

# ADDENDUM No. 1 Request for Competitive Sealed Proposals (CSP) 19CSP077 New Classroom Building at Lee Elementary School

December 5, 2018

**Item 1: Updates to Drawings and Specifications** 

### <u>Item 1:</u>

Updates to Drawings and Specifications in reference to this project can be found at planroom.millerids.com under 19CSP077

### AISD – LEE ELEMENTARY CLASSROOM BUILDING 17-0023 LEE

ADDENDUM NO. 1

December 4, 2018

To the DRAWINGS AND SPECIFICATIONS for

AISD Lee Elementary Classroom Building 3308 Hampton Road Austin, Texas 78705

Project No. 201611500

### **Architect**

### **GSC Architects**

901 South MoPac Expwy Bldg. III, Suite 400 Austin, Texas 78746 (512) 477-9417 FAX (512) 477-9675

### Civil Engineers

### **Doucet & Associates**

7401 B Hwy 71 West, Suite 160 Austin, Texas 78735 (512) 583-2643 FAX (800) 587-2817

### Structural Engineers

### JQ+Tsen

210 Barton Springs Road, Suite 250 Austin, Texas 78704 (512) 474-4001 FAX (512) 474-9179

### IT/Security

### **Combs Consulting Group**

4425 South MoPac, Building 4, Suite 800 Austin, Texas 78735 (210) 698-7887

### Roofing

### **Hollon + Cannon**

11800 Highland Oaks Trail Austin, Texas 78759 (512) 300-0452

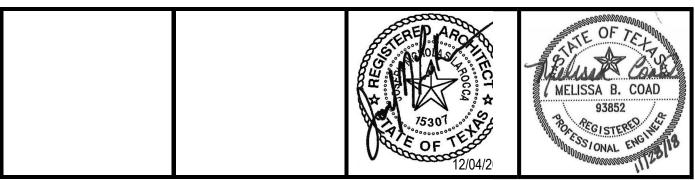
### Mechanical-Electrical-Plumbing

### Jones\*DBR

7800 Shoal Creek Blvd., Suite 100-W Austin, Texas 78757 (512) 637-4393 FAX (512) 637-4396

### TO: ALL PRIME BIDDERS OF RECORD

Acknowledge receipt of this Addendum by inserting its number in the Bidder's Proposal. Failure to do so may subject the Bidder to disqualification. This Addendum forms a part of the Contract Documents as follows:



add.doc

### **DRAWINGS**

- 1. A00-01 PROJECT INFORMATION: addition of sheet L-1, S04-22, S05-02
- 2. ADD sheet: L-1 LANDSCAPE PLAN
- 3. A03-01 FLOOR PLAN LEVEL 1
  - a. Remove general note #13
  - b. Projector screen to be owner furnishes and contractor installed
- 4. A12-01 INTERIOR ELEVATIONS: Projector to be owner furnished and contractor installed
- 5. A12-02 INTERIOR ELEVATIONS: Projector to be owner furnished and contractor installed
- 6. A14-01 REFLECTED CEILING PLAN LEVEL 1: Projector to be owner furnished and contractor installed
- 7. S01-01 STRUCTURAL NOTES:
  - a. ADD: 'Controlled backfill behind retaining walls' notes
  - b. REVISE: Cast-In- Place notes
- 8. S01-03 SPECIAL INSPECTIONS: Add sheet list
- 9. S02-01 WIND UPLIFT AND ROOF DECK ATTACHMENT PLAN: Add detail 2/S02-01
- 10. S03-01 FOUNDATION PLAN:
  - a. ADD: section markers for the retaining wall
  - b. ADD: stair and ramp section markers to Plan-North stair/ramp and Plan-West stair
  - c. REVISE: Lug Elevation around perimeter of building
- 11. S03-02 ROOF FRAMING PLAN: Add callouts for roof top opening and roof top units
- 12. S04-21 TYPICAL STEEL DETAILS: Revision of structural details
- 13. S05-01 FOUNDATION DETAILS: Revision and addition of structural details
- 14. S05-11 ROOF FRAMING DETAILS: Revise detail 4/S04-11
- 15. P02-01 PLUMBING SCHEDULES: Revise plumbing fixture schedule

### **SPECIFICATIONS**

- 16. SECTION 012300: Revise substantial completion date in 3.1 Schedule of alternates
- 17. SECTION 220201: Add section to specifications
- 18. SECTION 23 07 13: Revision of specification

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### **SECTION 01 23 00 - 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.
  - 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

3.2

A.

B.

C.

D.

1.

SCH	EDUL	LE OF ALTERNATES	
1.	Subs	stantial completion date to be changed from 12/13/2019	to 08/10/2019.
	a. b.	ADD DEDUCT NO CHANGE NOT AP	PLICABLE Dollars
	C.	(\$). ADD DEDUCT calendar days to adjust the alternate.	Contract Time for this
SUB	MISS	SION OF BID SUPPLEMENT	
Res	oectful	ally submitted this day of, 201	
	mitted orpora	•	lame of bidding firm
	orized ature).	d Signature:	(Handwritten
•	ed E e).	Ву:	(Type or print

### **END OF SECTION 01 23 00**

Title:\_\_\_\_\_

### **SECTION 22 02 01 - COORDINATION DRAWINGS**

### PART 1 - GENERAL

### 1.1 GENERAL REQUIREMENTS

A. The requirements of the General Conditions 013100 and Supplementary Conditions apply to all Work herein.

### 1.2 COORDINATION DRAWINGS

- A. The Contractor shall take the lead in coordinating the Mechanical, Electrical, Plumbing, Communications, Electronic Safety/Security and Fire Protection systems within the building.
- B. The Mechanical Contractor shall coordinate a three-dimensional (3D) model of the building which includes the Mechanical, Electrical, Plumbing, and Fire Protection systems. The Electrical, Plumbing, and Fire Protection Contractors shall prepare their work and generate 3D models which will be given to the Mechanical Contractor for coordination. The Contractor will be provided with the REVIT model that was used to generate the contract documents, this file may be used as the background file. The Contractor shall replace the systems drawn with the actual shop drawing models. The Contractor is not limited to using REVIT, but may use any 3-D software in generating and combining the coordination model.
- C. Submitting the contract drawings as coordination drawings will not be acceptable.
- D. The model shall include detailed and accurate representations of all equipment to be installed based upon the reviewed equipment submittals.
- E. The Mechanical Contractor shall hold a 3-D coordination meeting with all sub-contractors present to review the model and discuss coordination of the installation of the building systems.
- F. Upon completion of the coordination meeting, the Contractor shall submit the 3-D model and 1/4" scale drawings for review.
- G. The model shall detail major elements, components, and systems in relationship with other systems, installations, and building components. Indicate locations where space is limited for installation and access and where sequencing and coordination of installations are of importance to the efficient flow of the Work, including (but not necessarily limited to) the following:
  - Indicate the proposed locations of pipe, duct, equipment, and other materials. Include the following:
    - a. Wall and type locations.
    - b. Clearances for installing and maintaining insulation.
    - c. Locations of light fixtures and sprinkler heads.
    - d. Clearances for servicing and maintaining equipment, including tube removal, filter removal, and space for equipment disassembly required for periodic maintenance.
    - e. Equipment connections and support details.
    - f. Exterior wall and foundation penetrations.
    - g. Routing of storm and sanitary sewer piping.
    - h. Fire-rated wall and floor penetrations.

- i. Sizes and location of required concrete pads and bases.
- j. Valve stem movement.
- k. Structural floor, wall and roof opening sizes and details.
- 2. Indicate scheduling, sequencing, movement, and positioning of large equipment into the building during construction.
- 3. Prepare floor plans, elevations, and details to indicate penetrations in floors, walls, and ceilings and their relationship to other penetrations and installations.
- 4. Prepare reflected ceiling plans to coordinate and integrate installations, air distribution devices, light fixtures, communication systems components, and other ceiling-mounted items.

### A. Sequence of Coordination

Below is hierarchy of model elements and the sequencing by which the models will be coordinated.

- 1. Structural and Architectural model
- 2. Miscellaneous steel
- 3. Perform preliminary space allocation
- 4. Identify hard constraints (locations of access panels, lights, A/V space requirements, etc.)
- 5. Main and medium pressure ducts from the shaft out
- 6. Main graded plumbing lines and vents
- 7. Sprinkler mains and branches
- 8. Cold and hot water mains and branches
- 9. Lighting fixtures and plumbing fixtures
- 10. Smaller sized ducts and flex ducts
- 11. Smaller size cold water and hot water piping, flex ducts, etc.
- B. The Contractor and Sub-Contractors shall not install any item until the coordination has been completed and reviewed by the Construction Manager, Owner, and A/E team.
- C. This Contractor shall be responsible for coordination of all items that will affect the installation of the work of this Division. This coordination shall include, but not be limited to: voltage, ampacity, capacity, electrical and piping connections, space requirements, sequence of construction, building requirements and special conditions.
- D. By submitting shop drawings on the project, this Contractor is indicating that all necessary coordination has been completed and that the systems, products and equipment submitted can be installed in the building and will operate as specified and intended, in full coordination with all other Contractors and Subcontractors.

### **END OF SECTION**

### **SECTION 23 07 13 - DUCT INSULATION**

### PART 1 - GENERAL

### 1.01 GENERAL REQUIREMENTS

- A. The requirements of the General Conditions and Supplementary Conditions apply to all work herein.
- B. Section 23 02 00 Basic Materials and Methods is included as a part of this Section as though written in full in this document.

### 1.02 WORK INCLUDED

A. Ductwork system insulation.

### 1.03 RELATED SECTIONS

- A. Section 23 05 13 Common Motor Requirements for HVAC Equipment
- B. Section 23 05 53 Identification for HVAC Piping and Equipment

### 1.04 QUALITY ASSURANCE

- A. Installer's Qualifications: Firm with at least 5 years successful installation experience on projects with mechanical insulations similar to that required for this project.
- B. Flame/Smoke Ratings: Provide composite mechanical insulation (insulation, jackets, coverings, sealers, mastics and adhesives) with flame-spread index of 25 or less, and smoke-developed index of 50 or less, as tested by ASTM E 84 (NFPA 255) method.
  - 1. Exception: Outdoor mechanical insulation may have flame spread index of 75 and smoke developed index of 150.
- C. Duct and plenum insulation shall comply with minimum R-value requirements of 2012 International Energy Conservation Code.
- Adhesive and other material shall comply with NFPA and NBFU Standards No. 90A and 90B.

### 1.05 WARRANTY

- A. Warrant the Work specified herein for one year against becoming unserviceable or causing an objectionable appearance resulting from either defective, or nonconforming materials and workmanship.
- B. Defects shall include, but not be limited to, the following:
  - Mildewing.
  - 2. Peeling, cracking, and blistering.
  - Condensation on exterior surfaces.

### 1.06 SUBMITTALS

A. SHOP DRAWINGS: Indicate size, material, and finish. Show locations and installation

procedures. Include details of joints, attachments, and clearances.

B. PRODUCT DATA: Submit schedules, charts, literature, and illustrations to indicate the performance, fabrication procedures, project variations, and accessories. Submit product data and/or Material Safety Data Sheets (MSDS) for all adhesives and sealants, paints and coatings used inside the building's moisture barrier indicating the VOC content of each product and verifying that each product meets the requirements of Green Seal GS-11, SCAQMD Rule 1113, and SCAQMD rule 1168 as relevant.

### C. SUSTAINABLE REQUIREMENTS:

 For adhesives and sealants, documentation including printed statement of VOC content.

### 1.07 DELIVERY, STORAGE AND HANDLING

- A. Deliver insulation, coverings, cements, adhesives, and coatings to site in unopened containers with manufacturer's stamp, clearly labeled with flame and smoke rating, affixed showing fire hazard indexes of products.
- B. Protect insulation against dirt, water and chemical and mechanical damage. Do not install damaged or wet insulation; remove such from project site.

### PART 2 - PRODUCTS

### 2.01 GENERAL DESCRIPTION

- A. The type of insulation and its installation shall be in strict accordance with these specifications for each service, and the application technique shall be as recommended by the manufacturer. All insulation types, together with adhesives and finishes shall be submitted and approved before any insulation is installed.
- B. A sample quantity of each type of insulation and each type of application shall be installed and approval secured prior to proceeding with the main body of the Work.
- C. All insulation shall be free of formaldehyde binders.

### 2.02 ACCEPTABLE MANUFACTURERS

- A. Glass fiber materials shall be as manufactured by Knauf, Certain-Teed, Johns-Manville or Owens-Corning and shall have the same thermal properties, density, fire rating, vapor barrier, etc., as the types specified herein, subject to review by the Engineer.
- B. Adhesives shall be as manufactured by Minnesota Mining, Arabol, Benjamin-Foster, Armstrong or Insulmastic, Inc., and shall have the same adhesive properties, fire rating, vapor seal, etc., as the types specified herein, subject to review by the Engineer. Submit product data and/or Material Safety Data Sheets (MSDS) for all adhesives and sealants, paints and coatings used inside the building's moisture barrier indicating the VOC content of each product and verifying that each product meets the requirements of Green Seal GS-11, SCAQMD Rule 1113, and SCAQMD rule 1168 as relevant.
- C. Ceramic fiber materials shall be as manufactured by Primer Refractories, A.P. Green Refractories or approved equal.

### PART 3 - EXECUTION

### 3.01 GENERAL

- A. All insulation shall be installed in accordance with the manufacturer's recommendations and printed installation instructions.
- B. All items required for a complete and proper installation are not necessarily indicated on the plans or in the specifications. Provide all items required as per manufacturer's requirements.

### 3.02 EXTERNAL DUCT INSULATION

- A. External duct insulation shall contain no formaldehyde binders.
- B. Fasten all longitudinal and circumferential laps with outward clinching staples 3" on center. On rectangular ducts over 24" wide apply as above and hold insulation in place on bottom side with mechanical pins and clips on 12" centers.
- C. Seal all joints, fastener penetrations and other breaks in vapor barrier with 3 inch wide strips of white glass fabric embedded between two coats of vapor barrier mastic, Childers CP-30 or approved equal.
- D. All external duct insulation shall be Johns Manville Microlite EQ or Microlite XG fiberglass duct wrap insulation with reinforced aluminum facing or approved equal.
- E. External duct wrap is required on all outside air ducts, supply and return air ducts that are not internally insulated. Duct wrap shall be provided as follows:
  - 1. 1½" thick, 1.0 PCF density minimum when ducts are located in conditioned spaces.
  - 2. 2" thick with a minimum installed R-value of 6 when ducts are located in unconditioned spaces, such as ceiling plenum space.

### 3.03 DUCT LINER

- A. Duct liner shall be kept clean and dry during transportation, storage, installation, and throughout the construction process care should be taken to protect the liner from exposure to the elements or damage from mechanical abuse.
- B. All portions of duct designed to receive duct liner shall be completely covered with liner as specified. The smooth, black, acrylic-coated surfaces with flexible glass cloth reinforcement shall face the airstream. All duct liner shall be cut to assure tight, overlapped corner joints. The top pieces shall be supported by the sidepieces. Duct liner shall be installed following the guidelines in the NAIMA "Duct Liner Installation Standard".
- C. The duct liner shall be tested according to erosion test method in UL 181 and shall be guaranteed to withstand velocities in the duct system up to 5000 fpm without surface erosion.
- D. Duct liner shall be adhered to the sheet metal with full coverage of an approved adhesive that conforms to ASTM C 916, and all exposed leading edges and transverse joints shall be coated with Permacote factory-applied or field-applied edge coating and shall be neatly butted without gaps. Shop or field cuts shall be liberally coated with Johns Manville SuperSeal® duct butter and Edge Treatment or approved adhesive.

- E. Metal nosings shall be securely installed over transversely oriented liner edges facing the airstream at forward discharge and at any point where lined duct is preceded by unlined duct.
- F. When velocity exceeds 4000 fpm (20.3 m/sec), use metal nosing on every leading edge. Nosing may be formed on duct or be channel or zee attached by screws, rivets or welds.
- G. The liner shall further be secured with Graham welding pins and washers on not more than 18 inch centers both vertical and horizontal surfaces, and the pins and washers shall be pointed up with adhesive.
- H. Duct liner shall be Johns Manville Linacoustic RC fiberglass duct liner with factory-applied edge coating and acrylic coating on the mat surface of airstream side or approved equal. The liner shall meet the Life Safety Standards as established by NFPA 90A and 90B, FHC 25/50 and Limited Combustibility and the air stream surface coating should contain an immobilized, EPA-registered, anti-microbial agent so it will not support microbial growth as tested in accordance with ASTM G21 and G22. The duct liner shall conform to the requirements of ASTM C 1071, with an NRC not less than .70 as tested per ASTM C 423 using a Type "A" mounting, and a thermal conductivity no higher than .25 BTU•in/(hr•ft²•°F) at 75°F mean temperature.
- I. Line supply and return ductwork at connection of HVAC unit to a point of 5 feet upstream and downstream of the equipment and in return air boots. Attach with full cover coat of cement, duct dimensions up to 16 inches; provide stick clips or screws and cap for dimensions over 16 inches, spaced 16 inches o.c. maximum. Provide sheet metal liner cap over all leading edges of internal insulation exposed to air stream.
- J. Duct liner shall be provided as follows:
  - 1. 1" Thick, 1.5 PCF density minimum when ducts are located in conditioned spaces.
  - 2. 1 ½" Thick with a minimum installed R-value of 6 when ducts are located in unconditioned spaces, such as ceiling plenum space.
  - 3. 2" Thick with a minimum installed R-value of 8 when ducts are located outdoors.

### 3.04 EXPOSED DUCTWORK LOCATED INDOORS

- A. Duct routed exposed in occupied spaces shall be double wall.
- B. Round and flat oval duct routed exposed shall be double wall with perforated inner liner and 1" thick layer of fiberglass insulation as manufactured by United McGill Company model no. Acousti-27 or approved equal. Insulation density shall be a minimum of 1.0 PCF.

### 3.05 EXPOSED DUCT LOCATED OUTDOORS

- A. All duct located outdoors shall be internally lined as specified and also shall have a 2" thick, 6 lb. density rigid board external duct insulation, finished with aluminum jacketing.
- B. Paint non-insulated duct. Coordinate color with Architect.

### 3.06 AIR DEVICE AND MISCELLANEOUS DUCT INSULATION

A. The backside of all supply air devices shall be insulated with taped and sealed 1½ inch thick external duct wrap.

B. The contractor shall install an additional layer of 1½ inch thick external fiberglass duct wrap on any portion of the supply air, return air, outside air, or exhaust air system that has condensation forming during any period of operation. The insulation shall be taped and sealed and located until all evidence of the condensation has been eliminated, at no additional cost to the Owner.

**END OF SECTION** 

APER TOWEL OCATION PLAN SHOWER ROD SANITARY SEWER STAINLESS STEEL STATION INDER COUNTER INDERGROUND INIT HEATER INDERWRITERS LABORATORIES, EST, WIDE, WIDTH ENT THROUGH ROOF
NYL WALL COVERING P & BOTTOM
NGUE & GROOVE
WEL BAR, TACKI
ROUGH BOLT
ENCH DRAIN ATMENT ATED ULAR STEEL EVISION Y IN FIELD MATERIALS LEGEND CERAMIC TILE, PAVERS **ASTER ON METAL LATH** BATT INSULATION BACKFILLED PLYWOOD INTERIOR BUILDING USE: EDUCATIONAL BUILDING ELEMINEW CONSTRUCTION TYPE: II BOCCUPANCY GROUP: E (EDUCATIONAL GROUP) APPLICABLE CODES: **BUILDING CODE INFORMATION** STING BUILDING CONSTRUCTED UNDER THE FOLLOWING EXISTING DOOR ROOM NAME **SYMBOLS** 0 LEGEND DOOR TO BE REMOVED **\<u>\</u>** UILDING\_ GYP BOARD PARTITION

CONCRETE MASONRY UNITS

MASONRY VENEER W/ STUD BACKUP

MASONRY VENEER W/ CMU BACKUP A3-1.1 ELEMEN 10/A10-10 DIMENSIONS C ARE TO FACE ( MASONRY, BRICK NEW DOOR COLUMN REFERENCE KEY NOTE: NOTE: EQUIPMENT NO. PROPERTY LINE BOUNDARY LINE HIDDEN, FUTURE, TO BE REMOVED MATCH LINE CORNER GUARD VIEW WINDOW
STOREFRONT OT ELEVATION M SIZE (IF USED) DETAIL NO.
DRAWING NO. BUMPER RAIL TEST BORING

# **GENERAL NOTES TO PROJECT**

F.E.V.C.

FIRE VALVE AND EXTINGUISHER CABINET

ELECTRICAL SYMBOLS AND ABBREVIATIONS
CLASSROOM ADDITION-LIGHTING PLAN
CLASSROOM ADDITION POWER PLAN
ELECTRICAL ONE-LINE DIAGRAM
ELECTRICAL DETAILS

THESE NOTES APPLY TO EACH ARCHITECTOMPLETE PLAN SET,
THE CONTRACT DOCUMENTS INCLUDE THE COMPLETE PLAN SET,
PROJECT MANUAL AND ALL SUBSEQUENT OFFICIALLY ISSUED
MODIFICATIONS. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO
COORDINATE THE WORK OF ALL TRADES AND ISSUE COMPLETE
DOCUMENTS NECESSARY FOR SCOPE EXECUTION.
DO NOT SCALE DRAWINGS. SHOULD DIMENSIONS BE MISSING OR
CONFLICTING, NOTIFY ARCHITECT PRIOR TO PROCEEDING WITH

RAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL R-PROVIDED OR CONTRACTED ITEMS.

UTILITIES (CONDUIT, PLUMBING, ETC.) SHALL BE EXPOSED TO VIEW HOUT WRITTEN APPROVAL OF THE ARCHITECT, U.N.O.

NTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY SHORING BRACING NEEDED DURING CONSTRUCTION.

THE NON-HAZARDOUS WASTE MATERIALS AS ECONOMICALLY FEASIBLE SHALL BE REUSED, SALVAGED, OR RECYCLED. WASTE DISPOSAL IN LANDFILLS SHALL BE MINIMIZED. CONSTRUCTION DEBRIS THAT IS REMOVED FROM THE SITE WILL BE LEGALLY DISPOSED OF AT LEAST WEEKLY BY THE CONTRACTOR.

PROVIDE AND COORDINATE BLOCKOUTS, SLEEVES, INSERTS, BOLTS, PLATES, ETC. PRIOR TO PLACING CONCRETE OR MASONRY.

VERIFY LOCATIONS OF UTILITIES PRIOR TO EXCAVATION, TRENCHING, ETC. CONTRACTOR SHALL REPAIR OR REPLACE ALL UTILITIES DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS.

EACH CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AT THE SITE AND BE RESPONSIBLE FOR REMOVING OR REPLACING EXISTING IMPROVEMENTS AS REQUIRED TO PERFORM THE WORK.

SECURITY AND SAFETY ARE THE CONTRACTORS DESCRIPTIONS.

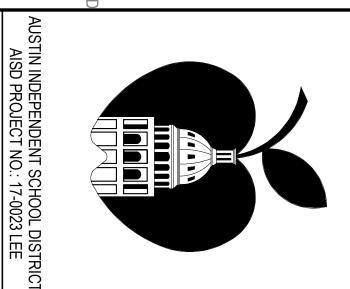
PROJECT INFORMATION

A.I.S.D. 17-0023 - LEE **ELEMENTARY SCHOOL CLASSROOM BUILDING** 3308 HAMPTON ROAD, AUSTIN, TX 78705

SMOKE DETECTOR

SPRINKLER HEAD

**CURTAIN TRACK** 



HVAC SUPPLY DIFFUSER (SQUARE)
HVAC SUPPLY DIFFUSER (ROUND)
HVAC RETURN REGISTER

RECESSED LIGHT FIXTURE



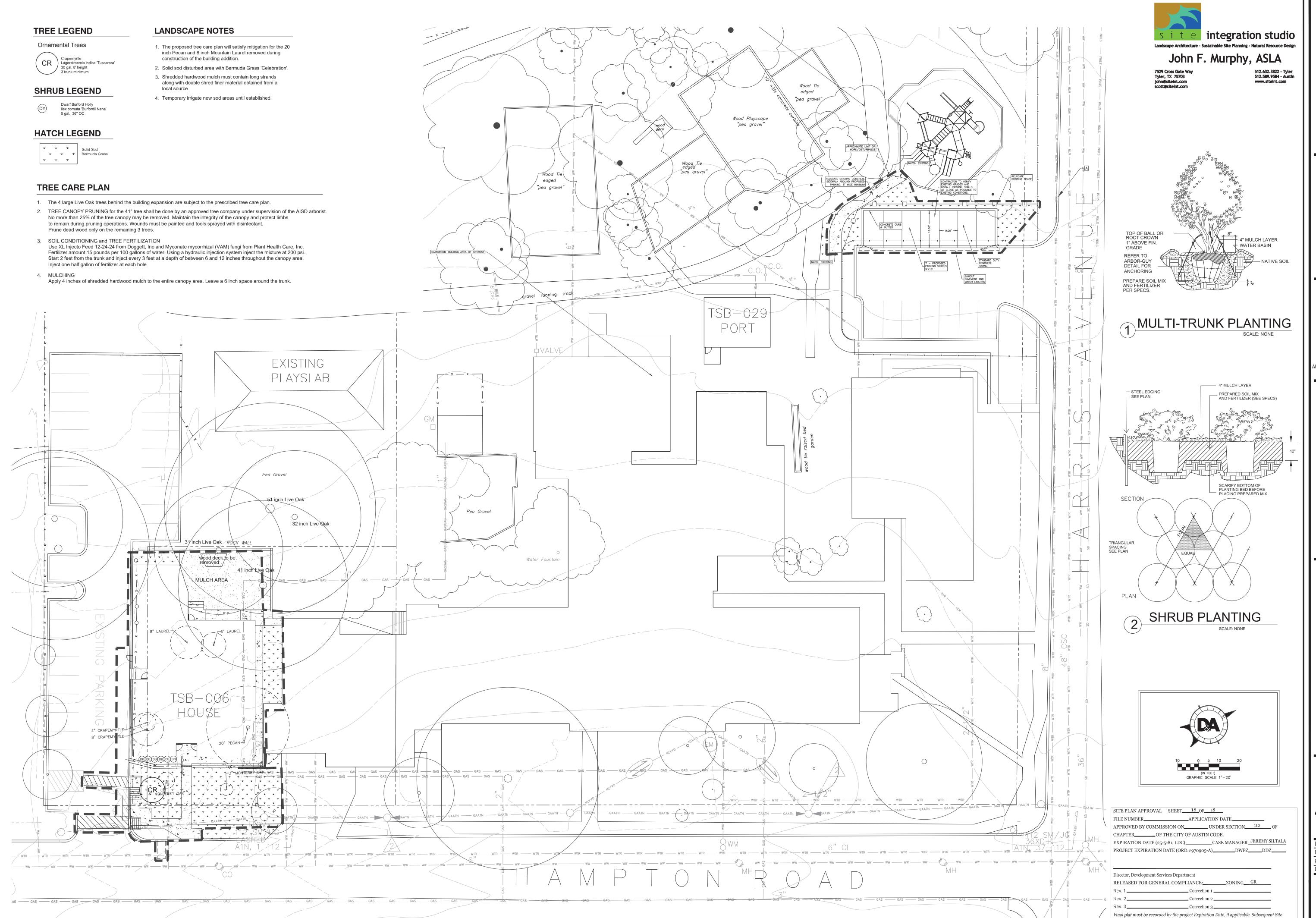
LIGHT TRACK OR STRIP
FIXTURE
LIGHT TRACK OR STRIP
FIXTURE (UNDER COUNTER)

AUSTIN WATER UTILITY NOTES

**INDEX OF DRAWINGS** 

**ABBREVIATIONS** 

A00-01



AUSTIN INDEPENDENT SCHOOL DISTRIC

AISD PROJECT NO.: 17-0023 LEE

Reviewed: JH 11/05/2018

SHEET

**18** OF 18

Plans which do not comply with the Code current at the time of filing, and all required Building Permits and/or a notice of construction (if building permit is not required), must also be

 $approved\ prior\ to\ the\ Project\ Expiration\ Date.$ 

Project No.:

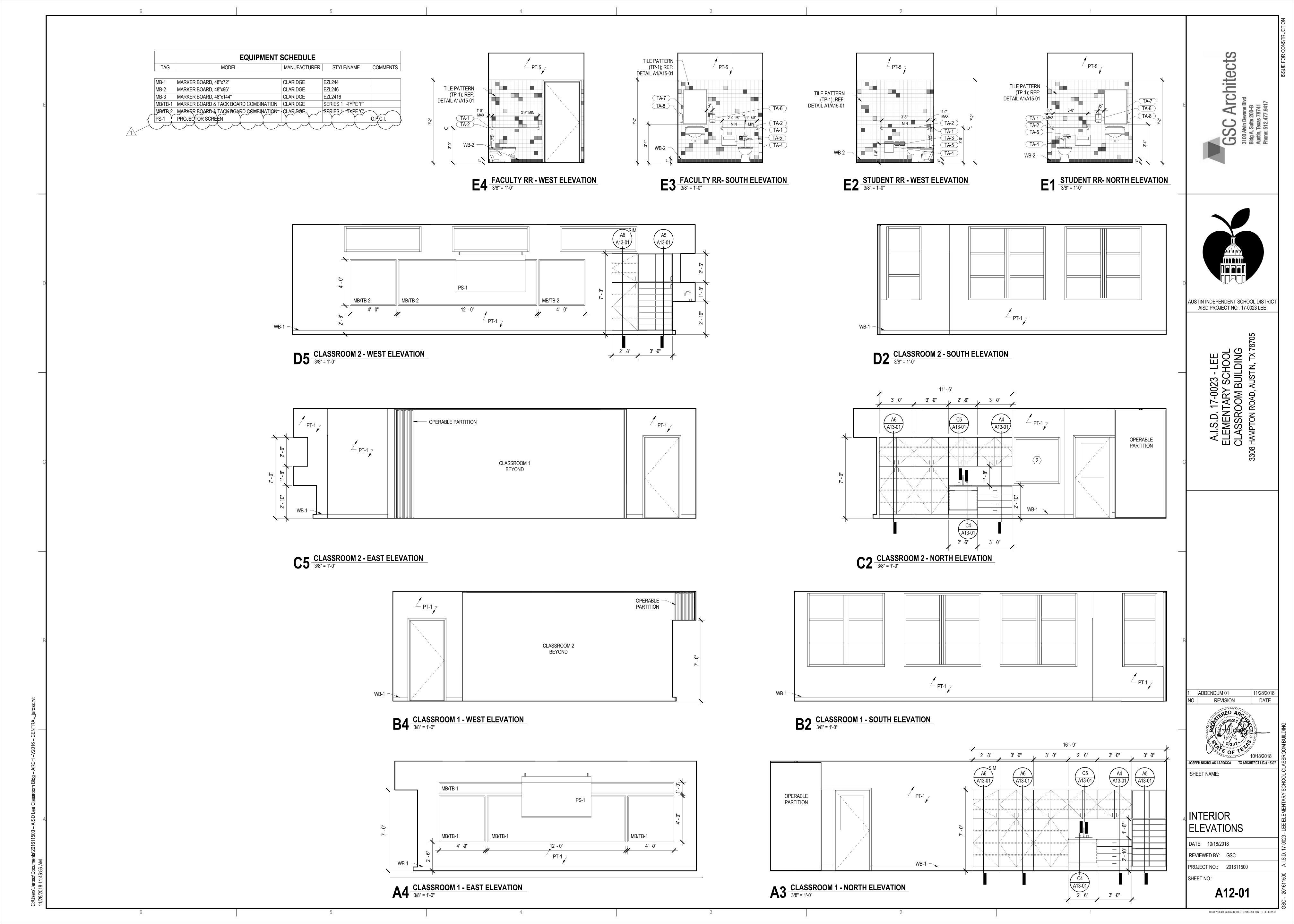
3308 HAMPTON ROAD, AUSTIN, TX 78705

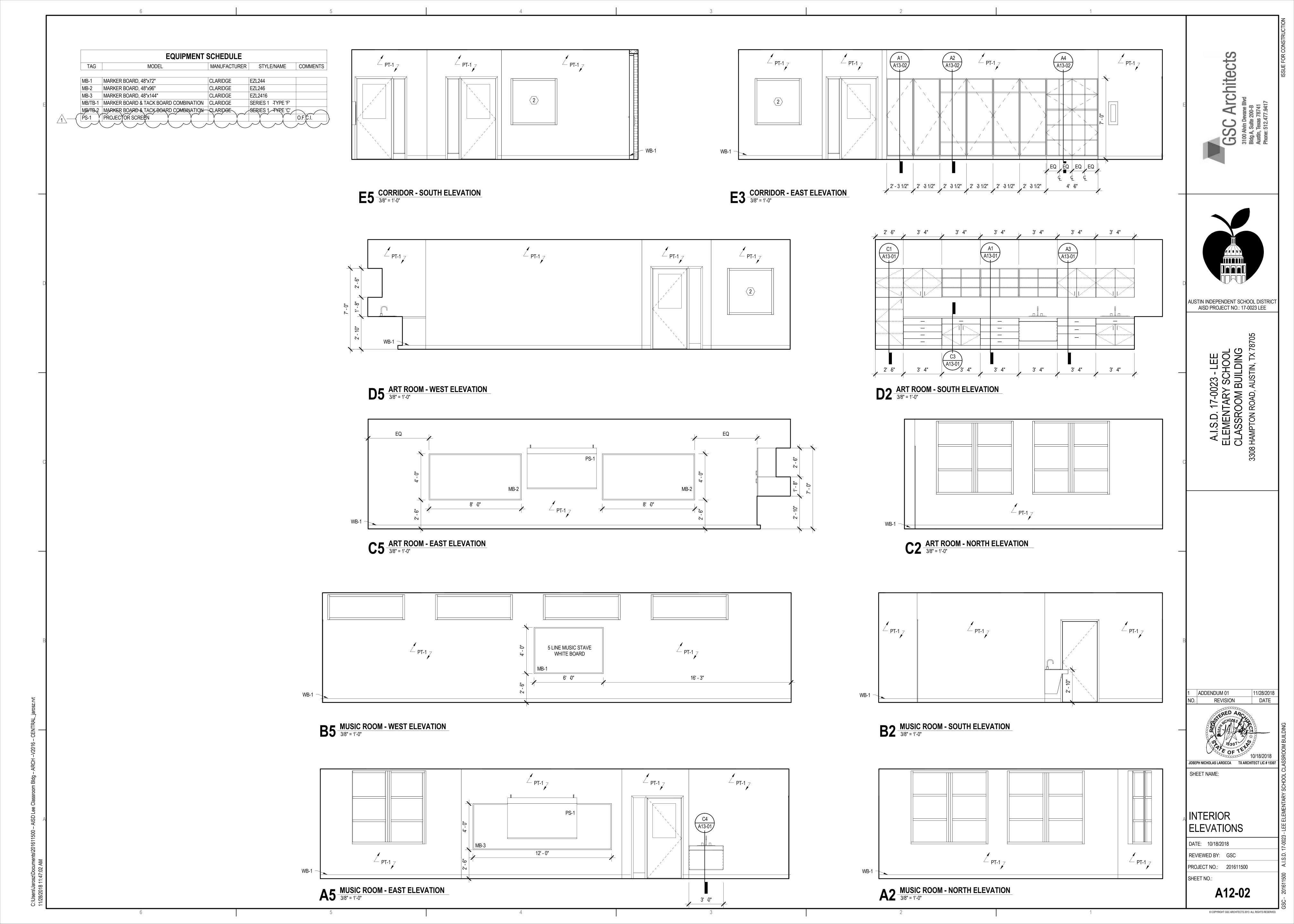
GSC - 201611500 A.I.S.D. 17-0023 - LEE ELEMENTARY SCHOOL CLASSROOM BUILDING

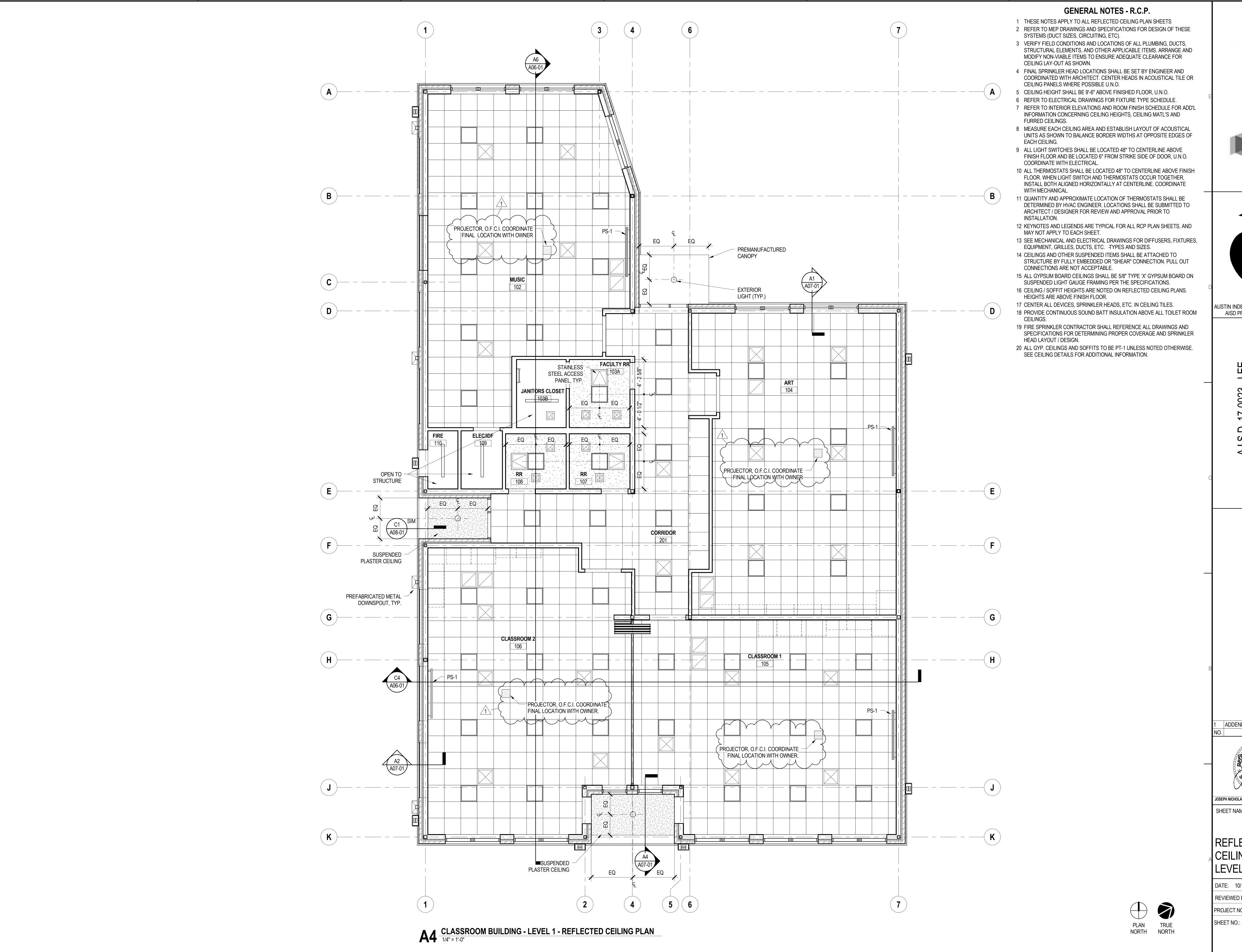
3100 Alvin Devane Blvd Bldg A, Suite 200-B

ISSUE FOR CONSTRUCTION

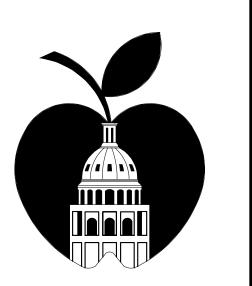
Austin, Texas 78741 Phone: 512.477.9417







Archited



AUSTIN INDEPENDENT SCHOOL DISTRICT AISD PROJECT NO.: 17-0023 LEE

ADDENDUM 01 REVISION

JOSEPH NICHOLAS LAROCCA TX ARCHITECT LIC # 15307

SHEET NAME:

REFLECTED CEILING PLAN -LEVEL 1

DATE: 10/18/2018 REVIEWED BY: GSC

PROJECT NO.: 201611500

A14-01

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STRUCTURAL FRAMING COMPONENT MEMBERS ARE INDICATED ON THE STRUCTURAL FRAMING COMPONENT MEMBERS ARE INDICATED ON THE STRUCTURAL DRAWINGS. HOWEVER, ALL SLEEVES, INSERTS AND OPENINGS, INCLUDING FRAMES AND/OR SLEEVES SHALL BE PROVIDED FOR PASSAGE, PROVISION AND/OR INCORPORATION OF THE WORK OF THE CONTRACT, INCLUDING BUT NOT LIMITED TO MECHANICAL, ELECTRICAL AND PLUMBING WORK. THIS WORK SHALL INCLUDE THE COORDINATION OF SIZES, ALIGNMENT, DIMENSIONS, POSITION, LOCATIONS, ELEVATIONS AND GRADES AS REQUIRED TO SERVE THE INTENDED PURPOSE. OPENINGS NOT INDICATED ON THE STRUCTURAL DRAWINGS, BUT REQUIRED AS NOTED ABOVE, SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW. ALL STRUCTURAL ELEMENTS OF THE PROJECT HAVE BEEN DESIGNED BY THE ENGINEER TO RESIST THE REQUIRED CODE VERTICAL AND LATERAL FORCES THAT COULD OCCUR IN THE FINAL COMPLETED STRUCTURE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL REQUIRED BRACING DURING CONSTRUCTION TO MAINTAIN THE STABILITY AND SAFETY OF ALL STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PROCESS UNTIL THE LATERAL-LOAD RESISTING OR STABILITY-PROVIDING SYSTEM IS COMPLETELY INSTALLED AND THE STRUCTURE IS COMPLETELY TIED TOGETHER. TEMPORARY SUPPORTS SHALL NOT RESULT IN THE OVERSTRESS OR DAMAGE OF THE ELEMENTS TO BE BRACED NOR ANY ELEMENTS USED AS BRACE SUPPORTS. THE GENERAL BUILDING CODE(S) USED AS THE BASIS FOR THE STRUCTURAL DESIGN ARE AS FOLLOWS:

2. INTERNATIONAL EXISTING BUILDING CODE, 2015 EDITION GEOTECHNICAL REPORT: FOUNDATION ELEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH INFORMATION PROVIDED IN THE FOLLOWING GEOTECHNICAL REPORT: PERIODIC SITE OBSERVATION BY FIELD REPRESENTATIVES OF JQ+TSEN IS SOLELY FOR THE PURPOSE OF DETERMINING IF THE WORK IS PROCEEDING IN ACCORDANCE WITH THE STRUCTURAL CONTRACT DOCUMENTS. THIS LIMITED SITE OBSERVATION IS NOT INTENDED TO BE A CHECK OF THE QUALITY OR QUANTITY OF THE WORK, BUT RATHER A PERIODIC CHECK IN AN EFFORT TO INFORM THE OWNER AGAINST DEFECTS AND DEFICIENCIES IN THE WORK OF THE CONTRACTOR. THE DETAILS DESIGNATED AS "TYPICAL DETAILS" APPLY GENERALLY TO THE STRUCTURAL DRAWINGS IN ALL AREAS WHERE CONDITIONS ARE SIMILAR TO THOSE DESCRIBED IN THE DETAILS. MPATIBILITY OF THE STRUCTURE AND PROVISIONS FOR BUILDING JIPMENT SUPPORTED ON OR FROM STRUCTURAL COMPONENTS SHALL VERIFIED AS TO SIZE, DIMENSIONS, CLEARANCES, ACCESSIBILITY, IGHTS AND REACTION WITH THE EQUIPMENT FOR WHICH THE RUCTURE HAS BEEN DESIGNED PRIOR TO SUBMISSION OF SHOP AWINGS AND DATA FOR EACH PIECE OF EQUIPMENT AND FOR LICTURAL COMPONENTS. DIFFERENCES SHALL BE NOTED ON THE 3MITTALS. ISMIC LOADS
THE STRUCTURE AND STRUMANE BEEN DESIGNED IN A MECHANICAL ROOMS, RESTROOMS ROOF - UNREDUCED SCHOOLS "PARTITIONS AT AREAS WITH LIV LOAD OF 80 PSF OR LESS" MECHANICAL ROOMS, TYPICAL PRESSURES FOR TRIB
VALUES MAY BE LINEA
NEGATIVE VALUE SIGN
SURFACE (SUCTION).
EDGE AND CORNER ZO
ACCORDANCE WITH RI MPONENTS AND CLAD PRESSURES ARE FOR GROSS UPLIFT CONDITIONS. REFER TO ROOF PLAN(S) FOR NET UPLIFT VALUES FOR DESIGN OF JOISTS JOIST GIRDERS, AND BRIDGING. CAL EQUIPMENT LOA +19.0 +16.0 -21.8 -25.8 -25.8 ONE DISTANCES SHALL BE DETERMINED IN REFERENCED STANDARD. IG WIND PRESSI 150 60 20 ING AWAY FROM THE EEN THE LISTED 115 MPH C +/-0.18 10 OR LESS 10 OR LESS 10 OR LESS TEXAS ARCHITECTURAL BARRIER ACT STANDARD: THE STRUCTURAL STRENGTH OF GRAB BARS, FASTENERS, AND MOUNTING DEVICES SHALL MEET THE FOLLOWING SPECIFICATION: STAIR RAILS: THE HANDRAILS AND SUPPORTING STRUCTURE SHALL BE CAPABLE OF WITHSTANDING A 200 POUND LOAD APPLIED IN ANY DIRECTION AT ANY POINT ON THE RAIL. AB-ON-GRADE MOVEMENT: PROVISIONS SHALL BE MADE IN THE JILDING CLADDING AND INTERIOR PARTITIONS FOR RELATIVE EFLECTIONS BETWEEN THE SOIL-SUPPORTED SLAB ON GRADE AND HE ROOF OR FLOOR LEVEL DIRECTLY ABOVE. DESIGN OF SOIL JPPORTED BUILDING SLABS IS BASED ON A RANGE OF [LOWER LIMIT] OF CH(ES) TO [UPPER LIMIT] 3/4 INCH(ES), BASED ON THE ECOMMENDATIONS OF THE PROJECT GEOTECHNICAL REPORT. REFEREMENT OF BUILDING PAD PREPARATION NOTES FOR SOIL STABILIZATION NOTES FOR SOIL STABILIZATION SHEAR STRESS INDUCED IN A GRAB BAR OR SEAT BY THE APPLICATION OF 250 LBF SHALL BE LESS THAN THE ALLOWABLE SHEAR STRESS FOR THE MATERIAL OF THE GRAB BAR OR SEAT. IF THE CONNECTION BETWEEN THE GRAB BAR OR SEAT AND ITS MOUNTING BRACKET OR OTHER SUPPORT IS CONSIDERED TO BE FULLY RESTRAINED, THEN DIRECT AND TORSIONAL SHEAR STRESS, STRESSES SHALL BE TOTALED FOR THE COMBINED SHEAR STRESS, WHICH SHALL NOT EXCEED THE ALLOWABLE SHEAR STRESS. GRAB BARS SHALL NOT ROTATE WITHIN THI XOMBINATIONS
RENGTH DESIGN

1.4(D+F)

1.2(D+F+T) + 1.6(L+H) + 0.5(Lr or S)

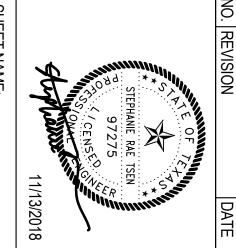
1.2D + 1.6(Lr or S or R) + (f1\*L or 0.1)

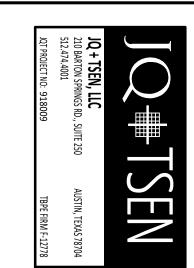
1.2D + 1.6W + f1\*L + 0.5\*(Lr or S or 1.2D + 1.0E + f1\*L + f2\*S)

0.9D + (1.0E or 1.6W) + 1.6 H 0.75L FOR FILL AREAS GREATER THAN 5 FEET, STRUCTURAL FILL SHALL BE PLACED IN 8 INCH LOOSE LIFTS TO FINAL SUBGRADE ELEVATION, WATERED AS REQUIRED AND COMPACTED TO A MINIMUM OF 100 PERCENT OF THE MAXIMUM DRY DENSITY AS DEFINED IN ASTM D THE ABOVE RECOMMENDATIONS HAVE BEEN PREPARED IN ACCORDANCE WITH THE REFERENCED GEOTECHNICAL REPORT BACKFILL MATERIAL SHALL CONSIST OF CRUSHED LIMESTONE WELL-GRADED. FILL SHALL BE PLACED IN LIFTS NOT TO EXCEED 8". FILL SHALL BE COMPACTED AT THE OPTIMUM MOISTURE CONTENT (-1% TO +3%) TO BETWEEN 95 AND 100 PERCENT OF THE MAXIMUM DRY DENSITY PER ASTM D698. COMPACTION AND MOISTURE CONTENT OF CONTROLLED BACKFILL SHALL BE VERIFIED BY AN INDEPENDENT TESTING LABORATORY.

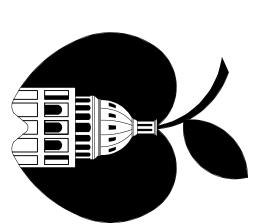
THE TOP 2 FT OF MATERIAL BELOW THE GROUND SURFACE SHALL CONSIST OF COHESIVE FILL MATERIAL. SIGN OF RETAINING WALLS IS BASED ON EQUIVALENT HYDROSTATIC PRESSURES OF 42 , ASSUMING FREE DRAINING BACKFILL OR SELECT FILL AND USE OF PERFORATED AIN PIPE. LACING FILL MATERIAL, REMOVE ALL ORGANIC AND OTHER US MATERIAL FROM THE EXISTING SUBGRADE WITHIN INE, BELOW FINAL SUBGRADE ELEVATION. ROOTS OF TREES OVED WITHIN CONSTRUCTION AREAS SHOULD BE GRUBBED PTH, INCLUDING THE DRY SOIL AROUND THE ROOTS. ZONES G DEBRIS OR ORGANICS AND VOIDS RESULTING FROM FOR TREE ROOTS, BOULDERS, ETC., SHOULD BE REMOVED AND WITH SOILS EXHIBITING SIMILLAR CLASSIFICATION, CONTENT, AND DENSITY AS THE ADJACENT IN SITU SOILS. VAINAGE SHOULD BE MAINTAINED DURING CONSTRUCTION SHALL THEN BE SCARIFIED TO A DEPTH OF 8", WATERED AS AND RECOMPACTED TO A MINIMUM OF 95 PERCENT OF THE RY DENSITY AS DEFINED BY ASTM D 698 (STANDARD EST) AT A MOISTURE CONTENT WITHIN 3 PERCENT OF THE IOISTURE CONTENT. AND MOISTURE CONTENT OF SUBGRADE AND EACH LIFT AL FILL SHALL BE INSPECTED AND APPROVED BY A SINEERING TECHNICIAN, SUPERVISED BY A L ENGINEER. ED STRATUM 1 SOILS AND STRATUM 2 LIMESTONE
BE ACCEPTABLE FOR RE-USE AS SELECT FILL PROVIDED
CESSED SUCH THAT IT MEETS THE ACCEPTABLE
IS FOR IMPORTED SELECT/STRUCTURAL FILL AND
TERRACON. GRADE BEAMS IN CONTACT WITH EARTH SHALL BE UNLESS NOTED OTHERWISE IN DETAILS. CONCRETE PLACEMENTS SHALL NOT EXCEED 10,000 SQUARE FEET OR 100 LINEAR FEET ON EACH SIDE WITHOUT PRIOR APPROVAL BY THE ARCHITECT FOR EACH PLACEMENT. EMBEDDED CONDUITS, PIPES, AND SLEEVES SHALL MEET THE REQUIREMENTS OF ACI 318, SECTION 26.8, INCLUDING THE FOLLOWING: FLY ASH SHALL NOT BE USED IN ARCHITECTURALLY EXPOSED CONCRETE. MAXIMUM OF 20% OF THE CEMENTITIOUS MATERIALS USED IN MIXESIGNS MAY BE REPLACED WITH CLASS , F, FLY ASH. MAXIMUM SHRINKAGE OF THE CONCRETE SHALL BE 0.03% AT 28 DAYS AS DETERMINED BY ASTM C157.
MINIMUM ENTRAINED AIR CONTENT SHALL BE 5 TO 7 PERCENT. CONDUITS, PIPES AND SLEEVES SHALL NOT BE SPACED CLOSER THAN THREE DIAMETERS OR WIDTHS ON CENTER. WHERE W/C RATIO IS NOT INDICATED IN THE CONCRETE MIX SCHEDULE, IT SHALL BE AS NECESSARY TO MEET STRENGTH REQUIREMENTS. "LWC" REFERS TO SAND LIGHTWEIGHT CONCRETE HAVING AN AIR-DRY UNIT WEIGHT NOT TO EXCEED 120 PCF (ASTM C330 AGGREGATE). "STRENGTH" IS REQUIRED COMPRESSIVE CYLINDER STRENGTH AT AN AGE OF 28 DAYS. "NWT" REFERS TO NORMAL CONCRETE HAVING AIR DRY UNIT WEIGHT OF APPROXIMATELY 145 PCF (ASTM C33 AGGREGATE). :, AUSTIN, TEXAS: CONCRETE CLASS FORMED BOTH SI AUSTIN INDEPENDENT SCHOOL DISTRICT AISD PROJECT NO.: 17-0023 LEE A.I.S.D. 17-0023 - LEE GSC Architects **ELEMENTARY SCHOOL** 

STRUCTURAL NOTES **S01-01** 





**CLASSROOM BUILDING** 3308 HAMPTON ROAD, AUSTIN, TX 78705





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Inspection tasks may be coordinated with the fabricator or erector's Qualithis footnote. All other tasks shall be performed by the Special Inspector.

YES		REQUIRED	SPECIAL	
a. Welding procedure specifications (WPSs) available	1. Inspection tasks prior to welding:	VENTICATION AND INSPECTION	VEDIEIO ATIONI AND INGDECTION	VERIFICATION AND INSPECTION TASKS FOR WELDING OF S
×		CONTINUOUS PERIODIC	INSPECTION FREQUENCY	STRUCTURAL STEEL <sup>1</sup> (AISC 360-10 Table N5.4)
:		PERIODIC	REQUENCY	EEL <sup>1</sup> (AISC 360
		STANDARD	REFERENCED	.10 Table N5.4)
		REFERENCE	IBC	

		INOPECTION	KEQUENCY	REFERENCED	IBC
REQUIRED		CONTINUOUS	PERIODIC	STANDARD	REFERENCE
YES	Nelding procedure specifications (WPSs) available	×	1		
YES	b. Manufacturer certifications for welding consumables available	×	i		
YES	c. Material identification (type/grade) <sup>2</sup>	:	×		
YES	d. Welder identification system <sup>2</sup>	:	×		
YES	<ul> <li>e. Fit-up of groove welds (including joint geometry)<sup>2</sup></li> <li>1) Joint preparation</li> <li>2) Dimensions (alignment, root opening, root face, bevel)</li> <li>3) Cleanliness (condition of steel surfaces)</li> <li>4) Tacking (tack weld quality and location)</li> <li>5) Backing type and fit (if applicable)</li> </ul>	!	×	AISC 360-10 N5.4-1: AWS D1.1	1705.2.1
YES	f. Configuration and finish of access holes. <sup>2</sup>	1	×		
YES	<ul> <li>g. Fit-up of fillet welds <sup>2</sup></li> <li>1) Dimensions (alignment, gaps at root)</li> <li>2) Cleanliness (condition of steel surfaces)</li> <li>3) Tacking (tack weld quality and location)</li> </ul>	I	×		
YES	h. Check welding equipment	1	×		
	2. Inspection tasks during welding:				
YES	a. Use of qualified welders	1	×		
YES	<ul> <li>b. Control and handling of welding consumables <sup>2</sup></li> <li>1) Packaging</li> <li>2) EXposure control</li> </ul>		×		
YES	c. No welding over cracked tack welds <sup>2</sup>	-	X		
YES	<ul> <li>d. Environmental conditions <sup>2</sup></li> <li>1) Wind speed within limits</li> <li>2) Precipitation and temperature</li> </ul>	ı	×		
YES	<ul> <li>e. WPS followed<sup>2</sup></li> <li>1) Settings on weld equipment</li> <li>2) Travel speed</li> <li>3) Selected welding materials</li> <li>4) Shielding gas type/flow rate</li> <li>5) Preheat applied</li> <li>6) Interpass temperature maintained (min./maX.)</li> <li>7) Proper position (F, V, H, OH)</li> </ul>	į	×	AISC 360-10 N5.4-2: AWS D1.1	1705.2.1
YES	<ul> <li>f. Welding techniques <sup>2</sup></li> <li>1) Interpass and final cleaning</li> <li>2) Each pass within profile limitations</li> <li>3) Each pass meets quality requirements</li> </ul>	i	×		
	3. Inspection tasks after welding:				
YES	a. Welds cleaned	:	×		
YES	b. Size, length and location of welds	×	i		
YES	<ul> <li>c. Welds meet visual acceptance criteria</li> <li>1) Crack prohibition</li> <li>2) Weld/base-metal fusion</li> <li>3) Crater cross section</li> <li>4) Weld profiles</li> <li>5) Weld size</li> <li>6) Undercut</li> <li>7) Porosity</li> </ul>	×	I	AISC 360-10 N5.4-2: AWS D1.1	1705.2.1
YES	d. Arc strikes	×	1		
YES	e. k-area <sup>3</sup>	×	1		
YES	f. Backing removed and weld tabs removed (if required)	×	1		
YES	g. Repair activities	×	1		
ΥΕ̈́	<ul> <li>h. Document acceptance or rejection of welded joint or</li> </ul>	×	<b>!</b>		

								1				
		YES	YES		REQUIRED	SPECIAL				YES		REQUIRED
<ol><li>Bridging that differs from the SJI specifications</li></ol>	1. Standard bridging	b. Bridging - horizontal or diagonal	a. End connections - welding or bolted.	1. Installation of open-web steel joists.	VENIFICATION AND INSPECTION		REQUIRED SPECIAL INSPECTION OF OPEN-WEB STEEL JOISTS AND JOIST GIRDERS (IBC TABLE 1705.2.3)			a. Roof deck welds	1. Cold-formed steel deck:	VENTICATION AND INSPECTION
	-	-	ı		CONTINUOUS	INSPECTION	TS AND JOIST G			ŀ		CONTINUOUS
<	×		×		PERIODIC	INSPECTION FREQUENCY	SIRDERS (IBC T			×		PERIODIC
	SJI Specs per IBC 2207.1		SJI Specs per IBC 2207.1		STANDARD	REFERENCED	ABLE 1705.2.3)			SDI QA/QC		STANDARD
170523	1705.2.3		1705.2.3		REFERENCE	IBC				1705.2.2		REFERENCE
										<u> </u>		

YES	YES	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES	YES		YES	YES	YES	YES		YES	SPECIAL INSPECTION REQUIRED	
<ol> <li>Inspect formwork for shape, location and dimensions of the concrete member being formed.</li> </ol>	<ol> <li>Verify in-situ concrete strength, prior to removal of shores and forms from grade beams.</li> </ol>	10. Inspect erection of precast concrete members.	b. Grouting of bonded prestressing tendons	a. Application of prestressing forces	9. Inspection of prestressed concrete:	<ol><li>Verify maintenance of specified curing temperature and techniques.</li></ol>	7. Inspect concrete placement for proper application techniques.	<ol> <li>Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.</li> </ol>	5. Verify use of required design mix.	Special Inspector must be certified by ACI/CRSI "Adhesive Anchor Installer. A report must be submitted to the licensed design professional and building official documenting, stating how each anchor was installed, including the Manufacturer's Printed Installation Instructions per ACI 318	<ul> <li>b. Mechanical anchors and adhesive anchors not defined in 4.a.</li> </ul>	<ul> <li>Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads.</li> </ul>	4. Inspection of post-installed anchors in hardened concrete.	3. Inspection of anchors cast in concrete.	c. Inspect all other welds.	b. Inspect single-pass fillet welds, maXimum 5/16"	a. Verify weldability of reinforcing bars other than ASTM A706	2. Reinforcing bar welding:	<ol> <li>Inspection of reinforcing steel and placement.</li> </ol>	VERIFICATION AND INSPECTION	VERIFICATION AND INSPECTION OF CONCRETE C
1	ŀ	ŀ	×	×		ŀ	×	×	I	ŀ	ı	×		ŀ	×	ł	-		ï	INSPECTION CONTINUOUS	CONSTRUCTION (IBC TABLE 1705.3)
×	×	×	ŀ	ł		×	ŀ	ı	×	I	×	I		×	i	×	X		×	INSPECTION FREQUENCY ONTINUOUS PERIODIC	ง (IBC TABLE 17
ACI 318: 26.10.1(b)	ACI 318: 26.10.2	ACI 318: 26.8	ACI 318: 26.9.2.3	ACI 318: 26.9.2.1		ACI 318: 26.4.7- 26.4.9	ACI 318: 26.4.5	ASTM C172 ASTM C31 ACI 318: 26.4.5, 26.12	ACI 318: Ch. 19 26.4.3, 26.4.4	ACI 318: 17.8.2.2 17.8.2.4	ACI 318: 17.8.2	ACI 318: 17.8.2.4		ACI 318: 17.8.2		26.5.4	AWS D1.4		ACI 318 Ch. 20, 25.2, 25.3, 26.5.1-26.5.3	REFERENCED STANDARD	'05.3)
1	ŀ	:		:		1908.9	1908.6, 1908.7, 1908.8	1908.10	1904.1, 1904.2, 1908.2, 1908.3		!			ŀ			<b>:</b>		1908.4	IBC REFERENCE	

CAST-IN-PLACE				BUILDING	BRICK LEDGE	STFFI	BOTTOM OF	ВОТТОМ	BLOCKING	BETWEEN	BELOW FINISH FLOOR	BEARING	BEAM	BASEMENT	BACK FACE I		AT	ARCHITECTURALLY EXPOSED STRUCTURAL STEEL	ARCHITECTURALLY EXPOSED CONCRETE	ARCHITECTURAL /		APPROXIMATE	VED	ANGLE	AND		NSTRUCTION	ONCRETE INSTITUTE		Т	TIONER	ADJACENT	ADHESIVE /	ADDITIONAL	ABOVE FINISHED FLOOR	ABBREVIATIONS
	C.I.T.	ם כ		BLDG.	B.L.	BOS	B.O.	BOT. OR BOTT.	BLKG.	BTWN.	B.F.F.	BRG.	BM	BSMT.	B.F.		@	A.E.S.S.	A.E.C.	ARCH'L	ARCH.	APPROX.	APR.		œ	A.B.	A.I.S.C.	A.C.I.	ALT.	AHU	A/C	ADJ.	ADH.	ADD'L.	A.F.F.	
DI ATE	יית איים איים איים איים איים איים איים א	DERDENDICH AR	PARALLEL	PANEL JOINT	PAN		OUTSIDE FACE	OUTSIDE DIAMATER	OPPOSITE HAND	OPPOSITE	OPENING	ON CENTER		NUMBER	NOT TO SCALE	NOT IN CONTRACT	NON-SHRINK	NOMINAL	NEAR FACE		MOMENT CONNECTION	MISCELLANEOUS	MINIMUM	MIDDLE	MEZZANINE		MECHANICAL, ELECTRICAL, PLUMBING	MECHANICAL	MAXIMUM	MATERIAL	MANUFACTURER		LOW POINT	LONGITUDINAL	LONG SIDE VERTICAL	ABBREVIATIONS

LONG SIDE HORIZONTAL	LONG LEG VERTICAL	LONG LEG HORIZONTAL	LOCATION	LIVE LOAD	LIGHTWEIGHT CONCRETE	LIGHTWEIGHT	KIPS (1000 LBS)	KIP PER SQUARE INCH	KIP PER SQUARE FOOT	KIP PER LINEAR FOOT	JOIST GIRDER	JOIST	JOINT	INTERMEDIATE	INTERIOR	INSIDE FACE

| | × | × | ×

	Π. ۷۷.	טראטר	QF A
	ELEC.	SPECIFICATION	SPECS.
	ELEV.	SQUARE	SQ.
	ENGR.	SQUARE FOOT	S.F.
	EQ.	STAGGERED	STAG.
	EQUIP.	STAINLESS STEEL	S.S.
	EXIST.	STANDARD	STD
	EXP.	STEEL	STL
	E.J.	STEEL JOIST INSTITUE	S.J.I.
	EXT.	STIFFENER	STIFF.
		STIRRUP	STIR.
	FAB.	STRUCTURAL	STRUCT'L
	F.S.	STRUCTURE	STRUCT.
	F.V.	SUBCONTRACTOR	SUBCONTR.
	F.F.	SUPPORT	SUPT.
	FP.		
	F.D.	TEMPORARY	TEMP.
	FT.	THICK	THK
	FDN.	TONGUE AND GROOVE	T&G
		TOP AND BOTTOM	T&B
	GA.	TOP OF	T.O.
TOB	GALV.	TOP OF CONCRETE	T.O.B.
	GR RM	TOP OF FOOTING	T 0.0.
	:	TOP OF JOIST	T.O.J.
-IOR	H.S.A.	TOP OF PIER	T.O.P.
	HD.	TOP OF PIER (PIPE) CAP	T.O.P.C.
	HT.	TOP OF STEEL	T.O.S.
	H.P.	TOP OF WALL	T.O.W.
RAL SECTION	HSS	TRANSVERSE	TRANSV.
	HORIZ.	TREAD	TR
	H.B.	TYPICAL	TYP.
	Z	UNLESS NOTED OTHERWISE	U.N.O.
	INFO.		
	ID.	VERTICAL	VERT.
	Ī.F.	VERTICAL BRACE	V.B.
	NT.		
	INTERM.	WATERSTOP	WS
		WEIGHT	WT
	JT.	WELDED WIRE FABRIC	W.W.F.
	JST.	WIDE FLANGE	X X
	e.	WINDLOAD	WI
OT	KLF	WITH	W/
ООТ	KSF	WITHOUT	W/O
CH	KSI	WOOD	WD
	7	WORK POINT	WP
PETE	LWC.		

Inspection tasks noted in this table are the responsibility of the Special Inspector or Quality Assurance Inspector (QAI). The fabricator and erector are responsible for all inspection tasks indicated in AISC 360-10 Section N5 and assigned to the Quality Control Inspector (QCI)

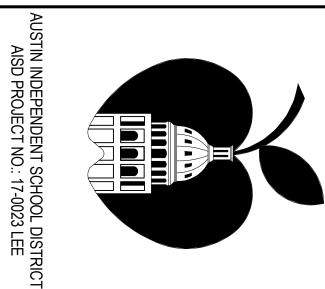
VERIFICATION AND INSPECTION

Connecting elements, including the appropriate faying surface condition and hole preparation, if specified, meet applicable requirements

										VISE																
CHAI	W/	WL	W	WF	W.W.F.	WT	WS	V.B.	VERT.	U.N.O.	TYP.	TR	TRANSV.	T.O.W.	T.O.S.	T.O.P.C.	T.O.P.	T.O.J.	T.O.F.	T.O.C.	T.O.B.	T.O.	T&B	T&G	THK	TEMP.
																								JQT PROJECT NO: 918009	312.4/4.4001	210 BARTON SPRINGS RD., SU 513 474 4001

	JQ + TSEN, LLC 210 BARTON SPRINGS RD., SUITE 250 512.474.4001 JQT PROJECT NO: 918009	AUSTIN, TEXAS 78704 TBPE FIRM F-12778
<u></u>	ADDENDUM 01	11/13/2018

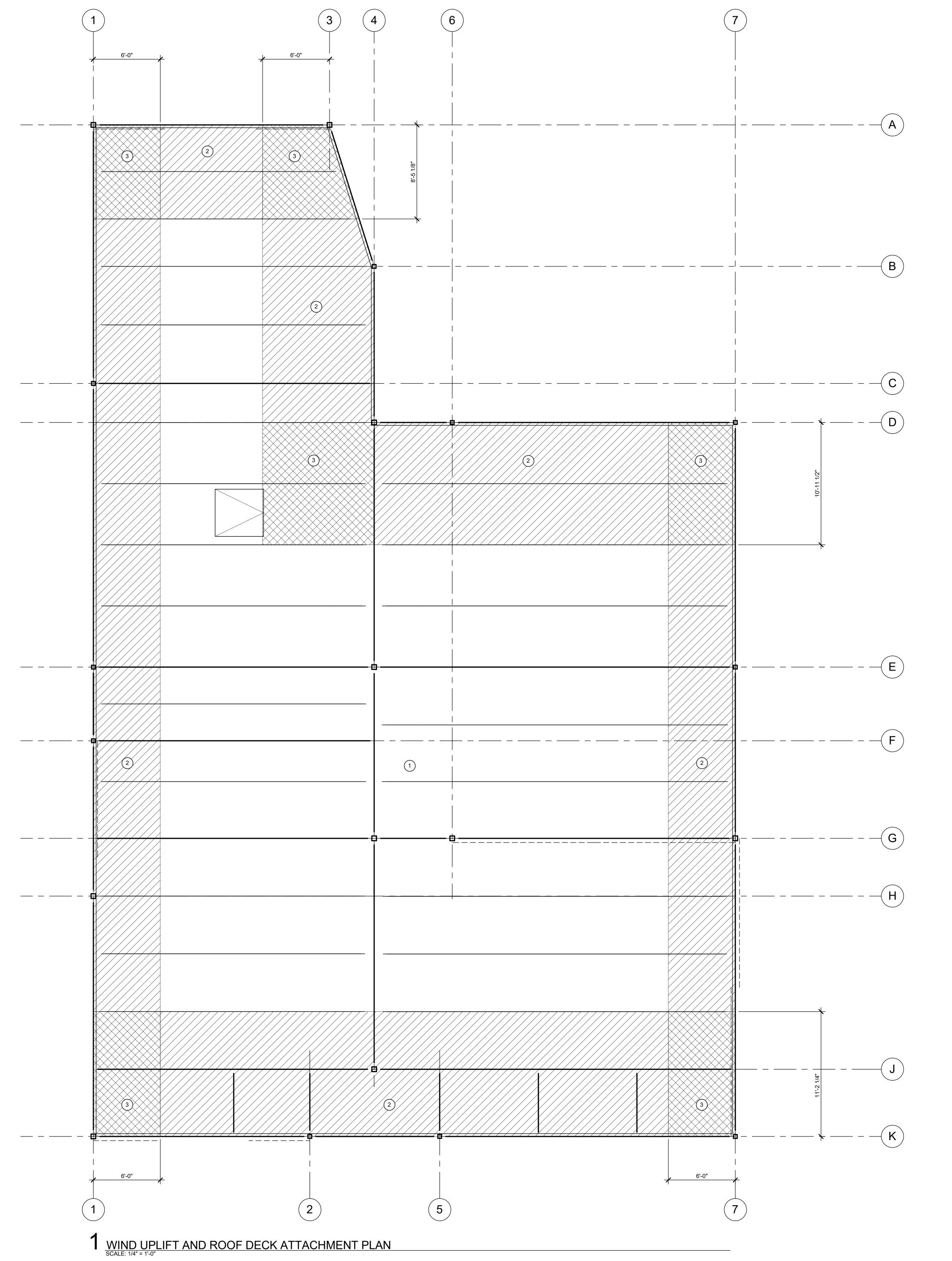
A.I.S.D. 17-0023 - LEE **ELEMENTARY SCHOOL CLASSROOM BUILDING** 3308 HAMPTON ROAD, AUSTIN, TX 78705



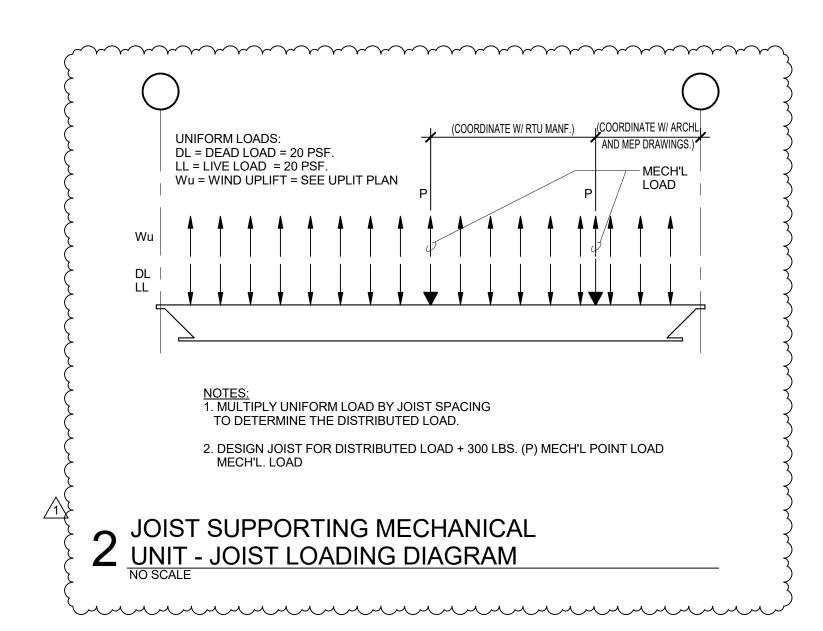


SPECIAL INSPECTIONS

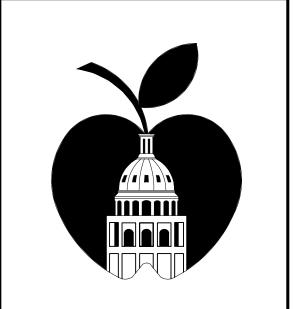
**S01-03** 



		WIN	ND NET UPLI	FT PRESSURE	(ASCE 7-10) & METAL ROOF DECK	ATTACHMENT		
HATCH	ZONE	ROOFING	DECKING	JOIST/BEAM	ROOF CONNECTION PATTERN	SIDE LAP PATTERN	NOTES	DECK SHEAR STRENGTH
	1	+10.0 -17.2	+10.0 -15.0	+10.0 -12.25	36/7 (5/8" PUDDLE WELDS)	(4) - #10 TEKS		418 PLF
	2	+15.9 -29.0	+15.22 -25.0	+12.8 -15.25	36/7 (5/8" PUDDLE WELDS)	(4) - #10 TEKS		418 PLF
	3	+15.9 -29.0	+15.22 -25.0	+12.8 -15.25	36/7 (5/8" PUDDLE WELDS)	(4) - #10 TEKS		418 PLF

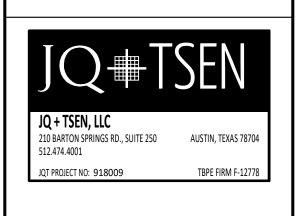


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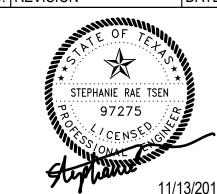


AUSTIN INDEPENDENT SCHOOL DISTRICT AISD PROJECT NO.: 17-0023 LEE

A.I.S.D. 17-0023 - LEE
ELEMENTARY SCHOOL
CLASSROOM BUILDING
3308 HAMPTON ROAD, AUSTIN, TX 78705



ADDENDUM 01 11/13/2018
O. REVISION DATE



SHEET NAME:

WIND UPLIFT AND ROOF DECK ATTACHMENT PLAN

DATE: 10/18/2018

REVIEWED BY: Checker

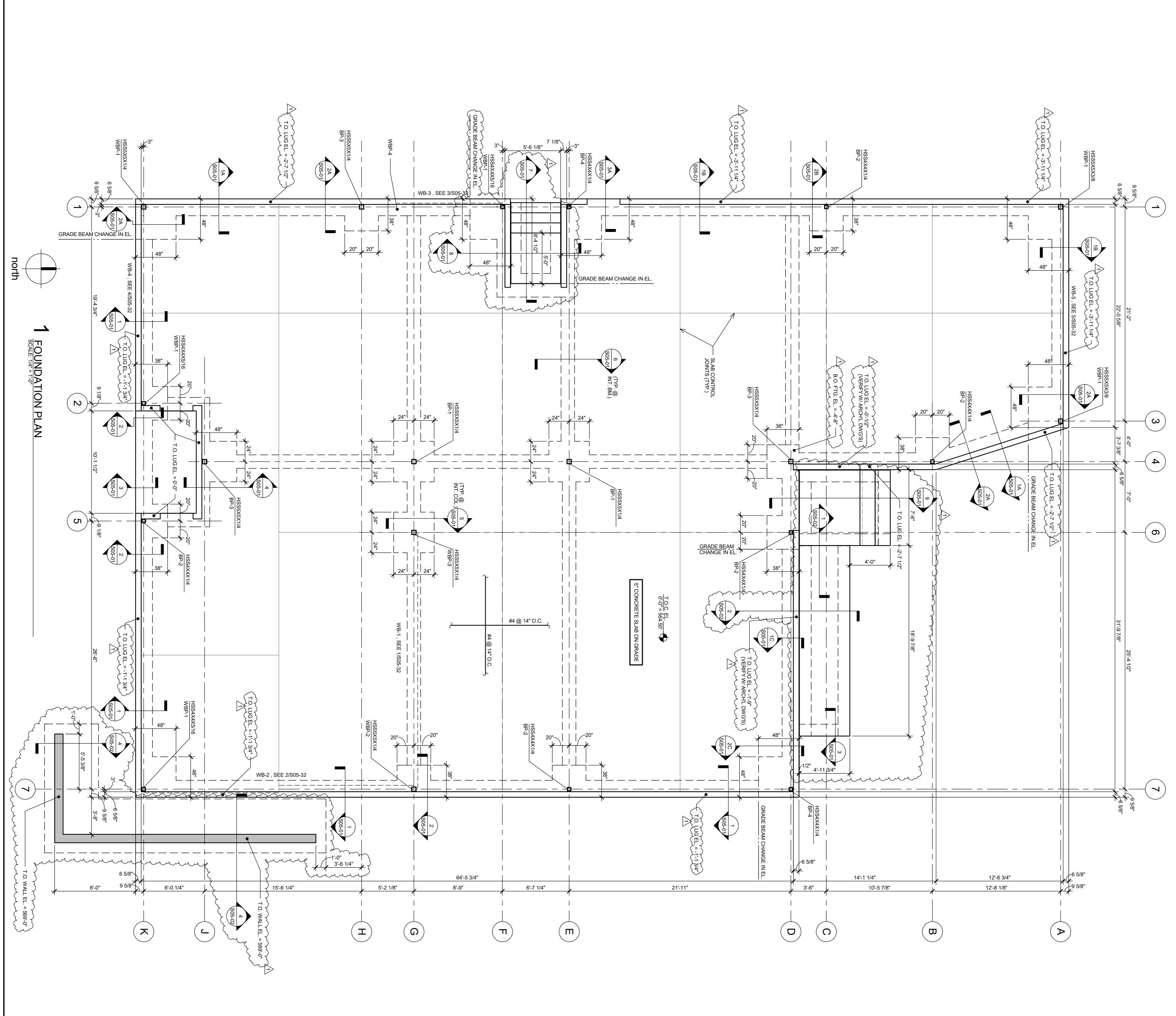
PROJECT NO.: 201611500

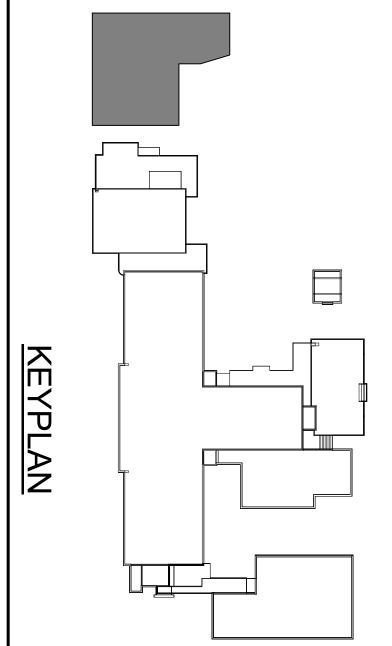
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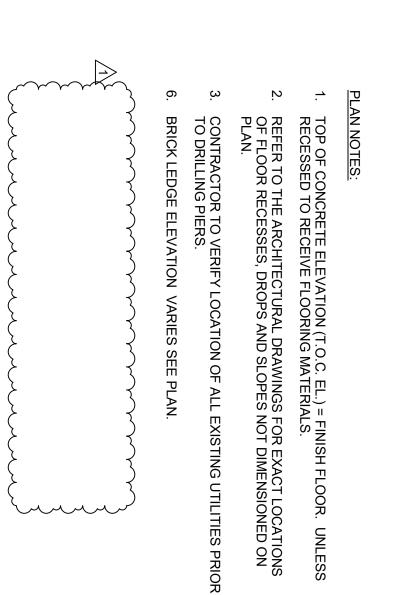
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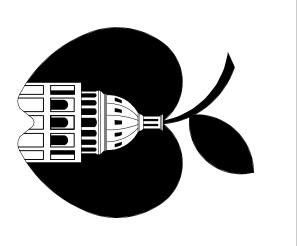








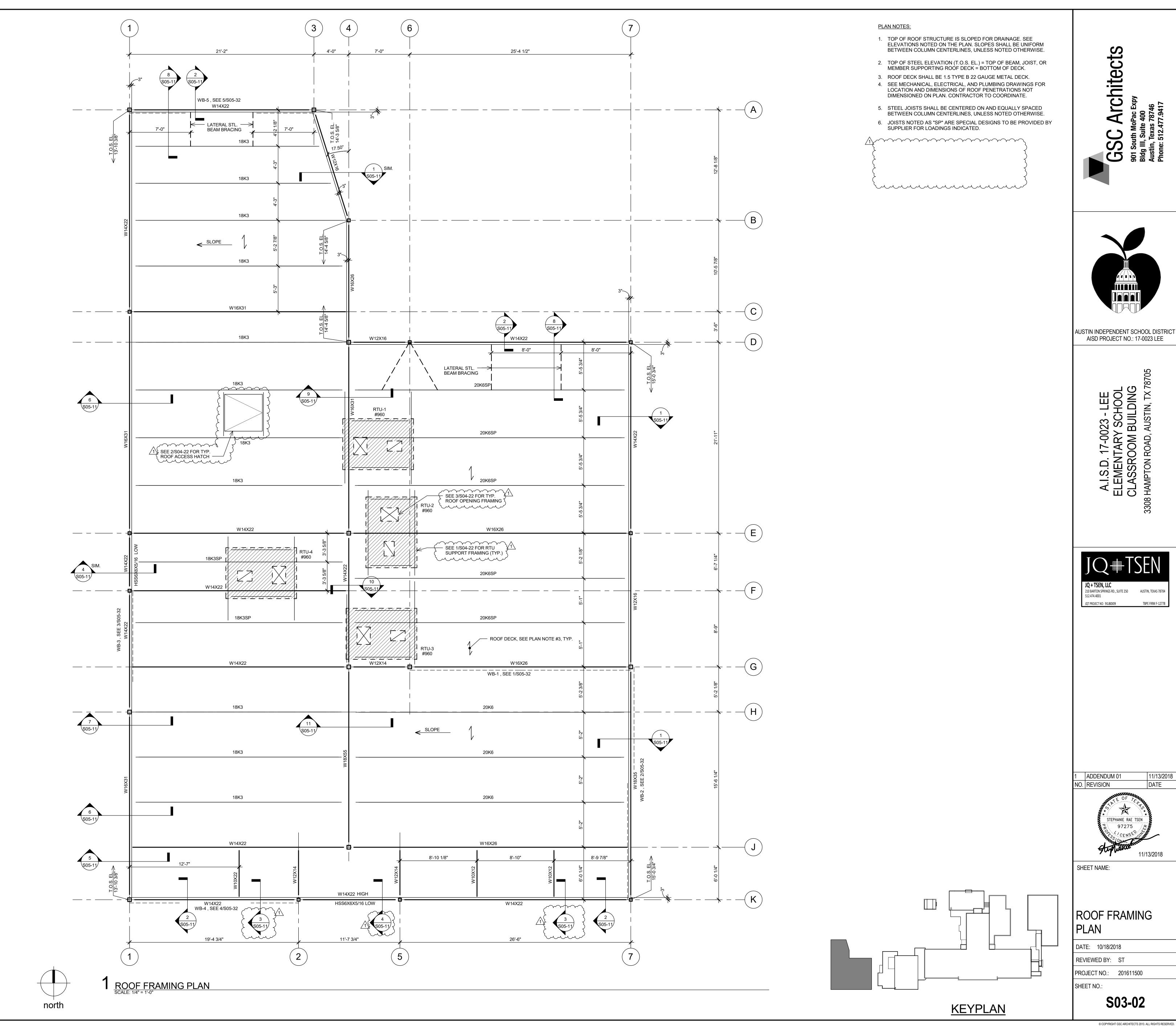
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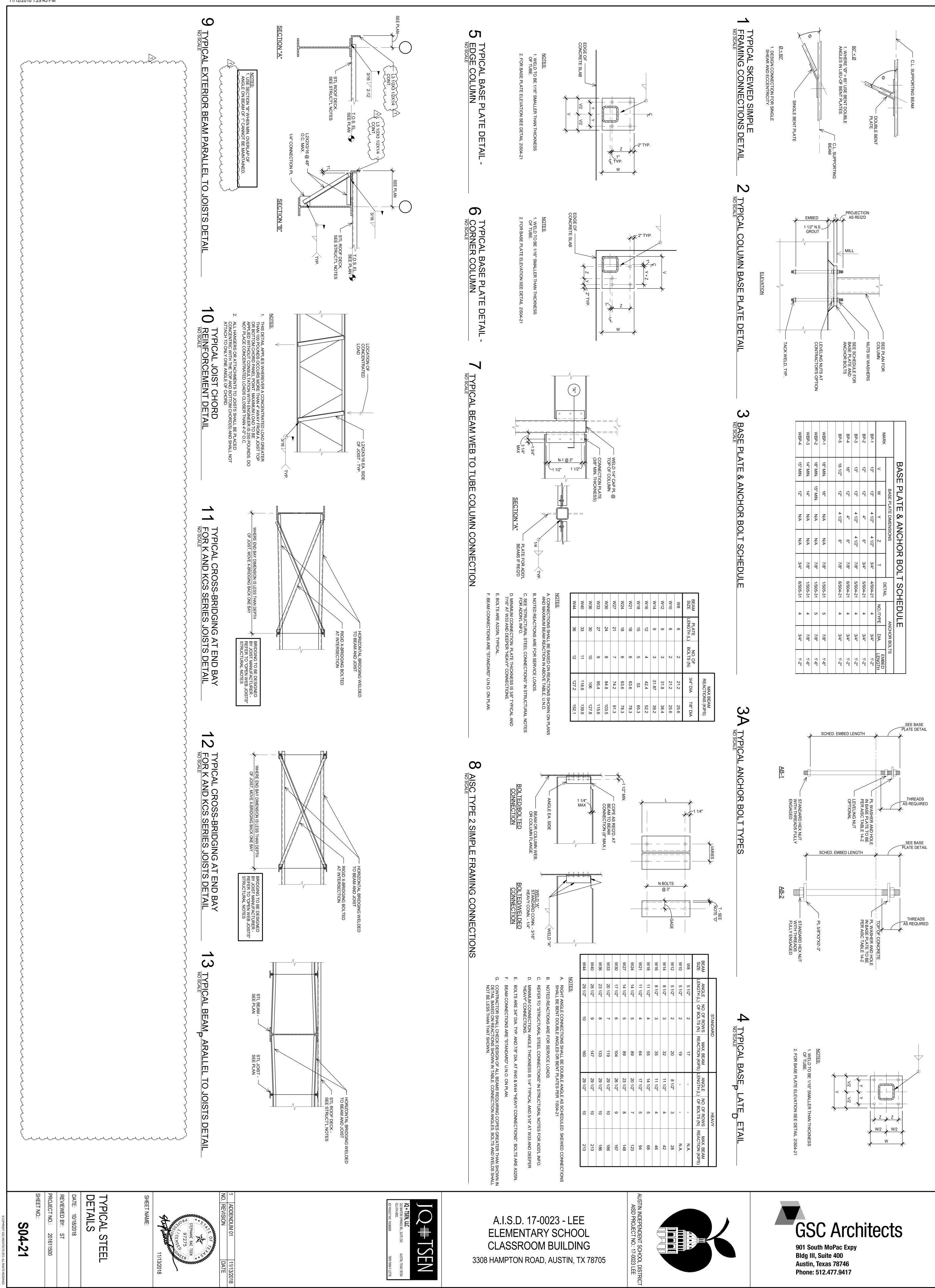
AUSTIN INDEPENDENT SCHOOL DISTRICT AISD PROJECT NO.: 17-0023 LEE

GSC Architects

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GSC - 201611500 A.I.S.D. 17-0023 - LEE ELEMENTARY SCHOOL CLASSROOM BUILDING



SEE PLAN STEEL MITERED ANGLE -FRAME, SEE SCHED. MECHANICAL UNIT -CURB, SEE MEP DWG'S DECK OPENING, SEE 3/S04-22 SEE SCHED. <u>PLAN</u> NOTES:

COORDINATE FRAME AND OPENING SIZE WITH MECHANICAL UNIT MANUFACTURER.

2. THIS DETAIL APPLIES ONLY TO THE CASE WHERE

THE RTU CURBS SET BETWEEN TWO JOISTS.

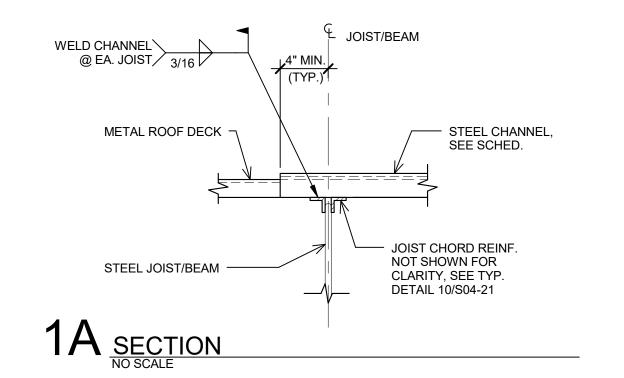
3. ENSURE THAT ANGLE FRAME SUPPORTS ENTIRE PERIMETER OF MECHANICAL

UNIT CURB.

Ç JOIST/BEAM

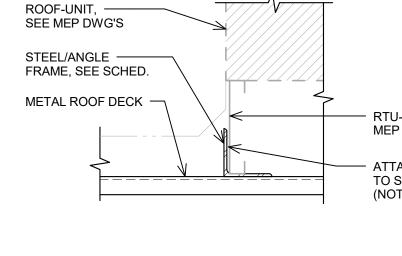
Ç JOIST/BEAM

RTU - FI	RAMING SC	HEDULE
STEEL CHANNEL	STEEL ANGLE FRAME	MAX UNIT WEIGHT
C6X8.2	L4X4X1/4	500 LBS
C6X8.2	L4X4X1/4	1,000 LBS



STEEL CHANNEL

SEE SCHED.

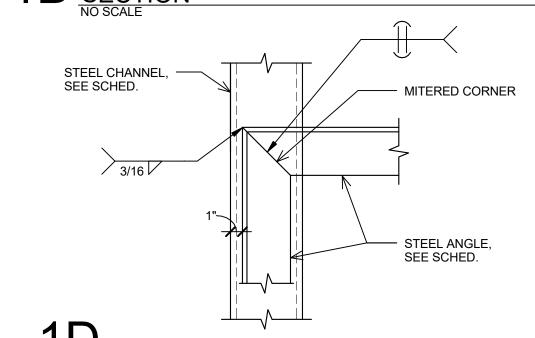


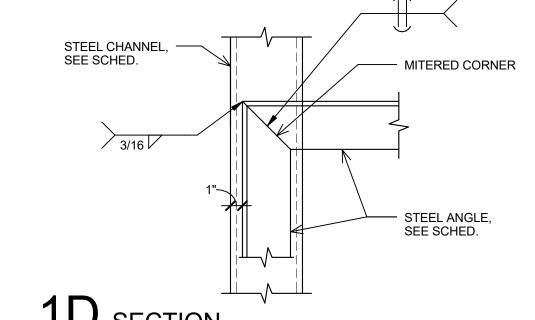
- RTU-CURB, SEE MEP DWG'S - ATTACHMENT OF CURB TO STEEL FRAME (NOT BY JQ TSEN)

**Architects** 

AUSTIN INDEPENDENT SCHOOL DISTRIC AISD PROJECT NO.: 17-0023 LEE

1B SECTION NO SCALE





TYPICAL SCHEMATIC ROOFTOP MOUNTED MECHANICAL

2. WHERE SUPPLY AND RETURN DUCTS STRADDLE A JOIST, PROVIDE ANGLE FRAME SIMILAR TO THAT

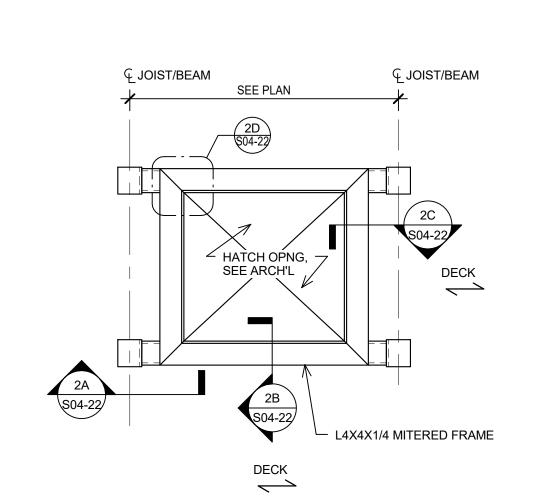
3. THIS DETAIL APPLIES ONLY TO THE CASE WHERE THE RTU CURBS EXTEND ACROSS TWO JOISTS.

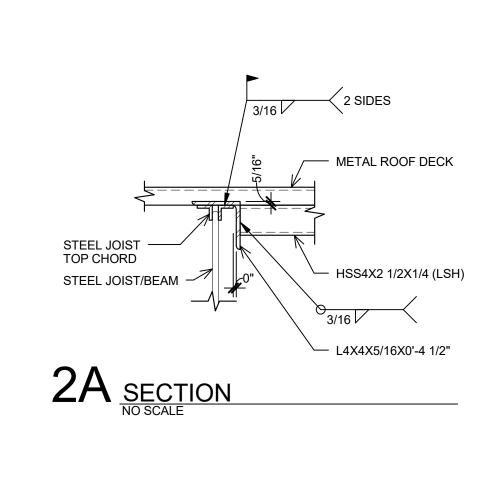
4. ENSURE THAT ANGLE FRAME SUPPORTS ENTIRE PERIMETER OF MECHANICAL UNIT CURB.

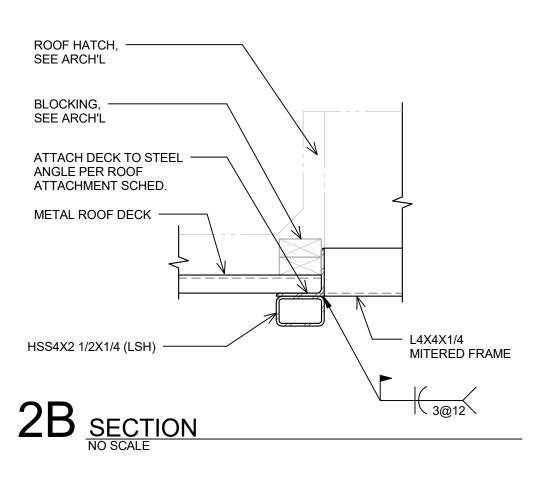
UNIT MANUFACTURER.

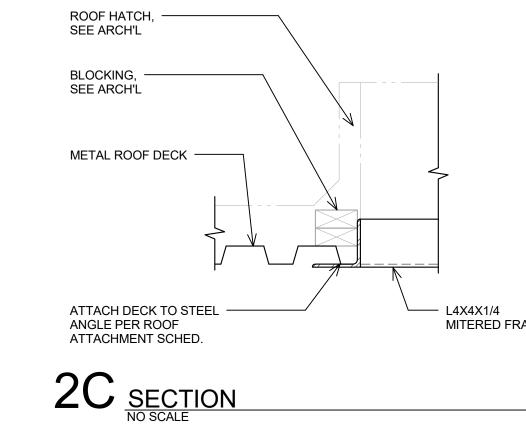
SHOWN ON EACH SIDE OF JOIST.

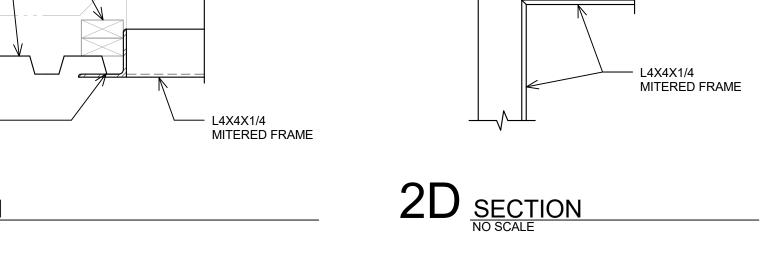
1 UNIT OPENING FRAMING DETAILS
NO SCALE











ROOF-UNIT, -

SEE MEP DWG'S

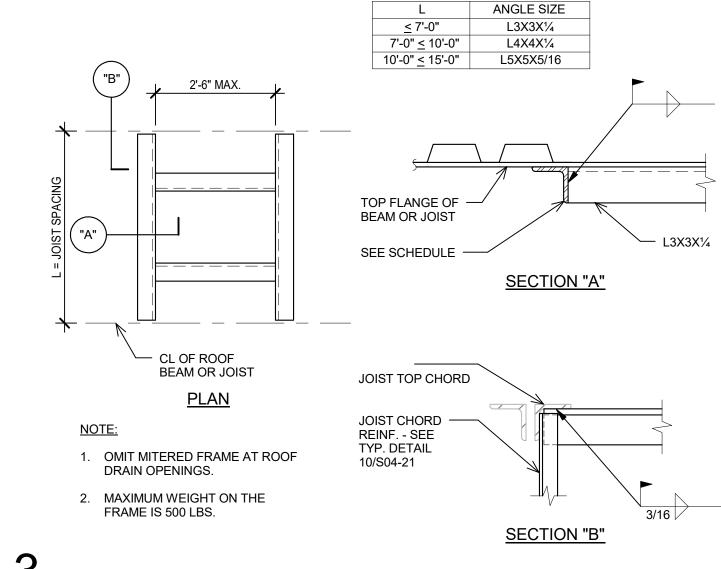
RTU-CURB, SEE -

STEEL/ANGLE -

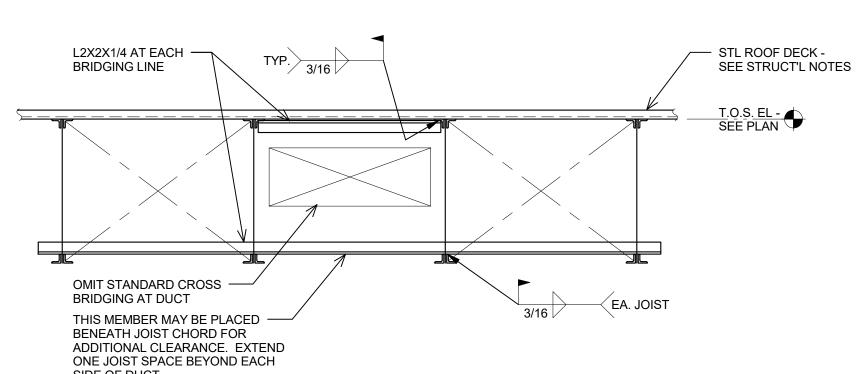
FRAME, SEE SCHED.

METAL ROOF DECK -

MEP DWG'S

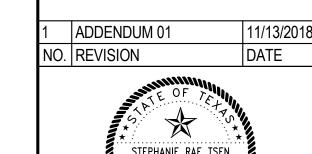


3 TYPICAL ROOF OPENING DETAIL



2 TYPICAL SCHEMATIC ROOF HATCH SUPPORT OPENING FRAMING DETAIL

4 TYPICAL DUCT OPENING AT CROSS BRIDGING DETAIL



JQ + TSEN, LLC
210 BARTON SPRINGS RD., SUITE 250 AUSTIN, TEXAS 78704
512.474.4001

TBPE FIRM F-12778

JQT PROJECT NO: 918009

SHEET NAME:

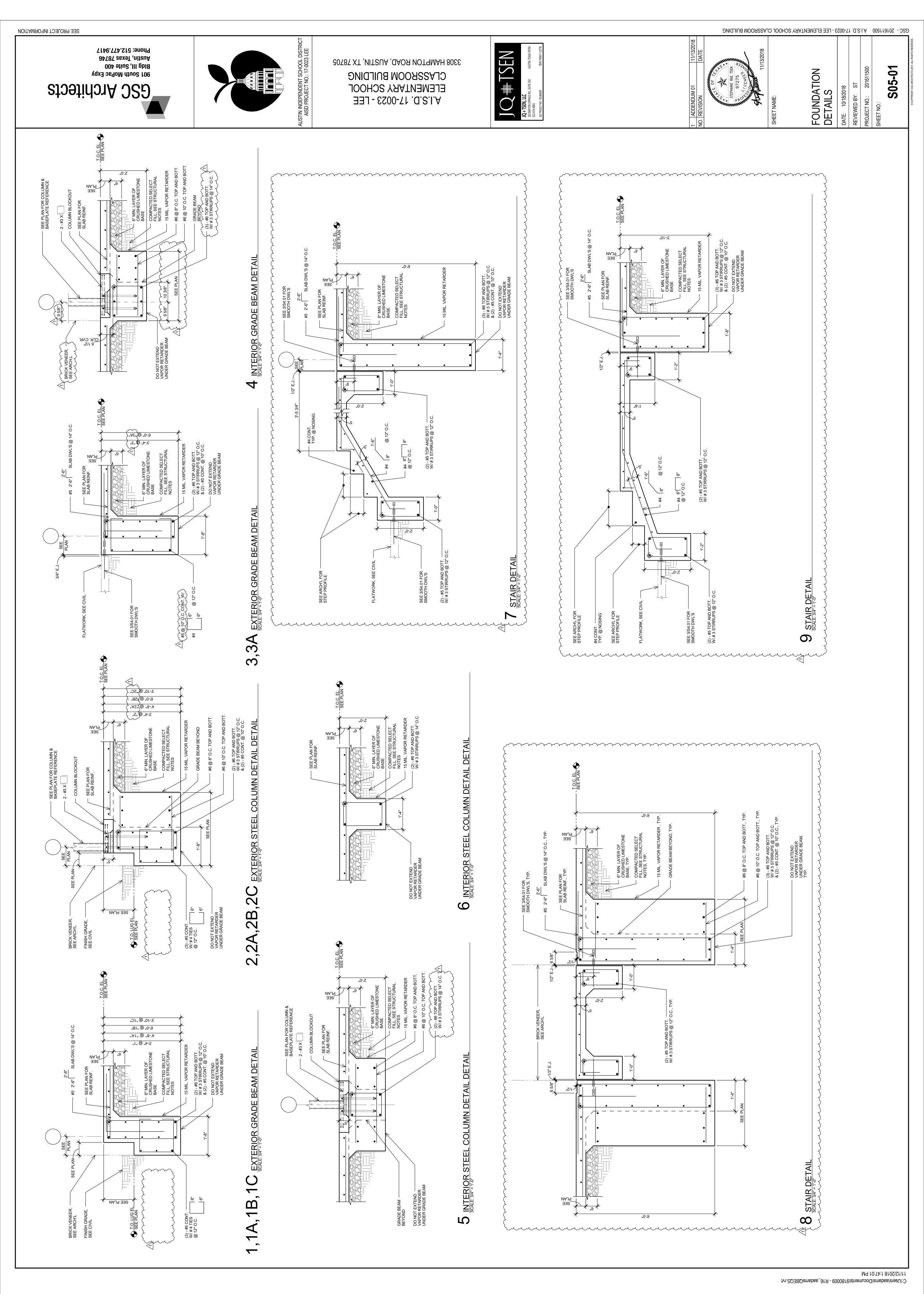
TYPICAL STEEL DETAILS

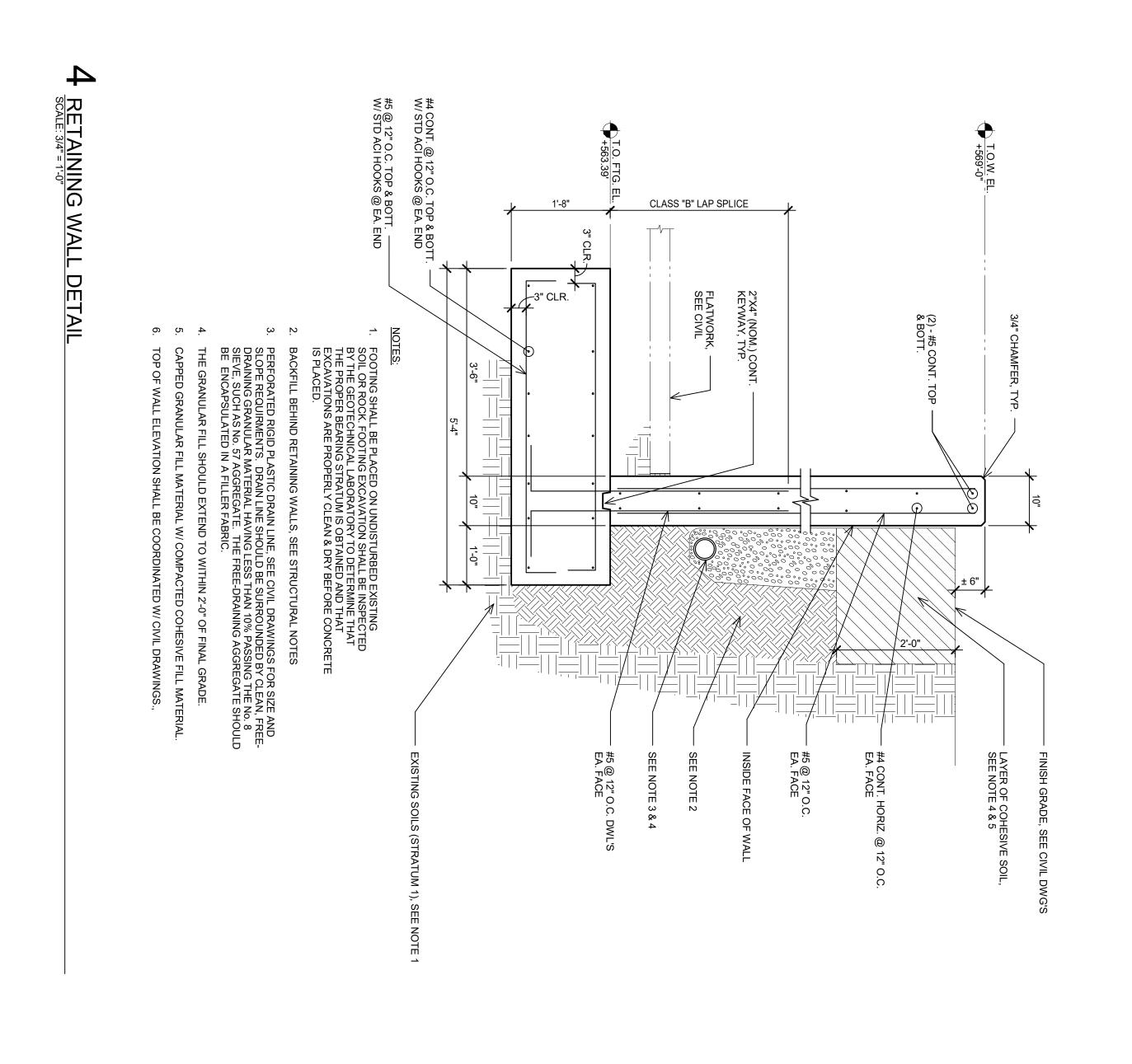
DATE: 11/09/18 REVIEWED BY: Checker PROJECT NO.: 201611500

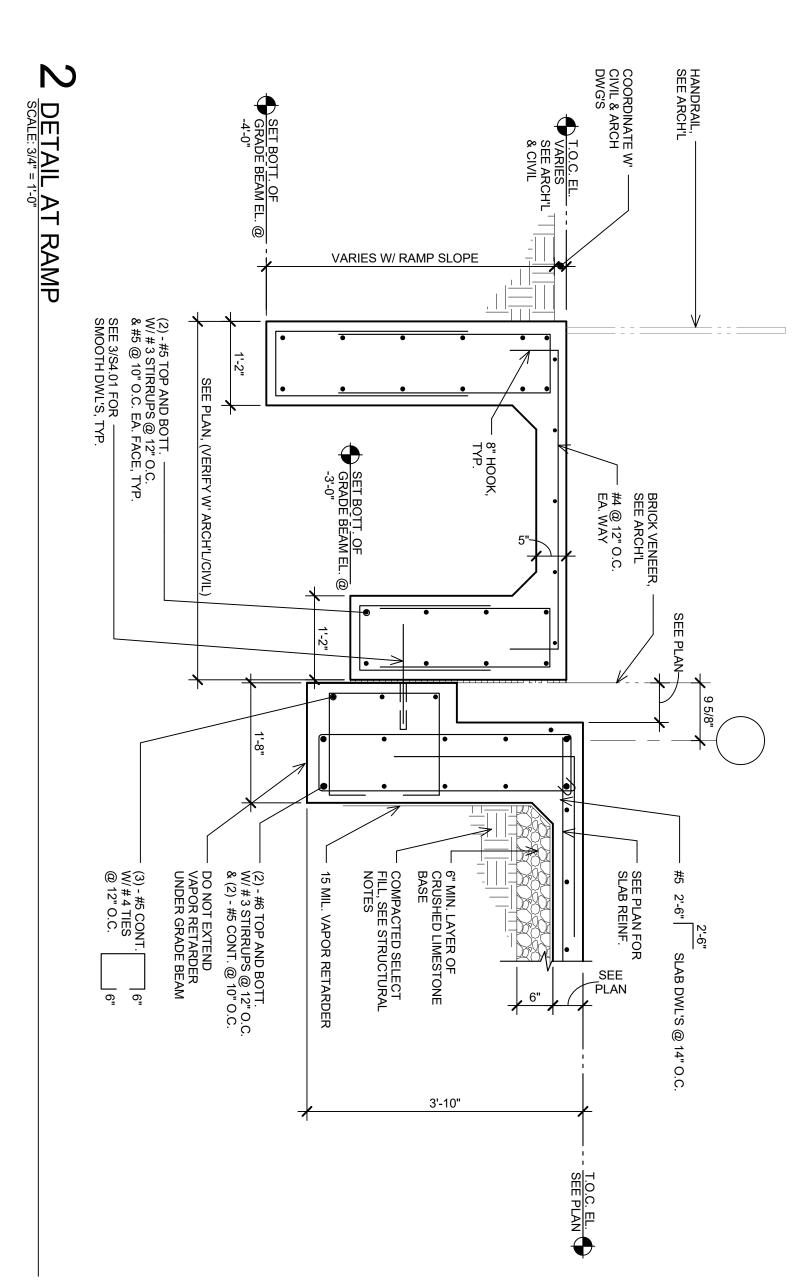
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THIS MEMBER MAY BE PLACED —— BENEATH JOIST CHORD FOR ADDITIONAL CLEARANCE. EXTEND ONE JOIST SPACE BEYOND EACH SIDE OF DUCT

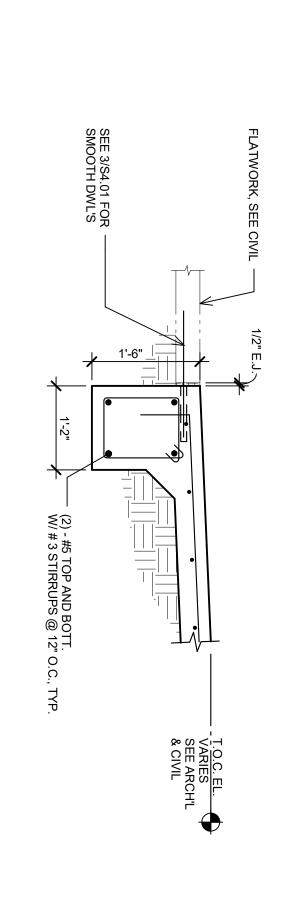




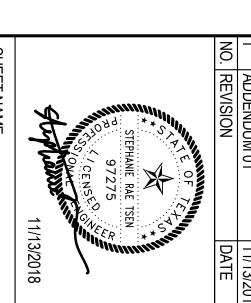


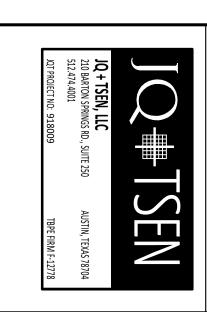
3 DETAIL AT RAMP

DETAIL AT RAMP SCALE: 3/4" = 1'-0"

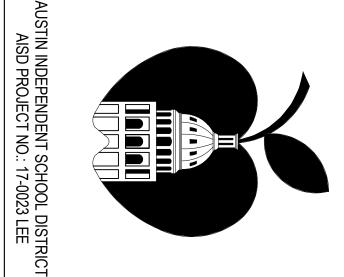


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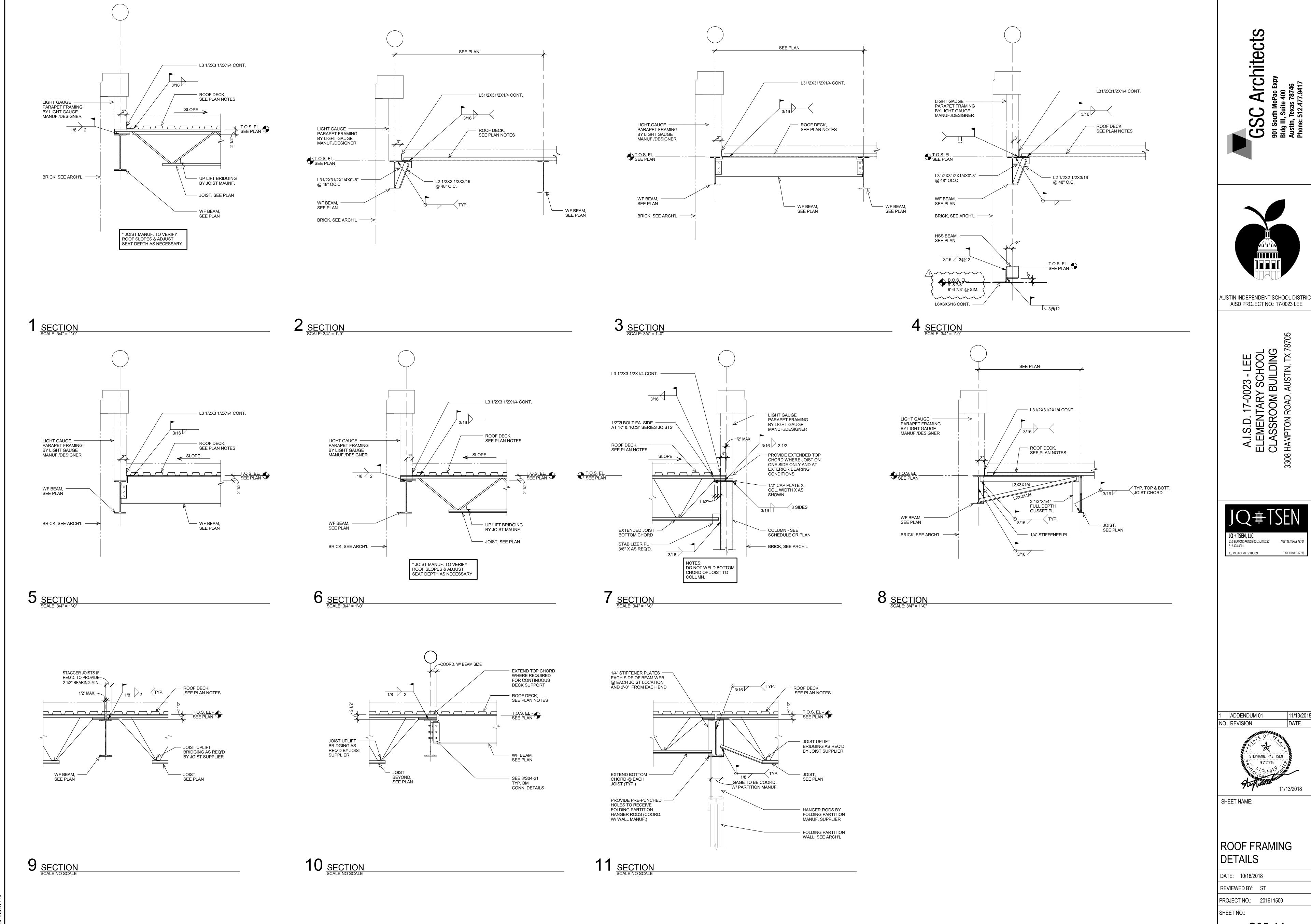




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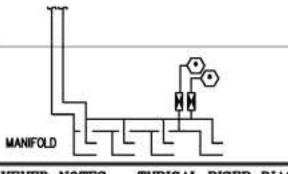
**Architects** 

A.I.S.D. 17-0023 - L ELEMENTARY SCH( CLASSROOM BUILD 8 HAMPTON ROAD, AUSTIN

TBPE FIRM F-12778

11/13/2018

DATE



### <u>KEYED NOTES - TYPICAL RISER DIAGRAM DETAILS</u> (NOT ALL RISERS USED IN EVERY PROJECT.)

- 1) REFER TO PLUMBING FIXTURE SCHEDULE FOR SOIL OR WASTE ROUGH-IN PIPE SIZE. MINIMUM SOIL OR WASTE DRAIN LINE SIZE (EXCEPT AS NOTED) FOR THIS FIXTURE.
- (2) REFER TO PLUMBING FIXTURE SCHEDULE FOR SANITARY VENT ROUGH-IN PIPE SIZE. MINIMUM SANITARY VENT
- BRANCH SIZE (EXCEPT AS NOTED) FOR THIS FIXTURE (3) REFER TO PLUMBING FIXTURE SCHEDULE FOR FIXTURE DRAIN ROUGH-IN PIPE SIZE. MINIMUM FIXTURE DRAIN AND TRAP
- SIZE (EXCEPT AS NOTED) FOR THIS FIXTURE (4) REFER TO PLUMBING FIXTURE SCHEDULE FOR WATER PIPING ROUGH-IN PIPE SIZE. MINIMUM WATER SUPPLY BRANCH SIZE (EXCEPT AS NOTED) FOR THIS FIXTURE.
- (5) WATER HAMMER ARRESTOR INLET; REFER TO ARRESTOR SCHEDULE FOR SIZE. LOCATION SHOWN HERE FOR INDIVIDUAL FIXTURE WILL VARY WHERE INCLUDED AS PART OF PLUMBING CHASE BATTERY OF PIPING. REFER TO RISER DIAGRAMS FOR MANIFOLD LOCATIONS. ARRANGE ALL WATER LINES TO
- (6) WALL CLEANOUTS SHALL BE PROVIDED AT ALL END OF BATTERY OR END OF BRANCH LINE FIXTURES AND WHERE REQUIRED BY PLUMBING CODE OFFICIALS TO ASSURE
- (7) SANITARY VENT PIPES SHALL CONTINUE TO CEILING OR HEADER TOGETHER AT MINIMUM 42" ABOVE FINISHED FLOOR.

COMPLETE ACCESS TO ALL PORTIONS OF DRAIN.

- (8) TRAP PRIMER LINE; SEE PLUMBING DETAILS SHEET. EXTEND AND CONNECT TO FLOOR DRAIN TRAP AS SHOWN.
- (9) AIR GAP FITTING; PROVIDE WHERE REQUIRED BY CODE.

WATER HAMMER ARRESTOR SCHEDULE				
P.D.I. SYMBOL	FIXTURE UNITS	1/2" NPT 3/4" NPT		
(A)	1–11			
B	12-32			
©	33-60	1" NPT		
0	61-113	1 1/4" NPT		
(E)	114-154	1 1/2" NPT		

PIPING RISER DIAGRAMS/TYPICAL RISER DETAILS ILLUSTRATE WATER HAMMER ARRESTORS FOR FIXTURE WATER PIPE OPENINGS. ALL ARRESTORS SHALL BE SIZED AS INDICATED ON DRAWINGS OR IN ACCORDANCE WITH THIS SCHEDULE, WHICHEVER PLACES THE MOST STRINGENT REQUIREMENT.

155-330

PROVIDE ARRESTORS IN ACCORDANCE WITH THE REQUIREMENTS OF PLUMBING DRAINAGE INSTITUTE (PDI) STANDARD PDI-WH-201. THE

USE OF AIR CHAMBERS SHALL NOT BE ACCEPTABLE. WATER HAMMER ARRESTORS SHALL HAVE LIFETIME WARRANTY AND SHALL BE CERTIFIED BY THE MANUFACTURER AS SUITABLE FOR INSTALLATION WITHOUT A REQUIREMENT FOR ACCESS PANELS. NONETHELESS, ACCESS PANELS SHALL BE PROVIDED IF AND AS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ)

## PLUMBING GENERAL PLAN NOTES:

- DRAINAGE PIPING INVERT ELEVATIONS NOTED ON FLOOR PLANS AS: INV. EL.= 0.00' BFF ARE BELOW FINISHED FLOOR TAKEN FROM FIRST FLOOR FINISHED ELEVATION OF 0.00' TO INSIDE BOTTOM OF PIPE.
- (B) PLUMBER SHALL FIELD VERIFY EXACT BUILDING FINISHED FLOOR ELEVATION AND THE INVERT ELEVATION OF ALL DRAIN LINES AT PROPOSED CONNECTING POINTS WITH SITE CIVIL UTILITIES PRIOR TO INSTALLATION OF BUILDING PIPING.
- ALL PIPE PASSING THROUGH FIRE RATED WALLS OR FLOOR SLABS SHALL BE SUPPORTED AT PENETRATION AND OPENINGS SHALL BE SEALED WITH APPROVED, NON-HARDENING, FIRE STOP MATERIALS AS SPECIFIED OR REQUIRED.
- CONTRACTOR SHALL COORDINATE WITH THE STRUCTURAL CONDITIONS AT THE SITE AND PROVIDE PROPER ROUGH-IN CONNECTIONS REQUIRED WITHOUT DAMAGE TO STRUCTURE. WHERE STRUCTURAL MODIFICATIONS ARE NECESSARY,
- CONTRACTOR SHALL FIRST RECEIVE WRITTEN APPROVAL OF THE ARCHITECT AND STRUCTURAL ENGINEER. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD COORDINATING LOCATIONS AND ELEVATIONS OF ALL PLUMBING PIPING WITH OTHER TRADES PRIOR TO INSTALLATION. CORRECTIONS OR RELOCATIONS DUE TO MISALIGNED PIPE SHALL BE PERFORMED IN A TIMELY MANNER AT NO ADDITIONAL COST TO OWNER.

ARCHITECTURAL AND STRUCTURAL DRAWINGS TO FIELD DETERMINE EXACT LOCATIONS OF PLUMBING ROUGH-IN WORK.

- (F) DO NOT SCALE THE PLUMBING DRAWINGS FOR ROUGH-IN WORK. CONTRACTOR SHALL REFER TO THE DIMENSIONED
- G PROVIDE BRACING TO PREVENT AXIAL MOVEMENT FOR ALL STORM DRAINAGE PIPING ABOVE GROUND. PROVIDE RESTRAINTS FOR ALL DRAINAGE PIPING AT ALL CHANGES IN DIRECTION AND AT ALL DIAMETER CHANGES GREATER THAN TWO PIPE SIZES. BRACES, BLOCKS, RODDING AND OTHER PERMANENT METHODS AS PRESCRIBED BY PIPE AND COUPLING MANUFACTURER SHALL BE ACCEPTABLE.
- (H) PROVIDE AND INSTALL CLEANOUTS AT EACH CHANGE OF DIRECTION OF THE BUILDING SANITARY DRAIN, AT MINIMUM 75' INTERVALS ALONG STRAIGHT RUNS OF MAIN DRAIN AND BRANCHES, AT EACH HORIZONTAL CHANGE OF DIRECTION IN SOIL OR WASTE PIPES GREATER THAN 45 DEGREES, AT END OF INDIVIDUAL BRANCH DRAINS LONGER THAN 5'. PROVIDE CLEANOUTS IN ACCORD WITH UNIFORM PLUMBING CODE.
- (1) PROVIDE FITTINGS FOR SANITARY DRAIN WASTE AND VENT PIPING SYSTEMS IN COMPLIANCE WITH UNIFORM PLUMBING CODE. (J) INSTALL EACH WATER HEATER AND ALL PLUMBING EQUIPMENT WITH ADEQUATE CLEARANCES FOR ACCESS BY SERVICE
- PROVIDE ISOLATION VALVES FOR ALL BRANCHES OFF DOMESTIC WATER MAINS. ALL PLUMBING SYSTEM VALVES SHALL BE INSTALLED IN ACCESSIBLE CEILING SPACES. WHERE CEILING IS NOT ACCESSIBLE, OR SPACE IS CONFLICTING, VALVES SHALL BE INSTALLED IN PARTITIONS OR PIPE CHASES. PROVIDE APPROVED PAINTED STEEL HINGED ACCESS PANELS IN LOCATIONS PRE-APPROVED BY THE ARCHITECT. PROVIDE STAINLESS STEEL ACCESS DOORS FOR SHOWER, LOCKER AND LOCKER TOILET ROOM PANELS. PROVIDE MARKINGS ON CEILING TILES ON LOCATIONS OF ISOLATION VALVES.
- (L) THIS CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD COORDINATING LOCATIONS OF ALL SANITARY VENTS UP THROUGH ROOF TO MAINTAIN MINIMUM 15' CLEARANCE TO ANY BUILDING OUTDOOR AIR INLET.

# **GENERAL NOTES - PLUMBING FIXTURES**

PERSONNEL AND WITH PROPER ORIENTATION FOR ELEMENT REMOVALS/REPLACEMENTS.

- MOUNTING HEIGHT ELEVATION OF ALL WALL HUNG OR COUNTER MOUNTED FIXTURES SHALL BE COORDINATED WITH ARCHITECTURAL DRAWINGS PRIOR TO INSTALLATION OF ROUGH-IN WORK.
- FOR ALL FIXTURES AND EQUIPMENT WITH ASSOCIATED TRIM OR COMPONENT ACCESSORIES PROVIDED UNDER SEPARATE DIVISIONS AND REQUIRING PLUMBING CONNECTIONS; THIS CONTRACTOR SHALL FIELD COORDINATE EXACT REQUIREMENTS OF, MAKE PROVISIONS FOR, AND SUPPLY ALL MATERIALS AND LABOR FOR MAKING FINAL CONNECTIONS.
- CONTRACTOR SHALL REFER TO SHOP DRAWINGS OF EQUIPMENT TO BE SUPPLIED FOR FINAL COORDINATION OF ALL ROUGH-IN OPENINGS BEFORE BEGINNING WORK.
- ALL FIXTURE AND EQUIPMENT STUB-OUTS SHALL BE PROVIDED WITH A STOP VALVE, ALL FIXTURE STOPS SHALL BE SOLID BRASS, LOOSE KEY OPERATED, CHROME PLATED (WHERE EXPOSED), AND FITTED TIGHT TO CHROME PLATED BRASS WALL
- ESCUTCHEON PLATES, SUPPLY RISERS SHALL BE STAINLESS STEEL FLEXIBLE CONNECTORS. ALL P-TRAPS WITHIN THE BUILDING, ABOVE GRADE AND EXPOSED TO INSPECTION SHALL BE C.P. ADJUSTABLE, CAST BRASS WITH CLEANOUT PLUG. PROVIDE CAST BRASS SLIP NUTS AND WASHERS, 17 GAGE SEAMLESS TUBULAR BRASS DRAIN TO WALL AND WALL FLANGE. PROVIDE McGUIRE No. 8872C, 1-1/4" P-TRAP FOR ALL LAVATORIES AND SIMILAR FIXTURES PROVIDE McGUIRE No. 8912C, 1-1/2" P-TRAP FOR ALL SINKS AND SIMILAR FIXTURES.
- PROVIDE DEEP SEAL P-TRAP FOR ALL DRAINS OF INFREQUENT USE OR REQUIRING TRAP PRIMER.
- ALL ROUGH IN OPENINGS SHALL BE FITTED WITH CHROME PLATED, WROUGHT BRASS DEEP BELL OR BOX ESCUTCHEON PLATES FITTED TIGHT TO THE PIPE AND FLUSH TO THE WALL STEEL ESCUTCHEON PLATES ARE NOT ACCEPTED.
- ALL EXPOSED BRASS SHALL BE CHROME PLATED.
- D. ALL HANDICAPPED ACCESSIBLE FIXTURES INDICATED WITH 🚨 SHALL BE PROVIDED OF APPROVED TYPES AND WITH REQUIRED CONTROLS AND INSTALLED TO HEIGHTS AND CLEARANCES, AS PRESCRIBED BY AMERICANS WITH DISABILITIES ACT (ADA). FIXTURES SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL ACCESSIBILITY CODE REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONED MOUNTING HEIGHTS AND SPECIFIED CLEARANCE REQUIREMENTS. PROVIDE FIXTURES WITH DEPTHS AT MAXIMUM PERMITTED AND AVAILABLE FOR INTENDED FIXTURE USE.
- ALL WHEELCHAIR LAVATORY AND SINK PIPING WHERE EXPOSED SHALL BE INSULATED. PROVIDE OFFSET DRAIN FITTINGS WHERE REQUIRED TO PROVIDE MINIMUM CLEARANCES.
- 2. ALL SINKS FOR HANDICAPPED USE SHALL BE STAMPED WITH DRAIN OUTLET AT REAR OF BOWL.
- 13. PLUMBING FIXTURES SHALL BE OF WATER CONSERVATION TYPE IN ACCORDANCE WITH PLUMBING CODE REQUIREMENTS FOR WATER
- 4. ORIENT ADA WATER CLOSET FLUSH VALVE WITH OPERATOR ON WIDE SIDE OF ENCLOSURE.
- 15. SEAL ALL SPACES BETWEEN PLUMBING FIXTURES AND MOUNTING SURFACES WITH WHITE LATEX CAULK WIPED SMOOTH AND FLUSH
- 6. Floor drains shall be installed at low points of uniformly sloped floor. Contractor shall field coordinate with STRUCTURAL TO INSURE FLOORS ARE SLOPED UNIFORMLY ACROSS ENTIRE TOILET ROOMS OR OVER AS WIDE AN AREA AS PRACTICAL FOR OPEN AREA FLOOR DRAINS. CONVEX FLOOR SLOPE IN THE IMMEDIATE VICINITY OF THE FLOOR DRAIN IS NOT ACCEPTABLE.

# PLUMBING PIPE MATERIALS SCHEDULE

PIPING SYSTEM	PIPING MATERIAL
SANITARY DRAINS AND VENTS INSIDE BUILDING AND BELOW GROUND	SCHEDULE 40 PVC PIPE
SANITARY DRAINS AND VENTS INSIDE BUILDING AND ABOVE GROUND	SCHEDULE 40 PVC PIPE
SANITARY DRAINS AND VENTS INSIDE BUILDING AT PLENUM CEILING	SCHEDULE 40 PVC PIPE
DOMESTIC HOT & COLD WATER INSIDE BUILDING AND ABOVE GROUND	COPPER, TYPE "L" HARD DRAWN
DOMESTIC HOT & COLD WATER INSIDE BUILDING AND BELOW GROUND	COPPER, TYPE "K" SOFT ANNEALED
DOMESTIC WATER AT ENTRY	COPPER, TYPE "K" HARD DRAWN
NATURAL GAS	BLACK STEEL SCHEDULE 40
FIRE SPRINKLER BELOW GROUND	DUCTILE IRON
FIRE SPRINKLER ABOVE GROUND — 2" AND SMALLER	BLACK STEEL SCHEDULE 40
DOE COOMING ED ADOLE COOLING & A COT AND LADOCE	DI AOV CTECI CONFOUNE AO

BLACK STEEL SCHEDULE 10 (FIRE SPRINKLER ABOVE GROUND - 2-1/2" AND LARGER NOTE: REFER TO SPECIFICATIONS FOR COMPLETE PIPING MATERIAL REQUIREMENTS FOR ASSOCIATED PIPING SYSTEMS.

# PLUMBING FIXTURE SCHEDULE MINIMUM ROUGH-IN SIZES PLAN MARK DESCRIPTION WST & VENT DRAIN CW HW KOHLER NO. K-96059-SS "JUVENILE ULTRA" WHITE V.C. ELONGATED JUVENILE HEIGHT FLOOR MTD. (1.1 GPF) BOWL WITH TOP SPUD, BOLT CAPS, LUSTRA NO. K-4666-CA WHITE OPEN FRONT SEAT LESS COVER AND SLOAN WES 111-1.1 FLUSH VALVE. WATER CLOSET ES-ADA WHITE V.C. ELONGATED STANDARD HEIGHT FLOOR MTD. (1.1 GPF) BOWL WITH TOP SPUD, BOLT CAPS, LUSTRA NO. K-4666-CA WHITE OPEN FRONT SEAT LESS COVER AND SLOAM WES 1/1-1.1 FLUSH VALVE. WATER CLOSET ADULT ADA AMERICAN STANDARD No.0356.421 WHITE V.C. LAVATORY WITH FRONT OVERFLOW AND SINGLE FAUCET HOLES CENTERS FOR SLOAN SOLIS EAF-275-ISM. WITH COVER PLAT GRID DRAIN STRAINER, P-TRAP, STOPS AND SUPPLIES. PROVIDE ZURN FLOOR MOUNTED CONCEALED ARM CARRIER. PROVIDE OFFSET TAILPIECE AND INSULATION KIT FOR ADULT ADA REQUIREMENTS. WITH IMV-1. REFER TO ARCH'L PLANS FOR MOUNTING HEIGHTS. 2" |1-1/2" |1/2" |1/2" L-1 ES-ADA L-2 ADULT ADA FUNTAIN EDF-1 W/BOTTLE FILLER 2" 2" -1/4" 1/2" HALSEY TAYCOR HOUSE HACKER PV WE WALL MOUNT LEAD FREE, BI-LEVEL, WITH PUSH BARS AND WALL HANGER, UNIT TO HAVE CAPACITY OF 8.0 GPH COOLED TO 50°F WITH 80°F AMBIENT TEMP. 3.8 FLA. WIRED FOR 120V/60/1 POWER. PROVIDE ALL STAINLESS STEEL CABINET AND CANE APRON FOR PROJECTING UNITS, TRAP AND SUPPLY AS PER SPECS AND GEN. NOTES AND ZURN, OR EQUAL FLOOR MOUNTED PLATE TYPE CARRIER. RE: ARCH'L PLAN FOR MOUNTING HEIGHT. AND FILTER 2" | 1-1/2" 1/2" | 1/2" | ELKAY NO. DRKAD2822-40 "LUSTERTONE" THREE HOLE DRILL STAINLESS STEEL SINK, REAR MOUNTED FAUCET, FRONT LEFT LEVER HANDLE AND BUBBLER MOUNTED IN FRONT RIGHT AND WITH REAR-CENTER DRAIN. PROVIDE ELKAY LKE413945RS FAUCET, VANDAL RESISTANT SWING SPOUT WITH WATER SAVING FLOW RESTRICTOR AND AERATOR, ELKAY NO. LK-VR-1141-A FLEXI-GUARD SAFETY BUBBLER NO. LK-VR-118 CRID DRAIN STRAINED CLASSROOM

# BUBBLER, NO. LK-VR-18 GRID DRAIN STRAINER, TAILPIECE, CAST BRASS P-TRAP WITH CO, STOPS AND SUPPLIES. PROVIDE INSULATION KIT WHERE EXPOSED. PROVIDE TWV-1. 2" 1-1/2" 1/2" 1/2" ELKAY No. DLR252210 "LUSTERTONE" THREE HOLE PUNCH STAINLESS STEEL SINK WITH OFF SK-3-ADA 4" DEEP SK-2-STD 10" DEEP (ART ROOM SINK) CENTER DRAIN OPENING. PROVIDE AMERICAN STANDARD No.7890.002.342V GOOSE-NECK FAUCET WITH BRASS LEVER HANDLES, AND SWING SPOUT, ELKAY No. LK-18 GRID DRAIN STRAINER, TAILPIECE, PROVIDE SOLIDS TRAP EQUAL TO JOSAM 61001-1/2. PROVIDE TMV-1. ZURN NO.Z-1300 RECESSED NON-FREEZE BRONZE WALL BOX, ANTI-SIPHON HYDRANT, WITH LOOSE KEY OPERATOR AND POLISHED NICKEL BRONZE LOCKING COVER. INSTALL WITH FACE FLUSH AND SQUARE TO FINISHED WALL. SECURE WITH WALL CLAW AND SETSCREW. PROVIDE EXTENSION AS REQUIRED TO PLACE VALVE SEAT IN HEATED ROOM SPACE. WALL HYDRANT ---- 3/4" ---- 3/4" MAPA MPH-24-FP, FREEZELESS ROOF HYDRANT WITH MOUNTING SYSTEM. INSTALL AS PER MANUFACTURER' DETAILS AND RECOMMENDATIONS. ---- ZURN No.ZN-415 CAST IRON DRAIN WITH 6" DIAMETER TYPE 'B' STRAINER WITH VANDAL PROOF SCREWS. SET STRAINER FLUSH WITH FINISH FLOOR. LOOR DRAIN 3\* | 2\* | ---- | ---- | 2" ---- ZURN No. ZN-1901-2-25-K, 12" SQUARE, 8" DEEP FLOOR SINK CAST IRON DRAIN WITH ENAMELED INTERIOR, SEDIMENT BUCKET STRAINER AND SECURED HALF ---- 1/2" ----TRAP PRIMER PROVIDE SLOAN No. VBF-72-A1 FLUSH VALVE VACUUM BREAKER TRAP REFILL SUPPLY. AFFIX TO WATER CLOSET NEAREST TO AND IN SAME ROOM AS DRAIN SUPPLIED. ALL EXPOSED TO BE CHROME PLATED AND RUN SHORT AS POSSIBLE WALL. CONCEALED DRAIN TUBING SHALL BE 1/2" TYPE

--- 1/2" 1/2"

---- SEE PLAN

TRAP PRIMER

MIXING VALVE

ELECTRIC WATER
HEATER

CIRCULATING PUMP

TIME SWITCH

'K' SOFT COPPER SLOPING UNIFORMLY TO DRAIN.

PRECISION PLUMBING PRODUCTS, INC. "OREGON"
 NO.1 FULLY AUTOMATIC TRAP PRIMER VALVE.
 INSTALL CONCEALED IN ACCESSIBLE LOCATION,

BEHIND APPROVED ACCESS PANEL OR EXPOSED IN

MECHANICAL EQUIPMENT AREAS WITH APPROVED TRAP PRIMER DISTRIBUTION UNIT. INSTALL AT

MINIMUM 15" ABOVE FINISHED FLOOR.

1/2" 1/2" POWERS NO. LFe480 ADJUSTABLE POINT-OF-USE THERMOSTATIC MIXING VALVE, ASSE 1070 WITH INLET CHECK STOPS TO LIMIT HOT WATER TEMPERATURE TO MAXIMUM 105" F AT FAUCET OUTLET. SUPPLY CW TO MIXING VALVE FROM CW RISER TO FAUCET. INSTALL BELOW FIXTURE AND HIGH AS POSSIBLE TO PROVIDE NEAT AND CLEAN APPEARANCE

---- 3/4" GRUNDFOS MODEL UP15-42SF, ALL BRONZE

120/1/60 POWER REQUIREMENT.

RHEEM EGSP20, 20 GALLON STORAGE WITH

4.5 KW ELEMENTS WIRED FOR 208 V, 1 PH.
POWER; VERIFY WITH ELECTRICAL CONTRACTOR
PRIOR TO ORDERING EQUIPMENT. UNIT SHALL
HAVE CAPACITY OF 23 GPH RECOVERY AT 80°F.
TEMPERATURE RISE PROVIDE ASME TEMPERATURE
AND PRESSURE RELIEF VALVE AND THERMOMETER
IN HW OUTLET PIPING. EXPANSION TANK EQUAL TO
AMTROL ST-5-C.

FLANGED PUMP. 1/25 HP WIRED FOR 120/60/1
POWER AND FITTED WITH REMOTE HEAT SENSING
AQUASTAT CONTROLLER AND SHUT-OFF TIMER TS-1

TORK ELECTROMECHANICAL 24 HOUR TIME SWITCH POWERED BY A SELF STARTING SYNCHRONOUS MOTOR. INSTALL ON WALL ADJACENT TO CIRCULATING PUMPS. COORDINATE WITH ELECTRICAL AND PROVIDE FOR

# FIRE PROTECTION GENERAL NOTES:

- . THE SCOPE OF THE WORK INCLUDES THE INSTALLATION OF SPRINKLER HEADS INCLUDING PIPE, FITTINGS, HANGERS AND ACCESSORIES. THIS BUILDING IS TO BE FULLY SPRINKLED. THE EXISTING FIRE SPRINKLER MAIN BRANCHES SHALL BE MODIFIED AS REQUIRED TO PROVIDE COMPLETE COVERAGE FOR ALL AREAS WITHIN THE SCOPE OF THIS WORK AND SHALL BE MODIFIED AS NECESSARY TO ACCOMMODATE REQUIREMENTS OF THE NEW PARTITION, NEW LIGHT FIXTURES, SOFFITS, FURR DOWNS, CEILING LAYOUT, ETC.
- 2. FIRE SPRINKLER SYSTEM SHALL PROVIDE COMPLETE AUTOMATIC PROTECTION AND COVERAGE REQUIRED BY THE LOCAL, STATE, JURISDICTIONAL, GOVERNMENTAL AGENCIES AND NFPA 13 (LATEST ADDITION). THE WORK SHALL INCLUDE BUT NOT BE LIMITED TO VALVE SUPERVISORY SWITCHES, FLOW SWITCHES AND COORDINATION WITH THE LANDLORD'S FIRE ALARM SYSTEM.
- Fire sprinkler system shall provide complete automatic protection and coverage. IMMEDIATELY OUTSIDE THE NEW AREA REQUIRED BY THE LOCAL, STATE, JURISDICTIONAL AND GOVERNMENTAL AGENCIES.
- 4. SPRINKLER SYSTEM SHALL BE DESIGNED AND INSTALLED BY A STATE LICENSED FIRE PROTECTION CONTRACTOR IN ACCORDANCE WITH ALL LOCAL, STATE, JURISDICTIONAL, GOVERNMENTAL AGENCIES AND NFPA 13 (LATEST ADDITION). SPRINKLER SYSTEM MUST ALSO BE APPROVED BY LANDLORD AND LANDLORD'S FIRE INSURANCE UNDERWRITER.
- 5. COMPLETE SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED BY THE CONTRACTOR TO OWNER/ARCHITECT, LANDLORD, LANDLORD'S FIRE INSURANCE UNDERWRITER AND FIRE MARSHALL'S APPROVAL.
- 6. ALL SPRINKLER HEADS SHALL BE INSTALLED IN CENTER OF CEILING TILES REGARDLESS OF ANY NECESSITY TO INSTALL ADDITIONAL HEADS TO ACCOMPLISH UNIFORM APPEARANCES OF
- 7. SPRINKLER SYSTEM SHALL CONTAIN NO VALVES DOWNSTREAM OF CONTROL STATION.

THE COMPLETED INSTALLATION BY THIS REQUIREMENT.

- 8. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL MAKE AND PAY FOR ALL TESTS AS MAY BE REQUIRED BY THE AUTHORITIES HAVING JURISDICTION AND SHALL CORRECT ANY DEFECTS INDICATED BY TESTS TO THE SATISFACTION OF THE AUTHORITIES.
- CONTRACTOR IS OFF THE SITE. 10. SPRINKLER CONTRACTOR SHALL REFER TO ARCHITECTURAL CODE SHEET FOR SPECIAL REQUIREMENTS.

9. THE SPRINKLER SYSTEM SHALL BE FULLY CHARGED AND OPERATIONAL WHEN THE

**Archite** 

AUSTIN INDEPENDENT SCHOOL DISTRICT

AISD PROJECT NO.: 17-0023 LEE

ADDENDUM 1 DATE REVISION



SHEET NAME:

PLUMBING **SCHEDULES** 

REVIEWED BY: DBR

DATE: 10/11/2018 Austin, Texas 78757 PROJECT NO.: 201611500 512.637.4393 p 512.637.4396 f

TBPE Firm Registration No. 2234 BR Project Number 175040.000

SHEET NO .: MC AH KH JL --

P02-01

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PLAN NORTH