ADDENDUM NO. 1

Issued: 10.20.2023

Project: Liberty Distribution Center
1142 Southview Dr.

Project No. 23021

Owner: Liberty Public Schools
8 Victory Lane
Liberty, Missouri 64106


This Addendum includes these 2 pages and the following attachments:

Project Manual:
Reissued Section 000005 “Certifications Page” consisting of 2 pages.
Reissued Section 000110 “Table of Contents” consisting of 4 pages.
Refer to MKEC, Civil Addendum No. 1
Refer to Smith & Boucher, MEP Addendum No. 1
Refer to Fellers, Food Service Addendum No. 1

Drawings:
Revised Architectural Sheets: G001, G100, G101, A101, A604, A701
Refer to MKEC, Civil Addendum No. 1
Refer to Smith & Boucher, MEP Addendum No. 1
Refer to Fellers, Food Service Addendum No. 1

PROJECT MANUAL REVISIONS

A1 SECTION 000005 – CERTIFICATIONS PAGE

A1.1 REPLACE existing Section 000005 “Certifications Page” with the attached revised Section 000005 “Certifications Page”, dated October 20, 2023.

A2 SECTION 000101 – PROJECT TEAM DIRECTORY

A2.1 DELETE project street address “1138 Southview Drive” in Subparagraph 1.2. A.2 and REPLACE with project street address “1142 Southview Drive.”

A3 SECTION 000110 - TABLE OF CONTENTS

A3.1 REPLACE existing Section 000110 “Table of Contents” with the attached revised Section 000110 “Table of Contents”, dated October 20, 2023.

A4 SECTION 011000 – SUMMARY

A4.1 DELETE project street address “1138 Southview Drive” in Subparagraph 1.2. A.1 and REPLACE with project street address “1142 Southview Drive.”

A5 SECTION 012500.01 – SUBSTITUTION PROCEDURES FORM

A5.1 DELETE project street address “1138 Southview Drive” and REPLACE with project street address “1142 Southview Drive.”
C1 REFERENCE ATTACHED CIVIL ADDENDUM NO. 1
E1 REFERENCE ATTACHED MEP ADDENDUM NO. 1
F1 REFERENCE ATTACHED FOOD SERVICE ADDENDUM NO. 1

DRAWINGS REVISIONS

A6 SHEET G001 – GENERAL PROJECT INFORMATION
   A6.1 REVISED Description of the Fire Safety Features paragraph.

A7

A8 SHEET G101 – CODE FLOOR PLAN – LEVEL 1 BLDG 1
   A8.1 REVISED Code Plan Indicating the location of fire access doors.

A9 SHEET A101 – FLOOR PLAN – LEVEL 1 – OVERALL
   A9.1 REVISED drawing A1 floor plan to show added door to the freezer. Reference Fellers, Food Service Addendum No. 1

A10 SHEET A604 – RACKING + SPECIALTY EQUIPMENT COORDINATION PLAN
   A10.1 REVISED drawing A1 racking plan to show added door to freezer.
   A10.2 REVISED drawing A1 racking plan to show 2 narrower storage racks adjacent to the added door.
   A10.3 REVISED dimensions on drawing A1 racking plan due to narrower racks.

A11 SHEET A701 - SIGNAGE & ENVIRONMENTAL GRAPHICS FLOOR PLAN - OVERALL - LEVEL 1
   A11.1 REVISED drawing A1 to show correct Fire Access Door signage location.

C2 REFERENCE ATTACHED CIVIL ADDENDUM NO. 1
E2 REFERENCE ATTACHED MEP ADDENDUM NO. 1

END OF ADDENDUM NO. 1
LIBERTY DISTRIBUTION CENTER

ADDENDUM 01

October 20, 2023

The following are a summary of addendum items:

C109:  
- Added perimeter fence and gates to plan, providing notes with fence information.

C110:  
- Added perimeter fence and gates to plan, providing notes with fence information.

C112:  
- Added additional grading area to plan.

C114:  
- Added additional grading area to plan. Revised silt fence extents.

C116:  
- Added storm sewer calculation table per City comment.

C203:  
- Revised chain link fence w/ gate detail per updated fencing heights and information.

Specifications:

323113 Chain Link Fencing and Gates
- Updated notes in section 2.1.A.1 to remove language about the fencing to surround the perimeter of the track.
- Updated the height of the fence to be 6’ or 8’ high.
Addendum #1

Liberty Public Schools Distribution Center
Smith & Boucher Project No. 2314705

10.20.2023

To Documents Titled:
Liberty Public Schools Distribution Center
08.31.2023

Architect-of-Record:
Hollis & Miller
1828 Walnut Street Suite 922
Kansas City, MO 64108

The Contract Documents for the above referenced project and the Work covered thereby are modified as described herein.

DRAWINGS

1. Sheet ME201 – Site Plan – Mechanical and Electrical
   a. ADD (2) power connections for motorized gates. See plan for locations.
   b. ADD plan notes 19, 20, and 21.
   c. ADD light fixture ‘G1’ and associated lighting control devices to existing building south canopy.
   d. ADD Fire Department Connection (FDC) and respective specification.

2. Sheet E101 – Overall Lighting Plan – Level 1
   a. ADD (1) wall mounted exit sign above exterior door in Flex/Charging A123 space.

3. Sheet E102 – Overall Lighting Plan – Mezz Level
   a. ADD (1) ‘G1’ type light fixture to the underside of loading dock canopy. See plan for location.

4. Sheet E304 – Electrical Schedules and Detail

SPECIFICATIONS

1. 270000 DISTRICT COMMUNICATIONS SPECIFICATIONS
   a. REVISE entire section.

Attachments

• Sheets listed above.

END OF MEP ITEMS FOR ADDENDUM #1
General: Specifications have been modified. This addendum shall be part of the bid documents and modifies the original bidding documents.

1. Update walk-in cooler/freezer specification as shown below.

**Item #1 COOLER/FREEZER WAREHOUSE: One (1) Required**

A. Kolpak cooler/freezer combo measuring 73'-6" x 38'-1" x 25'-0"
   1. Furnish 2-piece, foamed in place urethane wall system per Kolpak engineering drawings, 4" thick prefinished white on both sides.
   2. Cooler/freezer to have suspended ceiling, prefinished white on the inside of the box. Kolpak to furnish hanger brackets, installed with a maximum spacing of 48" between brackets.
   3. Cooler and freezer compartments to have flat bottom wall panels
   4. Furnish with (3) 34" Performer series walk doors as shown on the plan. Each to have a 14” x 14” heated viewport window. Doors to have half height diamond treadplate on both sides.
   5. Furnish buck openings for high speed coiling doors as specified. Kolpak to furnish wall backing to anchor doors and electrical boxes as detailed in the drawings.
   6. Furnish with (28) 48" LED light fixtures and Kason #1901A High Motion light sensors as shown, KEC to mount light fixtures, EC to wire.
   7. Furnish with 48”h diamond treadplate wall protection as shown on the plan.
   8. Furnish unit with ColdZone Refrigeration package per engineering drawings shown in addendum 1. The refrigeration system should consist of the following:
      (4) #CFDS10L4SE, 10.0 hp low temp condensing units, 448A
      (4) #CH6E044EDA low temp evaporator coils
      (2) #CFDS06M4SE 6.0 hp medium temp condensing units, 448a
      (2) #CMSA549ADA medium temp evaporator coils
      KEC to furnish roof curbs and pipe, charge, and fire the refrigeration systems.
   9. KEC to heat tape and insulate all condensate drain lines and extend to floor sinks as
10. Authorized installer and service agency for the walk-in cooler/freezer shall be Commercial Services, Inc. (CSI) in Kansas City. CSI shall be responsible for erecting the box, setting the refrigeration systems on the roof as shown, extension of condensate drain lines (including insulation and heat tape), piping, charging, and starting the refrigeration systems included in this package. Installation to also include the overhead doors as shown below. CSI will include as part of the pricing a 1-year preventative maintenance program with a minimum of one visit per month to inspect the refrigeration systems, clean coils, and make necessary adjustments as needed.

2. Updated sheets K100, K200, K300, K500, and K500.1 to reflect additional walk door and updated refrigeration system.
ARCHITECT

I HEREBY, PURSUANT TO RSMO 327.411, STATE THAT THE SPECIFICATIONS INTENDED TO BE AUTHENTICATED BY MY SEAL ARE LIMITED TO SPECIFICATIONS LISTED BELOW:

DIVISION 1 SECTIONS: 011000, 012100, 012200, 012300, 012500, 012500.01, 013100, 013200, 013233, 013300, 014000, 014200, 014529, 016000, 017419, 017700, 017823, 017839, 017900.
DIVISION 4 SECTION: 042000.
DIVISION 5 SECTIONS: 055000, 055100, 055213.
DIVISION 6 SECTIONS: 061000, 061600, 062013.
DIVISION 7 SECTIONS: 071113, 071326, 071900, 072100, 072500, 074213, 074219, 075423, 076200, 077200, 078413, 078413, 078446, 079200.
DIVISION 8 SECTIONS: 081113, 081416, 083323, 083613, 083800, 084113, 087100, 088000, 088300.
DIVISION 9 SECTIONS: 092116, 092900, 093000, 095113, 096513, 096519, 096813, 098433, 099113, 099123, 099600.
DIVISION 10 SECTIONS: 101400, 101423, 102113, 102310, 102600, 102800, 104300, 104413, 104416, 105629.
DIVISION 11 SECTION: 111300.
DIVISION 12 SECTIONS: 122113, 122413, 123200, 123666, 129300.
DIVISION 32 SECTION: 323119.

I HEREBY DISCLAIM ANY RESPONSIBILITY FOR ALL OTHER SPECIFICATIONS, DRAWINGS, ESTIMATES, REPORTS, OR OTHER DOCUMENTS OR INSTRUMENTS RELATING TO OR INTENDED TO BE USED FOR ANY PART OR PARTS OF THE ARCHITECTURAL OR ENGINEERING PROJECT OR SURVEY.

KEVIN NELSON ___________________________ OCTOBER 20, 2023 ___________________________

ARCHITECT DATE

STATE OF MISSOURI

KEVIN E.
NELSON
ARCHITECT

A-2019015618

OCTOBER 20, 2023
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## BIDDING REQUIREMENTS

(Refer to Construction Manager's Front End Manual for additional Bidding Requirements)

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## CONTRACTING REQUIREMENTS

(Refer to Construction Manager's Front End Manual for additional Contracting Requirements)

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SECTION 270000 - DISTRICT COMMUNICATIONS SPECIFICATIONS

PART 1 - GENERAL

1.1 SCOPE OF SERVICES

A. Fiberoptic Cabling: Fiber will be installed connecting the Main Distribution Frame (MDF) fiber panel at the Facility Center to the MDF of the Distribution Center with Single Mode Fiber Cabling: Fiber will be installed in provided 2" conduit with 12-filament single Loose Tube Single Jacket All Dielectric mode fiber. Superior Essex part number 110122T01. When pulling fiber and tracer wire through conduit, a pull string is to be included as well. Fiber to be terminated utilizing LC fiber bulkheads (OR-OFP-LCD12LC) with singlemode connectors (OR-205KNF9SA-09). A breakout kit for the “loose tube” fiber is also needed (OR-61500858). Tracer wire is to be included in conduit. Tracer wire is to be 12 gauge. At the Distribution Center, fiber to be routed to enclosure (Legrand Part# EQ01U-CHC). The Facility Center side currently has a fiber enclosure but will need the bulkheads and connectors.

B. Copper Cabling: CMP 66-240-xB. Cat 6 Superior Essex Datagain 6+, Plenum rated blue part number: 66-240-2B where noted. Open areas noted on prints would be CMP 66-240-4B (white).


D. Cable Management
1. No electrical tape or zip ties for bundling cables or attaching to j-hooks.
2. Black plenum rated Velcro strips only for bundling cable. White plenum rated Velcro strips for the locations with white cabling.
3. On the 48-port patch panels, both cable management bars are to be installed and utilized.
4. On all cable terminations, stuffer caps are required at the field and closet locations.
5. When dressing cables on the back of the patch panels, half of the cables will run down the left side and the other half down the right side of the rack.
6. New cables that are damaged during installation, such as a sliced or cut, even if they pass testing, must be replaced and tested and the old cable removed.
7. Damage to other cabling or systems not part of this project must be remedied by the vendor utilizing authorized vendors and/or cabling approved by the District at no cost to the District.
8. During installation of new cabling, ceiling tiles along artery routes are to be left open until inspected by District Technology staff. Damaged tile and/or grid will need to be replaced by the vendor and will need to match existing tile and grid. Vendors will be responsible for closing all ceiling tiles after District inspections.
9. Old Ethernet, fiber and enclosures, where applicable, not used will need to be removed and discarded by the vendor. This would also include any empty innerducts.
10. The District can provide ceiling tiles for any data closets that would need to be recut by the vendor to accommodate cabling pathways.
11. Any penetration that is not drywall material will need a sleeve and pull string (for future runs) installed per applicable codes.
12. Service loops of approximately 10-15’ should be installed above the ceiling at each endpoint location as well as at each MDF/IDF rack location.
13. For any endpoint locations and/or conduit pathways that are vacated, add a pull string from wall location to above ceiling starting point to ending point and cover with a correctly sized faceplate/metal cover.
14. All data, voice, access control, etc. cables shall be within raceway, J-hooks or other designated cable delivery system. Successful bidder must provide all hardware to run and secure Ethernet, fiber, etc. as specified by applicable codes and ordinances.
15. Cable trunks should be secured above HVAC duct where applicable unless otherwise approved by the District. All cable should be neatly run within the cable trunk until branching off to an endpoint.

E. Clarity Rear-Load High Density Jack Panel Kits
1. 48 Port Panel: 48-port, panel jack panel kit, flat, unloaded, 1 RU, Part: OR-PHDHJU48. All slots must be populated.
2. Rear-load jacks part OR-HDJ6-00 Black (Cat 6) and part OR-HDJ6A-36 (Cat 6a), Blue.
3. All rows in each panel must be filled with the same type of panel jack. No mixing of Cat 6 and 6a jacks in a row. In a 48-port panel there can be a row of 24 Cat 6 and a row of 24 Cat 6a panel jacks. All ports must be terminated from left to right with no skipping of ports on the panel.
F. Above ceiling: TracJack Surface Mount Box. Part: OR-404HDJ2 (Fog White) for locations with two or less cables. For locations with three or four cables, use OR-404HDJ4 (Fog White). For locations with five or six cables, use OR-404HDJ6 (Fog White). TracJacks OR-HDJ6 Fog White (Cat 6) and part OR-HDJ6A-36 Blue (Cat 6a).

G. Wall installation where applicable:
1. Wall mount box single: Part: OR-403HDJ16 Fog white
2. Wall mount box dual: Part: OR-403HDJ212 Fog white
3. Extra deep wall mount single: Part: Wiremold NM2044FW (for HDMI locations)
4. Extra deep wall mount double: Part Wiremold NM2044-2FW (for HDMI locations)
5. Wall mount box jack: Part: OR-HDJ6 Fog white
6. 6-port Faceplate: 403HDJ16 (Fog White) for single gang boxes. NOTE: All vacant slots must be filled with blanks
7. 4-port Faceplate: 419HDJ4-88 (Fog White) for dual gang boxes with half electrical where applicable.
8. 12-port Faceplate: 403HDJ212 (Fog White) for dual-gang boxes. NOTE: All vacant slots must be filled with blanks
9. Blank module, OR-HDJB (Fog White). All vacant slots must be filled with blanks
10. Wall mount box AV jack where applicable: OR-HDJ5E-68 (Dark Gray)
11. Wall/Ceiling mount blanks: Blank module, OR-HDJB20. All unpopulated jacks must have a blank installed.
12. Legrand-Wiremold PN10L10FW (Fog White-8 ft section)
13. Legrand-Wiremold PN10F86FW (Fog White-Ceiling Connector)
14. NOTE: All field Ethernet installations must be installed in the upper most top left location available and go from left to right and then down to the next available row, etc.

H. Equipment Racks:
1. MDF: The distribution frame termination equipment and any electronics to be mounted in one new vendor provided 7’ standard free standing 19” EIA/TIA rack with vertical swivel managers. Hubbell Part number CS1976H. Vendor will provide four (6) Horizontal managements to be installed above and below each patch panel and customer provided switches. (Part # Hubbell HM24C, Cable MGMT Duct Panel 19”W x 3.5” H x 3.5” D w/ Cover, steel Black). Ladder from rack(s) to walls and along walls in data closets are to also be included where applicable (with mounting hardware). Wall Angle Support Kit p/n 11421-X12, 3” Channel Rack to Runway p/n 10595-X12 and 12” Universal Cable Runway p/n 10250-X12) as well as a rack mounted power strip, Tripp-Lite PDU1215. See ladder section for other specific part numbers.

I. Ladder rack to be verified/installed in all existing and/or new racks in all closets. All ladder rack should utilize whatever parts needed for securing to wall and rack.
1. Straight Sections: 6’ part # HLS0612B, 10’ part # HLS1012B
2. 90º Turns: Inside Radius 12” part # HLI1290B, Outside Radius 12” part # HLO1290B and Flat Turn Radius 12” part # HLF1290B.
3. Splice Kits: Butt splice part #: HLBSK, Swivel part # HLSSK, T-junction part # HLTK.
4. Wall Angle Supports: 6-12” part number HLX0612
5. Vertical wall bracket (2 clips) part number HLVVWBK
6. Protective end caps, 2-pack, black part number HLECPK2
7. Wall/Rack mounting kit:Includes (1) HLMPK19, (1) HLX0612,
8. (1) 40”L x 12”W ladder section, part number HLWRK
9. J-Bolt Kit 2-pack, galvanized, part number HLJB
10. Foot kit: 2-pack with splices, black, part number HLRF

J. Grounding: For data racks, provide necessary grounding and bonding within telecommunications room to comply with TIA-607 B standards. A grounding bar also needs to be installed near the floor close to the rack with Hubbell part number HBB14210A. The grounding bar will be used at the main distribution point and not as an auxiliary point. Coordinate with the owner for location. Ladder rack, cable trays and free-standing rack(s), etc. must all be grounded as complete pieces. Connections must be clean and contain no spurs or sharp exposed wire. District will provide building ground to bus bar. None of the racks are currently grounded.

K. Labeling: All locations (fiber, Ethernet, etc.) are to be labeled in typewritten format or owner approved equivalent. Plastic protective covers that come with cable boxes are required. Hand-written location labels will not be permitted. Verify closet designations with the owner.
1. Field Termination: All location labels are to be installed behind the factory transparent plastic protector clearly indicating the closet, panel and port number. For example, in IDF L, jack locations are to be labeled by closet, panel and then port number. For example, L-2-01 would represent Closet L, Panel 2, Port 01. Multiple ports on a field termination endpoint would be labeled as “L-2-01 L-2-02”. Label numbers should be above the termination box ports and endpoint terminations should always start at the top of the endpoint termination box. Numbers should be sequential in order where possible. For example, on a two-port box, labels would be at
the top. In a three-port example two at the top and one at the bottom. In a four-port box two at the top and two at the bottom and in a six-port box three at the top and three at the bottom. All labeling starts at the top left of the box.

2. Closet Termination: The panels do not require port labels to match the field termination end points. Each panel will only need one identifying label in the upper left-hand corner. Examples include L-1, L-2, etc. Verify with owner for clarification.

L. Ensure all cabling meets specifications utilizing a contractor provided certified tester following TIA-526-14-B guidelines. Provide OTLS test results for all Fiber Optic cabling delivered in written and magnetic media (USB drive or DVD). This includes testing and providing certification results for any cables that need to be pulled again after the initial testing results have been delivered to the District.

M. Any item of equipment or material not specifically addressed on the drawings or in this document and required to provide a complete and functional installation shall be provided in a level of quality consistent with other specified items at no additional cost to the owner.

N. Codes: Unless otherwise documented, the successful bidder must provide all hardware to run and secure all cabling and equipment racks as specified by applicable codes and ordinances. References include but are not limited to the following:
   2. TIA/EIA-568-C: Commercial Building Telecommunications Wiring Standard
   3. EIA/TIA-569B: Commercial Building Standard for Telecommunications Pathways and spaces
   4. TIA/EIA-606: Administration Standard for the Telecommunications Infrastructure of Commercial Buildings
   5. National Electrical Code Article 770 "Optical Fiber Cables" and Article 800 "Communications Circuits"
   6. Local Electrical Code
   8. OSHA 29 CFR 1926/1910 Safety and Health Standards
   9. Underwriters Laboratories, Inc. (UL) Listings and Approvals
   10. Country, state and local health, safety and building

O. Penetrations of walls, floors and ceilings:
   1. The Contractor shall make no penetration of floors, walls or ceiling without the prior consent of the owner.
   2. Where penetrations through acoustical walls or other walls for cableways are needed the Contractor will seal such penetrations in compliance with applicable code requirements.
   3. Where penetrations through fire-rated walls for cableways are needed the Contractor will seal such penetrations as required by code.

P. General Installation
   1. The contractor shall furnish all required installation tools to facilitate cable pulling without damage to fiber jacket.
   2. All routing shall be kept clear of other trades work and supported using the method(s) mentioned in this section.
   3. During pulling operation an adequate number of workers shall be present to allow fiber observation at all points of raceway entry and exit, as well as to feed fiber and operate pulling machinery.
   4. Pull all cabling by hand unless installation conditions require mechanical assistance.
   5. Pull all cabling by hand unless installation conditions require mechanical assistance.
   6. Where mechanical assistance is used, ensure that maximum tensile load for fiber is not exceeded. This may be in the form of continuous monitoring of pulling tension, use of "break-away" or other approved method.
   7. Any fiber shall be installed splice-free.
   8. Avoid abrasion and other damage to cabling during installation.
   9. If pulling lubricant is used it shall be non-injurious to cabling jacket and other materials used and not harden or become adhesive with age.
   10. Minimum bend radii, as specified by the manufacturer, must be adhered to for pulling and final installation.
   11. Any cabling bent or kinked to radius less than recommended dimension are not allowed and shall be replaced at no expense to owner.
   12. Repair damage to interior spaces caused by installation of cable, raceway or other hardware.
   13. Repairs must match preexisting color and finish of walls, floors and ceilings.

Q. Documentation: An Excel spreadsheet will be prepared by vendor and submitted to the District in electronic format with at least the following information. Obtain official spreadsheet from customer.
   1. Building name
   2. Data closet number/identifier
   3. Panel number
   4. Port number
5. Terminated in wall, floor or ceiling
6. Room/Location Description

R. Door Controls Red Icon: Door control element wire, Windy City Wire part number 4461030 (or equivalent but must have a yellow jacket), to be ran from designated doors to the designated MDF/IDF. At each door location, there will be a 10-foot service loop starting at the top of the door frame. At the designated MDF/IDF, cable must be able to touch the ground plus four feet. All terminations will be completed by District staff or contractor.

S. Specialized Drops: If the map indicates something like HVAC, Door Controls, etc. next to the data drop symbol, the cable must be terminated inside of the enclosure. Note that the enclosure might not be installed at the time the cable is run. The cables will still be terminated in a biscuit and labeled accordingly. Coordinate with Network Administrator or Technology Director.

T. Specialized Systems: Additional cable will need to be pulled for intercom and intrusion detection systems. Cabling for intercom locations will be 2-conductor 18-gauge unshielded plenum rated cable (yellow in color). Intrusion detection will be 18 gauge 4-conductor unshielded plenum rated cable (gray in color). All locations and routes will be identified on the maps and handed out at the walk through. Verify where cable needs to be landed and labeled for each specialized system. For example, intercom cabling is usually routed to the bottom of the equipment rack and labeled in the data closets.

U. AV Requirements:
   1. At conference room locations, data will be installed at a specified location for District provided flat panel TV. There will be a single gang box down low and connected to the upper data box behind the TV. Vendor must connect an HDMI cable from upper location to lower location with HDJHDMI couplers. Blanks to be installed for any unused slots.

1.2 VENDOR QUALIFICATIONS

A. The contractor must employ and utilize a BICSI RCDD in good standing at all times during the entire installation of this system.

B. The contractor must have a minimum of five (5) years’ experience on similar cabling systems.

C. Vendor must agree to e-rate guidelines, have a valid SPIN number AND have a SPAC form on file that is not outdated.

D. The Vendor must also have the necessary certifications to provide the nCompass Warranty offered between Legrand Ortronics and Superior Essex. The network cabling infrastructure must be installed by Supplier approved designers and Certified Contractors at the Certified Installer Plus-Enterprise Solutions Partner (CIP-ESP) tier or Certified Installer Plus (CIP) tier in accordance with manufacturer’s installation instructions and specifications. Copies of certifications must be attached to the Vendor’s response for evaluation by The Customer.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 270000
SECTION 323113 - CHAIN LINK FENCES AND GATES

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:

1. Chain-link fences.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product indicated.

1. Fence and gate posts, rails, and fittings.
2. Chain-link fabric, reinforcements, and attachments.
3. Gates and hardware.

B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work. Show accessories, hardware, gate operation, and operational clearances.

1.4 PROJECT CONDITIONS

A. Field Measurements: Verify layout information for chain-link fences and gates shown on Drawings in relation to property survey and existing structures. Verify dimensions by field measurements.

1.5 WARRANTY

A. Special Warranty: Manufacturer’s standard form in which Installer agrees to repair or replace components of chain-link fences and gates that fail in materials or workmanship within specified warranty period.

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

a. Faulty operation of gates.
b. Deterioration of metals, metal finishes, and other materials beyond normal weathering.

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

PART 2 - PRODUCTS

2.1 CHAIN-LINK FENCE FABRIC

A. General: Provide fabric in one-piece heights measured between top and bottom of outer edge of selvage knuckle or twist. Comply with CLFMI Product Manual and with requirements indicated below:

1. Fabric Height: Fence to be 6’ or 8’ high.
2. Steel Wire Fabric: Wire with a diameter of 0.148 inch, 9 gauge
a. Mesh Size: 2 inches
b. Zinc-Coated Fabric: ASTM A 392, Type II, Class 1, 1.2 oz./sq. ft. with zinc coating applied after weaving.
c. Vinyl-Coated Fabric: ASTM F 668, Class 2b fused over zinc-coated steel wire.

1) Color: Black, complying with ASTM F 934.

d. Coat selvage ends of fabric, that is metallic coated before the weaving process, with manufacturer's standard clear protective coating.

3. Selvage: Knuckled at both selvages.

2.2 FENCE FRAMING

A. Posts and Rails: Comply with ASTM F 1043 for framing, including rails, braces, and line; terminal; and corner posts. Provide members with minimum dimensions and wall thickness according to ASTM F 1043 based on the following:

1. Fence Height: As indicated on Drawings.

   a. Line Post: 2.375 inches in diameter, SS40 (3.12 lbs/ft)
   b. End, Corner and Pull Post: 2.875 inches in diameter, SS40 (4.64 lbs/ft)


   a. Top Rail: 1.66 inches in diameter.

4. Metallic Coating for Steel Framing:

   a. Type A zinc coating.

5. Vinyl coating over metallic coating.

   a. Color: Black, complying with ASTM F 934.

2.3 TENSION WIRE

A. Vinyl-Coated Steel Wire: 0.177-inch diameter, tension wire complying with ASTM F 1664, Class 2b fused zinc-coated steel wire.


2.4 SWING GATES

A. General: Comply with ASTM F 900 for gate posts and single and double swing gate types.

   1. Gate Leaf Width: As indicated on drawings.
   2. Gate Fabric Height: As indicated on drawings.

B. Pipe and Tubing:

   1. Zinc-Coated Steel: Comply with ASTM F 1043 and ASTM F 1083; protective coating and finish to match fence framing.
   2. Gate Posts: Round tubular steel, 2.875 inches in diameter (5.79 lbs/ft)
   3. Gate Frames and Bracing: Round tubular steel matching fencing

C. Frame Corner Construction: Assembled with corner fittings.

D. Hardware:
1. Hinges: 360-degree inward and outward swing.
2. Latches permitting operation from both sides of gate with provision for padlocking accessible from both sides of gate.
3. Provide a gate stop for all gates.

E. Pipe and Tubing:
1. Zinc-Coated Steel: Protective coating and finish to match fence framing.
2. Gate Posts: Round tubular steel, 4.00 inches in diameter (9.11 lft), coating matching fencing.
3. Gate Frames and Bracing: Round tubular steel, matching fencing

F. Frame Corner Construction: Welded and 3/8 inch diameter, adjustable truss rods for panels 5 feet or wider

G. Hardware:
1. Provide latch. Padlock and chain to be provided by the Owner.
2. Tire with Post: Provide inflatable tire on galvanized post at leading edge of gate. Tire shall swivel on post.

2.5 FITTINGS
A. General: Comply with ASTM F 626.

2.6 GROUT AND ANCHORING CEMENT
A. Nonshrink, Nonmetallic Grout: Premixed, factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107. Provide grout, recommended in writing by manufacturer, for exterior applications.
B. Erosion-Resistant Anchoring Cement: Factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with potable water at Project site to create pourable anchoring, patching, and grouting compound. Provide formulation that is resistant to erosion from water exposure without needing protection by a sealer or waterproof coating and that is recommended in writing by manufacturer, for exterior applications.

PART 3 - EXECUTION

3.1 EXAMINATION
A. Examine areas and conditions, with Installer present, for compliance with requirements for site clearing, earthwork, pavement work, and other conditions affecting performance of the Work.
   1. Do not begin installation before final grading is completed unless otherwise permitted by Architect.
B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION
A. Stake locations of fence lines, gates, and terminal posts. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.

3.3 INSTALLATION, GENERAL
A. Install chain-link fencing to comply with ASTM F 567 and more stringent requirements indicated.
3.4 **CHAIN-LINK FENCE INSTALLATION**

A. **Post Excavation:** Drill or hand-excavate holes for posts to diameters and spacings indicated, in firm, undisturbed soil.

B. **Post Setting:** Set posts in concrete at indicated spacing into firm, undisturbed soil.

1. **Concrete Fill:** Place concrete around posts to dimensions indicated and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.
   a. **Concealed Concrete:** Top 2 inches below grade to allow covering with concrete sidewalk.

C. **Terminal Posts:** Locate terminal end, corner, and gate posts per ASTM F 567 and terminal pull posts at changes in horizontal or vertical alignment of 30 degrees or more.

D. **Line Posts:** Space line posts uniformly at 8’ o.c.

E. **Tension Wire:** Install according to ASTM F 567, maintaining plumb position and alignment of fencing. Pull wire taut, without sags. Fasten fabric to tension wire with 0.120-inch diameter hog rings of same material and finish as fabric wire, spaced a maximum of 24 inches o.c. Install tension wire in locations indicated before stretching fabric. Provide horizontal tension wire at the following locations:

1. **Extended along bottom of fence fabric.** Install top tension wire through post cap loops. Install bottom tension wire within 6 inches of bottom of fabric and tie to each post with not less than same diameter and type of wire.

F. **Top Rail:** Install according to ASTM F 567, maintaining plumb position and alignment of fencing. Run rail continuously through line post caps, bending to radius for curved runs and terminating into rail end attached to posts or post caps fabricated to receive rail at terminal posts. Provide expansion couplings as recommended in writing by fencing manufacturer.

G. **Chain-Link Fabric:** Apply fabric to outside of enclosing framework. Leave 1 inch between finish grade or surface and bottom selvage unless otherwise indicated. Pull fabric taut and tie to posts, rails, and tension wires. Anchor to framework so fabric remains under tension after pulling force is released.

H. **Tie Wires:** Use wire of proper length to firmly secure fabric to line posts and rails. Attach wire at one end to chain-link fabric, wrap wire around post a minimum of 180 degrees, and attach other end to chain-link fabric per ASTM F 626. Bend ends of wire to minimize hazard to individuals and clothing.

1. **Maximum Spacing:** Tie fabric to line posts at 12 inches o.c. and to braces at 24 inches o.c.

3.5 **GATE INSTALLATION**

A. Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach fabric as for fencing. Attach hardware using tamper-resistant or concealed means. Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation and lubricate where necessary.

3.6 **ADJUSTING**

A. **Gates:** Adjust gates to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.

B. Lubricate hardware and other moving parts.

END OF SECTION 323113
PAVING NOTES:
1. The objects shown on this plan are for reference only.
2. The objects shown on this plan are for information only.
3. The objects shown on this plan are for construction only.
4. The objects shown on this plan are for manufacturing only.
5. The objects shown on this plan are for installation only.
6. The objects shown on this plan are for maintenance only.
7. The objects shown on this plan are for testing only.
8. The objects shown on this plan are for inspection only.
9. The objects shown on this plan are for operation only.
10. The objects shown on this plan are for disposal only.
11. The objects shown on this plan are for research only.
12. The objects shown on this plan are for education only.
13. The objects shown on this plan are for entertainment only.
14. The objects shown on this plan are for recreation only.
15. The objects shown on this plan are for aesthetic only.
16. The objects shown on this plan are for safety only.
17. The objects shown on this plan are for security only.
18. The objects shown on this plan are for health only.
19. The objects shown on this plan are for comfort only.
20. The objects shown on this plan are for efficiency only.

PAVING LEGEND
- = PAVING MATERIAL
- = PAVING DETAIL
- = PAVING FEATURE
- = PAVING DIMENSION
- = PAVING NOTE
- = PAVING INFORMATION
SIGN NOTES:
1. ABOVE GRADE SECTION OF SIGN POST SHALL BE 1-3/4" TUBE SECTION (14 GAUGE WALL THICKNESS) AND THE BURIED SECTION SHALL BE 2" TUBE SECTION (12 GAUGE WALL THICKNESS)
2. ALL HARDWARE SHALL BE ZINC PLATED.
3. ALL BOLTS, NUTS, WASHERS, ETC. SHALL COMPLY WITH CURRENT STATE DOT STANDARDS.
4. FOR POST HOLE IN EXISTING PAVEMENT, CORE 4" DIAMETER HOLE THROUGH PAVEMENT AND INSTALL POST IN HOLE WITH NATIVE SOIL. PLACE 2" OF ASPHALT SURFACE MATERIAL AROUND POST AND COMPACT FLUSH WITH SURROUNDING PAVEMENT TO PROVIDE WATERTIGHT SEAL.
5. FOR POST HOLE IN PROPOSED PAVEMENT, PROVIDE A 4" PVC SLEEVE 36" LONG IN PAVEMENT FOR INSTALLATION OF SIGN POST. INSTALL POST IN HOLE WITH NATIVE SOIL AND PLACE 2" OF ASPHALT SURFACE MATERIAL AROUND POST AND COMPACT FLUSH WITH SURROUNDING PAVEMENT TO PROVIDE WATERTIGHT SEAL.

STREET NAME SIGN (X2) (MOUNTED BACK TO BACK)
MAJOR STREET MOUNTED ABOVE MINOR STREET

STOP SIGN
LOWEST STREET NAME SIGN FACE MOUNTED PERPENDICULAR TO OTHER SIGN FACE (TYP)

ALUMINUM POP RIVET (TYP)
1" X 1" TUBULAR PVC SPACER (TYP.)
1" SPACE BETWEEN SIGNS

8'-0" MAX. SPACING (TYP.)
4 TIMES POST DIA.
5. No motion detected for 15 minutes, then turn off.

Upon activation, the 'G1' type fixture to flash red until there is no motion. Provide a data connection to the site controller per power and lighting control circuit serving nearest power connection to motorized gate. Refer to civil plans. Devices to be installed by security.

Exterior rated card reader and keypad for motorized exterior heaters. Cord reels to have NEMA 5-20R at payout end, reel station, with (4) cord reels, for engine block heaters. Cords to have NEMA 4X industrial grade cord on generator pad detail. For additional information, refer to sheet E301 for location. Refer to generator pad detail on this sheet. Pad mounted generator. Refer to sheet E201 for exact location. Pad by contractor per utility. New pad mounted transformer by utility. Refer to sheet E201 for exact general location of distribution center IT room. Refer to drawing and this architect expressly disclaims any and all responsibility for such plan, drawings, or documents not exhibiting included with equipment. Coordinate exact electrical configuration, height, and finish with architect. Coordinate with security vendor/installer.

50'-0" long, and retractable. Coordinate exact location with civil drawings and Evergy. Equipment installed by Evergy, 1240 W 112th Street, Suite 200, Kansas City, MO 64111. Six feet for 6" for 24" diameter column. 3" pole bushing on ground lug. Terminate #6 conduit at transformer. Final grade 6" min. Coordinate with Evergy general notes. Electrical utility company is Evergy. Further referenced electrical general notes:

Electrical plan notes:

1. Exterior light fixtures shall utilize lighting control circuits unless otherwise noted.
2. #10 awg minimum conductors for all exterior lighting circuits.
3. Conductors for lighting requirements and areas noted by red. 4. Conductors for lighting control circuits.
5. Conductors for lighting control circuits.
6. Coordinate with Evergy for electrical engineers and transformers.
7. All conduits must be installed with RMC type conduit in accordance with Evergy standards.
8. Coordinate with Evergy for electrical engineers and transformers.
9. Coordinate with Evergy for electrical engineers and transformers.
10. Coordinate with Evergy for electrical engineers and transformers.
11. Coordinate with Evergy for electrical engineers and transformers.
12. Coordinate with Evergy for electrical engineers and transformers. Coordinate with Evergy for electrical engineers and transformers.
13. Coordinate with Evergy for electrical engineers and transformers. Coordinate with Evergy for electrical engineers and transformers.
Please consider the environment before printing this.
WIRE DIAGRAM #1

WIRE DIAGRAM #2

WIRE DIAGRAM #3

WIRE DIAGRAM #4

DO NOT ROUTE ANY OTHER WIRING THROUGH THIS ENCLOSURE!

Figure 4: Power Wiring Pictorial

NOT TO SCALE

HEAT CABLES OPERATE ON 208 VOLTS - PULL ROUGHLY 618 WATTS/± PER CABLE
**PLUMBING PLAN**

**PLUMBING SCHEDULE**

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<th>ITEM</th>
<th>DESCRIPTION</th>
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<th>AFF</th>
<th>DIA</th>
<th>MBTU</th>
<th>GPH</th>
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</tbody>
</table>

**PLUMBING NOTES**

- All plumbing installations shall be in accordance with the plumbing code of the jurisdiction in which the project is located.
- All plumbing fixtures shall be installed in accordance with the manufacturer’s instructions.
- All plumbing connections shall be made with appropriate fittings and connectors.
- All plumbing systems shall be tested for leaks before being turned over to the owner.
- All plumbing systems shall be labeled with appropriate signage.

**DRAIN LINE DETAIL**

- Water temperature to the dishwasher shall be 140°.
- Coordinate location of water heater with food service equipment.
- Plumber shall furnish and install pressure reducing valve(s) at dishwasher(s).
- All waste lines shall have a 2" minimum air gap.
- Floor sinks shall be furnished and installed by the plumbing contractor in locations shown.
- Plumbing connections, specifications, and dimensions shown on these plans are for food service equipment contractor.

**NOT TO SCALE**

- All drawings and details are not to scale and are for planning purposes only.
- All plans and details are subject to change without notice.
- All dimensions and tolerances shall be as shown on the plans.

**ADDITIONAL INFORMATION**

- All plumbing systems shall be tested for leaks before being turned over to the owner.
- All plumbing systems shall be labeled with appropriate signage.
- All plumbing installations shall be in accordance with the plumbing code of the jurisdiction in which the project is located.
- All plumbing fixtures shall be installed in accordance with the manufacturer’s instructions.
- All plumbing connections shall be made with appropriate fittings and connectors.
- All plumbing systems shall be tested for leaks before being turned over to the owner.
- All plumbing systems shall be labeled with appropriate signage.
ELECTRIC DEFROST WIRING DIAGRAM

NOTE:
1. USE COPPER CONDUCTORS ONLY
2. UNIT MUST BE GROUNDED
3. FOR VOLTAGE, MOTOR AND HEATER AMPS SEE RATING ON OUTSIDE OF UNIT.
   ALSO SHOWN ABOVE IN COLDZONE REFRIGERATION SCHEDULE.

LEGEND:
- HS - HEATER SAFETY
- HTR - DEFROST HEATER
- LLS - LIQUID LINE SOLENOID
- M1 TO M6 - FAN MOTOR
- KE2 - REFERS TO ELECTRONIC CONTROLLER CONNECTIONS

WIRING:
- FACTORY WIRED
- FACTORY WIRED ELECTRIC DEFROST FOR FREEZER COILS
- FIELD WIRING
- FIELD WIRE DRAIN LINE
- FIELD WIRE L2/N
- L1 (BK)
- H
- HS/F
- S
- KE2 LIQ. LINE SOL. RELAY "NO" (YL/BK)
- KE2 POWER IN "GND"
- KE2 POWER IN "NUET/L2"
- KE2 DEFROST HEATER RELAY "COM"
- KE2 FAN RELAY "COM"
- KE2 POWER IN "LINE/L1"
- L1 (WH/RD)(GRN)
- L1
- M1
- M2 M3 M4 M5 M6
- KE2 CONTROLLER (HEADER END)
- HEADER END WIRING (OPPOSITE END)
- TB13 (HEADER END)
- GND

FOR VOLTAGE, MOTOR AND HEATER AMPS SEE RATING ON OUTSIDE OF UNIT.

ALSO SHOWN ABOVE IN COLDZONE REFRIGERATION SCHEDULE.