Environmental Assessment and Final Section 4(f)

South Pleasant View Road, City of Madison
County Highway M Reconstruction
Cross Country Road to Prairie Hill Road
Project ID 5992-09-81

September 16, 2016
This page is intentionally left blank.
## 1. Table of Contents

### BASIC SHEETS

- Basic Sheet 1 .......................................................................................................................................................... 1:1
- Basic Sheet 2 .......................................................................................................................................................... 2:1
- Basic Sheet 3 – Coordination .................................................................................................................................. 3:1
- Basic Sheet 4 – Environmental Factors Matrix .................................................................................................. 4:1
- Basic Sheet 5 – Alternatives Comparison Matrix (South) ..................................................................................... 5:1
- Basic Sheet 5 – Alternatives Comparison Matrix (North) ...................................................................................... 5:2
- Basic Sheet 6 – Traffic Summary Matrix (South) .................................................................................................. 6:1
- Basic Sheet 6 – Traffic Summary Matrix (North) .................................................................................................. 6:2
- Basic Sheet 7 – EIS Significance Criteria ........................................................................................................... 7:1
- Basic Sheet 8 – Environmental Commitments .................................................................................................... 8:1

### FACTOR SHEETS

- Factor Sheet A-1 ...................................................................................................................................................... A-1:1
- Factor Sheet A-3 ...................................................................................................................................................... A-3:1
- Factor Sheet B-1: City of Madison ........................................................................................................................ B-1:1
- Factor Sheet B-1: City of Verona .......................................................................................................................... B-1:7
- Factor Sheet B-1: Town of Verona ........................................................................................................................ B-1:11
- Factor Sheet B-1: Town of Middleton ................................................................................................................... B-1:16
- Factor Sheet B-5 ...................................................................................................................................................... B-5:1
- Factor Sheet B-8: University Ridge Golf Course .................................................................................................. B-8:1
- Factor Sheet B-8: Ice Age National Scenic Trail ................................................................................................... B-8:9
- Factor Sheet B-8: Schroeder-Stickelberg-Thompson Farmstead ........................................................................ B-8:14
- Factor Sheet B-8: Hawks Landing Golf Course ..................................................................................................... B-8:17
- Factor Sheet B-8: Temporary Occupancy – Ice Age Junction Path ........................................................................ B-8:20
- Factor Sheet B-8: Temporary Occupancy – City of Verona Unnamed Path ............................................................ B-8:24
- Factor Sheet B-9 ...................................................................................................................................................... B-9:1
- Factor Sheet C-1 ...................................................................................................................................................... C-1:1
- Factor Sheet C-2 ...................................................................................................................................................... C-2:1
- Factor Sheet C-3 ...................................................................................................................................................... C-3:1
- Factor Sheet D-1 ...................................................................................................................................................... D-1:1
- Factor Sheet D-2 ...................................................................................................................................................... D-2:1
- Factor Sheet D-3 ...................................................................................................................................................... D-3:1
- Factor Sheet D-4 ...................................................................................................................................................... D-4:1
- Factor Sheet D-5 ...................................................................................................................................................... D-5:1
- Factor Sheet D-6 ...................................................................................................................................................... D-6:1
This page is intentionally left blank.
List of Figures

Figure 1 - Project Location ................................................................. 2:2
Figure 2 - County M Transportation Improvement Program (TIP) Approved Construction Projects .................................................. 2:3
Figure 3 - 2006 Congestion Levels, Madison Area, Dane County ... 2:4
Figure 4 - North/South Connector Routes ........................................ 2:9
Figure 5 - Madison Metro Transit Weekday Service and Supplemental School Day Service Maps .................................................. 2:10
Figure 6 - Corridor Phases .............................................................. 2:15
Figure 7 - Preferred Alternative, South Phase .................................. 2:16
Figure 8 - Preferred Alternative, North Phase .................................. 2:17
Figure 9 - Access Changes ............................................................. 2:19
Figure 10 - Area Trails and Multi-Use Paths ..................................... 2:22
Figure 11 - Option A-2: Signalized Intersection ............................. 2:24
Figure 12 - Option A-3: Continuous Flow Intersection .................. 2:25
Figure 13 - Option A-4.1: Northeast Jug-Handle Intersection ........ 2:26
Figure 14 - Option A-4.3: Southeast Jug-Handle Intersection ........ 2:27
Figure 15 - Option A-4.4 Southwest Jug Handle ............................. 2:29
Figure 16 - Option A-5: Multi-Lane Roundabout ......................... 2:31
Figure 17 - Option A-6: Tight Diamond ........................................... 2:33
Figure 18 - Option A-7: Westbound Underpass .............................. 2:35
Figure 19 - Option B-2: Continuous Flow Intersection ................. 2:38
Figure 20 - Option B-3: Roundabout ............................................. 2:39
Figure 21 - Option B-4: At-Grade Signalized Intersection ............. 2:41
Figure 22 - Typical Section Location Overview ............................. 2:44
Figure 23 - Typical Sections (South and North Phases) .................. 2:45
Figure 24 - Current Land Use: Madison Area January 2005 .......... 2:51
Figure 25 - Neighborhood Plans Adjacent to County M Project Area ........................................................................ 2:53
Figure 26 - Municipalities in the Project Area ................................. B-1:1
Figure 27 - Environmental Constraints Map ................................... B-1:6
Figure 28 - Ice Age Junction Path Impacts - At Flagstone Drive .... B-8:22
Figure 29 - Ice Age Junction Path Impacts - At Raymond Road .... B-8:22
Figure 30 - Unnamed Path Impacts ................................................ B-8:25

List of Tables

Table A - Current and Projected Traffic Counts, County M Project Corridor ............................................................ 2:4
Table B - Signalized At-Grade Intersection Level of Service ……….. 2:6
Table C - Crash Rates 2009 - 2013, County M Project Section and Statewide Average for County Trunk Highways .......... 2:7
Table D - Population, Households and Race (2010 Census) ........... 2:57
Table E - Household Income (2010 Census) ................................... 2:58
Table F - Economic Characteristics for Dane County ................. A-1:1
Table G - University of Wisconsin Property Uses ......................... B-8:2
This page is intentionally left blank.
List of Exhibits

Exhibit 1  Project Location Overview
Exhibit 2  Traffic Forecast Report
Exhibit 3  2006 Congestion Levels, Madison Area, Dane County
Exhibit 4  Madison Area Bus Routes – Weekday Map
Exhibit 5  Right of Way – Cross Country Road to Flagstone Drive and
          Right of Way – Flagstone Drive Prairie Hill Road
Exhibit 6  Current Land Use: Madison Area
Exhibit 7  Pioneer Neighborhood Development Plan with University Research Park – City of Madison
Exhibit 8  Midtown Neighborhood Development Plan – City of Madison
Exhibit 9  High Point – Raymond Neighborhood Development Plan – City of Madison
Exhibit 10  North Neighborhood Plan – City of Verona
Exhibit 11  Section 4(f) Properties Right of way Map
            11B – University Ridge Golf Course
            11C – Dane County Parkland
            11D – Ice Age National Scenic Trail
            11E – Schroeder-Stickelberg-Thompson Farmstead
            11F – Hawk’s Landing Golf Course
Exhibit 12  Delineated Wetlands Map
Exhibit 13  Badger Mill Creek Subwatersheds
This page is intentionally left blank.
List of Attachments

Attachment A – Conceptual Stage Relocation Plan
Attachment B – Other Agency Coordination
Department of Agriculture, Trade, and Consumer Protection
Dane County Sheriff’s Office
US Forest Service Region 9
Attachment C – Wisconsin Department of Natural Resources (WDNR) Coordination
Attachment D – Section 106 Coordination
Attachment E – Project Initiation Letters
Attachment F – Documentation for Consultation
Attachment G – US Army Corp of Engineers (COE) Coordination
Attachment H – Natural Resource Conservation Service (NRCS) Coordination
Attachment I – Fish & Wildlife Service (FWS) Coordination
Attachment J – American Indian Tribes Coordination
Attachment K – Indirect Effects Prescreening
Attachment L – Cumulative Effects Analysis
Attachment M – Determination of Eligibility Form – Schroeder-Stickelberg-Thompson Farmstead
Attachment N – Determination of Eligibility Form – Gordon School
Attachment O – Great Lakes Archaeological Research Center Coordination
Attachment P – Preliminary Construction Cost Estimate
Attachment Q – Memorandum of Agreement
Attachment R – Agricultural Impact Notice
Attachment S – Schroeder-Stickelberg-Thompson Farmstead Correspondence
Attachment T – Section 4(f) Documentation
University Ridge Golf Course
Dane County Parks
Ice Age National Scenic Trail
Temporary Occupancy: Ice Age National Scenic Trail
Temporary Occupancy: Unnamed Path
Section 4(f) Evaluation
Attachment U – Air Quality Methodology and Analysis Documentation
Attachment V – Noise Receptor Documentation
This page is intentionally left blank.
## 2. Abbreviation List

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AADT</td>
<td>Average Annual Daily Traffic</td>
</tr>
<tr>
<td>ADA</td>
<td>Americans with Disabilities</td>
</tr>
<tr>
<td>AIN</td>
<td>Agricultural Impact Notice</td>
</tr>
<tr>
<td>CFI</td>
<td>Continuous Flow Intersection</td>
</tr>
<tr>
<td>COE</td>
<td>United States Army Corps of Engineers</td>
</tr>
<tr>
<td>CTH</td>
<td>County Highway</td>
</tr>
<tr>
<td>DATCP</td>
<td>Department of Agriculture, Trade and Consumer Protection</td>
</tr>
<tr>
<td>DOE</td>
<td>Determination of Eligibility</td>
</tr>
<tr>
<td>DPW</td>
<td>Department of Public Works</td>
</tr>
<tr>
<td>EA</td>
<td>Environmental Assessment</td>
</tr>
<tr>
<td>ECIP</td>
<td>Erosion Control Implementation Plan</td>
</tr>
<tr>
<td>ERP</td>
<td>Environmental Repair Program</td>
</tr>
<tr>
<td>FDM</td>
<td>Wisconsin Department of Transportation Facilities Development Manual</td>
</tr>
<tr>
<td>FHWA</td>
<td>United States Department of Transportation Federal Highway Administration</td>
</tr>
<tr>
<td>FONSI</td>
<td>Finding of No Significant Impact</td>
</tr>
<tr>
<td>FWS</td>
<td>United States Fish and Wildlife Service</td>
</tr>
<tr>
<td>HCM</td>
<td>Highway Capacity Manual</td>
</tr>
<tr>
<td>IANST</td>
<td>Ice Age National Scenic Trail</td>
</tr>
<tr>
<td>IATA</td>
<td>Ice Age Trail Alliance</td>
</tr>
<tr>
<td>LRTCP</td>
<td>Long-Range Transportation Planning Committee</td>
</tr>
<tr>
<td>LOS</td>
<td>Level of Service</td>
</tr>
<tr>
<td>LWCF</td>
<td>Land and Water Conservation Fund</td>
</tr>
<tr>
<td>MAP-21</td>
<td>Moving Ahead for Progress in the 21st Century Act</td>
</tr>
<tr>
<td>MEV</td>
<td>Million Entering Vehicles</td>
</tr>
<tr>
<td>MMSD</td>
<td>Madison Metropolitan Sewer District</td>
</tr>
<tr>
<td>MOA</td>
<td>Memorandum of Agreement</td>
</tr>
<tr>
<td>MPO</td>
<td>Metropolitan Planning Organization</td>
</tr>
<tr>
<td>MPH</td>
<td>Miles per Hour</td>
</tr>
<tr>
<td>MSA</td>
<td>Metropolitan Statistical Area</td>
</tr>
<tr>
<td>MVM</td>
<td>Millions of Vehicle Miles</td>
</tr>
<tr>
<td>NDP</td>
<td>Neighborhood Development Plans</td>
</tr>
<tr>
<td>NHS</td>
<td>National Highway System</td>
</tr>
<tr>
<td>NLEB</td>
<td>Northern Long-eared Bat</td>
</tr>
<tr>
<td>NPS</td>
<td>National Park Service</td>
</tr>
<tr>
<td>NRCS</td>
<td>National Resource Conservation Service</td>
</tr>
<tr>
<td>NRHP</td>
<td>National Register of Historic Places</td>
</tr>
<tr>
<td>OWJ</td>
<td>Official with Jurisdiction</td>
</tr>
<tr>
<td>PASER</td>
<td>Pavement Surface Evaluation and Rating</td>
</tr>
<tr>
<td>PIM</td>
<td>Public Information Meetings</td>
</tr>
<tr>
<td>PLE</td>
<td>Permanent Limited Easement</td>
</tr>
<tr>
<td>SHPO</td>
<td>State Historic Preservation Office</td>
</tr>
<tr>
<td>STIP</td>
<td>State Transportation Improvement Program</td>
</tr>
<tr>
<td>STP-U</td>
<td>Surface Transportation Program – Urban</td>
</tr>
<tr>
<td>TSS</td>
<td>Total Suspended Solids</td>
</tr>
<tr>
<td>TLE</td>
<td>Temporary Limited Easement</td>
</tr>
<tr>
<td>TIP</td>
<td>Transportation Improvement Program</td>
</tr>
<tr>
<td>UW</td>
<td>University of Wisconsin</td>
</tr>
<tr>
<td>WDNR</td>
<td>Wisconsin Department of Natural Resources</td>
</tr>
<tr>
<td>WisDOT</td>
<td>Wisconsin Department of Transportation</td>
</tr>
<tr>
<td>WISLR</td>
<td>Wisconsin Local Roads</td>
</tr>
</tbody>
</table>
This page is intentionally left blank.