

January 22, 2016

Lefler Middle School Gym Addition and Renovation
1100 South 48th Street
Lincoln, NE

ADDENDUM NO. ONE

This Addendum is applicable to all work designated herein. It shall be understood that these items shall be considered a part of the contract documents and modifies the original specifications and drawings and shall be included in the contract. The changes designated herein shall supersede the original plans and specifications. All labor, materials, tools, equipment, and services required for these items shall be included in your proposal.

General Information:

1. Pre-bid conference sign-in sheets are attached for reference. See attachment # 1.

Project Manual/Specifications:

1. Reference Bid Proposal Form:
 - A. Contract Time:
 - a. Revise to read: "The Contractor shall complete the project before August 14, 2016 for interior renovations and December 22, 2016 for gymnasium and elevator additions."
See attachment # 2 for revised Bid Proposal Form.
2. Reference Instructions to Bidders, Section 8.1, Paragraph B:
 - A. Revise paragraph B to read: "The agreement does NOT include liquidated damages."
3. Reference Specification Section 07 5310, 60 MIL EPDM Membrane Roofing:
 - A. Add attached specification section 07 5310, 60 MIL EPDM Membrane Roofing. See attachment # 3.
4. Reference Specification Section 08 4500, Translucent Wall Assemblies:
 - A. Delete specifications section in its entirety.
 - B. Add attached specification section 08 4523, 2-3/4" Translucent Wall System. See attachment # 4.

Drawings:

1. Reference Sheet G300, Temporary Corridor Separation Wall:
 - A. Detail L3
 - a. Add Note: "Temporary Corridor Separation Wall will be constructed to provide 1-hour fire separation (Typical)."
2. Reference Sheet D126, Second Level Demo Plan - Area B1 and B2, Room B24, Computer Room:
 - A. Detail J1
 - a. Remove existing glazed masonry wall at existing sink. See attachment # 5.

3. Reference Sheet A116, First Level Floor Plan-Area B1 and B2:
 - A. Detail K7
 - a. Add: "1-Hour Temporary Corridor Separation Wall (Typical)." See attachment # 6 (similar).
4. Reference Sheet A126, Second Level Floor Plan-Area B1 and B2:
 - A. Detail J1
 - a. Add: "1-Hour Temporary Corridor Separation Wall (Typical)." See attachment # 6.
5. Reference Sheet i810, Room Finish Schedule:
 - A. Detail A11
 - a. Revise Room Finish Schedule Notes, note "8" to read: "All custodial room walls to be FRP panels."

Civil Information:

1. Reference sheet C0.03, Site Demolition Plan:
 - A. Site Demolition Plan -
 - a. Remove existing bollards as shown in attachment. See attachment # 7.
2. Reference Sheet C1.00, Site Plan:
 - A. Site Plan -
 - a. Revise location of construction fence as shown in attachment.
 - b. Add temporary rock drive as shown in attachment.
 - c. Add note, "New concrete drive to be constructed during Phase III, summer break or Phase IV, 1st or 2nd quarter (Fall Break)."
 - d. See attachment # 7.

Mechanical/Electrical Information:

1. See attached Mechanical/Electrical Addendum No. 1.

END OF ADDENDUM NO. ONE

Attachments

PRE-BID CONFERENCE SIGN-IN

PROJECT: Lefler Middle School Gym Addition & Renovation
 1100 S. 48th St., Lincoln, NE

DATE: January 19th, 2016 @ 3:30 P.M.

NAME	COMPANY	PHONE NUMBER	EMAIL ADDRESS
Phil Cook	Capitol City Electric	402-420-7435	pcook@cce-ne.com
KEVIN HITTLE	SSH ARCHITECTURE	402-483-2893	Kevin@SSH-ARCH.COM
Craig Beebe	Simpson Const	402-434-5403	Craig.Beebe@Simpson-Construction.com
ERIC WEMPHOFF	Coralhwyker Tile	402-476-2105	
SWIFT WIGSNAMP	UPS	402-436-1072	
Matt Bellamy	LPS	402-436-1753	
DANIEL LIGHTNER	HEP FUC	402-423-4800	DANIEL@NEB.RR.COM
Brian LeKoste	LPS		
Clark Warr	CHEEVER CONSTRUCTION	402-477-6745	MWARR@CHEEVERCONSTRUCTION.COM
Bryan Rahm	ETI	402-476-1273	brahm@eti-engineers.com
STEVE SWARTZ	LPS	402 436-1072	SSWARTZ@LPS.ORG
Charles Allen	TOBIAH	402 580 4487	charles.allen@tobiah-hvac.com
Randy Rogge	Rogge General Contrs	402-441-3100	rrogge@roggeinc.com



BID PROPOSAL FORM

**LINCOLN PUBLIC SCHOOLS
LEFLER MIDDLE SCHOOL GYM ADDITION & RENOVATION
1100 SOUTH 48TH STREET, LINCOLN, NE
BID #8368**

Bidders Legal Name _____ Dated _____
(a Corporation organized and existing under the laws of the State of _____)

Address _____

City, State, Zip _____

Phone No. _____ Fax No. _____

CONTRACT TIME

The Contractor shall complete the project before August 14, 2016 for interior renovations and December 22, 2016 for gymnasium and elevator additions.

ADDENDA

The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Sum.

Addendum # _____ Dated _____
Addendum # _____ Dated _____
Addendum # _____ Dated _____

BID AMOUNT

The undersigned, in compliance with your Invitation for Bids for the Lefler Middle School Gym Addition and Renovation Project, 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.

For all work described in the specifications and shown on the plans for the project, we agree to perform all work for the lump sum of:

_____ Dollars

(\$ _____)

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

The Discovery Allowance, in the amount of \$35,000.00 described in Section 01 2100, is included in the Bid Amount listed above.

ADDITIVE ALTERNATES (Not Included in Base Bid)

Alternate A1: Terrazzo flooring at ramp in main entry. Delete rubber flooring at ramp in main entry.

Add: \$ _____

DEDUCTIVE ALTERNATES (Included in Base Bid)

Alternate D1: Exterior masonry tuck-pointing and repair.

Deduct: \$ _____

SEE SECTION 01 2300 FOR DETAILED SCOPE OF ALTERNATE ITEM

Respectfully submitted,

By: _____

Title

SEAL: If bid is by Corporation

ATTACHMENTS – to be included with this Bid Proposal Form when the bid is submitted.
1. Communications Contractor Certifications (Per Section 27 0501 Common Work Result for Communications).

SECTION 07 5310

60 MIL EPDM MEMBRANE ROOFING

PART 1 GENERAL

1.01 SUMMARY

- A. Furnish and install elastomeric sheet roofing system, including:
 - 1. Roofing manufacturer's requirements for the specified warranty.
 - 2. Preparation of roofing substrates.
 - 3. Wood nailers for roofing attachment.
 - 4. Insulation.
 - 5. Elastomeric membrane roofing.
 - 6. Other roofing-related items specified or indicated on the drawings or otherwise necessary to provide a complete weatherproof roofing system.
- B. Disposal of demolition debris and construction waste is the responsibility of the roofing contractor. Perform disposal in manner complying with all applicable federal, state and local regulations.
- C. Comply with the published recommendations and instructions of the roofing membrane manufacturer.
- D. Commencement of work by the Contractor shall constitute acknowledgement by the Contractor that this specification can be satisfactorily executed, under the project conditions and with all necessary prerequisites for warranty acceptance by roofing membrane manufacturer. No modification of the Contract Sum will be made for failure to adequately examine the Contract Documents or the project conditions.

1.02 REFERENCES

- A. Referenced Standards: These standards form part of this specification only to the extent they are referenced as specification requirements.
- B. ASTM C 1177/C 1177M - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing; 2004.
- C. ASTM C 1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board; 2004.
- D. ASTM D 41 - Standard Specification for Asphalt Primer Used in Roofing, Dampproofing and Waterproofing; 2005.
- E. ASTM D 312 - Standard Specification for Asphalt Used in Roofing; 2000.
- F. ASTM D 1079 - Standard Terminology Relating to Roofing, Waterproofing and Bituminous Materials; 2005a.
- G. ASTM D 4637 - Standard Specification for EPDM Sheet used in Single-Ply Roof Membrane; 2004.
- H. ASTM D 4811 - Standard Specification for Non-vulcanized (Uncured) Rubber Sheet Used as Roof Flashing; 2004.
- I. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2005.
- J. CAN-ULC-S770 - Standard Test Method Determination of L-Term Thermal Resistance Of Closed-Cell Thermal Insulating Foams; 2003.
- K. FM 1-28 - Design Wind Loads; Factory Mutual System; 2002.
- L. FM 1-29 - Roof Deck Securement and Above Deck Roof Components; Factory Mutual System; 2005.
- M. FM 4470 - Approval Standard - Class I Roof Covers; 1986.
- N. PS 20 - American Softwood Lumber Standard; 2005.

1.03 DEFINITIONS

- A. Roofing Terminology: Refer to ASTM D 1079 for definition of terms related to roofing work not otherwise defined in the section.
- B. LTTR: Long Term Thermal Resistance, as defined by CAN-ULC S770.

1.04 SUBMITTALS

- A. Product Data:
 - 1. Provide three copies of membrane manufacturer's printed data sufficient to show that all components of roofing system, including insulation and fasteners, comply with the specified requirements and with the membrane manufacturer's requirements and recommendations for the system type specified; include at least the following:
 - a. Technical data sheet for roof membrane.
 - b. Technical data sheet for each insulation type.
 - 2. Where UL or FM requirements are specified, provide documentation that shows that the roofing system to be installed is UL-Classified or FM-approved, as applicable; include data itemizing the components of the classified or approved system.
- B. Samples: Submit three samples of at least the following:
 - 1. Sample of roof membrane.
 - 2. Sample of each insulation type.
- C. Shop Drawings: Provide four copies:
 - 1. The roof membrane manufacturer's standard details customized for this project for all relevant conditions, including flashings, base tie-ins, roof edges, terminations, expansion joints, penetrations and drains.
 - 2. For tapered insulation, provide project-specific layout and dimensions for each board.
- D. Specimen Warranty: Submit copies prior to starting work.
- E. Installer Qualifications: Provide copies of letter from manufacturer attesting that the roofing installer meets the specified qualifications.
- F. Pre-Installation Notice: Provide copies to show that manufacturer's required Pre Installation Notice (PIN) has been accepted and approved by the manufacturer.

1.05 QUALITY ASSURANCE

- A. Applicator Qualifications: Roofing installer shall have the following:
 - 1. Current Manufacturer's Licensed Contractor status.
 - 2. Fully staffed office within 200 miles of the job site.
 - 3. At least five years experience in installing specified system.
 - 4. Capability to provide payment and performance bond to building owner.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver products in manufacturer's original containers, dry and undamaged, with seals and labels intact and legible.
- B. Store materials clear of ground and moisture with weather protective covering.
- C. Keep combustible materials away from ignition sources.

1.07 WARRANTY

- A. Comply with all warranty procedures required by manufacturer, including notifications, scheduling and inspections.
 - 1. Contractor is responsible to provide material and installation as required to meet warranty requirements. Drawing details and specifications provide minimum requirements directed from the Architect. Additional and more stringent details and specifications, required by the manufacturer to provide specified warranty, will be included in contractor's bid and completed during construction.
 - a. Manufacturer's additional requirements (such as adhesive pull testing, specific edge flashing, etc.) will be included in base and alternate bids in order for the product installation to meet the specified warranty conditions.

- B. Warranty: 20 year Limited Warranty covering membrane, roof insulation, membrane accessories.
 - 1. Limit of Liability: No dollar limitation.
 - 2. Scope of Coverage: Repair leaks in the roofing system caused by:
 - a. Ordinary wear and tear of the elements.
 - b. Unintentional damage due to normal rooftop inspections, maintenance or service.
 - c. Manufacturing defect in materials.
 - d. Defective workmanship used to install these materials.
 - e. Damage due to winds up to 76 mph.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Acceptable Manufacturer - Roofing System:
 - 1. Firestone Building Products Co., Carmel, IN. www.firestonebpc.com.
 - 2. Carlisle Syntec, Carlisle, PA. www.carlisle-syntec.com.
- B. Manufacturer of Insulation: Same manufacturer as roof membrane.
- C. Substitution: Refer to Division 01 Administrative Requirements, for submittal procedures.

2.02 ROOFING SYSTEM DESCRIPTION

- A. Roofing System:
 - 1. Membrane: Ethylene propylene diene monomer (EPDM).
 - 2. Thickness: As specified elsewhere.
 - 3. Membrane Attachment: Fully adhered.
 - 4. Slope: Provide design slope as indicated on drawings by means of tapered insulation.
 - 5. Comply with applicable local building code requirements.
 - 6. Provide assembly having Underwriters Laboratories, Inc. (UL) Class A Fire Hazard Classification.
 - 7. Provide assembly complying with Factory Mutual Corporation (FM) Roof Assembly Classification, FM DS 1-28 and 1-29, and meeting minimum requirements of FM 1-60 wind uplift rating.
- B. Insulation:
 - 1. Average R Value: 20, minimum.
 - 2. Insulation System: Slope as indicated; provide 2" thickness at thinnest point; place tapered layer on top where indicated on drawings.
 - 3. Base Layer: Polyisocyanurate foam board, non-composite.
 - a. Attachment: Mechanically fastened at metal deck.
 - 4. Top Layer(s): Polyisocyanurate foam board, non-composite.
 - a. Attachment: Mechanical attachment.
- C. Crickets: Tapered polyiso insulation; slope to be double the slope of the final field slope.

2.03 EPDM MEMBRANE MATERIALS

- A. Roofing and Flashing Membrane: Black, cured synthetic single-ply membrane composed of ethylene propylene diene terpolymer (EPDM) with the following properties:
 - 1. Reinforcement: None; membrane complying with ASTM D 4637 Type I.
 - 2. Thickness: 0.060 inch.
 - 3. Nominal Thickness Tolerance: Plus/minus 10 percent.
 - 4. Sheet Width: Provide the widest available sheets to minimize field seaming.
 - 5. Acceptable Product: 60 Mil EPDM membrane.
- B. Membrane Fasteners: Type and size as required by roof membrane manufacturer for roofing system and warranty to be provided; use only fasteners furnished by roof membrane manufacturer.
- C. Flashing Membrane: Self-curing, non-reinforced EPDM membrane flashing composed of non-vulcanized EPDM rubber, complying with ASTM D 4811 Type II, and with the following properties:
 - 1. Thickness: 0.055 inch.

- D. Self-Adhesive Flashing Membrane: Semi-cured 45 mil EPDM membrane laminated to 35 mil EPDM tape adhesive.
- E. Pre-Molded Pipe Flashings: EPDM, molded for quick adaptation to different sized pipes.
- F. Self-Adhesive Lap Splice Tape: 35 mil EPDM-based, formulated for compatibility with EPDM membrane and high-solids primer.
- G. Splice Adhesive: Synthetic polymer-based, formulated for compatibility with EPDM membrane and metal surfaces.
- H. Bonding Adhesive: Neoprene-based, formulated for compatibility with EPDM membrane and wide variety of substrate materials, including masonry, wood and insulation facings.
- I. Adhesive Primer: Synthetic rubber based primer formulated for compatibility with EPDM membrane and tape adhesive.
- J. Seam Edge Treatment: EPDM rubber-based sealant, formulated for sealing exposed edges of membrane at seams.
- K. Pourable Sealer: Two-part polyurethane, two-color for reliable mixing.
- L. Water Block Seal: Butyl rubber sealant for use between two surfaces, not exposed.
- M. Metal Plates and Strips Used for Fastening Membrane and Insulation: Steel with Galvalume coating; corrosion-resistance meeting FM 4470 criteria.
- N. Termination Bars: Aluminum bars with integral caulk ledge; 1.3 inches wide by 0.10 inch thick.

2.04 ROOF INSULATION

- A. Polyisocyanurate Board Insulation: Closed cell polyisocyanurate foam with black glass reinforced mat laminated to faces, complying with ASTM C 1289 Type II Class 1, with the following additional characteristics:
 - 1. Thickness: As indicated elsewhere.
 - 2. Size: 48 inches by 48 inches, nominal.
 - 3. R-Value (LTTR):
 - a. 2 inch Thickness: 12, minimum.
 - 4. Compressive Strength: 20 psi when tested in accordance with ASTM C 1289.
 - 5. Ozone Depletion Potential: Zero; made without CFC or HCFC blowing agents.
 - 6. Recycled Content: 19 percent post-consumer and 15 percent post-industrial, average.

2.05 ACCESSORY MATERIALS

- A. Wood Nailers: PS 20 dimension lumber, Structural Grade No. 2 or better Southern Pine, Douglas Fir.
 - 1. Width: 5 1/2 inches, nominal minimum, or as wide as the nailing flange of the roof accessory to be attached to it.
 - 2. Thickness: Same as thickness of roof insulation.

PART 3 EXECUTION

3.01 GENERAL

- A. Install roofing, insulation, and accessories in accordance with roofing manufacturer's published instructions and recommendations for the specified roofing system. Where manufacturer provides no instructions or recommendations, follow good roofing practices and industry standards. Comply with federal, state and local regulations.
- B. Obtain all relevant instructions and maintain copies at project site for duration of installation period.
- C. Do not start work until Pre-Installation Notice has been submitted to manufacturer as notification that this project requires a manufacturer's warranty.
- D. Perform work using competent and properly equipped personnel.

- E. Temporary closures, which ensure that moisture does not damage any completed section of the new roofing system, are the responsibility of the applicator. Completion of flashings, terminations and temporary closures shall be completed as required to provide a watertight condition.
- F. Install roofing membrane only when surfaces are clean, dry, smooth and free of snow or ice; do not apply roofing membrane during inclement weather or when ambient conditions will not allow proper application; consult manufacturer for recommended procedures during cold weather. Do not work with sealants and adhesives when material temperature is outside the range of 60 to 80 degrees F.
- G. Protect adjacent construction, property, vehicles, and persons from damage related to roofing work; repair or restore damage caused by roofing work.
 - 1. Protect from spills and overspray from bitumen, adhesives, sealants and coatings.
 - 2. Particularly protect metal, glass, plastic and painted surfaces from bitumen, adhesives and sealants within the range of wind-borne overspray.
 - 3. Protect finished areas of the roofing system from roofing related work traffic and traffic by other trades.
- H. Until ready for use, keep materials in their original containers as labeled by the manufacturer.
- I. Consult membrane manufacturer's instructions, container labels, and Material Safety Data Sheets (MSDS) for specific safety instructions. Keep all adhesives, sealants, primers and cleaning materials away from all sources of ignition.

3.02 EXAMINATION

- A. Examine roof deck to determine that it is sufficiently rigid to support installers and their mechanical equipment and that deflection will not strain or rupture roof components or deform deck.
- B. Verify that surfaces and site conditions are ready to receive work. Correct defects in the substrate before commencing with roofing work.
- C. Examine roof substrate to verify that it is properly sloped to drains.
- D. Verify that the specifications and drawing details are workable and not in conflict with the roofing manufacturer's recommendations and instructions; start of work constitutes acceptance of project conditions and requirements.

3.03 PREPARATION

- A. Take appropriate measures to ensure that fumes from adhesive solvents are not drawn into the building through air intakes.
- B. Prior to proceeding, prepare roof deck surface so that it is clean, dry and smooth, and free of sharp edges, fins, roughened surfaces, loose or foreign materials, oil, grease and other materials that may damage the membrane.
- C. Fill all surface voids in the immediate substrate that are greater than 1/4 inch wide with insulation fill material acceptable to membrane manufacturer.
- D. Seal, grout, or tape deck joints, where needed, to prevent bitumen seepage into building.
- E. Wood Nailers: Provide wood nailers at all perimeters and other locations where indicated on the drawings, of total height matching the total thickness of insulation being used.
 - 1. Install with 1/8 inch gap between each length and at each change of direction.
 - 2. Mechanically fasten to deck to resist force of 200 lbf per linear foot.
- F. Notify Architect if asbestos is encountered/found during demolition/installation.

3.04 INSULATION INSTALLATION

- A. Install insulation in configuration and with attachment method(s) specified in PART 2, under Roofing System.
- B. Install only as much insulation as can be covered with the completed roofing system before the end of the day's work or before the onset of inclement weather.

- C. Lay roof insulation in courses parallel to roof edges.
- D. Neatly and tightly fit insulation to all penetrations, projections and nailers. Fill gaps greater than 1/4 inch with acceptable insulation. Do not leave the roofing membrane unsupported over a space greater than 1/4 inch.
- E. Mechanical Attachment: Install insulation with screws and accessories in accordance with manufacturer's recommendations.

3.05 SINGLE-PLY MEMBRANE INSTALLATION

- A. Beginning at low point of roof, place membrane without stretching over substrate and allow to relax at least 30 minutes before attachment or splicing; in colder weather allow for longer relax time.
- B. Lay out the membrane pieces so that field and flashing splices are installed to shed water.
- C. Install membrane without wrinkles and without gaps or fishmouths in seams; bond and test seams and laps in accordance with membrane manufacturer's instructions and details.
- D. Install membrane adhered to the substrate, with edge securement as specified.
- E. Adhered Membrane: Bond membrane sheet to substrate using membrane manufacturer's recommended bonding material, application rate, and procedures.
- F. Edge Securement: Secure membrane at all locations where membrane terminates or goes through an angle change greater than 2 in 12 inches using mechanically fastened reinforced perimeter fastening strips, plates, or metal edging as indicated or as recommended by roofing manufacturer.
 - 1. Exceptions: Round pipe penetrations less than 18 inches in diameter and square penetrations less than 4 inches square.
 - 2. Metal edging is not merely decorative; ensure anchorage of membrane as intended by roofing manufacturer.

3.06 FIELD QUALITY CONTROL

- A. Inspection by Manufacturer: Provide final inspection of the roofing system by a Technical Representative employed by roofing system manufacturer specifically to inspect installation for warranty purposes (i.e. not a sales person).
- B. Perform all corrections necessary for issuance of warranty.

3.07 CLEANING

- A. Clean all contaminants generated by roofing work from building and surrounding areas, including bitumen, adhesives, sealants and coatings.
- B. Repair or replace building components and finished surfaces damaged or defaced due to the work of this section; comply with recommendations of manufacturers of components and surfaces.
- C. Remove leftover materials, trash, debris, equipment from project site and surrounding areas.

3.08 PROTECTION

- A. Where construction traffic must continue over finished roof membrane, provide durable protection and replace or repair damaged roofing to original condition.

END OF SECTION

SECTION 08 4523

2-3/4" TRANSLUCENT WALL SYSTEM

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Section includes the insulated translucent sandwich panel system and accessories as shown and specified. Work includes providing and installing:
 - 1. Select Flat factory prefabricated structural insulated translucent sandwich panels
 - 2. Aluminum installation system
 - 3. Aluminum sill flashing

1.2 SUBMITTALS

- A. Submit manufacturer's product data. Include construction details, material descriptions, profiles and finishes of components.
- B. Submit shop drawings. Include elevations and details.
- C. Submit manufacturer's color charts showing the full range of colors available for factory-finished aluminum.
 - 1. Submit samples for each exposed finish required, in same thickness and material indicated for the work and in size indicated below. If finishes involve normal color variations, include sample sets consisting of two or more units showing the full range of variations expected.
 - a. Sandwich panels: 14" x 28" units
 - b. Factory finished aluminum: 5" long sections
- D. Submit Installer Certificate, signed by installer, certifying compliance with project qualification requirements.
- E. Submit product reports from a qualified independent testing agency indicating each type and class of panel system complies with the project performance requirements, based on comprehensive testing of current products. Previously completed reports will be acceptable if for current manufacturer and indicative of products used on this project.
 - 1. Reports required are:
 - a. International Building Code Evaluation Report
 - b. Flame Spread and Smoke Developed (UL 723) – Submit UL Card
 - c. Burn Extent (ASTM D 635)
 - d. Color Difference (ASTM D 2244)
 - e. Impact Strength (UL 972)
 - f. Bond Tensile Strength (ASTM C 297 after aging by ASTM D 1037)
 - g. Bond Shear Strength (ASTM D 1002)
 - h. Beam Bending Strength (ASTM E 72)
 - i. Insulation U-Factor (NFRC 100)
 - j. NFRC System U-Factor Certification (NFRC 700)
 - k. Solar Heat Gain Coefficient (NFRC or Calculations)
 - l. Condensation Resistance Factor (AAMA 1503)
 - m. Air Leakage (ASTM E 283)
 - n. Structural Performance (ASTM E 330)
 - o. Water Penetration (ASTM E 331)
 - p. 1200°F Fire Resistance (SWRI)

1.3 QUALITY ASSURANCE

- A. Manufacturer's Qualifications
 - 1. Material and products shall be manufactured by a company continuously and regularly employed in the manufacture of specified materials for a period of at least ten consecutive years and which can show evidence of those materials being satisfactorily used on at least six

- projects of similar size, scope and location. At least three of the projects shall have been in successful use for ten years or longer.
2. Panel system must be listed by an ANSI accredited Evaluation Service, which requires quality control inspections and fire, structural and water infiltration testing of sandwich panel systems by an accredited agency.
 3. Quality control inspections shall be conducted at least once each year and shall include manufacturing facilities, sandwich panel components and production sandwich panels for conformance with AC177 "Translucent Fiberglass Reinforced Plastic (FRP) Faced Panel Wall, Roof and Skylight Systems" as issued by the ICC-ES.
- B. Installer's Qualifications: Installation shall be by an experienced installer, which has been in the business of installing specified panel systems for at least two consecutive years and can show evidence of satisfactory completion of projects of similar size, scope and type.

1.4 PERFORMANCE REQUIREMENTS

- A. The manufacturer shall be responsible for the configuration and fabrication of the complete panel system.
1. When requested, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
 2. Standard panel system shall have less than 0.01 cfm/ft² air leakage by ASTM E 283 at 6.24 PSF (50 mph) and no water penetration by ASTM E 331 at 15 PSF; and structural testing by ASTM E 330.
 3. Structural Loads; Provide system capable of handling the following loads:
 - a. Positive Wind Load: +15 PSF
 - b. Negative Wind Load: -19 PSF
 - c. Seismic Design Criteria (where applicable): See structural sheets.

1.5 DELIVERY STORAGE AND HANDLING

- A. Deliver panel system, components and materials in manufacturer's standard protective packaging.
- B. Store panels on the long edge; several inches above the ground, blocked and under cover in accordance with manufacturer's storage and handling instructions.

1.6 WARRANTY

- A. Submit manufacturer's and installer's written warranty agreeing to repair or replace panel system work, which fails in materials or workmanship within one year of the date of delivery. Failure of materials or workmanship shall include leakage, excessive deflection, deterioration of finish on metal in excess of normal weathering, defects in accessories, insulated translucent sandwich panels and other components of the work.
1. Installer shall provide same length of Warranty as requested from Manufacture.

PART 2- PRODUCTS

2.1 MANUFACTURER

- A. Kalwall Corporation, Eric Holtmeyer @ SGH INC Tel: 9402-990-7034, email: eholtmeyer@sghinc.com
- B. Substitutions: Refer to Division 01 Product Requirements.

2.2 PANEL COMPONENTS

- A. Face Sheets
1. Translucent faces: Manufactured from glass fiber reinforced thermoset resins, formulated specifically for architectural use.
 - a. Thermoplastic (e.g. polycarbonate, acrylic) faces are not acceptable.
 - b. Face sheets shall not deform, deflect or drip when subjected to fire or flame.

2. Interior face sheets:
 - a. Flame spread: Underwriters Laboratories (UL) listed, which requires periodic unannounced retesting, with flame spread rating no greater than 50 and smoke developed no greater than 250 when tested in accordance with UL 723.
 - b. Burn extent by ASTM D 635 shall be no greater than 1".
 3. Exterior face sheets:
 - a. Color stability: Full thickness of the exterior face sheet shall not change color more than 3 CIE Units DELTA E by ASTM D 2244 after 5 years outdoor South Florida weathering at 5° facing south, determined by the average of at least three white samples with and without a protective film or coating to ensure long-term color stability. Color stability shall be unaffected by abrasion or scratching.
 - b. Strength: Exterior face sheet shall be uniform in strength, impenetrable by hand held pencil and repel an impact minimum of 70 ft. lbs. without fracture or tear when impacted by a 3-1/4" diameter, 5 lb. free-falling ball per UL 972.
 - c. The exterior face shall have a permanent glass erosion barrier embedded beneath the surface to provide maximum long-term resistance to reinforcing fiber exposure. Sacrificial surface films or coatings are not acceptable erosion barriers. Exterior face surface loss shall not exceed .7 mils and 40 mgs when tested in accordance with ASTM D4060-90 employing CS17 abrasive wheels at a head load of 500 grams for 1000 cycles.
 4. Appearance:
 - a. Exterior face sheets: Smooth .70 thick and Crystal in color.
 - b. Interior face sheets: Smooth .045 thick and White Matte in color.
 - c. Face sheets shall not vary more than ± 10% in thickness and be uniform in color.
- B. Grid Core
1. Insert Thermally Broken I-beam grid core shall be of 6063-T6 or 6005-T5 alloy and temper with provisions for mechanical interlocking of muntin-mullion and perimeter. Width of I-beam shall be no less than 7/16".
 2. I-beam Thermal break: Minimum 1", thermoset fiberglass composite. Pour and debridge is not acceptable.
- C. Laminate Adhesive
1. Heat and pressure resin type adhesive engineered for structural sandwich panel use, with minimum 25-years field use. Adhesive shall pass testing requirements specified by the International Code Council "Acceptance Criteria for Sandwich Panel Adhesives".
 2. Minimum tensile strength of 750 PSI when the panel assembly is tested by ASTM C 297 after two exposures to six cycles each of the aging conditions prescribed by ASTM D 1037.
 3. Minimum shear strength of the panel adhesive by ASTM D 1002 after exposure to four separate conditions:
 - a. 50% Relative Humidity at 68° F: 540 PSI
 - b. 182° F: 100 PSI
 - c. Accelerated Aging by ASTM D 1037 at room temperature: 800 PSI
 - d. Accelerated Aging by ASTM D 1037 at 182° F: 250 PSI

2.3 PANEL CONSTRUCTION

- A. Provide sandwich panels of flat fiberglass reinforced translucent face sheets laminated to a grid core of mechanically interlocking I-beams. The adhesive bonding line shall be straight, cover the entire width of the I-beam and have a neat, sharp edge.
1. Thickness: 2-3/4"
 2. Light transmission: 20%
 3. Solar heat gain coefficient .28.
 4. Panel U-factor by NFRC certified laboratory: 2-3/4" thermally broken grid .23U.
 5. Complete insulated panel system shall have NFRC certified U-factor of .28U.
 6. Grid pattern: Nominal size 12"X12"; pattern Tuckerman. Verify to match existing.

- B. Standard panels shall deflect no more than 1.9" at 30 PSF in 10' 0" span without a supporting frame by ASTM E 72.
- C. Standard panels shall withstand 1200° F fire for minimum one hour without collapse or exterior flaming.
- D. Thermally broken panels: Minimum Condensation Resistance Factor of 80 by AAMA 1503 measured on the bond line.

2.4 BATTENS AND PERIMETER CLOSURE SYSTEM

- A. Closure system: Extruded aluminum 6063-T6 and 6063-T5 alloy and temper clamp-tite screw type closure system.
- B. Sealing tape: Manufacturer's standard, pre-applied to closure system at the factory under controlled conditions.
- C. Fasteners: 300 series stainless steel screws for aluminum closures, excluding final fasteners to the building.
- D. Finish:
 - 1. Manufacturer's factory applied finish, which meets the performance requirements of AAMA 2604. Color to be selected from manufacturer's standards. Aluminum 79, verify to match existing.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Installer shall examine substrates, supporting structure and installation conditions.
- B. Do not proceed with panel installation until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Metal Protection:
 - 1. Where aluminum will contact dissimilar metals, protect against galvanic action by painting contact surfaces with primer or by applying sealant or tape recommended by manufacturer for this purpose.
 - 2. Where aluminum will contact concrete, masonry or pressure treated wood, protect against corrosion by painting contact surfaces with bituminous paint or method recommended by manufacturer.

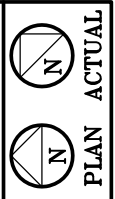
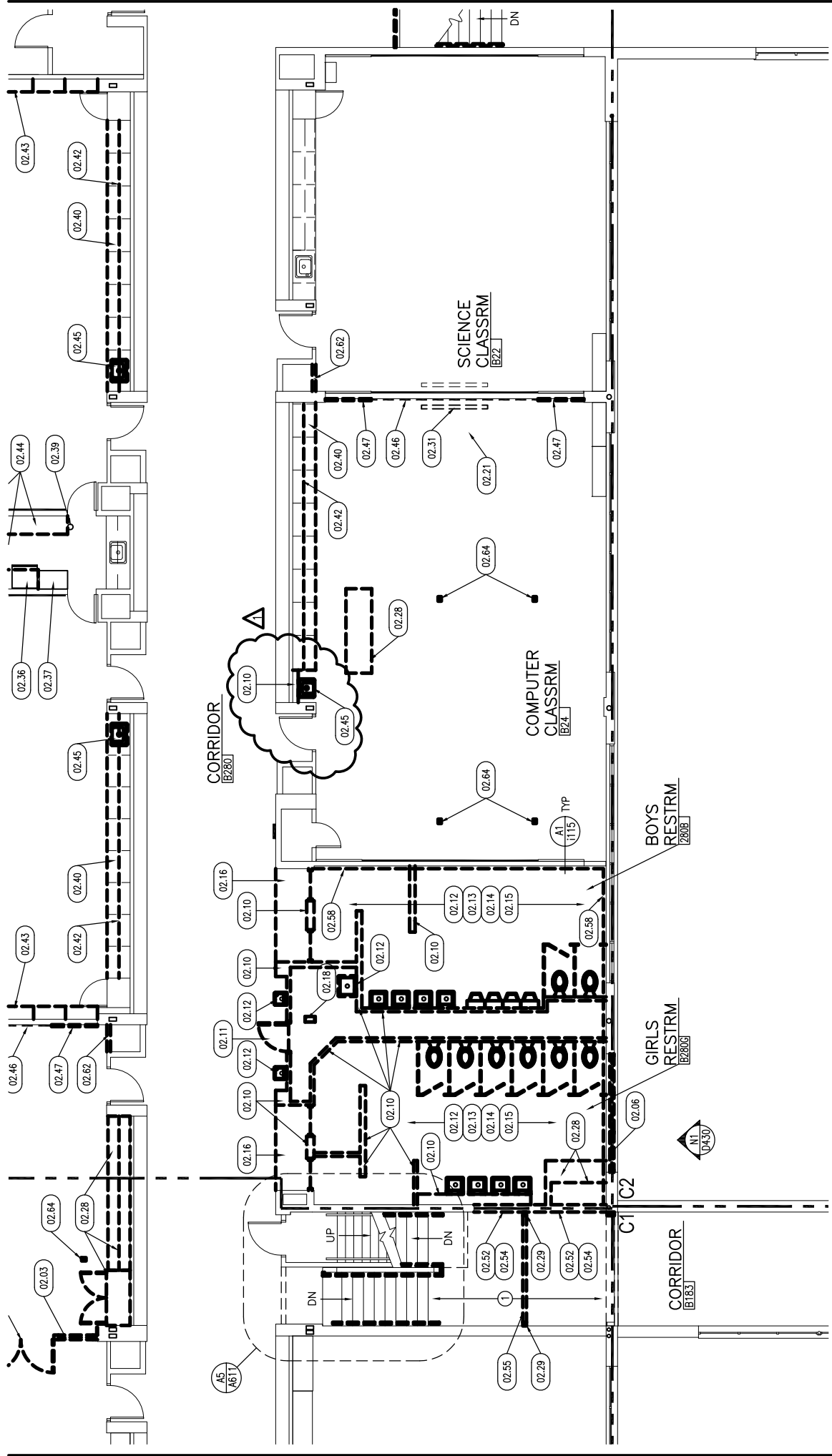
3.3 INSTALLATION

- A. Install the panel system in accordance with the manufacturer's suggested installation recommendations and approved shop drawings.
 - 1. Anchor component parts securely in place by permanent mechanical attachment system.
 - 2. Accommodate thermal and mechanical movements.
 - 3. Set perimeter framing in a full bed of sealant compound, or with joint fillers or gaskets to provide weather-tight construction.
- B. Install joint sealants at perimeter joints and within the panel system in accordance with manufacturer's installation instructions.

3.4 CLEANING

- A. Clean the panel system interior and exterior, immediately after installation.
- B. Refer to manufacturer's written recommendations.

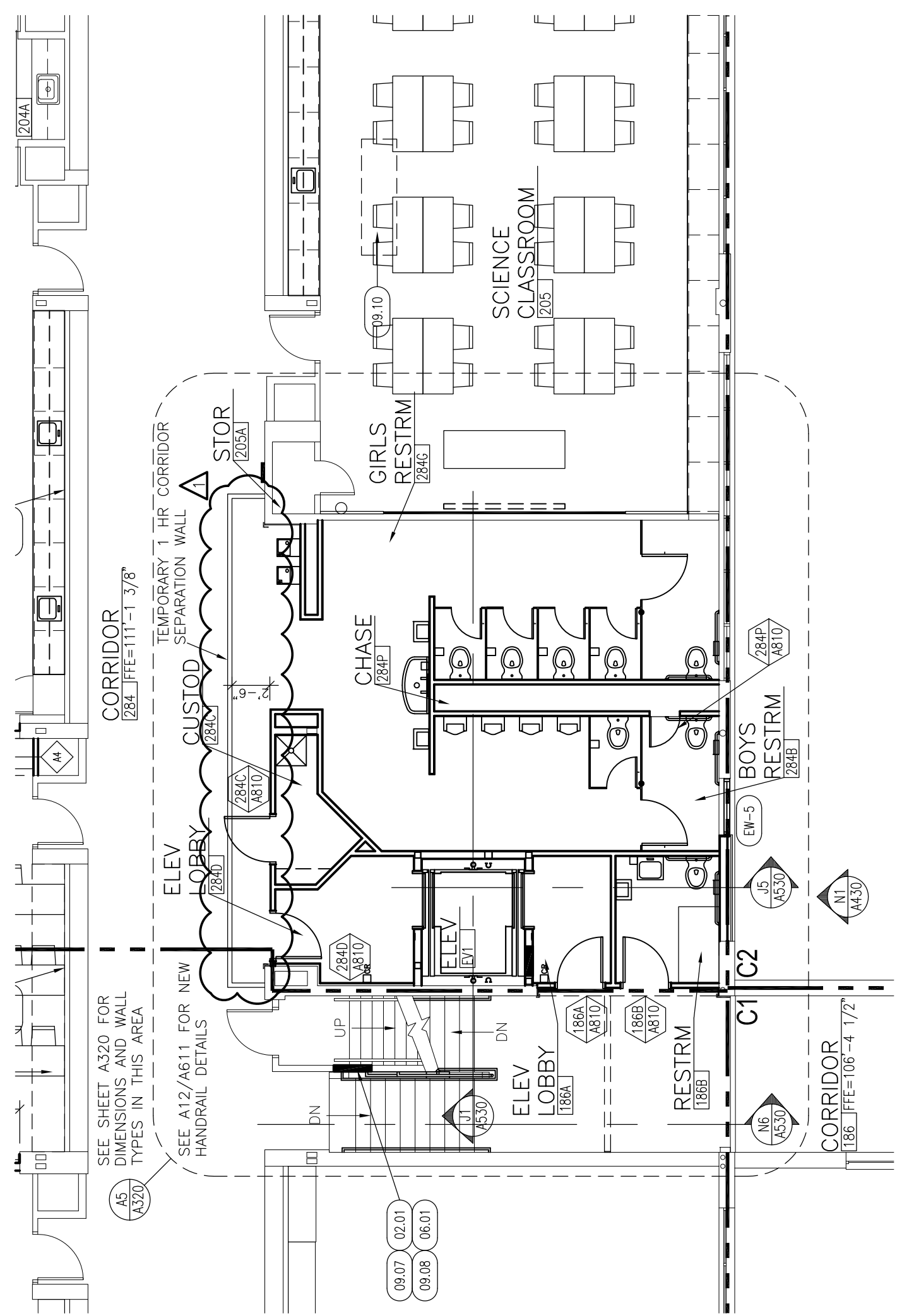
END OF SECTION 08 4523



J1 SECOND LEVEL DEMO PLAN - AREA B1 AND B2

D126

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



SEE SHEET A320 FOR DIMENSIONS AND WALL TYPES IN THIS AREA

SEE A12/A611 FOR NEW HANDRAIL DETAILS

CORRIDOR 284 FFE=111'-1 3/8"

TEMPORARY 1 HR CORRIDOR SEPARATION WALL

CUSTOD 284C

STOR 205A

CHASE 284P

GIRLS RESTRM 284G

SCIENCE CLASSROOM 205

BOYS RESTRM 284B

284P A810

EW-5

J5 A530

N1 A430

C2

C1

CORRIDOR 186 FFE=106'-4 1/2"

N6 A530

A5 A320

09.07 02.01 09.08 06.01

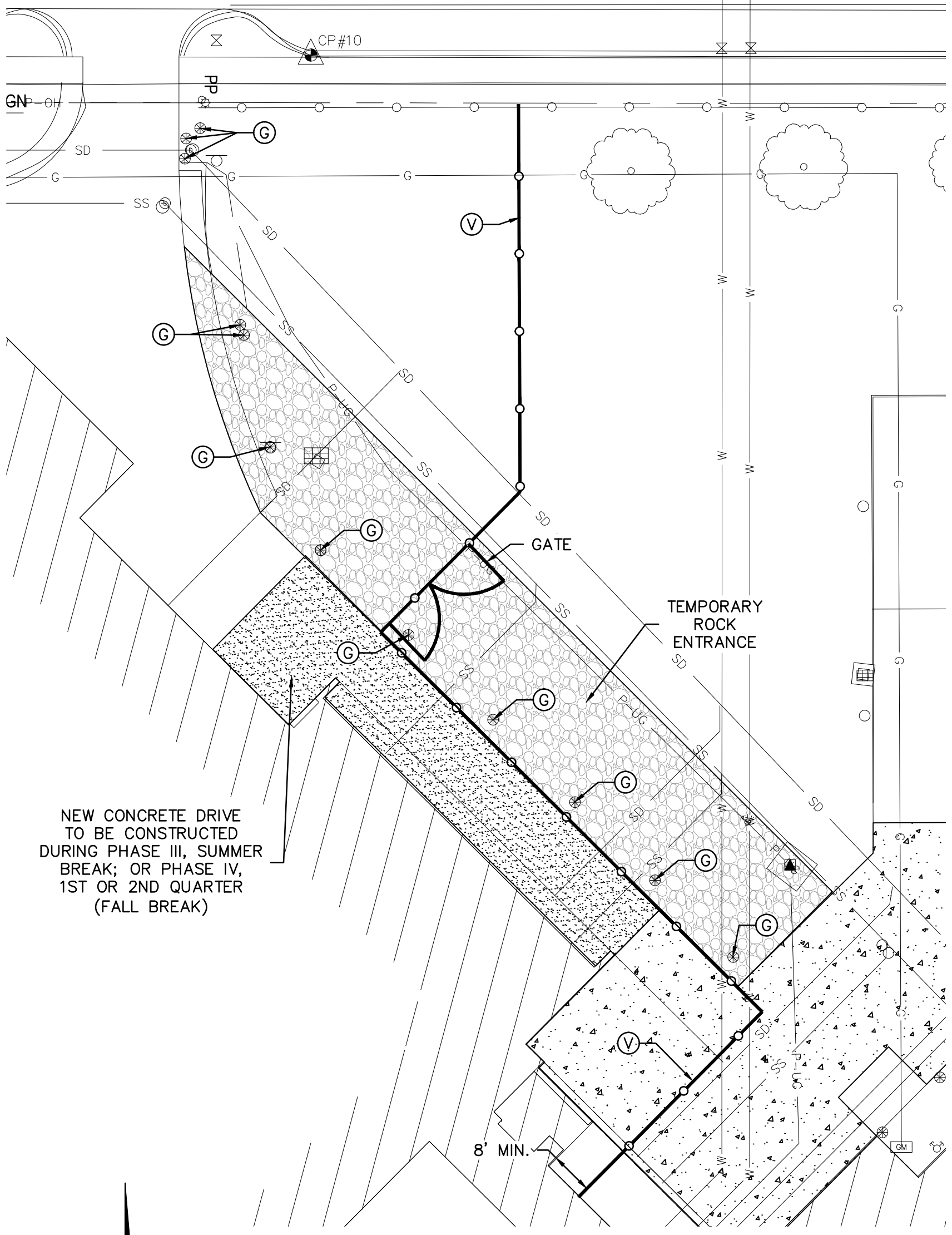
J1 SECOND LEVEL FLOOR PLAN-AREA B1 AND B2

Attachment # 6

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

A126

DWG: F:\Projects\015-3418\40-Design\AutoCAD\Exhibits\53418_LDVP_ADDENDUM NO.1.dwg USER: jfasnacht
 DATE: Jan 22, 2016 10:07am XREFS: C_PBASE_153418 C_SITE_153418 C_XBASE_153418 1511_New Second Level Floor Plan 1511_New Main Level Floor Plan



NEW CONCRETE DRIVE
 TO BE CONSTRUCTED
 DURING PHASE III, SUMMER
 BREAK; OR PHASE IV,
 1ST OR 2ND QUARTER
 (FALL BREAK)



DEMO LEGEND

- (G)** REMOVE AND DISPOSE EXISTING BOLLARDS, COMPLETE
- TEMPORARY ROCK CONSTRUCTION ENTRANCE. REMOVE AND DISPOSE ROCK SURFACE AFTER CONSTRUCTION IS COMPLETED. GRADE AND RESEED DISTURBED AREA.
- (V)** CONSTRUCTION FENCE

PROJECT NO:	015-3418
DRAWN BY:	JEF
DATE:	01-18-2016

**LPS - LEFLER MIDDLE SCHOOL
 ADDENDUM NO. 1**



601 P Street, Suite 200
 P.O. Box 84608
 Lincoln, NE 68508
 TEL 402.474.6311
 FAX 402.474.5160

ADDENDUM
1



DATE ISSUED January 22, 2016

ADDENDUM # 1

ENGINEER Engineering Technologies, Inc.
825 M Street, Suite 200
Lincoln, NE 68508

PROJECT Lefler Middle School Addition

ETI PROJECT # 2015-125

The Architect issues this Addendum to all known bidders before receipt of proposals. Bidder shall acknowledge the receipt of this addendum on their proposal sheet and all information contained herein shall become a part of the contract documents.

ADDENDUM:

PRIOR APPROVAL – MECHANICAL

- 1. The following manufacturers have received prior approval for bidding purposes subject to shop drawing review:
A. List Equipment Here: Diffusers, Registers and Grilles, Spiral Ductwork
List Manufacturer Here: Nailor, Spiral Pipe of Texas

PRIOR APPROVAL – ELECTRICAL

- 1. The following manufacturers have received prior approval for bidding purposes subject to shop drawing review:
A. List Equipment Here: Light Fixture Type #1 through #15
List Manufacturer Here: Columbia, Prescolite, Compass Life Safety, Lithonia, Fail Safe, Metalux, McGraw Edison, Spaulding

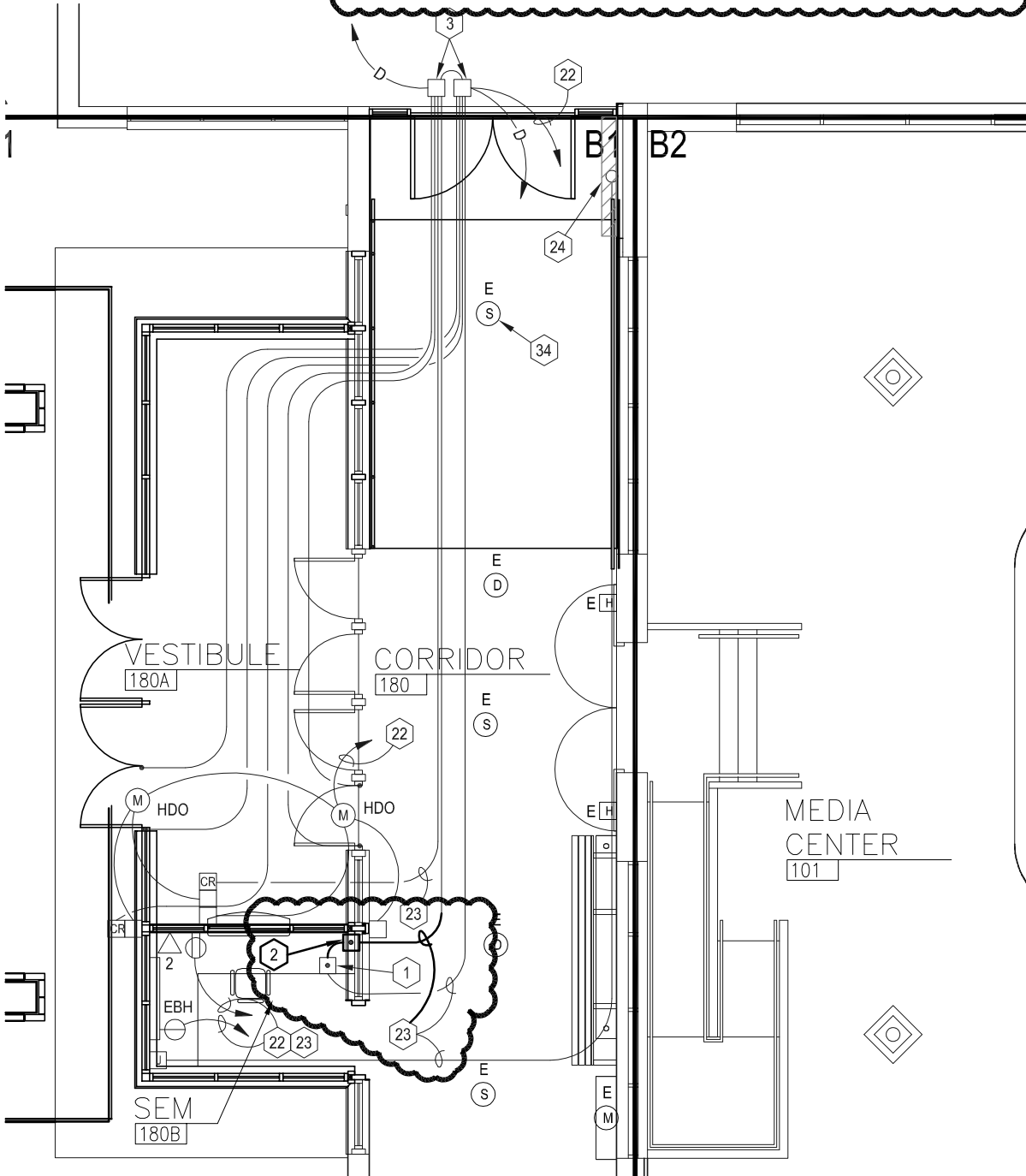
DRAWINGS – ELECTRICAL

1. Sheet E220 Second Level Floor Plan – Lighting
 - A. (A10) Second Level Floor Plan Area “C3” – Lighting
 - i. Light fixture in Vestibule 187C shall change from type #3 to type #3E.
2. Sheet E310 First Level Floor Plan - Electrical
 - A. (F8) First Level Floor Plan Area “B1” – Electrical
 - i. Delete lock out button in Office 100.
 - ii. Move lock out button in SEM 180B to window frame. See sheet E310 Attachment #1.
 - iii. Change note #2 to read “Provide lock out button mounted in window frame, above counter. Verify height with LPS”. See sheet E310, Attachment #1.
3. Sheet E401- Symbols & Schedules
 - A. Add light fixture 9E to light fixture schedule. Fixture is a 2 x 4 fluorescent static troffer, acrylic prismatic diffuser with generator transfer device. Lithonia 2SP8-G-232-A12125-MVOLT-GEB10RS-BGTD. Acceptable manufacturers are Metalux, Daybrite.
 - B. Light fixture type #3 catalog number should read “EVO-41/10-6AR-WD-LS-MVOLT-EZ1”.
 - C. Light fixture type #11 is not used.
 - D. Light fixture type #12 is not used.
4. Sheet E402 – Details
 - A. Replace detail (F1) Typical High-Bay Fluorescent Mounting Detail with new detail Typical High-Bay LED Mounting Detail. See sheet E402, Attachment #1.

END OF ADDENDUM

SHEET NOTES

1. PROVIDE DOOR RELEASE BUTTON MOUNTED UNDER COUNTER TO RELEASE INNER DOOR
2. PROVIDE LOCK OUT BUTTON MOUNTED IN WINDOW FRAME, ABOVE COUNTER. VERIFY HEIGHT WITH LPS.

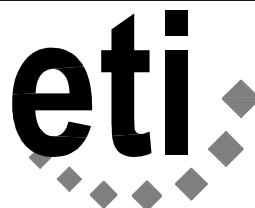


LEFLER MIDDLE SCHOOL
GYM ADDITION -
ELECTRICAL



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

TSK



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: 2015-125

ADD#1

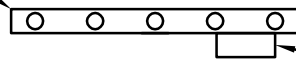
SHEET
E310

ATTACHMENT NO.

1

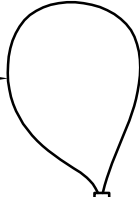
01/22/16

P1001 DOUBLE GALV. UNI-STRUT SUPPORT,
ANCHOR TO STRUCTURE

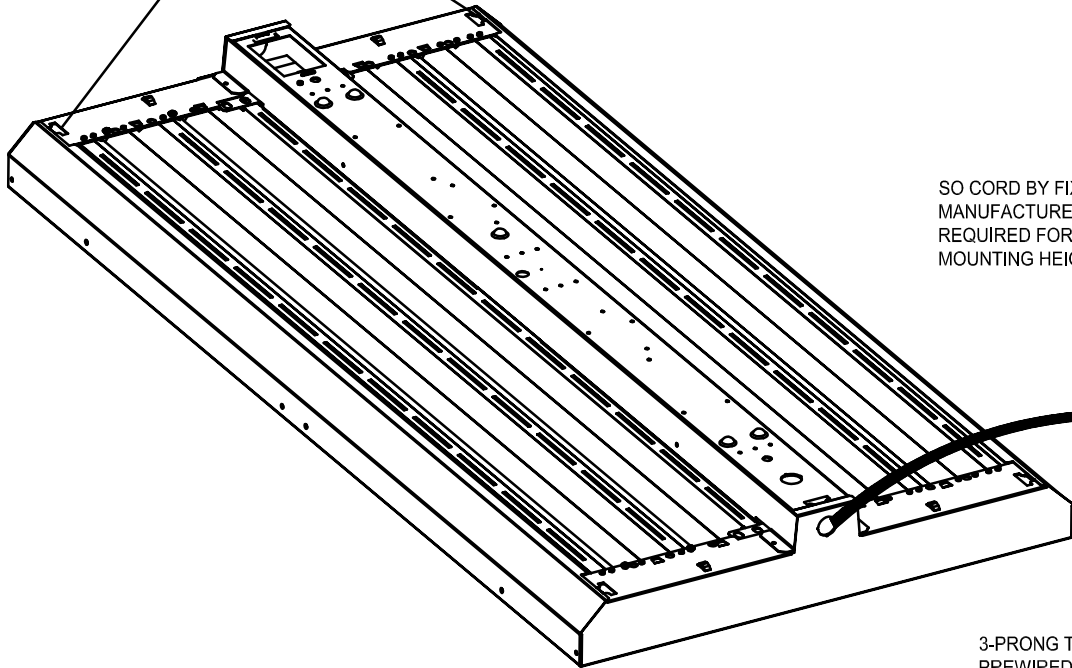


OUTLET BOX WITH
TWIST-LOCK RECEPTACLE

LOOP THROUGH
HOLE IN UNI-STRUT
SUPPORT (TYPICAL)



ADJUSTABLE WIRE CABLE SUPPORT AS
RECOMMENDED BY FIXTURE
MANUFACTURER, SUITABLE FOR
WEIGHT OF FIXTURE (TYP. EACH END
OF FIXTURE)



SO CORD BY FIXTURE
MANUFACTURER, LENGTH AS
REQUIRED FOR DESIGNATED
MOUNTING HEIGHT

3-PRONG TWIST-LOCK PLUG
PREWIRED TO BALLAST BY
FIXTURE MANUFACTURER

TYPICAL HIGH-BAY LED MOUNTING DETAIL

LEFLER MIDDLE SCHOOL
GYM ADDITION-
DETAILS

SCALE: NONE

TSK



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P 402.476.1273 | F 402.476.1274

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ETI Project No: 2015-125

ADD#1

SHEET

E402

ATTACHMENT NO.

1

01/22/16