ADDENDUM TWO

DATE: November 6, 2026

TO: PROSPECTIVE BIDDERS

FROM: EAGLE ENGINEERING GROUP
12100 W Center Road, Suite 803
Omaha, Nebraska 68144

RE: Water Treatment Plant Replacement
Minden, Iowa
EEG #24-34

This addendum forms a part of the Contract Documents and modifies the original Contract Documents, dated September 6, 2024, as noted below. Acknowledge receipt of this addendum in space provided on the Bid Form. FAILURE TO DO SO MAY SUBJECT BIDDER TO DISQUALIFICATION

CHANGES TO PROCUREMENT AND CONTRACTING REQUIREMENTS

1. 00010 TABLE OF CONTENTS

   A. DELETE in its entirety and SUBSTITUTE Attachment No. 1 to Addendum No. 2.

CHANGES TO PROJECT MANUAL

1. 02831 BLACK PVC COATED CHAIN LINK FENCING

   A. ADD specification section as Attachment No. 2 to Addendum No. 2.

2. 02832 SECURITY GATE OPERATOR

   A. ADD specification section as Attachment No. 3 to Addendum No. 2.

3. 05300 METAL DECKING

   A. ADD specification section as Attachment No. 4 to Addendum No. 2.

4. 08100 HOLLOW METAL DOORS AND FRAMES

   A. ADD specification section as Attachment No. 5 to Addendum No. 2.

5. 09651 POLISHED CONCRETE FINISHING

   A. ADD specification section as Attachment No. 6 to Addendum No. 2.

6. 11200 PUMPS, VALVES, & PIPING

   A. Add the following Paragraphs:

   1.05 Approved Manufacturers or suppliers are:

      1.05.1 Pentair

      1.05.2 Layne

      1.05.3 Fairbanks

      1.05.4 Simflo

      1.05.5 Ruhrpumpen

7. 11550 INDUCED DRAFT AERATOR

   A. Add the following Paragraphs:

   2.01.6.1 Approved Manufacturers or suppliers are:

      .1 Westech

      .2 Tonka

      .3 H2K Technologies

      .4 Artesian of Pioneer (AOP)

      .5 Approved equal

8. 11691 VERTICAL PRESSURE FILTER SYSTEM

   A. Add the following Paragraphs:

      2.01.5 Artesian of Pioneer (AOP)

      2.01.6 Water Surplus

9. 13500 SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM

A. AMEND Paragraph 2.01.2 to read as follows:

"Approved integrators are Electric Pump, Preferred Controls, Jetco and HOA Solutions"

10. 13550 COMMUNICATION AND NETWORKING EQUIPMENT

A. DELETE this section in entirety.

11. 13555 WIRELESS COMMUNICATION EQUIPMENT

A. DELETE Paragraph 1.02.2 and REPLACE with the following:

1.02.2 Approved Control Integrators are:

Electric Pump
Preferred Controls
HOA Solutions
Jetco

12. 16990 STANDBY GENERATOR SYSTEM

A. AMEND Paragraph 1.09.6.1 to read:

With the building load operating at normal, initiate a power failure by disconnecting the normal power supply to the facility. Monitor and record required test information as specified in NFPA 110. Monitor battery charge rate at five (5) minute intervals for the first fifteen (15) minutes and fifteen (15) minute intervals thereafter. Continue monitoring and recording load test for two (2) hours noting any abnormal resultant effects on voltage, frequency and current from load changes. After the two (2) hour running test, return normal power to the facility and record the time delays to retransfer and engine-generator shutdown. Wait for five (5) minutes after shutdown and immediately initiate another normal power failure. Immediately upon reaching rate frequency, apply full rate nameplate kW (facility load with supplemental load bank if required) in one step. Record all test data as specified earlier, operate the engine-generator at nameplate kW for one (1) hour noting any abnormal voltage, current or frequency changes. System supplier shall provide lube oil, fifty percent (50%) solution of ethylene glycol, connection to natural gas utility. Cost of natural gas use during testing will be responsibility of the Contractor. After the test is completed, the supplier will provide four (4), one (1) hour classes to the Owner pertaining to general maintenance, inspection, and testing of the entire system."

B. AMEND Paragraph 2.01.1 to read:

"THE ENGINE-GENERATOR SHALL BE 130 kW, Natural Gas Electric Generator Set 130 kW. continuous standby rating, 277/480 volt, 60 hertz, 3 phase, 4 wire, 1800 RPM, with no more than a ten percent (10%) voltage dip, with all standard equipment as per manufacturer's specifications plus the following modifications accessories"

C. AMEND Paragraph 3.01.3 to read:

"COORDINATE connection of natural gas with local utility."

CHANGES TO DRAWINGS

1. SHEET C.4 SITE UTILITIES

   i. ADD Attachment No. 7 to Addendum No. 2 to the overall utility work plan.

2. SHEET S.1 STRUCTURAL NOTES

   i. DELETE the following note:

   "Foundations – Basis of Design"

   ii. Add to the following note: Concrete / Reinforcing – Admixtures –

   "Penetron is an approved waterproofing admixture."

3. SHEET E.1 PROCESS ELECTRICAL PLAN

   i. Add the following Note:

   "1. Mini-Split System 1 will include a 20,000 BTU multi zone system. Zone 1 will service control room, lab room, and restroom. Zone 2 will service chemical feed room and storage room. System will include all indoor and outdoor installations to provide a complete and usable system. Control and thermostat for individual rooms will be placed near doors. All final installation locations and layouts will be up to the Contractor.

   2. Mini-Split System 2 will include a 20,000 BTU single zone system. The unit will service the pump/filter room. System will include all indoor and outdoor installations to provide a complete and usable system. Control and thermostat shall be placed within the filter room.

4. All exhaust fans and mechanical louvers shall activate when room is occupied and/or mechanical components are operating to ensure proper evacuation of air. Exhaust fans shall be Greenheck Model G-095-VG or equal. Mechanical louvers shall be Greenheck Model ECD-601 or equal.

5. SHEET E.2 LIGHTING AND POWER PLAN

i. Add the following:

"Item WGH2-70-LSCS-UNVC and WTZ8-10L-U-40_SPFL as provided by Convergence are acceptable models for exterior lights and interior lighting installations.

Jacob F. Zimmerer, PE

END OF ADDENDUM

Attachment No. 1 to
Addendum No. 2

WATER TREATMENT PLANT REPLACEMENT

MINDEN, IOWA

APRIL 2026

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APPENDIX

Radio Path Study

Tonka Drawings and Wiring Diagram

Attachment No. 2 to
Addendum No. 2

SECTION 02831

BLACK PVC COATED CHAIN LINK FENCING

1.0 GENERAL

1.01 DESCRIPTION

1.01.1 RELATED WORK SPECIFIED ELSEWHERE

Site Preparation	Section 02100
Surface Restoration	Section 02900
Cast-In-Place Concrete	Section 03300

1.02 SCOPE OF WORK

1.02.1 Furnish and install 6-foot-high black PVC-coated commercial chain-link fencing, including fabric, posts, rails, braces, fittings, tension wire where indicated, gates where indicated, concrete post foundations, and accessories required for a complete installation.

1.03 PRODUCT DELIVERY. STORAGE, AND HANDLING

1.03.1 Material will not be stored on site. Any material not installed at the end of a working day will be returned to the contractor’s yard.

1.03.2 Damaged material will be rejected.

1.04 GUARANTEE

1.04.1 Guarantee all work in this section for a period of two years from date of acceptance.

1.05 SUBMITTALS

1.05.1 Submit manufacturer's product data for fence fabric, framework, fittings, gates, and accessories.

1.05.2 Submit fabric data identifying wire gauge, steel core diameter, mesh size, coating classification, coating thickness, selvage, and color.

1.05.3 Submit framework data identifying product designation, outside dimensions, wall thickness or section properties, steel properties, protective coating, and applicable structural performance standard.

1.05.4 Submit fence layout and installation details, including post spacing, terminal-post bracing, gate-post requirements, and concrete foundation dimensions.

1.05.5 Submit manufacturer's warranty and installation instructions.

1.05.6 Submit signed Buy America or other applicable domestic-content certifications and supporting documentation required by the contract.

1.06 QUALITY REQUIREMENTS

1.06.1 Comply with the applicable ASTM standards specified herein.

1.06.2 Provide compatible fabric, framework, fittings, and accessories with consistent black finishes.

1.06.3 Obtain approval of product data and installation details before ordering materials.

2.0 PRODUCTS

2.01 CHAIN-LINK FABRIC

2.01.1 Height: 6 feet.

2.01.2 Mesh: 2-inch diamond mesh.

2.01.3 Wire: No. 9 gauge steel core wire, with the manufacturer to identify the core-wire diameter separately from the finished PVC-coated diameter.

2.01.4 Base wire: Galvanized steel wire suitable for polymer-coated chain-link fabric.

2.01.5 Polymer coating: PVC, fused and adhered, complying with ASTM F668, Class 2b.

2.01.6 Color: Black, complying with ASTM F934.

2.01.7 Selvage: Knuckled top and bottom unless otherwise indicated on the contract drawings.

2.01.8 Fabric shall be uniform in mesh, coating, color, and workmanship, without exposed sharp wire ends or coating defects.

2.02 POSTS, RAILS, AND BRACES

2.02.1 Manufacturer: Stephens Pipe & Steel or equivalent.

2.02.2 Framework product: SPS-40 steel fence framework, sized and selected for the intended line-post (2.5”), terminal-post (3”), corner-post (3”), gate-post (3”), rail, and brace applications.

2.02.3 Framework dimensions and structural properties shall be established by the manufacturer's published product data. Do not substitute nominal pipe dimensions for SPS-40 product dimensions without verification.

2.02.4 Provide galvanized steel framework with compatible black PVC coating where specified for the fence system. The framework coating shall comply with the applicable provisions of ASTM F1043, and the color shall comply with ASTM F934.

2.02.5 Provide posts, rails, and braces with compatible coatings and profiles throughout each continuous fence section.

2.02.6 Select post sizes (3” corners, 2.5” in-line), spacing (10 feet), and bracing to suit the fence height, gate loads, site conditions, and manufacturer's installation requirements.

2.02.7 Provide post caps and rail fittings compatible with the framework.

2.03 FITTINGS AND ACCESSORIES

2.03.1 Provide tension bars, tension bands, brace bands, rail ends, post caps, loop caps, rail sleeves, fabric ties, and other fittings required for a complete installation.

2.03.2 Provide corrosion-resistant fittings and fasteners suitable for exterior service and compatible with the black-coated fence system.

2.03.3 Provide fabric ties and tension wire where indicated by the contract drawings or required by the approved fence-system details.

2.03.4 Repair damaged protective coatings in accordance with the manufacturer's written recommendations.

2.04 GATES

2.04.1 Provide gates only where indicated on the contract drawings.

2.04.2 Gate frames, posts, hinges, latches, and accessories shall be suitable for the opening size and intended use.

2.04.3 Provide black PVC-coated fabric and compatible black-coated gate framework to match the adjoining fence.

2.04.4 Provide mechanical operating apparatus.

2.05 CONCRETE FOUNDATIONS

2.05.1 Set posts in concrete foundations of dimensions appropriate to the post size, fence height, soil conditions, and loading.

2.05.2 Submit proposed foundation diameters and depths for review before installation.

2.05.3 Do not use a standard footing dimension without confirming suitability for the project site and approved fence details.

2.06 SIGNS

2.06.1 SIGNS shall be provided for mounting on the fence. Signs shall be 1/16-inch thick aluminum with baked enamel finish. The sign background shall be white. The lettering shall be black. A total of two signs shall be provided and installed at the entrance gate and front fenceline. Signs shall read as follows:

NO TRESPASSING
WATER TREATMENT FACILITY
CITY OF MINDEN

3.0 EXECUTION

3.01 INSTALLATION

3.01.1 Install fencing in accordance with the approved shop drawings and manufacturer's written instructions.

3.01.2 Set posts plumb, aligned, and securely anchored. Maintain uniform fence height and fabric tension.

3.01.3 Install terminal, corner, pull, and gate posts with the required bracing and anchorage.

3.01.4 Install top rails, braces, tension bars, fabric ties, and fittings securely and uniformly.

3.01.5 Stretch fabric taut without damaging the PVC coating or distorting the mesh.

3.01.6 Coordinate gate locations, swings, clearances, and hardware with the approved drawings.

3.02 FINISH AND ACCEPTANCE

3.02.1 Finished fencing shall be straight, secure, uniform in appearance, and free of loose fittings, sharp projections, and visible coating damage.

3.02.2 Replace materials with defective coatings or unacceptable damage unless an approved repair method is authorized by the manufacturer.

3.02.3 Remove debris and surplus materials from the work area upon completion.

3.02.4 Provide final product certifications and warranty documents before final acceptance.

3.03 GROUNDING

3.03.1 GROUND the fence at every gate, at points 150 feet each side of overhead power transmission lines, at intervals of every 1,000 feet of length when fences are located in isolated places, and every 500 feet when in close proximity (100 feet or less) to public roads, highways, and buildings. The fence shall be grounded at locations where the fence alignment changes more than 15 degrees.

3.03.2 EACH FENCE POST to be grounded shall be connected to a ground electrode consisting of a copper-clad steel ground rod 3/4 inch in diameter and 10-feet long, driven not less than 11 feet into the ground with rod located at the fence line or as near to the fence line as is practical. Connection of fence post to ground electrode shall be made below grade with not less than No. 4 AWG stranded copper wire with TW or RR insulation by approved molded exothermic weld process or approved clamp-type fitting of copper on fence post and electrode. Each gate panel shall be bonded with a flexible bond strap to its gate post.

Attachment No. 3 to
Addendum No. 2

SECTION 02832

SECURITY GATE OPERATOR

Part 1 General

1.1 SECTION INCLUDES

A. Security Gate Operator for single track Chain Link.

1.2 REFERENCES

A. ASTM A 36/A 36M - Standard Specification for Carbon Structural Steel

B. ASTM A 500 - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes

C. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes

D. ASTM B 429/B 429M - Standard Specification for Aluminum-Alloy Extruded Structural Pipe and Tube.

E. ASTM F 1043 - Standard Specification for Strength and Protective Coatings on Steel Industrial Chain Link Fence Framework

F. ASTM F 2200 - Standard Specification for Automated Vehicular Gate Construction.

G. Federal Specification RR-F-191/2E - Chain Link Fences and Gates.

H. NFPA 70: National Electrical Code.

I. UL 325 - Standard for Safety for Door, Drapery, Gate, Louver, and Window Operators and Systems. Sixth Edition.

J. CAN/CSA-C22.2 No. 247, Operators and Systems of Doors, Gates, Draperies, and Louvers.

1.3 DESIGN / PERFORMANCE REQUIREMENTS

A. Comply with applicable Local code. Comply with requirements of Authorities Having Jurisdiction (AHJ) in Project location.

1. Standards: Comply and adhere to current Operation Control Systems and Gate Panel Construction Standards.

(a) UL 325 - Standard for Safety for Door, Drapery, Gate, Louver, and Window Operators and Systems.
(b) CAN/CSA-C22.2 No. 247 Operators and Systems of Doors, Gates, Draperies, and Louvers
(c) ASTM F 2200 - Standard Specification for Automated Vehicular Gate Construction.
(d) Electrical Components, Devices, and Accessories: NFPA 70, Article 100.

1.4 SUBMITTALS

A. Submit under provisions of Section 01 33 00 - Submittal Procedures.

B. Product Data: Manufacturer's data sheets on each product to be used, including:

1. Details of material and construction.
2. Preparation instructions and recommendations.
3. Storage and handling requirements and recommendations.
4. Installation methods.

C. Shop Drawings:

1. Controls: Show locations and details for control components, switches and motor drive system. Indicate motor size, drive schematic, electrical characteristics, drive arrangement, mounting, disengagement and override procedures, and grounding.
2. Wiring Diagrams: Power and control wiring, communication features, and access control features. Differentiate between factory-installed and field-installed wiring and between components provided by manufacturer and those provided by other sections of this specification.

D. Closeout Submittals:

1. Provide As-Built Drawings showing the as-built conditions of all equipment provided.
2. Provide manufacturer's maintenance and service instructions that include recommendations for periodic maintenance and cleaning of all gate and vehicle barrier system components including:

(a) Parts List, or Bill of Material on all major parts and components.
(b) Recommended Spare and Consumables Parts List. Spare parts shall be those that can be field replaced. Consumables include items required for maintenance and service, such as, lights, fuses, lubricants, recommended accessories, mechanical components, etc. Provide all items with a part number, recommended quantity, and a brief description.

1.5 QUALITY ASSURANCE

A. Gate Operators Manufacturer Qualifications: Minimum 3 years documented experience, producing systems specified in this section. Furnish UL 325 Listing Certification from a Nationally Recognized Testing Laboratory for Gate Operator specified in this section.

B. Installer Qualifications: Installer Qualifications: An experienced installer who has completed fences and gates similar in material, design, and extent to those specified for this Project and whose work has resulted in construction with a record of successful in-service performance.

1.6 DELIVERY, STORAGE, AND HANDLING

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

B. Store components to avoid damage from moisture, abrasion, and other construction activities. Carefully store materials off the ground to provide proper protection against oxidation caused by ground contact.

1.7 COORDINATION AND SEQUENCING

A. Coordinate gate installation with line fencing, paving and electrical power and control conduits.

B. Ensure that locating templates and other information required for installation of products of this section are furnished to affected trades in time to prevent interruption of construction progress.

C. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

1.8 PROJECT CONDITIONS

A. Field Measurements and Verification: Measure, verify and generate dimensions where Gate and Operator are to be located. Indicate specific location of gate with regard to existing roadways, proposed roadways, curb locations, grade changes and elevations. Indicate specific location of Gate Operator and its respective concrete foundation; include surrounding landscaping, fencing, buildings and other fixed stationary objects near the gate operator and gate panel in both open and closed positions.

1.9 WARRANTY

A. Standard Warranty: Provide manufacturer's standard 3-year limited warranty against defective materials and workmanship after Date of Substantial Completion

Part 2 PRODUCTS

2.1 MANUFACTURER: LINEAR GATE OPENERS or equal

2.2 COMMERCIAL SLIDE GATE OPERATOR

A. Model: HSLG-4

B. Motor: ¾ HP

C. Speed: 10 inches per second

D. Electric: 115/230VAC, Single Phase

E. Controller: APeX UL25/UL991 compliant 24VDC control module within weather resistant galvanized steel cabinet with powder coat finish

F. Convenience Features: Exterior stop/reset button and power on/off button.

G. Vehicle Loop Detector: 2500-2346 Plug-in loop detector

2.3 ACCESS CONTROLS

A. Model: AK-11

1. Two keypad mounted for entrance and exit

B. Exterior direct bury mounted keypad. 72” Direct Burial Mount Gooseneck stand; powder coat steel Model: ACP00907

2.4 VEHICLE LOOP

A. Model: 2510-1502 (wire only) and 2500-2509

1. Install 6x12 foot vehicle detector loop on entrance and exit

2. Gray Sealant: Linear 1600-818

Part 3 EXECUTION

3.1 EXAMINATION

A. Verify that trenching, backfilling, concrete foundations, pads, anchor bolts and adjacent construction are ready to receive automatic gate systems operator and vehicle detection.

B. Verify that required electric and control conduit, wiring, grounding and service utilities are in correct location and are of correct capacities for specified products.

3.2 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.

3.3 INSTALLATION

A. General: Install automatic gate systems in accordance with manufacturer's instructions and the authorities having jurisdiction.

B. Operator Installation:

1. Operator Expansion Bolt Mounting: Anchor through base plates to concrete substrate.
2. Install all loose shipped operator lower panels and guarding per manufacturer instructions.
3. Utilize existing electrical service to automatic gate operator

C. Adjusting: Adjust and lubricate operating components for smooth, accurate operation free of binding and racking.

D. Vehicle Loops: Sawcut existing pavement to install loop detection.

3.4 FIELD TESTING

A. Vehicle barrier system shall be initially started and commissioned by a certified manufacturer-authorized field service technician. Perform tests in accordance with the manufacturer's instructions.

1. Facility Electrical Power: Verify all wiring terminations before turning on electrical power. Verify voltage from facility electrical power feed.
2. Unit Start-up: Prepare for initial start-up by a factory-trained, manufacturer-authorized field service technician.

(a) Motor shall be jog started (but not run) to verify the correct direction of electric motor rotation.
(b) Perform Pre-Operation checks in accordance with the manufacturer's Operation and Maintenance manual.

B. Upon completion of installation place the gate/barrier in an open position and maintain vertically clear of traffic and surrounding fence line installation.

3.5 START-UP AND DEMONSTRATION

A. Instruct Owner's personnel in proper use, operation, and regular maintenance of the gate system. Review emergency provisions, including procedures to be followed if gate does not close or open. Review and demonstrate manually opening and closing the gate system in the event of total loss of power.

B. Instruct Owner's personnel in proper use, operation, and maintenance of all accessories and entrapment protection devices and provisions such as but not limited to: lights, access controls, photo eyes, contact sensors, barrier screening or fencing, etc.

C. Train Owner's personnel in normal procedures to be followed in checking for sources of damage to wind bracing, operational failures or malfunctions.

1. Periodic inspection is a must in order to maintain full wind load rating. Any dents, bends, nicks and loose bolts will affect the performance of the bracing must be corrected or repaired.
2. Additional, non-factory supplied signage must be approved by manufacturer.

D. Determine that control systems and operating devices are functioning properly.

E. Adjust control systems as required and as directed.

3.6 CLEANING AND PROTECTION

A. Remove dust or other foreign matter from component surfaces; clean finishes in accordance with manufacturer's instructions

B. Protect installed products until completion of project.

1. Ensure that finishes and structure of installed systems are not damaged by subsequent construction activities.
2. If minor damage to finishes occurs, repair damage in accordance with manufacturer's recommendations; provide replacement components if repaired finishes are unacceptable to Architect or authority having jurisdiction.

END OF SECTION

Attachment No. 4 to
Addendum No. 2

SECTION 05300

METAL DECKING

1.0 GENERAL

1.01 SCOPE OF WORK

1.01.1 THE EXTENT OF THE METAL DECKING WORK is shown on the Drawings and includes, but is not limited to, fabrication and erection of metal roof deck and steel centering.

1.01.2 RELATED WORK SPECIFIED ELSEWHERE

Structural Steel	Section 05120
Steel Joists	Section 05200

1.02 CODES AND STANDARDS

1.02.1 IN ADDITION TO COMPLYING with all pertinent codes and regulations, comply with published standards of the following:

.1 American Iron and Steel Institute (AISI)

.2 American Welding Society (AWS)

.3 Steel Deck Institute (SDI)

1.03 SUBMITTALS

1.03.1 SUBMIT SHOP DRAWINGS for approval in accordance with the General Conditions and General Requirements within 35 days after award of the contract, and before any metal deck or steel centering is delivered to the job site.

1.03.2 SHOP DRAWINGS SHALL INCLUDE an erection plan showing the arrangement of and identification of individual pieces, and all related details and connections.

1.04 PRODUCT HANDLING

1.04.1 USE ALL MEANS NECESSARY to protect metal deck materials from damage before, during and after erection, and to protect the installed work and materials of other trades.

1.04.2 IN THE EVENT OF DAMAGE, immediately make all repairs and replacements necessary to the approval of the Architect/Engineer and at no additional cost to the Owner.

2.0 PRODUCTS

2.01 METAL DECK

2.01.1 METAL DECK FOR ALL ROOF AREAS shall be wide rib, 1⁄2-inch thick, 22 gauge with a section modulus of .194 in (3)/ft, and moment of inertia of 1.67 in (4)/ft., and shall conform to ASTM A525. Metal deck shall be painted, and shall be used in 3 or more span condition.

2.02 ACCESSORIES

2.02.1 METAL CLOSURE STRIPS SHALL BE FABRICATED of not less than 20-gauge sheet steel of the same quality as deck units. Form to the configuration of the metal deck to provide tight fitting closures at open ends and sides of metal decking.

2.02.2 PROVIDE OTHER MISCELLANEOUS ACCESSORIES as required to provide finished surface for the application of insulation and roofing. Provide flat cover plate, 20 gauge by 6 inches wide at the following locations:

.1 Where deck changes direction

.2 Where deck ribs do not align

.3 Where slope varies at support, use ridge or valley plate

3.0 EXECUTION

3.01 JOB CONDITIONS

3.01.1 PRIOR TO THE INSTALLATION of the work of this section, carefully inspect the work of all other trades, and verify that all such work is complete to the point where this installation may properly commence.

3.01.2 VERIFY THAT THE METAL DECKING may be installed in accordance with all pertinent codes and regulations, the original design, approved shop drawings, and all referenced standards.

3.01.3 IN THE EVENT OF DISCREPANCIES, immediately notify the Architect/Engineer. Do not proceed with fabrication or installation in areas where discrepancies exist until all such discrepancies have been fully resolved.

3.02 INSTALLATION

3.02.1 PLACE METAL DECK UNITS on supporting members and adjust to final position with ends accurately aligned and bearing on supporting members. Do not stretch on contract side lap interlocks.

3.02.2 PLACE METAL DECK UNITS in straight alignment for entire length of run of cells and with close alignment between cells at ends of abutting units.

3.02.3 PLACE METAL DECK UNITS FLAT and square, secured to adjacent framing without warp or excessive deflection.

3.02.4 COORDINATE AND COOPERATE with structural steel erector in locating decking bundles on roof to prevent overloading of structural members.

3.02.5 ERECTION OF UNITS shall be in strict accordance with deck manufacturer's recommendations. Provide tight joints to prevent leakage of roofing materials.

3.03 ANCHORING, CUTTING AND REINFORCEMENT OF OPENINGS

3.03.1 FASTEN METAL DECKING to supports with 5/8-inch diameter puddle welds at 12 inches on center, in accordance with approved shop drawings. Side laps of individual sheets shall be fastened together between supports with one #12 Teks screw, equally spaced.

3.03.2 Cut and fit decking units and accessories around other work projecting through or adjacent to decking. Provide neat, square, and trim cuts.

3.03.3 PROVIDE REINFORCEMENT at all openings in metal deck as follows:

.1 At openings less than 12 inches in either direction, provide support with a 20-gauge steel sheet at least 12 inches longer and wider than the opening, centered around the opening and welded to the top surface of the deck.

.2 At openings greater than 12 inches in either direction, provide support with steel angles, 3-inch by 3-inch by 1/4-inch thick, welded together and supported by steel framing.

3.03.4 AFTER DECKING INSTALLATION, wire brush, clean, and paint scarred areas, welds and rust spots on the top and bottom surfaces of decking units, in accordance with manufacturer's instructions.

END OF SECTION

Attachment No. 5 to
Addendum No. 2

SECTION 08100

HOLLOW METAL DOORS AND FRAMES

1.0 GENERAL

1.01 QUALITY ASSURANCE

1.01.1 PROVIDE DOORS AND FRAMES complying with the Steel Door Institute, "Recommended Specifications: Standard Steel Doors and Frames" (SDI-100), and as herein specified.

1.02 SUBMITTALS

1.02.1 SUBMIT SHOP DRAWINGS to the Engineer. Shop drawings shall show quantities, types, and locations of doors and frames. Door and frame construction shall be fully detailed showing weights of material, finish, framing, and reinforcing, and must indicate conformance with specified technical requirements.

1.03 DELIVERY, STORAGE, AND HANDLING

1.03.1 DELIVER hollow metal doors in individual cartons. Ship doorframes with angle spreaders at door-opening bottoms.

1.03.2 STORE DOORS AND FRAMES at building site in an upright position, waterproof cover on wood blocking, and provide spacers to promote air circulation.

2.0 PRODUCTS

2.01 MATERIALS

2.01.1 ALL MATERIALS used in the fabrication of pressed steel frames and doors shall be from defects impairing their strength, durability or appearance. Doors and frames shall conform to Commercial Standard CS242-62 or PS4-66.

2.02 METAL FRAMES FOR DOORS (HM)

2.02.1 METAL FRAMES FOR DOORS (HM) shall be fabricated from 14-gauge steel for 1-3/4 inch doors. Frames shall be combination type with integral stop and trim. Head assemblies shall be reinforced internally at each miter joint with

16-gauge channel-shaped reinforcements. Miter and continuously arc-weld frame face to form a 1-piece, neat miter-corner assembly. Doorframes shall be equipped with 3 masonry anchors in each jamb. Anchors shall be of the proper type for masonry construction.

2.02.2 FRAMES shall be mortised, reinforced, drilled, and tapped at the factory to receive full mortised hinges and strikes as specified in the hardware schedule. Plaster guards shall be installed in back of all applicable hardware cutouts. Frames shall be reinforced for surface-applied hardware when specified. Strike jambs shall be punched to receive two rubber bumper silencers.

2.02.3 EXTERIOR FRAME MEMBERS shall be manufactured of hot-dip galvanized material in the 1.25-ounce coating conforming to ASTM Designation A 525 and A 526, and Federal Specification QQ-S-775D, Type 1, Class D (except marking). The material shall be treated in the mill to insure superior prime paint adhesion. The pretreatment shall conform to Federal Specification TT-C-490, Grade 1.

2.03 METAL DOORS (HM)

2.03.1 METAL DOORS shall be 16-gauge, heavy duty. Face sheets shall be 16-gauge steel internally welded to steel stiffeners to support the face sheets against impact and to assure flat face sheet surfaces, or shall be bonded to a rigid polystyrene, polyurethane, or a resin-impregnated honeycomb core. If steel stiffeners are used, doors shall be filled with mineral rock wool or fiberglass.

2.03.2 VERTICAL EDGES shall be 16-gauge channels with each face sheet wrapped around the channels, meeting at the center of the edge, with the seam welded shut and

2.03.3 TOP AND BOTTOM EDGES shall be 16-gauge steel channels. The back of the channel shall be flush with the top and bottom of face sheets. Tops shall be smooth and flush.

2.03.4 EXTERIOR DOOR PANELS AND END CLOSURES shall be manufactured of hot-dip galvanized material in the 1.25-ounce coating class, conforming to ASTM Designations A 525 and A 526, and Federal Specification QQ-S-775D, Type 1, Class D (except marking). The materials shall be treated in the mill to insure superior prime paint adhesion. The pretreatment shall conform to Federal Specification TT-C-490, Grade 1.

2.03.5 DOORS shall be mortised, reinforced, drilled, and tapped to receive mortise hardware, as specified in the hardware schedule. Doors shall be reinforced for

specified surface applied hardware; drilling and tapping shall be done in the field. Hinge reinforcement plates shall be 6 gauge. Reinforcing for other surface and mortised hardware shall be 14 gauge, except for closer reinforcings, which shall be 12 gauge. All locks shall have flat faces.

2.03.6 AFTER FABRICATION, doors shall be thoroughly cleaned and degreased, phosphatized, and painted with a rust-inhibitive primer.

3.0 EXECUTION

3.01 INSTALLATION OF FRAMES

3.01.1 FRAMES SHALL BE INSTALLED plumb, rigid and in true alignment, and be fastened so as to retain their position and clearance during construction of partitions. Frames in masonry walls shall be filled with mortar as the wall is laid up. When temperature conditions necessitate an additive to be used in the plaster or mortar to prevent freezing as the frames are installed, the inside of the frames shall be coated in the field with a corrosion inhibiting bituminous material by the Contractor installing the frames.

3.02 INSTALLATION OF DOORS

3.02.1 DOORS SHALL BE INSTALLED plumb and in true alignment in a prepared opening and be fastened to achieve the maximum operational effectiveness and appearance of the unit. Install miscellaneous items.

END OF SECTION

Attachment No. 6 to
Addendum No 2.

SECTION 09651

POLISHED CONCRETE FINISHING

Part 1 General

1.1 SUMMARY

A. Section Includes:

(a) Multi-step mechanical polishing and finishing of new concrete floor slabs.

1.2 REFERENCES

A. American National Standards Institute (ANSI):

1. ANSI B101.1 Test Method for Measuring Wet Static Coefficient of Friction of Common Hard-Surface Floor Materials.

B. American Society for Testing and Materials (ASTM):

1. ASTM C 140 – Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units
2. ASTM C 642 – Standard Test Method for Density, Absorption, and Voids in Hardened Concrete
3. ASTM C 779 – Standard Test Method for Abrasion Resistance of Horizontal Concrete Surfaces
4. ASTM D 523 – Standard Test Method for Specular Gloss
5. ASTM D 2047 – Standard Test Method for Static Coefficient of Friction of Polish-Coated Flooring Surfaces as Measured by the James Machine
6. ASTM D 5767 – Standard Test Methods for Instrumental Measurement of Distinctness-of-Image Gloss of Coating Surfaces
7. ASTM E 96 – Standard Test Methods for Water Vapor Transmission of Materials
8. ASTM F 1869 – Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
9. ASTM F 2170 – Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes.

C. Concrete Polishing Association of America (CPAA):

1. CPAA Definitions: Terminology used herein.

D. U.S. Green Building Council (USGBC):

1. Leadership in Energy & Environmental Design (LEED) v4.

1.3 ACTION SUBMITTALS

A. General: Submit the following for approval. Do not proceed with work involving any action submittal until approval is obtained.

B. Product Data: For each product used. Include material physical characteristics, storage and application instructions, precautions and safety data, cleanup, and maintenance information.

1.4 INFORMATIONAL SUBMITTALS

A. General: Submit the following to the Owner for the Owner's information and records. If acceptable, and unless otherwise indicated, Informational Submittals will not be acted upon or returned.

B. Safety Data Sheets (SDS) for all products used.

C. Qualification Data: For polishing subcontractor.

D. Maintenance Data: For inclusion in Operation and Maintenance Manual required by Division 01.

1. Include instructions for cleaning and maintenance of polished concrete floor, as well as precautions against cleaning products and other chemicals that may be detrimental to satisfactory appearance of polished floor.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company regularly engaged in the manufacturing of the products specified in this section, with at least ten (10) years' successful history manufacturing material specified herein.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver products in original factory packaging, bearing identification of product, manufacturer, batch number (or equivalent code), and expiration date.

1. Furnish Safety Data Sheets for each product to the project superintendent.

B. Store products in a location protected from freezing, damage, construction activity, precipitation and direct sunlight in strict accordance with the manufacturer's recommendations.

C. Handle all products with appropriate precautions and care as recommended by manufacturer and as stated on the Safety Data Sheet.

1.7 PROJECT CONDITIONS

A. Environmental Limitations: Comply with manufacturer's written instructions for ambient temperature and humidity, slab substrate temperature and moisture content, wind, precipitation, and other conditions affecting densifier performance.

B. Damage and Stain Prevention: Take precautions to prevent damage and staining of concrete surfaces to be polished.

1. Prohibit use of markers, spray paint, and soapstone.
2. Prohibit improper application of liquid membrane film-forming curing compounds.
3. Prohibit vehicle parking over concrete surfaces.
4. Prohibit pipe-cutting operations over concrete surfaces.
5. Prohibit storage of any items over concrete surfaces for not less than 28 days after concrete placement.
6. Prohibit ferrous metals storage over concrete surfaces.
7. Protect from petroleum, oil, hydraulic fluid, or other liquid dripping from equipment working over concrete surfaces.
8. Protect from acids and acidic detergents contacting concrete surfaces.
9. Protect from painting activities over concrete surfaces.

C. Use appropriate measures for protection and supplementary heating in accordance with manufacturer's recommendations during times of temperature extremes or inclement weather.

(a) Avoid heating methods that may result of carbonation of concrete surface.

D. Do not allow liquid materials to freeze.

E. Protect adjacent work from contamination due to mixing, handling, and application of liquid densifier and finishing products.

Part 2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Provide liquid materials by manufacturer(s) indicated.

B. Requests for substitutions will be considered.

2.2 LIQUID MATERIALS

A. Curing Compound: As specified elsewhere in Division 03.

B. Liquid Densifier: Water-based, odorless solution designed to react with materials present in new or old concrete in order to densify, harden, and dustproof the surface of the slab.

1. Manufacturer: Dayton Superior Corporation; 1125 Byers Road, Miamisburg, Ohio 45342; Tel: (877) 266-7732; Website: www.DaytonSuperior.com
2. Lithium Silicate Product: Dayton Superior "Pentra-Hard Densifier":

(a) Description: Water-based, penetrating, lithium silicate concrete hardener, dustproofer, and sealer.
(b) Active Ingredients: 100 percent of total solids.
(c) Total Solids: 8.8 percent.
(d) Freeze Point: 32 degrees F (0 degrees C).
(e) VOC Content: Less than 50 g/L.

3. Sodium Silicate/Siliconate Product: Dayton Superior "Sure Hard Densifier J17":

(a) Description: Water-based, penetrating, sodium silicate/siliconate concrete hardener, dustproofer, and sealer.
(b) Active Ingredients: 100 percent of total solids.
(c) Freeze Point: 32 degrees F (0 degrees C).
(d) VOC Content: 0 g/L.

C. Finish and Protector: Clear, water-based, lithium-fortified penetrating and micro film-forming liquid compound designed to enhance water resistance, chemical resistance and abrasion resistance of the densified floor.

1. Manufacturer: Dayton Superior Corporation; 1125 Byers Road, Miamisburg, Ohio 45342; Tel: (877) 266-7732; Website: www.DaytonSuperior.com
2. Product: Dayton Superior "Pentra-Hard Guard":

(a) Description: Water-based, lithium-fortified, high-gloss, concrete stain- and wear-resistant finish.
(b) Active Ingredients: 100 percent of total solids.
(c) Freeze Point: 32 degrees F (0 degrees C).

(d) Abrasion Resistance: Excellent.
(e) VOC Content: Less than 50 g/L.

D. Water: Potable and at a temperature of not more than 70 degrees F (21 degrees C).

2.3 POLISHING EQUIPMENT

A. Field Grinding and Polishing Equipment:

1. A multiple head, counter rotating, walk-behind or ride-on machine, of various size and weights, with diamond tooling affixed to the head for the purpose of grinding concrete. Excludes janitorial maintenance equipment.
2. If dry grinding, honing, or polishing, use dust extraction equipment with flow rate suitable for dust generated, with squeegee attachments.
3. If wet grinding, honing, or polishing, use slurry extraction equipment suitable for slurry removal and containment prior to proper disposal.

B. Edge Grinding and Polishing Equipment: Hand-held or walk-behind machine which produces same results, without noticeable differences, as field grinding and polishing equipment.

C. Burnishing Equipment: High speed walk-behind or ride-on machines capable of generating 1,000 to 2,000 revolutions per minute and with sufficient head pressure of not less than 20 lb-f (89 N) to raise floor temperature by 20 degrees F (11 degrees C).

D. Diamond Tooling: Abrasive tools that contain industrial grade diamonds within a bonded matrix (such as metallic, resinous, ceramic, etc.) that are attached to rotating heads to refine the concrete substrate.

1. Bonded Abrasive: Abrasive medium that is held within a bonding that erodes away to expose new abrasive medium as it is used.
2. Metal Bond Tooling: Diamond tooling that contains industrial grade diamonds with a metallic bonded matrix that is attached to rotating heads to refine the concrete substrate.
3. Resin Bond Tooling: Diamond tooling that contains industrial grade diamonds within a resinous bonded matrix that is attached to rotating heads to refine the concrete substrate.
4. Hybrid Tooling: Diamond tooling that combines metal bond and resin bond that has the characteristics of both types of tooling.
5. Transitional Tooling: Diamond tooling that is used to refine the scratch pattern of metal bond tooling prior to the application of resin bond tooling in an effort to extend the life of resin bond tooling and to create a better foundation for the polishing process.
6. Abrasive Pad: An abrasive pad, resembling a typical floor maintenance burnishing pad, that has the capability of refining the concrete surface on a microscopic level that may or may not contain industrial grade diamonds

Part 3 EXECUTION

3.1 EXAMINATION

A. Acceptance: Obtain written acceptance by Owner of concrete slab for flatness, levelness, and surface characteristics before beginning polishing work.

B. Inspect surfaces to be polished; ensure that substrate is clean, sound, properly cured, free of standing water, coatings, or curing compounds, foreign particles, oil, dust, grease, or laitance, that will adversely affect the performance of liquid materials.

1. Test concrete slab for moisture by one or both (as required by colorant manufacturer) of the following tests prior to commencing coloring work. Do not proceed with work if moisture characteristics exceed those recommended by colorant manufacturer:

(a) Moisture Vapor Transmission Rate: ASTM F 1869.
(b) Relative Humidity: ASTM F 2170.

C. Inspect all areas involved in work to establish extent of work, access, and need for protection of surrounding construction.

D. Examine Project conditions, with Installer present, for conditions affecting performance of the Work.

E. Verify proper placement, finishing, and curing of the concrete floor slab to be densified.

F. Proceed with concrete slab densifier work only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Protect all surroundings from exposure to densifier and sealer materials including, but not limited to, windows, roofs, walkways, drives, and landscaping.

1. Particularly protect glass, aluminum, and polished metal surfaces. In case of exposure, wash off immediately to avoid etching.

B. Ensure that new concrete has been cured at least seven days prior to commencing polishing operations.

1. If slab has been cured with film-forming curing compounds, completely remove residue, using cleaning materials recommended by curing compound manufacturer and/or by mechanical means, if necessary.

C. Remove loose material by hand or mechanically, in accordance with standard practice.

D. Ensure that air, liquid materials, and surface temperature is at least 40 degrees F (5 degrees C) and rising prior to beginning application.

E. If concrete has been treated with an acid-based stain, follow densifier/finish manufacturer's recommendation for surface preparation.

3.3 POLISHING CONCRETE

A. Perform all polishing procedures to ensure a consistent appearance from wall to wall.

B. Initial Grinding:

1. Use grinding equipment with metal or semi-metal bonded tooling.
2. Begin grinding in one direction using sufficient size equipment and diamond tooling to meet specified aggregate exposure class.
3. Make sequential passes with each pass perpendicular to previous pass using finer grit tool with each pass, up to 100 grit metal bonded tooling.
4. Achieve maximum refinement with each pass before proceeding to finer grit tools.

5. Clean floor thoroughly after each pass using dust extraction equipment properly fitted with squeegee attachment or walk behind auto scrubber suitable to remove all visible loose debris and dust.
6. Continue grinding until aggregate exposure matches approved field mock-ups.

C. Treating Surface Imperfections:

1. Mix patching compound or grout material with dust created by grinding operations, manufacturer's tint, or sand to match color of adjacent concrete surfaces.
2. Fill surface imperfections including, but not limited to, holes, surface damage, small and micro cracks, air holes, pop-outs, and voids with grout to eliminate micro pitting in finished work.
3. Work compound and treatment until color differences between concrete surface and filled surface imperfections are not readily noticeable when viewed from 10 feet away under lighting conditions that will be present during final occupancy.

D. Grout Grinding:

1. Use grinding equipment and appropriate grit and bond diamond tooling.
2. Apply grout, forced into the pore structure of the concrete substrate, to fill surface imperfections.
3. Clean floor thoroughly after each pass using dust extraction equipment properly fitted with squeegee attachment or walk behind auto scrubber suitable to remove all visible loose debris and dust.

E. Honing:

1. Use grinding equipment with hybrid or resin bonded tooling.
2. At grinding level specified elsewhere, apply [**colorant and**] liquid densifier. Allow liquid products to dry before resuming grinding.
3. Hone concrete in one direction starting with a 100 grit tooling and make as many sequential passes as required to remove scratches, each pass perpendicular to previous pass, up to 400 grit tooling, reaching maximum refinement with each pass before proceeding to finer grit tooling.
4. Clean floor thoroughly after each pass using dust extraction equipment properly fitted with squeegee attachment or walk behind auto scrubber suitable to remove all visible loose debris and dust.

F. Polishing:

1. Use polishing equipment with resin-bonded tooling.
2. Apply finish and protector at polishing level recommended by manufacturer.
3. Begin polishing in one direction starting with 800 grit tooling.
4. Make sequential passes with each pass perpendicular to previous pass using finer grit tooling with each pass until the specified level of gloss has been achieved.
5. Achieve maximum refinement with each pass before proceeding to finer grit pads.
6. Clean floor thoroughly after each pass using dust extraction equipment properly fitted with squeegee attachment or walk behind auto scrubber suitable to remove all visible loose debris and dust.
7. Final Polish: Using burnishing equipment and finest grit abrasive pads, burnish to

uniform reflective sheen matching approved field mock-up.

G. Final Polished Concrete Floor Finish:

1. Aggregate Exposure Class A – Cream Finish: Polish Portland cement paste resulting in little or no aggregate exposure.

2. Finished Gloss Level 1 – Low Gloss Appearance:

(a) Procedure: Recommended not less than 4 step process with full refinement of each diamond tool with one application of densifier.

(b) Gloss Measurement: Determine the specular gloss by incorporating the following:

i Reflective Clarity Reading: Not less than 20 according to ASTM D 5767 prior to the application of sealers.

ii Reflective Sheen Reading: Not less than 15 according to ASTM D 523 prior to the application of sealers.

3.4 LIQUID MATERIALS APPLICATION

A. General: Follow all manufacturer's recommendations and written instructions when applying densifier and sealer materials.

1. Follow manufacturer's safety and personal protective equipment recommendations.

B. Mixing: Thoroughly mix materials prior to each use.

1. Mix finish and protector gently to avoid formation of bubbles.

C. Dye or Pigmented Micro Stain Application:

1. Apply coloring materials at grinding/honing level recommended by colorant manufacturer.
2. Apply solution by methods and techniques required by manufacturer to produce finish matching approved field mock-ups.
3. Maintain wet edge, working newly applied solution into edges of adjacent wet edges of previously treated surfaces.
4. Maintain consistent saturation throughout application.
5. Avoid splashing, dripping, or puddling of solution on adjacent substrates.
6. When color matches approved mock-ups, neutralize as required by manufacturer.

D. Lithium Silicate Densifier Application:

1. Apply densifier immediately after coloring, prior to subsequent grinding/honing.

(a) If acid-based stain has been used, neutralize the surface prior to proceeding.

2. Apply densifier after grinding level that uses a 200-grit tooling.
3. Apply using HVLP sprayer or hand pump-up sprayer.

(a) Application Rate: 400 – 750 sq. ft. per gallon (9.8 – 18.4 sq. m/l), depending on surface porosity.

4. Brush out standing pools of material, if formed.
5. Reapply material to any areas that dry out before 20 minutes

E. Sodium Silicate Densifier Application:

1. Apply densifier immediately after coloring, prior to subsequent grinding.
   (a) If acid-based stain has been used, neutralize the surface prior to proceeding.
2. Apply densifier after grinding level that uses a 200-grit tooling.
3. Apply using HVLP, hand pump-up sprayer, brush, or roller.
   (a) Application Rate:
      i First Coat: 200 sq. ft. per gallon (4.9 sq. m/l).
      ii Second Coat (if needed): 300 – 400 sq. ft./gal. (7.3 – 9.8 sq. m/l).
4. Scrub material into surface using soft bristle brush or mechanical scrubber.
   (a) Work into surface for 15 – 30 minutes, depending on drying characteristics, until product begins to thicken.
   (b) Rewet with water, then work an additional 5 – 10 minutes.
5. Do not allow material to dry while working; reapply product, if necessary.
6. Thoroughly rinse and brush- or squeegee dry after application.
7. Repeat, if necessary due to surface porosity.

F. Finish and Protector Application: Apply liquid surface finish and protector after all construction activity on the slab surface has ceased and immediately after slab cleaning.

1. Allow new concrete to cure a minimum of 28 days prior to sealer application.
2. Mix finish and protector gently to avoid formation of bubbles.
3. Apply finish and protector using pump sprayer or HVLP sprayer. Limit area applied at one time to maximum area recommended by manufacturer. Spread with pre-moistened microfiber pad. Do not work material into surface.
   (a) Application Rate: 1,500 – 3,000 sq. ft. per gallon (36.8 – 73.7 sq. m/l), depending on surface porosity.
4. When dry, buff surface using high-speed burnisher and soft buffing pad.
5. Apply second coat of finish and protector after first coat has dried.
   (a) Application Rate: 3,000 – 4,000 sq. ft. per gallon (73.7 – 98.2 sq. m/l).
6. Buff second coat using same technique as first.

3.5 CLEANING

A. Clean overspray, spillage, and accidental exposure of material from adjacent surfaces.

B. Remove all debris and excess materials from the job site and dispose of in accordance with all applicable regulations for waste disposal.

1. Do not dispose of liquid materials into sanitary sewers or storm drains.

3.6 PROTECTION

A. Protect densified concrete from spills, stains, and damage during construction, prior to finish and protector application.

B. Do not clean, scrub, or allow liquids on surface for a minimum of 72 hours following application of finish and protector.

C. Do not cover surface for a minimum of 7 days following application of finish and protector.

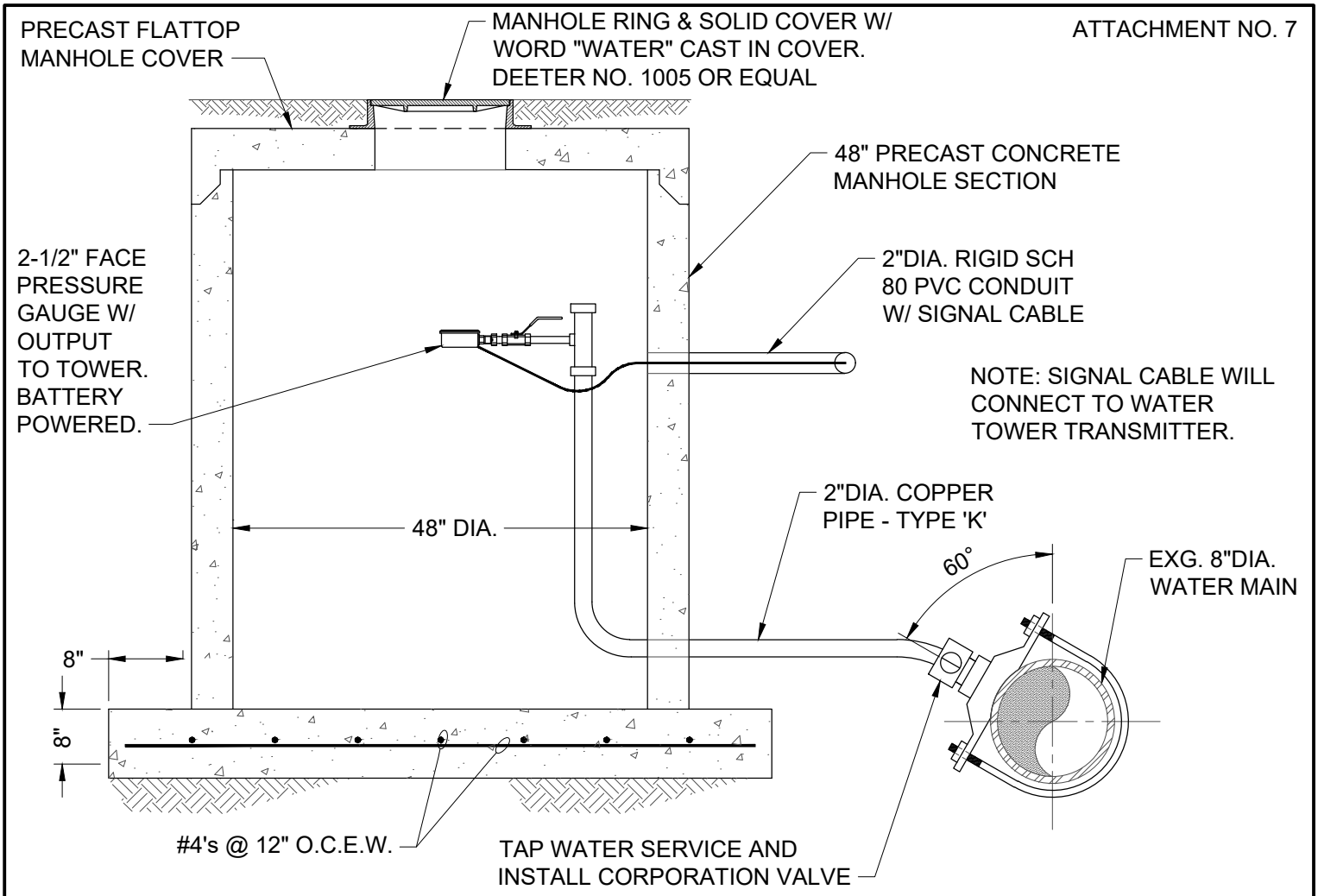
D. Do not allow standing water on surface for a minimum of 7 days following application of Durable Floor System.

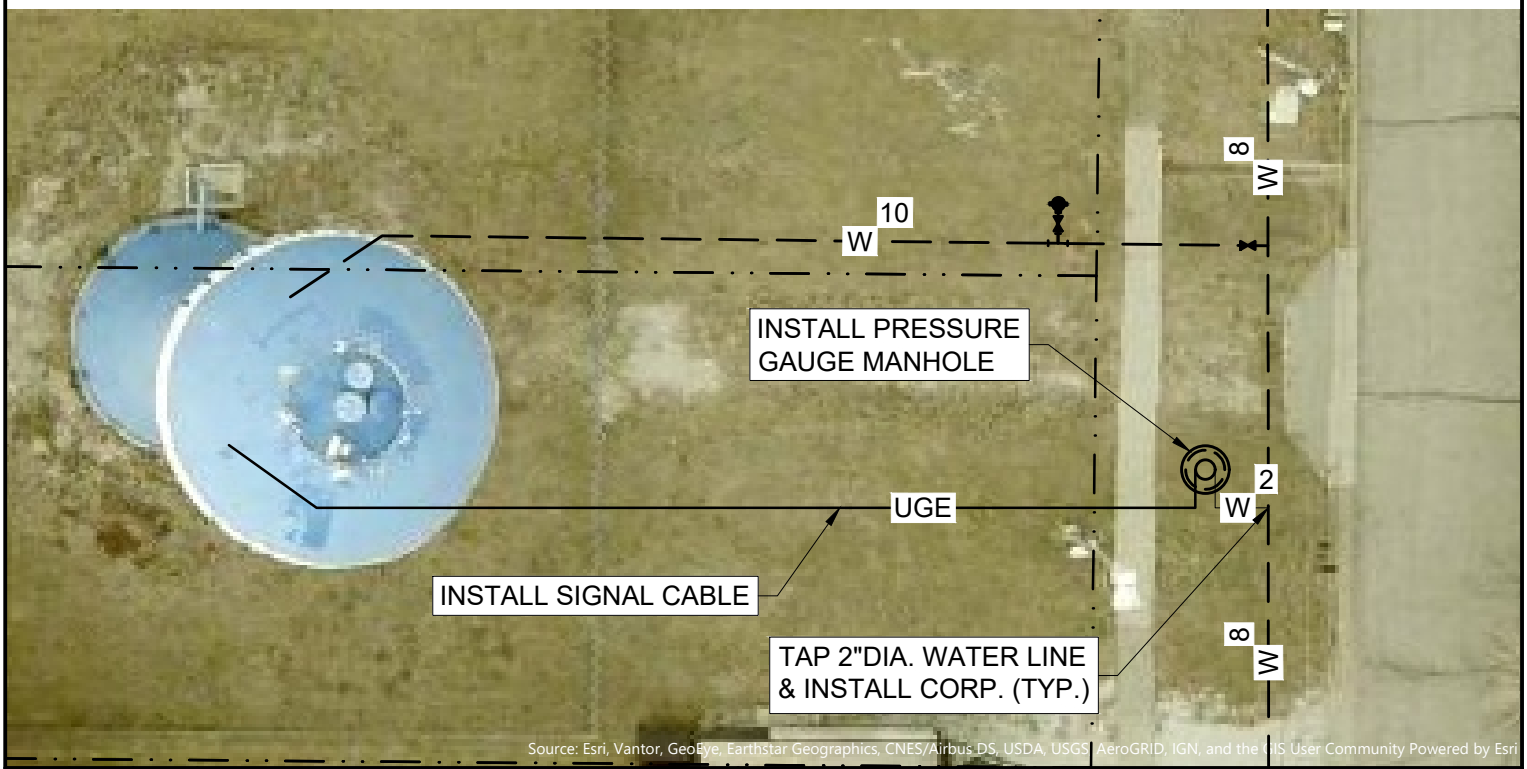
E. Provide temporary floor protective covering in construction traffic paths and where potentially damaging construction activity will occur.

F. At the end of construction, thoroughly clean and buff polished floors to gloss level indicated.

END OF SECTION

ATTACHMENT NO. 7





DESIGNED BY / DRAWN BY / CHECKED BY	
DATE	OCTOBER 2026
PROJECT NO.	24-34
SHEET NO.	1 of 1
PROJECT	2024 Disaster Recovery Water Treatment Plant Replacement Minden, Iowa
DRAWING TITLE	Pressure Gauge Manhole

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