

CITY OF MADISON

REQUEST FOR PROPOSALS



RFP #: 8967-0-2020-AH

Title: Engineering Design and Architectural Services

City Agency: Engineering

Due Date: September 28, 2020
2:00 PM CST

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1 NOTICE TO PROPOSERS

1.1 Summary

The City of Madison Engineering Division ("City") is soliciting proposals from qualified professionals for design and architectural services related to Reindahl Park Imagination Center project. Vendors submitting Proposals ("Proposers") are required to read this Request for Proposals ("RFP") in its entirety and follow the instructions contained herein.

1.2 Important Dates

Deliver Proposals no later than the due time and date indicated below. The City will reject late Proposals:

Issue Date: August 26, 2020.
Voluntary Site Visit: September 8, 2020
Questions Due Date: September 11, 2020.
Answers Posted Date: September 18, 2020.
Due Date: September 28, 2020 2:00 PM CST

1.3 Format

Submit Technical and Cost Proposals (Form D) in separate, distinct parts within the proposal package.

Cost Proposal (Form D): One Copy
Technical Proposal: One Copy
Electronic Proposal: One (1) complete copy. Cost and Technical Proposals should be separate files.

The City will not consider illegible Proposals.

Elaborate proposals (i.e., expensive artwork) beyond that sufficient to present a complete and effective proposal, are not necessary or desired.

Complete and return Forms A through E to City of Madison Purchasing Services by Friday, September 25, 2020, 2:00 PM CST.

City Wide Notice: currently the City is only accepting proposals in electronic format following the same guidelines indicated above. Submission of electronic proposals is detailed below within section 1.5 *Delivery of Proposals*.

1.4 Labeling

All proposals must be clearly labeled: Proposer's Name and Address
RFP #: 8967-0-2020-AH
Title: Engineering Design and Architectural Services
Due: September 25, 2020 2:00 PM CST

All email correspondence must include RFP #8967-0-2020-AH in the subject line.

1.5 Delivery of Proposals

Delivery of electronic copy to: via email to bids@cityofmadison.com
or on a commonly used media with the hard copies, with additional copy to bpaua@cityofmadison.com.

Proposals must be delivered as instructed. Deliveries to other City departments and/or locations may result in disqualification.

Note: When mailing your response via a third party delivery service, the outside of the packaging MUST be clearly marked with the RFP name and number. This ensures that the bid can be delivered to the correct purchasing agent without having to open the bid.

1.6 Appendix A: Standard Terms & Conditions

Proposers are responsible for reviewing this attachment prior to submission of their Proposals. City of Madison Standard Terms and Conditions are the minimum requirements for the submission of Proposals.

1.7 Appendix B: Sample Contract for Purchase of Services

Proposers are responsible for reviewing this attachment prior to submission of their Proposals. The Sample Contract for Purchase of Services shall serve as the basis of the contract resulting from this RFP. The terms of this template contract shall become contractual obligations following award of the RFP. By submitting a proposal, Proposers affirm their willingness to enter into a contract containing these terms.

1.8 Affirmative Action Notice

If Contractor employs 15 or more employees and does aggregate annual business with the City of \$50,000 or more for the calendar year in which the PO and/or Contract is in effect, Contractor shall file, within thirty (30) days from the PO/Contract effective date and BEFORE RELEASE OF PAYMENT, an Affirmative Action Plan designed to ensure that the Contractor provides equal employment opportunity to all and takes affirmative action in its utilization of applicants and employees who are women, minorities and/or persons with disabilities. A sample affirmative action plan, Request for Exemption forms, and instructions are available at: www.cityofmadison.com/civil-rights/contract-compliance/vendors-suppliers/forms or by contacting a Contract Compliance Specialist at the City of Madison Affirmative Action Division at (608) 266-4910. Vendors must register for an account to complete the required forms online, here: <https://elam.cityofmadison.com/citizenaccess>

Contractor shall also allow maximum feasible opportunity to small business enterprises to compete for any subcontracts entered into pursuant to this PO/Contract.

Job postings: All contractors who employ 15 or more employees (regardless of the dollar amount of this contract or their annual aggregate business with the City) must notify the City of all external job openings at locations in Dane County, Wisconsin, and agree to interview candidates referred by the City or its designated organization. Job posting information is available at: <http://www.cityofmadison.com/civil-rights/programs/referrals-and-interviews-for-sustainable-employment-raise-program>. Instructions for contractors: http://www.cityofmadison.com/civil-rights/documents/RaISE_Job_Posting_Instructions.pdf

The complete set of Affirmative Action requirements for this purchase can be found in **paragraph 20 of Appendix A – Standard Terms and Conditions** and, if applicable, in **Section 13 of Appendix B – Sample Contract for Purchase of Services**.

1.9 Multiple Proposals

Multiple Proposals from Proposers are permitted; however, each must fully conform to the requirements for submission. Proposers must sequentially label (e.g., Proposal #1, Proposal #2) and separately package each Proposal. Proposers may submit alternate pricing schemes without having to submit multiple Proposals.

1.10 City of Madison Contact Information

The City of Madison Engineering is the procuring agency:

Brent Pauba
City of Madison Engineering Division
bpauba@cityofmadison.com

The City of Madison Purchasing Services administers the procurement function:

Andy Hargianto
Purchasing Services
City-County Building, Room 407
210 Martin Luther King, Jr. Blvd.
Madison, WI 53703-3346
PH: (608) 243-0529
FAX: (608) 266-5948
bids@cityofmadison.com

For questions regarding Affirmative Action Plans please contact:

Contract Compliance
Department of Civil Rights
City-County Bldg., Room 523
210 Martin Luther King, Jr. Blvd.
Madison, WI 53703
PH: (608) 266-4910
dcrc@cityofmadison.com

The City employs spam filtering that occasionally blocks legitimate emails, holding them in 'quarantine' for four calendar days. The contacts listed in this RFP will acknowledge all emails received. Proposers not receiving acknowledgement within twenty-four hours shall follow-up via phone with specific information identifying the originating email address for message recovery.

1.11 Inquiries and Clarifications

Proposers are to raise any questions they have about the RFP document without delay. Direct all questions, *in writing*, to the Purchasing Services administrator listed in Section 1.10.

Proposers finding any significant ambiguity, error, conflict, discrepancy, omission, or other deficiency in this RFP document shall immediately notify the Buyer and request clarification. In the event that it is necessary to provide additional clarification or revision to the RFP, the City will post addenda – see 1.12 below. Proposers are strongly encouraged to check for addenda regularly.

Proposals should be as responsive as possible to the provisions stated herein. Exceptions are not permitted. The City of Madison reserves the right to disqualify any and all bids that are non-responsive or that include exceptions.

1.12 Addenda

In the event that it is necessary to provide additional clarification or revision to the RFP, the City will post addenda to its Proposals distribution websites – see 1.13 below. It is the Proposers responsibility to regularly monitor the websites for any such postings. Proposers must acknowledge the receipt of any addenda on Form B. Failure to retrieve addenda and include their provisions may result in disqualification.

1.13 Bid Distribution Networks

The City of Madison posts all Request for Proposals, addenda, tabulations, awards and related announcements on two distribution networks – VendorNet and DemandStar. The aforementioned documents are available **exclusively** from these websites. It is the Proposers responsibility to regularly monitor the bid distribution network for any such postings. Proposer's failure to retrieve such addenda and incorporate their appropriate provisions in their response may result in disqualification. Both sites offer free registration to City Proposers.

State of Wisconsin VendorNet System: State of Wisconsin and local agencies bid network. Registration is free. <http://vendornet.state.wi.us/vendornet>

DemandStar by Onvia: National bid network – Free subscription is available to access Proposals from the City of Madison and other Wisconsin agencies, participating in the Wisconsin Association of Public Purchasers (WAPP). A fee is required if subscribing to multiple agencies that are not included in WAPP.

Bid Opportunities: www.cityofmadison.com/finance/purchasing/bidDemandStar.cfm

Home Page: www.demandstar.com

To Register: www.onvia.com/WAPP

1.14 Local Vendor Preference

The City of Madison has adopted a local preference purchasing policy granting a scoring preference to local suppliers. Only suppliers registered as of the bid's due date will receive preference. Learn more and register at the City of Madison website: www.cityofmadison.com/business/localPurchasing.

1.15 Oral Presentations/Site Visits/Meetings

Proposers may be asked to attend meetings, make oral presentations, inspect City locations or make their facilities available for a site inspection as part of this RFP process. Such presentations, meetings or site visits will be at the Proposers expense.

Voluntary Site Visit

City Library, Parks, and Engineering representatives will lead a site visit for prospective bidders to review existing conditions.

Date: September 8, 2020
Time: 1:00 – 2:00 PM
Location: Reindahl Park, 1818 Portage Rd, Madison, WI 53704
**** Meet at the Reindahl Park Splash Pad**

Notes: Face coverings are mandatory at the site visit. Prospective vendors are responsible for supplying their own face covering.

Reindahl Park is open to the general public. Prospective bidders may visit the site at any time during park hours.

1.16 Acceptance/Rejection of Proposals

The City reserves the right to accept or reject any or all proposals submitted, in whole or in part, and to waive any informalities or technicalities, which at the City's discretion is determined to be in the best interests of the City. Further, the City makes no representations that a contract will be awarded to any proposer responding to this request. The City expressly reserves the right to reject any and all proposals responding to this invitation without indicating any reasons for such rejection(s).

The City reserves the right to postpone due dates and openings for its own convenience and to withdraw this solicitation at any time without prior notice.

1.17 Withdrawal or Revision of Proposals

Proposers may, without prejudice, withdraw Proposals submitted prior to the date and time specified for receipt of Proposals by requesting such withdrawal before the due time and date of the submission of Proposals. After the due date of submission of Proposals, no Proposals may be withdrawn for a period of 90 days or as otherwise specified or provided by law. Proposers may modify their Proposals at any time prior to opening of Proposals.

1.18 Non-Material and Material Variances

The City reserves the right to waive or permit cure of nonmaterial variances in the offer if, in the judgment of the City, it is in the City's best interest to do so. The determination of materiality is in the sole discretion of the City.

1.19 Public Records

Proposers are hereby notified that all information submitted in response to this RFP may be made available for public inspection according to the Public Records Law of the State of Wisconsin or other applicable public record laws. Information qualifying as a "trade secret"—defined in State of Wisconsin Statutes—may be held confidential.

Proposers shall seal separately and clearly identify all information they deem to be "trade secrets," as defined in the State of Wisconsin Statutes. Do not duplicate or co-mingle information, deemed confidential and sealed, elsewhere in your response.

S. 19.36(5)

(5) TRADE SECRETS. An authority may withhold access to any record or portion of a record containing information qualifying as a trade secret as defined in s. 134.90(1)(c).

s. 134.90(1)(c)

(c) "Trade secret" means information, including a formula, pattern, compilation, program, device, method, technique or process to which all of the following apply:

1. The information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use.
2. The information is the subject of efforts to maintain its secrecy that are reasonable under the circumstances.

The City cannot ensure that information will not be subject to release if a request is made under applicable public records laws. The City cannot consider the following confidential: a bid in its entirety, price bid information, or the entire contents of any resulting contract. The City will not provide advance notice to Proposers prior to release of any requested record.

To the extent permitted by such laws, it is the intention of the City to withhold the contents of Proposals from public view—until such times as competitive or bargaining reasons no longer require non-disclosure, in the City's opinion. At that time, all Proposals will be available for review in accordance with such laws.

1.20 Usage Reports

Annually, the successful Proposers shall furnish to City Purchasing usage reports summarizing the ordering history for each department served during the previous contract year. The report, at a minimum, must include each and every item or service ordered during the period, its total quantities and dollars by item/service and in total. The City reserves the right to request usage reports at any time and request additional information, if required, when reviewing contract activity.

1.21 Partial Award

Unless otherwise noted, it will be assumed that Proposers will accept an order for all or part of the items/services priced.

1.22 Tax Exempt

The City of Madison as a municipality is exempt from payment of federal excise taxes (Registration Number 39-73-0411-K) and State of Wisconsin taxes per Wisconsin statute 77.54(9a). Federal Tax ID #39-6005507. A completed Wisconsin Department of Revenue Form S-211 (R.2-00) can be found on the City website. Our tax-exempt number is ES 42916.

1.23 Cooperative Purchasing

Bidders may choose to extend prices offered on bids to other municipalities. Under Wisconsin Statutes, a municipality is defined as a county; city; village; town; school district; board of school directors; sewer district; drainage district; vocational, technical and adult education district; or any other public or quasi-public corporation, officer, board or other body having the authority to award public contracts. This is known as "cooperative" or "piggyback" purchasing, a practice common amongst units of government. The City is not responsible for any contract resulting from a cooperative purchase using this RFB as a basis; they are made solely between the bidders and third party unit of government.

1.24 Proposers Responsibility

Proposers shall examine this RFP and shall exercise their judgment as to the nature and scope of the work required. No plea of ignorance concerning conditions or difficulties that exist or may hereafter arise in the execution of the work under the resulting contract, as a consequence of failure to make necessary examinations and investigations, shall be accepted as an excuse for any failure or omission on the part of the Proposers to fulfill the requirements of the resulting contract.

2 DESCRIPTION OF SERVICES/COMMODITIES

2.1 Background Information

In 2018 the Madison Public Library System conducted a long and extensive study which incorporated resident survey, community engagement, and group discussion. In this study, it was identified that the northeast community of Madison is in need of expanded library services. Not only that, the Madison Public Library System also learned during community engagement that further extension of civic and social services are needed as well.

As a result, the concept of the Imagination Center at Reindahl Park was born with the intention to meet the growing needs of northeast Madison community. The Imagination Center is meant to be a hub for cultural platform, civic engagement, health advocacy, social forum, economic literacy and empowerment. This project can be seen as multi-agency collaboration encompassing our Public Library System, Information Technology, Parks Administration, and Engineering. What we will have is more than just a library or a park; but an Imagination Center.

Please see **Attachment A** for more information regarding the neighborhood demographic as well as additional socio-economic statistical data.

2.2 The Role of Architecture and Engineering Services (A/E).

Scope of Work for this project will be completed in two (2) separate Steps. Step 1 includes a comprehensive Pre-Design phase, while Step 2 includes Schematic Design through Warranty phases. See Attachment A, Exhibit-A for information on requirements and expectations of each Step and associated phases.

The City and A/E for this contract will be responsible for Step 1 of the Imagination Center, including Pre-Design visioning, site analysis, site design, space programming, conceptual design and site/building ordinance review. In addition the City and A/E will develop a Pre-Design level cost estimate, a proposed schedule for Step 2, and will present Pre-Design proposals in multiple public meetings. **See Attachment A, Exhibit-A for additional information on requirements and expectations of this step.**

Assuming successful completion of Step 1, and budget authority is granted by the Common Council to do so, in 2023 it is expected that the A/E team will proceed into Step 2 as described in Attachment-A, Exhibit A. Step 2 will commence after the successfully executed amendment to this Contract, which will append Step 2 Scope of Services and update Compensation accordingly. **See Attachment A, Exhibit-A for additional information on requirements and expectations of this step.**

The City expects the following design services to be fully provided by the A/E during step 1 and 2; architecture, civil, mechanical, electrical, plumbing, structural, fire protection, and exterior signage. Specialty work - to be included in the A/E's scope - includes civil engineering, acoustical, technology, audio/visual, cost estimation, interior signage (room/code signage, way-finding); furniture (selection/specifications) and LEED. Level of Development for each phase can be found in Attachment A, Exhibit A. City design standards are outlined in Attachment A, Exhibit B

Prospective bidders shall supply in their proposals costs for the Pre-Design phase, along with estimated costs for each design phase, Schematic Design through Warranty phase, as provided in Form D – Cost Proposal Excel Worksheet."

See Attachment A, Exhibit A-L for a complete scope of services description

1. Exhibit-A: Scope of Services
2. Exhibit-B: AE General Design Guidelines

3. Exhibit-C: Cost Proposal
4. Exhibit-D: Imagination Center at Reindahl Park Scoping Study
5. Exhibit-E: A Strategic Plan for Eastside Growth
6. Exhibit-F: Master Plan for Reindahl Park
7. Exhibit-G: Geotechnical Exploration Report
8. Exhibit-H: Extents of Scope Plan
9. Exhibit-J: Northeast Interceptor Plan
10. Exhibit-K: Reindahl Park Utility Structure Improvements
11. Exhibit-L: Reindahl Park Shelter Phase II

3 REQUIRED INFORMATION AND CONTENT OF PROPOSALS

3.1 General Information, Signatures and Required Guarantees and Certifications

Evaluation Criteria

Scoring will be weighted as follows

1. 5% for Local Vendor Preference
2. 5% or Commitment to Racial Equity and Social Justice
3. 25% for Firm Qualifications
4. 35% for Team Qualifications and Project Approach
5. 30% for Cost

Upon completion of this round of evaluation, the City intends to invite top candidates for a virtual interview that is tentatively planned for the second week of **October 2020**. However, this date may change.

This Request for Proposals does not commit the City to award a contract, pay any costs incurred in preparation of qualification statements, or to procure or contract for services or equipment. The City may require the submitting firm(s) to participate in negotiations and to submit such additional price, technical or other revisions to his or her submittals as may result from negotiation. The firm shall be responsible for all costs incurred as part of its participation in the pre-award process.

The City reserves the right to accept or reject any or all submittals, in whole or in part, and to waive any informalities or technicalities which at the City's discretion is determined to be in the best interests of the City. Further, the City makes no representations that a contract will be awarded to any offer or response to this request.

Required Forms

1. Form A Signature Affidavit
2. Form B Receipt Forms and Submittal Checklist
3. Form C Vendor Profile Information
4. Form D Cost Proposal
5. Form E References

Required Disclosures and Intent to Comply

1. List any and all contracts your firm has done for the City of Madison
2. Provide a Disclosure of Contract Failures and/or Litigations

Disclose any alleged significant prior or ongoing contract failures, contract breaches, any civil or criminal litigation, or investigations pending which involves the consultant or in which the consultant has been judged guilty or liable or which may affect the performance of the services to be rendered herein, in which the firm, any of its employees, subcontractors, or sub consultants is or has been involved in within the last three (3) years.

3. Intent to comply with the Affirmative Action Ordinance of the City of Madison.
4. Intent to comply with the insurance requirements of the City of Madison.
5. Disclosures and Intent to Comply responses may be included in the Technical Proposal as a separate section. This section will not be counted towards the overall page limit.

3.2 Local Vendor Preference (5%)

See Section 1.14

The City of Madison has adopted a local preference purchasing policy that grants a 1% pricing preference or 5% request for proposal scoring preference to local vendors. Bidders seeking to obtain local preference status must meet specific criteria and register online at:

<http://www.cityofmadison.com/business/localPurchasing/index.cfm>

3.3 Commitment to Racial Equity and Social Justice: (5%)

The following question counts for 5% of the scoring. Please limit responses to a total of 4 pages. Include responses in the Technical Proposal as a separate section.

The City of Madison's values include [racial equity and social justice](#), and we wish to contract with businesses who have similar values. Please indicate how your firm has prioritized racial equity and social justice in its operations, practices, and policies. Provide specifics in each of the following areas:

- hiring and workplace culture
- user-centered/innovative design
- community outreach
- hiring subconsultant

Describe how your firm has prioritized racial equity and social justice in each of these areas and which demographic groups were the focus of such efforts.

3.4 Technical Proposal: Firm Qualifications (25%)

The following three questions count for 30% of the scoring. Weight is shown in () before the question. Please limit response to a total of 10 pages. Responses must be in the same sequence as listed and must be identified with the corresponding question number, i.e., Question 1, Question 2, etc.

1. (10%) A description of the qualifications, experience, organization and resources of the firm. Describe what sets your firm apart, why your firm is prepared to provide services for this project, and what makes your firm better than the competition.
2. (10%) Describe your team. State firm or firms that will be on the team, location of the office from which this project will be serviced and the range of activities performed by the firm/team. Include names, titles, roles and responsibilities for each primary team member. Identify the project manager and primary contact. Include resumes for all primary team members. If using sub consultants, indicate what portion of the work is to be completed by them. Team member resumes can be placed in an appendix and will not be counted towards this section's page limit.
3. (10%) Case studies showing similar types of work previously completed, with the name and address of clients for whom the work was done. Key experience from at least three (3) similar past-projects should be included.

3.5 Technical Proposal: Team Qualifications and Project Approach (35%)

The following three questions count for 35% of the scoring. Weight is shown in () before the question. Please limit response to a total of 10 pages. Responses must be in the same sequence as listed and must be identified with the corresponding question number, i.e., Question 1, Question 2, etc.

1. (10%) Describe your teams design approach and philosophy. Share any initial thoughts on the Imagination Center project and how you would undertake this project.
2. (5%) Describe how your team will ensure Racial Equity and Social Justice is a core principle throughout the programming, design and construction of this project. Further explain strategies and techniques intended to encourage inclusive stakeholder engagement, just decisions making processes, and equitable environmental design.
3. (10%) A description of techniques, approaches and best practices intended to be used in delivering the programming scope of this project; and how the work of this phase may be successfully utilized to set the stage for the follow on phases
4. (10%) A description of techniques, approaches and best practices intended to be used in delivering a consistent, successful, high-quality project from the design process, through construction documents and bidding, and on through construction documents and warranty.

3.6 Cost (30%)

Please submit electronic copy of your Form D in both PDF and excel format to bids@cityofmadison.com.



Form A: Signature Affidavit

RFP #: 8967-0-2020-AH Engineering Design and Architectural Services

This form must be returned with your response.

In signing Proposals, we certify that we have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise take any action in restraint of free competition; that no attempt has been made to induce any other person or firm to submit or not to submit Proposals, that Proposals have been independently arrived at, without collusion with any other Proposers, competitor or potential competitor; that Proposals have not been knowingly disclosed prior to the opening of Proposals to any other Proposers or competitor; that the above statement is accurate under penalty of perjury.

The undersigned, submitting this Proposals, hereby agrees with all the terms, conditions, and specifications required by the City in this Request for Proposals, declares that the attached Proposals and pricing are in conformity therewith, and attests to the truthfulness of all submissions in response to this solicitation.

Proposers shall provide the information requested below. Include the legal name of the Proposers and signature of the person(s) legally authorized to bind the Proposers to a contract.

COMPANY NAME

SIGNATURE

DATE

PRINT NAME OF PERSON SIGNING



Form B: Receipt of Forms and Submittal Checklist

RFP #: 8967-0-2020-AH Engineering Design and Architectural Services

This form must be returned with your response.

Proposers hereby acknowledge the receipt and/or submittal of the following forms:

Forms	Initial to Acknowledge SUBMITTAL	Initial to Acknowledge RECEIPT
Description of Services/Commodities	N/A	
Form A: Signature Affidavit		
Form B: Receipt of Forms and Submittal Checklist		
Form C: Vendor Profile		
Form D: Cost Proposal		
Form E: References		
Responses to Section 3.1, 3.3, 3.4		N/A
Appendix A: Standard Terms & Conditions	N/A	
Appendix B: Contract for Purchase of Services	N/A	
Exhibit-A: Scope of Services	N/A	
Exhibit-B: AE General Design Guidelines	N/A	
Exhibit-C: Cost Proposal	N/A	
Exhibit-D: Imagination Center at Reindahl Park Scoping Study	N/A	
Exhibit-E: A Strategic Plan for Eastside Growth	N/A	
Exhibit-F: Master Plan for Reindahl Park	N/A	
Exhibit-G: Geotechnical Exploration Report	N/A	
Exhibit-H: Extents of Scope Plan	N/A	
Exhibit-J: Northeast Interceptor Plan	N/A	
Exhibit-K: Reindahl Park Utility Structure Improvements	N/A	
Exhibit-L: Reindahl Park Shelter Phase II	N/A	
Addendum #	N/A	
Addendum #	N/A	

VENDOR NAME

COMPANY NAME



Form C: Vendor Profile

RFP #: 8967-0-2020-AH Engineering Design and Architectural Services

This form must be returned with your response.

COMPANY INFORMATION

COMPANY NAME (Make sure to use your complete, legal company name.)			
FEIN		(If FEIN is not applicable, SSN collected upon award)	
CONTACT NAME (Able to answer questions about proposal.)		TITLE	
TELEPHONE NUMBER		FAX NUMBER	
EMAIL			
ADDRESS	CITY	STATE	ZIP

AFFIRMATIVE ACTION CONTACT

If the selected contractor employs 15 or more employees and does aggregate annual business with the City of \$50,000 or more, the contractor will be required to file an Affirmative Action Plan and comply with the City of Madison Affirmative Action Ordinance, Section 39.02(9)(e), within thirty (30) days contract signature. Vendors who believe they are exempt based on number of employees or annual aggregate business must file a request for exemption. Link to information and applicable forms: <https://www.cityofmadison.com/civil-rights/contract-compliance/vendors-suppliers>

CONTACT NAME		TITLE	
TELEPHONE NUMBER		FAX NUMBER	
EMAIL			
ADDRESS	CITY	STATE	ZIP

ORDERS/BILLING CONTACT

Address where City purchase orders/contracts are to be mailed and person the department contacts concerning orders and billing.

CONTACT NAME		TITLE	
TELEPHONE NUMBER		FAX NUMBER	
EMAIL			
ADDRESS	CITY	STATE	ZIP

LOCAL VENDOR STATUS

The City of Madison has adopted a local preference purchasing policy granting a scoring preference to local suppliers. Only suppliers registered as of the bid's due date will receive preference. Learn more and register at the City of Madison website.

CHECK ONLY ONE:

- ☐ **Yes**, we are a local vendor **and** have registered on the City of Madison website under the following category: _____ www.cityofmadison.com/business/localPurchasing
- ☐ **No**, we are not a local vendor or have not registered.



Form D: Cost Proposal

RFP #: 8967-0-2020-AH Engineering Design and Architectural Services

This form must be returned with your response.

Prepare the fee proposal as all inclusive, not-to-exceed, fixed fees:

- All Inclusive – Covers all direct and indirect necessary expenses including but not limited to; travel, telephone, copying and other out-of-pocket expenses.
- Not To Exceed – The actual fees shall not exceed the amount specified in fee proposal.
- Fixed Fee – All prices, rates, fees and conditions outlined in the proposal shall remain fixed and valid for the entire length of the contract and any/all renewals.

Any pricing increases or additions must be agreed upon in writing by both parties.

Please provide us with your rate, as well as any other applicable costs in the space below and then if applicable, indicate the intended service fee increases for subsequent years.

Notice: Please enter your cost proposal in Exhibit C, convert to PDF file, then email both files in PDF and excel as part of your submission. Thank you.

COMPANY NAME



Form E: References

RFP#:8967-0-2020-AH Engineering Design and Architectural Services

This form must be returned with your response.

REFERENCE #1 – CLIENT INFORMATION			
COMPANY NAME	CONTACT NAME		
ADDRESS	CITY	STATE	ZIP
TELEPHONE NUMBER	FAX NUMBER		
EMAIL			
CONTRACT PERIOD	YEAR COMPLETED	TOTAL COST	
DESCRIPTION OF THE PERFORMED WORK			

REFERENCE #2 – CLIENT INFORMATION			
COMPANY NAME	CONTACT NAME		
ADDRESS	CITY	STATE	ZIP
TELEPHONE NUMBER	FAX NUMBER		
EMAIL			
CONTRACT PERIOD	YEAR COMPLETED	TOTAL COST	
DESCRIPTION OF THE PERFORMED WORK			

REFERENCE #3 – CLIENT INFORMATION			
COMPANY NAME	CONTACT NAME		
ADDRESS	CITY	STATE	ZIP
TELEPHONE NUMBER	FAX NUMBER		
EMAIL			
CONTRACT PERIOD	YEAR COMPLETED	TOTAL COST	
DESCRIPTION OF THE PERFORMED WORK			

COMPANY NAME

ATTACHMENT A, TABLE OF CONTENTS

Exhibit-A: Scope of Services

City of Madison standard Scope of Services for Architects and Engineers.

- PROJECT OVERVIEW
- PROJECT GENERAL REQUIREMENTS
- PROGRAMMING
- URBAN PLANNING & DESIGN FOR PUBLIC USE
- ART
- CITY GOALS
- Architect Provided Services and Deliverables
- Personnel (City)
- Personnel (A/E)
- Purchase of Services Contract and Standard Terms and Conditions
- Payment Schedule
- Completion Schedule
- Extra Services

Exhibit-B: AE General Design Guidelines

City of Madison general design guidelines for City Facilities

Exhibit-C: Cost Proposal

Bidders are asked to communicate anticipated fee per discipline, per phase. Bidders are also asked to associate a duration of time for each phase. See Form D and the associated excel file for more information.

Exhibit-D: Imagination Center at Reindahl Park Scoping Study

A report issued in early 2020 which documents, among other things; public outreach, demographic and geographic analysis, and preliminary recommendations

Exhibit-E: A Strategic Plan for Eastside Growth

A report issued in 2016 which proposes an Imagination Center like facility at Reindahl Park. Core principles of this project are explained in the document

Exhibit-F: Master Plan for Reindahl Park

Approved Master Plan for Reindahl Park.

Exhibit-G: Geotechnical Exploration Report

A subsurface geotechnical report produced in December 2019

Exhibit-H: Extents of Scope Plan

Drawing that locates notable site features and establishes the extents of scope for this proposal

Exhibit-J: Northeast Interceptor Plan

Drawing indicating the general location of a recently installed MMSD interceptor

Exhibit-K: Reindahl Park Utility Structure Improvements

Drawings of an existing building onsite. A/E is tasked with incorporating the building into the design.

Exhibit-L: Reindahl Park Shelter Phase II

Drawings of an existing building onsite. A/E is tasked with incorporating the building into the design



Department of Public Works

Engineering Division

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Exhibit A - SCOPE OF SERVICES **CONTRACT # ####, PROJECT # 17085** **IMAGINATION CENTER AT REINDAHL PARK**

In this Exhibit A; the word "City" means City of Madison, Wisconsin. The City of Madison will include the City's Designated Representative and/or Owner's Representative and/or Commissioning Agent and/or Contractor to provide energy modeling; the word "A/E" means the licensed design professional(s) **A/E TBD**; and the word "General Building Contractor" means the entity which will construct the structure.

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PROJECT OVERVIEW

In addition to the information below, more Imagination Center information can be found online at [“Imagination Center at Reindahl Park”](#) webpage.

A. Introduction

1. This project consists of design and new construction of a co-located municipal government facility at Reindahl Park, 1818 Portage Road, Madison, Wisconsin, 53704. New construction is expected to be approximately 30,000 SF. In addition to building design, the A/E is expected to provide landscape design services for the surrounding area. See Exhibit-H, Extents of Scope plan for approximate area of scope.
2. Design services for this project will be conducted in two (2) Steps. Step 1 will focus on the Pre-Design phase and will be executed in Q1 of 2021. Step 2 will build on prior work to complete Schematic Design, Design Development, Construction Documents, Bidding Documents, Construction Administration, and Warranty phases. Step 2 is expected to begin in Q1 of 2023. Refer to *Completion Schedule* for more information.
3. The Contract will be active for approximately (4.5) years from contract signing through the end of the warranty phase. Note a portion of this time will be a project hold, refer to Completion Schedule for more information.
4. The construction contract shall be bid out as a Public Works contract by the City of Madison.
5. For Both Step 1 and Step 2, the A/E shall be responsible for the design of all architecture, civil, mechanical, electrical, plumbing, structural, fire protection, and exterior signage. Specialty work - to be included in the A/E's scope - includes civil engineering, acoustical, technology, audio/visual, cost estimation, interior signage (room/code signage, wayfinding); furniture (selection/specifications) and LEED.
6. The full design scope (Step 1 & 2) includes the development and preparation of programming and conceptual plans, space designs, plans and specifications, preparation of bid documents, assistance in the bid process, and construction and warranty phase administration for private and open office space, meeting rooms, and support space.
7. The A/E design services for this Scope (Step 1 & 2) shall include plans and specifications for site planning, landscaping, architectural design of interior and exterior spaces, finishes, MEP/FP/T (mechanical, electrical, plumbing, fire protection, and technology) systems design, constructions specifications, and cost estimating as noted within this exhibit.

B. Vision

The Imagination Center at Reindahl Park will be an innovative and dynamic public facility and Madison's tenth public library. Located at Reindahl Park (~90 acres) in northeast Madison, the Imagination Center will be more than just a library in a park. The center will be a transformational space that is responsive to community needs and furthers community aspirations. The Imagination Center will be a place for social connection, civic engagement, cultural expression, economic development, and health resources. The development of the Imagination Center represents a new model of inter-agency cooperation and public facility planning in the City of Madison.

C. Background

Madison Public Library has been exploring the Imagination Center concept for almost a decade. In 2014, the Library embarked on a strategic planning process for library services on the east side of Madison. Library staff spent two years conducting research and talking with community members through an innovative engagement program called *Tell Us: Cuéntenos*. During the strategic planning process, over 330 participants shared their thoughts with the Library through a combined 52 conversations. The collective community input formed the basis of the strategic plan and its recommendations.

Exhibit-E: A Strategic Plan for Eastside Growth was completed and adopted by the Library Board and Common Council in 2016. The primary recommendation of the plan is the construction of the Imagination Center, to be located at Reindahl Park. According to the eastside plan, “This northeast site (Reindahl Park)

meets a top criterion for a major capital expenditure, which is having the necessary population density for service. Every other advantage this site has is just as critical. Primarily, with neighboring Sandburg Elementary as the only eastside MMSD school outside of a five-minute drive area from a library, this site took particular priority. With additional equity factors mentioned in the site scenarios and the infrastructural convenience—highly visible placement, array of transit options, ability to locate multiple agencies, share green space, and complement future growth and development—this site meets the Library’s goals for equitable service.”

Although the Eastside Strategic Plan laid the foundation for the Imagination Center project, more work to define the Imagination Center ensued. Library staff embarked on another planning process to define the scope of the Imagination Center project in October 2018. The Library organized conversations with stakeholders including neighbors, service providers, businesses, and other interested parties. In addition, library staff attended community events and worked extensively with Madison youth through planning sessions and interactive activities. As a result, an additional 425 community members shared their thoughts with library staff through 112 community conversations.

To summarize these conversations and staff research, the Library published [Exhibit-D: Imagination Center at Reindahl Park Scoping Study](#) in March 2020, adopted unanimously by the Library Board and the Board of Park Commissioners. The Scoping Study identifies the community vision for the Imagination Center and contains 19 recommendations classified among five categories: social forum, civic innovator, holistic health advocate, cultural platform, and economic engine. The recommendations range from immigration and citizenship resources to digital inclusion and childcare. The Scoping Study should serve as a guide for design and operation of the Imagination Center.

During the last six years of planning, over 755 individual community members have engaged library staff through conversations around the Imagination Center project. There are a variety of committed leaders and important stakeholders involved in the planning process for the center. Some of these stakeholder groups include:

1. Madison Public Library Board and the City of Madison Board of Park Commissioners (official oversight bodies for the project)
2. Area non-profits
3. Library and City of Madison staff
4. Reindahl Park users
5. Residents of surrounding neighborhoods
6. Area youth including students at Sandburg and Hawthorne Elementary School as well as East High School
7. Madison College students, staff, and administration
8. Local businesses
9. General public

The A/E team will be expected to regularly attend meetings of these various groups and to work with the Library to execute a robust engagement process that includes conversations, meetings, workshops, virtual engagement, and other strategies to ensure that these stakeholders shape the Imagination Center throughout the design process.

D. Summary of Progress to Date:

1. 2014: The Library begins planning for the eastside strategic plan.
2. 2014-2016: Library staff spends two years conducting research and outreach to develop the eastside strategic plan. Library staff uses Tell Us: Cuéntenos, an innovative public engagement program, to collect, develop, and record the results of community conversations.
3. 2016: The Library Board and the Common Council adopt Communities Inspiring Libraries: A Strategic Plan for Eastside Growth, which contains the primary recommendation of building the Imagination Center at Reindahl Park.

4. 2018: The Library starts the planning process for the Imagination Center Scoping Study.
5. 2018-2019: Library staff identifies stakeholders and hosts community conversations throughout Madison around the Imagination Center project. Library staff conducts demographic and service research.
6. 2020: The Library Board and Board of Park Commissioners adopts the Imagination Center Scoping Study (3/11/2020) and directs next steps on design, development, and funding.

E. Location

Imagination Center at Reindahl Park will be located at 1818 Portage Road, within the Park's parcel (PARCEL #: [251/0810-283-0097-9](#)). The park is approximately 90.7 acres and offers many existing recreational opportunities for visitors including nine soccer fields, eight tennis courts, a basketball court, playground, Splash Park, and the only public cricket field in Madison. It is also home to 260 community garden plots, recreational paths, and a reservable park shelter. Reindahl Park is owned by the City of Madison and managed by the Madison Parks Division.

F. Facility Function and Program

Exhibit-E: A Strategic Plan for Eastside Growth recognizes five critical role the Imagination Center will take on. Those roles, stated below, were further articulated in Exhibit-D: Imagination Center at Reindahl Park Scoping Study. Prospective bidders are encouraged to review both documents to better understand the project's programmatic basis. Below is a brief summary of each critical role and possible spaces that may be included:

1. **Social Forum:** The Imagination Center should aim to maximize potential for social mixing at Reindahl Park. Meeting and gathering rooms, food preparation, teen spaces, and Anji Play areas are likely to be found in the Imagination Center
2. **Civic Innovator:** The Imagination Center should expand the Library's efforts to increase public engagement and involvement in northeast Madison. Spaces that allow for digital engagement, civic activities and citizenship / immigration services are likely to be included.
3. **Holistic Health Advocacy:** The Imagination Center should promote access to health care opportunity and should prioritize health literacy. Spaces for health services, environmental education, outdoor workspaces and gardening areas will be discussed during the programming stage.
4. **Cultural Platform:** the Imagination Center must increase culturally diverse and relevant educational and recreational opportunities. Stakeholders have requested artist-in-residence spaces, media programming and digital creation spaces, and gallery spaces that hold culturally-representative materials.
5. **Economic Engine:** the Imagination Center shall be a destination for those looking to expand their knowledge and abilities. Stakeholders have emphasized the need for digital inclusion, literacy classes, financial empowerment, and Child Care for the surrounding area. The Imagination Center programming exercises will explore what spaces are needed to provide these types of services.
6. **Park Shelter:** Reindahl Park's existing shelter will be demolished in anticipation that its functions will be include in the Imagination Center's programming. Stakeholders expect a covered outdoor meeting space with adjacent storage, restrooms, and possibly concessions'.
7. **Co-location:** It is the Imagination Center's goal to co-locate the above critical roles by designing spaces that are adaptable and dual-functioning. The City seeks to minimize specialized spaces and maximize versatility of the building

G. Project Budget

1. The preliminary budget estimates for this project is as follows.
2. ~\$10,600,000: Construction costs (including a 15% design contingency, 8% construction contingency, and 5 year cost escalation)
3. ~\$990,000 for furnishings to be bid via purchasing.
4. ~\$300,000 for AV equipment to be bid via purchasing.
5. ~\$50,000 for interior signage to be bid via purchasing.

H. Next Steps

With a location determined in MPL's East Side Plan ([Exhibit-D Eastside Report](#)) and the Imagination Center's vision and program further articulated in MPL's Imagination Center Scoping Study ([Exhibit-C Scoping Study](#)), the project's next step is a comprehensive Pre-Design phase, which makes up Step 1 of this 2 Step Scope of Services.

Step 1: Pre-Design

The A/E will curate a comprehensive pre-design phase that includes stakeholder visioning, site analysis, site/building ordinance review, programming, conceptual design, schedule definition, and a project cost estimate. Further detail regarding deliverables and expectations can be found in [Architect Provided Services and Deliverables, section V, Phase I: Pre-Design](#) of this exhibit, [Exhibit-B General Design Guidelines](#) and below;

1. **Visioning:** Assist stakeholders in determining project goals and priorities. Efforts shall build on the Imagination Center Scoping study.
2. **Site Analysis and design:** survey site attributes to determine constraints and opportunities. Observations shall be documented and presented to stakeholders. Observations should be used to develop multiple site design strategies for stakeholders to review and discuss.
3. **Programming:** Based on the Imagination Center Scoping Study, the A/E shall explore and articulate spatial needs of stakeholders to determine programming strategy to be used in future phases.
4. **Conceptual design:** While referencing Visioning, site analysis/design, and programming, the A/E will lead efforts in the development of conceptual design for the Imagination Center.
5. **Design Schedule:** Prior to project hold, the A/E will develop a *design schedule* and *work plan* for Step 2. See [Completion Schedule](#) for notable Design and Construction milestone dates.
6. **Project cost estimate:** See [Architect Provided Services and Deliverables, section V, Phase I: Pre-Design](#) of this document for Step 1 cost estimate requirements
7. **Site/Building ordinance review:** A/e Shall provide a code and ordinance statement based the site and building design strategy
8. **Public meetings and Presentations:** The A/E should anticipate a minimum of the following meetings:
 - a. (1) Design Assistance Team (DAT) presentations
 - b. (1) Urban Design Commission (UDC) presentations
 - c. (2) Public Meetings

Step 2: Design and Construction

Assuming successful completion of Step 1, and budget authority is granted by the Common Council to do so, in 2023 it is expected that the A/E team will proceed into Step 2. Phases of work shall include City of Madison Schematic Design, Design Development, Construction Documents, Bidding, Construction Administration, and Warranty. Further detail regarding deliverables requirements, expectations, and design standards can be found [in Architect Provided Services and Deliverables, section V, Phase II-VI: \(Schematic Design through Construction Administration\)](#) of this exhibit and [Exhibit-B AE General Design Guidelines](#).

City's A/E Role – The City and A/E for this contract will be responsible for the Pre-design work (Step 1) for the Imagination Center at Reindahl Park. Scope of services can be reviewed above in [Step-1: Pre-Design](#) and below in [Phase I: Pre-Design](#).

PROJECT GENERAL REQUIREMENTS

- A. Purpose of the Scope of Services Document
 1. This documentation contains minimum policy and technical criteria to be used in the programming, design, construction, measurement & verification, and documentation of this contract.
 2. Nothing included in this document shall be a substitute for technical architectural, engineering, and design competence.
 3. This document must be used in conjunction with all current federal, state, local or other applicable codes governing all architectural, engineering, and/or professional design of public buildings.
- B. Communication

4. The A/E should have any ambiguities or conflicts in this document clarified in writing by the City Project Manager prior to beginning design.
 5. All dealings between the City and the A/E with respect to the subject matter of the Agreement shall be with the City's Designated Representative. The City's Designated Representative shall inform the A/E as to groups and staff with which it is to consult, provide prompt evaluation of requests of such groups, examine documents and receive inquiries submitted by the A/E, refer information and requests submitted by the A/E to appropriate officials, departments and bodies and obtain or render decisions promptly with respect thereto so as to avoid delays in the work of the A/E. The designation of the Project Manager Representative thereof shall not limit those with whom the A/E may have contact if, in the A/E and Project Manager's judgment, consultation with others will be of assistance.
 6. SharePoint: The City will utilize a project SharePoint website from the beginning of design through the end of the warranty phase to store project files, communicate design review comments, process work flows, administer construction, etc. The A/E must utilize this project website to communicate with the Owner, third-party consultants, and contractors throughout the life of the project.
- C. Minimum A/E Team Qualifications
1. Architects (including project manager, project architect, and construction administrator, landscape): Licensed and 10 years' experience.
 2. Interior Designer: Licensed with 10 years' experience
 3. Structural Design: PE license with 10 years' experience
 4. HVAC Design: PE license with 5 years' experience or WI Designer of Engineered Systems with 10 years of experience
 5. Electrical Design: PE license with 5 years' experience or WI Designer of Engineered Systems with 10 years of experience
 6. Plumbing Design: PE license with 5 years' experience or WI Designer of Engineered Systems with 10 years of experience
 7. Fire Protection Design: PE license with 5 years' experience or WI Designer of Engineered Systems with 10 years of experience (when a complete FP design is required by the design contract).
 8. Lighting Design: PE license and 5 years' experience or WI Designer of Engineered Systems and 10 years' experience or CLD certification and 10 years of experience or 20 years of experience.
 9. Technology Design: PE license with 5 years' experience or Registered Communications Distribution Designer (RCDD) with 10 years of experience.
 10. Acoustical and Technology (Audio Visual, Data, Security, etc.) and other peripheral consultants shall have similar appropriate credentials and experience.
 11. Cost Estimator: 3rd party estimating sub-consultant shall be a general building contractor or cost estimator with 5 years of experience in construction projects over \$1,500,000 in the local Madison, Wisconsin area.
- D. Environmental Protection. In addition to building-specific codes, all A/E design must comply with all federal, state, and local environmental laws and regulations.
- E. Accessibility
1. All accessibility related design shall meet current applicable code(s).
 2. Building design elements in the path of travel to all public and all staff work areas shall be accessible and shall be designed to meet or exceed the minimum standards of ADA Accessibility Guidelines.
 3. The project shall include design that accommodates building and site use without special facilities for persons with disabilities. Standard building products set at code prescribed heights and maneuvering clearances to allow easy access to disabled employees and visitors. Building elements designated specifically for use by persons with disabilities should be avoided.
 4. Absolute versus "maximum" or "minimum" dimensions shall be clarified on all drawings where applicable.
- F. Occupational Safety and Health Regulations: The construction, operation, and occupation of the facilities must comply with OSHA regulations. The A/E must ensure that facilities can be constructed in a manner compliant with all current OSHA regulations applicable to construction, operation, and occupation of the facilities.

- G. Building Codes: The A/E shall use the latest edition of applicable local, state, and federal building codes throughout design and construction of this project. Current codes being enforced by the City of Madison Building Inspection Unit include but are not limited to the 2015 IBC, IECC, IMC, IFGC, & IEBC.
- H. National Standards: Organizations writing voluntary codes including NFPA, the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE), the Sheet Metal and Air Conditioning Contractor's National Association (SMACNA), the Institute of Electrical and Electronics Engineers (IEEE), and the American Society of Mechanical Engineers (ASME), publish standards on health, safety, welfare, and security relevant to this project. This project shall comply with the most current version of these nationally recognized standards to the extent practicable and specified in this document.
- I. State and Local Government Review
 - 1. The A/E must prepare as many documents and presentations as needed for the approval by appropriate committees, commissions, and plan review processes.
 - a. Prepare oral and visual presentations as required for presentations to committees and commissions including but not be limited to Library Board, Board of Park Commissioners, Urban Design Commission, Plan Commission, Board of Public Works, Common Council, and other committees as necessary.
 - b. Prepare plan review sets as required for the City of Madison Building Inspection Unit, Department of Natural Resources, Department of Commerce, Department of Transportation, Zoning, Fire, City Engineering, Traffic Engineering, and other similar agencies as necessary.
- J. Program Space Standard:
 - 1. The minimum space standards to be utilized shall be common industry wide space standards. Sources for comparable space standards and social distancing include but are not limited to AIA, CDC, GSA, OSHA, other regulatory agencies, and various office equipment manufacturers (All Steel, Hermann Miller, etc.).
 - 2. The City of Madison-Engineering-Facility Management has developed and adopted office space standards that shall be utilized whenever possible. See Exhibit B for more details.
- K. Energy, Sustainable Design: Environmental sensitivity and high performance characteristics are part of the project objectives. The City is particularly interested in integrated design principles and technology that optimize site potential, optimize energy performance, protect and conserve water, enhance indoor environmental quality, reduce environmental impact of materials, and optimize operations and maintenance practices. The result shall be a balance of cost, environmental, societal, and human benefits while meeting the mission and function of the facility. These principles must serve as the basis for planning, programming, design, budgeting, construction, and commissioning of the facilities.
- L. Energy Use Targets
 - 1. The A/E must design all facilities to have an energy target at a minimum of 20% better than ASHRAE 90.1, 2016, 30% better for installations having photovoltaic (PV).
 - 2. From pre-design through each design phase, the project must demonstrate that it meets the energy target.
 - 3. For new construction the A/E shall use energy modeling (provided by City's energy model consultant) to design enclosure systems in concert with mechanical systems and provide documentation showing that systems were chosen based on life-cycle cost analysis.
- M. Health and Safety
 - 1. The A/E must take a systems approach to risk management, utilizing codes, regulations, guidelines, and best practices to identify and mitigate facility-created health and safety risks early in the design phases of the of the project life cycle.
 - 2. If a hazard cannot be eliminated, the associated risk must be reduced to an acceptable level through design, the risk must be reduced to an acceptable level using engineering controls, protective safety features, or devices.
 - 3. If safety devices do not adequately lower the risk of the hazard, cautions and warnings must be provided using detection and warning systems, as appropriate.
 - 4. Specific Health and Safety Requirements
 - a. Confined Spaces: The A/E must avoid the creation of confined spaces except where required as part of a system (e.g. tanks, pits).

Exhibit A - SCOPE OF SERVICES

- b. Fall Protection: The A/E must consider the inspection operations, and maintenance of the site, facility, and equipment. Access and fall protection, especially to difficult maintenance needs in high locations, including light fixtures, mechanical equipment, and skylights, must be included in the design.
- c. Asbestos and Lead: Alterations for this Contract will require removal/mitigation of asbestos and lead containing materials. The City has contracted with a third-party consultant to complete a survey of the facilities. The City will contract with a hazardous removal company to remove the hazardous materials as required. The A/E must thoroughly review all hazardous materials survey to inform the design scope.

PROGRAMMING

The A/E shall provide professional architectural programming services for this contract. The A/E shall review and understand the daily operations of each agency/section and include all agency/section service needs for staff, visitors, and public service into the programming and all phases of the design development. See related sections in this document for additional information.

URBAN PLANNING & DESIGN FOR PUBLIC USE

- A. There a number of urban planning issues that must be considered and addressed by the A/E as part of this project.
 - 1. The A/E shall balance community goals, while also meeting City agency needs, wherever possible. The A/E must consider how the building responds to its site, to the surrounding neighborhood design and plans, and its potential for interactions with the general public. The focus should be on how to maintain and/or improve neighborhood design and experience for maximum potential public use of the exterior and interiors.
 - 2. The A/E must consider access to transit, bike friendly paths and corridors, proximity to neighborhood amenities that meet daily needs of employees and visitors, and maximization of existing infrastructure.
 - 3. The A/E must understand local plans and conditions, neighborhood context, and local perspectives early in the project's development and design. Collaboration with the City project team, city agencies, regulatory groups, stakeholder groups, and the general public will be required throughout the design construction phases.
- B. The A/E must consider and address how the project may encourage use of the facility for public, cultural, and/or educational, activities. The A/E must consider and address how the facility may support flexible passive or programmed use in gathering space, the shaping and orientation of building program to encourage such use, and, where appropriate, the expansion of the building's program to take advantage of site-specific public use opportunities.
 - 1. Interior examples designed for public use both during and after business hours must have direct and clear way finding from building entrances.
 - 2. Designs must demonstrate how the interiors may allow for several different public uses. One example is a space that could be used for a standing reception, a seated dinner, an awards ceremony, or similar.
 - 3. Exterior examples include:
 - a. Provide space within the property boundaries for passive and programmed use. The public spaces shall be furnished to support the intended use.
 - b. Landscape elements shall be designed in order to provide access, comfort, shade, seating options, and visual interest, that encourages passive and programmed public use, by building visitors and general public.

ART

- A. The A/E shall coordinate with the City's Art Coordinator for all of the following:

1. For new construction identify areas where art can be incorporated into the site, as architectural features, or as permanent/rotating art installations.
2. For remodels determine which items must be preserved in place or can be removed from the project area.
3. Be prepared to provide design and coordination services for artwork. Coordination services may include but not be limited to structural, electrical/lighting, mechanical, plumbing, technology, and civil/landscaping.

CITY GOALS

A. LEED

1. Meet and exceed City of Madison's policy requiring "green" building certification requirements. See City of Madison [legislative file #07453](#). LEED v4.1SILVER rating is required as a minimum LEED rating for this contract. A LEED rating plaque not required but the LEED silver goal shall be met.
2. Provide services to organize and manage the LEED documentation and certification process. Meet and confer with representatives of the Architect, and City to prepare LEED documentation. Include coordination of meetings, document preparation, and assistance to the City in final project specific preparation of the Owners Project Requirements (OPR) report. The A/E shall use the final OPR to establish the Basis of Design (BOD) report. The City of Madison shall register the project with USGBC (U.S. Green Building Council). Registration fees shall be paid by the City. Prepare submittals for credit rulings from the USGBC for interpretation of credit language, principles, and implementation strategies. Credit ruling fees required by USGBC shall be paid by the City. Prepare and submit a LEED Rating Application for the project to the USGBC. Include required calculations and documentation for each LEED credit claimed in accordance with the LEED Rating Plan. Prepare responses and submit additional documentation required by comments or questions received from the USGBC after review of the original submission for LEED certification. Prepare and distribute meeting minutes for meetings related to LEED Documentation services.
3. Applicable LEED Documentation shall be coordinated and updated at each design phase with LEED checklist submittal and other documentation as applicable.

B. Waste Management

1. There are two (2) Madison General Ordinances (MGO) that the City of Madison has regarding construction and demolition waste.
 - a. MGO 10.185, Recycling and Reuse of Construction and Demolition Debris, describes the requirements associated with this ordinance including definitions, documentation requirements, and penalties.
 - b. MGO 28.185, Approval of Demolition (Razing, Wrecking) and Removal, describes the requirements associated with applying for and receiving a demolition permit.
2. All City of Madison, Board of Public Works, contracts being conducted by City Engineering, Facility Management, for construction, remodeling, or demolition shall comply with the above ordinances regardless of project type or size.

C. Building Operations and Maintenance

1. Systems must be designed for ease of operation and cost-effective maintenance and repair. System accessibility is a critical consideration in building design. The A/E must ensure building systems and elements are physically accessible for cleaning, maintenance, repair, and replacement (e.g. tall spaces must provide methods to clean skylights, replace lamps, maintain fire alarm devices, etc).
2. The A/E must collaborate with City Library operations and maintenance personnel during design to provide for optimal life-cycle performance.
3. At the conclusion of design, the A/E must provide a digital document describing intent for all building systems. These instructions must be developed during the design phase and incorporated into the comprehensive training for operations and maintenance personnel.

D. Life-Cycle Costs

1. This project must be designed to achieve the lowest life-cycle cost. The A/E design must comprehensively define reasonable scope and performance requirements within the authorized

- budget for design and construction. Consistent with these constraints, building systems and features must be analyzed and selected to achieve lowest life-cycle cost.
2. Life-cycle costing (LCC) must be used when selecting a system from several alternative systems or components for a project to evaluate the cost effectiveness of systems that use energy and water. LCC must compare initial investment options and operating and salvage costs over the life of the equipment and identifies the least costly alternatives. Examples of building systems to be addressed that affect energy use are the building thermal envelope, passive solar features, fenestration, HVAC, domestic hot water, building automation, and lighting.
 3. The project team – including the A/E - must integrate the LCC analysis into pre-design process, and the analysis must be complete by the design development phase.

Architect Provided Services and Deliverables

I. Deliverables EACH Phase - General Requirements

- A. These design services submission requirements have been developed to ensure a rational, well-documented design process and to facilitate reviews by the City project team, tenant agencies, local regulatory agencies, review boards, user groups, and the general public as the design develops. These requirements are the minimum standards.
- B. During development of all pre-design and design phases the A/E shall meet and review progress documents with the City's Project Manager, City's Project Team, applicable tenant agency representatives and the City "executive" review team (Mayor, Department Heads, etc.) as required. Prepare appropriate presentation materials which may include large color presentation boards, power point presentations, handout sheets, project schedules, and similar project design related materials. To meet all the provisions of this scope document the City and the A/E will develop a schedule of meetings by phase that will be mutually agreed upon.
- C. Prior to completion of programming, preliminary concepts, schematic design, and design development meet and review progress documents with the public and community stakeholder groups (e.g. business associations, neighborhood associations, tenant agency customer groups, etc.). Prepare appropriate presentation materials which may include large color presentation boards, power point presentations, handout sheets, project schedules, and similar project design related materials. The City and the A/E will develop a schedule of meetings that will be mutually agreed upon.
- D. Prior to completion of each phase meet and confer with regulatory agencies as required to obtain necessary preliminary approvals, final approvals, permits, and the like. This shall include, but not be limited to, Urban Design Commission, Plan Commission, Landmarks Commission, Board of Public Works, Common Council, Zoning, Conditional Use Approvals, Building Inspection Plan Review, Department of Natural Resources, Department of Transportation, Madison Fire Department, City Engineering, Traffic Engineering, Parking Utility, Madison Metro, and similar agencies or committees.
- E. In each phase of work, project documents must be submitted to City in digital format as determined by the City Project Manager. Confirm with the City Project Manager prior to submission.
- F. Design Quality Reviews will be performed by the City of Madison staff and third party consultants at each design, construction document, bidding document, and construction administration phase. The review teams will evaluate each project for applications of best practices, conformance with criteria, building and systems performance, efficient and effective design, cost drivers, risk factors for successful execution, and customer satisfaction, as well as several other indicators of overall project suitability and readiness to move to the next phase in execution. The A/E should plan for City design quality review time after each design phase delivery see section on Completion Schedule for more information. All outstanding phase issues will need to be completed prior to proceeding to the next phase.
- G. No design phase is considered completed before all of the City's review comments are resolved in a timely manner. Unless approved by the City, a resolution of a problem shall not take more than one week. Furnish interim documents for review as requested by the City Project Manager. The A/E shall not proceed to future phases without written authorization from the City Project Manager.
- H. Provide all project-specific information on plan set. Provide City with proposed general and technical specifications.

- I. Consultant shall accommodate pausing or delays of the project (bidding delays, budget delays, etc.) at no extra charge.
- J. At all times, the City reserves the right to make public all information concerning this project and to choose the form, content, method of presentation, by whom presented, and the time of release, and at any time during or after completion of this project.
- K. Unilateral deviations from City preferred (or undesired) manufacturers, equipment, and construction methods are not permitted without City approval. The consultant shall adhere to these preferences and thoroughly discuss deviations of those if deviating is of advantage for the specific project.
- L. Whenever possible plans and details shall be prepared to be complete and show sufficient detail so as not to require the use of additional materials. All design data shall be included on plans. This includes, but is not limited to lighting calculation data, energy densities, and structural details. All equipment shall be specified by naming specific models that are basis of design.
- M. Design shall provide clear distinction between design-build (pre-cast, light-gauge metal framing) and design-bid-build features. Consultant shall provide all design and details that are not provided by design-build part of contractor's work. Consultant shall perform design changes that are required due to changes in final design after contract award to contractor.
- N. The A/E will translate the City provided plans of the existing building to a set of digital documents. City provided plans will be an approximation of the on-site conditions and dimensions. As such, the A/E is responsible for revising the layout based on as-is conditions.

II. Deliverables EACH Phase - Drawings

- A. Drawing Size: All drawings of a single project must be a uniform standard size. Reports, narratives, etc. must be 8.5 x 11 and/or 11 x 17. Drawing sets must be 24 x 36 or 30 x 42 format.
- B. Drawing Lettering: Lettering on drawings must be legible when drawings are reduced to half size. This applies to drawings at all phases.
- C. Drawing Scale: All drawings are to be created at full scale and plotted at a selected scale. The drawings or views (such as details) should include numeric and graphic scales. The scale selected should be appropriate for high resolution and legibility to include reduced copies (such as half-sized).
- D. Seals: The construction documents must bear the seal and signature of the responsible design professional as required by the authority having jurisdiction. On the cover sheet provide code certification statements for compliance with specified codes and standards by each discipline with the professional seal and signature. The intent is to formally recognize the responsibility for compliance.
- E. Building Information Modeling (Design Development and Construction Document phases only): The City requires the use of interoperable Building Information Models (BIM) on all projects throughout the project lifecycle. The final BIM model is to be provided during or right after bidding. No progress BIM model submissions are required. BIM models must be delivered in both native and IFC file formats.
- F. BIM Standards (Design Development and Construction Document phases only): Building Information Modeling (BIM) based on current Autodesk Revit software. Use actual families for each equipment and insert devices with actual size and clearance spaces. Perform clash detection with all equipment, pipes, ducts etc. The BIM shall be set up such that 2D CAD drawings should be derived from the model.
- G. As-is drawings: Prepare demolition and design drawings through use of existing City drawing documents and reports (Original Building Set, Shop Drawings, Remodel Set, tenant improvement documents, hazardous material survey(s), and related documents). A/E is responsible for confirmation of dimensions as necessary to complete demolition and design drawings. Using copies of existing plans alone for demolition or design drawings are not acceptable.

III. Deliverables EACH Phase - Specifications

- A. The A/E is responsible for providing and assembling all project specifications necessary to reflect the project design intent, City policy requirements, and law. This shall include but not be limited to:
 - 1. Incorporating all City supplied specifications (PDF format) into the overall specification document. The A/E will not be required to provide any specifications supplied by the City. The A/E may not edit these documents directly. The A/E may recommend edits to the Project manager as needed.

2. Providing and editing additional specifications as needed and carefully coordinating the specifications with the drawings to ensure that everything shown on the drawings is specified.
 - a. This shall include editing specifications to incorporate any City furnished design or equipment guidelines.
3. No specification submittal is required for the PD phase. Provide a specification Table of Contents at SD. Provide draft specification sections at DD (some spec notes are OK, but at a minimum Part 2 – products should be listed and coordinated). Provide completed specs at CD.
- B. Format: Specification sections shall be edited and compiled into a single PDF document.
 1. Specifications should be produced according to the latest edition Construction Specification Institute (CSI) division format.
 2. The complete specification shall have a Table of Contents (TOC), organized by CSI Divisions, listing all of the sections in each division. Each section in the TOC shall be hyperlinked directly to the subject section within the specification.
 3. Each page shall be numbered and shall incorporate the specification section in the numbering sequence (01 35 14 – 1, etc.).
 4. Each page shall incorporate the City project name, contract number, and project number.
 5. Each page shall also incorporate the appropriate level of release SD-Draft, DD-Draft, CD-Draft, Bid Set,
 6. The specification shall be exported directly to PDF to keep the integrity of word recognition, linked headings, etc. Printing to PDF or saving a scanned image as PDF will not be accepted.
- C. Editing of Specifications:
 1. The A/E shall thoroughly edit all specifications supplied by the A/E to ensure any specification language that is not applicable to the project has been removed and all necessary language has been added.
 2. The A/E shall thoroughly review all specifications supplied by the City to ensure any specification language that is not applicable to the project has been removed and all necessary language has been added. The A/E shall work with the City to edit City provided specifications as necessary.

IV. Deliverables EACH Phase - Design Narratives and Calculations

- A. Format: Typed, bound narratives should be produced for each design discipline and accompany the Pre-Design, Schematic Design, Design Development and Construction Document Submittals.
- B. Content: Narratives shall serve to explain the design intent and to document decisions made during the design process. Narratives are to respond to the Owner's Project Requirement (OPR) Document directly. If the design is deviating from the OPR, the design narrative is to explain why (e.g. the project budget doesn't support a strategy, the owner requested a change to the scope of the project, etc.). Like drawings and specifications, narratives are an important permanent record of the building design. Drawings and specifications are a record of what systems, materials, and components the building contains; narratives should record why they were chosen. The narrative of each submittal may be based on the previous submittal, but it must be revised and expanded at each stage to reflect the current state of the design.
- C. Calculations: Some Manual and/or computer based calculations are required to accompany narratives to support technical analysis. Each set of calculations should start with a summary sheet, which shows all assumptions, references applicable codes and standards, and lists the conclusions. Calculations should include engineering sketches as an aid to understanding by reviewers. The calculations for each submittal should be cumulative, so that the final submittal contains all calculations for the project. Calculations submitted at early stages of the project must be revised later to reflect the final design. Calculations must refer to code, paragraph of code used, standards, and text books used for specific portion of calculation. Refer to drawing number where the results of the calculations have been used. A few examples: number and sizes of re-bars used in reinforced concrete members, enclosure R-values, HVAC equipment and duct sizing, ventilation, HVAC loads, etc.
- D. Performance Criteria: As part of the development of concepts through construction documents there must be a check of building performance criteria established in pre-design and refined in subsequent phases.
- E. Energy Simulation (BY CITY): In addition to the City's requirement of USGBC LEED Silver Rating the City has established additional energy, maintenance, and operational standards to maintain manageable life cycle

costs. An energy model will be generated by the City and will be submitted to the design team in the pre-design phase of design and updated at significant milestones (e.g. completion of schematic design, and design development) in the project with the intent to continually explore creative ways to reduce energy use while meeting maintenance/operational goals.

1. The design team must provide all necessary documentation for the energy model and be available to support this activity.
2. The A/E shall look for opportunities to reduce energy consumption through the use of energy efficient materials/equipment and/or through the use of renewable energy technology during all phases of the design process.

V. Phase I: Pre-Design

A. GENERAL – PRIOR TO COMPLETION OF PRE-DESIGN

1. See “DELIVERABLES EACH PHASE – GENERAL REQUIREMENTS” above for meetings, presentations, approvals, and expectations.
2. Review all pre-design information provided by the City and field-survey existing spaces.
3. At the beginning of each project, the City’s project team, tenants and design A/E need to define the functional objectives of a project. A functional objectives matrix, or similar method shall be established by the A/E to confirm goals.
4. During the programming phase high impact issues will require formal design team technical discussions to help optimize design solutions. These technical discussions must take place with the appropriate members of the City’s project team and others as applicable. The technical discussion agenda can be organized by discipline (systems) and/or by functional objective heading, but should address:
 - a. Functional performance goals
 - b. Integrated solution options
 - c. Anticipate potential hurdles and stop blocks
 - d. Inspections/certification requirements
 - e. Coordinating construction and turnover-phase issues/deliverables
5. During the programming effort the A/E shall conduct meetings to develop clear and quantitative goals. The meetings shall be attended by the various disciplines of the design firm, its consultants, the City’s project team and others as applicable. The design goal setting session shall be used to develop consensus of the strategies and technologies to be explored during design. Goals are (not ordered by priority):
 - a. Optimize use of fiscal resources to meet design goals
 - b. Optimize constructability of project and implement cost evaluation at the beginning of the project
 - c. Optimize energy efficiency
 - d. Improve sustainability
 - e. Optimize maintainability and longevity of installed equipment
 - f. Promote occupant productivity and health
 - g. Promote resource conservation and environmental responsibility
 - h. ADA compliance

B. DOCUMENT DELIVERABLES – PRE-DESIGN

1. Comprehensive Report including:
 - a. Documentation of the methodology used
 - b. An executive summary
 - c. Value and Goal Statements
 - d. Relevant Facts
 - e. Data Analysis Conclusions
2. Program Requirements (including Space Listings by function and size, Relationship Diagrams, Space program documentation, Stacking plans, Preliminary Concept Drawings, and Flow diagrams).
 - a. The Space Program shall provide proposed gross facility square feet areas and space requirements listed by agency uses and general building uses listed by room name. It shall

- include the number of functional personnel and any special equipment or systems. The space program elements shall include all floors and areas
- b. The Space Needs Summary shall include written text documents and graphics for space relationships, analysis of operational functions including human (public and staff) (back of house and public floors), vehicular, and material flow patterns, flexibility and expandability, special equipment and systems, site requirements, security criteria, and communication relationships and adjacencies. Establish quantitative energy targets, comfort criteria (ASHRAE 55), indoor air quality requirements (ASHRAE 62) and include any requirements of access to daylight
 - c. The Staff Program shall provide definitions for staff adjacencies, connections, control and workflow, which will then help to show staffing levels needed to operate the building. This includes planning of staffing levels needed to deliver the quality of service desired
 - d. The Program shall develop or review service profile for clarity, revisions, and consensus. This should involve staff at all levels, and community stakeholders. Translate service profile into functional space needs, identify functional adjacencies that meet the quality of service for the customer, detail in writing the function of each space.
3. Site location plan [at least one mile around site], showing:
 - a. Site relative to location of city center, major landmarks, major parking facilities, major roads, and airport
 - b. Location of transit links
 - c. Location of distinct land use types and districts in the vicinity of the site (e.g., historic districts, retail nodes, civic districts, etc.)
 4. Existing site plan (at least one block around site), showing:
 - a. Site boundaries, approximate topography, existing buildings, setbacks, and easements
 - b. Climatic conditions including path of sun Description of flood plain issues related to building location and mechanical and electric equipment
 - c. Location of on-site and off-site utilities
 - d. Natural landscape
 - e. Pedestrian and vehicular circulation (include direction of traffic on adjoining streets)
 - f. Neighboring land uses, existing and planned
 5. Site plan showing:
 - a. Building location and massing
 - b. Parking and service area
 - c. Plans for surrounding area, relation of each concept to those plans, and summary of relevant recommendations
 6. Floor plans, showing at a minimum:
 - a. Entrances, lobbies, corridors, stairways, elevators, work areas, special spaces, mechanical rooms for major equipment and air handlers, and service spaces (with the principal spaces labeled). Dimensions for critical clearances, such as vehicle access, should be indicated
 7. Building sections (as necessary), showing:
 - a. Floor-to-floor heights and other critical dimensions
 - b. Labeling of most important spaces
 - c. Labeling of floor and roof elevations
 8. Photographs: Photographs showing the site and elevations of existing buildings (or landscape, as applicable) surrounding the site.
 9. Pre-Design Narrative:
 - a. Site statement, describing: Existing site features; climatic conditions; topography and drainage; any existing erosion conditions patterns; wetlands and locations of flood plains; surrounding buildings (style, scale); circulation patterns around site.
 - b. Site access: Noise/visual considerations; local zoning restrictions; Federal Aviation Administration requirements; hazardous waste (report to be supplied by City); pollution
 - c. Description of each architectural design scheme, explaining:
 - i. Organizational concept
 - ii. Expansion potential
 - iii. Building efficiency

- iv. Energy considerations
 - v. Advantages and disadvantages
 - d. Sustainable design considerations:
 - i. Potential for incorporation of renewable energy systems in the design
 - ii. Potential use of geothermal systems
 - e. Description of structural design scheme considerations for each design scheme explaining:
 - i. Design loads
 - ii. Foundation system
 - iii. Building framing system
 - iv. Lateral load resisting system
 - v. Advantages and disadvantages
 - f. Mechanical system and strategy to comply with energy goals
 - g. Plumbing system design considerations
 - h. Electrical system design considerations
 - i. Technology system design considerations (includes all data, audio visual (AV), and security)
 - j. Fire protection design considerations
10. Code statement. Provide a brief statement from each design team discipline member regarding the code requirements that relate to the site and occupancy use. For example, items such as, but not limited to: classification of construction and occupancy group(s), fire resistance requirements and general egress requirements, etc., would be prepared by the design team fire protection engineer
11. Project Schedule; Develop project time schedules for the project indicating the expected progress of the work; include architectural and engineering design, bidding, contract execution and construction.
12. Pre Design Cost Estimate: This deliverable will be completed by the Cost Estimator (consultant on A/E team) after the final Pre-Design submission is completed by the A/E. The cost estimate deliverable is to be reviewed concurrently by the City and the A/E. The cost estimate shall include the following detail:
- a. Itemization shall be raw construction costs for material, labor, equipment rentals, etc. (only) by area of occupancy. DO NOT include any markup. Provide a total cost for each area of occupancy.
 - b. Provide a summary sheet showing all of the following:
 - i. Each area of occupancy with its construction total from item *a* above.
 - ii. Provide a line item for the subtotal of all occupancies
 - iii. Provide a line item for Contractor Mark-up on the sub-total
 - iv. Provide a line item for Construction Bond on the sub-total
 - v. Provide a line item for BPW Contingency (8%) on the sum total of items *ii*, *iii*, and *iv* above
 - vi. Provide a line item for Design Contingency
 - vii. Provide a line item for Escalation of construction costs (if scheduled construction is 2 or more years out)
 - viii. Provide a Grand Total

VI. Phase II: Schematic Design

- A. General – Prior To Completion of Schematic Design
 - 1. See “DELIVERABLES EACH PHASE – GENERAL REQUIREMENTS” above for meetings, presentations, approvals, and expectations.
 - 2. Utilize owner and stake holder feedback from the PD phase to begin optimizing the site, elevations, and plans (architectural and mechanical).
 - 3. Begin the selection and design process for building materials and mechanical equipment by utilizing Exhibit B - Design Standards and meeting with the appropriate core city design team members.
- B. Document Deliverables – Schematic Design
 - 1. Site Plan (at least one block around site), showing:
 - a. Site boundaries, approximate topography, existing buildings, setbacks, and easements
 - b. Building orientation with respect to path of sun
 - c. Building massing and relationship to massing of surrounding buildings

- d. Location of on-site and off-site utilities
- e. Grading and drainage
- f. General landscape design, showing location of major features
- g. Pedestrian and vehicular circulation (include direction of traffic on adjoining streets)
- h. Parking and service areas (including but not limited to freight delivery and crane hoisting areas)
- i. Fire protection, water supplies, fire hydrants, and fire apparatus access roads
- 2. Site Narrative:
 - a. Description of site and landscape design final concept
 - b. Demolition, if required
 - c. Circulation
 - d. Parking
 - e. Paving
 - f. Landscape design
 - g. Irrigation, if any
 - h. Utility distribution and collection systems
 - i. Method for storm water detention or retention
 - j. Landscape maintenance concept
 - k. Fire protection, water supplies, fire hydrants, and fire apparatus access road
 - l. Accessibility path for the physically disabled
 - m. Summary of site and architectural design and the design's response to relevant recommendations by City staff
- 3. Architectural Drawings:
 - a. Demolition plans at all areas both interior and exterior
 - b. Floor plans, showing at a minimum work areas, lobbies, corridors, entrances, stairways, elevators, special spaces, and service spaces (with the principal spaces labeled and dimensions for critical clearances indicated)
 - c. Office areas must show proposed layouts down to the office level of detail verifying the integration between the approved program and the building concept is achievable
 - d. Proposed interior layouts showing open office plan and enclosed office plan
 - e. Indicate how major mechanical and electrical equipment can be removed/replaced
 - f. Elevations of major building facades showing fenestration, exterior materials, and cast shadows
 - g. Elevations of major interior spaces, showing lobby, typical public elevator lobby
 - h. Building sections showing adequate space for structural, mechanical and electrical, telecommunications, and fire protection systems, mechanical penthouses, floor-to-floor and other critical dimensions, labeling of spaces labeling of floor and roof elevations
 - i. Color Renderings providing sufficient detail to convey the architectural intent of the design at exterior, major lobby areas, and major and typical office spaces
 - j. Acoustical calculations including noise transmission through envelope, interior walls, floors (including raised floors), ceilings, mechanical and electrical equipment
 - k. Dew point locations in building envelope
 - l. Toilet fixture count analysis
 - m. Illumination, day lighting, and glare analysis
 - n. Passenger and freight elevator layout (when applicable)
 - i. Elevators shall be located in close proximity to the Mechanical Room
 - ii. Elevators shall be sized for ADA compatibility
 - iii. Elevators shall be sized/orientated to accommodate emergency response equipment (gurney's, stretchers, etc.)
 - iv. Elevators shall be sized to accommodate transferring of mechanical equipment components to other floors whenever possible
 - o. Loading dock layout (when applicable)
 - p. Energy analysis
- 4. Architectural Narrative (architectural program requirements):
 - a. Show in tabular form how the final concept meets the program requirements for each critical function

- b. A revised description of any deviation from City standards
 - c. Description of final concept, explaining expansion potential and building floor efficiency
 - d. Location and sizes of mechanical equipment rooms for accessibility, maintenance and replacement of equipment (including cooling towers and emergency generators)
 - e. Conveying systems (passenger and freight elevators) analysis; describe types of systems being proposed and adjacencies to public/back of house spaces
 - f. Loading docks analysis; describe need, location, and type (elevated, sunken, etc.)
 - g. Thermal, air leakage, and operational performance and maintainability of the building envelope
 - h. Design strategy to attain the assigned energy goal
 - i. Operations and maintenance goals (exterior and interior window washing, re-lamping, etc.)
 - j. Sustainable design concepts (LEED strategy)
 - k. Vertical transportation analysis (passenger and freight elevators and escalators)
 - l. Code analysis: The Code criteria must be reviewed by each design team discipline member to the degree of detail necessary to assure that tasks accomplished in this phase meet all the Code requirements. A Code/Criteria analysis must be prepared by each design team discipline member that documents an investigation of the applicable codes and agency criteria that will govern the design of a specific project. This analysis should alert the City to any conflicts in the project's design criteria so that they can be resolved early. The analysis should also provide a common perspective for the design and review of the project. This analysis is critical in building modernization and repair/alteration projects.
5. Structural Drawings: Framing and foundation plans of the proposed structural system showing column locations, bay sizes, and location of expansion and seismic joints.
6. Structural Narrative:
 - a. Identification of unusual local code requirements
 - b. Code compliance statement
 - c. Name of model building code followed (should be most current)
 - d. Building classification
 - e. Identification of region of seismicity, wind speed, etc.
 - f. Identification of special requirements
7. Mechanical Drawings: For the system approved and selected from the relevant concepts, provide the following:
 - a. Demolition plans
 - b. HVAC Systems including floor plan: Identification of equipment spaces for mechanical equipment and location of mechanical equipment, including size, weight, access to loading docks and elevators, and clearance requirements for operation, maintenance, and replacement; flow diagram(s), air flow riser diagrams representing supply, return, outside air, and exhaust systems and water flow riser diagrams of the main mechanical systems in the mechanical room(s) and throughout the building.
8. Mechanical Narrative:
 - a. A written HVAC narrative describing the selected mechanical systems, estimates of equipment capacities, weights, sizes, and power requirements
 - b. Building heating and cooling load calculations.
 - c. Schematic calculations of Ventilation and exhaust quantities including ASHRAE 62 and WI SPS 364 methodologies.
9. Plumbing Drawings: Plumbing systems including floor plan ; proposed building zoning and major piping runs and locations of proposed plumbing fixtures and equipment; and systems schematics and flow diagrams
10. Plumbing Narrative, including: Description of proposed plumbing systems, including domestic cold and hot water, sanitary and storm drainage, and irrigation
11. Electrical Drawings, including: Plans showing equipment spaces for all electrical equipment to include: panels, switchboards, transformers and other major items such as emergency lighting inverter, PV inverters, etc.
12. Electrical Narrative, including: Description of the proposed lighting and lighting control system, PV system and proposed special features of electrical system

13. Technology Drawings: Plans showing locations of data closets; AV closets; proposed routing of major fiber and data cabling lines; general locations for security cameras and controlled access doors; and other related features
14. Technology Narrative: description of proposed fiber/data cabling system; equipment spaces; proposed AV system; and proposed security systems.
15. Fire Protection Drawings: Plans showing equipment spaces for fire protection systems (e.g., fire pump, fire command center, etc. and fire protection water supplies, fire hydrant locations, fire apparatus access roads, and fire lanes.
16. Fire Protection Narrative, including:
 - a. Description of the building's proposed fire protection systems including the egress system
 - b. Code compliance analysis including the design team fire protection engineer must prepare an analysis of the applicable codes and agency criteria that will govern the design of the specific project. For example, items such as, but not limited to classification of construction and occupancy group(s), rating of structural components, fire resistance requirements, interior finish, occupant load calculations, exit calculations, identification of areas to receive automatic sprinkler systems and/or automatic detection systems, smoke control systems, etc. would be prepared by the design team fire protection engineer as necessary to provide a complete fire protection and life safety analysis for the final concept.
17. LEED Report:
 - a. Prepare and present to City for review and approval a LEED design report to include the LEED checklist of proposed strategy
 - b. Identify proposed elements and highlight features on schematic design documents in both graphic and written summary that address the LEED requirement.
18. Certification Requirements, including: The architect/engineer (lead designer) must certify that the concept design complies with the program requirements and energy goals, and local regulatory agencies and review boards. In bullet form, identify how proposed design features will support performance expectations of the project. Expectations are shall be identified in the project's design program.
19. Specifications (Div-02 through 31): Table of contents identifying specification sections to be used on the project.
20. Life-Cycle Cost Analysis: A/E shall provide applicable design documentation to support City Life-Cycle cost review.
21. Schematic Design Cost Estimate: This deliverable will be completed after submission of the final schematic design submission by the cost estimator (consultant on A/E team). Cost estimate deliverable is to be reviewed concurrently by the City and the A/E. The cost estimate shall provide the following detail:
 - a. Itemization shall be raw construction costs for material, labor, equipment rentals, etc. (only) by area of occupancy. DO NOT include any markup. Provide a total cost for each area of occupancy.
 - b. Provide a summary sheet showing all of the following:
 - i. Each area of occupancy with its construction total from item *a* above.
 - ii. Provide a line item for the subtotal of all occupancies
 - iii. Provide a line item for Contractor Mark-up on the sub-total
 - iv. Provide a line item for Construction Bond on the sub-total
 - v. Provide a line item for BPW Contingency (8%) on the sum total of items *ii*, *iii*, and *iv* above
 - vi. Provide a line item for Design Contingency
 - vii. Provide a line item for Escalation of construction costs (if scheduled construction is 2 or more years out)
 - viii. Provide a Grand Total
22. Energy Analysis (BY CITY): Final completion of this deliverable will be completed after submission of the final schematic design submission by the City's third party commissioning agent.
23. Project Schedule: Develop project time schedules for the project indicating the expected progress of the work; include architectural and engineering design, bidding, contract execution and construction.

VII. Phase III: Design Development

- A. General – Prior To Completion of Design Development
 1. See “DELIVERABLES EACH PHASE – GENERAL REQUIREMENTS” above for meetings, presentations, approvals, and expectations.
 2. This set of submissions shall reflect a more comprehensive project design developed from the selected final schematic design. In DD the A/E and City shall finalize the selection of all systems with respect to type, size, and other material characteristics. Systems are not only structural, mechanical, fire protection, and electrical, but include all other building components such as the building envelope (wall, window, and roof), interior construction (flooring, ceiling, and partitions), service spaces, elevators, security, signage, furnishings, and so on.
 3. All SHPO, Landmarks Commission, Urban Design Commission, Planning Commission, and Zoning approvals (including exterior signage) must be complete prior to proceeding beyond the design development phase.
 4. A/E shall complete all draft specifications for all sections at the design development phase. Outline specifications are not acceptable. . At a minimum, Part 2 – Products should be coordinated with the project. Mark out all content that does not apply to the project.
- B. Document Deliverables – Design Development
 1. Site Planning Drawings:
 - a. Demolition drawings
 - b. Site layout plan showing all buildings, roads, walks, parking, and other paved areas including type of pavement; accessible route from parking areas and from public street to main facility entrance; fire apparatus and fire lanes; freight delivery routes and access to loading docks; crane hoisting locations.
 - c. Grading and drainage plan showing site grading and storm drainage inlets, including storm water detention features.
 - d. Site utilities plan showing: sizes and locations of domestic and fire protection water supply lines, sanitary sewer lines, and all other utilities as applicable.
 - e. Landscape design plan showing General areas of planting, paving, site furniture, water features, and irrigation plan, if applicable.
 2. Site Planning Narrative:
 - a. Site circulation concept explaining Reasons for site circulation design and number of site entrances, Reasons and/or calculations for number of parking spaces provided, reasoning for design of service area(s), including description of number and sizes of trucks that can be accommodated, proposed scheme for waste removal, scheme for fire apparatus access and fire lanes
 - b. Site utilities distribution concept (provide description of fire protection water supplies, description of fire hydrant locations, drainage design concept
 - c. Landscape design concept explaining reasoning for landscape design, paving, site furnishings, and any water features; reasoning for choice of plant materials; landscape maintenance plan and water conservation plan; brief operating description of irrigation system;
 - d. Site construction description of materials proposed for pavements and utilities
 - e. Code analysis: The code criteria must be reviewed by each design team discipline member to the degree of detail necessary to ensure that tasks accomplished in this phase meet all the code requirements; Identify local zoning and all building code requirements and provide a complete analysis as they pertain to the project.
 3. Site Planning and Landscape Design Calculations:
 - a. Site storm drainage combined with building storm drainage and sanitary sewer calculations
 - b. Storm water detention calculations, if applicable
 - c. Parking calculations, if applicable
 - d. Where applicable dewatering
 - i. Calculations including calculations modeling dewatering rates during dry and wet season excavation.

- ii. Calculations must take into account effect of dewatering on adjacent structures and improvements
 - iii. Calculations must assume a specific shoring system as part of a comprehensive excavation system.
- 4. Architectural Drawings:
 - a. Demolition drawings
 - b. Building floor plans showing all spaces individually delineated and labeled; enlarged layouts of special spaces; dimensions on floor plans and enlarged layouts
 - i. Indicate locations of passenger/freight elevators and their relationship to main entrances, mechanical spaces and loading docks.
 - c. Building reflected ceiling plans showing enlarged layouts of special spaces; all spaces individually delineated; materials labeled; ceiling heights labeled; lighting fixture types indicated and scheduled
 - d. Building roof plan showing drainage design, including minimum roof slope; dimensions; membrane and insulation configuration of the roofing system;
 - e. Elevations showing entrances, window arrangements, doors; exterior materials with major vertical and horizontal joints; roof levels; suspended ceiling space; dimensions
 - f. Interior elevations showing: lobby; public corridors; restrooms; major office spaces; typical public elevator lobby; typical tenant corridors; typical conference rooms
 - g. One longitudinal and one transverse section showing floor-to-floor dimensions; stairs and elevators; typical ceiling heights; general roof construction
 - h. Exterior wall sections showing materials of exterior wall construction, including flashing, connections, method of anchoring, insulation, vapor retarders, and glazing treatments; Vertical arrangement of interior space, including accommodation of mechanical and electrical services in the floor and ceiling zones
 - i. Proposed room finish schedule submitted on a drawing set showing floors, bases, walls, and ceilings; renderings
 - j. Proposed site furniture showing Site furniture cut sheets or photos and proposed locations)
 - k. Diagrams illustrating the ability to access, service, and replace mechanical/electrical equipment showing the pathway with necessary clearance
 - l. Location of accessible pathways and services for the physically disabled
 - m. Design of building signage, including code signs, way-finding and room identification, building directory, exterior building signage, and major interior building identification
 - n. General layout of furnishings for offices, lobbies, conference rooms, specialty spaces, etc.
- 5. Architectural Narrative:
 - a. Building concept explaining reasons for building massing, entrance locations, and service locations; building circulation and arrangement of major spaces; interior design; adherence to the building preservation plan; energy conservation design elements; water conservation considerations; explain how all these design considerations are combined to provide a well-integrated cohesive design concept; analysis of refuse removal, recycled materials storage and removal, and maintenance requirements
 - b. Building construction description, explaining structural bay size; exterior materials, waterproofing, air barriers/vapor retarders, and insulation elements; roofing system(s); exterior glazing system; interior finishes (including signage and furnishing), with detailed explanation for public spaces
 - c. Potential locations for artwork, as a result of collaboration between the artist, A/E, and City Arts Program Administrator
 - d. Use of recycled materials
 - e. Sustainable design concepts and LEED strategy
 - f. Review of project for code compliance. Code criteria should be reviewed by each discipline to the degree of detail necessary to assure that tasks accomplished in this phase meet the code requirements.
 - g. Building maintenance explaining how unique and tall architectural spaces will be cleaned, have their light fixtures maintained, have interior and exterior glass surfaces cleaned and typical

- maintenance performed. If applicable explain how assembly spaces with fixed seating, multilevel spaces, or with sloped floors will have their ceilings, lights, and other ceiling elements maintained and repaired; proposed scheme for window washing equipment; consideration and prevention of bird nesting on exterior surfaces; how major mechanical and electrical equipment can be serviced and/or replaced in future years giving the necessary dimension clearances
- h. Describe the project-specific security design
 - i. Report verifying the current design's compliance with the approved space program. Any deviations must be clearly reported
 - j. Curtain Wall Report, if applicable
 - i. If the project has a complex curtain wall system describe size and locations of major movement joints to accommodate structural drift due to seismic and/or wind loading.
 - ii. Describe proposed curtain wall attachment methods to accommodate these lateral movements
 - iii. Describe water migration
 - iv. Describe exterior fire safety systems, if applicable
 - v. Describe typical interfaces between exterior wall system and interior finishes
 - vi. Describe interfaces between major enclosure assemblies such as glass curtain wall or windows to precast or stone panels
 - vii. Identification of at least three suppliers that can provide proposed exterior window system
 - k. Building keying: Report must fully define the keying hierarchy for the entire building incorporating various levels of access, security, and fire egress; Signage Report: Signage system and room numbering system must be integrated with keying system
 - l. Provide two finish boards for both public and tenant interior areas and two finish boards of exterior finishes composed of actual material samples and color coded plans, sections, and elevations of major space showing their use
6. Architectural Calculations:
- a. Acoustical calculations, including noise transmission through envelope interior walls, floors (including raised floors), and ceilings, and mechanical and electrical equipment
 - b. Heat transfer through dew point locations in building envelope
 - c. Toilet fixture count
 - d. Illumination, day lighting, and glare
 - e. Passenger and freight elevator analysis if applicable
 - f. Loading dock analysis
 - g. Energy analysis
7. Structural Drawings:
- a. Framing plans and key details
8. Structural Design Narrative:
- a. Code criteria should be reviewed by each discipline to the degree of detail necessary to ensure that tasks accomplished in this phase meet the code requirements
 - b. Description of recommended structural concept including choice of framing system, including lateral load-resisting elements, and proposed foundation design; Verification of adequacy of all assumed dead and live loads
 - c. Identify all code requirements and provide a complete analysis as it pertains to this project including but not limited to required fire-resistance rating of structural elements and Summary of special requirements resulting from applicable local codes
 - d. Proposed methods of corrosion protection, if applicable
 - e. Geotechnical engineering report by City, including boring logs (if part of scope of work)
9. Structural Design Report Calculations:
- a. Gravity load and lateral load calculations, with tabulated results showing framing schedules
 - b. Foundation calculations
 - c. Calculations showing that the system is not vulnerable to progressive collapse
 - d. Vibration calculations
10. Mechanical Drawings (HVAC):

- a. Demolition drawings
 - b. Floor plan(s) including Single line piping and ductwork schematic layout; terminal air units; Perimeter terminal units
 - c. Quarter-inch scale drawings of mechanical equipment room(s) showing all mechanical equipment, ductwork, and piping, including equipment access and service requirements in plan, elevations, and cross-sections
 - d. Roof plan showing all roof-mounted equipment and access to roof
 - e. Show adequate access from mechanical equipment room(s) to elevators and loading docks.
 - f. Single line schematic flow and riser diagram(s) (including airflow quantities and balancing devices for all heating/cooling equipment; water flow quantities and balancing devices for all heating/cooling equipment; flow/energy measuring devices for water and air systems for all cooling, heating, and terminal equipment
 - g. Automatic control diagram(s) (including control flow diagrams showing all sensors, valves, and analog and digital controllers; and sequence of operations of all the systems that describes the control sequences during occupied, 24-hour operations, and unoccupied conditions
 - h. Schedules major equipment that includes chillers, boilers, pumps, air handling units, and terminal units, cooling towers, air terminals etc.
 - i. Air terminal devices and diffusers shown connected to major duct runs and coordinated with reflected ceiling plan
 - j. Air balance relationships between spaces, if any.
11. Mechanical Narrative (HVAC):
- a. Updates from SD.
 - b. Updated psychrometric calculations (example Trace System check-sums) for HVAC systems at full and partial loads (partial loads at 50% and 25%, and unoccupied periods)
 - c. Updated building heating and cooling load calculations
 - d. Updated, space-by-space calculations of ventilation and exhaust quantities following ASHRAE 62 and WI SPS 364.
12. Plumbing Drawings:
- a. Demolition drawings
 - b. Floor plan(s) including proposed building zoning and major piping runs and Locations of proposed plumbing fixtures and equipment
 - c. Systems schematics and flow diagrams
13. Plumbing Narrative: Updates from SD.
14. Electrical Drawings:
- a. Site plan proposed site distribution for power, proposed service entrance and location of transformers, generators, and vaults, etc.
 - b. Floor plans including proposed major electrical distribution scheme and locations of electrical rooms and closets; proposed major routing of major electrical feeder runs, bus duct; plan layouts of electrical rooms, showing locations of major equipment, including size variations by different manufacturers.
 - c. Single line diagram of the building power distribution system
 - d. Plan of typical lighting layout
 - e. PV System major components (panels, inverters, etc.) shown on drawings and coordinated with structural.
 - f. Lightning protection and building grounding
15. Electrical Narrative
- a. Lighting calculations for a typical open office plan with system furniture
 - b. Lighting calculations for a typical one-person private office
 - c. Load calculations – note what equipment is not final if items are pending/unknown
 - d. Life-cycle cost analysis of luminaire/lamp system and associated controls
 - e. Power density analysis for lighting of each area
16. Technology Drawings: Updates from SD
17. Technology Narrative
- a. Site plan showing all incoming or existing data and communication lines by type

- i. Security system site plan including proposed locations for surveillance cameras, duress alarm sensors, and access controls.
 - b. Floor plans showing communication back bone system and security systems; plan layouts for data and AV closets
 - c. Single line diagram of each technology system including but not limited to telephone, data, security, public address, AV, and others.
 - d. Data port counts (will be provided to City IT for City IT to determine type/quantity of switches)
18. Fire Protection Drawings:
 - a. Floor plans showing Equipment spaces for fire protection systems including fire pump and fire command center; Fire protection water supply lines, fire hydrant locations, fire apparatus access roads, and fire lanes; Standpipes and sprinkler risers; Remoteness of exit stairways; Location of firewalls and smoke partitions; Identification of occupancy type of every space and room in building; Calculated occupant loads for every space and room in the building; Location of special fire protection requirements including kitchens, computer rooms, storage
 - b. Riser diagrams for sprinkler system
 - c. Riser diagram for fire alarm system
19. Fire Protection Narrative:
 - a. Updates from SD.
 - b. Occupant load and egress calculations
 - c. Fire protection water supply calculations. Includes water supply flow testing data.
 - d. Fire pump calculations where applicable
 - e. Smoke control calculations where applicable (e.g., atrium)
 - f. Stairway pressurization calculations where applicable
 - g. Calculate sound attenuation through doors and walls for placement and location of fire alarm system audible notification appliances
20. Specifications: All Divisions (00-31)
 - a. Updated TOC
 - b. Specification sections edited for the project and coordinated with City provided Div-00 and 01 with yellow highlights as needed to identify portions that still need updating and/or coordination.
 - c. All sections, Part 2 – Products, shall be coordinated with City standards and drawing schedules.
21. LEED Report:
 - a. Prepare and present to City for review and approval a LEED design report to include the LEED checklist of proposed strategy
 - b. Identify proposed elements and highlight features on design development documents in both graphic and written summary that address the LEED requirement
22. Certification Requirements, including: The architect/engineer (lead designer) must certify that the design development complies with the program requirements and energy goals, and local regulatory agencies and review boards. In bullet form, identify how proposed design features will support performance expectations of the project. Expectations are shall be identified in the project's design program.
23. Life-Cycle Cost Analysis: A/E to provide design documentation to support City's life-cycle cost analysis.
24. Energy Analysis (BY CITY): This deliverable will be completed after submission of the final design development submission by the City's third party commissioning agent.
25. Design Development Cost Estimate: This deliverable will be completed after submission of the final schematic design submission by the cost estimator (consultant on A/E team). Cost estimate deliverable is to be reviewed concurrently by the City and the A/E. The cost estimate shall provide the following detail:
 - a. Itemization shall be raw construction costs for material, labor, equipment rentals, etc. (only) by area of occupancy. DO NOT include any markup. Provide a total cost for each area of occupancy.
 - b. Provide a summary sheet showing all of the following:
 - i. Each area of occupancy with its construction total from item *a* above.
 - i. Provide a line item for the subtotal of all occupancies

- ii. Provide a line item for Contractor Mark-up on the sub-total
 - iii. Provide a line item for Construction Bond on the sub-total
 - iv. Provide a line item for BPW Contingency (8%) on the sum total of items *ii, iii, and iv* above
 - v. Provide a line item for Design Contingency
 - vi. Provide a line item for Escalation of construction costs (if scheduled construction is 2 or more years out)
 - vii. Provide a Grand Total
26. Project Schedule: Develop project time schedules for the project indicating the expected progress of the work; include architectural and engineering design, bidding, contract execution and construction.
27. At the end of the Design Development Phase – and the beginning of the Construction Document phase – the A/E shall be prepared to submit the City of Madison Parking Lot / Site Plan review. All items required for this submission can be found at the following link.....
<https://www.cityofmadison.com/development-services-center/other-residential/parking-lot-site-plan>

VIII. Phase IV: Construction Documents

- A. General – Prior To Completion of Construction Documents
- 1. See “DELIVERABLES EACH PHASE – GENERAL REQUIREMENTS” above for meetings, presentations, approvals, and expectations.
 - 2. This set of submissions shall reflect a complete project design. In CD the A/E and all sub-consultants shall provide all plans, details, and specifications to a level of 95% or better in preparation for the bidding phase. In order to complete this phase of design the:
 - a. A/E shall do all of the following:
 - i. Thoroughly scrub all floor plan backgrounds being used are the same version for all disciplines
 - ii. All floor plan dimensions are complete and not conflicting
 - iii. All details are complete, fully noted/dimensioned and properly linked to other details as necessary
 - iv. All disciplines have crashed their drawings and details against other disciplines looking for conflicts. All conflicts have been resolved.
 - v. All specifications are complete, properly numbered/labeled, all irrelevant information has been removed, and all performance specifications are complete and meet the intent of the design parameters for the system being specified.
 - b. The City Project Manager shall do all of the following:
 - i. Verify all division 00 and 01 specifications are complete and have been provided to the A/E. This includes any co-edited specifications.
 - ii. Verify the final design intent meets the needs for the project.
- B. Document Deliverables – Construction Documents
- 1. Site Planning and Landscape Design Drawings, General:
 - a. Demolition plans
 - b. Site layout plan: Location of all buildings, roads, walks, accessible routes from parking and public street to building entrance, parking and other paved areas, and planted areas; limits of construction; locations and sizes of fire protection water supply lines, fire hydrants, fire apparatus access roads, and fire lanes; freight delivery routes; access to crane hoisting areas; and location of floodplains and wetlands.
 - c. Grading and drainage plan showing existing and new contours 2 ft. interval minimum in area around buildings; Spot elevations at all entrances and elsewhere as necessary; Elevations for walls, ramps, terraces, plazas, and parking lots; All surface drainage structures; Water retention and conservation.
 - d. Site utilities plan showing all utilities, including inlets, manholes, clean-outs, and invert elevations.
 - e. Planting plan, showing building outline, circulation, parking, and major utility runs; size and location of existing vegetation to be preserved including construction protection measures.

- i. Review large vehicle access locations for fire apparatus vehicles, freight delivery, and crane hoisting.
 - ii. Ensure that planting scheme will not impede these areas during the growth cycle of the plants (trees and shrubs)
- f. Location of all new plant material; erosion control; planting schedule showing quantity of plants, botanical names, planted size, and final size.
- g. Irrigation plan, if applicable, Include schematic of irrigation control system.
- h. Planting and construction details, profiles, sections, and notes as necessary to fully describe design intent.
2. Site Planning and Landscape Design Calculations:
 - a. Final drainage calculations, including storm water detention
 - b. Final parking calculations, if applicable
 - c. Pipe sizing calculations for water and sewer pipes
 - d. Pavement design calculations
3. Site Planning and Landscape Specifications: Provide completed specification sections for all landscaping and civil disciplines as applicable. Ensure cross references to the City of Madison, Public Works Standard Specifications are complete and correct.
4. Architectural Drawings:
 - a. Project title sheet, drawing index
 - b. Demolition plans
 - c. Floor plans
 - d. Reflected ceiling plans; show ceiling grid and location of all elements to be placed in the ceiling.
 - e. Building sections; vertical zoning for electrical and mechanical utilities must be indicated on sections.
 - f. Roof plans must show slopes, low points, drains and scuppers, equipment, equipment supports, roof accessories, and specialty items.
 - g. Exterior elevations
 - h. Wall sections
 - i. Interior elevations
 - j. Details; all details shall be complete, dimensioned and cross referenced to other details as necessary.
 - k. Schedules
 - l. Diagrams illustrating proper clearance for servicing and replacement of equipment. This includes but is not limited to maintenance access; finished door openings along the replacement route; adjacency to mechanical and elevators/loading docks along the replacement route.
5. Architectural Narrative, Calculations and Compliance Reports:
 - a. Final acoustical calculations, including noise transmissions through envelope, interior walls, floors, and ceilings, mechanical and electrical equipment
 - b. Final heat transfer through and dew point locations in building envelope
 - c. Final toilet fixture count
 - d. Final illumination, day lighting, and glare analysis
 - e. Information as needed to complete City of Madison Building Inspection Plan Review.
6. Architectural Specifications Complete: Complete room finish schedules, door schedules, and window schedules must be incorporated on drawings. Schedules will not be permitted in the specifications.
7. Structural Drawings:
 - a. Demolition plans
 - b. Full set of structural construction drawings; Drawings must be fully dimensioned, noted and detailed for accurate bidding and construction; load criteria for all floor live loads, roof live load, roof snow load, wind load, earthquake design data, and special loads must be shown on drawings.
 - i. Live load reduction of the uniformly distributed floor live loads, if used in the design, must be indicated; basic wind speed (3-second gust), miles per hour (km/hr.), wind importance factor, and building category, wind exposure, the applicable internal pressure coefficient must be indicated

- ii. Seismic design criteria, such as seismic use group, spectral response coefficients SDS and SD1, site class, basic seismic-force-resisting system, design base shear, and analytical procedure must be indicated.
 - iii. Additional information may be required by the local building official including but not limited to soil bearing pressure, lateral earth pressure, properties of basic materials.
 - iv. Indicate the codes and standards used to develop the project.
- c. Structural Schedules for foundations, columns, walls, beams, slabs, and decks, as applicable.
- d. Structural details; All typical details must be shown on the drawings; including but not limited to details for steel connections, details for all fire-rated assemblies indicating Underwriters Laboratories Inc. or other nationally recognized testing laboratory fire resistance directory design numbers; Include details indicating if the assembly is restrained or unrestrained; details for anchorage of building system equipment and nonstructural building elements (may be shown on mechanical, electrical, or architectural drawings, as applicable). The anchorage details, if shown on other disciplines, must be referenced on the structural drawings.)
- 8. Structural Narrative and Calculations:
 - a. Gravity loads
 - b. Lateral loads (seismic and wind)
 - c. Foundations
 - d. Thermal loads where significant
 - e. Vibration propagation
 - f. Progressive collapse
 - g. Supports for nonstructural elements, including mechanical and electrical equipment on the roof and in equipment rooms, louvers, and other penetrations
 - h. Steel connections
 - i. Provide calculations to meet City of Madison Building Inspection review including roof mounted PV System, parking lot lighting, etc.
- 9. Structural Specifications; Complete and indicating all performance criteria for all structural materials required for the project including but not limited to soil compaction, reinforcing bar, structural concrete/masonry, structural wood, structural steel, and other similar materials.
- 10. Mechanical Drawings (HVAC):
 - a. Demolition plans
 - b. Floor plan: Double line piping and ductwork layout; show terminal air units; perimeter terminal units; show locations of automatic control sensors for example temperature, relative humidity, CO2, room pressurization.
 - c. Roof plan showing all roof-mounted equipment and access to roof
 - d. Show adequate access from mechanical equipment room(s) to elevators and loading docks.
 - e. Mechanical details: Quarter-inch scale drawings of mechanical equipment room(s) showing all mechanical equipment, ductwork, and piping including access and service requirements in plan, elevations, and cross-sections; all valves must be shown. Indicate locations where temperature, pressure, flow, contaminant/combustion gases, or vibration gauges are required, and if remote sensing is required; mechanical room piping and ductwork layout must be double line; all dampers—both fire dampers and volume control dampers—must be shown. Ductwork ahead of the distribution terminals must be indicated in true size (double line).
 - f. Updated Single line schematic flow and riser diagram(s); Airflow quantities and balancing devices for all heating/cooling equipment; water flow quantities and balancing devices for all heating/cooling equipment; show location of all flow/energy measuring devices for water and air systems for all cooling, heating, and terminal equipment, and their interface with the BAS.
 - g. Updated Automatic control diagrams: Control flow diagrams showing all sensors, valves, and controllers (analog and digital inputs for controllers, front end equipment, and system architecture); diagrams to show control signal interfaces, complete with sequence of operation of all heating, ventilating, and cooling systems during occupied, 24-hour, and unoccupied conditions
 - h. Updated Schedules: Provide schedules of equipment that includes chillers, boilers, pumps, air handling units, terminal units, cooling towers; Air terminal devices, etc.

- i. Updated Air balance relationships between spaces, if any
 - j. Data room cooling systems – evaporators and condensers
- 11. Mechanical Narrative and Calculations (HVAC):
 - a. Updates from DD.
 - b. A final description of any deviation from the HVAC system as approved during DD.
 - c. Final building heating and cooling load calculations
 - d. Final system pressure static analysis at peak and minimum block loads for occupied and unoccupied conditions
 - e. Building pressurization analysis for peak and minimum block loads for occupied and unoccupied conditions
 - f. Acoustical calculations for peak and minimum block loads for occupied conditions
 - g. Flow and head calculations for pumping systems for peak and minimum block loads for occupied conditions
 - h. Final selection of equipment, cut sheets of selected equipment
 - i. Final psychrometric calculations for the selected HVAC systems at full and partial loads
 - j. Final ventilation and exhaust calculations following ASHRAE 62 and WI SPS 364.
 - k. IT Space load calculations based on data port counts/City IT input about type/quantity of switches. Load calculations used to size data room cooling equipment
 - l. Information required to complete City of Madison Building Inspection review
- 12. Mechanical Specifications: Completed specifications indicating preferred manufacture and model numbers according to Exhibit B and the design team that meets the intent of the mechanical system; all performance based specifications, all BAS required connection information and control points
- 13. Plumbing Drawings
 - a. Demolition plans
 - b. Floor plans (Plumbing layout and fixtures, equipment and piping; large-scale plans should be used where required for clarity)
 - c. Riser diagrams for waste and vent lines
 - d. Riser diagrams for domestic cold and hot water lines
 - e. Plumbing fixture schedule
- 14. Plumbing Narrative and Calculations:
 - a. Updates from DD
 - b. hot water heating calculations
 - c. Water supply calculations, including pressure
 - d. Roof drainage calculations
 - e. Sanitary waste sizing calculations
 - f. Final water consumption calculations and analysis including make-up water for HVAC systems, domestic water consumption, and water consumption for irrigation
 - g. Information required to complete City of Madison Building Inspection review
- 15. Plumbing Specifications: Completed specifications indicating preferred manufacture and model numbers according to Exhibit B and the design team that meets the intent of the plumbing system; all performance based specifications.
- 16. Electrical Drawings
 - a. Demolition plans
 - b. Floor plans (Show lighting, power distribution, and communications raceway distribution, and locations of fire alarm and annunciator panels)
 - c. Single-line diagram of primary and secondary power distribution
 - d. Include normal power, emergency power, and UPS
 - e. Single-line diagram of fire alarm system
 - f. Circuit layout of lighting control system
 - g. Details of distribution system
 - h. Site plan (Indicate service locations, manholes, duct banks, and site lighting)
 - i. Layout of electrical equipment spaces (Show all electrical equipment. Include elevations of substation transformers and disconnect switches)

- j. Schedules for switchgear, switchboards, motor control centers, panel boards, and unit substations
- k. Grounding diagram
- l. Complete phasing plan (if required) for additions and alterations
- m. Storage areas for electrical equipment/spare parts
- 17. Electrical Narrative and Calculations:
 - a. Updates from DD and as needed for City of Madison Building Inspection review
 - b. Illumination level and lighting power calculations
 - c. Short circuit calculations
 - d. Voltage drop calculations
 - e. Overcurrent coordination study
- 18. Electrical Specifications: Completed specifications indicating preferred manufacture and model numbers according to Exhibit B and the design team that meets the intent of the plumbing system; all performance based specifications.
- 19. Technology Drawings: Complete floor plans showing all IT/AV/telecommunication/radio/security systems (including room locations), major pathways, etc.; complete single line details of all cabling systems, enlarged details as needed for all racks, security systems, AV systems and other related equipment; grounding details; schedules of equipment provided by contractor; etc.
- 20. Technology Narrative: Updates from DD
- 21. Technology Specifications: Completed specifications indicating preferred manufacture and model numbers according to Exhibit B and the design team that meets the intent of the plumbing system; all performance based specifications. Ensure all equipment by Contractor, Connection by Contractor, Equipment by Owner, and Connection by Owner are properly labeled and scheduled.
- 22. Fire Protection Drawings:
 - a. Demolition plans if applicable
 - b. Full set of fire protection construction drawings (Drawings must be carefully dimensioned, noted, and detailed for accurate bidding and construction)
 - c. Fire protection details (all typical details must be shown on the drawings including Firewalls and smoke partition, Panel and curtain walls, Fire-stopping configurations. Include details of all openings between the exterior walls (including panel, curtain, and spandrel walls) and floor slabs, openings in floors, and shaft enclosures; Mass notification system equipment; Horizontal exits; Each required fire door; Stairway pressurization fans; Security door hardware, including operation procedures; Fire pump configuration; Anchorage of underground fire protection water supply lines; Standpipe riser; water flow switches and tamper switches; Sprinkler floor control valves, sectional valves, and inspector text assembly; Special fire extinguishing systems (e.g., wet chemical); Fire alarm riser; Typical firefighter telephone station; Typical firefighter telephone jack; Electrical closets for fire alarm system panels; Fire alarm telephone panel including voice paging microphone and firefighter telephone system; Visual indicating device control and power detail, typical for floors stating location; Amplifier rack stating location; Typical location of duct smoke detectors; Outdoor fire alarm speaker; Wall-mounted cone fire alarm speaker; Typical terminal cabinet; Lay-in ceiling-mounted fire alarm speaker; Lay-in ceiling-mounted fire alarm combination speaker/strobe; Wall-mounted strobe device; Typical manual fire alarm box installation; Fire alarm system input/output matrix; Graphic annunciator panel; Fire command center showing the locations of each panel to be installed)
- 23. Fire Protection Narrative and Calculations: For any fire modeling generated results, submit a copy of the input data and all pertinent program material and assumptions required to understand the output and the analysis. A narrative of the input and results must be part of the calculations.
 - a. Final occupant load and egress calculations
 - b. Final fire protection water supply calculations including water supply flow testing data
 - c. Final fire pump calculations where applicable
 - d. Final smoke control calculations where applicable
 - e. Final stairway pressurization calculations
 - f. Fire modeling

- g. Final calculations for calculating sound attenuation through doors and walls for placement and location of fire alarm system audible notification appliances
- h. Other information as needed for City of Madison Building Inspection and MFD review.
- 24. Fire Protection Specifications; Completed specifications indicating manufacture and model numbers and performance based specifications.
- 25. LEED Report:
 - a. Prepare and present to City for review and approval a LEED design report to include the LEED checklist of proposed strategy
 - b. Identify proposed elements and highlight features on construction documents in both graphic and written summary that address the LEED requirement
- 26. LEED Online submission of design phase credits – The A/E is to submit all design phase credits to LEED Online and coordinate with City staff and other consultants as needed to complete submission (e.g. energy modeling credit). A/E is to respond to GBCI review comments as needed to finalize design credit submission.
- 27. Certification Requirements: The A/E (lead designer) must provide certification that the project has been designed and is in compliance with ASHRAE 90.1 and will meet City energy goal requirements. Certification will also indicate that the architectural/engineering design elements have been integrated with the overall project design, and that the building can meet the programmed LEED rating. The A/E certification must be signed and sealed by a principal of the architectural/engineering firm in charge of the project.
- 28. Specifications (General, ALL Divisions): Completely edited version of each specification section to be used on the project. All sections to be final, no drafts are permitted. All performance information has been provided, no blanks. All unrelated information has been removed. Final version has been exported to PDF to preserve all links from TOC to individual sections.
- 29. Construction Document Cost Estimate: This deliverable will be completed after submission of the final CD submission by the cost estimator (consultant on A/E team). Cost estimate deliverable is to be reviewed concurrently by the City and the A/E. The cost estimate shall provide the following detail:
 - a. Itemization shall be raw construction costs for material, labor, equipment rentals, etc. (only) by area of occupancy. DO NOT include any markup. Provide a total cost for each area of occupancy.
 - b. Provide a summary sheet showing all of the following:
 - i. Each area of occupancy with its construction total from item *a* above.
 - ii. Provide a line item for the subtotal of all occupancies
 - iii. Provide a line item for Contractor Mark-up on the sub-total
 - iv. Provide a line item for Construction Bond on the sub-total
 - v. Provide a line item for BPW Contingency (8%) on the sum total of items *ii*, *iii*, and *iv* above
 - vi. Provide a line item for Design Contingency
 - vii. Provide a line item for Escalation of construction costs (if scheduled construction is 2 or more years out)
 - viii. Provide a Grand Total
- 30. Energy Analysis (BY CITY): This deliverable will be updated by City third party consultant if there are any significant changes in the construction document phase.
- 31. Project Schedule: Develop project time schedules for the project indicating the expected progress of the work; include architectural and engineering design, bidding, contract execution and construction.

IX. Phase V: Bidding Phase

- A. The A/E, following the City's approval of the PHASE IV CONSTRUCTION DOCUMENTS, and the latest construction estimate; and the City's declaration of its intent to put the project out for bidding, shall assist the City in preparation and assembly of the final standard City of Madison, Public Works Contract Documents.
- B. The City's contract documents will be prepared by the City Project Manager and shall include statements relating to advertising for bid, instructions to bidders, Small Business Enterprise (SBE) program

information, special provisions, proposal, bid bond, agreement, payment bond, performance bond, and Best Value Contracting.

- C. The posting of bid documents on the City's preferred internet bid site (BidExpress), bid period, bid opening, building contractor selection, and contract signing will be provided by the City Engineering Division and the Board of Public Works.
- D. A/E shall assist the City in preparing the construction documents as Exhibits in searchable PDF format which will be incorporated into the bid documents noted above.
- E. A/E shall attend pre-bid conference meeting.
- F. A/E shall answer questions during bidding and develop addendums promptly in order to give bidders sufficient time to adjust bids. No design-related addendum shall be submitted past one week before bids are received.
- G. Upon receipt and acknowledgment of lowest responsible bidder the A/E will update the bidding set to incorporate all changes that occurred during the bid phase. The revised set must be completed in an expeditious manner.
- H. The A/E shall provide digital drawing files, in applicable 3D or 2D format, for the General Building Contractor and its subcontractors to use as may be necessary during design and construction of the project.
- I. As the City has a total construction cost limitation for this project, the A/E shall adhere to this limitation. Should the total bid for all work exceed the estimated probable costs of construction by more than eight (8) percent, the City shall have the discretion to require the A/E to revise the design at no additional cost to the City, whether or not the City ultimately decides to complete the project according to the redrafted plans or the original plans.
- J. Building Information Model: Provide final BIM Model during or right after bidding.

X. Phase VI: Construction Administration Phase

- A. The construction phase will commence with the award of the construction contract and will terminate when the common council accepts the construction. A pre-construction meeting held by owner shall be attended by A/E. A separate SharePoint construction administration orientation must be attended by the A/E team responsible for construction administration activities.
- B. All communication and filing shall be completed digitally. The City will receive a set of all design documents in digital form. Digital files shall be in universal format (PDF) and in the design tool specific file format (Revit file, Trane trace file).
- C. The A/E, and when appropriate to the progress of the project any sub-consultants, shall attend field project meetings. Such meetings shall be held at regular intervals (bi-weekly minimum) and as required by City.
- D. The A/E shall make periodic visits to the site at least every two weeks and more often as necessary to maintain familiarity generally with the progress and quality of the work and to determine in general if the work is proceeding in accordance with the contract documents. The visits will vary in frequency based on the stage of construction and nature of activities at the time of the visit, and will average the equivalent of one visit per two weeks in the early phases of construction, to one visit per week during the more intense construction phases from just after mid-construction through substantial completion. The exact schedule for these visits will be determined once a detailed construction schedule is issued by the awarded general contractor. Refer to Exhibit B – A/E General Design Guidelines – related to this agreement - for more information.
- E. A/E shall inspect field installation of critical design features and elements have been installed as intended per design. This includes pre-installation meetings, inspection of mockups, and inspection of partial builds during construction.
- F. A/E shall review (for conformance with the construction documents) and take other appropriate action upon the general building contractor's submittals such as shop drawings, product data, and samples and make recommendations regarding such to the City's Project Manager.
- G. A/E shall work with contractor, owner and other designers to resolve questions, conflicts and unforeseen situations. The A/E shall prepare, reproduce, and distribute supplemental drawings, specifications, and interpretations in response to requests for clarification by general building contractor or the City.

Exhibit A - SCOPE OF SERVICES

- H. A/E shall prepare, reproduce, and distribute drawings and specifications with revisions to describe work to be added, deleted, or modified.
- I. Review all change order requests, provide determination to City, and present proposed changes to the Board of Public Works for approval when requested by the City. Such documents shall be prepared in a timely manner.
- J. The A/E shall communicate with the City on design and construction related issues and shall not issue documents or give instructions to the contractor without knowledge and approval of the City. Documents received by the A/E from the contractor shall be shared with the City. The City maintains the right to object to instructions or approvals.
- K. Based on construction observations at the site and on the general building contractor's applications for payment, the consultant shall assist the City to determine the amount owing to the general building contractor by verifying and approving quantities of work put in place on the general building contractor's application for payment. The A/E shall assist in determining the dates of completion, substantiated by creation and distribution of punch lists.
- L. The A/E shall report to the Board of Public Works and other entities on all claims of the City or general building contractor relating to the execution and progress of the work and on all other matters or questions related thereto.
- M. The A/E shall provide punch list comments via the SharePoint. The A/E's items will be coordinated with the City's project team and third-party consultants. The purpose is to check conformance of the construction work with the requirements of the contract documents. The A/E is to verify the accuracy and completeness of the responses by the general contractor and to assist with checking construction work to be completed or corrected.
- N. A/E shall receive and review written guarantees and related documents assembled by the general building contractor, and shall transmit said data to the City's designated representative who will prepare the final certificate for payment.
- O. The A/E shall review and approve for accuracy and completeness, the general building contractors submission of "As-Built" drawings and Operations and Maintenance (O&M) manuals prior to certification of the general building contractors application for final payment.
- P. At the end of the project the A/E will prepare digital "Record Drawings". The Record Drawings shall consist of the final updated sheet/page of all plans and specifications as modified by the A/E during the construction administration process. All revision clouds shall be removed but all revision marks and dates indicating the Construction Bulletin (CB) or Request for Information (RFI) that initiated the change shall remain. Change all sheet/page titles to "Record Set" and upload to SharePoint.
- Q. The A/E shall work with the general building contractor, City staff and other consultants as needed to complete the construction phase LEED credit submission near the end of the construction phase. The general building contractor is responsible for uploading most construction phase LEED online credits, but will require some supporting documents and calculations from the A/E. The A/E is to review all LEED Online construction phase submittals and assist with responding to GBCI review comments, if needed.
- R. Warranty period is considered a construction phase for the purpose of the A/E assisting in resolving issues that are design or installation related.

Owner Provided Services and Deliverables

- A. ENHANCED COMMISSIONING AND ENERGY MODEL
- B. SITE SURVEY
- C. HAZARDOUS MATERIALS SURVEY
- D. GEOTECHNICAL REPORT
- E. EXPLORATORY DEMOLITION
- F. OTHERS AS APPLICABLE OR REQUIRED

Personnel (City)

- A. A core group of approximately ten City staff will comprise the main design team for the City of Madison. Each staff member represents specific areas of design or construction knowledge and also includes the

Exhibit A - SCOPE OF SERVICES

prime contact for the owner agency. In addition the owner agency may provide additional staff as needed for design and functionality requirements of specific areas. The A/E may be directed to other City staff regarding specific requirements of the design including but not limited to storm water management, fire protection, safety, facility maintenance, enclosure, and finishes.

- B. Additional consultants may be hired by the City to perform independent verification of various aspects of the design or provide support to the design as needed including but not limited to Energy Analysis, Enhanced Commissioning, Geotechnical Surveying, etc.
- C. A preliminary list of City Core group follows:

Name	Title	Employer / Organization
Greg Mickells	Owner Representative	City Library
Krissy Wick	Owner Representative	City Library
Mark Benno	Owner Representative	City Library
Kevin Englebert	Owner Representative	City Library
TBD	Owner Representative	City Parks
Brent Pauba	City Project Manager	City Engineering, Facilities Management
TBD	City Construction Manager	City Engineering, Facilities Management
Jon Evans	MEP & Envelope	City Engineering, Facilities Management
Jeanine Zwart	Interior Finishes	City Engineering, Facilities Management
Bryan Cooper	Principle Architect	City Engineering, Facilities Management

Personnel (A/E)

- A. List TBD after selection of A/E.
- B. Employees or sub-consultants of the A/E shall not in any way be construed as employees of the City. Activities to be performed by a Principal, either the A/E, sub-consultant, or both, as described in this Contract including the attachments and exhibits, shall be performed by or under the supervision of the appropriate Principal named above. In the event of the death or disability of the named Principal such as to be unable to participate in the above described activities, or if the named principal leaves the employment of the (Architect / Design Professional / Engineer), or in any other way becomes incapable of performing the above-described activities, the City may accept another as Principal or terminate this Agreement pursuant to the provisions of this Agreement, at its option.

Purchase of Services Contract and Standard Terms and Conditions

- A. Copies of the City of Madison Purchase of Services Contract (Architect) is attached to the RFQ as Appendix B: Contract for Purchase of Services and a copy of the City of Madison Standard Terms and Conditions is attached as Appendix A: Standard Terms & Conditions.
- B. By submitting a response packet to this RFQ and providing a proposal if requested for interview the A/E acknowledges and accepts all language associated with these two documents without changes or amendments.
- C. DO NOT complete and return a copy of the contract with your RFQ documents. This is only supplied for review at this time.

Payment Schedule

- A. The City shall make periodic payment to the A/E in approximate proportion to services performed so that the compensation on the completion of each task described herein shall not exceed the percentage of the contract price at the table below.
 - 1. The A/E and all sub-consultants shall appropriately plan for all meetings and communications (including but not limited to phone calls, emails and virtual meetings), both internally with the A/E team and externally with the City Design Team (or approving authorities), related to completing sub-

Exhibit A - SCOPE OF SERVICES

- tasks within each phase of design. The City will not accept requests for additional time and effort to complete a sub-task when there was no significant change in scope according to this contract.
- a. If the A/E and any sub-consultant feels that the requirements to complete a sub-task go beyond what was assumed under the original contract the A/E and sub consultant shall meet with the City for resolution prior to continuing work on the sub-task. Invoices for additional time after the fact will not be accepted by the City.
 - B. No itemized expenses shall be allowed during this contract. All A/E expenses including but not limited to travel, communication, reproductions, delivery, and other project-related expenditures shall be included in the contract price for each phase of work.
 - C. The City shall be responsible for all reproduction fees related to check sets, bid documents, plan review sets, etc. The A/E shall not include such fees in their proposal for any phase of work.
 - D. The City shall be responsible for all fees related to plan reviews including but not limited Zoning, Planning Commission, Fire Department and Building Inspection. The A/E shall not include such fees in their proposal for any phase of work.

PHASE	% of Scope	Completion Requirements
Pre-Design – Program Development	9%	Billed upon successful acceptance by City Designated Representative
Schematic Design	15%	Billed upon successful acceptance by City Designated Representative
Design Development	20%	Billed upon successful acceptance by City Designated Representative
Construction Documents	26%	Billed upon successful acceptance by City Designated Representative
Bidding	2%	Billed upon successful acceptance by City Designated Representative
Construction Administration	26%	Billed upon successful acceptance by City Designated Representative
Warranty & LEED Documentation Completion	2%	Billed upon successful acceptance by City Designated Representative

Completion Schedule

- A. The table below lists a preliminary project schedule. Prior to signing the contract the A/E and the City shall collaborate and develop a programming, design and construction project schedule indicating the completion date of each phase or segment of work.
 1. For each phase of the design process the schedule shall include sufficient time for review periods with the City, tenant agencies, committees or commissions, stakeholder groups, regulatory agencies, etc. as may be required for project design approvals and acceptance, or of similar items’.
 2. For each phase of the design process the schedule shall include sufficient time for the A/E to make corrections and updates resulting from the review process noted in item A.1. above.
- B. The A/E shall only begin work after final contract execution by the City and upon issuance by the City’s Designated Representative of official notice to proceed.
- C. The A/E shall update and resubmit the project schedule whenever scheduling changes occur.
- D. The A/E shall recognize that it is important to be prepared to advance this schedule as opportunities arise throughout the duration of the A/E scope of work.

Approximate Time Frame	Milestone Description
2020	
September - November	RFQ/RFP and contracting process with principal A/E firm
December	Complete A/E contract signing
2021	
January - April	Complete Pre Design Includes 2 week of owner review and 1 week of A/E corrections

Exhibit A - SCOPE OF SERVICES

April 12	Final Pre-Design cost estimate delivered to the City
May - December	Project Hold
2022	
January - December	Project Hold
2023	
January - April	Complete Schematic Design Includes 2 week of owner review and 1 week of A/E corrections
April - July	Complete Design Development Includes 2 week of owner review and 2 week of A/E corrections
July - October	Complete Construction Drawings Includes 2 week of owner review and 2 week of A/E corrections
November	Complete Pre-Bid Verification Includes 1 week of owner review and 1 week of A/E corrections
December	Construction Bidding and Contract Signing
2024	
January - February	Construction Bidding and Contract Signing
February	Start Construction and Construction Administration
2025	
June	Construction Complete, Owner Occupancy, begin 1 year warranty phase

Extra Services

- A. Any extra services to be per the Contract for Purchase of Services Agreement. Additional requirements for use in establishing an equitable agreement for extra services is as follows:
 1. The rates shall be limited to the usual overhead such as clerical and office support and benefits, insurance, and training.
 2. City may require proof of cost (payroll records, invoices, etc.).
- B. The A/E and all sub-consultants shall appropriately plan for all meetings and communications (including but not limited to phone calls, emails and virtual meetings), both internally with the A/E team and externally with the City Design Team (or approving authorities), related to completing sub-tasks within the scope of the Extra Service. The City will not accept requests for additional time and effort to complete a sub-task when there was no significant change in scope according to the contract amendment.
 1. If the A/E and any sub-consultant feels that the requirements to complete a sub-task go beyond what was assumed under the contract amendment the A/E and sub consultant shall meet with the City for resolution prior to continuing work on the sub-task. Invoices for additional time after the fact will not be accepted by the City.
- C. No itemized expenses shall be allowed for any requested extra services. All A/E expenses including but not limited to travel, communication, reproductions, delivery, and other project-related expenditures necessary to complete the extra service shall be included in the contract price for the extra service.
- D. The City shall be responsible for all reproduction fees related to check sets, bid documents, plan review sets, etc. related to the extra service. The A/E shall not include such fees in their proposal for the extra service.
- E. The City shall be responsible for all fees related to plan reviews including but not limited Zoning, Planning Commission, Fire Department and Building Inspection, for the extra service. The A/E shall not include such fees in their proposal for the extra service.
- F. All approved extra services shall be added as new line items to invoicing.

Exhibit A - SCOPE OF SERVICES

END OF EXHIBIT A



Department of Public Works

Engineering Division

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Exhibit B – GENERAL DESIGN GUIDELINES **for** **CONTRACT # ####, PROJECT # 17085** **IMAGINATION CENTER AT REINDAHL PARK**

In this Exhibit B; the word “City” means City of Madison, Wisconsin. The City of Madison will include the City’s Designated Representative and/or Owner’s Representative and/or Commissioning Agent and/or Contractor to provide energy modeling; the word “A/E” means the licensed design professional(s) **A/E TBD**; and the word “General Building Contractor” means the entity which will be responsible for the actual construction of the project.

The A/E shall use this Exhibit B as a basis for preparing all plans and specifications, in all phases of the design, as defined in Exhibit A-Scope of Work. Any deviation from the guidelines must be approved by the City Design Team before incorporating them into the plans and specifications.

Exhibit B is organized by the CSI Divisions of Work and consists of general preliminary information intended for the A/E to begin the design process. Only regularly used divisions on City projects have been provided in this document.

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GENERAL GUIDELINES

The information within this General Guidelines Section is not related to any one CSI Division of Work, but is applicable to the overall design process.

- A. The A/E and all sub-consultants shall become familiar with the City of Madison Standard Specification for Public Works Construction (<http://www.cityofmadison.com/business/pw/specs.cfm>) and all City provided Specifications (regardless of CSI Division) as they relate to City policies for Public Works Projects, procedures within SharePoint, and general contract expectations and intent on the part of the City.
- B. The A/E shall incorporate all City provided specifications, regardless of Division, into their specification documents.
- C. Construction Products and Materials: Whenever possible products and materials specified within this Exhibit B are to be used in the design of this project.
 - a. Bathrooms, showers, and custodial closets shall be constructed with masonry.
- D. The A/E must provide a complete design and thorough specifications for building products, materials, and equipment that meet the City's expectations and the Owners Basis Of Design (BOD).
 1. The A/E will review with the City, the design and specifications as outlined in Exhibits A & B.
 2. The A/E will confirm during construction that the contractors are using the specified products, materials, and equipment or pre-approved alternates.
- E. Each product shall be evaluated based on its applicable characteristics. Products shall be evaluated for construction, durability, acoustic properties, security, operability/flexibility, and other characteristics that reflect the functional requirements of the product under consideration.
- F. Structural Design: The structural design must be in full compliance with the latest edition of the IBC. Any variance for any reason must be reviewed with the City.
- G. Design Mockups: If it is determined that mock-ups would be helpful during the design phase the A/E shall coordinate with the City Project Manager all procedural requirements necessary to amend Exhibit A-Scope of Work, amendments to the contract proposal, and other related information prior to proceeding with the mockup. All contract amendments must be completely executed prior to proceeding with any design mockups.
- H. Interior Work Space Requirements and Design Goals:
 1. As part of the pre-design planning effort the A/E shall work with the City and applicable agencies to develop the tenant space (City staff utilizing the space) and customer space (non City staff visiting the space) requirements.
 2. Complete an in-depth analysis of the overall workspace requirements. The process must use analytical tools, methods, and technology to structure input from a broad range of the City staff, and integrate experienced insights and recommendations concerning the following:
 - a. Formal and informal amenities for collaborative spaces.
 - b. Space adjacencies, types, and sizes necessary to support the tenant's mission.
 - c. Analysis and documentation of client work patterns and styles.
 - d. Flexibility to adapt to future change.
 3. Mobility of workforce and accommodating technology.
 4. When designing and planning the tenant space, the following factors should be established as the primary criteria for calculating the total space needed:
 - a. The minimum space standards to be utilized shall be common industry wide space standards. Sources for comparable space standards and social distancing include, but are not limited to AIA, CDC, GSA, OSHA, other regulatory agencies, and various office equipment manufacturers (All Steel, Hermann Miller, etc.).
 - i. The City of Madison-Engineering-Facility Management has developed and adopted office space standards that shall be utilized whenever possible for open space cubicles, workstations, and enclosed offices. See Appendix A for standard layouts.
 - ii. Open/enclosed work spaces to be based on standards of supervision and for reasons of confidentiality only.
 - iii. Percentage of workforce with job mobility for desk-sharing potential shall be based on the applicable agency's ability to telecommute.
 - b. Collaborative spaces, both formal and informal, shall be based on the requirements for the applicable agency and/or public space needs necessary to perform the agency's daily functions.

5. General design goals should include:
 - a. A minimum of 24" clear space between bottom of floor (roof) and top of ceiling grid is required on all new construction projects (and whenever possible on renovation projects) to reduce conflict of structural members, piping, ductwork, light fixtures, and other equipment in the ceiling space. Provide more space as needed to reduce conflicts.
 - b. Maximize natural light in open spaces and avoid placing enclosed rooms along the windows.
 - c. Provide adequate speech privacy and consider sound masking if necessary to ensure appropriate acoustics.
 - d. Circulation patterns should be clearly recognizable and wayfinding must be user friendly. Proceeding through the office should be pleasant and intuitive for the users, encouraging informal communication.
 - e. Provide and minimize centrally located resource centers for files, supplies, and equipment.
 - f. Provide adequate, clearly located space for the recycling program.
 - g. Choose workplace components and furnishings as identified in Division 12 below or recommend furnishings that may be unique to the project requirements. Components and furnishings must be easy to move and reconfigure by the occupants, to accommodate change, without skilled labor or technical contract support.
6. The A/E must ensure the City's requirements are translated into the design, confirm the workspace requirement are being maintained throughout design development, and are reflected in the final construction documents.

DIVISION 00 – Procurement and Contracting Requirements

- A. The City will provide the specifications listed below to the A/E for inclusion in the project specifications. Additional specifications may be added or deleted during the design process as needed. The A/E shall not write/provide any additional Division 00 specifications without first verifying the need with the City.
 1. 00 31 46 Permits
 2. 00 43 25 Substitution Request Form (During Bidding)
 3. 00 43 43 Wage Rates Form
 4. 00 62 7613 Sales Tax Form
- B. The City will be responsible for assembling all final bid documents, posting the bid documents to the City's preferred internet bid site (BidExpress), determining the bidding schedule, conducting the bid opening, reviewing bids, awarding the contract, and contract signing.
- C. The A/E will be responsible for completing & providing to the City all construction document drawings and project specifications as previously outlined in Exhibit A – A/E Scope of Work.
- D. The A/E (including representatives of all sub-consultants) shall assist and advise the City during the bidding process in all of the following:
 1. Answer questions/provide clarification via email or phone of the plans and specifications as necessary to bidding contractors.
 2. Attend the Pre-Bid Walk Through to answer questions/provide clarification of the plans and specifications as necessary to the bidding contractors.
 3. Review all proposed substitutions of materials and equipment. Advise the City as to acceptable substitutions. Modify plans and specifications as necessary to City confirmed lists of accepted substitutions. NOTE: The City has final approval authority on all substitutions.
 4. Assist the City in preparing contract addenda based on information generated from items 1 thru 3 above and other corrections to plans and specifications that were completed during the bidding period.
- E. The City will be responsible for posting all addenda on BidExpress.
 1. All addenda must be published and posted no less than seven (7) calendar days prior to bid opening to give contractors sufficient time to review addenda items.
 2. In the event the City is extending the bid due date the extension addendum must be published and posted to BidExpress no later than 12:00 pm (noon) of the Tuesday prior to the bid opening.

DIVISION 01 – General Requirements

- A. The City may provide any/all of the specifications listed below to the A/E for inclusion in the project specifications.

- B. The A/E and the City shall refine this list as necessary based on the project needs. Editing of the specifications in this list shall be the responsibility of the City.
- C. If the A/E feels any of the listed specifications need editing to meet the intent of the project the A/E shall discuss the proposed edits with the City. The City has final approval on the edits for these specifications.
 - 1. 01 25 13 Product Substitution Procedures
 - 2. 01 26 13 Request for Information (RFI)
 - 3. 01 26 46 Construction Bulletin (CB)
 - 4. 01 26 57 Change Order Request (COR)
 - 5. 01 26 63 Change Order (CO)
 - 6. 01 29 73 Schedule of Values
 - 7. 01 29 76 Progress Payment Procedures
 - 8. 01 31 13 Project Coordination
 - 9. 01 31 19 Project Meetings
 - 10. 01 31 23 Project Management Web Site
 - 11. 01 32 16 Construction Progress Schedules
 - 12. 01 32 19 Submittals Schedule
 - 13. 01 32 23 Survey and Layout Data
 - 14. 01 32 26 Construction Progress Reporting
 - 15. 01 32 33 Photographic Documentation
 - 16. 01 33 23 Submittals
 - 17. 01 41 00 Regulatory Requirements
 - 18. 01 43 39 Mockups
 - 19. 01 43 50 Air Barrier Systems
 - 20. 01 45 16 Field Quality Control Procedures
 - 21. 01 45 29 Testing Laboratory Services
 - 22. 01 50 00 Temporary Facilities and Controls
 - 23. 01 58 13 Temporary Project Signage
 - 24. 01 60 00 Product Requirements
 - 25. 01 71 23 Field Engineering
 - 26. 01 73 29 Cutting and Patching
 - 27. 01 74 13 Progress Cleaning
 - 28. 01 74 19 Construction Waste Management and Disposal
 - 29. 01 76 00 Protecting Installed Construction
 - 30. 01 77 00 Closeout Procedures
 - 31. 01 78 13 Completion and Correction List
 - 32. 01 78 23 Operation and Maintenance Data
 - 33. 01 78 36 Warranties
 - 34. 01 78 39 As-Built Drawings
 - 35. 01 78 43 Spare Parts and Extra Materials
 - 36. 01 79 00 Demonstration and Training
 - 37. 01 81 13 Sustainable Design Requirements – LEED v4.1
 - 38. 01 91 00 Commissioning
 - 39. 01 95 00 Measurement and Verification
- D. The A/E will be responsible for writing additional Division 01 specifications as needed.

DIVISION 02 – Existing Conditions

- A. The City may provide any/all of the specifications listed below to the A/E for inclusion in the project specifications. The A/E and the City shall refine this list as necessary based on the project needs. Editing of the specifications in this list shall be the responsibility of the City.
 - 1. 02 41 16 Structural Demolition
- B. The A/E is responsible for writing any specifications related to this Division of Work
- C. The A/E shall use any existing information (site survey, soil information, hazardous material reports, etc.) generated and provided by the City during the design phase as attachments or references to the specifications.

DIVISION 03 – Concrete

- A. The City currently does not have any specifications for this Division of Work.
- B. The A/E shall be responsible for writing all performance specifications for each type/need of concrete being used during the project as necessary. This shall include the most current references to recognized industry standards, testing requirements, etc.
- C. The City is requiring the A/E to incorporate the following City standards into the A/E Division 03 specifications and design standards for:
 - 1. 03 20 00 Concrete Reinforcing
 - a. All rebar shall be plain steel rebar unless otherwise required or specified by code or construction detail.
 - b. Epoxy coated rebar shall only be used in exterior locations where open or cut concrete joints could potentially expose the rebar to corrosion.
- D. The City is requiring the A/E to incorporate the following standards into the A/E Division 03 specifications and design standards as follows:
 - 1. Structural concrete design and specifications must follow the recommendations of the American Concrete Institute (ACI) contained in ACI 301-10 Specifications for Structural Concrete, Current Edition.
 - 2. Cold weather concreting specifications must follow the recommendations of the American Concrete Institute (ACI) contained in ACI 306R-10 Guide to Cold Weather Concreting, Current Edition.
 - 3. Architectural precast concrete design and specifications must follow the recommendations of the Precast Concrete Institute (PCI) contained in PCI publication, Architectural Precast Concrete, Current Edition.

DIVISION 04 – Masonry

- A. The City currently does not have any specifications for this Division of Work.
- B. The A/E is responsible for writing any specifications related to this Division of Work.
- C. The City is requiring the A/E to incorporate the following standards into the A/E Division 04 specifications and design standards as follows:
 - 1. Concrete masonry design must follow the recommendations of the National Concrete Masonry Association contained in the publication, TEK Manual for Concrete Masonry Design and Construction.
 - 2. Brick masonry design must follow the recommendations of the Brick Institute of America contained in the publication, Technical Notes on Brick Construction.
 - 3. Exterior limestone design must follow the guidelines of the handbook published by the Indiana Limestone Institute of America.
 - 4. Restoration or Preservation of historic masonry must follow the Secretary of the Interior's Standards for the Treatment of Historic Properties and National Park Service Preservation Brief 2: Repointing Mortar Joints in Historic Masonry Buildings.

DIVISION 05 – Metals

- A. The City currently does not have any specifications or design standards for this Division of Work.
- B. The A/E is responsible for writing any specifications related to this Division of Work
- C. The A/E shall review all materials and methods related to this Division of Work with City Staff throughout the design process.

DIVISION 06 – Woods, Plastics, and Composites

- A. The City currently does not have any specifications or design standards for this Division of Work.
- B. The A/E is responsible for writing any specifications related to this Division of Work
- C. The A/E shall review all materials and methods related to this Division of Work with City Staff throughout the design process.
- D. Restoration or Preservation of historic wood elements must follow the Secretary of the Interior's standards for the Treatment of Historic Properties.

DIVISION 07 – Thermal and Moisture Protection

- A. The City currently does not have any specifications for this Division of Work.
- B. The A/E is responsible for writing any specifications related to this Division of Work.
- C. The City is requiring the A/E incorporate the following standards into the A/E Division 07 specifications and design standards as follows:
 - 1. General calculation of envelope assemblies: Isothermal-Planes Method per ASHRAE simulation (example: THERM).
 - 2. Thermal Performance Goals

	Maximum overall U-Value	Minimum overall R-value	Maximum overall SHGC	Notes
Roof	0.02	30	0.01	
Wall SE-SW	0.077	13	0.045	
Wall SW-NW	0.077	13	0.035	
Wall NW-NE	0.077	13	NA	
Wall NE-SE	0.077	13	0.035	
Wall Basement	0.05	20	NA	simulated
Floor Basement	0.05	20	NA	simulated

- 3. Moisture Control: A/E design of the above-grade building enclosure must be demonstrated early in the Design Development Phase.
 - a. ASHRAE 160, Criteria for Moisture Control Design Analysis in Buildings is an acceptable basis of design.
 - b. Demonstration of the transient hydrothermal behavior of the various multi-layer building components for all critical building enclosure systems must be confirmed through modeling.
 - c. Construction documents must clearly depict all drainage and air passages.
 - d. Detail in three dimensions where practical, indicating critical corner terminations, interface of all differing systems, proper sealant methodologies, etc.
- 4. Below Grade Systems: A/E design of the below-grade enclosure (when applicable) must be demonstrated early in the Design Development Phase.
 - a. Ground Water Control: If necessary, drainage mats and soil filters should be considered to relieve hydrostatic pressure on substructure walls and allow water drainage to the level of existing or new drains. Slope pipes per the specified Board of Public Works Standard Specification requirements. Subsurface drainage should discharge into the storm drain by gravity whenever possible. Cleanouts must be provided at grade to facilitate maintaining the system.
 - b. Waterproofing: Where below grade waterproofing is required the design shall follow the recommendations of the National Roofing Contractors Association (NRCA) Waterproofing Manual. Below-grade waterproofing must be applied to the positive pressure side and must be covered by a protection mat to shield the waterproofing membrane from harmful effects of construction activities, ultraviolet radiation, or aggressive vegetation.
 - c. Water Stops: Water stops must be used at construction joints in below-grade walls, footings and other elements where a waterproof system is required.
 - d. Under slab Insulation: Designs shall include insulation under concrete slabs on grade, where slabs are heated, or where they support refrigerated structures.
- 5. Wall Systems; A/E shall begin addressing wall enclosure system details as necessary early in the Design Development phase.
 - a. Connections and fasteners exposed to weather: No design shall include products constructed of carbon steel in exterior construction, including but not limited to exterior walls, soffits, and roofs, except where protected by appropriate galvanic zinc coating or other equivalent protection approved by the City.
 - b. Do not use vinyl wall coverings as the interior finish of exterior walls. On thermal mass storage walls where water may penetrate the wall, avoid interior finishes made from highly processed organic materials that may promote mold growth.

- c. **Air/Moisture Barrier System:** An air/moisture barrier is required in all new construction and should be employed wherever possible during remediation of existing exterior envelopes. The air barrier system is:
 - i. A continuous plane of air tightness, herein called the air barrier system, must be installed as part of the building enclosure (both above and below grade) to effectively separate all conditioned air from outdoor and polluted spaces.
 - ii. Continuous in three-dimensions from roof-to-wall-to-foundation.
 - iii. Consists of materials and components that are either individually or collectively sufficient in stiffness and rigidity to resist air pressure differentials across the exterior wall assembly without permanent deformation or failure.
 - iv. Durable and structurally rigid to withstand the construction process.
- d. The interior and exterior air pressures across an air barrier system that need to be examined include, but are not limited to, pressures caused by wind, stack effect, and mechanical systems. Air barriers may be located at different locations within a wall system, and the placement of the air barrier needs to be indicated by the designer on the drawings. The designer must carefully consider placement of the air barrier when the air barrier material(s) will act both as an air barrier and as a vapor retarder to determine if drying of the system will be inhibited by the location of this material within the assembly. Portions of the air barrier may require regular maintenance and an allowance should be made within the design to accommodate this maintenance.
- e. The air barrier system must be shown on the drawings as continuous through all section drawings of the enclosure. The air barrier materials and components of each assembly must be clearly identified and labeled as "Air barrier" on construction documents, and detailed at all penetrations, joints, and transitions. The pressure boundary of the air barrier system(s) and the zone(s) to be tested must also be shown on the drawings.
- f. The air barrier material of each assembly must be joined and sealed to the air barrier material of adjacent assemblies with sufficient flexibility to allow for the relative differential movement and with sufficient strength to resist expected peak air pressure differences.
- g. Penetrations of the air barrier system must be sealed to the air barrier system in an airtight manner. These penetrations include, but are not limited to: lighting fixtures, wiring, conduit, gas lines, cable services, windows, doors, ducts, fire protection standpipe connections, and plumbing pipes.
- h. The air barrier system (and all materials and components comprising it) must last the anticipated service life of the enclosure or allow for easy maintenance, repair, and/or replacement.
- i. Where required in the IBC, elevator hoist ways shall be provided with a means for venting smoke to the outside air in case of fire. Vents shall be permitted to open automatically upon detection of smoke in the elevator lobbies or hoist way, upon power failure, or upon activation of a manual override control.
- j. Parking garages (attached to or under buildings), other structures connected to the building, including those connected via tunnels, walkways, service conduits, etc., and any storage with contents that can negatively affect indoor air quality must be separated from all other conditioned spaces by an air barrier system. Access to such spaces must be provided by doors in air-tight vestibules or airtight hatches at building access points.
- k. Boiler rooms not using sealed combustion equipment must be separated from the rest of the building space by an air barrier system and provided with make-up air for combustion.
- l. Additional equipment and other items required for testing the building's air-tightness are to be included in the design and construction documents for installation by the contractor as specified. This may include: indoor-to-outdoor pressure taps at various locations across the air barrier system, air flow and pressure measuring stations in air conveyance and handling systems, and tight-sealing dampers on all ducts carrying air across the air barrier.
- m. **Air/Moisture Barrier Testing:** The specifications shall include provisions for air and moisture testing.
- n. Bathrooms, showers, and custodial closets shall be constructed with masonry.
6. **Roof Systems:** A/E shall begin addressing roof enclosure system details as necessary early in the Design Development phase.
 - a. Roofing design must follow the recommendations of the National Roofing Contractors Association as contained in NRCA publication, NRCA Roofing and Waterproofing Manual. The design of metal flashing, trim, and roofing must follow the recommendations of the Sheet Metal and Air Conditioning Contractors' National Association publication-Architectural Sheet Metal Manual. In

- addition, all roof assemblies and rooftop structures must meet the requirements of the International Building Code (IBC).
- i. Whenever possible the City prefers to upgrade to roofing materials and details that will achieve the City standard of a 30 year manufacturer warranty regardless of roofing system type (asphalt, EPDM, etc.).
 - ii. Whenever possible the City prefers to have a minimum roof insulation value of R-50. Where rigid insulation is used layers shall be staggered to reduce thermal breaks.
 - b. Access to the Roof: Provide a permanent interior stair to permit access to roof-mounted equipment. In addition provide permanent access to all roof levels to facilitate reoccurring inspections and maintenance.
 - c. Edge Protection: Flat roofs designed for access must include a parapet or perimeter railing at least 42 inches in height. Where parapets and railings are not feasible, personal fall protection anchorage points must be provided. Equipment should be located away from roof edges and oriented with access panel's inboard of the roof edge.
 - d. Roof Mounted Equipment: Must be kept to a minimum and must be housed in penthouses or screened by walls. Penthouses and screen walls should be integrated into the building design and constructed of materials used elsewhere in the building exterior. Some roof-mounted equipment, such as antennae, lightning rods, flagpoles, etc., do not need to be screened, but these elements must be integrated into the building design. Roof-mounted equipment should be elevated as recommended in the NRCA Roofing and Waterproofing Manual and set back from the roof edge to minimize visibility. Critical roof-mounted equipment should be installed in such a way to permit roof system replacement or maintenance without disruption of equipment performance.
 - e. When installing roof top photovoltaic systems, consult with City Engineering, local building, and fire code officials for additional access and safety requirements.
 - f. Provide walkways on the roof along routes to/from and around equipment for maintenance. No building element may be supported by the roofing system except walkways.
 - g. Penetrations through the roof to support equipment are extremely vulnerable to leaks. Flashing details must be studied for appropriate continuation of the waterproof barrier. Do not use pitch pockets as part of the roof design.
 - h. Exterior Soffits: Design exterior soffits to resist displacement and rupture by wind uplift. Design soffits for access to void space where operating equipment is located or maintenance must be performed. Soffits can be considered totally exposed to weather and should therefore be designed to be moisture resistant. Provide expansion and contraction control joints at the edges and within the soffit. Spacing and configuration of control joints should be in accordance with the recommendations of the manufacturer of the soffit material. Operating equipment or distribution systems that may be affected by weather should not be located inside soffits. Where it is necessary to insulate the floors over soffits, the insulation should be attached to the underside of the floor construction so that the soffit void may be ventilated to prevent condensation.
 - i. Rooftop Gardens and Landscaped Roof: The A/E shall explore the option of an "extensive" – sedum in tray style - green roof. If a green roof is pursued a fully adhered ballasted perimeter buffer shall be included. If the green roof option is pursued the EPDM roof may be black. Vegetated roof, rooftop gardens, and landscaped roofs must also be installed and maintained in accordance with the requirements in the ICC, International Fire Code (IFC).
7. Fire Performance and Smoke Development: Interior wall and ceiling finish materials shall comply with the applicable requirements in the International Building Code (IBC) for fire performance and smoke development (i.e., flame spread index and smoke developed index). This shall apply to all materials applied on or over the building interior finish for decorative, acoustical or other purposes.

DIVISION 08 – Openings

- A. The City currently does not have any specifications for this Division of Work.
- B. The A/E is responsible for writing any specifications related to this Division of Work.
- C. The City is requiring the A/E incorporate the following standards into the A/E Division 08 specifications and design standards as follows:
 1. ADA Compliant Door Actuators; whenever possible the A/E shall specify full-length, 36 inch high-low actuators as manufactured by BEA, Inc., model number LPR36.

- a. Finishes shall be consistent with other related project finishes.
 - b. Mounting locations shall be easily accessible and not within the outward swing radius of any door.
- D. The A/E shall provide in the construction drawings all of the following on the same sheet whenever possible:
 1. Door and window schematics clearly labeled and identified with a non-duplicated reference number keyed back to the door and window schedule. Schematics shall show all types and/or annotate modifications to types as needed.
 2. Door and window schedules indicating the identification number, rough opening, type, hardware sets by component, finishes, associated details, and any special requirements.
 3. A complete hardware schedule indicating the primary preferred hardware type. Allowable alternates shall be listed in the door hardware specifications. Schedule shall list all components (kick plates, hinges, closures, locksets (including electronic), etc.)
- E. Exterior Doors:
 1. Vestibules are desired to control air infiltration. All door assemblies installed in the means of egress must meet the requirements of the relevant building code.
 2. Entrance doors may be aluminum framed glass doors of heavy duty construction.
 - a. Aluminum frames and glazing shall be used at all public entrances
 - b. Aluminum frames must have thermal breaks.
 3. Hollow Metal doors and frames must meet the requirements of SDI Grade III with a G-90 galvanic zinc coating. HM entrance doors and frames will be used at service entrances, mechanical rooms and other related back of house locations.
- F. Interior Doors: Interior door types may be hollow metal, aluminum, wood or other metal that is complimentary to its intended use and occupancy. Types, finishes, and hardware shall be approved by City staff during the design process.
- G. Exterior Windows:
 1. Aluminum windows must meet the requirements of ANSI/AAMA Standard 101-85.
 - a. The City prefers Kawneer 451 UT, AA 250, AA 425 (Glazing U=0.19; SHGC=0.26; VT=0.6) or equal.
 - b. Only optimal performance classes may be used.
 - c. Aluminum frames must have thermal breaks.
 2. Metal windows other than aluminum must meet the requirements and standards of the following:
 - a. National Association of Architectural Metal Manufacturers
 - b. Steel Window Institute
 - c. Restoration or Preservation of historic steel windows must follow the Secretary of the Interior's Standards for the Treatment of Historic Properties and National Park Service Preservation Brief 13: The Repair and Thermal Upgrading of Historic Steel Windows.
 3. Window mullions, where applicable, should be located on the floor-planning grid to permit the abutment of interior partitions.
 4. Restoration or Preservation of historic wooden windows must follow the Secretary of the Interior's Standards for the Treatment of Historic Properties and National Park Service Preservation Brief 9: The Repair of Historic Wooden Windows.
- H. Interior Windows:
 1. Interior windows may be used when programming space dictates for space separation such as observation, borrowing light, etc.
 2. Types may be hollow metal, aluminum, wood or other metal that is complimentary to its intended use and occupancy. Types, finishes, and hardware shall be approved by City staff during the design process.
- I. Skylights and Sloped Glazing: Skylight design (when used) must follow the guidelines of AAMA Standard 1600. For the design of sloped glazing, two AAMA publications are available: Glass Design for Sloped Glazing and Structural Design Guidelines for Aluminum Framed Skylights.
 1. Skylights and sloped glazing should use low emissivity glass. Placement should be calculated to prevent glare or overheating in the building interior. Condensation gutters and a path for the condensation away from the framing shall be included in the design details of the skylight system.
 2. Consideration must be given to cleaning of all sloped glazing and skylights, including access and equipment required for both exterior and interior faces.
 3. Skylights must be guarded for fall protection or meet OSHA structural requirements.
- J. Window Cleaning: The facility must have provisions for cleaning the interior and exterior surfaces of all windows, skylights, and other glazed openings. The A/E shall demonstrate that cleaning and maintenance of

interior glazing surfaces can be achieved without extraordinary means and methods. Information on window cleaning shall be included with the architect design narratives for each phase.

K. Overhead Doors

1. 2", insulated, heavy duty, sectional steel door similar to Overhead Door Thermacore series 592.
2. R-17.5 minimum (U-value of .057).
3. Max air infiltration at 25 mph of 0.08 cfm/ft².
4. Sound Transmission Class 26
5. Glazing in doors to be insulated glass or polycarbonate. Glazing properties similar to other glazing for project.
6. Torsion spring operators, 10,000 cycle springs.
7. Roll-up doors can be considered in specific applications.

DIVISION 09 – Finishes

- A. The City may provide any/all of the specifications listed below to the A/E for inclusion in the project specifications. The A/E and the City shall refine this list as necessary based on the project needs. Editing of the specifications in this list shall be the responsibility of the City.
 1. 09 64 00 Engineered Flooring
 2. 09 68 13 Carpet Tile
 3. 09 83 16 Acoustical Plaster Ceilings
 4. 09 90 00 Painting and Coatings
 5. 09 91 23 Interior Paint
- B. The A/E is responsible for writing any specifications related to this Division of Work.
- C. The A/E must design, and review with the City, all specifications for building products throughout the design and construction phases to confirm the products are meeting the City's expectations for interior construction.
- D. The A/E shall address performance levels of typical floor, wall, and ceiling finishes, focusing on each product's durability, maintenance, service life, and environmental qualities. Metrics and attributes vary by finish based on performance need.
 - a. Finishes must meet requirements of the most current IBC. Other codes (Example: NFPA Fire Safety Codes) and application specific performance attributes (Examples: Severe traffic area; Raised access flooring) need to be taken into account.
 - b. Durability describes composition/content, thickness, hardness, strength, wear resistance, load limit, and water absorption.
 - c. Maintenance addresses wear layer/sealer, barrier/backing, "clean-ability", stain resistance, microbial resistance, and mold/mildew resistance.
 - d. Service life is described in terms of the length of warranty available.
 - e. Environmental addresses recycled content, renewable resources, local materials, and VOC emissions.
- E. The City is requiring the A/E incorporate the following standards into the A/E Division 09 specifications and design standards as follows:
 1. The A/E shall provide in the construction drawings all of the following, on the same sheet whenever possible:
 - a. A complete list of all finishes by component (tile, paint, acoustical tile, etc.).
 - b. Finish types within a component shall be uniquely identified (Paint; P1, P2, P3, etc.) with preferred manufacturer, color, texture, and other required identifiers as necessary.
 - i. Complete product specifications and allowable alternates shall be listed in the finishes specifications.
 - c. A complete finish schedule by room indicating the finish type for each wall, ceiling, floor, base, trim, etc.
 - i. The complete finish schedule shall be located in the architectural drawing set only.
 - ii. The use of keyed finish references on the floor plan and/or graphic symbolization will not be permitted.
 - iii. Where a room may have more than 4 walls, 2 ceiling finishes, etc. sufficient columns shall be provided to accommodate the additional surface identifiers as necessary.
 - iv. For more complicated finish schedules interior elevations may be required.

2. Whenever possible the City prefers the following standards, materials, or manufacturers be used in determining finishes. The A/E shall review any deviation from these standards prior to specifying other products and shall be responsible for final coordination of all finishes and colors with the City.
 - a. Flooring:
 - i. Rubber Flooring; Nora, 2x2, colors and locations as selected by project.
 - ii. Carpet; 2x2 carpet tile or plank style, 100% solution dyed nylon, tufted/textured loop, colors and locations as selected by project. Carpet tiles must be glued to floor.
 - iii. Tile; colors and locations as selected by project.
 - iv. Sealed Concrete (with non-slip additives as appropriate) in maintenance, janitorial, mechanical, shop, and storage rooms. Epoxy coatings with a urethane topcoat (with non-slip additives as appropriate) may be used as an alternate where budget or need allows. Painted floors are not permitted.
 - b. Ceramic Wall Tile; colors and locations as selected by project.
 - c. Paint; colors, types, and locations as selected by project.
 - d. Vinyl Wall Coverings; colors and locations as selected by project. Vinyl wall coverings are not permitted on exterior walls.
 - e. Shower stalls:
 - i. Walls shall be Corian or other City approved solid surface material colors as selected by project.
 - ii. Base shall be one piece, molded terrazzo or other solid surface, material colors as selected by project.
 - iii. Walls will be masonry substructure.
 - f. Acoustical Ceiling Tiles; Sag, impact and scratch resistant surface. 20 year systems warranty. Recycled content greater than or equal to 50%, and recycled in a closed loop process. Light reflectance no less than 85%. Acoustical qualities as follows: Open Plan NRC $\geq$ 0.95; Open Plan CAC = N/A; Closed Plan NRC $\geq$ 0.70; Closed Plan α $\geq$ 35. Ceiling tiles should be no larger than 2x2.
3. Acoustics, Noise Isolation, and Speech Privacy:
 - a. The standards in this section establish adequate acoustic qualities that can be achieved through standard design practices by the A/E without the use of an Acoustic Design professional. Post-construction commissioning will confirm that the acoustical standards have been met.
 - b. General Criteria for Building Spaces:
 - i. Closed Offices versus Open Plan: For work that does not require acoustic and/or visual privacy, an open plan environment with low or no partitions between workstations is permitted. For work that requires a balance between ongoing, active collaboration, easy workgroup reconfiguration, flexible settings, and minimized unwanted acoustic distraction, an open plan setting with a well-engineered acoustical design is required.
 - a) Key components of such engineered open plan designs are highly absorptive ceilings, suitable height partition panels that both absorb and block sound, suitable levels of background sound (typically provided by electronic sound masking systems), and ready access to acoustically private (closed-office) meeting spaces.
 - b) Closed offices must be provided for workers who routinely require extended periods of concentration, in-office meetings, and/or confidential conversation. Meeting spaces and closed offices that require speech security must be designed in conjunction with a qualified acoustical consultant.
 - ii. Floor and ceiling assemblies separating office spaces must achieve a Noise Isolation Class (NIC) rating of not less than 50 (when furnished) and Field Impact Isolation Class (FIIC) of not less than 50.
 - iii. Where an elevator shaft occurs adjacent to noise-sensitive spaces (NC/RC 35 or lower), the maximum intrusion level of elevator noise must be limited to 5 dB below the maximum NC/RC for the space in all octave bands.
 - iv. The intervening structure (partitions, shaft walls, doors, floor and ceiling assemblies, etc.) must be sufficient to control noise intrusion to no greater than the maximum NC or room criteria (RC) values.
 - v. For construction on suitable slab floors, when properly detailed and constructed, and with all connections caulked airtight with acoustical sealant, the following wall assemblies typically will satisfy the minimum specified NIC requirements, with the spaces furnished typically. Absorptive materials are required in speech-sensitive spaces to control reverberation and echoes. These

wall examples are not the only constructions that will satisfy the performance criteria; they are intended solely to provide guidance on projects:

- a) NIC 53 (teleconference room): Double stud wall, two layers of gypsum board on each side, batt insulation in the stud cavities. Full height (slab to slab).
 - b) NIC 48 (meeting rooms, training facilities): Staggered stud wall, two layers of gypsum board on each side, batt insulation in the stud cavity. Full height (slab to slab).
 - c) NIC 45 (private offices, confidential speech privacy): Single stud wall, two layers of gypsum board each side, batt insulation in the stud cavity. Full height (slab to slab) or 6 inches above a hung gypsum board ceiling.
 - d) NIC 40 (private offices, normal speech privacy): Single stud wall, two layers of gypsum board one side, one layer of gypsum board the other side, batt insulation in stud cavity. Slab to slab (preferred); minimum 6 inches above acoustical tile ceiling (minimum CAC 44).
 - e) NIC 35 (private offices, normal speech privacy, sound masking): Single stud wall, single layer gypsum board each side, batt insulation in stud cavity. Minimum 6 inches above acoustical tile ceiling (minimum CAC 44).
 - f) NIC 31 (private offices, normal speech privacy, low voice level, miscellaneous other spaces): Single stud wall, single layer of gypsum board each side, batt insulation in the stud cavity. Terminates at underside of acoustical tile ceiling (minimum CAC 35).
- vi. See Divisions 22, 23, and 26 for additional noise isolation requirements of MEP related equipment and piping.

DIVISION 10 – Specialties

- A. The City currently does not have any specifications for this Division of Work.
- B. The A/E is responsible for writing any specifications related to this Division of Work.
- C. The A/E shall work with City Staff for any specialty equipment that may be needed for the project.
 1. Advise on the requirements for comfort changing stations in public restrooms.
 2. Advise on the requirements for lactation rooms.
- D. The City is requiring the A/E incorporate the following standards into the A/E Division 10 specifications and design standards as follows:
 1. Signage:
 - a. General Signage:
 - i. The A/E shall be responsible for designing a clear and coordinated system of interior and exterior signage and way-finding that will allow users to locate their destination as quickly and directly as possible. A standardized system of signage, with interchangeable components, must be provided throughout the facility. Signage details and specifications shall be included in the construction documents bid package.
 - ii. A well-designed site shall use as few signs as possible. Signs should make the site way-finding clear to the first-time user by identifying multiple site entrances, parking, and the main building entrance.
 - iii. Any use of the Official City Logo or City Division Logo shall be sized and located as per City Administrative Procedure (APM) 3-18.
 - iv. Follow all ADA guideline specifics for parameters of design, including location, size, color, tactile qualities, and graphic symbols.
 - b. Building Identification Signage: Design building identification signage that complies with City of Madison Ordinances and has been reviewed/approved by the Urban Design Commission (UDC).
 - i. Building Identification Signage shall include, but not be limited to free standing monument signs, signage fastened to the building, badging/division logos fastened to the building, etched into building features (stone, glazing), and graphics visible through windows.
 - ii. Signage font characteristics and wording shall match existing examples where applicable.
 - iii. Provide appropriate plans and details in the construction documents and coordinate additional trade requirements as needed.
 - iv. Monumental Signage shall be designed as needed on a project by project basis. Design shall include all required foundations, electrical, lighting controls, and other elements necessary for the sign to fully function as intended.
 - c. Traffic Signage and Traffic Marking:

- i. Traffic related signage shall comply with City of Madison Ordinances and DOT regulations regarding font, colors, mounting heights, dimensions and other related requirements.
 - ii. Graphics painted on parking lot surfaces shall comply with City of Madison Ordinances and DOT regulations. All striping and symbology shall be high visibility traffic yellow.
 - d. Exterior Way-Finding Signage: Graphics and style of site way-finding signage should be consistent with signage used inside the building.
 - i. Signage placement can be an important detail element of the building design whether prominently displayed and tooled into the exterior building wall materials or as a freestanding component near the entrance to the facility.
 - ii. Customized Exterior Signage shall have full typical details provided with the architectural details in the construction drawings.
 - e. Interior Way-Finding Signage: shall be determined on a project by project basis. Style, materials, font, etc. shall be approved by City staff.
 - i. Customized Interior Signage shall have full typical details provided with the architectural details in the construction drawings.
 - ii. Manufactured Interior Signage; The City preferred interior signage is by InPro; provide full typical details with the architectural details. Provide room name/number tables as needed.
 - f. Specialty Signage:
 - i. MFD stairway signage; Madison Fire Department has standardized signage and way finding in emergency exit stairways. Signage includes but is not limited to luminescent signs on all landings indicating floor and door location, luminescent stair nosing strips, and luminescent hand rail strips. Verify requirements with MFD during design.
2. Visual Display Units: Provide recommendations for visual display units of suitable quality and functionality based on the intended room use and space available for mounted applications. A/E shall specify manufacturer, model, size, and any finish for contractor provided/installed display units.
3. Wall Protection: Coordinate with City Staff on areas of wall and corner protection. Wall and corner protection shall be clearly called out on finish floor plans and shall be identified in the finish materials schedule.
 - a. Corner Protection: The City preferred corner guard is; InPro Aluminum Surface Mount Corner Guards or a stainless steel alternative. Color and/or material selection shall be verified by City staff.
 - b. Wall Protection: The City preferred wall protection is; InPro Rigid Sheet Wall Protection. Color and/or material selection shall be verified by City staff. Space between pieces shall be 1/8" or less and filled with Vinylseal color matched caulk.
 - i. Wall protection shall be used on all soft wall (drywall) areas as needed where high traffic or equipment belts (Police corridors) are common.
 - ii. Wall protection plates shall be used around security door scanning devices.
4. Toilet Compartments and Accessories: Coordinate size of compartments with owner supplied accessories noted below.
 - a. A/E shall be responsible for determining and detailing all lateral bracing of toilet compartment support structures as needed.
 - b. Toilet Room Accessories: The A/E shall verify with City Staff all toilet room accessories including, but not limited to, paper dispensers, soap dispensers, and waste receptacles. Provide plan and interior elevation details indicating correct placement regardless of who is supplying/installing the accessory.
 - i. Standards vary from department to department as to who will provide accessories, install the accessories, and what manufacturer/model will be specified.
 - ii. Baby Changing Station; Public Restrooms only; Koala Kare, KB110-SSRE, provide backer board, indicate backer board in architectural design plans and interior toilet room elevations, do not interfere with ADA accessibility requirements.
 - iii. Child Protection Seat; Public Restrooms only; Koala Kare, KB102, provide backer board, indicate backer board in architectural design plans and interior toilet room elevations, mount in ADA stall but do not interfere with ADA accessibility requirements, provide stall door with part 795 door label.
5. Other Specialties:
 - a. AED Devices; Automated External Defibrillators (AED) shall be Zoll-AED Plus; quantities and locations as required by code; wall mounted; with case, mounting brackets and wall signage.

- b. Fire Extinguishers; shall be type, sized, and located as required by code, hanger or enclosure style to be determined during design process.

DIVISION 11 – Equipment

- A. The City currently does not have any specifications for this Division of Work.
- B. The A/E is responsible for writing any specifications related to this Division of Work.
- C. The A/E shall work with City Staff for any specialty equipment that may be needed for the project.
- D. The City is requiring the A/E to incorporate the following standards into the A/E Division 11 specifications and design standards as follows:
 1. The A/E shall indicate Kitchen and Food Service equipment on the floor plans for design coordination with other trades. Coordinate with the City as to which items will be provided by the contract or by the owner. All required rough-ins shall be part of the contract.
 2. The A/E shall provide all Audio-Visual (AV), Data, Security, and other related equipment on the Technology floor plans for design coordination with other trades.
 - a. Coordinate with the City as to which items will be provided/installed/connected by the contract or by the owner.
 - b. All required rough-ins shall be part of the contract.
 - c. See Divisions 27 and 28 for additional information.
 3. The A/E shall verify all on site custodial equipment needs and provide custodial closets of sufficient size and amenities for storing equipment and supplies. Storage requirements shall include specialty equipment that may be required for cleaning specified finish materials. For example, a “Taski” floor cleaning machine needs storage space for its footprint with power charging capabilities.
 4. The A/E shall be responsible for locating and coordinating other equipment needs on a project by project basis.

DIVISION 12 – Furnishings

- A. The City currently does not have any specifications for this Division of Work.
- B. The A/E is responsible for writing any specifications related to this Division of Work.
- C. The City is requiring the A/E to incorporate the following standards into the A/E Division 12 specifications and design standards as follows:
 1. Furniture Plans and Equipment Layouts:
 - a. The A/E shall provide preliminary furniture plans indicating locations of cubicles, desks, conference room tables, and equipment such as printers, copiers, plotters, etc.
 - b. The preliminary furniture plans shall be provided to all sub consultants to properly locate outlets, data ports, path of egress, exit lighting, and other mechanically related items.
 - i. Sub consultants shall show furniture/cubicle locations on their plan sheets as needed to ensure the sub-contractors are aware of critical placements during rough-in.
 - c. The preliminary furniture plans shall be included in the architectural construction documents for the general contractor’s reference of furnishing locations.
 - d. Preliminary plans shall be used by other consultants hired by the City for accurate furniture layouts, takeoffs, and purchase orders.
 2. The A/E shall provide furnishing schedules as appropriate in the construction drawings. Furnishings may be combined with other schedules (window treatments in the window schedule) where appropriate.
 3. Art: Requirements shall be determined with City Staff during the Pre-design phase and incorporated into the plan set as the design progresses.
 4. Window Treatments: Requirements shall be determined with City Staff during the Pre-design phase and incorporated into the plan set as the design progresses.
 5. Casework: Requirements shall be determined with City Staff during the Pre-design phase and incorporated into the plan set as the design progresses.
 6. Task Lighting: Requirements shall be determined with City Staff during the Pre-design phase and incorporated into the plan set as the design progresses.
 - a. Built-in task lighting shall be designed by A/E, shall be LED whenever possible and shall be reviewed by City Staff for approval of location, type, control, and light output.
 - b. Portable task lighting shall be by owner.

- c. Walk-off Mats: Requirements shall be determined with City Staff during the Pre-design phase and incorporated into the plan set as the design progresses.
 - i. Recessed Grate Type mats are preferred on new installations. Mats shall be removable for cleaning and maintaining the pan, metals shall be non-corrosive.
 - ii. Roll type, portable entrance mats shall be used when recessed matting is not practical. Appropriately locate mats of differing materials for cleaning dirt and wiping moisture.
- 7. General Office Furnishings: The A/E shall use the following City standard office furnishings for designing furnishing and equipment layouts as noted above. These standards shall be reviewed with City Staff prior to preparing furniture layouts.
 - a. Office and cubicle workspace configurations shall comply with City standard designs provided in Appendix A.
 - i. Systems Furniture; Allsteel; typical 6x7 workstations; 50" tackable fabric (Tempest, Full Stream) panel, 15" frosted glass stacker. Flint finish, Fossil Trim.
 - a) A/E shall note that workstations are typically 6x7. Other sizes and configurations may be used based on needs of various staff members. A/E and the City shall identify those needs during the Pre-design phase and incorporate them into the design process.
 - ii. Desking; Allsteel metal desk components including sit-to-stand component. Flint finish, Silver Mesh laminate tops.
 - iii. Storage; Allsteel metal storage components (storage cabinets, bookcases, mobile pedestal files, personal lockers, etc.). Flint finish, standard bevel pulls.
 - iv. Desk Chairs; the City has the following standard chair model :
 - a) Herman Miller-Mirra, Frame Graphite, Armpad: Black, Back Finish: Graphite, Seat Material: Graphite AireWeave
 - v. Conference Room, Office Side, and Stacking Chairs; the City has a standard chair model:
 - a) Herman Miller-Caper, Molded plastic or Flexnet Seats (depending on use), Seat Color: Black, Frame: Black, Casters or glides depending on flooring material selections.
 - vi. Conference Room and Training Room Tables
 - a) Herman Miller Everywhere Flip-top
 - b)
 - b. Other Furnishings shall be addressed by the A/E and City Staff on a project by project basis.

DIVISION 13 – Special Construction

- A. The City currently does not have any specifications for this Division of Work.
- B. The A/E is responsible for writing any specifications related to this Division of Work.

DIVISION 14 – Conveying Equipment

- A. The City currently does not have any specifications for this Division of Work.
- B. The A/E is responsible for writing any specifications related to this Division of Work.

DIVISION 21 – Fire Suppression

- A. The City currently does not have any specifications for this Division of Work.
- B. The A/E is responsible for writing any specifications related to this Division of Work.
- C. The City is requiring the A/E to incorporate the following standards into the A/E Division 21 specifications and design standards as follows:
 - 1. This division of design guidelines shall specifically apply when "Exhibit A – A/E Scope of Work" requires the A/E to have a Fire Protection Engineer (FPE) on the Design Team.
 - a. In the event Exhibit A does not require an FPE, the A/E shall provide sufficient Fire Protection plans to clearly indicate special requirements of the sprinkler system. Requirements may include, but would not be limited to, routing along architectural features, through specific penetration points, or around mechanical features such as roof vents.
 - 2. The FPE must be a full participant of the A/E team for each phase of the project from concept through design, construction, and occupancy.

3. Fire Suppression design shall be in full compliance with the latest edition of the IBC and other applicable codes. Any variance for any reason must be reviewed with the City.
4. The A/E and Fire Protection Engineer must perform the following minimum requirements and review with the Madison Fire Department Fire Protection Engineer at each phase of design and any revisions during construction:
 - a. Analysis of: Building construction, occupancy classification, means of egress, fire alarm system, water-based fire extinguishing system(s), non-water-based fire extinguishing system(s), smoke control system(s).
 - b. Calculations for: egress, water supply, smoke control (fire dynamics) and timed egress, audibility for fire alarm system.
 - c. Design of all fire protection and life safety systems, including but not limited to, fire alarm system, water-based fire extinguishing system(s), smoke control systems and stair pressurization systems.

DIVISION 22 – Plumbing

- A. The City currently does not have any specifications for this Division of Work.
- B. The A/E is responsible for writing any specifications related to this Division of Work.
- C. The City is requiring the A/E to incorporate the following standards into the A/E Division 22 specifications and design standards as follows:
 1. Plumbing design shall be in full compliance with the latest edition of the IBC and other applicable codes. Any variance for any reason must be reviewed with the City.
 2. Specify plumbing fixtures that comply with the International Plumbing Code and local building codes. Water conservation technologies must be applied to the extent that the technologies are life-cycle cost-effective.
 3. Coordinate locations of plumbing equipment, piping, etc., in each design phase, using REVIT, with other disciplines. Report all conflicts and potential corrective actions to the A/E design team.
 - a. A/E is responsible for resolving all conflicts of architectural, structural, mechanical, electrical, plumbing, fire protection, and technology.
 - b. Any exterior plumbing must be PEX.
 - c. All fixtures are to have their own shutoff valves that are accessible in the ceiling or wall besides the finished area shutoff valves.
 4. Where this Division of Work has floor mounted equipment a concrete housekeeping pad shall be provided for each piece of equipment.
 - a. Concrete pad shall be a minimum of 4" in height and 4" wider than the full size of the equipment footprint including connections, etc.
 - b. Concrete pad shall be level and edges shall be rounded to allow drainage off the slab.
 5. The City of Madison, **Library Maintenance** has standardized the following fixtures, equipment, and trim. Only the manufacturer and model information provided below shall be specified for this project.
 - a. Fixture Types: Zurn, Chicago Faucet. Faucets must be dual-handled.
 - i. Water Closet, flushometer valve type:
 - a) Water closets must be Sloan Royal, either dual-flush or low-flow type and manually controlled.
 - b) Single flush, maximum flush volume when determined in accordance with ASME A112.19.2– (1.28 gal).
 - c) Dual-flush, effective flush volume determined in accordance with ASME A112.19.14 and USEPA WaterSense Tank-Type High Efficiency Toilet Specification – (1.28 gal).
 - ii. Water Closet, Tank-Type, High Efficiency Toilets (HET); Tank-type water closets must comply with the performance criteria of the U.S. EPA WaterSense Tank-Type High-Efficiency Toilet Specification.
 - iii. High Efficiency Urinals (HEU); Urinals must be low-flow, flush-type fixtures. Maximum flush volume when determined in accordance with ASME A112.19.2 – 0.5 L (0.125 gal).
 - iv. Private Lavatory Faucets:
 - a) Model Number: T&S EC-3103-VF12
 - b) Sensor control, three hole

- c) Meter or on/off sensor control will be considered based on space type and use of fixture; Maximum water use — 1.0 L O (.25 gal) per metering cycle when tested in accordance with ASME A112.18.1/CSA B125.1.; Maximum flow rate: 0.5 gpm.
 - v. Public Lavatory Faucets:
 - a) Use metered or on/off sensor type faucets for lavatories.
 - b) If using sensors, preference is hard wired.
 - c) If using batteries, consider solar charged batteries for sensors.
 - d) Depending on the building and the lavatory use, meter or sensor type may be more appropriate.
 - e) Maximum water use — 1.0 L O (.25 gal) per metering cycle when tested in accordance with ASME A112.18.1/CSA B125.1.
 - f) Maximum flow rate: 0.5 gpm
 - vi. Other sinks: Manual, metered or on/off sensor type faucets depending on application.
 - vii. Water Cooler: Elkay Electric Water Coolers; Verify ADA accessibility and bottle filler capability for each location required.
 - viii. Warm Air Dryer: Dyson Airblade V Hand Dryer.
 - a) Standard-speed, warm-air hand dryer.
 - b) Surface mounted.
 - c) Electronic-sensor activated with timed power cut-off switch. Operation Time: 12 seconds.
 - d) Stainless steel, brushed finish.
 - e) Electrical Requirements: 110-120 V, 13 A, 425 Watts to 530 Watts.
 - ix. Water Softener: Capital Water Softener, Windsor Series or Hellenbrand High Efficiency Series.
 - x. Solar Hot Water Heating: Based on the anticipated building use and hot water loads, perform a life cycle cost analysis for the solar hot water system including first cost, utility cost savings, maintenance, replacement and utility cost escalation. If the analysis shows that the system is cost effective it shall be included in the project. Not less than 30 percent of the hot water demand must be met through the installation and use of solar hot water heaters. Both drainback and pressurized glycol systems should be considered.
 - xi. Emergency Plumbing Fixtures; Emergency eye wash and shower fixtures shall be as manufactured by Bradley. Combination units are acceptable when hazard dictates. Quantities and location to be determined during the design process with input from City Staff.
 - xii. Where plumbing fixtures are made of vitreous china only Kohler products shall be specified.
 - xiii. Provide specific models, options, and colors in plumbing schedules.
6. Plumbing Noise and Insulation: Ambient noise from plumbing equipment shall not exceed the noise criteria (NC) values described in Division 09 above.
- a. All wastewater and drain piping above slab on grade must be specified as cast iron.
 - b. All water, wastewater, and drain piping must be vibration-isolated from the structure, finishes, and other piping.
 - c. Install R-11 batt insulation in all wall spaces where such piping is located and install the piping at least 1 inch away from the gypsum wall board.
 - d. Pipe Insulation: All supply, wastewater, and drain piping shall be insulated for additional noise reduction.
 - i. Domestic water piping (both hot and cold) shall be insulated with closed cell insulation and jacketed where exposed or otherwise visible from occupied spaces.
7. Pipe Identification: All piping shall be identified as to content type (waste, vent, domestic hot, soft cold, etc.) and flow direction.
- a. The following minimum marking requirements shall be followed for all pipe types:
 - i. Minimum marking requirements is once per room with no ceiling for each pipe type preferably centered on the room.
 - ii. Where a room has exposed piping, with a ceiling, pipe identification shall be above and below the ceiling.
 - iii. Large rooms shall be marked as often as possible with distances not to exceed 50 feet apart.
 - iv. Where pipe alignments bend around large equipment and ducts pipes shall be marked on both sides.
 - v. Pipes entering or leaving equipment shall be marked within 5 feet of the equipment being served by the pipe.

8. Valve Identification Tags and Lists: All plumbing valves shall be brass tags fastened to the valve by chain or metal clip. Zip-ties are not an acceptable means of fastening tags.
 - a. All plumbing valve tags shall carry a prefix of “P” or “PLBG” followed by consecutive numbering. Valve tags DO NOT need to have pipe type and size on the tag.
 - b. A complete plumbing valve list shall be provided in hard copy and wall mounted in plexi-glass frames in all mechanical rooms. An electronic copy of the valve list in PDF format shall also be provided to the owner. Valve lists shall provide all of the following information for each valve.
 - i. Valve Number (example: P-101 or PLBG-101)
 - ii. Valve size and type (example: 3/4 Ball)
 - iii. Type of piping (example: CW)
 - iv. Room number or name; coordinate room locations with final architectural plan sets.
 - v. Remarks; indicate if valve is above ceiling in chase space, etc.
 - c. When the project is a remodeling of existing work:
 - i. The previous list shall be updated for valves taken out of service.
 - ii. New valves shall not reuse old numbers. Coordinate with the agency maintenance supervisor for numbering. Consider using a new numbering sequence (example; all new valves installed would be numbered in the 200’s).
9. Trap seal primers are not acceptable. Trap primers can be considered if very accessible.

DIVISION 23 – Heating, Ventilating, and Air Conditioning (HVAC)

- A. The City may provide any/all of the specifications listed below to the A/E for inclusion in the project specifications. The A/E and the City shall refine this list as necessary based on the project needs. Editing of the specifications in this list shall be the responsibility of the City.
 1. 23 83 00 Radiant Floor Heating System
- B. The A/E is responsible for writing any specifications related to this Division of Work.
- C. The City is requiring the A/E to incorporate the following standards into the A/E Division 23 specifications and design standards as follows:
 1. HVAC design shall be in full compliance with the latest edition of the IBC and other applicable codes. Any variance for any reason must be reviewed with the City.
 2. Specify HVAC Equipment that complies with the International Mechanical and Energy Conservation Codes and local building codes. Energy conservation technologies must be applied to the extent that the technologies are life-cycle cost-effective.
 3. Design a high level of building performance in order to achieve indoor environments that are most conducive to comfort, health, and productivity, to increase the longevity of the property, and to deliver these in an optimally energy efficient and cost effective manner.
 4. Select HVAC technology types as requested by City and provide alternative suggestions or new technologies when applicable.
 - a. Develop a report analyzing Initial Costs vs. Operating Costs to demonstrate energy efficiency and life cycle costing for each technology type. The City shall evaluate the benefits of incorporating components of varying energy efficiencies in the project to select final technologies to be used.
 - b. Energy Performance: Perform energy simulations to determine best system options and improve design and control strategy. Exceed current ASHRAE guidelines by 30%. Employ most efficient equipment for each technology type (if not contradicting maintainability).
 - c. Energy Simulation Methods:
 - i. Preliminary simulation: Energy Plus, Design Builder, Trane Trace, or eQuest.
 - ii. Final simulation: Same software as preliminary simulation unless approved by City.
 - d. Thermal Comfort shall be based on ASHRAE 55.
 - e. Indoor Air quality: Ventilate to meet OSHA, code and ASHRAE requirements (whichever is higher).
 5. Coordinate locations of HVAC equipment, ductwork, piping, etc., in each design phase, using REVIT, with other disciplines. Report all conflicts and potential corrective actions to the A/E design team.
 - a. A/E is responsible for resolving all conflicts of architectural, structural, mechanical, electrical, plumbing, fire protection, and technology.
 6. Where this Division of Work has floor mounted equipment a concrete housekeeping pad shall be provided for each piece of equipment.

- a. Concrete pad shall be a minimum of 4" in height and 4" wider than the full size of the equipment footprint including connections, etc.
 - b. Concrete pad shall be level and edges shall be rounded to allow drainage off the slab.
7. Unacceptable Design Practices: Obsolete or soon to be phased out technologies (example R22), electric heat.
8. The City of Madison, **Library Maintenance**, has standardized the following Operability and Maintainability requirements for the HVAC system regardless of the technology type selected:
 - a. Operation; Design the HVAC system so that equipment failures and normal maintenance have minimal impact on the tenants.
 - i. Failure of one piece of equipment should not shut down large portions of the building.
 - ii. Install piping and valves so that equipment can be easily isolated for repair and so that different combinations of equipment can be used during replacement and overhaul.
 - iii. Equipment components, spare parts, and related materials should be readily available in the local area.
 - iv. Equipment components, spare parts, and related materials be repairable by craftsman and technicians available in the local area.
 - b. Simple/Understandable to Operate; The sequence of operation for the control systems must be clearly described and comprehensively documented. The HVAC system design should minimize the need for overly complex control systems.
 - c. Accessible for Maintenance; Install equipment so that it can be safely and easily maintained and inspected. Comply with requirements for mechanical room sizes and manufacturer's recommended clearances around installed equipment. Maintenance access doors should swing full open and be accessible from the maintenance side of the equipment being served.
 - d. Robust and Reliable with Extended Life Expectancy; City facilities have a longer life expectancy than most commercial office buildings. Mechanical systems are expected to have extended service lives. They will be modified many times over the life of the building and operated by many different maintenance teams and occupied by many different tenants. Selection of robust, reliable, energy efficient equipment is important. Systems that can be reliably operated at near design conditions over the long term are needed.
9. The City of Madison, **Library Maintenance**, has standardized the following HVAC Components depending on the technology type selected. Only the manufacturer and model information provided below shall be specified for this project when applicable. Any recommended alternates shall be approved by the City prior to incorporating them into the plans and specifications.
 - a. Basis of Design (BOD); at time of contract, subject to design modifications throughout the design process.
 - i. Central Plant:
 - a) Heat and cool with single existing central plant where possible.
 - b) Multiple AHUs may be required by schedules or space constraints, but use central heating/cooling plant.
 - ii. Cooling:
 - a) Small systems DX system (variable speed compressors for modulation, variable speed condenser fan). BOD is Carrier or Daiken/McQuay. Sizing is to include a peak reduction from energy recovery.
 - b) Large systems water-cooled or air-cooled chillers. BOD is Carrier or Daiken/McQuay. Sizing is to include a peak reduction from energy recovery.
 - iii. Cooling/Ventilation:
 - a) For each air handling unit system (AHU), outside air (OA) and exhaust air (EA) is to be provided by a Dedicated Outdoor Air System (DOAS unit) with a total energy recovery wheel or HX.
 - b) Conditioned OA from DOAS unit is to be provided to the AHU.
 - c) Both the DOAS unit and AHU are to have DX or Cooling coils.
 - d) The AHU shall have a heating coil.
 - e) All fans are to be direct drive and nominal speed of 1750 RPM.
 - f) An airside dry bulb economizer is to be included with the AHU.
 - iv. Heating:
 - a) AHU shall have a heating coil.

- b) Heating is to be provided by perimeter radiators and/or in-floor radiant heating.
 - c) The AHU should have a boiler backup heating coil if not a boiler system.
 - v. Shop / Garage Ventilation:
 - a) ERV with hydronic heat preferable
 - b) Direct-fired MAU where ERV is not practical (example: dirty environment)
 - b. Alternatives to the BOD; The BOD system may be combined with a geothermal system when the appropriate site space is available for a quality design. (example: geothermal system as central boiler/chiller, no zone heat pumps).
 - i. When space is critical evaluate VRV system.
 - ii. When sensible cooling load is high, evaluate radiant cooling.
 - c. Controls; Honeywell WEBs Building Automation System Utilize existing system and expand as needed, All equipment shall be controlled by BAS as to the maximum extent possible. Control sequences to include, at a minimum:
 - i. Static pressure reset based on damper position.
 - ii. If the HVAC system is a VRF system, there shall be no occupancy sensors.
 - iii. HVAC Occupancy sensors, in addition to lighting occupancy sensors.
 - iv. Operable window sensors.
 - v. Discharge air temperature reset based on cooling demand.
 - vi. Boiler and Chiller (if applicable) supply temperature reset.
 - vii. CO2-sensors for system ventilation reset and VAV control in critical zones (i.e. conference room).
 - viii. Scheduling
 - ix. Lead/Lag switchover
 - d. Filtration:
 - i. MERV 8 for Air intake
 - ii. MERV 13 for re-circulated air of occupied spaces.
 - iii. MERV 8 for re-circulated air of unoccupied spaces.
 - e. Boilers: Condensing and modulating (down to 46,000 Btu/h), AERCO, Design for 90-140°F and dT of 30°F. Sizing is to include a peak reduction from energy recovery.
 - f. Actuators and Control Valves; Honeywell; Pressure-independent control valves in lieu of balancing valves.
 - g. Fans; Greenheck, Carnes
 - h. Pumps; B&G, Grundfos
 - i. Makeup Air Units; Modine, Greenheck
 - j. Unit Heaters; Modine; Sterling Gas-fired units
 - k. IT Equipment Cooling; cool with transient air from conditioned spaces when possible, recover excess heat when possible.
10. HVAC Mechanical Noise and Insulation: Ambient noise from HVAC equipment shall not exceed the noise criteria (NC) values described in Division 09 above.
- a. All mechanical equipment must be vibration isolated from the building frame.
 - b. Diffusers with an NC rating 5 points less than the noise criterion for the space being served must be used where occupied space occurs adjacent to, above, or below mechanical equipment, electrical equipment, machine rooms, or adjacent to HVAC or elevator shafts.
 - c. Where an equipment room occurs adjacent to noise-sensitive spaces (NC/RC 35 or lower), the maximum intrusion level of noise must be limited to 5 dB below the maximum NC/RC for the space in all octave bands.
 - d. In the walls, ceilings, and floors enclosing noise-sensitive spaces all hydronic piping, fans, motors, and other related HVAC equipment must be vibration-isolated from the structure, finishes, and other piping. Install R-11 batt insulation in all wall spaces where such piping is located and install the piping at least 1 inch away from the gypsum wall board.
 - e. Pipe Insulation: All HVAC piping shall be insulated. Closed cell insulation shall be used. Insulation shall be jacketed where exposed, exterior or otherwise visible from occupied spaces.
11. Pipe and Duct Identification: All piping and ductwork shall be identified as to content type (chiller supply, chiller return, air supply, air return, etc.) and flow direction.
- a. The following minimum marking requirements shall be followed for all pipe and duct types:

- i. Minimum marking requirements is once per room with no ceiling for each pipe type preferably centered on the room.
 - ii. Where a room has exposed piping and ductwork, with a ceiling, identification shall be above and below the ceiling.
 - iii. Large rooms shall be marked as often as possible with distances not to exceed 50 feet apart.
 - iv. Where pipe alignments bend around large equipment and ducts pipes shall be marked on both sides.
 - v. Pipes entering or leaving equipment shall be marked within 5 feet of the equipment being served by the pipe.
- 12. Valve Identification Tags: All HVAC valves shall be brass tags fastened to the valve by chain or metal clip. Zip-ties are not acceptable means of fastening tags.
 - a. All HVAC valve tags shall carry a prefix of “H” or “HVAC” followed by consecutive numbering. Valve tags DO NOT need to have the pipe type and size on the tag.
 - b. A complete HVAC valve list shall be provided in hard copy and wall mounted in plexi-glass frames in all mechanical rooms. An electronic copy of the valve list in PDF format shall also be provided to the owner. Valve lists shall provide all of the following information for each valve.
 - i. Valve Number (example: H-101)
 - ii. Valve size and type (example: 3/4 Ball)
 - iii. Type of piping (example: CW)
 - iv. Room number or name; coordinate room locations with final architectural plan sets.
 - v. Remarks; indicate if valve is above ceiling in chase space, etc.

DIVISION 26 – Electrical

- A. The City may provide any/all of the specifications listed below to the A/E for inclusion in the project specifications. The A/E and the City shall refine this list as necessary based on the project needs. Editing of the specifications in this list shall be the responsibility of the City.
 - 1. 26 31 00 Photovoltaic System Performance Requirements
- B. The A/E is responsible for writing any specifications related to this Division of Work.
- C. The City is requiring the A/E to incorporate the following standards into the A/E Division 26 specifications and design standards as follows:
 - 1. The Electrical design shall be in full compliance with the latest edition of the IBC and other applicable codes. Any variance for any reason must be reviewed with the City.
 - 2. Specify Electrical Equipment that complies with the International Electrical Code and local building codes.
 - 3. The following general electrical engineering standards are intended to be the minimum design guidelines/requirements for this project:
 - a. Minimum Design Services include power distribution, electrical service, circuit design for all load types, lighting design (by Lighting Designer), equipment connection schedules, integration of renewable energy equipment, electric vehicle charging equipment and utility coordination.
 - b. The service entrance location for commercial electrical power must be determined concurrently with the development of conceptual design and space planning documents.
 - i. Standards for equipment furnished by utility companies must be incorporated into the concept design.
 - ii. Locations of transformers, vaults, meters, and other utility items must be coordinated with the architectural design to avoid conflicts with critical architectural features such as main entrances and must accommodate both equipment ventilation and equipment removal.
 - iii. All major electrical equipment must be located 5 feet above the 100-year flood plain.
 - 4. A detailed load study, including connected loads and anticipated maximum demand loads, as well as the estimated size of the largest motor, must be included in the initial contact with the local utility company to prepare its personnel for discussions relative to the required capacity of the new electrical service.
 - 5. When required the A/E shall work with City Staff to determine any emergency power generation requirements. This shall include, but not be limited to, required emergency loads/circuits; generator size, location, type; etc.
 - 6. When required the A/E shall work with City Staff to determine the use of Photovoltaic (PV) power where site and roof features make it feasible and cost effective.

7. When required the A/E shall work with City Staff to determine the use of Electric Vehicle (EV) charging where site features make it feasible and cost effective.
8. Coordinate locations of electrical equipment, ductwork, piping, etc., in each design phase, using REVIT, with other disciplines. Report all conflicts and potential corrective actions to the A/E design team.
 - a. A/E is responsible for resolving all conflicts of architectural, structural, mechanical, electrical, plumbing, fire protection, and technology.
9. Where this Division of Work has floor mounted equipment a concrete housekeeping pad shall be provided for each piece of equipment.
 - a. Concrete pad shall be a minimum of 4" in height and 4" wider than the full size of the equipment footprint including connections, etc.
 - b. Concrete pad shall be level and edges shall be rounded to allow drainage off the slab.
10. The City of Madison, **Library Maintenance**, has standardized the following Electrical Power and Supply Components.
 - a. Electrical Panels; Shall be as manufactured by Square D or Siemens
 - i. Transient voltage surge suppression (TVSS) at main panel.
 - ii. All panels with at least 25% spare capacity for future expansion.
 - iii. Subpanels on each floor (multiple if required).
 - iv. Separate panels for high-usage areas (example: shops).
 - v. Separate panels for electric vehicle chargers.
 - b. Electrical Devices; Shall be as manufactured by Hubble or LeGrand
 - i. Including, but not limited to switches, receptacles, and other electric devices.
 - ii. All devices to be commercial grade.
 - iii. All outlets to be minimal rating of 20A.
 - iv. Any outlets in youth or teen areas must be GCFI and tamper-proof.
 - c. Photovoltaic Collectors:
 - i. Panels; Shall be as manufactured by Canadian Solar, Hanwha Q-Cells, Heliene, REC, or Trina Solar.
 - ii. Inverters; Shall be as manufactured by Solaredge, Fromius, or SMA.
 - iii. Racking shall be as manufactured by:
 - a) Unirac or Ecolibrium Solar when mounted on a support structure or ballasted roof.
 - b) Iron Ridge or Unirac when mounted on piers.
 - c) S5 Clips shall be used when mounting directly to standing seam metal roofs.
 - iv. Conduit associated with the PV System shall be metallic.
 - d. Electric Vehicle Chargers:
 - i. Basis of design is Juice Box. 240 V, 40A
 - ii. Size breakers and wire for 50A (charger will operate > 1hr)
 - iii. Charger and wiring is OFOI. Infrastructure including panel, breakers and conduit is CFCI
11. The City of Madison, **Library Maintenance**, has standardized the following Lighting Design and Component Requirements.
 - a. The A/E and Lighting Designer shall design all lighting including, but not limited to the interaction of daylighting and electric lighting, all interior general ambient, task and accent lighting, exterior lighting, illumination of means of egress, luminaires, emergency lighting, site lighting, artwork lighting, etc.
 - b. The lighting design shall meet code-required lighting and/or IES recommended foot candle (FC) levels.
 - i. The use of fixtures that provide 20% lower W/ft² to meet code minimum design is required.
 - c. Use 120v lighting.
 - d. Switching and Sensors:
 - i. Switching for improved comfort, however no switches in corridors.
 - ii. Dimming wherever possible and Bi-level only if dimming is not possible.
 - iii. No wall-mounted sensors – use ceiling mounted, line-voltage, dual technology. Sensorswtich.
 - iv. Occupancy sensor control in bathrooms, corridors, janitor and storage.
 - v. Vacancy sensor control in offices, conference rooms and break rooms.
 - vi. No occupancy sensor control where code prohibits including IT, Mech and Elec rooms.
 - vii. Daylight dimming in areas near large windows – use sensors integrated with fixture.

- viii. Outdoor lighting control by photocell (will consider central photocell and fixture integrated), motions sensor unless facility requires timed lighting.
- ix. No lighting controller or programmer shall be used.
- e. Lighting Products:
 - i. Lighting products shall be standard available fixtures. Factory customization of “gangable” fixtures is not permitted.
 - ii. Outdoors; LED lighting as manufactured by Cree. Controlled by integrated motion and photosensor. Dark sky compliant.
 - iii. Indoors, General Illumination:
 - a) Fluorescent 4’ lamps as manufactured by Lithonia, Daybrite; T8 with parallel-wired ballast as manufactured by GE UltraStart.
 - b) LED 2x2 Finelite HRP WAV and Finelite HP-4.
 - c) LED spotlights w/Edison-base; 4100 K.
 - d) LED task lights w/ motion sensor as manufactured by Phillips; 4100 K.
 - e) LED down lights w/Edison base as manufactured by Capri for non-proprietary replacement and when not much light is needed; 4100 K.
 - iv. LED EXIT signs as manufactured by Lithonia; 4100 K.
 - v. Emergency lighting; Separate emergency lighting fixture as manufactured by Lithonia.
 - a) Battery backup ballasts and drivers are not acceptable.
 - b) Consider central inverter for new installations as manufactured by Lithonia or Myers.

DIVISION 27 – Communications

- A. The City may provide any/all of the specifications listed below to the A/E for inclusion in the project specifications. The A/E and the City shall refine this list as necessary based on the project needs. Editing of the specifications in this list shall be the responsibility of the City.
 - 1. 27 00 05 Communication Cabling
 - 2. 27 21 33 Wireless Access Points (WAP)
 - 3. 27 32 43 Radio Communication Equipment
 - 4. 27 35 00 Call Management
 - 5. 27 41 23 Audio-Visual Accessories
- B. The A/E is responsible for writing any specifications related to this Division of Work.
- C. The City is requiring the A/E to incorporate the following standards into the A/E Division 27 specifications and design standards as follows:
 - 1. Design and coordinate with City Staff as directed all Telecommunication and Information Technology (IT) elements required for this project. This shall include, but not be limited to, the following:
 - a. Exterior service of cable, fiber and other utility connections.
 - b. Dedicated IT rooms, racks, and equipment.
 - c. All interior data conduit, cabling, data ports including floor outlets if needed.
 - d. Data cabling and connections for any equipment specified in other Divisions of Work.
 - e. All audio/visual equipment including projectors, monitors, mounting devices and related installation materials.
 - f. All items required for wireless connectivity as needed.
 - g. All items for City Channel connectivity as needed.
 - h. All items for security system connectivity as needed.
 - 2. Coordinate with other consultants as needed for complete installation this shall include, but not be limited to, the following:
 - a. The Architect/Structural Engineer for all items where support is required (hangers, backer boards, etc.) for a complete installation.
 - b. MEP Engineers for coordinating controls, electrical and mechanical connection points.
 - c. Specialized Equipment that is described in other Divisions of Work.
 - 3. Coordinate locations of all Technology equipment, cabling trays, conduit, etc., in each design phase, using REVIT, with other disciplines. Report all conflicts and potential corrective actions to the A/E design team.
 - a. A/E is responsible for resolving all conflicts of architectural, structural, mechanical, electrical, plumbing, fire protection, and technology.

DIVISION 28 – Electronic Safety and Security

- A. The City may provide any/all of the specifications listed below to the A/E for inclusion in the project specifications. The A/E and the City shall refine this list as necessary based on the project needs. Editing of the specifications in this list shall be the responsibility of the City.
 1. 28 13 00 Access Control System (Keyscan)
 2. 28 20 00 Electronic Surveillance
- B. The A/E is responsible for writing any specifications related to this Division of Work.
- C. The City is requiring the A/E to incorporate the following standards into the A/E Division 28 specifications and design standards as follows:
 1. The A/E shall work with the City at each phase of design (starting with pre-design) to develop a site/building specific risk assessment. The assessment shall evaluate credible threats, identify vulnerabilities, and assess consequences. This process will primarily be in collaboration with the City's Project Manager, Madison Police Department, and City IT; but will also require agency input.
 - a. Past and current solutions include both:
 - i. Architectural solutions such as "airport style" public bathrooms, open plans without hiding areas, physical barriers, proper staff locations, etc.
 - ii. Technological solutions such as access control, security cameras, glass break alerts, panic alarms, etc.
 2. Design and coordinate with City Staff as directed all locations for each of the following:
 - a. Access Control Systems; the City has standardized on Keyscan door security systems.
 - i. Provide installation plans, details and schedules per specification 28 13 00. Assist with edits as needed in Part 3 – Execution.
 - ii. System hardware shall be installed in dedicated IT rooms with other related equipment.
 - iii. Doors and card reader/keypad locations shall be identified on all floor plans, electrical plans, technology plans, and door schedules as required.
 - iv. Ensure required connectivity cabling does not exceed manufacturer maximums along the path of travel.
 - b. Electronic Surveillance Equipment; coordinate with City Staff (including Madison police, and IT Departments as needed) all requirements for electronic surveillance.
 - i. Provide floor plans, elevations, and other details as needed the locations for cameras and other surveillance equipment.
 - a) When necessary, architectural, electrical and other plans shall also show mounted equipment for clarity during construction.
 - ii. Provide equipment schedules as needed.
 - iii. Ensure required connectivity cabling does not exceed manufacturer maximums along the path of travel.
 - c. Electronic Security Equipment; coordinate with City Staff all requirements for additional electronic security equipment that may be needed for this project including but not limited to electronic security gates, body scanners, baggage scanners, etc.
 - i. Provide floor plans, elevations, and other details as needed the locations for cameras and other surveillance equipment.
 - a) When necessary, architectural, electrical and other plans shall also show mounted equipment for clarity during construction.
 - ii. Provide equipment schedules as needed.
 - iii. Ensure required connectivity cabling does not exceed manufacturer maximums along the path of travel.
 3. Coordinate locations of all Technology equipment, cabling trays, conduit, etc., in each design phase, using REVIT, with other disciplines. Report all conflicts and potential corrective actions to the A/E design team.
 - a. A/E is responsible for resolving all conflicts of architectural, structural, mechanical, electrical, plumbing, fire protection, and technology.

DIVISION 31 – Earthwork

- A. The A/E (including the Civil and Landscape Architect sub-consultants) shall use the *The City of Madison Board of Public Works Standard Specifications* (BPWSS) for most common work results required for this division of work.
 - 1. The City of Madison Board of Public Works Standard Specifications are updated annually and can be found on line at <http://www.cityofmadison.com/business/pw/specs.cfm>.
 - 2. The A/E shall use BPWSS Standard Detail Drawings that may apply to this division of work.
 - a. Details may be downloaded off the website in PDF format.
 - b. Details shall be inserted into A/E drawing sheets and shall include all City title blocks, detail numbers and other related information.
 - c. City standard details shall not be edited.
 - d. Deviations of details shall be approved by the City Project Manager and other City Engineering staff on a case by case basis.
- B. The A/E is responsible for writing any specifications, in CSI format, related to this Division of Work. References to the BPWSS within the CSI format are permissible and shall include the BPWSS Part, Article, and Section number being referenced.

DIVISION 32 – Exterior Improvements

- A. The A/E (including the Civil and Landscape Architect sub-consultants) shall use the *The City of Madison Board of Public Works Standard Specifications* (BPWSS) for most common work results required for this division of work.
 - 1. The City of Madison Board of Public Works Standard Specifications are updated annually and can be found on line at <http://www.cityofmadison.com/business/pw/specs.cfm>.
 - 2. The A/E shall use BPWSS Standard Detail Drawings that may apply to this division of work.
 - a. Details may be downloaded off the website in PDF format.
 - b. Details shall be inserted into A/E drawing sheets and shall include all City title blocks, detail numbers and other related information.
 - c. City standard details shall not be edited.
 - d. Deviations of details shall be approved by the City Project Manager and other City Engineering staff on a case by case basis.
- B. The A/E is responsible for writing any specifications, in CSI format, related to this Division of Work. References to the BPWSS within the CSI format are permissible and shall include the BPWSS Part, Article, and Section number being referenced.
- C. All proposed site design must meet baseline compliance with all applicable federal, state, and local regulation and/or guidance. This includes all elements of work performed under the scopes of the landscape architect, architect, civil engineer, and geotechnical engineer. The applicable regulations must be determined by the A/E and authority having jurisdiction.
- D. The A/E shall provide protection zone(s) on the drawings to define the area surrounding individual trees, groups of trees, shrubs, other vegetation or site features to be protected during construction. This shall include protection zone(s) for plantings outside the property boundaries. All protection zones shall conform to the BPWSS standards and details.
- E. The City is requiring the A/E to incorporate the following standards into the A/E Division 32 specifications and design standards as follows:
 - 1. Civil; the A/E shall prepare all civil plans and details required for the project with input from the City Design Staff and other City agencies as appropriate for the project.
 - 2. Pavements; the City shall specify the appropriate pavement type to be used in various portions of the project depending on the end use. This shall include asphalt paving, concrete paving, and permeable paving.
 - 3. Landscape; the A/E shall prepare all landscaping plans and details required for the project with input from the City Design Staff and other City agencies as appropriate for the project.
 - a. Prepare plans, details, and specifications for landscape design. Landscape shall consist of materials, systems, equipment, and furnishings for land forms, lawns, and plantings. Landscape design shall be based on program requirements, physical site characteristics, design objectives, and environmental determinants.

- b. Detailed plans must be provided for those plants that will be impacted and/or removed from the site. For all new construction projects this includes identifying proposed new tree/plant locations and quantities. Plans and schedules shall follow all applicable ordinances for screening and other parking lot/site related requirements prior to first review. Project shall always exceed the minimum requirements.
4. Storm Water Management; the A/E shall prepare all required storm water management plans, specifications and details. Coordinate types and designs with input from the City Design Staff and other City agencies as appropriate for the project. Coordinate required/compatible plantings for the storm water feature with the landscaping plans and planting schedule.
5. At the end of the Design Development Phase – and the beginning of the Construction Document phase – the A/E shall be prepared to submit the City of Madison Parking Lot / Site Plan review.
 - a. All items required for this submission can be found on line at <https://www.cityofmadison.com/development-services-center/other-residential/parking-lot-site-plan>
 - b. The Parking Lot / Site Plan review is conducted by multiple agencies within the City of Madison for compliance with City ordinances.
 - i. After the initial review the A/E shall be responsible for correcting any plans, details, specifications, etc. per the published staff agency comments and resubmitting for final review.
 - ii. Final review must be approved by all staff agencies prior to the completion of the CD phase.

DIVISION 33 – Utilities

- A. The A/E (including all sub-consultants) shall use the *The City of Madison Board of Public Works Standard Specifications* (BPWSS) for most common work results required for this division of work.
 1. The City of Madison Board of Public Works Standard Specifications are updated annually and can be found on line at <http://www.cityofmadison.com/business/pw/specs.cfm>.
 2. The A/E shall use BPWSS Standard Detail Drawings that may apply to this division of work.
 - a. Details may be downloaded off the website in PDF format.
 - b. Details shall be inserted into A/E drawing sheets and shall include all City title blocks, detail numbers and other related information.
 - c. City standard details shall not be edited.
 - d. Deviations of details shall be approved by the City Project Manager and other City Engineering staff on a case by case basis.
- B. The A/E is responsible for writing any specifications, in CSI format, related to this Division of Work. References to the BPWSS within the CSI format are permissible and shall include the BPWSS Part, Article, and Section number being referenced.
- C. The City is requiring the A/E to incorporate the following standards into the A/E Division 33 specifications and design standards as follows:
 1. This division of work shall apply to storm, sanitary, water and other Public Works Utilities (traffic signaling, street lighting, etc.).
 2. The A/E shall work with designated City Agencies for any City owned utility work and all private utility companies having utilities above or below the ground within the work limits of this project.
 3. Design and coordinate with City Agencies and private utility companies beginning in the Pre-design Phase for existing utilities that may be reused or rerouted and any new utilities that will be required for this project.
 4. Include utility installation, rate structure options, connection charges, area charges, and other related costs in all project cost estimates.

APPENDIX A – STANDARD WORKSTATION AND OFFICE LAYOUTS

- A. The A/E shall incorporate the following standard workstation and office layouts for this project as noted in Division 12.
1. Layout size standards are based on specific job tasks and changing sizes of layouts or equipment shall be avoided. Other workstation options will be considered, based on job tasks, on a project by project basis.
 2. Full sized cut sheets are available as needed through the City Project Manager.

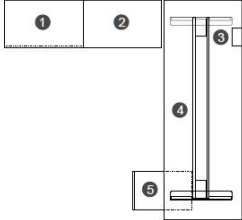
5.5' x 6' Workstation Cubicle, typical, use for most intern and touchdown/hoteling applications



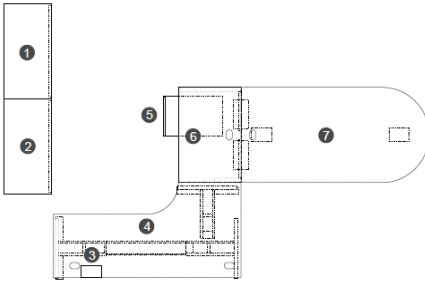
6' x 7' Workstation Cubicle, typical, use for most permanent employees



Supervisor Office Layout, furnishings standard, layout dependent on room size

		 DEPARTMENT OF PUBLIC WORKS - ENGINEERING DIVISION EXHIBIT B - GENERAL DESIGN GUIDELINES APPENDIX A - CITY STANDARD WORKSTATIONS AND OFFICE LAYOUTS
	SUPERVISOR OFFICE TYPICAL ① 30"W X 18"D X 28"H - LATERAL FILE W/ FRONT-BACK RAILS W/ TOP ② 30"W X 18"D X 28"H OPEN BOOKCASE W/ TOP ③ CLAMPED POWER MODULE WITH 3 OUTLETS ④ 84"W X 30"D ELECTRIC HEIGHT ADJUSTABLE DESK ⑤ 15"W X 23"D X 22"H - BOX-FILE PEDESTAL WITH CUSHION TOP	

Director Office Layout, furnishings standard, layout dependent on room size

		 DEPARTMENT OF PUBLIC WORKS - ENGINEERING DIVISION EXHIBIT B - GENERAL DESIGN GUIDELINES APPENDIX A - CITY STANDARD WORKSTATIONS AND OFFICE LAYOUTS
	DIRECTOR OFFICE TYPICAL ① 36"W X 18"D X 28"H - LATERAL FILE W/ FRONT-BACK RAILS W/ TOP ② 36"W X 18"D X 28"H - LATERAL FILE W/ FRONT-BACK RAILS W/ TOP ③ CLAMPED POWER MODULE WITH 3 OUTLETS ④ 72"W / 36"W X 24"D ELECTRIC HEIGHT ADJUSTABLE DESK ⑤ 15"W X 23"D X 22"H - BOX-FILE PEDESTAL WITH CUSHION TOP ⑥ 24"D X 36"W FIXED SURFACE ⑦ 36"D X 72"W PENINSULA FIXED SURFACE	

APPENDIX B – LEED V4.1 FOR BD+C CHECKLIST: NEW CONSTRUCTION AND MAJOR RENOVATIONS

					IMAGINATION CENTER AT REINDAHL PARK LEED v4.1 for BD+C: New Construction and Major Renovations (DRAFT) to be reviewed throughout all phases of design Project Checklist 08-24-2020		
0	0	0	0		Integrative Process		Possible Points: 1
Y	?Y	?N	N	D/C			
				D	Credit	Integrative Process	1
0	0	0	0		Location and Transportation		Possible Points: 16
Y	?Y	?N	N	D/C			
			0	D	Credit	LEED for Neighborhood Development Location	16 or
				D	Credit	Sensitive Land Protection	1
				D	Credit	High Priority Site	1-2
				D	Credit	Surrounding Density and Diverse Uses	1-5
				D	Credit	Access to Quality Transit	1-5
				D	Credit	Bicycle Facilities	1
				D	Credit	Reduced Parking Footprint	1
				D	Credit	Electric Vehicles	1
0	0	0	0		Sustainable Sites		Possible Points: 10
Y	?Y	?N	N	D/C			
Y	-	-	-	C	Prereq	Construction Activity Pollution Prevention	
				D	Credit	Site Assessment	1
				D	Credit	Site Development - Protect or Restore Habitat	1-2
				D	Credit	Open Space	1
				D	Credit	Rainwater Management	1-3
				D	Credit	Heat Island Reduction	1-2
				D	Credit	Light Pollution Reduction	1
0	0	0	0		Water Efficiency		Possible Points: 11
Y	?Y	?N	N	D/C			
Y	-	-	-	D	Prereq	Outdoor Water Use Reduction	
Y	-	-	-	D	Prereq	Indoor Water Use Reduction	-
Y	-	-	-	D	Prereq	Building Level Water Metering	-
				D	Credit	Outdoor Water Use Reduction	1-2
				D	Credit	Indoor Water Use Reduction	1-6
				D	Credit	Cooling Tower and Process Water Use Reduction	1-2
				D	Credit	Water Metering	1
0	0	0	0		Energy and Atmosphere		Possible Points: 33
Y	?Y	?N	N	d/C			

Exhibit B – General Design Guidelines

Y	-	-	-	C	Prereq	Fundamental Commissioning and Verification	-
Y	-	-	-	D	Prereq	Minimum Energy Performance	-
Y	-	-	-	D	Prereq	Building Level Energy Metering	-
Y	-	-	-	D	Prereq	Fundamental Refrigerant Management	-
2	2	2		C	Credit	Enhanced Commissioning	2-6
				D	Credit	Optimize Energy Performance	1-18
				D	Credit	Advanced Energy Metering	1
				D	Credit	Grid Harmonization	2
				D	Credit	Renewable Energy	1-5
				D	Credit	Enhanced Refrigerant Management	1
0	0	0	0		Materials and Resources		Possible Points: 13
Y	?Y	?N	N	D/C			
Y	-	-	-	D	Prereq	Storage and Collection of Recyclables	
Y	-	-	-	C	Prereq	Construction and Demolition Waste Management Planning	
				D	Credit	Building Life-Cycle Impact Reduction	2-5
1	1			C	Credit	Building Product Disclosure - EPD	1-2 pts
1	1			C	Credit	Building Product Disclosure – Source Materials	1-2 pts
1	1			C	Credit	Building Product Disclosure – Material Ingredients	1-2 pts
2				C	Credit	Construction and Demo Waste Management	1-2 pts
0	0	0	0		Indoor Environmental Quality		Possible Points: 16
Y	?Y	?N	N	D/C			
Y	-	-	-	D	Prereq	Minimum Indoor Air Quality Performance	
Y	-	-	-	D	Prereq	Environmental Tobacco Smoke (ETS) Control	
				D	Credit	Enhanced Indoor Air Quality Strategies	1-2
1	1	1		C	Credit	Low-Emitting Materials	1-3 pts
1				C	Credit	Construction IAQ Management Plan	1
1			1	C	Credit	Indoor Air Quality Assessment	1-2 pts
				D	Credit	Thermal Comfort	1
				D	Credit	Interior Lighting	1-2
				D	Credit	Daylight	1-3
				D	Credit	Quality Views	1
				D	Credit	Acoustic Performance	1
0	0	0	0		Innovation and Design Process		Possible Points: 6
Y	?Y	?N	N	D/C			
				D/C	Credit 1.1	Innovation in Design: X	1
				D/C	Credit 1.2	Innovation in Design: Y	1
				D/C	Credit 1.3	Innovation in Design: Z	1

Exhibit B – General Design Guidelines

				D/C	Credit 1.4	Innovation in Design: XX	1
				D/C	Credit 1.5	Innovation in Design: YY	1
				D	Credit 2	LEED Accredited Professional	1
0	0	0	0		Regional Priority Credits		Possible Points: 4
Y	?Y	?N	N	D/C			
				D/C	Credit 1.1	Regional Priority: WWW	1
				D/C	Credit 1.2	Regional Priority: XXX	1
				D/C	Credit 1.3	Regional Priority: YYY	1
				D/C	Credit 1.4	Regional Priority: ZZZ	1
0	0	0	0		Total		Possible Points: 110
Y	?Y	?N	N				

END OF DOCUMENT

TITLE	RFP COST PROPOSAL
PROJECT	IMAGINATION CENTER AT REINDAHL PARK
VENDOR	

DESIGN SERVICES		CONSULTANT	PRE-DESIGN		SCHEMATIC DESIGN		DESIGN DEVELOPMENT		CONSTRUCTION DOCUMENTS		BIDDING + CONTRACT		CONSTRUCTION ADMIN		WARRANTY		SUB-TOTAL		COST PER HOUR
			COST	HOURS	COST	HOURS	COST	HOURS	COST	HOURS	COST	HOURS	COST	HOURS	COST	HOURS	COST	HOURS	
PROJECT BASIC SERVICES	PROGRAMMING	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	ARCHITECTURE	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	INTERIOR ARCHITECTURE	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	LANDSCAPE ARCHITECTURE	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	CIVIL	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	MECHANICAL	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	ELECTRICAL	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	PLUMBING	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	STRUCTURAL	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	FIRE PROTECTION	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	SIGNAGE	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	ACOUSTIC	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	TECHNOLOGY	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	AUDIO VISUAL	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	COST ESTIMATION	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	ELEVATOR DESIGN	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	FF+E	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	LEED / SUSTAINABILITY	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	SUB-TOTAL		\$18	18	\$18	18	\$18	18	\$18	18	\$18	18	\$18	18	\$18	18	\$126	126	\$1.00
PROJECT EXTRA SERVICES	(insert extra service...)	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	(insert extra service...)	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	(insert extra service...)	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	(insert extra service...)	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	(insert extra service...)	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	(insert extra service...)	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	(insert extra service...)	X	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$1	1	\$7	7	\$1.00
	SUB-TOTAL		\$7	7	\$7	7	\$7	7	\$7	7	\$7	7	\$7	7	\$7	7	\$49	49	\$1.00
	TOTAL		\$25	25	\$25	25	\$25	25	\$25	25	\$25	25	\$25	25	\$25	25	\$175	175	\$1.00

NOTES	
1	INPUT FOR ALL GREEN CELLS IS REQUIRED. MPM BASIC SERVICES ARE IDENTIFIED IN EXHIBIT A: PROJECT SUMMARY, PROJECT GENERAL REQUIREMENTS
2	INPUT FOR ALL YELLOW CELLS IS NOT REQUIRED. IF THE TEAM ANTICIPATES EXTRA SERVICES WOULD BENEFIT THE PUBLIC INTEREST PLEASE INDICATE THEM WITHIN "PROJECT ADD SERVICES"
3	
4	
5	
6	
7	
8	
9	

SCOPING STUDY
MARCH 2020



MADISON
PUBLIC
LIBRARY



IMAGINATION CENTER at Reindahl Park

“I think the “imagination” part people have captured really well with some great ideas. But the “center” part is what I feel like our neighborhood needs a lot. Just a place where all of us can gather.”

— CHAS, Sandburg Neighborhood Resident



MADISON
PUBLIC
LIBRARY



IMAGINATION CENTER at Reindahl Park



EXECUTIVE SUMMARY

The Imagination Center concept was derived from a two year long planning process conducted by Madison Public Library that resulted in *Communities Inspiring Libraries: A Strategic Plan for Eastside Growth*. Within this study, the Library identified northeast Madison as an area in need of a library and expanded library service, but learned that other civic and social services are needed as well. As a result, the concept of the Imagination Center was born, intentionally meant to be opened-ended while additional planning ensued.

Over an additional two years, the Library completed further planning and conversed with a great number of community members. Madison Public Library now seeks to define the Imagination Center and establish a plan for its creation and operation at Reindahl Park in partnership with Madison Parks and the City of Madison's Department of Information Technology.

This report is organized in six sections that together lay the groundwork for the Imagination Center project. The history and background section details Reindahl Park's unique past and a brief history of library service on the east side. The neighborhoods section describes the northeast Madison region including its distinctive characteristics, social centers, and land use patterns.

Demographic indicators of northeast Madison show that the area's residents include significant percentages of immigrants and youth. The Library is excited to serve both populations with the Imagination Center. Finally, an examination of the transportation network in the northeast region is included with a focus on how visitors will be able to reach the Imagination Center. The Center's location within a visible public park and adjacency to a planned Bus Rapid Transit stop will make it a highly accessible destination.

The vision laid out in these pages is derived from numerous conversations shared between Library staff and community members of different ages, experiences, and backgrounds. The engagement section highlights the 112 conversations Madison Public Library shared with 425 community members. Their voices provide unique and valuable perspectives and are central to the Imagination Center's success. In addition, the section shares the process Madison Public Library used to gain an understanding of community members' concerns, hopes, and dreams for their area and the Imagination Center.

The remainder of this document provides recommendations for the Imagination Center and illustrates how they advance Madison Public Library and City of Madison goals. In *Communities Inspiring Libraries*, Madison Public Library identifies five critical roles to fulfill through library service on Madison's east side. The Library organizes the deliberate recommendations found in this report by these roles and ties them to the Imagination Center project.

① Social Forum

The Imagination Center will connect residents to each other in different ways, spontaneously and intentionally. The Center will have meeting rooms, event and gathering space, and a youth and teen area. It will also create space for Anji Play activities, a comprehensive approach to early learning employed by Madison Public Library and Madison Parks.

② Civic Innovator

Madison Public Library is committed to providing opportunities for residents to participate in public life. The Imagination Center will have citizenship and immigration resources and will connect area residents to civic life through voter registration, election participation, and citizen education. The Imagination Center will also promote digital engagement and increase accessibility to local government.

③ Holistic Health Advocate

The Imagination Center's location lends itself well to unique interactions with Reindahl Park, including environmental education and awareness. The Center will also place a special focus on health with the goal of increasing health literacy and health outcomes through community partnerships.

④ Cultural Platform

Northeast Madison currently lacks opportunities for residents to engage in the arts. The Imagination Center will expand the Library's Artist-in-Residence program, which will offer unique opportunities for residents to explore art and cultural heritage through programming offered in partnership with the Madison Public Library and Madison Parks. The Center will offer residents the ability to learn about and create their own media for artistic and civic purposes and will be a home for public art.

⑤ Economic Engine

Madison Public Library discovered that accessing child care is an obstacle for many northeast Madison families. The Imagination Center will address child care challenges and positively influence child care in the region. Madison Public Library will also provide access to broadband internet for Imagination Center visitors, as well as financial empowerment and literacy assistance.

A note about the recommendations:

Some of the recommendations in this report will not be surprising. All Madison Public Library facilities have comprehensive resources and materials collection, trained and knowledgeable staff, meeting spaces, technology, and broadband connected internet. However, recommended services such as child care, food preparation, and health services may feel like more of a departure. It is our belief, based on hours of community conversations, research, and years of embedded work in Madison's neighborhoods, that neighborhood challenges require imaginative solutions. The *City of Madison Comprehensive Plan Imagine Madison: People Powered Planning* has inspired us to develop new ways of providing services to meet the City's priorities, and we have identified ways to do this throughout the report.

The Library has a successful track record of partnering with city departments and community organizations to increase positive outcomes for neighborhood residents. As active partners in all Neighborhood Resource Teams, we've reimagined our existing spaces to better serve partners and residents in large and small ways, from community dinners to the creation of a Dream Bus, which brings needed library service to residents with transportation barriers. In partnership with Madison Parks, through the Wild Rumpus program in city parks, we've collaborated with Anji Play educators to bring a fresh approach to play and family interaction to the United States and public libraries.

The Imagination Center will take our partnership approach a step further. In partnership with the City of Madison Information Technology Department, the Imagination Center will address digital engagement. Creating a media studio and providing advanced communication technology will enable

residents to interact with City staff and elected officials remotely. This will connect residents to government and provide tools to people to share their own experiences and amplify their voices. Partnerships with public and private organizations will bring experts in health, nutrition, financial empowerment, environmental education, and more to the Imagination Center. Finally, a central partnership with Madison Parks will provide countless opportunities to expand the mix of active programming and social gatherings to Reindahl Park and the surrounding region. The co-location of City agencies and resources will respond to the vision within *Imagine Madison* of effective government through improved access and service delivery to our community. As this project moves forward, we anticipate there may be even more opportunities for adding other city services to the facilities.

While sharing conversations with community members during the Imagination Center's planning process, we've heard the question, "Isn't this just a library in a park?" We believe it is more. It is our hope that this project - from the planning stages to the realization of a shared vision - will serve as an example of a new way for City of Madison and our community to collaborate together to address regional challenges. Along the way, we believe this will drive us to collectively seek new ways to offer community services, and provide a model for City agencies to learn from each other and share best practices. We hope that you will imagine these new possibilities with us at the Imagination Center, a place where we can all learn, share and create together.

INTRODUCTION

In 2016, Madison Public Library completed a plan for library service on Madison's eastside called *Communities Inspiring Libraries: A Strategic Plan for Eastside Growth*. The plan guides the Library's growth and makes significant recommendations about the Library's future. *Communities Inspiring Libraries'* central recommendation is the construction of a new public library, Madison's tenth, at Reindahl Park. As the title suggests, the recommendation is an outgrowth of many community conversations shared with the Library. While assembling the plan, Madison Public Library discovered that northeast Madison is in need of expanded library service as well as other civic services and public amenities. The Library identified Reindahl Park as the place to address these services gaps, and the concept of the Imagination Center was created.

This report aims to answer the following questions:

- What is the Imagination Center and how will it impact Madison?***
- Who will be better off because of the Imagination Center?***
- How will the Imagination Center interact with Reindahl Park?***
- What does a successful Imagination Center look like?***

To answer these questions, Madison Public Library again turned outward and shared conversations with community members across Madison. The goal of this report is not to be prescriptive, but rather to serve as a guide for the Imagination Center's construction and operation. The Imagination Center should draw on ideas presented within, because the vision described in this plan is not a singular vision; it is the community's vision. Madison Public Library is pleased to present the Imagination Center at Reindahl Park.

HISTORY & BACKGROUND

Reindahl Park, as well as northeast Madison, has a singular history that should inform the Imagination Center project. The section that follows presents a brief and selective history of the northeast Madison region, focusing specifically on Reindahl Park and land ownership records. The Library does not intend this to be complete history and recognizes that this is ancestral native land.

Reindahl Park Area and Northeast Madison

The area that now comprises northeast Madison was formerly in the Town of Burke. The Town of Burke has a rich agricultural past, and most of the town consisted of farmland throughout the second half of the 19th century into the first half of the 20th century. From the early 1940s until the late 1960s, the City of Madison and the City of Sun Prairie annexed large portions of the Town of Burke.¹ This land included Truax Field (now Dane County Regional Airport), as well as the land that would become home to Madison College and East Towne Mall. The City of Madison annexed a portion of Reindahl Park in 1956, and the remainder in 1965.

Prior to its use as a public park, the land that is now Reindahl Park was a 100-acre farm run by a succession of owners. Early records show John Catlin, a founding Madisonian, owned and operated the farm until 1856 when he sold it to Bennett Britton and his family. The Brittons subsequently built a stagecoach and inn (the historic “Britton Inn”) on the property and farmed the land from 1856 to 1867. In 1867, A. A. Meredith, Wisconsin superintendent of public property, purchased the farm from the Britton family. He owned the farm for a brief period before

transferring possession to Civil War General Henry Harnden in 1874. General Harnden, the most well-known owner in the farm’s history, commanded the Wisconsin infantry during the Civil War and became a Wisconsin state legislator after the war’s conclusion. During the war, Harnden and his troops famously captured Jefferson Davis, which brought Harnden some fame and considerable local name recognition. After Harnden’s ownership, the farm changed hands twice more until Amund Reindahl purchased the property in 1901.

From 1901 to 1946, Amund Reindahl owned and farmed the property that would eventually bear his name. Reindahl was an alumnus of UW-Madison, and he served as the Dane County register of deeds from 1899 to 1903. For many years after his service as the register of deeds, he worked as the deputy register of deeds.² It appears he mostly leased his farm to tenants, but he was known to have lived on his farm in the second floor of a stone barn. The stone barn still stands in the park today.

In 1927, Amund Reindahl donated 10 acres of his farm to Sunnyside School District for a new primary school. The district built a two-story brick schoolhouse the year prior on his land, which remained in operation until 1968. Sunnyside School primarily served families in the Town of Burke and the far eastside of the City of Madison. The school closed in 1968 and sat vacant until it was razed in 1994. In 2007, Sunnyside East Ltd Partnership redeveloped the former school property and built a shopping center that is on the site today. Although the school has been demolished, it was emblematic of Amund Reindahl’s passion for education, children, and community.³

Amund Reindahl died in 1946 at the age of 77. Before his passing, he willed 90 acres of land to the Town of Burke for a public park, thereafter to be named Reindahl Park.

¹ Allen Ruff and Tracy Will, Forward: *A History of Dane the Capital County* (Milwaukee, WI: Goblin Fern Press, 2000).

² *History of Dane County: Biographical and Genealogical*. Madison, WI: Western Historical Association, 1906.

³ Jen, “Amund Reindahl: The Farmer Who Saved His Land for the Children,” *Madison Sun* (Madison), August 25, 1967.

Reindahl Park

Reindahl Park took years to develop after Amund Reindahl's land donation to the Town of Burke. The Town and Country Garden Club, a local civic organization, spearheaded efforts to convert the farm to parkland. It took over two decades of effort, but on September 13, 1967, the City of Madison opened and dedicated Reindahl Park. Neighbors of the park and other interested parties privately funded most of the original park improvements. Since its opening in 1967 however, the City of Madison has maintained the park.

Today Reindahl Park is a vibrant community park. The park offers many recreational opportunities for visitors including nine soccer fields, eight tennis courts, a basketball court, playground, splash park, and the only public cricket field in Madison. A paved recreational path transects the park from its southwest corner to its eastern boundary at the intersection of Portage Road and Dwight Drive. The path offers opportunities for biking, running, and walking through the park. Reindahl Park also is home to 260 community garden plots. The master plan for Reindahl Park was updated and approved in 2013 to include the splash park and the elimination of the ice rink area. At the time a softball complex was also contemplated, which is shown in the area where the cricket field currently exists.

Reindahl Park has two main structures, a reservable park shelter and the stone barn. The shelter at Reindahl Park was built after the park was dedicated, likely sometime in the 1970s. It is a concrete structure with a maximum capacity for 110 people. Three sides of the building are enclosed with a rear opening facing the interior of the park. There are restrooms on the southeast side of the shelter and running water. The Reindahl

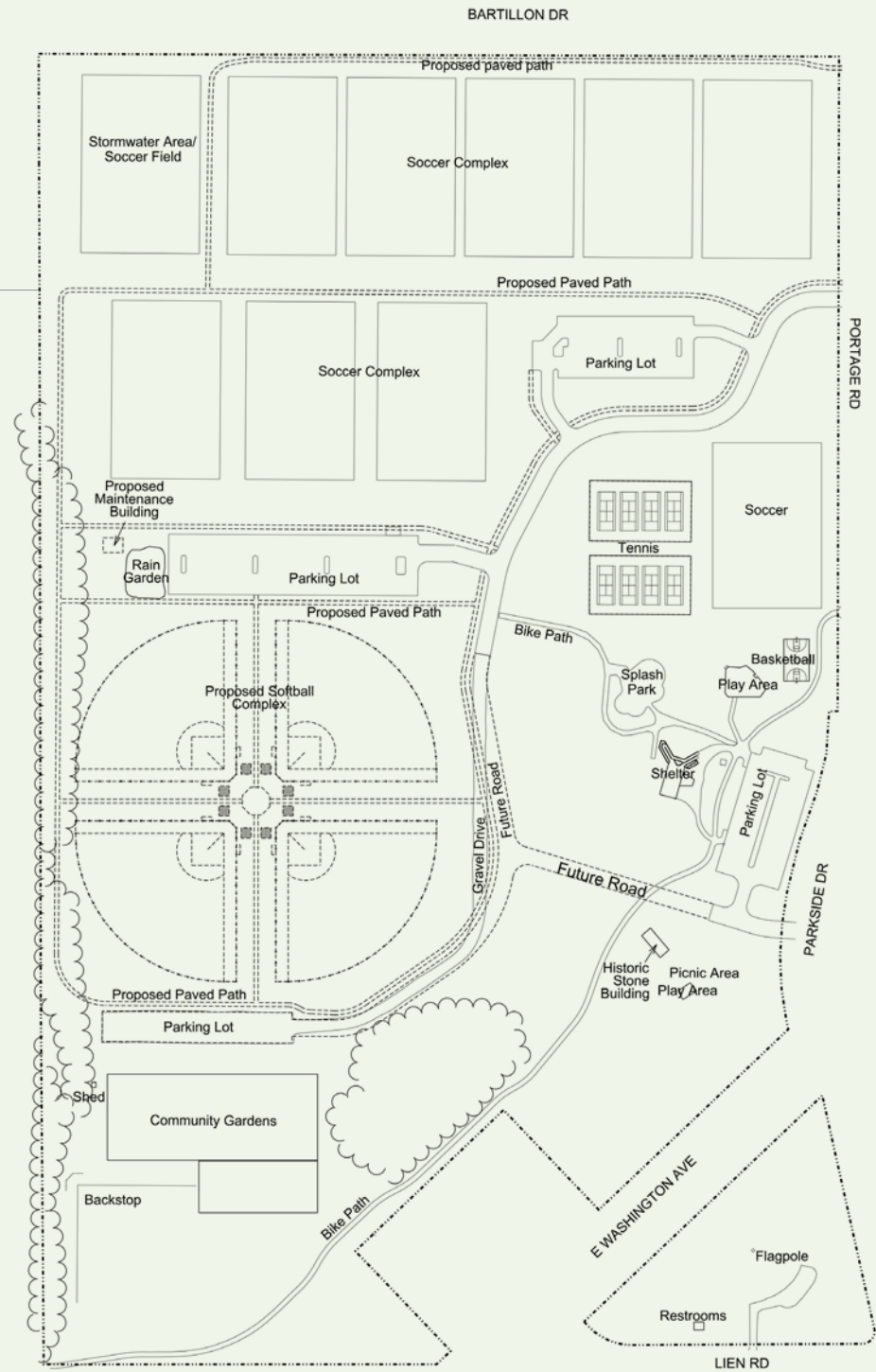
Park shelter is adjacent to a berm on its north side; a staircase and ramp ascend the shelter and provide access to a flat roof that also serves as a scenic overlook.

In recent years, a few community groups have used Reindahl Park extensively. Madison Cricket Association (est. 2011) uses the cricket field for leagues and practices. Two youth soccer clubs practice and play games at Reindahl Park. Madison Football Club (est. 1998) and Capital East Soccer Club (est. 2012) both host activities at the park throughout the spring, summer, and fall seasons. Each club is organized under the Madison Area Youth Soccer Association (MAYSA), and the clubs predominantly serve area youth. The Reindahl Park Gardeners group manages the community garden plots, and garden volunteers handle plot registrations as well as garden rules. The Reindahl Park Gardens are part of the regional Gardens Network, a partnership of Community GroundWorks, UW-Extension – Dane County, and the City of Madison. The park also serves as the site of one of several Parks and Library collaborations, hosting two summers of the Wild Rumpus, an outdoor program focused on the concept of true play, with an emphasis on early learning.

Master plan for Reindahl Park, approved March 2013.



Above: Park shelter and stone barn.



East Side Library Service in Madison

Madison Public Library has a long tradition of expansion to accommodate shifts in population and community needs. The Madison Free Library, established in 1875, soon outgrew its two rooms in Madison's City Hall and by 1906, the library moved to a Carnegie-funded library on Carroll Street. The Library opened a series of satellite library locations in Madison schools, followed by the first library branch on Williamson Street in 1912. Madison Public Library then added the Monroe Street (1944) and Sequoia (1957) libraries on the near west side. The Williamson Street location was subsequently replaced with three new east side libraries that expanded library services at the Hawthorne (1958), Lakeview (1959), and Pinney libraries (1966). In the south and southwest, Madison Public Library opened South Madison (1967) and Meadowridge (1974) libraries, and relocated and expanded the main library to become the Central Library at its present site (1965). Hawthorne and Lakeview Libraries moved several times during this period, often relocating further from the center of the city. The last new library, Alicia Ashman Library, opened in 2000 on the city's far west side.

From 2008 to present, Sequoia, Goodman South Madison, Central, Meadowridge, and Pinney Libraries were remodeled, relocated and/or expanded. In 2016, the *Communities Inspiring Libraries* report called for additional expansion on the east side of the city, resulting in the expansion and relocation of the Pinney Library (2020) and the recommendation for a northeast side library.

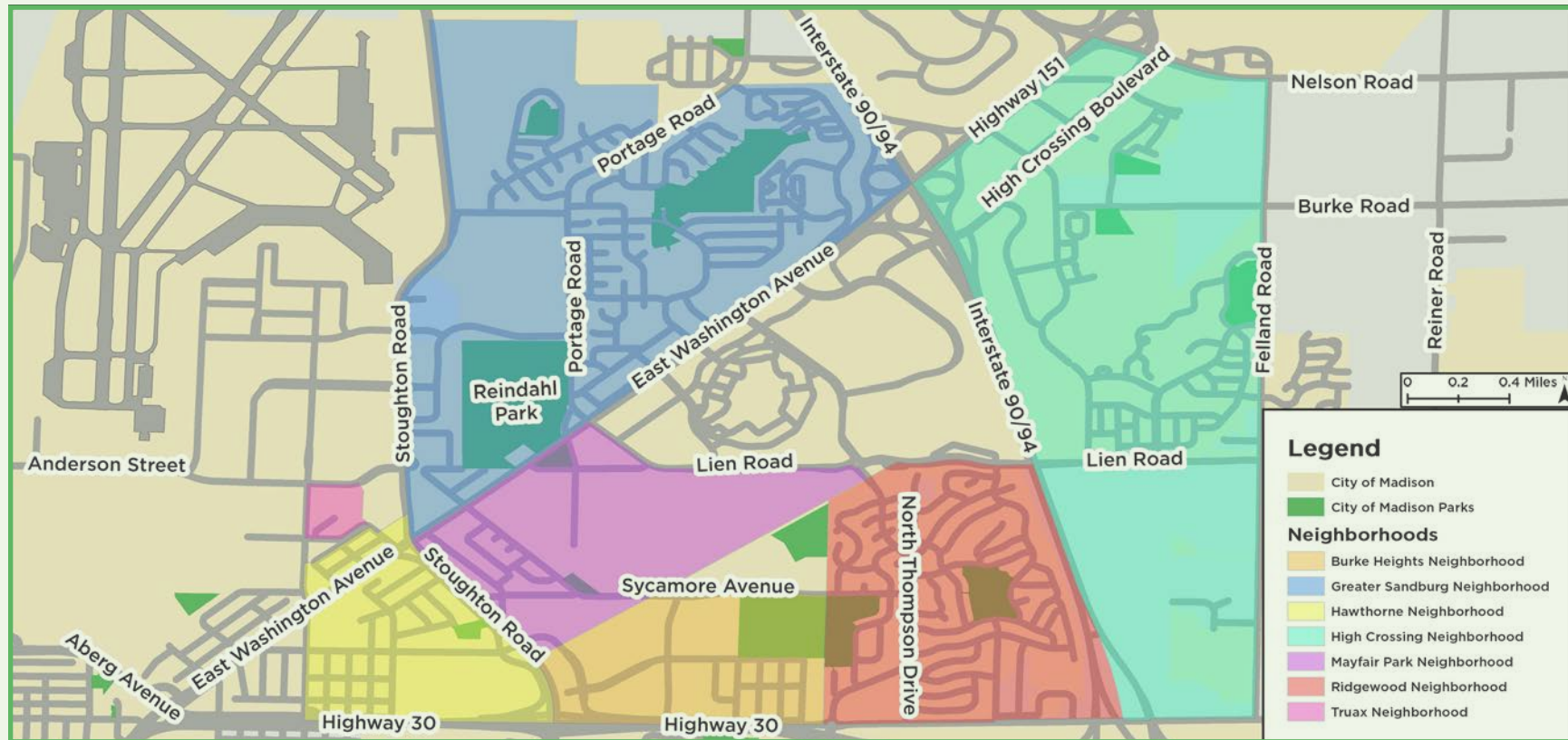
Library service has also expanded through a series of mobile service initiatives including the Bookmobile (1958), the Readmobile, and more recently the Dream Bus (2019). The Dream Bus predominantly serves youth and families in five Madison neighborhoods and provides service at Reindahl Park and other community locations.

Several libraries are now adjacent to community organizations or city departments. These include Hawthorne Library and Public Health of Madison and Dane County, a co-location of the Meadowridge Library and the Meadowood Neighborhood Center, and the adjacency of city and county partners near the Goodman South Madison Library. Two of these libraries – Hawthorne and Meadowridge – share meeting spaces, while the Goodman South Madison Library formerly shared a space with Public Health of Madison and Dane County.

In the last decade, library expansion has incorporated several attributes that feature prominently in recommendations for the Imagination Center at Reindahl Park. These include expanded meeting and event spaces, active and outdoor spaces, a kitchen at the Meadowridge Library, a garden at the Lakeview Library, and an outdoor play and event space at the new Pinney Library.

NEIGHBORHOODS

Northeast Madison is home to a variety of land uses and diverse neighborhoods. For the purposes of this report, northeast Madison or the Reindahl Park area is defined as the area east of the Dane County Regional Airport and Madison College and north of Aberg Avenue/Highway 30. The area is depicted below.



Perhaps most noticeable about northeast Madison is the dominant share of commercial and institutional land uses. The area is home to sprawling land uses such as the Dane County Regional Airport, Madison College, East Towne Mall, UW Health at the American Center, and the American Center Business Park. Highways 51 (Stoughton Road) and 151 (East Washington Avenue) divide the area and have many smaller commercial uses on their frontages. Several hotels, restaurants, and automotive centers are located on East Washington Avenue, and a variety of retail, office, and industrial buildings front Stoughton Road.

In addition to commercial, institutional, and industrial land uses, northeast Madison contains seven residential neighborhoods: Truax, Hawthorne, Mayfair Park, Burke Heights, Ridgewood, High Crossing, and Greater Sandburg. The neighborhoods are diverse and contain different types, densities, and ages of housing. The following section describes each neighborhood in greater detail.

■ Truax

The Truax neighborhood is located north of East Washington Avenue at the intersection of Wright Street and Straubel Street. The neighborhood consists of the Truax Apartment complex and the East Madison Community Center. Truax Apartments is a public housing complex containing 144 dwelling units. The City of Madison Community Development Authority (CDA) owns and operates the Truax Apartment complex, and the apartments are home to over 300 residents. In addition to the CDA, Joining Forces for Families (JFF) has an office at Truax focused on

connecting neighborhood residents with community services. JFF is an effort led by the Dane County Department of Human Services. It is a partnership with several local service providers including law enforcement agencies, public health departments, and school districts. Their goal is to provide accessible and integrated services to residents across Dane County including the Truax neighborhood.

The East Madison Community Center (EMCC) lies in the middle of the Truax community. The Center opened in 1966 as a community meeting place in two Truax apartments. It later moved to its current location with subsequent expansions in 1991, 1997, and 2008. The 2008 expansion greatly expanded the facility and added a commercial kitchen, gym, and locker rooms.⁴ In 2018, the Center received an interior renovation from the “Design for a Difference” charity makeover campaign. The renovation brought new furniture, flooring, painting, and more to the community center.

East Madison Community Center provides social, educational, recreational, and cultural programming to neighborhood residents as well as residents across the east side of Madison. It provides a range of services from nutrition and health to the arts. The Center manages 41 community garden plots, a food pantry, and is a meal site for children during the summer months. It also has an adult fitness room and a full-size gymnasium. The community center offers a variety of educational programming and has after school care for students. The Center also has a neighborhood resource center focused on helping adults obtain job skills and gain access to other service providers. In addition to those services, East Madison Community Center is a place for recreation and social events in the heart of the Truax community.⁵

⁴ Speckhard Pasque, “East Madison Community Center Receives Major Renovation from ‘Design for a Difference’ Movement,” *The Cap Times*, October 15, 2018.

⁵ East Madison Community Center, n.d. <https://eastmadisoncc.org/>.

Hawthorne

The Hawthorne neighborhood is located to the south of the Truax neighborhood. Wright Street bounds the neighborhood to the west, Aberg Avenue to the south, and Stoughton Road to the east. East Washington Avenue divides the neighborhood into two parts, a smaller northern section and a larger southern section.

The northern part of the Hawthorne neighborhood contains mostly single-family homes, which are tucked behind commercial buildings that run along East Washington Avenue. The homes in this area were developed incrementally over the course of five decades, from the 1920s to the early 1970s. Several commercial buildings are located in the neighborhood including the William T. Evjue Access Community Health Clinic.

The southern part of the Hawthorne neighborhood is similar to the northern section. The residences in this area include one and two-family homes that were built in the 1940s and 1950s. Hawthorne Elementary School sits at the center of the neighborhood and recently became a designated community school.⁶ The neighborhood also has a large zone of light industrial activity along Stoughton Road and Aberg Avenue.

Mayfair Park and Burke Heights

The Mayfair Park and Burke Heights neighborhoods are both comparable to the Hawthorne neighborhood. Each neighborhood features an area of concentrated low-density housing and large areas of commercial land use. Many of the homes in the two neighborhoods were built in the 1960s and 1970s as Madison expanded to the east. Housing in the Mayfair Park neighborhood is located near Stoughton Road with commercial activity further to the east. A cluster of three grocery stores is located there including Hy-Vee, ALDI, and Target. Additionally, Madison Fire Department Station #8 is in the neighborhood on Lien Road.

Further to the south in Burke Heights, commercial land uses give way to residential housing from west to east. On the western side of the neighborhood is a UW Credit Union location and a Walmart. Industrial activity, primarily warehousing, bridges the commercial land uses to a residential subdivision that makes up the bulk of the neighborhood to the east. Sycamore Park lies to the north of the subdivision and is a community focal point. The park includes over 71-acres of land and has a large off-leash dog exercise area as well as recreational fields for soccer as well as softball, picnic shelter, playground, and sledding areas.

Ridgewood

The Ridgewood neighborhood is located between Highway 30, I-90/94, and Lien Road. The neighborhood is the second largest neighborhood in the Reindahl Park region. Ridgewood is almost exclusively a residential neighborhood with a variety of single-family and multi-family dwelling units. The neighborhood developed more recently than most of the other neighborhoods in the area, with the majority of houses built in the 1990s and early 2000s.

Although the Ridgewood neighborhood is mostly residential, Glacier Hill Park lies in the middle of the community. It is smaller than Sycamore Park, but Glacier Hill Park still contains about 15-acres of land. Park features include a basketball court, playground, and two open recreation fields. A sun shelter has recently been added to the park, and an accessible path will connect amenities in 2020. The master plan for Glacier Hill Park was approved in 2019.

The Ridgewood neighborhood has a few individual land uses that are not residential. To the south of the neighborhood lie

⁶ Novak, Bill, "Hawthorne, Lakeview Will Become Community Schools; Service and Support the Key," *Wisconsin State Journal*. May 23, 2018.

three places of worship. Holy Cross Lutheran Church, Calvary Gospel Church, and Crosspoint Church of the Nazarene all call the Ridgewood neighborhood home. The City of Madison Streets Division - East Office is located to the west of the neighborhood just north of Sycamore Park. The facility offers a drop-off location for residents hauling brush and yard waste along with items for recycling.

■ High Crossing

Beyond I-90/94 and south of Highway 151 lies the High Crossing Neighborhood. The neighborhood is small but growing. It contains a large commercial presence located just south of Highway 151 that includes several auto dealerships and hotels. High Crossing is also home to Madison Fire Department Station #11.

Residential development lies behind the commercial frontage on Highway 151 and mostly consists of multi-family residential buildings. The area includes both condominium and apartment complexes. It also is home to Meadowmere Madison—an assisted living facility—and the Madison Heights Senior Living Community. The City of Madison is planning for new development further to the south with residential construction unfolding all the way to Lien Road, just east of the Ridgewood neighborhood.

Two neighborhood parks, High Crossing Park and Patriot Park, are located on Congress Avenue. High Crossing Park is a 5.74-acre neighborhood park and includes a basketball court, playground, rectangular athletic field and path system. The master plan for Patriot Park was approved in 2017; similarly sized (5.41-acres), the park will include a paved path and hiking trails; future expansion of the park is planned to include a sun shelter, play area, parking lot, and off-leash dog park.

■ Greater Sandburg

Immediately adjacent to the east side of Reindahl Park is the Greater Sandburg neighborhood. The Greater Sandburg neighborhood is the largest of the seven neighborhoods in the Reindahl Park area. It is located north of Highway 151 and branches off both sides of Portage Road heading to the north. The west side of the neighborhood is predominantly single-family housing. Much of this housing was developed between the 1970s and 1990s. Several multi-family housing complexes are nestled between the west side of the neighborhood and I-90/94 at the eastern boundary of the neighborhood. These include Forest Run, Morningside on the Green, and the Village Green East apartments as well as the Stonebridge Condominiums.

Sandburg Park and Sandburg Woods stands in the middle of the Greater Sandburg neighborhood. The woods is a 34-acre conservation park featuring oak and hickory woodlands. The area is part of a parkway strip that connects Sandburg Elementary School with the eastern part of the neighborhood. Sandburg Park has a recreational trail along its western edge as well as a field with a basketball court to the north and a playground.

Perhaps the social center of the neighborhood is Sandburg Elementary School. The school does not have an official designation as a community school, but it provides many community services beyond the scope of a typical elementary school. The Food for Thought Initiative runs a full-service food pantry at the school. In addition, the school allows community members to use their facility during non-school hours and provides other services such as mental health counseling. Sandburg Elementary is also a dual language immersion school and offers classroom instruction in Spanish and English.

DEMOGRAPHICS

People with different backgrounds, ages, and experiences all call the Reindahl Park area home. While similar in many regards to the rest of Madison, the Reindahl Park area is a unique region of the city with its own distinctive characteristics, which should inform and enlighten the Imagination Center project.

Area Demographics

The Reindahl Park region has a higher percentage of children than the city of Madison as a whole. Approximately 8.0% of northeast Madison residents are children under the age of five, compared to 6.4% living on the eastside, and 5.2% living in the city at large. Even more telling is the amount of children between the ages of five and 18 years old. Close to 25% of the population is under 18 years old, compared to around 20% of east side residents and only 17% of Madison residents. This suggests that in addition to many young children, there are quite a few tweens and teens living near the park. While there is an older adult presence, the percentage of seniors (age 65+) is slightly lower than the eastside and Madison, comprising about 10% of the population.

In addition to skewing younger, the population living near Reindahl Park is more ethnically diverse than that of Madison generally. More immigrants in particular live in the neighborhoods surrounding Reindahl Park. Around 13% of area residents were not born in the U.S., which is notably higher than the percentage of immigrants living on the eastside (8.7%) and living in Madison (11.7%). The vast majority of immigrants residing in the area were born in Latin America, Asia, or Africa. As a result, there

are more limited English speaking households than other areas of Madison's eastside; however, the number of households that speak little English is similar to Madison overall.

The racial makeup of the area is also more diverse than typical in Madison given the high proportion of immigrants. The region has a larger percentage of African-American, Hispanic, and Asian residents than the rest of the city. An estimated 8.0% of area residents identify as African-American, compared with 6.5% of Madison residents. Similarly, Asian-Americans comprise 9.4% of the population in northeast Madison, which is higher than the rate of 8.8% in the city of Madison. Adding to the area's diversity, there is also a significantly higher Latinx population. Approximately 9% of area residents are of Hispanic origin compared to 7% of residents on the eastside and the city of Madison.

Another demographic factor worth consideration is housing affordability in the Reindahl Park area. More specifically, the cost of renting a dwelling unit warrants attention as rents have increased faster in recent years than home values in Madison.⁷ According to the Census Bureau, cost burdened renters are those who spend more than 30% of their gross income on housing costs. Extremely cost burdened renters are those who spend more than 50% of their gross income to secure housing. In the Reindahl Park area, roughly 2 in 5 renters are cost burdened and 1 in 5 renters are extremely cost burdened. While not quite as high as the rate of cost burdened renters in the city of Madison generally, the numbers still merit attention.

Educational attainment is another measurement requiring examination to develop an understanding of northeast Madison residents. Fewer Reindahl Park area residents have completed

⁷ City of Madison Planning Division. *Equitable Development in Madison: An Assessment of Factors Contributing to Displacement and Gentrification*. Madison, WI. August 6, 2019.

a bachelor's or a graduate degree compared to the Madison population as a whole. The region is home to a lower percentage of residents with a bachelor's degree than the city of Madison (27.1% vs. 32.2%), as well as a significantly lower number of residents with a graduate degree (12.6% vs. 24.9%). A higher rate of residents in the Reindahl Park area have received associate's degrees or have attended some college without obtaining a degree. In addition, the region has a higher percentage of residents without a high school diploma than Madison overall (6.9% vs. 4.6%).

One final metric that commands attention is the ability of residents to access the internet in their homes. In northeast Madison, around 14% of residents do not have an internet connection in their home or a mobile data plan allowing them to connect to the internet. Although the rate of residents living in the Reindahl Park area without a data connection is slightly lower than the city of Madison as a whole, it is still substantial, with approximately 1,500 households living near Reindahl Park unable to access the internet at home. Libraries serve internet needs of residents and visitors in all neighborhoods in which they reside and this will be an important service consideration for the Imagination Center's operation.

CULTURE AND CHARACTER

Create safe and affirming community spaces that bring people together and provide social outlets for underrepresented groups.

The Imagination Center's meeting rooms, community space, seating areas, food preparation space, and outdoor space will provide the infrastructure for **safe and affirming community spaces**. The Center will bring the community together through art, media, civic engagement, and recreation. In addition, immigrants and English learners will be able to access immigration, citizenship, and literacy resources. Reindahl Park will activate in novel and exciting ways with the addition of the Imagination Center.

Northeast Madison Demographics

DEMOGRAPHICS	REINDAHL*	%	EASTSIDE**	%	MADISON	%
Total Population	25,972	10.4%	100,736	40.5%	248,856	100.0%
Population Sample for Poverty Data	25,776	10.9%	99,638	41.9%	237,559	100.0%
Number of Families for Poverty Data	6,278	12.4%	23,295	45.9%	50,806	100.0%
Number of Households	10,748	10.0%	44,350	41.1%	107,890	100.0%
YOUTH POPULATION						
Population under 5	2,067	8.0%	6,438	6.4%	13,033	5.2%
Population under 18	6,431	24.8%	20,102	20.0%	41,499	16.7%
Population 18 and up	19,541	75.2%	80,634	80.0%	207,357	83.3%
Population 25 and up	17,161	66.1%	71,930	71.4%	154,397	62.0%
OLDER ADULT POPULATION						
Population 65 and up	2,644	10.2%	12,240	12.2%	27,564	11.1%
ORIGIN AND LANGUAGE						
Limited English Speaking Households	341	3.2%	1,154	2.6%	3,752	3.5%
Foreign Born	3,396	13.1%	8,724	8.7%	29,049	11.7%
POVERTY						
Families Living in Poverty	416	6.6%	1,722	7.4%	4,014	7.9%
All People Living in Poverty	2,331	9.0%	11,720	11.8%	43,568	18.3%
RACE AND ETHNICITY						
White	19,687	75.8%	81,204	80.6%	196,174	78.8%
Black/African American	2,082	8.0%	8,303	8.2%	16,273	6.5%
Asian	2,435	9.4%	5,682	5.6%	21,836	8.8%
American Indian/Native American	106	0.4%	247	0.2%	947	0.4%
Some other race	891	3.4%	1,650	1.6%	4,802	1.9%
Two or more races	771	3.0%	3,628	3.6%	8,704	3.5%
Hispanic, any race	2,254	8.7%	7,030	7.0%	17,473	7.0%

* 2013-2017 American
Community Survey (ACS)
5-year Estimates

HOUSING AND HOUSING SECURITY	REINDAHL*	%	EASTSIDE**	%	MADISON	%
Cost Burdened Renters	2,069	41.0%	8,942	47.0%	28,084	49.7%
Extremely Cost Burdened Renters	993	19.7%	4,085	21.5%	15,557	27.5%
Total Renters	5,051		19,044		56,500	

EDUCATIONAL ATTAINMENT (25 YEARS OLD+)	REINDAHL*	%	EASTSIDE**	%	MADISON	%
No High School Diploma	1,183	6.9%	4,179	5.8%	7,169	4.6%
Some College	3,911	22.8%	14,326	19.9%	24,346	15.8%
Associate's Degree	2,097	12.2%	7,882	11.0%	12,981	8.4%
Bachelor's Degree	4,656	27.1%	20,693	28.8%	49,675	32.2%
Graduate/Post-Bachelor's Education	2,169	12.6%	11,247	15.6%	38,420	24.9%

INTERNET ACCESS	REINDAHL*	%	EASTSIDE**	%	MADISON	%
Households without internet access (including mobile data plans)	1,472	13.7%	6,187	14.0%	15,756	14.6%

*Includes Tracts 2500, 2601, 2602, 2603, 11402

**Includes Tracts 2301, 2601, 3100, 2000, 1804, 2700, 2401, 2602, 11402, 2603, 2402, 3002, 1900, 2100, 1802, 2900, 2302, 2200, 2800, 2500, 3001, 11401, 10501

ECONOMY AND OPPORTUNITY

Close the educational opportunity gap.

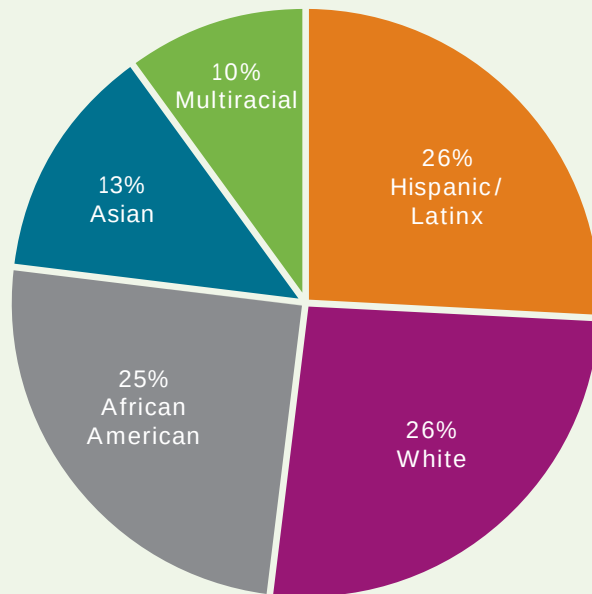
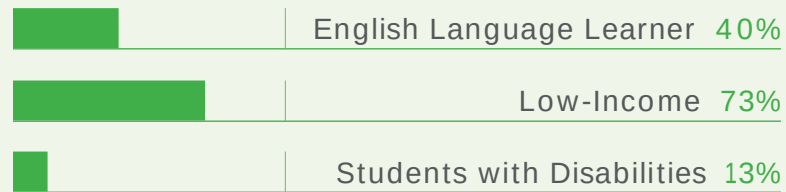
The Imagination Center will seek to improve access to quality child care and increase programming for youth. In addition, the Center will have services focused on literacy and digital skills development. The Imagination Center will also add a high quality Wi-Fi destination to an area where many do not have public internet access nearby.

Elementary School Demographics

Although examining area demographics is informative, it deserves mentioning that the demographic profile of youth in northeast Madison is considerably different from the rest of the area's population, especially when considering race. School profiles from the two public elementary schools near Reindahl Park reveal that the area's younger residents are far more diverse. Only 26% of elementary school students at Hawthorne and Sandburg Elementary School are white, compared to almost 76% of area residents as a whole. At Sandburg Elementary, 42% of students identify as Hispanic/Latinx, more than four times higher than the rate of Latinx residents in the region. Both schools also have a much higher percentage of African-American students than is reflected in the rest of the area's population.

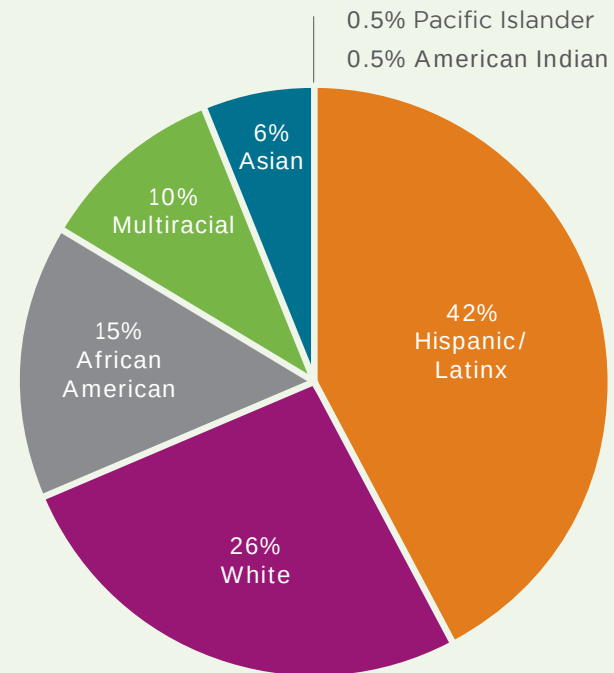
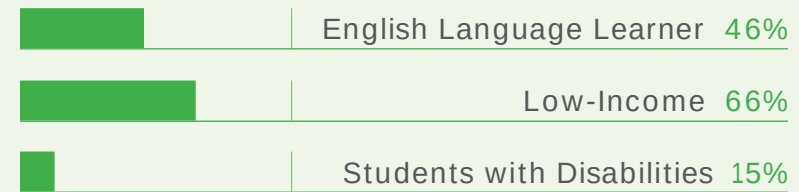
Students at the two elementary schools also face barriers to learning. Nearly 40% of students at Hawthorne Elementary are English language learners along with 46% of their peers at Sandburg Elementary. In addition, a majority of students at the two schools are from low-income families. Approximately 66% of the students at Sandburg Elementary and 73% of the students at Hawthorne Elementary come from low-income families. These barriers are significant and the Imagination Center will serve as a resource for these students and their families.

Hawthorne Elementary Demographics (~400 Students)⁹



⁹ Madison Metropolitan School District. "Hawthorne Elementary School Profile." Madison, WI, 2019.

Sandburg Elementary Demographics (~450 Students)¹⁰



¹⁰ Madison Metropolitan School District. "Sandburg Elementary School Profile." Madison, WI, 2019.

TRANSPORTATION

Accessibility is of central importance to the Imagination Center's success. The ways in which the Center fits within the wider transportation network in northeast Madison is key to understanding how visitors can effectively travel to and from the Center. An examination of the region's transportation network and infrastructure follows.

Pedestrian Network

Pedestrian infrastructure in northeast Madison is generally robust. Most streets in the region have sidewalks on each side of the street, providing pedestrians the means to traverse the area safely. The larger residential neighborhoods in particular have an abundance of sidewalks. The Greater Sandburg neighborhood contains sidewalks on almost every street and typically both sides of each street. The Sandburg Woods path also runs through the neighborhood, connecting the east and west sides of the neighborhood and leading to Sandburg School. Similar to the Greater Sandburg neighborhood, the Ridgewood neighborhood also has considerable internal sidewalk connectivity.

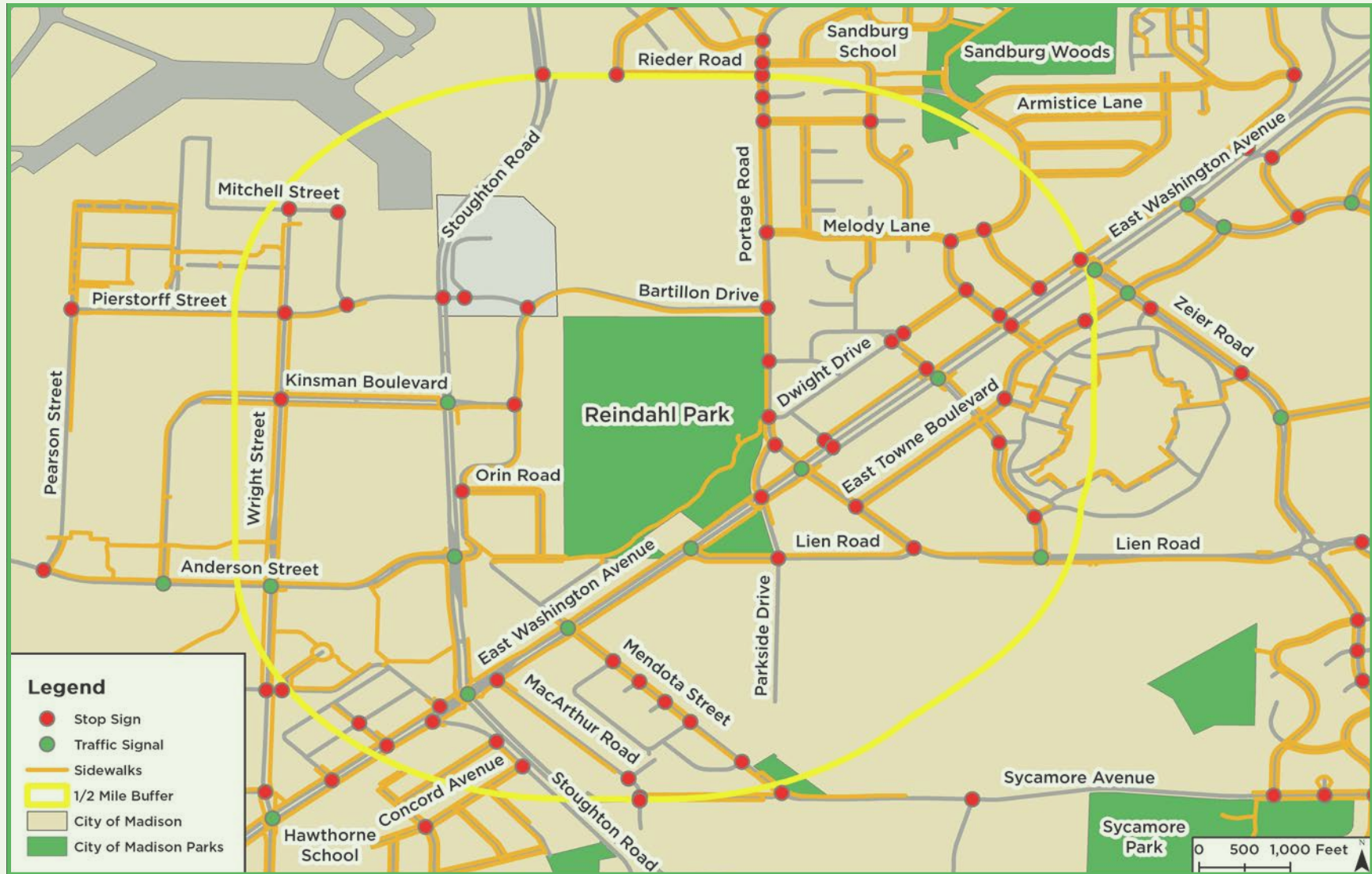
While the larger neighborhoods enjoy high-quality pedestrian infrastructure, smaller neighborhoods in the area do not. The Mayfair Park, Burke Heights, and Hawthorne neighborhoods do not have as robust connectivity. Streets in those neighborhoods have some sidewalks, but the sidewalks are not as systematically connected and have significant gaps. The lack of connectivity could be a barrier to pedestrian travel within these neighborhoods.

More importantly for the purposes of this report, the pedestrian infrastructure in northeast Madison features gaps between the residential neighborhoods and Reindahl Park. Lien Road is the most direct connection between the Ridgewood neighborhood and Reindahl Park. Significant gaps and inconsistencies in sidewalk access means neighbors need to cross streets multiple times for consistent sidewalk access, providing safety and accessibility barriers to reaching the park.

The Greater Sandburg neighborhood has better pedestrian access to Reindahl Park. However, the neighborhood does not have sidewalks on the streets closest to Reindahl Park where the Imagination Center will be located. A similar lack of consistent sidewalk access poses the same barriers to Reindahl Park access for this neighborhood, with Dwight Drive, Duke Street, Sunnyside Crescent, Stuart Court, having no or minimal sidewalks. Portage Road presents a similar situation to that of Lien Road, requiring most pedestrians to have to cross the street once or more to stay on the sidewalk network.

Crossing major corridors poses a significant barrier for pedestrians. Given Reindahl Park's location, many neighborhood residents will have to cross East Washington Avenue, Portage Road, Lien Road, or Stoughton Road to access the Imagination Center on foot. These are all major vehicular thoroughfares with a heavy amount of daily traffic. The table on page 18 shows the Average Weekday Traffic Counts (AWTC) for major roads that pedestrians may cross to reach the Imagination Center.

Existing Pedestrian Network



Traffic counts of major roads in the Reindahl Park region.

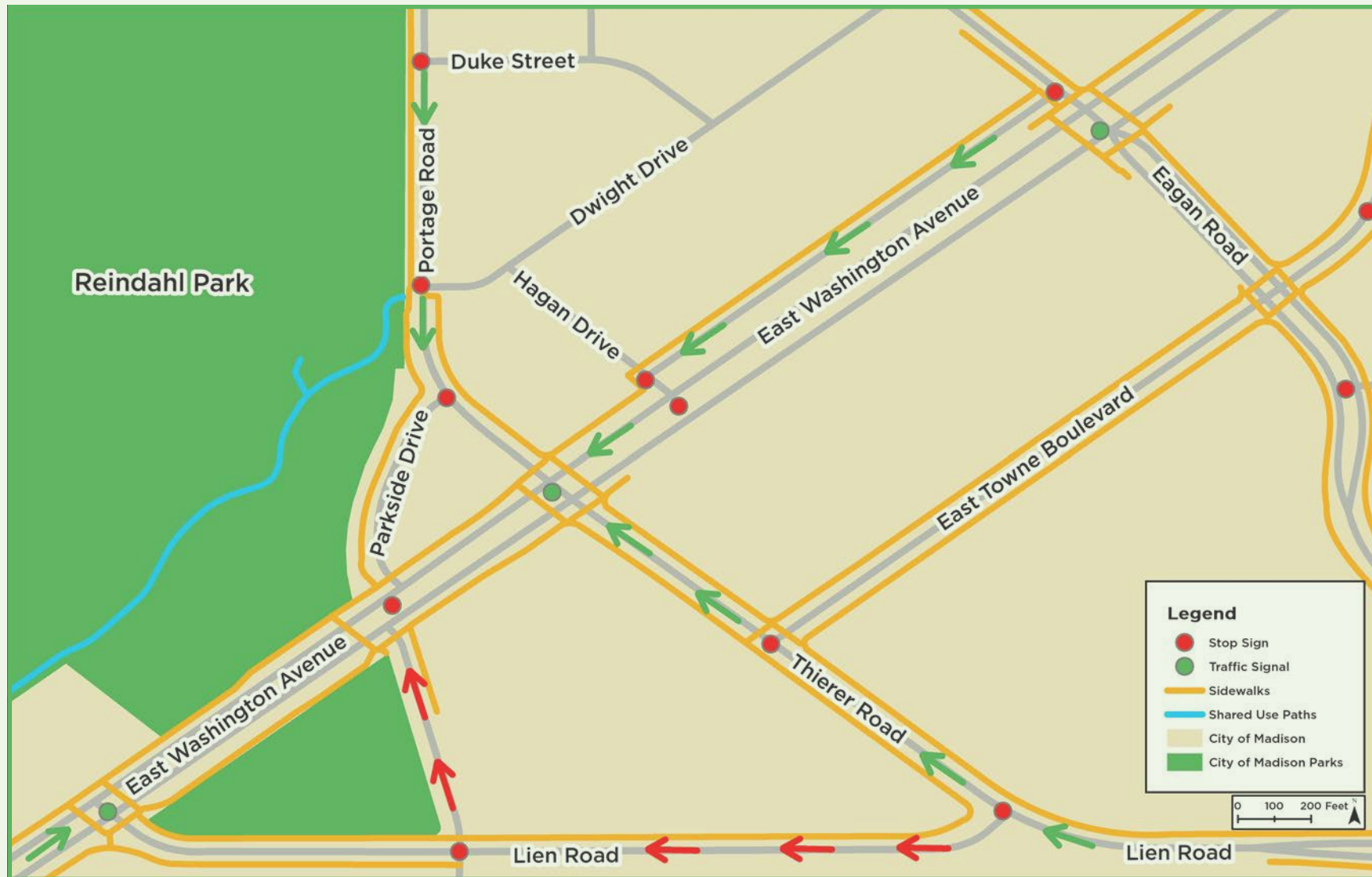
STREET NAME	AVERAGE WEEKLY TRAFFIC COUNT
East Washington Avenue	48,700
Portage Road	7,350
Lien Road	10,550
Stoughton Road	32,100

East Washington Avenue is the arterial street that divides northeast Madison more than any other. The most challenging crossing for pedestrians near Reindahl Park is at East Washington Avenue and Parkside Drive. East Washington Avenue contains eight lanes with a posted speed of 40 mph at the crosswalk near Parkside Drive. While there is a median that serves as a pedestrian refuge, the speed and volume of traffic makes the crossing difficult for most pedestrians. Adding to that difficulty, there is no intersection control to slow or stop traffic at Parkside Drive. Pedestrians must walk to Thierer Road or Lien Road in order to cross at a signalized intersection.

On its surface, the Parkside Drive crossing appears to present a barrier to reaching the Imagination Center from the south side of East Washington Avenue. However, most pedestrian traffic will originate from west of the Lien Road intersection, east of the Thierer Road intersection, or along Portage Road to the north. The remainder will likely emanate from the Ridgewood neighborhood and travel along Lien Road. With the addition of proper wayfinding signage, pedestrians will be directed to stay on Thierer Road at the Lien Road/Thierer Road split. Between the Lien Road split and East Washington Avenue, existing and planned land uses should not generate a large amount of pedestrian trips. As a result, pedestrian crossings at the Parkside Drive intersection will be minimal for those traveling to the Imagination Center.

At a regional level, the major obstacles to walkability in northeast Madison are the current land use patterns and large distances between popular destinations. Different land uses are typically separated from each other, as opposed to mixed, which creates great distance between trip origins and destinations. In addition, a number of gaps in the pedestrian network exist that makes safe travel difficult along some corridors. While there are pockets of residential density, there are still many areas of low-density residential housing with larger lot sizes. That in turn makes pedestrian travel harder to accomplish. Although the Imagination Center project will not solve these issues, its location will provide a walkable public destination for some area residents and will provide a refuge for those making long pedestrian trips.

Pedestrian Routes



Bicycle Network

As well as walking to the Imagination Center, visitors may also travel by bicycle. Given the nature of the land use patterns around Reindahl Park and the distance between origins and destinations, it is possible that more visitors will travel to the Center by bike than on foot. An analysis of bike infrastructure and bike route connectivity in the region follows.

Reindahl Park and the surrounding area has different levels and types of bike infrastructure. Along East Washington Avenue, the primary transportation corridor in the region, separate bike lanes exist in both travel directions and terminate near East Towne Mall. Other major corridors such as Wright Street, Portage Road, and Sycamore Avenue also have bike lanes albeit only in one direction. The notable exception is Stoughton Road, which does not have any bike infrastructure south of Anderson Street. Stoughton Road only has paved shoulders north of Anderson Street, which is not a robust form of bike infrastructure.

The Portage Road bike lane travels southbound, and the lane will allow visitors to reach the Imagination Center via bike from the Greater Sandburg neighborhood. Additionally, bike lanes along Lien Road and Sycamore Avenue will provide safe means for bicyclists coming to the Center from the Ridgewood Neighborhood. However, it is worth noting that the westbound bike lane on Lien Road follows Lien Road at the Lien Road/Thierer Road split, unlike the sidewalk that follows Thierer Road.

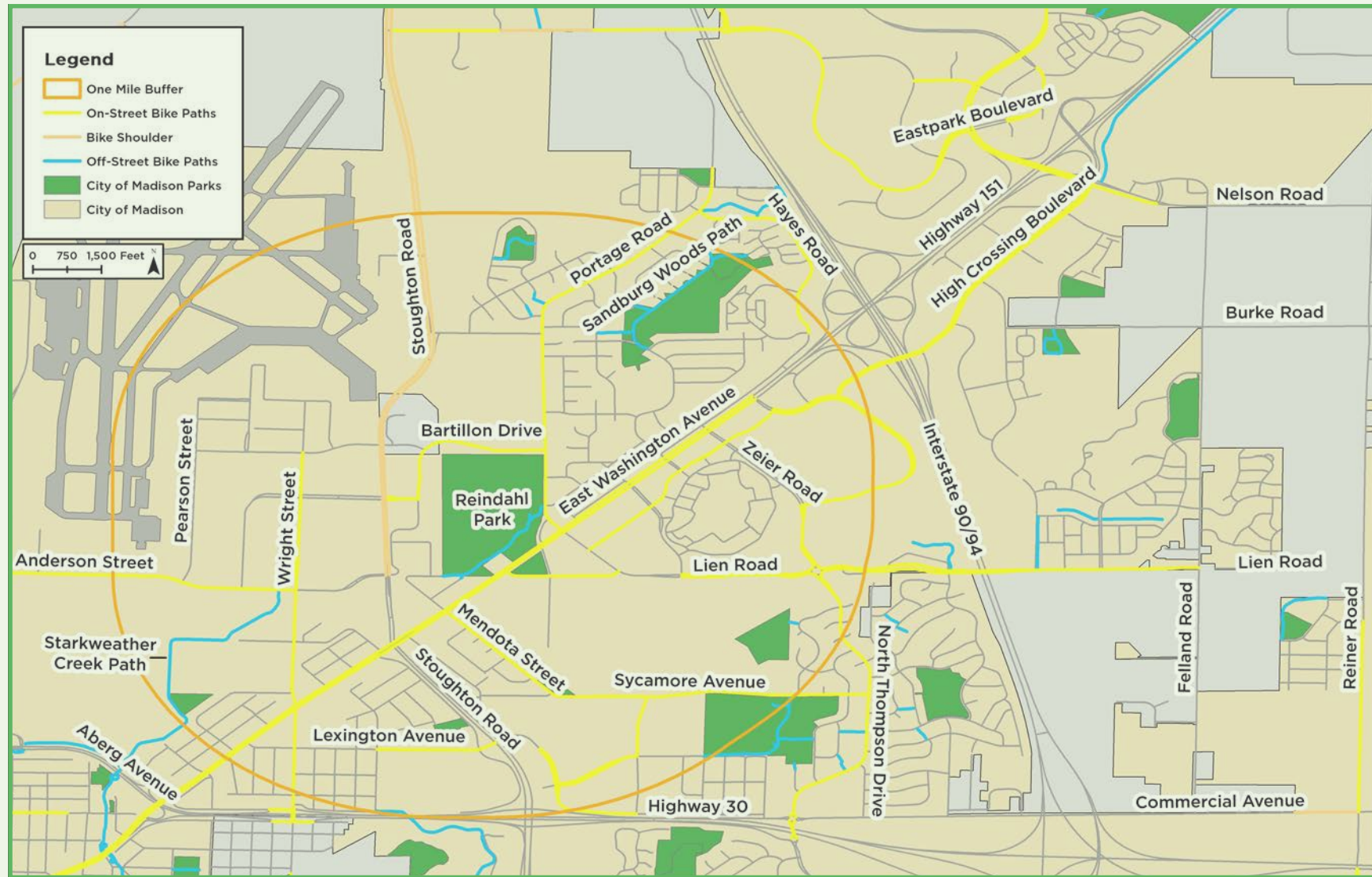
The Reindahl Park area has a few notable off-street bike paths. The Starkweather Creek Path is the most developed route, and it connects the Capital City Path to the Reindahl Park area.

The path enters the region from the southwest and ends near the Anderson Street and Wright Street intersection. The next largest off-street bike trail is the Sandburg Woods path, which connects both sides of the Greater Sandburg neighborhood. Reindahl Park also has an off-street bike and pedestrian path transecting the park. Aside from those paths, there is limited off-street bike infrastructure.

Bike infrastructure connectivity has one noteworthy interruption, which may affect visitors trying to reach the Imagination Center on a bike. There is a gap between the end of the Starkweather Creek Path and Reindahl Park. Specifically, Anderson Street between Wright Street and Stoughton Road lacks any kind of bike infrastructure. This section of Anderson Street crosses in front of the Madison College Truax Campus and is a four-lane road with an Average Daily Traffic Count of 15,950 vehicles. Navigating that portion of the street on a bike is challenging for bicyclists and may prevent some from choosing to bike to the Imagination Center.

In spite of the gap near Madison College, northeast Madison is generally well suited for bicyclists to reach the Imagination Center. In conversations with community members, several people noted this while also suggesting improvements, such as adding a B-Cycle station to the park or more bike storage. As the Imagination Center continues to develop, city staff should seek ways to improve the biking experience in northeast Madison.

Existing Bike Network



IMAGINE MADISON

NEIGHBORHOODS AND HOUSING

Create complete neighborhoods across the city where residents have access to transportation options and resources needed for daily living.

The Imagination Center will bring resources of all kinds to northeast Madison including child care, civic spaces, educational programs, and recreational opportunities.

The Imagination Center will create a social and civic focal point for several northeast Madison neighborhoods directly adjacent to a planned Bus Rapid Transit stop.

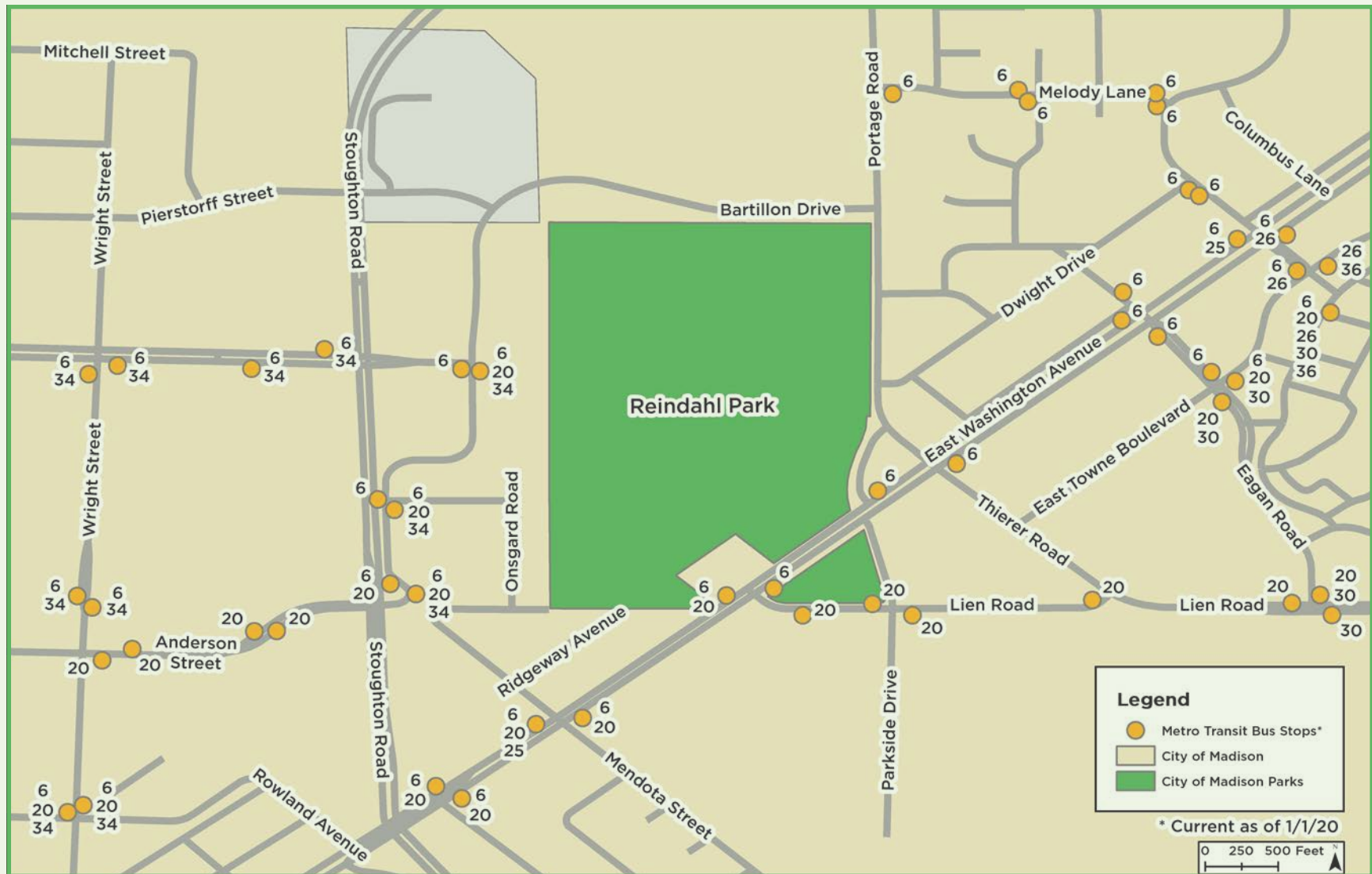
Public Transportation

Another way visitors will be able to access the Imagination Center is through public transit. Madison Metro currently serves northeast Madison with a few bus routes. The primary route serving the area is the #6 bus route, which travels from East Towne Mall through downtown Madison to the West Transfer Point. Buses on the #6 route run every half hour on weekdays and every 15 minutes during peak hours. The bulk of the #6 route travels along East Washington Avenue, with a loop at Madison College and another through the Greater Sandburg neighborhood. The loops offer less frequent stops, approximately once each hour during the week.

Besides the #6 route, the #20 bus route also services the Reindahl Park area. The #20 route travels from East Towne Mall, past Reindahl Park and Madison College to the Dane County Regional Airport, and onto the North Transfer Point. Buses typically run every half hour along the #20 route.

There are a handful of bus stops near Reindahl Park, which mainly serve the #6 and #20 routes. The closest stop is on the northeast corner of Parkside Drive and East Washington Avenue. The #6 route is the only bus that stops there. Another stop, at the intersection of Lien Road and East Washington Avenue, gives riders the chance to board the #6 or #20 bus routes. Maps depicting bus stop locations, including the routes they serve near Reindahl Park, and bus routes in northeast Madison follow.

Metro Transit Bus Stops



Metro Transit Weekday Service (02/25/2020)



Metro Transit Weekend & Holiday Service (02/25/2020)



Bus Rapid Transit

The City of Madison plans to add Bus Rapid Transit (BRT) as another public transportation alternative. Planning is underway for an initial east-west BRT corridor with possible future extensions to the north and south. The initial corridor is intended to travel along East Washington Avenue, through downtown Madison, and along University Avenue, Whitney Way, and Mineral Point Road on the west side. The City of Madison identified Thierer Road at East Washington Avenue as a potential stop for Bus Rapid Transit in the 2013 Madison Transit Corridor Study. This location would ideally suit the Imagination Center at Reindahl Park. It would allow for quick and direct travel between the Imagination Center and downtown Madison. In addition, it would help alleviate overcrowding on the #6 bus route, which is currently the most direct bus route to Reindahl Park from downtown.¹¹

Vehicle Travel

Imagination Center visitors will also be able to access the Center via automobile. The main routes most visitors will take will be along East Washington Avenue, Stoughton Road, or Portage Road. The road network is conducive for visitors attempting to reach the Imagination Center from the isthmus or the east side of Madison. East Washington Avenue is a high-capacity arterial corridor that permits direct vehicle travel from downtown. Additionally, visitors from Madison's northside will be able to travel to the Center along Anderson Street in front of the Madison College Truax campus. Visitors from Madison's west side will have a longer trip, but the Imagination Center will be accessible given its location near major highways.

Bus Rapid Transit Map (02/25/2020)



¹¹ Capital Region Sustainable Communities Initiative and the Madison Area Transportation Planning Board. *Madison Transit Corridor Study: Investigating Bus Rapid Transit in the Madison Area*. By the SRF Consulting Group Team. Madison, WI, May 2013.

¹² City of Madison Transportation Department. *Madison Bus Rapid Transit Route - Adopted 2/17/20* by the Madison Transportation Planning and Policy Board.

TELL US/CUÉNTENOS 2015-2016

In 2016, Madison Public Library established a strategic plan for library service in Madison's eastside called *Communities Inspiring Libraries: A Strategic Plan for Eastside Growth*. The strategic plan process was community-driven and relied extensively on deliberative dialogue methods.

The Library created a planning engagement program called Tell Us/Cuéntenos to host and facilitate conversations around the community. Tell Us/Cuéntenos encouraged face-to-face conversations among community members, with or without a library or government official present. The resulting 52 conversations with 338 participants laid the foundation for the library's eastside strategic plan including the decision to locate the Imagination Center at Reindahl Park.

Furthermore, the Eastside Strategic Plan identified five critical roles the Library must prioritize when planning new facilities and services for Madison's eastside. The critical roles provide a framework for analyzing feedback gathered during the Imagination Center engagement process and organizing subsequent recommendations in alignment with the eastside strategic plan. A brief description of each role follows.

SOCIAL FORUM

Madison Public Library is a social hub for the community and should work to become a more intentionally inclusive space for social interaction.

CIVIC INNOVATOR

Madison Public Library should encourage participation in public life and provide a space for civic engagement and connection.

HOLISTIC HEALTH ADVOCATE

Madison Public Library should promote access to health care opportunities and should prioritize health literacy.

CULTURAL PLATFORM

Madison Public Library should provide a platform for expression, education, and celebration. The library must increase culturally diverse and relevant educational and recreational opportunities.

ECONOMIC ENGINE

Madison Public Library should provide resources and tools to enhance workforce development and otherwise support library visitors.

IMAGINATION CENTER ENGAGEMENT 2018-2019

Building from the conversations that produced the Library's eastside strategic plan, the planning process for the Imagination Center at Reindahl Park also relied heavily on in-person conversations.

From October 2018 to December 2019, Madison Public Library organized conversations with local stakeholders including neighbors, service providers, businesses, and other interested parties. The goal of the conversations was simple. The Library wanted to discover how people perceive their neighborhoods as well as Reindahl Park in order to develop a shared vision for the Imagination Center. To that end, Madison Public Library conducted engagement in the following manner:

Madison Public Library's Library Planner and Community Engagement Coordinator identified specific neighborhood groups, organizations, and businesses with whom to share conversations. Library staff also solicited referrals from these stakeholders to arrange meetings with other community members.

Library staff attended existing community-organized events in the area to talk with community members. The Library strived to avoid creating additional events for people to attend while at the same time allowing for their contribution to the Imagination Center planning.

Madison Public Library staff met stakeholders at their convenience, when, where, and how they wanted to meet. Meeting locations varied from schools, businesses, coffee shops, community centers, and Reindahl Park itself.

The Library intentionally kept conversations small to allow for detailed discussion with stakeholders and relationship building. The average conversation size included four participants and conversations typically lasted around an hour.

Library staff hosted planning sessions with students at Sandburg Elementary School, East High School, and West High School to understand the perspective of youth and teens. The Library held two sessions with Centro Hispano's Escalera program.

The Library shared and collected "Build a Library" worksheets with youth. The worksheets are a blank template for children to write or draw their vision for the Imagination Center. The Library received outstanding ideas from 79 students who submitted "Build a Library" worksheets.

IMAGINATION CENTER ENGAGEMENT

“

112
CONVERSATIONS

425
COMMUNITY
MEMBERS

In total, the conversations included
over 138 HOURS of dialogue
and created a rich background
for the Imagination Center report.

”

Local Voices Network

In the fall of 2018, Madison Public Library formed a unique partnership with Cortico, a non-profit focused on fostering constructive public conversation in communities across the country. Specifically, the Library partnered with Cortico's Local Voices Network (LVN) to promote and increase community conversations in Madison. As a small part of the collaboration, Library staff hosted a few conversations with the Imagination Center project using LVN's one-of-a-kind technology, digital hearths. A digital hearth is a device that records and transcribes conversations among small groups of people. These conversations can then be shared with other community members and the media in interactive ways. LVN-style conversations help connect community members to one another, promote civic engagement, and encourage journalism that reflects and responds to local issues.

As a result of the community engagement process outlined above, the Library was able to deeply engage with the community to learn about neighborhood concerns, challenges, and dreams. Over the course of a year, Library staff engaged in 112 conversations with 425 community members. In total, the conversations included over 138 hours of dialogue and created a rich background for the Imagination Center plan.

To sustain engagement with community members throughout the planning process, the Library sent quarterly planning updates detailing project progress if needed. The updates typically included a general recap of engagement efforts, a list and map of organizations the Library met with, a project timeline, and a brief synopsis of the ideas shared in conversations. The Library made updates available in English and Spanish and delivered paper copies of the planning updates upon request. The Library also keeps the updates on the Madison Public Library website at <https://www.madisonpubliclibrary.org/locations/reindahl-park>.

STAKEHOLDER GROUPS ENGAGED

100 Black Men of Madison, Inc.	Goodman Community Center
Access to Independence	Hawthorne Elementary School
African Association of Madison	High Crossing Neighborhood
African Center Community Development	Home Savings Bank
American Family Insurance	HyVee - East Madison
Care Net - Dane County	Just Bakery/Madison Urban Ministry
Capital East Soccer Club	Just Coffee Cooperative
Center for Resilient Cities	Literacy Network
Centro Hispano of Dane County	Madison College - Administration
Christ the Solid Rock Baptist Church	Madison College - Student Senate
City of Madison - Community Development	Madison Cricket Association
City of Madison - CDA	Madison Football Club
City of Madison - Parks	Madison Metropolitan School District
City of Madison - Planning	Madison School & Community Recreation
City of Madison - Police	Monona East Side Business Alliance
Community Action Coalition	NAMI - Dane County
Community GroundWorks	Northside Planning Council
Community Living Alliance	Oakwood Village
Dane County - Immigration Affairs	Office Depot
Dane County - Joining Forces for Families	Old National Bank
East Madison Community Center	Reindahl Community Gardeners
East Madison High School - Book Club	Sandburg Elementary School
East Madison High School - Principal's Group	Sandburg Neighborhood Association
East Towne Mall Administration	Senegambia Association
Eastside Lutheran Church	Truax Neighborhood Association
Food for Thought Initiative	
Gambian Youths of Wisconsin	

DATA ANALYSIS AND MADISON PUBLIC LIBRARY CRITICAL ROLES

As described in the previous section, Madison Public Library prioritizes five critical roles when planning new facilities and services for Madison's eastside. The following section details various recommendations for the Imagination Center, organized by each library role. The recommendations are based on what Library staff heard during community conversations, research conducted by Library staff, and City of Madison and Madison Public Library goals and objectives.

During conversations with community members, Library staff recorded perspectives, ideas, and suggestions offered by conversation participants. Library staff subsequently assembled the collective feedback and performed a qualitative analysis of the data. The analysis summarized community ideas and grouped suggestions by the five Madison Public Library roles. Simultaneously, Library staff anonymized the data and shared it with South Central Library System's Data Services Consultant, who then performed a similar analysis and returned the analysis to Madison Public Library.

The analyses of community input, combined with research and institutional goals, produced the 19 recommendations that follow. A list of the recommendations and more detailed descriptions follow.

RECOMMENDATIONS

SOCIAL FORUM

1. Meeting Rooms
2. Event and Gathering Space
3. Food Preparation and Programming
4. Youth and Teen Space
5. Anji Play

CIVIC INNOVATOR

1. Immigration and Citizenship
2. Digital Engagement
3. Polling Place and Voter Registration

HOLISTIC HEALTH ADVOCATE

1. Health Literacy and Health Services
2. Environmental Education
3. Garden and Outdoor Workspace

CULTURAL PLATFORM

1. Artist-in-Residence
2. Imagination Center Art
3. Culturally-Representative Material Collection
4. Media Programming and Digital Creation

ECONOMIC ENGINE

1. Digital Inclusion
2. Child Care
3. Literacy Classes
4. Financial Empowerment

- ① Meeting Rooms
- ② Event and Gathering Space
- ③ Food Preparation and Programming
- ④ Youth and Teen Space
- ⑤ Anji Play

SOCIAL FORUM

Madison Public Library is a key space for social interaction in our community. Visitors use the Library's facilities to connect with each other, spontaneously or intentionally. The Imagination Center should aim to maximize the potential for social mixing at Reindahl Park.

Madison Public Library and
Madison Fire Department visited
Reindahl Park in August 2018.

① Meeting Rooms

Community members frequently expressed that they have trouble finding places to meet that are accessible, safe, free, and open to the public. Neighbors stated that the absence of meeting spaces fulfilling those requirements is an obstacle to neighborhood organization and cohesion. They repeatedly stressed that the Imagination Center should have meeting rooms of different sizes that are suitable for a variety of uses. Whether it is for a study session or a neighborhood meeting, the Imagination Center should have welcoming meeting spaces. Providing meeting rooms of different sizes that are open to the public will further the Library's goal of increasing the versatility of public space.

② Event and Gathering Space

Community members often articulated a desire to organize groups together in public space. Conversation participants suggested having celebrations, gatherings, performances, and presentations at the Imagination Center. They proposed having space suitable for weddings, special events, and large-scale gatherings. Whatever the purpose, the Imagination Center should have a space or spaces capable of hosting gatherings and large events.

Various groups including the Reindahl Park Gardeners and Madison FC currently use Reindahl Park for events. Library staff heard from a great number of community members that they feel that the existing park shelter is outdated and unwelcoming to visitors. The shelter has limited natural light it also is limited by a maximum capacity of 110 people. In the winter months, the City of Madison Parks Department closes the shelter because it is not heated. For these reasons, many groups forgo gathering in the shelter or choose to host gatherings in the lawn or in one of the parking lots at Reindahl Park.

New community event space with modern facilities at the Imagination Center will drastically change the landscape of Reindahl Park. Given the desire for large community gatherings and the limitations of the existing park shelter, Library and Parks staff should plan event space together to meet community and institutional goals.

At a minimum, prospective event space or spaces should accomplish the following:

- Serve as a suitable replacement for the existing park shelter.
- Provide event space for use during all four seasons.
- Have a range of audiovisual capabilities.
- Have capacity for large gatherings up to 300 people.
- Meet the amount of community demand for events and gatherings.
- Be flexible, adaptable, and viable for diverse uses.
- Have access to food preparation space.

Building community space at the Imagination Center will enable gatherings of all kinds to occur in an accessible and welcoming public venue. Providing event and gathering space will be critical to meet community needs. The Imagination Center's location within Reindahl Park will provide a scenic setting and accessible location for the community to come together in a public facility. The provision of community gathering space will reshape the park by enabling it to become a social hub and allowing it to be a unique gathering place.

③ Food Preparation and Programming

Multiple conversation participants stated a desire to come together as a community over food. They listed cooking classes, reservable space, and food related workshops as currently lacking in northeast Madison. The Reindahl Park Gardeners in particular expressed a desire for space for garden registrations, canning classes, and other food-related activities.

The Imagination Center should fulfill these needs by providing space for food-related workshops and food preparation for events. Ideally, a kitchen space will be located within the gathering and event space(s) or close by. Imagination Center staff could use the space to schedule programs and workshops or visitors could reserve it for events and gatherings. A food preparation space will provide great synergy with the gardens at Reindahl Park. The park gardens are vast and attract a diverse range of community members, and the gardeners have significant expertise related to food production and processing. A food-related space would allow for their talents and the talents of others to be shared with the community.

④ Youth and Teen Space

Northeast Madison is home to a higher share of children and teenagers than both the eastside and the City of Madison as a whole. The Imagination Center should embrace the large number of children living in the area by creating space designed for youth. The Imagination Center should take advantage of Reindahl Park to create indoor and outdoor opportunities. Community members emphasized the importance of having a place for teens and children to socialize and learn. Library staff heard from parents that there are limited public options for teenagers seeking a place to meet outside of school or home in northeast Madison. Teens shared with us directly that they desire a place to go that is welcoming and safe to meet with friends and peers.

Along with a space for teens, several parents noted a lack of children's spaces in northeast Madison. They hope for more child-friendly spaces and programs available throughout the year. It is worth noting that parents and caretakers mentioned that they desire a separate youth space or one that is buffered from quieter areas in the Imagination Center. They relayed to Library staff that a lack of separation prevents them from taking their kids to other library locations where they fear they will disrupt other library visitors.

Children participate in cooking classes at the Meadowridge Library in 2019.

One particular viewpoint stood out around discussions of youth and teen space. Community members emphasized that the Library should create youth space specifically to foster learning and development. Stakeholders conveyed their hope that the Imagination Center would be a place where students can find homework help and develop personal skills. To meet community demand, the Imagination Center should incorporate space dedicated to youth and teens that focuses on supporting learning both indoors and in Reindahl Park. Library staff should work directly with teens and children to design space according to their needs.

⑤ Anji Play

Along the lines of the previous section, parents and teachers shared with Madison Public Library that they would like more opportunities for children to play together outside of school. They hope the Imagination Center will provide programming for children to play and learn with one another. Conversation participants commented on the need to increase recreational and educational opportunities for children of all ages, but underscored a desire for more programming geared towards young children.

Madison Public Library, in collaboration with Madison Parks, currently provides Anji Play programming for children at Reindahl Park during the summer months through a program called the Wild Rumpus. In fact, Madison Public Library has been recognized as the first Anji Play demonstration site in the United States. Anji Play is an educational philosophy centered on self-determined play. It is a comprehensive approach to early learning developed in Anji County, China. The Anji Play approach predicated itself on education through true play, which takes place when children follow their own interests and intentions. Anji Play and other child-centered, research-based early literacy programs will be key to serving youth at the Imagination Center.

In its current arrangement, Wild Rumpus is a weekly pop-up program that takes place one evening a week at Reindahl Park during summer. The program requires a substantial amount of coordination and set-up since there is no permanent

facility or staff based at Reindahl Park to store Wild Rumpus materials. Due to its temporary nature, it also requires families to attend at a specific time each week, which may prevent some from participating in the program. It is also only available seasonally which limits its potential.

The Imagination Center at Reindahl Park should provide space and materials for Anji Play to occur year-round as well as indoors and outdoors. The Center should serve as a focal point for Anji Play activities, in large part because there is park space available to organize play opportunities. Anji Play will help fulfill two needs, a desire for more recreational activities in northeast Madison and programming that focuses on play and learning. The provision of Anji Play experiences will allow more children to play together and advance early learning in the Reindahl Park region.

Children participate in Wild Rumpus at Reindahl Park, July 2018.



- 
- ① Immigration and Citizenship
 - ② Digital Engagement
 - ③ Polling Place and Voter Registration

CIVIC INNOVATOR

Madison Public Library provides opportunities for participation in civic life. The Imagination Center should expand the Library's efforts to increase public engagement and involvement in northeast Madison.

People vote absentee at the Sequoya Library, 2019.
Photo credit: Shanna Wolf.

① Immigration and Citizenship

The Library heard frequently from community members that the Imagination Center should offer services for those seeking citizenship information and assistance. As detailed in the demographics section of this report, the northeast region is home to a higher percentage of immigrant residents than most other areas of Madison. The Imagination Center should be a place that is welcoming and accessible for immigrants. In addition, the Center should have easily identifiable resources regarding citizenship and immigration information. Madison Public Library currently offers phone interpreter services and immigration rights information at all library locations, and the Imagination Center should offer these resources as well.

Beyond providing resources and information, Imagination Center staff should work to bring direct immigration services to the Center. Multiple organizations offer services to immigrants in Madison through the Dane County Immigration Assistance Collaborative. Some of these organizations include the UW Law School Immigration Justice Clinic, the Community Immigration Law Clinic, Centro Hispano, and the Catholic Multicultural Center. Immigrants living in northeast Madison shared with Library staff that services can be difficult to find since most are not close to where they live. The Imagination Center should work with the Collaborative or other partners to offer a periodic walk-in immigration clinic to serve the large number of immigrants living in the area. Any prospective walk-in clinic should be at times that are convenient for working adults and families.

② Digital Engagement

Northeast Madison residents do not live near downtown, where most city council and city committee meetings take place. Community members expressed their reservations about participating in city government due to distance and travel concerns of attending meetings downtown. The City of Madison Task Force on Government Structure (TFOGS) identified Aldermanic District 17, which is home to the Reindahl Park area, as one that, “serve(s) transit dependent populations with children aged 0-4 and has been traditionally underrepresented in city government.”¹⁶ Therefore, the Imagination Center should seek ways to connect residents to city government and increase civic participation. The Imagination Center should have the capability to host Common Council and/or committee meetings with the same level of accessibility as meetings held downtown, including live streaming and television broadcast, presentation technology, remote participation by members of the body as well as in-person and remote public testimony.

In addition, the Imagination Center should have communication technology allowing visitors to remotely engage in city meetings held at other locations, and to remotely conduct business with City staff and elected officials. According to the Final Report of the Task Force on the Structure of City Government, “a key component to increasing representation and resident engagement is to create a robust technology plan that will create new avenues for resident engagement.”¹⁷ Creating a platform for digital engagement will go a long way towards promoting civic engagement in northeast Madison and breaking down barriers to participation in city government. These approaches and others will promote involvement in local government and engagement with local decision-making processes.

③ Polling Place and Voter Registration

Madison Public Library locations currently serve as polling places for elections. Visitors can vote at libraries on Election Day, and they can vote at library locations early through In-Person Absentee Voting. They also serve as year-round voter registration sites, and library card records are now recognized as official proof of address in the registration process. In fact, Madison Public Library locations are among the most popular places for early voting in the city of Madison.

During discussions with community members, many brought up voting as a critical way to bring the local community together to participate in civic life. The Reindahl Park area has a low amount of voter participation, and aldermanic district 17 recorded the third lowest voter turnout during the November 2014 elections.¹⁸ The Imagination Center will therefore be a polling place in northeast Madison and a place where residents can register to vote at any time. The Center will also have information regarding elections, including where to find more information about candidates and issues. This could take the form of candidate debates or civic discussions about local challenges or political issues. The Imagination Center will serve a critical role in connecting area residents to government resources and information about community issues.

^{16,18} City of Madison Task Force on Government Structure. *Final Report of the Task Force on the Structure of City Government*. November 20, 2019.

¹⁷ Ibid.

- ① Health Literacy and Health Services
- ② Environmental Education
- ③ Garden and Outdoor Workspace

HOLISTIC HEALTH ADVOCATE

The health and well-being of residents is of central importance to Madison Public Library. The Library should promote access to health care opportunities and should prioritize health literacy.

Yoga At The Lakeview Library,
2016. Photo credit: Erin Moore.

① Health Literacy and Health Services

A primary focus of the Imagination Center should be improving health literacy and offering health services. Throughout planning discussions for the Imagination Center, participants often spoke about health related topics. Many stakeholders shared with Library staff that they are concerned with what they perceive as an increasing amount of people with behavioral health issues in northeast Madison. Others conveyed that they wished that they could be more active, eat healthier, or have greater access to information on health related topics. Community members hope that the Imagination Center will deliver opportunities for recreation as well as relaxation and respite. Additionally, residents desire a place to meet with health care professionals and take part in community fitness classes. A primary focus of the Imagination Center should therefore be improving health literacy and offering health services.

In *Communities Inspiring Libraries: A Strategic Plan for Eastside Growth*, Madison Public Library identified a need to improve health literacy for eastside residents. Health literacy is defined as “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.”¹⁹ According to the National Library of Medicine (NLM), more than 90 million adults in the United States have low health literacy.²⁰ Health information, including health insurance options and coverage, is complex and not easily discernible for many. Health care information and legislation

also change at a rapid pace, which complicates the ability for individuals and families to navigate the health care landscape. These factors and others make it difficult for individuals to access health care information, engage with health professionals, and take control of their health care decisions.

The Imagination Center should provide opportunities for visitors to improve their health literacy by having resources and staff dedicated to connecting patrons with relevant and high-quality health related information. Library staff have an ideal skillset to assist visitors who are seeking health information. Librarians are highly skilled at finding factual and relevant information as well as providing confidential assistance to patrons looking for help. In addition, Library staff can identify appropriate local health care providers and services for visitors seeking health care services.

Along with knowledgeable staff, the Imagination Center should have health related resources readily available to visitors. The Imagination Center collection should have a special focus on health and health care information for people looking to expand their medical knowledge. The Center should also provide space for health services. Ideally, the Imagination Center will have a private space available for health care professionals to meet with community members. The space will allow practitioners to provide services such as health screenings and counseling in a comfortable and secure setting. Conversation participants

repeatedly shared that mental health is a pressing issue in the Reindahl Park area. Accordingly, Imagination Center staff should arrange counselors and behavioral health professionals to assist visitors.

From time to time, community members expressed a desire to participate in fitness and recreational classes at the Imagination Center. The Center's setting within Reindahl Park will allow for many different kinds of recreational programming. Library and Parks staff should work together to identify opportunities for joint activities at the park.

Combined, health literacy and health services will help community members better understand their health care, enhance their health knowledge, and improve their overall well-being. A focus on health literacy will empower individuals and families to be self-determined with their health care. Health services at the Imagination Center will enable visitors to access care directly in a safe environment. Additionally, well-planned recreational activities will provide an opportunity for residents to come together and advance their health goals as a community.

¹⁹ Goldsmith, Francisca. “Healthier Communities: Libraries Improve Health Literacy, Access.” *ALA Policy Perspectives*, no. 6 (May 2019).

²⁰ Ibid.

② Environmental Education

Over the past few years, neighbors have voiced concerns on a variety of environmental issues in the Reindahl Park area. The Madison Water Utility has detected PFAS substances in the local water supply and has closed Well 15 in Reindahl Park indefinitely.²¹ At the time of this writing, the Wisconsin Air National Guard has proposed Madison as the location for a squadron of F-35 fighter jets. Neighbors are concerned with projected increased noise levels and potential environmental pollution associated with the proposed jets. Area residents are also concerned about municipal growth and environmental change in the region.

In *Communities Inspiring Libraries: A Strategic Plan for Eastside Growth*, the Library recognized environmental education and environmental literacy as a priority for eastside residents.

The Imagination Center's location in a public park provides rationale to address environmental literacy gaps and create programming for environmental education. The eastside plan calls on eastside Madison Public Library locations to create "Partnerships with Madison Parks and key eastside health facilities to provide health and environmental literacy resources and a safe space to learn, share, and create."

The Imagination Center should embrace environmental education as a primary focus. The Center's collection should give emphasis to environmental knowledge and information along with health materials as recommended previously. Imagination Center staff should also develop programming to focus attention on environmental challenges and opportunities. Many existing community organizations may be able to assist with this work. The Reindahl Park Gardeners and organizations like Community GroundWorks are well equipped to share their knowledge and resources with the public.

The Imagination Center facility itself will create a tremendous opportunity to educate visitors on environmental efficiency considerations of an innovative public space. The Library has made great strides over the past two decades to strengthen operational sustainability and energy efficiency of Library facilities. Library cleaning practices have changed to include Green Seal cleaning products, and geothermal and solar

systems heat, cool, and provide power at multiple library locations. Central Library's green roof absorbs rainwater and prevents stormwater run-off. In addition, the Library has installed efficient HVAC and lighting systems at various locations with plans to install more.²²

Imagination Center construction and operations should incorporate techniques to maximize efficiency and sustainability, while at the same time providing a comfortable and accessible feel for all visitors. In turn, the Library should prioritize sharing identified efficiency methods with community members via signage, displays, and other approaches. Education surrounding the decisions and practices that underlie a dynamic, eco-conscious building will positively reinforce environmental knowledge for center visitors. In turn, visitors may become more curious and attempt to put their own environmentally-friendly strategies into action.

It is clear that environmental considerations weigh heavily on the minds of area residents and community members. Northeast Madison is changing and environmental quality will likely continue to be important to community members in the years to come. The Imagination Center should embrace a leading role regarding environmental education and best practices, and offer opportunities to those looking for environmental knowledge and programming.

²¹ NBC15 Staff. "Well 15 out of Service Indefinitely Due to PFAS Contamination." NBC 15, August 27, 2019.

²² "Committing to Sustainability," Madison Public Library, August 12, 2019.

③ Garden and Outdoor Workspace

Building on the connection of the Imagination Center and Reindahl Park, the Imagination Center should create a place for outdoor reading and reflection. Several community members asked for a space to relax, socialize, or work outdoors. Among these, teenagers in particular felt strongly about having an outdoor seating space to meet with peers or to study. A variety of neighbors also stated they have a desire to congregate in an outdoor space during the warm weather months. Reindahl Park has a few benches and tables, but they are spread over large areas and they are not set-up to encourage social mixing. The Imagination Center should have an area specifically designed to encourage learning and social interaction outdoors.

Providing an outdoor workspace or garden may also allow families and groups to take advantage of multiple park visit purposes simultaneously. For example, parents will be able to use outdoor space and have a line of sight while their kids are practicing soccer, playing at the splash park, or engaging in other park activities. Groups may use the outdoor space for socializing and in turn attend Imagination Center programming or events. An outdoor area will further integrate the Imagination Center into the existing park landscape and deliver another connection between the Center and the park.

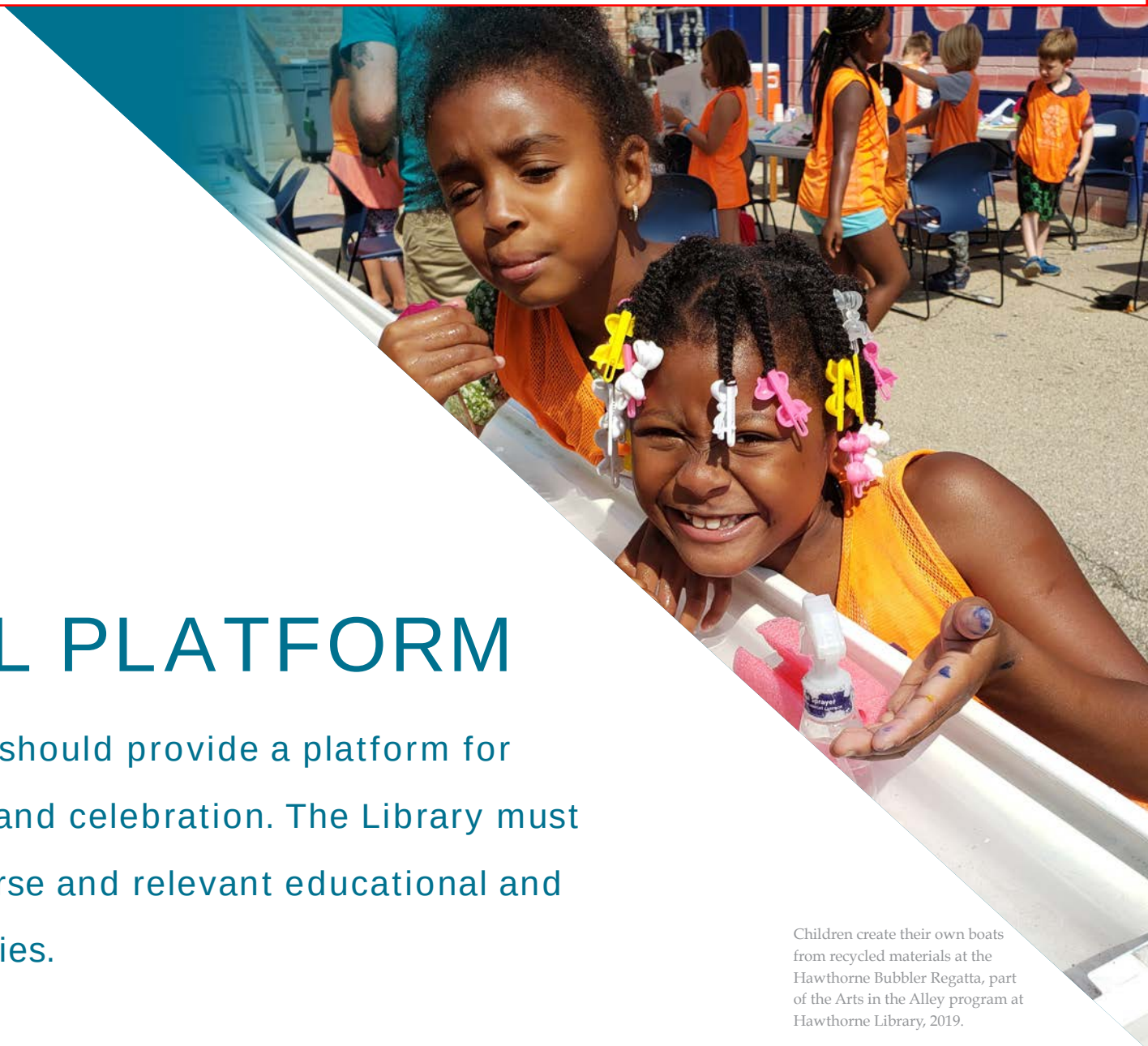
Rain garden planted at Pinney Library, 2009.



- ① Artist-in-Residence
- ② Imagination Center Art
- ③ Culturally-Representative Material Collection
- ④ Media Programming and Digital Creation

CULTURAL PLATFORM

Madison Public Library should provide a platform for expression, education, and celebration. The Library must increase culturally diverse and relevant educational and recreational opportunities.

A photograph showing two young girls in the foreground, smiling and working on a craft project. They are wearing orange mesh shirts. The girl in the foreground has colorful hair clips. They are using a spray bottle and other materials. In the background, other children and adults are visible at an outdoor event, likely a regatta or festival, with tables and chairs set up.

Children create their own boats from recycled materials at the Hawthorne Bubbler Regatta, part of the Arts in the Alley program at Hawthorne Library, 2019.

① Artist-in-Residence

Community members often spoke to the Library about an absence of opportunities for artistic expression in northeast Madison. Many parents pointed out that they need to travel downtown or to other areas of the city and Dane County to find art programs for themselves and their kids. Teenagers shared a desire for a place to connect with each other and display their creativity close to home. Others wished for a public place with art that is reflective of the area's history and its diversity. Together, they all hope the Imagination Center will be a place that has materials, knowledge, and artists available to help people learn, share, and create artistic works.

Madison Public Library takes an active role in the promotion and creation of art. One initiative in particular, the Artist-in-Residence program, is well suited for incorporation at the Imagination Center. The Bubbler at Madison Public Library coordinates the Artist-in-Residence program at Central Library. The program provides space to artists of different mediums to create art and share their talents with the community. Connecting artists to the community and the community to artists in an intentional way produces an opportunity for people of all ages to create art with familiar mediums, develop new skills, and connect with each other in an open and accessible space.

In December 2019, the Bubbler expanded the Artist-in-Residence program to Thurber Park. The Thurber Park program consists of an 11-month residency opportunity for artists that ultimately leads to the creation of a public art piece. During the residency, artists are required to create workshops for the public and have open studio sessions. The goals of the program are to create funding, time, and space for artists to develop their practice, to create hands-on programming that fosters neighborhood connection and community building, and to make and install public art.

The Imagination Center should have space to support arts programming and an expansion of the Artist-in-Residence program. Creating a space at Reindahl Park will allow for new and exciting programming with the ability to increase the diversity of artistic mediums currently available to artists in Madison Public Library facilities. The location of the Imagination Center at Reindahl Park will bring opportunities to community members who currently lack arts programming and facilities in their area. It will also add to the mix of recreational activities available at Reindahl Park to activate the park in new and exciting ways. An arts space will encourage the community to come together through art to express themselves and deepen relationships with each other.

② Imagination Center Art

Community members shared numerous ideas regarding artwork at the Imagination Center. Several people asked for an art gallery filled with local artist creations while others asked to display their own artwork or collections. All seemed to agree that art should be a focal point of the Center's design. Community members hope that artwork in the Center will reflect the area's identity, diversity, and immigrant populations.

Reindahl Park area residents often talked about their area as one that lacks identity. This perception could be due to many factors including geographical separation, demographic transitions, or the area's development over a long period of time. One thing is clear though; there is a tremendous amount of history and a wide range of people from different cultural backgrounds living near Reindahl Park. Artwork in the Imagination Center should seek to highlight the area's past and showcase modern experiences. It should aim to develop understanding and create shared links between community members. In addition, artwork at the Center should elevate diverse voices, issues, and perspectives from the area and beyond.

③ Culturally-Representative Material Collection

During conversations about the Imagination Center, many community members shared with the Library that they hope the Center will offer a robust collection of literary, educational, and recreational materials. Several stakeholders communicated that they value the Madison Public Library collection and are excited to have increased access to materials at the Imagination Center. Conversation participants had a few specific thoughts on the prospective collection at the Imagination Center. Some asked for more Spanish, Hmong, and Mandarin resources and materials. Others asked for a collection with an environmental and/or health focus. Most, however, simply desired greater access to books, resources, and materials.

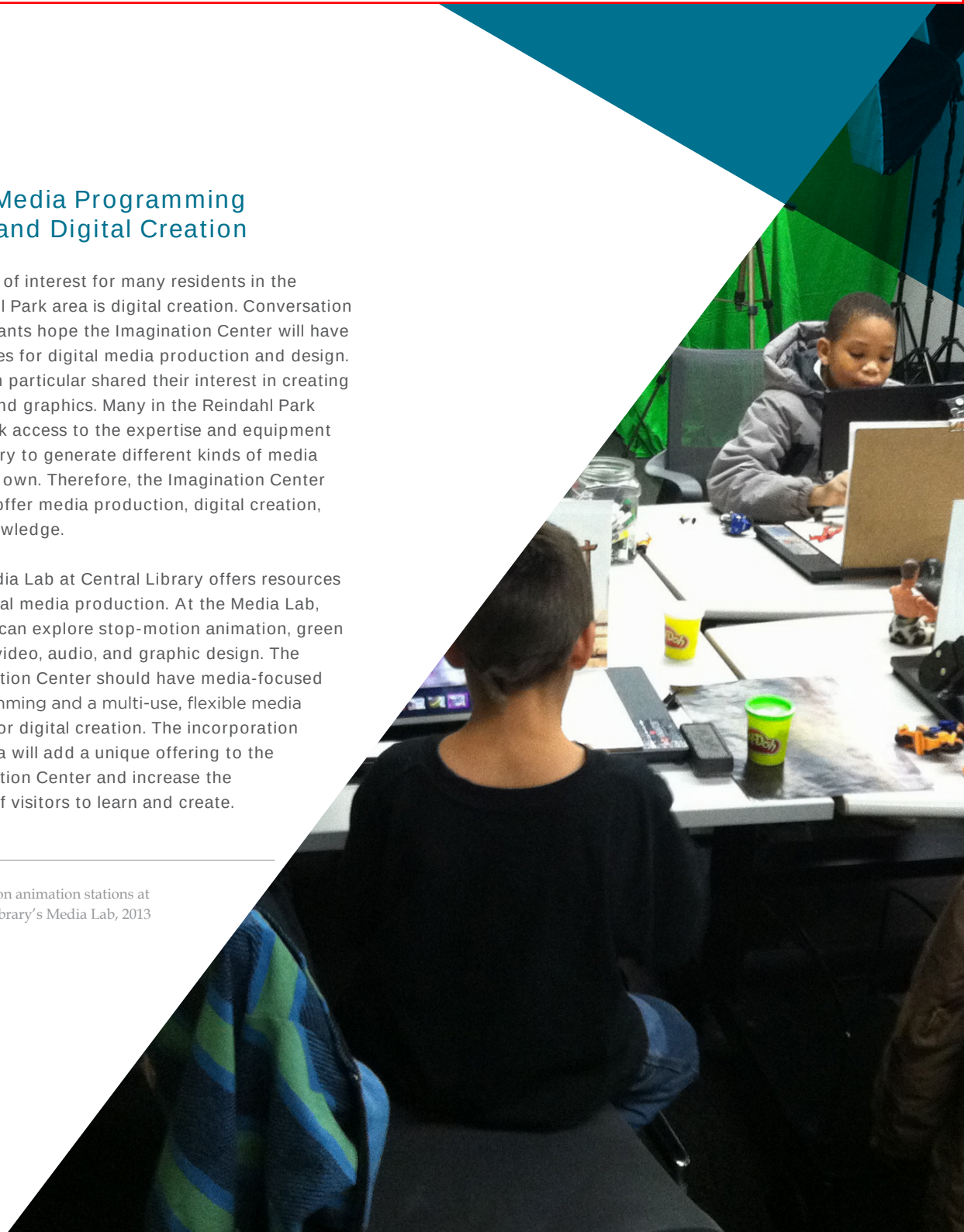
Madison Public Library's collection advances the Library's mission to "provide free and equitable access to cultural and educational experiences and celebrate ideas, promote creativity, connect people, and enrich lives." The Library's collection provides a wide array of resources and information to Library visitors. In addition, the collection offers a range of educational and recreational uses. The Imagination Center should therefore have a strong collection that serves visitors with various needs and diverse cultural backgrounds.

④ Media Programming and Digital Creation

An area of interest for many residents in the Reindahl Park area is digital creation. Conversation participants hope the Imagination Center will have resources for digital media production and design. Youth in particular shared their interest in creating music and graphics. Many in the Reindahl Park area lack access to the expertise and equipment necessary to generate different kinds of media on their own. Therefore, the Imagination Center should offer media production, digital creation, and knowledge.

The Media Lab at Central Library offers resources for digital media production. At the Media Lab, visitors can explore stop-motion animation, green screen video, audio, and graphic design. The Imagination Center should have media-focused programming and a multi-use, flexible media studio for digital creation. The incorporation of media will add a unique offering to the Imagination Center and increase the ability of visitors to learn and create.

Stop motion animation stations at
Central Library's Media Lab, 2013



- ① Digital Inclusion
- ② Child Care
- ③ Literacy Classes
- ④ Financial Empowerment

ECONOMIC ENGINE

Visitors use Madison Public Library to access many different types of resources and assistance. Whether it is writing a resume or learning a new language, Madison Public Library is a destination for those looking to expand their knowledge and abilities.

Patrons using the computers
at Meadowridge, 2019.
Photo credit: Shanna Wolf.

① Digital Inclusion

Approximately 14% of residents living in the Reindahl Park area do not have an internet connection in their homes or a mobile data plan. The Library heard from several conversation participants that a lack of digital access is an obstacle in their everyday lives. Several adults shared that barrier-free, high-quality Wi-Fi is difficult to find in northeast Madison. Furthermore, students informed the Library that there are limited places to work on homework or browse the internet after school and on weekends. The Imagination Center should therefore be a place where visitors can connect to the internet and fully engage in digital society. The Center should showcase high-speed internet connections through Wi-Fi and wired computers, as well as provide related services like printing and scanning.

The Imagination Center is well-positioned to provide broadband access resulting in a high quality digital access experience. Reindahl Park area residents will have a reliable, public destination close by where they can use devices and access high-speed internet.

Patron using a computer at
Sequoia Library, 2019.
Photo credit: Shanna Wolf.

② Child Care

A topic many community members spoke to is a lack of child care options in the Reindahl Park area. Conversation participants told Library staff that a shortage of nearby child care locations lengthens their commute times and is inconvenient for families. Stakeholders shared that many child care homes and centers are inaccessible by public transportation or require a substantial amount of travel. Library staff often heard child care options are not located within walking distance for most residents, largely because the area is not very walkable in general. The Library also heard repeatedly there are limited options for safe and welcoming places for children to go before and after school.

According to the Center for American Progress (CAP), a child care desert is an area where there is a ratio of more than three young children (under five years of age) for every licensed child care slot.²⁴ In northeast Madison, CAP identifies the census tract home to Reindahl Park and the Greater Sandburg neighborhood as a child care desert. In that census tract, there is a ratio of 17.41 children under the age of five per child care slot. However, the CAP does not identify the census tracts surrounding Reindahl Park as having child care deserts. Surrounding census tracts have ratios of 2.03, 0.87, 0.89 children per licensed child care slot respectively.²⁵ This suggests that there might

²⁴ Malik et al., "America's Child Care Deserts in 2018". Center for American Progress. December 6, 2018.

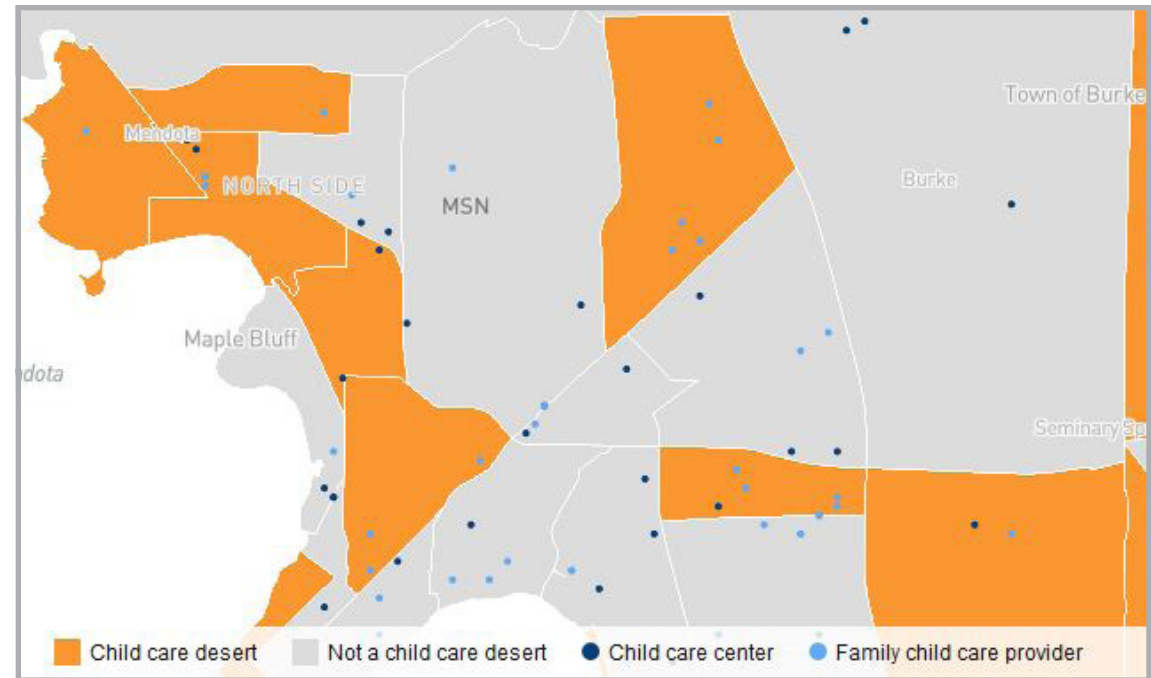
²⁵ Census Tracts 26.03, 26.01, 25

Child Care Deserts in Northeast Madison - Center for American Progress

be a need for more licensed child care slots in the Reindahl Park census tract specifically, but perhaps not the region. While this exercise gives a baseline indicator of child care need near Reindahl Park, greater scrutiny at the regional level is required.

Examining local data about the child care landscape in northeast Madison is more revealing. In the four census tracts representing northeast Madison to the west of Interstate 90/94, there are 17 child care centers.²⁶ The State of Wisconsin classifies child care centers in a few different categories. Licensed family child care centers provide care for between four and eight children, typically in a caretaker's home. Licensed group child care centers provide care for nine or more children.²⁷ The 17 centers near Reindahl Park (family and group) represent 6.9% of the total number of licensed child care centers in Madison. However, the area is home to approximately 10.1% of children in Madison under the age of five.²⁸ This could indicate there is a need for more child care locations. However, while there may be a spatial mismatch for the number of child care centers, the aforementioned data says nothing about the capacity of child care locations in the area.

Overall capacity numbers show there are 583 total child care slots in the Reindahl Park area spread among the 17 centers. The map on page 49 shows Reindahl Park area group child care centers and family child care locations. It also lists the capacity of each child care facility. The most recent American Community Survey (ACS) data estimates approximately 1,310 kids live in the four census tracts near Reindahl Park. The ratio of children to



child care slots is therefore 2.25. While the regional level data is below CAP's threshold for a child care desert, it is still relatively high. Another way of looking at the same data is by stating there are enough licensed child care slots for approximately 44.5% of kids under the age of five in the area.

Having enough slots for approximately four out of every ten children may be limiting for parents seeking child care. ACS data estimates that approximately 75.7% of Madison two-parent households with children have both parents in the

workforce. Additionally, around 87.3% of Madison parents in one-parent households with children are in the workforce.²⁹ Working parents likely seek external care for their children more than stay at home parents. These numbers suggest that there may be a high level of need for more child care slots in Madison and in the Reindahl Park area.

One more way to look at the issue of child care is by reviewing the options of specific child care locations in northeast Madison. Madison College is one of the group child care centers located in

Child Care Capacity in Northeast Madison

# OF CHILDREN	# OF TOTAL CHILD CARE SLOTS	RATIO OF CHILDREN TO TOTAL CHILD CARE SLOTS	# OF UNCONDITIONAL CHILD CARE SLOTS	RATIO OF CHILDREN TO UNCONDITIONAL CHILD CARE SLOTS
1,310	583	2.25	265	4.94

northeast Madison and has capacity for 32 kids. Most families are ineligible to use the Center, however, because it is only open to students, faculty, and staff of the college. There are also four religiously affiliated child care centers in the area. While perhaps not important to all families, child care may be an obstacle for those who do not share the same beliefs as a religiously affiliated child care provider.³⁰ Together, the religious affiliated centers and Madison College combine to offer 318 of the 583 total child care slots in the area. The table above reexamines the child care desert threshold with the conditionality of some child care locations in mind.

When conditionality is examined, the region has a ratio of children to accessible child care slots of 4.94, which suggests that the area overall is effectively a child care desert and investment in child care is needed.

Whether the conditional concerns stated above are considered or not, the number of children living in the neighborhoods surrounding Reindahl Park is rising at a rapid pace. The 2010 Census estimated 1,095 kids under the age of five years old lived in the four census tracts closest to the park. More recent data from the 2013-2017 ACS 5-year Estimates approximates 1,310 kids living in the same area. That rise represents a 20.1% increase over the past eight years. In addition, the City of Madison is planning for more growth in the area. The City of Madison Comprehensive Plan identifies two large peripheral growth areas in northeast Madison east of I90/94. Future development has the potential to bring in hundreds or thousands of additional dwelling units to the region over the next few decades.³¹

Given the limited availability of child care in northeast Madison and the area's continued and projected growth, the City of Madison occupies a

unique position to positively influence child care with the Imagination Center. One potential solution the Library and the City of Madison could pursue to increase the number of child care slots in the region is to collaborate with an organization to establish a group child care center directly at the Imagination Center. Alternatively, the City of Madison could explore the creation of a family child care cooperative. A family child care cooperative would provide multiple family care providers access to shared early learning facilities, programs, resources, and support within a community of practice. Whether either of these solutions or others is pursued, the complexity of access to high-quality child care should continue to be examined in greater depth. As such, the Library should conduct further exploration and align efforts with the City of Madison Comprehensive Early Childhood Plan, which is set to be released in spring of 2020.

²⁶ "This analysis excludes Census Tract 114.02, which contains portions of Madison as well as large portions of Sun Prairie and the Towne of Burke, for the sake of data clarity and accuracy.

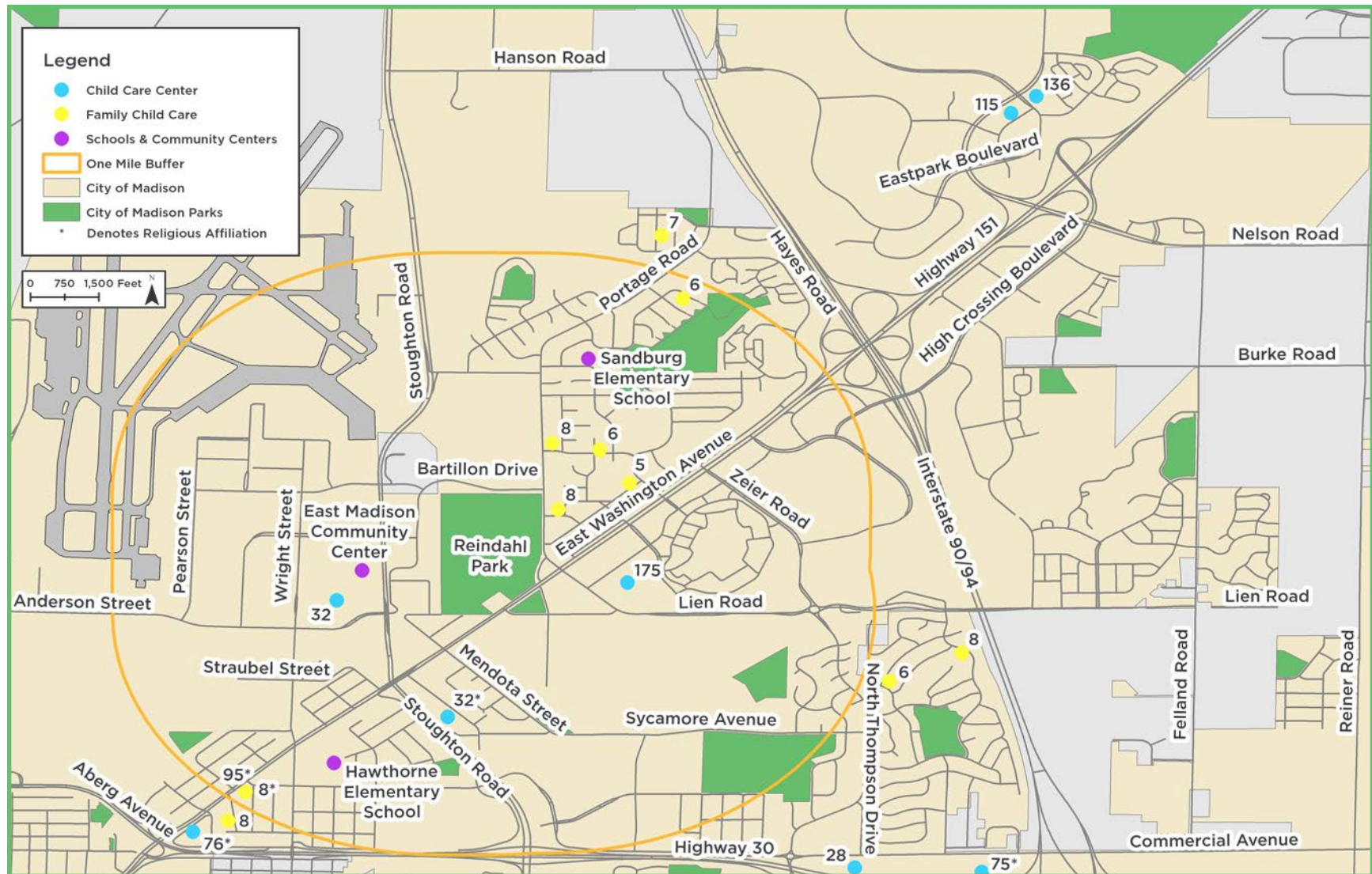
²⁷ "Wisconsin Child Care Licensing Home Page." Wisconsin Child Care Licensing Home Page. Accessed November 12, 2019. <https://dcf.wisconsin.gov/cclicensing>.

^{28, 29} 2017 American Community Survey 2013-2017 (5-year estimates)

³⁰ Edwards, Andrew W. "Parent's Satisfaction, Preferences, and Perception of Staff Competence and Quality of Services Rendered at Faith-Based Daycare Centers." *Social Work and Christianity*, 2013.

³¹ City of Madison Common Council. *Imagine Madison: City of Madison Comprehensive Plan*. By the City of Madison. Planning Division. Madison, WI, 2018.

Reindahl Park Area Child Care Centers and Homes



③ Literacy Classes

Literacy was another frequent topic of discussion with community members. A number of stakeholders shared that area residents struggle with low levels of literacy and English language proficiency. Community members are concerned that there are not available and convenient resources for those who struggle with reading, writing, and speaking English. The region has a comparatively high percentage of immigrants, which means that residents likely have varying levels of English accomplishment. The Imagination Center should dedicate resources and form partnerships to increase literacy in northeast Madison.

Mother and child reading at Literacy Night at Hawthorne Library, 2019. Photo credit: Jentri Colello.

Madison Public Library offers many resources for those who struggle with literacy. These include materials such as simplified versions of novels, materials to improve job and parenting skills, and basic STEM books. In addition, the Library has materials focusing on teaching and learning English as a Second Language (ESL) and basic literacy. The Imagination Center should have resources such as these for people who wish to improve their English knowledge and skills.

To further increase English proficiency, Imagination Center staff should form partnerships with organizations to provide literacy classes and tutoring for community members. Currently, East Madison Community Center provides literacy classes, but likely not as many as needed in the area. Imagination Center staff should work with EMCC and area organizations such as Literacy Network and DANenet to provide English and digital literacy classes at Reindahl Park.



④ Financial Empowerment

Financial literacy came up often in conversations with neighbors and service providers. Community members hope the Imagination Center will provide resources and materials that improve people's financial knowledge. However, financial knowledge does not necessarily equate to financial strength and security. Madison Public Library should go beyond financial literacy at the Imagination Center and take a leading role in helping visitors achieve financial empowerment.

Financial empowerment is a person's ability to take control of their financial circumstances to achieve financial security. One aspect of financial empowerment is financial literacy, or the ability to understand topics such as personal finance, money, and investing. However, financial empowerment is more expansive than financial literacy. Empowerment is predicated on economic security. All of the elements that constitute a person's financial situation and well-being affect their security. These include items such as a person's credit score, debt-to-income level, wealth, tax filings, access to financial counseling, and the ability to realize government assistance or benefits.³²

Tax assistance at Lakeview Library, 2016.
Photo credit: Erin Moore.

Madison Public Library should serve as a connector for people seeking financial empowerment. The Library has many programs that offer assistance for those looking for financial help. For example, the Library partners with community agencies to offer free tax assistance and provides basic job assistance. The Imagination Center should offer services like these and explore innovative ways to help Library visitors build financial security. The Reindahl Park area is home to several financial institutions including local banks and large corporate institutions. Imagination Center staff should seek ways to collaborate with these institutions to help individuals and families improve their financial well-being.

³² "Financial Empowerment: Improving Financial Outcomes for Low-Income Households." *Financial Empowerment: Improving Financial Outcomes for Low-Income Households*. Toronto, ON

IMAGINE MADISON

The Imagination Center at Reindahl Park will advance many strategies outlined in *Imagine Madison: City of Madison Comprehensive Plan*. The following is a brief overview of 12 *Imagine Madison* goals the Center will promote.

NEIGHBORHOODS AND HOUSING

Create complete neighborhoods across the city where residents have access to transportation options and resources needed for daily living.

The Imagination Center will bring resources of all kinds to northeast Madison including child care, civic spaces, educational programs, and recreational opportunities. The Imagination Center will create a social and civic focal point for several northeast Madison neighborhoods directly adjacent to a planned Bus Rapid Transit stop.

ECONOMY AND OPPORTUNITY

Close the educational opportunity gap.

The Imagination Center will seek to improve access to quality child care and increase programming for youth. In addition, the Center will have services focused on literacy, tutoring, and digital skills development. The Imagination Center will also add a high quality Wi-Fi destination to an area where many do not have public internet access nearby.

Remove barriers to achieving economic stability.

The Imagination Center's focus on financial empowerment will help residents achieve economic security. The location of the Imagination Center close to a variety of local financial institutions could pave the way for unique and innovative partnerships focusing on financial growth.

CULTURE AND CHARACTER

Create vibrant and inviting places through creative architecture and urban design.

The Imagination Center will be a new, exciting, and welcoming public space. The Center will have a variety of activities, offerings, and amenities that will make it a dynamic and inviting place. Creative architecture will be part of the Center's design, and it has the potential to be a civic landmark in northeast Madison at Reindahl Park.

Create safe and affirming community spaces that bring people together and provide social outlets for underrepresented groups.

The Imagination Center's meeting rooms, community shelters, seating areas, food preparation space, and outdoor space will provide the infrastructure for safe and affirming community spaces. The Center will bring the community together through art, media, civic engagement, and recreation. In addition, immigrants and English learners will be able to access immigration, citizenship, and literacy resources. Reindahl Park will activate in novel and exciting ways with the addition of the Imagination Center.

Balance the concentration of cultural and entertainment venues between the downtown and other areas of the city.

The Reindahl Park area currently lacks civic and cultural venues. The Imagination Center will transform the region by providing a place for the arts, and it will offer various opportunities for entertainment.

Integrate public art throughout the city.

The Imagination Center will provide a location for art in a region without much public art. Its focus on displaying the region's history, highlighting the richness of residents' experiences, and broadening perspectives will make it a desirable addition to Madison.

Provide opportunities to learn about, create, collaborate, and enjoy the arts.

The Artist-in-Residence program at Reindahl Park will increase arts programming in northeast Madison immensely. Visitors will have numerous opportunities to learn, share, and create art at the Imagination Center.

GREEN AND RESILIENT

Increase the use and accessibility of energy efficiency upgrades and renewable energy.

The Imagination Center will utilize construction methods focused on energy efficiency and renewable energy. The Center's focus on environmental education and showcasing efficiency measures will aim to expand environmental knowledge in northeast Madison.

Acquire parkland and upgrade park facilities to accommodate more diverse activities and gatherings.

The Imagination Center represents a new and exciting development for Reindahl Park. The Center will add diverse activities and increase social gatherings at the park. Services such as the Artist-in-Residence program and Anji Play will enhance park offerings. Gathering and event space as well as meeting rooms will provide a means for social gatherings of all kinds in northeast Madison.

EFFECTIVE GOVERNMENT

Locate community facilities to provide a high level of service to all neighborhoods.

The location of the Imagination Center at Reindahl Park will directly improve the level of public service in the northeast region of Madison. The Imagination Center will be a great example of agency collaboration and public facility co-location.

Improve accessibility to government agencies and services.

The Imagination Center staff will be able to register voters at any time, and the Center will be a polling place for local elections. In addition, staff will be able to connect visitors to resources and services on topics as varied as immigration, health care, and tax filing.

2018-2023 PARK AND OPEN SPACE PLAN

Madison Public Library intends to build on its successful partnership with Madison Parks through the Imagination Center project. The **2018 -2023 Park and Open Space Plan**, accepted by Common Council on October 30, 2018, contains strategies that dovetail well with the Imagination Center.

Design park facilities to accommodate diverse activities and populations.

The Imagination Center will be a newly constructed facility in Reindahl Park that will feature flexible public spaces. In addition, the Center will directly incorporate spaces for people with different cultural backgrounds, ages, and abilities. As a result, Reindahl Park will be better suited to accommodate diverse activities and populations.

Create equitable access and funding for parks.

Engagement and inclusion are cornerstones of the Imagination Center project. The Center will increase opportunities for civic engagement and create new partnerships. Equity is at the center of the Imagination Center planning process.

Increase engagement with groups and organizations and develop new ones.

The Imagination Center will create new opportunities for community organization and engagement. The Center will add to the mix of uses at Reindahl Park and attract diverse communities and groups.

THE ROAD AHEAD

The community's vision for the Imagination Center is broad and ambitious. At its core, the vision will promote creativity, connect people, and enrich lives. Madison Public Library, Madison Parks, and the City of Madison are prepared for the task of creating the Imagination Center. However, like our planning efforts to date, the Imagination Center's success will depend on continued community involvement and investment.

To that end, conversation will remain a priority for the Library as its rewards continue to manifest. The vision laid out in these pages is the result of numerous and varied contributions from community members of different backgrounds. The hours of conversation shared with us provided a rich tapestry of connection and a solid foundation for the Imagination Center project. The community-driven framework used to conduct planning for the Imagination Center will be critical for its upcoming design and operation. As the vision for the Imagination Center continues to take shape, we are excited to begin the preliminary design process.

As the process moves forward to realize the scope of this project, we will need to address some real challenges in making this vision a reality. The Imagination Center will add a new library to the Madison Public Library system, which will require substantial capital and operating investments in order to build and sustain its facilities and services. Financial estimates for the Imagination Center will require more exploration in response to this scoping study. The preliminary design process will provide some estimates to help inform the City on what will be needed to

support these expenditures. As with past library building projects, we anticipate that the Imagination Center will require a public/private funding partnership and the capacity for fundraising will need to be assessed. A fundraising feasibility study will need to be conducted. Based on those conditions, we recognize that the current timeline for the Imagination Center project within the City of Madison Capital Improvement Plan will not be feasible given the magnitude of this project. The Imagination Center will likely take several years to design, build, and establish a sustainable budget to meet the vision expressed in this report. However, we will begin the preliminary design process to discover the possibilities of the Imagination Center and further define its future.

The Imagination Center will undoubtedly transform Reindahl Park and the surrounding area. Reindahl Park, as well as northeast Madison, has a long and diverse history. Its residents included Amund Reindahl, the son of immigrants, and include the immigrant communities who call the neighborhoods home today. The Imagination Center will build upon the area's history and connect people in new and meaningful ways. In the future, the Center will assuredly be a civic anchor for the northeast Madison region. The road ahead may be long, but the journey to reach the community's vision will continue. There is no doubt the Imagination Center will improve the lives of many for years to come.

REFERENCES

Capital Region Sustainable Communities Initiative and the Madison Area Transportation Planning Board. *Madison Transit Corridor Study: Investigating Bus Rapid Transit in the Madison Area*. By the SRF Consulting Group Team. Madison, WI, May 2013.

City of Madison Planning Division. *Equitable Development in Madison: An Assessment of Factors Contributing to Displacement and Gentrification*. Madison, WI. August 6, 2019.

City of Madison Common Council. *Imagine Madison: City of Madison Comprehensive Plan*. By the City of Madison. Planning Division. Madison, WI, 2018.

City of Madison Task Force on Government Structure. *Final Report of the Task Force on the Structure of City Government*. Madison, WI. November 20, 2019.

"Committing to Sustainability." Madison Public Library, August 12, 2019. <https://www.madisonpubliclibrary.org/impact/accountability/committing-sustainability>.

East Madison Community Center, n.d. <https://eastmadison-cc.org/>. Edwards, Andrew W. 2013. "Parents' Satisfaction, Preferences, and Perception of Staff Competence and Quality Of Services Rendered at Faith-Based Daycare Centers." *Social Work & Christianity* 40 (1): 46-70. <http://search.ebscohost.com.ezproxy.library.wisc.edu/login.aspx?direct=true&AuthType=ip,uid&db=sih&AN=85443977&site=ehost-live&scope=site>.

"Financial Empowerment: Improving Financial Outcomes for Low-Income Households." *Financial Empowerment: Improving Financial Outcomes for Low-Income Households*. Toronto, ON. Accessed November 19, 2019. prospercanada.org/getattachment/77fecc22-dff1-4a22-9d90-1f6746c9436b/Financial-Empowerment-Improving-Financial-Outcomes.aspx.

Goldsmith, Francisca. "Healthier Communities: Libraries Improve Health Literacy, Access." *ALA Policy Perspectives*, no. 6 (May 2019).

"Heroic Life Ended." *The Madison Democrat* (Madison), March 18, 1900.

History of Dane County: Biographical and Genealogical. Madison, WI: Western Historical Association, 1906.

Jacobs, Herbert. "Start Work to Preserve Historic Inn Given to Town of Burke." *Capital Times* (Madison), October 15, 1947.

Jen. "Amund Reindahl: The Farmer Who Saved His Land for the Children." *Madison Sun* (Madison), August 25, 1967.

Madison Metropolitan School District. "Hawthorne Elementary School Profile." Madison, WI, 2019. <https://hawthorne.madison.k12.wi.us/files/profiles/hawthorne-profile.pdf>

Madison Metropolitan School District. "Sandburg Elementary School Profile." Madison, WI, 2019. <https://sandburg.madison.k12.wi.us/files/profiles/sandburg-profile.pdf>

Malik, Rasheed, Katie Hamm, Leila Schochet, Cristina Novoa, Simon Workman, and Steven Jessen-Howard. "America's Child Care Deserts in 2018." *Center for American Progress*. December 6, 2018.

"MUFN." Metropolitan Unified Fiber Network (MUFN). Accessed November 18, 2019. <https://mufn.org/>.

NBC15 Staff. "Well 15 out of Service Indefinitely Due to PFAS Contamination." NBC 15, August 27, 2019. <https://www.nbc15.com/content/news/Well-15-out-of-service-indefinitely-due-to-PFAS-contamination-558438261.html>.

Novak, Bill. "Hawthorne, Lakeview Will Become Community Schools; Service and Support the Key." *Wisconsin State Journal*, May 23, 2018. https://madison.com/wsj/news/local/education/local_schools/hawthorne-lakeview-will-become-community-schools-service-and-support-the/article_81b55143-fdae-59db-aca6-3f0d300347b3.html.

Ruff, Allen, and Tracy Will. *Forward: A History of Dane the Capital County*. Milwaukee, WI: Goblin Fern Press, 2000.

Speckhard Pasque, Lisa. "East Madison Community Center Receives Major Renovation from 'Design for a Difference Movement.'" *The Cap Times*. October 15, 2018. https://madison.com/ct/news/local/govt-and-politics/east-madison-community-center-receives-major-renovation-from-designfor/article_f3f17267-c8df-5694-bf6e-20db7c69aef3.html.

"Wisconsin Child Care Licensing Home Page." Wisconsin Child Care Licensing Home Page. Accessed November 12, 2019. <https://dcf.wisconsin.gov/cclicensing>.

ACKNOWLEDGMENTS

Thank you to the 425 participants who participated in conversations about the Imagination Center project. The time, expertise, and insights you provided are without comparison.

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A special thank you to Local Voices Network including Colleen Butler, Membership and Capacity Building Lead, and Mathias Lemos Castillo, Community Builder.



madisonpubliclibrary.org/locations/reindahl



MADISON
PUBLIC
LIBRARY

COMMUNITIES INSPIRING LIBRARIES

2016 A Strategic Plan
for Eastside Growth





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Photo credit: Shanna Wolf

Letter from the Director

A public library is a tremendous community asset that creates a space that is welcoming to all. It can be transformative to individuals and families who would not otherwise have access to essential services and resources. It is a critical investment in furthering equity. Madison Public Library has always embraced these values.

These values have brought Madison Public Library national recognition for its programs, design and service to the city. The recently renovated Central Library has received numerous design and service awards. The Library's programming efforts were recognized with a 2015 Wisconsin Innovation Award. In 2016, Madison Public Library was awarded a National Medal by the Institute of Museum and Library Services, the nation's highest honor given to museums and libraries. These awards would not be possible without the support and guidance we receive from our residents, so it was only appropriate to turn to them first when planning for Madison Public Library's future.

We believe that the best plans are those made *with* the people we serve, not just for them. This is why we could not create a strategic plan for the expansion of the Library's eastside facilities and services without consulting our most vulnerable communities first. Participants identified a host of issues that framed our priorities for location and services.

By keeping literacy at the core of what we do, enabling lifelong learning, and prioritizing personal interactions with our patrons and partners, the Library can have a significant impact on our struggling neighbors and empower them to address their needs. As an anchor institution, we play an active role in reducing social and economic disparities among Madison's communities of color and low-income families. For every struggle our residents face, Madison Public Library is up to the challenge of helping to overcome them.

Moving forward, the planning process has given us a way to focus our efforts to lift up all communities and to communicate those impacts more effectively. This plan represents an important step in creating a culture of community engagement and equitable delivery of services within Madison Public Library.

Greg Mickells

Director, Madison Public Library

Executive Summary

Madison Public Library has the honor of serving a rapidly growing city with a love of libraries. Our services have long expanded out of our buildings and into schools, clinics, detention centers, parks, and community centers. The demand for services continues to climb and it has become clear that we have outgrown our existing facilities. Since our last addition to the system in 2000 with Alicia Ashman Library on the west side, Madison has welcomed nearly 40,000 more residents and is expected to welcome 100,000 more in the next thirty years.

Understanding our need to grow, neighborhood groups and community leaders have approached the Library with suggestions, requests, and even land donations. The factors in siting new libraries have become much more complex, due in part to more limited municipal resources, operational costs, rising land prices, communications infrastructure, overlapping neighborhood and area plans, and more acute social needs both within and along the urban periphery.

This is why in 2014, after discussions began in earnest to relocate the eastside's beloved Pinney Library three blocks away to a planned mixed used development, Madison's Common Council asked the Library to address how to serve the whole eastside with a strategic plan.

The planning process was driven by a robust conversation-driven community engagement program called *Tell Us: Communities Inspiring Libraries*. With the goal of amplifying the voices of vulnerable communities, we identified key stakeholder groups who are routinely underrepresented in local public participation efforts. Over 330 people of all ages and backgrounds gathered at over 50 small conversations around the city to complete the story that Census data and library surveys could not tell. Their input defined the roles the Library will prioritize in planning for more equitable growth through facilities, services, and programs.

COMMUNITY PRIORITIES

Social Forum: Habits, attitudes, and relationships define one's outlook and shape the community around us. More than a quarter (26%) of the community needs and issues identified by participants revolved around the quality of relationships and interactions with others. The Library provides space and staffing to enable positive social interaction: its facilities provide neutral ground, flexibility, and safety, while Library staff members serve as connectors and facilitators for the community.

Civic Innovator: Of all community needs and issues, 11% of responses referred to civic life. Building a network of informed communities, addressing barriers to engaging in public life, and fostering a new generation of local leaders are top priorities for residents. The Library must promote civic literacy and help break down barriers that disenfranchise people.

Holistic Health Advocate: Access to affordable, quality healthcare is a struggle for many residents. Awareness of and access to resources, navigating the insurance marketplace, effective communication with providers, and maintaining a healthy lifestyle are pieces to this puzzle. The Library must promote health literacy and develop key partnerships with local government, non-profit, and private organizations to connect residents to services they need.

Economic Engine: Economic struggles top the list of concerns of many groups, with jobs and cost of living getting the most mentions. The Library must emphasize workforce development, neighborhood advocacy, and financial literacy in its mission to help residents and area businesses achieve economic stability and resilience.

These community priorities shown below framed the search for possible sites for a new eastside library. In addition to weighing infrastructural needs, we used this framework to rebuild our site criteria tool, making racial equity a heavy factor in facility siting decisions. After determining which areas of the eastside were underserved by Madison Public Library, we analyzed sites within the underserved areas for their ability to meet those technical and social criteria. This land use and equity analysis led to a three-part site recommendation.

Short-term (0-5 years): Our first priority is closing the eastside service gap by constructing a new library, the tenth in our system, in northeast Madison. Reindahl Park shows the most potential for serving the most people in need while taking advantage of key adjacencies and keeping a strong, visible civic presence.

Cultural Platform: Nearly 10% of all community needs and issues involved ideas like diversity, inclusion, and venues for cultural expression and celebration. Communities of color are destabilized by poverty at higher rates than white communities, pushing them into isolated areas and creating segregated neighborhoods. The Library must address the eastside's lack of cultural and open educational facilities by providing diverse materials, experiences, and venue space, facilitating cross-cultural educational opportunities, and cultivating diverse partnerships to maintain dynamic and inclusive programming.

Intermediate term (5-10 years): We must address the building deficiencies, economic inefficiencies, and service limitations at Hawthorne and Lakeview libraries by pursuing expansion or relocation in the next ten years. Given their success and critical roles in their respective neighborhoods, no relocation should move either library more than a half-mile from their current locations.

Long-term (10+ years): We must begin moving forward to work with the school district, city planning, residents, alders, and other agencies and organizations to develop plans for the eleventh library east of Interstates 90/94. Coordinated efforts to shape the urban fabric as Madison expands will result in more just, healthy, and vibrant communities.

As Madison Public Library moves forward with opening the new Pinney Library and planning a new northeast library, we must establish baseline data to track our progress in meeting community goals and making social impact. This plan also lays out potential outcome measures that address those community goals.

Most importantly, we recommend a continued public process to shape these future projects, refine our programs, and create new partnerships. The conversation has just begun!

Introduction

OUR MISSION

Madison Public Library provides free and equitable access to cultural and educational experiences. We celebrate ideas, promote creativity, connect people and enrich lives.



OUR VISION

Madison Public Library: your place to learn, share, and create.

Growing Stronger and Strategically

Over the next 35 years, Madison expects to welcome 100,000 new residents and 70,000 new jobs. The city's eastside will absorb much of that growth and become more dynamic, dense, and diverse. What does that mean for Madison Public Library? What specific capacity requirements do we need to address in order to meet the unique needs of a changing community?

In 2014, the Common Council charged Madison Public Library with the task of creating a strategic plan for eastside growth. We seized the opportunity to take stock of our capacity to serve our growing community and ask:

- **Who** are we serving? **Who** is underserved?
- **How** do we understand our neighborhoods' particular needs while being open and inclusive to all?
- **Where** should we locate future Madison Public Libraries to maximize service?
- **What** criteria will determine this?

The Library could not answer any of these questions without starting with the experts: Madison residents of all ages, regardless of library cardholder status. We sought a candid, open-ended, and accessible method that would allow us to hear unheard voices and build new relationships. *Tell Us: Communities Inspiring Libraries*, or *Cuéntenos*, is the community engagement program and tool we developed to gather feedback from our neighbors.

Over 330 people came together across the city in 52 small groups to participate in *Tell Us*. Using a method as simple as conversation, we were able to get to know our neighbors in a way that wasn't possible through library user statistics or Census data. Simply listening to people's biggest concerns and hopes provided a wealth of data that revealed common values and goals.

These common values and goals framed the priorities guiding this strategic plan. By looking at library usage data, land use analysis, and demographic data within this framework, we were able to derive appropriate sites for a new library, as well as recommend staffing needs, facility improvements, and measures of success.

This publicly driven framework will continue to guide the Library's future decisions around programs, partnerships, services, and siting. Our city will also continue to grow, which means these conversations are not over. We look forward to growing with our community and always finding new ways to help people learn, share, and create.

Why Public Libraries Matter

The Social Impact of Transformation

“Are libraries even necessary these days?”

Despite the near consensus of libraries’ intrinsic and material benefits, we still hear this question all the time. How would the general public answer this question?

Madison residents know the value of their libraries; over 2 million visitors walked through our doors in 2015. A 2008 Wisconsin study even put a dollar amount to this value, estimating that our state’s public libraries yield \$4.06 for every dollar invested.¹ National studies show that the majority of Americans (90%) value their libraries, with low-income residents, Hispanics, and African-American being most likely to report that library closures would impact their lives.²

Our answer to the question above is simple. Libraries are necessary because of the social impacts they have on their communities. Moreover, the *magnitude* of their impact is only possible because of the assets libraries bring: rich community expertise, visibility and presence, and commitment to the public interest.

We are connectors

The explosion of information and technology has created the illusion of unlimited resources. Library workers teach the public how to access, navigate, and discern information (i.e. information literacy). Moreover, they truly shine as connectors to community resources. In addition to books, Madison Public Library provides the following services:

- Early childhood development
- Youth and teen supports
- Senior services
- Lifelong learning
- Health and well-being resources
- Workforce development
- Financial literacy and tax help
- Digital literacy
- Research
- Community building and civic engagement
- Recreation and Social forum
- Entrepreneurial support
- Safe space
- Arts and culture
- Technology access and instruction
- Government service navigation

We are embedded in the community

Libraries are a physical presence in their neighborhoods, providing public space for learning, safety, and connection, but library workers are increasingly out in other forums, reaching diverse audiences where they live, work, and play to eliminate barriers to educational opportunities.

We are trusted

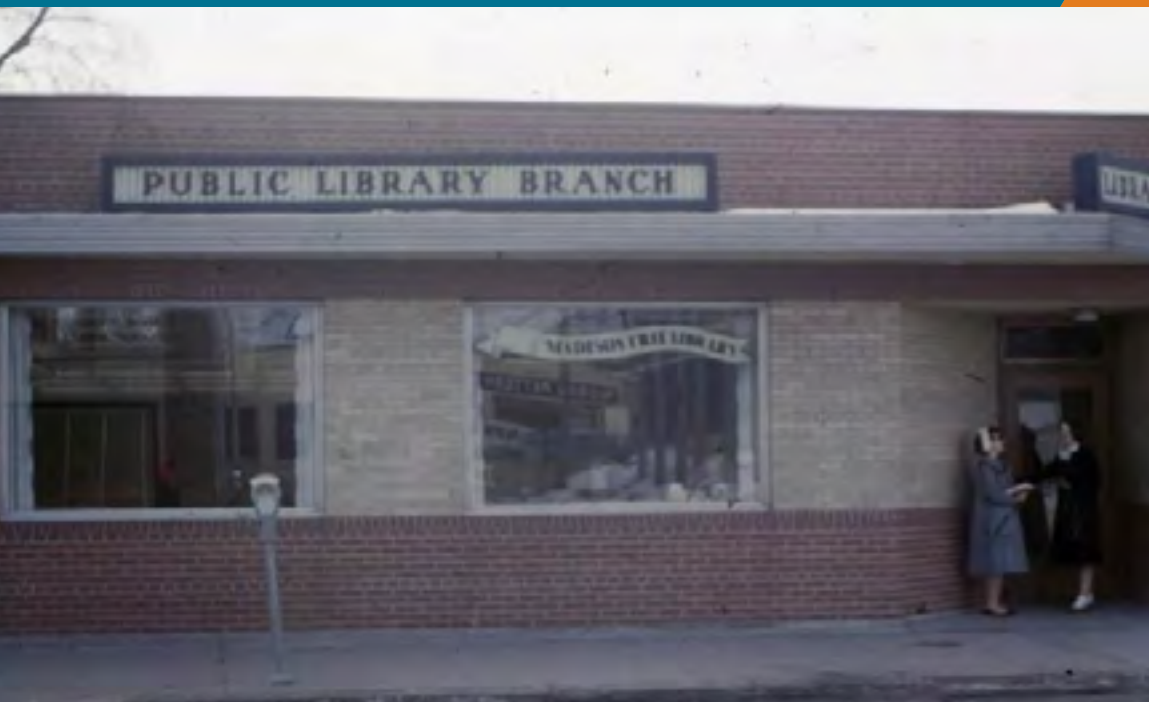
Libraries provide neutral space, welcome all residents, advocate for and protect privacy, and fight for the public interest.

We transform

Libraries' unique position in their communities as a resource provider, educator, facilitator, and partner enable immediate and long-term growth. At Madison Public Library, our community engagement work has shown that residents welcome deep transformation and wish to address some of our most challenging issues with more community connections, more space, more education, more opportunities, and more compassion. We welcome the challenge.



Our Past: Evolution of Madison Public Library



*Hawthorn's second location
(Madison Public Library archive)*

“The library brings all kinds of people together.”
- Tell Us participant



Rendering of Pinney facing Cottage Grove Road. (Ruedebusch Development & Construction)

**“A library outranks any other one thing a community can do to benefit its people. It is a never failing spring in the desert.”
- Andrew Carnegie**



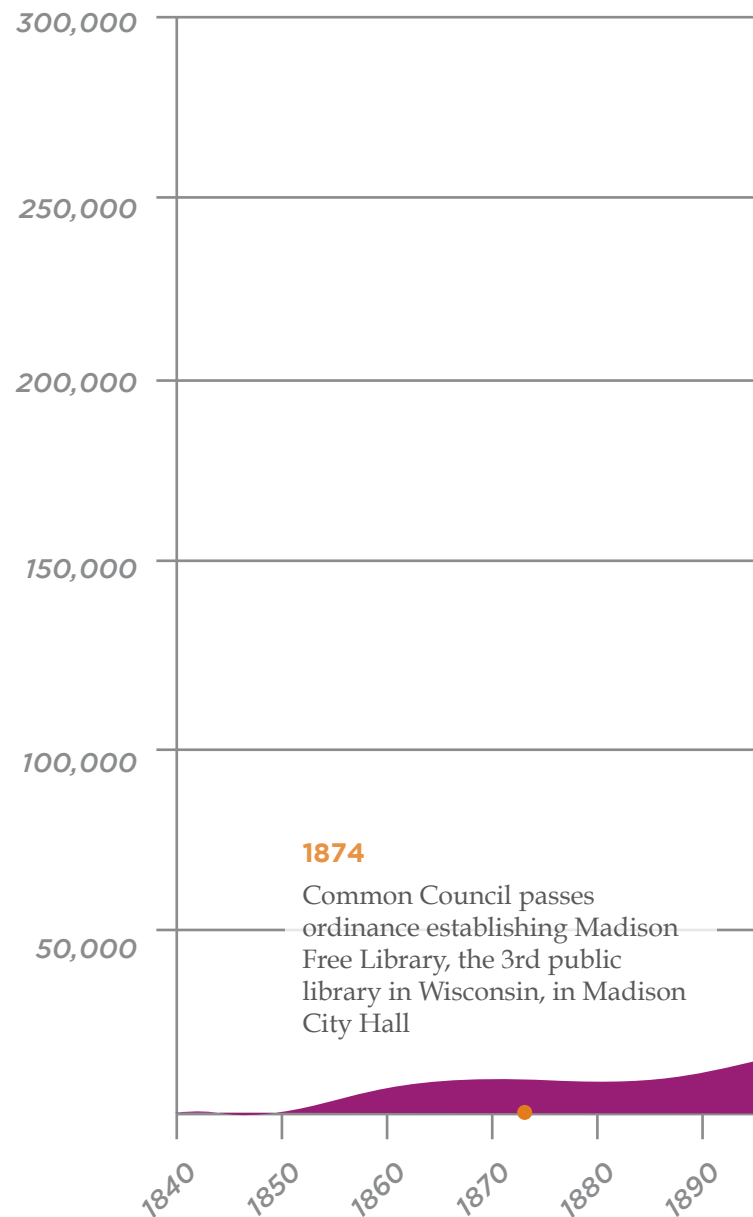
Lakeview's original Northport location (Madison Public Library archive)

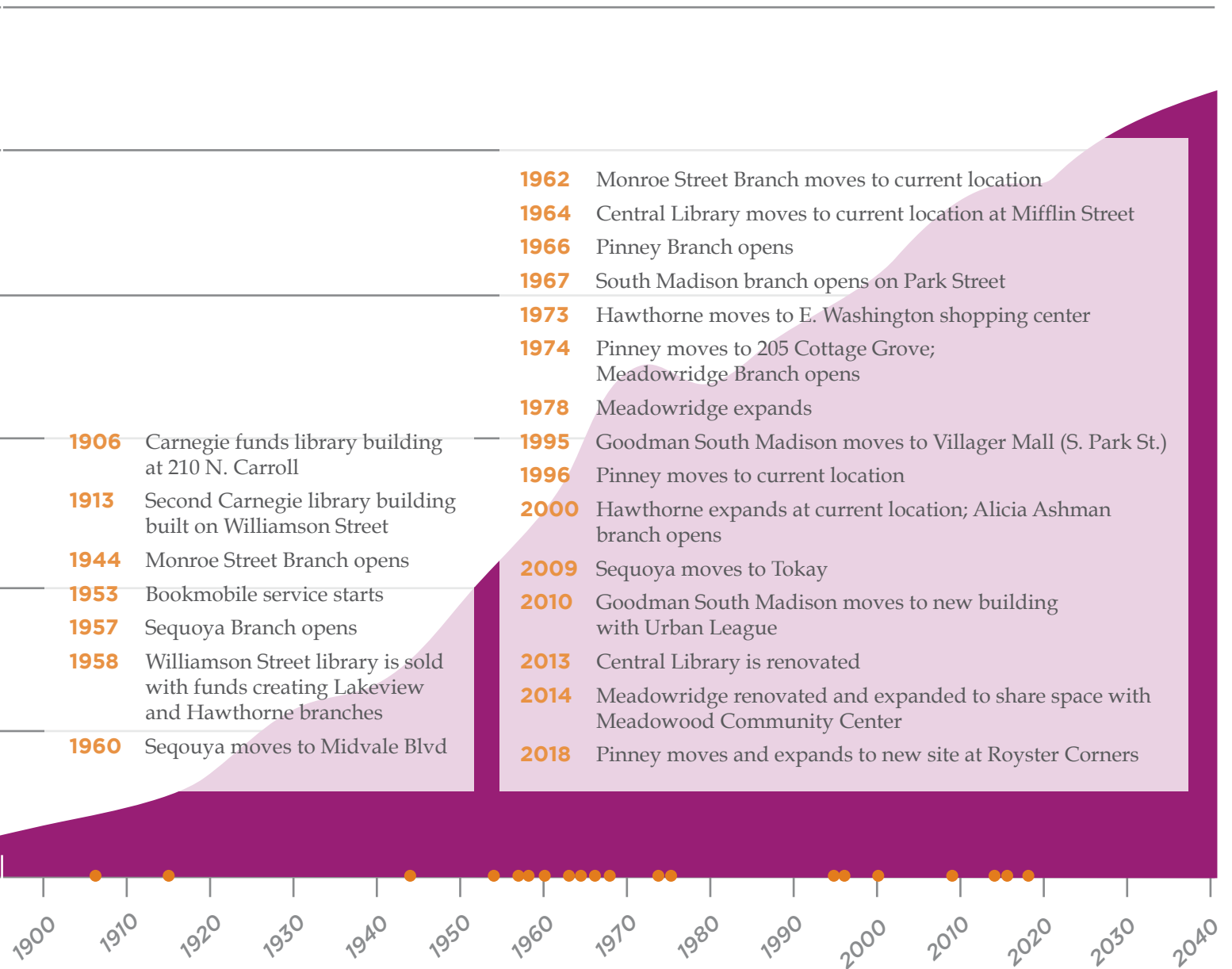
Madison Population Growth versus Library Growth

Before Madison's Common Council passed the ordinance establishing the creation of a public library in 1874, the public library's predecessor, the Madison Institute, was a private, subscription library for elite men. The trajectory from private, exclusive, and single-service oriented to public, inclusive, and multifaceted has been long and eventful, but we are not finished growing and improving.

The timeline to the right shows Madison's population history and projected growth alongside the expansion of library facilities. We have a chance to fill a very big need in Madison's eastside and the chance to plan with the public and not just for them.

We can see that the rhythm of major expansions respond to population growth, most notably during the decades of the post-WWII boom. While we have expanded, renovated, and moved locations, the eastside has not seen a new library in 50 years despite steady population growth.





Evolution of Service

While our physical footprint has remained more or less the same since 2000, Madison libraries have been anything but static. In a leap from our historic focus on books, our core services now encompass seven areas covering everything we currently do, from the behind-the-scenes technical work to the bold ways we engage with the city.

Collections
and Content

Patron
Experience

Community
Spaces

Internet and
Technology

Classes, Events,
and Programming

Community
Partnerships

Online
Services

We track the numbers behind so much of what we do because it's essential for fiscal planning and reporting purposes to local, state, and national entities. For instance, in 2015, Madison Public Library had:

- Over 2 million visitors
- Over 700,000 internet logins
- Nearly 4 million checkouts
- Over 18,000 meeting room reservations
- Over 126,000 program attendees

To some extent, we can measure the reach of some of our services, but can we assess the impact these experiences have on the community? More importantly, what do these numbers tell us about who isn't coming into our facilities, checking out materials, attending programs, or using our technology? What do these numbers say about the value and impact our offsite programming and outreach have? These measures, while helpful in communicating usage, do not speak to the quality of experience or the lasting impact on our community.

Evolution of measures

Our services have evolved to meet community needs, but our metrics have not. How do we measure the social impact of our work? Most people understand inherent value of the library³, but how can we measure and communicate the impact of our programs and resources?

This plan is a product of the Library's new approach to participatory planning. Driven by community needs and goals, we have derived key priorities and areas of impact that will inform decision-making processes for facility siting, capacity, services, programs, and partnerships.

In addition, the public process also shed some light on how individuals perceive change. Not only did the public process inform our work of transforming the community, it also gave us some insights on how to measure our progress along the way.

Our Present

“Community is the continual process of getting to know people, caring and sharing responsibility for the physical and spiritual condition of the living space.”

- Melvin H. King

**Educator, writer, and
community organizer**



City Context

Madison consistently places highly in national rankings, indices that typically factor in education, income, housing, transportation, open space, festivals, et cetera for years. Only recently⁵ have national metropolitan rankings⁴ emerged that measure equity and inclusion, putting Madison in a much different light.

When inequality and social disparities are factored in, Wisconsin and Dane County rate poorly, showing that many minority groups here experience a vastly different quality of life. Wisconsin Council on Children & Families' 2013 Race to Equity Baseline Report was a wake-up call for many in the Madison area. The data showed what many have experienced for so long: across all indicators — housing, income, school performance, arrests, incarceration, health, mobility, and others — residents of color, African-Americans in particular, in Dane County fare substantially worse than their white counterparts.

In addition, the 2016 report "Struggling for a Better Life" on the state of Latino workers in Dane County found that Latinos here are routinely exploited due to citizenship status, lack access to health care, face unsafe work conditions, and experience wage theft and harassment.

It is under these unacceptable conditions that Madison Public Library finds it necessary to reassess its decision-making strategies to create a more equitable approach to planning and service delivery so that Madison is livable for all its residents.

The municipal climate has made it easier for the Library to carry out this work. The City of Madison responded to the Baseline Report's findings by launching the Racial Equity and Social Justice Initiative in 2013 with the aim of eliminating racial and social inequities in city government by applying critical impact analyses to operations, community relations, and budgetary and policy decisions.

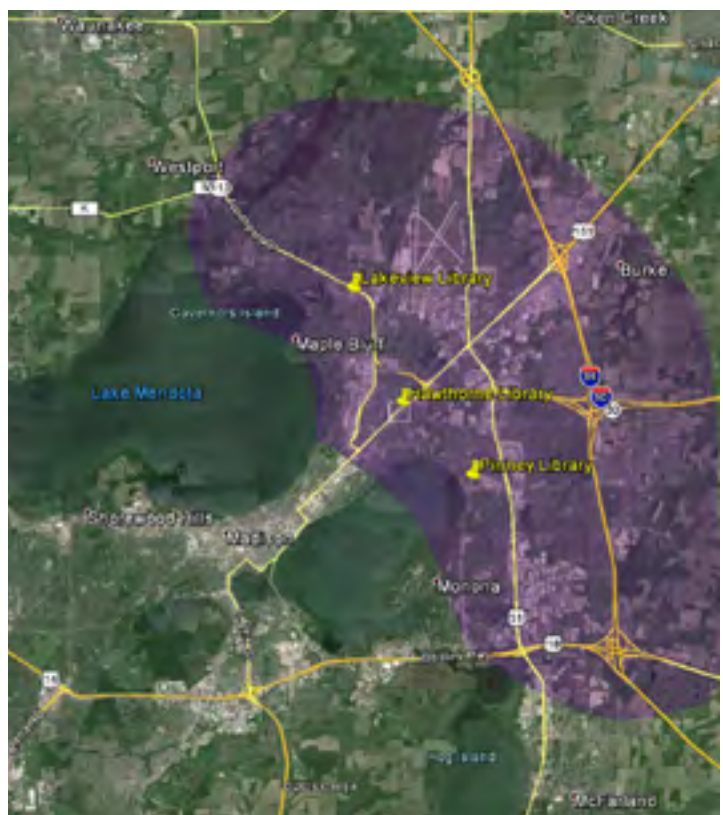
Madison Public Library is committed to reducing barriers and closing the achievement gaps for our

communities of color. As a participant in the Racial Equity and Social Justice Initiative, we are pleased to have the support from the City to carry out this work and continually refine our process as the community needs.

Eastside Context

Study Area

For the purposes of library planning, we define Madison's eastside as all neighborhoods east of the Yahara River. Our three libraries east of the isthmus serve all neighborhoods, even those in neighboring jurisdictions, east of the Yahara River. This plan covers this whole area shown in purple in order to look at how neighboring towns' libraries affect our service areas and which areas will be incorporated into the City of Madison in the future.



Demographics

The eastside, home to over 96,000 residents, skews younger, more diverse, and of lower income than the city as a whole. The percentage of the population of color is slightly smaller than that of the city's, but the

rate of growth is much higher, meaning the eastside has gained residents of color at a higher rate than the rest of the city.

TABLE 1

Demographic Characteristics

	Eastside ⁶	City of Madison
Youth Population		
Population under 5	7.1%	5.9%
Population under 18	20.8%	17.8%
Elderly Population		
Population over 65	11%	10%
Origin and Language		
Non-English Speaking Households	5.2%	6%
Foreign Born	6.7%	10.7%
<i>% Change in Foreign Born from 2000-2014</i>	120%	36.5%
Poverty		
Families Living in Poverty	10.2%	9.8%
<i>% Change from 2000-2014</i>	112%	98.9%
All people living in poverty	14.5%	19.6%
<i>% Change from 2000-2014</i>	166%	53%
Race and Ethnicity		
White	82.6%	79.2%
Black/African American	8.1%	7.2%
Asian	3.9%	8.1%
American Indian/Native American	0.3%	0.3%
Some other race	1.7%	1.7%
Two or more races	3.4%	3.5%
Hispanic, any race	6.6%	6.6%

Growth limitations and infrastructure barriers

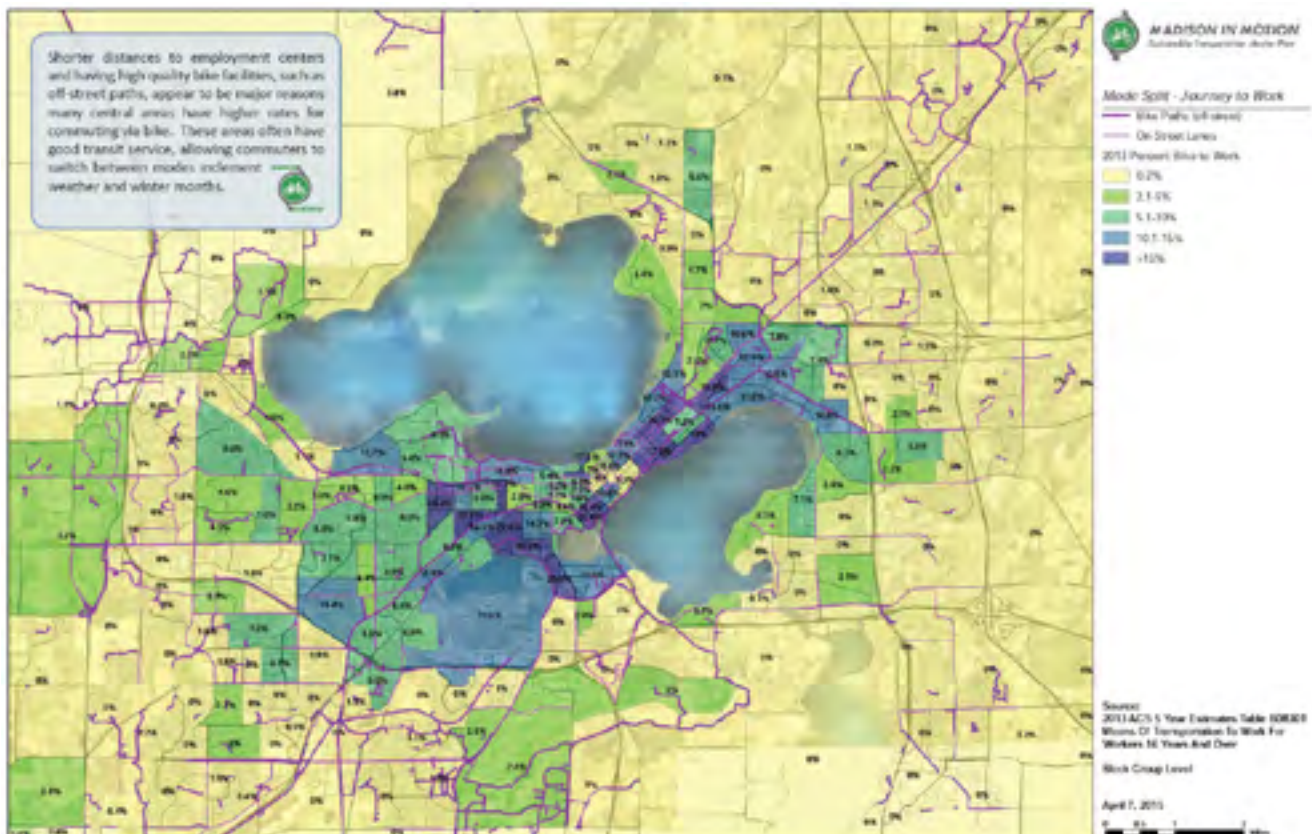
The eastside has several challenging barriers that break up the region. Infrastructure like the airport, State Road 30, Highways 51 and 151, and Interstates 90 and 94 creates illusions of adjacency but complicate access for residents.

Transit and connectivity

Due in part to the infrastructure barriers mentioned above, the eastside has limited trail and sidewalk connectivity, as well as limited bus service. The map below, created for the City of Madison's transportation plan, shows the percentage of residents who bike to work.

The map indicates that more people commute by bicycle in areas with continuous bike paths and on-street lanes. The vast majority of eastside neighborhoods, where there is very low connectivity in eastside bicycle infrastructure, have low bike commuting numbers.

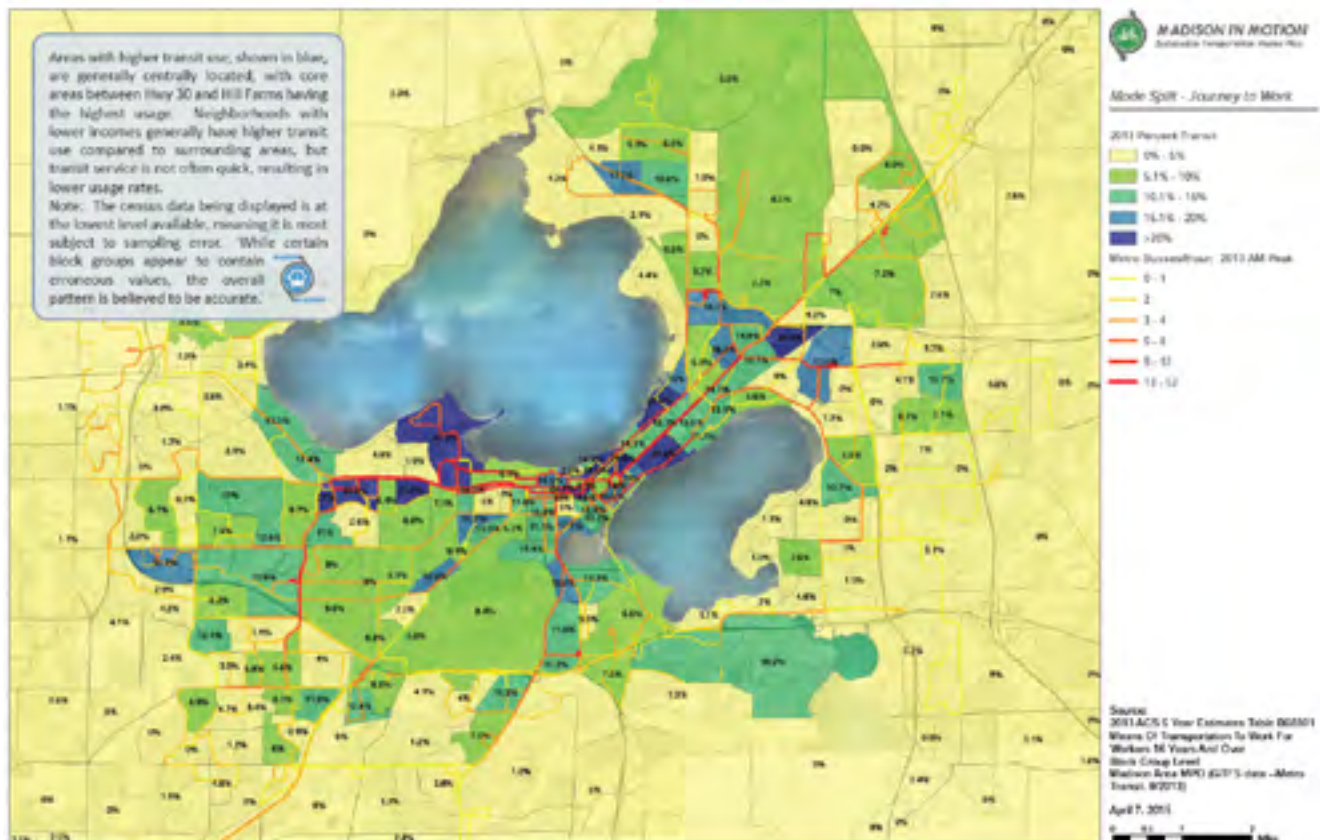
Journey to Work: Percentage of residents who bike to work and trail connectivity



The map below shows the percentage of residents who commute by bus. Again, eastside residents use transit with less frequency as there is also a much lower availability of bus routes. Most eastside neighborhoods have fewer than 2 buses per hour during peak time. The northeast neighborhoods show much more dependence on transit than the southeastern areas.

Understanding transportation patterns and barriers is critical to planning for equitable library service delivery. We wish to take advantage of existing transit infrastructure when locating a new library in order to be accessible to as many people as possible. However, we will also work to increase accessibility in surrounding neighborhoods by taking part in local planning discussions and, most importantly, empowering local community members to advocate for their best interests.

Journey to Work: Percentage of residents using transit and bus frequency



Housing Burdens

Table 1 showed that the eastside area's growth in families facing poverty has eclipsed the citywide rate. The eastside is home to more homeowners than the rest of the City, but those homeowners are burdened by unsustainable housing costs. Table 2 shows that more eastside homeowners spend upwards of half of their income on housing than the average Madison homeowner.

TABLE 2
Housing Burdens

	Eastside ⁶	City of Madison
Housing and Housing Security		
Renters	41.9%	50.7%
% Cost Burdened ⁷ Renters	32%	33%
% Extremely Cost Burdened ⁸ Renters	26%	30.7%
Homeowners	58.1%	49.3%
% Cost Burdened Homeowners	29.8%	31%
% Extremely Cost Burdened Homeowners	11.7%	9.6%

Implications for the library

The Library is sensitive to cost-of-living issues our community members face. It is paramount that Madison Public Library addresses the eastside's public service gaps with full understanding of the structural limitations, projected growth patterns, and economic disparities. As a catalyst for social change, the Library aims to spur successful, sustainable growth while remaining accessible to as many residents as possible.

Library Engagement



Getting out of the library to connect with our neighbors did not start with the eastside planning process. Madison Public Library staff has a long history of deep involvement in multiagency projects and neighborhood efforts in the eastside and beyond. This section highlights a sample of three recent partnerships of varying scope that have deepened our understanding of the community and improved our ability to serve our neighbors.

In the City

Neighborhood Resource Team Involvement

The City of Madison's Neighborhood Resource Teams (NRTs) are a place-based initiative rooted in racial justice, responsive government, and relationship building. The NRTs are made up of City staff across all agencies who, in addition to their respective departmental assignments, serve with the common goal of solving problems, making positive change, and empowering communities.

Each NRT serves a specific neighborhood identified by need and request from local residents. One of the essential functions these teams serve is to gather and share information about trends and concerns within these high needs areas. The NRTs have helped amplify the voices in these neighborhoods, getting residents' requests into departmental budgets and producing tangible improvements, like added bus lines, park equipment, and traffic calming measures.

Library staff's involvement with other team members, like emergency responders, social workers, school district personnel, has helped us better understand the Library's role in Madison's civic infrastructure.

This coordinated effort has produced many (as of yet) unquantifiable benefits to Library operations, including:

- Implementation of local schools' good behavior programs
- New outlets to publicize family events and workforce development programs
- Need-based program development informed by local social service providers
- Relationship with law enforcement to create preventative, not punitive, solutions for high needs patrons
- Maximizing the Library as a resource for information and research related to community development

- Insight into how Library policies and procedures may impact the most vulnerable populations

Most neighborhood library supervisors have taken leadership roles in the NRTs, pushing Madison Public Library to reimagine service areas outside of the traditional 5-minute drive radius. Above all, as a platform for communities with the least access to city services, NRTs have helped us craft more inclusive and accessible Library programs and services.

In the Neighborhood

Allis/Whitehorse Walkability Study

In addition to its role as a social and civic support, Madison Public Library also recognizes its role in shaping the built environment of its neighborhoods. In preparation for their upcoming relocation, Pinney Library staff took a step back to look at local school-age children's current commutes and after-school destination choices to inform the design and programs for an expanded youth and teen space.

In the spring of 2015, Madison Public Library staff partnered with UW Madison professor Carolina Sarmiento's community based research (CBR) class to look at barriers keeping nearby school-age kids from walking or biking to Pinney Library. Library staff wanted to understand the infrastructural, social, and/or logistical barriers that keep them from independently accessing the library as a community resource or social space.

Library staff and the UW students worked with a fifth grade class from Frank Allis Elementary, a half-mile south of Pinney, and an eighth grade class from Whitehorse Middle School, one mile north of Pinney, to create mental maps of their days. The fifth graders took a field trip on foot to the library, where the UW students talked with them about the experience.

The students' input opened up an array of discussions and interventions for Pinney Library staff to collaborate with the community to build a neighborhood library and surrounding infrastructure that work for our youth.



Examples of Neighborhood Scale Interventions

Health	Work with Streets and Planning on pathway plan between area schools, community centers, and libraries to promote safe, active, and independent mobility
Placemaking	Engage area students in pathway plans to determine what makes a pathway safe and fun Coordinate with area community organizations to create path landmarks
Safety	Assess all crossings on routes from schools to Pinney and work with MMSD and Streets to determine where traffic calming interventions are necessary
Engagement	Host conversations with area families to talk about walking/biking concerns Work with librarians and volunteers to create more offsite programming at schools and community centers to build relationships with students with limited after-school options
Access	Work with Metro to discuss public transportation options between library to surrounding neighborhoods

In the Home

Parents as First Teachers

Hawthorne Library has enjoyed countless benefits from its eastside location on East Washington Boulevard right next to the Madison Dane County Public Health office and clinic. The adjacency has made robust cross-promotion and programming possible over the years.

While adjacency is powerful, targeted and coordinated services are even more powerful. Library staff jumped at the chance to team up with Public Health to reach critical audiences outside our respective doors. The Library saw incredible mutual opportunity in reaching a population in a space we couldn't traditionally access: low-income mothers of babies and toddlers in their own homes.

The resulting partnership is the Parents as First Teachers program. Madison Public Library youth services staff teamed up with Madison Dane County Public Health's Nurse/Family staff to promote early literacy practices and provide baby books during home visits.

Library staff trained the nurses and clinicians making the visits and provided the materials (books and other info) while Public Health staff incorporated literacy strategies into their clients' check-ups.

The 2015 pilot project was a success. Madison Public Library and Madison Dane County Public are developing plans to replicate it in other neighborhoods, produce more Spanish-language materials, and explore more joint initiatives.

The Library is proud to bring a signature service, early literacy development, directly into people's homes. This program is helping us make some progress in key goals:

- Eliminate barriers to essential early literacy services
- Empower parents by helping them connect bonding activities to child development milestones
- Spread awareness of literacy as an indicator of health and well-being
- Develop new community feedback mechanism through partnership with Public Health staff

Tell Us/Cuéntenos: Communities Inspiring Libraries



tell us

COMMUNITIES INSPIRING LIBRARIES

Madison Public Library invites *everyone* to join the conversation to help us get to know our community better. Our city is growing and changing every year, and so are people's needs. In order to better serve you, we want to hear about your goals and the issues that matter most to you.



MADISON
PUBLIC
LIBRARY

madisonpubliclibrary.org

- QUESTION 3 -

WHAT LOCAL ORGANIZATIONS OR GROUPS DIRECTLY IMPROVE YOUR quality of life?

What makes them effective at helping?

CAPTURE AS MUCH OF THE CONVERSATION AS YOU CAN.



tell us

COMMUNITIES INSPIRING LIBRARIES

Thank you for hosting!

This is not another survey!

We are asking for a seat at your table to talk about things that matter to you. These are questions designed to spark a conversation between neighbors, friends, and family in a familiar setting. Let the "public" meeting happen in your own living room and send us the notes.

Why should you participate?

Your feedback will set the tone for future improvements in Madison Public Library services. We will follow up with all participants throughout the year to let you know how we put your ideas to work and give you more opportunities to make your voice heard.

How does this work?

The notes are the Library's only way to know how your attendees describe their goals, values, and priorities. Please send the conversation notes and Roll Call back to us after you've hosted a Tell Us session. You can drop it off at any Madison Public Library location, email it to us at tellus@madisonpubliclibrary.org, or mail it to us at:

Tell Us/Cuéntenos

Madison Public Library • 201 W. Mifflin St. • Madison, WI 53703

Encourage your attendees to host their own **tell us session!**

- QUESTION 4 -

WHAT ARE THE THREE biggest issues FACING YOUR COMMUNITY?

How do they personally affect you?

How do you see these issues affecting your friends and neighbors?

LOOK FOR THE CONNECTIONS PEOPLE MAKE BETWEEN IDEAS.

In order to create a framework for expanding library capacity in terms of facilities, staffing, and programs, we had to start with some basic values in order to get to the details. This is why our planning engagement program, *Tell Us/Cuéntenos*, focused on community issues and not on specific things people want to see in a library.

The title sums it up. People told us how they experience the city. They told us their concerns. They told us what they want to accomplish.

Methodology

Inspiration

We designed *Tell Us* to make participation as free of barriers as possible. This required getting out of the library and rethinking traditional public feedback tools to hear new voices.

The *Tell Us* process draws heavily from deliberative dialogue methods. We avoided a prescriptive method or anything with checkboxes. The primary intent was not to see what people wanted in a library, but to hear what people were concerned with on a personal and daily basis. Secondly, we wanted participants to know that the conversation would not end with *Tell Us*; the method had to establish new relationships to keep the exchange going.

The Harwood Institute also provided tremendous inspiration with public engagement strategies outlined in its “Turning Outward” philosophy. Its work with the American Library Association to train library professionals on intentionality and community-driven programming showed a way to allow our staff to continue the work begun with the *Tell Us* process.

Stakeholder Identification

Traditional feedback strategies tend to amplify the voices of the most engaged and privileged members of the community. We intentionally focused on our community’s most vulnerable populations. Using equity as a goal and guide for all our decisions, we used a combination of anecdotal, qualitative and quantitative information about local demographic dynamics and issues in public libraries to identify the communities least represented in our libraries and in our city.

Target populations

We made the *Tell Us* tool widely available to our advocates and patrons at all neighborhood libraries and on our website, while we spent the majority of our time outside of the library working with individuals and organizations to reach the following populations:

Youth (school-age)	Elderly	People of color
Low-income	English learners	Working families
LGBTQ	Disabled	Immigrants

Development

Taking traditional barriers to public participation into consideration, we had several requirements for the guide:

Accessible	Personal
Portable	No multiple choice answers
No device or internet connection necessary	Conversation format
Available in 4 languages	Each group or individual’s input uniquely reflective of their experience.
Comfortable	Fun
No officials present	Open-ended
No experts needed	Venue-flexible
Short enough to be manageable Long enough to elicit productive conversation	Good for social gatherings Bright and enticing packaging

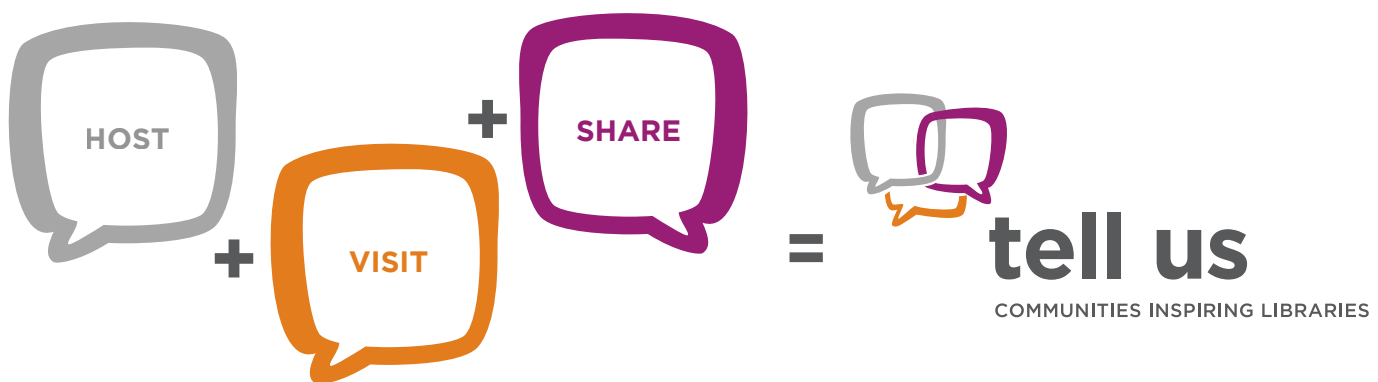
The guide, in booklet form, consisted of an introduction, instructions, questions for the group with room to write and prompts for the note-taker, follow-up questions for the host/note-taker, and a sign-in section with minimal demographic and contact fields. The roll call page helped us track the age, gender, race/ethnicity, ZIP code, and card status of our participants. The booklet was designed to contain the notes from the conversation and came in its own self-addressed envelope for easy return.

Implementation

Tell Us ran from April 2015 through December 2015. Participants held conversations at a variety of venues, from people's homes to classrooms, libraries, community centers, and workspaces.

Staff followed a tiered system to roll out the program. We took a three-pronged approach to getting the community conversations rolling.

Host	We hosted <i>Tell Us</i> sessions at all eastside libraries, inviting patrons and library advocates to experience the <i>Tell Us</i> process.
Visit	Our staff planner visited community centers, assisted living facilities, neighborhood non-profits, and schools to form small groups and facilitate dialogues.
Share	We asked participants at all <i>Tell Us</i> sessions to share the experience with their other networks. We learned that word of mouth is the most powerful source of information about local affairs for many residents, so making this a shareable experience was an essential piece of the program.



52
CONVERSATIONS
among
338 participants

50%
were
LIBRARY CARD HOLDERS

32
AVERAGE AGE
ranging from 8 to 84

TABLE 3
Race and Ethnicity of Participants and Local Residents

Race/Ethnicity	Percent of Madison population ⁹	Percent of Eastside Madison population ¹⁰	Percent of Tell Us Participants
White	79.2%	82.6%	39%
Black/African-American	7.2%	8.1%	16%
Asian	8.1%	3.9%	1.4%
American Indian/Native American	0.3%	0.3%	3.5%
Other	1.7%	1.7%	0.9%
Two or more	3.5%	3.4%	4.5%
Hispanic, any race	6.6%	6.6%	16% ¹¹
Declined to answer	-	-	19%

Anatomy of *Tell Us*

The choices behind the question number, formulation, and order were very deliberate in order to keep the conversation open, stimulating, and productive. None of the questions mention the word ‘library’ in order to keep the discussion about community issues.

Questions

1 What are the communities represented in this room?

This first question serves three purposes: to serve as an icebreaker, to challenge assumptions, and to give participants a variety of lenses through which to consider the proceeding questions about community.

2 What do you need to feel supported by your community? What does a strong community look like?

This gauges what people value most highly in community. After listing the groups they belong to in Question 1, Question 2 makes participants think about whether or not they feel supported in these communities. In this process, people tended to list qualities they need, though not everyone reported experiencing them currently. For some, this was a reporting exercise; for others, this was an aspirational question.

3 What organizations or groups directly improve your quality of life? What makes them effective at helping?

This gets groups thinking about the organizations or groups that actually provide the kind of support described in Question 2 and meet other critical needs. This is a useful way to link people’s sense of personal well-being to their ability to turn to a variety of sources for support.

Responses helped us understand the sectors of the community people tend to rely on the most and to explore opportunities to cluster or coordinate.

4 What are the three biggest issues facing your community? How do they personally affect you? How do you see these issues affecting your friends and neighbors?

At the halfway mark of the conversation, this prompts participants to reflect on issues that affect them most on any level that is most relevant to them.

5 What are some ideas to address these issues? Who would you trust to work on carrying these out? What can your community do to help resolve these issues?

While Question 4 could really get groups into a heated discussion, this question presents an opportunity to cool things down and let participants propose solutions. Our goal was not to get specific ideas, but to understand people’s social problem-solving values. Who do we think is ultimately responsible for creating change? What is our own role as individuals or as a community? What is the most realistic or functional way to make a difference?

6 How would you know things have gotten better? Where would we be if we took a couple steps in the right direction?

To end the discussion on a positive note, we wanted people to define what progress looks and feels like. This question was designed to help us craft locally relevant outcome measures.

Data Analysis

We designed the inquiry to build four different frames for organizing the input. After entering all responses into a database, Library staff reviewed all data sets and created categories and subcategories that adequately covered the content of the responses. All responses were subsequently coded and analyzed for major trends.

Frame	Tell Us Question
Personal Affiliations	1
Community Needs	2,4,6
Support Network Type	3
Solution Type	5

Personal Affiliations

In the interest of maintaining the diversity of responses, we created 17 different categories of community types. People were most likely to identify by where they are from or where they live; what they do or used to do for a living; what they like doing in their spare time; their heritage; and what/where they study or what degree/training they have.

Groups provided an average of 13 different communities to which they belonged. This is a powerful

reminder about the importance of intersectional services and programs and appealing to people's multiple communities.

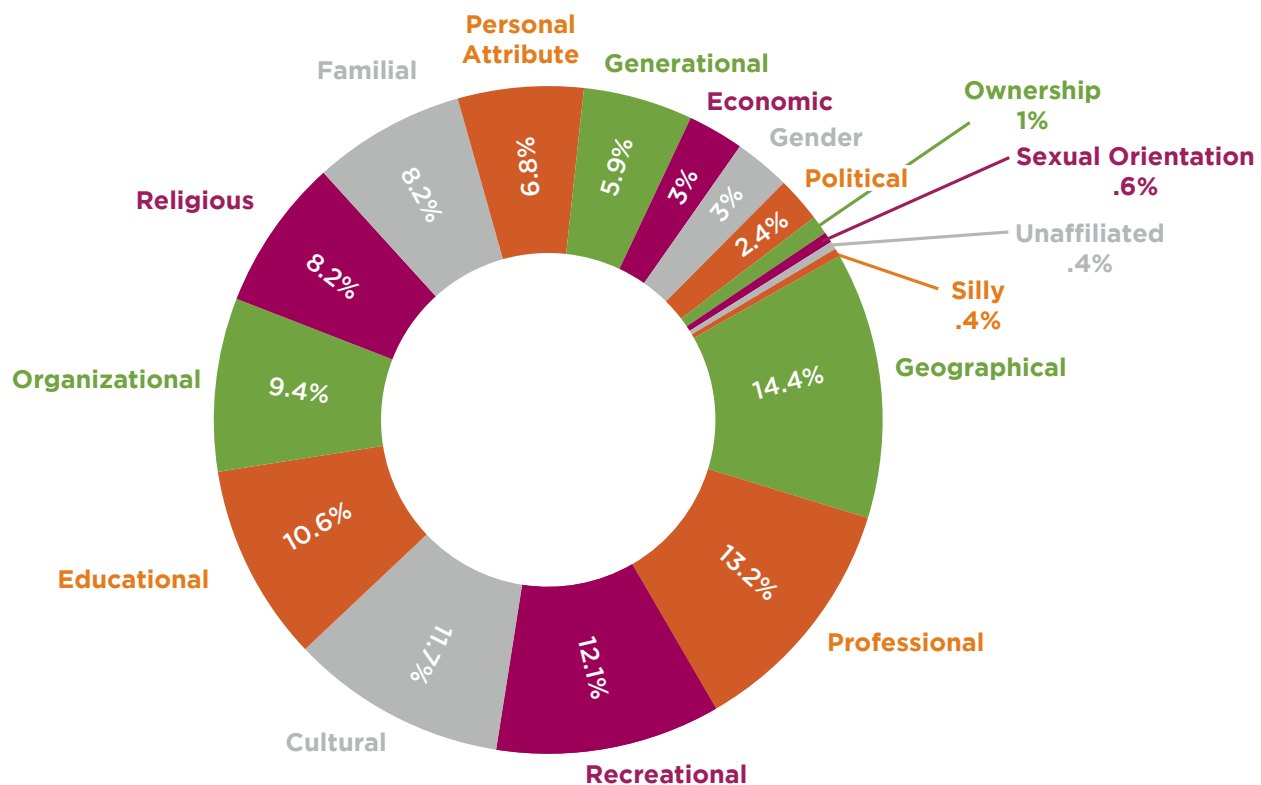
Community Needs

The responses to questions 2, 4, and 6 all describe how people experience community under different conditions: ideal (2), current (4), and improving (6). In a non-sequential manner, people described for us what exactly they need to feel supported, what issues they and their families and neighbors face, and what signs of progress would look like.

All responses fell under four general categories: Social, Basic Infrastructure, Economic, and Environment. People's social needs (e.g., healthy relationships, respect, places to congregate, feeling safe, diversity, and justice) were at the forefront of the conversations.

This pattern does not mean that environmental, economic, or basic infrastructural needs are any less necessary. The deliberative dialogue method is all about the connections between topics; this process showed us that the quality of our interactions and our ability to connect with others is our most reliable indicator of personal well-being.

Personal Affiliations by Percentage of Responses





Community Need Categories by Percentage of Responses per Question

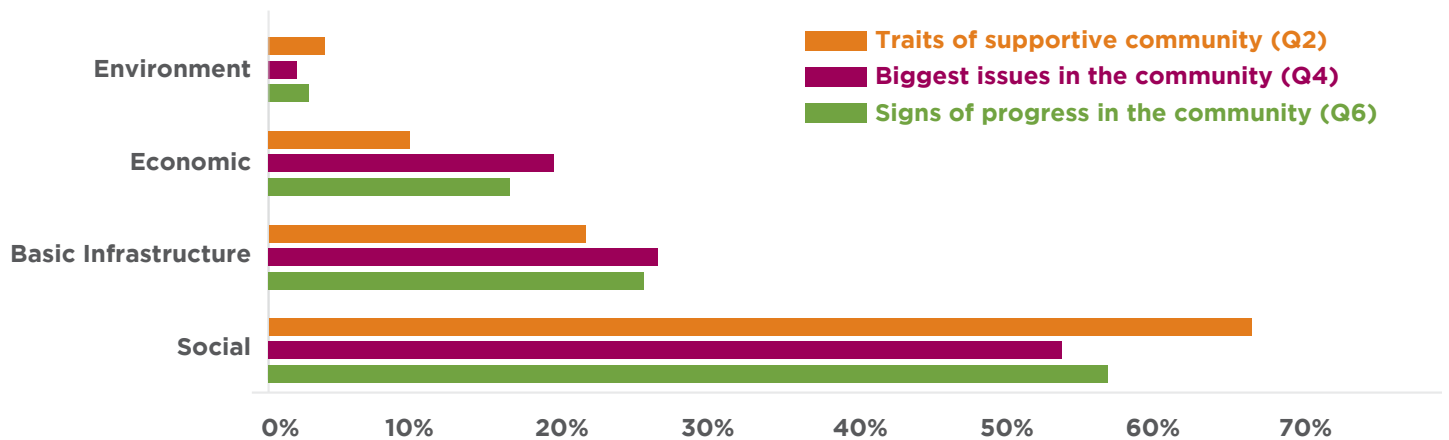


TABLE 4

Community Needs Categories and Subcategories

Social	Basic Infrastructure	Economic	Environmental
Culture	Food	Jobs	Environmental Health
Safety	Shelter	Wages	Wildlife
Civic	Clothing	Training	Open Space
Space	Health	Cost of living	
Behavior/ attitudes	Education	Consumer convenience	
Art/Entertainment	Sanitation		
Religion	Communications		
Relationships	Transportation		

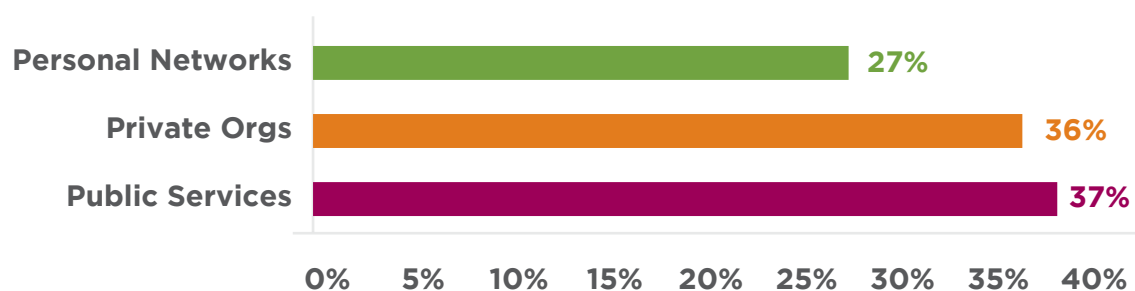
Each response was also assigned to more detailed subcategories (see Table 4) under the four main categories. The three most common subcategories of responses were Behavior/attitudes, Relationships, and Civic. On the positive side of the spectrum, the 'behavior/attitudes' subcategory describes behaviors like generosity, kindness, and respect, while on the negative side, it covers deeply rooted social ills like racism, homophobia, sexism, ageism, and ableism.

Support Networks

By asking participants to list organizations that directly impact their quality of life, we wanted to understand people's awareness of their community resources and see to whom they turn on a regular basis.

The responses fell into three main categories of sources: Personal Networks, Private Organizations, and Public Services. Public services and private organizations were nearly tied with the number of mentions.

Support Network Categories by Percentage of Responses



This is noteworthy given the weight of responses in the “Social” category in questions 2, 4, and 6. This means that while people identify strong communities and measure progress by their quality of relationships, attitudes, and culture, public services like health, education, food assistance, parks, emergency response, and other government functions play the biggest role in setting our quality of life. Private organizations, such as non-profits, faith-based charities, or local businesses, are a very close second to filling in gaps of need.

Each response was assigned to more detailed subcategories (listed above) under the three main categories. The three most common subcategories of responses were Basic infrastructure (providing items and services listed in the “Community Needs” category of the same name in questions 2, 4, and 6), Advocacy/service (i.e. non-profits and charitable organizations), and Public space. While some elements of basic infrastructure can be provided by private entities, (like food sold in stores, clothes from a religious charity, or mental health services from a non-profit provider, etc.) each subcategory code was assigned according to the source of the support as identified by the participant. Answers could be assigned more than one category or subcategory.

Lastly, these responses shed some light on the mutual reliance of community resources. Just as residents rely on a diverse mix of sources of support, Madison’s network of public and private service providers work in tandem whether it is intentional or not. Pursuing a model of strategic partnerships to deliver services would have a more profound effect on the community by serving more people and reflecting local values.

TABLE 5
Support Network Categories and Subcategories

Personal Network	Public Service	Private Organization
Family/friends	Basic infrastructure	Business
Cultural	Public space	Advocacy/service
Neighborhood	First responders	Religious
Recreational	Government	Employers
Collegial		

Public services lay the groundwork for a healthy community. The kind of infrastructure that the library represents— physical, civic, and information infrastructure—is an investment rooted in public demand.

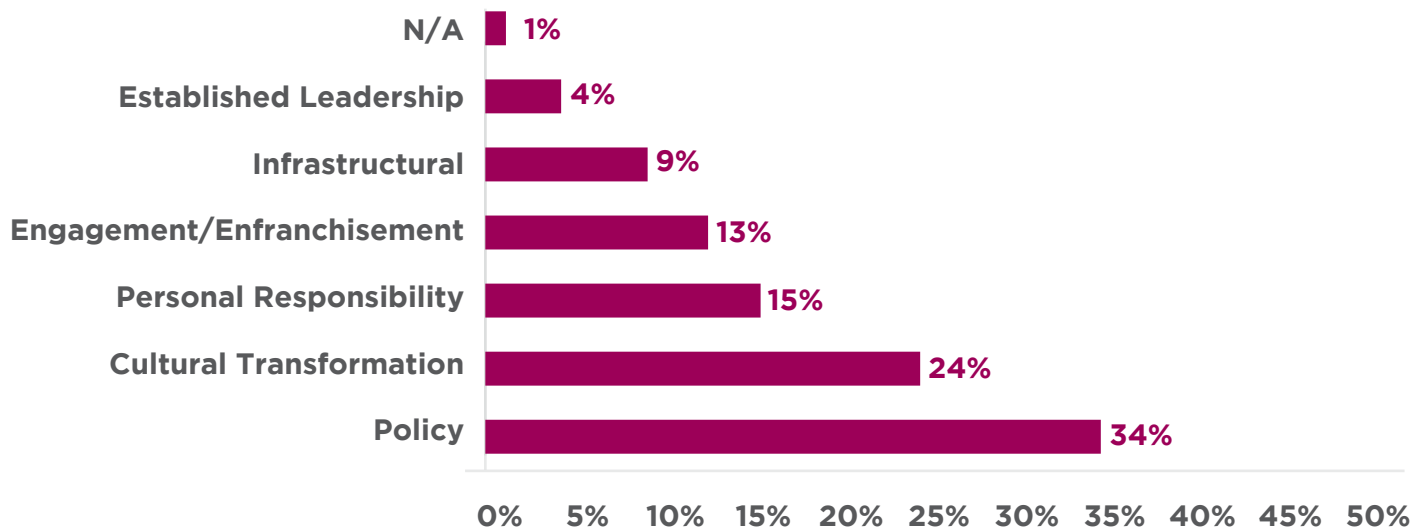


Participant Solutions

While no participant cracked the code for finding a single concrete solution to all our complex social problems, there was tremendous benefit from discussing what we are capable of today and what we must work toward.

Responses generally fell into six solution types: Policy, Cultural Transformation, Personal Responsibility, Engagement/Enfranchisement, Infrastructural, and Leadership. Over a third of all responses offered policy recommendations (specific rules or programs) to address previously mentioned issues (e.g. needle exchanges, higher minimum wage, and green building requirements).

Solution Type Categories by Percentage of Responses



The second most popular category of response, Cultural Transformation, requires deep, fundamental change on a wide scale (e.g. “stop perpetuating negative stereotypes,” “more creativity – people are afraid to be themselves,” etc.), while Personal Responsibility, or things individuals can do right away (e.g. “getting out of our comfort zone,” “being nice to a neighbor”), took a distant third place.

Responses under the Engagement/Enfranchisement category specifically referred to civic engagement and issues of representation and oppression. These often fit under the Cultural Transformation category, as well. The recognition of low voter turnout, low volunteerism, and general apathy is linked to a lack of trust, feelings of neighborhood disinvestment, lack of reliable information, and a lack of access by design. If someone wanted to speak out or get involved, where would they go? Even if one knew how to get involved, how would one ensure that their voice is heard?

Lastly, solutions pointing to established leadership were the least popular. The context provided by answers to the subquestion “Who would you trust in carrying these out?” showed an overall lack of trust in elected officials at all levels, most commonly those above the local level.

In sum, participants like seeing a direct and specific action, appreciate ambitious goals of social change, distrust elected leaders, and recognize their own part to play. This is a reminder that the Library must share its goals and impact with the community and must find new ways to connect residents with the tools to participate in and lead civic life.

Priorities, Values, and Goals

How community conversations lead to a framework for library growth?

We translated the most frequently mentioned community needs from the *Tell Us* conversations into five critical roles that Madison Public Library must prioritize in planning for new facilities, programs, partnerships, and services for Madison's eastside. The resulting five community priorities represent issues that weigh most heavily on residents.

Each community priority takes an "equity first" approach and is followed by specific ways Madison Public Library can serve the needs of Madison's eastside. Each priority is accompanied by values to guide service delivery and social impacts to guide outcome measures. These values and impacts also come directly from the *Tell Us* conversations.

1. Social Forum

Madison Public Library has embraced its role as a social hub for the community, but has more work to do to become a more intentionally inclusive space and to communicate the benefits of that service. The demographic transitions taking place on the eastside are noteworthy; there are higher numbers of vulnerable populations, such as older adults and families with young children, that are geographically, culturally, or financially isolated from public services.

Values	Social Impacts
• People-first approach	• Exposure to diversity
• Intergenerational experiences	• Building empathy
• Spontaneous interactions	• Strengthen neighborhood ties
• Inclusion and accessibility	• Facilitate mentorships
• Safety	• Harm prevention (e.g. weather exposure risks for the homeless)
• Versatility of public space	

2. Civic Innovator

There are many factors that determine one's participation in public life. Race, language, income, and neighborhood are just a few examples and the library has an opportunity to help level the playing field. Civic engagement in the 21st century requires much more than issuing a press release and holding a public meeting. As information professionals and community connectors, the Library must reorient its role in civic life to provide equitable service for positive change.

Values	Social Impacts
• Civic engagement and education	• Information and media literacy training
• Amplify unheard voices	• Increase diverse neighborhood representation in city issues
• Combat disenfranchisement	• Creation of leadership opportunities
• Action oriented	• Increase volunteerism
• Safe space for dialogue	• Connect residents to advocacy opportunities
• Leadership development	• Enabling citizenship for immigrant residents
• Accessible information	

3. Holistic Health Advocate

Access to and quality of health care is a major concern for residents. Furthermore, the interrelated factors that affect our health, like the built environment, natural resources, relationships, economic status, trauma, diet, and habits are complex. As information professionals, libraries can assist in making health literacy a priority for our most vulnerable populations. Health literacy is the ability to navigate the medical system, understand health terminology and processes, and make informed decisions about one's well-being.

Values	Social Impacts
• Health literacy	• Ability to self-advocate in medical arena
• Environmental literacy	• Connecting active outdoor play and literacy
• Mental health awareness	• Natural resource awareness
• Self-care empowerment	• Connection to mental health resources
• Neighborhood connectivity	• Healthier communities

4. Cultural Platform

As Madison absorbs more growth and becomes denser, Madison Public Library must support its communities of color by providing a platform for expression, education, and celebration. Traditional "public" space and open educational institutions like museums and libraries have not been truly inclusive for immigrant, indigenous, or other communities of color (Coffee, 2008). When it comes to combating racism and prejudice, neutrality is not an option. The Library must use its space and resources to increase culturally diverse and relevant educational and recreational opportunities for the community.

Values	Social Impacts
• Diversity and inclusion	• Bilingual literacy
• Combat racism and prejudice	• Language preservation initiatives
• Appeal to people's multiple communities	• Cross-cultural education
• Inclusion of "invisible minority" groups	• Youth and family engagement
• Multicultural design	

5. Economic Engine

In addition to hosting job fairs and teaching computer classes, Madison Public Library helps thousands of people every year fill out job applications and create resumes. Throughout these community conversations, the subject of jobs rarely came up without a qualifier, like "good" or "stable." The consensus is a wish to thrive instead of merely staying afloat.

Values	Social Impacts
• Basic needs first	• Housing resource connections
• Sustainable economic growth	• Living wage jobs created/obtained
• Youth employment opportunities	• Professional mentorships
• Recognize all educational goals	• GED, Certification and Associates graduations
• Universal internet access	• Wireless internet delivery to low-income neighborhoods
• Small business support	• Business permits and licenses obtained
• Close skills gap	• Training opportunities
	• Skill matching

Tell Us Summary

Madison residents have articulated a desire for a stronger social fabric, more robust public infrastructure, and economic stability. They believe that public services lead the way, but that only a mix of community resources can fully serve our neighborhoods, providing a strong basis for more coordination and partnerships. Lastly, they have shown a preference for action-oriented solutions, while identifying a desire for long-term transformational change.

The recurring themes from the *Tell Us* conversations gave us five priorities to inform future decision-making around growth and services. Working from a community-driven and equity-centered framework will help the Library facilitate the change residents want to see in Madison.



From Values to Sites: Land Use Analysis

Establishing service areas

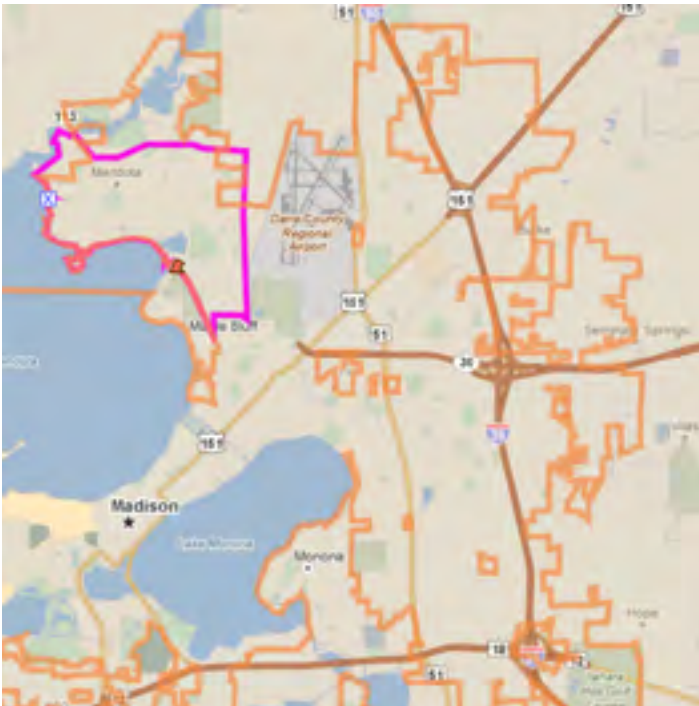
Neighborhood library service areas are not fixed. They are determined by multiple factors, but residents' needs and circumstances ultimately shape them. We present two different ways of visualizing our current eastside neighborhood libraries' service areas:

1. **Check-out patterns:** The areas bounded by the bright polygons represent the areas where residents check out materials with the most frequency. These boundaries were determined by mapping snapshots of check-out data from 2013 and 2014 to find usage patterns.
2. **Drive time:** The blue overlays on the aerial maps show the areas theoretically accessible by a 5-minute drive to and from the neighborhood library.

There are notable caveats to using these service area definitions, but ultimately, these maps reveal where overlaps and gaps in eastside library service exist, as well as where the built environment poses barriers and where it does not.

LAKEVIEW LIBRARY

Check-out map



Key adjacencies and characteristics

Open space: Warner Park, Cherokee Marsh

Community centers: Warner Park, Kennedy Heights, Vera Court

Schools: Lakeview ES, Gompers ES,

Facility size: 9,355 ft²

5-minute drive map



Lindbergh ES, Mendota ES, Black Hawk MS, Sherman MS, Shabazz HS

Visitors per year¹³: 130,000

Households making less than \$25,000/yr¹²: 26.2%

Limitations

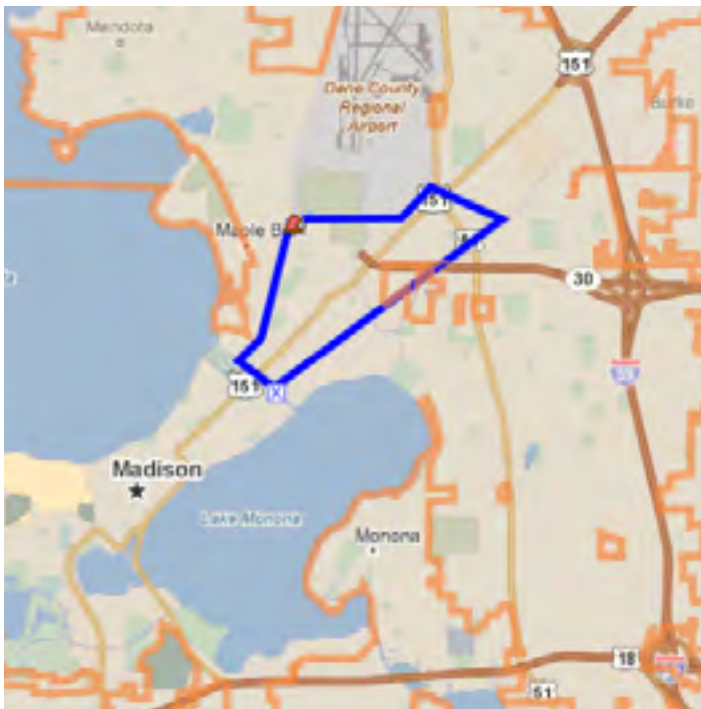
It is important to keep in mind that service areas vary. Visualizing them in any single way has certain limitations, so it is crucial to look at both, while keeping the neighborhoods' unique characteristics in mind.

The **check-out maps** are only based on one specific activity at the library. There are many library patrons who do not check out items, yet regularly use and depend on the library for other things, like special programs or resources like internet access. Additionally, several library programs take place outside of the library walls, expanding our service areas on any given day. Some libraries draw from a smaller radius of users, which can be attributed to a variety of factors like neighborhood density, library size, or average neighborhood income.¹²

The **five-minute drive time overlays** were calculated using a standard 35 MPH speed and do not account for high traffic. They also do not account for major barriers or restricted access areas, like waterways and airports, distorting the truly drivable area. However, it is a useful measure for those who have access to vehicles, a population that varies from neighborhood to neighborhood, depending on density, income, and access to transit. More suburban locations, like Pinney Library, tend to draw from a larger area partly because more people primarily travel by a car, while neighborhood libraries situated in higher density areas with more reliable access to several bus routes draw visits from smaller areas.

HAWTHORNE LIBRARY

Check-out map



Key adjacencies and characteristics

Open space: Worthington Park, Starkweather Creek trail

Community centers: Salvation Army, Goodman, East Madison

Agencies: Public Health Madison Dane County Office and Clinic

Facility size: 10,060 ft²

5-minute drive map



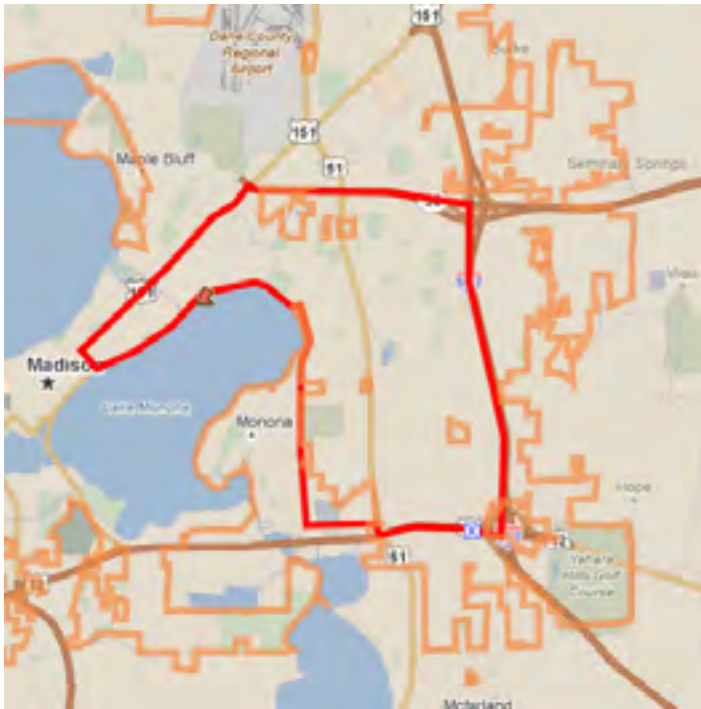
Schools: Hawthorne ES, Emerson ES, East HS, Holy Cross Lutheran School

Visitors per year: 171,000

Households making less than \$25,000/yr: 26.7%

CURRENT PINNEY LIBRARY

Check-out map



Key adjacencies and characteristics

Open space: Olbrich Park and Gardens, Starkweather Creek trail, Capital City Bike Trail

Community centers: YMCA

Schools: Allis ES, Marquette ES, Lowell ES, Schenk ES, Kennedy ES, Nuestro Mundo

Facility size: 11,200 ft²

5-minute drive map



Glendale ES, Elvehjem ES, Whitehorse MS, Sennett MS, O'Keeffe MS, LaFollette HS, Monona Grove HS

Visitors per year: 297,700

Households making less than \$25,000/yr: 16.7%

PINNEY LIBRARY (Royster Corners)

Check-out map: TBD

Key planned adjacencies (in addition to current adjacencies)

Community centers: Madison School & Community Recreation facility

Housing: Moderate-density developments

Business: Neighboring Royster Corners commercial tenants, Garver Mill redevelopment

Projected visitors per year: 440,000

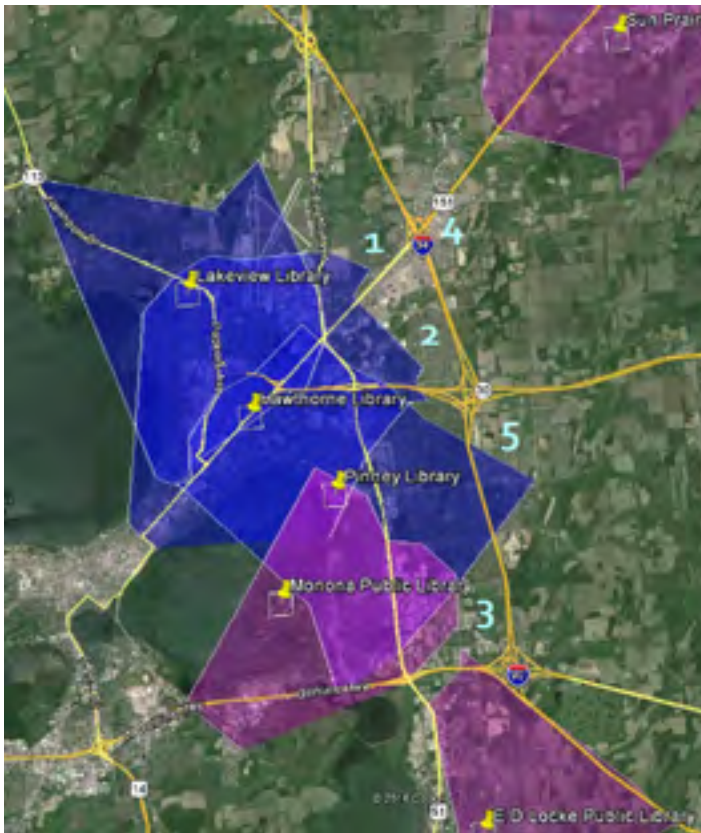
Facility size: 21,338 ft²

5-minute drive map



Visualizing the Underserved

Five-minute drive map with neighboring libraries



- Madison Public Library
- Neighboring public libraries

The spread of the underserved areas, numbered above, presents a challenge to siting new library facilities. Which location would provide maximum benefit to the most people with minimum barriers?

In addition to population, library siting takes other key factors in mind:

Schools and school-age population

Employment centers

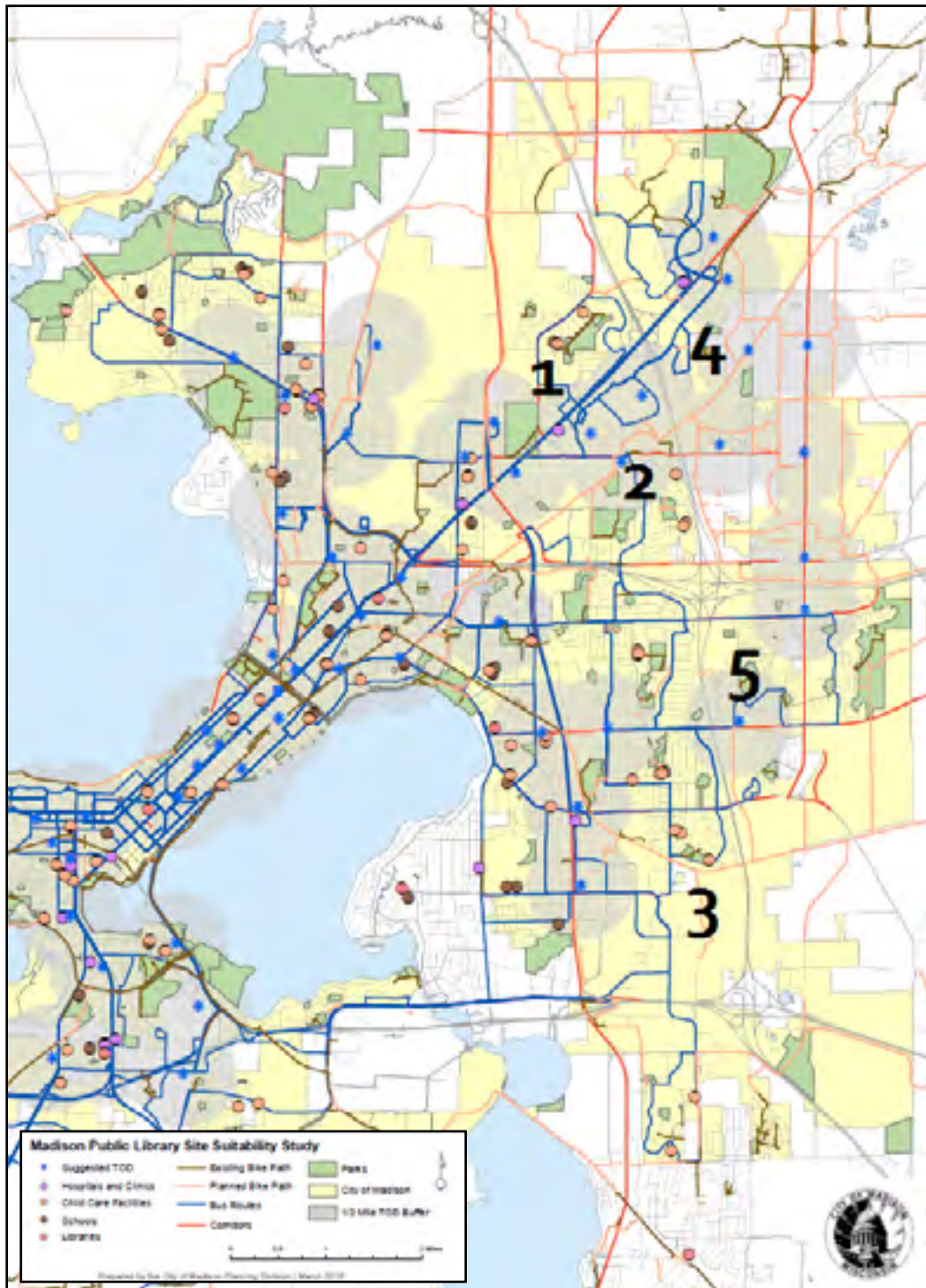
Transit access

Visibility

Library staff looked at local and regional plans to see what other developments use these same factors in siting. We found that Transit Oriented Developments (TODs) were a helpful way to assess the eastside's underserved areas for growth.

Transit oriented developments also take most of these factors into consideration in order to create complete, accessible communities. TODs are areas designed for compact walkability and access with transit stops as the center.

Planned Transit Oriented Development (TOD) Buffer Map



The map above shows a ½ mile radius around each planned Transit Oriented Development (TOD), as identified by the City of Madison Department of Planning, Community & Economic Development. It also shows key neighborhood assets, like schools, libraries, healthcare facilities, parks, and child care centers. The

numbered areas correspond to the underserved areas identified on page 37.

Please note that not all planned TODs east of I-90/94 are currently within city limits and are planned according to annexation schedules.

TABLE 6

Underserved Area Characteristics

Area	Population ¹⁵	Density	Notes ¹⁶	Priority
1	5,654	2,440/ mi ²	High diversity, high poverty area; only eastside MMSD school site (Sandberg ES) outside of a Madison Public Library 5-mile drive area; high transit dependency. Near two parks, higher education campus, child care centers, health care facility, and planned Portage Road TOD	High
2	5,206	2,125/ mi ²	High diversity, high poverty area in major employment center Near several green spaces, child care centers, health care facility, and four TODs	High
3	6,302	1,600/ mi ²	Still within high usage service area of Pinney Library; relatively low poverty and low transit-dependent population No plans for added density	Low
4	9,115	550/mi ²	Very low density; mostly commercial and agricultural uses; includes lands to be incorporated into City of Madison by 2036. Major long-term growth planned	Low
5	7,081	824/mi ²	Very low density; environmental corridor; area not fully in city limits, low poverty Long-term city and county growth planned	Low

This preliminary look at existing service areas and planned developments has given us two high priority areas to consider: the Sandberg Elementary neighborhood (area 1) and the East Towne Mall neighborhood (area 2).

Areas 4 and 5, though marked low priority due to their current population and lack of critical adjacencies to support a library, will be explored because of future plans for added density and transit access.

Of the three low priority areas, we eliminated area 3 from the site search for two main reasons:

The check out map indicates that while the area is just outside of the 5-minute drive area, the residents show high usage activity at Pinney and relatively easy access to Monona and McFarland libraries. Secondly, there are no plans for significant added density or transit infrastructure, making it unlikely that this area will meet our basic population and adjacency criteria.

Site Scenarios

In order to find specific sites to analyze within the four remaining underserved areas, we looked at sites that have either been proposed to the Library in the past or at planned neighborhood developments identified by the City of Madison Department of Planning and Community and Economic Development.

Reindahl Park/Portage Road



Locating a library in Reindahl Park was proposed in 2014 and briefly discussed by Parks and Library staff before the library planning process began. Library staff wanted to make sure all eastside areas were analyzed for service reach and that all prospective sites were thoroughly evaluated. Since this area emerged as the only neighborhood with an elementary school outside of a library service area, we revisited Reindahl Park as a site to evaluate using the new criteria.

Madison Public Library has enjoyed countless benefits from key adjacencies at other locations that have yielded high-impact programs (e.g., Hawthorne Library with Public Health Madison Dane County, Meadowridge Library with Meadowood Community Center), making a compelling case to plan for similar partnerships at the new location.

East Towne Mall



In 2014, the Library was approached by a donor with a parcel just south of East Towne Mall to donate. The particular parcel did not meet crucial accessibility or infrastructural criteria, but the general area appealed to the Library because of the regional draw, diverse demographics, and potential to become a more active and walkable area.

We do not have a particular site or address in the following scenario. However, since Area 2 is slated to host up to four different transit oriented developments (TODs), we treated the whole area bound between Stoughton Road, E. Washington Boulevard, I-90/94, and Highway 30 as a site with the assumption that location would be prominently situated in the heart of a TOD.

Reiner Road



With five TOD sites identified in Area 4, the Library chose to look at the southernmost site on Reiner Road along Highway 30 due to the scale of the high density development planned and because its 5-minute drive area did not overlap with Sun Prairie Public Library service area.

Grandview Commons



The City of Madison is party to a 2007 agreement with a development company to receive property on Sharpsburg Drive solely intended for the construction of a new Madison Public Library. Amended twice to revise terms and extend the deadline for construction, the agreement gives the Library until December 2018 to take actions toward construction or else the property reverts back to the original owners.

With the new Pinney Library slated to begin construction at Royster Corners in 2017, the feasibility of locating a new library at Grandview Commons has been called into question. This site analysis evaluates the infrastructural, social, economic, and cultural factors of a library at Grandview Commons and to recommend next steps for the Library and property donors.

Site Criteria

Madison Public Library developed a scoring tool prior to the formal planning process that evaluated potential sites by their adjacencies and infrastructure (See Appendix). The Tell Us input, however, helped us address social infrastructure needs and equity, creating an updated set of criteria.

Each site was evaluated using the Site Suitability Goals. We consulted local and regional plans for current and future land use and accessibility questions, as well as current Census counts and local projections for population counts. Each goal consists of five criteria relating to the Community Priorities identified by the *Tell Us* data.

Each criterion merits between 0 and 2 points. The criteria in *italics* are equity factors and carry an extra point, making each equity-driven criterion worth a maximum of three points. The following site scenarios show both the total score and each site goal score. The maximum number of points a site can achieve is 55.

Site Suitability Goals						
Community Priorities		Site Capacity	Demographics	Infrastructure	Sustainability	Economic Development
	Social Forum	Maximum density (current and projected)	Near K-12 facilities and child-care centers	Ability to address natural or infrastructural barriers preventing access for adjacent neighborhoods	Minimal adverse impact on neighborhood	Near major employment center(s)
	Civic Innovator	High visibility	Generational mix	Room for potential expansion	Easy access to previously isolated neighborhoods	Near non-profits/other community agencies
	Holistic Health Advocate	Near green space or natural feature	Near uninsured populations	Transit, trail, and sidewalk access	Infill, not greenfield development	<i>High poverty population</i>
	Cultural Platform	Near mixed use centers	<i>High diversity</i>	Complements nearby cultural facilities	High rate of population growth	<i>Near minority-owned businesses</i>
	Economic Engine	<i>Transit access</i>	<i>Higher than average unemployment</i>	Location on current or planned MUFN line	Potential for renewable energy source	Alignment with city development goals
	Points possible	11	12	10	10	12

TABLE 7

Site Snapshots by Select Socioeconomic Measures¹⁷

	SITE 1 Reindahl/ Portage	SITE 2 East Towne Mall	SITE 3 Reiner Road	SITE 4 Grandview Commons
% Under 18	22.3%	24.1%	23.9%	20.1%
% Poverty	9.2%	12.1%	4.5%	5.4%
% Unemployed	6%	7.2%	3.5%	2.5%
% Non-white population	19.8%	30%	18%	6.4%

To assign scores for the equity-informed criteria, we looked at broad measures of vulnerable populations – children, communities of color, the impoverished and unemployed. It is important to stress that the Library serves all residents of all ages, cultures, and means. Keeping equity at the forefront of planning and implementation means weighing the needs of populations with the fewest resources and least representation.

Ground was officially broken on March 27, 2009, for the new South Madison Branch Library.

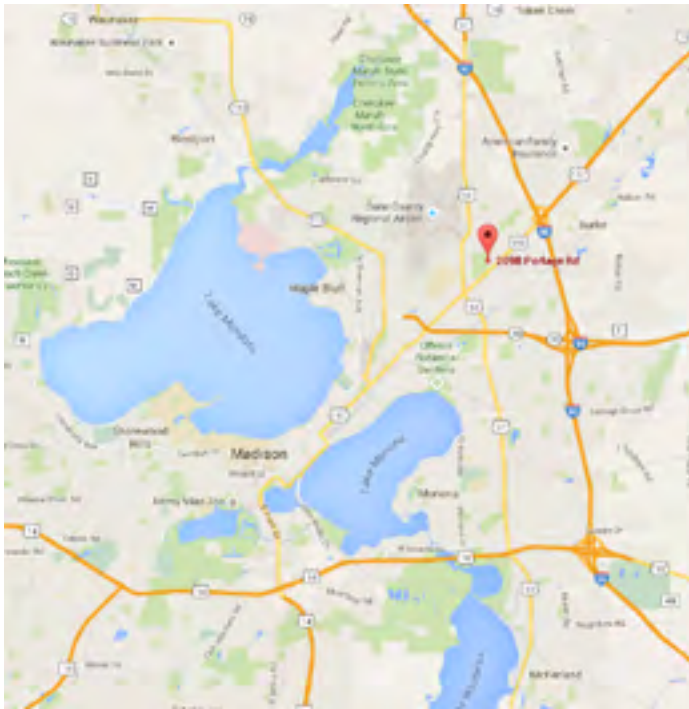


SITE 1

SCORE: 46/55

Portage Road/Reindahl Park

Site Context



Eastside Context

High poverty tract High foreign born population

Moderate population growth High transit use

On future express bus route

Site 1 | Portage Road/Reindahl Park

Site Suitability Goal Scores

Site Capacity	10
Demographics	9
Infrastructure	8
Sustainability	7
Economic Development	12

TOTAL SITE SCORE **46**

Neighborhood Context

Low residential density High diversity Mix of businesses

Near parks High 0-5 population Many neighboring agencies and non-profits

Near Sandburg Elementary and Madison College Low 65+ population High regional visibility

Near East Madison Community Center

Site Summary

The surrounding population density and high visibility factored into this site's high score, but its edge on the equity-centered criteria pushed this site above the rest. The area is growing, has a high share of foreign-born residents, communities of color, and families in poverty. There are also several childcare facilities within a half-mile radius, improving local families' access to early literacy resources. Lastly, a library at this site would be a short walk from Sandburg Elementary, a 71% non-white and 71% low-income student body at Sandburg Elementary¹⁷ and currently the only eastside MMSD campus outside of a Madison Public Library service area.

Community Priorities Discussion

	Advantages	Disadvantages
Social Forum	This stretch of East Washington is already a destination for families for shopping, park usage, dining, and medical needs. The addition of educational programs and public space contributes very well to the mix. Several child-care centers within walking distance to site.	New library may contribute to rate of new commercial and residential developments in the area, driving up rents and putting more burdens on low-income residents.
Civic Innovator	Huge potential to engage highly diverse neighborhood in local advocacy by providing space, resources, and facilitating dialogue.	May still be difficult to connect with underserved neighborhoods east of I-90/94
Holistic Health Advocate	Ability to co-locate with other agencies would serve multiple public needs. Adjacency to planned park and ride and TODs will ease access and promote active living. Location at park more desirable for more active outdoor programming and environmental education.	No opportunity to renovate existing structure - new construction less "green" than infill. Additional facility at park could reduce green space
Cultural Platform	Prominent location along East Washington corridor adds high visibility.	Lack of nearby cultural facilities may make creating professional partnerships difficult.
Economic Engine	Proximity to Madison College and regional employers has potential for training and education for area workers. Access to fiber optic line positions us as a technology hub. The high number of residents of color and lack of businesses registered with the state's Disadvantaged Business Enterprise (DBE) database shows opportunity for targeted outreach and entrepreneurial training.	Ability to pursue 100% renewable energy powered structure uncertain.

SITE 2

SITE SCORE: 40/55

East Towne Mall Area

Site Context



Eastside context

High poverty Bounded by highways,
interstates, train tracks

High diversity Major employment center

Moderate population High transit dependency
growth

Neighborhood context

Current connectivity Uncertain site
issues availability

Major bike and Low visibility
pedestrian
improvements planned “Big box” mixed use

Multiple future TODs

Site 2 | East Towne Mall Area

Site Suitability Goal Scores

Site Capacity	7
Demographics	8
Infrastructure	6
Sustainability	8
Economic Development	11

TOTAL SITE SCORE 40

Site Summary

This area and the possible sites around potential transit oriented developments meet many of our equity-driven goals, but it poses several infrastructural barriers and much uncertainty about future commercial uses within the area. The library does not offer the neighborhood contained within its highway borders, but would prevent wide visibility or accessibility for the larger eastside community.

Community Priorities Discussion

	Advantages	Disadvantages
Social Forum	Provides highly needed community services and public space to residents in a high commercial (and private) use area.	Several infrastructural barriers between whole area (no specific site) and surrounding schools.
Civic Innovator	Location in neighborhood isolated by highways would boost sense of place. High potential for neighborhood place-making through Library presence	Not a highly generationally diverse population. Lack of visibility from main corridors could keep visit numbers low.
Holistic Health Advocate	Planned bike and pedestrian facilities will make site more connected and active. Potential for commercial remodel follows urban infill best practices.	Uncertain if co-location with other public agencies is possible in commercial infill scenarios. Safe crossing of East Washington Boulevard, Stoughton Road, or I-90/94 for pedestrians a major issue
Cultural Platform	Would provide critical space and resources for a growing, highly diverse and isolated neighborhood.	Lack of nearby cultural facilities may make creating and maintaining partnerships with art & culture groups difficult. Uncertainty of the future configuration of East Towne Mall businesses could limit Library design options and audience exposure.
Economic Engine	Lots of commercial, medical, and non-profit partners in the immediate vicinity. Much potential for technical and educational assistance for high poverty, high rate of unemployed populations.	Far from fiber optic backbone cable. It would be a big expense to link in without other educational or government facilities to share the line.

SITE 3

Reiner Road

Site Context



Eastside Context

Largely agricultural Currently in Sun Prairie school district

Excellent highway access Targeted for major future growth

Bounded by other jurisdictions



Neighborhood Context

Very low density Moderate diversity No nearby schools

Low poverty Low unemployment Low path and trail connectivity

Few public services or amenities No transit access

Site 3 | Reiner Road

Site Suitability Goal Scores

Site Capacity	7
Demographics	7
Infrastructure	5
Sustainability	6
Economic Development	6

TOTAL SITE SCORE 31

Site Summary

This corner of Reiner Road will undergo tremendous change in the next generation. It scored well in many areas due to the potential in future conditions articulated in the Northeast Neighborhoods Development Plan. While this neighborhood has already experienced a 70% growth in population since 2000, it is still largely agricultural and currently does not have the density nor necessary public infrastructure (transit, fiber optic, adjacent services) to support a library. As Madison extends its eastern boundary and more people locate east of I-90/94 in the next the generation, it will be a site to watch for library service needs.

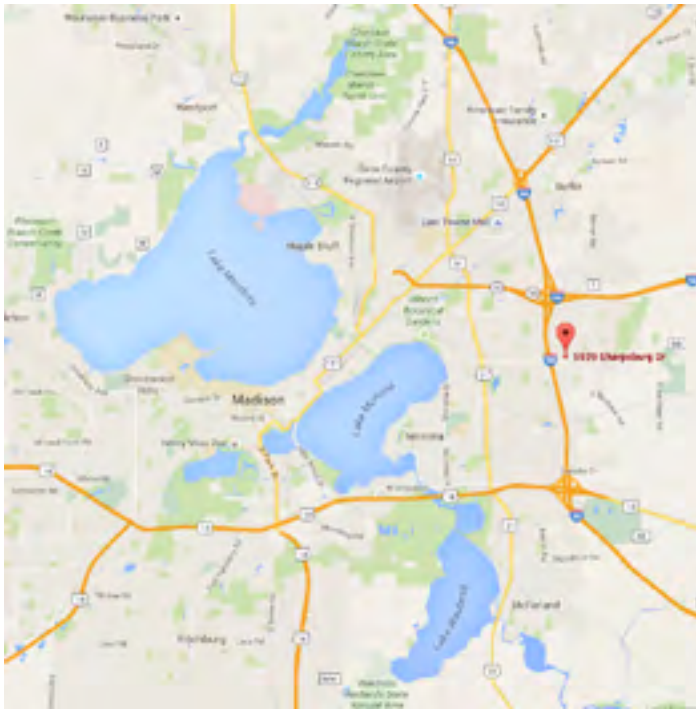
Community Priorities Discussion

	Advantages	Disadvantages
Social Forum	Excellent opportunity to create public space “from scratch” in a new development.	Density needed to maintain library facility will not be achieved for several years. No nearby planned MMSD campus
Civic Innovator	Will bring civic infrastructure from city core to urban periphery.	This location does not serve the current transit-dependent populations west of the interstate. No nearby agencies or organizations for partnerships
Holistic Health Advocate	Trail connectivity and transit plans will make area more walkable and accessible to all.	Number of affordable housing units required unknown – are vulnerable populations being considered in this development? No current bus service
Cultural Platform	Could provide unmatched City platform for cultural events and programs east of the interstate.	Density and diversity needed to maintain library facility will not be achieved for several years.
Economic Engine	In line with city goals to create complete communities with public services, commercial uses and dense housing.	Uncertainty about timeline, tenants, adjacencies at this time. Far from fiber optic backbone cable. It would be a big expense to link in without other educational or government facilities to share the line.

SITE 4

Grandview Commons

Site Context



Eastside Context

Low poverty tract	6 min. drive from Pinney
Recent growth	Easy I-39/90 access
On future express bus route	Low transit dependency

Site 4 | Grandview Commons

Site Suitability Goal Scores

Site Capacity	6
Demographics	3
Infrastructure	5
Sustainability	6
Economic Development	5

TOTAL SITE SCORE 25

SITE SCORE: 25/55



Neighborhood Context

-Low density	-Low diversity	-Few businesses
-Near parks	-Moderate 0-5 population	-Sparse agencies & non-profits
-No schools east of I-39/90	-High 65+ population	

Site Summary

The average distance between MPL locations is 5.5 miles. In very dense areas with high poverty and major barriers that distance tends to shrink (e.g. Hawthorne is 2.7 miles from Lakeview). Grandview Commons is in a neighborhood with relatively low infrastructural and economic barriers and is 2 miles from Pinney's new Royster Corners location. It also cannot adequately connect the rest of the Library's underserved neighborhoods via bus, bicycle or pedestrian trails, so it would not solve the problem of closing service gaps. Without the necessary density, transit connections, or scale of need or major barriers that other neighborhoods face, a library at this location would not be an equitable or efficient use of public funds.

Community Priorities Discussion

	Advantages	Disadvantages
Social Forum	Adjacency to shopping center and green space.	Inadequate density needed to maintain library facility. Still within the Pinney service area by both check-out and five-minute drive measures. No nearby planned MMSD campus.
Civic Innovator	Will maintain integrity of civic infrastructure from city core to urban periphery.	Does not serve the current transit-dependent populations west of the interstate.
Holistic Health Advocate	Great adjacency to farmer's market and other green space.	No nearby health or childcare facilities.
Cultural Platform	High growth in surrounding neighborhoods (which are closer to Pinney, Monona, and McFarland libraries).	Low diversity index. Moderate growth forecast for Grandview neighborhood.
Economic Engine	Mix of commercial uses and local employers along Cottage Grove Road corridor.	Low unemployment and low transit dependency.

Our Future: Recommendations



*“The only thing that you
absolutely have to know, is
the location of the library.”*

- Albert Einstein

Sites to Consider

SHORT TERM (0-5 YEARS)

Reindahl Park/Portage Road



This northeast site meets a top criterion for a major capital expenditure, which is having the necessary population density for service. Every other advantage this site has is just as critical. Primarily, with neighboring Sandburg Elementary as the only eastside MMSD school outside of a five-minute drive area from a library, this site took particular priority. With additional equity factors mentioned in the site scenarios and the infrastructural convenience—highly visible placement, array of transit options, ability to locate multiple agencies, share green space, and complement future growth and development—this site meets the Library’s goals for equitable service.

At this site, the Library is also poised meet the demands from the *Tell Us* process to serve as a Social Forum, Civic Innovator, Holistic Health Advocate, Cultural Platform, and Economic Engine by providing:

- Much needed public space and educational opportunities for an urban area short on public services
- Tools and expertise to empower residents to advocate for sustainable and equitable growth as the eastside continues to grow and change in the coming years

- A cultural platform for the growing international community and communities of color residing along the Portage Road, East Washington, and Interstate corridors
- Partnerships with Madison Parks and key eastside health facilities to provide health and environmental literacy resources and a safe space to learn, share, and create
- Role of catalyst in economic growth at all levels while serving as a connector between exurban, suburban, and downtown employers and the residents in between.

Partnerships

On a major corridor next to a major eastside park, this site has highest potential for both co-location with and proximity to multiple agencies and organizations.

This advantageous location and subsequent partnerships would address the dearth of public services in the northeastern neighborhoods.

Next steps:

2016-2017

- Introduce Reindahl Park Library into 5-year Capital Improvement Plan (CIP)
- Amend agreement with DJK Real Estate, LLC to incorporate findings from the the Library's strategic plan, move up deadline for property to revert.
- Meet with title holders and City attorney to discuss deed restrictions, land costs, and any necessary transactions.
- Explore interagency siting and design needs
- Create green space and tree canopy mitigation plan

2017-2019

- Determine committed partners for colocation
- Prepare detailed site analysis to explore building and facility orientation and other requirements
- Work with community leaders to inclusive public process to determine service model
- Finalize any required zoning or land use changes to accommodate library and other planned uses

2020-2021

- Procure architect
- Coordinate participatory design process
- Develop concept and schematic plans
- Private fundraising

The exacting requirements of constructing a new public facility and the competing needs of multiple partners make construction completion in five years an ambitious goal. We estimate a six to seven year goal for completion, with an opening date of 2022 or 2023.

INTERMEDIATE TERM (5-10 YEARS)

Expansion of Hawthorne and Lakeview



5-minute drive map of all eastside MPL libraries with Reindahl Park addition

Why build a new library before expanding current eastside libraries?

With the sheer spread of areas outside of our current service area, the most equitable plan of action is to establish service for as many previously underserved people as possible.

Expansion vs. Relocation

The current locations of Lakeview and Hawthorne Libraries work very well for their surrounding neighborhoods. However, their facilities are not ideal for three main reasons:

1) Rental costs

Both libraries are currently under lease. Similar in size to Goodman South Madison, which the Library owns, Hawthorne costs twice as much to run and Lakeview nearly three times as much because of rent and taxes. City ownership is much better for economic sustainability, so options for buying a permanent location should remain open.

2) Size

Both libraries lack the space to offer the full range of services and programming (e.g. teen space, technology instruction, etc.) In order to serve as more effective Social Forums, Civic Innovators, Holistic Health Advocates, Cultural Platforms, and Economic Engines, these two locations need more space to offer the kind

of square footage per capita offered at the new Pinney, Sequoya, or Ashman (see Table 8 on pg 63).

3) Upcoming neighborhood changes

The redevelopment of the East Washington and Sherman/Northport corridors may bring substantial change to current development and storefront configurations. Should opportunities arise to move and/or expand in the vicinity of the current locations, the Library should consider expansion to better serve the community by providing more interactive and inclusive services. For example:

- Increased technology and instruction
- Community kitchen or food pantry capacity
- Creative flex space for Bubbler activities
- Foreign language collections reflective of surrounding community
- Flexible office/consulting space for community providers
- More dedicated space for teens

What would a good opportunity to move or expand look like?

If the new location would better meet the service goals listed above, plus maintain all current site advantages, stay within a half-mile of the current site, enable agency co-location, and entail ownership, then that opportunity should be considered.

Hawthorne Library Service Area¹⁹ with Key Adjacencies



The red boundary represents Hawthorne's primary service area. The blue boundary shows Pinney's service area and the purple area is where the two service areas overlap. Hawthorne is conveniently nestled in between the area elementary schools, community center, and potential Marquette/East Washington TOD site.

Current site advantages

- On major thoroughfare
- Regular and frequent bus service
- Adjacency to Public Health
- Vicinity of Salvation Army community center
- Walking distance to two elementary schools



Preferred Area of Relocation for Hawthorne Library



The overlay shows the 0.5 mile area that would be suitable for Hawthorne's relocation within the next ten years if expansion at the current location is not possible. Moving further west along East Washington encroaches on the Pinney service area. A library at Reindahl would be just over two miles northeast of the planned TOD, so moving further east than the overlay area would not be an efficient use of resources.

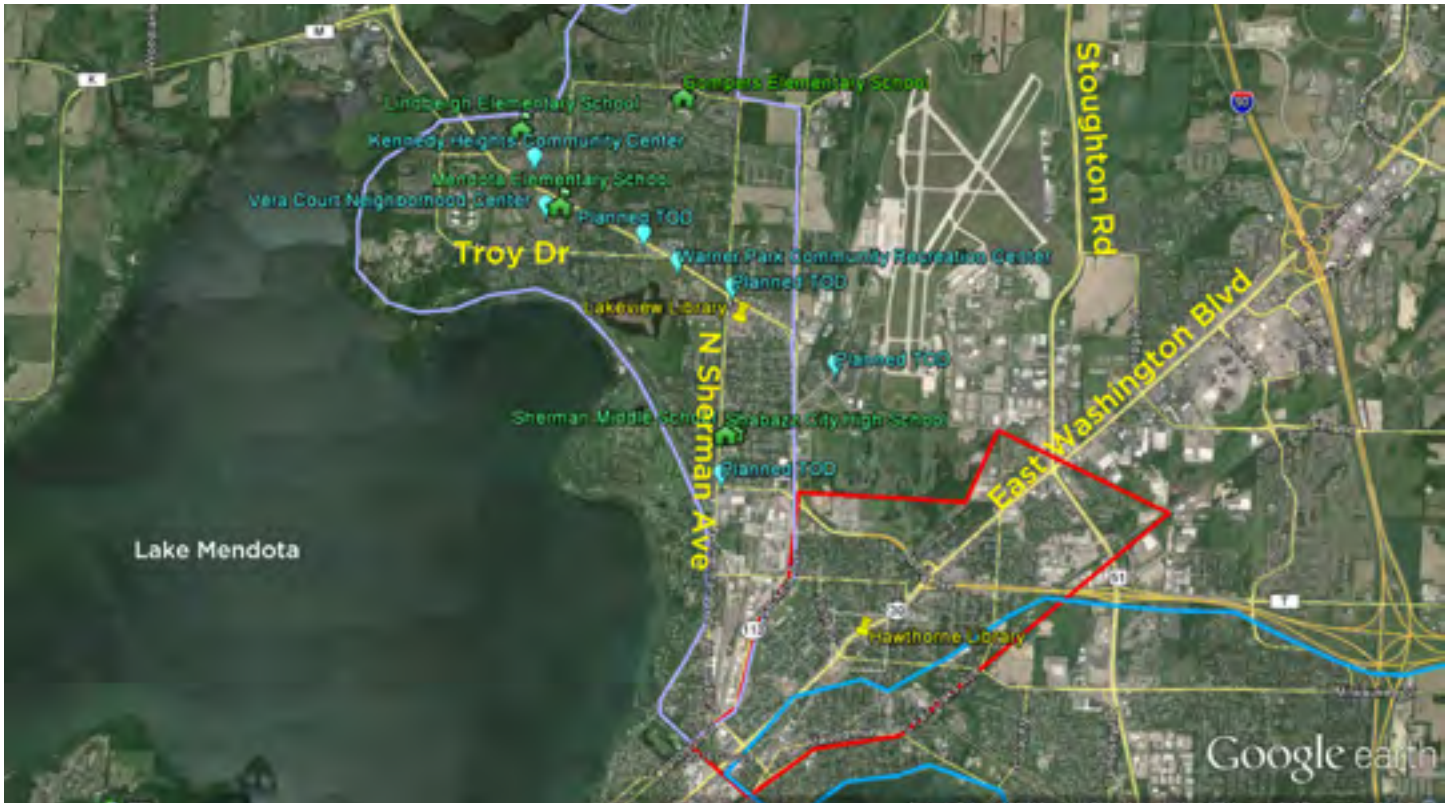
Goals for moving within preferred area

- More prominent street facing orientation
- More interaction with neighborhood green space
- More ease of coordination with community center at the Salvation Army
- Near multimodal safe crossings of East Washington
- Stay on same side of street as the future TOD
- More space for expanded programming and interagency collaboration
- Lower facility operating costs
- Fewer maintenance issues (plumbing, flooding, etc.)

Next steps

- Continue community dialogues to discuss Hawthorne-specific space and service needs
- Attend all neighborhood and corridor planning meetings
- Stay informed of East Washington Business District discussions and plans
- Work with property owner to discuss renovation timelines or condominium purchase options
- Work with fellow tenant Public Health Madison Dane County for timeline for moving
- Get Hawthorne Library expansion or relocation on five-year CIP by 2018

Lakeview Library Service Area with Key Adjacencies



The purple boundary shows Lakeview's primary service area in relation to the neighborhood schools. Again, the red boundary represents Hawthorne's primary service area and the blue boundary shows Pinney's service area.

There is a concentration of elementary schools in the far north end of the area that are very well served by Vera Court and Kennedy Heights community centers. Mendota Elementary will also soon pilot a new community school model, expanding public space and community facilities for the neighborhood.

Lakeview is well situated between Warner Park and the area's high school and middle school. Its current location is marked as a site for a future TOD.

Current site advantages

- On major thoroughfare
- Regular bus service
- Serves five public schools
- Vicinity of three community centers
- On site of future TOD
- Adequate parking

Preferred Area of Relocation for Lakeview Library



The white overlay shows the 0.5 mile area that would be suitable for Lakeview's relocation within the next ten years if expansion at the current location is not possible.

At the corner of two major northeast corridors, Sherman Avenue and Northport Drive, Lakeview Library is very well situated in the context of the neighborhood. However, in the context of the site, it sits very far back from the street. Expansion and redesign at its current location would be ideal, though the possibility of sharing green space and facilities with Warner Park via expansion at the community center is appealing for the same reasons we recommend a new library at Reindahl Park.

Goals for moving within preferred area

- More prominent street facing orientation
- Stay on same side of street as TOD
- More interaction with neighborhood green space
- More ease of coordination with Warner Park Recreation Center
- Access to multimodal safe crossings of major streets
- More space for expanded programming and interagency collaboration
- Lower facility operating costs

Next steps

- Attend all neighborhood and corridor planning meetings
- Work with property owner to discuss renovation timelines and condominium purchase
- Work with Madison Parks and community to assess feasibility of expanding Warner Park Recreation Center for library site
- Get Lakeview expansion or relocation on five-year CIP by 2020

LONG TERM (10+ YEARS) Reiner Road TOD



As the City of Madison starts to incorporate more lands east of I-90/94 in the next generation, Madison Public Library must watch population projections and neighborhood plans as they become closer to realization.

Advantages

At this point, there are too many uncertainties and limitations to commit to any specific sites, but there are advantages to identifying feasible areas now.

- Commitment to City development standards by prioritizing density, walkable communities, making public services close and accessible
- Could prompt key local and regional organizations to plan for future siting

Should development and population trends proceed as forecast, the site at Reiner Road just north of Highway 30 would have the kind of density, mix of uses, communications infrastructure necessary for the construction of a new neighborhood library.

Next steps

- Work with Madison Metropolitan School District as they plan for new eastside campuses
- Stay informed of plans for future Sun Prairie library branches to reassess service area boundaries
- Stay informed of any changes to neighborhood plans and construction progress
- Work with residents and local organizations to watch for areas developing pockets of poverty and need across the larger eastside to consider other feasible sites.

Facility Sizes

Library staff will take future population, partnerships, program, and services into account to determine the final square footage for the new northeast library, as well as any eastside library improvement projects.. The planned Pinney facility will be the new standard-bearer with the largest area per capita, 0.61 ft², and the basis of our calculations.

The new library could be between 16,500 ft² and 23,400 ft² depending on whether the area is based on current or projected population. The projected citywide growth of 42%²⁰ by 2050 was applied to the service area to derive the projected population. The new northeast library will serve the four-tract area identified (pg. 38) as underserved.

Current population	27,000 ²¹	2050 Population	38,340
Approx. facility size	16,500 ft ²	Approx. facility size	23,400 ft ²

Other factors could affect the facility size, including co-usage and service model. If Madison Public Library located with any partnering agencies, the space requirements could vary considerably. If the new library were to focus more heavily on services requiring smaller space requirements (e.g. technology) than on those requiring more space (e.g. large physical collections and seating areas), that would also make a difference.

Recommendation

Above all, a new neighborhood library should reflect the needs of its neighbors. The service model discussion should be brought to the community after Library staff and potential partners create thorough and feasible service model scenarios.

TABLE 8
Current Madison
Neighborhood Library
Facility Sizes

Neighborhood Libraries	Arrangement	Square footage	Square feet per capita ²²
Alicia Ashman	Condo	11,829	0.5
Goodman South Madison	Condo	12,010	0.41
Hawthorne	Lease	10,060	0.3
Lakeview	Lease	9,355	0.43
Meadowridge	Lease	10,736	0.25
Monroe Street	Own	2,300	0.1
Pinney - Current	Lease	11,200	0.33
Pinney - Planned	Condo	21,338	0.61
Sequoia	Condo	20,010	0.46

New Northeast Library Operations

Staffing

As the dynamic role Madison Public Library plays in the city and region increasingly takes staff out of the library and brings more groups into the library, we must ensure that all staff members are adequately supported to provide the best customer service possible. We recommend a robust staffing model to make any potential shared space and offsite neighborhood programming as impactful and engaging as possible.

Community Needs

An equity-driven staffing model requires adequate staff to provide more robust one-on-one service to make real progress on addressing issues like neighborhood safety, technology access, workforce development, intergenerational engagement, and educational supports. To do this, the new library will require:

- Personnel to staff Sunday and evening hours for family and student support
- Full-time youth and family services librarian
- Full-time teen librarian
- Social service providers or liaisons
- Bilingual staff at all levels
- Technology and workforce librarians – full time staff devoted to managing technology access and instruction, partnerships, and workforce development programming.

Assumptions

- More reliance on full-time positions and less on hourly positions creates more stability and fewer scheduling problems for Library staff
- The number of staff is based on having one full-time employee (FTE) per 1,000 square feet. Our neighborhood library average²³ is 1 per 964 sq. ft.
- The calculated 2021 salary (\$57,412) and wage (\$13.10) are based on current averages with annual 2% cost of living increases.

TABLE 9

Staffing Needs and Salary Expenditures

Position	FTEs	Estimated annual salaries (2021)
Librarian	5.5	\$315,791
Library Assistant	4.5	\$258,375
Clerk	4	\$229,667
Page I/II	7.5	\$217,244
Other ²⁴	2.5	\$143,541
Total	23.5	\$1,164,618

Facility

A beautiful, sustainable, and functional facility built to last several generations must also keep costs low. Owning our own facility and sharing a building or campus with one or more public agencies will have a significant cost savings not only in terms of city expenditures, but also in residents' time and transportation costs.

Community Needs

The *Tell Us* process revealed a strong need for more accessible resources – referring not just to adjacency, but availability and relevance. For library services, this translates to hours and services that accommodate working families. For library facilities, it means the social space provided must be available to and usable by underrepresented cultural groups, especially “invisible minority” groups like immigrant and Native American communities.

Directly complementing the needs for future staffing models, the facility needs to emerge from the public process are:

- Sunday and evening hours for family and school support
- Teen space
- Large, flexible social spaces
- Food preparation amenities
- Technology lab
- Culturally inclusive design
- Maximum accessibility for people of all abilities

TABLE 10

Estimated new library operational costs with select MPL comparisons

	Sequoia (Owned)	Meadowridge (Leased)	MPL average	New Library (Owned)
Square Footage	20,010	7,755	10,660	23,400
2014 Facility Expenditures	\$161,867	\$151,757	\$118,274	-
2014 Facility Cost to Operate per sq. ft.	\$8.08	\$19.57	\$11.56	-
Estimated 2021 Facility Cost to Operate per sq. ft.	\$9.83	\$23.81	\$14.06	\$14.06
Estimated 2021 Facility Expenditures	\$196,993	\$184,647	\$149,880	\$329,000

City Sustainability Goals

- Renewable energy powered
- Onsite storm water management systems and upkeep

Operational Costs

Taking all of the above needs and goals into consideration, we calculated future operational costs using the maximum per capita facility size and the current average facility cost to operate.

Sequoia and Meadowridge facilities for their unique characteristics that the new library may share. Sequoia has the approximate square footage of the planned library and is owned, not leased. Meadowridge is leased and is much smaller, but also shares space and programming with another agency (Meadowood Community Center). The third column shows the average current and projected operating costs for all Madison Public Library locations (excluding Central) for local perspective. The estimated cost per square foot for the new library uses the midpoint between the 2021 average costs and Sequoia's 2021 costs.

Scenario Assumptions

- Larger buildings have smaller per sq. ft. cost because of certain scale efficiencies.
- The Library will purchase, not lease, the new facility. Rent and taxes were not calculated into 2021 estimates.
- 2021 estimates figure in an annual 4% increase to best approximate cost of living increases and energy prices.

Recommendation

To be a Social Forum, Civic Innovator, Holistic Health Advocate, Cultural Platform, and Economic Engine for the northeast neighborhoods and the larger east-side, this new facility must have a staffing model that can adequately facilitate community connections, provide reference and instruction, and provide onsite and offsite program support without compromising the delivery of any single service. The physical building and grounds must meet the City's sustainability goals while providing ample, flexible space for gathering, collaborating, and learning.

Measuring Success

Just as the *Tell Us* community input shaped how Madison Public Library assesses future locations for libraries, it also helped define Library goals and will affect how we measure outcomes. The *Tell Us* tool asked participants to identify types of solutions and signs of progress, providing a strong basis of locally relevant measures for the Library and its partners to track.

Solution types

Over a third of people (34%) named a policy measure (such as a regulation or program) to address a specific problem. Almost a quarter (24%) of responses called for a cultural transformation, requiring deep, fundamental changes in attitudes and action for all citizens. The top three subcategories of responses dealing with cultural transformation (behavior and attitudes, civic, and safety) tell us that people want to see deep change in how people treat each other and in the level of engagement the average person has in public life.

Defining progress

We also asked participants to tell us what would progress look like. Over half (57%) of residents identified changes in the social sphere – such as changes in behavior, engagement, and safety – as indicators of progress. A quarter defined progress as seeing an expansion and better quality of basic community infrastructure, with health, education, housing, and transportation topping the list.

What do these findings mean to Madison Public Library as we set new goals and design new ways of measuring our impact on the community?

- **Madison residents want action.** Not only did participants turn to specific policies to address issues, but they trust local institutions and members of the community over traditional elected leaders to carry them out. As a trusted community institution, Madison Public Library must recognize its leadership role to boldly carry out its mission and consistently communicate our impact and accomplishments.
- **Madison residents value a people-first approach.** Nearly every suggested solution and marker of progress was tied to a better quality of life on an interpersonal level. For example, reaching community goals like “stop bullies,” “more capacity for service providers to combat substance abuse,” or “more opportunities for multicultural learning” takes investment in people, not just technology or buildings.
- **Madison residents expect transformation.** Libraries have always transformed lives; the growth and diversification of library services along the years have simply given us more ways to change lives. In addition to finding ways to quantify social impact on a regular basis, Madison Public Library must take the long-view on this and identify strategic long-term measures to track that go beyond annual counts for budgets and reporting.

SHORT-TERM RECOMMENDATIONS

Many of the “inputs” in the preceding table are programs or services Madison Public Library already provides; others are ideas for new ones based on the community input. The *Tell Us* framework provides new ways to organize, visualize, and communicate the impacts of our work. Before any new buildings are designed or new programs created, there is plenty of work we can do to start telling the Library’s story.

- Establish base-line data for key programs to begin tracking progress
- Create communications plan to share news and progress with diverse residents
- Create “Measures” page on the Library website to display
- Traditional usage data
 - Social impact measures
 - Community stories
 - Annual reports

LONG-TERM RECOMMENDATIONS

Madison Public Library must evaluate its unique contributions to the community through a comprehensive economic impact study to ensure future investments to close social disparities. The 2008 study on return on investment (ROI) of Wisconsin public libraries is close to a decade old and does not adequately account for the value of additional services offered at urban library systems like Madison Public Library.

ROI studies are critical in evaluating social policy. They are complex projects usually left to academics, as they are beyond a public agency’s capacity and budget, but they offer one of the most promising ways of getting at the true value and outcomes of investments in social equity in the long term (Norman-Major, 2011).

With the help of University partners, Madison Public Library should pick critical signature programs to track on a long-term basis, such as:

- Early literacy intervention
- Participatory learning through the Bubbler
- Workforce development strategies
- Digital inclusion efforts

TABLE 11

Using Community Framework to Measure Social Impact

Priorities	Outcomes	Inputs	Indicators	Data Sources
What are the roles we play?	What are our goals?	How do we get there?	What do we measure?	Who measures this?
Social Forum	Increase understanding and tolerance	Community conversations	Attendance and feedback	MPL
		Exhibits and screenings		MPL
	Create safer communities	Evening and weekend programs	Program attendance	MPL
			Neighborhood incident reports	Madison Police Dept.
		Harm prevention and safe haven resources	Number of service provider consultations	MPL/Partnering agency
			Visits on below freezing days compared to local homeless census	MPL/City of Madison Community Development
	Improve student performance	Robust teen programming	Behavior issue reports	MMSD
			Graduation rates	MMSD
		Summer reading	3rd grade reading scores	MMSD
		Early literacy intervention	Pre-K readiness scores	MPL/Partnering agency
	Foster resilient communities	Disaster response plan	Creation/existence of plan # of trainings # of partners	MPL/Partnering agencies
		Support group accommodation	# of groups/attendees	MPL
		Develop network of community partners	MPL asset map growth - # of partners, diversity of partners	MPL
Civic Innovator	More engaged residents	Youth advisory programs	Number of participants	MPL
			Number/description of projects	MPL/Partnering agency
		Build corps of library volunteers	Number of volunteers and volunteer hours	MPL
		Pop-up townhalls	Voter turnout	City clerk
	More ways to get involved	Digital engagement tool development (code camps, classes)	Attendance and feedback	MPL
			Number of apps created	MPL
			Number of coding languages taught	MPL
			Number of media projects produced (e.g. podcasts, songs, videos, etc.)	MPL
		MPL representation at neighborhood celebrations	# of events, neighborhoods, giveaways, signups	MPL
	More women and people of color in leadership	Leadership trainings	Program attendance and diversity of speakers	MPL

Priorities	Outcomes	Inputs	Indicators	Data Sources
What are the roles we play?	What are our goals?	How do we get there?	What do we measure?	Who measures this?
Holistic Health Advocate	Healthy communities in body and mind	Active commute resources (Bicycle facilities and maintenance programs, Metro ticket vending)	Transportation surveys	Census
			Bus pass sales	Madison Metro
		Mental health service provision and education	Number of service provider consultations	MPL/Partnering agency
		Health fairs and well-checks	Attendance and feedback	MPL/Partnering agency
	Foster environmental stewardship	Activities and events	Attendance and feedback	MPL
		Local ecology labs	Direct project details (e.g. # of trees planted, food harvested, pounds of compost created)	MPL/Partnering agency
Cultural Platform	Elevate eastside arts landscape	Bubbler space and programs	Attendance and feedback	MPL
		Performance space	Attendance and feedback	MPL
			# of genres performed	MPL/Partnering agency
		Intergenerational programs	Average age/range of attendees	MPL
	More integrated communities	Skillshare resources (e.g. service or tool library for neighborhood)	# of interactions Qualitative feedback	MPL
		Multicultural marketing and communications	# of languages	MPL
			# of digital, print, radio, and physical outlets	MPL
	Preservation of culture	Oral history recordings	# of stories captured	MPL
		Multilingual storytelling	# of cultures represented	MPL
			# of languages spoken	MPL
		Host cultural events	Attendance and feedback	MPL
			Attendance and feedback	MPL
			# of clans/tribes/countries represented	MPL
Economic Engine	Close the digital divide	Technology access and instruction	Attendance and feedback	MPL
			Wifi coverage map # of hotspots	MPL
			# of students reporting access	MMSD
	Economic stability for families	Food pantry access/ community meals	# of families helped # of meals served	MPL
		Financial literacy programs	Attendance and feedback	MPL/Partnering agency
		Job fairs	Attendance and feedback # of new hires	MPL/Partnering agency

Priorities	Outcomes	Inputs	Indicators	Data Sources
What are the roles we play?	What are our goals?	How do we get there?	What do we measure?	Who measures this?
			Decrease in unemployment	Department of Labor
		GED and Certification courses	# of graduates and participants	MPL
			Increase in average income/ Decrease of population in poverty	Census
		Resume writing workshops	Attendance and feedback Job placement	MPL
	Sustainable eastside investment	Small business resource tools: databases, training, permit guides, etc.	# of individuals and businesses assisted	MPL
			# of professional development training hours	MPL/Partnering agencies
			# of eastside business permits granted	Economic Development
			# of local DBE/MBE registrants	MPL/Economic Development
			Diversity of businesses assisted by sector	MPL
	Diversity in STEAM fields	STEAM programming	Attendance and feedback	MPL
			Diversity of instructors	MPL



Conclusion



Madison Public Library is on an exciting trajectory. In our 140+ year history, we have gone from exclusive to inclusive, passive to active, fixed in our buildings to out in the neighborhoods. The evolution continues. We are proud to do what we do very well, but we always strive to be better. Creating a plan for library growth was a chance to align our principles of service with the goals of the community through an equity-driven participatory process.

The participatory planning process has been a game-changer for the Library. For the first time, we were able to capture public input on the ground level before any plans were put to paper.

The community-driven framework guided us in assessing library locations, staff models, service models, and facility size. This led to our recommendation of new Library location in northeast Madison at Reindahl Park that can accommodate other agencies and provide more support and opportunities for eastside residents.

The same framework will also guide future program development and outcome measurement tools. Most importantly, the process itself connected the Library to the community in unprecedented way and built relationships we intend to grow.

Through the simple transformative tool of conversation, the *Tell Us* participants articulated the roles they need trusted institutions like Madison Public Library to play in order to meet their needs, reach their goals, and lift up the whole community. Building a 21st century library requires collaboration and flexibility, which means the conversation is far from over.

References



Local Plans and Reports Consulted

- | | |
|--|---|
| Madison Comprehensive Plan (2008) | Annual Report on Homeless Persons Served in Dane County (2013) |
| Northeast Neighborhoods Development Plan (2009) | State of the Eastside (2014) |
| Northport-Warner Park-Sherman Neighborhood Plan (2009) | Dane County, Wisconsin: Racial Equity Analysis & Recommendations (2015) |
| Madison Sustainability Plan (2011) | Justified Anger: Our Madison Plan (2015) |
| Arts and Economic Prosperity IV in Dane County, Wisconsin (2012) | Economic Development Plan |
| Madison Cultural Plan (2013) | Madison in Motion (ongoing) |
| Performing Arts Study (2013) | |

Footnotes

¹ Wisconsin Department of Public Instruction, 2008

² Horrigan, 2015

³ According to a Pew research poll, 65% of Americans age 16 and older say that closing their local public library would have a major impact on their community (Horrigan, 2015).

⁴ Recent examples: Most Livable City (Livability.com, 2015), Great Neighborhoods of America – William-son-Marquette (American Planning Association, 2013), #3 in 50 Best College Towns of America (Best College Reviews, 2016), #1 in Livability Index (AARP, 2015).

⁵ The “Metro Monitor” tool, released in January 2016 by the Brookings Institution’s Metropolitan Policy Program, is the first national tool to factor in racial inclusion in rankings of cities’ economic health.

⁶ Eastside area figures are aggregate of 2014 Census estimates of tracts (5502500)2301, 2601, 3100, 2000, 1804, 2700, 2401, 2602, 11402, 2603, 2402, 3002, 1900, 2100, 1802, 2900, 2302, 2200, 2800, 2500, 3001, 11401, 10501.

⁷ The U.S. Department of Housing and Urban Development (HUD) defines cost burdened households as those whose gross monthly rent or mortgage is 30% or more of household income.

⁸ HUD defines extremely cost burdened households as those whose monthly gross rent or mortgage is 50% or more of household income.

⁹ 2014 American Community Survey estimates

¹⁰ See Footnote 4.

¹¹ *Tell Us* participants who used Hispanic/Latino/Chicano as sole identifiers did not indicate any other racial affiliation, so the Hispanic category here functions as a racial identifier and not as a supplemental ethnic category.

¹² Research shows that lower-income populations have smaller physical mobility ranges (Frias-Martinez, Virse-da-Jerez, & Frias-Martinez, 2012).

¹³ Based on Madison Public Library’s 2015 counts

¹⁴ 2014 Census data from aggregated service area tracts. For comparison, households making less than \$25,000 in: Madison (23.1%), Dane County (18.2%), and Wisconsin (22%).

¹⁵ 2014 Census estimate based on area tract

¹⁶ Please see appendix for supporting maps used in these assessments.

¹⁷ 2014 Census estimate based on site tract

¹⁸ Sandburg Elementary 2014-2015 Data Profile, Madison Metropolitan School District

¹⁹ “Primary service area” or “service area” in these maps refers to area with heaviest checkout activity.

²⁰ Based on projections from City of Madison Department of Planning, Community, and Economic Development

²¹ Based on 2014 Census counts of tracts in MPL’s identified underserved area: 14.01, 14.02, 26.02, 26.03

²² Based on population within 2-mile radius

²³ Calculated without Monroe Street Branch, a historical outlier facility at 2,300 sq. ft.

²⁴ Denotes other professionals employed by MPL to provide essential social services in tandem with library professionals (e.g., family services liaison, social worker, neighborhood officer, etc.)

Acknowledgements

Our Participants

And to the 330+ wonderful Madison residents who participated in a *Tell Us/Cuéntenos* session: THANK YOU! Let's keep the conversation going.

Community Groups

The following organizations graciously hosted *Tell Us* sessions with their members:

A Place to Be
 Bridge Lakepoint-Waunona Comm. Ctr.
 Catholic Multicultural Center
 Centro Hispano
 Commonwealth Development Corp.
 East High School
 Friends of Madison Public Library
 Greater Sandburg Neighborhood Assn.
 Latino Support Network
 Let's Eat Out!
 MMSD Title VII
 Mentoring Positives
 Oakwood Village Retirement Community
 Play 'n' Learn
 UNIDOS
 Warner Park Comm. Recreation Ctr.
 YWCA

City of Madison

Mayor Paul Soglin
 Madison Common Council
 Ryan Jonely, Dept. of Planning, Community & Economic Development, Planning Technician

Madison Public Library Board

Tracy Kuczenski, President
 Gregory Markle, Vice-President
 Barbara McKinney, Common Council Member
 James Igielski, Madison Metropolitan School District Representative
 Eve Galanter, Secretary/Treasurer
 Willie Glenn, Sr.
 Philip Grupe
 Jaime Healy-Plotkin
 Megan Jackson

Madison Public Library Administration

Greg Mickells, Director

Krissy Wick, Director of Public Services

Mark Benno, Facilities Manager

Tana Elias, Communications and Marketing Manager

Marc Gartler, Supervisor, Alicia Ashman and Sequoya Libraries

Jane Jorgenson, Supervisor, Hawthorne and Lakeview Libraries

Sarah Lawton, Supervisor, Monroe Street and Pinney Libraries

Susan Lee, Business Operations Manager

Trent Miller, Bubbler Coordinator

Margie Navarre Saaf, Borrower Services Manager

Alice Oakey, Supervisor, Meadowridge Library

Janetta Pegues, Supervisor, Goodman South Library

Michael Spelman, Supervisor, Central Library

Molly Warren, Library Collection Manager

All neighborhood library staff

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Professor, Walkability Study Co-Lead

Ellen Bechtol, Data Analysis Consultant

Ayanna Wilnewic, 2015 Wanda Fullmore Intern

Graphic Design

Cricket Design Works

Appendix

Tell Us discussion guide



Download a PDF of the TellUs guide at
www.madisonpubliclibrary.org/tellus

Original Site Criteria

(Score each criteria 1 for lowest 5 for highest) v 1.0 April 2013	low		mid		high		
Developed by MPL Site Planning Task Force	1	2	3	4	5	MULTIPLIER	SCORE
Development Criteria: Madison Public Library Branches							
Branch/Site Name:							
Goal 1: Determine Optimal Site Capacity							
Pedestrian access						3	
Public transportation access						3	
Distance from school aged youth						2	
Ability to orient entrance to prominent public right of way						1	
Enough land for single level structure & expansion						2	
Pedestrian and bicycle safety measures						3	
Goal 2: Adequate Parking							
Number of stalls above code minimum						2	
Access to paid or free street/ramp parking						3	
Size of turning and passing lanes						2	
Drive through or potential for future drive through						2	
Drop-off lane						1	
Goal 3: Maximize Demographic Potential							
High visibility and prominence: civic destination						3	
Serves more than one neighborhood						2	
Benefits from surrounding cultural activities						2	
Complements adjacent Dane County Libraries						1	
Has or will have minimum service population						3	
Goal 4: Sustainability							
Minimal negative impact on local environment						3	
Offers solar, wind, geo-thermal opportunities						3	
Does not require soil remediation						1	
Not located on flood plain or steep grade						2	
Area surrounding site appropriate for a library						3	
Goal 5: Infrastructure							
Offers sewer, natural gas, electric, fiber optic						3	
Not situated above major easement, e.g. 3' sewer line						2	
Not under lien or legal/zoning restrictions						2	
Incorporates existing structures and landscape						1	
Allows for stand-alone structure as well as condominium						2	
Goal 6: Economic Development							
Maximizes commercial and joint opportunities						2	
Meets City Planning & Economic goals						3	
Developer has secured reliable funding						2	
Benefits from nearby employers						2	
Located near daycare center(s)						1	
TOTAL SITE SUITABILITY SCORE							

Revised Site Criteria

		Grandview Commons	Reindahl/ Portage Rd.	East Towne Mall	Reiner Road*
Site Capacity	Maximum density	1	1	1	1
	High visibility	1	2	1	1
	Near green space or natural feature	1	2	1	1
	Near mixed use centers	1	2	2	2
	Transit access	2	3	2	2
Demographics	Access to K-12 and childcare facilities	1	2	1	1
	Generational mix	1	2	1	1
	Near or connects medical facilities	0	2	1	1
	High diversity	1	2	3	2
	Higher than average unemployment	0	1	2	2
Infrastructure	Ability to address natural or infra-structural barriers preventing access for adjacent neighborhoods	2	2	1	1
	Room for potential expansion	1	1	2	2
	Trail and sidewalk access	2	2	1	2
	Complements nearby cultural facilities	0	1	1	0
	Location on current or planned MUFN line	0	2	1	0
Sustainability	Structure would have no/minimal adverse impact on neighborhood	2	3	3	2
	Multimodal access to multiple neighborhoods	1	2	1	1
	Infill, not green-field development	0	0	2	0
	High rate of population growth	2	1	1	2
	Potential for renewable energy source	1	1	1	1

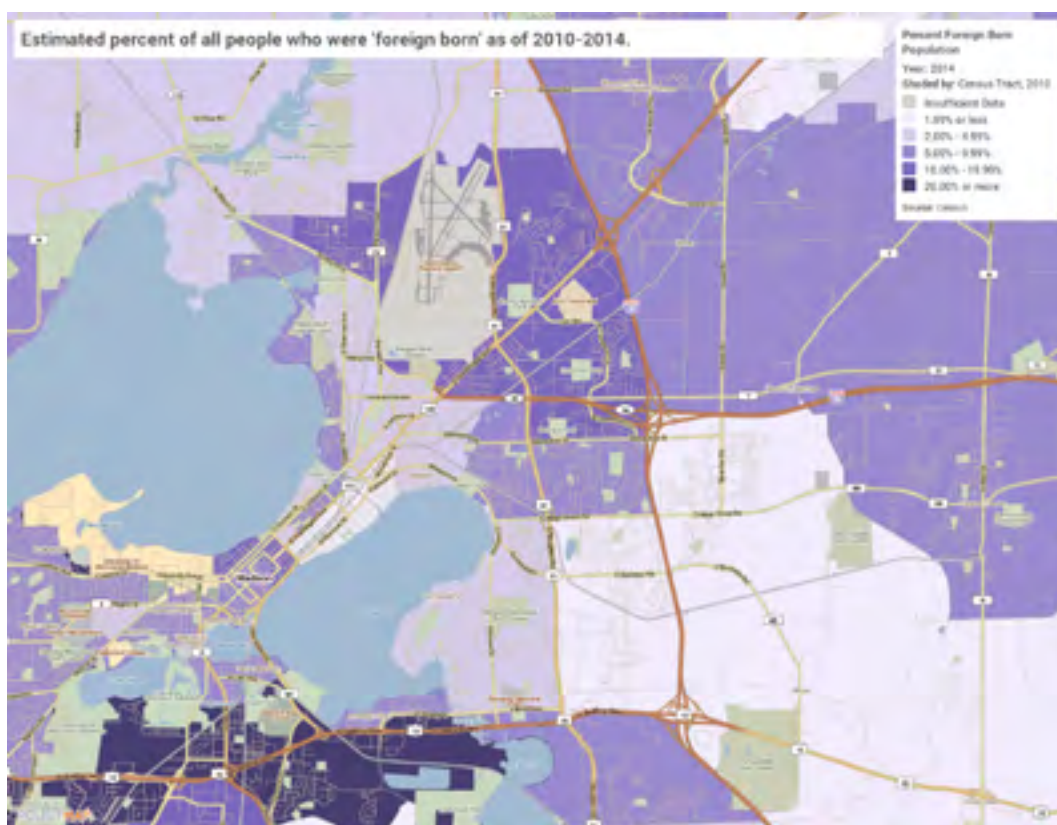
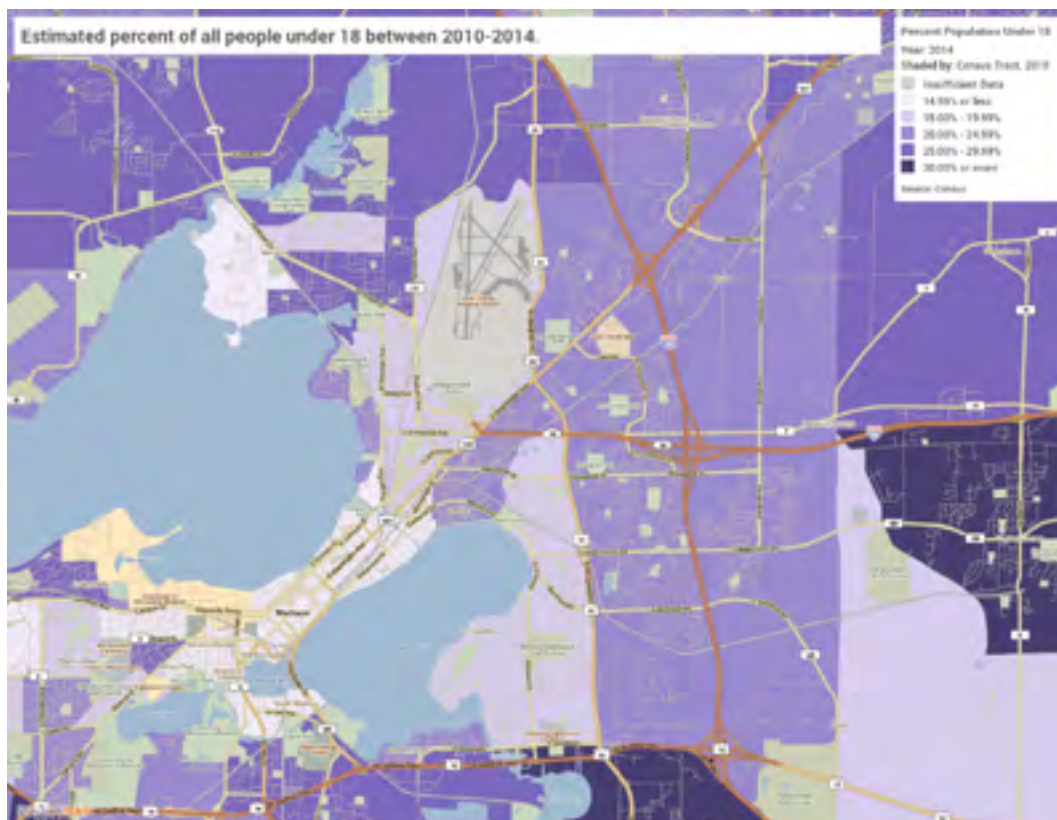
		Grandview Commons	Reindahl/ Portage Rd.	East Towne Mall	Reiner Road*
Economic Devt.	Near major employment center	1	2	2	1
	High poverty populations	2	3	3	2
	Near non-profits/ other community agencies	0	2	1	0
	Near minority-owned businesses	1	3	3	1
	Alignment with city development goals	1	2	2	2
TOTALS		25	46	40	31

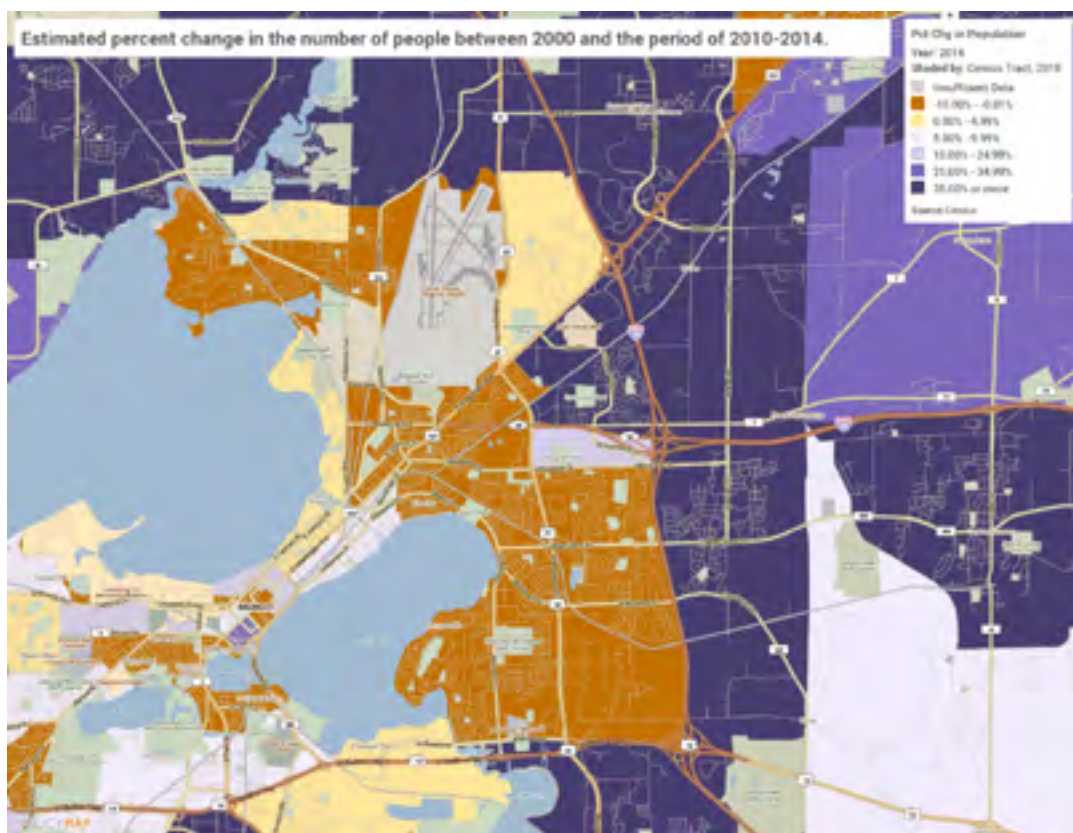
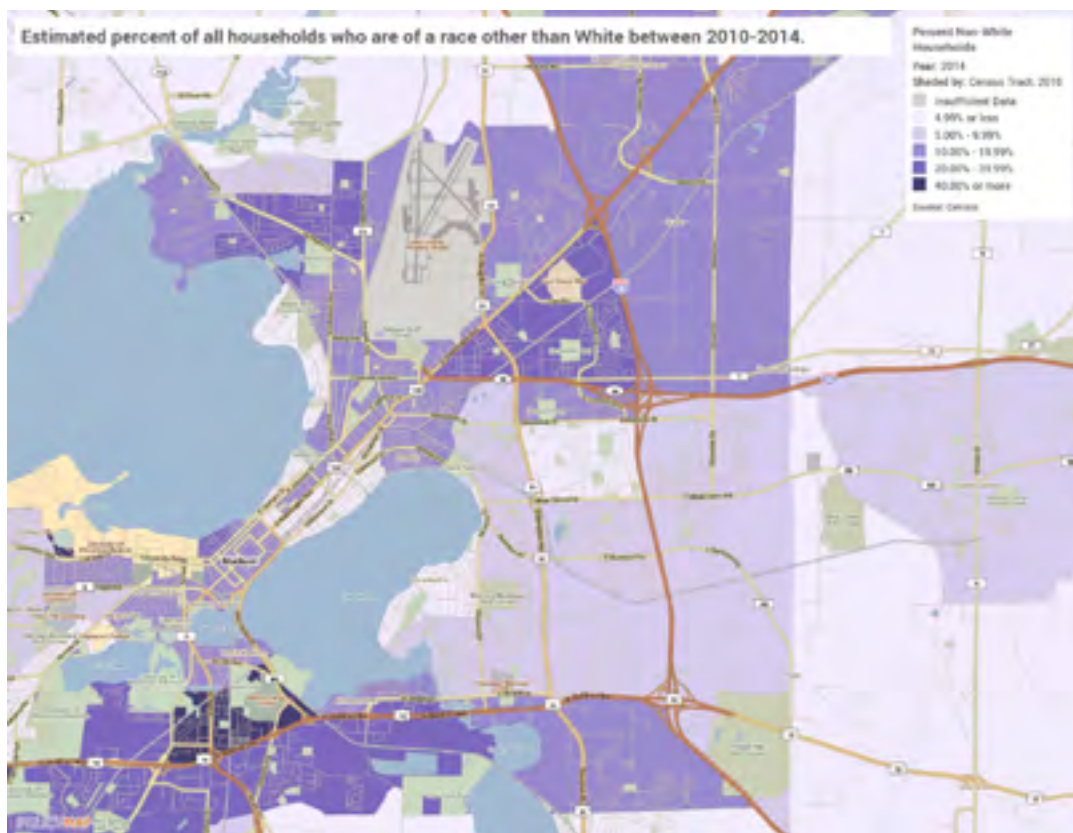
Scoring Guide

- 0 Does not meet criterion at all
- 1 Somewhat meets criterion
- 2 Fully meets criterion
- +1 Equity factor

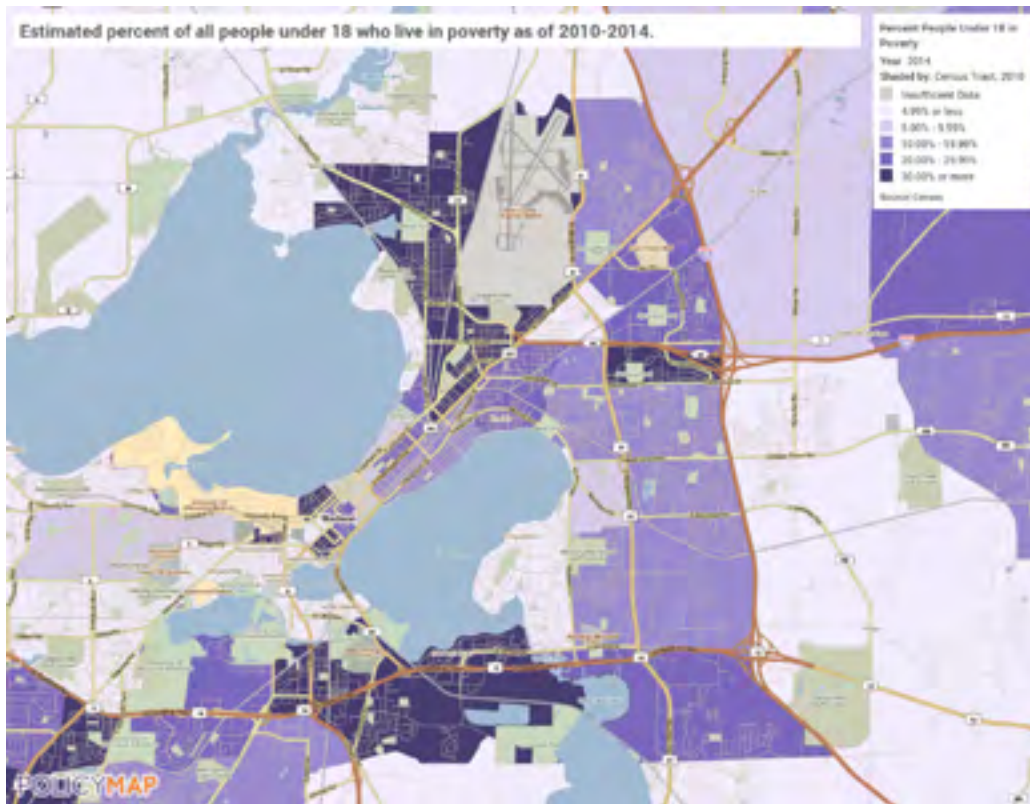
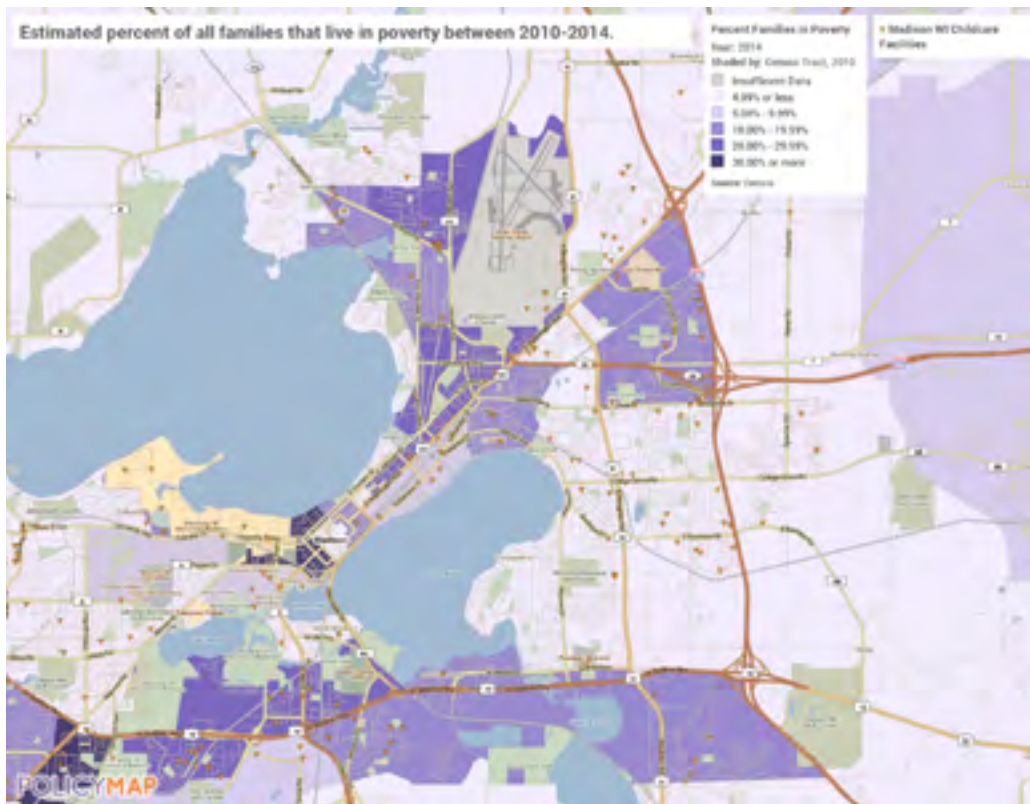
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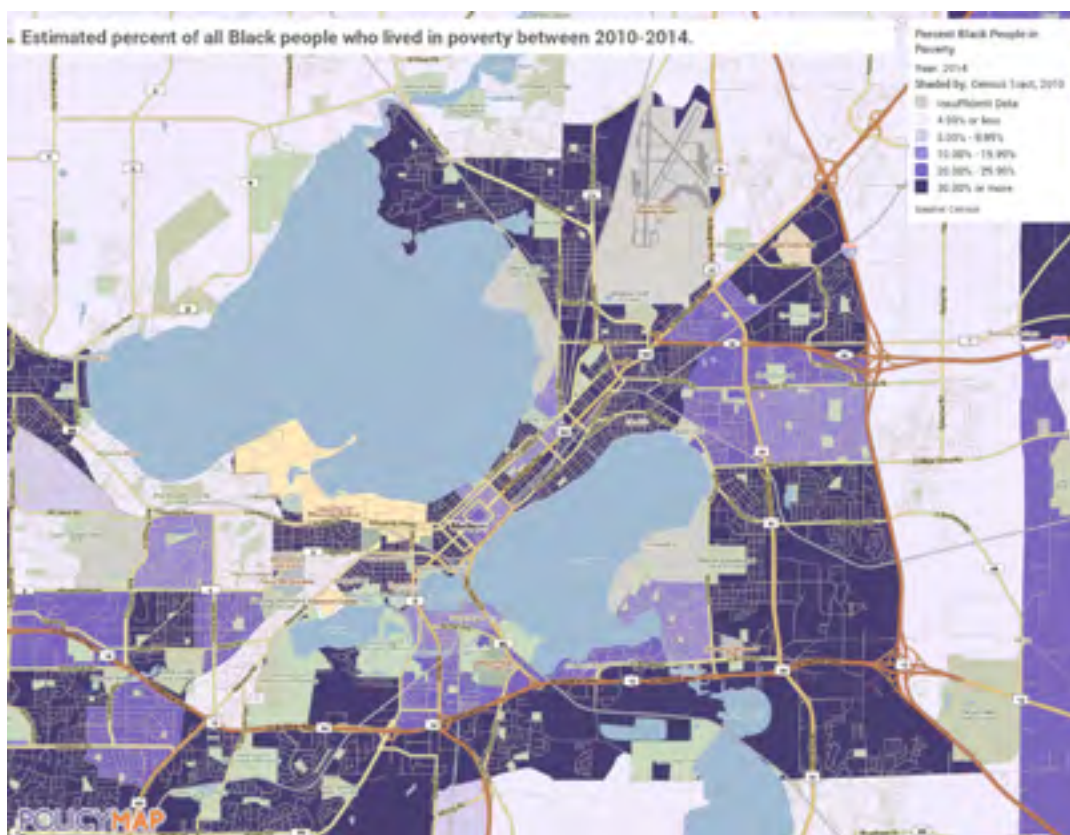
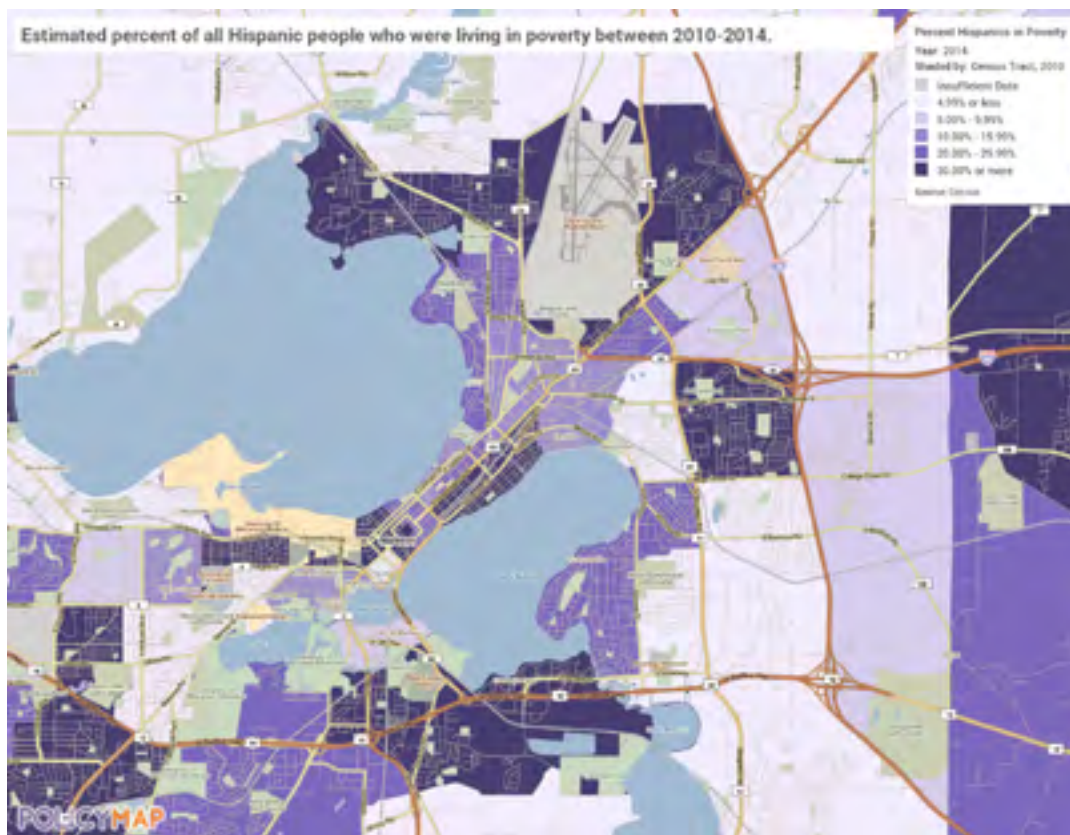
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 WI Dept. of Administration
 MMSD
 WisDOT
 Madison Area Transportation Planning Board



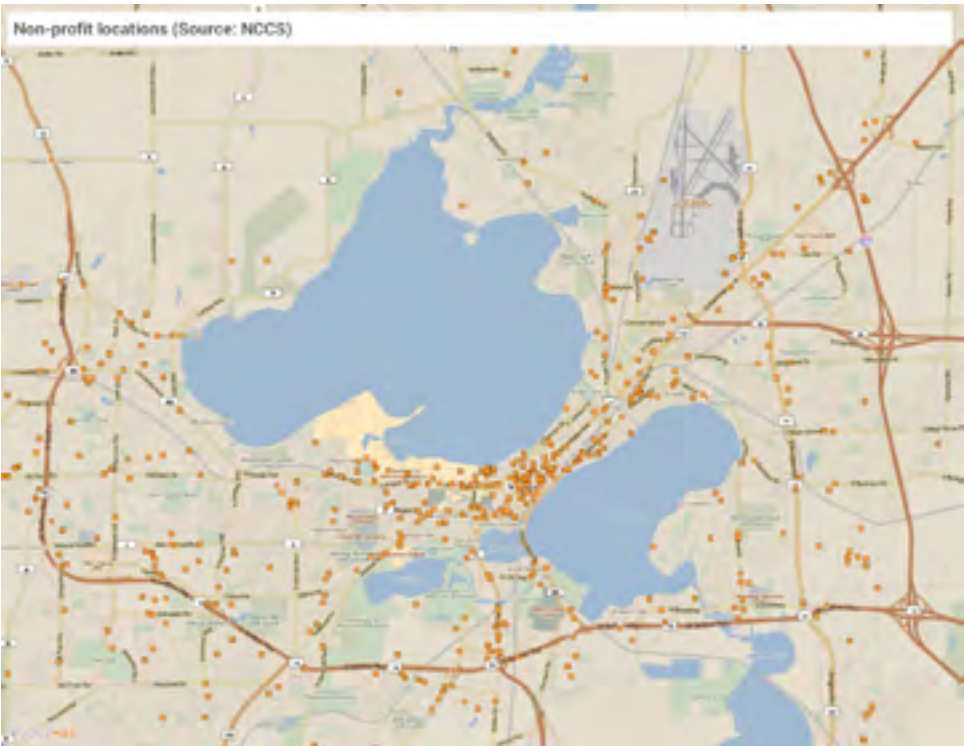


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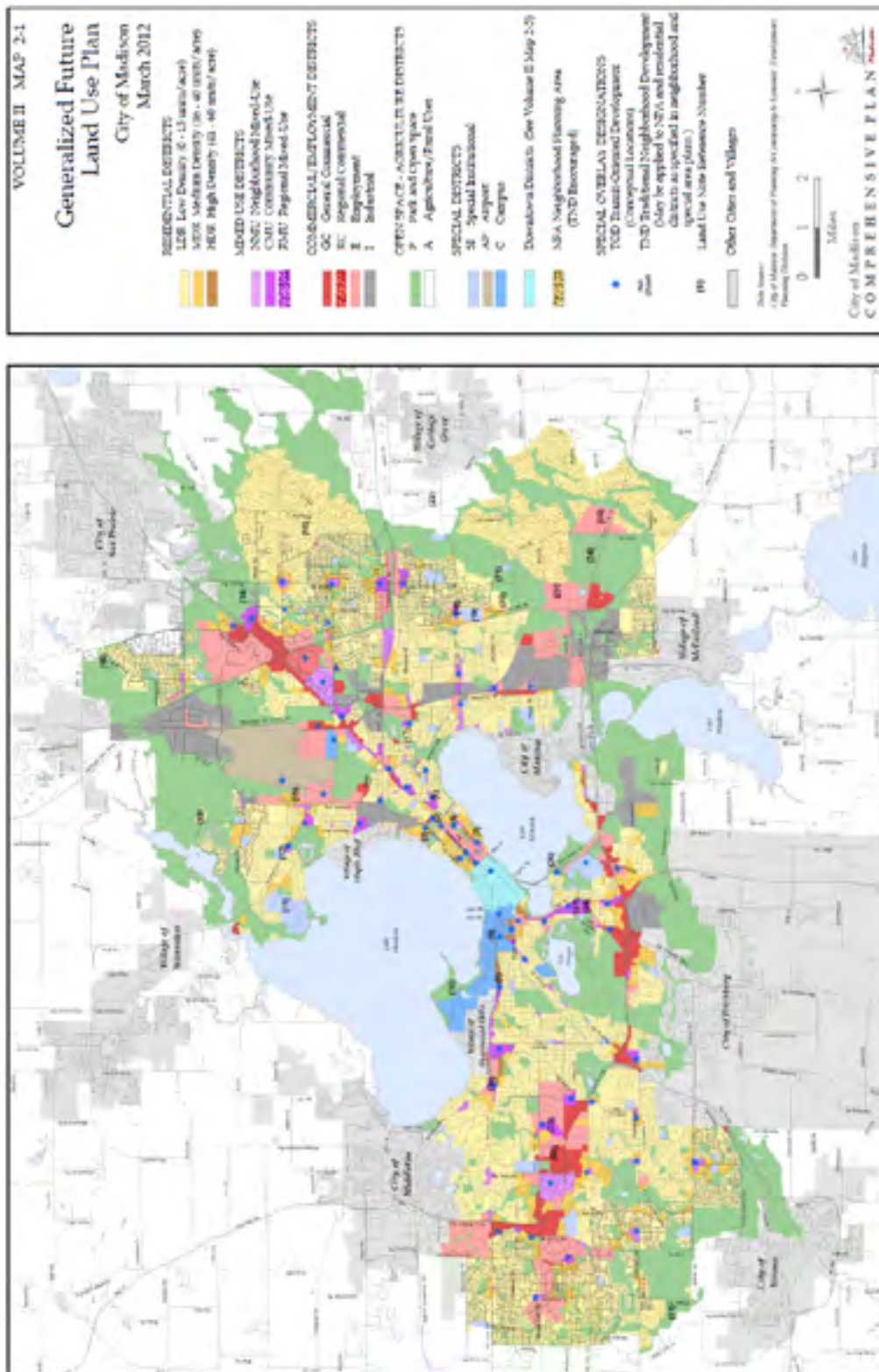




Partners

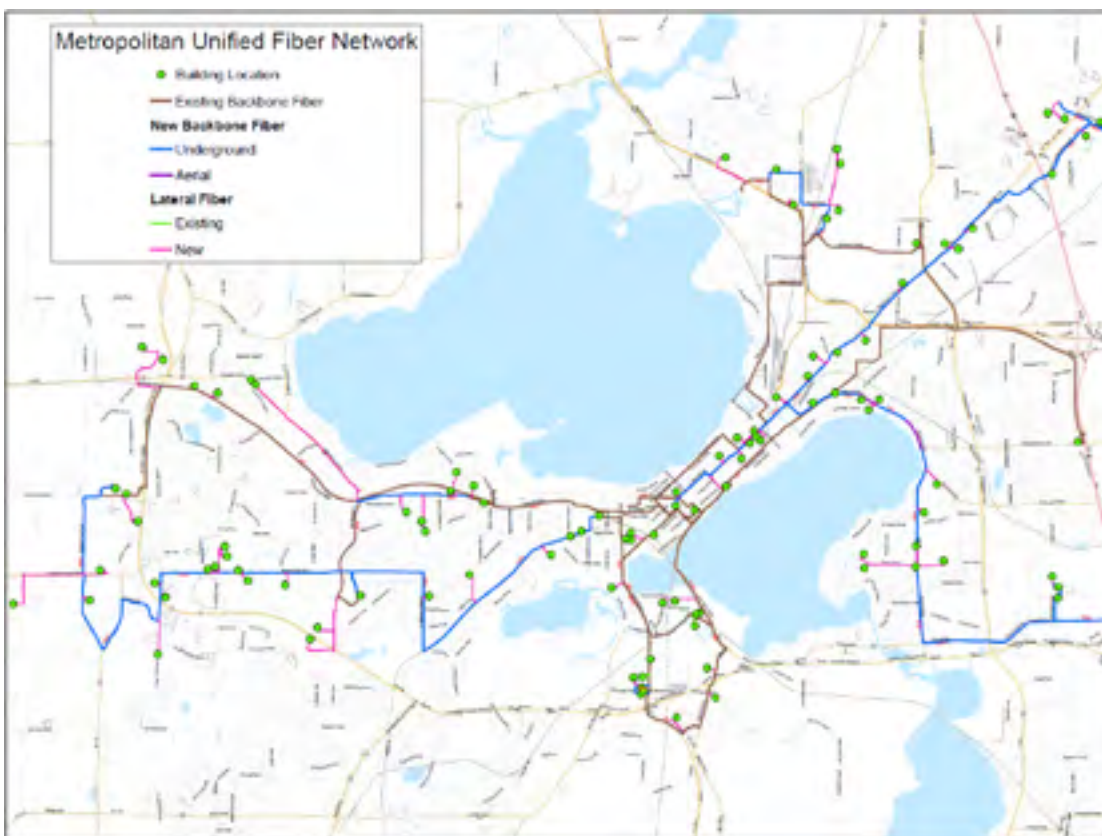
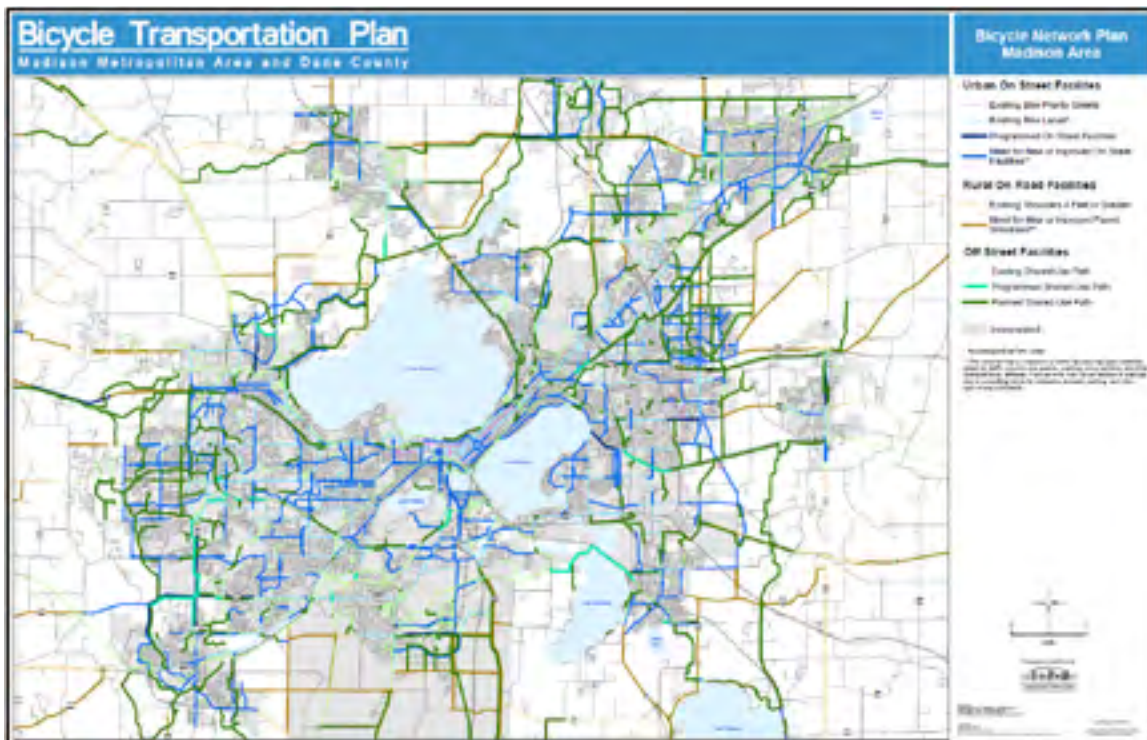


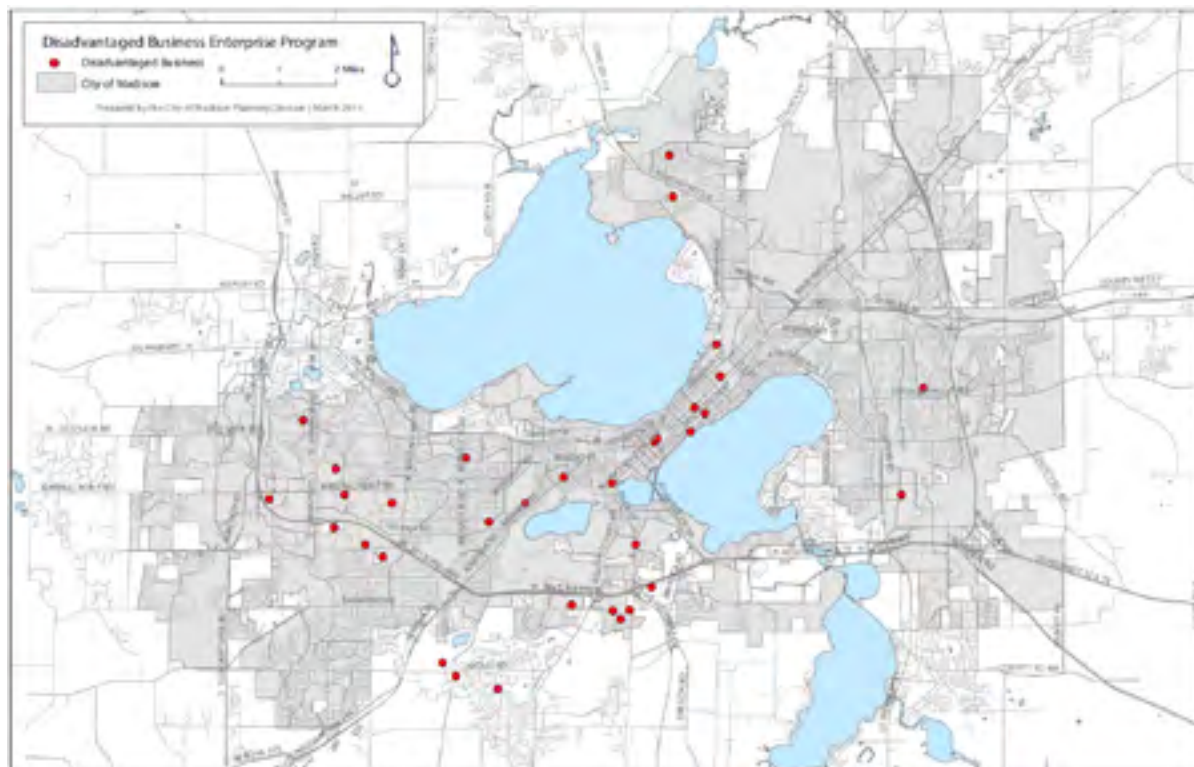
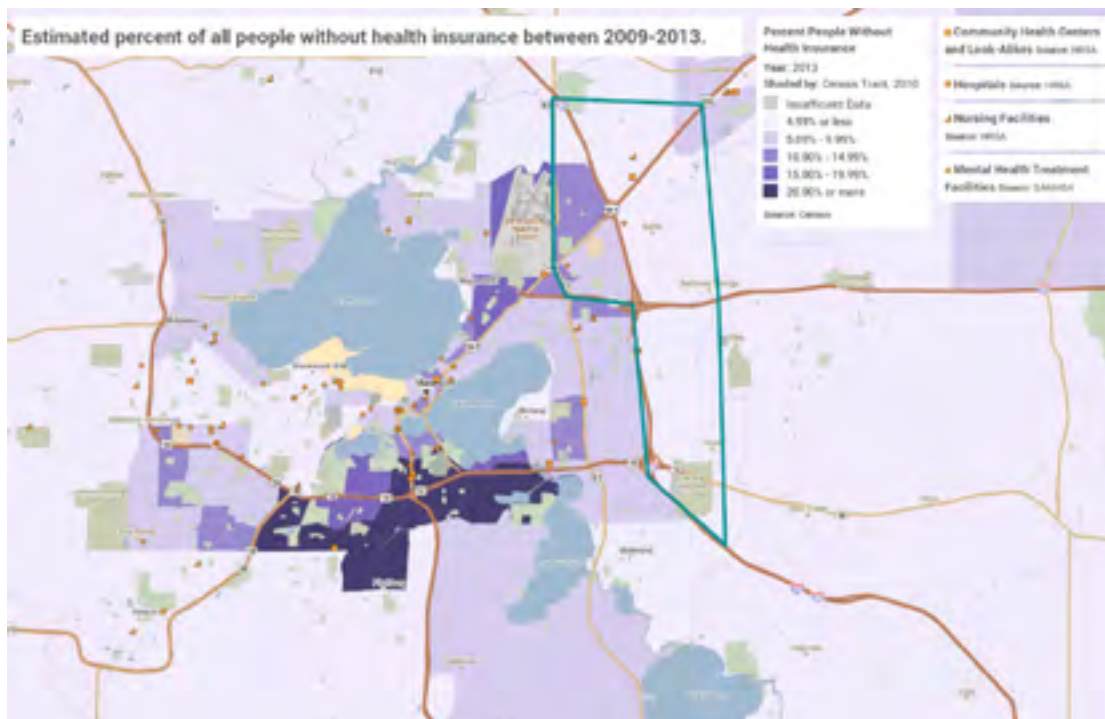
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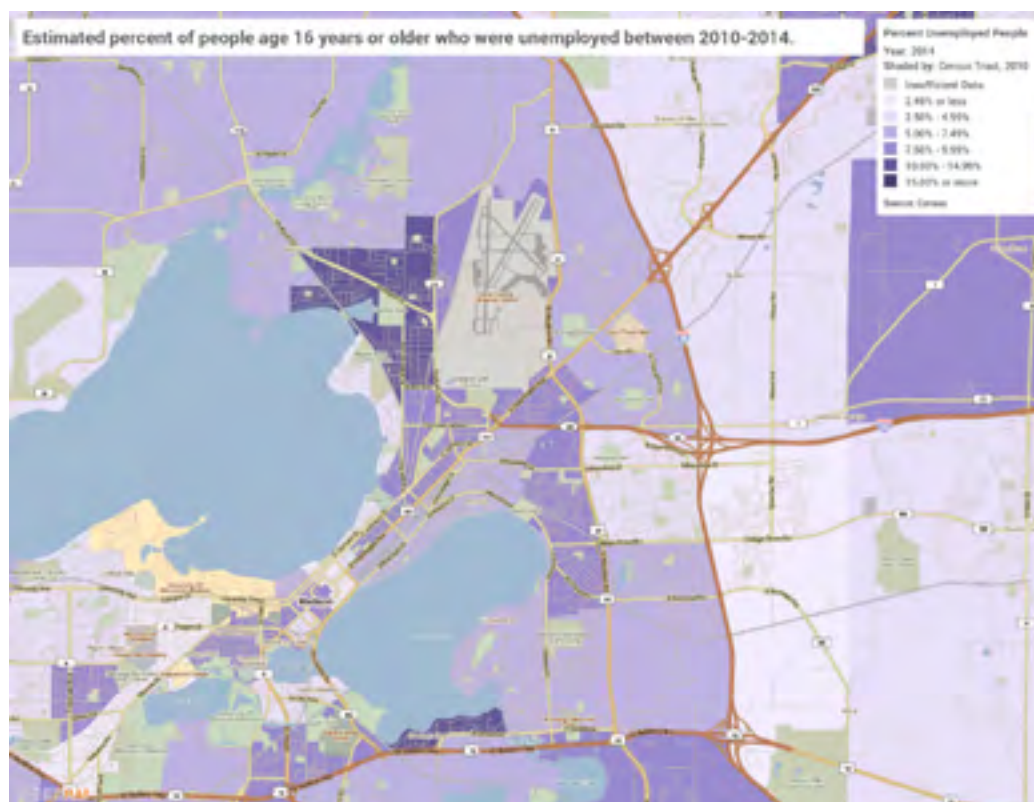
Access







Unemployment



Other References

- Becker, S. (2015, September). *Outcomes, Impacts, and Indicators*. Retrieved March 16, 2016, from Library Journal: lj.libraryjournal.com/2015/09/featured/outcomes-impacts-and-indicators
- Braun, L., Hartman, M. L., Hughes-Hassell, S., & Kumasi, K. (2014). *The Future of Library Service for and with Teens: A Call to Action*. Institute of Museum and Library Services.
- Brown, A., & Lopez, M. H. (March 2015). *Public Libraries and Hispanics: Immigrant Hispanics Use Libraries Less, but Those Who Do Appreciate Them the Most*. Washington, D.C.: Pew Research Center.
- Coffee, K. (2008). Cultural inclusion, exclusion and the formative roles of museums. *Museum Management and Curatorship*, 261–279.
- Ela, J. S. (1975). *Free and Public: One Hundred Years with Madison Public Library*. Friends of Madison Public Library.
- Frias-Martinez, V., Virseda-Jerez, J., & Frias-Martinez, E. (2012). On the relation between socio-economic status and physical mobility. *Information Technology for Development*, 91–106.
- Garner, A. K. (2014). *Rising to the Challenge: Re-Envisioning Public Libraries*. The Aspen Institute.
- Ghazaleh, R. A. (2011). *Multigenerational Planning: Family Friendly Communities Briefing Paper*. American Planning Association.
- Horrigan, J. (2015). *Libraries at the crossroads*. Pew Research Center.
- Ken R. Smith, P. B.-J. (2008). Walkability and Body Mass Index: Density, Design, and New Diversity Measures. *American Journal of Preventive Medicine*, 35 (3), 237–244.
- Moldauer, B. (2009). *Stories of Closing Achievement Gaps Through Community Engagement*. National Educational Association.
- New Solutions Group, LLC. (2013). *Placemaking in Legacy Cities: Opportunities and Good Practices*. Center for Community Progress.
- Norman-Major, K. (2011). Balancing the Four Es; Or Can We Achieve Equity for Social Equity in Public Administration? *Journal of Public Affairs Education*, 233–252.
- Pew Research Center. (2015). *Multiracial in America: Proud, Diverse and Growing in Numbers*. Washington, D.C.
- Rainie, L. (April 2016). *Libraries and Learning*. Pew Research Center.
- Smith, K. R., Brown, B. B., Yamada, I., Kowaleski-Jones, L., Zick, C. D., & Fan, J. X. (2008). Walkability and Body Mass Index; Density, Design, and New Diversity Measures. *American Journal of Preventative Medicine*, 237–244.
- Steffen, N., Lietzau, Z., Lance, K. C., Rybin, A., & Molliconi, C. (2009). *Public Libraries, A Wise Investment: A Return on Investment Study of Colorado Libraries*. Library Research Service.
- Steve Dubb, S. M. (2013). *The Anchor Dashboard: Aligning Institutional Practice to Meet Low-Income Community Needs*. The Democracy Collaborative at the University of Maryland.
- The Latino Workers Project. (March 2016). *Struggling for a Better Life: The State of Working Latinos in Dane County*.
- Wisconsin Council on Children & Families. (2013). *Race to Equity: A Baseline Report on the State of Racial Disparities in Dane County*.
- Wisconsin Department of Public Instruction. (2008). *The Economic Contribution for Wisconsin Public Libraries*.



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Consulting Engineering/Testing

December 17, 2019
C19051-15

Mr. Jon Evans, PE, LEED AP-BD&C
Department of Public Works
Engineering Division
City-County Building, Room 115
210 Martin Luther King Jr. Blvd.
Madison, WI 53703

Re: Geotechnical Exploration Report
Proposed Public Library
Amund Reindahl Park – 1818 Portage Road
City of Madison, Dane County, Wisconsin

Dear Mr. Evans:

Construction • Geotechnical Consultants, Inc. (CGC) has completed the subsurface exploration program for the above-referenced project. The purpose of this program was to evaluate the subsurface conditions within the proposed construction area and to provide geotechnical recommendations regarding site preparation, foundation, floor slab and pavement design/construction. A determination of the site class for seismic design is also included, along with a discussion of the on-site stormwater infiltration potential. We are sending you an electronic copy of this report, and we can provide a paper copy upon request.

SITE AND PROJECT DESCRIPTION

We understand the City of Madison is planning a new library to be located within the southeast quadrant of Amund Reindahl Park, bounded by Portage Road and Parkside Drive to the east, as well as East Washington Avenue to the southeast. The majority of the project area is covered with lawn and scattered trees, but a paved parking lot is present to the east of the existing shelter near Portage Road and Parkside Drive. Furthermore, paved walking/bike paths also traverse the project area. According to publicly-available topographic data (DCiMap; 1-ft contour lines), existing ground surface elevations within the project area generally slope from the north down towards East Washington Avenue in the southeast, with current site grades ranging between about EL 888 and 874 ft.

We understand the park was formerly farmland prior to about the 1970s or 1980s (based on historic aerial images available through DCiMap). We anticipate that the existing shelter, as well as a historic barn building located near the center of the project area, will remain.

We understand the building could be up to 40,000 SF and could be one or two stories and will likely not include a basement. The project is in preliminary stages of planning, and three possible locations are being considered for the new building to the east, southwest or south of the existing shelter.



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Building grades were not available at the time of this report. In addition to the new library building, the project will also involve paved drives and parking areas, as well as on-site stormwater management facilities.

SUBSURFACE CONDITIONS

Subsurface conditions for this study were explored by drilling 21 Standard Penetration Test (SPT) soil borings to planned depths of 20 ft below current site grades at locations selected by City personnel and field-staked by CGC. The soil borings were conducted by Badger State Drilling (under subcontract to CGC) between December 3 and 11, 2019 using a truck-mounted D-120 rotary drill rig equipped with hollow stem augers and an automatic SPT hammer. We have also taken into consideration the findings in three soil borings that were previously completed in the area of the splash pad, just north of the project area, in 2012. The specific procedures used for drilling and sampling are described in Appendix A, and the soil boring locations are shown in plan on the Soil Boring Location Exhibit presented in Appendix B. Ground surface elevations at the boring locations were estimated by CGC based on publicly-available topographic data (DCiMap; 1-ft contour lines), and the elevations should therefore be considered approximate.

The subsurface profiles at the boring locations were fairly consistent, and the following strata were typically encountered (in descending order):

- About 8 to 13 in. of **topsoil**; followed by
- About 2 to 7 ft of medium stiff to very stiff **lean clay**, typically softening somewhat or grading to very loose to loose **clayey sand** with depth; over
- Medium dense to very dense **sand** strata, generally containing significant amounts of silt and gravel as well as scattered cobbles/boulders, to the maximum depths explored.

As an exception to the above generalized subsurface profile, medium stiff to very stiff *cohesive fill* was found to extend about 5.5 ft below the ground surface in Boring 7. In addition, surficial clay layers in Borings 9 and 20 were classified as *possible fill* due to somewhat inconsistent composition (including minor amounts of organics) and coloration, and the shallow clays in Borings 8, 16 and 21 were classified as *possible/probable lower horizon topsoil* since they were also found to contain apparent organics.

Further exceptions included fairly thin, medium dense silt to sandy silt layers or interbeds of clay, silt and sand being encountered at the transition between the shallow clays and underlying granular soils in Borings 2, 12 and 15.

Moisture contents in representative samples obtained from the shallow clay and clayey sand soils (including apparent fill in Boring 7 as well as possible fill or possible/probable lower horizon topsoil in Borings 8, 9, 16, 20 and 21) were determined to range from 13.1% to 29.1%. Based on natural



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moisture contents, pocket penetrometer readings (q_p ; an estimate of the unconfined compressive strength of cohesive soils) and SPT blow counts (N-values), the surficial cohesive and fine-grained soils should generally be considered slightly to moderately compressible. In addition to natural moisture contents, several clay specimens (apparent fill in Boring 7, possible fill in Boring 9, probable lower horizon topsoil in Boring 16 and possible lower horizon topsoil in Borings 8, 20 and 21) were also tested for their organic contents by means of loss-on-ignition (LOI) due to their darker color. The samples were found to have organic contents of 3.2% to 5.3%, with soils having organic contents of 4% or more typically being considered organic.

Furthermore, representative samples of the granular soils were tested for their particle size distribution (gradation) to aid in their classification. The samples were determined to generally contain P200 (“fines”) content of 27.5% to 38.7%, corresponding to USCS classifications of silty sand (SM), as well as USDA designations of fine sandy loam (FSL), sandy loam (SL) to gravelly sandy loam (GRSL) or loamy fine sand (LFS). As an exception, Sample 3 of Boring 16, taken between the surficial clay and underlying sand soils, contained a slightly higher P200 content of 47.8%, corresponding to silty sand (SM, but close to sandy silt) and gravelly silt loam (GRSiL) per the USCS and USDA classification systems, respectively. The particle size distribution determined on two cleaner sand samples obtained from Boring 19, on the other hand, returned USCS and USDA classifications of poorly-graded sand (SP) and very gravelly sand (VGRS), respectively, with a composite P200 content of 4.1%.

Groundwater was generally not encountered in the borings during or upon the completion of drilling. As an exception, a probable perched condition was observed in Boring 17, performed in a lower-lying, portion of the project area, at about 3.5 ft below the ground surface during drilling and about 6 ft below the surface upon the completion of drilling (after the augers had been pulled). The borehole was left open for a longer-term water level reading. About one day after the completion of drilling, B-17 had caved in at a depth of about 8 ft, with the water level still at about 6 ft below the ground surface at that point. Groundwater levels are expected to fluctuate with seasonal variations in precipitation, infiltration, evapotranspiration, the water level in nearby waterbodies as well as other factors. A more detailed description of the site soil and groundwater conditions is presented on the Soil Boring Logs attached in Appendix B, which also contain the laboratory test results along with Particle Size Distribution Test Reports, as well as on the WDSPS Soil and Site Evaluation – Storm form attached in Appendix E.

DISCUSSION AND RECOMMENDATIONS

Subject to the limitations discussed below and based on the subsurface exploration, it is our opinion that the site is generally suitable for construction and that the proposed building can be supported by a conventional spread footing foundation system. Our recommendations for site preparation, foundation, floor slab and pavement design/construction, along with our assessment of the site class for seismic design and the on-site stormwater infiltration potential, are presented in the following subsections. *Note that the foundation design and construction recommendations contained herein*



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should be considered preliminary in nature as the building location and building grades were not available at the time of this report. Similarly, the stormwater infiltration potential discussion is also preliminary since the location and depth of the stormwater management areas had not been determined and the evaluation of the on-site stormwater infiltration potential is solely based on soil borings. Additional information regarding the conclusions and recommendations presented in this report is discussed in Appendix C.

1. Site Preparation

We recommend that topsoil be stripped at least 10 ft beyond the proposed construction area, including areas requiring fill beyond the building footprint and pavement limits. The topsoil can be stockpiled on-site and later re-used as fill in landscaped areas. As mentioned earlier, topsoil was about 8 to 13 in. thick in the soil borings, but differing topsoil thicknesses may be encountered between and beyond boring locations due to previous agricultural and grading activities. Note that slightly organic to organic possible/probable lower horizon topsoil was found to extend about 2 to 3 ft below current site grades in Borings 8, 16, 20 and 21, which may also require removal depending on organic contents. Trees and root zones should be removed from construction areas prior to or in conjunction with topsoil stripping.

After topsoil stripping, exposed soils are generally expected to consist of medium stiff to very stiff clay. In areas remaining at-grade or requiring fill, we recommend cohesive/fine-grained soils exposed be statically recompacted (i.e., without vibration) and subsequently proof-rolled with a piece of heavy rubber-tire construction equipment, such as a loaded tri-axle dump truck, to check for soft/yielding areas. If soft/yielding areas are observed, these soils should be undercut and replaced with granular backfill compacted to at least 95% compaction based on modified Proctor methods (ASTM D1557) in accordance with our Recommended Compacted Fill Specifications presented in Appendix D. Alternatively, 3-in. dense graded base (DGB) that is placed in loose 10-in. lifts and compacted until deflection ceases can also be used to restore grades in undercut areas. In areas where granular soils are exposed following topsoil stripping or where site grades need to be cut, the granular subgrades should be thoroughly recompacted with a vibratory smooth-drum roller, and zones that remain loose after recompaction should be undercut and replaced as described above. Areas subsequently receiving fill should be checked for their footing, floor slab and pavement support suitability prior to fill placement, as applicable.

Following the development of a firm and stable subgrade, fill placement to establish site, pavement and building grades can proceed, where required. To the extent possible, we recommend using granular soils (i.e., sands/gravels, including granular soils excavated on-site) as structural fill within the building pad and the upper 2 to 3 ft in pavement areas because these soils are relatively easy to place and compact in most weather conditions compared to clay/silt soils. Clay and silt soils excavated on-site are generally not recommended as structural fill because moisture conditioning by discing and drying (aeration) will likely be required to achieve desired compaction levels, which is highly weather-dependent (i.e., dry, warm and windy conditions) and could delay construction



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progress. In our opinion, clay/silt soils are best used as fill in landscaping or potentially as lower lifts in pavement areas provided the moisture contents can be sufficiently lowered from the natural states to facilitate compaction efforts. We recommend that structural fill be compacted to at least 95% compaction based on modified Proctor methods (ASTM D1557) following Appendix D guidelines. Periodic field density tests should be taken by CGC staff within the fill to document the adequacy of compactive effort.

Note that where significant fill will be required to establish building and pavement grades (i.e., more than 5 ft above existing grades), we recommend the fill be placed early in the construction process, potentially with a time delay between fill placement and beginning footing construction, to allow the slightly to moderately compressible cohesive and fine-grained soils to consolidate and settle under the weight of the new fill prior to resuming the regular construction sequence. For building areas where significant fill is required, typical time delays/consolidation periods are on the order of 1 to 3 months. If desired, we can provide further information and recommendations as development plans progress and planned site grades become available.

2. **Preliminary Foundation Design**

As the building location and elevations were not available at the time of this report, the foundation design and construction recommendations contained in this section should be considered *preliminary*. As development plans progress and the location of the planned library, as well as building elevations and loads have been established, this information should be provided to CGC in order for us to review and adjust the recommendations contained in this subsection, as needed. At that point, a supplemental subsurface exploration program consisting of soil borings and/or test pits may also be required to finalize the foundation design/construction recommendations.

The following parameters should be used for *preliminary* foundation design:

- Maximum net allowable bearing pressure: 3,000 to 5,000 psf
(dependent upon building location and grades)
- Minimum foundation widths:
 - Continuous wall footings: 18 in.
 - Column pad footings: 30 in.
- Minimum footing depths below finish site grades:
 - Exterior/perimeter footings: 4 ft
 - Interior footings: no minimum requirement

Note that the higher allowable bearing pressure of 5,000 psf assumes that footings bear within at least



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medium dense native sand soils, with shallow native clay and fill soils being undercut below the bottom of footings and replaced with well-compacted engineered granular or aggregate backfill. Some of the surficial clay layers may appear to be suitable for the support of footings designed for an allowable bearing pressure of 5,000 psf, but the clays were generally found to soften with depth or grade to very loose to loose clayey sand, and this condition is not considered suitable for the support of footings other than very lightly-loaded footings designed for a low allowable bearing pressure. Note that where substantial fill will be required to establish the building pad, consideration could be given to (mass) removal of the shallow clay soils prior to new fill placement in order to reduce (and practically eliminate) undercutting later on and to significantly shorten the consolidation period between fill placement and beginning footing construction.

Recognizing that subgrade conditions may vary across the site, footing subgrades should be checked by a CGC field representative to document that the subgrade soils are suitable for footing support and advise on corrective measures, such as undercutting, if necessary. We recommend using a smooth-edged backhoe bucket for footing and undercut excavations. The base of undercut excavations should be widened beyond the footing edges at least 0.5 ft in each direction for each foot of undercut depth for stress distribution purposes. Granular soils exposed at footing grade or the bottom of undercut excavations should be thoroughly recompacted with a large vibratory plate compactor or an excavator-mounted hoe-pack prior to backfilling or formwork/concrete placement to densify soils loosened during the excavation process. Soils potentially susceptible to disturbance from vibratory compaction (e.g., cohesive/fine-grained soils or granular soils with elevated moisture content where perched water is present) should be hand-trimmed. OSHA slope guidelines should be followed if workers need to enter footing/undercut excavations.

As noted above, undercutting will be required where existing fill is present at or below footing grades. Native clay may also need to be undercut below footings, the extent of which will be dependent upon the building location and finish grades. In order to re-establish footing grade in undercut areas, we generally recommend using granular backfill compacted to at least 95% compaction based on modified Proctor methods (ASTM D1557), in accordance with the Recommended Compacted Fill Specifications presented in Appendix D. Alternatively, 3-in. DGB that is placed in loose 10-in. lifts and compacted until deflection ceases can also be used to restore grades in undercut areas.

3. Seismic Site Class

In our opinion, the average soil properties in the upper 100 ft of the site (based on N-values projected to be between 15 and 50 blows/ft, on average, in the native sand soils underlying the site) may be characterized as a stiff soil profile. This characterization would place the site in Site Class D for seismic design according to the International Building Code (see Table 1613.5.2).



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4. Floor Slab

Depending on final building grades and assuming that the new building will not include a basement, floor slab subgrades may consist of a variety of cohesive fill or native clay to clayey sand, silt and sand soils, or of newly-placed engineered granular fill where site grades need to be raised. We recommend that granular floor slab subgrades be thoroughly recompact with a vibratory smooth-drum roller prior to concrete placement. Cohesive and fine-grained floor slab subgrades should be statically recompact (i.e., without vibration) and subsequently proof-rolled. Areas that remain loose after recompaction or where soft/yielding zones are observed should be undercut and replaced with well-compacted compacted 3-in. DGB or granular backfill.

To act as a capillary break below the slab, we recommend including a minimum 4 to 6-in. thick layer of well-graded sand/gravel with less than 5% by weight passing the No. 200 U.S. standard sieve. Note, however, that some structural engineers require a layer of DGB, such as 1¼-in. DGB, rather than sand/gravel below the floor slab to increase the subgrade modulus immediately below the slab. To further reduce the potential for moisture migration through the slab, a plastic vapor barrier can also be utilized. Fill and base layer material below the floor slab should be placed as described in the Site Preparation section of this report. Slabs constructed on a minimum 6-in. thick dense graded base layer may be designed utilizing a subgrade modulus of 150 pci, and a subgrade modulus of 100 pci should be used for the design of slabs that are constructed on a sand/gravel layer. The design subgrade moduli are based on a firm or adequately stabilized, recompact subgrade such that non-yielding conditions are developed. The slab should be structurally separated from the footings with a compressible filler and have construction joints and reinforcement for crack control.

5. Pavement Design

We anticipate that pavement design will be controlled by the medium stiff to very stiff clays generally encountered at shallow depths in the borings performed on this site. Subgrades should be prepared as described in the Site Preparation section of this report, with recompact/proof-rolling completed prior to base course and asphalt placement. We anticipate that asphalt pavement on this site will primarily be exposed to automobile traffic with less than one 18-kip equivalent single axle load (ESAL) per day. In view of this, we have assumed Traffic Class I following Wisconsin Asphalt Pavement Association (WAPA) recommendations for smaller parking areas (i.e., up to 50 stalls) and driveways that are mainly used by light passenger vehicles. However, main sections of the driveways are likely to experience heavier traffic loads (e.g., due to garbage and/or delivery trucks), and larger parking lots (i.e., more than 50 stalls) may also be planned. For pavement areas where trucks will routinely travel and parking lots greater than 50 stalls, we have assumed a traffic load of less than 10 ESALs per day and Traffic Class II according to WAPA. The pavement sections summarized in Table 1 below were selected assuming a Soil Support Value “SSV” of about 4.0 for a firm or adequately stabilized cohesive subgrade and a design life of 20 years.



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TABLE 1 – Recommended Pavement Sections

Material	Thicknesses (in.)		WDOT Specification ⁽¹⁾
	Traffic Class I (Light Duty)	Traffic Class II (Medium Duty)	
Bituminous Upper Layer ^(2,3)	1.5	1.75	Section 460, Table 460-1, 9.5 mm or 12.5 mm
Bituminous Lower Layer ^(2,3)	2.0	2.25	Section 460. Table 460-1, 12.5 mm or 19.0 mm
Dense Graded Base Course ^(2,4)	8.0	10.0	Sections 301 and 305, 3 in. and 1¼ in.
Total Thickness	11.5	14.0	

Notes:

- 1) Wisconsin DOT *Standard Specifications for Highway and Structure Construction*, latest edition, including supplemental specifications, and *Wisconsin Asphalt Pavement Association 2018 Asphalt Pavement Design Guide*.
- 2) Compaction requirements:
 - Bituminous concrete: Refer to Section 460-3.
 - Base course: Refer to Section 301.3.4.2, Standard Compaction
- 3) Mixture Type LT (or E-0.3) bituminous; refer to Section 460, Table 460-2 of the *Standard Specifications*.
- 4) The upper 4 in. should consist of 1¼-in. DGB; the bottom part of the layer can consist of 3-in. DGB.

The recommended pavement sections assume regular maintenance (crack sealing, etc.) will occur, as needed. Note that if traffic volumes are greater than those assumed, CGC should be allowed to review the recommended pavement sections and adjust them accordingly. Alternative pavement designs may prove acceptable and should be reviewed by CGC. If there is a delay between subgrade preparation and placing the base course, the subgrade should be recompact. *As discussed in the Site Preparation section, we recommend early fill placement in pavement areas where site grades need to be raised about 5 ft or more above existing.*

Where concrete pavement may be used, such as in pavement areas subjected to concentrated wheel loads (e.g., dumpster pads), we recommend that the concrete should be at least 6 in. thick and



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contain mesh reinforcement for crack control. Concrete slabs underlain by a minimum 6-in. thick dense graded base layer over a firm or stabilized subgrade can be designed utilizing a subgrade modulus of 150 pci.

6. Preliminary Stormwater Infiltration Potential

We understand that stormwater management areas are planned as part of the development, but the location and depth of these facilities has not been determined yet.

The subsurface profiles at Borings B-1 through B-21, performed throughout the project area, were fairly consistent and included lower-permeability clay loam, silty clay loam, sandy clay loam, silt loam and loam to depths between approximately 3 and 8 ft below current site grades. It is our opinion that the surficial soils encountered in the borings are not suitable for infiltrating significant amounts of stormwater.

Below depths of about 3 to 8 ft below current site grades, more permeable fine sandy loam, sandy loam, gravelly sandy loam, loamy fine sand, loamy sand and very gravelly sand soils were encountered, extending to the maximum depths explored at about 20 ft below the ground surface. Provided the infiltration systems will extend into these coarser-grained layers (or lower-permeability soils are undercut below the bottom of the infiltration systems and replaced with appropriate sandier soils), we anticipate that some infiltration will likely be possible. Note, however, that the granular soils were found to contain occasional lower-permeability (e.g., sandy clay loam, silt loam, etc.) seams, which will likely limit the infiltration rate. In an effort to improve the infiltration potential, we recommend that granular soils containing fairly thin lower-permeability seams be excavated and blended (or deep tilling, ripping, etc.) to break up the lower-permeability seams. *Thicker silt and clay layers will require excavation and removal.* It must also be noted that the majority of the granular soils appear to be overconsolidated glacial till deposits, and the fairly high density may limit the infiltration rate to less than the published values in WDNR literature, which is another reason we recommend that the soils be deep-tilled to improve the infiltration rate compared to the in-place condition. After removal of the overlying lower-permeability strata, we recommend that the deep-tilling process extend at least 5 ft (potentially deeper pending field observations) below the bottom of the infiltration systems. Samples of the mixed soils should be collected during construction to document that the gradations of the mixed samples are consistent with the soil texture that the design infiltration rate is based upon.

Infiltration Potential: The following is a summary of the estimated infiltration rates for the soils encountered in Borings B-1 through B-21, per Table 2 of the WDNR Conservation Practice Standard 1002, *Site Evaluation for Storm Water Infiltration*. *Note that where lower-permeability soil seams/layers exist within otherwise more permeable soils, the infiltration rate of the lower-permeability seams/layers will control the vertical infiltration rate, unless the lower-permeability seams are removed or the layer (with scattered seams) is excavated and blended (or deep*



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tilling, ripping, etc.), as discussed previously. The estimated infiltration rates are as follows:

• Clay loam (CL)	0.03 in./hr
• Silty clay loam (SiCL)	0.04 in./hr
• Sandy clay loam (SCL)	0.11 in./hr
• Silt loam (SiL)	0.13 in./hr
• Gravelly silt loam (GRSiL)	0.13 in./hr
• Loam (L)	0.24 in./hr
• Fine sandy loam (FSL)	0.50 in./hr
• Sandy loam (SL)	0.50 in./hr
• Gravelly sandy loam (GRSL)	0.50 in./hr
• Loamy fine sand (LFS)	0.50 in./hr
• Fine sand (FS)	0.50 in./hr
• Loamy sand (LS)	1.63 in./hr
• Very gravelly sand (VGRS)	3.60 in./hr

Note that the infiltration rates should be considered very approximate since they are merely based on soil texture and do not account for in-place soil density and other factors, which will affect the infiltration rate. We recommend that the soils at and several feet below the bottom of stormwater management systems be checked by a geotechnical engineer or certified soil tester *in conjunction with the basin designer* to document that the soils are appropriate for the design infiltration rate or recommend remedial measures, if necessary. *Variability in the soil conditions should be expected across the site and within the stormwater basin that could result in a wide range of undercut depths to reach soil suitable for the design infiltration rate.* The Wisconsin Department of Safety & Professional Services Soil and Site Evaluation – Storm form for B-1 through B-21 is contained in Appendix E.

It must be cautioned that the results of the soil borings have limitations with regard to the evaluation of the on-site stormwater infiltration potential, as actual soil horizon transitions may vary from those shown on the boring logs and infiltration forms. The reviewing agency may require test pits be excavated at a later date prior to finalizing the stormwater design. *The results of the test pits may require revisions to the stormwater management design if the design has been based solely on the soil borings.*

Groundwater: Groundwater was not encountered in the soil borings performed on this site, with the exception of probable perched water in B-17, as previously discussed. However, redoximorphic features (redox or mottling), which are indicative of the level of previous saturation from perched water, periodically infiltrating surface water or seasonally elevated groundwater, were noted in some of



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shallow clay soils. Seasonal fluctuations of the groundwater table should be expected, as previously discussed.

Bedrock: Bedrock was not encountered in the borings to the maximum depths explored. The depth of bedrock should be expected to vary across the site.

During construction, appropriate erosion control should be provided to prevent eroded soil from contaminating the stormwater management areas. Where appropriate, the stormwater system design should include pretreatment to remove fine-grained soils (silt/clay) and clogging materials (oils/greases) from stormwater prior to entering the infiltration areas. Additionally, a regular maintenance plan should be developed to remove silt/clay soils and clogging materials that may accumulate in the bottom of the stormwater management areas over time. Failure to adequately control fine-grained soils and clogging materials from entering the infiltration areas or failure to regularly remove fine-grained soils and clogging materials that accumulate at the base of the stormwater infiltration systems will likely cause the stormwater management systems to fail. Additionally, it is important that the soils in the bottom of the infiltration systems do not become compacted during construction or measures are taken to mitigate soils that are compacted during construction. Refer to WDNR Conservation Practice Standards 1002, 1003 and 1004, as well as NR151 for additional information.

CONSTRUCTION CONSIDERATIONS

Due to variations in weather, construction methods and other factors, specific construction problems are difficult to predict. Soil related difficulties which could be encountered on the site are discussed below:

- Due to the potentially sensitive nature of some of the on-site soils, we recommend that final site grading activities be completed during dry weather, if possible. Construction traffic should be avoided on prepared subgrades to minimize potential disturbance.
- Contingencies in the project budget for subgrade stabilization with coarse aggregate in pavement and floor slab areas should be increased if the project schedule requires that work proceed during adverse weather conditions.
- Earthwork construction during the late fall through early spring could be complicated as a result of wet weather and freezing temperatures. During cold weather, exposed subgrades should be protected from freezing before and after footing construction. Fill should never be placed while frozen or on frozen ground.



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- Excavations extending greater than 4 ft in depth below the existing ground surface should be sloped or braced in accordance with current OSHA standards.
- Based on the observations made during our field exploration, we generally do not anticipate groundwater to be encountered during construction. However, water accumulating at the bottom of excavations as a result of precipitation or seepage should be quickly removed, with dewatering means and methods the contractor's responsibility.

RECOMMENDED CONSTRUCTION MONITORING

The quality of the foundation, floor slab and pavement subgrades will be largely determined by the level of care exercised during site development. To check that earthwork and foundation construction proceed in accordance with our recommendations, the following operations should be monitored by CGC:

- Topsoil stripping and subgrade proof-rolling/compaction;
- Fill/backfill placement and compaction;
- Foundation excavation/subgrade preparation; and
- Concrete placement.

* * * * *



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It has been a pleasure to serve you on this project. If you have any questions or need additional consultation, please contact us.

Sincerely,

CGC, Inc.

A blue ink signature of Tim F. Gassenheimer, written in a cursive style.

Tim F. Gassenheimer, EIT, CST
Staff Engineer

A blue ink signature of Ryan J. Portman, written in a cursive style.

Ryan J. Portman, PE, CST
Consulting Professional

Encl: Appendix A - Field Exploration
Appendix B - Soil Boring Location Exhibit
Logs of Test Borings (21)
Particle Size Distribution Test Reports (12)
Log of Test Boring-General Notes
Unified Soil Classification System
Appendix C - Document Qualifications
Appendix D - Recommended Compacted Fill Specifications
Appendix E - WDSPS Soil and Site Evaluation – Storm Form (21 Borings)

APPENDIX A
FIELD EXPLORATION

APPENDIX A

FIELD EXPLORATION

Subsurface conditions for this study were explored by drilling 21 Standard Penetration Test (SPT) soil borings to planned depths of 20 ft below current site grades at locations selected by City personnel and field-staked by CGC. The soil borings were conducted by Badger State Drilling (under subcontract to CGC) between December 3 and 11, 2019 using a truck-mounted D-120 rotary drill rig equipped with hollow stem augers and an automatic SPT hammer.

The soil borings were sampled at 2.5-ft intervals to a depth of 15 ft and at 5-ft intervals thereafter. The samples were obtained in general accordance with specifications for standard penetration testing, ASTM D 1586. The specific procedures used for drilling and sampling are described below.

1. Boring Procedures between Samples

The boring is extended downward, between samples, by a hollow-stem auger.

2. Standard Penetration Test and Split-Barrel Sampling of Soils
(ASTM Designation: D 1586)

This method consists of driving a 2-inch outside diameter split-barrel sampler using a 140-pound weight falling freely through a distance of 30 inches. The sampler is first seated 6 inches into the material to be sampled and then driven 12 inches. The number of blows required to drive the sampler the final 12 inches is recorded on the log of borings and is known as the Standard Penetration Resistance.

During the field exploration, the driller visually classified the soil and prepared a field log. *Field screening of the soil samples for possible environmental contaminants was not conducted by the drillers as these services were not part of CGC's work scope.* Water level observations were made in each boring during and after drilling and are shown at the bottom of each boring log. Upon completion of drilling, the borings were backfilled with bentonite to satisfy WDNR regulations and the soil samples were delivered to our laboratory for visual classification and laboratory testing. The soils were visually classified by a geotechnical engineer using the Unified Soil Classification System as well as the USDA classification system. The final logs prepared by the engineer, including laboratory test results, as well as a Soil Boring Location Exhibit and a description of the Unified Soil Classification System are presented in Appendix B.

APPENDIX B

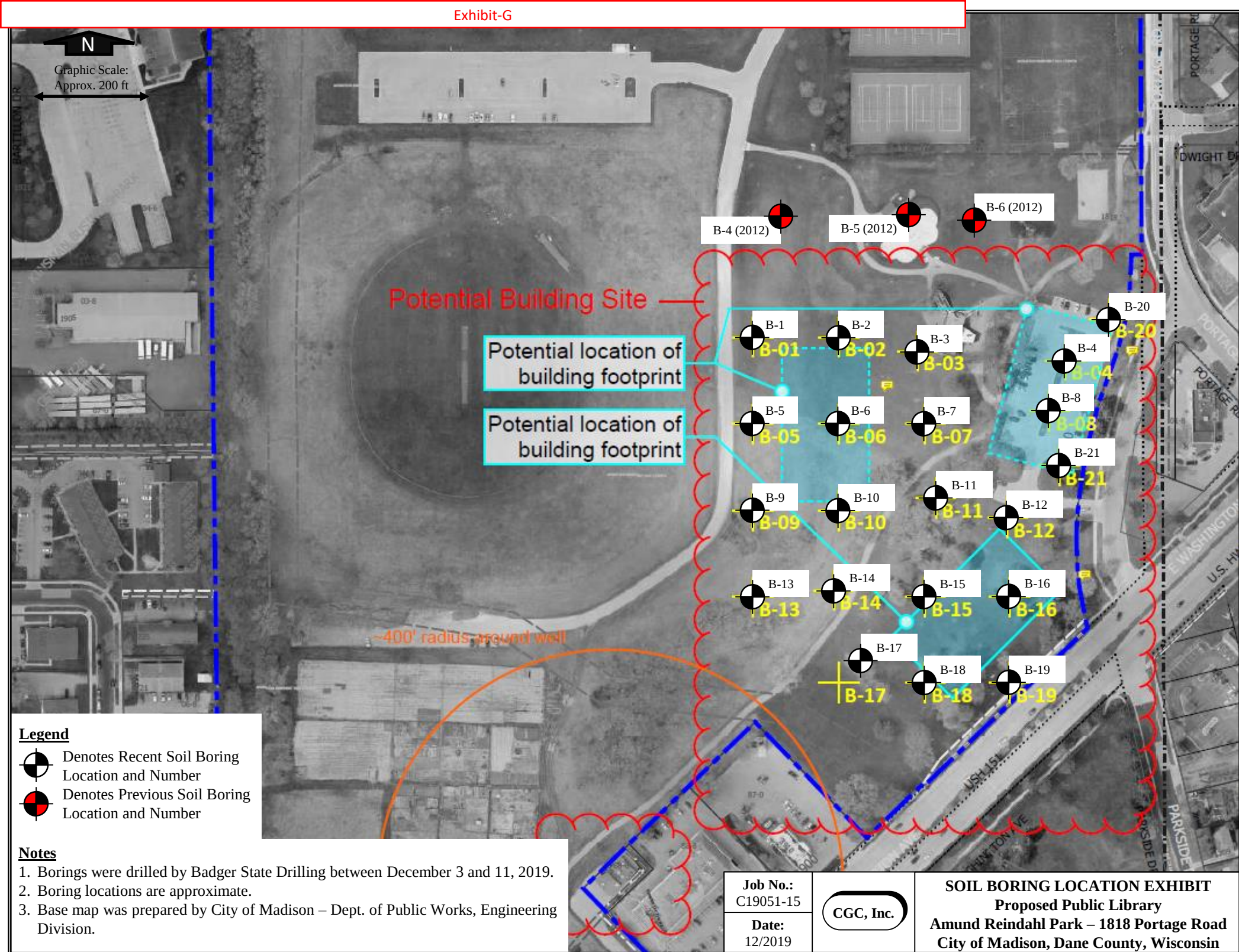
SOIL BORING LOCATION EXHIBIT

LOGS OF TEST BORINGS (21)

PARTICLE SIZE DISTRIBUTION TEST REPORTS (12)

LOG OF TEST BORING-GENERAL NOTES

UNIFIED SOIL CLASSIFICATION SYSTEM





LOG OF TEST BORING

Project **Proposed Public Library**
Amund Reindahl Park - 1818 Portage Road
 Location **City of Madison, Dane County, Wisconsin**

Boring No. **1**
 Surface Elevation (ft) **884.0±**
 Job No. **C19051-15**
 Sheet **1** of **1**

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL
						 11± in. TOPSOIL (OL)					
1		10	M	9		 Stiff, Brown Lean CLAY, Trace Sand (CL) USDA: 10YR 5/3 Silty Clay Loam	(1.5-1.75)				
2		12	M	18		 Medium Stiff, Brown Sandy Lean CLAY, Trace Gravel (CL) USDA: 10YR 4/3 Sandy Clay Loam	(0.75)				
					5	 Medium Dense, Pale Brown Fine to Medium SAND, Some Silt, Little Gravel (SM) USDA: 10YR 6/3 Sandy Loam					
3		18	M	23		P200 (Sample 3 - 6 to 7.5 ft): 32.8%		9.5			
4		18	M	36		 Dense, Pale Brown Fine SAND, Little to Some Silt (SP-SM/SM) USDA: 10YR 6/3 Loamy Fine Sand					
					10						
5		10	M	30		 Dense to Very Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam					
6		8	M	50/2"		Probable Cobble/Boulder near 14 ft					
					15						
7		14	M	65							
					20						
						End of Boring at 20 ft					
						Borehole Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling ☒ NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start **12/4/19** End **12/4/19**
 Driller **BSD** Chief **KD** Rig **D-120**
 Logger **JF** Editor **TFG**
 Drill Method **2.25" HSA; Autohammer**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Proposed Public Library**
Amund Reindahl Park - 1818 Portage Road
 Location **City of Madison, Dane County, Wisconsin**

Boring No. **2**
 Surface Elevation (ft) **887.0±**
 Job No. **C19051-15**
 Sheet **1** of **1**

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL
						8± in. TOPSOIL (OL)					
1		10	M	7		Stiff, Brown Lean CLAY, Trace Sand (CL) USDA: 10YR 5/3 Silty Clay Loam	(1.25-2.0)	25.7			
2		12	M	7			(1.5)	27.0			
					5						
3		12	M	16		Medium Dense, Pale Brown Sandy SILT, Little to Some Gravel, Scattered Cobbles/Boulders (ML) USDA: 10YR 6/3 Loam					
4		14	M	19		Medium Dense to Very Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam					
					10						
5		12	M	13							
6		10	M	27							
					15						
7		12	M	76							
					20						
						End of Boring at 20 ft					
						Borehole Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling ☒ NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start **12/3/19** End **12/3/19**
 Driller **BSD** Chief **KD** Rig **D-120**
 Logger **JF** Editor **TFG**
 Drill Method **2.25" HSA; Autohammer**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Proposed Public Library
Amund Reindahl Park - 1818 Portage Road
 Location City of Madison, Dane County, Wisconsin

Boring No. 3
 Surface Elevation (ft) 888.0±
 Job No. C19051-15
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	qu (qa) (tsf)	W	LL	PL	LI
					11± in. TOPSOIL (OL)					
1		10	M	11	Very Stiff, Brown Lean CLAY, Trace Sand (CL) USDA: 10YR 4/3 Silty Clay Loam	(2.0-2.5)				
2		10	M	8	Medium Stiff, Brown to Dark Brown Sandy Lean CLAY, Trace Gravel (CL) USDA: 10YR 4/3 to 3/3 Sandy Clay Loam	(0.5-0.75)	17.9			
3		12	M	21	Medium Dense, Gray to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) USDA: 10YR 5/1 to 6/4 Gravelly Sandy Loam					
4		10	M	26	Medium Dense to Very Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam					
5		12	M	27	P200 (Samples 5 and 6 - 11 to 15 ft): 33.7%					
6		14	M	27			7.2			
7		14	M	58						
					End of Boring at 20 ft					
					Borehole Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 12/3/19 End 12/3/19
 Driller BSD Chief KD Rig D-120
 Logger JF Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Proposed Public Library
Amund Reindahl Park - 1818 Portage Road
 Location City of Madison, Dane County, Wisconsin

Boring No. 4
 Surface Elevation (ft) 885.0±
 Job No. C19051-15
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL
						 11± in. TOPSOIL (OL)					
1		10	M	7		 Stiff, Brown Lean CLAY, Trace Sand (CL) USDA: 10YR 4/3 Silty Clay Loam	(1.5-1.75)	29.1			
2		12	M/W	5		 Soft/Loose, Very Dark Grayish Brown to Brown Sandy Lean CLAY to Clayey Fine SAND, Trace Gravel (CL/SC) USDA: 10YR 3/2 to 5/3 Sandy Clay Loam to Sandy Loam	(0.25-0.5)				
3		10	M	24		 Medium Dense to Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam					
4		10	M	15							
5		10	M	24							
6		12	M	23							
											
7		10	M	38							
											
End of Boring at 20 ft											
Borehole Backfilled with Bentonite Chips											

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 12/3/19 End 12/3/19
 Driller BSD Chief KD Rig D-120
 Logger JF Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Proposed Public Library
Amund Reindahl Park - 1818 Portage Road
 Location City of Madison, Dane County, Wisconsin

Boring No. 5
 Surface Elevation (ft) 883.5±
 Job No. C19051-15
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LI
						11± in. TOPSOIL (OL)					
1		8	M	8		Very Stiff, Brown Lean CLAY, Trace Sand (CL) USDA: 10YR 4/3 Silty Clay Loam	(2.0-2.75)	26.9			
2		10	M	9		Medium Stiff to Stiff/Loose, Brown to Pale Brown Sandy Lean CLAY to Clayey Fine to Medium SAND, Trace Gravel (CL/SC) USDA: 10YR 4/3 to 6/3 Sandy Clay Loam to Sandy Loam	(0.75-1.25)				
3		14	M	20		Medium Dense to Very Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam					
4		14	M	19							
5		12	M	33							
6		12	M	40							
7		3	M	50/3"		Probable Cobble/Boulder near 18.5 ft - Limited Recovery in Sample 7					
						End of Boring at 20 ft					
						Borehole Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 12/4/19 End 12/4/19
 Driller BSD Chief KD Rig D-120
 Logger JF Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Proposed Public Library
Amund Reindahl Park - 1818 Portage Road
 Location City of Madison, Dane County, Wisconsin

Boring No. 6
 Surface Elevation (ft) 888.0±
 Job No. C19051-15
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL
						 11± in. TOPSOIL (OL)					
1		12	M	9		 Stiff to Very Stiff, Brown Lean CLAY, Little Sand (CL) USDA: 10YR 5/3 Clay Loam	(1.75-3.5)	20.6			
2		10	M/W	5		 Soft, Brown Sandy Lean CLAY, Trace Gravel (CL) USDA: 10YR 4/3 Sandy Clay Loam	(0.25-0.5)	19.0			
					5						
3		14	M/W	21		 Medium Dense to Dense, Pale Brown to Light Yellowish Brown Fine to Coarse SAND, Some Silt, Little to Some Gravel, Scattered Thin Sandy Lean Clay Seams and Cobbles/Boulders (SM) USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam, Scattered Thin Sandy Clay Loam Seams P200 (Sample 4 - 8.5 to 10 ft): 31.8%					
4		14	M	21				8.5			
					10						
5		16	M	18							
6		16	M	17							
					15						
7		16	M	38							
					20						
						End of Boring at 20 ft					
						Borehole Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 12/3/19 End 12/3/19
 Driller BSD Chief KD Rig D-120
 Logger JF Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Proposed Public Library**
Amund Reindahl Park - 1818 Portage Road
 Location **City of Madison, Dane County, Wisconsin**

Boring No. **7**
 Surface Elevation (ft) **888.0±**
 Job No. **C19051-15**
 Sheet **1** of **1**

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	qu (qa) (tsf)	W	LL	PL	LI
					10± in. TOPSOIL (OL)					
1		10	M	9	FILL: Stiff to Very Stiff, Very Dark Grayish Brown to Yellowish Brown Lean Clay, Little to Some Sand, Trace Organics USDA: 10YR 3/2 to 5/4 Clay Loam to Sandy Clay Loam (Fill)	(1.5-3.0)	20.2			3.2
2		6	M	4	FILL: Medium Stiff to Stiff, Very Dark Brown to Dark Yellowish Brown Lean Clay, Little Sand, Trace Gravel and Organics USDA: 10YR 2/2 to 4/4 Clay Loam (Fill)	(0.75-1.5)	22.5			3.8
3		10	M	15	Medium Dense, Light Brownish Gray to Light Yellowish Brown Fine to Medium SAND, Little to Some Silt, Little Gravel (SP-SM/SM - Possible Fill) USDA: 10YR 6/2 to 6/4 Loamy Sand to Sandy Loam					
4		14	M	34	Dense, Gray to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) USDA: 10YR 5/1 to 6/4 Gravelly Sandy Loam					
5		12	M	23	Medium Dense to Very Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Thin Sandy Lean Clay Seams and Cobbles/Boulders (SM) USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam, Scattered Thin Sandy Clay Loam Seams					
6		12	M	25						
7		6	M	64/9"	Probable Cobble/Boulder near 19.5 ft					
					End of Boring at 20 ft					
					Borehole Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling ☒ NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start **12/3/19** End **12/3/19**
 Driller **BSD** Chief **KD** Rig **D-120**
 Logger **JF** Editor **TFG**
 Drill Method **2.25" HSA; Autohammer**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Proposed Public Library
Amund Reindahl Park - 1818 Portage Road
 Location City of Madison, Dane County, Wisconsin

Boring No. 8
 Surface Elevation (ft) 884.0±
 Job No. C19051-15
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	qu (qa) (tsf)	W	LL	PL	LI
					8± in. TOPSOIL (OL)					
1		10	M	14	Stiff, Very Dark Gray to Brown Organic to Lean CLAY, Trace Sand (OL/CL - Possible Lower Horizon Topsoil in Upper Part of Layer) USDA: 10YR 3/1 to 5/3 Silty Clay Loam	(1.0-2.0)	29.1			4.9
2		18	M	14	Medium Dense to Very Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Silt Seams and Cobbles/Boulders (SM) USDA: 10YR 6/3 to 6/4 Sandy Loam to Gravelly Sandy Loam, Scattered Silt Loam Seams P200 (Samples 2 and 3 - 3.5 to 7.5 ft): 29.4%		8.0			
3		16	M	19						
4		16	M	17						
5		2	M	50/2"						
6		2	M	50/2"						
7		14	M	57						
					End of Boring at 20 ft					
					Borehole Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 12/4/19 End 12/4/19
 Driller BSD Chief KD Rig D-120
 Logger JF Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Proposed Public Library
Amund Reindahl Park - 1818 Portage Road
 Location City of Madison, Dane County, Wisconsin

Boring No. 9
 Surface Elevation (ft) 884.0±
 Job No. C19051-15
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL
						 11± in. TOPSOIL (OL)					
1		6	M	8		 Stiff to Very Stiff, Brown to Very Dark Gray Lean CLAY, Trace to Little Sand and Gravel, Trace Organics (CL - Possible Fill) <i>USDA: 10YR 4/3 to 3/1 Silty Clay Loam</i>	(1.75-3.25)	20.9			3.2
2		10	M	11		 Very Stiff to Hard, Brown/Dark Gray (Lightly Mottled) Lean CLAY, Trace to Little Sand (CL) <i>USDA: 10YR 5/3 (Redox: c2f 10YR 4/1) Silty Clay Loam</i>	(3.5-4.5+)				
3		18	W	5		 Very Soft to Soft, Brown to Dark Brown Sandy Lean CLAY, Trace Gravel (CL) <i>USDA: 10YR 4/3 to 3/3 Sandy Clay Loam</i>	(0.25)	23.2			
4		16	M	17		 Medium Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) <i>USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam</i>					
5		10	M	31		 Dense to Very Dense, Light Yellowish Brown Fine to Medium SAND, Some Silt, Trace to Little Gravel, Scattered Cobbles/Boulders (SM) <i>USDA: 2.5Y 6/4 Loamy Fine Sand</i> P200 (Sample 5 - 11 to 12.5 ft): 27.5%		8.9			
6		4	M	50/2"		 Probable Cobble/Boulder near 14 ft					
7		16	M	59		 Very Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) <i>USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam</i>					
						End of Boring at 20 ft					
						Borehole Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 12/4/19 End 12/4/19
 Driller BSD Chief KD Rig D-120
 Logger JF Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Proposed Public Library
Amund Reindahl Park - 1818 Portage Road
 Location City of Madison, Dane County, Wisconsin

Boring No. 10
 Surface Elevation (ft) 886.0±
 Job No. C19051-15
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL	LI
							11± in. TOPSOIL (OL)					
1		12	M	6			Stiff, Brown Lean CLAY, Trace Sand (CL) USDA: 10YR 4/3 Silty Clay Loam	(1.75-2.0)	28.1			
2		14	M/W	10			Medium Dense to Very Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam					
3		16	M	15								
4		16	M	15								
5		12	M	42								
6		10	M	49								
7		8	M	50/4"			Probable Cobble/Boulder near 19 ft					
							End of Boring at 20 ft					
							Borehole Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 12/4/19 End 12/4/19
 Driller BSD Chief KD Rig D-120
 Logger JF Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Proposed Public Library
Amund Reindahl Park - 1818 Portage Road
 Location City of Madison, Dane County, Wisconsin

Boring No. 11
 Surface Elevation (ft) 886.5±
 Job No. C19051-15
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL	LI
						 11± in. TOPSOIL (OL)						
1		12	M	13		 Very Stiff, Brown/Gray (Mottled) Lean CLAY, Trace Sand (CL) <i>USDA: 10YR 5/3 (Redox: c1d 10YR 6/1) Silty Clay Loam</i>	(2.25-2.75)					
2		12	M	8			Stiff, Brown Lean CLAY, Little Sand (CL) <i>USDA: 10YR 5/3 Clay Loam</i>	(1.0-1.5)				
					5	 Medium Dense to Very Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) <i>USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam</i> Probable Cobble/Boulder near 6.5 ft P200 (Samples 4 and 5 - 8.5 to 12.5 ft): 29.8%						
3		6	M	50/5"								
4		14	M	18								
					10							
5		12	M	16								
6		12	M	18								
					15							
7		14	M	47								
					20							
						End of Boring at 20 ft						
						Borehole Backfilled with Bentonite Chips						

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 12/4/19 End 12/4/19
 Driller BSD Chief KD Rig D-120
 Logger JF Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Proposed Public Library
Amund Reindahl Park - 1818 Portage Road
 Location City of Madison, Dane County, Wisconsin

Boring No. 12
 Surface Elevation (ft) 882.5±
 Job No. C19051-15
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES						
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL	LI	
							10± in. TOPSOIL (OL)						
1		6	M	9			Medium Stiff to Stiff, Brown Lean CLAY, Little Sand (CL) <i>USDA: 10YR 5/3 Clay Loam</i>	(0.5-1.25)	22.3				
							Medium Dense, Pale Brown Sandy SILT, Little to Some Gravel, Scattered Cobbles/Boulders (ML) <i>USDA: 10YR 6/3 Loam</i>						
2		16	M	20									
					5								
3		16	M	15			Medium Dense to Very Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) <i>USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam</i>						
4		14	M	21									
					10								
5		4	M	24					Probable Cobble/Boulder near 11.5 ft - Limited Recovery in Sample 5				
6		10	M	27									
					15								
7		14	M	78									
					20								
End of Boring at 20 ft													
Borehole Backfilled with Bentonite Chips													

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 12/5/19 End 12/5/19
 Driller BSD Chief KD Rig D-120
 Logger JF Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Proposed Public Library**
Amund Reindahl Park - 1818 Portage Road
 Location **City of Madison, Dane County, Wisconsin**

Boring No. **13**
 Surface Elevation (ft) **884.0±**
 Job No. **C19051-15**
 Sheet **1** of **1**

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL
						 10± in. TOPSOIL (OL)					
1		6	M	9		 Medium Stiff, Brown Lean CLAY, Trace Sand (CL) <i>USDA: 10YR 5/3 Silty Clay Loam</i>	(0.5-1.0)	26.7			
2		10	M	9		 Loose to Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) <i>USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam</i>					
3		12	M	25							
4		14	M	18							
					10						
5		14	M	27							
6		12	M	47							
					15						
7		14	M	41							
					20						
End of Boring at 20 ft											
Borehole Backfilled with Bentonite Chips											

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling ☐ NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start **12/9/19** End **12/9/19**
 Driller **BSD** Chief **KD** Rig **D-120**
 Logger **JF** Editor **TFG**
 Drill Method **2.25" HSA; Autohammer**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Proposed Public Library
Amund Reindahl Park - 1818 Portage Road
 Location City of Madison, Dane County, Wisconsin

Boring No. 14
 Surface Elevation (ft) 884.0±
 Job No. C19051-15
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES						
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL	LI	
							11± in. TOPSOIL (OL)						
1		10	M	7			Medium Stiff to Stiff, Brown Lean CLAY, Trace Sand (CL) USDA: 10YR 4/3 Silty Clay Loam	(0.75-1.25)	27.4				
							Medium Dense to Very Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam P200 (Samples 2 and 3 - 3.5 to 7.5 ft): 30.0%						
2		6	M	18									
					5								
3		14	M	13						9.0			
4		10	M	13									
					10								
5		4	M	24									
6		0	-	50/1"			Probable Cobble/Boulder near 13.5 ft - No Recovery in Sample 6						
					15								
7		6	M	50/5"			Probable Cobble/Boulder near 19 ft						
					20								
						End of Boring at 20 ft							
						Borehole Backfilled with Bentonite Chips							

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 12/9/19 End 12/9/19
 Driller BSD Chief KD Rig D-120
 Logger JF Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

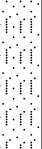


LOG OF TEST BORING

Project Proposed Public Library
 Location Amund Reindahl Park - 1818 Portage Road
City of Madison, Dane County, Wisconsin

Boring No. 15
 Surface Elevation (ft) 882.0±
 Job No. C19051-15
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL	LI
							12± in. TOPSOIL (OL)					
1		12	M	9			Stiff to Very Stiff, Brown Lean CLAY, Trace Sand (CL) <i>USDA: 10YR 5/3 Silty Clay Loam</i>	(1.75-2.0)	28.2			
2		12	M	11			(2.25-2.5)					
					5		Medium Stiff/Medium Dense, Fine Layers of Brown to Pale Brown Lean CLAY, SILT and Fine SAND, Trace Silt (CL/ML/SP) <i>USDA: Stratified 10YR 4/3 to 6/3 Silty Clay Loam, Silt Loam and Fine Sand</i>	(0.5-0.75)				
3		16	M	14								
4		18	M	14			Medium Dense to Very Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) <i>USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam</i>					
					10							
5		14	M	23								
6		12	M	26								
					15							
												
7		8	M	50/4"			Probable Cobble/Boulder near 19 ft					
					20							
						End of Boring at 20 ft						
						Borehole Backfilled with Bentonite Chips						

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 12/5/19 End 12/5/19
 Driller BSD Chief KD Rig D-120
 Logger JF Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Proposed Public Library
Amund Reindahl Park - 1818 Portage Road
 Location City of Madison, Dane County, Wisconsin

Boring No. 16
 Surface Elevation (ft) 878.5±
 Job No. C19051-15
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL	LI
							13± in. TOPSOIL (OL)					
1		8	M	9			Loose/Medium Stiff to Very Stiff, Black to Dark Grayish Brown/Dark Gray (Lightly Mottled) Organic SILT to Lean CLAY, Trace Sand and Organics (OL/CL - Probable Lower Horizon Topsoil in Upper Part of Layer) <i>USDA: 10YR 2/1 to 4/2 (Redox: c1f 10YR 4/1) Silt Loam to Silty Clay Loam</i>	(0.75-2.75)	26.6			5.3
2		6	M	54/7"			Stiff to Very Stiff, Brown Lean CLAY, Little Sand, Trace Gravel, Scattered Cobbles (CL) <i>USDA: 10YR 4/3 Clay Loam</i> Probable Cobble near 4.5 ft	(1.5-2.5)				
3		18	M	14			Medium Dense, Light Brownish Gray Silty Fine to Medium SAND, Some Gravel (SM) <i>USDA: 10YR 6/2 Gravelly Silt Loam</i> P200 (Sample 3 - 6 to 7.5 ft): 47.8%					
4		16	M	33			Medium Dense to Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) <i>USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam</i>		12.0			
5		12	M	26								
6		12	M	42								
												
7		14	M	24								
												
												
												
												
												
												
												
												
												
												

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 12/5/19 End 12/5/19
 Driller BSD Chief KD Rig D-120
 Logger JF Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Proposed Public Library**
Amund Reindahl Park - 1818 Portage Road
 Location **City of Madison, Dane County, Wisconsin**

Boring No. **17**
 Surface Elevation (ft) **880.0±**
 Job No. **C19051-15**
 Sheet **1** of **1**

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL	LI
							12± in. TOPSOIL (OL)					
1		12	M	5			Medium Stiff to Stiff, Brown Lean CLAY, Trace Sand (CL) USDA: 10YR 5/3 Silty Clay Loam	(0.75-1.25)				
2		14	M/W	3			Very Soft to Soft/Very Loose, Brown Sandy Lean CLAY to Clayey Fine to Medium SAND, Trace Gravel (CL/SC) USDA: 10YR 4/3 Sandy Clay Loam to Sandy Loam	(0.25)	24.8			
3		18	W	14			Medium Dense to Very Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam					
4		18	W	16								
5		18	W	17								
6		18	M	48								
												
7		16	M	74								
												
							End of Boring at 20 ft					
							Borehole Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ **3.5'** Upon Completion of Drilling **6.0'**
 Time After Drilling **(Probable)** **1 Day**
 Depth to Water **Perched** **6.0'** ∇
 Depth to Cave in **Water)** **8.0'**

Start **12/9/19** End **12/9/19**
 Driller **BSD** Chief **KD** Rig **D-120**
 Logger **JF** Editor **TFG**
 Drill Method **2.25" HSA; Autohammer**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Proposed Public Library
Amund Reindahl Park - 1818 Portage Road
 Location City of Madison, Dane County, Wisconsin

Boring No. 18
 Surface Elevation (ft) 876.0±
 Job No. C19051-15
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL
						 10± in. TOPSOIL (OL)					
1		6	M	7		 Medium Stiff to Stiff, Brown Lean CLAY, Trace Sand (CL) USDA: 10YR 5/3 Silty Clay Loam	(0.75-1.25)	28.1			
2		10	M/W	9		 Soft to Medium Stiff, Dark Brown Sandy Lean CLAY, Trace to Little Gravel (CL) USDA: 10YR 3/3 Sandy Clay Loam	(0.25-0.75)	20.7			
					5						
3		12	M	12		 Medium Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam					
4		14	M	17							
					10						
5		16	M	21		P200 (Samples 5 and 6 - 11 to 15 ft): 31.5%					
6		12	M	14							
					15						
7		18	M/W	16							
					20						
						End of Boring at 20 ft					
						Borehole Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 12/9/19 End 12/9/19
 Driller BSD Chief KD Rig D-120
 Logger JF Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Proposed Public Library
Amund Reindahl Park - 1818 Portage Road
 Location City of Madison, Dane County, Wisconsin

Boring No. 19
 Surface Elevation (ft) 875.5±
 Job No. C19051-15
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LI
						12± in. TOPSOIL (OL)					
1		10	M	5		Stiff, Brown/Grayish Brown (Lightly Mottled) Lean CLAY, Trace Sand, Scattered Organic Pockets (CL)	(1.25)	25.7			
						USDA: 10YR 4/3 (Redox: c2f 10YR 5/2) Silty Clay					
2		16	M	7		Loam	(1.0-1.25)	20.7			
						Stiff, Brown Sandy Lean CLAY, Little Gravel (CL)					
					5	USDA: 10YR 4/3 Sandy Clay Loam					
3		14	M	28		Medium Dense to Dense, Pale Brown Gravelly Fine to Coarse SAND, Trace Silt (SP)					
						USDA: 10YR 6/3 Very Gravelly Sand					
						P200 (Samples 3 and 4 - 6 to 10 ft): 4.3%		4.1			
4		6	M	47							
					10						
5		16	M	27		Medium Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM)					
						USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam					
6		18	M	24							
					15						
7		12	M/W	28							
					20						
End of Boring at 20 ft											
Borehole Backfilled with Bentonite Chips											

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 12/11/19 End 12/11/19
 Driller BSD Chief KD Rig D-120
 Logger JF Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

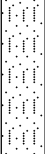


LOG OF TEST BORING

Project Proposed Public Library
Amund Reindahl Park - 1818 Portage Road
 Location City of Madison, Dane County, Wisconsin

Boring No. 20
 Surface Elevation (ft) 885.0±
 Job No. C19051-15
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL
						 10± in. TOPSOIL (OL)					
1		12	M	11		 Very Stiff to Hard, Very Dark Grayish Brown to Very Dark Gray Lean CLAY, Trace Sand and Organics (CL - Possible Lower Horizon Topsoil or Fill)	(2.25-4.5+)	20.0			3.4
2		12	M	10		 <i>USDA: 10YR 3/2 to 3/1 Silty Clay Loam</i> Stiff, Brown/Gray (Lightly Mottled) Lean CLAY, Trace to Little Sand (CL)	(1.25-1.5)				
					5	 <i>USDA: 10YR 5/3 (Redox: f2f 10YR 6/1) Silty Clay Loam</i>					
3		12	M	17		 Medium Dense to Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM)					
						<i>USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam</i>		7.0			
4		12	M	14		 P200 (Samples 3 and 4 - 6 to 10 ft): 31.9%					
					10						
5		12	M	15							
											
6		12	M	20							
					15						
											
7		14	M	39							
					20						
						End of Boring at 20 ft					
						Borehole Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 12/3/19 End 12/3/19
 Driller BSD Chief KD Rig D-120
 Logger JF Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

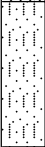
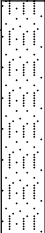
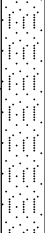
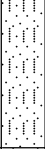


LOG OF TEST BORING

Project **Proposed Public Library**
Amund Reindahl Park - 1818 Portage Road
 Location **City of Madison, Dane County, Wisconsin**

Boring No. **21**
 Surface Elevation (ft) **882.0±**
 Job No. **C19051-15**
 Sheet **1** of **1**

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL
						 10± in. TOPSOIL (OL)					
1		12	M	9		 Stiff to Very Stiff, Very Dark Gray to Grayish Brown Organic to Lean CLAY, Trace Sand (OL/CL - Possible Lower Horizon Topsoil in Upper Part of Layer)	(1.25-3.5)	26.4			4.8
2		12	M	7		 <i>USDA: 10YR 3/1 to 5/2 Silty Clay Loam</i> Soft to Medium Stiff, Brown to Dark Brown Sandy Lean CLAY, Trace Gravel (CL) <i>USDA: 10YR 4/3 to 3/3 Sandy Clay Loam</i>	(0.75-1.0)	16.3			
3		18	M	11		 Medium Dense, Pale Brown Silty Fine SAND, Trace Gravel (SM) <i>USDA: 10YR 6/3 Fine Sandy Loam</i>	(0.25-1.0)	13.1			
4		16	M	10		 P200 (Sample 4 - 8.5 to 10 ft): 38.7%		11.5			
5		14	M	22		 Medium Dense to Very Dense, Pale Brown to Light Yellowish Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) <i>USDA: 10YR 6/3 to 6/4 Gravelly Sandy Loam</i>					
6		14	M	24							
7		14	M	70							
						End of Boring at 20 ft					
						Borehole Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling ☒ NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 12/4/19 End 12/4/19
 Driller BSD Chief KD Rig D-120
 Logger JF Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	8.1	2.6	5.6	50.9	32.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4	100.0		
1/2	94.8		
3/8	94.8		
#4	91.9		
#8	89.7		
#10	89.3		
#16	88.0		
#30	86.2		
#40	83.7		
#50	76.6		
#80	55.4		
#100	50.3		
#200	32.8		

* (no specification provided)

Sample Number: B-1: S-3

Date: 12/11/19

Material Description

Brown Fine to Medium Sand, Some Silt, Little Gravel

Atterberg Limits

PL=

LL=

PI=

Coefficients

D₉₀= 2.6042

D₈₅= 0.4893

D₆₀= 0.2026

D₅₀= 0.1484

D₃₀=

D₁₅=

D₁₀=

C_u=

C_c=

Classification

USCS= SM

AASHTO=

Remarks

USDA: Sandy Loam



Client: Madison City of Eng. MLK Blvd.

Project: Reindahl Park Library, Madison

Project No: C19051-15

Figure

Tested By: DRW

Checked By: TFG

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	9.2	7.1	3.8	7.9	38.3	33.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
3/4	90.8		
1/2	87.9		
3/8	86.4		
#4	83.7		
#8	81.4		
#10	79.9		
#16	78.1		
#30	75.7		
#40	72.0		
#50	66.0		
#80	51.1		
#100	45.2		
#200	33.7		

* (no specification provided)

Material Description

Brown Fine to Medium Sand, Some Silt and Gravel

Atterberg Limits

PL=

LL=

PI=

Coefficients

D₉₀= 18.2229

D₈₅= 7.3351

D₆₀= 0.2382

D₅₀= 0.1742

D₃₀=

D₁₅=

D₁₀=

C_u=

C_c=

Classification

USCS= SM

AASHTO=

Remarks

USDA: Gravelly Sandy Loam

Sample Number: B-3: S-5 + S-6

Date: 12/11/19

CGC, Inc.

Client: Madison City of Eng. MLK Blvd.

Project: Reindahl Park Library, Madison

Project No: C19051-15

Figure

Tested By: DRW

Checked By: TFG

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	10.7	5.4	8.3	43.8	31.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4	100.0		
1/2	95.3		
3/8	93.0		
#4	89.3		
#8	84.8		
#10	83.9		
#16	81.8		
#30	79.0		
#40	75.6		
#50	69.8		
#80	52.3		
#100	46.8		
#200	31.8		

* (no specification provided)

Sample Number: B-6: S-4

Material Description

Brown Fine to Coarse Sand, Some Silt, Little Gravel

Atterberg Limits

PL=

LL=

PI=

Coefficients

D₉₀= 5.4231

D₈₅= 2.4289

D₆₀= 0.2229

D₅₀= 0.1677

D₃₀=

D₁₅=

D₁₀=

C_u=

C_c=

Classification

USCS= SM

AASHTO=

Remarks

USDA: Gravelly Sandy Loam

Date: 12/11/19



Client: Madison City of Eng. MLK Blvd.

Project: Reindahl Park Library, Madison

Project No: C19051-15

Figure

Tested By: DRW

Checked By: TFG

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	1.4	9.6	3.8	7.7	48.1	29.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
3/4	98.6		
1/2	93.2		
3/8	92.2		
#4	89.0		
#8	86.5		
#10	85.2		
#16	83.6		
#30	81.2		
#40	77.5		
#50	71.6		
#80	54.5		
#100	46.4		
#200	29.4		

* (no specification provided)

Material Description

Brown Fine to Medium Sand, Some Silt, Little Gravel

Atterberg Limits

PL=

LL=

PI=

Coefficients

D₉₀= 5.8767

D₈₅= 1.9462

D₆₀= 0.2056

D₅₀= 0.1630

D₃₀= 0.0780

D₁₅=

D₁₀=

C_u=

C_c=

Classification

USCS= SM

AASHTO=

Remarks

USDA: Sandy Loam

Sample Number: B-8: S-2 + S-3

Date: 12/11/19

CGC, Inc.

Client: Madison City of Eng. MLK Blvd.

Project: Reindahl Park Library, Madison

Project No: C19051-15

Figure

Tested By: DRW

Checked By: TFG

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	1.8	2.8	8.2	59.7	27.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8	100.0		
#4	98.2		
#8	95.8		
#10	95.4		
#16	93.6		
#30	90.7		
#40	87.2		
#50	80.7		
#80	62.6		
#100	53.3		
#200	27.5		

* (no specification provided)

Material Description

Brown Fine to Medium Sand, Some Silt, Trace Gravel

Atterberg Limits

PL=

LL=

PI=

Coefficients

D₉₀= 0.5505

D₈₅= 0.3696

D₆₀= 0.1709

D₅₀= 0.1401

D₃₀= 0.0813

D₁₅=

D₁₀=

C_u=

C_c=

Classification

USCS= SM

AASHTO=

Remarks

USDA: Loamy Fine Sand

Sample Number: B-9: S-5

Date: 12/11/19

CGC, Inc.

Client: Madison City of Eng. MLK Blvd.

Project: Reindahl Park Library, Madison

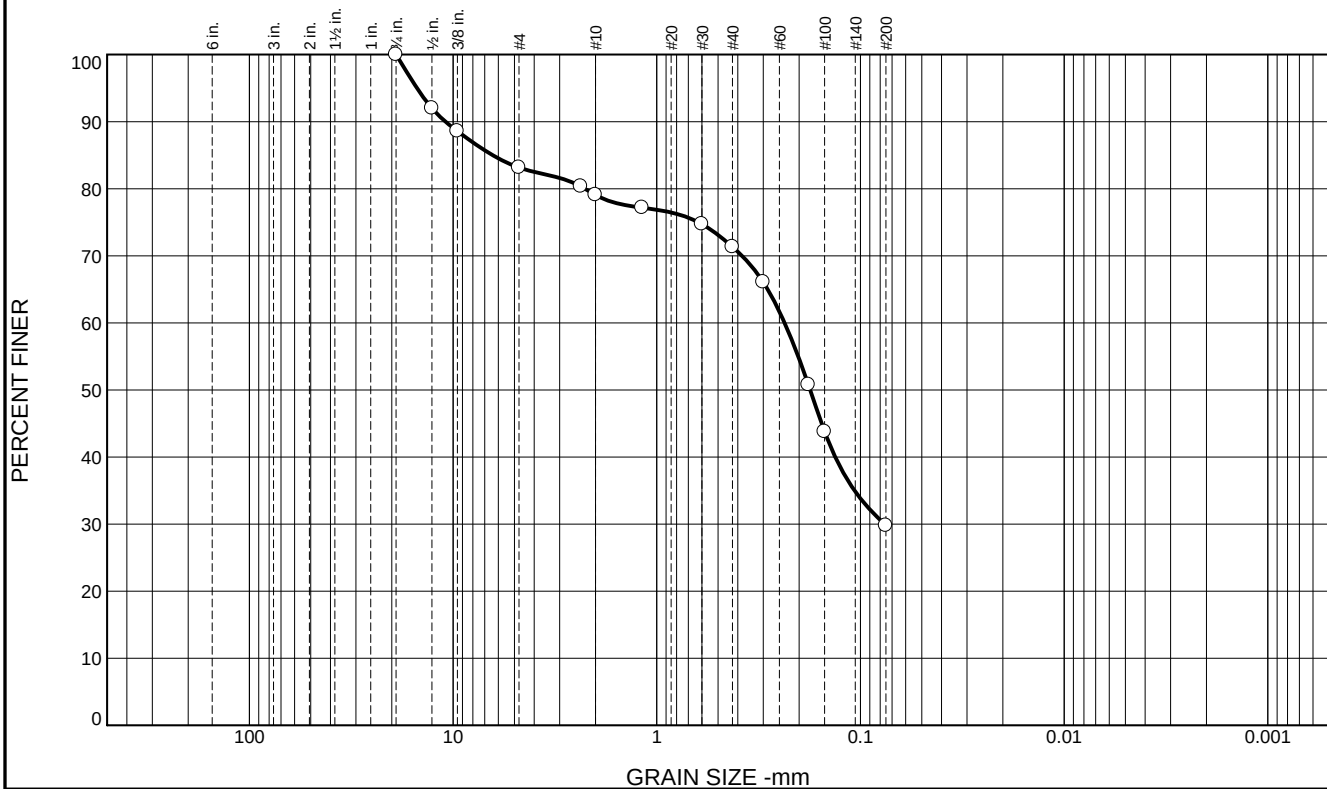
Project No: C19051-15

Figure

Tested By: DRW

Checked By: TFG

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	16.8	4.1	7.8	41.5	29.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4	100.0		
1/2	92.0		
3/8	88.6		
#4	83.2		
#8	80.3		
#10	79.1		
#16	77.2		
#30	74.7		
#40	71.3		
#50	66.1		
#80	50.8		
#100	43.8		
#200	29.8		

* (no specification provided)

Material Description

Brown Fine to Medium Sand, Some Silt and Gravel

Atterberg Limits

PL=

LL=

PI=

Coefficients

D₉₀= 10.8956

D₈₅= 6.3888

D₆₀= 0.2357

D₅₀= 0.1765

D₃₀= 0.0763

D₁₅=

D₁₀=

C_u=

C_c=

Classification

USCS= SM

AASHTO=

Remarks

USDA: Gravelly Sandy Loam

Sample Number: B-11: S-4 + S-5

Date: 12/11/19

CGC, Inc.

Client: Madison City of Eng. MLK Blvd.

Project: Reindahl Park Library, Madison

Project No: C19051-15

Figure

Tested By: DRW

Checked By: TFG

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	6.1	10.6	3.3	8.1	41.9	30.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
3/4	93.9		
1/2	89.8		
3/8	87.6		
#4	83.3		
#8	81.1		
#10	80.0		
#16	78.2		
#30	75.8		
#40	71.9		
#50	65.6		
#80	50.0		
#100	43.6		
#200	30.0		

* (no specification provided)

Material Description

Brown Fine to Medium Sand, Some Silt and Gravel

Atterberg Limits

PL=

LL=

PI=

Coefficients

D₉₀= 12.9961

D₈₅= 6.6257

D₆₀= 0.2431

D₅₀= 0.1800

D₃₀= 0.0751

D₁₅=

D₁₀=

C_u=

C_c=

Classification

USCS= SM

AASHTO=

Remarks

USDA: Gravelly Sandy Loam

Sample Number: B-14: S-2 + S-3

Date: 12/16/19



Client: Madison City of Eng. MLK Blvd.

Project: Reindahl Park Library, Madison

Project No: C19051-15

Figure

Tested By: DRW

Checked By: TFG

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	8.9	5.5	3.3	8.2	26.3	47.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
3/4	91.1		
1/2	89.9		
3/8	89.2		
#4	85.6		
#8	83.0		
#10	82.3		
#16	79.9		
#30	76.5		
#40	74.1		
#50	70.7		
#80	62.8		
#100	59.8		
#200	47.8		

* (no specification provided)

Material Description

Brown Silty Fine to Medium Sand, Some Gravel

Atterberg Limits

PL=

LL=

PI=

Coefficients

D₉₀= 13.0489

D₈₅= 4.0984

D₆₀= 0.1514

D₅₀= 0.0849

D₃₀=

D₁₅=

D₁₀=

C_u=

C_c=

Classification

USCS= SM

AASHTO=

Remarks

USDA: Gravelly Silt Loam

Sample Number: B-16: S-3

Date: 12/11/19

CGC, Inc.

Client: Madison City of Eng. MLK Blvd.

Project: Reindahl Park Library, Madison

Project No: C19051-15

Figure

Tested By: DRW

Checked By: TFG

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	2.2	10.7	3.8	8.1	43.7	31.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
3/4	97.8		
1/2	92.3		
3/8	91.6		
#4	87.1		
#8	84.5		
#10	83.3		
#16	81.4		
#30	78.9		
#40	75.2		
#50	69.4		
#80	53.8		
#100	46.6		
#200	31.5		

* (no specification provided)

Material Description

Brown Fine to Medium Sand, Some Silt and Gravel

Atterberg Limits

PL=

LL=

PI=

Coefficients

D₉₀= 7.0599

D₈₅= 2.5489

D₆₀= 0.2139

D₅₀= 0.1638

D₃₀=

D₁₅=

D₁₀=

C_u=

C_c=

Classification

USCS= SM

AASHTO=

Remarks

USDA: Gravelly Sandy Loam

Sample Number: B-18: S-5 + S-6

Date: 12/16/19

CGC, Inc.

Client: Madison City of Eng. MLK Blvd.

Project: Reindahl Park Library, Madison

Project No: C19051-15

Figure

Tested By: DRW

Checked By: TFG

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	7.1	33.6	8.9	13.3	32.8	4.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
3/4	92.9		
1/2	77.4		
3/8	72.4		
#4	59.3		
#8	52.4		
#10	50.4		
#16	47.3		
#30	43.3		
#40	37.1		
#50	28.9		
#80	14.8		
#100	10.2		
#200	4.3		

* (no specification provided)

Material Description

Brown Gravelly Fine to Coarse Sand, Trace Silt

Atterberg Limits

PL=

LL=

PI=

Coefficients

D₉₀= 17.6207

D₈₅= 15.6107

D₆₀= 4.9607

D₅₀= 1.9340

D₃₀= 0.3130

D₁₅= 0.1816

D₁₀= 0.1486

C_u= 33.38

C_c= 0.13

Classification

USCS= SP

AASHTO=

Remarks

USDA: Very Gravelly Sand

Sample Number: B-19: S-3 + S-4

Date: 12/16/19

CGC, Inc.

Client: Madison City of Eng. MLK Blvd.

Project: Reindahl Park Library, Madison

Project No: C19051-15

Figure

Tested By: DRW

Checked By: TFG

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	12.6	3.7	7.9	43.9	31.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4	100.0		
1/2	96.4		
3/8	91.6		
#4	87.4		
#8	85.0		
#10	83.7		
#16	82.0		
#30	79.5		
#40	75.8		
#50	70.1		
#80	54.4		
#100	47.4		
#200	31.9		

* (no specification provided)

Sample Number: B-20: S-3 + S-4

Date: 12/11/19

Material Description

Brown Fine to Medium Sand, Some Silt and Gravel

Atterberg Limits

PL=

LL=

PI=

Coefficients

D₉₀= 8.3960

D₈₅= 2.3498

D₆₀= 0.2097

D₅₀= 0.1607

D₃₀=

D₁₅=

D₁₀=

C_u=

C_c=

Classification

USCS= SM

AASHTO=

Remarks

USDA: Gravelly Sandy Loam



Client: Madison City of Eng. MLK Blvd.

Project: Reindahl Park Library, Madison

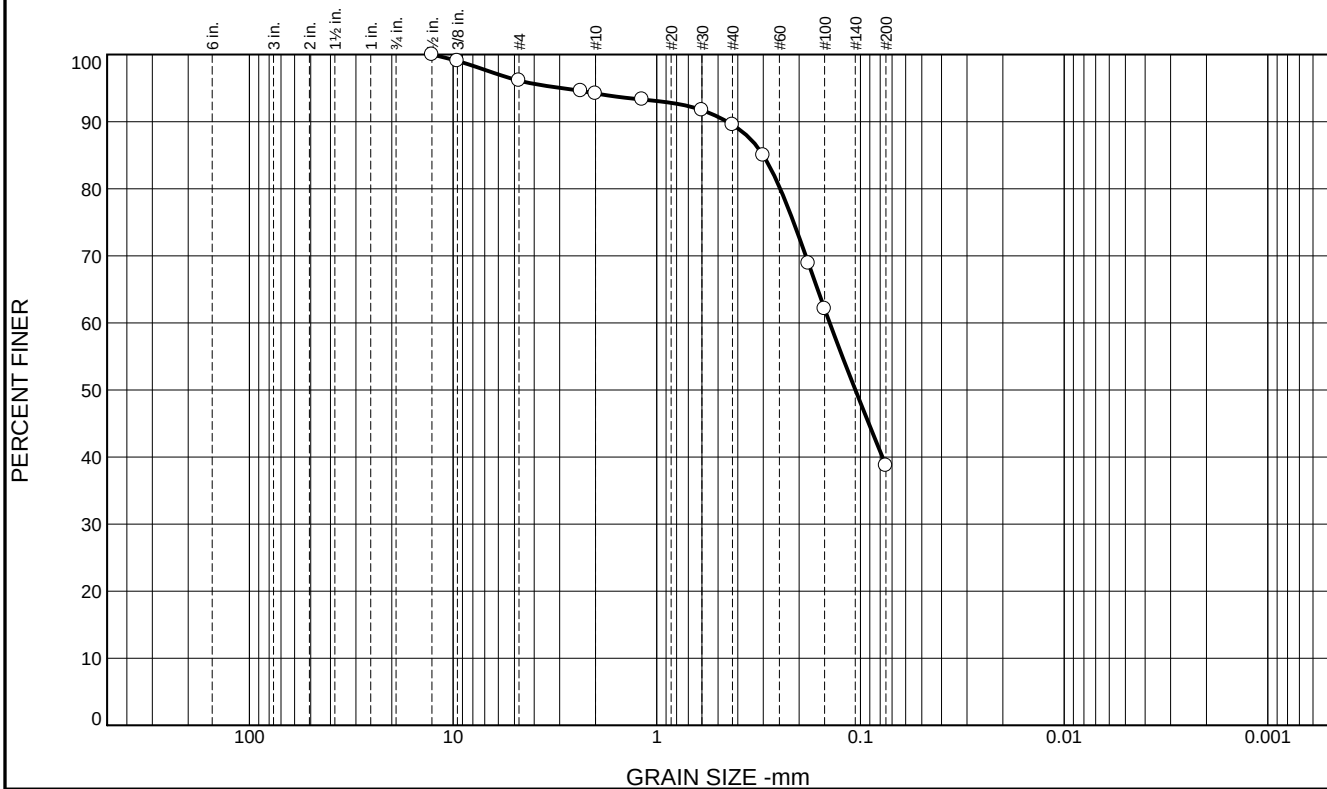
Project No: C19051-15

Figure

Tested By: DRW

Checked By: TFG

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	3.9	1.9	4.7	50.8	38.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2	100.0		
3/8	99.1		
#4	96.1		
#8	94.6		
#10	94.2		
#16	93.3		
#30	91.7		
#40	89.5		
#50	85.0		
#80	68.9		
#100	62.1		
#200	38.7		

* (no specification provided)

Material Description

Brown Silty Fine Sand, Trace Gravel

Atterberg Limits

PL=

LL=

PI=

Coefficients

D₉₀= 0.4516

D₈₅= 0.3003

D₆₀= 0.1415

D₅₀= 0.1059

D₃₀=

D₁₅=

D₁₀=

C_u=

C_c=

Classification

USCS= SM

AASHTO=

Remarks

USDA: Fine Sandy Loam

Sample Number: B-21: S-4

Date: 12/11/19

CGC, Inc.

Client: Madison City of Eng. MLK Blvd.

Project: Reindahl Park Library, Madison

Project No: C19051-15

Figure

Tested By: DRW

Checked By: TFG

CGC, Inc.

LOG OF TEST BORING

General Notes

DESCRIPTIVE SOIL CLASSIFICATION

Grain Size Terminology

Soil Fraction	Particle Size	U.S. Standard Sieve Size
Boulders	Larger than 12"	Larger than 12"
Cobbles	3" to 12"	3" to 12"
Gravel: Coarse.....	¾" to 3"	¾" to 3"
Fine	4.76 mm to ¾"	#4 to ¾"
Sand: Coarse.....	2.00 mm to 4.76 mm.....	#10 to #4
Medium	0.42 to mm to 2.00 mm	#40 to #10
Fine	0.074 mm to 0.42 mm.....	#200 to #40
Silt.....	0.005 mm to 0.074 mm.....	Smaller than #200
Clay.....	Smaller than 0.005 mm.....	Smaller than #200

Plasticity characteristics differentiate between silt and clay.

General Terminology

Physical Characteristics
Color, moisture, grain shape, fineness, etc.

Major Constituents
Clay, silt, sand, gravel

Structure
Laminated, varved, fibrous, stratified,
cemented, fissured, etc.

Geologic Origin
Glacial, alluvial, eolian, residual, etc.

Relative Density

Term	"N" Value
Very Loose.....	0 - 4
Loose.....	4 - 10
Medium Dense.....	10 - 30
Dense.....	30 - 50
Very Dense.....	Over 50

Relative Proportions Of Cohesionless Soils

Proportional Term	Defining Range by Percentage of Weight
Trace.....	0% - 5%
Little	5% - 12%
Some.....	12% - 35%
And	35% - 50%

Consistency

Term	q _u -tons/sq. ft
Very Soft.....	0.0 to 0.25
Soft.....	0.25 to 0.50
Medium.....	0.50 to 1.0
Stiff.....	1.0 to 2.0
Very Stiff.....	2.0 to 4.0
Hard.....	Over 4.0

Organic Content by Combustion Method

Soil Description	Loss on Ignition
Non Organic.....	Less than 4%
Organic Silt/Clay.....	4 - 12%
Sedimentary Peat.....	12% - 50%
Fibrous and Woody Peat...	More than 50%

Plasticity

Term	Plastic Index
None to Slight.....	0 - 4
Slight.....	5 - 7
Medium.....	8 - 22
High to Very High ..	Over 22

The penetration resistance, N, is the summation of the number of blows required to effect two successive 6" penetrations of the 2" split-barrel sampler. The sampler is driven with a 140 lb. weight falling 30" and is seated to a depth of 6" before commencing the standard penetration test.

SYMBOLS

Drilling and Sampling

CS – Continuous Sampling
RC – Rock Coring: Size AW, BW, NW, 2"W
RQD – Rock Quality Designation
RB – Rock Bit/Roller Bit
FT – Fish Tail
DC – Drove Casing
C – Casing: Size 2 ½", NW, 4", HW
CW – Clear Water
DM – Drilling Mud
HSA – Hollow Stem Auger
FA – Flight Auger
HA – Hand Auger
COA – Clean-Out Auger
SS - 2" Dia. Split-Barrel Sample
2ST – 2" Dia. Thin-Walled Tube Sample
3ST – 3" Dia. Thin-Walled Tube Sample
PT – 3" Dia. Piston Tube Sample
AS – Auger Sample
WS – Wash Sample
PTS – Peat Sample
PS – Pitcher Sample
NR – No Recovery
S – Sounding
PMT – Borehole Pressuremeter Test
VS – Vane Shear Test
WPT – Water Pressure Test

Laboratory Tests

q_a – Penetrometer Reading, tons/sq ft
q_a – Unconfined Strength, tons/sq ft
W – Moisture Content, %
LL – Liquid Limit, %
PL – Plastic Limit, %
SL – Shrinkage Limit, %
LI – Loss on Ignition
D – Dry Unit Weight, lbs/cu ft
pH – Measure of Soil Alkalinity or Acidity
FS – Free Swell, %

Water Level Measurement

▽ - Water Level at Time Shown
NW – No Water Encountered
WD – While Drilling
BCR – Before Casing Removal
ACR – After Casing Removal
CW – Cave and Wet
CM – Caved and Moist

Note: Water level measurements shown on the boring logs represent conditions at the time indicated and may not reflect static levels, especially in cohesive soils.

CGC, Inc.

Madison - Milwaukee

Unified Soil Classification System

UNIFIED SOIL CLASSIFICATION AND SYMBOL CHART

COARSE-GRAINED SOILS

(more than 50% of material is larger than No. 200 sieve size)

Clean Gravels (Less than 5% fines)	
GRAVELS More than 50% of coarse fraction larger than No. 4 sieve size	 GW Well-graded gravels, gravel-sand mixtures, little or no fines
	 GP Poorly-graded gravels, gravel-sand mixtures, little or no fines
Gravels with fines (More than 12% fines)	
	 GM Silty gravels, gravel-sand-silt mixtures
	 GC Clayey gravels, gravel-sand-clay mixtures
Clean Sands (Less than 5% fines)	
SANDS 50% or more of coarse fraction smaller than No. 4 sieve size	 SW Well-graded sands, gravelly sands, little or no fines
	 SP Poorly graded sands, gravelly sands, little or no fines
Sands with fines (More than 12% fines)	
	 SM Silty sands, sand-silt mixtures
	 SC Clayey sands, sand-clay mixtures

FINE-GRAINED SOILS

(50% or more of material is smaller than No. 200 sieve size.)

SILTS AND CLAYS Liquid limit less than 50%	 ML Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
	 CL Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
	 OL Organic silts and organic silty clays of low plasticity
SILTS AND CLAYS Liquid limit 50% or greater	 MH Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
	 CH Inorganic clays of high plasticity, fat clays
	 OH Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS	 PT Peat and other highly organic soils

LABORATORY CLASSIFICATION CRITERIA

GW $C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3

GP Not meeting all gradation requirements for GW

GM Atterberg limits below "A" line or P.I. less than 4

GC Atterberg limits above "A" line or P.I. greater than 7

Above "A" line with P.I. between 4 and 7 are borderline cases requiring use of dual symbols

SW $C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3

SP Not meeting all gradation requirements for GW

SM Atterberg limits below "A" line or P.I. less than 4

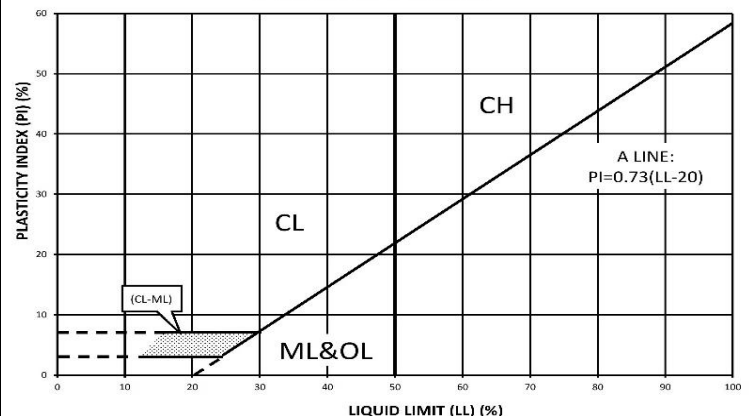
SC Atterberg limits above "A" line with P.I. greater than 7

Limits plotting in shaded zone with P.I. between 4 and 7 are borderline cases requiring use of dual symbols

Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:

Less than 5 percent GW, GP, SW, SP
More than 12 percent GM, GC, SM, SC
5 to 12 percent Borderline cases requiring dual symbols

PLASTICITY CHART



APPENDIX C

DOCUMENT QUALIFICATIONS

APPENDIX C

DOCUMENT QUALIFICATIONS

I. GENERAL RECOMMENDATIONS/LIMITATIONS

CGC, Inc. should be provided the opportunity for a general review of the final design and specifications to confirm that earthwork and foundation requirements have been properly interpreted in the design and specifications. CGC should be retained to provide soil engineering services during excavation and subgrade preparation. This will allow us to observe that construction proceeds in compliance with the design concepts, specifications and recommendations, and also will allow design changes to be made in the event that subsurface conditions differ from those anticipated prior to the start of construction. CGC does not assume responsibility for compliance with the recommendations in this report unless we are retained to provide construction testing and observation services.

This report has been prepared in accordance with generally accepted soil and foundation engineering practices and no other warranties are expressed or implied. The opinions and recommendations submitted in this report are based on interpretation of the subsurface information revealed by the test borings indicated on the location plan. The report does not reflect potential variations in subsurface conditions between or beyond these borings. Therefore, variations in soil conditions can be expected between the boring locations and fluctuations of groundwater levels may occur with time. The nature and extent of the variations may not become evident until construction.

II. IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL ENGINEERING REPORT

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes. While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. *No one except you* should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one - not even you* - should apply the report for any purpose or project except the one originally contemplated.

READ THE FULL REPORT

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A GEOTECHNICAL ENGINEERING REPORT IS BASED ON A UNIQUE SET OF PROJECT-SPECIFIC FACTORS

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, *do not rely on a geotechnical engineering report* that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes - even minor ones - and request an assessment of their impact. *CGC cannot accept responsibility or liability for problems that occur because our reports do not consider developments of which we were not informed.*

SUBSURFACE CONDITIONS CAN CHANGE

A geotechnical engineering report is based on conditions that existed at the time the geotechnical engineer performed the study. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

MOST GEOTECHNICAL FINDINGS ARE PROFESSIONAL OPINION

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgement to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ - sometimes significantly - from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most

effective method of managing the risks associated with unanticipated conditions.

A REPORT'S RECOMMENDATIONS ARE NOT FINAL

Do not over-rely on the confirmation-dependent recommendations included in your report. *Those confirmation-dependent recommendations are not final*, because geotechnical engineers develop them principally from judgement and opinion. Geotechnical engineers can finalize their recommendations *only* by observing actual subsurface conditions revealed during construction. *CGC cannot assume responsibility or liability for the report's confirmation-dependent recommendations if we do not perform the geotechnical-construction observation required to confirm the recommendations' applicability.*

A GEOTECHNICAL ENGINEERING REPORT IS SUBJECT TO MISINTERPRETATION

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Constructors can also misinterpret a geotechnical engineering report. Confront that risk by having CGC participate in prebid and preconstruction conferences, and by providing geotechnical construction observation.

DO NOT REDRAW THE ENGINEER'S LOGS

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

GIVE CONSTRUCTORS A COMPLETE REPORT AND GUIDANCE

Some owners and design professionals mistakenly believe they can make constructors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give constructors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise constructors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure constructors have sufficient time to perform additional study.* Only then might you be in a position to give constructors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

READ RESPONSIBILITY PROVISIONS CLOSELY

Some clients, design professionals, and constructors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic

expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineer's responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

ENVIRONMENTAL CONCERNS ARE NOT COVERED

The equipment, techniques, and personnel used to perform an *environmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

OBTAIN PROFESSIONAL ASSISTANCE TO DEAL WITH MOLD

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, many mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; ***none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention.*** ***Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.***

RELY ON YOUR GEOTECHNICAL ENGINEER FOR ADDITIONAL ASSISTANCE

Membership in the Geotechnical Business Council (GBC) of Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk confrontation techniques that can be of genuine benefit for everyone involved with a construction project. Confer with CGC, a member of GBC, for more information.

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Geotechnical Business Council
of the Geoprofessional Business Association
8811 Colesville Road, Suite G 106
Silver Spring, MD 20910

APPENDIX D

RECOMMENDED COMPACTED FILL SPECIFICATIONS

APPENDIX D

CGC, INC.

RECOMMENDED COMPACTED FILL SPECIFICATIONS

General Fill Materials

Proposed fill shall contain no vegetation, roots, topsoil, peat, ash, wood or any other non-soil material which by decomposition might cause settlement. Also, fill shall never be placed while frozen or on frozen surfaces. Rock, stone or broken concrete greater than 6 in. in the largest dimension shall not be placed within 10 ft of the building area. Fill used greater than 10 ft beyond the building limits shall not contain rock, boulders or concrete pieces greater than a 2 sq ft area and shall not be placed within the final 2 ft of finish subgrade or in designated utility construction areas. Fill containing rock, boulders or concrete pieces should include sufficient finer material to fill voids among the larger fragments.

Special Fill Materials

In certain cases, special fill materials may be required for specific purposes, such as stabilizing subgrades, backfilling undercut excavations or filling behind retaining walls. For reference, WisDOT gradation specifications for various types of granular fill are attached in Table 1.

Placement Method

The approved fill shall be placed, spread and leveled in layers generally not exceeding 10 in. in thickness before compaction. The fill shall be placed at moisture content capable of achieving the desired compaction level. For clay soils or granular soils containing an appreciable amount of cohesive fines, moisture conditioning will likely be required.

It is the Contractor's responsibility to provide all necessary compaction equipment and other grading equipment that may be required to attain the specified compaction. Hand-guided vibratory or tamping compactors will be required whenever fill is placed adjacent to walls, footings, columns or in confined areas.

Compaction Specifications

Maximum dry density and optimum moisture content of the fill soil shall be determined in accordance with modified Proctor methods (ASTM D1557). The recommended field compaction as a percentage of the maximum dry density is shown in Table 2. Note that these compaction guidelines would generally not apply to coarse gravel/stone fill. Instead, a method specification would apply (e.g., compact in thin lifts with a vibratory compactor until no further consolidation is evident).

Testing Procedures

Representative samples of proposed fill shall be submitted to CGC, Inc. for optimum moisture-maximum density determination (ASTM D1557) prior to the start of fill placement. The sample size should be approximately 50 lb.

CGC, Inc. shall be retained to perform field density tests to determine the level of compaction being achieved in the fill. The tests shall generally be conducted on each lift at the beginning of fill placement and at a frequency mutually agreed upon by the project team for the remainder of the project.

Table 1
Gradation of Special Fill Materials

Material	WisDOT Section 311	WisDOT Section 312	WisDOT Section 305			WisDOT Section 209		WisDOT Section 210
	Breaker Run	Select Crushed Material	3-in. Dense Graded Base	1 1/4-in. Dense Graded Base	3/4-in. Dense Graded Base	Grade 1 Granular Backfill	Grade 2 Granular Backfill	Structure Backfill
Sieve Size	Percent Passing by Weight							
6 in.	100							
5 in.		90-100						
3 in.			90-100					100
1 1/2 in.		20-50	60-85					
1 1/4 in.				95-100				
1 in.					100			
3/4 in.			40-65	70-93	95-100			
3/8 in.				42-80	50-90			
No. 4			15-40	25-63	35-70	100 (2)	100 (2)	25-100
No. 10		0-10	10-30	16-48	15-55			
No. 40			5-20	8-28	10-35	75 (2)		
No. 100						15 (2)	30 (2)	
No. 200			2-12	2-12	5-15	8 (2)	15 (2)	15 (2)

Notes:

1. Reference: Wisconsin Department of Transportation *Standard Specifications for Highway and Structure Construction*.
2. Percentage applies to the material passing the No. 4 sieve, not the entire sample.
3. Per WisDOT specifications, both breaker run and select crushed material can include concrete that is 'substantially free of steel, building materials and other deleterious material'.

Table 2
Compaction Guidelines

Area	Percent Compaction (1)	
	Clay/Silt	Sand/Gravel
<u>Within 10 ft of building lines</u>		
Footing bearing soils	93 - 95	95
Under floors, steps and walks		
- Lightly loaded floor slab	90	90
- Heavily loaded floor slab and thicker fill zones	92	95
<u>Beyond 10 ft of building lines</u>		
Under walks and pavements		
- Less than 2 ft below subgrade	92	95
- Greater than 2 ft below subgrade	90	90
Landscaping	85	90

Notes:

1. Based on Modified Proctor Dry Density (ASTM D 1557)

APPENDIX E

**WISCONSIN DEPARTMENT OF SAFETY & PROFESSIONAL SERVICES
SOIL AND SITE EVALUATION – STORM FORM (21 BORINGS)**



Attachment 2:

SOIL AND SITE EVALUATION - STORM

In accordance with SPS 382.365, 385, Wis. Adm. Code, and WDNR Standard 1002

1002-CPS-23
Division of Industry Services

P.O. Box 2658

Madison, Wisconsin 53701

Scott Walker, Governor

Laura Gutierrez, Secretary

Page 1 of 7

Attach a complete site plan on paper not less than 8 1/2 x 11 inches in size. Plan must include, but not limited to: vertical and horizontal reference point (BM), direction and percent of slope, scale or dimensions, north arrow, and BM referenced to nearest road Please print all information Personal information you provide may be used for secondary purposes [Privacy Law, s. 15.04(1)(m)]	County Dane
	Parcel I.D. 251/0810-283-0097-9
	Reviewed by: Date:

Property Owner City of Madison Parks Amund Reindahl Park	Property Location Govt. Lot SE 1/4 SW 1/4 S 28 T 08 N R 10 E	
Property Owner's Mail Address 210 MLK Jr. Blvd., Room 104	Lot #	Block#
City Madison State WI Zip Code 53703-3342 Phone Number	Subd. Name or CSM #	
City Madison State WI Zip Code 53703-3342 Phone Number	☒ City ☐ Village ☐ Town Madison	Nearest Road 1818 Portage Road
Drainage area _____ ☐ sq ft ☐ acres Test site suitable for (check all that apply): ☐ Site not suitable; ☐ Bioretention; ☐ Subsurface Dispersal System; ☐ Reuse; ☐ Irrigation; ☐ Other _____	Hydraulic Application Test Method ☒ Morphological Evaluation ☐ Double Ring Infiltrometer ☐ Other: (specify) _____	
Soil Moisture Date of soil borings: _____ USDA-NRCS WETS Value: ☐ Dry = 1; ☐ Normal = 2; ☐ Wet = 3.		

B-1	#OBS.	☐ Pit ☒ Boring	Ground surface elevation 884.0 ft.	Elevation of limiting factor below 864.0 ft.						
Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-11	Topsoil (not sampled)								
2	11-30	10YR 5/3	none	SiCL	0m	mfi		<5		0.04
3	30-48	10YR 4/3	none	SCL	2csbk	mfi		<5		0.11
4	48-96	10YR 6/3	none	SL	1fsbk	mfr		11	33	0.50
5	96-126	10YR 6/3	none	LFS	0sg	ml		<5		0.50
6	126-240	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		15-25		0.50 ⁽¹⁾
Comments: ⁽¹⁾ Infiltration rate may be lower than published value due to fairly high in-place relative density. Deep-tilling or excavating/turning-over is recommended to loosen soil.										

B-2	#OBS.	☐ Pit ☒ Boring	Ground surface elevation 887.0 ft.	Elevation of limiting factor below 867.0 ft.						
Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-8	Topsoil (not sampled)								
2	8-66	10YR 5/3	none	SiCL	0m	mfi		<5		0.04
3	66-96	10YR 6/3	none	L	1fsbk	mfr		5-15		0.24
4	96-240	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		15-25		0.50 ⁽¹⁾
Comments: ⁽¹⁾ Infiltration rate may be lower than published value due to fairly high in-place relative density. Deep-tilling or excavating/turning-over is recommended to loosen soil.										

Name (Please Print)	Tim F. Gassenheimer	Signature		Credential Number	SP-011900004
Address	129 Milky Way, Madison, WI 53718	Date Evaluation Conducted	December 11, 2019	Telephone Number	(608) 288-4100

B-3	#OBS.	☐ Pit	☒ Boring	Ground surface elevation	888.0 ft.	Elevation of limiting factor	882.5 ft. (Gray)
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Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-11	Topsoil (not sampled)								
2	11-36	10YR 4/3	none	SiCL	0m	mvfi		<5		0.04
3	36-66	10YR 4/3 to 3/3	none	SCL	2csbk	mfi		<5		0.11
4	66-96	10YR 5/1 to 6/4	none	GRSL	1fsbk	mft		15-25		0.50
5	96-240	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		20	34	0.50 ⁽¹⁾

Comments: Low-chroma/high-value (gray) dominant color in Horizon 4 indicates past saturation from perched water, periodically infiltrating surface water or seasonally elevated groundwater; groundwater was not encountered during or upon completion of drilling.

⁽¹⁾ Infiltration rate may be lower than published value due to fairly high in-place relative density. Deep-tilling or excavating/turning-over is recommended to loosen soil.

B-4	#OBS.	☐ Pit	☒ Boring	Ground surface elevation	885.0 ft.	Elevation of limiting factor below	865.0 ft.
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Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-11	Topsoil (not sampled)								
2	11-36	10YR 4/3	none	SiCL	0m	mfi		<5		0.04
3	36-66	10YR 3/2 to 5/3	none	SCL to SL	variable			<10		0.11-0.50
4	66-240	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		15-25		0.50 ⁽¹⁾

Comments: ⁽¹⁾ Infiltration rate may be lower than published value due to fairly high in-place relative density. Deep-tilling or excavating/turning-over is recommended to loosen soil.

B-5	#OBS.	☐ Pit	☒ Boring	Ground surface elevation	883.5 ft.	Elevation of limiting factor below	863.5 ft.
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Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-11	Topsoil (not sampled)								
2	11-36	10YR 4/3	none	SiCL	0m	mvfi		<5		0.04
3	36-66	10YR 4/3 to 6/3	none	SCL to SL	variable			<10		0.11-0.50
4	66-240	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		15-25		0.50 ⁽¹⁾

Comments: ⁽¹⁾ Infiltration rate may be lower than published value due to fairly high in-place relative density. Deep-tilling or excavating/turning-over is recommended to loosen soil.

B-6 #OBS. ☐ Pit ☒ Boring Ground surface elevation 888.0 ft. Elevation of limiting factor below 868.0 ft.

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-11	Topsoil (not sampled)								
2	11-36	10YR 5/3	none	CL	0m	mvfi		<5		0.03
3	36-66	10YR 4/3	none	SCL	2csbk	mfi		<5		0.11
4	66-240	10YR 6/3 to 6/4	none	GRSL, SCL Seams	1msbk	mfr		16	32	0.11-0.50 ⁽¹⁾

Comments: ⁽¹⁾ Infiltration potential will likely be limited by sandy clay loam seams (and potentially due to the fairly high in-place relative density). Infiltration rate can potentially be improved by deep-tilling or excavating/turning-over to disrupt lower-permeability seams (and loosen soil). Gradations should be collected during construction to check that blended soil is consistent with design infiltration rate.

B-7 #OBS. ☐ Pit ☒ Boring Ground surface elevation 888.0 ft. Elevation of limiting factor 880.0 ft. (Gray)

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-10	Topsoil (not sampled)								
2	10-36	10YR 3/2 to 5/4	none	CL to SCL (Fill)	variable			<5		0.03-0.11 ⁽¹⁾
3	36-66	10YR 2/2 to 4/4	none	CL (Fill)	2csbk	mfi		<10		0.03 ⁽¹⁾
4	66-96	10YR 6/2 to 6/4	none	LS to SL	variable			<10		0.50-1.63
5	96-126	10YR 5/1 to 6/4	none	GRSL	1fsbk	mfr		15-25		0.50
6	126-240	10YR 6/3 to 6/4	none	GRSL, SCL Seams	1msbk	mfr		15-25		0.11-0.50 ⁽¹⁾

Comments: Low-chroma/high-value (gray) dominant color in Horizon 5 indicates past saturation from perched water, periodically infiltrating surface water or seasonally elevated groundwater; groundwater was not encountered during or upon completion of drilling.

⁽¹⁾ Infiltration rate in fill should be considered very approximate due to the potential for seams/pockets of dissimilar material.

⁽²⁾ Infiltration potential will likely be limited by sandy clay loam seams (and potentially due to the fairly high in-place relative density). Infiltration rate can potentially be improved by deep-tilling or excavating/turning-over to disrupt lower-permeability seams (and loosen soil). Gradations should be collected during construction to check that blended soil is consistent with design infiltration rate.

B-8 #OBS. ☐ Pit ☒ Boring Ground surface elevation 884.0 ft. Elevation of limiting factor below 864.0 ft.

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-8	Topsoil (not sampled)								
2	8-36	10YR 3/1 to 5/3	none	SiCL	0m	mfi		<5		0.04
3	36-240	10YR 6/3 to 6/4	none	SL-GRSL, SiL Seams	1msbk	mfr		15	29	0.50 ⁽¹⁾

Comments: ⁽¹⁾ Infiltration potential will likely be limited by silt loam seams (and potentially due to the fairly high in-place relative density). Infiltration rate can potentially be improved by deep-tilling or excavating/turning-over to disrupt lower-permeability seams (and loosen soil). Gradations should be collected during construction to check that blended soil is consistent with design infiltration rate.

B-9	#OBS.	☐ Pit	☒ Boring	Ground surface elevation	884.0 ft.	Elevation of limiting factor	881.0 ft. (Redox)
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Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-11	Topsoil (not sampled)								
2	11-36	10YR 4/3 to 3/1	none	SiCL	0m	mvfi		<10		0.04
3	36-66	10YR 5/3	c2f 10YR 4/1	SiCL	0m	mvfi		<5		0.04
4	66-96	10YR 4/3 to 3/3	none	SCL	2csbk	mfi		<5		0.11
5	96-126	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		15-25		0.50
6	126-204	2.5Y 6/4	none	LFS	1msbk	mfr		5	28	0.50 ⁽¹⁾
7	204-240	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		15-25		0.50 ⁽¹⁾

Comments: Redox in Horizon 3 indicates past saturation from perched water, periodically infiltrating surface water or seasonally elevated groundwater; groundwater was not encountered during or upon completion of drilling.

⁽¹⁾ Infiltration rate may be lower than published value due to fairly high in-place relative density. Deep-tilling or excavating/turning-over is recommended to loosen soil.

B-10	#OBS.	☐ Pit	☒ Boring	Ground surface elevation	886.0 ft.	Elevation of limiting factor below	866.0 ft.
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Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-11	Topsoil (not sampled)								
2	11-36	10YR 4/3	none	SiCL	0m	mfi		<5		0.04
3	36-240	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		15-25		0.50 ⁽¹⁾

Comments: ⁽¹⁾ Infiltration rate may be lower than published value due to fairly high in-place relative density. Deep-tilling or excavating/turning-over is recommended to loosen soil.

B-11	#OBS.	☐ Pit	☒ Boring	Ground surface elevation	886.5 ft.	Elevation of limiting factor	885.6 ft. (Redox)
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Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-11	Topsoil (not sampled)								
2	11-36	10YR 5/3	c1d 10YR 6/1	SiCL	0m	mvfi		<5		0.04
3	36-66	10YR 5/3	none	CL	0m	mfi		<5		0.03
4	66-240	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		21	30	0.50 ⁽¹⁾

Comments: Redox in Horizon 2 indicates past saturation from perched water, periodically infiltrating surface water or seasonally elevated groundwater; groundwater was not encountered during or upon completion of drilling.

⁽¹⁾ Infiltration rate may be lower than published value due to fairly high in-place relative density. Deep-tilling or excavating/turning-over is recommended to loosen soil.

B-12	#OBS.	☐ Pit	☒ Boring	Ground surface elevation	882.5 ft.	Elevation of limiting factor below	862.5 ft.			
Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frgs.	% Fines	Hydraulic App Rate Inches/Hr
1	0-10	Topsoil (not sampled)								
2	10-36	10YR 5/3	none	CL	0m	mfi		<5		0.03
3	36-72	10YR 6/3	none	L	1fsbk	mfr		5-15		0.24
4	72-240	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		15-25		0.50 ⁽¹⁾
<u>Comments:</u> ⁽¹⁾ Infiltration rate may be lower than published value due to fairly high in-place relative density. Deep-tilling or excavating/turning-over is recommended to loosen soil.										

B-13	#OBS.	☐ Pit	☒ Boring	Ground surface elevation	884.0 ft.	Elevation of limiting factor below	864.0 ft.			
Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frgs.	% Fines	Hydraulic App Rate Inches/Hr
1	0-10	Topsoil (not sampled)								
2	10-48	10YR 5/3	none	SiCL	0m	mfi		<5		0.04
3	48-240	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		15-25		0.50 ⁽¹⁾
<u>Comments:</u> ⁽¹⁾ Infiltration rate may be lower than published value due to fairly high in-place relative density. Deep-tilling or excavating/turning-over is recommended to loosen soil.										

B-14	#OBS.	☐ Pit	☒ Boring	Ground surface elevation	884.0 ft.	Elevation of limiting factor below	864.0 ft.			
Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frgs.	% Fines	Hydraulic App Rate Inches/Hr
1	0-11	Topsoil (not sampled)								
2	11-36	10YR 4/3	none	SiCL	0m	mfi		<5		0.04
3	36-240	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		20	30	0.50 ⁽¹⁾
<u>Comments:</u> ⁽¹⁾ Infiltration rate may be lower than published value due to fairly high in-place relative density. Deep-tilling or excavating/turning-over is recommended to loosen soil.										

B-15	#OBS.	☐ Pit	☒ Boring	Ground surface elevation	882.0 ft.	Elevation of limiting factor below	862.0 ft.			
Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frgs.	% Fines	Hydraulic App Rate Inches/Hr
1	0-12	Topsoil (not sampled)								
2	12-66	10YR 5/3	none	SiCL	0m	mvfi		<5		0.04
3	66-96	10YR 4/3 to 6/3	none	Stratified SiCL/SiL/FS	variable			<5		0.04-0.50
4	96-240	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		15-25		0.50 ⁽¹⁾
<u>Comments:</u> ⁽¹⁾ Infiltration rate may be lower than published value due to fairly high in-place relative density. Deep-tilling or excavating/turning-over is recommended to loosen soil.										

B-16	#OBS.	☐ Pit	☒ Boring	Ground surface elevation	878.5 ft.	Elevation of limiting factor	877.4 ft. (Redox)
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Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-13	Topsoil (not sampled)								
2	13-36	10YR 2/1 to 4/2	c1f 10YR 4/1	SiL to SiCL	variable			<5		0.04-0.13
3	36-66	10YR 4/3	none	CL	0m	mfi		<5		0.03
4	66-96	10YR 6/2	none	GRSiL	2mabk	mfi		18	48	0.13
5	96-240	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		15-25		0.50 ⁽¹⁾

Comments: Redox in Horizon 2 indicates past saturation from perched water, periodically infiltrating surface water or seasonally elevated groundwater; groundwater was not encountered during or upon completion of drilling.

⁽¹⁾ Infiltration rate may be lower than published value due to fairly high in-place relative density. Deep-tilling or excavating/turning-over is recommended to loosen soil.

B-17	#OBS.	☐ Pit	☒ Boring	Ground surface elevation	880.0 ft.	Elevation of limiting factor below	860.0 ft.
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Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-12	Topsoil (not sampled)								
2	12-36	10YR 5/3	none	SiCL	0m	mfi		<5		0.04
3	36-66	10YR 4/3	none	SCL to SL	variable			<10		0.11-0.50
4	66-240	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		15-25		0.50 ⁽¹⁾

Comments: Probable perched water was encountered at about 3.5 ft during drilling, and at about 6 ft at the completion of drilling (after casing removal). About one day after the completion of drilling, the borehole had caved in at about 8 ft, with the water level at about 6 ft.

⁽¹⁾ Infiltration rate may be lower than published value due to fairly high in-place relative density. Deep-tilling or excavating/turning-over is recommended to loosen soil.

B-18	#OBS.	☐ Pit	☒ Boring	Ground surface elevation	876.0 ft.	Elevation of limiting factor below	856.0 ft.
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Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-10	Topsoil (not sampled)								
2	10-36	10YR 5/3	none	SiCL	0m	mfi		<5		0.04
3	36-66	10YR 3/3	none	SCL	2mabk	mfi		<10		0.11
4	66-240	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		17	32	0.50 ⁽¹⁾

Comments: ⁽¹⁾ Infiltration rate may be lower than published value due to fairly high in-place relative density. Deep-tilling or excavating/turning-over is recommended to loosen soil.

B-19	#OBS.	☐ Pit	☒ Boring	Ground surface elevation	875.5 ft.	Elevation of limiting factor	874.5 ft. (Redox)
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Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-12	Topsoil (not sampled)								
2	12-36	10YR 4/3	c2f 10YR 5/2	SiCL	0m	mfi		<5		0.04
3	36-66	10YR 4/3	none	SCL	2mabk	mfi		5-15		0.11
4	66-126	10YR 6/3	none	VGRS	0sg	ml		50	4	3.60
5	126-240	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		16	32	0.50 ⁽¹⁾

Comments: Redox in Horizon 2 indicates past saturation from perched water, periodically infiltrating surface water or seasonally elevated groundwater; groundwater was not encountered during or upon completion of drilling.

⁽¹⁾ Infiltration rate may be lower than published value due to fairly high in-place relative density. Deep-tilling or excavating/turning-over is recommended to loosen soil.

B-20	#OBS.	☐ Pit	☒ Boring	Ground surface elevation	885.0 ft.	Elevation of limiting factor	882.0 ft. (Redox)
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Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-10	Topsoil (not sampled)								
2	10-36	10YR 3/2 to 3/1	none	SiCL	0m	mvfi		<5		0.04
3	36-66	10YR 5/3	f2f 10YR 6/1	SiCL	0m	mfi		<5		0.04
4	66-240	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		16	32	0.50 ⁽¹⁾

Comments: Redox in Horizon 3 indicates past saturation from perched water, periodically infiltrating surface water or seasonally elevated groundwater; groundwater was not encountered during or upon completion of drilling.

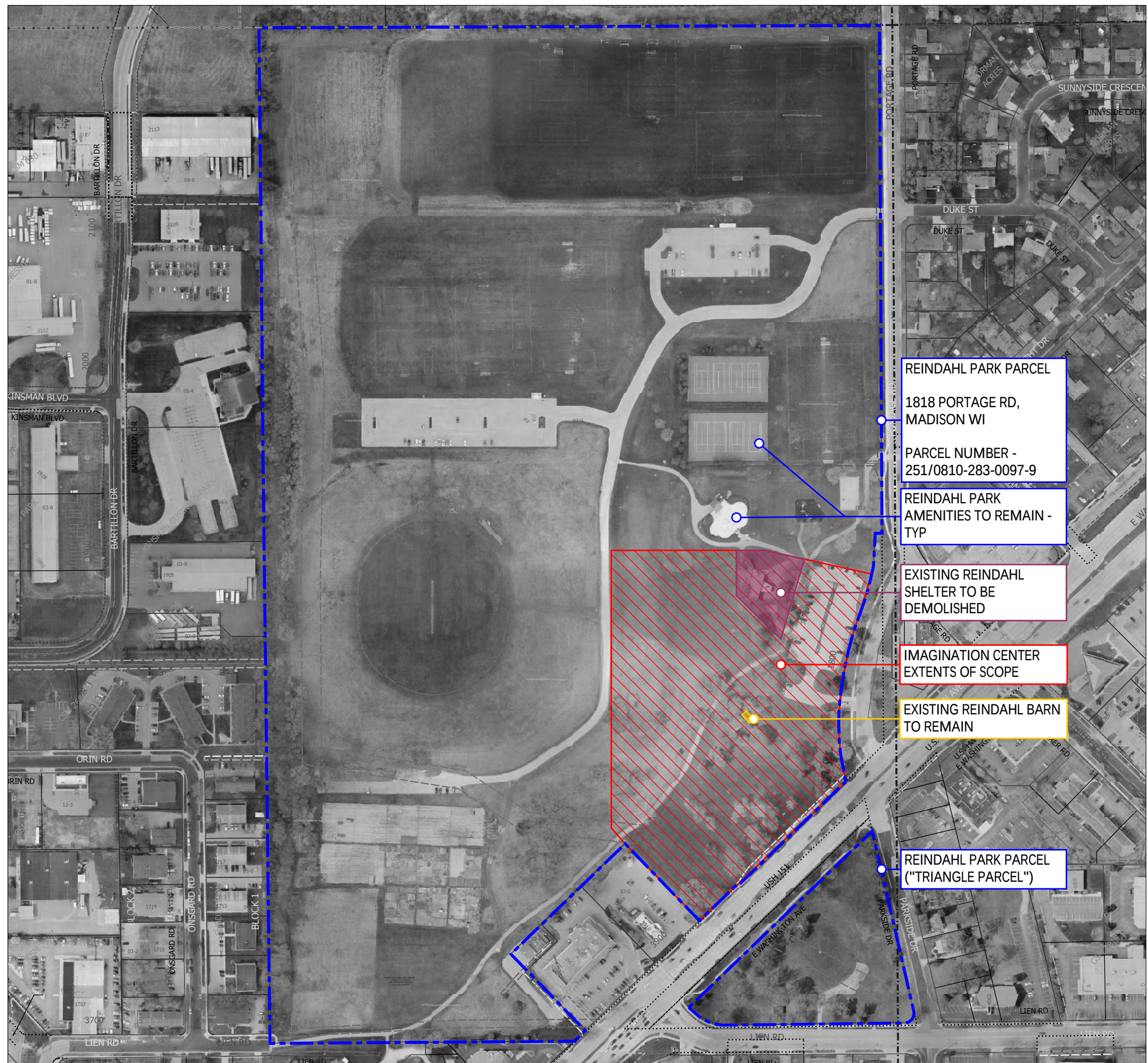
⁽¹⁾ Infiltration rate may be lower than published value due to fairly high in-place relative density. Deep-tilling or excavating/turning-over is recommended to loosen soil.

B-21	#OBS.	☐ Pit	☒ Boring	Ground surface elevation	882.0 ft.	Elevation of limiting factor below	862.0 ft.
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Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-10	Topsoil (not sampled)								
2	10-36	10YR 3/1 to 5/2	none	SiCL	0m	mfi		<5		0.04
3	36-84	10YR 4/3 to 3/3	none	SCL	2csbk	mfi		<5		0.11
4	84-114	10YR 6/3	none	FSL	1fsbk	mfr		6	39	0.50
5	114-240	10YR 6/3 to 6/4	none	GRSL	1msbk	mfr		15-25		0.50 ⁽¹⁾

Comments: ⁽¹⁾ Infiltration rate may be lower than published value due to fairly high in-place relative density. Deep-tilling or excavating/turning-over is recommended to loosen soil.

Overall Site Comments: See Comments above and Preliminary Stormwater Infiltration Potential section in Geotechnical Exploration Report.



REINDAHL PARK PARCEL

1818 PORTAGE RD,
MADISON WI

PARCEL NUMBER -
251/0810-283-0097-9

REINDAHL PARK
AMENITIES TO REMAIN -
TYP

EXISTING REINDAHL
SHELTER TO BE
DEMOLISHED

IMAGINATION CENTER
EXTENTS OF SCOPE

EXISTING REINDAHL BARN
TO REMAIN

REINDAHL PARK PARCEL
("TRIANGLE PARCEL")

Path: S:\MAD1000-1099\1021021\Drawings\GIS\Preferred Alignment 11x17.mxd

User: danc

Date: 9/17/2018

Time: 2:50:36 PM



STRAND ASSOCIATES

FIGURE 1

1021.021

RELIEF SEWER

NORTHEAST INTERCEPTOR - TRUAX EXTENSION RELIEF PROJECT

MADISON METROPOLITAN SEWERAGE DISTRICT

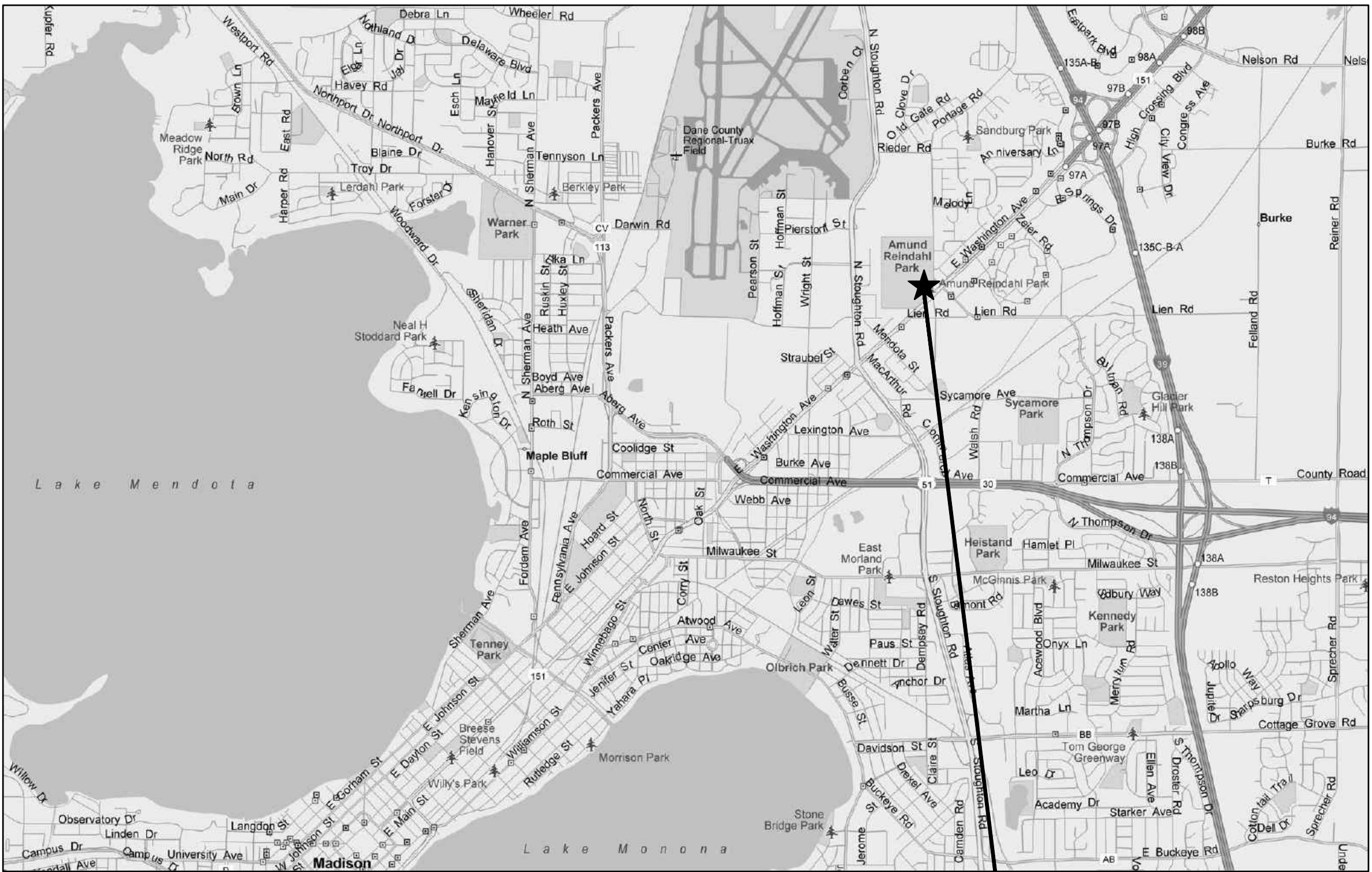
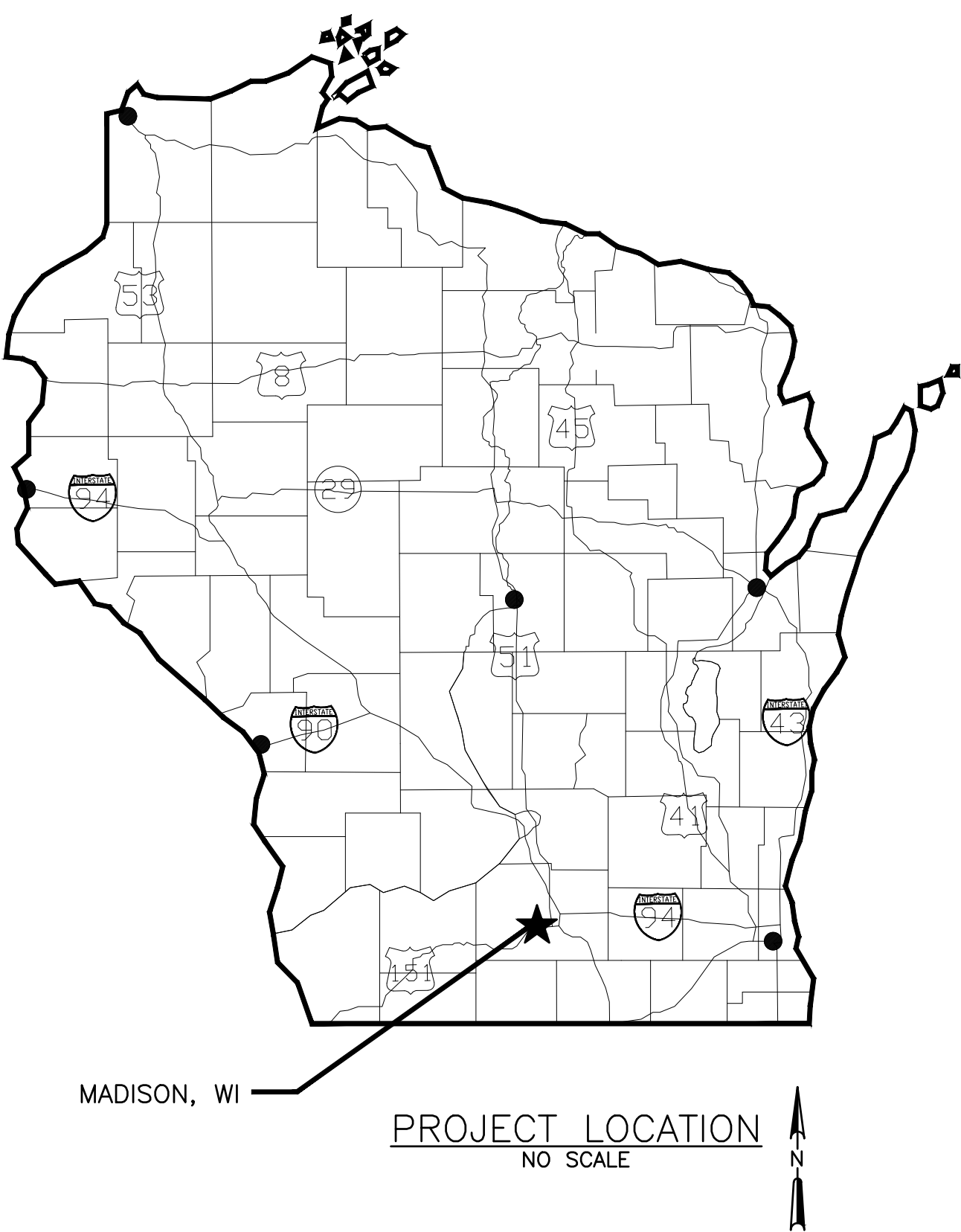
CITY OF MADISON

DANE COUNTY, WISCONSIN

NOT FOR
CONSTRUCTION

REINDAHL PARK UTILITY STRUCTURE IMPROVEMENTS

FOR THE
CITY OF MADISON
MADISON, WISCONSIN
CONTRACT NO. 9404
MUNIS NO. 17390-51-200



AREA MAP
NO SCALE

LIST OF DRAWINGS		
SHEET NO.	DRAWING NO.	DRAWING TITLE
1	G0.1	TITLE SHEET, LOCATION MAP, AND LIST OF DRAWINGS
2	C1.1	OVERALL SITE PLAN
3	D1.1	DEMOLITION PLANS
4	AS1.1	PLANS
5	AS2.1	ELEVATIONS
6	AS3.1	SECTIONS
7	AS5.1	DETAILS

DRAFTING SYMBOLS

- DETAIL NOTATION
DETAIL LETTER
SHEET WHERE SHOWN
- SECTION NOTATION
SECTION NUMBER
SHEET WHERE SECTION IS SHOWN
- SECTION
SCALE
SECTION NUMBER
DRAWING THAT SECTION IS SHOWN ON
- ELEVATION NOTATION
ELEVATION LETTER
SHEET WHERE SHOWN

- EXISTING OBJECTS ARE SCREENED
- EXISTING OBJECTS TO BE DEMOLISHED
- KEY/SPECIFIC NOTE CALL-OUT

ARCHITECTURAL SYMBOLS

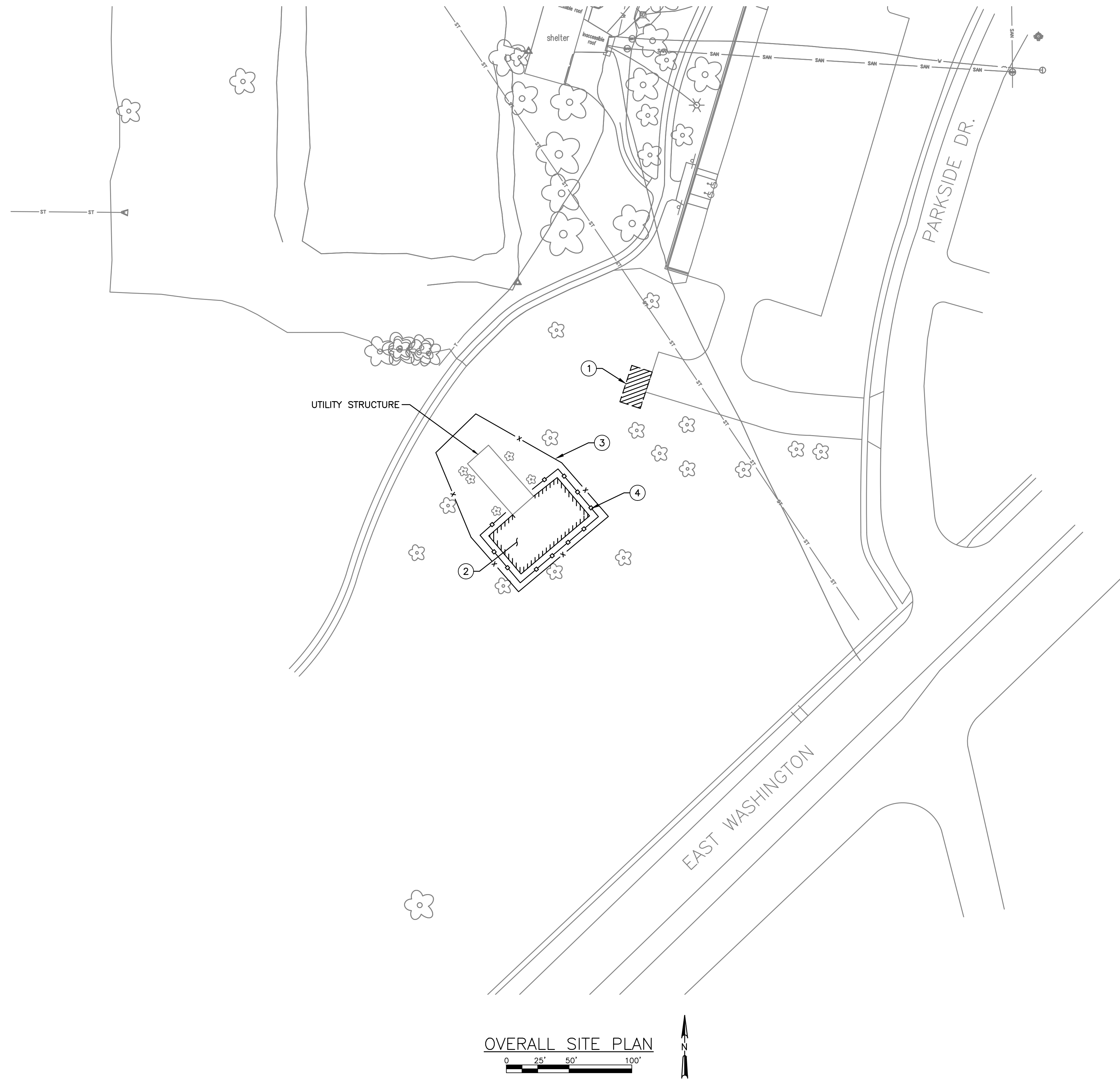
- EARTH
- CONCRETE
- MASONRY WALL
- SILT FENCE
- CONSTRUCTION FENCE

910 West Wingra Drive
Madison, WI 53715
608-251-4843
608-251-8655 fax
www.strand.com



90% SUBMITTAL, 4/18/2019

SHEET
1
G0.1



GENERAL NOTES:

1. PROTECT ALL EXISTING TREES. NO TREES SHALL BE CUT WITHOUT THE APPROVAL OF THE CITY.
2. EXISTING PATHS, ROADWAYS, CURB AND GUTTER, AND PARKING AREAS WITHIN PARK THAT ARE TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION. IF DAMAGED DURING CONSTRUCTION, REPLACE AT CONTRACTORS'S EXPENSE.
3. RESTORE ALL SITE AREAS DISTURBED DURING CONSTRUCTION.
4. SEE GENERAL NOTES ON SHEET 3.

KEY NOTES:

- ① CONSTRUCTION ENTRANCE PER BID ITEM 21011.
- ② CONSTRUCTION STAGING AND EQUIPMENT STORAGE AREA.
- ③ CONSTRUCTION FENCE AROUND STRUCTURE AND STAGING AREA.
- ④ SILT FENCE.

OVERALL SITE PLAN

REINDAHL PARK UTILITY STRUCTURE IMPROVEMENTS
CITY OF MADISON
MADISON, WISCONSIN

JOB NO.
1020.115

PROJECT MGR.
KEITH BEHREND



SHEET
2
C1.1

NOT FOR
CONSTRUCTION

GENERAL NOTES:

- EXISTING INFORMATION SHOWN ON DRAWINGS WAS OBTAINED FROM FIELD MEASUREMENTS COMPLETED ON 1/20/2017. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE ACCURACY OF EXISTING INFORMATION AS REQUIRED TO COMPLETE THE WORK.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURE THROUGHOUT THE DURATION OF THE PROJECT. NOTE THAT THE EXISTING ELEVATED CONCRETE SLAB ACTS AS A RIGID FLOOR DIAPHRAGM AND PROVIDES BRACING FOR EXISTING WALLS.

DEMOLITION KEY NOTES:

- A** REMOVE EXISTING CONCRETE SLAB--ON--GRADE.
- B** SAWCUT AND REMOVE EXISTING ELEVATED CONCRETE SLAB AND BEAMS.
- C** REMOVE EXISTING CONCRETE LINTELS OVER UPPER AND LOWER WINDOWS.
- D** REMOVE EXISTING ASPHALT SHINGLE ROOFING SYSTEM.
- E** REMOVED DAMAGED WOOD ROOF SHEATHING.
- F** REMOVE INTERIOR BRICK CHIMNEY.

DEMOLITION PLANS

REINDAHL PARK UTILITY STRUCTURE IMPROVEMENTS
CITY OF MADISON
MADISON, WISCONSIN

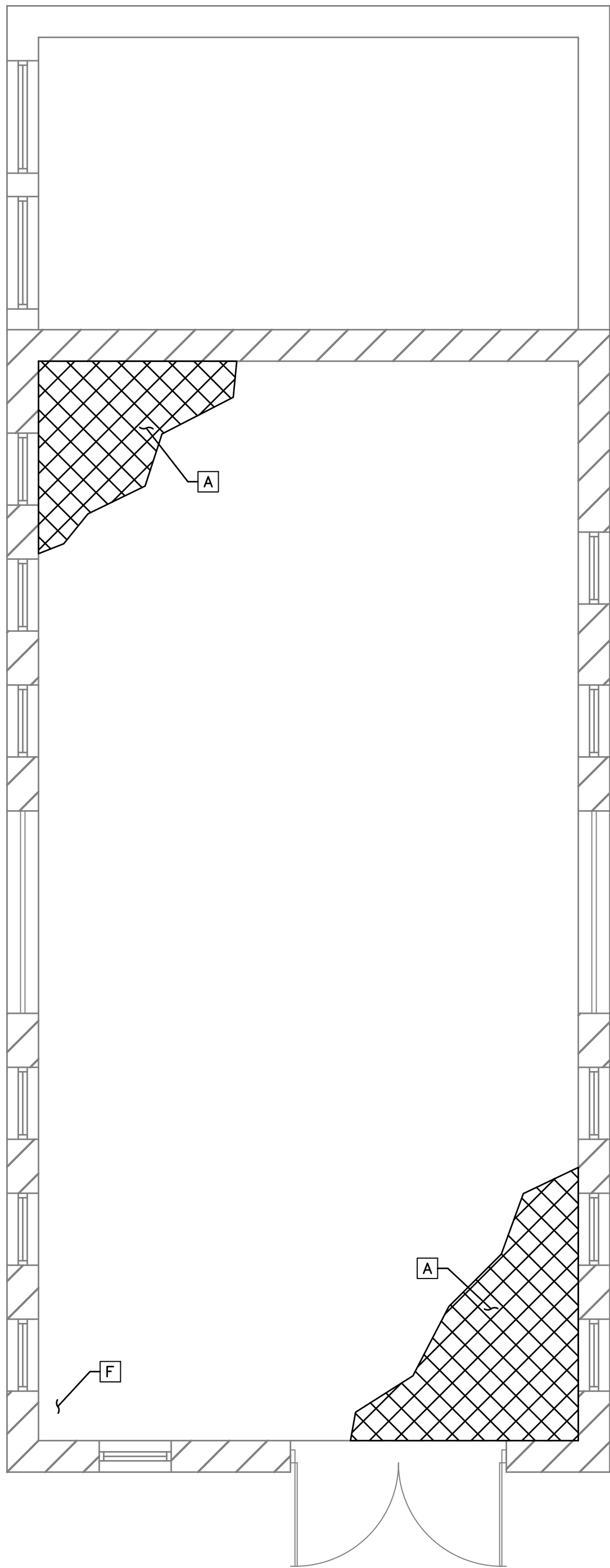
JOB NO.
1020.115

PROJECT MGR.
KEITH BEHREND

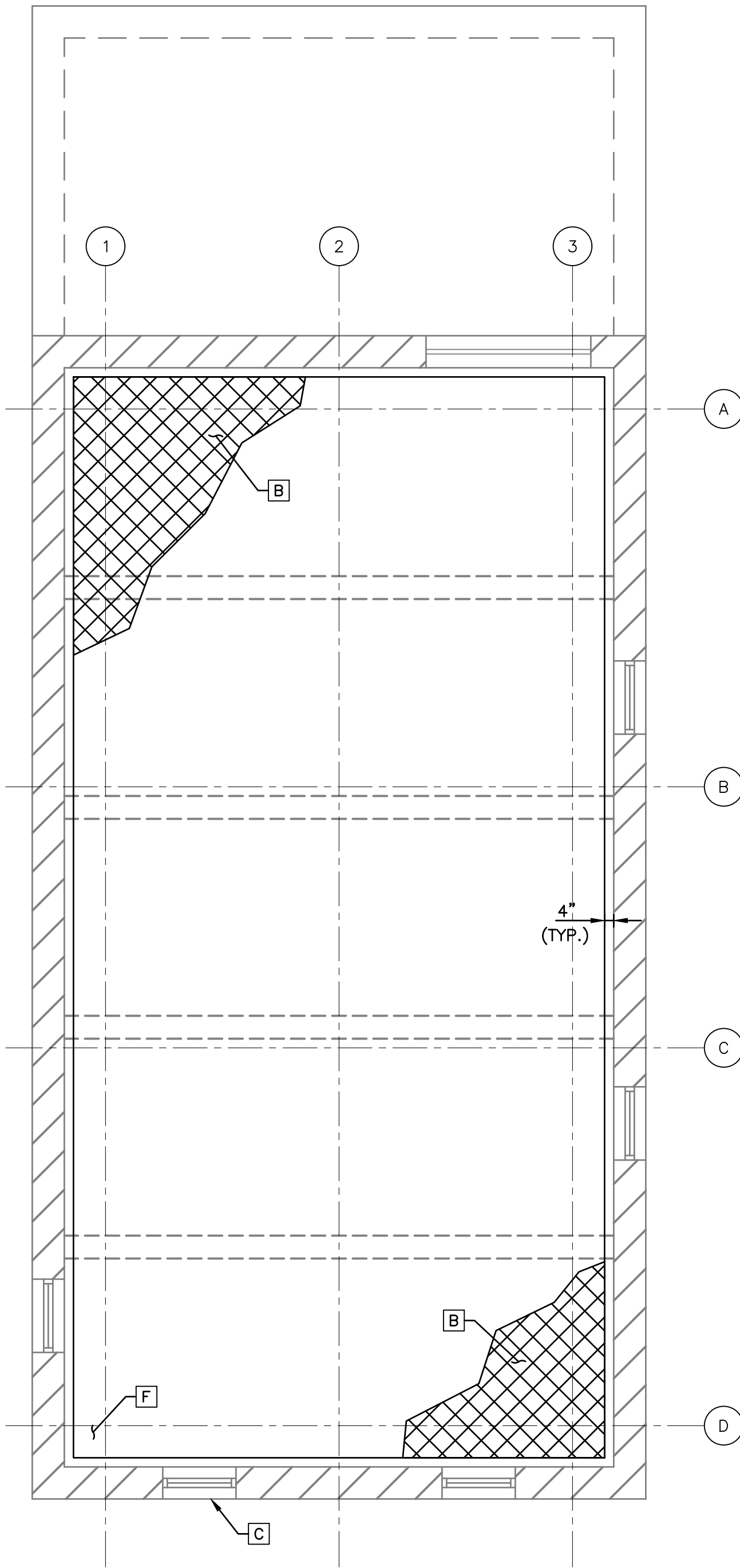


SHEET
3
D1.1

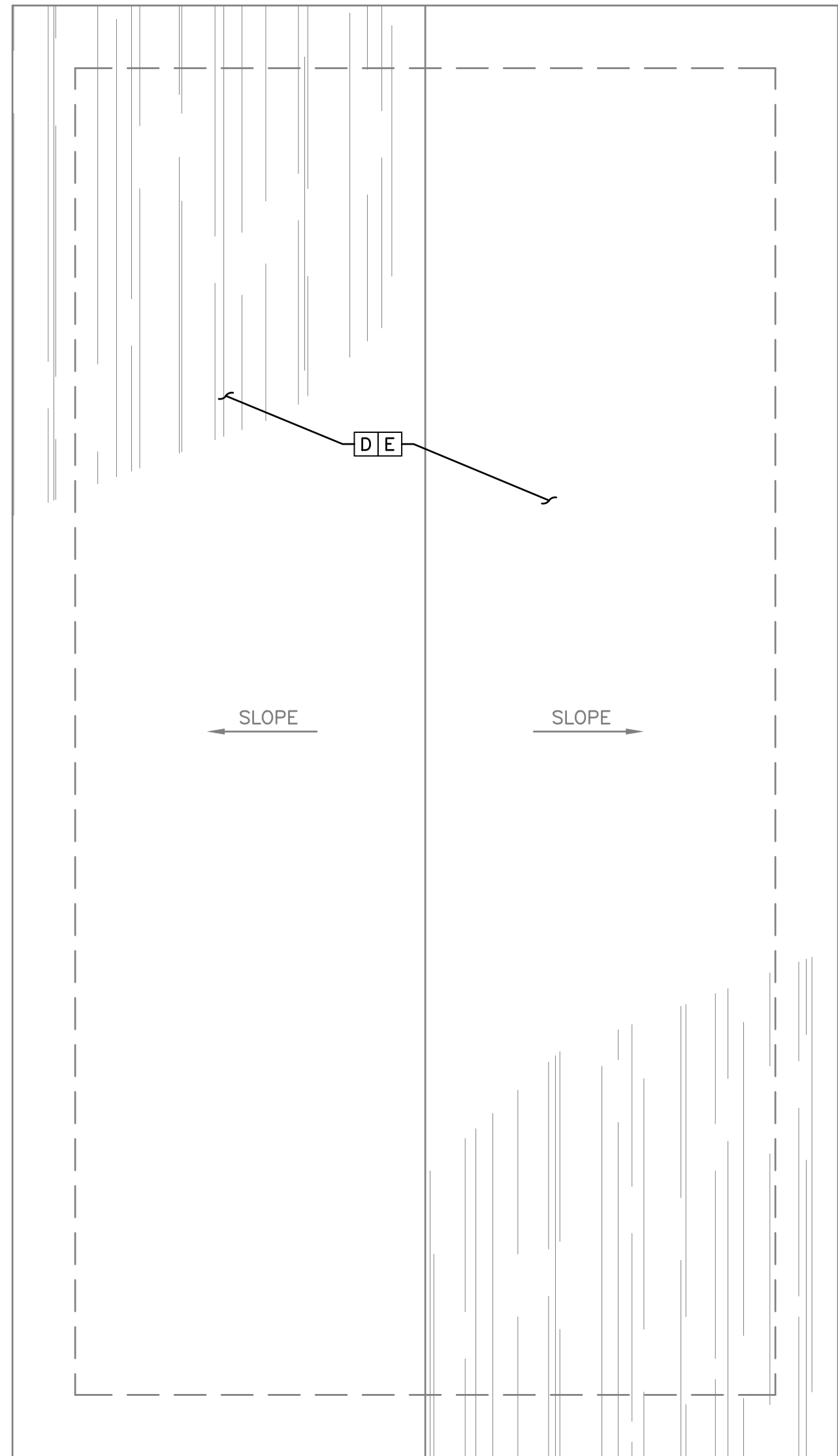
NO.	REVISIONS					DATE



LOWER LEVEL PLAN



UPPER LEVEL PLAN



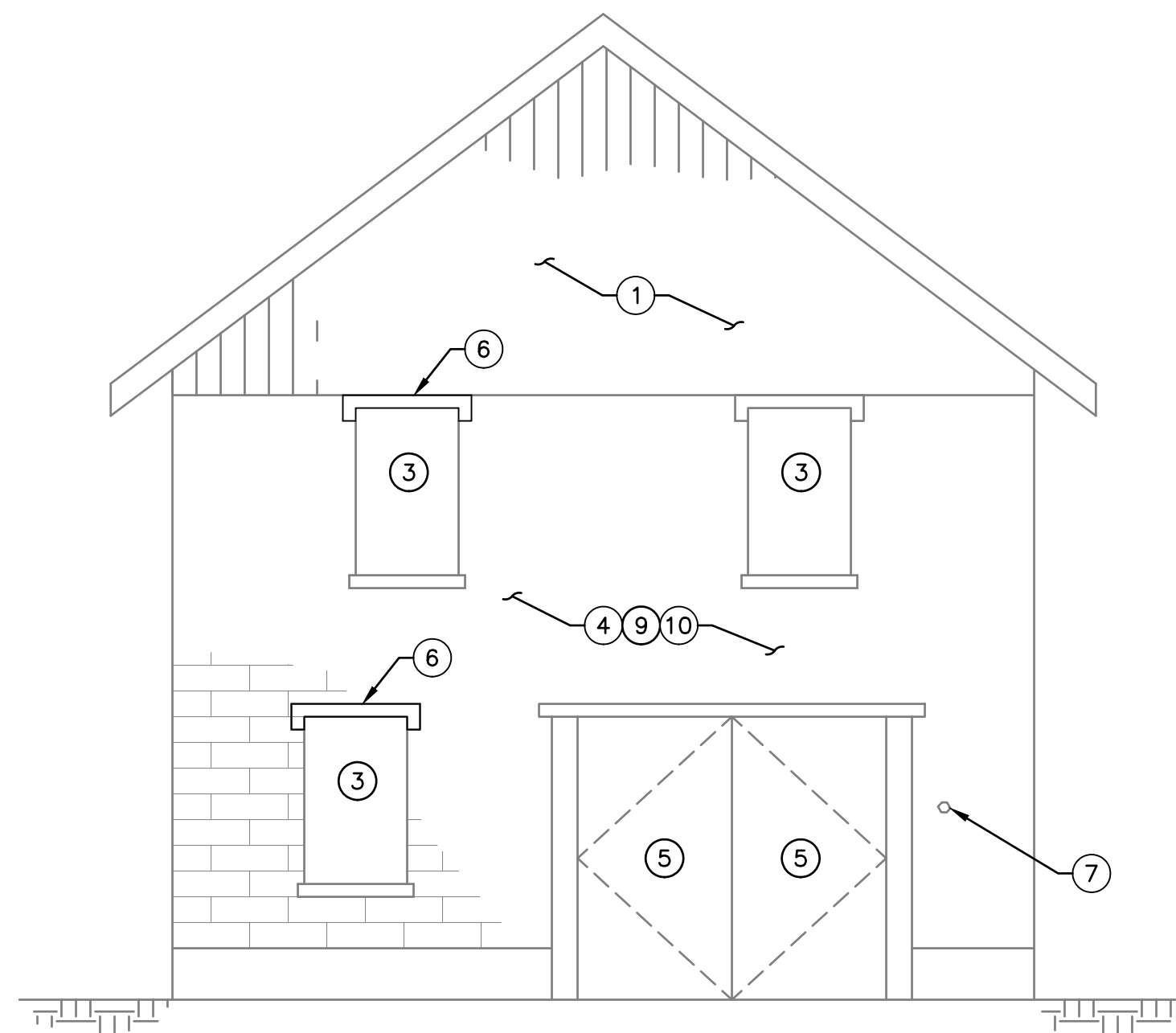
ROOF PLAN

GENERAL NOTES:

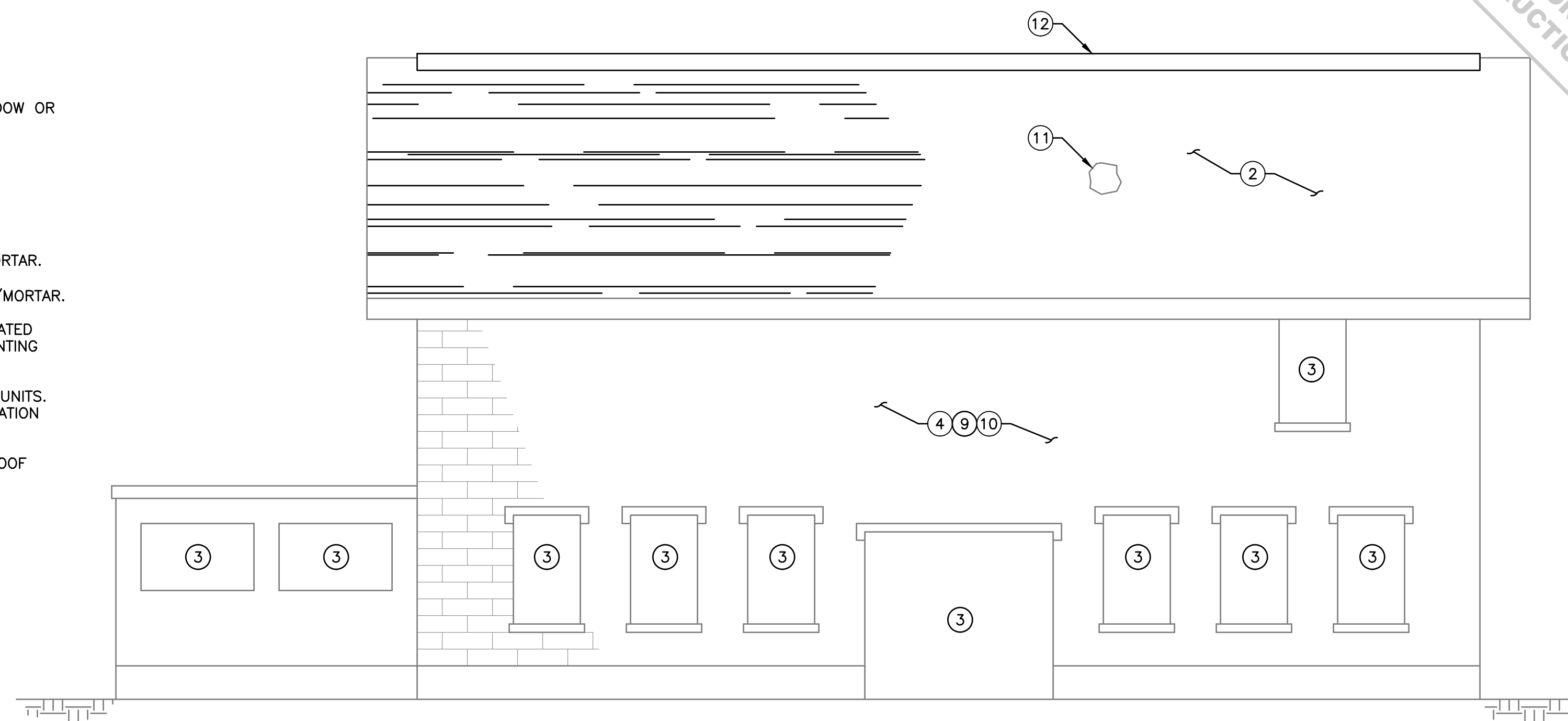
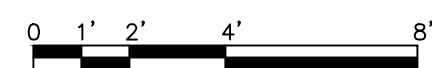
1. MASONRY WALL PATCHES SHALL CLOSELY MATCH THE APPEARANCE, INCLUDING COLOR AND TEXTURE, OF THE MASONRY UNITS ADJACENT TO THE HOLES/GAPS BEING PATCHED.

KEY NOTES:

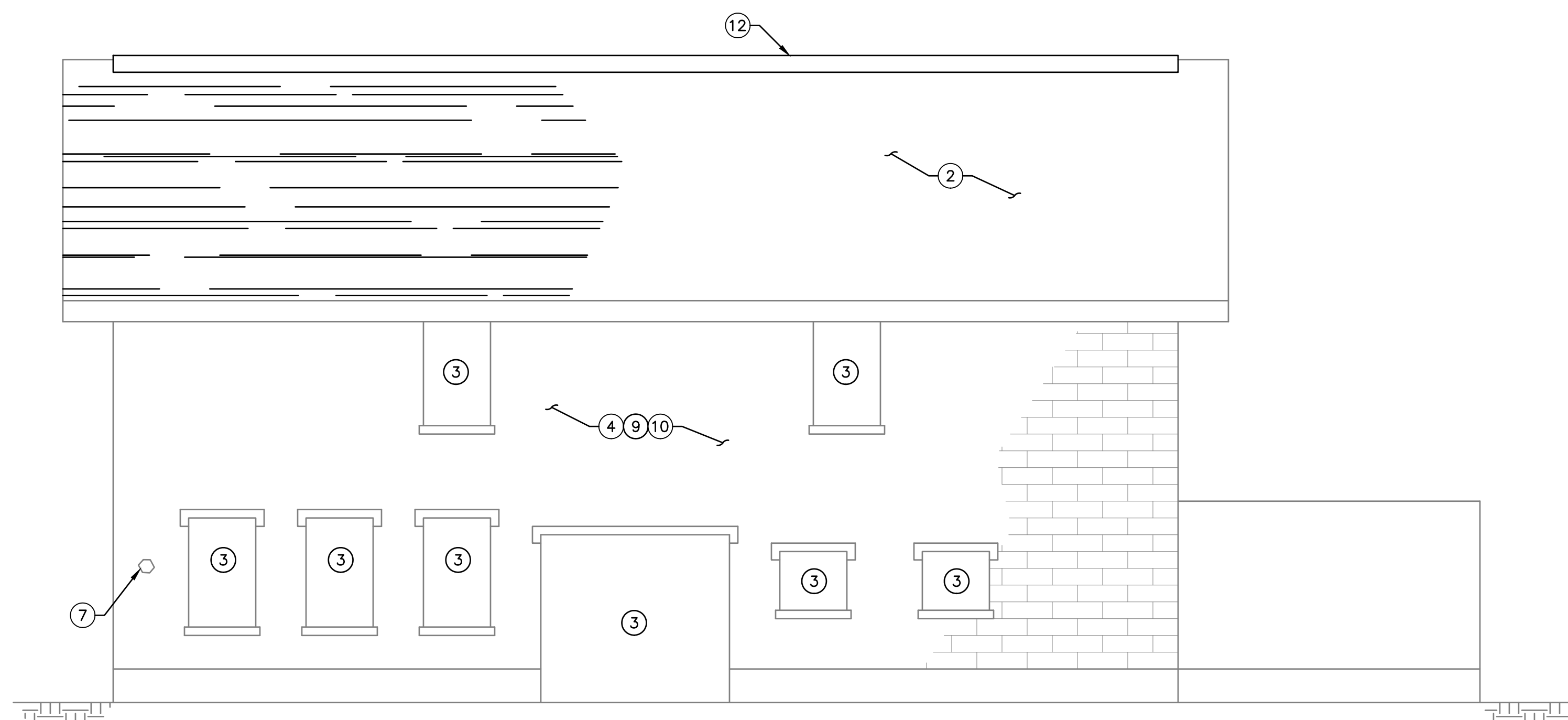
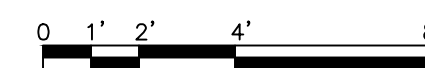
- ① EXISTING WOOD SIDING.
- ② NEW ASPHALT SHINGLES.
- ③ EXISTING BOARDED-UP WINDOW OR DOOR OPENING.
- ④ EXISTING MASONRY WALL.
- ⑤ EXISTING STEEL DOOR.
- ⑥ NEW CONCRETE LINTEL.
- ⑦ PATCH HOLE IN WALL W/MORTAR.
- ⑧ PATCH GAP IN MASONRY W/MORTAR.
- ⑨ REPOINT EXISTING DETERIORATED MORTAR JOINTS. SEE REPOINTING SPECIAL PROVISION.
- ⑩ REPAIR CRACKED MASONRY UNITS. SEE MASONRY UNIT RESTORATION SPECIAL PROVISION.
- ⑪ REPLACE DAMAGED WOOD ROOF SHEATHING.
- ⑫ RIDGE VENT.



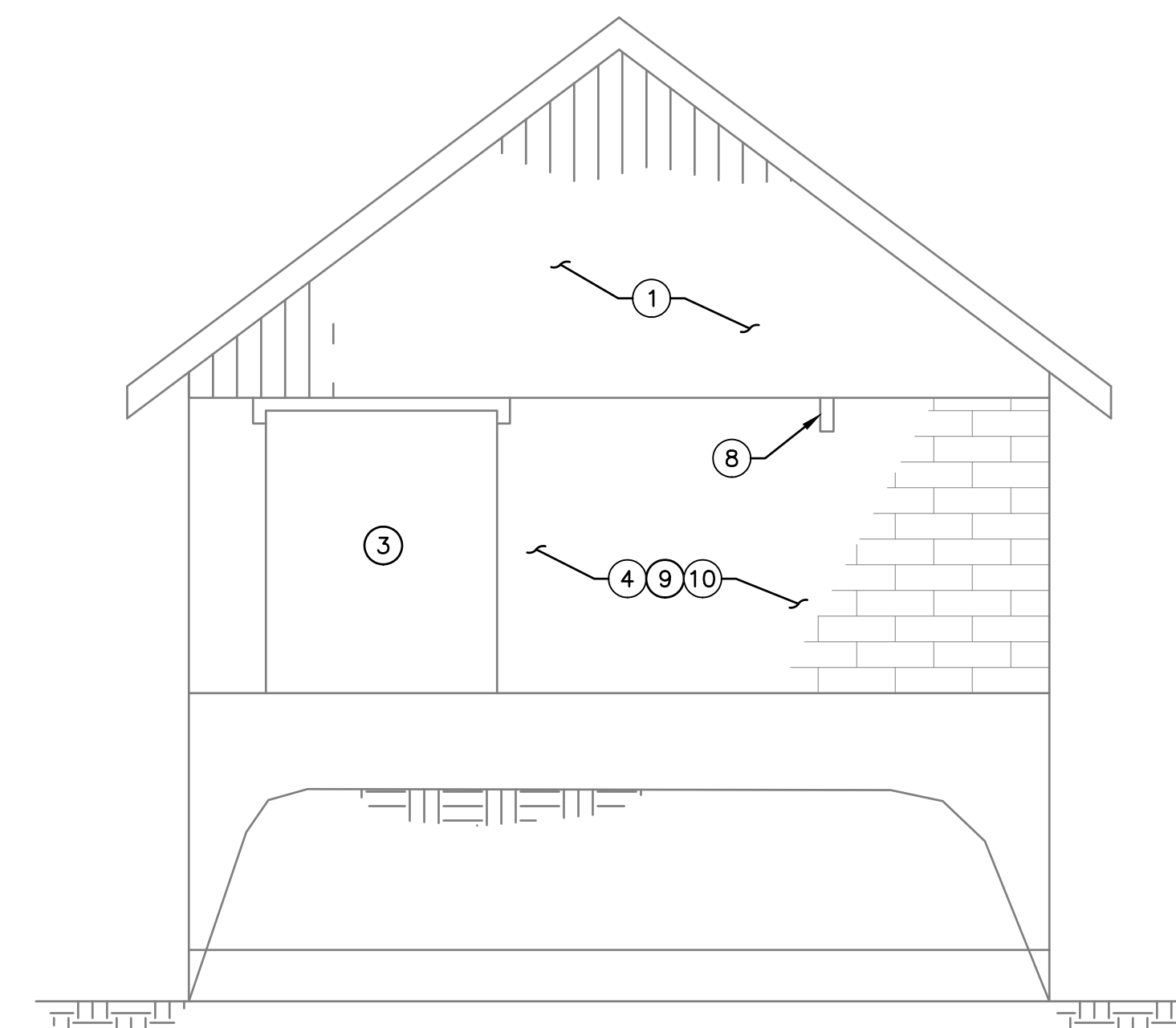
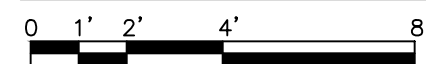
SOUTH ELEVATION



WEST ELEVATION



EAST ELEVATION



NORTH ELEVATION



NOT FOR CONSTRUCTION

[illegible]

ELEVATIONS

REINDAHL PARK UTILITY STRUCTURE IMPROVEMENTS
CITY OF MADISON
MADISON, WISCONSIN

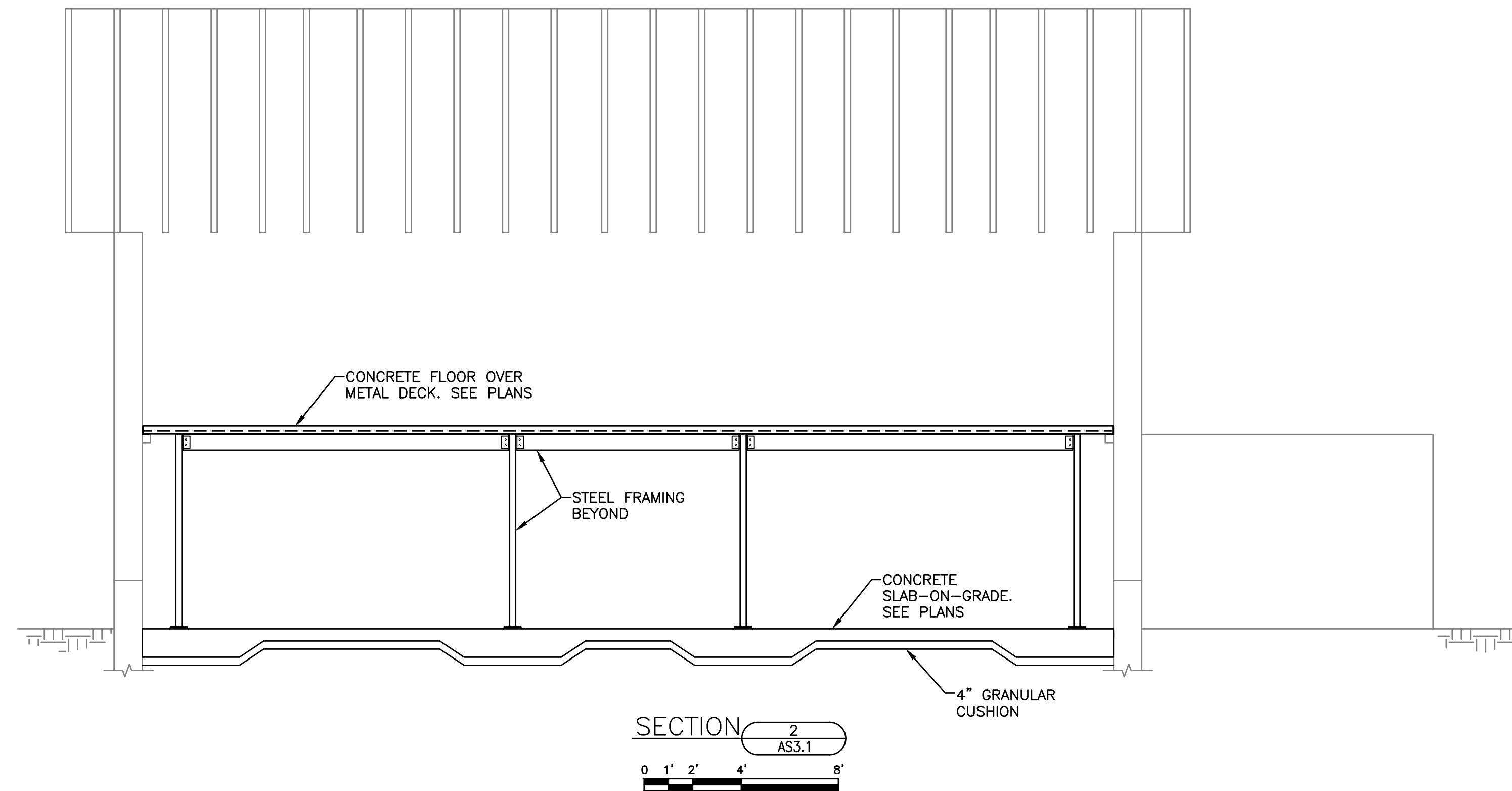
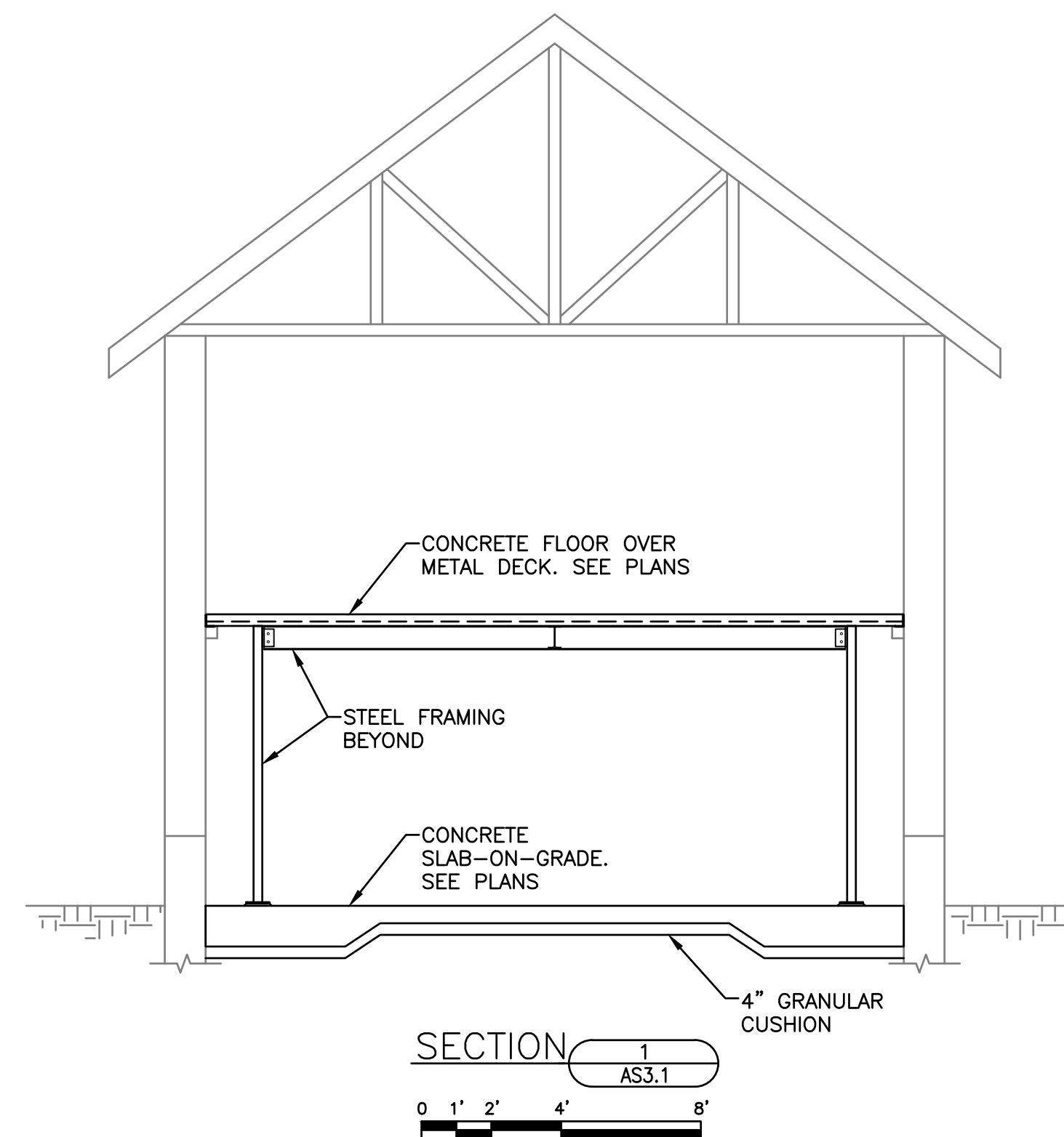
JOB NO.
1020.115

PROJECT MGR.
KEITH BEHREND



**SHEET
5
AS2.1**

NOT FOR
CONSTRUCTION

[illegible]

SECTIONS

REINDAHL PARK UTILITY STRUCTURE IMPROVEMENTS
CITY OF MADISON
MADISON, WISCONSIN

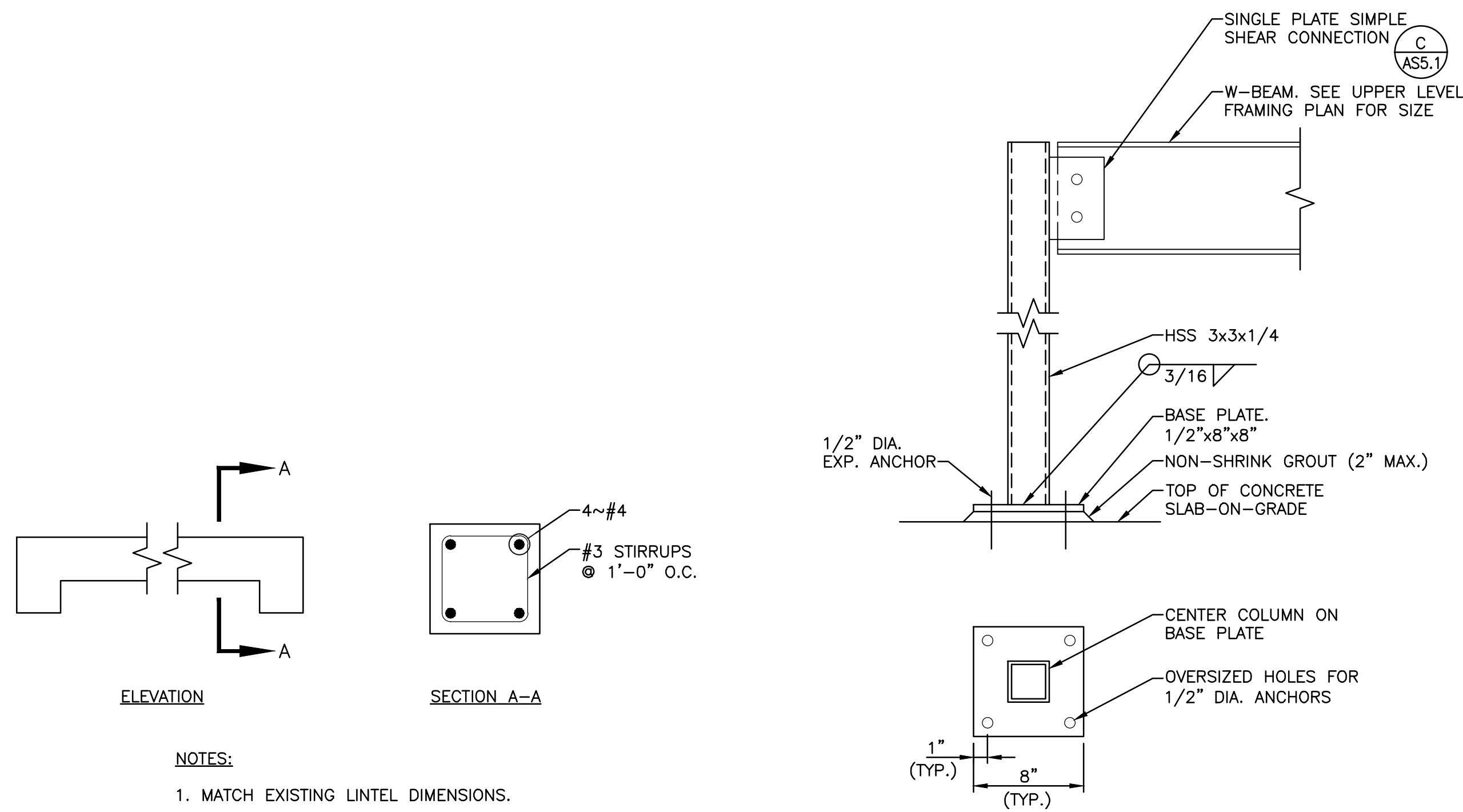
JOB NO.
1020.115

PROJECT MGR.
KEITH BEHREND



SHEET
6
AS3.1

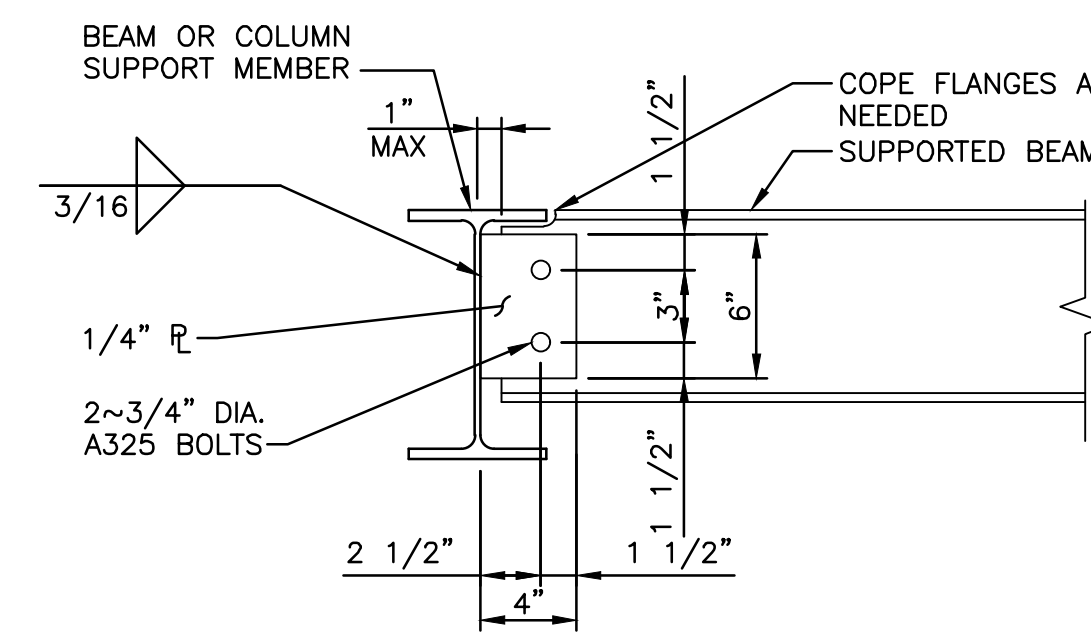
NOT FOR
CONSTRUCTION



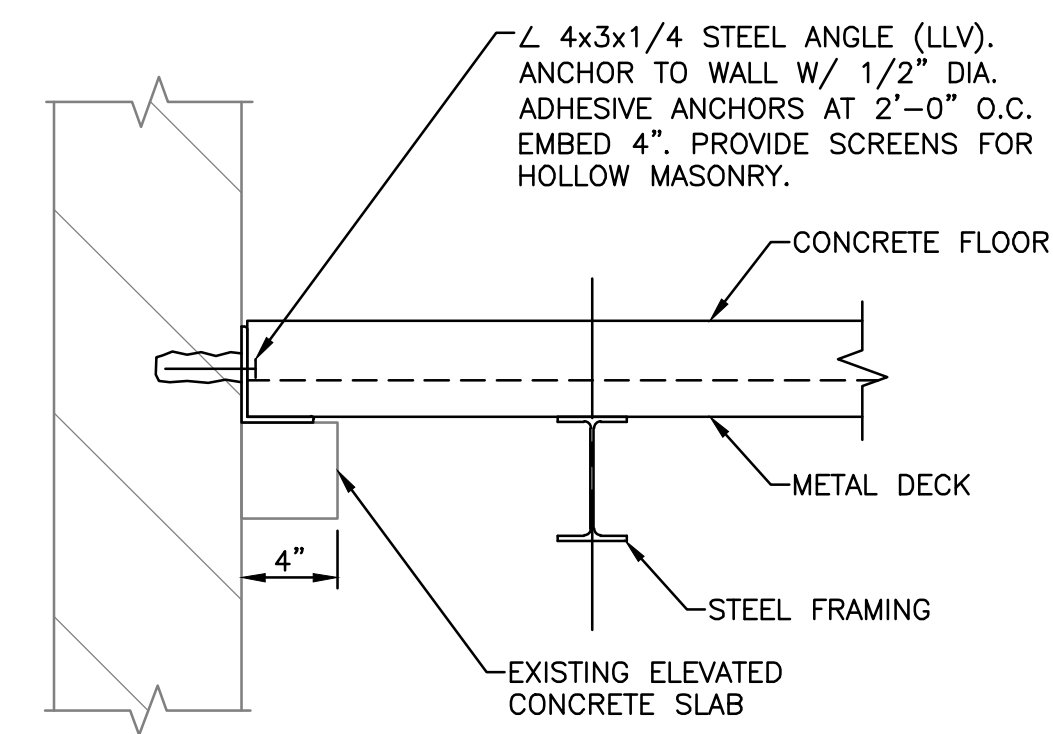
- NOTES:
1. MATCH EXISTING LINTEL DIMENSIONS.
 2. BEVEL EXPOSED EDGES 1/4-INCH.

A CONCRETE LINTEL
AS5.1 NO SCALE

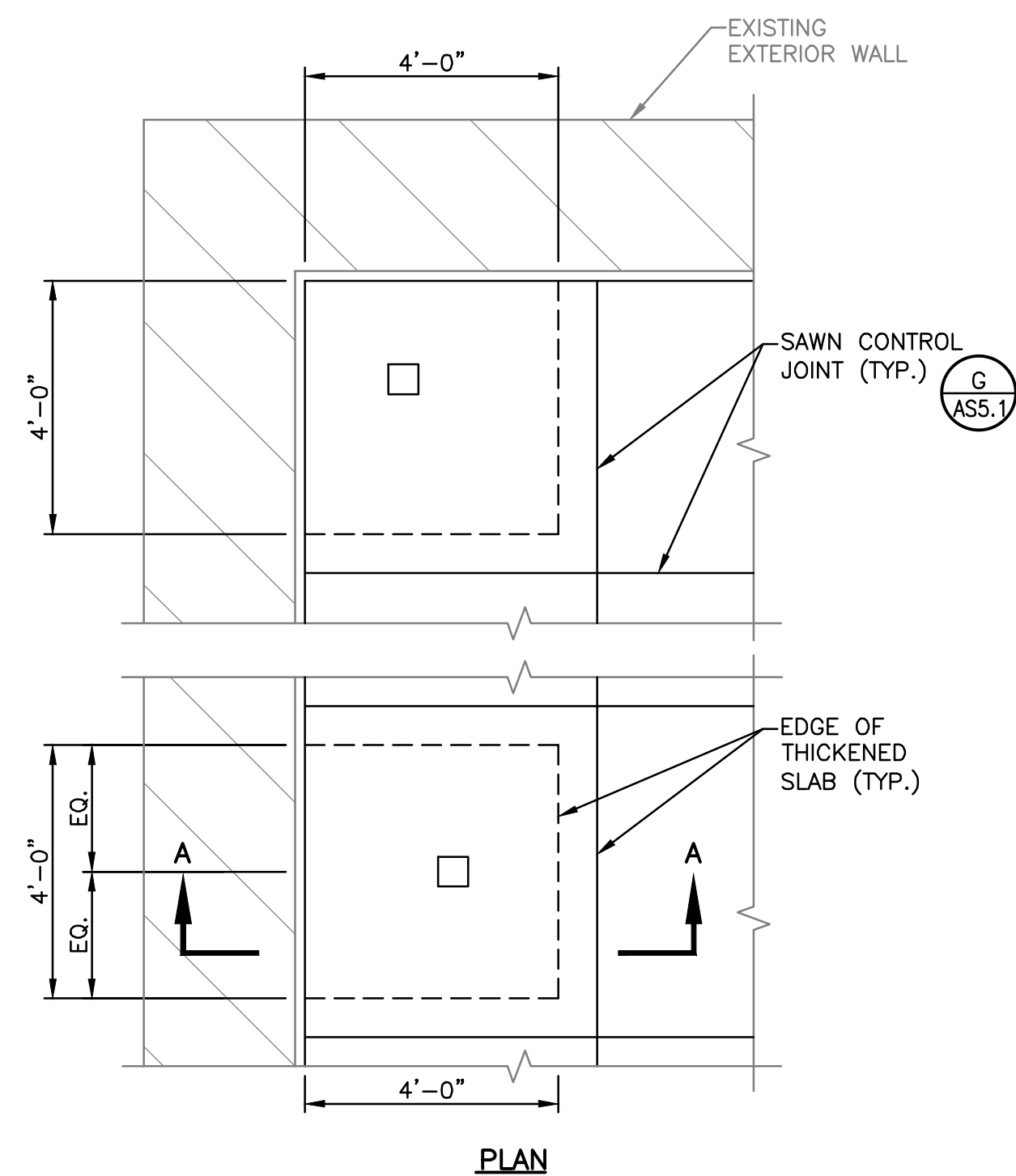
B STEEL COLUMN
AS5.1 NO SCALE



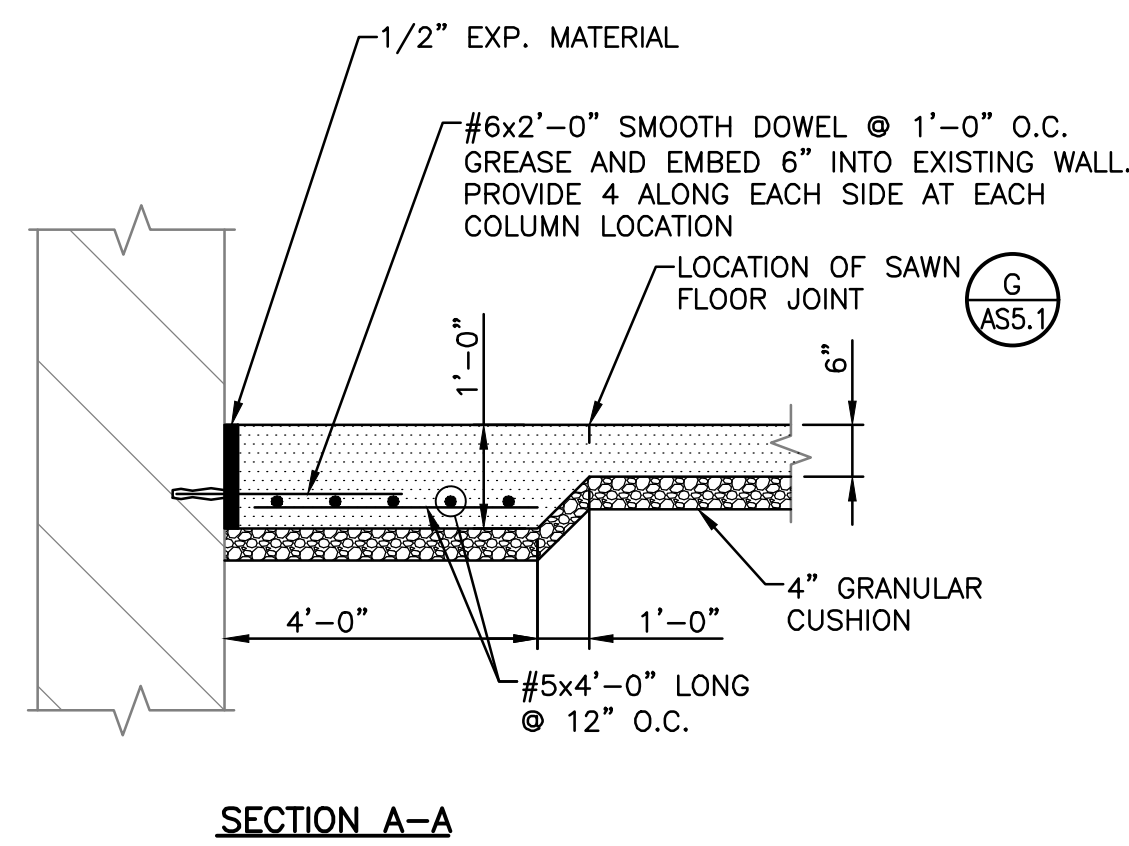
C SINGLE PLATE SIMPLE SHEAR CONNECTION
AS5.1 NO SCALE



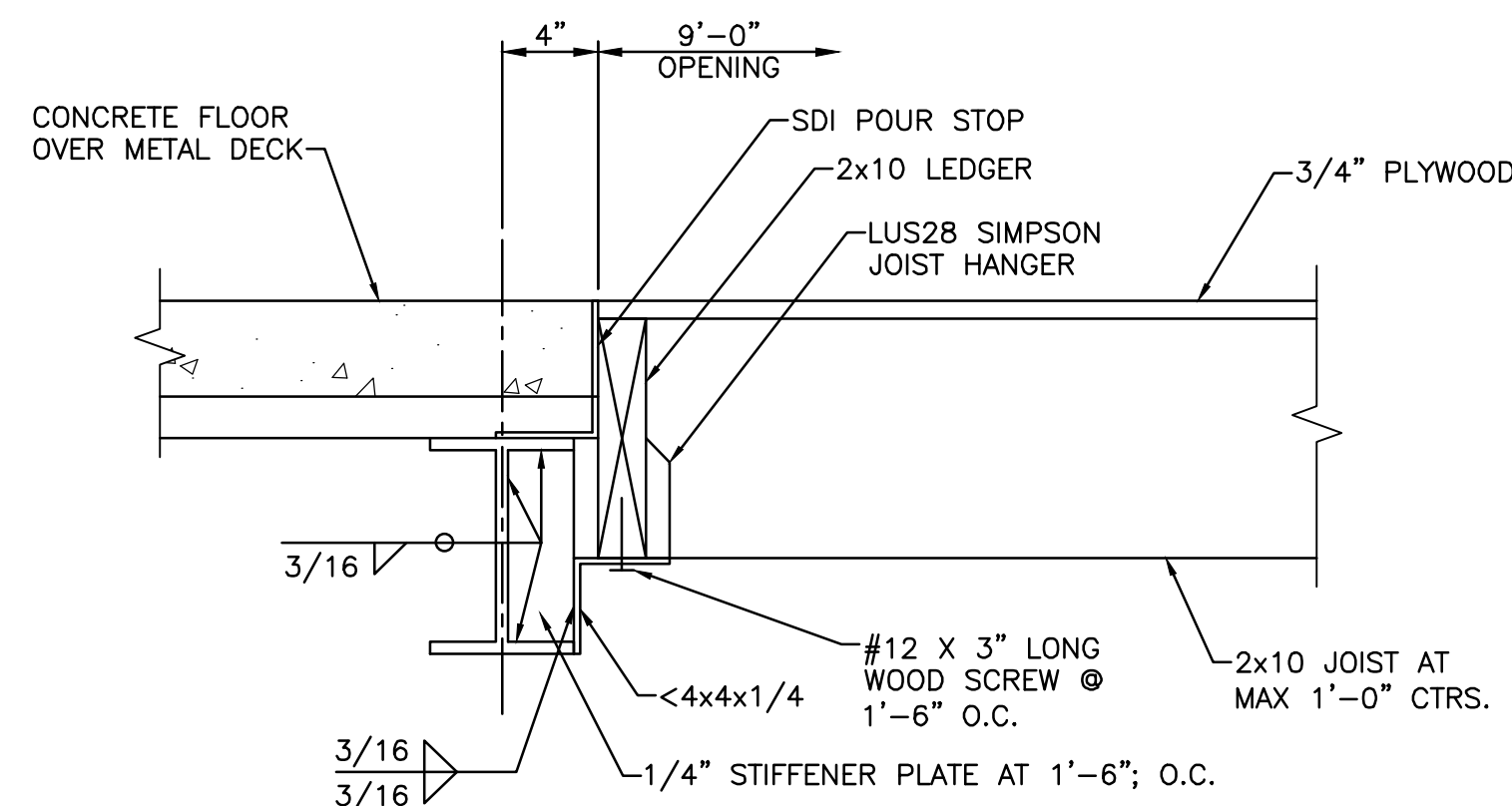
D EDGE OF FLOOR
AS5.1 NO SCALE



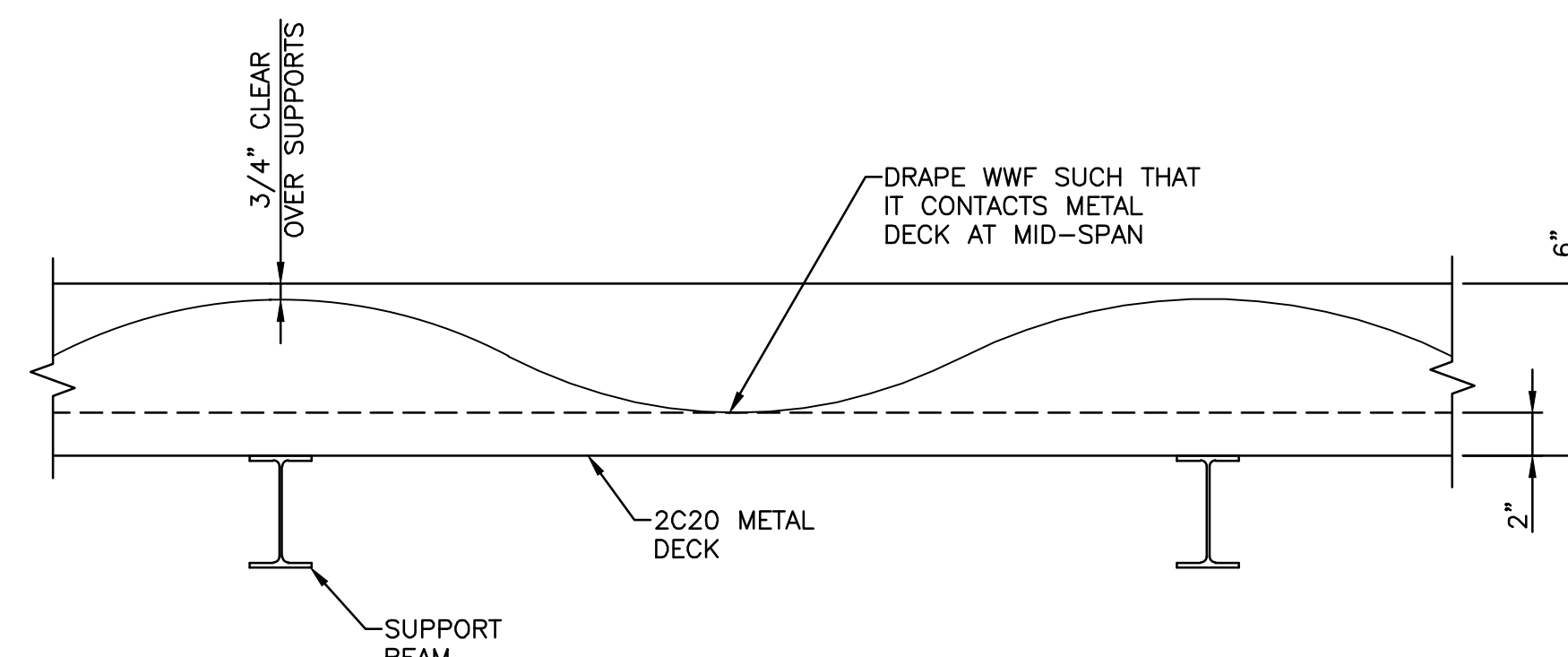
E THICKENED SLAB-ON-GRADE AT NEW COLUMNS
AS5.1 NO SCALE



F WOOD FLOOR INFILL
AS5.1 NO SCALE



G TYPICAL SLAB SAWN JOINT
AS5.1 NO SCALE



H DRAPED WELDED WIRE FABRIC REINFORCING
AS5.1 NO SCALE

DETAILS

REINDAHL PARK UTILITY STRUCTURE IMPROVEMENTS
CITY OF MADISON
MADISON, WISCONSIN

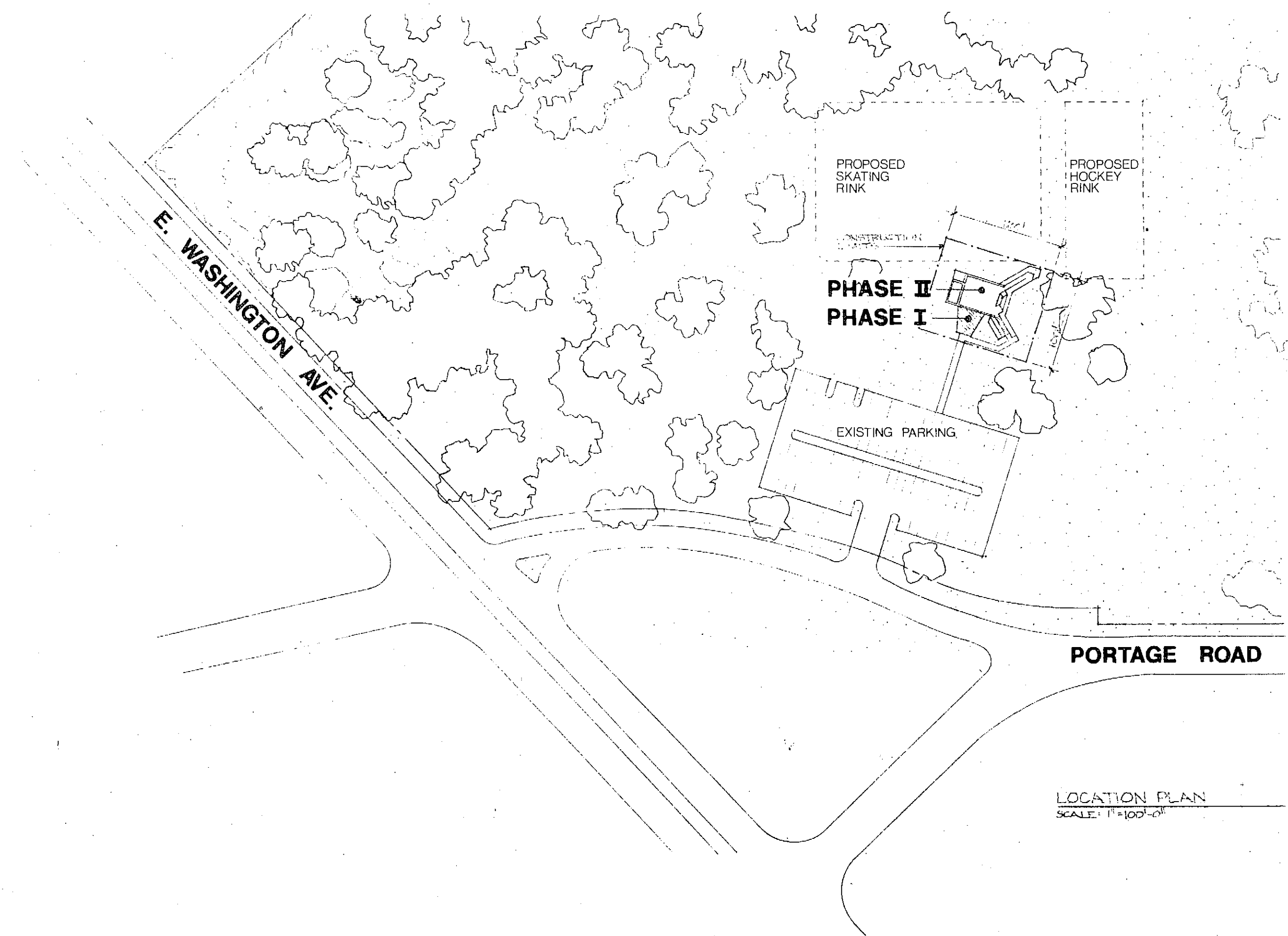
JOB NO.
1020.115

PROJECT MGR.
KEITH BEHREND

SA
STRAND
ASSOCIATES®

SHEET
7
AS5.1

REINDAHL PARK SHELTER
PHASE II
MADISON, WISCONSIN



INDEX TO DRAWINGS

NUMBER	DESCRIPTION
TITLE SHEET	TITLE, INDEX, SIGNATURES
S1	FOUNDATION PLAN
S2	ROOF FRAMING PLAN
S3	STRUCTURAL DETAILS
A1	FIRST FLOOR PLAN
A2	SECOND FLOOR PLAN
A3	ELEVATIONS
A4	ELEVATIONS
A5	SECTIONS
A6	SECTIONS, DETAILS
A7	DETAILS

APPROVED BY COUNCIL _____

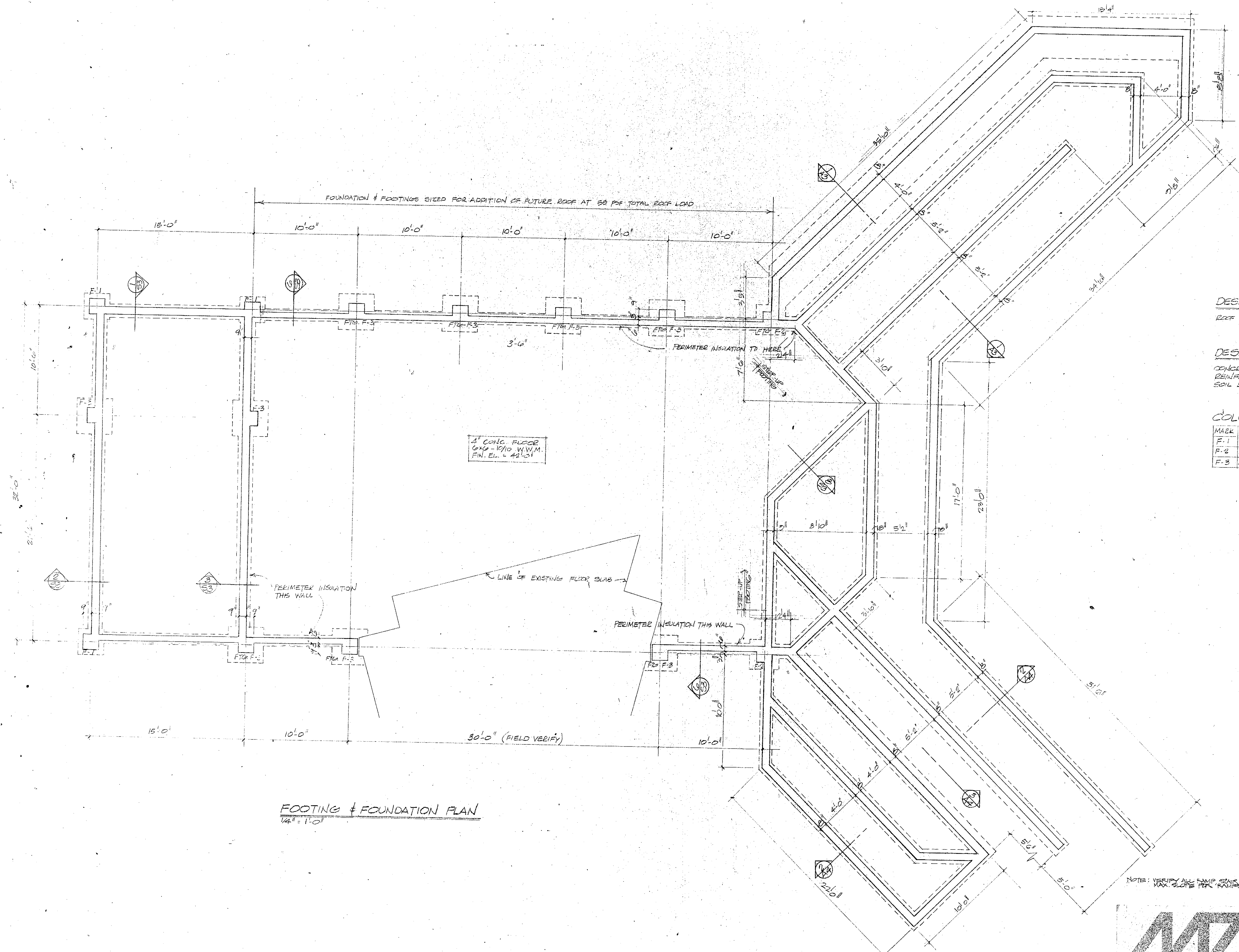
CITY CLERK

OWNER:
CITY OF MADISON, PARKS DEPT.

ARCHITECT:
MARTINSONS ZECK, INC.

[Signature]
14 FEB 78

CONSULTANT:
DRIES - JACQUES ASSOCIATES, INC.



DESIGN LIVE LOADS
ROOF PATIO 100 PSF + 30 PSF

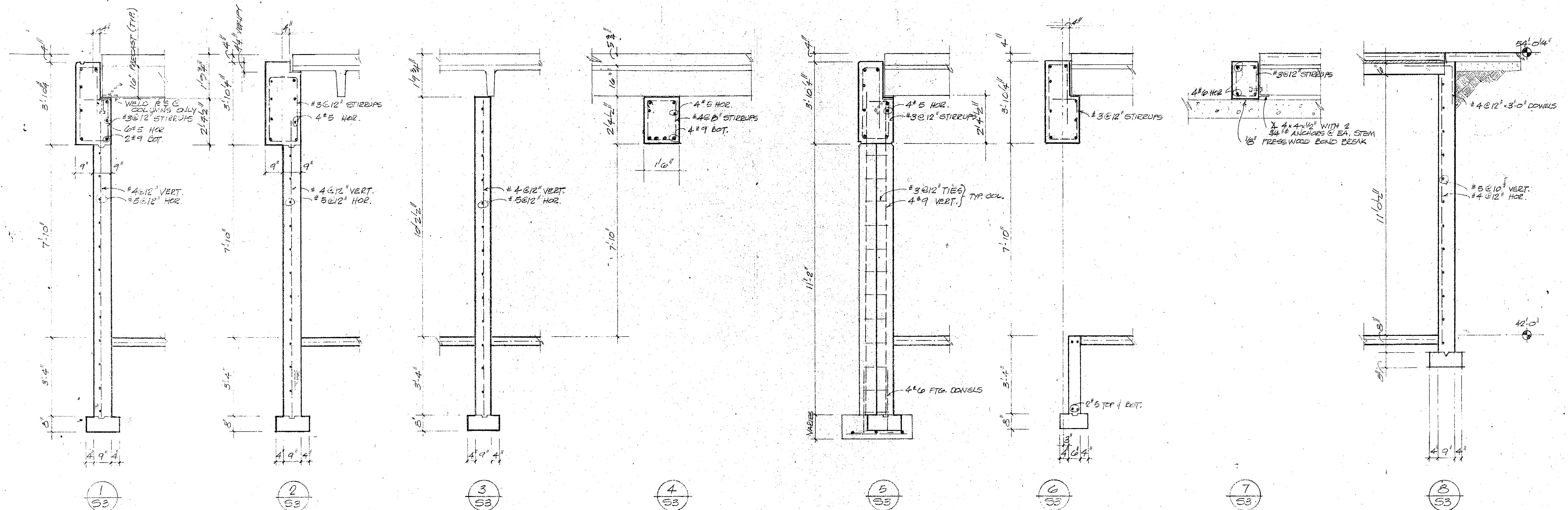
DESIGN STRESSES
CONCRETE $f'_c = 3000$ PSI
REINFORCING STEEL $f_y = 60,000$ PSI
SOIL BEARING $q_u = 4000$ PSF

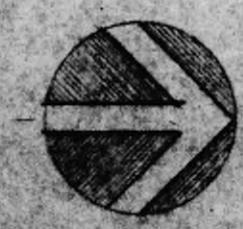
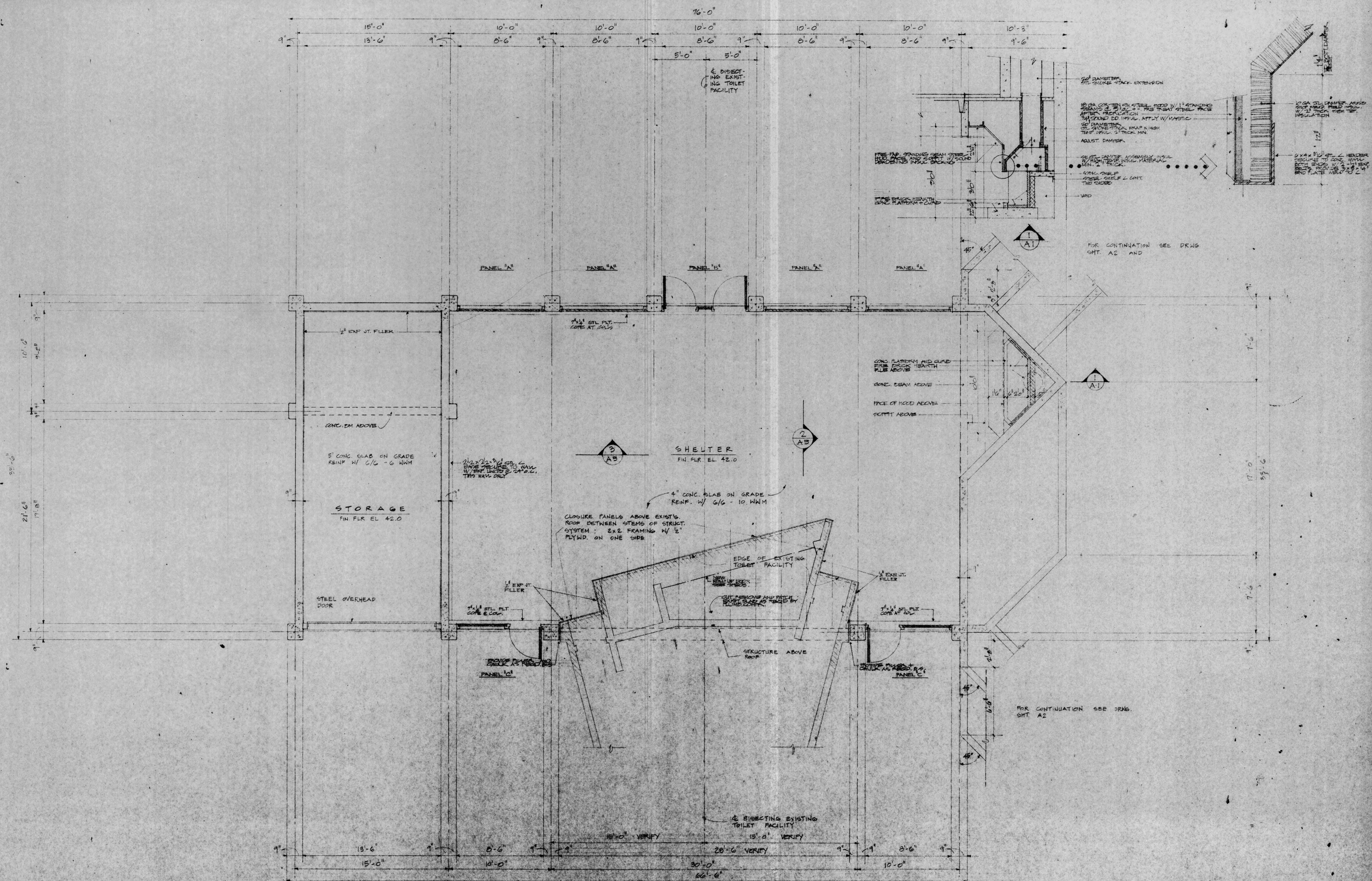
COLUMN FOOTING SCHEDULE

MARK	SIZE	REINFORCING
F-1	2'-0" SQ x 10"	3" x 4 EA. WAY BOT.
F-2	3'-0" SQ x 10"	4" x 4 EA. WAY BOT.
F-3	5'-7" SQ x 12"	6" x 4 EA. WAY BOT.

FOOTING & FOUNDATION PLAN
1/4" = 1'-0"

NOTE: VERIFY ALL RAMP SLOPES AND PLANTER DIMENSIONS IN THE FIELD.
MAX. SLOPE FOR RAMP SHALL NOT EXCEED 1:12





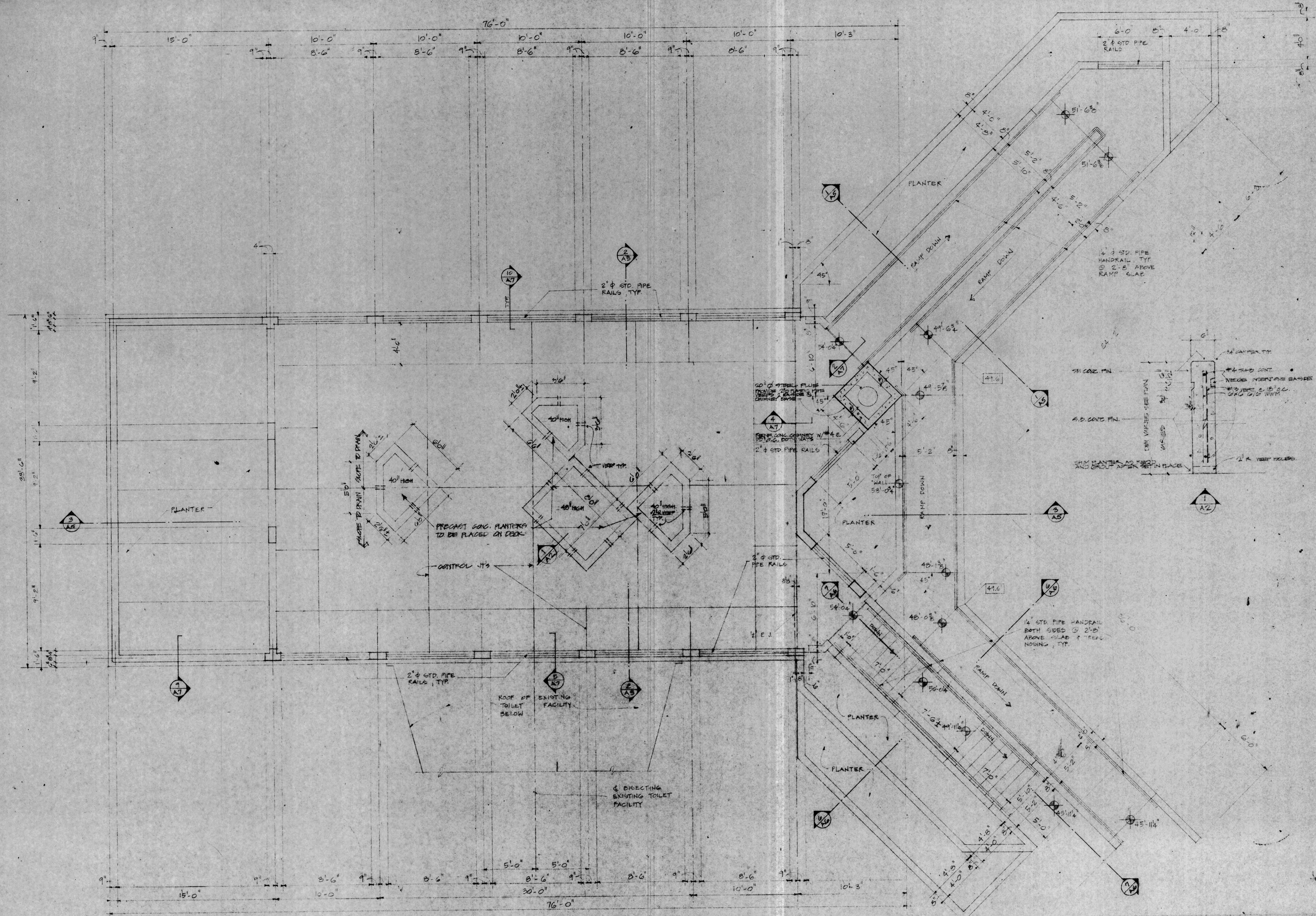
GROUND LEVEL FLOOR PLAN

1/4" = 1'-0"



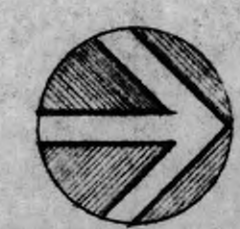
RENNAL PARK SHELTER PROJECT
PHASE II
MADISON, WISCONSIN
CITY OF MADISON
PUBLICS DEPARTMENT
MARTINSONS ZECK
324 SOUTH MOUNTAIN STREET
MADISON, WISCONSIN 53703
608.256.2002

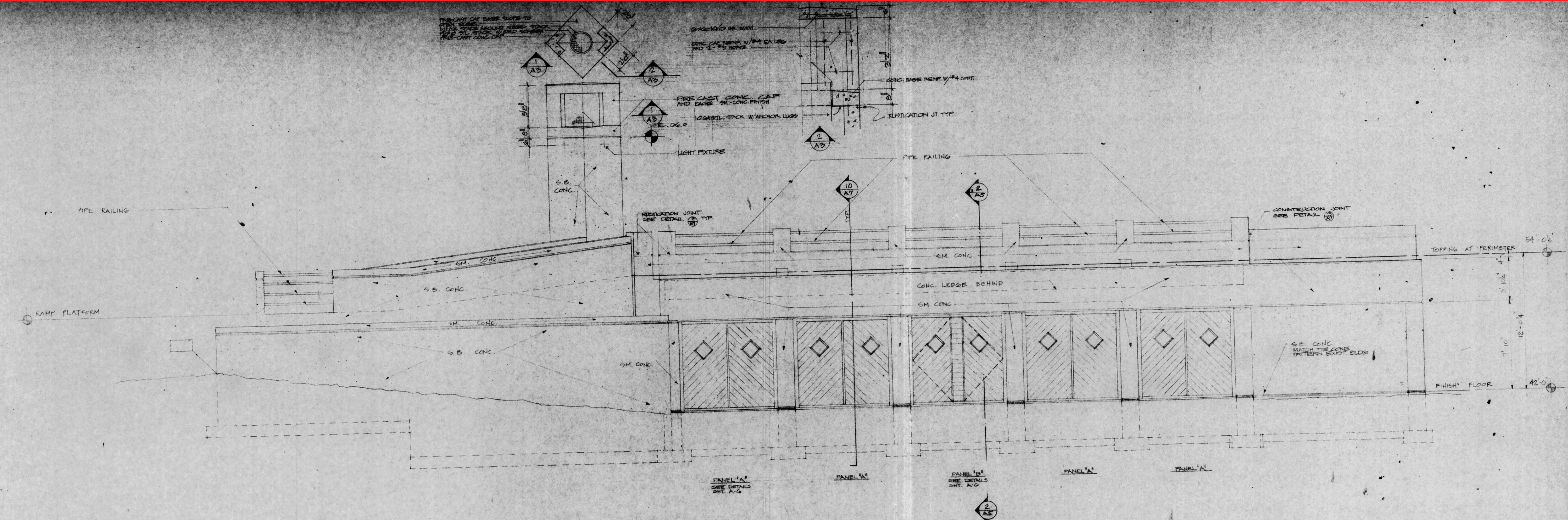
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DRAWING NUMBER
A1



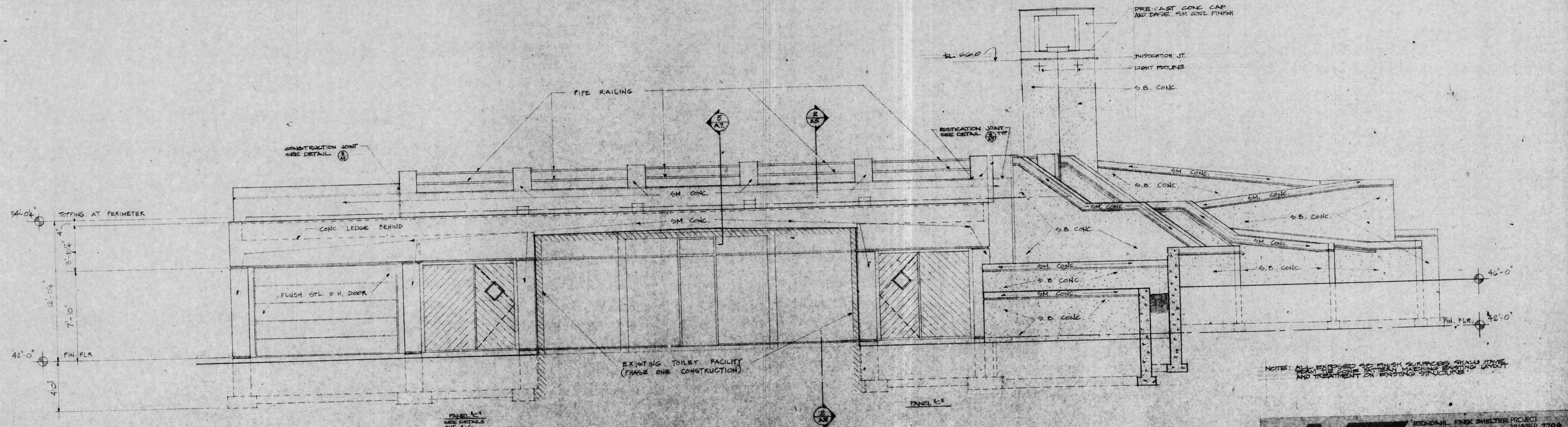
ROOF, RAMP, AND STAIR PLAN

1/4" = 1'-0"





WEST ELEVATION
1/4" = 1'-0"



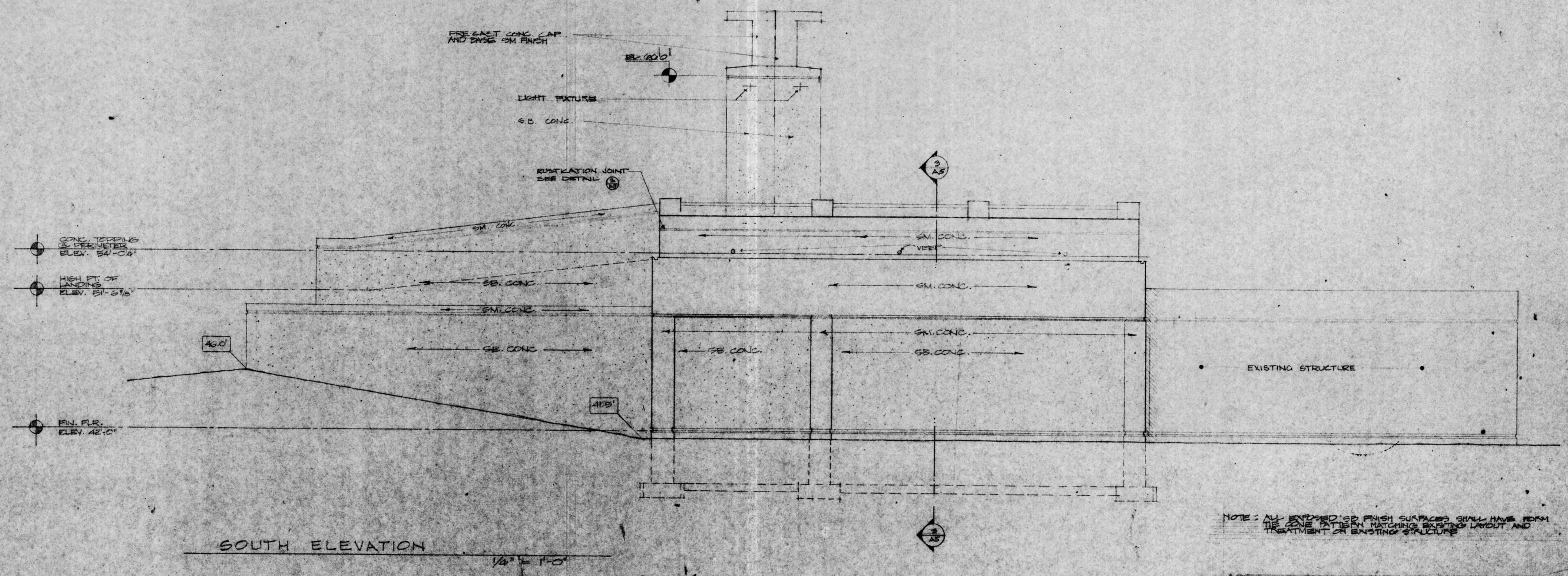
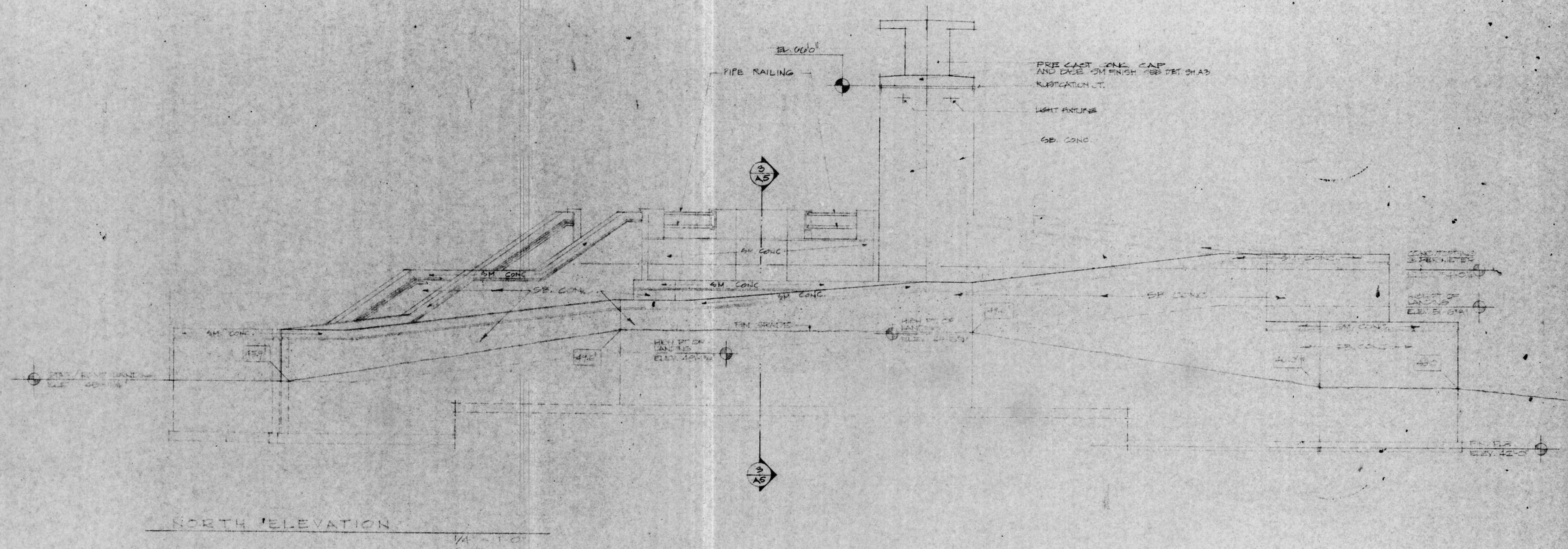
EAST ELEVATION
1/4" = 1'-0"

NOTE: ALL EXPOSED S.D. FINISH SURFACES SHALL HAVE
A 1/8" X 1/8" X 1/8" MACHINE FINISH AND TREATMENT ON EXISTING STRUCTURE

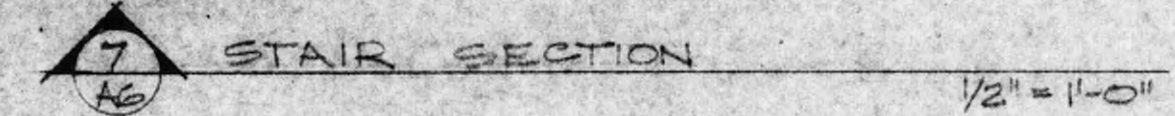
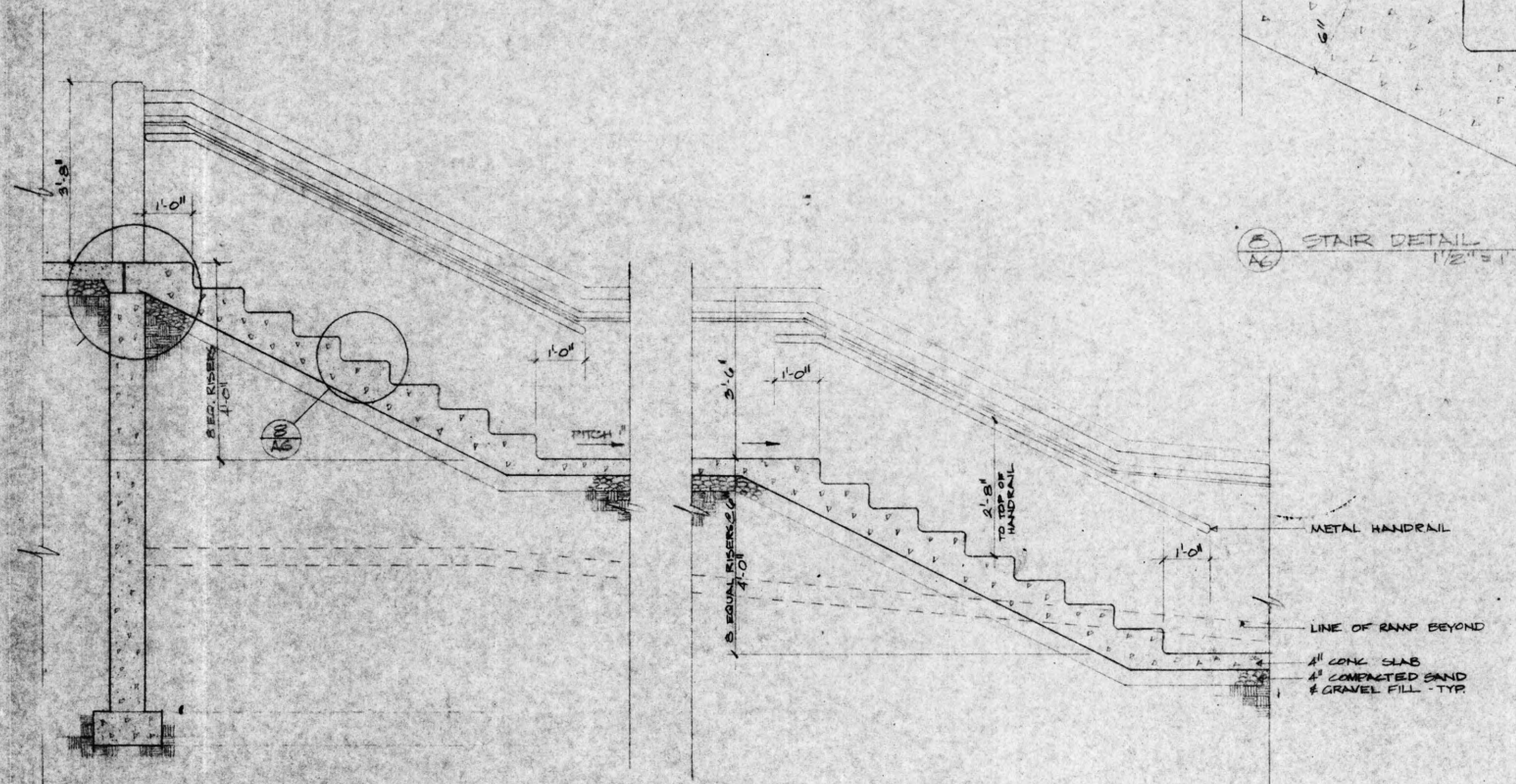
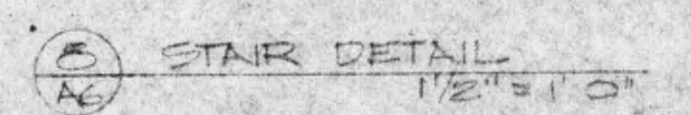
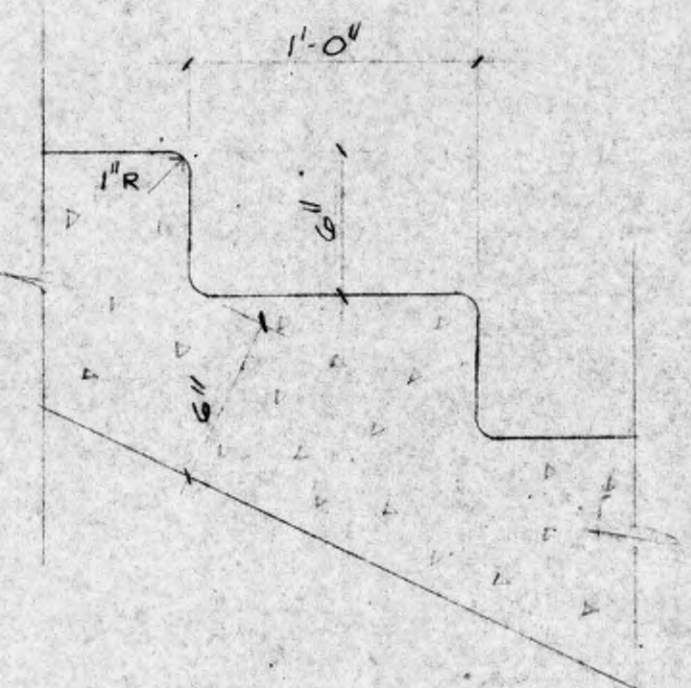
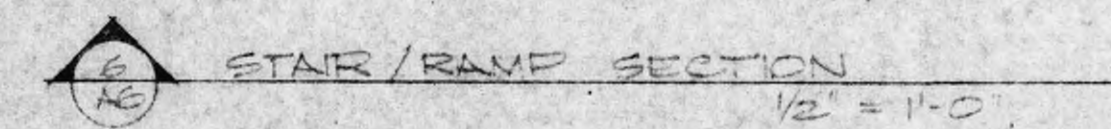
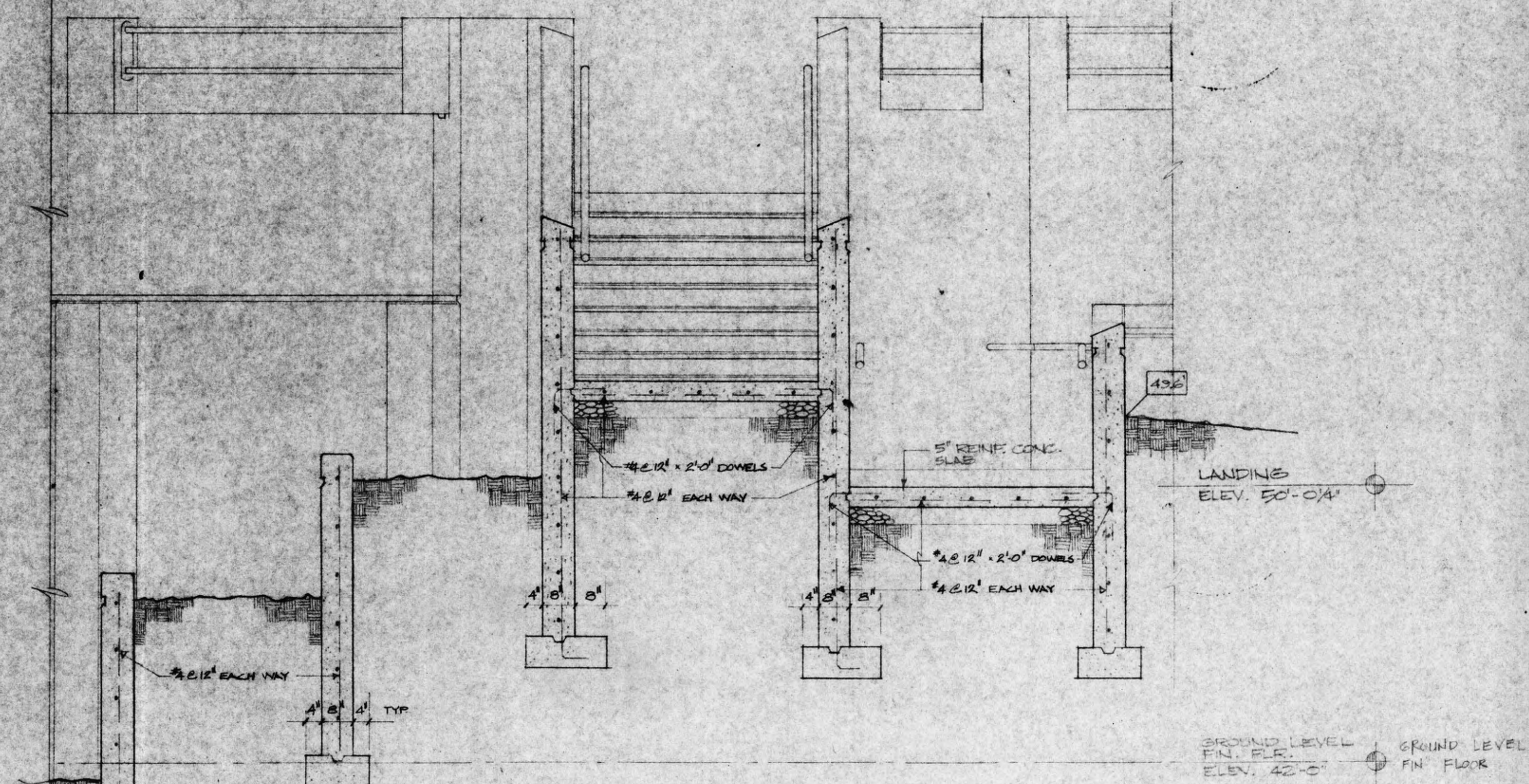
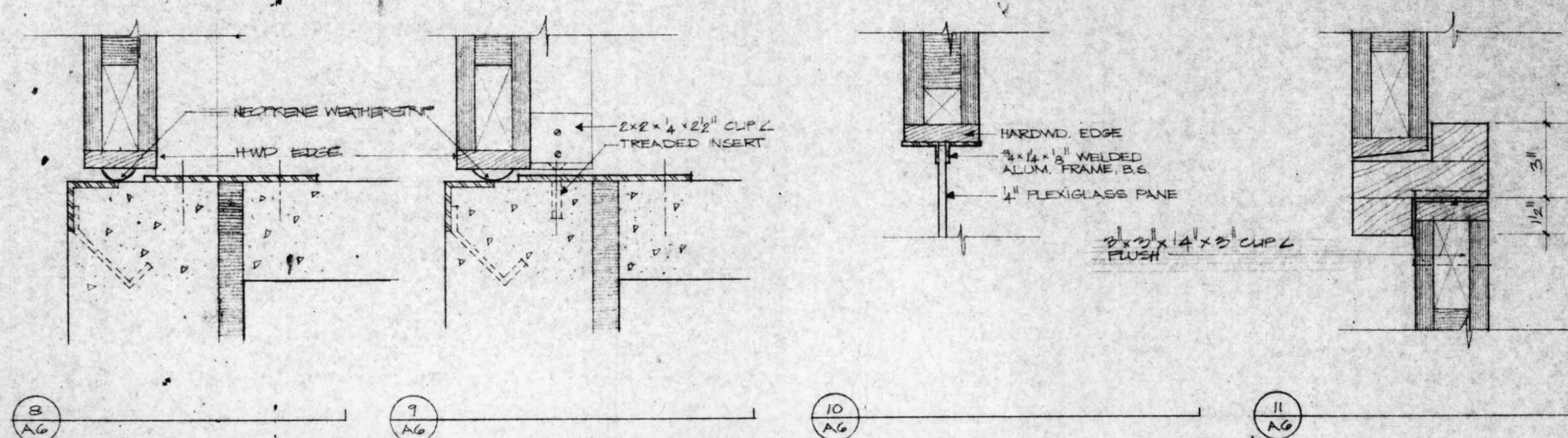
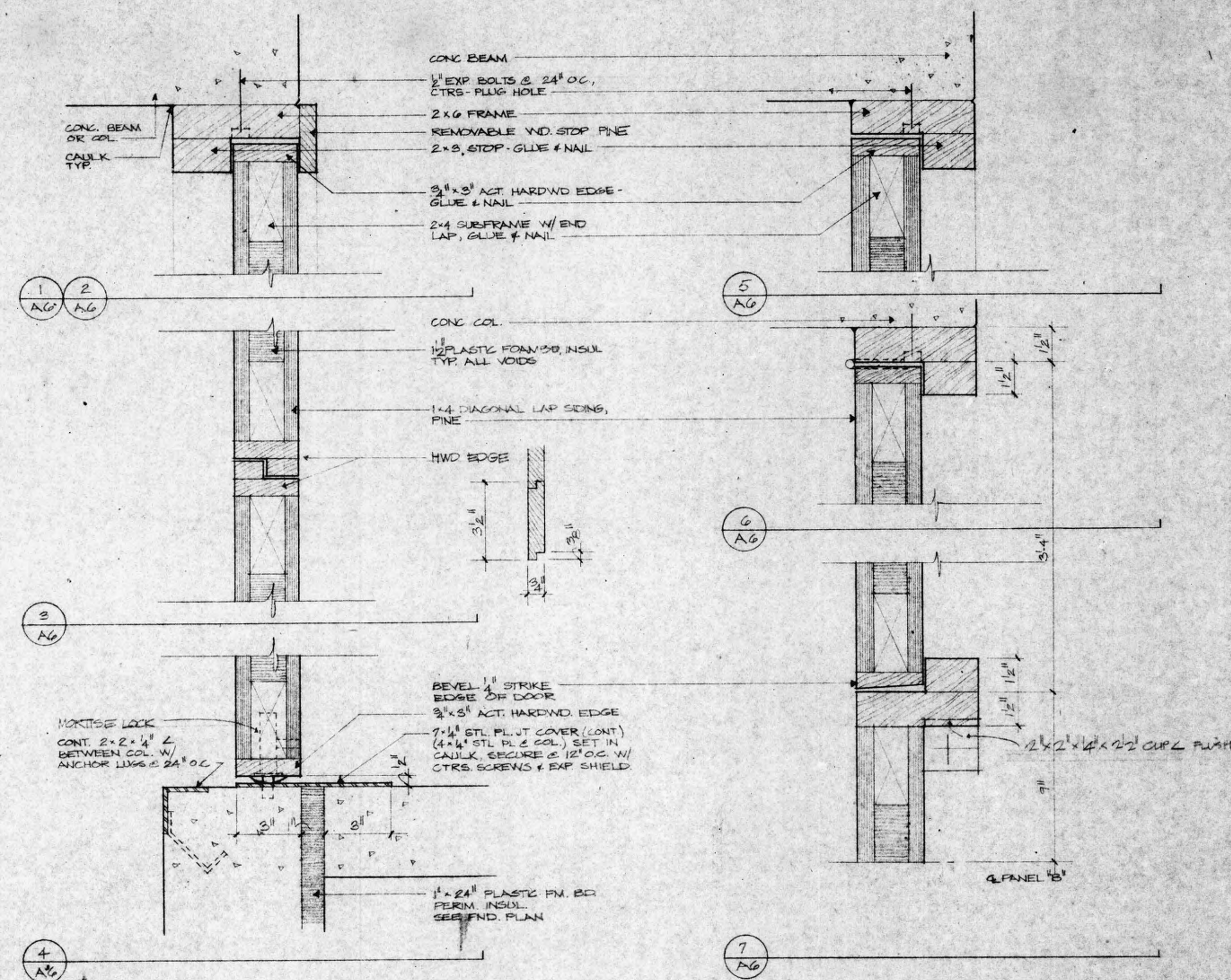
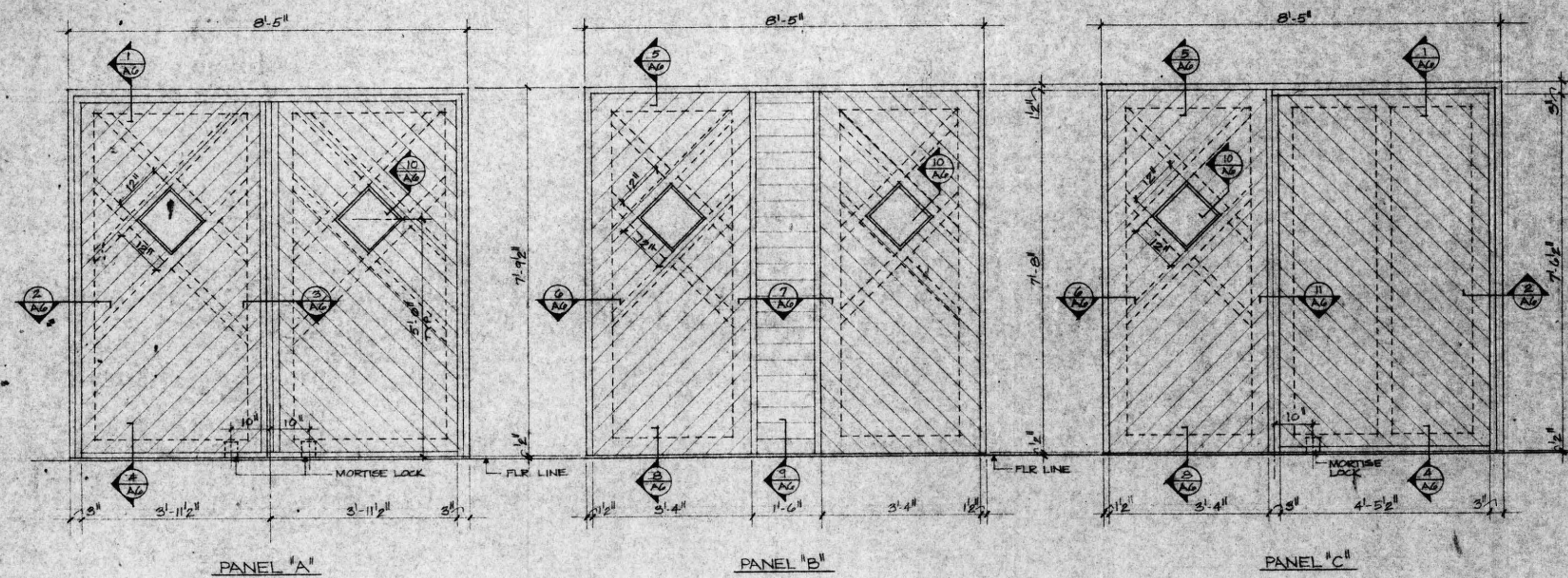


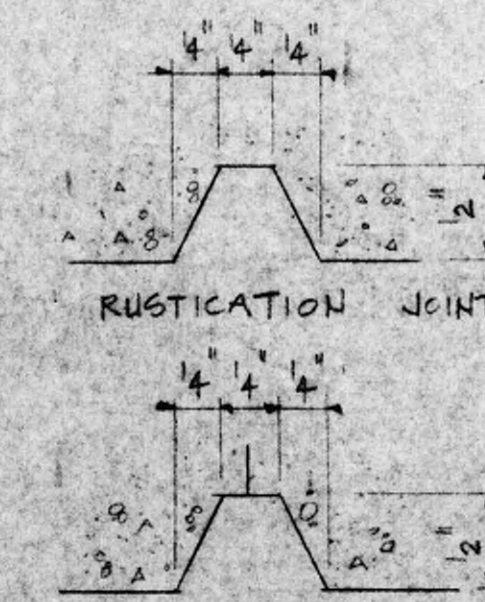
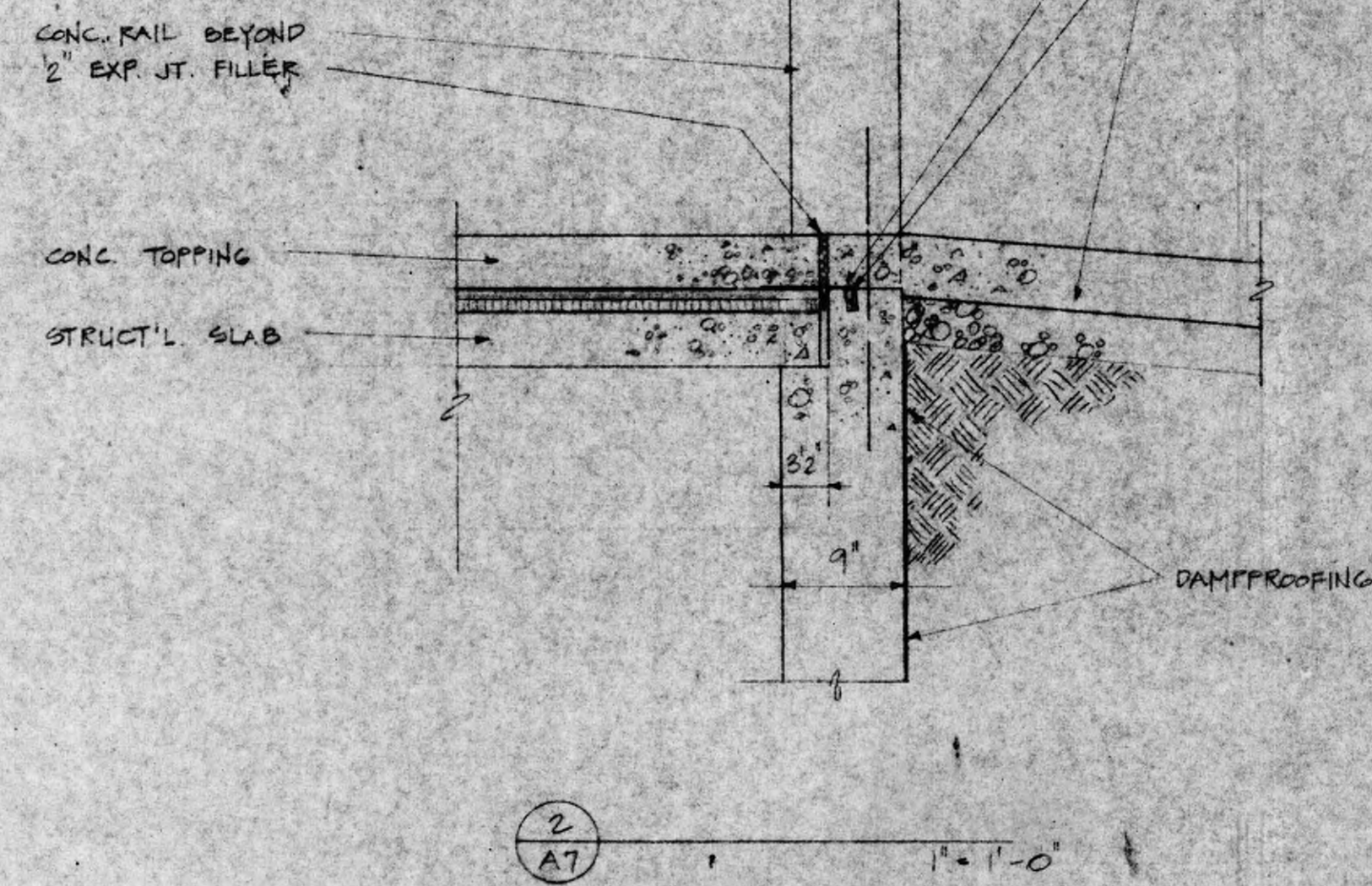
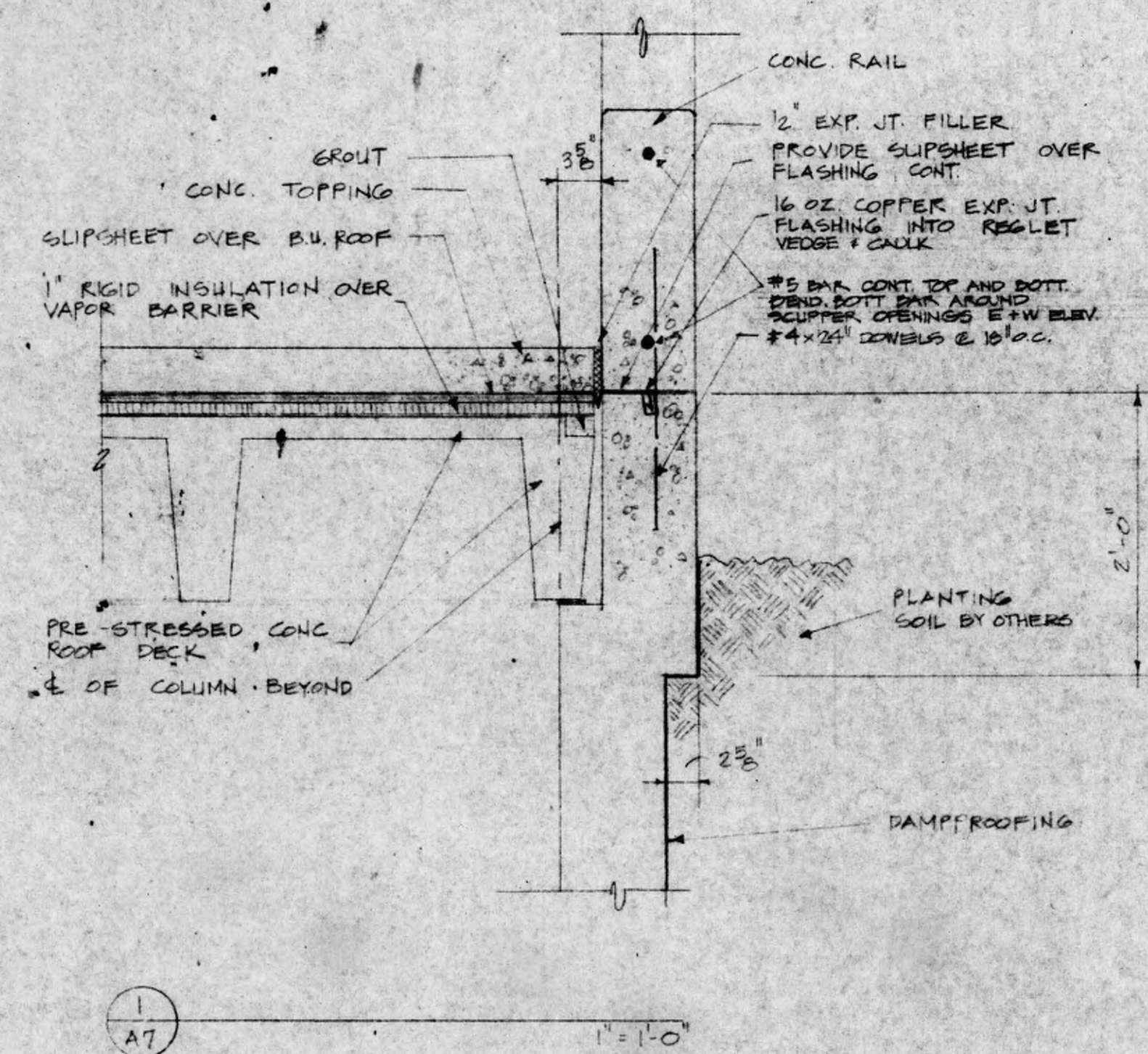
REYNOLDS PARK SHELTER PROJECT
PHASE II
MADISON, WISCONSIN
CITY OF MADISON
PUBLIC DEPARTMENT
MARTINSONS ZECK
324 SOUTH HAMILTON STREET
MADISON, WISCONSIN 53703
608 266 2002

PROJECT NUMBER 7706
DATE 11-15-77
DRAWING NUMBER
A3

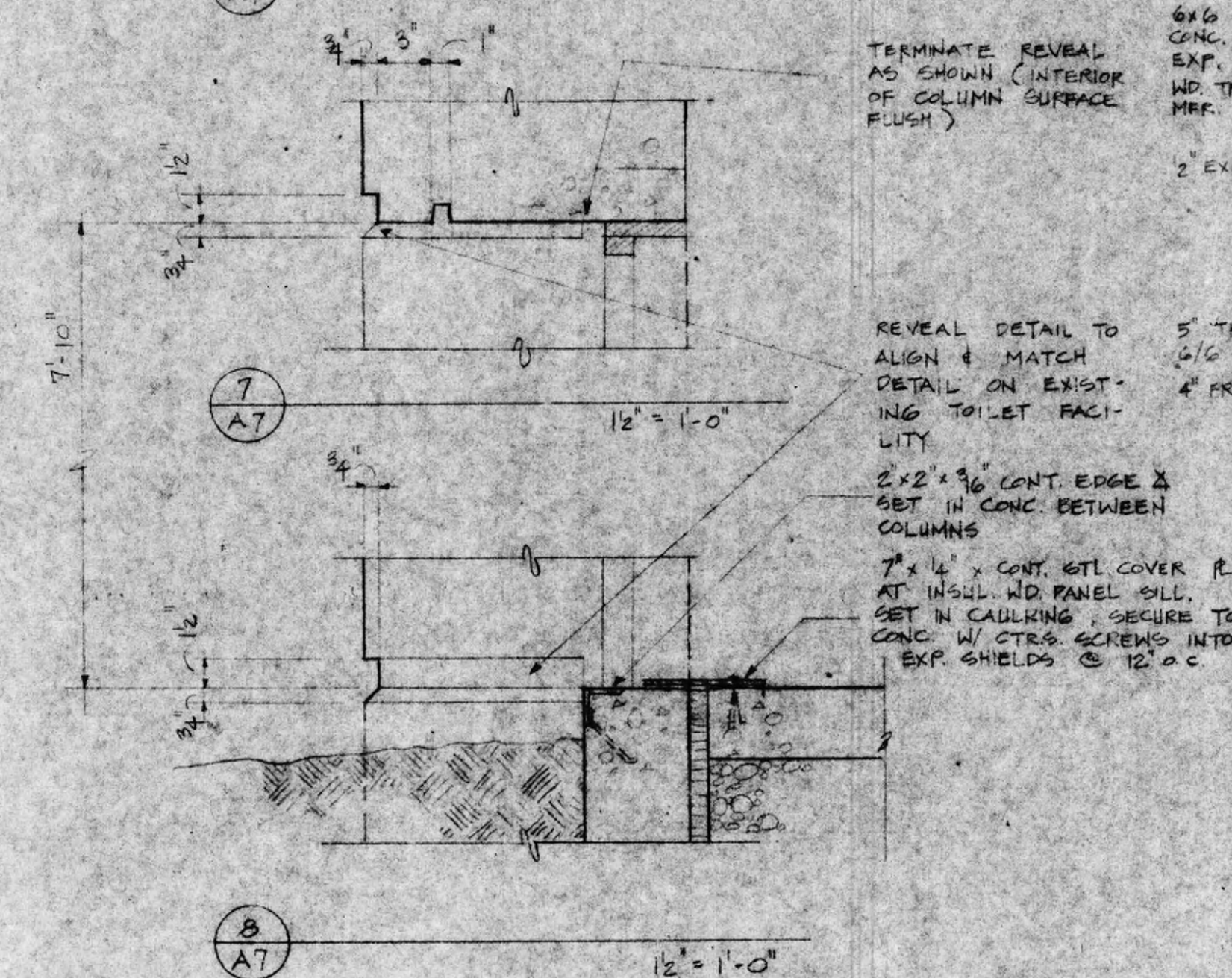
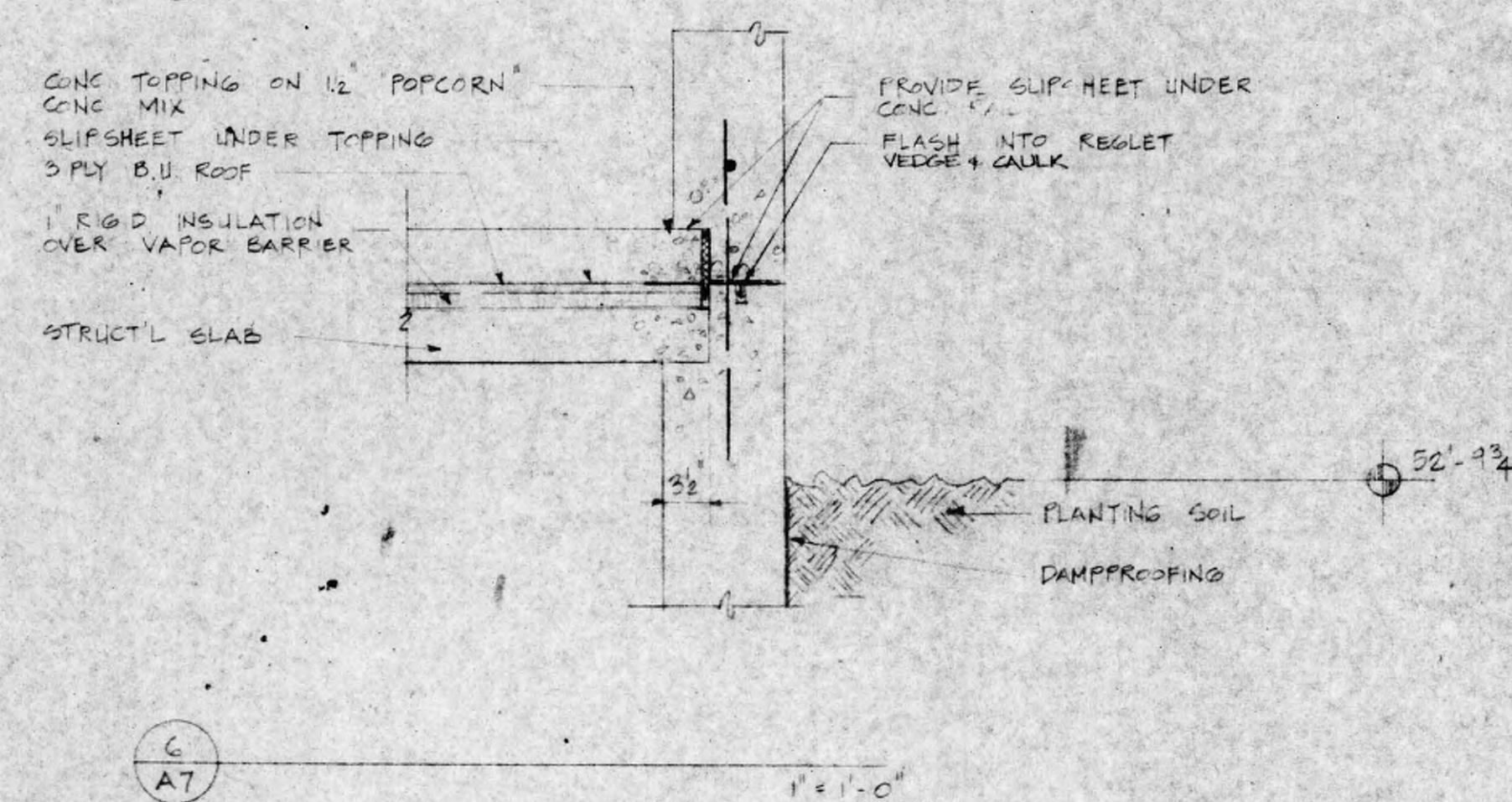
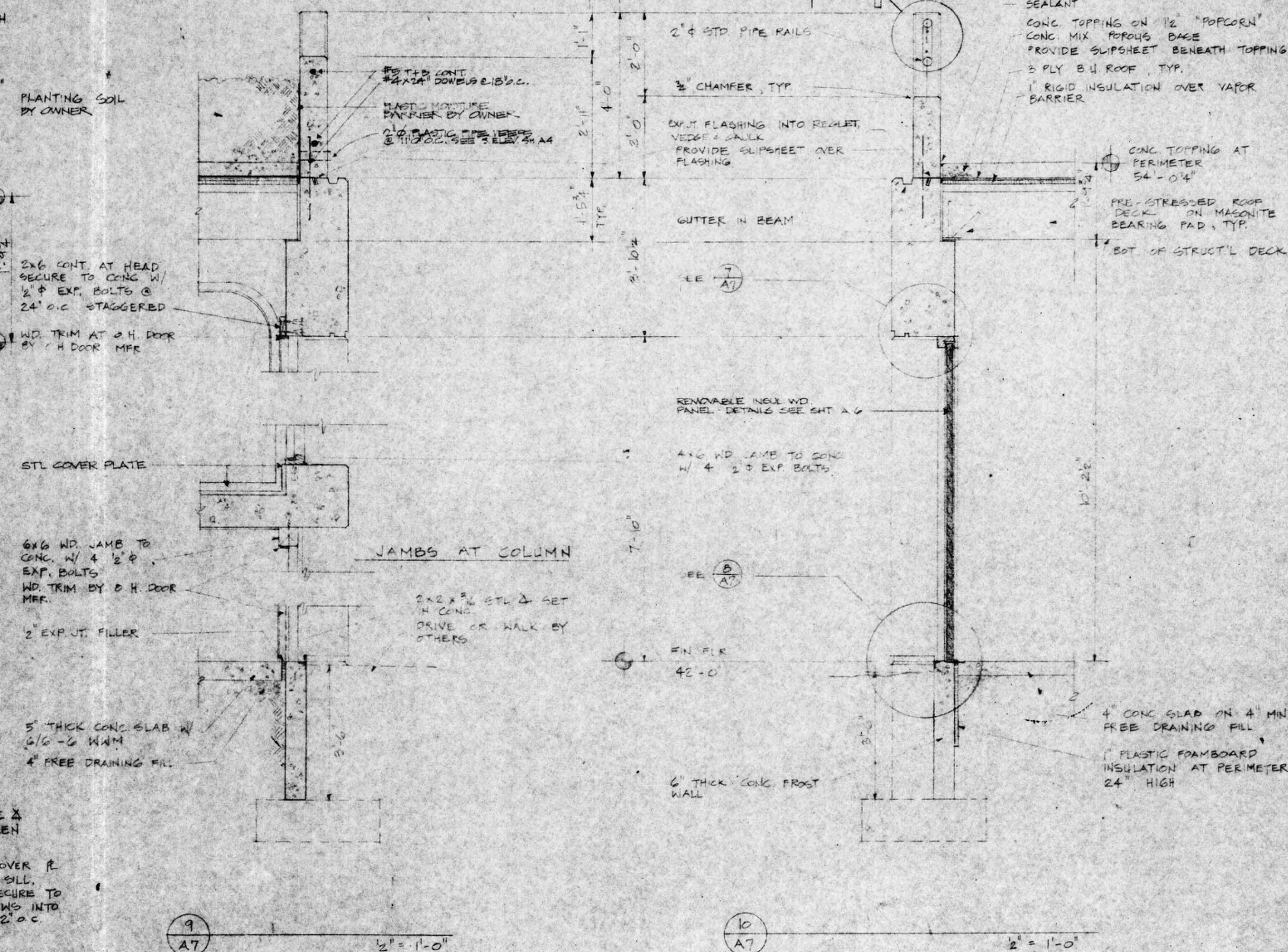
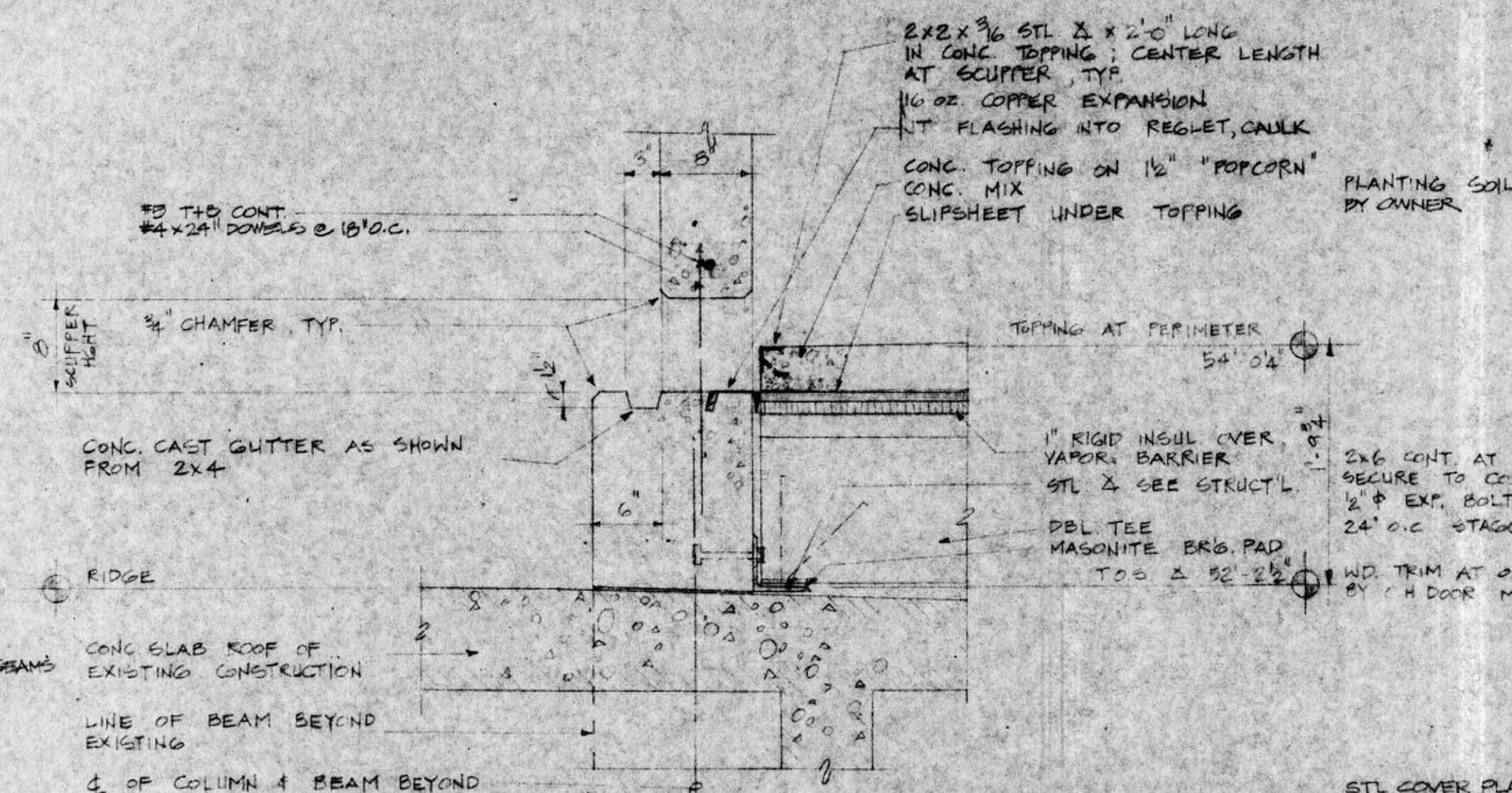
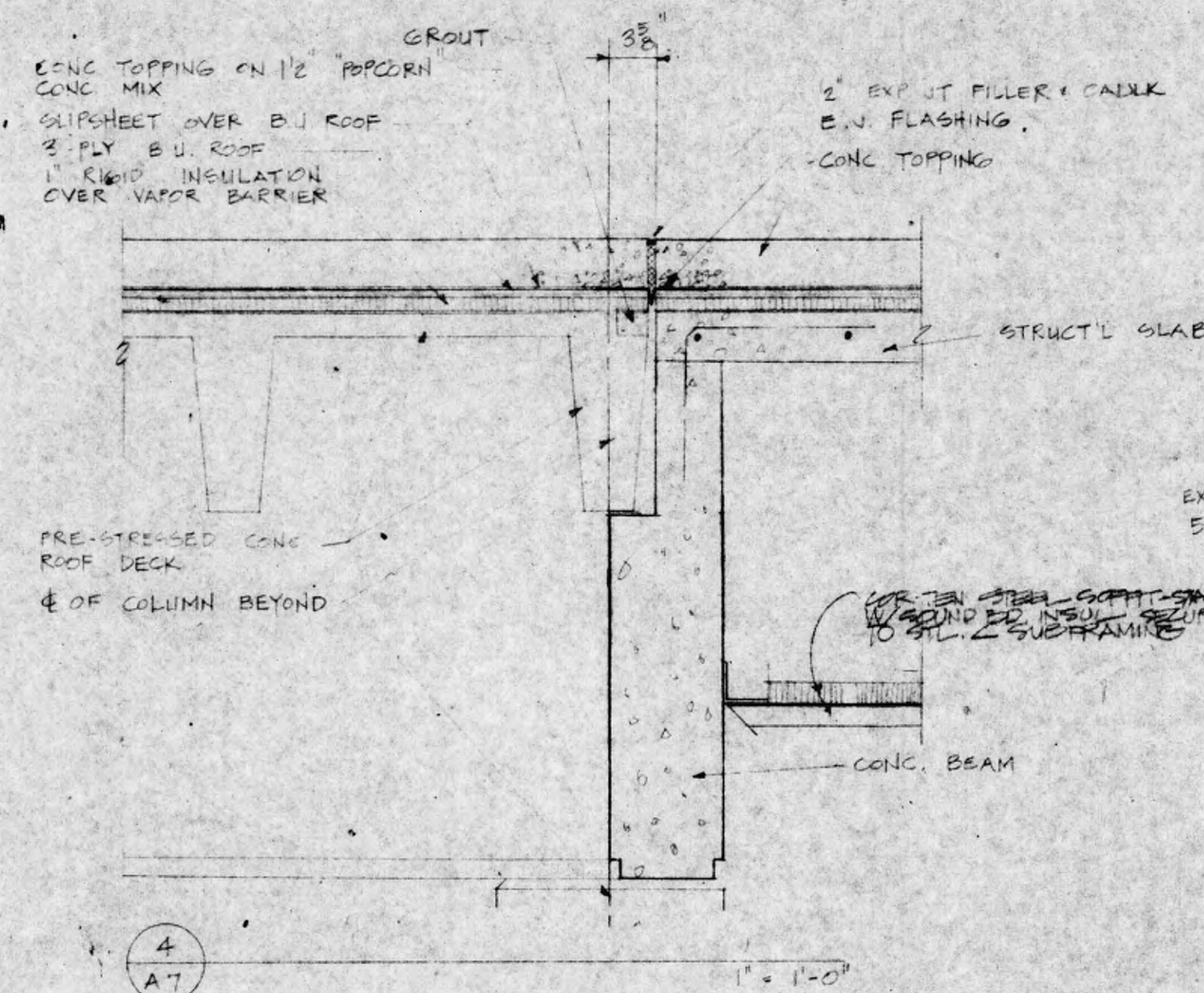


NOTE: ALL EXTERIOR SB FINISH SURFACES SHALL HAVE FORM OF CONC. PATTERN MATCHING EXISTING LAYOUT AND TREATMENT ON EXISTING STRUCTURE

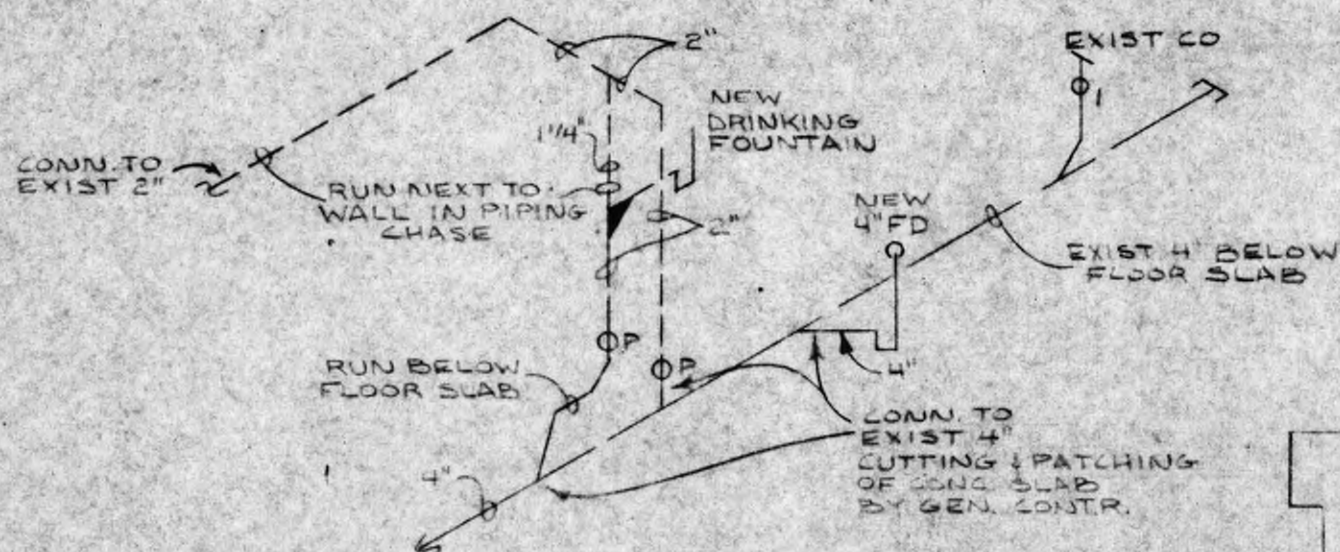




VERTICAL CONSTRUCTION JOINT



FIXTURE CONNECTION SCHEDULE						
SYMBOL	DESCRIPTION	PIPE SIZE (INCHES DIA.)				REMARKS
		C.W.	H.W.	WASTE	VENT	
P-1	DRINKING FOUNTAIN	1/2"	—	1/4"	1/4"	LOCATE AS TIGHT UNDER DRINKING FOUNTAIN AS POSSIBLE
P-2	HOSE HYDRANT	1/2"	—	—	—	



WASTE SYSTEM ISOMETRIC
NO SCALE

SYMBOL SCHEDULE - PLUMBING

---	WASTE
---	VENT
---	COLD WATER
---	CHILLED WATER
---	GAS
---	GAS DRIP LEG
---	GAS PLUG VALVE
---	UNION
---	CAPPED OR PLUGGED PIPE
---	GATE VALVE
---	SHOCK ARRESTOR
CO	CLEAN OUT

SHOCK ARRESTOR SCHEDULE				
SYMBOL	MFG.	MODEL NO.	P.D.I. RATING	MAX. F.U. CAP.
A	WADE	W-5	A	11
B	WADE	W-10	B	22

FIXTURE SCHEDULE - ELECTRICAL					
SYMBOL	MANUFACTURER	CATALOG NO.	LAMP	WATTAGE	REMARKS
A	SPERO ELECTRIC	100-BV4	100 W-MV	SURFACE	CAST ALUMINUM ①
B	P.S.S.	110	100 W	SURFACE	PORCELAIN ①
C	PRESCOTE	93020	175 W-MV	WALL SURFACE	TEXTURED BLACK ENAMEL ②

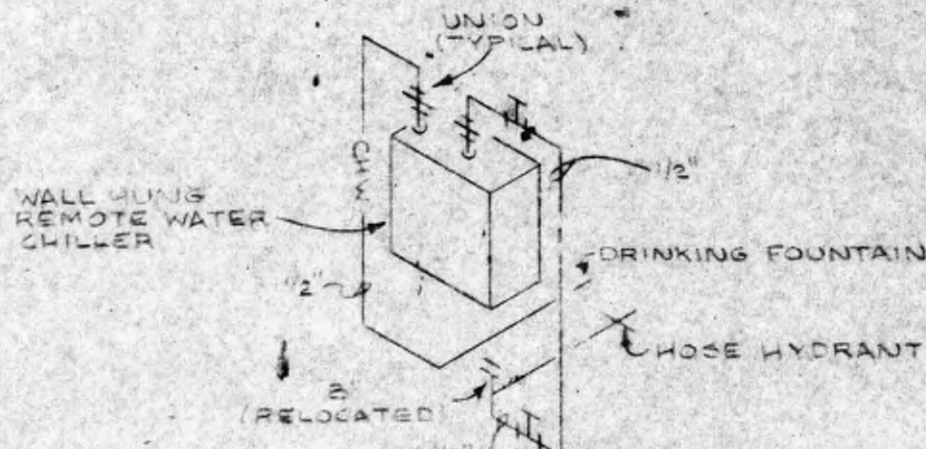
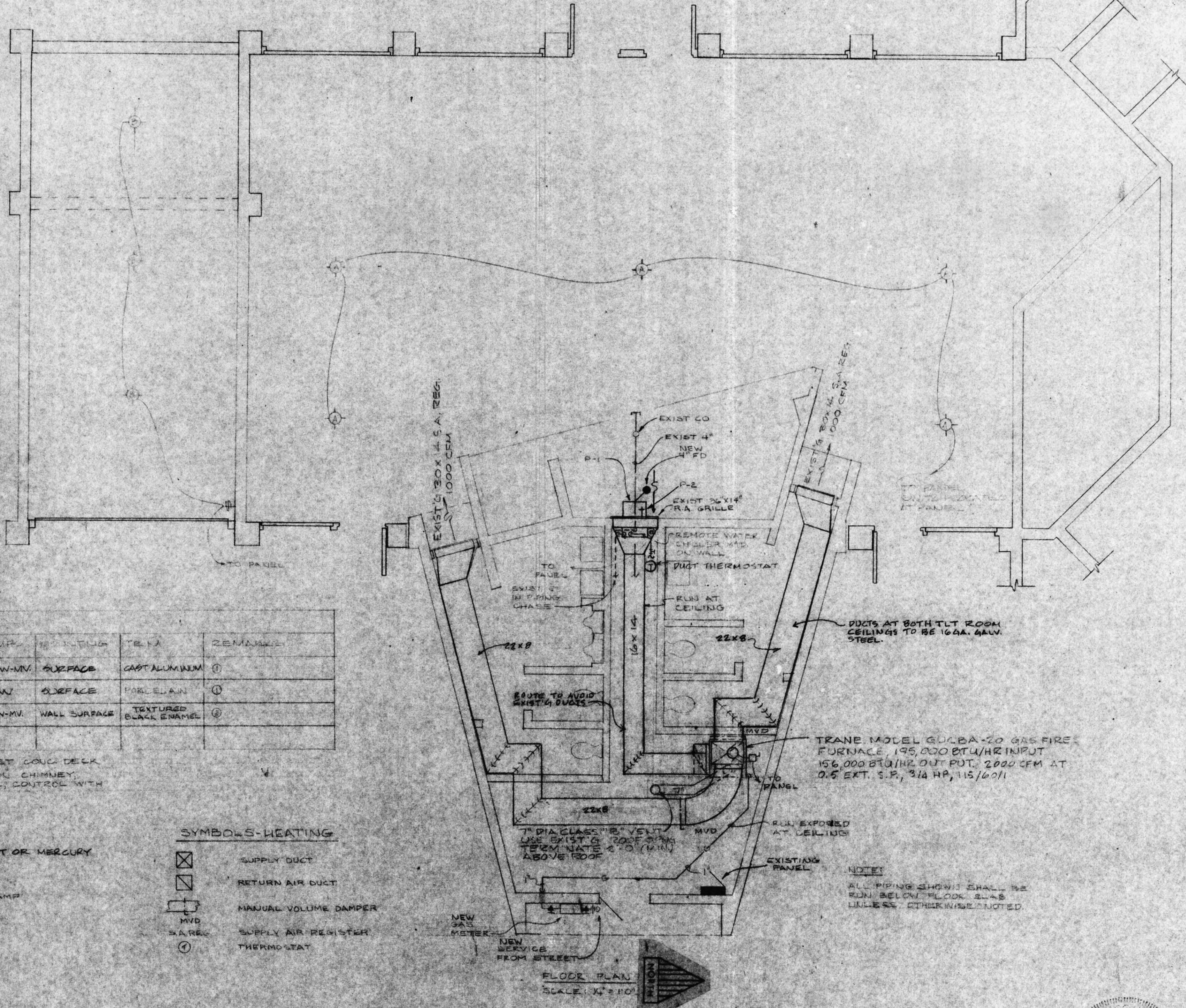
① MOUNT BETWEEN TIES OF PRECAST CONCRETE DECK
② SEE ARCH. DWGS FOR LOCATION OF CHIMNEY
RUN SEPARATE CIRCUIT TO PANEL; CONTROL WITH TIME CLOCK

SYMBOLS - ELECTRICAL

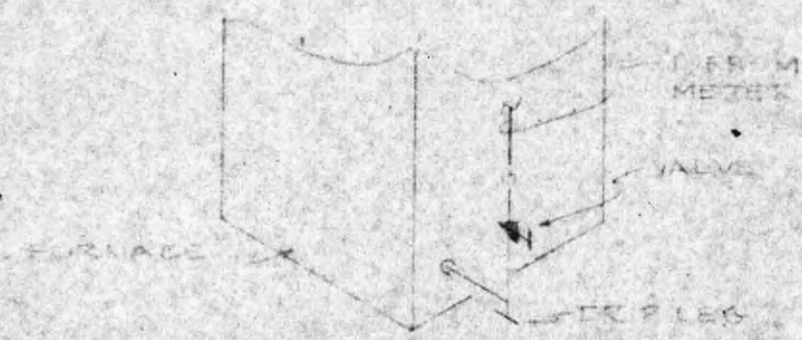
- SURFACE FIXTURE - INCANDESCENT OR MERCURY
- SINGLE POLE SWITCH
- SURFACE MOUNTED MERCURY VAPOR LAMP
- MOTOR
- MOTOR DISCONNECT
- PANEL
- HOME RUN
- ⊙ EQUIPMENT CONNECTION

SYMBOLS - HEATING

- ☒ SUPPLY DUCT
- ☐ RETURN AIR DUCT
- ⊞ MANUAL VOLUME DAMPER
- MVD SUPPLY AIR REGISTER
- ① THERMOSTAT



WATER SUPPLY SYSTEM ISOMETRIC
NO SCALE



GAS CONNECTION ISOMETRIC
NO SCALE

WILLIAM C. DINE
11-15-77
william c. dine



REDAHL, PARK, WELTER PROJECT
THANE, WISCONSIN
CITY OF MADISON
PARKS DEPARTMENT
MARTINDALE ZONE
324 SOUTH HAMILTON STREET
MADISON, WISCONSIN 53703
REV 256 2002

NUMBER 07/06
DATE 11-15-77
DRAWING NUMBER M1



APPENDIX B

CITY OF MADISON

1. General. Throughout this document, "City of Madison," "City" and "Purchasing" shall be synonymous and mean the City of Madison. The words "bid" and "proposal" are synonymous, as are the words "bidder," "proposer" and "contractor." The phrases "request for proposal," "invitation for bids," "request," "invitation," and "solicitation" shall also be synonymous.

As applied to the winning or selected bidder, the words "bid," "proposal," and "contract" are synonymous.

2. Entire Agreement, Order of Precedence. These standard terms and conditions shall apply to any Purchase Order issued as a result of this Request for Bid/Proposal, except where expressly stated otherwise in the RFP or in a written instrument covering this purchase signed by an authorized representative of the City and the Contractor, in a form approved by the City Attorney (a "Separate Contract"). If such a separate contract is executed it shall constitute the entire agreement and no other terms and conditions, whether oral or written, shall be effective or binding unless expressly agreed to in writing by the City.

If a Separate Contract is not executed, these Standard Terms and Conditions, the City's request for proposals, the version of the vendor's bid that was accepted by the City, and the City's Purchase Order (if any) shall constitute a contract and will be the entire agreement.

Order of Precedence: If there is a conflict between this Section A and any terms in the vendor's accepted bid or proposal, this Section A shall control unless the parties expressly agree to another order of precedence, in writing. If there is a conflict between this Section A and a Separate Contract, the terms and conditions of the Separate Contract shall control.

I. TERMS FOR SUBMISSION OF BIDS: The following section applies to the bid/selection process only.

3. This invitation for bids does not commit the City to award a contract, pay any costs incurred in preparation of bids, or to procure or contract for services or equipment. The City may require the bidder to participate in negotiation and to submit such additional price or technical or other revisions to his or her bids as may result from negotiation. The bidder shall be responsible for all costs incurred as part of his or her participation in the pre-award process.

The City reserves the right to accept or reject any or all bids submitted, in whole or in part, and to waive any informalities or technicalities which at the City's discretion are determined to be in the best interests of the City. Further, the City makes no representations that a contract will be awarded to any offeror responding to this request. The City expressly reserves the right to reject any and all bids responding to this invitation without indicating any reasons for such rejections(s).

The City reserves the right to postpone due dates and openings for its own convenience and to withdraw this solicitation at any time without prior notice.

4. Addenda. Changes affecting the specifications will be made by addenda. Changes may include, or result in, a postponement in the bid due date. Bidders are required to complete the Bidder Response Sheet, acknowledging receipt of all parts of the bid, including all addenda.

5. Price Proposal. All bidders are required to identify the proposed manufacturer and model, and to indicate the proposed delivery time on the attached Proposal Form. Failure to do so may cause the bid to be considered not responsive. If desired, the bidder may include product literature and specifications. The price quoted will remain firm throughout each contract period. Any price increase proposed shall be submitted sixty (60) calendar days prior to subsequent contract periods and shall be limited to fully documented cost increases to the bidder which are demonstrated to be industry-wide.

6. Price Inclusion. The price quoted in any bid shall include all items of labor, materials, tools, equipment, and other costs necessary to fully complete the furnishing and delivery of equipment or services pursuant to the specifications attached thereof. Any items omitted from the specifications which are clearly necessary for the completion of the project shall be considered a portion of the specifications although not directly specified or called for in these specifications.

7. Pricing and Discount.

- a. Unit prices shown on the bid/proposal or contract shall be the price per unit of sale (e.g., gal., cs., doz., ea., etc.) as stated on the bid/proposal or contract. For any given item, the quantity multiplied by the unit price shall establish the extended price. If an apparent mistake exists in the extended price, the unit price shall govern in the bid/proposal evaluation and contract administration.
- b. In determination of award, discounts for early payment will only be considered when all other conditions are equal. Early payment is defined as payment within fifteen (15) days providing the discount terms are deemed favorable. All payment terms must allow the option of Net 30.

8. F.O.B. Destination Freight Prepaid. Bid prices must include all handling, transportation and insurance charges. Failure to bid FOB Destination Freight Prepaid may disqualify your bid.

9. Award.

- a. The City will have sole discretion as to the methodology used in making the award. Where none is specified, the award will be made to the lowest responsible bidder in compliance with the specifications and requirements of this solicitation.
- b. The right is reserved to make a separate award of each item, group of items or all items, and to make an award in whole or in part, whichever is deemed in the best interest of the City.

10. Responsiveness and Responsibility. Award will be made to the responsible and responsive bidder whose bid is most advantageous to the City with price and other factors considered. For the purposes of this project, responsiveness is defined as the bidder's conformance to the requirements of the solicitation. Being not responsive includes the failure to furnish information requested.

Responsibility is defined as the bidder's potential ability to perform successfully under the terms of the proposed contract. Briefly, a responsible bidder has adequate financial resources or the ability to obtain said resources; can comply with required delivery taking into

account other business commitments; has a satisfactory performance record; has a satisfactory record of integrity and business ethics; and has the necessary organization, experience and technical skills.

The City reserves the right to refuse to accept any bid from any person, firm or corporation that is in arrears or is in default to the City, or has failed to perform faithfully any previous contract with the City. If requested, the bidder must present within five (5) working days evidence satisfactory to the City of performance ability and possession of necessary facilities, financial resources, adequate insurance, and any other resources required to determine the bidder's ability to comply with the terms of this solicitation document.

11. Cancellation.

- a. The City reserves the right to cancel this bid, in whole or in part, at any time for any reason. The City may, in its sole discretion and without any reason, cancel or terminate any contract or purchase order awarded as a result of this bid, in whole or in part, without penalty, by providing ten (10) days written notice thereof to the contractor.
- a. In the event the Bidder shall default in any of the covenants, agreements, commitments, or conditions and any such default shall continue unremedied for a period of ten (10) days after written notice to the Bidder, the City may, at its option and in addition to all other rights and remedies which it may have, terminate the Agreement and all rights of the Bidder under the Agreement.
- b. Failure to maintain the required certificates of insurance, permits, licenses and bonds will be cause for contract termination. If the Bidder fails to maintain and keep in force the insurance, if required, the City shall have the right to cancel and terminate the contract without notice.

II. CONDITIONS OF PURCHASE: The following section applies to purchases/contracts after the award. See Paragraphs 1 & 2 for applicability and order of precedence.

12. Specifications.

- a. All bidders must be in compliance with all specifications and any drawings provided with this solicitation. Exceptions taken to these specifications must be noted on your bid.
- b. When specific manufacturer and model numbers are used, they are to establish a design, type, construction, quality, functional capability and/or performance level desired. When alternates are bid/proposed, they must be identified by manufacturer, stock number, and the bidder/proposer is responsible for providing sufficient information to establish equivalency. The City shall be the sole judge of equivalency. Bidders are cautioned to avoid bidding alternates which do not meet specifications, which may result in rejection of their bid/proposal.

13. Regulatory Compliance.

- a. Seller represents and warrants that the goods or services furnished hereunder, including all labels, packages, and container for said goods, comply with all applicable standards, rules and regulations in effect under the requirements of all Federal, State and local laws, rules and regulations as applicable, including the Occupational Safety and Health Act (OSHA), as amended, with respect to design, manufacture or use for their intended purpose of said goods or services. Seller shall furnish Material Safety Data Sheets (MSDS) whenever applicable.
- b. If it is determined by the City that such standards are not met, the seller agrees to bear all costs required to meet the minimum standards as stated above for the equipment/products furnished under this contract.

14. Warranty. Unless otherwise specifically stated by the bidder, products shall be warranted against defects by the bidder for ninety (90) days from the date of receipt. If bidder or manufacturer offers warranty that exceeds 90 days, such warranty shall prevail.

15. Ownership of Printing Materials. All artwork, camera-ready copy, negative, dies, photos and similar materials used to produce a printing job shall become the property of the City. Any furnished materials shall remain the property of the City. Failure to meet this requirement will disqualify your bid.

16. Item Return Policy. Bidder will be required to accept return of products ordered in error for up to twenty-one (21) calendar days from date of receipt, with the City paying only the return shipping costs. Indicate in detail on the Bidder Response Sheet, your return policy.

17. Payment Terms and Invoicing. The City will pay properly submitted vendor invoices within thirty (30) days of receipt, providing good and/or services have been delivered, installed (if required), and accepted as specified.

- a. Payment shall be considered timely if the payment is mailed, delivered, or transferred within thirty (30) days after receipt of a properly completed invoice, unless the vendor is notified in writing by the agency of a dispute before payment is due.
- b. Invoices presented for payment must be submitted in accordance with instructions contained on the purchase order, including reference to purchase order and submittal to the correct address for processing. Invoice payment processing address is shown on the upper middle section of the purchase order. Send invoices to Accounts Payable address on the purchase order. Do not send invoices to Purchasing or ship to address.
- c. Bidders, proposers shall include discounts for early payment as a percent reduction of invoice. Invoice discounts shall be determined where applicable, from the date of acceptance of goods and/or the receipt of invoice, whichever is later. Discounts for early payment terms stated on the bid/proposal must be shown plainly on the invoice; discounts for early payment not shown on the invoice will be taken.
- d. Invoices submitted not in accordance with these instructions will be removed from the payment process and returned within ten (10) days.

18. F.O.B. Destination Freight Prepaid. Unless otherwise agreed in writing, the vendor shall bear all handling, transportation and insurance charges. Title of goods shall pass upon acceptance of goods at the City's dock.

19. **Tax Exemption.** The City of Madison is exempt from the payment of Federal Excise Tax and State Sales Tax. **The City Tax Exempt number is ES 42916.** Any other sales tax, use tax, imposts, revenues, excise, or other taxes which are now, or which may hereafter be imposed by Congress, the State of Wisconsin, or any other political subdivision thereof and applicable to the sale of material delivered as a result of the bidder's bid and which, by terms of the tax law, may be passed directly to the City, will be paid by the City.

20. **Affirmative Action.**

A. The following language applies to all successful bidders employing fifteen (15) or more employees (MGO 39.02(9)(c):

The Contractor agrees that, within thirty (30) days after the effective date of this Contract, Contractor will provide to the City of Madison Department of Civil Rights (the "Department"), certain workforce utilization statistics, using a form provided by the City.

If the Contract is still in effect, or if the City enters into a new Agreement with the Contractor, within one year after the date on which the form was required to be provided, the Contractor will provide updated workforce information using a second form, also to be furnished by the City. The second form will be submitted to the Department no later than one year after the date on which the first form was required to be provided.

The Contractor further agrees that, for at least twelve (12) months after the effective date of this Contract, it will notify the Department of each of its job openings at facilities in Dane County for which applicants not already employees of the Contractor are to be considered. The notice will include a job description, classification, qualifications, and application procedures and deadlines, shall be provided to the City by the opening date of advertisement and with sufficient time for the City to notify candidates and make a timely referral. The Contractor agrees to interview and consider candidates referred by the Department, or an organization designated by the Department, if the candidate meets the minimum qualification standards established by the Contractor, and if the referral is timely. A referral is timely if it is received by the Contractor on or before the date stated in the notice.

The Department will determine if a contractor is exempt from the above requirements (Sec. 20.A.) at the time the Request for Exemption in 20.B.(2) is made.

B. Articles of Agreement, Request for Exemption, and Release of Payment:

The "ARTICLES OF AGREEMENT" beginning on the following page, apply to all contractors, unless determined to be exempt under the following table and procedures:

NUMBER OF EMPLOYEES	LESS THAN \$50,000 Aggregate Annual Business with the City*	\$50,000 OR MORE Aggregate Annual Business with the City*
14 or less	Exempt**	Exempt**
15 or more	Exempt**	Not Exempt

*As determined by the Finance Director

**As determined by the Department of Civil Rights

(1) **Exempt Status:** In this section, "Exempt" means the Contractor is exempt from the Articles of Agreement in section 20.B.(5) of this Contract and from filing an Affirmative Action plan as required by Section IV of the Articles of Agreement. The Department of Civil Rights ("Department") makes the final determination as to whether a contractor is exempt. If the Contractor is not exempt, sec. 20.B.(5) shall apply and Contractor shall select option A. or B. under Article IV therein and file an Affirmative Action Plan.

(2) **Request for Exemption – Fewer Than 15 Employees:** (MGO 39.02(9)(a)2.) Contractors who believe they are exempt based on number of employees shall submit a Request for Exemption on a form provided by the Department within thirty (30) days of the effective date of this Contract.

(3) **Exemption – Annual Aggregate Business:** (MGO 39.02(9)(a)c.): The Department will determine, at the time this Contract is presented for signature, if the Contractor is exempt because it will have less than \$50,000 in annual aggregate business with the City for the calendar year in which the contract is in effect. **CONTRACTORS WITH 15 OR MORE EMPLOYEES WILL LOSE THIS EXEMPTION AND BECOME SUBJECT TO SEC. 20.B.(5) UPON REACHING \$50,000 OR MORE ANNUAL AGGREGATE BUSINESS WITH THE CITY WITHIN THE CALENDAR YEAR, BEGINNING IN 2019.**

(4) **Release of Payment:** (MGO 39.02(9)(e)1.b.) All non-exempt contractors must have an approved Affirmative Action plan meeting the requirements of Article IV below on file with the Department within thirty (30) days of the effective date of this Contract and prior to release of payment by the City. Contractors that are exempt based on number of employees agree to file a Request for Exemption with the Department within thirty (30) days of the effective date and prior to release of payment by the City.

(5) **Articles of Agreement:**

ARTICLE I

The Contractor shall take affirmative action in accordance with the provisions of this Contract to insure that applicants are employed, and that employees are treated during employment without regard to race, religion, color, age, marital status, disability, sex, sexual orientation, gender identity or national origin and that the employer shall provide harassment-free work environment for the realization of the potential of each employee. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training including apprenticeship insofar as it is within the control of the Contractor. The Contractor agrees to post in conspicuous places available to employees and applicants notices to be provided by the City setting out the provisions of the nondiscrimination clauses in this Contract.

ARTICLE II

The Contractor shall in all solicitations or advertisements for employees placed by or on behalf of the Contractors state that all qualified or qualifiable applicants will be employed without regard to race, religion, color, age, marital status, disability, sex, sexual orientation, gender identity or national origin.

ARTICLE III

The Contractor shall send to each labor union or representative of workers with which it has a collective bargaining Agreement or other Contract or understanding a notice to be provided by the City advising the labor union or workers representative of the Contractor's equal employment opportunity and affirmative action commitments. Such notices shall be posted in conspicuous places available to employees and applicants for employment.

ARTICLE IV

(This Article applies to non-public works contracts.)

The Contractor agrees that it will comply with all provisions of the Affirmative Action Ordinance of the City of Madison (MGO 39.02) including the Contract compliance requirements. The Contractor warrants and certifies that one of the following paragraphs is true (check one):

- ☐ A. Contractor has prepared and has on file an affirmative action plan that meets the format requirements of Federal Revised Order No. 4, 41 CFR part 60-2, as established by 43 FR 51400 November 3, 1978, including appendices required by City of Madison ordinances or it has prepared and has on file a model affirmative action plan approved by the Madison Common Council.
- ☐ B. Within thirty (30) days after the effective date of this Contract, Contractor will complete an affirmative action plan that meets the format requirements of Federal Revised Order No. 4, 41 CFR Part 60-2, as established by 43 FR 51400, November 3, 1978, including appendices required by City of Madison ordinance or within thirty (30) days after the effective date of this Contract, it will complete a model affirmative action plan approved by the Madison Common Council.
- ☐ C. Contractor believes it is exempt from filing an affirmative action plan because it has fewer than fifteen (15) employees and has filed, or will file within thirty (30) days after the effective date of this Contract, a form required by the City to confirm exempt status based on number of employees. If the City determines that Contractor is not exempt, the Articles of Agreement will apply.
- ☐ D. Contractor believes it is exempt from filing an affirmative action plan because its annual aggregate business with the City for the calendar year in which the contract is in effect is less than fifty thousand dollars (\$50,000), or for another reason listed in MGO 39.02(9)(a)2. If the City determines that Contractor is not exempt, the Articles of Agreement will apply.

ARTICLE V

(This Article applies only to public works contracts.)

The Contractor agrees that it will comply with all provisions of the Affirmative Action Ordinance of the City of Madison, including the Contract compliance requirements. The Contractor agrees to submit the model affirmative action plan for public works Contractors in a form approved by the Director of Affirmative Action.

ARTICLE VI

The Contractor will maintain records as required by Section 39.02(9)(f) of the Madison General Ordinances and will provide the City's Department of Affirmative Action with access to such records and to persons who have relevant and necessary information, as provided in Section 39.02(9)(f). The City agrees to keep all such records confidential, except to the extent that public inspection is required by law.

ARTICLE VII

In the event of the Contractor's or subcontractor's failure to comply with the Equal Employment Opportunity and Affirmative Action provisions of this Contract or Sections 39.03 and 39.02 of the Madison General Ordinances, it is agreed that the City at its option may do any or all of the following:

- A. Cancel, terminate or suspend this Contract in whole or in part.
- B. Declare the Contractor ineligible for further City contracts until the Affirmative Action requirements are met.
- C. Recover on behalf of the City from the prime Contractor 0.5 percent of the Contract award price for each week that such party fails or refuses to comply, in the nature of liquidated damages, but not to exceed a total of five percent (5%) of the Contract price, or ten thousand dollars (\$10,000), whichever is less. Under public works contracts, if a subcontractor is in noncompliance, the City may recover liquidated damages from the prime Contractor in the manner described above. The preceding sentence shall not be construed to prohibit a prime Contractor from recovering the amount of such damage from the noncomplying subcontractor.

ARTICLE VIII

(This Article applies to public works contracts only.)

The Contractor shall include the above provisions of this Contract in every subcontract so that such provisions will be binding upon each subcontractor. The Contractor shall take such action with respect to any subcontractor as necessary to enforce such provisions, including sanctions provided for noncompliance.

ARTICLE IX

The Contractor shall allow the maximum feasible opportunity to small business enterprises to compete for any subcontracts entered into pursuant to this Contract. (In federally funded contracts the terms "DBE, MBE, and WBE" shall be substituted for the term "small business" in this Article.)

21. Nondiscrimination. During the term of this Contract, the Contractor agrees not to discriminate against any employee or applicant for employment because of race, religion, marital status, age, color, sex, handicap, national origin or ancestry, income level or source of income, arrest record or conviction record, less than honorable discharge, physical appearance, sexual orientation, gender identity, political beliefs

or student status. Contractor further agrees not to discriminate against any subcontractor or person who offers to subcontract on this Contract because of race, religion, color, age, disability, sex, sexual orientation, gender identity or national origin.

22. Prevailing Wage. Where applicable under federal law, the Contractor warrants that prevailing wages will be paid to all trades and occupations.
23. Indemnification. **The Contractor shall be liable to and hereby agrees to indemnify, defend and hold harmless the City of Madison, and its officers, officials, agents, and employees against all loss or expense (including liability costs and attorney's fees) by reason of any claim or suit, or of liability imposed by law upon the City or its officers, officials, agents or employees for damages because of bodily injury, including death at any time resulting therefrom, sustained by any person or persons or on account of damages to property, including loss of use thereof, arising from, in connection with, caused by or resulting from the acts or omissions of Contractor and any of Contractor's subcontractors in the performance of this agreement, whether caused by or contributed to by the negligence of the City or its officers, officials, agents or employees.**
24. Insurance.
The Contractor will insure, and will require each subcontractor to insure, as indicated, against the following risks to the extent stated below. The Contractor shall not commence work under this Contract, nor shall the Contractor allow any Subcontractor to commence work on its Subcontract, until the insurance required below has been obtained and corresponding certificate(s) of insurance have been approved by the City Risk Manager.
- a. Commercial General Liability - The Contractor shall procure and maintain during the life of this contract, Commercial General Liability insurance including, but not limited to, products and completed operations, bodily injury, property damage, personal injury, and products and completed operations (unless determined to be inapplicable by the Risk Manager) in an amount not less than \$1,000,000 per occurrence. This policy shall also provide contractual liability in the same amount. Contractor's coverage shall be primary and list the City of Madison, its officers, officials, agents and employees as additional insureds. Contractor shall require all subcontractors under this Contract (if any) to procure and maintain insurance meeting the above criteria, applying on a primary basis and listing the City of Madison, its officers, officials, agents and employees as additional insureds.
 - b. Automobile Liability - The Contractor shall procure and maintain during the life of this contract Business Automobile Liability insurance covering owned, non-owned and hired automobiles with limits of not less than \$1,000,000 combined single limit per accident. Contractor shall require all subcontractors under this Contract (if any) to procure and maintain insurance covering each subcontractor and meeting the above criteria.
 - c. Worker's Compensation - The Contractor shall procure and maintain during the life of this contract statutory Workers' Compensation insurance as required by the State of Wisconsin. The Contractor shall also carry Employers Liability limits of at least \$100,000 Each Accident, \$100,000 Disease – Each Employee, and \$500,000 Disease – Policy Limit. Contractor shall require all subcontractors under this Contract (if any) to procure and maintain such insurance, covering each subcontractor.
 - d. Professional Liability - The Contractor shall procure and maintain professional liability insurance with coverage of not less than \$1,000,000. If such policy is a "claims made" policy, all renewals thereof during the life of the contract shall include "prior acts coverage" covering at all times all claims made with respect to Contractor's work performed under the contract. This Professional Liability coverage must be kept in force for a period of six (6) years after the services have been accepted by the City.
 - e. Acceptability of Insurers - The above-required insurance is to be placed with insurers who have an A.M. Best rating of no less than A- (A minus) and a Financial Category rating of no less than VII.
 - f. Proof of Insurance, Approval. The Contractor shall provide the City with certificate(s) of insurance showing the type, amount, effective dates, and expiration dates of required policies prior to commencing work under this Contract. Contractor shall provide the certificate(s) to the City's representative upon execution of the Contract, or sooner, for approval by the City Risk Manager. If any of the policies required above expire while this Contract is in effect, Contractor shall provide renewal certificate(s) to the City for approval. Certificate Holder language should be listed as follows:
City of Madison
ATTN: Risk Management, Room 406
210 Martin Luther King, Jr. Blvd.
Madison, WI 53703
The Contractor shall provide copies of additional insured endorsements or insurance policies, if requested by the City Risk Manager. The Contractor and/or Insurer shall give the City thirty (30) days advance written notice of cancellation, non-renewal or material changes to any of the above-required policies during the term of this Contract.
25. Work Site Damages. Any damage, including damage to finished surfaces, resulting from the performance of this contract shall be repaired to the Owner's satisfaction at the Contractor's expense.
26. Compliance.
- a. Regulations. The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the performance of the work.
 - b. Licensing and Permits. The Contractor selected under this bid shall be required to demonstrate valid **possession of appropriate required licenses and will** keep them in effect for the term of this contract. The Contractor shall also be required, when appropriate, to obtain the necessary building permits prior to performing work on City facilities.
27. Warranty of Materials and Workmanship.
- a. The Contractor warrants that, unless otherwise specified, all materials and equipment incorporated in the work under the Contract shall be new, first class, and in accordance with the Contract Documents. The Contractor further warrants that all workmanship shall be first class and in accordance with the Contract Documents and shall be performed by persons qualified in their respective trades.
 - b. Work not conforming to these warranties shall be considered defective.

c. This warranty of materials and workmanship is separate and independent from and in addition to any other guarantees in this Contract.

28. Replacement of Defective Work or Materials. Any work or material found to be in any way defective or unsatisfactory shall be corrected or replaced by the Contractor at its own expense at the order of the City notwithstanding that it may have been previously overlooked or passed by an inspector. Inspection shall not relieve the Contractor of its obligations to furnish materials and workmanship in accordance with this contract and its specifications.
29. Reservation of the Right to Inspect Work. At any time during normal business hours and as often as the City may deem necessary, the Contractor shall permit the authorized representatives of the City to review and inspect all materials and workmanship at any time during the duration of this contract, provided, however, the City is under no duty to make such inspections, and any inspection so made shall not relieve the Contractor from any obligation to furnish materials and workmanship strictly in accordance with the instructions, contract requirements and specifications.
30. Sweatfree Procurement of Items of Apparel. If this bid results in the procurement of \$5,000 or more in garments or items of clothing, any part of which is a textile, or any shoes/ footwear, then Sec. 4.25 of the Madison General Ordinances, "Procurement of Items of Apparel", is hereby incorporated by reference and made part of this contract. See Section 4.25(2) at www.municode.com for applicability specifics. The contractor shall follow labor practices consistent with international standards of human rights, meaning that, at a minimum, contractor shall adhere to the minimum employment standards found in Section 4.25 and shall require all subcontractors and third-party suppliers to do the same. For purposes of sec. 4.25, "Subcontractor" means a person, partnership, corporation or other entity that enters into a contract with the contractor for performance of some or all of the City-contracted work and includes all third-party suppliers or producers from whom the contractor or its contractors obtains or sources goods, parts or supplies for use on the city contract and is intended to include suppliers at all level of the supply chain. The standards in Sec. 4.25 shall apply in all aspects of the contractor's and subcontractor's operations, including but not limited to, manufacture, assembly, finishing, laundering or dry cleaning, (where applicable), warehouse distribution, and delivery. Contractor acknowledges that by entering into this contract, Contractor shall be subject to all of the requirements and sanctions of sec. 4.25 of the Madison General Ordinances.
- The sanctions for violating Sec. 4.25 under an existing contract are as follows:
- Withholding of payments under an existing contract.
 - Liquidated damages. The contractor may be charged liquidated damages on an existing contract of two thousand dollars (\$2,000) per violation, or an amount equaling twenty percent (20%) of the value of the apparel, garments or corresponding accessories, equipment, materials, or supplies that the City demonstrates were produced in violation of the contract and/or this ordinance per violation; whichever is greater.
 - Termination, suspension or cancellation of a contract in whole or in part.
 - Nonrenewal when a contract calls for optional renewals.
 - Nonrenewal for lack of progress or impossible compliance. The City reserves the right to refuse to renew the contract that calls for optional renewals, when the contractor cannot comply with the minimum standard under (4)(b) and the noncompliance is taking place in a country where:
 - Progress toward implementation of the standards in this Ordinance is no longer being made; and
 - Compliance with the employment standards in the Ordinance is deemed impossible by the City and/or any independent monitoring agency acting on behalf of the City. Such determination shall be made in the sole opinion of the City and may be based upon examination of reports from governmental, human rights, labor and business organizations and after consultation with the relevant contractors and sub-contractors and any other evidence the City deems reliable.
 - Disqualification of the contractor from bidding or submitting proposals on future City contracts, or from eligibility for future city procurements as defined in sub. (2), whether or not formal bidding or requests for proposals are used, for a period of one (1) year after the first violation is found and for a period of three (3) years after a second or subsequent violation is found. The disqualification shall apply to the contractor who committed the violation(s) whether that be under the same corporate name, or as an individual, or under the name of another corporation or business entity of which he or she is a member, partner, officer, or agent.
- The exercise by the City of any or all of the above remedies, or failure to so exercise, shall not be construed to limit other remedies available to the City under this Contract nor to any other remedies available at equity or at law.
31. Local Purchasing. The City of Madison has adopted a local preference purchasing policy granting a 5 percent request for proposal and 1 percent request for bid scoring preference to local vendors.
- To facilitate the identification of local suppliers, the City has provided an on-line website as an opportunity for suppliers to voluntarily identify themselves as local, and to assist City staff with their buying decisions. Proposers seeking to obtain local preference are required to register on the City of Madison online registration website. Only vendors registered as of the bid due date will receive preference. Additional information is available at: www.cityofmadison.com/business/localPurchasing.
32. Weapons Prohibition. Contractor shall prohibit, and shall require its subcontractors to prohibit, its employees from carrying weapons, including concealed weapons, in the course of performance of work under this Contract, other than while at the Contractor's or subcontractor's own business premises. This requirement shall apply to vehicles used at any City work site and vehicles used to perform any work under this Contract, except vehicles that are an employee's "own motor vehicle" pursuant to Wis. Stat. sec. 175.60(15m). This section does not apply to employees who are required to carry a weapon under the express terms of the Contract (such as armed security guard services, etc.).
33. Software & Technology Purchases.
- Software Licenses. All software license agreements shall include the City's mandatory legal terms and conditions as determined by the City Attorney. Please be advised that no City employee has the authority to bind the City by clicking on an End User License Agreement (EULA) or any other click-through terms and conditions without being specifically authorized by the City's Chief Information Officer through procedures approved by the City Attorney and Risk Manager. All legal documents associated with the purchase or download of software must be reviewed by the City Attorney and may only be signed by an individual authorized to do so.

- b. Network Connection Policy. If this purchase includes software support, software maintenance, network services, and/or system development services and will require a Network Connection the City Network (as defined in the following link), the City's Network Connection Policy found at this link: www.cityofmadison.com/attorney/documents/posNetworkConnection.doc is hereby incorporated and made a part of the Contract and Contractor agrees to comply with all of its requirements.

34. Ban the Box - Arrest and Criminal Background Checks.

This provision applies to service contracts of more than \$25,000 executed by the City on January 1, 2016 or later, unless exempt by Sec. 39.08 of the Madison General Ordinances (MGO).

- a. Definitions. For purposes of this requirement, "Arrest and Conviction Record" includes, but is not limited to, information indicating that a person has been questioned, apprehended, taken into custody or detention, held for investigation, arrested, charged with, indicted or tried for any felony, misdemeanor or other offense pursuant to any law enforcement or military authority.

"Conviction record" includes, but is not limited to, information indicating that a person has been convicted of a felony, misdemeanor or other offense, placed on probation, fined, imprisoned or paroled pursuant to any law enforcement or military authority.

"Background Check" means the process of checking an applicant's arrest and conviction record, through any means.

- b. Requirements. For the duration of any contract awarded under this RFP, the successful contractor shall:

- (1) Remove from all job application forms any questions, check boxes, or other inquiries regarding an applicant's arrest and conviction record, as defined herein.
- (2) Refrain from asking an applicant in any manner about their arrest or conviction record until after a conditional offer of employment is made to the applicant in question.
- (3) Refrain from conducting a formal or informal background check or making any other inquiry using any privately or publicly available means of obtaining the arrest or conviction record of an applicant until after a conditional offer of employment is made to the applicant in question.
- (4) Make information about this ordinance available to applicants and existing employees, and post notices in prominent locations at the workplace with information about the ordinance and complaint procedure, using language provided by the City.
- (5) Comply with all other provisions of Sec. 39.08, MGO.

- c. Exemptions: This section does not apply when:

- (1) Hiring for a position where certain convictions or violations are a bar to employment in that position under applicable law, or
- (2) Hiring a position for which information about criminal or arrest record, or a background check is required by law to be performed at a time or in a manner that would otherwise be prohibited by this ordinance, including a licensed trade or profession where the licensing authority explicitly authorizes or requires the inquiry in question.

To be exempt under sec. C.1. or 2. above, contractor must demonstrate to the City that there is a law or regulation that requires the background check in question. If so, the contractor is exempt from this section for the position(s) in question.



INSTRUCTIONS FOR CONTRACTOR

DO NOT ATTACH TO CONTRACT

***Your contract MUST include the following information,
or it will not be signed by the City.***

- ☐ Check one box at top of Page 1 for the type of business entity.
- ☐ Sections 3 & 4 will be completed by the City and should be complete before you sign.
- ☐ Put a name in Sec. 7.A. – person responsible for administering the contract.
- ☐ **Affirmative Action:** Check the appropriate box in Sec. 13.B., Article IV and complete the appropriate online form for the box you have checked:

All contractors:

Access the online forms for Affirmative Action compliance at this link: www.cityofmadison.com/civil-rights/contract-compliance/vendors-suppliers/forms. If you do not already have an approved, current Affirmative Action Plan on file with the City of Madison, read the "Instructions for Completing City of Madison Affirmative Action Plan" at the above link. This will direct you to register for an account. If you already have an account you may click on the link for "Affirmative Action Plan for Vendors and Suppliers" to proceed. If you have never filed a plan or request for exemption, you must create an account in our online system. If you are exempt under Article IV, Sections C or D you will still need to create an account and go through some steps to confirm your exemption. Register for an account here: <https://elam.cityofmadison.com/citizenaccess>.

Affirmative Action Questions? Contact Dept. of Civil Rights, Contract Compliance: (608) 266-4910.

- ☐ Complete Sec. 15 – Official Notices. This is the name/job title/address of the person at your organization to receive legal notices under the contract.
- ☐ Signature line. A person with authority to bind the organization should sign, date, and print name and job title where shown on the signature page. Contractor signs first, City signs last.
- ☐ Print, sign and return three (3) complete, signed hard copies to the address for the City in Sec. 15 (Notices) unless otherwise instructed. (Under some circumstances, the City will accept a signed, scanned PDF of the entire contract. Please ask if you want to use this method.)
 - Make sure all exhibits/attachments are labeled and attached after the signature page, unless otherwise instructed.
 - Double-sided is OK, but all attachments should begin on a new page.
 - City will sign last, and will send you one hard copy with original signatures unless otherwise agreed.
- ☐ Enclose CERTIFICATE OF INSURANCE (C.O.I.) showing proof of insurance required by Sec. 28.

Insurance Instructions:

Certificate Holder: City of Madison
Attn: Risk Manager
210 Martin Luther King Jr. Blvd. Room 406
Madison, WI 53703

Proof of all insurance required in the contract must be shown. Use City's certificate at this link: www.cityofmadison.com/finance/documents/CertInsurance.pdf

Insurance delivery options: (a) enclose hard copy of certificate with hard copies of contract mailed to the address in Section 15 of the contract, or (b) email certificate to City Risk Manager Eric Veum at: eveum@cityofmadison.com and cc: your City contact person on the email. Call Eric Veum at (608) 266-5965 with insurance questions.

Failure to complete these steps will result in contract not being signed.

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SAMPLE

City of Madison
CONTRACT FOR PURCHASE OF SERVICES
(Architect)

1. **PARTIES.**

This is a Contract between the City of Madison, Wisconsin, hereafter referred to as the "City" and _____ hereafter referred to as "Contractor" or "Architect."

The Architect is a: ☐ Corporation ☐ Limited Liability Company ☐ General Partnership ☐ LLP
(to be completed by Architect) ☐ Sole Proprietor ☐ Unincorporated Association ☐ Other: _____.

2. **PURPOSE.**

The purpose of this Contract is as set forth in Section 3.

3. **SCOPE OF SERVICES AND SCHEDULE OF PAYMENTS.**

Architect will perform the following services and be paid according to the following schedule(s) or attachment(s):

List all attachments here by name, and attach and label them accordingly.

Order of Precedence: In the event of a conflict between the terms of this Contract for Purchase of Services and the terms of any document attached or incorporated herein, the terms of this Contract for Purchase of Services shall control and supersede any such conflicting term.

4. **TERM AND EFFECTIVE DATE.**

This Contract shall become effective upon execution by the Mayor, (or the Purchasing Agent, if authorized) on behalf of the City of Madison, unless another effective date is specified in the Attachment(s) incorporated in Section 3, however in no case shall work commence before execution by the City of Madison. The term of this Contract shall be insert dates or reference attachments as needed.

5. **ENTIRE AGREEMENT.**

This Contract for Purchase of Services, including any and all attachments, exhibits and other documents referenced in Section 3 (hereafter, "Agreement" or "Contract") is the entire Agreement of the parties and supersedes any and all oral contracts and negotiations between the parties. If any document referenced in Section 3 includes a statement that expressly or implicitly disclaims the applicability of this Contract for Purchase of Services, or a statement that such other document is the "entire agreement," such statement shall be deemed rejected and shall not apply to this Contract.

6. **ASSIGNABILITY/SUBCONTRACTING.**

Architect shall not assign or subcontract any interest or obligation under this Contract without the City's prior written approval. All of the services required hereunder will be performed by Architect and employees of Architect.

7. **DESIGNATED REPRESENTATIVE.**

- A. Architect designates _____ as Contract Agent with primary responsibility for the performance of this Contract. In case this Contract Agent is replaced by another for any reason, the Architect will designate another Contract Agent within seven (7) calendar days of the time the first terminates his or her employment or responsibility using the procedure set forth in Section 15, Notices.
- B. In the event of the death, disability, removal or resignation of the person designated above as the Contract agent, the City may accept another person as the Contract agent or may terminate this Agreement under Section 25, at its option.

8. **PROSECUTION AND PROGRESS.**

- A. Services under this Agreement shall commence upon written order from the City to the Architect. This order will constitute authorization to proceed, unless another date for commencement is specified elsewhere in this Contract including documents incorporated in Section 3.
- B. The Architect shall complete the services under this Agreement within the time for completion specified in the Scope of Services, including any amendments. The Architect's services are completed when the City notifies the Architect in writing that the services are complete and are acceptable. The time for completion shall not be extended because of any delay attributable to the Architect, but it may be extended by the City in the event of a delay attributable to the City, or in the event of unavoidable delay caused by war, insurrection, natural disaster, or other unexpected event beyond the control of the Architect. If at any time the Architect believes that the time for completion of the work should be extended because of unavoidable delay caused by an unexpected event, or because of a delay attributable to the City, the Architect shall notify the City as soon as possible, but not later than seven (7) calendar days after such an event. Such notice shall include any justification for an extension of time and shall identify the amount of time claimed to be necessary to complete the work.
- C. Services by the Architect shall proceed continuously and expeditiously through completion of each phase of the work.
- D. Progress reports documenting the extent of completed services shall be prepared by the Architect and submitted to the City with each invoice under Section 24 of this Agreement, and at such other times as the City may specify.
- E. The Architect shall notify the City in writing when the Architect has determined that the services under this Agreement have been completed. When the City determines that the services are complete and are acceptable, the City will provide written notification to the Architect, acknowledging formal acceptance of the completed services.

9. **AMENDMENT.**

This Contract shall be binding on the parties hereto, their respective heirs, devisees, and successors, and cannot be varied or waived by any oral representations or promise of any agent or other person of the parties hereto. Any other change in any provision

of this Contract may only be made by a written amendment, signed by the duly authorized agent or agents who executed this Contract.

10. **EXTRA SERVICES.**

The City may require the Architect to perform extra services or decreased services, according to the procedure set forth in Section 24. Extra services or decreased services means services which are not different in kind or nature from the services called for in the Scope of Services, Section 3, but which may increase or decrease the quantity and kind of labor or materials or expense of performing the services. Extra services may not increase the total Contract price, as set forth in Section 23, unless the Contract is amended as provided in Section 9 above.

11. **NO WAIVER.**

No failure to exercise, and no delay in exercising, any right, power or remedy hereunder on the part of the City or Architect shall operate as a waiver thereof, nor shall any single or partial exercise of any right, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy. No express waiver shall affect any event or default other than the event or default specified in such waiver, and any such waiver, to be effective, must be in writing and shall be operative only for the time and to the extent expressly provided by the City or Architect therein. A waiver of any covenant, term or condition contained herein shall not be construed as a waiver of any subsequent breach of the same covenant, term or condition.

12. **NONDISCRIMINATION.**

During the term of this Contract, the Architect agrees not to discriminate against any employee or applicant for employment because of race, religion, marital status, age, color, sex, handicap, national origin or ancestry, income level or source of income, arrest record or conviction record, less than honorable discharge, physical appearance, sexual orientation, gender identity, political beliefs or student status. Architect further agrees not to discriminate against any subcontractor or person who offers to subcontract on this Contract because of race, religion, color, age, disability, sex, sexual orientation, gender identity or national origin.

13. **AFFIRMATIVE ACTION.**

A. The following language applies to all contractors employing fifteen (15) or more employees (MGO 39.02(9)(c):

The Contractor agrees that, within thirty (30) days after the effective date of this Contract, Contractor will provide to the City of Madison Department of Civil Rights (the "Department"), certain workforce utilization statistics, using a form provided by the City.

If the Contract is still in effect, or if the City enters into a new Agreement with the Contractor, within one year after the date on which the form was required to be provided, the Contractor will provide updated workforce information using a second form, also to be furnished by the City. The second form will be submitted to the Department no later than one year after the date on which the first form was required to be provided.

The Contractor further agrees that, for at least twelve (12) months after the effective date of this Contract, it will notify the Department of each of its job openings at facilities in Dane County for which applicants not already employees of the Contractor are to be considered. The notice will include a job description, classification, qualifications, and application procedures and deadlines, shall be provided to the City by the opening date of advertisement and with sufficient time for the City to notify candidates and make a timely referral. The Contractor agrees to interview and consider candidates referred by the Department, or an organization designated by the Department, if the candidate meets the minimum qualification standards established by the Contractor, and if the referral is timely. A referral is timely if it is received by the Contractor on or before the date stated in the notice.

The Department will determine if a contractor is exempt from the above requirements (Sec. 13.A.) at the time the Request for Exemption in 13.B.(2) is made.

B. Articles of Agreement, Request for Exemption, and Release of Payment:

The "ARTICLES OF AGREEMENT" beginning on the following page, apply to all contractors, unless determined to be exempt under the following table and procedures:

NUMBER OF EMPLOYEES	LESS THAN \$50,000 Aggregate Annual Business with the City*	\$50,000 OR MORE Aggregate Annual Business with the City*
14 or less	Exempt**	Exempt**
15 or more	Exempt**	Not Exempt

*As determined by the Finance Director

**As determined by the Department of Civil Rights

(1) **Exempt Status:** In this section, "Exempt" means the Contractor is exempt from the Articles of Agreement in section 13.B.(5) of this Contract and from filing an Affirmative Action plan as required by Section IV of the Articles of Agreement. The Department of Civil Rights ("Department") makes the final determination as to whether a contractor is exempt. If the Contractor is not exempt, sec. 13.B.(5) shall apply and Contractor shall select option A. or B. under Article IV therein and file an Affirmative Action Plan.

(2) **Request for Exemption – Fewer Than 15 Employees:** (MGO 39.02(9)(a)2.) Contractors who believe they are exempt based on number of employees shall submit a Request for Exemption on a form provided by the Department within thirty (30) days of the effective date of this Contract.

(3) **Exemption – Annual Aggregate Business:** (MGO 39.02(9)(a)c.): The Department will determine, at the time this Contract is presented for signature, if the Contractor is exempt because it will have less than \$50,000 in annual aggregate business with the City for the calendar year in which the contract is in effect. CONTRACTORS WITH 15 OR MORE

EMPLOYEES WILL LOSE THIS EXEMPTION AND BECOME SUBJECT TO SEC. 13.B.(5) UPON REACHING \$50,000 OR MORE ANNUAL AGGREGATE BUSINESS WITH THE CITY WITHIN THE CALENDAR YEAR, BEGINNING IN 2019.

(4) Release of Payment: (MGO 39.02(9)(e)1.b.) All non-exempt contractors must have an approved Affirmative Action plan meeting the requirements of Article IV below on file with the Department within thirty (30) days of the effective date of this Contract and prior to release of payment by the City. Contractors that are exempt based on number of employees agree to file a Request for Exemption with the Department within thirty (30) days of the effective date and prior to release of payment by the City.

(5) Articles of Agreement:

ARTICLE I

The Contractor shall take affirmative action in accordance with the provisions of this Contract to insure that applicants are employed, and that employees are treated during employment without regard to race, religion, color, age, marital status, disability, sex, sexual orientation, gender identity or national origin and that the employer shall provide harassment-free work environment for the realization of the potential of each employee. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training including apprenticeship insofar as it is within the control of the Contractor. The Contractor agrees to post in conspicuous places available to employees and applicants notices to be provided by the City setting out the provisions of the nondiscrimination clauses in this Contract.

ARTICLE II

The Contractor shall in all solicitations or advertisements for employees placed by or on behalf of the Contractors state that all qualified or qualifiable applicants will be employed without regard to race, religion, color, age, marital status, disability, sex, sexual orientation, gender identity or national origin.

ARTICLE III

The Contractor shall send to each labor union or representative of workers with which it has a collective bargaining Agreement or other Contract or understanding a notice to be provided by the City advising the labor union or workers representative of the Contractor's equal employment opportunity and affirmative action commitments. Such notices shall be posted in conspicuous places available to employees and applicants for employment.

ARTICLE IV

(This Article applies to non-public works contracts.)

The Contractor agrees that it will comply with all provisions of the Affirmative Action Ordinance of the City of Madison (MGO 39.02) including the Contract compliance requirements. The Contractor warrants and certifies that one of the following paragraphs is true (**check one**):

- ☐ A. Contractor has prepared and has on file an affirmative action plan that meets the format requirements of Federal Revised Order No. 4, 41 CFR part 60-2, as established by 43 FR 51400 November 3, 1978, including appendices required by City of Madison ordinances or it has prepared and has on file a model affirmative action plan approved by the Madison Common Council.
- ☐ B. Within thirty (30) days after the effective date of this Contract, Contractor will complete an affirmative action plan that meets the format requirements of Federal Revised Order No. 4, 41 CFR Part 60-2, as established by 43 FR 51400, November 3, 1978, including appendices required by City of Madison ordinance or within thirty (30) days after the effective date of this Contract, it will complete a model affirmative action plan approved by the Madison Common Council.
- ☐ C. Contractor believes it is exempt from filing an affirmative action plan because it has fewer than fifteen (15) employees and has filed, or will file within thirty (30) days after the effective date of this Contract, a form required by the City to confirm exempt status based on number of employees. If the City determines that Contractor is not exempt, the Articles of Agreement will apply.
- ☐ D. Contractor believes it is exempt from filing an affirmative action plan because its annual aggregate business with the City for the calendar year in which the contract is in effect is less than fifty thousand dollars (\$50,000), or for another reason listed in MGO 39.02(9)(a)2. If the City determines that Contractor is not exempt, the Articles of Agreement will apply.

ARTICLE V

(This Article applies only to public works contracts.)

The Contractor agrees that it will comply with all provisions of the Affirmative Action Ordinance of the City of Madison, including the Contract compliance requirements. The Contractor agrees to submit the model affirmative action plan for public works Contractors in a form approved by the Director of Affirmative Action.

ARTICLE VI

The Contractor will maintain records as required by Section 39.02(9)(f) of the Madison General Ordinances and will provide the City's Department of Affirmative Action with access to such records and to persons who have relevant and necessary information, as provided in Section 39.02(9)(f). The City agrees to keep all such records confidential, except to the extent that public inspection is required by law.

ARTICLE VII

In the event of the Contractor's or subcontractor's failure to comply with the Equal Employment Opportunity and Affirmative Action provisions of this Contract or Sections 39.03 and 39.02 of the Madison General Ordinances, it is agreed that the City at its option may do any or all of the following:

- A. Cancel, terminate or suspend this Contract in whole or in part.
- B. Declare the Contractor ineligible for further City contracts until the Affirmative Action requirements are met.
- C. Recover on behalf of the City from the prime Contractor 0.5 percent of the Contract award price for each week that such party fails or refuses to comply, in the nature of liquidated damages, but not to exceed a total of five percent (5%) of the Contract price, or ten thousand dollars (\$10,000), whichever is less. Under public works contracts, if a subcontractor is in noncompliance, the City may recover liquidated damages from the prime Contractor in the manner described above. The preceding sentence shall not be construed to prohibit a prime Contractor from recovering the amount of such damage from the noncomplying subcontractor.

ARTICLE VIII

(This Article applies to public works contracts only.)

The Contractor shall include the above provisions of this Contract in every subcontract so that such provisions will be binding upon each subcontractor. The Contractor shall take such action with respect to any subcontractor as necessary to enforce such provisions, including sanctions provided for noncompliance.

ARTICLE IX

The Contractor shall allow the maximum feasible opportunity to small business enterprises to compete for any subcontracts entered into pursuant to this Contract. (In federally funded contracts the terms "DBE, MBE, and WBE" shall be substituted for the term "small business" in this Article.)

14. **SEVERABILITY.**

It is mutually agreed that in case any provision of this Contract is determined by any court of law to be unconstitutional, illegal or unenforceable, it is the intention of the parties that all other provisions of this Contract remain in full force and effect.

15. **NOTICES.**

All notices to be given under the terms of this Contract shall be in writing and signed by the person serving the notice and shall be sent registered or certified mail, return receipt requested, postage prepaid, or hand delivered to the addresses of the parties listed below:

FOR THE CITY:

(Department or Division Head)

FOR THE ARCHITECT:

16. **STATUS OF ARCHITECT/INDEPENDENT/TAX FILING.**

It is agreed that Architect is an independent Contractor and not an employee of the City, and that any persons who the Architect utilizes and provides for services under this Contract are employees of the Architect and are not employees of the City of Madison.

Architect shall provide its taxpayer identification number (or social security number) to the Finance Director, 210 Martin Luther King Jr. Blvd, Room 406, Madison, WI 53703, prior to payment. The Architect is informed that as an independent Contractor, s/he may have a responsibility to make estimated tax returns, file tax returns, and pay income taxes and make social security payments on the amounts received under this Contract and that no amounts will be withheld from payments made to this Architect for these purposes and that payment of taxes and making social security payments are solely the responsibility and obligation of the Architect. The Architect is further informed that s/he may be subject to civil and/or criminal penalties if s/he fails to properly report income and pay taxes and social security taxes on the amount received under this Contract.

17. **GOODWILL.**

Any and all goodwill arising out of this Contract inures solely to the benefit of the City; Architect waives all claims to benefit of such goodwill.

18. **THIRD PARTY RIGHTS.**

This Contract is intended to be solely between the parties hereto. No part of this Contract shall be construed to add, supplement, amend, abridge or repeal existing rights, benefits or privileges of any third party or parties, including but not limited to employees of either of the parties.

19. **AUDIT AND RETAINING OF DOCUMENTS.**

The Architect agrees to provide all reports requested by the City including, but not limited to, financial statements and reports, reports and accounting of services rendered, and any other reports or documents requested. Financial and service reports shall be provided according to a schedule (when applicable) to be included in this Contract. Any other reports or documents shall be provided within five (5) working days after the Architect receives the City's written requests, unless the parties agree in writing on a longer period. Payroll records and any other documents relating to the performance of services under the terms of this Contract shall be retained by the Architect for a period of three (3) years after completion of all work under this Contract, in order to be available for audit by the City or its designee.

20. **CHOICE OF LAW AND FORUM SELECTION.**

This Contract shall be governed by and construed, interpreted and enforced in accordance with the laws of the State of Wisconsin. The parties agree, for any claim or suit or other dispute relating to this Contract that cannot be mutually resolved, the venue shall be a court of competent jurisdiction within the State of Wisconsin and the parties agree to submit themselves to the jurisdiction of said court, to the exclusion of any other judicial district that may have jurisdiction over such a dispute according to any law.

21. **COMPLIANCE WITH APPLICABLE LAWS.**

The Architect shall become familiar with, and shall at all times comply with and observe all federal, state, and local laws, ordinances, and regulations which in any manner affect the services or conduct of the Architect and its agents and employees.

22. **CONFLICT OF INTEREST.**

- A. The Architect warrants that it and its agents and employees have no public or private interest, and will not acquire directly or indirectly any such interest, which would conflict in any manner with the performance of the services under this Agreement.
- B. The Architect shall not employ or Contract with any person currently employed by the City for any services included under the provisions of this Agreement.

23. **COMPENSATION.**

It is expressly understood and agreed that in no event will the total compensation under this Contract exceed \$_____.

24. **BASIS FOR PAYMENT.**

- A. **GENERAL.**
 - (1) The City will pay the Architect for the completed and accepted services rendered under this Contract on the basis and at the Contract price set forth in Section 23 of this Contract. The City will pay the Architect for completed and approved "extra services", if any, if such "extra services" are authorized according to the procedure established in this section. The rate of payment for "extra services" shall be the rate established in this Contract. Such payment shall be full compensation for services rendered and for all labor, material, supplies, equipment and incidentals necessary to complete the services.
 - (2) The Architect shall submit invoices, on the form or format approved by the City and as may be further specified in Section 3 of this Contract. The City will pay the Contractor in accordance with the schedule, if any, set forth in Section 3. The final invoice, if applicable, shall be submitted to the City within three months of completion of services under this Agreement.
 - (3) Should this Agreement contain more than one service, a separate invoice and a separate final statement shall be submitted for each individual service.
 - (4) Payment shall not be construed as City acceptance of unsatisfactory or defective services or improper materials.
 - (5) Final payment of any balance due the Architect will be made upon acceptance by the City of the services under the Agreement and upon receipt by the City of documents required to be returned or to be furnished by the Architect under this Agreement.
 - (6) The City has the equitable right to set off against any sum due and payable to the Architect under this Agreement, any amount the City determines the Architect owes the City, whether arising under this Agreement or under any other Agreement or otherwise.
 - (7) Compensation in excess of the total Contract price will not be allowed unless authorized by an amendment under Section 9, AMENDMENT.
 - (8) The City will not compensate for unsatisfactory performance by the Architect.
- B. **SERVICE ORDERS, EXTRA SERVICE, OR DECREASED SERVICE.**
 - (1) Written orders regarding the services, including extra services or decreased services, will be given by the City, using the procedure set forth in Section 15, NOTICES.
 - (2) The City may, by written order, request extra services or decreased services, as defined in Section 10 of this Contract. Unless the Architect believes the extra services entitle it to extra compensation or additional time, the Architect shall proceed to furnish the necessary labor, materials, and professional services to complete the services within the time limits specified in the Scope of Services, Section 3 of this Agreement, including any amendments under Section 9 of this Agreement.
 - (3) If in the Architect's opinion the order for extra service would entitle it to extra compensation or extra time, or both, the Architect shall not proceed to carry out the extra service, but shall notify the City, pursuant to Section 15 of this Agreement. The notification shall include the justification for the claim for extra compensation or extra time, or both, and the amount of additional fee or time requested.
 - (4) The City shall review the Architect's submittal and respond in writing, either authorizing the Architect to perform the extra service, or refusing to authorize it. The Architect shall not receive additional compensation or time unless the extra compensation is authorized by the City in writing.

25. **DEFAULT/TERMINATION.**

- A. In the event Architect shall default in any of the covenants, agreements, commitments, or conditions herein contained, and any such default shall continue unremedied for a period of ten (10) days after written notice thereof to Architect, the City may, at its option and in addition to all other rights and remedies which it may have at law or in equity against Architect, including expressly the specific enforcement hereof, forthwith have the cumulative right to immediately terminate this Contract and all rights of Architect under this Contract.
- B. Notwithstanding paragraph A., above, the City may in its sole discretion and without any reason terminate this Agreement at any time by furnishing the Architect with ten (10) days' written notice of termination. In the event of termination under this subsection, the City will pay for all work completed by the Architect and accepted by the City.

26. **INDEMNIFICATION.**

Architect shall be liable to and hereby agrees to indemnify, defend and hold harmless the City of Madison, and its officers, officials, agents, and employees against all loss or expense (including liability costs and attorney's fees) by reason of any claim or suit, or of liability imposed by law upon the City or its officers, officials, agents or employees for damages because of bodily injury, including death at any time resulting therefrom, sustained by any person or persons or on account of damages to property, including loss of use thereof, arising from, in connection with, caused by or resulting from the Architect's and/or subcontractor's negligent acts, errors or omissions, in the performance of this Agreement.

27. **STANDARD OF CARE.**

The Architect agrees that all work performed under this Contract shall be performed in accordance with good, sound architectural design and applicable engineering, geological, or other applicable professional or trade practices, shall be in conformity with any

applicable data, specification, and design criteria attached to or included by reference in this Contract, and that performance under this Contract shall reflect the Architect's best professional knowledge, skill and judgment.

Architect shall, to the best of his/her information and knowledge, prepare all design and construction plans and documents and other materials or deliverables required under this Contract in such a manner to be accurate, coordinated and adequate for construction and the Architect shall review all of the same for conformity and compliance with all applicable laws, codes and regulations.

28. **INSURANCE.**

- A. The Contractor will insure, and will require each subcontractor to insure, as indicated, against the following risks to the extent stated below. The Contractor shall not commence work under this Contract, nor shall the Contractor allow any Subcontractor to commence work on its Subcontract, until the insurance coverage required below has been obtained and approved by the City Risk Manager, under the procedures in Section 28. C., below.

Commercial General Liability

The Contractor shall procure and maintain during the life of this Contract, Commercial General Liability insurance including, but not limited to bodily injury, property damage, personal injury, and products and completed operations (unless determined to be inapplicable by the Risk Manager) in an amount not less than \$1,000,000 per occurrence. This policy shall also provide contractual liability in the same amount. Contractor's coverage shall be primary and list the City of Madison, its officers, officials, agents and employees as additional insureds. Contractor shall require all subcontractors under this Contract (if any) to procure and maintain insurance meeting the above criteria, applying on a primary basis and listing the City of Madison, its officers, officials, agents and employees as additional insureds.

Automobile Liability

The Contractor shall procure and maintain during the life of this Contract Business Automobile Liability insurance covering owned, non-owned and hired automobiles with limits of not less than \$1,000,000 combined single limit per accident. Contractor shall require all subcontractors under this Contract (if any) to procure and maintain insurance covering each subcontractor and meeting the above criteria.

Worker's Compensation

The Contractor shall procure and maintain during the life of this Contract statutory Workers' Compensation insurance as required by the State of Wisconsin. The Contractor shall also carry Employers Liability limits of at least \$100,000 Each Accident, \$100,000 Disease – Each Employee, and \$500,000 Disease – Policy Limit. Contractor shall require all subcontractors under this Contract (if any) to procure and maintain such insurance, covering each subcontractor.

Professional Liability

The Contractor shall procure and maintain professional liability insurance with coverage of not less than \$1,000,000. If such policy is a "claims made" policy, all renewals thereof during the life of the Contract shall include "prior acts coverage" covering at all times all claims made with respect to Contractor's work performed under the Contract. This Professional Liability coverage must be kept in force for a period of six (6) years after the services have been accepted by the City.

- B. Acceptability of Insurers. The above-required insurance is to be placed with insurers who have an A.M. Best rating of no less than A- (A minus) and a Financial Category rating of no less than VII.
- C. Proof of Insurance, Approval. The Contractor shall provide the City with certificate(s) of insurance showing the type, amount, effective dates, and expiration dates of required policies prior to commencing work under this Contract. Contractor shall provide the certificate(s) to the City's representative upon execution of the Contract, or sooner, for approval by the City Risk Manager. If any of the policies required above expire while this Contract is still in effect, Contractor shall provide renewal certificate(s) to the City for approval. Certificate Holder language should be listed as follows:

City of Madison
ATTN: Risk Management, Room 406
210 Martin Luther King, Jr. Blvd.
Madison, WI 53703

The Contractor shall provide copies of additional insured endorsements or insurance policies, if requested by the City Risk Manager. The Contractor and/or Insurer shall give the City thirty (30) days advance written notice of cancellation, non-renewal or material changes to any of the above-required policies during the term of this Contract.

- D. Notice of Cancellation. The Contractor and/or Insurer shall give the City thirty (30) days advance written notice of cancellation, non-renewal or material changes to any of the above-required policies during the term of this Contract.

29. **OWNERSHIP OF CONTRACT PRODUCT.**

The original drawings and specifications, renderings, models, scale details, approved copies of shop drawings, record drawings and other such documents prepared by the Architect pursuant to this Contract shall become the property of the City on completion and acceptance of the Architect's work, or upon termination of the Contract, and shall be delivered to the City.

The City will not unilaterally construct additional building(s) based on the architectural work produced under this Contract, without written Agreement by the Architect. Documents prepared under this Contract may be distributed by the City for informational purposes without additional compensation to the Architect.

Specifications and isolated, detail drawings inherent to the architectural design of the project, whether provided by the City or generated by the Architect, shall be available for future use by the parties to this Contract and other parties, each at their own risk.

If design and documentation has been completed using automated or computerized techniques, the Architect shall provide a copy of project documents upon request in a format approved by the City.

30. **BAN THE BOX - ARREST AND CRIMINAL BACKGROUND CHECKS.** (Sec. 39.08, MGO. Applicable to contracts exceeding \$25,000.)
- A. **DEFINITIONS.**
- For purposes of this section, "Arrest and Conviction Record" includes, but is not limited to, information indicating that a person has been questioned, apprehended, taken into custody or detention, held for investigation, arrested, charged with, indicted or tried for any felony, misdemeanor or other offense pursuant to any law enforcement or military authority.
- "Conviction record" includes, but is not limited to, information indicating that a person has been convicted of a felony, misdemeanor or other offense, placed on probation, fined, imprisoned or paroled pursuant to any law enforcement or military authority.
- "Background Check" means the process of checking an applicant's arrest and conviction record, through any means.
- B. **REQUIREMENTS.** For the duration of this Contract, the Contractor shall:
- (1) Remove from all job application forms any questions, check boxes, or other inquiries regarding an applicant's arrest and conviction record, as defined herein.
 - (2) Refrain from asking an applicant in any manner about their arrest or conviction record until after conditional offer of employment is made to the applicant in question.
 - (3) Refrain from conducting a formal or informal background check or making any other inquiry using any privately or publicly available means of obtaining the arrest or conviction record of an applicant until after a conditional offer of employment is made to the applicant in question.
 - (4) Make information about this ordinance available to applicants and existing employees, and post notices in prominent locations at the workplace with information about the ordinance and complaint procedure using language provided by the City.
 - (5) Comply with all other provisions of Sec. 39.08, MGO.
- C. **EXEMPTIONS:** This section does not apply when:
- (1) Hiring for a position where certain convictions or violations are a bar to employment in that position under applicable law, or
 - (2) Hiring a position for which information about criminal or arrest record, or a background check is required by law to be performed at a time or in a manner that would otherwise be prohibited by this ordinance, including a licensed trade or profession where the licensing authority explicitly authorizes or requires the inquiry in question.
- To be exempt under sec. C.(1) or (2) above, Contractor must demonstrate to the City that there is a law or regulation that requires the hiring practice in question. If so, the contractor is exempt from this section for the position(s) in question.
31. **WEAPONS PROHIBITION.**
- Contractor shall prohibit, and shall require its subcontractors to prohibit, its employees from carrying weapons, including concealed weapons, in the course of performance of work under this Contract, other than while at the Contractor's or subcontractor's own business premises. This requirement shall apply to vehicles used at any City work site and vehicles used to perform any work under this Contract, except vehicles that are an employee's "own motor vehicle" pursuant to Wis. Stat. sec. 175.60(15m).
32. **AUTHORITY.**
- Contractor represents that it has the authority to enter into this Contract. If the Contractor is not an individual, the person signing on behalf of the Contractor represents and warrants that he or she has been duly authorized to bind the Contractor and sign this Contract on the Contractor's behalf.
33. **COUNTERPARTS, ELECTRONIC SIGNATURE AND DELIVERY.**
- This Contract may be signed in counterparts, each of which shall be taken together as a whole to comprise a single document. Signatures on this Contract may be exchanged between the parties by facsimile, electronic scanned copy (.pdf) or similar technology and shall be as valid as original; and this Contract may be converted into electronic format and signed or given effect with one or more electronic signature(s) if the electronic signature(s) meets all requirements of Wis. Stat. ch. 137 or other applicable Wisconsin or Federal law. Executed copies or counterparts of this Contract may be delivered by facsimile or email and upon receipt will be deemed original and binding upon the parties hereto, whether or not a hard copy is also delivered. Copies of this Contract, fully executed, shall be as valid as an original.

IN WITNESS WHEREOF, the parties hereto have set their hands at Madison, Wisconsin.

CONTRACTOR:

(Type or Print Name of Contracting Entity)

By: _____
(Signature)

(Print Name and Title of Person Signing)

Date: _____

**CITY OF MADISON, WISCONSIN
a municipal corporation:**

By: _____
Satya Rhodes-Conway, Mayor

Date: _____

Approved:

David P. Schmiedicke, Finance Director

Date: _____

By: _____
Maribeth Witzel-Behl, City Clerk

Date: _____

Approved as to Form:

Eric T. Veum, Risk Manager

Date: _____

Michael Haas, City Attorney

Date: _____

For City Use Only: SIGNATURE INSTRUCTIONS FOR CONTRACTS SIGNED BY MAYOR/CLERK:

Obtain contractor's signature first. Route this contract & all of its attachments for City signatures using the City Clerk's Contract Routing Database. Include 1 copy of authorizing resolution & 1 copy of the Certificate of Insurance.

NOTE: Certain service contracts may be executed by the designee of the Finance Director on behalf of the City of Madison:

By: _____
Mary Richards, Procurement Supervisor

Date: _____

MGO 4.26(3) and (5) authorize the Finance Director or designee to sign purchase of service contracts when all of the following apply:

- (a) The funds are included in the approved City budget.
- (b) An RFP or competitive process was used, or the Contract is exempt from competitive bidding under 4.26(4)(a).
- (c) The City Attorney has approved the form of the Contract.
- (d) The Contract complies with other laws, resolutions and ordinances.
- (e) The Contract is for a period of 1 year or less, OR not more than 5 years AND the average cost is not more than \$100,000 per year, AND was subject to competitive bidding. (If over \$50,000 and exempt from bidding under 4.26(4)(a), regardless of duration of the Contract, the Common Council must authorize the Contract by resolution and the Mayor and City Clerk must sign, per 4.26(5)(b).)

Emergency Service contracts may also be signed by the designee of the Finance Director if the requirements of MGO 4.26(3)(c) are met.

For City Use Only: SIGNATURE INSTRUCTIONS FOR CONTRACT TO BE SIGNED BY FINANCE (PURCHASING):

Obtain contractor's signature first. Attach the contractor-signed contract with all attachments/exhibits and the certificate of insurance to the requisition in MUNIS.