

**ADDENDUM 04  
TO THE**

**DLR Group**  
100 East Pine Street  
Suite 404  
Orlando, FL 32801  
Phone 407-648-1331  
Fax 407-648-1433

PROJECT MANUAL AND DRAWINGS

FOR

January 14, 2021

FLORIDA GATEWAY COLLEGE  
NEW STEM FACILITY  
149 SE COLLEGE PL.  
LAKE CITY, FLORIDA 32025

DLR Group Project No. 36-17116-00

FOR SEPARATE CONTRACTS

NOTICE TO BIDDERS: Following an additional Owner/Design team review, Addendum 04 is issued to include a Technology Responsibility Matrix and other items to better clarify this scope of work. As a result, we are moving the Bid Date to January 20, 2021 at 2:00 P.M. local time. Questions from bidders are not being accepted at this time; the question period has expired.

NOTICE TO BIDDERS: The Project Manual and Drawings for the above referenced project are hereby amended as follows:

ITEM NO. 1 TECHNOLOGY RESPONSIBILITY MATRIX

ITEM NO. 2 FLORIDA GATEWAY COLLEGE BID DATE REVISION NOTIFICATION

**PROJECT MANUAL**

ITEM NO. 3 TABLE OF CONTENTS

- a. Division 27: Delete Section 274134, "Broadband Distribution System."
- b. Division 28: Delete Sections 281000, "Electronic Security Systems," 281010, "Intrusion Detection Systems," and 282000, "Closed Circuit Television-Video Surveillance System."

ITEM NO. 4 SECTION 001115 – INVITATION TO BID

- a. Delete Section 001115 in its entirety and substitute Section 001115 attached to Addendum 04 dated January 14, 2021. Revision to Bid Dates in Paragraph 1.2: Revise bid date from January 15, 2021 at 2:00 P.M Local Time to January 20, 2021 at 2:00 P.M. Local Time, Paragraph 1.5: Revise bid date from January 15, 2021 at 2:00 P.M to January 20, 2021 at 2:00 P.M. Local Time, and Paragraph 1.6: Revise bid date from Jan 15, 2021 at 2:00 P.M Eastern Time to Jan 20, 2021 at 2:00 P.M. Eastern Time.

ITEM NO. 5 SECTION 002113 – INSTRUCTIONS TO BIDDERS

- a. Delete Section 002113 in its entirety and substitute Section 002113 attached to Addendum 04 dated January 14, 2021. Revision to Bid Dates in Paragraph 1.5 B.: Revise bid date from JANUARY 15, 2021 to JANUARY 20, 2021.

ITEM NO. 6 SECTION 005214 – AGREEMENT FORM – GENERAL CONDITIONS

- a. Revision to Bid Dates in Attachment 10, Paragraph 8: Revise bid date from January 15, 2021 to January 20, 2021. (ONLY Attachment 10 is included in this Addendum)

ITEM NO. 7 SECTION 055202 – ALUMINUM HANDRAILS AND RAILINGS

- a. Delete Section 055202 in its entirety and substitute Section 055202 attached to Addendum 04 dated January 14, 2021. Revision to references of “bronze” finishes to “clear anodized” found in paragraphs 1.2 B and 2.4 C.

**DRAWINGS**

ITEM NO. 8 SHEET M1.1 - MECHANICAL FLOOR PLAN – FIRST LEVEL

- a. Revised requirements for the new connection to the existing campus chilled water loop.

ITEM NO. 9 SHEET M6.5 – MECHANICAL DETAILS

- a. Revised requirements for the new connection to the existing campus chilled water loop. Detail #8 on this sheet has been revised.

END OF ADDENDUM 04

**RESPONSIBILITIES MATRIX - TECHNOLOGY SYSTEMS DESIGN AND CONSTRUCTION**

**FGC STEM Building**

ITEM	SYSTEM	SCOPE	DESIGN RESPONSIBILITY	PROCUREMENT RESPONSIBILITY	CONSTRUCTION OR INSTALLATION RESPONSIBILITY
<b>1.00</b>	<b>VOICE SYSTEM (TELEPHONE COMMUNICATIONS SYSTEM - ALL AREAS)</b>				
	RACEWAYS	Conduit, boxes, cable tray, etc.	A&E	GC	GC
	INSIDE HORIZONTAL WIRING	Structured cabling system	A&E	GC	GC
	OUTSIDE PREMISE WIRING IN PRIVATE CAMPUS	Structured cabling system	A&E	GC	GC
	OUTSIDE PREMISE WIRING FROM SERVICE PROVIDERS	Fiber and copper for services	A&E	SP	SP
	PATCHING OF VOICE LINES	Cross connect & patching at patch panels	OWNER	OWNER	OWNER
	PHONE SWITCH	Equipment selection, sizing, equipment layout, RFP	OWNER	OWNER	OWNER
<b>2.00</b>	<b>DATA SYSTEM (COMPUTER NETWORKS - ALL AREAS)</b>				
	RACEWAYS	Conduit, boxes, cable tray, etc.	A&E	GC	GC
	HORIZONTAL WIRING	Structured cabling system	A&E	GC	GC
	PATCHING OF DATA LINES	Patch cords & patching at patch panel and work areas	OWNER	OWNER	OWNER
	ACTIVE ELECTRONICS (NETWORKING EQUIPMENT, SWITCHES, ROUTERS, SERVERS AND COMPUTERS)	Equipment selection, sizing, equipment layout, RFP	OWNER	OWNER	OWNER
	WAPs	Wireless access points, including installation labor, support materials,	OWNER	OWNER	OWNER
<b>3.00</b>	<b>TELECOM ROOM OUTFIT</b>				
	BACKBOARDS AND WALL SLEEVES	Plywood backboards and conduit sleeves for cables	A&E	GC	GC
	GROUNDING SYSTEM	Ground bar and ground bus	A&E	GC	GC
	RACKS, WIRE MANAGERS AND LADDER TRAY	Racks and all passive elements	A&E	GC	GC
<b>5.00</b>	<b>A/V SYSTEMS</b>				
	RACEWAYS	Conduit, boxes, cable tray, etc.	A&E	GC	GC
	HORIZONTAL WIRING	Wiring for A/V systems	A&E	GC	GC
	DISPLAYS	TVs, projectors, digital signage, etc.	OWNER	OWNER	OWNER
	DISPLAY MOUNTS	Mounting hardware for displays	OWNER	OWNER	OWNER
	ACTIVE ELECTRONICS	A/V system electronics, controls, extenders, etc.	A&E	OWNER	OWNER
	RACKS & CABINETS	Mounts for active A/V electronics	A&E	GC	GC
	PROGRAMMING	Software programming	OWNER	OWNER	OWNER
<b>6.00</b>	<b>OVERHEAD PAGING SYSTEM</b>				
	RACEWAYS	Conduit, boxes, cable tray, etc.	A&E	GC	GC
	HORIZONTAL WIRING	Wiring for paging system	A&E	GC	GC
	ACTIVE ELECTRONICS	Amplifiers, mixers, microphones, etc.	OWNER	OWNER	OWNER
	SPEAKERS	Speakers	A&E	OWNER	OWNER
<b>7.00</b>	<b>ACCESS CONTROL</b>				
	RACEWAYS	Conduit, boxes, cable tray, etc.	A&E	GC	GC
	HORIZONTAL WIRING	Cables for alarms and access control	A&E	GC	GC
	ACTIVE ELECTRONICS	Access control panels, readers, etc	VENDOR	VENDOR	VENDOR
	DOOR HARDWARE	Door position switches, electric strikes, etc.	A&E	GC	GC
	LOCKING DEVICES	Mortise locks, wireless locks, etc	A&E	VENDOR	VENDOR
	SOFTWARE & LICENSING	Access control software	VENDOR	VENDOR	VENDOR
	PROGRAMMING	Software programming	VENDOR	VENDOR	VENDOR
<b>8.00</b>	<b>VIDEO SURVEILLANCE SYSTEM (CCTV)</b>				
	RACEWAYS	Conduit, boxes, cable tray, etc.	A&E	GC	GC
	HORIZONTAL WIRING	Cables for cameras	A&E	GC	GC

**RESPONSIBILITIES MATRIX - TECHNOLOGY SYSTEMS DESIGN AND CONSTRUCTION**

**FGC STEM Building**

ITEM	SYSTEM	SCOPE	DESIGN RESPONSIBILITY	PROCUREMENT RESPONSIBILITY	CONSTRUCTION OR INSTALLATION RESPONSIBILITY
	CAMERAS	Interior & exterior cameras & mounting hardware	VENDOR	VENDOR	VENDOR
	RECORDING SYSTEM (NVR)	Appliances, servers, storage	VENDOR	VENDOR	VENDOR
	SOFTWARE & LICENSING	Viewing software	VENDOR	VENDOR	VENDOR
	PROGRAMMING	Software programming	VENDOR	VENDOR	VENDOR
<b>9.00</b>	<b>EMERGENCY POWER BACKUP (UPS) FOR ACTIVE EQUIPMENT</b>				
	POWER WIRING	Conduit, cables and circuits	A&E	GC	GC
	POWER DISTRIBUTION UNITS	PDUs to be installed in racks and cabinets	A&E	GC	GC
	ACTIVE EQUIPMENT - WORK AREAS	UPS units in work areas	OWNER	OWNER	OWNER
	ACTIVE EQUIPMENT - SMALL UNITS < 10KVA	UPS units in racks or cabinets	OWNER	OWNER	OWNER

NOTES: A&E: ARCHITECT & ENGINEERS  
 GC: GENERAL CONTRACTOR  
 SP: SERVICE PROVIDER  
 VENDOR: A SYSTEM INSTALLER HIRED DIRECTLY BY THE OWNER FOR A SPECIFIC SYSTEM  
 OWNER: OWNER OF THE BUILDING



# FLORIDA GATEWAY COLLEGE

## **Addendum 04**

### **ITB #21-1-01 – New STEM Facility**

**January 14, 2021**

**Submission of bids has been extended per the following:**

Following an additional Owner/Design team review, we are issuing Addendum 04 to include a Technology Responsibility Matrix to better clarify this scope of work. As a result, we are moving the Bid Date to January 20, 2021 at 2:00 P.M. local time.

Updated Zoom meeting invitation:

Topic: Bid Opening for ITB 21-1-01 New STEM Facility

Time: Jan 20, 2021 02:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/85014251464?pwd=Rnl1azJvZmN3TTJFN1JSUEhyeDRiQT09>

Meeting ID: 850 1425 1464

Passcode: 8Maagc

Misty Taylor

Director of Procurement and Contracts

Florida Gateway College

SECTION 001115 - INVITATION TO BID

PART 1 - GENERAL

- 1.1 The District Board of Trustees of Florida Gateway College will receive bids for the following:

Florida Gateway College  
New STEM Facility  
Lake City, Florida  
FGC Bid Number: ITB NO. 21-1-01  
Architect's Project No. 36-17116-00

- 1.2 Date & Time for Receiving Bids: January ~~15~~ 20, 2021, at 2:00 P.M. Local Time

- 1.3 Date, Time and Place for Pre-Bid Conference: All contractors who have prequalified for and are interested in bidding this project are strongly advised to attend the Non-Mandatory Pre-Bid Conference to be held at 10:00 A.M. local time on January 6, 2021 via Zoom meeting.

Scheduled Zoom meeting invitation:

Topic: ITB 21-1-01 New STEM Facility Pre-Bid Conference

Time: Jan 6, 2021 10:00 AM Eastern Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/86440120319?pwd=a09ZSG1PelN4Snpwam55UIBjODIjdz09>

Meeting ID: 864 4012 0319

Passcode: EeBzK2

- 1.4 Place for Receiving Bids: Bids will be received electronically via FGC Dropbox with instructions provided in the Bid Documents.

- 1.5 All bids must be electronically submitted to the FGC Dropbox prior to the specified bid opening date/time. The College will not be responsible for delays that cause a bid to arrive at Florida Gateway College after the designated bid opening date/time.

Bids are for "ITB 21-1-01, FLORIDA GATEWAY COLLEGE, NEW STEM FACILITY, BID OPENING, JANUARY ~~15~~ 20, 2021".

- 1.6 Bids will be opened via Zoom meeting in a public bid opening in electronic format and can be viewed by Bidders.

Scheduled Zoom meeting invitation:

Topic: Bid Opening for ITB 21-1-01 New STEM Facility

Time: Jan ~~15~~ 20, 2021 02:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/85014251464?pwd=Rnl1azJvZmN3TTJFN1JSUEhyeDRiQT09>  
Meeting ID: 850 1425 1464  
Passcode: 8Maagc

1.7 Contractor's Prequalification:

ONLY THOSE PRIME CONTRACTORS WHO HAVE SUBMITTED A QUALIFICATION APPLICATION IN ACCORDANCE WITH THE NOTICE OF INTENT TO PREQUALIFY CONTRACTORS PUBLISHED ON OCTOBER 22, 2020, AND HAVE BEEN ISSUED A CERTIFICATE OF PREQUALIFICATION WILL BE ALLOWED TO BID THIS PROJECT.

1.8 Bid Documents Prepared By and Available From:

DLR Group  
100 East Pine Street, Suite 404  
Orlando, Florida 32801  
(407) 648-1331  
dlrgroup.com

1.9 Project Description:

The New STEM Facility project consist of approximately 26,500 GSF of higher education space consisting of offices, classrooms and science labs. There's a pad ready site since the previous building has already been demolished.

1.10 Right to Waive Irregularities and Technicalities:

- A. Florida Gateway College reserves the right to waive minor irregularities and/or technicalities associated with this solicitation. The Director of Procurement & Contracts of Florida Gateway College shall be the final authority regarding waivers of irregularities and technicalities.

FOR THE DISTRICT BOARD OF TRUSTEES  
OF FLORIDA GATEWAY COLLEGE

Lawrence Barrett, President

END OF SECTION

SECTION 002113 - INSTRUCTIONS TO BIDDERS

PART 1 - GENERAL

1.1 DEFINITION OF TERMS: Whenever in this Project Manual the following term(s) are used, their intent and meaning shall be interpreted as follows:

A. OWNER

DISTRICT BOARD OF TRUSTEES OF FLORIDA  
GATEWAY COLLEGE  
149 S.E. COLLEGE PLACE  
LAKE CITY, FLORIDA 32025-8703

B. BUILDING CODE ADMINISTRATOR

1. The Building Code Administrator shall be licensed by the Department of Professional Regulation as a Building Official.

C. CONTRACTOR

1. Any individual, firm, partnership or corporation entering into a construction Contract to perform as "General" or "Prime" Contractor the Work specified in the Contract Documents.

D. ARCHITECT

1. The firm of DLR Group, 100 East Pine Street, Orlando, Florida, 32801-2761.

E. ENGINEERS

1. North Florida Professional Services, Inc., P.O. Box 3823, Lake City, FL 32056

F. SUBCONTRACTOR

1. Any individual, firm, partnership or corporation entering into an agreement to furnish materials and labor for the work specified and described in the Contract Documents. Subcontractors must have a current occupational license for the State of Florida, as applicable.

G. MANUFACTURER OR SUPPLIER

1. Any individual, firm, partnership or corporation entering into an agreement to furnish materials only for the work specified and described in the Contract Documents.



H. BIDDER

1. Any individual, firm, partnership or corporation submitting a Bid Proposal for the work contemplated.

I. PROJECT

1. All work specified and described in the Contract Documents.

J. SURETY

1. A Labor and Material Payment Bond, Performance Bond, and Bid Bond is required for this project.

K. ADDENDA

1. Written and/or graphic revisions issued prior to the award and execution of the Contract which modify and/or interpret the Contract Documents by additions, deletions, clarifications or corrections. Addenda will become part of the Contract Documents when the Contract is awarded and executed.

L. CONTRACT DOCUMENTS

1. Contract Documents consist of the following:
  - a. The executed Agreement between Owner and Contractor
  - b. Conditions of the Contract (General and Supplementary Conditions) and Attachments thereto
  - c. Performance Bond
  - d. Labor and Material Payment Bond
  - e. Project Manual
  - f. Drawings
  - g. Instructions to Bidders (Bid Package ITB 21-1-01)
  - h. Addenda issued prior to execution of the Contract
  - i. Modifications issued after execution of the Contract
  - j. Bid Proposal submitted by the Contractor and accepted by the Owner and post-bid modifications, if any.

M. BID PROPOSAL

1. The forms, including all items related thereto, envelopes, and all other information pertaining to the entire bid, complete and properly executed, which the Bidder has submitted as his Bid Proposal for the work contemplated.
  - a. Bid Amount: The sum stated in the Bid Proposal for which the Bidder offers to perform the work described in the Contract Documents as the base, to which work may be added to or deducted from for sums stated in Alternate Bids.
  - b. Alternate Bid: An amount stated in the Bid Proposal to be added to or deducted from the amount of the Base Bid if the corresponding change in

Project scope or materials or methods of construction described in the Contract Documents is accepted.

- c. Unite Price: An amount stated in the Bid Proposal as a price per unit of measurement for materials and labor or services as described in the Contract Documents.

N. DRAWINGS

1. The official plans and other Drawings or reproductions thereof, pertaining to the work to be performed.

O. PROJECT MANUAL

1. Written and graphic data bound together for Architectural and MEP Specifications.

P. BUILDING PERMIT

1. Issued to the Contractor after all requirements of the application process have been satisfied and compliance with the appropriate Codes and Standards has been achieved. Construction Plans and Specifications shall be submitted for review by the Building Code Administrator and construction cannot begin until a Building Permit has been issued by the Building Code Administrator.

Q. CONTRACT

1. The Owner-Contractor Agreement consisting of: The agreement text preceding the signature of the parties, the Certificates of Insurance and any other documents as may be required by the Contract Documents.

R. APPLICATION FOR PAYMENT

1. Statement of amounts claimed by Contractor as payments due on account of work performed or materials suitably stored.

S. ARCHITECT'S ACCEPTANCE

1. Architect's acknowledgement that a material is acceptable or in accordance with Contract requirements.

T. RECORD DRAWINGS

1. Drawings made during progress of construction illustrating how various elements of the work were actually installed.

U. CHANGE ORDER

1. A work order, issued after the award and execution of the Contract, signed by the Owner, authorizing a change in the scope of the work during construction.

V. FIELD REPRESENTATIVE

1. A person in the field designated to represent a responsible party during construction.

W. SCHEDULE OF VALUES

1. A statement furnished to the Owner by the Contractor reflecting the amounts to be allotted for the principal parts of the work. It is to serve as a guide for reviewing the Contractor's periodic Application for Payment.

X. SHOP DRAWINGS AND PRODUCT DATA

1. Drawings, diagrams, illustrations, schedules, performance charts, brochures and other data prepared by the Contractor or any Subcontractor, manufacturer, supplier or distributor, which illustrate how specific portions of the work shall be fabricated, erected and/or installed.

Y. SAMPLES

1. Physical examples furnished by the Contractor which illustrate materials, equipment or workmanship, and which establish standards by which the work will be judged.

Z. TIME OF COMPLETION

1. The number of calendar days, or the actual date, by which the work is required to be completed.

1.2 EXAMINATION

A. DRAWINGS, PROJECT MANUAL AND PROJECT SITE AND PRE-BID CONFERENCE

1. Bidders are required to examine carefully the Drawings, Project Manual and any issued Addenda to become thoroughly familiar with all work to be performed under the Contract.
2. Bidders are encouraged to visit the project site to become familiar with the local conditions that may in any manner affect the work to be performed, and the equipment, materials and labor required. Project site visits will be by appointment only.
3. Pre-Bid Conference: As indicated on the Advertisement for Bids, All Bidders who have prequalified for and are interested in bidding this project are strongly advised to attend the Non-Mandatory Pre-Bid Conference on the date, time and place set forth in the Advertisement for Bids. This Pre-Bid Conference will be held in order to more fully explain the scope of work covered by the Contract Documents and to allow questions to be asked by the Bidders. If deemed necessary, Owner will then issue an Addendum to the Drawings and Project Manual as necessary to change, modify or explain any decisions or other information that comes out at this Pre-Bid Conference.

### 1.3 CLARIFICATION TO BIDDERS

#### A. CLARIFICATION

1. No oral clarification in regard to the meaning of Drawings and Project Manual and no oral instructions will be given before the award and execution of the Contract. Discrepancies, omissions or doubts as to the meaning of Contract Documents shall be submitted in writing to the Director of Procurement and Contracts at [misty.taylor@fgc.edu](mailto:misty.taylor@fgc.edu) for interpretation not later than January 7, 2021. Bidders shall act promptly and allow three business days for a reply to reach them before the submission of their bids.

### 1.4 FAMILIARITY WITH LAWS

#### A. KNOWLEDGE OF LAWS

1. The Bidder shall be familiar with all Federal, State, and Local laws, ordinances, codes, rules, and regulations that in any manner affect the Bid or the work under this Contract. Lack of knowledge on the part of the Bidder will not provide relief from responsibility of compliance with the above, whether or not specifically called for or shown in the Contract Documents.

### 1.5 PREPARATION AND SUBMISSION OF BIDS

#### A. PREPARATION

1. Each Bidder shall use the Bid Proposal Form included herein, indicating base bid amount and alternate bid amount(s) in the proper spaces. Any erasures or other corrections in the Bid Proposal must be explained or noted over the signature of the Bidder. Bid Proposals containing any conditions, omissions, unexplained erasures, alterations, items not called for, or irregularities of any kind may be rejected by the Owner.
2. Each Bid Proposal must give the full business address of the Bidder and state whether it is an individual, corporation or partnership. Bid Proposals by a corporation, must be signed with the legal name and seal of the corporation, followed by the name of the State of its incorporation, and by the manual signature and designation of an officer, agent, or other person authorized to bind the corporation, and if the person signing is not the President, be accompanied by a duly authenticated document evidencing the authority to the officer or agent. Bid Proposals by partnerships shall show the names of all partners and must be signed in the partnership name by one of the partners. The partnership signature shall be followed by the manual signature of the partner signing. In every case, the name of the person signing and his designation shall be typed or printed below his signature. Bid Proposals by a person who affixes to his signature the word "President", "Secretary", "Agent", or other designation without disclosing his principal may be held to the terms of the Bid Proposal by the individual so signing. Satisfactory evidence of the authority of an officer, agent, attorney, or other person signing for a corporation, and agent, attorney, etc., signing for a partnership or an individual shall be furnished.

B. SUBMISSION

1. Bid Proposals with all items related thereto, shall be enclosed in a sealed envelope which shall be marked: "ITB 21-1-01 NEW STEM FACILITY, BID OPENING, JANUARY 15 ~~20~~, 2021," and electronically submitted to the FGC Dropbox. Failure to comply with these requirements shall be cause for rejection of the Bid Proposal. Instructions on submitting Bid Proposals to the FGC Dropbox is listed on Attachment 10.
2. Each bidder shall submit a list of the Subcontractors per the following:
  - a. A list of names of the Subcontractors or other persons or organizations, including those who are to furnish materials for equipment fabricated to a special design, proposed for such portions of the work as may be designated in the Contract Documents, or if no portions are so designated, the names of the Subcontractors proposed for the principal portions of the work. If the Contractor uses his own work force for any of the above, he must insert the names of his firm in the appropriate blank and be properly licensed as applicable for the specific type work listed.
  - b. Refer to Section 00 4300.

1.6 DISQUALIFICATION OF BIDDERS

A. DISQUALIFICATION

1. More than one Bid Proposal from an individual, firm, partnership, corporation, or association under the same or different names will not be considered. Reasonable grounds for believing that a Bidder is interested in more than one Bid Proposal for the same work will cause rejection of all Bid Proposals in which such Bidders are believed to be interested. Any or all Bid Proposals will be rejected if there is reason to believe that collusion exists among the Bidders, and no participants in such collusion will be considered in future Bid Proposals for the same work. Bid Proposals in which the prices obviously are unbalanced may be rejected.

1.7 BID GUARANTEE

- A. Each bid must be accompanied by a bid security in the form of either a Certified Check, Cashier's Check, Treasurer's Check, Bank Draft or Bid Bond in the amount of, not less than, five percent (5%) of the maximum amount bid as a guarantee that the Bidder, if awarded the contract, will enter into a written contract with the District Board of Trustees of Florida Gateway College in accordance with the accepted bid and give a surety bond satisfactory to the District Board of Trustees of Florida Gateway College equal to one hundred percent (100%) of the Contract Price. Bidders withdrawing their bids within thirty (30) days after the date of the bid opening shall forfeit their bid security.

1.8 RECEIPT AND OPENING OF BIDS

A. RECEIPT AND OPENING

1. Bid Proposals must be electronically submitted to the FGC Dropbox prior to the specified bid opening date/time. The College will not be responsible for delays that cause a Bid Proposal to arrive at Florida Gateway College after the designated bid opening date/time, and no Bid Proposals received thereafter will be considered. Bid Proposals will be opened via Zoom meeting publicly at the time and place stated in the Advertisement for Bids. No responsibility will be attached to the Owner or any Owner's Agent for the premature opening of a Bid Proposal not properly addressed and identified.

1.9 BID MODIFICATIONS

A. MODIFICATIONS

1. Bid modifications will be accepted from Bidders provided the modification(s) is (are) clearly written and signed and dated by an authorized agent of the Bidder, at the place where Bid Proposals are to be received, and if received prior to the Bid Opening. Bid modifications will be read prior to opening formal Bids.

1.10 WITHDRAWAL OF BIDS

A. WITHDRAWAL

1. Bids may be withdrawn on request received from Bidders prior to the time fixed for Bid opening.

1.11 AWARD OF CONTRACT

A. AWARD OF CONTRACT

1. The Construction Contract will be awarded as soon as possible to the lowest responsible Bidder, provided his Bid Proposal is reasonable and it is to the best interest of the Owner to accept it.

B. RIGHT TO WAIVER

1. The Owner reserves the right to waive any informality in bids received when such waiver is in the best interest of the Owner.

C. FURTHER REQUESTS

1. Each Bidder shall, if so requested by the Owner, present evidence of his experience, qualifications and ability to carry out the terms of the Contract, including a financial statement.

1.12 REJECTION OF BIDS

A. REJECTION

1. The Owner reserves the right to reject any and all Bid Proposals when rejection is in the best interest of the Owner and to reject the Bid Proposal of a Bidder who, in the opinion of the Owner, is not in a position to perform the Contract.

1.13 COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK

A. TIME OF COMPLETION

1. Contractor shall execute the Owner/Contractor Contract within seven calendar days from date of receipt and return to the Owner for his execution, along with all required bonds and insurance certificates. Contractor shall begin within seven calendar days from date of receipt of a letter of intent, Building Permit and Notice to Proceed issued by the appropriate authority.
2. All work shall be Substantially Complete by March 25, 2022, and Finally Complete 90 days after Substantial Completion.
3. Contractor shall maintain sufficient labor and supervision on the project site until all work have been completed, including Architect's Substantial Completion Review Punch List. A Final Review with the Owner's Representative, Architect, Engineers and Contractor will be scheduled upon completion of all items on all A/E Punch Lists.

B. COMMENCEMENT

1. At the Preconstruction Conference, the Owner and Architect shall make arrangements with the Contractor for the assignment of staging area to be used at the site for storage of materials, parking, sheds, trailers, etc. During the construction, the Contractor shall maintain the areas in neat condition. The storage of materials for use in construction of this Contract shall in no way interfere with, or make hazardous, existing walkways, driveways, etc. Existing trees and landscaping shall be protected from injury.

1.14 SUBSTANTIAL COMPLETION

A. DEFINITION

1. The term Substantial Completion shall mean that all materials required by the Contract Documents are incorporated in the project, that all labor has been performed and that the work is ready for review. It shall not mean the inclusion of such minor alterations and patching as the Substantial Completion Review shall disclose.

1.15 FINAL COMPLETION

A. FINAL COMPLETION

1. If, upon Final Review of the project site, more than ten items on the A/E Substantial Completion Review Punch Lists are found to be uncorrected, the Architect reserves the right to terminate the Final Review at the site, until such time as all items on the Punch Lists are completed.

1.16 LIQUIDATED DAMAGES

- A. Bidders are notified that the following paragraphs will be inserted in the Contract: "If project is not Substantially Completed, according to the definition of Substantial Completion, or within such further time, if any, as in accordance with the provisions of the Contract Documents shall be allowed for such Substantial Completion, the Contractor shall pay to the Owner as liquidated damages for such delay and not as a penalty, one thousand dollars for each and every calendar day elapsing between the date fixed for Substantial Completion and the date such Substantial Completion shall have been fully accomplished. It is also hereby agreed that if the project is not Finally Completed, in accordance with the requirements of the Contract Documents, the Contractor shall pay to the Owner as liquidated damages for such delay, and not as a penalty, One Thousand dollars per calendar day."
- B. Said Liquidated Damages shall be payable in addition to any excess expenses or costs payable by the Contractor to the Owner under the provisions of the General Conditions, and Supplementary Conditions and shall not exclude the recovery of damages by the Owner under other provisions of the Contract Documents, except for Contractor's delays.
- C. The provision for Liquidated Damages for delay shall in no manner affect the Owner's right to terminate the Contract as provided in the General Conditions, or elsewhere in the Contract Documents, and the Owner's exercise of the right to terminate shall not release the Contractor from his obligation to pay said Liquidated Damages in the amounts stipulated herein. Said Liquidated Damages shall be payable in addition to any excess expenses or costs payable by the Contractor in the General Conditions and shall not exclude the recovery of damages by the Owner under other provisions of the Contract, except for Contractor's delays.

1.17 PERFORMANCE BOND

- A. A Performance Bond is required for one hundred percent (100%) of the contract amount of this project from the successful bidder.

1.18 LABOR AND MATERIAL PAYMENT BOND

- A. A Labor and Material Payment Bond is required for one hundred percent (100%) of the contract amount of this project from the successful bidder.



1.19 REQUIREMENTS FOR CERTIFICATES OF INSURANCE RELATED REQUIREMENTS

- A. Refer to Supplementary Conditions for specific requirements.

1.20 EXECUTION OF CONTRACT

A. SIGNATURES

1. If the Contractor be an individual, the Contract shall be signed with his manual signature.
2. If the Contractor be a firm or company owned by an individual, the Contract shall be executed in the name of the firm or company by the manual signature of the Owner.
3. If the Contractor be a partnership, the Contract shall be executed in the name of the partnership by the manual signature of a partner or partners.
4. If the Contractor be a corporation, the Contract shall be executed in the name of the corporation and shall bear the corporate seal. It may be signed for the corporation by the President and attested by the Secretary; if signed for the corporation by any officer other than the President, the signature of each officer signing shall be attested by the Secretary, and the executed Contract shall be accompanied by a duly authenticated document, bearing the seal of the corporation, quoting the section of the By-Laws of the corporation authorizing the Board of Directors to designate such officer, and a copy of the Resolution designating and authorizing him to execute on behalf of the corporation. That document must contain a statement that the authority is in effect on the date of execution of the Contract, and may not be dated earlier than the date of the execution of the Contract. The same officer may not execute the Contract and authenticate the document of authority.

1.21 INTENT

- A. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the work. The Contract Documents are complementary, and what is required by any one element of the Contract Documents shall be binding as if required by all.

1.22 PRECEDENCE

- A. Supplementary General Conditions shall govern over the General Conditions; but neither the Supplementary General Conditions nor the General Conditions shall govern over the basic Owner/Contractor Contract. Addenda and Change Orders supersede only affected portions of the Construction Documents.
- B. Should any provision of the Florida Statutes or other State Regulations conflict with any of the General Conditions, the provisions of the State requirements shall govern; where there are no State requirements involved, the General Conditions shall govern.

- C. Should the Construction Documents (Drawings and Specifications) conflict on any point, the work shall be performed according to the Specifications, in-so-far as the quality of materials and workmanship is concerned; but the Drawings shall govern in-so-far as the form or extent of the work is concerned. Should an item be shown on the Drawings, but not specified, or specified but not shown on the Drawings, Contractor shall provide the item as "standard of the industry", or as specified insofar as quality is concerned.
- D. Should details and schedules shown on the Drawings conflict on any point, the schedules shall prevail. Large scale details shall prevail over small-scale details, plans or elevations. Figure dimensions shall prevail over scaled dimensions.

END OF SECTION 002113

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**SWORN STATEMENT – THE FLORIDA TRENCH SAFETY ACT**

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR BY AN OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. This Sworn Statement is submitted with ITB 21-1-01
2. This Sworn Statement is submitted by \_\_\_\_\_ whose business address is \_\_\_\_\_ and, if applicable, its Federal Employer Identification Number (FEIN) is \_\_\_\_\_. If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement \_\_\_\_\_.
3. Name of individual signing this Sworn Statement is: \_\_\_\_\_.  
Whose relationship to the above entity is: \_\_\_\_\_.
4. The Trench Safety Standards that will be in effect during the construction of this project shall include, but are not limited to: s.553.60 et seq, Florida Statutes, TRENCH SAFETY ACT, and OSHA RULES AND REGULATIONS 29 CFR 1926.650 Subpart P, effective October 1, 1990.
5. The undersigned assures that the entity will comply with the applicable Trench Safety Standards and agrees to indemnify and hold harmless the Owner and Engineer, and any of their agents or employees from any claims arising from the failure to comply with said standard.

6. The undersigned has appropriated the following costs for compliance with the applicable standards:

	Trench Safety Measure (Description)	Unit of Measure (LF,SY)	Unit Quantity	Unit Cost	Extended Cost
a.	_____	_____	_____	\$ _____	_____
b.	_____	_____	_____	\$ _____	_____
c.	_____	_____	_____	\$ _____	_____
d.	_____	_____	_____	\$ _____	_____

7. The undersigned intends to comply with these standards by instituting the following procedures:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

THE UNDERSIGNED, in submitting this Bid, represents that they have reviewed and considered all available geotechnical information and made such other investigations and tests as they may deem necessary to adequately design the trench safety system(s) to be utilized on this project.

\_\_\_\_\_  
(AUTHORIZED SIGNATURE/TITLE)

STATE OF FLORIDA  
COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me, by means of  physical presence or  online notarization this \_\_\_\_ day of \_\_\_\_\_ 2020, by \_\_\_\_\_  
who  is personally known to me or  has produced a Florida driver's license as identification.

\_\_\_\_\_  
Notary Public, State of Florida

(NOTARIAL SEAL)

My Commission Expires:

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DRUG FREE WORKPLACE PROGRAM REQUIREMENTS

The Contractor will be required to have a Drug Free Workplace Program implemented in his business. In order to have a Drug Free Workplace Program, a business shall:

- 1) Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
- 2) Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
- 3) Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection one above.
- 4) In the statement specified in subsection one, notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893, or of any controlled substance law of the United States or any state, for a violation occurring in the workplace, no later than five days after such conviction.
- 5) Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program, if such is available in the employee's community, by any employee who is so convicted.
- 6) Make a good faith effort to continue to maintain a drug free workplace through implementation of this section.

As the person authorized to sign this statement, I certify that this firm complies fully with the above requirements.

\_\_\_\_\_  
DATE

\_\_\_\_\_  
CONTRACTOR'S SIGNATURE

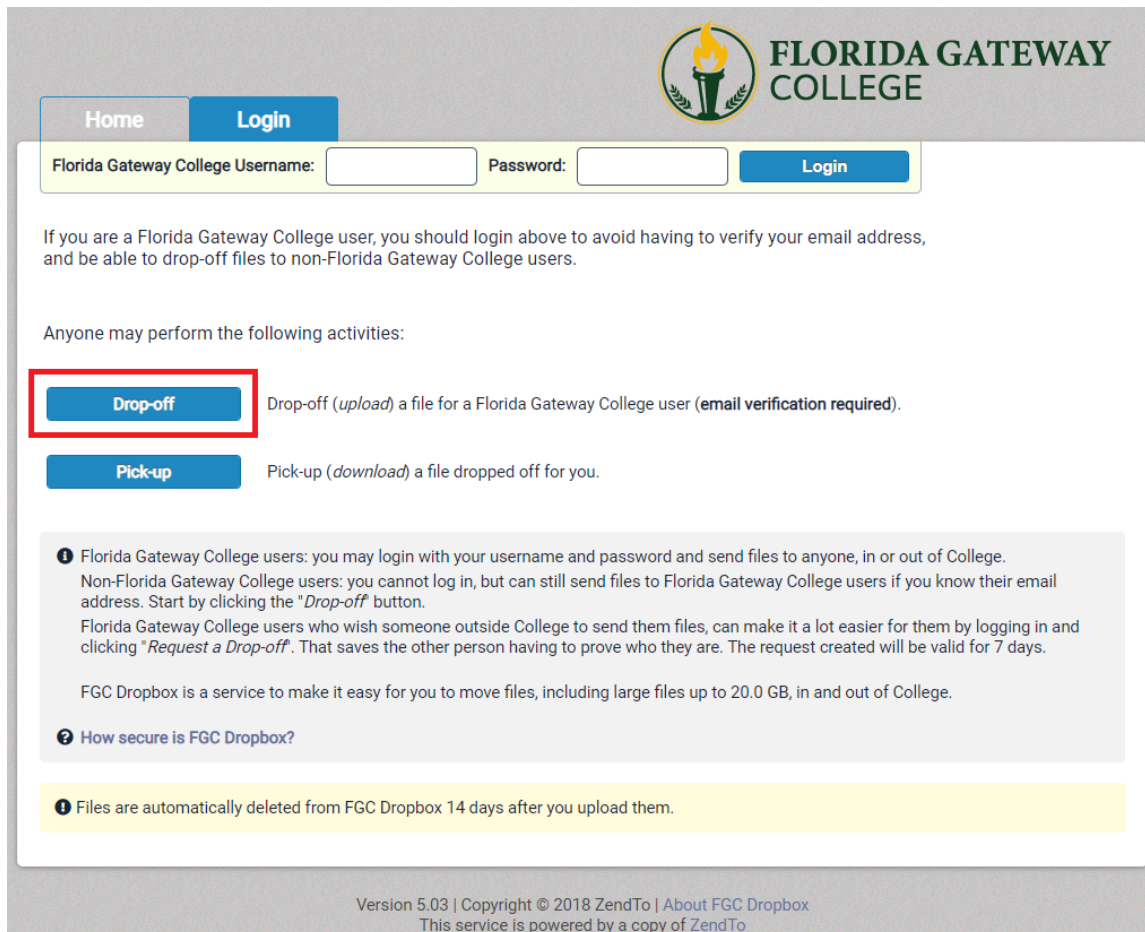
DRUGFREE.REQ

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ATTACHMENT NO. 10

### Submitting Bid Proposals via FGC Dropbox

1. In a web browser, navigate to <https://dropbox.fgc.edu/>.
2. Click the **Drop-off** button.



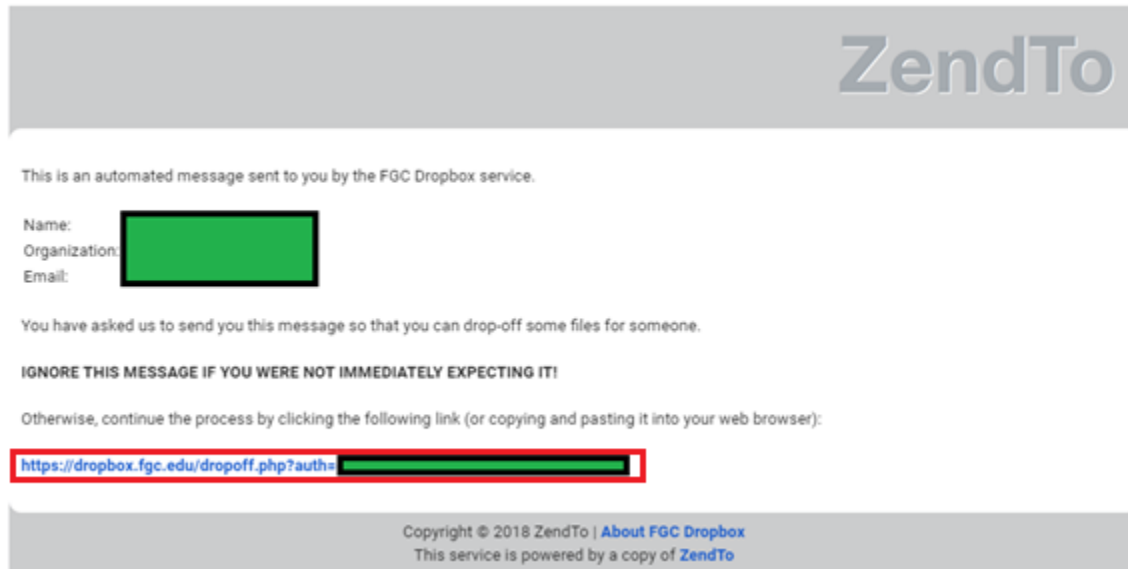
The screenshot shows the Florida Gateway College Dropbox interface. At the top right is the college logo and name. Below it are 'Home' and 'Login' buttons. A login form contains fields for 'Florida Gateway College Username:' and 'Password:', followed by a 'Login' button. A message states: 'If you are a Florida Gateway College user, you should login above to avoid having to verify your email address, and be able to drop-off files to non-Florida Gateway College users.' Below this, it says 'Anyone may perform the following activities:'. Two buttons are listed: 'Drop-off' (highlighted with a red box) and 'Pick-up'. The 'Drop-off' button description is 'Drop-off (*upload*) a file for a Florida Gateway College user (**email verification required**).'. The 'Pick-up' button description is 'Pick-up (*download*) a file dropped off for you.' A grey information box contains details for Florida Gateway College users and non-users, and a note that the request is valid for 7 days. A yellow warning box at the bottom states: 'Files are automatically deleted from FGC Dropbox 14 days after you upload them.' The footer includes 'Version 5.03 | Copyright © 2018 ZendTo | About FGC Dropbox' and 'This service is powered by a copy of ZendTo'.



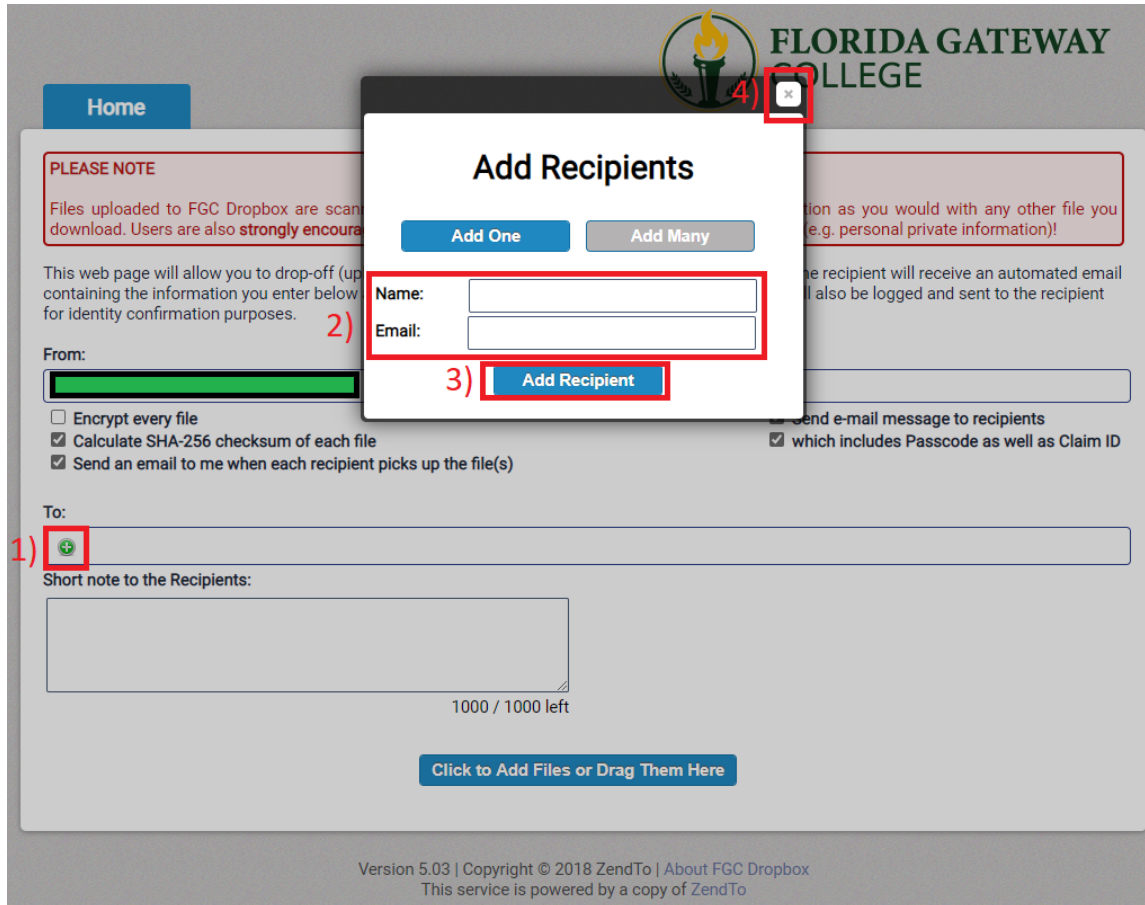
3. On the page that follows, 1) enter your name, organization, and email address; 2) complete the reCAPTCHA; and 3) click the **Send confirmation** button.

The screenshot shows a web form for Florida Gateway College. At the top right is the college's logo and name. Below the logo is a blue 'Home' button. The main content area is titled 'Information about the Sender'. It contains a question 'Have you been given a "Request Code"?' with 'Yes' and 'No' buttons. Below this is a red-bordered box labeled '1)' containing three input fields: 'Your name: (required)', 'Your organization:', and 'Your email address: (required)'. Below the input fields is the text 'To confirm that you are a *real* person (and not a computer), please complete the quick challenge below:'. This is followed by a red-bordered box labeled '2)' containing a reCAPTCHA widget with the text 'I'm not a robot' and a 'reCAPTCHA Privacy - Terms' link. Below the reCAPTCHA is the text 'I now need to send you a confirmation email. When you get it in a minute or two, click on the link in it.' This is followed by a red-bordered box labeled '3)' containing a blue 'Send confirmation' button. At the bottom of the page, there is a footer with the text 'Version 5.03 | Copyright © 2018 ZendTo | About FGC Dropbox This service is powered by a copy of ZendTo'.

4. You will receive an email like the one below at the address you specified in the previous step. Navigate to the link provided in the email.



5. On the linked page, 1) click the add button (green and white plus sign); 2) enter the recipient's information. **Name:** Misty Taylor **Email:** [misty.taylor@fgc.edu](mailto:misty.taylor@fgc.edu); and 3) click the **Add Recipient** button; and 4) click the close button on the Add Recipients modal dialog.



- IMPORTANT:** To provide assurance that the submitted files cannot be opened except by College personnel at the appropriate time, 1) check the **Encrypt every file** checkbox; 2) carefully enter a secure passphrase; and 3) click the **OK** button. You **MUST** be able to provide the passphrase to College personnel at the appropriate time (when your files are being reviewed). Without the passphrase, the files **cannot** be retrieved, even by College IT staff.

The screenshot shows the Florida Gateway College Dropbox interface. A modal dialog box titled "Encryption Passphrase" is open in the center. The dialog box contains the following elements:

- Two input fields: "Passphrase:" and "And again:".
- A checkbox labeled "Hide characters" which is checked.
- An "OK" button.

Red annotations on the screenshot indicate the steps:


- 1) A red box highlights the "Encrypt every file" checkbox in the background interface.
- 2) A red box highlights the "Passphrase:" and "And again:" input fields in the dialog box.
- 3) A red box highlights the "OK" button in the dialog box.

The background interface includes a "Home" button, a "PLEASE NOTE" section, a "From:" field, a "To:" field, and a "Short note to the Recipients:" text area. The footer of the page reads: "Version 5.03 | Copyright © 2018 ZendTo | About FGC Dropbox. This service is powered by a copy of ZendTo".

7. Upload the desired file(s) to be submitted. Either drag-and-drop the file(s) into the browser window or click the **Click to Add Files or Drag Them Here** button and select the file(s) from the dialog window that opens.

The screenshot shows the Florida Gateway College Dropbox upload page. At the top right is the college logo and name. A blue 'Home' button is on the left. A red-bordered box contains a 'PLEASE NOTE' about virus scanning and encryption. Below this is a paragraph explaining the service. The 'From:' field is a redacted text box. There are four checkboxes: 'Encrypt every file', 'Calculate SHA-256 checksum of each file', 'Send an email to me when each recipient picks up the file(s)', 'Send e-mail message to recipients', and 'which includes Passcode as well as Claim ID'. The 'To:' field is a redacted text box with a plus icon. Below is a 'Short note to the Recipients:' text area with a '1000 / 1000 left' character count. A blue button with a red border says 'Click to Add Files or Drag Them Here'. At the bottom, it says 'Version 5.03 | Copyright © 2018 ZendTo | About FGC Dropbox' and 'This service is powered by a copy of ZendTo'.

Home

 **FLORIDA GATEWAY COLLEGE**

**PLEASE NOTE**  
Files uploaded to FGC Dropbox are scanned for viruses. But still exercise the same degree of caution as you would with any other file you download. Users are also **strongly encouraged** to encrypt every file if any contain sensitive information (e.g. personal private information)!

This web page will allow you to drop-off (upload) one or more files for a Florida Gateway College user. The recipient will receive an automated email containing the information you enter below and instructions for downloading the file. Your IP address will also be logged and sent to the recipient for identity confirmation purposes.

From:

Encrypt every file  Send e-mail message to recipients  
 Calculate SHA-256 checksum of each file  which includes Passcode as well as Claim ID  
 Send an email to me when each recipient picks up the file(s)

To:

Short note to the Recipients:

1000 / 1000 left

**Click to Add Files or Drag Them Here**

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8. After uploading your files, 1) Enter a brief description of each item. 2) Type your organization's name and ITB 21-1-01 NEW STEM FACILITY, BID OPENING, JANUARY 15 20, 2021. When done, 3) click the **Drop-off Files** button to submit your files.

The screenshot shows the Florida Gateway College Dropbox interface. At the top right is the college logo and name. A 'Home' button is on the left. A red-bordered box contains a 'PLEASE NOTE' section with virus scanning information. Below this is a 'From:' field with a redacted name and several checkboxes for encryption and email notifications. A 'To:' field with a redacted name and a plus icon is below. A 'Short note to the Recipients:' text area contains 'This is an example note.' and is annotated with a red '2)'. A blue button 'Click to Add Files or Drag Them Here' is centered. Below it is a table with columns 'Filename', 'Size', and 'Description'. The first row shows '1: ExampleFile.txt', '<0.1 KB', and 'Example file description'. The 'Description' cell is annotated with a red '1)'. Below the table, the text '<0.1 KB / 20480 MB' is shown, and a blue 'Drop-off Files' button is annotated with a red '3)'. The footer contains version and copyright information.

FLORIDA GATEWAY COLLEGE

Home

**PLEASE NOTE**  
Files uploaded to FGC Dropbox are scanned for viruses. But still exercise the same degree of caution as you would with any other file you download. Users are also **strongly encouraged** to encrypt every file if any contain sensitive information (e.g. personal private information)!

This web page will allow you to drop-off (upload) one or more files for a Florida Gateway College user. The recipient will receive an automated email containing the information you enter below and instructions for downloading the file. Your IP address will also be logged and sent to the recipient for identity confirmation purposes.

From:  
[Redacted]

Encrypt every file  
 Calculate SHA-256 checksum of each file  
 Send an email to me when each recipient picks up the file(s)

Send e-mail message to recipients  
 which includes Passcode as well as Claim ID

To:  
[Redacted]

Short note to the Recipients:  
This is an example note.  
976 / 1000 left

2)

Click to Add Files or Drag Them Here

Filename	Size	Description
1: ExampleFile.txt	<0.1 KB	Example file description

<0.1 KB / 20480 MB

3) Drop-off Files

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9. You will then be presented with the Drop-Off Summary.

The screenshot shows a web interface for Florida Gateway College. At the top right is the college's logo and name. A blue 'Home' button is on the left. The main content area is titled 'Drop-Off Summary' and contains the following text: 'Your files have been sent successfully.' and 'This drop-off is encrypted with a passphrase known only to the sender.' Below this is a table with columns for 'Filename', 'Size', 'SHA-256 Checksum', and 'Description'. The table lists one file: 'ExampleFile.txt' (16 bytes) with a long SHA-256 checksum and the description 'Example file description'. Below the table, it says '1 file'. A 'From:' field shows a redacted name and email address, followed by 'from' and another redacted name and email address, and 'on 2020-04-02 13:26'. A 'Comments:' section contains a text box with the text 'This is an example note.' At the bottom, there is a footer with the text: 'Version 5.03 | Copyright © 2018 ZendTo | About FGC Dropbox This service is powered by a copy of ZendTo'.

Filename	Size	SHA-256 Checksum	Description
ExampleFile.txt	16 bytes	42319A509CF5DFFB1E14E6D4C8033180 7B64750DFBBCE6AB9EA7C7FAE1639CB4	Example file description

1 file

From: [Redacted] from [Redacted] on 2020-04-02 13:26

Comments:  
This is an example note.

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SECTION 055202 – ALUMINUM HANDRAILS AND RAILINGS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes aluminum pipe handrails and railings, both interior and exterior.

1.2 SUBMITTALS

- A. Shop Drawings: Detail fabrication and erection of each fabrication indicated. Include plans, elevations, sections, details, and connections of fabrications. Provide templates for anchors and bolts for installation under other Sections.
  - 1. Indicate loading requirements.
  - 2. A registered structural engineer shall sign and seal loading calculations.
- B. Samples: Furnish ~~bronze~~ clear anodized sample string.
- C. Welder certificates signed by Contractor certifying that welders comply with requirements specified under the "Quality Assurance" Article.
- D. Qualification data for firms and persons specified in the "Quality Assurance" Article to demonstrate their capabilities and experience. Include a list of completed projects with project name, addresses, names of architects and owners, and other information specified.

1.3 QUALITY ASSURANCE

- A. Fabricator Qualifications: Firm experienced in producing metal fabrications similar to those indicated for this Project with a record of successful in-service performance, and with sufficient production capacity to produce required units without delaying the Work.
- B. Welding Standards: Comply with applicable provisions of AWS D1.2 "Structural Welding Code--Aluminum".
  - 1. Certify that each welder has satisfactorily passed AWS qualification tests for welding processes involved and, if pertinent, has undergone re-certification.
- C. Inserts and Anchorages: Furnish inserts and anchoring devices which must be set in concrete or built into masonry for installation of stair work. Provide setting drawings, templates, instructions, and directions for installation of anchorage devices. Coordinate delivery with other work to avoid delay.
  - 1. See Concrete and Masonry Sections of these Specifications for installation of inserts and anchorage devices.

- D. Shop Assembly: Pre-assemble items in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for re-assembly and coordinated installation.
- E. Structural Performance: Design, engineer, fabricate, and install the following metal fabrications to withstand the following structural loads without exceeding the allowable design working stress of the materials involved, including anchors and connections.
  - 1. Handrails: 250 pounds, concentrated load applied at any point in any direction and 50 pounds per linear foot applied in any direction.
  - 2. Guardrails:
    - a. 250 pounds, concentrated load applied at any point in any direction
    - b. 50 pounds per linear foot applied in any direction
    - c. 250 pound, concentrated load applied on a one foot area at any point in the system
  - 3. Loading conditions need not be assumed to act concurrently but each shall be applied to produce the maximum stress in each respective component or any of the supporting components.

#### 1.4 FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION

- A. Handrails and railings shall conform with the Accessibility Requirements Manual from the Florida Department of Community Affairs, Florida Board of Building Codes and Standards.
- B. Handrails and railings shall conform to NFPA 101, 2012, Life Safety Code.

### PART 2 - PRODUCTS

#### 2.1 ALUMINUM MANUFACTURERS

- A. Subject to compliance with requirements, aluminum handrails and railings shall be as fabricated by one of the following:
  - 1. Architectural Metal Works
  - 2. Greco Aluminum Railings (formerly Petersen Metal Products, Inc.)
  - 3. Poma Corporation
  - 4. Renegade Aluminum Products

## 2.2 MATERIALS

### A. Aluminum

1. Aluminum Surfaces, General: For fabrication of miscellaneous metal work which will be exposed to view, use only materials which are smooth and free of surface blemishes including pitting, seam marks, roller marks, rolled trade names, and roughness.
2. Aluminum Pipe: Formed from extruded 6063-T5, 1-1/2 inch outside diameter aluminum pipe. Formed Elbows from extruded 6063-T4 aluminum.
3. Accessories: Cast from ANSI 713 alloy.

### B. Nonshrink, Nonmetallic Grout: Refer to Division 05 – Metal Fabrications

### C. Fasteners

1. General: Provide zinc-coated fasteners for exterior use or where built into exterior walls. Select fasteners for the type, grade, and class required.
2. Masonry Anchorage Devices: Expansion shields, FS FF--325.
3. Toggle Bolts: Tumble-wing type, FS FF-B-588, type, class, and style as required.
4. Concrete Anchor Bolts: Hexagon head "Kwik Bolt" by Hilti Fastening System

## 2.3 ALUMINUM PIPE HANDRAILS AND RAILINGS

- A. Fabricate railings to dimensions and details shown with smooth bends and welded joints ground smooth and flush.
- B. Interconnect railing and handrail members by butt-welding or welding with internal connectors, at fabricator's option, unless otherwise indicated.
  1. At tee and cross intersections, provide coped joints.
  2. At bends, interconnect pipe by means of prefabricated elbow fittings or flush radius bends, as applicable, or radiuses indicated.
  3. Form bends by use of prefabricated elbow fittings and radius bends.
- C. Form simple and compound curves by bending pipe in jigs to produce uniform curvature for each repetitive configuration required; maintain cylindrical cross-section of pipe throughout entire bend without bucking, twisting, or otherwise deforming exposed surfaces of pipe.
- D. Provide wall returns at end of wall-mounted handrails, except where otherwise indicated.
- E. Close exposed ends of pipe by welding 3/16-inch thick aluminum plate in place or by use of prefabricated fittings.
- F. Provide wall brackets, end closures, flanges, miscellaneous fittings, and anchors for interconnections of pipe and attachment of railings and handrails to other work. Furnish inserts and other anchorage devices for connecting railings and handrails to concrete or masonry work.

- G. Stair Railings and Handrails: Comply with applicable requirements specified elsewhere in this Section for aluminum pipe railing and handrails, and as follows:
1. Railings may be bent at corners, rail returns and wall returns, instead of using prefabricated fittings.
  2. Connect railing posts to stair framing by direct welding, unless otherwise indicated.

## 2.4 ALUMINUM FINISHES

- A. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.
- C. AAMA 608 medium ~~bronze~~ clear anodized finish conforming to AAM10C22A44 Class I, 0.7 mils thick.

## PART 3 - EXECUTION

### 3.1 INSTALLATION OF HANDRAILS

- A. Secure handrails to wall with wall brackets and end fittings. Provide bracket with not less than 1-1/2 inch clearance from inside face of handrail and finished wall surface. Locate brackets as indicated or, if not indicated, at spacing required for design loading. Secure wall brackets and wall return fittings to building construction as follows:
1. Use type of bracket with predrilled hole for exposed bolt anchorage.
  2. For concrete and solid masonry anchorage, use drilled-in expansion shield and either concealed hanger bolt or exposed lag bolt, as applicable.
  3. For hollow masonry anchorage, use toggle bolts having square heads.

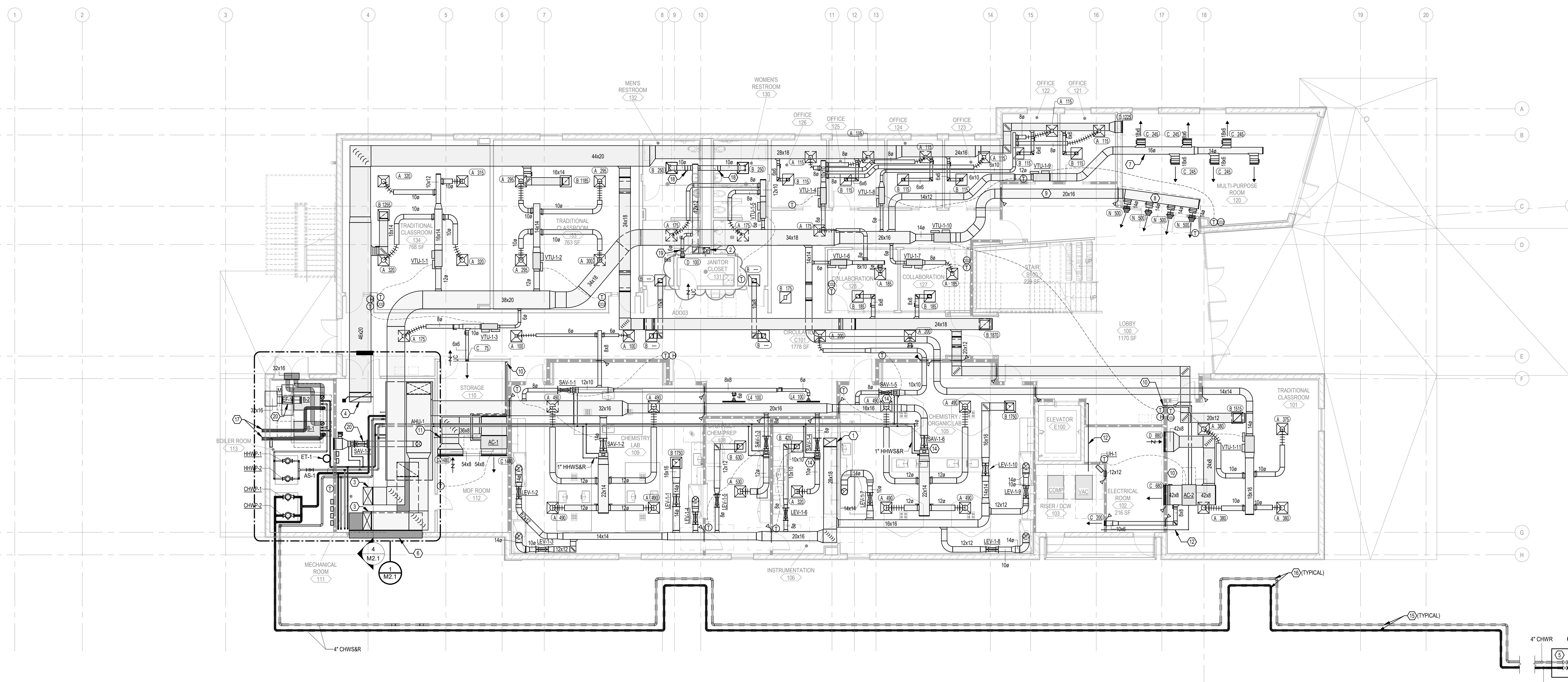
### 3.2 INSTALLATION OF RAILINGS

- A. Adjust railings prior to anchoring to ensure matching alignment at abutting joints. Space posts at spacing indicated, or if not indicated, as required by design loadings. Plumb posts in each direction. Secure posts and railings ends to building construction as follows:
1. Anchor posts in concrete by means of pipe sleeves, preset and anchored into concrete. After posts have been inserted into sleeves, fill annular space between post and sleeve solid with nonshrink grout.
    - a. Leave anchorage joint exposed; wipe off excess grout and leave 1/8 inch build-up, sloped away from post. For installation exposed on exterior or to flow of water, seal grout to comply with grout manufacturer's directions.

2. Anchor posts to metal surfaces with oval flanges, angle type, or floor type as required by conditions, attach posts as indicated using fittings designed and engineered for this purpose.
3. Anchor rail ends into concrete and masonry with aluminum round flanges welded to rail ends and anchored into wall construction with lead expansion shields and bolts.
4. Anchor rail ends to aluminum with aluminum oval or round flanges welded to rail ends and bolted to structural aluminum members, unless otherwise indicated.
5. Railings shall be isolated when mounted to dissimilar materials.

END OF SECTION 055202

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**1 HVAC FLOOR PLAN - FIRST LEVEL**  
1/8" = 1'-0"

**GENERAL NOTES:**

1. ALL HEATING HOT WATER TAKEOFFS TO LAB SUPPLY AIR VALVE HEATING COILS SHALL BE 3/4" HHWS&R PIPING UNLESS NOTED OTHERWISE ON PLANS.
2. PROVIDE DOUBLE WALL DUCTWORK FOR ALL DUCTWORK THAT IS EXPOSED.
3. CONTRACTOR SHALL PROVIDE AN INDEPENDENT FUME HOOD CERTIFICATION COMPANY TO FIELD CERTIFY ALL FUME HOODS IN THE BUILDING. FUME HOOD CERTIFICATION SHALL BE IN ACCORDANCE WITH ANSI/ASHRAE 110 (INCLUDING BUT NOT LIMITED TO: FACE VELOCITY MEASUREMENTS, SMOKE VISUALIZATION, TRACER GAS CONTAINMENT, AIRFLOW MONITOR AND ALARM CALIBRATION). REFER TO FLOOR PLANS AND LAB DRAWINGS FOR FUME HOOD QTY AND LOCATIONS.
4. CONTRACTOR SHALL PROVIDE AN INDEPENDENT LAMINAR FLOW HOOD CERTIFICATION COMPANY TO FIELD CERTIFY ALL LAMINAR HOODS IN THE BUILDING. LAMINAR HOOD CERTIFICATION SHALL BE IN ACCORDANCE WITH USP793 (INCLUDING BUT NOT LIMITED TO: AEROSOL CHALLENGE TESTING, PARTICLE COUNT TESTING (ISO CLASS 5), AIRFLOW UNIFORMITY TESTING, FACE VELOCITY MEASUREMENTS AND UNIFORMITY, AIRFLOW PATTERN VISUALIZATION (SMOKE VISUALIZATION TESTING)). REFER TO LAB DRAWINGS FOR LAMINAR FLOW HOOD QTY AND LOCATIONS.
5. CONTRACTOR SHALL PROVIDE AN INDEPENDENT BIOLOGICAL SAFETY CABINET (BSC) CERTIFICATION COMPANY TO FIELD CERTIFY ALL BSCS IN THE BUILDING. CERTIFICATION SHALL BE PERFORMED IN ACCORDANCE WITH NSF/ANSI 49 BY NSF ACCREDITED CERTIFIERS, INCLUDING BUT NOT LIMITED TO: DOWNFLOW VELOCITY TEST, NEFLOW VELOCITY TEST, AIRFLOW SMOKE PATTERNS TEST, HEPA FILTER LEAK TEST, CABINET INTEGRITY TEST, FACE VELOCITY MEASUREMENTS, SMOKE VISUALIZATION, TRACER GAS CONTAINMENT, AIRFLOW MONITOR AND ALARM CALIBRATION. REFER TO FLOOR PLANS AND LAB DRAWINGS FOR FUME HOOD QTY AND LOCATIONS.

**REFERENCED NOTES:**

1. LAB EXHAUST DUCTWORK UP TO SECOND LEVEL.
2. 12" X 12" GENERAL EXHAUST DUCTWORK UP TO SECOND LEVEL.
3. SUPPLY AIR DUCTWORK UP TO SECOND LEVEL.
4. RETURN AIR DUCTWORK UP TO SECOND LEVEL.
5. NEW UNDERGROUND CHILLED WATER CONNECTION TO EXISTING UNDERGROUND CAMPUS CHILLED WATER LOOP. CONNECT TO EXISTING 4" BLIND FLANGES DOWNSTREAM OF EXISTING ISOLATION VALVES. PROVIDE NEW ISOLATION VALVES AND NEW PRECAST VALVE VAULT. NEW ISOLATION VALVES SHALL BE PROVIDED WITH ALL STAINLESS STEEL CONSTRUCTION IN NEW VALVE VAULT. REFER TO VALVE VAULT DETAIL. CONTRACTOR SHALL COORDINATE FINAL WALL LOCATION WITH EXISTING AND NEW UNDERGROUND UTILITIES. FIELD VERIFY EXISTING CHW MAINS LOCATION AND PIPE ROUTING, AS MAIN LOCATION IS DIAGNOSTIC ONLY.
6. 15" X 6" OUTDOOR AIR INTAKE WALL LOUVER (AMCA 540/550), MIN. 45% FREE AREA.
7. PROVIDE DOUBLE WALL ROUND SPIRAL DUCTWORK WHERE EXPOSED.
8. ROUTE DUCTWORK IN FIRE RATED ARCHITECTURAL SOFFIT.
9. SUPPLY AIR DUCTWORK ROUTED IN ARCHITECTURAL SOFFIT.
10. REFRIGERANT LIQUID AND SUCTION PIPING DOWN FROM ROOF TO ASSOCIATED MECHANICAL EQUIPMENT.
11. CONDENSATE DRAIN PIPING, ROUTE TO HUB DRAIN IN MECHANICAL ROOM. REFER TO PLUMBING FOR EXACT LOCATION OF DRAIN.
12. CONDENSATE DRAIN PIPING, ROUTE TO HUB DRAIN IN DOMESTIC WATER RISER ROOM. REFER TO PLUMBING FOR EXACT LOCATION OF DRAIN.
13. NOT USED.
14. INDICATED LAB SUPPLY VALVE OR VTU SHALL BE PROVIDED WITH A 3-WAY HYDRONIC HOT WATER CONTROL VALVE. REFER TO DETAIL FOR REQUIREMENTS.
15. UNDERGROUND CHILLED WATER PIPING SHALL BE: PRE-ENGINEERED PRE-INSULATED HDPE/HDPE FUSION WELDED CHW SYSTEM RATED FOR THE ANTICIPATED PRESSURE AND TEMPERATURES (MINIMUM 150 PSI RATED OPERATING PRESSURE). POLYPROPYLENE PIPING SYSTEM BY THERMACOR® OR APPROVED EQUAL UNDERGROUND CHILLED WATER PIPING WITH FUSION WELDED HDPE INNER CARRIER PIPE AND FUSION WELDED HDPE OUTER CARRIER. PROVIDE PRE-ENGINEERED PIPING SUBMITTED FOR REVIEW COMMENT. CHILLED WATER PIPING SHALL NOT BE ROUTED BELOW ANY EQUIPMENT AND FINAL COORDINATION/FITTING LAYOUT SHALL BE COORDINATED BY THE CONTRACTOR AND UNDERGROUND UTILITIES, AS ADDITIONAL OFFSETS WILL BE REQUIRED. PROVIDE PRE-ENGINEERED PIPING SUBMITTAL FOR REVIEW COMMENT.
16. PROVIDE EXPANSION LOOPS AND THRUST BLOCKS, AND PIPE ANCHORS IN ACCORDANCE WITH THE PRE-ENGINEERED PIPING MANUFACTURE INSTALLATION GUIDELINES.
17. BOILER FLUE VENT SIDEWALL WALL CAP TERMINATION, PER MANUFACTURES INSTALLATION GUIDELINES.
18. PROVIDE 10" ROUND CONSTANT VOLUME REGULATOR, BASIS OF DESIGN YOUNG REGULATOR CVR-10M OR EQUIVALENT. SET CONSTANT VOLUME REGULATOR TO 250 CFM.
19. PROVIDE 8" ROUND CONSTANT VOLUME REGULATOR, BASIS OF DESIGN YOUNG REGULATOR CVR-8M OR EQUIVALENT. SET CONSTANT VOLUME REGULATOR TO 100 CFM.

**REFERENCED NOTES:**

20. BOILER ROOM TEMPERATURE CONTROL ECM EXHAUST FAN IS TO MODULATE TO MAINTAIN SPACE TEMPERATURE COOLING SET-POINT, AND SUPPLY AIR VALVE IS TO FLOW TRACK TO MAINTAIN BOILER SPACE SLIGHTLY POSITIVE AT ALL TIMES DURING ALL TIMES WHEN CALLING FOR COOLING. WHEN SPACE IS CALLING FOR HEATING, SUPPLY AIR VALVE SHALL MAINTAIN ITS HEATING COIL LAT SET-POINT FOR HEATING (85 DEGREE ADJ.), AND MODULATE FROM MINIMUM VALUE UPWARD TOWARD MAX VALUE TO MAINTAIN HEATING SET-POINT OF 85 DEGREE IN THE SPACE. BOILER ROOM EF SHALL FLOW TRACK TO MAINTAIN SPACE SLIGHTLY POSITIVE TO AMBIENT. COOLING SET-POINT SHALL BE 85 DEG F (ADJ.). (CONTROLS SHALL OPEN EF ISOLATION DAMPER PRIOR TO MODULATING DAMPER AND PROVIDE AN ALARM IF IT DOES NOT OPEN, OR IF FAN FAILS TO OPERATE VIA CURRENT SENSING TRANSMITTER STATUS INPUT. DAMPER SHALL BE CLOSED WHEN EF IS NOT ON. PROVIDE DEAD-BAND BETWEEN HEATING, FLOW TRACKING SHALL BE BASED ON FIELD TESTING DURING TAB).

**NEW STEM FACILITY**  
149 SE COLLEGE PL,  
LAKE CITY, FL 32025

**FLORIDA GATEWAY COLLEGE**

**BID DOCUMENTS**

36-17116-00  
12/11/2020  
Revisions:  
ADD03 1/08/2021  
ADD04 1/14/2021

**MECHANICAL FLOOR PLAN - FIRST LEVEL**

**M1.1**



SYSTEM NO. C-AJ-5017  
F RATING - 3 HR  
T RATINGS - 1/2 AND 1 HR (SEE ITEM 3)  
L RATING AT AMBIENT - LESS THAN 1 CFM PER SQ FT  
L RATING AT 400 F - LESS THAN 1 CFM PER SQ FT  
W RATING - CLASS 1 (SEE ITEM 6)

1. FLOOR OR WALL ASSEMBLY — MIN 4-1/2 IN. THICK LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS' MAX AREA OF SQUARE, RECTANGULAR OR CIRCULAR OPENING IS 45 SQ IN. WITH MAX DIMENSION OF 9 IN.

2. SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

3. PIPE — NOM 3 IN. DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER PIPE OR NOM 2-1/2 IN. DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE. ONE OR MORE INSULATED PIPES MAY BE INSTALLED WITH A MIN CLEARANCE OF 1/2 IN. MAINTAINED BETWEEN INSULATED PIPES AND WITH A MIN CLEARANCE OF 1/4 IN. MAINTAINED BETWEEN INSULATED PIPE AND SIDES OF THROUGH OPENING. PIPES TO BE ROCKY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

3. PIPE INSULATION — PLASTICS — NOM 3/4 IN. THICK ACRYLONITRILE BUTADIENE/POLYVINYL CHLORIDE (AB/PVC) FLEXIBLE FOAM FURNISHED IN THE FORM OF TUBING WITH SKIN. WHEN NOM 2-1/2 OR 3 IN. DIAM INSULATED STEEL OR COPPER PIPE IS USED, T RATING IS 1/2 HR. WHEN MAX 2 IN. DIAM INSULATED STEEL OR COPPER PIPE IS USED, T RATING IS 1 HR.

SEE PLASTICS (QMFZ2) CATEGORY IN THE RECOGNIZED COMPONENT DIRECTORY FOR NAMES OF MANUFACTURERS. ANY RECOGNIZED COMPONENT TUBE INSULATION MATERIAL MEETING THE ABOVE SPECIFICATIONS AND HAVING A UL94 FLAMMABILITY CLASSIFICATION OF 94-0VA MAY BE USED.

4. FILL VOID OR CAVITY MATERIALS' — WRAP STRIP — NOM 1/4 IN. THICK INTUMESCENT ELASTOMERIC MATERIAL FACED ON ONE SIDE WITH ALUMINUM FOIL. SUPPLIED IN 2 IN. WIDE STRIPS, ONE NOM 2 IN. WIDE STRIP TIGHTLY WRAPPED AROUND PIPE INSULATION (ITEM 3) WITH THE FOIL SIDE EXPOSED AND SLID INTO THROUGH OPENING SUCH THAT THE TOP EDGE IS FLUSH WITH TOP SURFACE OF FLOOR. WHEN A SINGLE INSULATED PIPE IS INSTALLED IN A CIRCULAR THROUGH OPENING AND WHEN THE MAX ANNULAR SPACE BETWEEN THE INSULATED PIPE AND THE SIDES OF THE THROUGH OPENING IS 3/8 IN. THE WRAP STRIP LAYER MAY BE SECURED IN PLACE WITH PRESSURE-SENSITIVE TAPE. IN ALL OTHER SITUATIONS, THE WRAP STRIP LAYER SHALL BE SECURED IN PLACE WITH MIN 10 18 GAUGE GALV STEEL WIRE. IN WALL ASSEMBLIES, THE WRAP STRIP LAYER IS TO BE INSTALLED ON THE INSULATED PIPE IN THE SAME MANNER USED FOR FLOOR ASSEMBLIES BUT SHALL BE INSTALLED SYMMETRICALLY ON BOTH SIDES OF THE WALL.

3M COMPANY — TYPE FS-195+

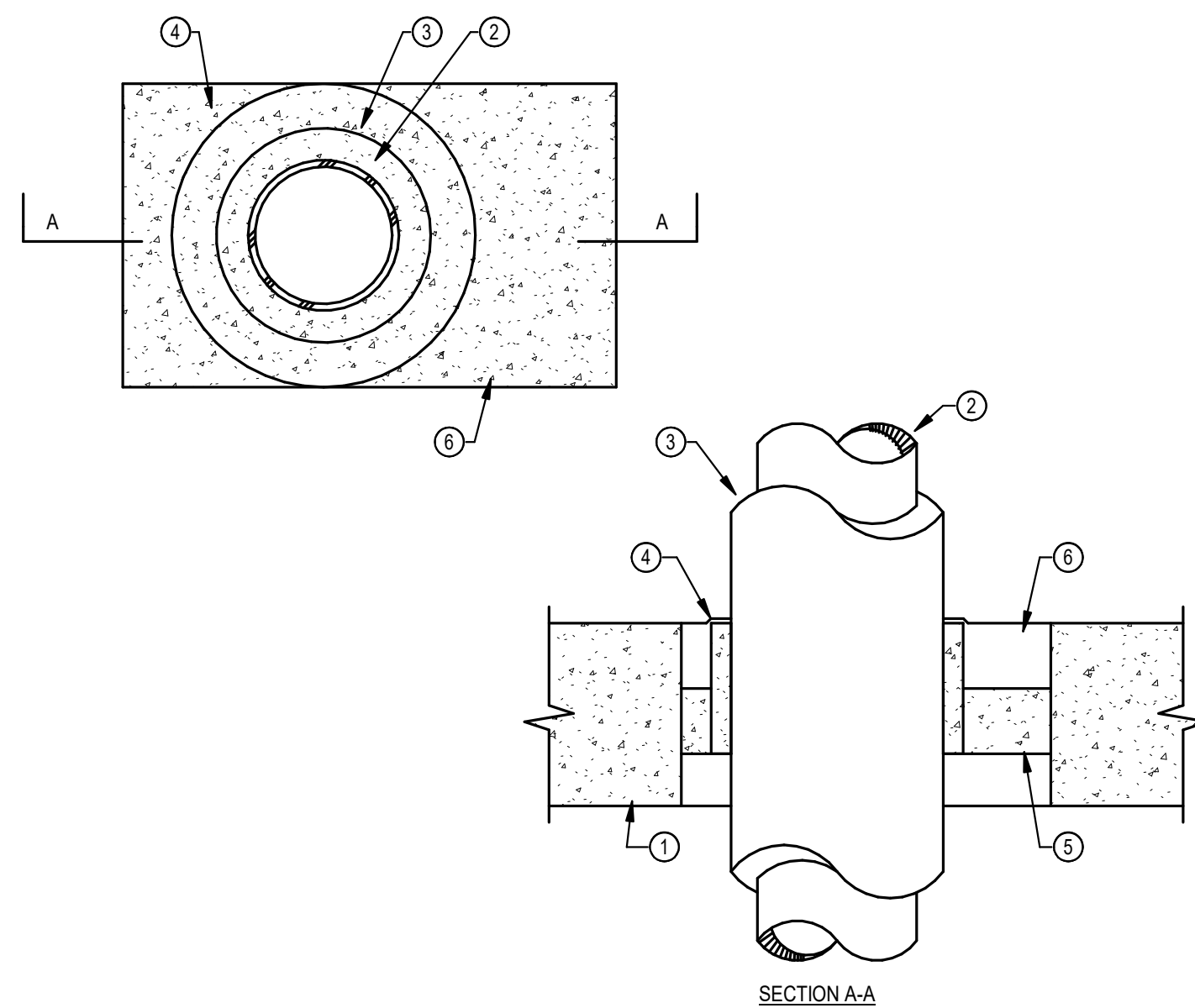
5. PACKING MATERIAL — MIN 1 IN. THICK MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING WITH ITS TOP SURFACE RECESSED MIN 1 IN. FROM TOP SURFACE OF THE FLOOR. IN WALL ASSEMBLIES, PACKING MATERIAL TO BE FIRMLY PACKED INTO OPENING ON BOTH SIDES OF WALL AND RECESSED MIN 1 IN. FROM WALL SURFACE. WHEN A SINGLE INSULATED PIPE (WITH WRAP STRIP LAYER) IS INSTALLED IN A CIRCULAR THROUGH OPENING AND WHEN THE MAX ANNULAR SPACE BETWEEN THE WRAP STRIP LAYER AND THE SIDES OF THE THROUGH OPENING IS 1/8 IN., NO FORMING MATERIAL IS REQUIRED.

6. FILL VOID OR CAVITY MATERIALS' — CAULK OR SEALANT — APPLIED TO FILL THROUGH OPENING TO A MIN DEPTH OF 1 IN. IN FLOOR ASSEMBLIES, FILL MATERIAL TO BE INSTALLED FLUSH WITH TOP SURFACE OF FLOOR. IN WALL ASSEMBLIES, FILL MATERIAL TO BE INSTALLED FLUSH WITH WALL SURFACE ON BOTH SIDES OF WALL.

3M COMPANY — CP 25WB+ OR FB-3000 WT.

(NOTE - W RATING APPLIES ONLY WHEN FB-3000 WT IS USED.)

\*BEARING THE UL CLASSIFICATION MARK



**REFRIGERANT FIRESTOPPING DETAIL**

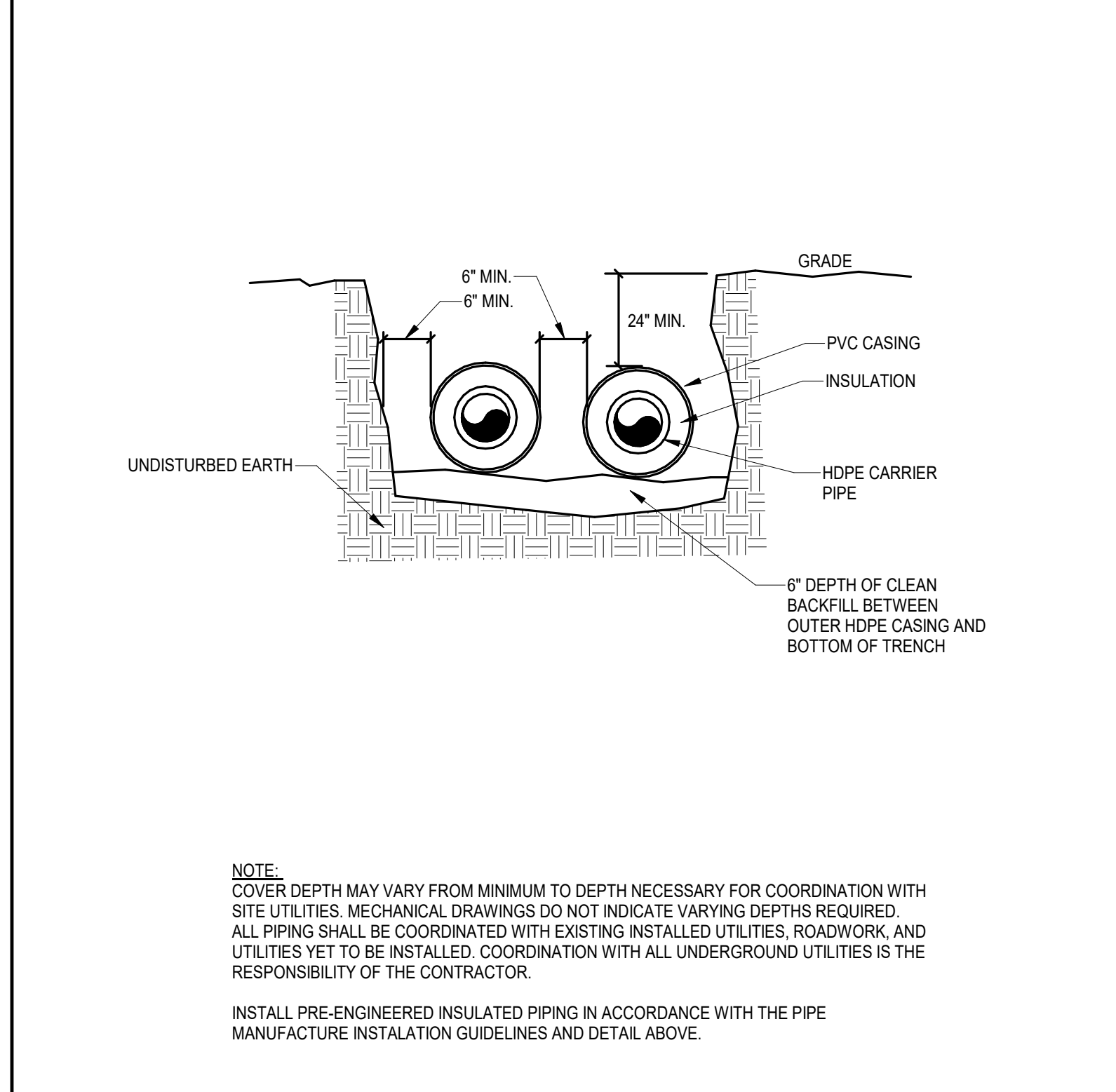
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**SPLIT DUCTLESS UNIT ROOF SUPPORT DETAIL**

No Scale

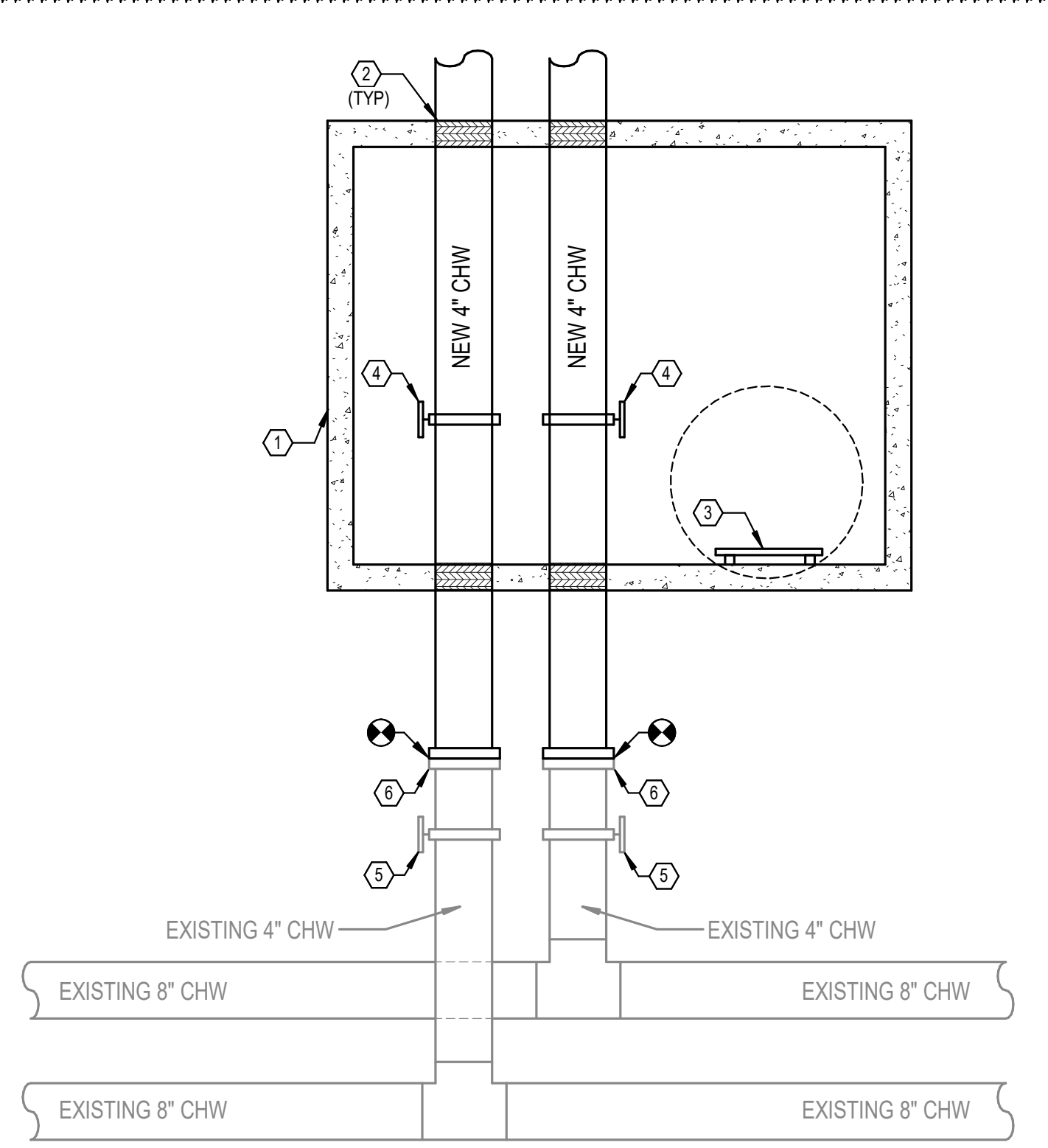
**TYPICAL REFRIGERANT PIPING ROOF CAP DETAIL**

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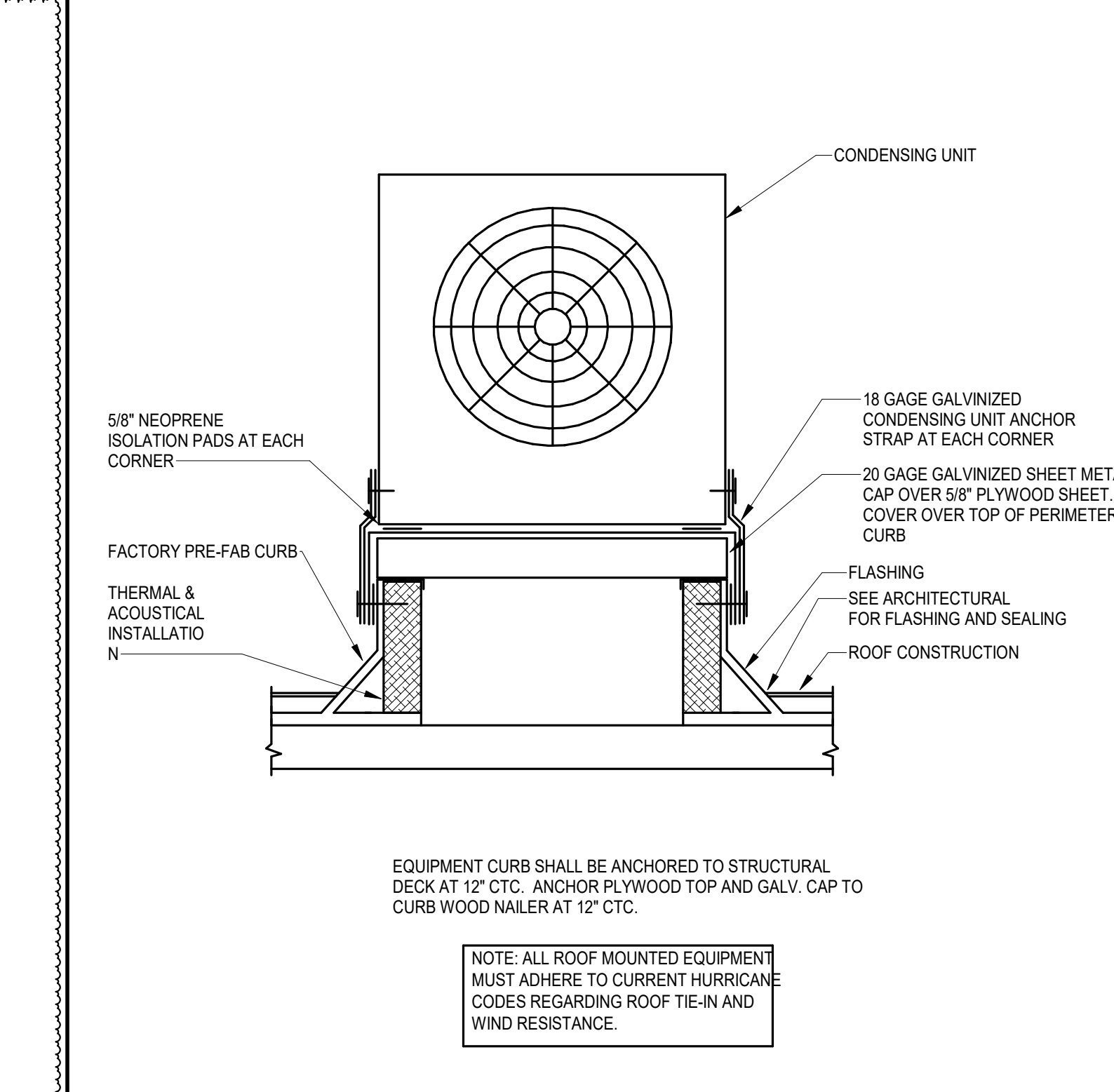
**UNDERGROUND HYDRONIC PIPING INSTALLATION**

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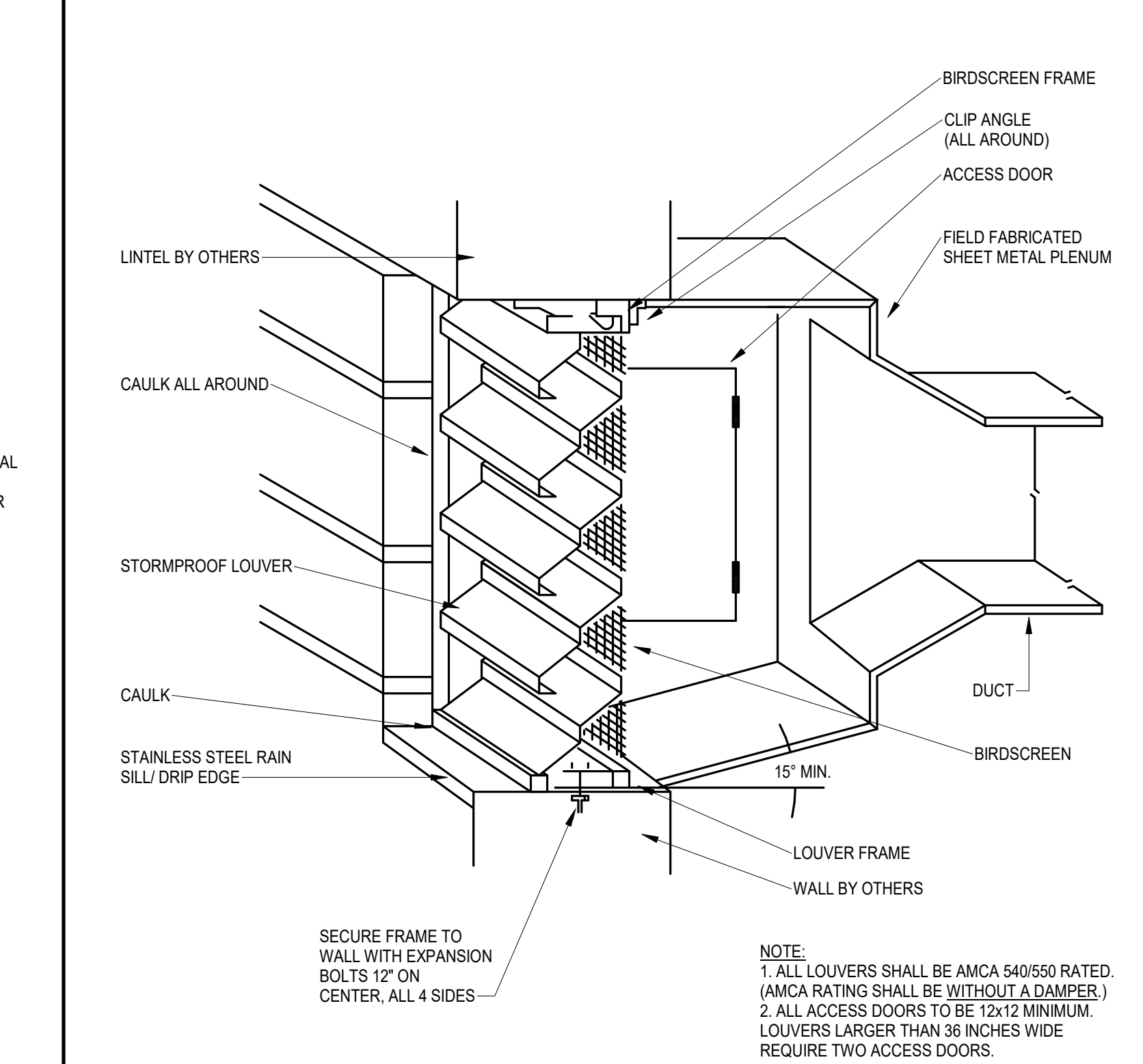
**CHILLED WATER VALVE VAULT**

No Scale



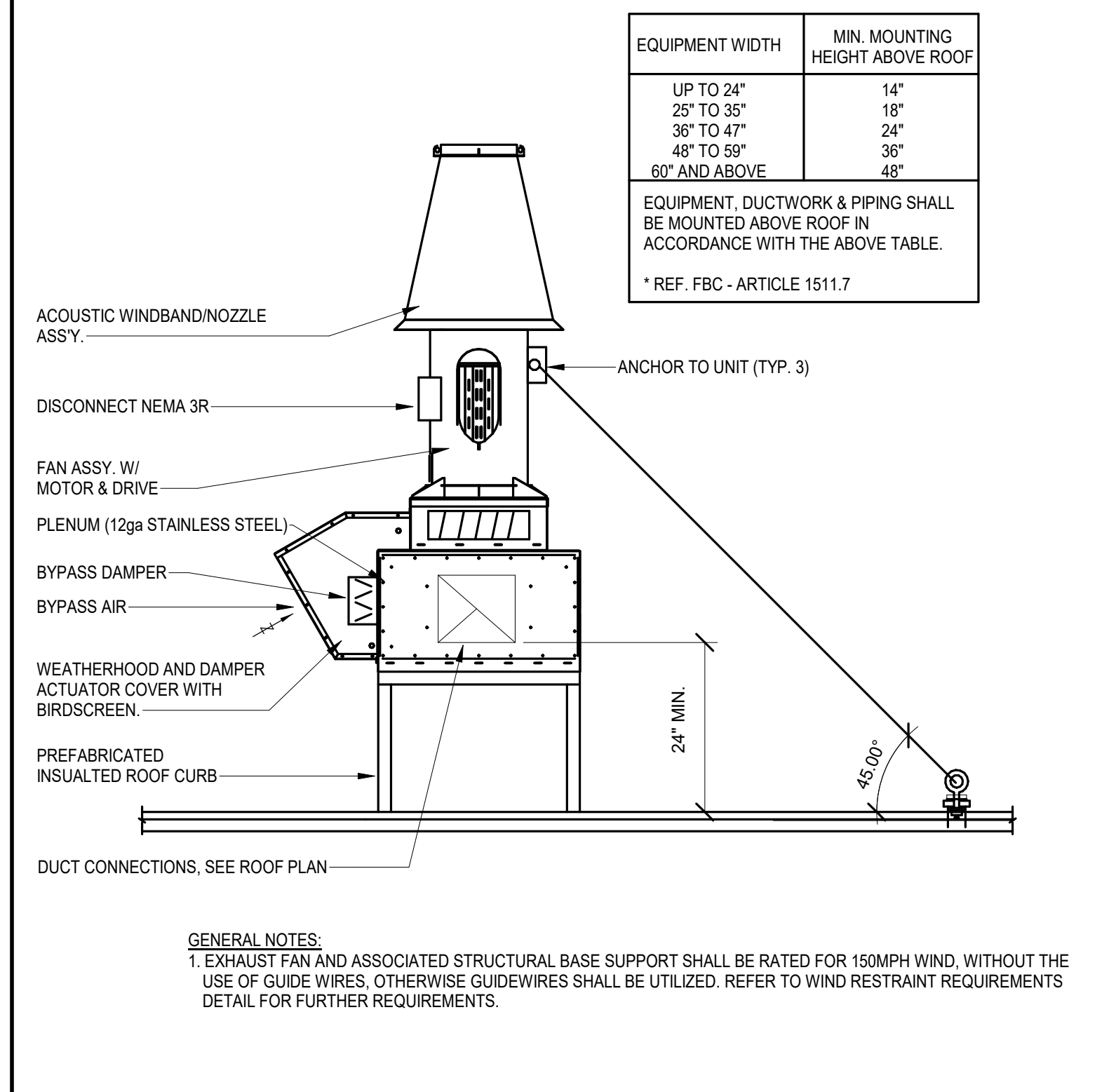
**ROOF MOUNTED EQUIPMENT PLATFORM DETAIL**

No Scale



**TYPICAL WALL LOUVER**

No Scale



**HIGH PLUME EXHAUST FAN DETAIL**

No Scale

REFERENCED NOTES:

- VALVE VAULT WALLS AND FLOOR SHALL BE PRECAST CONCRETE WITH WATERPROOFING APPLIED.
- PROVIDE EXPANDABLE EPDM RUBBER SEALS (MECHANICAL LINK SEAL) AROUND ALL PIPE PENETRATIONS.
- PROVIDE WELDED STAINLESS STEEL ACCESS LADDER WITH NON-SLIP LADDER RUNGS. LADDER SHALL HAVE CLEARANCES PER OSHA STANDARDS.
- PROVIDE LUG-STYLE BUTTERFLY ISOLATION VALVES WITH EPDM PEROXIDE-CURED SEAT, MANUAL GEAR HAND WHEEL OPERATOR WITH INDICATOR, AND ALL STAINLESS STEEL CONSTRUCTION.
- EXISTING CHILLED WATER ISOLATION VALVES TO REMAIN.
- EXISTING 4" CHILLED WATER BLIND FLANGE, NEW POINT OF CONNECTION.

GENERAL NOTES:

PROVIDE CAST IRON ACCESS COVER OF A MINIMUM 30" DIAMETER LARGE ENOUGH TO ALLOW REMOVAL AND REPLACEMENT OF THE LARGEST VALVE WITHIN THE VAULT. ACCESS COVER SHALL HAVE "CHW" STAMPED, ENGRAVED, OR CAST INTO THE COVER.

PROVIDE 3/4" DRAINS WITH SCHEDULE 80 PIPE NIPPLES AND FULL-PORT BALL VALVES FOR THE NEW 8" CHWS&R PIPES WITHIN THE VALVE VAULT. PROVIDE BALL VALVES WITH BRASS AND ALL STAINLESS TRIM/CONSTRUCTION. (LOCATE UPSTREAM AND DOWNTREAM OF EACH NEW TEE.)

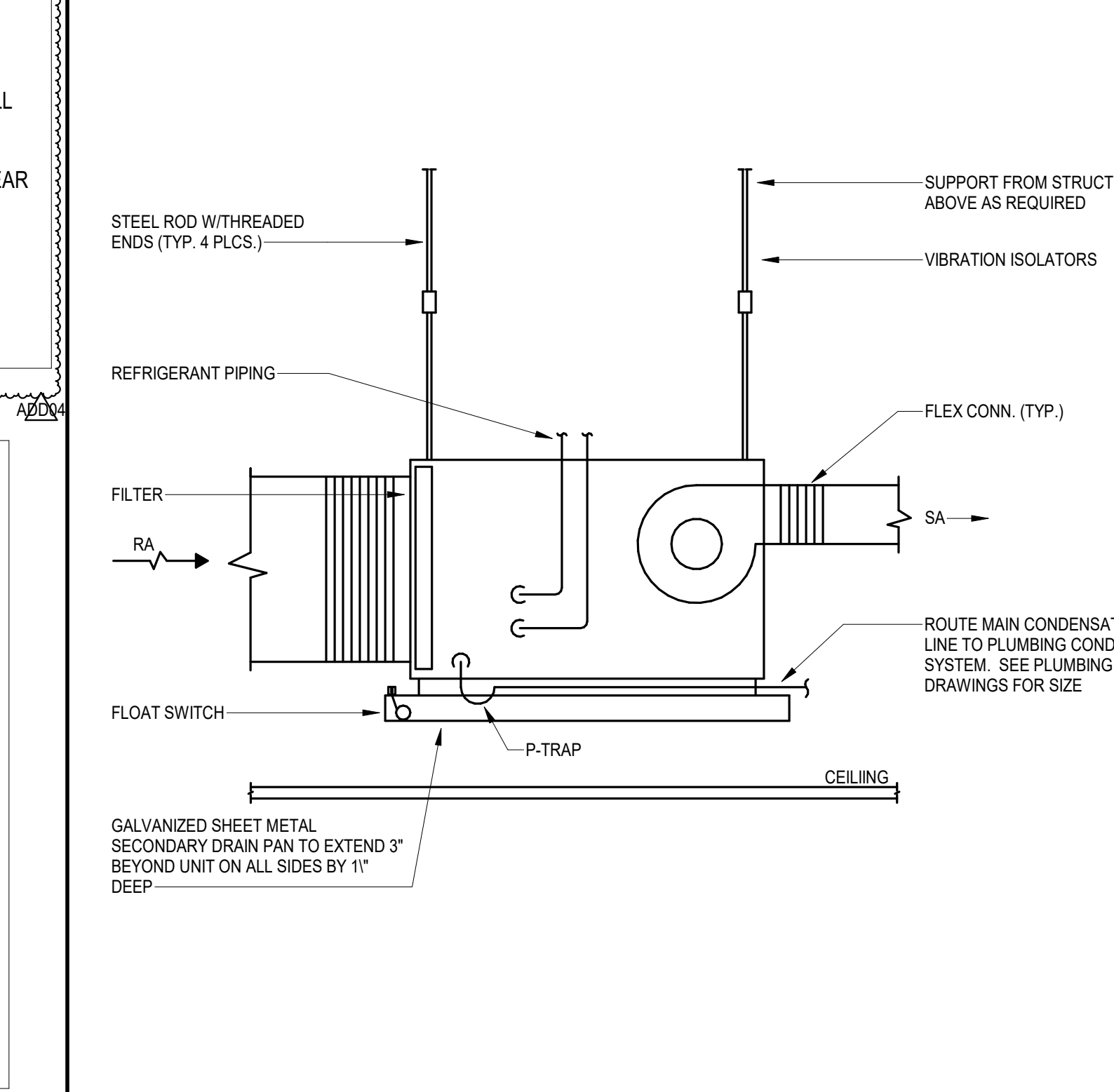
PROVIDE AT MINIMUM 18" CLEARANCE FROM OUTSIDE OF PIPING INSULATION TO WALLS AND CEILING AND 24" MINIMUM CLEARANCE TO FLOOR BELOW, AND VAULT SHALL BE A MINIMUM OF 6'8" TALL INSIDE.

PROVIDE MINIMUM OF 24" DEEP BED OF PEAGRAVEL BELOW VAULT TO ALLOW FOR VAULT DRAINAGE. PROVIDE FOUR 2" OPENINGS IN THE BOTTOM OF THE PRECAST VAULT TO ALLOW FOR DRAINAGE INTO THE PEAGRAVEL BELOW THE VAULT.

VAULT DEPTH SHALL ACCOMMODATE PROPER SERVICE CLEARANCE INTO SPACE. VAULT LID FINISHED INSTALLATION SHALL BE MINIMUM 12" BELOW FINISHED GRADE TO ALL FLOOR TOP SOIL AND GRASS GROWTH ABOVE. PROVIDE PRECAST MANHOLE EXTENSION RINGS TO EXTEND VAULT TO FINISHED GRADE ELEVATION. VAULT CONSTRUCTION AND ASSOCIATED LID SHALL BE H20 RATED.

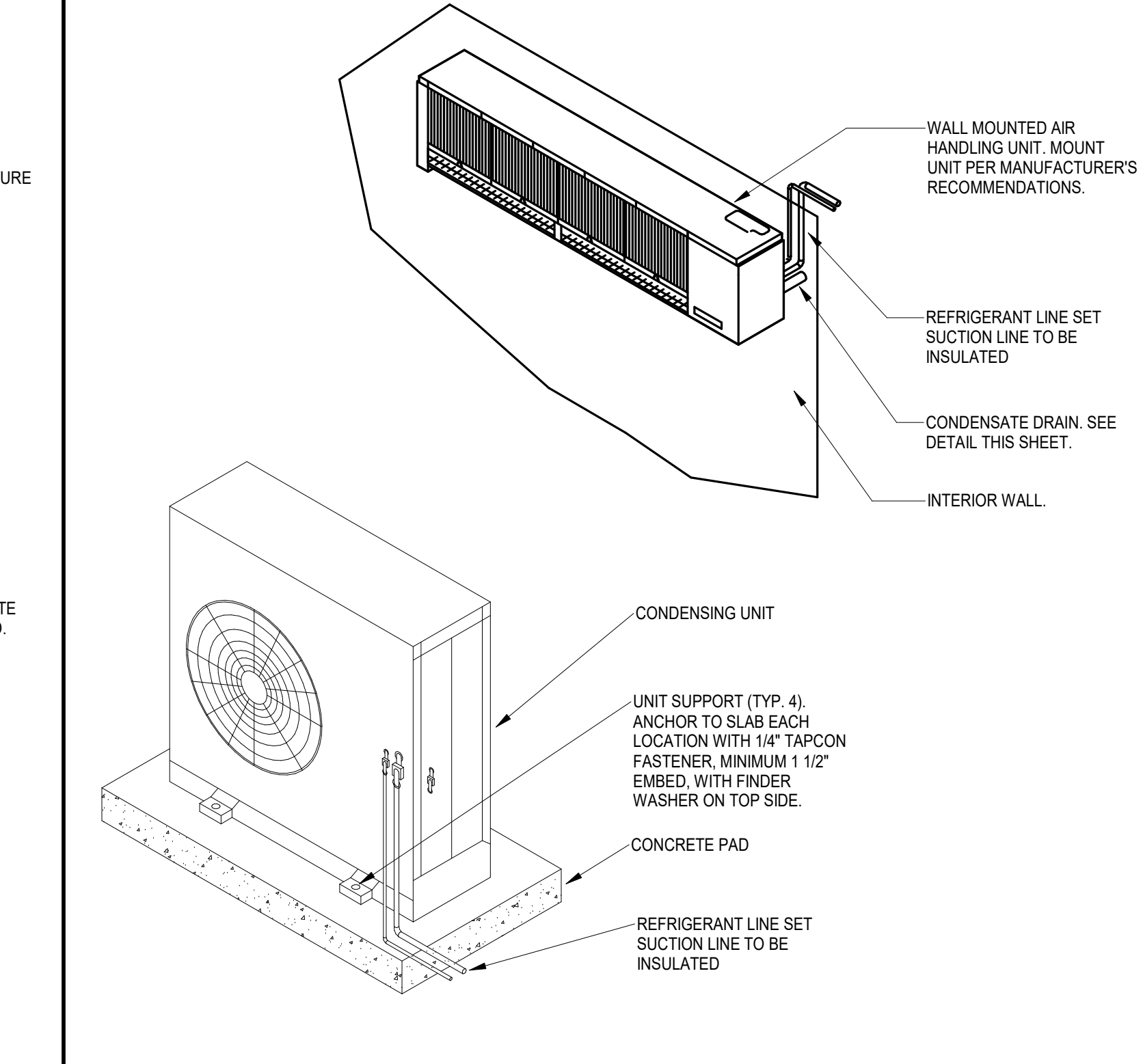
**CHILLED WATER VALVE VAULT**

No Scale



**SUSPENDED FCU/AHU INSTALLATION**

No Scale



**WALL MOUNTED AHU SPLIT SYSTEM**

No Scale

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**BID DOCUMENTS**

36-17116-00  
12/11/2020  
Revisions:  
ADD04 1/14/2021

**MECHANICAL DETAILS**

**M6.4**