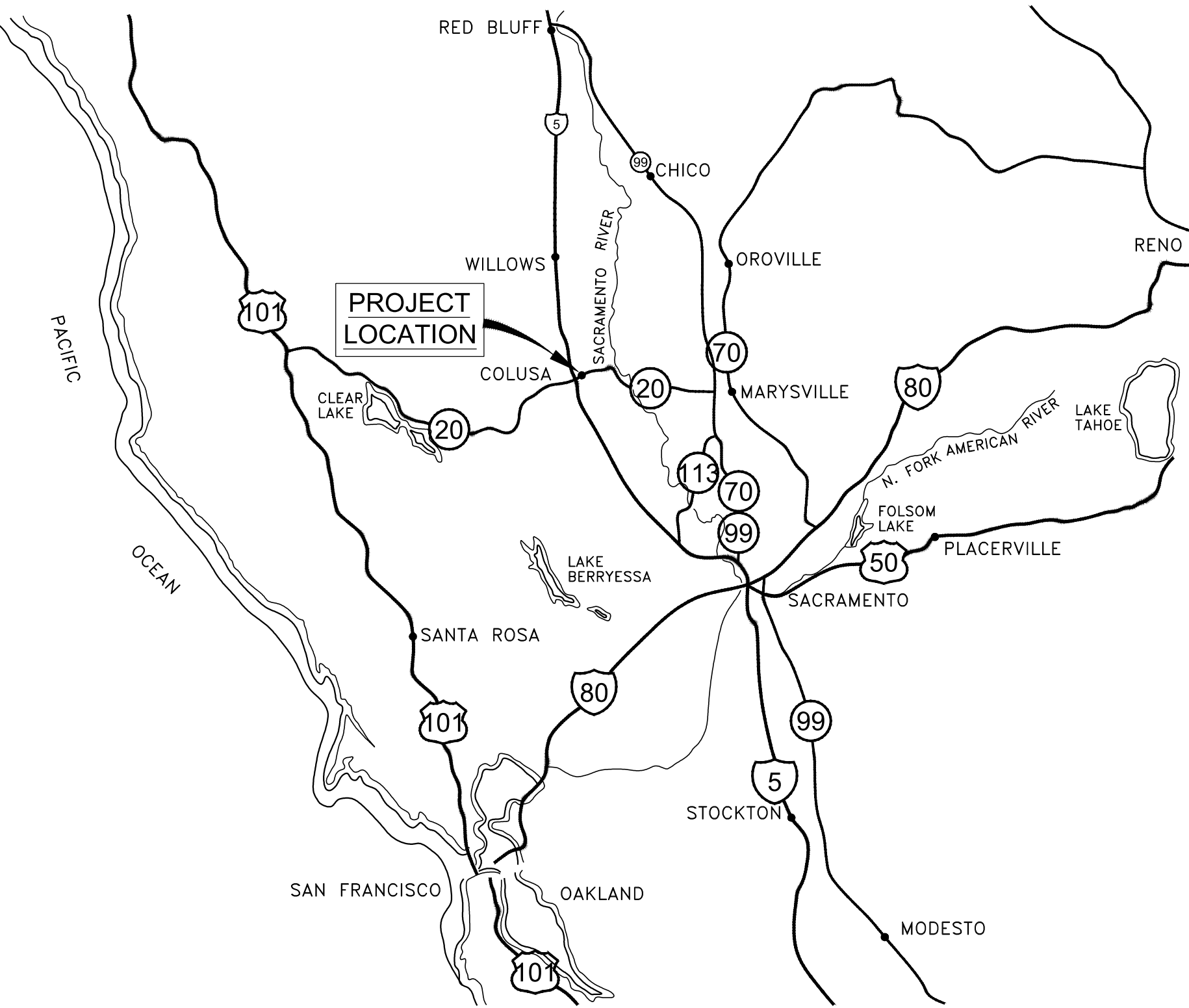
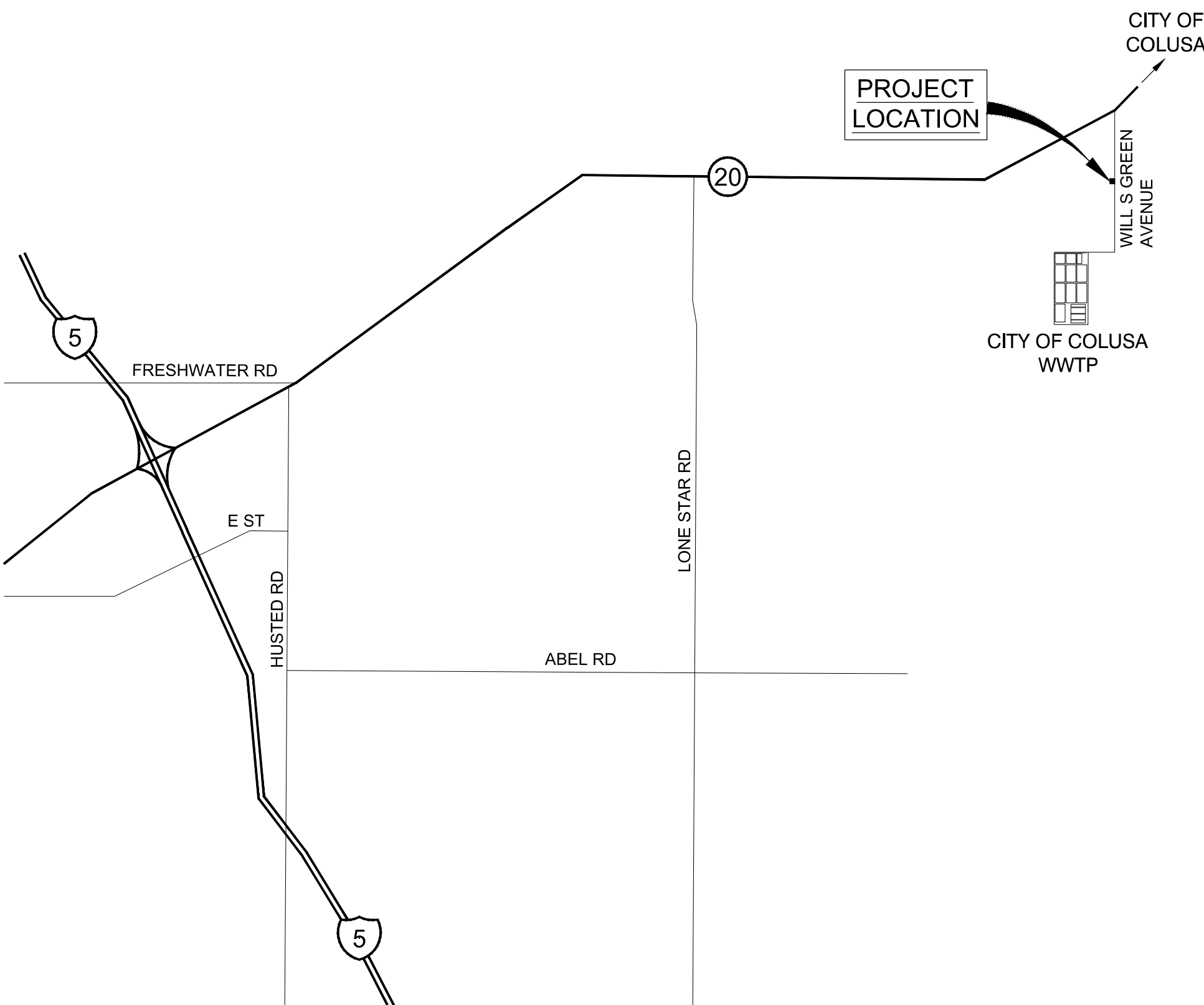




VICINITY MAP
SCALE: 1" = 25 MILES



LOCATION MAP

CITY OF COLUSA 2026 WILL S. GREEN AVENUE PUMP STATION PROJECT

COLUSA COUNTY, CALIFORNIA
SRF LOAN PROJECT No. C-06-8613-110
CITY PROJECT No. 2026-020



JULY 2026
City of Colusa

100% SUBMITTAL

SUBMITTED: Daniel Rich
Daniel Rich, Project Manager

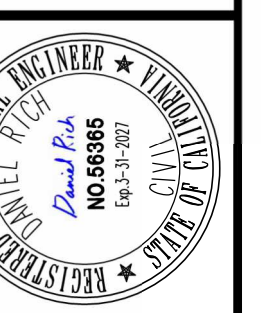
APPROVED: Jesse Cain
Jesse Cain, Director of Planning and Public Works

APPROVED: Dave Swartz
Dave Swartz, City Engineer

BAR IS ONE INCH
AT FULL SCALE

DATE	REVISIONS	APPROVAL

NEXGEN UTILITY MANAGEMENT
4010 LENNANE DRIVE
SACRAMENTO, CA 95834
916.564.8000



City of Colusa
2026 WILL S. GREEN AVENUE
PUMP STATION PROJECT
Colusa County, California

PROJECT TITLE, VICINITY
MAP AND LOCATION MAP

DATE: 21/07/2026
SCALE: NONE
DRAWN BY: JA
DESIGNED BY: JD
CHECKED BY: JD
JOB NO: 63.102.C
DRAWING NO:
G001
1 OF 45 SHEETS

DRAWING INDEX

SHT NO.	DWG NO.	DRAWING TITLE
GENERAL		
1	G001	PROJECT TITLE, VICINITY MAP AND LOCATION MAP
2	G002	INDEX OF DRAWINGS AND STANDARD ABBREVIATIONS
3	G003	ABBREVIATIONS, SYMBOLS AND LEGEND
4	G004	PROCESS FLOW DIAGRAM AND DESIGN CRITERIA
CIVIL		
5	C001	TYPICAL CIVIL DETAILS 1
6	C002	TYPICAL CIVIL DETAILS 2
7	C003	TYPICAL CIVIL DETAILS 3
8	C010	SITE GRADING, PAVING AND DRAINAGE PLAN
9	C011	SITE PIPING PLAN
10	C012	24in GRAVITY SEWER PLAN AND PROFILE
11	C013	CONTROL BUILDING PLAN
12	C014	CONTROL BUILDING ELEVATIONS 1
13	C015	CONTROL BUILDING ELEVATIONS 2
MECHANICAL		
14	M001	TYPICAL MECHANICAL DETAILS 1
15	M002	TYPICAL MECHANICAL DETAILS 2
16	M003	TYPICAL MECHANICAL DETAILS 3
17	M010	PUMP STATION PLAN AND SECTION
18	M011	PUMP STATION SECTION
19	M013	RECYCLED WATER BOOSTER PUMP STATION PLAN AND SECTIONS
ELECTRCAL		
20	E001	ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES
21	E002	MSB SINGLE LINE DIAGRAM AND LOAD SCHEDULE
22	E003	MSB SINGLE LINE DIAGRAM AND LOAD SCHEDULE
23	E004	MSB/MCC ELEVATIONS
24	E005	TYPICAL CONTROL PANEL WIRING DIAGRAM
25	E006	TYPICAL CONTROL PANEL ELEVATION
26	E007	EXAMPLE DIGITAL MODULE WIRING DIAGRAM
27	E008	EXAMPLE ANALOG MODULE WIRING DIAGRAM
28	E009	EXAMPLE INTERCONNECTION DIAGRAM
29	E010	LIGHTING FIXTURE AND SCHEDULES
30	E020	TYPICAL ELECTRICAL DETAILS 1
31	E021	TYPICAL ELECTRICAL DETAILS 2
32	E022	TYPICAL ELECTRICAL DETAILS 3
33	E030	CONDUIT AND CABLE SCHEDULE
34	E100	OVERALL UTILITY PLAN
35	E101	OVERALL ELECTRICAL SITE PLAN
36	E102	OVERALL COMMUNICATION PLAN
37	E110	PUMP STATION ELECTRICAL PLAN
38	E111	CONTROL BUILDING ELECTRICAL PLAN
39	E112	CONTROL BUILDING LIGHTING AND GROUNDING PLAN
40	I001	INSTRUMENTATION SYMBOLS AND ABBREVIATIONS
41	I002	EXISTING NETWORK BLOCK DIAGRAM MODIFICATIONS
42	I003	PUMP STATION INLET P&ID
43	I004	WET WELL 1 AND 2 PUMP STATION P&ID
44	I005	BOOSTER PUMP STATION P&ID
45	I006	PUMP STATION MISCELLANEOUS P&ID

DRAWING NUMBERING SYSTEM

1. THE DRAWINGS ARE SUBDIVIDED INTO BROAD TRADE SECTIONS AND HAVE THE FOLLOWING PREFIXES TO THEIR NUMBERS ACCORDING TO CATEGORY AND ARE BOUND IN THE FOLLOWING ORDER.
- G

C

E

I

GENERAL

CIVIL

ELECTRICAL

INSTRUMENTATION

STANDARD ABBREVIATIONS

ABND	ABANDONED
AC	ASPHALT CONCRETE
APPROX	APPROXIMATE(LY)
ARV	AIR RELEASE VALVE
AVG	AVERAGE
BF	BLIND FLANGE
BFP	BACK FLOW PREVENTER
BLDG	BUILDING
BOT	BOTTOM
BUV	BUTTERFLY VALVE
BV	BALL VALVE
CONC	CONCRETE
CPLG	COUPLING
CV	CHECK VALVE
DI	DROP INLET
DIP	DUCTILE IRON PIPE
DISCH	DISCHARGE
DWG	DRAWING
EA	EACH
EFL	EFFLUENT
EL	ELEVATION
EG	EXISTING GRADE
ELB	ELBOW
ELEC	ELECTRIC(AL)
EMER	EMERGENCY
EP	EDGE OF PAVEMENT
EQPT	EQUIPMENT
FA	FOUL AIR
FC	FLEXIBLE COUPLING
FCA	FLANGED COUPLING ADAPTER
FM	FORCE MAIN, FLOW METER
FG	FINISH GRADE
FT	FEET, FOOT
GENL	GENERAL
GLV	GLOBE VALVE
GPM	GALLONS PER MINUTE
GR	GRADE
GTV	GATE VALVE
GTV & B	GATE VALVE AND VALVE BOX
HGLV	HOSE GLOBE VALVE
HGV	HOSE GATE VALVE
HP	HORSEPOWER, HIGH PRESSURE, HIGH POINT
HV	HOSE VALVE, HOSE BIBB
HWL	HIGH WATER LEVEL
IE	INVERT ELEVATION
IN	INCH
LBS	POUNDS
LWL	LOW WATER LEVEL
MH	MANHOLE
MNL	MANUAL
NC	NORMALLY CLOSED
NRS	NON-RISING STEM
PCV	PLASTIC CHECK VALVE
PK	PEAK
POC	POINT OF CONNECTION
PV	PLUG VALVE
PVT	PAVEMENT
QCPLG	QUICK COUPLING
RED	REDUCER
RMV	REMOVE
SARV	SEWAGE AIR RELEASE VALVE
SCHED	SCHEDULE
SCV	SPLIT CHECK VALVE
SECT	SECTION
SFM	SEWAGE FORCE MAIN
SG	SLUICE GATE
SLG	SLIDE GATE
SPEC	SPECIFICATIONS
TDH	TOTAL DYNAMIC HEAD
TYP	TYPICAL
UGND	UNDERGROUND
V	VALVE, VENT, VOLTS

NOTE:
NOT ALL ABBREVIATIONS APPEARING ON THIS
SHEET ARE USED ON THESE DOCUMENTS.

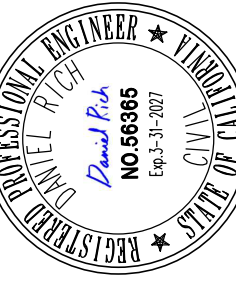
BAR IS ONE INCH
AT FULL SCALE

APR'L					
REVISIONS					
DATE					
Δ	-	-	-	-	-

NEXGEN UTILITY MANAGEMENT

4010 LENNANE DRIVE
SACRAMENTO, CA 95834
916.564.8000





City of Colusa

2026 WILL S. GREEN AVENUE
PUMP STATION PROJECT

Colusa County, California

INDEX OF DRAWINGS AND
STANDARD ABBREVIATIONS

DATE:	21/07/2026
SCALE:	NONE
DRAWN BY:	JA
DESIGNED BY:	JD
CHECKED BY:	JD

JOB NO: 63.102.C

DRAWING NO:
G002

A

M101

SECTION IDENTIFICATION LETTER

A

M104

SHEET OR DRAWING NUMBER WHERE SECTION IS TAKEN

1

M101

DETAIL IDENTIFICATION LETTER

1

M101

SHEET OR DRAWING NUMBER WHERE DETAIL IS TAKEN OR APPEARS

NEW FACILITIES

EXISTING FACILITIES

FUTURE FACILITIES AND UTILITIES

X

NEW FENCE

NEW PIPING

NEW PIPING HIDDEN

EXISTING PIPING

0.0

0.0

NEW SPOT ELEVATION

FLOW ARROW

NEW EMBANKMENT

EXISTING EMBANKMENT

NEW CONTOUR

EXISTING EXISTING

AIR VALVE

ANGLE VALVE

BALL VALVE

BALL CHECK VALVE

BACK-FLOW PREVENTER

BUTTERFLY VALVE

CHECK VALVE

DIAPHRAGM VALVE

GATE VALVE

GLOBE VALVE

SEAT SIDE

PLUG VALVE

PRESSURE REDUCING VALVE

PRESSURE RELIEF VALVE

SOLENOID VALVE

WAFER SWING CHECK VALVE

SPLIT DISK CHECK VALVE

UNION

REDUCER

STRAINER

CLEANOUT

PRESSURE GAUGE OR SWITCH

HOSE VALVE

FIRE OR WHARF HYDRANT

MECHANICAL JOINT OR BELL & SPIGOT FITTING

FLANGED FITTING

FLANGED COUPLING ADAPTER

FLEXIBLE COUPLING

GROOVED COUPLING

NEW CONCRETE

NEW AGGREGATE BASE

NEW NATIVE FILL

NEW AC PAVING

NEW HATCH

NEW GRATE

NEW RIP RAP

NEW COBBLE

ARV

AIR RELEASE VALVE

ASV

ANGLE STOP VALVE

AVV

AIR & VACUUM VALVE

BFV

BUTTERFLY VALVE

BV

BALL VALVE

CAV

COMBINATION AIR VALVE

CV

CHECK VALVE

DV

DIAPHRAGM VALVE

FCV

FLEXIBLE CHECK VALVE

FG

FLAP GATE

FH

FIRE HYDRANT

FSCV

FLEXIBLE SWING CHECK VALVE

GLV

GLOBE VALVE

GTV

GATE VALVE

NV

NEEDLE VALVE

PBV

PLASTIC BALL VALVE

PCHV

PINCH VALVE

PCV

PLASTIC CHECK VALVE

PH

POST HYDRANT

PRFV

PRESSURE RELIEF VALVE

PRV

PRESSURE REGULATING (REDUCING) VALVE

PV

PLUG VALVE

RV

RELIEF VALVE

SARV

SEWAGE AIR RELEASE VALVE

SAVV

SEWAGE AIR VACUUM VALVE

SCAV

SEWAGE COMBINATION AIR VALVE

SCV

SPLIT DISC CHECK VALVE

SG

SLUICE GATE

SLG

SLIDE GATE

SOLV

SOLENOID VALVE

SP

SLIDE PLATE

SST

STAINLESS STEEL

VB

VACCUM BREAKER

WSCV

WAFER SWING CHECK VALVE

ADPTR

ADAPTER

BF

BLIND FLANGE

BO

BLOWOFF

CO

CLEANOUT

CONN

CONNECTION

COTG

CLEANOUT TO GRADE

CPLG

COUPLING

CREJ

CORRUGATED RUBBER EXPANSION JOINT

ECC

ECCENTRIC

ELB

ELBOW

FC

FLEXIBLE COUPLING

FCA

FLEXIBLE COUPLING ADAPTER

FD

FLOOR DRAIN

FLG

FLANGE(D)

FM

FORCE MAIN

GC

GROOVED COUPLING

GSKT

GASKET

HGR

HANGER

MH

MANHOLE

MJ

MECHANICAL JOINT

PG

PRESSURE GAUGE

PS

PIPE SUPPORT

QCPLG

QUIK COUPLING

RAD

RADIUS

RED

REDUCER

UN

UNION

VB

VALVE BOX

LEGEND

DRAWING NUMBERING SYSTEM

THE DRAWINGS ARE SUBDIVIDED INTO BROAD TRADE SECTIONS AND HAVE THE FOLLOWING PREFIXES TO THEIR NUMBERS ACCORDING TO CATEGORY AND ARE BOUND IN THE FOLLOWING ORDER.

G

GENERAL

C

CIVIL

S

STRUCTURAL

M

MECHANICAL

E

ELECTRICAL

I

INSTRUMENTATION

THE DRAWINGS WITHIN THIS SET ARE NUMBERED PER THE FOLLOWING EXAMPLE:

M

3

2

1

DRAWING NUMERICAL SEQUENCE

SUB AREA

MAJOR AREA

TRADE

PIPING IDENTIFICATION SYSTEM

NEW OR RELOCATED

4" RAS

PIPING SYSTEM ABBREVIATION

PIPE SIZE

EXISTING

4" RS

NOTE:
SEE PIPING SYSTEM ABBREVIATIONS THIS SHEET FOR PIPE SERVICE. SEE SPECIFICATION FOR PIPE MATERIAL. NOT SHOWN ON PLANS

PIPING SYSTEM ABBREVIATIONS

C

CULVERT

D

DRAIN

RS

RAW SEWAGE

RW

RECYCLED WATER

SD

STORM DRAIN

SS

SANITARY SEWER

V

VENT

WN

NON-POTABLE WATER

WP

POTABLE WATER

BAR IS ONE INCH
AT FULL SCALE

APR'L

REVISIONS

DATE

1

1

1

1

1

NEXGEN UTILITY MANAGEMENT

4010 LENNANE DRIVE
SACRAMENTO, CA 95834
916.564.8000

NEXGEN

PROFESSIONAL ENGINEER

STATE OF CALIFORNIA

NO. 8885

EXP. 12-31-2027

SEAL

City of Colusa

2026 WILL S. GREEN AVENUE
PUMP STATION PROJECT

Colusa County, California

ABBREVIATIONS, SYMBOLS
AND LEGEND

DATE: 21/07/2026

SCALE: NONE

DRAWN BY: JA

DESIGNED BY: JD

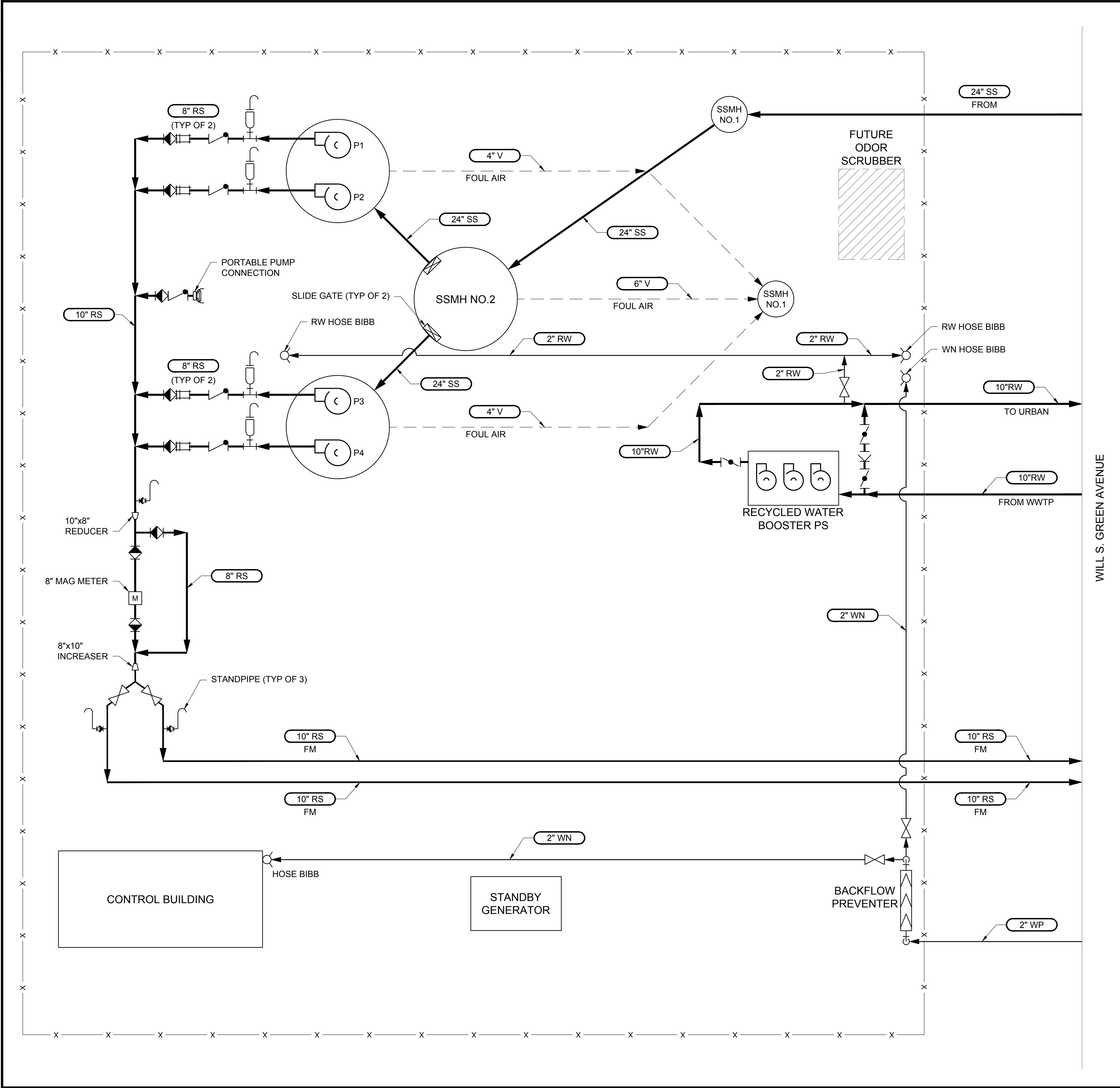
CHECKED BY: JD

JOB NO: 63.102.C

DRAWING NO:
G003

3 OF 45 SHEETS

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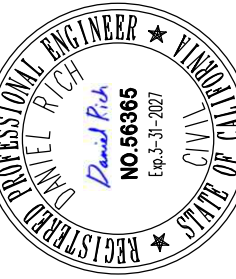
WILL S. GREEN AVENUE PUMP STATION		
	INITIAL	DESIGN
ADWF (GPM)	320	800
PEAK HOUR (GPM, RELIABLE CAPACITY)	690	2470
FLUSH FLOW (GPM)	735	1470
NUMBER OF PUMPS	4 (1 DUTY, 1 STANDBY, 2 REDUNDANT)	4 (2 DUTY, 2 STANDBY)
SIZE (HP, EACH PUMP)	10	25
CAPACITY (GPM, EACH PUMP)	735	1,230
FLUSH/PEAK HOUR TDH (FEET)	32	58
GENERATOR SIZE (KW)	80	250
FUEL TYPE (GAS)	DIESEL	DIESEL

RECYCLED WATER BOOSTER STATION	
NUMBER OF PUMPS	4 (2 DUTY, 1 STANDBY, 1 JOCKEY)
DESIGN FLOW (GPM, 2 PUMPS)	1200
PRESSURE (PSI)	60

BAR IS ONE INCH
AT FULL SCALE

APRVL	REVISIONS	DATE

NEXGEN UTILITY MANAGEMENT
4010 LENNANE DRIVE
SACRAMENTO, CA 95834
916.564.8000



City of Colusa
2026 WILL S. GREEN AVENUE
PUMP STATION PROJECT
Colusa County, California

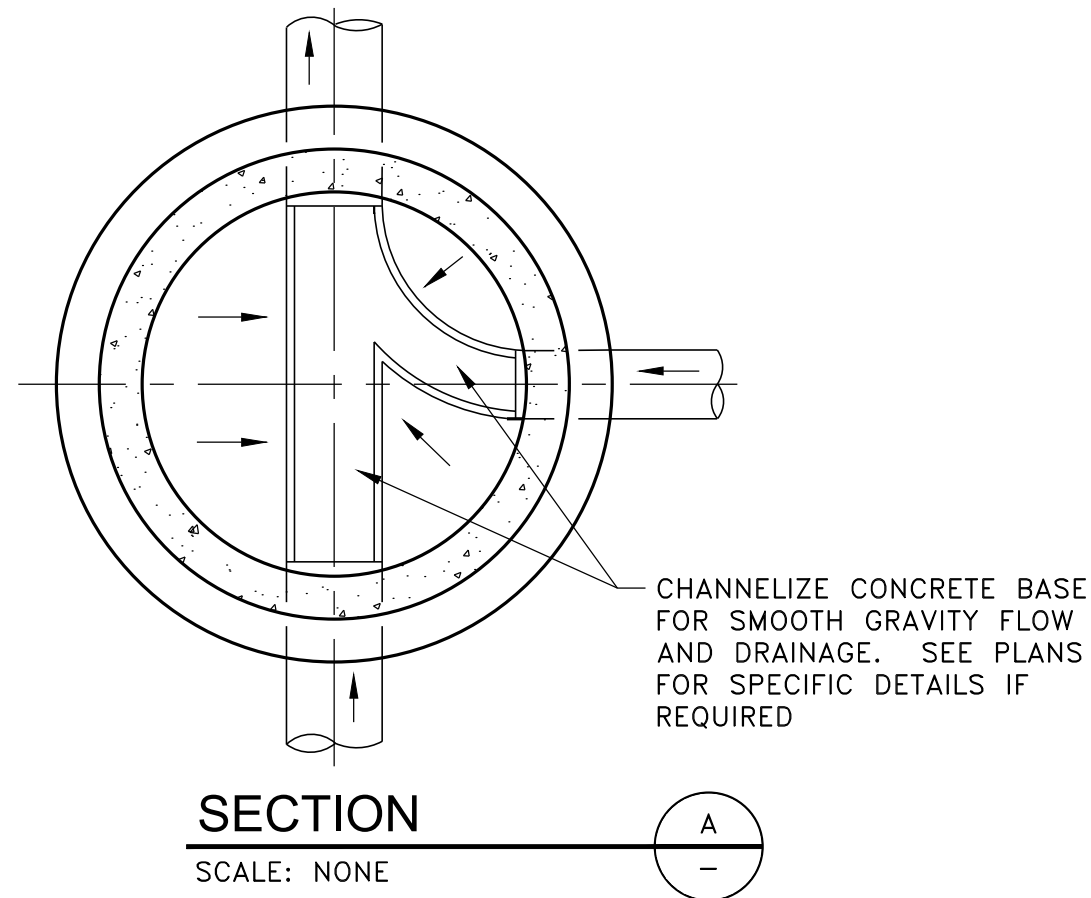
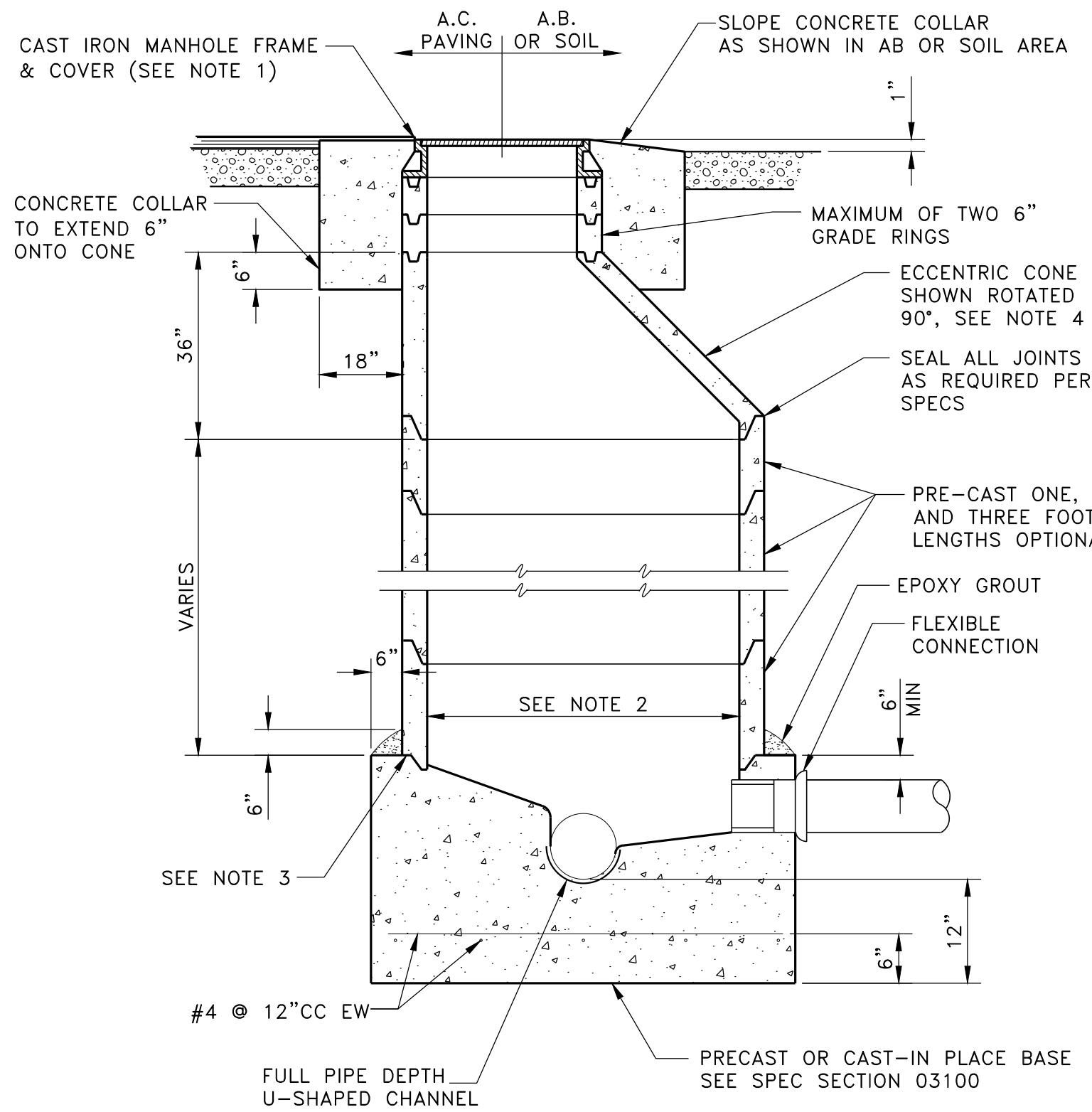
PROCESS FLOW DIAGRAM
AND DESIGN CRITERIA

DATE: 22/07/2026
SCALE: NONE
DRAWN BY: JA
DESIGNED BY: JD
CHECKED BY: JD

JOB NO: 63.102.C

DRAWING NO:
G004

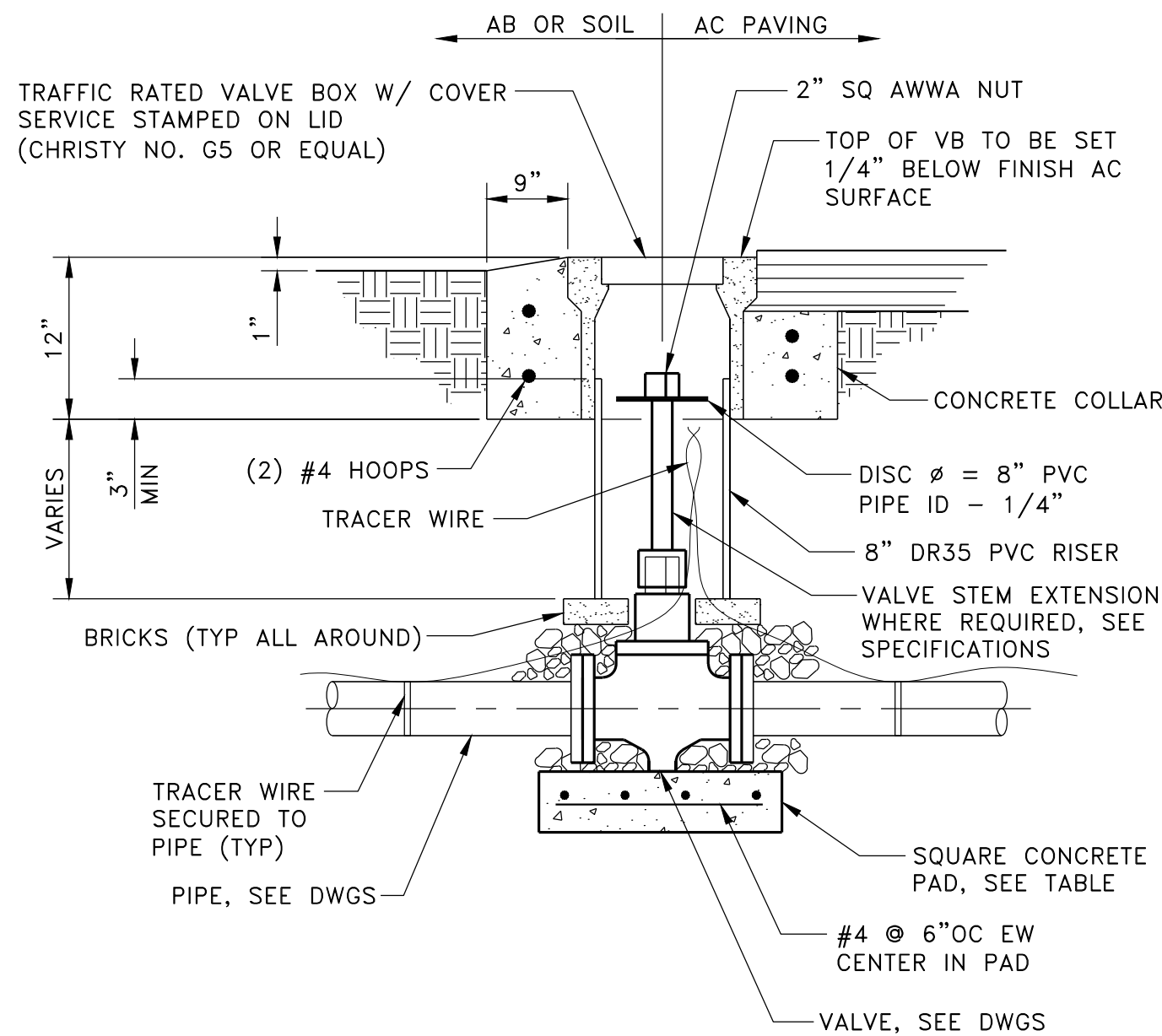
4 OF 45 SHEETS



- NOTES:
- UNLESS OTHERWISE SPECIFIED, 24"Ø ON 48"Ø MANHOLE, 30"Ø ON 60"Ø MANHOLE CAST IRON MANHOLE FRAME & COVER TOP OF MANHOLE FRAME AND CONCRETE COLLAR TO BE SET 1/4" BELOW FINISHED AC SURFACE, CONCRETE SHALL BE CLASS A IN ACCORDANCE WITH THE SPECIFICATIONS SET FRAME AND COVER IN GROUT.
 - UNLESS NOTED OTHERWISE, 48"Ø FOR 6"-12", 60"Ø FOR 15"-36".
 - CONTRACTOR SHALL FORM GROOVE IN BASE WITH MANUFACTURER'S IMPRESSION RING.
 - LOCATE COVER OVER DOWNSTREAM SIDE OF MANHOLE UNLESS NOTED OTHERWISE.

MANHOLE
SCALE: NONE

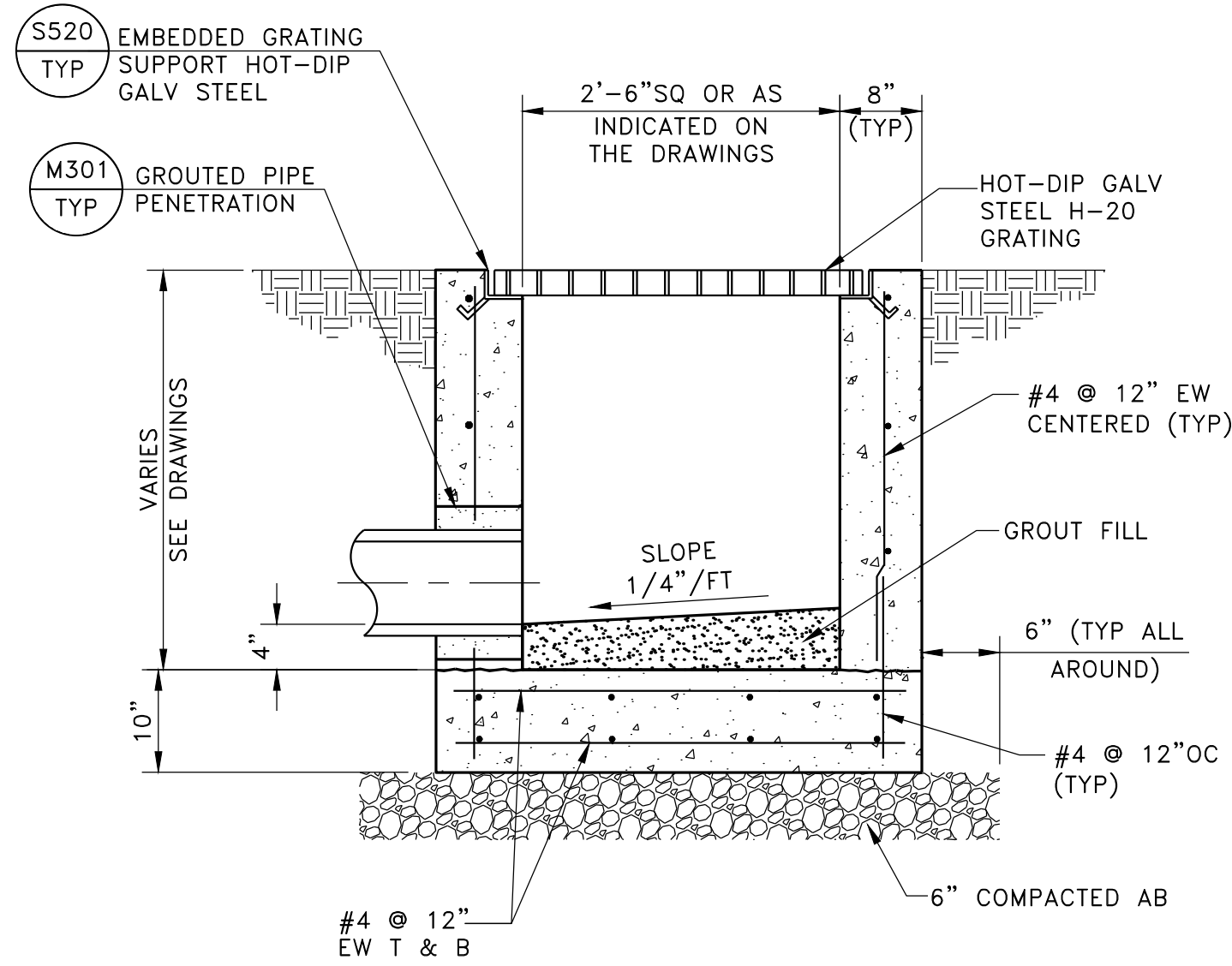
C101
TYP



CONCRETE PAD		
VALVE SIZE	PAD SIZE	PAD THICKNESS
3"-16"	24"	6"
18"-30"	36"	6"
36"-48"	48"	8"
54"-60"	60"	8"

TYPICAL BURIED VALVE
SCALE: NONE

C500
TYP



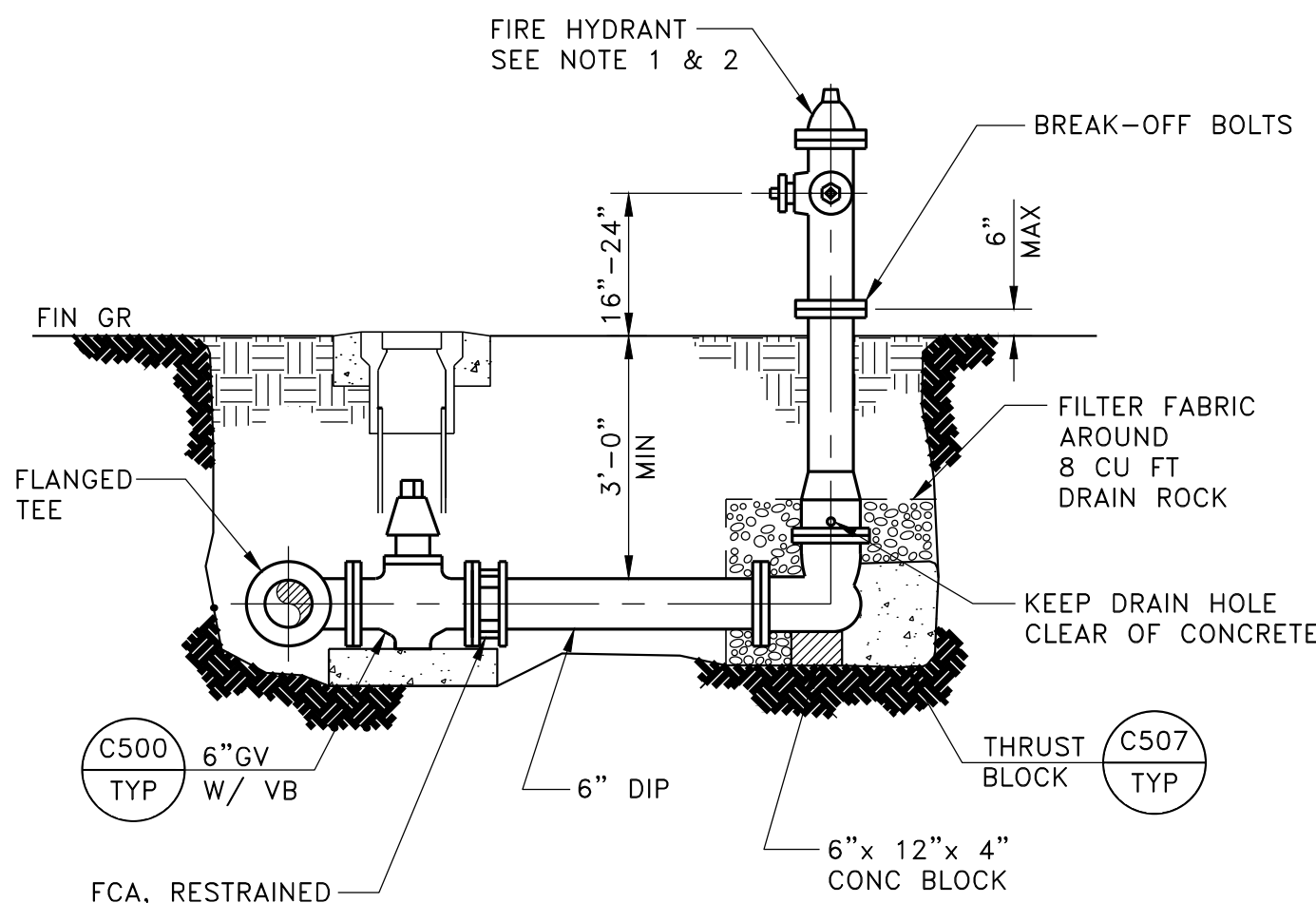
- NOTES:
- TOP OF DROP INLET 1/4" BELOW FINISH GRADE UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
 - DROP INLET MAY BE PRECAST STRUCTURE WITH ENGINEERS APPROVAL.

STANDARD DROP INLET
SCALE: NONE

C120
TYP

BARRIER POST
SCALE: NONE

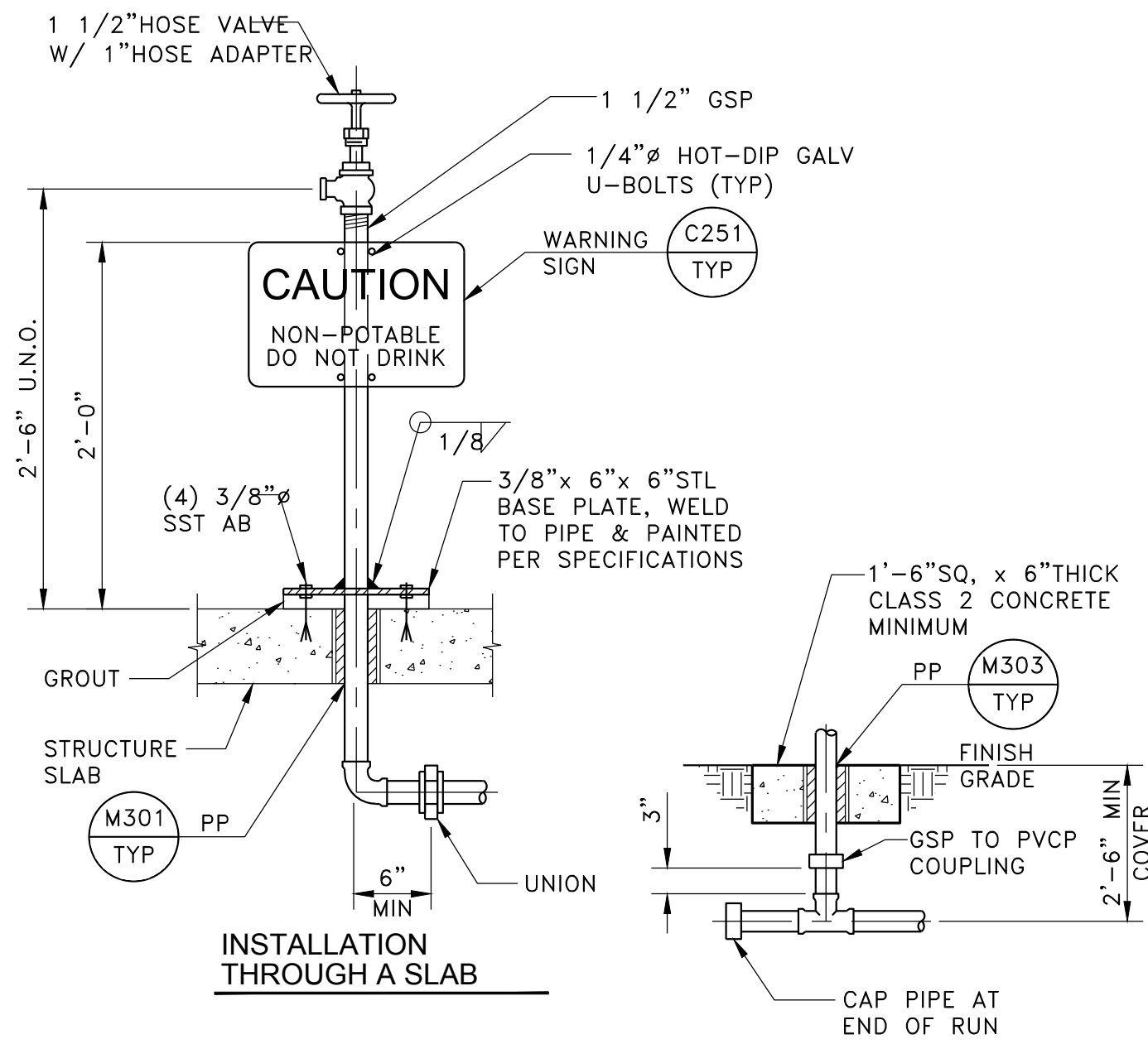
C200
TYP



- NOTES:
- HYDRANT SHALL BE INSTALLED PLUMB AND TRUE, PLACED 2.0' FROM FLOWLINE AT CURB OR V-DITCH TO CENTERLINE OF HYDRANT.
 - THE SAME MODEL AND COLOR HYDRANT SHALL BE USED FOR ALL LOCATIONS OR SHALL BE PER CITY STANDARDS, SEE SPECIFICATIONS.

FIRE HYDRANT
SCALE: NONE

C510
TYP



- NOTES:
- HOSE VALVE AND SIGN SHALL BE MOUNTED TO PERMIT UNOBSTRUCTED VIEWING OF SIGN AND ACCESS TO VALVE.
 - INSTALL HOSE RACK PER TYPICAL DETAIL M630 AT EACH HOSE VALVE.
 - PAINT VALVE & EXPOSED PIPE PER SPECIFICATIONS AFTER INSTALLATION.

1-1/2" HOSE VALVE
NON-POTABLE WATER
SCALE: NONE

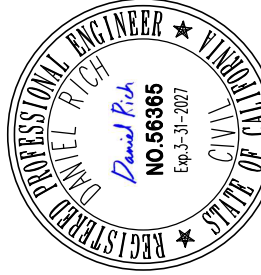
C520
TYP

BAR IS ONE INCH
AT FULL SCALE

APRVL	REVISIONS	DATE

NEXGEN UTILITY MANAGEMENT
4010 LENNANE DRIVE
SACRAMENTO, CA 95834
916.564.8000

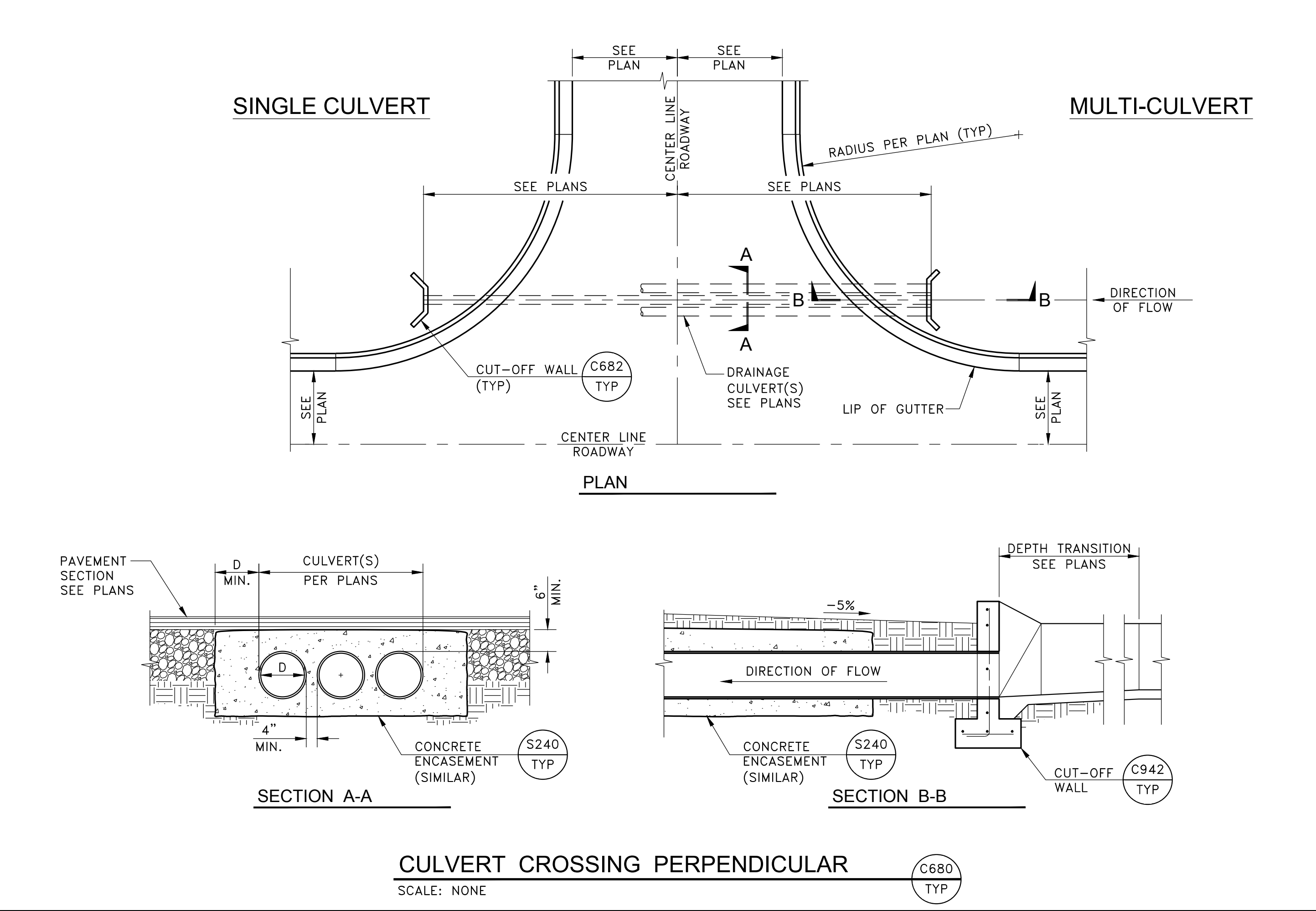
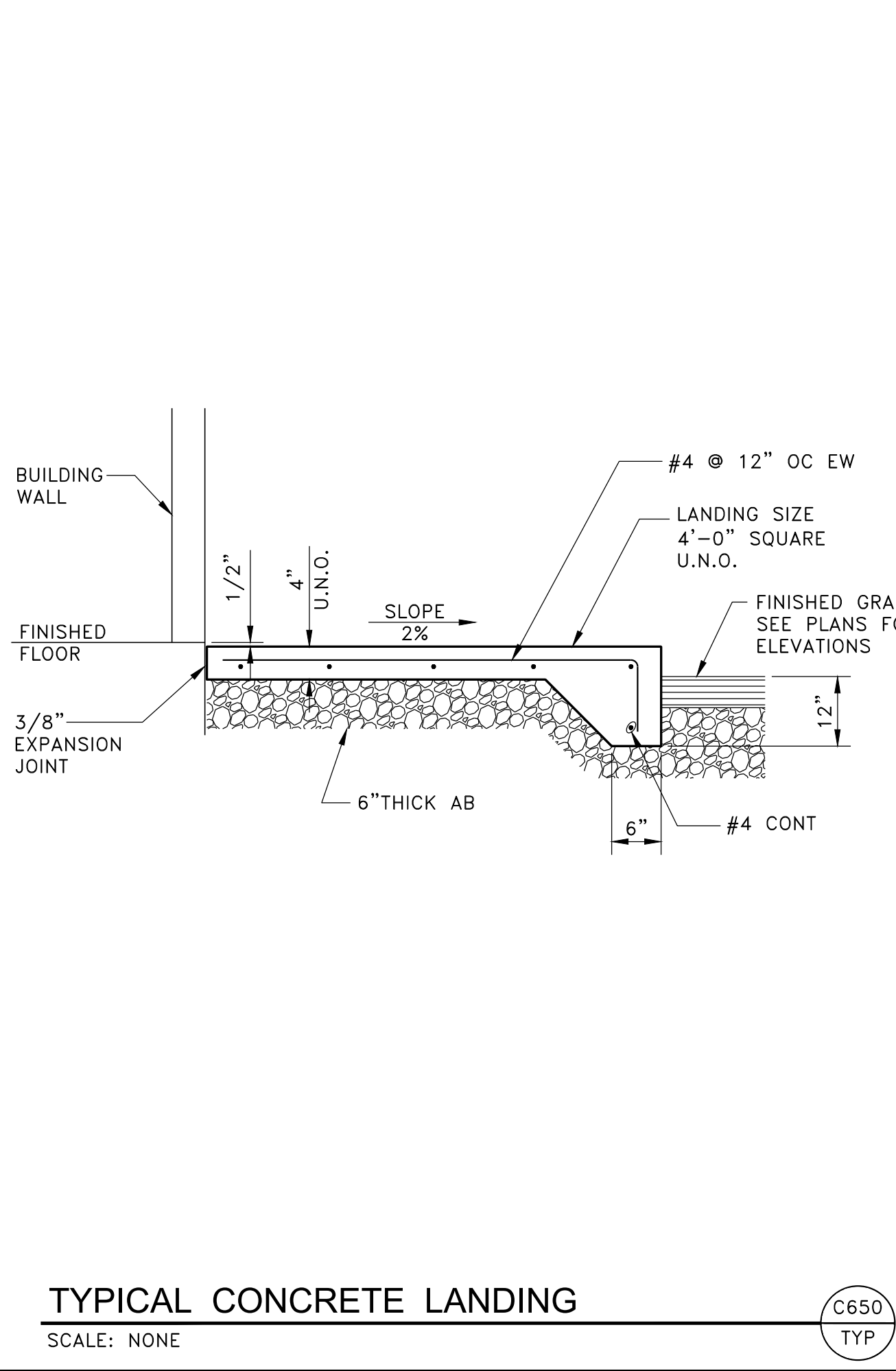
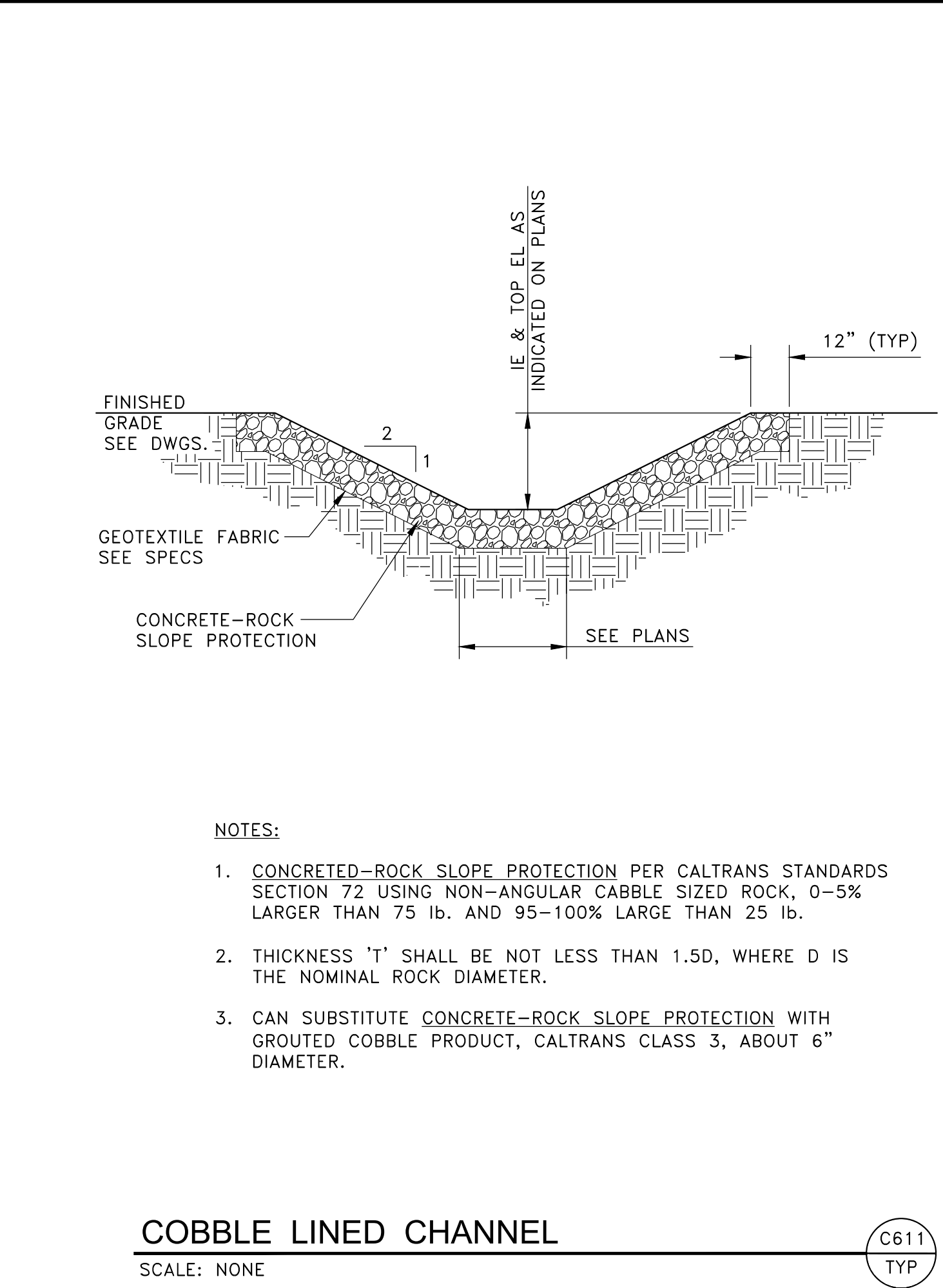
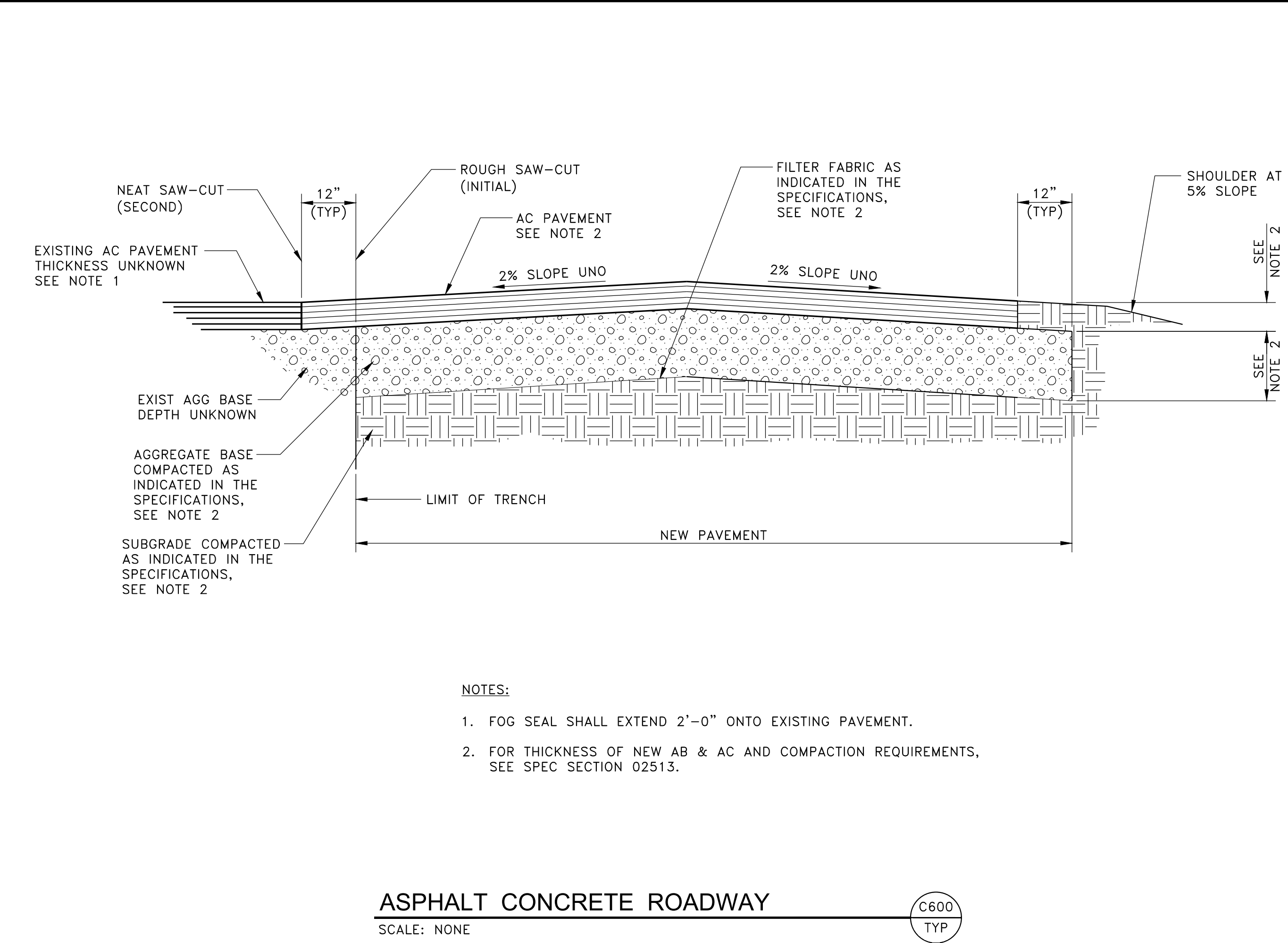
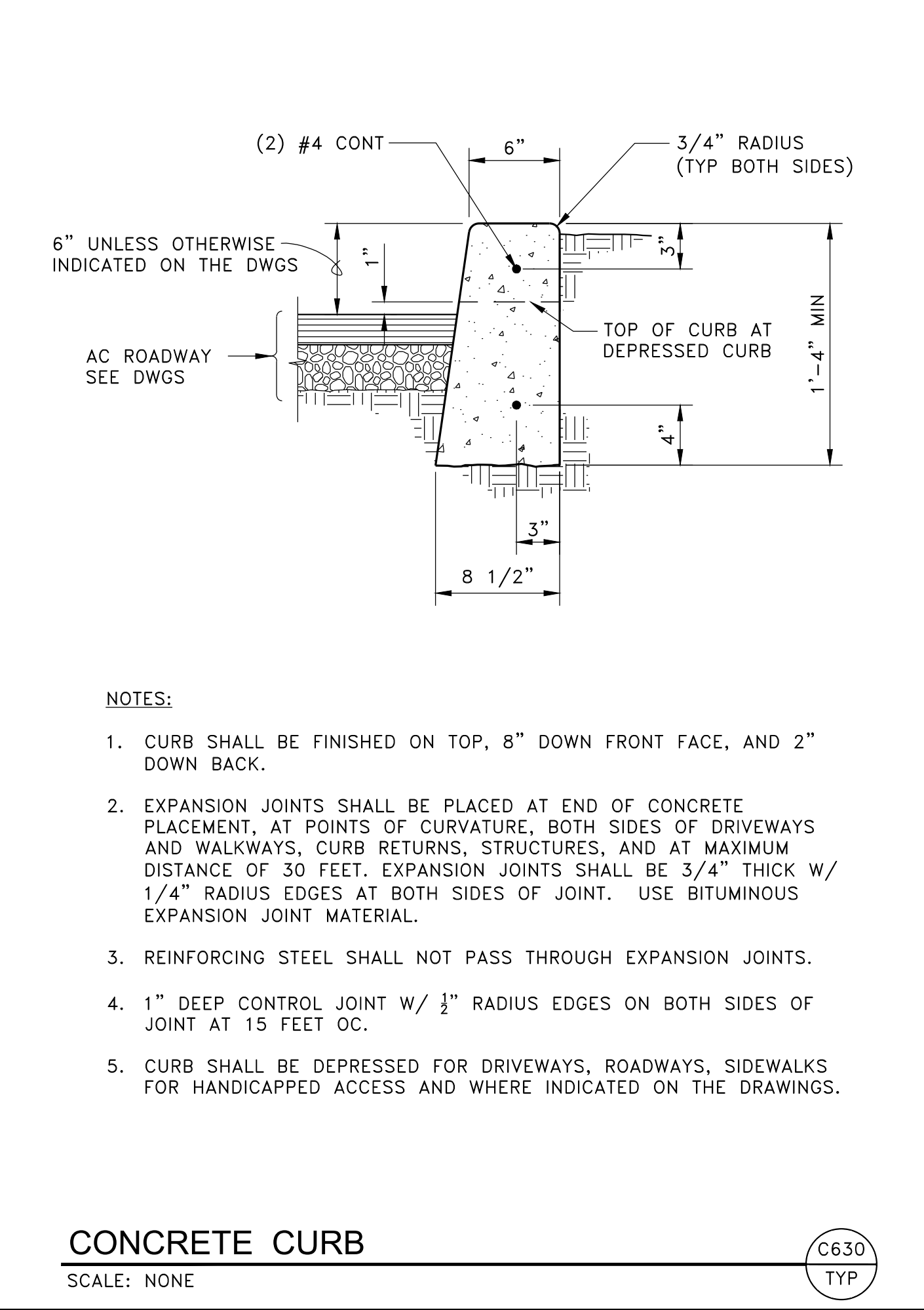
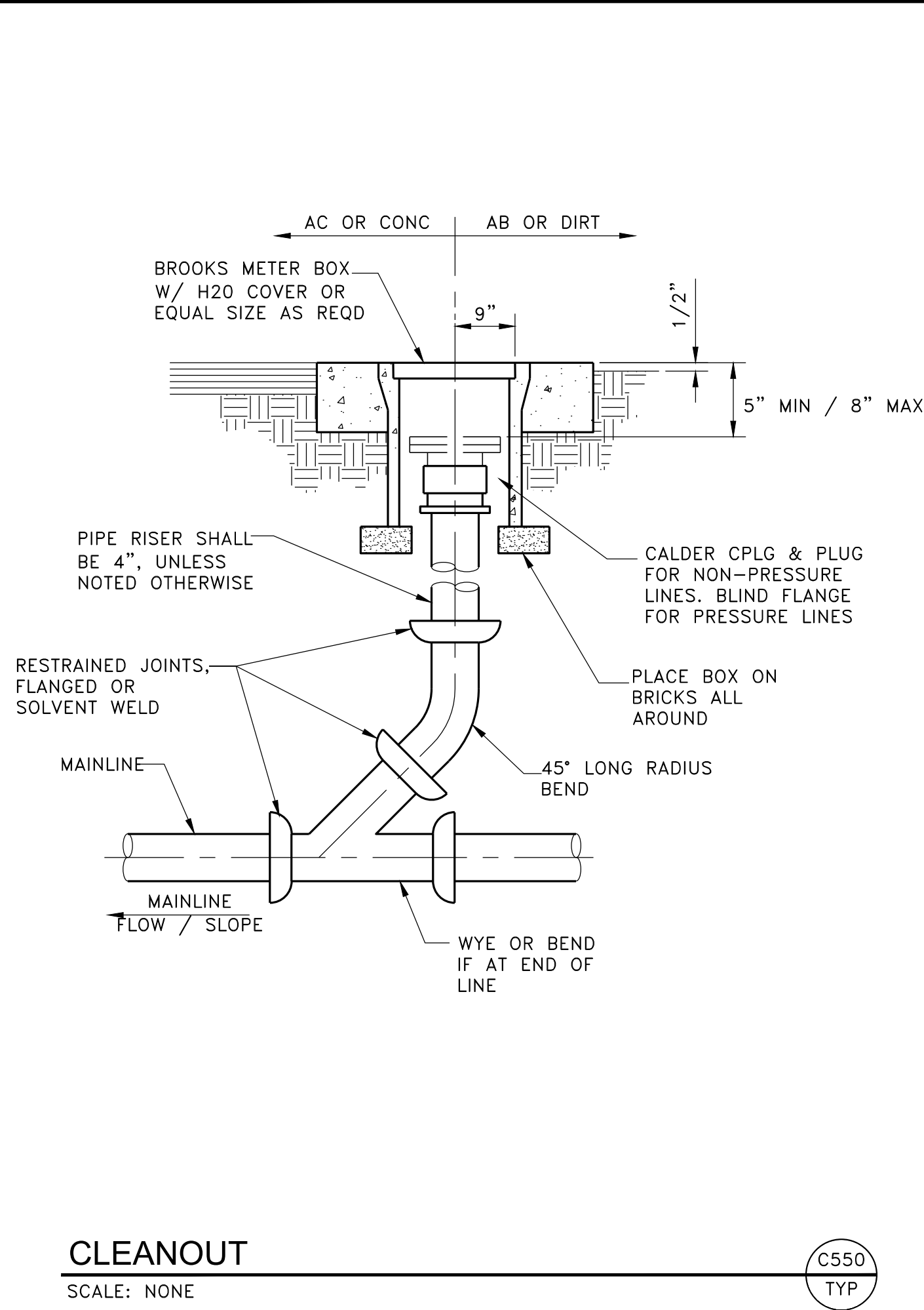
NEXGEN



City of Colusa
2026 WILL S. GREEN AVENUE
PUMP STATION PROJECT
Colusa County, California

TYPICAL CIVIL DETAILS 1

DATE: 21/07/2026
SCALE: NONE
DRAWN BY: JA
DESIGNED BY: JD
CHECKED BY: JD
JOB NO: 63.102.C
DRAWING NO: C001
5 OF 45 SHEETS



APRVL			
DATE	REVISIONS	DATE	REVISIONS

NEXGEN UTILITY MANAGEMENT
4010 LENNANE DRIVE
SACRAMENTO, CA 95834
916.564.8000

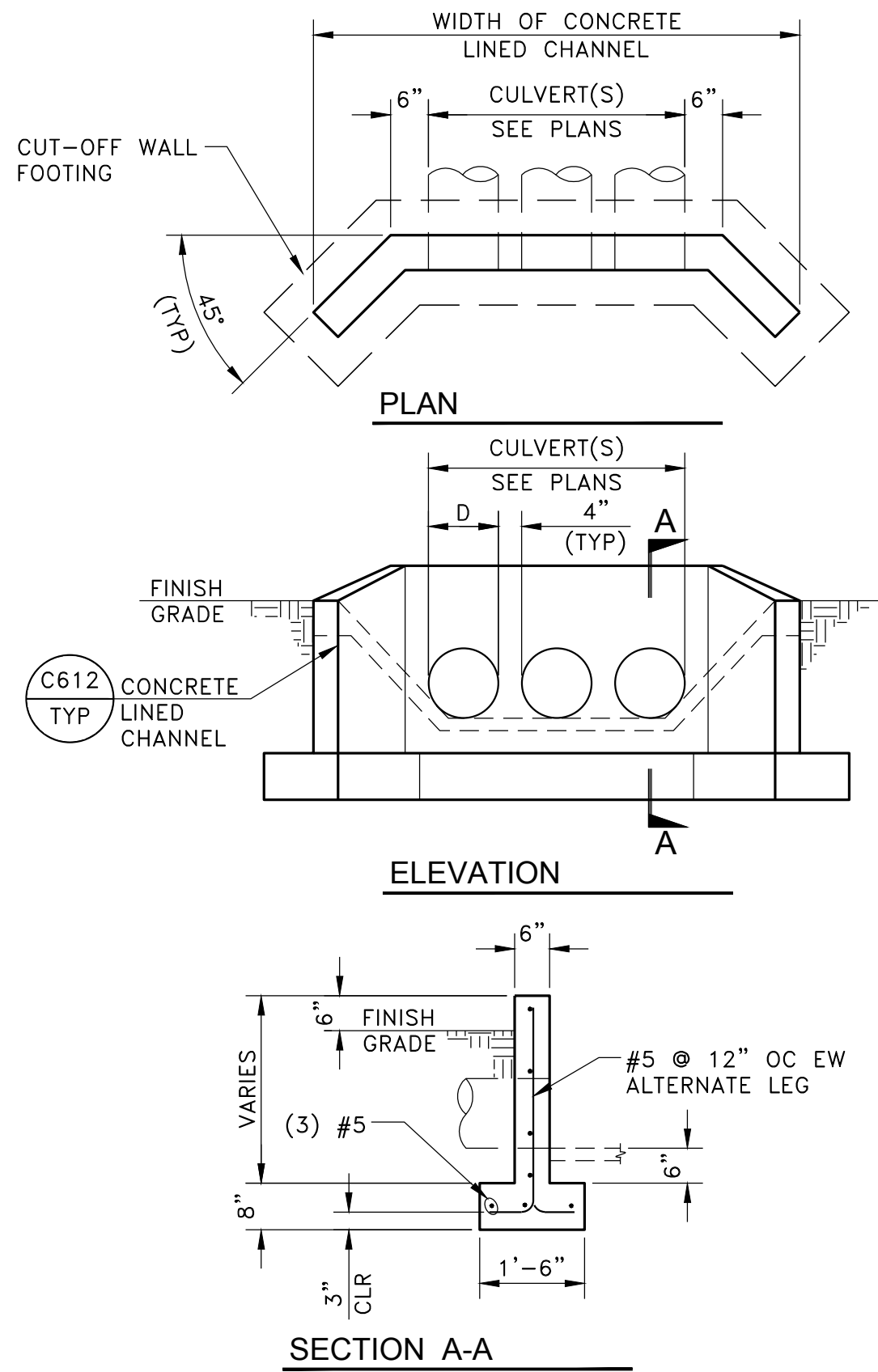
NEXGEN

Professional Engineer
California
No. 88885
Exp. 12-31-2027

City of Colusa
2026 WILL S. GREEN AVENUE
PUMP STATION PROJECT
Colusa County, California

TYPICAL CIVIL DETAILS 2

DATE: 21/07/2026
SCALE: NONE
DRAWN BY: JA
DESIGNED BY: JD
CHECKED BY: JD
JOB NO: 63.102.C
DRAWING NO: C002
6 OF 45 SHEETS



CULVERT CUT-OFF WALL

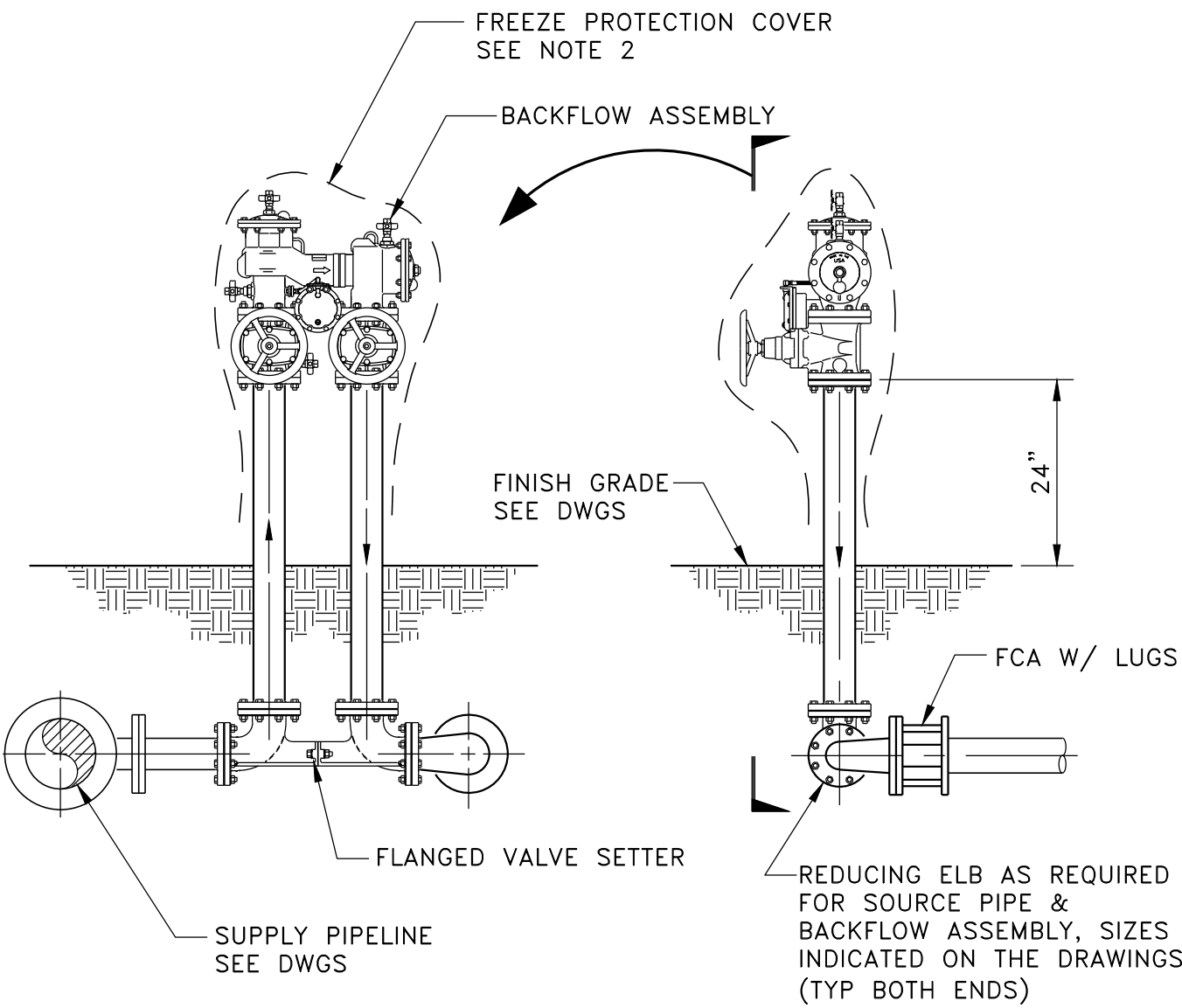
SCALE: NONE

C682
TYP

BACKFLOW PREVENTION VALVE

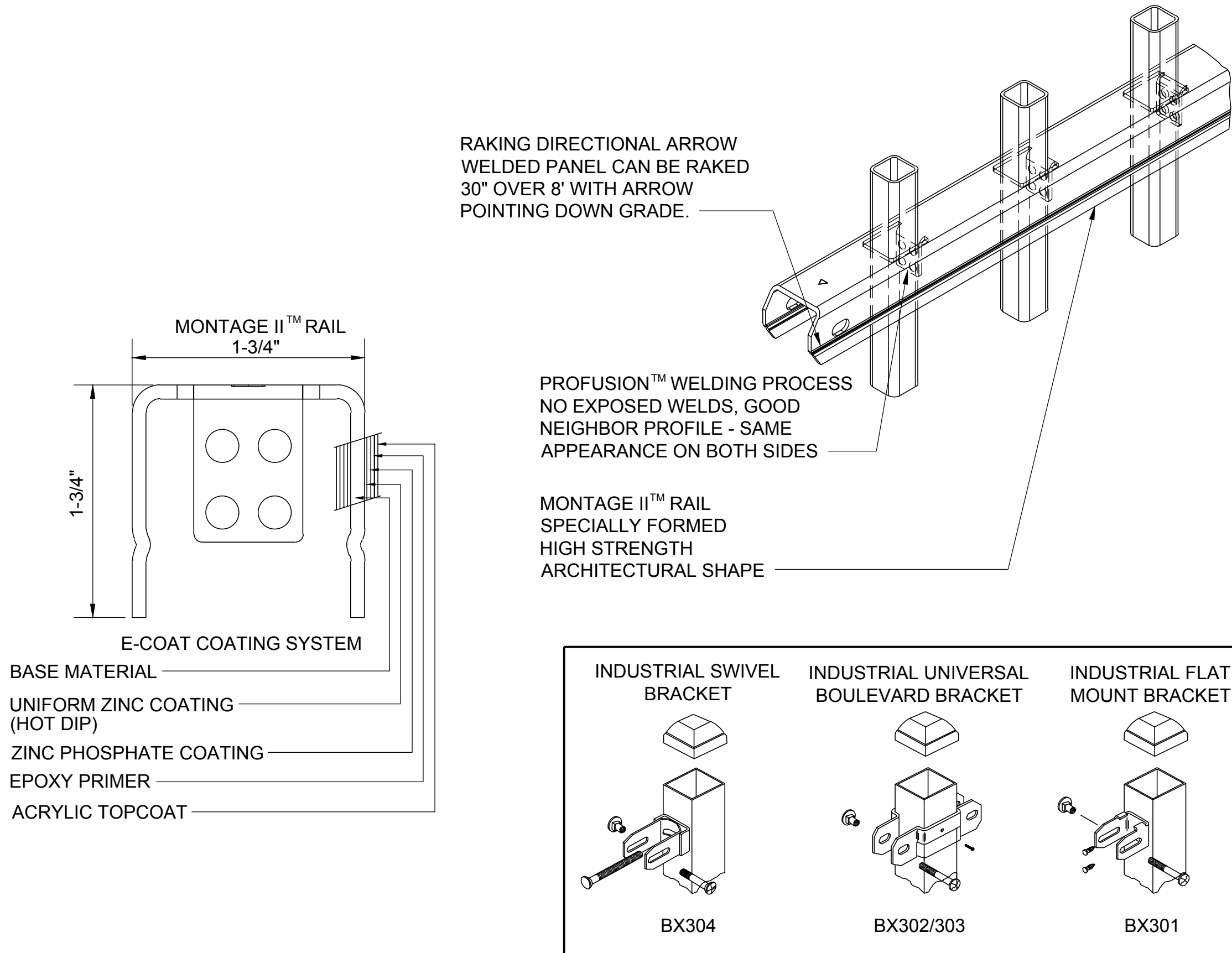
SCALE: NONE

C530
TYP



NOTES:

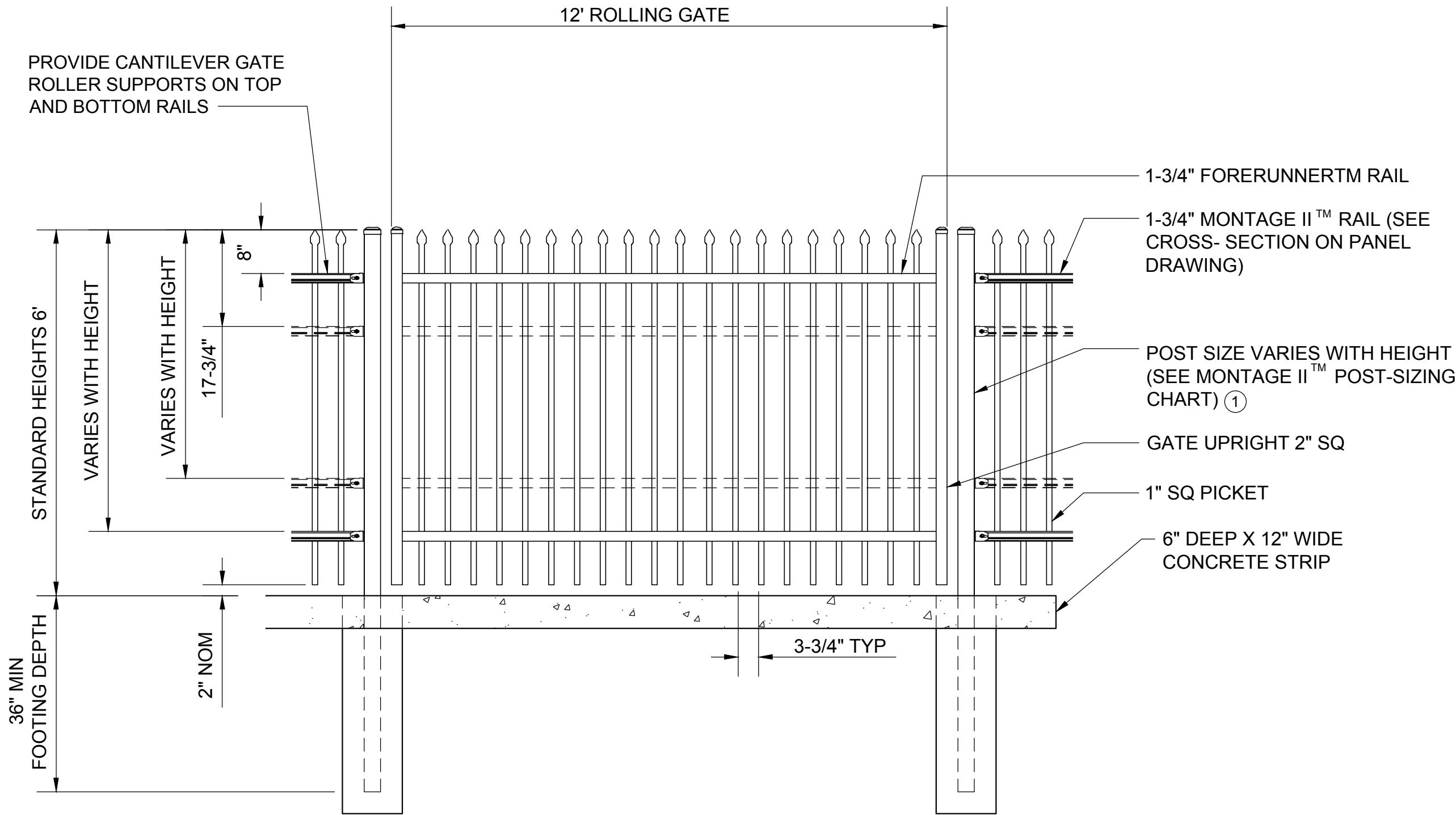
- CERTIFICATION OF PROPER INSTALLATION AND OPERATION FROM A CERTIFIED TESTER WILL BE REQUIRED BEFORE ACCEPTANCE.
- CONTRACTOR SHALL PROVIDE A ZIPPERED FIBERGLASS COVER FOR FREEZE PROTECTION.
- PROVIDE BARRIER POSTS PER TYPICAL DETAIL C200 AS DIRECTED BY THE ENGINEER OR AS SHOW ON THE DRAWINGS.



STEEL FENCE DETAIL

SCALE: NONE

C212
TYP



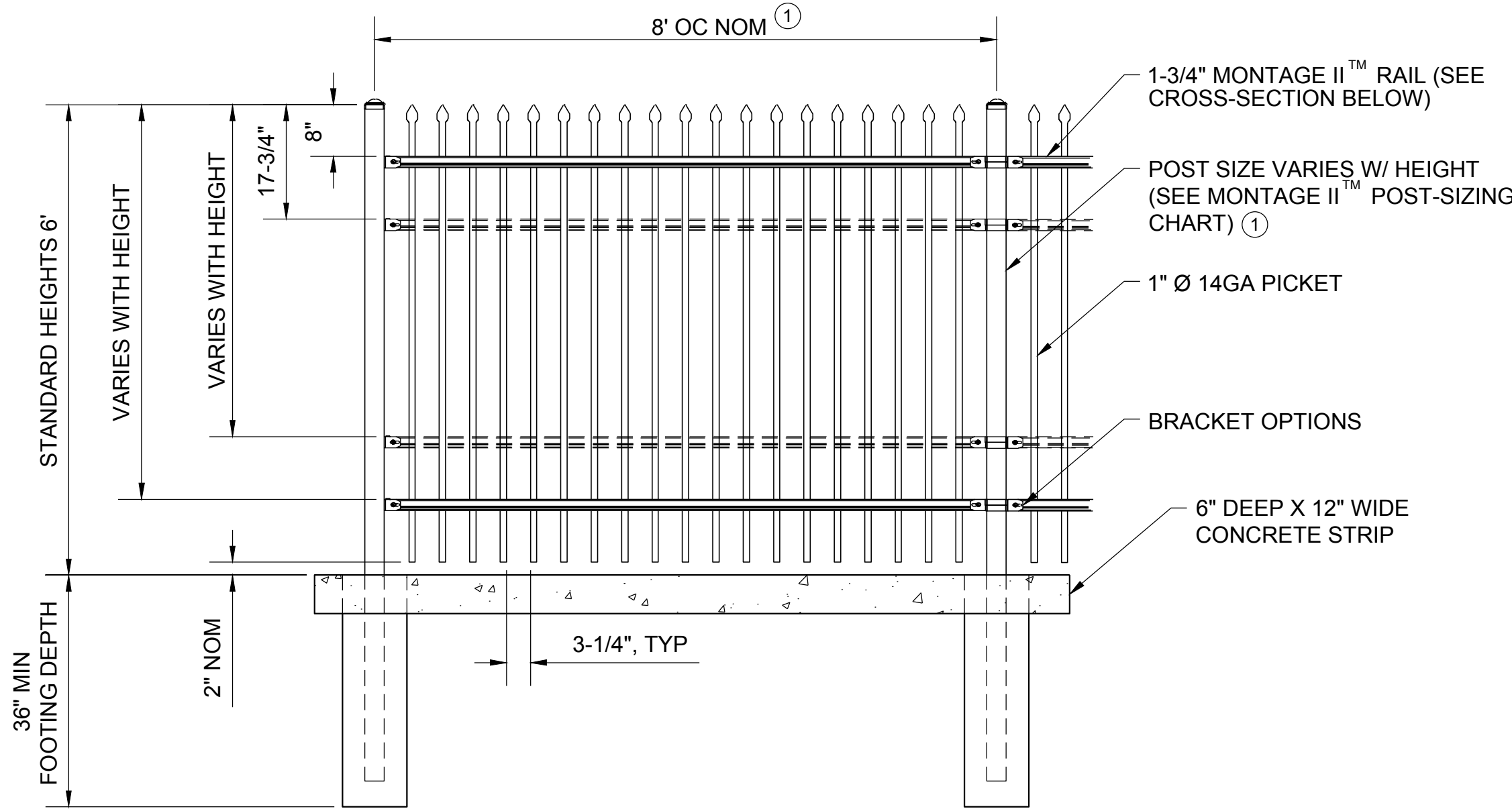
NOTES:

- POST SIZE DEPENDS ON FENCE HEIGHT, WEIGHT AND WIND LOADS. SEE MONTAGE II™ SPECIFICATIONS FOR POST SIZING CHART.

ROLLING GATE DETAIL

SCALE: NONE

C213
TYP



NOTES:

- POST SIZE DEPENDS ON FENCE HEIGHT AND WIND LOADS. SEE MONTAGE II™ SPECIFICATIONS FOR POST SIZING CHART AND SETTING DIMENSIONS.

BAR IS ONE INCH
AT FULL SCALE

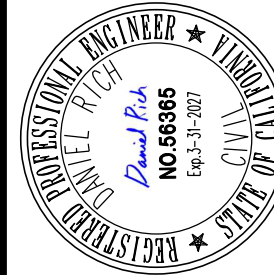
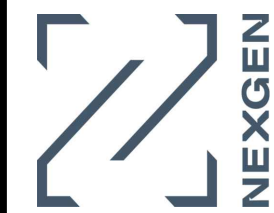
APRVL

REVISIONS

DATE

NEXGEN UTILITY MANAGEMENT

4010 LENNANE DRIVE
SACRAMENTO, CA 95834
916.564.8000



City of Colusa
2026 WILL S. GREEN AVENUE
PUMP STATION PROJECT
Colusa County, California

TYPICAL CIVIL DETAILS 3

DATE: 21/07/2026

SCALE: NONE

DRAWN BY: JA

DESIGNED BY: JD

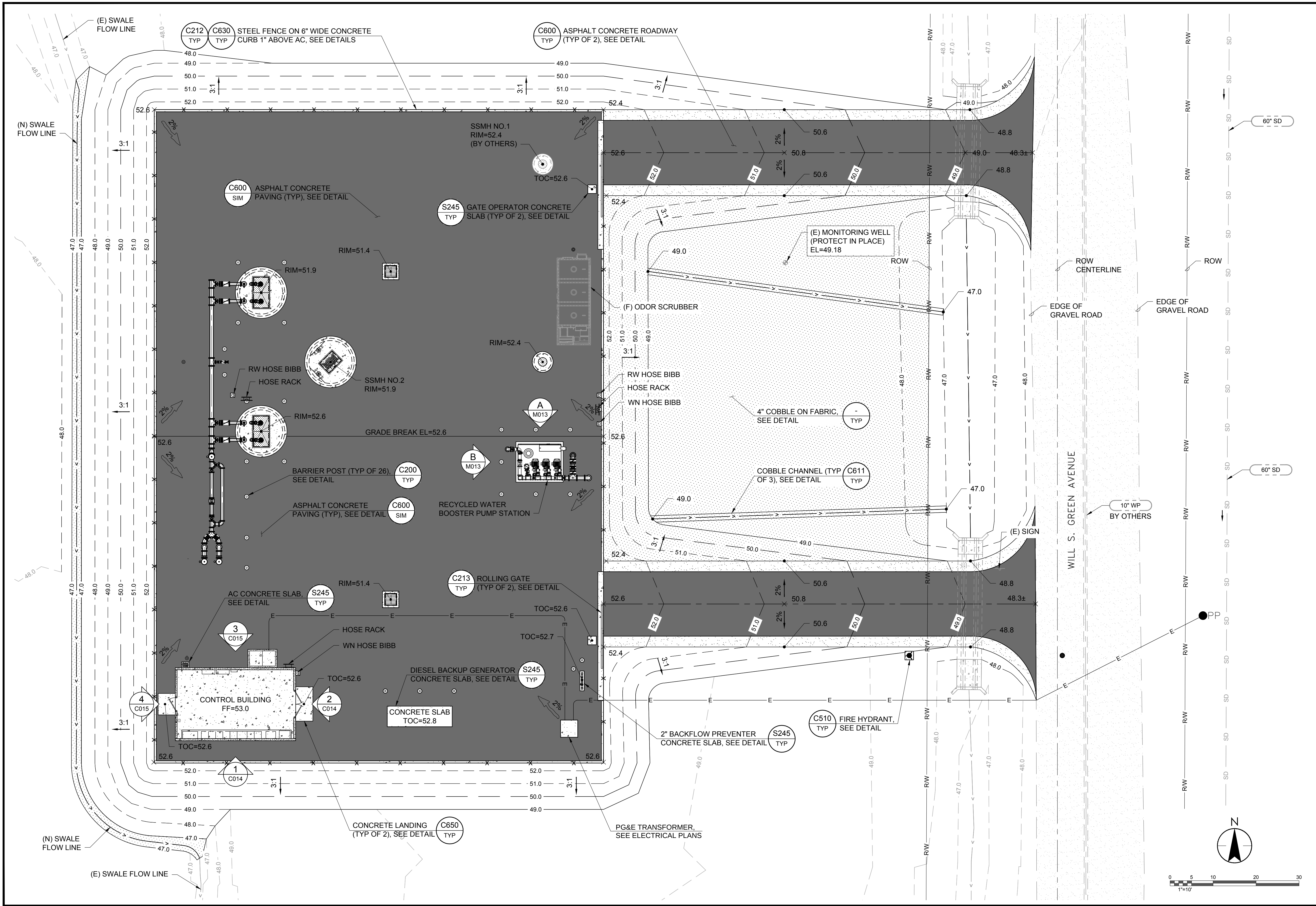
CHECKED BY: JD

JOB NO: 63.102.C

DRAWING NO:

C003

7 OF 45 SHEETS

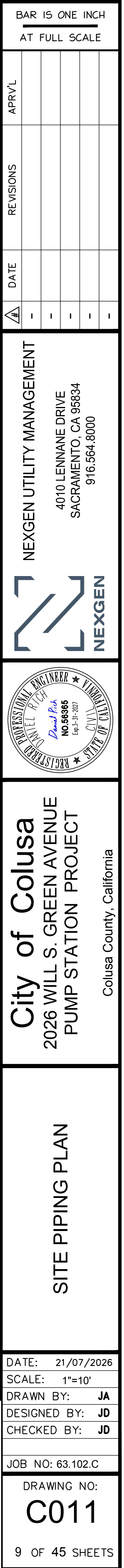


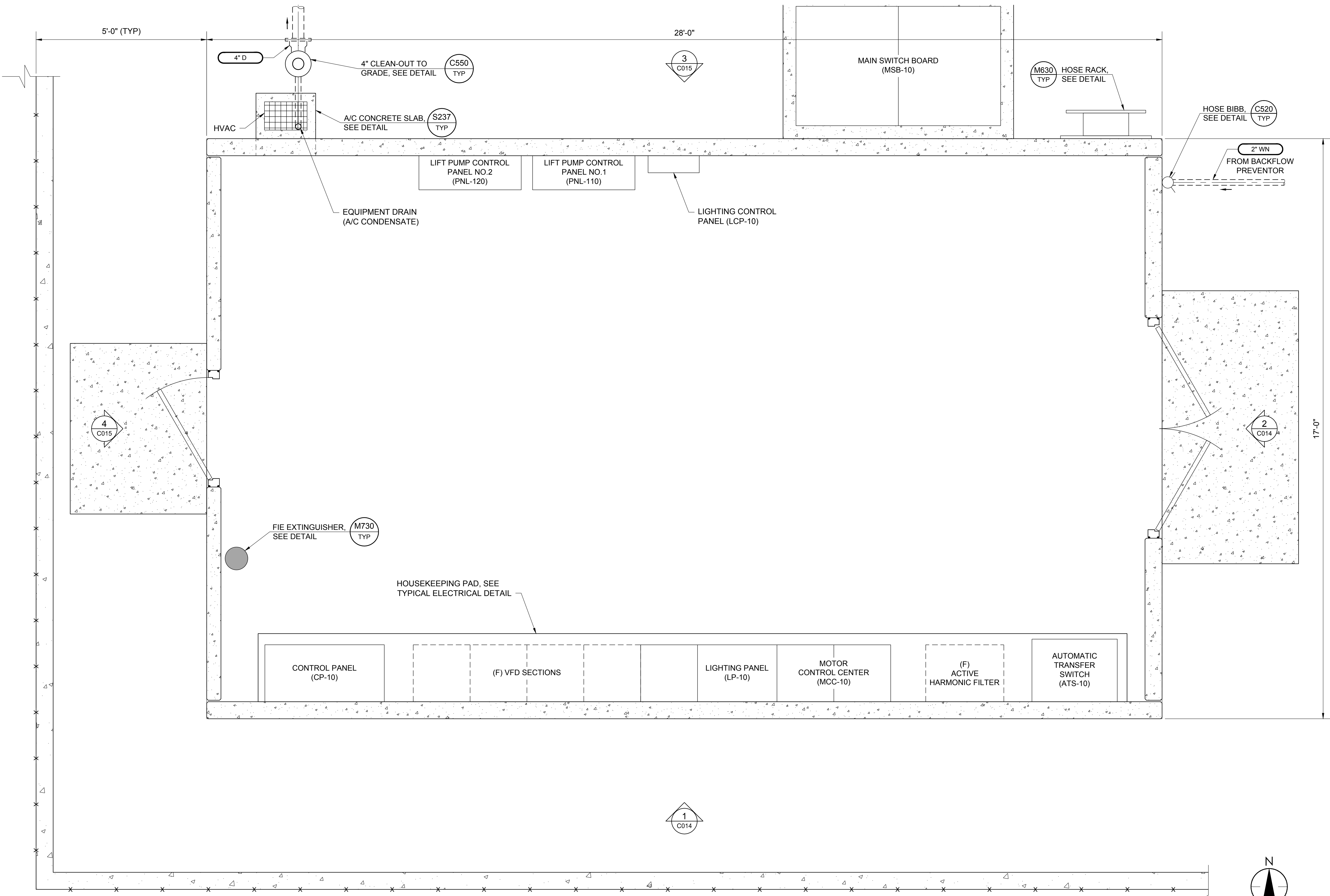
BAR IS ONE INCH AT FULL SCALE			
APR'L	REVISIONS	DATE	

NEXGEN UTILITY MANAGEMENT	
4010 LENNANE DRIVE SACRAMENTO, CA 95834 916.564.8000	

City of Colusa	
2026 WILL S. GREEN AVENUE PUMP STATION PROJECT	

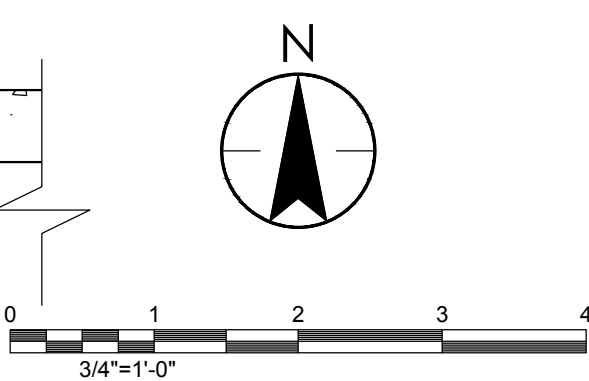
SITING, PAVING AND DRAINAGE PLAN	
DATE: 21/07/2026 SCALE: 1"=10' DRAWN BY: JA DESIGNED BY: JD CHECKED BY: JD	
JOB NO: 63.102.C	
DRAWING NO: C010	
8 OF 45 SHEETS	





PLAN

SCALE: 3/4"=1'-0"



BAR IS ONE INCH
AT FULL SCALE

APR'L	REVISIONS	DATE

NEXGEN UTILITY MANAGEMENT

4010 LENNANE DRIVE
SACRAMENTO, CA 95834
916.564.8000

PROFESSIONAL ENGINEER

NO. 8885

EXP. 8-10-27

STATE OF CALIFORNIA

City of Colusa

2026 WILL S. GREEN AVENUE

PUMP STATION PROJECT

Colusa County, California

CONTROL BUILDING PLAN

DATE: 21/07/2026

SCALE: 3/4"=1'-0"

DRAWN BY: JA

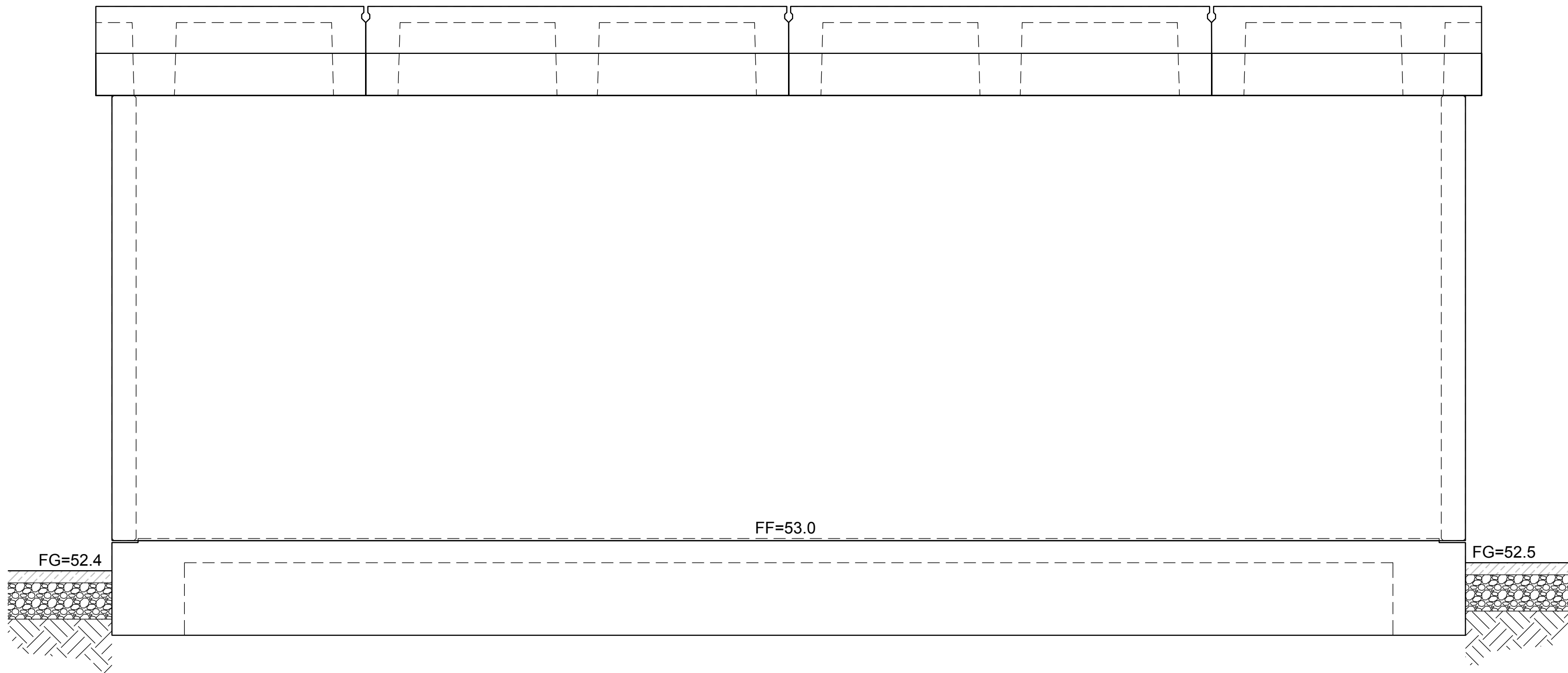
DESIGNED BY: JD

CHECKED BY: JD

JOB NO: 63.102.C

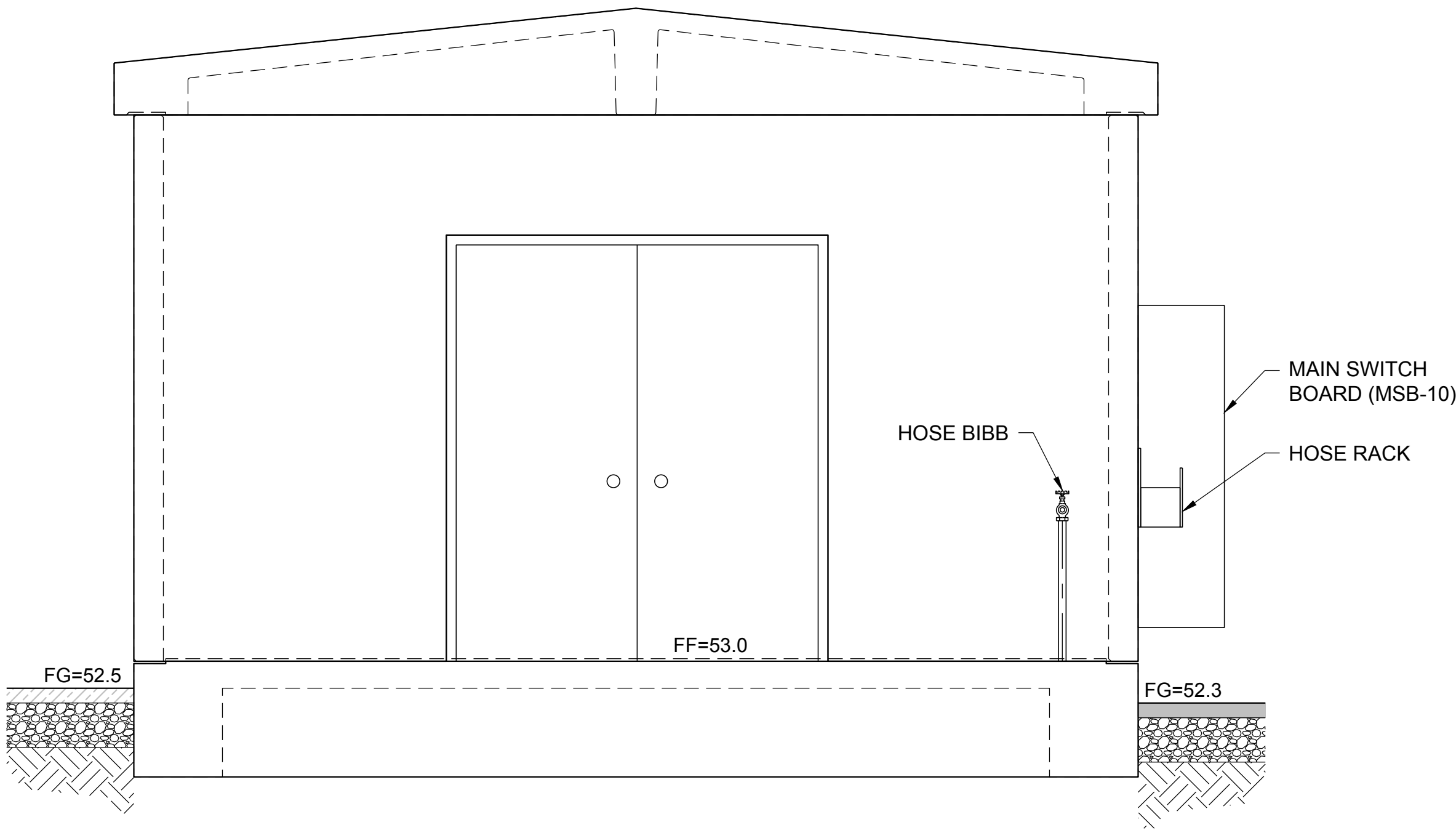
DRAWING NO:
C013

11 OF 45 SHEETS



ELEVATION
SCALE: 1/2"=1'-0"

1
C010



ELEVATION
SCALE: 1/2"=1'-0"

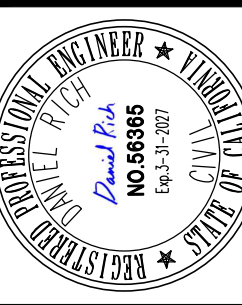
2
M200

BAR IS ONE INCH
AT FULL SCALE

DATE	REVISIONS	APR'L
-	-	-
-	-	-
-	-	-
-	-	-

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SACRAMENTO, CA 95834
916.564.8000

NEXGEN



City of Colusa
2026 WILL S. GREEN AVENUE
PUMP STATION PROJECT

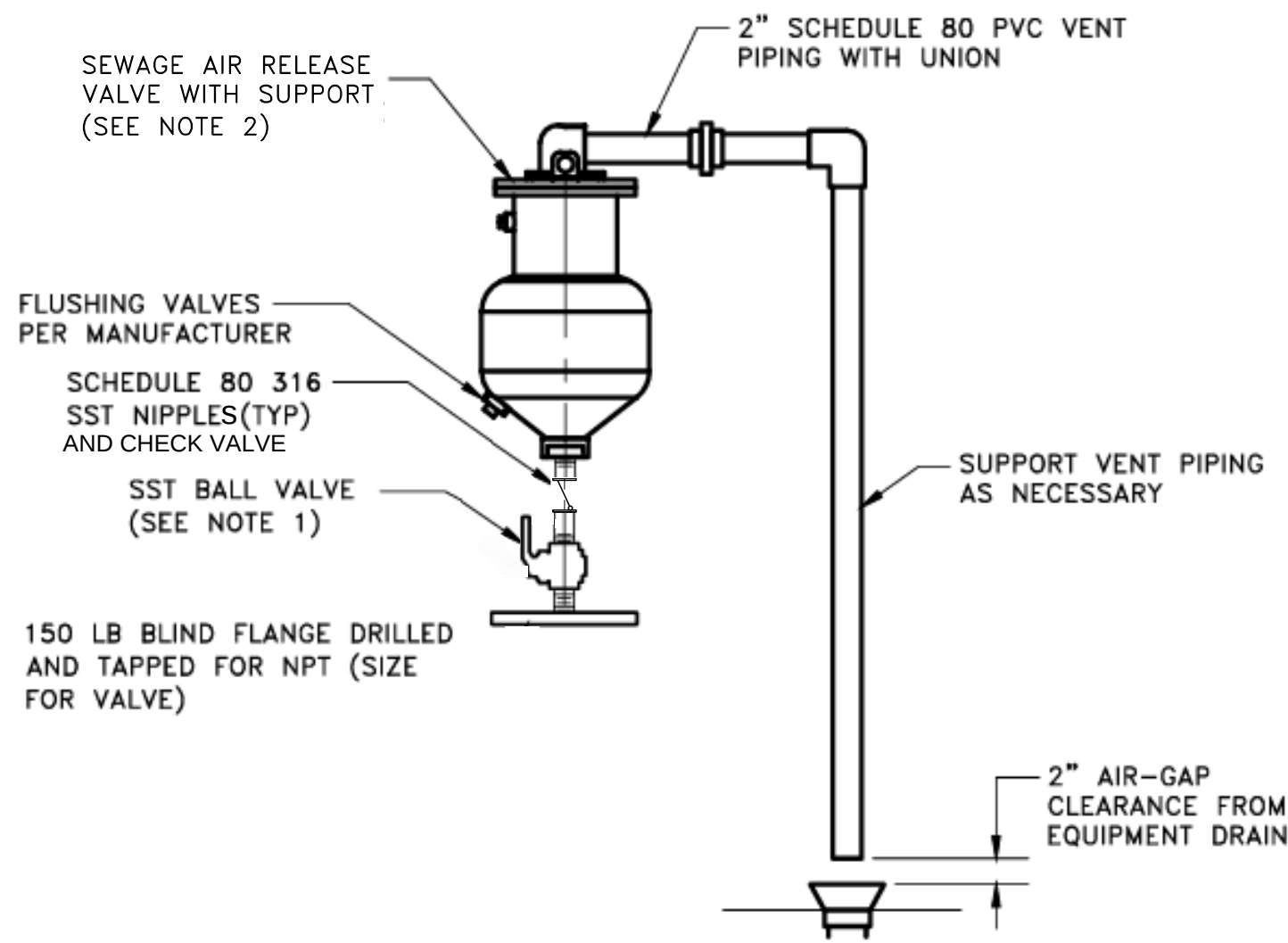
Colusa County, California

**CONTROL BUILDING
ELEVATIONS 1**

DATE:	21/07/2026
SCALE:	1/2"=1'-0"
DRAWN BY:	JA
DESIGNED BY:	JD
CHECKED BY:	JD

JOB NO: 63.102.C

DRAWING NO:
C014



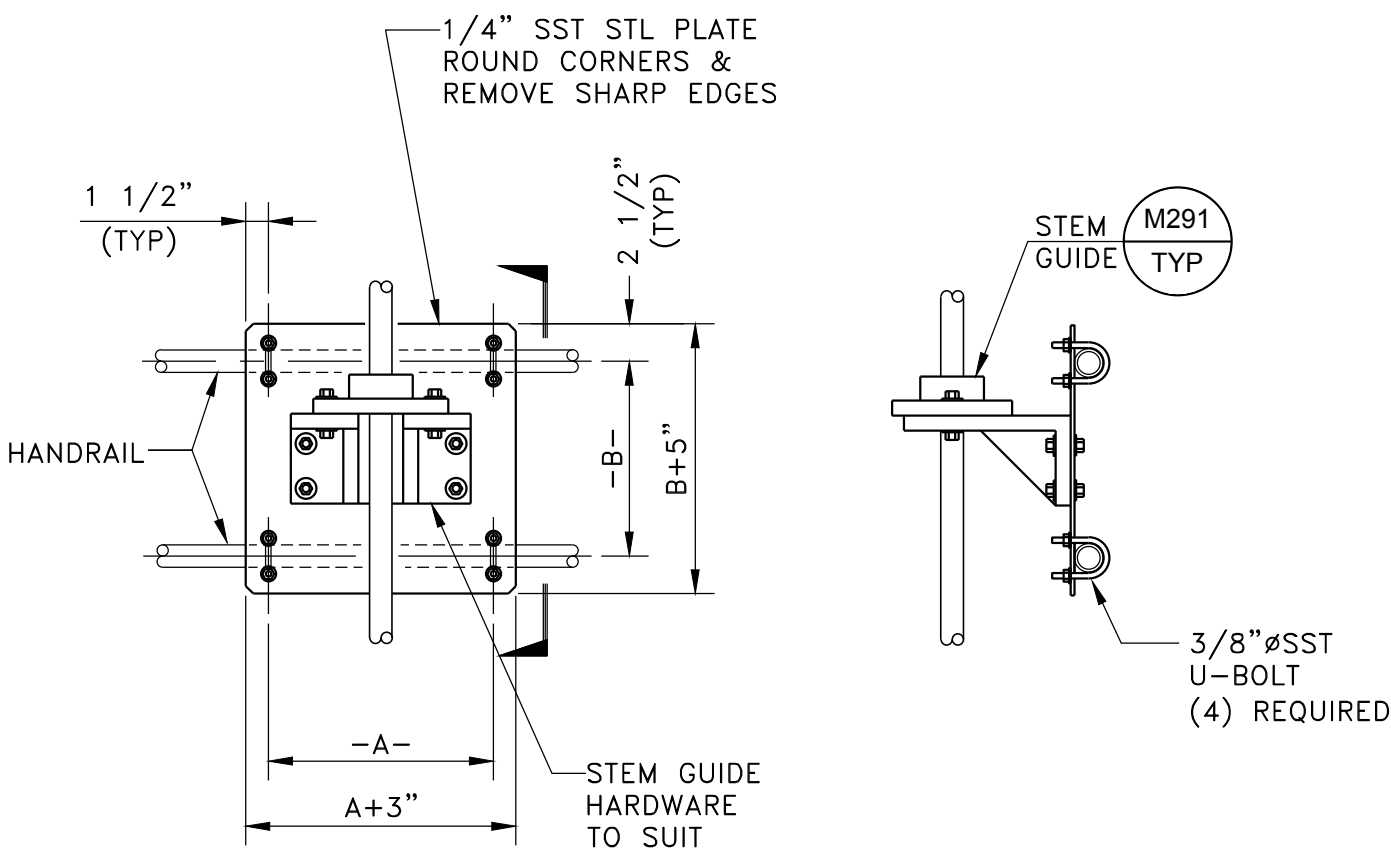
NOTES:

1. FLANGED OUTLET AND BALL VALVE SHOULD BE SUITABLE FOR 150 PSI PRESSURE MINIMUM. INCREASE PRESSURE RATING AS REQ'D TO MATCH PIPING SYSTEM TEST PRESSURE.
2. VALVE SIZE PER SPECIFICATIONS OR AS INDICATED ON DRAWINGS. STAINLESS STEEL APCO MODEL ASU WITH BACKFLUSH ATTACHMENT VALVES.

SEWAGE AIR-RELEASE VALVE

SCALE: NONE

M112
TYP



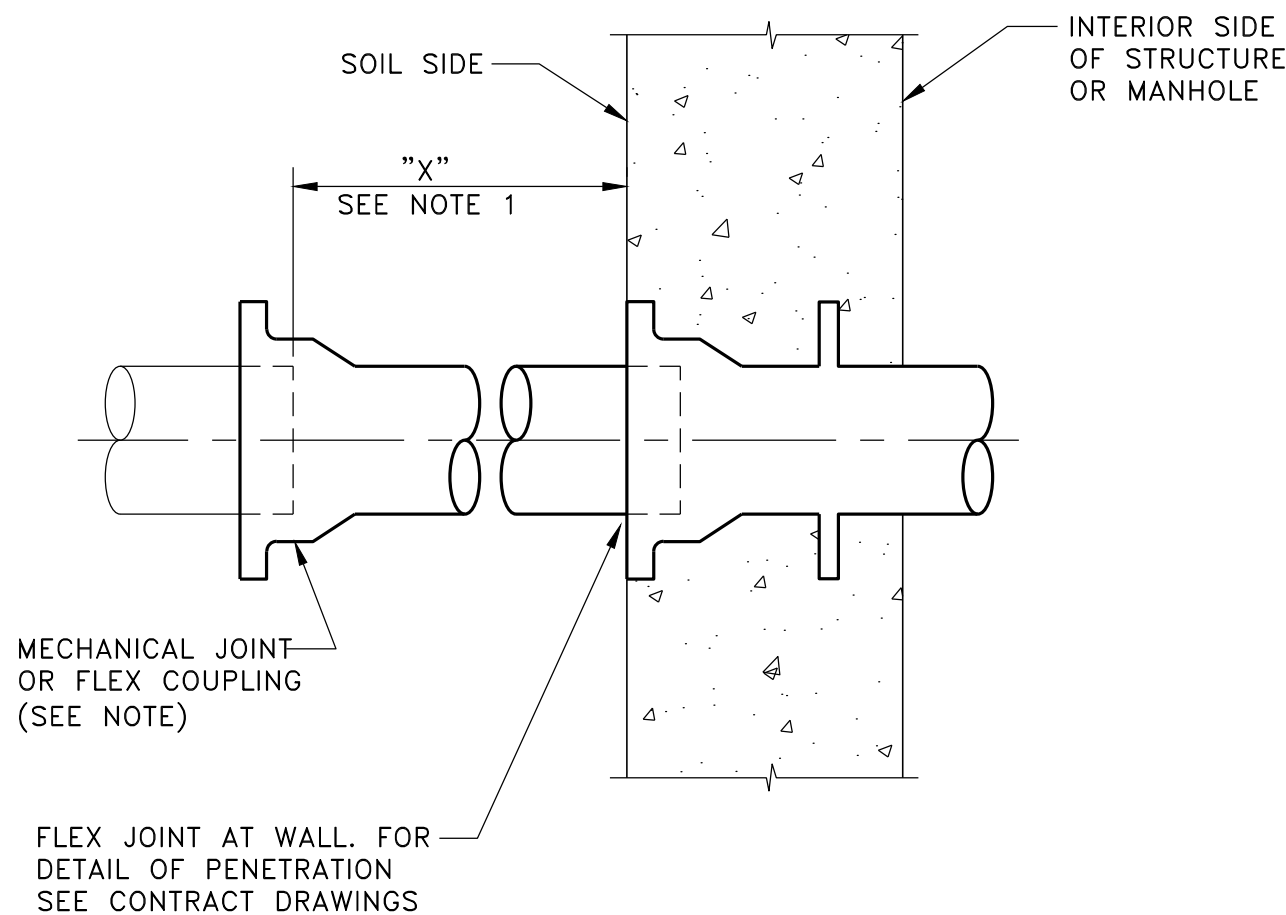
ELEVATION

SECTION

RAIL MOUNTED STEM GUIDE

SCALE: NONE

M292
TYP



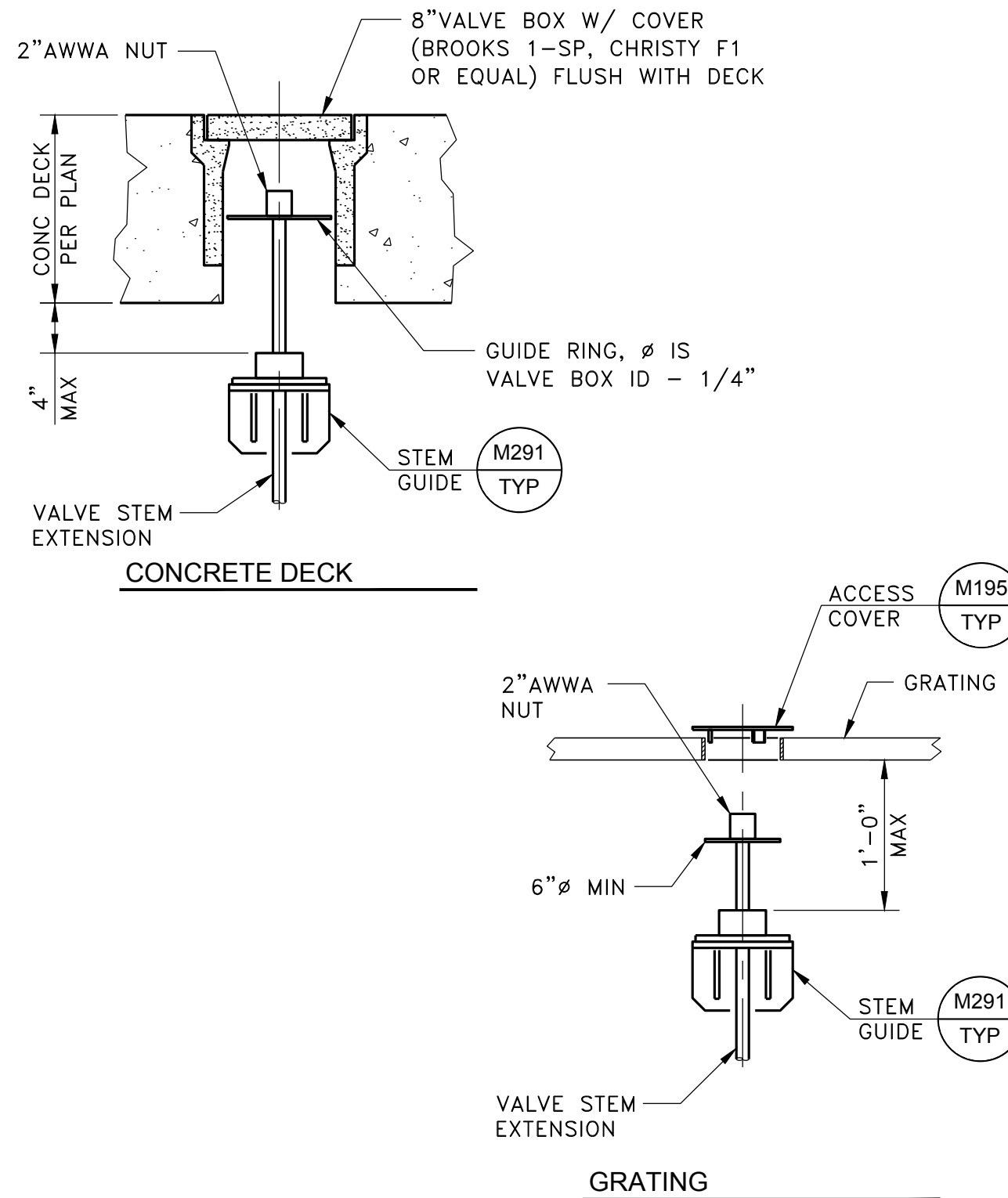
NOTES:

1. "X" = 18 INCHES OF PIPE OR INSIDE DIAMETER, WHICHEVER IS GREATER.

TYPICAL PIPING CONNECTION
AT MANHOLE OR STRUCTURE

SCALE: NONE

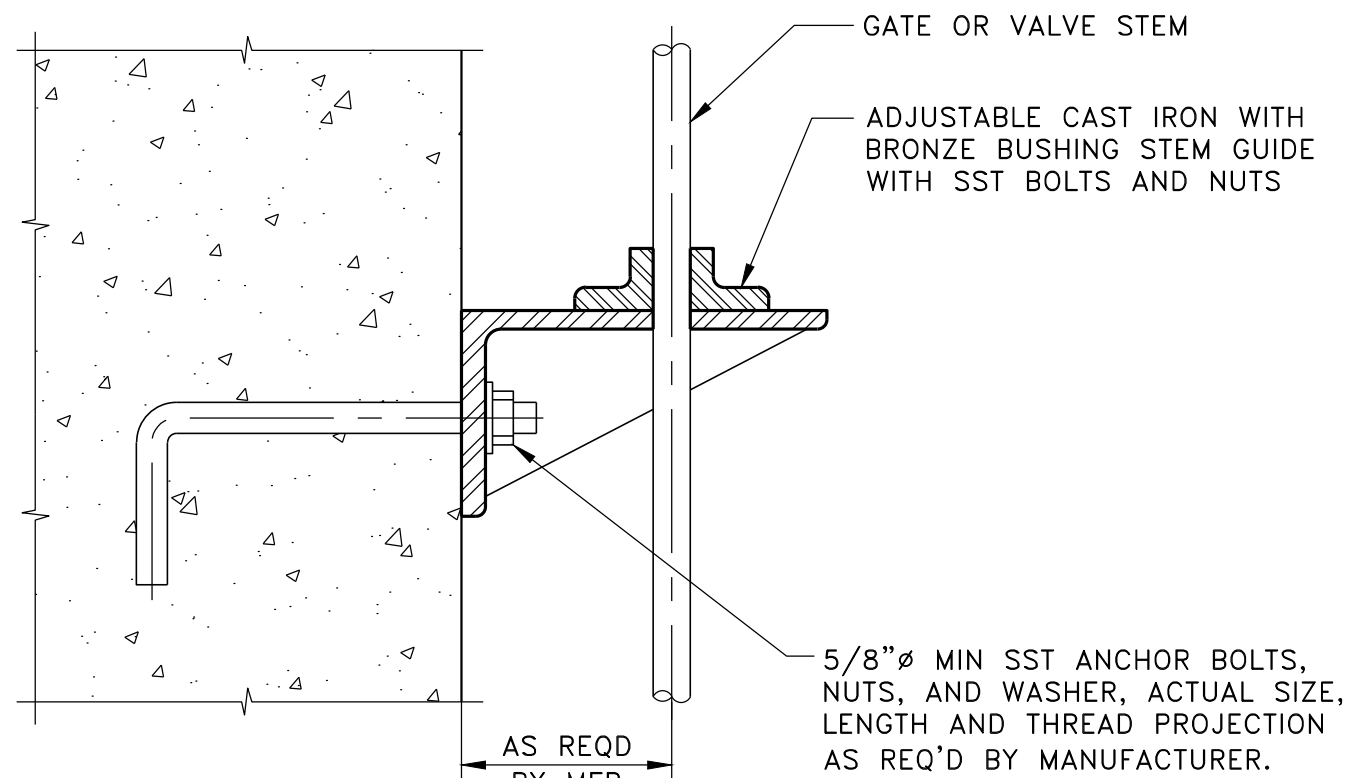
M300
TYP



2" AWWA NUT W/ ACCESS COVER

SCALE: NONE

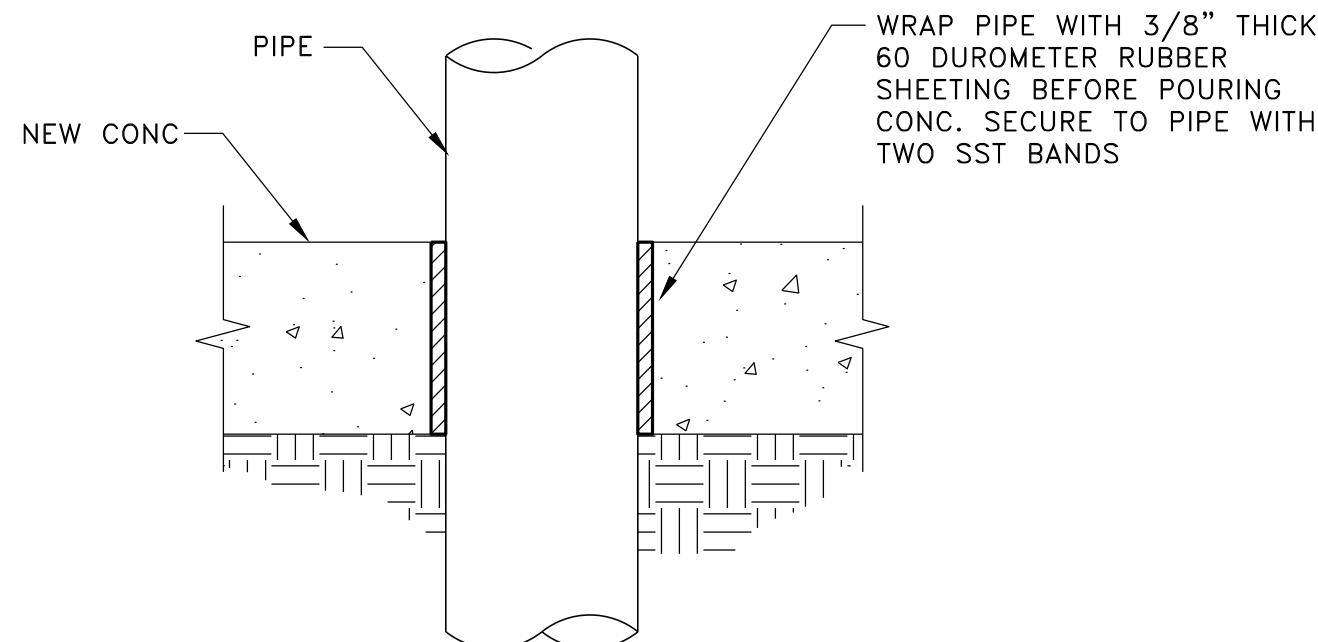
M192
TYP



STEM GUIDE

SCALE: NONE

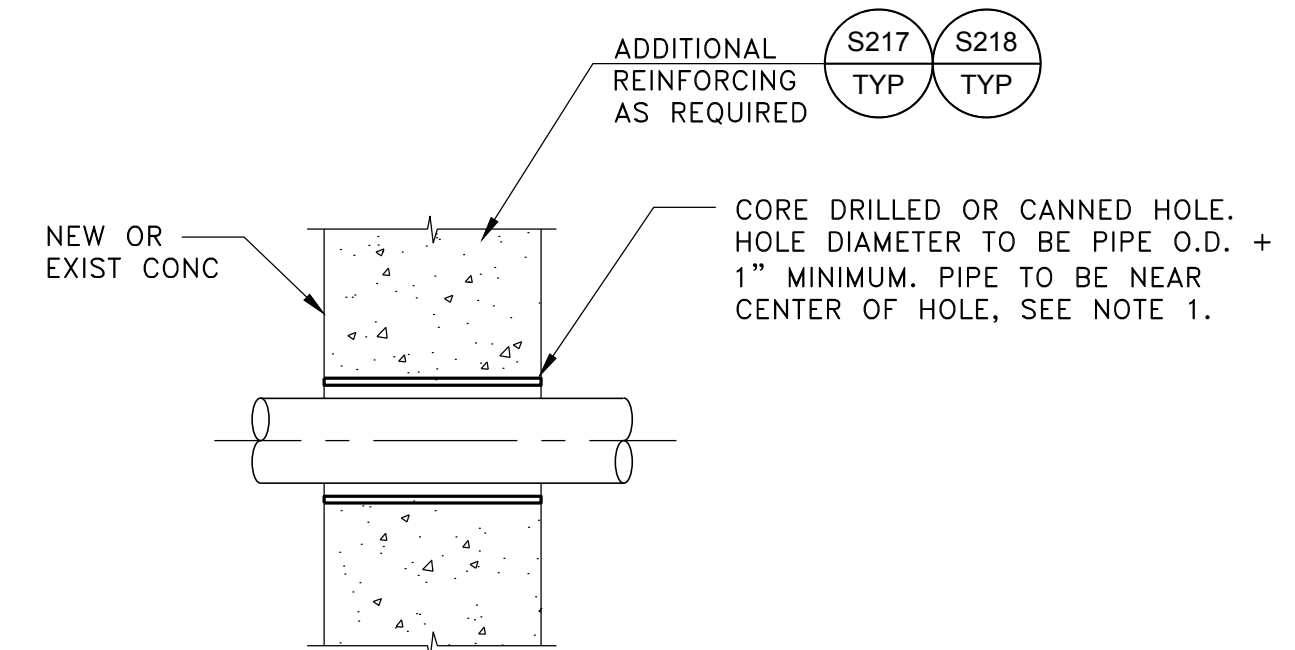
M291
TYP



SLAB ON GRADE PIPE PENETRATION

SCALE: NONE

M303
TYP



NOTE:

INSTALL CLOSURE PLATE OR BUG SCREEN IF CALLED FOR ON THE DRAWINGS.

ABOVE GRADE OR WATER LEVEL
PIPE PENETRATION

SCALE: NONE

M314
TYP

BAR IS ONE INCH
AT FULL SCALE

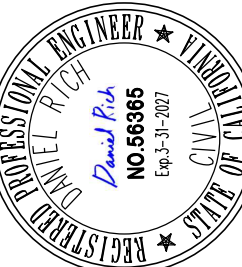
APR'L

REVISIONS

DATE

NEXGEN UTILITY MANAGEMENT

4010 LENNANE DRIVE
SACRAMENTO, CA 95834
916.564.8000



City of Colusa
2026 WILL S. GREEN AVENUE
PUMP STATION PROJECT
Colusa County, California

TYPICAL MECHANICAL
DETAILS 1

DATE: 21/07/2026

SCALE: NONE

DRAWN BY: JA

DESIGNED BY: JD

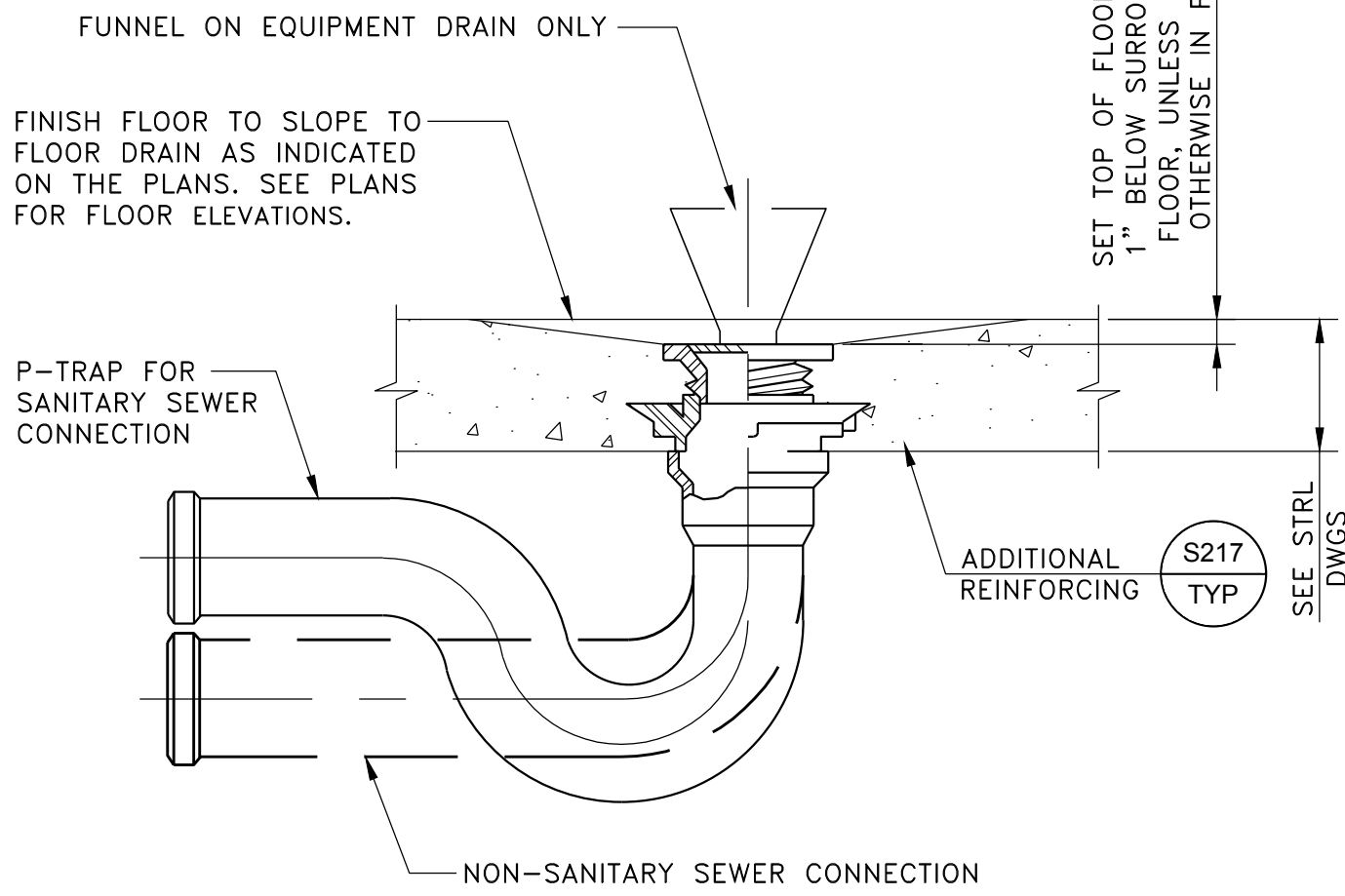
CHECKED BY: JD

JOB NO: 63.102.C

DRAWING NO:

M001

14 OF 45 SHEETS

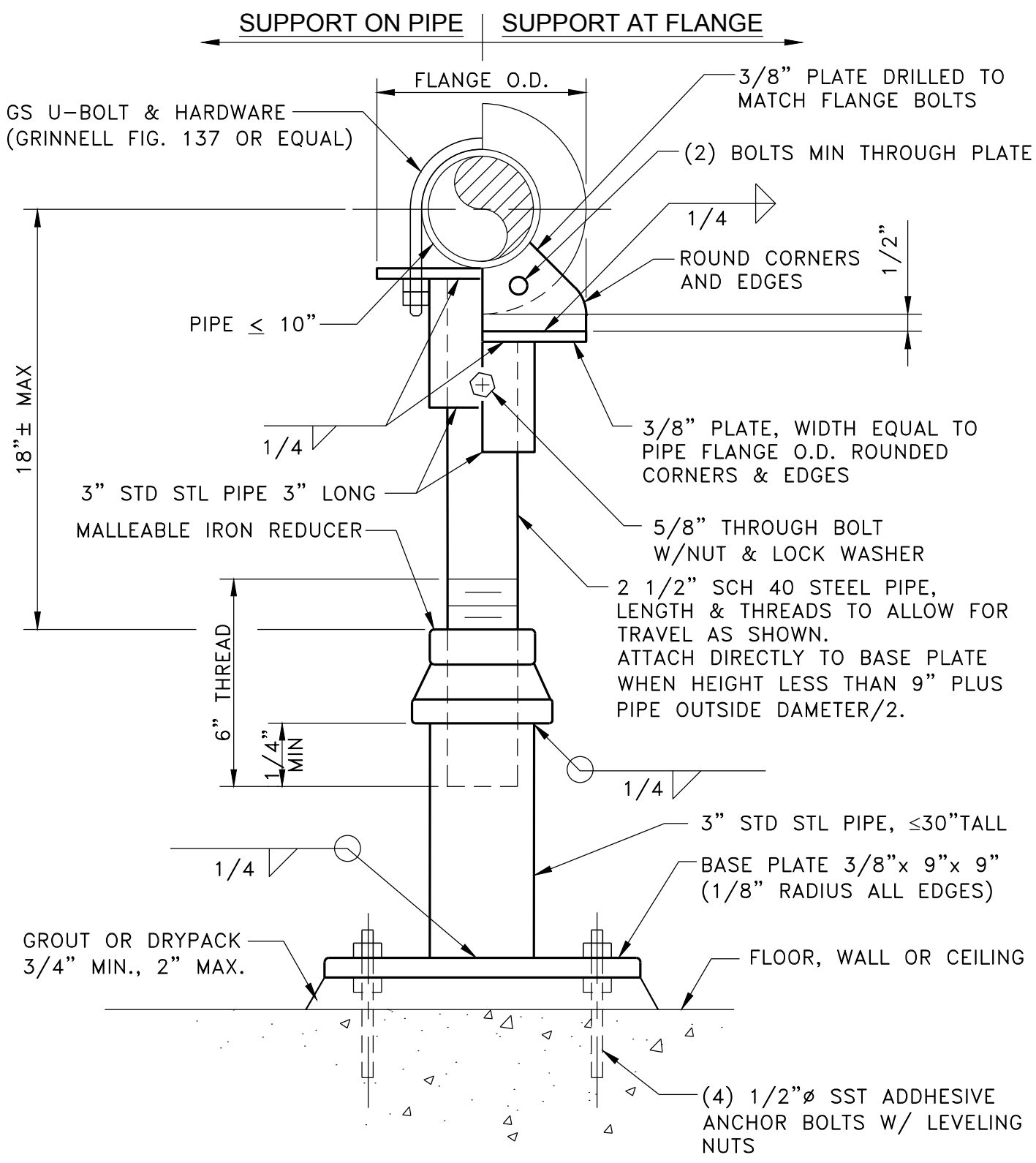


- NOTES:
1. WHEN DRAINING INTO SANITARY SEWER TRAP IS REQUIRED.
 2. PROVIDE 12" RADIUS SLOPE TO EQUIPMENT DRAINS WHERE FLOOR DOES NOT SLOPE TO DRAIN.

FLOOR OR EQUIPMENT DRAIN

SCALE: NONE

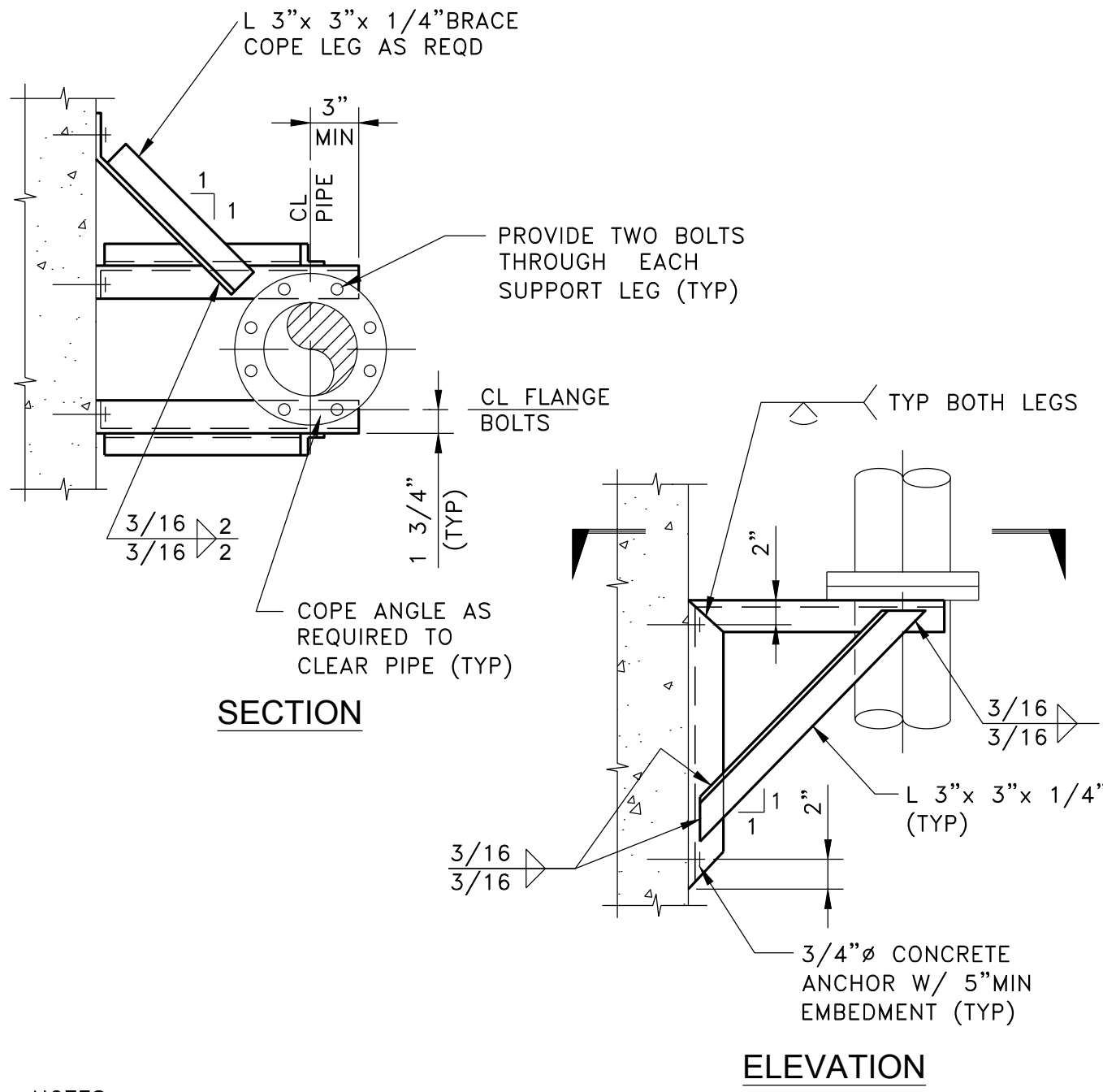
M330
TYP



ADJUSTABLE PIPE SUPPORT (PIPE < 10")

SCALE: NONE

M410
TYP



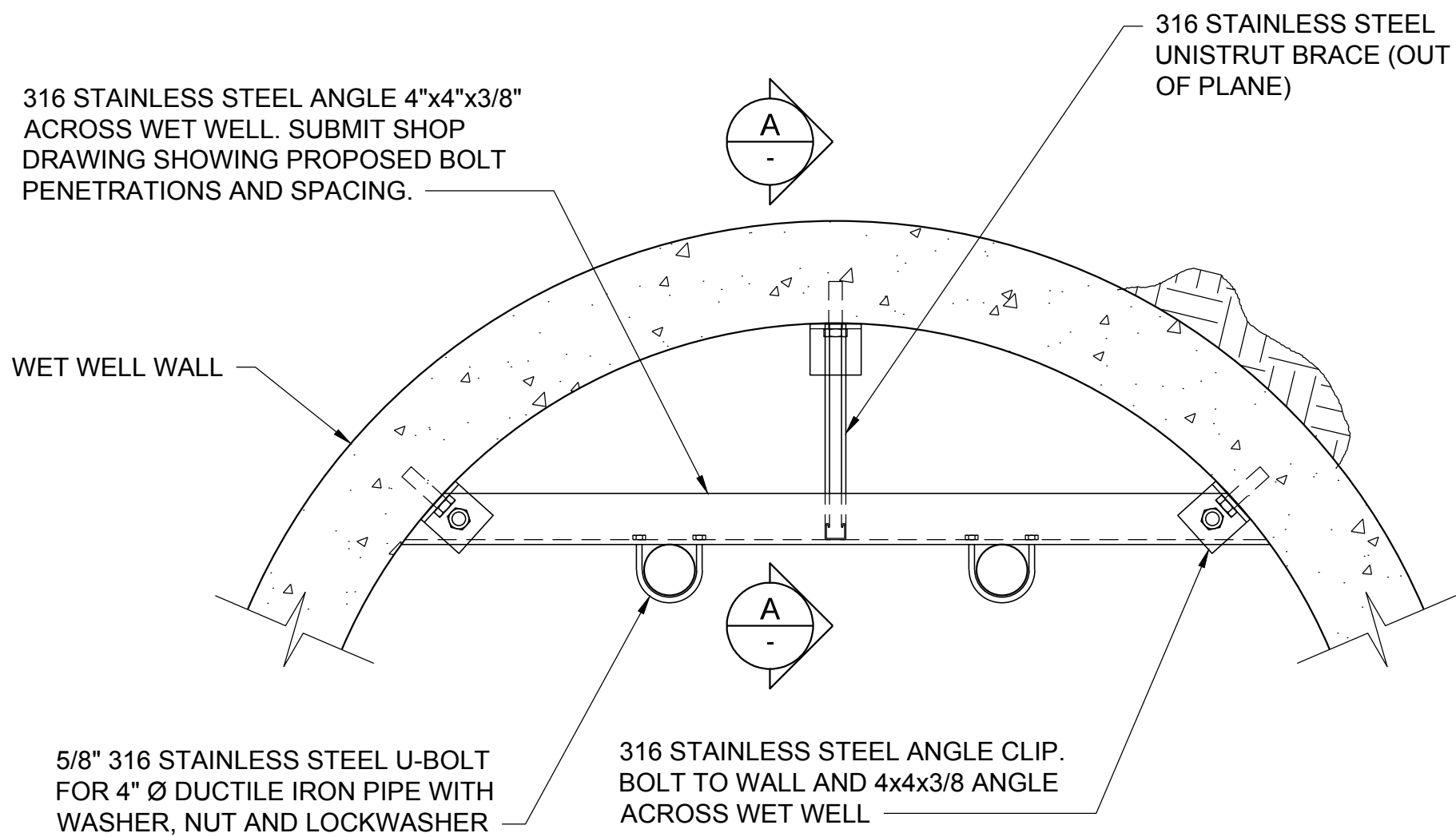
NOTES:

1. PIPE SUPPORT IS TO BE USED FOR 4"Ø AND LARGER PIPES. FOR SUPPORTS NOT AT FLANGES USE RISER CLAMPS ONE SIDE WELDED TO SUPPORTS.
2. MAXIMUM ALLOWABLE VERTICAL LOAD = 900 POUNDS PER SUPPORT. ADJUST SUPPORTS SPACING AS REQUIRED.
3. ALL MATERIAL SHALL BE STAINLESS STEEL IF SUPPORT IS SUBMERGED OR LOCATED BELOW THE TOP OF WALL IN A WATER BEARING STRUCTURE. IN ALL OTHER AREAS, THE MATERIALS SHALL BE HOT-DIP GALVANIZED STEEL UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
4. FIELD PAINT GALVANIZED STEEL PER THE SPECIFICATIONS.

VERTICAL PIPE SUPPORT

SCALE: NONE

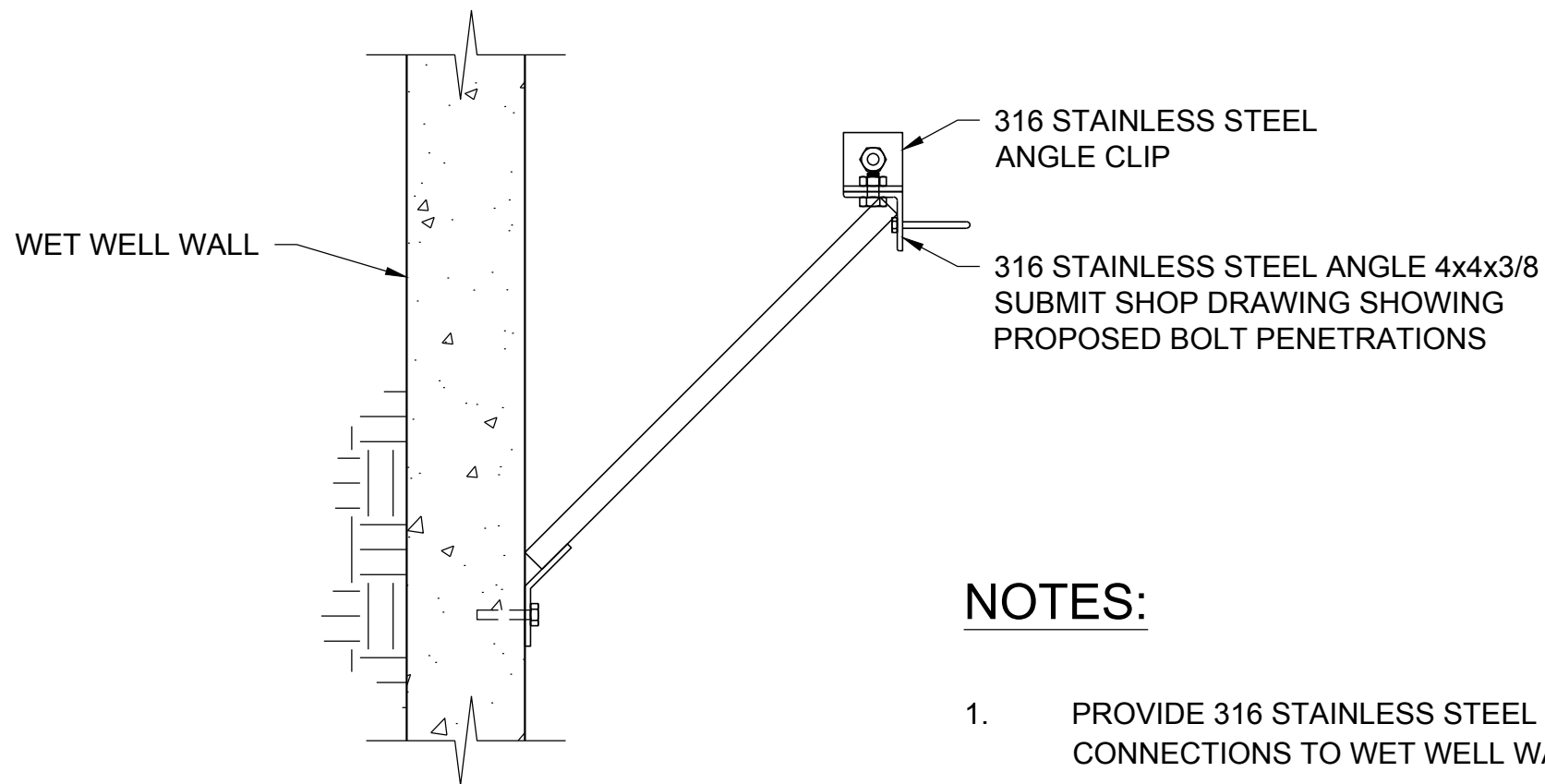
M432
TYP



WET WELL PIPE SUPPORT PLAN VIEW

SCALE: NONE

M447
TYP



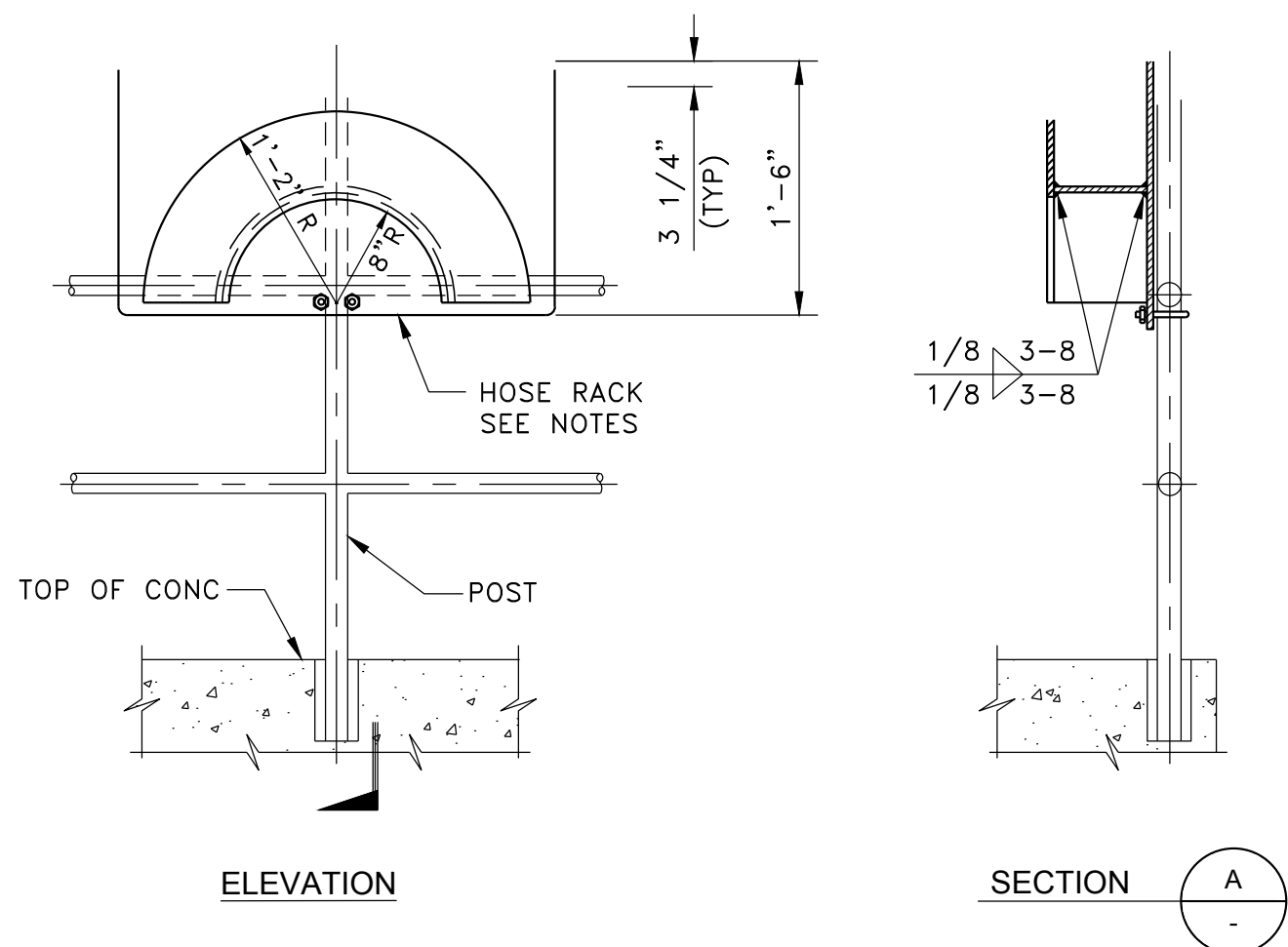
SECTION

SCALE: NONE

A
-

NOTES:

1. PROVIDE 316 STAINLESS STEEL ANCHOR BOLT CONNECTIONS TO WET WELL WALL.
2. LOAD CAPACITIES OF ANCHOR BOLTS, BRACKETS AND FITTINGS SHOULD BE IN COMPLIANCE WITH AMERICAN STANDARD CODE FOR PRESSURE PIPING.



NOTES:

1. HOSE RACK SHALL BE FABRICATED FROM 1/4" ALUMINUM PLATE. ROUND SMOOTH ALL EDGES AND SHARP CORNERS.
2. HOSE RACKS INSTALLED IN YARD LOCATIONS SHALL BE MOUNTED ON POST. WITH BOTTOM 3'-0" ABOVE FINISH GRADE. POST SIMILAR TO TYPICAL CIVIL DETAIL C250.
3. HOSE RACKS INSTALLED IN STRUCTURES SHALL BE WALL MOUNTED. FASTEN RACK TO WALL WITH (4) 3/8"Ø SST CONCRETE ANCHORS. FOR MASONRY WALLS, FASTEN TO GROUTED CELLS.
4. EACH HOSE RACK SHALL BE SUPPLIED WITH A 50-FOOT LONG INDUSTRIAL HOSE, IN ACCORDANCE WITH THE SPECIFICATIONS.

HOSE RACK

SCALE: NONE

M630
TYP

BAR IS ONE INCH
AT FULL SCALE

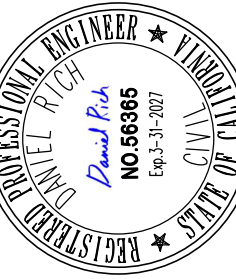
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REVISIONS

DATE

NEXGEN UTILITY MANAGEMENT

4010 LENNANE DRIVE
SACRAMENTO, CA 95834
916.564.8000



City of Colusa
2026 WILL S. GREEN AVENUE
PUMP STATION PROJECT
Colusa County, California

TYPICAL MECHANICAL DETAILS 2

DATE: 21/07/2026

SCALE: NONE

DRAWN BY: JA

DESIGNED BY: JD

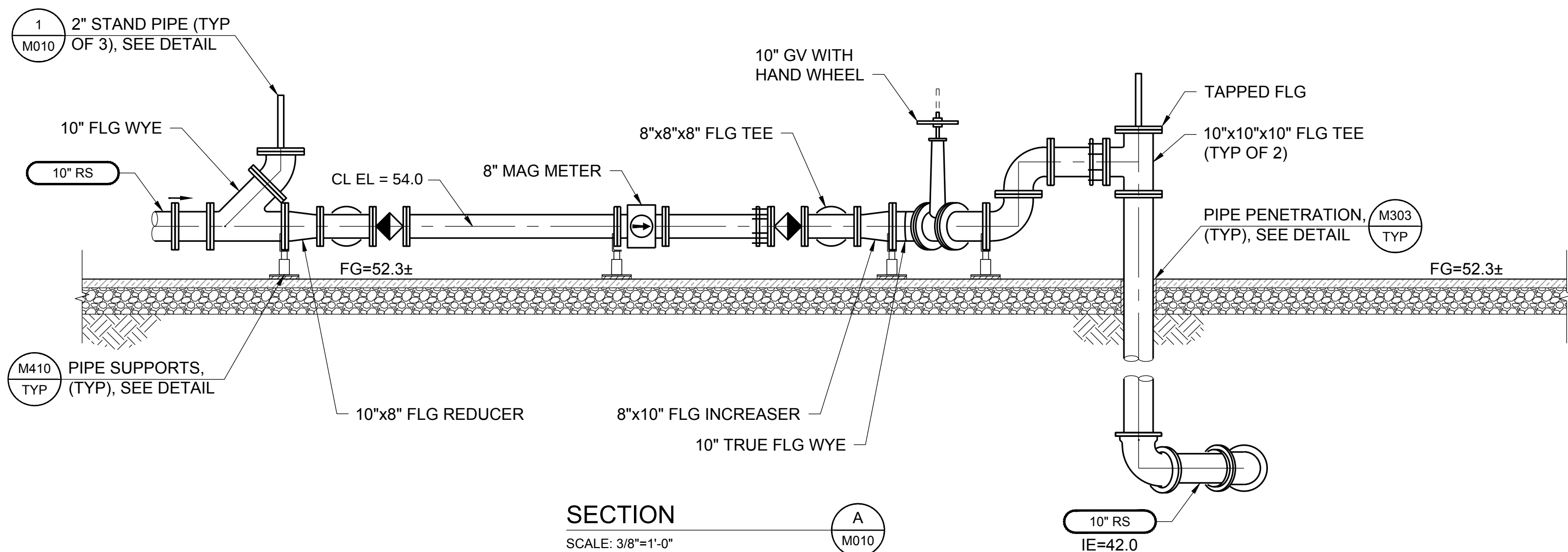
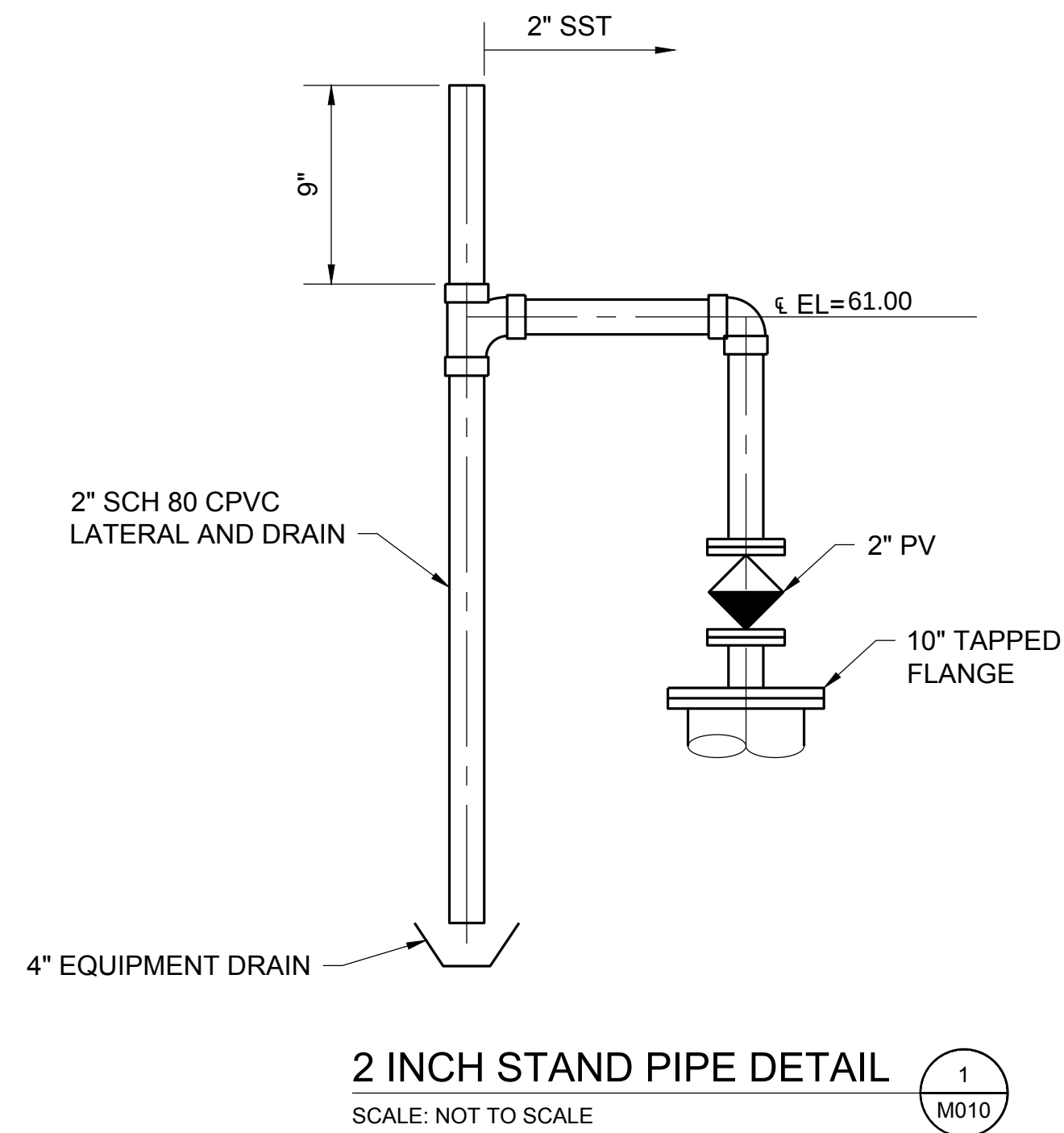
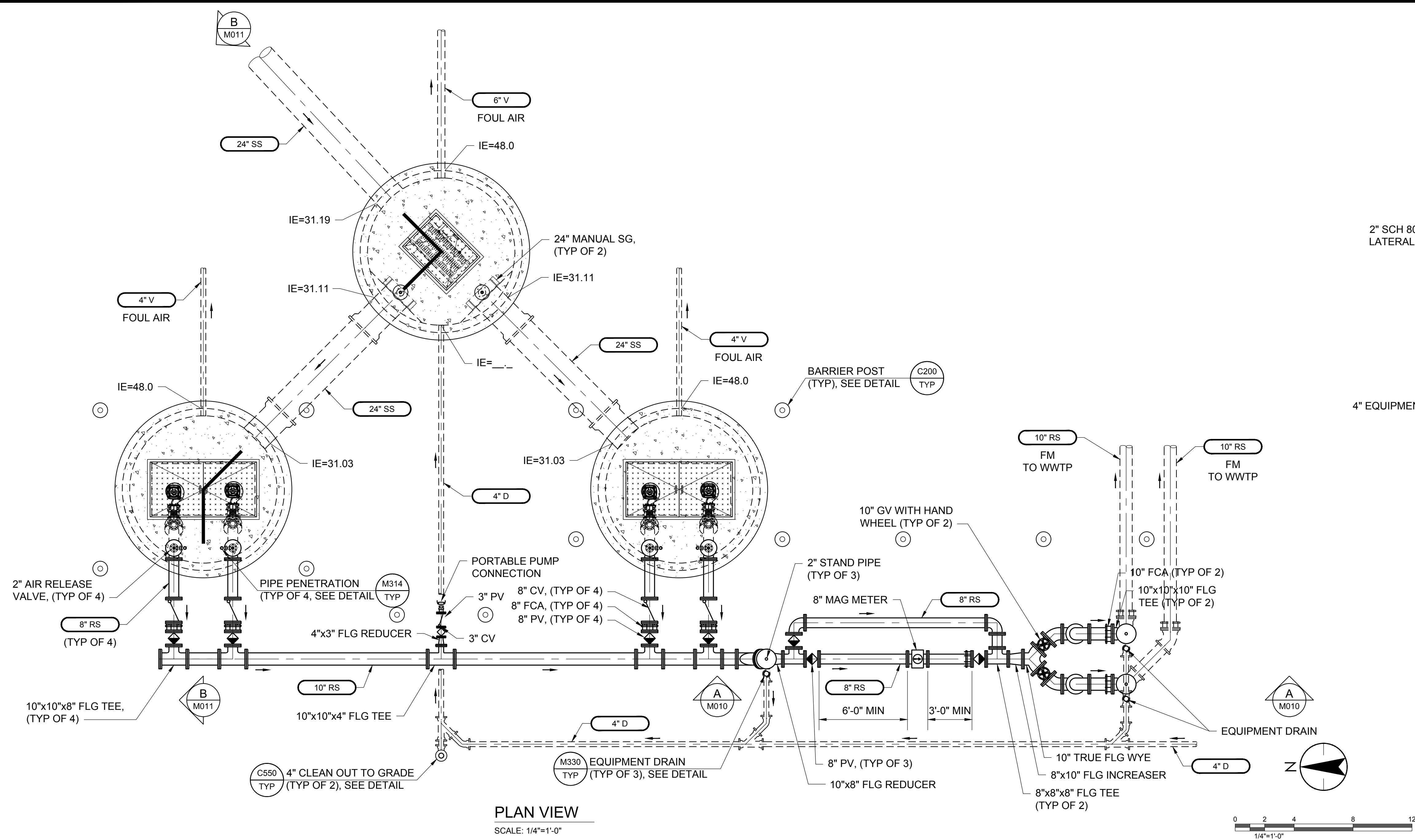
CHECKED BY: JD

JOB NO: 63.102.C

DRAWING NO:

M002

15 OF 45 SHEETS



BAR IS ONE INCH AT FULL SCALE			
APRVL	REVISIONS	DATE	

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4010 LENNANE DRIVE
SACRAMENTO, CA 95834
916.564.8000

NEXGEN

PROFESSIONAL ENGINEER
No. 8385
Exp. 12-31-2027
CIVIL

City of Colusa
2026 WILL S. GREEN AVENUE
PUMP STATION PROJECT
Colusa County, California

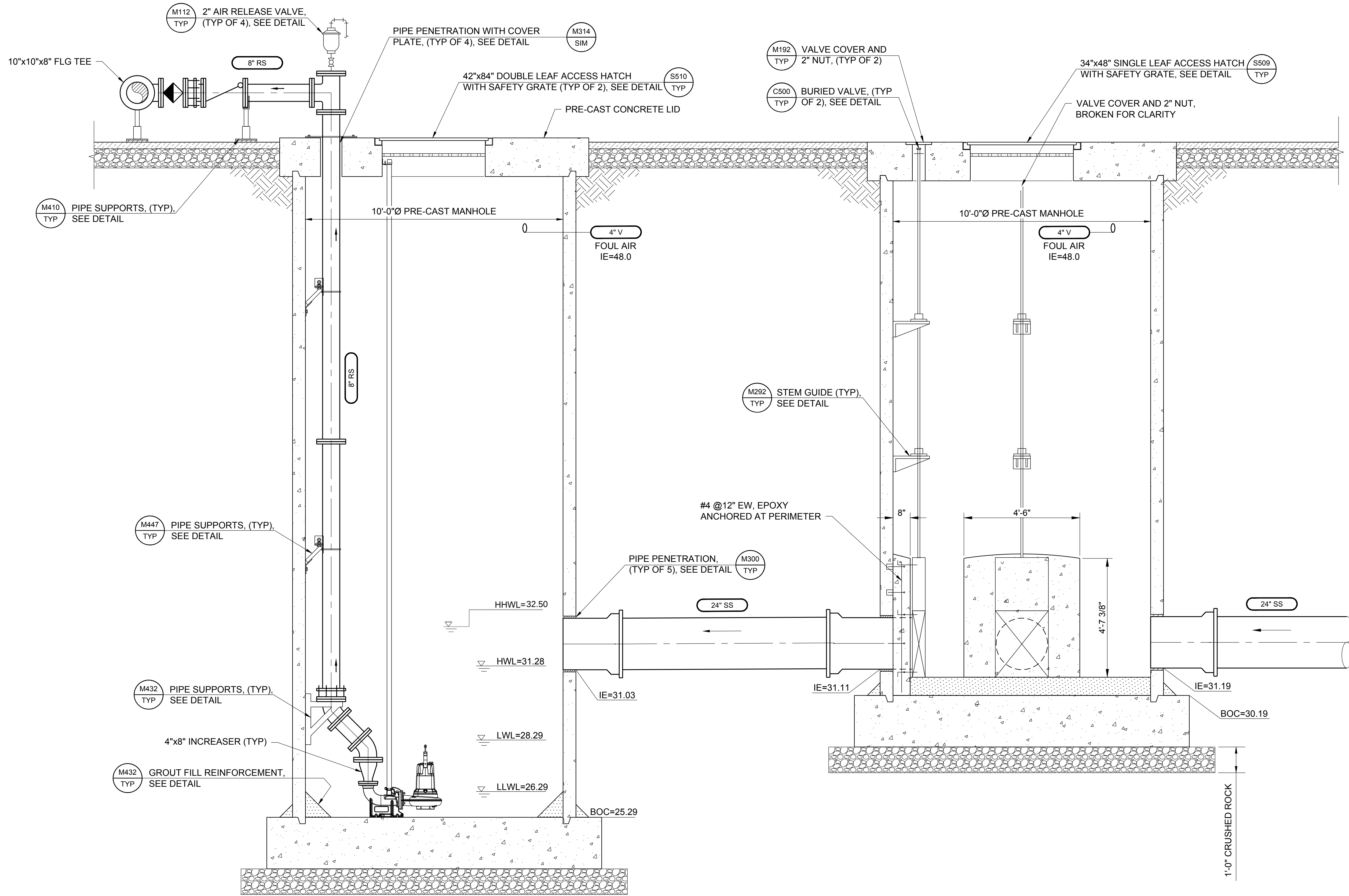
PUMP STATION PLAN AND SECTION

DATE: 21/07/2026
SCALE: AS NOTED
DRAWN BY: JA
DESIGNED BY: JD
CHECKED BY: JD

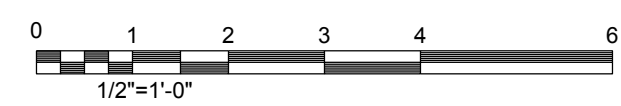
JOB NO: 63.102.C

DRAWING NO:
M010

17 OF 45 SHEETS



SECTION B
SCALE: 1/2"=1'-0"



BAR IS ONE INCH
AT FULL SCALE

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916.564.8000

City of Colusa
2026 WILL S. GREEN AVENUE
PUMP STATION PROJECT
Colusa County, California

PUMP STATION SECTION

DATE: 21/07/2026
SCALE: 1/2"=1'-0"
DRAWN BY: JA
DESIGNED BY: JD
CHECKED BY: JD

JOB NO: 63.102.C

DRAWING NO:
M011

18 OF 45 SHEETS

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DATE:	21/07/2026
SCALE:	1/2"=1'-0"
DRAWN BY:	JA
DESIGNED BY:	JD
CHECKED BY:	JD
JOB NO: 63.102.C	
DRAWING NO:	
M013	
19 OF 45 SHEETS	

SINGLE LINE DIAGRAM SYMBOLS	CONDUIT AND RACEWAY SYMBOLS	SCHEMATIC DIAGRAM SYMBOLS	SCHEMATIC DIAGRAM SYMBOLS (CONT.)	ELECTRICAL ABBREVIATIONS	GENERAL ELECTRICAL NOTES
Thermal Magnetic Circuit Breaker 30AT ← AMP TRIP 100AF ← AMP FRAME MCP Circuit Breaker 100A ← CONTINUOUS AMPS MCP ← TRIP SETTING BASED ON MOTOR HORSEPOWER Low Voltage Drawout Circuit Breaker 20AT (LSIG) 100AF L = LONG TIME S = SHORT TIME I = INSTANTANEOUS G = GROUND FAULT 30A MCP COMBINATION NEMA RATED STARTER X = NEMA SIZE Y = TYPE (FVNR, FVR) NEMA X X VFD VARIABLE FREQUENCY DRIVE X = HP RATING X RVSS REDUCED VOLTAGE SOLID STATE STARTER X = HP RATING X Y PACKAGED EQUIPMENT X = EQUIPMENT SIZE Y = TYPE (KW, KVA, OR HP AS INDICATED) K KEY INTERLOCK Transfer Switch (Manual or Automatic) AS AMMETER SWITCH SB SHORTING BLOCK Metering Device X = METER TYPE WHM — WATT HOUR METER WM — WATT METER AM — AMMETER VM — VOLTMETER PFM — POWER FACTOR METER Potential Transformer Ratio and Number of PT's as Indicated Current Transformer Ratio and Number of CT's as Indicated 5A FUSE SIZE AS INDICATED FLA SFA MOTOR X = HORSEPOWER DELTA-WYE TRANSFORMER WITH SECONDARY KVA SIZE AND VOLTAGE RATIO AS INDICATED SPD SURGE PROTECTIVE DEVICE SSM SOLID STATE METERING DEVICE LIGHTNING ARRESTOR AND SURGE CAPACITOR POWER FILTER/CONDITIONER	Exposed or Concealed Conduit Conduit Run (in Concrete) Conduit Run (Underground) Conduit Run (Change in Elevation) Conduit Turning Up Conduit Turning Down Conduit Grouped Together and Shown as Single Line for Clarity Conduit from Floor Above to Floor Below Conduit Capped, or Sealed Homerun to Equipment Indicated (3/4" Conduit 2#12, 1#12GND unless indicated otherwise) MISCELLANEOUS SYMBOLS J JUNCTION BOX OR FITTING M MOTOR T THERMOSTAT FIELD DEVICE FIELD CONTROL STATION / DISCONNECT GROUNDING SYMBOLS GROUND ROD AND GROUND WELL GROUND ROD (3/4" X 10'-0") GROUND CONNECTION - "C" TAP GROUND CONNECTION GROUND CONNECTION - EXOTHERMIC TYPE GROUND CONNECTION - MECHANICAL TYPE BARE COPPER GROUND TO GROUND WIRE IN SLAB, OR UNDERGROUND GROUND GRID EARTH GROUNDING LIGHTING SYMBOLS WALL MOUNTED LUMINAIRE POLE, BRACKET, ARM, AND STREETLIGHT CEILING MOUNTED LUMINAIRE EMERGENCY LUMINAIRE BATTERY OPERATED EXIT LIGHT, SHOWN WITH TWO ILLUMINATED SIDES, ARROWS INDICATE DIRECTION OF EXIT LUMINAIRE CALLOUT A = LUMINAIRE TYPE * = APPROXIMATE MOUNTING HEIGHT AFF CLG = CEILING MOUNT (SEE LUMINAIRE SCHEDULE FOR MORE DETAILS) Light Switch X = LIGHTING PANEL DESIGNATION # = CIRCUIT DESIGNATION a = SWITCH DESIGNATION * = SWITCH TYPE 3 — 3 WAY 4 — 4 WAY D — DIMMER M — MANUAL MOTOR STARTER 120V DUPLEX RECEPTACLE, NEMA CONFIGURATION 5-20R (WALL MOUNT) X = PANELBOARD DESIGNATION # = CIRCUIT DESIGNATION * = TYPE WP — WEATHERPROOF XP — EXPLOSION PROOF GFCI — GROUND FAULT CIRCUIT INTERRUPTER	SINGLE POLE TOGGLE SWITCH VACUUM OR PRESSURE SWITCH CLOSE/OPEN ON RISING PRESSURE FLOAT LEVEL SWITCH CLOSE/OPEN ON RISING LEVEL NORMALLY OPEN/CLOSED NORMALLY OPEN HELD CLOSED/OPEN MAINTAINED POSITION TS1 TS1 TEMPERATURE SWITCH CLOSE/OPEN ON RISING TEMPERATURE FLOW SWITCH CLOSE/OPEN ON INCREASING FLOW TORQUE SWITCH OPEN ON INCREASING TORQUE SOLENOID VALVE PLC INPUTS/OUTPUTS DIGITAL INPUT TO PLC/RTU/DCS DIGITAL OUTPUT FROM PLC/RTU/DCS NORMALLY OPEN DIGITAL OUTPUT FROM PLC/RTU/DCS NORMALLY CLOSED ANALOG INPUT TO PLC/RTU/DCS 4-20 mA (UNLESS INDICATED OTHERWISE) ANALOG OUTPUT FROM PLC/RTU/DCS 4-20 mA (UNLESS INDICATED OTHERWISE) OPERATIONAL CONTROLS E-STOP OR LOS PUSHBUTTON OPEN NORMALLY OPEN PUSHBUTTON STOP NORMALLY CLOSED PUSHBUTTON TWO - POSITION SWITCH NO/NC MAINTAINED PUSHBUTTON THREE - POSITION SELECTOR SWITCH TWO - POSITION SELECTOR SWITCH THREE - POSITION SPRING RETURN-TO-CENTER MOMENTARY CONTACT SWITCH	CONTROL RELAY AND CONTACTS M1 CONTROL RELAY OR COIL X = DEVICE CR — CONTROL RELAY TD — TIME DELAY RELAY (TIMING AS INDICATED) M — MOTOR STARTER PC — PHOTOCELL NORMALLY OPEN CONTACT NORMALLY CLOSED CONTACT XXXX NORMALLY OPEN CONTACT LINE REFERENCE XXXX NORMALLY CLOSED CONTACT LINE REFERENCE TIMED DELAY RELAY CONTACTS ENERGIZED TD1 NORMALLY OPEN WITH TIME DELAY CLOSING TD1 NORMALLY CLOSED WITH TIME DELAY OPENING DE-ENERGIZED TD1 NORMALLY OPEN WITH INSTANT CLOSING AND TIME DELAY OPENING TD1 NORMALLY CLOSED WITH INSTANT OPENING AND TIME DELAY CLOSING MISCELLANEOUS SYMBOLS PILOT LIGHT X = LENS COLOR R — RED G — GREEN A — AMBER W — WHITE PILOT LIGHT (PUSH-TO-TEST) X = LENS COLOR (SEE ABOVE) HORN ELAPSED TIME METER HEATER GROUND CONNECTION CROSSING OF CONDUCTORS - NOT CONNECTED CROSSING OF CONDUCTORS - CONNECTED FUSE VOLTAGE SURGE SUPPRESSOR FAN CIRCUIT BREAKER TERMINAL BLOCK - IN MCC TERMINAL BLOCK - IN FIELD DEVICE TERMINAL EARTH GROUNDING ELECTRICAL FIELD WIRING ELECTRICAL SCHEMATIC WIRING EQUIPMENT BOUNDARY	A AMPERE, AUTOMATIC AC ALTERNATING CURRENT AF CIRCUIT BREAKER FRAME SIZE AM AMMETER ANN ANNUNCIATOR AT AMPERE TRIP ATS AUTOMATIC TRANSFER SWITCH AUTO AUTOMATIC AWG AMERICAN WIRE GAUGE BATT BATTERY BC BARE COPPER BKR BREAKER C CONDUIT CB CIRCUIT BREAKER CKT CIRCUIT CLF CURRENT LIMITING FUSE COMM COMMUNICATIONS CP CONTROL PANEL CPT CONTROL POWER TRANSFORMER CR CONTROL RELAY, CARD READER CT CURRENT TRANSFORMER DISC DISCONNECT E EMERGENCY ENCL ENCLOSURE ETM ELAPSED TIME METER F FREQUENCY, FUSE, FIXED FDR FEEDER FLA FULL LOAD AMPS FVR FULL VOLTAGE REVERSING FVNR FULL VOLTAGE NON-REVERSING GEN GENERATOR GFCI GROUND FAULT CIRCUIT INTERRUPTER GFP GROUND FAULT PROTECTION GND GROUND HID HIGH INTENSITY DISCHARGE HOA HAND-OFF-AUTOMATIC HS HAND SWITCH HZ HERTZ I/O INPUT/OUTPUT Isc SHORT CIRCUIT CURRENT, AMPS JJB JUNCTION BOX KA KILO AMPERES KAIC KILO AMP INTERRUPTING CURRENT KCMIL KILO CIRCULAR MILS KV KILOVOLT KVA KILOVOLT AMPERE KLOWATT KILOWATT LCS LLOCAL CONTROL STATION LOC LOCAL LOR LOCAL-OFF-REMOTE LOS LOOKOUT STOP PUSHBUTTON LP LIGHTING PANEL LTG LIGHTING M MOTOR CONTACTOR COIL mA MILLIAMPERE MCC MOTOR CONTROL CENTER MCP MOTOR CIRCUIT PROTECTOR MLO MAIN LUGS ONLY MOV MOTOR OPERATED VALVE MSC MANUFACTURER SUPPLIED CABLE MTS MANUAL TRANSFER SWITCH NEUT NEUTRAL O OPEN, OFF OL OVERLOAD PB PUSHBUTTON, PULLBOX PF POWER FACTOR PH PHASE PL PILOT LIGHT PLC PROGRAMMABLE LOGIC CONTROLLER PP POWER PANELBOARD POS POSITION POT POTENTIOMETER PWR POWER RECPT RECEPTACLE RGS RIGID GALVANIZED STEEL RVSS REDUCED VOLTAGE SOLID STATE SHLD SHIELDED SIG SIGNAL SPD SURGE PROTECTIVE DEVICE ST SHUNT TRIP SWBD SWITCHBOARD SWGR SWITCHGEAR TB TERMINAL BOX TD TIME DELAY RELAY UPS UNINTERRUPTIBLE POWER SUPPLY V VOLTAGE, VOLTS VA VOLT AMPERE VAR VOLT AMPERE REACTIVE VM VOLTMETER W WATTS, WIRE WP WEATHERPROOF	1. ALL RACEWAYS AND EQUIPMENT SHALL BE INSTALLED AND GROUNDED IN ACCORDANCE WITH THE 2023 EDITION OF THE NATIONAL ELECTRICAL CODE AND APPLICABLE LOCAL CODES. 2. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF TERMINAL BOXES AND CONDUIT ENTRANCES OF ALL EQUIPMENT AGAINST APPROVED SHOP DRAWINGS BEFORE STUBBING UP CONDUITS. 3. CONDUIT RUNS ARE SHOWN DIAGMAMATICALLY ONLY AND SHALL BE INSTALLED IN A MANNER TO PREVENT CONFLICTS WITH EQUIPMENT OR STRUCTURAL CONDITIONS. 4. CONDUIT STUB-UPS SHALL NOT BE MORE THAN 6 INCHES FROM THE CENTERLINE OF TERMINAL BOXES. 5. IN THE EVENT OF INTERFERENCE BETWEEN ELECTRICAL EQUIPMENT SHOWN ON THE DRAWINGS AND OTHER EQUIPMENT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING. 6. ALL SURFACE MOUNTED PANELS SHALL BE MOUNTED SO AS TO MAINTAIN A 1/4 INCH (MINIMUM) AIR SPACE BETWEEN THE ENCLOSURE AND THE WALL. 7. ONLY MAJOR PULLBOXES ARE SHOWN. THE CONTRACTOR SHALL PROVIDE ADDITIONAL PULLBOXES WHERE REQUIRED TO MAKE A WORKABLE INSTALLATION. 8. THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE DETAILS WHETHER OR NOT THEY ARE REFERENCED ON THE DRAWINGS. 9. ALL PANELBOARDS SHALL BE MOUNTED SO THAT THE DISTANCE FROM THE CENTERLINE OF THE TOP CIRCUIT BREAKER OPERATING HANDLE IN THE UPPERMOST POSITION TO THE FINISHED FLOOR SHALL NOT EXCEED 6'-7". 10. CONNECTIONS BETWEEN RIGID CONDUIT AND MOTOR TERMINAL BOXES OR SIMILAR EQUIPMENT SUBJECT TO VIBRATION SHALL BE FLEXIBLE LIQUID-TIGHT CONDUIT. 11. CONDUITS SHALL BE TERMINATED SO AS TO PERMIT NEAT CONNECTION TO MOTORS AND OTHER EQUIPMENT. 12. CONDUITS FOR FUTURE EQUIPMENT OR EXTENSIONS SHALL BE TERMINATED AS SHOWN IN DETAIL OR AS SPECIFIED. 13. ALL MOTOR STARTER CONTROL POWER TRANSFORMERS SHALL BE SIZED TO PROVIDE SUFFICIENT VOLT-AMPERE CAPACITY FOR OPERATING ALL LOCAL AND REMOTE ELECTRICAL DEVICES ASSOCIATED WITH CONTROL OF THE MOTOR IN ADDITION TO THE STARTER COIL.

BAR IS ONE INCH
AT FULL SCALE

APRVL

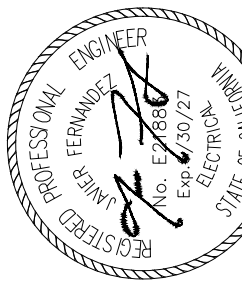
REVISIONS

DATE

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NEXGEN UTILITY MANAGEMENT

4010 LENNANE DRIVE
SACRAMENTO, CA 95834
916.564.8000



City of Colusa
2023 WILL S. GREEN AVENUE
PUMP STATION PROJECT
Colusa County, California

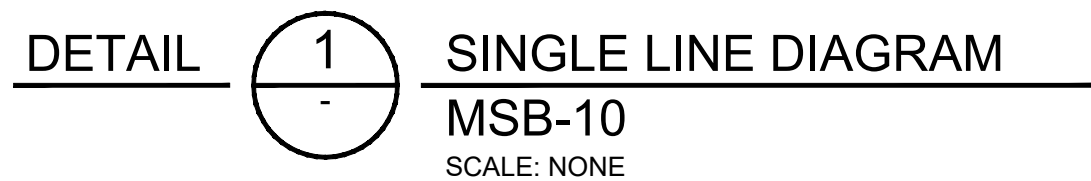
ELECTRICAL SYMBOLS,
ABBREVIATIONS, AND
GENERAL NOTES

DATE: 09/07/2026
SCALE: NONE
DRAWN BY: JF
DESIGNED BY: JF
CHECKED BY: JP

JOB NO: 63.102.C

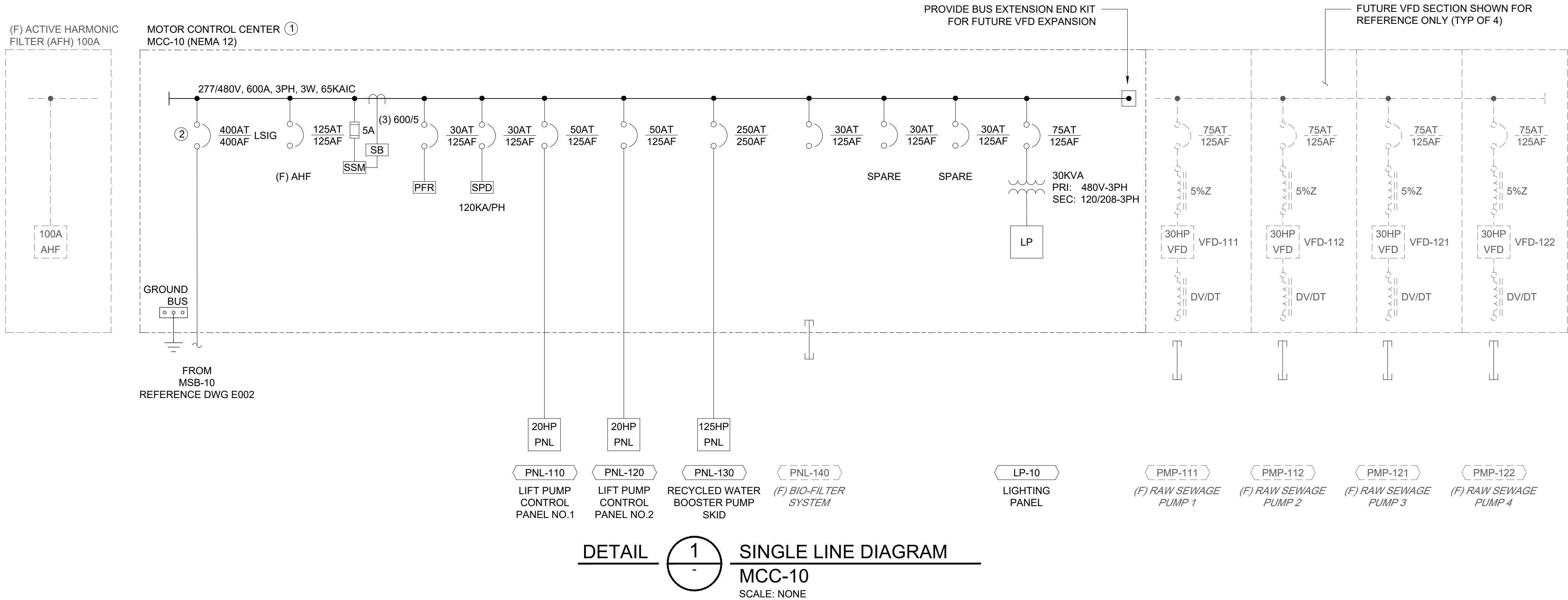
DRAWING NO:
E001

20 OF 45 SHEETS



SERVICE LOAD CALCULATION				
LOAD CENTER: <i>MSB</i>		480 VAC, 3 PHASE		4-WIRE
FED FROM: <i>XFMR</i>		CONNECTED		UTILITY
EQUIPMENT DESCRIPTION		LOAD AMPS	LOAD (KVA)	LAOD (KVA)
<i>MCC</i>	<i>MOTOR CONTROL CENTER</i>	231.8	192.8	201.9
SUBTOTAL (KVA)			192.8	201.9
SUBTOTAL (AMPS)			231.8	242.8
UTILITY:		GENERATOR:		
SERVICE SIZE	243 A	SERVICE SIZE		62 A
MAIN BREAKER SIZE	400 A	GEN SIZE		80KW
% LOADED	61%			% LOADED
				52%

BAR IS ONE INCH AT FULL SCALE		APR/VL	
		REVISIONS	
		DATE	
NEXGEN UTILITY MANAGEMENT 4010 LENNANE DRIVE SACRAMENTO, CA 95834 916.594.8000			
City of Colusa 2026 WILL S. GREEN AVENUE PUMP STATION PROJECT		Colusa County, California	
MSB SINGLE LINE DIAGRAM AND LOAD SCHEDULE			
DATE:		16/07/2026	
SCALE:		NONE	
DRAWN BY:		JF	
DESIGNED BY:		JF	
CHECKED BY:		JP	
JOB NO: 63.102.C			
DRAWING NO:		E002	
21 OF 45 SHEETS			



GENERAL NOTES

A. ALL FIELD EQUIPMENT SHALL BE RATED AS NOTED BY ELECTRICAL SPECIFICATIONS AND ELECTRICAL SITE PLANS UNLESS NOTED OTHERWISE BY THIS DRAWING.

SHEET NOTES

- FURNISH AND INSTALL CB WITH PERMANENT LOCKOUT PROVISIONS.
- PROVIDE 100% RATED BREAKER.

BAR IS ONE INCH
AT FULL SCALE

APRVL	REVISIONS	DATE

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SACRAMENTO, CA 95834
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City of Colusa
2026 WILL S. GREEN AVENUE
PUMP STATION PROJECT
Colusa County, California

MCC SINGLE LINE DIAGRAM
AND LOAD SCHEDULE

DATE: 16/07/2026
SCALE: NONE
DRAWN BY: JF
DESIGNED BY: JF
CHECKED BY: JP

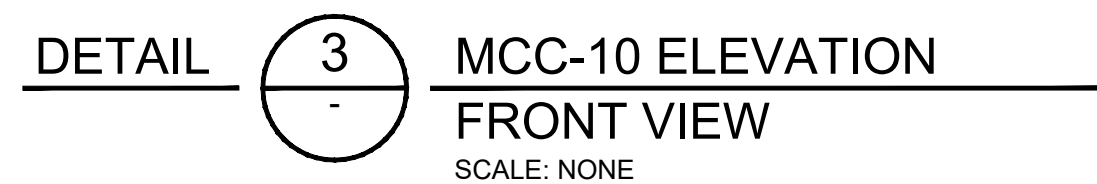
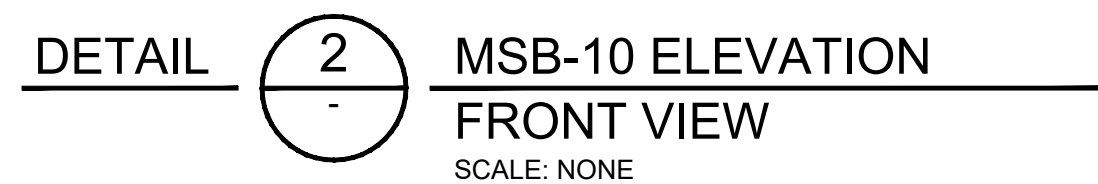
JOB NO: 63.102.C

DRAWING NO:
E003

22 OF 45 SHEETS

LOAD CALCULATION									
LOAD CENTER: MCC-10				480 VAC, 3 PHASE SERVICE				3-WIRE	
EQUIPMENT NUMBER	FED FROM: MSB-10			CONNECTED		UTILITY		GENERATOR	
	HP	MOTOR CONTROL	EQUIPMENT DESCRIPTION	LOAD (AMPS)	QTY	LOAD (KVA)	LOAD QTY	LOAD (KVA)	LOAD (KVA)
PNL-130	125	VFD	RECYCLE WATER BOOSTER PS	156.0	1	129.7	1	129.7	0.0
PMP-111,112	10	VFD	LIFT PUMP 1, 2	14.0	2	23.3	1	11.6	23.3
PMP-121, 122	10	VFD	LIFT PUMP 3, 4	14.0	2	23.3	1	11.6	11.6
(F) PNL-140	7.5	FVNR	FUTURE ODOR CONTROL SYSTEM	11.0	0	-	0	-	0.0
LP-100	30 kVA	XFMR	LIGHTING PANEL	19.8	1	16.5	1	16.5	16.5
SUBTOTAL						192.8		169.5	51.4
LARGEST MOTOR @ 25%				125	HP			32.4	
TOTAL								201.9	51.4
3 PHASE CURRENT				243 AMPS					
CALCULATED SERVICE SIZE				100% MAXIMUM LOAD CURRENT					
MAIN BREAKER SIZE				243 AMPS					
% MAIN BREAKER LOAD				400 AMPS					
				61%					

PANEL SCHEDULE												
		LOCATION WILL S. GREEN STATION			MAIN BKR 150A							
		VOLTAGE 120/208Y			SYSTEM 3Φ, 4W							
		TRIM FLUSH			BUS RATING 200A							
					PHASE LOADS-AMPS							
CKT	LOAD	VA	AMPS	CB	A	B	C	CB	AMPS	VA	LOAD	CKT
1	NORTHERN GATE OPERATOR	1200	10.0	15/1	20.0			15/1	10.0	1200	SOUTHERN GATE OPERATOR	2
3		1200	10.0			20.0			10.0	1200		4
5	LTG - AREA SITE LIGHTING	200	1.7	15/1			1.7	15/1	0.0	0		6
7	LTG - INTERIOR BUILDING	260	2.2	15/1	12.2			15/1	10.0	1200	RECEPT - INTERIOR BUILDING	8
9	LTG - EXTERIOR BUILDING	135	1.1	15/1		11.1		15/1	10.0	1200	RECEPT - EXTERIOR BUILDING	10
11	GENERATOR HEATER	1200	10.0	15/1			10.0	15/1	0.0	0	SPARE	12
13	GENERATOR BATTERY CHARGER	1200	10.0	15/1	10.0			15/1	0.0	0	SPARE	14
15	LTG - EMERGENCY LIGHTS	12	0.1	15/1		0.1		15/1	0.0	0	SPARE	16
17	LIGHTING CONTROL PANEL LCP-10	1200	10.0	15/1			10.0	15/1	0.0	0	SPARE	18
19	SPARE		0.0	15/1	0.0			20/1	0.0	0	SPARE	20
21	AC UNIT	2500	20.8	50/2		20.8		20/1	0.0	0	SPARE	22
23		2500	20.8				20.8	20/1	0.0	0	SPARE	24
25			0.0	15/1	0.0			20/1	0.0	0	SPARE	26
27			0.0	15/1		0.0		20/1	0.0	0	SPARE	28
Notes												
(L)	Lockout Provision Required				A	B	C					
(H)	HACR - Rated Breaker				42 A	52 A	43 A					
(GFI)	Ground Fault Interrupt Rated Breaker				5060 VA	6247 VA	5100 VA					
(AFI)	Arc-Fault Interrupt Rated Breaker				PHASE LOADS			TOTAL	16407 VA	208 V		
					93%	114%	93%	AMPS	46 A			

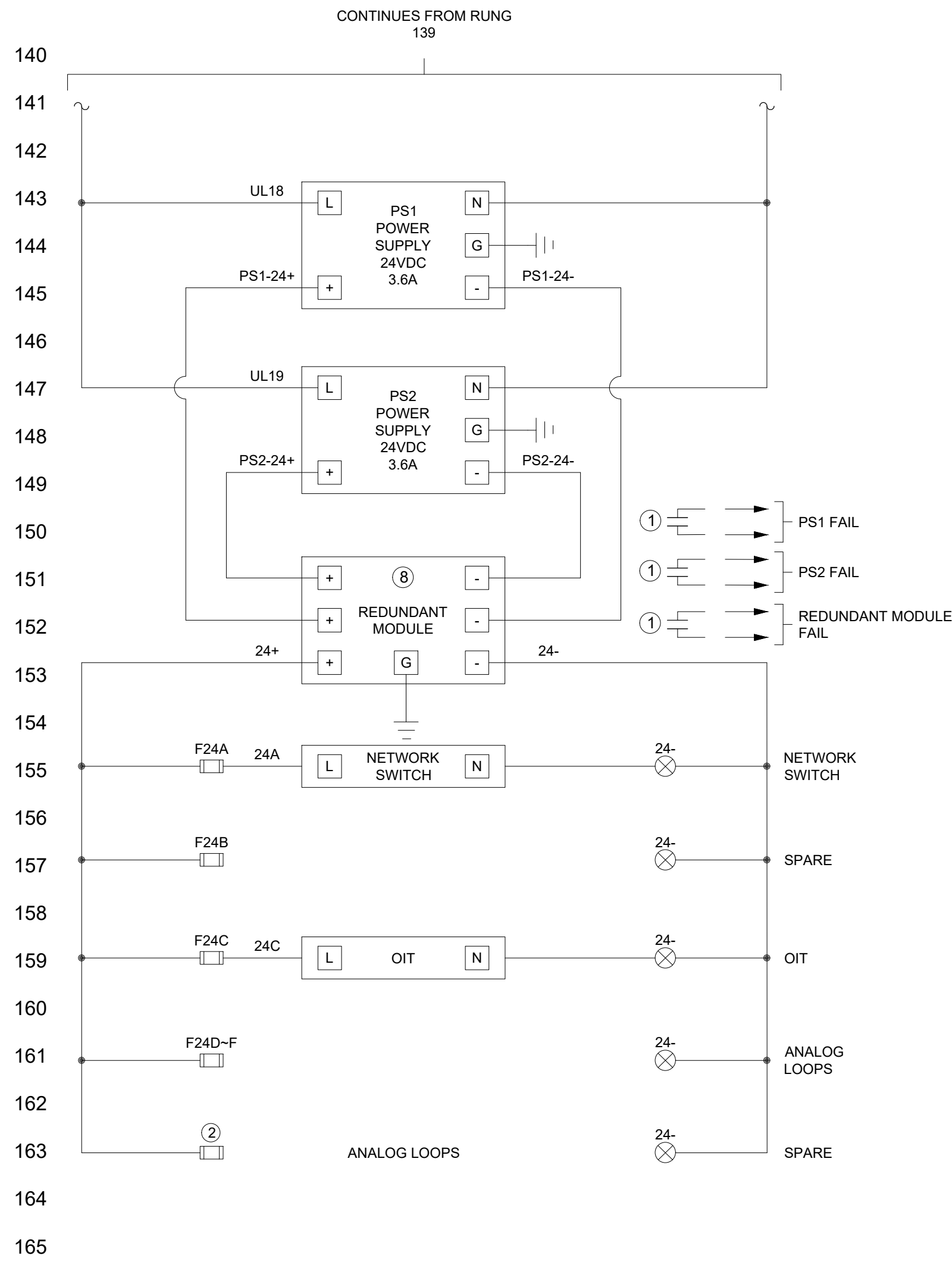
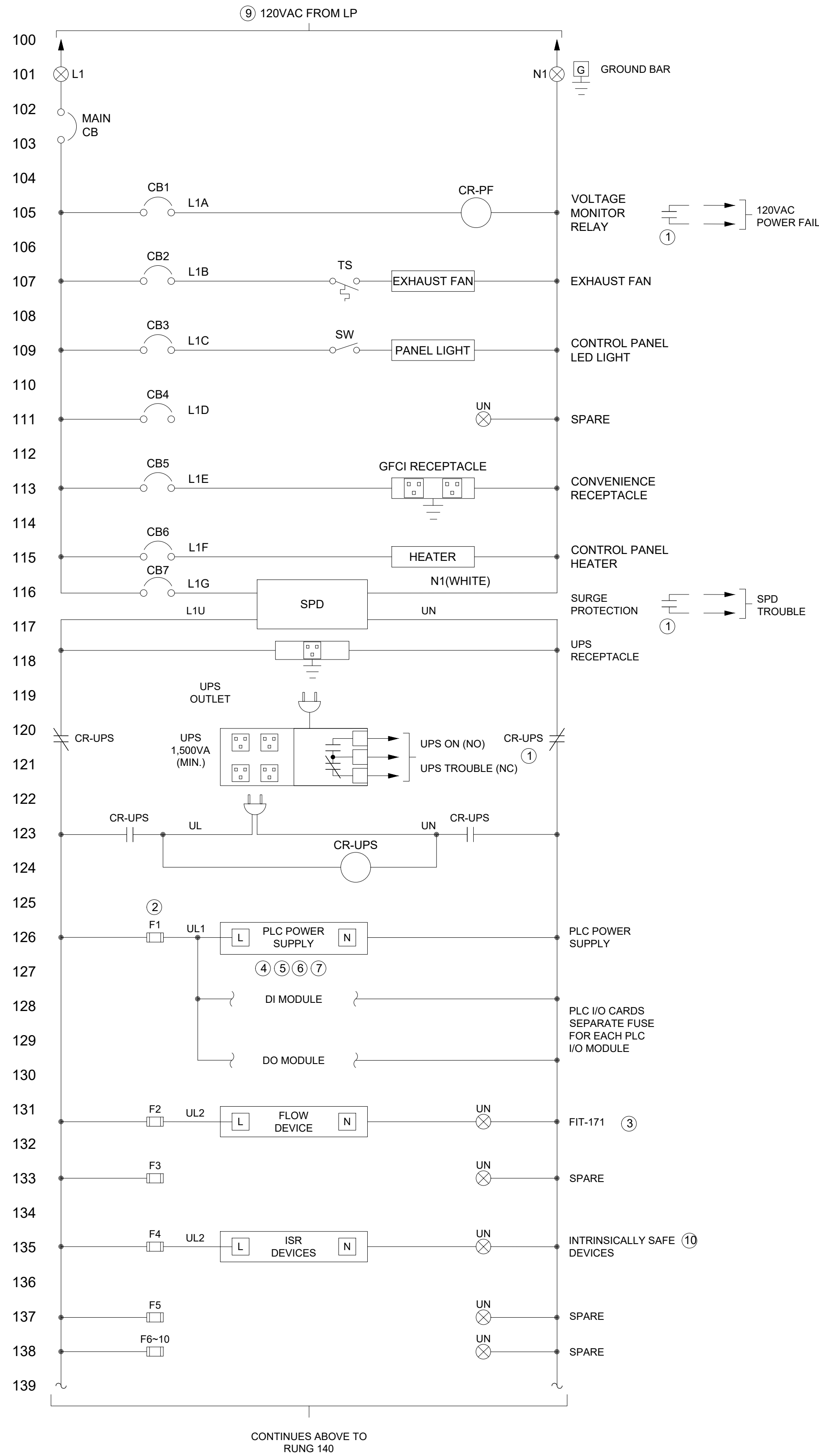


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|--------------------|--|--|--|--|--|--|--|-----------|--|
| MSB/MCC ELEVATIONS | | City of Colusa
2023 WILL S. GREEN AVENUE
PUMP STATION PROJECT

Colusa County, California | | | |
NEXGEN
NEXGEN UTILITY MANAGEMENT
4010 LENNANE DRIVE
SACRAMENTO, CA 95834
916.594.8000 | | APPROVAL | |
| | | | | | | | | REVISIONS | |
| | | | | | | | | DATE | |
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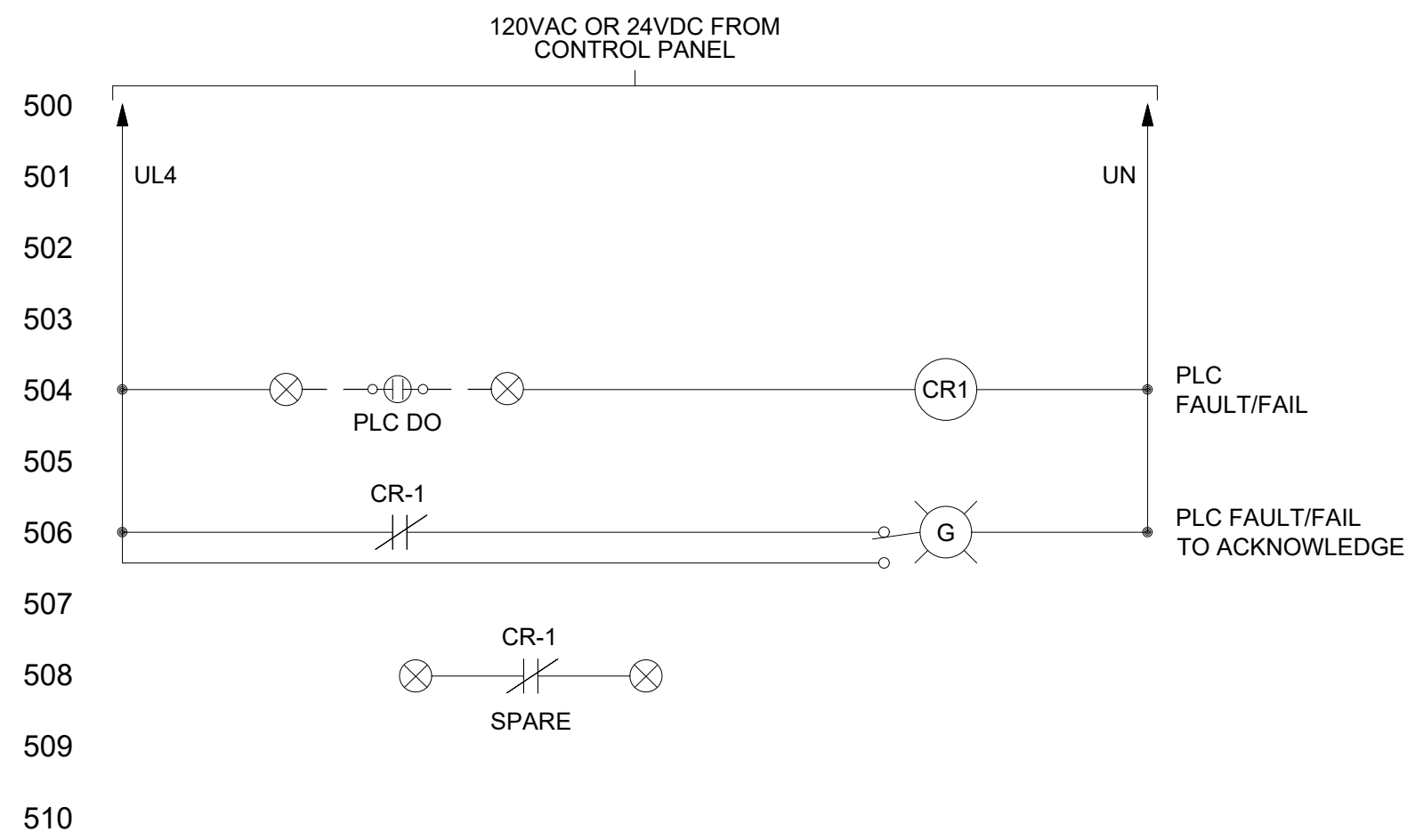
BAR IS ONE INCH AT FULL SCALE

DATE: 09/07/2026
 SCALE: NONE
 DRAWN BY: JF
 DESIGNED BY: JF
 CHECKED BY: JP
 JOB NO: 63.102.C
 DRAWING NO:
E-004
 23 OF 45 SHEETS



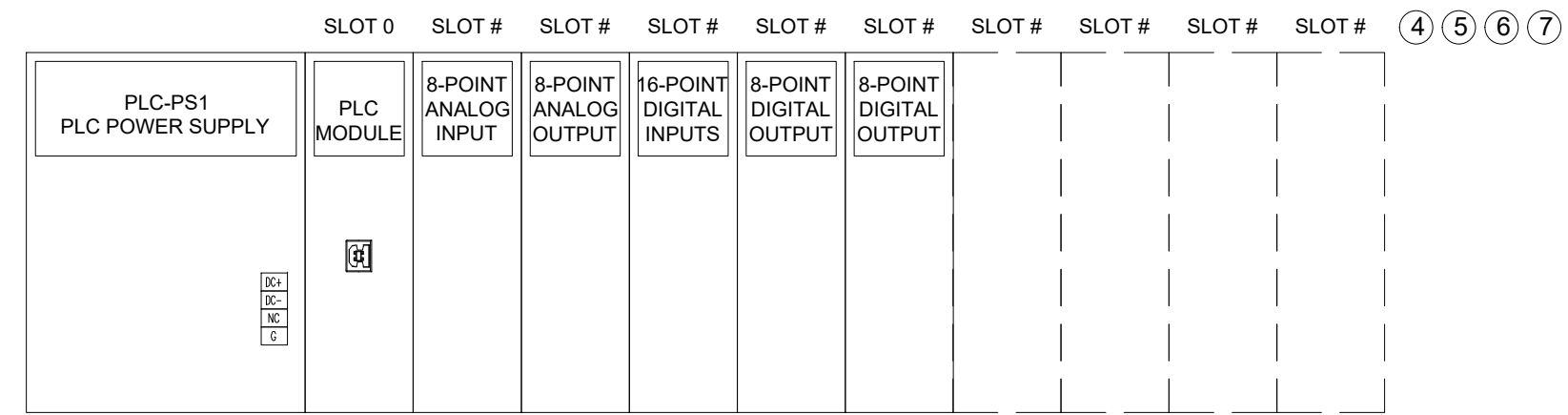
DETAIL 1 TYPICAL CONTROL PANEL ELEMENTARY DIAGRAM

SCALE: NONE



DETAIL 2 CONTROL PANEL ALARM ELEMENTARY DIAGRAM

SCALE: NONE



DETAIL 3 TYPICAL PLC BLOCK WIRING DIAGRAM

SCALE: NONE

GENERAL NOTES

A. THESE DRAWINGS SHOW GENERAL CONTROL PHILOSOPHY AND DEVICES. NOT ALL REQUIRED CONTROL COMPONENTS AND DEVICES ARE SHOWN. CONTRACTOR IS RESPONSIBLE TO PROVIDE COMPLETE AND FUNCTIONAL SYSTEM.

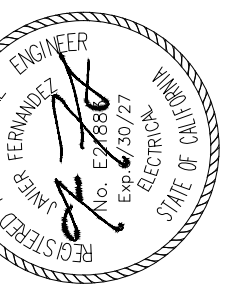
SHEET NOTES

- ADD EXTERNAL RELAYS IF REQUIRED FOR 120VAC INTERFACE.
- FUSES LABELED PER PLC MODULE I/O WIRING DIAGRAMS.
- PROVIDE AS MANY TRANSMITTERS AND ANALYZER FUSES AS NEEDED FOR PROJECT PLUS 5 SPARES.
- INSTALL RACK TO LEAVE SPACE FOR FUTURE EXPANSION.
- PROVIDE PRE-WIRED FUSED ANALOG INPUT AND OUTPUT MODULES AND FUSED RELAY MODULE FOR DISCRETE OUTPUTS.
- PROVIDE AS MANY MODULES OF EACH TYPE TO ACCOMMODATE PROJECT I/O PLUS 25% OF SPARE I/O.
- LINE UP MODULES OF EACH TYPE NEXT TO EACH OTHER.
- WIRE NUMBERS SHOWN ARE AN EXAMPLE, ACTUAL WIRE NUMBERS SHALL BE DETERMINED BY THE SUPPLIER.
- PROVIDE REDUNDANT 24VDC POWER SUPPLY AND MODULE.
- FURNISH AND INSTALL (8) SPARE ISR FOR (6) FLOATS AND (2) SUBMERSIBLE LEVEL TRANSDUCERS.

BAR IS ONE INCH
AT FULL SCALE

APRVL	REVISIONS	DATE

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City of Colusa
2023 WILL S. GREEN AVENUE
PUMP STATION PROJECT
Colusa County, California

TYPICAL CONTROL PANEL
WIRING DIAGRAM

DATE: 09/07/2026
SCALE: NONE
DRAWN BY: JF
DESIGNED BY: JF
CHECKED BY: JP

JOB NO: 63.102.C

DRAWING NO:
E005

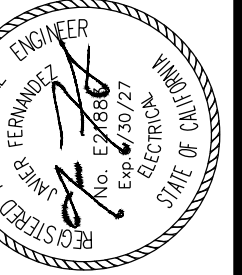
24 OF 45 SHEETS

A. THIS IS AN EXAMPLE OF A TYPICAL DIGITAL INTERFACE MODULE AND NOT AN ACTUAL REPRESENTATION FOR THIS PROJECT. REFERENCE DIV 17 FOR PLC EQUIPMENT AND IO REQUIREMENTS.

AT FULL SCALE

NEOXEN UTILITY MANAGEMENT

4010 LENNANE DRIVE
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916.564.8000



City of Colusa
2023 WILL S. GREEN AVENUE
PUMP STATION PROJECT
Colusa County, California

City of Colusa
WILL S. GREEN AVENUE
PUMP STATION PROJECT

EXAMPLE DIGITAL MODULE WIRING DIAGRAM

DATE:	09/07/2026
LEVEL:	NONE
DRAWN BY:	JF
SIGNED BY:	JF
CHECKED BY:	JP

NO: 63.102.C

DRAWING NO:
E007

OF 45 SHEETS



GENERAL NOTES

A. THIS IS AN EXAMPLE OF A TYPICAL ANALOG INTERFACE MODULE AND NOT AN ACTUAL REPRESENTATION FOR THIS PROJECT. REFERENCE DIV 17 FOR PLC EQUIPMENT AND IO REQUIREMENTS.

BAR IS ONE INCH
AT FULL SCALE

APR'L

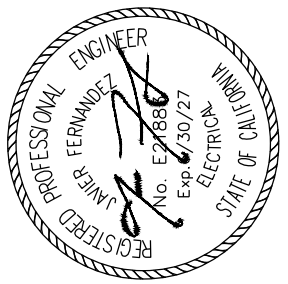
REVISIONS

DATE



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2023 WILL S. GREEN AVENUE
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Colusa County, California

EXAMPLE ANALOG MODULE
WIRING DIAGRAM

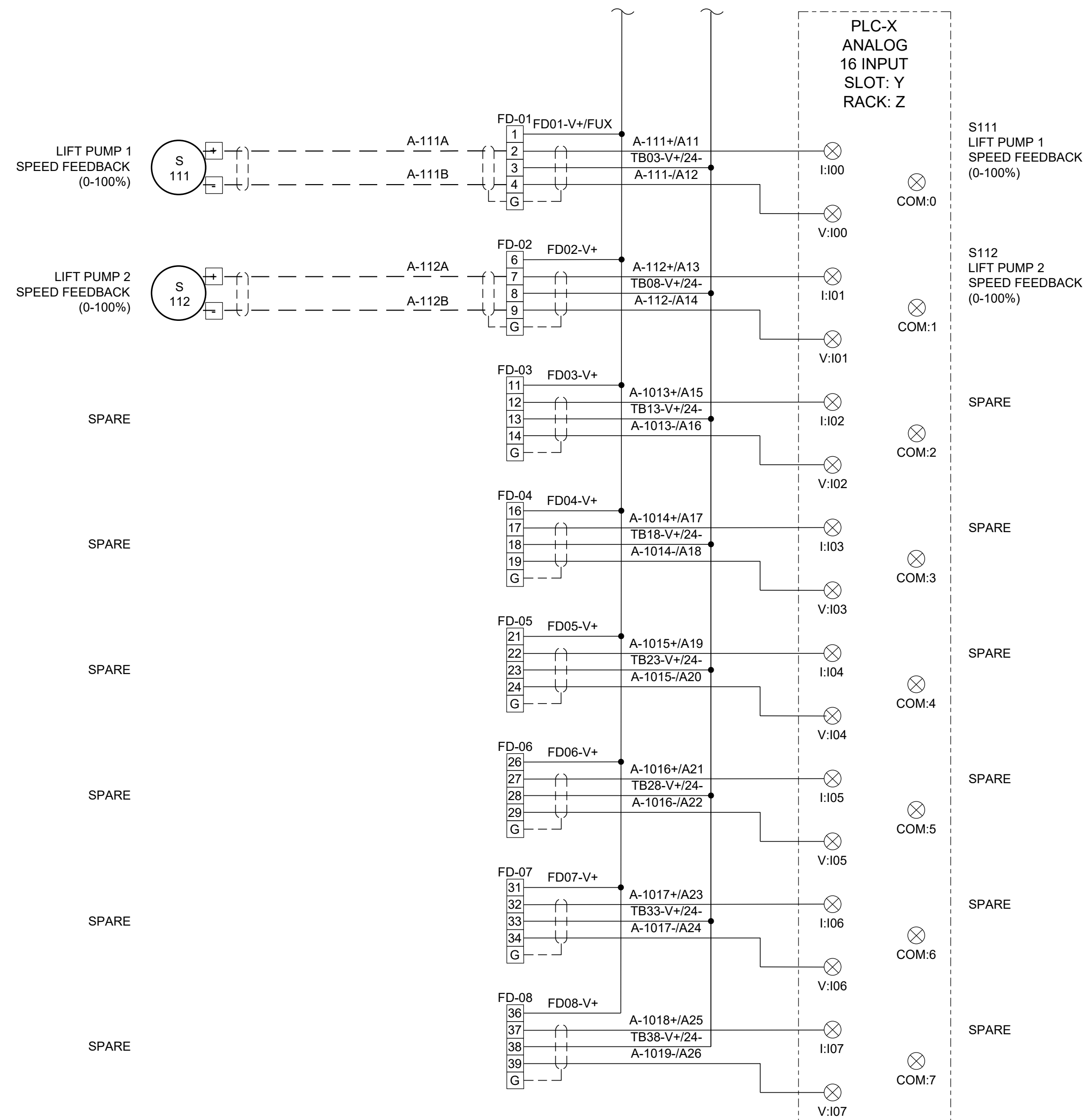
DATE: 09/07/2026
SCALE: NONE
DRAWN BY: JF
DESIGNED BY: JF
CHECKED BY: JP

JOB NO: 63.102.C

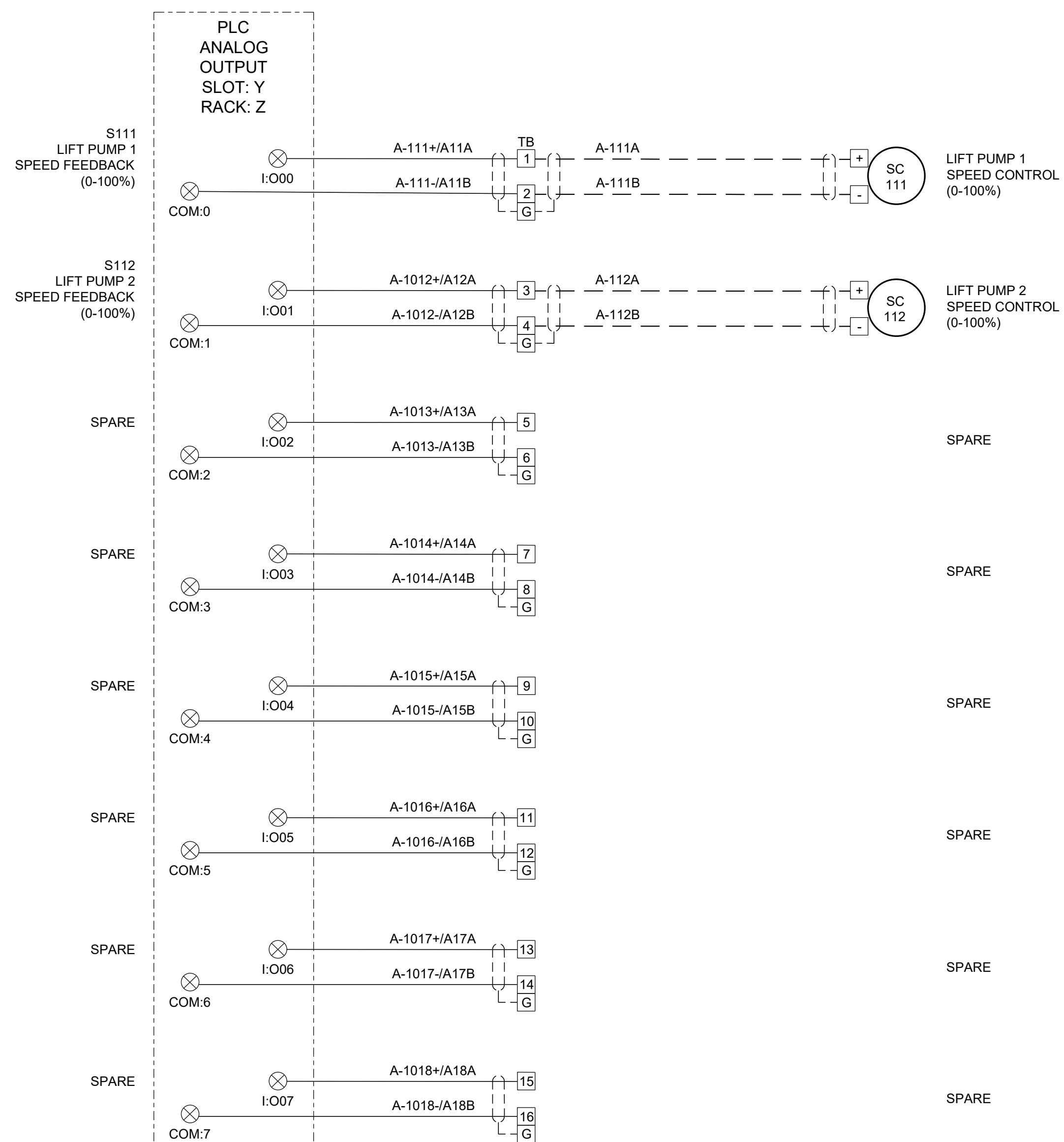
DRAWING NO:
E008

27 OF 45 SHEETS

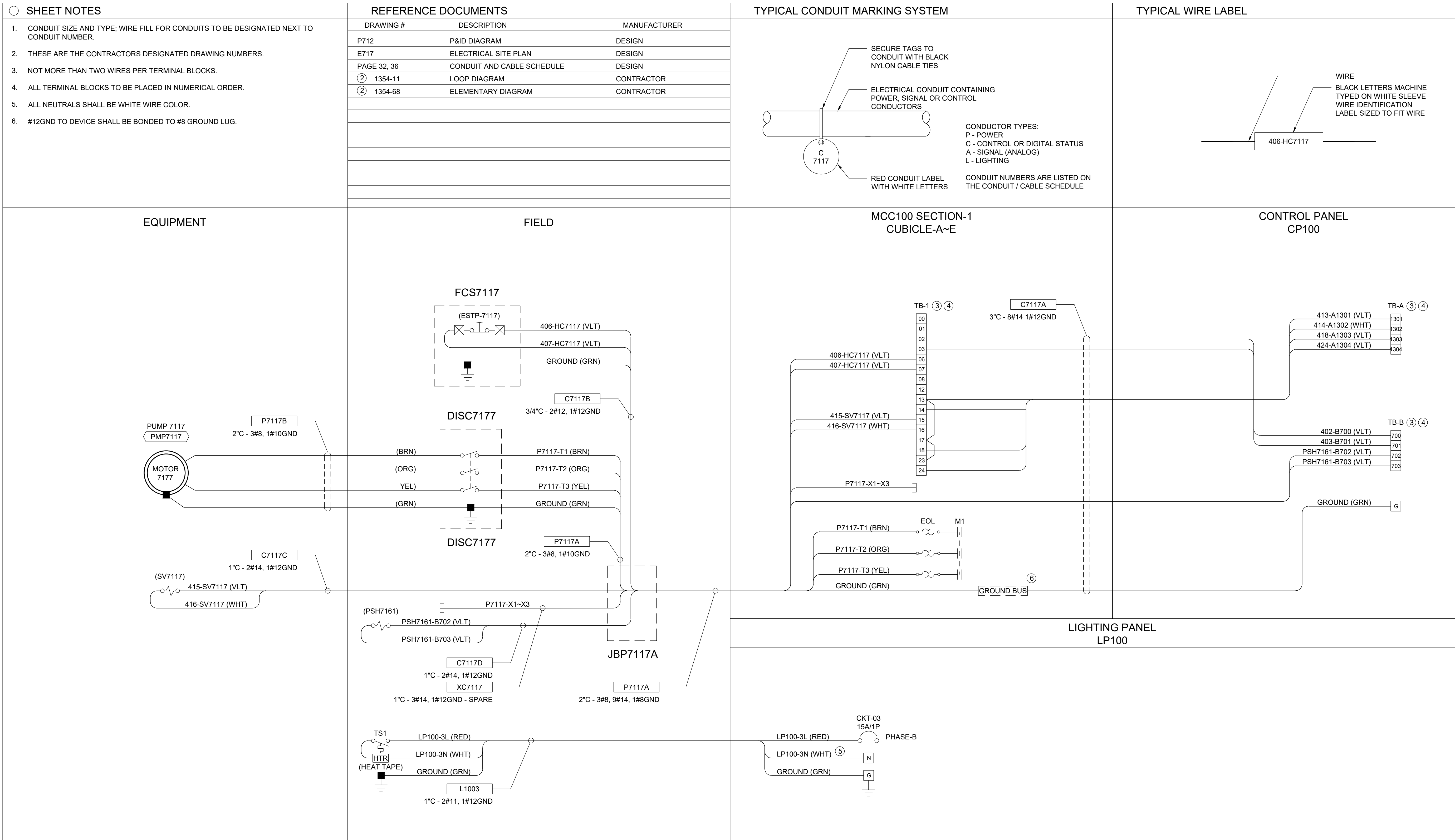
24VDC FROM FUSE TERMINAL

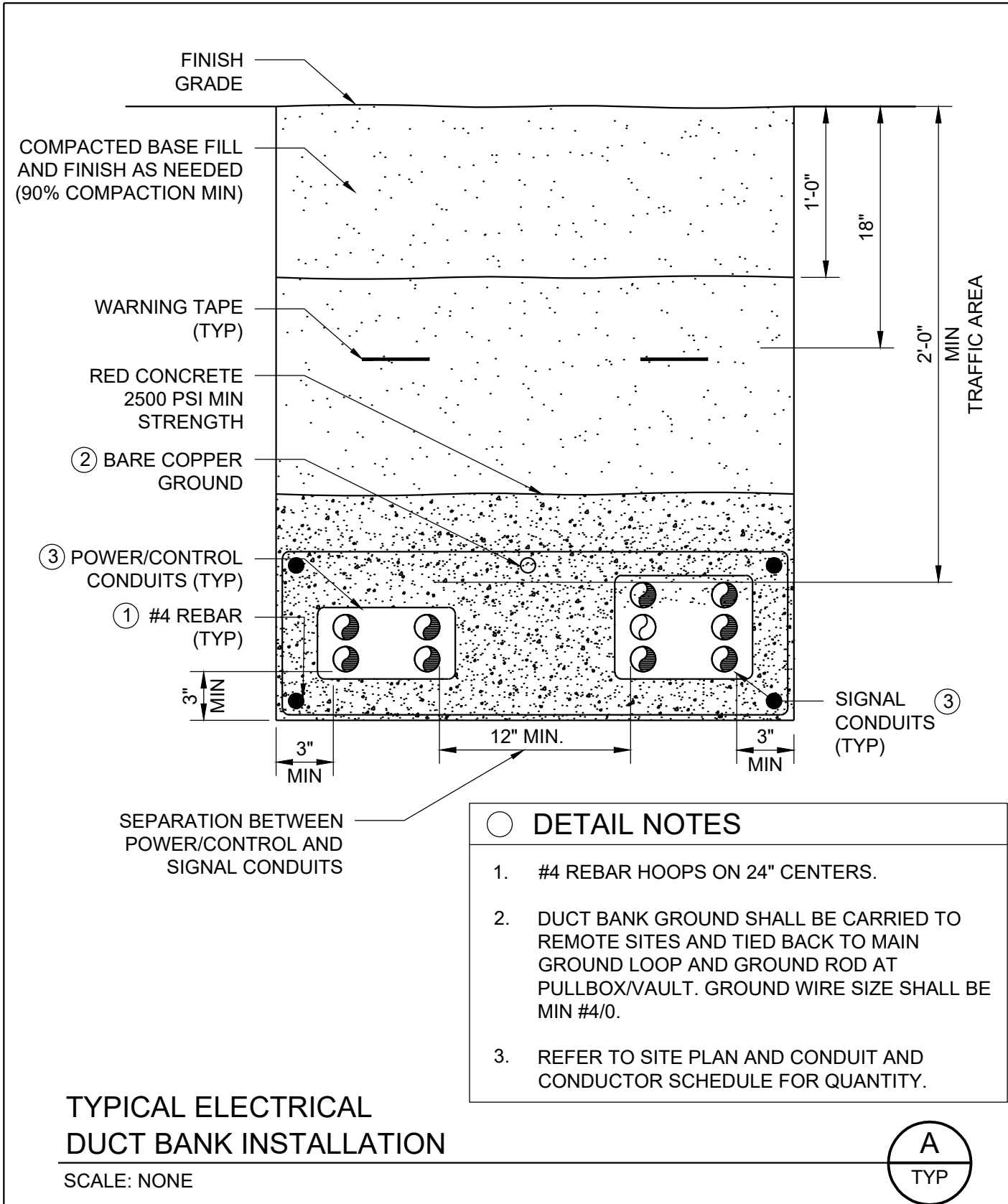


EXAMPLE AI WIRING DIAGRAM

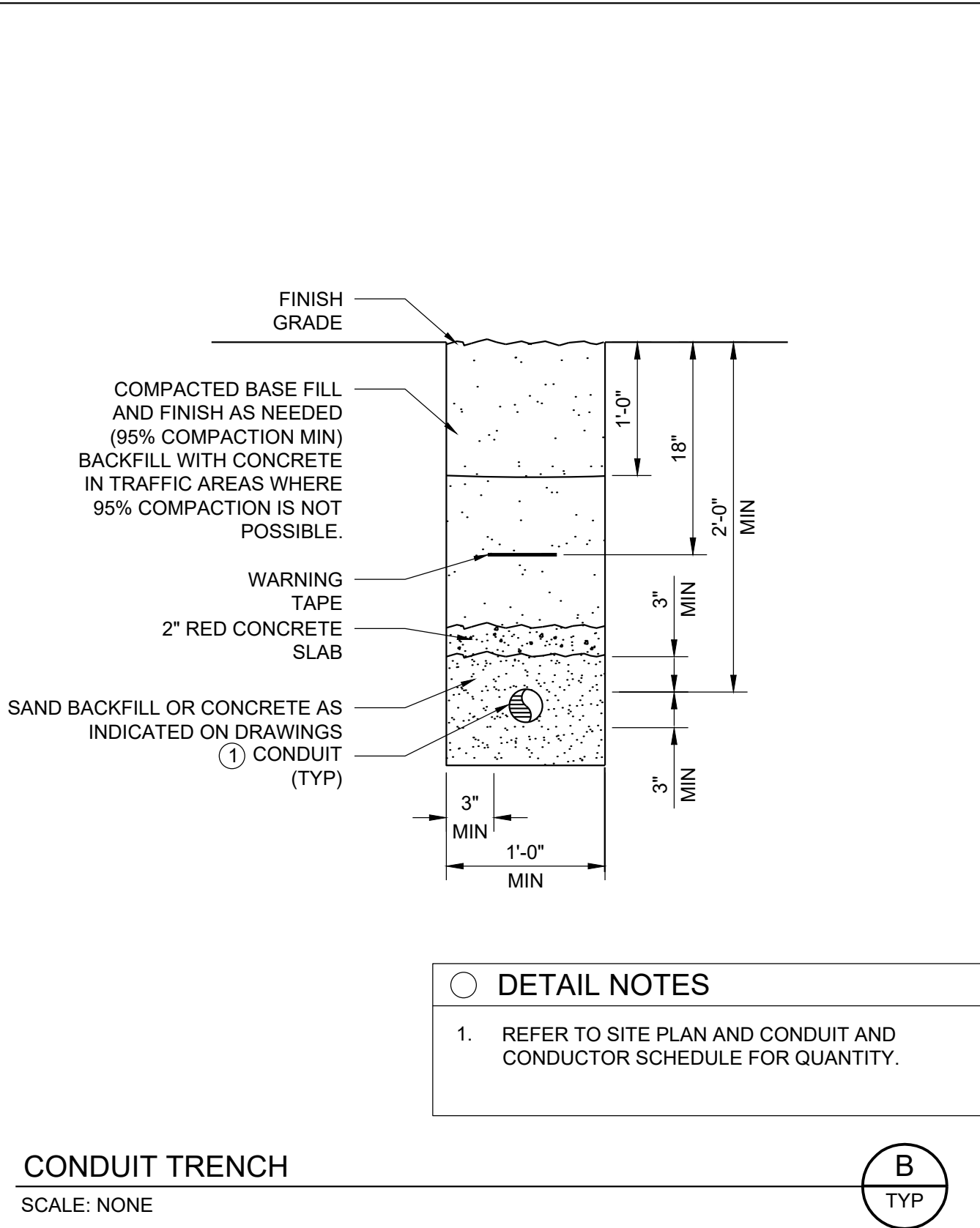


EXAMPLE AO WIRING DIAGRAM

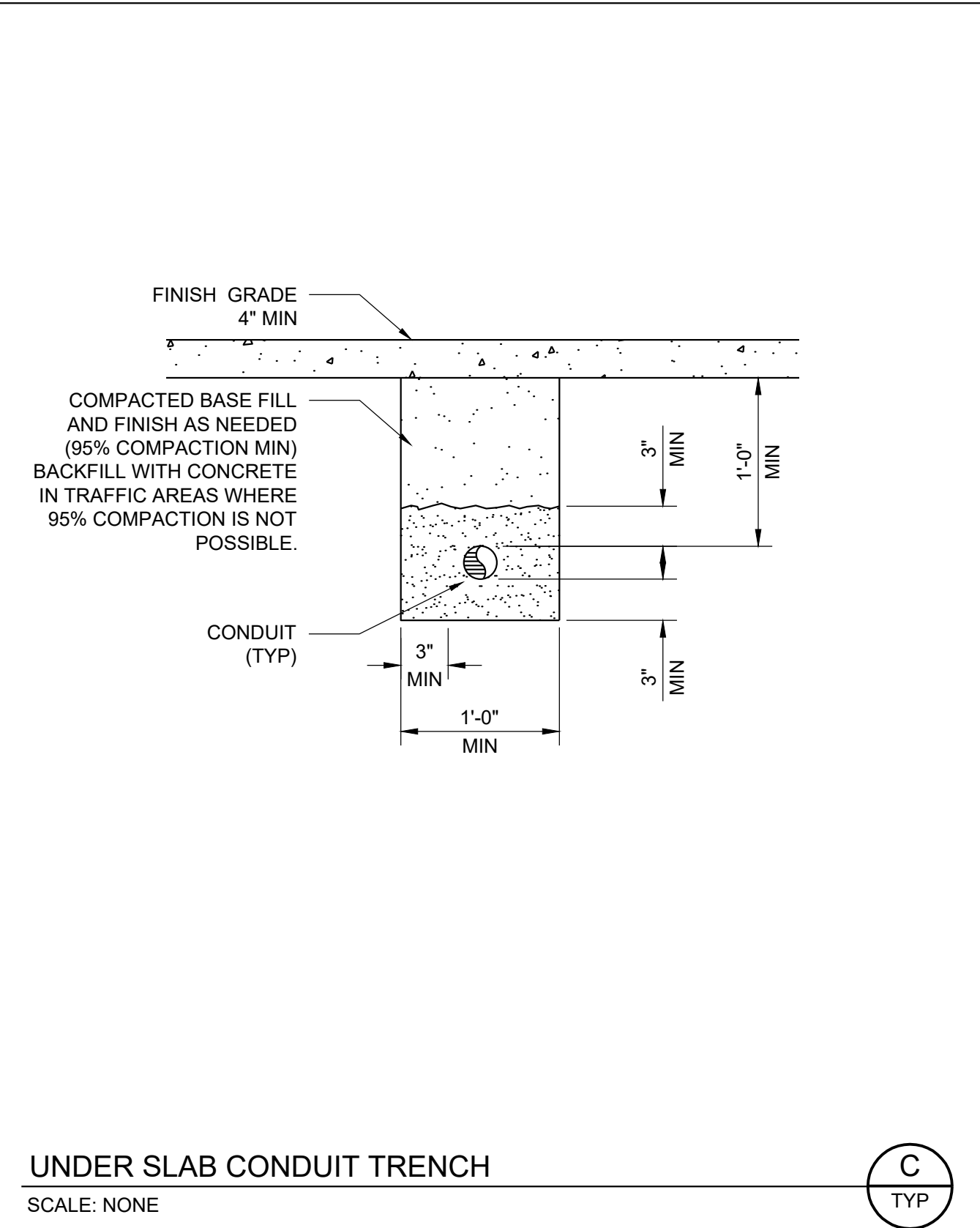




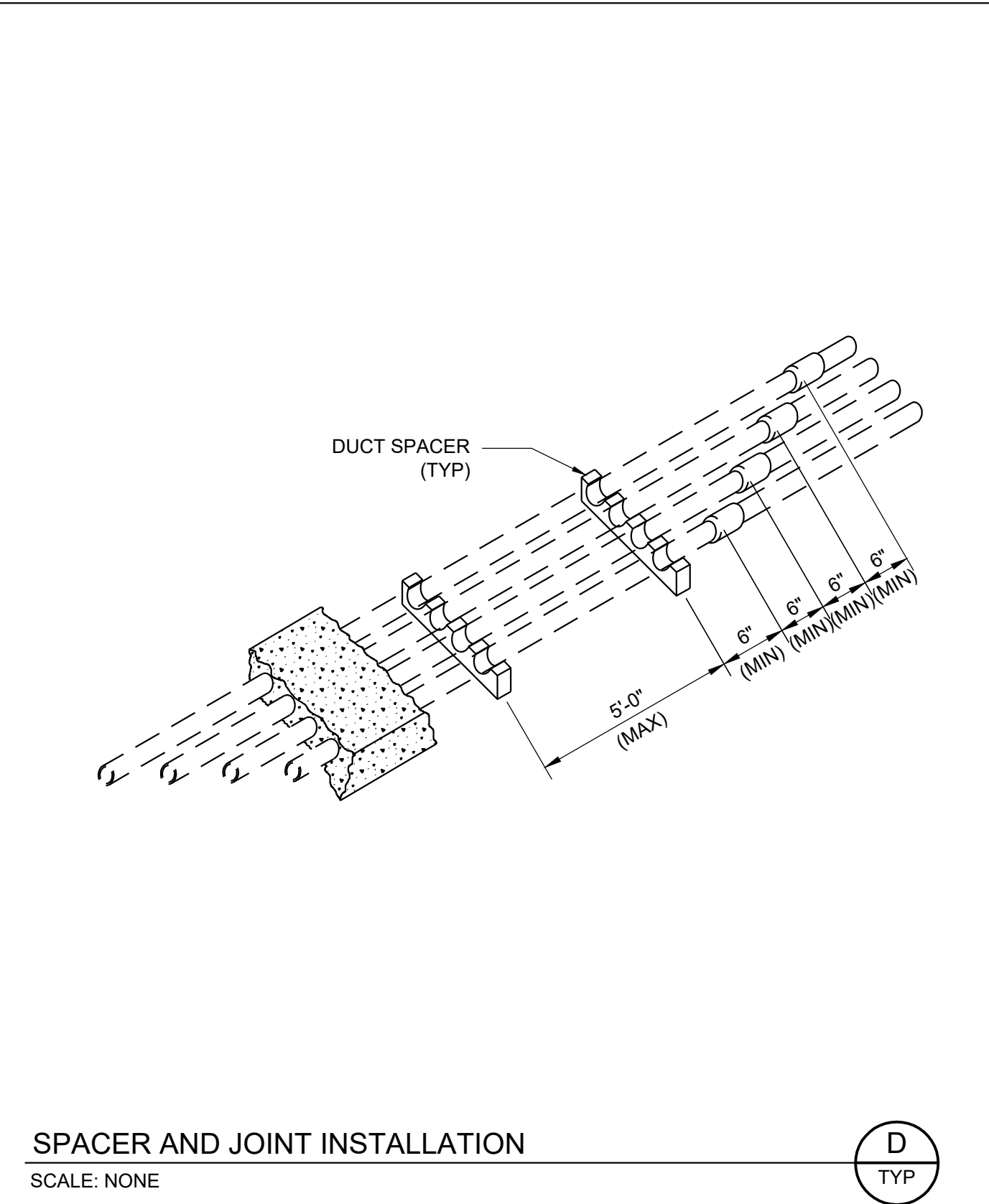
- DETAIL NOTES**
- #4 REBAR HOOPS ON 24" CENTERS.
 - DUCT BANK GROUND SHALL BE CARRIED TO REMOTE SITES AND TIED BACK TO MAIN GROUND LOOP AND GROUND ROD AT PULLBOX/VULT. GROUND WIRE SIZE SHALL BE MIN #4/0.
 - REFER TO SITE PLAN AND CONDUIT AND CONDUCTOR SCHEDULE FOR QUANTITY.



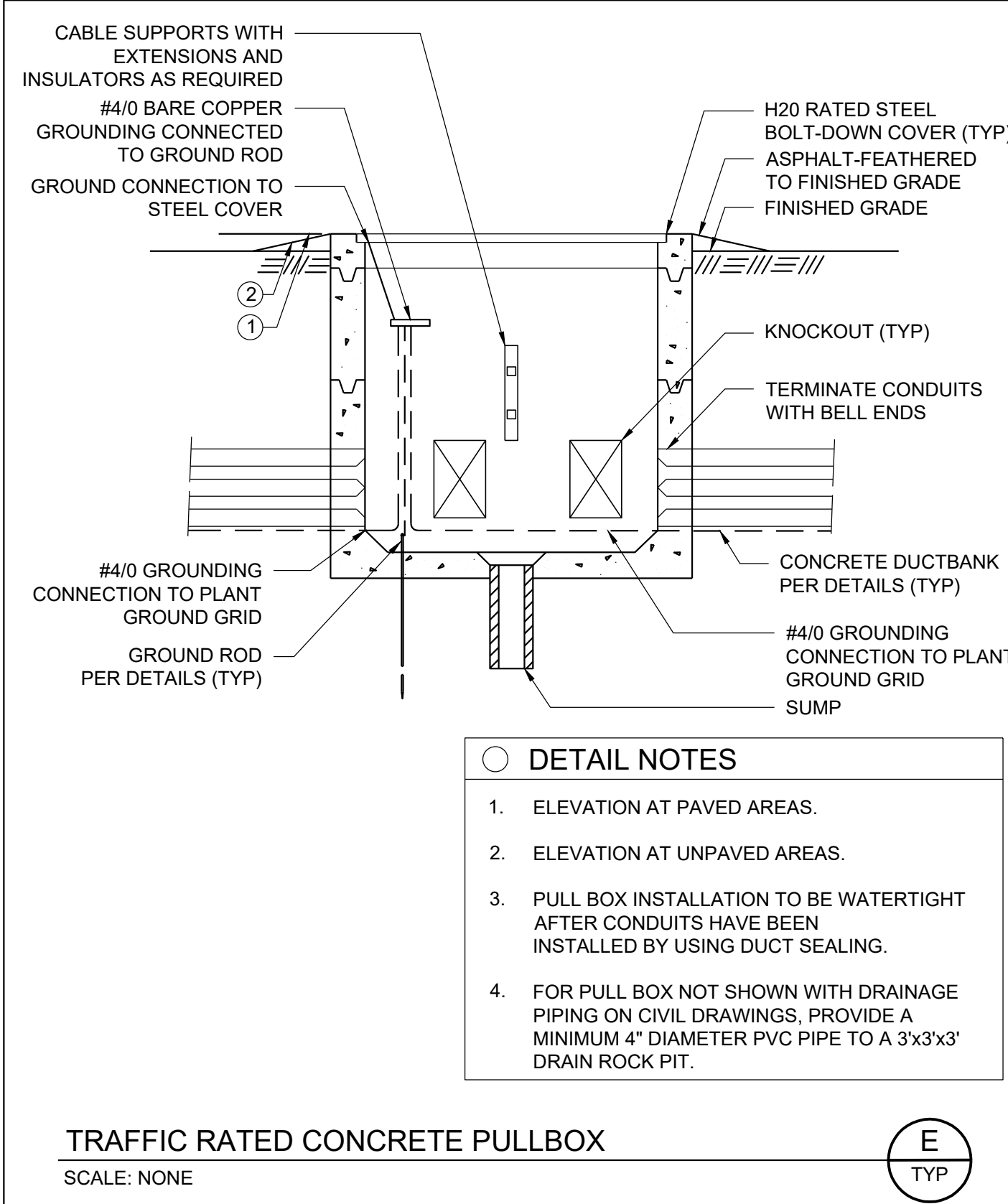
- DETAIL NOTES**
- REFER TO SITE PLAN AND CONDUIT AND CONDUCTOR SCHEDULE FOR QUANTITY.



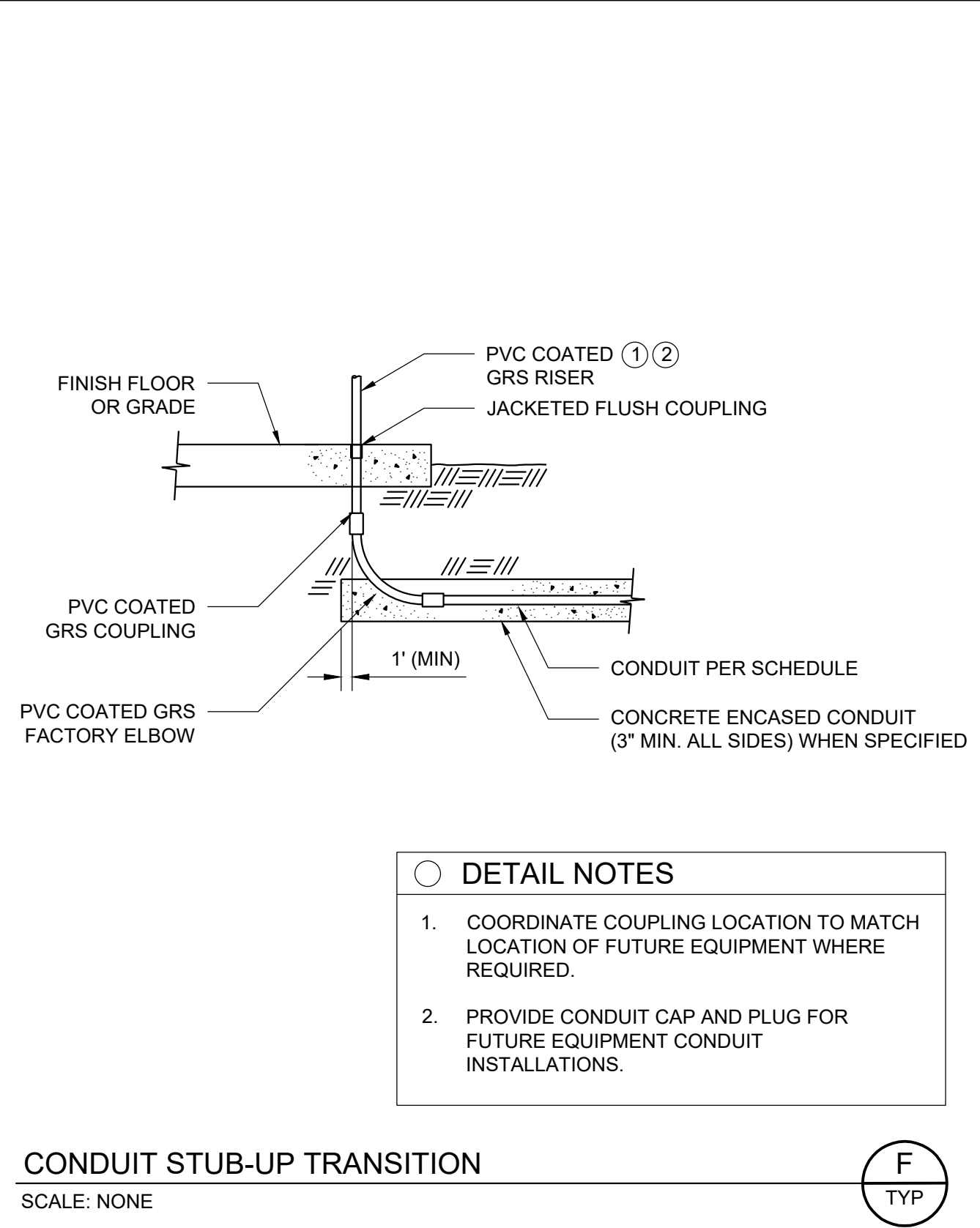
- DETAIL NOTES**
- REFER TO SITE PLAN AND CONDUIT AND CONDUCTOR SCHEDULE FOR QUANTITY.



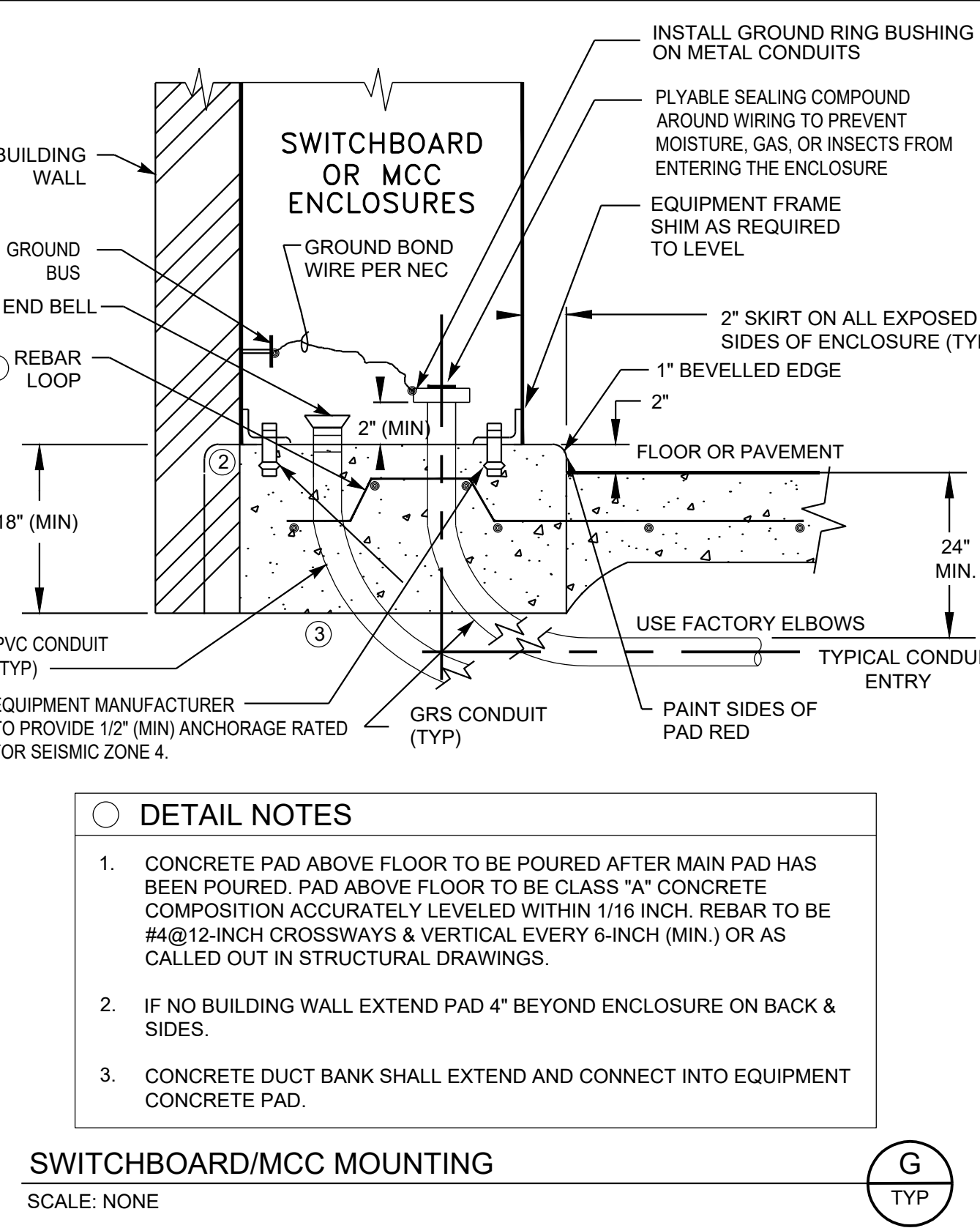
- DETAIL NOTES**
- REFER TO SITE PLAN AND CONDUIT AND CONDUCTOR SCHEDULE FOR QUANTITY.



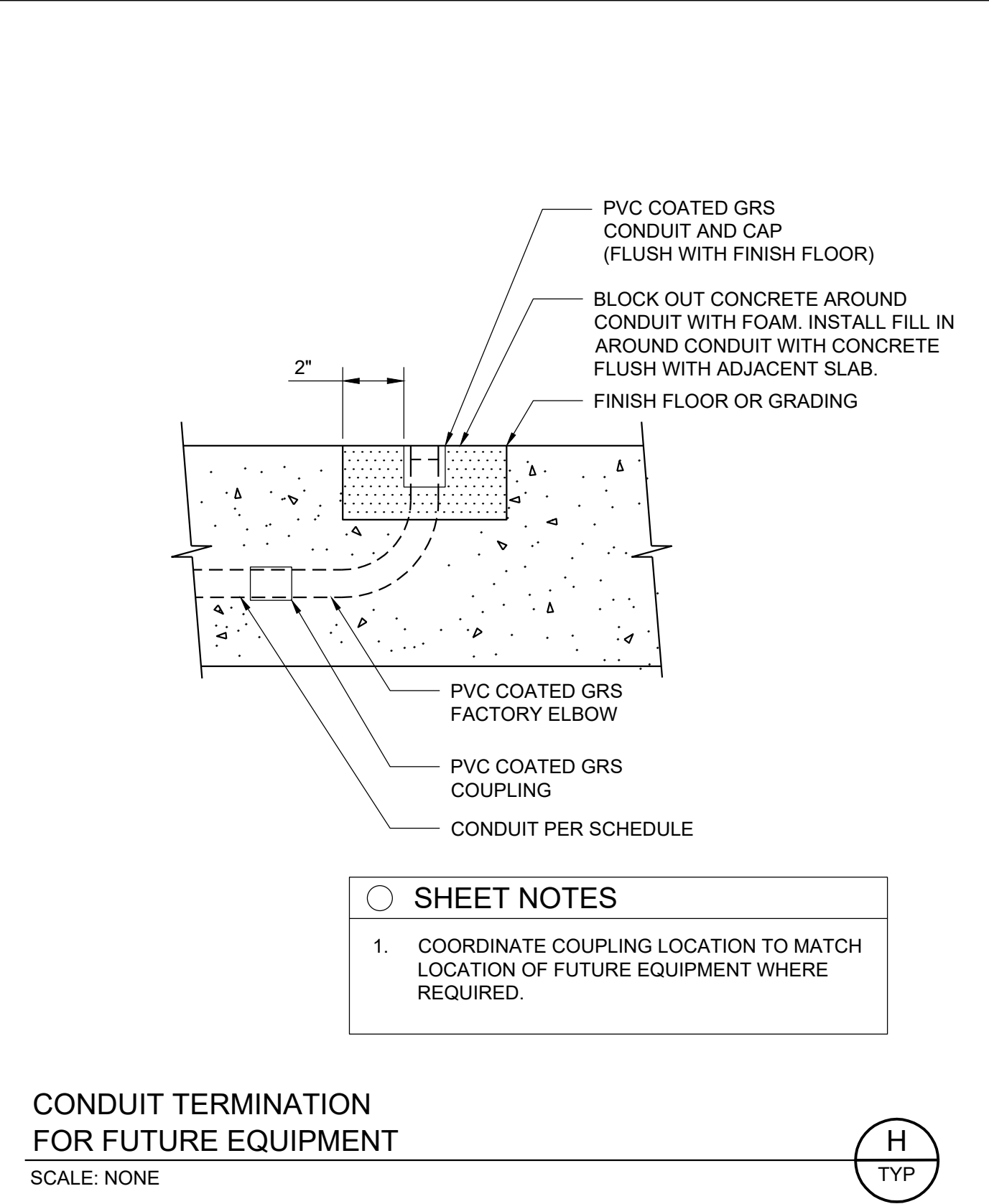
- DETAIL NOTES**
- ELEVATION AT PAVED AREAS.
 - ELEVATION AT UNPAVED AREAS.
 - PULL BOX INSTALLATION TO BE WATERTIGHT AFTER CONDUITS HAVE BEEN INSTALLED BY USING DUCT SEALING.
 - FOR PULL BOX NOT SHOWN WITH DRAINAGE PIPING ON CIVIL DRAWINGS, PROVIDE A MINIMUM 4" DIAMETER PVC PIPE TO A 3'x3'x3" DRAIN ROCK PIT.



- DETAIL NOTES**
- COORDINATE COUPLING LOCATION TO MATCH LOCATION OF FUTURE EQUIPMENT WHERE REQUIRED.
 - PROVIDE CONDUIT CAP AND PLUG FOR FUTURE EQUIPMENT CONDUIT INSTALLATIONS.



- DETAIL NOTES**
- CONCRETE PAD ABOVE FLOOR TO BE POURED AFTER MAIN PAD HAS BEEN POURED. PAD ABOVE FLOOR TO BE CLASS "A" CONCRETE COMPOSITION ACCURATELY LEVELED WITHIN 1/16 INCH. REBAR TO BE #4@12-INCH CROSSWAYS & VERTICAL EVERY 6-INCH (MIN.) OR AS CALLED OUT IN STRUCTURAL DRAWINGS.
 - IF NO BUILDING WALL EXTEND PAD 4" BEYOND ENCLOSURE ON BACK & SIDES.
 - CONCRETE DUCT BANK SHALL EXTEND AND CONNECT INTO EQUIPMENT CONCRETE PAD.



- SHEET NOTES**
- COORDINATE COUPLING LOCATION TO MATCH LOCATION OF FUTURE EQUIPMENT WHERE REQUIRED.

BAR IS ONE INCH AT FULL SCALE			
APR'L	REVISIONS	DATE	
NEXGEN UTILITY MANAGEMENT 4010 LENNANE DRIVE SACRAMENTO, CA 95834 916.564.8000			
City of Colusa 2023 WILL S. GREEN AVENUE PUMP STATION PROJECT Colusa County, California			
TYPICAL ELECTRICAL DETAILS 1			
DATE: 09/07/2026 SCALE: NONE DRAWN BY: JF DESIGNED BY: JF CHECKED BY: JP			
JOB NO: 63.102.C			
DRAWING NO: E020			
30 OF 45 SHEETS			

CONDUIT				PARALLEL RACEWAY	CONDUIT		POWER		GROUND	CONTROL		SIGNAL		
TAG	FROM	TO	QTY	SIZE	TYPE	QT	SIZE	WIRE	QT	SIZE	QT	SIZE	REMARKS	
A110B	SPB-01A	PNL-110 - LIFT PUMP CONTROL PANEL NO.1	1	2"	PVC40	-	-	#12	-	-	3	#16TSP	(2) MSH/TSH, (1) LE-151	
A111B	TERMINAL ENCLOSURE - WET WELL 1	LE, LSL, LSL, LSH, LSHH-151	1	2"	PVC40	-	-	-	-	-	5	MSC		
A120B	SPB-01A	PNL-120 - LIFT PUMP CONTROL PANEL NO.2	1	2"	PVC40	-	-	#12	-	-	3	#16TSP	(4) MSH/TSH, (1) LE-152	
A121B	TERMINAL ENCLOSURE - WET WELL 2	LE, LSL, LSL, LSH, LSHH-151	1	2"	PVC40	-	-	-	-	-	5	MSC		
A151A	SPB-01A	TERMINAL ENCLOSURE - WET WELL 1	1	1"	PVC40	-	-	#12	-	-	1	#16TSP		
A152A	SPB-01A	TERMINAL ENCLOSURE - WET WELL 2	1	1"	PVC40	-	-	#12	-	-	1	#16TSP		
A171A	CP-10 CONTROL PANEL	FIT-171 (VIA SPB-01A)	1	1"	PVC40	-	-	#12	-	-	1	#16TSP		
A171B	FIT-171	FE-171	1	1"	PVC40	-	-	#12	-	-	1	MSC		
C100A	MSB-10	CP-10 CONTROL PANEL	1	1"	PVC40	-	-	#12	2	#14	-	-	SPD TROUBLE	
C100B	ATS-10	CP-10 CONTROL PANEL	1	1"	PVC40	-	-	#12	6	#14	-	-	ATS STATUS	
C100C	ATS-10	GEN-11 - STANDBY GENERATOR	1	1"	PVC40	-	-	#12	6	#14	-	-	GENERATOR CONTROLS	
C100D	MCC-10 - POWER FAIL RELAY, SPD TROUBLE	CP-10 CONTROL PANEL	1	1"	PVC40	-	-	#12	4	#14	-	-	SPD TROUBLE	
C101A	CP-10	NORTHERN GATE MOTOR OPERATOR (SPB-02A/B/C/D)	1	1"	PVC40	-	-	#12	6	#14			GATE CONTROLS	
C102A	CP-10	SOUTHERN GATE MOTOR OPERATOR (SPB-02A/B/C/D)	1	1"	PVC40	-	-	#12	6	#14			GATE CONTROLS	
C110B	SPB-01A	PNL-110 - LIFT PUMP CONTROL PANEL NO.1	1	2"	PVC40	-	-	#12	8	#14	-	-	(8) LSHH, LSH, LSL, LSL-151	
C111A	SPB-01A	TERMINAL ENCLOSURE - WET WELL 1	1	1-1/2"	PVC40	-	-	#12	-	-	2	#16TSP	MSH/TSH	
C112A	SPB-01A	TERMINAL ENCLOSURE - WET WELL 1	1	1-1/2"	PVC40	-	-	#12	-	-	2	#16TSP	MSH/TSH	
C120B	SPB-01A	PNL-120 - LIFT PUMP CONTROL PANEL NO.2	1	2"	PVC40	-	-	#12	8	#14	-	-	(8) LSHH, LSH, LSL, LSL-152	
C121A	SPB-01A	TERMINAL ENCLOSURE - WET WELL 2	1	1-1/2"	PVC40	-	-	#12	-	-	2	#16TSP	MSH/TSH	
C122A	SPB-01A	TERMINAL ENCLOSURE - WET WELL 2	1	1-1/2"	PVC40	-	-	#12	-	-	2	#16TSP	MSH/TSH	
C151A	SPB-01A	TERMINAL ENCLOSURE - WET WELL 1	1	1-1/2"	PVC40	-	-	#12	8	#14	-	-		
C152A	SPB-01A	TERMINAL ENCLOSURE - WET WELL 2	1	1-1/2"	PVC40	-	-	#12	8	#14	-	-		
C171A	CP-10 CONTROL PANEL	FIT-171 (VIA SPB-01A)	1	1"	PVC40	-	-	#12	-	-	1	#16TSP		
C190A	CP-10	DOOR INSTRUSION SWITCH - ZS190A	1	3/4"	GRS	-	-	#12	2	#14				
C190B	CP-10	DOOR INSTRUSION SWITCH - ZS190B	1	3/4"	GRS	-	-	#12	2	#14				
D001A	ADMIN ROOM - WWTP	CP-10 - WILL S. GREEN PUMP STATION	1	2"	PVC40	-	-	-	-	-	1	12-STRAND	OS2 12-STRAND FIBER OPTIC	
D100A	MCC-10 - POWER MONITOR	CP-10 CONTROL PANEL	1	1"	PVC40	-	-	-	-	-	1	CAT6	600V RATED	
D110A	CP-10	PNL-110 - LIFT PUMP CONTROL PANEL NO.1	1	1"	PVC40	-	-	#12	-	-	1	CAT6	600V RATED	
D120A	CP-10	PNL-120 - LIFT PUMP CONTROL PANEL NO.2	1	1"	PVC40	-	-	#12	-	-	1	CAT6	600V RATED	
D130A	MCC-10	RW BOOSTER PUMP SKID (SPB-02A/B)	1	2"	PVC40	-	-	#12	-	-	1	CAT6	600V RATED	
L101A	LP-10	NORTHERN GATE MOTOR OPERATOR (PPB-02A/B/C/D)	1	1"	PVC40	3	#10	#10	-	-	-	-	GATE POWER	
L102A	LP-10	SOUTHERN GATE MOTOR OPERATOR (PPB-02A/B/C/D)	1	1"	PVC40	3	#10	#10	-	-	-	-	GATE POWER	
L105A	LCP-10	SITE LIGHT POLE - ENTRANCE AREAS (PPB-02A, LPB-02A/02B, PPB-02B, PPB-02C/D)	1	1"	PVC40	2	#12	#12	-	-	-	-		
L105B	SITE LIGHT POLE - ENTRANCE AREAS (PPB-02A, LPB-02A/02B, PPB-02B, PPB-02C/D)	LIGHT POLE	1	1"	PVC40	2	#12	#12	-	-	-	-		
L106A	LCP-10	SITE LIGHT POLE - PUMP STATION AREAS (LPB-01A/01B)	1	1"	PVC40	2	#12	#12	-	-	-	-		
L106B	SITE LIGHT POLE - PUMP STATION AREAS (LPB-01A/01B)	LIGHT POLE	1	1"	PVC40	2	#12	#12	-	-	-	-		
L107A	LP-10	LTG - INTERIOR BUILDING	1	1"	PVC40	2	#12	#12	-	-	-	-	GATE POWER	
L108A	LP-10	RECEPT - INTERIOR BUILDING	1	1"	PVC40	2	#12	#12	-	-	-	-	GATE POWER	
L109A	LCP-10	LTG - EXTERIOR BUILDING	1	1"	PVC40	2	#12	#12	-	-	-	-		
L110A	LP-10	RECEPT - EXTERIOR BUILDING	1	1"	PVC40	2	#12	#12	-	-	-	-	GATE POWER	
L111A	LP-10	GEN-11 - STANDBY GENERATOR	1	1"	PVC40	4	#10	#10	-	-	-	-	GENERATOR HEATER/CHARGER	
L115A	LP-10	LTG - EMERGENCY LIGHTING	1	1"	PVC40	2	#12	#12	-	-	-	-	GATE POWER	
L117A	LP-10	LIGHTING CONTROL PANEL (LCP-10)	1	1"	PVC40	6	#12	#12	-	-	-	-	CKT-17 LCP POWER, CKT-05 AREA SITE LIGHTING, CKT-09 EXTERIOR LIGHTING	
L119A	LP-10	AC UNIT	1	1"	PVC40	3	#6	#8	-	-	-	-	CKT-19/21	
P001	SERVICE POLE	PG&E TRANSFORMER - XFMR-10	1	5"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
P001A	PG&E TRANSFORMER - XFMR-10	MAIN SWITCHBOARD MSB-10	2	5"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
P100A	MSB-10	ATS-10	2	2"	PVC40	4	#4/0	#4	-	-	-	-		
P100B	ATS-10	MCC-10	2	2"	PVC40	4	#4/0	#4	-	-	-	-		
P100C	ATS-10	GEN-11 - STANDBY GENERATOR	1	2-1/2"	PVC40	4	#4/0	#4	-	-	-	-	PROVIDE (1) 2-1/2" CONDUIT WITH PULL ROPE	
P110A	MCC-10	PNL-110 - LIFT PUMP CONTROL PANEL NO.1	1	1-1/2"	PVC40	3	#6	#8	-	-	-	-		
P110B	PPB-01A	PNL-110 - LIFT PUMP CONTROL PANEL NO.1	1	2"	PVC40	2-3C	#10	#10	-	-	-	-	3-CONDUCTOR VFD CABLE WITH GROUND	
P111A	PPB-01A	TERMINAL ENCLOSURE - WET WELL 1	1	1-1/2"	PVC40	3C	#10	#10	-	-	-	-	3-CONDUCTOR VFD CABLE WITH GROUND	
P111B	TERMINAL ENCLOSURE - WET WELL 1	PMP-111 - LIFT PUMP 1	1	2"	PVC40	1	MSC	-	-	-	-	-		
P112A	PPB-01A	TERMINAL ENCLOSURE - WET WELL 1	1	1-1/2"	PVC40	3C	#10	#10	-	-	-	-	3-CONDUCTOR VFD CABLE WITH GROUND	
P112B	TERMINAL ENCLOSURE - WET WELL 1	PMP-112 - LIFT PUMP 2	1	2"	PVC40	1	MSC	-	-	-	-	-		
P120A	MCC-10	PNL-120 - LIFT PUMP CONTROL PANEL NO.2	1	1-1/2"	PVC40	3	#6	#8	-	-	-	-		
P120B	PPB-01A	PNL-120 - LIFT PUMP CONTROL PANEL NO.2	1	2"	PVC40	2-3C	#10	#10	-	-	-	-	3-CONDUCTOR VFD CABLE WITH GROUND	
P121A	PPB-01A	TERMINAL ENCLOSURE - WET WELL 2	1	1-1/2"	PVC40	3C	#10	#10	-	-	-	-	3-CONDUCTOR VFD CABLE WITH GROUND	
P121B	TERMINAL ENCLOSURE - WET WELL 2	PMP-112 - LIFT PUMP 3	1	2"	PVC40	1	MSC	-	-	-	-	-		
P122A	PPB-01A	TERMINAL ENCLOSURE - WET WELL 2	1	1-1/2"	PVC40	3C	#10	#10	-	-	-	-	3-CONDUCTOR VFD CABLE WITH GROUND	
P122B	TERMINAL ENCLOSURE - WET WELL 2	PMP-122 - LIFT PUMP 4	1	2"	PVC40	1	MSC	-	-	-	-	-		
P130A	MCC-10	RW BOOSTER PUMP SKID (PPB-02A/B)	1	3"	PVC40	3	#250KCMIL	#2	-	-	-	-		
P171A	CP-10 CONTROL PANEL	FIT-171 (VIA PPB-01A)	1	1"	PVC40	-	-	#12	-	-	1	#16TSP		
P171B	FIT-171	FE-171	1	1"	PVC40	-	-	#12	-	-	1	MSC		
XA001A	CP-10	SPB-01A	2	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XA001B	CP-10	SPB-02A/B/C/D	2	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XA111	CP-10	VFD - 111 - FUTURE VFD SECTION	1	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XA112	CP-10	VFD - 112 - FUTURE VFD SECTION	1	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XA121	CP-10	VFD - 121 - FUTURE VFD SECTION	1	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XA122	CP-10	VFD - 122 - FUTURE VFD SECTION	1	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XA151A	CP-10 CONTROL PANEL	SPB-01A	1	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XA152A	CP-10 CONTROL PANEL	SPB-01A	1	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XC001A	CP-10	SPB-01A	2	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XC001B	CP-10	SPB-02A/B/C/D	2	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XC111	CP-10	VFD - 111 - FUTURE VFD SECTION	1	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XC111A	MCC-10 FUTURE VFD SECTION	SPB-01A	1	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XC112	CP-10	VFD - 112 - FUTURE VFD SECTION	1	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XC112A	MCC-10 FUTURE VFD SECTION	SPB-01A	1	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XC121	CP-10	VFD - 121 - FUTURE VFD SECTION	1	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XC121A	MCC-10 FUTURE VFD SECTION	SPB-01A	1	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XC122	CP-10	VFD - 122 - FUTURE VFD SECTION	1	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XC122A	MCC-10 FUTURE VFD SECTION	SPB-01A	1	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XC151A	CP-10 CONTROL PANEL	SPB-01A	1	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XC152A	CP-10 CONTROL PANEL	SPB-01A	1	1"	PVC40	-	-	-	-	-	-	-	WITH PULLROPE	
XD001A	ADMIN ROOM - WWTP	CP-10 - WILL S. GREEN PUMP STATION (VIA PB-01A THRU PB-J)	1	2"	PVC40/PVC-GRS	-	-	-	-	-	-	-	WITH PULLROPE	
XD140A	MCC-10	FUTURE BIO-FILTER CONTROL SYSTEM (SPB-02A/B/C)	1	2"	PVC40	-	-							

BAR IS ONE INCH
AT FULL SCALE

APR'L

REVISIONS

DATE

APPROVAL

DATE

BY

DATE

BY

DATE

BY

DATE

BY

NEXGEN UTILITY MANAGEMENT

4010 LENNANE DRIVE
SACRAMENTO, CA 95834
916.564.8000

NEXGEN

PROFESSIONAL ENGINEER
REGISTERED
STATE OF CALIFORNIA
ELECTRICAL
No. 100000000
DATE OF QUAL. 1/1/2020

City of Colusa

2026 WILL S. GREEN AVENUE
PUMP STATION PROJECT

Colusa County, California

CONDUIT AND CABLE
SCHEDULE

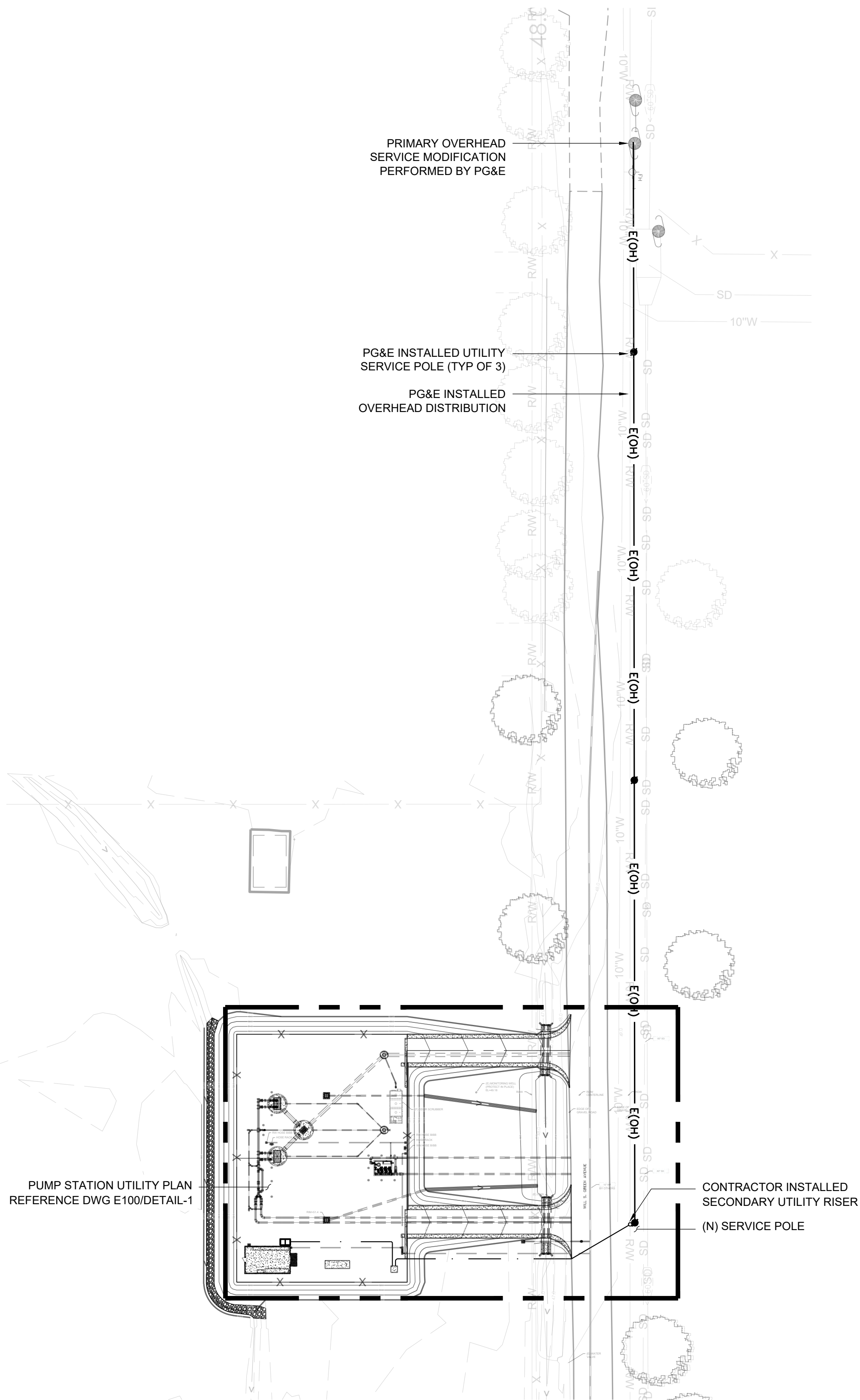
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SCALE: NONE
DRAWN BY: JF
DESIGNED BY: JF
CHECKED BY: JP

JOB NO: 63.102.C

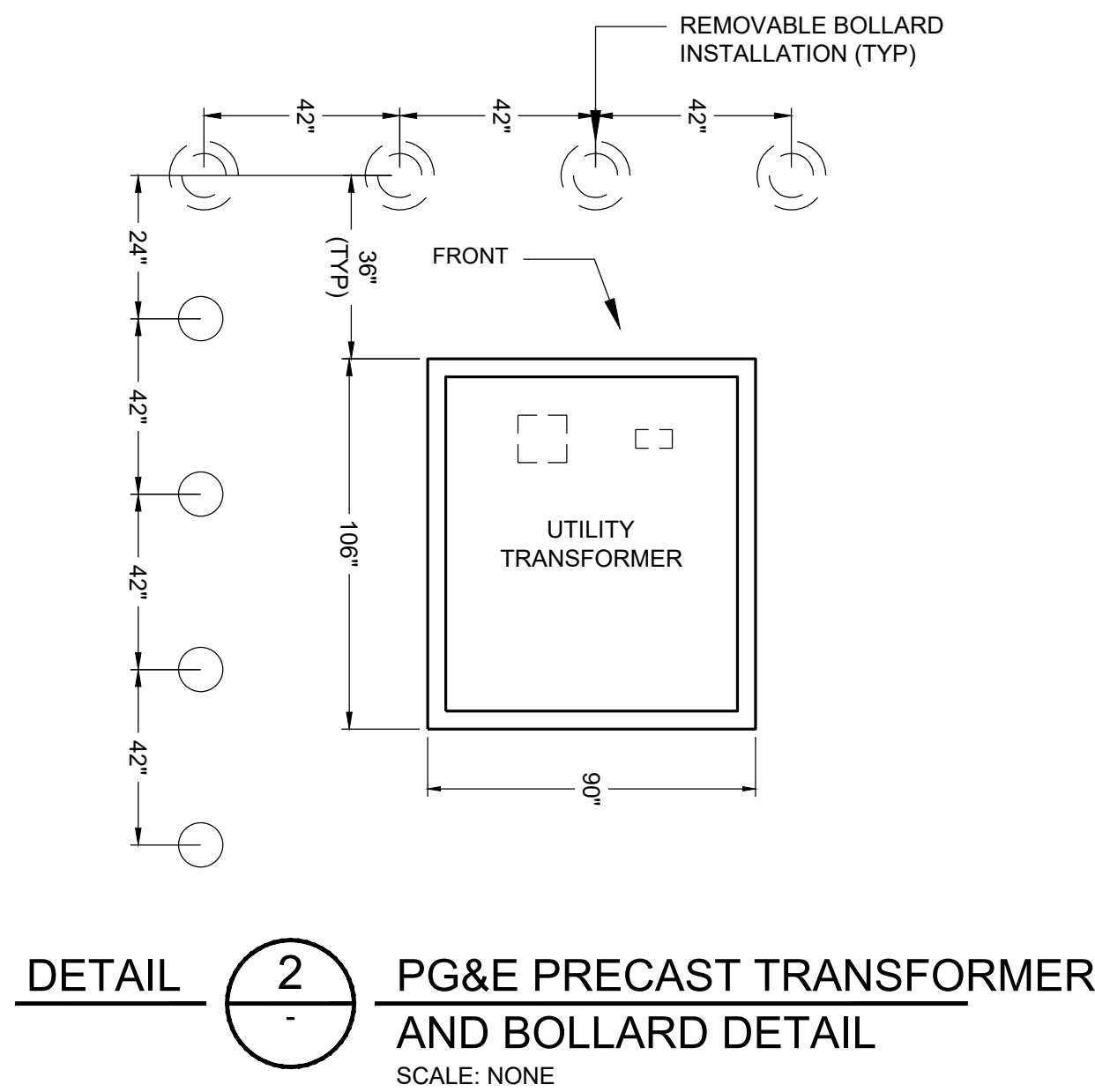
DRAWING NO:
E030

33 OF 45 SHEETS

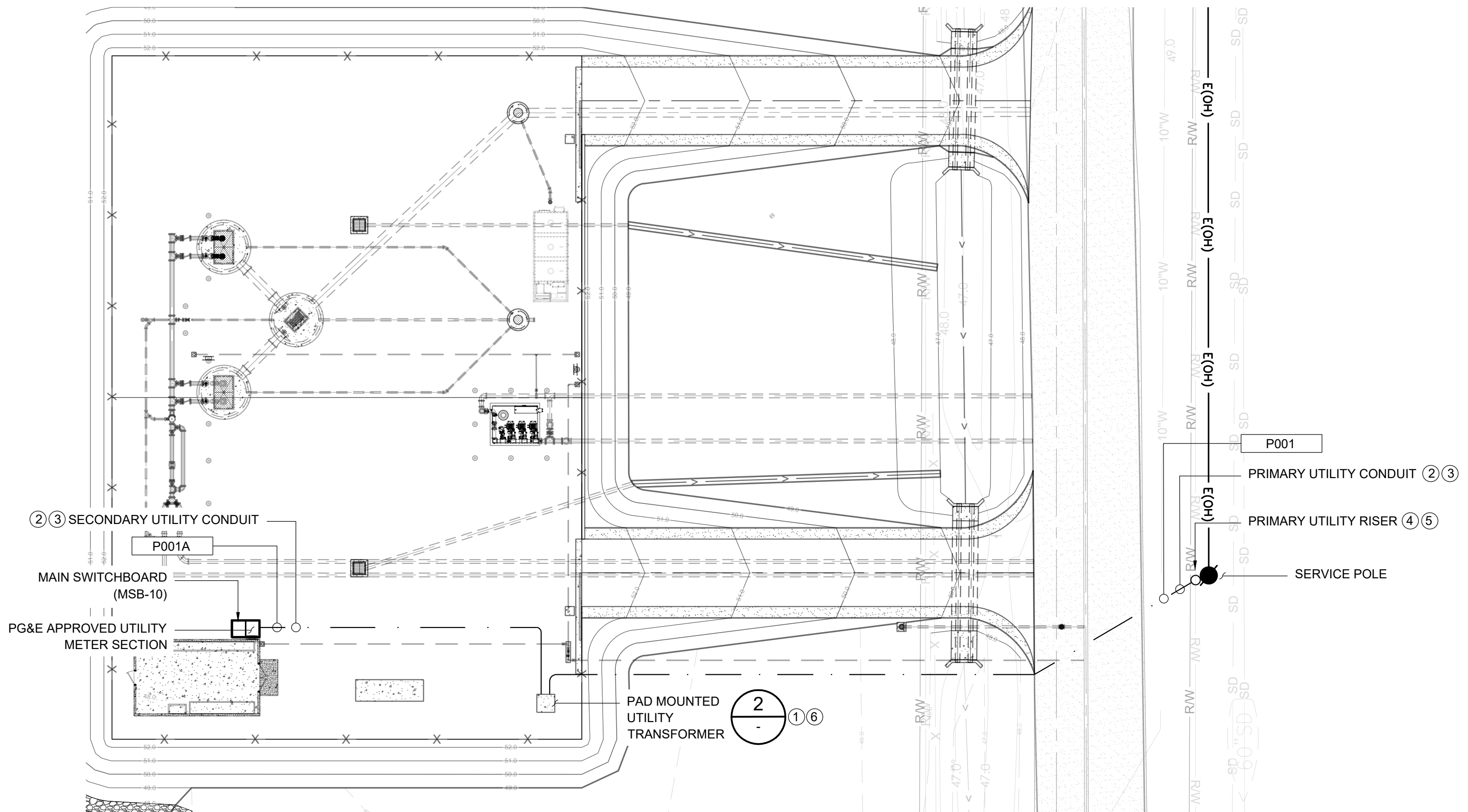
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OVERALL UTILITY PLAN
SCALE: 1" = 50'-0"



DETAIL 2 PG&E PRECAST TRANSFORMER
AND BOLLARD DETAIL
SCALE: NONE



VIEW 1 PUMP STATION
UTILITY PLAN
SCALE: 1" = 20'-0"

- GENERAL NOTES**
- REFERENCE E001 FOR ADDITIONAL ELECTRICAL GENERAL NOTES.
 - UTILITY EQUIPMENT SHALL CONFORM TO PG&E GREEN BOOK REQUIREMENTS. REFERENCE SPECIFICATION SECTION 16473 FOR ADDITIONAL COORDINATION REQUIREMENTS.
- SHEET NOTES**
- PAD MOUNTED UTILITY TRANSFORMER PROVIDED AND INSTALLED BY PG&E.
 - ALL UNDERGROUND UTILITY CONDUITS SHALL CONFORM TO PG&E GREENBOOK AND STANDARDS.
 - PRIMARY/SECONDARY CONDUITS SHALL BE TRENCHED AND INSTALLED BY THE CONTRACTOR. CONDUCTORS SHALL BE PULLED AND TERMINATED BY PG&E.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE INSTALLATION, INSPECTIONS AND ACCEPTANCE OF INSTALLATION.
 - FURNISH AND INSTALL UTILITY RISERS IN ACCORDANCE WITH PG&E GREEN BOOK STANDARDS.
 - CONTRACTOR SHALL INSTALL PRE-CAST PAD TRANSFORMER PAD. COORDINATE EXACT PAD LOCATION WITH PG&E AND CITY PRIOR TO INSTALLATION.

BAR IS ONE INCH
AT FULL SCALE

APRVL

REVISIONS

DATE

NEXGEN UTILITY MANAGEMENT

4010 LENNANE DRIVE
SACRAMENTO, CA 95834
916.564.8000

City of Colusa

2026 WILL S. GREEN AVENUE
PUMP STATION PROJECT

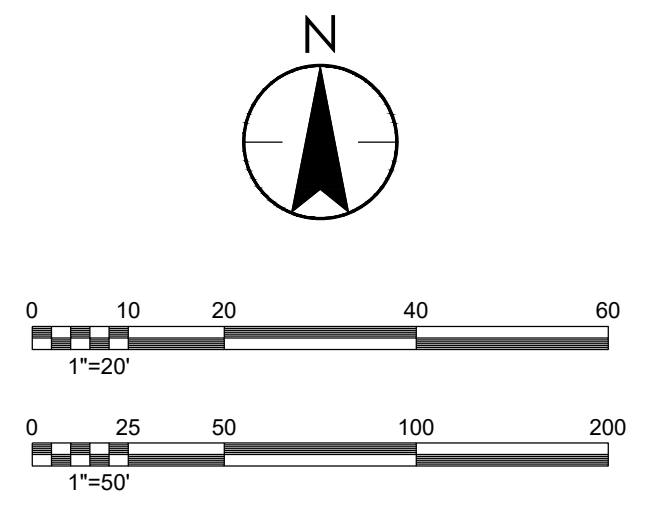
Colusa County, California

OVERALL UTILITY PLAN

DATE: 16/07/2026
SCALE: AS NOTED
DRAWN BY: JF
DESIGNED BY: JF
CHECKED BY: JP

JOB NO: 63.102.C
DRAWING NO:
E100

34 OF 45 SHEETS



NEMA
3R



NEMA
12

CLASS 1
DIV 1 (1)

CLASS 1
DIV 2 (1)

1 PUMP STATION AREA
REFERENCE DWG E110

5

P121A P122A
C121A C122A
A152A C152A

P111A P112A
C111A C112A
A151A C151A

A171A
C171A
P171A

P110B P120B
A110B A120B
C110B C120B
P171A A171A
L106A C171A
XP111A XC111A
XP112A XC112A
XP121A XC121A
XP122A XC122A
XA151A XC151A
XA152A XC152A
XP001A XA001A
XL001A XC001A

CONTROL BUILDING
REFERENCE DWG E111

L106B
LPB-01B ④
L106A
L106A ⑤
LPB-01A ④
L106B
ELECTRICAL DUCT BANK
PPB-01A ②⑥
SPB-01A ②⑥
D001A
XD001A
GEN11
STANDBY GENERATOR
PPB-02A ②⑥
SPB-02A ②⑥
P101C
L111A ⑤
C101C
L105B
LPB-02A ④
L105A ⑤
ELECTRICAL DUCT BANK
A E020 E020 (TYP)

PNL140
FUTURE ODOR CONTROL SYSTEM
STUP-UP CONDUITS FOR FUTURE USE
XP140A
XD140A
② SPB-02C
② PPB-02C
PNL130
RW BOOSTER PUMP SKID
P130A
D130A
ELECTRICAL TRENCH WITH CONCRETE BACKFILL
H E020 B E020 (TYP)

FIBER CONDUIT
CONTINUE TO DWG E102
② SPB-02B
② PPB-02B
L105B
LPB-02B ④
L105B
CARD READER
OR KEYPAD
NORTHERN GATE
MOTOR OPERATOR
L101A C101A
L105A XA001B
XP001B XC001B
L101A C101A
L105A XA001B
XP001B XC001B
XP140A XD140A
L101A C101A
L105A D130A
P130A XA001B
XP001B XC001B
XP140A XD140A
CARD READER
OR KEYPAD
SOUTHERN GATE
MOTOR OPERATOR
L102A C102A
L101A C101A
L102A C102A
L105A D130A
P130A XA001B
XP001B XC001B
XP140A XD140A

PE

SCALE: 1" = 10'-0"

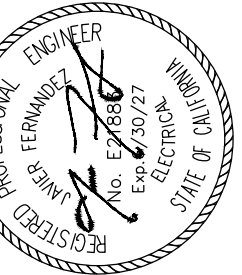
- A. REFERENCE E001 FOR ADDITIONAL ELECTRICAL GENERAL NOTES.
- B. AREA CLASSIFICATION SHALL APPLY UNLESS OTHERWISE NOTED ON THE PLANS AND SPECIFICATIONS.
- C. MAINTAIN A MINIMUM OF 12" SEPARATIONS BETWEEN ELECTRICAL CONDUITS AND PROCESS PIPING.

1. ALL CONDUITS ENTERING AND LEAVING CLASSIFIED AREA SHALL BE GRS-PVC AND HAVE HAZARDOUS LOCATION FITTINGS.
2. PROVIDE H20 RATED (36"x24" MIN.) PRE-CAST CONCRETE PULL BOX. INSTALL PER E020/DETAIL-E.
3. PROVIDE H20 RATED (17"x22" MIN.) PRE-CAST CONCRETE PULL BOX. INSTALL PER E021/DETAIL-A.
4. PROVIDE H20 RATED (10"x17" MIN.) PRE-CAST CONCRETE PULL BOX. INSTALL PER E021/DETAIL-A.
5. TRANSITION CONDUITS OUT OF DUCT BANK ONCE REQUIRED CONDUIT ARE WITHIN PROCESS AREA.
6. THE CONTRACTOR SHALL FIELD COORDINATE EXACT PULL BOX LOCATION TO ALLOW DUCT BANK SWEEPS AND TRANSITION INTO PULL BOXES.
7. MAINTAIN 12" MIN VERTICAL AND HORIZONTAL SEPARATION BETWEEN PG&E SECONDARY CONDUITS AND ELECTRICAL DUCTBANKS.

--	--

MENT

4010 LENNANE DRIVE
SACRAMENTO, CA 95834
916.564.8000



City of Colusa
2026 WILL S. GREEN AVENUE
PUMP STATION PROJECT

Colusa County, California

OVERALL ELECTRICAL SITE PLAN

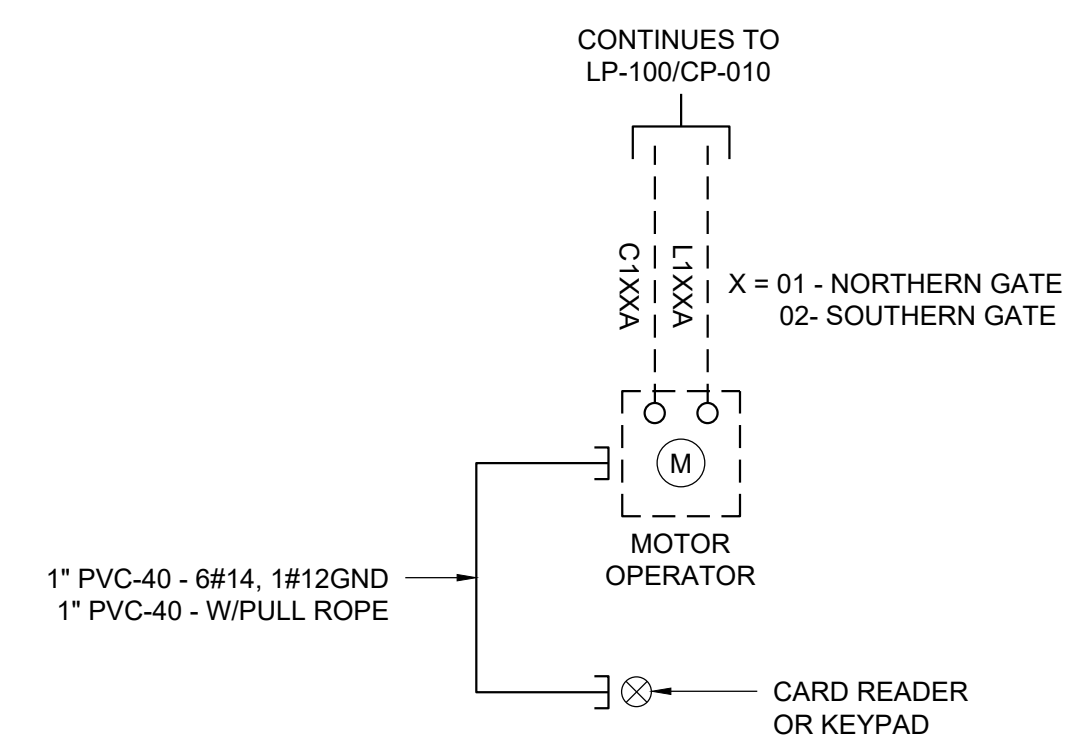
TE: 16/07/2026
ALE: AS NOTED
AWN BY: JF
SIGNED BY: JF
ECKED BY: JP

B NO: 63.102.C

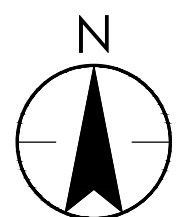
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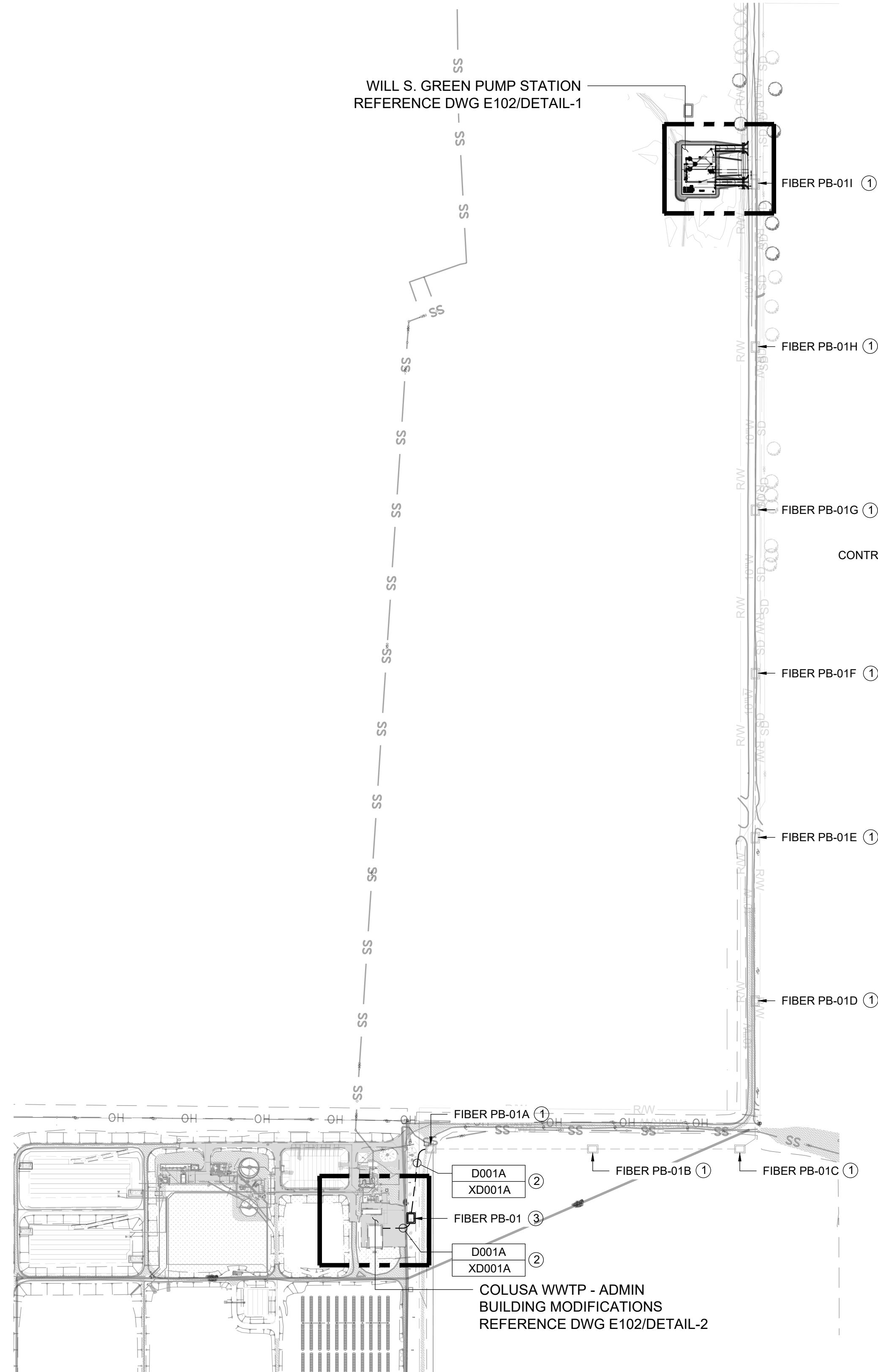
E101

5 OF 45 SHEETS

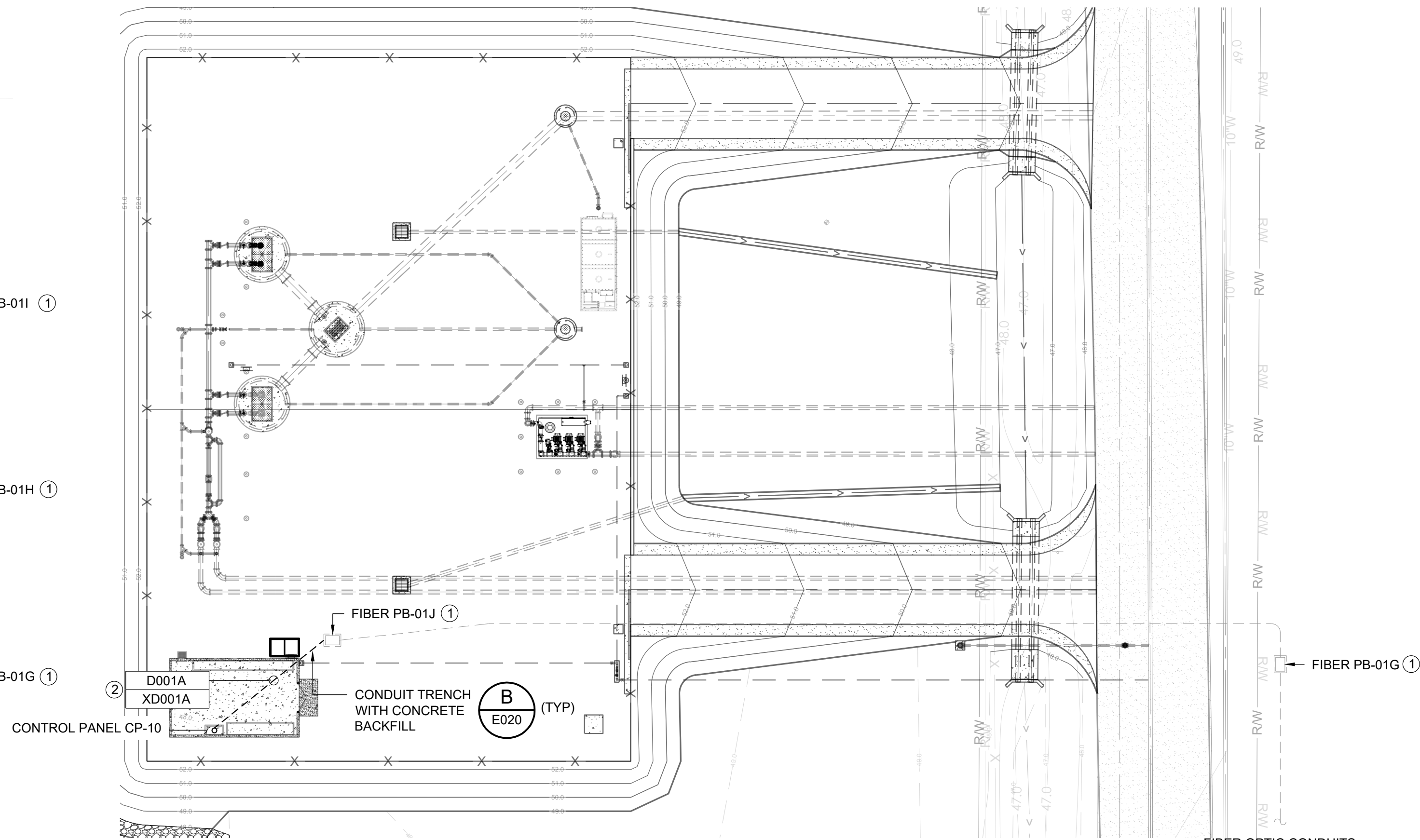


DETAIL  MOTOR OPERATOR
TYPICAL ELECTRICAL DETAIL
SCALE: NONE

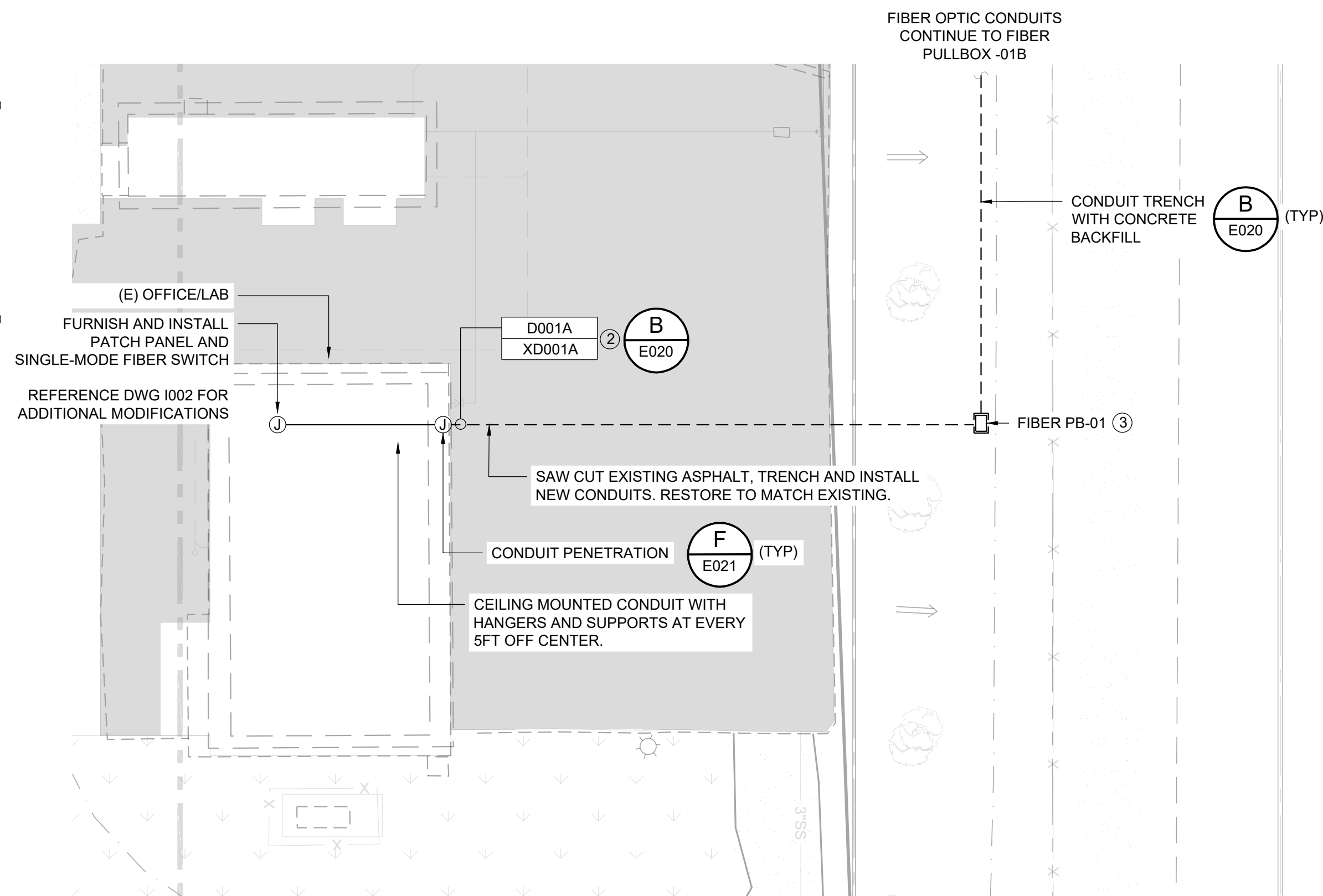




OVERALL COMMUNICATION PLAN
SCALE: 1" = 250'-0"



VIEW 1 WILL S. GREEN PUMP STATION
COMMUNICATION PLAN
SCALE: 1" = 20'-0"



VIEW 2 COLUSA WWTP ADMIN BUILDING
COMMUNICATION PLAN
SCALE: 1" = 20'-0"

- GENERAL NOTES**
- REFERENCE E001 FOR ADDITIONAL ELECTRICAL GENERAL NOTES.
 - AREA CLASSIFICATION SHALL APPLY UNLESS OTHERWISE NOTED ON THE PLANS AND SPECIFICATIONS.
 - MAINTAIN A MINIMUM OF 12" SEPARATIONS BETWEEN FIBER CONDUITS AND PROCESS PIPING.
- SHEET NOTES**
- FIBER OPTIC PULL BOXES AND CONDUITS TO BE INSTALLED BY OTHERS. THE CONTRACTOR SHALL PULL, TESTING, AND INSTALL NEW SINGLE MODE FIBER OPTIC VIA 2" CONDUIT BETWEEN WILL S. GREEN PUMP STATION AND COLUSA WWTP.
 - INSTALL (2) 2" CONDUIT BETWEEN FIBER OPTIC PUL BOX LOCAL CONTROL PANEL AT WILL S. GREEN AND ADMIN ROOM NETWORK RACK.
 - INSTALL (N) H20 RATED 24"X36" MIN. PULL BOX TO MATCH EXISTING. PROVIDE PULL BOX WITH STEEL LID.

BAR IS ONE INCH
AT FULL SCALE

APRVL	REVISIONS	DATE

NEXGEN UTILITY MANAGEMENT
4010 LENNANE DRIVE
SACRAMENTO, CA 95834
916.564.8000

NEXGEN

REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
No. 10207
Exp. 12/31/27
J. F. JEFFREY
STATE OF CALIFORNIA

City of Colusa
2023 WILL S. GREEN AVENUE
PUMP STATION PROJECT
Colusa County, California

OVERALL COMMUNICATION PLAN

DATE: 09/07/2026
SCALE: AS NOTED
DRAWN BY: JF
DESIGNED BY: JF
CHECKED BY: JP

JOB NO: 63.102.C
DRAWING NO:
E102

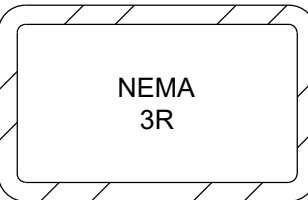
36 OF 45 SHEETS

0 10 20 40 60
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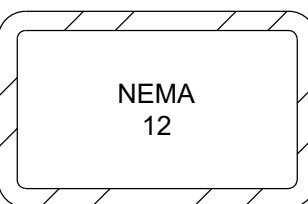
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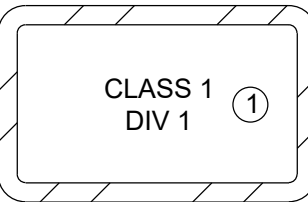
AREA CLASSIFICATION



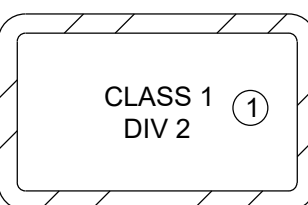
ALL OTHER AREAS



INSIDE CONTROL BUILDING



INSIDE WET WELLS



OUTSIDE WET WELL
EXTENDING 10FT BEYOND
HATCH AND 1.5 FEET ABOVE

GENERAL NOTES

- A. REFERENCE E001 FOR ADDITIONAL ELECTRICAL GENERAL NOTES.
- B. AREA CLASSIFICATION SHALL APPLY UNLESS OTHERWISE NOTED ON THE PLANS AND SPECIFICATIONS.

SHEET NOTES

1. ALL CONDUITS ENTERING AND LEAVING CLASSIFIED AREA SHALL BE GRS-PVC AND HAVE HAZARDOUS LOCATION FITTINGS.

BAR IS ONE INCH

AT FULL SCALE

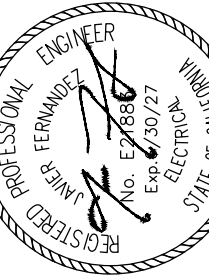
APR'L

REVISIONS

DATE

NEXGEN UTILITY MANAGEMENT

4010 LENNANE DRIVE
SACRAMENTO, CA 95834
916.564.8000



City of Colusa
2023 WILL S. GREEN AVENUE
PUMP STATION PROJECT
Colusa County, California

PUMP STATION
ELECTRICAL PLAN

DATE: 09/07/2026

SCALE: AS NOTED

DRAWN BY: JF

DESIGNED BY: JF

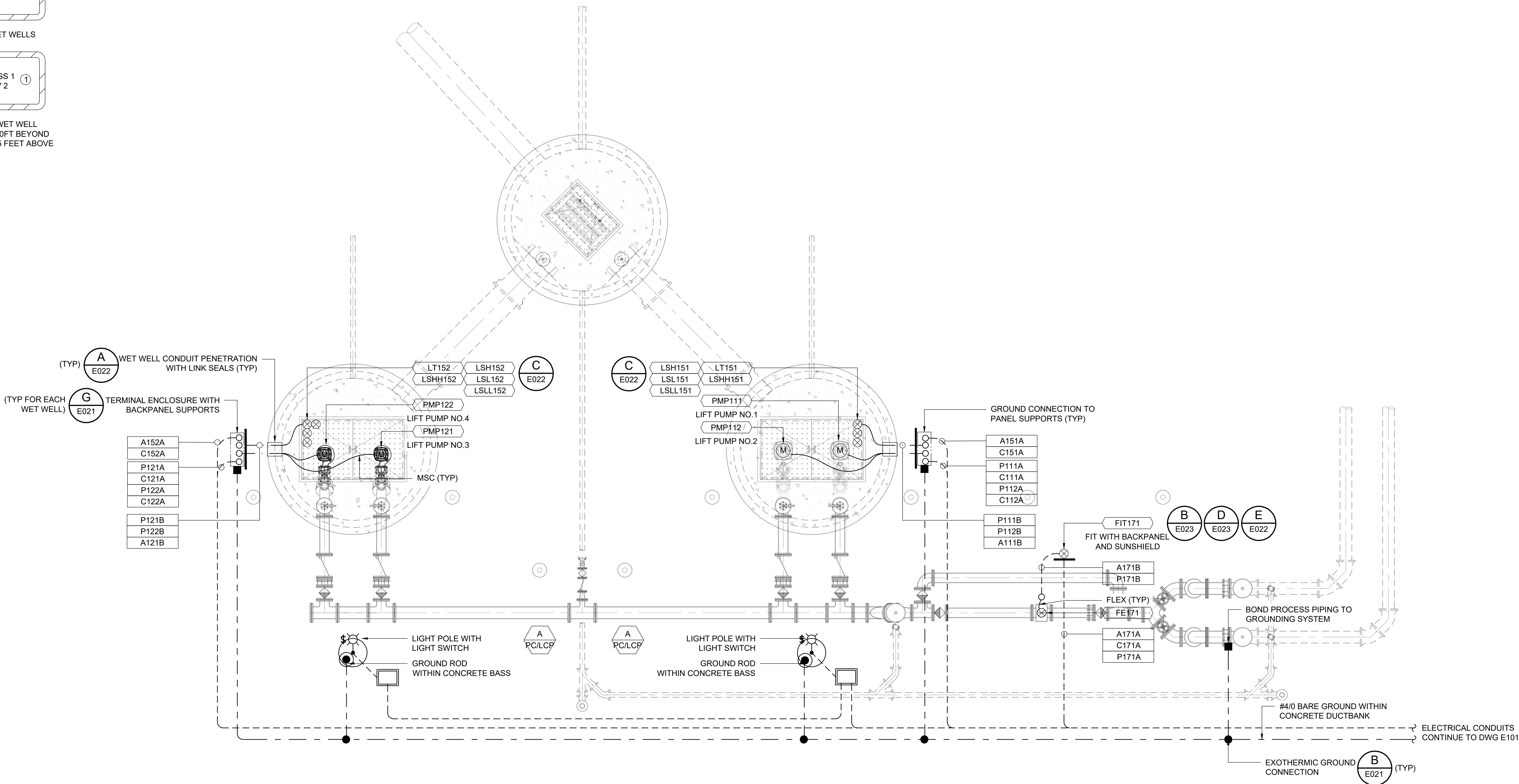
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JOB NO: 63.102.C

DRAWING NO:

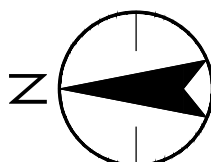
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37 OF 45 SHEETS

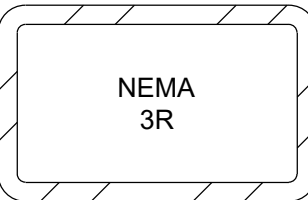


PUMP STATION ELECTRICAL PLAN

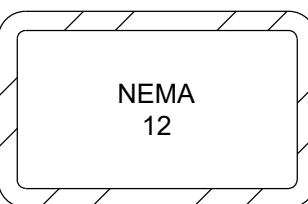
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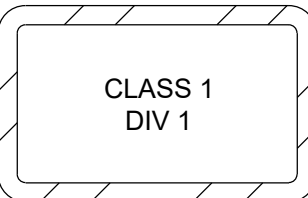
AREA CLASSIFICATION



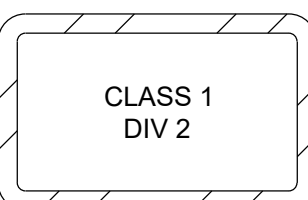
ALL OTHER AREAS



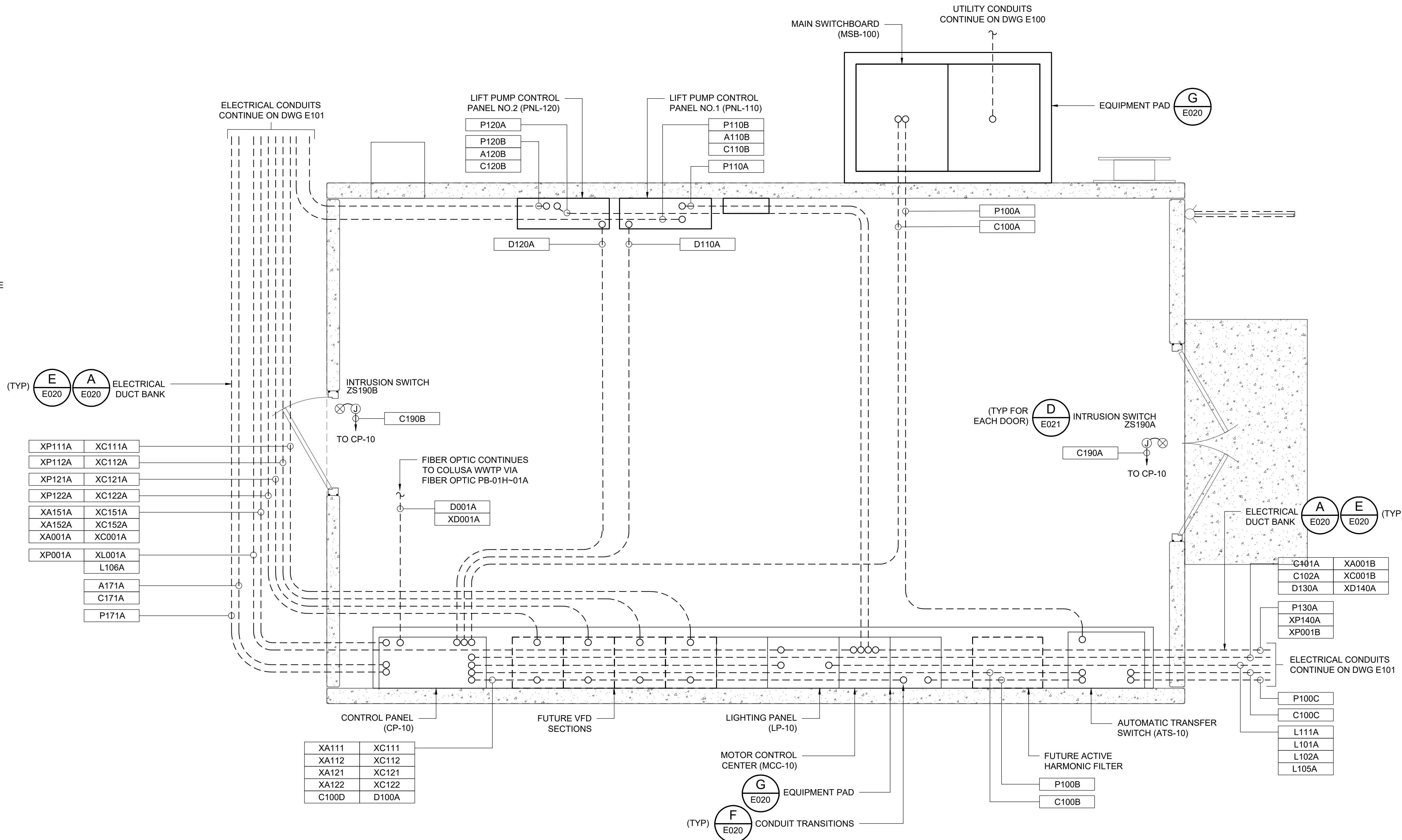
INSIDE CONTROL BUILDING



INSIDE WET WELLS



OUTSIDE WET WELL
EXTENDING 10FT BEYOND
HATCH AND 1.5 FEET ABOVE



CONTROL BUILDING ELECTRICAL PLAN

SCALE: 1/2" = 1'-0"

GENERAL NOTES

- REFERENCE E001 FOR ADDITIONAL ELECTRICAL GENERAL NOTES.
- AREA CLASSIFICATION SHALL APPLY UNLESS OTHERWISE NOTED ON THE PLANS AND SPECIFICATIONS.
- MAINTAIN A MINIMUM OF 12" SEPARATIONS BETWEEN ELECTRICAL CONDUITS AND PROCESS PIPING.

BAR IS ONE INCH

AT FULL SCALE

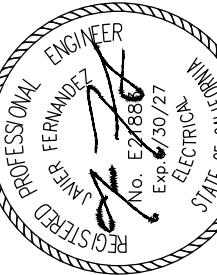
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DATE

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SACRAMENTO, CA 95834
916.564.8000



City of Colusa
2023 WILL S. GREEN AVENUE
PUMP STATION PROJECT

Colusa County, California

CONTROL BUILDING
ELECTRICAL PLAN

DATE: 09/07/2026

SCALE: AS NOTED

DRAWN BY: JF

DESIGNED BY: JF

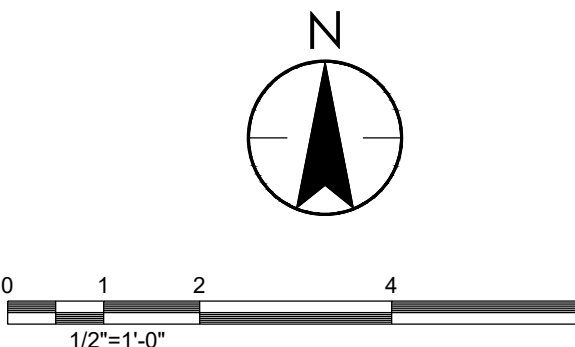
CHECKED BY: JP

JOB NO: 63.102.C

DRAWING NO:

E111

38 OF 45 SHEETS



INSTRUMENT SYMBOLS					
SYMBOL	DESCRIPTION		SYMBOL	DESCRIPTION	
	FIELD MOUNTED INSTRUMENT			ELECTRICAL - MSC	
	FACE MOUNTED INSTRUMENT ON LOCAL PANEL, OPERATOR ACCESSIBLE			ELECTRICAL - SIGNAL	
	INSTRUMENT MOUNTED IN LOCAL PANEL, OPERATOR INACCESSIBLE			ETHERNET	
	FACE MOUNTED INSTRUMENT ON FIELD PANEL, OPERATOR ACCESSIBLE			PNEUMATIC	
	INSTRUMENT MOUNTED IN FIELD PANEL, OPERATOR INACCESSIBLE			CAPILLARY	
	OPERATION PERFORMED WITH LOGIC OR HARDWIRED DEVICES - REFERENCE ELEMENTARY DWG. #			ELECTRICAL (PULSE)	
	LAMP INDICATION (STATUS OR ALARM)			HYDRAULIC SIGNAL	
	ANNUNCIATOR WINDOW R - ROW # C - COLUMN #			VENDOR PROVIDED LIMITS	
	COMMUNICATIONS POINT			PANEL LIMITS	
	DISCRETE INPUT			PRIMARY PROCESS	
	DISCRETE OUTPUT			SECONDARY PROCESS	
	ANALOG INPUT			EXISTING PRIMARY PROCESS	
	ANALOG OUTPUT			EXISTING SECONDARY PROCESS	
	INSTRUMENT PANEL MOUNTED WITH COMPUTING, CONVERTING FUNCTION			FUTURE PROCESS	
	E - VOLTAGE	H - HYDRAULIC		ELECTRICAL SUPPLY	
	I - CURRENT	O - ELECTROMAGNETIC, SONIC		MOTOR	
	P - PNEUMATIC	R - RESISTANCE (ELECT.)		CENTRIFUGAL PUMP	
	A - ANALOG	D - DIGITAL		BLOWER OR FAN	
	B - BINARY			SUBMERSIBLE PUMP	
	SUMMING	AVERAGING		VERTICAL/INLINE PUMP	
	SUBTRACTOR	RATIO		ROTARY LOBE OR GEAR PUMP	
	MULTIPLYING	DIFFERENCE		METERING PUMP	
	DIVIDING	HIGH SELECTING		MIXER	
	ROOT EXTRACTION	LOW SELECTING		PROGRESSIVE CAVITY PUMP	
	PROPORTIONAL	INTEGRAL		PAGE THAT LINE IS CONTINUED ON	
	DERIVATIVE	INTERLOCK		AUDIBLE ALARM (BUZZER OR HORN)	
	VALVE/GATE NUMBER			BLIND FLANGE	
	EQUIPMENT NUMBER			CHEMICAL DIFFUSER	
	PLC OR COMPUTER FUNCTION PERFORMING OPERATION WITH VISUAL INDICATION			CONTINUED PIPE	
	PLC OR COMPUTER FUNCTION PERFORMING OPERATION WITH VISUAL ALARM INDICATION			DRAIN	
	PLC OR COMPUTER PERFORMING INTERNAL OPERATION			DIFFUSER	
	AUTODIALER PRIORITY # PC BASED SOFTWARE			DOUBLE CONTAINED PIPE	
				FLEXIBLE HOSE	
				FLEXIBLE PIPE CONNECTOR	
				HOSE BIB	
				QUICK CONNECTION COUPLING	
				REDUCER/INCREASER	
				STATIC MIXER	
				Y-STRAINER	
				VALVE ACTUATOR	
				DIAPHRAGM OPERATOR	
				DIAPHRAGM VALVE	
				GATE VALVE OR PINCH VALVE (NORMALLY OPEN)	
				GATE VALVE OR PINCH VALVE (NORMALLY CLOSED)	
				PLUG VALVE (NORMALLY OPEN)	
				PLUG VALVE (NORMALLY CLOSED)	
				BALL VALVE (NORMALLY OPEN)	
				BALL VALVE (NORMALLY CLOSED)	
				BALL CHECK VALVE	
				BUTTERFLY VALVE	
				CHECK VALVE	
				SLUICE GATE	
				SLIDE GATE	
				AIR RELEASE VALVE	
				BACKFLOW PREVENTOR	
				SOLENOID VALVE	
				MOTOR OPERATED INTEGRAL MOTOR STARTER (UNLESS SHOWN OTHERWISE)	
				MAGNETIC FLOW METER	
				MAGNETIC FLOW TUBE	
				CORIOLIS FLOW METER	
				SLUDGE DENSITY METER	
				PROPELLER OR TURBINE FLOW METER	
				ULTRASONIC FLOW METER	
				ULTRASONIC LEVEL ELEMENT	
				XXX = DEVICE FUNCTION PER FUNCTIONAL IDENTIFICATION	

ABBREVIATIONS			
A	AMPERES, AMBER	mA	MILLIAMPERES
AC	ALTERNATING CURRENT	MIN	MINIMUM
ACU	AIR CONDITIONING UNIT	MSC	MANUFACTURER SUPPLIED CABLE
ADR	AIR DRYER	MOA	MANUAL-OFF-AUTO
AER	AERATOR	MOT	MOTOR OVERTEMP SENSOR
AGR	AGITATOR	MOV	MOTOR OPERATED VALVE
AI	ANALOG INPUT	MTU	MODULAR TREATMENT UNIT
AO	ANALOG OUTPUT	MUX	MULTIPLEXER
B	BLUE	MWR	MOTORIZED WEIR
BLR	BLOWER	MXR	MIXER
C	CLOSE, CONTROL	N	NEUTRAL
CFE	CLEARWELL FILTER EFFLUENT	NC	NORMALLY CLOSED
CLR	CLARIFIER	NO	NORMALLY OPEN
CMP	COMPRESSOR	O	OPEN
CR	CONTROL RELAY	OAC	OPEN-AUTO-CLOSE
CTF	CENTRIFUGE	OCA	OPEN-CLOSE-AUTO
d	DIFFERENTIAL	PB	PUSHBUTTON
DC	DIRECT CURRENT	pH	HYDROGEN ION CONCENTRATION
(DDM)	DIGITAL DISPLAY MODULE	PID	PROPORTIONAL/INTEGRAL/DERIVATIVE
DI	DIGITAL INPUT	PLC	PROGRAMMABLE LOGIC CONTROLLER
DO	DIGITAL OUTPUT	PMP	PUMP
DPDT	DOUBLE POLE DOUBLE THROW	PNL	PANEL
DRV	DRIVE	POT	POTENTIOMETER
(E)	EXISTING	POV	PNEUMATIC OPERATED VALVE
ETM	ELAPSED TIME METER	PS	PRESSURE SWITCH
(F)	FUTURE	PRV	PRESSURE RELIEF VALVE
FAN	FAN	PTT	PUSH TO TEST
FC	FAIL CLOSED	PV	PROCESS VARIABLE
FE	FLOW METER ELEMENT	R	RED
FLC	FLOCCULATOR	(R)	EXISTING TO BE REMOVED OR RELOCATED
FLP	FAIL LAST POSITION	REF	REFERENCE
FLT	FILTER	RVSS	REDUCED VOLTAGE SOLID STATE
FO	FAIL OPEN	S	SWITCH
FS	FLOAT SWITCH	(SIM)	SIGNAL INPUT MODULE
FVNR	FULL VOLTAGE NON REVERSING	SCR	SILICON CONTROLLED RECTIFIER
G	GREEN	(SOM)	SIGNAL OUTPUT MODULE
G, GND	GROUND	SMP	TYPICAL
GNR	MACERATOR/GRINDER	SP	SET POINT
HMI	HUMAN MACHINE INTERFACE	SS	SURGE SUPPRESSOR
HP AIR	HIGH PRESSURE AIR	TDD, TDE	TIME DELAY RELAY
HOA	HAND-OFF-AUTO	TWP	TWISTED PAIR
HOG	HYDRAULIC OPERATED GATE	TWSP	TWISTED SHIELDED PAIR
I	INTERLOCK	TYP	TYPICAL
I/O	INPUT/OUTPUT	UVC	ULTRAVIOLET CHANNEL
ISR	INTRINSICALLY SAFE RELAY	V	VOLTS, VOLTAGE
LOR	LOCAL/OFF/REMOTE	VFD	VARIABLE FREQUENCY DRIVE
LOS	LOCK-OUT STOP	VLV	VALVE
LP AIR	LOW PRESSURE AIR		

P & I DIAGRAM INSTRUMENT FUNCTIONAL IDENTIFICATION					
CODE LETTER	FIRST LETTER(S)		SUCCEEDING LETTER(S)		
	MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS		ALARM		AUTO
B	BURNER FLAME				
C	CHLORINE			CONTROL	CLOSE
D	DENSITY	DIFFERENTIAL	DIRECTION		
E	VOLTAGE		ELEMENT, SENSOR		
F	FLOW	RATIO	FUEL		FAILURE
G	GAUGING		VIEWING DEVICE		
H	HAND				HIGH/HAND
I	CURRENT		INDICATE		
J	POWER	SCAN		CONTROL STATION	
K	TIME	TIME RATE OF CHANGE			LOW/LOCAL
L	LEVEL		PILOT LIGHT		
M	MOISTURE/MOTOR	MOMENTARY	MOTOR		MIDDLE/MANUAL
N	STATUS				OPEN/OVERLOAD
O	OPERATOR		ORIFICE		
P	PRESSURE		POINT		
Q	EVENT	TOTALIZE	TOTAL		
R	RESET		RECORD		RUNNING/REMOTE
S	SPEED	SAFETY		SWITCH	STOP/SPEED
T	TEMPERATURE		TEST	TRANSMIT	
U	MULTIVARIABLE		MULTIFUNCTION		
V	VIBRATION/VALVE			VALVE	
W	FORCE, WEIGHT		WELL		
X	TELEMETRY INTERFACE				
Y	COMPUTER INTERFACE			COMPUTE/RELAY/ CONVERTER	
Z	POSITION			ACTUATE	POSITION

BAR IS ONE INCH
AT FULL SCALE

APRVL

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DATE

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SACRAMENTO, CA 95834
916.564.8000

City of Colusa

2023 WILL S. GREEN AVENUE
PUMP STATION PROJECT

Colusa County, California

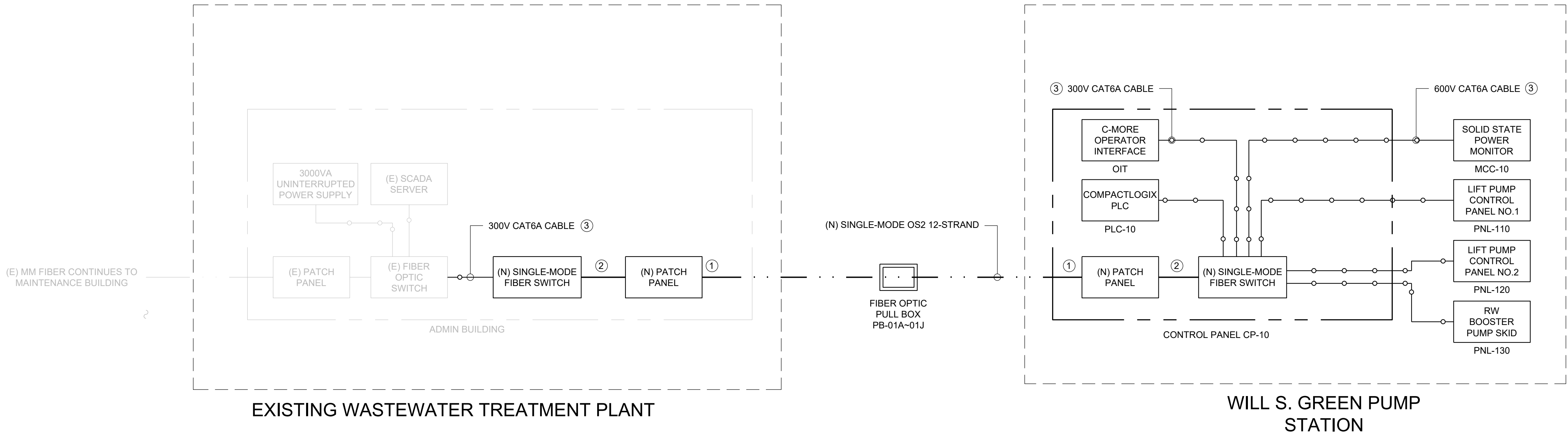
INSTRUMENTATION
SYMBOLS AND
ABBREVIATIONS

DATE: 09/07/2026
SCALE: NONE
DRAWN BY: JF
DESIGNED BY: JF
CHECKED BY: JP

JOB NO: 63.102.C

DRAWING NO:
1001

40 OF 45 SHEETS



EXISTING NETWORK BLOCK DIAGRAM MODIFICATIONS

LEGEND

ELECTRICAL - SIGNAL

ETHERNET

EXISTING EQUIPMENT

SINGLE-MODE FIBER

FIBER PATCH CABLE

GENERAL NOTES

A.

NOT ALL EXISTING (E) NETWORK DEVICES ARE SHOWN FOR CLARITY. ALL EQUIPMENT IS EXISTING UNLESS NOTED AS NEW (N).

SHEET NOTES

1.

FURNISH AND INSTALL (N) CORNING PATCH PANEL WITH LC CONNECTORS.

2.

FURNISH AND INSTALL (N) FIBER OPTIC PATCH CABLES BETWEEN PATCH PANEL AND FIBER OPTIC SWITCH.

3.

INSTALL 300V RATED CAT6A CABLES WITHIN THE CONTROL PANEL AND 600V RATED CAT6A CABLES FOR COMMUNICATION BETWEEN 600V RATED EQUIPMENT.

BAR IS ONE INCH
AT FULL SCALE

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916.564.8000

NEXGEN

REGISTERED PROFESSIONAL ENGINEER
No. 100007
Electrical
State of California

City of Colusa

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Colusa County, California

EXISTING NETWORK
BLOCK DIAGRAM
MODIFICATIONS

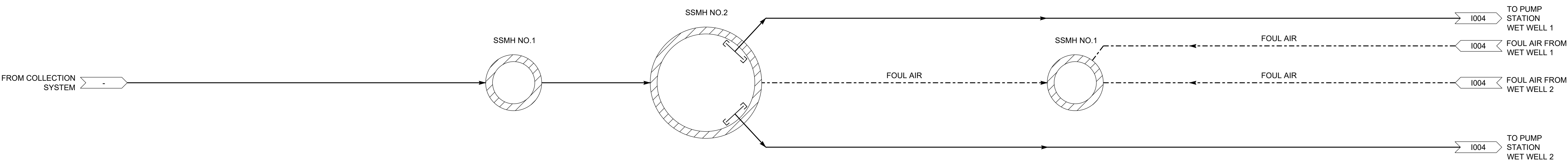
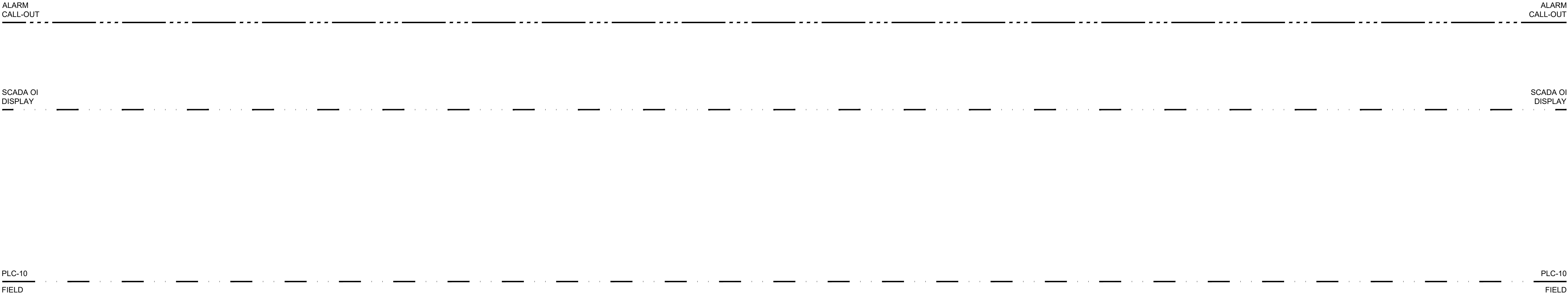
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SCALE: NONE
DRAWN BY: JF
DESIGNED BY: JF
CHECKED BY: JP

JOB NO: 63.102.C

DRAWING NO:
1002

41 OF 45 SHEETS

C:\Projects\Active\001023-001 - WWP - Reliability - Project\Nexus\ACT\WSS\1002 - SCADA - BLOCK DIAGRAM.dwg 7/19/26 10:12am jnfermendez



GENERAL NOTES

A. REFER TO CIVIL AND MECHANICAL DRAWINGS FOR PIPE SIZE.

PUMP STATION INLET P&ID

BAR IS ONE INCH
AT FULL SCALE

APRVL				
REVISIONS				
DATE				

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Colusa County, California

**PUMP STATION
INLET P&ID**

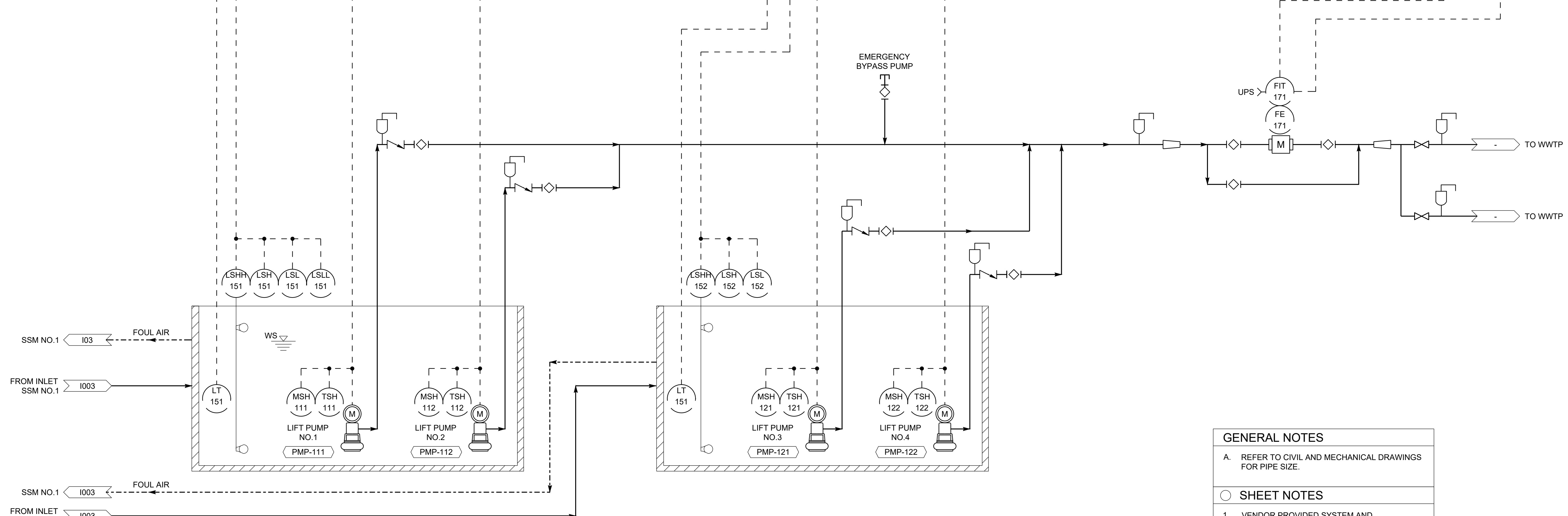
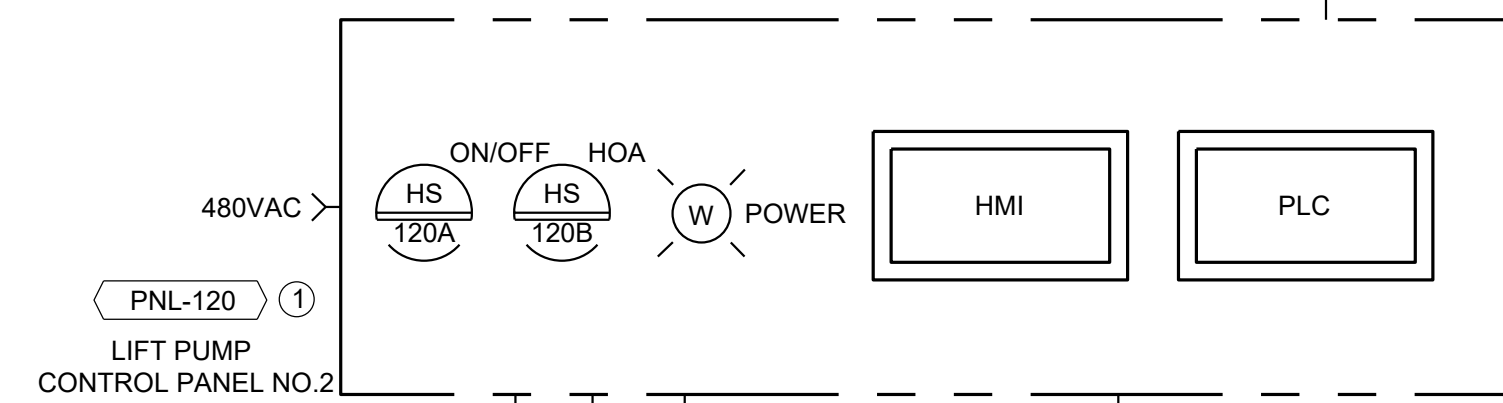
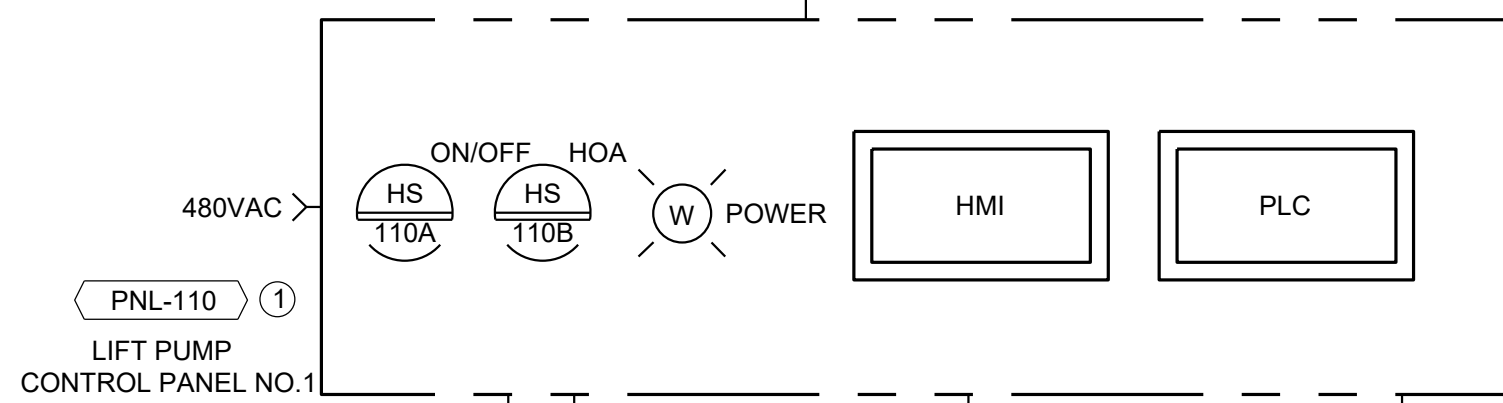
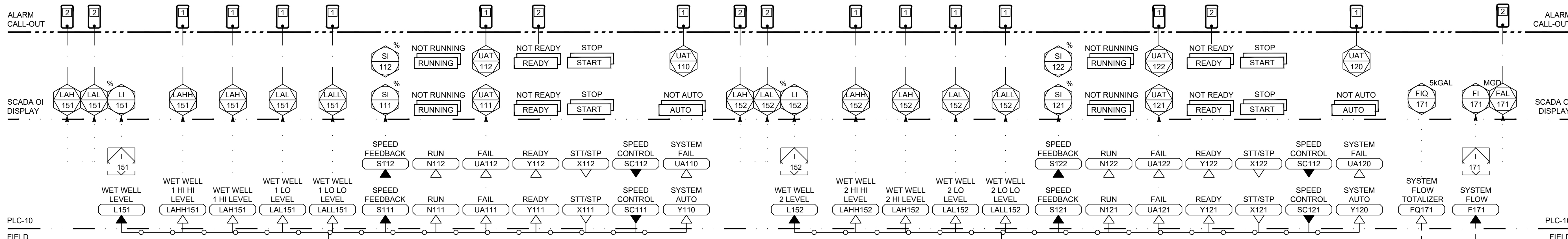
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DESIGNED BY: JF
CHECKED BY: JP

JOB NO: 63.102.C

DRAWING NO:
1003

42 OF 45 SHEETS

C:\Projects\Active\001023-001 -- WWP - Reliability - Project\AutoCAD\ACT\WGSA\003 PUMP STATION INLET P&ID.dwg 7/09/26 10:17pm jpowermendez



- GENERAL NOTES**
- A. REFER TO CIVIL AND MECHANICAL DRAWINGS FOR PIPE SIZE.
- SHEET NOTES**
1. VENDOR PROVIDED SYSTEM AND CONTRACTOR INSTALLED, COMPLETE AND OPERATIONAL.

WET WELL 1 & 2 PUMP STATION P&ID

BAR IS ONE INCH
AT FULL SCALE

APRVL					
REVISIONS					
DATE					

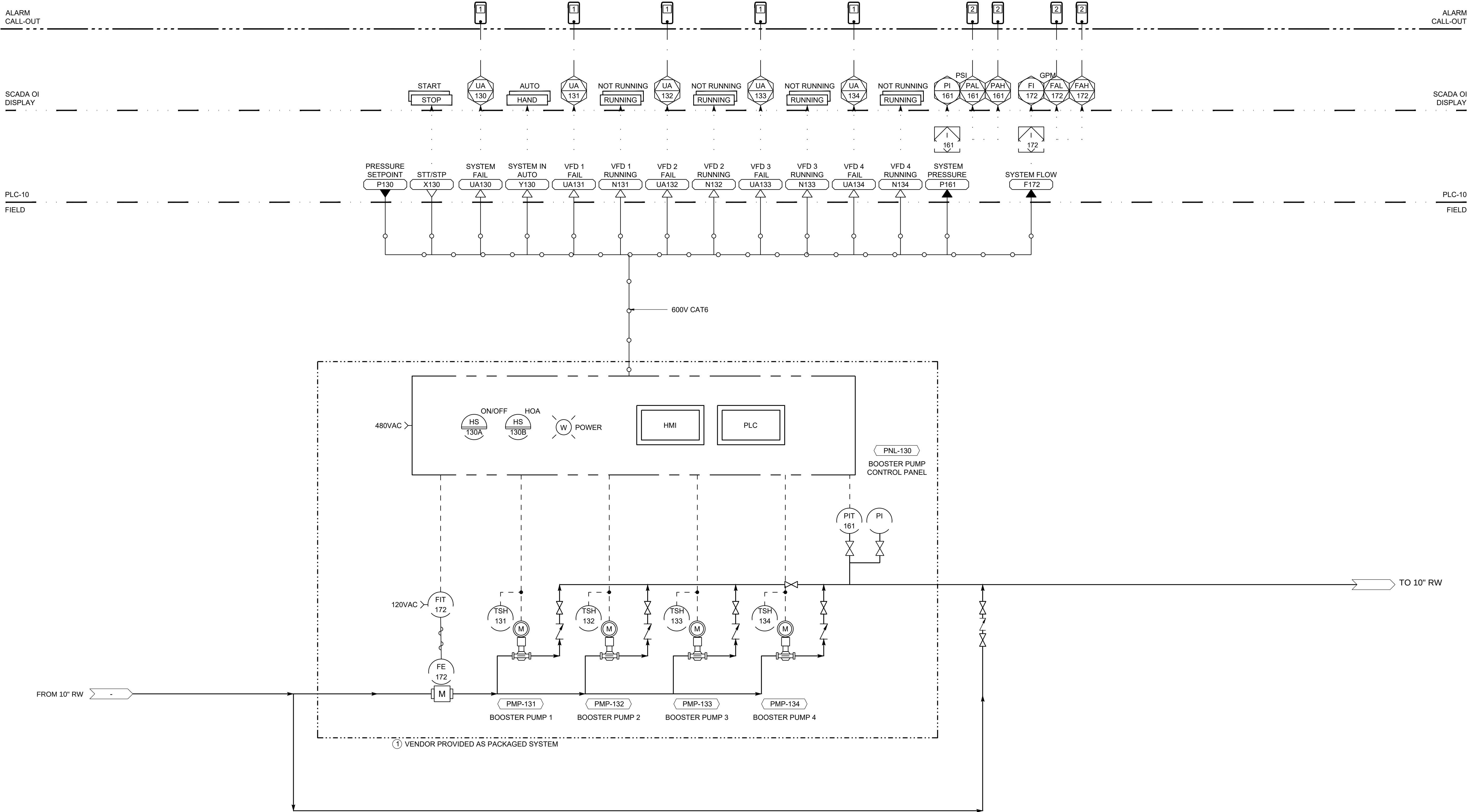
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916.564.8000

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PUMP STATION PROJECT
Colusa County, California

WET WELL 1&2
PUMP STATION P&ID

DATE: 09/07/2026
SCALE: NONE
DRAWN BY: JF
DESIGNED BY: JF
CHECKED BY: JP

JOB NO: 63.102.C
DRAWING NO:
1004
43 OF 45 SHEETS



- GENERAL NOTES
- A. REFER TO CIVIL AND MECHANICAL DRAWINGS FOR PIPE SIZE.
- SHEET NOTES
1. VENDOR PROVIDED SYSTEM AND CONTRACTOR INSTALLED, COMPLETE AND OPERATIONAL.

BOOSTER PUMP STATION P&ID

BAR IS ONE INCH
AT FULL SCALE

APR'L				
REVISIONS				
DATE				

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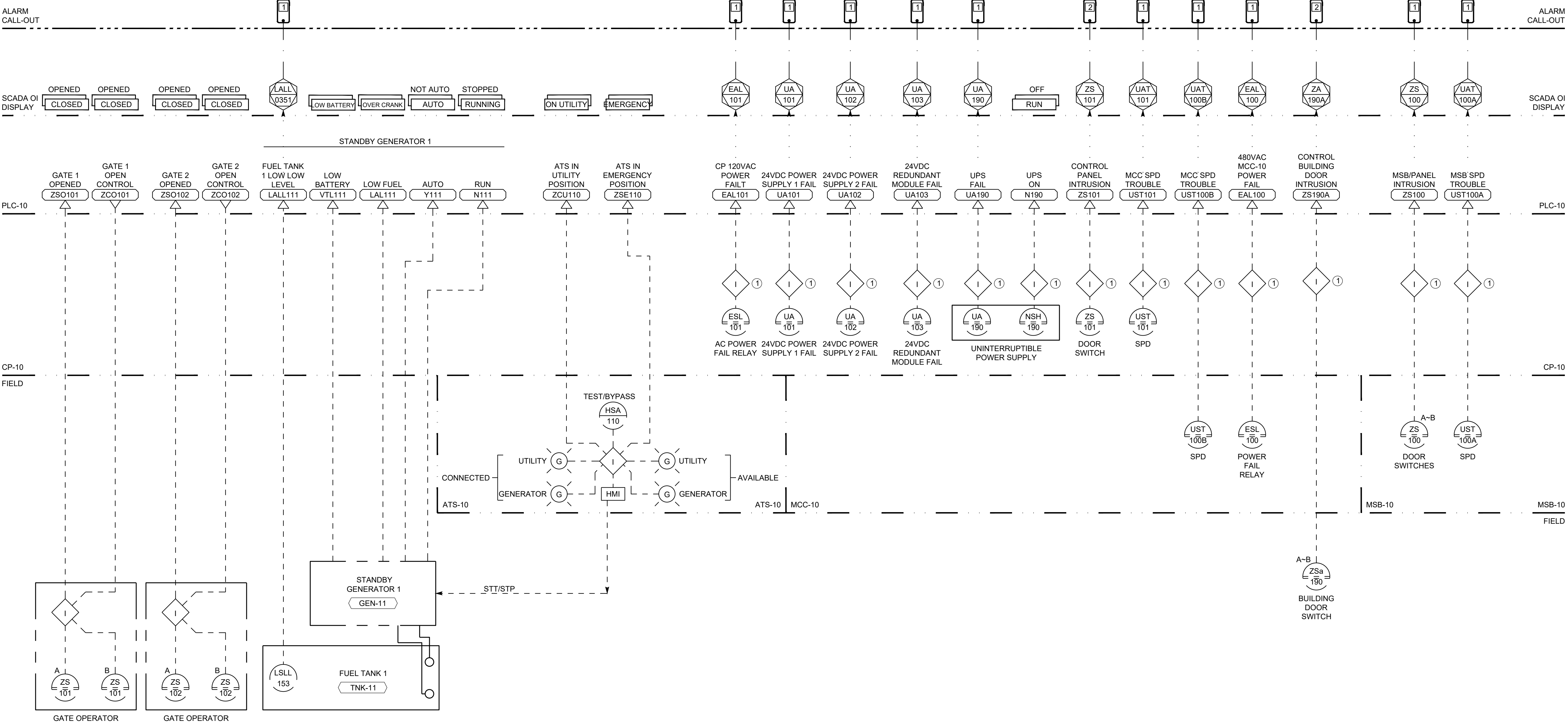
BOOSTER PUMP
STATION P&ID

DATE: 09/07/2026
SCALE: NONE
DRAWN BY: JF
DESIGNED BY: JF
CHECKED BY: JP

JOB NO: 63.102.C

DRAWING NO:
1005

44 OF 45 SHEETS



GENERAL NOTES

A. REFER TO CIVIL AND MECHANICAL DRAWINGS FOR PIPE SIZE.

PUMP STATION MISCELLANEOUS P&ID

BAR IS ONE INCH
AT FULL SCALE

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Colusa County, California

PUMP STATION
MISCELLANEOUS P&ID

DATE: 09/07/2026
SCALE: NONE
DRAWN BY: JF
DESIGNED BY: JF
CHECKED BY: JP

JOB NO: 63.102.C

DRAWING NO:
1006

45 OF 45 SHEETS