Department of Public Works
City Engineering Division
608 266 4751

Robert F. Phillips, P.E.
City Engineer

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GIS Manager
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Financial Officer
Steven B. Danner-Rivers

Hydrogeologist
Brynn Bemis

NOTICE OF ADDENDUM
ADDENDUM NO. 1

CONTRACT NO. 6590, PROJECT NO. 53W1152
FIRE STATION 13

Revise and amend the contract document(s) for the above project as stated in this addendum, otherwise, the original document shall remain in effect.

This addendum is issued to modify, explain or correct the original Drawings, Specifications, or Contract Documents marked as ***Fire Station No. 13, City of Madison Project #53W1152, Contract #6590***, dated ***May 3, 2012*** and is hereby made a part of the contract documents. This addendum consists of **THIRTY NINE (39)** page(s) of text and ***ONE (1)*** Drawing PDF file consisting of two (2) revised drawing sheets as identified in section V of this addendum. Please attach this Addendum to the Drawings and Project manual in your possession.

I. GENERAL CONTRACT CONDITIONS

A. The deadline time indicated in the General Info section of the Bid Express web site reads 1:30 PM CDT. Please correct Sheet A-1, Advertisement of Bid to also read "BID SUBMISSION 1:30 P.M.". Bids will still be opened at 1:30 P.M. as previously stated.

B. Section E: Bidder's Acknowledgement Downloadable Document on the Bid Express website and Page E-1 of the downloadable contract documents (6590 specs.pdf) are incorrect. A line was added to provide space for the Notary to sign on. Please use the revised form located at the end of this addendum.

C. The consultants specifications (as originally published) indicate five (5) allowance items that shall be included in the base bid amount. The bidder shall completely fill out the "SUPPLEMENTAL UNIT PRICES" work sheet located at the end of this addendum and submit it with all uploaded documents. The online bid documents have been revised by adding tabs under Section B to allow for submittal of this document online.

D. The City of Madison has obtained a Temporary Limited Easement for Grading Purposes for this project. Recorded Document 4985741 provides a full twenty (20) foot grading easement west and north of the west and north property lines. The three (3) page document is at the end of this addendum.

E. Section 104.2 (page D-3) of the Special Provisions listed Exhibit B – City of Madison Project Quality Management Plan. This document was not available at the time the specifications were released for bidding. It is included at the end of this addendum.

II. GENERAL QUESTIONS AND ANSWERS

A. Q. How can bidding documents be accessed?
   A. Bidding documents may be accessed through any of the following:

- Electronically through www.bidexpress.com
- Electronically through the City Of Madison Public Works website at http://www.cityofmadison.com/business/PW/contracts/openforBid.cfm
- On request through the Engineering Main Office (608-266-4751) phone number a CD set will be burned and either mailed to you or held for you to pick up.
- A hard copy set is available at the Engineering Operations Building located at 1600 Emil St., Madison, WI. This set is to remain at this location.

B. Q. Will the bid deadline be extended?
A. No. The bid deadline is not being extended.

C. Q. Is the date of liquidated damages in the specification?
A. The date of liquidated damages is not in the consultant's specifications, however it is located in the bid documents in Section D - Special Provisions on page D-5.

III. ACCEPTABLE EQUIVALENTS

The following manufacturers, products, or suppliers have been approved as acceptable equivalents for this contract. No other equivalents or alternates shall be allowed.

A. Unit Masonry-Cast Stone Trim; Section 04 20 00, 2.01 N. 8.
ADD: Marcstone, LLC, Hampton MN

B. Cold Formed Metal Framing; Section 05 40 00, 2.01 A.
ADD: Okaw Truss, Inc., Arthur, IL

C. Aluminum Composite Rainscreen Panel System; Section 07 42 43, 2.02 A.
ADD: Larson by Alucoil, Alucoil North America, LLC, Manning, SC

D. Aluminum Doors and Frames; Section 08 41 00
ADD: Tubelite Medium Stile Doors, Tubelite T14000 Series Framing by Tubelite, Faribault, MN

E. Rubber Sports Flooring; Section 09 65 70 2.01 B.
ADD: Regupol Aktiv by Spec Athletic, Inc, Plainfield, IL

F. Epoxy Quartz Flooring; Section 09 67 26 2.01 A.
ADD: Anchor Bond 4000 Decorative Quartz Flooring System with Urethane topcoat by Industrial Protective Coatings, Inc., DePere, WI

G. Painting; Section 09 90 00, 2.01
ADD: Diamond Vogel, Orange City, IA as follows:
i. Section 09 90 00, 2.01 E.; Vers-Acryl 222 Acrylic Maintenance Semi-Gloss
ii. Section 09 90 00, 2.01 F.; Vers-Acryl 200 Acrylic Maintenance Primer/Finish
iii. Section 09 90 00, 2.01 G.; Vers-Acryl 200 Acrylic Maintenance Primer/Finish
iv. Section 09 90 00, 2.01 H.; Old Master's H2O Acrylic Polyurethane
v. Section 09 90 00, 2.01 I.; Old Master's Water-Based Stain
vi. Section 09 90 00, 2.01 J.; Dia Pro Acrylic Block Filler
vii. Section 09 90 00, 2.01 K.; Health Kote Interior Zero VOC Primer
viii. Section 09 90 00, 2.01 M.; Health Kote Interior Zero VOC Semi-gloss Latex

IV. SPECIFICATIONS

A. Section 08 36 00 Metal Overhead Doors (see reissued section at the end of this addendum)

i. REPLACE section to REVISE door style.

B. Section 08 54 13 – Fiberglass Windows
   i. 2.01, A. REVISE Alpen model from "725" to "725L".

C. Section 09 65 00 Resilient Flooring
   i. 2.01, B. REVISE approved manufacturer from "Nora Systems, Inc. "Norament Strada"" to "Nora Systems, Inc. "Norament Grano".

D. Section 12 93 00 - Site Furnishings
   i. 2.02 Benches: REPLACE "Quantity as shown in the landscape plans" to read "Provide (3) benches; location to be coordinated with Owner".
   ii. 2.03 Trash/Ash Cans: REPLACE "Quantity as shown in the landscape plans" to read "Provide (2) units; location to be coordinated with Owner".

E. Section 22 05 14 – Plumbing Specialties
   i. 2.11, A. Grease Interceptor: REVISE interceptor to "Schier Model GB-250, 100 gpm flow rate, 250 gal. liquid capacity, 1,076 lbs. grease capacity."
   ii. 2.11, B. Grease Interceptor: ADD "Alternate grease interceptor to be minimum 750 gallon capacity concrete tank equal to Crest Precast, Inc. Model No. 780-GR."

F. Section 23 09 24 – Temperature Control System and Facility Management Control System
   i. 1.1 ADD section D in its entirety: "Contractor shall provide Integration of system into existing WEBs supervisor per owner instructions."
   ii. 1.3, A. REVISE to read: "The contractor shall be certified and trained by the TCS and FMCS manufacturer and shall be ACI (Authorized Controls Integrator) Honeywell Contractor. The firm must be specializing and experienced in DDC control system installation for no less than 5 years. All engineering and commissioning work shall be done by qualified employees of this manufacturer, or qualified employees of an Authorized Representative of that manufacturer that provides engineering and commissioning of the manufacturer's control equipment."
   iii. 1.3 C REVISE to read: "The contractor must have a service office within 20 miles of the building location. This requirement applies to the actual office location the individuals working on controls work out of. Response Time During warrantee period, must be four (4) hours or less, 24-hours/day, 7 days/week."

G. Section 23 34 00 – HVAC Fans
   i. 2.03 A: DELETE "Cook".

H. Section 31 00 00 – Earthwork for Building
   i. 3.20 A: DELETE sub paragraph 2.

V. **DRAWINGS**

A. Multiple Sheets – Building Systems, Assemblies and Components
   i. Floor 1, Floor 3: REVISE vapor barrier from "10 Mil" to "15 Mil".
   ii. Floor 1, Floor 3: REVISE reinforcement from "6x6W2.1xW2.1" to "6x6 W1.4xW1.4".
   iii. Foundation 1: ADD "Provide 4" rigid insulation **(2" at walls)**(R-10 min.) from top…."

B. Sheet C100 – Site Plan (see reissued sheet as a separate attachment "ADDENDUM 1 REVISED DRAWINGS.pdf on the Bid Express Website)
   i. ADD utility information in terrace space adjacent to Town Center Drive.

C. Sheet S502 – Details

i. Detail 17/S502 ADD "Design Connection to Structure for Minimum 1200# Uplift" to follow "Stand Off Base (By Others)".

D. Sheet A120 – Roof Plan
   i. REVISE "ROOF VENT" notes to read as follows:
      1. Small circles are plumbing roof vents
      2. Large square and small square are mechanical equipment penetrations.

E. Sheet A600 – Door and Frame Schedules
   i. Door Schedule
      1. Doors 101, 108A, 108E: REVISE frame type from "B" to "C".
   ii. Window Schedule
      1. Windows 36, 43, 44, 57: REVISE construction type from "Fiberglass" to "Aluminum".

F. Sheet A700 – Room Finish Schedule
   i. Material List: REVISE RF-1 to read:
      Nora Systems Inc.
      Norament
      Series: Grano
      Color: 4880 Drusy
      Size: ~40" x 40" (1004MM) tile
      Thickness: ~.14" (3.5MM)
   ii. Material List: REVISE RF-2 to read:
      Nora Systems Inc.
      Norament
      Series: Grano
      Color: 4891 Beryl
      Size: ~40" x 40" (1004MM) tile
      Thickness: ~.14" (3.5MM)

G. Sheet E104 – Mezzanine Electrical Plan
   i. ADD to detail 1/E104 Mezzanine Power and System Plan, Three (3) data ports on the west wall adjacent to the Temp. Control Panel for the BAS system. Coordinate the final location with the mechanical contractor prior to installation.

H. Sheet P100 – Foundation Plumbing Plan (see reissued sheet as a separate attachment "ADDENDUM 1 REVISED DRAWINGS.pdf on the Bid Express Website)
   i. REVISE 3" grease waste and 3" sanitary waste to and from grease interceptor to 4". REVISE grease interceptor symbol to reflect specification change. Provide tracer wire in trench for buried non-metallic sanitary piping.
   ii. REVISE location of (3) catch basin floor cleanouts to within 15" of catch basin outlet.

I. Sheet P200 – Waste and Vent Piping Isometric
   i. REVISE waste and vent isometrics to coincide with changes made to Sheet P100.

J. Sheet P201 – Water Piping Isometric
   i. REVISE hose reel vacuum breaker designation from ASSE 1020 to ASSE 1056.

Please acknowledge this addendum on page E1 of the contract documents and/or in Section E: Bidder's Acknowledgement on Bid Express.

Electronic version of these documents can be found on Bid Express at https://www.bidexpress.com/ and the City of Madison web site at http://www.cityofmadison.com/business/PW/contracts/openforBid.cfm

If you are unable to download plan revisions associated with the addendum, please contact the Engineering office at 608-266-4751 receive the material by another route.

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

SECTION E: BIDDERS ACKNOWLEDGEMENT

FIRE STATION #13

CONTRACT NO. 6590

Bidder must state a Unit Price and Total Bid for each item. The Total Bid for each item must be the product of quantity, by Unit Price. The Grand Total must be the sum of the Total Bids for the various items. In case of multiplication errors or addition errors, the Grand Total with corrected multiplication and/or addition shall determine the Grand Total bid for each contract. The Unit Price and Total Bid must be entered numerically in the spaces provided. All words and numbers shall be written in ink.

1. The undersigned having familiarized himself/herself with the Contract documents, including Advertisement for Bids, Instructions to Bidders, Form of Proposal, City of Madison Standard Specifications for Public Works Construction - 2013 Edition thereto, Form of Agreement, Form of Bond, and Addenda issued and attached to the plans and specifications on file in the office of the City Engineer, hereby proposes to provide and furnish all the labor, materials, tools, and expendable equipment necessary to perform and complete in a workmanlike manner the specified construction on this project for the City of Madison; all in accordance with the plans and specifications as prepared by the City Engineer, including Addenda to the Contract Nos. _____ through _____ issued thereto, at the prices for said work as contained in this proposal. (Electronic bids submittals shall acknowledge addendum under Section E and shall not acknowledge here)
2. If awarded the Contract, we will initiate action within seven (7) days after notification or in accordance with the date specified in the contract to begin work and will proceed with diligence to bring the project to full completion within the number of work days allowed in the Contract or by the calendar date stated in the Contract.
3. The undersigned Bidder or Contractor certifies that he/she is not a party to any contract, combination in form of trust or otherwise, or conspiracy in restraint of trade or commerce or any other violation of the anti-trust laws of the State of Wisconsin or of the United States, with respect to this bid or contract or otherwise.
4. I hereby certify that I have met the Bid Bond Requirements as specified in Section 102.5. *(IF BID BOND IS USED, IT SHALL BE SUBMITTED ON THE FORMS PROVIDED BY THE CITY. FAILURE TO DO SO MAY RESULT IN REJECTION OF THE BID).*
5. I hereby certify that all statements herein are made on behalf of _____ (name of corporation, partnership, or person submitting bid) a corporation organized and existing under the laws of the State of _____ a partnership consisting of _____; an individual trading as _____; of the City of _____ State of _____; that I have examined and carefully prepared this Proposal, from the plans and specifications and have checked the same in detail before submitting this Proposal; that I have fully authority to make such statements and submit this Proposal in (its, their) behalf; and that the said statements are true and correct.

_____
SIGNATURE

_____
TITLE, IF ANY

Sworn and subscribed to before me this
_____ day of _____, 20_____.

_____
(Notary Public or other officer authorized to administer oaths)
My Commission Expires _____
Bidders shall not add any conditions or qualifying statements to this Proposal.

Fire Station 13 - Contract No. 6590

SUPPLEMENTAL UNIT PRICES

The following Supplemental Unit Prices will apply in the event that estimated quantities to be included in the Lump Sum Base Bid are different from final measured quantities. A single price shall be bid for each item.

Item No.	Description	Qty.	Unit	Unit Price Bid	Total Amount To Be Included in the Lump Sum Base Bid
1	Specification 03 20 00/12 Section 3.08 Furnish, deliver, fabricate, and install reinforcing steel.	1000	LBS		
2	Specification 05 10 00/22 Section 3.07 Furnish, deliver, fabricate, and erect additional steel.	3000	LBS		
3	Specification 31 00 00/24 Section 3.20 A. 1. Removal of 10% unsuitable soils to 1 foot deep from the building and replace with engineered soils as described in 31 00 00 2.01 A. or H.	45	CY		
4	Specification 31 00 00/24 Section 3.20 A. 3. Removal of unsuitable soils as per the note on Drawing S100 and replace with engineered soils as described in 31 00 00 2.01 A. or H.	45	CY		
5	Specification 32 11 23.33 Section 3.01 2.g. 15% Undercut for paved areas as outlined by 31 05 00 3.05 C.	285	CY		

Bidders Signature Date

Bidders Company Name

Company Address

Phone

Email

8554050
Tx:8453184

KRISTI CHLEBOWSKI
DANE COUNTY
REGISTER OF DEEDS

DOCUMENT #
4985741
05/08/2013 3:45 PM
Trans. Fee:
Exempt #:
Rec. Fee: 30.00
Pages: 3

RETURN TO: City of Madison
Economic Development Division
Office of Real Estate Services
P.O. Box 2983
Madison, WI 53701-2983

Tax Parcel No.: 251-0710-021-0307-7
251-0710-021-0308-5

TEMPORARY LIMITED EASEMENT FOR FIRE STATION #13 GRADING PURPOSES

Metro Tech, L.L.C. ("Grantor"), a Wisconsin limited liability company, located in Dane County, Wisconsin, being the owner of the property located at 6318 and 6334 Town Center Drive, City of Madison, Dane County, Wisconsin, for the sum of Two Thousand Five Hundred Dollars ($2,500) and and other valuable considerations, the receipt whereof is hereby acknowledged, does grant, set over and convey to the **City of Madison** ("City"), a Wisconsin municipal corporation located in Dane County, Wisconsin, a temporary limited easement ("TLE") for filling, sloping and grading, upon, over and across the following parcel depicted on attached Exhibit A and described as follows:

Easement area: 10,522.36 square feet / 0.242 acre

Parts of Lots 2 & 3, CSM 12761, recorded the 8th of September, 2009, in Volume 80 of Certified Survey Maps, Pages 304-307, as document no. 4593131, being located in the Northeast one-quarter (1/4) of Section 2, Town 7 North, Range 10 East, City of Madison, Dane County, Wisconsin, more particularly described as follows:

Beginning at the Southeast corner of said Lot 3, also being on the Northerly Right-of-Way of Town Center Drive as presently located, thence N 00°20'14" E, along the common lot line of Lots 1 & 3, said CSM 12761, 181.58 feet; thence continuing along said common lot line, N 29°17'03" E, 79.30 feet; thence N 89°38'54" E, along the common lot line of Lots 1 & 2, said CSM 12761, 248.01 feet, to a common corner of said Lots 1 & 2; thence N 18°11'42" E, on a northeasterly extension of the common lot line of Lots 1 & 2 that is adjoining and southerly to, the previously mentioned common corner, 21.10 feet, to a point on a line that is 20 feet north of and parallel to, as measured by right angles to, the common lot line of said Lots 1 & 2; thence S 89°38'54" W, along said line that is 20 feet north of and parallel to, the common lot line, 266.35 feet; thence continuing along a line that is 20 feet northwest of and parallel to, the common lot line of said Lots 1 & 3, S 29°17'03" W, 96.10 feet; thence continuing along a line that is 20 feet west of and parallel to, the common lot line of said Lots 1 & 3, S 00°20'14" W, 180.41 feet, to a point on the south line of said Lot 3, also being on the Northerly Right-of-Way of Town Center Drive as presently located; thence along the said south line and right-of-way line, being a curve to the left, convex to the Southwest, having a radius of 167.00 feet, and a long chord that bears S 72°05'40" E, 20.98 feet, to **the point of beginning**.

Bearings are referenced to CSM 12761 which is referenced to the East Line of the NE ¼ of Section 2, T 7 N, R 10 E, assumed to bear S 00°21'18" E.

The Temporary Limited Easement is subject to the following conditions:

1. The purpose of this TLE is to allow the City to perform sloping and grading on lands located outside of Lot 1, CSM 12761, as recorded on September 8, 2009, Volume 80, Page 304-307, Doc # 4593131 at 4229 Lien Road, in association with City Engineering Contract No. 6590 and Project No. 53W1152.

2. The City's use of the TLE shall be for construction, sloping and grading purposes including, but not limited to, the right of ingress and egress, the right to stockpile material, the right to operate and store necessary equipment thereon, and the right to preserve, protect, remove or plant thereon any vegetation that the City may deem desirable to prevent erosion of the soil.

3. Construction shall be performed and completed in good and workmanlike manner and shall not interfere with or endanger the use of the abutting land owned by the Grantor.

4. City will promptly restore the TLE Area after completion of the construction and/or grading of the TLE Area (or as soon thereafter as weather reasonable permits) and in a manner satisfactory to the Grantor.

5. The Grantor reserves the right to use and occupy the TLE Area in a manner consistent with the rights conveyed herein, provided that such use and occupancy shall not interfere with or disturb the construction and/or grading of the TLE Area.

6. This TLE shall terminate upon completion of the construction described in City Engineering Division Contract No. 6590, or a term of eighteen (18) months commencing on the date hereof and automatically expiring on June 1, 2014, unless mutually extended by the parties; whichever occurs first.

Dated this 2nd day of May, 2013.

Metro-Tech, L.L.C.

By: Frederick J. Campbell
Frederick J. Campbell
The Cascade Group, LLC

State of Wisconsin)
)ss.
County of Dane)

Personally came before me this 2nd day of May 2013, the above named **Fred Campbell**, President & Chief Financial Officer, of Wall Land Investment LLC, known to me to be the person who executed the above and foregoing instrument and acknowledged that he/she executed the foregoing instrument as such officer as the deed of such corporation, by its authority.

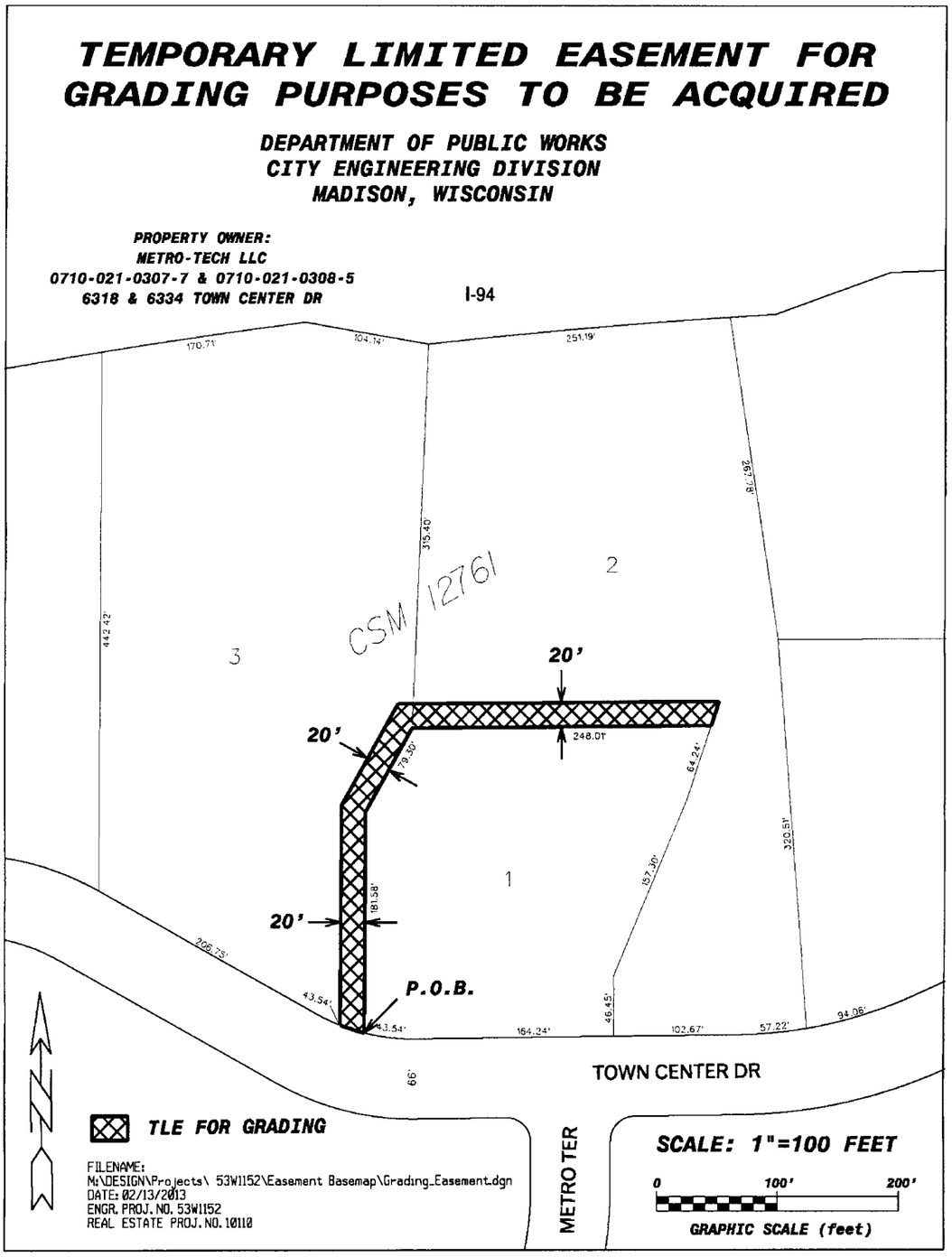
Monica J. Slaght
Notary Public, State of Wisconsin
Monica J. Slaght
Print or Type Name
My Commission: 1.3.2016

This document is authorized by City of Madison Common Council Resolution Enactment No. RES-13-00088, File ID No. 28811, adopted February 5, 2013.

City Engineering Division Project No. 53W1152
Drafted by the City of Madison Real Estate Section. Project No. 10110

EXHIBIT A

TEMPORARY LIMITED EASEMENT FOR
FIRE STATION #13 GRADING PURPOSES



Viewers are advised to ignore any illegible text on this map. It is presented to show spatial relationships only.

Authorized by _____ Date 6 May 2013

Exhibit B
PROJECT QUALITY MANAGEMENT PLAN

City of Madison

Fire Station 13

6350 Town Center Drive

Quality Initiative Outline

A. PURPOSE

The intended purpose of the Quality Management Plan is to establish a formal program to ensure compliance of the construction effort with the Contract Documents.

The goal of this Quality Management Plan is to delineate individual quality management personnel responsibilities, and to instill in *each worker* on the project the attitude that attention to quality and "right the first time" is the only acceptable performance.

ESTABLISHING EXPECTATIONS:

Open communication between The City of Madison, Consultants of the City of Madison, it's General Contractor, and all subcontractors is a top priority. Preparatory Meetings are held prior to beginning a new scope of work to establish quality expectations. The contractor and subcontractor's individual responsible for field quality control, typically the foreman, must be present at this meeting. These meetings are conducted with the understanding that many factors influence the reasonable interpretation of the contract requirements such as the foreman's individual perspective based upon past Trade practices, reading of the plans and specifications, and the innate ability to provide what was intended rather than what was contracted. The Project Quality Management Plan's effort to establish consensus by discussing expectations before the work has begun is essential.

B. SCOPE

The City of Madison has the expectation that their project, Fire Station 13, will be built to meet or exceed the quality specified and designed in the Contract Documents. It is the responsibility of the General Contractor and their Subcontractors to provide and maintain an effective Quality Management Program throughout the duration of the contract at the City of Madison's direction. To accomplish the goal of construction in compliance with the Contract Documents, all Contractors shall ensure that sufficient inspections and tests of all items of work, including that of subcontractors, will be performed to ensure quality of materials, workmanship, functional performance, and conformance to specifications and drawings.

C. ORGANIZATION

The City of Madison shall be the lead in the Quality Management Plan and have a designated Quality Director that works directly with the project team. The General Contractor shall provide a designated Quality Manager. The Quality Manager will take the lead in implementing the Quality Management Plan with their subcontractors and self-performed work.

1. Quality Director's Responsibilities: Randy Wiesner, City of Madison

a. Provide oversight and direction to the Quality Manager. Support the Quality Management Plan with contractual commitments - inclusion of Quality Management plan in bidding documents and Contract with General Contractor.

b. Oversee the development and execution of the Quality Management plan - contribute and review the plan, insuring that the end outcome meets and/or exceeds the City of Madison's expectations with regards to quality.

c. Perform Preconstruction meeting between the City of Madison and the General Contractor.

d. Attend/participate in all Preparatory meetings and Initial Inspections. Participation in follow-up inspections will be discretion of the Quality Director. Provide contractual input in

the development of Preparatory meetings.

e. Represent interests of the City of Madison. The Quality Director will have final determination on level of quality required for the project.

2. Quality Manager's Responsibilities: General Contractor Representative

a. Implement and maintain the project Quality Management Plan. This includes the delegation of certain applicable responsibilities to the General Contractor team members and their Subcontractors as required. Weekly quality coordination shall be lead by the Quality Manager through regular progress meetings.

b. Participate in Preconstruction Meeting with City of Madison prior to start of work.

c. Perform Preparatory Meetings, initial and follow-up inspections for each phase of work and/or each Subcontractor to ensure that materials are installed in accordance with the drawings and specifications. Quality Manager to maintain documentation of these activities.

d. The Quality Manager shall be present at the site whenever work is in progress and shall have the authority to stop any nonconforming work. All work shall be inspected prior to being covered by succeeding work activities.

e. Review all drawings and specifications of each Scope prior to Preparatory Meetings. Identify any potential problem areas and review these with Subcontractor/s.

f. Review **and modify or correct** (as needed) all submittals for approval prior to forwarding to the architect. Submittals must be thoroughly compared to the Contract Documents before they are submitted to the A/E for approval. Non-conforming submittals must be returned to the Subcontractor for correction prior to submission to A/E.

g. Ensure coordination of work with the shop drawings for the various trades. Make sure shop drawings show adjacent systems and coordinate properly with these systems.

h. Maintain and manage a Non-Conformance Log for all non-conforming items observed during inspections on the project. The Quality Manager shall be responsible for verifying that all non-conforming items are resolved.

i. Maintain photos of work in place during all inspections. Tie photos to Inspection Reports for filing purposes.

j. Review Specifications for Hazardous Materials and assure that all corresponding MSDS sheets are maintained on the project site.

k. Review Crane Pick Plans for safety and quality.

l. Ensure that subcontractors comply with the Quality Management Plan including Subcontract language binding them to the Project Quality Management Plan.

m. Make off-site inspections of fabrications of assemblies as required.

n. Coordinate all required inspections and third-party testing services to include, but not limited to - above-ceiling, in-wall, under-floor, and punchlist inspections and contact all subcontractors/jurisdictional authorities or inspectors (if required) before any inspections.

o. Develop inspection sheets for each area and inspection type for documenting, in a consistent manner, the results of each inspection.

p. Any direction given from any entity (i.e. Design Team, Owner's representative,

Commissioning agent, etc.) must be reviewed prior to execution of rework or revision.

4. General Contractor/Subcontractor Supt./Foreman's Responsibilities:

a. The Contractor/Subcontractor Superintendent/Foreman will take the lead in implementing the Quality Management Plan in the field for their scope of work.

b. Ensure conformance of all items of work to applicable specifications and drawings with respect to the materials, workmanship, construction finish, functional performance, and identification.

c. Take such corrective action as required, bringing materials and installation into compliance with the requirements of the specifications and drawings.

d. Participate in all Preparatory Meetings related to your scope of work. Actively participate in the preparation for the Preparatory Meetings.

e. Assist in initial and follow-up inspections as required.

f. Upon a change in lead personnel, General Contractor shall notify City of Madison (prior to change) to allow re-preparatory meeting to be scheduled and performed.

5. Architect/Engineer Representative Responsibilities:

a. Attend/participate in all Preparatory meetings and Initial Inspections as able. Participation in follow-up inspections will be at the discretion of the Architect/Engineer Representative and Quality Director.

D. PROCEDURES

1. In order to not burden the project with unnecessary paperwork (inspections, procedures, notices, etc.) the Quality Manager with the Quality Director will define each feature of work that shall comply to the Three Part Quality Strategy during the Preconstruction meeting between the City of Madison and the General Contractor.

2. Three Part Quality Strategy – Meetings and inspections shall be required for each independent work activity as follows:

   a. *Preparatory Meetings (see Appendix 3):* Preparatory meetings will be performed approximately one week prior to beginning each feature of work. Quality Manager and Contractor/Subcontractor Superintendent/Foreman MUST attend these meetings. Quality Director and Architect/Engineer Representative MUST be invited, and are suggested to attend these meetings. **If there is an additional crew added or the on-site Foreman is removed/replaced, or if the entire crew is off-site for a period of (2) months or longer, or if the Owner's expectations have changed, there MUST be a new meeting or a re-prep meeting held.** These meetings are held to identify the following:

      I. Identify the Owner's and General Contractor's expectations.

         a. Review the Quality Program and clearly establish the expectations for the work.
         b. Review of approved submittals and all other Contract Documents, including design, with the foremen or supervisors directly responsible for the performance of the work.
         c. Review General Contractor/Subcontractor's plan for performing the work.
         d. Review required testing
         e. Examination of the work area to ascertain that all preliminary work has been completed and those means/methods conform to the Contract Documents.
         f. Review Inspection Sheets

   b. *Initial Inspections* will be performed after work begins on a representative portion of the

particular feature of work and will include examination of the quality of workmanship. The time elapsed after work has begun is somewhat dependent on duration of activity. **This inspection MUST be scheduled at the Preparatory Meeting**, with the inspection form executed/developed. Any observations that are not completed at the time of initial inspection shall be re-inspected and documented prior to covering up any work. The initial inspection is crucial to lay out the quality expectations of the work; all affected Subcontractors must be involved with this initial inspection. The Quality Manager, and Contractor/Subcontractor Superintendent/Foreman must be in attendance at this first inspection. The Quality Director and Architect/Engineer shall be invited to be involved with this initial inspection.

c. *Follow-up Inspections:* Follow-up inspections shall be performed at a frequency as determined by the scope of the work, the criticality of the work, and by the Quality Director. Documentation of items of non-compliance and correction of those items will be distributed in the Non-Conformance Log. Inspections will be performed, as required, as any particular feature of work progresses to ensure compliance with contract requirements, including control testing, until completion of that feature of the work. The Quality Director and Architect/Engineer will participate in follow-up inspections at their discretion.

3. After all inspections, the following procedure shall be followed:
   - Complete inspection form, and fill in date and other information on Inspection Log.
   - Turn in Inspection Report to the Quality Director.
   - It is the Quality Manager's responsibility to verify and document completion (on the inspection form) of any non-compliance items.

4. On-site material inspections will be performed on a representative portion of the materials delivered to verify compliance with the approved submittals prior to installation.

5. Mock-ups, if required by the Contract Documents, will be constructed to establish a standard of quality for a feature of work.

6. Critical Follow-up Inspections: The following list of inspection examples will be completed by all Subcontractors; to assure that construction normally "covered-up" is reviewed for contract conformance. These inspections are critical to assuring the minimum required level of quality is achieved for the project.

   a. Mock-Up Inspection
   b. Concrete/Rebar Placement Inspection
   c. Enclosure/Roofing Inspection
   d. Priority/Coordination Wall Construction Inspection
   e. In Wall Rough-in and Backing Verification
   f. Fire-Rated Walls, Wall Finishes, and Floor Coverings
   g. Above Ceiling Inspection
   h. Underground Utilities
   i. Embedded materials
   j. Under Floor Inspection

8. Compliance Testing is to be performed on each feature of work as required by the Contract Documents. Quality Manager to identify the tests required for each scope of work and log all tests to ensure that they are completed and re-tested for contract compliance.

E. DOCUMENTATION

1. Documentation of Preparatory Meetings, initial and follow-up inspections, miscellaneous reports (including meeting minutes and inspections) shall be prepared and maintained by the

Quality Manager. Copies to be provided to the Quality Director.

2. Periodic reviews, as deemed necessary by the Quality Director, of the Project Quality Management Plan will be conducted. The purpose of the review is to ensure that an updated and effective program is being implemented on the project site.

QUALITY MANAGEMENT PLAN APPENDICES AND POLICIES

1. **Obligation to Quality for All Workers**
2. **Preconstruction Meeting Definition and Agenda**
3. **Preparatory Meeting and Re-Prep Meeting Definition and Agenda**
4. **Site Utilization Plan - Provided General Contractor**
5. **DRAFT Project Definable Feature of Work Log - Verified during Preconstruction Meeting**
6. **Inspection Checklist Template - Quality Manager to develop final**
7. **Submittal and RFI Review Policy and Checklists - developed by Project Team**
8. **Plan to Prevent Water Release Events - developed by Quality Manager**
9. **Punchlist Plan - developed by Project Team**

Appendix 1

Fire Station 13, Madison, WI – Project Guidelines

Chosen Obligation for Quality – Zero Punchlist

Quality must be everyone's responsibility, and all workers shall have an obligation for the quality of their work. The five core values for quality on this project:

1. Protect Materials from Water/Weather Damage

Save the costly removal and re-order of materials so they can be installed properly the first time!

- ☐ All materials stored on wood cribbing or pallets (not on drywall scraps)
- ☐ Materials are adequately covered/protected based on their proximity to wet areas

2. Respect The Work of Others

A person who doesn't respect other people's work, can't be expected to have a much higher opinion of their own work. How we treat others is a reflection on our true attitudes.

- ☐ Do not store tools or materials near (or on top of) other contractors' systems or materials.
- ☐ Roofing access – must be coordinated with the General Contractor
- ☐ Notify the General Contractor if any materials are damaged so they can get fixed!

3. Housekeeping / Cleanliness / Infection Control

There is a correlation between a clean site and a high quality of work. Keeping a clean area reduces accidental damage, allows everyone to work efficiently, and gives your finished work a better appearance.

- ☐ All eating and drinking of non-water fluids will be limited to the designated lunch/eating area. **No food, soda/juice, chewing tobacco, or seeds outside of this area.**
- ☐ **No tobacco - smoking or other, will be allowed on the project site.**
- ☐ Stop work before the end of the day and pick up scrap materials **daily.**
- ☐ All trash and scraps to be put in containers and taken to proper dumpsters **daily.**
- ☐ Keep access to stored materials free of debris.
- ☐ Cleaning, sweeping, and removing trash and extra materials **daily**. Do not just sweep into piles.
- ☐ Carpeted areas are off-limits if there is not protection on the carpet.

4. Manage and Monitor Deficiencies

Mistakes are opportunities for us to better define a construction process, but only if they are spotted, remedied, and learned from.

- ☐ When a mistake is discovered, correct or report it immediately. Involve your foreman or the General Contractor Superintendent to arrive at the correct fix for the situation.
- ☐ Do not cover up mistakes or damaged materials.
- ☐ Share these learning experiences with your co-workers so that they can avoid similar mistakes as well.

5. Zero Punchlist

Our project goal is to finish on schedule without a punchlist at substantial completion.

- ☐ Carefully examine your own work before allowing an inspection.
- ☐ If deficiencies in the finish product are found, a deadline for their correction will be established. If the deadline cannot be met, involve the General Contractor On-Site Representative.
- ☐ When deficiencies are remedied, report to the General Contractor On-Site Representative that those items have been addressed.

Appendix 2

PRECONSTRUCTION MEETING. The Preconstruction Phase will consist of, at a minimum, one Preconstruction Meeting between the City and the General Contractor and one Preparatory Meeting for each Subcontractor/discipline of work (although multiple meetings may be required as determined by the Quality Director and Quality Manager). The Preconstruction Meeting is to be held between the City and the General Contractor two weeks after the award of contract as applicable.

1) **Attendance.** The Preconstruction Meeting will be conducted by the Quality Director, with participation of the Quality Manager, General Contractor Project Manager (if different), General Contractor Superintendent/Foreman, and their designees. Any subcontractor attendance should be included as necessary. Project representatives and appropriate inspection agencies should also be invited.
2) **Agenda.** The Quality Director, with assistance from the Quality Manager and Contractor Project Manager, will develop a project-specific agenda for the meeting using the template attached. The template identifies four major topics of discussion: safety, quality, submittals, and administration of the plan. Expectations in these categories are to be clearly defined.
3) **Meeting Minutes.** Following the meeting the Quality Director, or designee, is responsible for publishing minutes of the meeting. The minutes are to be distributed to all parties in attendance and other parties (i.e. designers, Team representatives, etc.) as appropriate within one (1) week.

PRE-CONSTRUCTION MEETING

PROJECT NAME: Fire Station 13, Madison, WI
CONTRACT NUMBER: 6437 **PROJECT NUMBER:** 53W1152
ARCHITECT: Zimmerman Architechtural Studios, Inc
MEP Engineer: Harwood Engineering Consultants, LTD
Civil Engineer: Harwood Engineering Consultants, LTD
OWNER: City of Madison Fire Department
GENERAL CONTRACTOR: _____ **DATE:**

GOAL:
This meeting is to identify clearly the ***expectations*** of the City of Madison and the General Contractor in order to properly integrate the Quality Management Program on this project. The formation of a Construction TEAM, through clear communication and mutual cooperation, is critical to the successful completion of this project.

I. Safety

A. Pre-construction submittals, due before on site mobilization

- ☐ Written Site Specific Safety Plan – Complete with Site Specific Safety Binder - **distributed at this meeting**; turn back to the City *2-weeks prior* to Preparatory Meeting
- ☐ Company Safety Policy
- ☐ Designated project safety representative
- ☐ 100% PPE (No Exceptions)

II. Quality

- Onsite Quality Manager Designated for Project _____
- Contract Document Review
  - Confirm have current set of drawings. Any RFIs? Most Recent Issue # Received?
    - **Hand out copy of latest RFI Log and Drawing Issue Log for review.** Any RFI's/Drawing Issues need to be distributed to Contractor?
    - Contractor to verify current set of drawings prior to Prep Meeting.
  - Submittal requirements and status – **see attached submittal log (developed by Contractor)**
    - Discuss submittal log and submittal quality expectations
    - Identify critical submittals, long lead time items.
    - Shop drawing sequencing/phasing –
      Building Area Expected Date Install Date
      -
      -
    - Coordinate shop drawings with adjacent trades/attachment to adjacent surfaces, etc. Show adjacent trades/systems on shop drawings, as applicable.
    - LEED Submittals to The City (requirement for each contractor)
    - LEED Submittals to Architect

- Develop/review Management Plan for this project
  - Finalize Definable Features of work log and determine each scope of work that will be tracked and plan for Preparatory Meetings for those scopes of work
  - Preparatory Meetings (Will be scheduled for *insert date and time*) – On-site Superintendent / Lead **Foreman attendance is mandatory**. If/when 2nd Crew mobilizes, meeting will be held again with new foreman. If there is a Foreman change, a new preparatory meeting will be required.
  - 3-Phase inspection process (Preparatory Meeting, Initial, & Follow-up)
    - Inspection Checklists – Initial checklist will be assembled by the Quality Manager and forwarded to Subcontractor for review and comment prior to first preparatory meeting.

III. Construction

- To be reviewed in more detail at the Preparatory Meeting (with foreman present)
- Mobilization – how long before start date? What materials/equipment mobilized?

- Schedule
  - Review CPM Schedule for: Comments:
    - Scheduled Start Date: _____ _____
    - Scheduled Duration: _____ _____
    - Material Delivery Expectations:
  - Multiple Crews?
- Permit/environmental requirements and responsibilities – Any?
- Communication between City of Madison and the General Contractor's second tier subcontractor or supplier shall be through the General Contractor.

IV. ADMINISTRATIVE ITEMS

A. Submittal and/or action **items required prior** to beginning work:

ITEM	YES	NO	REMARKS/DATE EXPECTED
Insurance Certificates			
Bonds – Performance and Payment			
Permits Required			
List of Major Material Suppliers			
List of Management Personnel – Manager, Superintendent, Lead Foreman			
Names and numbers of Quality and Safety Representative			
Safety Statement & Site Specific Plan			
Executed Contract Agreement			

- Paperwork Procedures
  - Any paperwork submitted to this project that involves final cost or schedule revisions MUST be either **faxed** or **mailed** to the City ATTN: Randy Wiesner. Emails of cost- or schedule-related items will not be accepted. This also includes Payment Applications.
  - All paperwork **must** reference the proper Issue, RFP, FI, or change numbers to assist the City in reviewing the paperwork's history.

- Extra Work and Backcharge Procedures
  - Contractor shall not proceed with the performance of any work outside of their scope of Work without prior written authorization from the City.

- Project Payment Procedures
  - Per Construction Documents

- Project Close Out
  - Review Punch List Procedure – Goal is Zero Punchlists.

We have discussed the expectations identified in this form and agree to the expectations as identified.

_____ _____
General Contractor Representative City of Madison Representative

_____ _____
Printed Name/Title Printed Name/Title

_____ _____
Date Date

Appendix 3

PREPARATORY MEETINGS. The Preconstruction Phase will consist of, at a minimum, one Preparatory Meeting for each Subcontractor/work discipline (although multiple meetings may be required as determined by the City). A Preparatory Meeting is to be held with each subcontractor one week before the mobilization and commencement of scope activities on-site.

1) **Attendance.** The Preparatory Meeting will be conducted by the Quality Manager, Project Manager of scope, Contractor Superintendent/Foreman, and their designees. Any subcontractor attendance should be included as necessary. The Quality Director and Architect/Engineer MUST be invited and are suggested to attend if able. ***This meeting WILL NOT BE HELD if the Foreman cannot be in attendance. AIso – if there is a Foreman change during the project or if an additional Foreman is added during the project, another Preparatory Meeting will be held with this individual*.** Project representatives and appropriate inspection agencies should also be invited.
2) **Prior to meeting.** The Quality Manager will transmit a scope-specific preliminary meeting agenda, and draft Initial Inspection Checklist to the Subcontractor Project Manager before the Preparatory Meeting. Allow enough time for subcontractor review prior to the meeting.
3) **Agenda.** The Quality Manager, with assistance from the Quality Director and Contractor Project Manager, will develop a Contractor-specific agenda for the meeting using the template attached. The template identifies the major topics of discussion: safety, quality, detailed drawing and scope review, scheduling/coordination, construction, materials delivery and storage, and administration of the Plan. The Contract Documents, past project experience, and related best practices should be used as a resource when creating this agenda. This agenda is to be sent to the Subcontractor/supplier (3) days in advance of the meeting. Expectations in these categories are to be clearly defined.
4) **Meeting Minutes.** Following the meeting the Quality Manager, or designee, is responsible for publishing minutes of the meeting. The minutes are to be distributed to all parties in attendance and other parties (i.e. designers, Team representatives, etc.) as appropriate within one (1) week.
Re-Prep Meetings. For any Foreman change, any foremen that are added on-site, or for any companies that are off-site for greater than (2) months at a time, a Re-Preparatory Meeting shall be held (1) week in advance of this change, reviewing the previous Preparatory Meeting and any additional quality events that have occurred subsequent to the original Preparatory Meeting.

Appendix 3

PREPARATORY MEETING AGENDA

Project Name: Fire Station 13, Madison, WI

Project # 53W1152, Contract # 6590

Date:

Scope of work:

Specification Section:

Subcontractor(s):

Attendants:

Name	Company	Title

1. Subcontractor Foreman/Foremen name(s)/phone(s):_____

2. Review specific requirements of the Project Safety Manual

   - ❑ Project Safety Manual is signed and returned
   - ❑ Copy of MSDS sheets on site
   - ❑ 1st Day/1st Hour Orientation for each employee
   - ❑ 2nd orientation (pre-task planning) first week on project
   - ❑ 3rd orientation (project zero injury) second week on the project
   - ❑ Top safety concerns with this scope (discuss):
     1. _____
     2. _____
     3. _____

   - ❑ Contractor Safety On-Site Representative name/title/phone:_____

3. Discuss quality expectations:

   - ❑ Quality Program Initiative – discuss high-points of changes/requirements
   - ❑ Contractor Quality On-Site Representative name/title/phone: _____
   - ❑ Review quality & field inspection guidelines
   - ❑ Discuss repetitive deficiencies
   - ❑ Review tolerance and finish requirements per the specifications
   - ❑ Review subcontractor procedures to meet quality goals. Do they have a Quality Plan?
   - ❑ Quality Control Walks – once/month/contractor, as applicable

4. Review the testing and inspection requirements:

   - ❑ Initial inspection and follow up inspections. Review an example inspection report for this scope of work and come to an agreement on its checklist items. **Contractor should bring an example inspection checklist to the meeting to review with the Quality Director and Quality Manager.**
   - ❑ Establish the date, time, and location of the initial inspection:_____
   - ❑ Establish the frequency of the follow-up inspections:_____
   - ❑ Establish the procedure for how the contractor will schedule tests or inspections (name and number of contact, minimum notification time, etc)

5. Review the Contract Scope of Work

   - (insert important/specialized scope lines only – do not insert entire scope)

6. Schedule/Phasing/Coordination

   - ❑ Scheduled start date:
   - ❑ Mobilization date:
   - ❑ Sequencing of work/Schedule Dates for Each area:
   - ❑ Scheduled Finish Date:
   - ❑ Coordination with which contractors work:

7. Review the contract drawings, specifications, shop drawings and submittals.

   - ❑ Review current construction document set.
   - ❑ Review plans and details of the work. Open forum to discuss constructability issues - document new/created RFIs as needed.
   - ❑ Review shop drawings for architect/engineers comments
   - ❑ Review LEED Submittal requirements

8. Jobsite Work Rules:

   - **No food/drink outside the designated area.** The only exception is water.
   - **No tobacco (smoking, chewing, or other) shall be allowed on the project site.**
   - **All materials should be stored in a dry environment on cribbing.** Wet materials shall be removed from the project.
   - **Review Jobsite Work Rules.** Discuss any rules that are particular to this Scope of Work, and have the foreman review it with his/her workers at mobilization.

9. Discuss material delivery and storage:

   - ❑ Delivery dates and what is to be included on these dates
   - ❑ Hoisting requirements
   - ❑ Storage issues related to productivity and housekeeping on the project
   - ❑ Do not store materials where they can be damaged by other trades or by the weather

10. Inspection of Preliminary Work

    - ❑ Check that work preceding this scope of work is inspected and approved
      Any preceding work still need to be completed? _____
    - ❑ Determine if all layout and field measurements are completed
    - ❑ What temporary utilities are needed and when? _____
    - ❑ Check to see that all delivered materials match the approved submittals

We have discussed items on this agenda and are ready to begin installing this scope of work.

Subcontractor Quality Manager	**Quality Manager**
_____	_____
Signature and Date	Signature and Date
_____	_____
Printed Name	Printed Name

Appendix 3

RE-PREP MEETING AGENDA

Project Name: Fire Station 13, Madison, WI

Project # 53W1152, Contract # 6590

Date:

Scope of work:

Specification Section:

Subcontractor(s):

(re-prep organizer make sure to review the previous prep meeting and add any hot topics/discussion points from the original meeting***)***

Attendants:

Name	Company	Title

1. Reason for re-prep (additional foremen, replacement foreman, additional scope, returning to site, etc):_____

   New contractor Foreman/Foremen

Name	Phone	Scope	Replacing (if applicable)

2. Review specific Safety requirements for this scope:

   - ❑ 1st Day/1st Hour Orientation for each employee
   - ❑ 2nd orientation (pre-task planning) first week on project
   - ❑ 3rd orientation (project zero injury) second week on the project
   - ❑ Top safety concerns with this scope (discuss):
     1. _____
     2. _____
     3. _____

3. Discuss quality expectations:

   - ❑ Quality Program Initiative – discuss high-points of changes/requirements
   - ❑ Top repetitive deficiencies for your scopes to date (based on inspections):
     1. _____
     2. _____
     3. _____
     4. _____
     5. _____

4. Review the testing and inspection requirements:

   - ❑ Follow-up inspections. Review the inspection report for this scope of work; add any additional items mentioned by the new foreman
   - ❑ Verify the frequency of the follow-up inspections:_____
   - ❑ Verify the procedure for how the contractor has been scheduling tests or inspections (name and number of contact, minimum notification time, etc)

5. Schedule/Phasing/Coordination

   - ❑ Current location of work:
   - ❑ Review Interior Milestone Matrix and sequencing requirements
   - ❑ Current status (ahead/on/behind):
   - ❑ Coordination with which contractors work:

6. Review the contract drawings, specifications, shop drawings and submittals.

   - ❑ Based on the work to-date, what drawing and/or specification requirements are different than normal, or what requirements are the Architect really focusing on? What shop drawing mark-ups should the foreman be aware of?
   - ❑ What Drawing Issue/FI should the foreman be aware of?

7. Jobsite Work Rules:

   - **No food/drink outside designated areas.**
   - **No tobacco (smoking, chewing, or other) shall be allowed on the project site.**
   - **All materials should be stored in a dry environment on cribbing.** Wet materials shall be removed from the project.
   - **All work areas will be thoroughly cleaned before the end of each work day.**
   - **Review Jobsite Work rules.** Have foreman review this listing separately from this meeting.

8. Discuss material delivery and storage:

   - ❑ Delivery dates and what is to be included on these dates
   - ❑ Hoisting requirements
   - ❑ Do not store materials where they can be damaged by other trades or by the weather

We have discussed items on this agenda and are ready to begin installing this scope of work.

Subcontractor Quality Manager	**Quality Manager**
_____	_____
Signature and Date	Signature and Date
_____	_____
Printed Name	Printed Name

Appendix 4
Site Utilization Plan

This plan shall be developed by the General Contractor and Quality Director.

Appendix 5
Definable Feature of Work Log

Appendix 6
Inspection Checklist Template

Appendix 7

Fire Station 13, Madison, WI

Contractor/Subcontractor Quality Management Plan

Contractor: **Project:**

Scope: **Date:**

Crew

Quality Supervisor**:** Designated on-site person responsible for quality on project.

Other key personnel: Names of Superintendents, foremen, number of crews, contact info etc.

Equipment

Equipment used: What equipment will be used on the project and why?

Materials

Approved products: Describe all products used to execute the work and why?

Schedule

Sequence of work: Give a general description of the flow of work and any conditions that may disrupt this flow (coordinate with General Contractor superintendent to develop sequence).

Installation

Predecessor work: What needs to be in place before your work begins? Is there any criteria for accepting this work before beginning? Are there special access requirements (opening size, corridor width, etc.) for materials/equipment?

QC measures: What procedures will be used to control quality in the field? List testing/inspections/"pre-punchlists" performed by the subcontractor, frequency, etc.

Environmental controls: Describe any product installation environmental restrictions (temperature, moisture, humidity, etc.)

Product data specs: Describe any key manufacturer specs or industry standards and how they will be met.

High-risk quality activities: Describe any special facets of the work that are particularly difficult, unique, or have a history of failure in the company/industry and any special QC measures.

Non-conforming work: Describe the process of identifying work that does not comply to Contract Documents and steps for corrective action.

Appendix 8
Water Release Plan

This process and related supporting documents will be developed as the work progresses.

Appendix 9

Punchlist Plan

This plan will be developed by the Project Team as the project progresses.

Section 08 36 00 – Overhead Doors

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work Included:
   1. Glazed Aluminum Sectional Overhead Doors.
   2. Electric Operators and Controls.
   3. Operating Hardware, tracks, and support.

B. Related Work Specified Elsewhere:
   1. Section 06 09 00 – Rough and Finish Carpentry
   2. Section 05 50 00 – Miscellaneous Metals
   3. Section 07 90 00 – Caulking and Sealants
   4. Division 26 – Electrical Work

1.02 REFERENCES

A. ANSI/DASMA 102 - American National Standard Specifications for Sectional Overhead Type Doors.

1.03 DESIGN / PERFORMANCE REQUIREMENTS

A. Wind Loads: Design and size components to withstand loads caused by pressure and suction of wind acting normal to plane of wall as calculated in accordance with applicable code.

B. Wiring Connections: Requirements for electrical characteristics.
   1. 115 volts, single phase, 60 Hz.

C. Single-Source Responsibility: Provide doors, tracks, motors, and accessories from one manufacturer for each type of door. Provide secondary components from source acceptable to manufacturer of primary components.

1.04 SUBMITTALS

A. Submit under provisions of General Conditions and Division 01.

B. Product Data: Manufacturer's data sheets on each product to be used, including:
   1. Preparation instructions and recommendations.
   2. Storage and handling requirements and recommendations.
   3. Installation methods.

C. Shop Drawings: Indicate plans and elevations including opening dimensions and required tolerances, connection details, anchorage spacing, hardware locations, and installation details.

D. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

E. Operation and Maintenance Data.

F. USGBC LEED Submittals:
   1. Recycled Content: MR4
      a. Indicate recycled content; indicate percentage of pre-consumer and post-consumer recycled content per unit of product.
      b. Indicate relative dollar value of recycled content product to total dollar value of product included in project.
      c. If recycled content product is part of an assembly, indicate the percentage of recycled content product in the assembly by weight.
      d. If recycled content product is part of an assembly, indicate relative dollar value of recycled content product to total dollar value of assembly.
   2. Local/Regional Materials: MR5
      a. Sourcing location(s): Indicate location of extraction, harvesting, and recovery; indicate distance between extraction, harvesting, and recovery and the project site.
      b. Manufacturing location(s): Indicate location of manufacturing facility; indicate distance between manufacturing facility and the project site.
      c. Product Value: Indicate dollar value of product containing local/regional materials; include materials cost only.
      d. Product Component(s) Value: Where product components are sourced or manufactured in separate locations, provide location information for each component. Indicate the percentage by weight of each component per unit of product.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum five years documented experience.

B. Installer Qualifications: Authorized representative of the manufacturer with minimum five years documented experience.

C. Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories, Inc. acceptable to authority having jurisdiction as suitable for purpose specified.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened labeled packaging until ready for installation.

B. Protect materials from exposure to moisture until ready for installation.

C. Store materials in a dry, ventilated weathertight location.

1.07 PROJECT CONDITIONS

Pre-Installation Conference: Convene a pre-installation conference just prior to commencement of field operations, to establish procedures to maintain optimum working conditions and to coordinate this work with related and adjacent work.

1.08 WARRANTY

Warranty: Manufacturer shall warrant overhead door to be free from defects in materials and workmanship for a period of one (1) year from date of substantial completion of project.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Approved Manufacturers:
In order to establish a standard of design and quality, this specification is based on aluminum overhead doors with insulated glazing as manufactured by:
- Overhead Door Corp., Lewisville, TX 75067.
  Toll Free: (800) 275-3290.
  “521 Series Aluminum Doors”

Equal products by the following manufacturers which meet the requirements of this specification are also approved:
- Haas Door, "CA-220"
- Wayne Dalton, "Model 452"
- Raynor, "AlumaView Standard"
- C.H.I. Overhead Doors, "Model 3295"

2.02 GLAZED ALUMINUM SECTIONAL OVERHEAD DOORS

A. Door Assembly: Stile and rail assembly secured with 1/4 inch diameter through rods.
   1. Panel Thickness: 1-3/4 inches.
   2. Center Stile Width: 2-11/16 inches.
   3. End Stile Width: 3-5/16 inches.
   4. Intermediate Rail Pair Width: 3-11/16 inches.
   5. Top Rail Width: 3-3/4 inches.
   6. Bottom Rail Width: 4-1/2 inches.
   7. Aluminum Panels: 0.050 inch thick, aluminum.
   8. Stiles and Rails: 6063 - T6 aluminum.

B. Springs: 100,000 cycles.

C. Glazing: 1/2” Insulating Glass.

D. Provide panel in bottom section of each door with CFC-free and HCFC-free polyurethane insulation.

E. Finish and Color: Powder Coating Finish: Color: White. Submit sample and receive architect approval prior to finishing doors.

F. Hardware: Galvanized steel hinges and fixtures. Ball bearing rollers with hardened steel races.

G. Lock: Interior galvanized single unit.

H. Weatherstripping:
   1. Flexible bulb-type strip at bottom section.
   2. Flexible Jamb seals.
   3. Flexible Header seal.

I. Track: Provide track as recommended by manufacturer to suit loading required and clearances available.

I. Electric Motor Operation: Provide UL listed electric operator, size and type as recommended by manufacturer to move door in either direction at not less than 2/3 foot nor more than 1 foot per second. Operator shall meet UL325/2010 requirements for continuous monitoring of safety devices.
   1. Entrapment Protection: Photoelectric sensors monitored to meet UL 325/2010.
   2. Operator Controls:
      a. Interior: Push-button operated control stations with open, close, and stop buttons. One for each door. Flush Mounted. Locate where shown on drawings. In addition, provide one control station

for each door and one master control station to operate all doors located in Watch Room 113.

b. Radio control operation. Provide six (6) three (3) button openers. Program as directed by Owner.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Do not begin installation until openings have been properly prepared.

B. Verify wall openings are ready to receive work and opening dimensions and tolerances are within specified limits.

C. Verify electric power is available and of correct characteristics.

D. Notify General Contractor of unsatisfactory preparation before proceeding.

3.02 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.03 INSTALLATION

A. Install overhead doors and track in accordance with approved shop drawings and the manufacturer's printed instructions.

B. Coordinate installation with adjacent work to ensure proper clearances and allow for maintenance.

C. Anchor assembly to wall construction and building framing without distortion or stress.

D. Securely brace door tracks suspended from structure. Secure tracks to structural members only.

E. Fit and align door assembly including hardware.

F. Coordinate installation of electrical service. Complete power and control wiring from disconnect to unit components.

3.04 CLEANING AND ADJUSTING

A. Adjust door assembly to smooth operation and in full contact with weatherstripping.

B. Clean doors, frames and glass.

C. Remove temporary labels and visible markings.

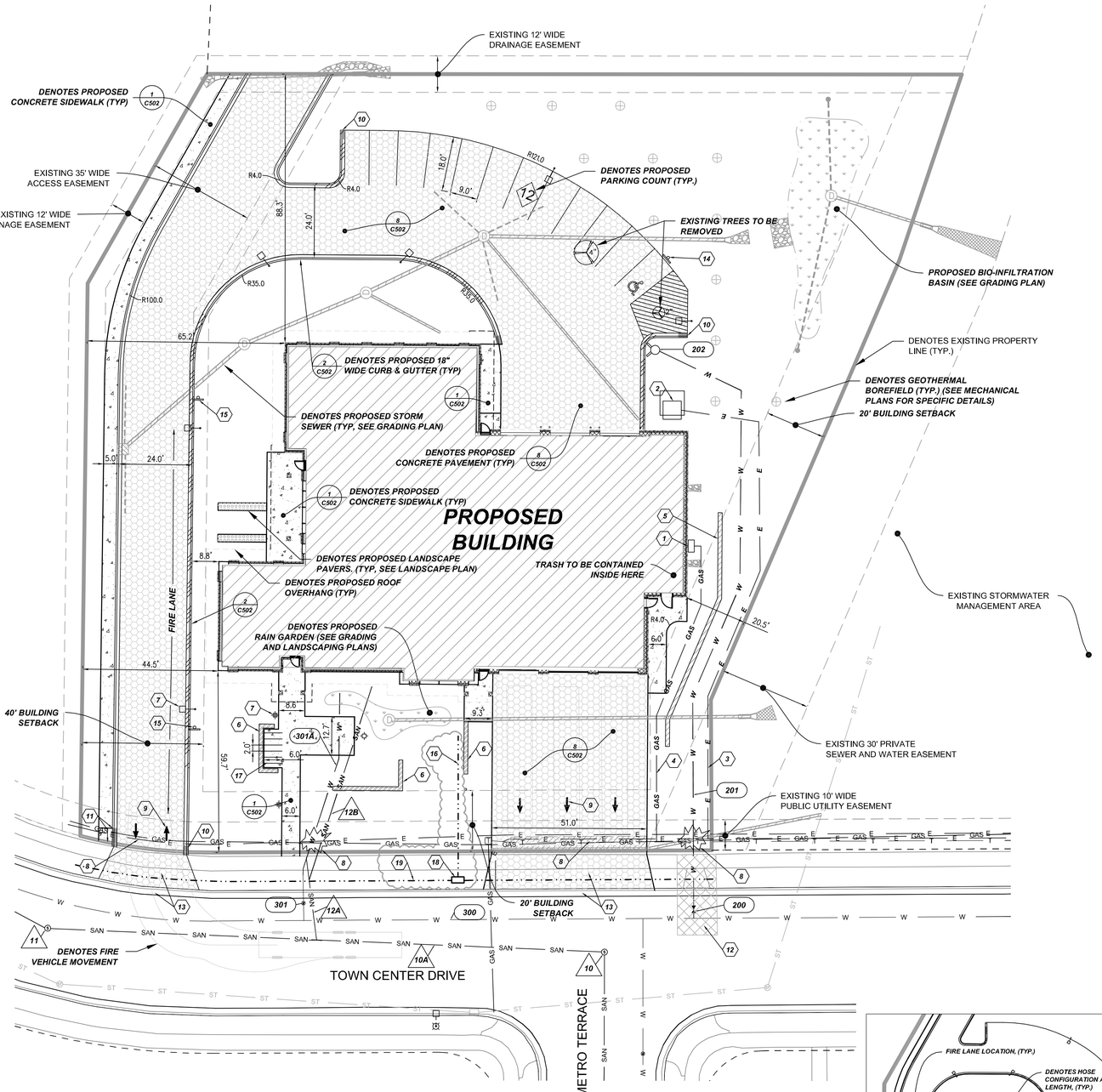
3.05 PROTECTION

A. Do not permit construction traffic through overhead door openings after adjustment and cleaning.

B. Protect installed products until completion of project.

C. Touch-up, damaged coatings and finishes and repair minor damage before Substantial Completion.

* * *



UTILITY TAGS

SANITARY

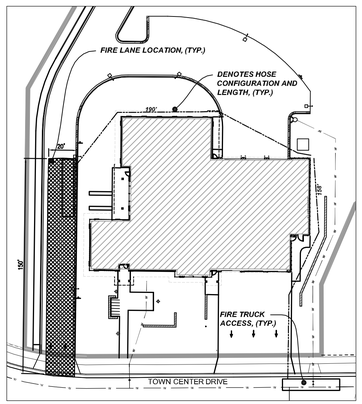
#	
10	EXIST. SANITARY MANHOLE RIM = 952.47 INV (W) = 942.54 (8") INV (S) = 942.50 (8")
10A	EXIST. 8" PVC SANITARY SEWER
11	EXIST. SANITARY MANHOLE RIM = 960.85 INV (W) = 950.86 (8") INV (E) = 950.79 (8")
12A	EXIST. 6" SANITARY SERVICE STUB (VERIFY STUB ELEVATION PRIOR TO CONSTRUCTION)
12B	PROP. 67 L.F. 6" PVC SANITARY SERVICE @ 1.0 % (MIN). INV @ BLDG = 950.50 INSTALL CITY OF MADISON LATERAL MARKERS PER SPECS

WATER

#	
200	PROP. LIVE TAP AND 8" GATE VALVE (CITY OF MADISON TO MAKE CONNECTION TO WATERMAIN. CONTRACTOR TO COORDINATE. EXCAVATE/PREP TRENCH AND PAY FOR ANY CONNECTION FEES)
201	PROP. 206 LF 8" WATERMAIN, D.I. CL 52
202	PROP. FIRE HYDRANT AND AUXILIARY VALVE. BURY ELEV = 957.65 +/-
300	EXIST. WATERMAIN
301	EXIST. 6" WATER SERVICE STUB
301A	PROP. 60 L.F. 6" D.I. (CL 52) WATER SERVICE

DIGGER'S HOTLINE — CALL BEFORE YOU DIG — 1-800-242-8511

IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.



FIRE LANE EXHIBIT
Scale: 1" = 50'

SITE ZONING AND LOCATION TABLE

LEGAL DESCRIPTION:
ALL OF LOT 1, CERTIFIED SURVEY MAP NUMBER 12761, AS RECORDED IN VOLUME 80 OF CERTIFIED SURVEY MAPS, ON PAGES 304–307, AS DOCUMENT NUMBER 4593131, DANE COUNTY REGISTRY, LOCATED IN THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 02, TOWNSHIP 07 NORTH, RANGE 10 EAST, CITY OF MADISON, DANE COUNTY, WISCONSIN.

PROPERTY LOCATION:	6350 TOWN CENTER DRIVE MADISON WISCONSIN
EXISTING ZONING:	PUD - (GDP)
PROPOSED ZONING:	PUD - (GDP)
ZONING SETBACKS:	
BUILDING SETBACK:	20 FEET (FRONT & EAST SIDE) 40 FEET (WEST SIDE)
PROPERTY OWNER:	CITY OF MADISON
PROPOSED USEAGE:	FIRE STATION

SITE CALCULATION TABLE

TOTAL SITE AREA	1.38 AC
TOTAL DISTURBED AREA	1.52 AC
EXISTING IMPERVIOUS AREA	0.00 AC
PROPOSED IMPERVIOUS AREA	0.69 AC
PROPOSED GREENSPACE	0.69 AC (50% OF SITE)
PROPOSED REGULAR PARKING SPACES	11
PROPOSED HANDICAP PARKING	1
PROPOSED TOTAL PARKING	12

UTILITY LEGEND

SYMBOL	DESCRIPTION
W W	EXISTING WATER MAIN
	PROPOSED WATER SERVICE
E E	EXISTING ELECTRICAL LINE
E E	PROPOSED ELECTRICAL LINE
GAS GAS	EXISTING GAS MAIN
GAS GAS	PROPOSED GAS MAIN
SAN SAN	EXISTING SANITARY SEWER
	PROPOSED SANITARY SEWER
ST ST	EXISTING STORM SEWER
	PROPOSED STORM SEWER
OHW OHW	OVERHEAD WIRES
	EXISTING POWER POLES
M	EXISTING LIGHT POLES
SN	SANITARY MANHOLE
	FIRE HYDRANT
W	EXISTING WATER VALVE
	PROPOSED WATER VALVE
ST	EXISTING STORM STRUCTURE
D	PROPOSED STORM STRUCTURE
	DENOTES EMERGENCY OVERFLOW ROUTE / DRAINAGE PATH
100.00 100.00	PROPOSED & EXISTING SPOT GRADE

NOTES

1. DENOTES PROPOSED GAS METER LOCATION. SEE MECHANICAL PLANS.
2. DENOTES PROPOSED TRANSFORMER LOCATION. CONTRACTOR TO COORDINATE EXACT LOCATION WITH UTILITY COMPANY.
3. DENOTES PROPOSED ELECTRIC SERVICE. CONTRACTOR TO COORDINATE EXACT LOCATION WITH UTILITY COMPANY.
4. DENOTES PROPOSED GAS SERVICE. CONTRACTOR TO COORDINATE EXACT LOCATION WITH UTILITY COMPANY.
5. DENOTES PROPOSED RETAINING WALL. SEE LANDSCAPE PLANS.
6. DENOTES PROPOSED LANDSCAPE WALL. SEE LANDSCAPE PLANS.
7. DENOTES PROPOSED SITE LIGHTING. (TYP, SEE ELECTRIC PLANS)
8. CAUTION! EXISTING UTILITIES. VERIFY EXACT LOCATION AND ELEVATION PRIOR TO STARTING CONSTRUCTION.
9. DENOTES PROPOSED PAVEMENT MARKING DIRECTIONAL ARROWS. (TYP)
10. DENOTES PROPOSED 3' CURB TAPER.
11. DENOTES PROPOSED 6' CURB TAPER AND SIDEWALK RAMP. FIRST 6' OF SIDEWALK TO BE RAMPED AT 8% MAX SLOPE.
12. REMOVE AND REPLACE PAVEMENT, CURB, SIDEWALK AND ADA RAMP AS REQUIRED TO INSTALL WATERMAIN. SLURRY BACKFILL REQUIRED WITHIN ROADWAY. CONSTRUCT NEW ADA RAMP TO MATCH DETAIL 3, C502
13. CUT CURB HEAD PER DETAIL 6, C502 WITHIN DRIVEWAY AREA AND INSTALL DRIVEWAY PER DETAIL 7, C502. REMOVE EXISTING SIDEWALK WITHIN DRIVEWAY AREA AND REPLACE MATCHING THE CONCRETE PAVEMENT SECTION.
14. DENOTES PROPOSED ADA SIGN. SEE DETAIL 4, C502.
15. DENOTES PROPOSED "NO PARKING FIRE LANE" SIGN.
16. EXTEND CONDUITS FROM BUILDING TO UTILITY ACCESS VAULT. ONE-3" FOR FUTURE FIBER, ONE-2" FOR PHONE SERVICE, TWO-4" FOR FUTURE RADIO/WIRELESS, AND ONE-2" FOR CABLE TV. (SEE ELECTRICAL PLANS)
17. PROPOSED BIKE PARKING. SEE LANDSCAPE PLANS FOR SPECIFIC BIKE RACK DETAILS AND CONFIGURATION.
18. PROVIDE UTILITY ACCESS VAULT MEETING CITY OF MADISON REQUIREMENTS.
19. DENOTES PROPOSED 3" CONDUIT FOR FUTURE FIBER SERVICE. SCH 80 REQUIRED UNDER DRIVEWAYS, SCH 40 MAY BE USED ELSEWHERE. INSTALL WITH TRACER WIRE AND LONG SWEEP BENDS.

GENERAL NOTES AND SPECIFICATIONS

1. THE EXISTING SITE INFORMATION ON THIS PLAN WAS TAKEN FROM A SITE SURVEY PROVIDED BY BURSE SURVEYING AND ENGINEERING, INC. THE ENGINEER MAKES NO WARRANTY OR REPRESENTATION WITH REFERENCE TO THE ACCURACY AND COMPLETENESS OF THE EXISTING CONDITIONS INDICATED OR NOT INDICATED ON THE ENGINEERING PLANS PROVIDED. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING SITE CONDITIONS INCLUDING UNDERGROUND UTILITIES, UNDERGROUND UTILITY ELEVATIONS, BUILDING SETBACKS AND EXISTING BUILDING LOCATIONS. THE CONTRACTOR SHALL INFORM THE OWNER AND ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WITH WORK. QUESTIONS REGARDING THE EXISTING SURVEY SHALL BE DIRECTED TO THE PARTIES LISTED ABOVE.
2. BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, CONTRACTOR SHALL EXCAVATE EACH EXISTING LATERAL TO BE CONNECTED TO (VERIFYING ELEVATION, LOCATION AND SIZE). SHOULD THE EXISTING UTILITY NOT BE AS INDICATED ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR EVALUATION.
3. ALL UTILITY CONSTRUCTION SHALL ADHERE TO THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN (2003), AS WELL AS, THE CITY OF MADISON CONSTRUCTION STANDARDS AND THE DEPT. OF COMMERCE SEC. 82-87.
4. ALL UTILITY PERMITS MUST BE RECEIVED FROM THE CITY OF MADISON PRIOR TO THE START OF CONSTRUCTION.
5. NOTIFY THE PUBLIC WORKS INSPECTION DEPT. AT LEAST 48 HOURS BEFORE STARTING CONSTRUCTION.
6. BACKFILL REQUIREMENTS AND ROADWAY/SIDEWALK RESTORATION SHALL ADHERE TO LOCAL STANDARDS (GRANULAR BACKFILL UNDER OR WITHIN 5' OF CURBS, SIDEWALK, OR PAVEMENT. SPOIL MAY BE USED ELSEWHERE. SLURRY BACKFILL WILL BE REQUIRED IN PUBLIC ROADWAYS.)
7. ALL BUILDING UTILITIES SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.
8. ALL PROPOSED WATERMAIN SHALL BE DUCTILE IRON, CLASS 52
.
9. PROPOSED SANITARY SEWER PIPE SHALL BE PVC, ASTM D-3034, SDR 35 WITH RUBBER GASKETED JOINTS CONFORMING TO ASTM D-3212.
10. PROPOSED STORM SEWER SHALL BE PVC, ASTM D-3034, SDR 35 WITH RUBBER ELASTOMERIC JOINTS CONFORMING TO ASTM D-3212 (UNLESS OTHERWISE NOTED).
11. UTILITY TRENCHES SHALL BE MECHANICALLY COMPACTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
12. SILT FENCE AND ALL OTHER EROSION CONTROL METHODS MUST BE INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION. ALSO, CONTRACTOR IS RESPONSIBLE FOR REMOVING EROSION CONTROL METHODS ONCE THE SITE IS STABILIZED.
13. THE PROPOSED SITE LOCATION AND SURROUNDING STREETS MUST BE KEPT DEBRIS FREE. SWEEP STREETS AS NEEDED TO MAINTAIN CLEAN STREETS.
14. ALL EXCAVATED OR STRIPPED MATERIALS NOT BEING REPLACED IN UTILITY TRENCHES OR BEING USED FOR FILL SHALL BE REMOVED FROM THE SITE, UNLESS OTHERWISE DIRECTED BY THE OWNER.
15. ALL DISTURBED GRASS AREAS SHALL BE STABILIZED (PER DNR TECHNICAL STANDARDS) WITHIN 7 DAYS OF COMPLETION. DISTURBED GRASS AREAS SHALL BE TOPSOILED (6"), RESEEDED AND STABILIZED. AREAS WITH A SLOPE OF 3H:1V OR STEEPER SHALL BE COVERED WITH A CLASS 1 - TYPE A EROSION FABRIC. (SEE SPECIFICATIONS)
16. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING & FOUNDATION DETAILS AND ORIENTATION.
17. ALL ON-SITE CONCRETE CURB AND GUTTER TO BE 18" WIDE VERTICAL FACE, UNLESS OTHERWISE NOTED. REVERSE OR REGULAR STYLE CURB DENOTED ON PLANS.
18. ALL CURB ELEVATIONS ARE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. SEE CURB DETAIL FOR TOP OF CURB ELEVATIONS.
19. ALL CURB RADII ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
20. CONTRACTOR SHALL MATCH PROPOSED CONCRETE CURB AND GUTTER, SIDEWALK AND PAVEMENT TO EXISTING IN ELEVATION AND ALIGNMENT.
21. REMOVAL OF CURB AND GUTTER, SIDEWALK AND PAVEMENT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE WISCONSIN D.O.T.
22. ALL CONCRETE FOR CURB AND GUTTER, ROADWAY AND SIDEWALKS MUST CONFORM TO THE STANDARD SPECIFICATIONS FOR READY MIXED CONCRETE. MINIMUM 28 DAY COMPRESSIVE STRENGTH TEST MUST EQUAL 4000 PSI.
23. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL PROPERTY CORNERS.
24. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING UTILITIES OR SITE IMPROVEMENTS. CONTRACTOR SHALL DOCUMENT ALL EXISTING DAMAGE PRIOR TO START OF CONSTRUCTION AND NOTIFY CONSTRUCTION MANAGER OF ANY FINDINGS.
25. PROJECT SAFETY ON-SITE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
26. CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING SOIL CONDITIONS, CONSTRUCTION MANAGER MAY HAVE SOILS REPORT FOR MORE INFO.
27. CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED UP PLANS (AS-BUILTS) SHOWING ANY CHANGES DURING CONSTRUCTION.

HATCH LEGEND

- PROPOSED CONCRETE SIDEWALK
- PROPOSED POROUS ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED DEPRESSED CURB
- PROPOSED TAPER CURB
- PROPOSED REVERSE CURB

CIVIL PLAN SET INDEX:

ZIMMERMAN ARCHITECTURAL STUDIOS, INC.
2122 West Mt. Vernon Avenue | Milwaukee, WI 53233 | zastudios.com
TELEPHONE [414] 476.9500
FACSIMILE [414] 476.8582

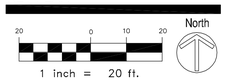
PROJECT NFORMATION

Madison Fire Station 13
Madison Project #53W1152, Contract # 6590

ISSUANCE AND REVISIONS

Bid Set

KEY PLAN



SHEET INFORMATION

REVISIONS

DATE	DESCRIPTION
05-10-2013	FIBER OPTIC DUCT PACKAGE IN TERRACE

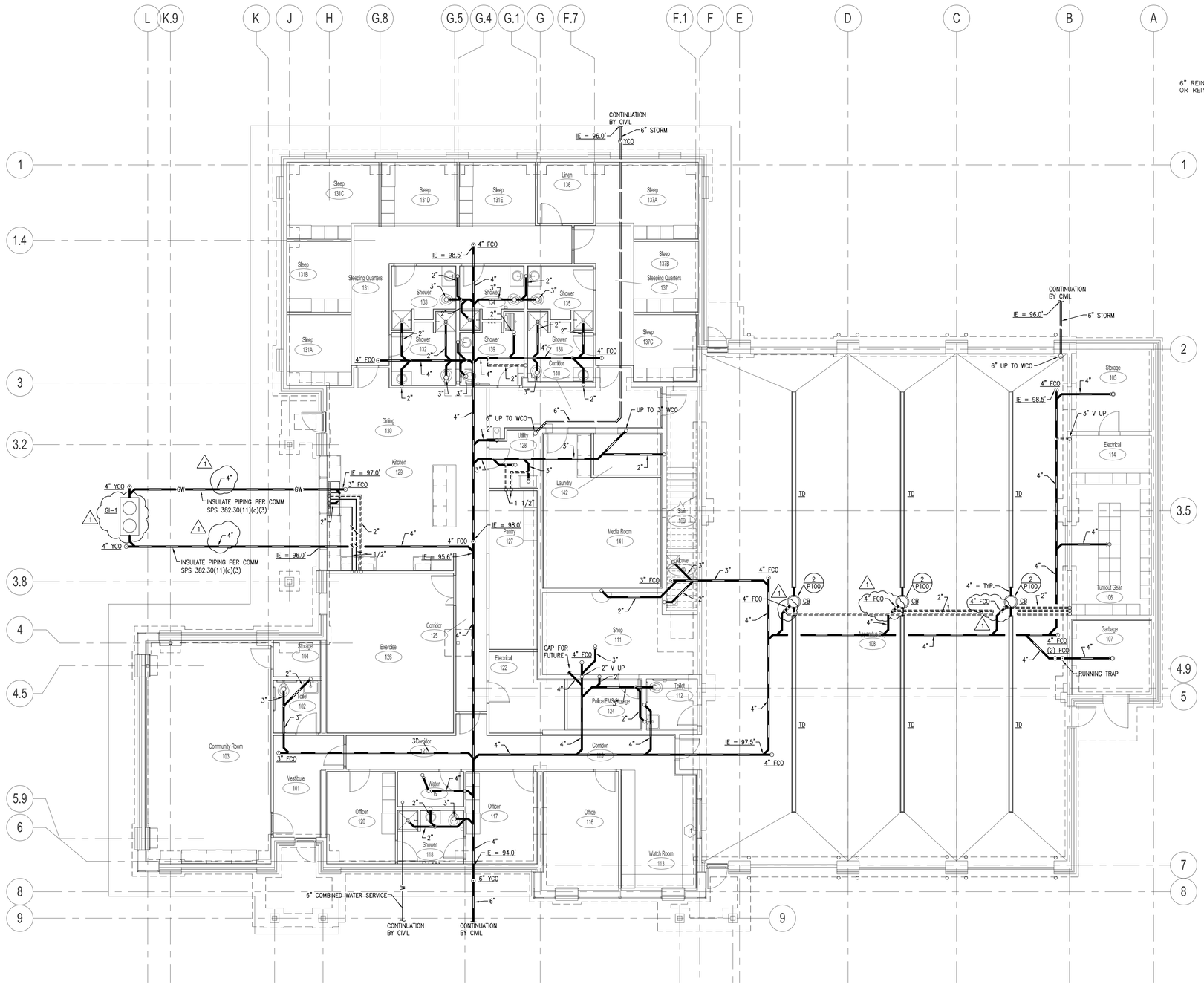
DATE
May 03, 2013

PROJECT NUMBER	STUDIO
120062.00	Sabinash

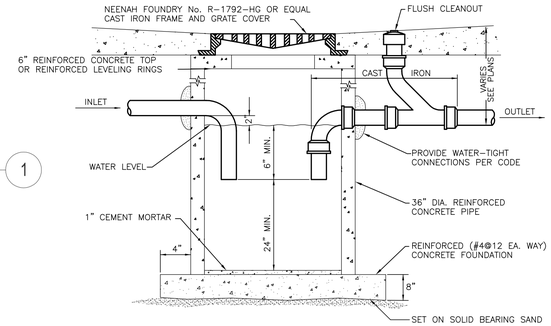
Site Plan

C100

HARWOOD ENGINEERING CONSULTANTS, LTD
255 North 21st Street Milwaukee Wisconsin 53233
414.475.5554 414.773.9299 fax harwood@hecl.com
HEC Project Number: 12-0062.00



1 FOUNDATION PLUMBING PLAN
SCALE: 1/8" = 1'-0"



2 GARAGE CATCH BASIN DETAIL
NTS

Zimmerman
ARCHITECTURAL STUDIOS, INC.
2122 West Mt. Vernon Avenue | Milwaukee, WI 53233 | zastudios.com
TELEPHONE [414] 476.9500
FACSIMILE [414] 476.8582

PROJECT NFORMATION

Madison Fire Station 13
Madison Project #53W1152, Contract # 6590

Madison

ISSUANCE AND REVISIONS

Bid Set

KEY PLAN

SHEET INFORMATION

REVISIONS

DATE	DESCRIPTION
05-16-2013	1 ADDENDUM No.1

DATE
May 03, 2013

PROJECT NUMBER	STUDIO
120062.00	Sabinash

Foundation Plumbing Plan

P100

HARWOOD ENGINEERING CONSULTANTS, LTD
255 North 21st Street Milwaukee Wisconsin 53233
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HEC Project Number: 12-0062.00