

COLUMBIA CAMPUS CONDENSATE PUMP REPLACEMENT LIEBER COLLEGE

**STATE PROJECT NUMBER H27-Z206
COLUMBIA, SC
CONSTRUCTION DOCUMENTS**

DRAWING INDEX

GENERAL

T1 TITLE SHEET

MECHANICAL

M1 SITE PLAN AND FLOOR PLAN
M2 MANHOLE DIAGRAMS
M3 DETAILS, NOTES, SCHEDULES,
AND LEGEND

ELECTRICAL

E1 SITE PLAN AND ENLARGED FLOOR PLAN

**CAMPUS PLANNING
AND CONSTRUCTION
COLUMBIA, SC 29208**

SEAL:

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DATE

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DESCRIPTION

BUILDING:

REV.

DRAWING: CP00419517

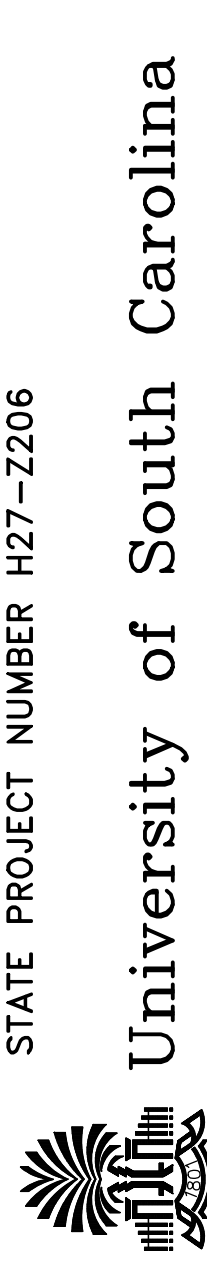
DATE: 06FEB15

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DESCRIPTION

**PROJECT TITLE: COLUMBIA CAMPUS CONDENSATE PUMP
REPLACEMENT - LIEBER COLLEGE**

STATE PROJECT NUMBER H27-Z206



University of South Carolina

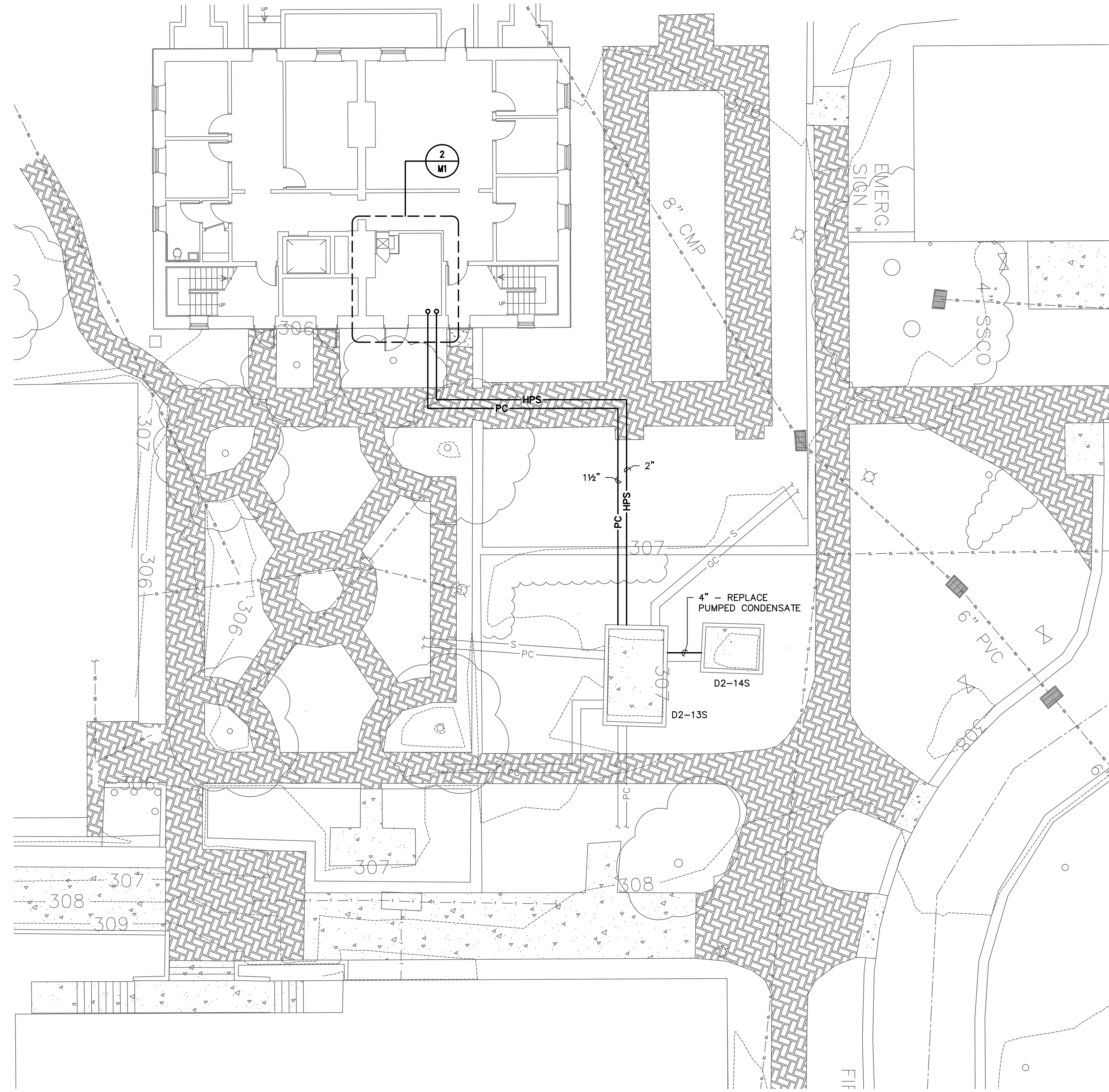
Swygert & Associates
CONSULTING ENGINEERS

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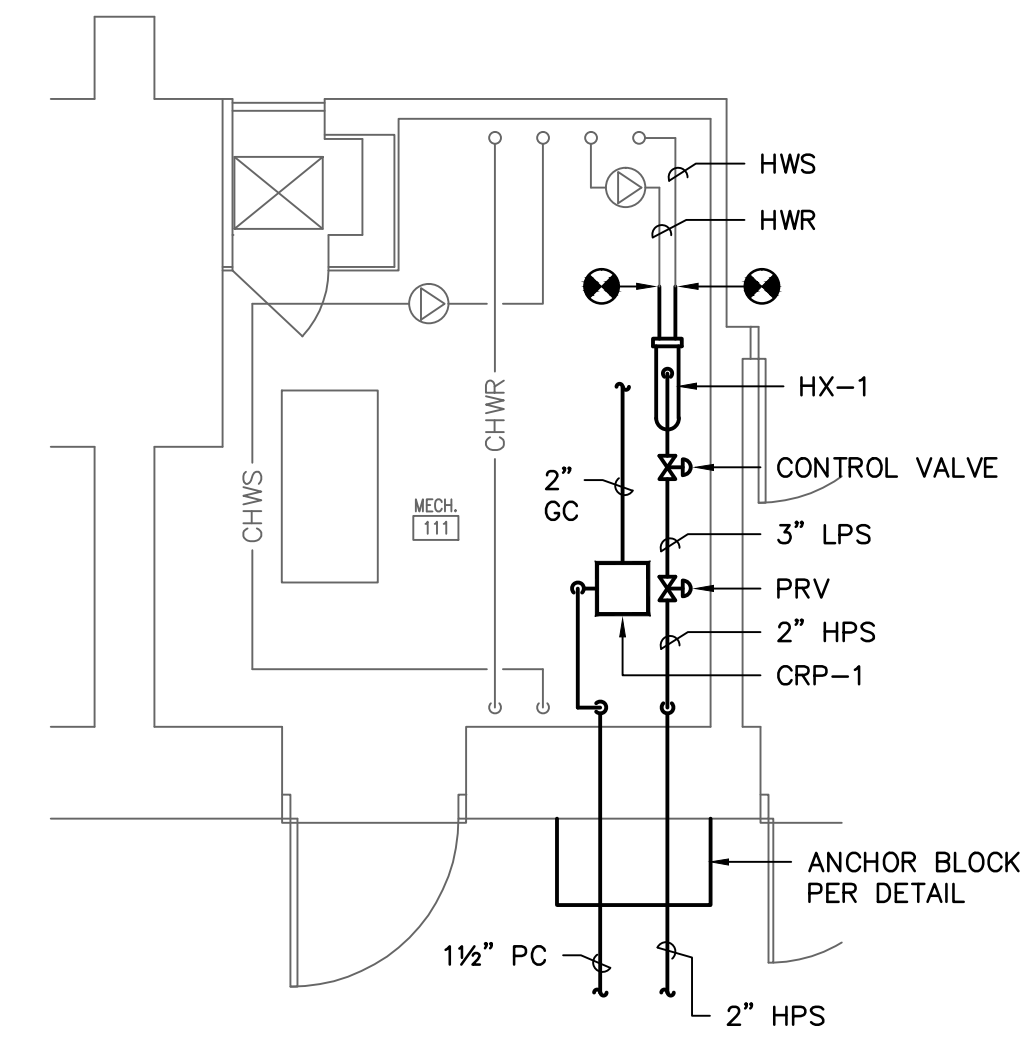
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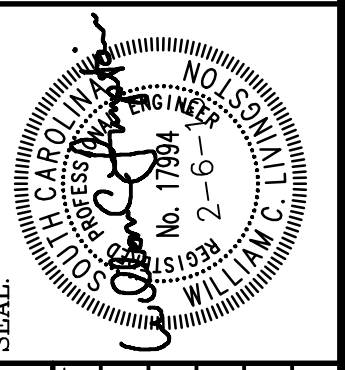


1 SITE PLAN
 SCALE: 1" = 10'



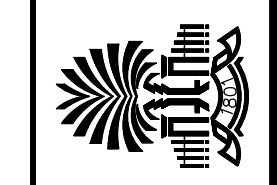
2 ENLARGED FLOOR PLAN
 SCALE: 1/4" = 1'-0"

CAMPUS PLANNING
 AND CONSTRUCTION
 COLUMBIA, SC 29208



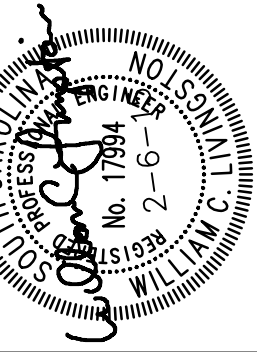
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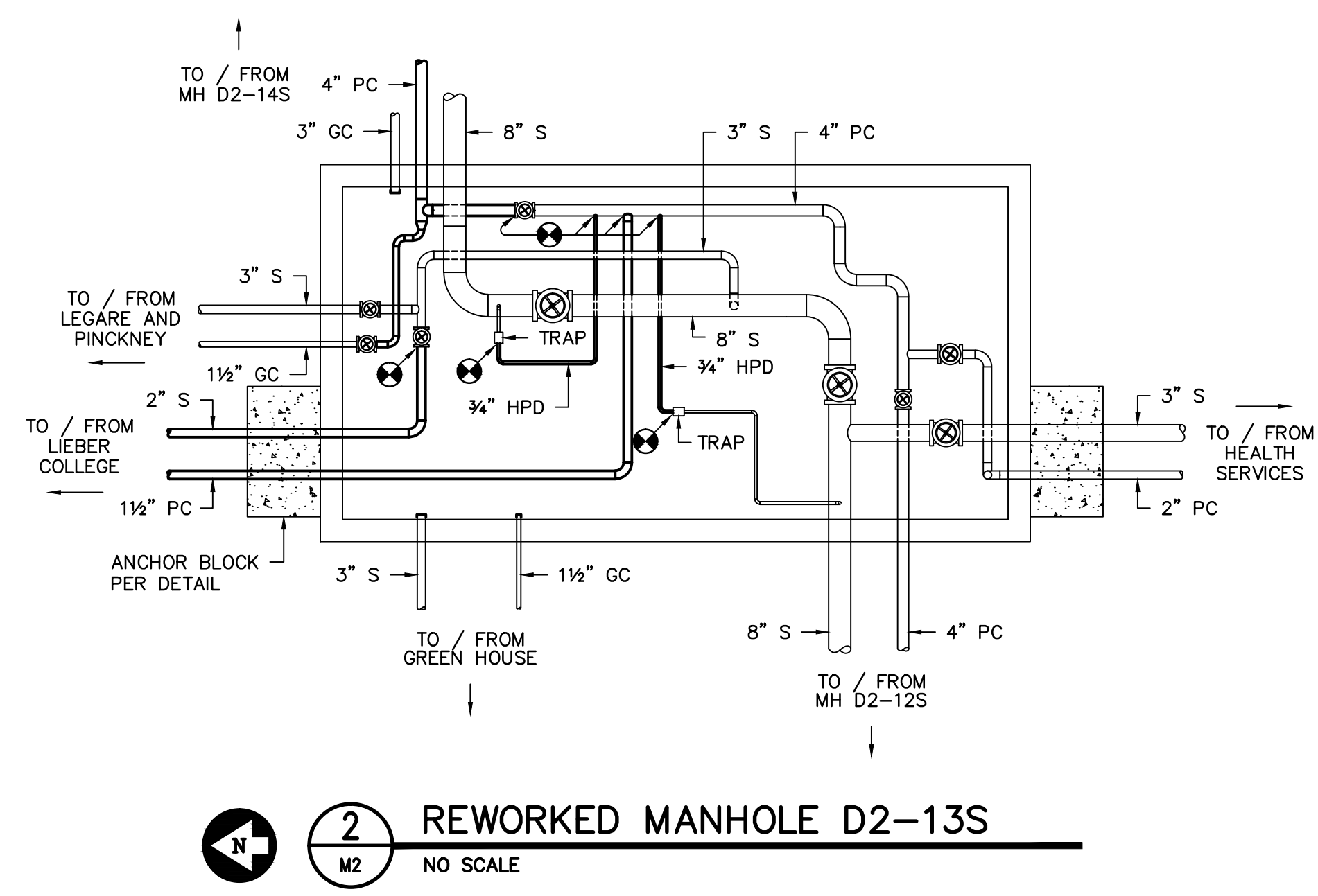
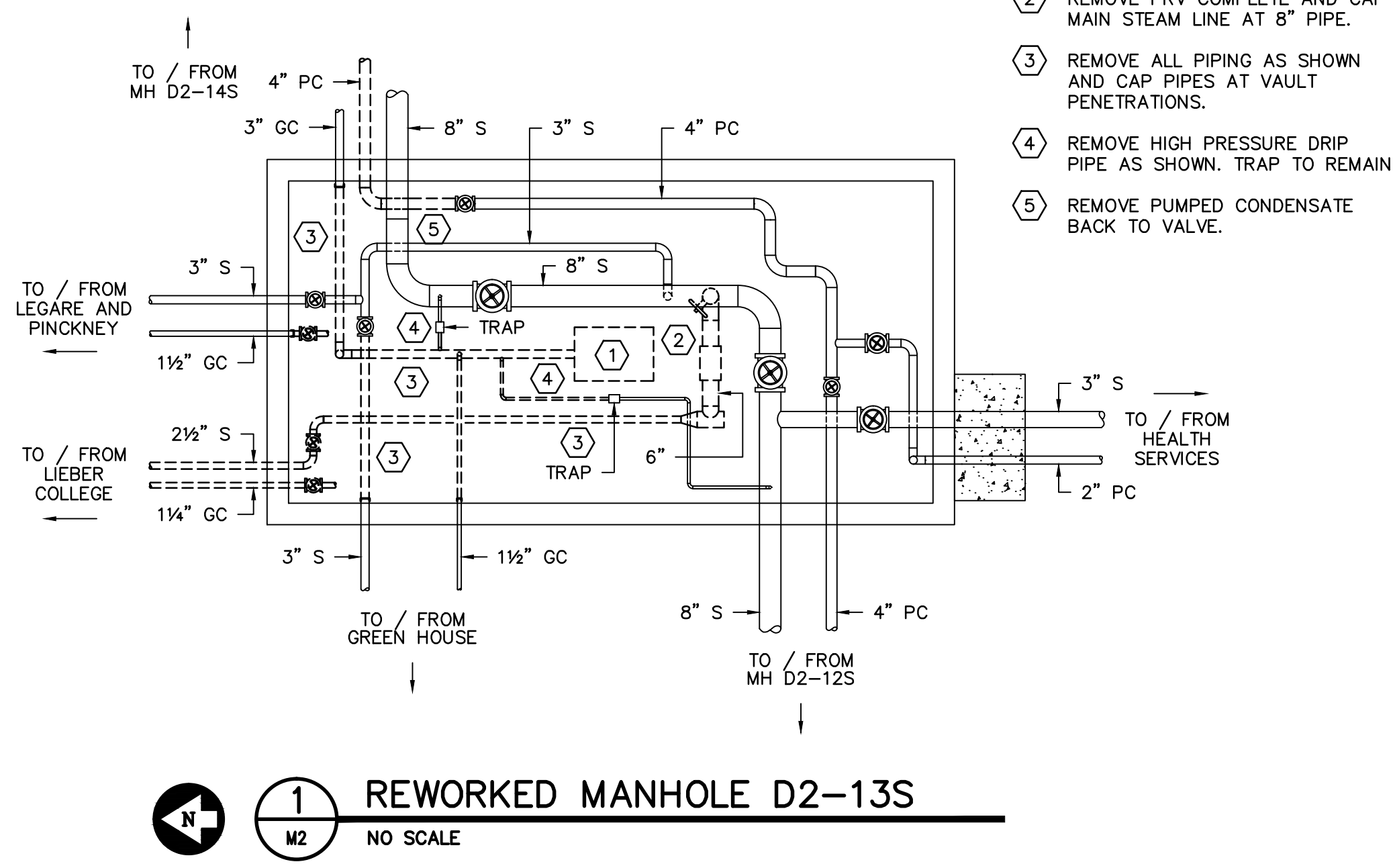
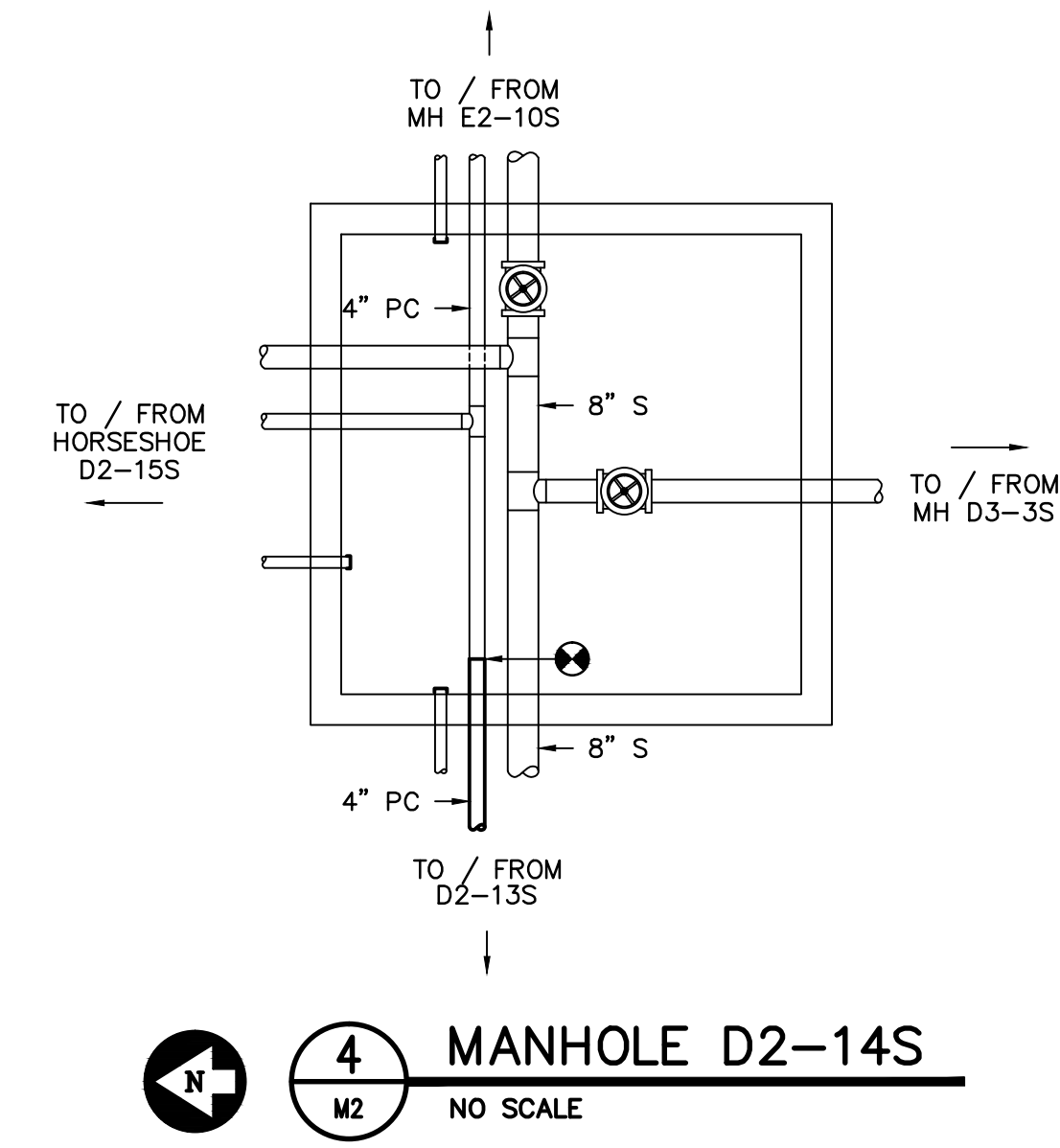
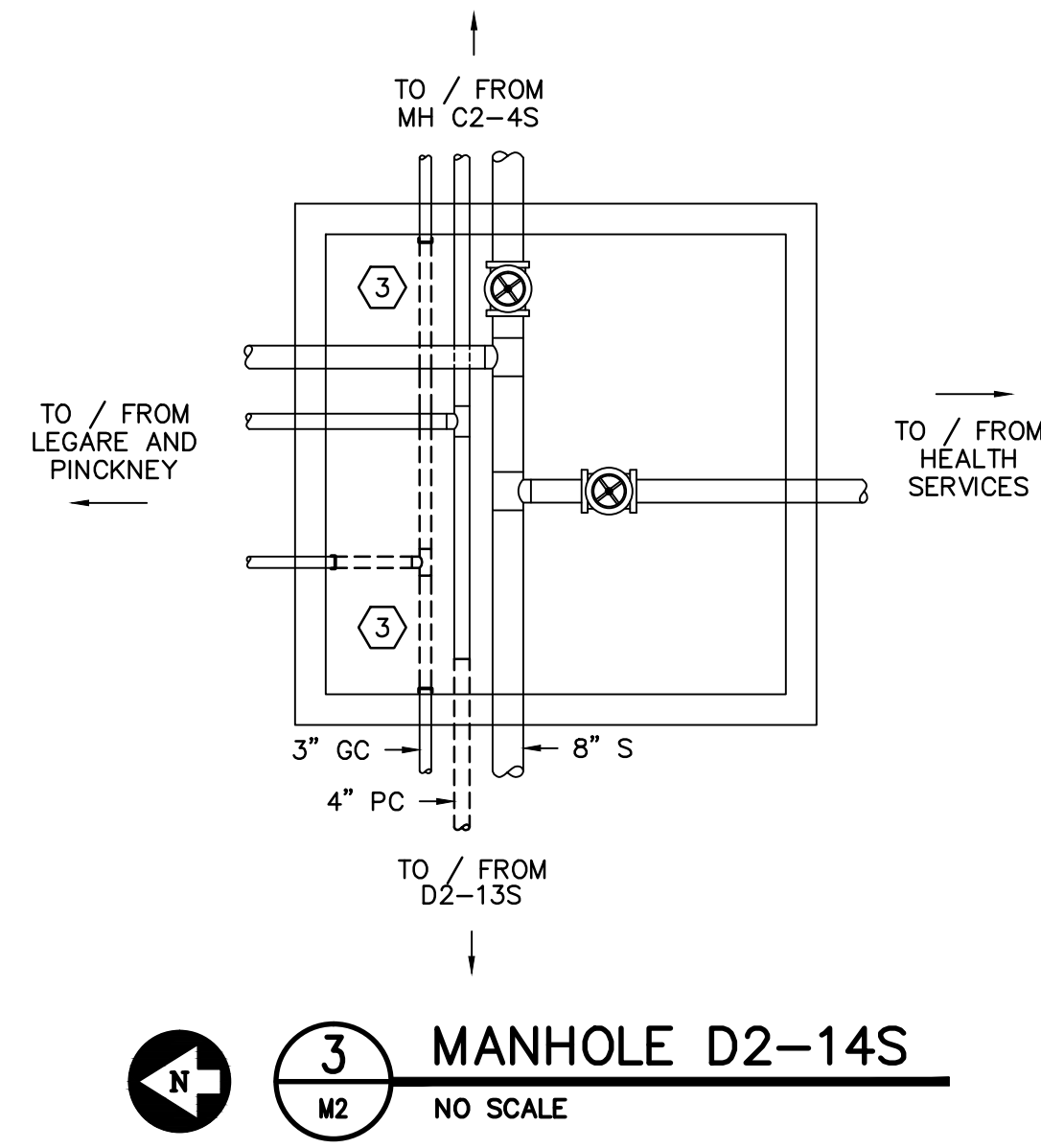
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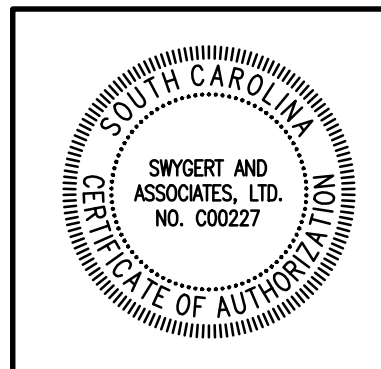
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PROJECT TITLE: COLUMBIA CAMPUS CONDENSATE PUMP REPLACEMENT - LIEBER COLLEGE
STATE PROJECT NUMBER H27-2206

UNIVERSITY OF SOUTH CAROLINA



- ① REMOVE CONDENSATE RECEIVER COMPLETE, INCLUDING WIRING.
- ② REMOVE PRV COMPLETE AND CAP MAIN STEAM LINE AT 8" PIPE.
- ③ REMOVE ALL PIPING AS SHOWN AND CAP PIPES AT VAULT PENETRATIONS.
- ④ REMOVE HIGH PRESSURE DRIP PIPE AS SHOWN. TRAP TO REMAIN.
- ⑤ REMOVE PUMPED CONDENSATE BACK TO VALVE.

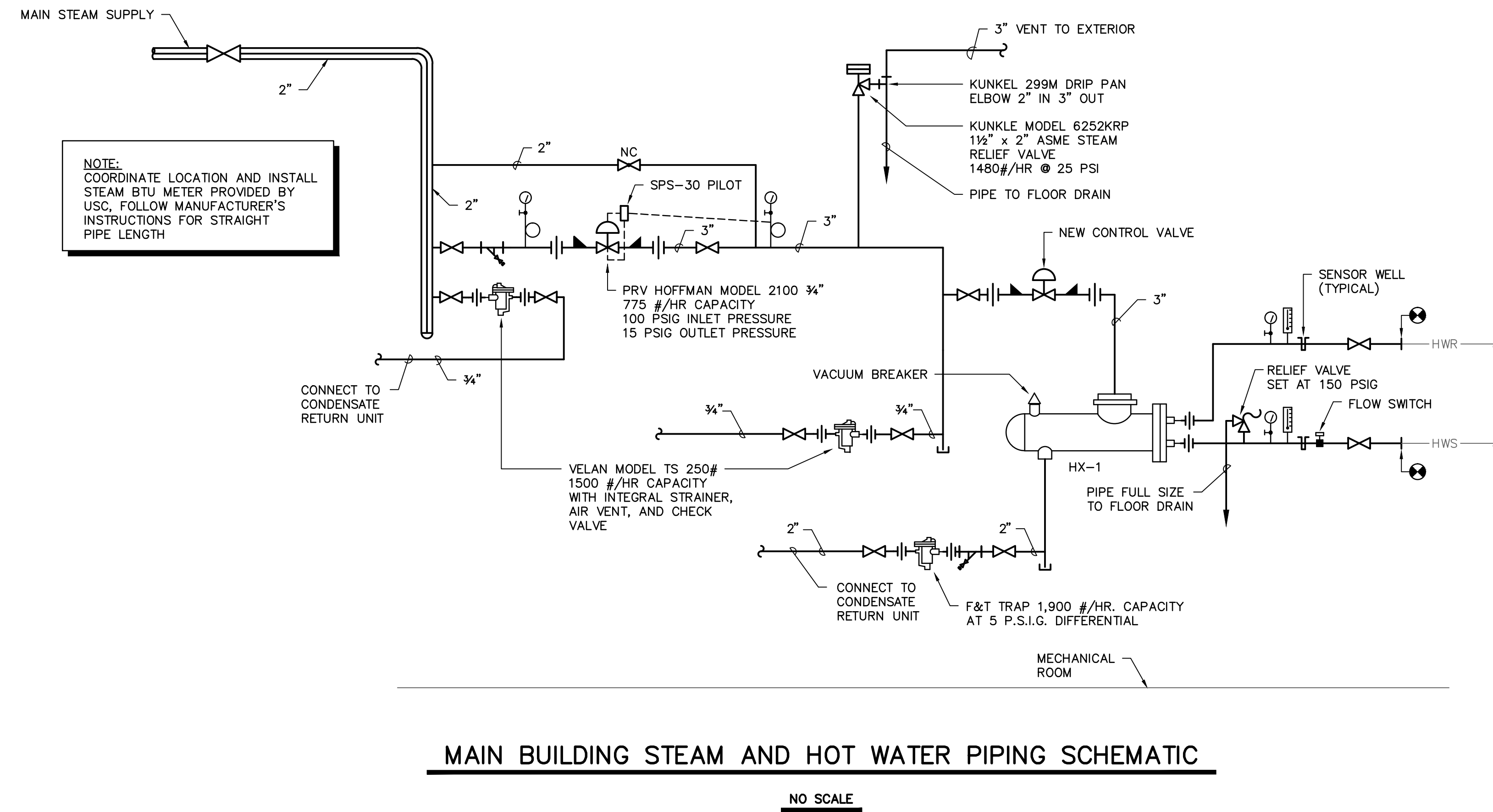
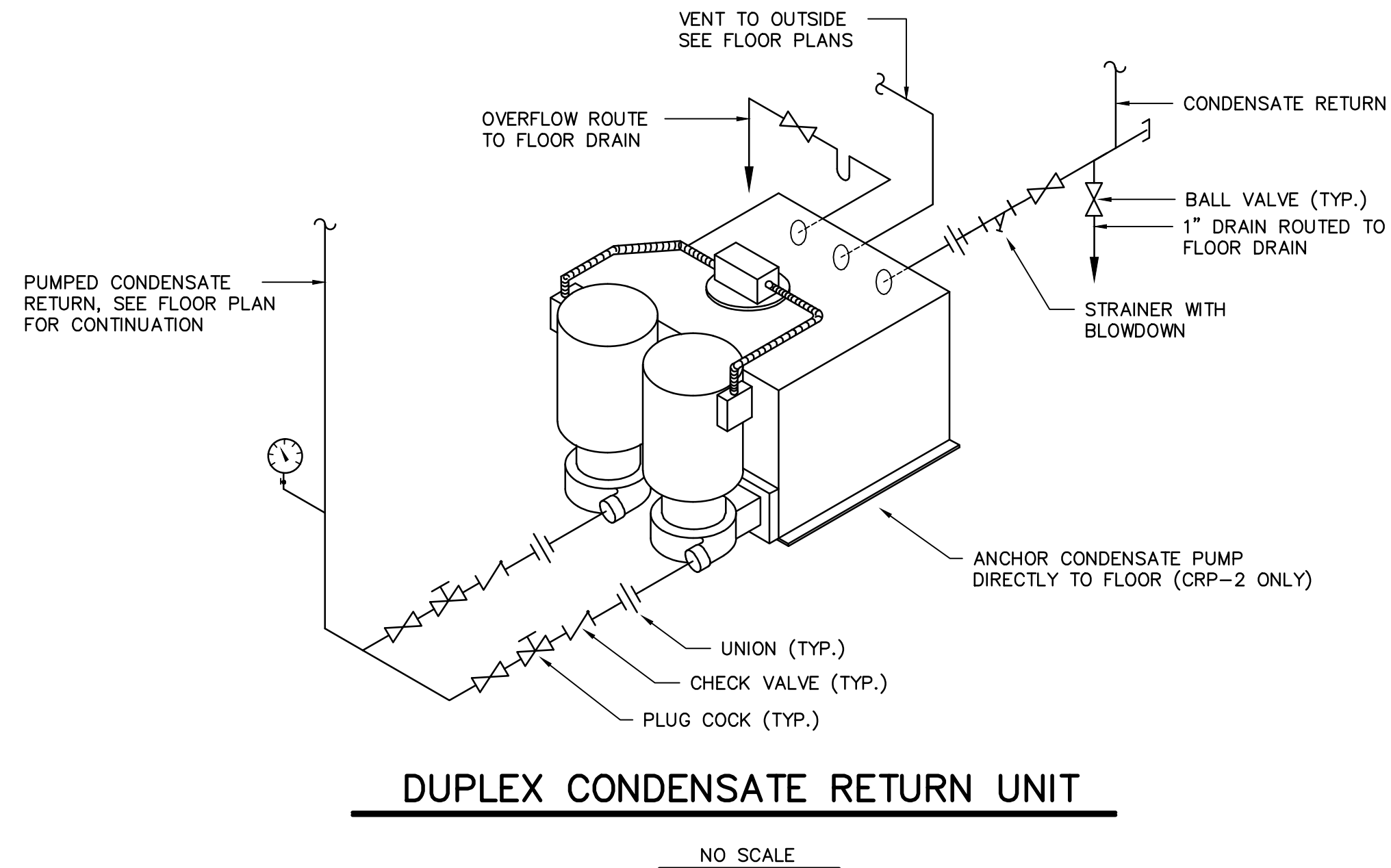


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SHEET: M2
OF
SHEET IN SET: OF

CONDENSATE RETURN UNIT						
TAG	ITT B&G MODEL NO.	CAP. GPM	DIS. PRESS. PSIG	MOTOR H.P.	RECEIVER CAP.-GALS.	REMARKS
CRP-1	WCD-30-30BMA	30	30	1	23	1,2
1. PROVIDE MECHANICAL ALTERNATOR PUMP CONTROL, VENT AND OVERFLOW AND LOW INLET HEIGHT TO ALLOW GRAVITY FALL FROM EXISTING AIR HANDLING UNIT. 2. PUMPS SHALL BE DUPLEX ARRANGEMENT.						

CONVERTER SCHEDULE							
TAG	ITT B&G MODEL NO.	GPM	WATERSIDE		STEAM PSI	STEAM LBS./HR.	REMARKS
			TEMP. IN	TEMP. OUT			
HX-1	QSU 8 2-4	50	150	180	15.0	776	1,2
1. PROVIDE WITH CAST IRON BONNET, STEEL BAFFLES, SHELL AND TUBESHEET, WITH 3/4" O.D. 0.035" THICK COPPER TUBES. 2. PROVIDE HEAT EXCHANGER WITH MAXIMUM LENGTH OF 30" TO FIT INSIDE AVAILABLE SPACE IN MECHANICAL ROOM.							



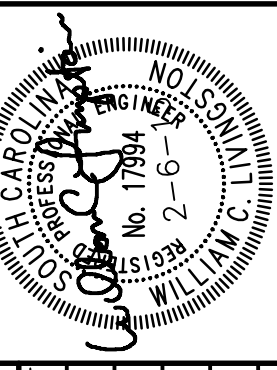
GENERAL NOTES

- 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.
- SEE SITE PLAN FOR CONTINUATION OF UTILITIES.
- WATER SYSTEMS SHALL BE DRAINED AS REQUIRED FOR INSTALLATION OF WORK. UPON COMPLETION, SYSTEM SHALL BE FILLED WITH WATER AND VENTED OF ALL AIR.
- ALL PIPING AND DUCTWORK INSULATION SHALL BE RUN CONTINUOUSLY THROUGH FLOORS, ROOFS AND PARTITIONS.
- ALL PIPING IS SHOWN DIAGRAMMATIC. HOWEVER, THIS CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS, PIPING AND INSULATION FOR ALL OFFSETS AND/OR CHANGES IN ELEVATION.
- EXTEND ALL DRAIN LINES TO NEAREST FLOOR DRAIN OR AS INDICATED - SO ROUTED AS TO AVOID INTERFERENCE WITH PASSAGEWAYS AND MAINTENANCE. DRAINS FROM AIR HANDLING UNITS SHALL BE TRAPPED PER STATIC PRESSURE REQUIREMENTS.
- EXTEND DRAIN LINES FROM RELIEF VALVES TO NEAREST FLOOR DRAIN UNLESS OTHERWISE NOTED OR INDICATED.
- 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.
- 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.
- INSTALL ANCHORS AND EXPANSION LOOPS WHERE INDICATED ON DRAWINGS AND WHERE REQUIRED TO ALLOW FOR EXPANSION.
- STEAM MAINS SHALL PITCH DOWN IN DIRECTION OF FLOW A MINIMUM OF ONE INCH IN FIFTY FEET. CONDENSATE RETURN MAINS SHALL PITCH DOWN IN DIRECTION OF FLOW A MINIMUM OF ONE INCH IN FIFTY FEET.
- ALL ITEMS OF EQUIPMENT IN MECHANICAL ROOM SHALL BE LOCATED ON REINFORCED CONCRETE FOUNDATIONS, MINIMUM 6-INCH THICK OR AS DETAILED ON THESE PLANS AND SPECIFICATIONS AND 6 INCHES LARGER THAN EQUIPMENT IN EACH DIRECTION. PADS SHALL BE REINFORCED PER THE HOUSEKEEPING PAD SECTION OF THE ASHRAE PRACTICAL GUIDE FOR SEISMIC RESTRAINT. ALL UNITS SHALL BE SECURED TO THE HOUSEKEEPING PAD WITH SEISMIC RESTRAINTS. PROVIDE 1-INCH CHAMFERS ON ALL SIDES.
- PROVIDE FOR ACCESS TO ALL EQUIPMENT REQUIRING CLEANING OR ADJUSTMENT.
- THIS CONTRACTOR SHALL PROVIDE ALL ITEMS OF MISCELLANEOUS STEEL AS REQUIRED FOR INSTALLATION OF ALL MECHANICAL ITEMS.
- 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 FINISHED TO MATCH EXISTING WHERE ALL ITEMS OR EQUIPMENT ARE REMOVED.

LEGEND

SYMBOL	DESCRIPTION
	HWS -> HOT WATER SUPPLY LINE
	HWR -> HOT WATER RETURN LINE
	S -> STEAM LINE
	LPS -> LOW PRESSURE STEAM LINE
	HPS -> HIGH PRESSURE STEAM LINE
	PC -> PUMPED CONDENSATE LINE
	GC -> GRAVITY CONDENSATE LINE
	PIPE TURNS TO AWAY
	CONNECTION POINT OF NEW TO EXISTING

CAMPUS PLANNING AND CONSTRUCTION
 COLUMBIA, SC 29208



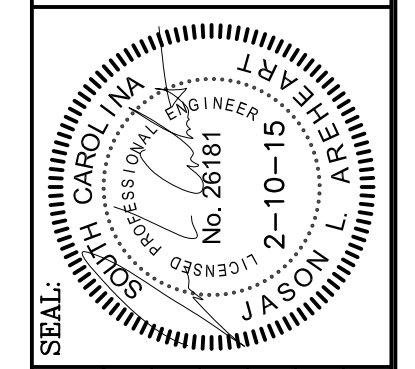
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M3
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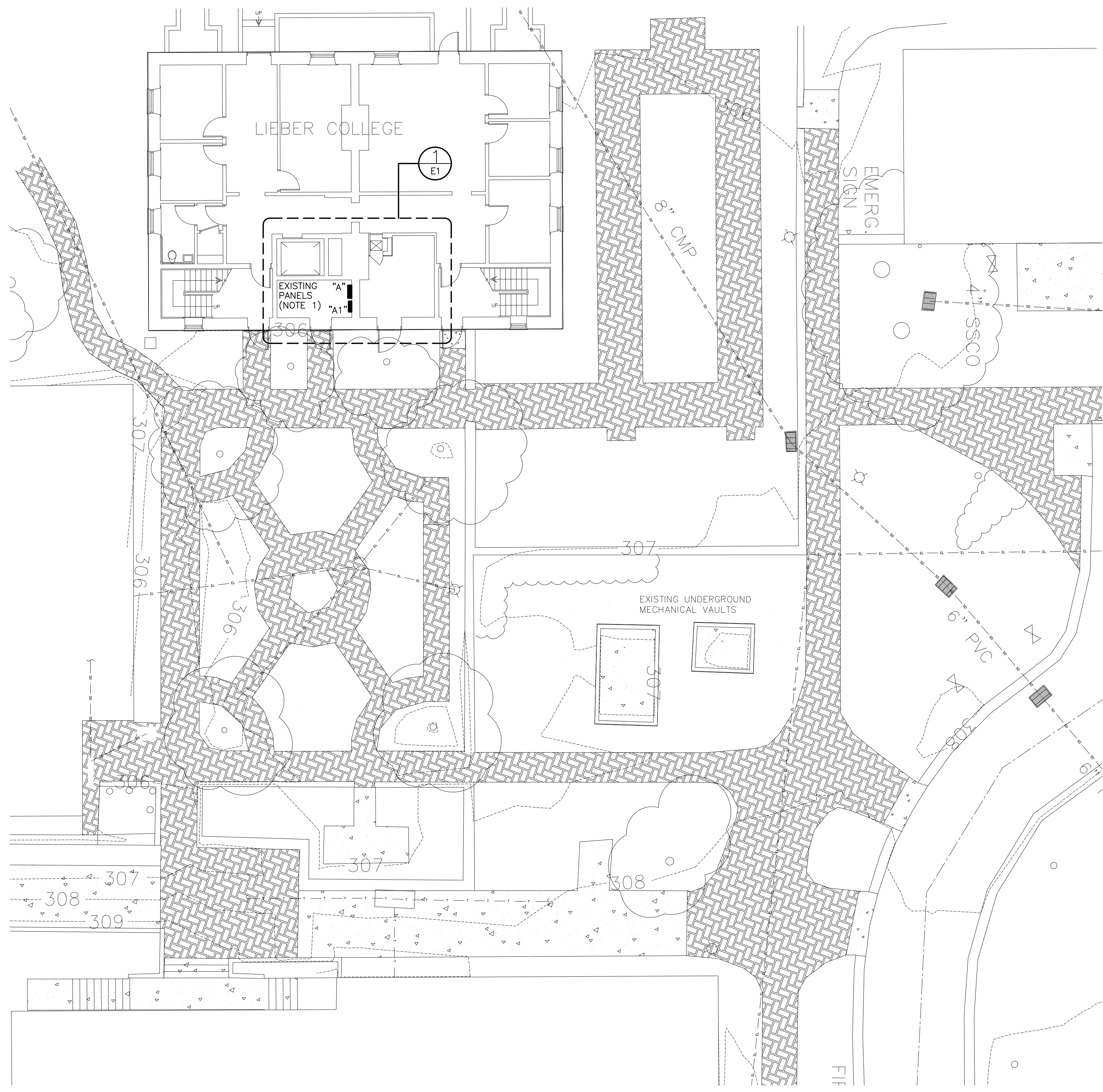


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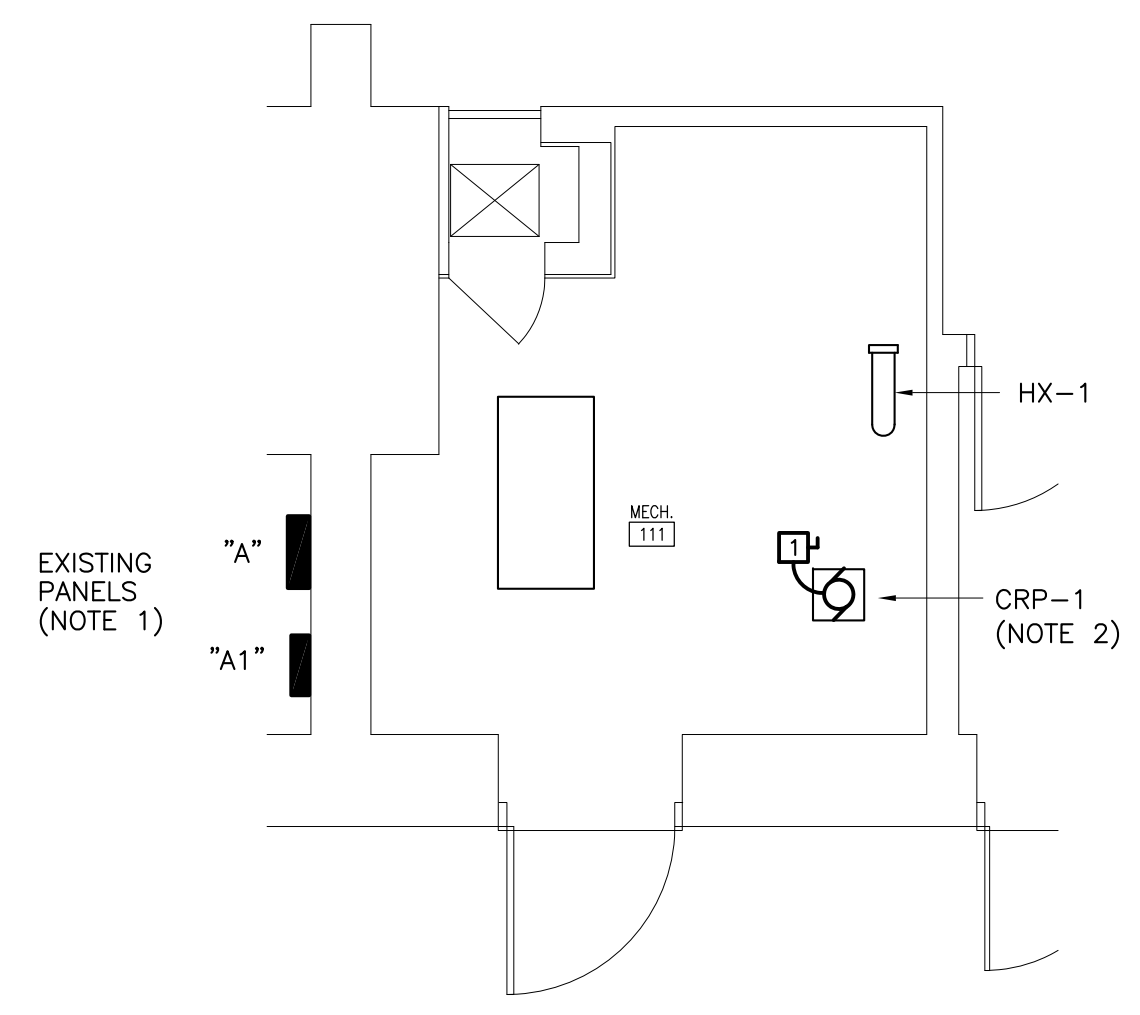
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STATE_PROJECT_NUMBER_H27-2206
University of South Carolina

ELECTRICAL NOTES

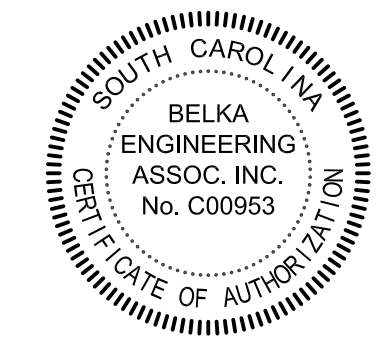
- EXISTING PANELS IN LIEBER COLLEGE IS AS FOLLOWS:
PANEL "A" - 400 AMP M.L.O., 120/208V, 3ø, 4W, FEDERAL PACIFIC "LDP"
PANEL "A1" - 125 AMP M.L.O., 120/208V, 3ø, 4W, GENERAL ELECTRICAL "A" SERIES
- PROVIDE 30 AMP, 120V CIRCUIT (A1-7) WITH 2#10, 1#10 GND. IN 3/4"C. AND 30A/2P/240V/NEMA 1 FUSIBLE DISCONNECT SWITCH. REPLACE ONE EXISTING SPARE 20 AMP BREAKER WITH 30 AMP, 1 POLE IN EXISTING PANEL "A1." COORDINATE LOCATION AND CONNECTIONS WITH MECHANICAL CONTRACTOR.



2 KEY SITE PLAN
E1 SCALE: 1" = 10' - 0"



1 ENLARGED FLOOR PLAN
E1 SCALE: 1/4" = 1'-0"



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