DANE COUNTY DEPT. OF ADMINSTRATION,PUBLIC WORKS DIVISION

1919 Alliant Energy Center Way
Madison, Wisconsin 53713
Office: 608/266-4018 ◊ Fax: 608/267-1533
Public Works Engineering Division

ADDENDUM

February 18, 2022

ATTENTION ALL REQUEST FOR BIDS (RFB) HOLDERS

RFB NO. 322004 - ADDENDUM NO. 1

MCCARTHY PARK IMPROVEMENTS

BIDS DUE: TUESDAY, MARCH 22, 2022, 2:00 PM. DUE DATE AND TIME ARE NOT CHANGED BY THIS ADDENDUM.

This Addendum is issued to modify, explain or clarify the original Request for Bid (RFB) and is hereby made a part of the RFB. Please attach this Addendum to the RFB.

PLEASE MAKE THE FOLLOWING CHANGES:

1. **Section 00 01 01 – Project Manual Cover Page**
   Delete current Section 01 01 10, replace with new Section 00 01 01 issued with this Addendum (stamped version).

2. **Section 00 01 10 – Table of Contents**
   Delete 04 21 13 – Brick Masonry from the Table of Contents.

3. **Section 03 31 10 – Integral Water Proofing of Concrete**
   Add new Section 03 31 10 – Integral Water Proofing of Conctrete, issued with this Addendum

4. **Section 07 71 23 – Gutters and Downspouts**
   Add new Section 07 71 23 – Gutters and Downspouts, issued with this Addendum.

5. **Sheet G1.0**
   Delete current Sheet G1.0, replace with new Sheet G1.0 issued with this Addendum (stamped version).

6. **Sheet C4.1**
   Add new Sheet C4.1, issued with this Addendum.

7. **Sheet S1.0**
   Delete note “By Others” in Detail 4 of Sheet S1.0.

8. **Sheet A4.0**
   Add new Sheet A4.0, issued with this Addendum.

PLEASE NOTE THE FOLLOWING CONTRACTOR SUBMITTED QUESTIONS:

Q1: Detail 1 on Sheet A4.1 shows a wood shake roof. Is this just an errant detail that is not applicable to this project or is this an alternate? Please advise.
A1: Detail not applicable to the project.

Q2: Detail 4 on Sheet S1.0 states that the stone cap and stone walls are BY OTHERS. Should this be deleted?
A2: "By others" note should be deleted from sheet S1.0.

Q3: Spec Section 04 21 13 - Brick Masonry is not present in the spec book. Is this an error in the Table of Contents?
A3: Section 04 21 13 - Brick Masonry has been removed from the Table of Contents.

Q4: Page 06 13 26-2, paragraph 3.01, line A states that a 3 coat urethane system is to be used on the exposed side of the roof decking. There is no roof decking per the specified metal roof and the detail for the metal roof (2/A4.1). Is this incorrectly included in specs? Please advise.
A4: There is no roof decking in this project, this material will only be applied to the rafters under the sheet metal.

If any additional information about this Addendum is needed, please contact Eric Urtes, AIA, at 608/266-4798, urtes.eric@countyofdane.com.

Sincerely,

Eric Urtes, AIA

Project Manager

Enclosures:

00 01 01 – Project Manual Cover Page – Stamped
03 31 10 – Integral Water Proofing of Concrete
07 71 23 – Gutters and Downspouts
Sheet G1.0 – Stamped
Sheet C4.1
Sheet A4.0

RFB NO. 322004

CONSTRUCTION DOCUMENTS
PROJECT MANUAL

DANE COUNTY DEPARTMENT OF ADMINISTRATION.
PUBLIC WORKS DIVISION

PUBLIC WORKS ENGINEERING DIVISION
1919 ALLIANT ENERGY CENTER WAY
MADISON, WISCONSIN 53713

REQUEST FOR BIDS NO. 322004
MCCARTHY PARK IMPROVEMENTS
MCCARTHY YOUTH & CONSERVATION COUNTY PARK
4841 CO HWY TT
COTTAGE GROVE, WISCONSIN

ISSUED FOR BIDS: FEBRUARY 1, 2022

Due Date / Time: **TUESDAY, MARCH 22, 2021 / 2:00 P.M.**

Location: **PUBLIC WORKS OFFICE**

Performance / Payment Bond: **100% OF CONTRACT AMOUNT**

Bid Deposit: **5% OF BID AMOUNT**

FOR INFORMATION ON THIS REQUEST FOR BIDS, PLEASE CONTACT:

ERIC URTES, AIA, PROJECT MANAGER
TELEPHONE NO.: 608/266-4798
FAX NO.: 608/267-1533
E-MAIL: URTES.ERIC@COUNTYOFDANE.COM

SECTION 03 31 10

INTEGRAL WATERPROOFING OF CONCRETE

PART 1 - GENERAL

1.01 Section Includes

A. Crystalline waterproofing admixture for concrete.

B. Crystalline waterproofing treatment of construction joints between successive concrete pours.

1.02 Related Sections

A. 01 45 23 - Reservoir Disinfection and Leakage Testing.

B. 03 31 00 - Concrete, Forms and Reinforcement.

1.03 References

A. ACI 305R - Hot Weather Concreting.

B. ACI 306R - Cold Weather Concreting.

C. ACI 308 - Standard Practice for Curing Concrete.

D. ASTM C39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.

E. COE CRD-C 48 - Standard Test Method for Water Permeability of Concrete.

F. NSF 61 - Drinking Water System Components - Health Effects; 2000a.

1.03 Submittals

A. Manufacturer's printed data sheet, for specified products.

B. Product certificates signed by manufacturer certifying that the materials comply with specified performance characteristics and physical requirements.

C. Manufacturer's installation instructions.

1.04 Quality Assurance

A. Manufacturer Qualifications: A firm with not less than 10 years experience manufacturing crystalline waterproofing of the type specified, able to provide test reports showing

compliance with specified performance characteristics, and able to provide on-site technical representation to advise on installation.

B. Installer Qualifications: Experienced in work of the type specified in this section and approved by waterproofing manufacturer.

C. Mockups: Provide mockups of crystalline waterproofing to verify selections made under sample submittals and to demonstrate aesthetic effects.

1.05 Delivery, Storage, and Handling

A. Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

B. Store materials protected from exposure to harmful weather conditions and at temperature conditions recommended by manufacturer.

1.06 Project Condition For Surface Treatments

A. Weather Limitations: Proceed with application only when existing forecasted weather conditions permit crystalline waterproofing to be performed according to manufacturer’s written instructions and warranty requirements.

B. Proceed with waterproofing work only after pipe sleeves, vents, curbs, inserts, drains, and other projections through the substrate to be waterproofed have been completed. Proceed only after concrete and masonry substrate defects, including honeycombs, voids, and cracks have been repaired to provide a sound substrate free of forming materials, including reveal inserts.

C. Ambient Conditions: Proceed with waterproofing work only if temperature is maintained at 40 deg F(4.4 deg C) or above during work and cure period, and space is well ventilated and kept free of water.

PART 2 - PRODUCTS

2.01 Manufacturer’s

A. Acceptable Manufacturer: Xypex Chemical Corp., 13731 Mayfield Pl.; Richmond, BC, Canada V6V 2G9; Tel: 800-961-4477; Tel: 604-273-5265; Fax: 604-270-0451.

B. Obtain all crystalline waterproofing products from a single source.

C. Substitutions: Approved product equivalent in performance.

2.02 Materials

A. Waterproofing Admixture: Proprietary compound of Portland cement, silica sand and active chemicals; provide product and mix ratio that produce concrete that complies with specified requirements in Section 03 31 00 and the following:

1. Basis of Design Product: Subject to compliance with requirements, provide Xypex Chemichal Corporation; Xypex, or a comparable product by one of the following:
    a. IPA Systems; Ipanex
    b. Kryton; Krystol Internal Membrane (KIM)

c. Xypex; Admixture C-1000

2. Penetration: At least 2 inches penetration of crystal-forming material, evidenced by scanning electron microscope photographs.
3. Permeability: No measurable leakage through waterproofed concrete, when tested in accordance with COE CRD-C 48 at 350 feet of head or 150 psi.
4. Chemical Resistance: Weight loss significantly less than control samples, when tested as follows:
   a. Test specimens consisting of concrete made with admixture dosage rates (to weight of cement) of 3 percent, 5 percent, and 7 percent, and a control sample prepared without admixture.
   b. Immerse samples in sulfuric acid and weigh daily.
   c. When weight loss of control sample reaches 50 percent, stop test and weigh treated samples.
5. Compressive Strength: At least 10 percent increase in strength compared to samples prepared without admixture, when tested in accordance with ASTM C 39 after 28 days.
6. Potable Water Contact Approval: NSF certification for use on structures holding potable water, based on testing in accordance with NSF 61.

B. Slurry Coat: A prepackaged, gray-colored proprietary blend of portland cement, specially treated sand, and active chemicals that, when mixed with water and applied, penetrates by capillary action into concrete or masonry and reacts chemically with free lime in the presence of water to develop crystalline growth within concrete or masonry capillaries to produce an impervious, dense, waterproof concrete or masonry with properties meeting or exceeding the following criteria:

1. Revise subparagraphs below according to properties of product selected. Not all manufacturers test products for every property.
2. Permeability: 0 for water at 405 feet (123 m) when tested according to CE CRD-C 48.
3. Compressive Strength: 4000 psi (27.6 MPa) when tested according to ASTM C 109/C 109M.

C. Patching Compound: Cementitious waterproofing and repair mortar for filling and patching tie holes, honeycombs, reveals, and other imperfections; with properties meeting or exceeding the following criteria:

1. Compressive Strength: 7600 psi (52.44 MPa) at 28 days when tested according to ASTM C 109/C 109M.
2. Flexural Strength: 710 psi (4.8 MPa) at 28 days when tested according to ASTM C 348.
3. Shrinkage: Minus 0.093 percent at 28 days and plus 0.073 percent at 90 days when tested according to ASTM C 596.

D. Plugging Compound: Cementitious compound with hydrophobic properties; resistant to water and moisture but vapor permeable for all standard applications (vertical, overhead and horizontal surfaces not exposed to vehicular traffic); with properties meeting or exceeding the following criteria:

1. Compressive Strength: 4500 psi (31.1 MPa) at 28 days when tested according to ASTM C 109/C 109M.

PART 3 - EXECUTION

3.01 Concrete Mixing and Placing

A. Comply with requirements of Section 03 31 00.

B. Make and test trial mixes under project conditions to determine setting time and strength of concrete; obtain manufacturer's recommendations regarding mix design, project conditions, and dosage rate.

C. Add waterproofing admixture at time of batching and blend thoroughly, following manufacturer's instructions.

D. In hot weather comply with ACI 305R; in cold weather comply with ACI 306R; use monomolecular film (evaporation retardant) on slabs during hot, dry, or windy conditions.

E. Moist cure concrete in accordance with ACI 308; if moist curing is not possible, use curing compound complying with ASTM C 309.

3.02 Surface Treatments

A. Preparation

1. Protect other work from damage from cleaning, preparation, and application of crystalline waterproofing. Provide temporary enclosure to confine spraying operation and to ensure adequate ambient temperatures and ventilation conditions for application.
2. Stop active water leaks according to waterproofing manufacturer's written instructions.
3. Repair damaged or unsatisfactory concrete or masonry according to manufacturer's written instructions.
4. Surface Preparation: Comply with waterproofing manufacturer's written instructions to remove efflorescence, chalk, dust, dirt, mortar spatter, grease, oils, curing compounds, and form-release agents to ensure that waterproofing bonds to concrete or masonry surfaces.
    a. Clean concrete surfaces according to ASTM D 4258.
        1) Scratch- and Float-Finished Concrete: Etch with 10 percent muriatic (hydrochloric) acid solution according to ASTM D 4260 or pressure wash using 3,000 to 4,000 psi water stream.
        2) Prepare smooth-formed and trowel-finished concrete by mechanical abrading or abrasive-blast cleaning according to ASTM D 4259.
        3) Wood-Formed Vertical Concrete Surfaces: Pressure wash, lightly sandblast, or acid etch with muriatic (hydrochloric) acid to provide a clean, absorbent surface.
    b. Concrete Joints: Clean reveals according to waterproofing manufacturer's written instructions.

B. Application

1. General: Comply with waterproofing manufacturer's written instructions for application.
   a. Saturate concrete substrate with clean water to ensure migration of crystalline chemicals into voids and capillary tracts of concrete. Remove free surface water before application.
   b. Maintain damp condition until applying waterproofing.
   c. Number of Coats: per manufacturer instructions.
   d. Dampen surface between coats.
2. Final Coat Finish: Spray Textured.
3. Moist-cure waterproofing for two days immediately after application has set, followed by two days of air drying as recommended in writing by manufacturer.
4. Waterproofing Treatment Extensions: Extend waterproofing treatment as follows:
   a. Onto columns integral with treated walls.
   b. Onto interior nontreated walls intersecting exterior treated walls, for a distance of 24 inches (600 mm) for cast-in-place concrete.
   c. Onto exterior walls and onto both exterior and interior columns, for a height of 12 inches (300 mm), where floors, but not walls, are treated.
   d. Onto every substrate in areas indicated for treatment.

C. Protection

1. Protect applied crystalline waterproofing from rapid drying, severe weather exposure, traffic and water accumulation. Maintain completed Work in moist condition for not less than two days by procedures recommended in writing by waterproofing manufacturer. Protect waterproofing from temperatures below 36 deg F (2 deg C). Take measures to protect completed crystalline waterproofing coating from damage for at least 2 weeks after application.

3.03 Construction Joints

A. Comply with manufacturer's instructions, including technical bulletins, catalog installation instructions, and product carton instructions.

B. Apply sealing strips at each construction joint by filling grooves coinciding with construction joint.

1. If grooves have not been preformed, at least 3/4 inch wide and minimum 1 inch deep, saw cut and chip grooves to that dimension.
2. Apply specified slurry coat to slot at rate recommended by manufacturer.
3. Fill and form surfaces using specified dry pack repair compound while slurry coat is still green, but after slurry coat has reached initial set.
4. Compact tightly using pneumatic packer or hammer and block.

3.04 Field Quality Control

A. Do not cover admixture treated concrete with other construction until it has been observed by manufacturer's field representative and Architect/Engineer.

B. After removal of forms, repair honeycombing, rock pockets, tie holes, faulty construction joints, cold joints, and cracks using waterproofing admixture manufacturer's recommended procedures.

C. Manufacturer's Field Services: Provide manufacturer's field service consisting of product use recommendations and periodic site visits for inspection of concrete batching and product installation in accordance with manufacturer's instructions.

D. Testing: Perform leakage testing in accordance with 01 45 23.

3.05 Cleaning and Protection

A. Protect installed concrete from damage during construction.

B. When backfilling occurs less than 7 days after installation, use moist backfill material.

C. Do not apply paint or other coatings for at least 21 days; before applying coatings neutralize waterproofed surface as recommended by waterproofing manufacturer.

END OF SECTION

SECTION 07 71 23

GUTTERS AND DOWNSPOUTS

PART 1 - GENERAL

1.01 Section Includes

A. Furnishing and installation of gutters and downspouts.

1.02 References

A. ASTM A653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
B. ASTM B 209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
C. SMACNA - Architectural Sheet Metal Manual.

1.03 Design/Performance Requirements

A. American Architectural Manufacturers Association (AAMA) Specification 1405.1 "Specification for Aluminum Raincarrying Systems".

1.04 Submittals

A. Product Data: Manufacturer's catalog data, detail sheets, and specifications.
B. Shop Drawings: Show dimensions of downspouts and accessories, fastening details and connections and interface with other products.
C. Selection Samples: For each finish product specified, set of color chips representing manufacturer's full range of available colors

1.05 Quality Assurance

A. Installer/Fabricator Qualifications: A firm regularly engaged in the type of work specified with a minimum five year’s experience.
B. Perform Work in accordance with SMACNA Manual.

1.06 Delivery, Storage, and Handling

A. Store products in manufacturer's unopened packaging until ready for installation.
B. Store products to prevent twisting, bending, and abrasion, and to provide ventilation. Slope stored materials to drain.
C. During storage prevent contact with materials capable of causing discoloration, staining, or other damage.

PART 2 - PRODUCTS

2.01 Components

A. Gutters: Aluminum sheet, ASTM B 209, Alloy 3105 H14 or H24.
   1. Style: K-style.

2. Thickness: 0.032 inch
3. Size: 5 inch.

B. Downspouts: Aluminum sheet, ASTM B 209, Alloy 3105 H14 or H24.
1. Style: Plain square.
2. Thickness: 0.019 inch.
3. Size: 3”x4”.
C. End Caps: Aluminum sheet, ASTM B 209, Alloy 3105-H24, 0.027 inch thick.
D. Elbows: Aluminum sheet, ASTM B 209, Alloy 3105-H24, 0.019 inch thick.
E. Downspout Anchors: Provide types required to suit project requirements.
F. Gutter Hangers and Anchors: Aluminum. Provide types required to suit project requirements.
G. Aluminum Finish: Kynar 500 or equal. Color as selected from manufacturer’s standard colors.
H. Downspout Adapters: Polyethylene, ADS or equal.

2.02 Fabrication

A. Continuously form seamless gutters to the profiles and sizes specified
B. Form downspouts of profiles and sizes specified.
C. Hem exposed edges of metal.

PART 3 - EXECUTION

3.01 Examination

A. Do not begin installation until substrates have been properly prepared.
B. Verify governing dimensions at building.
C. Verify surfaces are ready to receive gutters and downspouts.
D. If substrate preparation is the responsibility of another installer, notify Engineer of unsatisfactory preparation before proceeding.

3.02 Preparation

A. Clean surfaces thoroughly prior to installation.
B. Clean and repair if necessary any adjoining work on which this work is in any way dependent for its proper installation.

3.03 Installation

A. Install in accordance with manufacturer's instructions.

B. Install gutters using appropriate hangers to allow normal expansion and contraction.
C. Install gutter hangers using two 1-1/4 inch screw shank nails and fastened into solid lumber.
D. All gutters shall be in continuous length for each elevation (run). No end laps are allowed.
E. Exercise care in placing aluminum in contact with other dissimilar metals or materials that are not compatible with aluminum.
F. Providing adequate insulation/separation where ever necessary, such as by painting or otherwise protecting when they are in contact with aluminum or when drainage from them passes over aluminum surfaces.

G. Install sealants to clean dry surfaces only without skips or voids.

3.04 Protection

A. Protect installed products until completion of project.
B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

BIDDING DOCUMENTS

McCARTHY PARK IMPROVEMENTS
DANE COUNTY PARKS

TOWN OF SUN PRAIRIE
DANE COUNTY, WI

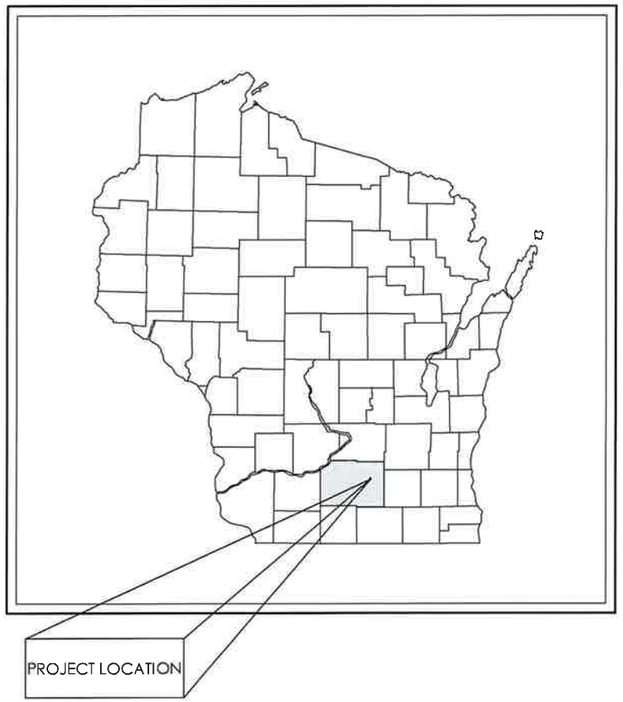
ENGINEER SEAL:

WISCONSIN
KORY D. ANDERSON
E-34942
PORTAGE, WI
1/31/22
PROFESSIONAL ENGINEER

General Engineering Company
P.O. Box 340 • 916 Silver Lake Dr. • Portage, WI 53901
608-742-2169 (Office) • 608-742-2592 (Fax)
www.generalengineering.net

BUILDING DESIGN CRITERIA

- CODE COMPLIANCE PER 2011 WISCONSIN COMMERCIAL BUILDING CODE (WCBC) (2009 I - CODES)
- USE & OCCUPANCY
  A-5, OUTSIDE ASSEMBLY
- CONSTRUCTION CLASSIFICATION - TYPE VB
  WOOD FRAMED UNPROTECTED
- ALLOWABLE AREA
  UNLIMITED (TABLE 503)
- OCCUPANT LOAD
  90 - TOTAL
- BUILDING IS NOT PROTECTED WITH A COMPLETE NFPA 13 FIRE SPRINKLER SYSTEM



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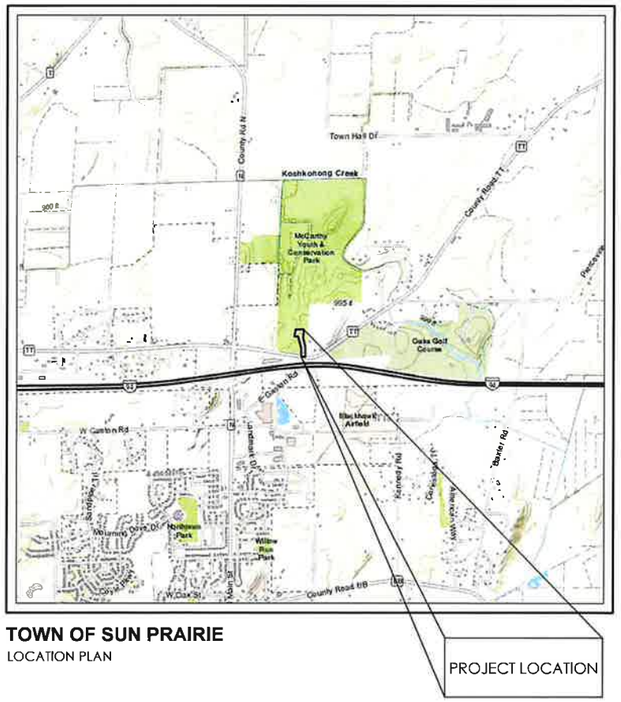

TOWN OF SUN PRAIRIE
LOCATION PLAN

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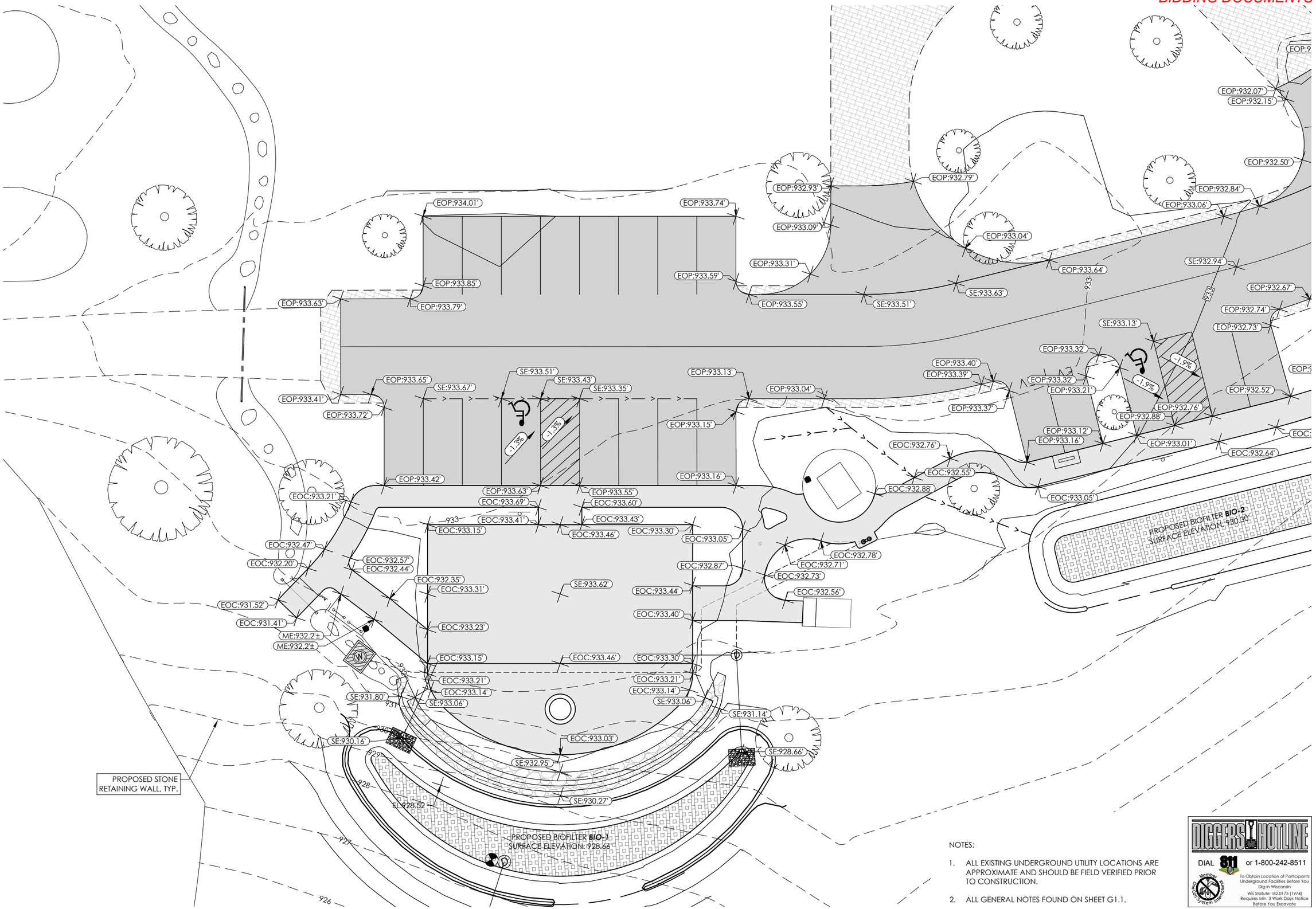
TITLE PAGE
McCARTHY PARK IMPROVEMENTS
DANE COUNTY PARKS
TOWN OF SUN PRAIRIE
DANE COUNTY, WI

NO.	BY	DATE
REVISIONS		

SCALE

DRAWN BY	SRR
REVIEWED BY	LAL
ISSUE DATE	OCT. 2021
GEC FILE NO.	2-0321-169
SHEET NO.	G1.0

BIDDING DOCUMENTS



NOTES:

1. ALL EXISTING UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
2. ALL GENERAL NOTES FOUND ON SHEET G1.1.

DIGGERS HOTLINE
DIAL 811 or 1-800-242-8511
To Obtain Location of Participants Underground Facilities Before You Dig in Wisconsin
Wis Statute 182.0175 (1974) Requires Min. 3 Work Days Notice Before You Excavate

General Engineering Company
P.O. Box 340 • 916 Silver Lake Dr. • Portage, WI 53901
608-742-2169 (Office) • 608-742-2592 (Fax)
www.generalengineering.net

GRADING - SPOT ELEVATIONS
McCARTHY PARK IMPROVEMENTS
DANE COUNTY PARKS

TOWN OF SUN PRAIRIE
DANE COUNTY, WI

REVISIONS	NO.	BY	DATE
ADDENDUM	1	LAL	02/18/2022

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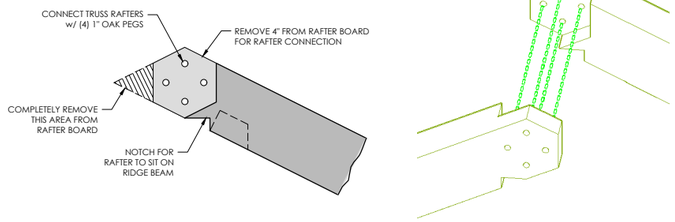
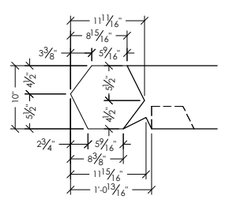
SCALE

DRAWN BY	SRR
REVIEWED BY	LAL
ISSUE DATE	NOV. 2021
GEC FILE NO.	2-0321-169
SHEET NO.	C4.1



F TRUSS RAFTER - END DETAIL
SCALE: ½" = 1'-0" (11x17)



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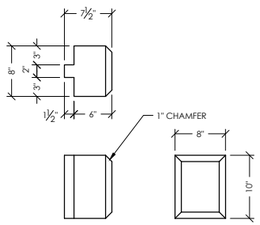

D END CAP DETAIL
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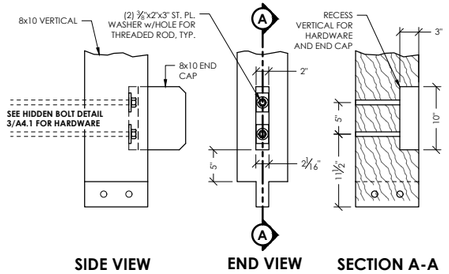

C HARDWARE NOTCH DETAIL
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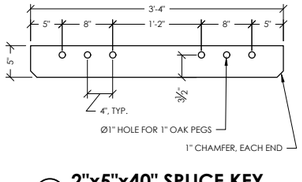

B 2"x5"x40" SPLICE KEY
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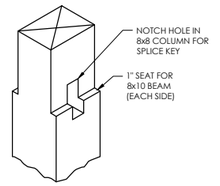

A COLUMN TOP DETAIL
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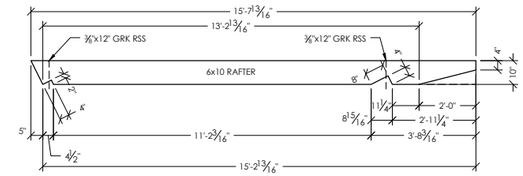

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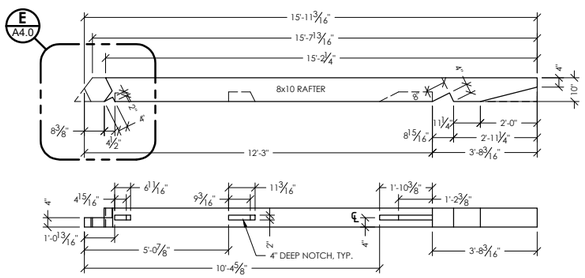

8 TRUSS RAFTER DETAILS
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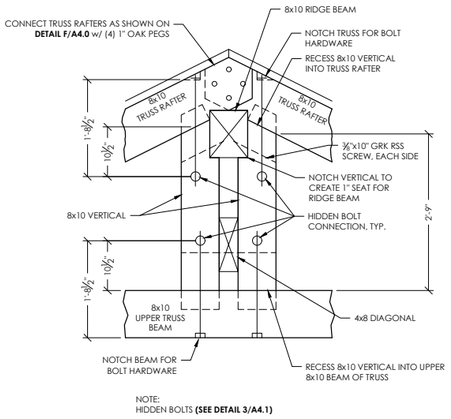

7 TRUSS @ RIDGE DETAIL
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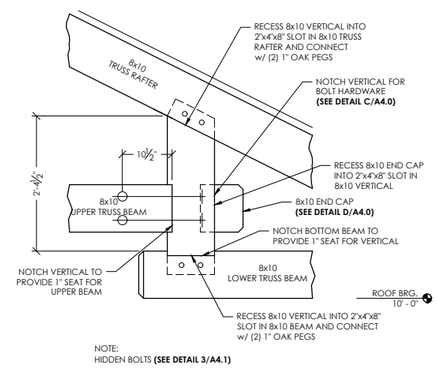

6 TRUSS DETAIL
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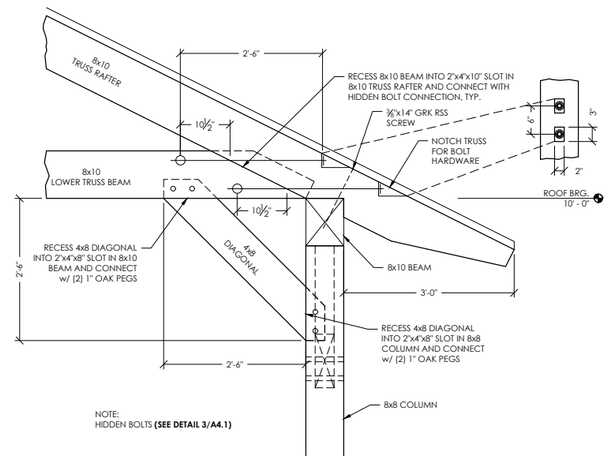
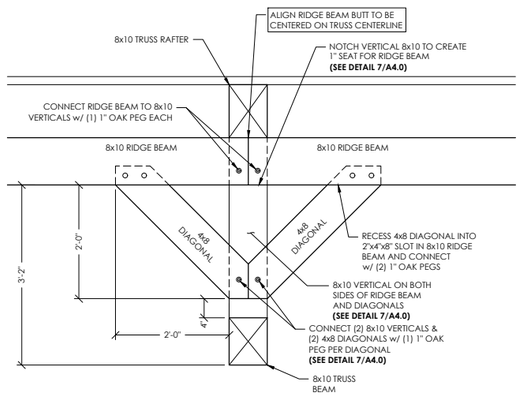
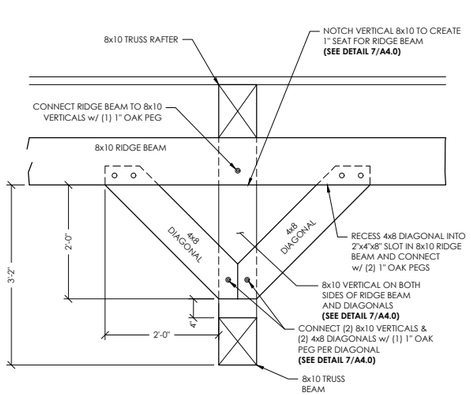


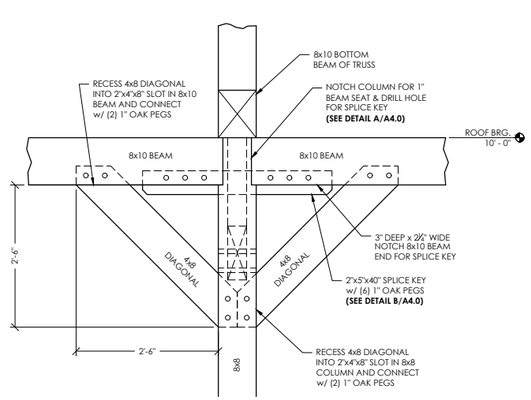
5 TRUSS @ COLUMN DETAIL
SCALE: 3/8" = 1'-0" (11x17)



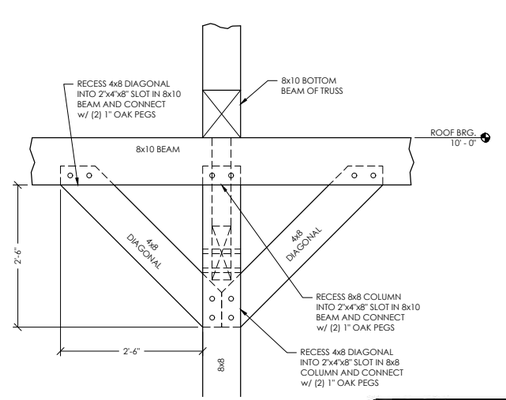
4 RIDGE DETAIL
SCALE: 3/8" = 1'-0" (11x17)



3 TYPICAL RIDGE DETAIL
SCALE: 3/8" = 1'-0" (11x17)



2 COLUMN @ BEAM SPLICE DETAIL
SCALE: 3/8" = 1'-0" (11x17)



1 TYPICAL COLUMN DETAIL
SCALE: 3/8" = 1'-0" (11x17)

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FRAMING DETAILS
McCARTHY PARK IMPROVEMENTS
DANE COUNTY PARKS

TOWN OF SUN PRAIRIE
DANE COUNTY, WI

NO.	REVISIONS	BY	DATE
1	ADDENDUM	LAL	02/18/2022

0 X
SCALE

DRAWN BY	SRR
REVIEWED BY	LAL
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