

Replace Air Cooled Chiller  
Blatt PE Center  
University of South Carolina  
TP20000029

### Addendum One

June 24, 2020

NOTE: The following amendments, additions, and deletions shall be made to the Construction Documents and Contract Documents. Insofar as those documents are at variance with this Addendum, this Addendum shall govern.

### Clarifications

- | <u>Item No.</u> | <u>Description</u>  |
|-----------------|---|
| 1.              | <u>Clarification:</u> See attached SE-310, this SE-310 replaces the original 310 due to change in location where to hand deliver or mail bid documents  |
| 2.              | <u>Clarification:</u> Construction start date will be after Thanksgiving.   |
| 3.              | <u>Clarification:</u> Work can proceed during normal business hours.  |
| 4.              | <u>Clarification:</u> There is no preferred electrical contractor, any properly SCLLR licensed contractor can provide the power wiring.   |
| 5.              | <u>Clarification:</u> Johnson Controls is the only approved manufacturer for the controls. Contractor to include cost of controls in their bid.   |
| 6.              | <u>Clarification:</u> Chilled water shall be 20% propylene glycol. Select chiller to operate with glycol.   |
| 7.              | <u>Clarification:</u> Electrical conduit and wiring shall be routed under the elevated walkway and up through the concrete slab near the chiller connection. Existing hole in concrete shall be patched by this contractor. |
| 8.              | <u>Clarification:</u> Existing electrical circuit shall be reused. Contractor to extend and connect conduit and wire to electrical connection to new chiller.   |
| 9.              | <u>Clarification:</u> Contractor shall follow the USC COVID-19 guidelines while performing work on USC Campus. See attached guidelines.   |
| 10.             | <u>Clarification:</u> USC will coordinate with the City any street closure required when performing crane lift.   |

### Drawings

- | <u>Item No.</u> | <u>Description</u>  |
|-----------------|---|
| 1.              | <u>Revision:</u> Reference Drawing M1. Chiller flow rate shall be 86 gpm. |

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Specifications

Item No.            Description

1.                    Revision: Reference Specification Section 230010 Heating Ventilation and Air Conditioning. Reference 2.9 Air Cooled Chiller paragraph K, delete interface optional. Chiller shall be provided with BACnet interface. Controls Contractor shall map BACnet points and remotely control chiller.

END OF ADDENDUM

Attachments:

SE-310  
Pre-Bid Meeting Attendees  
USC COVID-19 Guidelines  
M1-R1

# SE-310 INVITATION FOR DESIGN-BID-BUILD CONSTRUCTION SERVICES

**AGENCY/OWNER:** University of South Carolina  
**PROJECT NAME:** Replace Air Cooled Chiller Blatt PE Center  
**PROJECT NUMBER:** TP20000029 **CONSTRUCTION COST RANGE:** \$ 100,000 to \$ 125,000 N/A   
**PROJECT LOCATION:** Blatt Physical Education Center 1300 Wheat Street, Columbia, SC 29208  
**DESCRIPTION OF PROJECT/SERVICES:** Replace 50 ton air cooled chiller  
**BID/SUBMITTAL DUE DATE:** 7/2/2020 **TIME:** 10:00am **NUMBER OF COPIES:** 1  
**PROJECT DELIVERY METHOD:** Design-Bid-Build  
**AGENCY PROJECT COORDINATOR:** Hatice Hikmet  
**EMAIL:** hikmeth@mailbox.sc.edu **TELEPHONE:** (803) 777-9994  
**DOCUMENTS MAY BE OBTAINED FROM:** http://purchasing.sc.edu

**BID SECURITY IS REQUIRED IN AN AMOUNT NOT LESS THAN 5% OF THE BASE BID.**

**PERFORMANCE BOND REQUIRED?** Yes  No  **PAYMENT BOND REQUIRED?** Yes  No

**DOCUMENT DEPOSIT AMOUNT:** \$ 0.00 **IS DEPOSIT REFUNDABLE** Yes  No  N/A

Bidders must obtain Bidding Documents/Plans from the above listed source(s) to be listed as an official plan holder. Bidders that rely on copies obtained from any other source do so at their own risk. All written communications with official plan holders & bidders will be via email or website posting.

Agency **WILL NOT** accept Bids sent via email.

*All questions & correspondence concerning this Invitation shall be addressed to the A/E.*

**A/E NAME:** Swygert & Associates, Ltd  
**A/E CONTACT:** Bill Livingston, P.E.  
**EMAIL:** bill@swygert-associates.com **TELEPHONE:** (803) 791-9300 X103

**PRE-BID CONFERENCE:** Yes  No  **MANDATORY ATTENDANCE:** Yes  No

**PRE-BID DATE:** \_\_\_\_\_ **TIME:** \_\_\_\_\_

**PRE-BID PLACE:** Conference Call 800-753-1965 Access Code 777-7162

**BID OPENING PLACE:** Conference Call 800-753-1965 Access Code 777-7162

**BID DELIVERY ADDRESSES:**

**HAND-DELIVERY:**

**Attn:** Hatice Hikmet (Bid Enclosed TP20000029)  
1600 Hampton Street Suite 606  
Columbia, SC 29208

**MAIL SERVICE:**

**Attn:** Hatice Hikmet (Bid Enclosed TP20000029)  
1600 Hampton Street Suite 606  
Columbia, SC 29208

**IS PROJECT WITHIN AGENCY CONSTRUCTION CERTIFICATION? (Agency *MUST* check one)** Yes  No

**APPROVED BY:** \_\_\_\_\_ **DATE:** \_\_\_\_\_  
*(OSE Project Manager)*



# COVID-19 RETURN TO WORK

## University of South Carolina Construction site guidelines

1. All construction companies mobilizing for a University of South Carolina construction project must submit their regular Health & Safety Plan, as well as a site specific COVID-19 Health & Safety Plan.
2. All Architectural or Engineering companies that will be visiting construction sites on campus must also submit a COVID-19 Health & Safety Plan.
3. Contractors will be expected to have the following items (at a minimum) in their safety plans;
  - a. Before mobilizing to the project site the General Contractor will work with their U of SC Project Manager to identify one point of entry and one point of exit to the jobsite if at all possible.
  - b. The General Contractor and all Subcontractors will each have one individual from their company assigned as their COVID-19 contact point for related issues.
  - c. The General Contractor will maintain a list of all individuals who access the site each day, this list will be kept for a minimum of four weeks.
  - d. The General Contractor will NOT pass around a communal sign-in sheet to create the daily attendance list when the majority of workers are arriving each day, but will have one individual responsible for creating the list as individuals arrive.
  - e. The General Contractor will ensure that workers who arrive on site each day are healthy and have no symptoms similar to those associated with COVID-19. If a worker is symptomatic, they will immediately leave campus and follow their employer's protocol. Employees should not report to work on the U of SC campus if they have any of the symptoms that are common to those who test positive for Covid-19.
  - f. Depending on the building where the construction work is taking place, the General Contractor will arrange for the start and completion of the work day to work around the times assigned for

passage between scheduled classes so that workers are not entering or exiting the jobsite as students are rotating classes.

- g. The General Contractor will encourage workers to stay on site for their whole shift, rather than leaving the site for lunch. The General Contractor will provide enough space for workers to take their lunch break without having to break the University mandated physical distancing guidelines or the maximum of 10 individuals together. If this requires allowing the workers to take their breaks and lunch in shifts, the General Contractor will accommodate this.
- h. The General Contractor and all Subcontractors will make every attempt to keep the same employees assigned to the same construction projects for the duration of their required scope of work. Assignments of rotating or random trades, work force personnel is highly discouraged.
- i. If feasible, depending on the jobsite and trade, the General Contractor and Subcontractors will divide their work crews into two separate groups that will work in separate areas and workers will not shift between groups once assigned. This should be done as, if a worker in one group is exposed and must self-quarantine, then the whole group must self-quarantine, however this will leave the separate work group able to continue working on the jobsite without shutting the whole jobsite down. The General Contractor may discuss the potential for achieving this by running two separate time shifts on the project with the U of SC Project Manager.
- j. The General Contractor will limit access to the jobsite trailer or office as required to maintain physical distancing guidelines whenever possible and face coverings will be worn if the 6' distance cannot be maintained.
- k. Architects and Engineers that need to access the construction site for inspections or other related tasks are requested to schedule their site visits for late in the day after construction work has ceased for the day, if at all possible.
- l. The GC will have signage posted on site reminding workers to maintain the minimum 6' physical distancing whenever possible and

that a face covering must be worn when that distance cannot be maintained.

- m. Workers will wear gloves at all times except when the task at hand cannot be performed safely with gloves on.
- n. Regular PPE guidelines will be maintained.
- o. Face coverings should be worn by workers whenever they are on campus and traveling to or from the job site.
- p. Workers will wash their hands each day when they enter and leave the jobsite. This is the minimum requirement and more frequent hand washing is recommended.
- q. The General Contractor/Subcontractor will provide individual bottles of water for workers on site and NOT a cooler for communal use.
- r. The General Contractor and all subcontractors should avoid having workers share tools wherever possible. If it is not possible to avoid, then tools should be cleaned before and after each individual use.
- s. The General Contractor and all subcontractors should avoid having employees share company vehicles wherever possible. If it is not possible to avoid, then the vehicle should be cleaned before and after each individual use.
- t. The General Contractor and all subcontractors will maintain a clean jobsite and trash will be removed on a daily basis by an individual who is wearing gloves and a face covering.
- u. The GC will ensure that the portable restroom facilities are sanitized daily.
- v. If a worker who has been on a U of SC construction site within the past 14 days is found to test positive for COVID-19, the General Contractor will ***immediately*** notify the U of SC Project Manager and advise which days the worker was on site and if the exposure appears to be work related or non-work related.
- w. If the GC or any of their subcontractors are advised by one of their employees that they have been potentially exposed to Covid-19 within the previous 14 days and they have been advised to self-quarantine, and that employee has been on a project site at the U of SC campus within that same 14 day period the employer must notify

the U of SC Project Manager and advise what days their employee was on site.

- x. If any individual who has been on the project jobsite is found to have tested positive for Covid-19, the construction site will be shut down immediately for thorough cleaning by the General Contractor.



## DAILY COVID-19 SCREENING

### Select Yes or No

First time answering questions below, look back 14 days. Each time after, answer since last interviewed.

Yes  No  Have you been diagnosed with the Novel Coronavirus/COVID-19?

Yes  No  Have you had a temperature reading of 100.0°F or higher or felt feverish?

Have you lived with or been within 6 feet of someone for 10 consecutive minutes who ...

Yes  No  • has been diagnosed with COVID-19?

Yes  No  • is quarantined or isolated due to suspicion of COVID-19?

### Mark all symptoms that you have experienced

First time assessing symptoms below, look back 7 days. Each time after, answer since last interviewed.

NONE

Cough

Shortness of Breath

Sore Throat

Muscle Aches

Headache

Chills/Shaking

Lost Sense of Smell/Taste

Temperature Reading from today: On-Site \_\_\_\_\_ -or- Home \_\_\_\_\_

If you have answered 'Yes' to any questions above, experienced any of the listed symptoms or have a temperature reading of 100.0°F or higher, you should remain at home and contact your supervisor. If you are screening at the worksite, exit your worksite with your face cover/mask in place and contact your supervisor for further instructions.

Remember to wear a Face Cover/Mask as indicated throughout the day.

### UofSC Employee:

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

Signature: \_\_\_\_\_ Supervisor: \_\_\_\_\_

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

### Vendor/Contractor:

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

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

The university continues to act in good faith to fulfill its obligation to protect, to the extent possible, members of the university community from COVID-19. The information collected on this form will be used to help the university address your needs and prevent the spread of COVID-19.

State and federal law and university policy prohibit discrimination based on age, disability, genetics, race, color, national origin, sex, gender, religion, sexual orientation, protected veteran status, pregnancy, childbirth or medical conditions related to pregnancy or childbirth.

If you believe you have been a victim of unlawful discrimination because of information you provided on this form, you may contact the university's Office of Equal Opportunity Programs at 803-777-3854; by email at eop@mailbox.sc.edu; online at sc.edu/eop; in person at 1600 Hampton Street, Suite 805, Columbia, SC.

AIR COOLED SCROLL CHILLER SCHEDULE												
TAG	TRANE MODEL NO.	CAPACITY TONS	UNIT IPLV	EVAPORATOR			CONDENSER		COMPRESSOR		REMARKS	
				EWT °F	LWT °F	CRV	P.D.-FT.	AMB. °F	MIN. °F	QUAN.		STAGES
CH-1	CGAM	52	15.04	45.6	33.8	86	8.13	95	0	4	4	1, 2, 3

1. PROVIDE FACTORY MOUNTED CIRCUIT BREAKER, FLOW SWITCH, AND COIL GUARD.  
 2. PROVIDE ON BOARD MICROPROCESSOR UNIT CONTROL.  
 3. PROVIDE STARTUP BY A FACTORY TRAINED TECHNICIAN FROM THE UNIT MANUFACTURER.

- ### GENERAL NOTES
- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2018 INTERNATIONAL MECHANICAL CODE AND 2009 INTERNATIONAL ENERGY CONSERVATION CODE. ALL LOCAL CODES OR REQUIREMENTS STILL APPLY.
  - VISIT SITE PRIOR TO BIDDING. THIS CONTRACTOR SHALL DETERMINE DIFFICULTY OF INSTALLATION AND REFLECT THIS IN HIS BIDDING.
  - DO NOT SCALE DRAWINGS. THIS CONTRACTOR SHALL VERIFY ALL EXISTING ITEMS AND LOCATIONS IN THE FIELD.
  - ALL PIPING LOCATIONS SHALL BE COORDINATED WITH WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID INTERFERENCE.
  - EXISTING PIPE, DUCTWORK, CONDUIT, ETC. THAT INTERFERES WITH THE ROUTING OF NEW SYSTEMS SHALL BE RELOCATED. THIS CONTRACTOR SHALL INCLUDE THE COST OF SUCH IN HIS BID UNLESS NOTED OTHERWISE.
  - WATER SYSTEMS SHALL BE DRAINED AS REQUIRED FOR INSTALLATION OF WORK. UPON COMPLETION, SYSTEM SHALL BE FILLED WITH WATER AND GLYCOL SOLUTION AND VENTED OF ALL AIR.
  - ALL PIPING INSULATION SHALL BE RUN CONTINUOUSLY THROUGH FLOORS. SEAL PENETRAION WATER TIGHT WITH LINK SEAL.
  - ALL PIPING IS SHOWN DIAGRAMMATIC. HOWEVER, THIS CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS, PIPING AND INSULATION FOR ALL OFFSETS AND/OR CHANGES IN ELEVATION.
  - ALL PIPING THERMOMETERS, GAUGES, P/T PORTS, VALVES, ETC. SHALL BE READILY ACCESSIBLE FROM FLOOR LEVEL. IN GENERAL ALL ITEMS SHALL BE NO MORE THAN 6' ABOVE FINISHED FLOOR.
  - ALL VALVES AND SPECIALTIES SHALL BE LINE SIZE UNLESS NOTED OTHERWISE, USING ECCENTRIC REDUCERS ON PUMP SUCTION AND CONCENTRIC REDUCERS ON PUMP DISCHARGE. USE ECCENTRIC REDUCERS ON AUTOMATIC VALVES AS REQUIRED.
  - WHEREVER ANY CONNECTION IS MADE BETWEEN DISSIMILAR METALS, PROVIDE DIELECTRIC PIPE COUPLINGS, UNIONS, OR NIPPLES RATED FOR 210 DEGREES F.
  - ALL PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH THE SPECIFICATIONS AND FURTHER SUPPORTS OR HANGERS SHALL BE PROVIDED TO PREVENT WEIGHT OF PIPING BEING PLACED ON EQUIPMENT.
  - PROVIDE FOR ACCESS TO ALL EQUIPMENT REQUIRING CLEANING OR ADJUSTMENT PER MANUFACTURER'S INSTRUCTIONS. PROVIDE FULL SPACE FOR COIL REMOVAL AND REPLACEMENT FOR ALL UNITS.
  - THIS CONTRACTOR SHALL PROVIDE ALL ITEMS OF MISCELLANEOUS STEEL AS REQUIRED FOR INSTALLATION OF ALL MECHANICAL ITEMS.
  - THIS CONTRACTOR SHALL DO ALL CONTROL WIRING AND ALL POWER WIRING. ALL WIRING SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE. CONTROL WIRING SHALL BE CONCEALED WITHIN WALL AND ALL CONTROL WIRING SHALL BE ROUTED IN EMT CONDUIT. CONTROLS SHALL BE CONNECTED TO EXISTING JOHNSON CONTROLS METASYS NETWORK BY JCI.
  - THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY DISMANTLING OF EQUIPMENT TO BE REMOVED.
  - ITEMS REMOVED UNDER THIS CONTRACT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF PROPERLY.
  - THIS CONTRACTOR SHALL PATCH ALL WALLS AND FINISHES TO MATCH EXISTING WHERE ALL ITEMS OR EQUIPMENT ARE REMOVED.

- ### DEMOLITION NOTES
- ① REMOVE EXISTING CHILLER COMPLETE, INCLUDING BUT NOT LIMITED TO CONNECTING PIPING, POWER WIRING, DISCONNECT, AND CONTROLS.

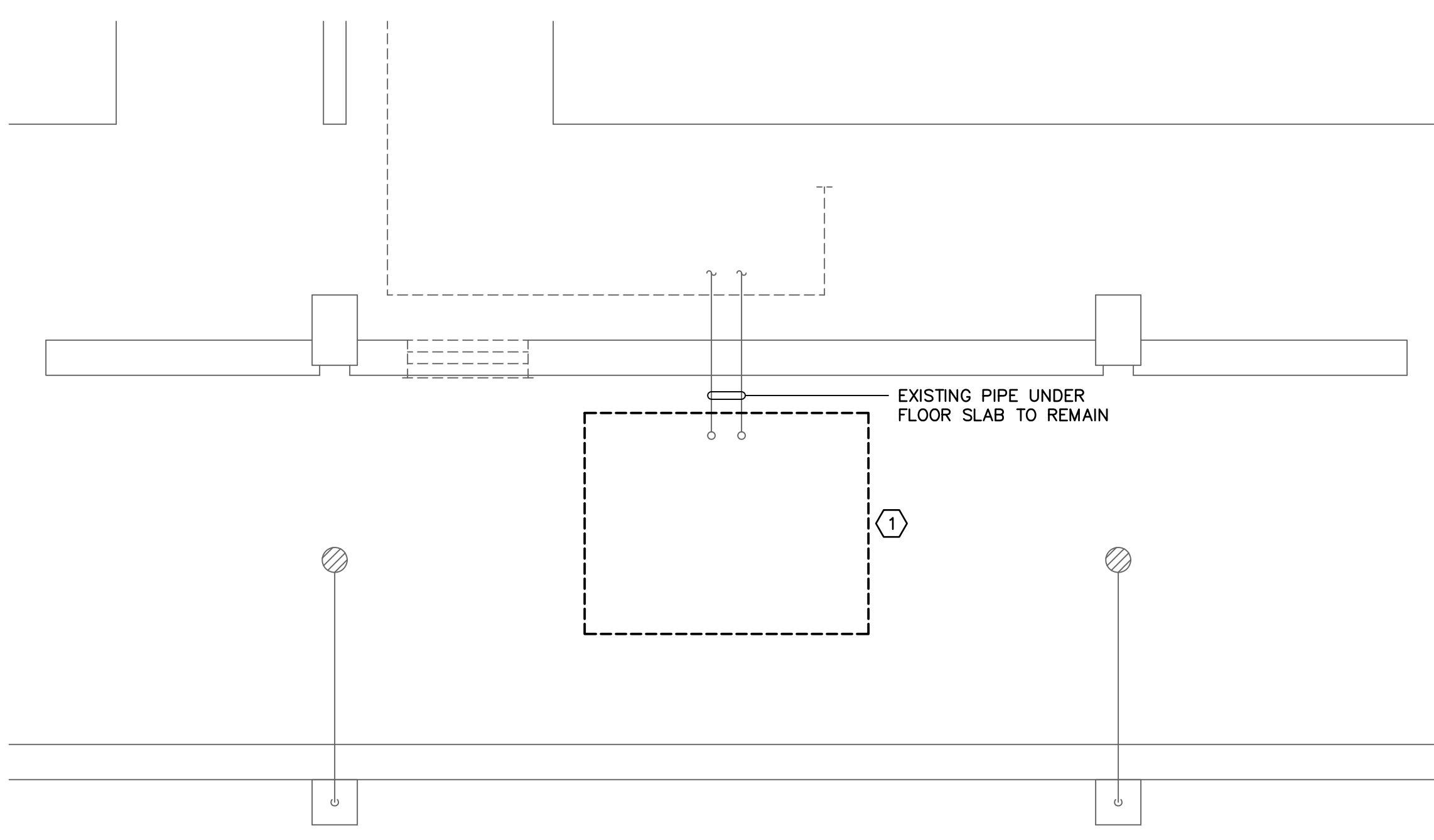
### ISOLATION AND SEISMIC SCHEDULE

RISK CATEGORY = III		SEISMIC DESIGN CATEGORY = D		
EQUIPMENT TAG	COMPONENT Ip	ISOLATION SPECIFICATION	SEISMIC REST. SPECIFICATION	ISOLATION DEFLECTION
CHILLERS (ROOF / UPPER FLOORS)	1.0	SPEC C SPEC K	SPEC C	2"

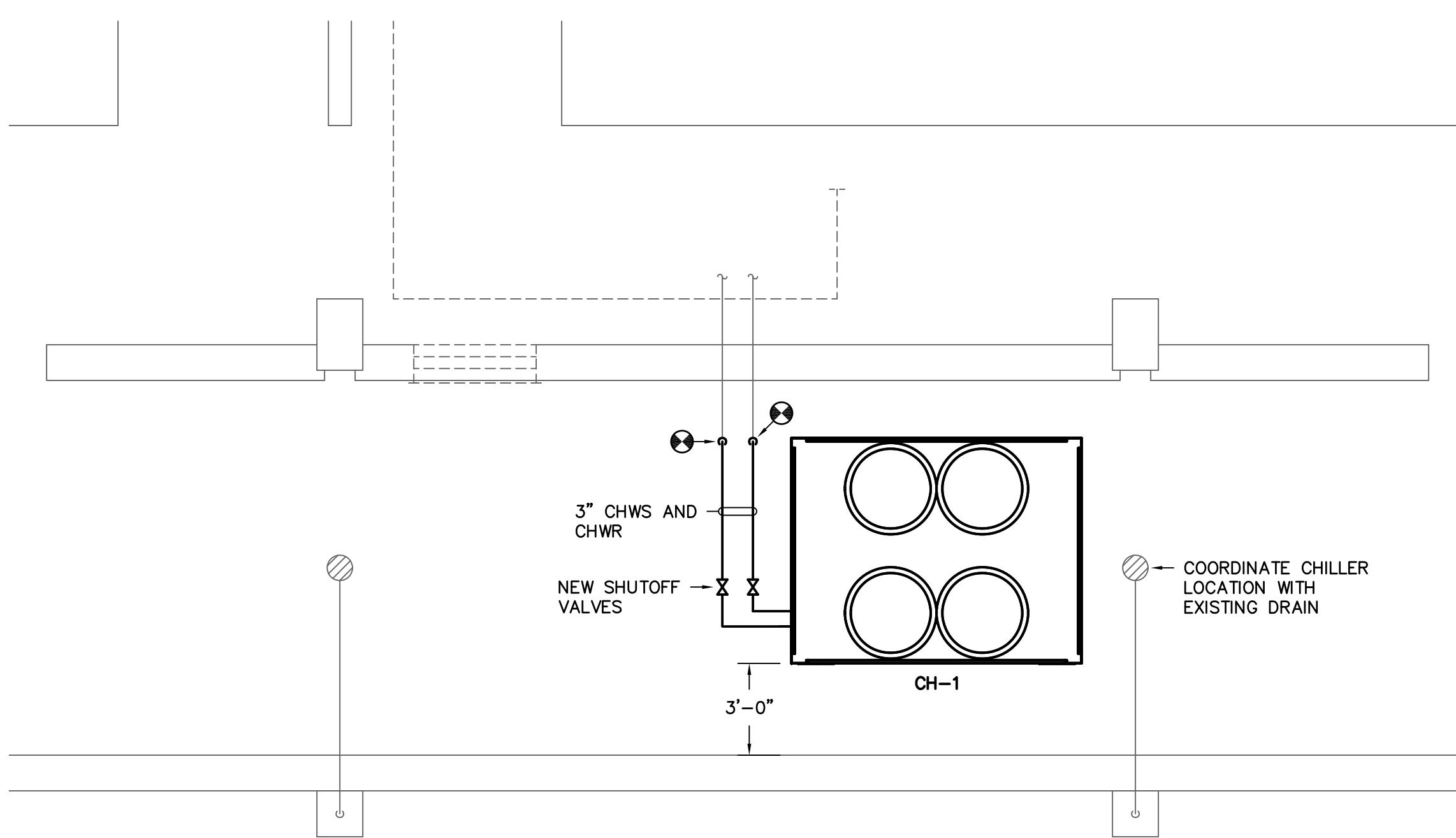
- ANCHOR BOLTS FOR NON-ISOLATED AND INTERNALLY ISOLATED EQUIPMENT SHALL BE SIZED BY THE SEISMIC RESTRAINT SUPPLIER. IF REQUIRED, SPEC. SL SNUBBERS OR SPEC. SC CABLE KITS SHALL BE PROVIDED.
- ROOF CURBS PROVIDED BY OTHERS MUST BE CERTIFIED BY A PROFESSIONAL ENGINEER FOR THE REQUIRED SEISMIC LOADS.
- PADS REINFORCED AND DOWELED IN ACCORDANCE WITH ASHRAE SEISMIC GUIDELINES.
- DIFFUSERS WEIGHING LESS THAN 20 LBS MUST BE MECHANICALLY ATTACHED TO CEILING GRID, BUT REQUIRE NO ADDITIONAL RESTRAINT.

### LEGEND

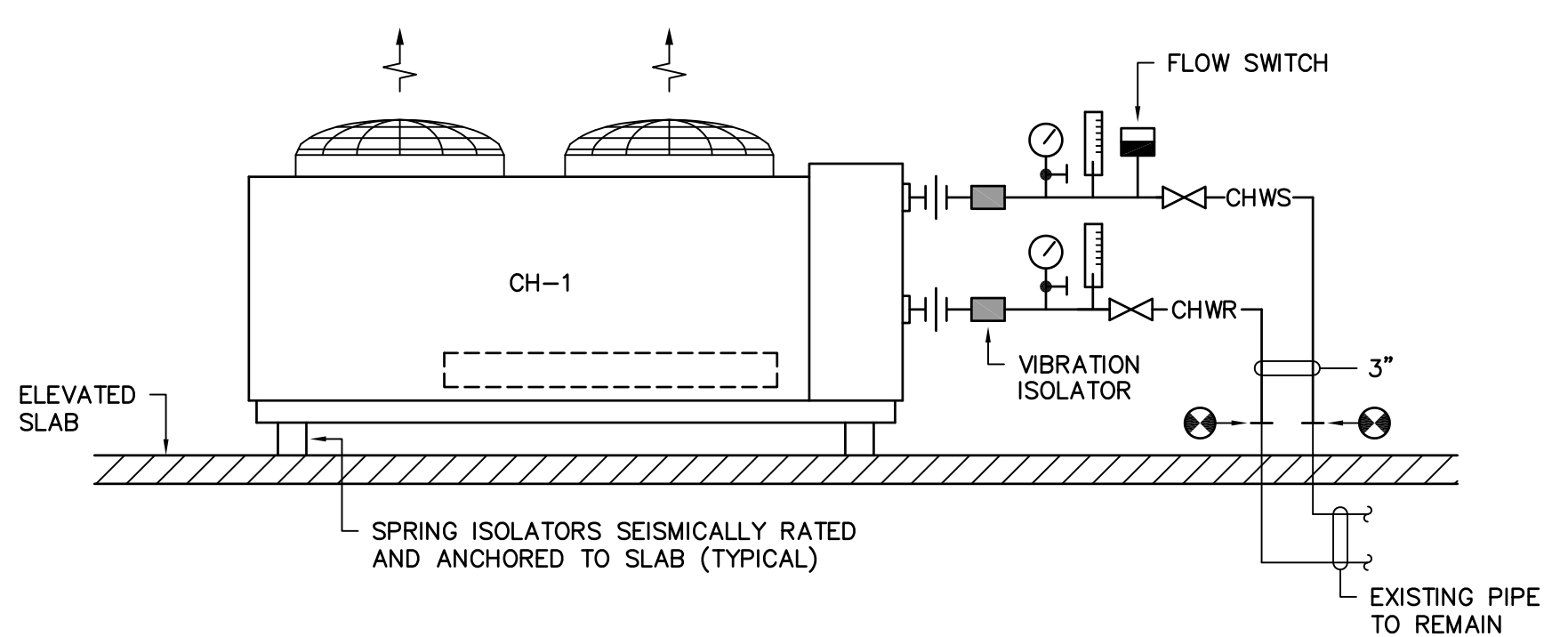
SYMBOL	DESCRIPTION
↔-CHWS↔	CHILLED WATER SUPPLY LINE
↔-CHWR↔	CHILLED WATER RETURN LINE
↔-X↔	SHUTOFF VALVE
↔-O-↔	PIPE TURNS TO, AWAY
↔-○/○↔	THERMOMETER / PRESSURE GAGE
⊕	CONNECTION POINT OF NEW TO EXISTING



1 PARTIAL SECOND FLOOR DEMOLITION PLAN  
 SCALE: 1/4" = 1'-0"

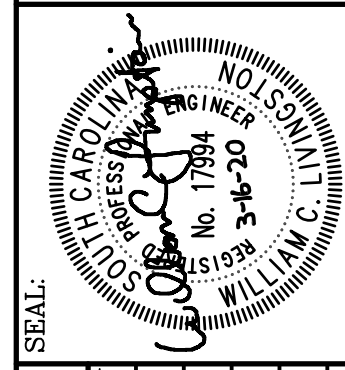


2 PARTIAL SECOND FLOOR RENOVATION PLAN  
 SCALE: 1/4" = 1'-0"



AIR COOLED CHILLER  
 NO SCALE

CAMPUS PLANNING AND CONSTRUCTION  
 COLUMBIA, SC 29208



BUILDING:	DRAWING:	DATE:	DESCRIPTION:	REV:	WCL	DEM	WCL	DEM
TP20000029	16MAR20	08.22.20	ADDDENDUM NO. 1	1				

PROJECT TITLE: REPLACE AIR COOLED CHILLER BLATT PE CENTER

University of South Carolina

SHEET: M1 OF SHEET IN SET: OF

Swygert & Associates  
 CONSULTING ENGINEERS

DBA Swygert & Assoc., Ltd. Telephone: (803) 791-9300  
 Post Office Box 11886 Columbia, S.C. 29211 Facsimile: (803) 791-9830  
 mail@swygert-associates.com

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