

Department of Public Works Engineering Division

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DATE: November 16, 2016

TO: CONSULTANTS SUBMITTING PROPOSALS FOR MULTIPLE BUILDING COMMISSIONING SERVICES

FROM: ROBERT F. PHILLIPS, CITY ENGINEER

SUBJECT: **RFP # 8574-0-2016-BP**

The City of Madison Engineering Division is requesting consultant proposals for **Commissioning Services.** The services are to be provided for three upcoming projects, currently in early design: Pinney Library, Olbrich Gardens Expansion Project 1 and Firestation 14. The intent for the Request for Proposal is to allow consultants the opportunity to enter into a contract with the City of Madison for the commissioning services as detailed in the Request for Proposals (RFP).

Please refer to the RFP for pertinent information and dates. The following items are included with the RFP and considered part of it:

- Appendix A: Standard Terms & Conditions
- Appendix B: Contract for Purchase of Services
- 10 Page Exhibit A Pinney Library Developer Conceptual Drawings
- 29 Page Exhibit B Olbrich Gardens Master Plan Documents
- 16 Page Exhibit C Fire station 14 Master Plan Documents

The RFP may be obtained at any of the following online locations:

State of Wisconsin, VendorNet System – <u>http://vendornet.state.wi.us/vendornet</u> (Registration is Free)

City of Madison Public Works - www.cityofmadison.com/business/pw/requestforproposals.cfm

City of Madison Purchasing: www.cityofmadison.com/finance/purchasing/bidDemandStar.cfm

Home Page: <u>www.demandstar.com</u> To Register: <u>www.onvia.com/WAPP</u> (Free Subscription)

Interested Consultants shall submit copies of their Proposals per Section 1.3 of the RFP to City of Madison Purchasing Services. Due Date is 2:00 PM CST on Friday December 16, 2016. Submit proposal to:

City of Madison Purchasing Services City County Building, Room 407 210 Martin Luther King Jr. Blvd. Madison, WI 53703

Proposals may be submitted electronically to bids@cityofmadison.com labeled per Section 1.4 of RFP.

Please carefully review the RFP and follow all instructions. The successful Consultant must be agreeable to the City Of Madison standard contract language in the Sample. Contract Questions regarding this project may be directed to the project manager Jon Evans at jevans@cityofmadison.com or 608-243-5893.

Sincerely,

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Robert F. Phillips, P.E., City Engineer

Cc: Mike Dailey

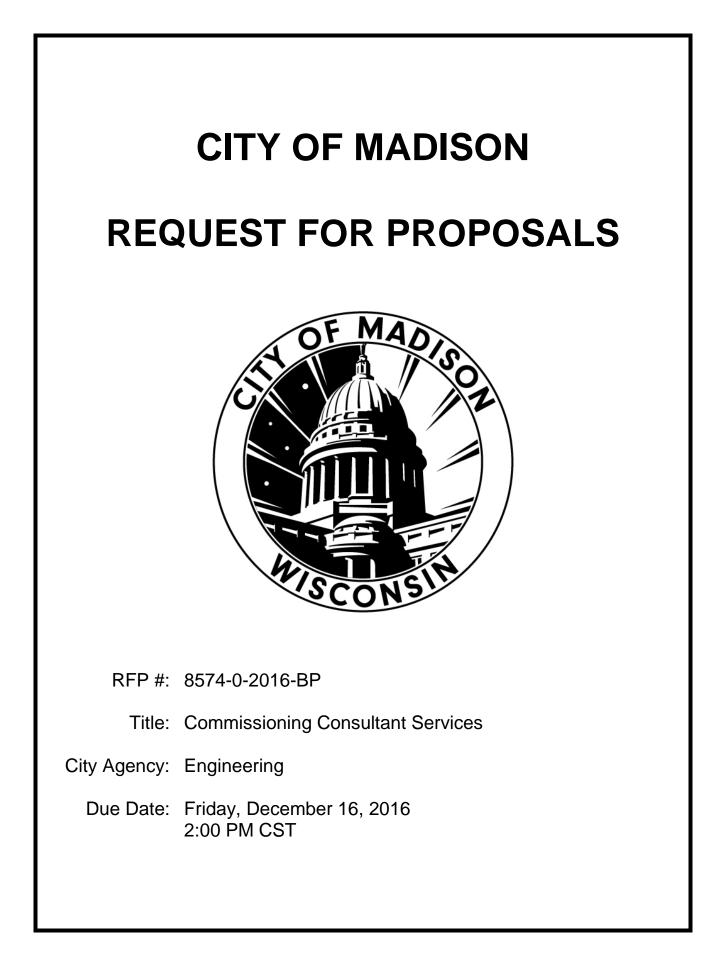


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- Exhibit B: Olbrich Gardens Master Plan Documents
- Exhibit C: Fire station 14 Master Plan Documents

1 NOTICE TO PROPOSERS

1.1 Summary

The City of Madison Engineering ("City") is soliciting Proposals from qualified vendors for Commissioning Consultant Services. 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: Wednesday, November 16, 2016 Questions Due Date: Wednesday, November 30, 2016 Answers Posted Date: Monday, December 5, 2016 Due Date: Friday, December 16, 2016, 2:00 PM CST

1.3 Format

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

Hardcopy proposals typed and securely bound on 8.5 by 11-inch paper, otherwise identical to the electronic version.

Electronic proposal in a PDF format stored on a common media (CD, DVD, or flash drive), identical in content and sequence to hardcopy proposals submitted.

 Cost Proposal (Form D):
 One Copy

 Technical Proposal:
 Five Copies

 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, December 16, 2016, 2:00 PM CST.

1.4 Labeling

All proposals must be clearly	Propose	r's Name and Address
labeled:	RFP #: 8	8574-0-2016-BP
	Title:	Commissioning Consultant Services
	Due:	Friday, December 16, 2016, 2:00 PM CST

All email correspondence must include RFP #8574-0-2016-BP in the subject line.

1.5 Delivery of Proposals

Delivery of hard copies to:	City of Madison Purchasing Services City County Building, Room 407 210 Martin Luther King Jr. Blvd. Madison, WI 53703
Delivery of electronic copy to:	via email to <u>bids@cityofmadison.com</u> or on a commonly used media with the hard copies.

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 \$25,000 or more for the calendar year in which the PO and/or Contract takes effect, Contractor shall file, within thirty (30) days from the PO/Contract effective date and BEFORE RELEASE OF PAYMENT, an Affirmative Action Plan (www.cityofmadison.com/dcr/aaFormsVS.cfm) 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. The Model Affirmative Action Plan for Vendors, Request for Exemption form, and instructions are available at: www.cityofmadison.com/dcr/aaForms.cfm or by contacting a Contract Compliance Specialist at the City of Madison Affirmative Action Division at (608) 266-4910.

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: If Contractor employs 15 or more employees, regardless of dollar amount, Contractor must notify the City of all external job openings at locations in Dane County, WI and Contractor agrees to interview candidates referred by the City or its designee. Job posting information is available at: www.cityofmadison.com/dcr/aaJobSkillsBank.cfm.

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 **paragraph 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 Enter the City Agency is the procuring agency:	Jon Evans City of Madison Engineering PH: (608) 243-5893 jevans@cityofmadison.com
The City of Madison Purchasing Services administers the procurement function:	Brian Pittelli Purchasing Services City-County Bldg, Room 407 210 Martin Luther King, Jr. Blvd. Madison, WI 53703-3346 PH: (608) 267-4969 FAX: (608) 266-5948 bpittelli@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 dcr@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, Clarifications, and Exceptions

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. A prospective vendor may take "exception" to bid terms, conditions, specifications and dates stated within the bid package. However, the City of Madison reserves the right to disqualify any and all bids submitted which include exceptions, if deemed not in the City's best interests.

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. Proposers 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.

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 quasipublic 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 General Information

The commissioning services are for three (3) new buildings located in Madison, WI that are pursuing LEEDv3 certification. Professional commissioning services for the design and construction of the buildings are required. In addition as defined by LEEDv3, enhanced commissioning, energy modeling and measurement & verification services are being included for these projects. The three buildings are: Pinney Library Branch, Olbrich Botanical Gardens Expansion - Project 1 and Fire station 14. Building descriptions and general scope of work are included later in this document.

The following Exhibits also describe each project:

- A. Exhibit A Pinney Library Developer Conceptual Drawings
- B. Exhibit B Olbrich Gardens Master Plan Documents
- C. Exhibit C Fire station 14 Master Plan Documents

Please note that firms <u>selected</u> for A/E services for one of these projects will not be considered for commissioning services on that project and vise-versa. The firm would not be excluded from submitting on the other projects (either as an A/E or commissioning consultant) and will not be penalized for only submitting on some of the projects. For example if ABC Engineering is the <u>selected</u> design MEP firm for Fire station 14, they will not be considered for the Commissioning consultant for Fire station 14, but would be considered for the other projects. The intent is that A/E team will be selected for each of these projects prior to selecting the commissioning consultant; however this is subject to change as the projects progress.

The selection process may result in up to two (2) consultants being selected for some combination of these three projects. The winning consultant(s) and personnel assigned to these projects need to be licensed to perform engineering work in the State of Wisconsin and also have experience commissioning similar past projects, including firestations, libraries, education centers and production greenhouses. In addition, schedules for these projects may overlap therefore the winning consultant(s) need to demonstrate ability and capacity to perform commissioning and energy modeling work on more than one of these projects simultaneously.

2.2 Consultant Scope Definition

The projects include commissioning, enhanced commissioning, energy modeling, and measurement & verification services. These services will include documenting Owner's requirements, developing a commissioning plan, review of design submittals, O&M manual review, systems manuals, training, operations and warranty review, commissioning reports, and similar items. The scope of these projects includes energy modeling and simulation engineering services, and measurement & verification services after completion of construction. Commissioning, enhanced commissioning, energy modeling, and measurement & verification services shall meet the requirements of USGBC LEEDv3 design and construction criteria.

Systems to be commissioned shall include:

- The entire HVAC system including boilers, chillers, pumps, piping, and air distribution, and similar items.
- The building automation system for the HVAC system.
- The plumbing system including domestic hot water.
- The electrical systems including lighting fixtures and lighting controls.
- Renewable energy systems potentially including solar hot water heating and photovoltaic (PV) electrical power generation systems.
- The building envelope and roofing system as it pertains to HVAC energy conservation
- The emergency power generation system.

The commissioning services shall ensure that building systems are designed, installed, functionally tested and capable of being operated and maintained to perform within the building design intent.

The Commissioning Authority shall provide supporting services for building improvements that will achieve LEED Certification-Silver following the U.S. Green Building Council's LEED for New Construction (LEED-NCv3) or Commercial Interiors (LEED-Clv3) Rating System (for a copy of the LEED-NC Rating System go to <u>www.usgbc.org</u> and click on LEED). The environmental sensitivity and high performance characteristics are part of the project objectives. The City is particularly interested in sustainable technologies that address waste reduction, energy efficiency, water efficiency, storm water management, materials and resources, indoor environmental quality, operations, and maintenance. All three of these projects have been registered under LEEDv3 and will not be required to use the LEEDv4 rating system.

A detailed scope of work follows this section. Consultants will be expected to perform the following, general services for each project:

- 1. Assist the City with development of the Owner's Project Requirements.
- 2. Provide professional commissioning services during the design of the project including development of the commissioning specification.
- 3. Assist the City's MEP engineering design consultants with development of Basis of Design documentation.
- 4. Provide energy modeling services.
- 5. Assist in the bidding process for the project.
- 6. Provide professional commissioning services during construction of the project.
- 7. Provide measurement and verification services after completion of construction.
- 8. Performance of the above shall include the following:
 - Make presentations to appropriate City user groups, and prepare appropriate presentation materials.
 - Meet and confer with City staff and others, including Focus on Energy, as needed or requested by the City, to complete all aspects of this project.
 - All commissioning services shall be in compliance with LEEDv3 requirements.
 - Prepare and distribute meeting minutes and reports as needed.

The City anticipates hiring a consultant by the end of January 2017.

2.3 Building Descriptions

The three projects are detailed in this section.

2.3.1 Pinney Library Branch

The Madison Public Library intends to move the Pinney Library Branch to a new location at 516 Cottage Grove Road in Madison, WI. The building will be around 20,000 square feet at the ground floor level of a multi-story, multifamily development. The core and shell portion of the project is by the developer and outside of the scope of services for this RFP. However, the interior buildout ("graybox") and MEP systems is included in the scope and to follow the LEED-CIv3 rating system. The mechanical system will likely be an underfloor air distribution system served by an air handler in the lower level with heating/cooling provided by centralized geothermal heat pumps. The geothermal borefield would be included in the commissioning scope. The lighting system will likely be 100% LED. Exterior lighting would be excluded from the commissioning scope. The project may also include a roof mounted PV system that would be part of the commissioning scope. The Project is scheduled for design in 2017 with construction scheduled to begin in either late 2017 or early 2018. The preliminary construction budget for this project is around \$5,000,000.

2.3.2 Olbrich Botanical Gardens Expansion – Project 1

The Madison Parks Department and Olbrich Botanical Gardens intends to expand and renovate Olbrich Botanical Gardens at 3330 Atwood Ave, Madison, WI in several phases. Project 1 consists of two independent and diverse building additions. The first building is a ~10,000 square foot education center. The second building is a new ~14,000 square foot production greenhouse which operates all year and will be replacing the existing antiquated greenhouse structures. The existing MEP systems will be expanded and modified to accommodate both expansion spaces. The existing systems include air handlers, boilers and chillers. The boilers were recently upgraded and are sized to handle the expansion. New chillers, VAV air handlers and heating terminals will be part of the project. New lighting systems will likely be LED. The project may also include a roof mounted PV system. Emergency power is not likely part of this project. The project is scheduled for design in 2017 and early 2018 with construction to begin in late 2018. Predesign Phase for this project is likely to start before the Schematic Design phases of the other projects. Therefore selection of a consultant for this project may take priority over the other projects in the short term. The preliminary construction budget for expansion - project 1, including the new green houses is around \$7,500,000.

2.3.3 Fire station 14

The Madison Fire Department intends to build a new Fire station at 5102 Femrite Drive in Madison, WI in the southeast portion of the city. The building will be around 15,000 square feet and likely single story construction – with the exception of a mechanical penthouse above the living quarters. Construction and scope of the building systems will likely be similar to Fire station 12 and 13, with the exception of a larger community/training room. The mechanical system will likely be a central AHU located in the penthouse and include a dedicated outdoor air ventilation system. Heating would likely be from a radiant floor system or perimeter radiators through the facility. Heating and cooling will either be provided by centralized ground source heat pumps (with a vertical borefield) or a boiler/DX plant. Lighting will likely be 100% LED. The project may also include a solar hot water heating system and a roof mounted PV system. The Project is scheduled for design in 2017 with construction scheduled to begin in either late 2017 or early 2018. The preliminary construction budget for this project is around \$4,000,000.

2.3.4 Project Schedules

The following table includes estimated project schedules.

	2017			2018			2019			2020						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Pinney Library Branch	PD	SD	DD	CD	Bid/Construction		Post Construction									
Olbrich Gardens Phase PD SD DD		CI	C	Bid/C	Bid/Construction				ion							
Fire station 14 PD SD DD CD		Bid/Construction		Post Construction												

2.4 Detailed Scope of Work

The Commissioning Authority's services, <u>for each of the three projects</u>, shall consist of the seven (7) phases described below and shall be performed by the Commissioning Authority as principal.

2.4.1 PHASE I: PRE-DESIGN PHASE (PD)

- A. Pre Design Phase has been completed for the Pinney Library and Firestation 14projects. Some limited pre design involvement, such as progress meetings (assume 2) and high level system discussions for Olbrich Botanical Gardens Expansion Project 1 should be expected for the commissioning consultant.
- B. Scope is limited to reviewing Pre-Design information to become familiar with project and if needed, answering questions about the commissioning process/scope from project team members.

2.4.2 PHASE II: SCHEMATIC DESIGN PHASE (SD)

A. Review all predesign and schematic design information provided by the City.

- B. Assist the City with initial development of the Owner's Project Requirements.
- C. Develop an energy simulation model of the building and provide simulations of different massing, assemblies and system options, including simple payback analysis. No LEED Baseline modeling is required at this phase. Assume that up to 10 features of the building will be modeled (such as insulation, window properties and placement, lighting targets or HVAC systems). Relative cost savings between the options will be considered; accuracy related to absolute savings should not be a key focus. The first costs for various options will be provided by either the City or the architectural and engineering consultants.
- D. Attend a Schematic Design charrette meeting, organized by the Architect, to develop clear and quantitative sustainability goals that: optimize energy efficiency, promote occupant productivity and health, promote resource conservation and environmental responsibility. The charrette will be attended by the Architect and various disciplines of the design firm and its consultants. The sustainable design goal setting session shall be used to develop consensus of the strategies and technologies to be explored during design. The Architect will use LEED rating system as a goal setting tool to establish a LEED target.
- E. Review the schematic design documents and provide comments.
- F. The Commissioning Authority shall not proceed beyond Phase II without written authorization from the City's Designated Representative.

2.4.3 PHASE III: DESIGN DEVELOPMENT PHASE (DD)

- A. Review all predesign, schematic design, and design development information provided by the City.
- B. Perform focused reviews of the Architect's drawings and specifications.
- C. Meet to review Owner's Project Requirements (OPR) with the City and Architect.
- D. Develop an energy simulation model of the building and provide simulations of different equipment options for the building, including simple and life cycle payback analysis. Assume up to 6 options will be simulated. The equipment costs will be provided by the City or the architectural and engineering consultants. Include a LEED Baseline to compare options to.
- E. Assist Focus on Energy, architectural and engineering consultants with developing energy conservation measures for the building. This could include different equipment options or configurations to improve efficiency. It is assumed that the general systems will be selected prior to this phase. Assist with Focus on Energy bundling process. Provide opinion of the number of LEED points associated with each Focus on Energy Bundle and attempt to align energy simulations with Focus on Energy options.
- F. Prepare a draft commissioning plan.
- G. Assist the City and Architect to review the development of the Basis of Design.
- H. Review Architect's sustainability design development report. The Architect's report shall contain a narrative discussion of project goals and priorities developed as part of the charrette including a completed copy of the LEED assessment. The Architect's report shall contain opportunities and special features for design elements to address incorporating "Green Building" design materials and system(s) into the project design and shall include preliminary cost estimates associated with proposed green building design materials and system(s).
- I. Develop draft commissioning specifications for all commissioned equipment.

- J. Meet and confer with the City and Architect where the engineering design team and the commissioning agent discuss integration issues between equipment, systems and controls to ensure that all responsibilities are clearly described in the Architect's specifications.
- K. Meet and confer with City staff, users, and others as required to complete all design approval needs and completion aspects of design development phase.
- L. The Commissioning Authority shall not proceed beyond Phase III without written authorization from the City's Designated Representative.

2.4.4 PHASE IV: CONSTRUCTION DOCUMENTS PHASE (CD)

- A. Review all construction document information provided by the City.
- B. Perform focused reviews of the Architect's drawings and specifications.
- C. Update the energy simulation model of the final building design to include selected options and document final results of simulations to GBCI for LEED Review, including LEED baseline simulation. These simulations will also be the basis for the Measurement & Verification work during post occupancy.
- D. Prepare final commissioning plan.
- E. Assist the City and Architect with development of the Basis of Design. Review final version.
- F. Develop final commissioning specifications for all commissioned equipment.
- G. Meet and confer with the City and Architect where the engineering design team and the commissioning agent discuss integration issues between equipment, systems and controls to ensure that all responsibilities are clearly described in the Architect's specifications.
- H. Meet and confer with City staff, users, and others as required to complete all design approval needs and completion aspects of construction document phase.
- I. The Commissioning Authority shall not proceed beyond Phase IV without written authorization from the City's Designated Representative.

2.4.5 PHASE V: BIDDING PHASE

A. Prepare addendum information as needed to answer commissioning related questions.

2.4.6 PHASE VI: CONSTRUCTION PHASE - ADMINISTRATION OF THE CONSTRUCTION CONTRACT

- A. Review all construction administration information provided by the City.
- B. Coordinate and direct commissioning activities in a logical, sequential, and efficient manner using consistent protocols and forms.
- C. Review construction shop drawing submittals in conjunction with Architect reviews.
- D. The commissioning agent and construction manager shall work in conjunction to coordinate all testing, inspecting and site specific activities pertaining to commissioning.
- E. Review O&M manual documents in compliance with LEED V3 criteria.

- F. Review systems manual documentation.
- G. Plan and conduct commissioning meetings as needed, prepare and distribute minutes.
- H. Review requests for information (RFI's) and change orders for impact on commissioning and Owner's objectives.
- I. Write and distribute commissioning checklists for all applicable equipment. These checklists shall provide static inspections, pre-functional tests, functional tests, and set point adjustments.
- J. Perform site visits, as necessary but no more than 12 site visits, to observe component and system installations. Attend selected construction jobsite meetings.
- K. Witness HVAC piping pressure test and flushing, sufficient to be confident that proper procedures were followed.
- L. Witness ductwork testing and cleaning, sufficient to be confident that proper procedures were followed.
- M. Complete commissioning checklist for both static and pre-functional testing. Verify that 100% of the equipment checklists are completed by the contractors.
- O. Document systems start-up by reviewing start-up reports and by selected site observations.
- P. Approve air and water systems balancing by spot testing and by reviewing completed reports.
- Q. Prepare functional performance test procedures for equipment and systems. Include manual functional testing, energy management control system trending, and may include stand-alone data-logger monitoring.
- R. Analyze functional performance trend logs and monitoring data to verify performance.
- S. Coordinate, witness, and document manual functional performance tests performed by the installing contractors. Coordinate retesting as necessary and in accordance with the requirements outlined within the commissioning specifications of the contract documents, until satisfactory performance is achieved.
- T. Meet and confer with City staff, users, and others as required to complete all approval needs and completion aspects of construction administration phase. Tests on respective HVAC equipment shall be executed, if possible, during both the heating and cooling seasons. However, some overwriting of control values to simulate conditions shall be allowed.
- U. Maintain a master deficiency log with internet access and a separate record of functional testing. Report all issues as they occur directly to the General Building Contractor. Provide written reports and test results with recommended actions and deficiency updates.
- V. Review equipment warranties to ensure that the building owner's responsibilities are clearly defined.
- W. Confirm the training of the building owner's operating personnel.
- X. Review and approve preparation of the O&M manuals for commissioned equipment.
- Y. Prepare a measurement and verification plan in compliance with LEED-NC requirements, that will include establishing a baseline for energy consumption, determine measuring criteria, formulate a post construction inspection, and provide quality assurance plan to ensure accurate and frequent

auditing of the energy consumption over time.

- Z. Compile commissioning report. Provide commissioning summary report that includes a list of participants and roles, brief building description, overview of commissioning and testing scope, and a general description of testing and verification methods. For each piece of commissioned equipment, include a disposition of the Commissioning Authority regarding the adequacy of the equipment meeting the specifications, equipment installation, equipment functional performance and efficiency, equipment documentation, and operator training. All outstanding non-compliance items shall be specifically listed with recommendations for improvement.
- AA. Compile a systems manual that consists of owner objectives (by City), design narrative and basis of design (by Architect), performance matrix, space and use descriptions, single line drawings and schematics for major systems (by Architect), control drawings, sequences of control (by General Building Contractor), table of setpoints and implications when changing them, schedules, instructions for operations of equipment for emergencies, seasonal adjustment, startup and shutdown, instructions for energy savings operations and descriptions of the energy savings strategies in the facility, recommendations for retro-commissioning frequency by equipment type, energy tracking recommendations, and recommended standard trend logs with brief description of what to look for in them.

2.4.7 PHASE VII: POST-CONSTRUCTION PHASE

- A. Return to site at the 6th month of normal operation to coordinate and supervise required seasonal of deferred testing and deficiency corrections and provide the final testing documentation for the commissioning report and O&M manuals.
- B. Return to the site at the 6th and 10th month of the 12-month warranty period and review with the City's facilities maintenance staff the current building operation and the condition of the outstanding issues related to the original and seasonal commissioning. Interview City staff and identify problems or concerns they have with operating the building as originally intended. Make suggestions for improvements and for recording these changes in the O&M manuals. Identify areas that may come under warranty or under the original construction contract. Assist City staff in developing reports and documents and requests for services to remedy ongoing equipment problems.
- C. Review the operation of data collection systems at 6 and 10 months of normal operation. Verify ongoing performance of energy conservation measures and green building strategies.
- D. Complete a measurement and verification plan in compliance with LEED-NC requirements, that will determine utility savings under actual operating conditions. Provide results of the measurement and verification process in the final commissioning report if 12 months of normal operation is achieved within 14 months of substantial completion.

2.4.8 ALL TASKS OUTLINED IN PHASES I THROUGH VI ABOVE SHALL INCLUDE THE FOLLOWING

- A. Make presentations to appropriate groups, and prepare appropriate presentation materials.
- B. Meet and confer with City staff and others as needed or requested by the City, to complete all aspects of this project.
- C. Meet and confer with the City's designated Architect as needed or requested by the City, to complete all aspects of this project. The Commissioning Authority shall assist the City's Architect in documentation efforts, providing all necessary supporting documentation directly related to the Commissioning Authority's engineering services.

3 REQUIRED INFORMATION AND CONTENT OF PROPOSALS

Scoring will be weighted as follows:

5% for local vendor preference 30% for Project Overview Qualifications 35% for Technical Qualifications 30% for cost

The City reserves the right to not select the highest scoring proposal if it is the result of receiving the highest cost score (due to lowest cost).

3.1 Section 1 – General Information, Signatures, and Required Guarantees and Certifications

- 1. Form A Signature Affidavit
- 2. Form B Receipt Forms and Submittal Checklist
- 3. Form C Contractor Profile Information
- 4. Form E References

3.2 Section 2 – Project Overview Qualifications (30%)

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.

The first two questions are prerequisites:

- 1. Intent to comply with the Affirmative Action Ordinance of the City of Madison.
- 2. Intent to comply with the insurance requirements of the City of Madison.

The following questions will be scored. Percentage each question is worth is listed in parentheses ().

- 3. (6%) A description of the qualifications, experience, organization and resources of the firm. Describe what sets your firm apart and makes it better than the competition.
- (6%) Case studies showing similar types of work previously completed, with the name and address of clients for whom the work was done. Please use Form E – References for this part. Key experience from at least two (2) similar past-projects for each of the projects listed below should be included.
 - a. Key experience for Pinney Library should include LEED certified library projects.
 - b. Key experience for Olbrich Gardens Expansion should include LEED certified education centers and/or production greenhouses.
 - c. Key experience for Fire station 14 should include LEED certified fire stations. Experience with other, similar municipal buildings such as maintenance facilities or police stations would also be acceptable to meet the key experience requirement.
- 5. (6%) Describe your team. State firm or firms that will be on the team, location of the office from which this engagement will be serviced and the range of activities performed by the firm/team. If using subconsultants, include their resumes and indicate what portion of the work is to be done by them.
- (6%) Describe individual team members. Include names, titles, roles and responsibilities for each team member. Identify the project manager and primary contact. Include resumes for all team members.

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7. (6%) A description of how the committed staff will manage workload from these simultaneous projects and their procedures to ensure that they have adequate capacity and quality control built into the process.

3.3 Section 3 – Technical Qualifications (35%)

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.

Percentage each question is worth is listed in parentheses ().

- 1. (10%) A description of techniques intended to be used in commissioning delivery approach for the projects.
- 2. (10%) A description of techniques intended to be used in energy modeling approach for the projects.
- 3. (10%) A description of techniques intended to be used in the measurement & verification approach for the projects.
- 4. (5%) A description of techniques to be used to achieve LEED certification for the projects.
- 3.4 Section 4 Cost (30%)

Please see the Cost Proposal on Form D.

Form A: Signature Affidavit



RFP #: 8574-0-2016-BP Commissioning Consultant 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 #: 8574-0-2016-BP Commissioning Consulant 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		
Appendix A: Standard Terms & Conditions	N/A	
Appendix B: Contract for Purchase of Services	N/A	
Exhibit A: Pinney Library Developer Conceptual Drawing	N/A	
Exhibit B: Olbrich Gardens Master Plan Documents	N/A	
Exhibit C: Fire Station 14 Master Plan Documents	N/A	
Addendum #		
Addendum #		

VENDOR NAME

COMPANY NAME

Form C: Vendor Profile



RFP #: 8574-0-2016-BP Commissioning Consultant 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	I)				
CONTACT NAME (Able to answer questions about proposal.)	TITLE					
TELEPHONE NUMBER	FAX NUMBER					
EMAIL						
ADDRESS	CITY	STATE	ZIP			

AFFIRMATIVE ACTION CONTACT

The successful Contractor, who employs more than 15 employees and whose aggregate annual business with the City for the calendar year, in which the contract takes effect, is more than twenty-five thousand dollars (\$25,000), will be required to comply with the City of Madison Affirmative Action Ordinance, Section 39.02(9) within thirty (30) days of award of contract.

CONTÁCT 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.

	IIILE		
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 UNLY UNE:	
Yes, we are a local vendor and have regist	ered 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 #: 8574-0-2016-BP Commissioning Consultant 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.

This section will count for 30% of the scoring. Provide a cost breakdown by Project and Phase:

Pinney Library Branch

Phase	Cost
I: PRE DESIGN	
II: SCHEMATIC DESIGN	
III: DESIGN DEVELOPMENT	
IV: CONSTRUCTION DOCUMENTS	
V: BIDDING	
VI: CONSTRUCTION	
VII: POST CONSTRUCTION	
TOTAL	

List an hourly rate for all people working on this project. Attach additional documents if needed:

Neme and Title	Llauriu Data	
Name and Title	Hourly Rate	Estimated number of hours for Pinney Library Branch

Olbrich Gardens Expansion

Phase	Cost
I: PRE DESIGN	
II: SCHEMATIC DESIGN	
III: DESIGN DEVELOPMENT	
IV: CONSTRUCTION DOCUMENTS	
V: BIDDING	
VI: CONSTRUCTION	
VII: POST CONSTRUCTION	
TOTAL	

List an hourly rate for all people working on this project. Attach additional documents if needed:

Name and Title	Hourly Rate	Estimated number of hours for Olbrich Gardens Expansion

Fire station 14

Phase	Cost
I: PRE DESIGN	
II: SCHEMATIC DESIGN	
III: DESIGN DEVELOPMENT	
IV: CONSTRUCTION DOCUMENTS	
V: BIDDING	
VI: CONSTRUCTION	
VII: POST CONSTRUCTION	
TOTAL	

List an hourly rate for all people working on this project. Attach additional documents if needed:

Name and Title	Hourly Rate	Estimated number of hours for Fire Station 14

Please list any discount provided if your firm is selected for more than one project:

\$_____%

COMPANY NAME

Form E: References



RFP #: 8574-0-2016-BP Commissioning Consultant 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 C	OST
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 C	OST
DESCRIPTION OF THE PERFORMED WORK			

Form E: References



RFP #: 8574-0-2016-BP Commissioning Consultant Services

REFERENCE #4 – 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			

Appendix A



CITY OF MADISON

(STC-Form: 07/26/2016)

- <u>General</u>. 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.

<u>Order of Precedence</u>: 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. <u>Addenda</u>. 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. <u>Price Proposal</u>. 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. <u>Price Inclusion</u>. 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. <u>F.O.B. Destination Freight Prepaid</u>. Bid prices must include all handling, transportation and insurance charges. Failure to bid FOB Destination Freight Prepaid may disqualify your bid.
- 9. <u>Award</u>.
 - 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. <u>Responsiveness and Responsibility</u>. 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 any contract in whole or in part without penalty due to non-appropriation of funds.
- b. 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.
- c. 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. <u>Warranty</u>. 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.
- <u>Ownership of Printing Materials</u>. 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. <u>Item Return Policy</u>. 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. <u>Payment Terms and Invoicing</u>. 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. <u>F.O.B. Destination Freight Prepaid</u>. 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. <u>Tax Exemption</u>. 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 \$25,000 Aggregate Annual Business with the City*	\$25,000 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) <u>Exempt Status</u>: 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) <u>Request for Exemption – Fewer Than 15 Employees</u>: (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) <u>Exemption – Annual Aggregate Business</u>: (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 \$25,000 in annual aggregate business with the City in the calendar year. CONTRACTORS WITH 15 OR MORE EMPLOYEES WILL LOSE THIS EXEMPTION AND BECOME SUBJECT TO SEC. 20.B.(5) UPON REACHING \$25,000 OR MORE ANNUAL AGGREGATE BUSINESS WITH THE CITY WITHIN THE CALENDAR YEAR.

(4) <u>Release of Payment</u>: (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) <u>Articles of Agreement</u>:

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 takes effect is less than twenty-five thousand dollars (\$25,000), 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 five thousand dollars (\$5,000), 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. <u>Non-Discrimination</u>. In the performance of work under 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. <u>Living Wage</u>. (Applicable to Service Contracts Exceeding \$5,000.) The bidder agrees to pay all employees employed in the performance of this contract, whether on full-time or part-time basis, a base wage of not less than the City minimum hourly wage as required by Section 4.20, Madison General Ordinances. Additional information is available on our website: www.cityofmadison.com/finance/wage.
- 23. <u>Prevailing Wage. (Applicable to single-trade projects of \$48,000 or more & multiple-trade projects of \$100,000 or more.)</u> When required by Wis. 66.0903, the Contractor warrants that prevailing wages will be paid to all trades and occupations, as may be applicable under Wisconsin Statutes sec. 66.0903. Wage scale is on file with the City Engineer and linked at <u>www.cityofmadison.com/finance/purchasing</u> (See "Prevailing Wage Rates.").
- 24. 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.
- 25. 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.

- 26. <u>Work Site Damages</u>. 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.
- 27. 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.
- 28. 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.
 This warranty of materials and workmanship is separate and independent from and in additional in the separate and independent from and in additional in the separate and independent from and in additional in the separate and independent from and in additional in the separate and independent from and in additional in the separate and independent from and in additional in the separate and independent from and in the separate and independent from and in additional in the separate and independent from and and independent fr
 - c. This warranty of materials and workmanship is separate and independent from and in addition to any other guarantees in this Contract.
- 29. <u>Replacement of Defective Work or Materials</u>. 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.
- 30. <u>Reservation of the Right to Inspect Work</u>. 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.
- 31. 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 Madison General Ordinances, Sec. 4.25 "Procurement of Items of Apparel", is hereby incorporated by reference and made part of this contract. See MGO 4.25(2) 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:
 - a. Withholding of payments under an existing contract.
 - b. 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.
 - c. Termination, suspension or cancellation of a contract in whole or in part.
 - d. Nonrenewal when a contract calls for optional renewals.
 - e. 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:
 - (1) Progress toward implementation of the standards in this Ordinance is no longer being made; and
 - (2) 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.
 - f. 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.

32. <u>Local Purchasing</u>. 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.

33. Equal Benefits Requirement. (Sec. 39.07, MGO)

This provision applies to service contracts of more than \$25,000 executed, extended, or renewed by the City on July 1, 2012 or later, unless exempt by Sec. 39.07 of the Madison General Ordinances (MGO).

For the duration of this Contract, the Contractor agrees to offer and provide benefits to employees with domestic partners that are equal to the benefits offered and provided to married employees with spouses, and to comply with all provisions of Sec. 39.07, MGO. If a benefit would be available to the spouse of a married employee, or to the employee based on his or her status as a spouse, the benefit shall also be made available to a domestic partner of an employee, or to the employee based on his or her status as a domestic partner. "Benefits" include any plan, program or policy provided or offered to employees as part of the employer's total compensation package, including but not limited to, bereavement leave, family medical leave, sick leave, health insurance or other health benefits, dental insurance or other dental benefits, disability insurance, life insurance, membership or membership discounts, moving expenses, pension and retirement benefits, and travel benefits.

<u>Cash Equivalent</u>. If after making a reasonable effort to provide an equal benefit for a domestic partner of an employee, the Contractor is unable to provide the benefit, the Contractor shall provide the employee with the cash equivalent of the benefit.

<u>Proof of Domestic Partner Status</u>. The Contractor may require an employee to provide proof of domestic partnership status as a prerequisite to providing the equal benefits. Any such requirement of proof shall comply with Sec. 39.07(4), MGO.

Notice Posting, Compliance. The Contractor shall post a notice informing all employees of the equal benefit requirements of this Contract, the complaint procedure, and agrees to produce records upon request of the City, as required by Sec. 39.07, MGO.

<u>Subcontractors (Service Contracts Only)</u>. Contractor shall require all subcontractors, the value of whose work is twenty-five thousand dollars (\$25,000) or more, to provide equal benefits in compliance with Sec. 39.07, MGO.

- 34. 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.).
- 35. Software & Technology Purchases.
 - a. <u>Software Licenses</u>. 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 a End User License Agreement (EULA) or any other click-through terms and conditions. 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. <u>Network Connection Policy</u>. 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: <u>www.cityofmadison.com/attorney/documents/posNetworkConnection.doc</u> is hereby incorporated and made a part of the Contract and Contractor agrees to comply with all of its requirements.

36. 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. <u>Definitions</u>. 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.

- 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. <u>Exemptions</u>: 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.

b.

APPENDIX B

City of Madison CONTRACT FOR PURCHASE OF SERVICES

1. PARTIES.

This is a Contract between the City of Madison	, Wisconsin,	, hereafter referred t	o as the "City	" and	hereafter r	eferred to as
"Contractor."						

The Contractor is a: Corporation (to be completed by contractor) Sole Proprietor Limited Liability Company Unincorporated Association General Partnership LLP

2. PURPOSE.

The purpose of this Contract is as set forth in Section 3.

3. SCOPE OF SERVICES AND SCHEDULE OF PAYMENTS.

Contractor 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 <u>insert dates or reference attachments as needed</u>.

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.

Contractor 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 Contractor and employees of Contractor.

7. DESIGNATED REPRESENTATIVE.

- A. Contractor 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 Contractor 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 Contractor, which 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 Contractor shall complete the services under this Agreement within the time for completion specified in Section 3, the
 - The Contractor shall complete the services under this Agreement within the time for completion specified in Section 3, the Scope of Services, including any amendments. The Contractor's services are completed when the City notifies the Contractor 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 Contractor, but it may be extended by the City in the event of a delay attributable to the Contractor. If at any time the Contractor 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 Contractor 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 Contractor 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 Contractor and submitted to the City with each invoice under Section 24 of this Agreement, and at such other times as the City may specify, unless another procedure is specified in Section 3.
- E. The Contractor shall notify the City in writing when the Contractor 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 Contractor, 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 Contractor 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 Contractor 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 Contractor 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. NON-DISCRIMINATION.

In the performance of work under 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.

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.

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 \$25,000 Aggregate Annual Business with the City*	\$25,000 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) <u>Exempt Status</u>: 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) <u>Request for Exemption – Fewer Than 15 Employees</u>: (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) <u>Exemption – Annual Aggregate Business</u>: (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 \$25,000 in annual aggregate business with the City in the calendar year. CONTRACTORS WITH 15 OR MORE EMPLOYEES WILL LOSE THIS

В.

APPENDIX B

EXEMPTION AND BECOME SUBJECT TO SEC. 13.B.(5) UPON REACHING \$25,000 OR MORE ANNUAL AGGREGATE BUSINESS WITH THE CITY WITHIN THE CALENDAR YEAR.

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):

- Δ 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.
- 🔲 в. 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.
- С. 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 takes effect is less than twenty-five thousand dollars (\$25,000), 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

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:

- Cancel, terminate or suspend this Contract in whole or in part. Declare the Contractor ineligible for further City contracts until the Affirmative Action requirements are met. Recover on behalf of the City from the prime Contractor 0.5 percent of the Contract award price for each week that such party В. C. 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 five thousand dollars (\$5,000), 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

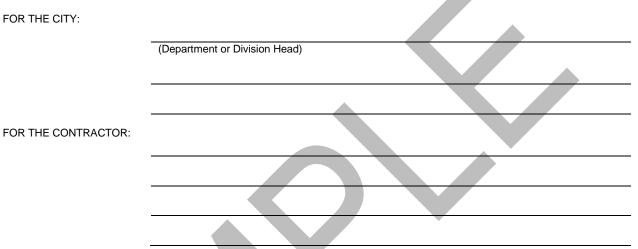
The Contractor shall allow the maximum feasible opportunity to small business enterprises to compete for any subcontracts entered into pursuant to this Contract. (In federally funded contracts the terms "DBE, MBE, and WBE" shall be substituted for the term "small business" in this Article.)

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:



16. STATUS OF CONTRACTOR/INDEPENDENT/TAX FILING.

It is agreed that Contractor is an independent Contractor and not an employee of the City, and that any persons who the Contractor utilizes and provides for services under this Contract are employees of the Contractor and are not employees of the City of Madison.

Contractor 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 Contractor 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 Contractor for these purposes and that payment of taxes and making social security payments are solely the responsibility and obligation of the Contractor. The Contractor 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; Contractor 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 Contractor 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 Contractor 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 Contractor 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 Contractor 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 Contractor and its agents and employees.

22. CONFLICT OF INTEREST.

- A. The Contractor 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 Contractor 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 Contractor 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 Contractor 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 Contractor 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 Contractor 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 Contractor under this Agreement.
- (6) The City has the equitable right to set off against any sum due and payable to the Contractor under this Agreement, any amount the City determines the Contractor 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 Contractor.
- SÉRVICE 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 Contractor believes the extra services entitle it to extra compensation or additional time, the Contractor 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 Contractor's opinion the order for extra service would entitle it to extra compensation or extra time, or both, the Contractor 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 Contractor's submittal and respond in writing, either authorizing the Contractor to perform the extra service, or refusing to authorize it. The Contractor shall not receive additional compensation or time unless the extra compensation is authorized by the City in writing.

DEFAULT/TERMINATION.

- In the event Contractor 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 Contractor, 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 Contractor, including expressly the specific enforcement hereof, forthwith have the cumulative right to immediately terminate this Contract and all rights of Contractor 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 Contractor 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 Contractor and accepted by the City.

26. INDEMNIFICATION.

В.

A.

25.

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 Contractor's and/or Subcontractor's acts or omissions in the performance of this Agreement, whether caused by or contributed to by the negligence of the City, its officers, officials, agents, or its employees.

27. 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.

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.

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.

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.

OWNERSHIP OF CONTRACT PRODUCT.

All of the work product, including, but not limited to, documents, materials, files, reports, data, including magnetic tapes, disks of computer-aided designs or other electronically stored data or information (the "Documents"), which the Contractor prepares pursuant to the terms and conditions of this Contract are the sole property of the City. The Contractor will not publish any such materials or use them for any research or publication, other than as expressly required or permitted by this Contract, without the prior written permission of the City. The grant or denial of such permission shall be at the City's sole discretion.

The Contractor intends that the copyright to the Documents shall be owned by City, whether as author (as a Work Made For Hire), or by assignment from Contractor to City. The parties expressly agree that the Documents shall be considered a Work Made For Hire as defined by Title 17, United States Code, Section 101(2).

As further consideration for the City entering into this Contract, the Contractor hereby assigns to City all of the Contractor's rights, title, interest and ownership in the Documents, including the right to procure the copyright therein and the right to secure any renewals, reissues and extensions of any such copyright in any foreign country. The City shall be entitled to the sole and exclusive benefit of the Documents, including the copyright thereto, and whenever required by the City, the Contractor shall at no additional compensation, execute all documents of assignment of the full and exclusive benefit and copyright thereof to the City. Any subcontractors and other independent Contractors who prepare portions of the Documents shall be required by the Contractor to execute an assignment of ownership in favor of the City before commencing work.

28.

29. LIVING WAGE (Applicable to contracts exceeding \$5,000).

Unless exempt by MGO 4.20, the Contractor agrees to pay all employees employed by the Contractor in the performance of this Contract, whether on a full-time or part-time basis, a base wage of not less than the City minimum hourly wage as required by Section 4.20, Madison General Ordinances.

30. EQUAL BENEFITS REQUIREMENT (Sec. 39.07, MGO.) (Applicable to contracts exceeding \$25,000).

This provision applies to service contracts of more than \$25,000 executed, extended, or renewed by the City on July 1, 2012 or later, unless exempt by Sec. 39.07 of the Madison General Ordinances (MGO).

For the duration of this Contract, the Contractor agrees to offer and provide benefits to employees with domestic partners that are equal to the benefits offered and provided to married employees with spouses, and to comply with all provisions of Sec. 39.07, MGO. If a benefit would be available to the spouse of a married employee, or to the employee based on his or her status as a spouse, the benefit shall also be made available to a domestic partner of an employee, or to the employee based on his or her status as a domestic partner. "Benefits" include any plan, program or policy provided or offered to employees as part of the employer's total compensation package, including but not limited to, bereavement leave, family medical leave, sick leave, health insurance or other health benefits, dental insurance or other dental benefits, disability insurance, life insurance, membership or membership discounts, moving expenses, pension and retirement benefits, and travel benefits.

<u>Cash Equivalent</u>. If after making a reasonable effort to provide an equal benefit for a domestic partner of an employee, the Contractor is unable to provide the benefit, the Contractor shall provide the employee with the cash equivalent of the benefit.

<u>Proof of Domestic Partner Status</u>. The Contractor may require an employee to provide proof of domestic partnership status as a prerequisite to providing the equal benefits. Any such requirement of proof shall comply with Sec. 39.07(4), MGO.

<u>Notice Posting, Compliance</u>. The Contractor shall post a notice informing all employees of the equal benefit requirements of this Contract, the complaint procedure, and agrees to produce records upon request of the City, as required by Sec. 39.07, MGO.

<u>Subcontractors (Service Contracts Only)</u>. Contractor shall require all subcontractors, the value of whose work is twenty-five thousand dollars (\$25,000) or more, to provide equal benefits in compliance with Sec. 39.07, MGO.

31. 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.

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.

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).

33. IT NETWORK CONNECTION POLICY.

If this Contract includes services such as 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: http://www.cityofmadison.com/attorney/documents/posNetworkConnection.doc is hereby incorporated and made a part of this Contract and Contractor agrees to comply with all of its requirements.

34. 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.

35. COUNTERPARTS, ELECTRONIC 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. 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:
	(Print Name and Title of Person Signing)
	Date:
	CITY OF MADISON, WISCONSIN a municipal corporation
	By: Paul R. Soglin, Mayor
Approved:	Date:
	Ву:
David P. Schmiedicke, Finance Director	Maribeth Witzel-Behl, City Clerk
Date:	Date:
	Approved as to Form:
Eric T. Veum, Risk Manager	Michael P. May, City Attorney
Date:	Date:
NOTE: Certain service contracts may be executed by	the designee of the Finance Director on behalf of

NOTE: Certain service contracts may be executed by the designee of the Finance Director on behalf of the City of Madison:

By:

Kathryn L. Schwenn, CPA, Accountant 3 Designee of Finance Director

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 3 years AND the average cost is not more than \$50,000 per year, AND was subject to competitive bidding. (If over \$25,000 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.

EXHIBIT A: PINNEY LIBRARY DEVELOPER CONCEPTUAL DRAWINGS (10 Pages)

	ABBREVIA	TIONS		GRAPHI	C SY
@ A.B.	AT ANCHOR BOLT	LLH LLV	LONG LEG HORIZONTAL LONG LEG VERTICAL		NORTH
A/C ACCESS.	AIR CONDITIONER ACCESSIBLE	LS## LVP	LAZY SUSAN LUXURY VINYL PLANK	$ $ \forall	
CT DJ.	ACOUSTICAL CEILING TILE ADJACENT	LVT MATL.	LUXURY VINYL TILE MATERIAL	×	
	ADJUSTABLE ROD AND SHELF ABOVE FINISH FLOOR	MAX. MC	MAXIMUM MEDICINE CABINET	X A-X.X X	INTERIO
Г.	ALUMINUM ALTERNATE	MECH. MFR.	MECHANICAL MANUFACTURER('S)	X A-X.X X	INTERIO
M. ROX.	ALUMINUM APPROXIMATE	MH. MIN.	MANHOLE MINIMUM	x	
#	BASE CABINET BOARD	M.O. MOD.	MASONRY OPENING MODULE	\mathbf{X}	
DG.	BITUMINOUS BUILDING	M.R. MTL.	MOISTURE RESISTANT METAL	(A-X.X)	DETAIL C
.G. \B.	BEARING CABINET	N.I.C. N.T.S.	NOT IN CONTRACT NOT TO SCALE		
.G.	CONTROL JOINT CEILING	O.C. O.D.	ON CENTER OVERFLOW DRAIN		
1U DL.	CONCRETE MASONRY UNIT COLUMN	O.S.B. OPP.	ORIENTED STRAND BOARD OPPOSITE HAND		SECTION
DMN. DNT.	COMMUNICATION CONTINUOUS	P.C. P.D.F.	PRECAST CONCRETE POWER DRIVEN FASTENER		
RR.	CORRIDOR CARPET	PLBG. P.T.	PLUMBING PRESSURE TREATED		
	CERAMIC TILE DRYER	PLWD. PSF	PLYWOOD POUNDS PER SQUARE FOOT		EXTERIO
##	DRYER DRAWER BASE CABINET DRINKING FOUNTAIN	PSI	POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH QUARRY TILE	A-X.X	
	DIAMETER	Q.T. ##R R D	NUMBER OF STAIR RISERS	Ì	
1.	DIMENSION DOWN DOWN	R.D. REINF. REM	ROOF DRAIN REINFORCING OR REINFORCED		COLUMN
•	DOWN SPOUT DRAIN TILE	REM. REQ'D.	REMOVABLE REQUIRED	X	REFEREN
/	DISHWASER EACH	R.O. R. & S.	ROUGH OPENING ROD AND SHELF		
C. V.	ELECTRIC ELEVATION OR ELEVATOR	SB### SCW	SINK BASE CABINET SOLID CORE WOOD		
	EXPANSION JOINT EQUAL	SF SH.	SQUARE FEET SHELF OR SHELVES		
′.C. ST.	ELECTRIC WATER COOLER EXISTING	SIM. S.M.	SIMILAR SHEET METAL		
•	EXPANSION EXTERIOR	SPECS. SQ.	SPECIFICATIONS SQUARE		
2	FIRE EXTINGUISHER FIRE EXTINGUISHER CABINET	STD. STL.	STANDARD STEEL		
). 1.	FLOOR DRAIN FINISHED	STOR. S.V.	STORAGE SHEET VINYL FLOORING		
α. ₹. DN.	FLOOR FOUNDATION	###T T&B	NUMBER OF STAIR TREADS TOP AND BOTTOM		
.C. .M.	FACE OF CONCRETE FACE OF MASONRY	T&G T.B.	TONGUE AND GROOVE TOP OF BEAM		
D.S. L.P.	FACE OF MASONN' FACE OF STUD FIBERGLASS REINFORCED PANEL	T.B. TBM T.O.A.	TRAFFIC BEARING MEMBRANE TOP OF COLUMN		
r . G.	FIDERGLASS REINFORCED PANEL FOOT OR FEET FOOTING	T.O.A. T.O.CMU T.O.F.	TOP OF COLOMN TOP OF CMU TOP OF FOOTING		
G. 4. C.	GAUGE GENERAL CONTRACTOR	т.О.г. Т.О.L. Т.О.Р.	TOP OF FOOTING TOP OF LEDGE TOP OF PIER		
с. Т. W.B.	GIRDER TRUSS	T.O.P. T.O.W. THRU.	TOP OF PIER TOP OF WALL THROUGH		
Ρ.	GYPSUM WALL BOARD GYPSUM HOSE BIB	TWF	THROUGH WALL FLASHING		
3. CW	HOSE BIB HOLLOW CORE WOOD	TYP. UNEXC.	TYPICAL UNEXCAVATED		
GT. M.	HEIGHT HOLLOW METAL	U.N.O. VB##	UNLESS NOTED OTHERWISE VANITY BASE CABINET		
ORZ. R	HORIZONTAL HOUR	VCT VERT.	VINYL COMPOSITION TILE VERTICAL		
G. /AC	HEATING HEATING/VENTILATION/AIR CONDITIONING	VWC W	VINYL WALL COVERING WASHER		
0	INTERNATIONAL BUILDING CODE INTERNATIONAL FIRE CODE	W## WCC##	WALL CABINET WALL CORNER CABINET		
C SUL.	INTERNATIONAL MECHANICAL CODE INSULATION	W/ WD.	WITH WOOD		
	INTERIOR INVERT	W/D W.H.	STACKED WASHER / DRYER WATER HEATER		
	JOINT LAVATORY	W/O WP	WITHOUT WATERPROOF		
		WT W.W.F.	WEIGHT WIRE WELDED FABRIC		

				1	
				1	

ROYSTER CROSSINGS

86 UNIT APARTMENT BUILDING ABOVE FIRST FLOOR COMMERCIAL TENANT SPACE 516-530 COTTAGE GROVE ROAD, MADISON, WI

'MBOLS			PROJECT INFO	С
HARROW	——[X]	WALL TYPE	PROJECT: #1421 ROYSTER CROSSINGS ADDRESS: 516-530 COTTAGE GROVE, MADISON, WI WORK DESCRIPTION: 86 UNIT APARTMENT BUILDING ABOVE FIRST FLOOR COMMERCIAL SPACE w/ BASEMENT PARKING	ARCHITE Knothe & Br 7601 Univers
OR ELEVATIONS	(0000)	DOOR TAG	APPLICABLE CODES AND STANDARDS: CITY OF MADISON ZONING CODE SPS 361-366 WISCONSIN COMMERCIAL BUILDING CODE INTERNATIONAL BUILDING CODE (IBC) 2009 NATIONAL FIRE PROTECTION ASSOCIATION NFPA 13 AND 13R ICC/ANSI A117.1-2003	Middleton, V Contact: Jim Phone: (60 E-mail: jbel
. CALLOUT	X	WINDOW TAG	BUILDING SUMMARY: 4 STORIES ABOVE GRADE w/ I LEVEL UNDER GROUND PARKING: • APARTMENT BUILDING, 3 STORY (2ND - 4TH): • GROUP R-2 • VA CONSTRUCTION • SPRINKLERED PER NFPA 13R	DEVELOF Ruedebusch 4605 Doveta
ON CUT	(ALX) (WDX)	ALUM. / WOOD WINDOW TAG	 LIBRARY, I STORY (IST): GROUP A-3 IA CONSTRUCTION SPRINKLERED PER NFPA I3 2 HR SEPARATED USE TO R2 COMMERCIAL SPACE, I STORY (IST): 	Madison, WI Contact: Sco Phone: (608) E-mail: scottp
OR ELEVATION		REVISION CLOUD & TAG	 GROUP B/M/A-2 IA CONSTRUCTION SPRINKLERED PER NFPA I 3 2 HR SEPARATED USE TO R-2 BASEMENT VEHICLE & BICYCLE PARKING / STORAGE: GROUP S-2 IA CONSTRUCTION 	STRUCTI Pierce Engine
1N NCE GRID	•—	EXTERIAL FINISH MATERIAL TAG	 SPRINKLERED PER NFPA 13 I HR SEPARATED USE TO A-3/A-2/B/M IMAGINARY PROPERTY LINES BETWEEN BUILDINGS ALLOWED TO TERMINATE AT SECOND FLOOR 3 HR HORIZONTAL SYSTEM ABOVE IA (A-3/A-2/B/M) 	10 West Miff Madison, WI Contact: Kur Phone: (60 E-mail: kdf
			BUILDING HEIGHT 2 AREAS: 4 STORIES / 60 FEFT R-2 MODIFIED ALLOWABLE AREA (XA) = 19.04(MY) / 19.488(E) SF A-3A-28EM MODIFIED ALLOWABLE AREA (IA) = UNLIMITED S-2 MODIFIED ALLOWABLE AREA (IA) = INTERIOS BASEMENT (S-2) = IF (300 S) SS STRUCTURAL FRAME = IA STRUCTUR	CIVIL EN Quam Engine 4604 Siggelk McFarland, V Contact: Rya Phone: (60) E-mail: rqu Niddleton, V Contact: Rich Phone: (60) E-mail: rstr
			VICINITY MAP	
			Porter Ave Porter Ave Porter Ave Park Ct Park Ct Par	

S Floor

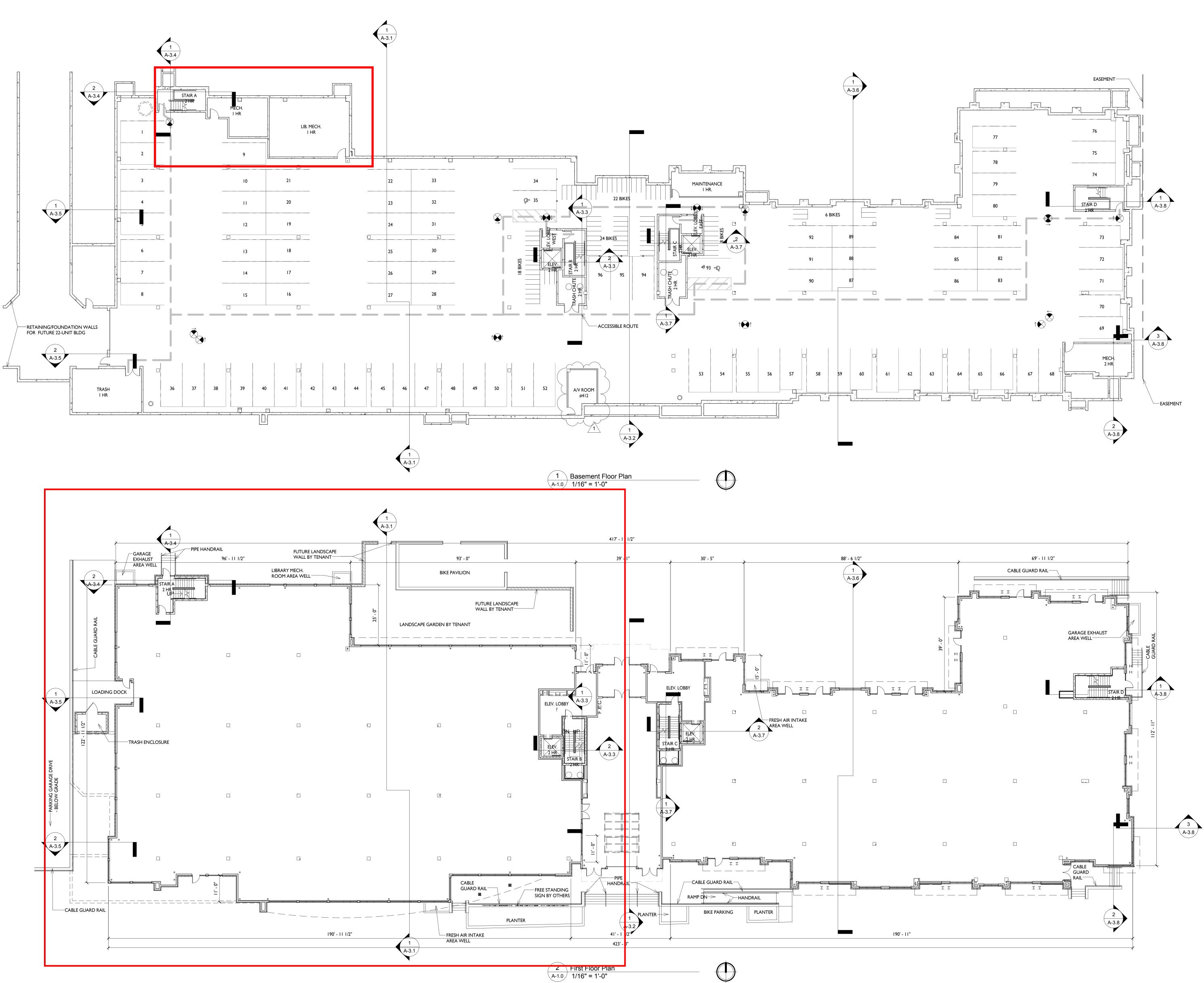
ONTACTS	SHEET INDEX	
ONTACTS CT: re Architects, LLC try Avenue, Suite 201 1 33542 Seltran 1) 836-3690 ran@knothebruce.com ER/GENERAL CONTRACTOR: 2000 2012 Ext. 231 @ruedebusch.com RAL ENGINEER: eris 1 Street, Suite 205 53705 2020 20	11.1 TITE SHET 11.3 LIELE TINUELA 21.1 INTROCK PARKS - MEST VINC 21.2 OVERALL STOCK PARKS 22.3 OVERALLSTER PARK 23.1 INTROCK PARKS 23.1 INTROCK PARKS 23.2 OVERALLSTER PARK 23.1 INTROCK PARKS 23.2 OVERALLSTER PARK 23.2 INTROCK PARKS 23.2 INTROCK PARKS 23.2 INTROCK PARKS 23.3 INTROCK PARKS 23.4 INTROCK PARKS 23.5 INTROCK PARKS 23.6 INTROCK PARKS 23.7 INTROCK PARKS 23.8 INTROCK PARKS 23.9 INTROCK PARKS 23.1 INTROCK PARKS 23.2 INTROCK PARKS 23.3 INTROCK PARKS 23.4 INTROCK PARKS 23.5 INTROCK PARKS 23.6 INTROCK PARKS	1 A PLANS ANS WEST WEST WEST WEST ANNEX EAST EAST EAST EAST EST & STAIR
ER/GENERAL CONTRACTOR: Development & Construction, Inc. I Drive 53704 t Pulver 249-2012 Ext. 231 @ruedebusch.com URAL ENGINEER: ers in Street, Suite 205 53705 t Frey 0 256-7307 x204 Development & Construction, Inc. I Pulver 249-2012 Ext. 231 @ruedebusch.com URAL ENGINEER: ers in Street, Suite 205 53705 t Frey 0 256-7307 x204 Development & Construction, Inc. I Pulver 249-2012 Ext. 231 @ruedebusch.com STREER: ering, LLC bow Road, Suite A 1 53558 in Quam 0 838-7750 im@quamengineering.com APE DESIGNER: pmpany ter Street 1 53562 Strohmenger 0 836-7041	C.10 STRUCTURAL C.21 OVERALL SITE PLAN C.21 UIUTY AND FIRE LANE PLAN C.22 OVERALL SITE PLAN C.21 UIUTY AND FIRE LANE PLAN C.22 OVERALL SITE PLAN C.22 OVERALL SI	A PLA ANS WEST WEST ANNI EAST EAST ST & S

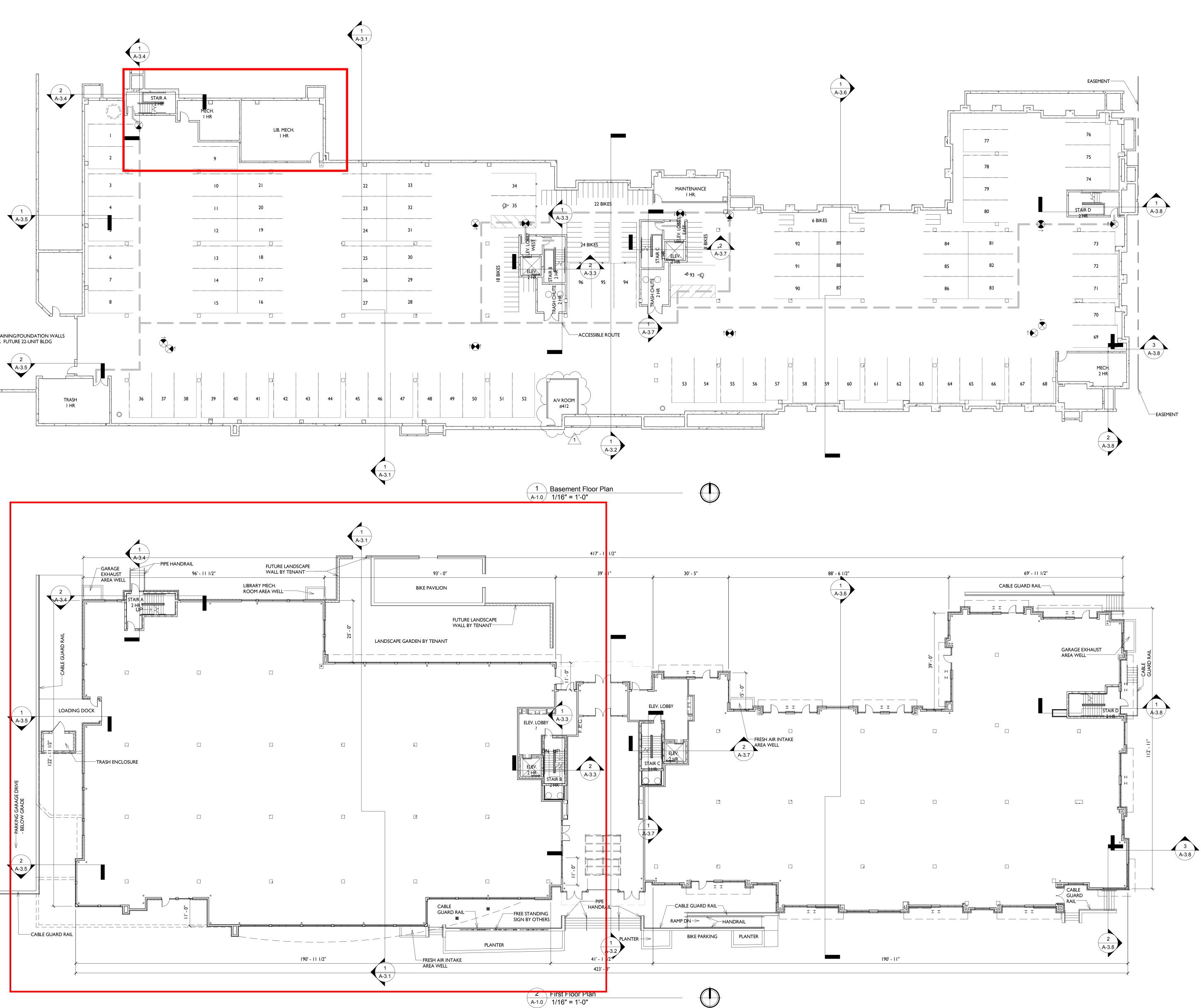


ISSUED Issued for Bid: September 25, 2015



PROJECT NO. **[42]** © Knothe & Bruce Architects, LLC









I REVISED - November 18, 2015 PROJECT TITLE ROYSTER CROSSINGS LOT 2

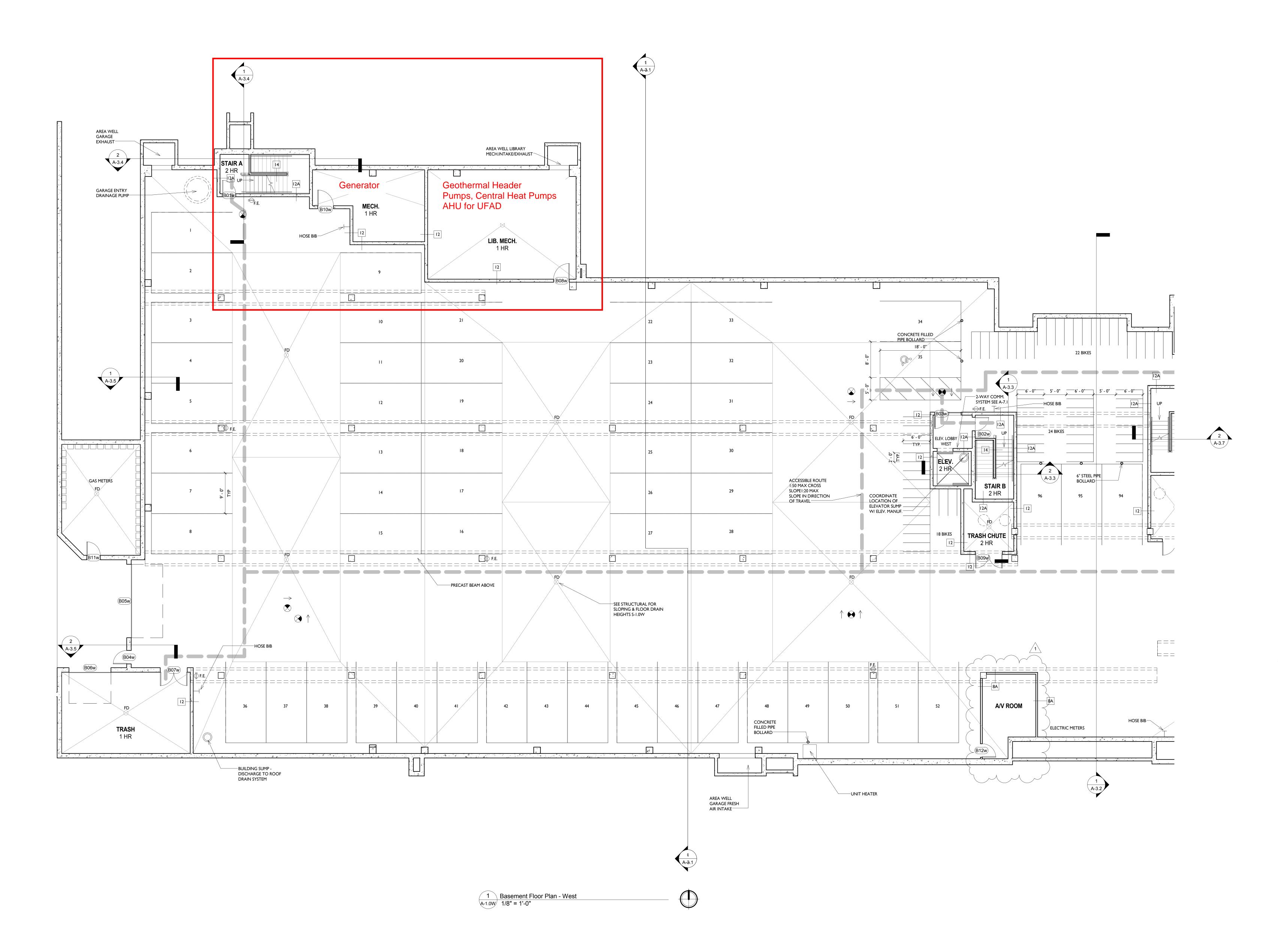
516-530 COTTAGE GROVE RD, MADISON, WI sheet title Overall Floor Plans

SHEET NUMBER A-1.0

PROJECT NUMBER

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1421





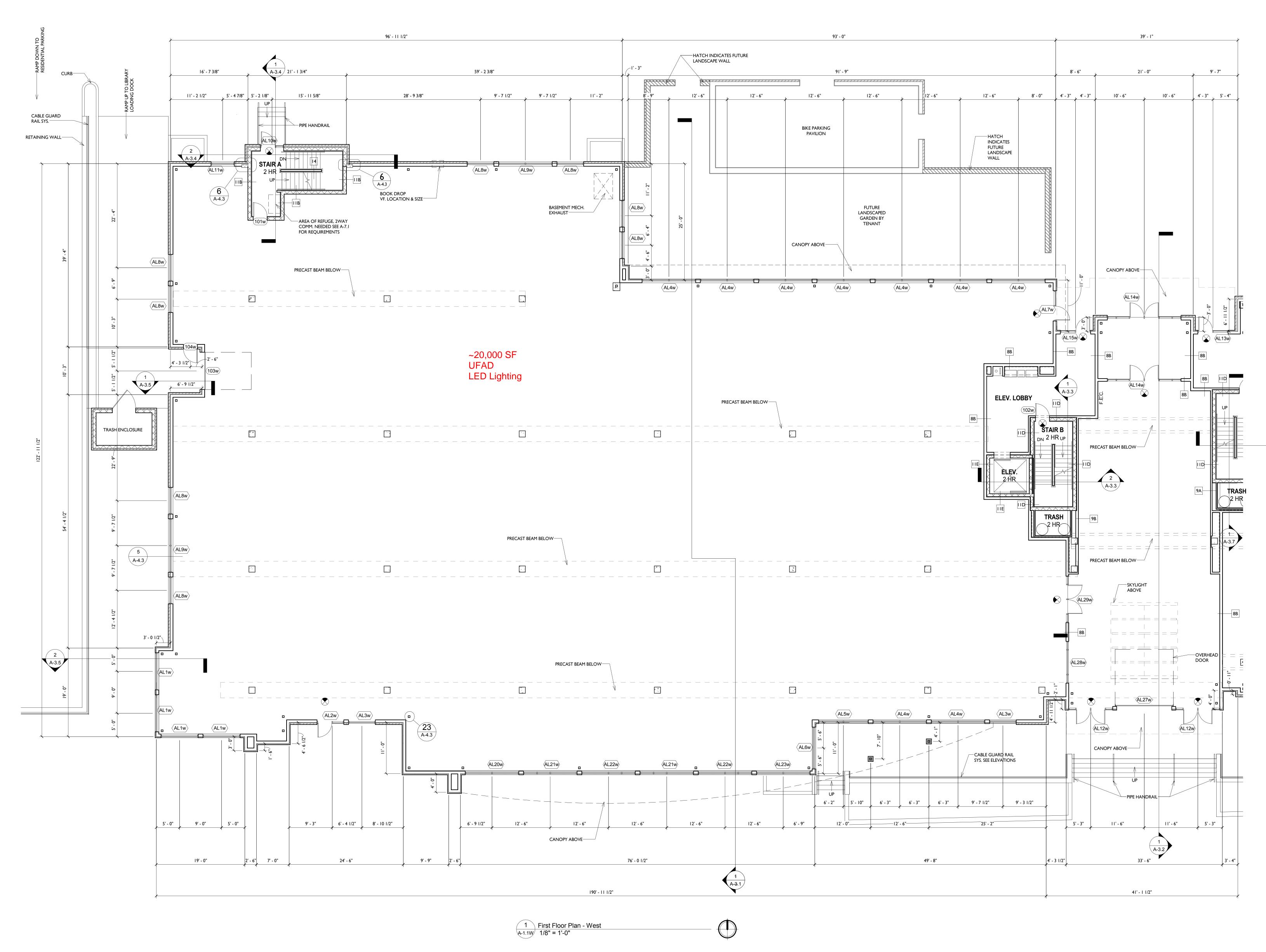


REVISED - November 18, 2015 PROJECT TITLE ROYSTER CROSSINGS LOT 2

516-530 COTTAGE GROVE RD, MADISON, WI SHEET TITLE Basement Floor Plan-West

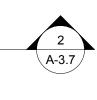
SHEET NUMBER

A-I.OWV
PROJECT NUMBER
[42]
© Knothe & Bruce Architects, LLC

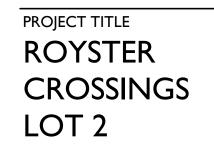




WEST WING EAST WING



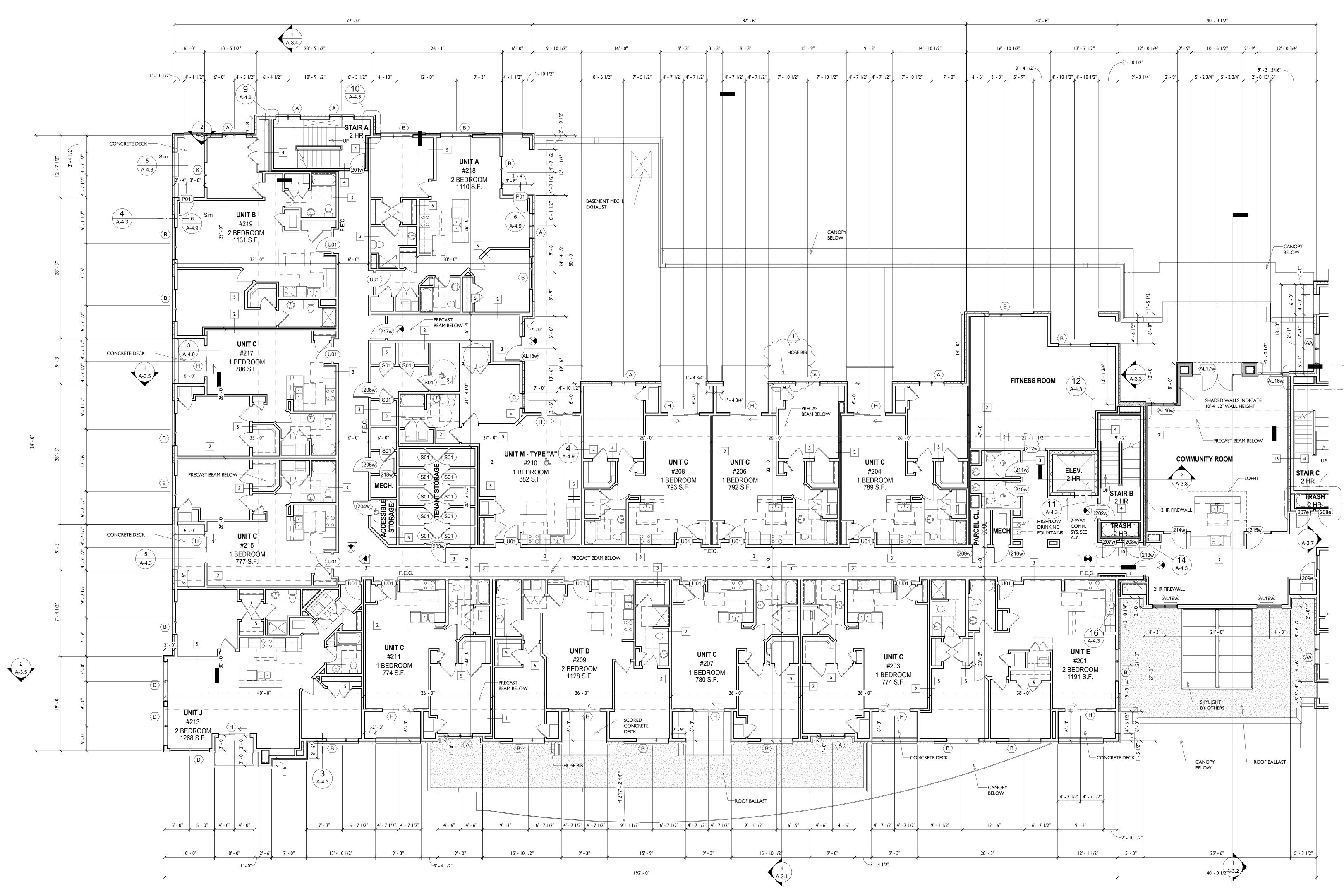
ISSUED ISSUED FOR BID: SEPTEMBER 25, 2015



516-530 COTTAGE GROVE RD, MADISON, WI SHEET TITLE First Floor Plan-West

SHEET NUMBER

PROJECT NUMBER 421



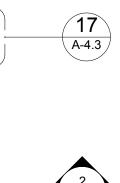
Apartment Floor Above Library Space

A-1.2W 1/8" = 1'-0"

 \bigcirc



WEST WING EAST WING



2 A-3.7

19 A-4.3 ISSUED ISSUED FOR BID: SEPTEMBER 25, 2015

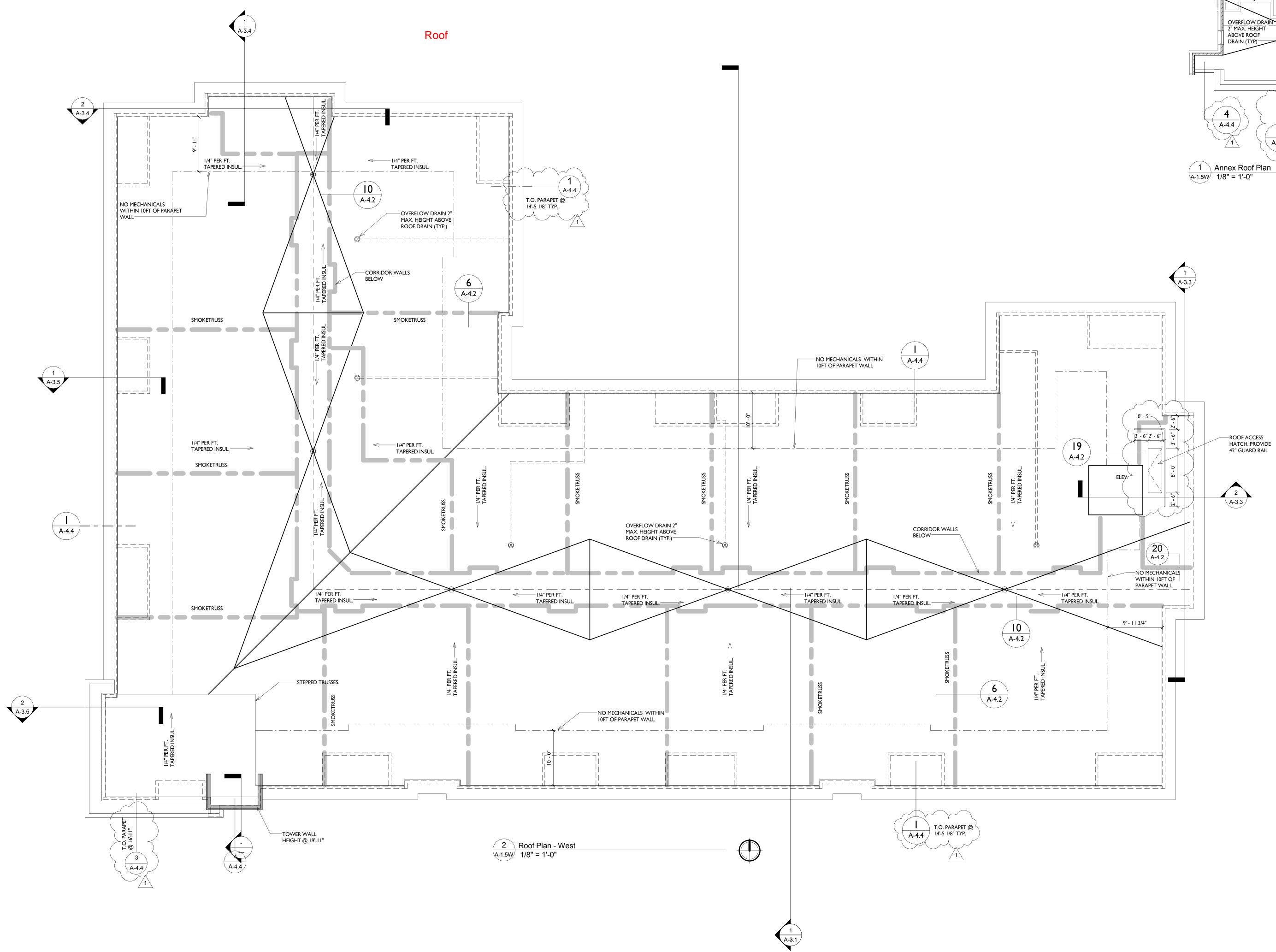
REVISED - November 18, 2015 PROJECT TITLE ROYSTER CROSSINGS LOT 2

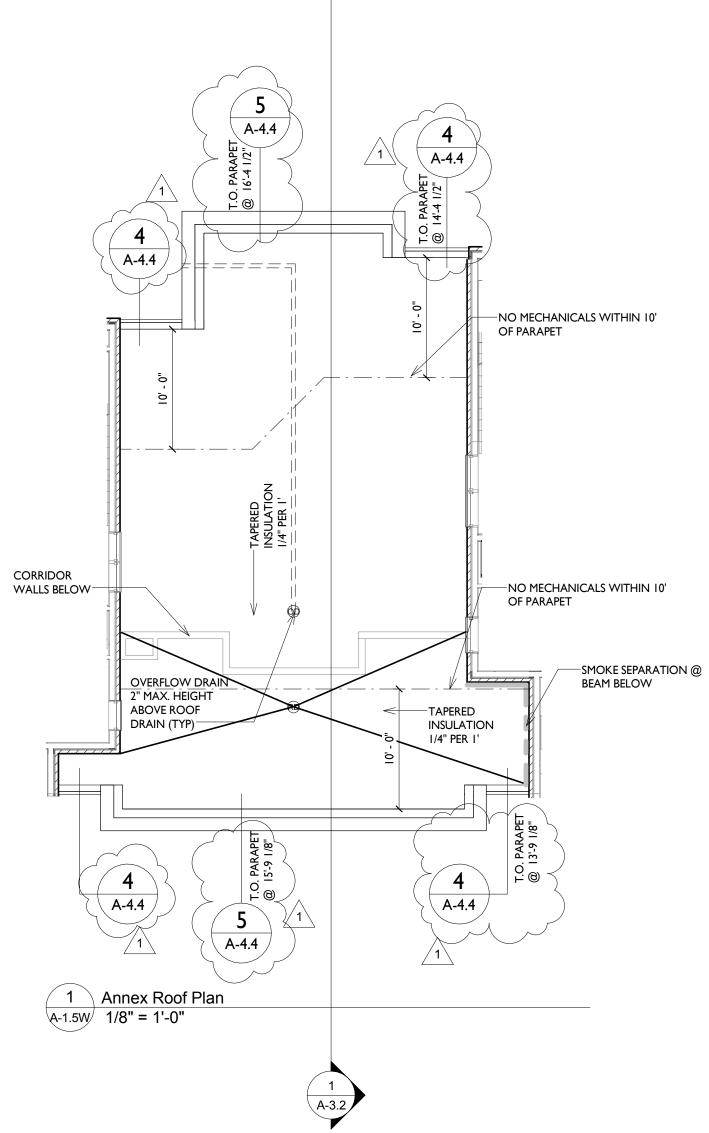
516-530 COTTAGE GROVE RD, MADISON, WI SHEET TITLE Second Floor Plan-West

SHEET NUMBER



PROJECT NUMBER © Knothe & Bruce Architects, LLC







ANNEX	
	EAST WING

GENE	RAL NOTES:
۱.	HVAC CONTRACTOR TO PROVIDE TRUSS
	DESIGNER WITH LOCATION AND LOADING
	INFORMATION FOR ALL ROOF TOP
	MECHANICAL EQUIPMENT.
2.	ROOFER SHALL SUBMIT TAPERED INSULATION
	(SADDLE / CRICKET) PLAN FOR REVIEW PRIOR
	TO INSTALLATION.
3.	NO MECHANICAL EQUIPMENT TO BE
	LOCATED WITHIN 10'-0" OF ROOF EDGE.
4.	TOP OF PARAPET HEIGHTS ARE DETERMINED
	FROM THE TOP OF FLOOR DECK BELOW.



I REVISED - November 18, 2015 PROJECT TITLE ROYSTER CROSSINGS LOT 2

516-530 COTTAGE GROVE RD, MADISON, WI sheet title Roof Plan-West & Annex

-----SHEET NUMBER

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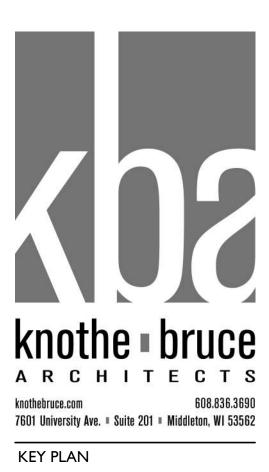






NE				
BLACK				
NDDRIFT SAND BLASTED FACE				
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	200>		1	
Ý		(A-	3.4	
DRAIN T				
				- <u> </u>
	F F			A (P01)
			A	A P01
	BOOKDROP			
SCUPPER 25/A-4.4	COORDINATE LOCATION			
	CONTROL JOINTS (TYP.) SEE DETAILS 9 & 10/A-4.9			
		±:	⊨ <u>↓</u> _	

		Z	
т			
(- SEDONA IORNSPOT			
(
IES I 2in. (2) RIBS			
AC-CLAD GRANITE			
ER METALLIC			
S MICA GREY			
CTURAL PRODUCTS - REYNOBOND			
- RUST PATINA			
ANDDRIFT SANDBLASTED FACE (8" PIE	CES)		





I REVISED - November 18, 2015 PROJECT TITLE ROYSTER CROSSINGS LOT 2

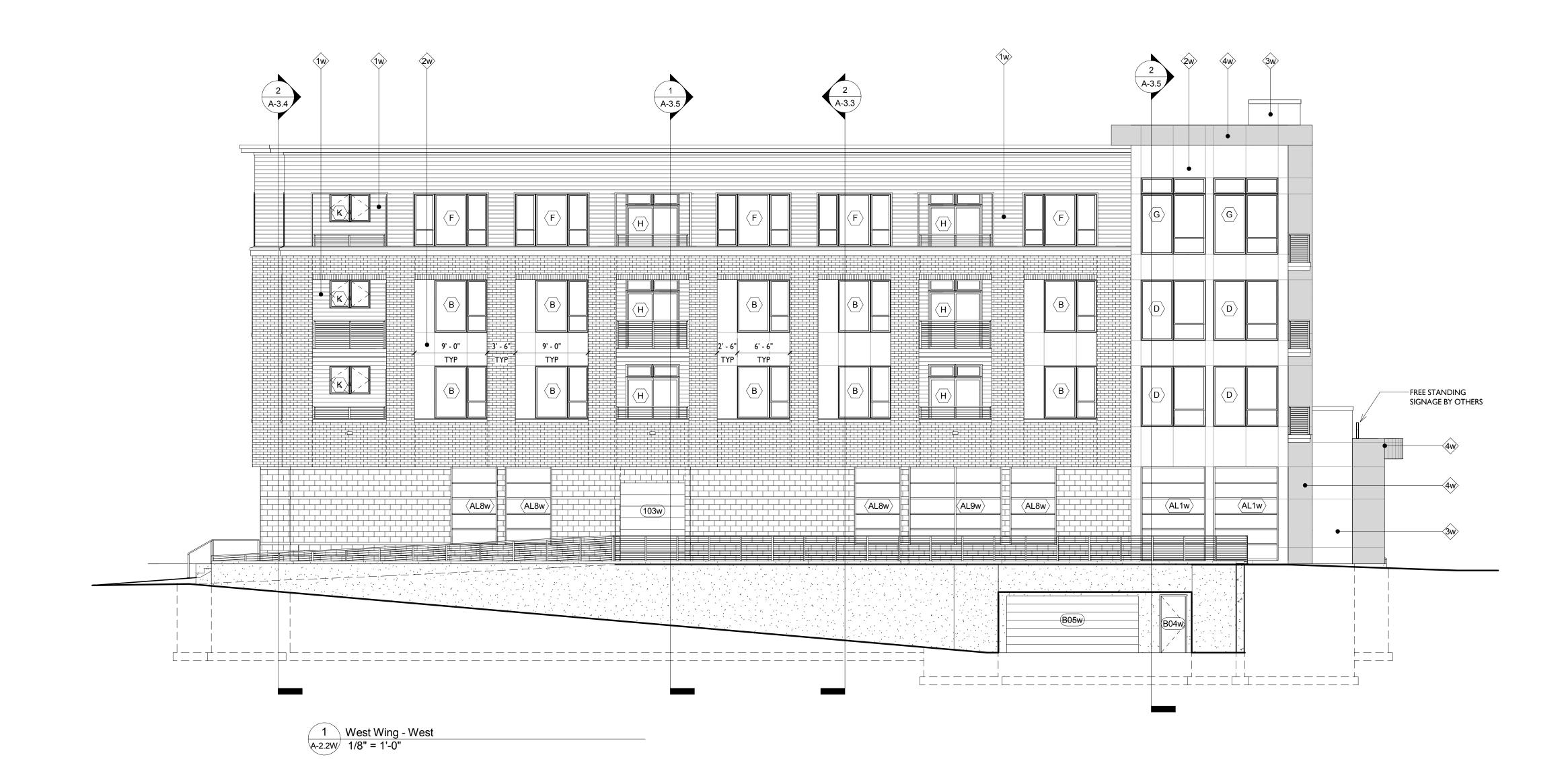
516-530 COTTAGE GROVE RD, MADISON, WI SHEET TITLE Exterior Elevations N/S

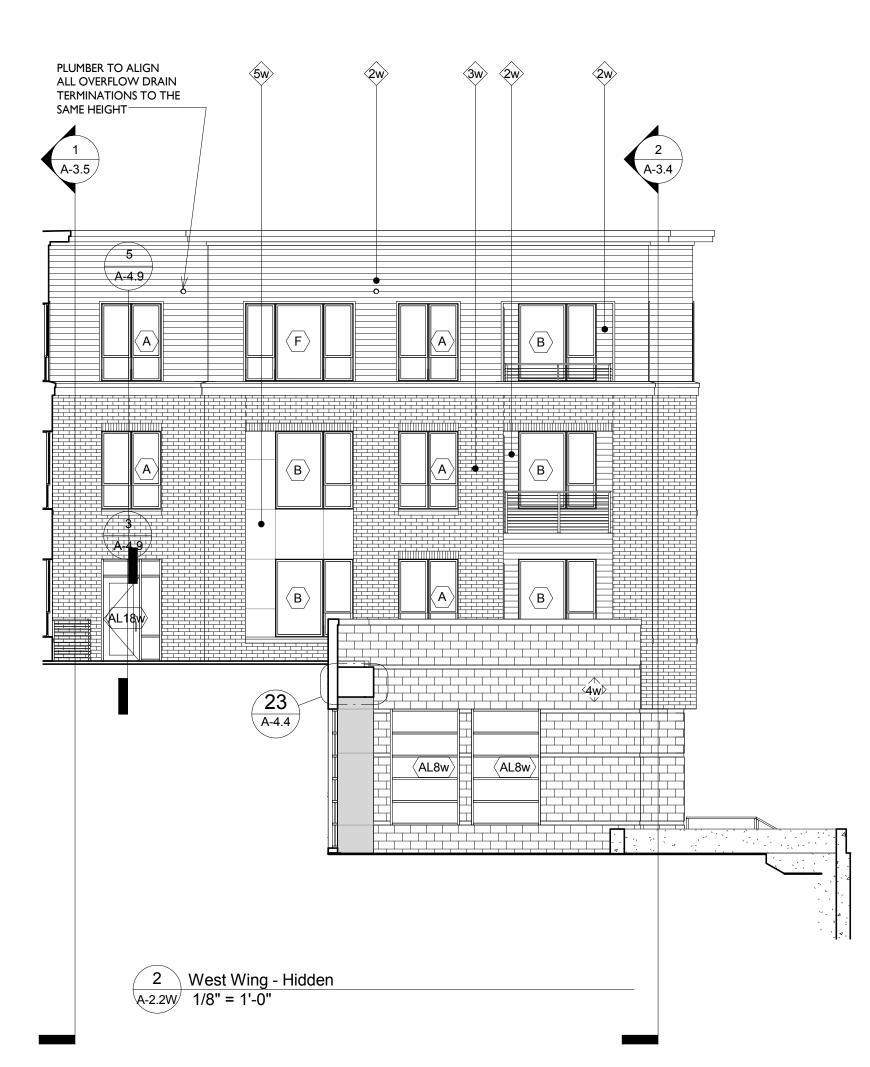
SHEET NUMBER



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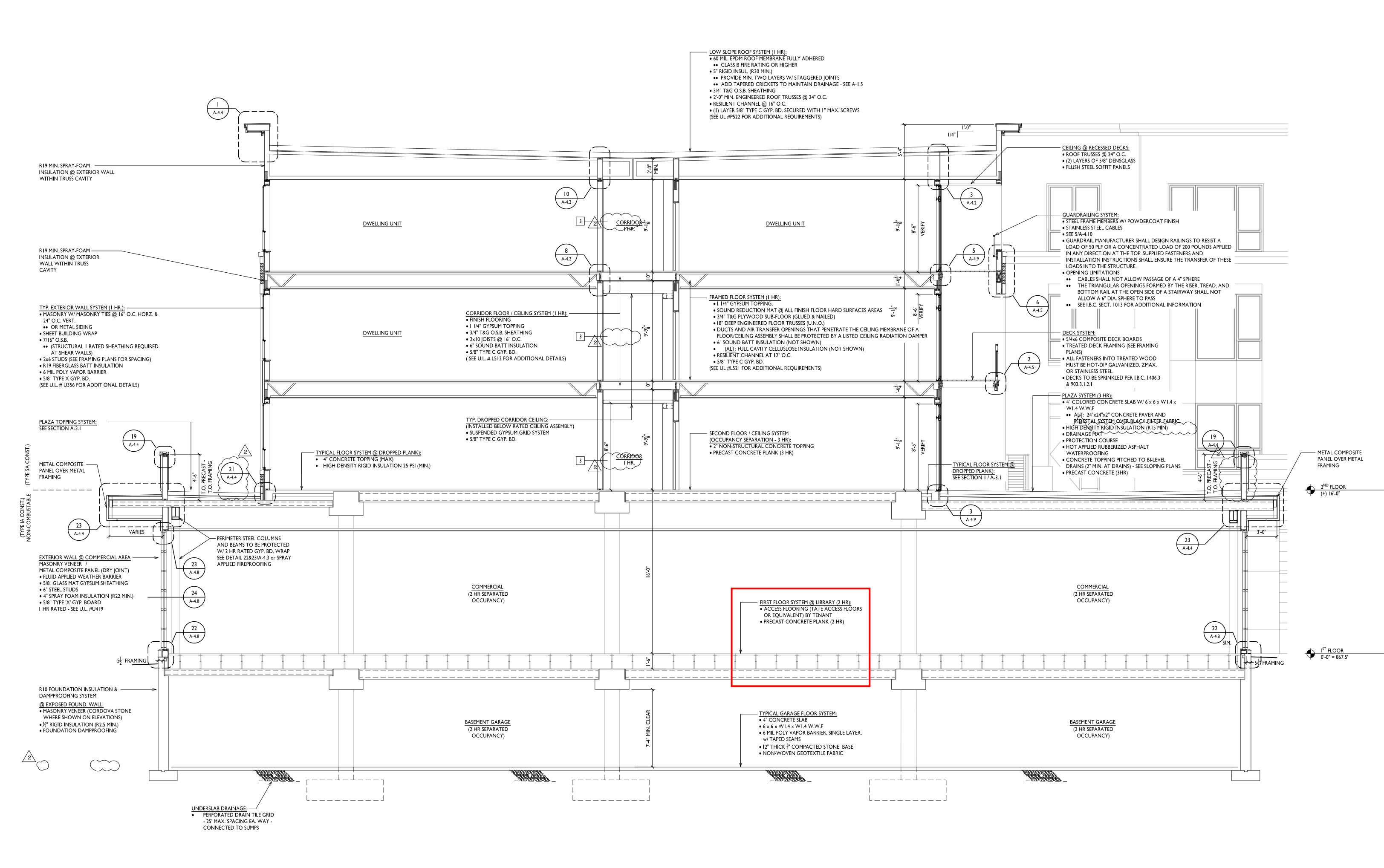
PROJECT TITLE ROYSTER CROSSINGS LOT 2

516-530 COTTAGE GROVE RD, MADISON, WI SHEET TITLE Exterior Elevations E/W

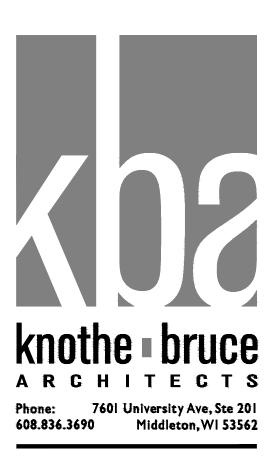
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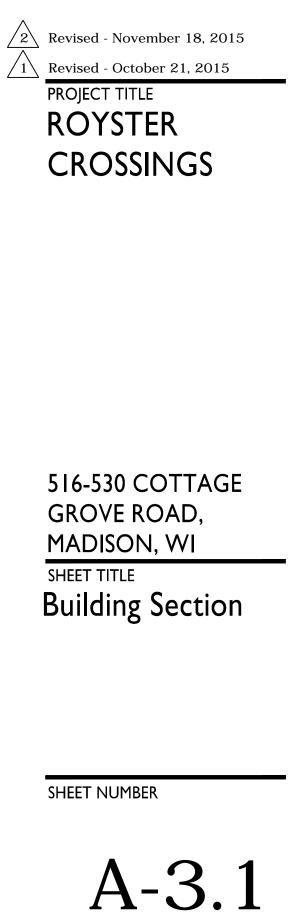
PROJECT NUMBER 421 © Knothe & Bruce Architects, LLC



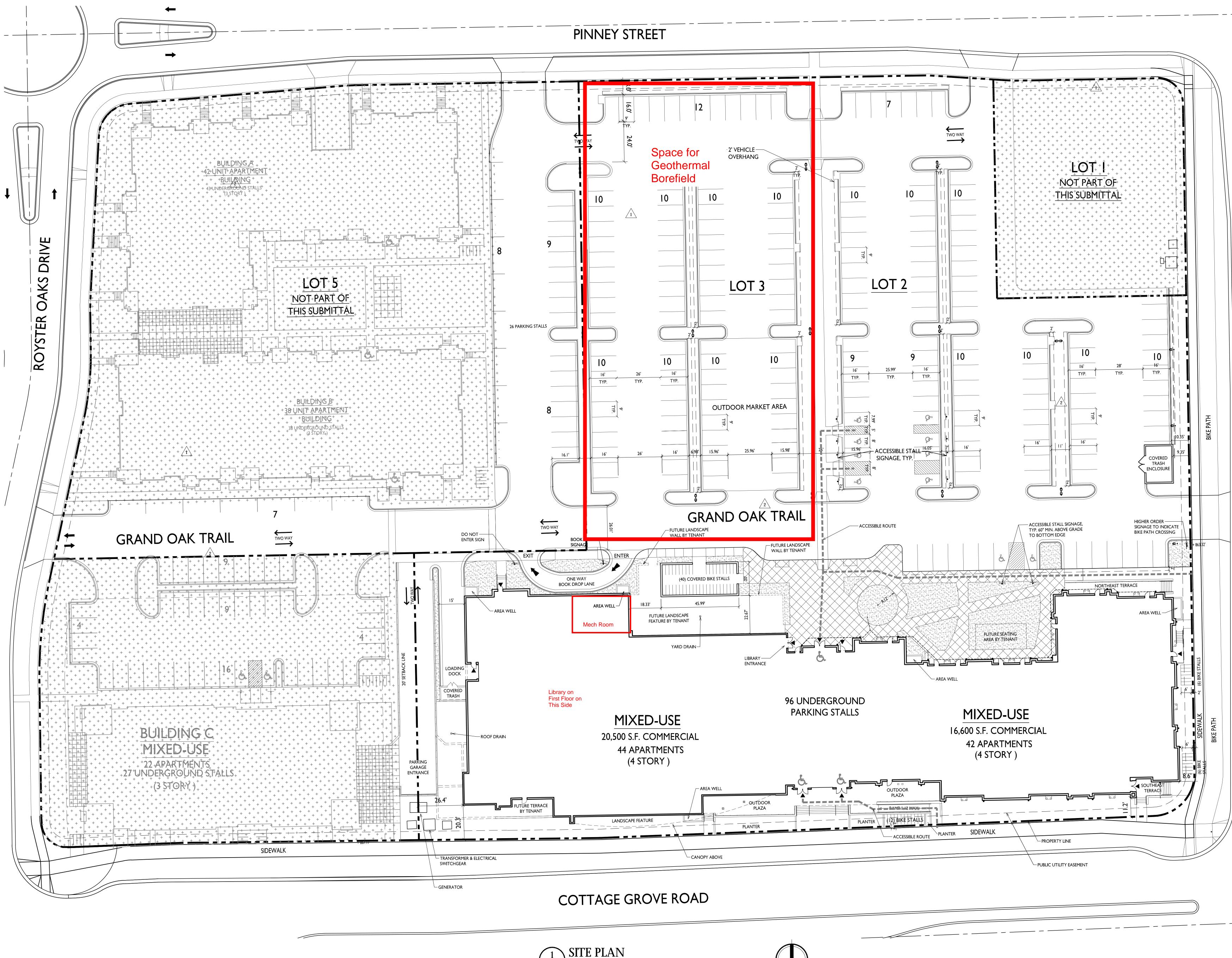




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1 C-1.1 SITE PLAN 1" = 20'



S TE DEVELOPMEN	T STATISTICS
L�T AREA	160,736 S.F./ 3.69 ACRES
DWELLING UNITS	86 DU
LØT AREA/D.U.	I,869 S.F./D.U.
DENSITY	23.31 UNITS/ACRE
BUILDING HEIGHT	4 STORIES
U\$ABLE OPEN SPACE	· · · · · · · · · · · · · · · · · · ·
LOT COVERAGE	130,352 S.F. (81%)
GROSS FLOOR AREA	
COMMERCIAL AREA	37,100 S.F.
RÉSIDENTIAL AREA	104,465 S.F.
τφται	141,565 S.F.
ONE BEDROOM	45
TWO BEDROOM	41
τφται	86
VEHICLE PARKING	
ON SITE	202 STALLS
UNDERGROUND	96 STALLS
TOTAL	298 STALLS
ACCESSIBLE STALLS ON	SITE IO
ACCESSIBLE STALLS UN	DERGROUND 2
TOTAL ACCESSIBLE STA	
BICYCLE PARKING	
UNDERGROUND 2X6	78
ON SITE COVERED	40
ON SITE UNCOVERED	24
TOTAL PROVIDED	I42 STALLS
 TOTAL REQUIRED - 114	(86 PERMANENT FOR
	FOR APARTMENTS, 19 GUEST
FOR COMMERCIAL SPACE	
	/

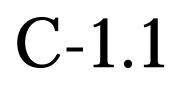


ISSUED Issued for Bid: September 25, 2015 Revised Bid Set: January 19, 2016 Issued For Plan Review: February 8, 2016



521-523 Grand Oak Trail MADISON, WI SHEET TITLE Site Plan

SHEET NUMBER



PROJECT NO. **|42|** © 2013 Knothe & Bruce Architects, LLC

Exhibit B: Olbrich Botanical Gardens Master Plan Documents (29 Pages)





FACILITIES MASTER PLAN & SCHEMATIC DESIGN REPORT

Prepared by: HGA Architects, Engineers, & Planners / GRAEF / KBS August 2, 2013



Summany Executive 0.0

- 0.1 General Project Scope & Description
- 0.2 Goals & Objectives
- 0.3 Site & Existing Buildings Description
- 0.4 Program & Design Summary
- 0.5 Budget Summary
- 0.6 Schedule Summary

0.1 General Project Scope & Description

The goal of this project is to provide programming, master planning, and schematic design services for the Olbrich Botanical Gardens. The assessment and analysis required the study of the existing facilities and site, programming, sustainability, and cost estimating.

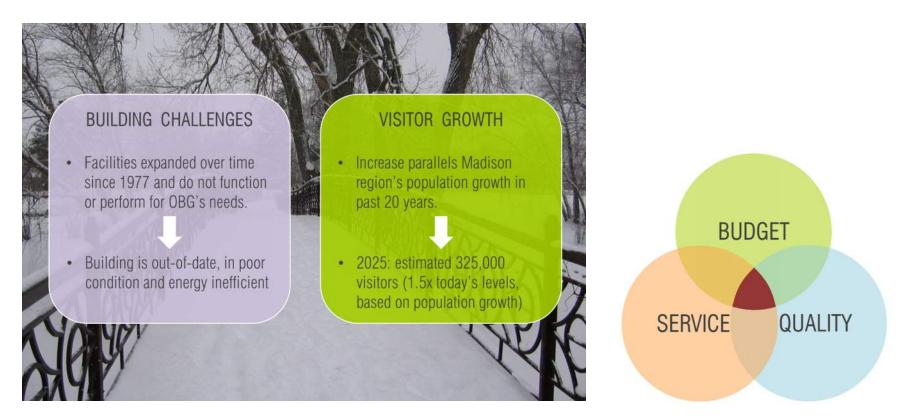
The site for the Olbrich Botanical Gardens study focused on the area north of Atwood Avenue, east of the neighborhood park, south of the railroad tracks, and west of Starkweather Creek. This study explored the expansion and reuse of the building in three different master plan schemes, selecting one of the options to further develop into a schematic design.

The project effort included:

- Observations & assessment of the existing facility and site
- Benchmarking
- Codes & regulations
- Programming & space needs analysis
- Program planning options
- Site planning options
- Implementation consideration
- Building systems
- Budget & schedule



OBG has grown tremendously since the last addition was made to the facility in 1991. It has grown across the board in visitorship, membership, and program offerings.



Not only has OBG outgrown its existing facilities, the condition of the facilities requires updating and renovation for functionality and energy efficiency. It is due to both of these imminent needs that the project should move ahead as soon as possible. Throughout the process, this balance of parameters between budget, service, and quality has guided the direction of the project.



Guiding Principles

- Be an exciting, engaging, and relevant destination where visitors personally connect to the beauty and importance of plants in a sustainable world.
- Provide exemplary and innovative educational and interpretive opportunities based on best practices for informal education.
- **Be known as a leader** in Midwest horticulture by the residents of the Madison area, the 7-county region, the State, and nationally.
- Be a leader and model in sustainability in horticulture, landscape design, facilities, operations, and programs.
- Strengthen the relationship between the Gardens and its neighbors and foster trust in this relationship through both the process of this study and the end result.

Overall Project Goals

- Enhance the visitor experience through improved and expanded flexible public building spaces, ancillary functions, street presence, amenities, building & facility capacity, visitor flow, visitor orientation, and programs.
- Expand and enhance educational and interpretive opportunities.
- **Improve site** for plant production, facilities maintenance, and storage.
- Upgrade staff and volunteer work space to improve efficiencies and traffic flow.
- Fine tune efficiency of the facility and operations to strengthen the financial health of the Gardens.
- Improve sustainable facility operations to efficiently use energy, lower environmental impacts, and reduce consumption of resources in daily operations.





The Olbrich Botanical Gardens Vision:

Olbrich Botanical Gardens will be a locally treasured and globally renowned source of beauty and education celebrating the importance of plants in a sustainable world.

The Olbrich Botanical Gardens Mission:

Olbrich Botanical Gardens enriches life by nourishing and sharing the beauty of gardens, the joy of gardening, the knowledge of plants, and the diversity of our world. Olbrich Botanical Gardens is dedicated to the creation, conservation and interpretation of gardens and plant collections hardy to the American Midwest or native to the world's tropical forests for study, enjoyment and public benefit.

Values:

Olbrich Botanical Gardens is a place where:

- Gardens, facilities and programs serve people of all ages, abilities and incomes.
- Relationships with staff, volunteers and friends are conducted with the highest integrity, respect and consideration.
- Excellence is the standard and service is exemplary.
- Public and private partnerships are essential.
- The community is served and the region is celebrated.
- Contributions are made to global solutions.
- The joy, diversity, wonder and beauty of plants can be shared by everyone.

0.3 Site & Existing Buildings Description

The site is located on the East Side of Madison, WI, north of Lake Monona. Sugar Avenue divides the site and is undiscernable from the OBG parking lot. The lot serves 220 spots. The main facility consists of structures built in 1978 and 1991 and range in height from one to two stories. The buildings are generally in fair condition, due to deferred maintenance.

Currently, a project is under construction to re-roof the existing complex in a copper roof and add an ADA-compliant restroom. This project was treated as an existing condition for the purpose of the study.





Existing site aerial map



Executive Summary

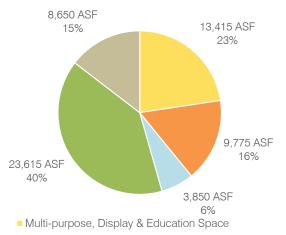
0.4 Program & Design Summary

General Project Scope:

OBG will occupy approximately 65,935 gross square feet of space south of the railroad tracks. It will be divided among the original two-story Atrium building, the existing 1991 addition, the new greenhouses, and the new addition of a Lobby/Orangerie, a Plant Show Hall, and an Education Wing. The space will be comprised of 53,605 assignable square feet which can be separated into five categories: Multi-purpose, Display & Education Space, Public Space, Office Space, Plant Propagation. Headhouse & Conservatory. and Support Space. The estimated netto-gross area ratio is 57%. An additional Maintenance Shop/Storage building and the Quonsets are not a part of the program proper, but will be located north of the railroad tracks. In addition to the interior space, the program calls for 7,395 square feet of outdoor space. This space includes Outdoor Patio Seating, the renovated Atrium Deck, an Outdoor Gift Shop Sales Area, and the Office Courtyard.

Design Summary:

During the planning process for the Olbrich Botanical Gardens, it was determined that the addition would be located on the north and east sides of the existing building as a "wrapper" or a new face to the garden. The scheme allows for the reuse of all of the existing main building. The existing facility will be renovated to allow for growth of existing spaces and up-to-



Public Space

Office Space

- Plant Propagation, Headhouse & Conservatory
- Support Space

date and efficient systems and finishes.

The following is a summary of the proposed resolutions to the existing space needs:

- Proposed Gift Shop areas increase square footage by 820 sf and gains 117 If of shelving/display. Gift shop improves productivity with layout of adjacent and efficient support spaces.
- Proposed Greeter Desk has high visibility in new Lobby/Orangerie. Signage creates presence for Membership. Single location for Gift Shop/Greeter Desk increases staff efficiency.
- Proposed Library areas increase

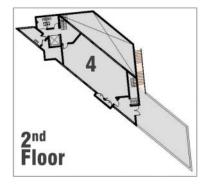
square footage by 570 sf and gain 76 If of shelving. Library improves productivity with support spaces. Ample multi-purpose reading/storytelling space has views to garden.

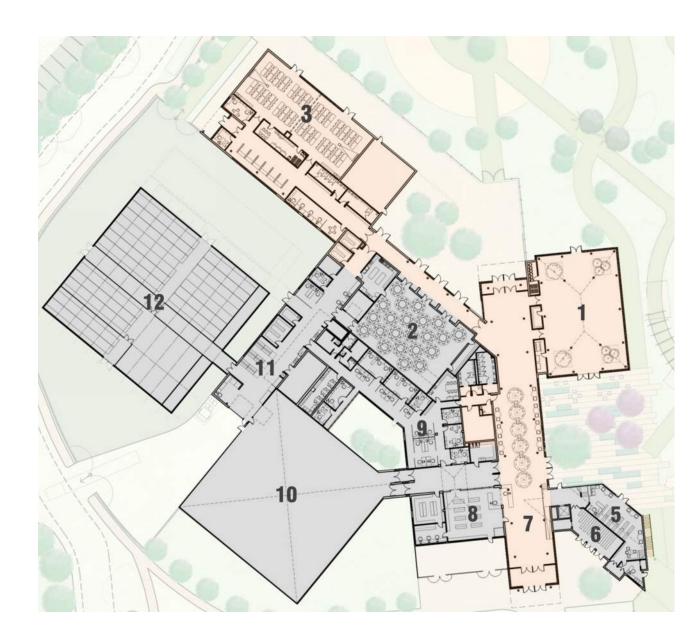
- Proposed Office Space increases square footage by 1,855 sf and gains 9 desks for staff and volunteers. Larger group work areas and storage increase productivity. Lounge allows for personal storage space.
- Proposed Maintenance Facilities and support increase square footage by 3,710 sf. New support facility north of the railroad increases back-of-house productivity.
- Proposed Greenhouse increases square footage of plant benches 24%. Modern systems improve plant production capability and energy efficiency. Cooler is added for bulb storage.
- Proposed Headhouse space increases efficiency by the removal of unrelated functions. Potting area is expanded with adjacent storage and support functions.
- Proposed Facility Circulation introduces clearer circulation routes for user groups by bringing like functions together to reduce the distance traveled, separating office functions from horticulture functions, improving the routes traveled for special events/ plant shows, and adding an extra corridor to reduce the load on the administration hallway.

Floor Plan

- Floor Plan
 Plant Show Space
 Event Space
 Education Wing
 Meeting/Bride's Room
 Library
 Orientation Hall
 Lobby/Orangerie
 Gift Shop
 Office
 Conservatory
 Headhouse
 Greenhouse

- 12. Greenhouse





Executive Summary



Rendering (a): View of new courtyard, Plant Show Hall, Education Wing, and Lobby with green roofs and existing buildings



A capital cost budget has been assembled for this project. This budget reflects total project cost including construction costs, contingency, and fees. This cost summary is based upon the OBG program. Fee Contigency Bond encompasses the contractor fees including an estimating contingency and performance & payment bonds.

Project soft costs include A/E basic services, moveable equipment, and owner contingency.

				1	1		Total Pr	oject gSF :	66,77
				Fee Contingency	Project Soft				
	Description	SF	COST	Bond	Costs	-	TOTAL	Cost/SF	Cost /qS
lew Co	Instruction	01	0001	Donid	00010			00010.	ooorige
00	Education	9,735	2,030,034	137.941	650,392		2.818.367	289.51	42.2
	Visitor Facilities (Lobby, Plant Show)	12,605	4,287,102	291.309	1.373.523		5,951,934	472.19	89.1
	New Construction Cost	22,340		\$ 429,249	\$ 2,023,916	\$	8,770,302	\$ 392.58	\$ 131.3
enroa	rammed Existing Space								
opiog	Library / Orientation / Meeting / Brides	3,269	301,189	20,466	96,497		418,152	127.91	6.
	Event Hall	3,000	94,573	6,426	30,300		131,299	43.77	1.
	Gift Shop	2,032	335,219	22,778	107,399		465,397	229.03	6
	Service/Circulation	7,662	515,263	35,012	165,083		715,358	93.36	10
	Offices	3,911	269,461	18,310	86,331		374,101	95.65	5.
	Reprogrammed Construction Cost	19,874	\$ 1,515,706	\$ 102,992	\$ 485,609	\$	2,104,307	\$ 105.88	\$ 31.
xisting	g Infrastructure								
	Add Sprinkler system to existing	22,867	91,634	6,227	29,358		127,219	5.56	1
	Upgrade existing locker room Finishes / ADA	478	54,571	3,708	17,484		75,763	158.50	1
	Upgrade finishes and AV for Event Space	3,000	127,000	8,630	40,689		176,319	58.77	2
	Upgrade finishes to 2nd floor Classroom / Brides	1,160	62,698	4,260	20,087		87,046	75.04	1
	Repair wood out door deck	1,025	61,138	4,154	19,588		84,879	82.81	1
		3,683	396,880	26,968	127,154		551,002	149.61	8
	Utilities		770,000	50 007	040.005				
	Deferred Maintenance - Conservatory Existing Infrastructure Construction Cost	10,000 32,867	778,328 \$ 1,572,249	52,887 \$ 106,834	249,365 \$ 503,725	\$	1,080,580 2,182,808	108.06 \$ 66.41	
Greenh	Deferred Maintenance - Conservatory Existing Infrastructure Construction Cost	10,000		- 1		\$			\$ 32
ireenh	Deferred Maintenance - Conservatory Existing Infrastructure Construction Cost OUSES	10,000 32,867 11,258 3,304	\$ 1,572,249 1,882,133 184,120	\$ 106,834 127,891 12,511	\$ 503,725 603,007 58,989	\$	2,182,808 2,613,031 255,621	\$ 66.41 232.10 77.37	39. 3.
ireenh	Deferred Maintenance - Conservatory Existing Infrastructure Construction Cost Ouses New Greenhouse Headhouse Quonset Greenhouses	10,000 32,867 11,258 3,304 3,456	\$ 1,572,249 1,882,133 184,120 221,366	\$ 106,834 127,891 12,511 15,042	\$ 503,725 603,007 58,989 70,922		2,182,808 2,613,031 255,621 307,331	\$ 66.41 232.10 77.37 88.93	\$ 32 39 3 4
ireenh	Deferred Maintenance - Conservatory Existing Infrastructure Construction Cost OUSES New Greenhouse Headhouse	10,000 32,867 11,258 3,304	\$ 1,572,249 1,882,133 184,120 221,366	\$ 106,834 127,891 12,511 15,042	\$ 503,725 603,007 58,989 70,922		2,182,808 2,613,031 255,621	\$ 66.41 232.10 77.37	\$ 32 39 3 4
	Deferred Maintenance - Conservatory Existing Infrastructure Construction Cost OUSES New Greenhouse Headhouse Quonset Greenhouses Greenhouse Construction Cost able Features / Sitework	10,000 32,867 11,258 3,304 3,456 14,562	\$ 1,572,249 1,882,133 184,120 221,366 \$ 2,287,619	\$ 106,834 127,891 12,511 15,042 \$ 155,444	\$ 503,725 603,007 58,989 70,922 \$ 732,919		2,182,808 2,613,031 255,621 307,331 3,175,982	\$ 66.41 232.10 77.37 88.93 \$ 218.10	\$ 32 39 3 4 \$ 47
	Deferred Maintenance - Conservatory Existing Infrastructure Construction Cost Ouses New Greenhouse Headhouse Quonset Greenhouses Greenhouse Construction Cost able Features / Sitework Sitework	10,000 32,867 11,258 3,304 3,456 14,562 215,093	\$ 1,572,249 1,882,133 184,120 221,366 \$ 2,287,619 157,328	\$ 106,834 127,891 12,511 15,042 \$ 155,444 10,690	\$ 503,725 603,007 58,989 70,922 \$ 732,919 50,405		2,182,808 2,613,031 255,621 307,331 3,175,982 218,424	\$ 66.41 232.10 77.37 88.93 \$ 218.10 1.02	\$ 32 39 3 4 \$ 47
	Deferred Maintenance - Conservatory Existing Infrastructure Construction Cost Ouses New Greenhouse Headhouse Quonset Greenhouses Greenhouse Construction Cost able Features / Sitework Sitework Paving	10,000 32,867 11,258 3,304 3,456 14,562 215,093 76,858	\$ 1,572,249 1,882,133 184,120 221,366 \$ 2,287,619 157,328 446,040	\$ 106,834 127,891 12,511 15,042 \$ 155,444 10,690 30,308	\$ 503,725 603,007 58,989 70,922 \$ 732,919 50,405 142,905		2,182,808 2,613,031 255,621 307,331 3,175,982 218,424 619,253	\$ 66.41 232.10 77.37 88.93 \$ 218.10 1.02 8.06	\$ 32 39 3 4 \$ 47 3 9
	Deferred Maintenance - Conservatory Existing Infrastructure Construction Cost Ouses New Greenhouse Headhouse Quonset Greenhouses Greenhouse Construction Cost able Features / Sitework Sitework Paving Site Improvements	10,000 32,867 11,258 3,304 3,456 14,562 215,093 76,858 215,093	\$ 1,572,249 1,882,133 184,120 221,366 \$ 2,287,619 157,328 446,040 401,857	\$ 106,834 127,891 12,511 15,042 \$ 155,444 10,690 30,308 27,306	\$ 503,725 603,007 58,989 70,922 \$ 732,919 50,405 142,905 128,749		2,182,808 2,613,031 255,621 307,331 3,175,982 218,424 619,253 557,912	\$ 66.41 232.10 77.37 88.93 \$ 218.10 1.02 8.06 2.59	\$ 32 39 3 4 \$ 47 3 9 8
	Deferred Maintenance - Conservatory Existing Infrastructure Construction Cost Ouses New Greenhouse Headhouse Quonset Greenhouses Greenhouse Construction Cost able Features / Sitework Site work Paving Site Improvements Green Roofs	10,000 32,867 11,258 3,304 3,456 14,562 215,093 76,858 215,093 12,431	\$ 1,572,249 1,882,133 184,120 221,366 \$ 2,287,619 157,328 446,040 401,857 264,782	\$ 106,834 127,891 12,511 15,042 \$ 155,444 10,690 30,308 27,306 17,992	\$ 503,725 603,007 58,989 70,922 \$ 732,919 50,405 142,905 128,749 84,832		2,182,808 2,613,031 255,621 307,331 3,175,982 218,424 619,253 557,912 367,606	\$ 66.41 232.10 77.37 88.93 \$ 218.10 1.02 8.06 2.59 29.57	\$ 32 39 3 4 \$ 47 3 9 8 5
	Deferred Maintenance - Conservatory Existing Infrastructure Construction Cost OUSES New Greenhouse Headhouse Quonset Greenhouses Greenhouse Construction Cost able Features / Sitework Sitework Paving Site Improvements Green Roofs Sugar Bike Path / Pedestrian Connection / Street	10,000 32,867 11,258 3,304 3,456 14,562 215,093 76,858 215,093 12,431 27,579	\$ 1,572,249 1,882,133 184,120 221,366 \$ 2,287,619 157,328 446,040 401,857 264,782 156,848	\$ 106,834 127,891 12,511 15,042 \$ 155,444 10,690 30,308 27,306 17,992 10,658	\$ 503,725 603,007 58,989 70,922 \$ 732,919 50,405 142,905 142,905 128,749 84,832 50,252		2,182,808 2,613,031 255,621 307,331 3,175,982 218,424 619,253 557,912 367,606 217,758	\$ 66.41 232.10 77.37 88.93 \$ 218.10 1.02 8.06 2.59 29.57 7.90	\$ 32 39 3 4 \$ 47 3 9 8 5 3
	Deferred Maintenance - Conservatory Existing Infrastructure Construction Cost OUSES New Greenhouse Headhouse Quonset Greenhouses Greenhouse Construction Cost able Features / Sitework Sitework Paving Site Improvements Green Roofs Sugar Bike Path / Pedestrian Connection / Street Parking Lot -Bio Retention	10,000 32,867 11,258 3,304 3,456 14,562 215,093 76,858 215,093 12,431 27,579 21,746	\$ 1,572,249 1,882,133 184,120 221,366 \$ 2,287,619 157,328 446,040 401,857 264,782 156,848 108,730	\$ 106,834 127,891 12,511 15,042 \$ 155,444 10,690 30,308 27,306 17,992 10,658 7,388	\$ 503,725 603,007 58,989 70,922 \$ 732,919 50,405 142,905 128,749 84,832 50,252 34,835		2,182,808 2,613,031 255,621 307,331 3,175,982 218,424 619,253 557,912 367,606 217,758 150,954	\$ 66.41 232.10 77.37 88.93 \$ 218.10 1.02 8.06 2.59 29.57	\$ 32 39 3 4 \$ 47 \$ 47 3 9 8 8 5 3 2
	Deferred Maintenance - Conservatory Existing Infrastructure Construction Cost OUSES New Greenhouse Headhouse Quonset Greenhouses Greenhouse Construction Cost able Features / Sitework Sitework Paving Site Improvements Green Roofs Sugar Bike Path / Pedestrian Connection / Street	10,000 32,867 11,258 3,304 3,456 14,562 215,093 76,858 215,093 12,431 27,579	\$ 1,572,249 1,882,133 184,120 221,366 \$ 2,287,619 157,328 446,040 401,857 264,782 156,848	\$ 106,834 127,891 12,511 15,042 \$ 155,444 10,690 30,308 27,306 17,992 10,658 7,388 8,834	\$ 503,725 603,007 58,989 70,922 \$ 732,919 50,405 142,905 128,749 84,832 50,252 34,835 41,650	\$	2,182,808 2,613,031 255,621 307,331 3,175,982 218,424 619,253 557,912 367,606 217,758	\$ 66.41 232.10 77.37 88.93 \$ 218.10 1.02 8.06 2.59 29.57 7.90	\$ 32 39 3 4 5 5 5 5 5 2 2 2 2
ustain	Deferred Maintenance - Conservatory Existing Infrastructure Construction Cost OUSES New Greenhouse Headhouse Quoset Greenhouses Greenhouse Construction Cost able Features / Sitework Sitework Paving Site Improvements Green Roofs Sugar Bike Path / Pedestrian Connection / Street Parking Lot -Bio Retention Rainwater capture/Treatment/holding /reuse Sustainable Construction Cost	10,000 32,867 11,258 3,304 3,456 14,562 215,093 76,858 215,093 12,431 27,579 21,746	\$ 1,572,249 1,882,133 184,120 221,366 \$ 2,287,619 157,328 446,040 401,857 264,782 156,848 108,730 130,000	\$ 106,834 127,891 12,511 15,042 \$ 155,444 10,690 30,308 27,306 17,992 10,658 7,388 8,834	\$ 503,725 603,007 58,989 70,922 \$ 732,919 50,405 142,905 128,749 84,832 50,252 34,835 41,650	\$	2,182,808 2,613,031 255,621 307,331 3,175,982 218,424 619,253 557,912 367,606 217,758 150,954 180,484	\$ 66.41 232.10 77.37 88.93 \$ 218.10 1.02 8.06 2.59 29.57 7.90	\$ 32 39 3 4 \$ 47 \$ 47 3 8 8 5 3 2 2 2
Sustain	Deferred Maintenance - Conservatory Existing Infrastructure Construction Cost OUSES New Greenhouse Headhouse Quonset Greenhouses Greenhouse Construction Cost able Features / Sitework Sitework Paving Site Improvements Green Roofs Sugar Bike Path / Pedestrian Connection / Street Parking Lot -Bio Retention Rainwater capture/Treatment/holding /reuse Sustainable Construction Cost is the Tracks" Elements	10,000 32,867 11,258 3,304 3,456 14,562 215,093 76,858 215,093 12,431 27,579 21,746 1	\$ 1,572,249 1,882,133 184,120 221,366 \$ 2,287,619 157,328 446,040 401,857 264,782 156,848 108,730 130,000 \$ 1,665,585	\$ 106,834 127,891 12,511 15,042 \$ 155,444 10,690 30,308 27,306 17,992 10,658 7,388 8,834 \$ 113,176	\$ 503,725 603,007 58,989 70,922 \$ 732,919 50,405 128,749 84,832 50,252 34,835 41,650 \$ 533,628	\$	2,182,808 2,613,031 255,621 307,331 3,175,982 218,424 619,253 557,912 367,606 217,758 150,954 180,484 2,312,390	\$ 66.41 232.10 77.37 88.93 \$ 218.10 1.02 8.06 2.59 29.57 7.90	\$ 32 39 4 \$ 47 \$ 47 3 9 8 5 3 2 2 2 \$ 34
Sustain	Deferred Maintenance - Conservatory Existing Infrastructure Construction Cost OUSES New Greenhouse Headhouse Quonset Greenhouses Greenhouse Construction Cost able Features / Sitework Sitework Paving Site Improvements Green Roofs Sugar Bike Path / Pedestrian Connection / Street Parking Lot -Bio Retention Rainwater capture/Treatment/holding /reuse Sustainable Construction Cost s the Tracks" Elements Heated Storage	10,000 32,867 11,258 3,304 3,456 14,562 215,093 76,858 215,093 12,431 27,579 21,746 1 2,611	\$ 1,572,249 1,882,133 184,120 221,366 \$ 2,287,619 157,328 446,040 401,857 264,782 156,848 108,730 130,000 \$ 1,665,585 127,939	\$ 106,834 127,891 12,511 15,042 \$ 155,444 10,690 30,308 27,306 17,992 10,658 7,388 8,834 \$ 113,176 8,693	\$ 503,725 603,007 58,989 70,922 \$ 732,919 50,405 142,905 128,749 84,832 50,252 34,835 41,650 \$ 533,628 40,990	\$	2,182,808 2,613,031 255,621 307,331 3,175,982 218,424 619,253 557,912 367,606 217,758 150,954 180,484 2,312,390 177,622	\$ 66.41 232.10 77.37 88.93 \$ 218.10 1.02 8.06 2.59 29.57 7.90 6.94	\$ 32 39 3 4 \$ 47 3 9 8 5 5 3 2 2 2 \$ 34
Sustain	Deferred Maintenance - Conservatory Existing Infrastructure Construction Cost OUSES New Greenhouse Headhouse Quonset Greenhouses Greenhouse Construction Cost able Features / Sitework Sitework Paving Site Improvements Green Roofs Sugar Bike Path / Pedestrian Connection / Street Parking Lot -Bio Retention Rainwater capture/Treatment/holding /reuse Sustainable Construction Cost is the Tracks" Elements	10,000 32,867 11,258 3,304 3,456 14,562 215,093 76,858 215,093 12,431 27,579 21,746 1	\$ 1,572,249 1,882,133 184,120 221,366 \$ 2,287,619 157,328 446,040 401,857 264,782 156,848 108,730 130,000 \$ 1,665,585	\$ 106,834 127,891 12,511 15,042 \$ 155,444 10,690 30,308 27,306 17,992 10,658 7,388 8,834 \$ 113,176	\$ 503,725 603,007 58,989 70,922 \$ 732,919 50,405 128,749 84,832 50,252 34,835 41,650 \$ 533,628	\$	2,182,808 2,613,031 255,621 307,331 3,175,982 218,424 619,253 557,912 367,606 217,758 150,954 180,484 2,312,390	\$ 66.41 232.10 77.37 88.93 \$ 218.10 1.02 8.06 2.59 29.57 7.90 6.94 6.84	\$ 32 39 3 4 \$ 47 \$ 47 \$ 3 9 8 8 5 5 3 2 2 2 \$ 34 \$ 4 2 4
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ustain	Deferred Maintenance - Conservatory Existing Infrastructure Construction Cost OUSES New Greenhouse Headhouse Quonset Greenhouses Greenhouse Construction Cost able Features / Sitework Sitework Paving Site Improvements Green Roofs Sugar Bike Path / Pedestrian Connection / Street Parking Lot -Bio Retention Rainwater capture/Treatment/holding /reuse Sustainable Construction Cost s the Tracks" Elements Heated Storage Cold Storage Site Improvements	10,000 32,867 11,258 3,304 3,456 14,562 215,093 76,858 215,093 12,431 27,579 21,746 1 2,611 3,730 1	\$ 1,572,249 1,882,133 184,120 221,366 \$ 2,287,619 157,328 446,040 401,857 264,782 156,848 108,730 130,000 \$ 1,665,585 127,939 220,070 155,786	\$ 106,834 127,891 12,511 15,042 \$ 155,444 10,690 30,308 27,306 17,992 10,658 7,388 8,834 \$ 113,176 8,693 14,954 10,586	\$ 503,725 603,007 58,989 70,922 \$ 732,919 50,405 142,905 128,749 84,832 50,252 34,835 41,650 \$ 533,628 40,990 70,507 49,911	\$	2,182,808 2,613,031 255,621 307,331 3,175,982 218,424 619,253 557,912 367,606 217,758 150,954 180,484 2,312,390 177,622 305,531 216,283	\$ 66.41 232.10 77.37 88.93 \$ 218.10 1.02 8.06 2.59 29.57 7.90 6.94 6.94 68.03 81.91	\$ 32 39 4 \$ 47 \$ 47 3 9 8 5 3 2 2 2 2 \$ 34 \$ 34 \$ 4 3

This budget is in 2013 dollars. An escalation of 4% compounding would apply for each year after 2013:

2014 \$	20,015,034
2015 \$	20,815,635
2016\$	21,648,261



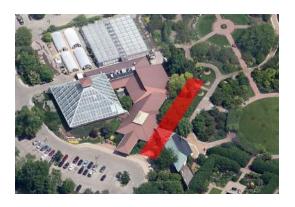
The master plan shown on the following pages represents the concept supported by the Core Team, OBS, and the public stakeholders that was presented at the final community meeting on May 20, 2013.

Key Elements

- New Lobby/Orangerie with prairie green roof
- New Education Wing with green sedum roof
- New Plant Show Hall
- New Greenhouse
- Existing facilities are maintained and renovated: Gift Shop expanded in place, Atrium building renovated for Library and Orientation Hall, Office ex-

panded in place, and Headhouse replanned for greenhouse support only

- Secondary entrance connects to majority of parking
- Sustainable parking garden with permeable paving and bioswales
- Sugar Avenue defined and edge improved with neighborhood park
- Pedestrian and bicycle access to site improved





Site organizational strategy

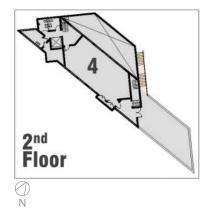


Master Plan

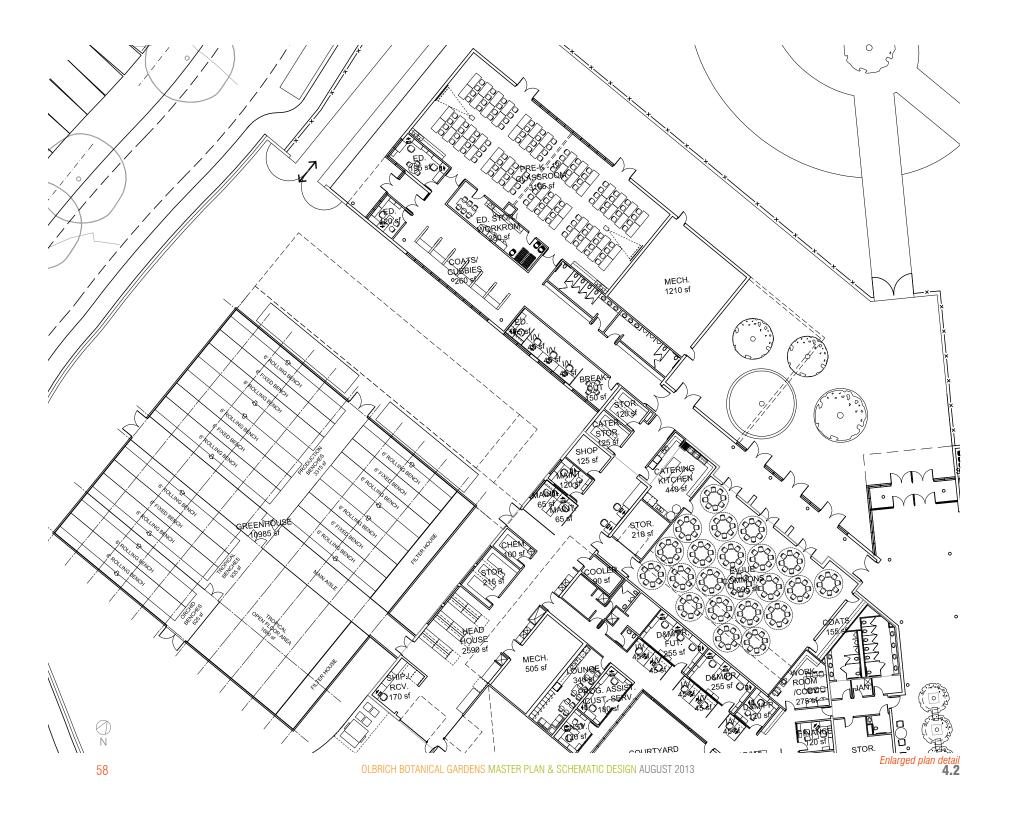
Floor Plan

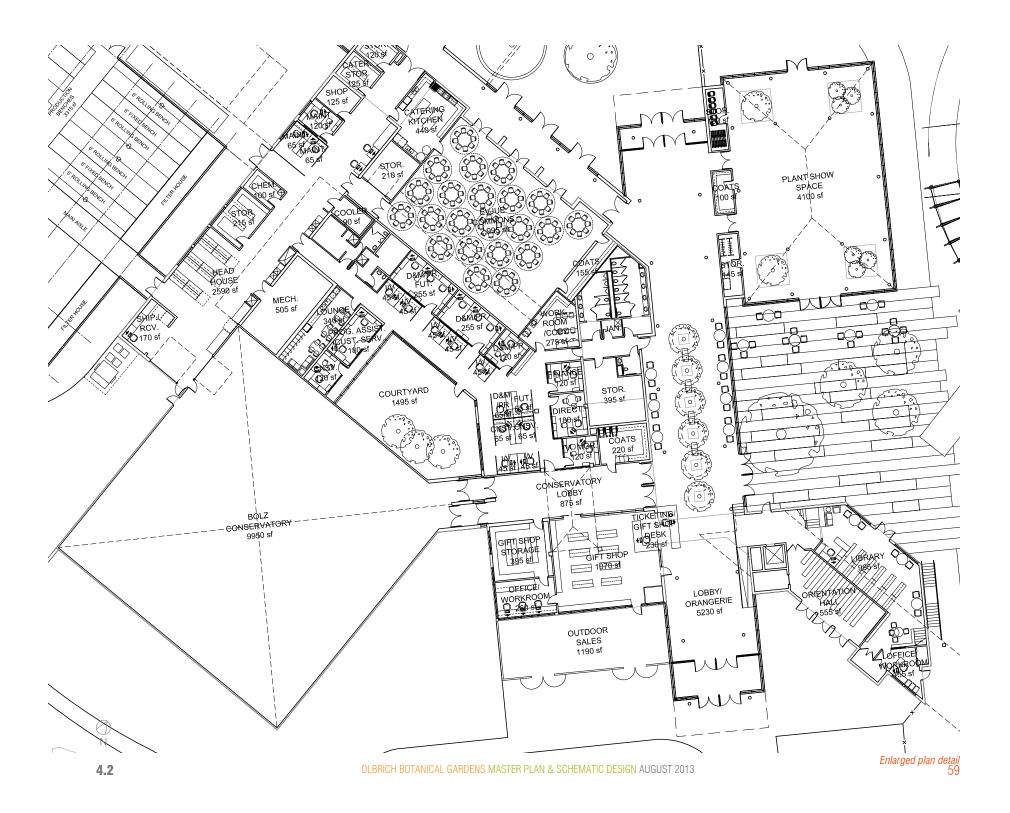
- Plant Show Space
 Event Space
 Education Wing
 Meeting/Bride's Room
 Library
 Orientation Hall
 Lobby/Orangerie
 Gift Shop
 Office

- 9. Office 10. Conservatory 11. Headhouse
- 12. Greenhouse









CONSTRUCTION PHASING DIAGRAMS



Phase 1 Construction

a. Maintain existing greenhouse. Construct two bays of new greenhouse.

b. Maintain existing library. Renovate new library location.

c. Maintain existing gift shop. Renovate orientation space for temporary gift shop location.

d. Maintain existing office. Construct Education Wing.





Phase 2 Construction

a. Move tropicals and orchids to completed greenhouse bays. Demolish existing greenhouse. Construct final bay of new greenhouse.

b. Move library into new location.

c. Move gift shop into temporary space. Renovate existing gift shop/lobby for new, expanded gift shop.

d. Move office into Education Wing for temporary location. Renovate existing office.

Phase 3 Construction

a. Move production to completed greenhouse bay.

b. Move gift shop into new, permanent location.

c. Move office into new, permanent location.

existing	under construction	new	greenhous	se
existing	under construction	new	library	
existing	under construction	temp	oorary <mark>new</mark>	gift shop
existing	under construction	temp	oorary new	office

SPACE NEEDS RESOLUTIONS

Proposed Gift Shop areas increase square footage by 820 sf and gains 117 lf of shelving/display. More daylight and an outdoor sales area will allow for the selling of more mission-focused items. Gift shop improves productivity with layout of adjacent and efficient support spaces. Gift shop will sell food sourced from local restaurants to provide this necessary amenity and support local businesses.

Proposed Greeter Desk has high visibility in new Lobby/Orangerie. Signage creates presence for Membership. Single location for Gift Shop/Greeter Desk increases staff efficiency.

Proposed Library areas increase square footage by 570 sf and gains 76 lf of shelving. Library improves productivity with support spaces. Ample multi-purpose reading/storytelling space has views to garden.

Proposed Office Space increases square footage by 1,855 sf and gains 9 desks for staff and volunteers. Larger group work areas and storage increase productivity. Lounge allows for personal storage space.

Proposed Maintenance Facilities and support increase square footage by 3,710 sf. New support facility north of the railroad increases back-of-house productivity.

Master Plan

Proposed Greenhouse increases square footage of plant benches by 24%. Modern systems improve plant production capability and energy efficiency. Cooler is added for bulb storage.

Proposed Headhouse space increases efficiency by the removal of unrelated functions. Potting area is expanded with adjacent storage and support functions.

> Conservatory Horticulture

Marketing/PR Gift Shop Education

Volunteers

Catering

Facilities/Maintenance

Leadership Leadership

Specialty Events

Railroad

Proposed Facility Circulation introduces clearer circulation routes for user groups by bringing like functions together to reduce the distance traveled, separating office functions from horticulture functions, improving the routes traveled for special events/plant shows, and adding an extra corridor to reduce the load on the administration hallway. The Children's Garden has been moved near the Education Wing.



Proposed facility circulation



4.2.1 Building & Site Systems Concepts

STRUCTURE

Lobby / Orangerie:

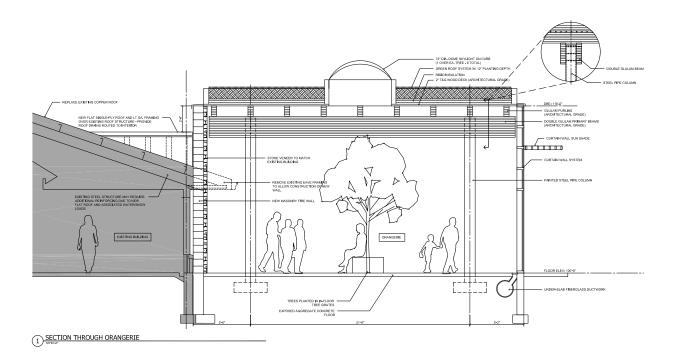
The proposed visitor spaces are conceived of as a combination steel and laminated wood framing system. Steel pipe columns will support laminated wood primary beams, which in turn support secondary laminated wood purlins and a tongue and groove wood deck. This is a robust structural system that is capable of the additional loading from the proposed green roof above. Visually, the laminated wood members reference the existing 1978 atrium building and serve to incorporate a natural and warm material into the project. A new masonry or concrete fire wall will establish the northwest wall of the lobby and will be required to be structurally independent from the existing building and new steel/wood frame.

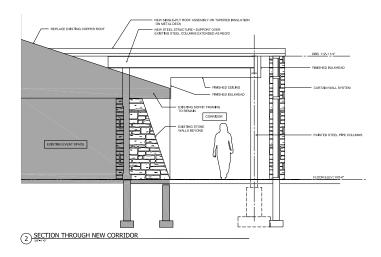
Plant Show Hall:

This fully-glazed space will be supported by a combination of steel and laminated wood structural members. The structure will be designed to support a glazed wall and roof cladding system.

Link:

The new corridor constructed along the east facade of Evjue Commons will be a steel frame supported both on new exposed pipe columns and by the existing steel frame structure. The roof will consist of a single-ply roof membrane, tapered insulation, and metal deck.





Master Plan

Education Wing:

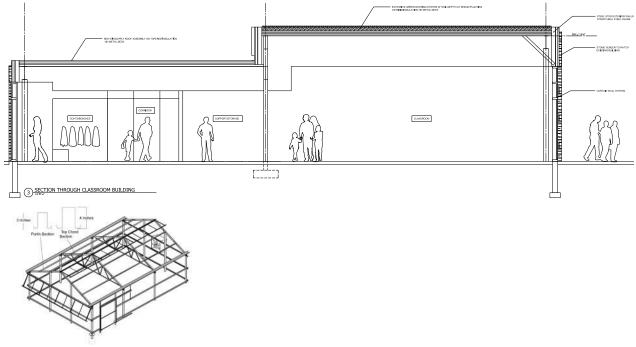
The new Education Wing will consist of exposed steel pipe columns at exterior walls, steel roof beams, and metal roof deck. Solid exterior walls will be steel studframed and clad in full-depth masonry veneer.

Greenhouses:

The existing greenhouse structure will be removed and replaced with a similar preengineered framing system consisting of steel tube posts, steel primary trusses, and secondary purlins. Roof member profiles will incorporate integral channels for condensation drainage. A new frost footing, foundation wall, and concrete slabon-grade will be required for the new proposed location.

Challenges:

The proposed new additions tie into the existing building along its east and southeast facades. The existing roof structure and roofing at these areas will be required to be modified to allow for the new building tie-in. The design team was presented with concerns about the existing building re-roofing project on May 6th, by Paul Stauffer who attended the project core team meeting that day. HGA contacted Metal Design Corporation, installer of the new copper roof, and discussed the project with president Vicki Volenberg. Vicki explained that because the copper roofing panels are a continuous mechanical-



Greenhouse framing diagram

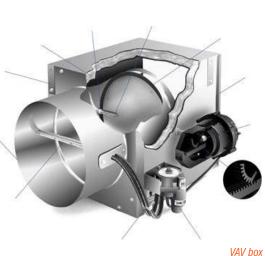
ly-seamed panel from eave to ridge, and because a double lock cleat is used to secure the bottom of each panel, there is no way to cut back a portion of the copper roof where the new membrane roof needs to connect and secure the edge with a new locked connection. It is also not possible to bend up panels against their seams to achieve a water-tight tie in of the new membrane proposed. Due to the mechanically bent seams of each panel, tie in of the new roof membrane will most likely require full removal and replacement of the copper panels in areas of interface. This strategy is accounted for in the project budget and estimates a replacement of 47% of the new copper roof. Also, where the proposed additions are taller than the existing roof, a structural analysis should be performed to determine impact of additional drifting snow. Some reinforcing of the existing structure may be required as a result. Overframing above these portions of existing roof could minimize the potential depth of drifting snow. Other challenges that need to be resolved as the design progresses are routing the existing stormwater lines and venting the existing roof at areas affected by the addition.

EXISTING MECHANICAL & ELECTRICAL UPGRADES

In July of 2009, the City of Madison contracted Michael Hein, PE of HEIN Engineering Group to perform an existing facility systems assessment and produce a series of upgrade options that could be considered to address equipment nearing the end of service life and improve overall efficiency. HEIN Engineering issued a seven-page report that summarized their findings and recommendations and included first cost estimates and annual energy cost estimates for each option presented. Upgrade options included the following:

- Option 1: Replace existing boilers with low-temperature condensing boilers
- Option 2: Replace existing hot water pumping with variable pumping
- Option 3: Replace existing air handler AH-1 and convert to VAV system with ventilation energy recovery.
- Option 4: Replace existing air handlers AH-2 & 3 and convert to VAV system with ventilation energy recovery.
- Option 5: Replace existing air-cooled condensers with new high efficiency units. (The condensor unit model was abandoned in lieu of chillers for this new addition.)
- Option 6: Greenhouse complex HVAC
 & temperature control upgrade
- Option 7: DDC building automation network
- Option 8: Domestic hot water upgrades
- Option 9: Lighting upgrades

During the current master planning process, HGA was informed by the City of Madison that HEIN Engineering is in the process of designing a systems upgrade for the existing facility that implements some of the recommendations included in their 2009 report. This upgrade will take effect in the near future. HGA will be working closely with the City of Madison and HEIN Engineering to ensure that any systems upgrades being designed account for proposed modifications and additions included in the master plan.





box

SYSTEMS DESCRIPTIONS FOR PROPOSED ADDITIONS

Proposed Mechanical System:

10.1 Heating and Cooling Systems Description

A. Hot Water Heating System

- 1. The existing hot water heating plant will serve the new addition.
- 2. The existing hot water heating plant will have space for a future boiler. If needed, a new AERCO 3.0 MBH boiler will be added to accommodate the heating load of the new addition.
- 3. The existing heating water system piping distribution will be extended to serve the new addition.
- 4. The existing heating system will provide hot water heat to the entire addition, serving air handling units, unit heaters, radiation and similar devices throughout the addition.

B. Chilled Water Cooling System

- 1. The existing chilled water cooling plant will serve the addition.
- 2. The existing chilled water cooling plant will have space for a future chiller evaporator. A new 60-ton aircooled chiller with remote evaporator chiller barrels will be added to accommodate the cooling load of the new addition.
- 3. The existing chilled water cooling piping distribution will be extended to

serve the new addition.

4. The existing chilled water system will provide chilled water cooling to the entire addition, serving air handling units throughout the addition.

C. The Education Wing of the new addition will be heated, cooled and ventilated by a variable air volume with reheat system. An indoor air handling unit of approximately 7,000 CFM supply air capacity will serve the system. The air handling unit will consist of return air inlet plenum, plenum type return fans in a fan array, relief air plenum including damper, mixing air plenum including dampers, air mixing blender, MERV 7 pre-filters, hot water heating coil, chilled water cooling coil, plenum type supply fans in a fan array, MERV 13 final filters and supply air discharge plenum. Each fan array shall be controlled by a single variable speed drive controller controlling multiple fan motors in the fan array. The hot water heating coil shall be piped with dedicated inline circulating pump.

D. The Plant Show space of the new addition will be heated, cooled and ventilated by a single zone, variable air volume system. An indoor air handling unit of approximately 8,500 CFM supply air capacity will serve the system. The air handling unit will consist of return air inlet plenum, plenum type return fans in a fan array, relief air plenum including damper, mixing air plenum including dampers, air mixing blender,

MERV 7 pre-filters, hot water heating coil, chilled water cooling coil, plenum type supply fans in a fan array, MERV 13 final filters and supply air discharge plenum. Each fan array shall be controlled by a single variable speed drive controller controlling multiple fan motors in the fan array. The hot water heating coil shall be piped with dedicated inline circulating pump.

E. The Lobby/Orangerie space of the new addition will be heated, cooled and ventilated by a single zone, variable air volume system. An indoor air handling unit of approximately 7,500 CFM supply air capacity will serve the system. The air handling unit will consist of return air inlet plenum, plenum type return fans in a fan array, relief air plenum including damper, mixing air plenum including dampers, air mixing blender, MERV 7 pre-filters, hot water heating coil, chilled water cooling coil, plenum type supply fans in a fan array, MERV 13 final filters and supply air discharge plenum. Each fan array shall be controlled by a single variable speed drive controller controlling multiple fan motors in the fan array. The hot water heating coil shall be piped with dedicated inline circulating pump.

F. The new greenhouse will include a 2-zone heating system consisting of aluminum finned pipe under benches and second zone of aluminum finned pipe installed directly below the gutter lines. Pip-

ing will be tied back to the main building boiler equipment and regulated by valves and a new PC-based environmental control system. Active greenhouse cooling will consist of an evaporative cooling pad system located along one gable end of the structure. Exhaust fans located on the opposite gable end will serve to draw incoming air across the cooling pads. Supplemental HAF fans throughout the greenhouse will provide general air movement. Motorized ridge vents will allow for passive ventilation of the greenhouses. A cable-driven retractable heat-retention curtain system will be employed, allowing users a means to better retain heat within the greenhouses during nighttime hours. All greenhouse systems and motorized elements will be tied to and controlled by the environmental control system. Each greenhouse area will be zoned and controlled independently.

G. The current space plan proposes locating all three new air handling units noted above in a single mechanical room located in the new Education Wing and extending ductwork to the various areas served by each. A second strategy could be analyzed as the project progresses, and would involve locating a second mechanical room in closer proximity to the Lobby/ Orangerie and Plant Show Hall space to house the units serving these spaces. This would require potential re-shuffling of programmed space, but could reduce ductwork runs.

H. All supply air serving the Plant Show will be ducted under floor from the mechanical room to Plant Show. Water use will be unpredictable based on the varied use of the space, so potential water infiltration into the duct system is a concern. To address this, the perimeter under floor ductwork will terminate in stainless steel arilles placed at the top horizontal surface of a 12" high continuous perimeter curb. All underground ductwork will be double wall insulated fiberglass reinforced plastic (FRP) duct for corrosion protection. Ductwork will be pitched to a clean-out location should water be advertently introduced to the system. Air circulation in the space will be addressed by incorporating ceilingmounted fans.

I. All supply air serving the Lobby/Orangerie will be ducted under floor from the mechanical room to Lobby/Orangerie. All supply air will discharge through floor mounted supply air grilles along exterior walls of Lobby/Orangerie. Watering of tree planters in this space should be a controlled activity with limited potential for water or spray to infiltrate the floor grilles. All underground ductwork will be double wall insulated fiberglass reinforced plastic (FRP) duct for corrosion protection. Ductwork will be pitched to a clean-out location should water be advertently introduced to the system. Return grilles will be located high on opposing walls to promote air flow through space.

J. All return air from the Plant Show and Lobby/Orangerie will be ducted under floor from the mechanical room to respective space served. Underground return air ductwork will rise above finish floor in wall cavities to wall mounted return air grilles. All underground ductwork will be double wall insulated fiberglass reinforced plastic (FRP) duct for corrosion protection.

K. All return air will be fully ducted back to each air handling unit.

L. All Toilet Rooms, Janitor's Closets, and similar rooms will be exhausted. Based on preliminary analysis, incorporation of an air to air heat exchanger either as a wheel in the AHU or a separate plate exchanger is not recommended as it does not appear to offer the project a reasonable payback considering equipment and ductwork first costs. However, the City has noted that it is a standard and should be considered.

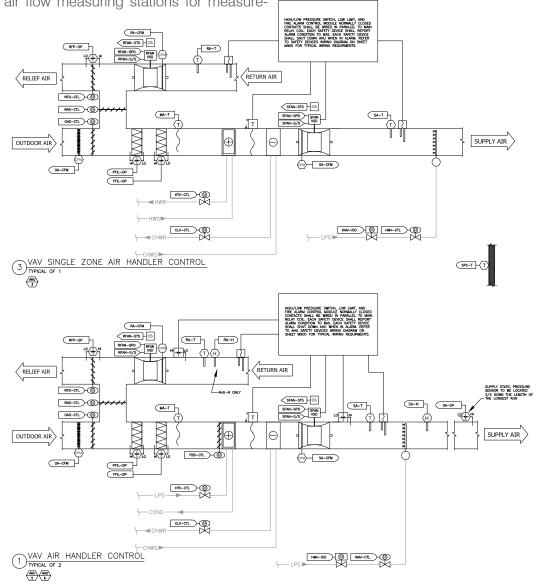
M. The Temperature Control system shall be the modification and extension of existing Honeywell Direct Digital Control (DDC) system, which is the standard for the City.

N. All new ventilation, heating and cooling systems will be controlled by the DDC system.

Master Plan

O. Supply, return and outdoor air intake for each air handling unit will be provided with air flow measuring stations for measure-

ment and control of system air flow.



Proposed Electrical Service/Systems:

11.1 Electrical Project Scope

A. All electrical work associated with Olbrich Botanical Garden renovation and addition in the City of Madison, WI and site work associated with the project, unless listed below. Work includes interior and exterior demolition and renovation of the existing facilities while maintaining existing services to the facility while occupied.

B. Items currently not included in the scope of work:

- 1. Telephone System: Telephone hardware and electronics, cabling, faceplates, terminal blocks, termination and testing. The owner will perform this work under a separate contract. Pathways (conduit and cable tray), backboxes, and backboards are included as part of this project scope.
- 2. Data System: Data network electronics such as concentrators, switches, servers, uninterruptible power supplies, and other electronic equipment, as well as cabling, faceplates, patch panels, network equipment racks, terminations and testing is not included. The owner will perform this work under a separate contract. Pathways (conduit and cable tray) and backboxes are included as part

of this project.

- 3. Cable TV (CATV) System: VCR's, video signal processors, other electronics, as well as cabling, outlets, faceplates, are not included. The owner will provide this equipment. Video cabling pathways (conduit and cable tray), backboxes, and backboards are included as part of this project.
- 4. Security and Access Control Systems: Monitors, switchers, recorders, controllers, and other electronics, as well as cabling, outlets, faceplates, are not included. The owner will provide this equipment. Pathways (conduit and cable tray), backboxes, and backboards are included as part of this project.
- 11.2 Service and Low Voltage Distribution

A. The existing Conservatory facility electrical service consists of a 1600 ampere, 208Y/120V, 3-phase, 4-wire underground secondary electrical service from Madison Gas & Electric (MG&E) from an outdoor pad mounted transformer adjacent to the building.

B. The existing main service equipment installed circ. 1990 consists of a 1600A – 208Y/120V, 3-phase, 4-wire, switchboard manufactured by Square D – Power Style, with fusible switch main, cold-sequence MG&E approved CT/meter section and I-line molded case circuit breaker distribution. There are spaces present in the existing distribution section and the distribution bus was originally designed for future buss extension with modifications.

C. The remainder of the branch panelboard distribution is of similar vintage as the existing main switchboard.

D. The renovation/addition project will include provisions for a new free-standing main switchboard rated 2500A-208Y/120V, 3-phase, 4-wire, with 2500A/3P main circuit breaker located within a new Main Electrical Room. The main electrical room shall be designed within a 2-hour fire rated enclosure. Owner's Engineer with current HVAC renovation project has provided an assessment that the existing electrical service may not be suitable, in terms of capacity for future addition/renovation. However, recent request of MGE service demand history of the existing facility reflects a peak demand within the last 24 months of 166 kW. This would reflect an existing surplus capacity on the existing 1600A service that should be subject to a preliminary load study as facility renovation advances.

E. New 208Y/120V branch circuit panelboards will be located in dedicated, centrally located, branch panel electrical rooms in each wing, on each floor. No existing branch panelboards reuse is anticipated.

11.3 Emergency Power

A. General:

- The existing building emergency power is currently supplied by an indoor emergency generator rated at 60kW – 208Y/120V, via as single 400A/3P, S/N automatic transfer switch manufactured by Onan-Cummins Power. The engine generator fuel source is natural gas and is located in the generator room adjacent to the main electrical room.
- 2. The existing generator will be replaced as its capacity is not suitable to support emergency and optional stand-by loads to maintain environmental conditions of the Conservatory botanical environments and the Greenhouses. In addition, the existing emergency distribution is co-mingled and this shall be segregated in accordance with codes enforced with separate distribution for both emergency and optional stand-by distribution.
- 3. A new outdoor, pad mounted, engine generator will be provided, supplying both emergency power distribution.
- The existing emergency distribution is fed from a single transfer switch which will be removed. New transfer switches for life safety and optional stand by branch(es) will be provided.

- 5. The generator will not supply a fire pump.
- 6. The generator shall be located outdoors and the main emergency switchboard (min. 2-section) and automatic transfer switches shall be located within a 2-hour rated room separate from the normal power main distribution equipment.
- 7. Loads:
 - a. Life safety branch: Provide single 3P/SN – 208Y/120V wall mounted, program transition automatic transfer switch to serve code required emergency egress lighting and exit signage, fire alarm and fire protection branch circuits.
 - b. Optional Standby Equipment branch: Provide 3P/SN – 208Y/120V wall mounted. Program transition automatic transfer switch to service HVAC/plumbing equipment required to keep the botanical exhibit assets and building from damage.
- 11.4 Lighting Scope

A. In 2011, the entire facility underwent an interior lighting update. While the existing lighting is largely current cataloged product, it may not be appropriate for application in the renovation/addition. Therefore, lighting and lighting control systems appropriate for the task and design of the

space will be selected. Ambient lighting levels will meet or exceed IES recommendations for illumination per space type.

B. Design will utilize energy efficient LED, T5, or T5HO fluorescent lamp technology and electronic ballasts. Lamp color temperature shall be either 4100k or 3500 degree Kelvin with a color rendering index (CRI) of 85 or better for general lighting applications.

C. Digital lighting controls (occupancy/ daylight/low-voltage switch stations) shall represent the Basis of Design would include nLight digital dimming, lighting controls and lumen management on CAT-5 modular connected network.

D. Exterior Lighting Specifics:

- Provide building / accent lighting: Each exit door shall have one, two (2) lamp, building mounted compact fluorescent luminaire.
- 2. Landscape Feature Lighting: Design unknown at this time.
- 3. Pedestrian Circulation Areas Lighting: Exterior shall be lit using 42" high bollards along sidewalks leading to entry canopy, spaced 15' on center, utilizing LED lamp sources.
- 4. Parking Lighting: Provide all new LED pole mount area lighting for the entire parking lot, including poured concrete pole bases and multi-level

lighting controls.

- 5. All exterior lighting will be LED unless noted otherwise.
- E. Emergency Egress Lighting:
- 1. Exterior: All exterior lighting at entrances/exits from the building will be circuited and controlled to serve as egress lights. All egress lighting shall be connected to the life safety circuit(s).
- 2. Interior: Egress lighting will be provided by fixtures connected to the life safety circuit where necessary to meet code requirements.

11.5 Systems Scope

A. Fire Alarm: The existing fire alarm system is not suitable for the scope of the future expansion and shall be completely replaced with a new addressable fire alarm and detection system with one-way voice EVAC capabilities.

B. Remove the existing fire alarm and detection system and provide new within project boundaries.

11.6 Voice/Data Systems

A. The voice/data cabling systems will be provided and installed by the owner. The contractor will provide empty boxes, conduit and sleeves to facilitate the voice/data

cabling. A typical voice/data outlet will have a two-gang box with a single gang faceplate and a 1" empty conduit routed to the accessible corridor ceiling.

- **B.** Telecommunications Rooms:
- 1. There will be one Main Telecom room for the building. Telecommunications services to the building from the Owner's service provider will also terminate in this room.
- 2. There will be distribution telecom rooms (TR's) located in the building. Location and quantity will be subject to EIA/TIA cabling testing criteria.
- 3. The typical layout for each Telecom Room will be equipment racks located along the center of each room with front and rear vertical cable management between each rack and on each end of the row of racks. 12" wide cable tray will be installed over the racks and to the end wall.

C. Cable Tray:

- 1. 12" width, 4" inside loading depth, wire basket-type, chromed steel, NEMA 8C supported 8' on center.
- 2. The cable tray will installed along all of the major corridors through-out the building.
- 11.7 Audio/Visual Systems

A. The project budget estimate assumes approximately \$15,000 for an A/V upgrade in the Event Space. The specifics of this upgrade have not been confirmed with the user group, so the cost may vary depending on the complexity of the system desired.

11.8 Construction Phasing Strategy

A. The building must remain occupied throughout the entire construction process. Work will need to be completed in phases to accommodate occupancy during construction. Temporary displacement of personal around the building may be required to facilitate installation of new work.

Proposed Plumbing/Fire Protection Systems:

- 10.1 Sanitary Sewer System
- A. Sanitary Sewer
- 1. A new 4" sanitary sewer will be installed to serve all plumbing requirements of the new addition. The new sanitary shall route to the site and connect to an existing sanitary sewer in Sugar Avenue. The load of the new addition is approximately 80 DFU's.
 - a. Addition investigation will need to be performed to validate a tie in

connection for the new sanitary sewer.

- b. The Lobby/Orangerie shall utilize floor drains installed near the planters. These drains will collect any overspray from planters, any spills that occur in the lobby and any water from cleaning the floors.
- c. Drainage will be required in the Plant Show Space. The drainage shall be designed to meet the requirements of the users. This may require floor drains, trench drains or some combination.
- 10.2 Storm Sewer System

A. Storm Sewer

- Roof drains will be utilized for the new addition which will utilize a flat roof. The existing downspouts will be adjusted/eliminated to splash on the new roof or be rerouted underground to the new addition. All storm water from the new and existing buildings will be collected and routed to the site rainwater harvesting system. See architectural plans for additional information on rainwater harvesting system location.
 - a. Storm conductors shall be routed down in thickened walls or in column enclosures to the under-

ground.

10.3 Domestic Water System

A. Domestic Cold Water

- 1. An existing 4" domestic water service provides water to the current facility. Based on the estimated usage and domestic water loads of the existing and new facilities, this 4" water service will be adequate to feed the domestic water needs of the existing and new additions.
- 2. A connection point will need to be field verified on the existing domestic water system so an adequate size domestic water pipe serves the new addition requirements.

B. Domestic Hot Water

- 1. Due to the minimal load being added in the new addition and water hardness level, it has been recommended that the existing domestic hot water system be utilized to serve the new addition.
 - a. A connection point will need to be field verified on the existing system so an adequate size domestic hot water pipe can be routed to the new addition.
 - b. The new hot water piping will also need to tie into the existing hot

water recirculation system.

C. Plumbing Fixtures

- 1. The fixtures provided in the new addition shall match the manufacturer and model of the recent Restroom Addition Project.
- 2. Exterior and interior hose bibb requirements need to be discussed with users in the next project phase to determine the facility needs. This would apply to all new spaces and the relocated greenhouse.
- 10.4 Fire Protection

A. General:

- 1. The following codes, standards, and guidelines will be used for design as applicable to or as directed by the authorities having jurisdiction:
 - a. Wisconsin Administrative Plumbing Code, latest edition.
 - b. NFPA Chapters 13, 101 and as referenced in the Wisconsin Building Code
 - c. Requirements of Insurance Carrier.
 - d. The codes, standards, and guidelines listed indicate recommended or minimum requirements. Based on input from Owner representatives and recommenda-

tions from HGA, minimum requirements or standards may be exceeded.

- **B.** Wet Fire Protection System
- 1. The building is to be fully sprinklered in accordance with agencies listed above.
- 2. A new 6" fire protection service will be added to serve the requirements of the fire protection system.
 - a. The system shall connect to the existing unused 6" stub located on the northwest of the green house, just off Sugar Ave.
 - b. Fire protection contractor shall perform hydraulic calculations to determine the flow requirements of the facility.
 - c. The fire protection contractor shall obtain recent flow test data or request a flow test be performed to determine the condition of the existing water utilities.
- 3. Quick response sprinkler heads will be used throughout the building.
- 4. Piping material shall be Schedule 40 steel pipe.

Proposed Project Site Improvements:

The project will be adding new buildings and entrances to the facility. The main parking lot will not change in size or shape, but will get a new pavement and open graded stone base with the parking stalls being paved with pervious asphalt pavement. The western parking lot will be removed and reconfigured to follow the general shape of Sugar Avenue and is proposed to contain bio swales, open graded stone base, pervious asphalt pavement parking stalls and tree islands. The pervious pavement will drain into an underground drain tile system or the bio swales before entering the storm sewer system. This will allow for a higher guality and cleaner water being discharged to Starkweather Creek at a slower rate than current conditions.

Sanitary Sewer – the existing system will be maintained along with connecting the currently unused six-inch lateral for the new Education Wing located northwest of the green house area off of Sugar Avenue. In addition, the sewer system will need to be extended to provide service for the Quonset huts and building improvements north of the railroad tracks and east of the feed mill.

Water - the existing system will be maintained along with connecting the currently unused six-inch service for the new Education Wing located northwest of the green house area off of Sugar Avenue. The sizing for this service could be reduced if necessary. In addition, the water system will need to be extended to provide service for the Quonset huts and building improvements north of the railroad tracks and east of the feed mill.

Storm Sewer – In addition to the modifications noted above, the project proposes to install two 5000 gallon rain water harvesting tanks and a pumping system for reuse of rain water in the green house and conservatory areas to water plantings and other uses. The chilling pond for the ice rinks will need to be relocated to the west in an area west of the new western parking lot and some modifications to the existing storm sewer will be required to provide drainage. There will be a new storm sewer system installed as part of the Sugar Avenue improvements that will collect the drain tiles and overflow from the tanks before it drains to the north where it will connect to the City's system at an existing manhole. No work is planned to upgrade or modify the City's piping in either Atwood Avenue or along the Union Pacific Railroad/Capitol City Trail at this time.

Sugar Avenue Improvements – the existing street will be reconstructed to a new alignment, which will require some modifications to the right of way mostly near the central segment as the curve will be flattened. The street will receive curb and gutter, storm sewer, five foot wide bike lanes on each side and a six foot wide sidewalk along the east side. The bike and pedestrian facilities provide a desired connection between the Capitol City Trail and improvements planned for Atwood Avenue as well as additional access to the garden facilities. EXHIBIT C: Firestation 14 Master Plan Documents (16 Pages)



Madison Site Plan Study Madison Fire Department Employee Development Center and Fire Station #14 October 16, 2015 Note to Consultants: The following pages

Note to Consultants: The following pages are excerpts from a larger master plan study. Study was written assuming that the Employee Development Center was being built first, but the current plan is to build only Firestation 14. It is unlikely that the EDC will be built - however training space is to be programmed into the FS 14 building. Therefore the location of FS 14 and the EDC are also being flipped from what is shown in the study.





The purpose of this master plan study is to evaluate the long term development of the site for the Madison Fire Department (MFD) to include an-Employee Development Center (EDC) and Fire Station 14. By locating these functions on adjacentsites, many uses can be shared and their efficiencies increased.

The site selected and purchased by the city for these new uses is at the corner of Dairy Drive and Femrite Drive in Madison, Wisconsin. Phase 1 of the development includes the Firestation 14 at Center on lots 34/35/36. Phase 2 metadoes me station 14 and site parking on lots 52/53.

The site was selected to:

- Provide a local, open space for outdoor training for MFD staff to earn and maintain their professional certifications
- + Provide year round indoor course for Candidate Physical Ability Testing (CPAT)

- To minimize response times to residents in this area
- + To pro-actively prepare for population growth and shifts within the region
- + To provide meeting space to the community in an under-served area

The primary design goal of the ^{FS 14} building and site is to retain maximum flexibility for a variety of training techniques and needs that will evolve over time.

An important goal for the project is to achieve a high level of sustainability, and achieve a LEED Silver certification at a minimum.

The scope of work for the master planning phase includes programming, master planning, a LEED charrette, a design concept and a cost estimate for the EDC.

Note to consultants: FS14 is now phase 1 and on the EDC site. EDC is not part of the project scope.



City of Madison Madison, WI

1.2 Methodology

The master planning process was a joint venture led by OPN Architects and CR which included the following elements:

> 1. Research – Questionnaires were developed by the design team and completed by the fire department to provide detailed descriptions of the operational requirements for the new station and EDC.

> 2. Space Needs Analysis – A list of spaces and general characteristics was generated from the questionnaires and plans from completed stations.

3. Tour of sites and facilities – The team toured existing facilities to uncover success stories and lessons learned. We toured MFD Station 12 and 13, Monroe Fire Department Training Facility, Madison College Training Facility, and the proposed site.

4. Room Diagrams – Individual rooms were drawn to scale and noted with special requirements.

5. Adjacency Diagrams – Individual rooms were clustered together to resolve special relationships.

6. Schematic Design – Preliminary designs were developed for phase 1 of the project – the EDC.

7. Sustainability Charrette and Research – The Owner's Project Requirements (OPR) document was generated to reflect the goals for the project. Primary sustainability categories were discussed and developed.

8. Cost Estimating – A cost estimate was developed based on the selected scheme.

The report would not have been possible without the contribution of many people and organizations, a few of which we would like to highlight here. Specifically the project team would like to thank The Madison Fire Department, the City of Madison, and the Monroe Fire department, who all provided professional expertise and in depth insight into their operations, tours of existing buildings, and thoughtful critiques of the designs herein.

1.4 Participants

OPN Architects – Architect

CR – Architect/Programming

Snyder Associates - Civil Engineering

KJWW – MEP Systems

Kraus-Anderson – Cost Estimating

City of Madison - Owner/Occupant

Madison Fire Department - Occupant

Sustainable Engineering Group - Commissioning

1.3 Acknowledgments

The city of Madison currently uses facilities on the Madison College campus to train and test MFD staff and candidates.

Thirteen fire stations currently facilitate the City of Madison. The fire stations retain 82 on-duty personnel who service the fire stations' various departments. The proposed station 14 would house Engine 14 and 4 staff members.

Fire Stations 12 and 13 are the most recently built facilities for the MFD, and provide the following benchmarks for the proposed buildings:

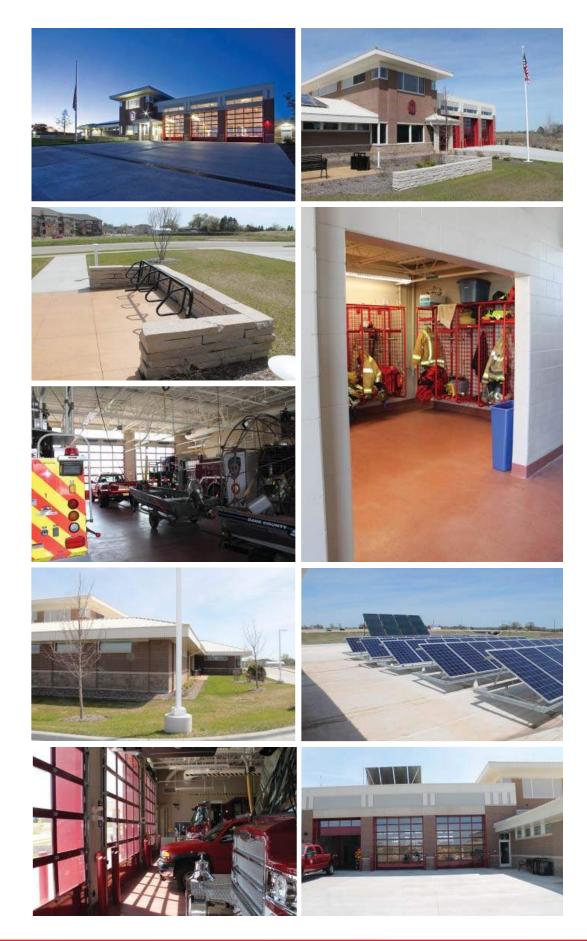
Fire Station No. 13

- 13,724sf
- Construction = \$4,055,690 (includes building & site)
- Landscaping separate bid = \$99,937

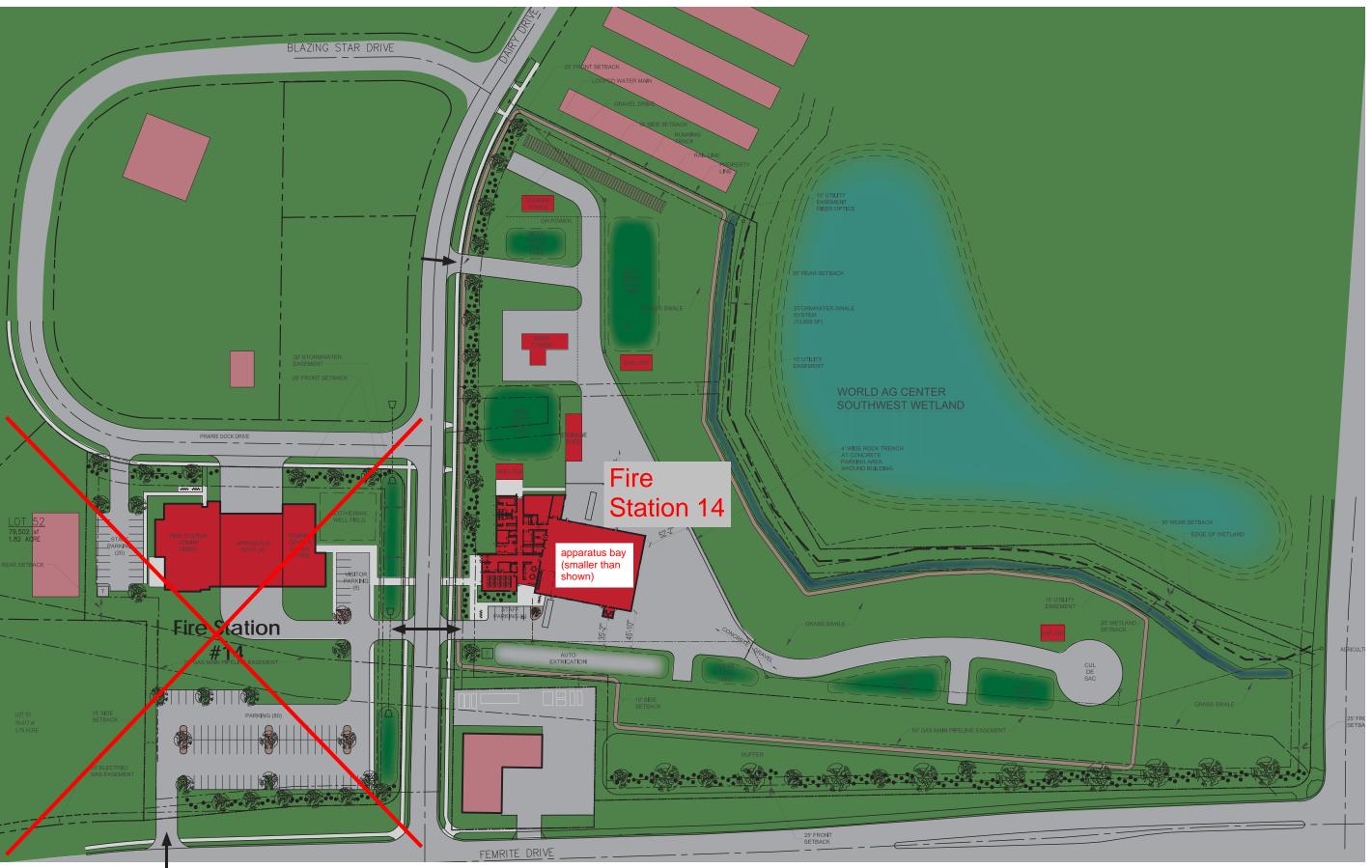
Fire Station No. 12

- 13,500sf
- Construction = \$3,627,823 (includes building & site)





City of Madison Madison, WI



City of Madison Madison, WI

4.5 MFD Firestation 14



Combined Firestation 14 with Enhanced Training Space.

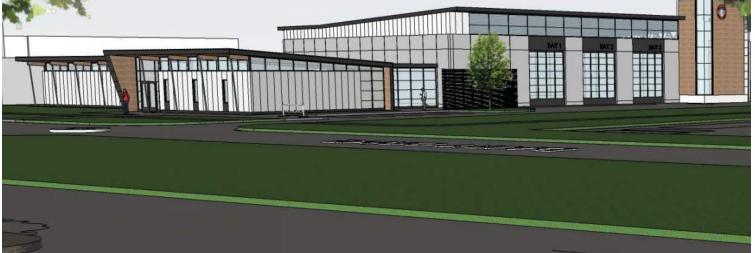




Materials

Materials for this concept include precast walls for the apparatus bays. The majority of these are left exposed, while the training tower is covered in metal panels and a wood rainscreen. The apparatus bay has clerestory windows, as well as glass overhead doors. Other walls are metal stud construction with three types of metal panels or wood veneer. Clerestory windows are present along the West wall of the office portion, in addition to punched window openings. Several areas of full height windows are present in the office area.







Scheme 1

OPN Architects Section 4 - Schematic Design



City of Madison Madison, WI

Note to Consultants: Scope is not LEEDv3 for the FS14 project, not LEEDv4 as written.

5.6.1 Operational Requirements

Normal hours for the Employee Development Center will be 10 hours per day, 6 days per week (7:00 AM-5:00 PM). The buildings will have variable occupancy with several full time staff.

Normal occupied hours for Fire Station 14 will be 24 hours per day, every day of the year. The grounds and custodial duties will be maintained by Fire Department staff. The City of Madison maintenance staff will maintain the mechanical, plumbing and electrical equipment.

5.6.2 Energy Efficiency and Environmental Sustainability Goals

General

Establishing the Employee Development Center and Fire Station 14 as a model of energy efficiency and environmental sustainability is a priority for the City of Madison. The following elements have been established as goals:

- + The City of Madison desires to pursue LEED-NCv4 Silver Level certification (minimum) to demonstrate that the design, construction and operation are energy efficient and environmentally sustainable.
- + The City of Madison desires the facility to be designed to achieve at least 30 percent energy cost savings compared to efficiency levels prescribed by ASHRAE Standard 90.1-2010.
- + Evaluation of building systems will be based on both source and site energy EUI (Energy Use Intensity) and energy cost. Source energy differs from site energy as it accounts for both the energy used by the building and the energy associated with generating and distributing it to the building. Operational benchmarks of other City of Madison Fire Stations and other area training centers will be used. These benchmarks (EUI and utility costs per square foot) are to be established by the design team during schematic design. The site-to-source conversion factors to be used for this project are:

Electricity: 1 unit site = 3.14 units source Natural Gas: 1 unit site = 1.05 units source

+ Options for building materials, mechanical equipment, and equipment maintenance and replacement for the new fire station shall be evaluated over the life of the facility and selections will be based on minimizing life cycle costs.

5.6 Owner's Project Requirements (OPR)

- + Innovative energy efficiency and sustainability features throughout the facility will be prevalent and easily identifiable for educational purposes targeting employees and visitors as the audience.
- + An integrative design process will be used on these facilities to support high-performance, cost-effective project outcomes. This process will involve an early analysis of the interrelationships between building systems.

A "simple box" energy modeling analysis will be performed before the completion of schematic design that explores how to reduce energy loads in the building. A preliminary water budget analysis will also be performed before the completion of schematic design that explores how to reduce potable water loads in the building. This will be in addition to incentive modeling for Focus on Energy and detailed modeling required for LEED documentation.

+ Design team will participate in the Focus on Energy Design Assistance Program.

Site Requirements

Water | Stormwater | Rainwater Harvesting

- + MFD requests a looped water main be installed along the rear of lots 34/35/36 from Dairy Drive to Agriculture Drive for fire hydrant connections.
- + Fire Station 14 site has a capped municipal test well. Geothermal systems utilized on this site would need to consider potential DNR restrictions or additional permitting requirements.
- + The outdoor training site is located within an environmental corridor defined by the Capital Area Regional Planning Commission (CARPC). The minimum wetland setback is 25' if satisfactory stormwater quality management measures are put in place to mitigate the impacts of the loss of vegetative buffer to the marsh. In addition to planned stormwater practices, infiltration rock trenches must be installed at the edge of parking areas in the rear of the lots surrounding the marsh.
- Stormwater biofiltration ponds will be used to treat runoff from the training grounds on lots 34/35/36 prior to discharging to wetlands and the adjoining marsh.
- Stormwater biofiltration ponds will be used to treat runoff from the Fire Station 14 site on lots 52/53 and then be discharged to storm sewers.
- + Evaluate the use of rainwater harvesting for use at the fire station for equipment washing.

Landscaping

- + Maintain high percentage of open green space for on-site storm water infiltration.
- + Landscaping will be drought tolerant native species so no potable water will be needed for landscape irrigation.
- + Use landscaping to block winter winds.
- + Grass lawn outdoor training areas will be drought tolerant, low/no mow plantings.

Parking | Circulation | Hard Surfaces

- MFD requests a driveway for the training yard on Femrite and on Dairy Drive to simulate response workflow more accurately.
- + Reduce and hold on-site parking stall numbers to minimum zoning code requirements and minimum criteria established by the Fire Department's needs; this will decrease the amount of impervious paving surfaces and help keep a cooler ambient temperature around the fire station.
- + A minimal amount of parking around the training exercise building will be required (4-6 spaces).
- + Dedicate 5% of parking stalls as preferred parking for carpools.
- + Dedicate 5% of parking stalls as preferred parking for green vehicles. These spaces are to be clearly identified and distributed proportionally among various parking areas. In addition, install electric vehicle charging in 2% of all parking spaces. These spaces are to be clearly identified and reserved for the sole use by plug-in electric vehicles. These spaces are provided in addition to preferred parking spaces for green vehicles.
- Provide bicycle parking for public and staff use equal to at least 2.5% of all peak visitors, but no fewer than four storage spaces per building. Bicycle storage must be no greater than 200 yards from main site access.
- + Concrete pavement for all drive surfaces within 70' of the Training Exercise Building is required by the Fire Department. Concrete pavement for drive aprons, extending 30' into the training grounds is also required. Concrete pavement for all drive surfaces leading into and out of Fire Station 14 Apparatus Bay is also required. The natural light color of concrete paving will help to reduce the heat island effect by reflecting more sunlight than typical dark asphalt paving.

- + Asphalt can be considered for student and visitor parking lots around Fire Station 14.
- + The MFD desires drive surfaces in the training yard to remain gravel base other than drive aprons and within 70' of the Training Exercise Building.

These surfaces will be considered for paving in the future once the ground is adequately compacted. Typical vehicle weight is 70,000 lbs.

Pervious concrete, other than at training prop locations, will be considered in conjunction with onsite storm water detention areas to reduce stress on municipal storm water system.

Use minimal concrete pads at outdoor training prop locations. Pervious concrete is not desired at these locations due to silting and contamination issues.

Exterior Lighting

+ Little or no exterior lighting beyond the property lines. Project is MLO lighting zone LZ2, which prescribes no more than 0.10 FC (1 LUX) of vertical illuminance at the lighting boundary (defined as a normal plan oriented toward the property and perpendicular to the lighting boundary, extending from grade to 33' above the height of the highest luminaire) and no more than 1.5% of total luminaire lumens emitted above horizontal. Alternatively the BUG rating method can be used which requires Uplight ratings, Backlight and Glare ratings as defined by IES TM-15-11, Addendum A.

Building Requirements

Roof

- + A white or reflective roof will be used to reflect the sun's energy and help maintain a cooler ambient temperature around and in the fire station and training facilities.
- Evaluate using a green (or vegetated) roof to aid in maintaining cooler ambient temperatures, filter and store rainwater, increase roof lifeexpectancy, and aid in roof insulation.

Daylighting | Views

 Natural daylight will be abundant in proper locations as well as views to the landscape surrounding the station. Evaluate the use of exterior sun shades and tinted glazing to control excess heat gain.

Building Materials

+ The exterior building envelope shall be designed and constructed to minimize outside air

infiltration. Provide calibrated blower door testing, after construction, to quantify the amount of air leakage and the effectiveness of air sealing.

- + Spray foam insulation will be used in exterior walls to increase insulation, and more importantly it will create an improved sealed building envelope that will minimize outside air infiltration.
- Highly durable, easily cleaned and low maintenance materials and finishes that are also low or no VOC-emitting are required by MFD staff.
- Building materials are to have highest recycled content available and come from regional producers.
- + Recycle over 75% of the construction waste generated on site.
- + The burn tower will either be constructed onsite with non-combustible materials or it will be prefabricated off-site and delivered for installation.
- + The burn tower will be constructed to use natural gas for training purposes or it will use class-A combustible materials for training such as wood, paper, or fabrics. It is to be designed in a flexible and replaceable configuration to minimize replacement costs in the future.
- MFD requests that the Training Exercise Building be configured so a 24' extension ladder can be used and a regular, pressurized hydrant is near or in the building.

Plumbing | Water

- High efficiency plumbing fixtures to reduce water use by 30% will be used. Fixtures include low-flow shower heads, faucet aerators, and dual-flush toilets. All toilets, urinals, private lavatory faucets and showerheads that are eligible for labeling must be WaterSense labeled.
- The MFD requests that low flow sensors not be used on private bathroom sinks in the living quarters of the fire station. Staff would prefer these fixtures to operate manually (residential style).

Building Configuration

 The architectural and engineering design team shall consider the implications of alternate building configurations to maximize building energy performance, functionality and daylighting.

- + An hourly energy modeling simulation tool will be used to predict energy performance and to prioritize efficiency and sustainability options.
- + Design the building form and roof structure to maximize rainwater harvesting.
- + Minimize site development to reduce impact and disturbance of adjoining site areas.
- + Pulse data collection from utility meters for gas and electric service is desired for tracking and profiling energy consumption.
- + The community room will be on the classroom side of Fire Station 14 near a public entrance. The space will be a classroom during the day and community room at night.

Lighting

- A daylighting study and photometric analysis will be used to design the building's interior lighting systems.
- + High performance LED lighting will be used to reduce lighting power densities by 30 percent as compared to ASHRAE Standard 90.1.2010.
- + Maximize use of natural daylighting techniques and daylight views in the fire station, classroom areas, and community room.
- + Utilize task lighting, occupancy and/or vacancy controls, continuous dimming daylighting controls, timers and other energy efficient lighting strategies wherever practical.
- Vacancy sensors are to be used in the sleeping and captain quarters to ensure that lighting stays off during the night.
- + Provide on/off override controls on all "continuous" lighting circuits.
- + Outdoor lighting will consist of fixtures (e.g., full cutoff, timeclock, occupancy sensors with dual level switching) that use LED technologies, and that minimize light pollution.
- + Provide automatic daylight sensor light switch controls at exterior perimeter window locations.
- + Lighting of outdoor training areas is desired to facilitate after hour training activities with other area agencies.
- + Site lighting in the training yard is to include power receptacles.

Mechanical | Electrical | Energy

Mechanical Equipment

- + The City of Madison has a strong desire to install high efficiency cooling and heating systems including optional geothermal systems. The engineer will evaluate different energy efficient heating and cooling systems and provide life cycle costing and recommendations.
- Domestic hot water demand will be met by demand hot water heaters, high efficiency condensing appliances, geothermal heat pumps and/or solar hot water systems.
- + Project-specific load calculations will be used to properly size mechanical equipment rather than relying on generic rule-of-thumb sizing criteria.
- + Heating and cooling digital control system will easily integrate with the global facility management software standard.
- Consider an energy recovery system between the ventilation outside-air intake and exhaust-air streams.
- Consider a separate penthouse for air handling equipment that serves the classroom portion of Fire Station 14 due to its varied occupancy.
- Consider a radiant floor heating system in the vehicle apparatus bay and training exercise building.
- + Consider radiant floor heating for the entire facility.
- + Consider specifying a 3-pipe water system with hot water, cold-hard water and cold-soft water. The cold-hard to be used only for drinking water and hose bibs. This will extend the life of equipment and eliminate excessive maintenance and premature failure of equipment such as dishwashers, washing machines, toilets and faucets.
- + Consider a single geothermal field shared by the entire facility that will serve geothermal heat pumps in each building. Piping would need to be installed under Dairy Dr.

Motors and Drives

- + Utilize where possible motors that will meet or exceed NEMA Premium efficiency standards.
- Variable speed drives will be installed on all motors 5 hp or larger that have variable load and operate regularly.

- + Employee workstations will be configured to encourage energy efficiency and make it easy to reduce waste (e.g., location of task lighting controls, desk level access to plug load control).
- + ENERGY STAR-rated equipment will be exclusively specified for all appliances, computers and other qualified equipment within the scope of the building project.
- + Configure receptacles to be on timers/schedule/ occupancy sensors to meet 90.1-2010 mandatory requirements.

Renewable Energy

- + The facility will either a) be equipped with onsite renewable energy systems to supply building electric and thermal loads, or b) be equipped with the infrastructure for future on-site renewable energy systems to meet building electric and thermal loads wherever cost effective. Options for on-site systems may include additional PV and solar domestic hot water.
- + Consider a photo voltaic array (PV) used as sun shades over the outdoor patio area or parking area or otherwise roof mounted.
- + The max size of the PV array on the Training Exercise Building is 20 kW or the maximum allowed by net metering.
- Solar water heating panels will be used to preheat the domestic water used in the facility. The max size of a solar water heating system is four 4'x10' panels. The system is to be integrated with the BAS.

5.6.3 Indoor Environmental Goals

High priority goals identified by the City of Madison for indoor environmental quality include:

- + Mechanical systems will function seamlessly to maintain space comfort within specifications set forth in ASHRAE Standard 55-2010. Separate comfort conditions will be determined for the classroom, living quarters, office and training and apparatus bays.
- The HVAC system will be capable of providing outside air volume that meets ASHRAE Standard 62.1-2010 and maintain adequate levels of building pressurization.
- + Outside air quantity should be driven by occupancy not exhaust requirements.
- + State code exhaust rates for "shower rooms" will be split between the shower area and the

Plug Loads

bathroom area to minimize exhaust requirements.

- The apparatus bay will be maintained at negative air pressure compared to the adjacent spaces to prevent vehicle exhaust gases from entering the living quarters.
- Humidity levels in the space will always be maintained less than 60 percent relative humidity, but as high as possible without humidifying the building (consider achieving humidity contribution with latent heat exchange on ventilation air).
- Low or no VOC and non-toxic caulks, paints, adhesives, sealants and cleaning products will be used.
- + Procedures during construction will be implemented by all contractors to minimize construction related contaminants in the building. Building materials and equipment will be shipped in weather-tight clean packaging; stored materials and equipment will be confined to weather-tight enclosures prior to unpacking for installation.
- + Finishes that emit VOCs and other pollutants during curing will be scheduled to minimize absorption by absorbent materials including ceiling tiles, carpets, insulation, gypsum products, and fabric-covered furnishings.
- + Outside air intakes will be located to prevent recirculation of pollutants emitted from toilet exhausts, kitchen hoods, backup generation, vehicle exhausts, etc. from mixing with outside air entering the HVAC system.
- The building design and mechanicals will allow for an acoustical environment which does not negatively impact occupant productivity, communication, and privacy of staff. Criteria is based on 2011 ASHRAE Handbook, HVAC Applications, Chapter 48, Table 1; AHRI Standard 885-2008, Table 15:

Sounds levels in sleeping areas from air handling systems will not exceed Room Criteria 25.

Sound levels for the community space from air handling systems will not exceed Room Criteria 25.

Sound levels for office spaces will not exceed Room Criteria 30

Sound levels for classroom spaces will not exceed Room Criteria 30

Sound levels for other spaces (excluding the

apparatus bay) from air handling systems will not exceed Room Criteria 30.

Sound levels for the apparatus bay and training exercise building from air handling systems will not exceed Room Criteria 40.

5.6.4 Equipment and System Expectations

General

To ensure that equipment maintenance tasks can be easily performed, the following criteria will be adhered:

- + Contractors will furnish a full set of record documents, system manuals, maintenance and calibration requirements, control protocols, etc. in a format that facilitates building operation by City of Madison maintenance staff. These documents will be updated at the end of construction to reflect any changes in the installation from the construction documents and submitted in original file formats.
- + Contractors shall train the City of Madison maintenance staff in how to operate the installed equipment and systems.
- + System manual(s) will include any changes made to components and systems after substantial completion and will include the final set points established through the commissioning process.
- + Designers and contractors will ensure sufficient access and clearances are provided to mechanical and electrical equipment in order to perform routine building maintenance services and repairs.
- + Air handling system testing and balancing will be verified after the building is completed by a separate third party commissioning authority.

5.6.5 Safety and Security

- + Ensure occupant safety and health by providing appropriate security and accessibility for building occupants and assets. The design and construction process will include an integrated team approach to include analysis and recognition for solutions to provide a safe and healthy built work environment.
- + Training yard to have landscape berm.
- + Minimal site lighting and fencing in the training yard is desired. Security cameras connected with City of Madison PD will be used. Fencing along Femrite Drive should be screened with landscaping.