

Addendum One

April 24, 2013

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> The new variable frequency drive(s) will be located inside on the same rack as the existing drives serving the existing towers for chiller 1. |
| 2. | <u>Clarification:</u> Any damage to the building caused by the contractor will be repaired at the Contractor's expense, to an as existing condition prior to the Contractor beginning work. |
| 3. | <u>Clarification:</u> Make up water is indicated to the tower. The make up pipe will be connected as shown but a valve will be provided to shut the water off. Make up water is supplied via the common header. |
| 4. | <u>Clarification:</u> The new pipe shall be flushed and cleaned by the Contractor but water treatment will be by USC. |
| 5. | <u>Clarification:</u> Tower is indicated on schedule to be field erected by tower Manufacturer. Tower can be erected by contractor personnel under direct supervision of an on-site tower Manufacturer representative. |
| 6. | <u>Clarification:</u> Controls for cooling tower operation shall be by Johnson Controls as specified. Controls Contractor is to include all raceway and wiring in the controls scope of work. |
| 7. | <u>Clarification:</u> The specification for the Alternate 1 cooling tower is in Specification Section 230500 page 10. |
| 8. | <u>Clarification:</u> The piping is to be painted per Specification Section 230010 page 13. |
| 9. | <u>Clarification:</u> The piping is to be domestically produced per Specification 230010 page 8. |

10. Clarification: The controls integration and programming is to be included by Johnson Controls in the Contractor's bid.
11. Clarification: The Contractor will field coordinate the exact connection point for the structural bracing with the Structural Engineer.
12. Clarification: Please note that the existing abandoned steam piping can be removed where it interferes with the new pipe routing at the catwalk, to avoid additional offsets.

Drawings

- | <u>Item No.</u> | <u>Description</u> |
|-----------------|---|
| 13. | <u>Revision:</u> Reference Drawing M-1, Mezzanine Level Plan. This plan shows relocating the water pipe penetration to the existing roof curb. |
| 14. | <u>Revision:</u> Reference Drawing M-2, Roof Plan. This plan shows relocating the water pipe penetration to the existing roof curb. |
| 15. | <u>Revision:</u> Reference Drawing M-3, Roof Plan. This plan shows two details for the roof penetration at the existing curb and a pipe support rail on the roof. |

Specifications

- | <u>Item No.</u> | <u>Description</u> |
|-----------------|--|
| 16. | <u>Revision:</u> Reference Section 230500 Heating Ventilation and Air Conditioning, Part 2 Products. Under schedule of piping change Galvanized pipe to Black Steel Schedule 40. |
| 17. | <u>Revision:</u> The following are listed as prior approved equals. Please note that this does not relive responsibility to meet the requirements in the specifications. In addition this does not relieve the contractor of responsibility to coordinate electrical requirements for a substituted tower. |

Cooling Tower Alternate 1: Marley/SPX, Evapco, Baltimore Air Coil

END OF ADDENDUM

Attachments:

Pre-Bid Sign In Sheets

M-1-REV1

M-2-REV1

M-3-REV1



University of South Carolina Pre Bid Sign In Sheet

Columbia, South Carolina

Project Name & Number: RE BID East Energy Chiller I - Cooling Tower Addition/H27-1969
 Pre Bid Date & Time: April 16, 2013 @ 9am

Name	Company	Address	Phone #	Email
GRANT HUNTER	MSI	W. Columbia	803-796-3324	granthunter@msiconst.com
B.B. Bell	Gregory Industrial	Columbia, SC 224 College St	803-748-1742	bbbell@gregoryindustrial.com
Jeremy Long	SZ Engineering	137 Misty Glen Circle Irmo, SC 29063	803 319-9755	longjeremy1ff9@gmail.com
John Gordin	Cullum Const. Inc.	P.O. Box 40368 Charleston, S.C. 29423	843-554-6645	Gordin.J@Culluminc.com
Brian Sharpans	Boiler Master	3044 N. Main St. Columbia, SC 29201	803-252-5410	DANIFIED BOILER MASTERS INC
Mike Smith	Boiler Masters, Inc	314 Village Green Dr. Greensboro, NC 27406	1-888-272-9046	boilermasters@boiler.com
Nick Miller	Shelby Bros Elec	P.O. Box 4253 W. Columbia, SC 29171	803) 794-2322	Nick-miller@shelbysouth.net
Will Thompson	McCartor Mech	605 S. Main Dodd Rd Spartanburg, SC	803-599-7883	willt@mcCartormechanical.com
Todd Yarborough	MSC		803-929-6846	

*Please make sure you list your company name as registered with LUR.
 * By signing and providing your email address, you are authorizing the University of South Carolina to send you information electronically.

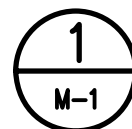
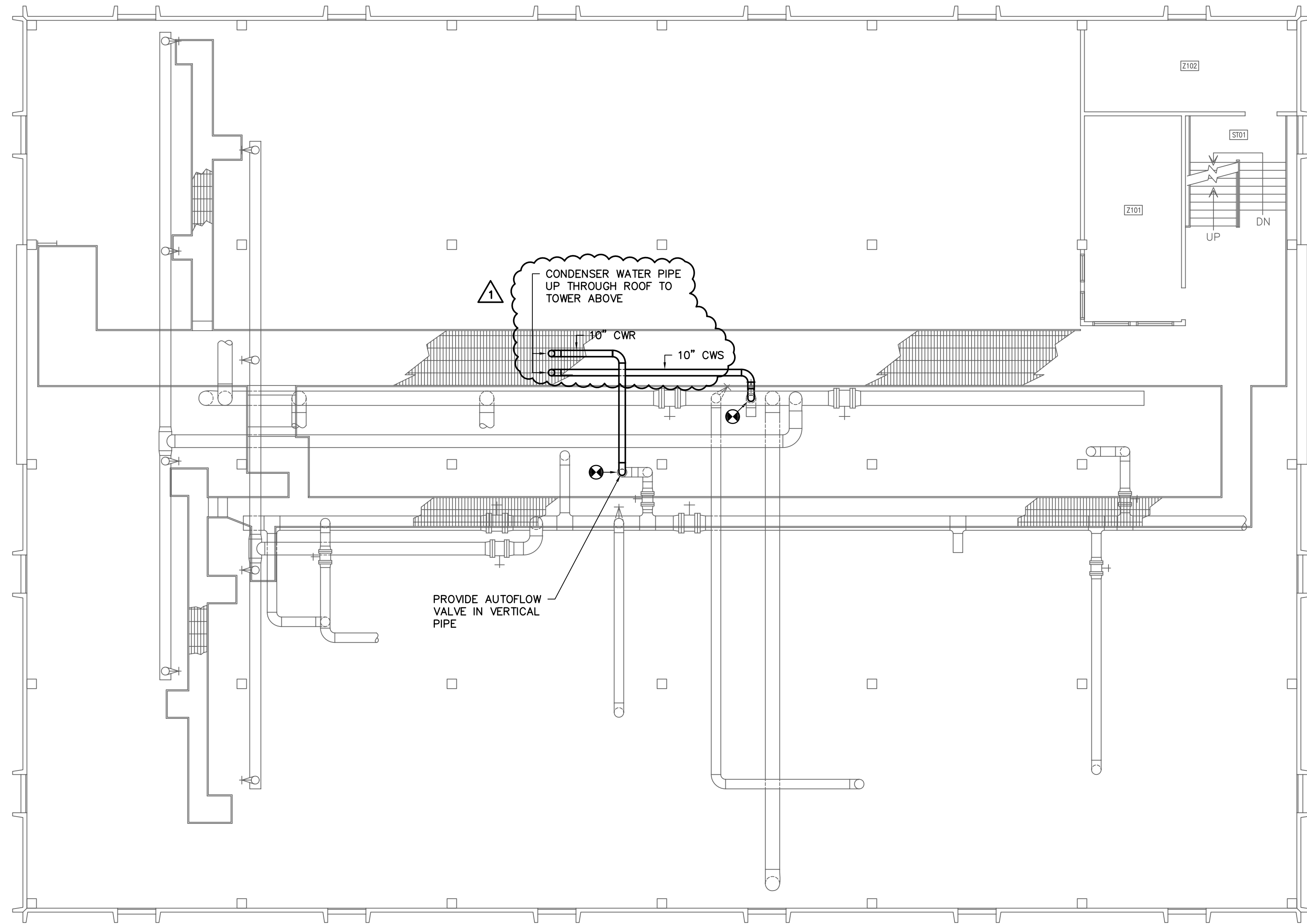


University of South Carolina Pre Bid Sign In Sheet
Columbia, South Carolina

Project Name & Number: RE BID East Energy Chiller I - Cooling Tower Addition/H27-1969
Pre Bid Date & Time: April 16, 2013 @ 9am

Name	Company	Address	Phone #	Email
Troy Nelson	usc		803 777-4674	tnebsd@sc.edu
Juaguana Brookins	usc		803.777.3596	jbrookin@finc.sc.edu
David Yi	White Crane		903-609-7706	dyyi@coastal.edu
Bill LIVINGSTON	SWYGER & ASSOCIATES		803-791-9300	BILL@SWYGER- ASSOCIATES.COM

*Please make sure you list your company name as registered with LLR.
* By signing and providing your email address, you are authorizing the University of South Carolina to send you information electronically.



MEZZANINE LEVEL PLAN

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

CAMPUS PLANNING
AND CONSTRUCTION
COLUMBIA, SC 29208

SEAL:

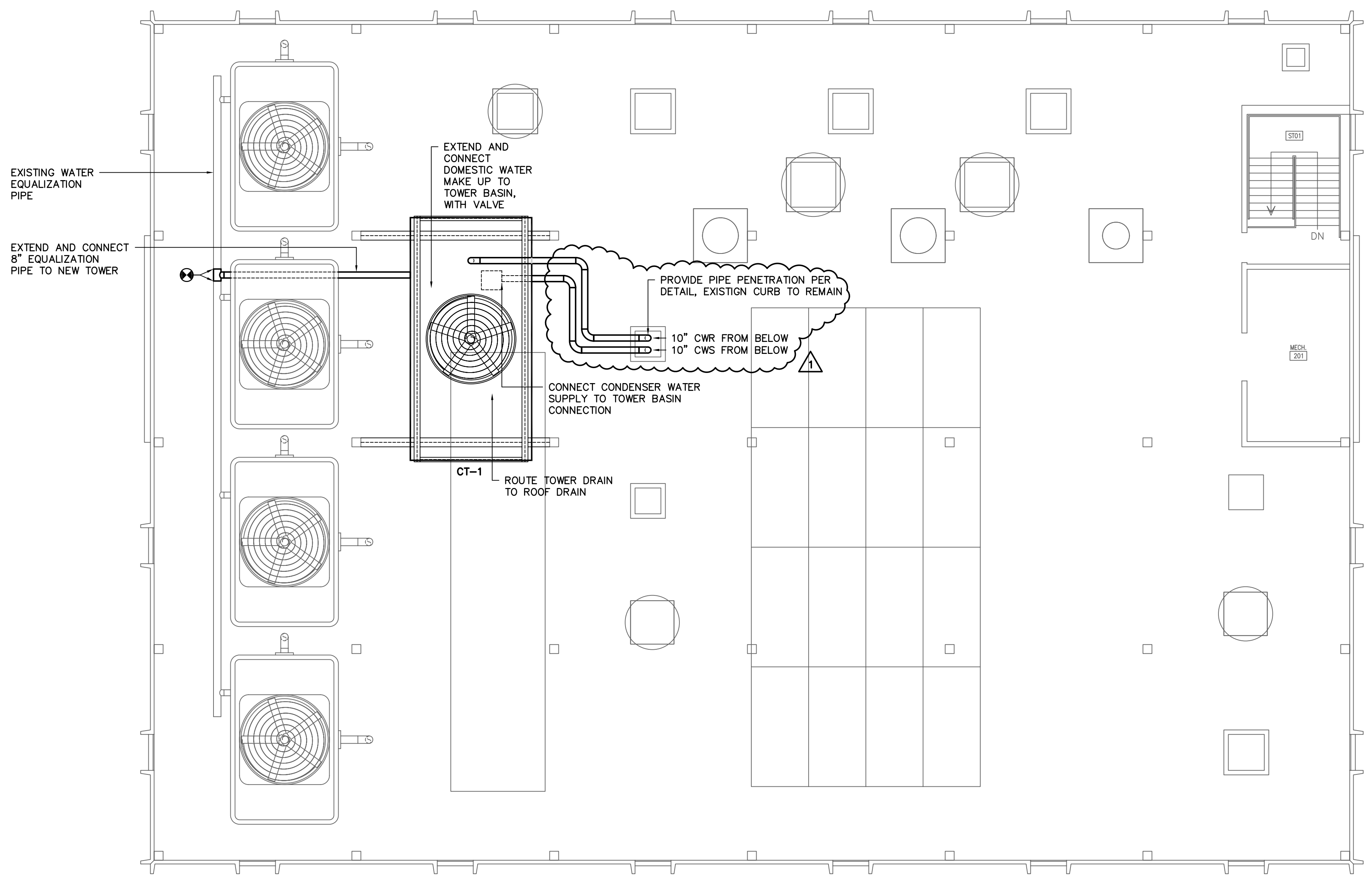
BUILDING:	DRAWING:	DATE:	DRAWN BY:	DEM DATE:	CHECKED BY:	
					WCL	WCL
REV. 1	CP00331757	01APR13		4.24.13	WCL	WCL
	ADDENDUM 1	DESCRIPTION				

PROJECT TITLE: REBID EAST ENERGY CHILLER 1
COOLING TOWER ADDITION
STATE PROJECT NO.: H27-1969
University of South Carolina

SHEET: M-1
OF 3
SHEET IN SET:
OF

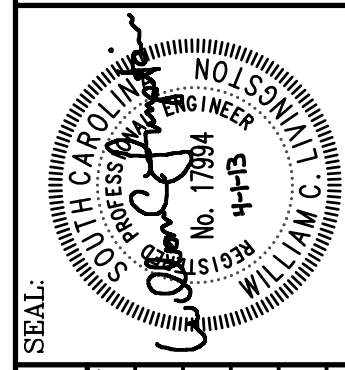
Swygert & Associates
CONSULTING ENGINEERS

DBA Swygert & Assoc., Ltd. Telephone: (803) 791-9300
Post Office Box 11686 Fax: (803) 791-9830
Columbia, S.C. 29211 mail@swygert-associates.com



1 ROOF PLAN
 M-2 SCALE: 1/8" = 1'-0"

CAMPUS PLANNING
 AND CONSTRUCTION
 COLUMBIA, SC 29208



BUILDING:	DRAWING:	DATE:	DRAWN BY:	CHECKED BY:
REV. 1	CP00331757	01 APR 13	WCL	WCL
	ADDENDUM 1		WCL	WCL
		DESCRIPTION	WCL	WCL
		4.24.13	WCL	WCL
		DEM DATE	WCL	WCL

PROJECT TITLE: REBID EAST ENERGY CHILLER 1
 COOLING TOWER ADDITION
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SHEET: M-2
 OF 3
 SHEET IN SET:

COOLING TOWER SCHEDULE (ALTERNATE 1)

TAG	MARLEY MODEL NO.	ENT. WTR.	LVG. WTR.	GPM	HEAD FT.	ENT. AIR WB	MOTOR H.P.	REMARKS
CT-1	NC8407SAS1	95	85	1,500	12.3	79	30	1,2,3

1. PROVIDE CROSSFLOW INDUCED DRAFT TOWER WITH ALL STAINLESS CONSTRUCTION.
2. PROVIDE BALDOR TEAO ADJUSTABLE SPEED DIRECT DRIVE FAN MOTOR INCLUDING ADJUSTABLE SPEED DRIVE AND SEVERE DUTY RATING.
3. PROVIDE WITH PVC FILL.

COOLING TOWER SCHEDULE

TAG	CCS MODEL NO.	ENT. WTR.	LVG. WTR.	GPM	HEAD FT.	ENT. AIR WB	MOTOR H.P.	REMARKS
CT-1	P3K-707	95	85	1,500	20.8	79	30	1,2,3,4

1. PROVIDE CROSSFLOW INDUCED DRAFT TOWER WITH ALL FRP CONSTRUCTION, AND STRUCTURAL CONNECTORS CONSTRUCTED FROM 304 STAINLESS STEEL.
2. PROVIDE BALDOR TEAO ADJUSTABLE SPEED DIRECT DRIVE FAN MOTOR INCLUDING ADJUSTABLE SPEED DRIVE AND SEVERE DUTY RATING.
3. PROVIDE WITH PVC FILL.
4. TOWER MANUFACTURER SHALL PROVIDE ALL ERECTION ON SITE.

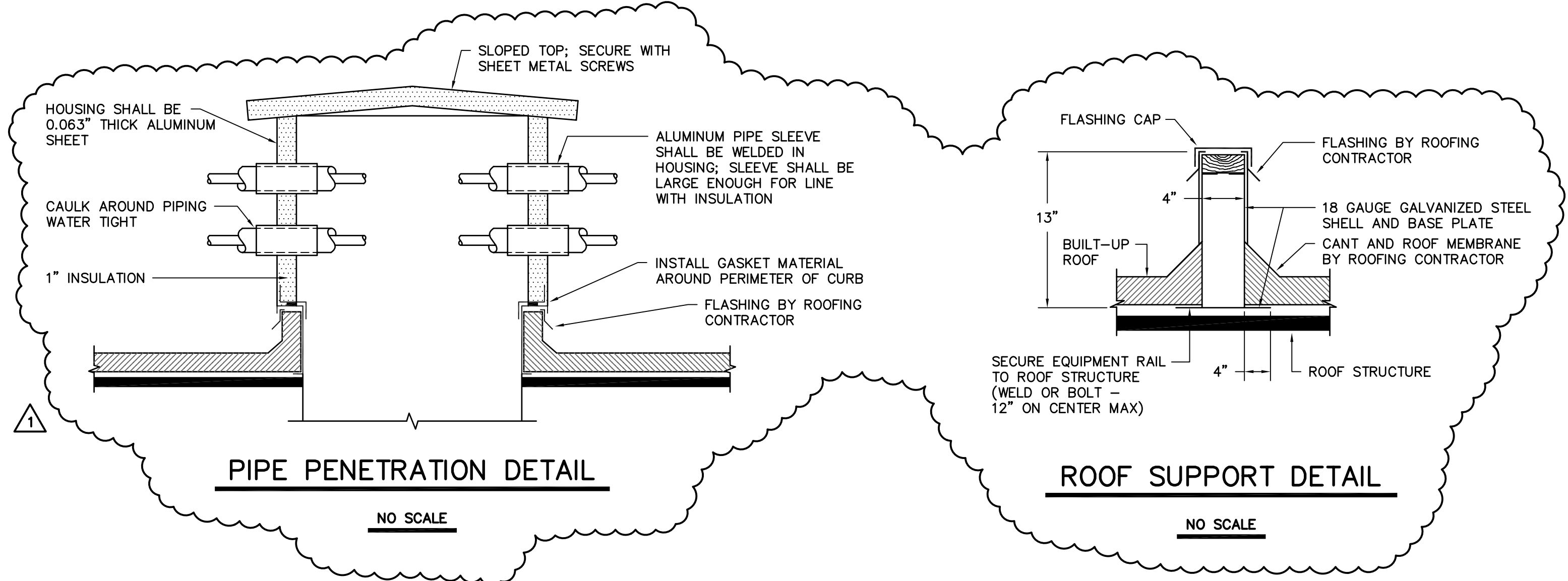
ISOLATION AND SEISMIC SCHEDULE

OCCUPANCY CATEGORY = I		SEISMIC SITE CLASS = D		
EQUIPMENT TAG	COMPONENT ID	ISOLATION SPECIFICATION	SEISMIC REST. SPECIFICATION	ISOLATION DEFLECTION
COOLING TOWER (ON ROOF)	1.0	SPEC W SPEC K	NOTE 1	.15"

1. 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.
2. ROOF CURBS PROVIDED BY OTHERS MUST BE CERTIFIED BY A PROFESSIONAL ENGINEER FOR THE REQUIRED SEISMIC LOADS.
3. PADS REINFORCED AND DOWELED IN ACCORDANCE WITH ASHRAE SEISMIC GUIDELINES.
4. DIFFUSERS WEIGHING LESS THAN 20 LBS MUST BE MECHANICALLY ATTACHED TO CEILING GRID, BUT REQUIRE NO ADDITIONAL RESTRAINT.

GENERAL NOTES

1. VISIT SITE PRIOR TO BIDDING. THIS CONTRACTOR SHALL DETERMINE DIFFICULTY OF INSTALLATION AND REFLECT THIS IN HIS BIDDING.
2. DO NOT SCALE DRAWINGS. THIS CONTRACTOR SHALL VERIFY ALL EXISTING ITEMS AND LOCATIONS IN THE FIELD.
3. ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED WITH WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID INTERFERENCE.
4. THIS CONTRACTOR SHALL COORDINATE STEEL AND EQUIPMENT SUPPORT WITH STEEL SHOP DRAWINGS TO CONFIRM DIMENSIONS MATCH WITH EQUIPMENT SUPPLIED.
5. 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.
6. WATER SYSTEMS SHALL BE DRAINED AS REQUIRED FOR INSTALLATION OF WORK. UPON COMPLETION, SYSTEM SHALL BE FILLED WITH WATER AND VENTED OF ALL AIR.
7. ALL MECHANICAL ITEMS EXTENDING THROUGH ROOF SHALL BE FLASHED AND COUNTERFLASHED. PROVIDE PIPE PORTALS AS REQUIRED FOR PIPING PENETRATIONS THROUGH THE ROOF. COORDINATE WITH ROOFING CONTRACTOR. THIS CONTRACTOR TO FLASH ROOF CURBS AND SEAL TO EXISTING ROOF SYSTEM.
8. ALL PIPING IS SHOWN DIAGRAMMATIC. HOWEVER, THIS CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS, PIPING AND INSULATION FOR ALL OFFSETS AND/OR CHANGES IN ELEVATION.
9. EXTEND ALL DRAIN LINES TO NEAREST ROOF DRAIN AS INDICATED - SO ROUTED AS TO AVOID INTERFERENCE WITH PASSAGEWAYS AND MAINTENANCE.
10. 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.
11. PROVIDE AND INSTALL 3W/FT HEAT TRACE TAPE ON ALL EXTERIOR WATER PIPING.
12. PROVIDE FOR ACCESS TO ALL EQUIPMENT REQUIRING CLEANING OR ADJUSTMENT.
13. THIS CONTRACTOR SHALL PROVIDE ALL ITEMS OF MISCELLANEOUS STEEL AS REQUIRED FOR INSTALLATION OF ALL MECHANICAL ITEMS.
14. THIS CONTRACTOR SHALL DO ALL CONTROL WIRING. DIVISION 23 WILL DO ALL POWER WIRING. ALL WIRING SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE. CONTROL WIRING SHALL BE CONCEALED WITHIN WALL.
15. CORRECT SETTINGS ON ALL BALANCING FITTINGS SHALL BE PERMANENTLY MARKED.
16. THIS CONTRACTOR SHALL PATCH ALL WALLS AND FINISHES TO MATCH EXISTING WHERE ALL ITEMS OR EQUIPMENT ARE REMOVED.



LEGEND

SYMBOL	DESCRIPTION
	CONDENSER WATER SUPPLY LINE
	CONDENSER WATER RETURN LINE
	EXISTING CONDENSER WATER PIPE
	SHUTOFF VALVE
	CHECK VALVE
	STRAINER WITH BLOWDOWN
	BUTTERFLY VALVE
	BALANCING VALVE
	UNION
	PIPE TURNS TO, AWAY
	THERMOMETER / PRESSURE GAGE
	THERMOMETER WELL CAPPED / GAGE COCK
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	CONNECTION POINT OF NEW TO EXISTING

CAMPUS PLANNING AND CONSTRUCTION
COLUMBIA, SC 29208

DATE:	01 APR 13
DRAWN BY:	DEM
CHECKED BY:	WCL
DATE:	4.24.13
ORIG. BY:	WCL
REV:	1
DESCRIPTION:	ADDENDUM 1

PROJECT TITLE: REBID EAST ENERGY CHILLER 1
COOLING TOWER ADDITION
STATE PROJECT NO.: H27-1969
University of South Carolina

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SHEET: M-3
OF 3
SHEET IN SET: