ATTACHMENT III – DESIGN DRAWINGS

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DOMINION ENERGY

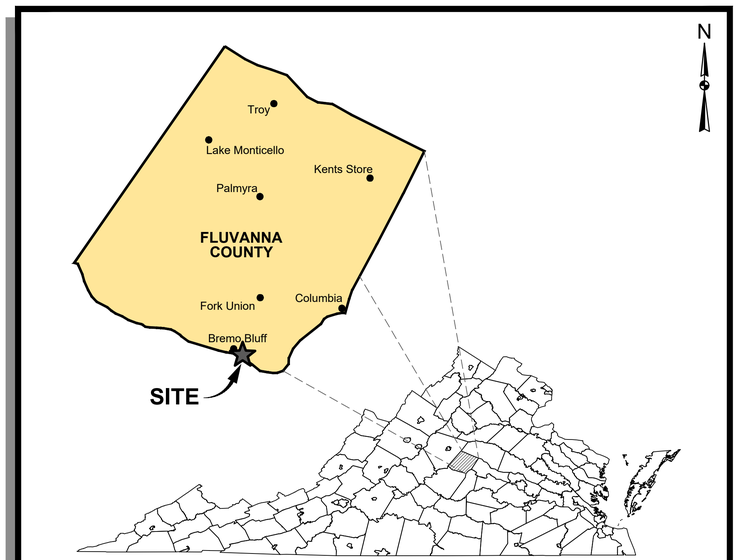
BREMO BLUFF

FFCP MANAGEMENT FACILITY

SOLID WASTE PERMIT No. 627

FLUVANNA COUNTY, VIRGINIA

NOVEMBER 2024



SITE ADDRESS:
1038 BREMO ROAD
BREMO BLUFF, VA 23022

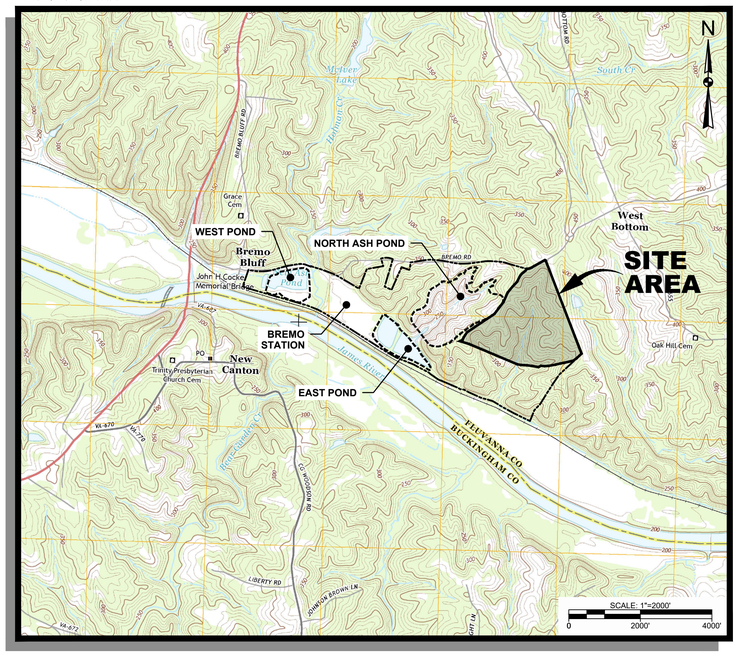
NOT TO SCALE

LOCATION MAP

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DRAWING No.	SHEET No.	DRAWING TITLE	REV
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2	2	OVERALL SITE MAP	2
3	3	EXISTING SITE CONDITIONS	2
4	4	SITE BOUNDARIES	2
5	5	ENGINEERING MODIFICATION PLAN	2
6	6	UNDERDRAIN PLAN	2
7	7	UNDERDRAIN PROFILE AND DETAILS	2
8	8	BASE GRADE PLAN	2
9	9	LEACHATE COLLECTION PIPING PLAN	2
10	10	TOP OF LEACHATE COLLECTION LAYER PLAN	2
11	11	PHASING PLAN	2
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13	13	CROSS SECTION LOCATION PLAN	2
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15	15	CROSS SECTIONS (2 of 2)	2
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26	26	FINAL COVER DETAILS (2 of 2)	2
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MAP SOURCE
BASE MAP CONSISTS OF 7.5-MINUTE USGS TOPOGRAPHIC QUADRANGLE NAMED ARVONIA, VIRGINIA, DATED 2013.



VICINITY MAP

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ISSUED FOR PERMIT
NOT FOR CONSTRUCTION

REV	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
0	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23
1	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
2	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

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BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

TITLE SHEET

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING 1
SHEET 1 OF 42

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LEGEND

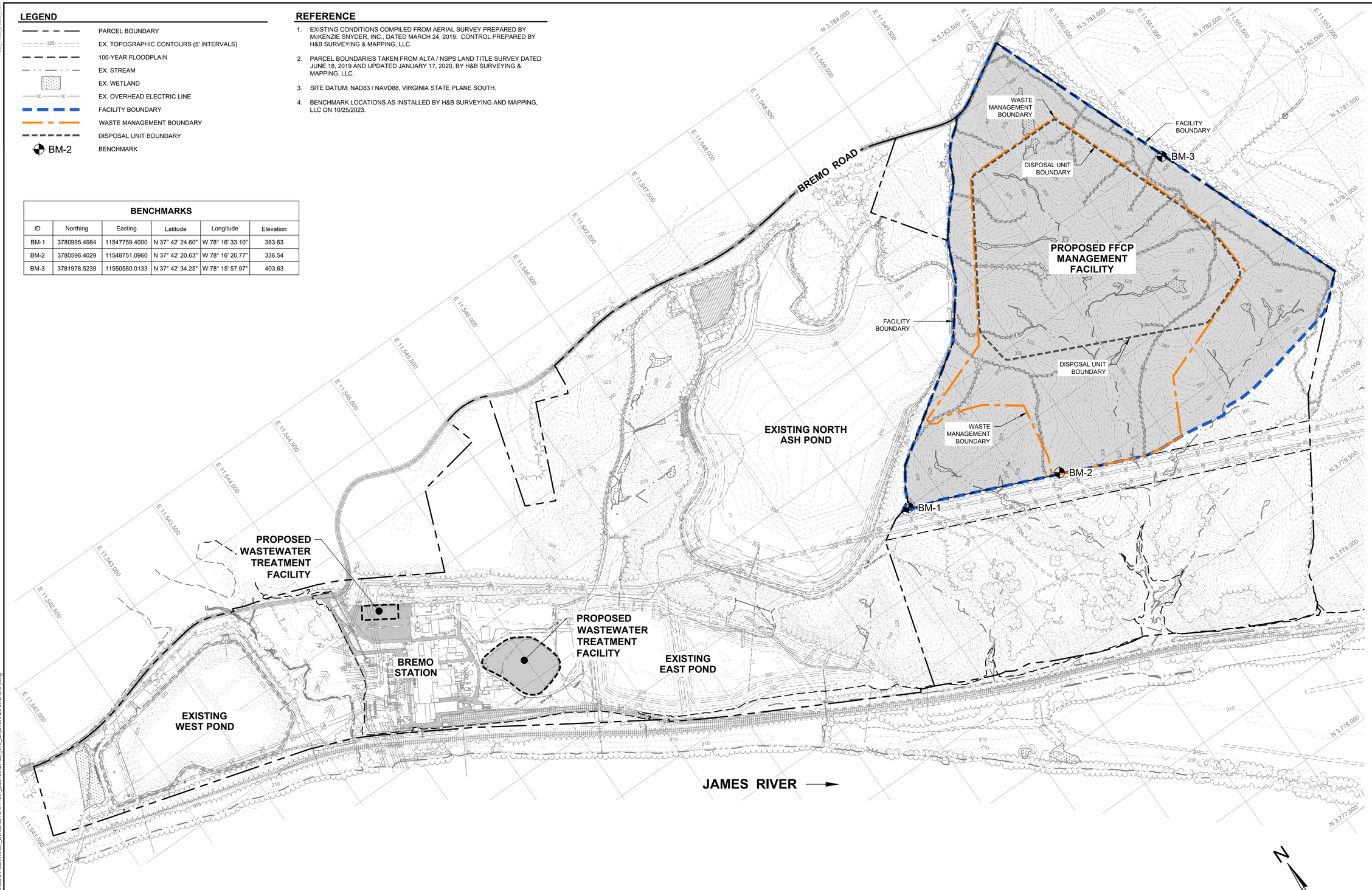
- PARCEL BOUNDARY
- EX. TOPOGRAPHIC CONTOURS (5' INTERVALS)
- 100-YEAR FLOODPLAIN
- EX. STREAM
- EX. WETLAND
- EX. OVERHEAD ELECTRIC LINE
- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- DISPOSAL UNIT BOUNDARY
- BM-2 BENCHMARK

REFERENCE

1. EXISTING CONDITIONS COMPILED FROM AERIAL SURVEY PREPARED BY McKENZIE SNYDER, INC., DATED MARCH 24, 2019. CONTROL PREPARED BY H&B SURVEYING & MAPPING, LLC.
2. PARCEL BOUNDARIES TAKEN FROM ALTA / NSPS LAND TITLE SURVEY DATED JUNE 18, 2019 AND UPDATED JANUARY 17, 2020, BY H&B SURVEYING & MAPPING, LLC.
3. SITE DATUM: NAD83 / NAVD88, VIRGINIA STATE PLANE SOUTH.
4. BENCHMARK LOCATIONS AS INSTALLED BY H&B SURVEYING AND MAPPING, LLC ON 10/25/2023.

BENCHMARKS

ID	Northing	Easting	Latitude	Longitude	Elevation
BM-1	3780995.4984	11547759.4000	N 37° 42' 24.60"	W 78° 16' 33.10"	383.63
BM-2	3780596.4029	11548751.0960	N 37° 42' 20.63"	W 78° 16' 20.77"	336.54
BM-3	3781978.5239	11550580.0133	N 37° 42' 34.25"	W 78° 15' 57.97"	403.63



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	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

COMMONWEALTH OF VIRGINIA — JAMES R. DIPASCUSCO — Lic. NO. 052560 — PROFESSIONAL ENGINEER — 11/15/2024

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BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

OVERALL SITE MAP

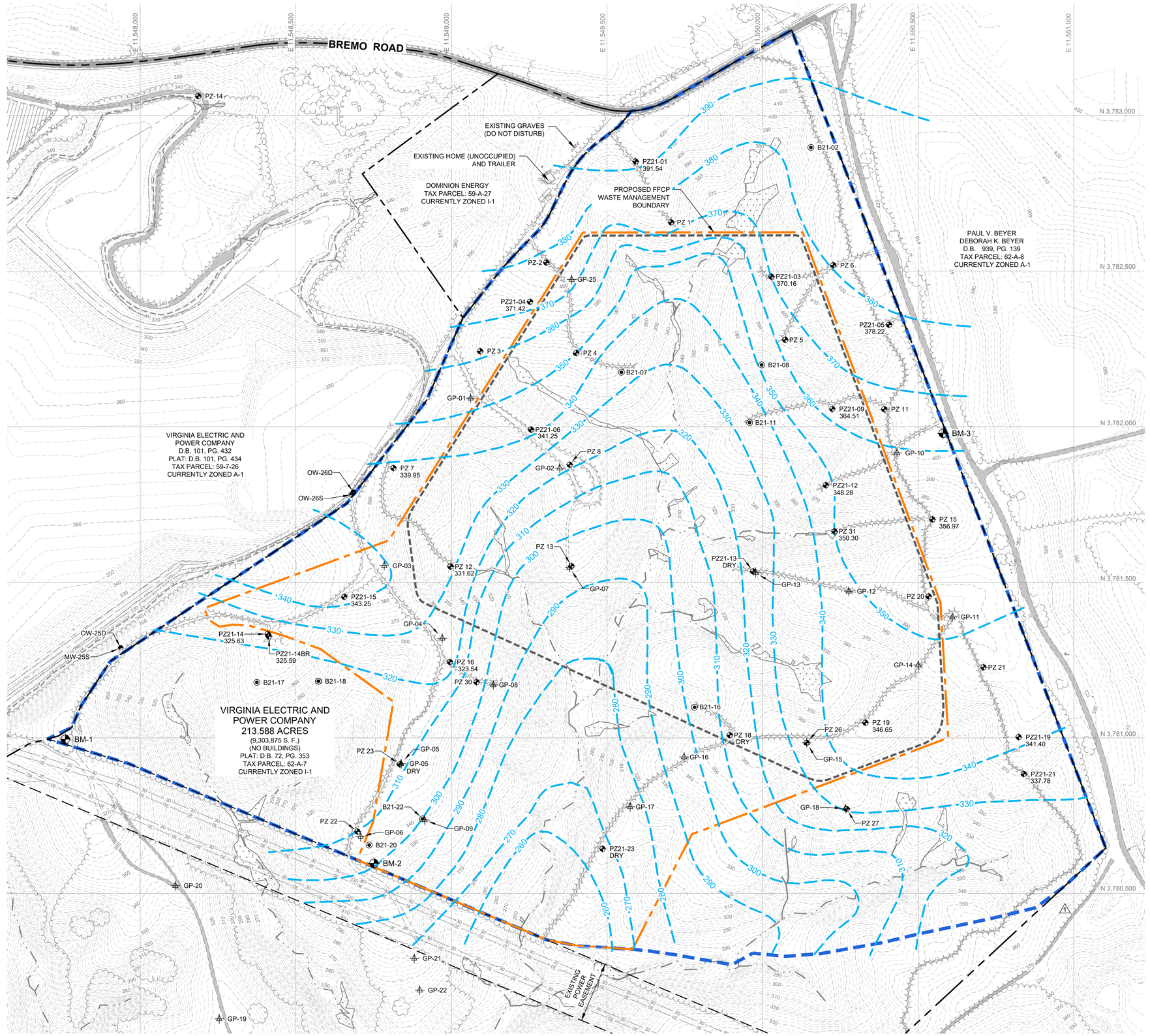
PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING 2
SHEET 2 OF 42

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LEGEND

- PARCEL BOUNDARY
- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- EX. STREAM
- EX. WETLAND
- EX. OVERHEAD ELECTRIC LINE
- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- DISPOSAL UNIT BOUNDARY
- BM-2 — BENCHMARK
- PZ21-21 — PIEZOMETER LOCATION AND IDENTIFICATION
- B21-16 — BORING LOCATION AND IDENTIFICATION
- MW-25S — MONITORING WELL LOCATION AND IDENTIFICATION
- OW-25D — OBSERVATION WELL LOCATION AND IDENTIFICATION
- GP-10 — GOLDER DPT (2019)
- 300 — INFERRED SEASONAL HIGH POTENTIOMETRIC SURFACE CONTOUR (10' INTERVALS) (SEE NOTE 6 BELOW)

REFERENCE

1. EXISTING CONDITIONS COMPILED FROM AERIAL SURVEY PREPARED BY McKENZIE SNYDER, INC., DATED MARCH 24, 2019. CONTROL PREPARED BY H&B SURVEYING & MAPPING, LLC.
2. PARCEL BOUNDARIES TAKEN FROM ALTA / NSPS LAND TITLE SURVEY DATED JUNE 18, 2019 AND UPDATED JANUARY 17, 2020, BY H&B SURVEYING & MAPPING, LLC.
3. SITE DATUM: NAD83 / NAVD88, VIRGINIA STATE PLANE SOUTH.
4. JURISDICTIONAL AREAS SHOWN BASED ON APPROVED JURISDICTIONAL DETERMINATION BY USACE ON JUNE 14, 2021 AND VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) ON MARCH 10, 2021.
5. PRIOR TO CONSTRUCTION, ALL AFFECTED PIEZOMETERS OR MONITORING WELLS LOCATED WITHIN THE PROPOSED WASTE MANAGEMENT BOUNDARY SHALL BE COMPLETELY REMOVED BY REMOVING THE CASING OR OVERDRILLING OF THE WELLBORE, FOLLOWED BY PRESSURE GROUTING METHODS TO THE GROUND SURFACE.
6. TO SUPPLEMENT THE RECORDED GROUNDWATER ELEVATIONS FOR THE FACILITY, WHICH ONLY DATE BACK TO 2020 AND MAY NOT BE REPRESENTATIVE OF PEAK SEASONAL HIGHS, A CORRECTION FACTOR WAS APPLIED TO PRODUCE A CONSERVATIVE ESTIMATION OF GROUNDWATER VALUES FOR THE FACILITY DESIGN. THE CORRECTION FACTOR, 4.66 FEET, WAS APPLIED TO THE FACILITY'S JANUARY 27, 2022, GROUNDWATER ELEVATIONS (SEE TABLE BELOW). THIS CORRECTION FACTOR IS BASED ON THE CHANGE IN GROUNDWATER ELEVATION OF THE ADJACENT NORTH ASH POND (NAP) PZ-14 FROM ITS HIGHEST RECORDED ELEVATION ON MAY 2, 2019 TO ITS JANUARY 27, 2022, READING. THE MAY 2, 2019, READINGS FROM NAP PZ-14 OCCURRED IN A YEAR WHICH RECORDED SIGNIFICANTLY HIGHER THAN AVERAGE RAINFALL (74 INCHES). IT IS UNDERSTOOD THAT NAP PZ-14 IS REPRESENTATIVE OF THE GEOLOGY AND GROUNDWATER FLUCTUATION TRENDS OF THE PIEZOMETERS IN THE FACILITY VICINITY.

REFERENCE GROUNDWATER ELEVATIONS

PIEZOMETER ID	JANUARY 27, 2022 READING	INFERRED SEASONAL HIGH
PZ-7	335.29	339.95
PZ-12	326.96	331.62
PZ-15	352.31	356.97
PZ-16	318.88	323.54
PZ-18	DRY	DRY
PZ-19	341.99	346.65
PZ-23	Dry	Dry
PZ-31	345.64	350.30
PZ21-01	386.88	391.54
PZ21-03	365.50	370.16
PZ21-04	366.76	371.42
PZ21-05	373.56	378.22
PZ21-06	336.59	341.25
PZ21-09	359.85	364.51
PZ21-12	343.62	348.28
PZ21-13	DRY	DRY
PZ21-14	320.97	325.63
PZ21-14BR	320.93	325.59
PZ21-15	338.59	343.25
PZ21-19	336.74	341.40
PZ21-21	333.12	337.78
PZ21-23	DRY	DRY

N

SCALE: 1"=150'
0 150' 300'

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
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	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

COMMONWEALTH OF VIRGINIA — JAMES R. DIPASCUSCO — Lic. NO. 025260 — PROFESSIONAL ENGINEER — 11/15/2024

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SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

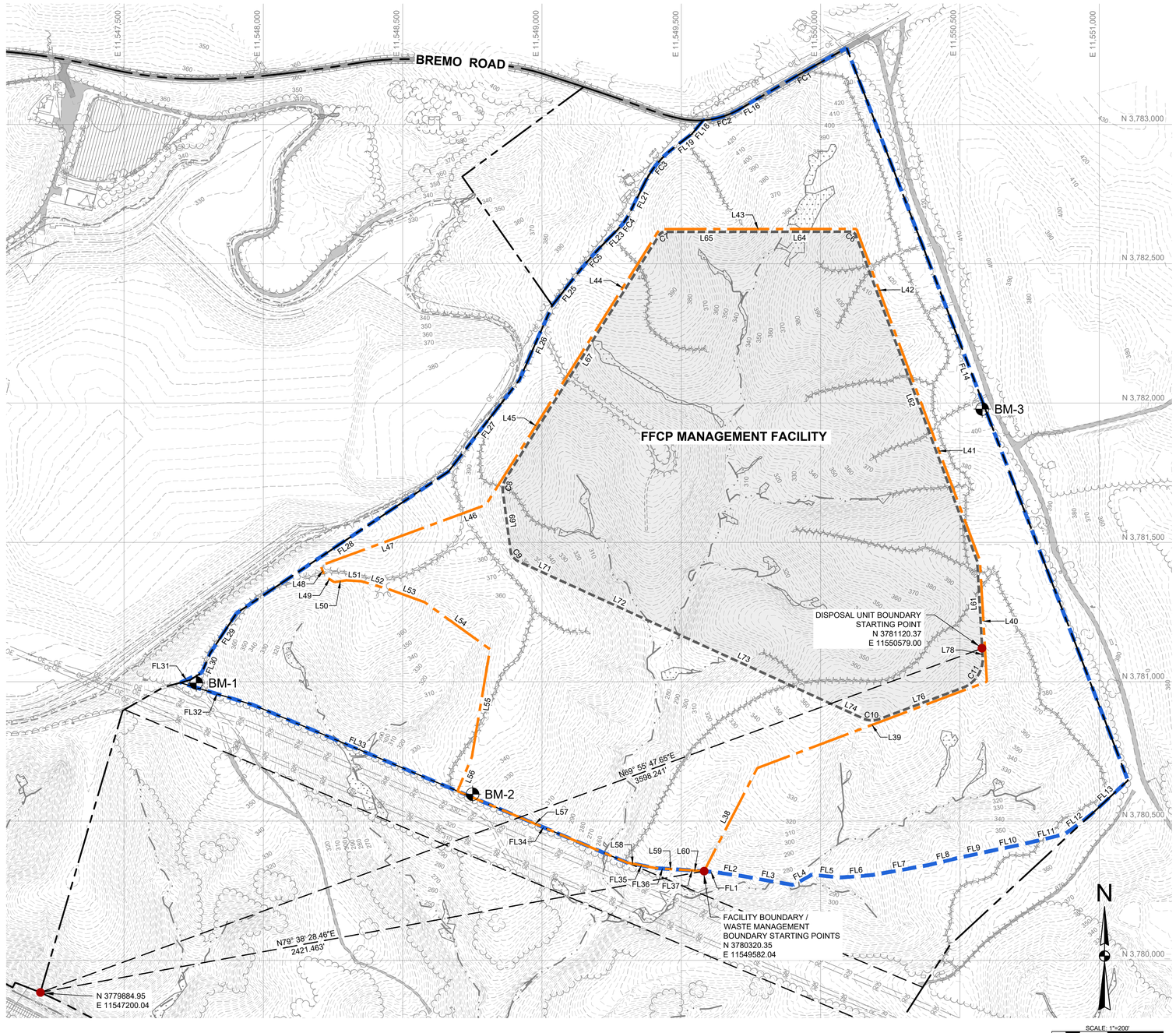
EXISTING SITE CONDITIONS

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING 3
SHEET 3 OF 42

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LEGEND

- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PARCEL BOUNDARY
- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- DISPOSAL UNIT BOUNDARY
- BM-2 — BENCHMARK

REFERENCE

1. EXISTING CONDITIONS COMPILED FROM AERIAL SURVEY PREPARED BY McKENZIE SNYDER, INC., DATED MARCH 24, 2019. CONTROL PREPARED BY H&B SURVEYING & MAPPING, LLC.
2. PARCEL BOUNDARIES TAKEN FROM ALTA / NSPS LAND TITLE SURVEY DATED JUNE 18, 2019 AND UPDATED JANUARY 17, 2020, BY H&B SURVEYING & MAPPING, LLC.
3. SITE DATUM: NAD83 / NAVD88, VIRGINIA STATE PLANE SOUTH.
4. BENCHMARK LOCATIONS AS INSTALLED BY H&B SURVEYING AND MAPPING, LLC ON 10/25/2023.

FACILITY BOUNDARY

Line #/Curve #	Length	Bearing/Delta	Radius
FL1	50.22	S84° 16' 00.65"E	
FL2	85.04	S81° 45' 24.58"E	
FL3	188.06	S80° 03' 40.31"E	
FL4	76.97	N61° 03' 27.00"E	
FL5	104.08	S84° 17' 33.18"E	
FL6	114.55	N85° 33' 45.11"E	
FL7	202.62	N79° 55' 04.67"E	
FL8	119.70	N76° 28' 57.64"E	
FL9	105.57	N78° 02' 53.31"E	
FL10	146.54	N77° 53' 21.93"E	
FL11	132.05	N76° 17' 29.11"E	
FL12	114.80	N53° 23' 43.38"E	
FL13	181.79	N47° 12' 59.54"E	
FL14	2815.80	N21° 00' 38.99"W	
FC1	372.51	1.72	12396.64
FL16	64.04	S59° 26' 52.09"W	
FC2	143.49	26.02	315.92
FL18	63.62	S39° 43' 51.76"W	
FL19	85.39	S52° 37' 47.10"W	
FC3	161.71	26.26	352.87

FACILITY BOUNDARY

Line #/Curve #	Length	Bearing/Delta	Radius
FL21	117.79	S26° 22' 23.78"W	
FC4	77.50	18.55	239.31
FL23	51.83	S44° 55' 40.87"W	
FC5	164.54	6.65	1416.91
FL25	142.66	S38° 16' 28.24"W	
FL26	291.97	S23° 48' 19.24"W	
FL27	416.54	S37° 44' 54.09"W	
FL28	913.92	S56° 15' 45.59"W	
FL29	171.71	S33° 24' 57.33"W	
FL30	75.68	S23° 07' 15.93"W	
FL31	85.99	S64° 44' 15.86"W	
FL32	274.84	S73° 01' 47.46"E	
FL33	794.38	S67° 08' 02.46"E	
FL34	660.10	S67° 08' 02.46"E	
FL35	105.46	S78° 59' 22.59"E	
FL36	86.90	S86° 31' 32.92"E	
FL37	86.90	S86° 31' 32.92"E	

WASTE MANAGEMENT BOUNDARY

Line #/Curve #	Length	Bearing/Delta	Radius
L38	415.98	N27° 16' 49.08"E	
L39	880.35	N69° 22' 47.99"E	
L40	434.91	N3° 16' 42.45"W	
L41	801.62	N20° 25' 00.79"W	
L42	468.63	N20° 25' 00.79"W	
L43	706.28	S89° 57' 03.01"W	
L44	498.23	S32° 12' 45.61"W	
L45	671.29	S32° 12' 45.61"W	
L46	132.09	S69° 49' 18.34"W	
L47	499.54	S69° 49' 18.34"W	
L48	40.00	S20° 10' 41.66"E	
L49	41.22	S57° 45' 22.20"E	
L50	44.25	N81° 23' 53.02"E	
L51	53.29	S86° 23' 43.08"E	
L52	109.26	S73° 40' 49.30"E	
L53	130.64	S69° 59' 25.97"E	
L54	288.59	S54° 14' 54.69"E	
L55	392.08	S9° 33' 33.68"W	
L56	132.74	S22° 51' 57.54"W	
L57	660.10	S67° 08' 02.46"E	
L58	105.46	S78° 59' 22.59"E	
L59	86.90	S86° 31' 32.92"E	
L60	86.90	S86° 31' 32.92"E	

DISPOSAL UNIT BOUNDARY

Line #/Curve #	Length	Bearing/Delta	Radius
L61	306.14	N3° 16' 42.45"W	
L62	1247.90	N20° 25' 07.54"W	
C6	24.31	69.63	20.00
L64	364.79	S89° 57' 03.01"W	
L65	303.72	S89° 57' 03.01"W	
C7	20.15	57.73	20.00
L67	1034.23	S32° 13' 29.00"W	
C8	51.83	39.60	75.00
L69	211.20	S7° 22' 13.80"E	
C9	50.73	58.14	50.00
L71	186.56	S65° 30' 21.57"E	
L72	406.32	S65° 30' 21.57"E	
L73	574.37	S65° 29' 47.27"E	
L74	192.68	S65° 29' 47.27"E	
C10	59.05	45.11	75.00
L76	320.13	N69° 23' 30.54"E	
C11	139.52	72.67	110.00
L78	32.04	N3° 16' 42.45"W	

BENCHMARKS

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COMMONWEALTH OF VIRGINIA
JAMES R. DIPASCUSCO
Lic. No. 052560
PROFESSIONAL ENGINEER
11/15/2024

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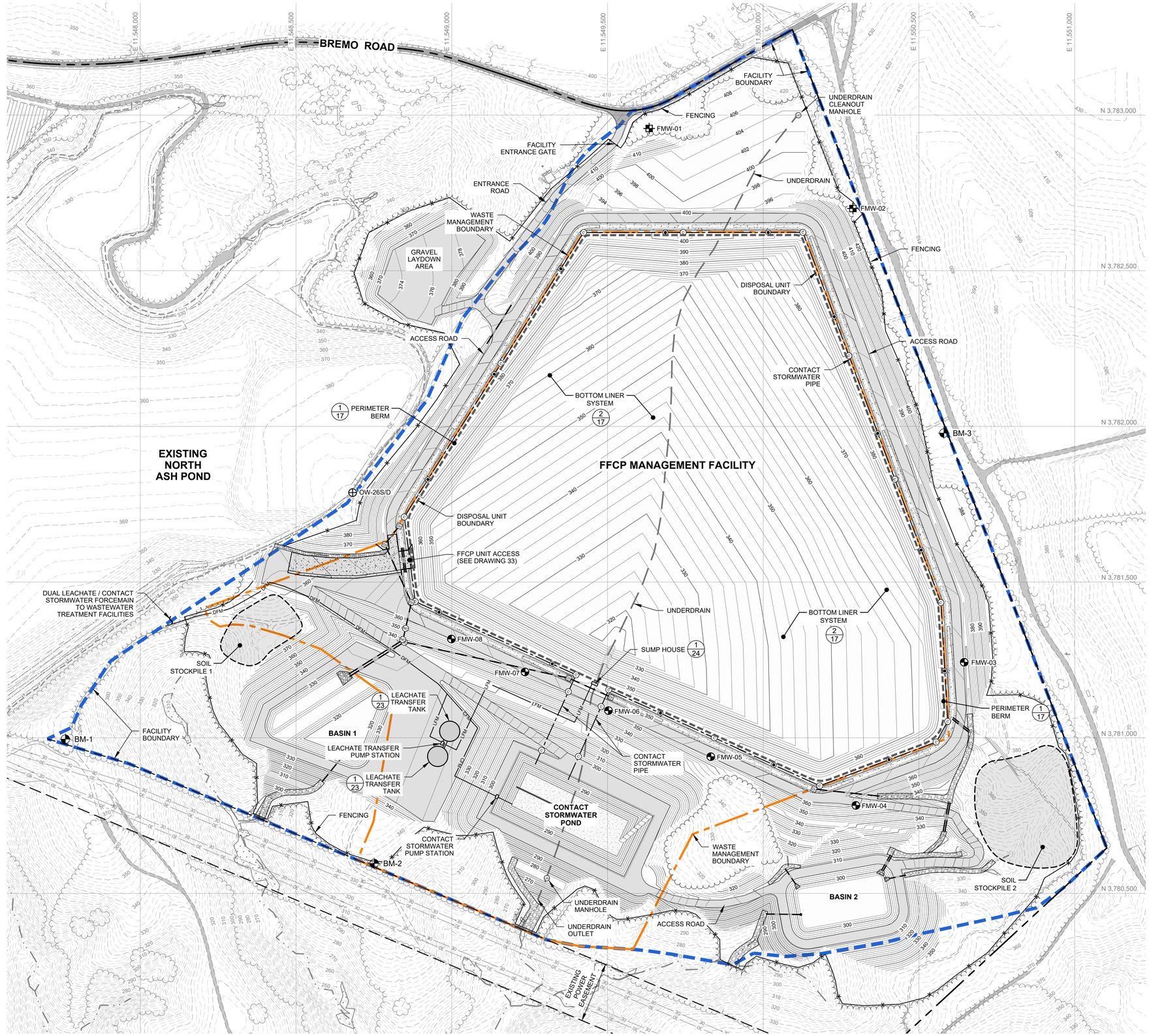
SITE BOUNDARIES

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING 4
SHEET 4 OF 42

O:\Richmond\2022\22130437.000 Bremo CAD\04-CONTRACT_DWGS\03\1.010-PART_B\22130437.031_010_04 ILF BOUNDARIES.dwg

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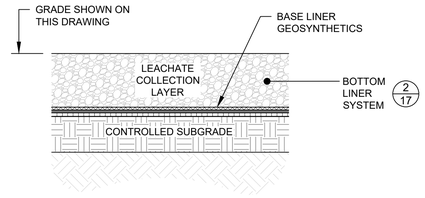


LEGEND

- PARCEL BOUNDARY
- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- EX. OVERHEAD ELECTRIC LINE
- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- DISPOSAL UNIT BOUNDARY
- BM-2 — BENCHMARK
- PROP. UNDERDRAIN ALIGNMENT
- UD — PROP. UNDERDRAIN MANHOLE
- PROP. ROAD
- PROP. CONCRETE CHANNEL
- PROP. CONTACT STORMWATER PIPE
- C — PROP. CONTACT STORMWATER PIPE MANHOLE
- PROP. CONTACT STORMWATER PIPE INLET
- NC — PROP. NON-CONTACT STORMWATER MANHOLE
- PROP. NON-CONTACT STORMWATER DROP INLET
- PROP. NON-CONTACT STORMWATER PIPE / CULVERT
- LFM — PROP. LEACHATE FORCEMAIN
- CFM — PROP. CONTACT STORMWATER FORCEMAIN
- DFM — PROP. DUAL LEACHATE / CONTACT STORMWATER FORCEMAIN
- PROP. RIP RAP CHANNEL ARMORING
- PROP. SOIL BORROW AREA BOUNDARY
- PROP. FENCING
- FMW-01 — PROP. UPGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- FMW-03 — PROP. DOWNGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- OW-26S/D — PROP. SIDEGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION

NOTES

1. PROPOSED GRADES SHOWN ON THIS DRAWING DEPICT THE CONDITION OF THE SITE AFTER COMPLETION OF LEACHATE COLLECTION LAYER INSTALLATION.
2. UNDERDRAIN ALIGNMENT MAY VARY BASED ON FIELD CONDITIONS.



BOTTOM LINER SYSTEM

NOT TO SCALE

N

SCALE: 1"=150'
0 150' 300'

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
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1	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
2	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

COMMONWEALTH OF VIRGINIA
JAMES R. DIPASCUSO
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11/15/2024

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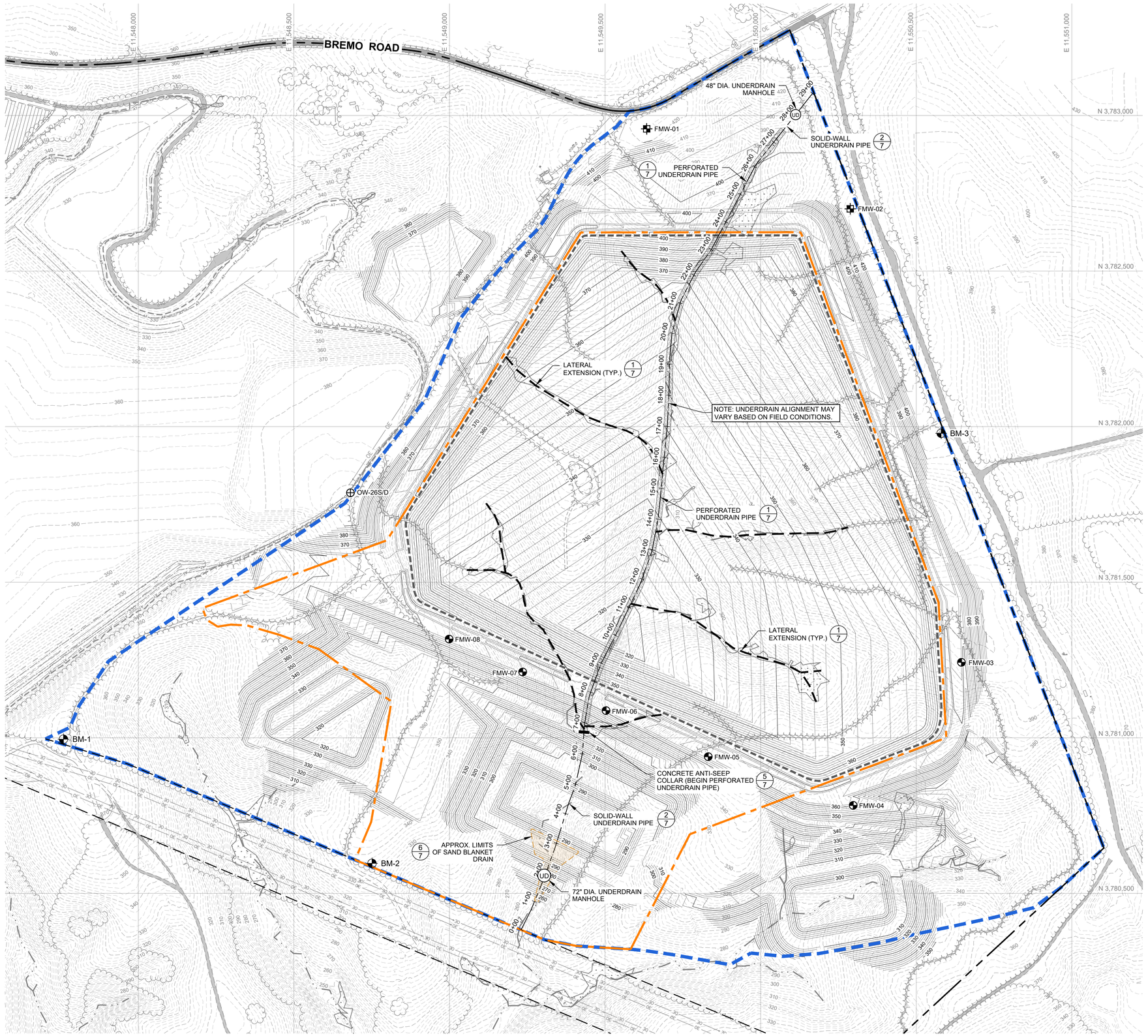
BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

ENGINEERING MODIFICATION PLAN

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING 5
SHEET 5 OF 42

O:\Richmond\2022\22130437.000 Bremo CADD\04-CONTRACT_DWGS\03 DWG\PART_B\22130437.031_010_05 (ENGINEERING MODIFICATIONS).dwg
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LEGEND

- PARCEL BOUNDARY
- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- EX. STREAM
- EX. WETLAND
- EX. OVERHEAD ELECTRIC LINE
- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- DISPOSAL UNIT BOUNDARY
- BM-2 — BENCHMARK
- PROP. PERFORATED UNDERDRAIN PIPE
- PROP. UNDERDRAIN LATERAL EXTENSION
- PROP. SOLID-WALL UNDERDRAIN PIPE
- UD — PROP. UNDERDRAIN MANHOLE
- FMW-01 — PROP. UPGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- FMW-03 — PROP. DOWNGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- OW-26S/D — PROP. SIDEGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION

NOTES

1. PROPOSED GRADES SHOWN ON THIS DRAWING DEPICT THE CONDITION OF THE SITE AFTER COMPLETION OF BASE GRADE CONSTRUCTION.
2. UNDERDRAIN ALIGNMENT MAY VARY BASED ON FIELD CONDITIONS.

N

SCALE: 1"=150'
0 150' 300'

REV.	DATE	DES. BY	CAD BY	CHK. BY
0	07/10/23	JRD	BPG	ATN
DESCRIPTION: ISSUED FOR PERMIT				
1	02/16/24	JRD	BPG	ATN
DESCRIPTION: RESPONSE TO COMMENTS				
2	06/03/24	JRD	BPG	ATN
DESCRIPTION: RESPONSE TO COMMENTS 2				
	11/15/24	JRD	BPG	ATN
DESCRIPTION: SUBMITTED FOR FINAL DEQ APPROVAL				

COMMONWEALTH OF VIRGINIA
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BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

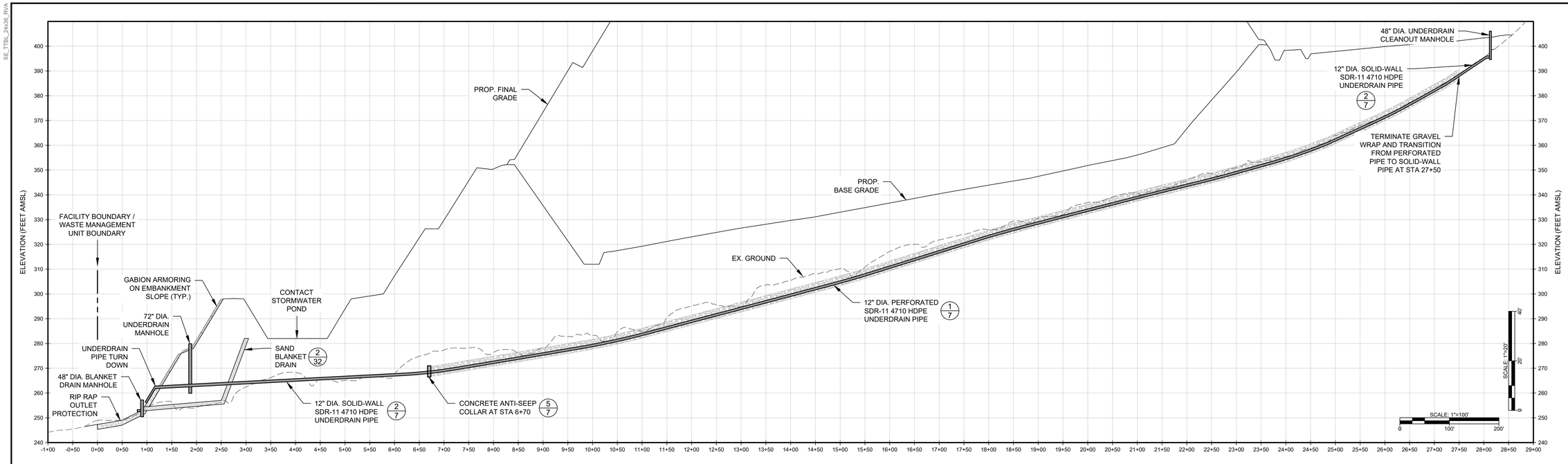
UNDERDRAIN PLAN

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING 6
SHEET 6 OF 42

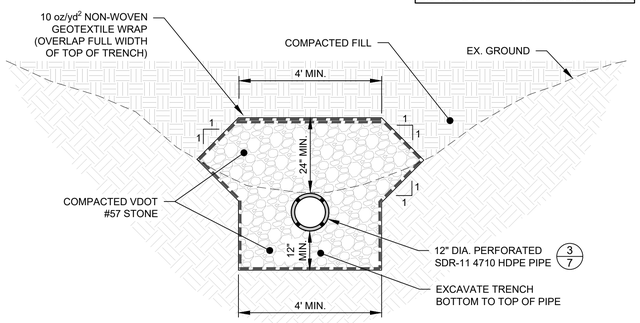
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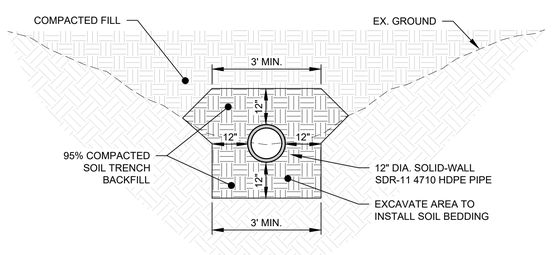
UNDERDRAIN PROFILE

NOTE: LATERAL EXTENSIONS SHALL OMIT PIPE AND BE FIELD LOCATED AS NEEDED.



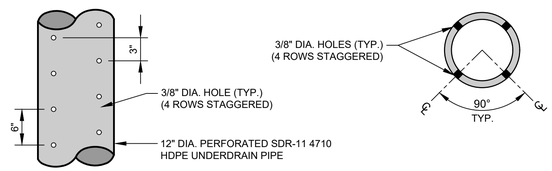
1/7 PERFORATED UNDERDRAIN PIPE DETAIL

NOT TO SCALE



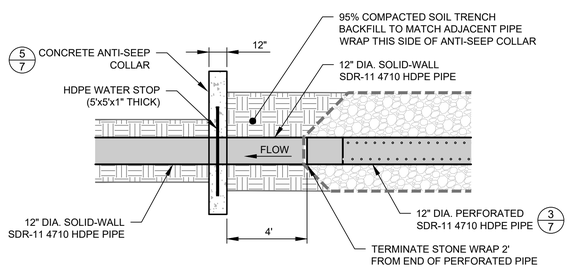
2/7 SOLID-WALL UNDERDRAIN PIPE DETAIL

NOT TO SCALE



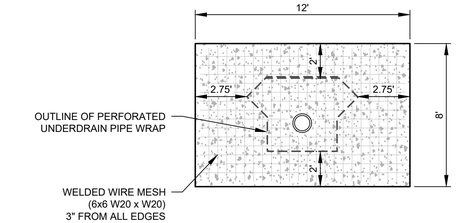
3/7 UNDERDRAIN PIPE PERFORATION DETAIL

NOT TO SCALE



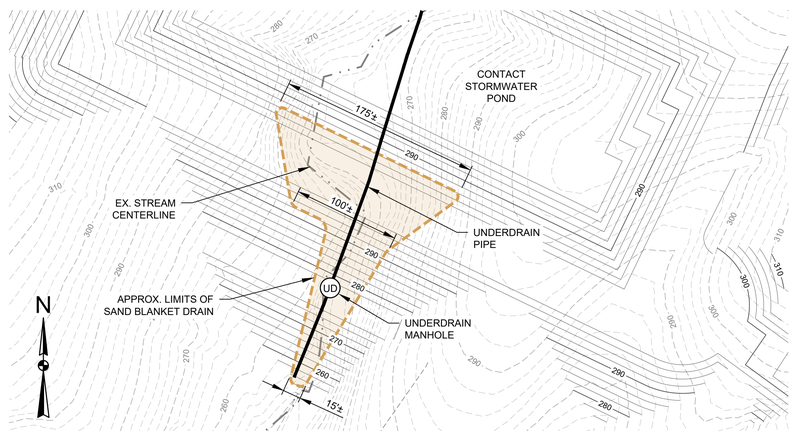
4/7 WATER STOP DETAIL

NOT TO SCALE



5/7 CONCRETE ANTI-SEEP COLLAR DETAIL

NOT TO SCALE



6/7 SAND BLANKET DRAIN PLAN VIEW

NOT TO SCALE

DATE	DESCRIPTION	REV.
07/10/23	ISSUED FOR PERMIT	0
02/16/24	RESPONSE TO COMMENTS	1
06/03/24	RESPONSE TO COMMENTS 2	2
11/15/24	SUBMITTED FOR FINAL DEQ APPROVAL	

DES. BY: JRD | CAD BY: BPG | CHK. BY: ATN

COMMONWEALTH OF VIRGINIA — JAMES R. DIPASCESCO — Lic. NO. 052560 — PROFESSIONAL ENGINEER — 11/15/2024

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BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

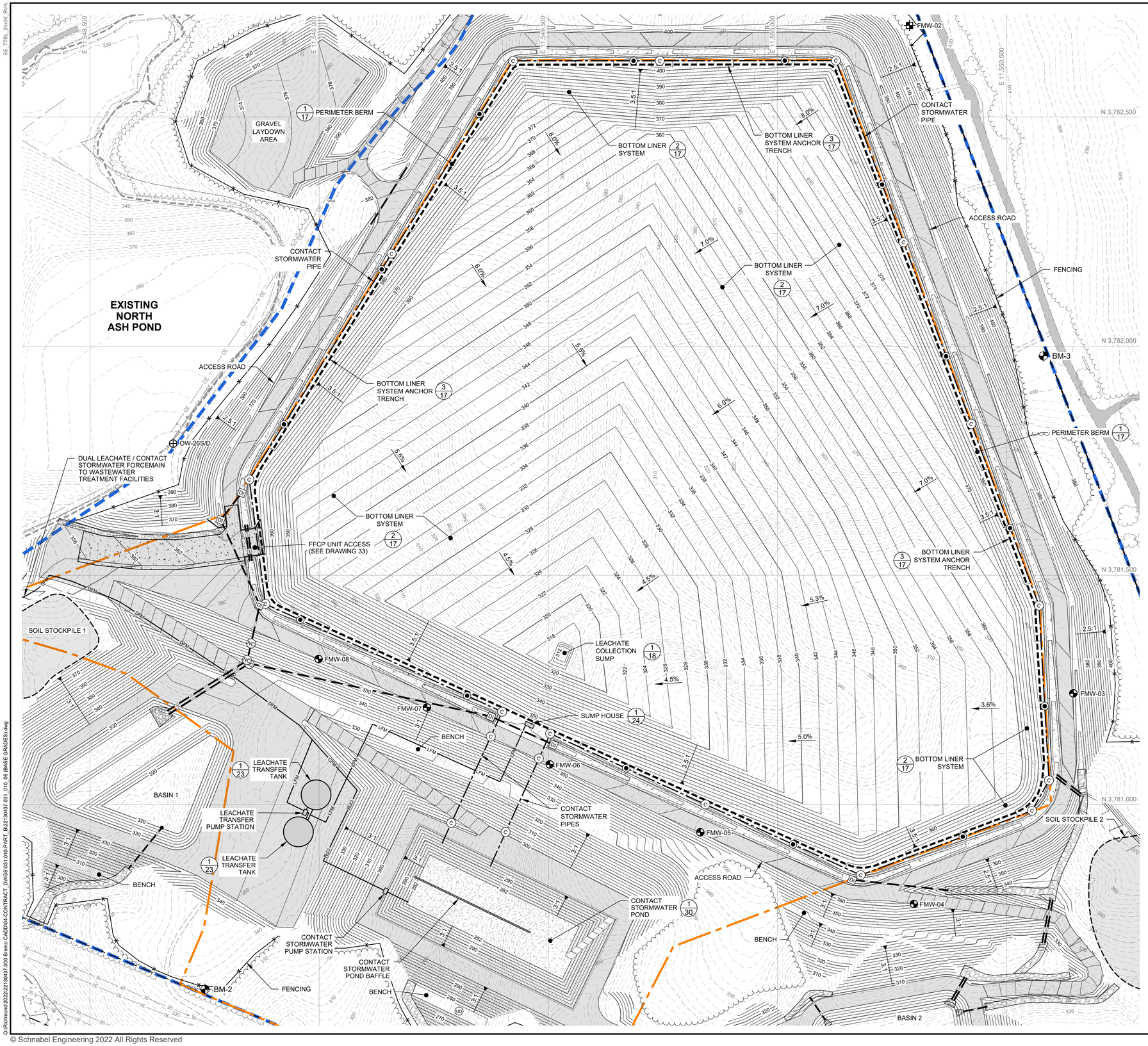
UNDERDRAIN PROFILE AND DETAILS

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING 7
SHEET 7 OF 42

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LEGEND

- PARCEL BOUNDARY
- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- EX. OVERHEAD ELECTRIC LINE
- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- DISPOSAL UNIT BOUNDARY / BOTTOM LINER ANCHOR TRENCH
- BM-2 BENCHMARK
- UD PROP. UNDERDRAIN MANHOLE
- PROP. ROAD
- PROP. CONCRETE CHANNEL
- PROP. CONTACT STORMWATER PIPE
- C PROP. CONTACT STORMWATER PIPE MANHOLE
- PROP. CONTACT STORMWATER PIPE INLET
- NC PROP. NON-CONTACT STORMWATER MANHOLE
- DI PROP. NON-CONTACT STORMWATER DROP INLET
- PROP. NON-CONTACT STORMWATER PIPE / CULVERT
- LFM PROP. LEACHATE FORCEMAIN
- CFM PROP. CONTACT STORMWATER FORCEMAIN
- DFM PROP. DUAL LEACHATE / CONTACT STORMWATER FORCEMAIN
- PROP. RIP RAP CHANNEL ARMORING
- FMW-01 PROP. UPGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- FMW-03 PROP. DOWNGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- OW-26S/D PROP. SIDEGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION

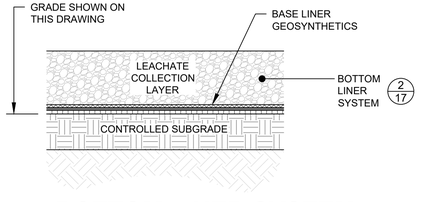
CONSTRUCTION QUANTITIES

EARTHWORK	
CUT-TO-FILL	1,032,735 CY
CUT-TO-STOCKPILE	24,465 CY

CCR UNIT	
GEOSYNTHETIC CLAY LINER	47.2 AC
60-mil HDPE LINER	47.2 AC
250-mil GEOCOMPOSITE	47.2 AC
12" LEACHATE DRAINAGE LAYER	75,990 CY
6" PROTECTIVE COVER LAYER	37,995 CY
SUMP STONE	170 CY
24" DIA. LEACHATE COLLECTION PIPE	360 LF
8" DIA. LEACHATE COLLECTION PIPE	3,925 LF
6" DIA. LEACHATE COLLECTION PIPE	9,740 LF

CONTACT STORMWATER BASIN	
GEOSYNTHETIC CLAY LINER	2.5 AC
60-mil HDPE LINER	5.0 AC
10 oz/sy NON-WOVEN GEOTEXTILE	2.5 AC
6" THICK CONCRETE SLAB	43,800 SF
4" THICK FABRIC-FORMED CONCRETE	65,100 SF

NOTE: QUANTITIES BASED ON 2D PLAN VIEW MEASUREMENTS.



BOTTOM LINER SYSTEM

NOT TO SCALE

N

SCALE: 1"=100'
0 100' 200'

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
2	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24
1	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
0	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23

COMMONWEALTH OF VIRGINIA
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BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

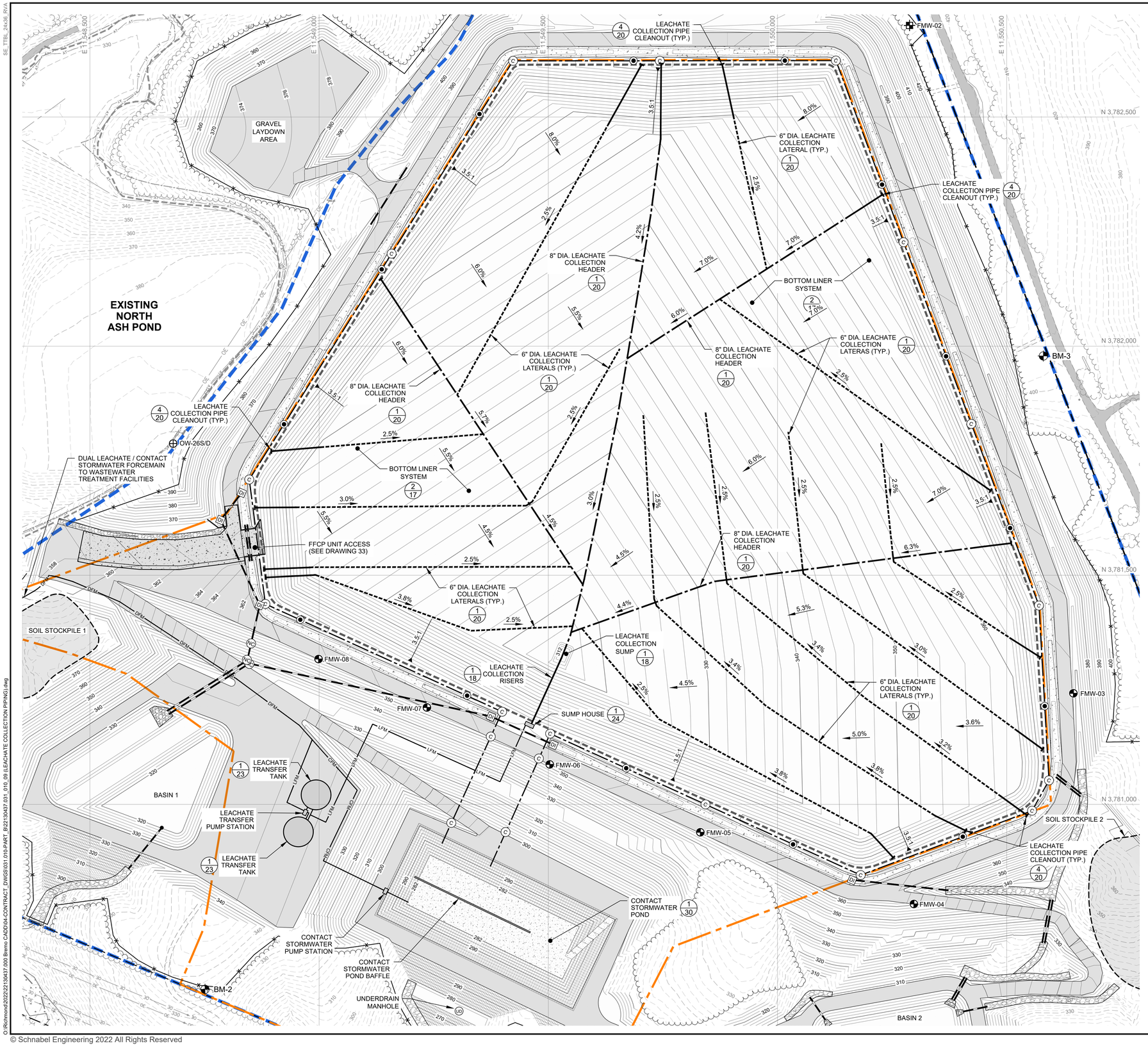
BASE GRADE PLAN

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING 8
SHEET 8 OF 42

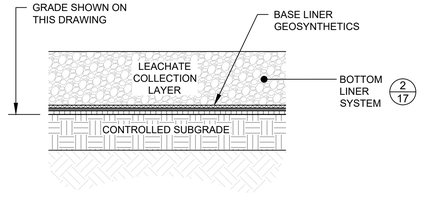
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LEGEND

- PARCEL BOUNDARY
- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- EX. OVERHEAD ELECTRIC LINE
- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- DISPOSAL UNIT BOUNDARY / BOTTOM LINER ANCHOR TRENCH
- BM-2 BENCHMARK
- UD PROP. UNDERDRAIN MANHOLE
- PROP. ROAD
- PROP. CONCRETE CHANNEL
- PROP. CONTACT STORMWATER PIPE
- C PROP. CONTACT STORMWATER PIPE MANHOLE
- PROP. CONTACT STORMWATER PIPE INLET
- PROP. LEACHATE COLLECTION HEADER
- PROP. LEACHATE COLLECTION LATERAL
- PROP. LEACHATE COLLECTION PIPE CLEANOUT
- NC PROP. NON-CONTACT STORMWATER MANHOLE
- DI PROP. NON-CONTACT STORMWATER DROP INLET
- PROP. NON-CONTACT STORMWATER PIPE / CULVERT
- LFM PROP. LEACHATE FORCEMAIN
- CFM PROP. CONTACT STORMWATER FORCEMAIN
- DFM PROP. DUAL LEACHATE / CONTACT STORMWATER FORCEMAIN
- PROP. RIP RAP CHANNEL ARMORING
- FMW-01 PROP. UPGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- FMW-03 PROP. DOWNGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- OW-26S/D PROP. SIDEGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION



BOTTOM LINER SYSTEM

NOT TO SCALE

N

SCALE: 1"=100'
0 100' 200'

REV.	DATE	DESCRIPTION	DES. BY	CAD BY	CHK. BY
0	07/10/23	ISSUED FOR PERMIT	JRD	BPG	ATN
1	02/16/24	RESPONSE TO COMMENTS	JRD	BPG	ATN
2	06/03/24	RESPONSE TO COMMENTS 2	JRD	BPG	ATN
	11/15/24	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN

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BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

LEACHATE COLLECTION PIPING PLAN

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031

DATE: 11/15/24

DRAWING 9

SHEET 9 OF 42

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EXISTING NORTH ASH POND

GRAVEL LAYDOWN AREA

SOIL STOCKPILE 1

SOIL STOCKPILE 2

BASIN 1

BASIN 2

BOTTOM LINER SYSTEM (2/17)

DUAL LEACHATE / CONTACT STORMWATER FORCEMAIN TO WASTEWATER TREATMENT FACILITIES

FFCP UNIT ACCESS (SEE DRAWING 33)

SUMP HOUSE (1/24)

LEACHATE TRANSFER TANK (1/23)

LEACHATE TRANSFER PUMP STATION

CONTACT STORMWATER POND (1/30)

CONTACT STORMWATER POND BAFFLE

CONTACT STORMWATER PUMP STATION

UNDERDRAIN MANHOLE

FMW-01 FMW-02 FMW-03 FMW-04 FMW-05 FMW-06 FMW-07 FMW-08

OW-26S/D

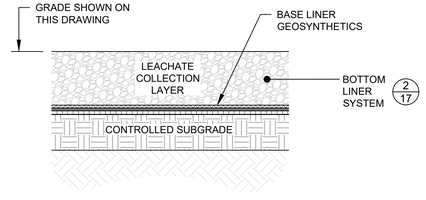
BM-2 BM-3

E 11,548,500 E 11,549,000 E 11,549,500 E 11,550,000 E 11,550,500

N 3,782,500 N 3,782,000 N 3,781,500 N 3,781,000

LEGEND

- PARCEL BOUNDARY
- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PROP. TOP OF LEACHATE COLLECTION LAYER CONTOURS (2' INTERVALS)
- EX. OVERHEAD ELECTRIC LINE
- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- DISPOSAL UNIT BOUNDARY / BOTTOM LINER ANCHOR TRENCH
- BM-2 BENCHMARK
- UD PROP. UNDERDRAIN MANHOLE
- PROP. ROAD
- PROP. CONCRETE CHANNEL
- PROP. CONTACT STORMWATER PIPE
- C PROP. CONTACT STORMWATER PIPE MANHOLE
- DI PROP. CONTACT STORMWATER PIPE INLET
- PROP. LEACHATE COLLECTION HEADER
- PROP. LEACHATE COLLECTION LATERAL
- PROP. LEACHATE COLLECTION PIPE CLEANOUT
- NC PROP. NON-CONTACT STORMWATER MANHOLE
- DI PROP. NON-CONTACT STORMWATER DROP INLET
- PROP. NON-CONTACT STORMWATER PIPE / CULVERT
- LFM PROP. LEACHATE FORCEMAIN
- CFM PROP. CONTACT STORMWATER FORCEMAIN
- DFM PROP. DUAL LEACHATE / CONTACT STORMWATER FORCEMAIN
- PROP. RIP RAP CHANNEL ARMORING
- FMW-01 PROP. UPGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- FMW-03 PROP. DOWNGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- OW-26S/D PROP. SIDEGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION



BOTTOM LINER SYSTEM

NOT TO SCALE

N

SCALE: 1"=100'
0 100' 200'

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
0	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23
1	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
2	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

COMMONWEALTH OF VIRGINIA
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11/15/2024

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Fax: 804-264-3244
schnabel-eng.com

BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

TOP OF LEACHATE COLLECTION LAYER PLAN

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031

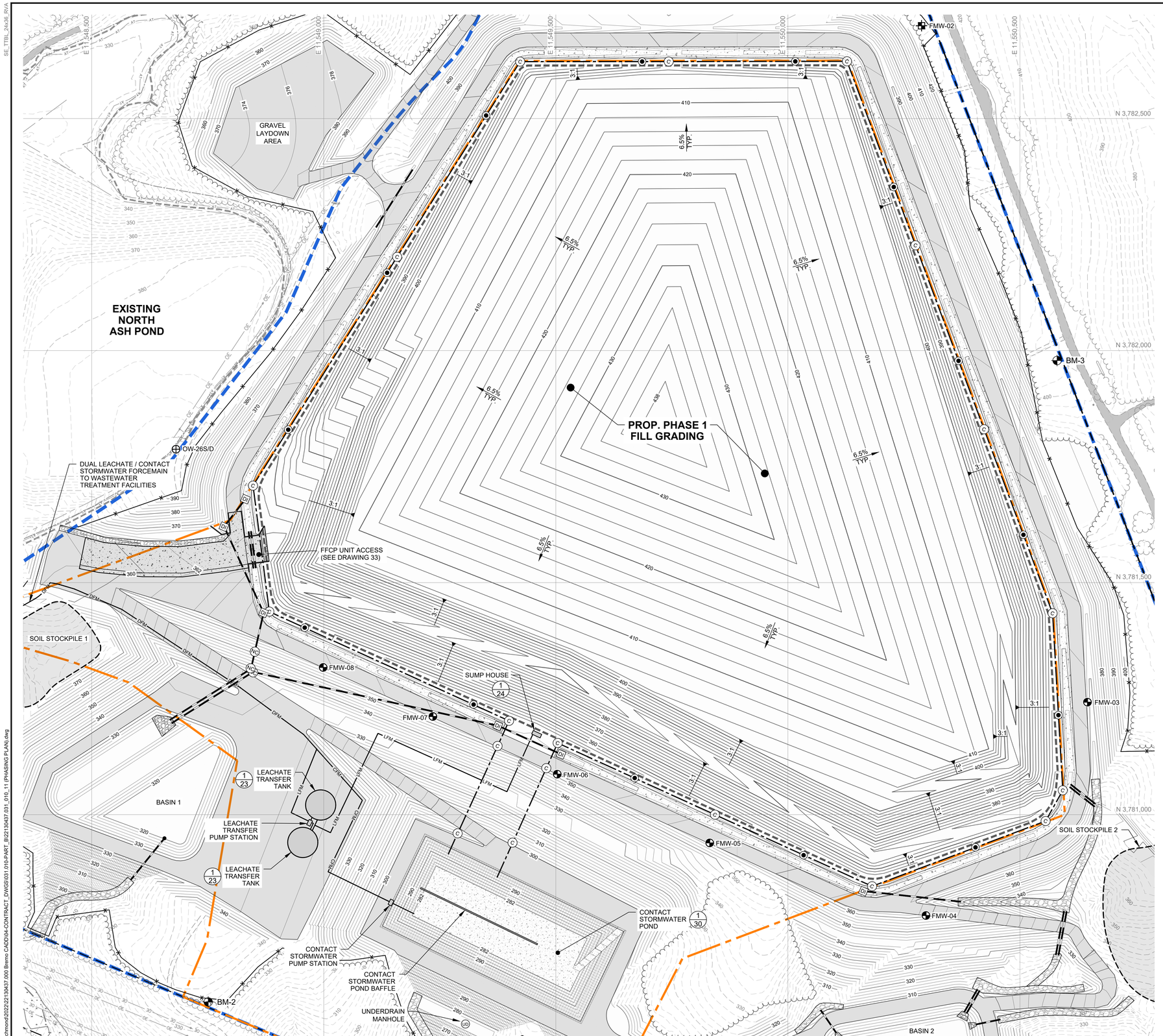
DATE: 11/15/24

DRAWING 10

SHEET 10 OF 42

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LEGEND

- PARCEL BOUNDARY
- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PROP. FILL CONTOURS (2' INTERVALS)
- EX. OVERHEAD ELECTRIC LINE
- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- DISPOSAL UNIT BOUNDARY / BOTTOM LINER ANCHOR TRENCH
- BM-2 — BENCHMARK
- UD — PROP. UNDERDRAIN MANHOLE
- PROP. ROAD
- PROP. CONCRETE CHANNEL
- PROP. CONTACT STORMWATER PIPE
- C — PROP. CONTACT STORMWATER PIPE MANHOLE
- PROP. CONTACT STORMWATER PIPE INLET
- NC — PROP. NON-CONTACT STORMWATER MANHOLE
- DI — PROP. NON-CONTACT STORMWATER DROP INLET
- PROP. NON-CONTACT STORMWATER PIPE / CULVERT
- LFM — PROP. LEACHATE FORCEMAIN
- CFM — PROP. CONTACT STORMWATER FORCEMAIN
- DFM — PROP. DUAL LEACHATE / CONTACT STORMWATER FORCEMAIN
- PROP. RIP RAP CHANNEL ARMORING
- FMW-01 — PROP. UPGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- FMW-03 — PROP. DOWNGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- OW-26S/D — PROP. SIDEGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION

N

SCALE: 1"=100'
0 100' 200'

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
2	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24
1	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
0	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23

COMMONWEALTH OF VIRGINIA
JAMES R. DIPASCASO
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11/15/2024

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schnabel-eng.com

BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

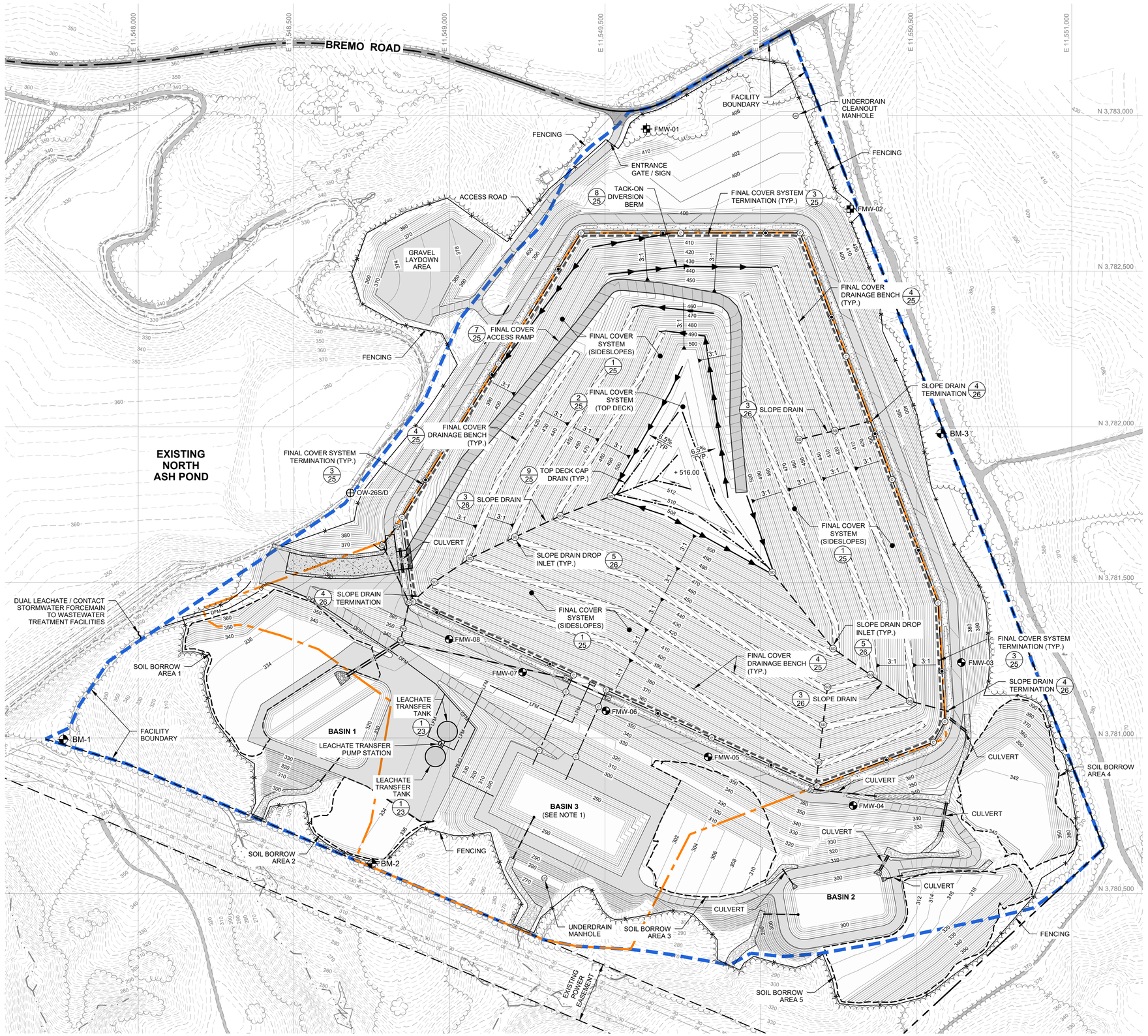
PHASING PLAN

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING 11
SHEET 11 OF 42

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LEGEND

- PARCEL BOUNDARY
- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- EX. OVERHEAD ELECTRIC LINE
- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- DISPOSAL UNIT BOUNDARY / BOTTOM LINER ANCHOR TRENCH
- BM-2 BENCHMARK
- PROP. UNDERDRAIN MANHOLE
- PROP. ROAD
- PROP. CONCRETE CHANNEL
- PROP. CONTACT STORMWATER PIPE
- PROP. CONTACT STORMWATER PIPE MANHOLE
- PROP. CONTACT STORMWATER PIPE INLET
- PROP. DRAINAGE BENCH
- PROP. SLOPE DRAIN
- PROP. SLOPE DRAIN DROP INLET
- PROP. TOP DECK CAP DRAIN
- PROP. TACK-ON DIVERSION BERM
- PROP. NON-CONTACT STORMWATER MANHOLE
- PROP. NON-CONTACT STORMWATER DROP INLET
- PROP. NON-CONTACT STORMWATER PIPE / CULVERT
- PROP. LEACHATE FORCEMAIN
- PROP. RIP RAP CHANNEL ARMORING
- PROP. SOIL BORROW AREA BOUNDARY
- PROP. FENCING
- FMW-01 PROP. UPGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- FMW-03 PROP. DOWNGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- OW-26S/D PROP. SIDEGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION

NOTE

1. POST CAPPING, THE CONTACT STORMWATER POND IS TO BE CONVERTED TO A PERMANENT STORMWATER MANAGEMENT POND (BASIN 3). SEE DRAWING SWM-1 FOR MORE DETAILS.

N

SCALE: 1"=150'
0 150' 300'

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
0	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23
1	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
2	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

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BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

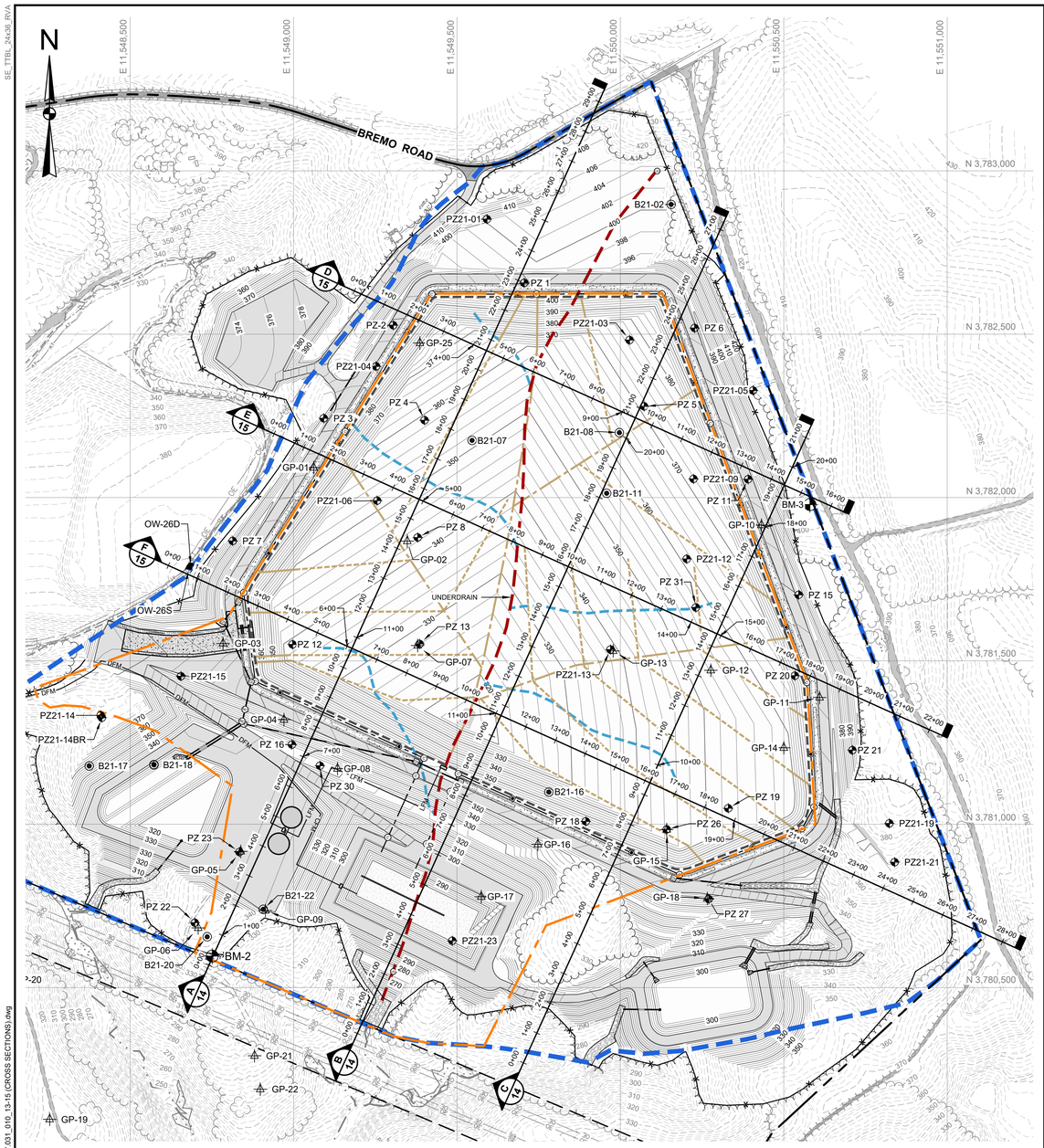
FINAL GRADING PLAN

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING 12
SHEET 12 OF 42

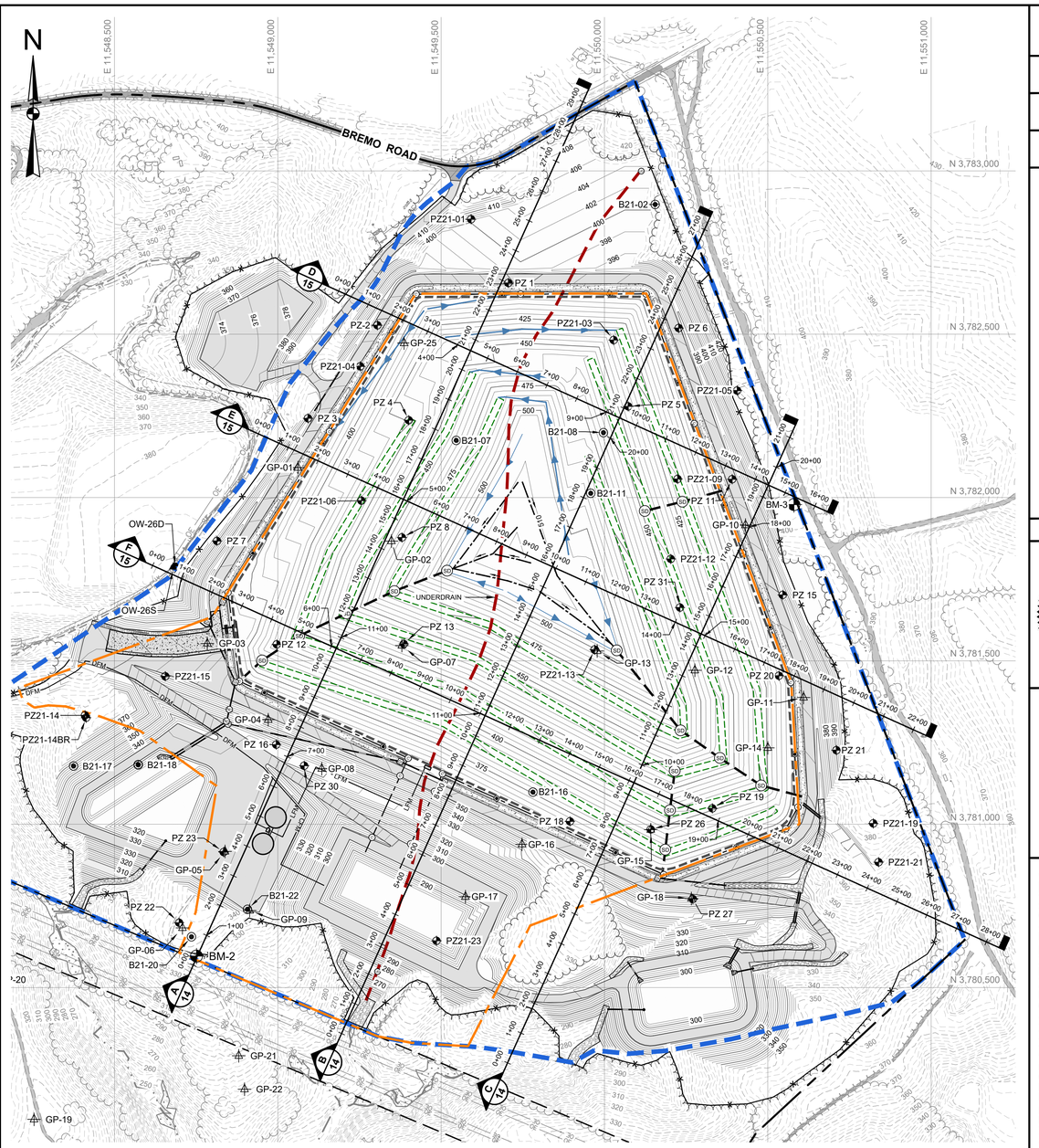
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BASE GRADE PLAN

SCALE: 1"=200'
0 200' 400'



FINAL GRADING PLAN

SCALE: 1"=200'
0 200' 400'

LEGEND

- PARCEL BOUNDARY
- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- DISPOSAL UNIT BOUNDARY
- BENCHMARK
- PROP. NON-CONTACT STORMWATER PIPE / CULVERT
- PROP. UNDERDRAIN
- PROP. UNDERDRAIN LATERAL EXTENSION
- PROP. LEACHATE COLLECTION HEADER
- PROP. LEACHATE COLLECTION LATERAL
- PROP. DRAINAGE BENCH
- PROP. SLOPE DRAIN
- PROP. SLOPE DRAIN DROP INLET
- PROP. TOP DECK CAP DRAIN
- PROP. TACK-ON DIVERSION BERM

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
0	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23
1	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
2	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

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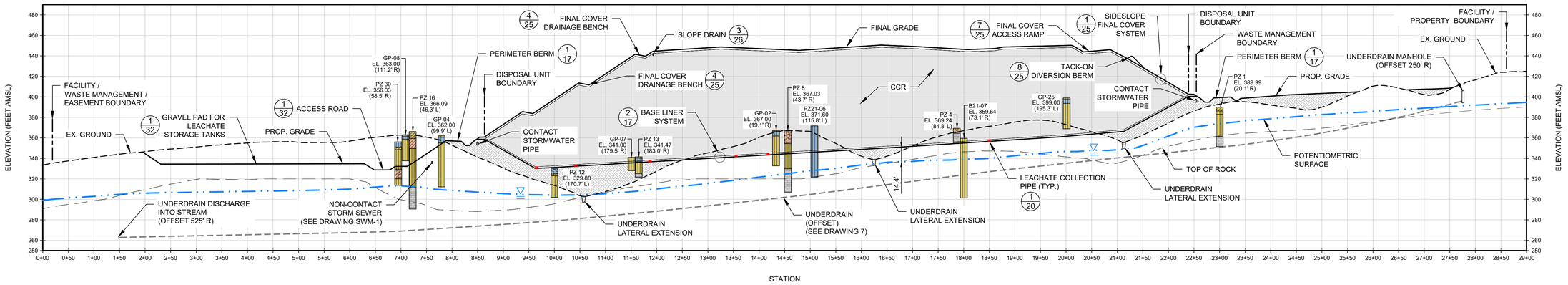
CROSS SECTION LOCATION PLAN

PREPARED FOR: Dominion Energy

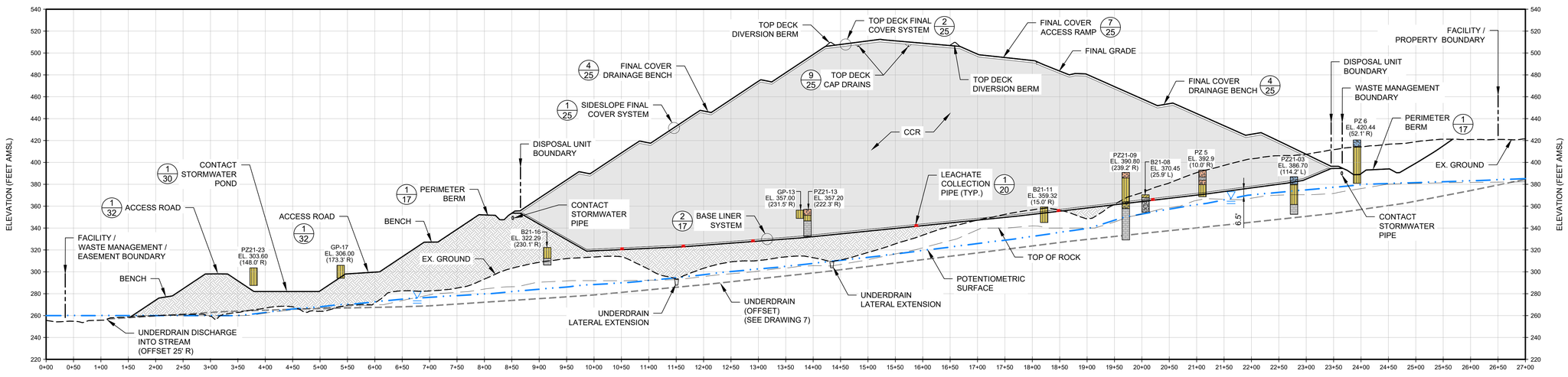
PROJECT: 22130437.031
DATE: 11/15/24
DRAWING 13
SHEET 13 OF 42

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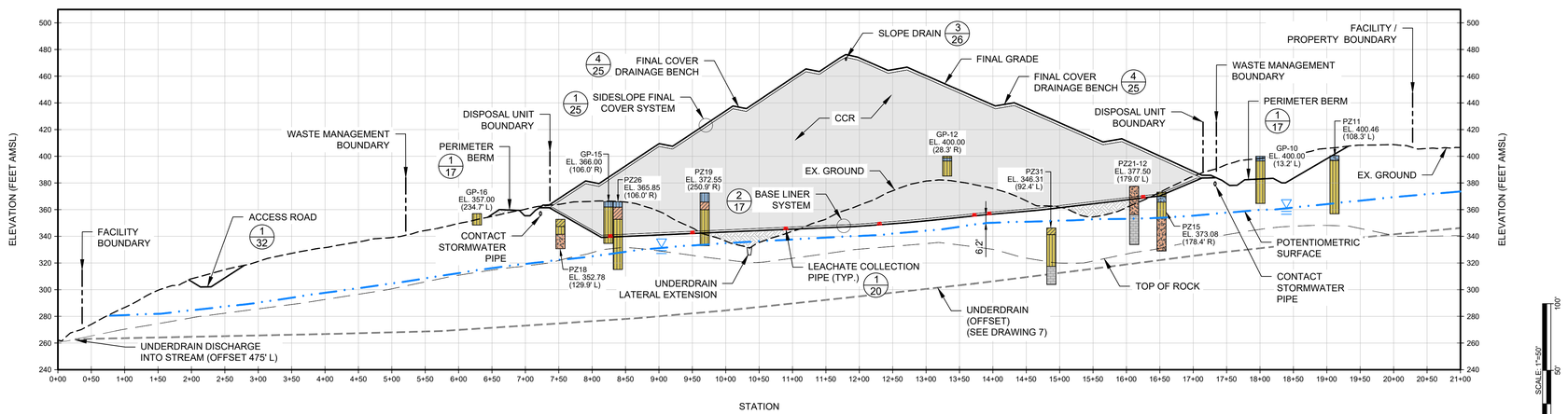
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SECTION A - A '



SECTION B - B '



SECTION C - C '

BORING LEGEND

SANDY SILT · CLAY · STONE
CLAYEY SILT · SILTY CLAY · GRAVEL
SAND · SANDY CLAY · SANDY GRAVEL
CLAYEY SAND · CLAYEY GRAVEL
SILTY SAND

LEGEND

EX. GROUND SURFACE
PROP. GRADE
POTENTIOMETRIC SURFACE
TOP OF ROCK SURFACE
STRUCTURAL FILL
CCR
BORING

SCALE: 1"=100'
SCALE: 1"=50'

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
0	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23
1	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
2	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

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FLUVANNA COUNTY, VIRGINIA

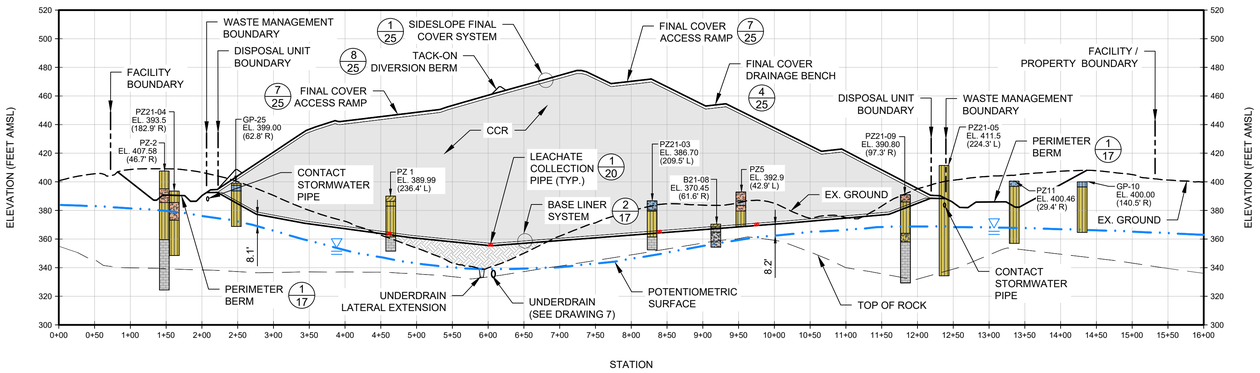
CROSS SECTIONS (1 of 2)

PREPARED FOR: Dominion Energy

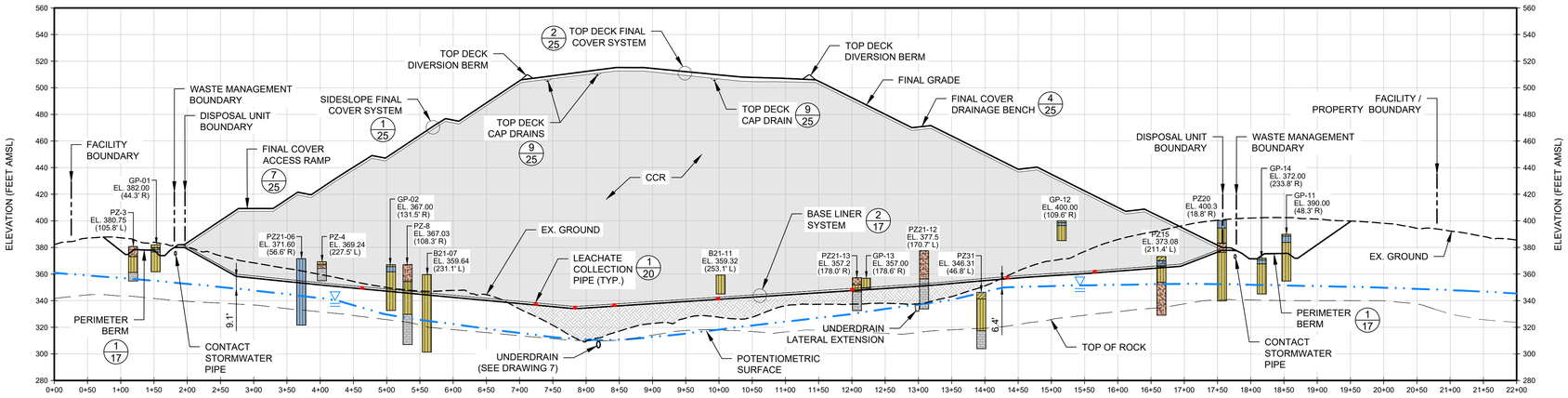
PROJECT: 22130437.031
DATE: 11/15/24
DRAWING 14
SHEET 14 OF 42

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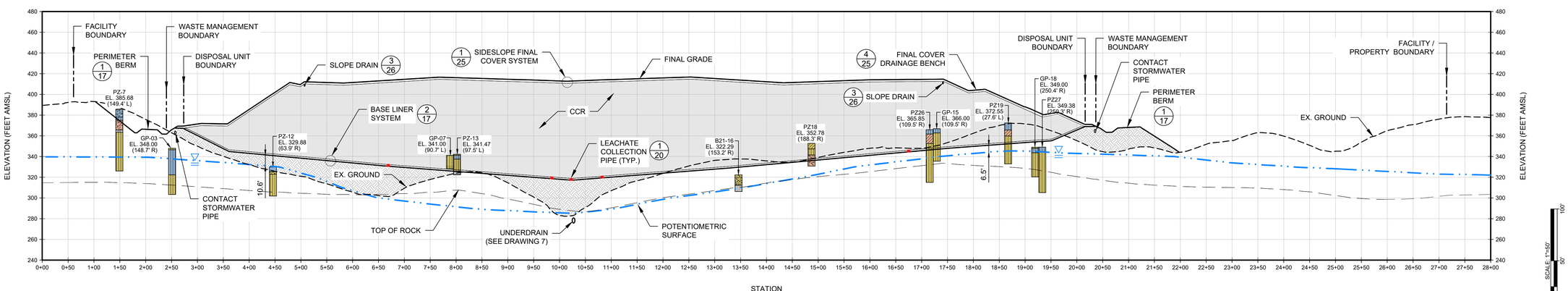
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SECTION D - D '



SECTION E - E '



SECTION F - F '

SCALE: 1"=100'

SCALE: 1"=50'

LEGEND

- EX. GROUND SURFACE
- PROP. GRADE
- POTENTIOMETRIC SURFACE
- TOP OF ROCK SURFACE
- STRUCTURAL FILL
- CCR
- BORING

BORING LEGEND

- SANDY SILT
- CLAYEY SILT
- SAND
- CLAYEY SAND
- SILTY SAND
- CLAY
- SILTY CLAY
- SANDY CLAY
- STONE
- GRAVEL
- SANDY GRAVEL
- CLAYEY GRAVEL

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
2	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24
1	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
0	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23

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SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

CROSS SECTIONS (2 of 2)

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031

DATE: 11/15/24

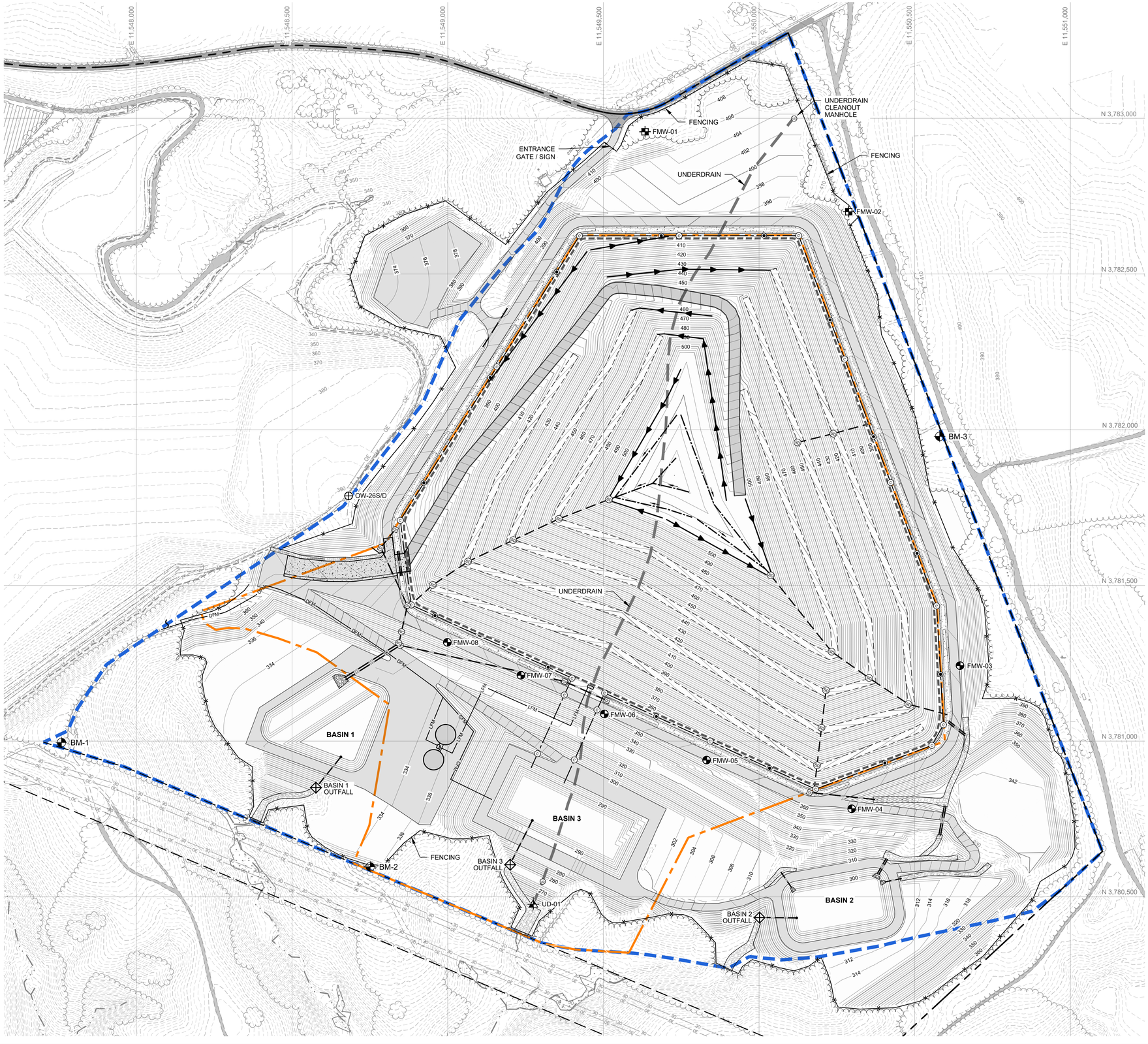
DRAWING 15

SHEET 15 OF 42

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LEGEND

- PARCEL BOUNDARY
- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PROP. FINAL GRADE CONTOURS (2' INTERVALS)
- EX. OVERHEAD ELECTRIC LINE
- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- DISPOSAL UNIT BOUNDARY / BOTTOM LINER ANCHOR TRENCH
- BM-2 BENCHMARK
- PROP. UNDERDRAIN
- UM PROP. UNDERDRAIN MANHOLE
- PROP. ROAD
- PROP. CONCRETE CHANNEL
- PROP. CONTACT STORMWATER PIPE
- C PROP. CONTACT STORMWATER PIPE MANHOLE
- PROP. CONTACT STORMWATER PIPE INLET
- PROP. DRAINAGE BENCH
- PROP. SLOPE DRAIN
- SD PROP. SLOPE DRAIN DROP INLET
- PROP. TOP DECK CAP DRAIN
- PROP. TACK-ON DIVERSION BERM
- NC PROP. NON-CONTACT STORMWATER MANHOLE
- PROP. NON-CONTACT STORMWATER DROP INLET
- PROP. NON-CONTACT STORMWATER PIPE / CULVERT
- PROP. RIP RAP CHANNEL ARMORING
- FMW-01 PROP. UPGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- FMW-03 PROP. DOWNGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- OW-26S/D PROP. SIDEGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- UD-01 PROP. UNDERDRAIN OUTFALL LOCATION AND IDENTIFICATION
- BASIN 1 OUTFALL PROP. STORMWATER OUTFALL LOCATION AND IDENTIFICATION

NOTES

1. PROPOSED GRADES SHOWN ON THIS DRAWING DEPICT THE CONDITION OF THE SITE AFTER FINAL COMPLETION.

N

SCALE: 1"=150'
0 150' 300'

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
2	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24
1	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
0	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23

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BREMO BLUFF FFCP MANAGEMENT FACILITY
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FLUVANNA COUNTY, VIRGINIA

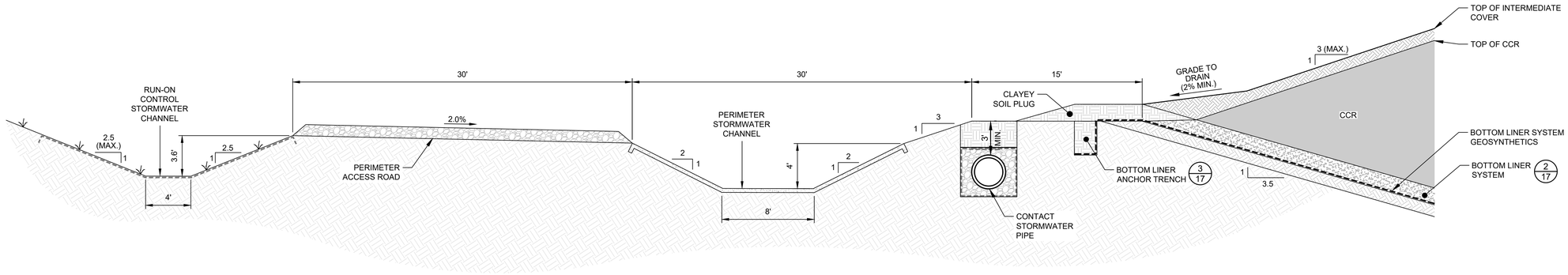
SITE MONITORING PLAN

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING 16
SHEET 16 OF 42

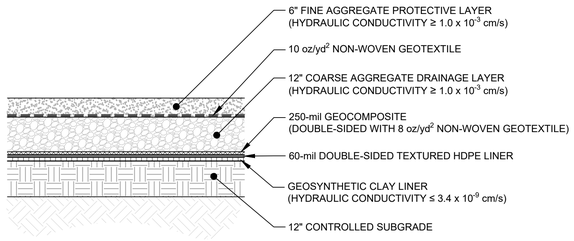
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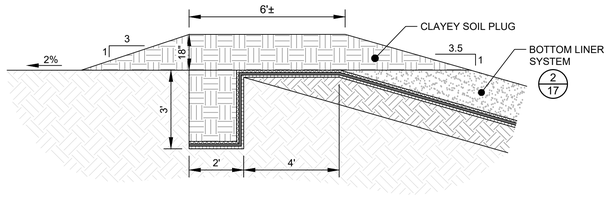


1/17 PERIMETER BERM CROSS SECTION

SCALE: 1" = 5'

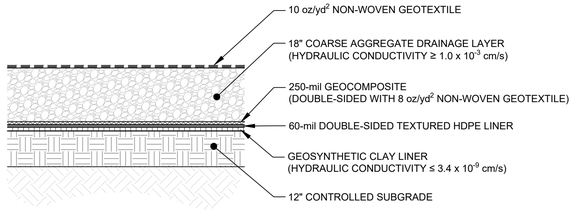


OPTION 1

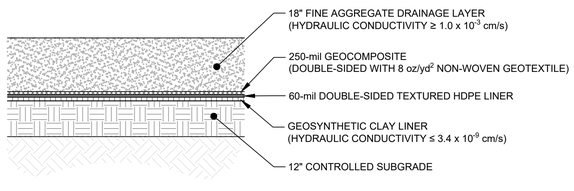


3/17 BASE LINER SYSTEM ANCHOR TRENCH DETAIL

SCALE: 1" = 3'



OPTION 2A



OPTION 2B

2/17 BOTTOM LINER SYSTEM DETAIL

SCALE: 1" = 2'

NOTE:

1. GEOSYNTHETICS ARE EXAGGERATED FOR CLARITY.

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
0	ISSUED FOR PERMIT	JRD	BPG	ATN	02/16/24
1	RESPONSE TO COMMENTS	JRD	BPG	ATN	06/03/24
2	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	11/15/24
	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

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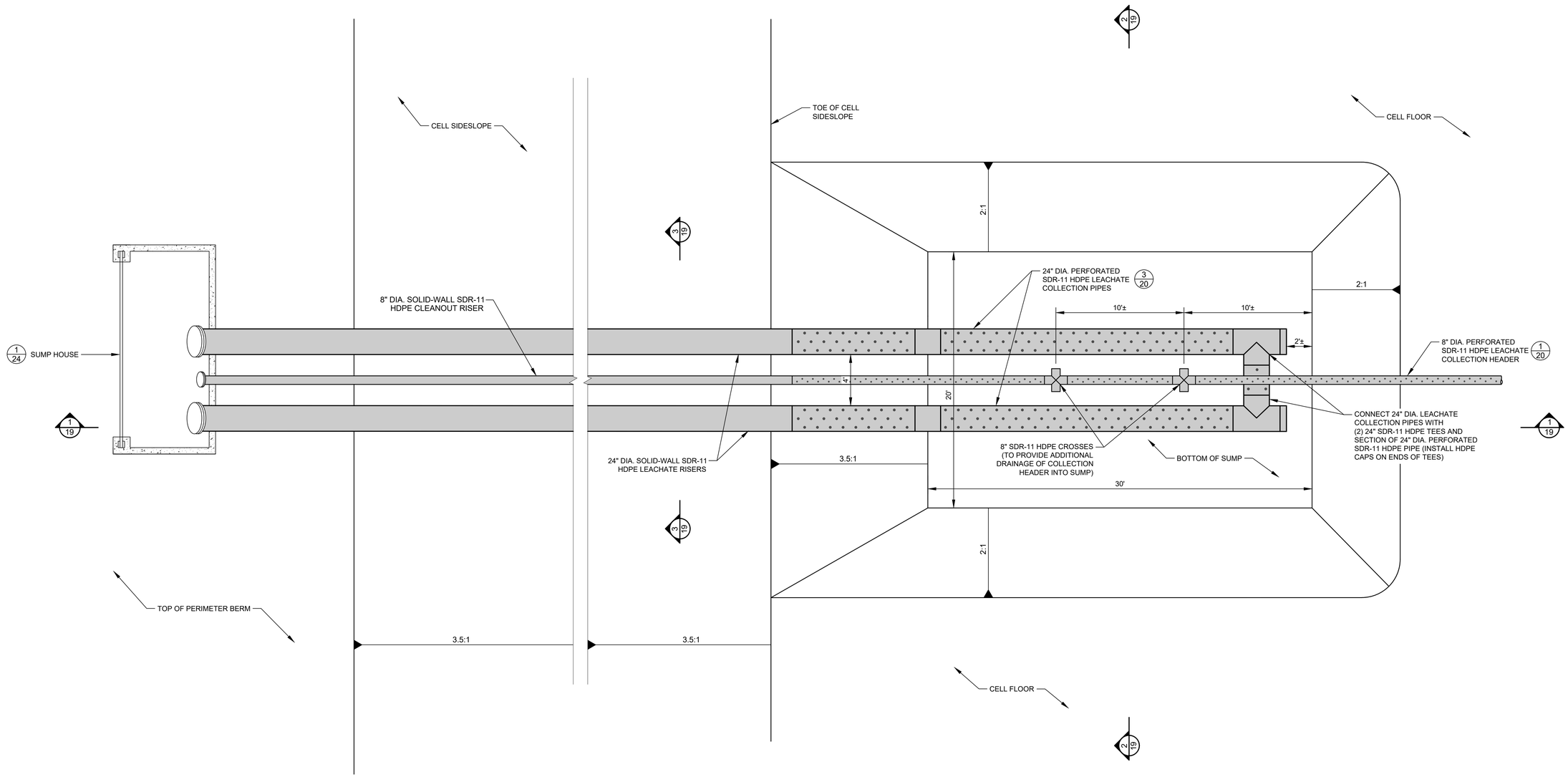
BOTTOM LINER SYSTEM DETAILS

PREPARED FOR: Dominion Energy

PROJECT: 22130453.011
DATE: 11/15/24
DRAWING 17
SHEET 17 OF 42

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1/18 LEACHATE COLLECTION SUMP AND RISER PLAN VIEW

SCALE: 1" = 4'

NOTE:

1. INTERNAL FUSION BEADS RESULTING FROM BUTT-WELDING OF HDPE PIPES SHALL BE REMOVED FROM THE LEACHATE RISER PIPES DURING INSTALLATION USING AN INTERNAL BEAD REMOVAL TOOL WITHOUT AFFECTING THE INTEGRITY OF THE FUSION JOINT. INTERNAL FUSION BEADS SHALL BE REMOVED FROM THE RISER PIPE AFTER WELDING IS COMPLETE AT EACH PIPE JOINT AFTER APPROXIMATELY HALF THE COOLING TIME OF THE WELDED JOINT HAS PASSED. ONCE REMOVED, THE INTERNAL BEAD AND ANY ASSOCIATED DEBRIS SHALL BE REMOVED PRIOR TO WELDING OF THE SUBSEQUENT PIPE SECTION AND ENTIRE PIPE LENGTH SHALL BE THOROUGHLY CLEANED PRIOR TO THE INSTALLATION OF THE RISER PIPE END CAP AND SIDE SLOPE PUMPING SYSTEM. ALTERNATIVE MEANS TO REMOVE POTENTIAL OBSTRUCTIONS MAY BE APPROVED BY THE ENGINEER.

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
2	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24
1	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
0	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23

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FLUVANNA COUNTY, VIRGINIA

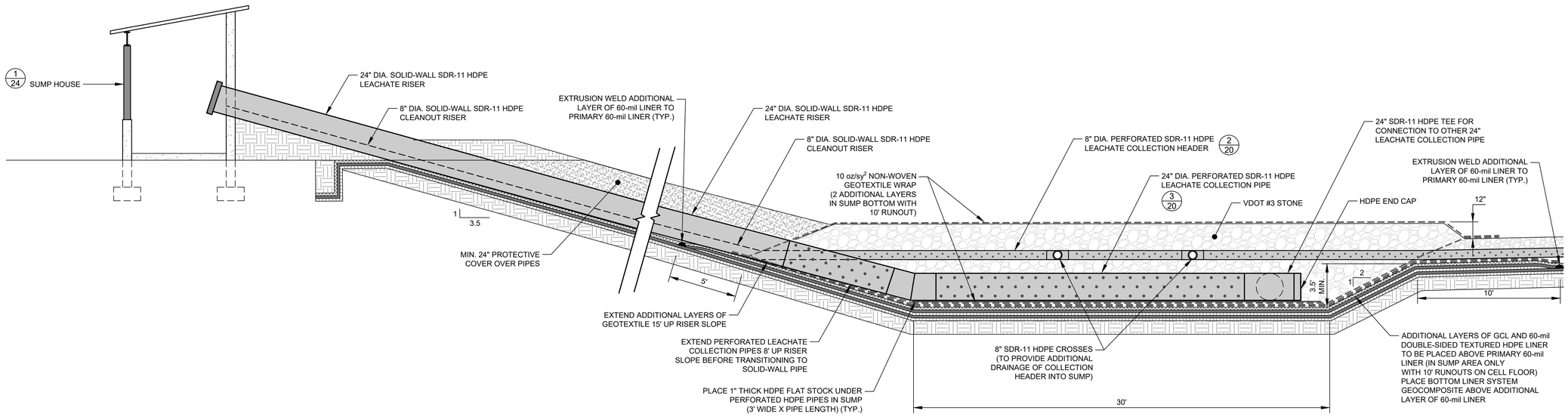
LEACHATE COLLECTION DETAILS
(1 of 3)

PREPARED FOR: Dominion Energy

PROJECT: 22130453.011
DATE: 11/15/24
DRAWING 18
SHEET 18 OF 42

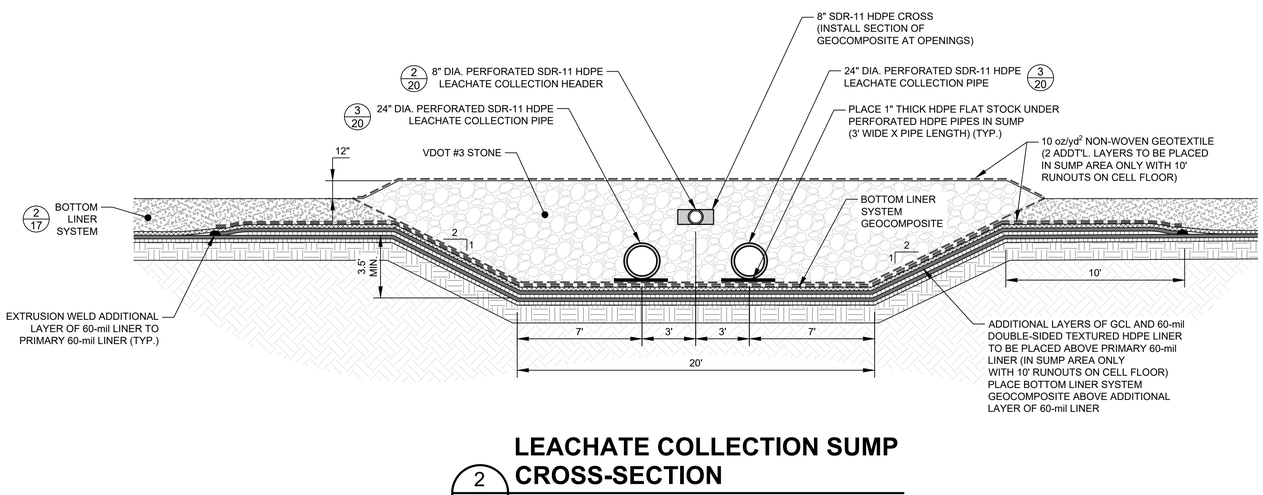
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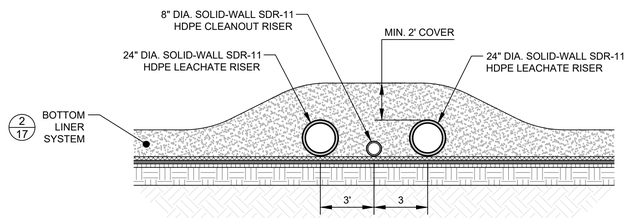
1/19 LEACHATE COLLECTION SUMP AND RISER CROSS SECTION

SCALE: 1" = 4'



2/19 LEACHATE COLLECTION SUMP CROSS-SECTION

SCALE: 1" = 4'



3/19 LEACHATE COLLECTION RISERS CROSS-SECTION

SCALE: 1" = 4'

NOTE:

1. GEOSYNTHETICS ARE EXAGGERATED FOR CLARITY.

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0	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23
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	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

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FLUVANNA COUNTY, VIRGINIA

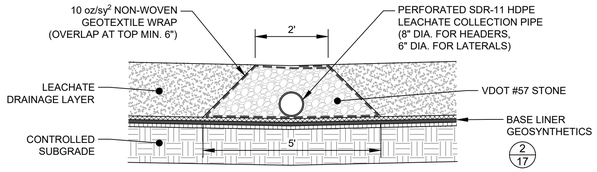
LEACHATE COLLECTION DETAILS
(2 of 3)

PREPARED FOR: Dominion Energy

PROJECT: 22130453.011
DATE: 11/15/24
DRAWING 19
SHEET 19 OF 42

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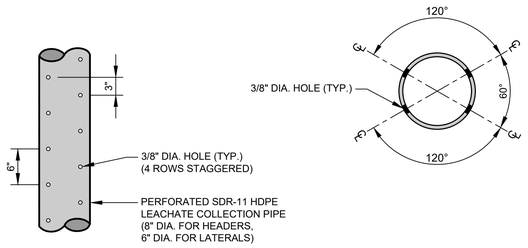


NOTES:

1. GEOSYNTHETICS ARE EXAGGERATED FOR CLARITY.
2. IF VDOT #57 STONE IS USED FOR LEACHATE DRAINAGE LAYER, GEOTEXTILE WRAP IS NOT REQUIRED.

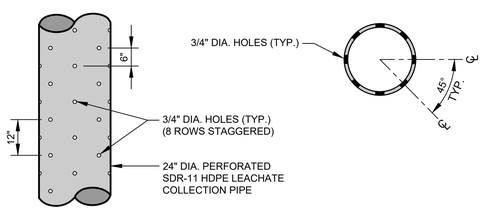
1/20 LEACHATE COLLECTION PIPE DETAIL

SCALE: 1" = 2'



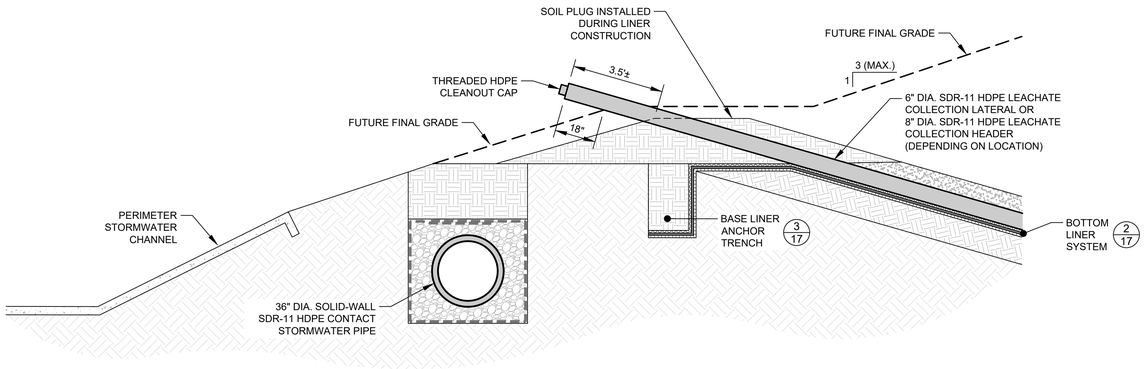
2/20 6" & 8" DIA. LEACHATE COLLECTION PIPE PERFORATION DETAIL

SCALE: 1" = 1'



3/20 24" DIA. LEACHATE COLLECTION SUMP PIPE PERFORATION DETAIL

SCALE: 1" = 2'



4/20 LEACHATE COLLECTION PIPE CLEANOUT DETAIL

SCALE: 1" = 3'

REV	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
0	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23
1	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
2	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

COMMONWEALTH OF VIRGINIA
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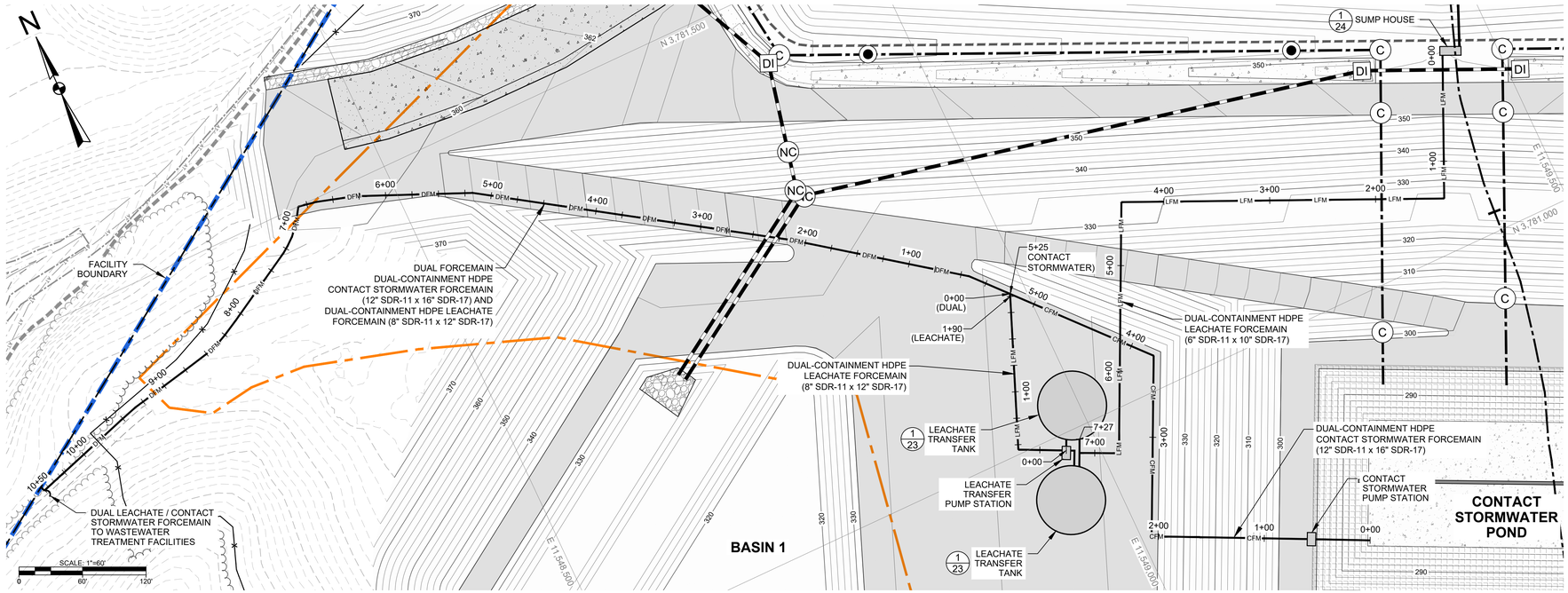
BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

LEACHATE COLLECTION DETAILS
(3 of 3)

PREPARED FOR: Dominion Energy

PROJECT: 22130453.011
DATE: 11/15/24
DRAWING 20
SHEET 20 OF 42

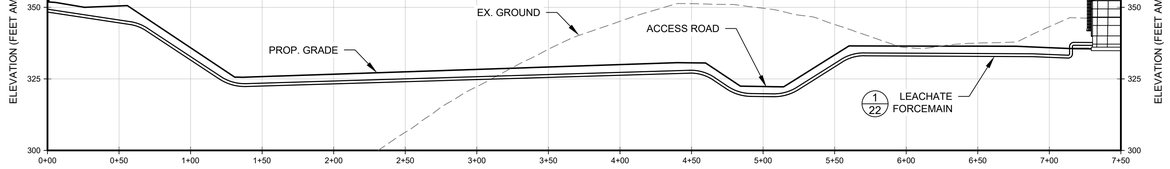
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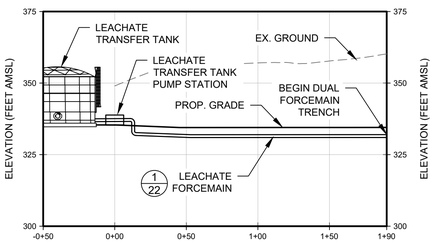


FORCEMAIN PLAN

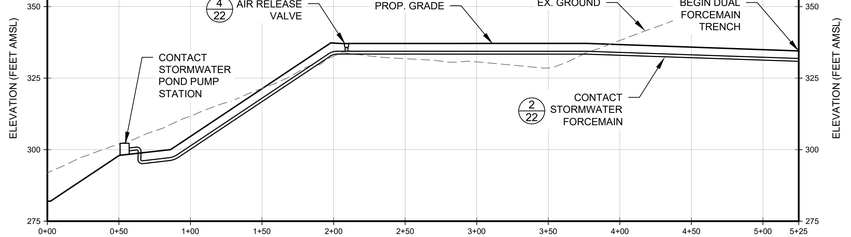
LEGEND

- PARCEL BOUNDARY
- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- DISPOSAL UNIT BOUNDARY / BOTTOM LINER ANCHOR TRENCH
- PROP. ROAD
- PROP. CONCRETE CHANNEL
- PROP. CONTACT STORMWATER PIPE
- PROP. CONTACT STORMWATER PIPE MANHOLE
- PROP. CONTACT STORMWATER PIPE INLET
- PROP. NON-CONTACT STORMWATER MANHOLE
- PROP. NON-CONTACT STORMWATER DROP INLET
- PROP. NON-CONTACT STORMWATER PIPE / CULVERT
- PROP. LEACHATE FORCEMAIN
- PROP. CONTACT STORMWATER FORCEMAIN
- PROP. DUAL LEACHATE / CONTACT STORMWATER FORCEMAIN

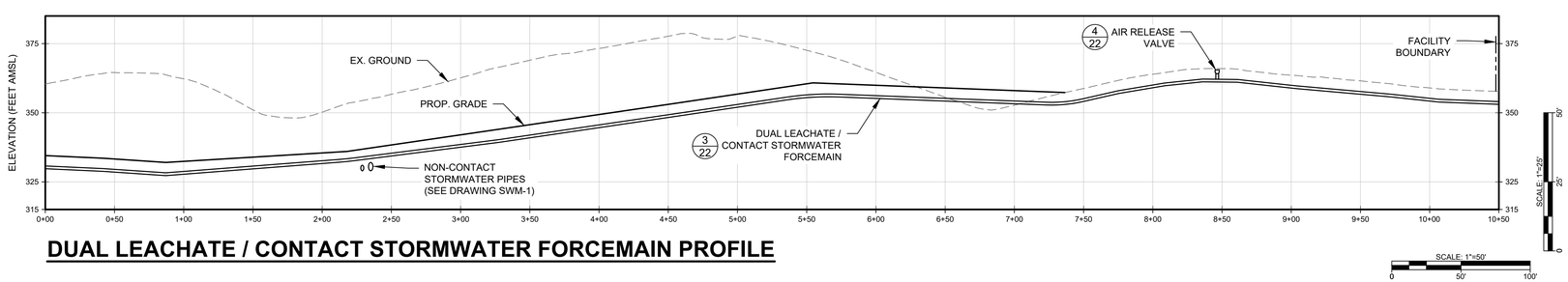




LEACHATE FORCEMAIN PROFILES



CONTACT STORMWATER FORCEMAIN PROFILE



DUAL LEACHATE / CONTACT STORMWATER FORCEMAIN PROFILE

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
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	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

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BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

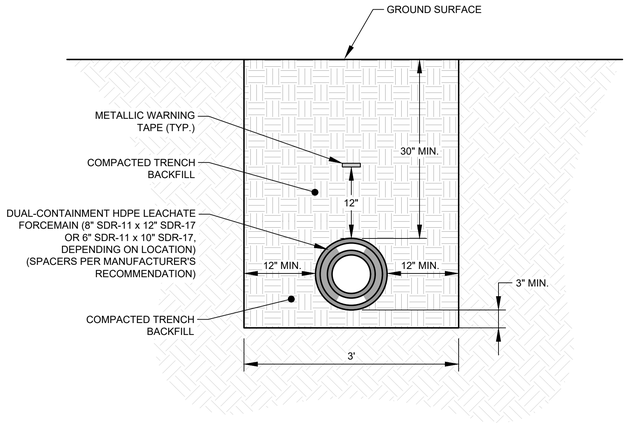
FORCEMAIN PLAN AND PROFILES

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING 21
SHEET 21 OF 42

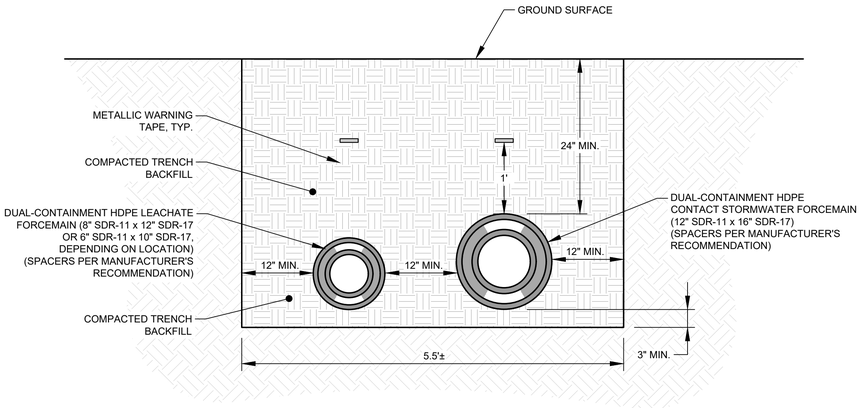
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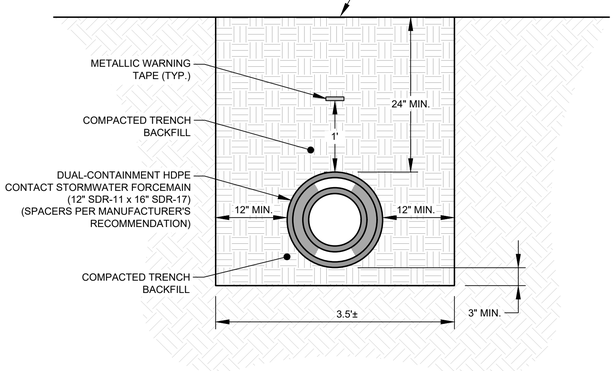
1/22 LEACHATE FORCEMAIN TRENCH DETAIL

SCALE: 1" = 1'



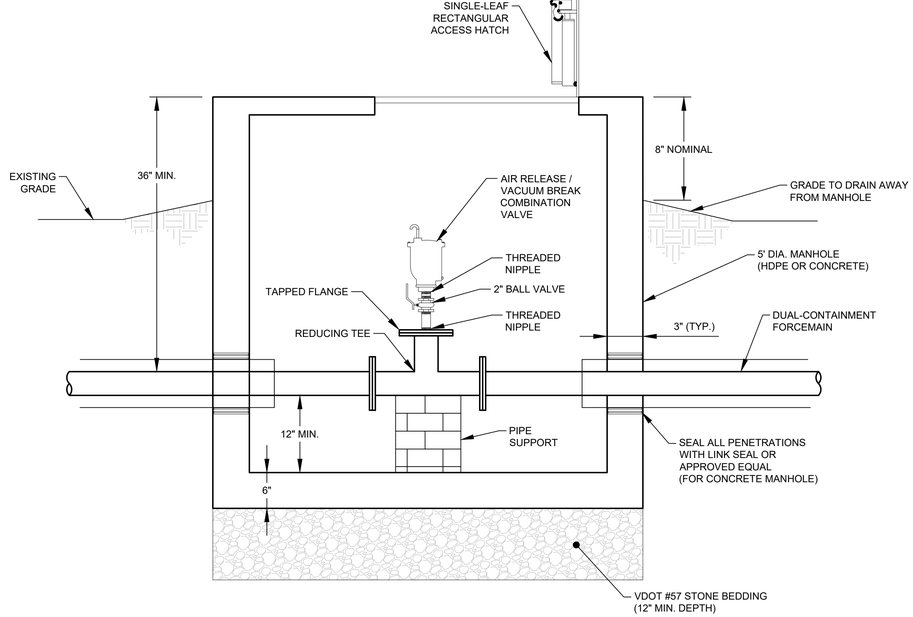
3/22 DUAL LEACHATE / CONTACT STORMWATER FORCEMAIN TRENCH DETAIL

SCALE: 1" = 1'



2/22 CONTACT STORMWATER FORCEMAIN TRENCH DETAIL

SCALE: 1" = 1'



4/22 FORCEMAIN INLINE AIR RELEASE / VACUUM BREAK DETAIL

SCALE: 1" = 1'

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	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

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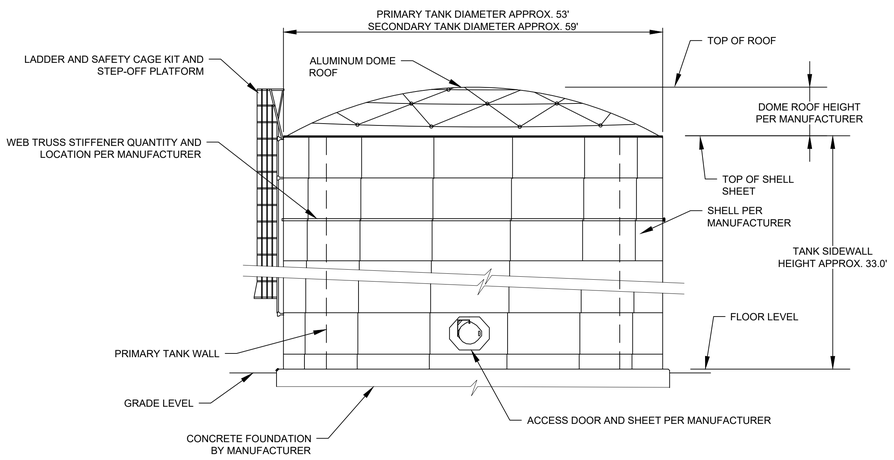
BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

FORCEMAIN DETAILS

PREPARED FOR: Dominion Energy

PROJECT: 22130453.011
DATE: 11/15/24
DRAWING 22
SHEET 22 OF 42

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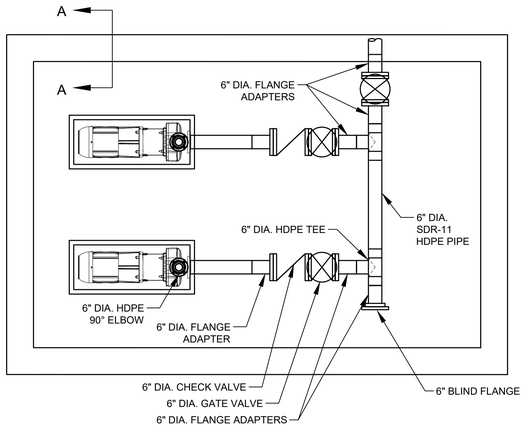


1/23 500,000 GALLON LEACHATE TRANSFER TANK DETAIL

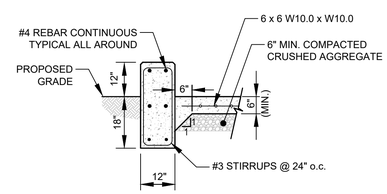
NOT TO SCALE

NOTES

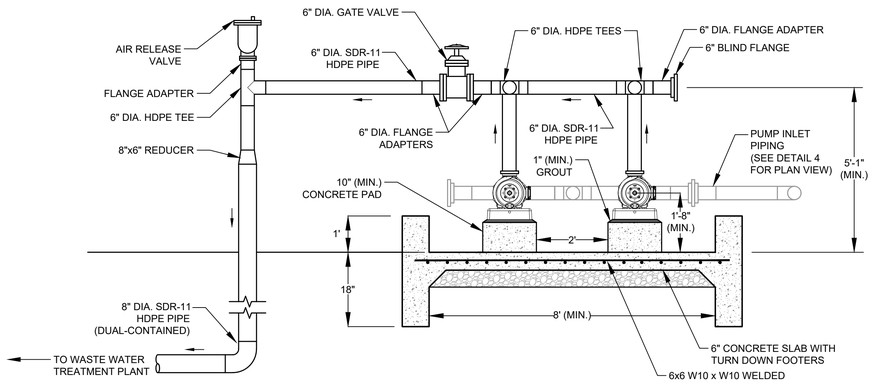
1. TANK FOUNDATION FINAL DESIGN SHALL BE PER THE MANUFACTURER. DETAILS SHOWN ARE TYPICAL OF AQUASTORE TANKS, ALTERNATE EQUIVALENT PRODUCTS WILL BE CONSIDERED. FINAL DESIGN WILL BE DEVELOPED BY A VIRGINIA LICENSED ENGINEER. SOILS DATA WILL BE PROVIDED BY OWNER FOR FINAL FOUNDATION DESIGN.
2. LEACHATE TANK DESIGN AND CONCRETE FOUNDATION DESIGN TO BE PROVIDED BY MANUFACTURER FOLLOWING GEOTECHNICAL INVESTIGATION BY OWNER.
3. LEACHATE TANK SHALL INCORPORATE A SECONDARY TANK FOR CONTAINMENT OF ANY PRIMARY TANK LEAKS.
4. TANKS SHOWN CONFORMS WITH STANDARD TANK SIZE AND DESIGN FROM CST INDUSTRIES. CONTRACTOR MAY SUBMIT ALTERNATE MANUFACTURERS FOR REVIEW.
5. TANK SHALL PROVIDE MINIMUM 500,000 GALLONS OF STORAGE FOR LEACHATE.
6. GRADING AROUND TANK SHALL DIRECT WATER AWAY FROM THE TANK FOUNDATION.
7. A LIQUID LEVEL INDICATOR THAT OPERATES ON A FLOAT INSIDE THE TANKS SHALL BE PROVIDED BY THE MANUFACTURER FOR VISUAL INSPECTION OF TANK CAPACITY.
8. HEAT TRACE AND INSULATE ALL ABOVE-GROUND PIPE TO 18" MIN. BELOW GRADE.
9. TANK INLET AND OUTLET CONFIGURATIONS SHALL BE PER MANUFACTURER'S RECOMMENDATION AND SHALL INCLUDE AT A MINIMUM ONE CHECK VALVE AND ONE BALL VALVE PER CONNECTION.



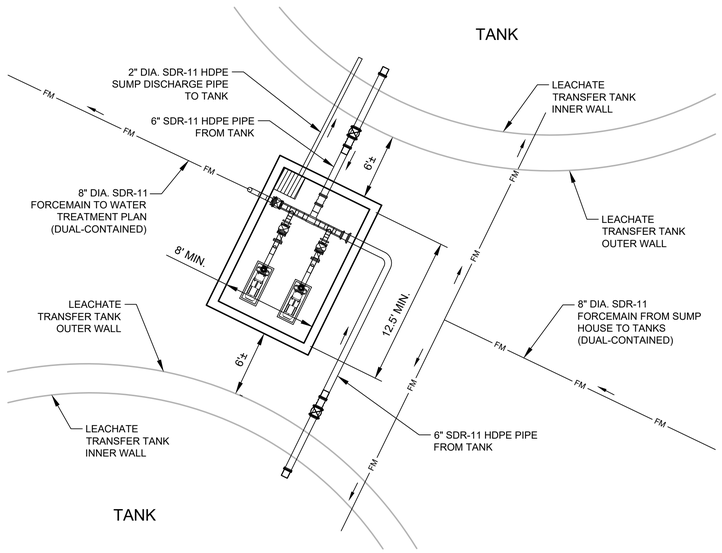
NOTE: PUMP DISCHARGE CONFIGURATION IS ABOVE PUMP INLET CONFIGURATION WITHIN THE PUMP STATION



SECTION A



ELEVATION VIEW



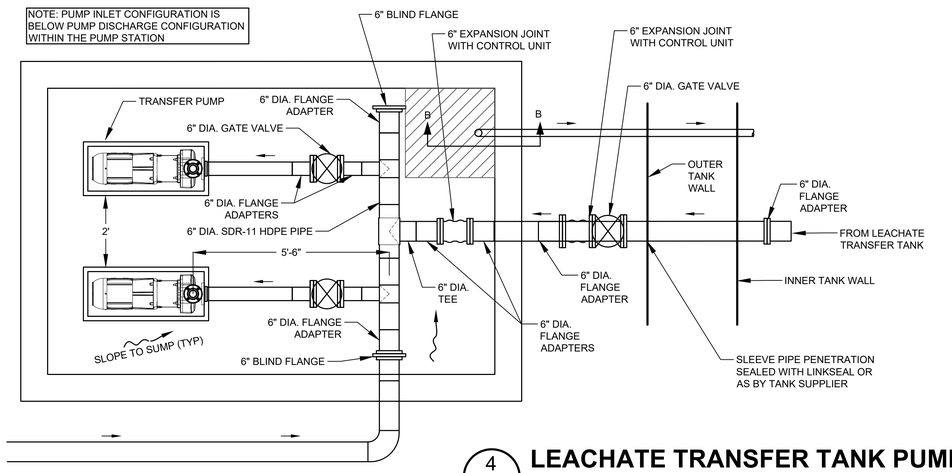
2/23 LEACHATE TRANSFER TANK AND PUMP STATION PLAN DETAIL

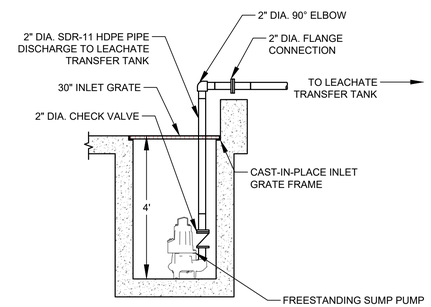
NOT TO SCALE

3/23 LEACHATE TRANSFER TANK PUMP DISCHARGE CONFIGURATION

NOT TO SCALE

NOTE: PUMP INLET CONFIGURATION IS BELOW PUMP DISCHARGE CONFIGURATION WITHIN THE PUMP STATION





SECTION B

4/23 LEACHATE TRANSFER TANK PUMP INLET CONFIGURATION

NOT TO SCALE

REV	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
0	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23
1	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
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	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

COMMONWEALTH OF VIRGINIA
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BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

LEACHATE TRANSFER TANK AND PUMP STATION DETAILS

PREPARED FOR: Dominion Energy

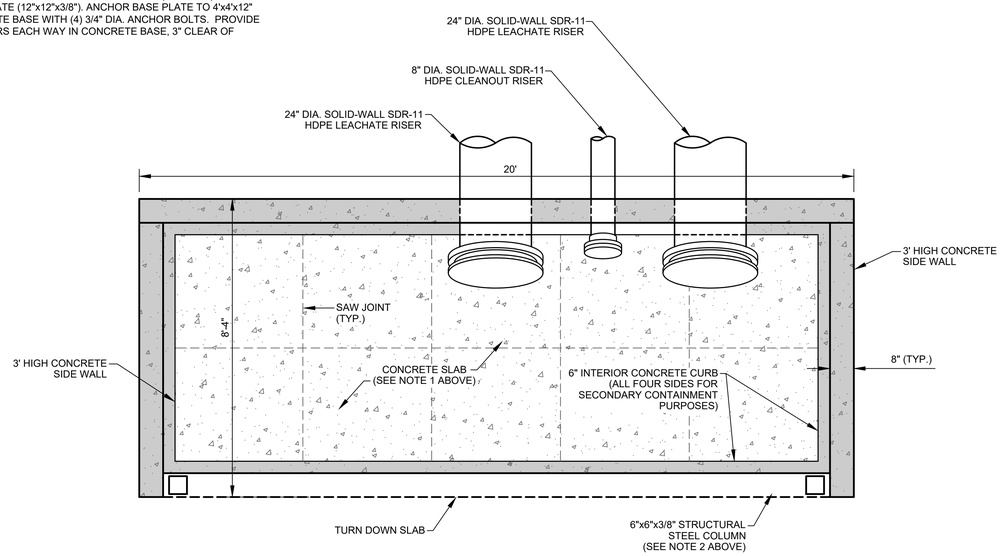
PROJECT: 22130453.011
DATE: 11/15/24
DRAWING 23
SHEET 23 OF 42

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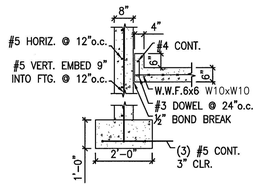
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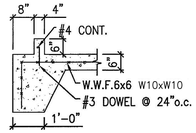
1. CONCRETE SLAB SHALL BE 6" THICK WITH WELDED WIRE FABRIC (6"x6" - W10xW10) AT MID-DEPTH. CONSTRUCT SLAB OVER MIN. 6" VDOT #57 STONE.
2. COLUMNS SHALL BE STRUCTURAL STEEL (6"x6"x3/8") WITH BASE PLATE (12"x12"x3/8"). ANCHOR BASE PLATE TO 4'x4'x12" CONCRETE BASE WITH (4) 3/4" DIA. ANCHOR BOLTS. PROVIDE (4) #5 BARS EACH WAY IN CONCRETE BASE, 3" CLEAR OF BOTTOM.



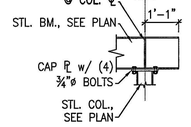
1/24 **SUMP HOUSE PLAN VIEW**
SCALE: 1" = 2'



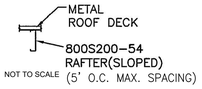
TYPICAL WALL AND FOOTING DETAIL
NOT TO SCALE



SECTION AT FRONT OPENING
NOT TO SCALE

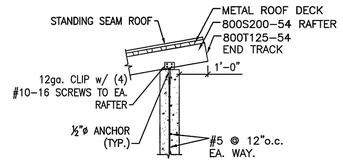


COLUMN & BEAM CONNECTION DETAIL
NOT TO SCALE

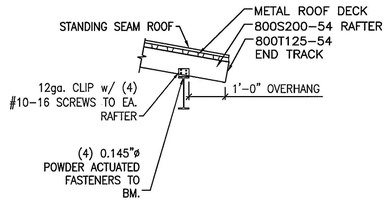


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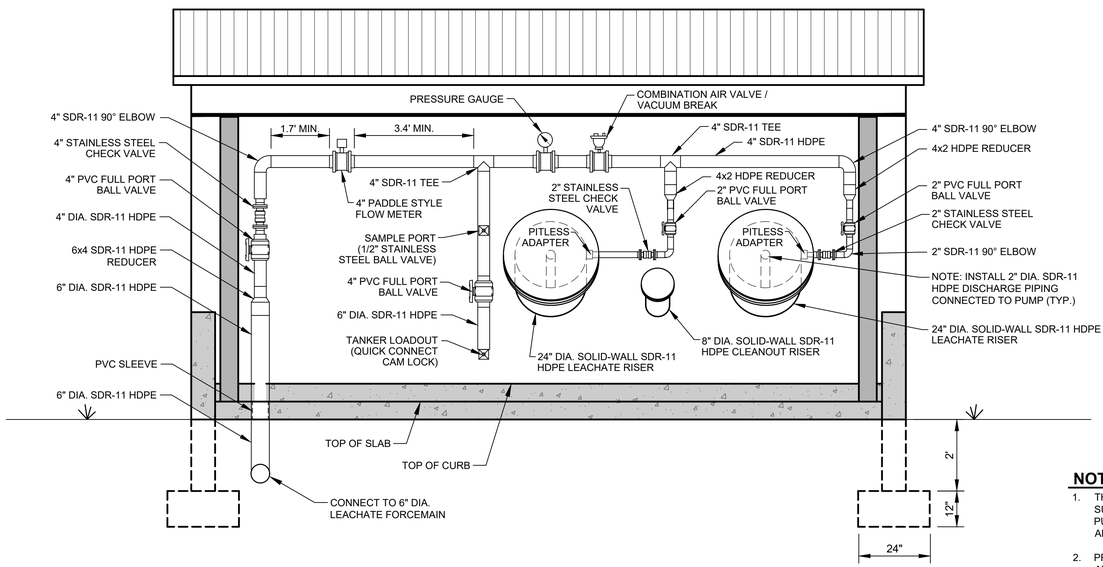
TYPICAL ROOF SECTION



ROOF DETAIL (AT BACK)
NOT TO SCALE



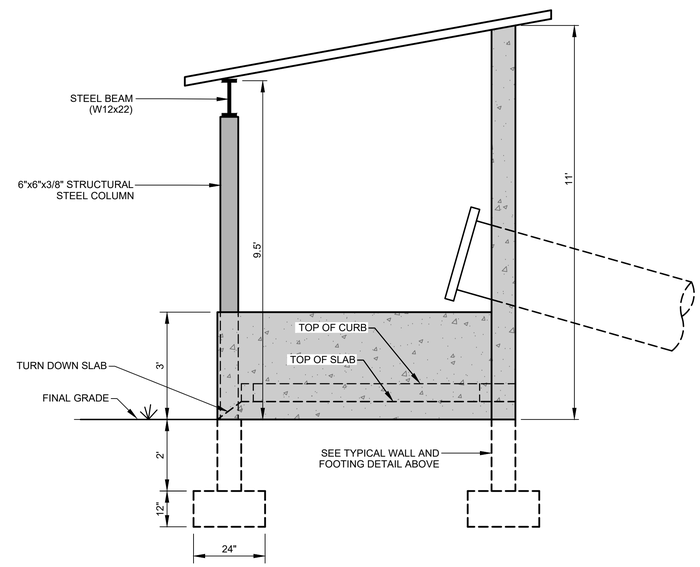
ROOF DETAIL (AT FRONT)
NOT TO SCALE



NOTES

1. THE CONFIGURATION OF PLUMBING WITHIN THE SUMP HOUSE IS SHOWN FOR GENERAL LAYOUT PURPOSES. THE EXACT CONFIGURATION MAY BE ADJUSTED IN THE FIELD.
2. PROVIDE INSULATION AND HEAT TRACING FOR ALL ABOVE-GROUND PIPING AND BURIED PIPING ABOVE FROST LINE (18" MIN. DEPTH).

2/24 **SUMP HOUSE FRONT ELEVATION**
SCALE: 1" = 2'



3/24 **SUMP HOUSE SIDE ELEVATION**
SCALE: 1" = 2'

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COMMONWEALTH OF VIRGINIA
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BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

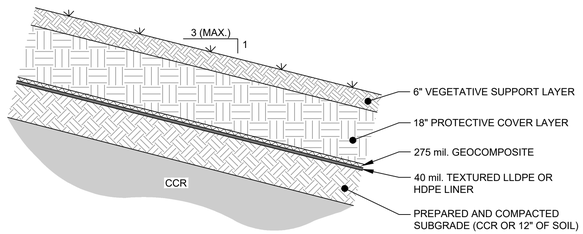
SUMP HOUSE DETAILS

PREPARED FOR: Dominion Energy

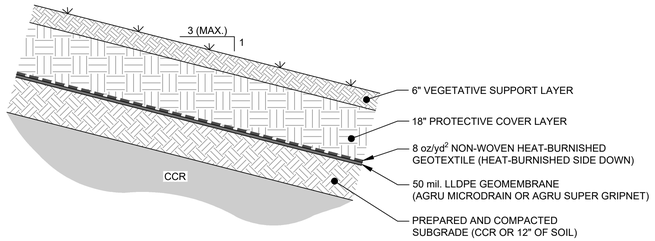
PROJECT: 22130453.011
DATE: 11/15/24
DRAWING 24
SHEET 24 OF 42

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SE_TTBL_24x36_RVA



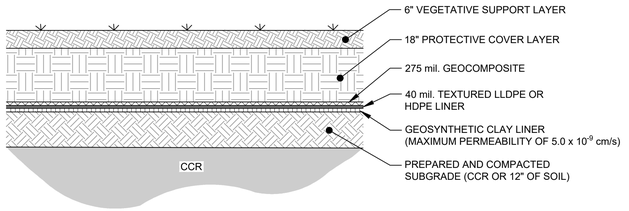
OPTION 1



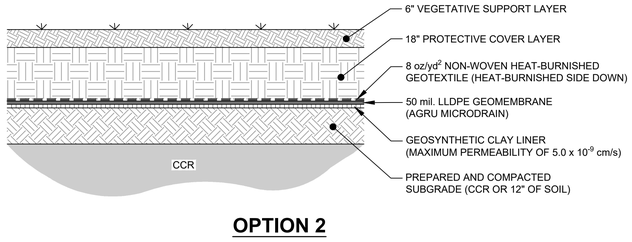
OPTION 2

1/25 SIDESLOPE FINAL COVER SYSTEM DETAIL

SCALE: 1" = 2'



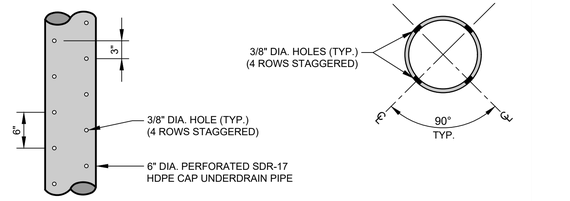
OPTION 1



OPTION 2

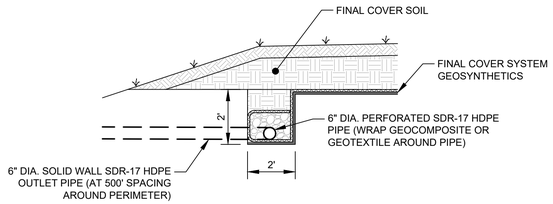
2/25 TOP DECK FINAL COVER SYSTEM DETAIL

SCALE: 1" = 2'



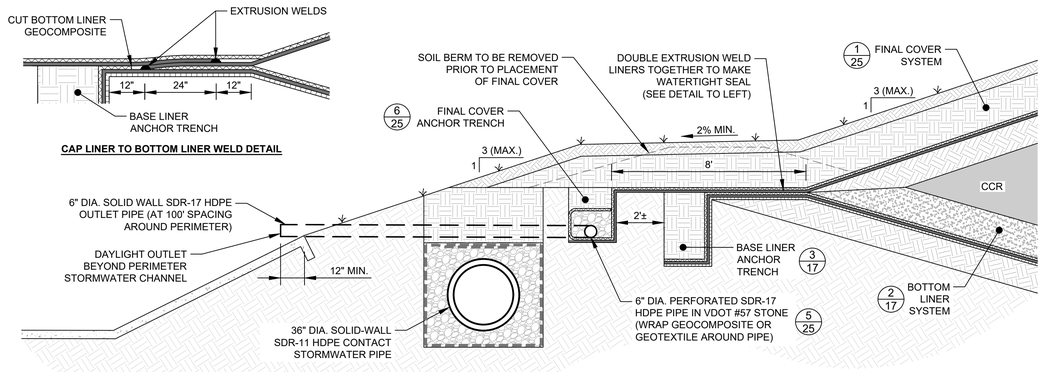
5/25 CAP UNDERDRAIN PIPE PERFORATION DETAIL

SCALE: 1" = 1'



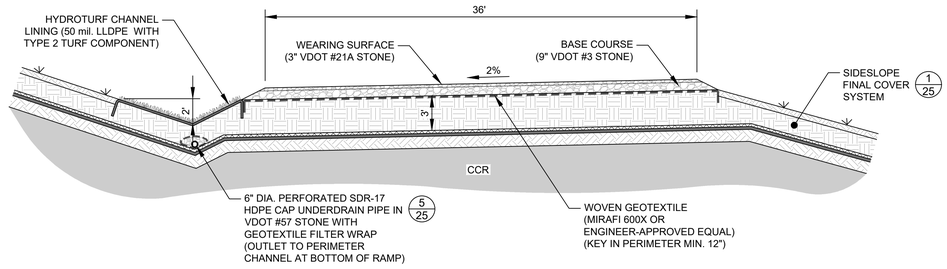
6/25 FINAL COVER ANCHOR TRENCH DETAIL

SCALE: 1" = 3'



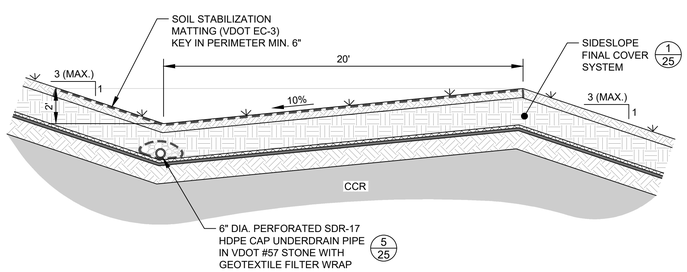
3/25 FINAL COVER TERMINATION DETAIL

SCALE: 1" = 3'



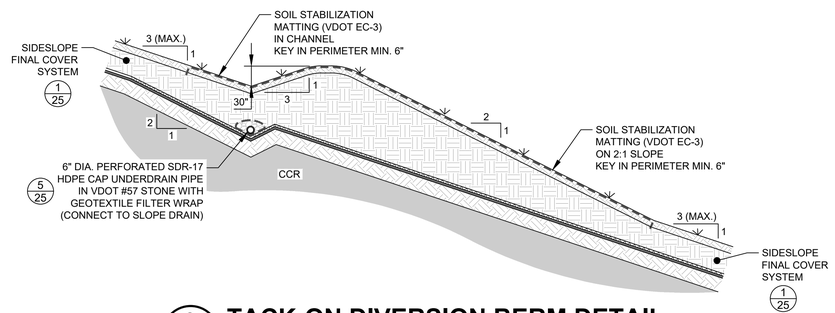
7/25 FINAL COVER ACCESS RAMP DETAIL

SCALE: 1" = 6'



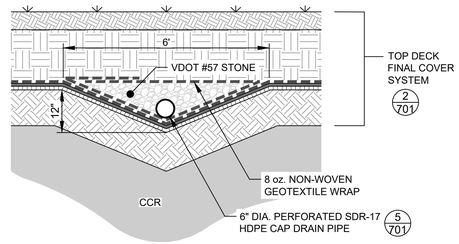
4/25 FINAL COVER DRAINAGE BENCH DETAIL

SCALE: 1" = 4'



8/25 TACK-ON DIVERSION BERM DETAIL

NOT TO SCALE



9/25 CAP DRAIN DETAIL

NOT TO SCALE

NOTE:

1. GEOSYNTHETICS ARE EXAGGERATED FOR CLARITY.

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
0	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23
1	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
2	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

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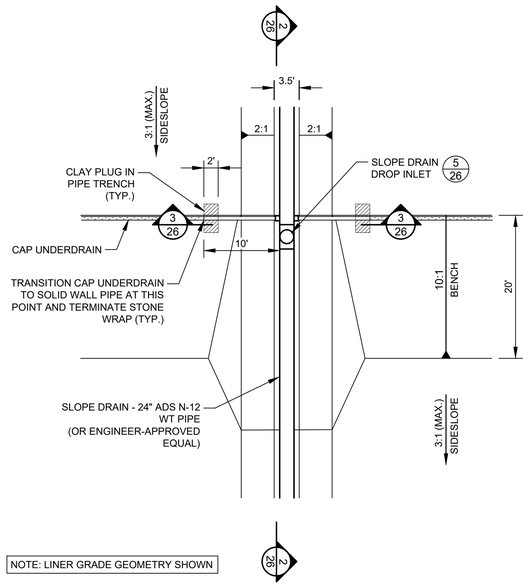
BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

FINAL COVER DETAILS (1 of 2)

PREPARED FOR: Dominion Energy

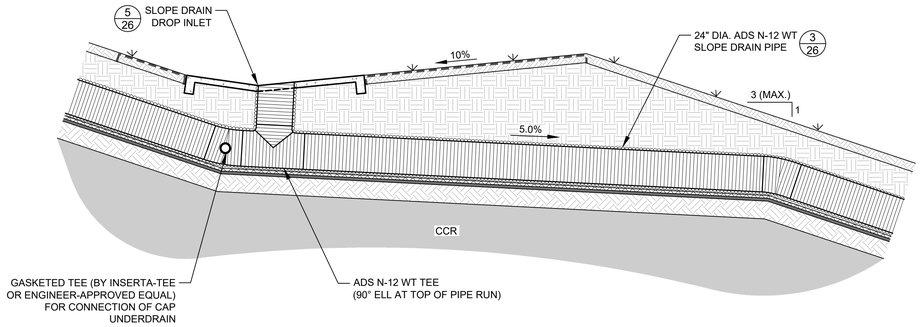
PROJECT: 22130453.011
DATE: 11/15/24
DRAWING 25
SHEET 25 OF 42

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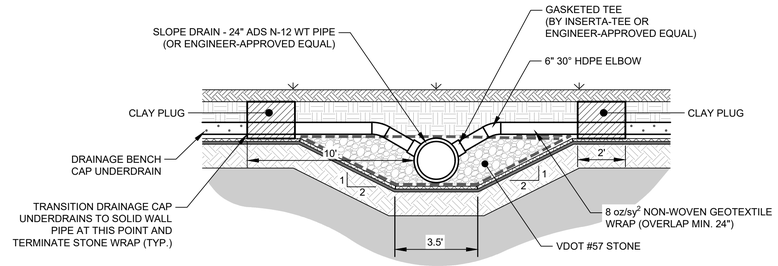
1/26 SLOPE DRAIN PLAN DETAIL AT DRAINAGE BENCH

SCALE: 1" = 10'



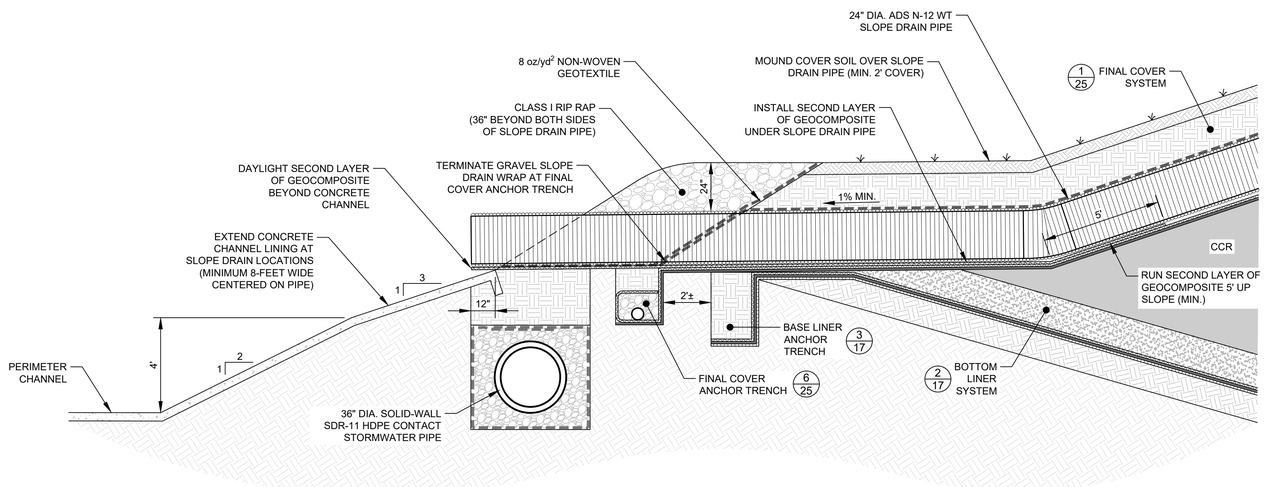
2/26 SLOPE DRAIN PROFILE AT DRAINAGE BENCH

SCALE: 1" = 4'



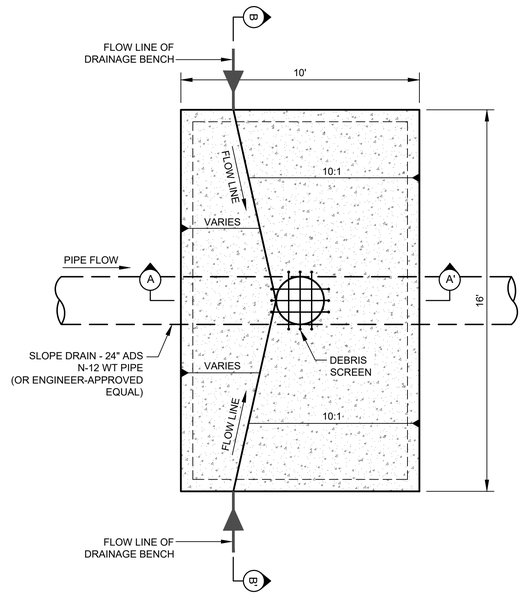
3/26 SLOPE DRAIN CROSS SECTION

SCALE: 1" = 3'

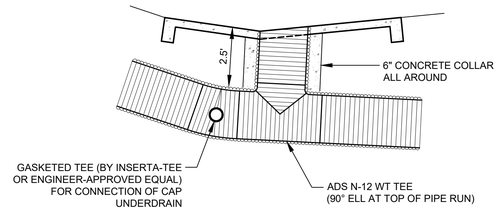


4/26 SLOPE DRAIN TERMINATION DETAIL

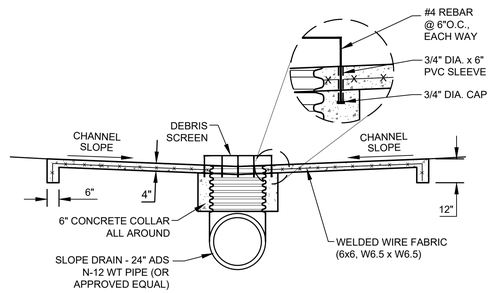
SCALE: 1" = 3'



PLAN VIEW



SECTION A-A'



SECTION B-B'

5/26 SLOPE DRAIN DROP INLET DETAIL

SCALE: 1" = 3'

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
2	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24
1	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
0	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23

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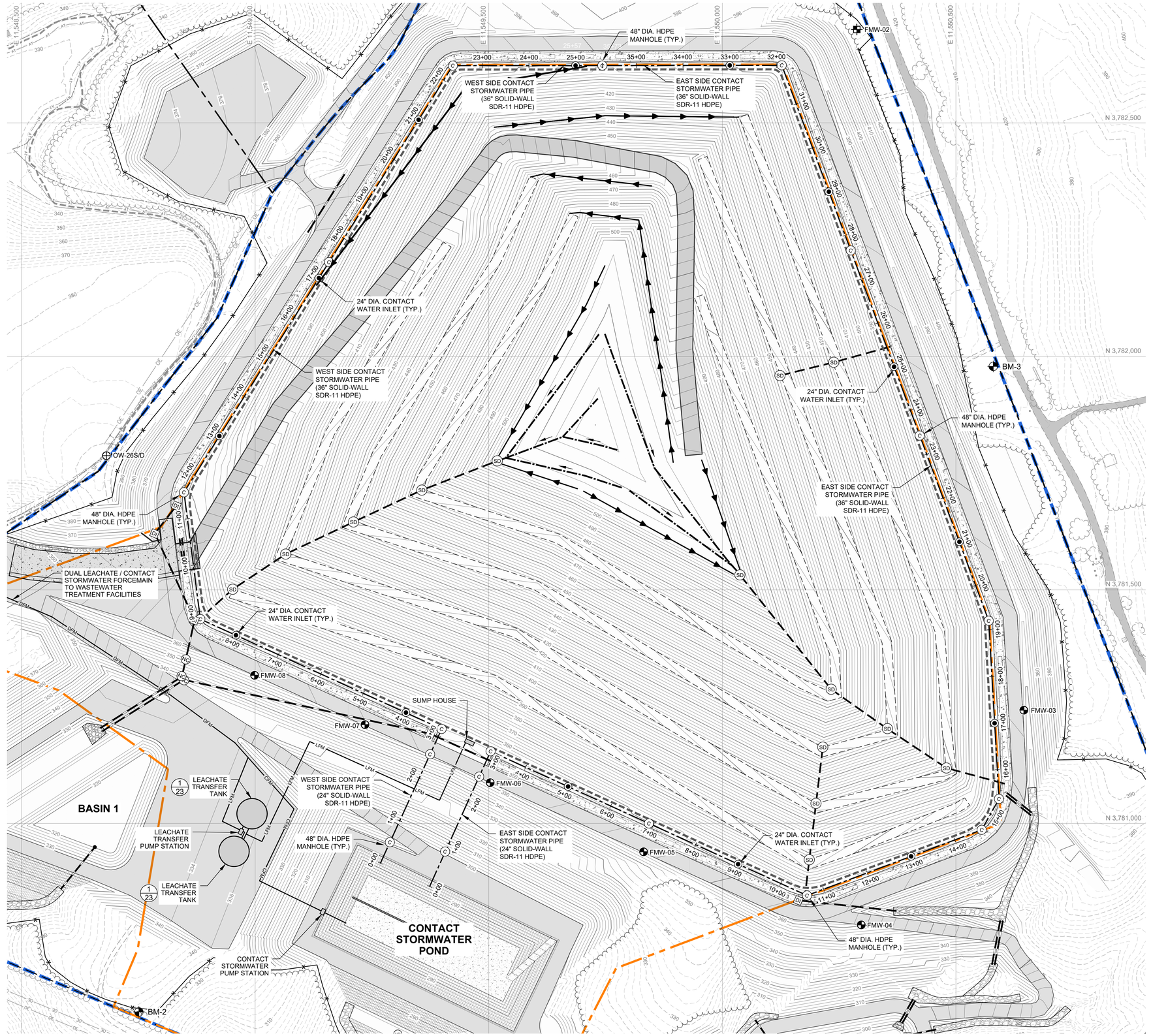
FINAL COVER DETAILS
(2 of 2)

PREPARED FOR: Dominion Energy

PROJECT: 22130453.011
DATE: 11/15/24
DRAWING 26
SHEET 26 OF 42

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LEGEND

- PARCEL BOUNDARY
- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- EX. OVERHEAD ELECTRIC LINE
- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- DISPOSAL UNIT BOUNDARY / BOTTOM LINER ANCHOR TRENCH
- BM-2 BENCHMARK
- UD PROP. UNDERDRAIN MANHOLE
- PROP. ROAD
- PROP. CONCRETE CHANNEL
- PROP. CONTACT STORMWATER PIPE
- C PROP. CONTACT STORMWATER PIPE MANHOLE
- PROP. CONTACT STORMWATER PIPE INLET
- PROP. DRAINAGE BENCH
- PROP. SLOPE DRAIN
- SD PROP. SLOPE DRAIN DROP INLET
- PROP. TOP DECK CAP DRAIN
- PROP. TACK-ON DIVERSION BERM
- NC PROP. NON-CONTACT STORMWATER MANHOLE
- DI PROP. NON-CONTACT STORMWATER DROP INLET
- PROP. NON-CONTACT STORMWATER PIPE / CULVERT
- LFM PROP. LEACHATE FORCEMAIN
- CFM PROP. CONTACT STORMWATER FORCEMAIN
- DFM PROP. DUAL LEACHATE / CONTACT STORMWATER FORCEMAIN
- PROP. RIP RAP CHANNEL ARMORING
- FMW-01 PROP. UPGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- FMW-03 PROP. DOWNGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- OW-26S/D PROP. SIDEGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION

N

SCALE: 1"=100'
0 100' 200'

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
0	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23
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	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

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FLUVANNA COUNTY, VIRGINIA

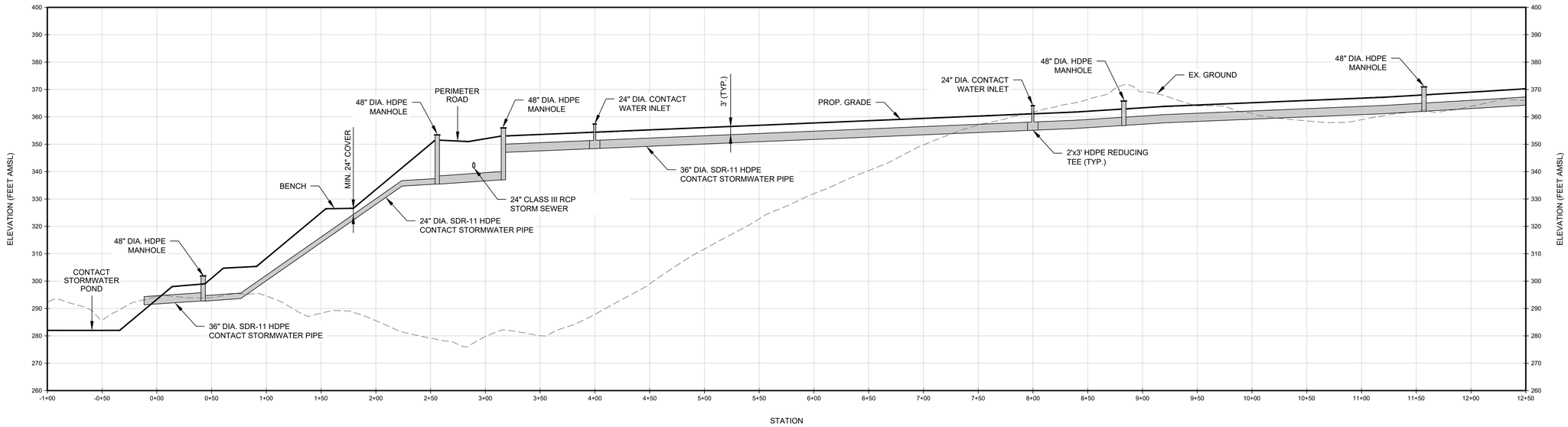
CONTACT STORMWATER PIPE PLAN

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING 27
SHEET 27 OF 42

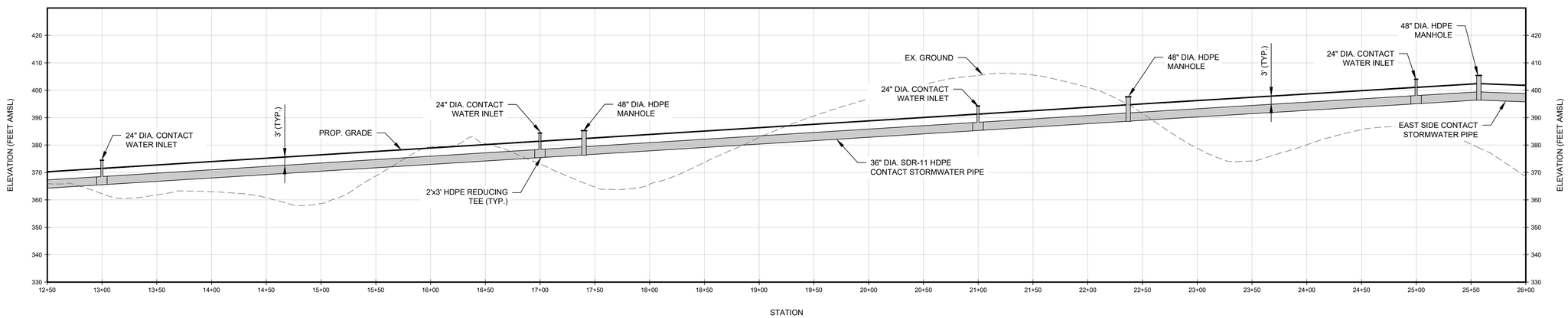
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WEST SIDE CONTACT STORMWATER PIPE PROFILE

(STATION 0+00 THRU 12+50)



WEST SIDE CONTACT STORMWATER PIPE PROFILE

(STATION 12+50 THRU 26+00)

SCALE: 1"=20'

SCALE: 1"=50'

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
2	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24
1	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
0	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23

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FLUVANNA COUNTY, VIRGINIA

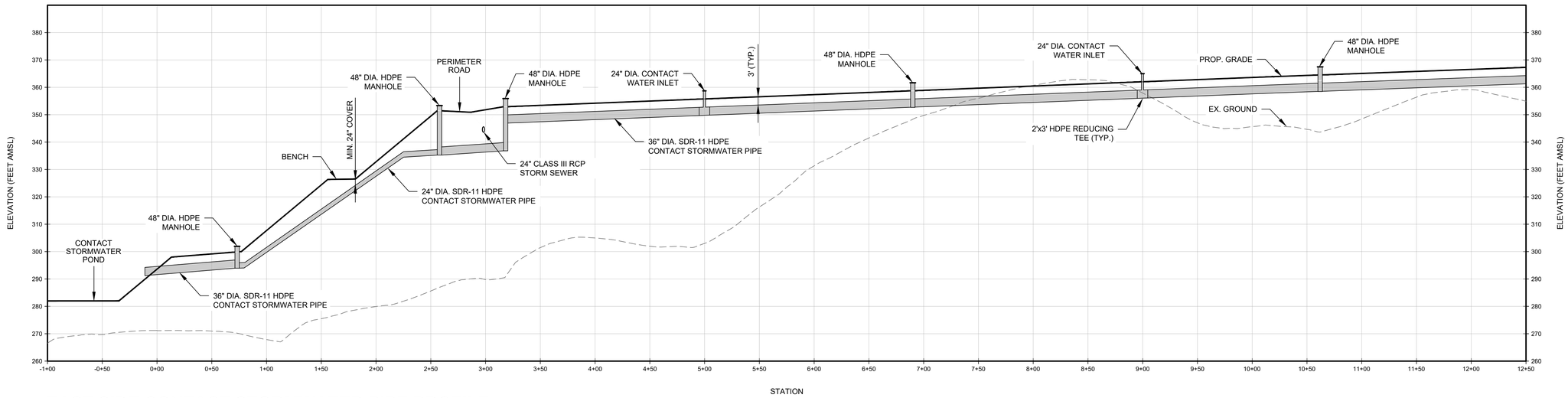
WEST SIDE CONTACT STORMWATER PIPE PROFILE

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING 28
SHEET 28 OF 42

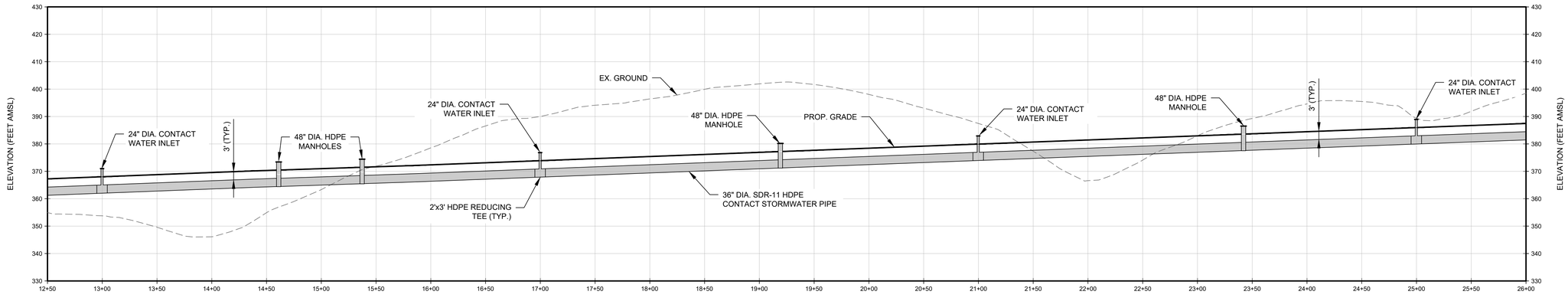
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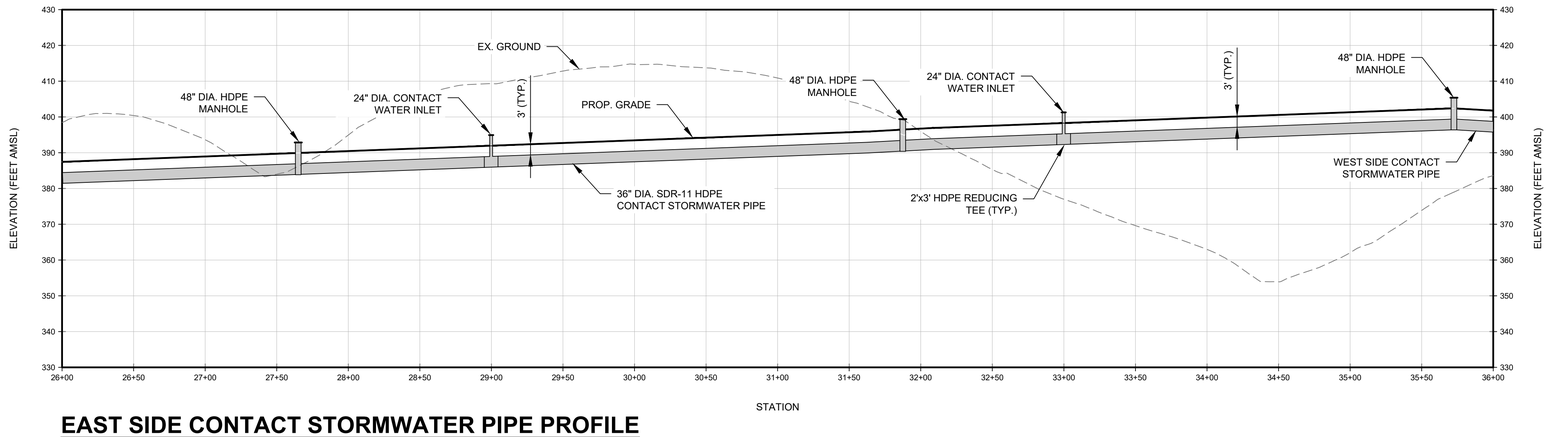
EAST SIDE CONTACT STORMWATER PIPE PROFILE

(STATION 0+00 THRU 12+50)



EAST SIDE CONTACT STORMWATER PIPE PROFILE

(STATION 12+50 THRU 26+00)



EAST SIDE CONTACT STORMWATER PIPE PROFILE

(STATION 26+00 THRU 36+00)

SCALE: 1"=50'

SCALE: 1"=20'

REV	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
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	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

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SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

EAST SIDE CONTACT STORMWATER PIPE PROFILE

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031

DATE: 11/15/24

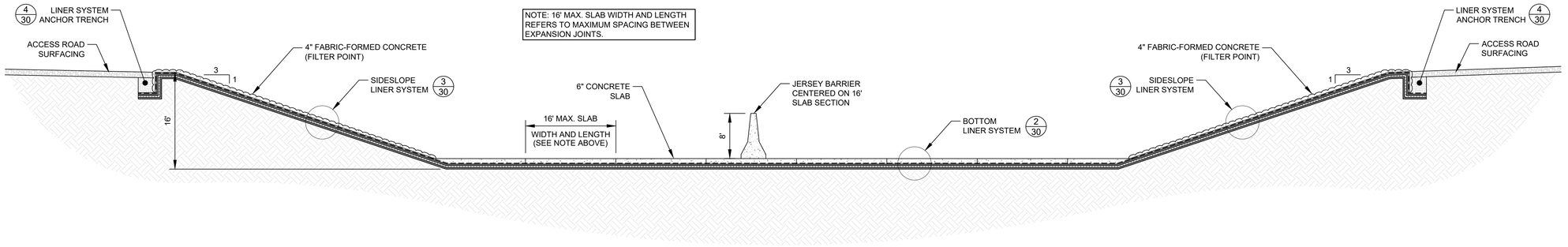
DRAWING 29

SHEET 29 OF 42

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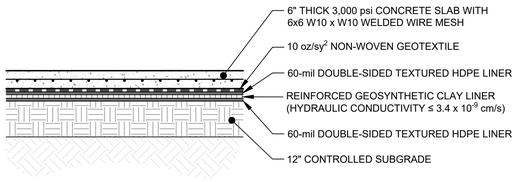
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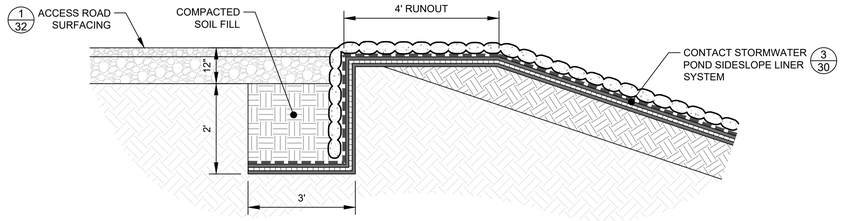
1/30 CONTACT STORMWATER POND TYPICAL CROSS-SECTION

NOT TO SCALE



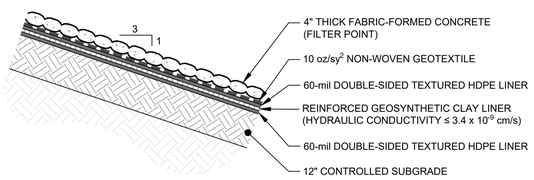
2/30 CONTACT STORMWATER POND BOTTOM LINER SYSTEM DETAIL

SCALE: 1" = 2'



4/30 CONTACT STORMWATER POND LINER SYSTEM ANCHOR TRENCH DETAIL

SCALE: 1" = 2'



3/30 CONTACT STORMWATER POND SIDESLOPE LINER SYSTEM DETAIL

SCALE: 1" = 2'

NOTE:

1. GEOSYNTHETICS ARE EXAGGERATED FOR CLARITY.

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0	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23

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SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

CONTACT STORMWATER POND DETAILS

PREPARED FOR: Dominion Energy

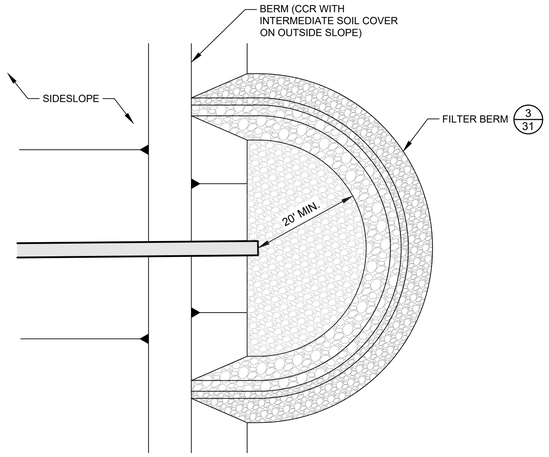
PROJECT: 22130453.011
DATE: 11/15/24
DRAWING 30
SHEET 30 OF 42

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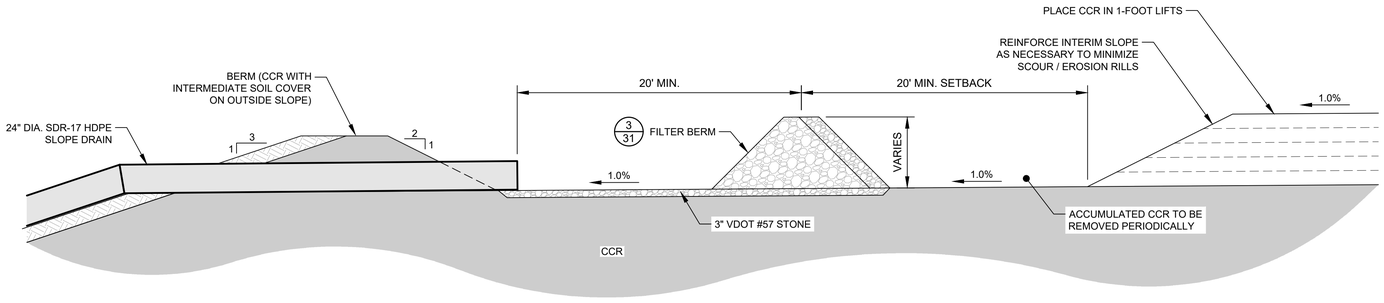
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SE_TTBL_24x36_RVA

NOTE: ALTERNATIVE CONTACT STORMWATER RUNOFF CONTROL DETAILS MAY BE PROPOSED DURING CONSTRUCTION, PROVIDED ADEQUATE CONTAINMENT AND CONVEYANCE DURING THE 25-YEAR, 24-HOUR STORM EVENT IS DEMONSTRATED.



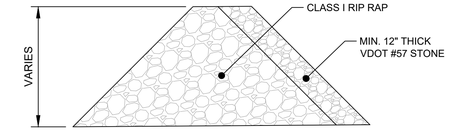
PLAN VIEW



SECTION

1/31 CONTACT STORMWATER SLOPE DRAIN INLET DETAIL

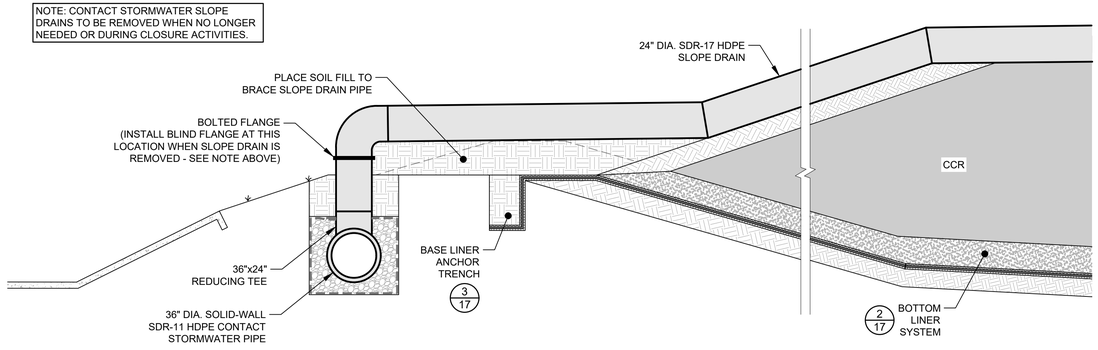
NOT TO SCALE



3/31 FILTER BERM DETAIL

NOT TO SCALE

NOTE: CONTACT STORMWATER SLOPE DRAINS TO BE REMOVED WHEN NO LONGER NEEDED OR DURING CLOSURE ACTIVITIES.



2/31 CONTACT STORMWATER SLOPE DRAIN DETAIL

NOT TO SCALE

REV	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
0	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23
1	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
2	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

COMMONWEALTH OF VIRGINIA
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BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

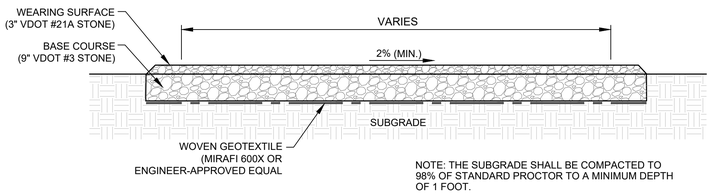
CONTACT STORMWATER MANAGEMENT DETAILS

PREPARED FOR: Dominion Energy

PROJECT: 22130453.011
DATE: 11/15/24
DRAWING 31
SHEET 31 OF 42

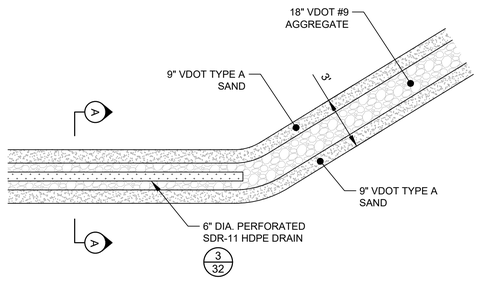
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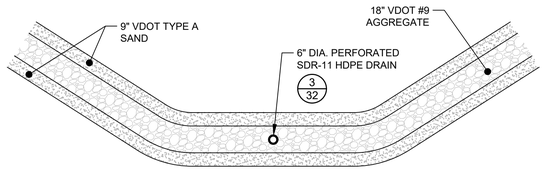
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1/32 ACCESS ROAD DETAIL

NOT TO SCALE

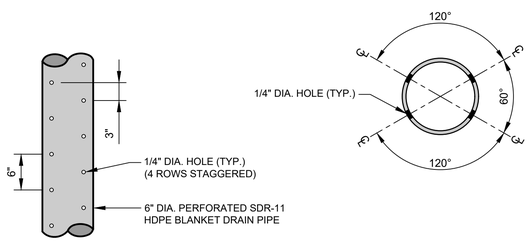




SECTION A

2/32 SAND BLANKET DRAIN DETAIL

NOT TO SCALE



3/32 BLANKET DRAIN PIPE PERFORATION DETAIL

NOT TO SCALE

REV	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
2	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24
1	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
0	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23

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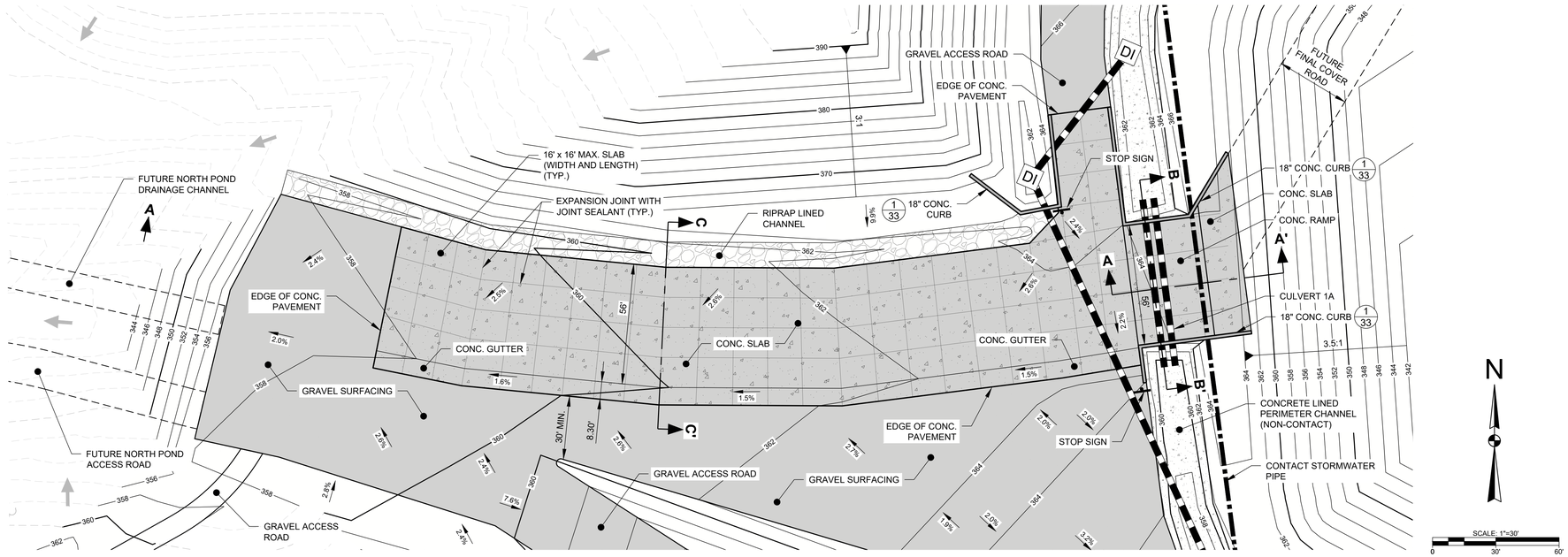
BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

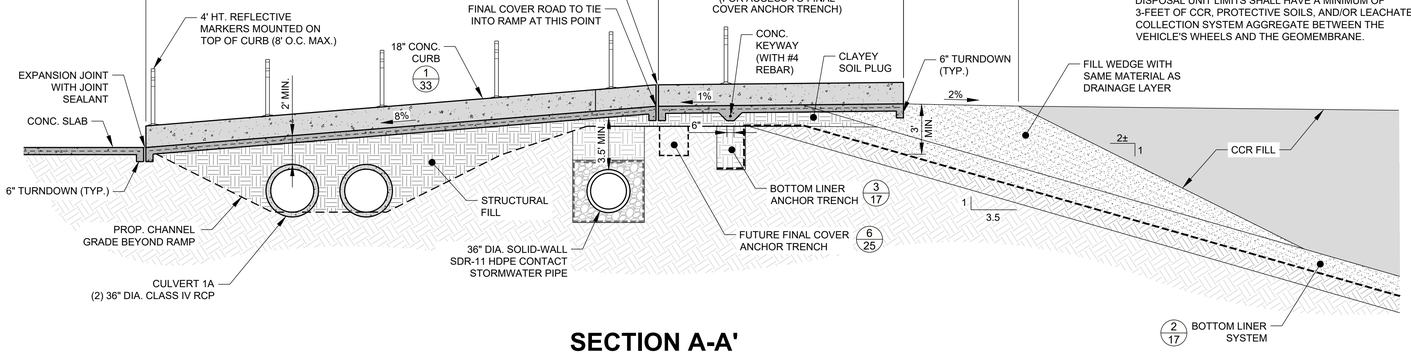
MISCELLANEOUS CONSTRUCTION DETAILS

PREPARED FOR: Dominion Energy

PROJECT: 22130453.011
DATE: 11/15/24
DRAWING 32
SHEET 32 OF 42

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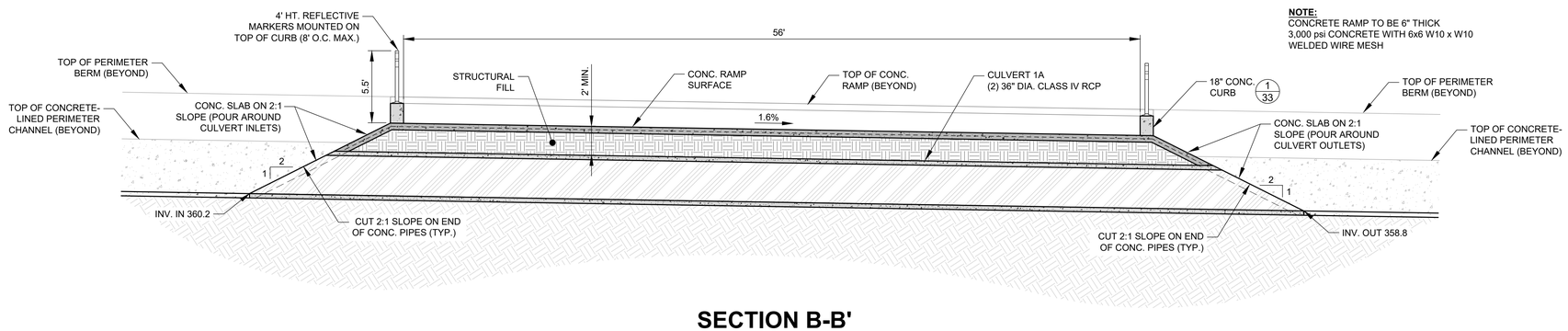


SECTION A-A'

NOT TO SCALE

NOTES:

1. CONCRETE RAMP AND SLABS TO BE 6" THICK 3,000 psi CONCRETE WITH 6x6 W10 x W10 WELDED WIRE MESH.
2. ANY HAULING EQUIPMENT OPERATING WITHIN THE DISPOSAL UNIT LIMITS SHALL HAVE A MINIMUM OF 3-FEET OF CCR, PROTECTIVE SOILS, AND/OR LEACHATE COLLECTION SYSTEM AGGREGATE BETWEEN THE VEHICLE'S WHEELS AND THE GEOMEMBRANE.

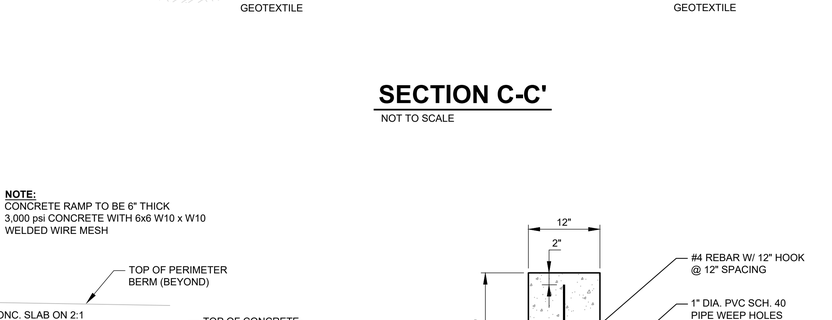


NOTE:
CONCRETE RAMP TO BE 6" THICK
3,000 psi CONCRETE WITH 6x6 W10 x W10
WELDED WIRE MESH

SECTION B-B'

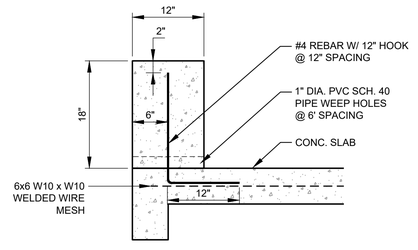
NOT TO SCALE

NOTE:
CONCRETE SLAB TO BE 6" THICK
3,000 psi CONCRETE WITH 6x6 W10 x W10
WELDED WIRE MESH



SECTION C-C'

NOT TO SCALE



CONCRETE CURB DETAIL

1/33

NOT TO SCALE

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24
3	RESPONSE TO COMMENTS 3	JRD	BPG	ATN	09/17/24
2	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
1	RESPONSE TO COMMENTS - NEW SHEET	JRD	BPG	ATN	02/16/24

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SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

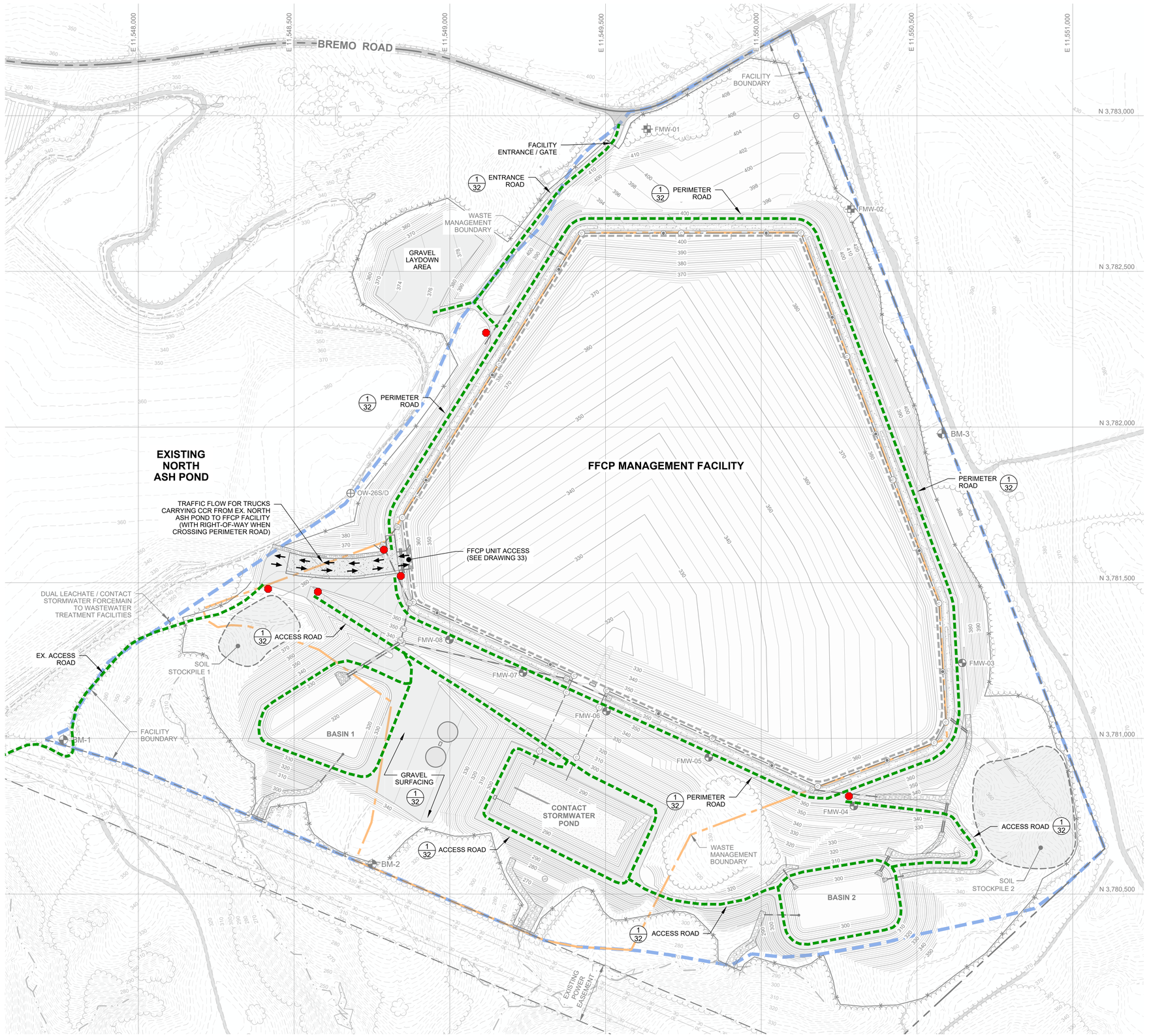
FFCP UNIT ACCESS PLAN

PREPARED FOR: Dominion Energy

PROJECT: 22130437.011
DATE: 11/15/24
DRAWING 33
SHEET 33 OF 42

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LEGEND

- PARCEL BOUNDARY
- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- EX. OVERHEAD ELECTRIC LINE
- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- DISPOSAL UNIT BOUNDARY
- BM-2 BENCHMARK
- PROP. ROAD
- PROP. CONCRETE CHANNEL
- PROP. CONTACT STORMWATER PIPE
- PROP. CONTACT STORMWATER PIPE MANHOLE
- PROP. CONTACT STORMWATER PIPE INLET
- PROP. NON-CONTACT STORMWATER MANHOLE
- PROP. NON-CONTACT STORMWATER DROP INLET
- PROP. NON-CONTACT STORMWATER PIPE / CULVERT
- PROP. RIP RAP CHANNEL ARMORING
- PROP. SOIL BORROW AREA BOUNDARY
- FMW-01 PROP. UPGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- FMW-03 PROP. DOWNGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- OW-26S/D PROP. SIDEGRADIENT GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
- PROP. TWO-WAY TRAFFIC ROUTE
- PROP. STOP SIGN
- PROP. TRAFFIC FLOW ARROWS FOR TRUCKS CARRYING CCR FROM EX. NORTH ASH POND TO FFCP FACILITY

NOTES

1. PROPOSED GRADES SHOWN ON THIS DRAWING DEPICT THE CONDITION OF THE SITE AFTER COMPLETION OF LEACHATE COLLECTION LAYER INSTALLATION.

N

SCALE: 1"=150'
0 150' 300'

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
2	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
1	RESPONSE TO COMMENTS - NEW SHEET	JRD	BPG	ATN	02/16/24

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BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

SITE TRAFFIC PLAN

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 06/03/24
DRAWING 34
SHEET 34 OF 42

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ESC LEGEND

- LOD — PROPOSED LIMITS OF DISTURBANCE LOD
- DV — DIVERSION BERM
- CE — CONSTRUCTION ENTRANCE (MIN. STD. 3.02)
- SF — SILT FENCE (MIN. STD. 3.05)
- RSF — REINFORCED SILT FENCE
- SW — SILT WATTLE (SEE ESC-7)
- CIP — CULVERT INLET PROTECTION (MIN. STD. 3.08)
- IP — STORM DRAIN INLET PROTECTION (MIN. STD. 3.07)
- OP — OUTLET PROTECTION (MIN. STD. 3.18)
- CD — CHECK DAM (MIN. STD. 3.20)
- BM — EROSION CONTROL MATTING (MIN. STD. 3.36) (TYP. ON ALL SLOPES >15%)
- MU — MULCH (MIN. STD. 3.35)
- PS — PERMANENT SEEDING (MIN. STD. 3.32)
- RR — RIP RAP (MIN. STD. 3.19)

N

SCALE: 1"=150'
0 150' 300'

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
0	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23
1	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
2	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

COMMONWEALTH OF VIRGINIA
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BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

EROSION & SEDIMENT CONTROL PLAN (PHASE 1)

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING ESC-1
SHEET 35 OF 42

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ESC LEGEND

- LOD — PROPOSED LIMITS OF DISTURBANCE LOD
- DV — DIVERSION BERM
- CE — CONSTRUCTION ENTRANCE (MIN. STD. 3.02)
- SF — SILT FENCE (MIN. STD. 3.05)
- RSF — REINFORCED SILT FENCE
- SW — SILT WATTLE (SEE ESC-7)
- CIP — CULVERT INLET PROTECTION (MIN. STD. 3.08)
- IP — STORM DRAIN INLET PROTECTION (MIN. STD. 3.07)
- OP — OUTLET PROTECTION (MIN. STD. 3.18)
- CD — CHECK DAM (MIN. STD. 3.20)
- BM — EROSION CONTROL MATTING (MIN. STD. 3.36) (TYP. ON ALL SLOPES >15%)
- MU — MULCH (MIN. STD. 3.35)
- PS — PERMANENT SEEDING (MIN. STD. 3.32)
- RR — RIP RAP (MIN. STD. 3.19)

N

SCALE: 1"=150'
0 150' 300'

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
2	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24
1	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
0	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23

COMMONWEALTH OF VIRGINIA
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BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

EROSION & SEDIMENT CONTROL PLAN
(PHASE 2)

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING ESC-2
SHEET 36 OF 42

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EROSION CONTROL NARRATIVE

PROJECT DESCRIPTION
THE PURPOSE OF THE PROJECT IS TO CONSTRUCT A CAPTIVE INDUSTRIAL LANDFILL (CCR UNIT), NAMED THE ***"BREMO BLUFF FOSSIL FUEL COMBUSTION PRODUCTS (FFCP) MANAGEMENT FACILITY"*** (FACILITY), UNDER THE VIRGINIA ENVIRONMENTAL QUALITY (DEQ) SOLID WASTE PERMIT (SWP) 627.

THE LIMITS OF DISTURBANCE FOR THE PROJECT IS APPROXIMATELY 110 ACRES.
THE TOTAL PARCEL BOUNDARY IS APPROXIMATELY 214-ACRES.

EXISTING SITE CONDITIONS
THE SITE IS TO LOCATED ALONG STATE ROUTE 656 AT 2134 BREMO ROAD IN BREMO BLUFF, VIRGINIA (N37° 42' 32" LATITUDE AND W78° 16' 25" LONGITUDE) ON AN APPROXIMATELY 214-ACRE PARCEL (TAX PARCEL 62-A-7) THAT IS OWNED BY DOMINION.

THE SITE CONSISTS OF PRIMARILY WOODED SILVICULTURE LANDS, WITH A NATURAL VALLEY DOWN THE CENTER OF THE PARCEL (RUNNING FROM THE NORTH TO THE SOUTH). POWER TRANSMISSION LINES (RUNNING EAST TO WEST) BISECTS THE LOWER THIRD OF THE PARCEL. THE PROPOSED FFCP FACILITY IS LOCATED TO THE NORTH OF THE EXISTING TRANSMISSION LINES.

ADJACENT AREAS
THE SITE IS BOUND TO THE NORTH BY STATE ROUTE 656 (BREMO ROAD); TO THE WEST BY THE BREMO POWER STATIONS NORTH ASH POND; TO THE SOUTH BY THE CSX RAIL ROAD; AND TO THE EAST BY FORESTED AGRICULTURAL LANDS.

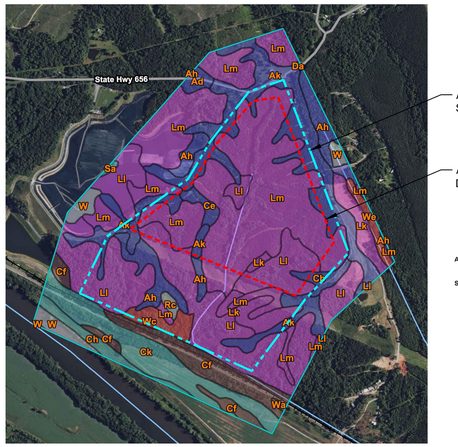
OFF-SITE AREAS
SOIL FOR THE INITIAL CONSTRUCTION OF THE FACILITY AND THE REQUIRED INTERMEDIATE AND FINAL COVER DURING CLOSURE ACTIVITIES, IS ANTICIPATED TO BE FROM WITHIN THE SITE.

EVIDENCE OF E&S PLAN COVERAGE FOR ANY OFF-SITE AREAS SHALL BE PROVIDED TO THE PLAN APPROVING AUTHORITY (IF APPLICABLE).

ON-SITE SOIL STOCKPILE AREAS
ON-SITE SOIL STOCKPILES MAY BE UTILIZED FOR THE STORAGE OF EXCAVATED OR IMPORTED MATERIALS DURING CONSTRUCTION. THESE AREAS ARE SHOWN ON THE DRAWINGS. SILT FENCING WILL BE INSTALLED ON THE DOWNHILL PERIMETER OF EACH STOCKPILE. STOCKPILES WILL BE SEEDED IF LEFT DORMANT FOR MORE THAN 7 DAYS.

SOILS
EXISTING SOILS ON THE SITE CONSIST MAINLY OF HYDRAULIC SOIL GROUP A WITH AREAS OF HSG B SOILS ALONG THE TOP OF EXISTING RIDGES. SEE SOILS MAP THIS SHEET PER WEB SOILS SURVEY.

CRITICAL AREAS
DISTURBED AREAS ADJACENT TO WATER FEATURES HAVE BEEN IDENTIFIED AS CRITICAL AREAS. SPECIAL CARE WILL BE TAKEN IN THE CONTAINMENT AND FILTERING OF RUNOFF THROUGH SILT FENCE DURING CONSTRUCTION AND STABILIZATION WHERE WATER BODIES ARE NOT OTHERWISE PROTECTED BY THE SURROUNDING TERRAIN.



GENERAL SEQUENCE OF CONSTRUCTION

CONSTRUCTION OF THE PROPOSED FFCP MANAGEMENT FACILITY WILL TAKE PLACE IN TWO MAIN PHASES (PHASE 1 AND PHASE 2). PHASE 1 CONSISTS OF THE INSTALLATION OF INITIAL PERIMETER CONTROLS UP TO, AND DURING, THE CONSTRUCTION OF THE LINER BASE GRADES. PHASE 2 CONSISTS OF THE EXCAVATION AND PLACEMENT OF INTERMEDIATE AND FINAL COVER, AS WELL AS THE FINAL STABILIZATION OF THE SITE DURING CAPPING AND CLOSURE. BELOW IS A DETAILED LIST OF THE PHASE 1 AND PHASE 2 GENERAL CONSTRUCTION SEQUENCE.

PHASE 1 (DEVELOPMENT) EROSION AND SEDIMENT CONTROL MEASURES AND SEQUENCING (INITIAL)
1. INSTALL CONSTRUCTION ENTRANCES AS INDICATED ON PLANS.
2. INSTALL SILT FENCE AND CLEARING AS INDICATED ON THE PLANS TO COLLECT AND FILTER RUNOFF.
3. INSTALL BASINS AS INDICATED ON PLANS. ONLY THE MINIMUM AREA NECESSARY TO CONSTRUCT THE BASINS IS TO BE CLEARED AND GRUBBED INITIALLY. BASINS AND OTHER PERIMETER CONTROLS ARE TO BE CONSTRUCTED AND STABILIZED PRIOR TO UPLAND CLEARING AND GRUBBING.
4. INSTALL UNDER DRAIN.
5. CLEAR AND GRUB REMAINING AREA AS EARTHWORKS PROGRESSES FROM SOUTH TO NORTH.
   5.1. RUNOFF FROM CONSTRUCTION AREAS NORTH OF THE PROPOSED BASINS IS TO BE COLLECTED IN DISCHARGED TO BASINS VIA PUMPS UNTIL GRADES ARE ACHIEVED THAT WILL ALLOW FOR CONVEYANCE BY GRAVITY.
6. INSTALL STABILIZATION ON ALL FINISHED SURFACES AS CONSTRUCTION PROGRESSES FROM SOUTH TO NORTH.
7. INSTALL ADDITIONAL CONTROL MEASURES AS CONSTRUCTION PROGRESSES FROM SOUTH TO NORTH.

PHASE 2 (CLOSURE) EROSION AND SEDIMENT CONTROL MEASURES AND SEQUENCING (FINAL)
1. INSTALL ADDITIONAL CONTROLS AS SHOWN AROUND PROPOSED BORROW AREAS.
2. CLEAR AND GRUB BORROW AREAS.
3. EXCAVATE AND TRANSPORT SOIL FROM BORROW AREAS TO CCR UNIT AS NEEDED TO ACHIEVE INTERMEDIATE COVER AND FINAL COVER.
4. INSTALL DOWNCHUTES AS CAPPING PROGRESSES.
5. DECOMMISSION AND REMOVE CONTACT WATER POND LINER.
6. CONVERT CONTACT WATER POND TO BASIN 3 AS SHOWN.
7. INSTALL STABILIZATION ON ALL FINISHED SURFACES AS CONSTRUCTION PROGRESSES.
8. DURING AND AFTER SITE DEMOBILIZATION, APPLY PERMANENT SEEDING AND MULCH / MATTING TO OTHER FINISHED SURFACES AND WHERE PRE-EXISTING GRASS SURFACES WERE DISTURBED.
9. MAINTAIN E&S CONTROLS UNTIL VEGETATION IS ESTABLISHED AND REMOVAL OF MEASURES IS ALLOWED BY THE COUNTY INSPECTOR.

STANDARD EROSION AND SEDIMENT CONTROL & POLLUTION PREVENTION PLAN NOTES

1. PRIOR TO COMMENCEMENT OF ANY LAND DISTURBANCE ACTIVITIES, A LAND DISTURBANCE PERMIT MUST BE ISSUED BY THE BUILDING INSPECTIONS OFFICE. AN APPROVED EROSION AND SEDIMENT CONTROL PLAN AND BONDING OF THE EROSION AND SEDIMENT CONTROL MEASURES IS REQUIRED FOR PERMIT ISSUANCE.
2. A SEPARATE LAND DISTURBANCE PERMIT OR AN ESC PLAN AMENDMENT TO THIS PLAN MUST BE SUBMITTED TO, AND APPROVED BY THE FLUVANNA COUNTY BUILDING INSPECTIONS OFFICE PRIOR TO ANY OFF-SITE LAND DISTURBANCE (BORROW / FILLING / DISPOSAL ACTIVITIES) ASSOCIATED WITH THIS PROJECT IF NOT OTHERWISE PERMITTED PREVIOUSLY. IF THE OFF-SITE PORTION OF THE PROJECT IS LOCATED WITHIN FLUVANNA COUNTY, ADDITIONAL E&S INSPECTION FEES WILL BE REQUIRED.
3. NOTIFY THE FLUVANNA COUNTY BUILDING INSPECTIONS OFFICE AT 434-591-1935 AT LEAST THREE DAYS IN ADVANCE TO SCHEDULE AN ON-SITE PRE-CONSTRUCTION MEETING.
4. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE.
5. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN FOURTEEN DAYS.
6. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCK PILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES.
7. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES, AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
8. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND INSTALLED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE. INITIAL CLEARING MUST BE THE MINIMUM REQUIRED TO INSTALL EROSION AND SEDIMENT CONTROL MEASURES AND DEVICES. SHOULD EITHER THE EROSION AND SEDIMENT CONTROL NARRATIVE OR SEQUENCE OF CONSTRUCTION CONFLICT WITH THIS REQUIREMENT, THE CONFLICTING PORTIONS OF EITHER WILL BE DETERMINED TO BE INVALID.
9. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT, IN THE OPINION OF THE COUNTY INSPECTOR, IS UNIFORM MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.
10. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:

    10.1. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME
    10.2. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES
    10.3. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
    10.4. RESTABILIZATION SHALL BE IN ACCORDANCE WITH THE ABOVE NOTES.

11. ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.
12. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A DISPOSAL AREA.
13. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSPECT EROSION CONTROL DEVICES PERIODICALLY AND AFTER EVERY ERODIBLE RAINFALL. ANY NECESSARY REPAIRS OR CLEAN UP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.
14. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AND DEVICES MAY BE REQUIRED BY THE DIRECTOR OF BUILDINGS INSPECTION OR THEIR DESIGNATED AGENT IF DEEMED NECESSARY.
15. THE OWNER SHALL INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES AND MEASURES IF THE REGISTERED LAND DISTURBER DETERMINES THAT SUCH ADDITIONAL DEVICES AND MEASURES ARE NECESSARY.
16. ALL EROSION CONTROL DEVICES SHALL BE IN PLACE AND FUNCTIONAL AT ALL TIMES AND IF REMOVED FOR CONSTRUCTION PROGRESS, SHALL BE REPLACED BY THE CLOSE OF EACH WORKDAY.
17. FINAL REMOVAL OF EROSION CONTROL DEVICES SHALL NOT OCCUR UNTIL THE DIRECTOR OF BUILDINGS INSPECTION OR HIS DESIGNATED AGENT DEEMS THE SITE STABILIZED.
18. PERMANENT SEEDING IS TO BE IN ACCORDANCE WITH THE ACCOMPANYING SEEDING SCHEDULE.
19. CONSTRUCTION SITE OPERATORS ARE REQUIRED TO CONTROL WASTE SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER, AND SANITARY WASTE AT THE CONSTRUCTION SITE THAT MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY.
20. CONSTRUCTION SITE OPERATORS ARE REQUIRED TO CONTROL THE TRANSPORT OF DUST AND OTHER WIND BORN CONTAMINANTS AS A RESULT OF LAND-DISTURBING, DEMOLITION AND CONSTRUCTION ACTIVITIES. THE OPERATOR SHALL PREVENT THE SURFACE AND AIR MOVEMENT OF AIRBORNE SUBSTANCES IN ACCORDANCE WITH STD AND SPEC 3.39 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK OR AS APPROVED BY THE BUILDING INSPECTIONS OFFICE OR THEIR DESIGNATED AGENT.

EROSION AND SEDIMENT CONTROL COMPLIANCE:
FINAL EROSION AND SEDIMENT CONTROL (ESC) PLANS AND DETAILS SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY (FLUVANNA COUNTY). NOTES, NARRATIVE, CONTROLS, AND DETAILS SHOWN WITHIN THIS PLAN SHALL BE SUPERCEDED BY THOSE APPROVED BY THE LOCAL AUTHORITY COMPLETED DURING THE LAND DISTURBANCE PERMITTING PROCESS.

STORMWATER COMPLIANCE:
FINAL STORMWATER MANAGEMENT (SWM) PLANS AND DETAILS SHALL BE IN ACCORDANCE WITH THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) AND LOCAL AUTHORITY (DEQ). NOTES, NARRATIVE, CONTROLS, AND DETAILS SHOWN WITHIN THIS PLAN SHALL BE SUPERCEDED BY THOSE APPROVED BY THE LOCAL AUTHORITY COMPLETED DURING THE LAND DISTURBANCE PERMITTING PROCESS.

CONSTRUCTION NOTES

1. ALL EXISTING GRAVEL ACCESS ROADS AROUND THE CONSTRUCTION AREA SHALL BE MAINTAINED IN SERVICEABLE CONDITION THROUGHOUT THE PROJECT, INCLUDING REGRADING AND DRESSING WITH STONE AS NECESSARY.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING FLUVANNA COUNTY'S BUILDING INSPECTIONS OFFICE AND SCHEDULING A PRE-CONSTRUCTION MEETING AT LEAST THREE DAYS PRIOR TO STARTING ANY WORK ON THIS PROJECT. ALL WORK SHALL BE SUBJECT TO INSPECTION BY COUNTY INSPECTORS.
3. DISTURBED AREAS SHALL BE KEPT TO A MINIMUM, AND RESTORATION OF SUCH AREAS SHALL BE DONE BY THE CONTRACTOR AS QUICKLY AS POSSIBLE. ALL DISTURBED AREAS SHALL BE SEEDED OR PAVED WITHIN SEVEN DAYS AFTER BEING DISTURBED OR BACKFILLED, OR AS DIRECTED BY THE INSPECTOR ASSIGNED TO THE PROJECT.
4. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE V.D.O.T. ROAD AND BRIDGE SPECIFICATIONS AND ROAD AND BRIDGE STANDARDS.
5. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, AND SECTION 1.5 OF THE E&S REGULATIONS OF THE VIRGINIA DIVISION OF SOIL AND WATER CONSERVATION (VR625-02-00).
6. FINAL ACCEPTANCE BY THE OWNER SHALL NOT BE MADE UNTIL ALL WORK SHOWN ON THE APPROVED PLANS IS COMPLETED.
7. WHERE UNSUITABLE MATERIAL IS ENCOUNTERED, IT SHALL BE REMOVED WHERE NECESSARY, AND REPLACED WITH SUITABLE MATERIAL IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
8. LOCATIONS OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE. CONTRACTOR SHALL CALL "MISS UTILITY" AT 811 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. IF PROPOSED WORK CONFLICTS WITH ANY UTILITIES, CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY, CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND UTILITIES OR STRUCTURES.
9. THE RESPONSIBLE LAND DISTURBER FOR THIS PROJECT SHALL BE DESIGNATED BY THE CONTRACTOR.

DUST CONTROL NOTES

1. EXPOSED CCR AS WELL AS OTHER CONSTRUCTION AREAS ARE TO BE MANAGED TO PREVENT GENERATION OF FUGITIVE DUST.
2. DUST CONTROL MEASURE SHALL INCLUDE, BUT ARE NOT LIMITED TO, WATERING, SPRAY-ON ADHESIVES (EARTHGUARD SOIL STABILIZER), AND TRAFFIC CONTROL.
3. DUST CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH STANDARD E&S NOTE #20.
4. CONTRACTOR SHALL PREPARE A SITE SPECIFIC DUST CONTROL PLAN.

TEMPORARY SEEDING NOTES

1. ALL SEEDING, FERTILIZING AND LIMING SHALL BE DONE IN ACCORDANCE WITH SPECIFICATION 3.31 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH), THIRD EDITION, 1992. MULCHING SHALL BE DONE IN ACCORDANCE WITH SPECIFICATION 3.31 OF THE VESCH.
2. TEMPORARY SEEDING WILL BE APPLIED WITHIN 7 DAYS TO DENUDED AREAS WHICH MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 14 DAYS. FOR TEMPORARY SEEDING USE 50% OF THE RECOMMENDED RATES OF FERTILIZER, LIME AND FULL AMOUNT OF SEED AND MULCH REQUIRED FOR REGULAR SEEDING.
3. ALL TEMPORARY EARTH BERMS, DIVERSIONS, AND SILT DAMS ARE TO BE MULCHED AND SEEDED FOR VEGETATIVE COVER IMMEDIATELY AFTER GRADING. STRAW OR HAY MULCH IS REQUIRED. THE SAME APPLIES TO ALL STOCKPILES, ON SITE AS WELL AS SOIL (INTENTIONALLY) TRANSPORTED FROM THE PROJECT SITE.

TEMPORARY SEEDING MIXTURES FOR ALL AREAS

PLANTING DATES	SPECIES	RATE (LBS/AC.)
SEPT 1 - FEB 15	50/50 MIX OF ANNUAL RYE & CEREAL WINTER RYE	50-100
FEB 16 - APR 30	ANNUAL RYE	60-100
MAY 1 - AUG 31	GERMAN MILLET	50-100

PERMANENT SEEDING NOTES

1. ALL SEEDING, FERTILIZING AND LIMING SHALL BE DONE IN ACCORDANCE WITH SPECIFICATION 3.32 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH), THIRD EDITION, 1992. MULCHING SHALL BE DONE IN ACCORDANCE WITH SPECIFICATION 3.35 OF THE VESCH.
2. CONDUCT SOIL TESTING PER SECTION 02936 OF THE TECHNICAL SPECIFICATIONS. THE AREA TO BE SEEDED SHALL FIRST BE FERTILIZED AND TREATED WITH AGRICULTURAL LIME IN ACCORDANCE WITH THE SOIL TESTING RESULTS. SOIL ADDITIVES SHALL BE WORKED INTO THE SURFACE A MINIMUM DEPTH OF ONE INCH.
3. PERMANENT SEEDING SHALL BE DONE ONLY BETWEEN THE DATES OF FEBRUARY 15 AND JUNE 15 OR BETWEEN SEPTEMBER 15 AND DECEMBER 15, EXCEPT AS OTHERWISE DIRECTED BY THE ENGINEER. ABSENT OF SITE-SPECIFIC SOIL TESTING AND SEED MIXTURE RECOMMENDATIONS, FOLLOW THE SEEDING SCHEDULE BELOW:

SEEDING MIXTURES FOR THE PIEDMONT REGION

SPECIES	RATE (LBS/AC.)
KENTUCKY 31 FESCUE	128
RED TOP GRASS	2
SEASONAL NURSE CROP*	20
	150 LBS.

*USE SEASONAL NURSE CROP IN ACCORDANCE WITH SEEDING DATES AS STATED BELOW:

PLANTING DATES	SPECIES
FEBRUARY 16 - APRIL 30	ANNUAL RYE
MAY 1 - AUGUST 15	FOXTAIL MILLET
AUGUST 16 - OCTOBER 31	ANNUAL RYE
NOVEMBER 1 - FEBRUARY 15	WINTER RYE

4. AFTER SEEDING, THE SURFACE SHALL BE COVERED WITH STRAW OR HAY AT THE RATE OF 70-90 LBS PER 1,000 SQ. FT.
5. LIME AND FERTILIZER SCHEDULE

LIME
2 TON/ACRE PULVERIZED AGRICULTURAL GRADE LIMESTONE (MAXIMUM 100 LBS/1,000 SQ. FT.)

FERTILIZER
1000 LBS/ACRE 12-12-12 OR EQUIVALENT NUTRIENTS, (23 LBS/1,000 SQ. FT.)

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
0	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23
1	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
2	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

CONDITIONALLY APPROVED FOR CONSTRUCTION
COMMONWEALTH OF VIRGINIA
JAMES R. DIPANCESCO
Lic. No. 052560
PROFESSIONAL ENGINEER
11/15/2024

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BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

EROSION & SEDIMENT CONTROL NOTES AND NARRATIVE

PREPARED FOR: Dominion Energy

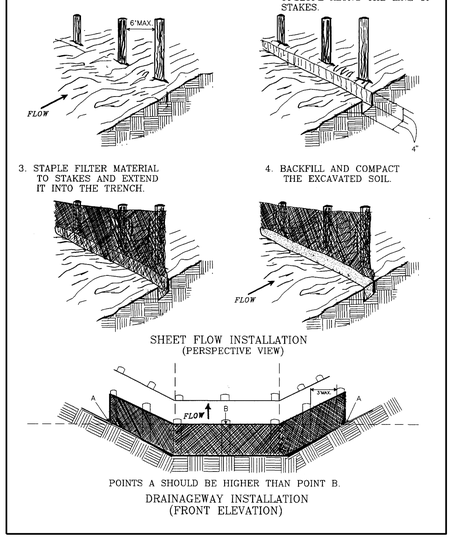
PROJECT: 22130437.031
DATE: 11/15/24
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SHEET 37 OF 42

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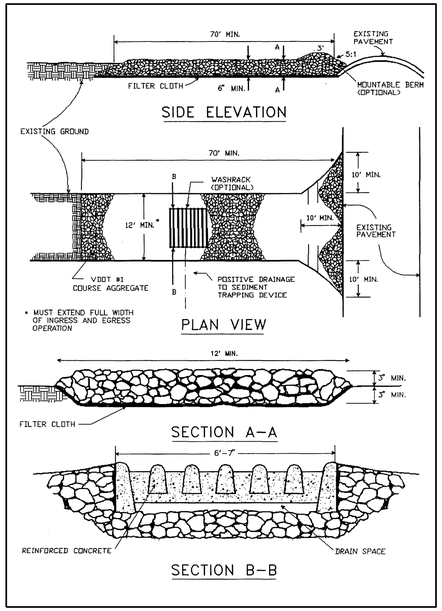
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SEE TITLE SHEET FOR PLOT

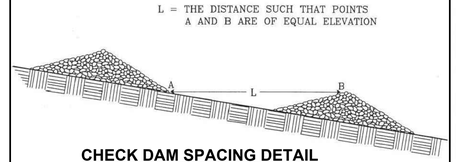
CONSTRUCTION OF A SILT FENCE (WITHOUT WIRE SUPPORT)



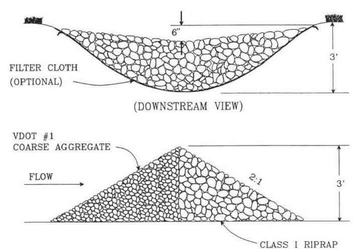
SF **SILT FENCE DETAIL**
NOT TO SCALE



CE **CONSTRUCTION ENTRANCE DETAIL**
NOT TO SCALE

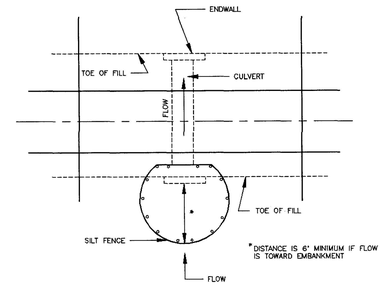


CHECK DAM SPACING DETAIL

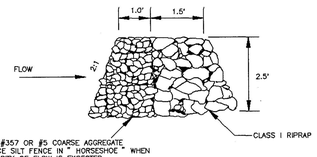


CD **ROCK CHECK DAM DETAIL**
NOT TO SCALE

SILT FENCE CULVERT INLET PROTECTION



OPTIONAL STONE COMBINATION **



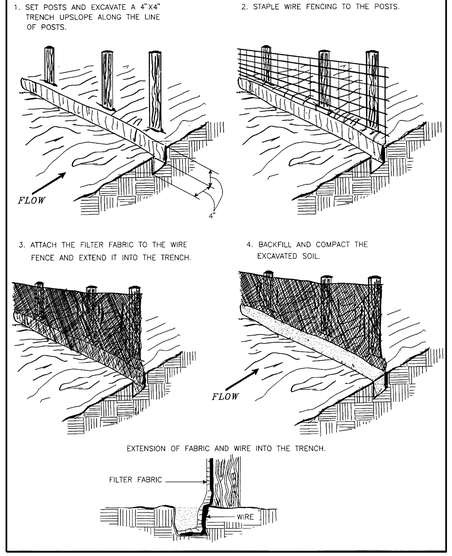
** VDOT #3, #357 OR #5 COARSE AGGREGATE TO REPLACE SILT FENCE IN " HORSESHOE " WHEN HIGH VELOCITY OF FLOW IS EXPECTED

CIP **INLET PROTECTION DETAIL**
NOT TO SCALE

INLET PROTECTION NOTES

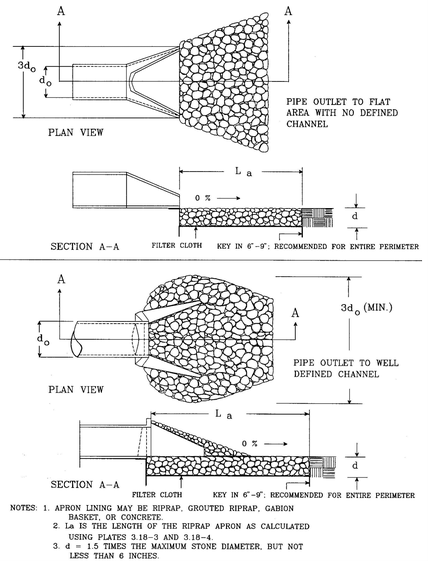
1. FOR CULVERT INLET PROTECTION AT THE 48" BRICK CULVERT, DISTURBANCE OF THE NATURAL STREAM CHANNEL FOR PLACEMENT OF TEMPORARY ROCK CHECK DAMS AND INLET PROTECTION IS AUTHORIZED BY THE U.S. ARMY CORPS OF ENGINEERS PERMIT No. NAO-2006-00447 ISSUED MARCH 7, 2016, NWP-3.
2. INLET PROTECTION STRUCTURES SHALL BE INSPECTED AFTER EACH RAIN EVENT AND REPAIRS MADE AS NEEDED.
3. AGGREGATE SHALL BE REPLACED OR CLEANED WHEN INSPECTION REVEALS THAT CLOGGED VOIDS ARE CAUSING PONDING PROBLEMS WHICH INTERFERE WITH ON-SITE CONSTRUCTION.
4. SEDIMENT SHALL BE REMOVED AND THE IMPOUNDMENT RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE AND CAUSE SEDIMENTATION PROBLEMS.
5. TEMPORARY STRUCTURES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED, AND APPROVED BY THE FLUVANNA COUNTY EROSION AND SEDIMENT CONTROL INSPECTOR.

CONSTRUCTION OF A SILT FENCE (WITH WIRE SUPPORT)



RSF **REINFORCED SILT FENCE DETAIL**
NOT TO SCALE

PIPE OUTLET CONDITIONS



NOTES: 1. APRON LINING MAY BE RIPRAP, GROUTED RIPRAP, GABION BASKET, OR CONCRETE.
2. La IS THE LENGTH OF THE RIPRAP APRON AS CALCULATED USING PLATES 3.18-3 AND 3.18-4
3. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER, BUT NOT LESS THAN 6 INCHES.

OP **OUTLET PROTECTION DETAIL**
NOT TO SCALE

SILT FENCE NOTES

1. SILT FENCE AND FILTER FABRIC MUST BE ENTRENCHED.
2. POST FOR SILT FENCES SHALL BE EITHER 2-INCH OAK, 4-INCH PINE OR 1.33 POUNDS PER LINEAR FOOT STEEL WITH A MINIMUM LENGTH OF 5 FEET.
3. WIRE FENCE REINFORCEMENT FOR SILT FENCES USING STANDARD STRENGTH FILTER CLOTH SHALL BE A MINIMUM OF 42 INCHES IN HEIGHT, A MINIMUM OF 14 GAUGE AND SHALL HAVE A MAXIMUM MESH SPACING OF 6 INCHES.
4. POST SHALL BE SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MIN. OF 12 INCHES) WHEN EXTRA STRENGTH FABRIC IS USED. WITHOUT THE WIRE SUPPORT FENCE, POST SHALL NOT EXCEED 6 FEET.
5. WHEN EXTRA STRENGTH FILTER FABRIC AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POST.
6. SEDIMENT MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
7. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.
8. UNDER NO CIRCUMSTANCES SHOULD SILT FENCE BE CONSTRUCTED IN LIVE STREAMS. SILT FENCE SHALL BE REMOVED UPON COMPLETION OF THE PROJECT.

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
0	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23
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	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

COMMONWEALTH OF VIRGINIA
JAMES R. DIPASCENZO
Lic. No. 052560
PROFESSIONAL ENGINEER
11/15/2024

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BREMO BLUFF FFCP MANAGEMENT FACILITY
SOLID WASTE PERMIT No. 627
FLUVANNA COUNTY, VIRGINIA

EROSION & SEDIMENT CONTROL DETAILS (1 of 2)

PREPARED FOR: Dominion Energy

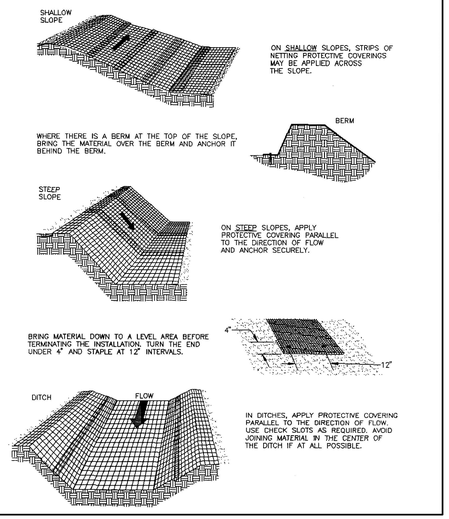
PROJECT: 22130437.031
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O:\Richmond\2022\22130437.000 Bremo CADD\04-CONTRACT_DWGS\031 010-PART_B\22130437.031_010_ESC_03-05 (E&S NOTES AND DETAILS).dwg

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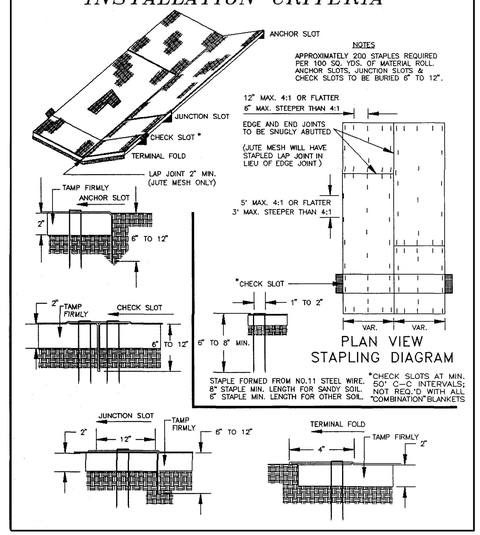
SEE TITEL SHEAR PDF

TYPICAL ORIENTATION OF TREATMENT – 1 (SOIL STABILIZATION BLANKET)



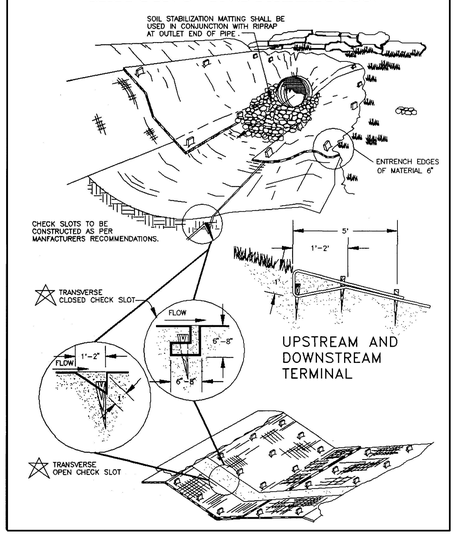
BM **TEMPORARY SOIL STABILIZATION MATTING DETAIL**
NOT TO SCALE

TYPICAL TREATMENT – 1 (SOIL STABILIZATION BLANKET) INSTALLATION CRITERIA



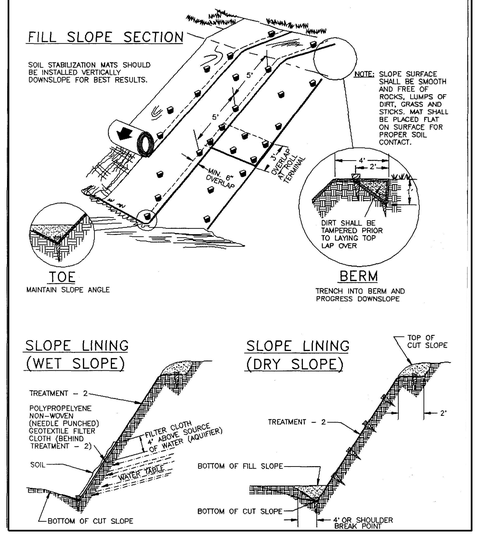
BM **TEMPORARY SOIL STABILIZATION MATTING DETAIL**
NOT TO SCALE

TYPICAL TREATMENT–2 SOIL STABILIZATION MATTING INSTALLATION

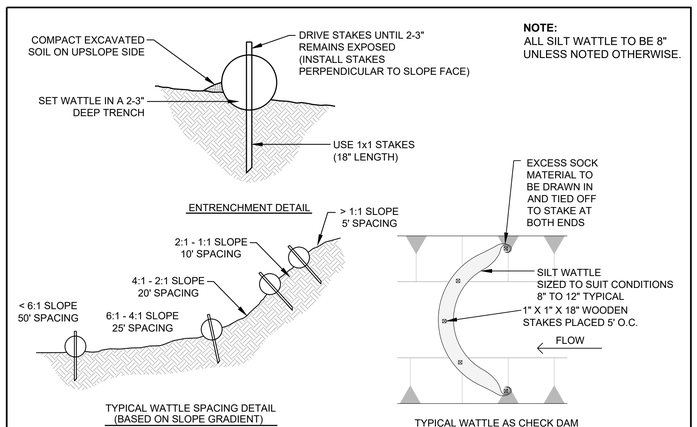


BM **PERMANENT SOIL STABILIZATION MATTING DETAIL**
NOT TO SCALE

TYPICAL TREATMENT – 2 SOIL STABILIZATION MATTING SLOPE INSTALLATION



BM **PERMANENT SOIL STABILIZATION MATTING DETAIL**
NOT TO SCALE



NOTE:
ALL SILT WATTLE TO BE 8" UNLESS NOTED OTHERWISE.

INSTALLATION NOTES:

1. BEGIN AT THE LOCATION WHERE THE WATTLE IS TO BE INSTALLED BY EXCAVATING A 2-3" DEEP x 9" WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UPSLOPE FROM THE ANCHOR TRENCH.
2. PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. ADJACENT WATTLES SHOULD TIGHTLY ABUT.
3. SECURE THE WATTLE WITH 18-24" STAKES EVERY 3-4' AND WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE WATTLE LEAVING AT LEAST 2-3" OF STAKE EXTENDING ABOVE THE WATTLE. STAKES SHOULD BE DRIVEN PERPENDICULAR TO THE SLOPE FACE.

SW **SILT WATTLE DETAIL**
NOT TO SCALE

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0	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23
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	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

COMMONWEALTH OF VIRGINIA
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11/15/2024

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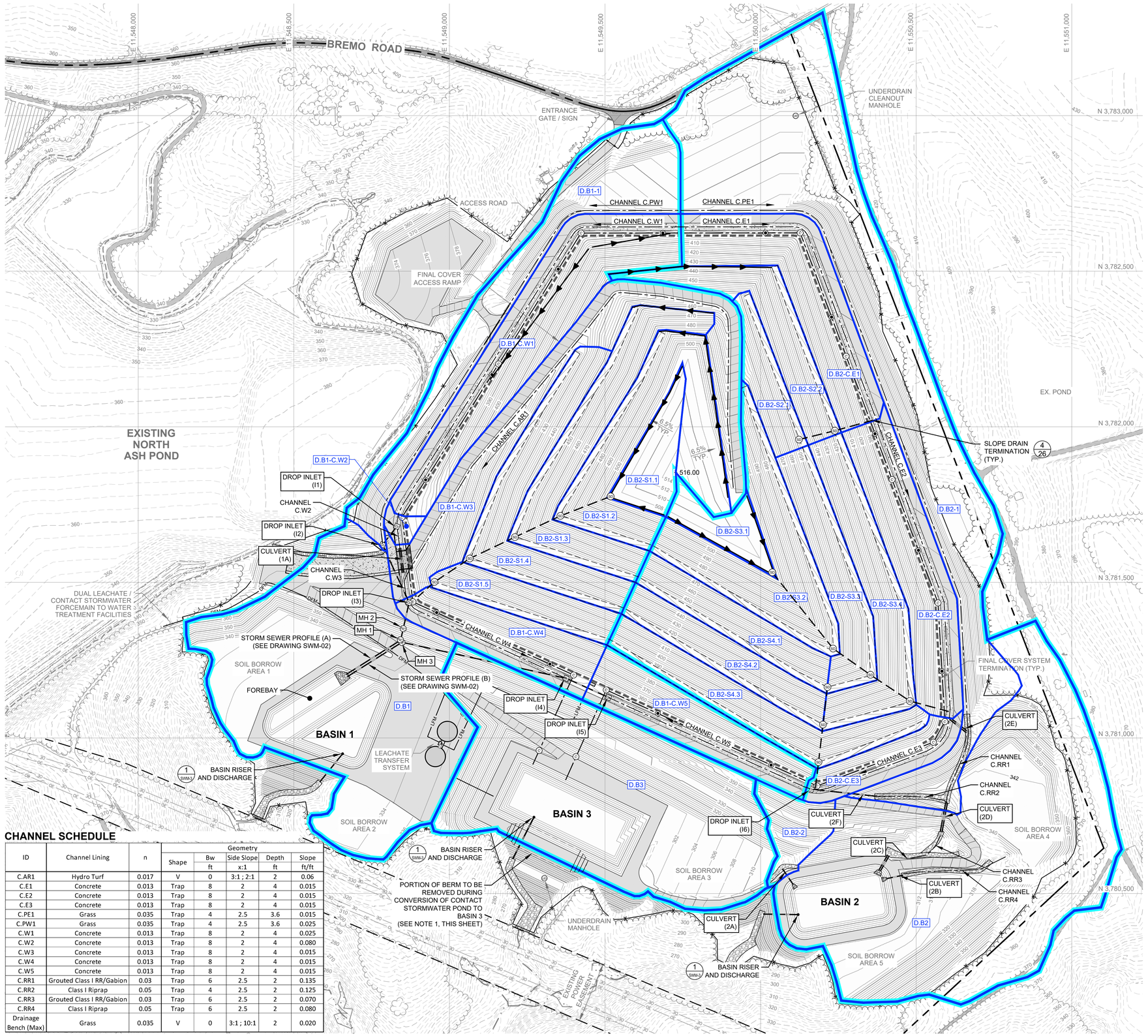
EROSION & SEDIMENT CONTROL DETAILS (2 of 2)

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING ESC-5
SHEET 39 OF 42

O:\Richmond\2022\22130437.000 Bremo CADD\04-CONTRACT_DWGS\031 (010-PART_B)\22130437.031_010_ESC_03-05 (E&S NOTES AND DETAILS).dwg

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LEGEND

- PARCEL BOUNDARY
- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- EX. OVERHEAD ELECTRIC LINE
- DISPOSAL UNIT BOUNDARY / BOTTOM LINER ANCHOR TRENCH (3/25)
- PROP. UNDERDRAIN MANHOLE
- PROP. ROAD
- PROP. CONCRETE CHANNEL
- PROP. CONTACT STORMWATER PIPE
- PROP. CONTACT STORMWATER PIPE MANHOLE
- PROP. CONTACT STORMWATER PIPE INLET
- PROP. DRAINAGE BENCH (4/25)
- PROP. SLOPE DRAIN (3/26)
- PROP. SLOPE DRAIN DROP INLET (5/26)
- PROP. TACK-ON DIVERSION BERM (8/25)
- PROP. NON-CONTACT STORMWATER MANHOLE
- PROP. NON-CONTACT STORMWATER DROP INLET
- PROP. NON-CONTACT STORMWATER PIPE / CULVERT
- PROP. LEACHATE FORCEMAIN
- PROP. CLASS I RIP RAP CHANNEL ARMORING
- MAJOR DRAINAGE AREA BOUNDARY
- MINOR DRAINAGE AREA BOUNDARY
- XXXX — DRAINAGE AREA IDENTIFICATION

NOTES

1. POST CAPPING, THE CONTACT STORMWATER POND IS TO BE CONVERTED TO A PERMANENT STORMWATER MANAGEMENT POND (BASIN 3).
2. SEE DETAIL 1 ON DRAWING SWM-3 FOR TYPICAL BASIN RISER AND DISCHARGE DETAIL.
3. SEE DETAIL 2 ON DRAWING SWM-3 FOR CULVERT TABLE.

CHANNEL SCHEDULE

ID	Channel Lining	n	Geometry				
			Shape	Bw	Side Slope	Depth	Slope
				ft	x:1	ft	ft/ft
C.AR1	Hydro Turf	0.017	V	0	3:1 ; 2:1	2	0.06
C.E1	Concrete	0.013	Trap	8	2	4	0.015
C.E2	Concrete	0.013	Trap	8	2	4	0.015
C.E3	Concrete	0.013	Trap	8	2	4	0.015
C.PE1	Grass	0.035	Trap	4	2.5	3.6	0.015
C.PW1	Grass	0.035	Trap	4	2.5	3.6	0.025
C.W1	Concrete	0.013	Trap	8	2	4	0.025
C.W2	Concrete	0.013	Trap	8	2	4	0.080
C.W3	Concrete	0.013	Trap	8	2	4	0.015
C.W4	Concrete	0.013	Trap	8	2	4	0.015
C.W5	Concrete	0.013	Trap	8	2	4	0.015
C.RR1	Grouted Class I RR/Gabion	0.03	Trap	6	2.5	2	0.135
C.RR2	Class I Riprap	0.05	Trap	4	2.5	2	0.125
C.RR3	Grouted Class I RR/Gabion	0.03	Trap	6	2.5	2	0.070
C.RR4	Class I Riprap	0.05	Trap	6	2.5	2	0.080
Drainage Bench (Max)	Grass	0.035	V	0	3:1 ; 10:1	2	0.020

NOTE: SEE STORMWATER MANAGEMENT CALCULATION PACKAGE, PREPARED BY SCHNABEL ENGINEERING, DATED 02/16/24, FOR HYDRAULIC ROUTING INFORMATION AND RESULTS.

REV.	DESCRIPTION	DES. BY	CAD BY	CHK. BY	DATE
0	ISSUED FOR PERMIT	JRD	BPG	ATN	07/10/23
1	RESPONSE TO COMMENTS	JRD	BPG	ATN	02/16/24
2	RESPONSE TO COMMENTS 2	JRD	BPG	ATN	06/03/24
	SUBMITTED FOR FINAL DEQ APPROVAL	JRD	BPG	ATN	11/15/24

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POST-DEVELOPMENT DRAINAGE AREA MAP

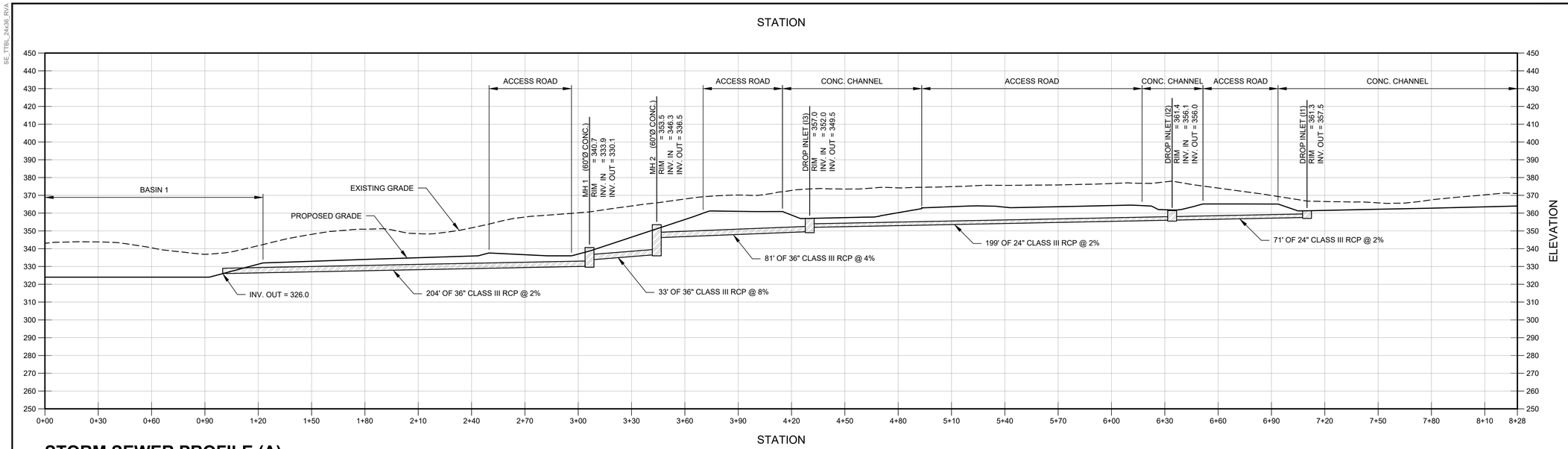
PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING SWM-1
SHEET 40 OF 42

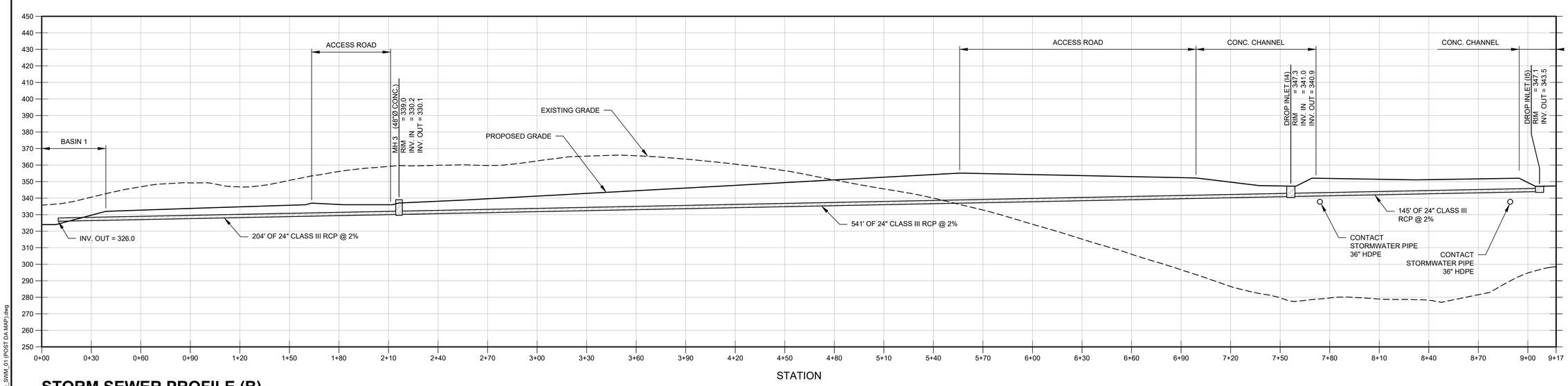
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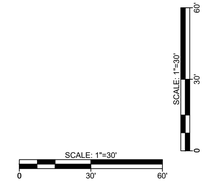
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STORM SEWER PROFILE (A)



STORM SEWER PROFILE (B)



NOTE: SEE STORMWATER MANAGEMENT CALCULATION PACKAGE, PREPARED BY SCHNABEL ENGINEERING, DATED 02/16/24, FOR HYDRAULIC ROUTING INFORMATION AND RESULTS.

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STORM SEWER PROFILES A & B

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031

DATE: 11/15/24

DRAWING SWM-2

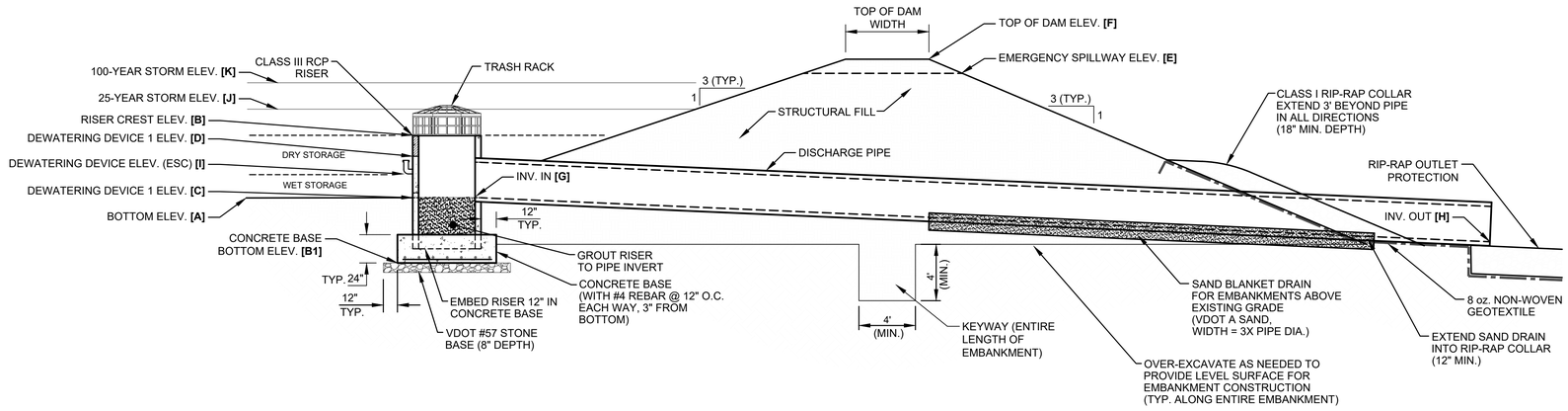
SHEET 41 OF 42

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BASIN SCHEDULE

Basin ID	Drainage Area (ac)	Pond Bottom Elev. [A]	Riser Crest Elev. [B]	Riser Dia. (in)	Conc. Base Bottom Elev. [B1]	Dewatering Orifice 1		Dewatering Orifice 2		Emergency Spillway			Embankment		Discharge Pipe					ESC				25-yr Storm Elev. [J]	100-yr Storm Elev. [K]
						Dia. (in)	Elev. [C]	Size (WxH), (in)	Elev. [D]	Elev. [E]	Bottom Width (ft)	Side Slopes (x:1)	Top Elev. [F]	Top Width (ft)	Dia. (in)	Length (ft)	Inv. In [G]	Inv. Out [H]	Slope (%)	Dewatering Device Elev. [I]	Wet Storage Volume (cy)		Dry Storage Volume (cy)			
																				Req'd	Provided	Req'd	Provided		
Basin 1	45.7	320.0	327.5	60.0	316.0	3	320.0	18" x 18"	326.0	330.0	15.0	4	332.0	25	36	125	320.0	315.0	4.0	324.0	3,062	4,449	3,062	11,203	327.3	328.2
Basin 2	59.7	296.0	303.0	60.0	292.0	3	296.0	18" x 18"	301.5	306.0	15.0	4	308.0	25	36	125	296.0	290.0	4.8	300.0	4,000	5,968	4,000	11,594	302.8	303.7
Basin 3	12.3	282.0	287.0	48.0	278.0	3	282.0	12" x 18"	285.5	290.0	15.0	4	292.0	73	24	120	282.0	278.0	3.3	284.0	824	3,468	824	9,751	284.4	285.6



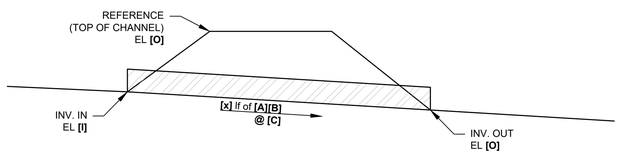
1 SWM-3

BASIN RISER STRUCTURE AND DISCHARGE PIPE DETAIL (TYP.)

NOT TO SCALE

CULVERT SCHEDULE

Culvert Name/No.	Culvert Details							Channel Details		Max Capacity	Design Flows				Notes
	Diameter (in) [A]	No. of Barrels	Type [B]	Slope (%) [C]	Length (ft) [x]	Inv. In El. [I]	Inv. Out El. [O]	Reference Top El.	Reference HEC-HMS Node	Q_{MAX}	Q_2	Q_{10}	Q_{25}	Q_{100}	
C1A	36	2	Class IV RCP	1.7%	80	360.2	358.8	364.2	C.W3	50.3	6.5	12.6	16.2	22.2	With Headwall and Endwall
C2A	18	1	Class III RCP	1.7%	60	304.0	303.0	308.0	D.B2-2	15.4	0.4	1.4	2.0	3.2	With Headwall
C2B	36	1	Class III RCP	3.3%	54	304.8	303.0	308.8	D.B2	53.1	6.5	17.3	25.1	39.5	With Headwall
C2C	36	2	Class III RCP	6.1%	56	305.4	302.0	309.4	C.RR3	169.2	17.7	42.0	61.0	97.2	With Headwall
C2D	36	2	Class III RCP	8.3%	96	332.0	324.0	336.0	C.RR3	103.2	17.7	42.0	61.0	97.2	With Headwall and Endwall
C2E	36	2	Class III RCP	5.1%	68	365.5	362.0	369.5	C.RR1	102.0	13.4	31.6	46.1	73.7	With Headwall and Endwall
C2F	24	1	Class III RCP	1.6%	208	354.3	351.0	362.3	C.RR2	40.0	4.4	11.4	16.0	24.1	Drop Inlet



2 SWM-3

CULVERT SCHEDULE

NOT TO SCALE

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STORMWATER SCHEDULES

PREPARED FOR: Dominion Energy

PROJECT: 22130437.031
DATE: 11/15/24
DRAWING SWM-3
SHEET 42 OF 42

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