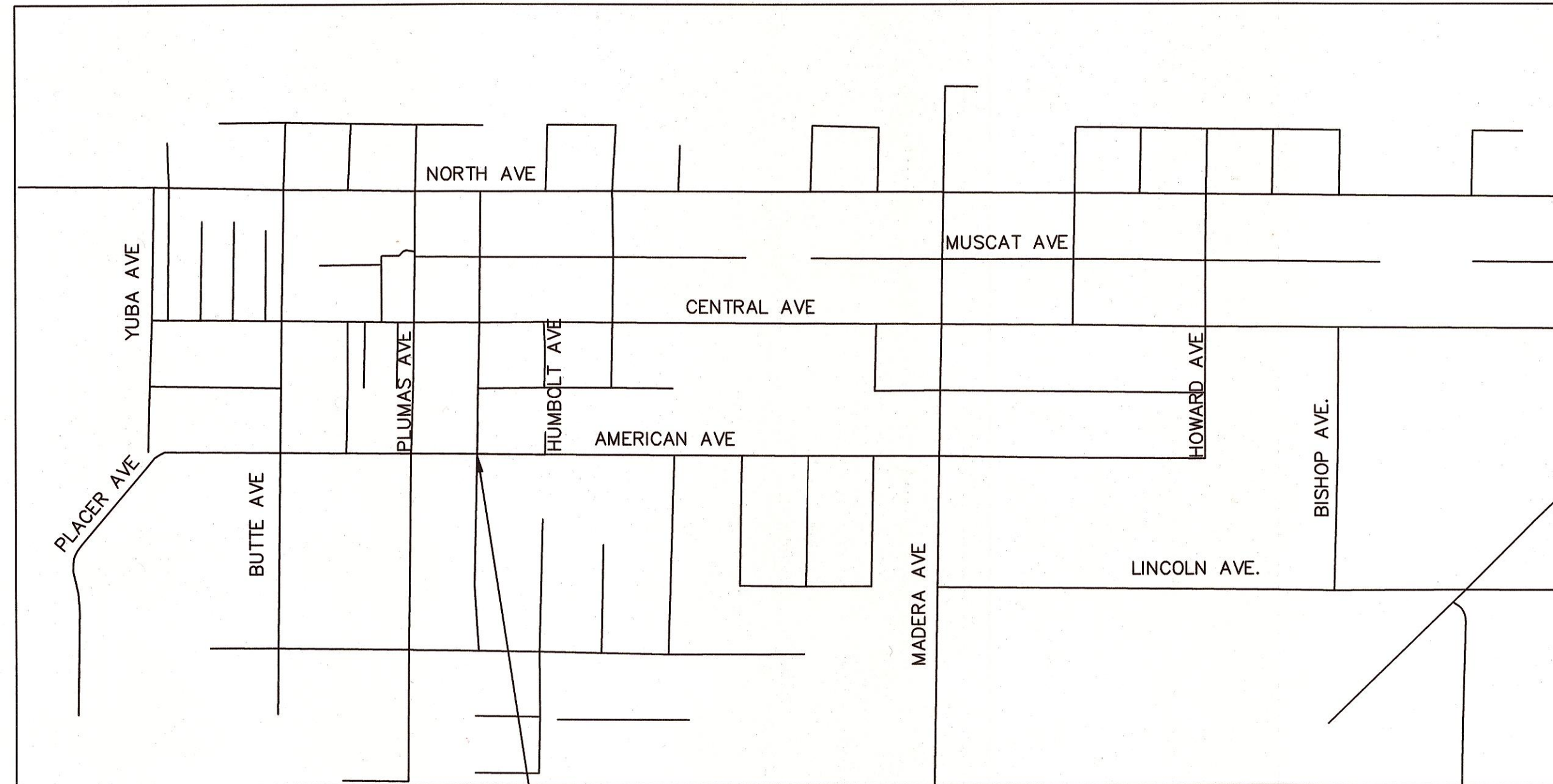


PLANS FOR CONSTRUCTION

AMERICAN AVE DISPOSAL SITE PHASE III - MODULES 3-8 LANDFILL GAS COLLECTION AND CONTROL SYSTEM (LFGCCS) EXPANSION



0 0.5 1.0
SCALE IN MILES

AADS ENTRANCE

INDEX OF SHEETS	
SHEET	DESCRIPTION
1	TITLE PAGE
2	ABBREVIATIONS
3	SITE PLAN/INDEX/SURVEY CONTROL PLAN
4	LFGCCS EXPANSION PLAN
5	LFGCCS EXPANSION PLAN
6	LFGCCS EXPANSION PLAN
7	LANDFILL BASE GRADES WITH PROPOSED WELLS
8	LFGCCS DETAILS
9	LFGCCS DETAILS
10	LFGCCS DETAILS
11	LFGCCS DETAILS
12	LFGCCS DETAILS
13	LFGCCS DETAILS
14	LFGCCS DETAILS
15	LFGCCS DETAILS
16	CONDENSATE PUMP STATION DETAIL

Steve Brandau Chairman 2nd District
 Brian Pacheco Vice Chairman 1st District
 Sal Quintero 3rd District
 Buddy Mendes 4th District
 Nathan Magsig 5th District

Jean M. Rousseau
 County Administrative Officer

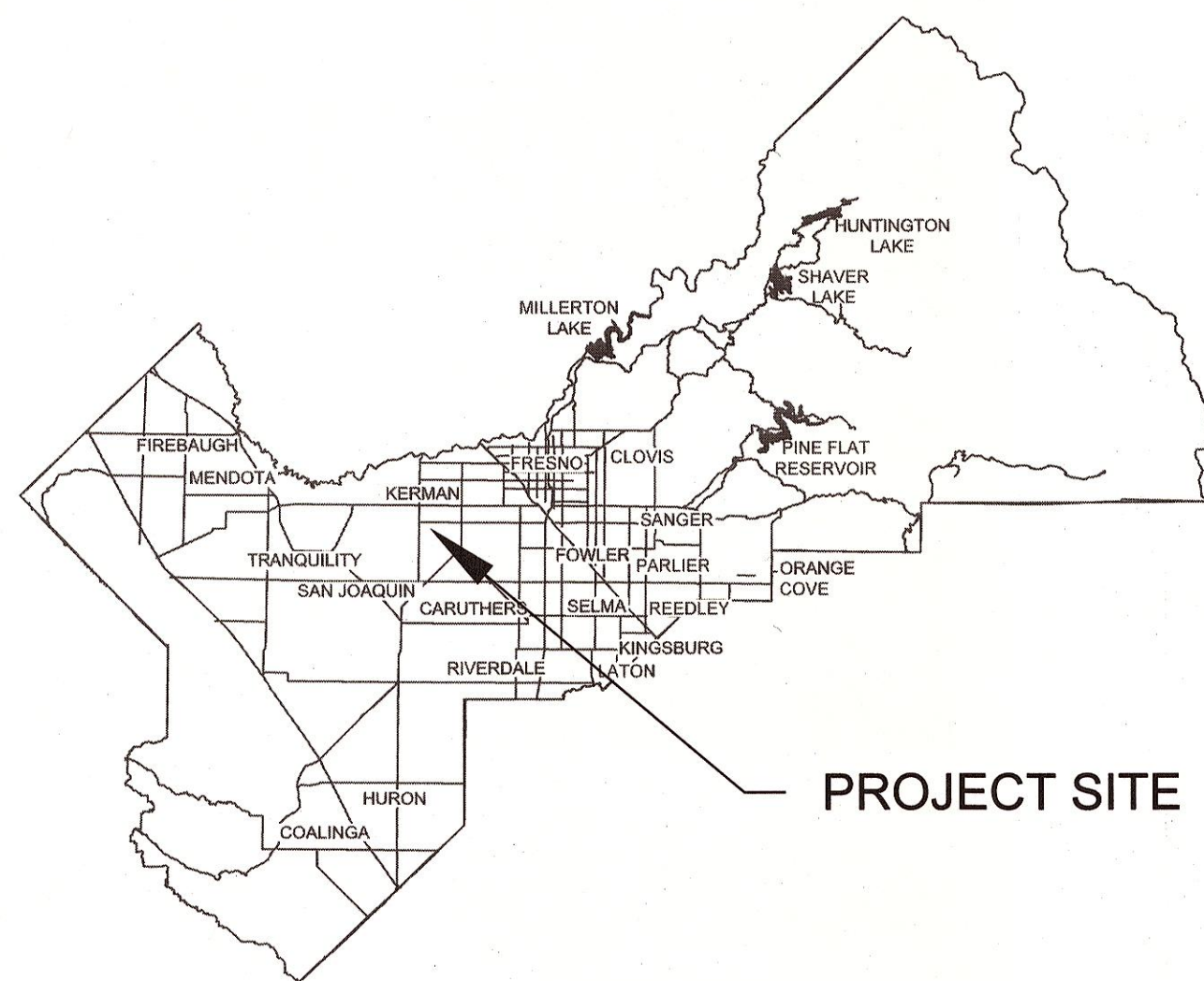
APPROVED

Steven E. White, Director
 Department of Public Works and Planning

CALIFORNIA CONTRACTOR'S LICENSES REQUIRED FOR THIS PROJECT					
CLASS A, GENERAL ENGINEERING					
DRAWING NO.	ROAD NO.	BRIDGE NO.	FISCAL YR.	SHEET NO.	TOTAL
11307	N/A	N/A	20/21	1	16
CONTRACT NO. 20-18-SW					

RECORD DRAWING		
DATE ADOPTED		
CONTRACTOR		
NAME		
ADDRESS		
CITY	STATE	ZIP
PHONE		
DATE AWARDED		
DATE STARTED		
DATE COMPLETED		
RESIDENT ENGINEER		
NAME	SIGNATURE	
NAME	SIGNATURE	

SHEET 1 OF 16



DEPARTMENT OF PUBLIC WORKS AND PLANNING




MISCELLANEOUS ABBREVIATIONS

A = ACTUATOR	FLT or F = FILTER	LAHH = LEVEL ALARM HIGH HIGH	OL = OVERLOAD	SYS = SYSTEM
AC or A/C = AIR CONDITIONER	FA = FLAME ARRESTER	LAL = LEVEL ALARM LOW	PDI = PRESSURE DIFFERENTIAL INDICATOR	T or TK = TANK
ACFM = ACTUAL CUBIC FEET PER MINUTE	FAH = FLOW ALARM HIGH	LALL = LEVEL ALARM LOW LOW	PMP or P = PUMP	TACH = TACHOMETER
ADS = AUTO DIALER SYSTEM	FAHH = FLOW ALARM HIGH HIGH	LC = LEVEL CONTROLLER	PB = PUSH BUTTON	TAH = TEMPERATURE ALARM HIGH
AF = AMPERE FRAME SIZE (CIRCUIT BREAKER)	FAL = FLOW ALARM LOW	LCH = LEVEL CONTROLLER HIGH	PA = PURGE AUTO	TAHH = TEMPERATURE ALARM HIGH HIGH
AFF = ABOVE FINISH FLOOR	FALL = FLOW ALARM LOW LOW	LCL = LEVEL CONTROLLER LOW	PAH = PRESSURE ALARM HIGH	TAL = TEMPERATURE ALARM LOW
AI = ANALOG INPUT	FBO = FURNISHED BY OTHERS	LCP = LOCAL CONTROL PANEL	PAHH = PRESSURE ALARM HIGH HIGH	TALL = TEMPERATURE ALARM LOW LOW
AIO = ANALOG INPUT OUTPUT	FC = FLOW CONTROLLER	LCR = LATCHING CONTROL RELAY	PAL = PRESSURE ALARM LOW	TB = TERMINAL BLOCK
AOUT = ANALOG OUTPUT	F.C. = FAIL CLOSE	LE = LEVEL ELEMENT	PALL = PRESSURE ALARM LOW LOW	TC = TEMPERATURE CONTROLLER
AL = ALUMINUM	FCV = FLOW CONTROL VALVE	LEL = LOWER EXPLOSIVE LIMIT	PC = PRESSURE CONTROLLER	TCV = TEMPERATURE CONTROL VALVE
AMP = AMPERES, AMPERAGE	FD = FUSED DISCONNECT	LFG = LANDFILL GAS	PCV = PRESSURE CONTROL VALVE	TCZ = TEMPERATURE CONTROLLER POSITIONER
AT = AMPERE TRIP	FDR = FEEDER	LFGCCS = LANDFILL GAS COLLECTION AND CONTROL SYSTEM	PDI = PRESSURE DIFFERENTIAL INDICATOR	TD or TDR = TIME DELAY RELAY
AUTO = AUTOMATIC	FE = FLOW ELEMENT (FLOW METER)	LG = LEVEL GAGE	PE = POLYETHYLENE	TE = TEMPERATURE ELEMENT (THERMOCOUPLE)
AWG = AMERICAN WIRE GAUGE	FFA = FLAME FAILURE ALARM	LI = LEVEL INDICATOR	PG = PILOT GAS	TEMP = TEMPERATURE
B = BLOWER	FG = FINISH GRADE	LMP = LAMP	PH = PHONE	TES = TEMPERATURE ELEMENT SWITCH
BALL = BURNER ALARM LOW LOW	FI = FLOW INDICATOR	LO = LUBE OIL	PI = PRESSURE INDICATOR	TEW = TEMPERATURE ELEMENT WELL
BATT = BATTERY	FIR = FLOW INDICATING RECORDER	LOC = LOCAL	P&ID = PIPING AND INSTRUMENTATION DIAGRAM	THERM = THERMOSTAT
BC = BARE COPPER	FIT = FLOW INDICATING TRANSMITTER	LOS = LOCK-OUT-STOP	PIC = PRESSURE INDICATING CONTROLLER	TI = TEMPERATURE INDICATOR
BG = BURNER GLASS	FL = FLOWLINE	LP = LOW POINT OR LIGHTING PANEL	PIR = PRESSURE INDICATING RECORDER	TIC = TEMPERATURE INDICATOR CONTROLLER
BE = BURNER ELEMENT (UV SCANNER)	FLA = FULL LOAD AMPS	LS = LEVEL SWITCH	PIT = PRESSURE INDICATING TRANSMITTER	TIR = TEMPERATURE INDICATOR RECORDER
BKR = BREAKER	FLR = FLARE	LSH = LEVEL SWITCH HIGH	PLC = PROGRAMMABLE LOGIC CONTROLLER	TIT = TEMPERATURE INDICATOR TRANSMITTER
BOM = BILL OF MATERIAL	FX or FLEX = FLEXIBLE HOSE	LSHH = LEVEL SWITCH HIGH HIGH	PLT = PILOT	TMR = TIMER
BPS = BUILDING PROTECTION SYSTEM	FLTP = PORT FILTER	LSL = LEVEL SWITCH LOW	PNL = PANEL	TR = TEMPERATURE RECORDER
BS = BURNER SWITCH (FLAME SAFEGUARD)	F.O. = FAIL OPEN	LSLL = LEVEL SWITCH LOW LOW	POS = POSITION, POSITIVE	TS = TEMPERATURE SWITCH OR TOP OF SLAB
BTM = BOTTOM	FOR = FORWARD	LT = LEVEL TRANSMITTER OR LIGHT(S)	POT = POTENTIOMETER	TSE = TEMPERATURE SAFETY ELEMENT
BTU = BRITISH THERMAL UNIT	FQI = FLOW TOTALIZER INDICATOR	LTG = LIGHTING	POZ = POSITIONER	TSH = TEMPERATURE SWITCH HIGH
C = CONDUIT	FR = FLOW RECORDER	LUB = LUBRICATOR	PP = POWER PANEL or POWER POLE	TSL = TEMPERATURE SWITCH LOW
CAH = CURRENT ALARM HIGH	FRG = FILTER REGULATOR	M = MOTOR	PS = PRESSURE SWITCH	TSO = TIGHT SHUTOFF
CAL = CURRENT ALARM LOW	FRL = FILTER/REGULATOR/LUBRICATOR	MA = MILLIAMPS	PSE = PRESSURE SAFETY ELEMENT	TSV = TEMPERATURE SAFETY VALVE
CBL = CABLE	FRP = FIBERGLASS REINFORCED PLASTIC	M.A. = METHANE ANALYZER	PSH = PRESSURE SWITCH HIGH	TT = TEMPERATURE TRANSMITTER
CC = CENTER TO CENTER	FS = FLOW SWITCH OR FINISH SURFACE	MAL = METHANE ALARM LOW	PSI = POUNDS PER SQUARE INCH	TV = TEMPERATURE VALVE
CGH = COMBUSTIBLE GAS HIGH	FSH = FLOW SWITCH HIGH	MALL = METHANE ALARM LOW LOW	PSL = PRESSURE SWITCH LOW	TYP = TYPICAL
CGHH = COMBUSTIBLE GAS HIGH HIGH	FSL = FLOW SWITCH LOW	MAG = MAGNETIC	PT = PRESSURE TRANSMITTER	UG = UNDERGROUND
CGI = COMBUSTIBLE GAS INDICATOR	FSV = FLOW SAFETY VALVE (CHECK VALVE)	MAN = MANWAY	PSV = PRESSURE RELIEF VALVE	UPS = UNINTERRUPTIBLE POWER SUPPLY
CGT = COMBUSTIBLE GAS TRANSMITTER	FT = FLOW TRANSMITTER	MAX = MAXIMUM	PVC = POLYVINYL CHLORIDE	UV = ULTRAVIOLET SCANNER
CH = CHANNEL	FU = FUSE	MCC = MOTOR CONTROL CENTER	PWR = POWER	V = VESSEL
CHR = CHART RECORDER	FUH = FUSE HOLDER	MCM = THOUSAND CIRCULAR MILS	QL = TOTALIZER	VA = VIBRATION ALARM
CI = CURRENT INDICATOR	FUT = FUTURE	MCP = MAIN CONTROL PANEL	REQD = REQUIRED	VAH = VIBRATION ALARM HIGH
CIR = CIRCUIT	FV = FLOW VALVE	MH = MANHOLE	RD = RUPTURE DISK	VAHH = VIBRATION ALARM HIGH HIGH
CNT = COUNTER	GAC = GRANULAR ACTIVATED CARBON	MI = METHANE INDICATOR	RDH = RUPTURE DISK ALARM HIGH	VFD = VARIABLE FREQUENCY DRIVE
CO = CONDUIT ONLY	GB = GRADE BREAK	MIR = METHANE INDICATING RECORDER	RDS = RUPTURE DISK SWITCH	VI = VIBRATION INDICATOR
COMM = COMMUNICATION	GCCS = GAS COLLECTION AND CONTROL SYSTEM	MIN = MINIMUM	RECEPT = RECEPTACLE	VIR = VIBRATION INDICATING RECORDER
CMP or COMP = COMPRESSOR	GF = GROUND FAULT	MIT = METHANE INDICATOR TRANSMITTER	RES = RESISTOR	VP = VAPOR PROOF
CP = CONTROL PANEL	GFI = GROUND FAULT INTERRUPTER	MMS = MANUAL MOTOR STARTER	RGS = RIGID GALVANIZED STEEL	VS = VIBRATION SWITCH
CPT = CONTROL POWER TRANSFORMER	GM = GAS MONITOR	MOD = MODEM	RM = RELAY MODULE	VSD = VARIABLE SPEED DRIVE
CPVC = CHLORINATED POLYVINYL CHLORIDE	GND or GRND = GROUND	MOT = MOTOR	RPM = REVOLUTIONS PER MINUTE	VSH = VIBRATION SWITCH HIGH
CS = CARBON STEEL	HDPE = HIGH DENSITY POLYETHYLENE	MOV = MOTOR OPERATED VALVE	RT = RETENTION TIME	VT = VIBRATION TRANSMITTER
CSH = CURRENT SWITCH HIGH	HOA = HAND-OFF-AUTO	MS = MOTOR STARTER	RTC = RETENTION TIME CALCULATOR	W = WATTS
CSL = CURRENT SWITCH LOW	HP = HORSEPOWER OR HIGH POINT	MSB = MAIN SWITCH BOARD	S = AIR STRIPPER	W.C. = WATER COLUMN
CSP = CORRUGATED STEEL PIPE	HS = HAND SWITCH	MTD = MOUNTED	SB = SPECTACLE BLIND	WP = WEATHER PROOF
CT = CONDENSATE TRAP OR CURRENT TRANSFORMER	HT = HEAT TRACE	M.W. = MANWAY	SCFM = STANDARD CUBIC FEET PER MINUTE	XFMR = TRANSFORMER
CU = COPPER	HTR = HEATER	NA = NON-AUTOMATIC	SCH = SCHEDULE	XP = EXPLOSION PROOF
CV = CONTROL VALVE (MODULATING)	HV = HAND VALVE	NBK = NEUTRAL BLOCK	SD = SHUTDOWN	YA = EVENT ALARM
D = DRYER	HVP = HAND VALVE PORT	N.C. = NORMALLY CLOSED	SD/O = SHUTDOWN OR ON	YI = EVENT INDICATOR
DI = DIGITAL INPUT	HZ = HERTZ	N.C.T.C. = NORMALLY CLOSED TIMED TO CLOSE	SDV = SHUTDOWN VALVE	YIC = EVENT INDICATOR CONTROLLER
DISTR = DISTRIBUTION	I = CURRENT	N.C.T.O. = NORMALLY CLOSED TIMED TO OPEN	SEC = SECONDARY, SECONDS	ZA = POSITION ALARM
DL = DAYLIGHT	II = CURRENT INDICATOR	NEG = NEGATIVE	SECT = SECTION	ZC = POSITION CONTROLLER
DP = DELTA OR DIFFERENTIAL PRESSURE	II = CURRENT TRANSFORMER	NIC = NOT IN CONTRACT	SEL = SELECTOR	ZI = POSITION INDICATOR
DPI = DIFFERENTIAL PRESSURE INDICATOR	IAH = CURRENT ALARM HIGH	N.O. = NORMALLY OPEN	SEQ = SEQUENCE, SEQUENCER	ZS = POSITION SWITCH
DPS = DIFFERENTIAL PRESSURE SWITCH	IAHH = CURRENT ALARM HIGH HIGH	N.O.T.C. = NORMALLY OPEN TIMED TO CLOSE	SF = SUPPLEMENTAL FUEL	ZSC = POSITION SWITCH CLOSED
DS = DISCONNECT SWITCH	IAL = CURRENT ALARM LOW	N.O.T.O. = NORMALLY OPEN TIMED TO OPEN	SFR = SENSOR FAILURE	ZSO = POSITION SWITCH OPENED
DWG = DRAWING	IALL = CURRENT ALARM LOW LOW	NP = NAMEPLATE	SG = SIGHT GLASS	
E = ELECTRICAL MOTOR	IAS = INSTRUMENT AIR SUPPLY	NTS = NOT TO SCALE	SHLD = SHIELD, SHIELDED	
E/E = VOLTAGE TRANSFORMER	IG or IGN = IGNITOR	NOX = OXIDES OF NITROGEN	SHT = SHEET	
EDP = ELECTRICAL DISTRIBUTION PANEL	IIR = CURRENT INDICATING RECORDER	O = OXYGEN	SI = SPEED INDICATOR	
EI = VOLTAGE INDICATOR	INST = INSTANTANEOUS	O/C = OPEN/CLOSE	SOV = SOLENOID VALVE	
EL OR ELEV = ELEVATION	INSTR = INSTRUMENT	O.C. = ON CENTER	SP = SAMPLE PORT	
EMER = EMERGENCY	INV = INVERT	OA = OXYGEN ANALYZER	SPECS = SPECIFICATION	
EMT = ELECTRICAL METALLIC TUBING	ISC = SHORT CIRCUIT CURRENT	OAH = OXYGEN ALARM HIGH	SS = STAINLESS STEEL	
ENCL = ENCLOSURE, ENCLOSED	IT = CURRENT TRANSMITTER	OAHH = OXYGEN ALARM HIGH HIGH	SSR = SURGE ARRESTOR	
EQPT = EQUIPMENT	ITC = INDUSTRIAL TECHNICAL CORPORATION	OE = OXYGEN ELEMENT	ST = SHUNT TRIP	
ETM = ELAPSED TIME METER	KI = TIME INDICATOR	OI = OXYGEN INDICATOR	STA = STATION	
EXH = EXHAUST	KV = KILOVOLTS	OIR = OXYGEN INDICATING RECORDER	STD = STANDARD	
EXIST = EXISTING	KVA = KILOVOLT AMPERES	OT = OXYGEN TRANSMITTER	STR = STRAINER	
EXP = EXPLOSION PROOF	KW = KILOWATTS	OIT = OXYGEN INDICATOR TRANSMITTER	SW = SWITCH	
°F = DEGREE FAHRENHEIT	LAH = LEVEL ALARM HIGH	OSF = OXYGEN SENSOR FAILURE		



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Angus Scott Friday, January 15, 2021 3:08:57 PM G:\DWG\AMERICAN AVENUE LANDFILL\GASPHASE 3 GGCS DESIGN\SHEET 02.DWG

DESIGNED: SNA	DATE: 01-2021	RECORD DRAWING	SCALE	 ENGINEER OF RECORD DATE: 02/08/2021		PROJECT		DEPARTMENT OF PUBLIC WORKS AND PLANNING
DRAWN: SNA	01-2021	RESIDENT ENGINEER	NONE			AMERICAN AVENUE LANDFILL PHASE III - MODULES 3-8 LFGCCS EXPANSION		ABBREVIATIONS
CHECKED: AMN/SHA	01-2021					ROAD NO. N/A BRIDGE NO. N/A		DRAWING NO. 11307 SHEET NO. 2 TOTAL 16

FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.

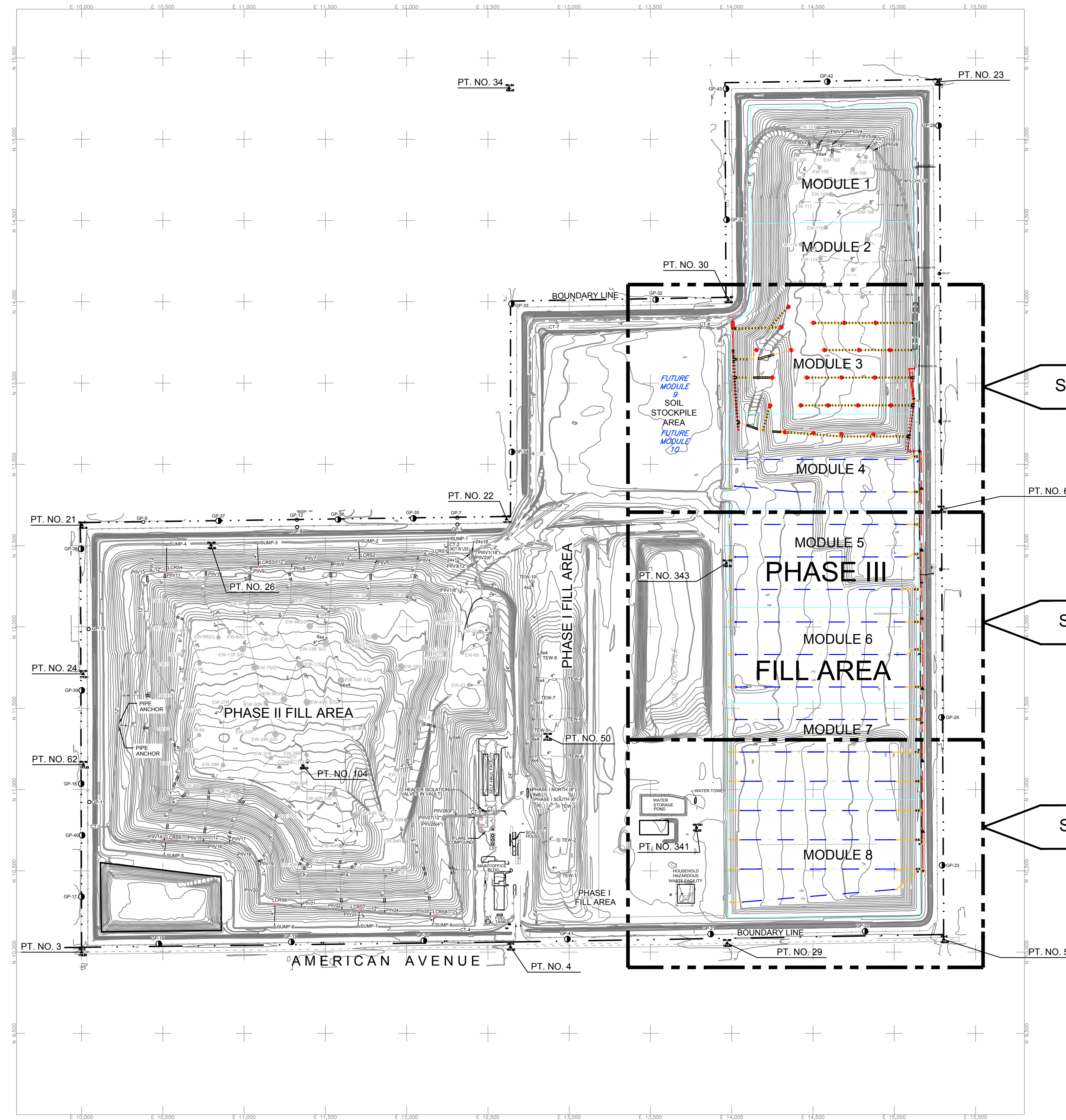
SURVEY NOTES:

BASIS OF BEARINGS
 THE LINE FROM THE N 1/4 CORNER OF SECTION 5, T.15.S., R.17.E. TO THE NW CORNER OF SECTION 3, T.15.S., R.17.W., M.D.B.&M., BEARS N 89°06'11" E PER FRESNO COUNTY SURVEYS AUTOCAD DRAWING "AMERICA MASTER DWG.DWG (12-12-03).

BASIS OF VERTICAL CONTROL
 FRESNO COUNTY BENCHMARK LH19B ON THE NORTHEAST CORNER OF AMERICAN AVENUE AND PLUMAS AVENUE HAS AN ELEVATION OF 177.208' (NGVD29) PER FRESNO COUNTY RECORDS.

**AMERICAN AVENUE LANDFILL
 FLIGHT PANEL DIAGRAM
 JUNE 2020**

PT. NO.	NORTHING	EASTING	DESCRIPTION	FLIGHT PANEL ELEVATION
3	9999.60	10000.16	N 1/4 SEC 5 15/17	178.24
4	10032.36	12638.45	NW COR SEC 4 15/17	181.11
5	10078.20	15303.66	N 1/4 SEC 4 15/17	182.85
6	12722.87	15290.48	C 1/4 SEC 33 14/17	185.78
21	12626.08	10002.48	COTTON SPINDLE ON PAVEMENT	179.10
22	12663.28	12614.41	COTTON SPINDLE ON PAVEMENT	181.71
23	15353.51	15266.08	COTTON SPINDLE ON PAVEMENT	188.83
24	11711.52	10009.91	PK NAIL IN PAVEMENT	177.50
26	12503.05	10796.16	TRAV PT (REBAR W/ F.C. CAP)	182.34
29	10055.08	13971.99	PK NAIL IN PAVEMENT	183.18
30	14013.08	13978.05	PK NAIL IN PAVEMENT	184.68
34	15315.79	12630.04	HUB & TACK	186.47
50	11325.27	12863.54	TRAV PT (REBAR W/ F.C. CAP)	213.15
62	11152.98	10011.34	PK NAIL IN PAVEMENT	177.28
104	11148.27	11362.64	HUB & TACK	267.55
341	10766.56	13783.20	TRAV PT (REBAR W/ F.C. CAP)	182.13
343	12391.99	13966.88	HUB & TACK	188.75



SEE SHEET 4

SEE SHEET 5

SEE SHEET 6



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DATE	RECORD DRAWING	SCALE
DESIGNED: SNA 01-2021	RESIDENT ENGINEER	AS NOTED
DRAWN: SNA 01-2021		
CHECKED: AMN/SHA 01-2021		

Sailyan
 ENGINEER OF RECORD
 02/08/2021
 DATE



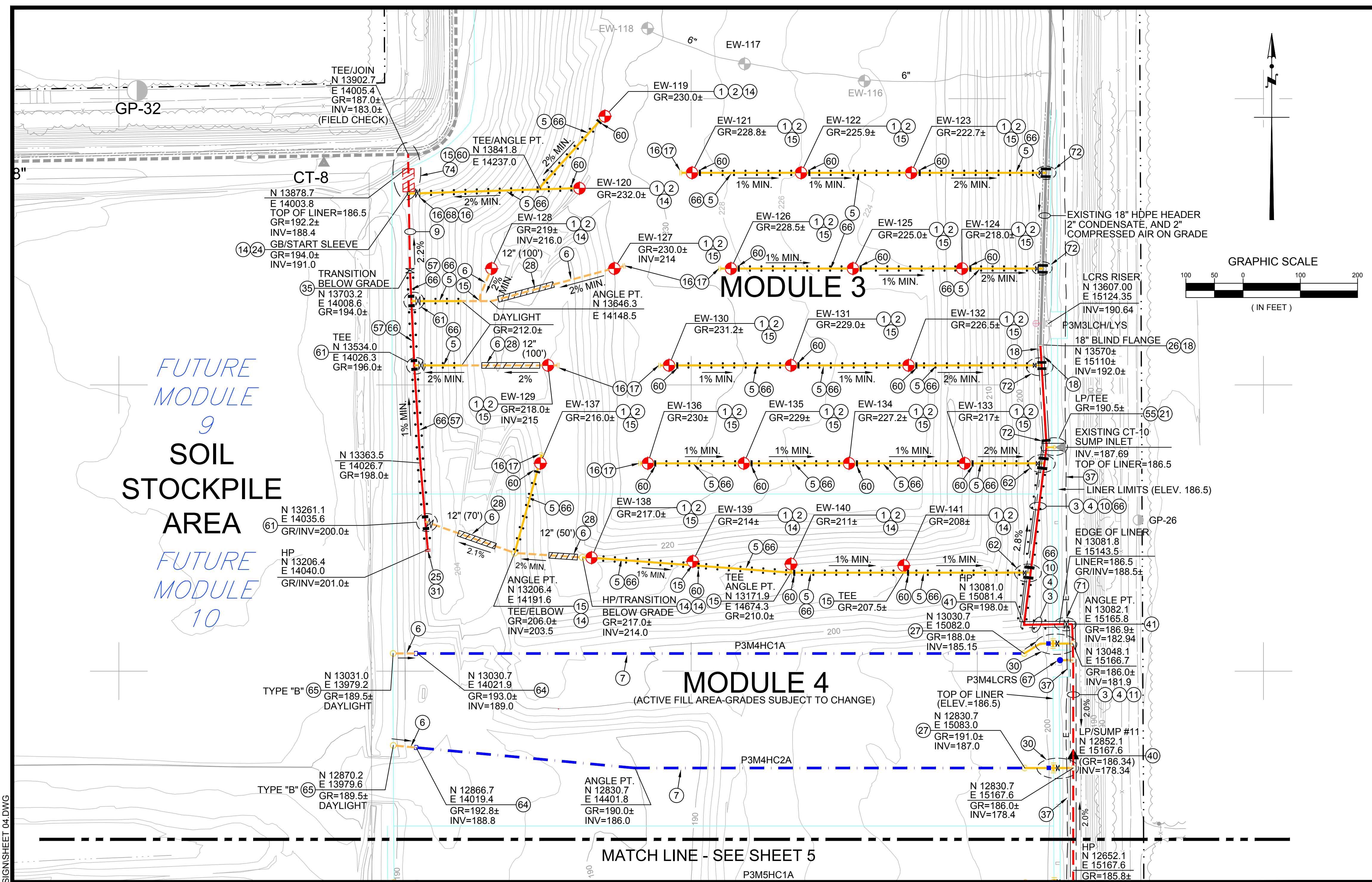
PROJECT
 AMERICAN AVENUE LANDFILL PHASE III -
 MODULES 3-8 LFGCCS EXPANSION
 ROAD NO. N/A BRIDGE NO. N/A



DEPARTMENT OF PUBLIC WORKS AND PLANNING
 SITE PLAN/INDEX/SURVEY CONTROL PLAN
 DRAWING NO. 11307 SHEET NO. 3 TOTAL 16

CONSTRUCTION NOTES:

- 1 INSTALL VERTICAL GAS EXTRACTION WELL PER DETAIL 1/SHEET 8
- 2 INSTALL VERTICAL WELLHEAD PER DETAIL 2/SHEET 8
- 3 INSTALL 2" SDR 11 HDPE COMPRESSED AIR LINE & FITTINGS ON GRADE OR COMMON TRENCH
- 4 INSTALL 2" SDR 11 HDPE CONDENSATE CONVEYANCE LINE & FITTINGS ON GRADE OR COMMON TRENCH
- 5 INSTALL 6" SDR 11 HDPE PIPE & FITTINGS ON GRADE
- 6 INSTALL 6" SDR 11 HDPE PIPE & FITTINGS BELOW GRADE PER DETAIL 3/SHEET 10
- 7 INSTALL 6" SDR 11 HDPE PERFORATED HORIZONTAL WELL PER DETAIL 1/SHEET 10
- 8 INSTALL 2" QED HORIZONTAL WELLHEAD, MODEL ORP215MHL, PER DETAIL 2/SHEET 9 (NO SUBSTITUTION)
- 9 INSTALL 12" SDR 11 HDPE PIPE & FITTINGS BELOW GRADE PER DETAIL 3/SHEET 10
- 10 INSTALL 18" SDR 11 HDPE PIPE & FITTINGS ON GRADE
- 11 INSTALL 18" SDR 11 HDPE HEADER BELOW GRADE PER DETAIL 2/SHEET 10
- 12 INSTALL 18" X 12" HDPE ELECTRO-FUSION SADDLE
- 13 INSTALL 6" HDPE CROSS, SDR 11
- 14 INSTALL 6" 90° HDPE ELBOW, SDR 11
- 15 INSTALL 6" HDPE TEE, SDR 11
- 16 INSTALL 6" HDPE FLANGE ADAPTER SET WITH D.I. BACK-UP RINGS, GASKET, AND BOLT PACK
- 17 INSTALL 6" HDPE BLIND FLANGE
- 18 JOIN EXISTING LINE (GAS, AIR, OR CONDENSATE)
- 19 INSTALL 6" X 4" HDPE REDUCER
- 20 INSTALL 4" X 2" HDPE REDUCER
- 21 CONNECT HEADER TO EXISTING SUMP PER DETAIL 1/SHEET 11
- 22 INSTALL 12" X 8" HDPE REDUCER
- 23 INSTALL 8" X 6" HDPE REDUCER
- 24 INSTALL 12" X 6" HDPE TEE, SDR 11 (MOLDED REDUCING TEE OR 12" TEE WITH REDUCERS)
- 25 INSTALL 12" HDPE FLANGE ADAPTER WITH D.I. BACK-UP RINGS, GASKET, SPACERS, AND BOLT PACK
- 26 INSTALL 18" HDPE FLANGE ADAPTER WITH D.I. BACK-UP RING, GASKET, SPACERS, AND BOLT PACK
- 27 INSTALL HORIZONTAL COLLECTOR TRANSITION PER DETAIL 5/SHEET 10
- 28 INSTALL 12" CSP SLEEVE
- 29 INSTALL 18" HDPE TEE WITH 18" X 6" HDPE REDUCERS, SDR 11
- 30 INSTALL HORIZONTAL WELLHEAD/MANIFOLD TO HEADER CONNECTION PER DETAIL 1/SHEET 9
- 31 INSTALL 12" HDPE BLIND FLANGE
- 32 INSTALL 18" HDPE BLIND FLANGE
- 33 INSTALL 18" VALVE ASSEMBLY AT HEADER END POINT PER DETAIL 4/SHEET 15
- 34 INSTALL 2" SDR 11 HDPE PIPE AND FITTINGS
- 35 INSTALL 12" BUTTERFLY VALVE WITH GEAR OPERATOR AND HANDWHEEL, ON GRADE
- 36 INSTALL WELL I.D. PLACARD PER DETAIL 2/SHEET 13
- 37 PROTECT IN-PLACE EXISTING HIGH VOLTAGE ELECTRICAL CONDUIT AND LEACHATE FORCEMAIN
- 38 INSTALL 2" QED VERTICAL WELLHEAD, MODEL ORP215M (NO SUBSTITUTION)
- 39 INSTALL 18" HDPE TEE WITH 18" X 12" HDPE REDUCERS, SDR 11
- 40 INSTALL R.E.P. MODEL 7000 IN-LINE CONDENSATE SUMP PER DETAIL 1/SHEET 16 (NO SUBSTITUTION)
- 41 INSTALL 18" HDPE ELBOW, SDR 11
- 42 INSTALL 2" FERNCO PIPE ADAPTER
- 43 INSTALL 2" FLEX HOSE (ITC OR SNOOK) X 24" LONG WITH CLAMPS
- 44 INSTALL 4" HDPE ELBOW, SDR 11
- 45 INSTALL 4" HDPE FLANGE ADAPTER WITH D.I. BACK UP RING, GASKET, AND BOLT PACK
- 46 INSTALL 6" X 2" FERNCO PIPE ADAPTER
- 47 INSTALL 2" SDR 11 HDPE PIPE
- 48 INSTALL 1/4" PVC LABCOCK VALVE, HOSE X HOSE
- 49 INSTALL CONDUIT PIPE STRAP OR BRACKET TO SUPPORT HOSE
- 50 INSTALL 1/4" BRAIDED HOSE, CUT TO LENGTH, WITH TWO STAINLESS STEEL HOSE CLAMPS
- 51 INSTALL 1/4" MPT X HOSE BARB FITTING, STAINLESS STEEL (DRILL & TAP PIPING)
- 52 INSTALL 6" 45° HDPE ELBOW, SDR 11
- 53 INSTALL 4" X 2" HDPE TEE, SDR 11
- 54 INSTALL 1/2" STAINLESS STEEL BAND CLAMP
- 55 INSTALL 18" X 6" ECCENTRIC HDPE TEE, CUSTOM FABRICATION (SEE DETAIL 1/SHEET 11)
- 56 INSTALL 6" SDR 11 HDPE END CAP
- 57 INSTALL 12" SDR 11 HDPE PIPE ON GRADE
- 58 INSTALL 18" CSP SLEEVE
- 59 INSTALL VERTICAL WELLHEAD/MANIFOLD TO HEADER CONNECTION PER DETAIL 1/SHEET 14
- 60 INSTALL 6" PIPE ANCHOR PER DETAIL 2/SHEET 12
- 61 INSTALL 12" ANCHOR/SIDE SLOPE BRANCH CONNECTION PER DETAIL 1/SHEET 12
- 62 INSTALL 18" ANCHOR/SIDE SLOPE BRANCH CONNECTION PER DETAIL 3/SHEET 12
- 63 INSTALL 2" HDPE TO SS TRANSITION FITTING (BUTT X MPT)
- 64 INSTALL 2" WIDE X 1.5' LONG X 2" THICK BENTONITE SEAL AT PERFORATED/SOLID PIPE TRANSITION
- 65 INSTALL HORIZONTAL COLLECTOR STUB-OUT PER DETAIL 2/SHEET 11
- 66 INSTALL PIPE ALIGNMENT GUIDE PER DETAIL 3/SHEET 11
- 67 INSTALL LCRS RISER CONNECTION PER DETAIL 1/SHEET 13
- 68 INSTALL 6" BUTTERFLY VALVE, C.I. LUG BODY, GEAR OPERATOR WITH HANDWHEEL (SEE SPECS)
- 69 INSTALL 10" X 6" HDPE ELECTRO-FUSION SADDLE AND 1" STUB OF 6" SDR 11 PIPE (@ LCRS RISER)
- 70 INSTALL 4" X 4" X 1' LONG TREATED REDWOOD LUMBER TO SUPPORT WELLHEAD
- 71 INSTALL 18" VALVE ASSEMBLY AND BELOW GRADE TRANSITION PER DETAIL 3/SHEET 15
- 72 INSTALL 18" CONCRETE ANCHOR BLOCK/BRANCH CONNECTION PER DETAIL 4/SHEET 12
- 73 INSTALL 2" HDPE END CAP
- 74 INSTALL 12" HEADER CONNECTION PER DETAIL 3/SHEET 9
- 75 INSTALL 18" VALVE ASSEMBLY AT HEADER HIGH POINT PER DETAIL 1/SHEET 15



LEGEND

- PROPOSED COMPRESSED AIR LINE
- PROPOSED CONDENSATE CONVEYANCE LINE
- PROPOSED HORIZONTAL GAS COLLECTOR
- PROPOSED PIPE ANCHOR/GUIDES
- CONCRETE BLOCK, CAST-IN-PLACE CONCRETE ANCHOR OR INFA-JUST PIPE ANCHOR (PER DETAILS)
- #6 REBAR PIPE GUIDE
- PROPOSED LANDFILL GAS HEADER, ABOVE GRADE
- PROPOSED LANDFILL GAS HEADER, BELOW GRADE
- PROPOSED GAS LATERAL, ABOVE GRADE
- PROPOSED GAS LATERAL, BELOW GRADE
- ISOLATION VALVE (BUTTERFLY OR BALL VALVE)
- EXISTING VERTICAL GAS EXTRACTION WELL
- ▲ PROPOSED VERTICAL GAS EXTRACTION WELL
- ▲ PROPOSED CONDENSATE PUMP STATION
- PROPOSED REMOTE VERTICAL WELLHEAD LOCATION
- PROPOSED HORIZONTAL WELLHEAD LOCATION
- EXISTING LANDFILL GAS HEADER, ABOVE GRADE
- EXISTING LANDFILL GAS HEADER, BELOW GRADE
- ▲ EXISTING CONDENSATE PUMP STATION
- EXISTING HIGH VOLTAGE ELECTRICAL CONDUIT

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 TEL 909.860.7777 FAX 909.860.8017

DATE	RECORD DRAWING	SCALE
01-2021	RESIDENT ENGINEER	NOT TO SCALE
01-2021		
01-2021		

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 ENGINEER OF RECORD
 02/08/2021
 DATE

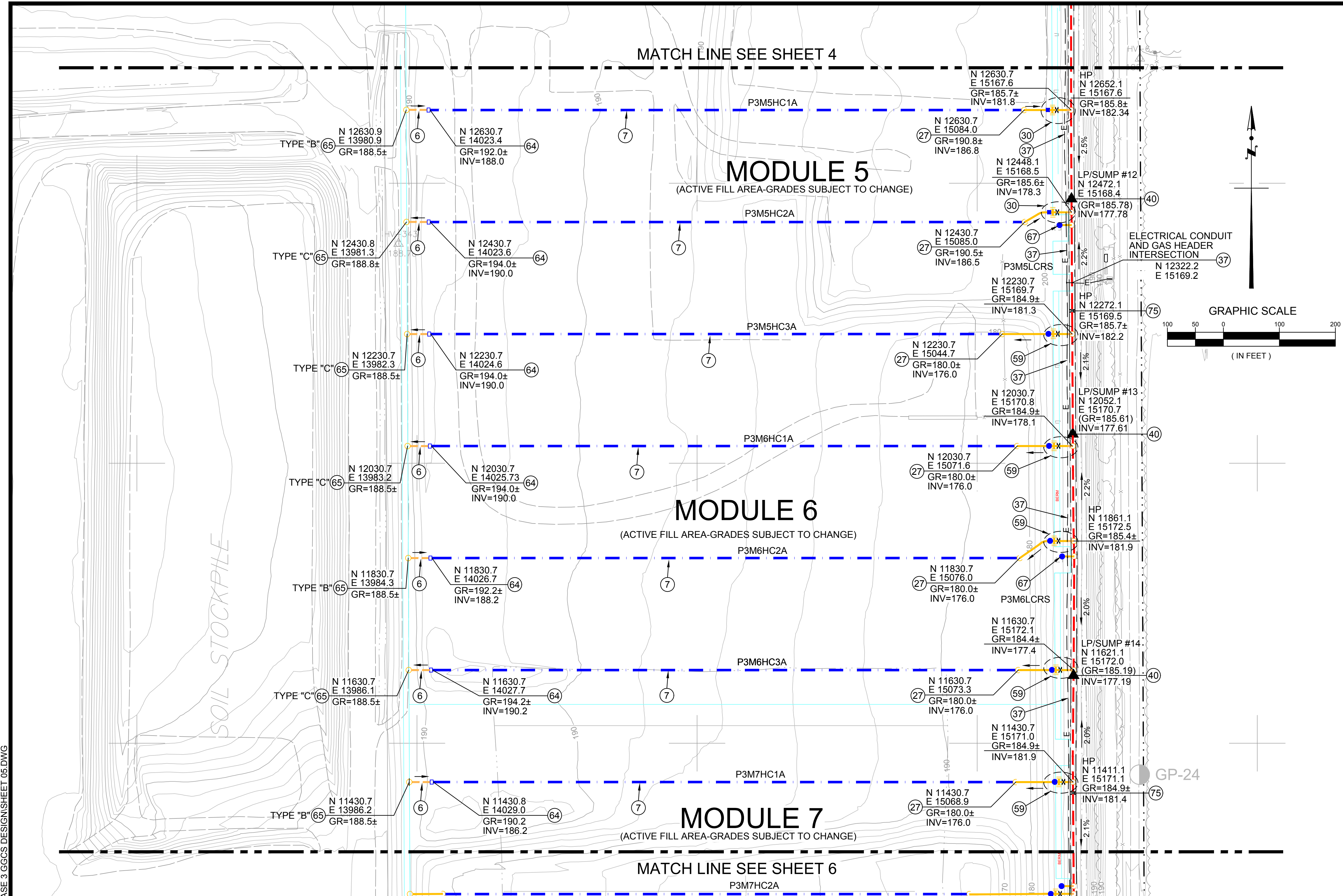
PROJECT
 AMERICAN AVENUE LANDFILL PHASE III -
 MODULES 3-8 LFGCCS EXPANSION

DEPARTMENT OF PUBLIC WORKS AND PLANNING
 LFGCCS EXPANSION PLAN

ROAD NO. N/A BRIDGE NO. N/A

DRAWING NO. 11307 SHEET NO. 4 TOTAL 16

Angus, Scott
 Monday, February 01, 2021 4:18:51 PM
 G:\DWG\AMERICAN AVENUE LANDFILL\GASPHASE 3 GGCS DESIGN\SHEET 04.DWG



CONSTRUCTION NOTES:

- 1 INSTALL VERTICAL GAS EXTRACTION WELL PER DETAIL 1/SHEET 8
- 2 INSTALL VERTICAL WELLHEAD PER DETAIL 2/SHEET 8
- 3 INSTALL 2" SDR 9 HDPE COMPRESSED AIR LINE & FITTINGS ON GRADE OR COMMON TRENCH
- 4 INSTALL 2" SDR 11 HDPE CONDENSATE CONVEYANCE LINE & FITTINGS ON GRADE OR COMMON TRENCH
- 5 INSTALL 6" SDR 11 HDPE PIPE & FITTINGS ON GRADE
- 6 INSTALL 6" SDR 11 HDPE PIPE & FITTINGS BELOW GRADE PER DETAIL 3/SHEET 10
- 7 INSTALL 6" SDR 11 HDPE PERFORATED HORIZONTAL WELL PER DETAIL 1/SHEET 10
- 8 INSTALL 2" QED HORIZONTAL WELLHEAD, MODEL ORP215MHL, PER DETAIL 2/SHEET 9 (NO SUBSTITUTION)
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- 10 INSTALL 18" SDR 11 HDPE PIPE & FITTINGS ON GRADE
- 11 INSTALL 18" SDR 11 HDPE HEADER BELOW GRADE PER DETAIL 2/SHEET 10
- 12 INSTALL 18" X 12" HDPE ELECTRO-FUSION SADDLE
- 13 INSTALL 6" HDPE CROSS, SDR 11
- 14 INSTALL 6" 90° HDPE ELBOW, SDR 11
- 15 INSTALL 6" HDPE TEE, SDR 11
- 16 INSTALL 6" HDPE FLANGE ADAPTER SET WITH D.I. BACK-UP RINGS, GASKET, AND BOLT PACK
- 17 INSTALL 6" HDPE BLIND FLANGE
- 18 JOIN EXISTING LINE (GAS, AIR, OR CONDENSATE)
- 19 INSTALL 6" X 4" HDPE REDUCER
- 20 INSTALL 4" X 2" HDPE REDUCER
- 21 CONNECT HEADER TO EXISTING SUMP PER DETAIL 1/SHEET 11
- 22 INSTALL 12" X 8" HDPE REDUCER
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- 34 INSTALL 2" SDR 11 HDPE PIPE AND FITTINGS
- 35 INSTALL 12" BUTTERFLY VALVE WITH GEAR OPERATOR AND HANDWHEEL, ON GRADE
- 36 INSTALL WELL I.D. PLACARD PER DETAIL 2/SHEET 13
- 37 PROTECT IN-PLACE EXISTING HIGH VOLTAGE ELECTRICAL CONDUIT AND LEACHATE FORCEMAIN
- 38 INSTALL 2" QED VERTICAL WELLHEAD, MODEL ORP215M (NO SUBSTITUTION)
- 39 INSTALL 18" HDPE TEE WITH 18" X 12" HDPE REDUCERS, SDR 11
- 40 INSTALL R.E.P. MODEL 7000 IN-LINE CONDENSATE SUMP PER DETAIL 1/SHEET 16 (NO SUBSTITUTION)
- 41 INSTALL 18" HDPE ELBOW, SDR 11
- 42 INSTALL 2" FERNCO PIPE ADAPTER
- 43 INSTALL 2" FLEX HOSE (ITC OR SNOOK) X 24" LONG WITH CLAMPS
- 44 INSTALL 4" HDPE ELBOW, SDR 11
- 45 INSTALL 4" HDPE FLANGE ADAPTER WITH D.I. BACK UP RING, GASKET, AND BOLT PACK
- 46 INSTALL 6" X 2" FERNCO PIPE ADAPTER
- 47 INSTALL 2" SDR 11 HDPE PIPE
- 48 INSTALL 1/4" PVC LABCOCK VALVE, HOSE X HOSE
- 49 INSTALL CONDUIT PIPE STRAP OR BRACKET TO SUPPORT HOSE
- 50 INSTALL 1/4" BRAIDED HOSE, CUT TO LENGTH, WITH TWO STAINLESS STEEL HOSE CLAMPS
- 51 INSTALL 1/4" MPT X HOSE BARB FITTING, STAINLESS STEEL (DRILL & TAP PIPING)
- 52 INSTALL 6" 45° HDPE ELBOW, SDR 11
- 53 INSTALL 4" X 2" HDPE TEE, SDR 11
- 54 INSTALL 1/2" STAINLESS STEEL BAND CLAMP
- 55 INSTALL 18" X 6" ECCENTRIC HDPE TEE, CUSTOM FABRICATION (SEE DETAIL 1/SHEET 11)
- 56 INSTALL 6" SDR 11 HDPE END CAP
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- 59 INSTALL VERTICAL WELLHEAD/MANIFOLD TO HEADER CONNECTION PER DETAIL 1/SHEET 14
- 60 INSTALL 6" PIPE ANCHOR PER DETAIL 2/SHEET 12
- 61 INSTALL 12" ANCHOR/SIDE SLOPE BRANCH CONNECTION PER DETAIL 1/SHEET 12
- 62 INSTALL 18" ANCHOR/SIDE SLOPE BRANCH CONNECTION PER DETAIL 3/SHEET 12
- 63 INSTALL 2" HDPE TO SS TRANSITION FITTING (BUTT X MPT)
- 64 INSTALL 2" WIDE X 1.5' LONG X 2" THICK BENTONITE SEAL AT PERFORATED/SOLID PIPE TRANSITION
- 65 INSTALL HORIZONTAL COLLECTOR STUB-OUT PER DETAIL 2/SHEET 11
- 66 INSTALL PIPE ALIGNMENT GUIDE PER DETAIL 3/SHEET 11
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- 68 INSTALL 6" BUTTERFLY VALVE, C.I. LUG BODY, GEAR OPERATOR WITH HANDWHEEL (SEE SPECS)
- 69 INSTALL 10" X 6" HDPE ELECTRO-FUSION SADDLE AND 1" STUB OF 6" SDR 11 PIPE (@ LCRS RISER)
- 70 INSTALL 4" X 4" X 1' LONG TREATED REDWOOD LUMBER TO SUPPORT WELLHEAD
- 71 INSTALL 18" VALVE ASSEMBLY AND BELOW GRADE TRANSITION PER DETAIL 3/SHEET 15
- 72 INSTALL 18" CONCRETE ANCHOR BLOCK/BRANCH CONNECTION PER DETAIL 4/SHEET 12
- 73 INSTALL 2" HDPE END CAP
- 74 INSTALL 12" HEADER CONNECTION PER DETAIL 3/SHEET 9
- 75 INSTALL 18" VALVE ASSEMBLY AT HEADER HIGH POINT PER DETAIL 1/SHEET 15

LEGEND

- PROPOSED COMPRESSED AIR LINE
- PROPOSED CONDENSATE CONVEYANCE LINE
- PROPOSED HORIZONTAL GAS COLLECTOR
- PROPOSED PIPE ANCHOR/GUIDES
- CONCRETE BLOCK, CAST-IN-PLACE CONCRETE ANCHOR OR INFA-JUST PIPE ANCHOR (PER DETAILS)
- #6 REBAR PIPE GUIDE
- PROPOSED LANDFILL GAS HEADER, ABOVE GRADE
- PROPOSED LANDFILL GAS HEADER, BELOW GRADE
- PROPOSED GAS LATERAL, ABOVE GRADE
- PROPOSED GAS LATERAL, BELOW GRADE
- ISOLATION VALVE (BUTTERFLY OR BALL VALVE)
- EXISTING VERTICAL GAS EXTRACTION WELL
- PROPOSED VERTICAL GAS EXTRACTION WELL
- ▲ PROPOSED CONDENSATE PUMP STATION
- PROPOSED REMOTE VERTICAL WELLHEAD LOCATION
- PROPOSED HORIZONTAL WELLHEAD LOCATION
- EXISTING LANDFILL GAS HEADER, ABOVE GRADE
- EXISTING LANDFILL GAS HEADER, BELOW GRADE
- ▲ EXISTING CONDENSATE PUMP STATION
- EXISTING HIGH VOLTAGE ELECTRICAL CONDUIT



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RECORD DRAWING	
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Saulyan
DATE
02/08/2021



PROJECT
AMERICAN AVENUE LANDFILL PHASE III -
MODULES 3-8 LFGCCS EXPANSION



DEPARTMENT OF PUBLIC WORKS AND PLANNING
LFGCCS EXPANSION PLAN

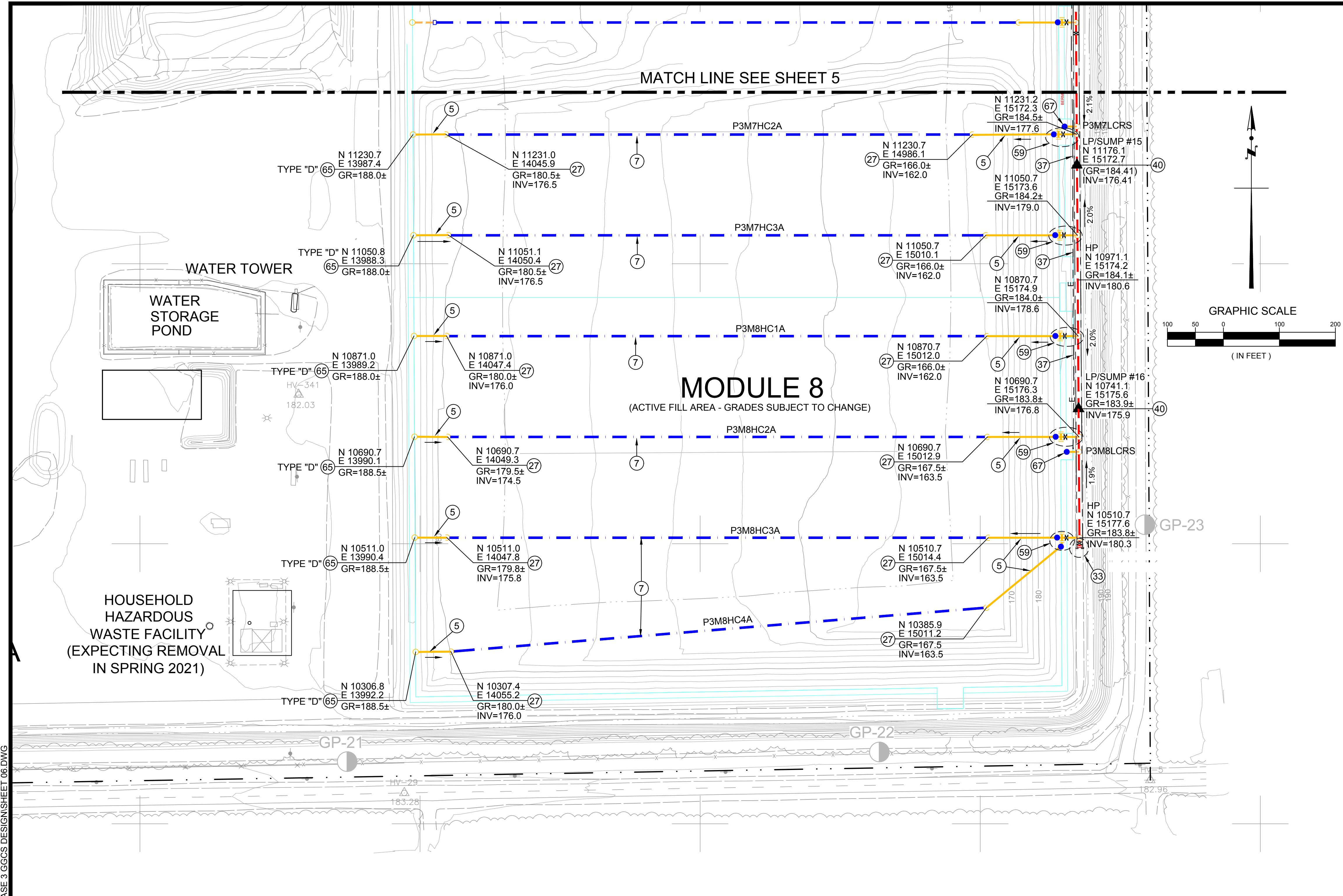
DRAWING NO. 11307 SHEET NO. 5 TOTAL 16

August, Scott Monday, February 01, 2021 4:26:50 PM G:\DWG\AMERICAN AVENUE LANDFILL\GAS\PHASE 3 GGCSS DESIGN\SHEET 05.DWG

FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.

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- 75 INSTALL 18" VALVE ASSEMBLY AT HEADER HIGH POINT PER DETAIL 1/SHEET 15



LEGEND

- | | | | |
|--|---|--|---|
| --- PROPOSED COMPRESSED AIR LINE | --- PROPOSED LANDFILL GAS HEADER, ABOVE GRADE | ⊕ EXISTING VERTICAL GAS EXTRACTION WELL | --- EXISTING LANDFILL GAS HEADER, ABOVE GRADE |
| --- PROPOSED CONDENSATE CONVEYANCE LINE | --- PROPOSED LANDFILL GAS HEADER, BELOW GRADE | ⊕ PROPOSED VERTICAL GAS EXTRACTION WELL | --- EXISTING LANDFILL GAS HEADER, BELOW GRADE |
| --- PROPOSED HORIZONTAL GAS COLLECTOR | --- PROPOSED GAS LATERAL, ABOVE GRADE | ▲ PROPOSED CONDENSATE PUMP STATION | ▲ EXISTING CONDENSATE PUMP STATION |
| --- PROPOSED PIPE ANCHOR/GUIDES | --- PROPOSED GAS LATERAL, BELOW GRADE | ● PROPOSED REMOTE VERTICAL WELLHEAD LOCATION | --- EXISTING HIGH VOLTAGE ELECTRICAL CONDUIT |
| --- CONCRETE BLOCK, CAST-IN-PLACE CONCRETE ANCHOR OR INFA-JUST PIPE ANCHOR (PER DETAILS) | ⊗ ISOLATION VALVE (BUTTERFLY OR BALL VALVE) | ■ PROPOSED HORIZONTAL WELLHEAD LOCATION | |
| --- #6 REBAR PIPE GUIDE | | | |

TETRA TECH

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DATE		RECORD DRAWING	
DESIGNED: SNA	01-2021	RESIDENT ENGINEER	DATE
DRAWN: SNA	01-2021		
CHECKED: AMN/SHA	01-2021		

SCALE
AS NOTED

Saulyan
02/08/2021
ENGINEER OF RECORD DATE



PROJECT
AMERICAN AVENUE LANDFILL PHASE III -
MODULES 3-8 LFGCCS EXPANSION

ROAD NO. N/A BRIDGE NO. N/A



DEPARTMENT OF PUBLIC WORKS AND PLANNING

LFGCCS EXPANSION PLAN

DRAWING NO. 11307 SHEET NO. 6 TOTAL 16

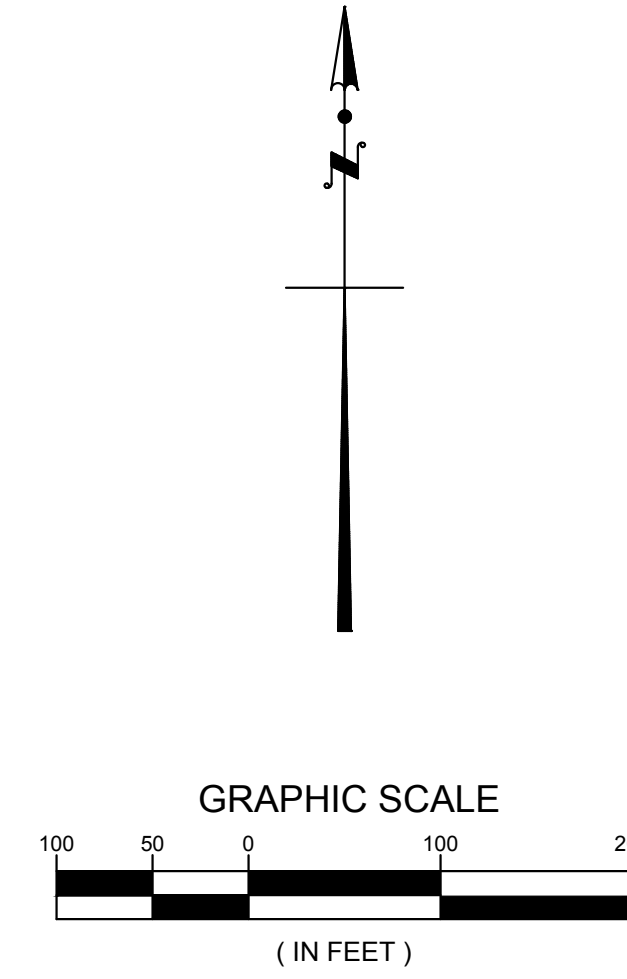
August, Scott
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FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.

GP-31

MODULE 2

GP-27



EW-119
BTM=156

EW-120
BTM=156

EW-121
BTM=156

EW-122
BTM=154

EW-123
BTM=152

EW-128
BTM=156

EW-127
BTM=154

EW-126
BTM=152

EW-125
BTM=150

EW-124
BTM=158

MODULE 3

P3M3LCH/LYS

EW-129
BTM=156

EW-130
BTM=154

EW-131
BTM=152

EW-132
BTM=150

EW-137
BTM=158

EW-136
BTM=156

EW-135
BTM=154

EW-134
BTM=152

EW-133
BTM=158

EW-138
BTM=156

EW-139
BTM=154

EW-140
BTM=152

EW-141
BTM=150

GP-26

TOP OF OPERATION LAYER, TYPICAL

MODULE 4



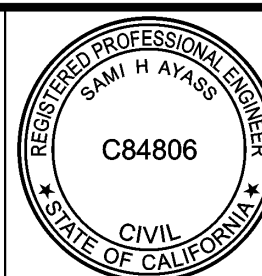
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August, Scott
Friday, January 15, 2021 3:46:02 PM
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DATE	RECORD DRAWING	SCALE
01-2021	RESIDENT ENGINEER	AS NOTED
01-2021		
01-2021		

Saulyan
ENGINEER OF RECORD

02/08/2021
DATE



PROJECT
AMERICAN AVENUE LANDFILL PHASE III -
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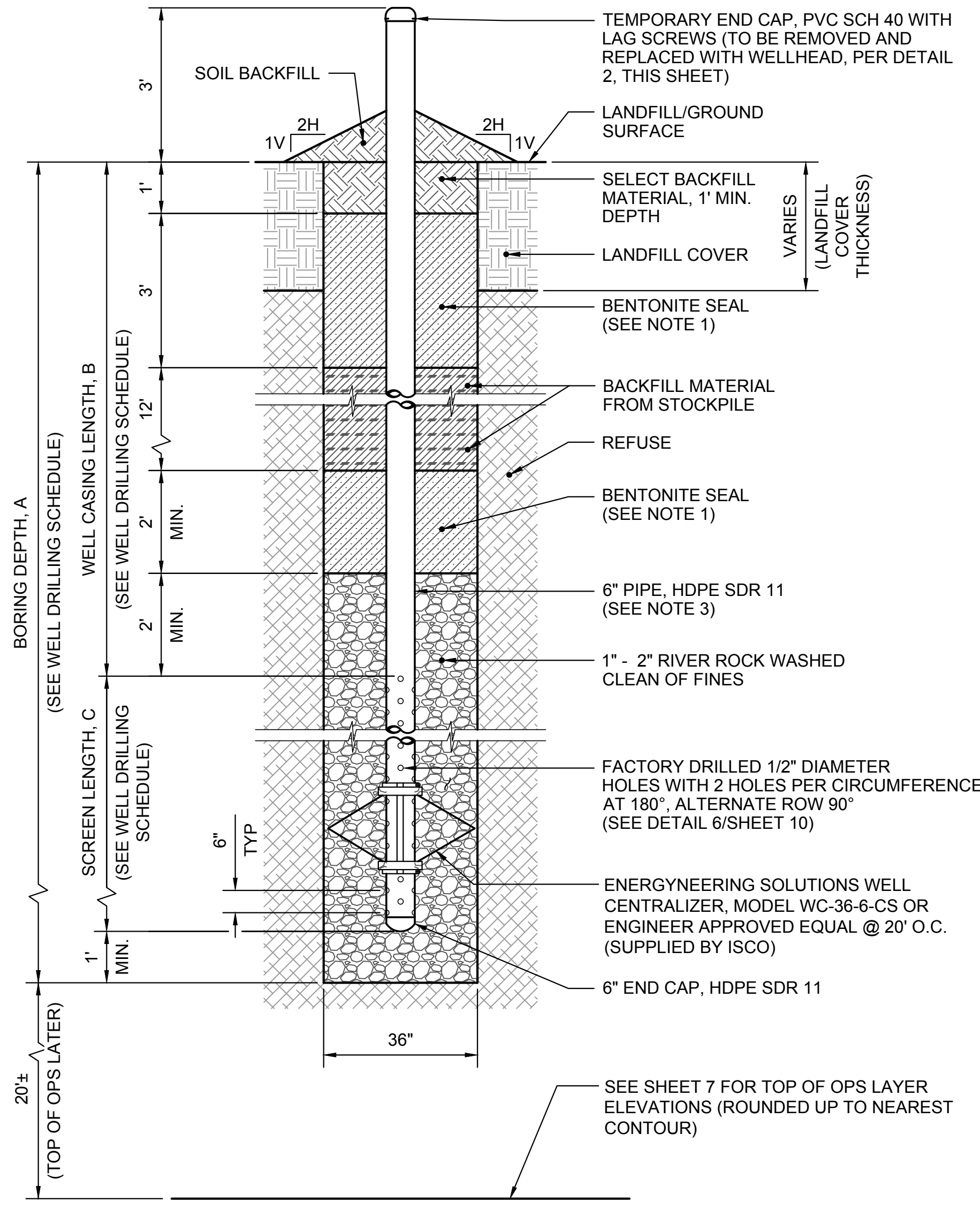


DEPARTMENT OF PUBLIC WORKS AND PLANNING

LANDFILL BASE GRADES WITH PROPOSED WELLS

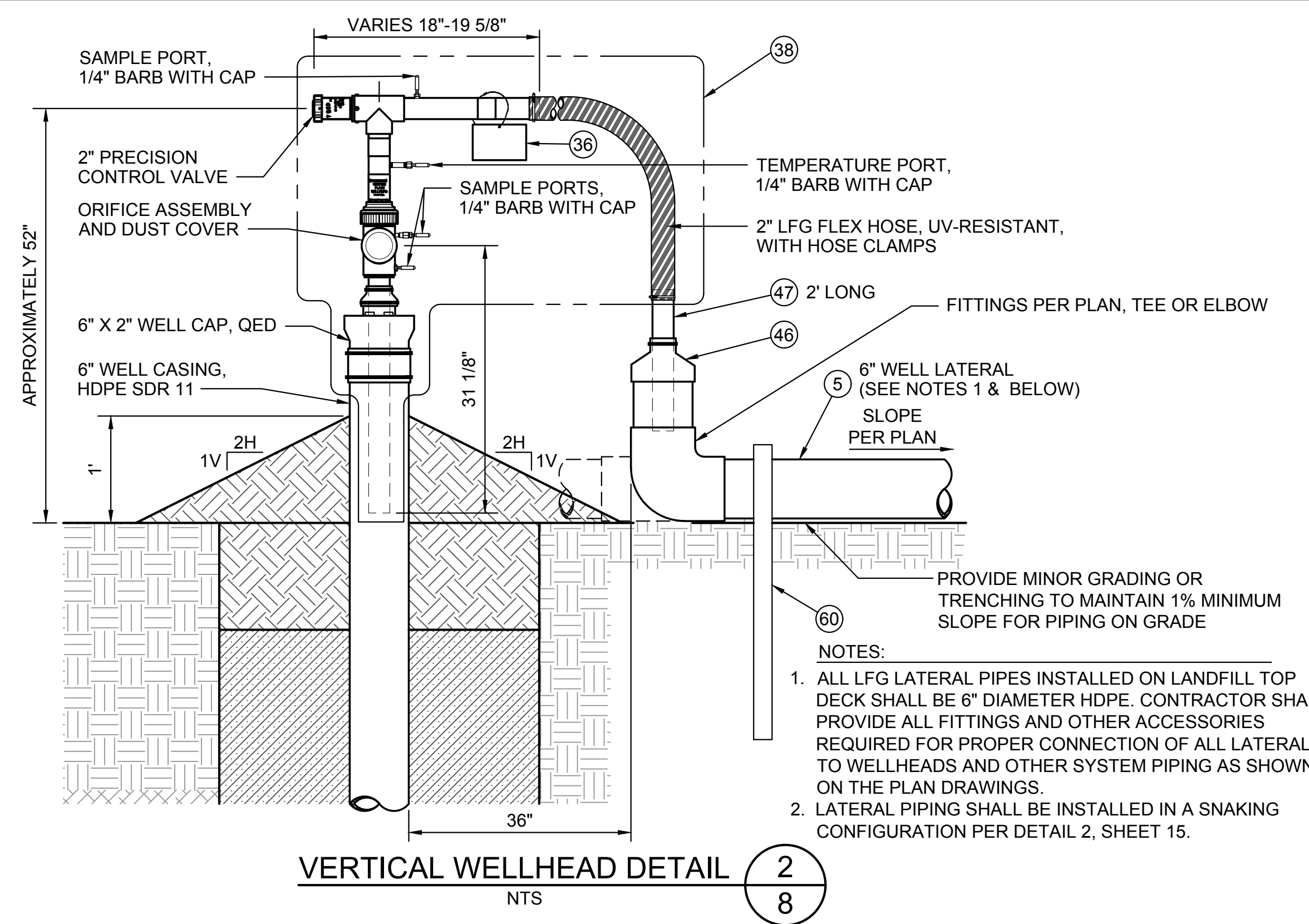
DRAWING NO. 11307 SHEET NO. 7 TOTAL 16

FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.



- NOTES:**
- HYDRATED BENTONITE SEAL SHALL INCLUDE COARSE GRANULAR BENTONITE CHIPS (3/8" TO 1/4") AND FINE GRANULAR BENTONITE (8 MESH BAROID BENSEAL) PRE-MIXED AT RATIO 2:1 OR APPROVED EQUAL. MINIMUM 60% BENTONITE TO MAXIMUM 40% WATER (BY VOLUME) AND POLYMER (CETCO INSTA-VIS PLUS OR APPROVED EQUAL) SHALL BE MIXED TO THICK SLURRY CONSISTENCY BEFORE PLACEMENT. DO NOT HYDRATE BENTONITE IN PLACE BY ADDING WATER DOWN THE BOREHOLE.
 - INSTALLED HDPE FITTINGS SHALL BE FULL PRESSURE RATED OR ONE SDR LOWER THAN HDPE PIPE SDR.
 - INSTALL ALL WELL CASINGS VERTICALLY PLUMB. USE SPRING CENTRALIZERS TO CENTER SINGLE WELL CASINGS IN THE BORE AT 20' SPACING AS SHOWN ON DETAIL.

VERTICAL GAS EXTRACTION WELL DETAIL 1
NTS 8



- NOTES:**
- ALL LFG LATERAL PIPES INSTALLED ON LANDFILL TOP DECK SHALL BE 6" DIAMETER HDPE. CONTRACTOR SHALL PROVIDE ALL FITTINGS AND OTHER ACCESSORIES REQUIRED FOR PROPER CONNECTION OF ALL LATERALS TO WELLHEADS AND OTHER SYSTEM PIPING AS SHOWN ON THE PLAN DRAWINGS.
 - LATERAL PIPING SHALL BE INSTALLED IN A SNAKING CONFIGURATION PER DETAIL 2, SHEET 15.

VERTICAL WELLHEAD DETAIL 2
NTS 8

WELL DRILLING SCHEDULE

WELL I.D.	COORDINATES		WELL ELEVATION (NGVD29)	TOP OF OPS LAYER ELEVATION (NGVD29)	BORING DEPTH DIMENSION "A" IN FEET	WELL CASING LENGTH DIMENSION "B" IN FEET	SCREEN LENGTH DIMENSION "C" IN FEET
	NORTHING	EASTING					
EW-119	13969.2	14349.2	230	156	54	20	33
EW-120	13843.4	14304.7	232	156	56	20	35
EW-121	13870.4	14501.5	228	156	52	20	31
EW-122	13870.4	14692.0	225	154	51	20	30
EW-123	13870.4	14884.5	222	152	50	20	29
EW-124	13703.2	14973.3	218	158	40	20	19
EW-125	13703.2	14782.7	225	150	55	20	34
EW-126	13703.2	14569.5	228	152	56	20	35
EW-127	13703.2	14363.4	230	154	56	20	35
EW-128	13703.2	14151.1	219	156	43	20	22
EW-129	13534.0	14249.9	218	156	42	20	21
EW-130	13534.0	14461.2	231	154	57	20	36
EW-131	13534.0	14674.4	229	152	57	20	36
EW-132	13534.0	14879.8	226	150	56	20	35
EW-133	13362.9	14978.0	217	158	39	20	18
EW-134	13362.9	14775.8	227	152	55	20	34
EW-135	13362.9	14592.0	229	154	55	20	34
EW-136	13362.9	14414.3	230	156	54	20	33
EW-137	13362.9	14236.5	216	158	38	20	17
EW-138	13198.1	14325.9	217	156	41	20	20
EW-139	13198.1	14502.7	214	154	40	20	19
EW-140	13198.1	14674.4	211	152	39	20	18
EW-141	13198.1	14871.3	208	150	38	20	17

TOTAL DRILLING: 1,124 VF

- WELL DRILLING SCHEDULE NOTES:**
- THE ENGINEER SHALL CONFIRM ALL WELL DEPTHS AFTER WELL LOCATIONS ARE SURVEYED. THIS WELL SCHEDULE IS DRAFT UNTIL APPROVED BY ENGINEER.
 - SURVEYOR SHALL STAKE THE WELL LOCATIONS AND VERIFY SURFACE ELEVATIONS PRIOR TO CONSTRUCTION. INCLUDE ON EACH STAKE IN THE FIELD THE NORTHING, EASTING, ELEVATION, SURVEY STAKE ID, SURVEY POINT NUMBER. ALL INFORMATION SHALL CORRESPOND TO WELL DRILLING SCHEDULE.
 - 3 FEET OF SOLID PIPE STICK-UP NOT INCLUDED IN THE PIPING TOTAL.

CONSTRUCTION NOTES:

- INSTALL VERTICAL GAS EXTRACTION WELL PER DETAIL 1/SHEET 8
- INSTALL VERTICAL WELLHEAD PER DETAIL 2/SHEET 8
- INSTALL 2" SDR 9 HDPE COMPRESSED AIR LINE & FITTINGS ON GRADE OR COMMON TRENCH
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- INSTALL 6" SDR 11 HDPE PIPE & FITTINGS ON GRADE
- INSTALL 6" SDR 11 HDPE PIPE & FITTINGS BELOW GRADE PER DETAIL 3/SHEET 10
- INSTALL 6" SDR 11 HDPE PERFORATED HORIZONTAL WELL PER DETAIL 1/SHEET 10
- INSTALL 2" QED HORIZONTAL WELLHEAD, MODEL ORP215MHL, PER DETAIL 2/SHEET 9 (NO SUBSTITUTION)
- INSTALL 12" SDR 11 HDPE PIPE & FITTINGS BELOW GRADE PER DETAIL 3/SHEET 10
- INSTALL 18" SDR 11 HDPE PIPE & FITTINGS ON GRADE
- INSTALL 18" SDR 11 HDPE HEADER BELOW GRADE PER DETAIL 2/SHEET 10
- INSTALL 18" X 12" HDPE ELECTRO-FUSION SADDLE
- INSTALL 6" HDPE CROSS, SDR 11
- INSTALL 6" 90° HDPE ELBOW, SDR 11
- INSTALL 6" HDPE TEE, SDR 11
- INSTALL 6" HDPE FLANGE ADAPTER SET WITH D.I. BACK-UP RINGS, GASKET, AND BOLT PACK
- INSTALL 6" HDPE BLIND FLANGE
- JOIN EXISTING LINE (GAS, AIR, OR CONDENSATE)
- INSTALL 6" X 4" HDPE REDUCER
- INSTALL 4" X 2" HDPE REDUCER
- CONNECT HEADER TO EXISTING SUMP PER DETAIL 1/SHEET 11
- INSTALL 12" X 8" HDPE REDUCER
- INSTALL 8" X 6" HDPE REDUCER
- INSTALL 12" X 6" HDPE TEE, SDR 11 (MOLDED REDUCING TEE OR 12" TEE WITH REDUCERS)
- INSTALL 12" HDPE FLANGE ADAPTER WITH D.I. BACK-UP RINGS, GASKET, SPACERS, AND BOLT PACK
- INSTALL 18" HDPE FLANGE ADAPTER WITH D.I. BACK-UP RING, GASKET, SPACERS, AND BOLT PACK
- INSTALL HORIZONTAL COLLECTOR TRANSITION PER DETAIL 5/SHEET 10
- INSTALL 12" CSP SLEEVE
- INSTALL 18" HDPE TEE WITH 18" X 6" HDPE REDUCERS, SDR 11
- INSTALL HORIZONTAL WELLHEAD/MANIFOLD TO HEADER CONNECTION PER DETAIL 1/SHEET 9
- INSTALL 12" HDPE BLIND FLANGE
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- INSTALL 18" VALVE ASSEMBLY AT HEADER END POINT PER DETAIL 4/SHEET 15
- INSTALL 2" SDR 11 HDPE PIPE AND FITTINGS
- INSTALL 12" BUTTERFLY VALVE WITH GEAR OPERATOR AND HANDWHEEL, ON GRADE
- INSTALL WELL I.D. PLACARD PER DETAIL 2/SHEET 13
- PROTECT IN-PLACE EXISTING HIGH VOLTAGE ELECTRICAL CONDUIT AND LEACHATE FORCEMAIN
- INSTALL 2" QED VERTICAL WELLHEAD, MODEL ORP215M (NO SUBSTITUTION)
- INSTALL 18" HDPE TEE WITH 18" X 12" HDPE REDUCERS, SDR 11
- INSTALL R.E.P. MODEL 7000 IN-LINE CONDENSATE SUMP PER DETAIL 1/SHEET 16 (NO SUBSTITUTION)
- INSTALL 18" HDPE ELBOW, SDR 11
- INSTALL 2" FERNCO PIPE ADAPTER
- INSTALL 2" FLEX HOSE (ITC OR SNOOK) X 24" LONG WITH CLAMPS
- INSTALL 4" HDPE ELBOW, SDR 11
- INSTALL 4" HDPE FLANGE ADAPTER WITH D.I. BACK UP RING, GASKET, AND BOLT PACK
- INSTALL 6" X 2" FERNCO PIPE ADAPTER
- INSTALL 2" SDR 11 HDPE PIPE
- INSTALL 1/4" PVC LABCOCK VALVE, HOSE X HOSE
- INSTALL CONDUIT PIPE STRAP OR BRACKET TO SUPPORT HOSE
- INSTALL 1/4" BRAIDED HOSE, CUT TO LENGTH, WITH TWO STAINLESS STEEL HOSE CLAMPS
- INSTALL 1/4" MPT X HOSE BARB FITTING, STAINLESS STEEL (DRILL & TAP PIPING)
- INSTALL 6" 45° HDPE ELBOW, SDR 11
- INSTALL 4" X 2" HDPE TEE, SDR 11
- INSTALL 1/2" STAINLESS STEEL BAND CLAMP
- INSTALL 18" X 6" ECCENTRIC HDPE TEE, CUSTOM FABRICATION (SEE DETAIL 1/SHEET 11)
- INSTALL 6" SDR 11 HDPE END CAP
- INSTALL 12" SDR 11 HDPE PIPE ON GRADE
- INSTALL 18" CSP SLEEVE
- INSTALL VERTICAL WELLHEAD/MANIFOLD TO HEADER CONNECTION PER DETAIL 1/SHEET 14
- INSTALL 6" PIPE ANCHOR PER DETAIL 2/SHEET 12
- INSTALL 12" ANCHOR/SIDE SLOPE BRANCH CONNECTION PER DETAIL 1/SHEET 12
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- INSTALL 2" WIDE X 1.5" LONG X 2" THICK BENTONITE SEAL AT PERFORATED/SOLID PIPE TRANSITION
- INSTALL HORIZONTAL COLLECTOR STUB-OUT PER DETAIL 2/SHEET 11
- INSTALL PIPE ALIGNMENT GUIDE PER DETAIL 3/SHEET 11
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- INSTALL 6" BUTTERFLY VALVE, C.I. LUG BODY, GEAR OPERATOR WITH HANDWHEEL (SEE SPECS)
- INSTALL 10" X 6" HDPE ELECTRO-FUSION SADDLE AND 1" STUB OF 6" SDR 11 PIPE (@ LCRS RISER)
- INSTALL 4" X 4" X 1" LONG TREATED REDWOOD LUMBER TO SUPPORT WELLHEAD
- INSTALL 18" VALVE ASSEMBLY AND BELOW GRADE TRANSITION PER DETAIL 3/SHEET 15
- INSTALL 18" CONCRETE ANCHOR BLOCK/BRANCH CONNECTION PER DETAIL 4/SHEET 12
- INSTALL 2" HDPE END CAP
- INSTALL 12" HEADER CONNECTION PER DETAIL 3/SHEET 9
- INSTALL 18" VALVE ASSEMBY AT HEADER HIGH POINT PER DETAIL 1/SHEET 15

Angus, Scott
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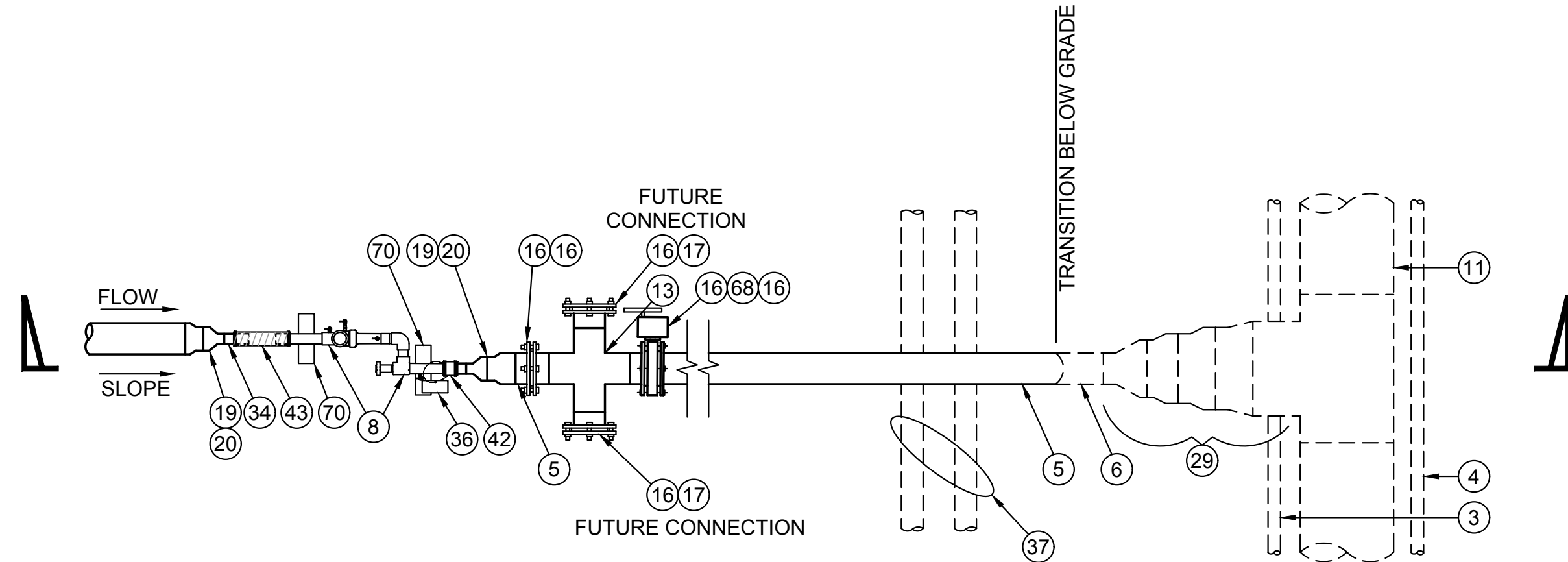
TETRA TECH
 21700 Copley Drive, Suite 200
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 TEL 909.860.7777 FAX 909.860.8017

DESIGNED: SNA	DATE: 01-2021	RECORD DRAWING	SCALE
DRAWN: SNA	DATE: 01-2021	RESIDENT ENGINEER	NOT TO SCALE
CHECKED: AMN/SHA	DATE: 01-2021		

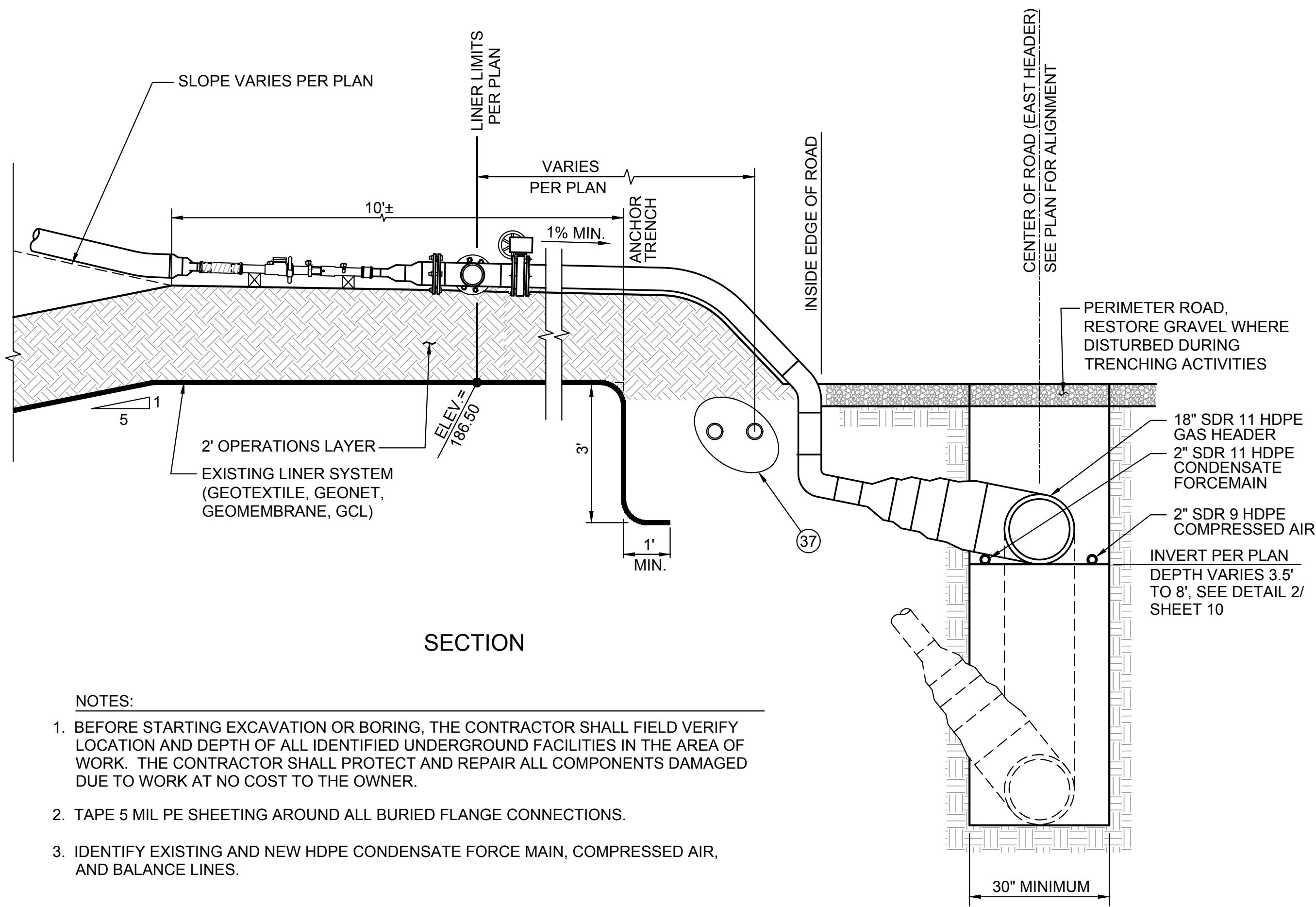
ENGINEER OF RECORD DATE

PROJECT
 AMERICAN AVENUE LANDFILL PHASE III -
 MODULES 3-8 LFGCCS EXPANSION
 ROAD NO. N/A BRIDGE NO. N/A

DEPARTMENT OF PUBLIC WORKS AND PLANNING
 LFGCCS DETAILS
 DRAWING NO. 11307 SHEET NO. 8 TOTAL 16



PLAN

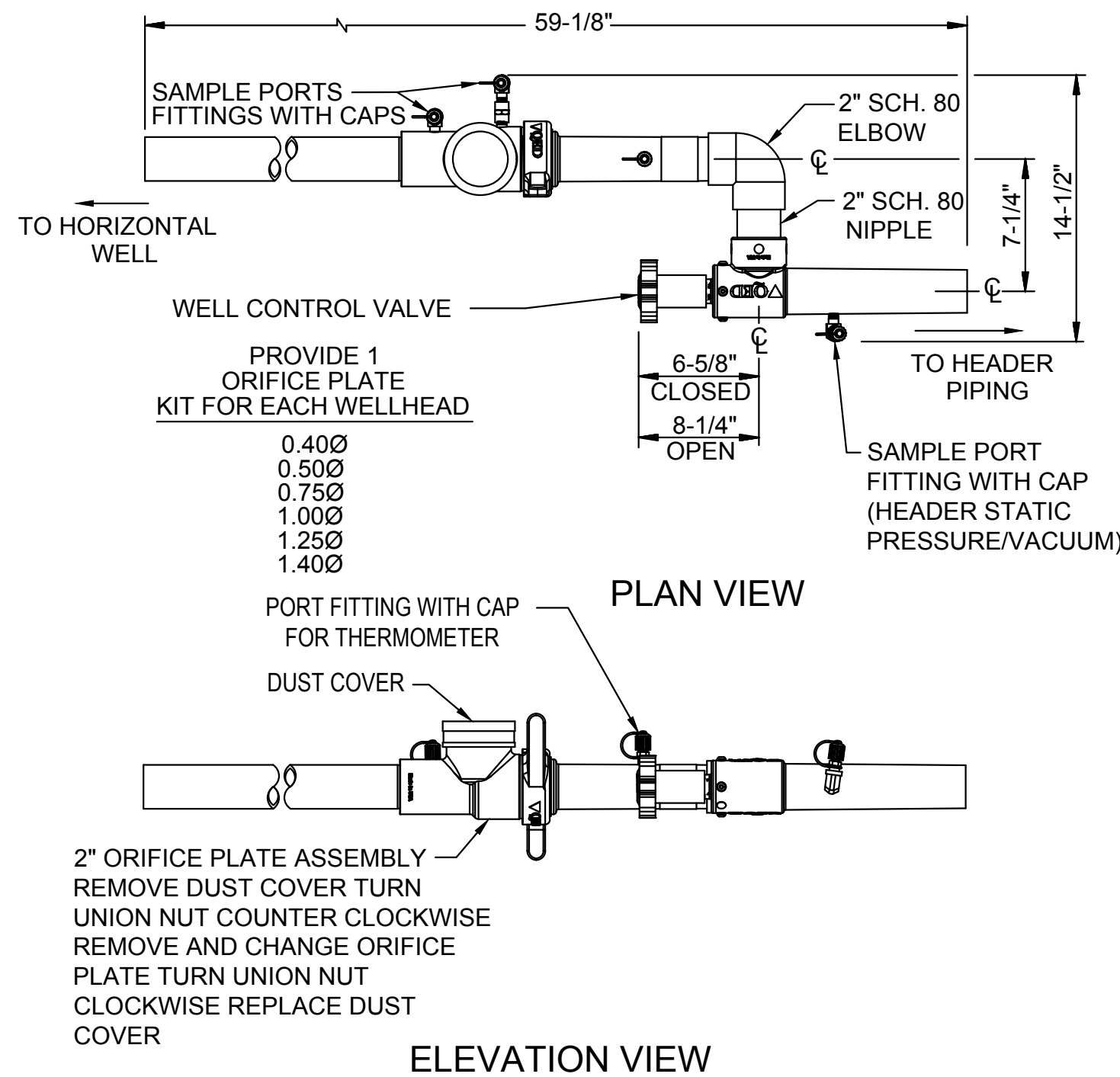
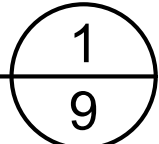


SECTION

NOTES:

- BEFORE STARTING EXCAVATION OR BORING, THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF ALL IDENTIFIED UNDERGROUND FACILITIES IN THE AREA OF WORK. THE CONTRACTOR SHALL PROTECT AND REPAIR ALL COMPONENTS DAMAGED DUE TO WORK AT NO COST TO THE OWNER.
- TAPE 5 MIL PE SHEETING AROUND ALL BURIED FLANGE CONNECTIONS.
- IDENTIFY EXISTING AND NEW HDPE CONDENSATE FORCE MAIN, COMPRESSED AIR, AND BALANCE LINES.

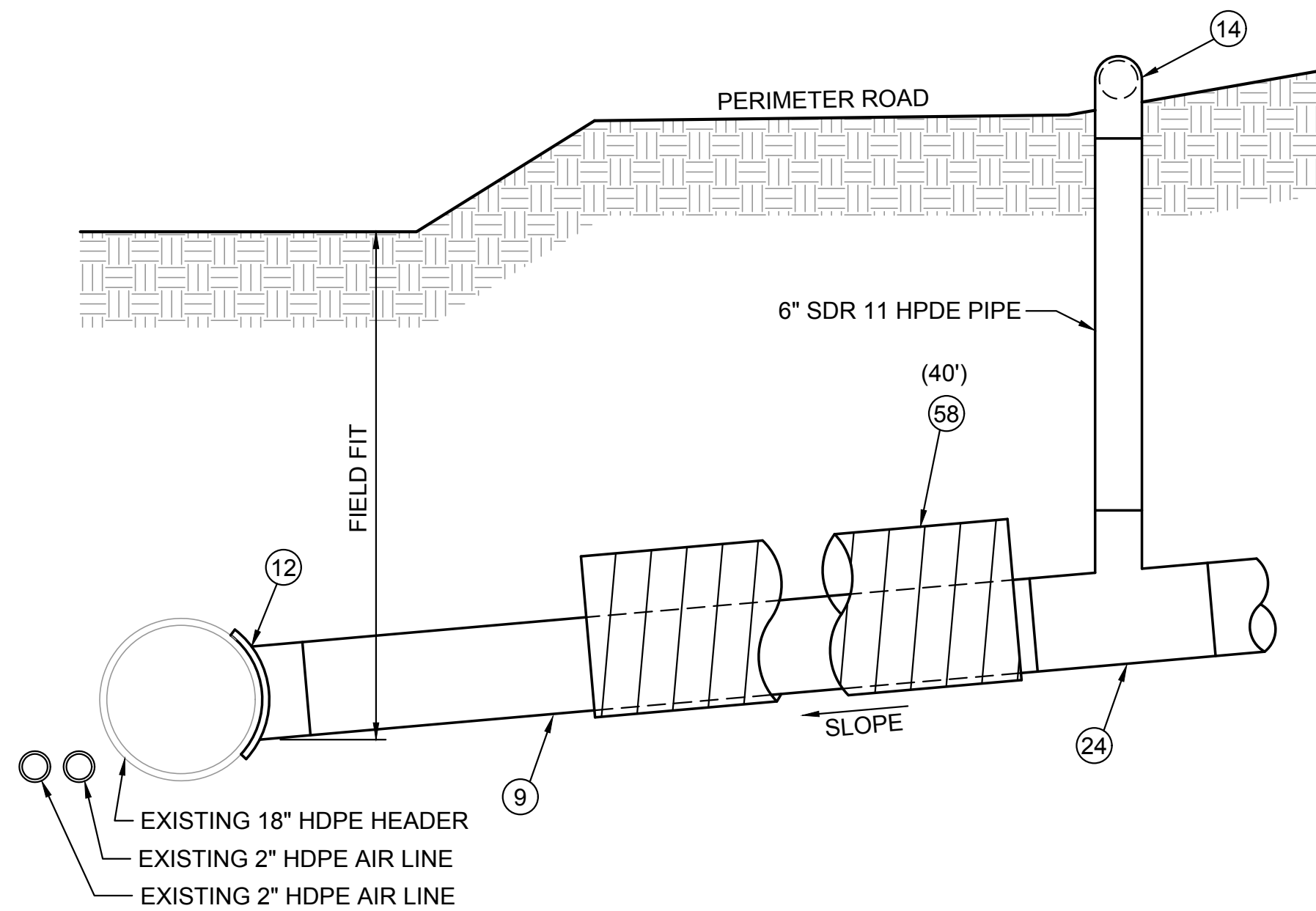
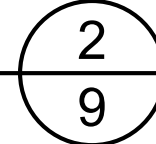
HORIZONTAL WELLHEAD TO HEADER CONNECTION DETAIL 1



ELEVATION VIEW

TYPICAL HORIZONTAL WELLHEAD DETAIL 2

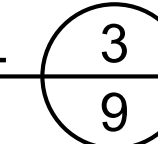
NTS (QED MODEL ORP215MHL, DO NOT SUBSTITUTE)



NOTES:

- FIELD VERIFY DEPTH OF EXISTING HEADER AT TIE-IN LOCATION.
- THE EXISTING HEADER IS LOCATED IN NATIVE SOIL, OUTSIDE THE WASTE FOOTPRINT.

12" HEADER CONNECTION DETAIL 3



CONSTRUCTION NOTES:

- INSTALL VERTICAL GAS EXTRACTION WELL PER DETAIL 1/SHEET 8
- INSTALL VERTICAL WELLHEAD PER DETAIL 2/SHEET 8
- INSTALL 2" SDR 9 HDPE COMPRESSED AIR LINE & FITTINGS ON GRADE OR COMMON TRENCH
- INSTALL 2" SDR 11 HDPE CONDENSATE CONVEYANCE LINE & FITTINGS ON GRADE OR COMMON TRENCH
- INSTALL 6" SDR 11 HDPE PIPE & FITTINGS ON GRADE
- INSTALL 6" SDR 11 HDPE PIPE & FITTINGS BELOW GRADE PER DETAIL 3/SHEET 10
- INSTALL 6" SDR 11 HDPE PERFORATED HORIZONTAL WELL PER DETAIL 1/SHEET 10
- INSTALL 2" QED HORIZONTAL WELLHEAD, MODEL ORP215MHL, PER DETAIL 2/SHEET 9 (NO SUBSTITUTION)
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- INSTALL 6" 90° HDPE ELBOW, SDR 11
- INSTALL 6" HDPE TEE, SDR 11
- INSTALL 6" HDPE FLANGE ADAPTER SET WITH D.I. BACK-UP RINGS, GASKET, AND BOLT PACK
- INSTALL 6" HDPE BLIND FLANGE
- JOIN EXISTING LINE (GAS, AIR, OR CONDENSATE)
- INSTALL 6" X 4" HDPE REDUCER
- INSTALL 4" X 2" HDPE REDUCER
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- INSTALL 18" HDPE ELBOW, SDR 11
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- INSTALL 1/4" BRAIDED HOSE, CUT TO LENGTH, WITH TWO STAINLESS STEEL HOSE CLAMPS
- INSTALL 1/4" MPT X HOSE BARB FITTING, STAINLESS STEEL (DRILL & TAP PIPING)
- INSTALL 6" 45° HDPE ELBOW, SDR 11
- INSTALL 4" X 2" HDPE TEE, SDR 11
- INSTALL 1/2" STAINLESS STEEL BAND CLAMP
- INSTALL 18" X 6" ECCENTRIC HDPE TEE, CUSTOM FABRICATION (SEE DETAIL 1/SHEET 11)
- INSTALL 6" SDR 11 HDPE END CAP
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- INSTALL 12" ANCHOR/SIDE SLOPE BRANCH CONNECTION PER DETAIL 1/SHEET 12
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- INSTALL 4" X 4" X 1" LONG TREATED REDWOOD LUMBER TO SUPPORT WELLHEAD
- INSTALL 18" VALVE ASSEMBLY AND BELOW GRADE TRANSITION PER DETAIL 3/SHEET 15
- INSTALL 18" CONCRETE ANCHOR BLOCK BRANCH CONNECTION PER DETAIL 4/SHEET 12
- INSTALL 2" HDPE END CAP
- INSTALL 12" HEADER CONNECTION PER DETAIL 3/SHEET 9
- INSTALL 18" VALVE ASSEMBLY AT HEADER HIGH POINT PER DETAIL 1/SHEET 15

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DATE	RECORD DRAWING	SCALE
01-2021	RESIDENT ENGINEER	NOT TO SCALE
01-2021		
01-2021		

Sauyan
 ENGINEER OF RECORD
 DATE 02/08/2021



PROJECT
**AMERICAN AVENUE LANDFILL PHASE III -
 MODULES 3-8 LFGCCS EXPANSION**

ROAD NO. N/A BRIDGE NO. N/A



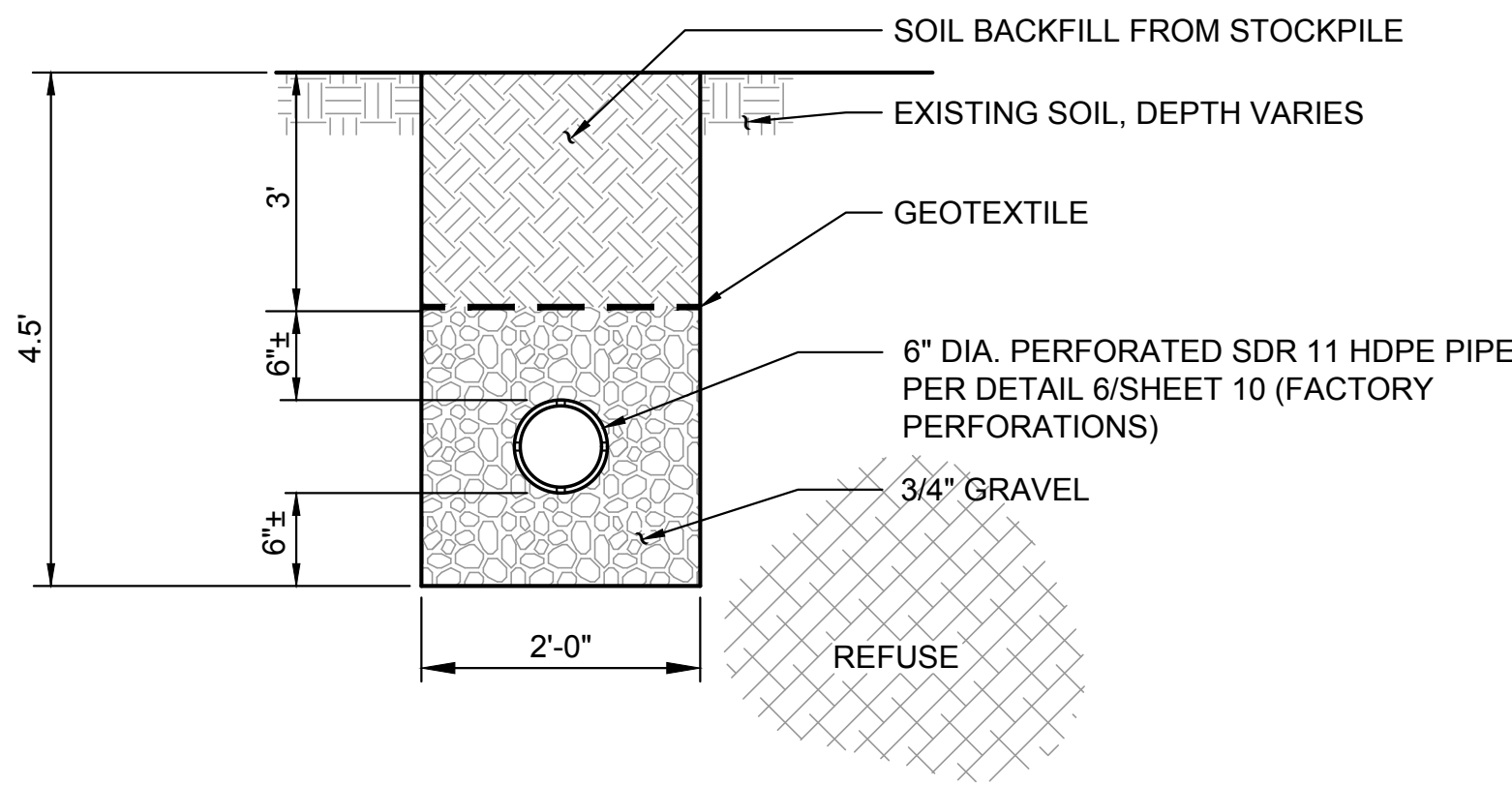
DEPARTMENT OF PUBLIC WORKS AND PLANNING

LFGCCS DETAILS

DRAWING NO. 11307 SHEET NO. 9 TOTAL 16

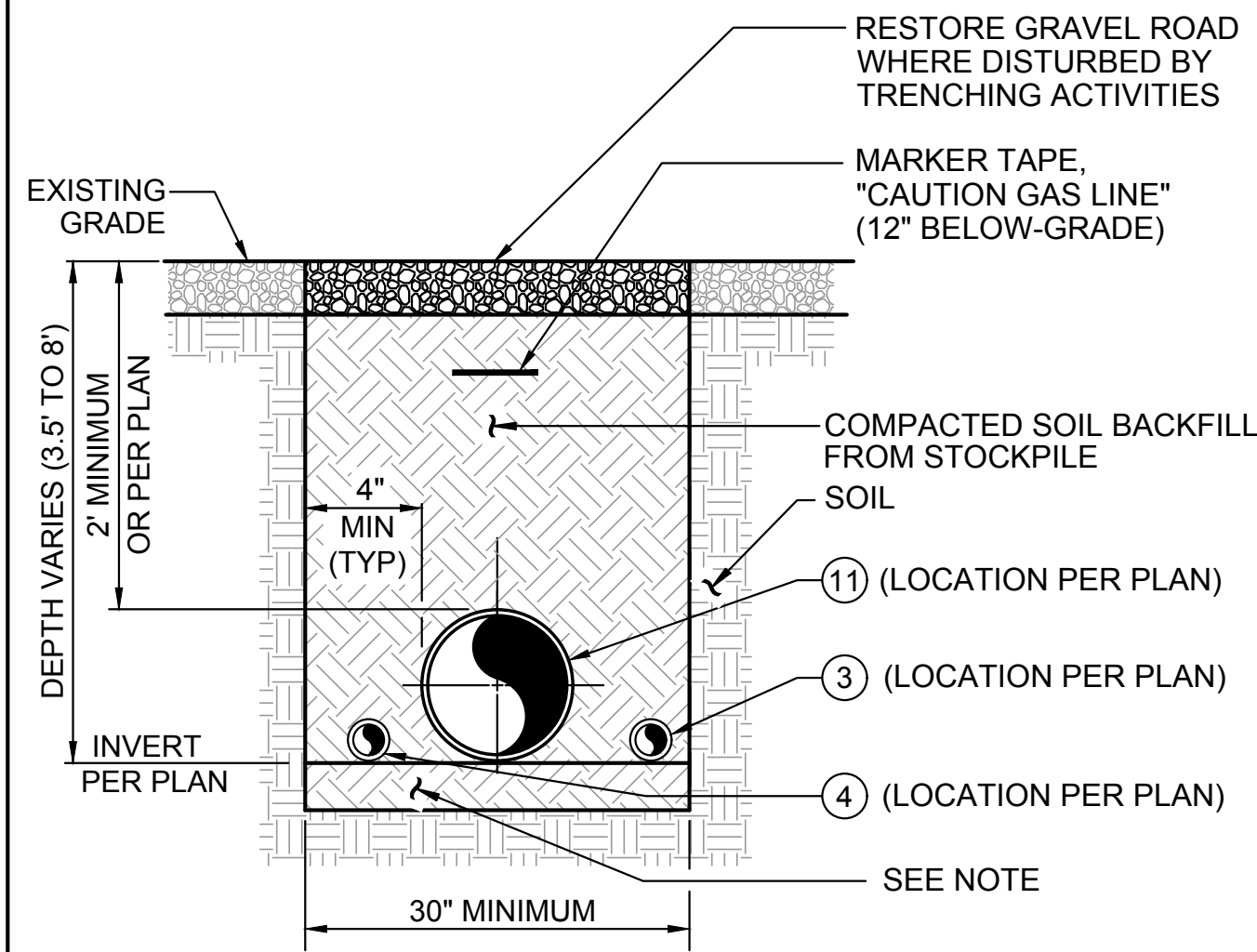
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FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.



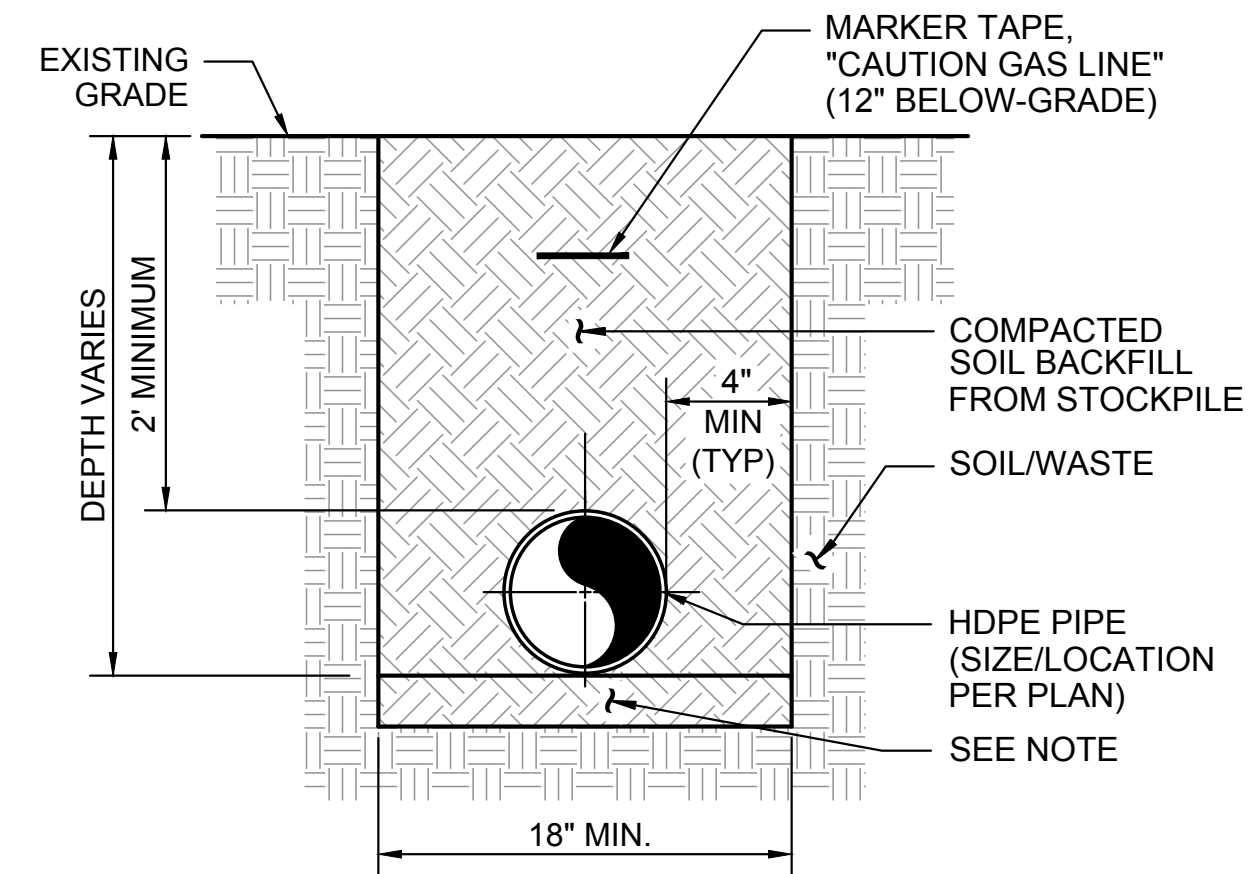
- NOTES:**
1. THE INTENT IS TO INSTALL HORIZONTAL GAS COLLECTOR TRENCH TO INTERCEPT THE WASTE PRISM. IF THE COVER THICKNESS IS GREATER THAN 3 FEET, THE HORIZONTAL GAS TRENCH COLLECTOR SHALL BE TRENCHED DEEPER TO INTERCEPT WASTE. THE TRENCH DEPTH SHALL BE A MINIMUM OF 4.5 FEET (TYPICAL) AND MAXIMUM OF 6 FEET.
 2. THE PERFORATED COLLECTOR PIPE SHALL BE TERMINATED APPROXIMATELY 40 FEET FROM THE CELL BOUNDARY (ANCHOR TRENCH LOCATION) AND TRANSITION TO SOLID 6" SDR 11 LATERAL PIPE PER DETAIL 5/SHEET 10. THE LATERAL SHALL BE SLOPED A MINIMUM 3% BACK INTO WASTE, OR SLOPED TOWARDS THE HORIZONTAL WELLHEAD. NO LOW POINTS IN THE SOLID LATERAL PIPE ARE ALLOWED. A HIGH POINT CAN BE INSTALLED DEPENDING ON LANDFILL ELEVATIONS AT TIME OF CONSTRUCTION.

TYPICAL HORIZONTAL GAS COLLECTION TRENCH SECTION 1
NTS 10



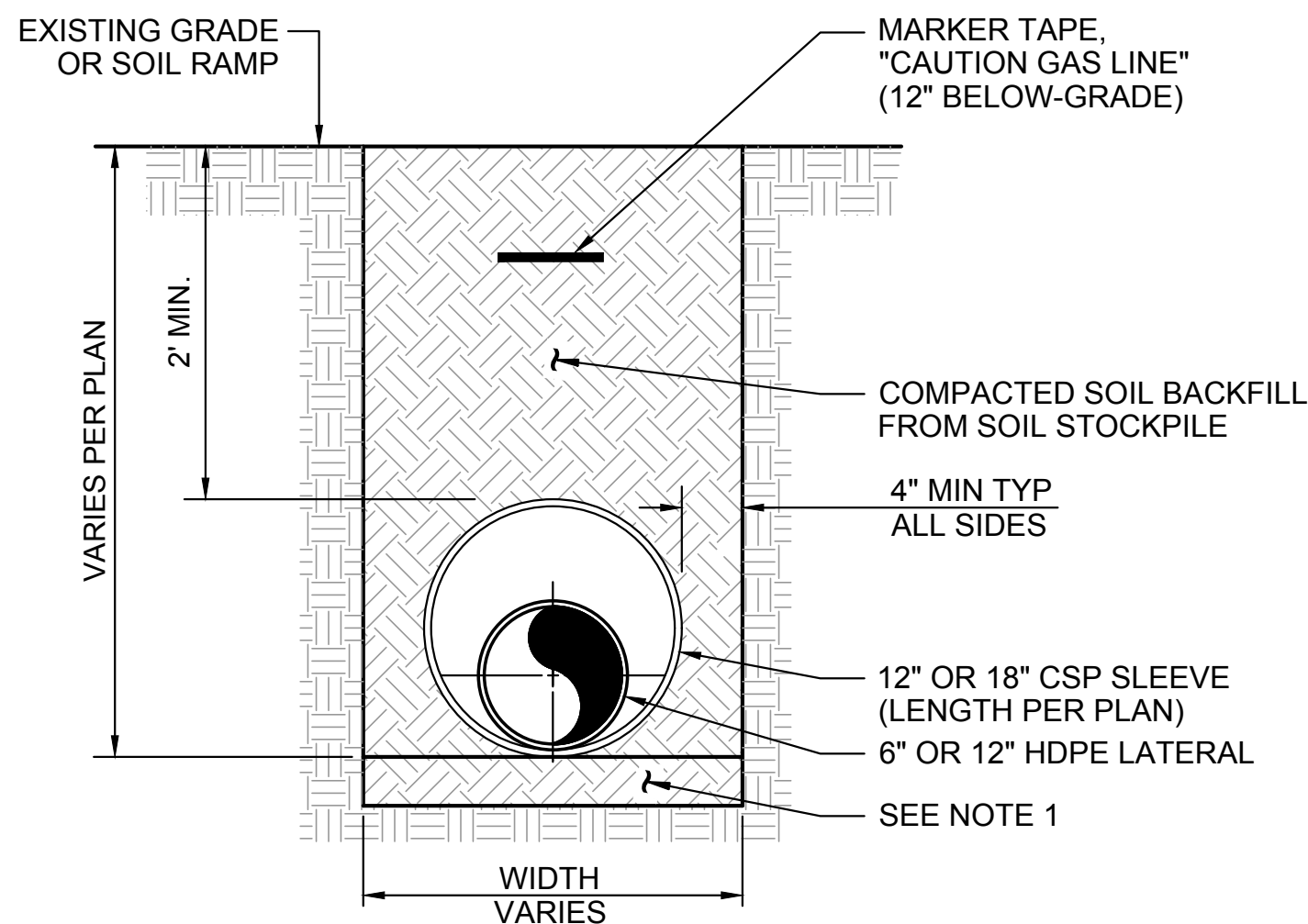
- NOTE:**
INSTALL 6" OF SOIL BEDDING BELOW PIPING IF REFUSE OR UNSUITABLE SOIL IS ENCOUNTERED DURING TRENCHING.

TYPICAL HEADER TRENCH SECTION 2
NTS 10



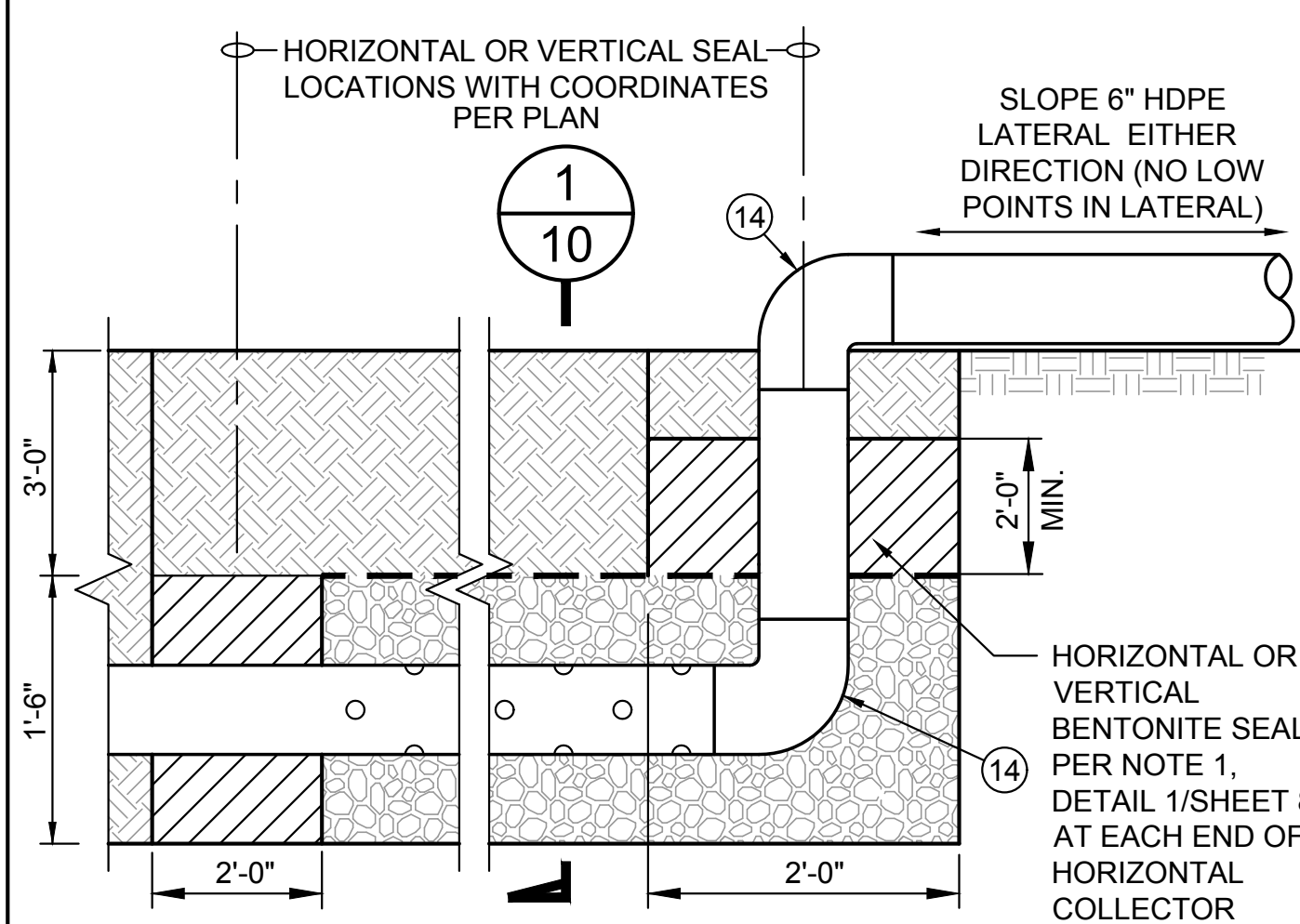
- NOTE:**
INSTALL 6" OF SOIL BEDDING BELOW PIPING IF REFUSE OR UNSUITABLE SOIL IS ENCOUNTERED DURING TRENCHING.

TYPICAL LATERAL SECTION 3
NTS 10



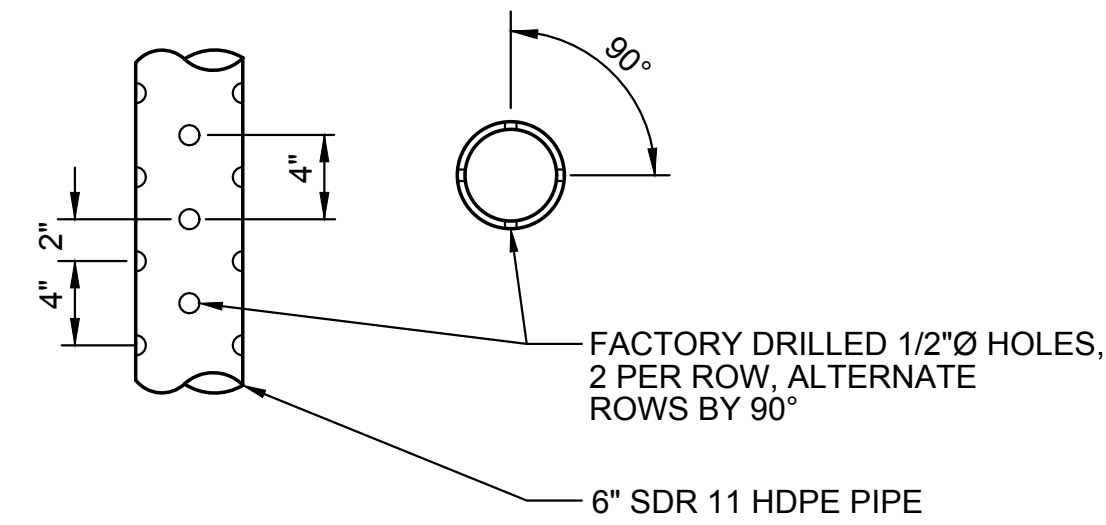
- NOTES:**
1. INSTALL 6" OF SOIL BEDDING BELOW PIPING IF REFUSE OR UNSUITABLE SOIL IS ENCOUNTERED DURING TRENCHING.
 2. AIR AND CONDENSATE LINES NOT SHOWN. SEE PLAN SHEETS IF REQUIRED.

12"/18" CSP ROAD CROSSING DETAIL 4
NTS (12" CSP FOR 6" LATERAL AND 18" CSP FOR 12" LATERAL, AS REQUIRED) 10



- NOTE:**
1. GENERALLY THE HORIZONTAL COLLECTORS SLOPE FROM WEST TO EAST. EXISTING GRADES WILL VARY AT TIME OF CONSTRUCTION. ADJUSTMENTS TO LOCATIONS OF STUB-UPS AND TRANSITIONS FROM PERFORATED TO SOLID PIPE SHALL BE FIELD VERIFIED WITH ENGINEER PRIOR TO CONSTRUCTION.

HORIZONTAL COLLECTOR TRANSITION DETAIL 5
NTS 10



- NOTES:**
1. FACTORY DRILLED PERFORATIONS SPACED 90° APART HORIZONTALLY.
 2. FACTORY DRILLED PERFORATIONS SPACED 4" APART VERTICALLY.
 3. 90° AND 270° ROWS STAGGERED 2" BELOW 0° AND 180° ROWS.

TYPICAL HORIZONTAL AND VERTICAL WELL PERFORATION DETAIL 6
NTS 10

CONSTRUCTION NOTES:

1. INSTALL VERTICAL GAS EXTRACTION WELL PER DETAIL 1/SHEET 8
2. INSTALL VERTICAL WELLHEAD PER DETAIL 2/SHEET 8
3. INSTALL 2" SDR 9 HDPE COMPRESSED AIR LINE & FITTINGS ON GRADE OR COMMON TRENCH
4. INSTALL 2" SDR 11 HDPE CONDENSATE CONVEYANCE LINE & FITTINGS ON GRADE OR COMMON TRENCH
5. INSTALL 6" SDR 11 HDPE PIPE & FITTINGS ON GRADE
6. INSTALL 6" SDR 11 HDPE PIPE & FITTINGS BELOW GRADE PER DETAIL 3/SHEET 10
7. INSTALL 6" SDR 11 HDPE PERFORATED HORIZONTAL WELL PER DETAIL 1/SHEET 10
8. INSTALL 2" QED HORIZONTAL WELLHEAD, MODEL ORP215MHL, PER DETAIL 2/SHEET 9 (NO SUBSTITUTION)
9. INSTALL 12" SDR 11 HDPE PIPE & FITTINGS BELOW GRADE PER DETAIL 3/SHEET 10
10. INSTALL 18" SDR 11 HDPE PIPE & FITTINGS ON GRADE
11. INSTALL 18" SDR 11 HDPE HEADER BELOW GRADE PER DETAIL 2/SHEET 10
12. INSTALL 18" X 12" HDPE ELECTRO-FUSION SADDLE
13. INSTALL 6" HDPE CROSS, SDR 11
14. INSTALL 6" 90° HDPE ELBOW, SDR 11
15. INSTALL 6" HDPE TEE, SDR 11
16. INSTALL 6" HDPE FLANGE ADAPTER SET WITH D.I. BACK-UP RINGS, GASKET, AND BOLT PACK
17. INSTALL 6" HDPE BLIND FLANGE
18. JOIN EXISTING LINE (GAS, AIR, OR CONDENSATE)
19. INSTALL 6" X 4" HDPE REDUCER
20. INSTALL 4" X 2" HDPE REDUCER
21. CONNECT HEADER TO EXISTING SUMP PER DETAIL 1/SHEET 11
22. INSTALL 12" X 8" HDPE REDUCER
23. INSTALL 8" X 6" HDPE REDUCER
24. INSTALL 12" X 6" HDPE TEE, SDR 11 (MOLDED REDUCING TEE OR 12" TEE WITH REDUCERS)
25. INSTALL 12" HDPE FLANGE ADAPTER WITH D.I. BACK-UP RINGS, GASKET, SPACERS, AND BOLT PACK
26. INSTALL 18" HDPE FLANGE ADAPTER WITH D.I. BACK-UP RING, GASKET, SPACERS, AND BOLT PACK
27. INSTALL HORIZONTAL COLLECTOR TRANSITION PER DETAIL 5/SHEET 10
28. INSTALL 12" CSP SLEEVE
29. INSTALL 18" HDPE TEE WITH 18" X 6" HDPE REDUCERS, SDR 11
30. INSTALL HORIZONTAL WELLHEAD/MANIFOLD TO HEADER CONNECTION PER DETAIL 1/SHEET 9
31. INSTALL 12" HDPE BLIND FLANGE
32. INSTALL 18" HDPE BLIND FLANGE
33. INSTALL 18" VALVE ASSEMBLY AT HEADER END POINT PER DETAIL 4/SHEET 15
34. INSTALL 2" SDR 11 HDPE PIPE AND FITTINGS
35. INSTALL 12" BUTTERFLY VALVE WITH GEAR OPERATOR AND HANDWHEEL, ON GRADE
36. INSTALL WELL I.D. PLACARD PER DETAIL 2/SHEET 13
37. PROTECT IN-PLACE EXISTING HIGH VOLTAGE ELECTRICAL CONDUIT AND LEACHATE FORCEMAIN
38. INSTALL 2" QED VERTICAL WELLHEAD, MODEL ORP215M (NO SUBSTITUTION)
39. INSTALL 18" HDPE TEE WITH 18" X 12" HDPE REDUCERS, SDR 11
40. INSTALL R.E.P. MODEL 7000 IN-LINE CONDENSATE SUMP PER DETAIL 1/SHEET 16 (NO SUBSTITUTION)
41. INSTALL 18" HDPE ELBOW, SDR 11
42. INSTALL 2" FERNCO PIPE ADAPTER
43. INSTALL 2" FLEX HOSE (ITC OR SNOOK) X 24" LONG WITH CLAMPS
44. INSTALL 4" HDPE ELBOW, SDR 11
45. INSTALL 4" HDPE FLANGE ADAPTER WITH D.I. BACK UP RING, GASKET, AND BOLT PACK
46. INSTALL 6" X 2" FERNCO PIPE ADAPTER
47. INSTALL 2" SDR 11 HDPE PIPE
48. INSTALL 1/4" PVC LABCOCK VALVE, HOSE X HOSE
49. INSTALL CONDUIT PIPE STRAP OR BRACKET TO SUPPORT HOSE
50. INSTALL 1/4" BRAIDED HOSE, CUT TO LENGTH, WITH TWO STAINLESS STEEL HOSE CLAMPS
51. INSTALL 1/4" MPT X HOSE BARB FITTING, STAINLESS STEEL (DRILL & TAP PIPING)
52. INSTALL 6" 45° HDPE ELBOW, SDR 11
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56. INSTALL 6" SDR 11 HDPE END CAP
57. INSTALL 12" SDR 11 HDPE PIPE ON GRADE
58. INSTALL 18" CSP SLEEVE
59. INSTALL VERTICAL WELLHEAD/MANIFOLD TO HEADER CONNECTION PER DETAIL 1/SHEET 14
60. INSTALL 6" PIPE ANCHOR PER DETAIL 2/SHEET 12
61. INSTALL 12" ANCHOR/SIDE SLOPE BRANCH CONNECTION PER DETAIL 1/SHEET 12
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65. INSTALL HORIZONTAL COLLECTOR STUB-OUT PER DETAIL 2/SHEET 11
66. INSTALL PIPE ALIGNMENT GUIDE PER DETAIL 3/SHEET 11
67. INSTALL LCRS RISER CONNECTION PER DETAIL 1/SHEET 13
68. INSTALL 6" BUTTERFLY VALVE, C.I. LUG BODY, GEAR OPERATOR WITH HANDWHEEL (SEE SPECS)
69. INSTALL 10" X 6" HDPE ELECTRO-FUSION SADDLE AND 1' STUB OF 6" SDR 11 PIPE (@ LCRS RISER)
70. INSTALL 4" X 4" X 1' LONG TREATED REDWOOD LUMBER TO SUPPORT WELLHEAD
71. INSTALL 18" VALVE ASSEMBLY AND BELOW GRADE TRANSITION PER DETAIL 3/SHEET 15
72. INSTALL 18" CONCRETE ANCHOR BLOCK BRANCH CONNECTION PER DETAIL 4/SHEET 12
73. INSTALL 2" HDPE END CAP
74. INSTALL 12" HEADER CONNECTION PER DETAIL 3/SHEET 9
75. INSTALL 18" VALVE ASSEMBLY AT HEADER HIGH POINT PER DETAIL 1/SHEET 15

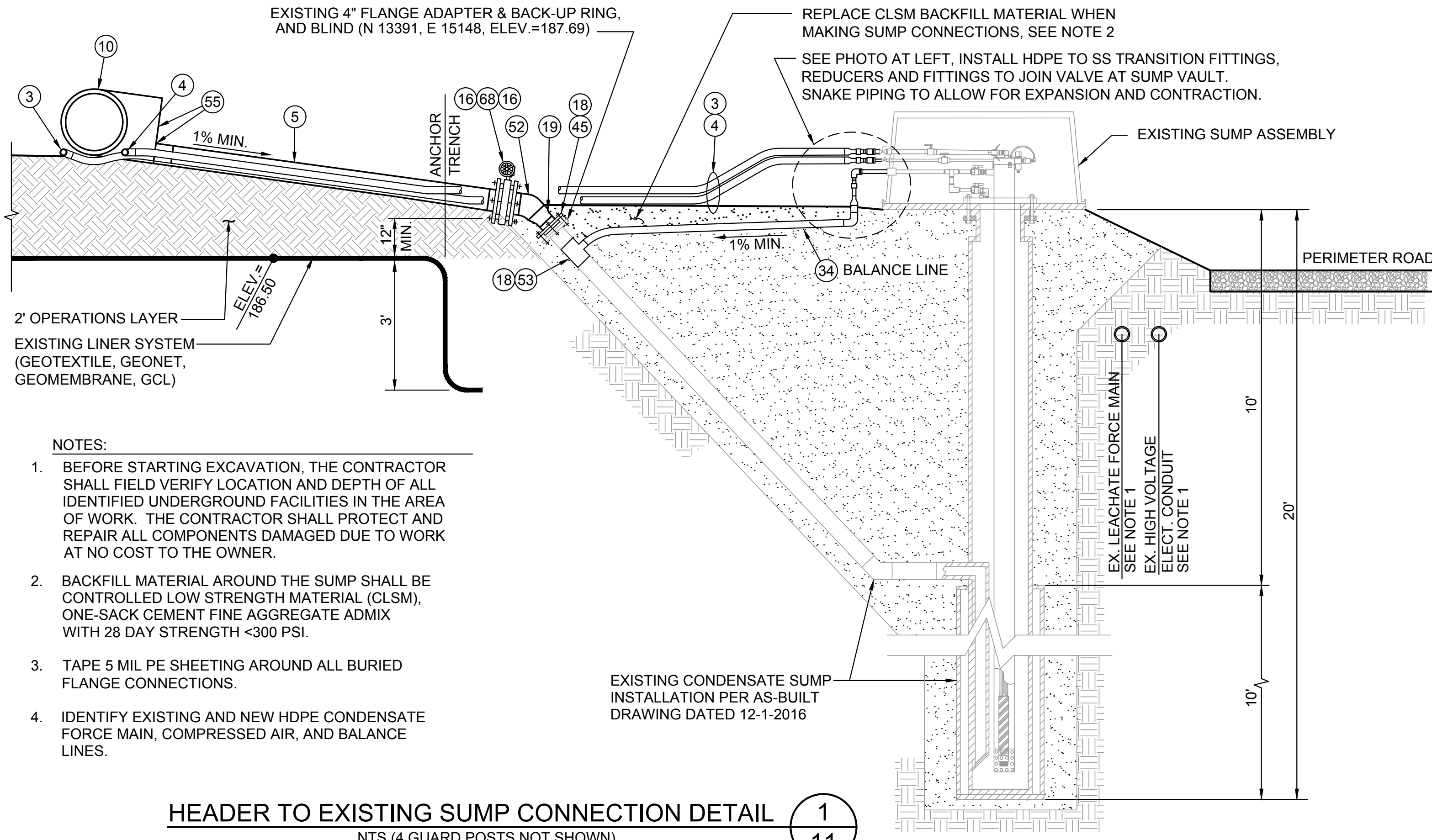
August, Scott
Friday, January 15, 2021 3:43:24 PM
G:\DWG\AMERICAN AVENUE LANDFILL\GASPHASE 3 GCSCS DESIGN\SHEET 10.DWG

TETRA TECH
21700 Copley Drive, Suite 200
Diamond Bar, CA 91765
TEL 909.860.7777 FAX 909.860.8017

DESIGNED: SNA	DATE: 01-2021	RECORD DRAWING	SCALE		PROJECT		DEPARTMENT OF PUBLIC WORKS AND PLANNING
DRAWN: SNA	DATE: 01-2021	RESIDENT ENGINEER	NOT TO SCALE		AMERICAN AVENUE LANDFILL PHASE III - MODULES 3-8 LFGCCS EXPANSION		LFGCCS DETAILS
CHECKED: AMN/SHA	DATE: 01-2021	DATE	ENGINEER OF RECORD		ROAD NO. N/A		DRAWING NO. 11307
FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.				DATE: 02/08/2021	BRIDGE NO. N/A	SHEET NO. 10	TOTAL 16



VAULT CONNECTION (WEST)



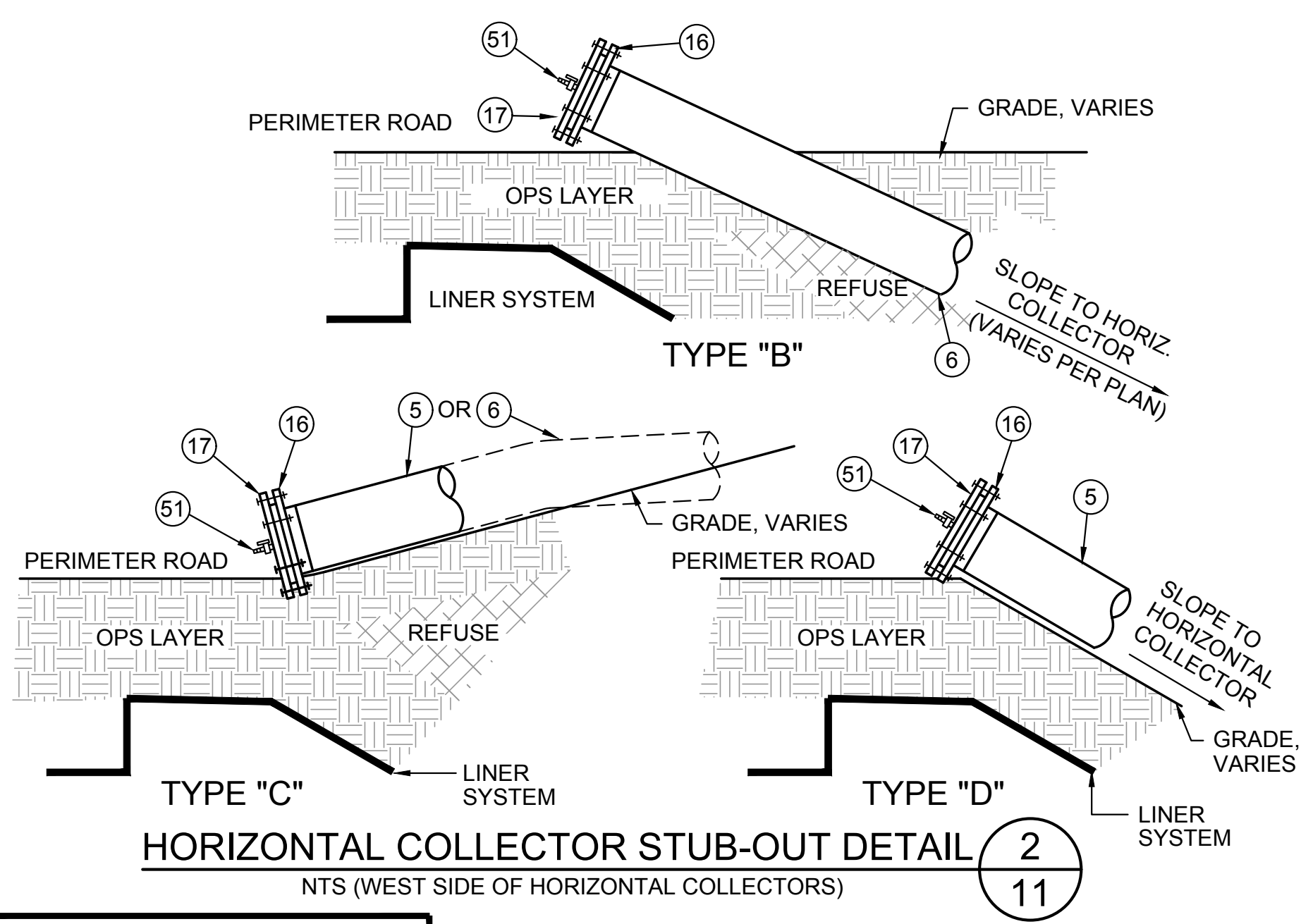
- NOTES:
- BEFORE STARTING EXCAVATION, THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF ALL IDENTIFIED UNDERGROUND FACILITIES IN THE AREA OF WORK. THE CONTRACTOR SHALL PROTECT AND REPAIR ALL COMPONENTS DAMAGED DUE TO WORK AT NO COST TO THE OWNER.
 - BACKFILL MATERIAL AROUND THE SUMP SHALL BE CONTROLLED LOW STRENGTH MATERIAL (CLSM), ONE-SACK CEMENT FINE AGGREGATE ADMIX WITH 28 DAY STRENGTH <3000 PSI.
 - TAPE 5 MIL PE SHEETING AROUND ALL BURIED FLANGE CONNECTIONS.
 - IDENTIFY EXISTING AND NEW HDPE CONDENSATE FORCE MAIN, COMPRESSED AIR, AND BALANCE LINES.

HEADER TO EXISTING SUMP CONNECTION DETAIL 1
NTS (4 GUARD POSTS NOT SHOWN)

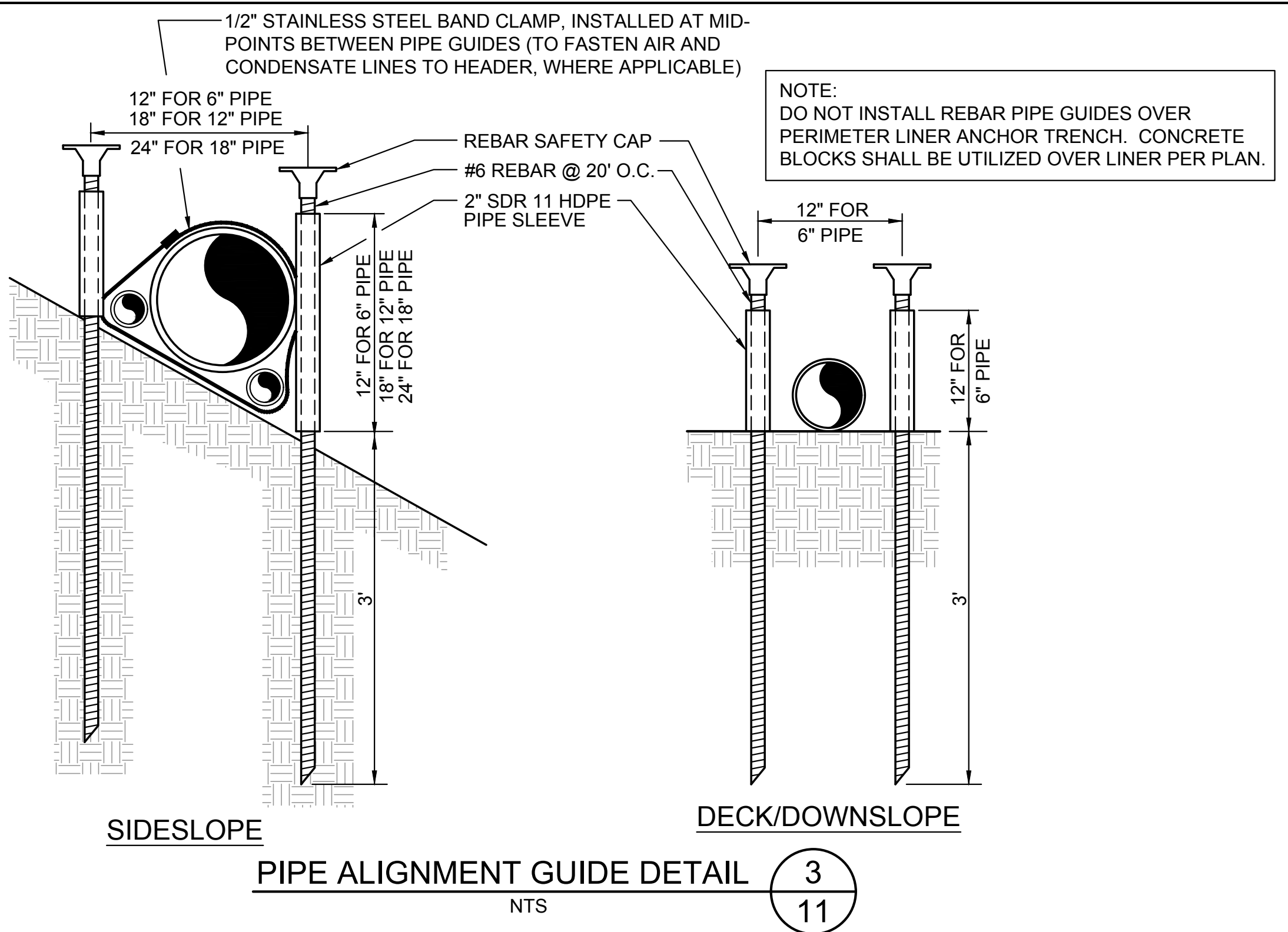


EAST VIEW OF SUMP VAULT

- CONSTRUCTION NOTES:**
- INSTALL VERTICAL GAS EXTRACTION WELL PER DETAIL 1/SHEET 8
 - INSTALL VERTICAL WELLHEAD PER DETAIL 2/SHEET 8
 - INSTALL 2" SDR 11 HDPE COMPRESSED AIR LINE & FITTINGS ON GRADE OR COMMON TRENCH
 - INSTALL 2" SDR 11 HDPE CONDENSATE CONVEYANCE LINE & FITTINGS ON GRADE OR COMMON TRENCH
 - INSTALL 6" SDR 11 HDPE PIPE & FITTINGS ON GRADE
 - INSTALL 6" SDR 11 HDPE PIPE & FITTINGS BELOW GRADE PER DETAIL 3/SHEET 10
 - INSTALL 6" SDR 11 HDPE PERFORATED HORIZONTAL WELL PER DETAIL 1/SHEET 10
 - INSTALL 2" QED HORIZONTAL WELLHEAD, MODEL ORP215MHL, PER DETAIL 2/SHEET 9 (NO SUBSTITUTION)
 - INSTALL 12" SDR 11 HDPE PIPE & FITTINGS BELOW GRADE PER DETAIL 3/SHEET 10
 - INSTALL 18" SDR 11 HDPE PIPE & FITTINGS ON GRADE
 - INSTALL 18" SDR 11 HDPE HEADER BELOW GRADE PER DETAIL 2/SHEET 10
 - INSTALL 18" X 12" HDPE ELECTRO-FUSION SADDLE
 - INSTALL 6" HDPE CROSS, SDR 11
 - INSTALL 6" 90° HDPE ELBOW, SDR 11
 - INSTALL 6" HDPE TEE, SDR 11
 - INSTALL 6" HDPE FLANGE ADAPTER SET WITH D.I. BACK-UP RINGS, GASKET, AND BOLT PACK
 - INSTALL 6" HDPE BLIND FLANGE
 - JOIN EXISTING LINE (GAS, AIR, OR CONDENSATE)
 - INSTALL 6" X 4" HDPE REDUCER
 - INSTALL 4" X 2" HDPE REDUCER
 - CONNECT HEADER TO EXISTING SUMP PER DETAIL 1/SHEET 11
 - INSTALL 12" X 8" HDPE REDUCER
 - INSTALL 8" X 6" HDPE REDUCER
 - INSTALL 12" X 6" HDPE TEE, SDR 11 (MOLDED REDUCING TEE OR 12" TEE WITH REDUCERS)
 - INSTALL 12" HDPE FLANGE ADAPTER WITH D.I. BACK-UP RINGS, GASKET, SPACERS, AND BOLT PACK
 - INSTALL 18" HDPE FLANGE ADAPTER WITH D.I. BACK-UP RING, GASKET, SPACERS, AND BOLT PACK
 - INSTALL HORIZONTAL COLLECTOR TRANSITION PER DETAIL 5/SHEET 10
 - INSTALL 12" CSP SLEEVE
 - INSTALL 18" HDPE TEE WITH 18" X 6" HDPE REDUCERS, SDR 11
 - INSTALL HORIZONTAL WELLHEAD/MANIFOLD TO HEADER CONNECTION PER DETAIL 1/SHEET 9
 - INSTALL 12" HDPE BLIND FLANGE
 - INSTALL 18" HDPE BLIND FLANGE
 - INSTALL 18" VALVE ASSEMBLY AT HEADER END POINT PER DETAIL 4/SHEET 15
 - INSTALL 2" SDR 11 HDPE PIPE AND FITTINGS
 - INSTALL 12" BUTTERFLY VALVE WITH GEAR OPERATOR AND HANDWHEEL, ON GRADE
 - INSTALL WELL I.D. PLACARD PER DETAIL 2/SHEET 13
 - PROTECT IN-PLACE EXISTING HIGH VOLTAGE ELECTRICAL CONDUIT AND LEACHATE FORCEMAIN
 - INSTALL 2" QED VERTICAL WELLHEAD, MODEL ORP215M (NO SUBSTITUTION)
 - INSTALL 18" HDPE TEE WITH 18" X 12" HDPE REDUCERS, SDR 11
 - INSTALL R.E.P. MODEL 7000 IN-LINE CONDENSATE SUMP PER DETAIL 1/SHEET 16 (NO SUBSTITUTION)
 - INSTALL 18" HDPE ELBOW, SDR 11
 - INSTALL 2" FERNCO PIPE ADAPTER
 - INSTALL 2" FLEX HOSE (ITC OR SNOOK) X 24" LONG WITH CLAMPS
 - INSTALL 4" HDPE ELBOW, SDR 11
 - INSTALL 4" HDPE FLANGE ADAPTER WITH D.I. BACK UP RING, GASKET, AND BOLT PACK
 - INSTALL 6" X 2" FERNCO PIPE ADAPTER
 - INSTALL 2" SDR 11 HDPE PIPE
 - INSTALL 1/4" PVC LABCOCK VALVE, HOSE X HOSE
 - INSTALL CONDUIT PIPE STRAP OR BRACKET TO SUPPORT HOSE
 - INSTALL 1/4" BRAIDED HOSE, CUT TO LENGTH, WITH TWO STAINLESS STEEL HOSE CLAMPS
 - INSTALL 1/4" MPT X HOSE BARB FITTING, STAINLESS STEEL (DRILL & TAP PIPING)
 - INSTALL 6" 45° HDPE ELBOW, SDR 11
 - INSTALL 4" X 2" HDPE TEE, SDR 11
 - INSTALL 1/2" STAINLESS STEEL BAND CLAMP
 - INSTALL 18" X 6" ECCENTRIC HDPE TEE, CUSTOM FABRICATION (SEE DETAIL 1/SHEET 11)
 - INSTALL 6" SDR 11 HDPE END CAP
 - INSTALL 12" SDR 11 HDPE PIPE ON GRADE
 - INSTALL 18" CSP SLEEVE
 - INSTALL VERTICAL WELLHEAD/MANIFOLD TO HEADER CONNECTION PER DETAIL 1/SHEET 14
 - INSTALL 6" PIPE ANCHOR PER DETAIL 2/SHEET 12
 - INSTALL 12" ANCHOR/SIDE SLOPE BRANCH CONNECTION PER DETAIL 1/SHEET 12
 - INSTALL 18" ANCHOR/SIDE SLOPE BRANCH CONNECTION PER DETAIL 3/SHEET 12
 - INSTALL 2" HDPE TO SS TRANSITION FITTING (BUTT X MPT)
 - INSTALL 2" WIDE X 1.5' LONG X 2" THICK BENTONITE SEAL AT PERFORATED/SOLID PIPE TRANSITION
 - INSTALL HORIZONTAL COLLECTOR STUB-OUT PER DETAIL 2/SHEET 11
 - INSTALL PIPE ALIGNMENT GUIDE PER DETAIL 3/SHEET 11
 - INSTALL LCRS RISER CONNECTION PER DETAIL 1/SHEET 13
 - INSTALL 6" BUTTERFLY VALVE, C.I. LUG BODY, GEAR OPERATOR WITH HANDWHEEL (SEE SPECS)
 - INSTALL 10" X 6" HDPE ELECTRO-FUSION SADDLE AND 1' STUB OF 6" SDR 11 PIPE (@ LCRS RISER)
 - INSTALL 4" X 4" X 1' LONG TREATED REDWOOD LUMBER TO SUPPORT WELLHEAD
 - INSTALL 18" VALVE ASSEMBLY AND BELOW GRADE TRANSITION PER DETAIL 3/SHEET 15
 - INSTALL 18" CONCRETE ANCHOR BLOCK BRANCH CONNECTION PER DETAIL 4/SHEET 12
 - INSTALL 2" HDPE END CAP
 - INSTALL 12" HEADER CONNECTION PER DETAIL 3/SHEET 9
 - INSTALL 18" VALVE ASSEMBLY AT HEADER HIGH POINT PER DETAIL 1/SHEET 15



HORIZONTAL COLLECTOR STUB-OUT DETAIL 2
NTS (WEST SIDE OF HORIZONTAL COLLECTORS)

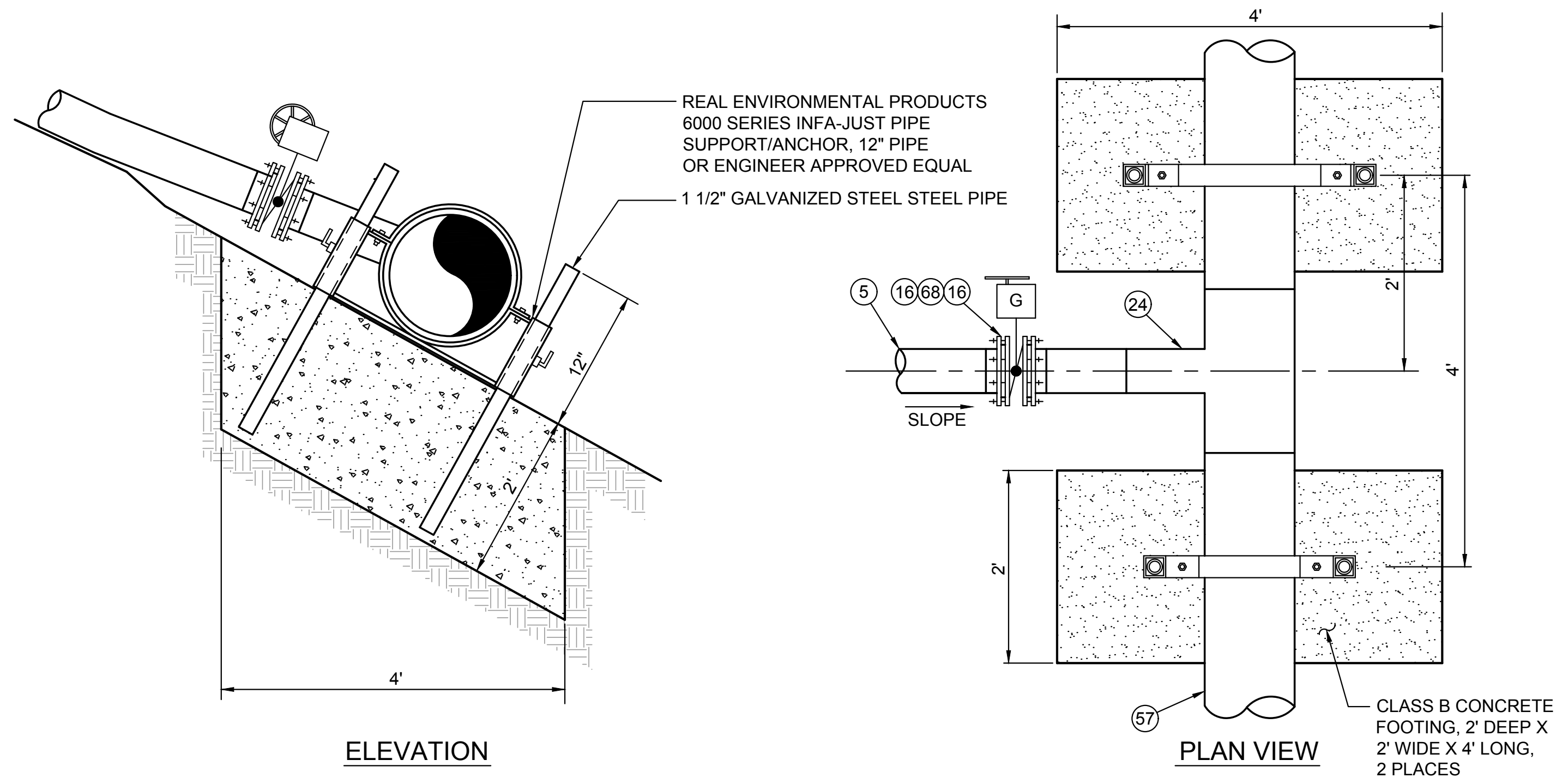


PIPE ALIGNMENT GUIDE DETAIL 3
NTS

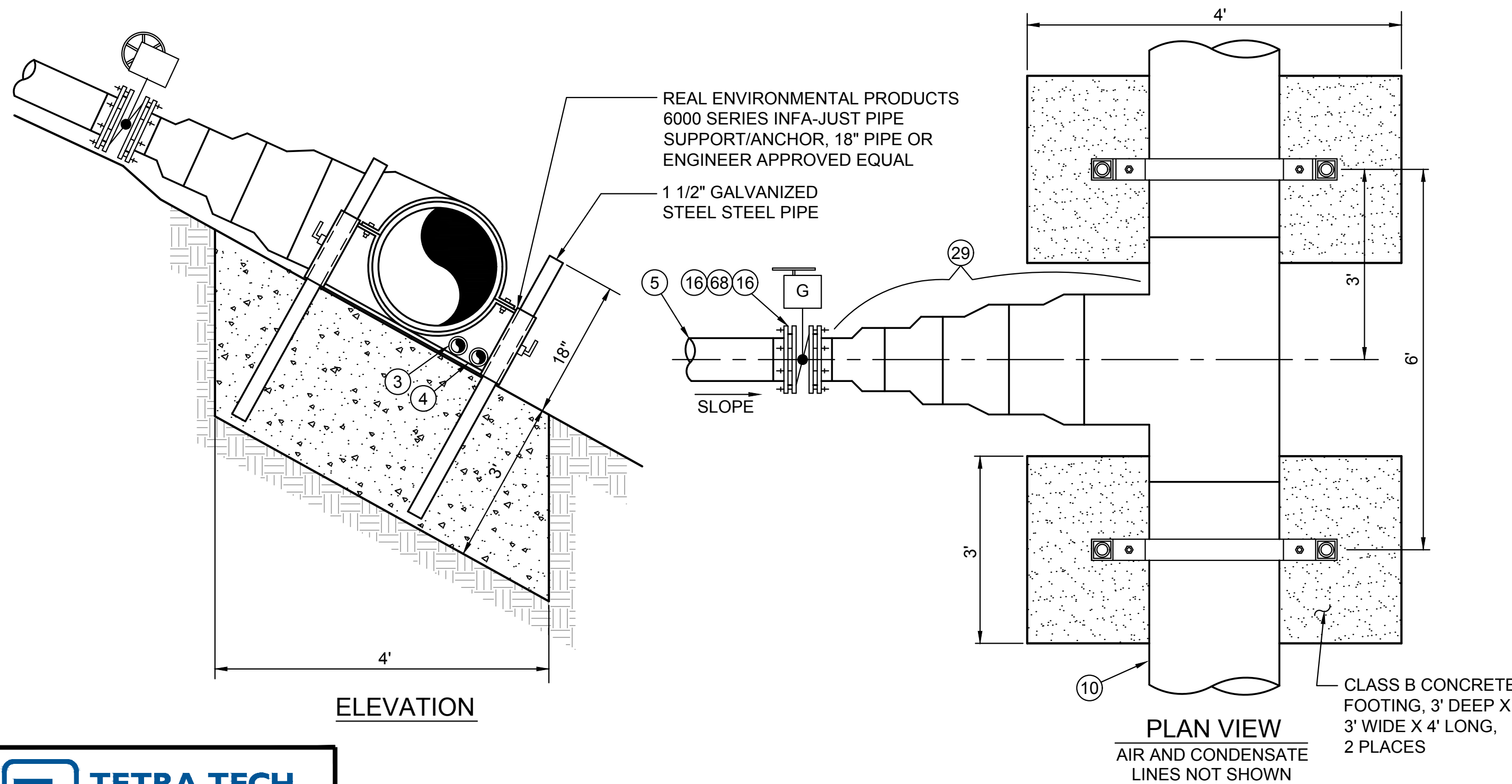
TETRA TECH
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Angus, Scott
Friday, January 15, 2021 3:42:23 PM
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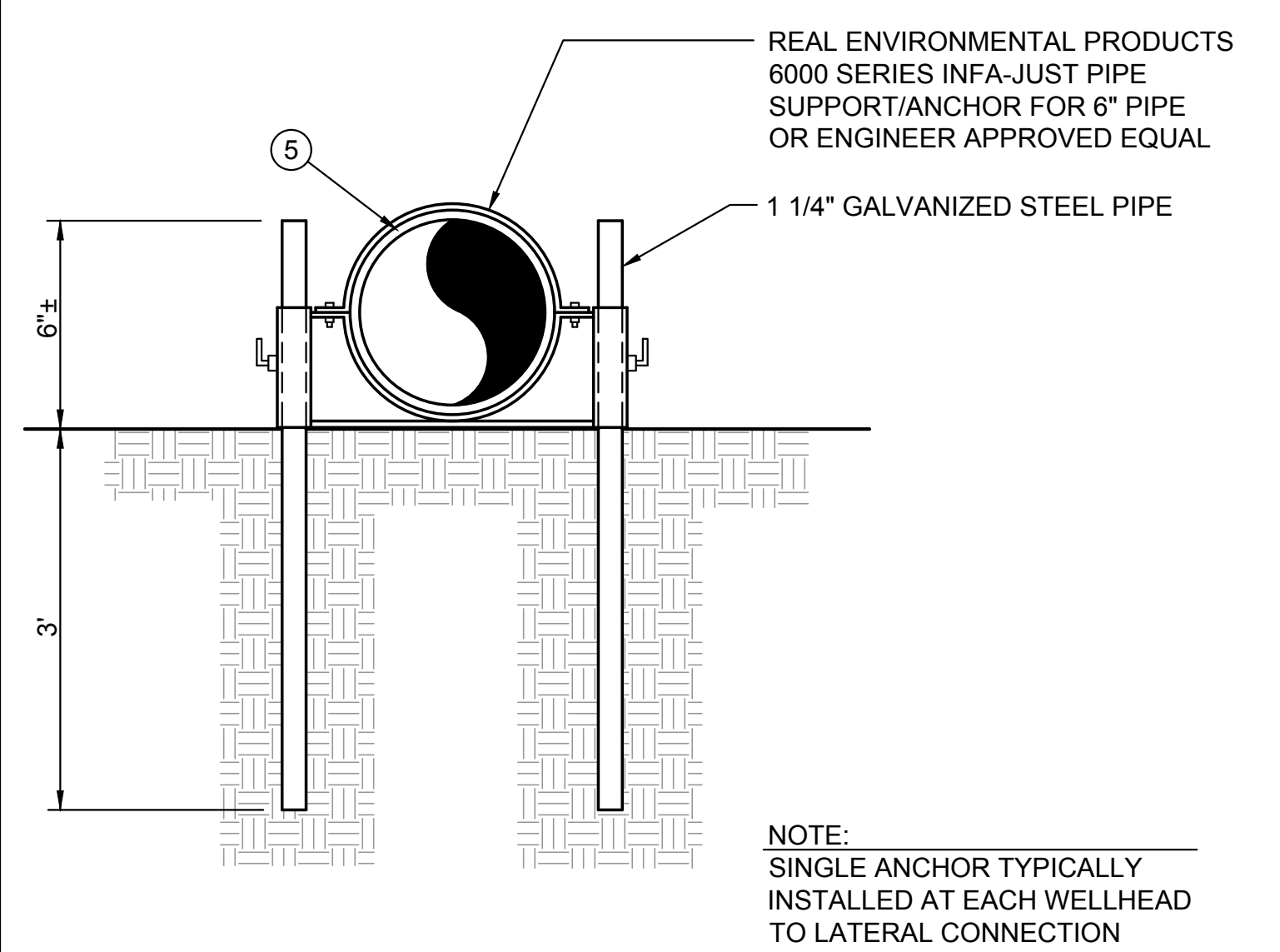
DESIGNED: SNA	DATE: 01-2021	RECORD DRAWING	SCALE		PROJECT AMERICAN AVENUE LANDFILL PHASE III - MODULES 3-8 LFGCCS EXPANSION ROAD NO. N/A BRIDGE NO. N/A		DEPARTMENT OF PUBLIC WORKS AND PLANNING LFGCCS DETAILS DRAWING NO. 11307 SHEET NO. 11 TOTAL 16
DRAWN: SNA	DATE: 01-2021	RESIDENT ENGINEER	NOT TO SCALE				
CHECKED: AMN/SHA	DATE: 01-2021	DATE	ENGINEER OF RECORD DATE: 02/08/2021				



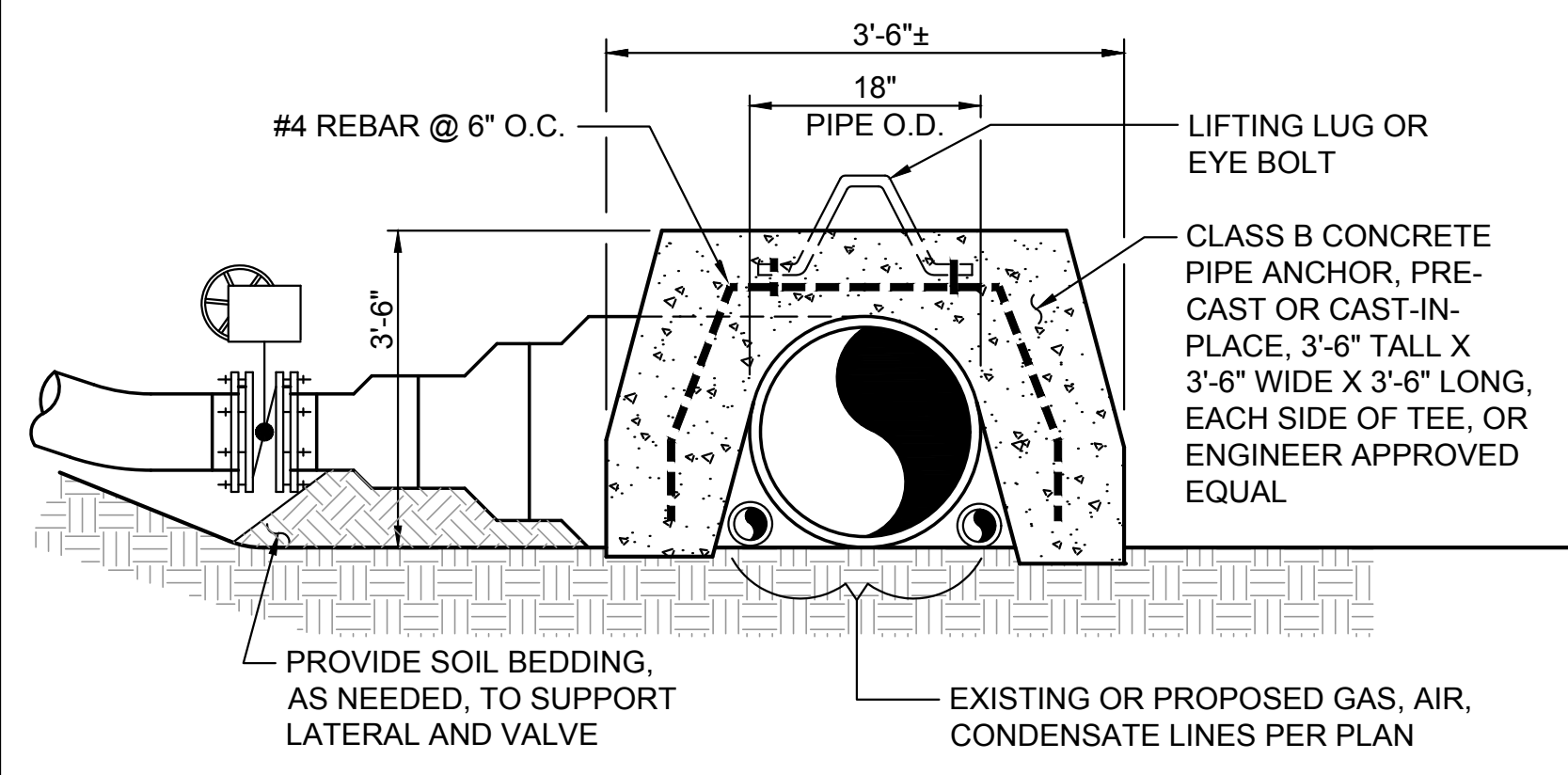
12" ANCHOR/SIDE SLOPE BRANCH CONNECTION DETAIL 1/12
NTS



18" ANCHOR/SIDE SLOPE BRANCH CONNECTION DETAIL 3/12
NTS



6" PIPE ANCHOR DETAIL 2/12
NTS



**18" CONCRETE ANCHOR BLOCK/
BRANCH CONNECTION DETAIL** 4/12
NTS

- CONSTRUCTION NOTES:**
- 1 INSTALL VERTICAL GAS EXTRACTION WELL PER DETAIL 1/SHEET 8
 - 2 INSTALL VERTICAL WELLHEAD PER DETAIL 2/SHEET 8
 - 3 INSTALL 2" SDR 9 HDPE COMPRESSED AIR LINE & FITTINGS ON GRADE OR COMMON TRENCH
 - 4 INSTALL 2" SDR 11 HDPE CONDENSATE CONVEYANCE LINE & FITTINGS ON GRADE OR COMMON TRENCH
 - 5 INSTALL 6" SDR 11 HDPE PIPE & FITTINGS ON GRADE
 - 6 INSTALL 6" SDR 11 HDPE PIPE & FITTINGS BELOW GRADE PER DETAIL 3/SHEET 10
 - 7 INSTALL 6" SDR 11 HDPE PERFORATED HORIZONTAL WELL PER DETAIL 1/SHEET 10
 - 8 INSTALL 2" QED HORIZONTAL WELLHEAD, MODEL ORP215MHL, PER DETAIL 2/SHEET 9 (NO SUBSTITUTION)
 - 9 INSTALL 12" SDR 11 HDPE PIPE & FITTINGS BELOW GRADE PER DETAIL 3/SHEET 10
 - 10 INSTALL 18" SDR 11 HDPE PIPE & FITTINGS ON GRADE
 - 11 INSTALL 18" SDR 11 HDPE HEADER BELOW GRADE PER DETAIL 2/SHEET 10
 - 12 INSTALL 18" X 12" HDPE ELECTRO-FUSION SADDLE
 - 13 INSTALL 6" HDPE CROSS, SDR 11
 - 14 INSTALL 6" 90° HDPE ELBOW, SDR 11
 - 15 INSTALL 6" HDPE TEE, SDR 11
 - 16 INSTALL 6" HDPE FLANGE ADAPTER SET WITH D.I. BACK-UP RINGS, GASKET, AND BOLT PACK
 - 17 INSTALL 6" HDPE BLIND FLANGE
 - 18 JOIN EXISTING LINE (GAS, AIR, OR CONDENSATE)
 - 19 INSTALL 6" X 4" HDPE REDUCER
 - 20 INSTALL 4" X 2" HDPE REDUCER
 - 21 CONNECT HEADER TO EXISTING SUMP PER DETAIL 1/SHEET 11
 - 22 INSTALL 12" X 8" HDPE REDUCER
 - 23 INSTALL 8" X 6" HDPE REDUCER
 - 24 INSTALL 12" X 6" HDPE TEE, SDR 11 (MOLDED REDUCING TEE OR 12" TEE WITH REDUCERS)
 - 25 INSTALL 12" HDPE FLANGE ADAPTER WITH D.I. BACK-UP RINGS, GASKET, SPACERS, AND BOLT PACK
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 - 30 INSTALL HORIZONTAL WELLHEAD/MANIFOLD TO HEADER CONNECTION PER DETAIL 1/SHEET 9
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 - 32 INSTALL 18" HDPE BLIND FLANGE
 - 33 INSTALL 18" VALVE ASSEMBLY AT HEADER END POINT PER DETAIL 4/SHEET 15
 - 34 INSTALL 2" SDR 11 HDPE PIPE AND FITTINGS
 - 35 INSTALL 12" BUTTERFLY VALVE WITH GEAR OPERATOR AND HANDWHEEL, ON GRADE
 - 36 INSTALL WELL I.D. PLACARD PER DETAIL 2/SHEET 13
 - 37 PROTECT IN-PLACE EXISTING HIGH VOLTAGE ELECTRICAL CONDUIT AND LEACHATE FORCEMAIN
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 - 39 INSTALL 18" HDPE TEE WITH 18" X 12" HDPE REDUCERS, SDR 11
 - 40 INSTALL R.E.P. MODEL 7000 IN-LINE CONDENSATE SUMP PER DETAIL 1/SHEET 16 (NO SUBSTITUTION)
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 - 45 INSTALL 4" HDPE FLANGE ADAPTER WITH D.I. BACK UP RING, GASKET, AND BOLT PACK
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 - 47 INSTALL 2" SDR 11 HDPE PIPE
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 - 50 INSTALL 1/4" BRAIDED HOSE, CUT TO LENGTH, WITH TWO STAINLESS STEEL HOSE CLAMPS
 - 51 INSTALL 1/4" MPT X HOSE BARB FITTING, STAINLESS STEEL (DRILL & TAP PIPING)
 - 52 INSTALL 6" 45° HDPE ELBOW, SDR 11
 - 53 INSTALL 4" X 2" HDPE TEE, SDR 11
 - 54 INSTALL 1/2" STAINLESS STEEL BAND CLAMP
 - 55 INSTALL 18" X 6" ECCENTRIC HDPE TEE, CUSTOM FABRICATION (SEE DETAIL 1/SHEET 11)
 - 56 INSTALL 6" SDR 11 HDPE END CAP
 - 57 INSTALL 12" SDR 11 HDPE PIPE ON GRADE
 - 58 INSTALL 18" CSP SLEEVE
 - 59 INSTALL VERTICAL WELLHEAD/MANIFOLD TO HEADER CONNECTION PER DETAIL 1/SHEET 14
 - 60 INSTALL 6" PIPE ANCHOR PER DETAIL 2/SHEET 12
 - 61 INSTALL 12" ANCHOR/SIDE SLOPE BRANCH CONNECTION PER DETAIL 1/SHEET 12
 - 62 INSTALL 18" ANCHOR/SIDE SLOPE BRANCH CONNECTION PER DETAIL 3/SHEET 12
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 - 70 INSTALL 4" X 4" X 1' LONG TREATED REDWOOD LUMBER TO SUPPORT WELLHEAD
 - 71 INSTALL 18" VALVE ASSEMBLY AND BELOW GRADE TRANSITION PER DETAIL 3/SHEET 15
 - 72 INSTALL 18" CONCRETE ANCHOR BLOCK/BRANCH CONNECTION PER DETAIL 4/SHEET 12
 - 73 INSTALL 2" HDPE END CAP
 - 74 INSTALL 12" HEADER CONNECTION PER DETAIL 3/SHEET 9
 - 75 INSTALL 18" VALVE ASSEMBLY AT HEADER HIGH POINT PER DETAIL 1/SHEET 15

Angus, Scott
 Friday, January 15, 2021 3:40:48 PM
 G:\DWG\AMERICAN AVENUE LANDFILL\GASPHASE 3 GGCS DESIGN\SHEET 12.DWG

TETRA TECH
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DATE	RECORD DRAWING	SCALE
DESIGNED: SNA 01-2021	RESIDENT ENGINEER	NOT TO SCALE
DRAWN: SNA 01-2021		
CHECKED: AMN/SHA 01-2021		

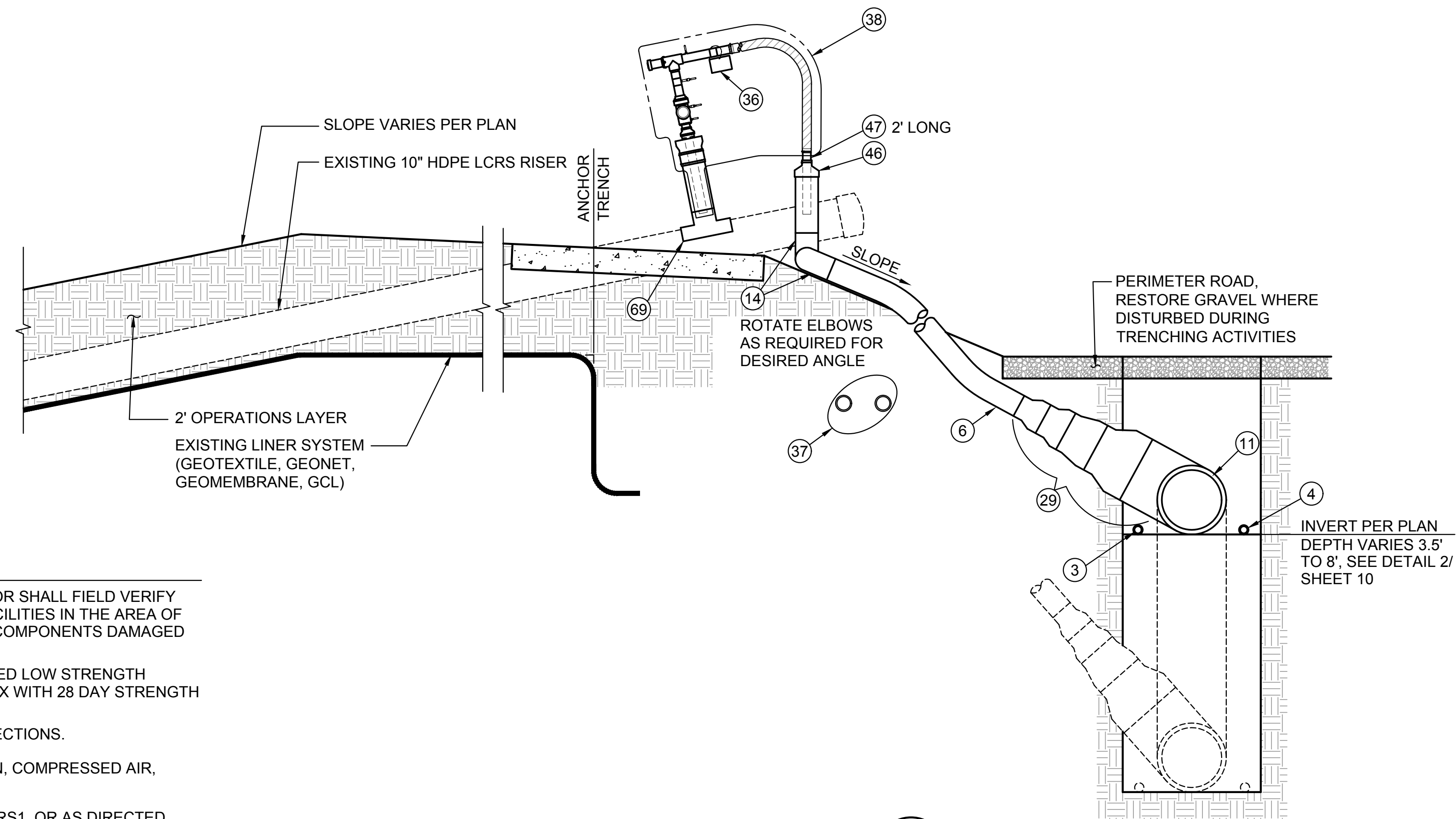
02/08/2021
 ENGINEER OF RECORD DATE

PROJECT
 AMERICAN AVENUE LANDFILL PHASE III -
 MODULES 3-8 LFGCCS EXPANSION
 ROAD NO. N/A BRIDGE NO. N/A

DEPARTMENT OF PUBLIC WORKS AND PLANNING
 LFGCCS DETAILS
 DRAWING NO. 11307 SHEET NO. 12 TOTAL 16



TYPICAL LCRS/LYS SYSTEM



LCRS RISER TO HEADER CONNECTION DETAIL

1
13

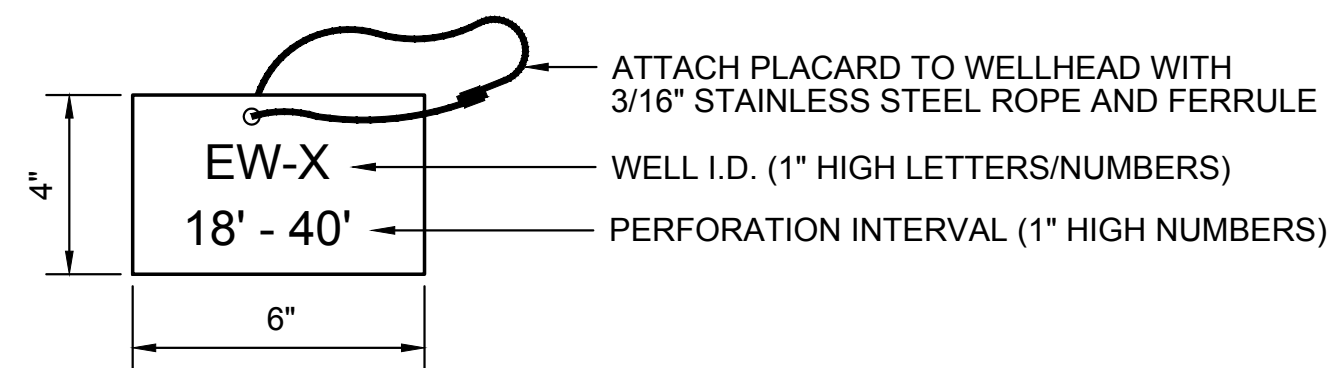
NTS (REQUIRED AT LCRS RISER LOCATIONS FOR EACH MODULE)

NOTES:

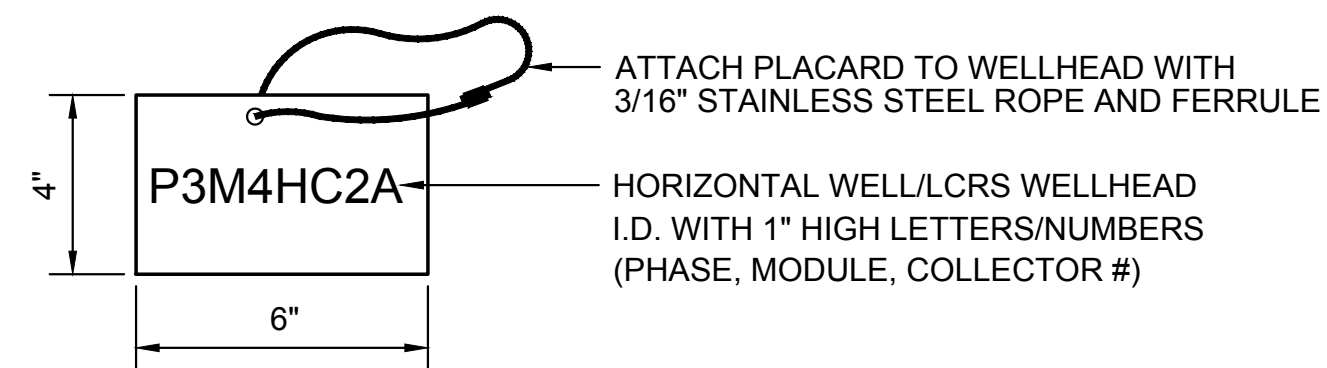
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- BACKFILL MATERIAL AROUND THE SUMP SHALL BE CONTROLLED LOW STRENGTH MATERIAL (CLSM), ONE-SACK CEMENT FINE AGGREGATE ADMIX WITH 28 DAY STRENGTH <300 PSI.
- TAPE 5 MIL PE SHEETING AROUND ALL BURIED FLANGE CONNECTIONS.
- IDENTIFY EXISTING AND NEW HDPE CONDENSATE FORCE MAIN, COMPRESSED AIR, AND BALANCE LINES.
- IDENTIFY WELLHEAD I.D. PLACARD AS P3M4LCRS1 OR P3M5LCRS1, OR AS DIRECTED BY ENGINEER.

CONSTRUCTION NOTES:

- INSTALL VERTICAL GAS EXTRACTION WELL PER DETAIL 1/SHEET 8
- INSTALL VERTICAL WELLHEAD PER DETAIL 2/SHEET 8
- INSTALL 2" SDR 9 HDPE COMPRESSED AIR LINE & FITTINGS ON GRADE OR COMMON TRENCH
- INSTALL 2" SDR 11 HDPE CONDENSATE CONVEYANCE LINE & FITTINGS ON GRADE OR COMMON TRENCH
- INSTALL 6" SDR 11 HDPE PIPE & FITTINGS ON GRADE
- INSTALL 6" SDR 11 HDPE PIPE & FITTINGS BELOW GRADE PER DETAIL 3/SHEET 10
- INSTALL 6" SDR 11 HDPE PERFORATED HORIZONTAL WELL PER DETAIL 1/SHEET 10
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- INSTALL 6" HDPE FLANGE ADAPTER SET WITH D.I. BACK-UP RINGS, GASKET, AND BOLT PACK
- INSTALL 6" HDPE BLIND FLANGE
- JOIN EXISTING LINE (GAS, AIR, OR CONDENSATE)
- INSTALL 6" X 4" HDPE REDUCER
- INSTALL 4" X 2" HDPE REDUCER
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- INSTALL 18" HDPE FLANGE ADAPTER WITH D.I. BACK-UP RING, GASKET, SPACERS, AND BOLT PACK
- INSTALL HORIZONTAL COLLECTOR TRANSITION PER DETAIL 5/SHEET 10
- INSTALL 12" CSP SLEEVE
- INSTALL 18" HDPE TEE WITH 18" X 6" HDPE REDUCERS, SDR 11
- INSTALL HORIZONTAL WELLHEAD/MANIFOLD TO HEADER CONNECTION PER DETAIL 1/SHEET 9
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- INSTALL 18" VALVE ASSEMBLY AT HEADER END POINT PER DETAIL 4/SHEET 15
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- INSTALL VERTICAL WELLHEAD/MANIFOLD TO HEADER CONNECTION PER DETAIL 1/SHEET 14
- INSTALL 6" PIPE ANCHOR PER DETAIL 2/SHEET 12
- INSTALL 12" ANCHOR/SIDE SLOPE BRANCH CONNECTION PER DETAIL 1/SHEET 12
- INSTALL 18" ANCHOR/SIDE SLOPE BRANCH CONNECTION PER DETAIL 3/SHEET 12
- INSTALL 2" HDPE TO SS TRANSITION FITTING (BUTT X MPT)
- INSTALL 2" WIDE X 1.5' LONG X 2" THICK BENTONITE SEAL AT PERFORATED/SOLID PIPE TRANSITION
- INSTALL HORIZONTAL COLLECTOR STUB-OUT PER DETAIL 2/SHEET 11
- INSTALL PIPE ALIGNMENT GUIDE PER DETAIL 3/SHEET 11
- INSTALL LCRS RISER CONNECTION PER DETAIL 1/SHEET 13
- INSTALL 6" BUTTERFLY VALVE, C.I. LUG BODY, GEAR OPERATOR WITH HANDWHEEL (SEE SPECS)
- INSTALL 10" X 6" HDPE ELECTRO-FUSION SADDLE AND 1" STUB OF 6" SDR 11 PIPE (@ LCRS RISER)
- INSTALL 4" X 4" X 1' LONG TREATED REDWOOD LUMBER TO SUPPORT WELLHEAD
- INSTALL 18" VALVE ASSEMBLY AND BELOW GRADE TRANSITION PER DETAIL 3/SHEET 15
- INSTALL 18" CONCRETE ANCHOR BLOCK/BRANCH CONNECTION PER DETAIL 4/SHEET 12
- INSTALL 2" HDPE END CAP
- INSTALL 12" HEADER CONNECTION PER DETAIL 3/SHEET 9
- INSTALL 18" VALVE ASSEMBLY AT HEADER HIGH POINT PER DETAIL 1/SHEET 15



VERTICAL WELL I.D. PLACARD



HORIZONTAL WELL/LCRS I.D. PLACARD

WELL I.D. PLACARD (ALUMINUM) DETAIL

2
13

NTS

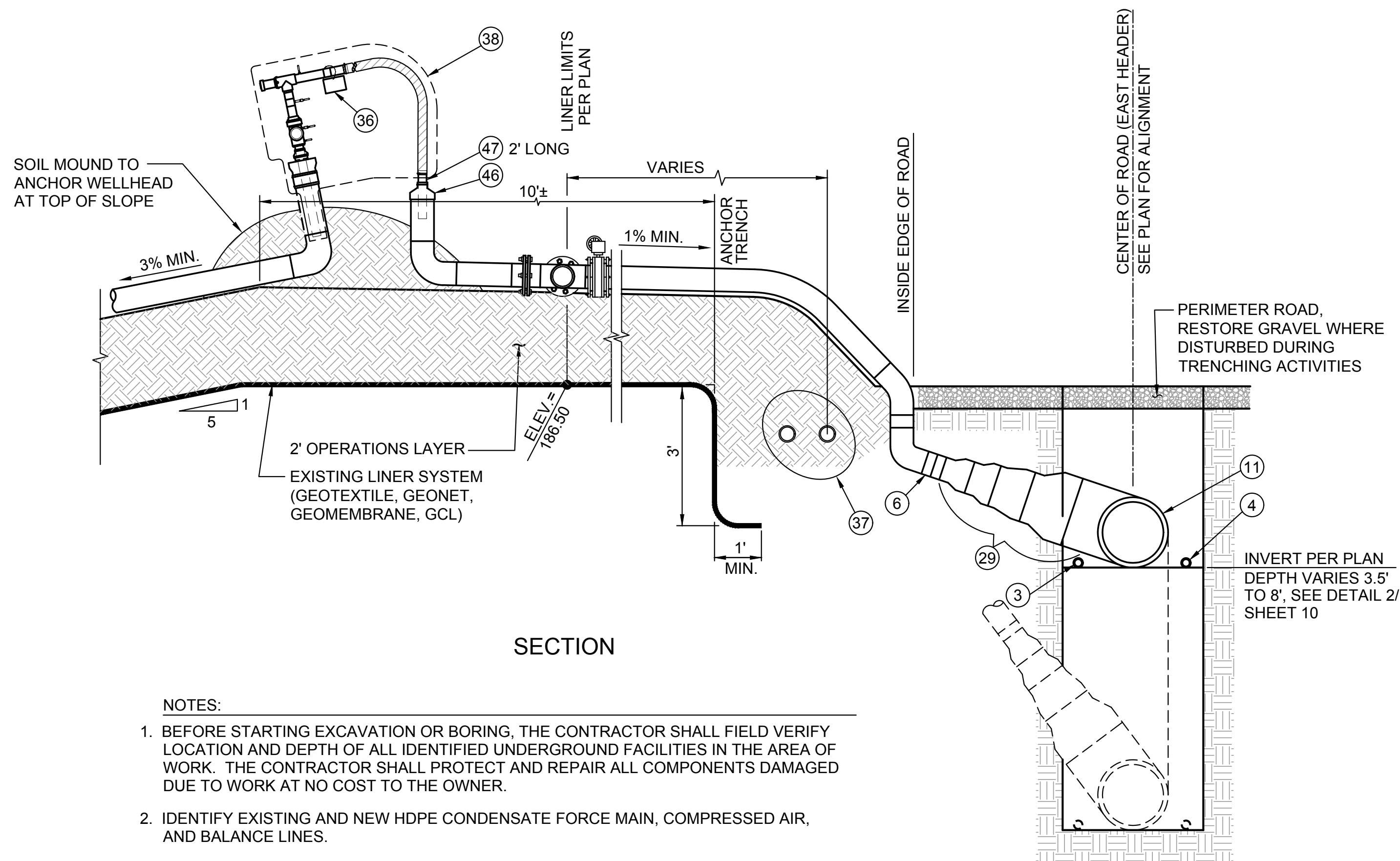
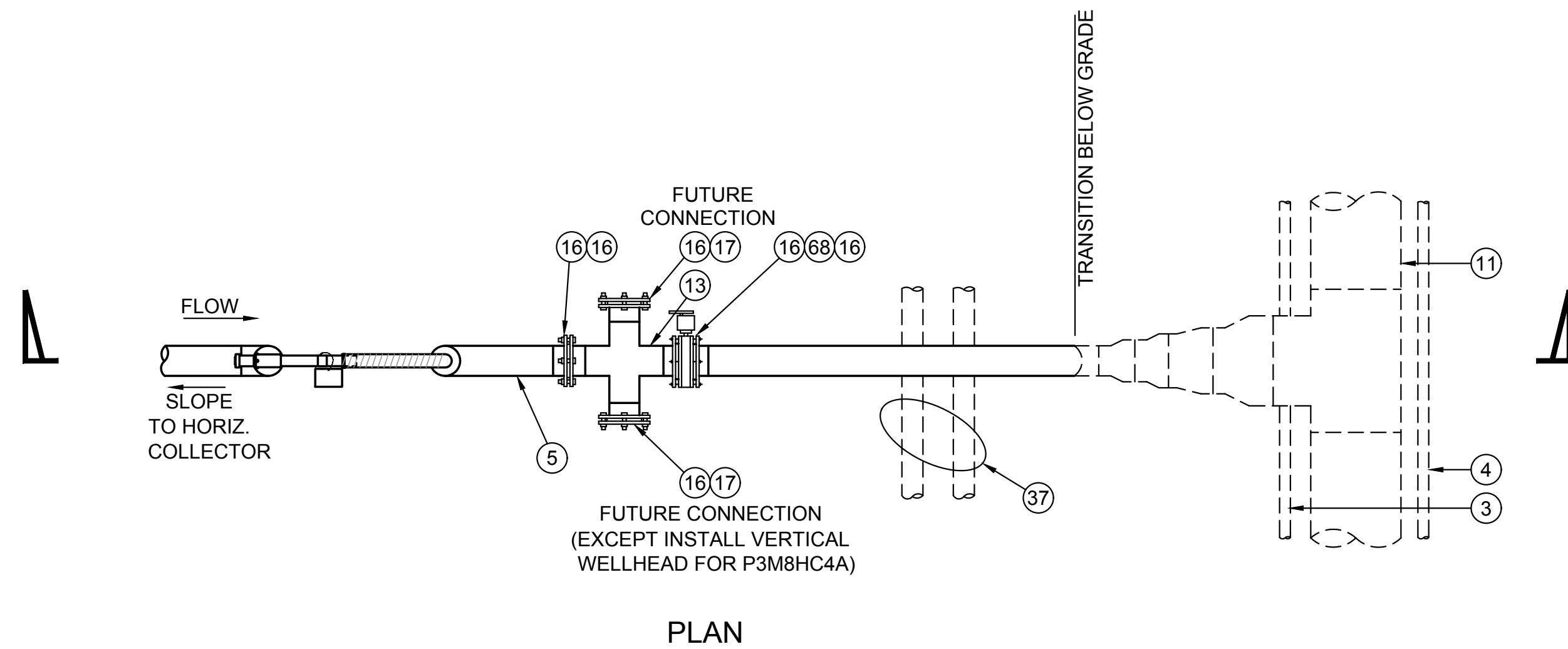


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Angus, Scott
Friday, January 15, 2021, 3:32:03 PM
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DESIGNED: SNA	DATE: 01-2021	RECORD DRAWING	SCALE		PROJECT		DEPARTMENT OF PUBLIC WORKS AND PLANNING	
DRAWN: SNA	DATE: 01-2021	RESIDENT ENGINEER	NOT TO SCALE		AMERICAN AVENUE LANDFILL PHASE III - MODULES 3-8 LFGCCS EXPANSION		LFGCCS DETAILS	
CHECKED: AMN/SHA	DATE: 01-2021				ROAD NO. N/A		BRIDGE NO. N/A	DRAWING NO. 11307

FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.



NOTES:

- BEFORE STARTING EXCAVATION OR BORING, THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF ALL IDENTIFIED UNDERGROUND FACILITIES IN THE AREA OF WORK. THE CONTRACTOR SHALL PROTECT AND REPAIR ALL COMPONENTS DAMAGED DUE TO WORK AT NO COST TO THE OWNER.
- IDENTIFY EXISTING AND NEW HDPE CONDENSATE FORCE MAIN, COMPRESSED AIR, AND BALANCE LINES.

VERTICAL WELLHEAD/MANIFOLD TO HEADER CONNECTION DETAIL 1/14

CONSTRUCTION NOTES:

- INSTALL VERTICAL GAS EXTRACTION WELL PER DETAIL 1/SHEET 8
- INSTALL VERTICAL WELLHEAD PER DETAIL 2/SHEET 8
- INSTALL 2" SDR 9 HDPE COMPRESSED AIR LINE & FITTINGS ON GRADE OR COMMON TRENCH
- INSTALL 2" SDR 11 HDPE CONDENSATE CONVEYANCE LINE & FITTINGS ON GRADE OR COMMON TRENCH
- INSTALL 6" SDR 11 HDPE PIPE & FITTINGS ON GRADE
- INSTALL 6" SDR 11 HDPE PIPE & FITTINGS BELOW GRADE PER DETAIL 3/SHEET 10
- INSTALL 6" SDR 11 HDPE PERFORATED HORIZONTAL WELL PER DETAIL 1/SHEET 10
- INSTALL 2" QED HORIZONTAL WELLHEAD, MODEL ORP215MHL, PER DETAIL 2/SHEET 9 (NO SUBSTITUTION)
- INSTALL 12" SDR 11 HDPE PIPE & FITTINGS BELOW GRADE PER DETAIL 3/SHEET 10
- INSTALL 18" SDR 11 HDPE PIPE & FITTINGS ON GRADE
- INSTALL 18" SDR 11 HDPE HEADER BELOW GRADE PER DETAIL 2/SHEET 10
- INSTALL 18" X 12" HDPE ELECTRO-FUSION SADDLE
- INSTALL 6" HDPE CROSS, SDR 11
- INSTALL 6" 90° HDPE ELBOW, SDR 11
- INSTALL 6" HDPE TEE, SDR 11
- INSTALL 6" HDPE FLANGE ADAPTER SET WITH D.I. BACK-UP RINGS, GASKET, AND BOLT PACK
- INSTALL 6" HDPE BLIND FLANGE
- JOIN EXISTING LINE (GAS, AIR, OR CONDENSATE)
- INSTALL 6" X 4" HDPE REDUCER
- INSTALL 4" X 2" HDPE REDUCER
- CONNECT HEADER TO EXISTING SUMP PER DETAIL 1/SHEET 11
- INSTALL 12" X 8" HDPE REDUCER
- INSTALL 8" X 6" HDPE REDUCER
- INSTALL 12" X 6" HDPE TEE, SDR 11 (MOLDED REDUCING TEE OR 12" TEE WITH REDUCERS)
- INSTALL 12" HDPE FLANGE ADAPTER WITH D.I. BACK-UP RINGS, GASKET, SPACERS, AND BOLT PACK
- INSTALL 18" HDPE FLANGE ADAPTER WITH D.I. BACK-UP RING, GASKET, SPACERS, AND BOLT PACK
- INSTALL HORIZONTAL COLLECTOR TRANSITION PER DETAIL 5/SHEET 10
- INSTALL 12" CSP SLEEVE
- INSTALL 18" HDPE TEE WITH 18" X 6" HDPE REDUCERS, SDR 11
- INSTALL HORIZONTAL WELLHEAD/MANIFOLD TO HEADER CONNECTION PER DETAIL 1/SHEET 9
- INSTALL 12" HDPE BLIND FLANGE
- INSTALL 18" HDPE BLIND FLANGE
- INSTALL 18" VALVE ASSEMBLY AT HEADER END POINT PER DETAIL 4/SHEET 15
- INSTALL 2" SDR 11 HDPE PIPE AND FITTINGS
- INSTALL 12" BUTTERFLY VALVE WITH GEAR OPERATOR AND HANDWHEEL, ON GRADE
- INSTALL WELL I.D. PLACARD PER DETAIL 2/SHEET 13
- PROTECT IN-PLACE EXISTING HIGH VOLTAGE ELECTRICAL CONDUIT AND LEACHATE FORCEMAIN
- INSTALL 2" QED VERTICAL WELLHEAD, MODEL ORP215M (NO SUBSTITUTION)
- INSTALL 18" HDPE TEE WITH 18" X 12" HDPE REDUCERS, SDR 11
- INSTALL R.E.P. MODEL 7000 IN-LINE CONDENSATE SUMP PER DETAIL 1/SHEET 16 (NO SUBSTITUTION)
- INSTALL 18" HDPE ELBOW, SDR 11
- INSTALL 2" FERNCO PIPE ADAPTER
- INSTALL 2" FLEX HOSE (ITC OR SNOOK) X 24" LONG WITH CLAMPS
- INSTALL 4" HDPE ELBOW, SDR 11
- INSTALL 4" HDPE FLANGE ADAPTER WITH D.I. BACK UP RING, GASKET, AND BOLT PACK
- INSTALL 6" X 2" FERNCO PIPE ADAPTER
- INSTALL 2" SDR 11 HDPE PIPE
- INSTALL 1/4" PVC LABCOCK VALVE, HOSE X HOSE
- INSTALL CONDUIT PIPE STRAP OR BRACKET TO SUPPORT HOSE
- INSTALL 1/4" BRAIDED HOSE, CUT TO LENGTH, WITH TWO STAINLESS STEEL HOSE CLAMPS
- INSTALL 1/4" MPT X HOSE BARB FITTING, STAINLESS STEEL (DRILL & TAP PIPING)
- INSTALL 6" 45° HDPE ELBOW, SDR 11
- INSTALL 4" X 2" HDPE TEE, SDR 11
- INSTALL 1/2" STAINLESS STEEL BAND CLAMP
- INSTALL 18" X 6" ECCENTRIC HDPE TEE, CUSTOM FABRICATION (SEE DETAIL 1/SHEET 11)
- INSTALL 6" SDR 11 HDPE END CAP
- INSTALL 12" SDR 11 HDPE PIPE ON GRADE
- INSTALL 18" CSP SLEEVE
- INSTALL VERTICAL WELLHEAD/MANIFOLD TO HEADER CONNECTION PER DETAIL 1/SHEET 14
- INSTALL 6" PIPE ANCHOR PER DETAIL 2/SHEET 12
- INSTALL 12" ANCHOR/SIDE SLOPE BRANCH CONNECTION PER DETAIL 1/SHEET 12
- INSTALL 18" ANCHOR/SIDE SLOPE BRANCH CONNECTION PER DETAIL 3/SHEET 12
- INSTALL 2" HDPE TO SS TRANSITION FITTING (BUTT X MPT)
- INSTALL 2" WIDE X 1.5' LONG X 2" THICK BENTONITE SEAL AT PERFORATED/SOLID PIPE TRANSITION
- INSTALL HORIZONTAL COLLECTOR STUB-OUT PER DETAIL 2/SHEET 11
- INSTALL PIPE ALIGNMENT GUIDE PER DETAIL 3/SHEET 11
- INSTALL LCRS RISER CONNECTION PER DETAIL 1/SHEET 13
- INSTALL 6" BUTTERFLY VALVE, C.I. LUG BODY, GEAR OPERATOR WITH HANDWHEEL (SEE SPECS)
- INSTALL 10" X 6" HDPE ELECTRO-FUSION SADDLE AND 1" STUB OF 6" SDR 11 PIPE (@ LCRS RISER)
- INSTALL 4" X 4" X 1' LONG TREATED REDWOOD LUMBER TO SUPPORT WELLHEAD
- INSTALL 18" VALVE ASSEMBLY AND BELOW GRADE TRANSITION PER DETAIL 3/SHEET 15
- INSTALL 18" CONCRETE ANCHOR BLOCK/BRANCH CONNECTION PER DETAIL 4/SHEET 12
- INSTALL 2" HDPE END CAP
- INSTALL 12" HEADER CONNECTION PER DETAIL 3/SHEET 9
- INSTALL 18" VALVE ASSEMBLY AT HEADER HIGH POINT PER DETAIL 1/SHEET 15

Angus, Scott
 Friday, January 15, 2021 3:33:32 PM
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DESIGNED:	DATE	RECORD DRAWING	SCALE
SNA	01-2021	RESIDENT ENGINEER	NOT TO SCALE
SNA	01-2021		
AMN/SHA	01-2021		

Saulyan
 ENGINEER OF RECORD
 02/08/2021
 DATE



PROJECT
 AMERICAN AVENUE LANDFILL PHASE III -
 MODULES 3-8 LFGCCS EXPANSION



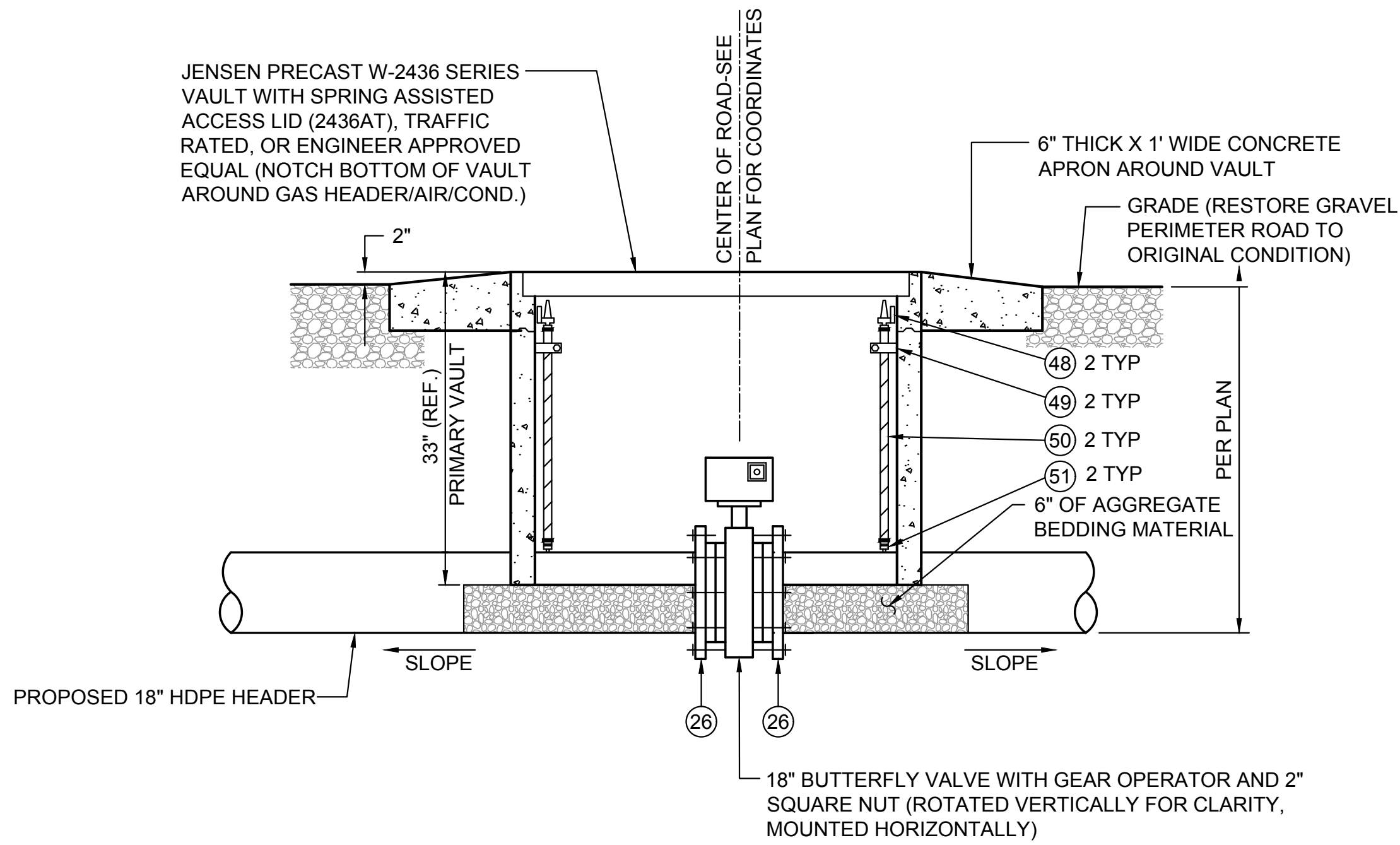
DEPARTMENT OF PUBLIC WORKS AND PLANNING
 LFGCCS DETAILS

ROAD NO. N/A BRIDGE NO. N/A

DRAWING NO. 11307 SHEET NO. 14 TOTAL 16

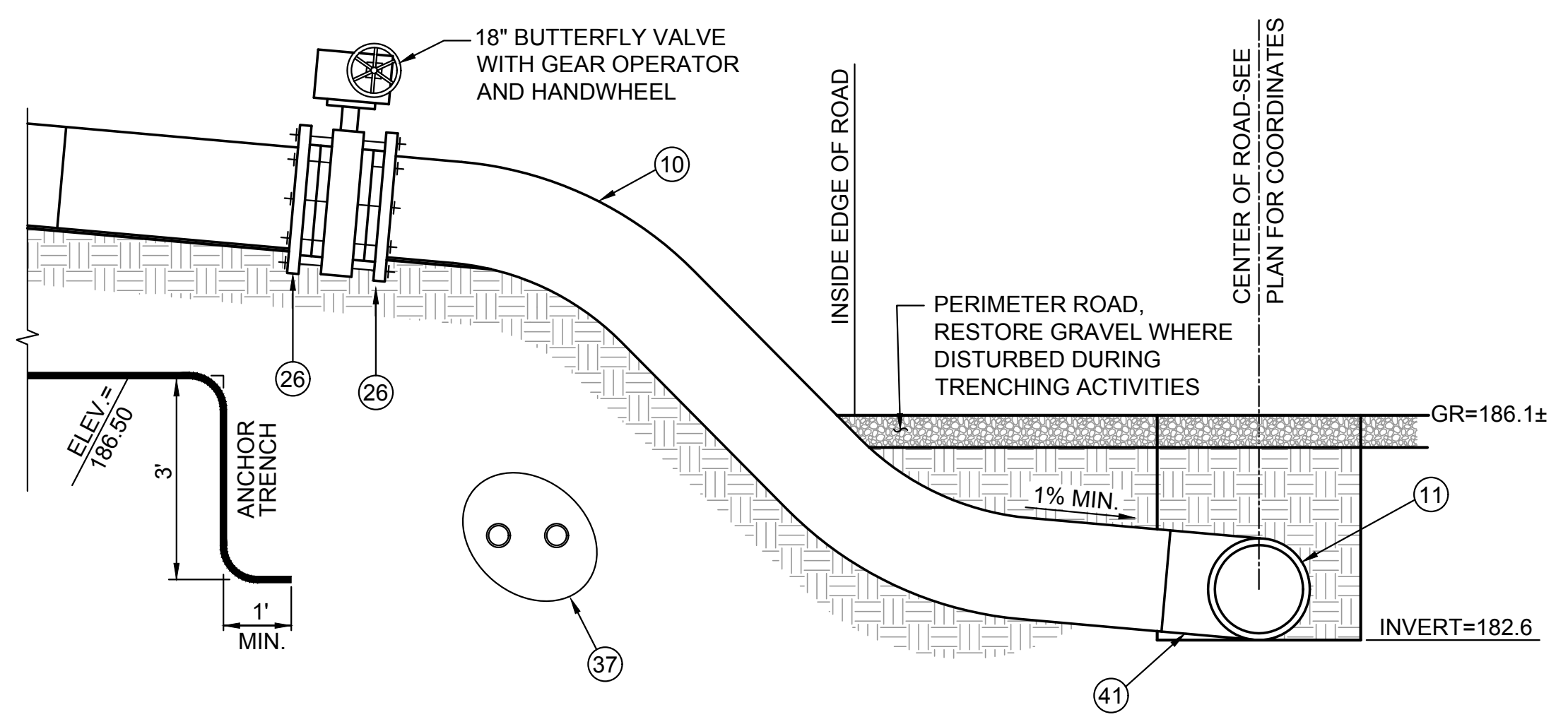
CONSTRUCTION NOTES:

1. INSTALL VERTICAL GAS EXTRACTION WELL PER DETAIL 1/SHEET 8
2. INSTALL VERTICAL WELLHEAD PER DETAIL 2/SHEET 8
3. INSTALL 2" SDR 9 HDPE COMPRESSED AIR LINE & FITTINGS ON GRADE OR COMMON TRENCH
4. INSTALL 2" SDR 11 HDPE CONDENSATE CONVEYANCE LINE & FITTINGS ON GRADE OR COMMON TRENCH
5. INSTALL 6" SDR 11 HDPE PIPE & FITTINGS ON GRADE
6. INSTALL 6" SDR 11 HDPE PIPE & FITTINGS BELOW GRADE PER DETAIL 3/SHEET 10
7. INSTALL 6" SDR 11 HDPE PERFORATED HORIZONTAL WELL PER DETAIL 1/SHEET 10
8. INSTALL 2" QED HORIZONTAL WELLHEAD, MODEL ORP215MHL, PER DETAIL 2/SHEET 9 (NO SUBSTITUTION)
9. INSTALL 12" SDR 11 HDPE PIPE & FITTINGS BELOW GRADE PER DETAIL 3/SHEET 10
10. INSTALL 18" SDR 11 HDPE PIPE & FITTINGS ON GRADE
11. INSTALL 18" SDR 11 HDPE HEADER BELOW GRADE PER DETAIL 2/SHEET 10
12. INSTALL 18" X 12" HDPE ELECTRO-FUSION SADDLE
13. INSTALL 6" HDPE CROSS, SDR 11
14. INSTALL 6" 90° HDPE ELBOW, SDR 11
15. INSTALL 6" HDPE TEE, SDR 11
16. INSTALL 6" HDPE FLANGE ADAPTER SET WITH D.I. BACK-UP RINGS, GASKET, AND BOLT PACK
17. INSTALL 6" HDPE BLIND FLANGE
18. JOIN EXISTING LINE (GAS, AIR, OR CONDENSATE)
19. INSTALL 6" X 4" HDPE REDUCER
20. INSTALL 4" X 2" HDPE REDUCER
21. CONNECT HEADER TO EXISTING SUMP PER DETAIL 1/SHEET 11
22. INSTALL 12" X 8" HDPE REDUCER
23. INSTALL 8" X 6" HDPE REDUCER
24. INSTALL 12" X 6" HDPE TEE, SDR 11 (MOLDED REDUCING TEE OR 12" TEE WITH REDUCERS)
25. INSTALL 12" HDPE FLANGE ADAPTER WITH D.I. BACK-UP RINGS, GASKET, SPACERS, AND BOLT PACK
26. INSTALL 18" HDPE FLANGE ADAPTER WITH D.I. BACK-UP RING, GASKET, SPACERS, AND BOLT PACK
27. INSTALL HORIZONTAL COLLECTOR TRANSITION PER DETAIL 5/SHEET 10
28. INSTALL 12" CSP SLEEVE
29. INSTALL 18" HDPE TEE WITH 18" X 6" HDPE REDUCERS, SDR 11
30. INSTALL HORIZONTAL WELLHEAD/MANIFOLD TO HEADER CONNECTION PER DETAIL 1/SHEET 9
31. INSTALL 12" HDPE BLIND FLANGE
32. INSTALL 18" HDPE BLIND FLANGE
33. INSTALL 18" VALVE ASSEMBLY AT HEADER END POINT PER DETAIL 4/SHEET 15
34. INSTALL 2" SDR 11 HDPE PIPE AND FITTINGS
35. INSTALL 12" BUTTERFLY VALVE WITH GEAR OPERATOR AND HANDWHEEL, ON GRADE
36. INSTALL WELL I.D. PLACARD PER DETAIL 2/SHEET 13
37. PROTECT IN-PLACE EXISTING HIGH VOLTAGE ELECTRICAL CONDUIT AND LEACHATE FORCEMAIN
38. INSTALL 2" QED VERTICAL WELLHEAD, MODEL ORP215M (NO SUBSTITUTION)
39. INSTALL 18" HDPE TEE WITH 18" X 12" HDPE REDUCERS, SDR 11
40. INSTALL R.E.P. MODEL 7000 IN-LINE CONDENSATE SUMP PER DETAIL 1/SHEET 16 (NO SUBSTITUTION)
41. INSTALL 18" HDPE ELBOW, SDR 11
42. INSTALL 2" FERNCO PIPE ADAPTER
43. INSTALL 2" FLEX HOSE (ITC OR SNOOK) X 24" LONG WITH CLAMPS
44. INSTALL 4" HDPE ELBOW, SDR 11
45. INSTALL 4" HDPE FLANGE ADAPTER WITH D.I. BACK UP RING, GASKET, AND BOLT PACK
46. INSTALL 6" X 2" FERNCO PIPE ADAPTER
47. INSTALL 2" SDR 11 HDPE PIPE
48. INSTALL 1/4" PVC LABCOCK VALVE, HOSE X HOSE
49. INSTALL CONDUIT PIPE STRAP OR BRACKET TO SUPPORT HOSE
50. INSTALL 1/4" BRAIDED HOSE, CUT TO LENGTH, WITH TWO STAINLESS STEEL HOSE CLAMPS
51. INSTALL 1/4" MPT X HOSE BARB FITTING, STAINLESS STEEL (DRILL & TAP PIPING)
52. INSTALL 6" 45° HDPE ELBOW, SDR 11
53. INSTALL 4" X 2" HDPE TEE, SDR 11
54. INSTALL 1/2" STAINLESS STEEL BAND CLAMP
55. INSTALL 18" X 6" ECCENTRIC HDPE TEE, CUSTOM FABRICATION (SEE DETAIL 1/SHEET 11)
56. INSTALL 6" SDR 11 HDPE END CAP
57. INSTALL 12" SDR 11 HDPE PIPE ON GRADE
58. INSTALL 18" CSP SLEEVE
59. INSTALL VERTICAL WELLHEAD/MANIFOLD TO HEADER CONNECTION PER DETAIL 1/SHEET 14
60. INSTALL 6" PIPE ANCHOR PER DETAIL 2/SHEET 12
61. INSTALL 12" ANCHOR/SIDE SLOPE BRANCH CONNECTION PER DETAIL 1/SHEET 12
62. INSTALL 18" ANCHOR/SIDE SLOPE BRANCH CONNECTION PER DETAIL 3/SHEET 12
63. INSTALL 2" HDPE TO SS TRANSITION FITTING (BUTT X MPT)
64. INSTALL 2" WIDE X 1.5" LONG X 2" THICK BENTONITE SEAL AT PERFORATED/SOLID PIPE TRANSITION
65. INSTALL HORIZONTAL COLLECTOR STUB-OUT PER DETAIL 2/SHEET 11
66. INSTALL PIPE ALIGNMENT GUIDE PER DETAIL 3/SHEET 11
67. INSTALL LCRS RISER CONNECTION PER DETAIL 1/SHEET 13
68. INSTALL 6" BUTTERFLY VALVE, C.I. LUG BODY, GEAR OPERATOR WITH HANDWHEEL (SEE SPECS)
69. INSTALL 10" X 6" HDPE ELECTRO-FUSION SADDLE AND 1' STUB OF 6" SDR 11 PIPE (@ LCRS RISER)
70. INSTALL 4" X 4" X 1' LONG TREATED REDWOOD LUMBER TO SUPPORT WELLHEAD
71. INSTALL 18" VALVE ASSEMBLY AND BELOW GRADE TRANSITION PER DETAIL 3/SHEET 15
72. INSTALL 18" CONCRETE ANCHOR BLOCK/BRANCH CONNECTION PER DETAIL 4/SHEET 12
73. INSTALL 2" HDPE END CAP
74. INSTALL 12" HEADER CONNECTION PER DETAIL 3/SHEET 9
75. INSTALL 18" VALVE ASSEMBLY AT HEADER HIGH POINT PER DETAIL 1/SHEET 15



- NOTES:**
1. THE EXISTING HEADER IS LOCATED IN NATIVE SOIL, OUTSIDE THE WASTE FOOTPRINT.
 2. INSTALL 5 MIL PLASTIC SHEETING AROUND FLANGE ASSEMBLIES.
 3. 2" HDPE COMPRESSED AIR AND CONDENSATE CONVEYANCE LINES (ON EACH SIDE OF HEADER, NOT SHOWN).

VALVE DETAIL @ HEADER HIGH POINT 1/15
NTS



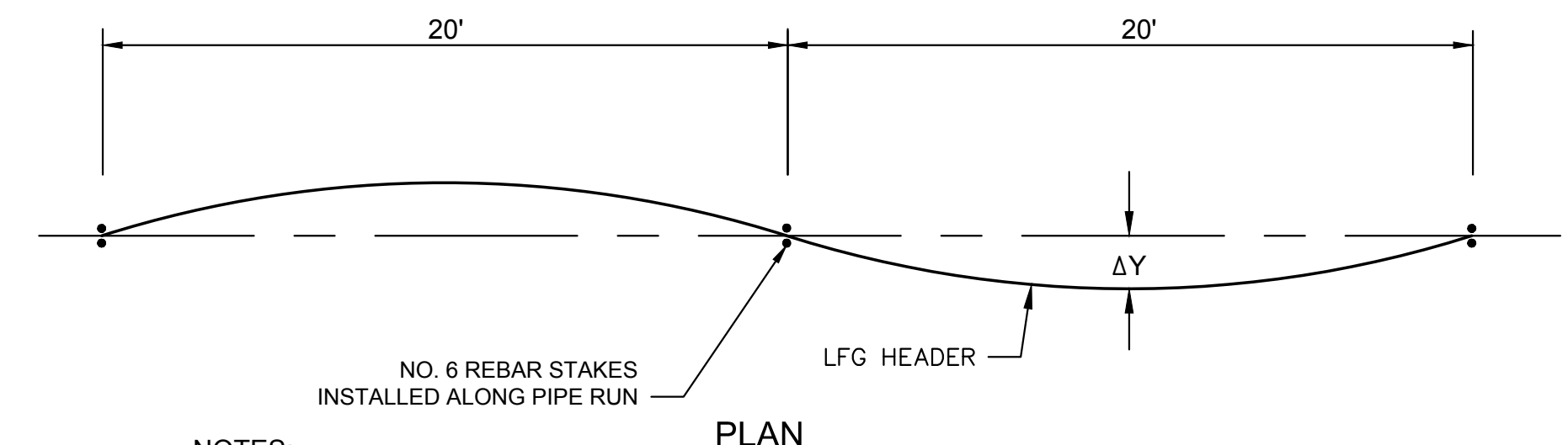
- NOTES:**
1. BEFORE STARTING EXCAVATION OR BORING, THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF ALL IDENTIFIED UNDERGROUND FACILITIES IN THE AREA OF WORK. THE CONTRACTOR SHALL PROTECT AND REPAIR ALL COMPONENTS DAMAGED DUE TO WORK AT NO COST TO THE OWNER.
 2. 2" HDPE COMPRESSED AIR AND CONDENSATE CONVEYANCE LINES (ON EACH SIDE OF HEADER, NOT SHOWN).

18" VALVE ASSEMBLY AND TRANSITION DETAIL 3/15
NTS

TETRA TECH
21700 Copley Drive, Suite 200
Diamond Bar, CA 91765
TEL 909.860.7777 FAX 909.860.8017

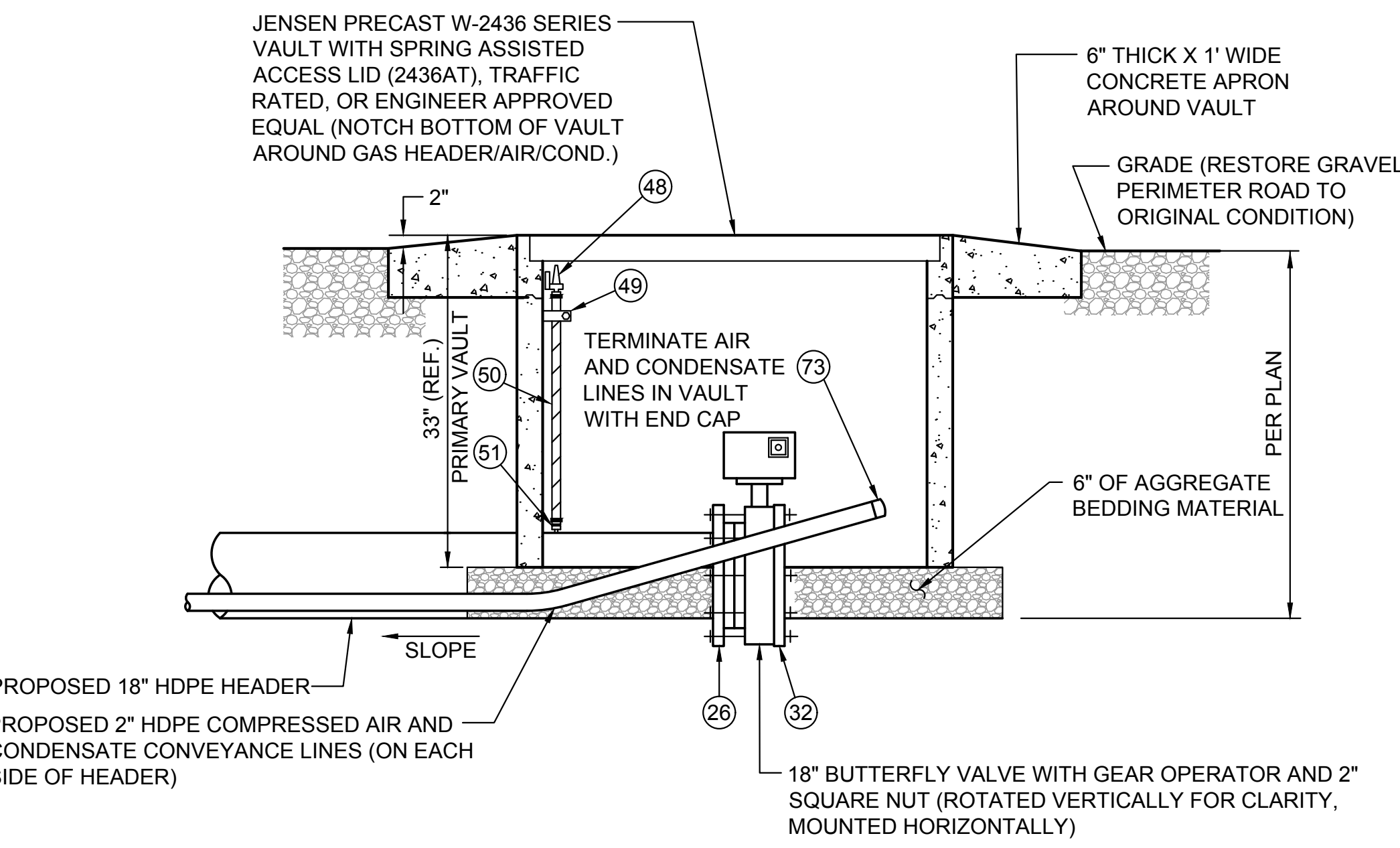
DESIGNED:	DATE:	RESIDENT ENGINEER	DATE:	SCALE:
SNA	01-2021			NOT TO SCALE
DRAWN:	01-2021			
CHECKED:	01-2021			

FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.



- NOTES:**
1. DUE TO THERMAL EXPANSION AND CONTRACTION OF HDPE PIPE, PIPE SHALL BE INSTALLED IN A SNAKING ALIGNMENT. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR EXTRA LENGTH OF PIPE. THE SNAKING OF PIPING SHALL BE PERFORMED ON THE TOP DECK (NOT SIDE SLOPES).
 2. ΔY VARIES BASED ON AMBIENT TEMPERATURES DURING INSTALLATION. ΔY SHALL BE 10" IF AMBIENT TEMPERATURES ARE BETWEEN 60°F - 80°F. FOR OTHER INSTALLATION TEMPERATURES, SEE RESIDENT ENGINEER.
 3. FOR PIPES INSTALLED ON SIDESLOPES, SEE DETAIL 3, SHEET 11.

ABOVE GROUND PIPE INSTALLATION DETAIL 2/15
NTS



- NOTES:**
1. THE EXISTING HEADER IS LOCATED IN NATIVE SOIL, OUTSIDE THE WASTE FOOTPRINT.
 2. INSTALL 5 MIL PLASTIC SHEETING AROUND FLANGE ASSEMBLIES.

VALVE DETAIL @ HEADER END POINT 4/15
NTS

Saulyan
ENGINEER OF RECORD
02/08/2021
DATE
C84806
REGISTERED PROFESSIONAL ENGINEER
SAM H AVASE
STATE OF CALIFORNIA
CIVIL

PROJECT
AMERICAN AVENUE LANDFILL PHASE III -
MODULES 3-8 LFGCCS EXPANSION
ROAD NO. N/A
BRIDGE NO. N/A

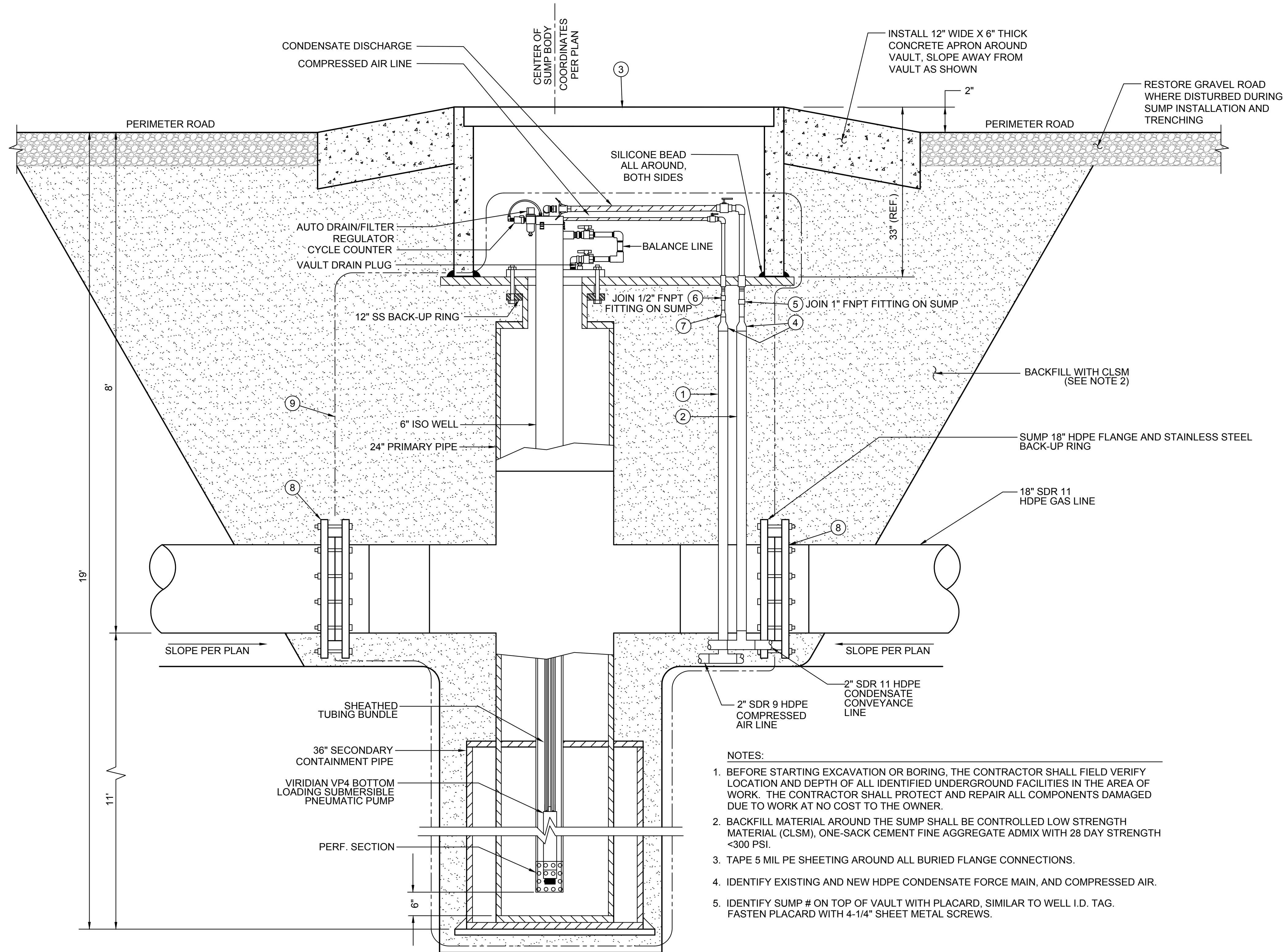


DEPARTMENT OF PUBLIC WORKS AND PLANNING
LFGCCS DETAILS
DRAWING NO. 11307
SHEET NO. 15
TOTAL 16

Angus, Scott
Friday, January 15, 2021 3:36:15 PM
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PUMP STATION CONSTRUCTION NOTES:

- 1 INSTALL 2" SDR 9 HDPE COMPRESSED AIR LINE AND FITTINGS
- 2 INSTALL 2" SDR 11 HDPE CONDENSATE CONVEYANCE LINE & FITTINGS
- 3 INSTALL 24" X 36" TRAFFIC RATED CONCRETE VAULT WITH SPRING ASSISTED COVER, GALVANIZED
- 4 INSTALL 2" X 1" HDPE REDUCER (SDR 9 FOR AIR, SDR 11 FOR OTHERS)
- 5 INSTALL 1" HDPE TO STAINLESS STEEL TRANSITION FITTING
- 6 INSTALL 1/2" HDPE TO STAINLESS STEEL TRANSITION FITTING
- 7 INSTALL 1" x 1/2" HDPE REDUCER
- 8 INSTALL 18" HDPE FLANGE ADAPTER, SS BACK-UP RING, GASKET, AND BOLT KIT
- 9 INSTALL REAL ENVIRONMENTAL PRODUCTS SERIES 7000 SERIES IN-LINE CONDENSATE SUMP WITH 18" FLANGE CONNECTIONS, 24" PRIMARY PIPE, 36" SECONDARY CONTAINMENT, AND VIRIDIAN VP4 BOTOM LOADING SUBMERSIBLE PNEUMATIC PUMP (MODEL 7000-I-24/36 DC, DO NOT SUBSTITUTE)



- NOTES:**
1. BEFORE STARTING EXCAVATION OR BORING, THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF ALL IDENTIFIED UNDERGROUND FACILITIES IN THE AREA OF WORK. THE CONTRACTOR SHALL PROTECT AND REPAIR ALL COMPONENTS DAMAGED DUE TO WORK AT NO COST TO THE OWNER.
 2. BACKFILL MATERIAL AROUND THE SUMP SHALL BE CONTROLLED LOW STRENGTH MATERIAL (CLSM), ONE-SACK CEMENT FINE AGGREGATE ADMIX WITH 28 DAY STRENGTH <300 PSI.
 3. TAPE 5 MIL PE SHEETING AROUND ALL BURIED FLANGE CONNECTIONS.
 4. IDENTIFY EXISTING AND NEW HDPE CONDENSATE FORCE MAIN, AND COMPRESSED AIR.
 5. IDENTIFY SUMP # ON TOP OF VAULT WITH PLACARD, SIMILAR TO WELL I.D. TAG. FASTEN PLACARD WITH 4-1/4" SHEET METAL SCREWS.

CONDENSATE PUMP STATION DETAIL 1/16
NTS (TYPICAL 6 PLACES)

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Argus, Scott
Friday, January 15, 2021 3:39:24 PM
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DESIGNED: SNA	DATE: 01-2021	RECORD DRAWING	SCALE		PROJECT AMERICAN AVENUE LANDFILL PHASE III - MODULES 3-8 LFGCCS EXPANSION		DEPARTMENT OF PUBLIC WORKS AND PLANNING		
DRAWN: SNA	DATE: 01-2021	RESIDENT ENGINEER	NOT TO SCALE				CONDENSATE PUMP STATION DETAIL		
CHECKED: AMN/SHA	DATE: 01-2021		ENGINEER OF RECORD				DATE: 02/08/2021	ROAD NO. N/A	BRIDGE NO. N/A
FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.							DRAWING NO. 11307	SHEET NO. 16	TOTAL 16