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ARCHITECT / ENGINEERS:



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SITE DEMOLITION PLAN
SCALE: 1" = 20'

Drawing Title
SITE PLAN - DEMOLITION

Project Title
WACO ENERGY CENTER

Project Number
674A4-12-705

DATE
Paul Cherry

Location
Waco VAMC

Drawing Number
225

Drawn
10/28/11

Checked
rs

Drawn
rs

Dwg. 2 of 16

Office of
Construction
and Facilities
Management
D. James III
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OR PROJECT NO. 0917.08

SEAL

10

Drawing Title		Project Title	
MECHANICAL STEAM SITE PLAN		WACO ENERGY CENTER	
Location		Waco VAMC	
Paul Cherry		Date	
		10/28/11	
		NP	
		Checked	
		Drawn	
		RS	

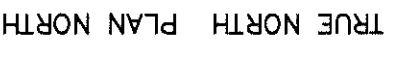
Office of
Construction
and Facilities
Management

MECHA SCALE: 1" = 20'



1. REFER TO SHEET MM.01 FOR GENERAL MECHANICAL NOTES THAT SHALL APPLY TO ALL SHEETS IN THIS SET UNLESS NOTED OTHERWISE IN THE KEYED NOTES.
2. ALL EXISTING DUCTWORK, PIPING SIZES & LOCATIONS ARE TAKEN FROM AVAILABLE RECORD DOCUMENTS & SITE OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION.

- 1 DIRECT BURIED PIPES & SERVICES TO BE ABANDONED
REMOVE
- 2 ROUTE PIPING IN CRAWLSPACE OF EXISTING BLDG. 17.
SEE SHEET MS17 FOR ADDITIONAL WORK IN BLDG. 17.
- 3 REMOVE EXISTING TRENCH ENCLOSURE FOR NEW
SILT DISTRIBUTION TRENCH BELOW GRADE (SEE AS
NOTED). REFERENCE TO TRENCH PROFILES ON SHEET MS19.
- 4 SOILER PLANT AND CONDENSATE RETURN LINES TO
ABANDON THE EXISTING STEAM AND CONDENSATE
RETURN LINES IN PLACE.
- 5 ABANDON THE EXISTING STEAM AND CONDENSATE
RETURN LINES IN PLACE.
- 6 EXTEND "A" PUMPED CONDENSATE RETURN FROM NEW
MS19. FOR ADDITIONAL WORK IN BLDG. 14.
- 7 APPROXIMATE LOCATION OF NEW INDUSTRIAL GAS
METER TO BE SET BY ATMOSPHERIC ENERGY, COORDINATE
INSTALLATION WITH ATMOSP.
- 8 REMOVE NATURAL GAS PRESSURE REGULATOR AND
EMERGENCY SHUTOFF VALVE AT BLDG. ENTRY.
- 9 INSTALL PIPE TRENCH AND MANHOLE TO BE
CONDENSATE PIPING UNDER SEPARATE CONTRACT.
- 10 PROVIDE PIPE ANCHORS ON STEAM AND CONDENSATE
RETURN LINES INDICATED.
- 11 CONNECT TO EXISTING MFS & OR PIPING WITH IN
CRAWL SPACE OF BLDG. 15.



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MECHANICAL CAMPUS STEAM
DIAGRAM

WACO ENERGY CENTER

Project Number	674A4-12-705
Building Number	225

REPORTING ON
VETERANS AFFAIRS



EXISTING TO REMAIN -----

NEW WORK _____

EXISTING TO BE REMOVED OR ABANDONED ---#---#---

REVISIONS		DATE	DESCRIPTION
NO.	AMENDMENT #2	4-20-12	
1			
2			
3			
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5			
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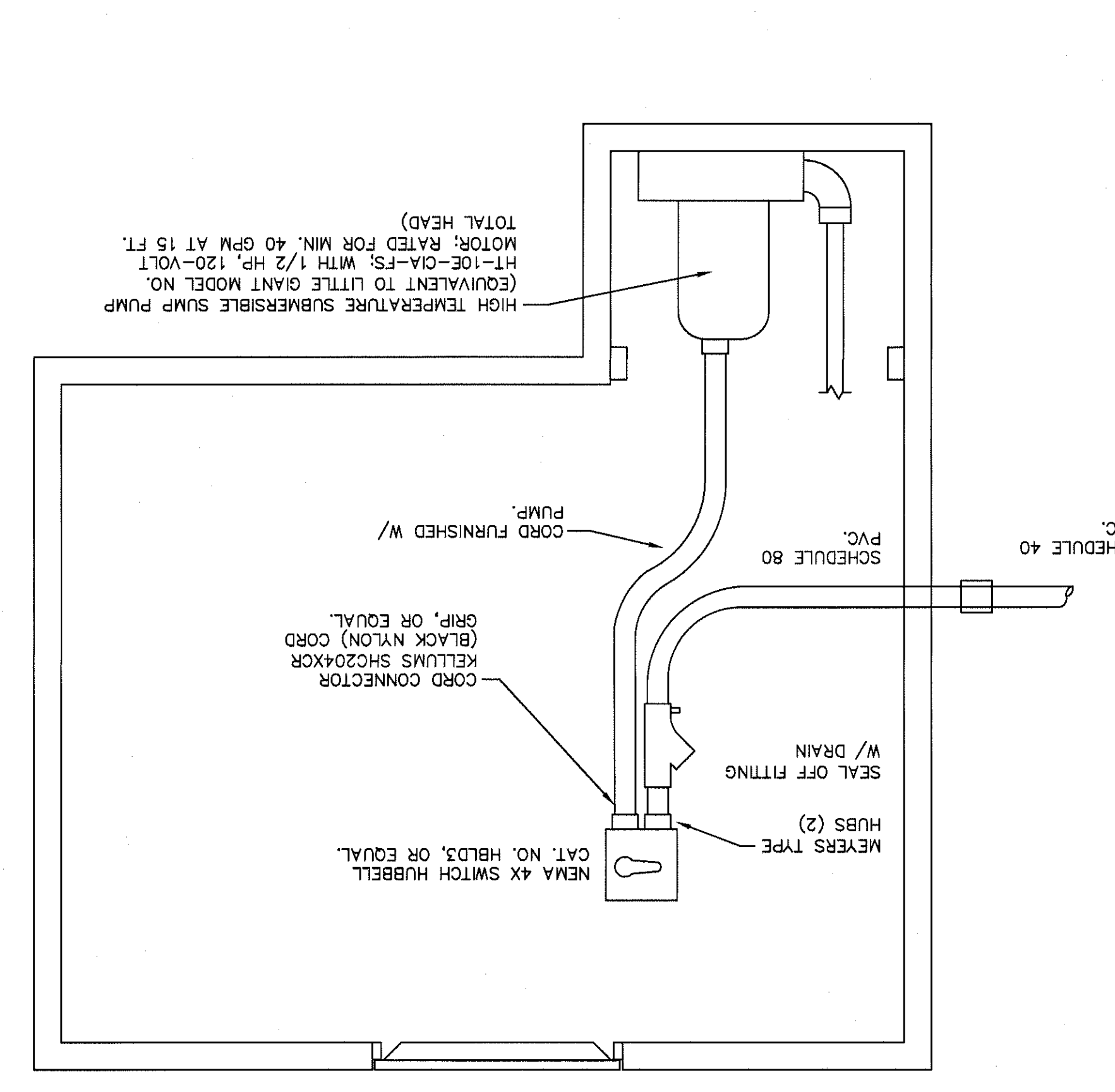
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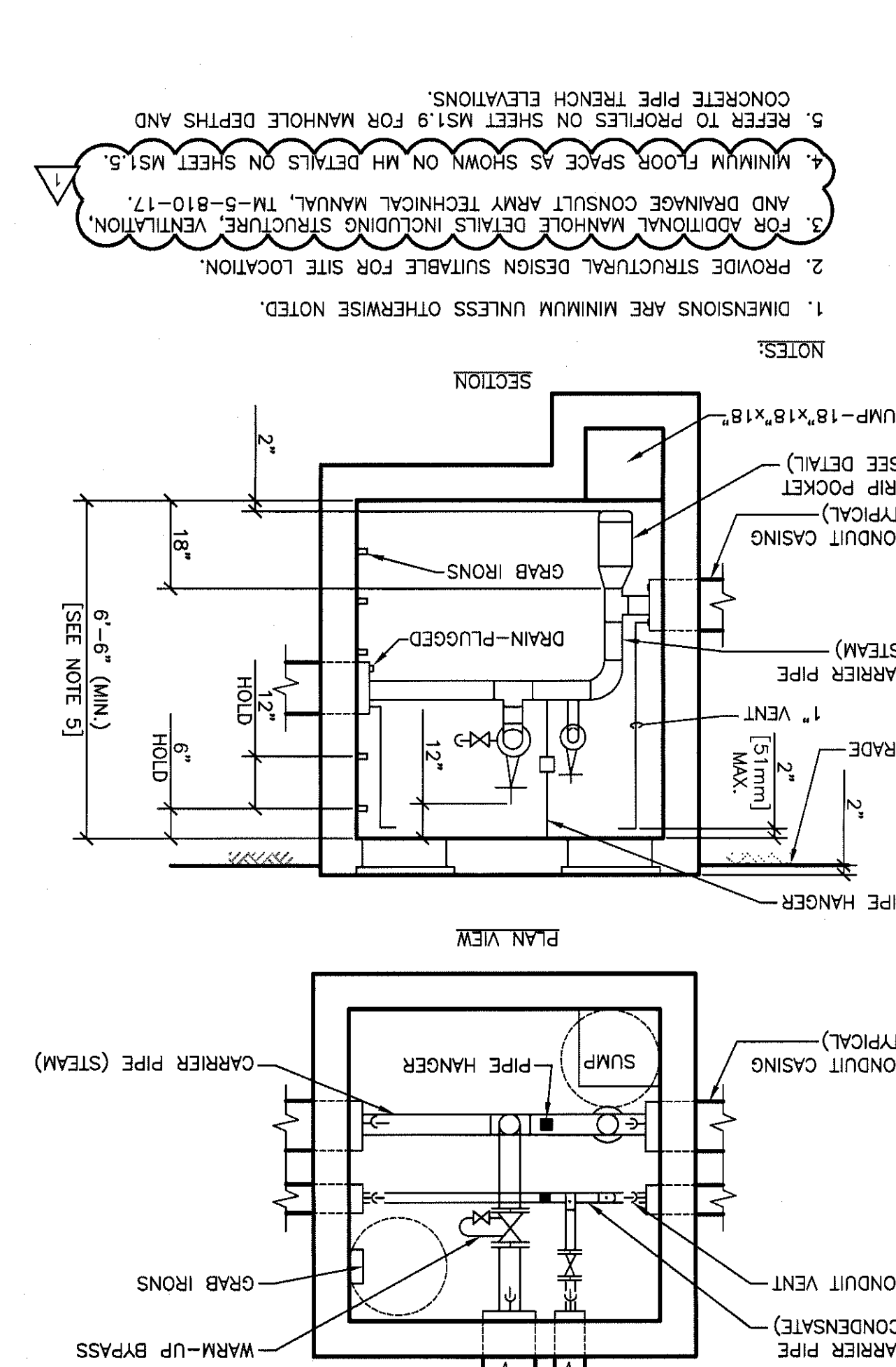
Paul Cherry
COTR:
MECHANICAL STEAM SITE DETAILS
WACO ENERGY CENTER
Location
Waco VAMC
Date
10/28/11
Checked
NP
Drawn
RS
Drawing Number
225-MS1.4
Building Number
225
Project Number
674A4-12-705

Office of
Construction
and Facilities
Management
Department of
Transportation
and
Infrastructure

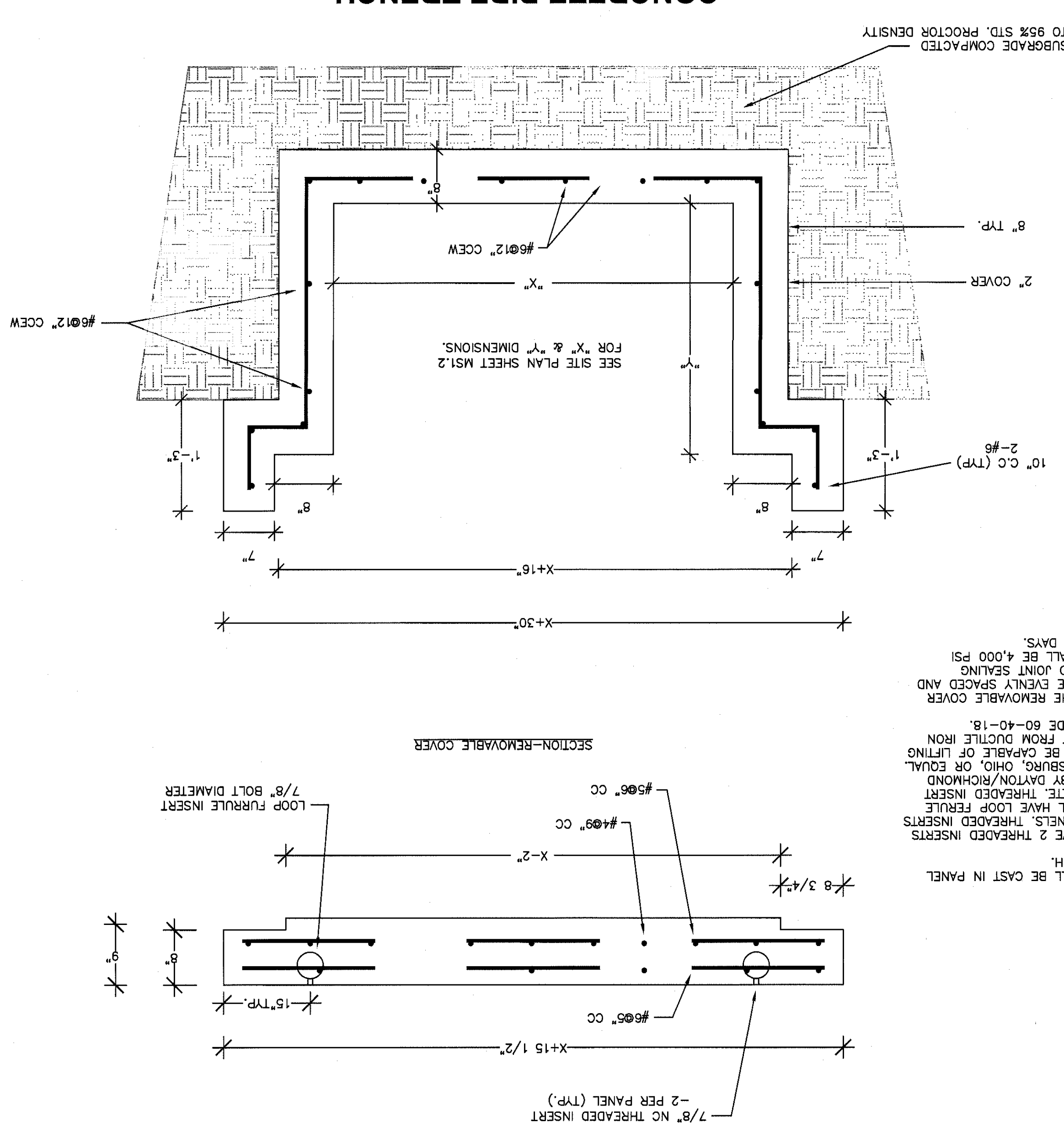
3 MAN HOLE SECTION



2 WITH TYPICAL PIPING

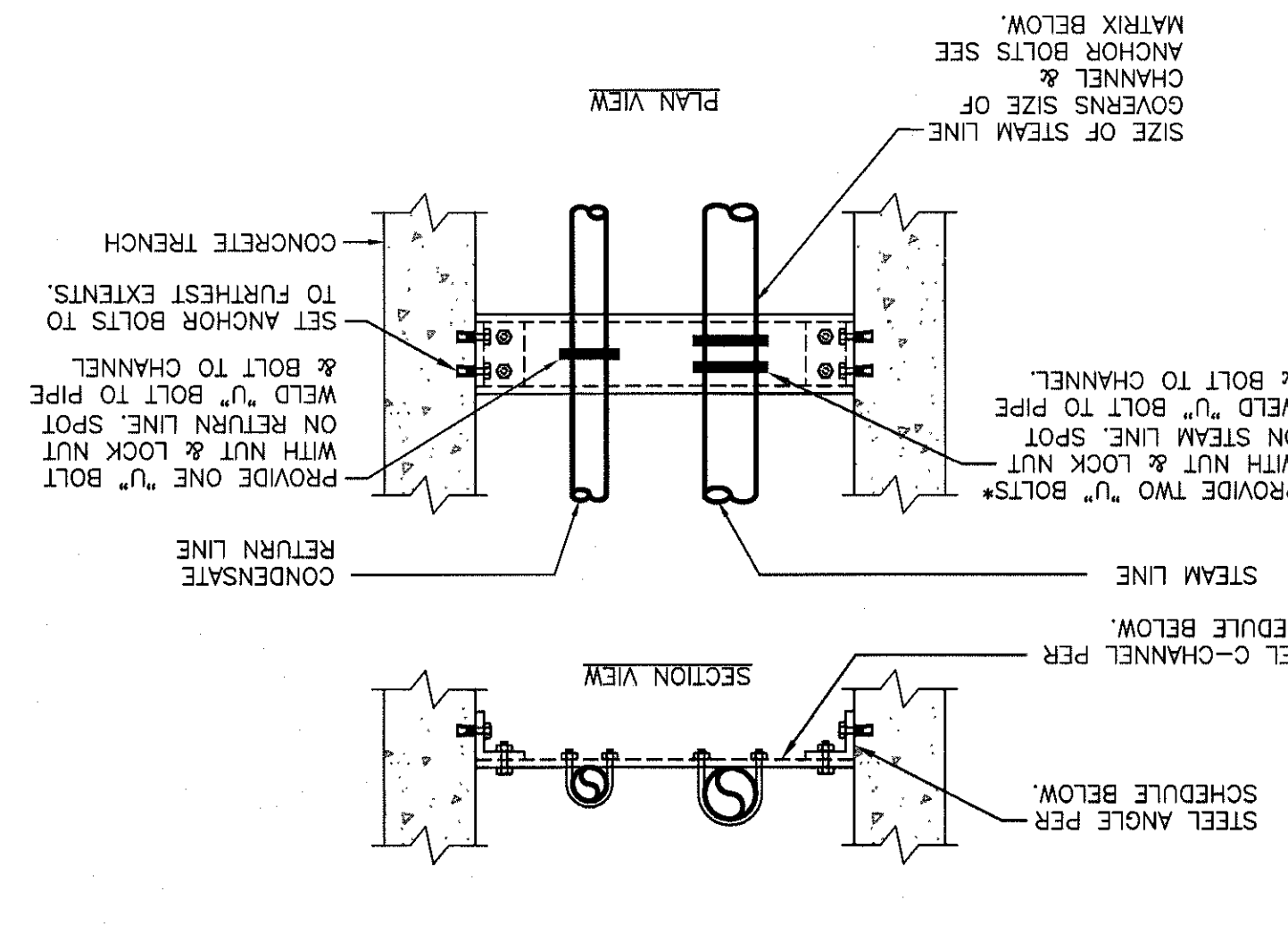


1 WITH REMOVABLE COVER



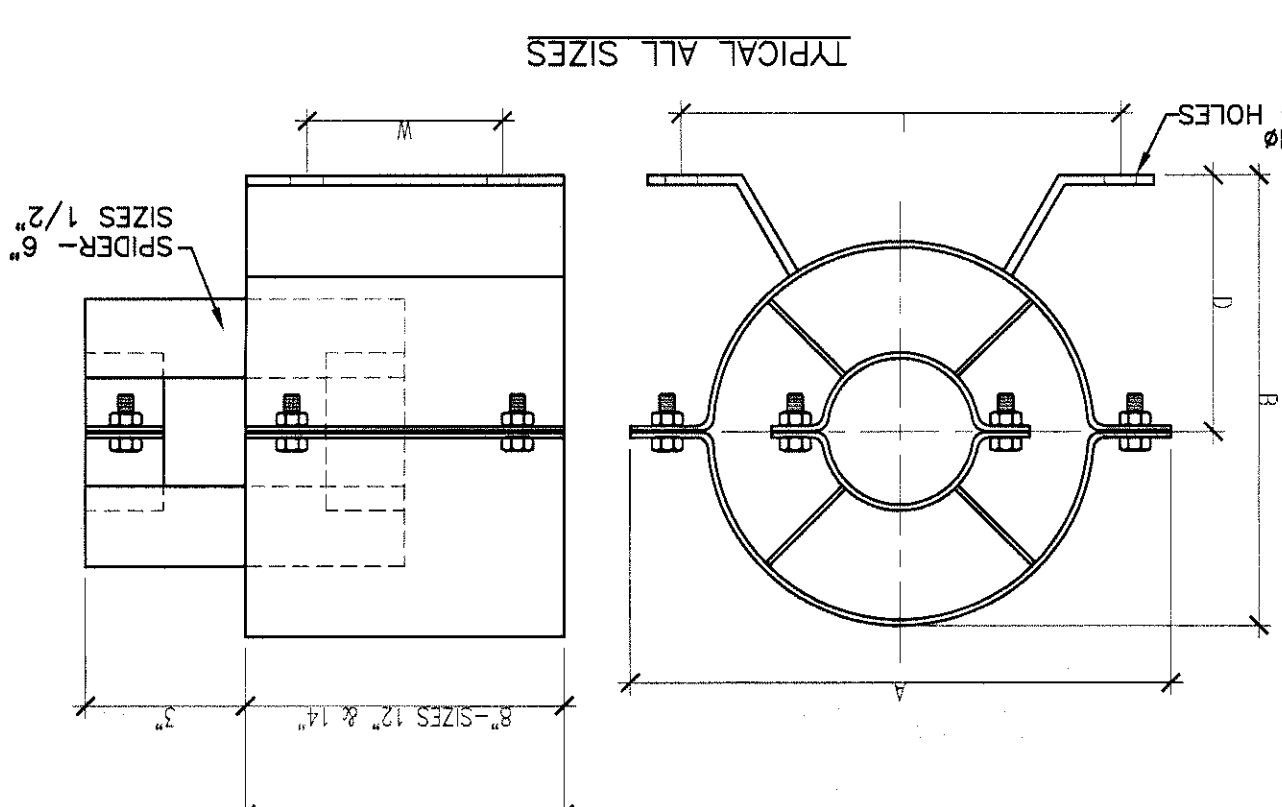
6 TYP. ANCHOR IN TRENCH DETAIL

SIZE OF PIPE	SIZE OF ANCHOR BOLT	SIZE OF CHANNEL	SIZE OF ANGLE
1/4" [355]	1" [25]	15x40 [380x1016]	3x3x1/2 [75x75x10]
1/2" [255-305]	1" [25]	15x40 [380x1016]	3x3x1/2 [75x75x10]
3/4" [200-250]	1 1/2" [38]	15x40 [380x1016]	3x3x1/2 [75x75x10]
1" [255-305]	1 1/2" [38]	15x40 [380x1016]	3x3x1/2 [75x75x10]
1 1/2" [380-450]	2" [51]	15x40 [380x1016]	3x3x1/2 [75x75x10]
2" [510-600]	2" [51]	15x40 [380x1016]	3x3x1/2 [75x75x10]
2 1/2" [635-750]	2 1/2" [64]	15x40 [380x1016]	3x3x1/2 [75x75x10]
3" [762-900]	3" [76]	15x40 [380x1016]	3x3x1/2 [75x75x10]
3 1/2" [890-1000]	3 1/2" [89]	15x40 [380x1016]	3x3x1/2 [75x75x10]

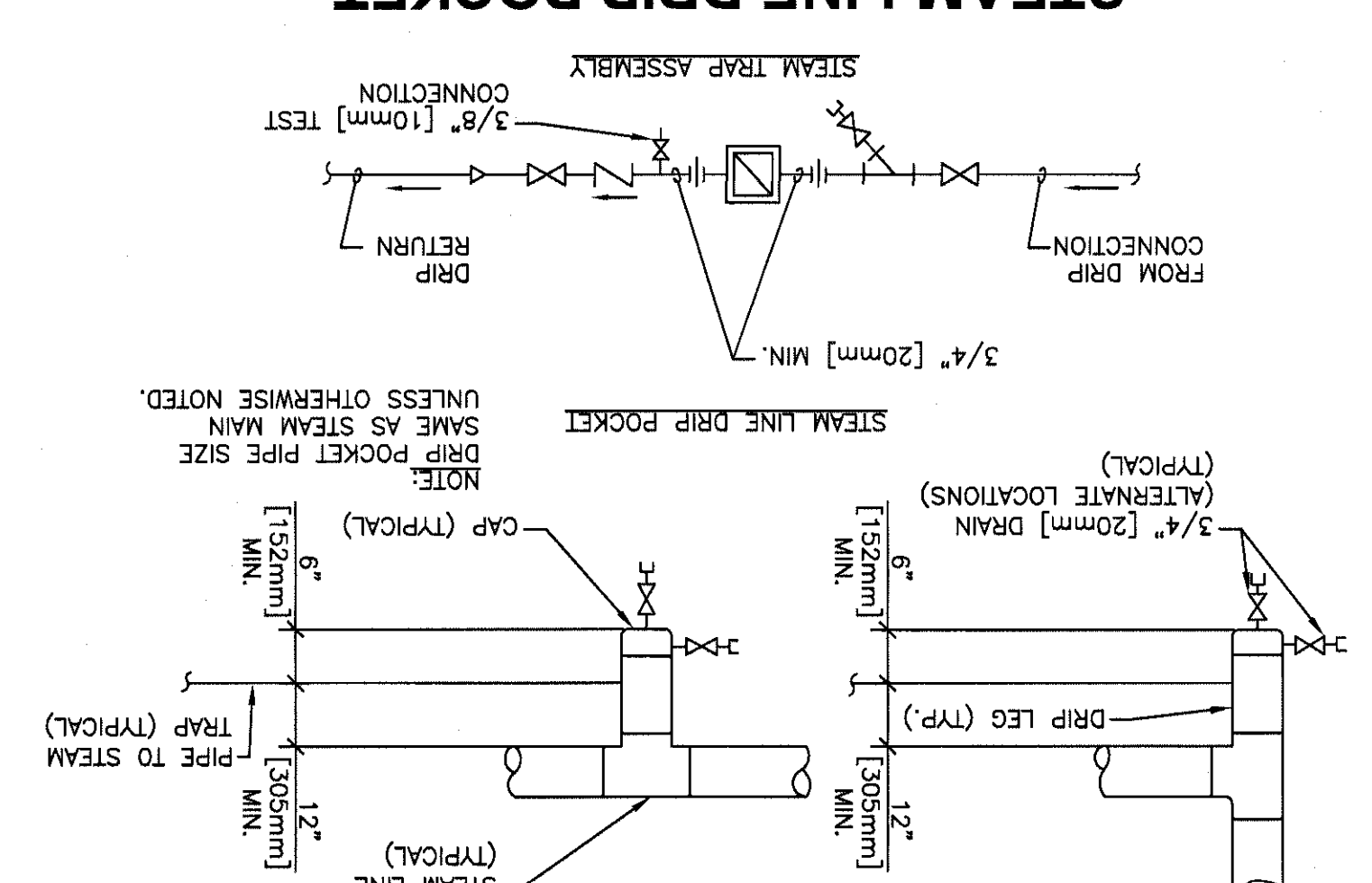


5 TYP. PIPE GUIDES

NOM. SIZE	PIPE EXP. (INCHES)	INSULAT. THK. (INCHES)	D. HEIGHT (INCHES)	A. W. H. (INCHES)
1/4"	1.5	3.50	8.44	6.34
1/2"	1.5	3.50	8.44	6.34
3/4"	1.5	3.50	8.44	6.34
1"	1.5	3.50	8.44	6.34
1 1/4"	1.5	3.50	8.44	6.34
1 1/2"	1.5	3.50	8.44	6.34
2"	1.5	3.50	8.44	6.34
2 1/2"	1.5	3.50	8.44	6.34
3"	1.5	3.50	8.44	6.34
3 1/2"	1.5	3.50	8.44	6.34
4"	1.5	3.50	8.44	6.34
4 1/2"	1.5	3.50	8.44	6.34
5"	1.5	3.50	8.44	6.34
5 1/2"	1.5	3.50	8.44	6.34
6"	1.5	3.50	8.44	6.34
6 1/2"	1.5	3.50	8.44	6.34
7"	1.5	3.50	8.44	6.34
7 1/2"	1.5	3.50	8.44	6.34
8"	1.5	3.50	8.44	6.34
8 1/2"	1.5	3.50	8.44	6.34
9"	1.5	3.50	8.44	6.34
9 1/2"	1.5	3.50	8.44	6.34
10"	1.5	3.50	8.44	6.34

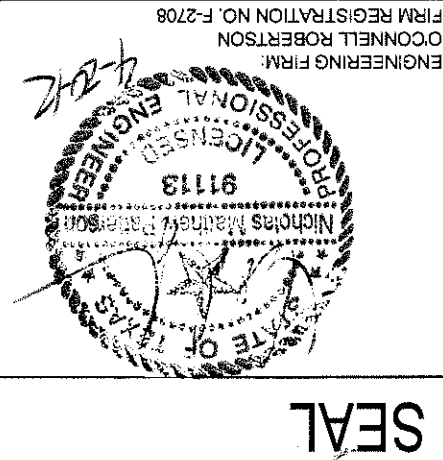


4 STEAM TRAP ASSEMBLY



REVISIONS		DESCRIPTION	DATE
NO.	Δ	AMENDMENT #2	4-20-12
1			
2			
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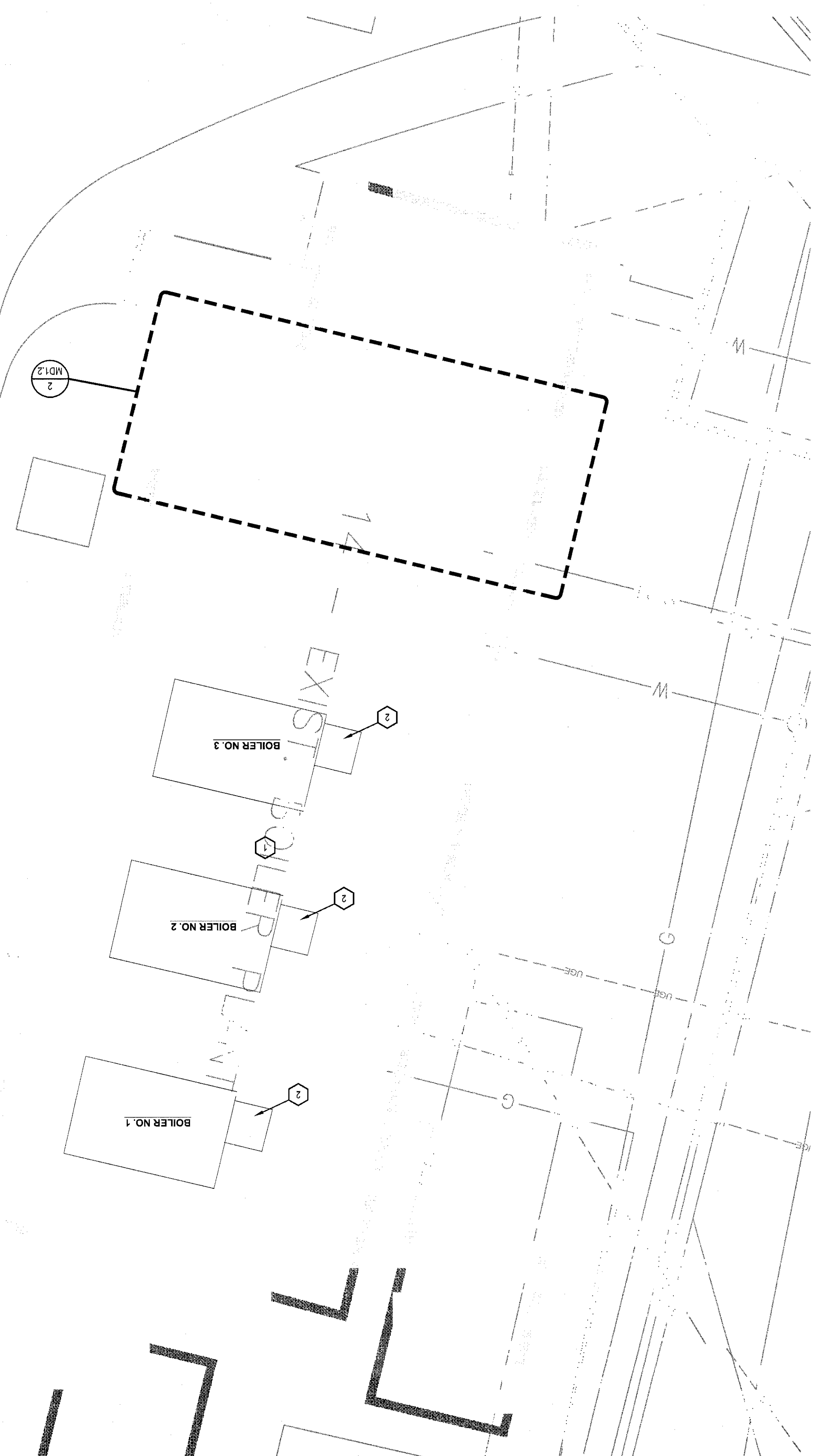
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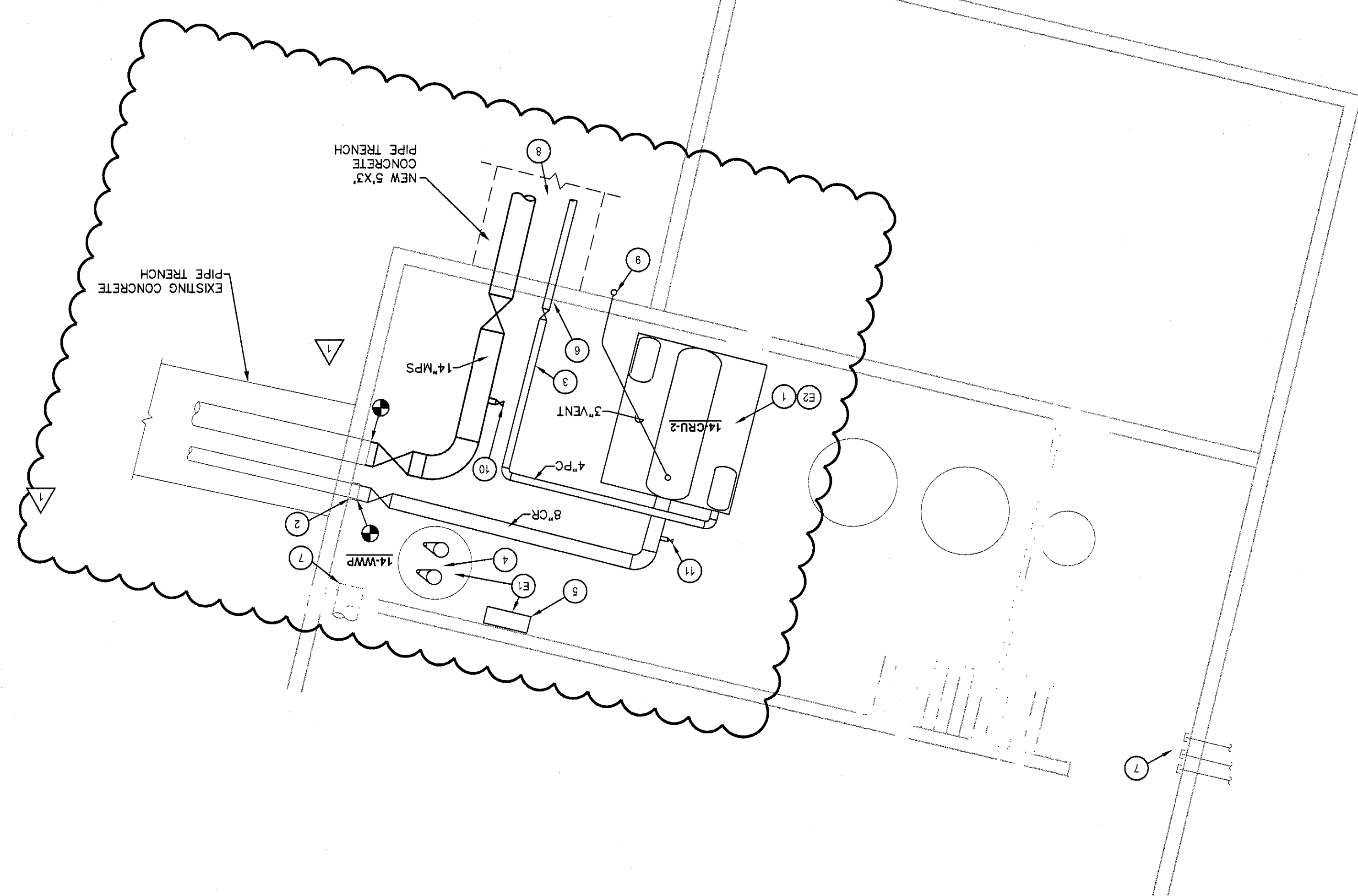
ARCHITECT
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COTR:
Paul Cherry
Drawing Title
EXISTING BOILER PLANT BUILDING
STEAM DISTRIBUTION PLAN
Project Title
WACO ENERGY CENTER
Location
Waco VAMC
Date
10/28/11
Checked
NP
Drawn
RS
Drawing Number
225-MS1.8
Building Number
674A4-12-705
Project Number

Office of
Construction
and Facilities
Management
Department of
Transportation
and
Infrastructure
Development
225-MS1.8
Drawing Number
674A4-12-705
Project Number

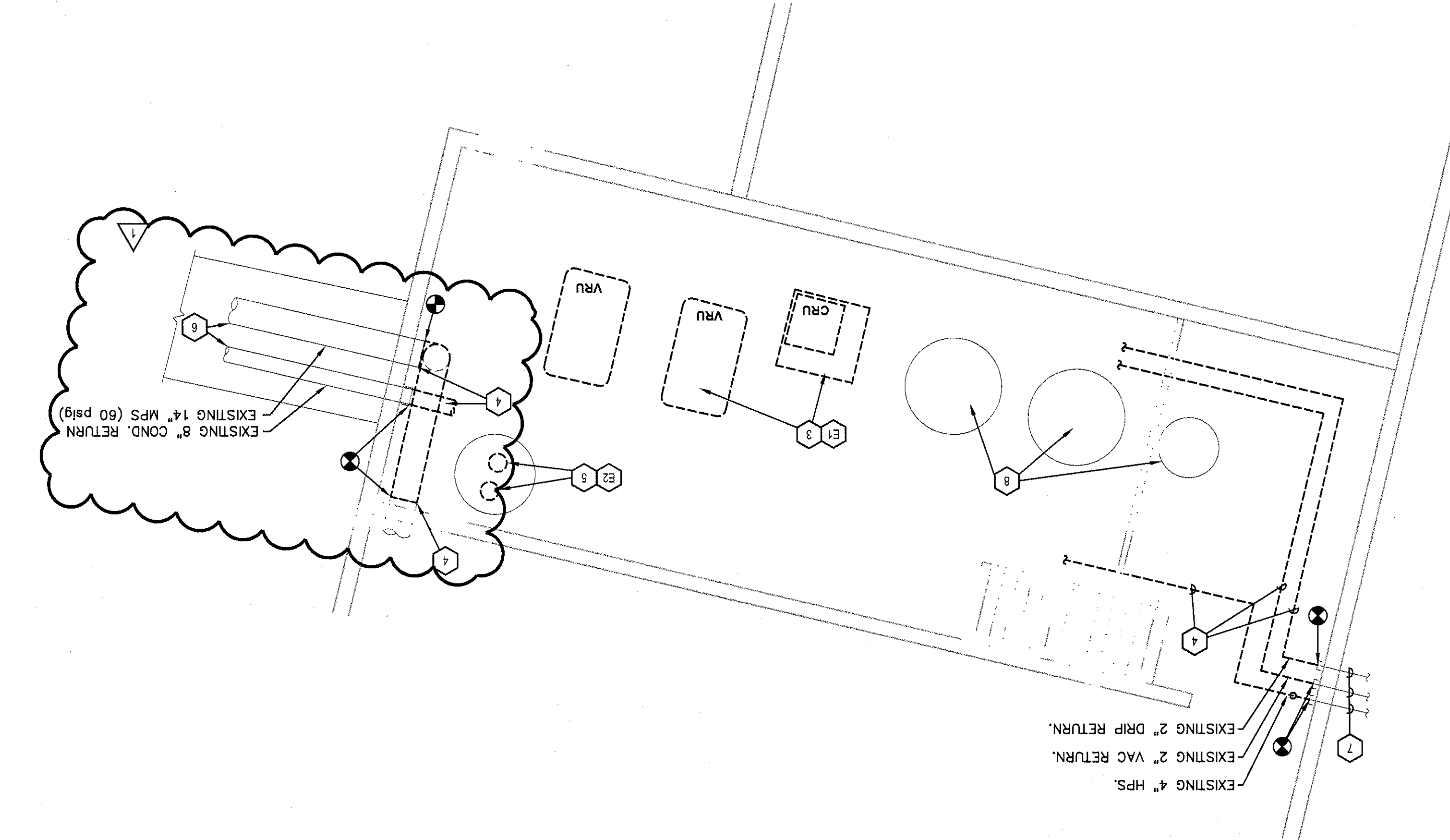
1 EXISTING BOILER PLANT (BUILDING 14)
SCALE: 1/8" = 1'-0"



3 EXISTING BOILER PLANT
PUMP ROOM MECH. PLAN
SCALE: 1/4" = 1'-0"



2 EXISTING BOILER PLANT
PUMP ROOM DEMO PLAN
SCALE: 1/4" = 1'-0"



GENERAL NOTES:

1. REFER TO SHEET MWO.1 FOR GENERAL MECHANICAL NOTES THAT APPLY TO ALL SHEETS IN THIS SET UNLESS NOTED OTHERWISE IN THE KEYED NOTES.
2. ALL EXISTING DUCTWORK, PIPING SIZES & LOCATIONS ARE TAKEN FROM AVAILABLE RECORD DOCUMENTS & SITE OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION.

DEMO NOTES :

1. ALL COMPONENTS OF EXISTING BOILER PLANT SHALL REMAIN IN OPERATION DURING CONSTRUCTION OF NEW ENERGY CENTER UNIT. SUCH NEW BOILERS IN ENERGY CENTER HAVE BEEN ENGAGED & COMMISSIONED EXCEPT FOR THE STAGED REMOVAL OF EXISTING BURNERS AS NOTED BELOW. REFER TO SHEET MWO.1 FOR ENERGY CENTER PHASING NOTES.
2. BOILERS FOR RELOCATION & REUSE WITH NEW BOILERS IN ENERGY CENTER BUILDING 225.
3. REMOVE ALL EQUIPMENT & PIPING FROM BASEMENT LEVEL AS NECESSARY FOR INSTALLATION OF NEW COND. RET. UNIT. (REFER TO ARCH. FOR ABATEMENT PROCEDURES THIS AREA.) ALSO, REMOVE EXISTING CONCRETE HOUSEKEEPING FLOORS AS REQUIRED FOR NEW EQUIPMENT FLOOR.
4. REMOVE EXISTING STEAM AND CONDENSATE PIPING BACK TO POINTS INDICATED AND CAP UNUSED PIPING.
5. REMOVE EXISTING PUMPS AND ASSOCIATED PIPING, WIRING & CONTROLS FROM EXISTING SUMP PIT.
6. EXISTING PIPING WITHIN EXISTING CONCRETE TRENCH.
7. EXISTING STEAM AND CONDENSATE RETURN PIPING TO BE ABANDONED.
8. EXISTING WATER SORTING EQUIPMENT TO REMAIN IN CENTER. (IF ALTERNATE BID #2 IS ACCEPTED, EQUIPMENT WILL BE ABANDONED.)

ELECT. DEMO NOTES :

1. DISCONNECT AND SELECTIVELY DEMO WIRING TO THESE EXISTING PIECES OF EQUIPMENT.
2. DISCONNECT AND SELECTIVELY DEMO WIRING TO EXISTING PUMPS AND CONTROLLER.

KEYED NOTES :

1. PROVIDE NEW CONDENSATE RETURN UNIT CRU-2, AS SCHEDULED, TO HANDLE RETURN FROM CAMPUIS. PROVIDE NEW CONCRETE HOUSEKEEPING PAD FOR CRU.
2. EXTEND NEW 8" CONDENSATE RETURN PIPE FROM CAMPUIS TO NEW RECEIVER.
3. EXTEND NEW 4" PUMPED CONDENSATE RETURN PIPE FROM CRU TO NEW CONCRETE TRENCH.
4. SCHEDULED ON SHEET PLS.1 WITHIN EXISTING SUMP PIT. CONNECT PUMP DISCHARGE PIPING TO EXISTING WASTE PIPING EXISTING BLDG.
5. MOUNT PUMP CONTROL PANEL ON WALL & EXTEND WIRING TO PUMPS AND FLOAT CONTROLS IN SUMP PIT. CORE THRU EXISTING EXTERIOR WALL BELOW GRADE INTO NEW CONCRETE TRENCH. PROVIDE LINK SEAL PROTECTION AROUND PIPE AT PENETRATION.
6. CAP REMAINING MPS PIPING AT EXTERIOR WALL. REFER TO SHEET MS1.2 FOR CONTINUATION OF PIPE TRENCHES AND SHEET MS1.9 FOR ELEVATION OF TRENCHES.
7. EXTEND 3" VENT PIPE FROM CONDENSATE RECEIVER TANK THRU EXTERIOR WALL & TURN UP TO TERMINATE AT 10' ABOVE GRADE.
8. PROVIDE 3" CAPPED & VALVED MPS PIPE STUB-OUT FOR FUTURE SERVICE TO BUILDING 14.
9. PROVIDE 2" CAPPED & VALVED CR PIPE STUB-OUT FOR FUTURE SERVICE TO BUILDING 14.
10. UTILIZE EXISTING CIRCUIT CURRENTLY FEEDING EXISTING NEW CONTROLLER & CONNECT NEW PUMPS TO FEED NEW CONTROLLER.
11. CRU TO FEED NEW CRU-2.

ELECT. KEYED NOTES :

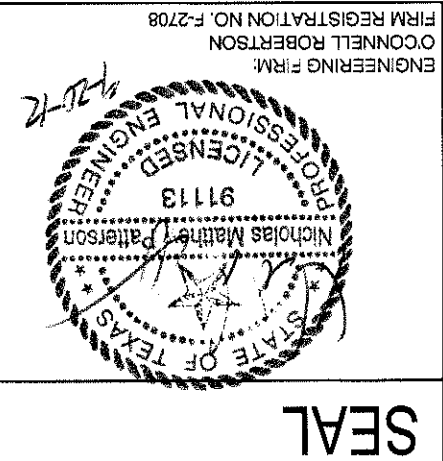
1. UTILIZE EXISTING CIRCUIT AT THIS LOCATION TO FEED NEW CONTROLLER.
2. CRU TO FEED NEW CRU-2.

LEGEND

- TO BE REMOVED
- _____ EXISTING TO REMAIN
- _____ NEW WORK

NO.	AMENDMENT #2	DESCRIPTION	DATE
1			4-20-12
REVISIONS			

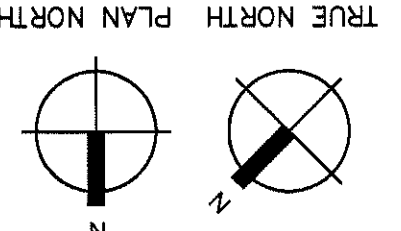
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HOUSTON, TEXAS 77036
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OR PROJECT NO. 0917.08



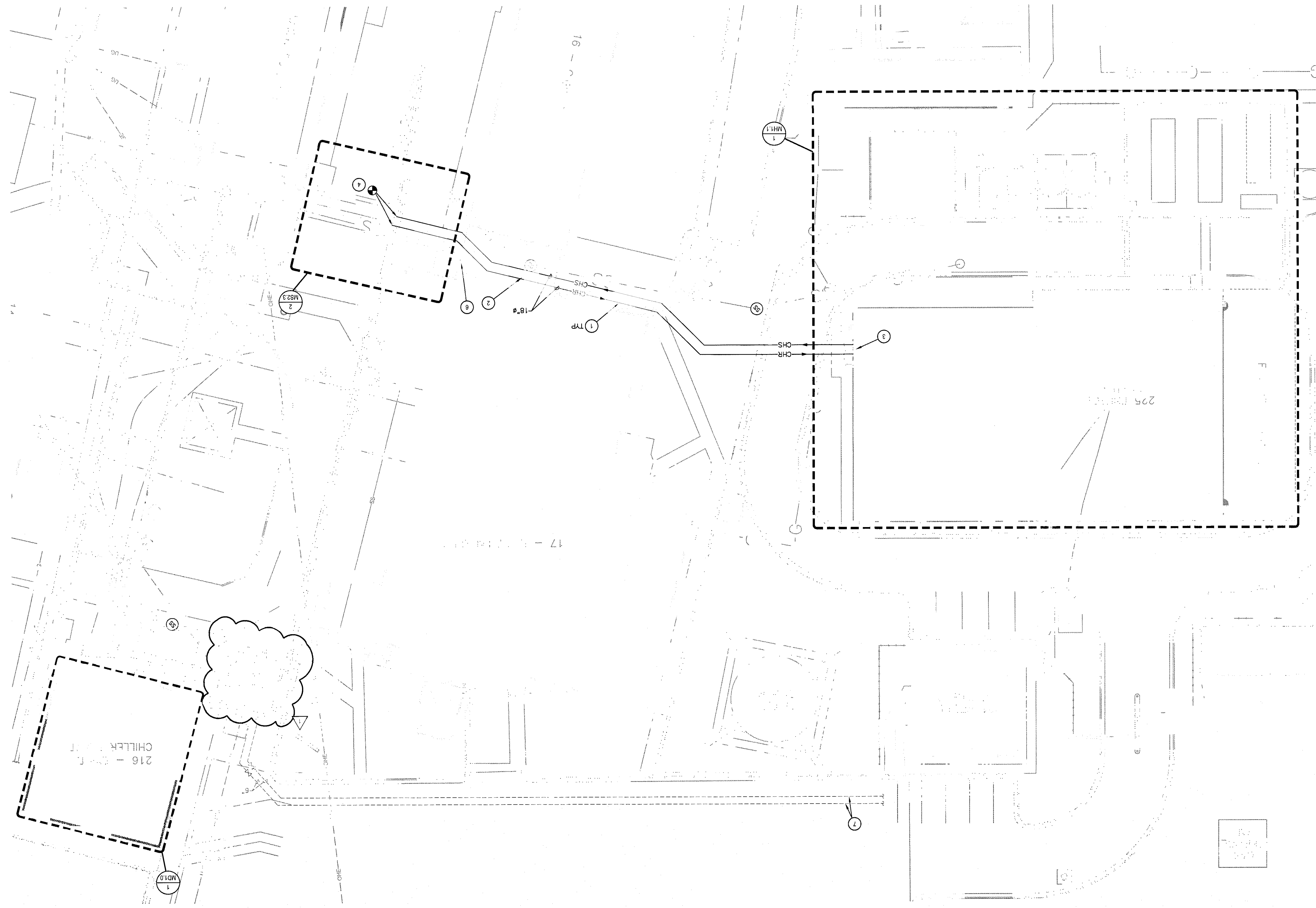
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Paul Cherry
COOR.
Drawing Title
MECHANICAL CHILLED WATER SITE
Project Title
WACO ENERGY CENTER
Location
Waco VAMC
Date
10/28/11
Checked
NP
Drawn
RS
Drawing Number
225-MS2.2
Building Number
225
Project Number
674A4-12-705

Office of
Construction
and Facilities
Management
Waco Veterans Affairs
Medical Center

LEGEND
--- EXISTING TO REMAIN
--- NEW WORK



1 MECHANICAL SITE - CHILLED WATER
SCALE: 1" = 20'



- KEYED NOTES:
- 18" DIAMETER DIRECT BURIED. PIPING AS SPECIFIED.
 - COORDINATE ROUTE WITH EXISTING AND NEW UTILITIES IN THIS LOCATION. SEE SHEET MS1.6.
 - CHILLED WATER PIPING ENTERS BUILDING 225 AT BASEMENT/CRAWLSPACE LEVEL. REFERENCE 1/MH1.2.
 - THE INTO EXISTING CHILLED WATER PIPING IN THIS LOCATION.
 - NOT USED.
 - REMOVE AND REINSTALL EXISTING STAIR AS NECESSARY TO INSTALL PIPING.
 - 6" CHILLED WATER PIPES TO LAUNDRY.

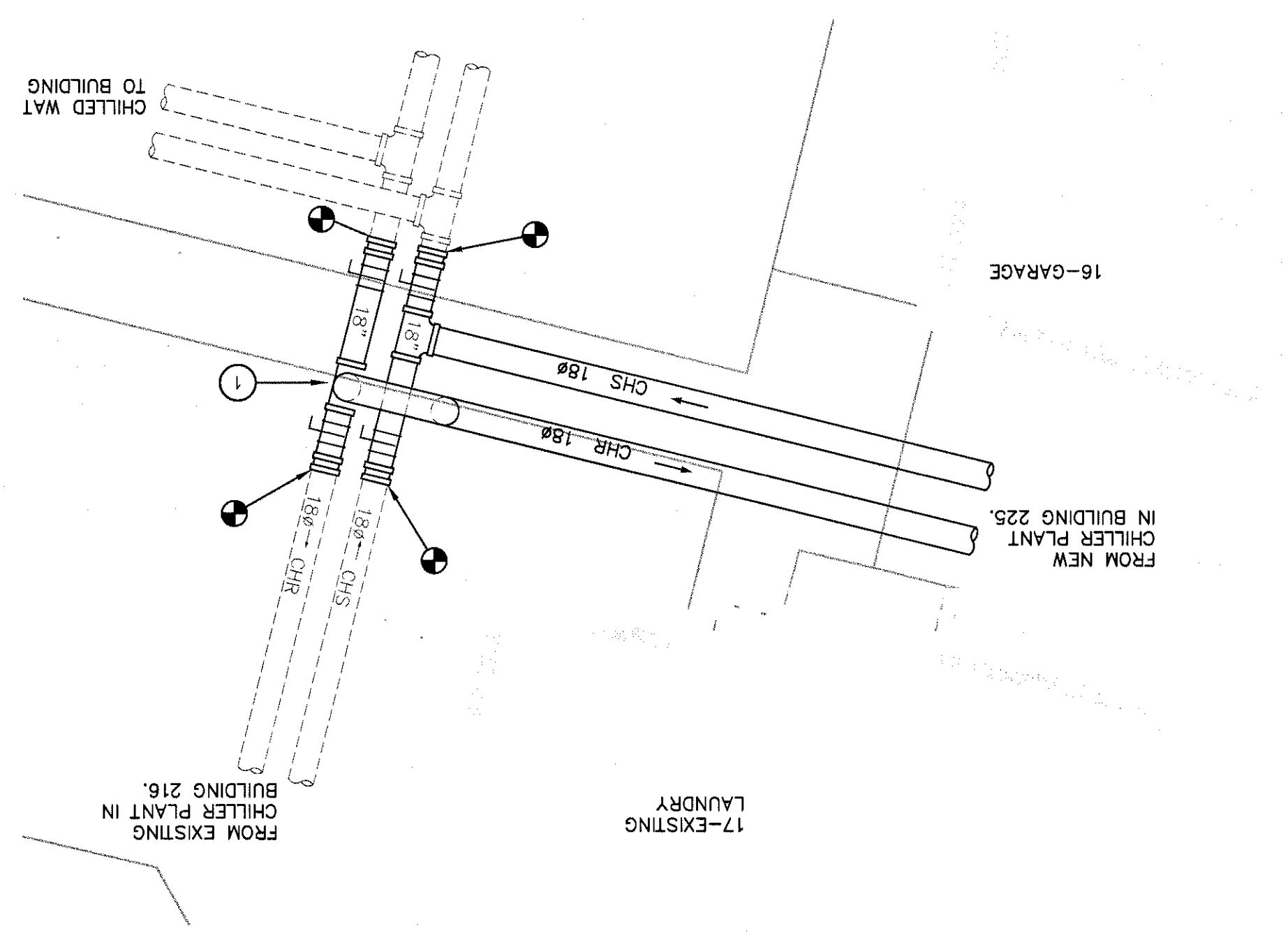
NO.	REVISIONS	DESCRIPTION	DATE
1	AMENDMENT #2		4-20-12

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OR PROJECT NO. 0917.08

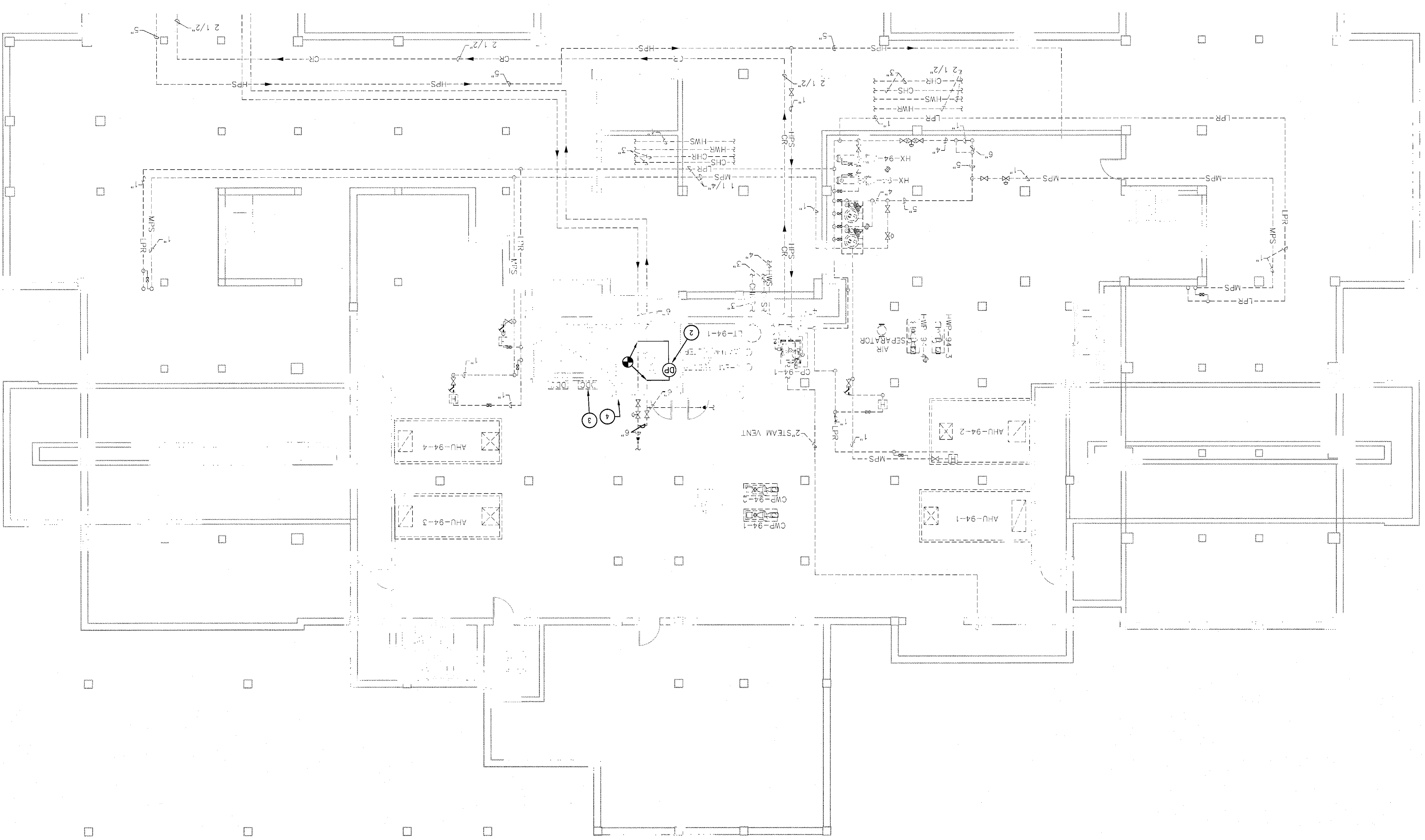
SEAL
ARCHITECT
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Temple, Texas 76504
254.773.2144 F
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Project Title MECHANICAL CHILLED WATER SITE DETAILS		Drawing Title DETAILS		Location Waco VAMC		Date 10/28/11		Checked NP		Drawn RS	
Project Number 674A4-12-705		Building Number 225		Drawing Number 225-MS2.3		Date 10/28/11		Checked NP		Drawn RS	
Project Title WACO ENERGY CENTER		Drawing Title DETAILS		Location Waco VAMC		Date 10/28/11		Checked NP		Drawn RS	
Project Number 674A4-12-705		Building Number 225		Drawing Number 225-MS2.3		Date 10/28/11		Checked NP		Drawn RS	

2 CHILLED WATER DETAIL - CONNECTION TO EXISTING LOOP
SCALE: 1/8" = 1'-0"



1 BUILDING 94 CRAWLSPACE AND BASEMENT PLAN - CHILLED WATER PIPING
SCALE: 1/8" = 1'-0"



- KEYED NOTES:
- 1. REFERENCE PHASING PLAN ON 2/MS2.1.
 - 2. PROVIDE NEW DIFFERENTIAL PRESSURE SENSOR AS SHOWN ON CAMPUS FLOW DIAGRAM IN VERTICAL RISE IN MECHANICAL ROOM. NEW DDC POINT TO EXISTING DDC CONTROLLER.
 - 3. EXISTING TAC INET DDC PANEL AND WORKSTATION. THE NEW POINT TO EXISTING CONTROLLER AND MAP TO NEW FRONT END.
 - 4. FIRE GASK NEW CONDUIT PENETRATION THROUGH FIRE RATED WALL, TYP.

LEGEND

EXISTING TO REMAIN
NEW WORK

ENGINEER:


ROBERTSON

STRUCTURE
ENGINEERING
INTERIORS

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DALLAS, TEXAS 75204
(214) 472-7286
FAX (214) 472-7441

OR PROJECT NO. 0917.08

A circular professional engineer seal for the State of Texas. The outer ring contains the text "STATE OF TEXAS" at the bottom and "PROFESSIONAL ENGINEER" at the top. Inside the ring, the word "LICENSED" is at the top, and the license number "11713" is in the center. The signature "DONALD ROBERTSON" is written across the middle of the seal.



Bridge Inc.
Temple, Texas 76504
254.773.2144 F

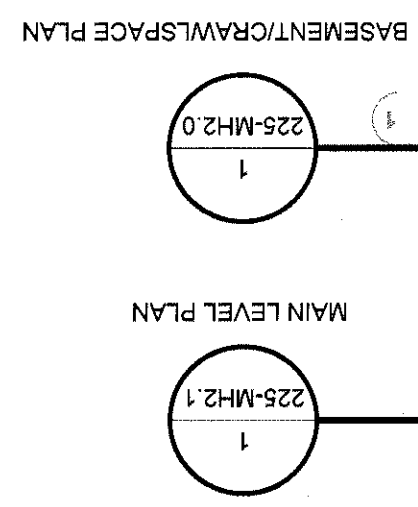
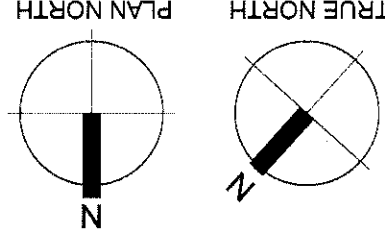
PAUL CHERRY

Location
Waco VAMC

225-MH1.1

Department of

KEY PLAN

[illegible]

