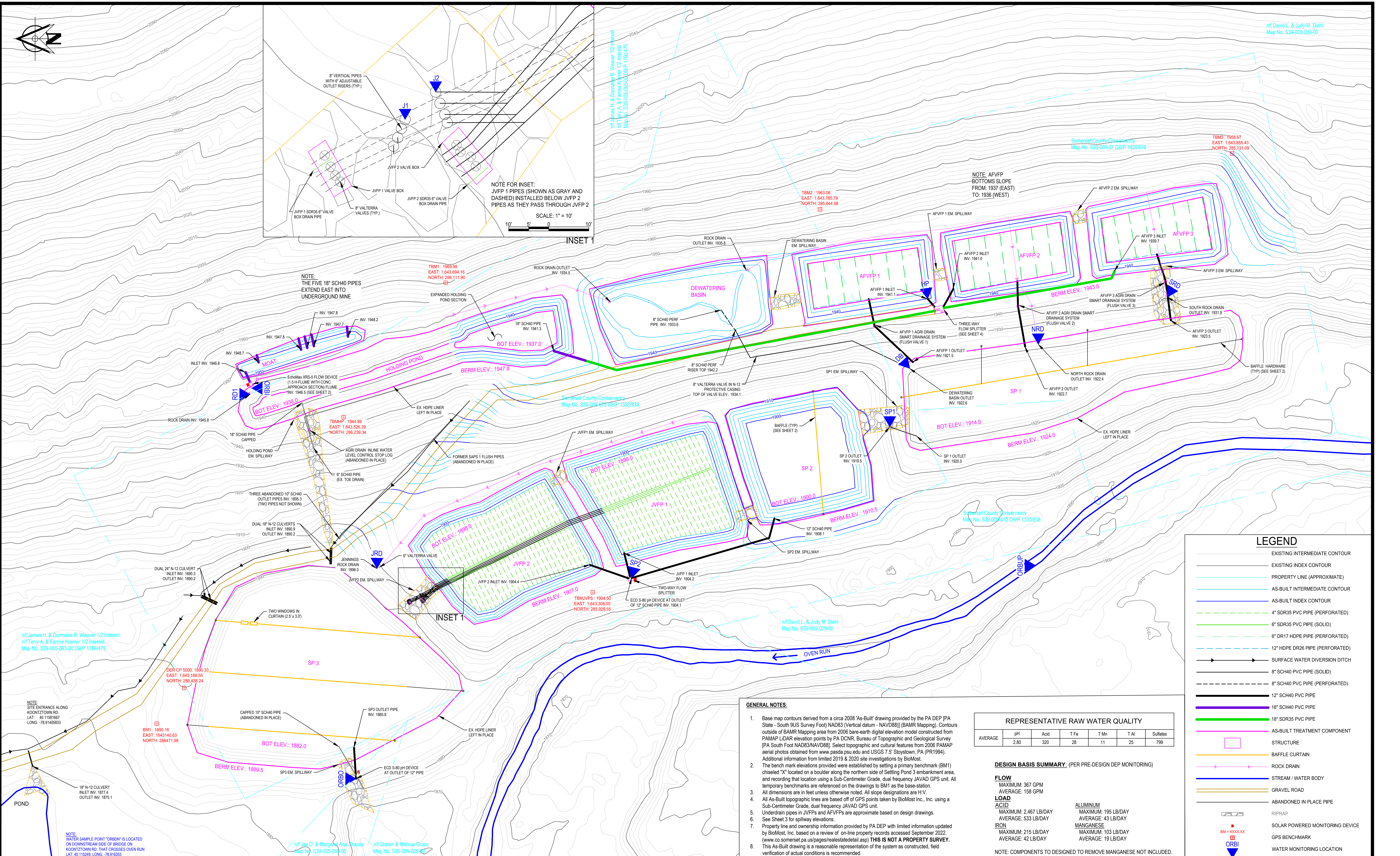
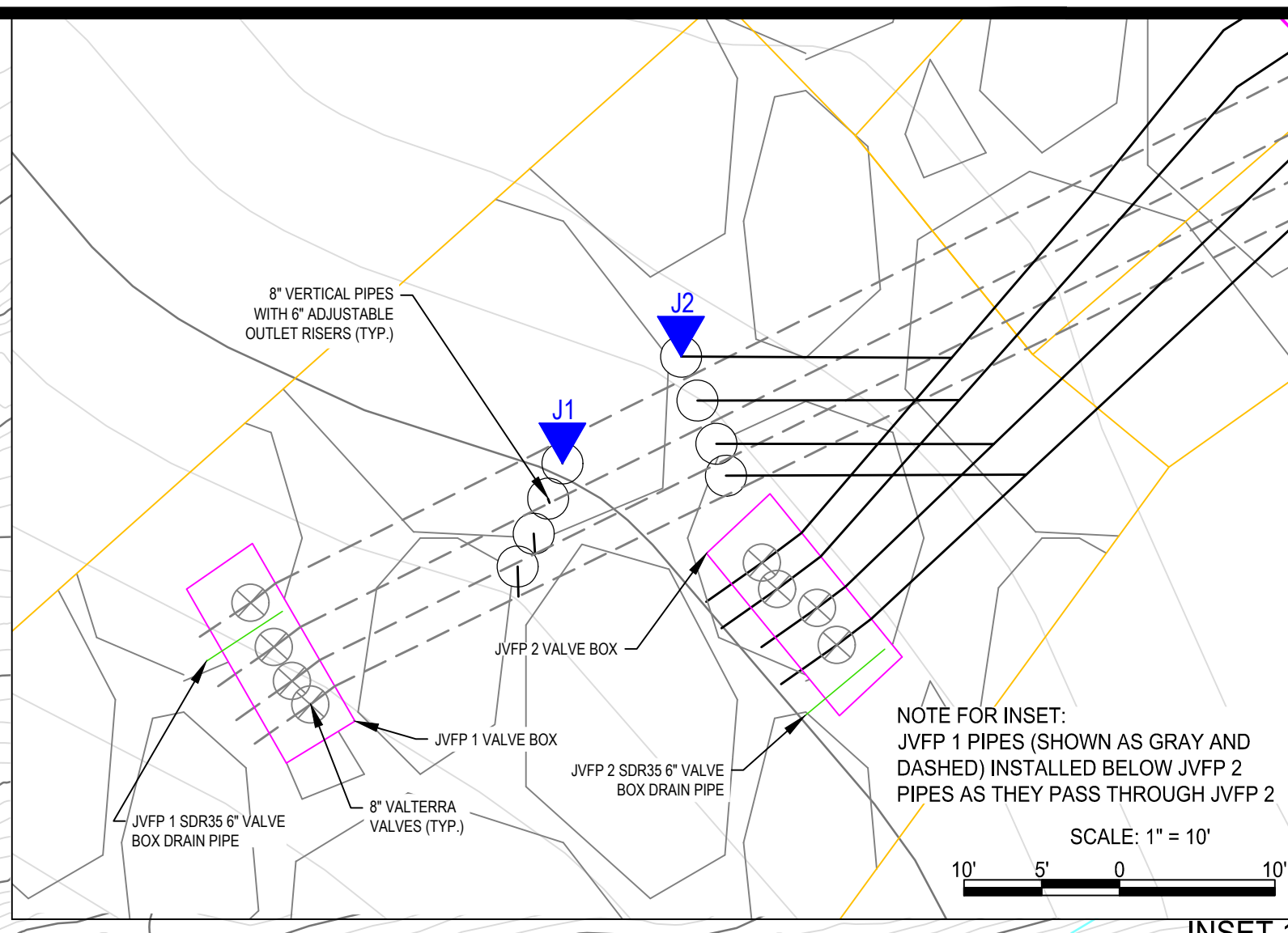


n/f David L. & Judy M. Diehl  
Map No. S39-009-009-00



### LEGEND

- EXISTING INTERMEDIATE CONTOUR
- EXISTING INDEX CONTOUR
- PROPERTY LINE (APPROXIMATE)
- AS-BUILT INTERMEDIATE CONTOUR
- AS-BUILT INDEX CONTOUR
- 4" SDR35 PVC PIPE (PERFORATED)
- 6" SDR35 PVC PIPE (SOLID)
- 6" DR17 HDPE PIPE (PERFORATED)
- 12" HDPE DR26 PIPE (PERFORATED)
- SURFACE WATER DIVERSION DITCH
- 8" SCH40 PVC PIPE (SOLID)
- 8" SCH40 PVC PIPE (PERFORATED)
- 12" SCH40 PVC PIPE
- 18" SCH40 PVC PIPE
- 18" SDR35 PVC PIPE
- AS-BUILT TREATMENT COMPONENT
- STRUCTURE
- BAFFLE CURTAIN
- ROCK DRAIN
- STREAM / WATER BODY
- GRAVEL ROAD
- ABANDONED IN PLACE PIPE
- RIPRAP
- SOLAR POWERED MONITORING DEVICE
- GPS BENCHMARK
- WATER MONITORING LOCATION

### GENERAL NOTES:

- Base map contours derived from a circa 2008 'As-Built' drawing provided by the PA DEP (PA State - South 9US Survey Foot) NAD83 (Vertical datum - NAVD83) (BAMR Mapping). Contours outside of BAMR Mapping area from 2006 bare-earth digital elevation model constructed from PAMAP LIDAR elevation points by PA DCR, Bureau of Topographic and Geological Survey (PA South Foot NAD83/NAVD83). Select topographic and cultural features from 2006 PAMAP aerial photos obtained from [www.pasda.psu.edu](http://www.pasda.psu.edu) and USGS 7.5' Stoytown, PA (PR1994). Additional information from limited 2019 & 2020 site investigations by BioMost.
- The bench mark elevations provided were established by setting a primary benchmark (BM1) chiseled 'X' located on a boulder along the northern side of Settling Pond 3 embankment area, and recording that location using a Sub-Centimeter Grade, dual frequency JAVAD GPS unit. All temporary benchmarks are referenced on the drawings to BM1 as the base-station.
- All dimensions are in feet unless otherwise noted. All slope designations are H:V.
- All As-Built topographic lines are based off of GPS points taken by BioMost Inc., Inc. using a Sub-Centimeter Grade, dual frequency JAVAD GPS unit.
- Underdrain pipes in JVPF's and AFVFP's are approximate based on design drawings.
- See Sheet 3 for spillway elevations.
- Property line and ownership information provided by PA DEP with limited information updated by BioMost, Inc. based on a review of on-line property records accessed September 2022. ([www.co.somerset.pa.us/pages/realstate/detail.asp](http://www.co.somerset.pa.us/pages/realstate/detail.asp)) THIS IS NOT A PROPERTY SURVEY.
- This As-Built drawing is a reasonable representation of the system as constructed, field verification of actual conditions is recommended.

### REPRESENTATIVE RAW WATER QUALITY

AVERAGE	pH	Acid	T Fe	T Mn	T Al	Sulfates
	2.80	320	28	11	25	799

**DESIGN BASIS SUMMARY: (PER PRE-DESIGN DEP MONITORING)**

<b>FLOW</b>	MAXIMUM: 367 GPM	<b>ALUMINUM</b>	MAXIMUM: 195 LB/DAY
AVERAGE: 158 GPM		AVERAGE: 43 LB/DAY	
<b>LOAD</b>		<b>MANGANESE</b>	MAXIMUM: 103 LB/DAY
<b>ACID</b>	MAXIMUM: 2.467 LB/DAY	AVERAGE: 19 LB/DAY	
AVERAGE: 533 LB/DAY			
<b>IRON</b>	MAXIMUM: 215 LB/DAY		
AVERAGE: 42 LB/DAY			

NOTE: COMPONENTS TO DESIGNED TO REMOVE MANGANESE NOT INCLUDED.

n/f James H. & Donnalee B. Weaver, 1/2 Interest  
n/f Terry A. & Fannie Kramer, 1/2 Interest  
Map No. S39-005-063-00 DB/P-1766475

NOTE: SITE ENTRANCE ALONG KOONTZTOWN RD. LAT: 40.11581667 LONG: -78.91408833

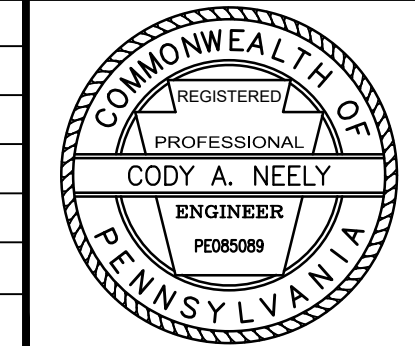
NOTE: WATER SAMPLE POINT "ORION" IS LOCATED ON DOWNSTREAM SIDE OF BRIDGE ON KOONTZTOWN RD. THAT CROSSES OVEN RUN LAT: 40.115249, LONG: -78.916353

n/f Jay D. & Margaret Ann Shaulis  
Map No. S39-005-059-00

n/f Shawn & Melissa Cross  
Map No. S39-009-008-00

**BioMost, Inc.**  
Mining & Reclamation Services  
434 Spring Street Ext.  
Mars, PA 16046  
[www.biomost.com](http://www.biomost.com)

CLIENT:	STREAM RESTORATION INCORPORATED		
	<a href="http://www.streamrestorationinc.org">www.streamrestorationinc.org</a>		
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SUBMITTED BY:  
**CODY A. NEELY, P.E.**  
PROJECT DESIGNER - BioMost, Inc.

DATE: 09/30/2022  
DRAWN BY: LVH  
ACAD FILE NAME: 3000AB.dwg

LATITUDE: 40.112275  
LONGITUDE: -78.912004  
CHECKED BY: TPD

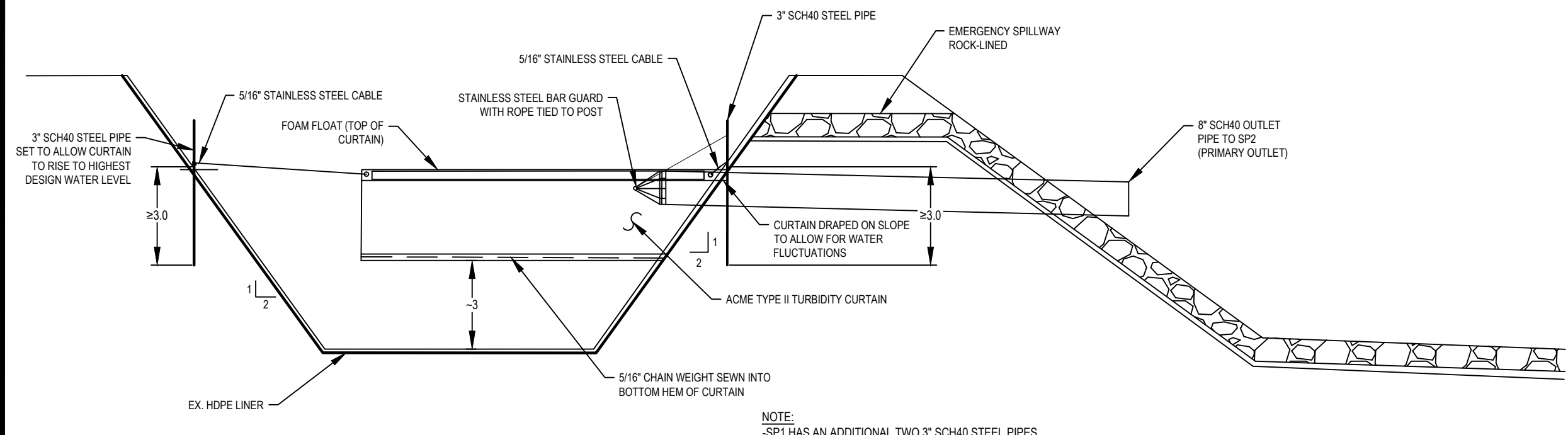
SCALE: 1" = 50'  
50' 25' 0' 50'

ALL CONDITIONS SHALL BE CHECKED AND VERIFIED AT THE SITE AS APPLICABLE PRIOR TO PERFORMING ANY MAINTENANCE WORK

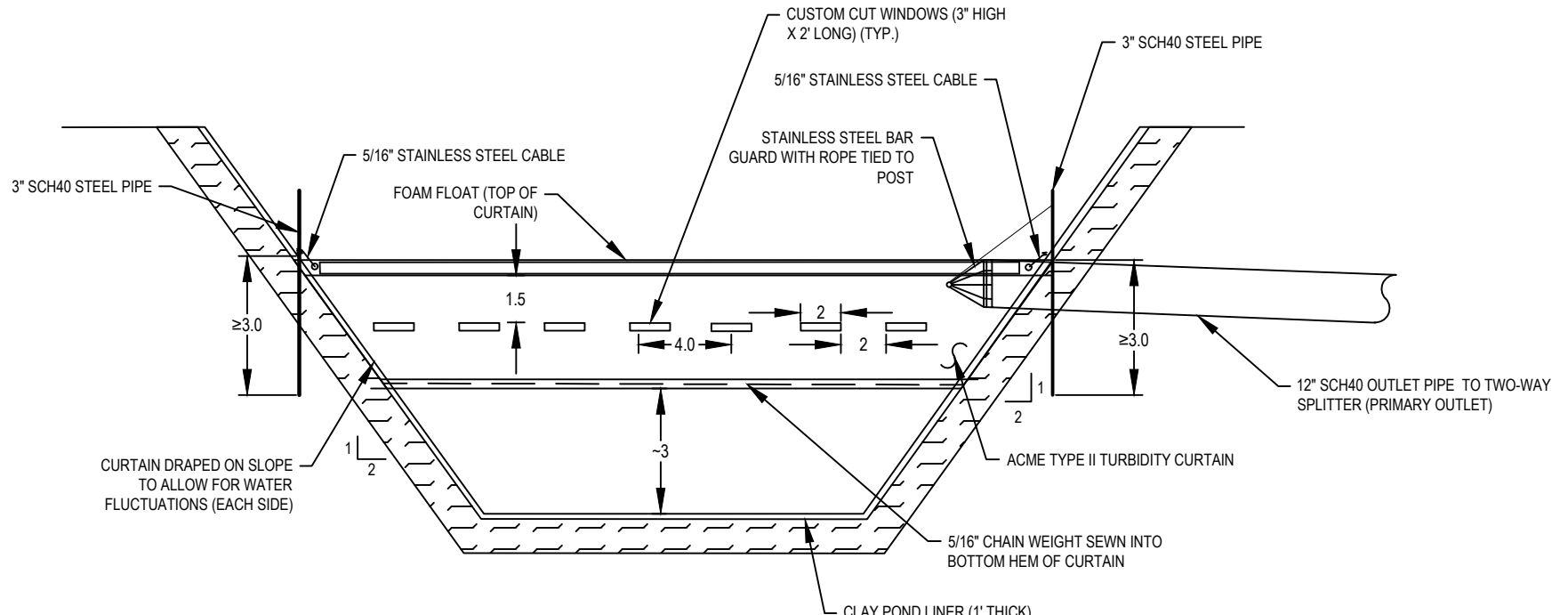
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**OVEN RUN B**  
PASSIVE TREATMENT SYSTEM  
REDESIGN AND CONSTRUCTION

Shade Township  
Somerset County, PA

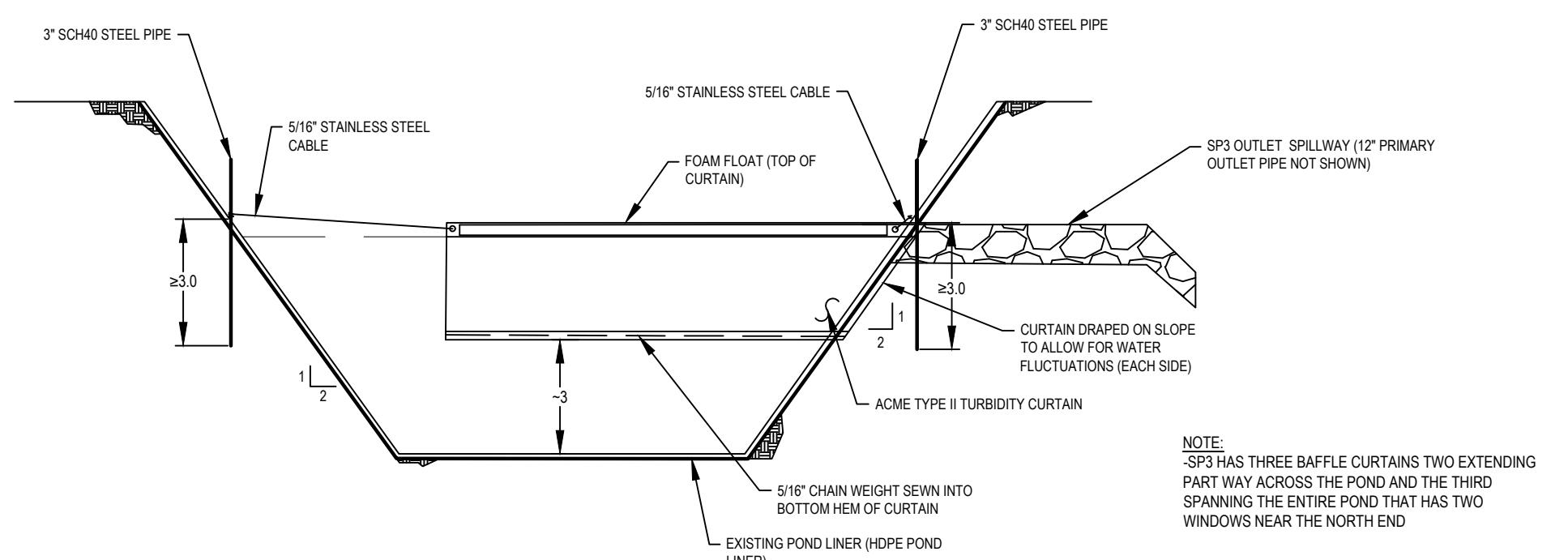
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**1 of 4**



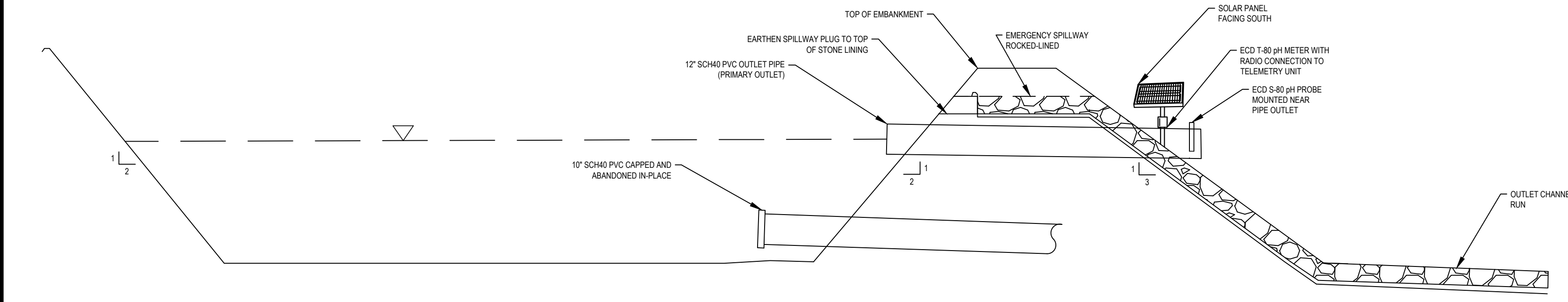
**SETTLING POND #1 WITH DIRECTIONAL BAFFLE CURTAIN**  
Horizontal Scale: None Vertical Scale: None



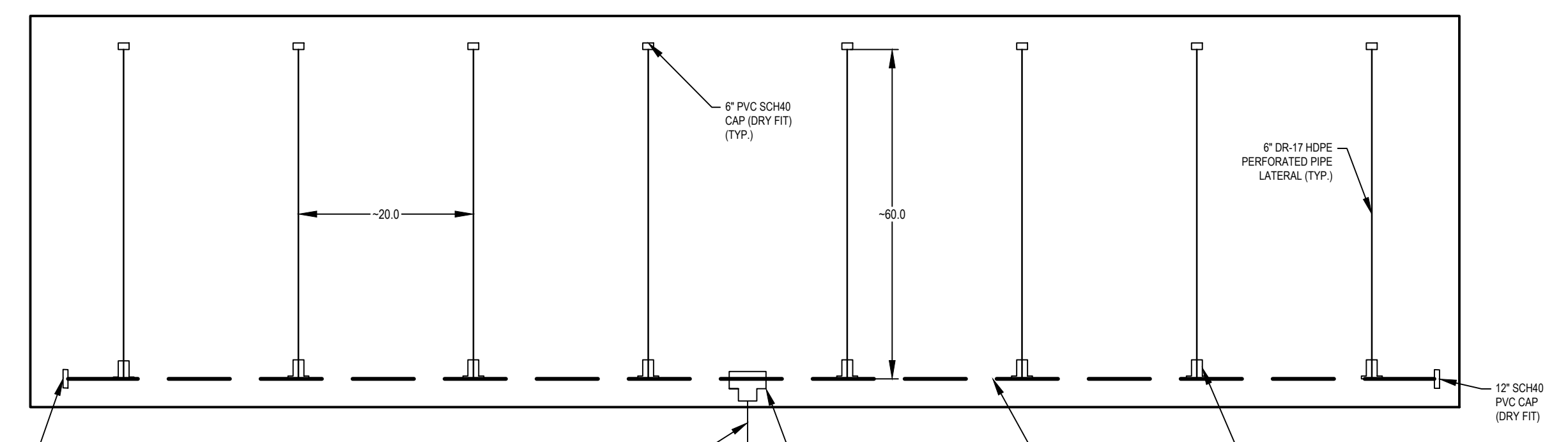
**SETTLING POND #2 WITH WINDOWED BAFFLE CURTAIN**  
Horizontal Scale: None Vertical Scale: None



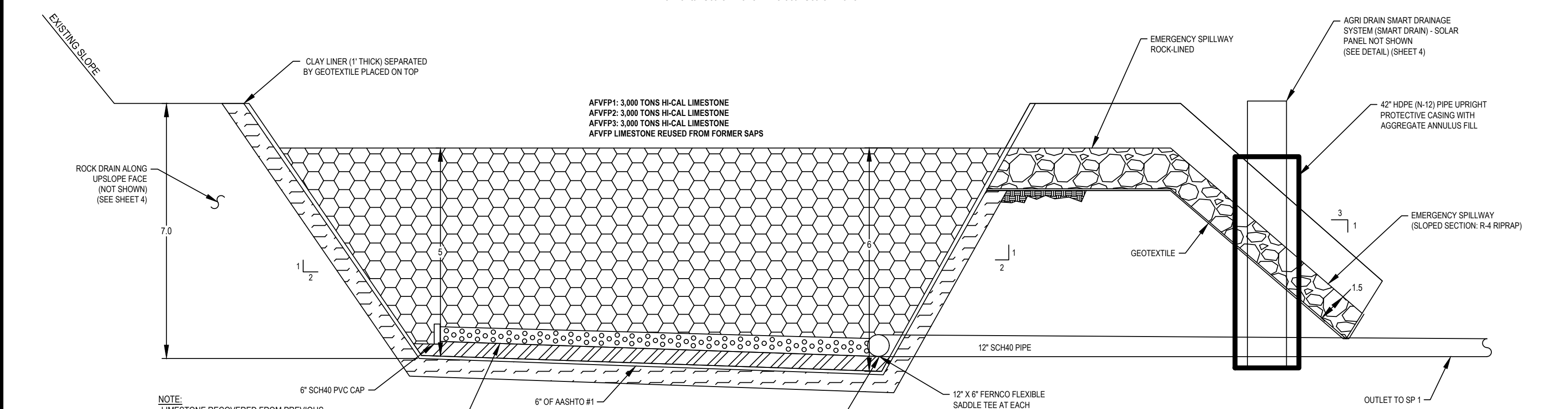
**SETTLING POND #3 WITH DIRECTIONAL BAFFLE CURTAINS (TYP.)**  
Horizontal Scale: None Vertical Scale: None



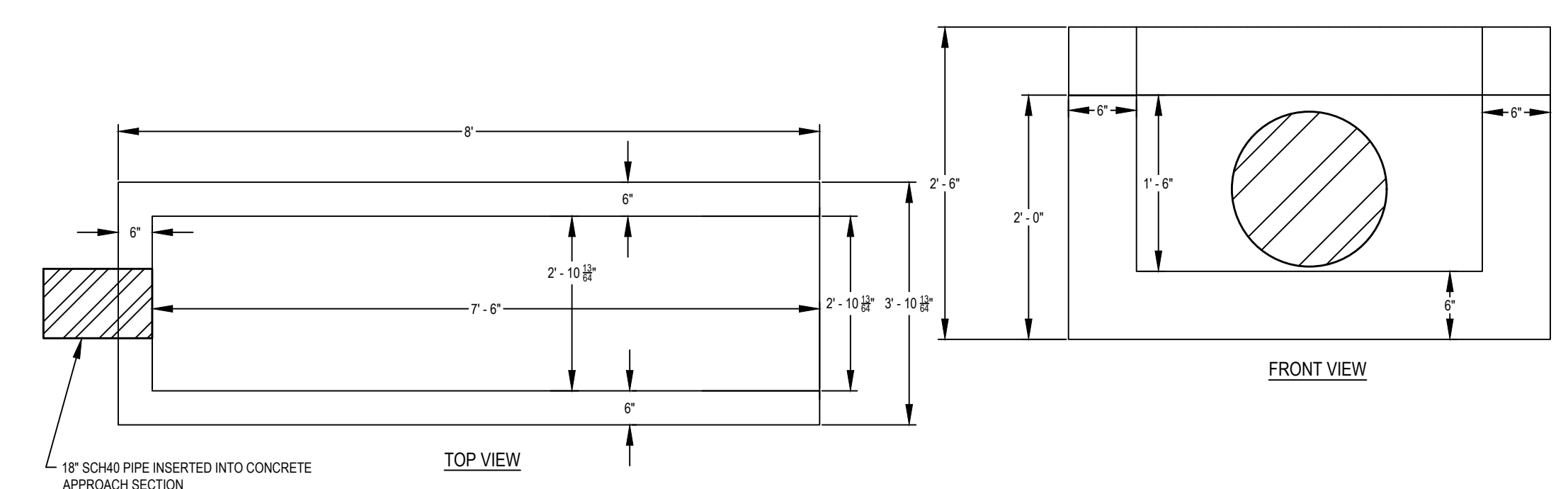
**SETTLING POND #3 & OUTLET STRUCTURE**  
Horizontal Scale: None Vertical Scale: None



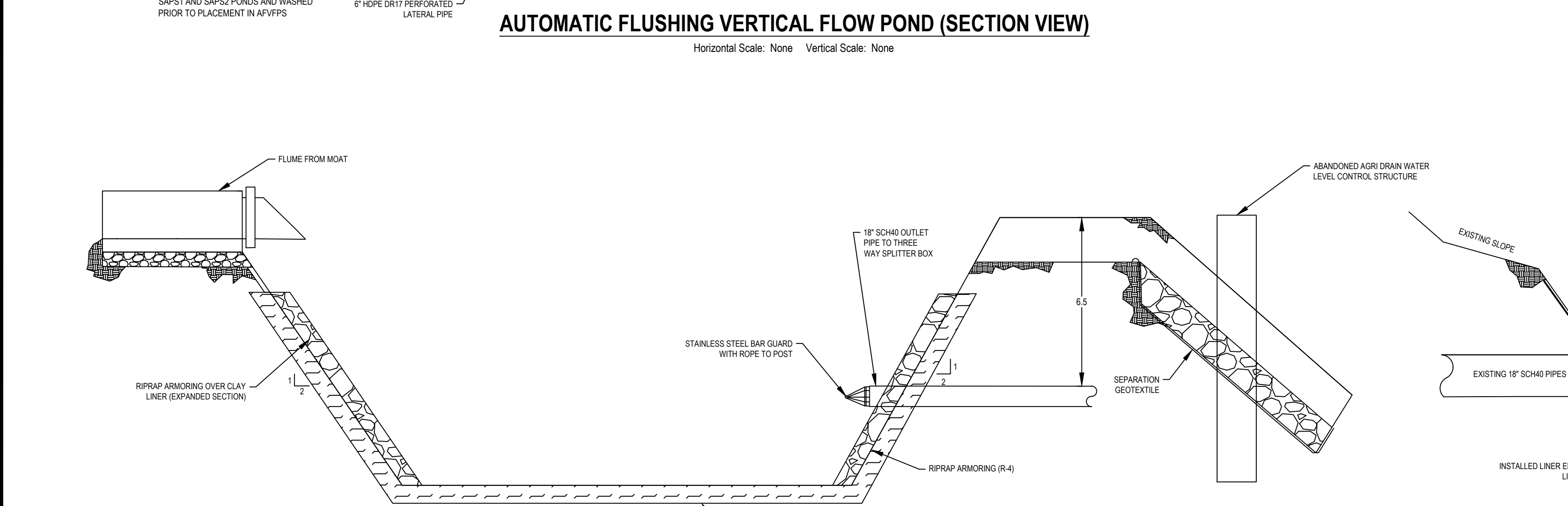
**AFVFP UNDERDRAIN PIPING SCHEMATIC (TYP.)**  
Horizontal Scale: None Vertical Scale: None



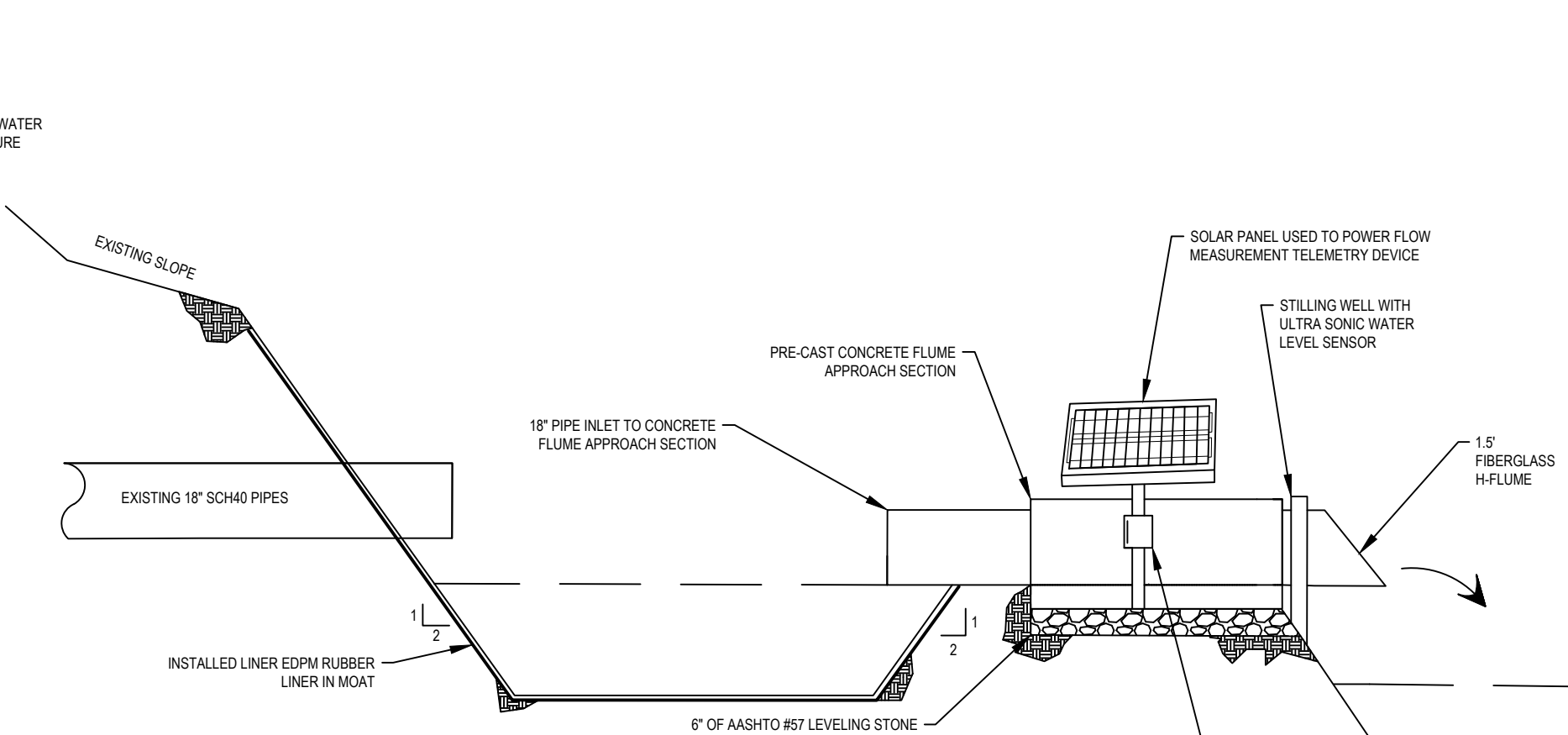
**AUTOMATIC FLUSHING VERTICAL FLOW POND (SECTION VIEW)**  
Horizontal Scale: None Vertical Scale: None



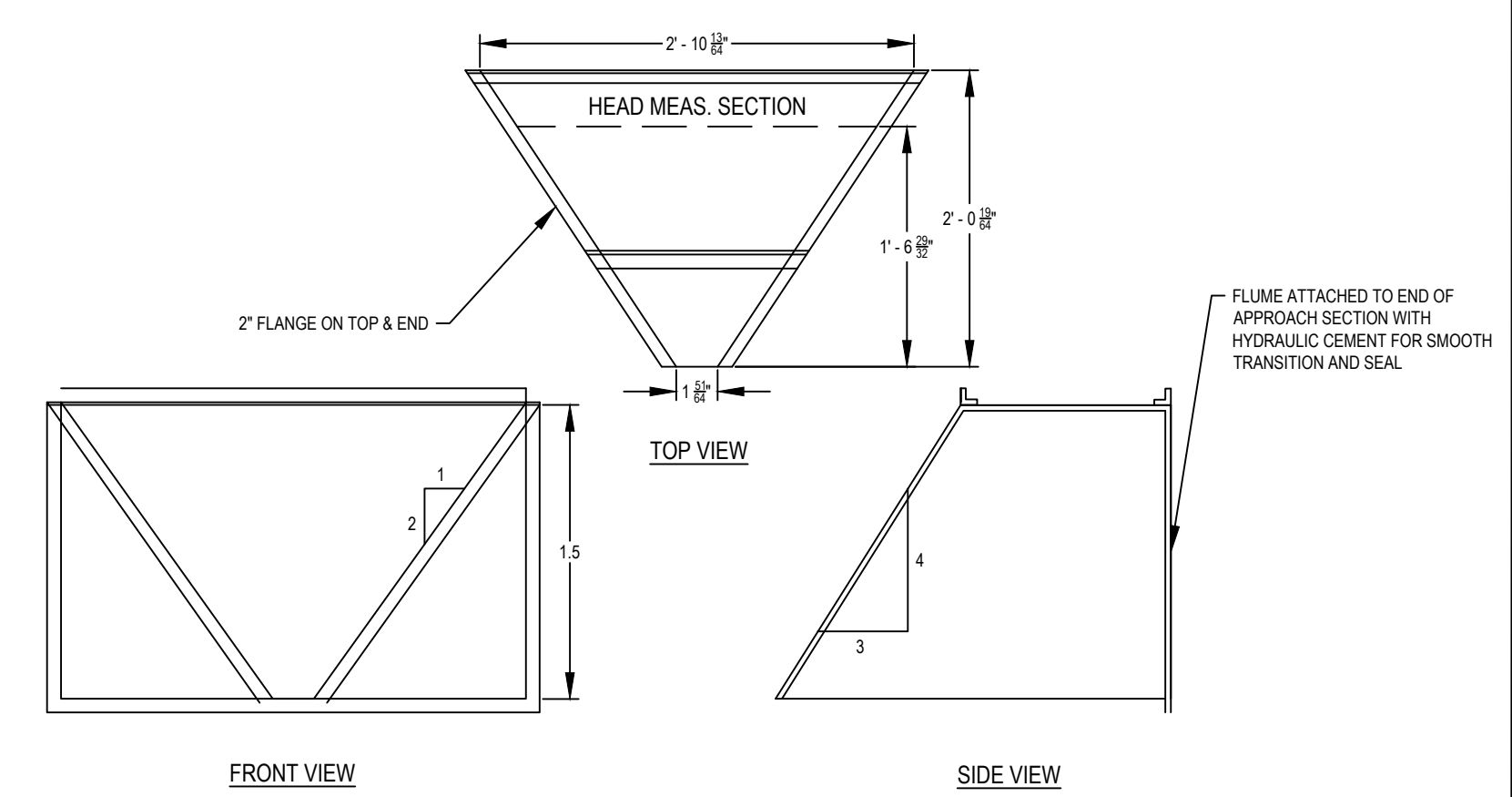
**PRE-CAST CONCRETE FLUME APPROACH SECTION**  
Horizontal Scale: None Vertical Scale: None



**HOLDING POND (HP)**  
Horizontal Scale: None Vertical Scale: None



**MOAT AND FLUME OUTLET**  
Horizontal Scale: None Vertical Scale: None

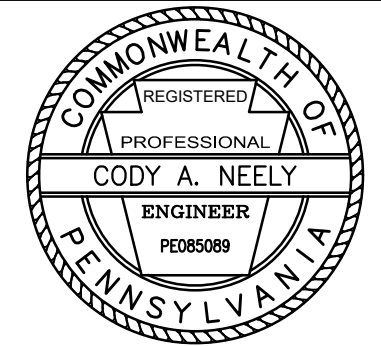


**1.5 FT H FLUME (TYP.)**  
Horizontal Scale: None Vertical Scale: None

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www.biomost.com

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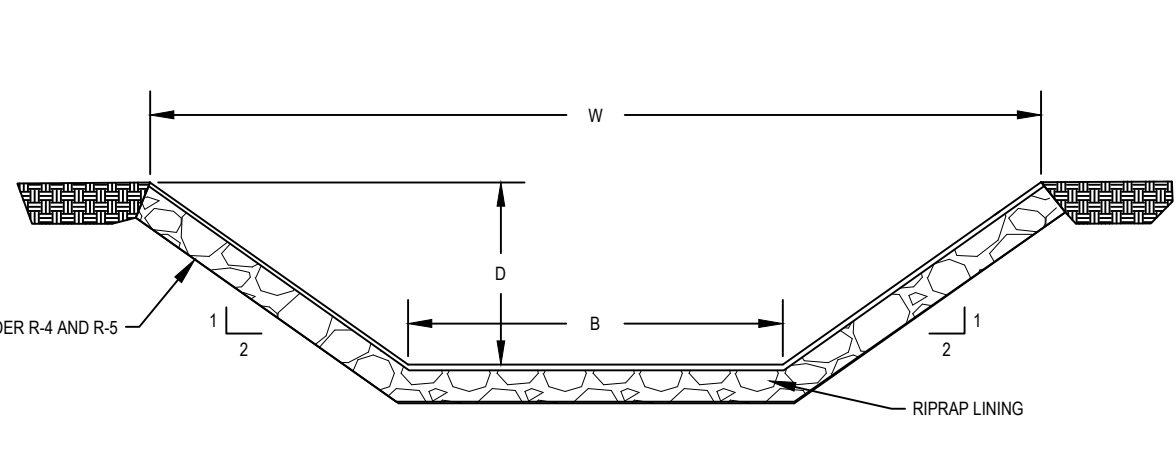
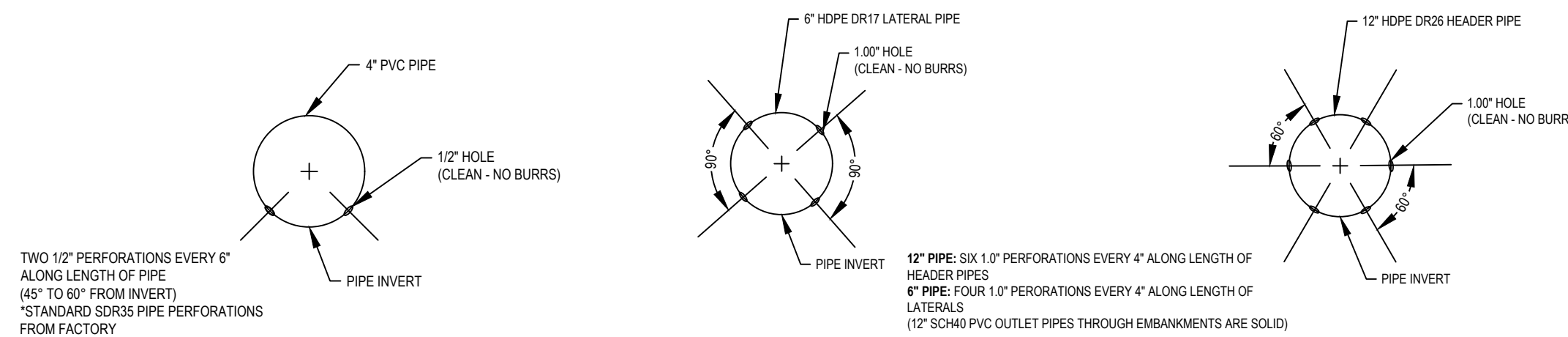
NO.	BY	DATE	DESCRIPTION
REVISIONS			



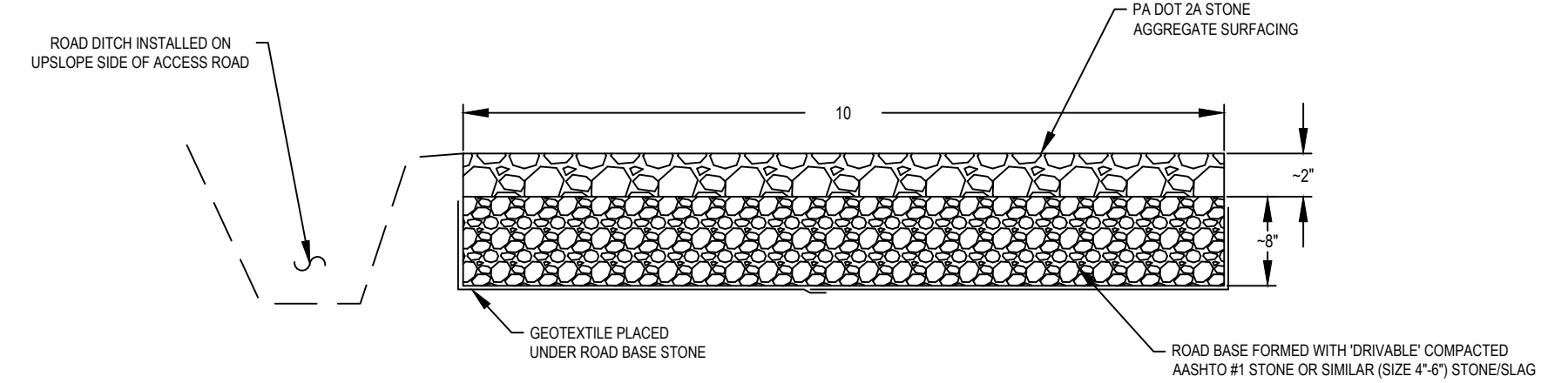
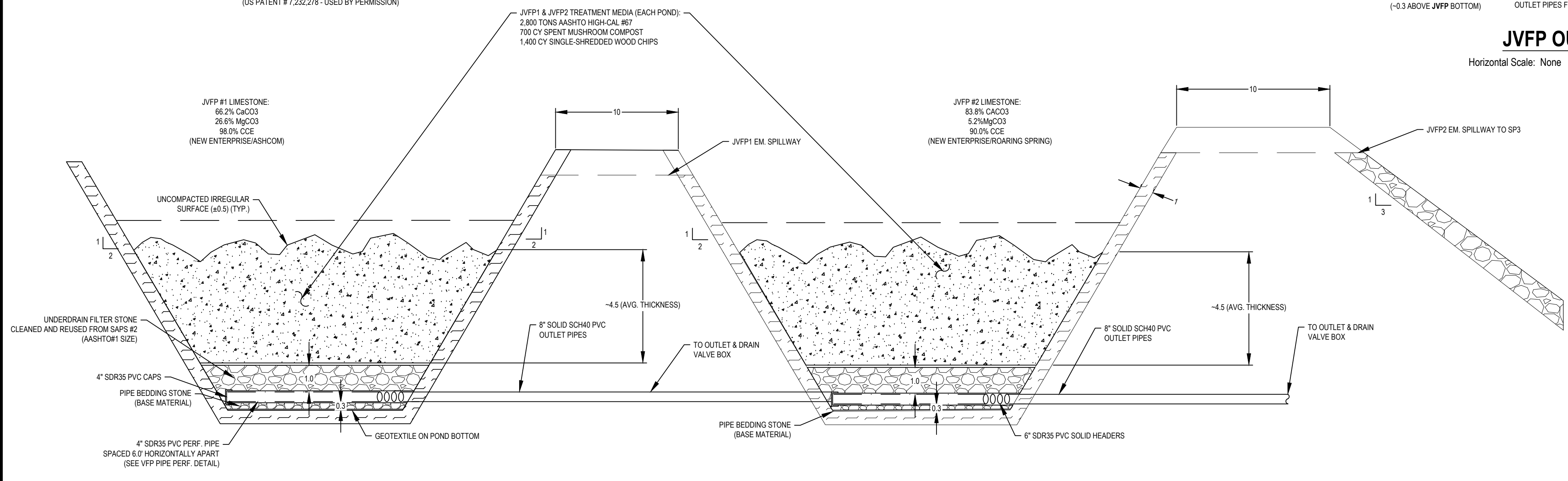
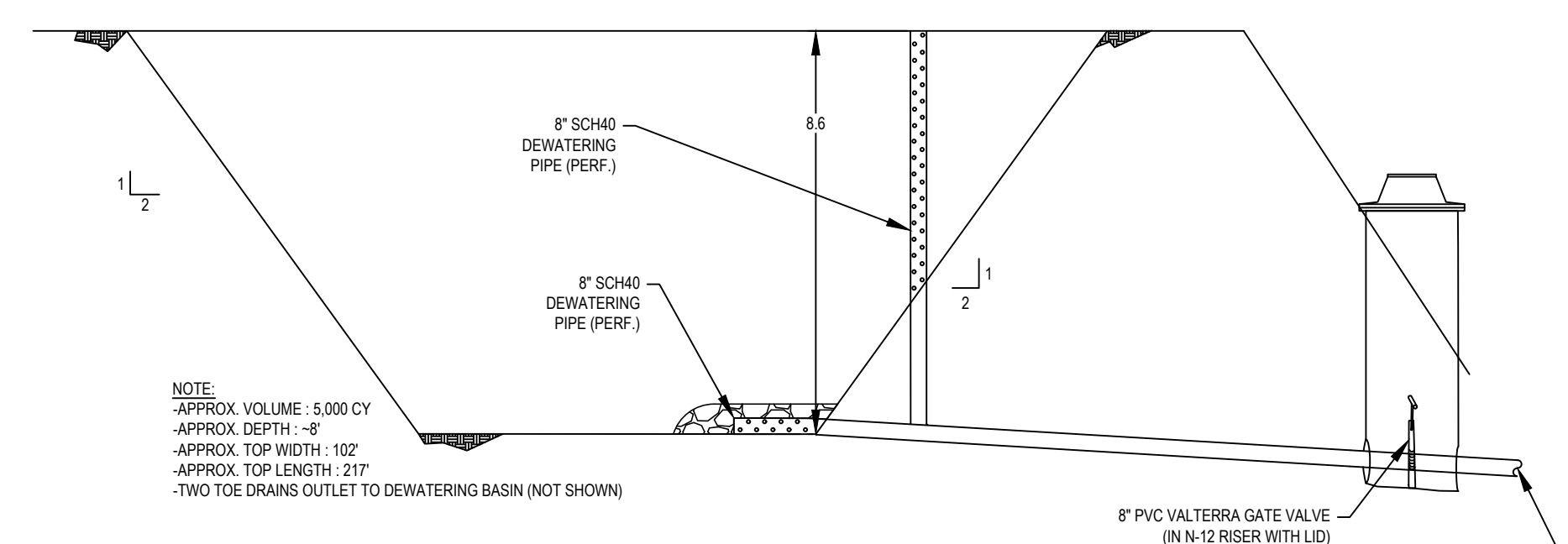
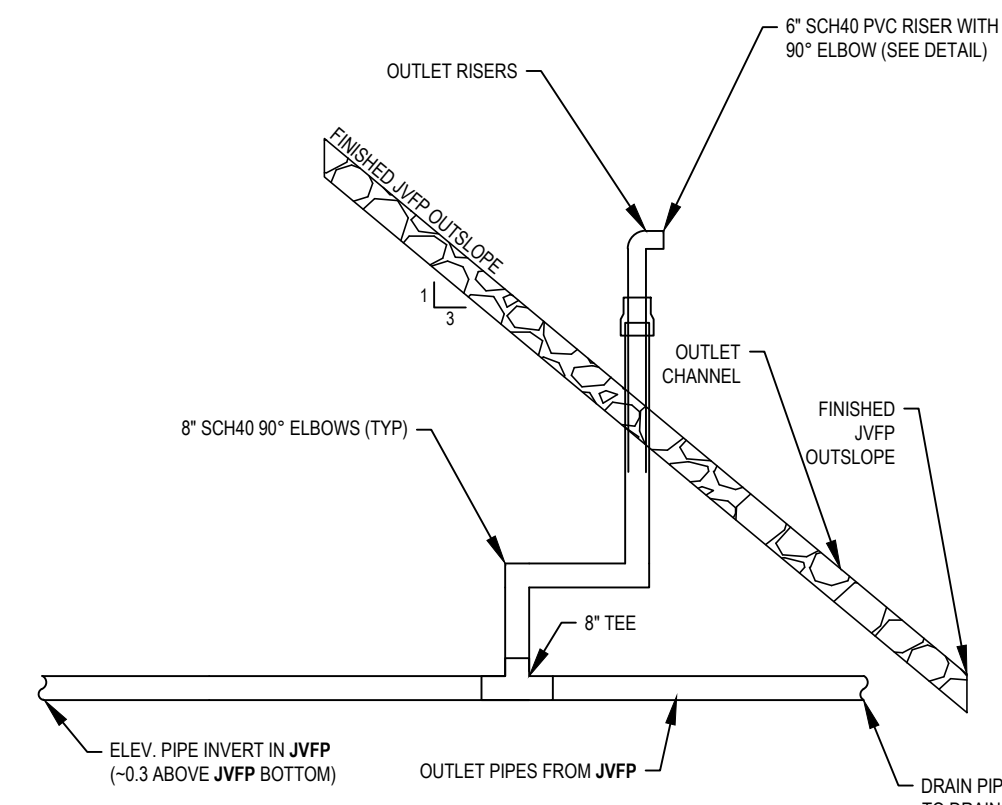
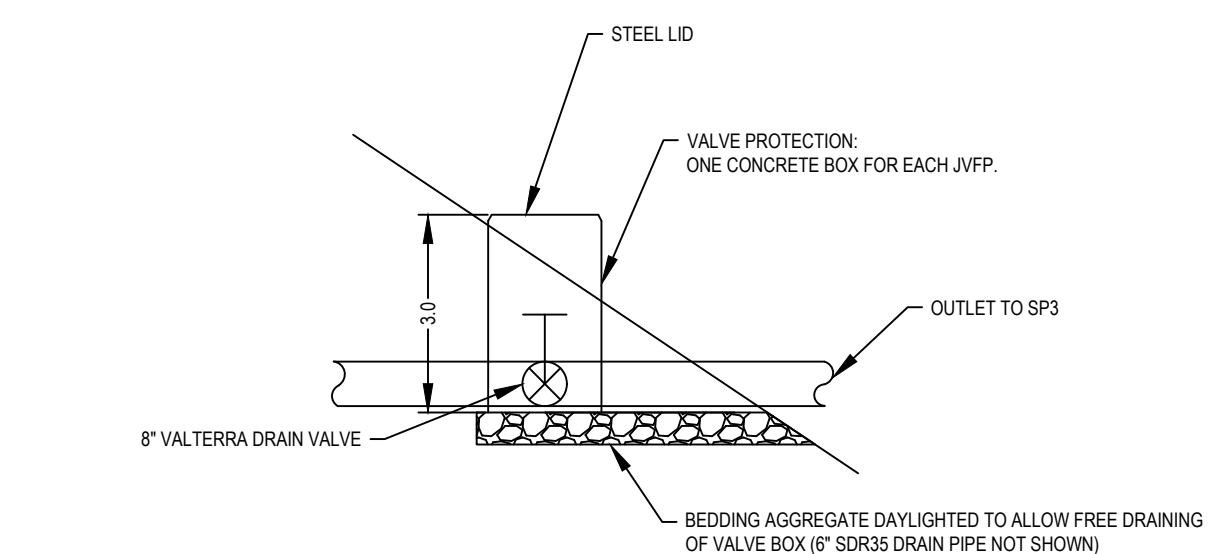
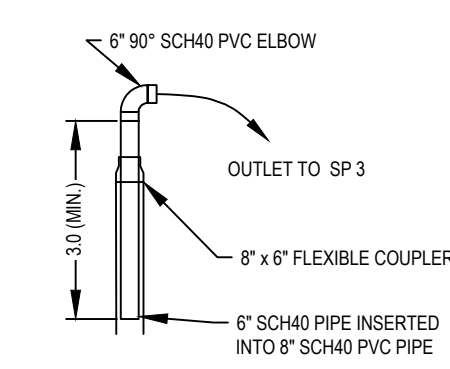
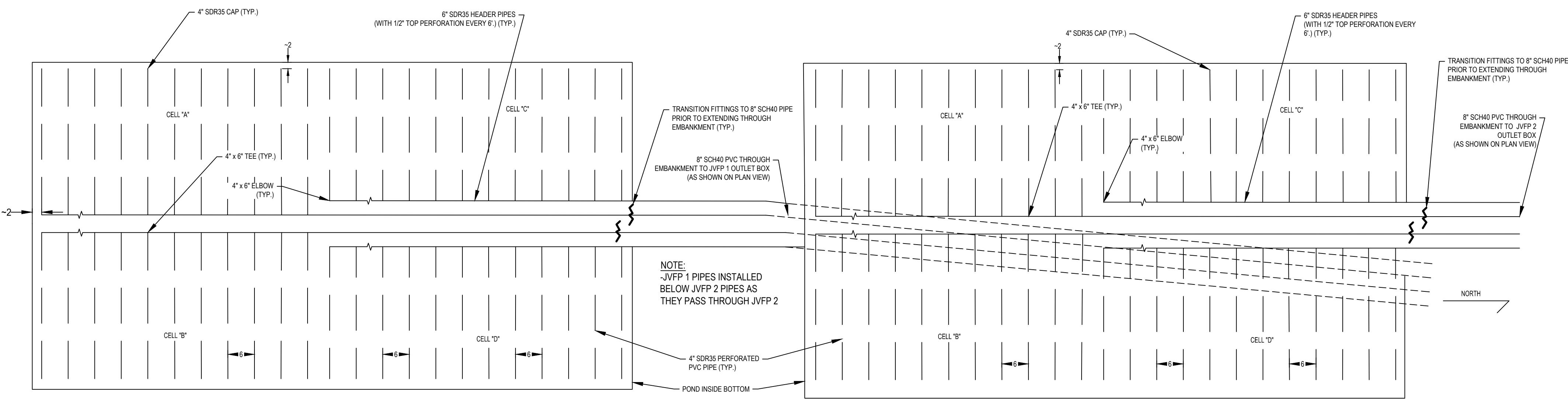
SIGNATURE / DATE  
SUBMITTED BY:  
**CODY A. NEELY, P.E.**  
PROJECT DESIGNER - BioMost, Inc.

DATE: 09/30/2022  
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LONGITUDE: -78.912004  
SCALE: NO SCALE  
DRAWN BY: LVH  
CHECKED BY: TPD  
ACAD FILE NAME: 3000AB.dwg  
ALL CONDITIONS SHALL BE CHECKED AND VERIFIED AT THE SITE AS APPLICABLE PRIOR TO PERFORMING ANY MAINTENANCE WORK

AS BUILT DRAWING  
OVEN RUN B  
PASSIVE TREATMENT SYSTEM  
REDESIGN and CONSTRUCTION  
Shade Township  
Somerset County, PA  
DRAWING NUMBER:  
**2 of 4**

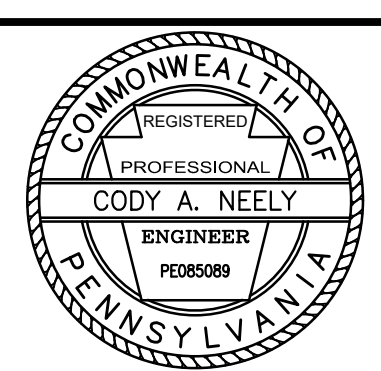


CHANNEL/DITCH/SPILLWAY	SEGMENT	BEGIN ELEV. (INVERT)	END ELEV. (INVERT)	LENGTH (FT)	SLOPE (FT/FT)	D' (FT)	B (FT)	W'' (FT)	PERM. LINING
HOLDING POND EM. SPILLWAY	FLAT SEGMENT THROUGH EMBANKMENT	1944.7	1992.4	175	0.30	1.9	17.5	30.3	ROCK
DEWATERING BASIN EM. SPILLWAY	FLAT SEGMENT THROUGH EMBANKMENT	1941.5	1942.0	32	0.02	1.4	12.2	18.1	GRASS
AFVFP1 EM. SPILLWAY	FLAT SEGMENT THROUGH EMBANKMENT	1941.8	1941.8	17	0.00	1.2	9.1	15.0	GRASS
AFVFP2 EM. SPILLWAY	FLAT SEGMENT THROUGH EMBANKMENT	1942.1	1942.0	19	0.01	1.2	8.5	16.9	GRASS
AFVFP3 EM. SPILLWAY	FLAT SEGMENT THROUGH EMBANKMENT	1941.6	1921.2	73	0.28	1.6	16.2	24.6	ROCK
SP1 EM. SPILLWAY	FLAT SEGMENT THROUGH EMBANKMENT	1941.6	1908.0	60	0.05	2.0	20.5	27.8	ROCK
SP2 EM. SPILLWAY	FLAT SEGMENT THROUGH EMBANKMENT	1909.0	1904.1	27	0.18	1.8	9.8	19.2	ROCK
JVFP1 EM. SPILLWAY	FLAT SEGMENT THROUGH EMBANKMENT	1906.0	1905.6	17	0.02	1.8	20.5	27.8	ROCK
JVFP2 EM. SPILLWAY	FLAT SEGMENT THROUGH EMBANKMENT	1905.9	1904.9	15	0.07	1.88	9.8	19.2	ROCK
SP3 EM. SPILLWAY	FLAT SEGMENT THROUGH EMBANKMENT	1887.7	1866.7	76	0.28	1.04	10.0	21.3	ROCK



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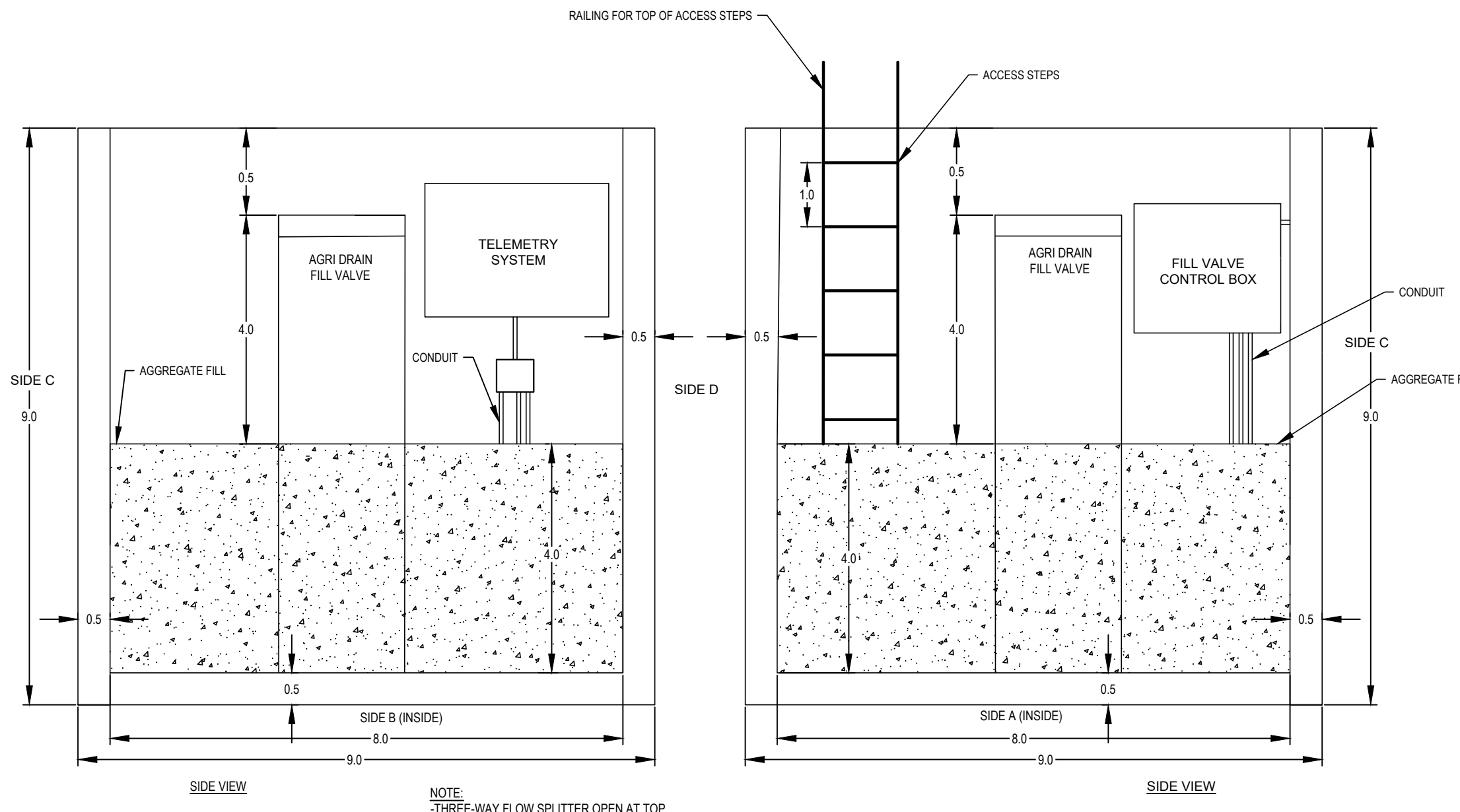
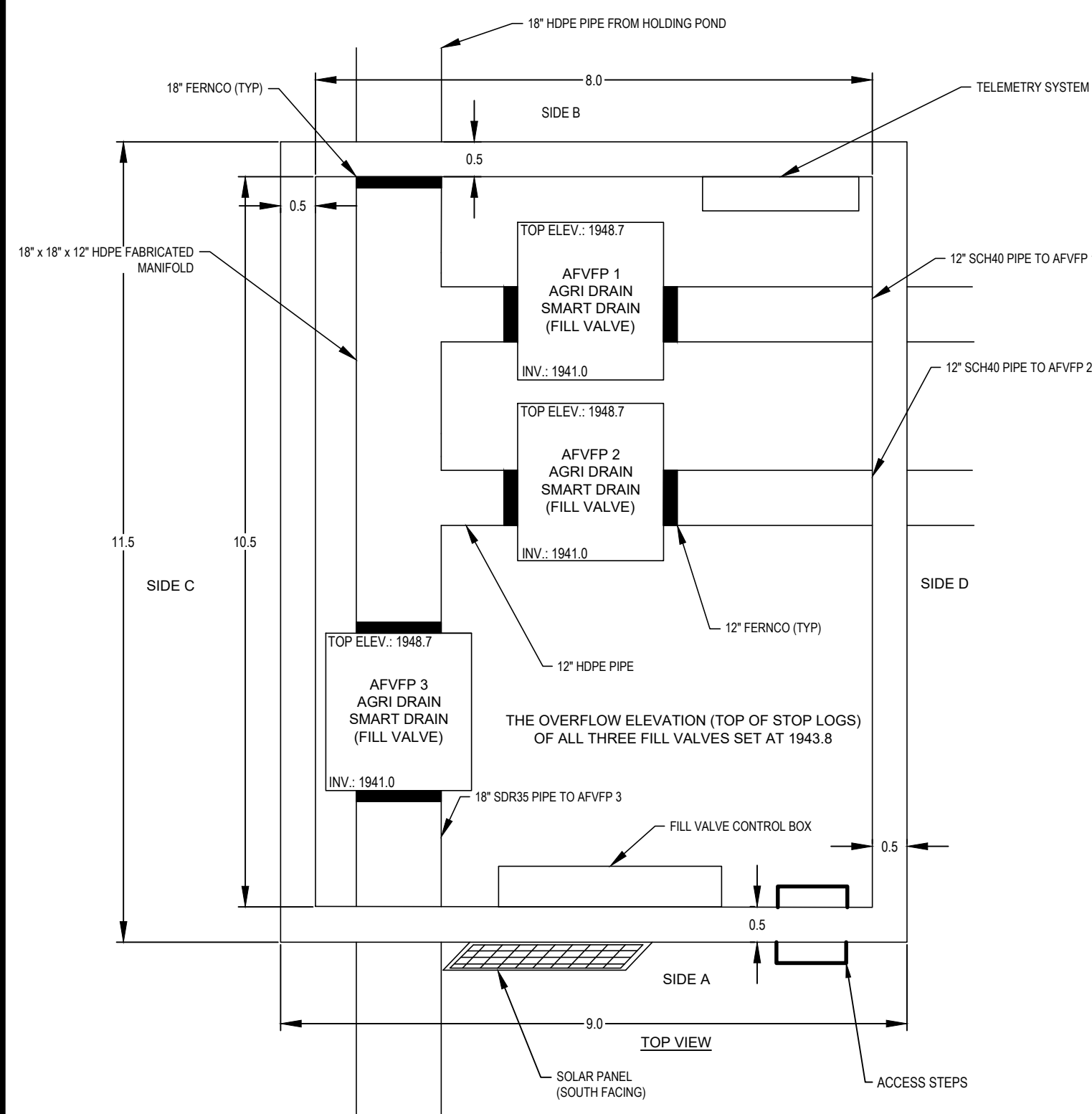
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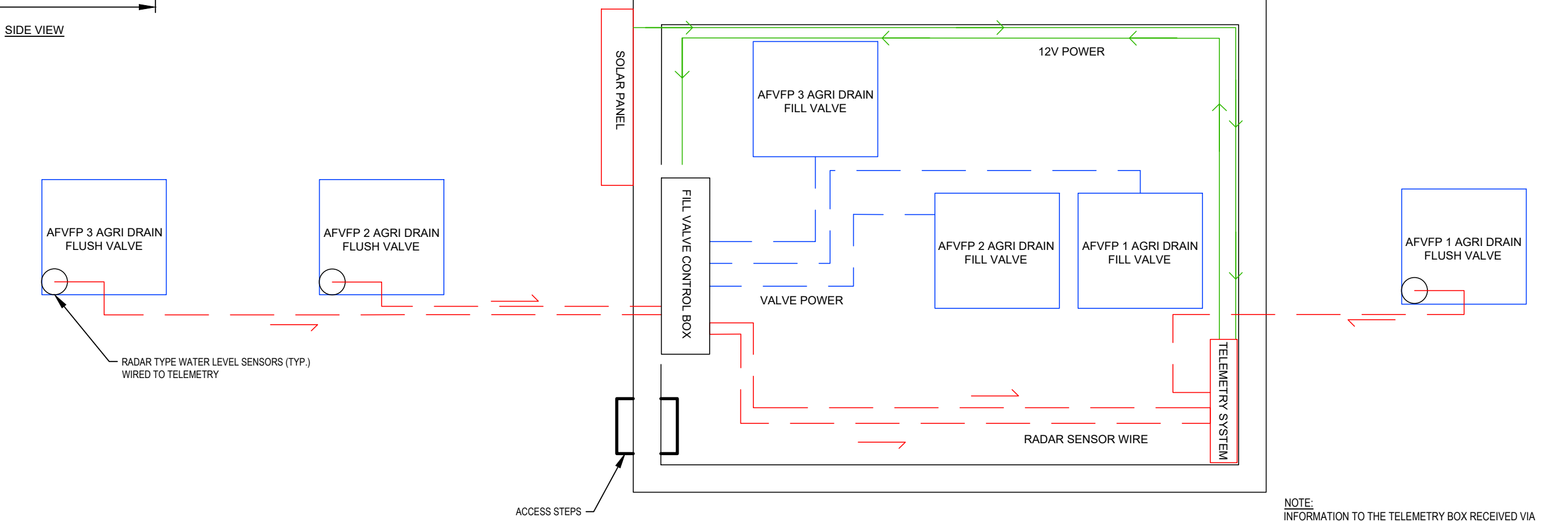
AS BUILT DRAWING  
OVEN RUN B  
PASSIVE TREATMENT SYSTEM  
REDESIGN and CONSTRUCTION  
Shade Township  
SOMERSET COUNTY, PA  
DRAWING NUMBER: 3 of 4

ALL CONDITIONS SHALL BE CHECKED AND VERIFIED AT THE SITE AS APPLICABLE PRIOR TO PERFORMING ANY MAINTENANCE WORK

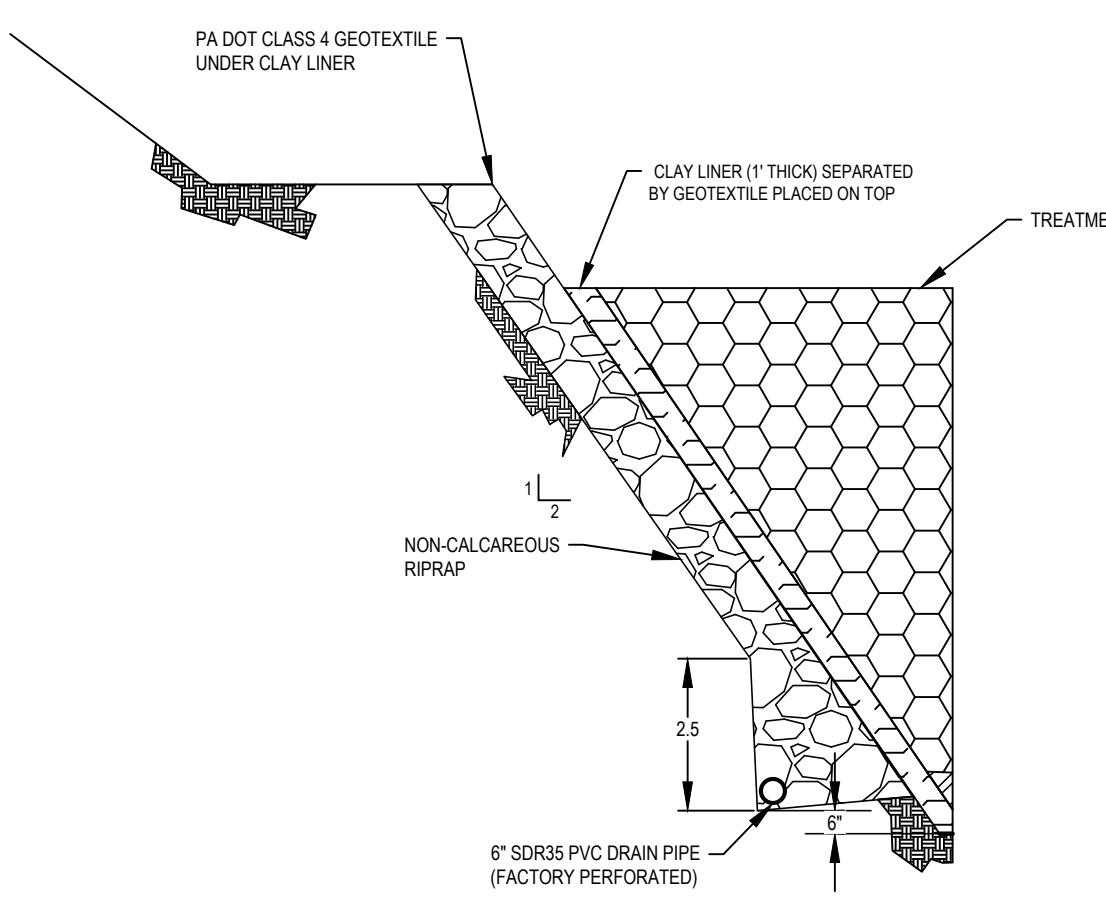


**THREE-WAY FLOW SPLITTER**  
Horizontal Scale: None Vertical Scale: None

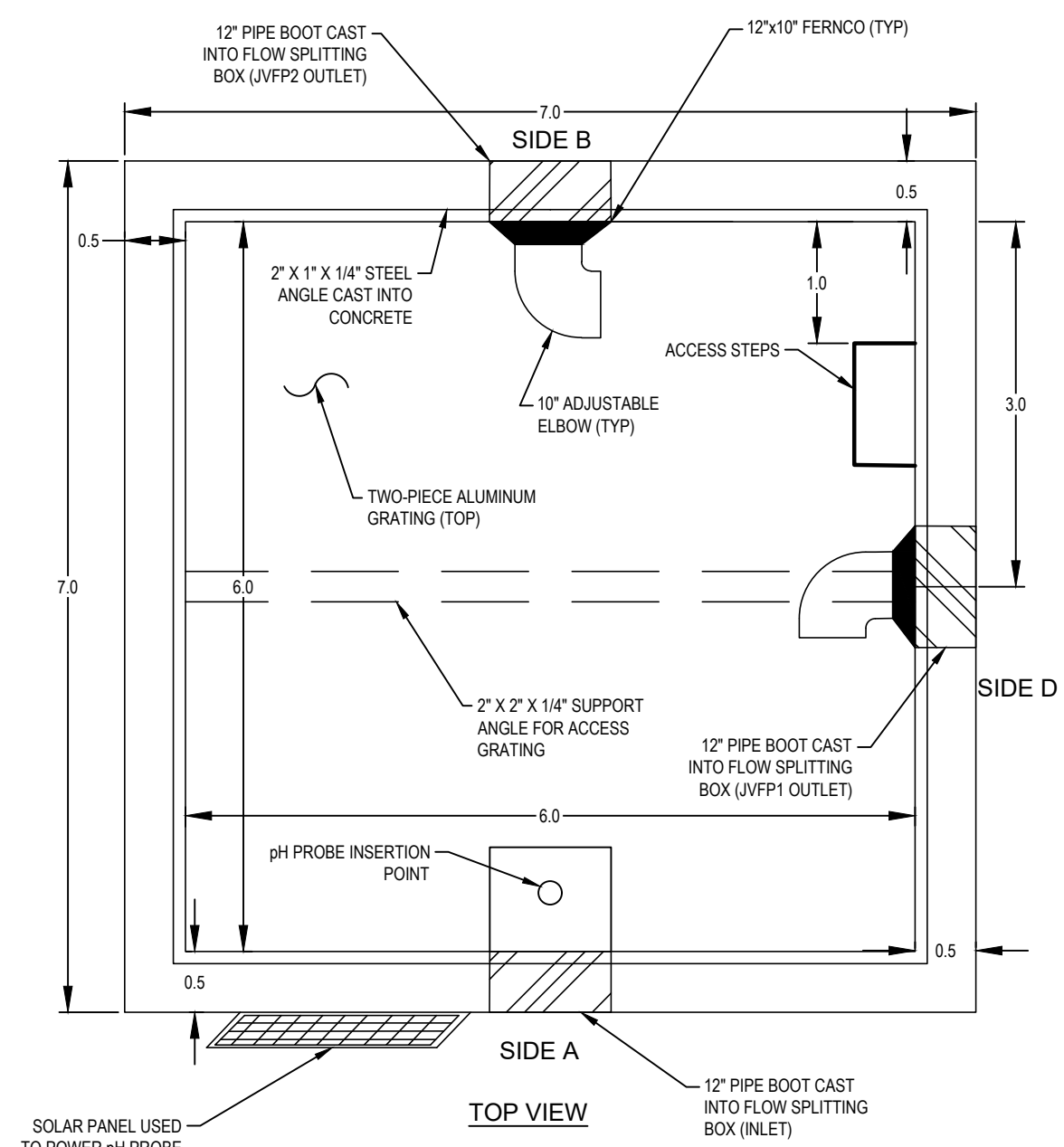
APPROX. ELEVATIONS					
COMPONENT	NAME	TOP	INVERT	STOP LOGS	STONE
	AGRI DRAIN 1 FLUSH	1944.7	TBD	TBD	1941.2 (FROM AFVFP1)
	AGRI DRAIN 2 FLUSH	1945.3	TBD	TBD	1940.5 (FROM AFVFP2)
	AGRI DRAIN 3 FLUSH	1944.8	TBD	TBD	1940.7 (FROM AFVFP3)
	THREE-WAY SPLITTER BOX	1950.1	1940.6	N/A	N/A
	AGRI DRAINS IN SPLITTER BOX	1948.7	1941.0	1943.7	N/A
	TWO-WAY SPLITTER BOX	1907.9	1905.1 (INV. OF INLET PIPE)	N/A	N/A
	JVFP1 VALVE BOX	1897.8	1894.8 (INV. OF PIPES)	N/A	N/A
	JVFP2 VALVE BOX	1901.0	1897.9 (INV. OF PIPES)	N/A	N/A



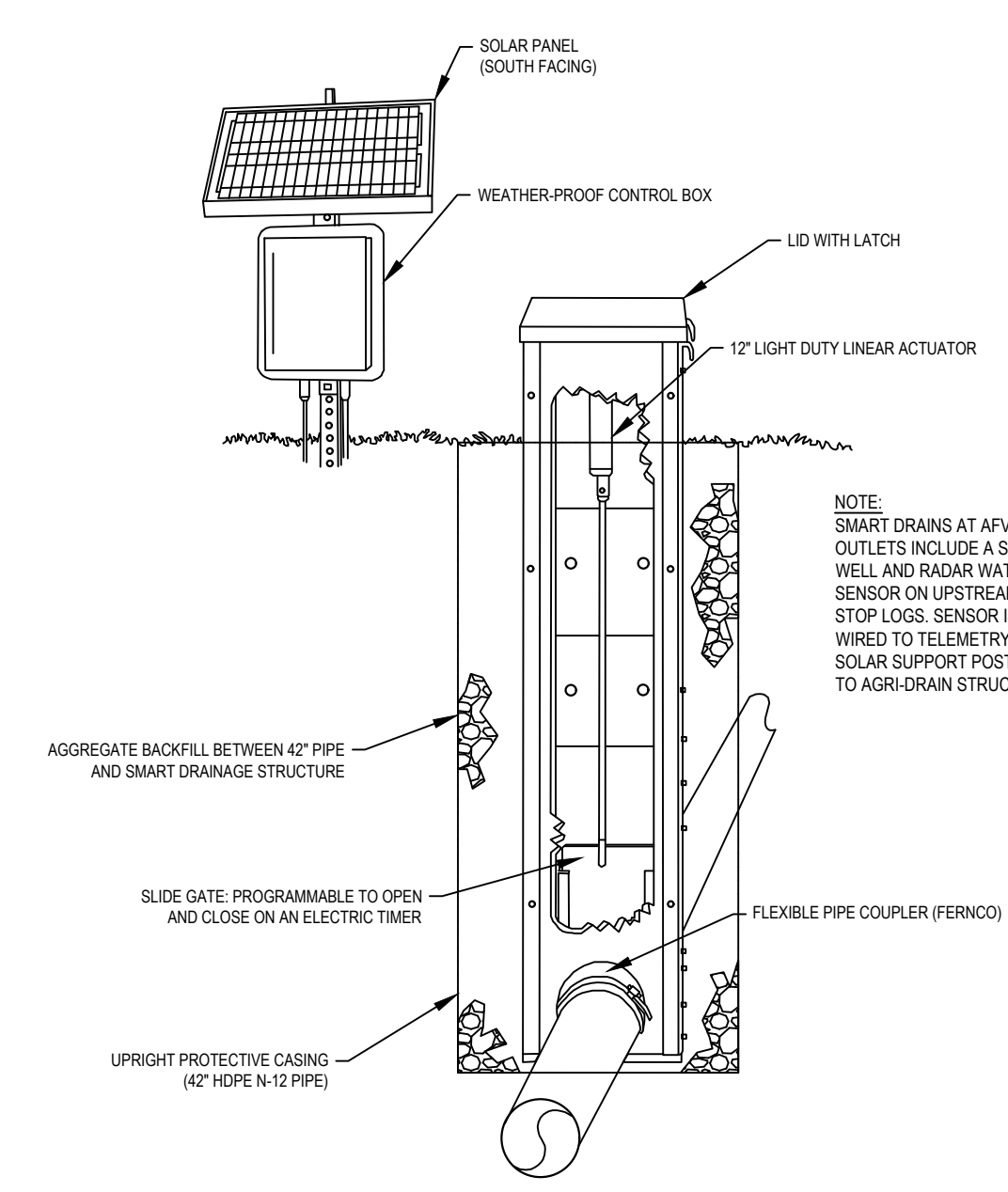
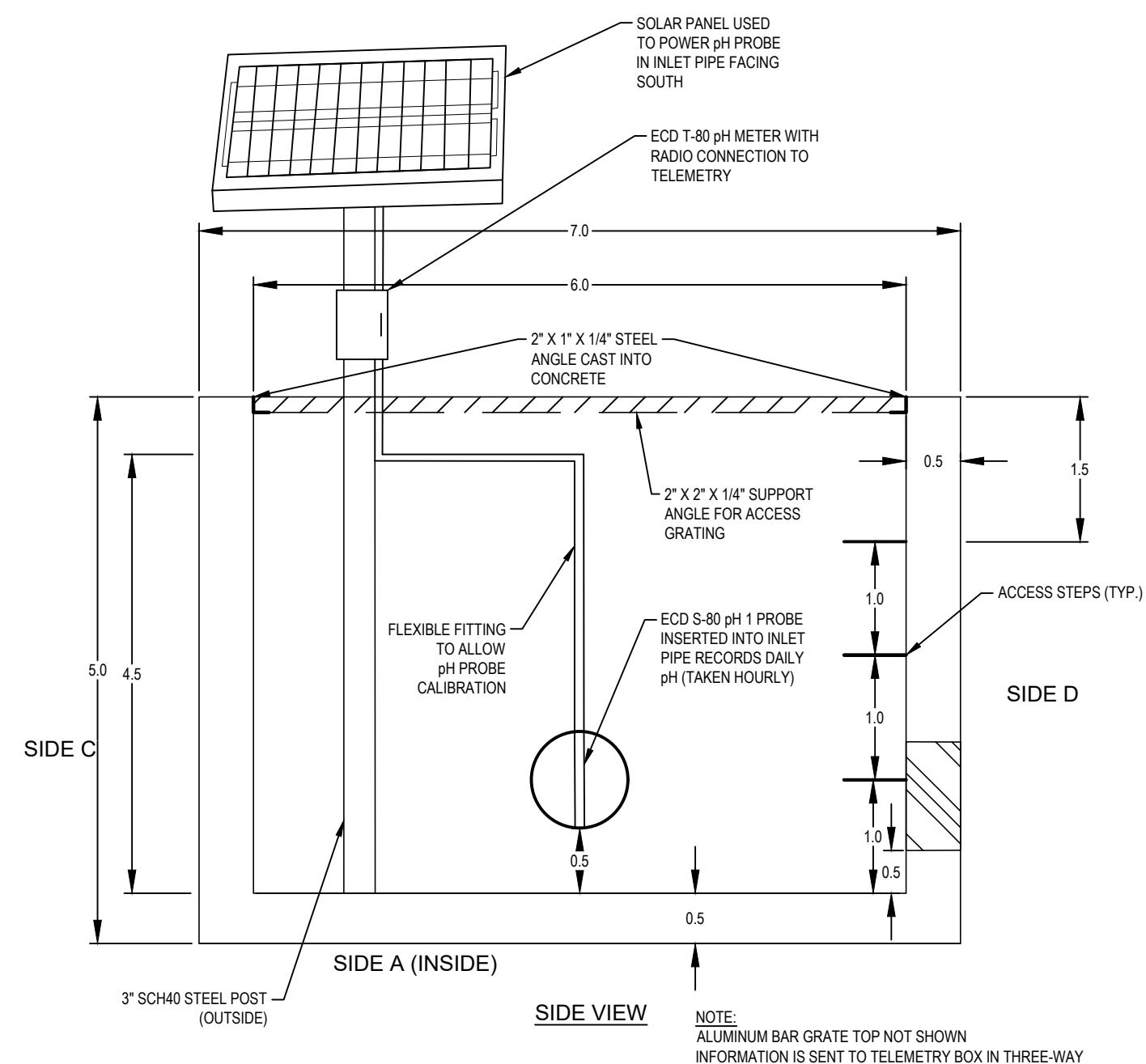
**THREE-WAY SPLITTER WIRING DIAGRAM**  
Horizontal Scale: None Vertical Scale: None



**ROCK DRAIN (TYP.)**  
Horizontal Scale: None Vertical Scale: None



**TWO-WAY FLOW SPLITTER**  
Horizontal Scale: None Vertical Scale: None



**AGRI DRAIN SMART DRAINAGE SYSTEM® (TYP.)**  
Horizontal Scale: None Vertical Scale: None

NO.	BY	DATE	DESCRIPTION
REVISIONS			