

## Addendum #1

**Project Name:** Randolph Elementary Additions & Renovation  
1024 S. 37<sup>th</sup> Street  
Lincoln, Nebraska 68510

**SHA Project No.:** 15049-05  
**LPS Bid No.:** 8366  
**Date Issued:** February 3, 2016

**Bid Date:** Thursday February 18, 2016; 2:00pm CT  
**Bid Opening:** LPS Facilities and Maintenance Office  
**Location:** 800 S. 24<sup>th</sup> Street  
Lincoln, NE 68508

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This Addendum is issued to all known bidders before receipt of proposals. This Addendum is to authorize the use of the following information in preparing proposals for the above named project. The bidder **must** enter the number of this Addendum on the **Proposal Sheet**.

### GENERAL QUESTIONS AND CLARIFICATIONS

**ADD 1-1.** A list of those who attended the pre-Bid Meeting held on February 1, 2016 at 4:00pm has been **Attached** for reference.

**ADD 1-2.** Existing Kitchen Equipment Relocation.

**Question:** *Can you confirm the responsibilities for work associated with the relocation of existing kitchen equipment?*

**Response:** Refer to Section 114000 "Food Service" equipment specification page 1, item 1H.

*Transport of existing equipment shall be provided by the General Contractor. Equipment shall be stored in an Owner-designated space. Existing equipment will be set in place by the General Contractor and utility connections made by the appropriate subcontractor.*

The Kitchen Equipment Schedule found on Sheet FS2.0 also provides additional direction regarding coordination and responsibility of equipment connections.

### MODIFICATIONS TO THE DRAWINGS

**ADD 1-3.** Refer to Sheet A102A, Detail A5; The background plan indicates a solid wall that separates Corridor 286 from Corridor 280 to the south. No wall exists. Refer to **Attachment A1** for further clarification of existing conditions.

- ADD 1-4.** Refer to Sheet MD101 First Floor Mechanical Demolition Plan – Area “A” & “B”, Sheet Note 1; Replace the note listed with the following:
- 1 RELOCATE EXISTING CABINET UNIT HEATER, ASSOCIATED SENSOR AND CONTROLS. SEE SHEET M200, M301 AND M302 FOR NEW LOCATION
- ADD 1-5.** Refer to Sheet M102, Detail A1, First Floor Plumbing Plan – Area “B”; Modify location of service sink located in Custodial 188C as indicated on **Attachment M102-1**.
- ADD 1-6.** Refer to Sheet M200, Detail A1, First Floor Hydronic Plan – Area “B”; Add ball valves and blind flange as shown on **Attachment M200-1**. Add Sheet Note 4 which shall read as follows:
4. PROVIDE 2” BALL VALVE AND BLIND FLANGE FOR VENT AND SYSTEM FILL.
- ADD 1-7.** Refer to Sheet T1.1A, Detail A1, First Floor Telecommunication Plan – Area “A”; At Vestibule 181A, add device and Note 23 as indicated on **Attachment T1.1A-T1**.
- ADD 1-8.** Refer to Sheet T1.1A, First Floor Telecommunication Plan – Area “A”, Sheet Note 22; Modify note to read as follows:
22. DOOR RELEASE FOR INTERIOR PAIR OF DOORS AT VESTIBULE 184A AND FOR DOORS 181.1 AT VESTIBULE 181A. EXTEND WIRING TO DOOR CONTROLLERS AS REQUIRED. COORDINATE BUTTON LOCATIONS WITH LPS PRIOR TO ROUGH-IN.

**MODIFICATIONS TO THE SPECIFICATIONS**

- ADD 1-9.** Refer to the Table of Contents; Add the following section:
- |    |        |                                   |   |
|----|--------|-----------------------------------|---|
| OA | 323100 | STEEL ORNAMENTAL FENCES AND GATES | 6 |
|----|--------|-----------------------------------|---|
- ADD 1-10.** Refer to Section 004113 “Bid Proposal Form”; Alternate 05 has been added to the proposal form. Unit Prices 04, 05, 06, 07, 08 and 09 have also been added to the proposal form. This Section has been revised and included in its entirety as an **Attachment** to this Addendum.
- ADD 1-11.** Refer to Section 012200 “Unit Prices”; The description of Unit Prices 01, 02 and 03 have been modified and Unit Prices 04, 05, 06, 07, 08 and 09 have been added. This Section has been revised and included in its entirety as an **Attachment** to this Addendum.
- ADD 1-12.** Refer to Section 012300 “Alternates”; The description of Alternate No. 03 has been modified and Alternate No. 05 has been added. This Section has been revised and included in its entirety as an **Attachment** to this Addendum.
- ADD 1-13.** Refer to Section 321373 “Concrete Paving”, Article 3.11, Paragraph A; Amend this paragraph to read as follows:
- A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- ADD 1-14.** Refer to Section 323100 “Steel Ornamental Fences and Gates”; This section was inadvertently left out of the project manual and is included as an **Attachment** to this Addendum.

**ATTACHMENTS**

**ADD 1-15.** The following attachments are included as part of this addendum.

- Pre-Bid Attendance List
- Attachment A1: Revision to A5/A102A
- Attachment M102-1: Revision to A1/M102
- Attachment M200-1: Revision to A1/M200
- Attachment T1.1A-T1: Revision to A1/T1.1A
- Section 004113 “Bid Proposal Form” Re-issued
- Section 012200 “Unit Prices” Re-issued
- Section 012300 “Alternates” Re-issued
- Section 323100 “Steel Ornamental Fences and Gates” Issued

**End of Addendum #1**

**Pre-Bid Meeting Attendance Sheet**

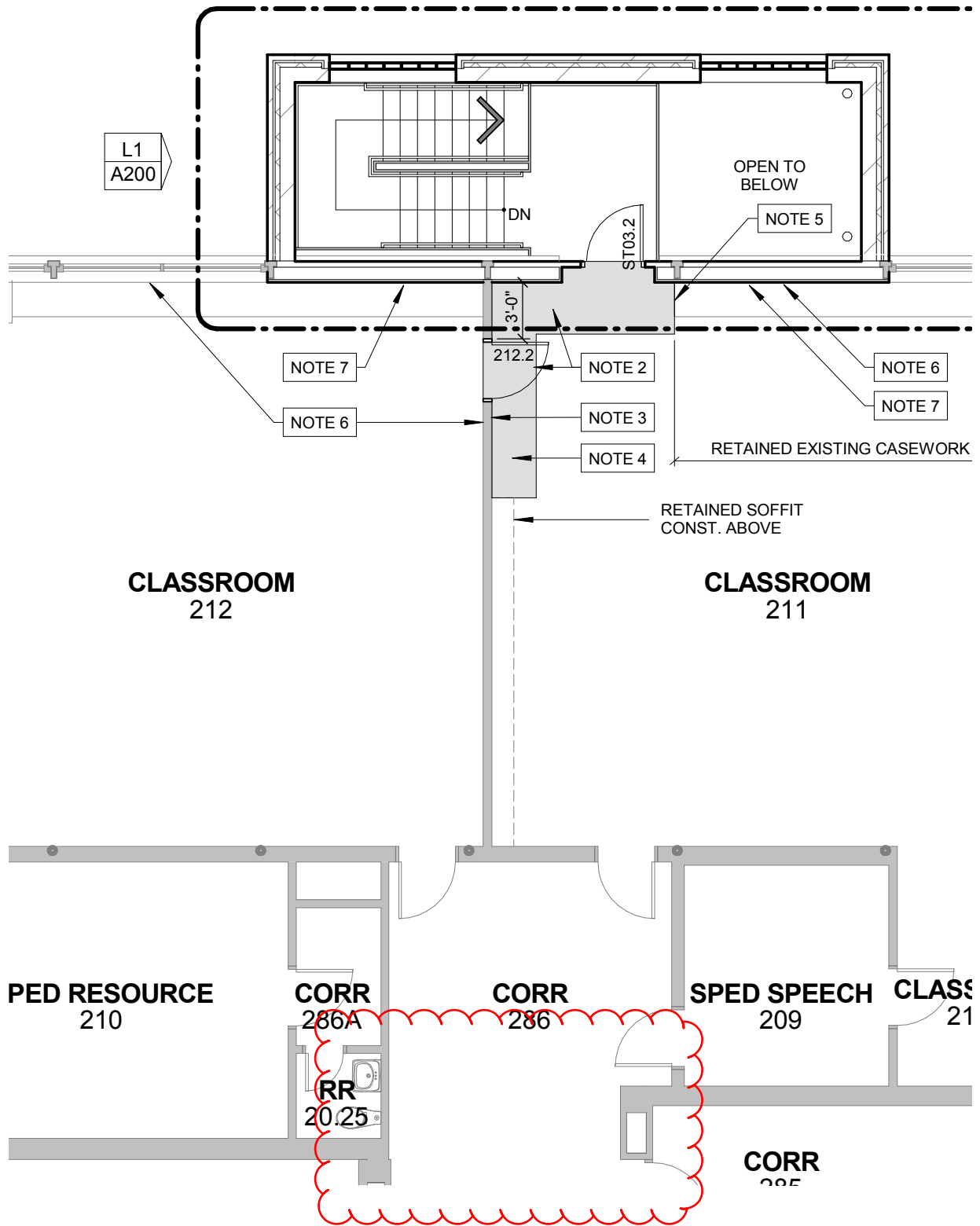
Date and Time: February 1, 2016  
 Project: Randolph Elementary School, Additions and Renovation

Name Phone # E-mail address

JUSTIN KURTZER	402-432-3325	CHEEVER CONSTRUCTION	jkurtzer@cheeverconstruction.com
BEN BOGNER	402-261-2994	N&C GROUP	bbogner@nccgroupinc.com
DAVE HARAU	402-339-4344	CONTROL SERVICES	dharrill@controlservices.com
David Autry	Meininger Fire Prot. 402.466.2616	402.466.2617	david@mfp-inc.com
MARCUS WILSON	402-613-7306	HAUSMANN CONSTRUCTION	Marcusw@hausmannconstruction.com
Dave McNeal	402-434-5450	Sampson	estimating@sampson-construction.com
DAVE JUNG	402-890-2931	Willmar Electric	djung@willmar-electric.com
FRY WELSHOFF	402 476 2106	CORNBUSKEN T.I.E.	
STEVE SHWARTZ	402-436-1072	EPS	SSWARTZ@EPS.org
Marty Kasl	402-476-1273	ETI	mksl@eti-engineers.com
Joel Thieman	402-476-1273	ETI	jthieman@eti-engineers.com
Randy Rogge	402-441-3100	Rogge General Contr.	r.rogge@rogge-gk.com







# Second Level Floor Plan & Roof Plan - Area A

SINCLAIR **hille** architects

Revision to Detail: **A5/A102A**

Lincoln Public Schools District Office

Attachment: **A1**

Scale: 1/8" = 1'-0"

Project Number:

15049

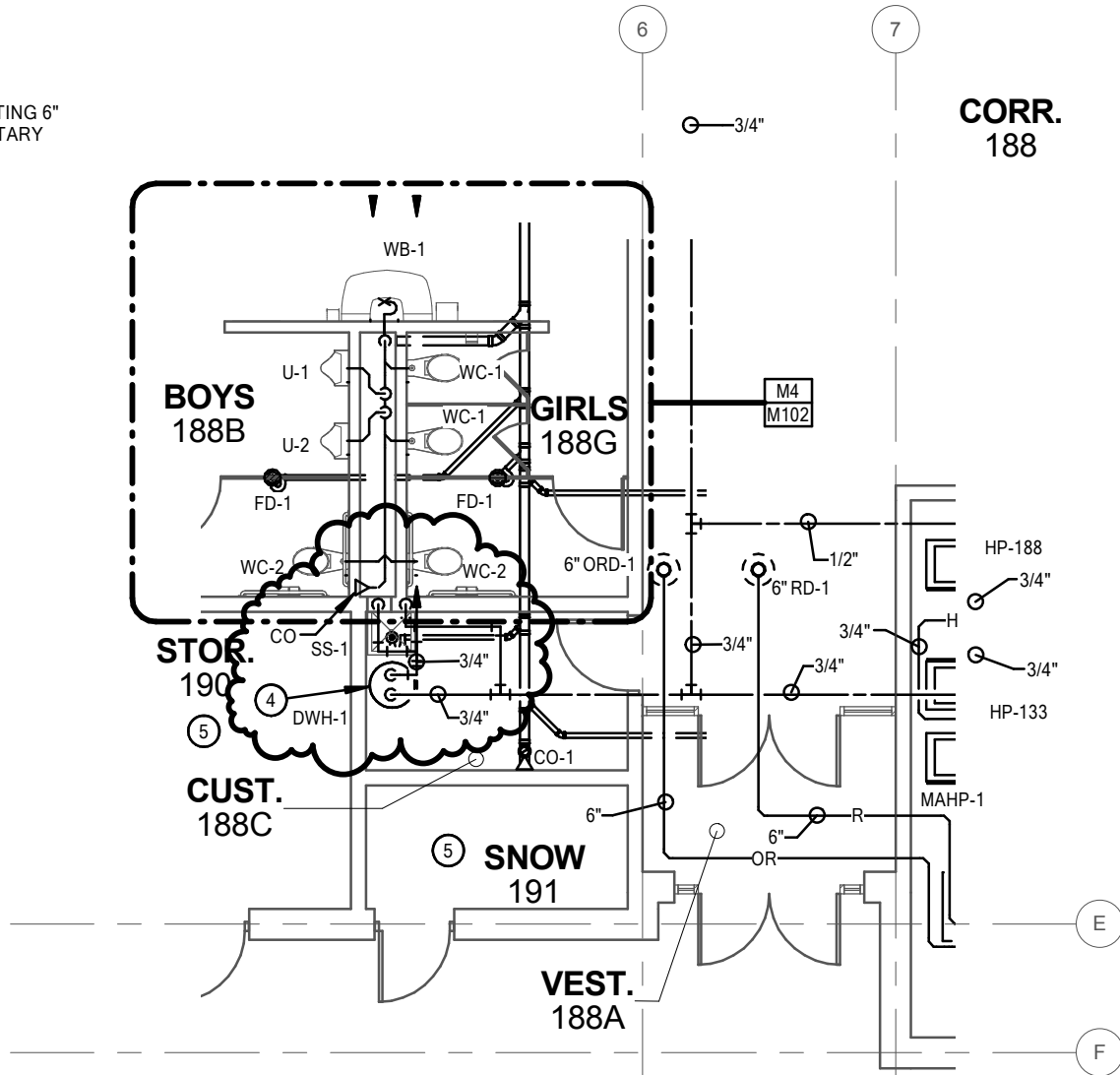
Date:

February 3, 2016

Attachment to:

**Addendum 1**

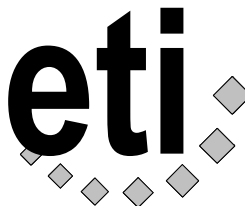
EXISTING 6" SANITARY



# 1 FIRST FLOOR PLUMBING PLAN - AREA "B"

SCALE: 1/8" = 1'-0"

Randolph Elem. Add. & Reno.  
 First Floor Plumbing Plan  
 Area "B"



**Engineering Technologies Inc.**  
 Mechanical & Electrical Building Solutions

1111 N. 13th Street, Suite 216 | Omaha, NE 68102 | P 402.330.2772 | F 402.330.2630  
 825 M Street, Suite 200 | Lincoln, NE 68508  
 P 402.476.1273 | F 402.476.1274  
 ETI Project No: 2015-127

ETI Addendum #1

SHEET  
**M102**  
 ATTACHMENT NO.

**1**  
 02/02/2016

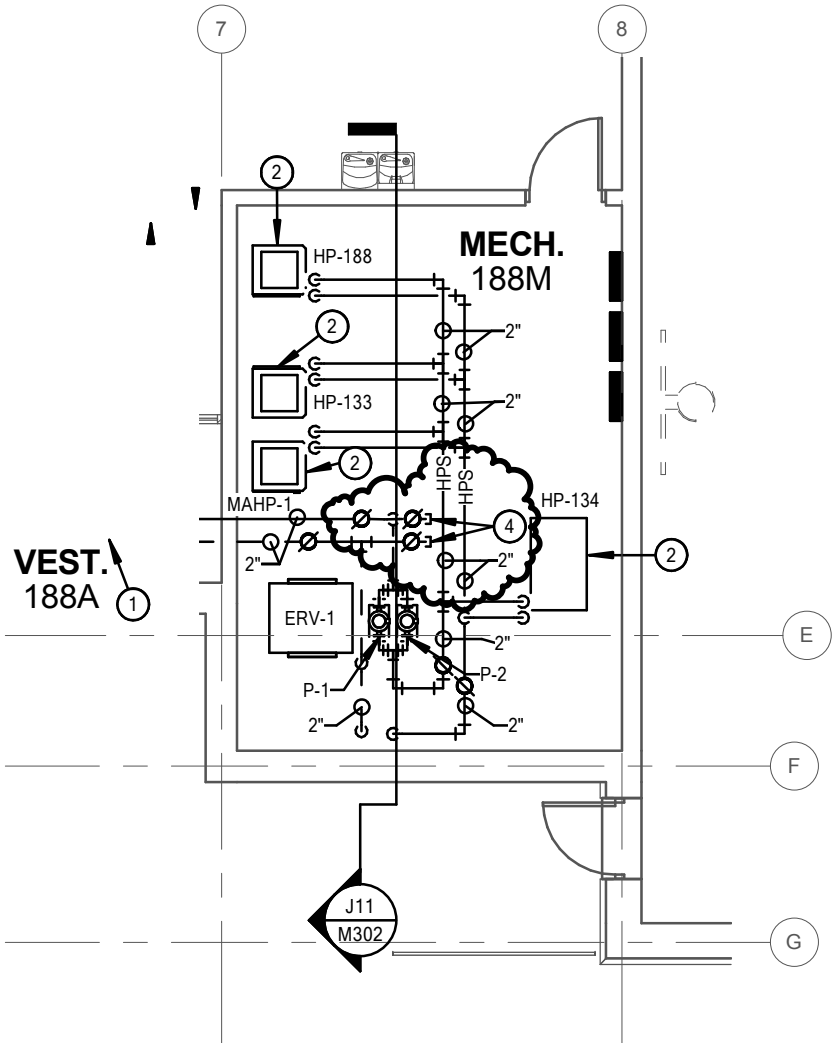
SCALE: 1/8" = 1'-0"

jct

**SHEET NOTES**

4 PROVIDE 2" BALL VALVE AND BLIND FLANGE FOR VENT AND SYSTEM FILL.

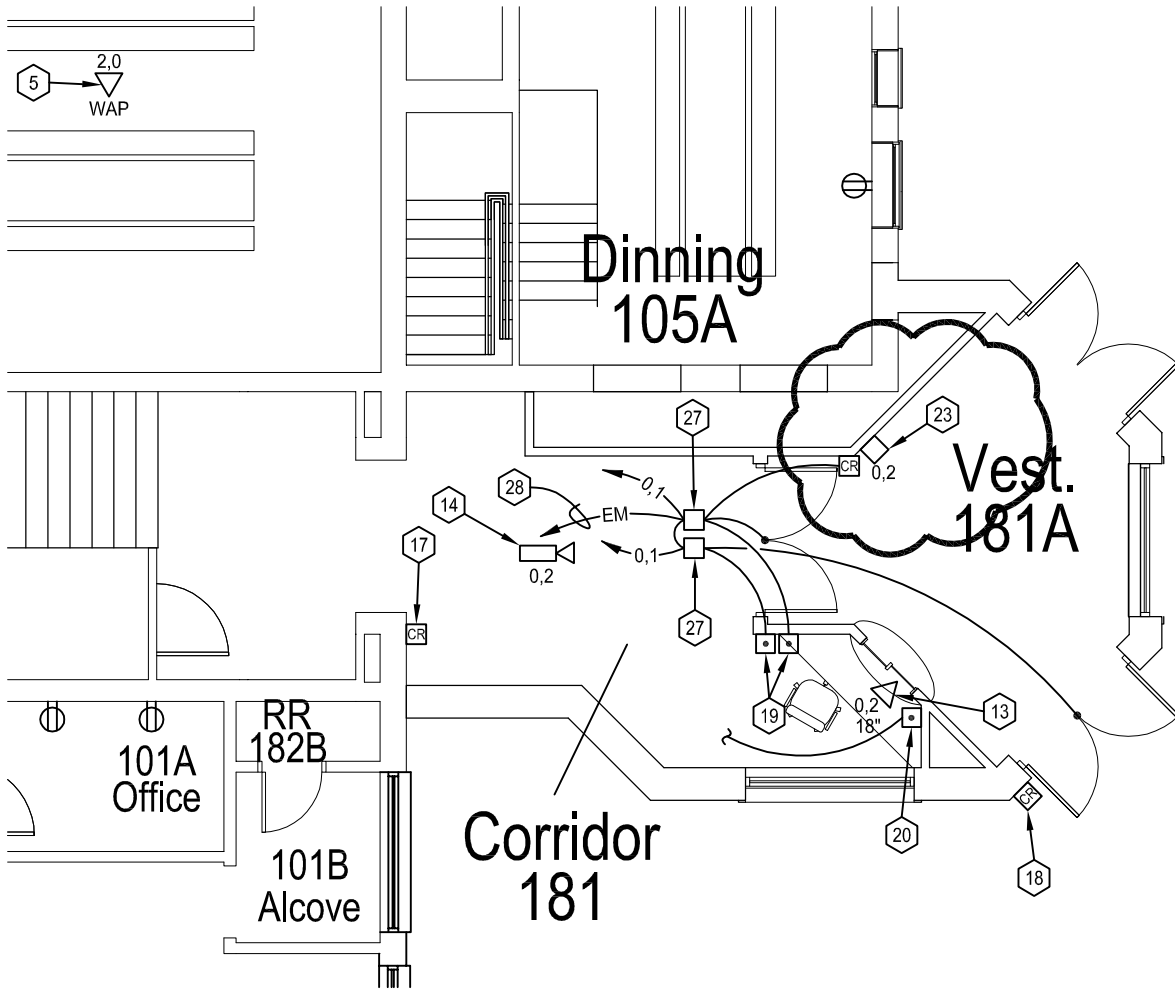
**CORR.**  
188



# 1 FIRST FLOOR HYDRONIC PLAN - AREA "B"

SCALE: 1/8" = 1'-0"

<p>Randolph Elem. Add. &amp; Reno.</p> <p><b>FIRST FLOOR HYDRONIC PLAN - AREA "B"</b></p>			<p><b>Engineering Technologies Inc.</b> Mechanical &amp; Electrical Building Solutions</p> <p>1111 N. 13th Street, Suite 216   Omaha, NE 68102   P 402.330.2772   F 402.330.2630 825 M Street, Suite 200   Lincoln, NE 68508 P 402.476.1273   F 402.476.1274 ETI Project No: 2015-127</p>	<p>ETI ADDENDUM 1</p> <p style="text-align: center;">SHEET <b>M200</b></p> <p style="text-align: center;">ATTACHMENT NO. <b>1</b></p> <p style="text-align: center;">02/02/2016</p>
SCALE: 1/8" = 1'-0"	JCT			



# SHEET NOTES

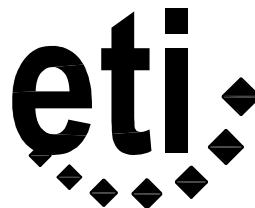
23. INSTALL BACKBOX FOR LPS FURNISHED INTERCOM PHONE. EXTEND CONDUIT WITH PULLSTRING TO NEAREST ACCESSIBLE CEILING. ROUTE TWO CAT-6 CABLES FROM DATA CLOSET TO THIS LOCATION AND TERMINATE. REFER TO SHEET T0.1 FOR DATA CLOSET LOCATION.

RANDOLPH  
 ADDITION/RENOVATION  
 ADD #1



SCALE: 1/8" = 1'-0"

BAR



**Engineering Technologies Inc.**  
 Mechanical & Electrical Building Solutions

825 M Street, Suite 200 | Lincoln, NE 68508  
 P 402.476.1273 | F 402.476.1274

1111 N. 13th Street, Suite 216 | Omaha, NE  
 68102 | P 402.330.2772 | F 402.330.2630

ETI Project No: (2015-127)

ADD #1

SHEET

T1.1A

ATTACHMENT NO.

T1

2/2/2016

**PROPOSAL FORM**

The following proposal shall be filled out by each bidder:

Date: \_\_\_\_\_

Proposal of:

Name: \_\_\_\_\_

(a Corporation organized and existing under the laws of the State of \_\_\_\_\_)

or

(an Individual trading as: \_\_\_\_\_)

**TO: LINCOLN PUBLIC SCHOOLS**

**PROJECT: RANDOLPH ELEMENTARY ADDITIONS & RENOVATION**

**LPS BID NO. 8366**

The undersigned in compliance with your Invitation for Bids for the construction of :

**Randolph Elementary Additions & Renovation**

having examined the plans and specifications with related documents and the site of the proposed work and being familiar with all of the conditions surrounding the construction of the proposed project, including the availability of labor, hereby proposes to furnish all labor, materials and supplies and to construct the project in accordance with the Contract Documents, at the prices stated below. The prices are to cover all expenses incurred in performing the work required under the contract documents of which this proposal is a part.

I (or We) acknowledge receipt of the following addendum or addenda:

\_\_\_\_\_

The Contractor shall indicate herein the number of consecutive calendar days anticipated to complete the project after commencing work.

\_\_\_\_\_ calendar days

The Contractor shall indicate herein that their Base Bid Proposal includes a Discovery Allowance of **\$40,000.**

\_\_\_\_\_

**BASE BID PROPOSAL**

For all work described in the specifications and shown on the plans for the project, I (or we) agree to perform all work for the sum of

\_\_\_\_\_ Dollars

(\$ \_\_\_\_\_ )

(Amount shall be shown in both written form and figures. In case of discrepancy between the written amount and the figures, the written amount will govern.)

**ALTERNATES**

**Alternate No. 01: Kitchen Decorative Wall Tile**

ADD \_\_\_\_\_ Dollars

**Alternate No. 02: Technology Upgrades**

DEDUCT \_\_\_\_\_ Dollars

**Alternate No. 03: Site Fencing and Masonry Piers**

DEDUCT \_\_\_\_\_ Dollars

**Alternate No. 04: Media Center Millwork**

DEDUCT \_\_\_\_\_ Dollars

**Alternate No. 05: Parking Lot PCC Pavement**

DEDUCT \_\_\_\_\_ Dollars

**UNIT PRICES**

**Unit Price No. 01: 4-inch Pavement**

\$ \_\_\_\_\_ per SF

**Unit Price No. 02: 5-inch Pavement**

\$ \_\_\_\_\_ per SF

**Unit Price No. 03: 6-inch Pavement**

\$ \_\_\_\_\_ per SF

**Unit Price No. 04: 6” PCC Pavement with Integral Curb**

\$\_\_\_\_\_ per SY

**Unit Price No. 05: 8-inch PCC Pavement with Integral Curb**

\$\_\_\_\_\_ per SY

**Unit Price No. 06: Full Depth Pavement Repair**

\$\_\_\_\_\_ per SF

**Unit Price No. 07: 6'-0” Tall Galvanized Chain Link Fence**

\$\_\_\_\_\_ per LF

**Unit Price No. 08: 6'-0” Tall Black Vinyl Coated Chain Link Fence**

\$\_\_\_\_\_ per LF

**Unit Price No. 09: 6'-0” Tall Ornamental Fence (Montage II)**

\$\_\_\_\_\_ per LF

Upon receipt of notice of the acceptance of the bids, we will execute the formal contract attached within five (5) days and deliver a Surety Bond for a faithful performance of this contract.

Respectfully submitted,

By: \_\_\_\_\_

\_\_\_\_\_  
Title

\_\_\_\_\_  
Business Address

SEAL: If bid is by Corporation

## **SECTION 012200 - UNIT PRICES**

### **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 unit prices.
- B. Related Requirements:
  - 1. Section 012600 "Contract Modification Procedures" for procedures for submitting and handling Change Orders.
  - 2. Section 014000 "Quality Requirements" for general testing and inspecting requirements.

#### 1.3 DEFINITIONS

- A. Unit price is an amount incorporated in the Agreement, applicable during the duration of the Work as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

#### 1.4 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: See individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

**PART 2 - PRODUCTS (Not Used)**

**PART 3 - EXECUTION**

3.1 SCHEDULE OF UNIT PRICES

A. Unit Price No. 01: 4-inch Pavement.

1. Description: Provide a unit price for 4” thick concrete pavement that includes full compensation for all preparation of subgrade, forms or slip forming, materials, labor, tools, equipment, jointing, finishing, curing, sawing, sealing, backfilling, guarantee, cleanup and incidentals necessary to complete the Work.
2. Unit of Measurement: Cost per Square Foot

B. Unit Price No. 02: 5-inch Pavement.

1. Description: Provide a unit price for 5” thick concrete pavement that includes full compensation for all preparation of subgrade, forms or slip forming, materials, labor, tools, equipment, jointing, finishing, curing, sawing, sealing, backfilling, guarantee, cleanup and incidentals necessary to complete the Work.
2. Unit of Measurement: Cost per Square Foot

C. Unit Price No. 03: 6-inch Pavement.

1. Provide a unit price for 6” thick concrete pavement that includes full compensation for all preparation of subgrade, forms or slip forming, materials, labor, tools, equipment, jointing, finishing, curing, sawing, sealing, backfilling, guarantee, cleanup and incidentals necessary to complete the Work.
2. Unit of Measurement: Cost per Square Foot

D. Unit Price No. 04: 6-inch PCC Pavement with Integral Curb.

1. Provide a unit price for 6” thick concrete pavement with integral curb that includes full compensation for all preparation of subgrade, forms or slip forming, materials, labor, tools, equipment, jointing, finishing, curing, sawing, sealing, backfilling, guarantee, cleanup and incidentals necessary to complete the Work.
2. Unit of Measurement: Cost per Square Yard

E. Unit Price No. 05: 8-inch PCC Pavement with Integral Curb.

1. Provide a unit price for 8” thick concrete pavement with integral curb that includes full compensation for all preparation of subgrade, forms or slip forming, materials, labor, tools, equipment, jointing, finishing, curing, sawing, sealing, backfilling, guarantee, cleanup and incidentals necessary to complete the Work.
2. Unit of Measurement: Cost per Square Yard

F. Unit Price No. 06: Full Depth Pavement Repair.

1. Provide a unit price for full depth pavement repair that shall include full compensation for all preparation of subgrade, forms or slip forming, materials, labor, tools, equipment, jointing, finishing, curing, sawing, sealing, backfilling, guarantee, cleanup and incidentals necessary to complete the Work. Full depth repair includes sawcutting and removing full

- depth asphalt pavement, building 5" concrete base (L3500) with 2" asphalt surface course-type SPL (S10-12-104).
2. Unit of Measurement: Cost per Square Foot.
- G. Unit Price No. 07: 6'-0" Tall Galvanized Chain Link Fence.
1. Provide a unit price for a 6'-0" tall galvanized chain link fence that is installed in accordance with the Plans and Specifications. Cost shall be for full compensation for materials, equipment, tools, labor and incidentals necessary to complete the Work as indicated on the plans.
  2. Unit of Measurement: Cost per Lineal Foot
- H. Unit Price No. 08: 6'-0" Tall Black Vinyl Coated Chain Link Fence.
1. Provide a unit price for a 6'-0" tall black vinyl coated chain link fence that is installed in accordance with the Plans and Specifications. Cost shall be for full compensation for materials, equipment, tools, labor and incidentals necessary to complete the Work as indicated on the plans.
  2. Unit of Measurement: Cost per Lineal Foot
- I. Unit Price No. 09: 6'-0" Tall Ornamental Fence (Montage II).
1. Provide a unit price for a 6'-0" tall ornamental fence (Montage II or approved equal) that is installed in accordance with the Plans and Specifications. Cost shall be for full compensation for materials, equipment, tools, labor and incidentals necessary to complete the Work as indicated on the plans.
  2. Unit of Measurement: Cost per Lineal Foot

**END OF SECTION 012200**

## **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.

#### 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. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
  - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- 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. Alternate No. 01: **Kitchen Decorative Wall Tile.**

1. Base Bid: South and West walls of Kitchen Serving Line walls are to be finished as a painted GWB surface.
2. Alternate: South and West walls of Kitchen serving line walls are to receive a full height decorative wall tile in pattern as indicated on Detail A6 Sheet A603 and specified in Section 093013 "Ceramic Tiling".

B. Alternate No. 02: **Technology Upgrades.**

1. Base Bid: As indicated in the T-Series sheets, all existing data cabling throughout the building shall be removed in its entirety including the removal of all cabling back to its source and the removal of all existing exposed raceways and boxes.
2. Alternate: Removal of all existing exposed raceways and boxes is not required.

C. Alternate No. 03: **Site Fencing and Masonry Piers.**

1. Base Bid: Provide seven (9) masonry piers (as described in Note 22 on Sheet A103 and tagged as Item Z on Sheet C100) along with the ornamental fence assembly that starts at the Secure Entry and extends east along the north, east and south side of the parking lot as shown on Sheet C100.
2. Alternate: Provide one (1) masonry pier (as described in note 22 on Sheet A103) along with a black vinyl coated chain link fence assembly that starts at the Secure Entry and extends east along the north, east and south side of the parking lot as shown on Sheet C100 where the ornamental fence is currently indicated.

D. Alternate No. 04: **Media Center Millwork.**

1. Base Bid: Provide all millwork as documented in the Contract Documents.
2. Alternate: Eliminate all millwork shown in Office 106A. Eliminate the Media Circulation Desk as shown on M4/A601. Eliminate millwork beneath Stage 156 and Stage 160 as shown in Details J10/A601 and J13/A601.

E. Alternate No. 05: **Parking Lot PCC Pavement.**

1. Base Bid: Remove and dispose of existing parking lot, complete. Install 6" PCC with integral curb.
2. Alternate: Mill off existing asphalt surface coat (assume 2" thick). Remove and dispose of asphalt. Install geotextile fabric. Build 2" asphalt surface course. Perform full depth repair at areas where significant deterioration has occurred. Full depth repair shall be sawcutting and removing full depth asphalt pavement. Building 5" concrete base (L3500) with 2" asphalt surface course-type SPL (S10-12-104). Assume 100 SF of existing parking lot needs full depth repair.

**END OF SECTION 012300**

## **SECTION 323100 – STEEL ORNAMENTAL L FENCES AND GATES**

### **PART 1 - GENERAL**

#### 1.1 SUMMARY

- A. Work shall include all labor, materials, and equipment necessary to completely furnish and install the Steel Ornamental Fence and Gates as indicated on the plans and as herein specified.
- B. Section Includes:
  - 1. Steel Ornamental Fence
  - 2. Ornamental Gates: Swing gates.
- C. Related Sections:
  - 1. 033000 “Cast-in-Place Concrete”.
  - 2. 310000 “Earthwork”

#### 1.2 REFERENCES

- A. ASTM A653/A653M – Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process.
- B. ASTM B117 – Practice for Operating Salt-Spray (Fog) Apparatus.
- C. ASTM D523 – Test Method for Specular Gloss.
- D. ASTM D714 – Test Method for Evaluating Degree of Blistering in Paint.
- E. ASTM D822 – Practice for Conducting Test on Paint and Related Coatings and materials using Filtered Open-Flame Carbon-Arc Light and Water Exposure Apparatus.
- F. ASTM D1654 – Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments.
- G. ASTM D2244 – Test Method for Calculation of Color Differences from Instrumentally Measure Color Coordinates.
- H. ASTM D2794 – Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
- I. ASTM D3359 – Test Method for Measuring Adhesion by Tape Test.
- J. ASTM F2408 – Ornamental Fences Employing Galvanized Steel Tubular Pickets.

#### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for chain link fence and gates
  - 1. Fences and gate posts, rails, and fittings
  - 2. Fences reinforcements and attachments

3. Gates and hardware.

B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.

1. Include diagrams for power, signal, and control wiring.

C. Samples: For each fence material and for each color specified.

#### 1.4 INFORMATIONAL SUBMITTALS

A. Field quality-control reports.

B. Product Test Reports: For decorative metallic-coated-steel tubular picket fences, including finish, indicating compliance with referenced standard and other specified requirements.

#### 1.5 CLOSEOUT SUBMITTALS

A. Maintenance Data: For gate operators to include in maintenance manuals.

#### 1.6 QUALITY ASSURANCE

A. Installer Qualifications: An experienced commercial installer who has complete ornamental fences and gates similar in material, design, and extent to those indicated for this Project.

B. Single-Source Responsibility: Obtain ornamental fences and gates, including accessories, fitting, and fastening, from a single source.

C. Mockups: Build mockups to set quality standards for fabrication and installation.

#### 1.7 Project Conditions

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

#### 1.8 WARRANTY

A. Special Warranty: Manufacturer's standard form in which installer agrees to repair or replace components of ornamental 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 gate operations and controls.

b. Deterioration of materials, metal finishes, and other materials beyond normal weathering.

2. Warranty Period: 1 year from date of Substantial Completion.

## **PART 2 - PRODUCTS**

### **2.1 STEEL ORNAMENTAL FENCE:**

#### **A. Manufacturer:**

1. Ameristar 1-800-321-3724
  - a. Height: 6'-0"
  - b. Color: Black
2. Or equal, if and as specifically approved by Engineer and approved by Owner.

**B. Fence Framework:** Steel material for fence frameworks (tubular pickets, rails, and posts), when galvanized prior to forming, shall conform to the requirements of ASTM A924/A924M, with a minimum yield strength of 45,000 psi. the steel shall be hot-dip galvanized to meet the requirements of ASTM A653/A653M with a minimum zinc coating weight of 0.90 oz./ft<sup>2</sup>, Coating Designation G-90.

**C. Fence Pickets:** Material for fence pickets shall be 3/4" square x 17 Ga. Tubing. The cross sectional shape of the rails shall conform to the manufacturer's ForeRunner™ double-wall design with outside cross-section dimensions of 1.50" square and a minimum thickness of 14 Ga. Picket holes in the ForeRunner™ rail shall be spaced 4.7" o.c. Picket retaining rods shall be 0.125" diameter galvanized steel. High quality PVC grommets shall be supplied to seal all pickets-to-rail intersections

### **2.2 STEEL SWING GATE**

#### **A. Manufacturer:**

1. Ameristar 1-800-321-3724
  - a. Height: 6'-0"
  - b. Color: Black
2. Or equal, if and as specifically approved by Engineer and approved by Owner.

**B. Swing Gates:** Comply with ASTM F900 for gate posts and swing gate types.

### **2.3 FABRICATION**

**A.** Pickets, rails, and posts shall be pre-cut to specified lengths. ForeRunner™ rails shall be pre-punched to accept pickets.

**B.** Grommets shall be inserted into the pre-punched holes in the rails and pickets shall be inserted through the grommets so that the pre-drilled picket holes align with the internal upper raceway of the rails.

**C.** The manufactured galvanized framework shall be subject to the thermal stratification coating process, and electrostatic spray application of any epoxy base, and a separate electrostatic spray application of a polyester finish. The base coat shall be a thermosetting epoxy powder coating with a minimum thickness of 2 mils. The topcoat shall be a polyester powder coat finish with a minimum thickness of 2 mils.

**D.** Complete panels shall be capable of supporting a 400 lb. load (applied at midspan) without permanent deformation. Panels without rings shall be able to change 12.5% in grade.

- E. Swing gates shall be fabricated using 1.5 x 14 ga. double channel rail, 1.75" sq. x 14 ga gate ends, and 3/4" sq. x 17 ga pickets. Gates that exceed 6' in width will have an intermediate upright. All rail and upright intersections shall be joined by welding. All picket and rail intersections shall be joined by welding.

#### 2.4 MISCELLANEOUS MATERIALS

- A. Concrete: Normal-weight, air-entrained, ready-mix concrete complying with requirements in Section 033000 "Cast-in-Place Concrete" with a minimum 28-day compressive strength of 3500 psi.

#### 2.5 GROUNDING MATERIALS

- A. Grounding Conductors: Bare, solid wire for No. 6 AWG and smaller; stranded wire for No. 4 AWG and larger.
  - 1. Material above Finished Grade: Copper.
  - 2. Material on or below Finished Grade: Copper.
- B. Grounding Connectors and Grounding Rods: Comply with UL 467.

### **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 work.
  - 1. Do not begin installation before final grading is completed unless otherwise permitted by Engineer.
- B. Proceed with installation only after unsatisfactory conditions have been removed.

#### 3.2 PREPERATION

- A. Stake locations of fence lines, gates, and terminal posts. Do not exceed interval of 500 feet or line of site between stakes. Indicate location of utilities, lawing sprinkler system, underground structures, benchmarks, and property monuments.

#### 3.3 INSTALATION

- A. Install fence to comply with ASTM F567

#### 3.4 ORNAMENTA FENCE INSTALLATION

- A. Install fences according to manufacturer's written instructions.
- B. Install fences by setting posts as indicated and fastening rails and infill panels] to posts.
- C. Post Excavation: Drill or hand-excavate holes for posts in firm, undisturbed soil. Excavate holes to a diameter of not less than 4 times post size and a depth of not less than 3 inches (75 mm) lower than post bottom. Bottom of posts shall be set not less than 36" below finish surface.
- D. Post Setting: Set posts in concrete at indicated spacing into firm, undisturbed soil.

1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
2. Concrete Fill: Place concrete around posts and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.
3. Posts Set in Concrete: Extend post to within 6 inches (150 mm) of specified excavation depth, but not closer than 3 inches (75 mm) to bottom of concrete.
4. Space posts uniformly.

### 3.5 GATE INSTALLATION

- A. Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. 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 GROUNDING AND BONDING

- A. Fence Grounding: Install at maximum intervals of 1500 feet except as follows:
  1. Fences within 100 Feet (30 m) of Buildings, Structures, Walkways, and Roadways: Ground at maximum intervals of 750 feet.
    - a. Gates and Other Fence Openings: Ground fence on each side of opening. Bond metal gates to gate posts.
- B. Grounding Method: At each grounding location, drive a grounding rod vertically until the top is 6 inches (150 mm) below finished grade. Connect rod to fence with No. 6 AWG conductor. Connect conductor to each fence component at grounding location.
- C. Bonding Method for Gates: Connect bonding jumper between gate post and gate frame.
- D. Connections: Make connections so possibility of galvanic action or electrolysis is minimized. Select connectors, connection hardware, conductors, and connection methods so metals in direct contact are galvanically compatible.

### 3.7 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. Conform that latches and locks engage accurately and securely without forcing or binding.
- B. Lubricate hardware and other moving parts.

### 3.8 INSTALLATION MAINTENANCE

- A. When cutting or drilling rails, or posts, adhere to the following steps to seal the exposed steel surfaces:
  1. Remove all metal shavings from cut area.
  2. Apply zinc-rich primer to thoroughly cover cut edge and/or drilled hole; let dry.
  3. Apply 2 coats of custom finish paint matching fence color, seal all exposed surfaces.

3.9 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's personnel to adjust, operate, and maintain ornamental fences and gates.

3.10 CLEANING

- A. The contractor shall clean the jobsite of excess materials.

**END OF SECTION 323119**