor in the Office of the Register of Deeds in the County where the Stewardship Property is located, and the interests of the State under this Contract shall thereby be placed in the chain of title. The Department may re-record this Contract or any other document necessary to protect its rights under the Contract.

18. No portion of the Stewardship Property shall in the future be used to satisfy land area requirements for other property not subject to this Contract for the purpose of determining building density, lot coverage or open space requirements under otherwise applicable laws, regulations or ordinances controlling land use and building density. Development rights have been encumbered or extinguished by this Contract, and may not be transferred to any other property pursuant to a transferable development rights program, cluster development arrangement or otherwise.

19. The Department agrees that the Sponsor shall have sole control over the method, hours worked, time and manner of any performance under this Contract other than as specifically provided herein. The Department reserves the right only to inspect the Stewardship Property for the purpose of ensuring that management is progressing in compliance with this Contract. The Department takes no responsibility for supervision or direction of the performance of this Contract by the Sponsor or the Sponsor's employees or agents. The Sponsor is an independent contractor for all purposes, not an employee or agent of the Department. The Department further agrees that it will exercise no control over the selection and dismissal of the Sponsor's employees or agents.

20. The Sponsor shall not discriminate against any person in the use and enjoyment of the Stewardship Property on the basis of age, race, creed, color, handicap, marital status, conviction record, arrest record, sex, national origin, ancestry, sexual orientation or membership in the national guard, state defense force, or any other reserve component of the military forces of the United States or this state.

21. Except for claims or costs arising out of the acts or omissions of the Department, its officers, employees and agents, the Sponsor agrees to save, keep harmless, defend and indemnify the Department and all its officers, employees and agents, against any and all liability claims, costs of whatever kind and nature, for injury to or death of any person or persons, and for loss or damage to any property (state or other) occurring directly or indirectly in connection with or in any way arising out of the occupancy, use, service, operation or performance of work in connection with this Contract or omissions of Sponsor's employees, agents or representatives.

22. In certain cases described in this Contract, the Sponsor is required to obtain written approval from the Department prior to undertaking an action. Whenever such approval is required, the Sponsor shall notify the Department in writing. The request for approval shall describe the nature, scope, design, location, size, timetable, and any other material aspect of the proposed action in sufficient detail to permit the Department to make an informed judgment as to its consistency with the terms and purpose of this Contract. The Department shall approve, conditionally approve, or deny the Sponsor's request in writing within sixty days (60) days of receipt of the written request. The Department may withhold its approval if it lacks sufficient information to reach an informed decision, or if it determines, in its sole discretion, that the proposal violates the purpose of this Contract and impairs the natural resource values of the Stewardship Property.

23. The Sponsor warrants that it has complied with all necessary requirements to do business in the State of Wisconsin, that it is a qualified tax exempt organization within the meaning of Section 170(h)(3) of the Internal Revenue Code, and that the persons executing this Contract are authorized to act on its behalf.

Land Management Plan:

24. Purpose. Pursuant to s. 23.17, Wis. Stats., the primary purpose of this Contract and the Land Management Plan is to permanently preserve a corridor for the Ice Age National Scenic Trail; to assure that the natural, conservation and open space values of the Stewardship Property are protected in perpetuity; and to confine the use of the Stewardship Property to activities that are consistent with these objectives.

25. Management Responsibilities of the Sponsor. The Sponsor is responsible for operation of the Stewardship Property and for providing adequate management and maintenance in a manner consistent with the purpose described above and with the requirements and conditions of this Contract and the Land Management Plan.

26. Management Rights of the Department. The Department, its officers, employees and agents may enter the Stewardship Property in order to monitor compliance with this Contract and the Land Management Plan or carry out any management activity necessary to ensure the public's rights and safety.

    If the Sponsor fails to fulfill its responsibilities under the terms of this Contract, the Department shall have the right, but not the obligation, to undertake land management activities on the Stewardship Property in accordance with the terms of the Land Management Plan. Before undertaking such responsibility, the Department shall provide the Sponsor with six (6) months prior written notice of the land management activity required and give the Sponsor the opportunity to perform that activity within the six-month period, or within a reasonable time thereafter if more time is needed due to weather constraints.

27. Revisions. Changes or revisions to the Land Management Plan may be made with written agreement of the Sponsor and Department.

28. Land Management Conditions and Requirements. Any activity on or use of the Stewardship Property that is inconsistent with the purpose of the project as described in paragraph 24 is prohibited. Without limiting the generality of the foregoing, the following activities and uses are expressly prohibited:

    a. Animals. There shall be no introduction of any wild animals onto the Stewardship Property without the prior written approval of the Department. There shall be no captive wild animal farm, bird hunting preserve, farm raised deer farm, wild fur farm or dog club training license, established or licensed on the Stewardship Property. The Sponsor shall not allow horses, cattle, or other livestock on the Stewardship Property for grazing or other purposes, except as permitted under Paragraph 29.

    b. Dumping. There shall be no temporary or permanent storage or placement of trash, soil, gravel, ashes, treated sewage, manure piles, hazardous or toxic substances, abandoned vehicles or machinery, or any other unsightly or offensive materials on, under or in the Stewardship Property, except that brush or other plant material cut as the result of activities approved herein may be left on the Stewardship Property.

    c. Mining, Surface Alteration and Manipulation of Water. There shall be no topographic changes, extraction of subsurface materials, alteration of the natural landscape, or manipulation of any waters or shorelines of the Stewardship Property by excavation, filling, dredging, draining, tiling, ditching or any other means, except as permitted in Paragraph 29.

    d. Natural Materials. There shall be no damage, destruction or removal from the Stewardship Property of any natural features or natural materials, including, but not limited to, rocks, soil, minerals, dead wood and fossils, except as permitted in Paragraph 29.

    e. Rights-of-Way. No right-of-way shall be granted across the Stewardship Property in conjunction with any industrial, commercial or residential use of other land not protected by this Contract, except as permitted in paragraph 29.

    f. Soil Erosion. There shall be no use or activity that causes or is likely to cause significant soil erosion or significant pollution of any surface or sub-surface waters. Best management practices shall be employed to minimize soil erosion during and after construction of any permitted roads, trails, structures or other improvements.

    g. Spraying. Application of pesticides on the Stewardship Property is not allowed except as follows: (i) to control pests on an emergency basis when such control is necessary to protect public health, (ii) to control non-native or invasive species (iii) for habitat restoration purposes (iv) or for other purposes specifically described in Paragraph 29.

h. Structures, buildings and improvements. The placement or construction of any mobile or permanent building, structure or other improvement is prohibited, except as permitted below or in Paragraph 29.

1) Fences. The Sponsor may repair and maintain any existing fences on the Stewardship Property.

2) Signs and Interpretive Displays. The Sponsor may not erect, display or maintain any outdoor advertising structure, sign or billboard on the Stewardship Property; however, the Sponsor may erect signs and interpretive displays for the following purposes: to identify the property; to indicate that the Stewardship Property is under the protection of the Sponsor and to acknowledge the Stewardship Program; to commemorate or interpret the natural features or human history of the Stewardship Property; to regulate uses, mark the boundaries or provide directions. The placement, size, number and design of signs or interpretive displays shall not diminish the scenic character of the Stewardship Property.

3) Roads and Parking Lots. Any existing roads on the Stewardship Property may be maintained, but shall not be widened or improved and no new roads shall be constructed or established, except as specifically permitted in Paragraph 29. A small parking lot, commensurate in size with the public use of the Stewardship Property, may be constructed.

4) Trails. The Sponsor may clear, construct and maintain trails for firebreaks, walking, cross-country skiing and other non-motorized recreational activities. Other trail restrictions may be included in paragraph 29 below.

i. Vegetation. There shall be no disturbances of any aquatic vegetation, fallen trees or other natural features in any shallow waters on or directly adjacent to the Stewardship Property, except as specifically permitted under Paragraph 29. Furthermore, there shall be no introduction, removal, damage, mowing, plowing, cutting, trimming or otherwise altering of any trees, shrubs, or other plants on the Stewardship Property, except as permitted in Paragraph 29 or as follows:

1) to remove non-native and invasive vegetation
2) to prevent or control insects, diseases, fire, personal injury or property damage
3) to construct and maintain any roads, trails or other structures permitted herein
4) to enhance wildlife habitat or restore and maintain native biological communities
5) to construct firebreaks for prescribed burning.
6) Collecting mushrooms, berries and nuts is permitted, provided that any collecting is carried out in a manner that maintains a sustainable growth and reproduction cycle for the plants.

j. Vehicles. There shall be no operation of any vehicle on the Stewardship Property, including, but not limited to, bicycles, snowmobiles, dune buggies, motorcycles, all-terrain vehicles, cars and trucks, except as follows: (i) in emergency situations, (ii) for maintenance of the Stewardship Property and habitat and resource management activities, (iii) for disabled access on existing roads and trails that are normally vehicle-accessible, with a permit issued by the Sponsor, or (iv) as permitted in Paragraph 29.

29. Other Management Conditions:

a. The Sponsor shall acknowledge the state's assistance and federal assistance in acquiring ownership of the Stewardship Property, and provide notice of public access to the Stewardship Property, by placement of signs on the Stewardship Property that have been approved by the Department and the National Park Service.

b. The Ice Age National Scenic Trail shall pass through the Property. The Trail shall be built to conform to standards for the Ice Age Trail, as outlined in the 2001 *Ice Age National Scenic Trail: A Handbook for Trail Construction, Design and Maintenance,* which was written by the National Park Service, Department and Ice Age Park and Trail Foundation. The Ice Age Trail is a foot trail, for walkers, hikers, snowshoers and where appropriate cross-country skiers.

c. The Sponsor shall be responsible for the construction, maintenance, operation, fencing and signing of the Ice Age Trail on the Stewardship Property and for keeping the Trail open for public use. Necessary maintenance shall include, but not be limited to, grading, landscaping and controlling vegetative growth on the Trail and in other use areas to keep the Trail in a good state of usefulness and sightliness.

d. Recreational uses such as hiking, nature appreciation and educational activities that do not degrade the natural features of the Stewardship Property will be encouraged. Pursuant to NR 51.75(4), there shall be no hunting unless specifically authorized by the Department.

Special Terms and Conditions:

30. The primary uses of the Property will be hiking, scientific research, nature appreciation and education.

31. The Trail shall be offered to the National Park Service for certification as a component of the Ice Age National Scenic Trail, and if it qualifies, shall be certified as part of the Ice Age National Scenic Trail.

32. The Stewardship Property shall be offered to the Department for dedication under s. 3.293, Wis. Stats., and if it is accepted shall be dedicated a State Ice Age Trail Area.

33 This project is being funded in part with funds from the National Park Service. An agreement between the National Park Service (NPS) and Department, signed by the Department on March 12, 2003, and the NPS on March 31, 2003, contains provisions for administration of funds and activities authorized under National Park Service Land Acquisition and State Assistance, in Title I and VIII, of the Interior and Related Agencies Appropriations Action, 2001, of October 11, 2000, and Section 135 of Title I, Division B, Appendix D of the Consolidate Appropriations Act, 2001, of December 21, 2000, including the following provisions which are hereby incorporated into this Contract.:

a. The Sponsor agrees that the property shall not, without the express written approval of the NPS, be converted to other than preservation/recreational use, but shall be maintained in the public trust for preservation/recreational use in perpetuity.

b. All deeds for real property acquired with assistance under this Contract shall contain the following covenant ensuring the protection of the land for Ice Age National Scenic Trail purposes in perpetuity.

"The Grantee hereby acknowledges that the property conveyed by this document has been acquired with Federal assistance from the Land and Water Conservation Fund and such property shall not be converted to other than preservation/recreation uses related to the Ice Age National Scenic Trail without the prior written approval of the National Park Service."

c. The Sponsor hereby agrees that, as soon as practicable subsequent to closing, title to the Stewardship Property shall be transferred by donation to either (1) the Wisconsin Department of Natural Resources or (2) with written approval from the National Park Services, to another appropriate public agency.

Signed this 30th day of January, 2006.

ICE AGE PARK AND TRAIL FOUNDATION

Christine Thisted White

Signature of Sponsor Representative

Christine Thisted White

Typed or Printed Name of Sponsor Representative

STATE OF WISCONSIN)
) ss.
DANE COUNTY)

Personally came before me this 30th day of January, 2006, the above named Christine Thisted White to me known to be the person who executed the foregoing instrument and acknowledged the same.

NOTARY PUBLIC JULIE McCUTCHIN STATE OF WISCONSIN

Julie McCutchin

Signature of Notary Public

Julie McCutchin

Typed or Printed Name of Notary Public
Notary Public, State of Wisconsin
My Commission (expires)(is) 10-4-2009

Signed this 25 day of January, 2006

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

BY Kimberlee Wright for
Michele A. Young, Director
Bureau of Community Financial Assistance

STATE OF WISCONSIN)
) ss.
Dane COUNTY)

Personally came before me this 25th day of January, 2006, the above named Kimberlee Wright to me known to be the person who executed the foregoing instrument and acknowledged the same.

NOTARY PUBLIC JULIE McCUTCHIN STATE OF WISCONSIN

Julie McCutchin

Signature of Notary Public

Julie McCutchin

Typed or Printed Name of Notary Public
Notary Public, State of Wisconsin
My Commission (expires)(is) 10-4-2009

THIS INSTRUMENT WAS DRAFTED BY THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Exhibit A – Legal Description

Lot one (1) , certified survey map no. 5016 recorded in Volume 22 of certified survey maps of Dane County, Wisconsin, pages 225 and 226 as document number 1958301, in the Town of Verona, Dane County, Wisconsin

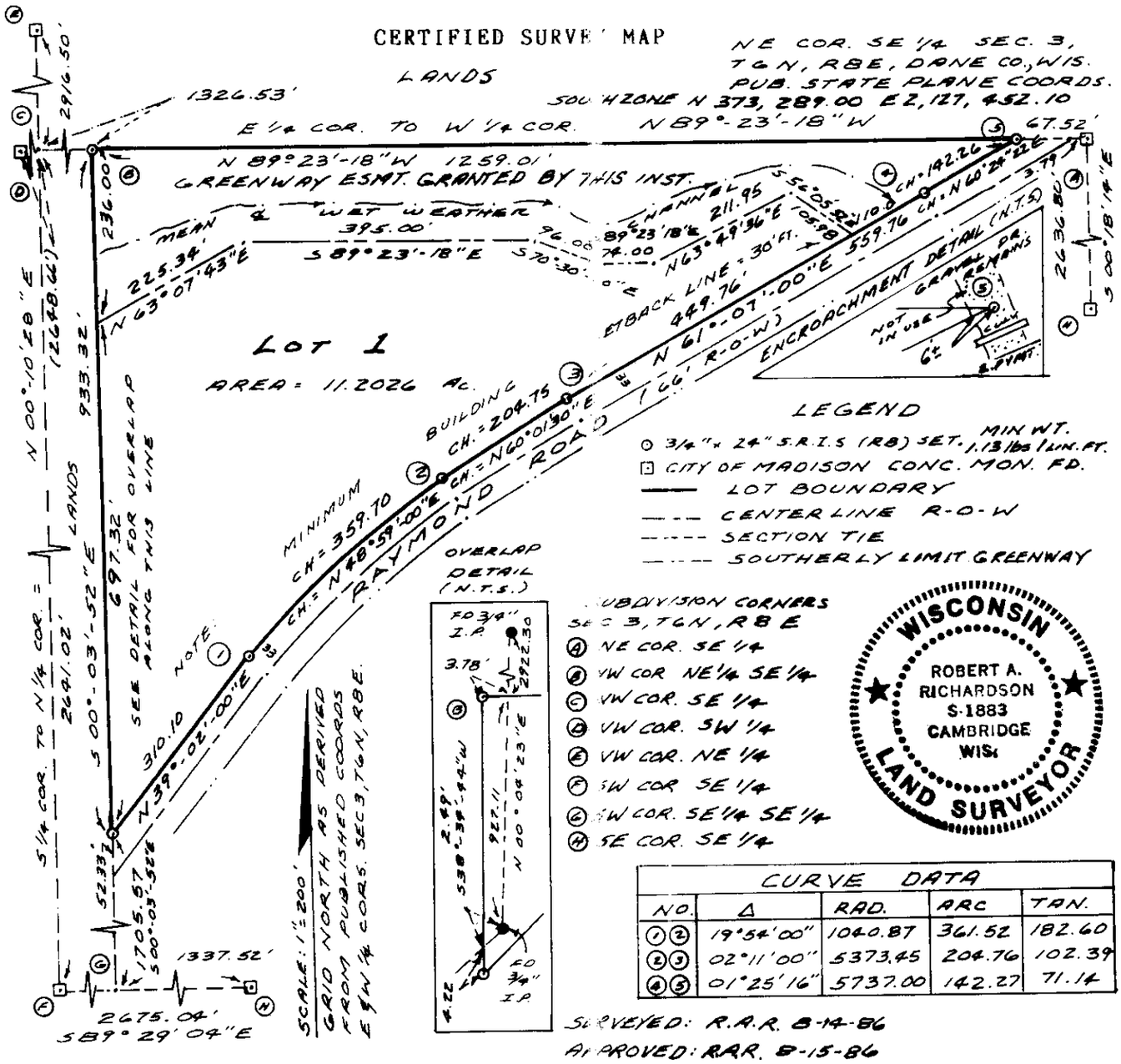
Except for:

That part of the NE ¼ of the SE ¼, Section 3, T6N, R8E, Town of Verona, Dane County, Wisconsin, lying northerly and westerly of Raymond Road and being more particularly described as follows: From the NE corner of the NE ¼ of the SE ¼ of said Section 3; thence along the north line thereof N 89°23'18" W, 67.52 feet to the northwesterly right-of-way line of Raymond Road and the POINT OF BEGINNING of the parcel herein described; thence continuing along said north line N 89°23'18" W, 451 feet; thence S 00°03'52" E, 250 feet to a point intersecting the northwesterly right-of-way line of Raymond Road; thence northeasterly along said right-of-way line to the POINT OF BEGINNING. The parcel contains approximately 1.29 acres.

CERTIFIED SURVEY MAP

LANDS

NE COR. SE 1/4 SEC. 3, T6N, R8E, DANE CO., WIS.
PUB. STATE PLANE COORDS.
SOUTH ZONE N 373,289.00 E 2,127,452.10



CURVE DATA				
NO.	Δ	RAD.	ARC	TAN.
(1)(2)	19°54'00"	1040.87	361.52	182.60
(2)(3)	02°11'00"	5373.45	204.76	102.39
(4)(5)	01°25'16"	5737.00	142.27	71.14

SURVEYED: R.A.R. 8-14-86
APPROVED: R.A.R. 8-15-86

Prepared by: The Landmark Survey Group, Inc., 6320 Monona Drive, Madison, WI 53716

Surveyed For: Daniel & Helane VanDerSteen, 6224 Raymond Rd., Madison, WI 53711

Location: Part of the NE 1/4 of the SE 1/4 of Section 3, T6N, R8E, Dane County, WI

Notes: (1) Lot 1 as shown above existed as a separate and distinct tract prior to the drafting of this instrument; therefore, no subdivision of lands is intended or created hereby.
(2) This instrument is being recorded as a certified survey map solely for administrative filing purposes and for granting a greenway easement to the City of Madison in accordance with its powers of extraterritorial jurisdiction.
(3) This instrument was drafted by Robert A. Richardson.

CERTIFICATION:
I, Robert A. Richardson, a Land Surveyor duly registered in the State of Wisconsin, do hereby certify that I have surveyed and mapped the lands described and shown hereon in full compliance with Chapt. 236.34 of the Wisconsin Statutes and in accordance with information furnished, and that such survey and map are true and correct to the best of my knowledge and belief.

R.A.R. 8-18-86
Robert A. Richardson, RLS S-1883

REGISTER OF DEED'S CERTIFICATE:
Received for record this 20 day of August, 19 86 at 1:20 o'clock, P.M. and recorded in Volume 22 of CERTIFIED SURVEY MAPS of Dane County, on Page 225 & 226.

Carol R. Mahoke
Register of Deeds by: Darlene M. Duckert Deputy

DOCUMENT NO. 1958301

CERTIFIED SURVEY MAP NO. 5016 VOLUME 22 PAGE 225

6.00

Description:

That part of the NE 1/4 of the SE 1/4, Section 3, T6N, R8E, Dane County, Wisconsin, lying northerly and westerly of Raymond Road and being more particularly described as follows: From the NE corner of the NE 1/4 of the SE 1/4 of said Section 3, run thence along the north line thereof N 89° 23' 18" W, 67.52 ft to the northwesterly R-O-W line of Raymond Road and the POINT OF BEGINNING of the parcel herein described; thence continuing along the same N 89° 23' 18" W, 1259.01 ft to the NW corner of said NE 1/4 of said SE 1/4; thence S 00° 03' 52" E, 933.32 ft along the West line of said 1/4 1/4 section to a point in the aforesaid Northwesterly R-O-W line of Raymond Road; thence turn and run with said R-O-W line the following 5 courses and distances: N 39° 02' 00" E, 310.10 ft to a point of curvature; thence along the arc of a curve deflecting to the right, said curve having a radius of 1040.87 ft, a central angle of 19° 54' 00" and a chord which bears N 48° 59' 00" E, 359.70 ft to a point of compound curvature; thence along the arc of a curve deflecting to the right, said curve having a radius of 5373.45 ft, a central angle of 02° 11' 00" and a chord which bears N 60° 01' 30" E, 204.75 ft, to a point of tangency; thence N 61° 07' 00" E, 559.76 ft, to a point of curvature; thence along the arc of a curve deflecting to the left, said curve having a radius of 5747.00 ft, a central angle of 01° 25' 16" and a chord which bears N 60° 24' 22" E, 142.26 ft to the POINT OF BEGINNING.

APPROVED FOR RECORDING PER Dane County ~~Agriculture, Forestry, Planning, and Water Resources~~ Agriculture, Environment & Land Records Committee action of August 19, 1986.

Norbert Scribner #3748

Norbert Scribner, authorized representative

GREENWAY EASEMENT AS SHOWN HEREON APPROVED AND ACCEPTED PER action of the City of Madison Engineering Department August 19, 1986

Arnold E Miller

APPROVED FOR RECORDING PER action of owners (mortgagees) August 15, 1986

Daniel E VanDer Stoep

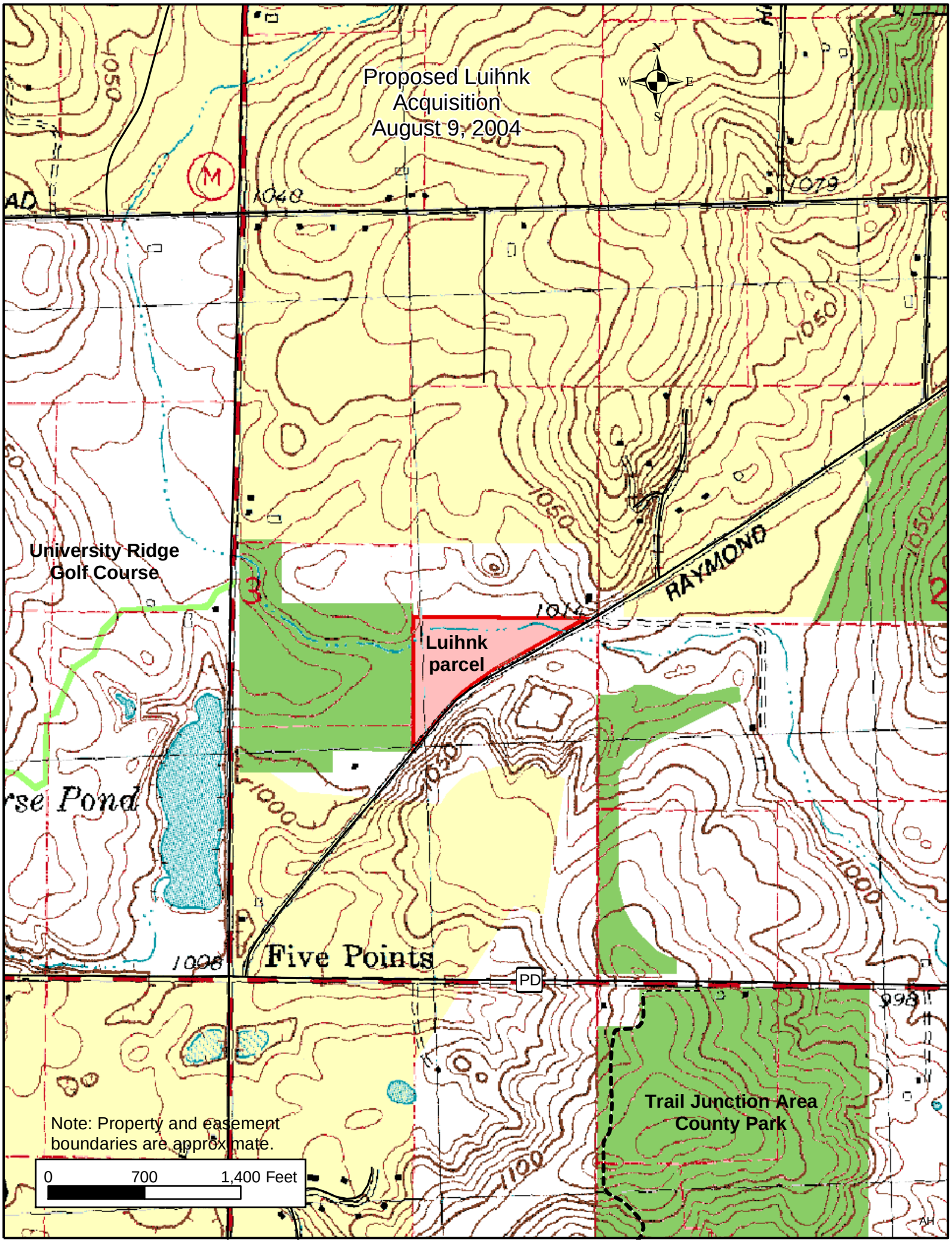
Helene G VanDer Stoep

APPROVED FOR RECORDING PER action of State Bank of Cross Plains (mortgagor) Aug 15, 1986

Gary DiPiazza AVP

DOCUMENT NO. 1958301

CERTIFIED SURVEY MAP NO. 6016 VOLUME 22 PAGE 226


Proposed Luihnk
Acquisition
August 9, 2004
N
W
E
S
University Ridge
Golf Course
Luihnk
parcel
RAYMOND
Five Points
PD
Trail Junction Area
County Park
Note: Property and easement
boundaries are approximate.
0
700
1,400 Feet

Document Number

STATE BAR OF WISCONSIN FORM 2 - 1998

WARRANTY DEED

DANE COUNTY
REGISTER OF DEEDS

3249568

09-08-2000 1:20 PM

Trans. Fee EXEMPT #2
Rec. Fee 12.00
Pages 2

000670

Recording Area

Name and Return Address
ARDEN T. SANDSNES
ROYAL OAK ENGINEERING INC
5610 MEDICAL CIRCLE SUITE 6
MADISON WI 53719

This Deed, made between Dane County, a Wisconsin municipal corporation Grantor, and Midtown Madison Corp. Grantee.

Grantor, for a valuable consideration, conveys and warrants to Grantee the following described real estate in Dane County, State of Wisconsin:

See attached Exhibit A

0608 034 8501 0
Parcel Identification Number (PIN)

This is not homestead property.
(is) (is not)

Exceptions to warranties: Municipal and zoning ordinances; recorded easements; recorded building and use restrictions and covenants; and taxes, general and special, levied or assessed on or after January 1, 2000.

Dated this 6th day of September, 2000.

DANE COUNTY
By:
* Joseph T. Parisi, County Clerk
* Joseph T. Parisi

*
*

AUTHENTICATION

Signature(s) of Joseph T. Parisi

authenticated this 6th day of September, 2000

* Judith K. Nowak
TITLE: ~~MEMBER STATE BAR OF WISCONSIN~~
(If not, Notary Public, Wisconsin
authorized by § 706.06, Wis. Stats.)

THIS INSTRUMENT WAS DRAFTED BY

Thomas J. Sobota

(Signatures may be authenticated or acknowledged. Both are not necessary.)

ACKNOWLEDGMENT

STATE OF WISCONSIN)
) ss.
Dane County.)

Personally came before me this 6th day of Sept, 2000 the above named Joseph T. Parisi

to me known to be the person — who executed the foregoing instrument and acknowledged the same.

* Arden T. Sandsnes
Notary Public, State of Wisconsin
My Commission is permanent. (If not, state expiration date: 08-13, 2002)

*Names of persons signing in any capacity must be typed or printed below their signature.

WARRANTY DEED

STATE BAR OF WISCONSIN
FORM No. 2-1998

Produced with ZipForm™ by Vertisoft Inc. 18025 Fifteen Mile Road, Clinton Township, Michigan 48035, (800) 383-9805

Boardman, Suhr, Curry & Field LLP PO Box 927 Madison WI 53701-0927 Phone: 608 257-9521 Fax: 608 283-1709

07632160.UFD

2/12

EXHIBIT A

000671

Part of the Southwest 1/4 of the Northeast 1/4 of Section 03, Township 06 North, Range 08 East, Town of Verona, Dane County, Wisconsin, more fully described as follows:

Commencing at the North 1/4 corner of said Section 03;

Thence S 00°10'11" W, 2366.63 feet along the North-South 1/4 line of said Section 03;

Thence S 89°23'35" E, 208.31 feet to the point of beginning of this description;

Thence continue S 89°23'35" E, 160.02 feet;

Thence S 00°33'45" W, 226.89 feet;

Thence N 34°37'00" W, 277.74 feet to the point of beginning of this description.

Said parcel contains 18,153 square feet.

STATE BAR OF WISCONSIN FORM 2 - 1998

WARRANTY DEED

Document Number

DANE COUNTY
REGISTER OF DEEDS

3249567

09-08-2000 1:20 PM

Trans. Fee 21.00

Rec. Fee 12.00
Pages 2

000668

Recording Area

Name and Return Address
ARDEN T. SANDSNES
ROYAL OAK ENG
5610 MEDICAL CIRCLE #6
MADISON, WI 53719

0608 034 8501 0
Parcel Identification Number (PIN)

This is not homestead property.
(is) (is not)

This Deed, made between Midtown Madison Corp.

Grantor,

and Dane County, a Wisconsin municipal corporation

Grantee.

Grantor, for a valuable consideration, conveys and warrants to Grantee the following described real estate in Dane County, State of Wisconsin:

See attached Exhibit A

Exceptions to warranties: Municipal and zoning ordinances; recorded easements; recorded building and use restrictions and covenants; and taxes, general and special, levied or assessed on or after January 1, 2000.

Dated this 6th day of Sept, 2000.

MIDTOWN MADISON CORP.

By:

* David M. Roark, Authorized Agent

*

*

*

AUTHENTICATION

Signature(s) of David M. Roark

authenticated this 6th day of Sept, 2000

* ARDEN T. SANDSNES

TITLE: ~~MEMBER STATE BAR OF WISCONSIN~~
(If not, Notary Public, Wisconsin
authorized by § 706.06, Wis. Stats.)

THIS INSTRUMENT WAS DRAFTED BY

Thomas J. Sobota

(Signatures may be authenticated or acknowledged. Both are not necessary.)

ACKNOWLEDGMENT

STATE OF WISCONSIN)
) ss.
DANE County.)

Personally came before me this 6th day of Sept, 2000 the above named DAVID ROARK

to me known to be the person ——— who executed the foregoing instrument and acknowledged the same.

* ARDEN T. SANDSNES
Notary Public, State of Wisconsin
My Commission is permanent. (If not, state expiration date: Oct 13, 2002.)

*Names of persons signing in any capacity must be typed or printed below their signature.

WARRANTY DEED

STATE BAR OF WISCONSIN
FORM No. 2-1998

Produced with ZipForm™ by Vertisoft Inc. 18025 Fifteen Mile Road, Clinton Township, Michigan 48035, (800) 383-9805

Boardman, Suhr, Curry & Field LLP PO Box 927 Madison WI 53701-0927 Phone: 608 257-9521 Fax: 608 283-1709

05145702.UFD

1/2

EXHIBIT A

Part of the Southwest 1/4 of the Northeast 1/4 of Section 03, Township 06 North, Range 08 East, City of Madison, Dane County, Wisconsin, more fully described as follows:

Commencing at the North 1/4 corner of said Section 03;
Thence S 00°10'11" W, 2366.63 feet along the North-South 1/4 line of said Section 03;
Thence S 89°23'35" E, 368.33 feet;
Thence S 00°33'45" W, 226.89 feet to the point of beginning of this description;
Thence S 34°37'00" E, 277.74 feet;
Thence N 89°23'32" W, 160.02 feet;
Thence ~~continue~~ N 00°33'45" E, 226.89 feet to the point of beginning of this description.

Said parcel contains 18,153 square feet.

DOCUMENT NO.

2633737

STATE BAR OF WISCONSIN FORM 1—1982
WARRANTY DEED

THIS SPACE RESERVED FOR RECORDING DATA

REGISTER OF DEEDS
DANE COUNTY WI

94 SEP 23 PM 2:54

V28480P 21

RETURN TO Douglas Haag
Dane County Parks Department
4318 Robertson Road
Madison, WI 53714

This Deed, made between Wisconsin Capital Land Fund, L.P., Grantor, and Dane County, Grantee,

Witnesseth, That the said Grantor, for a valuable consideration of One Dollar ($1.00) and additional consideration conveys to Grantee the following described real estate in Dane County, State of Wisconsin:

Tax Parcel No:

See Exhibit A attached hereto and made a part hereof.

TRANSFER
$ 799.20 N
FEE PAID

By acceptance of this deed, the grantee, for itself and its successors and assigns hereby covenants and agrees not to sell, lease, assign or mortgage the premises herein described without the prior written approval of the Secretary of the Wisconsin Department of Natural Resources, his or her designee or successor.

This is not homestead property.
(~~is~~ (is not)

Together with all and singular the hereditaments and appurtenances thereunto belonging;
And Grantor warrants that the title is good, indefeasible in fee simple and free and clear of encumbrances except municipal and zoning ordinances, recorded easements for public utilities serving the property, recorded building and use restrictions and covenants, general taxes for 1994 and future years
and will warrant and defend the same.

Dated this 22 day of September 19 94

WISCONSIN CAPITAL LAND FUND, L.P.

By: Intervest Midwest Real Estate Corporation, its authorized agent

By: Barry L. Lazarus, President

(SEAL)

*

(SEAL)

*

(SEAL)

*

(SEAL)

*

AUTHENTICATION

Signature(~~s~~) of Barry L. Lazarus

authenticated this 22 day of Sept, 19 94

Jesse S. Ishikawa

* Jesse S. Ishikawa

TITLE: MEMBER STATE BAR OF WISCONSIN

(If not, authorized by § 706.06, Wis. Stats.)

THIS INSTRUMENT WAS DRAFTED BY

Jesse S. Ishikawa
Michael, Best & Friedrich
P.O. Box 1806, Madison, WI 53701-1806

(Signatures may be authenticated or acknowledged. Both are not necessary.)

ACKNOWLEDGMENT

STATE OF WISCONSIN } ss.
County.

Personally came before me this day of , 19 the above named

to me known to be the person who executed the foregoing instrument and acknowledge the same.

*

Notary Public County, Wis.
My Commission is permanent. (If not, state expiration date: , 19)

*Names of persons signing in any capacity should be typed or printed below their signatures.

EXHIBIT A

A parcel of land located in the Southwest 1/4 of the Northeast 1/4 and in the Northwest 1/4 of the Southeast 1/4 of Section 3, Town 6 North, Range 8 East, Town of Verona, Dane County, Wisconsin, to-wit: Commencing at the North quarter corner of said Section 3; thence N 88 degrees 53'11" E, 54.44 feet to the South quarter corner of Section 34, Town 7 North, Range 8 East; thence N 88 degrees 51'59" E, 1,271.00 feet; thence S 00 degrees 08'41" W, 2,860.83 feet to the point of beginning; thence continuing S 00 degrees 08'41" W, 96.00 feet; thence S 00 degrees 03'26" E, 980.78 feet; thence N 89 degrees 28'19" W, 598.68 feet; thence S 00 degrees 31'41" W, 162.80 feet; thence N 89 degrees 28'19" W, 670.56 feet; thence N 00 degrees 11'23" E, 1,145.20 feet; thence N 01 degree 13'47" E, 550.02 feet; thence S 89 degrees 23'26" E, 297.72 feet; thence S 00 degrees 36'34" W, 453.83 feet; thence S 89 degrees 23'26" E, 961.53 feet to the point of beginning.

147/147A

839-8545

EXHIBIT A

001043

?

Lazarus p.2 4 notes

Plat of Survey

SURVEYORS CERTIFICATE
STATE of WISCONSIN)
COUNTY of DANE) ss.

I hereby certify that this survey is in compliance with Chapter 236.34 of Wisconsin Statutes.

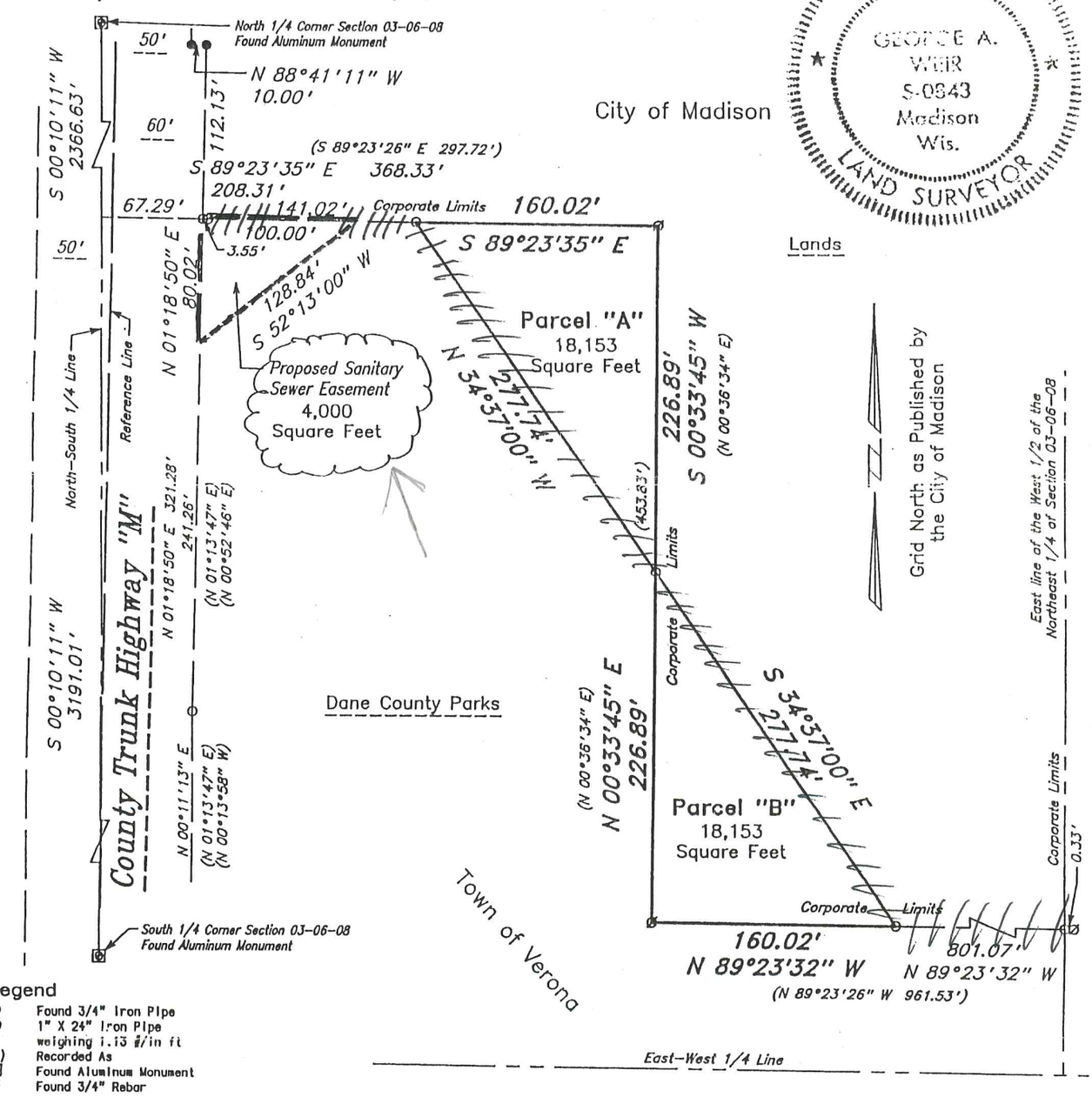
I further certify that I have surveyed and mapped the lands described hereon, and that this map is a correct representation in accordance with the information furnished.

George A Weir Nov 24, 00

George A. Weir, Professional Land Surveyor, S-0843

Royal Oak Engineering, Inc.
&
George A. Weir, Land Surveyor
5610 Medical Circle, Suite 6
Madison, Wisconsin 53719
Phone (608) 274-0500
Fax (608) 274-4530

WISCONSIN GEORGE A. WEIR S-0843 Madison Wis. LAND SURVEYOR



Legend
- ● Found 3/4" Iron Pipe
- O 1" X 24" Iron Pipe weighing 1.13 #/in ft
- ( ) Recorded As
- ⊠ Found Aluminum Monument
- Ø Found 3/4" Rebar

0 50 100 200
Scale 1" = 100'

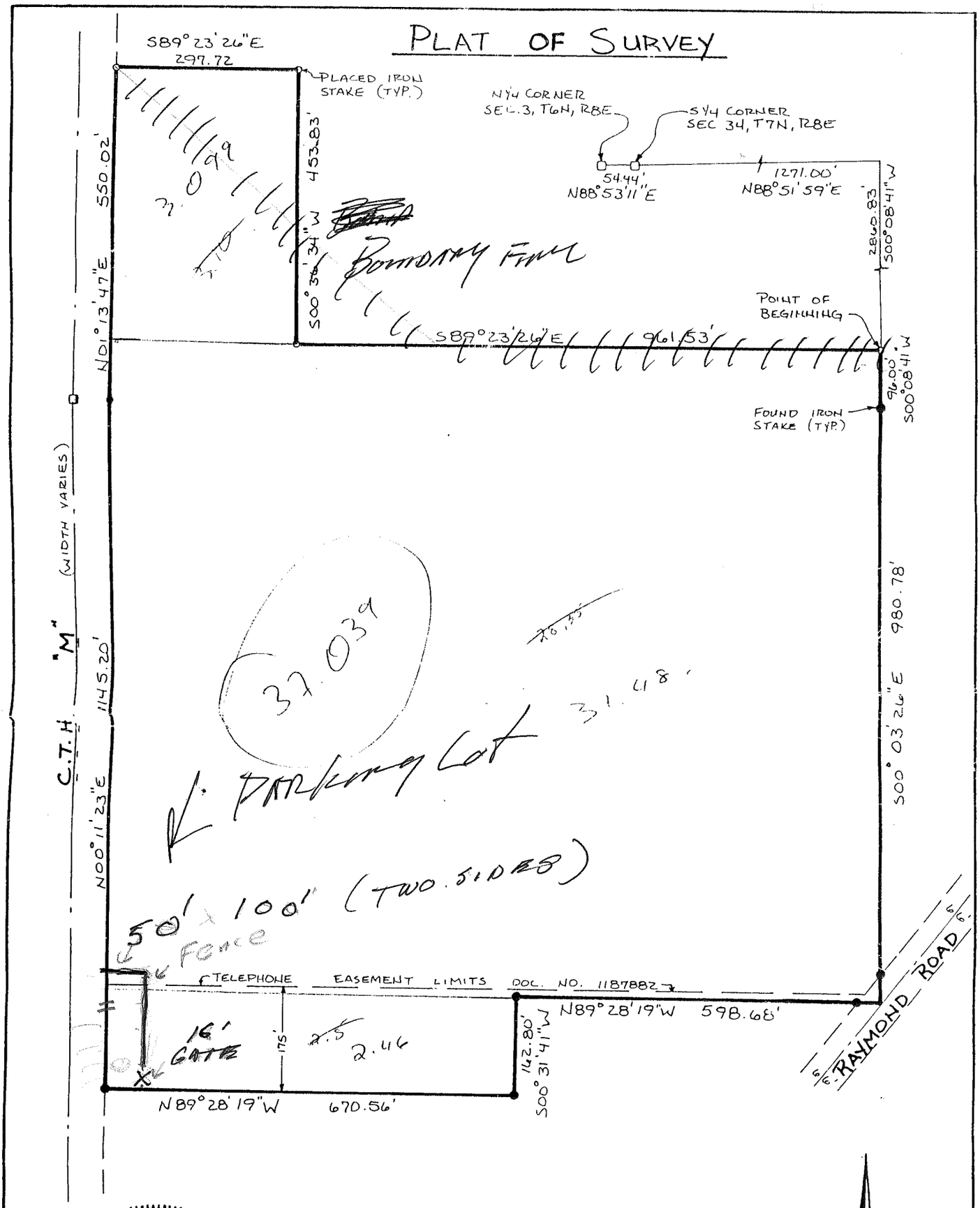
Surveyed By RP, EWS
Drawn By RP
Checked By
Approved By
Date of Survey March 23, 2000
Field Book 873 Pgs 1
Dir /data/dane/verona/
Dir cont. section03
Data Level(s) PLAT
File Name 14194

Office Map No. 14194
Sheet 1 of 2 Sheet(s)

FOR: Mr. David Roark
ADDRESS: 1009 South Whitney Way
Madison, Wisconsin 53711

DESCRIPTION-LOCATION: Part of the Southwest 1/4 of the Northeast 1/4 of Section 03, Township 06 North, Range 08 East, City of Madison and Town of Verona, Dane County, Wisconsin

PLAT OF SURVEY



WISCONSIN
RICHARD G. RASMUSSEN
S-1034
Madison
Wis.
LAND SURVEYOR

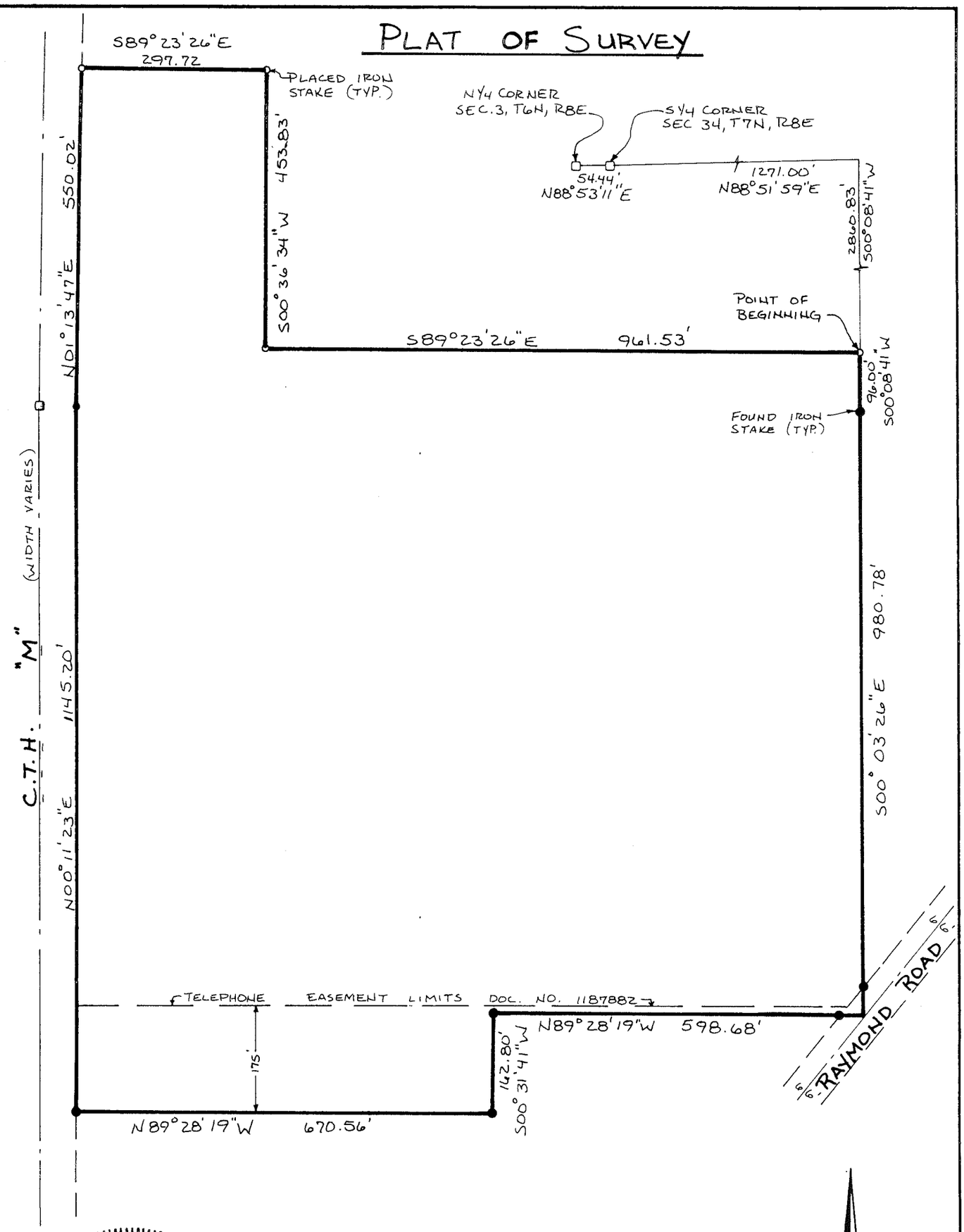
D'ONOFRIO KOTTKE AND ASSOCIATES, INC.
7530 WESTWARD WAY
MADISON, WISCONSIN 53717
PHONE: 608-833-7530

DATE: 9-12-94

SCALE: 1" = 200'

F.N.: 94-02-180

PLAT OF SURVEY



WISCONSIN
RICHARD G. RASMUSSEN
S-1034
Madison
Wis.
LAND SURVEYOR

D'ONOFRIO KOTTKE AND ASSOCIATES, INC.
7530 WESTWARD WAY
MADISON, WISCONSIN 53717
PHONE: 608-833-7530

DATE: 9-12-94

SCALE: 1" = 200'

F.N.: 94-02-180

LANDS TO BE ACQUIRED BY DANE COUNTY FOR PARK PURPOSES

A parcel of land located in the SW 1/4 of the NE 1/4 and in the NW 1/4 of the SE 1/4 of Section 3, T6N, R8E, Town of Verona, Dane County, Wisconsin, To-wit: Commencing at the north quarter corner of said Section 3; thence N88°53'11"E, 54.44 feet to the south quarter corner of Section 34, T7N R8E, thence N88°51'59"E, 1,271.00 feet; thence S00°08'41"W, 2,860.83 feet to the point of beginning; thence continuing S00°08'41"W, 96.00 feet; thence S00°03'26"E, 980.78 feet; thence N89°28'19"W, 598.68 feet; thence S00°31'41"W, 162.80 feet; thence N89°28'19"W, 670.56 feet; thence N00°11'23"E, 1,145.20 feet; thence N01°13'47"E, 550.02 feet; thence S89°23'26"E, 297.72 feet; thence S00°36'34"W, 453.83 feet; thence S89°23'26"E, 961.53 feet to the point of beginning. Containing 37.000 acres.

Note: This parcel is encumbered by a "blanket" easement including the entire parcel granted to Wisconsin, Power & Light (Volume 130, Misc. Page 27 as Document No. 598968).

SURVEYOR'S CERTIFICATE

I have surveyed the above described property and the map hereon is a true representation thereof and shows the size and location of the property, its exterior boundaries, the location and dimensions of all visible structures thereon, fences apparent easements and roadways and visible encroachments, if any. This survey is made the exclusive use of the present owners of the property, and also those who purchase, mortgage, or guarantee the title thereto within one (1) year from date hereof; and as to them I certify the accuracy of said survey and map.

Dated at Madison, Wisconsin, this 12 day of SEPTEMBER, 1994.

Richard G. Rasmussen, S-1034
Registered Land Surveyor

Surveyed For:

Dane County Park Commission
4318 Robertson Road
Madison, WI 53714

WISCONSIN
RICHARD G.
RASMUSSEN
S-1034
Madison
Wis.
LAND SURVEYOR

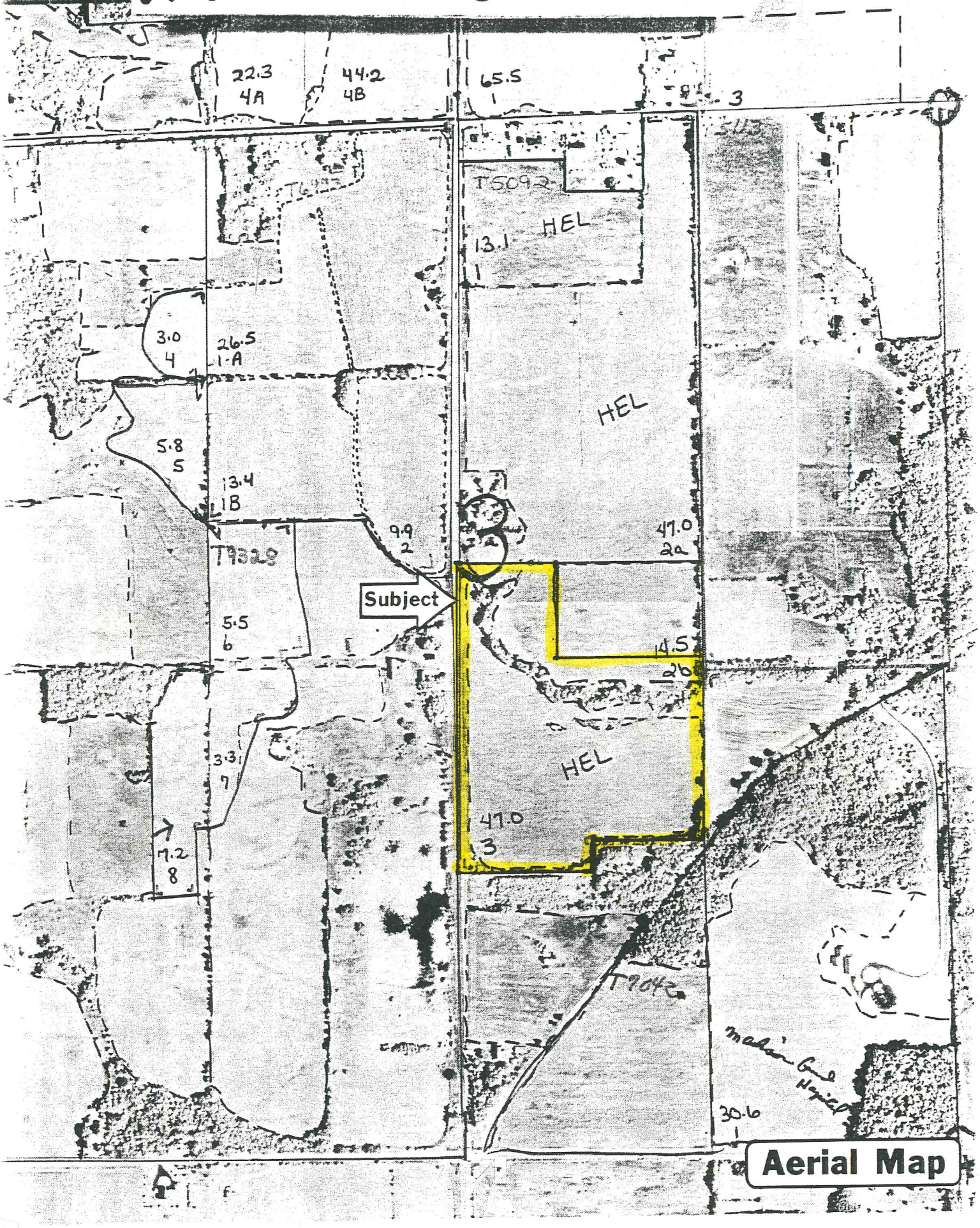
D'ONOFRIO KOTTKE
AND ASSOCIATES, INC.
7530 WESTWARD WAY
MADISON, WISCONSIN 53717
PHONE: 608-833-7530

DATE: 9-12-94

F.N.: 94-02-180

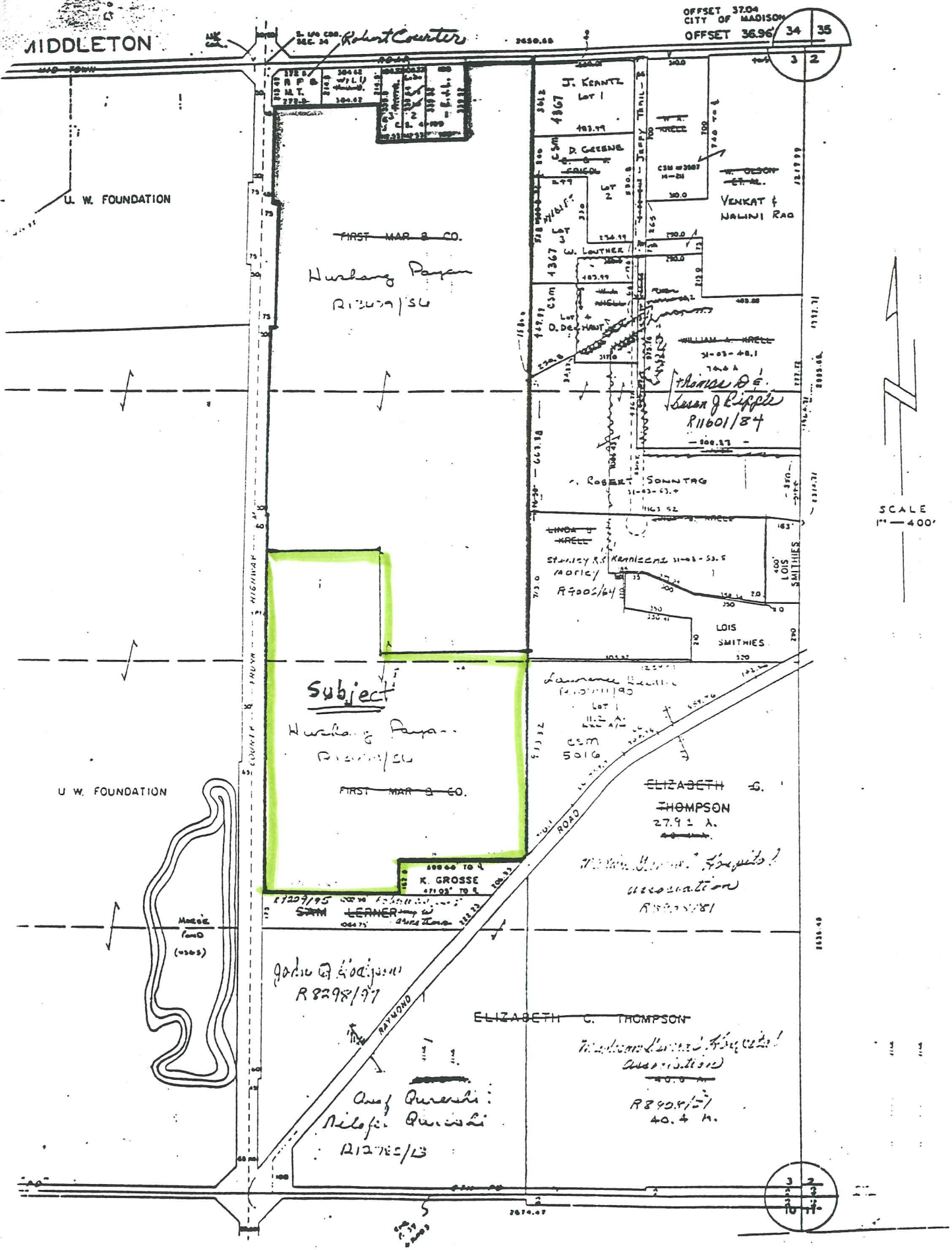
Verona

87 J·10 3 6 8



Aerial Map

C.3 T.6N. R.8E. Exhibit A



Section Map

State of Wisconsin
Department of Natural Resources
Box 7921
Madison, Wisconsin 53704

YOUR COPY

RECREATION AIDS GRANT AGREEMENT
OR PROJECT FUNDING AGREEMENT
8700-65 Rev. 9-93

Sponsor:	Project Number:
Dane County	UGS - 42

Project Title:

Dane County, Ice Age - Payan Acquisition

Period Covered By this Agreement:	Name of Program:
Date of approval through June 30, 1997	Urban Green Space Program

Project Scope and Description of Project:

The Dane County will participate in the Urban Green Space Program by providing the following items:

Dane County will purchase approximately 35 acres of land for public outdoor recreation purposes.

Project Cost:

Total Cost:	$ 266,400
Fund Support:	50%
State Aid Amount:	$ 133,200
Sponsor Share:	$ 133,200

The following documents are hereby incorporated into and made part of this agreement:

1. Chapter NR 50 , Wisconsin Administrative Code
2. Recreation Aids Application

1. The State of Wisconsin Department of Natural Resources (Department) and the Sponsor mutually agree to perform this agreement in accordance with the Urban Green Space Program and with the project proposal, application, terms, promises, conditions, plans, specifications, estimates, procedures, maps, and assurances attached hereto and made a part hereof.

2. The Department hereby promises, in consideration of the covenants and agreements made by the Sponsor herein, to obligate to the sponsor the amount of $133,200, and to tender to the Sponsor that portion of the obligation which is required to pay the Department's share of the costs based upon the state providing 50 percent of the eligible project costs. The Sponsor hereby promises, in consideration of the promises made by the Department herein, to execute the project described herein in accordance with this agreement.

3. The Sponsor agrees to comply with all applicable Wisconsin Statutes and Wisconsin Administrative Codes in fulfilling terms of this agreement. In particular, the Sponsor agrees to comply with the provisions of Chapter NR 50, Wis. Adm. Code, attached hereto and made a part hereof.

4. The Department agrees that the Sponsor shall have sole control of the method, hours worked, and time and manner of any performance under this agreement other than as specifically provided herein. The department reserves the right not only to inspect the job site or premises for the sole purpose of insuring that the performance is progressing or has been completed in compliance with the agreement. The Department takes no responsibility of supervision or direction of the performance of the agreement to be performed by the Sponsor or the sponsor's employees or agents. The Sponsor is an Independent Contractor for all purposes, not an employee or agent of the Department. The Department further agrees that it will exercise no control over the selection and dismissal of the Sponsor's employees or agents

5. This agreement, together with any referenced parts and attachments, shall constitute the entire agreement and previous communications or agreements pertaining to the subject matter of this agreement are hereby superseded. Any revisions, including cost adjustments, must be made by an amendment to this agreement or other written documentation, signed by both parties, prior to the termination date of the agreement. Time extensions to the agreement may be granted to the sponsor by the Department in writing without the requirements of Sponsor signature.

6. The sponsor may rescind this agreement in writing at any time prior to the starting of the project and before expending any funds. After the project has been started or funds expended, this agreement may be rescinded, modified, or amended only by mutual agreement in writing.

7. Failure by the Sponsor to comply with the terms of this agreement shall not cause the suspension of all obligations of the State hereunder if, in the judgement of the Secretary of the Department, such failure was due to no fault of the sponsor. In such case, any amount required to settle at minimum costs any irrevocable obligations properly incurred shall be eligible for assistance under this agreement, at the Department's discretion.

8. The Sponsor agrees, to save, keep harmless, defend and indemnify the Department and all its officers, employees and agents, against any and all liability claims, costs of whatever kind and nature, for injury to or death of any person or persons, and for loss or damage to any property (state or other) occurring in connection with or in any way incident to or arising out of the occupancy, use, service, operation or performance of work in connection with this agreement or omissions of Sponsor's employees, agents or representatives.

9. The Sponsor agrees to reimburse the Department of any and all funds the Department deems appropriate in the event the Sponsor fails to comply with the conditions of this agreement or project proposal as described, or fails to provide public benefits as indicated in the project application, proposal description or this agreement. In addition, should the Sponsor fail to comply with the conditions of this agreement, fail to progress due to nonappropriation of funds, or fail to progress with or complete the project to the satisfaction of the Department, all obligations of the Department under this agreement may be terminated, including further project cost payment.

- Other Conditions -

10. Property acquired or developed with assistance from this program shall not be converted to uses inconsistent with public outdoor recreation without the approval of this Department

11. All facilities constructed with assistance from this program must be accessible to persons with disabilities.

12. All existing overhead utility services if feasible shall be buried and any new utility services provided through this project must be installed underground.

13. The sponsor must assure compliance with the Historic Properties State Statute (s. 66.037) or have a clearance letter from the State Historic Preservation Officer.

14. The Sponsor agrees, to save, keep harmless, defend and indemnify the Department and all its officers, employees and agents, against any and all liability claims, costs of whatever kind and nature related to any and all environmental hazards associated with the purchase of property or rights in property that are purchased with Department grant funds, by the Sponsor.

15. The following special project terms and conditions were added to this agreement before it was signed by the parties hereto:

1. Acquisition of real property shall be in accordance with state guidelines for preparation of appraisals and relocation assistance.

2. The following clause must be entered in the deed: By the acceptance of this deed, the sponsor, for itself and its successors and assign, hereby covenants and agrees not to sell, lease, assign or mortgage the premises herein described without prior written approval of the Secretary of the Department of Natural Resources, his designee, or any successor.

The persons signing for the Sponsor represents both personally and as an agent of his or her principal that he or she is authorized to execute this agreement and bind his or her principal, either by a duly adopted resolution or otherwise.

By Kenneth L. Pa
(Signature)

Park Director
(Title)

12/2/94
(Date)

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
FOR THE SECRETARY

By Craig L. Karr
Craig L. Karr, Director
Bureau of Community Assistance

11-23-94
(Date)

SECTION 4(F) DETERMINATION REPORT

Ice Age National Scenic Trail
Correspondence and Documentation

Wisconsin
Federal Highway Administration
Finding of *De Minimis* Impact on Parks, Recreation Areas and Wildlife and Waterfowl Refuges

WISDOT ID: 5992-06-51
Route: CTH M
Termini: Cross County Road to Prairie Hill Road
City/County: Dane County

Name of 4(f) Resource: Ice Age National Scenic Trail

Project description:

The state name for this project is South Pleasant View Road, City of Madison, County Highway M Reconstruction, Cross Country Road to Prairie Hill Road. This project involves a full reconstruction of the CTH M mainline and two intersections. An Environmental Assessment was conducted to satisfy NEPA requirements.

The CTH M corridor is a critical north/south roadway connecting the City of Madison and the City of Verona. The project limits are Cross Country Road to Prairie Hill Road, a distance of 2.9 miles. The proposed project is located in Dane County, Wisconsin in the cities of Madison and Verona and the Towns of Verona and Middleton.

The proposed improvements include expansion of CTH M from a two-lane highway to a 4 to 6-lane arterial roadway with a raised median and a multi-use path. Improvements are proposed for the intersections of CTH M – Midtown Road and CTH M – CTH PD. Improvements are proposed for the intersections of CTH M – Midtown Road and CTH M – CTH PD. This roadway is a principal arterial on the National Highways System (MAP-21).

This property is considered a Section 4(f) resource because it is part of the Ice Age National Scenic Trail and has been designated a recreation area. This property is also protected by Section 6(f).

To accommodate the CTH M roadway widening and the proposed pedestrian improvements near the CTH M – Flagstone Drive intersection, approximately 0.3 acres of right of way need to be acquired from the existing easement.

The Ice Age Trail crosses CTH M at-grade at the Flagstone Drive intersection connecting the Dane County Parkland parcel to the east and the University Ridge Golf Course Property to the west. The expansion of the roadway will impact the Ice Age Trail at this location regardless of where the roadway is constructed. Realigning the Ice Age Trail and providing a new connection under CTH M is necessary at Flagstone Drive.

Every attempt was made to minimize impacts to the Ice Age Trail easement. Specific measures taken include:

- Reduce the skew and provide grade-separated crossing at CTH M and Flagstone Drive that provides connectivity to the Ice Age National Scenic Trail
- Install a dodge way and signage on the west side of the proposed underpass at the Ice Age National Scenic Trail to deter bicycle use. Coordinate design and installation with the Ice Age Trail Alliance
- Minimize the length of trail that is concurrent with the multi-use path and connections to the multi-use path should be as close to perpendicular as possible to prevent use of the IAT by bicycles
- Amend the existing easement the Ice Age Trail Alliance has with the University of Wisconsin-Madison as necessary to insure connectivity to the proposed underpass
- Reducing overall roadway width by using acceptable standards for cross-section elements including lane, median, and terrace widths.

The attached documentation shows the following:

1.
    a. *What the activities, features, and attributes are that qualify Ice Age National Scenic Trail for protection under Section 4(f).*

    b. *What the transportation use of the Section 4(f) resource is.*

    c. *How this use does not adversely affect the activities, features, and attributes listed in 1.A., above. In making this determination, consideration may be given to any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project; and*

2. The Ice Age Trail Alliance has been informed that FHWA may make a *de minimis* finding under 4(f) and may use the Ice Age Trail Alliance's written concurrence that the project does not adversely affect the activities, features, and attributes listed in 1.A., above that qualify the property for protection under Section 4(f) in making that finding; and

3. The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource.

4. There are no federal encumbrances [such as 6(f)] on the Ice Age National Scenic Trail easement.

SRF Consulting Group, Inc.
ENGINEERS
PLANNERS
DESIGNERS

December 6, 2012 SRF No. 0107334

Mr. Anthony Fernandez
City Engineer
City-County Building, Room 115
210 Martin Luther King Jr. Boulevard
Madison, WI 53703

SUBJECT: SOUTH PLEASANT VIEW ROAD/COUNTY M,
PRAIRIE HILL ROAD TO CROSS COUNTRY ROAD (PROJECT ID: 5992-09-81)
4(F) PROPERTY COORDINATION – ICE AGE TRAIL

Dear Mr. Fernandez:

The City of Madison, in conjunction with the City of Verona and Dane County, is proposing roadway improvements to South Pleasant View Road (CTH M) from Cross Country Road to Prairie Hill Road, a distance of approximately three miles. The proposed improvements consist of expanding South Pleasant View Road initially from two to four lanes from Prairie Oaks Drive to Flagstone Drive with provisions to accommodate six lanes in the future. Flagstone Drive to Prairie Hill Road initially will be constructed with an additional northbound lane (three northbound lanes) and two southbound lanes, which will be able to accommodate a third southbound lane in the future if needed. The proposed project also includes expansion of the roadway to a multi-lane urban arterial with a raised median, bike lanes, a multi-use path, and sidewalks.

This action is part of a multi-phase project to reconstruct the CTH M corridor, which includes reconstructing the Mid Town Road intersection and provision of a roundabout at the CTH PD intersection. To accommodate the CTH M roadway expansion, approximately 0.3 acres of right-of-way will need to be acquired from the Ice Age Trail easement. The required property is located adjacent to CTH M, along the eastern edge of the OJ Noer turf grass facility just south of CTH M and Flagstone Drive intersection (please see attached 4(f) Properties Exhibit).

The Ice Age Trail property is considered a Section 4(f) resource since it has been designated as a recreation area by state or local agency and the official with jurisdiction. An initial review of the project impacts and proposed construction plans indicate that the impacts to the property will be minimal and will not alter or affect the park's use.

Under Section 4(f) of the U.S. Department of Transportation Act of 1966, the Federal Highway Administration (FHWA) "may not approve the use of land from a significant publicly-owned park, or recreation area" unless a determination is made that:

1) There is no feasible and prudent alternative to the use of land from the property
2) The action includes all possible planning to minimize harm to the property.

Federal law (SAFETEA-LU Section 6009(a)) amended Section 4(f) to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). FHWA has issued guidance for making *de minimis* impacts as follows:

1) An impact of a park, recreation area, or wildlife refuge may be determined to be de minimis if:
    a. The transportation use of the Section 4(f) resource, together with any impact, avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features and attributes that qualify the resource for protection under Section 4(f)
    b. The official with jurisdiction over the property are informed of FHWA's intent to make the *de minimis* impact finding based on their written concurrence that the project will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f); and
    c. The public has been afforded an opportunity to review and comment on the effects of the project

This letter is intended to serve as official consultation and coordination with the Ice Age Trail property. Regulations within US Department of Transportation FHWA, Section 4(f) Policy Paper – July 20, 2012, require a finding that the official with jurisdiction has been consulted and "has not objected." The regulations require concurrence of the official with jurisdiction in the following situations:

1) Finding there are no adverse effects prior to making *de minimis* impact findings
2) Applying the exception for temporary occupancies
3) Applying the exception for transportation enhancement activities and mitigation activities

At this time, we are requesting your comments regarding the potential *de minimis* impact determination to the Ice Age Trail property. Following consideration of your comments and consideration of public comments, we will consult with FHWA and they will make the final Section 4(f) determination. FHWA will inform the official with jurisdiction of their determination.

Once the *de minimis* determination has been made, the official with jurisdiction must concur in writing that the project will not affect the activities, features, or attributes that make the property eligible for Section 4(f) protection. The final determination regarding the subject property will be included in the Final Environmental Assessment (EA) document.

If you have any questions about the Section 4(f) process or would like to set up a meeting to help clarify the process, please call me at (608) 829-5875 or contact me by email at pchellevold@srfconsulting.com.

Sincerely,

Paul M. Chellevold
SRF Consulting Group, Inc.

Enclosure

January 27, 2012

Mr. Dunlop,

Please consider this email as the Ice Age Trail Alliance's (IATA) official comments regarding the South Pleasant Valley Rd/CTH M Project in Dane County.

First of all, the IATA appreciates the opportunity to comment on this project, and, our ability to meet previously with the City, County and MSA.

The IATA's comments revolve directly around the Ice Age National Scenic Trail (NST) crossing of CTH M. The Ice Age NST currently crossed at grade and we understand that the plans include an underpass crossing for the Ice Age NST and a bike path. The IATA strongly supports this portion of the plan. However, in order for the underpass to be useful for the Ice Age NST, it is vital the project include a mechanism for connecting the Ice Age NST with IATA's easement on the UW's Turf Grass Facility property. This will likely require an easement amendment. IATA requests that the necessary work required to be complete an easement amendment (or similar legal instrument) be performed by the City or the planners as part of the overall project.

Thank you for your time. If you have any questions or require further information, do not hesitate to ask.

Regard,
Kevin

Kevin Thusius
Director of Land Conservation

ICE AGE TRAIL
ALLIANCE

Ice Age Trail Alliance

2110 Main Street, Cross Plains, WI 53528
608-798-4453 x 26 (p) • 800-227-0046 (p) • 608-798-4460 (f)

Working since 1958 to create, support and protect the Ice Age National Scenic Trail
Please join or renew today at www.iceagetrail.org

ID 5992-09-81
S. Pleasant View Road Reconstruction
(Prairie Hill Road to Cross Country Road)
CTH M

Dane County Parks and IAT Meeting – September24, 2014

ATTENDEES

Name / Representing	Email and Phone Number
1. JASON DiPIAZZA MSA	jdi.piazza@msa-ps.com 608 242 6640
2. Kevin Thusius IATA	kevin@icegetrail.org
3. John MAdden Nat. Park Svc	john_madden@nps.gov
4. Pam Schuler, Nat. Park Ser.	pam_schuler@nps.gov
5. Tony Fernandez - City of Madison	AFernandez@cityofmadison.com
6. Chris Petykowski City of Madison	cpetykowski@cityofmadison.com 267-8678
7. JAN ZIMMERMANN DANE CO.	ZIMMERMANN.JAN@COUNTYOFDANE.COM 224-3761
8. CHRIS JAMES / DCP	JAMES@COUNTYOFDANE.COM 224-3763
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MSA
PROFESSIONAL SERVICES
TRANSPORTATION · MUNICIPAL · REMEDIATION
DEVELOPMENT · ENVIRONMENTAL

ID 5992-09-81
S. Pleasant View Road Reconstruction
(Prairie Hill Road to Cross Country Road)
CTH M
Dane County

Dane County Parks and IAT Meeting

Wednesday September 24, 2014

Meeting Time: 8:30 AM
Meeting Location: City County Building, **Room 118 (Engineering Conference Room)**

AGENDA

Meeting focus: CTH M impacts and R/W needs from Dane County Parks and Ice Age Trail

I. Project Review/Recap	A. Limits/Scope/ Typical section/ Schedule	A. Review project
II. Project impacts to Dane County Park	A. R/W Needs	A. Wider section, R/W for roadway and ATC facilities
	B. Easement needs	B. Permanent Easement: Multi-use path Temporary Easement: Grading
	C. Drainage	C. Re-work of the small retention pond at the cross culvert
	D. Review impact mitigation letter	D. (handout)
	E. Utility impacts	E. ATC, Alliant Energy, TDS relocations anticipated
III. Project impacts to Ice Age Trail	A. Multi-use path tunnel	A. New crossing option for IAT users. Discuss how to tie into this path and crossing.
	B. Impacts to easement	B. Include easement for IAT on the Transportation Project Plat
	C. Use of OJ Noer Bridge	C. Discuss options within CTH M R/W

IV. Other?

MINUTES

(Also, see attached follow up email correspondence with notes from meeting attendees)

I.A.

Jason provided attendees with a brief recap of the project, overview of the design and design objectives and answered questions about the plan view layout.

II. A & B

The project will require real estate acquisition from Dane County Parks land. The current estimate is approximately 0.5 acres of highway right-of-way, 1 acre of permanent easement, and 1.5 acres of temporary easement for grading and construction needs. The permanent easement estimate is for construction and maintenance of the 10' multi-use path along the east side of CTH M. The path will be constructed on a 15' easement along the edge of the CTH M highway right-of-way. Chris James also requested that the prairie area be protected/isolated from the construction by temporary fencing (orange safety fence is acceptable).

ATC will be relocating their overhead power distribution poles into the terrace area between the multi-use path and CTH M roadway. The poles will be located in the CTH M highway R/W. This location will minimize the amount of aerial easement that ATC requires for their facilities.

Jan Zimmerman said she would research the grant funding that was used to fund the purchase of the Dane County Park land.

Chris James would like to see grading impacts to the restored prairie along the east side of CTH M completed under the guidance of Dane County Parks. The letter provided by Dane County Parks on January 23, 2013, requested funds to restore the disturbed prairie with Dane County or Dane County hired crews. The group developed on idea for the work to be completed by a Dane County Parks approved contractor with inspection and acceptance of the restored prairie area to be provided by Dane County Parks staff. Chris James noted that he could provide a list of 3 approved contractors and assist in developing the specs and design details for the restoration work. Chris James was also willing to review an "approved equal" contractor other than the 3 necessary for inclusion in the specs.

II. C

The group discussed impacts to the small pond at the east (outlet) end of the CTH M culvert crossing. The slope intercepts for the current roadway design would fill most of this pond. Chris James expressed a preference for grading and reestablishing the small pond near its current location with the project. This would be an aesthetic benefit for both the multi-use path and the Ice Age Trail. This alternative was preferred to constructing a retaining wall to maintain the pond its current location. Another alternative would be to construct a wetland scrape along the southeast edge of the park property. This was the alternative originally noted in the letter provided by Dane County Parks on January 23, 2013.

II. D See above for items in this letter that were discussed.

II. E. Specific utility impacts and relocations were not discussed.

III. A

The Ice Age Trail Alliance (IAT) is still agreeable to utilizing the multi-use path grade separation (box culvert) to cross below CTH M. They want to minimize the length of trail that is concurrent with the multi-use path and connections to the multi-use path should be as close to perpendicular as possible to prevent use of the IAT by bicycles.

The group discussed design concepts for the multi-use path box culvert. The group wanted to see options for reducing the skew of the crossing. This will shorten the tunnel and possibly allow for a natural light skylight to be incorporated in the design (tunnel must cross below a raised median). The reduced skew would put the west end closer to the IAT alignment through the OJ Noer Turf Research land. Jason and Chris Petykowski noted that the skew was designed this way to limit the amount of impact to OJ Noer. Reducing the skew (squaring up the path) may require more R/W from OJ Noer. This land cannot be condemned. Jason agreed to explore design alternatives that will reduce the skew.

Tony Fernandez reiterated the design standards for the box culvert:

1. Minimum of 9' high above the 10' wide path section (the clearance can be reduced along the edges for lights and structure haunches)
2. Minimum 14' wide
3. The preference is to have the path at an elevation of 1' above the 100 year flood elevation for the drainage way. At the 100' year flood elevation would be acceptable. Anything lower should be discussed. There are issues, especially with path clean up and maintenance if it is any lower.

IAT wants to include dodge ways at the locations where the IAT breaks off from the multi-use path. They don't have a standard design, but are happy with the one constructed where the IAT crosses Woods Road, which is a split rail fence design. MSA will investigate these details for including in the plan. MSA indicated that signage could be considered for inclusion in the plans. IAT signs should be 18x24 inches. Kevin Thusius and National Parks Service offered to help by providing the sign design and logos and review of the placement. Trail markers should also be included.

IAT indicated that standard pedestrian standards for grade should be used if possible.

III.B.

The group discussed how to address the IAT easement. IAT's preferences are:

1. Be located outside the CTH M R/W. Being located within the highway R/W requires the IAT to obtain permits for any trail maintenance work needed within the R/W
2. IAT does not want a separate easement from UW due to insurance and other regulatory issues required for each easement.
3. The easiest alternative in IAT's view is to update the current easement to relocate it outside the potential R/W location. MSA/City of Madison will follow up with real estate staff to see if this is a possibility. This will have to be document well in the EA to clearly note that this was not done to avoid having to acquire the IAT easement with the project.
4. Another alternative that should be explored is to have the City of Madison purchase easement along the CTH M R/W for IAT use. This will also have to be run by UW and real estate staff.

NOTE: The IAT did not use federal LWCF funds for purchasing the easement along CTH M.

III.C.

IAT would still like to utilize the OJ Noer bridge to cross the drainage way. Chris Petykowski indicated that he had talked to UW about this and didn't think it would be an issue.

OTHER

The group discussed the impacts to the IAT at the Raymond Road crossing. The City of Madison will reconstruct this crossing. The IAT crosses Raymond Road near where the drainage way crosses Raymond Road. The City of Madison will be reconstructing this structure which will affect the IAT crossing. IAT was agreeable to shifting their trail east to get up onto Raymond Road. This shift should be minimized to keep the IAT within Dane County Park land and still provide a wooded buffer between it and the future extension of Jeffy Trail (new City of Madison

Street that is budgeted for completion in 2015). The IAT will utilize the sidewalk on the Raymond Road bridge before crossing Raymond Road and continuing on parallel to the multi-use path (Ice Age Junction Path). Tony recommended that the IAT use the multi-use path crossing to keep roadway crossings to a minimum.

Chris James offered to IAT to use the recently constructed multi-use path bridge to cross the waterway. IAT would prefer to provide spur trail markings here for a future trail head parking area but keep the IAT separate from the multi-use path as long as possible. They anticipate a high volume of bike traffic on the multi-use path.

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ATTACHMENT U:

Air Quality Methodology and Analysis Documentation

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Rachel Burnham

From: Waldschmidt, Jay - DOT <Jay.Waldschmidt@dot.wi.gov>
Sent: Tuesday, May 08, 2012 3:11 PM
To: 'Karen Richardson'; Jason DiPiazza
Cc: William Dunlop; Paul Chellevold
Subject: RE: CTH M - Air Quality Impact Methodology

Looks good to me.

Jay

From: Karen Richardson [mailto:karenrichardson@kjohnsonengineers.com]
Sent: Tuesday, May 08, 2012 2:27 PM
To: Jason DiPiazza
Cc: William Dunlop; Paul Chellevold; Waldschmidt, Jay - DOT
Subject: RE: CTH M - Air Quality Impact Methodology

Jason/Bill/Paul:

I discussed your proposed approach with Jay Waldschmidt of BEES.

Your proposed approach is appropriate, with the following clarifications/comments. (Jay, please clarify if I misinterpreted our conversation):

Proposed air Quality Methodology:

1. First paragraph:
    1. The Factor Sheet has been renamed Air Quality Evaluation, Factor Sheet D-1. The Factor Sheet is in the process of being revised since NR 411 has been repealed.
    2. Reword “it may be beneficial” to “it is required under NEPA”.
2. Second paragraph: This approach is fine, but you will need to go into more detail in the EA. Will need to describe where the receptors were located for the M-S project, what levels were modeled, the distance to the roadway, and compare these results to the South Pleasant View Road project. Although NR 411 required 75%, NEPA only requires 100%.
3. Fourth paragraph: First sentence: change “evaluation” to “qualitative discussion”.

Jay also indicated that since NR 411 has been repealed, the DNR does not have involvement in the air quality issues. However, the analyses outlined are necessary to meet NEPA requirements.

Let me know if you have any questions or would like to discuss further.

Thanks,
Karen
Karen Richardson, P.E.
Kjohnson Engineers, Inc.
701 Deming Way, Suite 110
Madison, WI 53717
(608) 829-3858

From: Jason DiPiazza [mailto:jdipiazza@msa-ps.com]
Sent: Thursday, April 26, 2012 4:29 PM
To: Karen Richardson

Cc: Chase Kieler; Mike Statz; William Dunlop; Paul Chellevold; Petykowski, Christopher
Subject: CTH M - Air Quality Impact Methodology

Karen,

Please see the attached Memo regarding our approach to evaluating air quality impacts for the Environmental Assessment. Please review and comment at your earliest convenience. We are looking for a response by May 11. Please let me know if this schedule is not achievable. A hard copy of this memo will be in the mail to you tomorrow.

Thank you.

Jason

Jason DiPiazza, PE | Team Leader
MSA Professional Services, Inc.
(608) 242-7779

SRF Consulting Group, Inc. | ENGINEERS PLANNERS DESIGNERS

SRF No. 0117334 0004D

MEMORANDUM

THRU: Jason DiPiazza, MSA Professionals Inc.

TO: Karen Richardson, KJohnson Engineers, Inc.

FROM: Paul Morris, Senior Engineer
Bill Dunlop, Senior Associate

DATE: April 26, 2012

SUBJECT: CTH M RECONSTRUCTION: CROSS COUNTY ROAD TO PRAIRIE HILL ROAD
AIR QUALITY ANALYSIS METHODOLOGY, PROJECT ID 5992-09-81

As part of our preparation of the EA for the proposed reconstruction of CTH M between Cross Country Road and Prairie Hill Road in Madison and Verona, WI, we are seeking your concurrence with the proposed level of air quality analysis to be performed for the EA. Our proposed methodology for the air quality analysis follows below.

Project Background

The location of this project is the approximately three mile segment of CTH M between Cross Country Road and Prairie Hill Road. The proposed design of CTH M is a four-lane divided roadway between Cross Country Road and CTH PD, and a six-lane divided roadway between CTH PD and Prairie Hill Road. Along some of the six-lane segments the third lane in each direction will be limited to bus use only. The proposed project will also include reconstructing CTH M as an urban arterial with curb and gutter and include a raised median, bike lanes, multi-use paths, and sidewalk.

The proposed project also includes reconstruction of the Mid Town Road and CTH PD intersections with CTH M. The proposed traffic control at the CTH M/Mid Town Road intersection is a traffic signal and the proposed traffic control at the CTH M/CTH PD intersection is a two-lane roundabout. The CTH M/CTH PD roundabout will be constructed to allow expansion to three lanes as future traffic volumes increase.

This project is scheduled to be constructed in 2014 and 2015. The City of Madison is the lead agency for this project. Federal funding will be used for construction.

Proposed Air Quality Methodology

An *Air Quality Impact Evaluation* (Factor Sheet DT2072) will be completed for inclusion in the EA. For Carbon Monoxide, it is not expected that NR 411 exemptions would apply, due to the addition of more than two lanes of traffic. Since NR 411 is no longer in place, quantitative modeling of Carbon Monoxide is not necessary and an indirect source permit will not be required. Nonetheless, it may be beneficial to perform a comparison to a similar project to show that the proposed design is not expected to result in any air quality issues.

The EA prepared for the CTH M / CTH S intersection reconstruction (available on City of Madison website) included a screening analysis where dispersion modeling results showed that Carbon Monoxide concentrations would not exceed 75 percent of any ambient air quality standard. Since existing and forecast traffic volumes at the CTH M/CTH S intersection are similar to the intersections in the current project, air quality issues are not expected.

Dane County is not designated a non-attainment or maintenance area for ozone, so no conformity determination is required.

Since this project will receive federal funding for construction, an evaluation of Mobile Source Air Toxics (MSAT) must be included in the EA. The FHWA has prepared guidance for MSAT evaluation in NEPA documents. We will include these prepared statements and perform an evaluation according to the guidance. The proposed project is expected to be classified as a "Project with Low Potential MSAT Effects" ("Higher Potential MSAT Effects" are expected only at ADT levels above 140,000-150,000 vpd). Within this category, this would be considered a "Minor Widening Project" for which a qualitative evaluation template is provided. This template will be completed and included in the EA as an appendix.

Next Steps

We are seeking your concurrence or comments or recommendations on the proposed methodology by Friday, May 11. If you have any questions or would like to discuss further, please don't hesitate to call us at 608-829-0010 anytime.

If there are other individuals that should be included in this review, please advise.

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SRF No. 0076098

MEMORANDUM

THRU: Jason DiPiazza, MSA Professionals Inc.

TO: Karen Richardson, KJohnson Engineers, Inc.

FROM: Paul Morris, Senior Engineer
Paul Chellevold, Transportation Planner

DATE: December 28, 2012

SUBJECT: CTH M RECONSTRUCTION: CROSS COUNTRY ROAD TO PRAIRIE HILL ROAD
AIR QUALITY ANALYSIS DOCUMENTATION, PROJECT ID 5992-09-81

This memorandum provides air quality documentation for inclusion in the CTH M Reconstruction Environmental Assessment. The methods used to evaluate Carbon Monoxide and Mobile Source Air Toxic effects were established in cooperation with WisDOT.

Introduction

Motorized vehicles affect air quality by emitting airborne pollutants. Changes in traffic volumes, travel patterns, and roadway locations affect air quality by changing the number of vehicles and the congestion levels in a given area. The air quality impacts from the project are analyzed by addressing criteria pollutants, a group of common air pollutants regulated by the U.S. Environmental Protection Agency (EPA) on the basis of criteria (information on health and/or environmental effects of pollution). The criteria pollutants identified by the EPA are ozone, particulate matter, carbon monoxide, nitrogen dioxide, lead, and sulfur dioxide. Potential impacts resulting from these pollutants are assessed by comparing projected concentrations to National Ambient Air Quality Standards (NAAQS).

In addition to the criteria air pollutants, the EPA also regulates air toxics. The Federal Highway Administration (FHWA) provides guidance for the assessment of Mobile Source Air Toxic (MSAT) effects for transportation projects in the National Environmental Policy Act (NEPA) process. A qualitative evaluation of MSATs has been performed for this project as documented below.

NAAQS Criteria Pollutants

Ozone

Ground-level ozone is a primary constituent of smog and is a pollution problem throughout many areas of the United States. Exposures to ozone can make people more susceptible to respiratory infection, result in lung inflammation, and aggravate preexisting respiratory diseases such as asthma. Ozone is not emitted directly from vehicles but is formed as volatile organic compounds (VOCs) and nitrogen oxides (NO_x) react in the presence of sunlight. Transportation sources emit NO_x and VOCs and can therefore affect ozone concentrations. However, due to the phenomenon of atmospheric formation of ozone from chemical precursors, concentrations are not expected to be elevated near a particular roadway.

Dane County, Wisconsin, where the project is located, is classified by the EPA as an "ozone attainment area," which means that it has been identified as a geographic area that meets the national health-based standards for ozone levels. As a result, no conformity determination is required and a quantitative ozone analysis was not conducted for this project.

Particulate Matter

Particulate matter (PM) is the term for particles and liquid droplets suspended in the air. Particles come in a wide variety of sizes and have been historically assessed based on size, typically measured by the diameter of the particle in micrometers. $PM_{2.5}$ or fine particulate matter refers to particles that are 2.5 micrometers or less in diameter. PM_{10} refers to particulate matter that is 10 micrometers or less in diameter.

Motor vehicles (i.e., cars, trucks, and buses) emit direct PM from their tailpipes, as well as from normal brake and tire wear. Vehicle dust from paved and unpaved roads may be re-entrained, or re-suspended, in the atmosphere. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur dioxide, nitrogen oxides, and VOCs. $PM_{2.5}$ can penetrate the human respiratory system's natural defenses and damage the respiratory tract when inhaled. Numerous scientific studies have linked particle pollution exposure to a variety of problems, including:

Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing for example;

- Decreased lung function
- Aggravated asthma
- Development of chronic bronchitis
- Irregular heartbeat

- Nonfatal heart attacks
- Premature death in people with heart or lung disease.

Source: http://www.epa.gov/air/particlepollution/health.html

The EPA issued a final rule on October 17, 2006 that tightened the NAAQSs for $PM_{2.5}$ to include a 24-hour standard of 35 micrograms per cubic meter ($\mu g/m^3$) and retained the 1997 annual $PM_{2.5}$ standard of 15.0 $\mu g/m^3$. The annual standard is based on a three-year average of annual mean $PM_{2.5}$ concentrations; the 24-hour standard is based on a three-year average of the 98th percentile of 24-hour concentrations. The NAAQS 24-hour standard for PM_{10} is 150 $\mu g/m^3$, not to be exceeded more than once per year on average over three years.

The Clean Air Act conformity requirements include the assessment of localized air quality impacts of federally-funded or federally-approved transportation projects that are deemed to be projects of air quality concern located within $PM_{2.5}$ nonattainment and maintenance areas. Dane County, Wisconsin has been designated as an unclassifiable/attainment area for PM. This means that it has been identified as a geographic area that meets the national health-based standards for PM levels, and therefore is exempt from performing PM qualitative hot-spot analyses.

Nitrogen dioxide (Nitrogen oxides)

Nitrogen oxides, or NO_x, are the generic term for a group of highly reactive gases, all of which contain nitrogen and oxygen in varying amounts. Nitrogen oxides form when fuel is burned at high temperatures, as in a combustion process. The primary sources of NO_x are motor vehicles, electric utilities, and other industrial, commercial, and residential sources that burn fuels.

The EPA's regulatory announcement, EPA420-F-99-051 (December 1999), describes the Tier 2 standards for tailpipe emissions, and states:

> *The new tailpipe standards are set at an average standard of 0.07 grams per mile for nitrogen oxides for all classes of passenger vehicles beginning in 2004. This includes all light-duty trucks, as well as the largest SUVs. Vehicles weighing less than 6,000 pounds will be phased-in to this standard between 2004 and 2007.*
>
> *As newer, cleaner cars enter the national fleet, the new tailpipe standards will significantly reduce emissions of nitrogen oxides from vehicles by about 74 percent by 2030. The standards also will reduce emissions by more than 2 million tons per year by 2020 and nearly 3 million tons annually by 2030.*

Within the project area, it is unlikely that NO_2 standards will be approached or exceeded based on the relatively low ambient concentrations of NO_2 in the region and on the long-term trend

toward reduction of NO_x emissions. Because of these factors, a specific analysis of NO_2 was not conducted for this project.

Sulfur Dioxide

Sulfur dioxide (SO_2) and other sulfur oxide gases (SO_x) are formed when fuel containing sulfur, such as coal, oil, and diesel fuel is burned. Sulfur dioxide is a heavy, pungent, colorless gas. Elevated levels can impair breathing, lead to other respiratory symptoms, and at very high levels aggravate heart disease. People with asthma are most at risk when SO_2 levels increase. Once emitted into the atmosphere, SO_2 can be further oxidized to sulfuric acid, a component of acid rain.

Emissions of sulfur oxides from transportation sources are a small component of overall emissions and continue to decline due to the desulphurization of fuels. Additionally, Dane County, Wisconsin is classified by the EPA as a "sulfur dioxide attainment area," which means that it has been identified as a geographic area that meets the national health-based standards for sulfur dioxide levels. Because of these factors, a quantitative analysis for sulfur dioxide was not conducted for this project.

Lead

Due to the phase out of leaded gasoline, lead is no longer a pollutant associated with vehicular emissions.

Carbon Monoxide

Carbon monoxide is the traffic-related pollutant most commonly associated with transportation projects. Carbon monoxide concentrations can be affected at the regional level and in the localized area of a specific transportation facility. At the regional level, the 1990 Clean Air Act Amendments (CAAA) require that State Implementation Plans (SIPs) must demonstrate how states with nonattainment and maintenance areas will meet federal air quality standards. Dane County, Wisconsin is not designated as a nonattainment or maintenance area, therefore no conformity determination is required.

To evaluate CO impacts at the localized level, NEPA requires that hot-spot analysis be performed for carbon monoxide for new projects. Through 2011, the State of Wisconsin has required compliance with NR 411 for transportation projects. This required that a detailed carbon monoxide evaluation was performed for non-exempt projects to demonstrate that future concentrations would be below 75 percent of ambient air quality standards. Projects meeting this

requirement would be eligible for a permit. This law has subsequently been repealed by the Wisconsin Legislature.

To satisfy the NEPA requirements, a qualitative evaluation of the project is performed to demonstrate that localized carbon monoxide concentrations are not expected to exceed 100 percent of ambient air quality standards. A quantitative carbon monoxide evaluation was recently completed for the Environmental Assessment prepared for the South Junction Road and Mineral Point Road Reconstruction project, immediately to the north of the current project. The characteristics and results of that evaluation are discussed below, followed by a comparison to the current project.

The intersection of South Junction Road and Mineral Point Road is located approximately two miles north of Mid Town Road. The proposed design on this intersection is a modified split-grade jug handle, which provides reduced conflicts by grade separating some movements. Forecast traffic volumes at this intersection are very large, with daily volumes on some legs exceeding 40,000 vehicles per day (vpd) and total entering vehicles of over 80,000 vpd.

A detailed carbon monoxide evaluation was performed for this proposed design using two EPA-approved computer models: MOBILE6.2 and CAL3QHC. Receptor sites were placed at 16 locations near the roadway to represent humans on adjacent walking paths proposed as part of the project design. The evaluation results are shown in Table 1.

Table 2
Maximum Projected Carbon Monoxide Concentrations for Mineral Point Road and South Junction Road

Receptor Location	Carbon Monoxide (ppm)			
	1-Hour Peak		8-Hour Average	
	Construction Year 2012	Construction Year Plus Ten Years 2022	Construction Year 2012	Construction Year Plus Ten Years 2022
A1	2.9	3.4	2.1	2.3
A2	2.7	2.8	1.9	2.2
A3	2.7	2.9	1.9	2.2
A4	2.1	2.2	1.5	1.6
A5	3.1	3.5	2.4	2.5
A6	3.8	4.1	2.5	2.8
A7	3.2	3.8	2.4	2.8
A8	2.3	2.5	1.7	1.9
A9	3.1	3.1	2.2	2.2
A10	3.3	3.2	2.4	2.5

A11	3.8	3.6	2.7	2.8
A12	3.9	4.3	2.8	3.1
A13	3.0	3.3	2.1	2.4
A14	3.5	3.9	2.7	2.7
A15	4.0	4.3	2.8	3.1
A16	4.1	4.5	2.7	3.0

Source: Mineral Point Road and South Junction Road Environmental Assessment, City of Madison

The maximum one-hour concentration for year 2012 was estimated to be 4.1 parts per million (ppm) and for year 2022 was 4.5 ppm. The maximum eight-hour average concentration was estimated at 2.8 ppm for year 2012 and 3.1 ppm for year 2022. All of these predicted concentrations fall below the NAAQS thresholds of 35 ppm for one-hour concentrations and 8 ppm for eight-hour concentrations.

Localized carbon monoxide concentrations are influenced by the number of vehicles present on a roadway, the travel speeds of those vehicles, the proximity of receptors to the roadway, and wind direction. Carbon monoxide emissions tend to be higher at lower vehicle speeds, and are highest for idling vehicles. Therefore, worst case conditions occur along highly congested roadways where multiple lanes have queues of idling vehicles. Pedestrian facilities adjacent to these roadways represent worst-case receptor sites.

The intersection of CTH M and Mid Town Road is proposed to have traffic signal control as part of the CTH M Reconstruction project. The proposed intersection design includes four east-west through lanes on Mid Town Road and six north-south through lanes on CTH M. A pedestrian/bike path is also proposed along the west side of CTH M. The forecast daily traffic volumes on the approaches to this intersection are shown in Table 2.

The intersection of CTH M and CTH PD is proposed as a two-lane roundabout design. A pedestrian/bike path is also proposed along the east side of CTH M north of CTH PD and along the west side of CTH M south CTH PD. These paths would be connected with a proposed underpass beneath the roundabout. The forecast daily traffic volumes on the approaches to this intersection are shown in Table 2.

Table 2
Project Area Intersection Volumes

	Year 2035 Daily Volumes				
Intersection	**North**	**East**	**South**	**West**	**Total Entering**
CTH M & Mid Town Road	49,300	16,300	41,700	12,600	59,950
CTH M & CTH PD	41,700	34,000	25,200	13,700	57,300

Source: WisDOT Traffic Forecast Report; Project ID 5992-09-81; January 17, 2012

The traffic evaluation performed for the CTH M Reconstruction project demonstrated that the proposed intersection designs at Mid Town Road and CTH PD are expected to operate at an acceptable level of service of D or better. This suggests that significant congestion will not be present at these intersections and major queuing of idling of vehicles will not be present. Therefore, the conditions necessary to result in high concentrations of carbon monoxide at receptor sites near the proposed project area are not likely to occur.

By comparison to the carbon monoxide evaluation performed for the South Junction Road and Mineral Point Road project, a number of conclusions can be drawn. First, both projects are expected to result in acceptable traffic operations, thereby avoiding congested conditions that could produce high carbon monoxide concentrations. Next, the CTH M intersections at Mid Town Road and CTH PD have lower daily traffic forecasts compared South Junction Road and Mineral Point Road, meaning fewer vehicles will be present and emitting carbon monoxide. Finally, the concentrations predicted at South Junction Road and Mineral Point Road were substantially below NAAQS threshold (less than 15 percent for one-hour concentrations, and less than 40 percent for eight-hour concentrations) so even modest increases over these results would remain well below allowable limits. This qualitative comparison demonstrates that no localized concentrations of carbon monoxide would be expected to occur as a result of the proposed CTH M Reconstruction project.

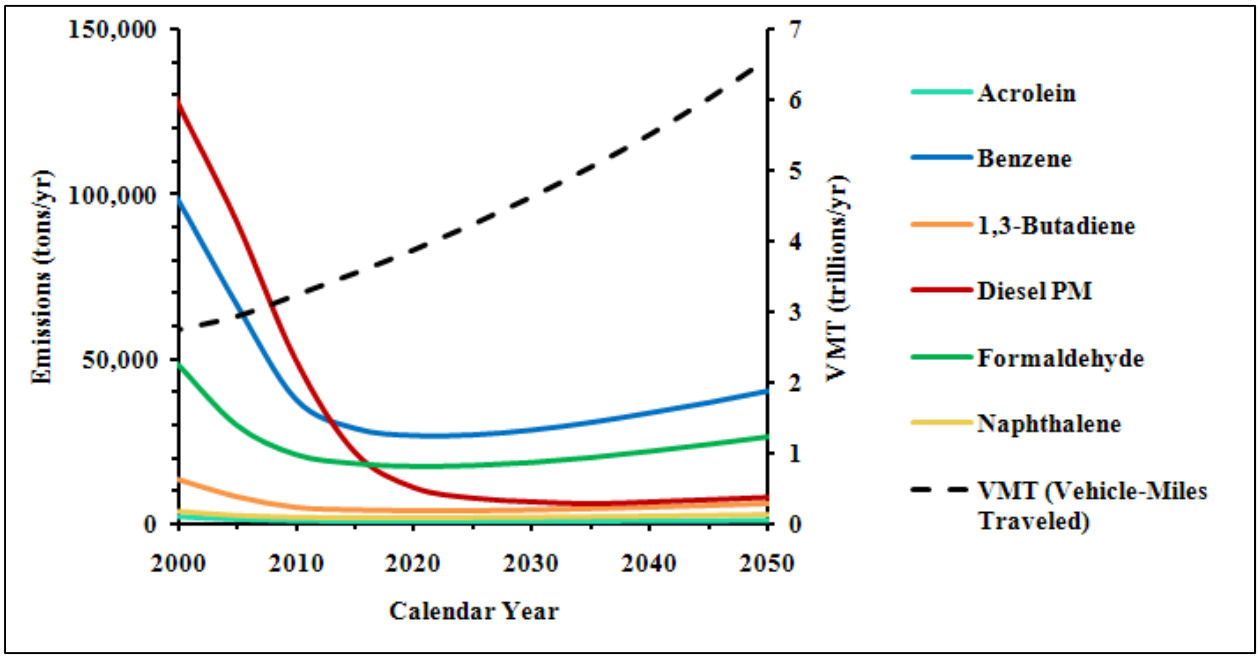
Mobile Source Air Toxics

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the EPA regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007) and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS) (http://www.epa.gov/ncea/iris/index.html).

In addition, EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics Assessment (NATA) (http://www.epa.gov/ttn/atw/nata1999). These are acrolein, benzene, 1,3-butadiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules.

The 2007 EPA rule mentioned above requires controls that will dramatically decrease Mobile Source Air Toxics (MSAT) emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA's MOBILE6.2 model, even if vehicle activity (vehicle-miles traveled, VMT) increases by 145 percent as assumed, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050, as shown in Figure 1.

Figure 1: National MSAT Emission Trends 1999 - 2050 for Vehicles Operating On Roadways Using EPA's MOBILE 6.2 Model



Notes:

(1)Annual emissions of polycyclic organic matter are projected to be 561 tons/yr for 1999, decreasing to 373 tons/yr for 2050.

(2)Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorology, and other factors. Source: U.S. Environmental Protection Agency. MOBILE6.2 model run 20 August 2009.

Air toxics analysis is a continuing area of research. While much work has been done to assess the overall health risk of air toxics, many questions remain unanswered. In particular, the tools and techniques for assessing project-specific health outcomes as a result of lifetime MSAT exposure remain limited. These limitations impede the ability to evaluate how the potential health risks posed by MSAT exposure should be factored into project-level decision-making within the context of NEPA.

Nonetheless, air toxics concerns continue to be raised on highway projects during the NEPA process. Even as the science emerges, we are duly expected by the public and other agencies to address MSAT impacts in our environmental documents. The FHWA, EPA, the Health Effects Institute, and others have funded and conducted research studies to try to more clearly define potential risks from MSAT emissions associated with highway projects. The FHWA will continue to monitor the developing research in this emerging field.

Unavailable Information for Project Specific MSAT Impact Analysis

The FHWA has prepared guidance for basic analysis of the likely MSAT emission impacts of this project. However, available technical tools do not enable us to predict the project-specific health impacts of MSAT emission. Due to these limitations, the following discussion is included in accordance with CEQ regulations (40 CFR 1502.22(b)) regarding incomplete or unavailable information.

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The EPA is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the Clean Air Act and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. The EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. They maintain the IRIS, which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects" (EPA, http://www.epa.gov/ncea/iris/index.html). Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the Health Effects Institute (HEI). Two HEI studies are summarized in Appendix D of FHWA's Interim Guidance Update on Mobile Source Air Toxic analysis in NEPA Documents. Among the adverse health effects linked to MSAT compounds at high exposures are cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health

effects of MSAT compounds at current environmental concentrations (HEI, http://pubs.healtheffects.org/view.php?id=282) or in the future as vehicle emissions substantially decrease (HEI, http://pubs.healtheffects.org/view.php?id=306).

The methodologies for forecasting health impacts include emissions modeling; dispersion modeling; exposure modeling; and then final determination of health impacts - each step in the process building on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, since such information is unavailable. The results produced by the EPA's MOBILE6.2 model, the California EPA's Emfac2007 model, and the EPA's Draft MOVES2009 model in forecasting MSAT emissions are highly inconsistent. Indications from the development of the MOVES model are that MOBILE6.2 significantly underestimates diesel particulate matter (PM) emissions and significantly overestimates benzene emissions.

Regarding air dispersion modeling, an extensive evaluation of EPA's guideline CAL3QHC model was conducted in a National Cooperative Highway Research Program (NCHRP) study (http://www.epa.gov/scram001/dispersion_alt.htm#hyroad), which documents poor model performance at 10 sites across the country - three where intensive monitoring was conducted plus an additional seven with less intensive monitoring. The study indicates a bias of the CAL3QHC model to overestimate concentrations near highly congested intersections and underestimate concentrations near uncongested intersections. The consequence of this is a tendency to overstate the air quality benefits of mitigating congestion at intersections. Such poor model performance is less difficult to manage for demonstrating compliance with NAAQS for relatively short time frames than it is for forecasting individual exposure over an entire lifetime, especially given that some information needed for estimating 70-year lifetime exposure is unavailable. It is particularly difficult to reliably forecast MSAT exposure near roadways, and to determine the portion of time that people are actually exposed at a specific location.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI (http://pubs.healtheffects.org/view.php?id=282). As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel PM. The EPA (http://www.epa.gov/risk/basicinformation.htm#g) and the HEI (http://pubs.healtheffects.org/getfile.php?u=395) have not established a basis for quantitative risk assessment of diesel PM in ambient settings.

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the EPA as provided by the Clean Air Act to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries. The decision framework is a two-step process. The first step requires EPA to determine a "safe" or "acceptable" level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld EPA's approach to addressing risk in its two step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than safe or acceptable.

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, that are better suited for quantitative analysis.

Qualitative MSAT Analysis

For each alternative in this EA, the amount of MSAT emitted would be proportional to the average daily traffic (ADT) assuming that other variables such as fleet mix are the same for each alternative. The ADT estimated for the Build Alternative is slightly higher than that for the No Build Alternative, because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. This increase in ADT would lead to higher MSAT emissions for the preferred action alternative along the highway corridor, along with a corresponding decrease in MSAT emissions along the parallel routes. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA's MOBILE6.2 model, emissions of all of the priority MSAT except for diesel particulate matter decrease as speed increases. The extent to which these speed-related emissions decreases will offset ADT-related emissions increases cannot be reliably projected due to the inherent deficiencies of technical models. Regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control

programs that are projected to reduce annual MSAT emissions by 72 percent between 1999 and 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, vehicle-miles of travel (VMT) growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for traffic growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

The additional travel lanes contemplated as part of the project alternatives will have the effect of moving some traffic closer to nearby homes, schools, and businesses; therefore, under each alternative there may be localized areas where ambient concentrations of MSAT could be higher under the Build Alternative than the No Build Alternative. The localized increases in MSAT concentrations would likely be most pronounced along the expanded roadway sections that would be built along CTH M between Cross Country Road and Prairie Hill Road. However, the magnitude and the duration of these potential increases compared to the No-Build alternative cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts. In sum, when a highway is widened, the localized level of MSAT emissions for the Build Alternative could be higher relative to the No Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSAT will be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

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ATTACHMENT V:

Noise Receptor Documentation

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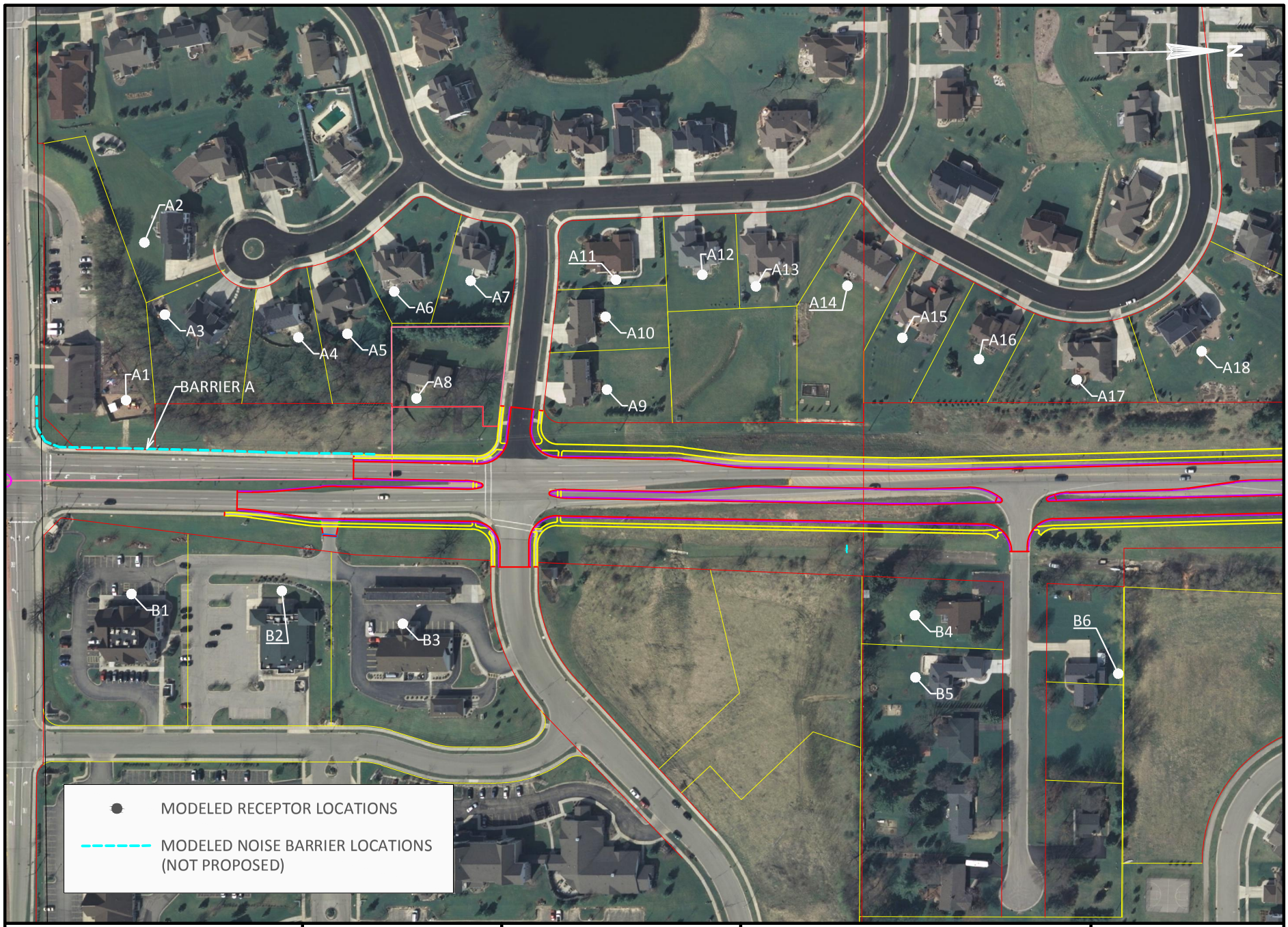

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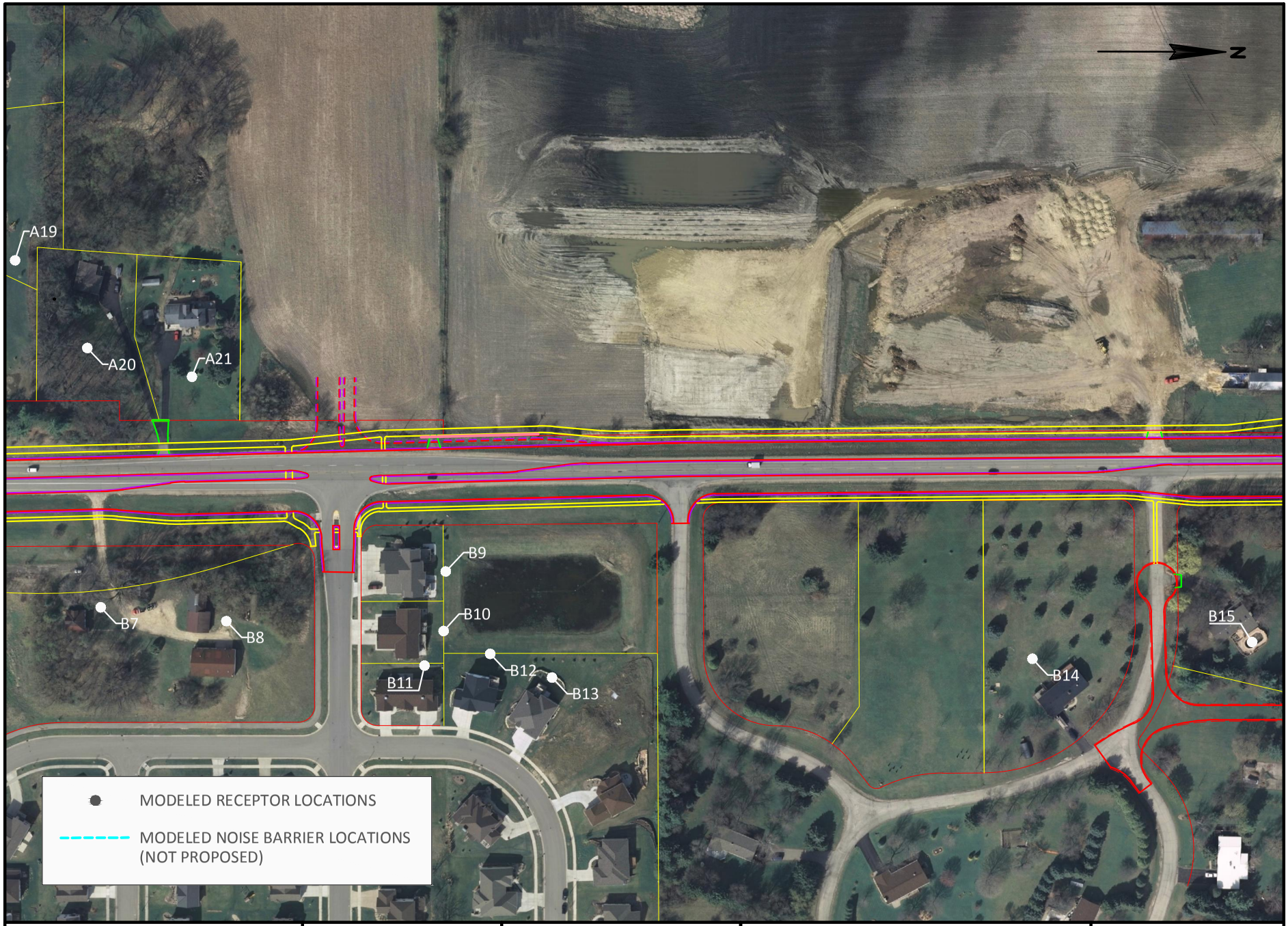

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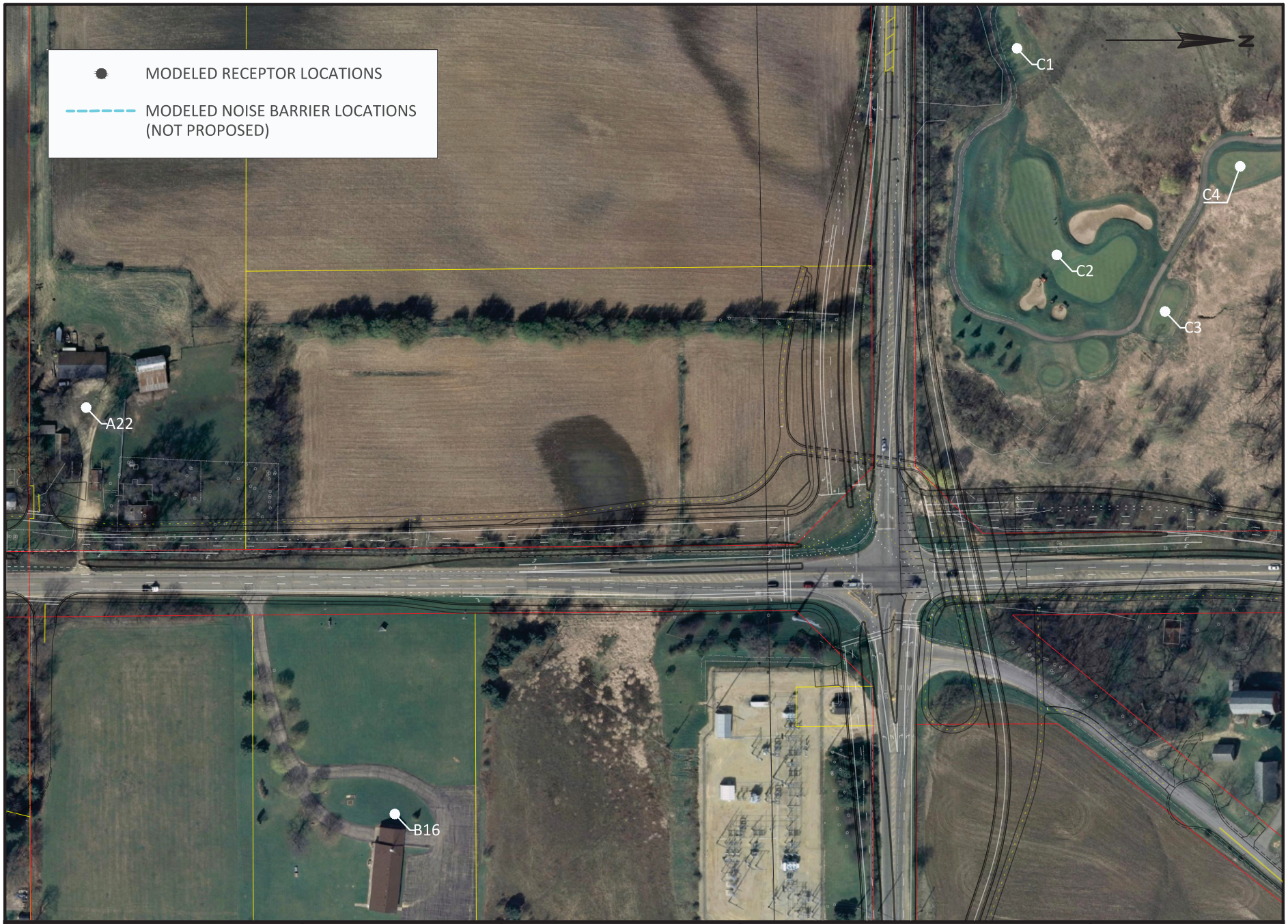

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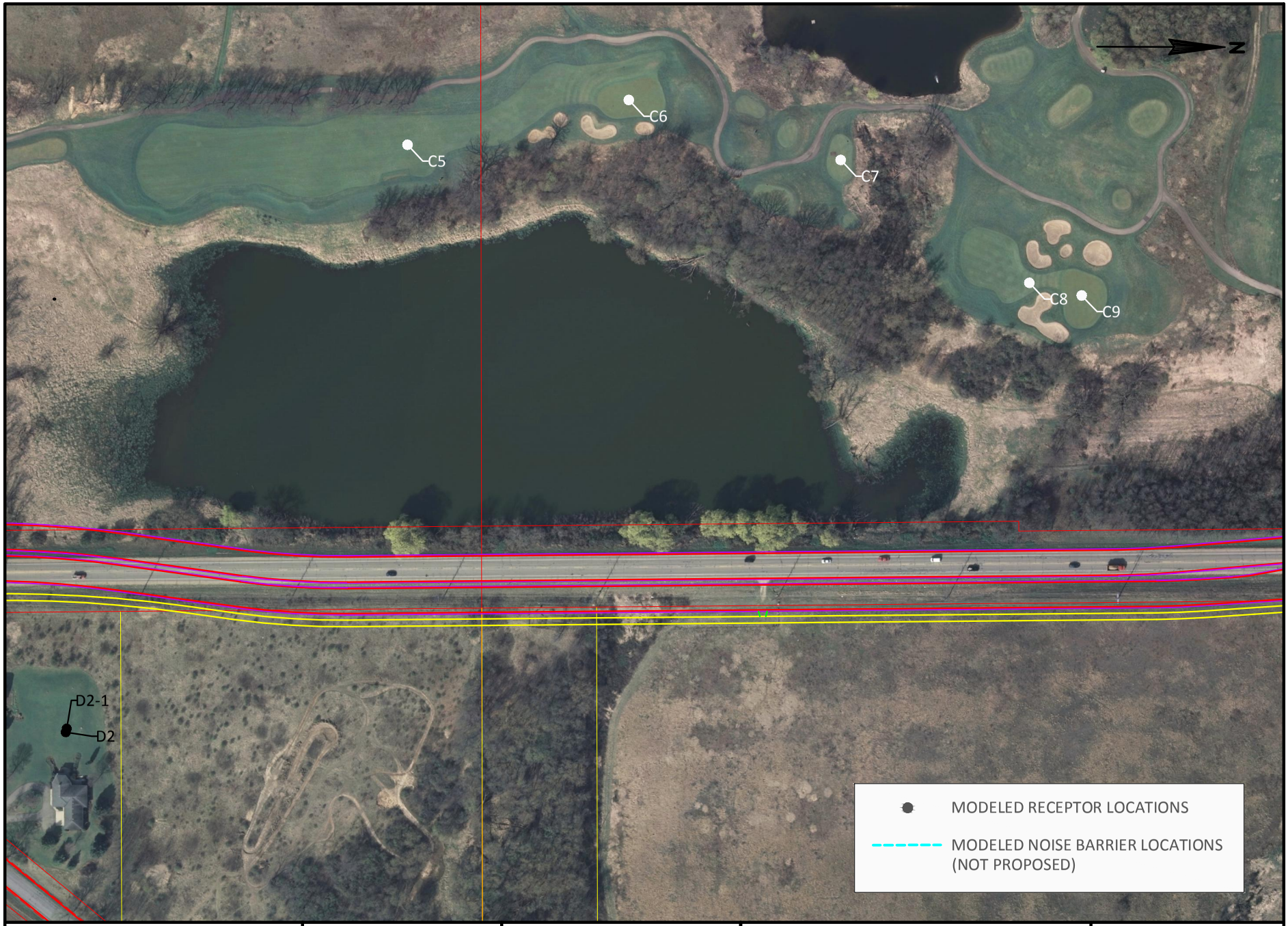

PROJECT NO:5992-09-81	HWY:CTH M	COUNTY:DANE	TRAFFIC NOISE ANALYSIS	ATTACHMENT U

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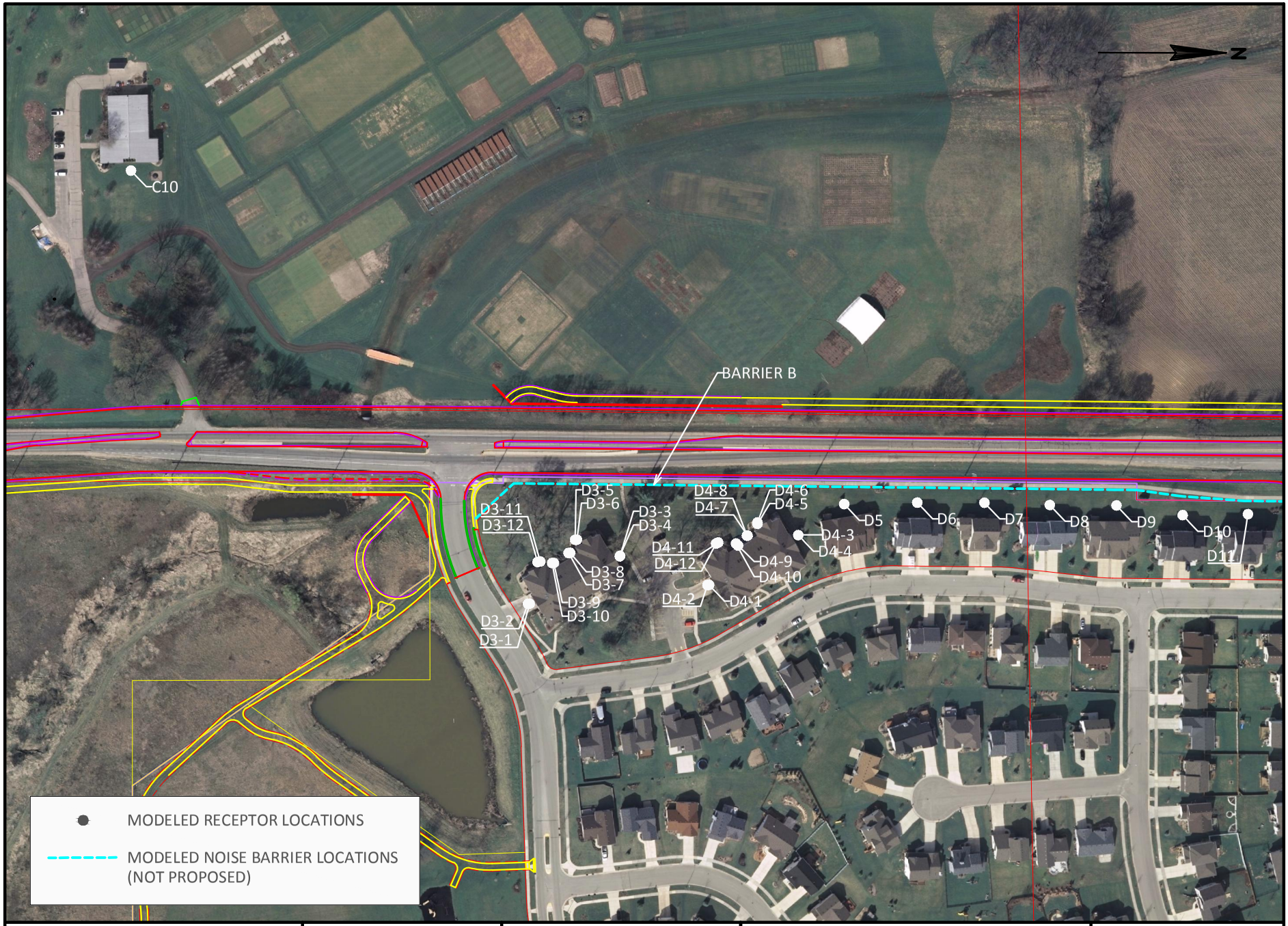

PROJECT NO:5992-09-81	HWY:CTH M	COUNTY:DANE	TRAFFIC NOISE ANALYSIS	ATTACHMENT U

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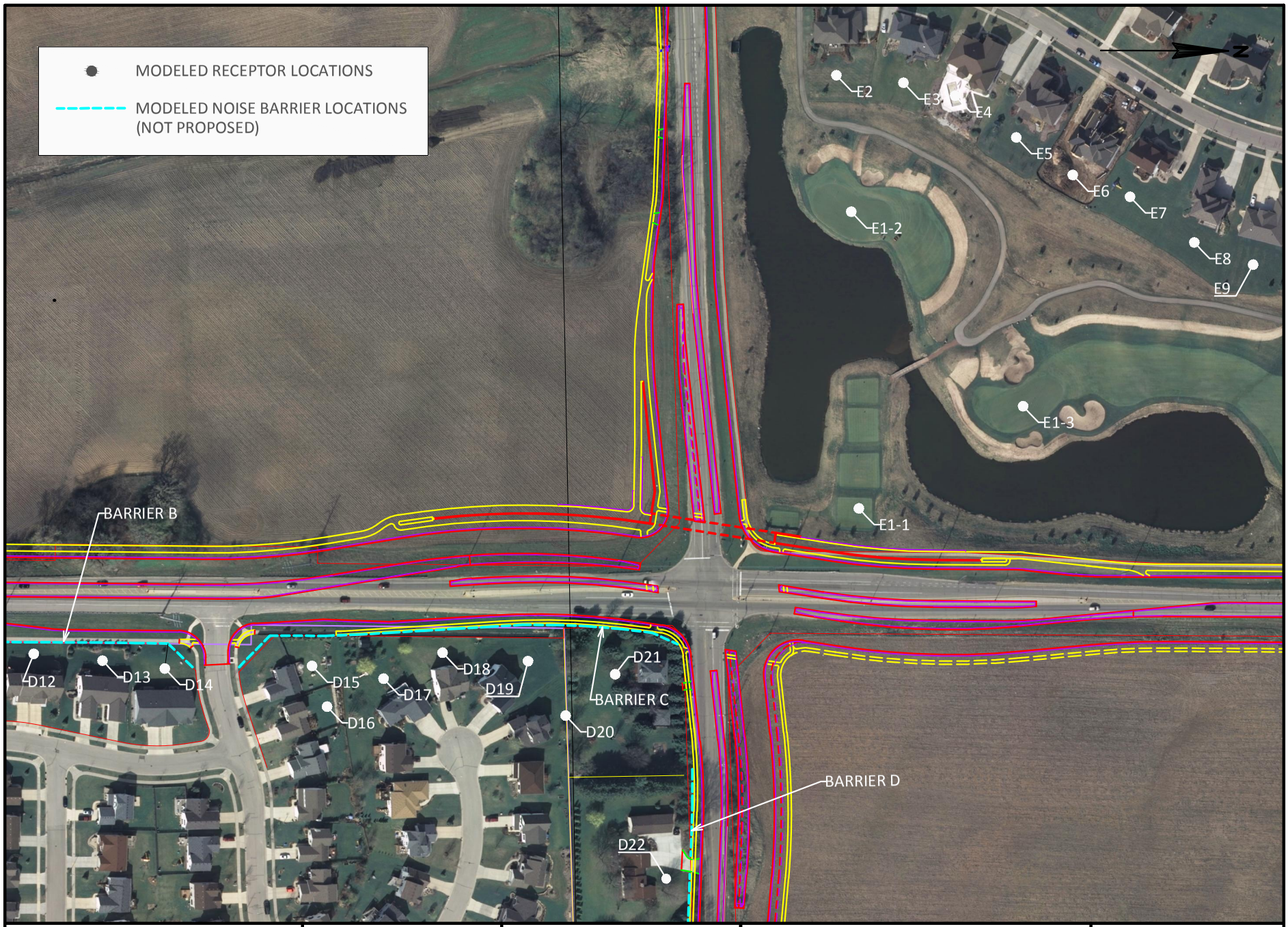

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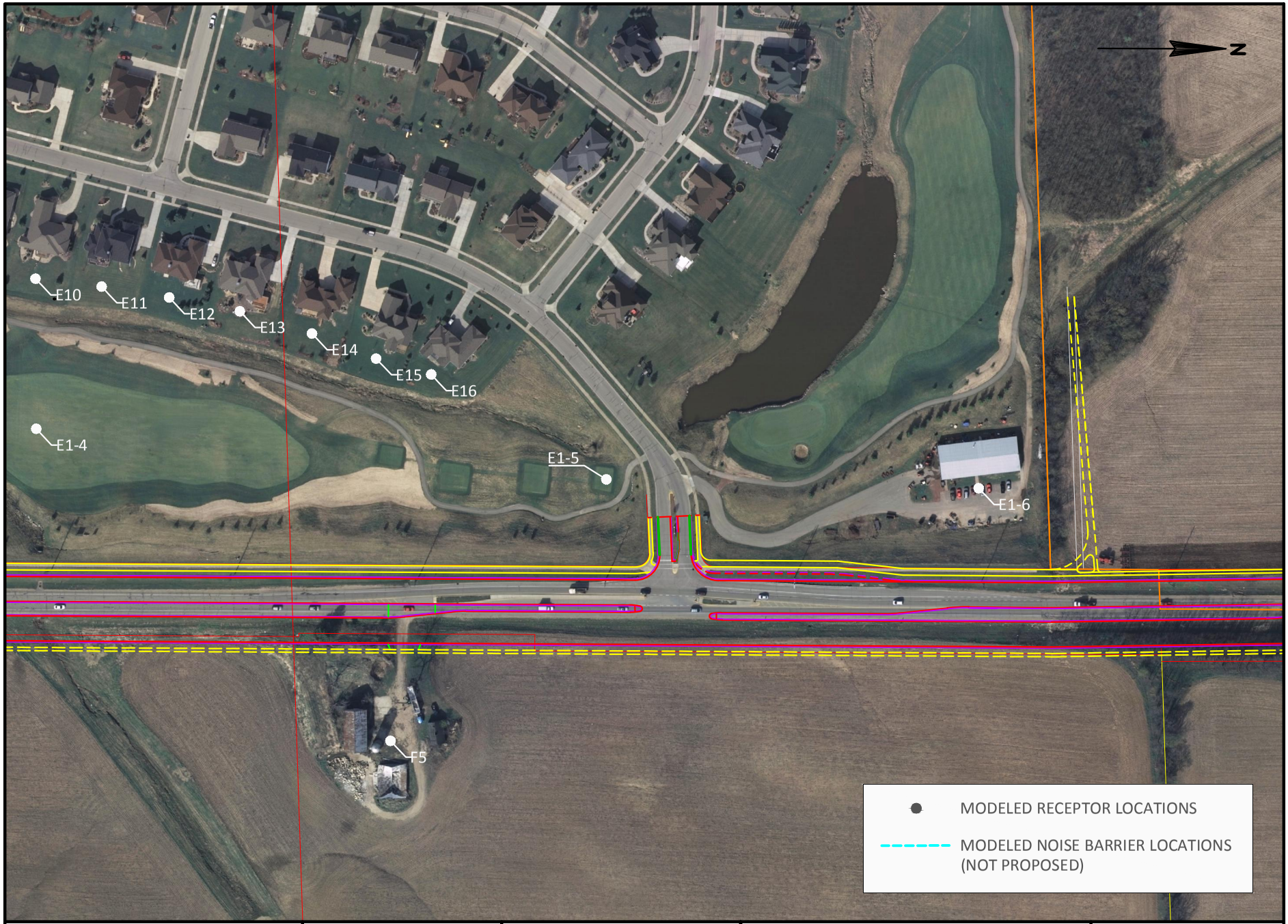

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FILE NAME : H:\PROJECTS\7334\HI-MU\7334_RECEPTORS.DWG PLOT DATE : 12/31/2012 11:18 AM PLOT SCALE 1 IN:200 FT

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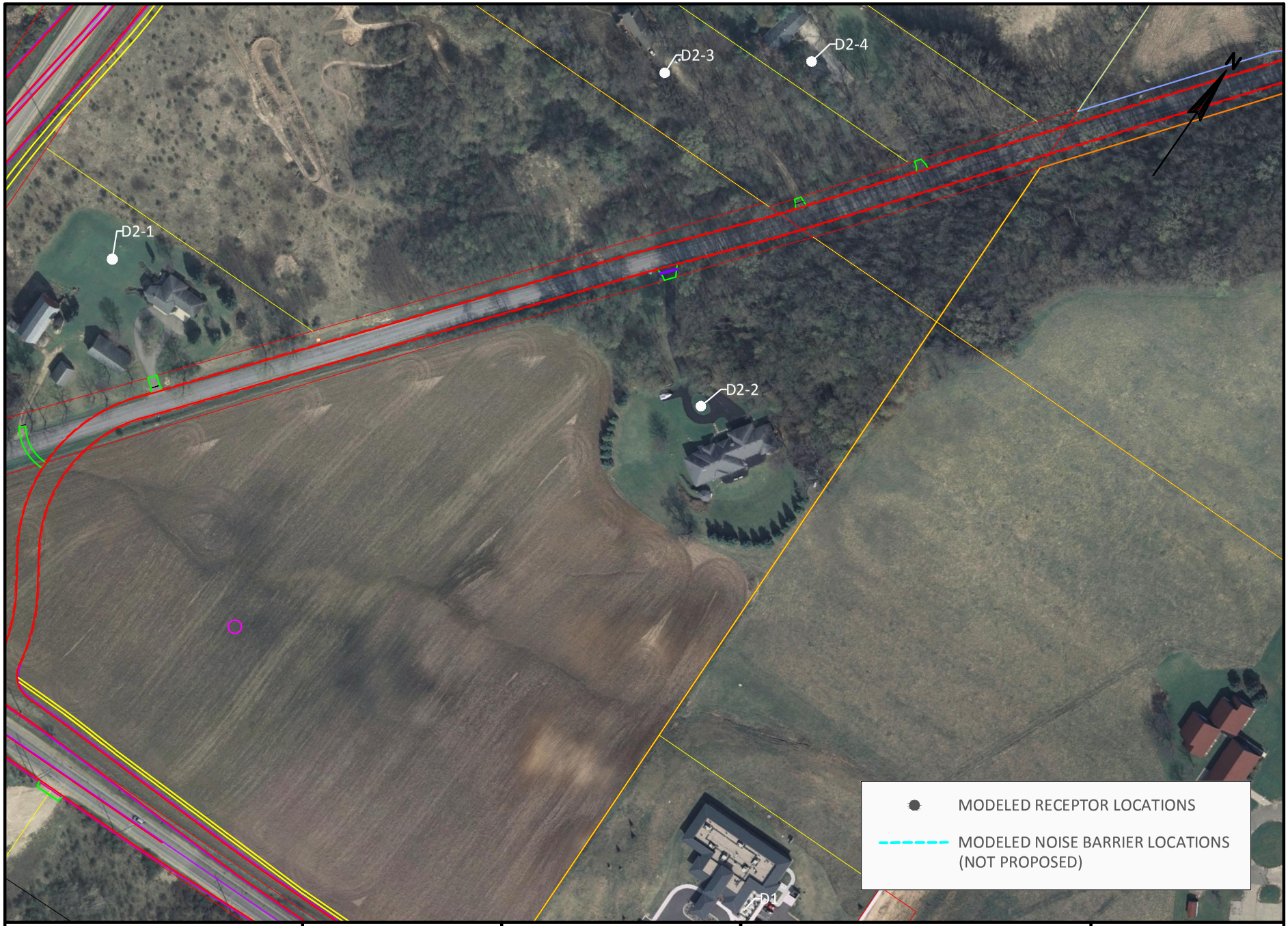

PROJECT NO:5992-09-81	HWY:CTH M	COUNTY:DANE	TRAFFIC NOISE ANALYSIS	ATTACHMENT U

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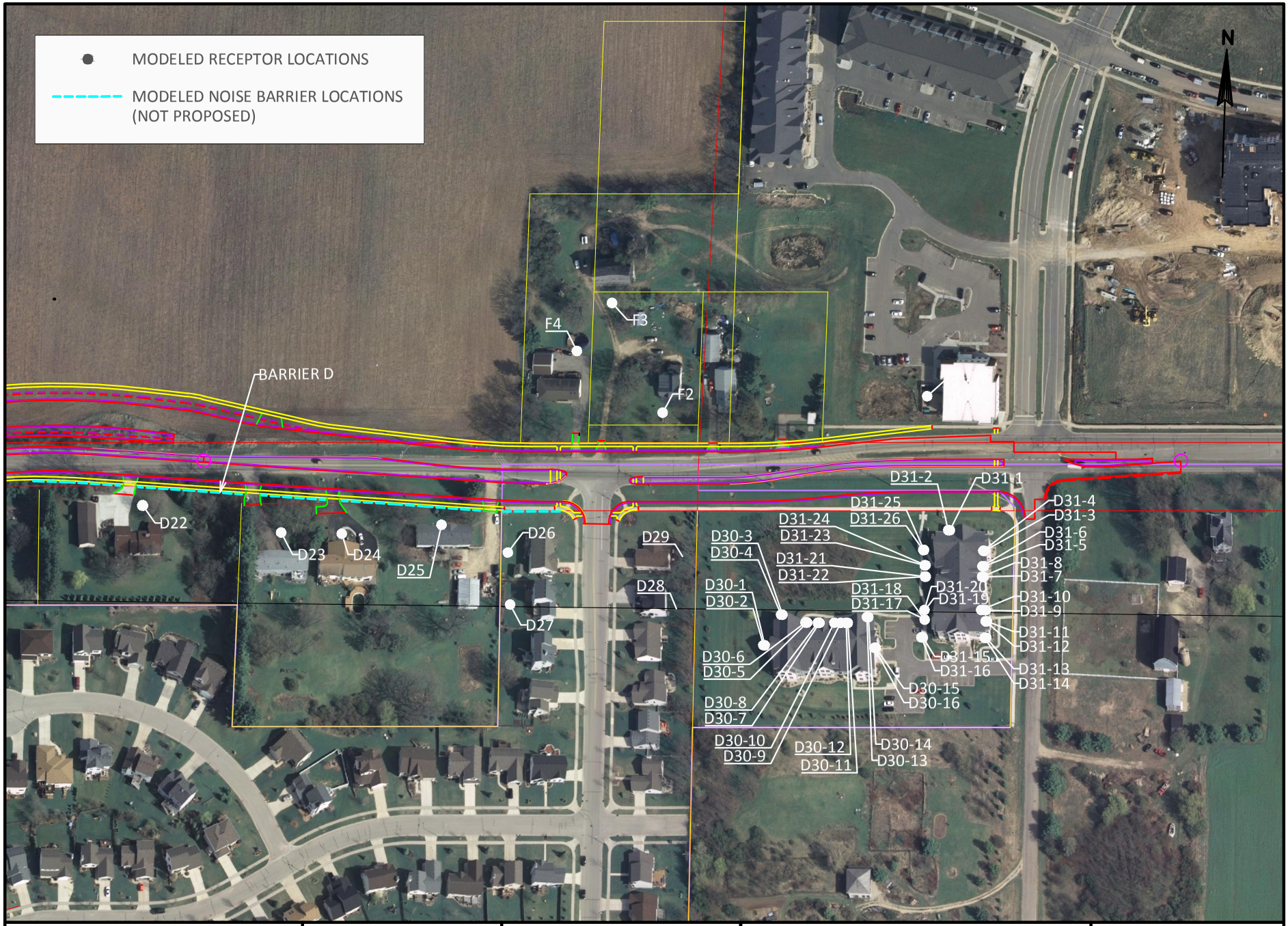

PROJECT NO:5992-09-81	HWY:CTH M	COUNTY:DANE	TRAFFIC NOISE ANALYSIS	ATTACHMENT U

FILE NAME : H:\PROJECTS\7334\HI-MU\7334_RECEPTORS.DWG PLOT DATE : 12/31/2012 11:18 AM PLOT SCALE 1 IN:200 FT

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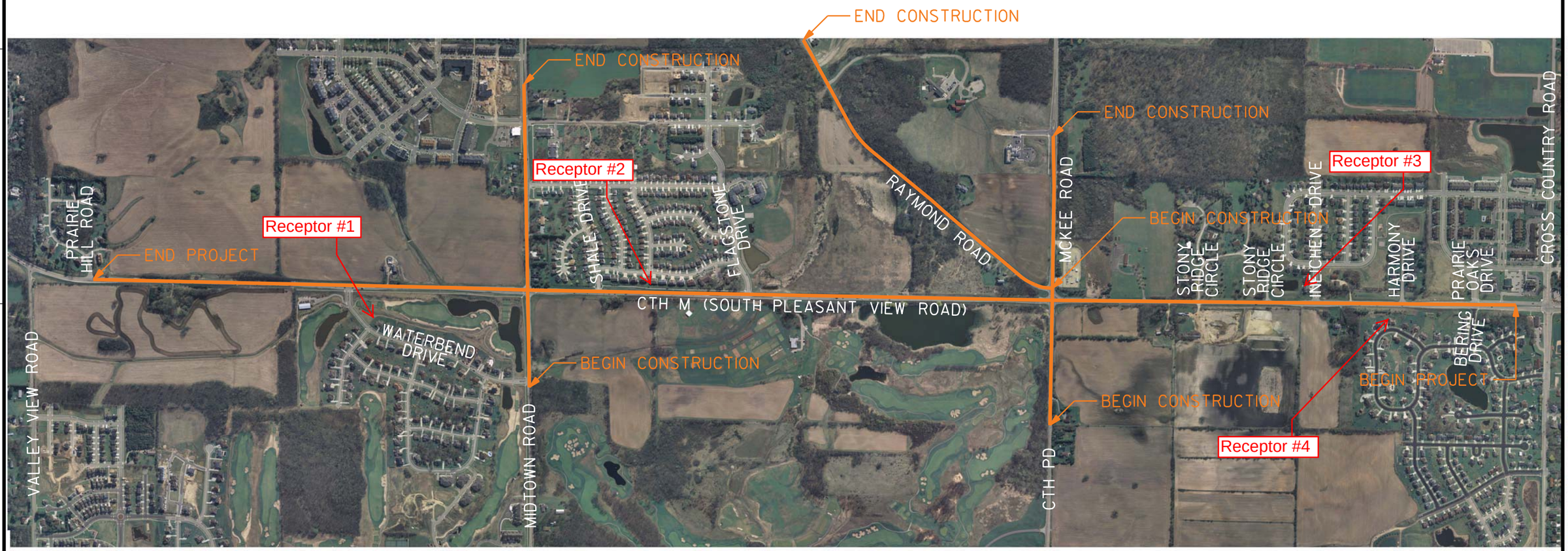
N

Proposed Noise Receptor Field Locations



Proposed Receptor Locations:

Receptor #1 - 1701 Waterbend Drive
Receptor #2 - 2214 Talc Trail
Receptor #3 - 110 Ineichen Drive
Receptor #4 - 124 Monte Cristo Circle
* Every effort will be made to locate the receptors at these locations. If unforeseen events are noticed in the field that will alter the readings, adjustments will me made and documented accordingly.

PROJECT NO:00373030	HWY:CTH M	COUNTY:DANE	AREA OF POTENTIAL EFFECT OVERVIEW	SHEET	E

FILE NAME : P:\370s\373\00373030\CADD\Planshts\APE\APE Total Project.dgn PLOT DATE : 4/5/2012 PLOT BY : jdolens PLOT NAME : PLOT SCALE : 1:1050 WISDOT/CADDS SHEET 42

APE Total Project.dgn 4/5/2012 1:59:57 PM jdolens

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May 15, 2012

Joseph & Nicole Donny
128 MONTE CRISTO CIR
VERONA, WI 53593

RE: Project ID: 5992-09-81, South Pleasant View Road/CTH M (Prairie Hill Road to Cross Country Road), Dane County

Dear Mr. and Mrs. Donny:

The City of Madison, in conjunction with the City of Verona and Dane County, propose improvements to South Pleasant View Road (CTH M) from Cross Country Road to Prairie Hill Road, a distance of approximately 3 miles. The proposed improvements consist of expanding South Pleasant View Road initially from 2 to 4-lanes with provisions to accommodate 6-lanes in the future. The proposed project includes expansion of the roadway to a multi-lane urban arterial with a raised median, bike lanes, a multi-use path, and sidewalk. The project is part of a multi-phase project which will reconstruct the CTH M corridor, including reconstruction of the CTH PD and Mid Town Road intersections.

In the upcoming months, various surveys may be conducted in the project area so that an updated assessment can be made about the project's effect upon the environment. The information obtained from these surveys will be used this evaluation.

An analysis of noise impacts will need to occur on your property in the near future. This will likely take place during the week of May 28, 2012, dependent on weather. An individual will collect readings with a handheld noise meter lasting approximately one hour. Other than entering your property, noise readings should be non-intrusive.

Someone from SRF Consulting Group will contact you prior to coming upon your land with an approximate time that this survey will be performed. Every effort will be made to cause as little inconvenience as possible, to perform the work in a timely manner, and to answer any questions about the work being done.

If you have any questions regarding the proposed project, please feel free to contact me at jdipiazza@msa-ps.com or call me at 608-242-7779.

Sincerely,

Jason Di Piazza, PE
Project Manager

First Name	Last Name	Address	City	State	Zip
Richard & Joan	Wischmeier	1709 Waterbend Drive	Verona	WI	53593
Shaochen	Gu	1705 Waterbend Drive	Verona	WI	53593
Myung Hee	Park	1701 Waterbend Drive	Verona	WI	53593
Midland	Builders	2308 Talc Trail	Verona	WI	53593
Midland	Builders	2214 Talc Trail	Verona	WI	53593
Midland	Builders	2302 Talc Trail	Verona	WI	53593
Richard	Bourne	110 Ineichen Drive	Verona	WI	53593
Keith	Waier	102 Harmony Drive	Verona	WI	53593
Joseph & Nicole	Donny	128 Monte Cristo Circle	Verona	WI	53593
Cleven	McChesney	124 Monte Cristo Circle	Verona	WI	53593

Preferred Location

Alternate Location

NOISE MONITOR FIELD SHEET

Sound Level Meter (SLM) Settings			Name:	RAB
Time:	**Fast**	Slow	Date:	5/30/2012
Weighting:	Lin.	**A**	Project Name:	CTH M
Mic. Setting:	Fr.	**Rnd**	Project Number:	7334

Sound Level Meter (SLM)		**Calibrator**	
Manufacturer	Bruel & Kjaer	Manufacturer	Bruel & Kjaer
Model	2238 Mediator	Model	Type 4231
Serial No.	2231384	Serial No.	2774372
Microphone	4188	Calibrator Frequency (Hz)	1000 Hz

Calibration

Initial Calibration	93.9 dB, -30.4, -30.4, -30.0	Time	10:03 AM
Final Calibration	93.9 dB, -30.4, -30.4, -30.0	Time	1:35 PM

Monitor Location: Receptor #1 - 1701 Waterbend Drive

Source:

MEASURMENT INFORMATION					
Test Number	1	2	3	4	5
Date	5/30/2012	5/30/2012			
Start Time	10:08 AM	1:36 PM			
End Time	10:38 AM	2:06 PM			
Weather	overcast	overcast			
Temp (^{o} F)	55°F	61°F			
Wind (mph)	8 mph	7 mph			
Wind direction	NNW	N			
Event duration	30 min	30 min			

TRAFFIC					
Test Number	1	2	3	4	5
Autos	422	425			
Med Trucks	18	12			
Heavy Trucks	18	27			
Total	460	466			
Speed Limit	45	45			

MONITOR RESULTS (dBA)					
Test Number	1	2	3	4	5
L1					
L5					
L10	58.5	55.0			
L50					
L90					
L99					
Leq	56.0	52.6			
Lmax					
Lmin					

(See other side for plan view and cross section sketches)

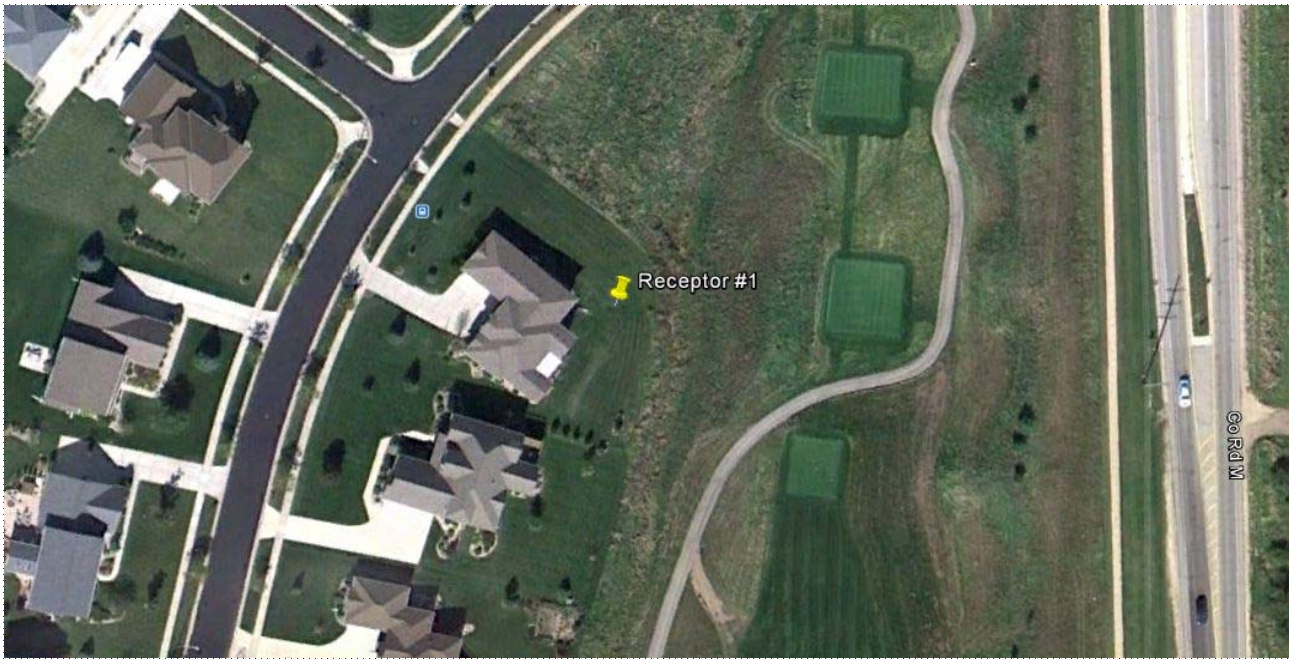
Plan view and cross section diagram

(Include noise source, receiver, microphone location, reflecting objects, obstructions, landmarks and approximate distances)

GPS Coordinates: X: 43° 2'8.36"N Y: 89°32'3.32"W

Comments:

PLAN VIEW



CROSS SECTION

NOISE MONITOR FIELD SHEET

Sound Level Meter (SLM) Settings			Name:	RAB
Time:	**Fast**	Slow	Date:	5/30/2012
Weighting:	Lin.	**A**	Project Name:	CTH M
Mic. Setting:	Fr.	**Rnd**	Project Number:	7334

Sound Level Meter (SLM)		**Calibrator**	
Manufacturer	Bruel & Kjaer	Manufacturer	Bruel & Kjaer
Model	2238 Mediator	Model	Type 4231
Serial No.	2231384	Serial No.	2774372
Microphone	4188	Calibrator Frequency (Hz)	1000 Hz

Calibration

Initial Calibration	93.9 dB, -30.3, -30.4, -30.0	Time	10:54 AM
Final Calibration	93.9 dB, -30.5, -30.4, -30.0	Time	1:35 PM

Monitor Location: Receptor #2 - 2214 Talc Trail

Source:

MEASURMENT INFORMATION					
Test Number	1	2	3	4	5
Date	5/30/2012	5/30/2012			
Start Time	10:57 AM	2:15 PM			
End Time	11:27 AM	2:45 PM			
Weather	overcast	overcast			
Temp (^{o} F)	58°F	61°F			
Wind (mph)	10 mph	10 mph			
Wind direction	NW	NW			
Event duration	30 min	30 min			

TRAFFIC					
Test Number	1	2	3	4	5
Autos	447	534			
Med Trucks	19	15			
Heavy Trucks	16	36			
Total	483	585			
Speed Limit	45	45			

MONITOR RESULTS (dBA)					
Test Number	1	2	3	4	5
L1					
L5					
L10	69.0	70.0			
L50					
L90					
L99					
Leq	65.8	67.0			
Lmax					
Lmin					

(See other side for plan view and cross section sketches)

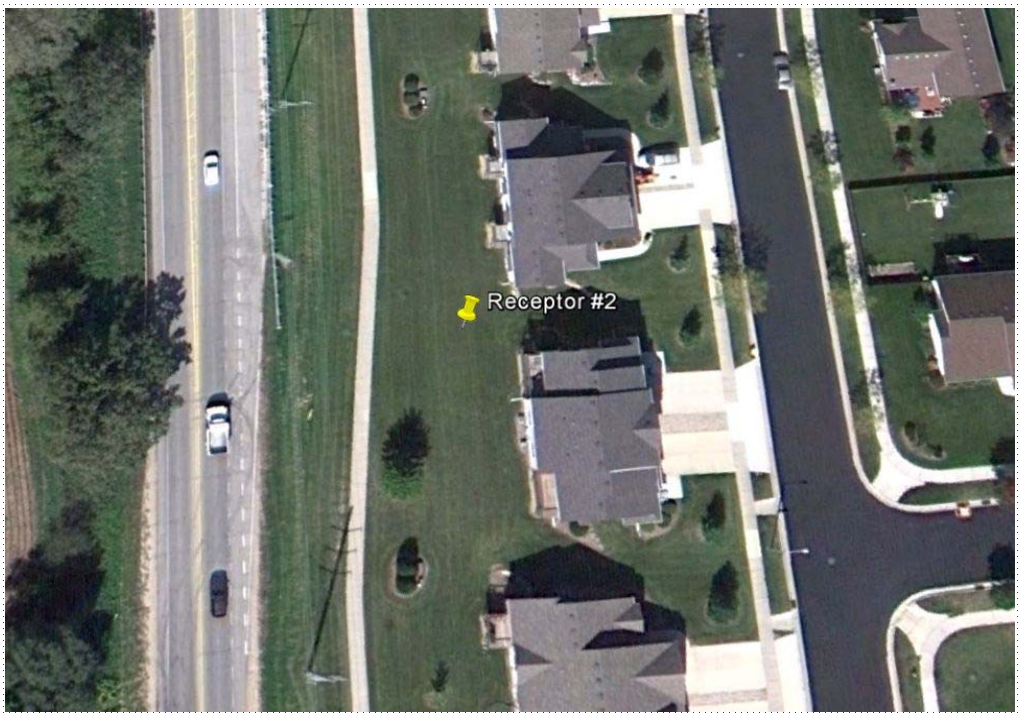
Plan view and cross section diagram

(Include noise source, receiver, microphone location, reflecting objects, obstructions, landmarks and approximate distances)

GPS Coordinates: X: 43° 1'41.08"N Y: 89°31'58.40"W

Comments:

PLAN VIEW



CROSS SECTION

NOISE MONITOR FIELD SHEET

Sound Level Meter (SLM) Settings			Name:	RAB
Time:	**Fast**	Slow	Date:	5/30/2012
Weighting:	Lin.	**A**	Project Name:	CTH M
Mic. Setting:	Fr.	**Rnd**	Project Number:	7334

Sound Level Meter (SLM)		**Calibrator**	
Manufacturer	Bruel & Kjaer	Manufacturer	Bruel & Kjaer
Model	2238 Mediator	Model	Type 4231
Serial No.	2231384	Serial No.	2774372
Microphone	4188	Calibrator Frequency (Hz)	1000 Hz

Calibration

Initial Calibration	93.9 dB, -30.4, -30.3, -30.0	Time	11:43 AM
Final Calibration	93.9 dB, -30.5, -30.5, -30.0	Time	3:35 PM

Monitor Location: Receptor #3 - 110 Ineichen Drive

Source:

MEASURMENT INFORMATION					
Test Number	1	2	3	4	5
Date	5/30/2012	5/30/2012			
Start Time	11:43 AM	3:05 PM			
End Time	12:13 PM	3:35 PM			
Weather	overcast	overcast			
Temp (^{o} F)	58°F	61°F			
Wind (mph)	6	6			
Wind direction	NW	N			
Event duration	30 min	30 min			

TRAFFIC					
Test Number	1	2	3	4	5
Autos	380	454			
Med Trucks	12	4			
Heavy Trucks	12	18			
Total	405	481			
Speed Limit	35	35			

MONITOR RESULTS (dBA)					
Test Number	1	2	3	4	5
L1					
L5					
L10	69.0	68.0			
L50					
L90					
L99					
Leq	65.4	65.4			
Lmax					
Lmin					

(See other side for plan view and cross section sketches)

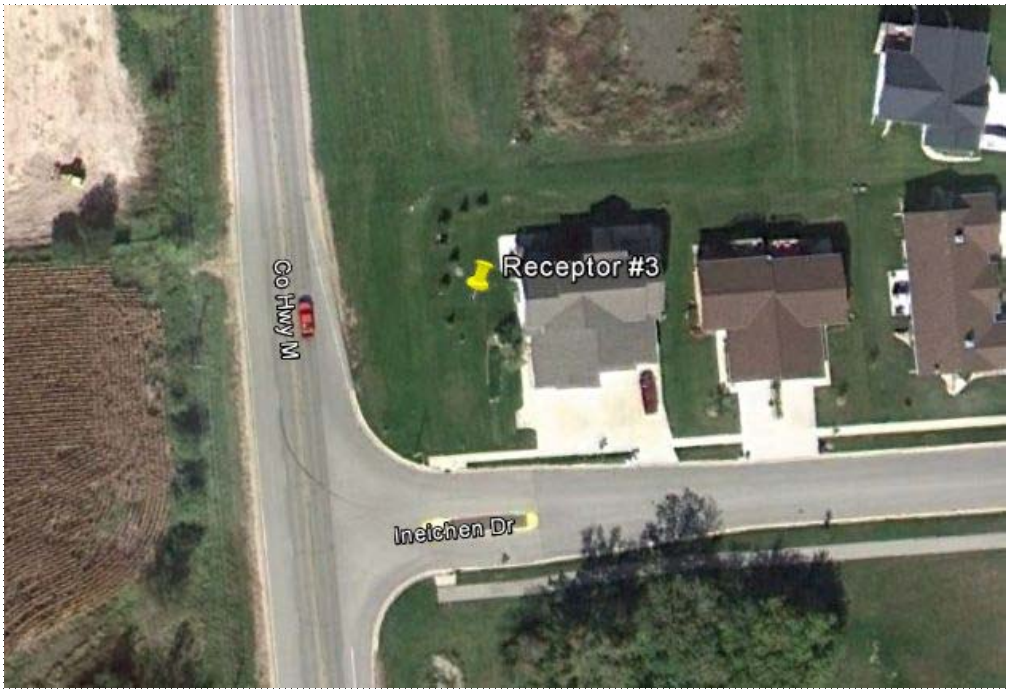
Plan view and cross section diagram

(Include noise source, receiver, microphone location, reflecting objects, obstructions, landmarks and approximate distances)

GPS Coordinates: X: 43° 0'31.38"N Y: 89°31'59.75"W

Comments:

PLAN VIEW



CROSS SECTION

NOISE MONITOR FIELD SHEET

Sound Level Meter (SLM) Settings			Name:	RAB
Time:	**Fast**	Slow	Date:	5/30/2012
Weighting:	Lin.	**A**	Project Name:	CTH M
Mic. Setting:	Fr.	**Rnd**	Project Number:	7334

Sound Level Meter (SLM)		**Calibrator**	
Manufacturer	Bruel & Kjaer	Manufacturer	Bruel & Kjaer
Model	2238 Mediator	Model	Type 4231
Serial No.	2231384	Serial No.	2774372
Microphone	4188	Calibrator Frequency (Hz)	1000 Hz

Calibration

Initial Calibration	93.9 dB, -30.4, -30.4, -30.0	Time	12:38 PM
Final Calibration	93.9 dB, -30.4, -30.5, -30.0	Time	3:45 PM

Monitor Location: Receptor #4 - 112 Monte Cristo Circle

Source:

MEASURMENT INFORMATION					
Test Number	1	2	3	4	5
Date	5/30/2012	5/30/2012			
Start Time	12:39 PM	3:46 PM			
End Time	1:09 PM	4:16 PM			
Weather	overcast	partly cloudy			
Temp (^{o} F)	59°F	62°F			
Wind (mph)	7	5			
Wind direction	N	N			
Event duration	30 min	30 min			

TRAFFIC					
Test Number	1	2	3	4	5
Autos	380	545			
Med Trucks	12	8			
Heavy Trucks	12	8			
Total	404	569			
Speed Limit	35	35			

MONITOR RESULTS (dBA)					
Test Number	1	2	3	4	5
L1					
L5					
L10	57.5	57.0			
L50					
L90					
L99					
Leq	54.3	54.3			
Lmax					
Lmin					

(See other side for plan view and cross section sketches)

Plan view and cross section diagram

(Include noise source, receiver, microphone location, reflecting objects, obstructions, landmarks and approximate distances)

GPS Coordinates: X: 43° 0'18.43"N Y: 89°32'4.20"W

Comments:

PLAN VIEW

CROSS SECTION

	SB Autos	NB Autos	SB Med Trucks	NB Med Trucks	SB Heavy Trucks	MB Heavy Trucks	SB Motorcycles	NB Motorcycles	SB Busses	NB Busses
Receptor 1 - AM										
15 min cycle 1	111	103	7	4	4	3	0	1	0	0
15 min cycle 2	117	91	4	3	6	5	0	1	0	0
Totals	228	194	11	7	10	8	0	2	0	0
	422		18		18		2		0	
Receptor 2 - AM										
15 min cycle 1	100	128	7	7	7	2	0	0	0	1
15 min cycle 2	116	133	2	3	3	4	0	0	0	0
Totals	216	261	9	10	10	6	0	0	0	1
	477		19		16		0		1	
Receptor 3 - AM										
15 min cycle 1	108	100	2	1	3	2	0	1	0	0
15 min cycle 2	82	90	3	6	3	4	0	0	0	0
Totals	190	190	5	7	6	6	0	1	0	0
	380		12		12		1		0	
Receptor 4 - AM										
15 min cycle 1	85	89	5	0	4	5	0	0	0	0
15 min cycle 2	73	85	1	2	1	2	0	0	0	0
Totals	190	190	5	7	6	6	0	0	0	0
	380		12		12		0		0	
Receptor 1 - PM										
15 min cycle 1	111	85	1	7	9	3	0	0	0	0
15 min cycle 2	108	121	3	1	7	8	0	2	0	0
Totals	219	206	4	8	16	11	0	2	0	0
	425		12		27		2		0	
Receptor 2 - PM										
15 min cycle 1	138	114	5	3	8	5	0	0	0	0
15 min cycle 2	143	139	5	2	10	13	0	0	0	0
Totals	281	253	10	5	18	18	0	0	0	0
	534		15		36		0		0	
Receptor 3 - PM										
15 min cycle 1	109	111	2	0	5	1	0	0	0	0
15 min cycle 2	158	76	0	2	6	6	0	0	0	5
Totals	267	187	2	2	11	7	0	0	0	5
	454		4		18		0		5	
Receptor 4 - PM										
15 min cycle 1	110	159	0	5	2	4	0	2	1	3
15 min cycle 2	134	142	1	2	1	1	0	0	1	1
Totals	244	301	1	7	3	5	0	2	2	4
	545		8		8		2		6	

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