MOAKE PARK GROUP
ARCHITECTURE INTERIORS PLANNING

Addendum D4

re: **City of Berne**
New Municipal Maintenance Building
335003.00

date: **March 1, 2024**

This Addendum forms a part of the Contract Documents for the above-referenced project and is issued in accordance with the Instructions to Bidders. Acknowledge receipt of this addendum by inserting its number in the space provided in the bid form.

ITEM	LOCATION	DESCRIPTION
A4.01	SPECIFICATIONS REQUIREMENTS AND FORMS Supplementary Bid Form ***(Document Reissued)***	**CLARIFICATION:** Supplementary Bid Form ***reissued*** to reflect the changes made in Addendum D1 and Addendum D4. **ADD:** ADD Alternate No. 8 as follows: **Alternate No. 8:** State the cost to provide a Pre-Engineered Metal Building (PEMB) package with Varco Pruden. The Varco Pruden PEMB shall meet or exceed all requirements (except proprietary) in Specification Section 133419 – Metal Building Systems. ADD/DEDUCT:_____ Dollars $_____ This document shall be used when submitting a bid for the project and shall be considered an integral part of the Construction Documents.
A4.02	SPECIFICATIONS Section 012300 Alternates Page 2, Section 3.1, A ***(Specification Reissued)***	**ADD:** ADD Alternate No. 8 as follows: **Alternate No. 8:** State the cost to provide a Pre-Engineered Metal Building (PEMB) package with Varco Pruden. The Varco Pruden PEMB shall meet or exceed all requirements (except proprietary) in Specification Section 133419 – Metal Building Systems. This document shall be considered an integral part of the Construction Documents.

7223 Engle Road | Suite 200 | Fort Wayne, IN 46804 | p: 260-424-6516 | f: 260-424-6309
www.moakepark.com

ITEM	LOCATION	DESCRIPTION
A4.03	SPECIFICATIONS Section 083613 Sectional Doors ***(Specification Reissued)***	**ADD:** On page 3, Section 2.3, A, 1, b ADD as follows: b. Overhead Door Corporation. ***(Basis of Design – Thermacore Model 596)*** **ADD:** On page 3, Section 2.3, A, 1 ADD Manufacturer as follows: e. Wayne Dalton Commercial Doors **CHANGE:** On page 3, Section 2.3, J CHANGE Door Finish as follows: 1. Baked-Enamel or Powder-Coat Finish: Color: Manufacturers Standard White. 2. Finish of Interior Facing Material: Manufacturers Standard White This document shall be considered an integral part of the Construction Documents.
A4.04	DRAWING A4.0 Door Panel Elevation OSHHD	**CLARIFICATION:** Basis of Design for the glazing within the panels depicted on the Door Panel Elevation OSHHD shall be Double Thermal Acrylic (25” wide x 12” high). Refer to Glazing Column and Abbreviations above the Remarks on the Door Schedule.

ITEM	LOCATION	DESCRIPTION
A4.05	DRAWING A6.60	**CHANGE:** Change doors on the Steelmaster USA building from "Sliding Type Bi-Parting Barn Door (Two 12'-0" Leafs) by Steelmaster USA" to Doors "Provided by Others". Steel frame of the door openings shall be provided by Steelmaster USA. Doors shall be Roll-Up Vinyl Commercial Salt Storage Doors. Basis of Design – Paylon Roll Up Doors Door Type: Bi-Parting (2) 12'-0" wide leafs. Door Height: 16'-0". Material: Premium 40 oz. Vinyl Tear Strength: 308 x 283 lbs. / 1" Color: Architect select from manufacturer's full range. Cold Crack: -40d Fahrenheit. Adhesion: 31 lbs. / 2". Operation: Manual. Mounting Style: I-beam. Mounting Hardware: Heavy gauge galvanized mounting hardware with heavy duty ball bearing trolleys. Wind Stabilization: Full height, galvanized pipe standoffs placed evenly throughout the door. Ground locking mechanism: Cane bolts.

CIVIL ITEMS:

C4.01	GENERAL	**CLARIFICATION:** Excess topsoil and possible clay will be allowed to stay in stock pile form rounded off on the south side of the property as long as positive drainage is provided, the stockpile is capped with clean topsoil so that turf can be established, and the side slopes don't exceed 20%. The Contractor shall be responsible for coordinating with the Owner for final stockpile location and allowable maximum height.

ITEM	LOCATION	DESCRIPTION
C4.02	DRAWING C201	**CHANGE:** Change doors on the Steelmaster USA building from "Sliding Type Bi-Parting Barn Door (Two 12'-0" Leafs) by Steelmaster USA" to Doors "Provided by Others". Steel frame of the door openings shall be provided by Steelmaster USA. Doors shall be Roll-Up Vinyl Commercial Salt Storage Doors. Basis of Design – Paylon Roll Up Doors Door Type: Bi-Parting (2) 12'-0" wide leafs. Door Height: 16'-0". Material: Premium 40 oz. Vinyl Tear Strength: 308 x 283 lbs. / 1" Color: Architect select from manufacturer's full range. Cold Crack: -40d Fahrenheit. Adhesion: 31 lbs. / 2". Operation: Manual. Mounting Style: I-beam. Mounting Hardware: Heavy gauge galvanized mounting hardware with heavy duty ball bearing trolleys. Wind Stabilization: Full height, galvanized pipe standoffs placed evenly throughout the door. Ground locking mechanism: Cane bolts.
C4.03	DRAWING C401 ***(Drawing Reissued)***	**REVISED:** REVISE Pipe material type of new RCP storm pipes to HDPE.

ITEM	LOCATION	DESCRIPTION

Submitted by:
The Moake Park Group, Inc.

Kevin L. Runkel, AIA
Principal

attachments:
(Reissued) Supplementary Bid Form
(Reissued) Specification Section 012300 – Alternates
(Reissued) Specification Section 083613 – Sectional Doors
(Reissued) Drawing C401

copies: All Plan Holders
335003/670

SUPPLEMENTARY BID FORM

Circle the appropriate Bid Category:

Bid 1 – Site Construction
Bid 2 – General Construction
Bid 3 – Fire Protection Construction
Bid 4 – Plumbing / Mechanical Construction
Bid 5 – Electrical Construction

PROJECT NAME: **City of Berne**
New Municipal Maintenance Building
BID DATE: **Thursday, March 7, 2024**
TIME: **2:00 p.m. (Eastern Standard Time)**
LOCATION: **158 West Franklin Street**
Berne, IN 46711

I have also received, carefully reviewed, and understand the Contract Documents prepared by:

The Moake Park Group, Inc.
7223 Engle Road, Suite 200
Fort Wayne, Indiana 46804

I have also received Addenda No(s). _____ and have included their provisions in my Bid.

BIDDER NAME: _____

ADDRESS: _____

CITY/STATE/ZIP: _____

TELEPHONE: _____ **FAX:** _____

BID AMOUNT

TOTAL BASE BID **$** _____

BID CHECKLIST

- **STATE FORM 96**
- **FINANCIAL STATEMENT**
- **BID BOND**
- **NON-COLLUSION FORM**
- **SUPPLEMENTARY BID FORM**
- **CONTRACTOR'S QUALIFICATION STATEMENT A305**
- **E.E.O FORM**
- **SUBCONTRACTOR/MANUFACTURER LIST**

The successful bidder/contractor represents that by submitting a bid for this work, he has been at the job site and fully examined the existing conditions, all the contract documents, and has to his satisfaction prepared a bid representing all the work necessary to complete this project.

Bidder/Contractor also affirms that he has completely examined all bid documents and represents that there are no inconsistencies and/or ambiguities contained herein, or if there were, he has requested in writing, prior to time of bid being due, has any and all inconsistencies and/or ambiguities answered in writing from the Architect. Once the Bidder/Contractor submits his bid for this work, no changes/additions to the contract shall be requested by the Contractor due to his failure to comply with these provisions.

Clearly mark sealed bid envelope with your Name and Project(s) being bid.

NOTE: All lines and totals must be completed.

Completion Time: The undersigned here agrees, if awarded the contract, to pursue the work to substantial completion within _____ calendar days after contract execution and authorization to proceed barring strikes, civil strife, natural calamity, or other events beyond control.

ALTERNATES: (Note: Add or Deduct Must Be Indicated.)

CLARIFICATION: All scope outside of Specification Section 133419 – Metal Building Systems shall be included in Base Bid.

Alternate No. 1: State the cost to provide a Pre-Engineered Metal Building (PEMB) package with Butler Manufacturing as the Basis of Design per Specification Section 133419 – Metal Building Systems.

ADD/DEDUCT:_____

Dollars $_____

Alternate No. 2: State the cost to provide a Pre-Engineered Metal Building (PEMB) package with Nucor Building Systems as the Basis of Design. The Nucor Building Systems PEMB shall meet or exceed all requirements (except proprietary) in Specification Section 133419 – Metal Building Systems.

ADD/DEDUCT:_____

Dollars $_____

Alternate No. 3: State the cost to provide a 4'-0" high wainscot of split face cmu on the West, South and North exterior elevations. See 1-A5.0, 2-A5.0 and 3-A5.0 for more information. Clarification: Base Bid includes no split face cmu on the exterior elevations.

ADD/DEDUCT:_____

Dollars $_____

Alternate No. 4: State the cost to provide and install manual flush valves on all water closets and urinals in lieu of the scheduled hard wired sensor flush valves on the plumbing fixture schedule on sheet P6.1 of the construction documents. Contractor shall provide a manual flush valve like Sloan model # Royal 111-1.6 for all water closets and Sloan model # Royal 186-1.0 for all urinals. The Electrical Contractor shall terminate only the soap dispensers in all restrooms; delete all conduit, conductors, junction boxes and accessories associated with electronic flush valves.

ADD/DEDUCT:_____

Dollars $_____

Alternate No. 5: State the cost to provide painted pavement markings in lieu of thermoplastic at all pavement areas requiring markings.

ADD/DEDUCT:_____

Dollars $_____

Alternate No. 6: State the cost to provide a Pre-Engineered Metal Building (PEMB) package with Kirby Building Systems, a division of Nucor as the Basis of Design. The Kirby Building Systems PEMB shall meet or exceed all requirements (except proprietary) in Specification Section 133419 – Metal Building Systems.

ADD/DEDUCT:_____

Dollars $_____

Alternate No. 7: State the cost to provide a Pre-Engineered Metal Building (PEMB) package with American Buildings, a division of Nucor as the Basis of Design. The American Buildings PEMB shall meet or exceed all requirements (except proprietary) in Specification Section 133419 – Metal Building Systems.

ADD/DEDUCT:_____

Dollars $_____

Alternate No. 8: State the cost to provide a Pre-Engineered Metal Building (PEMB) package with Varco Pruden. The Varco Pruden PEMB shall meet or exceed all requirements (except proprietary) in Specification Section 133419 – Metal Building Systems.

ADD/DEDUCT:_____

Dollars $_____

UNIT COSTS: Enter values on the Unit Price Sheet.

Unit Price 1 – Import Engineered Fill: Unit Price shall include importing and compacting #1 Aggregate.

ADD: $_____ Per _____

Unit Price 2 – Import Engineered Fill: Unit Price shall include importing and compacting #2 Aggregate.

ADD: $_____ Per _____

Unit Price 3 – Import Satisfactory Fill: Unit Price shall include importing and compacting Satisfactory Fill.

ADD: $_____ Per _____

Unit Price 4 – Concrete: Unit Price shall include concrete.

ADD: $_____ Per _____

Unit Price 5 – Asphalt: Unit Price shall include asphalt.

ADD: $_____ Per _____

I have also attached the following required submissions:

Use this form if bidder is Sole Proprietor:

IN TESTIMONY WHEREOF, the Bidder, (a firm) has hereunto set its hand this _____ Day of _____, 2024.

FIRM NAME _____

_____
(Signature)

Use this form if Bidder is a Partnership:

IN TESTIMONY WHERE OF, the Bidder, (a corporation) has caused this proposal to be signed by its President and Secretary and affixed its corporate seal this _____ day of _____, 2024.

CORPORATION NAME _____

President _____
(Signature)

Secretary _____
(Signature)

(SEAL)

THIS BID SHLL BE FURNISHED IN DUPLICATE, WITH BOTH COPIES ENCLOSED IN THE SEALED BID ENVELOPE.

NON-COLLUSIVE BIDDING CERTIFICATION

No bid will be accepted that does not have this form completely executed.

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party hereto certifies as to its own organization, under penalty of perjury, that to the best of knowledge and belief:

(a) The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or any competition;

(b) Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor;

(c) No attempt has been made or will be made by the bidder to insure any other person, partnership, or corporation to submit or not to submit a bid for the purpose of restricting competition;

(d) The person signing this bid or proposal certifies that he has fully informed himself regarding the accuracy of the statements contained in this certification, and under the penalties of perjury, affirms the truth thereof, such penalties being applicable to the bidder as well as to the person signing in its behalf;

(e) That attached hereto (if corporate bidder) is a certified copy of resolution authorizing the execution of this certificate by the signature of this bid or proposal in behalf of the corporate bidder.

_____
(Individual)

_____
(Corporation)

Date: _____ By: _____

This Non-Collusive Bidding Certificate must be submitted with the Bid.

END OF SUPPLEMENTARY BID FORM

SUBCONTRACTOR AND MANUFACTURER LIST

Subcontractor List

TRADE					
Company:		Contact Name:			
Address:		Email:			
City/State/Zip		Phone:		Fax:	
TRADE					
Company:		Contact Name:			
Address:		Email:			
City/State/Zip		Phone:		Fax:	
TRADE					
Company:		Contact Name:			
Address:		Email:			
City/State/Zip		Phone:		Fax:	
TRADE					
Company:		Contact Name:			
Address:		Email:			
City/State/Zip		Phone:		Fax:	
TRADE					
Company:		Contact Name:			
Address:		Email:			
City/State/Zip		Phone:		Fax:	
TRADE					
Company:		Contact Name:			
Address:		Email:			
City/State/Zip		Phone:		Fax:	
TRADE					
Company:		Contact Name:			
Address:		Email:			
City/State/Zip		Phone:		Fax:	
TRADE					
Company:		Contact Name:			
Address:		Email:			
City/State/Zip		Phone:		Fax:	
TRADE					
Company:		Contact Name:			
Address:		Email:			
City/State/Zip		Phone:		Fax:	
TRADE					
Company:		Contact Name:			
Address:		Email:			
City/State/Zip		Phone:		Fax:	
TRADE					
Company:		Contact Name:			
Address:		Email:			
City/State/Zip		Phone:		Fax:	

Manufacturer List

TRADE			
Company:		Contact Name:	
Phone:		Email:	
TRADE			
Company:		Contact Name:	
Phone:		Email:	
TRADE			
Company:		Contact Name:	
Phone:		Email:	
TRADE			
Company:		Contact Name:	
Phone:		Email:	
TRADE			
Company:		Contact Name:	
Phone:		Email:	
TRADE			
Company:		Contact Name:	
Phone:		Email:	
TRADE			
Company:		Contact Name:	
Phone:		Email:	
TRADE			
Company:		Contact Name:	
Phone:		Email:	
TRADE			
Company:		Contact Name:	
Phone:		Email:	
TRADE			
Company:		Contact Name:	
Phone:		Email:	
TRADE			
Company:		Contact Name:	
Phone:		Email:	

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for alternates.

B. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in Owner-Contractor Agreement. The Owner-Contractor Agreement may identify certain Alternates to remain an Owner option for a stipulated period of time.

1.3 DEFINITIONS

A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.

1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

A. Coordinate related Work and modify surrounding Work. Description for each alternate is recognized to be abbreviated but requires that each change shall be complete for scope of Work affected.

1. Coordinate related requirements among Specification Sections as required.
2. Include as part of each Alternate: Miscellaneous devices, appurtenances, and similar items incidental to or necessary for complete installation.
3. Coordinate Alternate with adjacent Work and modify or adjust as necessary to ensure integration.

B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated revisions to alternates.

C. Execute accepted alternates under the same conditions as other work of the Contract.

D. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

A. **CLARIFICATION:** All scope outside of Specification Section 133419 – Metal Building Systems shall be included in Base Bid.

Alternate No. 1: State the cost to provide a Pre-Engineered Metal Building (PEMB) package with Butler Manufacturing as the Basis of Design per Specification Section 133419 – Metal Building Systems.

Alternate No. 2: State the cost to provide a Pre-Engineered Metal Building (PEMB) package with Nucor Building Systems as the Basis of Design. The Nucor Building Systems PEMB shall meet or exceed all requirements (except proprietary) in Specification Section 133419 – Metal Building Systems.

Alternate No. 3: State the cost to provide a 4'-0" high wainscot of split face cmu on the West, South and North exterior elevations. See 1-A5.0, 2-A5.0 and 3-A5.0 for more information. Clarification: Base Bid includes no split face cmu on the exterior elevations.

Alternate No. 4: State the cost to provide and install manual flush valves on all water closets and urinals in lieu of the scheduled hard wired sensor flush valves on the plumbing fixture schedule on sheet P6.1 of the construction documents. Contractor shall provide a manual flush valve like Sloan model # Royal 111-1.6 for all water closets and Sloan model # Royal 186-1.0 for all urinals. The Electrical Contractor shall terminate only the soap dispensers in all restrooms; delete all conduit, conductors, junction boxes and accessories associated with electronic flush valves.

Alternate No. 5: State the cost to provide painted pavement markings in lieu of thermoplastic at all pavement areas requiring markings.

Alternate No. 6: State the cost to provide a Pre-Engineered Metal Building (PEMB) package with Kirby Building Systems, a division of Nucor as the Basis of Design. The Kirby Building Systems PEMB shall meet or exceed all requirements (except proprietary) in Specification Section 133419 – Metal Building Systems.

Alternate No. 7: State the cost to provide a Pre-Engineered Metal Building (PEMB) package with American Buildings, a division of Nucor as the Basis of Design. The American Buildings PEMB shall meet or exceed all requirements (except proprietary) in Specification Section 133419 – Metal Building Systems.

Alternate No. 8: State the cost to provide a Pre-Engineered Metal Building (PEMB) package with Varco Pruden. The Varco Pruden PEMB shall meet or exceed all requirements (except proprietary) in Specification Section 133419 – Metal Building Systems.

END OF SECTION 012300

SECTION 083613 - SECTIONAL DOORS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes electronically operated sectional doors.

1.3 ACTION SUBMITTALS

A. Product Data: For each type and size of sectional door and accessory.

1. Include construction details, material descriptions, dimensions of individual components, profile door sections, and finishes.

B. Shop Drawings: For each installation and for special components not dimensioned or detailed in manufacturer's product data.

1. Include plans, elevations, sections, and mounting details.
2. Include details of equipment assemblies. Indicate dimensions, required clearances, method of field assembly, components, and location and size of each field connection.
3. Include points of attachment and their corresponding static and dynamic loads imposed on structure.

C. Samples for Initial Selection: For units with factory-applied finishes.

1. Include Samples of accessories involving color selection.

1.4 INFORMATIONAL SUBMITTALS

A. Sample Warranties: For special warranties.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer for both installation and maintenance of units required for this Project.

B. Regulatory Requirements: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines and ICC A117.1.

1.6 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace components of sectional doors that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:

a. Structural failures including, but not limited to, excessive deflection.
b. Failure of components or operators before reaching required number of operation cycles.
c. Faulty operation of hardware.
d. Deterioration of metals, metal finishes, and other materials beyond normal weathering and use; rust through.
e. Delamination of exterior or interior facing materials.

2. Warranty Period: Five years from date of Substantial Completion.

B. Special Finish Warranty: Manufacturer agrees to repair or replace components that show evidence of deterioration of factory-applied finishes within specified warranty period.

1. Warranty Period: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS, GENERAL

A. Source Limitations: Obtain sectional doors from single source from single manufacturer.

1. Obtain operators and controls from sectional door manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. General Performance: Sectional doors shall comply with performance requirements specified without failure due to defective manufacture, fabrication, installation, or other defects in construction and without requiring temporary installation of reinforcing components.

B. Structural Performance, Exterior Doors: Capable of withstanding the design wind loads.

1. Design Wind Load: As indicated on Drawings.
2. Testing: According to ASTM E 330 or DASMA 108 for garage doors and complying with the acceptance criteria of DASMA 108.
3. Deflection Limits: Design sectional doors to withstand design wind loads without evidencing permanent deformation or disengagement of door components.

a. Deflection of door sections in horizontal position (open) shall not exceed 1/120 of the door width.
b. Deflection of horizontal track assembly shall not exceed 1/240 of the door height.

4. Operability under Wind Load: Design overhead coiling doors to remain operable under design wind load, acting inward and outward.

2.3 DOOR ASSEMBLY

A. Steel Sectional Door: Sectional door formed with hinged sections and fabricated according to DASMA 102 unless otherwise indicated.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

a. C.H.I. Overhead Doors.
b. Overhead Door Corporation. ***(Basis of Design – Thermacore Model 596)***
c. Raynor.
d. Rite-Hite Corporation.
e. Wayne Dalton Commercial Doors.

B. Operation Cycles: Door components and operators capable of operating for not less than 20,000. One operation cycle is complete when a door is opened from the closed position to the fully open position and returned to the closed position.

C. Air Infiltration: Maximum rate of 0.08 cfm/sq. ft. (0.406 L/s per sq. m) at 15 and 25 mph (24.1 and 40.2 km/h) when tested according to ASTM E 283 or DASMA 105.

D. Steel Sections: Zinc-coated (galvanized) steel sheet with G60 (Z180) zinc coating.

1. Section Thickness: 2 inches (51 mm).
2. Exterior-Face, Steel Sheet Thickness: 0.064-inch- (1.63-mm-) nominal coated thickness.

a. Surface: Flat.
b. Surface: Manufacturer's standard, flush.

E. Track Configuration: Standard-lift track.

F. Roller-Tire Material: Manufacturer's standard.

G. Locking Devices: Equip door with slide bolt for padlock.

H. Counterbalance Type: Torsion spring.

I. Electric Motor Operation: U.L. listed electric operator.

J. Door Finish:

1. Baked-Enamel or Powder-Coat Finish: Color: Manufacturers Standard White.
2. Finish of Interior Facing Material: Manufacturers Standard White.

2.4 STEEL DOOR SECTIONS

A. Exterior Section Faces and Frames: Zinc-coated (galvanized), cold-rolled, commercial steel (CS) sheet, complying with ASTM A 653/A 653M, with indicated zinc coating and thickness.

1. Fabricate section faces from single sheets to provide sections not more than 24 inches (610 mm) high and of indicated thickness. Roll horizontal meeting edges to a continuous,

interlocking, keyed, rabbeted, shiplap, or tongue-in-groove weather-resistant seal, with a reinforcing flange return.

2. For insulated doors, provide sections with continuous thermal-break construction, separating the exterior and interior faces of door.

B. Section Ends and Intermediate Stiles: Enclose open ends of sections with channel end stiles formed from galvanized-steel sheet not less than 0.064-inch- (1.63-mm-) nominal coated thickness and welded to door section. Provide intermediate stiles formed from not less than 0.064-inch- (1.63-mm-) thick galvanized-steel sheet, cut to door section profile, and welded in place. Space stiles not more than 48 inches (1219 mm) apart.

C. Reinforce bottom section with a continuous channel or angle conforming to bottom-section profile.

D. Reinforce sections with continuous horizontal and diagonal reinforcement, as required to stiffen door and for wind loading. Provide galvanized-steel bars, struts, trusses, or strip steel, formed to depth and bolted or welded in place.

E. Provide reinforcement for hardware attachment.

F. Interior Facing Material: Manufacturer's standard material complying with the acceptance criteria of DASMA 107, with indicated thickness.

G. Fabricate sections so finished door assembly is rigid and aligned, with tight hairline joints and free of warp, twist, and deformation.

2.5 TRACKS, SUPPORTS, AND ACCESSORIES

A. Tracks: Manufacturer's standard, galvanized-steel track system of configuration indicated, sized for door size and weight, designed for lift type indicated and clearances indicated on Drawings, Provide complete system including brackets, bracing, and reinforcement to ensure rigid support of ball-bearing roller guides for required door type, size, weight, and loading.

1. Galvanized Steel: ASTM A 653/A 653M, minimum G60 (Z180) zinc coating.
2. Slope tracks at an angle from vertical or design tracks to ensure tight closure at jambs when door unit is closed.
3. Track Reinforcement and Supports: Galvanized-steel members to support track without sag, sway, and vibration during opening and closing of doors. Slot vertical sections of track spaced 2 inches (51 mm) apart for door-drop safety device.

    a. For Vertical Track: Continuous reinforcing angle attached to track and attached to wall with jamb brackets.
    b. For Horizontal Track: Continuous reinforcing angle from curve in track to end of track, attached to track and supported at points by laterally braced attachments to overhead structural members.

B. Weatherseals: Replaceable, adjustable, continuous, compressible weather-stripping gaskets of flexible vinyl, rubber, or neoprene fitted to bottom and top of sectional door unless otherwise indicated.

2.6 HARDWARE

A. General: Heavy-duty, corrosion-resistant hardware, with hot-dip galvanized, stainless-steel, or other corrosion-resistant fasteners, to suit door type.

B. Hinges: Heavy-duty, galvanized-steel hinges of not less than 0.079-inch- (2.01-mm-) nominal coated thickness at each end stile and at each intermediate stile, according to manufacturer's written recommendations for door size. Attach hinges to door sections through stiles and rails with bolts and lock nuts or lock washers and nuts. Use rivets or self-tapping fasteners where access to nuts is impossible. Provide double-end hinges where required, for doors more than 16 feet (4.88 m) wide unless otherwise recommended by door manufacturer.

C. Rollers: Heavy-duty rollers with steel ball-bearings in case-hardened steel races, mounted with varying projections to suit slope of track. Extend roller shaft through both hinges where double hinges are required. Provide 3-inch- (76-mm-) diameter roller tires for 3-inch- (76-mm-) wide track and 2-inch- (51-mm-) diameter roller tires for 2-inch- (51-mm-) wide track.

D. Push/Pull Handles: Equip each push-up operated or emergency-operated door with galvanized-steel lifting handles on each side of door, finished to match door.

2.7 LOCKING DEVICES

A. Slide Bolt: Fabricate with side-locking bolts to engage through slots in tracks for locking by padlock, located on single-jamb side, operable from inside only.

2.8 COUNTERBALANCE MECHANISM

A. Torsion Spring: Counterbalance mechanism consisting of adjustable-tension torsion springs fabricated from steel-spring wire complying with ASTM A 229/A 229M, mounted on torsion shaft made of steel tube or solid steel. Provide springs designed for number of operation cycles indicated.

B. Weight Counterbalance: Counterbalance mechanism consisting of filled pipe weights that move vertically in a galvanized-steel weight pipe. Connect pipe weights with cable to weight-cable drums mounted on torsion shaft made of steel tube or solid steel.

C. Cables: Galvanized-steel, multistrand, lifting cables with cable safety factor of at least 5 to 1.

D. Cable Safety Device: Include a spring-loaded steel or spring-loaded bronze cam mounted to bottom door roller assembly on each side and designed to automatically stop door if either lifting cable breaks.

E. Bracket: Provide anchor support bracket as required to connect stationary end of spring to the wall and to level the shaft and prevent sag.

F. Bumper: Provide spring bumper at each horizontal track to cushion door at end of opening operation.

2.9 ELECTRIC MOTOR OPERATION

A. 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: Required for momentary contact, includes radio control operation.

a) Photoelectric Sensors monitored to meet UL 325/2010.

2. Operator Controls:

a) Key operated control stations with open, close, and stop buttons.
b) Surface mounting.
c) Interior location.

2.10 GENERAL FINISH REQUIREMENTS

A. Comply with NAAMM/NOMMA's "Metal Finishes Manual for Architectural and Metal Products (AMP 500-06)" for recommendations for applying and designating finishes.

B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.11 STEEL AND GALVANIZED-STEEL FINISHES

A. Baked-Enamel or Powder-Coat Finish: Manufacturer's standard baked-on finish consisting of prime coat and thermosetting topcoat. Comply with coating manufacturer's written instructions for cleaning, pretreatment, application, and minimum dry film thickness.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for substrate construction and other conditions affecting performance of the Work.

B. Examine locations of electrical connections.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install sectional doors and operating equipment complete with necessary hardware, anchors, inserts, hangers, and equipment supports; according to manufacturer's written instructions and as specified.

B. Tracks:

1. Fasten vertical track assembly to opening jambs and framing, spaced not more than 24 inches (610 mm) apart.
2. Hang horizontal track assembly from structural overhead framing with angles or channel hangers attached to framing by welding or bolting, or both. Provide sway bracing, diagonal bracing, and reinforcement as required for rigid installation of track and door-operating equipment.

C. Accessibility: Install sectional doors, switches, and controls along accessible routes in compliance with regulatory requirements for accessibility.

3.3 STARTUP SERVICES

A. Engage a factory-authorized service representative to perform startup service.

1. Complete installation and startup checks according to manufacturer's written instructions.
2. Test and adjust controls and safety devices. Replace damaged and malfunctioning controls and equipment.

3.4 ADJUSTING

A. Adjust hardware and moving parts to function smoothly so that doors operate easily, free of warp, twist, or distortion.

B. Lubricate bearings and sliding parts as recommended by manufacturer.

C. Adjust doors and seals to provide weather-resistant fit around entire perimeter.

D. Touch-up Painting: Immediately after welding galvanized materials, clean welds and abraded galvanized surfaces and repair galvanizing to comply with ASTM A 780/A 780M.

3.5 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain sectional doors.

END OF SECTION 083613

1 **This Page Intentionally Left Blank**

UTILITY CROSSING NOTES:

1 STORM SEWER
TOP OF 8" PIPE – 833.79
8" PIPE INV – 833.12

SANITARY SEWER
TOP OF 6" PIPE – 830.28
6" PIPE INV – 829.78

2 STORM SEWER
TOP OF 8" PIPE – 833.72
8" PIPE INV – 833.05

SANITARY SEWER
TOP OF 6" PIPE – 830.48
6" PIPE INV – 829.98

NEW STORM STRUCTURE INFORMATION

1

6 SD102

~~CB #1 – 48"ø CATCH BASIN~~
~~EJ 0061045 GRATE~~
~~RIM 831.00~~
~~INV 826.34 – 12" HDPE NW~~
~~INV 826.24 – 12" HDPE SW~~
W/ ORIFICE PLATE

CB #2 – 48"ø CATCH BASIN
EJ 0061045 GRATE
RIM 832.00
INV 826.18 – 12" HDPE NE
INV 826.08 – 30" HDPE S

1

CB #3 – 72"ø DOGHOUSE MANHOLE
RIM 833.22
INV 825.08 – 30" HDPE N
~~INV 824.19 – 30" RCP W~~
~~INV 824.73 – 36" RCP E~~

NEW SANITARY STRUCTURE INFORMATION

OIL/SAND STR #101
RIM 836.22
INLET INV 829.94
OUTLET INV 829.69

GRINDER STATION, GS-C403-1
SEE SHEET C403
RIM 835.00
INV 828.80 – 6" SDR 35 PVC N
INV 829.00 – 2" DR 11 HDPE SW

SAN MANHOLE #1
48"ø SANITARY MANHOLE
RIM 834.19
INV 829.45 – 6" SDR 35 PVC N
INV 829.35 – 6" SDR 35 PVC SW

EXISTING SANITARY STRUCTURE INFORMATION

1 EXST STR
RIM ~835.17
~~INV 830.82 – 6" PVC N~~
INV 833.00 – 2" DR 11 HDPE NE

EXISTING STORM STRUCTURE INFORMATION

1 EXST STR
RIM 830.59
~~INV 828.23 – 18" RCP N~~

2 EXST STR
RIM 830.58
~~INV 826.63 – 12" HDPE N~~
INV 827.00 – 12" HDPE W
INV 827.00 – 12" HDPE E
4

LEGEND

- PROPOSED STORM MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED STORM LINE
- PROPOSED WATER LINE
- PROPOSED SANITARY LINE
- PROPOSED GAS LINE
- PROPOSED ELECTRIC LINE
- PROPOSED FIBER OPTIC LINE
- EXISTING ELECTRICAL CONDUIT
- EXISTING GAS LINE
- EXISTING TELEPHONE
- EXISTING OVERHEAD LINE
- EXISTING STORM SEWER
- EXISTING SANITARY LINE
- EXISTING FIBER OPTIC LINE
- EXISTING WATER LINE

NOTES:

1. CONTRACTOR SHALL MAINTAIN 18" MIN VERTICAL AND 10' MIN HORIZONTAL SEPARATION BETWEEN WATER MAIN AND STORM AND/OR SANITARY SEWER

2. CONTRACTOR SHALL COORDINATE DOWNSPOUT LOCATIONS WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION OF DOWNSPOUT STORM SEWER CONNECTION.

3. CONTRACTOR SHALL COORDINATE WATER AND SANITARY SEWER SERVICE LOCATIONS WITH ARCHITECTURAL & PLUMBING DRAWINGS PRIOR TO CONSTRUCTION.

4. PROTECT ALL EXISTING SITE UTILITY LINES AND/OR SERVICES UNLESS OTHERWISE NOTED ON DEMOLITION PLANS

5. CONTRACTOR SHALL TAKE CARE DURING INSTALLATION OF NEW SANITARY FORCE MAINS NOT TO INADVERTENTLY CREATE ANY ADDITIONAL HIGH POINTS IN THE FORCE MAINS. ANY HIGH POINTS CREATED SHALL BE ADDRESSED AT THE CONTRACTOR'S EXPENSE AND PURSUANT TO THE DIRECTION OF THE ENGINEER.

6. GRINDER STATION LOCATION SHOWN IN THE DRAWING MAY ONLY BE SHIFTED DURING CONSTRUCTION WITH PRIOR WRITTEN APPROVAL OF THE ENGINEER OF THEIR DULY AUTHORIZED REPRESENTATIVE.

ORIFICE SIZING CALCULATIONS – CB #1

1

7 SD102

ALLOWABLE SITE DISCHARGE RATE = 0.26 CFS

$Q = C * A * \sqrt{2GH}$

ASSUMPTIONS .....

Q = DISCHARGE RATE (CFS)
A = DISCHARGE ORIFICE AREA (SFT)
C = ORIFICE DISCHARGE COEFFICIENT (0.62)
G = GRAVITY CONSTANT (32.2 FT/SEC)
H = HEIGHT FROM ORIFICE TO TOP OF BASIN

$0.26\ CFS = 0.62 * A * \sqrt{2*32.2*4.76}$

$A = \frac{0.26}{0.62 * \sqrt{2*32.2*4.76}}$

$A = 0.024\ SFT$

DETERMINE ORIFICE PLATE SIZING

$A = \pi * R^2$

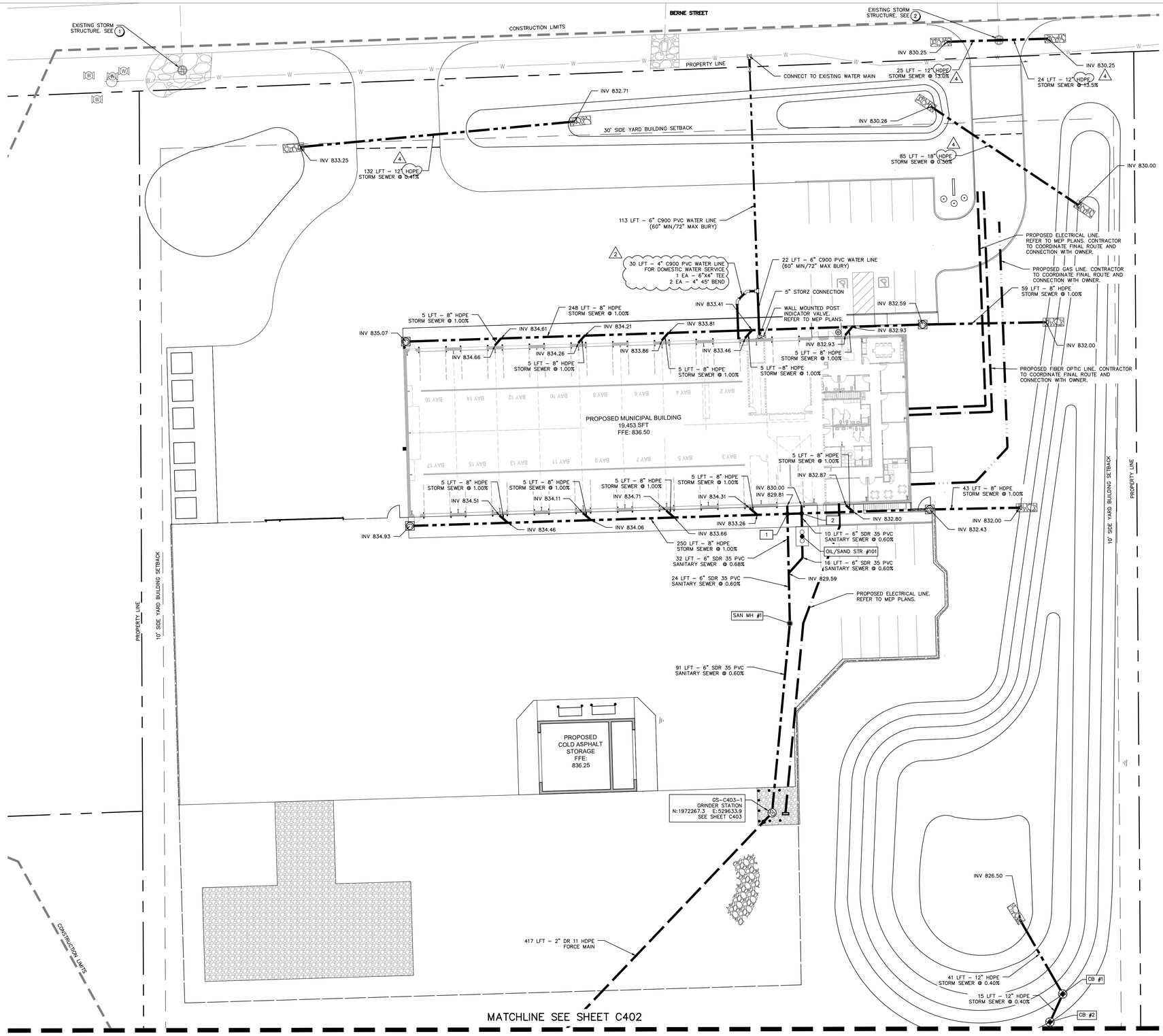
$0.024 = \pi * R^2$

$R = 0.09\ FT = 1.08\ IN.$

1

ORIFICE SIZE – 2.16"ø USE 2"ø

$Q = 0.62 * \Pi * 0.083^2 * \sqrt{2*32.2*4.76} = 0.24\ CFS$



N

GRAPHIC SCALE
0 10 20 40
(IN FEET)
1 INCH = 20 FT

MOAKE PARK GROUP
ARCHITECTURE INTERIORS PLANNING
7223 Engle Rd. Suite 200, Fort Wayne, IN 46804 260-424-6516
www.moakepark.com

JONES PETRIE RAFINSKI
222 Pearl Street, Fort Wayne, IN 46802 260-422-2522
www.jpr1source.com

CLAIRE ELIZABETH ELLSWORTH
No. 12000703
STATE OF INDIANA
PROFESSIONAL ENGINEER
10-24

A PROJECT FOR:

NEW MUNICIPAL MAINTENANCE BUILDING

mark	date	description
1	02/08/24	PER ADDENDUM 1
2	02/16/24	PER ADDENDUM 2
3	02/23/24	PER ADDENDUM 3
4	03/01/24	PER ADDENDUM 4

UTILITY PLAN

date: 1/30/2024
project: 2021-0136
coordinator: NGD
drawn: JJB / RRM
checked: NGD

C401