

VA PROJECT NO. 516-15-107

DESIGN TO REPLACE BOILERS, BLDG 100 ENERGY CENTER

C.W. BILL YOUNG VETERANS AFFAIRS MEDICAL CENTER

10,000 BAY PINES BLVD.

BAY PINES, FLORIDA 33744

CONTRACT NO. VA248-16-C-0145

DESIGNED FOR:



Department of
Veterans Affairs

DEPARTMENT OF VETERANS AFFAIRS
NETWORK CONTRACTING OFFICE 8
ROOM 234, BLDG. 2
10,000 BAY PINES BLVD.
BAY PINES, FLORIDA 33744

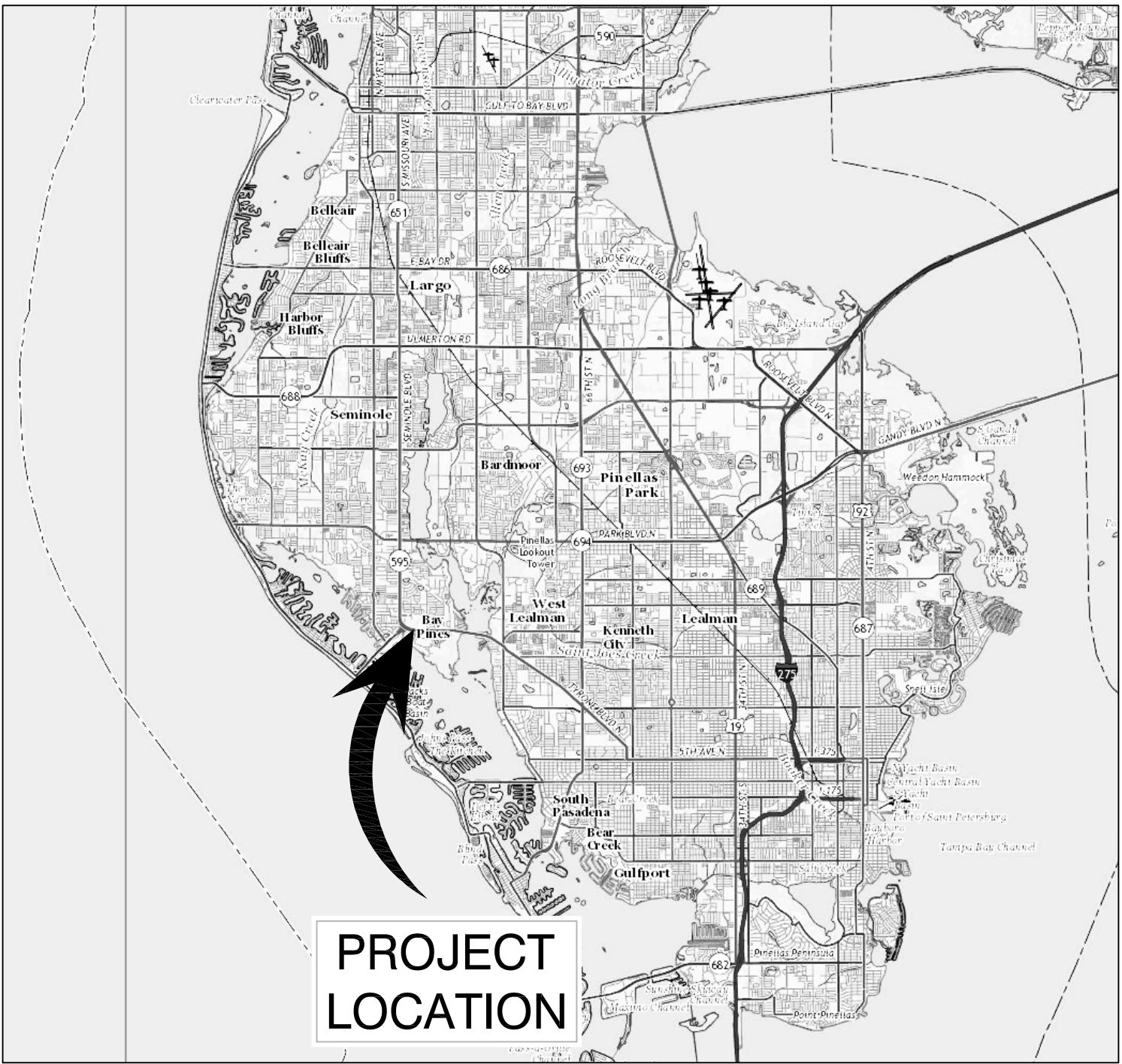
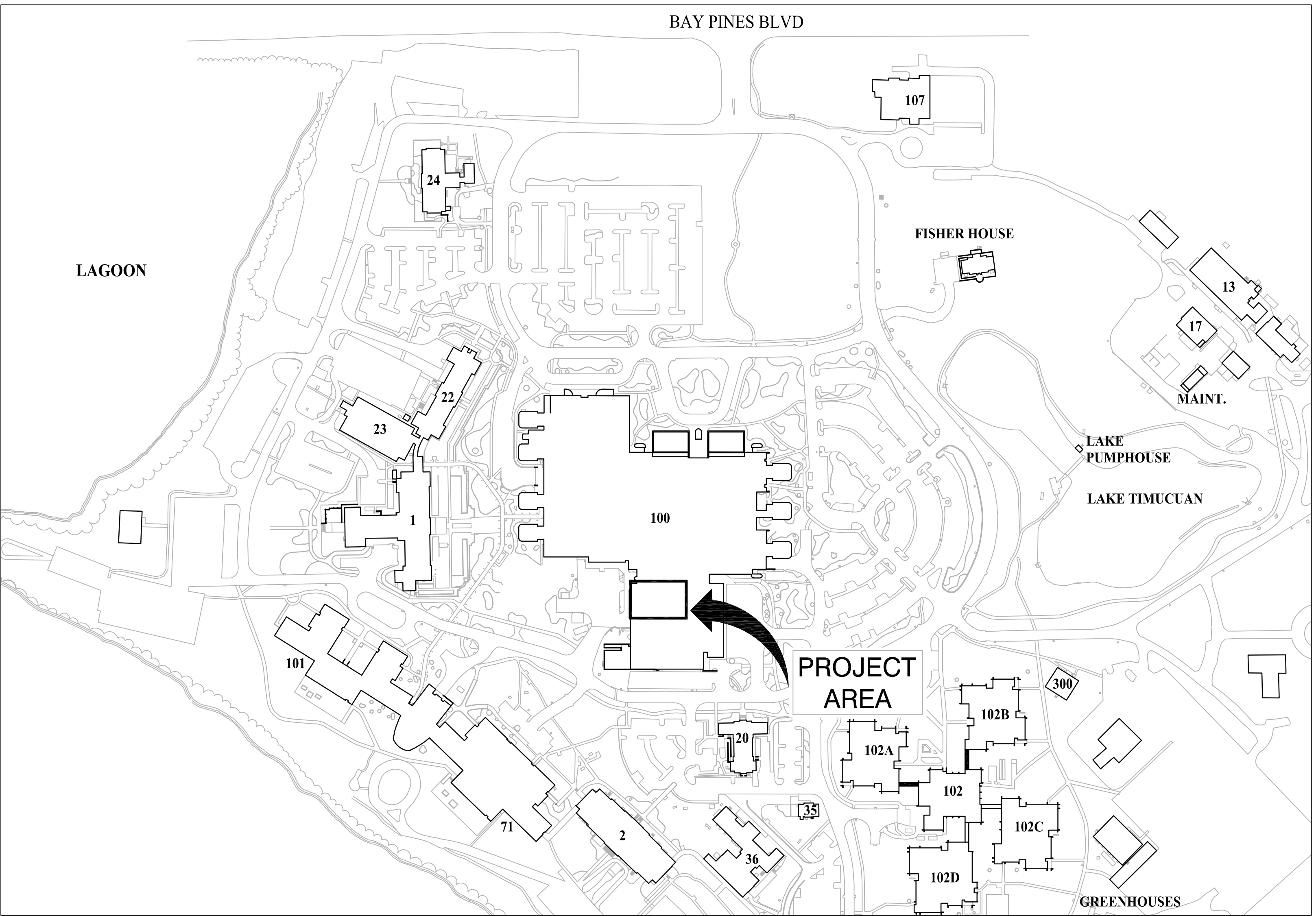
DESIGNED BY:

AKEA Design, Inc.

3603 NW 98TH STREET, SUITE B
GAINESVILLE, FLORIDA 32606
PH: (352) 474-6124
FAX: (352) 553-4437
COA: FL #29578

AEI Affiliated
Engineers

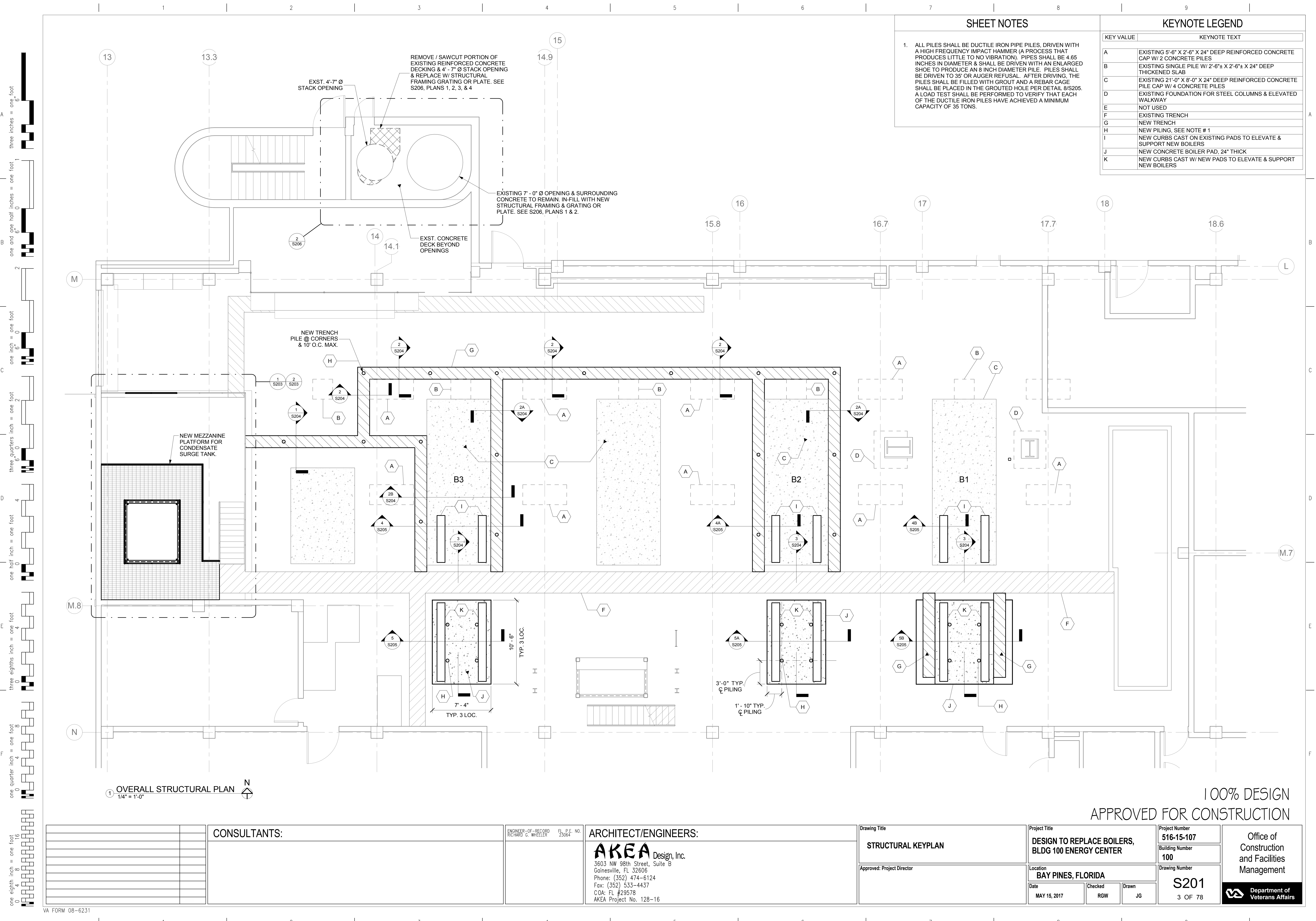
Affiliated Engineers SE, Inc.
Tioga Town Center
12921 SW 1st Road Ste 205
Gainesville, Florida 32669
Tel 352.376.5500 Fax 352.375.3479
CA-5140



100% DESIGN
MAY 15, 2017

100% DESIGN
APPROVED FOR CONSTRUCTION

		CONSULTANTS:		ENGINEER-OF-RECORD JACK S. NEALE FL. P.E. NO. 42678		ENGINEER-OF-RECORD STEPHEN T. STEFFE FL. P.E. NO. 70349		ARCHITECT/ENGINEERS: AKEA Design, Inc. 3603 NW 98th Street, Suite B Gainesville, FL 32606 Phone: (352) 474-6124 Fax: (352) 553-4437 COA: FL #29578 AKEA Project No. 128-16		Drawing Title TITLE PAGE	Drawing Title DESIGN TO REPLACE BOILERS, BLDG 100 ENERGY CENTER	Project Number 516-15-107 Building Number 100	Office of Construction and Facilities Management
		 Affiliated Engineers SE, Inc. Tioga Town Center 12921 SW 1st Road Ste 205 Gainesville, Florida 32669 Tel 352.376.5500 Fax 352.375.3479 CA-5140								Approved Project Director	Location BAY PINES, FLORIDA	Drawing Number G001 1 OF 78	
Revisions		Date									Date MAY 15, 2017	Checked	Drawn




SHEET NOTES

1. ALL PILES SHALL BE DUCTILE IRON PIPE PILES, DRIVEN WITH A HIGH FREQUENCY IMPACT HAMMER (A PROCESS THAT PRODUCES LITTLE TO NO VIBRATION). PILES SHALL BE 4.65 INCHES IN DIAMETER & SHALL BE DRIVEN WITH AN ENLARGED SHOE TO PRODUCE AN 8 INCH DIAMETER PILE. PILES SHALL BE DRIVEN TO 35' OR AUGER REFUSAL. AFTER DRIVING, THE PILES SHALL BE FILLED WITH GROUT AND A REBAR CAGE SHALL BE PLACED IN THE GROUTED HOLE PER DETAIL 8/S205. A LOAD TEST SHALL BE PERFORMED TO VERIFY THAT EACH OF THE DUCTILE IRON PILES HAVE ACHIEVED A MINIMUM CAPACITY OF 35 TONS.

KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
A	EXISTING 5'-6" X 2'-6" X 24" DEEP REINFORCED CONCRETE CAP W/ 2 CONCRETE PILES
B	EXISTING SINGLE PILE W/ 2'-6"± X 2'-6"± X 24" DEEP THICKENED SLAB
C	EXISTING 21'-0" X 8'-0" X 24" DEEP REINFORCED CONCRETE PILE CAP W/ 4 CONCRETE PILES
D	EXISTING FOUNDATION FOR STEEL COLUMNS & ELEVATED WALKWAY
E	NOT USED
F	EXISTING TRENCH
G	NEW TRENCH
H	NEW PILING, SEE NOTE # 1
I	NEW CURBS CAST ON EXISTING PADS TO ELEVATE & SUPPORT NEW BOILERS
J	NEW CONCRETE BOILER PAD, 24" THICK
K	NEW CURBS CAST W/ NEW PADS TO ELEVATE & SUPPORT NEW BOILERS

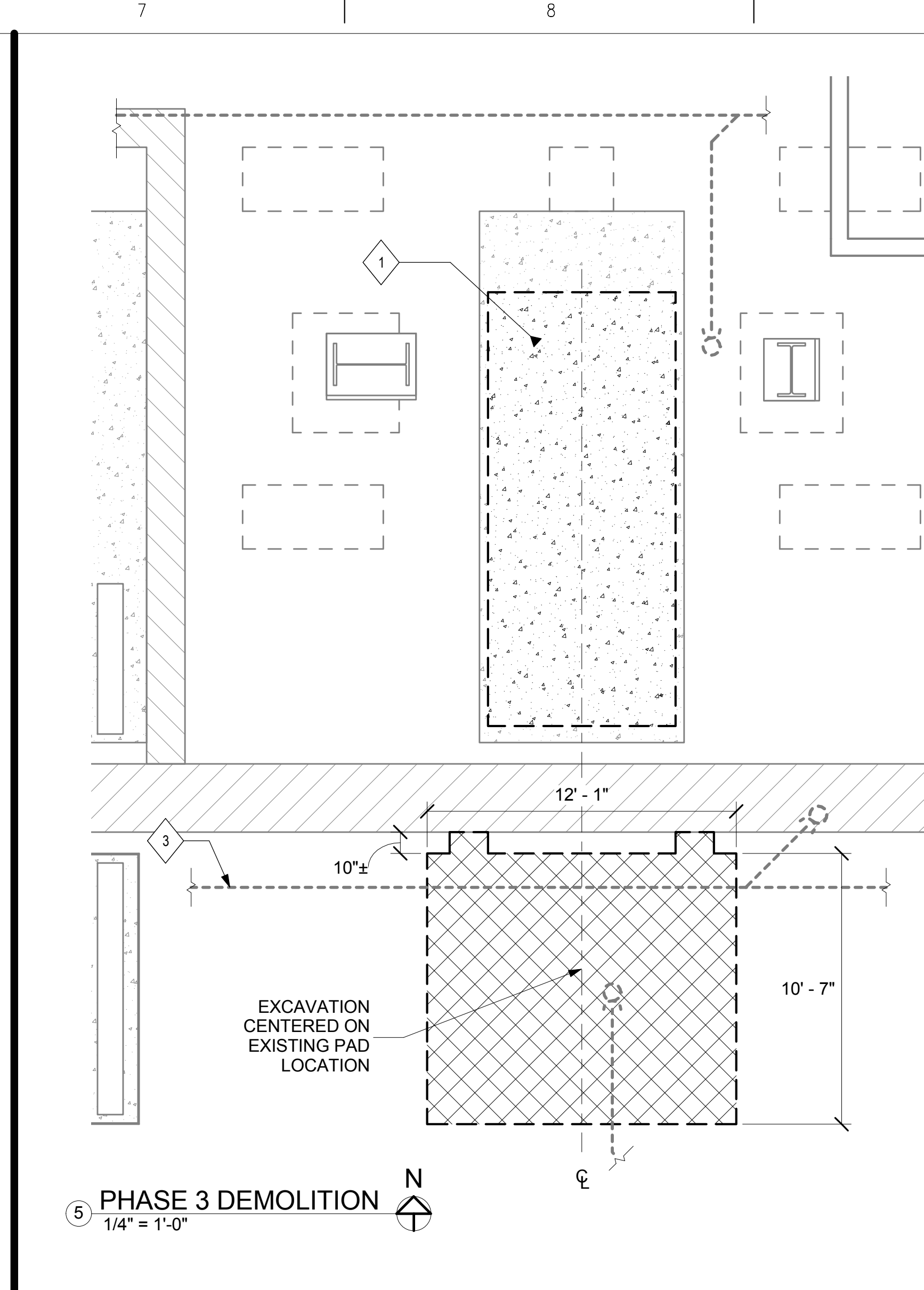
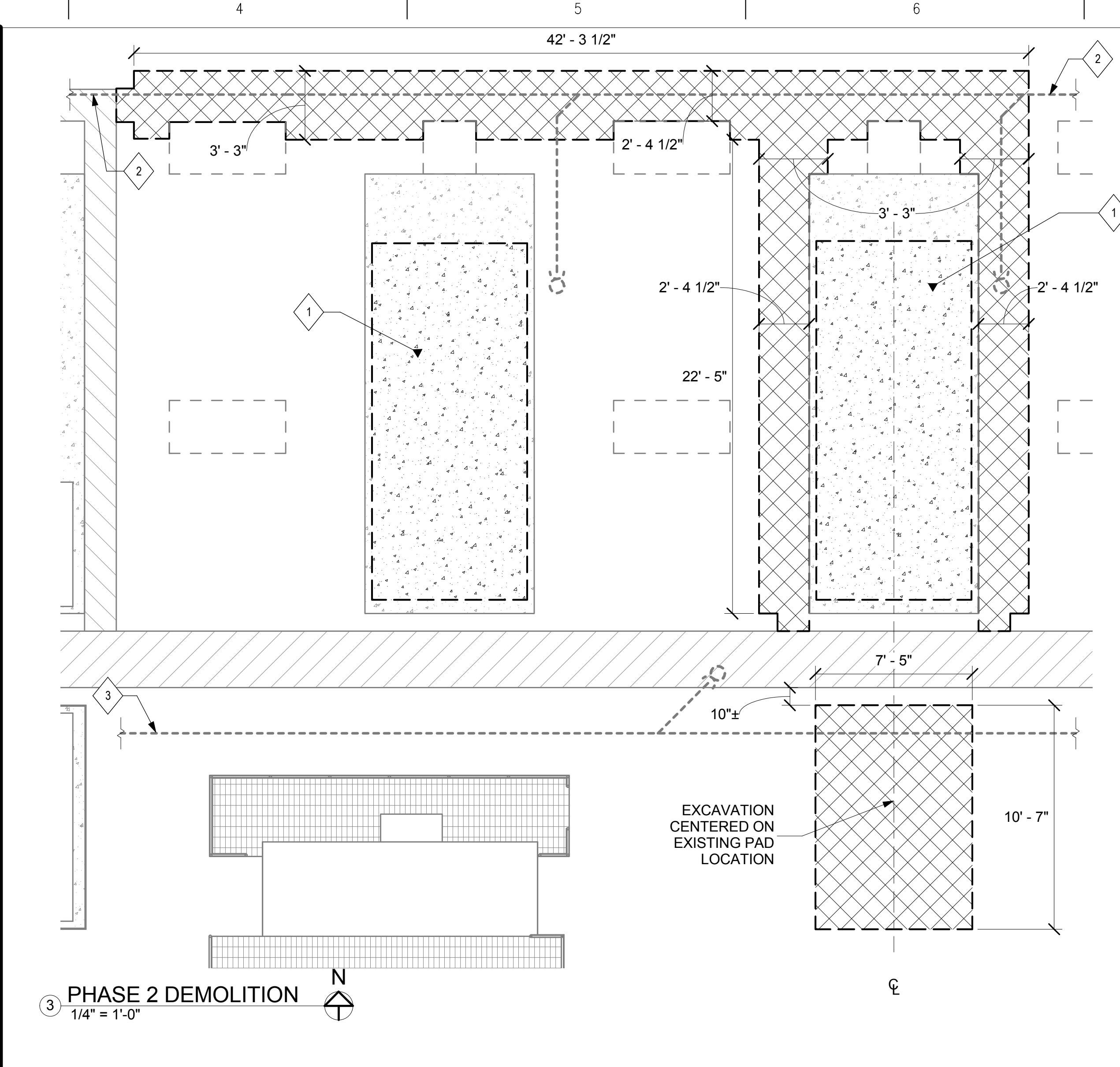
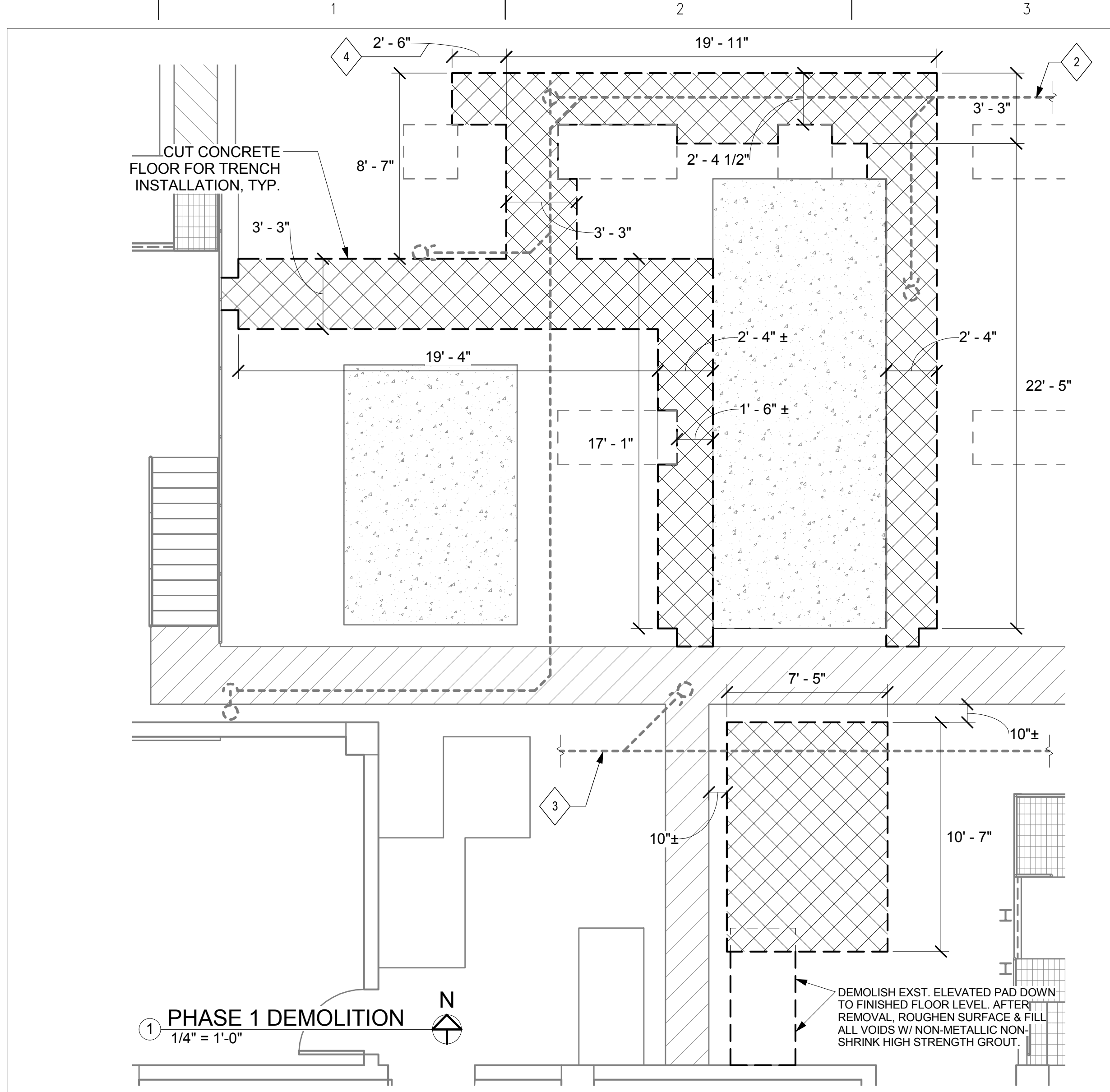
1 OVERALL STRUCTURAL PLAN
1/4" = 1'-0"

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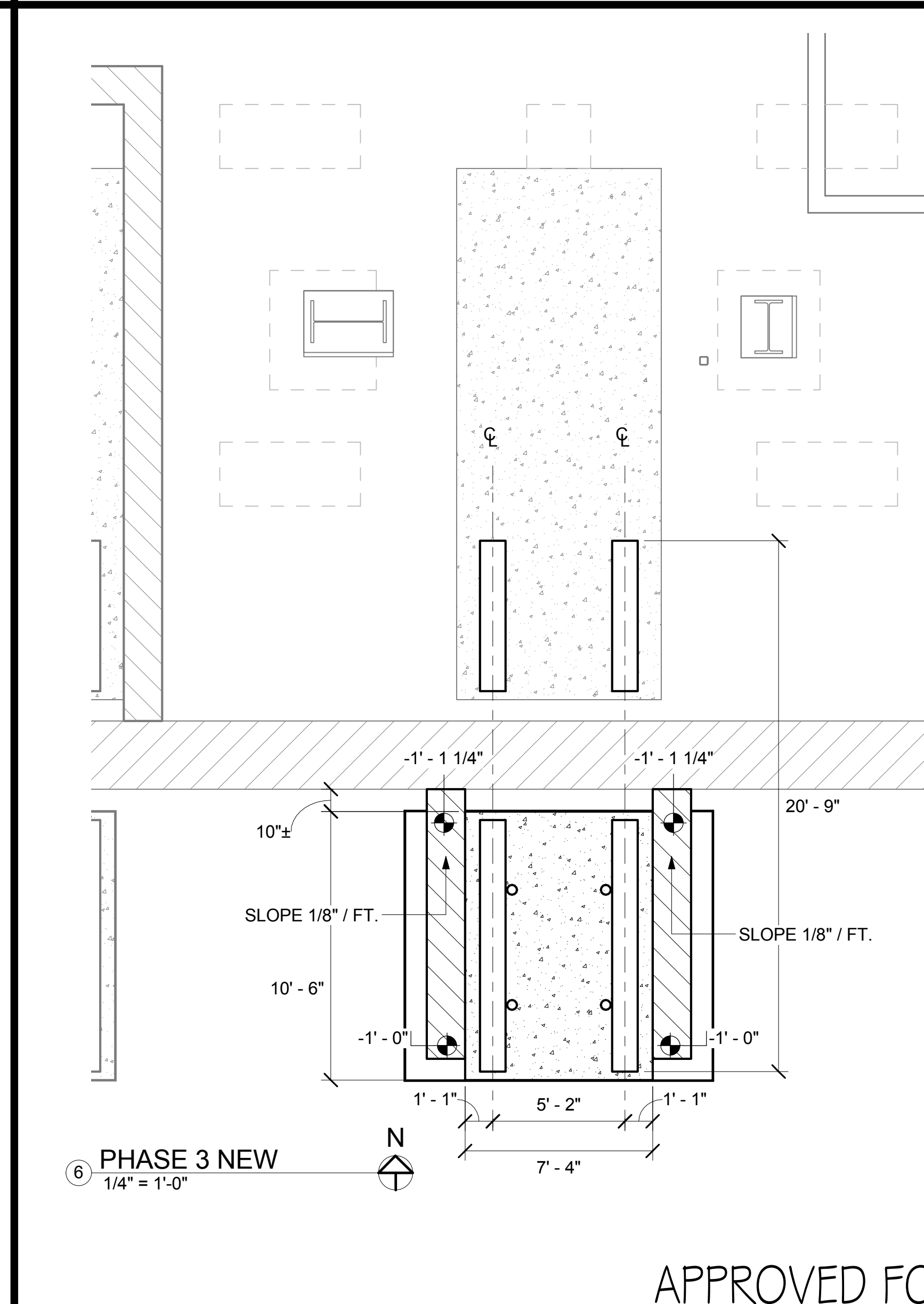
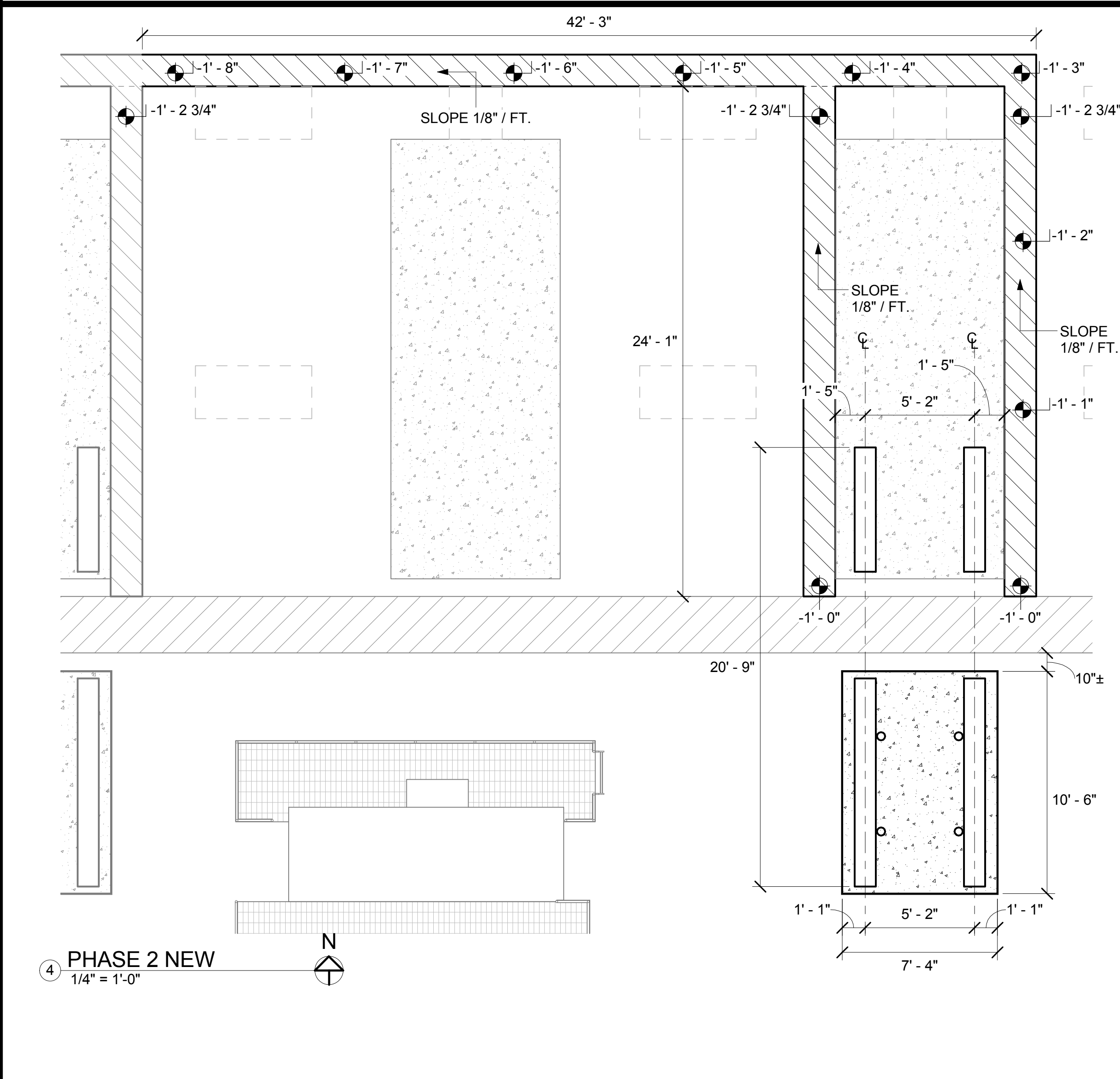
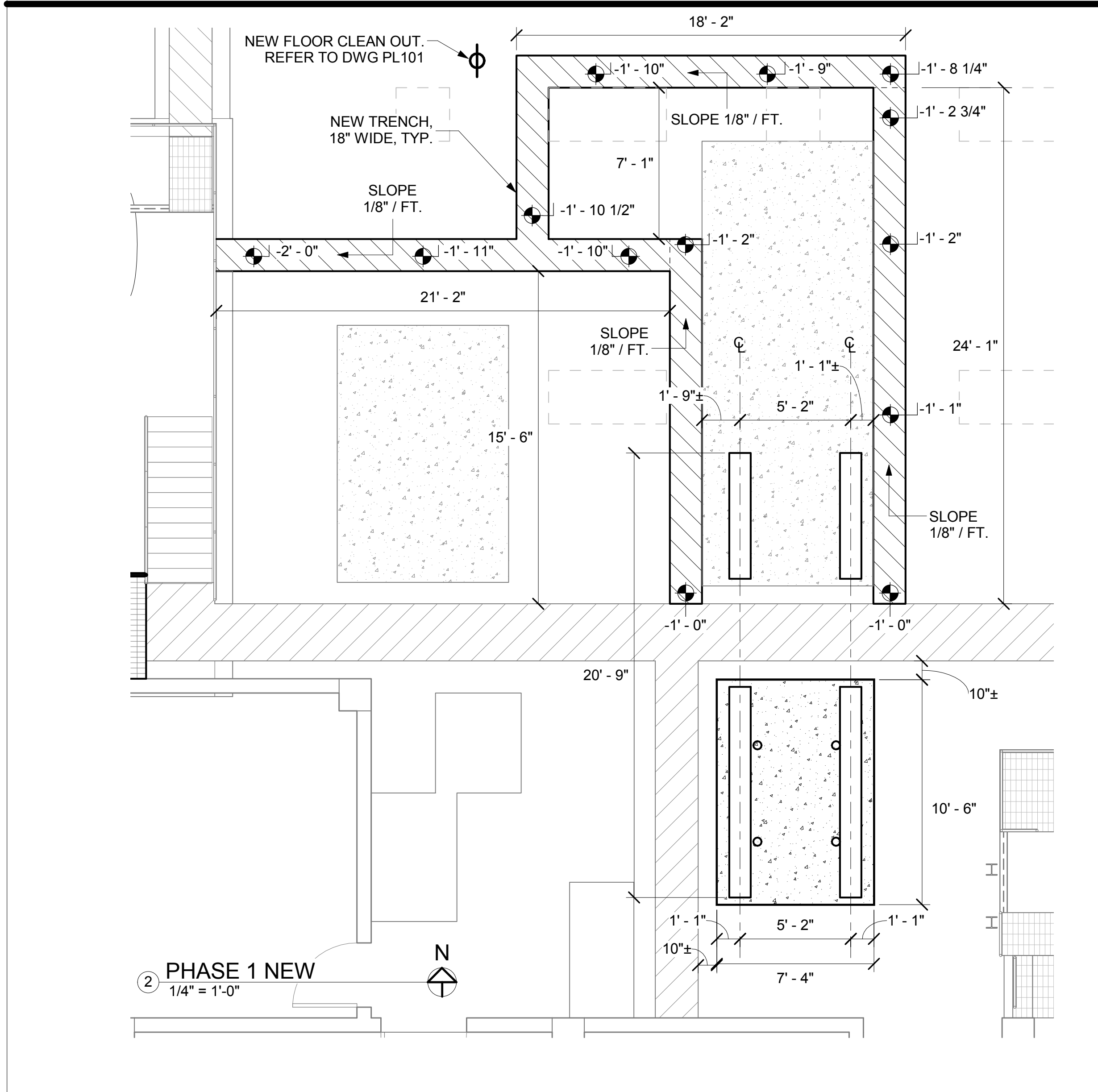
		CONSULTANTS:		ENGINEER-OF-RECORD RICHARD C. WHEELER FL P.E. NO. 23064	ARCHITECT/ENGINEERS: AKEA Design, Inc. 3603 NW 98th Street, Suite B Gainesville, FL 32606 Phone: (352) 474-6124 Fax: (352) 533-4437 COA: FL #29578 AKEA Project No. 128-16	Drawing Title STRUCTURAL KEYPLAN	Project Title DESIGN TO REPLACE BOILERS, BLDG 100 ENERGY CENTER	Project Number 516-15-107 Building Number 100	Office of Construction and Facilities Management
						Approved: Project Director	Location BAY PINES, FLORIDA	Drawing Number S201 3 OF 78	 Department of Veterans Affairs
							Date MAY 15, 2017	Checked RGW	Drawn JG

one eighth inch = one foot
one quarter inch = one foot
three eighths inch = one foot
one half inch = one foot
three quarters inch = one foot
one inch = one foot
one and one half inches = one foot
three inches = one foot

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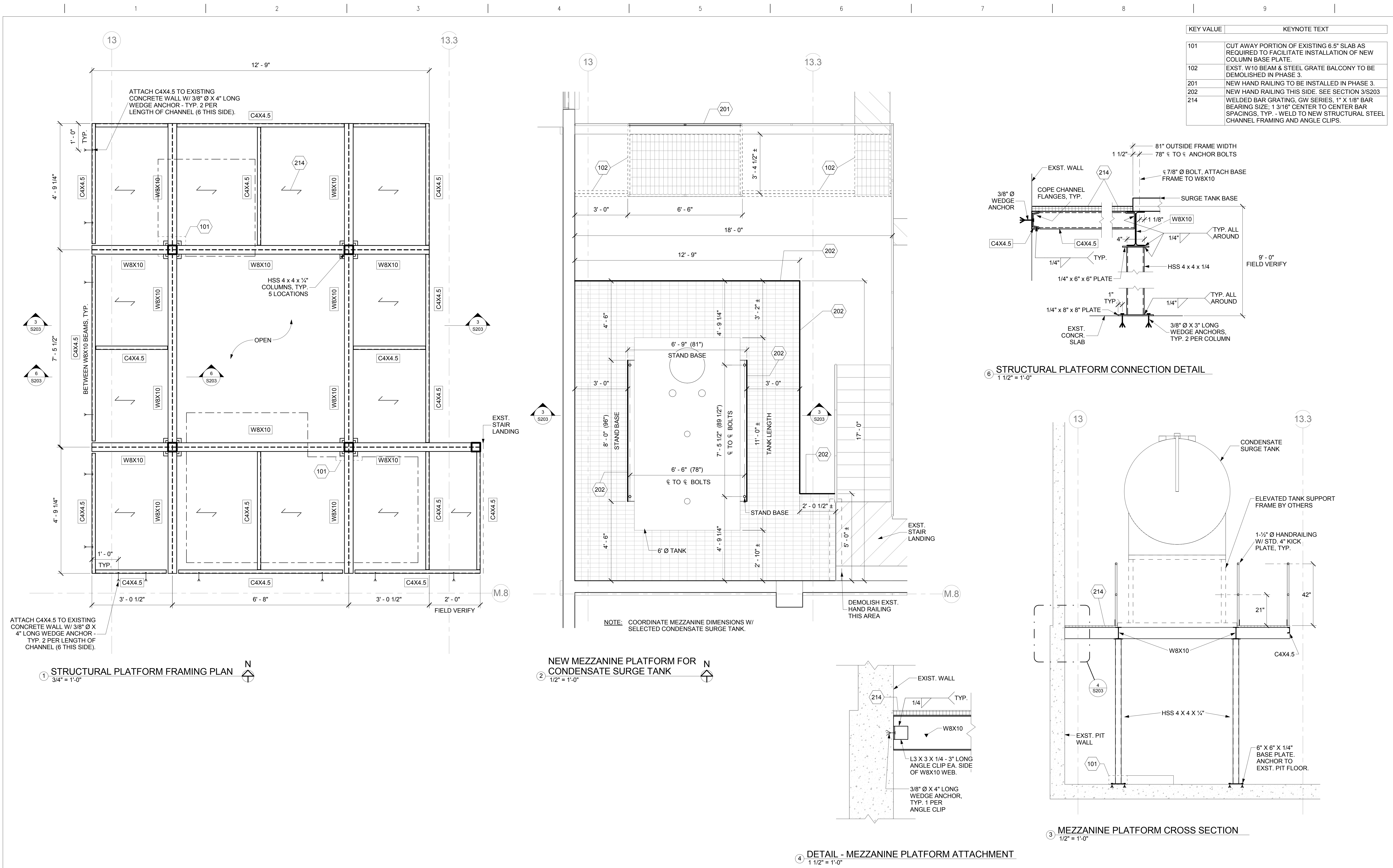
- SHEET NOTES**
- 1 REMOVE EXISTING 4-1/2" THICK HOUSEKEEPING PAD ATOP EXISTING BOILER PAD. AFTER REMOVAL, ROUGHEN SURFACE & FILL ALL VOIDS W/ NON-METALLIC NON-SHRINK HIGH STRENGTH GROUT.
 - 2 AN EXISTING FLOOR DRAIN PIPE IS LOCATED BELOW BOTTOM OF PROPOSED TRENCH IN APPROXIMATE LOCATIONS SHOWN (REFER TO DWG PL101). CONTRACTOR SHALL BE CAREFUL NOT TO DAMAGE EXISTING PIPE THAT IS TO BE LEFT IN PLACE. IN LOCATIONS WHERE NEW TRENCH PILES ARE TO BE CONSTRUCTED, CONTRACTOR SHALL DETERMINE DRAIN PIPE LOCATION PRIOR TO INSTALLATION OF PILING TO AVOID INTERFERENCE. SHOULD DRAIN PIPE INTERFERE WITH PILING, DRAIN PIPE SHALL BE RELOCATED.
 - 3 AN EXISTING FLOOR DRAIN PIPE IS LOCATED AT AN ELEVATION BELOW THE BOTTOM OF EXISTING TRENCHES IN APPROXIMATE LOCATIONS SHOWN (REFER TO DWG PL101). CONTRACTOR SHALL BE CAREFUL NOT TO DAMAGE EXISTING PIPE THAT IS TO BE LEFT IN PLACE. IN LOCATIONS WHERE NEW PILES OR BOILER PADS ARE TO BE CONSTRUCTED, CONTRACTOR SHALL DETERMINE DRAIN PIPE LOCATIONS TO AVOID DAMAGE DUE TO EXCAVATION OR INSTALLATION OF PILING.
 - 4 SAW-CUT FLOOR TO ACCOMMODATE FLOOR CLEAN OUT RELOCATION. COMPACT SOIL & PATCH FLOOR WITH CONCRETE TO MATCH EXISTING. REFER TO DWG PL101.



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				Approved: Project Director	Location BAY PINES, FLORIDA	Drawing Number S202 4 OF 78	
					Date MAY 15, 2017	Checked RGW	Drawn JG

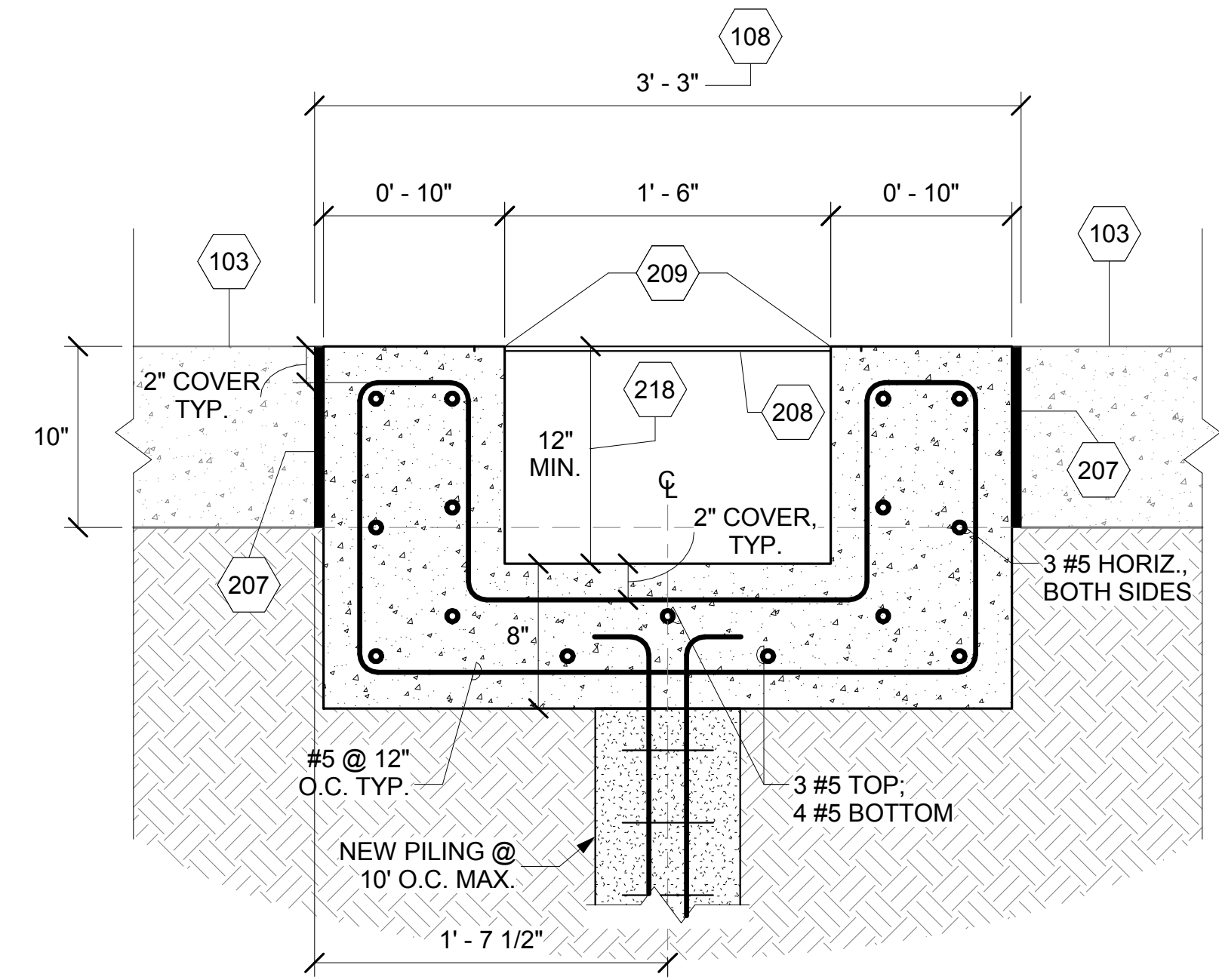
three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot



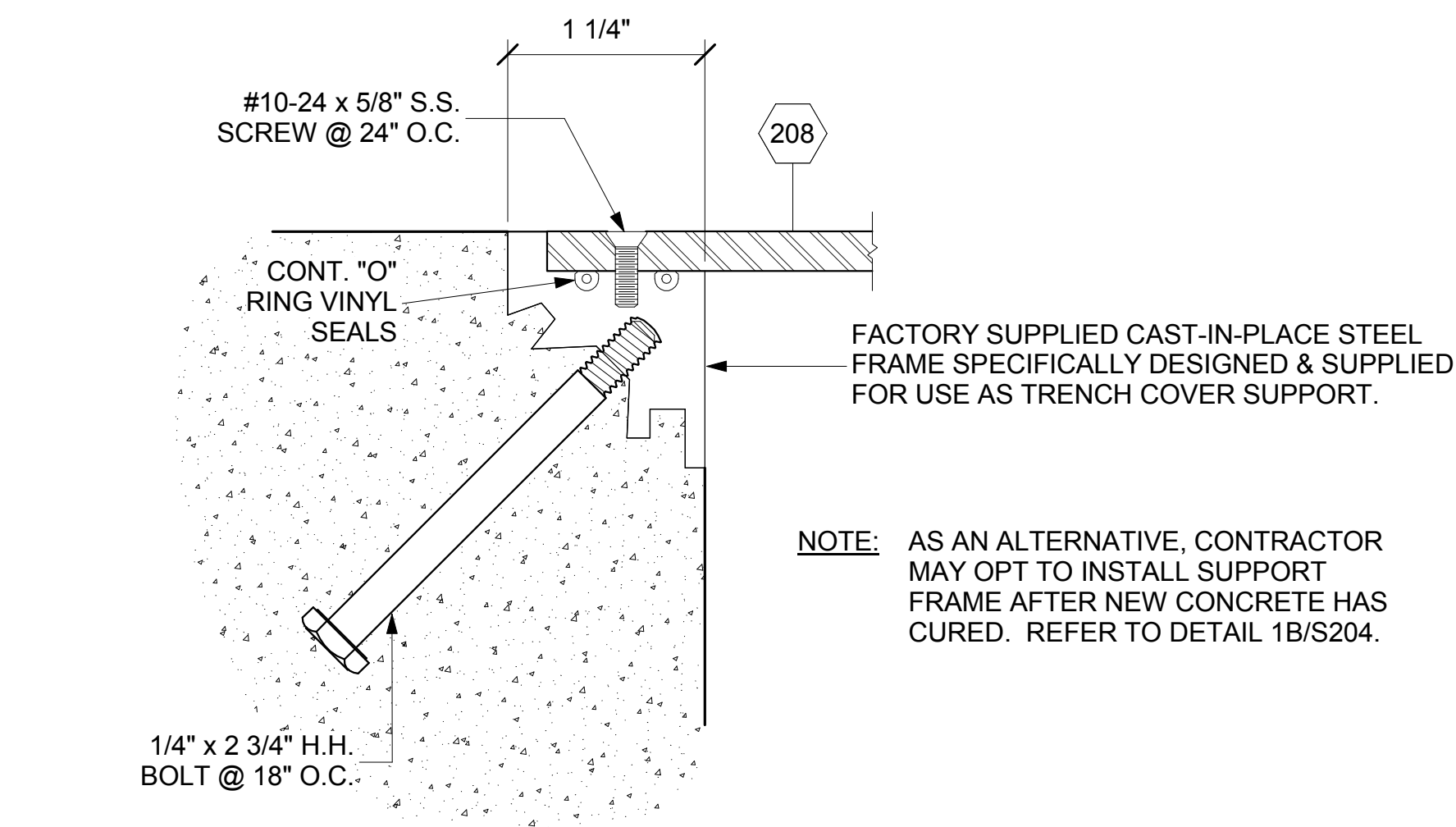
CONSULTANTS:		ENGINEER-OF-RECORD RICHARD C. WHEELER FL P.E. NO. 23064	ARCHITECT/ENGINEERS: AKEA Design, Inc. 3603 NW 98th Street, Suite B Gainesville, FL 32606 Phone: (352) 474-6124 Fax: (352) 533-4437 COA: FL #29578 AKEA Project No. 128-16	Drawing Title CONDENSATE TANK PLATFORM	Project Title DESIGN TO REPLACE BOILERS, BLDG 100 ENERGY CENTER	Project Number 516-15-107 Building Number 100	Office of Construction and Facilities Management
				Approved: Project Director	Location BAY PINES, FLORIDA	Drawing Number S203 5 OF 78	
					Date MAY 15, 2017	Checked RGW	

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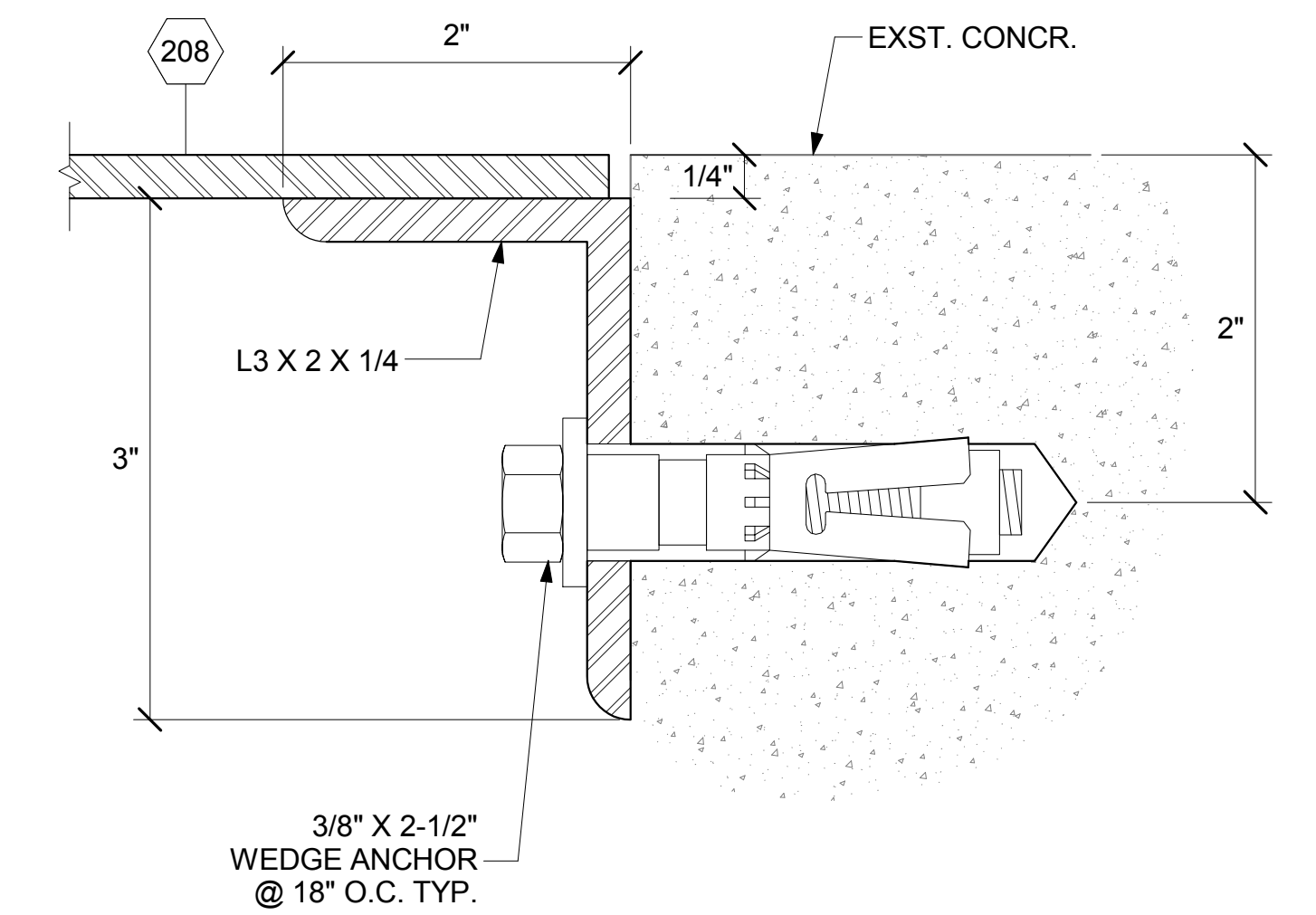
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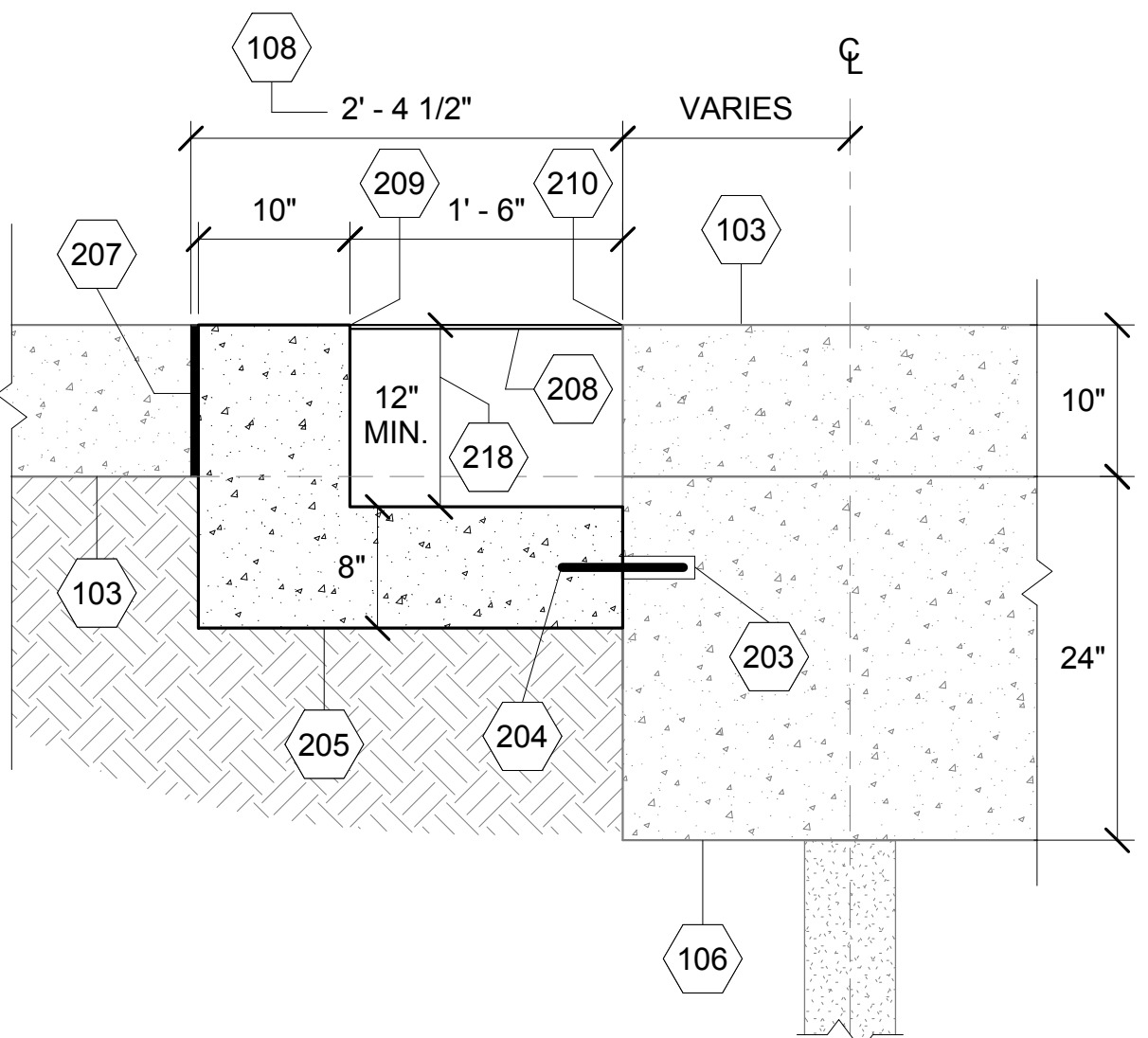
1 TYPICAL NEW TRENCH SECTION
1 1/2" = 1'-0"



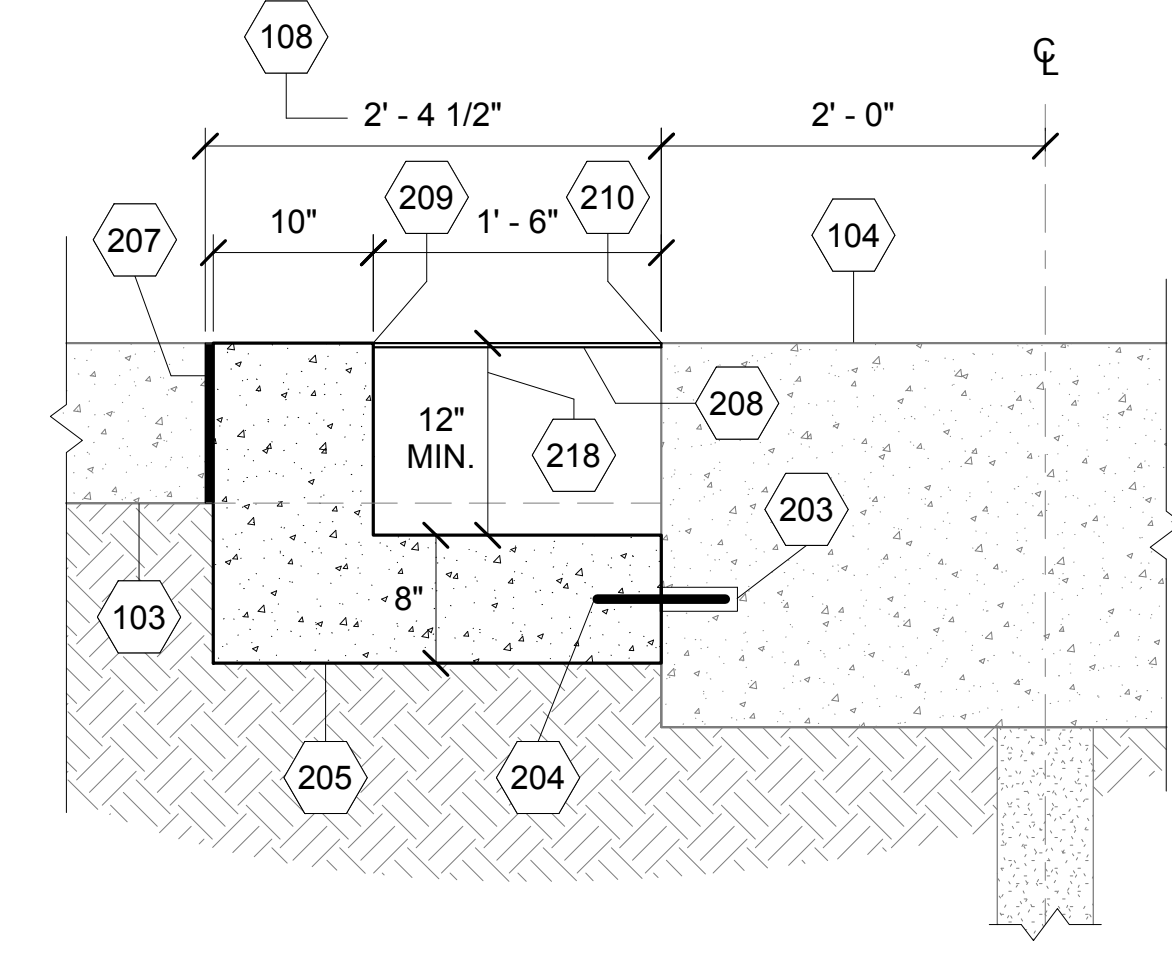
1A DETAIL - CAST-IN-PLACE TRENCH COVER SUPPORT
1" = 1"



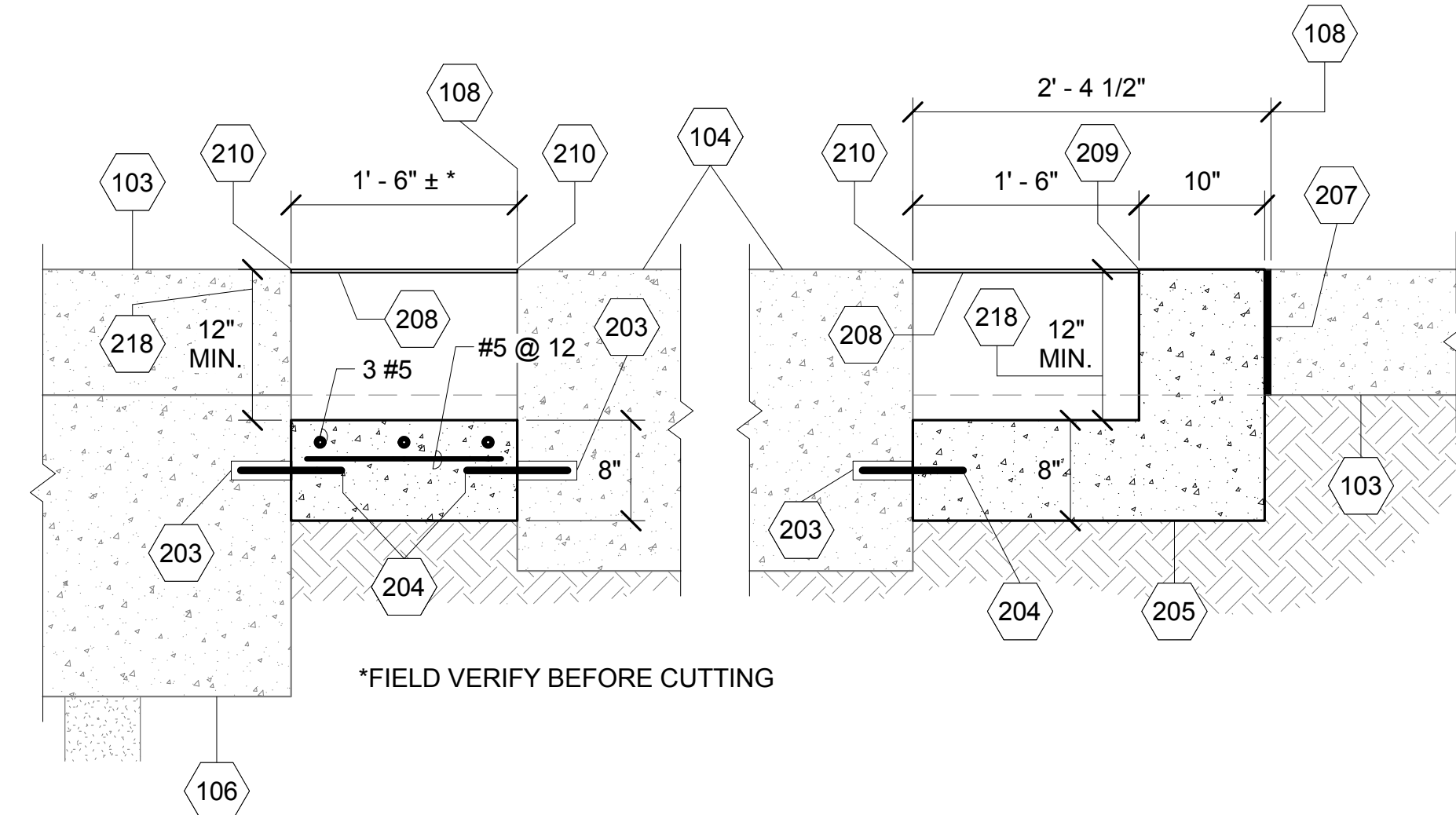
1B DETAIL TRENCH COVER SUPPORT FRAME @ EXISTING CONCRETE
1" = 1"



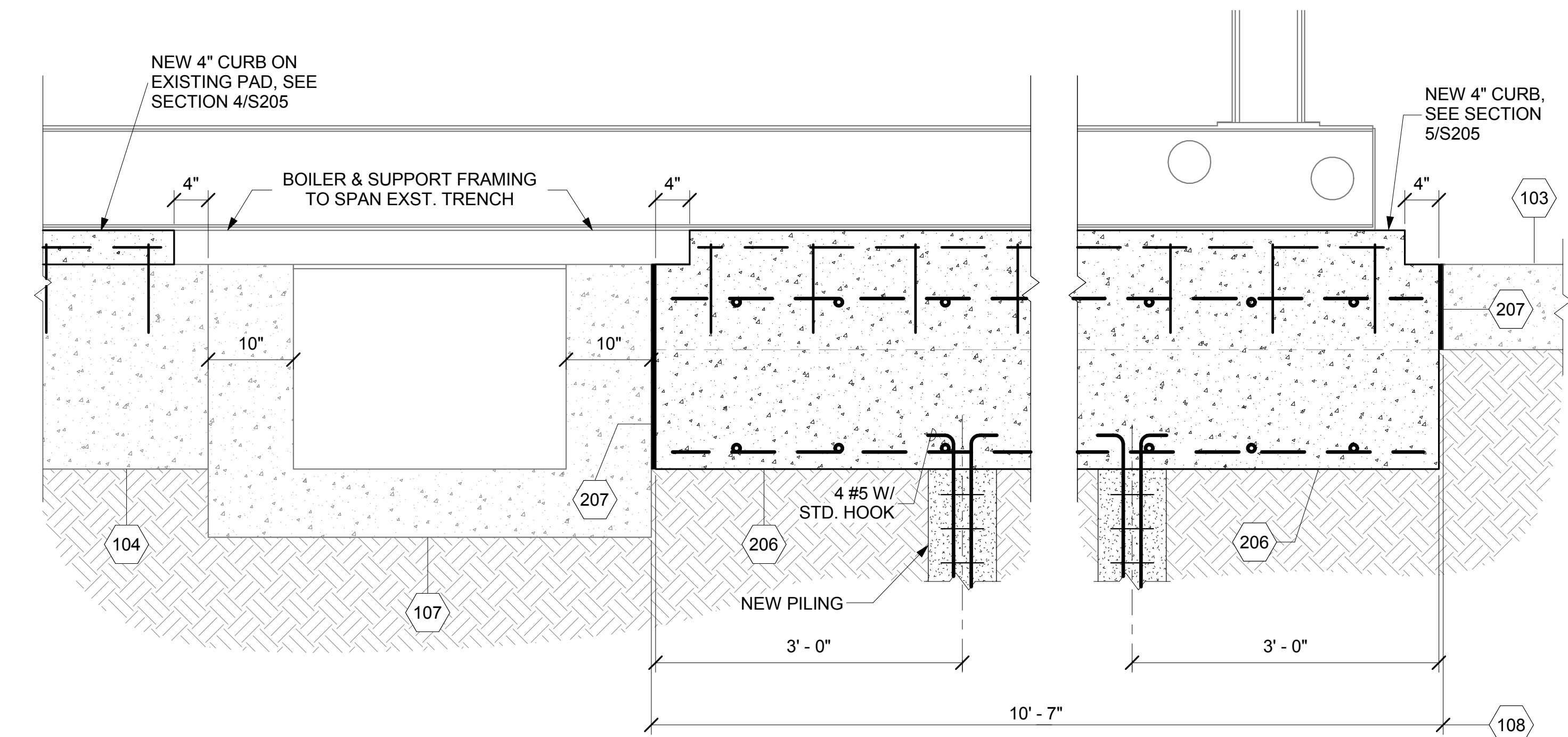
2 TRENCH @ PILE CAP INTERFACE
1" = 1'-0"



2A TRENCH @ EXISTING BOILER PAD INTERFACE
1" = 1'-0"



2B TRENCHING @ EXISTING PILE CAP & BOILER PAD INTERFACES
1" = 1'-0"



3 NEW BOILER PAD & CURBING TO SUPPORT BOILER
1" = 1'-0"

SHEET NOTES

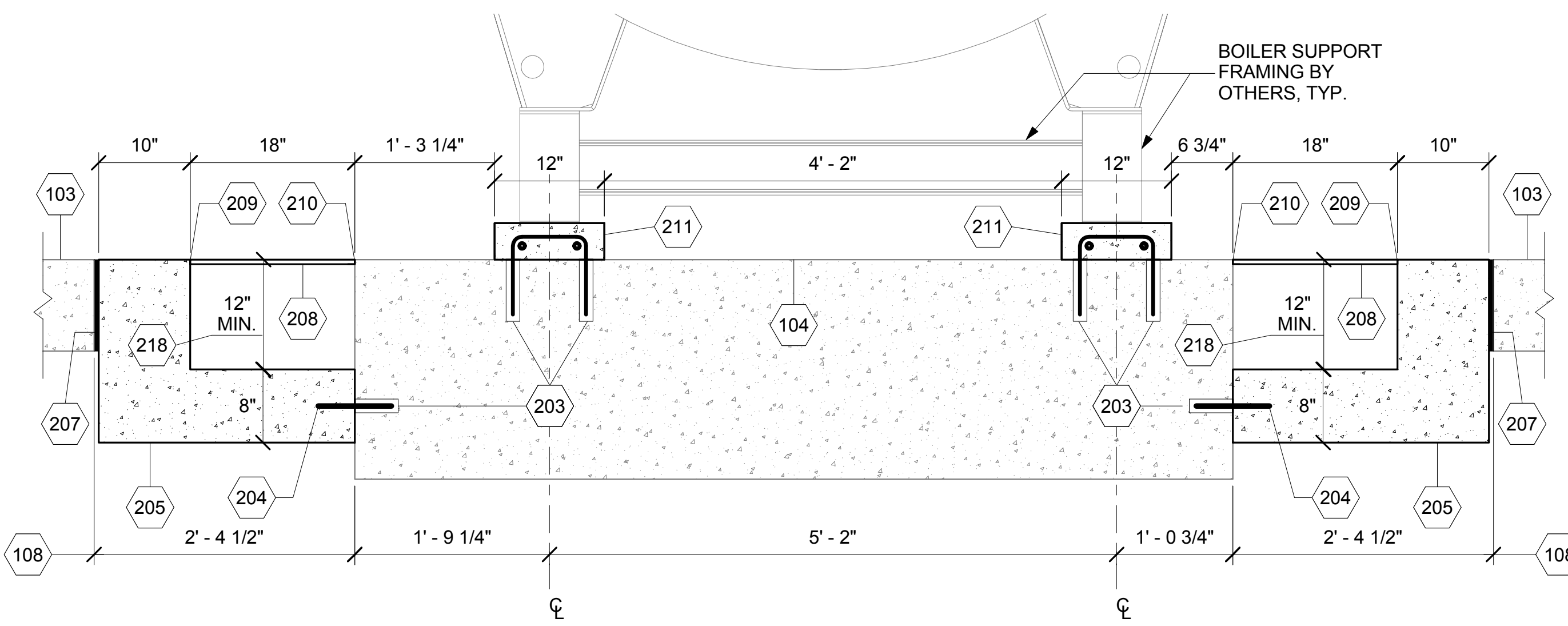
- EXISTING PILE CAPS ARE NOT VISIBLE FROM SURFACE. CONTRACTOR SHALL EXPOSE PRIOR TO TRENCH CONSTRUCTION.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS BEFORE CUTTING EXISTING SLAB.

KEY VALUE	KEYNOTE TEXT
103	EXISTING REINFORCED 10" FLOOR SLAB TO REMAIN.
104	EXISTING 24" THICK BOILER PAD W/ 4 PILES TO REMAIN.
106	EXISTING 24" THICK PILE CAP TO REMAIN.
107	EXISTING 24" DEEP, 30" WIDE TRENCH TO REMAIN.
108	SAW CUT & REMOVE EXISTING 10" FLOOR SLAB.
203	DRILL HOLE & EPOXY GROUT, TYP.
204	#5 DOVEL, MID DEPTH & 4" EMBEDMENT EACH SIDE, @ 18" O.C., TYP.
205	NEW TRENCH; SEE SECTION 1/S204 FOR REINFORCING
206	NEW 4 PILE BOILER PAD, 24" THICK W/ #7 @ 12" TOP & BOTTOM, EACH DIRECTION.
207	1/2" PREMOLDED EXPANSION JOINT.
208	1/4" DIAMOND PLATE STEEL TRENCH COVER.
209	CAST-IN-PLACE TRENCH COVER SUPPORT. REFER TO DETAIL 1A/S204
210	TRENCH COVER SUPPORT AT EXISTING CONCRETE. REFER TO DETAIL 1B/S204
218	REFER TO S202 FOR DEPTH.

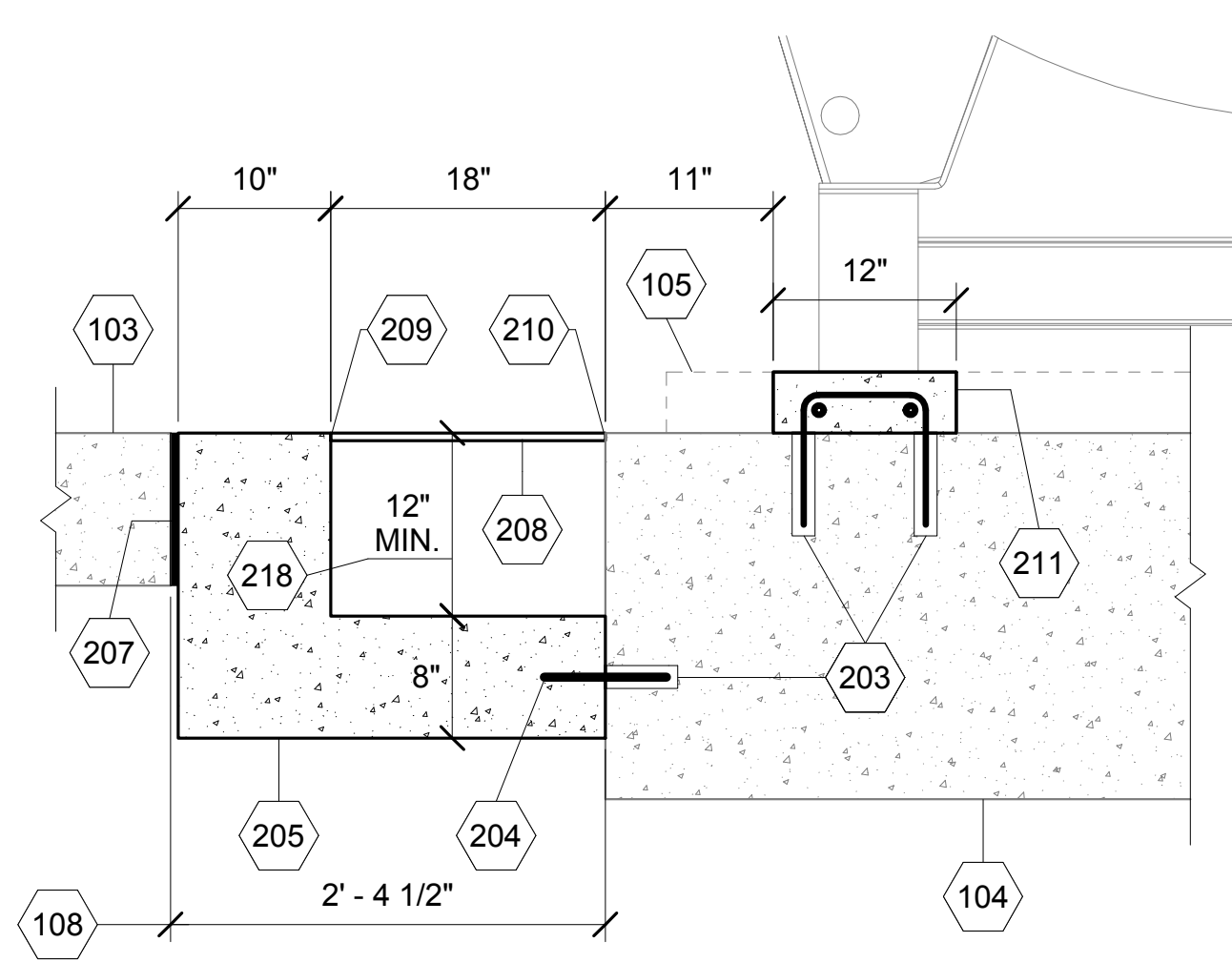
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				Approved: Project Director	Location BAY PINES, FLORIDA	Drawing Number S204 6 OF 78	

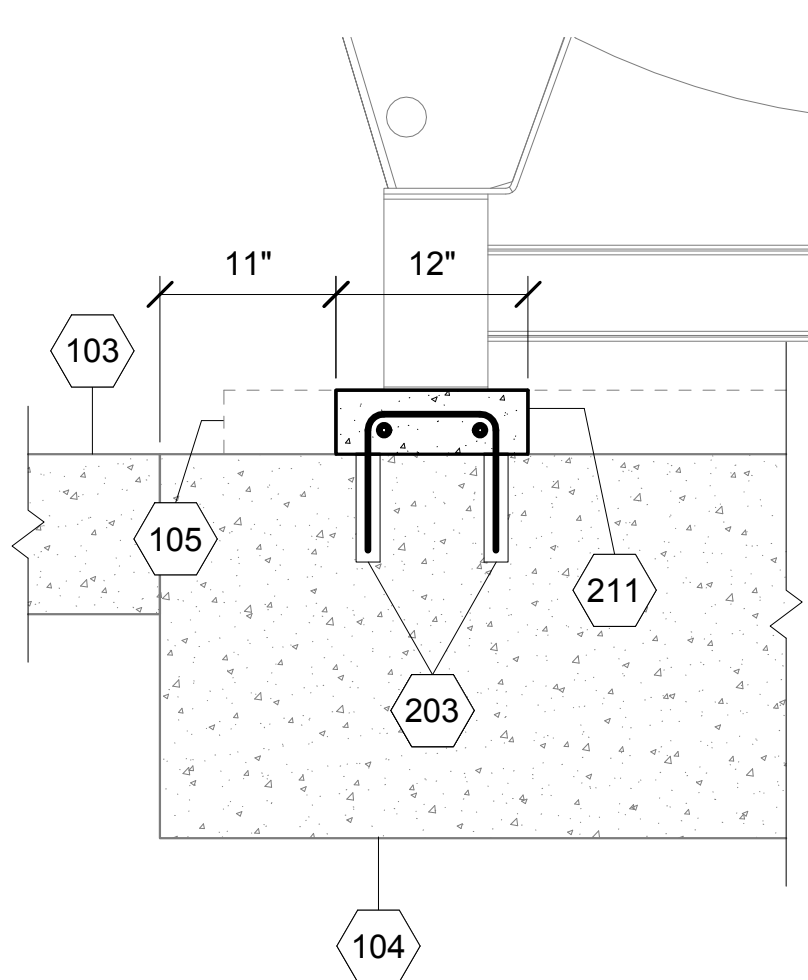
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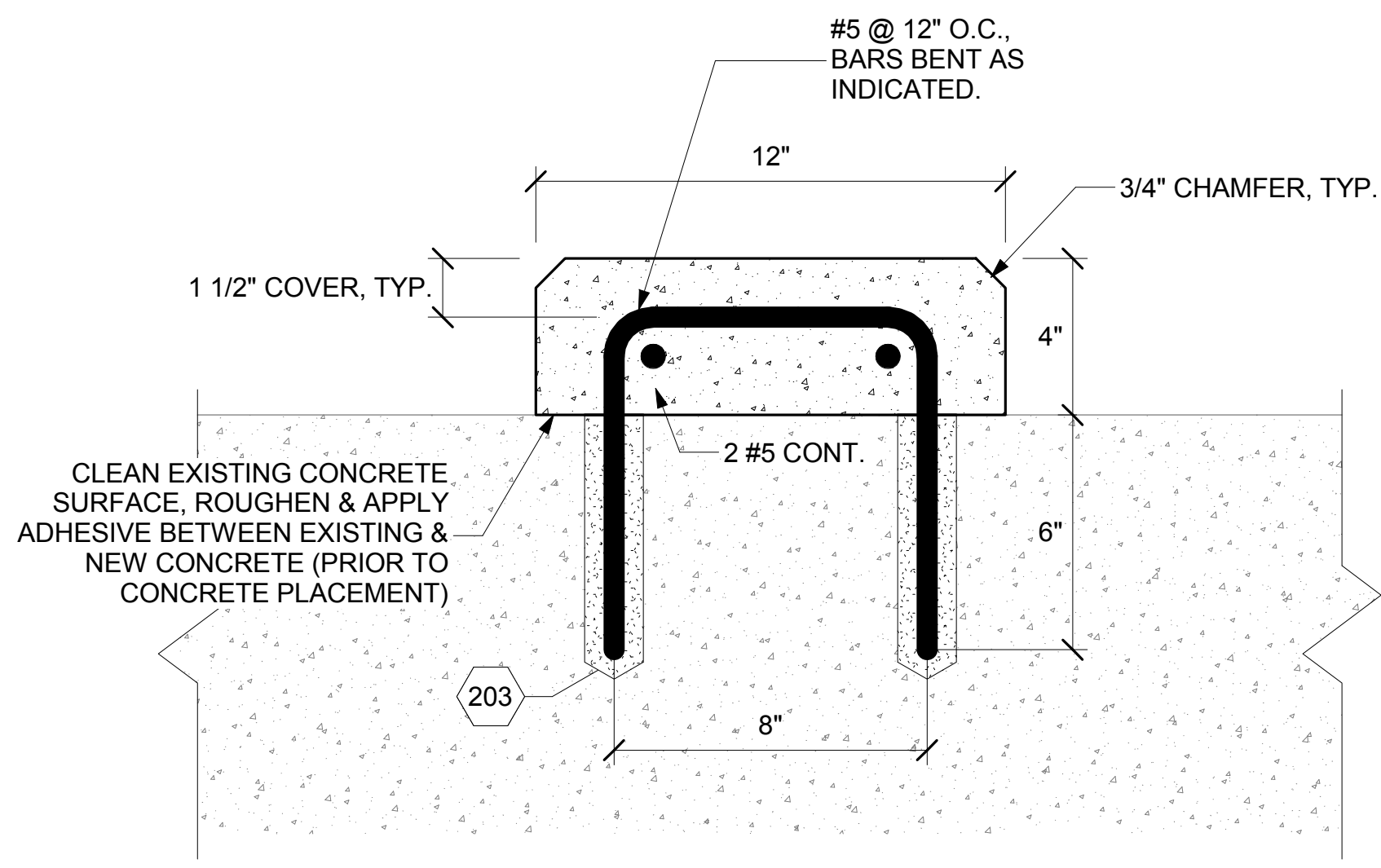
SECTION - NEW TRENCHES & CURBS @ EXISTING STRUCTURAL PAD
1" = 1'-0"



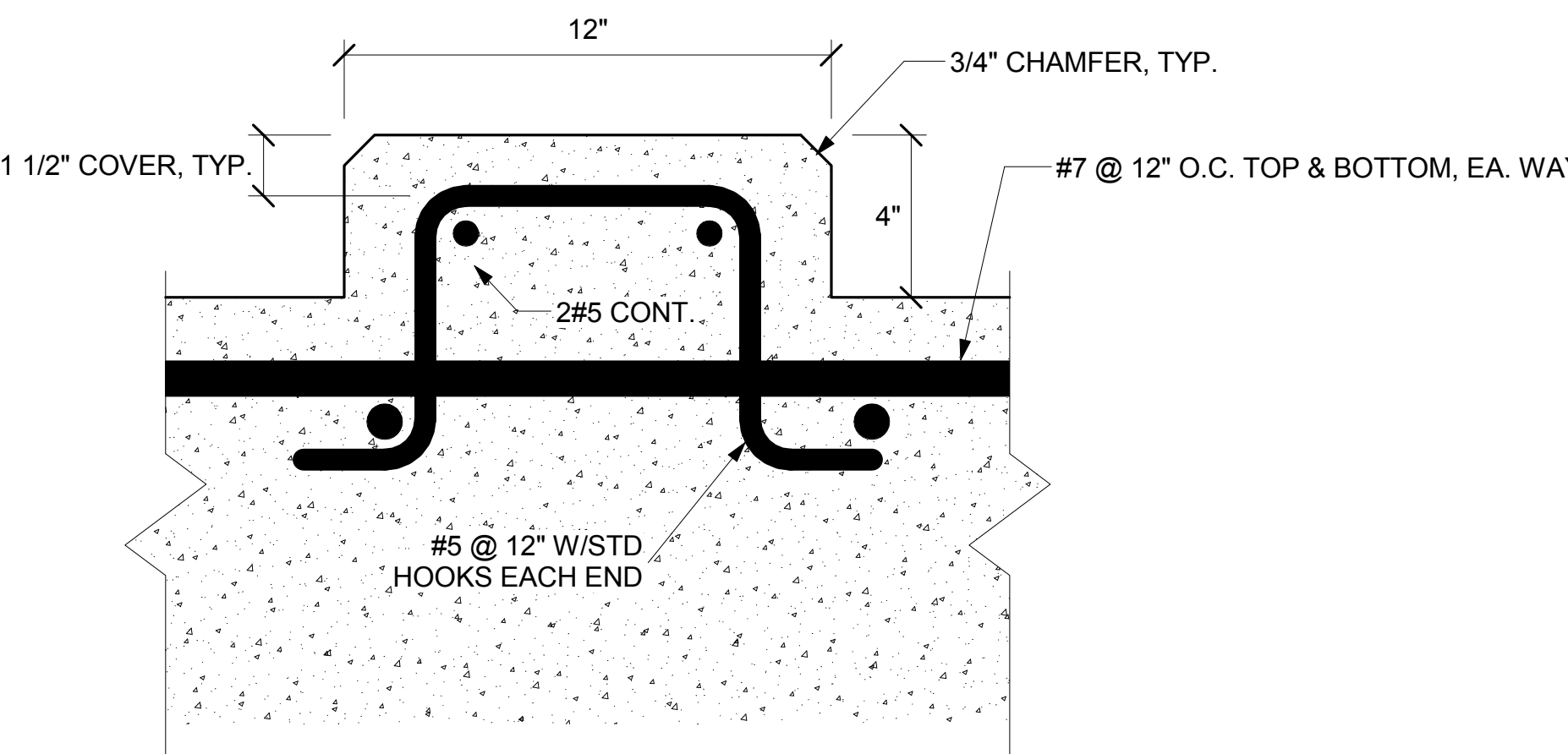
SECTION - NEW TRENCHES & CURBS @ EXISTING STRUCTURAL PAD
1" = 1'-0"



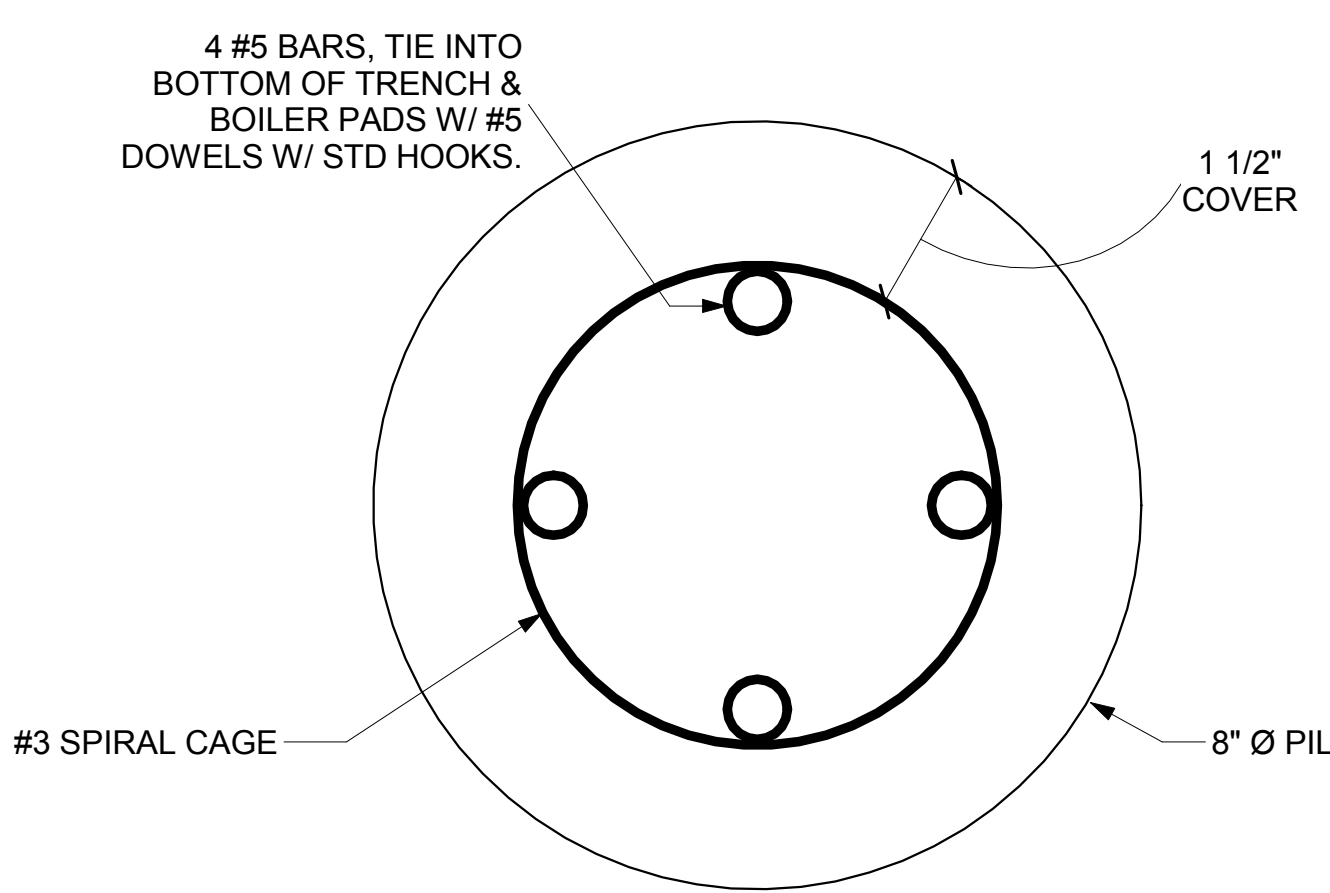
SECTION - NEW CURBS ON EXISTING STRUCTURAL PAD
1" = 1'-0"



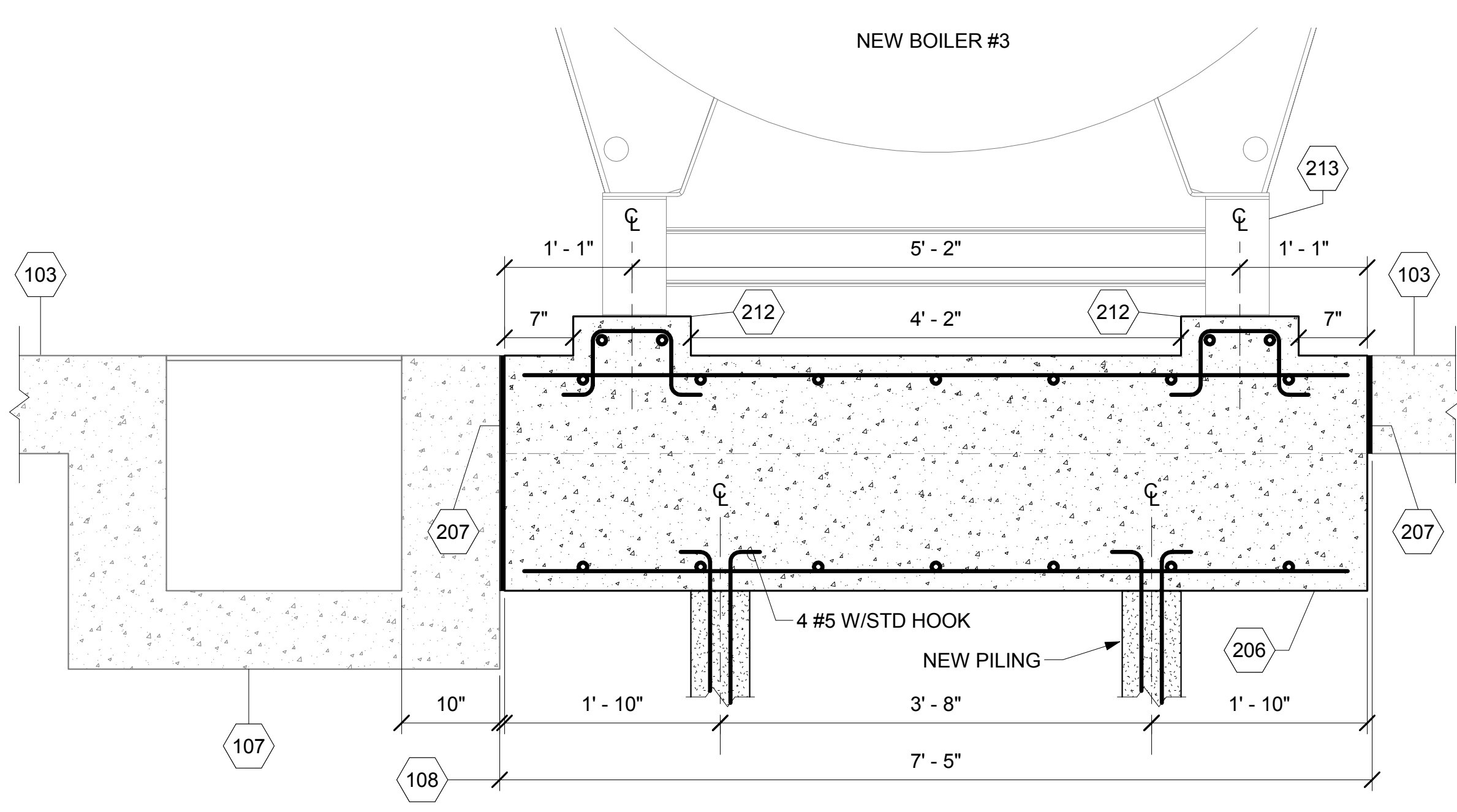
DETAIL - NEW CURB TO EXISTING CONCRETE
3" = 1'-0"



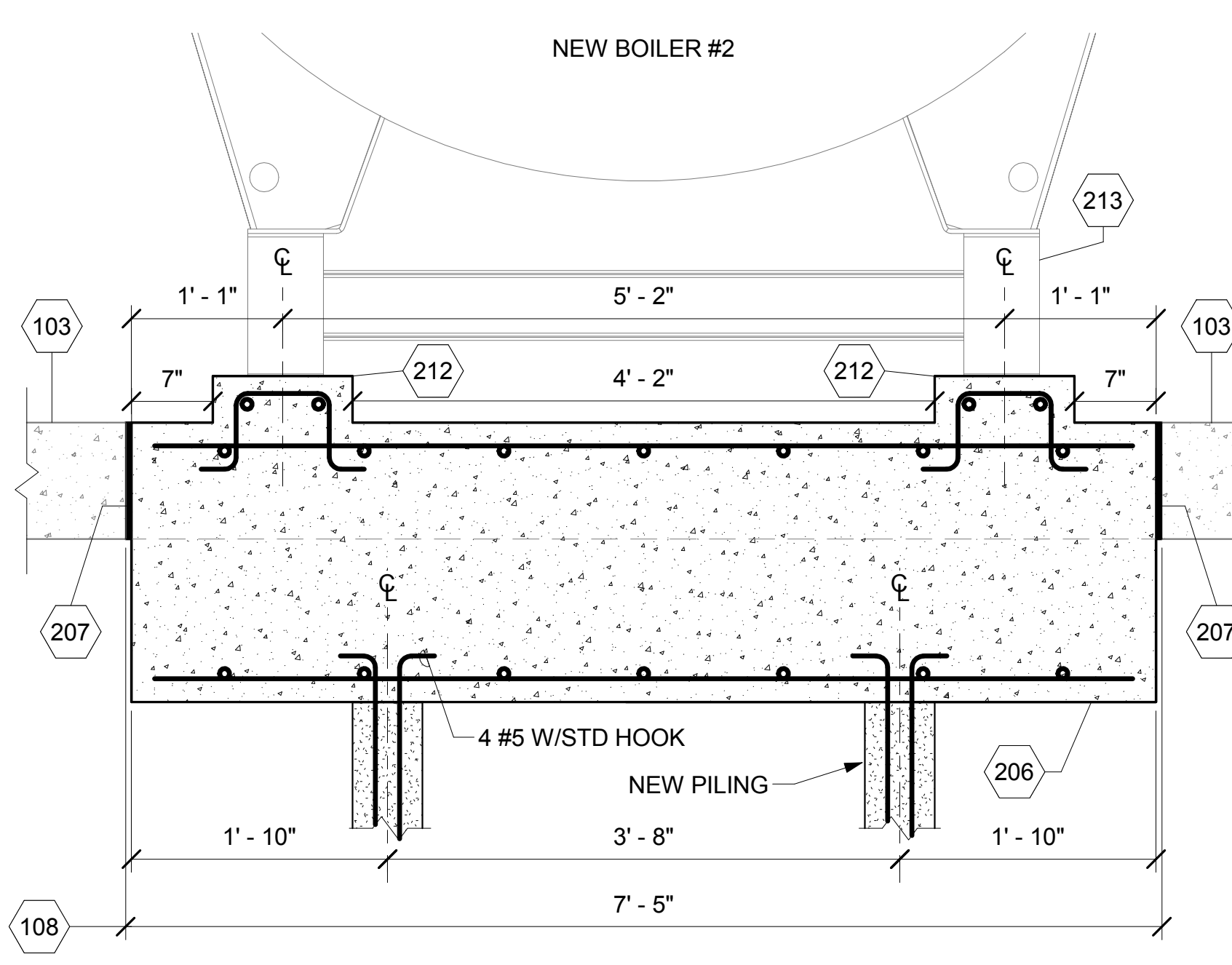
DETAIL - NEW CURB CAST W/ NEW BOILER PAD
3" = 1'-0"



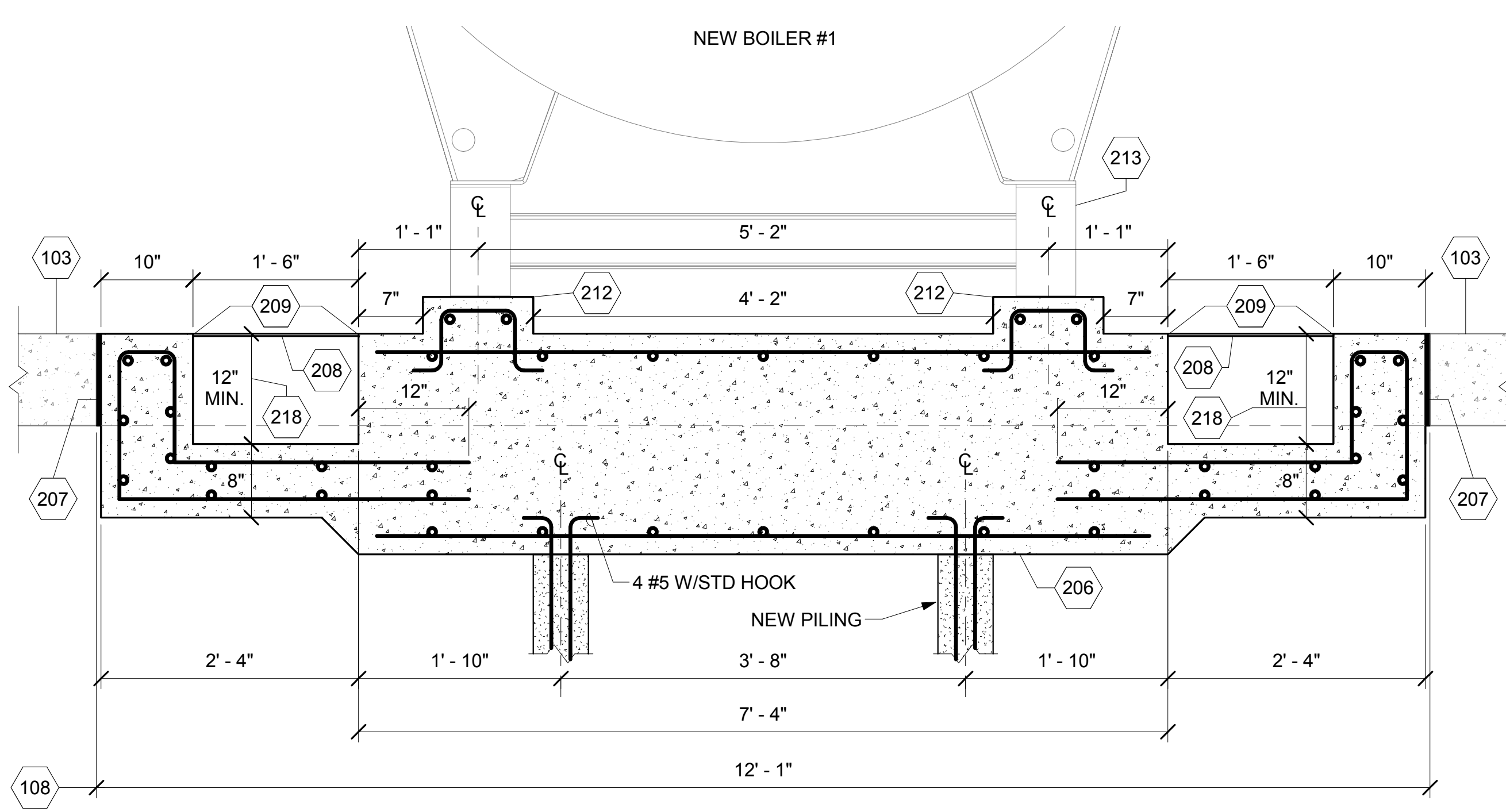
DETAIL - TYPICAL NEW PILE REINFORCEMENT
6" = 1'-0"



SECTION - NEW BOILER PAD & CURBS @ EXISTING TRENCH
1" = 1'-0"



SECTION - NEW BOILER PAD & CURBS @ EXISTING SLAB
1" = 1'-0"



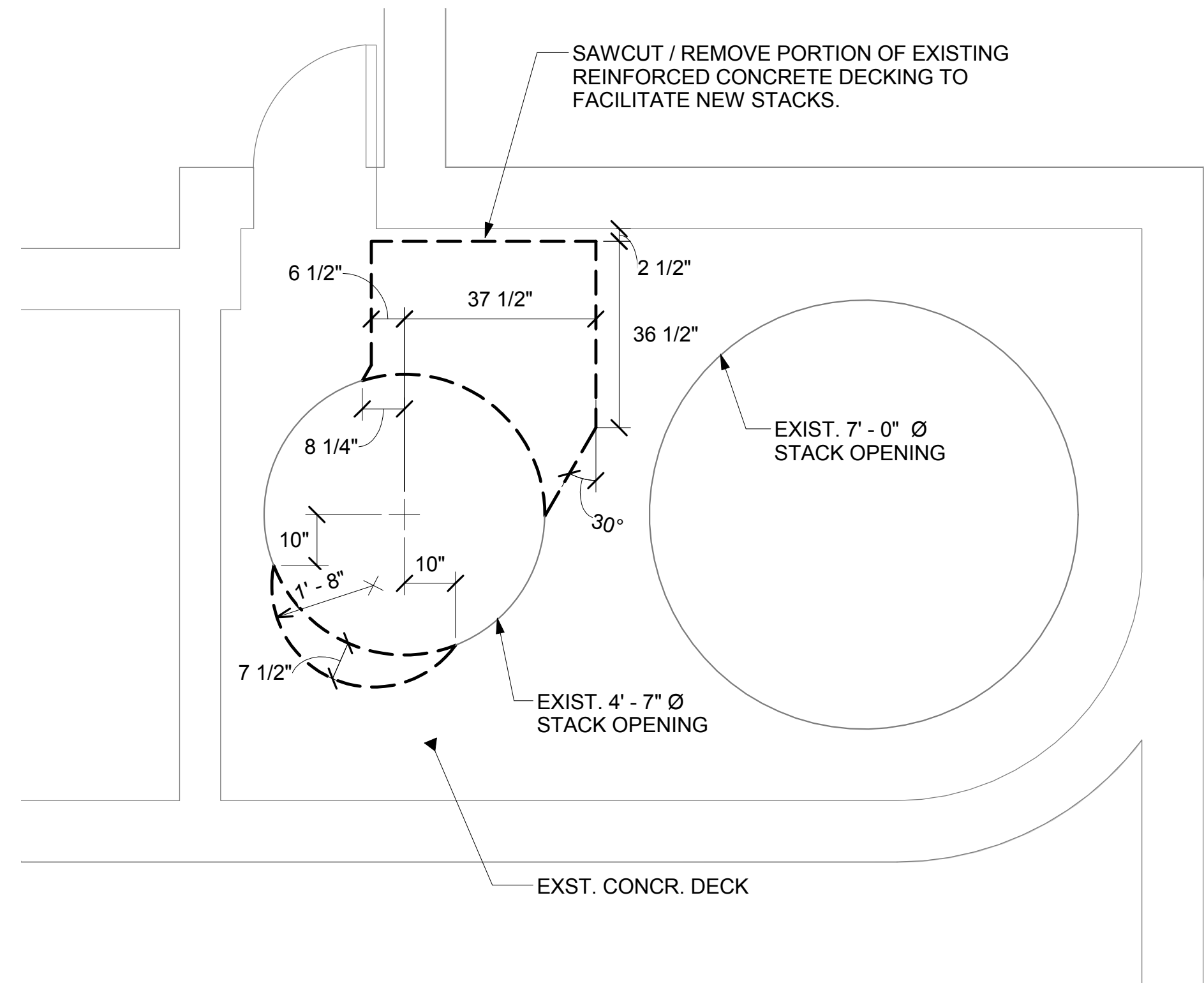
SECTION - NEW BOILER PAD, TRENCHES, & CURBS @ EXISTING SLAB
1" = 1'-0"

KEY VALUE	KEYNOTE TEXT
103	EXISTING REINFORCED 10" FLOOR SLAB TO REMAIN.
104	EXISTING 24" THICK BOILER PAD W/ 4 PILES TO REMAIN.
105	EXISTING 4-1/2" ELEVATED HOUSEKEEPING PAD (ATOP BOILER PAD) TO BE DEMOLISHED.
107	EXISTING 24" DEEP, 30" WIDE TRENCH TO REMAIN.
108	SAW CUT & REMOVE EXISTING 10" FLOOR SLAB.
203	DRILL HOLE & EPOXY GROUT, TYP.
204	#5 DOWEL, MID DEPTH & 4" EMBEDMENT EACH SIDE, @ 18" O.C., TYP.
205	NEW TRENCH; SEE SECTION 1/S204 FOR REINFORCING
206	NEW 4 PILE BOILER PAD, 24" THICK W/ #7 @ 12" TOP & BOTTOM, EACH DIRECTION.
207	1/2" PREMOLED EXPANSION JOINT.
208	1/4" DIAMOND PLATE STEEL TRENCH COVER.
209	CAST-IN-PLACE TRENCH COVER SUPPORT. REFER TO DETAIL 1A/S204
210	TRENCH COVER SUPPORT AT EXISTING CONCRETE. REFER TO DETAIL 1B/S204
211	ELEVATED CURB, ATTACH TO EXISTING CONCRETE. SEE DETAIL 6/S205
212	ELEVATED CURB, CAST WITH NEW BOILER PAD. SEE DETAIL 7/S205
213	NEW BOILER SUPPORT FRAMING BY OTHERS.
218	REFER TO S202 FOR DEPTH.

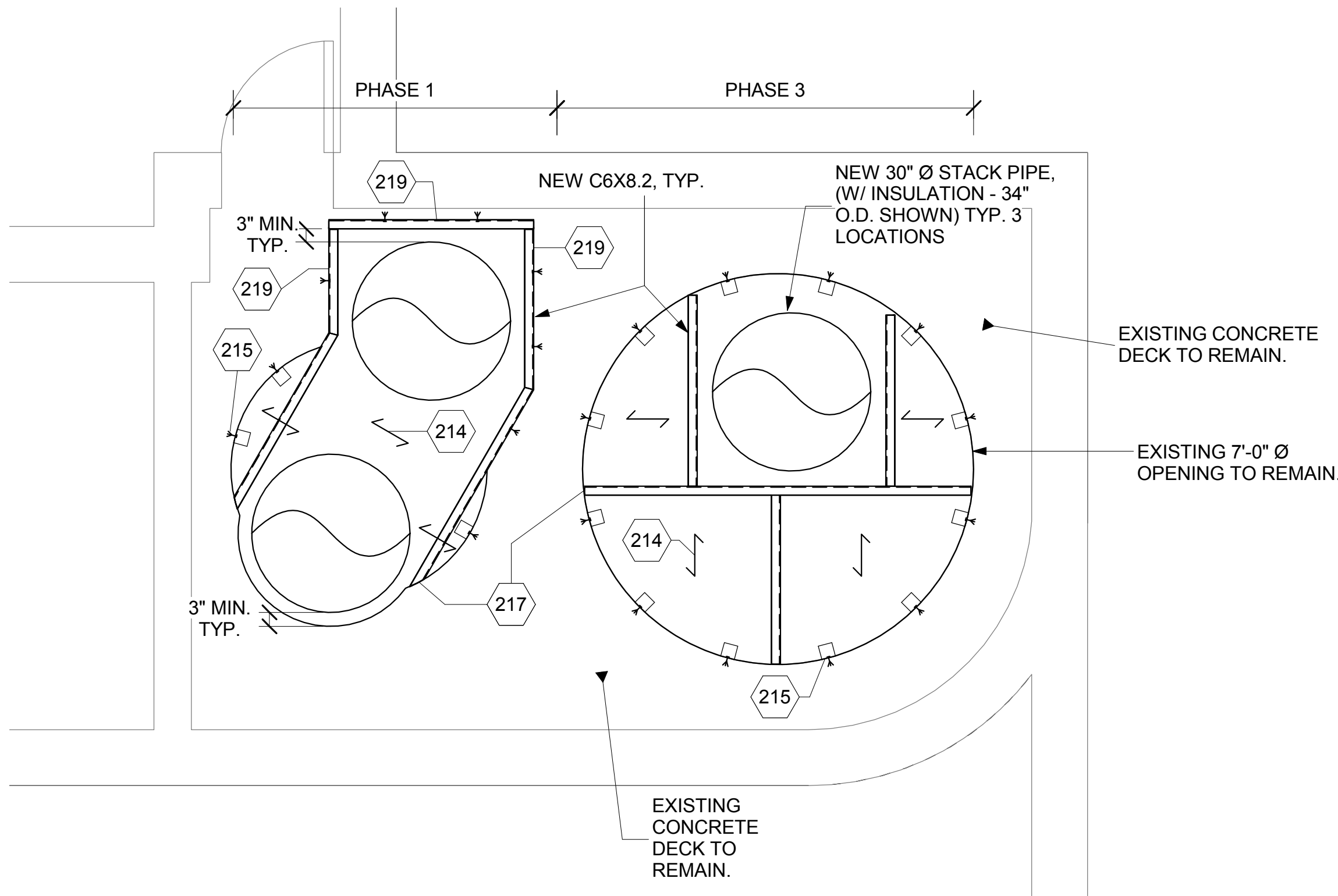
100% DESIGN
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				Approved: Project Director	Location BAY PINES, FLORIDA	Drawing Number S205 7 OF 78	

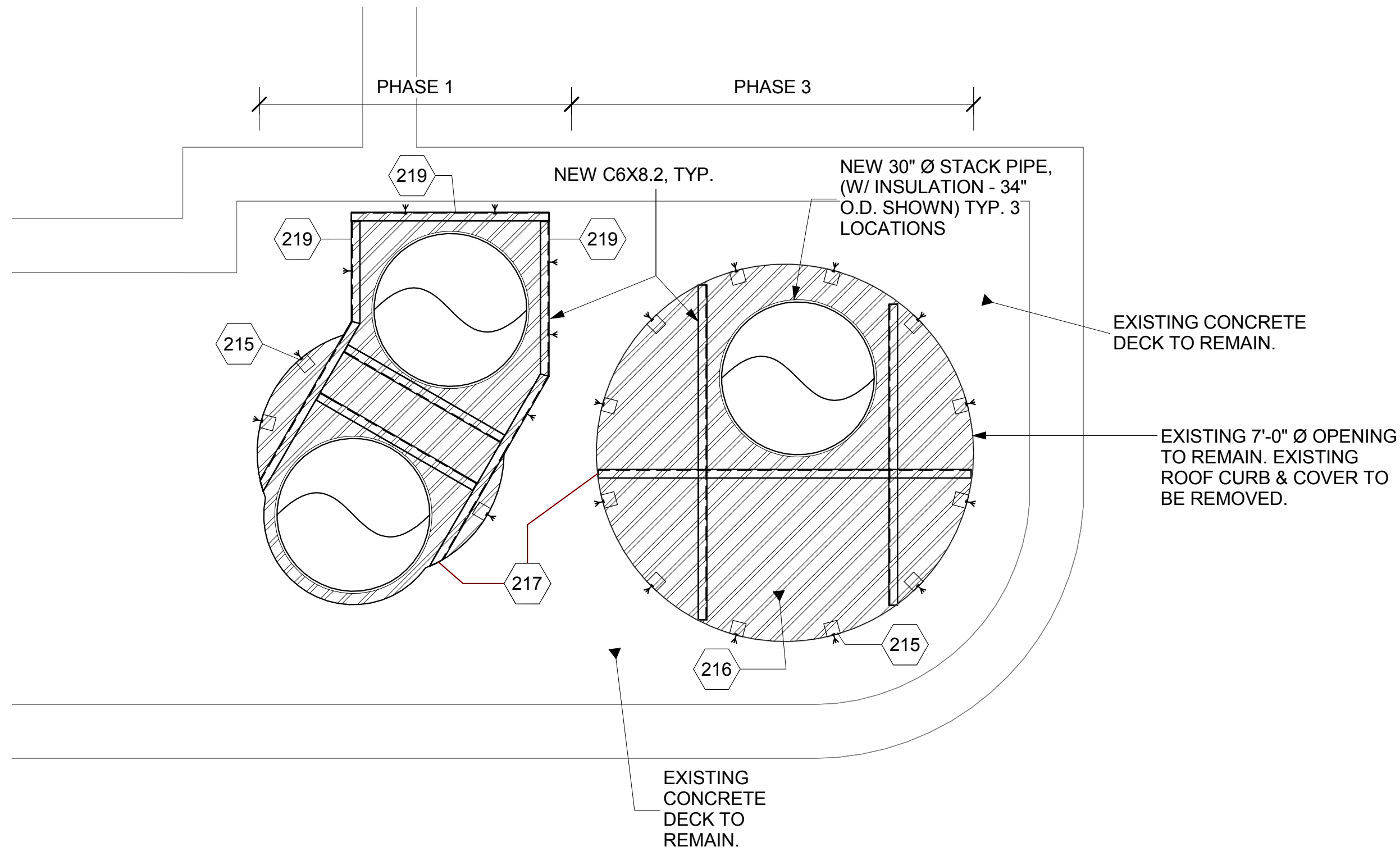
KEY VALUE	KEYNOTE TEXT
214	WELDED BAR GRATING, GW SERIES, 1" X 1/8" BAR BEARING SIZE; 1 3/16" CENTER TO CENTER BAR SPACINGS, TYP. - WELD TO NEW STRUCTURAL STEEL CHANNEL FRAMING AND ANGLE CLIPS. CUT TO WITHIN 3" BETWEEN STACKS & GRATING.
215	ATTACH L3 X 3 X 1/4 X 3" LONG ANGLE CLIPS TO EXISTING CONCRETE W/ 1/4" X 2" LONG WEDGE ANCHORS. WELD GRATING & METAL PLATE TO CLIPS. SEE DETAIL 6/S206
216	1/4" GALVANIZED METAL PLATE, WELDED TO NEW STRUCTURAL STEEL CHANNEL FRAMING AND ANGLE CLIPS. CUT TO WITHIN 1/2" BETWEEN STACKS & PLATING.
217	SEE 5/S206 FOR TYPICAL C6X8.2 TO EXISTING CONCRETE ATTACHMENT DETAIL.
219	ATTACH NEW C6X8.2 TO EXISTING CONCRETE. REFER TO DETAIL 7/S206



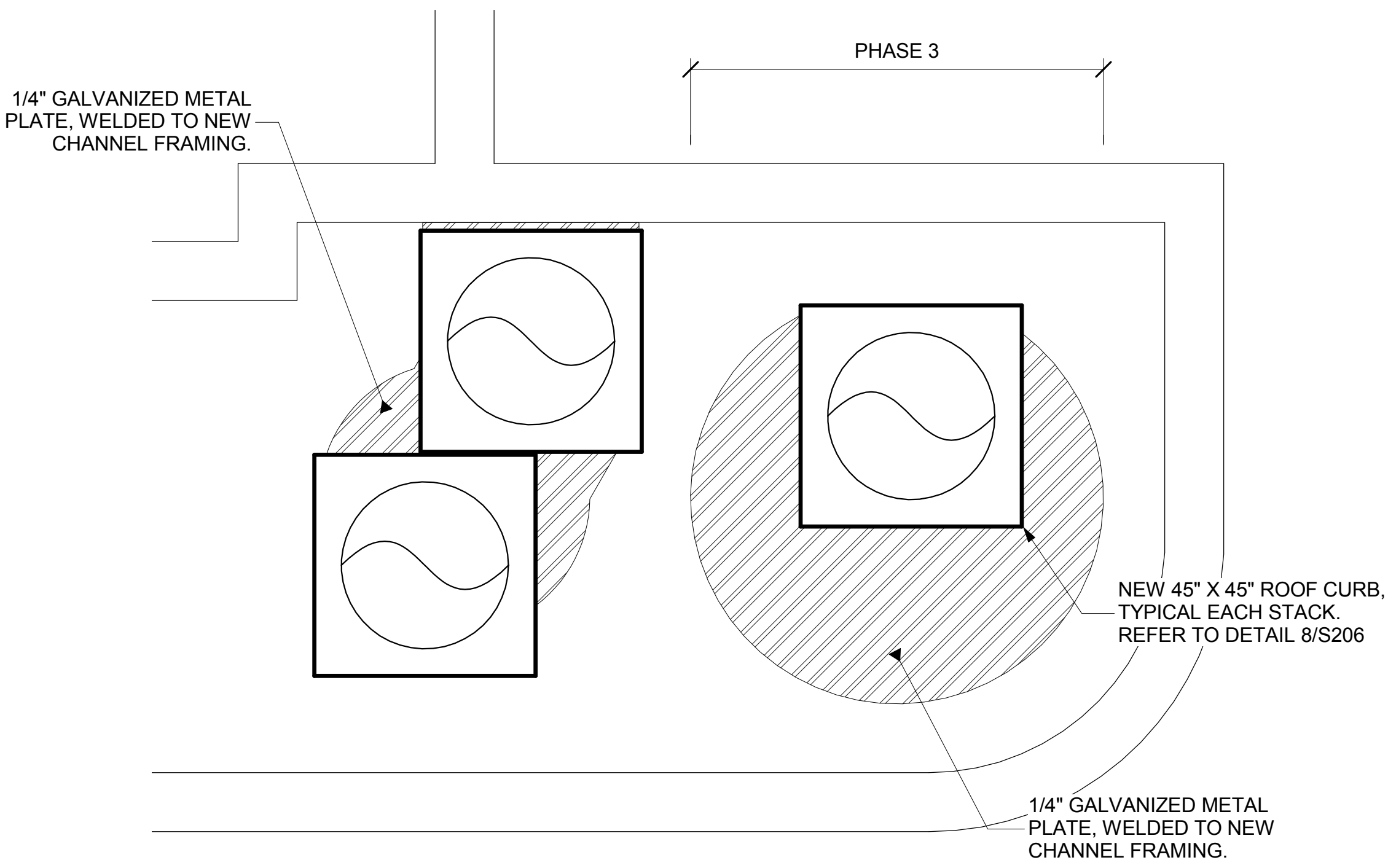
1 TYPICAL STAIRWELL SLAB DEMOLITION PLAN
1/2" = 1'-0"



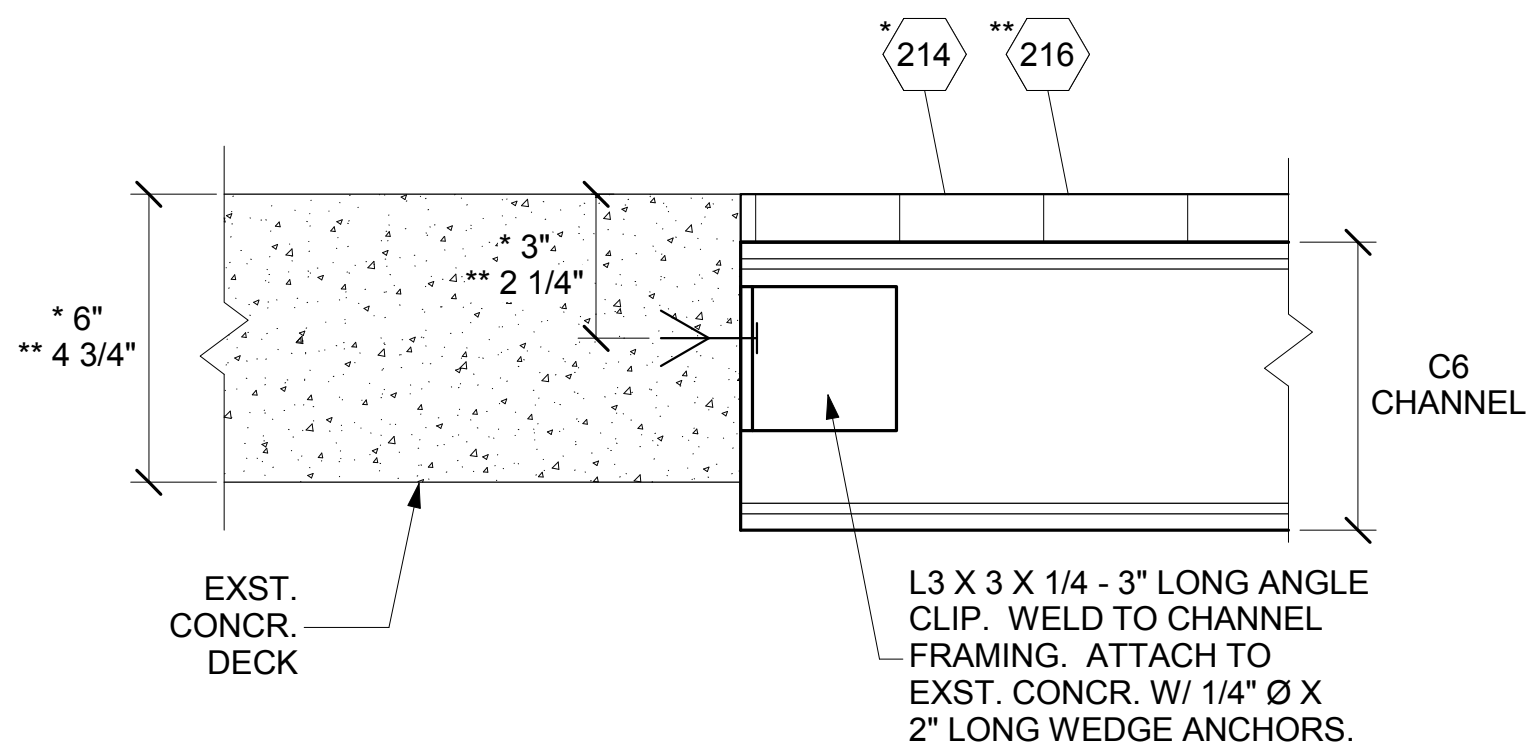
2 TYPICAL INTERIOR STACK FRAMING PLAN (SEE 3/S206 FOR ROOF)
1/2" = 1'-0"



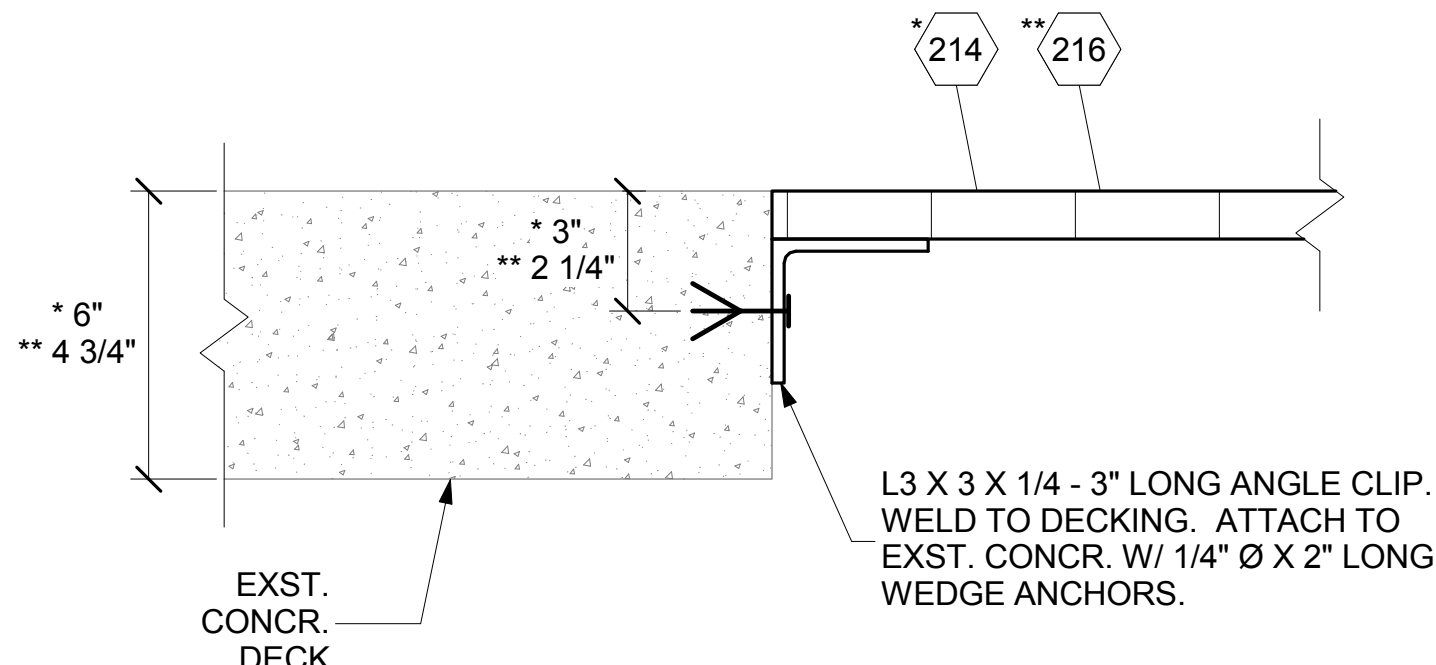
3 STACK FRAMING PLAN - ROOF LEVEL
1/2" = 1'-0"



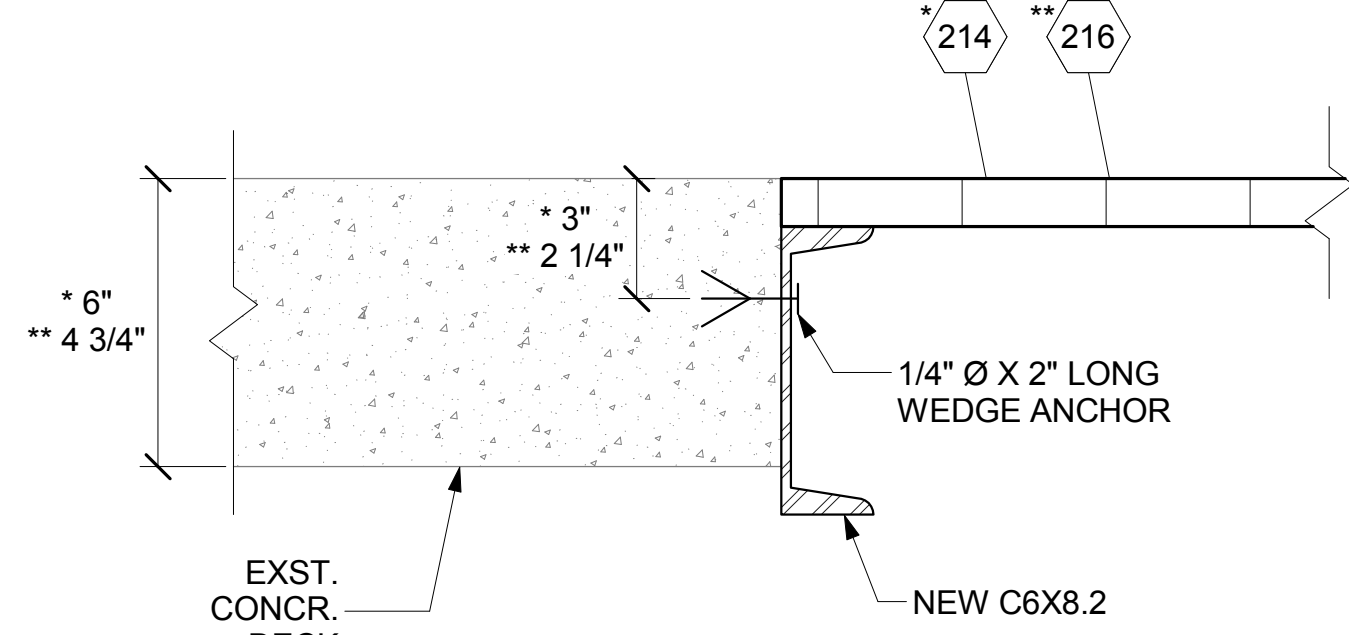
4 STACK IN STAIRWELL - ROOF FINISHING PLAN
1/2" = 1'-0"



5 DETAIL - STRUCTURAL FRAMING - DECKING & END OF CHANNEL TO EXISTING CONCRETE DECK
3" = 1'-0"



6 DETAIL - STRUCTURAL FRAMING - DECKING & ANGLE CLIP TO EXISTING CONCRETE DECK
3" = 1'-0"



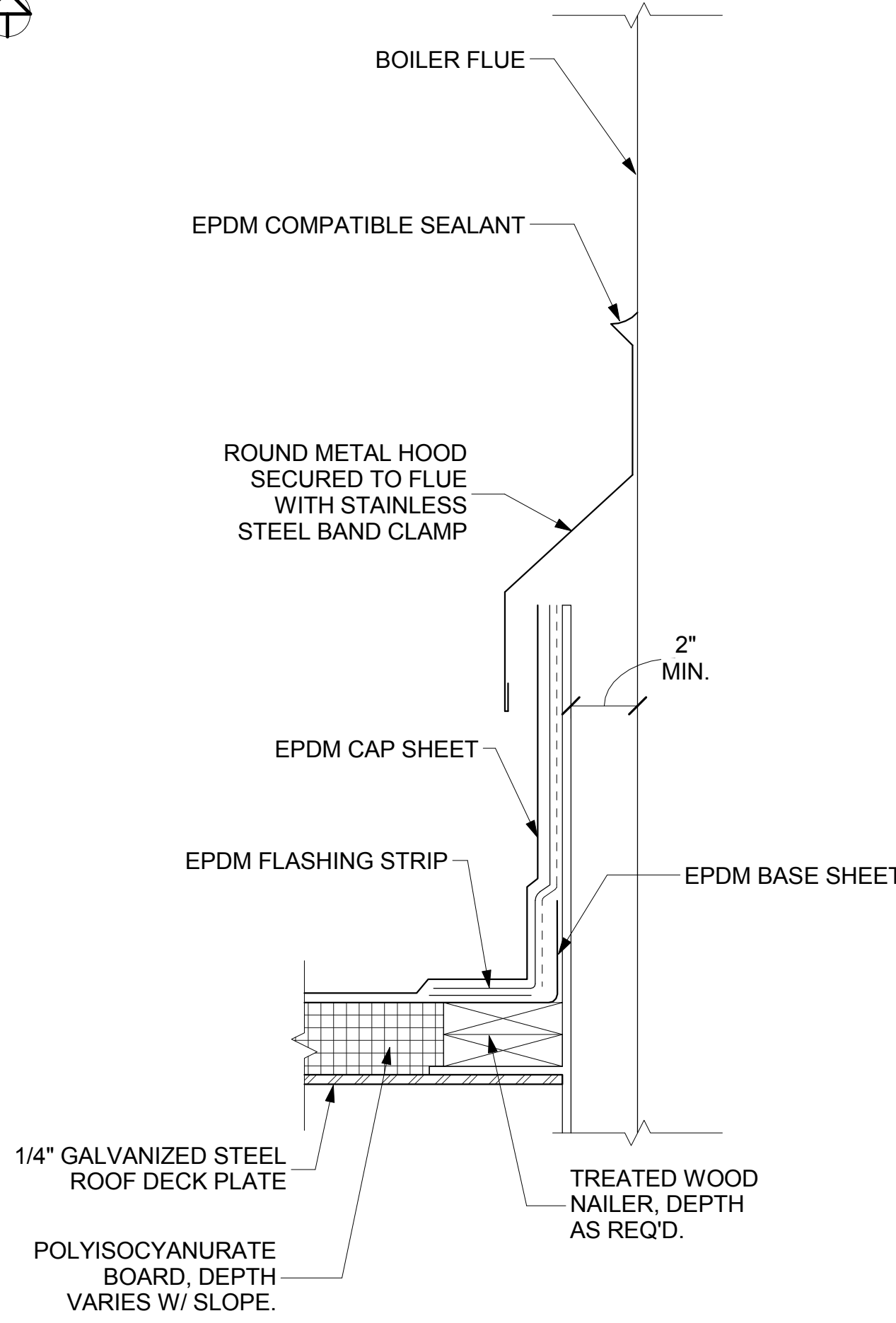
7 DETAIL - DECKING & CHANNEL FRAMING TO EXISTING CONCRETE DECK
3" = 1'-0"

NOTE: FOR DETAILS 5, 6, & 7

* INTERIOR FLOORS

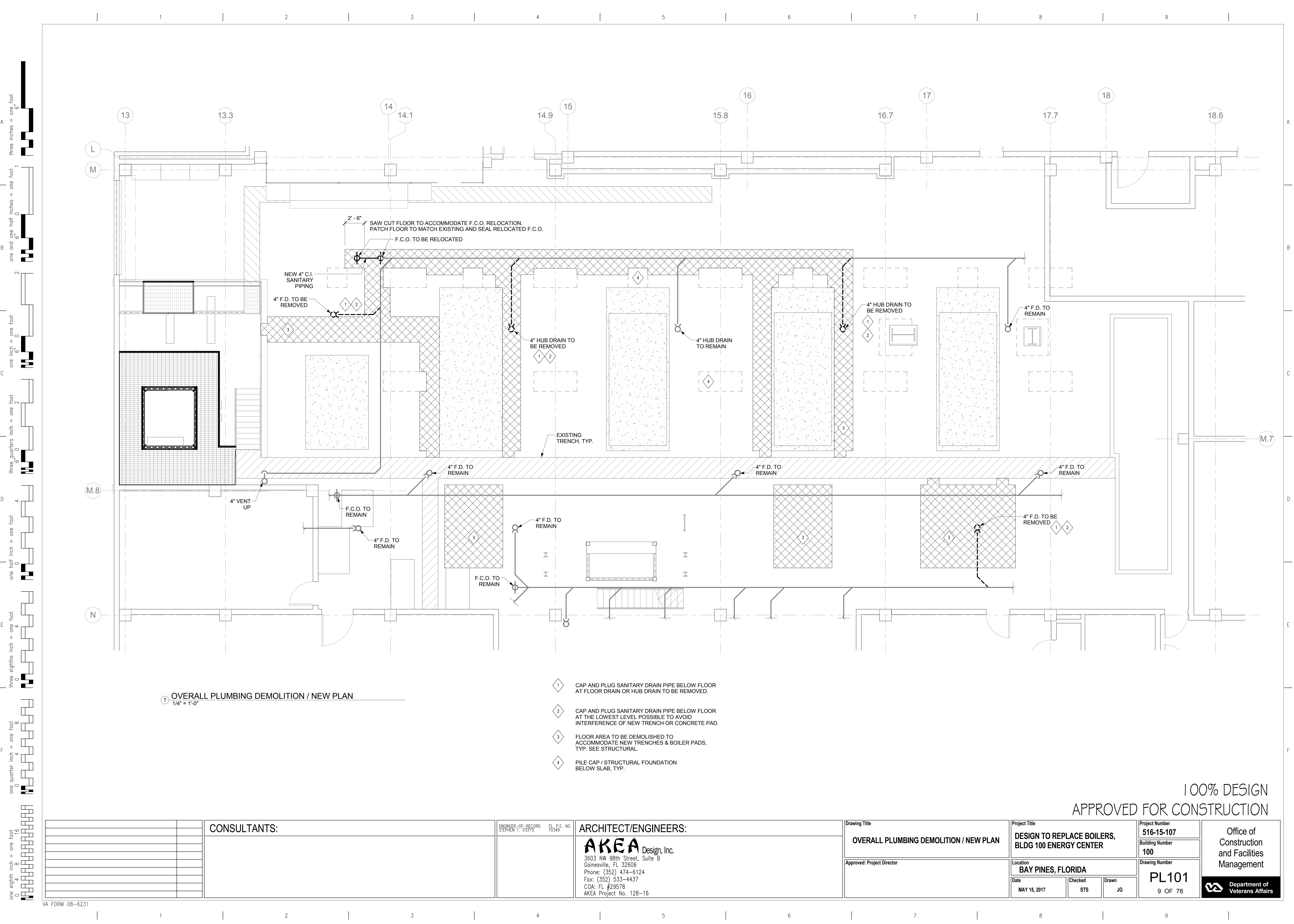
** ROOF DECK

GENERAL NOTES: POLYISO BOARD VARIES IN THICKNESS TO CREATE RIDGES & VALLEYS TO SLOPE TO DRAINS. PREFABRICATED TAPERED PANELS SHALL BE UTILIZED TO CREATE SLOPE AND ALL LAYOUTS SHALL BE CLEARLY DEFINED IN SHOP DRAWINGS & COORDINATED WITH ALL PENETRATIONS RELATIVE TO DEPTH OF INSULATION.



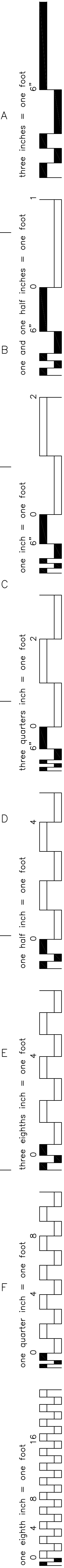
8 DETAIL - NEW ROOF CURB
3" = 1'-0"

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100% DESIGN
APPROVED FOR CONSTRUCTION

		CONSULTANTS:		ENGINEER-OF-RECORD STEPHEN T. STEFFE FL P.E. NO. 70349	ARCHITECT/ENGINEERS: <div>AKEA Design, Inc. 3603 NW 98th Street, Suite B Gainesville, FL 32606 Phone: (352) 474-6124 Fax: (352) 533-4437 COA: FL #29578 AKEA Project No. 128-16</div>	Drawing Title		Project Title		Project Number 516-15-107		Office of Construction and Facilities Management	
						OVERALL PLUMBING DEMOLITION / NEW PLAN		DESIGN TO REPLACE BOILERS, BLDG 100 ENERGY CENTER		Building Number 100			
						Approved: Project Director		Location BAY PINES, FLORIDA		Drawing Number PL101			
						Date MAY 15, 2017		Checked STS		Drawn JG			9 OF 78



STEAM TRAP SCHEDULE					
TRAP NO.	SIZE	BUILDING NO.	LOCATION	SERVING	COMMENTS
1	3"	100	CHILLER PLANT	HHW PUMPS	—
2	3"	100	CHILLER PLANT	HHW PUMPS	—
3	3"	100	CHILLER PLANT	HHW PUMPS	—
4	3"	100	CHILLER PLANT	HHW PUMPS	—
5	3/4"	100	CHILLER PLANT	HHW PUMPS	END OF MAIN DRIP
6	3/4"	100	CHILLER PLANT	HHW PUMPS	END OF MAIN DRIP
7	1/2"	100	BOILER ROOM	MPS — PRS	100 S To MPS PRS
8	1/2"	100	BOILER ROOM	MPS — PRS	60 S From PRV — 1B
9	1/2"	100	BOILER ROOM	MPS — PRS	60 S From PRV — 1A
10	3/4"	100	BOILER ROOM	—	END OF MAIN DRIP FROM STEAM HEADER
11	3/4"	100	BOILER ROOM	—	END OF MAIN DRIP FROM STEAM HEADER
13	3/4"	100	BOILER ROOM	—	UPPER MEZZ. PRS STATION
14	3/4"	100	BOILER ROOM	DA TANK	UPPER MEZZ. PRS STATION
15	3/4"	100	BOILER ROOM	DA TANK	UPPER MEZZ. PRS STATION
16	2"	100	BOILER ROOM	HEAT EXCHANGER	UPPER MEZZ. HW CONVERTER #23
17	1"	100	BOILER ROOM	HEAT EXCHANGER	END OF MAIN DRIP
18	2"	100	BOILER ROOM	HEAT EXCHANGER	UPPER MEZZ. HW CONVERTER #21
19	2"	100	BOILER ROOM	HEAT EXCHANGER	UPPER MEZZ. HW CONVERTER #22
20	2"	100	BOILER ROOM	HEAT EXCHANGER	UPPER MEZZ. HW CONVERTER #22
21	3/4"	100	BOILER ROOM	MOBILE BOILER	RISER DRIP
T-01	1/2"	100	BOILER ROOM	PRS	PRESSURE REDUCING STATION
T-02	1/2"	100	BOILER ROOM	PRS	PRESSURE REDUCING STATION
—	3/4"	100	1ST FLOOR INTERSTITIAL	HUMIDIFIER	NOT NUMBERED, HUMIDIFIER SERVING AHU 38
—	3/4"	100	1ST FLOOR INTERSTITIAL	HUMIDIFIER	NOT NUMBERED, HUMIDIFIER SERVING AHU 38
—	3/4"	100	1ST FLOOR INTERSTITIAL	HUMIDIFIER	NOT NUMBERED, HUMIDIFIER SERVING MRI
—	3/4"	100	1ST FLOOR INTERSTITIAL	HUMIDIFIER	NOT NUMBERED, HUMIDIFIER SERVING MRI
—	3/4"	100	1ST FLOOR INTERSTITIAL	HUMIDIFIER	NOT NUMBERED, HUMIDIFIER SERVING MRI
84	3/4"	100	2ND FLOOR INTERSTITIAL	HUMIDIFIER	HUMIDIFIER SERVING OR 9
85	3/4"	100	2ND FLOOR INTERSTITIAL	HUMIDIFIER	HUMIDIFIER SERVING OR 9
86	3/4"	100	2ND FLOOR INTERSTITIAL	HUMIDIFIER	HUMIDIFIER SERVING OR 7
87	3/4"	100	2ND FLOOR INTERSTITIAL	HUMIDIFIER	HUMIDIFIER SERVING OR 7
88	3/4"	100	2ND FLOOR INTERSTITIAL	HUMIDIFIER	HUMIDIFIER SERVING OR 8
89	3/4"	100	2ND FLOOR INTERSTITIAL	HUMIDIFIER	HUMIDIFIER SERVING OR 8
90	3/4"	100	2ND FLOOR INTERSTITIAL	HUMIDIFIER	HUMIDIFIER SERVING OR 6
91	3/4"	100	2ND FLOOR INTERSTITIAL	HUMIDIFIER	HUMIDIFIER SERVING OR 6
93	3/4"	100	2ND FLOOR INTERSTITIAL	HUMIDIFIER	HUMIDIFIER SERVING OR 5
94	3/4"	100	2ND FLOOR INTERSTITIAL	HUMIDIFIER	HUMIDIFIER SERVING OR 4
95	3/4"	100	2ND FLOOR INTERSTITIAL	HUMIDIFIER	HUMIDIFIER SERVING OR 4
96	3/4"	100	2ND FLOOR INTERSTITIAL	—	END OF MAIN DRIP
97	3/4"	100	2ND FLOOR INTERSTITIAL	HUMIDIFIER	HUMIDIFIER SERVING OR 3
98	3/4"	100	2ND FLOOR INTERSTITIAL	HUMIDIFIER	HUMIDIFIER SERVING OR 3
99	3/4"	100	2ND FLOOR INTERSTITIAL	HUMIDIFIER	HUMIDIFIER SERVING OR 2
100	3/4"	100	2ND FLOOR INTERSTITIAL	HUMIDIFIER	HUMIDIFIER SERVING OR 2
101	3/4"	100	2ND FLOOR INTERSTITIAL	HUMIDIFIER	HUMIDIFIER SERVING OR 1
102	3/4"	100	2ND FLOOR INTERSTITIAL	HUMIDIFIER	HUMIDIFIER SERVING OR 1
193	3/4"	1	MECHANICAL ROOM	—	—
194	3/4"	1	MECHANICAL ROOM	—	—
195	3/4"	1	ED-10	—	—
196	3/4"	1	ED-10	—	—
197	3/4"	1	ED-10	—	—
198	3/4"	1	ED-10	—	—
199	3/4"	101	RM. 27	—	—
200	3/4"	101	RM. 27	—	—
204	3/4"	101	RM. 27	—	—
205	3/4"	101	RM. 27	—	—

STEAM TRAP SCHEDULE					
TRAP NO.	SIZE	BUILDING NO.	LOCATION	SERVING	COMMENTS
206	3/4"	101	RM. 27	—	—
175	3/4"	2	RM. 115	—	—
176	3/4"	2	RM. 115	—	—
178	3/4"	2	RM. 115	—	—
181	3/4"	2	RM. 115	—	—
170	3/4"	37	RM. 110	—	—
171	3/4"	37	RM. 110	—	—
172	3/4"	37	RM. 110	—	—
173	3/4"	37	RM. 110	—	—
174	3/4"	37	RM. 110	—	—
107	3/4"	13	BOILER ROOM	—	—
108	3/4"	13	BOILER ROOM	—	—
109	3/4"	13	BOILER ROOM	—	—
110	3/4"	13	BOILER ROOM	—	—
111	3/4"	13	BOILER ROOM	—	—
112	3/4"	13	BOILER ROOM	—	—
113	3/4"	13	BOILER ROOM	—	—
114	3/4"	13	BOILER ROOM	—	—
116	3/4"	13	BOILER ROOM	—	—
182	3/4"	23	BASEMENT	—	END OF MAIN DRIP
183	3/4"	23	BASEMENT	—	END OF MAIN DRIP
213	3/4"	71	E-39	—	—
214	3/4"	71	E-39	—	—
215	3/4"	71	E-39	—	—
219	3/4"	71	E-39	—	—
220	3/4"	71	E-39	—	—
221	3/4"	71	E-39	—	—
222	3/4"	71	E-39	—	—
—	3/4"	71	E-39	—	NOT NUMBERED
72	3/4"	102	MECHANICAL ROOM	—	—
73	3/4"	102	MECHANICAL ROOM	—	—
74	3/4"	102	MECHANICAL ROOM	—	—
75	3/4"	102	MECHANICAL ROOM	—	—
76	3/4"	102	MECHANICAL ROOM	—	—
77	3/4"	102	MECHANICAL ROOM	—	—
78	3/4"	102	MECHANICAL ROOM	—	—
79	3/4"	102	MECHANICAL ROOM	—	—
NOTES: 1. PROVIDE STEAM TRAP MONITORING, WHICH INCLUDES INDIVIDUAL TRANSMITTERS, REPEATERS AND RECEIVERS AS REQUIRED ON ALL EXISTING STEAM TRAPS. NEW MONITORING SYSTEMS SHALL BE CONNECTED TO EXISTING BUILDING CONTROL SYSTEM.					

EQUIPMENT SCHEDULE				
DESCRIPTION	MANUFACTURE	MODEL	QUANTITY	COMMENTS
TRANSMITTER	ARMSTRONG	4700	101	
REPEATER	ARMSTRONG	4000	45	23 EXTERIOR TO BE PROVIDED WITH WEATHER PROOF HOUSING
GATEWAY	ARMSTRONG	4000M	1	
NOTES: 1. LISTED MANUFACTURE — ARMSTRONG STEAMEYE SYSTEM SHALL BE "BASIS OF DESIGN".				

LEGEND	
	STEAM TRAP
	TRANSMITTER
	REPEATER
	GATEWAY

GENERAL NOTES	
1. TRANSMITTER TO BE PLACED AT INLET/OUTLET OF STEAM TRAP PER MANUFACTURER'S LITERATURE. 2. EXTERIOR MOUNTED REPEATER SHALL BE INSTALLED WITH WEATHER PROOF HOUSING PER MANUFACTURER'S RECOMMENDATIONS. 3. EXISTING STERILIZER AND AUTOCLAVE INTERNAL STEAM TRAPS SHALL NOT BE MONITORED. STERILIZERS AND AUTOCLAVES ARE SELF MONITORING.	

NOTES	
1. COMPLETE STEAM TRAP MONITORING SYSTEMS INCLUDING ALL ASSOCIATED ELECTRICAL AND COMMUNICATIONS SYSTEMS SHALL BE INCLUDED IN DEDUCT ALTERNATE NO. 1	

DEDUCTIVE ALTERNATES	
THIS PROJECT INCLUDES MULTIPLE DEDUCTIVE ALTERNATES. CONTRACTOR SHALL REFER TO SPEC SECTION 01 00 00 FOR DETAILED DESCRIPTIONS. IN SUMMARY: BASE BID — ALL WORK SHOWN. DEDUCT ALTERNATE #1 — DEDUCT STEAM TRAP MONITORING. DEDUCT ALTERNATE #2 — DEDUCT INDIVIDUAL BOILER STACKS. DEDUCT ALTERNATE #3 — DEDUCT BOILER ROOM VENTILATION. DEDUCT ALTERNATE #4 — DEDUCT WATER SOFTENER. DEDUCT ALTERNATE #5 — DEDUCT NEW BOILER B-1.	

Revisions:

Date:

CONSULTANTS:

ENGINEER-OF-RECORD
STEPHEN T. STEFFE
FL P.E. NO.
70349

ARCHITECT/ENGINEERS:
AKEA Design, Inc.
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COA: FL #29578
AKEA Project No. 128-16

Drawing Title
STEAM TRAP SCHEDULES, LEGEND,
AND NOTES

Approved: Project Director

Project Title
DESIGN TO REPLACE BOILERS,
BLDG 100 ENERGY CENTER

Location
BAY PINES, FLORIDA

Date
MAY 15, 2017

Checked
STS

Drawn
CRR

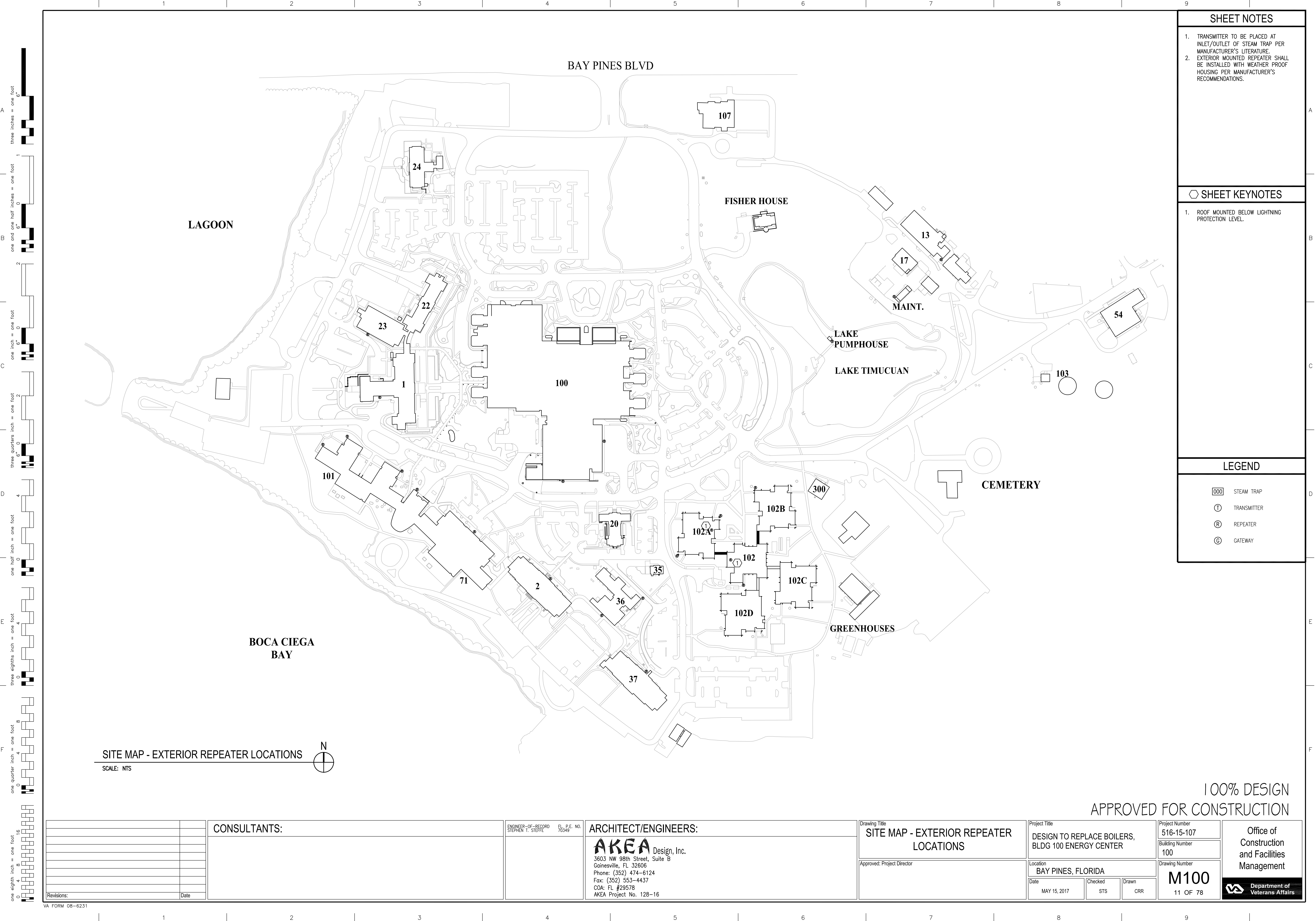
Project Number
516-15-107

Building Number
100

Drawing Number
M001
10 OF 78

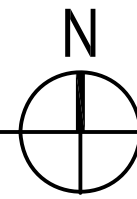
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Construction
and Facilities
Management

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SITE MAP - EXTERIOR REPEATER LOCATIONS

SCALE: NTS



SHEET NOTES

1. TRANSMITTER TO BE PLACED AT INLET/OUTLET OF STEAM TRAP PER MANUFACTURER'S LITERATURE.
2. EXTERIOR MOUNTED REPEATER SHALL BE INSTALLED WITH WEATHER PROOF HOUSING PER MANUFACTURER'S RECOMMENDATIONS.


SHEET KEYNOTES

1. ROOF MOUNTED BELOW LIGHTNING PROTECTION LEVEL.

LEGEND

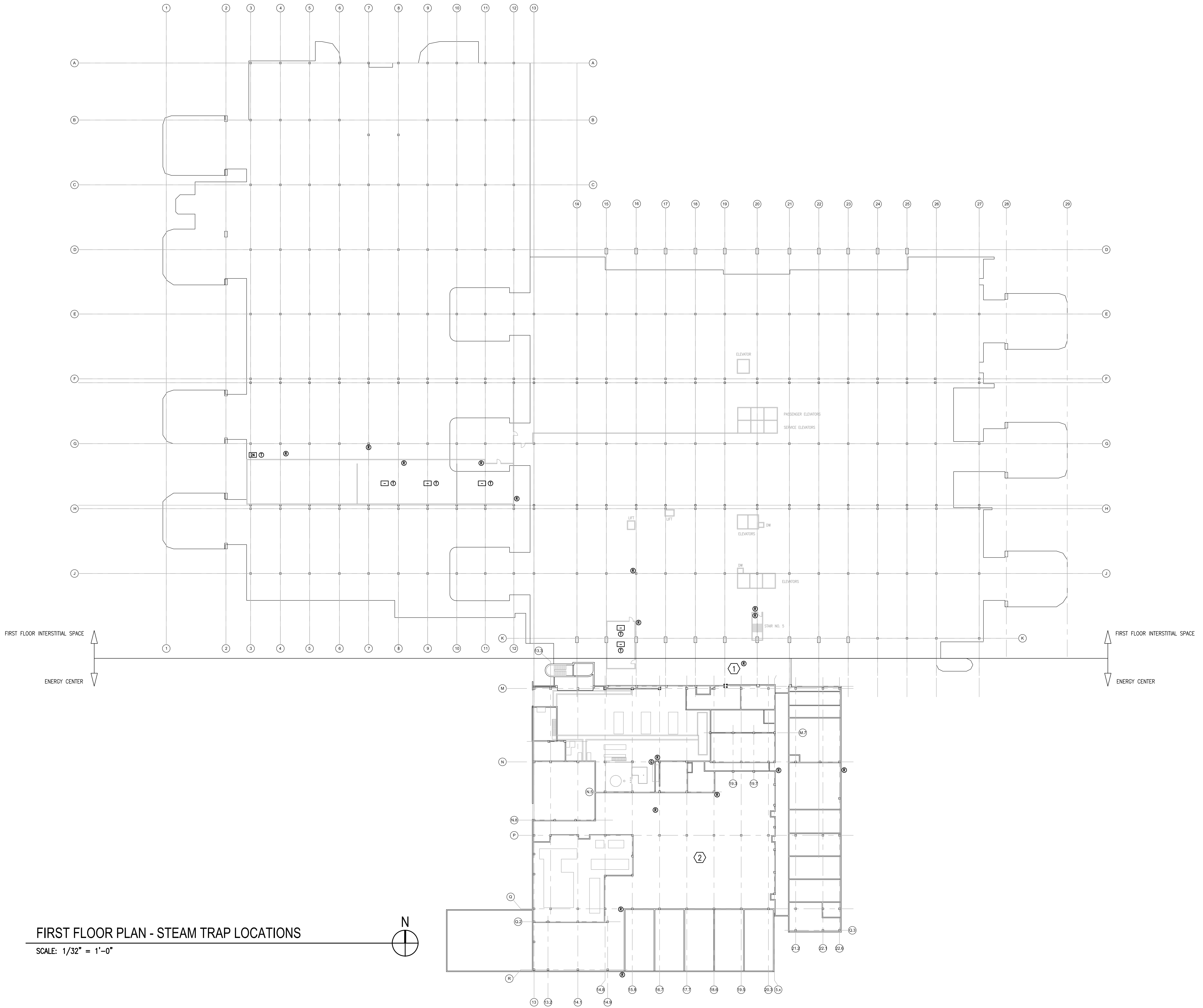
- [000] STEAM TRAP
- (T) TRANSMITTER
- (R) REPEATER
- (G) GATEWAY

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		CONSULTANTS:	ENGINEER-OF-RECORD STEPHEN T. STEFFE FL P.E. NO. 70349	ARCHITECT/ENGINEERS: <div><div>AKEA</div>Design, Inc. 3603 NW 98th Street, Suite B Gainesville, FL 32606 Phone: (352) 474-6124 Fax: (352) 553-4437 COA: FL #29578 AKEA Project No. 128-16</div>	Drawing Title	SITE MAP - EXTERIOR REPEATER LOCATIONS			Project Title	DESIGN TO REPLACE BOILERS, BLDG 100 ENERGY CENTER			Project Number	516-15-107		Office of Construction and Facilities Management		
															Building Number		100	
Revisions:						Approved: Project Director			Location BAY PINES, FLORIDA			Drawing Number M100 11 OF 78			 Department of Veterans Affairs			

1
2
3
4
5
6
7
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9

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot



FIRST FLOOR PLAN - STEAM TRAP LOCATIONS

SCALE: 1/32" = 1'-0"

SHEET NOTES

1. TRANSMITTER TO BE PLACED AT INLET/OUTLET OF STEAM TRAP PER MANUFACTURER'S LITERATURE.
2. EXTERIOR MOUNTED REPEATER SHALL BE INSTALLED WITH WEATHER PROOF HOUSING PER MANUFACTURER'S RECOMMENDATIONS.

SHEET KEYNOTES

1. REPEATER INSTALLED IN BREEZEWAY BETWEEN BUILDING 100 AND ENERGY CENTER.
2. SEE SHEET M103 FOR ENERGY CENTER ENLARGED PLAN.

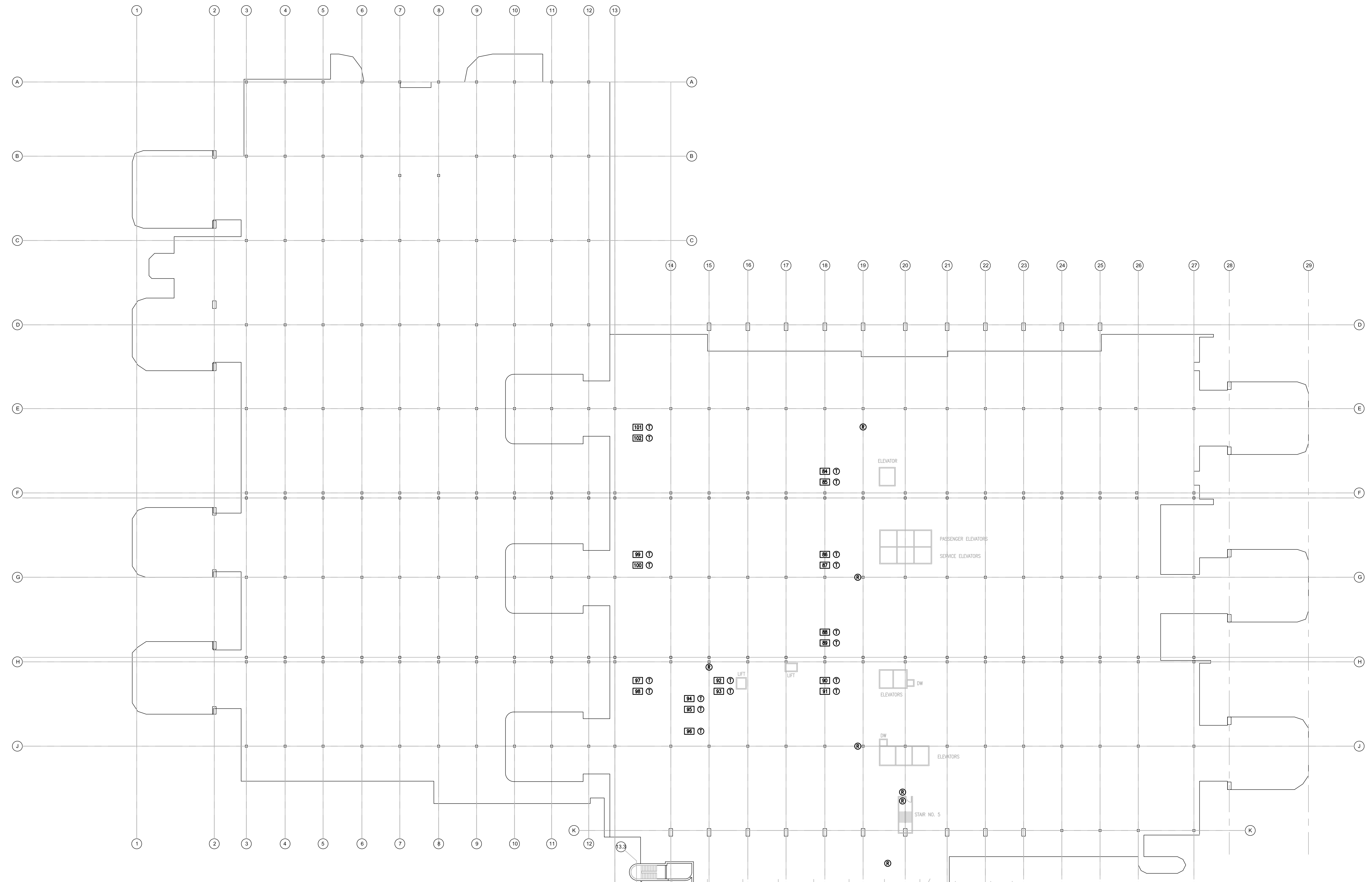
LEGEND

- 000 STEAM TRAP
- T TRANSMITTER
- R REPEATER
- G GATEWAY

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		CONSULTANTS:		ENGINEER-OF-RECORD STEPHEN T. STEFFE		FL P.E. NO. 70349		ARCHITECT/ENGINEERS:		Drawing Title BUILDING 100 - 1ST FLOOR PLAN - STEAM TRAP LOCATIONS		Project Title DESIGN TO REPLACE BOILERS, BLDG 100 ENERGY CENTER		Project Number 516-15-107		Office of Construction and Facilities Management	
								AKEA Design, Inc. 3603 NW 98th Street, Suite B Gainesville, FL 32606 Phone: (352) 474-6124 Fax: (352) 553-4437 COA: FL #29578 AKEA Project No. 128-16		Approved: Project Director		Location BAY PINES, FLORIDA		Building Number 100			
										Date MAY 15, 2017		Checked STS		Drawn CRR			
Revisions:		Date												12 OF 78		Department of Veterans Affairs	

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
one quarter inch = one foot
three eighths inch = one foot
one eighth inch = one foot
one eighth inch = one foot



SECOND FLOOR INTERSTITIAL PLAN - STEAM TRAP LOCATIONS
SCALE: 1/32" = 1'-0"

SHEET NOTES

1. TRANSMITTER TO BE PLACED AT INLET/OUTLET OF STEAM TRAP PER MANUFACTURER'S LITERATURE.
2. EXTERIOR MOUNTED REPEATER SHALL BE INSTALLED WITH WEATHER PROOF HOUSING PER MANUFACTURER'S RECOMMENDATIONS.

SHEET KEYNOTES

1. NOT USED

LEGEND

- 000 STEAM TRAP
- T TRANSMITTER
- R REPEATER
- G GATEWAY

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Revisions:		Date:		CONSULTANTS:		ENGINEER-OF-RECORD STEPHEN T. STEFFE FL P.E. NO. 70349		ARCHITECT/ENGINEERS: AKEA Design, Inc. 3603 NW 98th Street, Suite B Gainesville, FL 32606 Phone: (352) 474-6124 Fax: (352) 553-4437 COA: FL #29578 AKEA Project No. 128-16		Drawing Title BUILDING 100 - 2ND FLOOR PLAN - STEAM TRAP LOCATIONS		Project Title DESIGN TO REPLACE BOILERS, BLDG 100 ENERGY CENTER		Project Number 516-15-107 Building Number 100		Location BAY PINES, FLORIDA		Date MAY 15, 2017		Checked STS		Drawn CRR		Drawing Number M102 13 OF 78		Office of Construction and Facilities Management Department of Veterans Affairs	
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three inches = one foot

one and one half inches = one foot

one inch = one foot

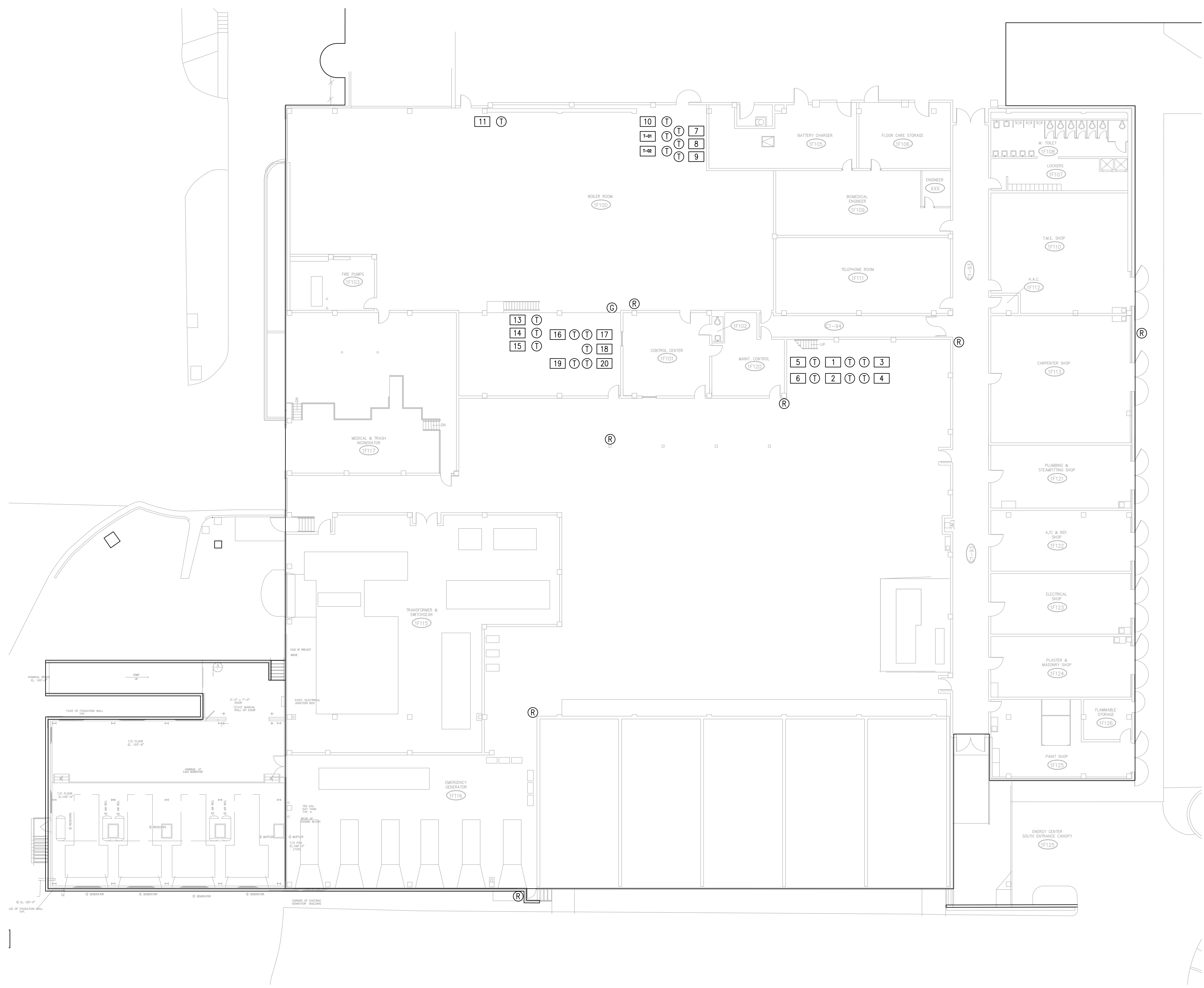
three quarters inch = one foot

one half inch = one foot

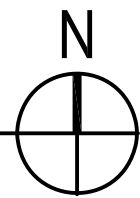
three eighths inch = one foot

one quarter inch = one foot

one eighth inch = one foot



ENERGY CENTER - STEAM TRAP LOCATIONS
SCALE: 1" = 1'-0"



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Revisions:		Date		CONSULTANTS:		ENGINEER-OF-RECORD STEPHEN T. STEFFE FL P.E. NO. 70349		ARCHITECT/ENGINEERS: AKEA Design, Inc. 3603 NW 98th Street, Suite B Gainesville, FL 32606 Phone: (352) 474-6124 Fax: (352) 553-4437 COA: FL #29578 AKEA Project No. 128-16		Drawing Title ENERGY CENTER - STEAM TRAP LOCATIONS		Project Title DESIGN TO REPLACE BOILERS, BLDG 100 ENERGY CENTER		Project Number 516-15-107 Building Number 100		Location BAY PINES, FLORIDA		Drawing Number M103 14 OF 78		Office of Construction and Facilities Management 	
Approved: Project Director		Date MAY 15, 2017		Checked STS		Drawn CRR															

SHEET NOTES

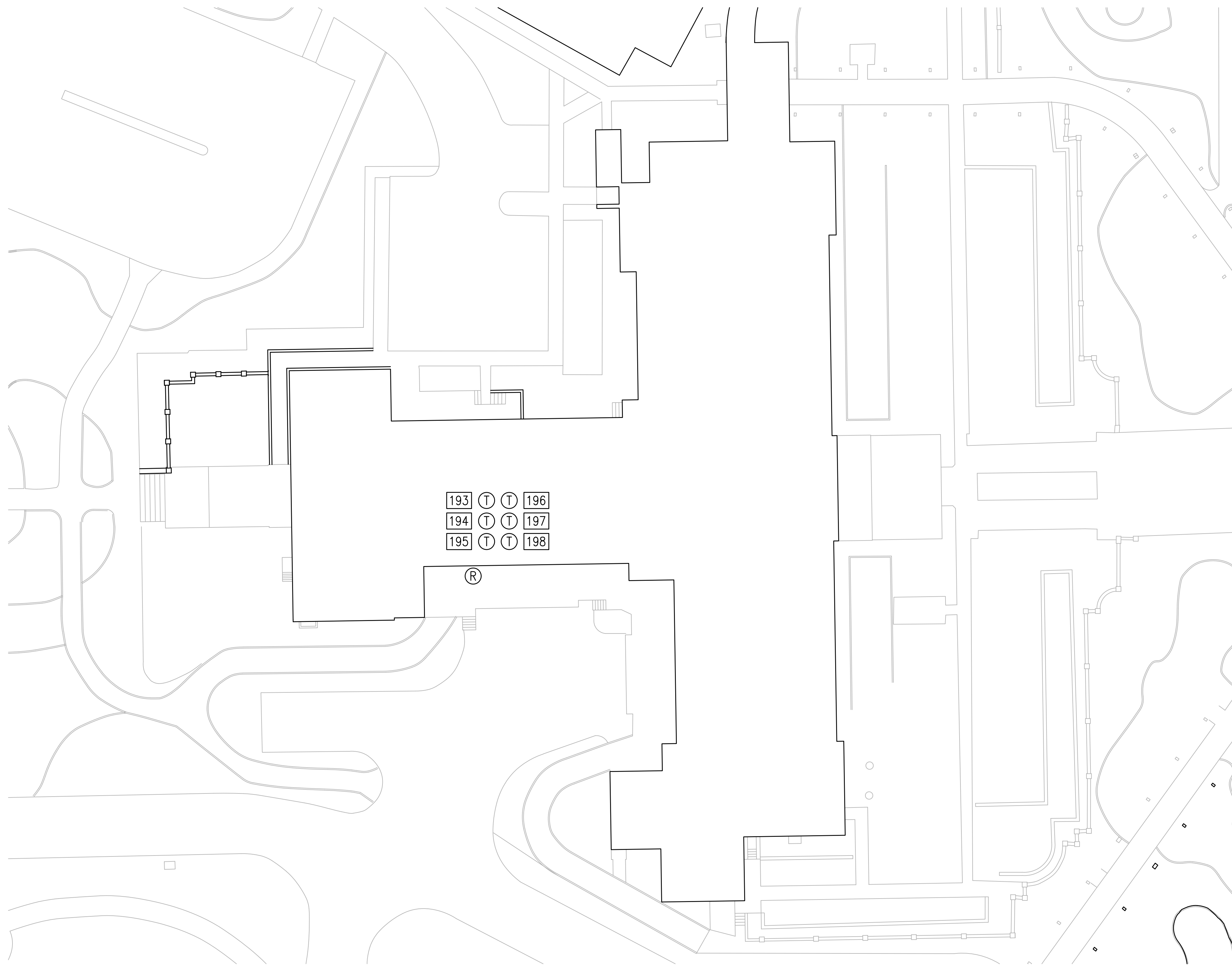
1. TRANSMITTER TO BE PLACED AT INLET/OUTLET OF STEAM TRAP PER MANUFACTURER'S LITERATURE.
2. EXTERIOR MOUNTED REPEATER SHALL BE INSTALLED WITH WEATHER PROOF HOUSING PER MANUFACTURER'S RECOMMENDATIONS.

SHEET KEYNOTES

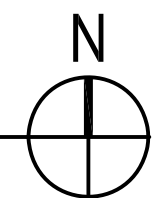
1. NOT USED


LEGEND

- 000 STEAM TRAP
- T TRANSMITTER
- R REPEATER
- G GATEWAY



SCALE: NTS



		CONSULTANTS:		ENGINEER-OF-RECORD STEPHEN T. STEFFE	FL P.E. NO. 70349	ARCHITECT/ENGINEERS: AKEA Design, Inc. 3603 NW 98th Street, Suite B Gainesville, FL 32606 Phone: (352) 474-6124 Fax: (352) 553-4437 COA: FL #29578 AKEA Project No. 128-16	Drawing Title	Project Title	Project Number	Office of Construction and Facilities Management	
							BUILDING 1 - STEAM TRAP LOCATIONS	DESIGN TO REPLACE BOILERS, BLDG 100 ENERGY CENTER	516-15-107		
									Building Number		
									100		
									Drawing Number		
									M104		
									15 OF 78		
Revisions:	Date						Approved: Project Director	Location			 Department of Veterans Affairs
								BAY PINES, FLORIDA			
							Date	Checked	Drawn		
								MAY 15, 2017	STS	CRR	

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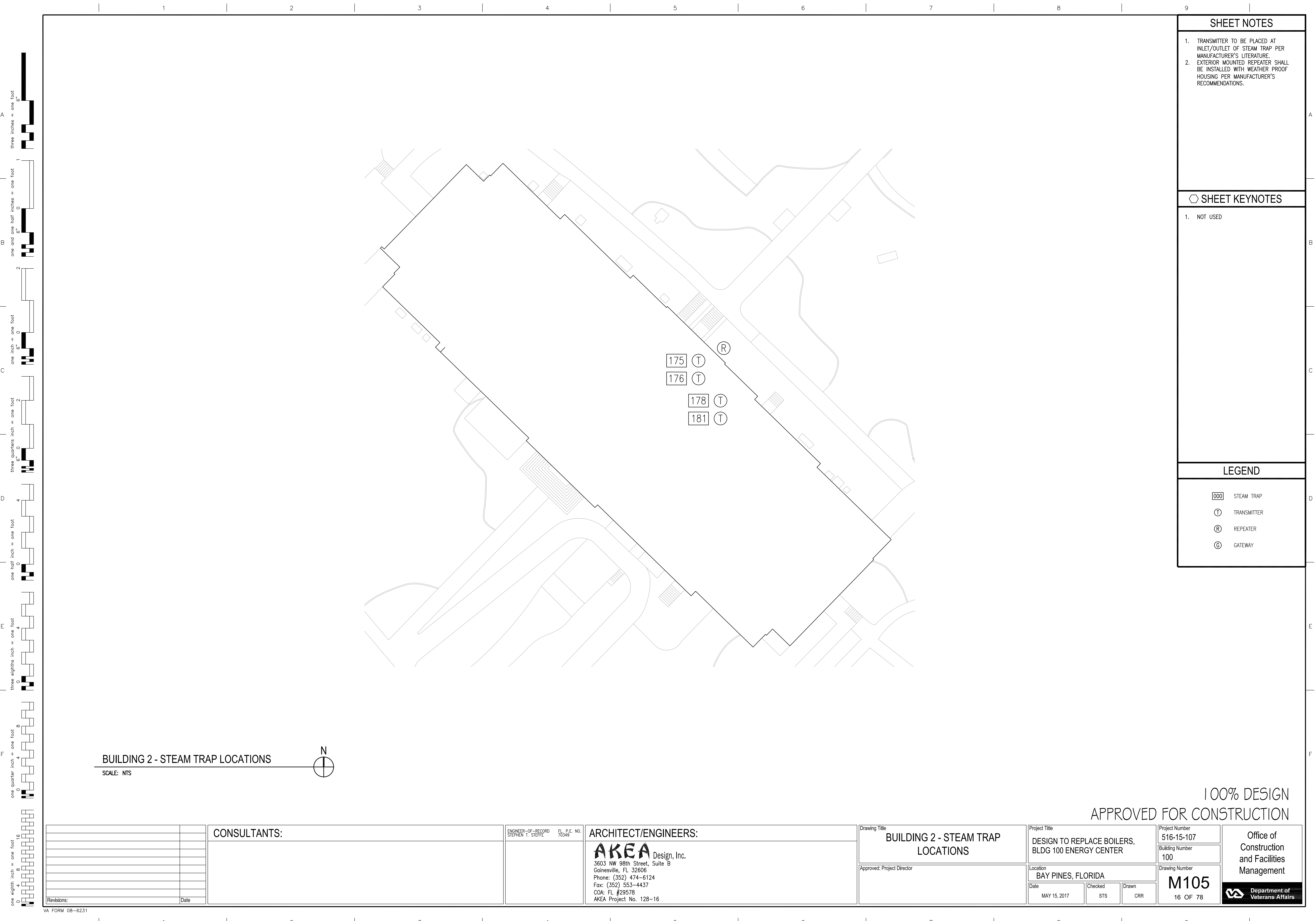
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SHEET KEYNOTES

1. NOT USED

LEGEND

	STEAM TRAP
	TRANSMITTER
	REPEATER
	GATEWAY



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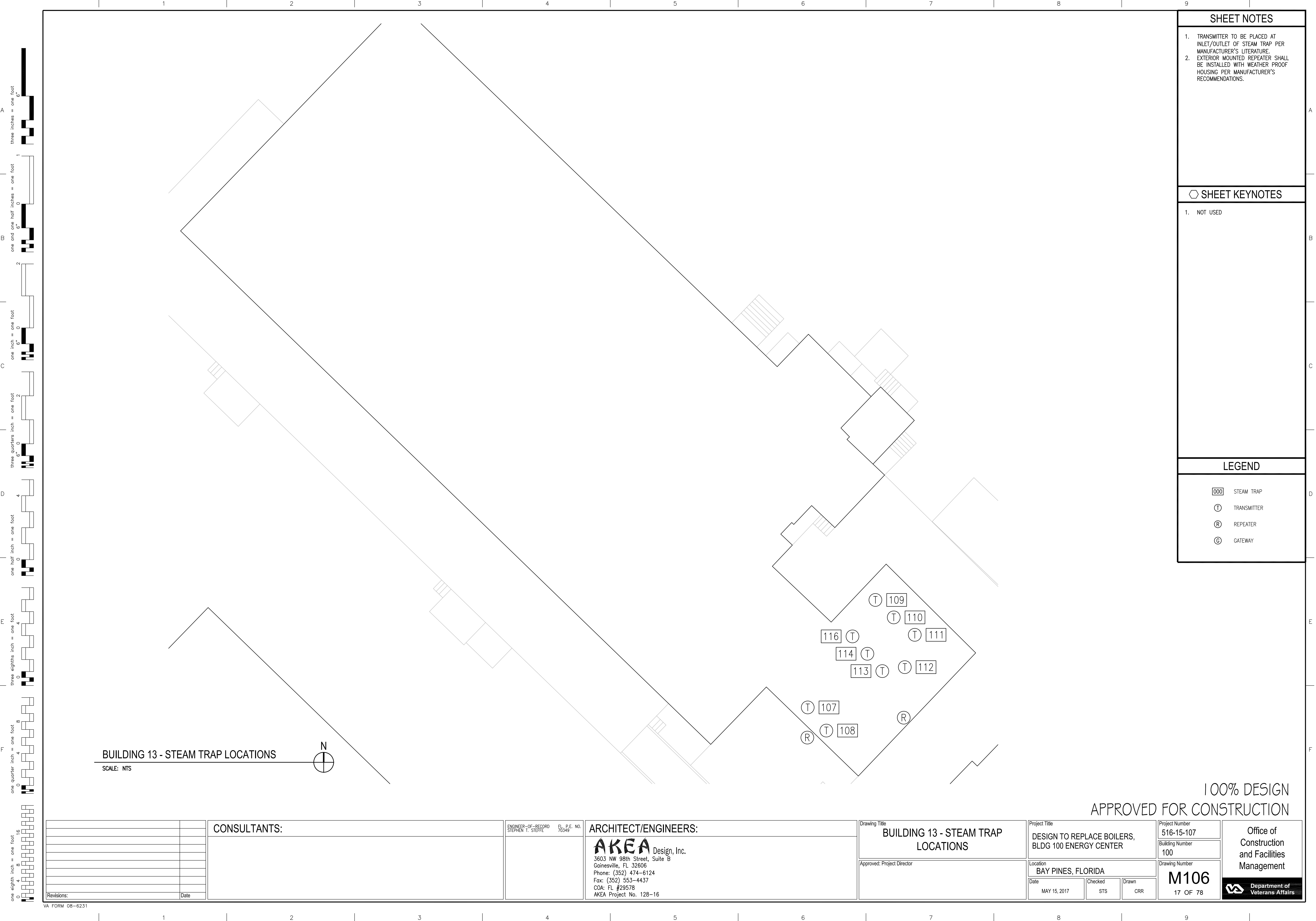
- 000 STEAM TRAP
- T TRANSMITTER
- R REPEATER
- G GATEWAY

Project Number	516-15-107
Building Number	100
Drawing Number	M103

Department of
Veterans Affairs

SCALE: NTS





SHEET NOTES

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SHEET KEYNOTES

1. NOT USED

LEGEND

- 000 STEAM TRAP
- T TRANSMITTER
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<div>Revisions:<div></div></div>		CONSULTANTS:		<div>ENGINEER-OF-RECORD STEPHEN T. STEFFE</div> <div>FL P.E. NO. 70349</div>		<div>ARCHITECT/ENGINEERS:</div> <div>AKEA Design, Inc. 3603 NW 98th Street, Suite B Gainesville, FL 32606 Phone: (352) 474-6124 Fax: (352) 553-4437 COA: FL #29578 AKEA Project No. 128-16</div>		<div>Drawing Title</div> <div>BUILDING 13 - STEAM TRAP LOCATIONS</div>		<div>Project Title</div> <div>DESIGN TO REPLACE BOILERS, BLDG 100 ENERGY CENTER</div>		<div>Project Number</div> <div>516-15-107</div>		<div>Office of Construction and Facilities Management</div> <div> Department of Veterans Affairs</div>					
								<div>Location</div> <div>BAY PINES, FLORIDA</div>		<div>Building Number</div> <div>100</div>									
								<div>Approved: Project Director</div>		<div>Date</div> <div>MAY 15, 2017</div>		<div>Checked</div> <div>STS</div>				<div>Drawn</div> <div>CRR</div>		<div>Drawing Number</div> <div>M106</div>	

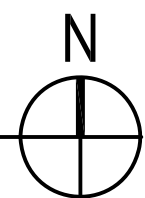


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1. NOT USED

000	STEAM TRAP
T	TRANSMITTER
R	REPEATER
G	GATEWAY

SCALE: NTS



100% DESIGN
APPROVED FOR CONSTRUCTION

		CONSULTANTS:	<div></div>	<div>ENGINEER-OF-RECORD STEPHEN T. STEFFE</div> <div>FL P.E. NO. 70349</div>	ARCHITECT/ENGINEERS: <div><div>AKEA</div>Design, Inc.<div>3603 NW 98th Street, Suite B Gainesville, FL 32606 Phone: (352) 474-6124 Fax: (352) 553-4437 COA: FL #29578 AKEA Project No. 128-16</div></div>	<div>Drawing Title</div> <div>BUILDING 23 - STEAM TRAP LOCATIONS</div> <div>Approved: Project Director</div>	<div>Project Title</div> <div>DESIGN TO REPLACE BOILERS, BLDG 100 ENERGY CENTER</div> <div>Location</div> <div>BAY PINES, FLORIDA</div> <div><div>Date</div><div>MAY 15, 2017</div><div><div>Checked</div><div>STS</div><div>Drawn</div><div>CRR</div></div></div>	<div>Project Number</div> <div>516-15-107</div> <div>Building Number</div> <div>100</div> <div>Drawing Number</div> <div>M107</div> <div>18 OF 78</div>	<div>Office of Construction and Facilities Management</div> <div><div></div>Department of Veterans Affairs</div>
Revisions:	Date								