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WW 5	WASTEWATER DISPOSAL DETAILS

STONEY CREEK

MORGAN HILL, CA



Sht	Rev	Date	By	Description	App'd

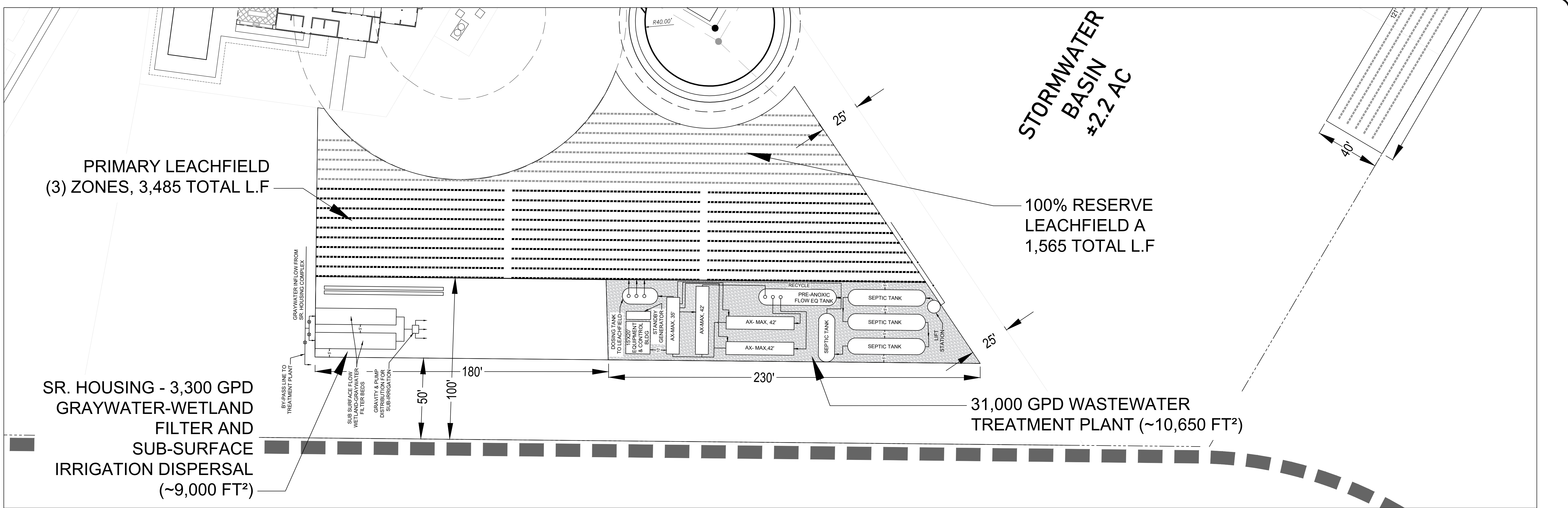
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WASTEWATER FACILITIES PLAN

MORGAN HILL, CA

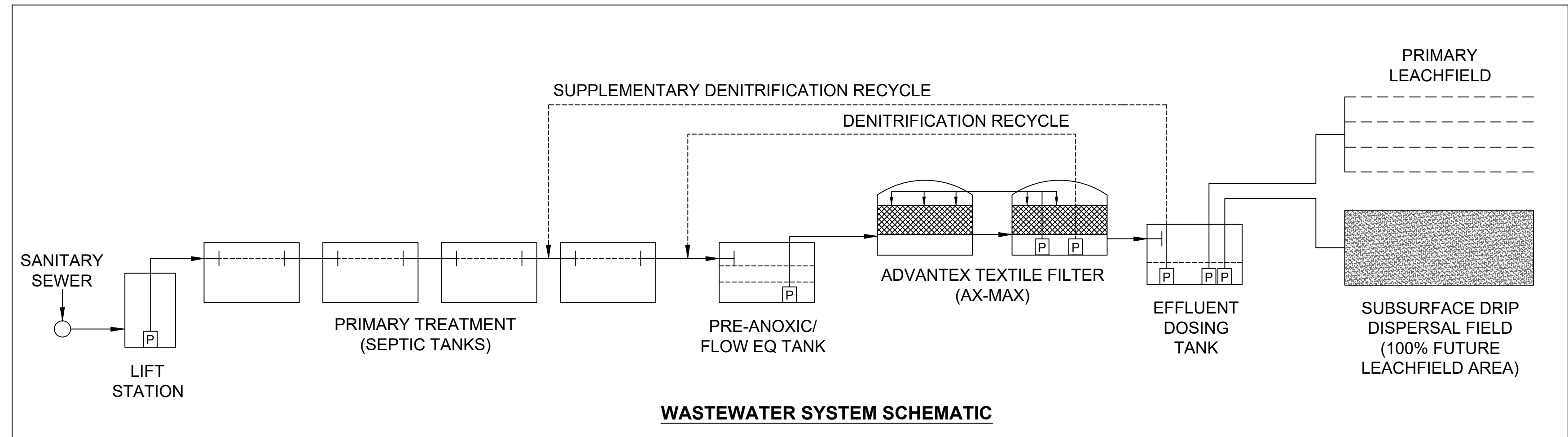
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Date:	02/05/24
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STONEY CREEK WASTEWATER FACILITIES SUMMARY

- DESIGN FLOW, 30-DAY AVERAGE:** 31,000 GPD
- WASTEWATER COLLECTION:** CONVENTIONAL GRAVITY SEWERS W/INFLUENT LIFT STATION
- PRIMARY TREATMENT:** SEPTIC TANKS; 90,000 GALS CAPACITY; 2.9 DAYS HRT
- INFLUENT FLOW EQUALIZATION:** 25,000-GAL. PRE-ANOXIC/FLOW EQ TANK
- SECONDARY TREATMENT:** 35,000 GPD RECIRCULATING TEXTILE FILTER, AX-MAX (ORENCO SYSTEMS)
- NITROGEN REMOVAL:**
 - DENITRIFICATION LOOP THROUGH PRE-ANOXIC/FLOW EQ TANK
 - SUPPLEMENTARY DENITRIFICATION LOOP THROUGH PRIMARY TANKS
- EFFLUENT LIMITS :**
 - BOD: 30 MG/L; TSS: 30 MG/L; TOTAL N: 20 MG/L
- DOSING SYSTEM:** 5,000-GAL DOSING TANK, W/DUPEX LEACHFIELD AND DRIP FIELD PUMPS
- EFFLUENT DISPERSAL:**
 - PRIMARY LEACHFIELD: 3,485 LF 24" X 49" TRENCH @ 9.0 GPD/LF = 31,365 GPD
 - 100% RESERVE LEACHFIELD AREA: CAPACITY FOR FUTURE 3,940 LF TRENCH
 - INTERIM DRIP DISPERSAL IN RESERVE AREA, W/SEASONAL USE @ 20,000 GPD
- GRAYWATER SYSTEM:** SEPARATE 3,300 GPD GRAYWATER COLLECTION, WETLAND FILTER AND IRRIGATION/DISPOSAL SYSTEM FOR 55-UNIT SR. HOUSING CONDOMINIUMS
- EMERGENCY POWER:** ONSITE STANDBY GENERATOR
- MONITORING AND ALARMS:** REMOTE TELEMETRY MONITORING AND CONTROL SYSTEM (SCADA)
- SYSTEM OPERATIONS:** CALIFORNIA AMERICAN WATER; MINIMUM GRADE II OPERATOR



STONEY CREEK

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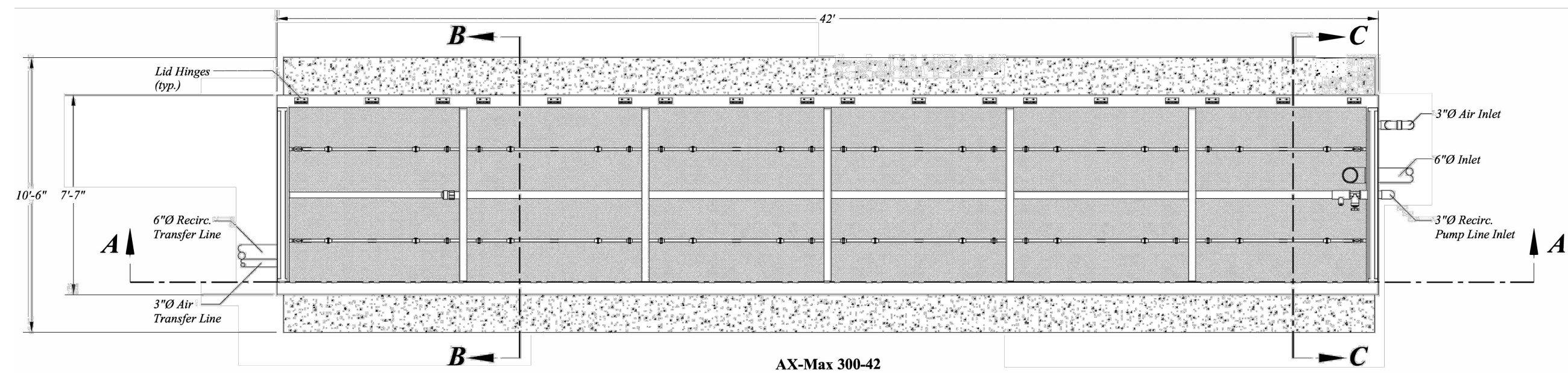
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WASTEWATER TREATMENT LAYOUT

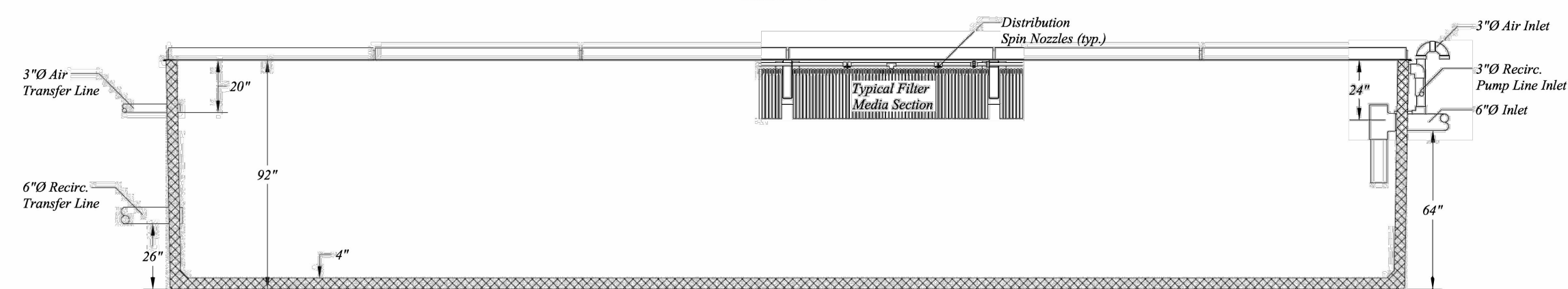
MORGAN HILL, CA

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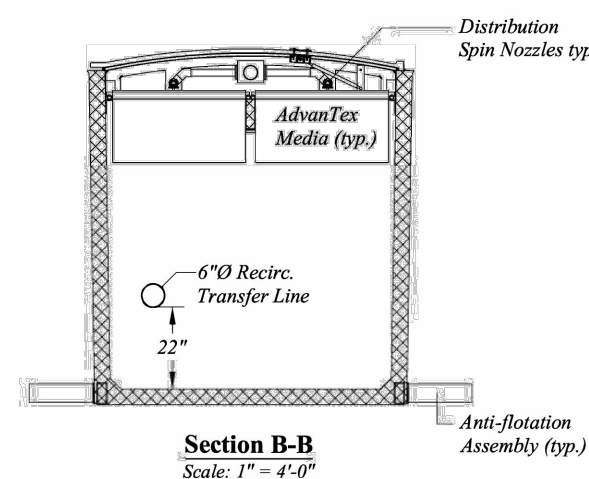
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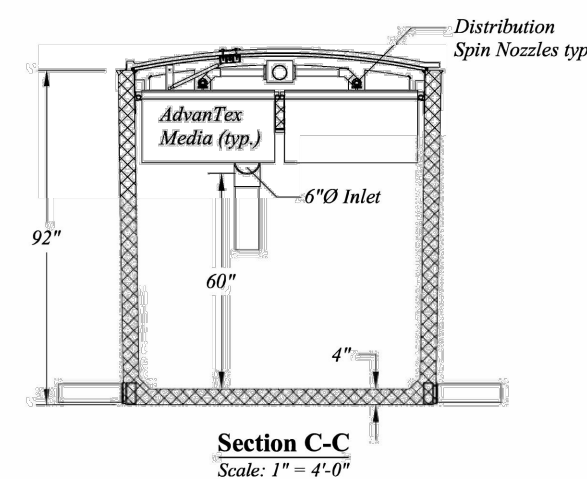
AX-Max 300-42
Unit #1 Planview
Scale: 1" = 4'-0"



Section A-A
Scale: 1" = 4'-0"

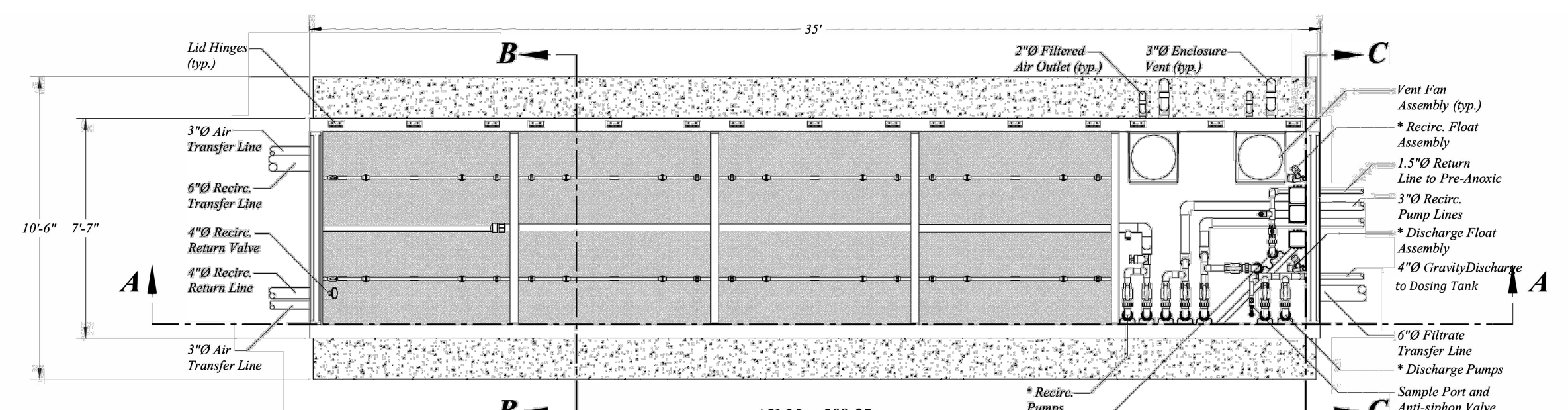


Section B-B
Scale: 1" = 4'-0"

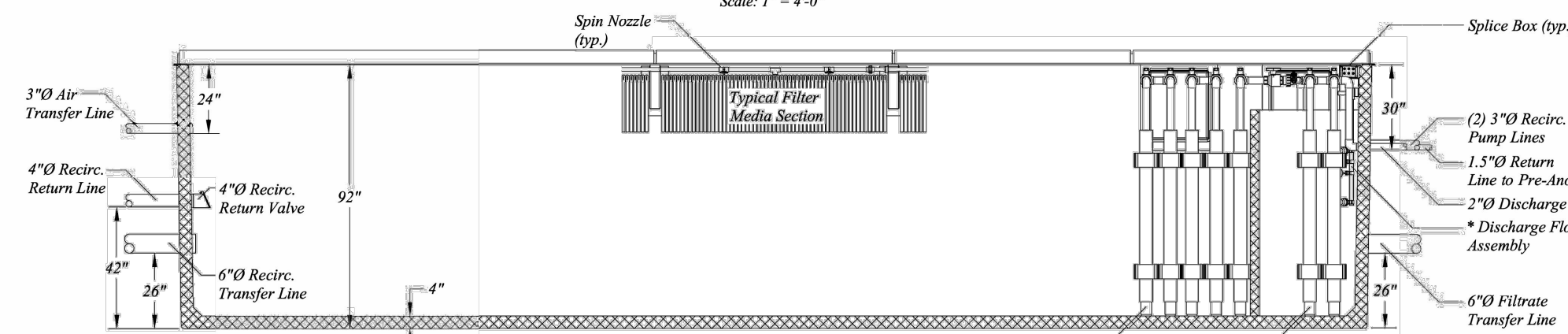


Section C-C
Scale: 1" = 4'-0"

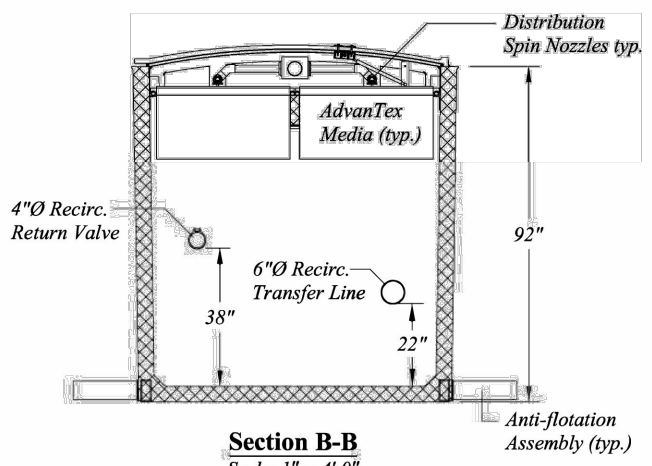
1 AX-MAX300-42 (3 TOTAL)
NOT TO SCALE



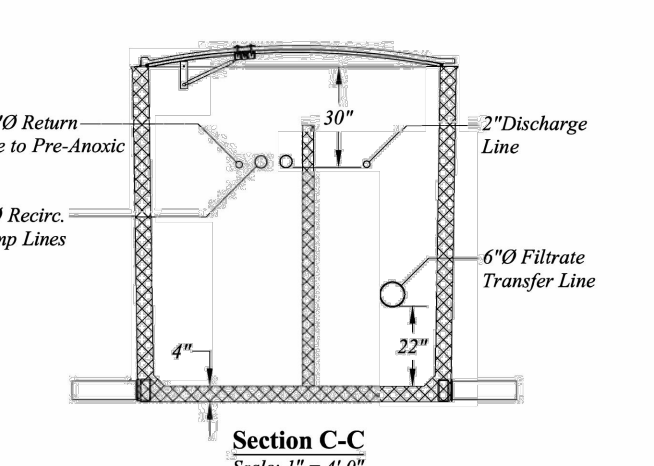
AX-Max 200-35
Unit #2 Planview
Scale: 1" = 4'-0"



Section A-A
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Section B-B
Scale: 1" = 4'-0"



Section C-C
Scale: 1" = 4'-0"

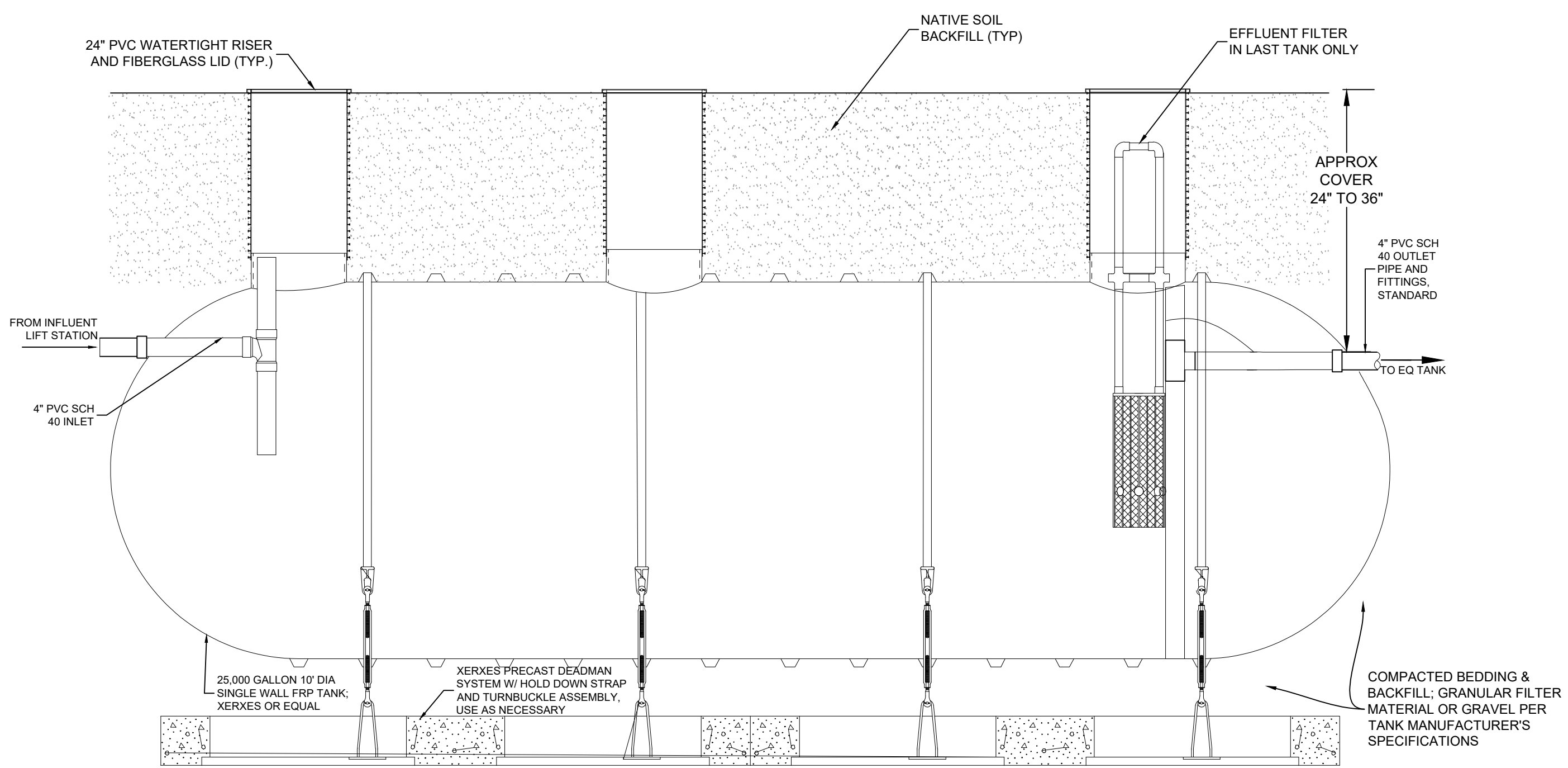
2 AX-MAX200-35
NOT TO SCALE

* Float Functions & Pump Index

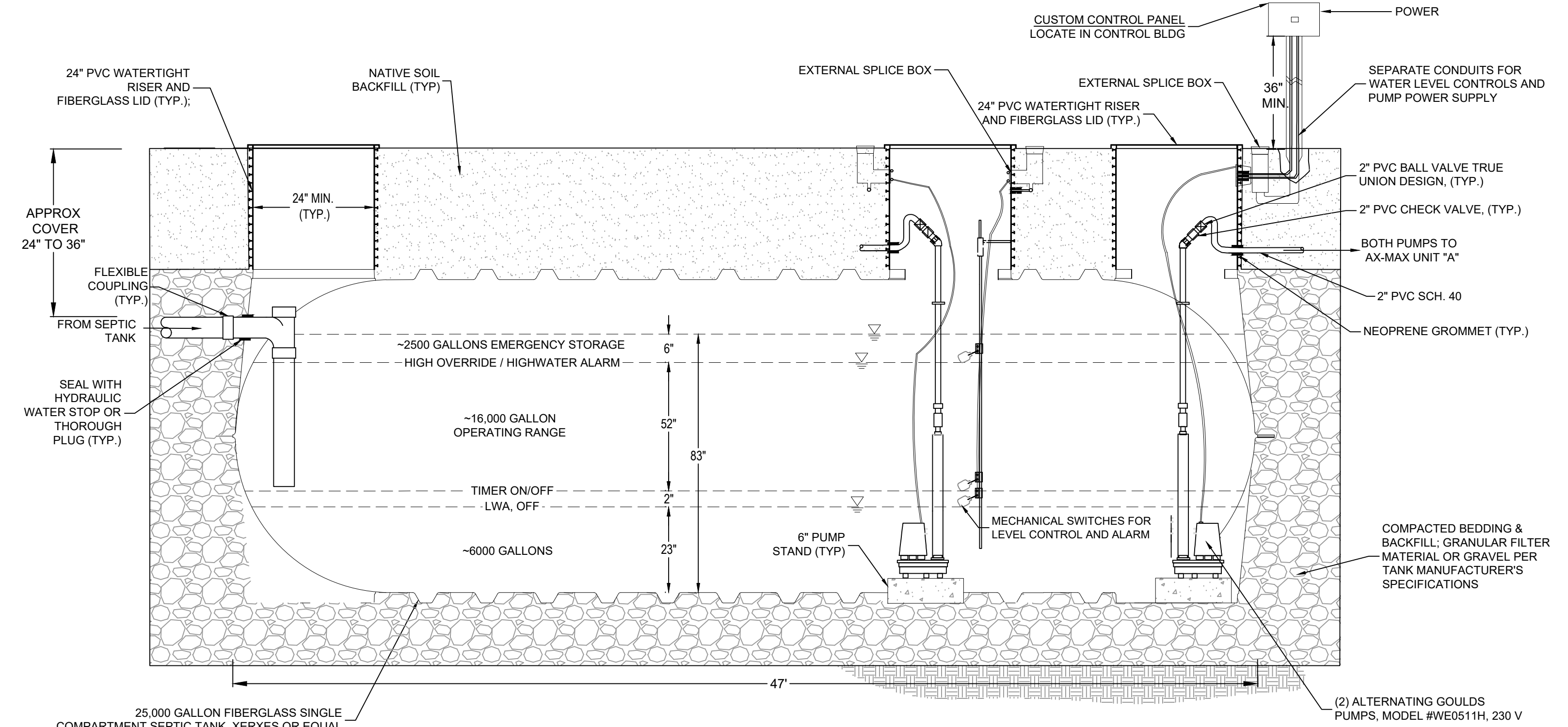
A	High Level Alarm / Log Enable
B	Override Timer
C	Pump ON
D	Pump OFF
E	Redundant Off / Low Level Alarm

Recirc. MF3P	Discharge MF4P
3'0" Recirc. Pump Lines	3'0" Recirc. Pump Lines
1.5'0" Return Line to Pre-Anoxic	1.5'0" Return Line to Pre-Anoxic
4'0" Gravity/Discharge to Dosing Tank	4'0" Gravity/Discharge to Dosing Tank
6'0" Filtrate Transfer Line	6'0" Filtrate Transfer Line
* Recirc. Pumps	* Discharge Pumps
* Anoxic Pump	

Recirculation Pumps: TBD
Discharge Pumps: TBD
Anoxic Return Pumps: 3005



3 25,000 GALLON SEPTIC TANK (3 TOTAL+1@ 15,000 GAL)
NOT TO SCALE. 4 ACCESS RISERS AND BAFFLE



4 25,000 GALLON PRE-ANOXIC/ EQ TANK
NOT TO SCALE

STONEY CREEK

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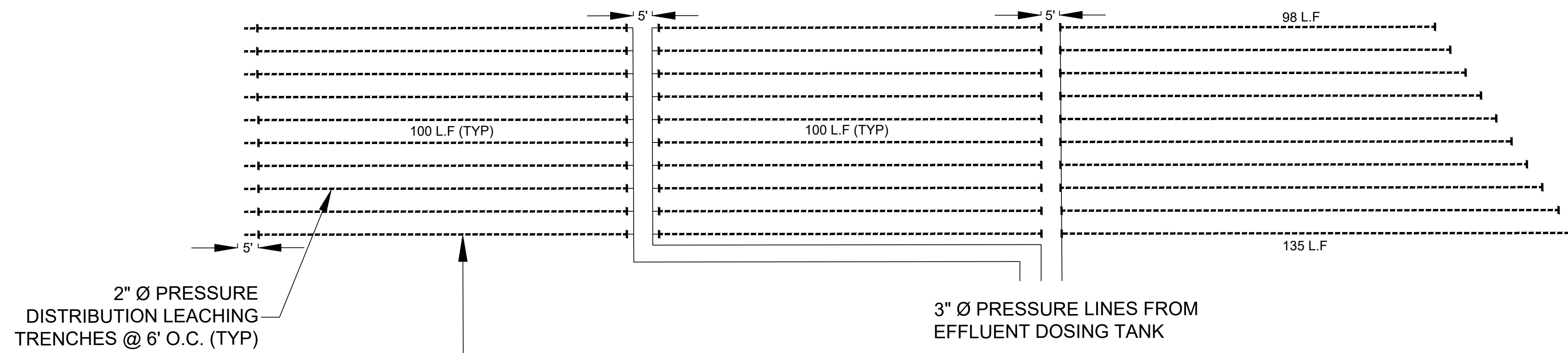
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TREATMENT DETAILS

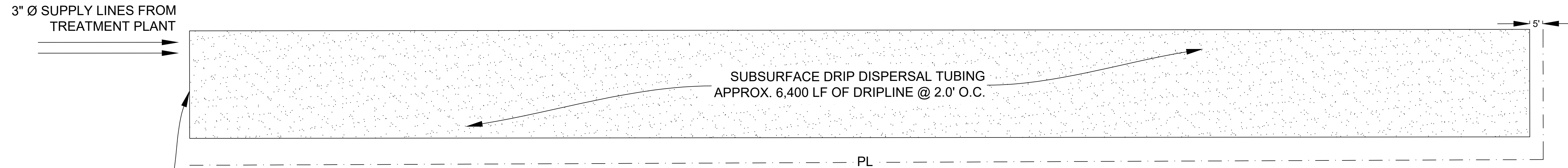
STONEY CREEK, CA

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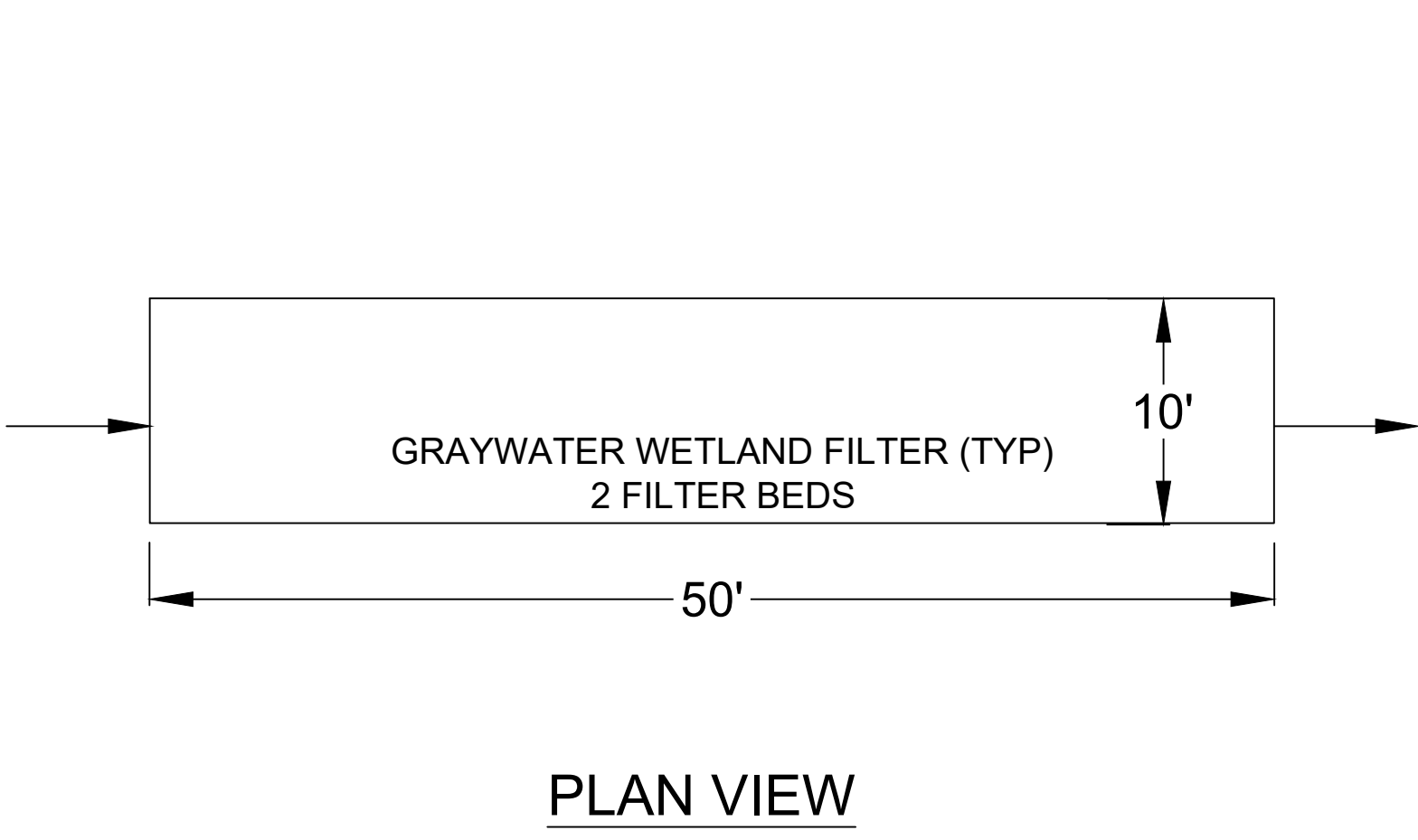
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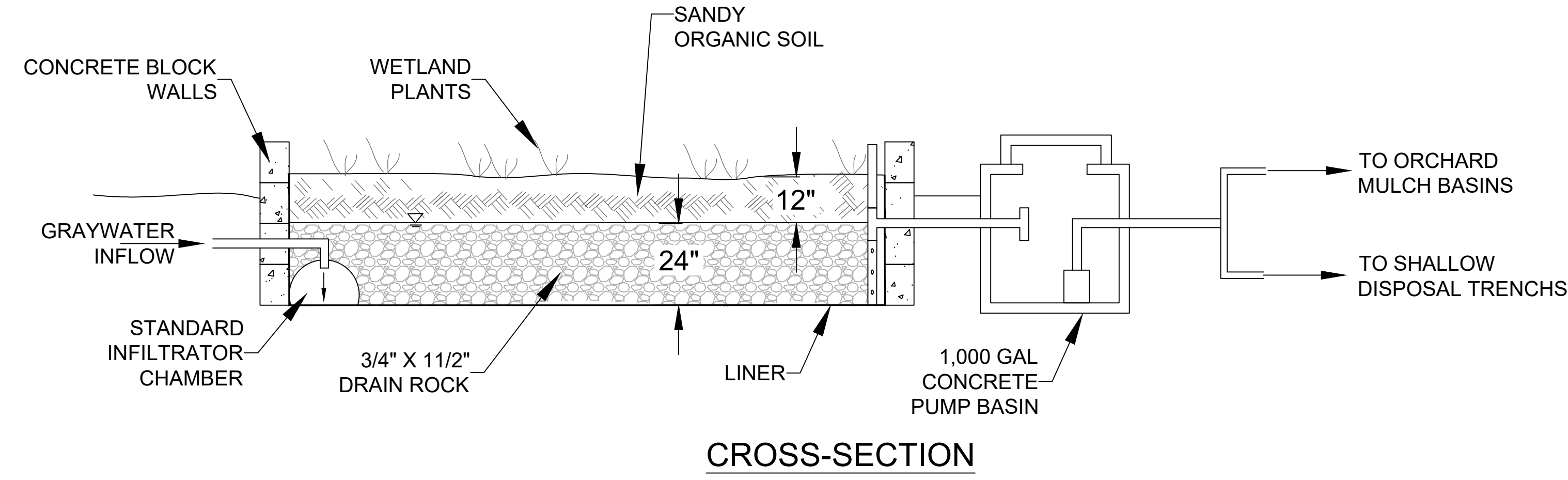
1 PRIMARY LEACHFIELD
 NOT TO SCALE
 3,485 LF OF 24"W X 49" D PRESSURE DISTRIBUTION LEACHING TRENCH



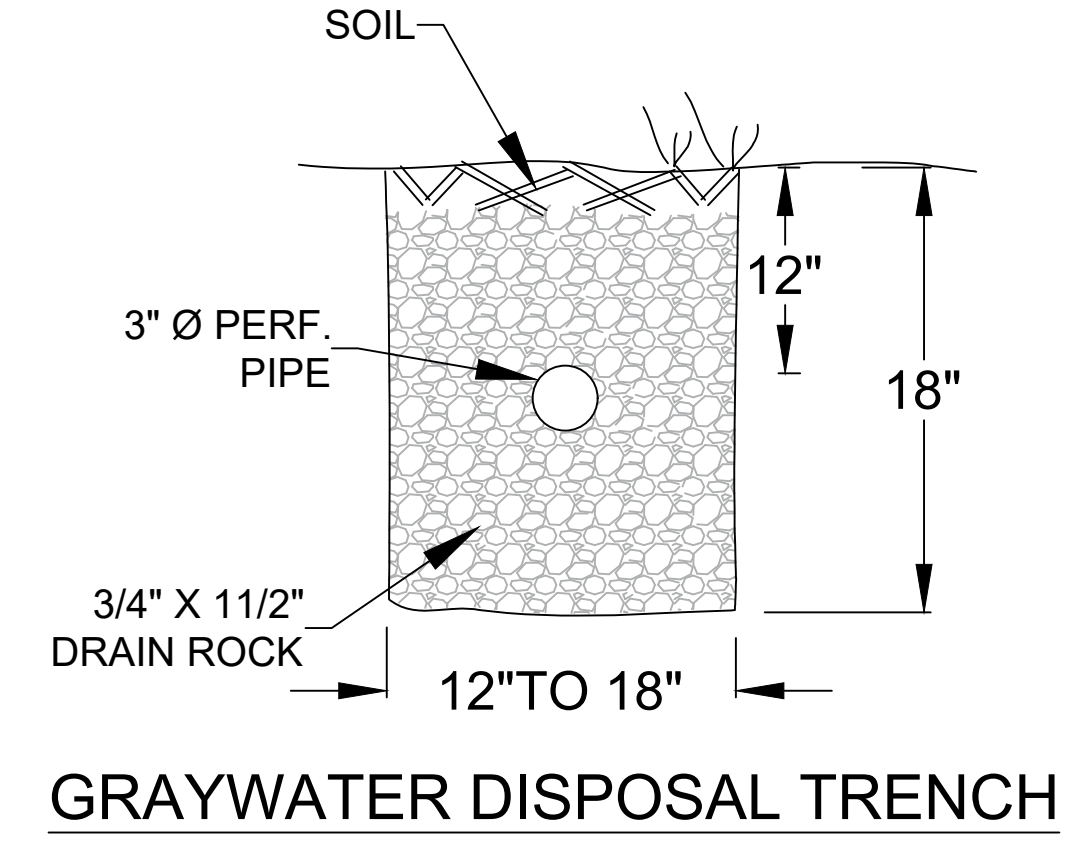
2 INTERM DRIP DISPERSAL IN RESERVE AREA (FIELD B, TYP)
 NOT TO SCALE
 FOR SEASONAL DRIP DISPOSAL/ IRRIGATION, (APRIL - OCTOBER)



PLAN VIEW



CROSS-SECTION



GRAYWATER DISPOSAL TRENCH

3 GRAYWATER WETLAND FILTER
 NOT TO SCALE

STONEY CREEK

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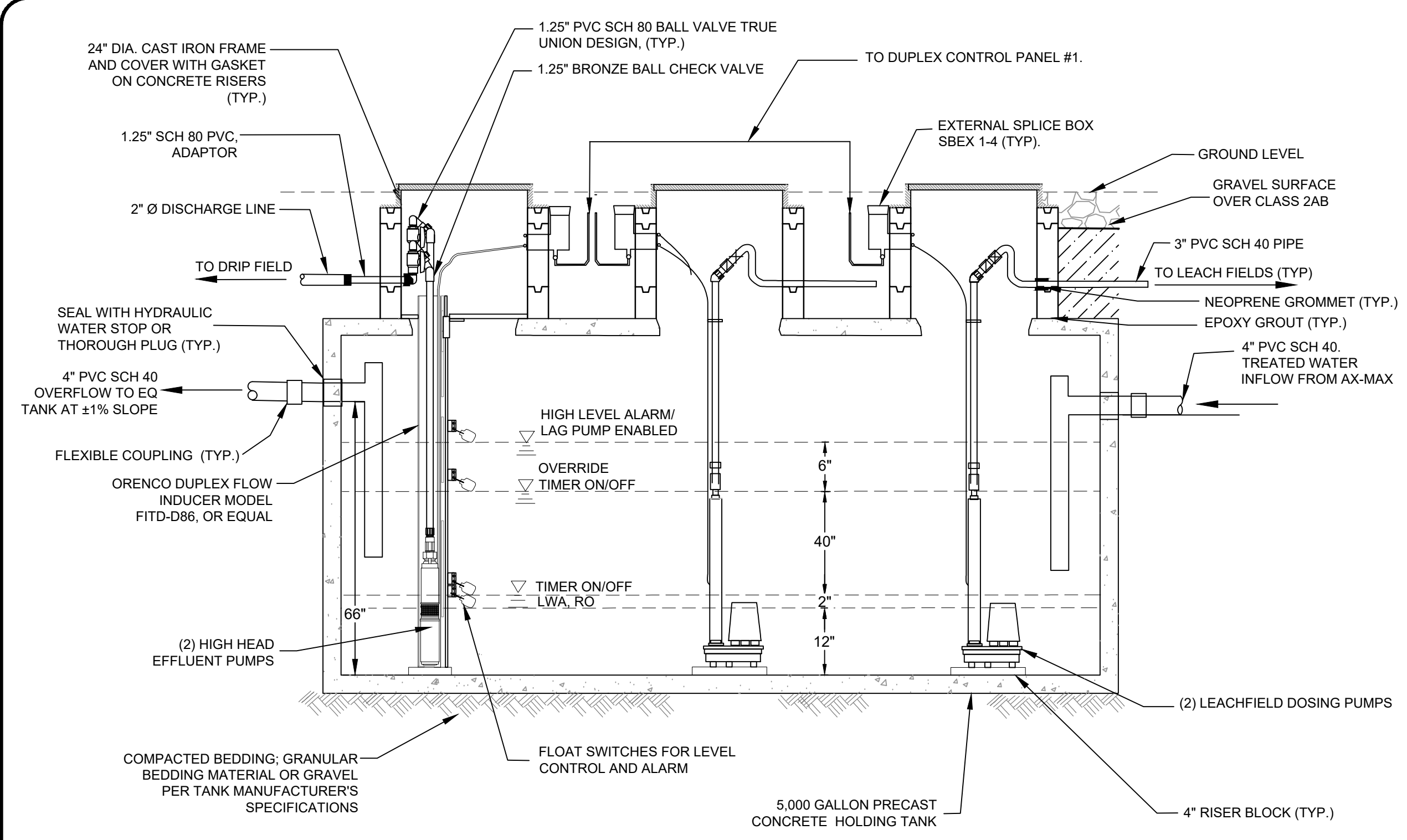
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WASTEWATER DISPOSAL AND GRAYWATER PLAN

MORGAN HILL, CA

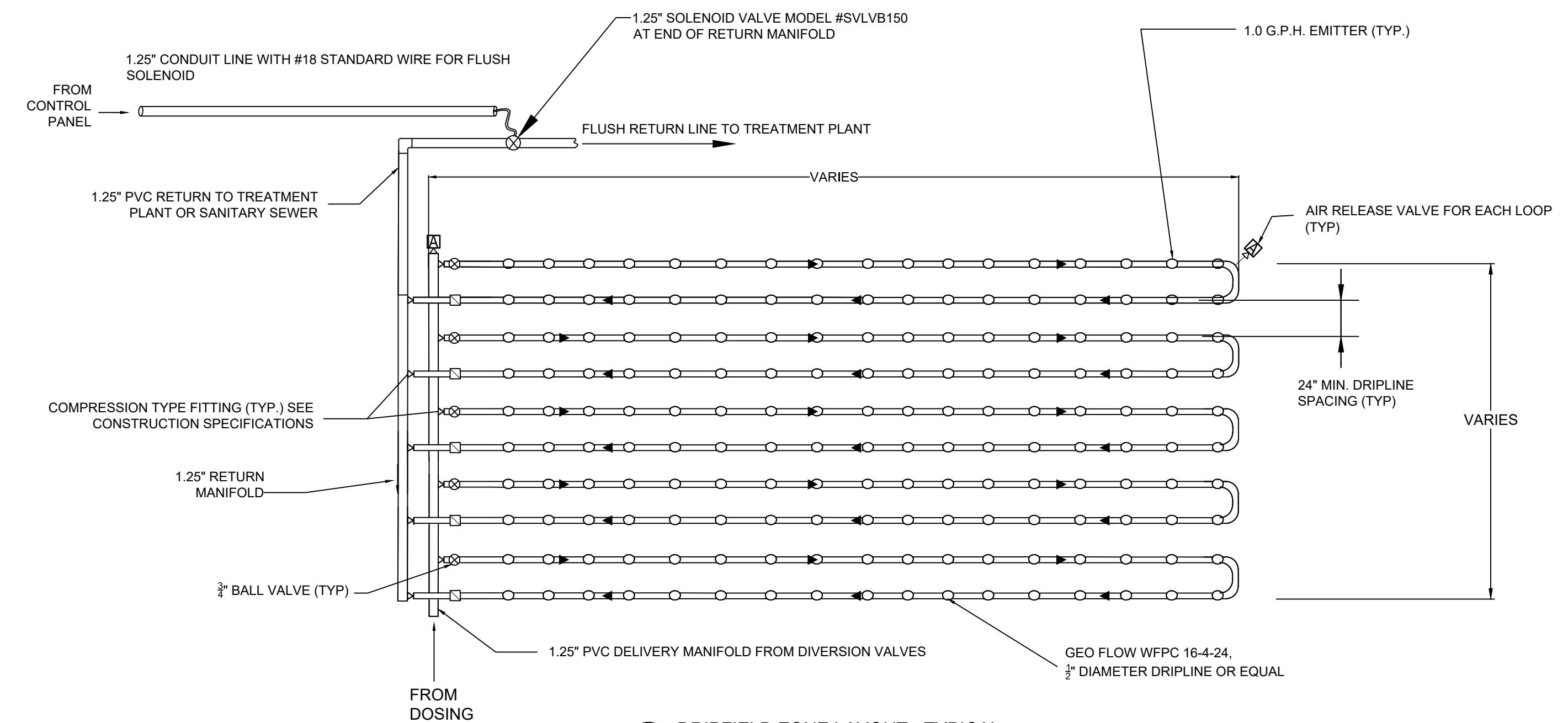
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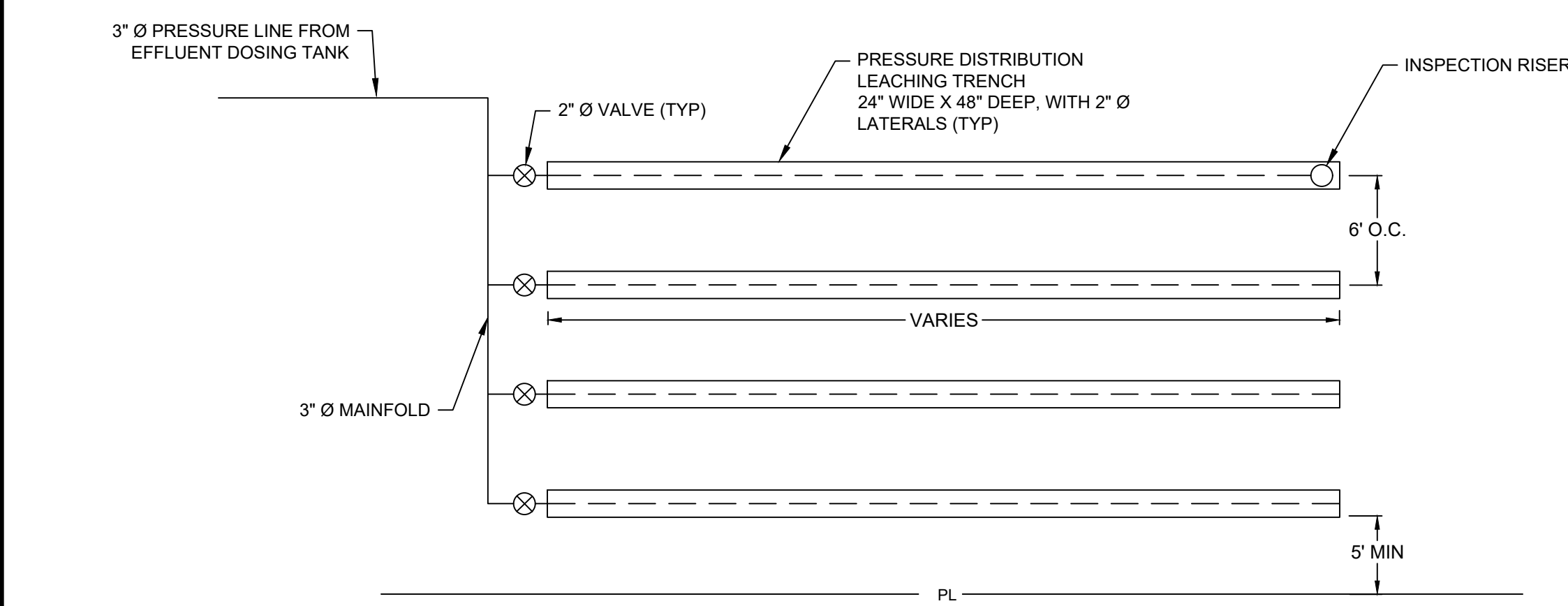


1 5,000 GALLON EFFLUENT DOSING TANK
NOT TO SCALE

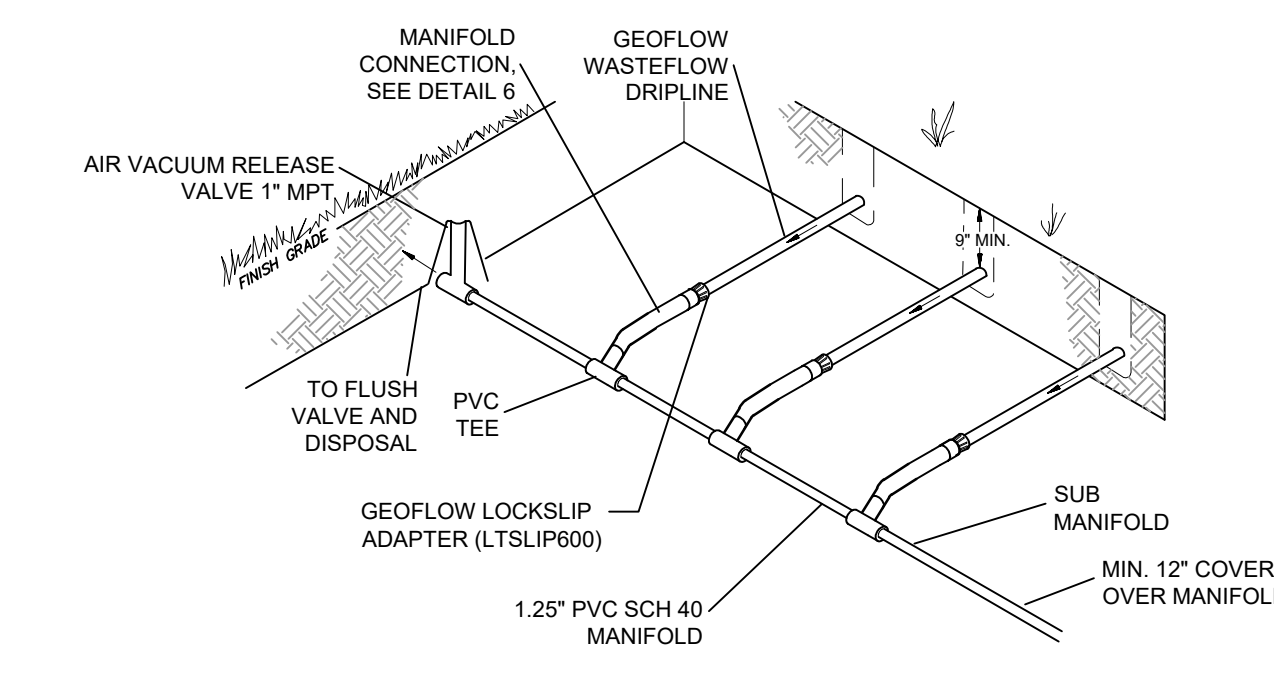
NOTE:
1. INSTALL VACUUM/AIR RELIEF VALVES AT HIGH POINTS OF DRIP LINE AND BEFORE EACH CHECK VALVE.
2. THE ROOT INTRUSION INHIBITOR IS TEMPERATURE SENSITIVE. DRIPLINE SHALL BE STORED IN SHADE DURING CONSTRUCTION.



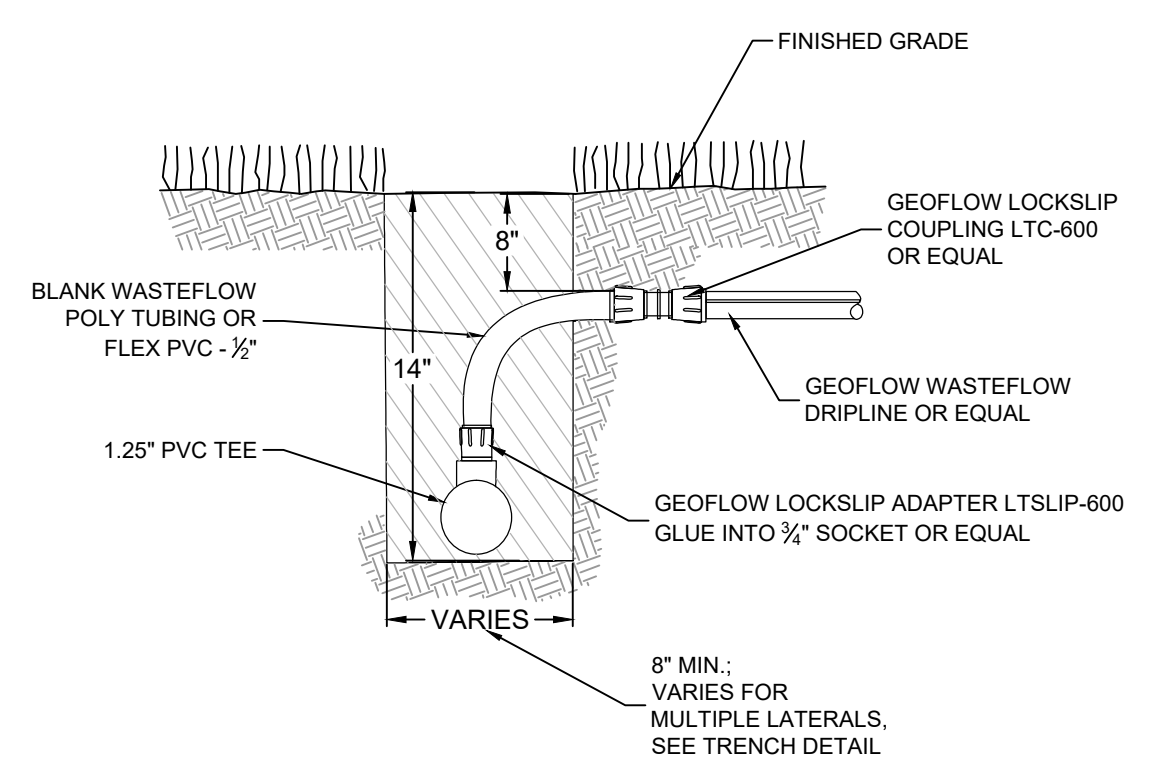
2 DRIPFIELD ZONE LAYOUT - TYPICAL
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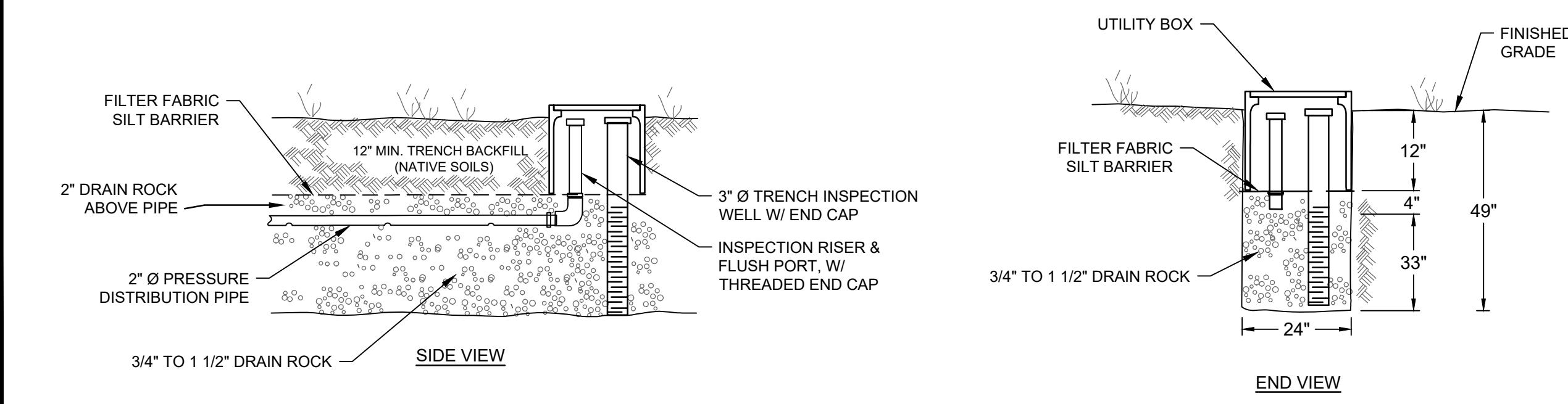
2 TYPICAL LEACHFIELD ZONE
NOT TO SCALE



4 END FEED/FLUSH MANIFOLD DETAIL
NOT TO SCALE



5 MANIFOLD CONNECTION
NOT TO SCALE



3 PRESSURE-DISTRIBUTION TRENCH DETAIL
NOT TO SCALE

WASTEWATER DISPOSAL SYSTEM DESIGN

PRESSURE DISTRIBUTION LEACHING TRENCHES:

- SYSTEM DESIGN FLOW (30-DAY AVE): 31,000 GPD
- TRENCH DIMENSIONS: 2' W X 4' D (32" EFFECTIVE SIDEWALL)
- EFFECTIVE INFILTRATIVE AREA: 7.5 SF PER LF
- APPLICATION RATE: 1.2 GPD/SF FOR SECONDARY WASTEWATER, <24 MPI
- TRENCH LOADING RATE: (7.5)*(1.2) = 9.0 GPD PER LF
- TOTAL REQUIRED TRENCH LENGTH PER FIELD: 21,000 GPD/9.0 GPD/LF = 3,450 LF
- PRIMARY LEACHFIELD: 3,485 LF
- PRIMARY 100% LEACHFIELD CAPACITY: (3,485 LF)*(9.0 GPD/LF) = 31,365 GPD
- 100% RESERVE FIELD CAPACITY: 3,940 LF; (3,940 LF)*(9.0 GPD/LF) = 35,460 GPD
- TOTAL PRIMARY AND RESERVE DISPOSAL CAPACITY: 66,825 GPD (215% OF DESIGN)

INTERIM DRIP DISPERSAL FIELD

- INSTALL AND OPERATE SUBSURFACE DRIP DISPERSAL FIELD IN RESERVE AREA
- SEASONAL OPERATION FROM APRIL-OCTOBER (7-MONTH GROWING SEASON)
- BENEFITS:
 - ✓ SUB-IRRIGATION OF GRASS OPEN SPACE AREA W/TREATED WASTEWATER
 - ✓ ENHANCED NITROGEN UPTAKE/REMOVAL BY VEGETATION & DENITRIFICATION
- DRIP TUBING INSTALLED AT 8-INCH DEPTH
- DRIP DISPERSAL AREA AVAILABLE: 20,000 FT²
- WASTEWATER LOADING RATE FOR GRAVELLY LOAM SURFACE SOILS: 1.0 GPD/FT²
- TOTAL POTENTIAL WASTEWATER DISPOSAL CAPACITY: 20,000 GPD
- ANNUAL VOL. OF WASTEWATER TO DRIP FIELD: 38% OF FLOW (1.88 MGALS)

STONEY CREEK

MORGAN HILL, CA

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Sh#	Rev	Date	By	Description	App'd

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WASTEWATER DISPOSAL DETAILS

STONEY CREEK, CA

Size D	Project 2300140
Scale:	AS NOTED
Date:	02/05/24
Sheet:	WW5

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