

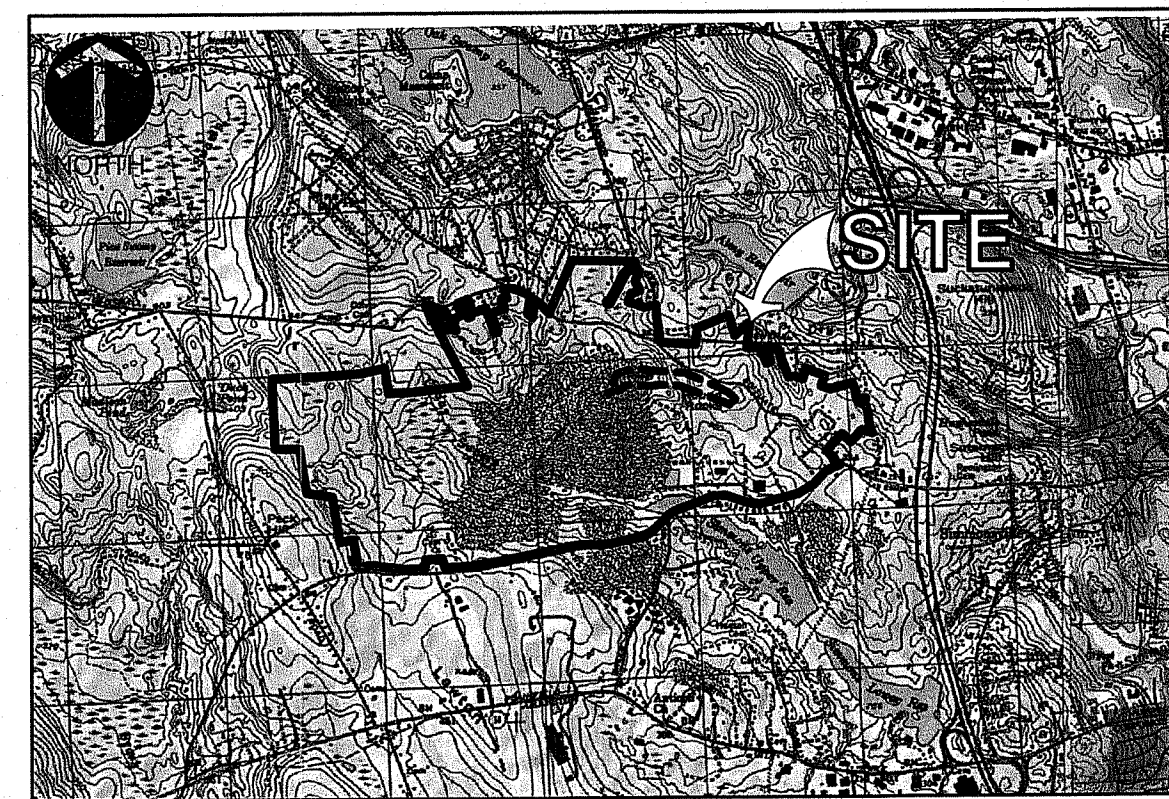


# RHODE ISLAND RESOURCE RECOVERY CORPORATION

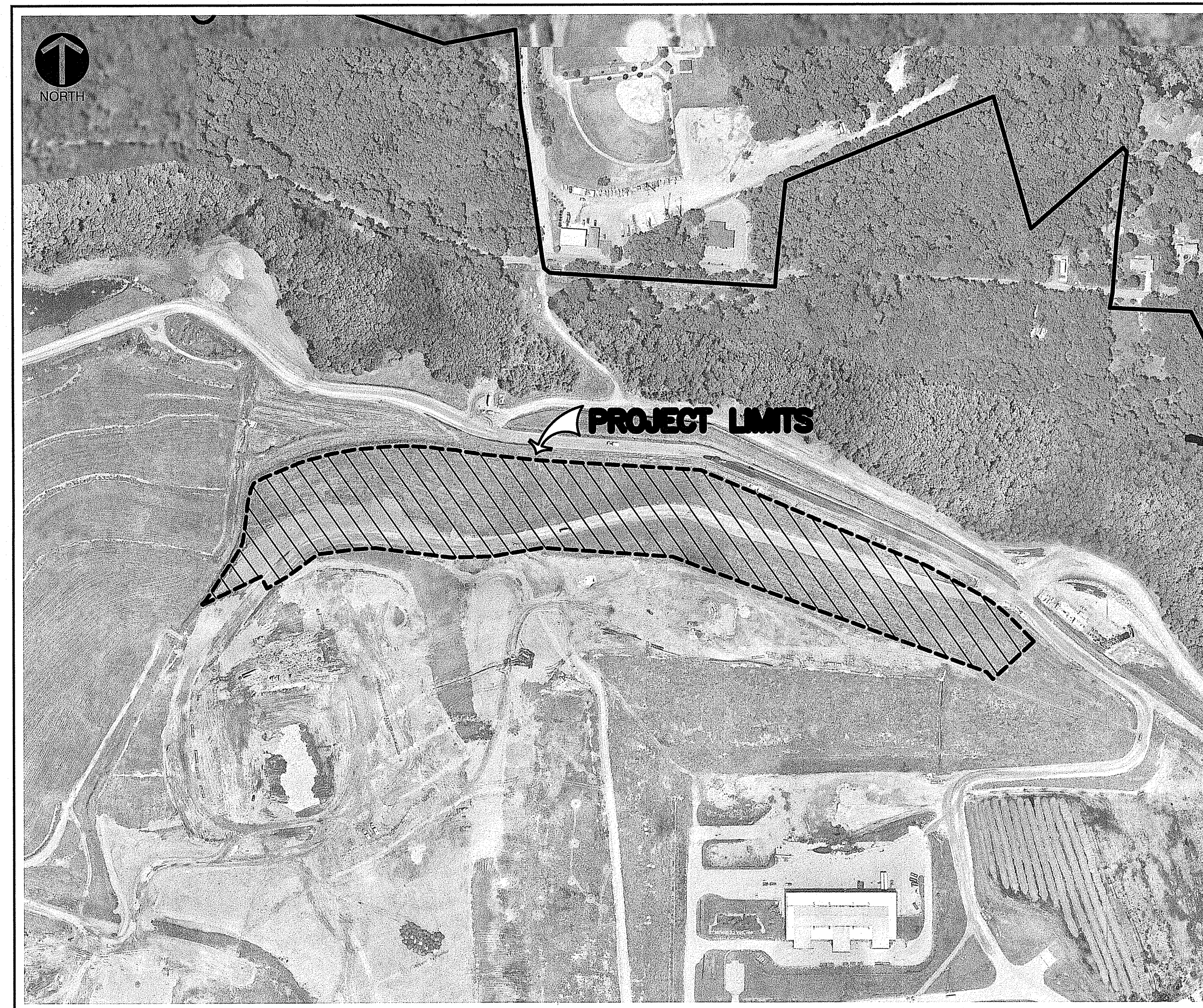
## PHASE VI AREAS 1 & 2 NORTH SLOPE CLOSURETURF® PROJECT

RFP # 310

CENTRAL LANDFILL  
 65 SHUN PIKE, JOHNSTON, RHODE ISLAND  
 PROVIDENCE COUNTY  
 PLAT 43-LOTS 22, 23 24, 30, 116, 17, 137, 194, 402  
 SEPTEMBER 2023  
 REVISED AUGUST 2024



VICINITY MAP  
 SCALE: 1"=4000'



SITE MAP  
 SCALE: 1"=300'

SOURCE: AERIAL ORTHOGRAPHIC IMAGERY PROVIDED BY RIRRC, IMAGERY DATE 06/29/2023.

**OWNER/TEAM INFORMATION**

**CIVIL ENGINEER**  
 CIVIL & ENVIRONMENTAL CONSULTANTS, INC.  
 31 BELLOWS ROAD  
 RAYNHAM, MA 02767  
 PHONE: (774) 501-2176

**APPLICANT/OWNER**  
 RHODE ISLAND RESOURCE RECOVERY CORPORATION  
 65 SHUN PIKE  
 JOHNSTON, RI 02919  
 PHONE: (401) 942-1430

DRAWING INDEX		
SHEET NUMBER	DRAWING NUMBER	SHEET TITLE
1	C000	COVER SHEET
2	C100	EXISTING CONDITIONS PLAN
3	C200	EXISTING SITE PLAN
4	C300	OPERATIONAL COVER GRADING PLAN
5	C301	CLOSURETURF™ FINAL COVER GRADING PLAN
6	C302	STORMWATER MANAGEMENT PLAN (1 OF 2)
7	C302A	STORMWATER MANAGEMENT PLAN (2 OF 2)
8	C500	EXISTING LANDFILL GAS MANAGEMENT SYSTEM PLAN
9	C501	PROPOSED CLOSURETURF™ LANDFILL GAS PRESSURE RELIEF VALVE PLAN
10	C800	DETAIL SHEET - I
11	C801	DETAIL SHEET - II
12	C802	DETAIL SHEET - III
13	C803	DETAIL SHEET - IV
14	C804	DETAIL SHEET - V

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS AS  
 SPECIFIED IN THE LETTER OF APPROVAL  
 DATED: OCT - 3 2024 FILE #: 24-0117  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM

NOTE PER DEM:  
 Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site

RI Department of Environmental Management  
 AUG 29 2024  
 Office of Water Resources

PHILLIP N. JAGODA  
 No. 9923  
 REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	03/20/23	Issue No. 1
2	07/18/24	Revisions to sheets C202 and C203
3	07/18/24	Revisions to sheets C202 and C203
4	07/18/24	Revisions to sheets C202 and C203
5	07/18/24	Revisions to sheets C202 and C203
6	07/18/24	Revisions to sheets C202 and C203
7	07/18/24	Revisions to sheets C202 and C203
8	07/18/24	Revisions to sheets C202 and C203
9	07/18/24	Revisions to sheets C202 and C203
10	07/18/24	Revisions to sheets C202 and C203
11	07/18/24	Revisions to sheets C202 and C203
12	07/18/24	Revisions to sheets C202 and C203
13	07/18/24	Revisions to sheets C202 and C203
14	07/18/24	Revisions to sheets C202 and C203

**Civil & Environmental Consultants, Inc.**  
 31 BelloWS Road - Raynham, MA 02767  
 Ph: 774.501.2176 866.312.2024 Fax: 774.501.2869  
 www.cedric.com

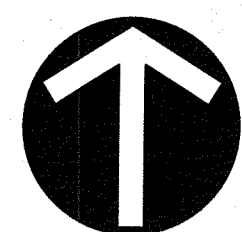
RHODE ISLAND RESOURCE RECOVERY CORPORATION  
 PHASE VI AREAS 1 & 2 NORTH SLOPE CLOSURETURF™ PROJECT  
 JOHNSTON, RI

COVER SHEET  
 PLAT 43-LOTS 22,23,24,30,116,117,137,194,402  
 DATE: SEPTEMBER 2023 DRAWN BY: DGB  
 AS SHOWN CHECKED BY: CSB  
 PROJECT NO: 331-870  
 APPROVED BY: PNU

DRAWING NO: C000  
 SHEET 1 OF 15  
 per RIDEM

P:\330-001\331-001-001\Draw\33107 - Closure Turf\33107-001-000\_L05.dwg(2/20) US:10/20/2024 1:54 PM  
 - Alameda - US: 8/26/2024 1:54 PM





NORTH

SITE BENCHMARK  
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E=318792.04  
ELEV.=408.61

SITE BENCHMARK  
MONUMENT #7  
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E=318580.810  
ELEV.=403.82

LEGEND

- 920 — EXISTING CONTOUR
- LIMIT OF WETLANDS
- EXISTING TREE LINE
- EXISTING RETAINING WALL
- EXISTING CULVERT
- EXISTING FENCE
- EXISTING UTILITY POLE
- EXISTING BASELINER
- PROPERTY BOUNDARY
- EXISTING ACCESS ROAD
- EXISTING LIMIT OF FINAL COVER
- PROPOSED LIMIT OF FINAL COVER

NOTES:

1. REFER TO SHEET C100 FOR GENERAL NOTES.
2. PRIOR TO START OF WORK, CONTRACTOR WILL BE REQUIRED TO SURVEY AND DETERMINE ALL TIE-IN LOCATIONS FOR ADJACENT EXISTING FINAL COVER AND BASELINER ANCHOR TRENCHES. CONTRACTOR MAY NEED TO FILL OR EXCAVATE AREAS OF THE PROJECT WORK AREA TO MEET TIE-IN GRADES AT ADJACENT COMPLETED FINAL COVER AND BASELINER AREAS. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ANY AREAS REQUIRING FIELD ADJUSTMENTS AND REVIEW WITH RIRRC PRIOR TO STARTING WORK.

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS  
SPECIFIED IN THE LETTER OF APPROVAL  
DATED: 01-3-2024 FILE #: 24-0117  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
*Gregory D. Casence*

NO	DATE	DESCRIPTION

**C&E**  
**Civil & Environmental Consultants, Inc.**  
31 Bellows Road - Raynham, MA 02787  
Ph: 774.501.2176 • 866.312.2024 • Fax: 774.501.2669  
www.cceinc.com

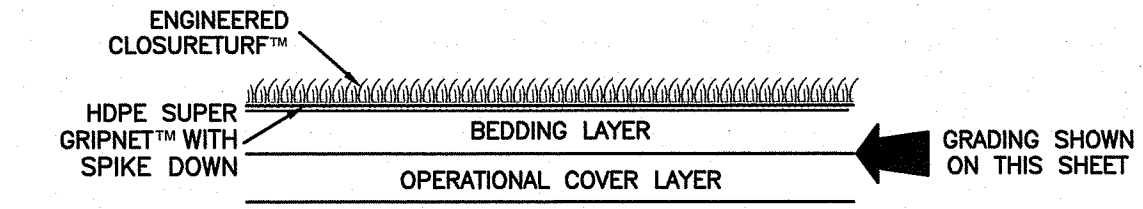
**RHODE ISLAND RESOURCE  
RECOVERY CORPORATION  
PHASE VI AREAS 1 & 2 NORTH SLOPE  
CLOSURETURF™ PROJECT  
JOHNSTON, RI**

DATE: SEPTEMBER 2023	DRAWN BY: DCB
DWG SCALE: AS SHOWN	CHECKED BY: CSD
PROJECT NO: 331-870	PNJ
APPROVED BY:	

PHILLIP N. JAGODA  
No. 9923  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL

SCALE IN FEET  
0 100 200

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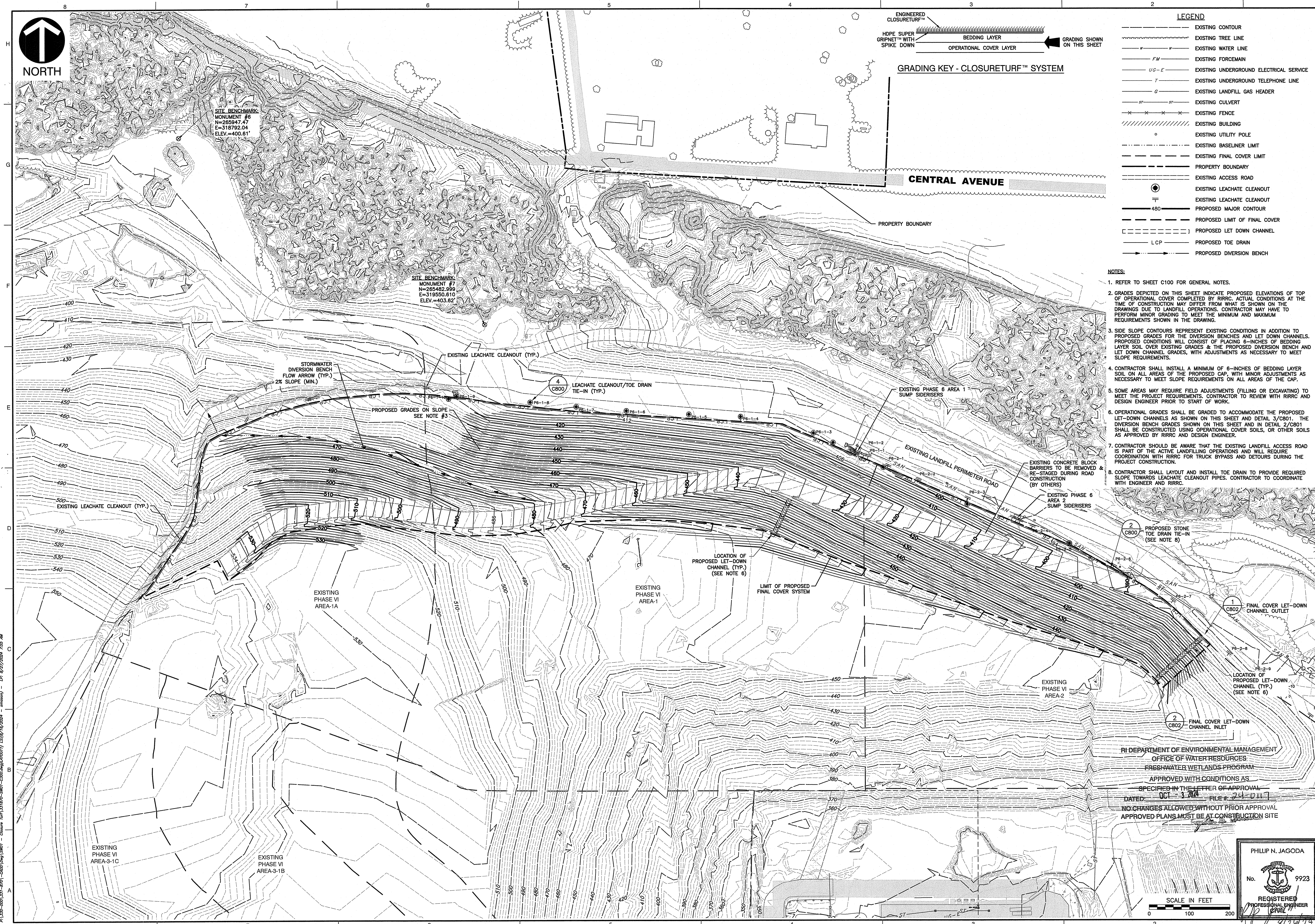


GRADING KEY - CLOSURETURF™ SYSTEM

**LEGEND**

	EXISTING CONTOUR
	EXISTING TREE LINE
	EXISTING WATER LINE
	EXISTING FORCEMAIN
	EXISTING UNDERGROUND ELECTRICAL SERVICE
	EXISTING UNDERGROUND TELEPHONE LINE
	EXISTING LANDFILL GAS HEADER
	EXISTING CULVERT
	EXISTING FENCE
	EXISTING BUILDING
	EXISTING UTILITY POLE
	EXISTING BASELINER LIMIT
	EXISTING FINAL COVER LIMIT
	PROPERTY BOUNDARY
	EXISTING ACCESS ROAD
	EXISTING LEACHATE CLEANOUT
	EXISTING LEACHATE CLEANOUT
	PROPOSED MAJOR CONTOUR
	PROPOSED LIMIT OF FINAL COVER
	PROPOSED LET DOWN CHANNEL
	PROPOSED TOE DRAIN
	PROPOSED DIVERSION BENCH

- NOTES:**
- REFER TO SHEET C100 FOR GENERAL NOTES.
  - GRADES DEPICTED ON THIS SHEET INDICATE PROPOSED ELEVATIONS OF TOP OF OPERATIONAL COVER COMPLETED BY RIRRC. ACTUAL CONDITIONS AT THE TIME OF CONSTRUCTION MAY DIFFER FROM WHAT IS SHOWN ON THE DRAWINGS DUE TO LANDFILL OPERATIONS. CONTRACTOR MAY HAVE TO PERFORM MINOR GRADING TO MEET THE MINIMUM AND MAXIMUM REQUIREMENTS SHOWN IN THE DRAWING.
  - SIDE SLOPE CONTOURS REPRESENT EXISTING CONDITIONS IN ADDITION TO PROPOSED GRADES FOR THE DIVERSION BENCHES AND LET DOWN CHANNELS. PROPOSED CONDITIONS WILL CONSIST OF PLACING 6-INCHES OF BEDDING LAYER SOIL OVER EXISTING GRADES & THE PROPOSED DIVERSION BENCH AND LET DOWN CHANNEL GRADES, WITH ADJUSTMENTS AS NECESSARY TO MEET SLOPE REQUIREMENTS.
  - CONTRACTOR SHALL INSTALL A MINIMUM OF 6-INCHES OF BEDDING LAYER SOIL ON ALL AREAS OF THE PROPOSED CAP, WITH MINOR ADJUSTMENTS AS NECESSARY TO MEET SLOPE REQUIREMENTS ON ALL AREAS OF THE CAP.
  - SOME AREAS MAY REQUIRE FIELD ADJUSTMENTS (FILLING OR EXCAVATING) TO MEET THE PROJECT REQUIREMENTS. CONTRACTOR TO REVIEW WITH RIRRC AND DESIGN ENGINEER PRIOR TO START OF WORK.
  - OPERATIONAL GRADES SHALL BE GRADED TO ACCOMMODATE THE PROPOSED LET-DOWN CHANNELS AS SHOWN ON THIS SHEET AND DETAIL 3/C801. THE DIVERSION BENCH GRADES SHOWN ON THIS SHEET AND IN DETAIL 2/C801 SHALL BE CONSTRUCTED USING OPERATIONAL COVER SOILS, OR OTHER SOILS AS APPROVED BY RIRRC AND DESIGN ENGINEER.
  - CONTRACTOR SHOULD BE AWARE THAT THE EXISTING LANDFILL ACCESS ROAD IS PART OF THE ACTIVE LANDFILL OPERATION AND WILL REQUIRE COORDINATION WITH RIRRC FOR TRUCK BYPASS AND DETOURS DURING THE PROJECT CONSTRUCTION.
  - CONTRACTOR SHALL LAYOUT AND INSTALL TOE DRAIN TO PROVIDE REQUIRED SLOPE TOWARDS LEACHATE CLEANOUT PIPES. CONTRACTOR TO COORDINATE WITH ENGINEER AND RIRRC.



P:\2023-2024\331-402\C300\Drawings\331-402-C300.dwg (Plot) - User: jgagoda - Date: 10/16/2024 - Time: 10:25:58 AM

**REVISION RECORD**

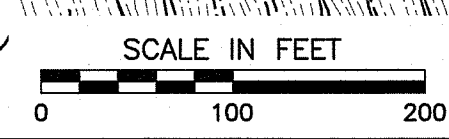
NO.	DATE	DESCRIPTION

**Civil & Environmental Consultants, Inc.**  
 31 Bellows Road - Raynham, MA 02767  
 Ph: 774.501.2176 - 866.312.2024 - Fax: 774.501.2669  
 www.cesinc.com

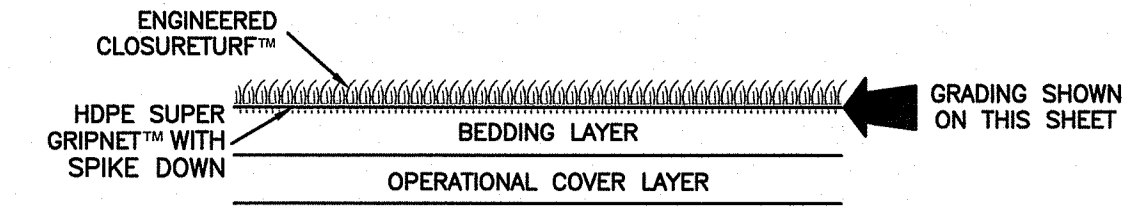
**RHODE ISLAND RESOURCE RECOVERY CORPORATION  
 PHASE VI AREAS 1 & 2 NORTH SLOPE  
 CLOSURETURF™ PROJECT  
 JOHNSTON, RI**

**OPERATIONAL COVER GRADING PLAN**  
 PLAT 43-LOTS 22,23,24,30,116,117,137,194,402  
 DATE: SEPTEMBER 2023 DRAWN BY: CSD  
 DWG SCALE: AS SHOWN CHECKED BY: CSD  
 PROJECT NO: 331-870  
 APPROVED BY: PNU

PHILLIP N. JAGODA  
 No. 9923  
 REGISTERED PROFESSIONAL ENGINEER  
 CIVIL





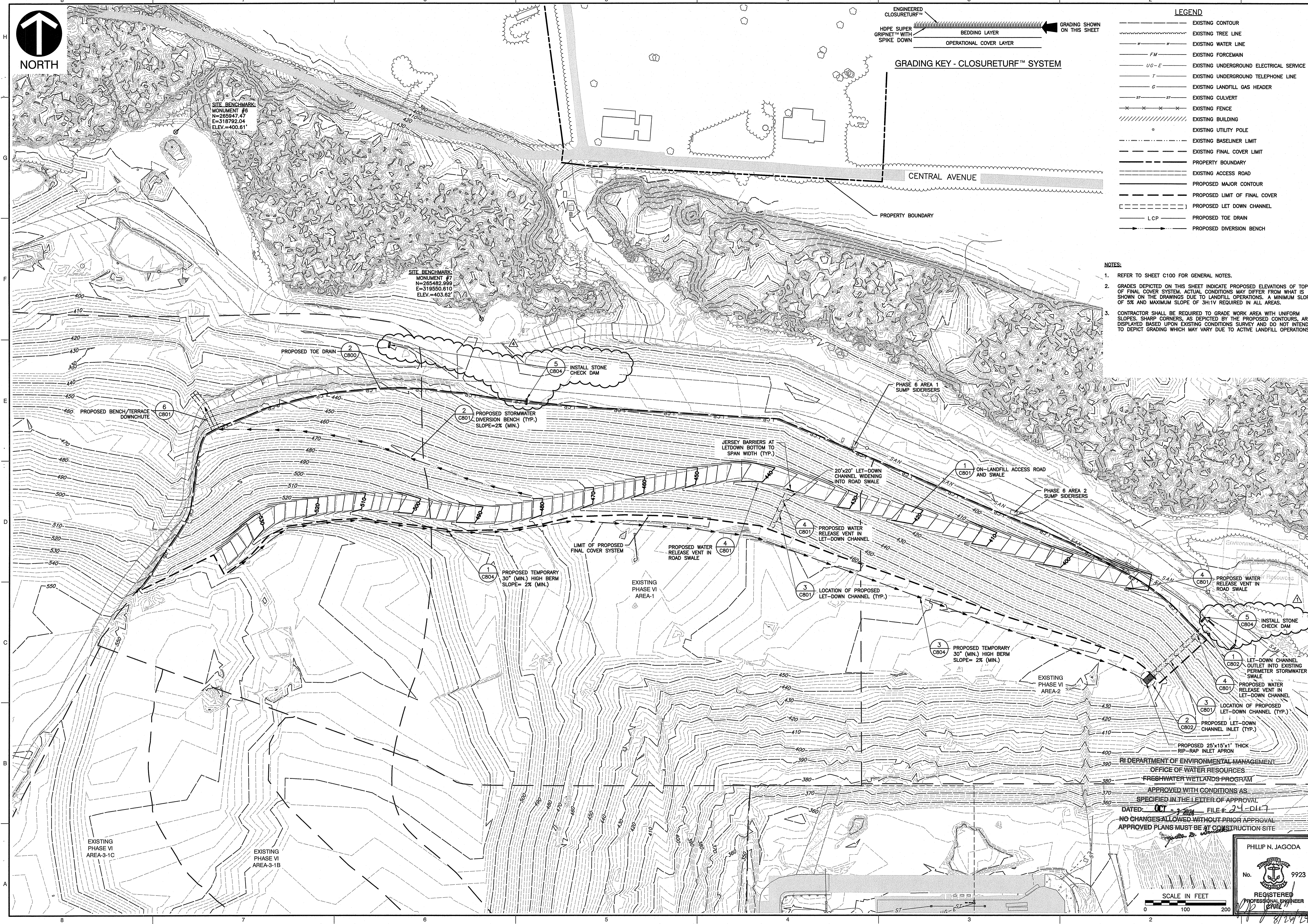


GRADING KEY - CLOSURETURF™ SYSTEM

**LEGEND**

	EXISTING CONTOUR
	EXISTING TREE LINE
	EXISTING WATER LINE
	EXISTING FORCE MAIN
	EXISTING UNDERGROUND ELECTRICAL SERVICE
	EXISTING UNDERGROUND TELEPHONE LINE
	EXISTING LANDFILL GAS HEADER
	EXISTING CULVERT
	EXISTING FENCE
	EXISTING BUILDING
	EXISTING UTILITY POLE
	EXISTING BASELINER LIMIT
	EXISTING FINAL COVER LIMIT
	PROPERTY BOUNDARY
	EXISTING ACCESS ROAD
	PROPOSED MAJOR CONTOUR
	PROPOSED LIMIT OF FINAL COVER
	PROPOSED LET DOWN CHANNEL
	LCP
	PROPOSED TOE DRAIN
	PROPOSED DIVERSION BENCH

- NOTES:**
- REFER TO SHEET C100 FOR GENERAL NOTES.
  - GRADES DEPICTED ON THIS SHEET INDICATE PROPOSED ELEVATIONS OF TOP OF FINAL COVER SYSTEM. ACTUAL CONDITIONS MAY DIFFER FROM WHAT IS SHOWN ON THE DRAWINGS DUE TO LANDFILL OPERATIONS. A MINIMUM SLOPE OF 5% AND MAXIMUM SLOPE OF 3H:1V REQUIRED IN ALL AREAS.
  - CONTRACTOR SHALL BE REQUIRED TO GRADE WORK AREA WITH UNIFORM SLOPES. SHARP CORNERS, AS DEPICTED BY THE PROPOSED CONTOURS, ARE DISPLAYED BASED UPON EXISTING CONDITIONS SURVEY AND DO NOT INTEND TO DEPICT GRADING WHICH MAY VARY DUE TO ACTIVE LANDFILL OPERATIONS.



**REVISION RECORD**

NO	DATE	DESCRIPTION

**Civil & Environmental Consultants, Inc.**  
 31 Belovs Road - Raynham, MA 02767  
 Ph: 774.501.2176 - 866.312.2024 - Fax: 774.501.2669  
 www.cecinc.com

**RHODE ISLAND RESOURCE RECOVERY CORPORATION  
 PHASE VI AREAS 1 & 2 NORTH SLOPE CLOSURETURF™ PROJECT  
 JOHNSTON, RI**

**STORMWATER MANAGEMENT PLAN (1 OF 2)**  
**PLAT 43-LOTS 22,23,24,30,116,117,137,194,402**

DATE: SEPTEMBER 2023 DRAWN BY: DCB  
 DWG SCALE: AS SHOWN CHECKED BY: CSD  
 PROJECT NO: 331-870  
 APPROVED BY: PNJ

**RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM**

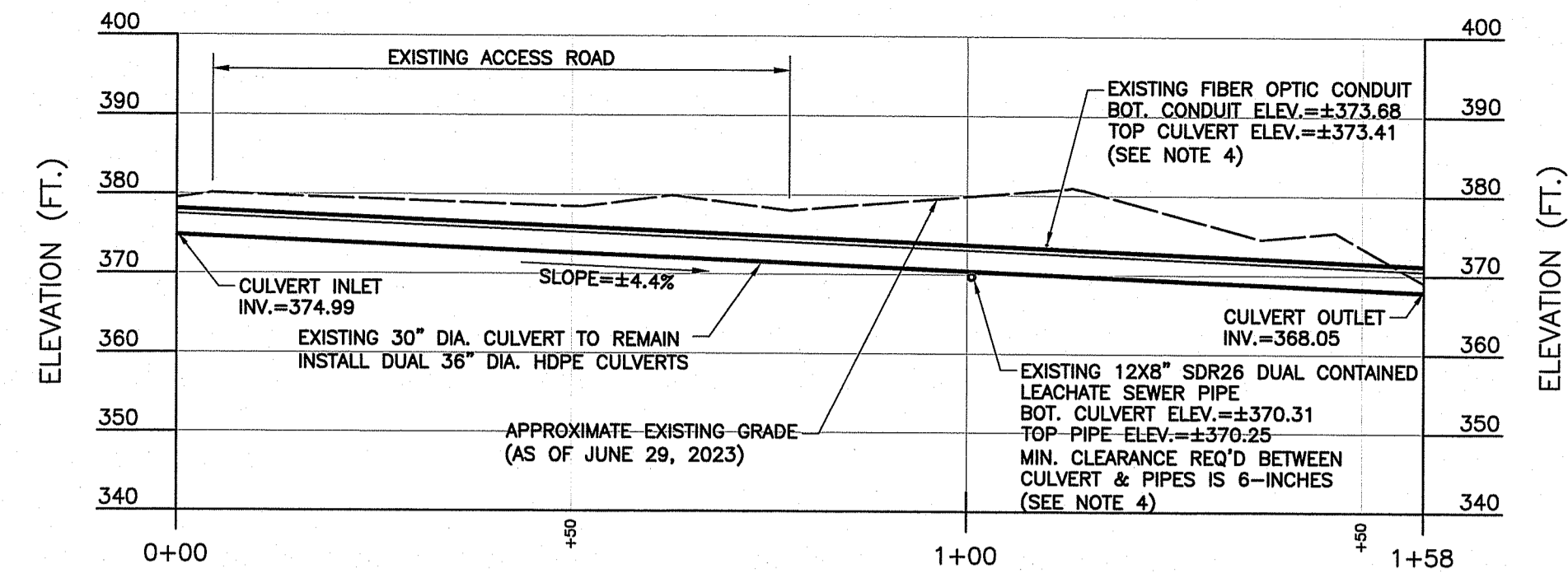
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED: 09-27-2023 FILE # 24-DH7  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

PHILIP N. JAGODA  
 No. 9923  
 REGISTERED PROFESSIONAL ENGINEER

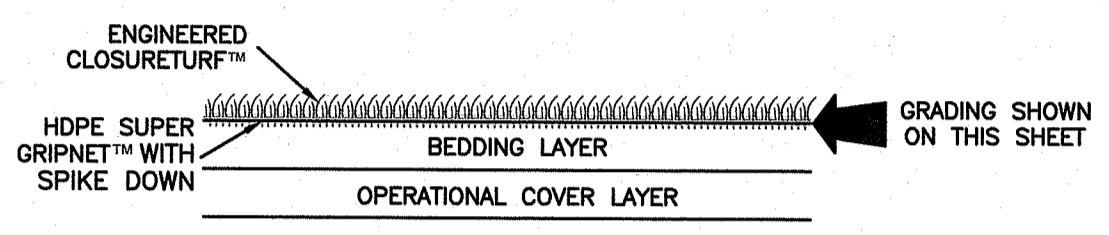
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DRAWING NO.: **C302**  
 SHEET 6 OF 15

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**PROPOSED CULVERT PROFILE**  
SCALE H:1"=20'; V:1"=20'

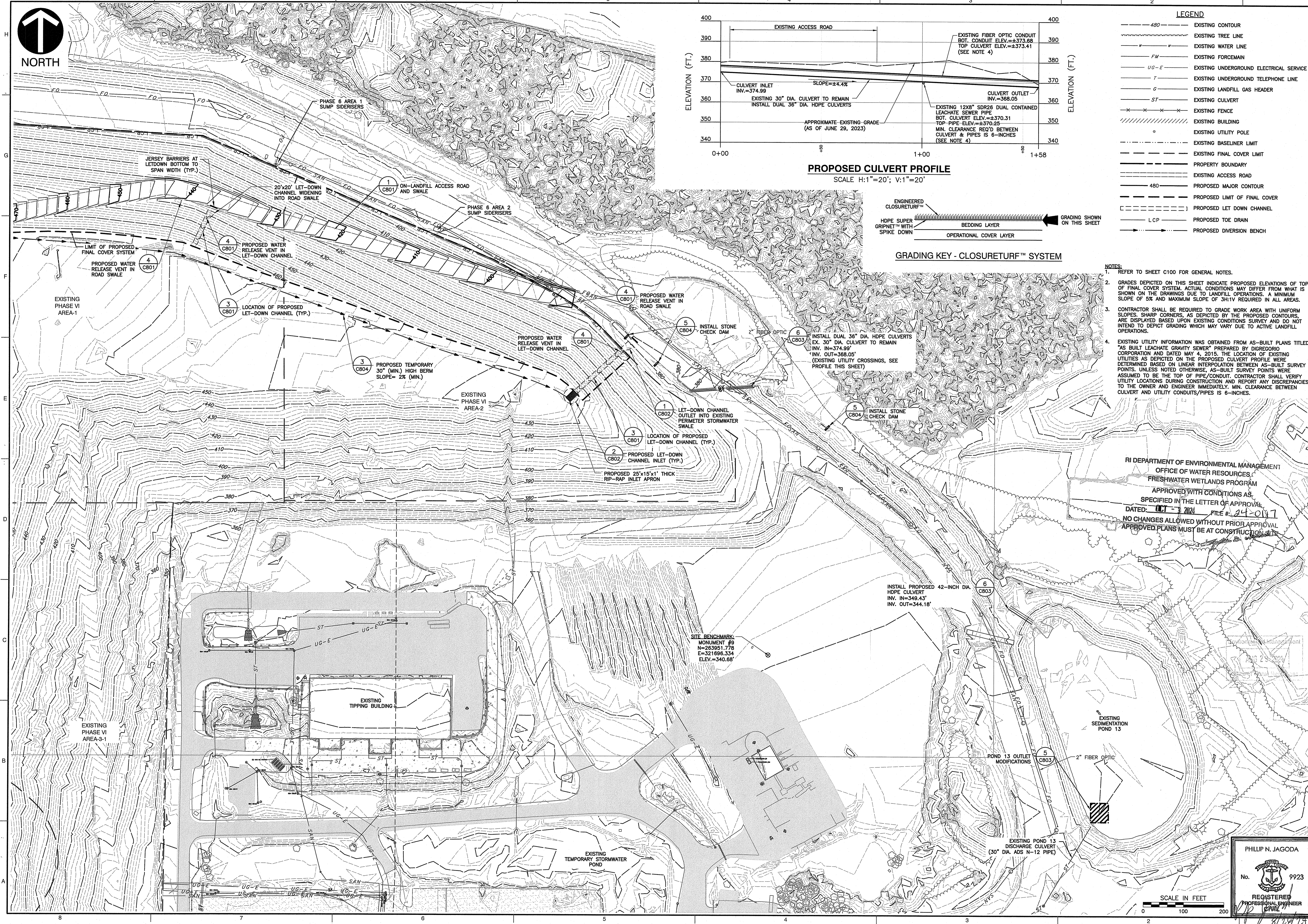


**GRADING KEY - CLOSURETURF™ SYSTEM**

**LEGEND**

480	EXISTING CONTOUR
---	EXISTING TREE LINE
---	EXISTING WATER LINE
FM	EXISTING FORCEMAIN
UG-E	EXISTING UNDERGROUND ELECTRICAL SERVICE
T	EXISTING UNDERGROUND TELEPHONE LINE
G	EXISTING LANDFILL GAS HEADER
ST	EXISTING CULVERT
---	EXISTING FENCE
	EXISTING BUILDING
o	EXISTING UTILITY POLE
---	EXISTING BASELINER LIMIT
---	EXISTING FINAL COVER LIMIT
---	PROPERTY BOUNDARY
480	EXISTING ACCESS ROAD
---	PROPOSED MAJOR CONTOUR
---	PROPOSED LIMIT OF FINAL COVER
---	PROPOSED LET DOWN CHANNEL
---	PROPOSED TOE DRAIN
---	PROPOSED DIVERSION BENCH

- NOTES:**
- REFER TO SHEET C100 FOR GENERAL NOTES.
  - GRADES DEPICTED ON THIS SHEET INDICATE PROPOSED ELEVATIONS OF TOP OF FINAL COVER SYSTEM. ACTUAL CONDITIONS MAY DIFFER FROM WHAT IS SHOWN ON THE DRAWINGS DUE TO LANDFILL OPERATIONS. A MINIMUM SLOPE OF 5% AND MAXIMUM SLOPE OF 3H:1V REQUIRED IN ALL AREAS.
  - CONTRACTOR SHALL BE REQUIRED TO GRADE WORK AREA WITH UNIFORM SLOPES. SHARP CORNERS, AS DEPICTED BY THE PROPOSED CONTOURS, ARE DISPLAYED BASED UPON EXISTING CONDITIONS SURVEY AND DO NOT INTEND TO DEPICT GRADING WHICH MAY VARY DUE TO ACTIVE LANDFILL OPERATIONS.
  - EXISTING UTILITY INFORMATION WAS OBTAINED FROM AS-BUILT PLANS TITLED "AS BUILT LEACHATE GRAVITY SEWER" PREPARED BY DIORREGGIO CORPORATION AND DATED MAY 4, 2015. THE LOCATION OF EXISTING UTILITIES AS DEPICTED ON THE PROPOSED CULVERT PROFILE WERE DETERMINED BASED ON LINEAR INTERPOLATION BETWEEN AS-BUILT SURVEY POINTS. UNLESS NOTED OTHERWISE, AS-BUILT SURVEY POINTS WERE ASSUMED TO BE THE TOP OF PIPE/CONDUIT. CONTRACTOR SHALL VERIFY UTILITY LOCATIONS DURING CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE OWNER AND ENGINEER IMMEDIATELY. MIN. CLEARANCE BETWEEN CULVERT AND UTILITY CONDUITS/PIPES IS 6-INCHES.



RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED: **07-17-2024** FILE #: **24-0117**  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

**REVISION RECORD**

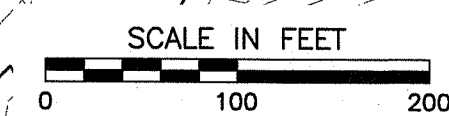
NO.	DATE	DESCRIPTION

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Ph: 774.501.2176 • Fax: 774.501.2669  
www.cecinc.com

**RHODE ISLAND RESOURCE RECOVERY CORPORATION**  
PHASE VI AREAS 1 & 2 NORTH SLOPE CLOSURETURF™ PROJECT  
JOHNSTON, RI

**STORMWATER MANAGEMENT PLAN**  
(2 OF 2)  
PLAT 43-LOTS 22,23,24,30,116,117,137,194,402  
DATE: SEPTEMBER 2023 DRAWN BY: DGB  
DWS SCALE: AS SHOWN CHECKED BY: CSD  
PROJECT NO: 331-870  
APPROVED BY: PNU

PHILLIP N. JAGODA  
No. 9923  
REGISTERED PROFESSIONAL ENGINEER

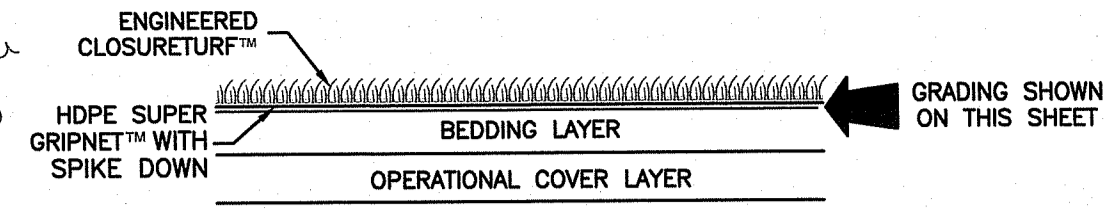


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E=318792.04  
ELEV.=400.61

SITE BENCHMARK  
MONUMENT #7  
N=265482.999  
E=319550.610  
ELEV.=403.62



GRADING KEY - FINAL COVER SYSTEM

CENTRAL AVENUE

LEGEND

- 480 --- EXISTING CONTOUR
- --- LIMIT OF WETLANDS
- --- EXISTING TREE LINE
- --- EXISTING RETAINING WALL
- --- EXISTING CULVERT
- --- EXISTING FENCE
- --- EXISTING UTILITY POLE
- --- EXISTING BASELINER
- --- PROPERTY BOUNDARY
- --- EXISTING ACCESS ROAD
- --- EXISTING LIMIT OF FINAL COVER
- --- PROPOSED LIMIT OF FINAL COVER
- --- PROPOSED TOE DRAIN
- --- PROPOSED LET DOWN CHANNEL
- --- EXISTING LANDFILL GAS PIPE
- ⊕ L1-630 EXISTING VERTICAL LANDFILL GAS WELL
- ⊕ GW-6150 EXISTING LEACHATE CLEANOUT
- ⊕ P6-1-10

NOTES:

1. REFER TO SHEET C100 FOR GENERAL NOTES.
2. ADDITIONAL LANDFILL GAS WELLS MAY BE ADDED BY OTHERS PRIOR TO START OF FINAL COVER CONSTRUCTION. CONTRACTOR TO VERIFY NUMBER OF PENETRATIONS AT START OF PROJECT AND REVIEW WITH RIRRC.
3. CONTRACTOR TO VERIFY NUMBER OF PENETRATIONS AT START OF PROJECT AND REVIEW WITH RIRRC AND DESIGN ENGINEER.
4. DAMAGE TO WELLS DURING THE INSTALLATION OF THE FINAL COVER SYSTEM IS THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AT NO ADDITIONAL COST TO RIRRC.
5. ALL LANDFILL GAS INFORMATION SHOWN ON THIS DRAWING WAS PROVIDED ELECTRONICALLY TO CIVIL & ENVIRONMENTAL CONSULTANTS, INC. BY RHODE ISLAND RESOURCE RECOVERY CORPORATION IN MAY 2023.

NO.	DATE	DESCRIPTION

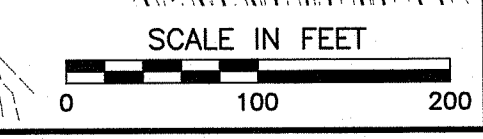
**Civil & Environmental Consultants, Inc.**  
31 Bellows Road - Raynham, MA 02767  
Ph: 774.501.2176 - 866.312.2024 - Fax: 774.501.2669  
www.cesinc.com

**RHODE ISLAND RESOURCE RECOVERY CORPORATION  
PHASE VI AREAS 1 & 2 NORTH SLOPE CLOSURE/RETURF™ PROJECT  
JOHNSTON, RI**

**EXISTING LANDFILL GAS MANAGEMENT SYSTEM PLAN**  
PLAT 43-LOTS 22,23,24,30,116,117,137,194,402  
DATE: SEPTEMBER 2023 DRAWN BY: AS SHOWN CHECKED BY:  
DWS SCALE: PROJECT NO: 331-870  
APPROVED BY:

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER/WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED: OCT - 3 2024 FILE # 24-0117  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

PHILIP N. JAGODA  
No. 9923  
REGISTERED PROFESSIONAL ENGINEER  
PWIL

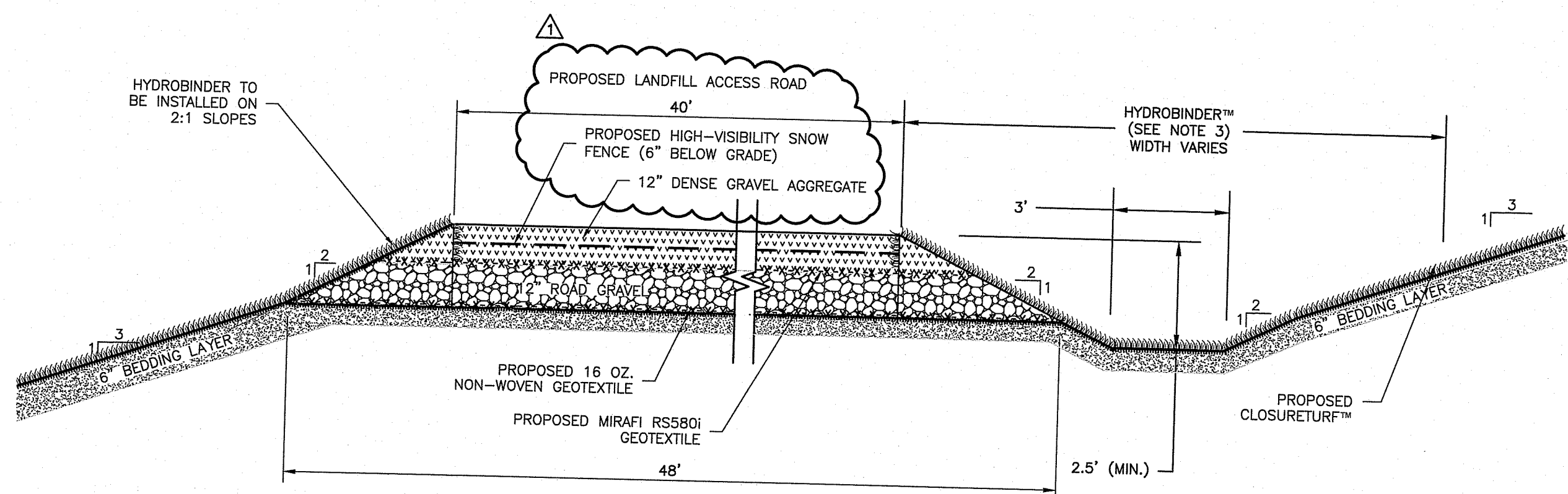


ESTIMATED GEOMEMBRANE PIPE BOOTS			
Remote Wellhead	Vertical LFG Well	Horiz.LFG Pipe	Leachate Cleanout
49	23	4	27

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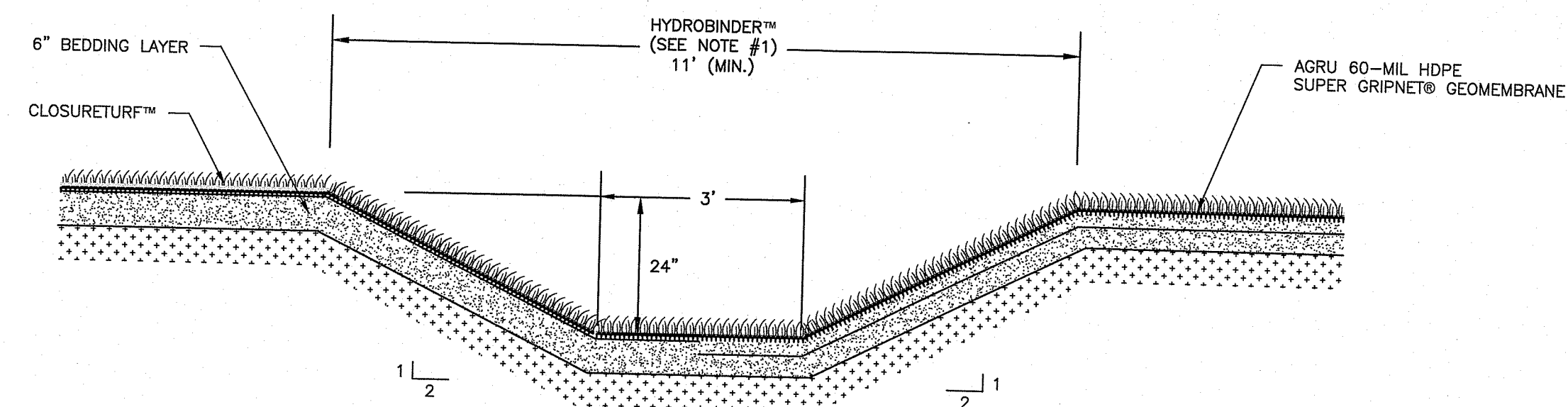




**NOTES:**

- EXISTING CONCRETE BARRIER BLOCKS ON THE EXISTING LANDFILL ACCESS ROAD WILL BE REMOVED AND REINSTALLED BY OTHERS. COORDINATE WITH RIRRC AS REQUIRED.
- CONTRACTOR SHOULD BE AWARE THAT THE LANDFILL ACCESS ROAD IS PART OF THE ACTIVE LANDFILLING OPERATIONS AND TRUCK TRAFFIC WILL BE REQUIRED TO BE RE-ROUTED AND DETOURED DURING THE PROJECT, COORDINATION WITH RIRRC WILL BE REQUIRED.
- HYDROBINDER™ TO BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- SEE DETAIL 4/C801 FOR WATER RELEASE VENT AT BOTTOM AND MIDSLOPE OF THE PROPOSED ROAD SWALE AS SHOWN IN THE SITE PLANS.
- CONTRACTOR WILL BE REQUIRED TO RESTORE EXISTING LANDFILL ACCESS TO PRE-CONSTRUCTION CONDITIONS AFTER GEOMEMBRANE DEPLOYMENT.

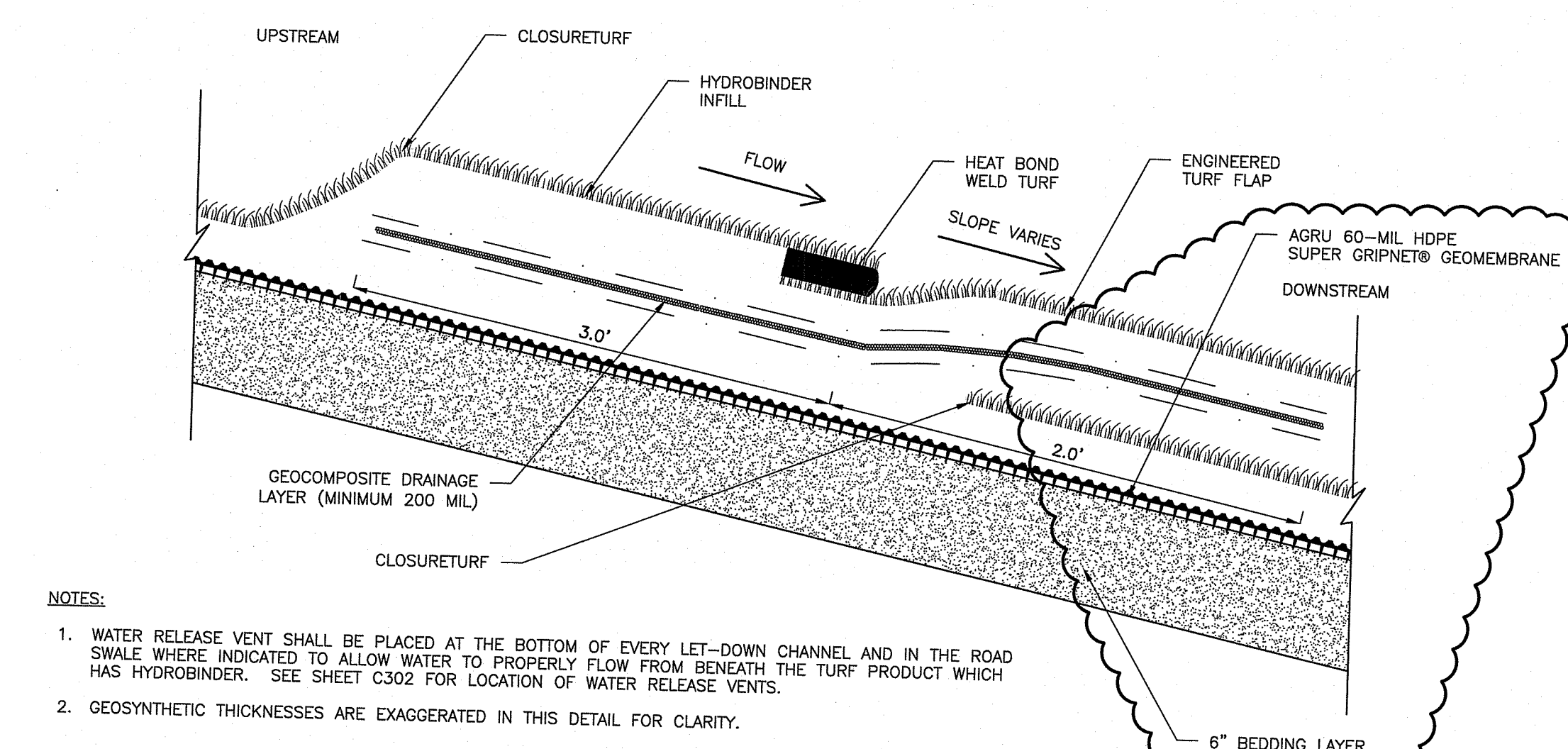
**1 ON-LANDFILL ACCESS ROAD AND SWALE DETAIL**  
SCALE: 1"=3'



**NOTES:**

- HYDROBINDER™ TO BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- SEE DETAIL 4/C801 FOR WATER RELEASE VENT AT BOTTOM OF ALL PROPOSED LET-DOWN CHANNELS.

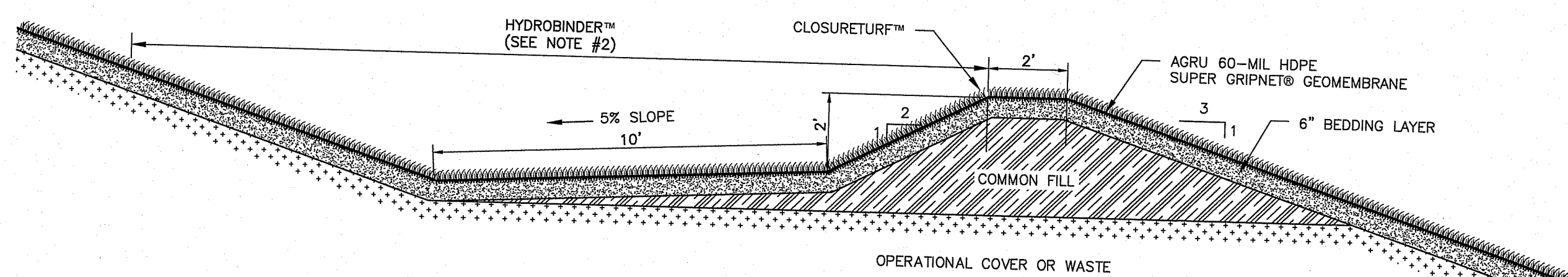
**3 PROPOSED LET-DOWN CHANNEL WITH HYDROBINDER™ DETAIL**  
SCALE: 1"=2'



**NOTES:**

- WATER RELEASE VENT SHALL BE PLACED AT THE BOTTOM OF EVERY LET-DOWN CHANNEL AND IN THE ROAD SWALE WHERE INDICATED TO ALLOW WATER TO PROPERLY FLOW FROM BENEATH THE TURF PRODUCT WHICH HAS HYDROBINDER. SEE SHEET C302 FOR LOCATION OF WATER RELEASE VENTS.
- GEOSYNTHETIC THICKNESSES ARE EXAGGERATED IN THIS DETAIL FOR CLARITY.

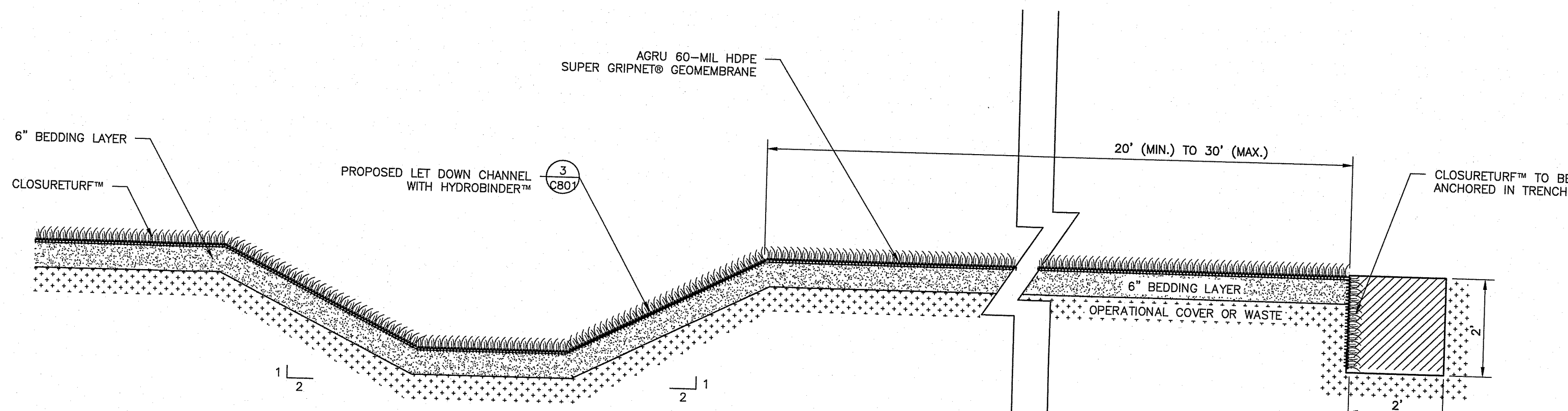
**4 PROPOSED CLOSURETURF WATER RELEASE VENT**  
SCALE: 1"=5"



**NOTES:**

- CONTRACTOR MAY BE REQUIRED TO PERFORM MINOR GRADING OF OPERATIONAL COVER TO MAINTAIN A MINIMUM SLOPE REQUIREMENT AS SHOWN ON GRADING PLANS. STORMWATER DIVERSION BENCH IS SLOPED A MINIMUM 5% BACK TOWARDS LANDFILL USING BEDDING SOILS.
- HYDROBINDER™ TO BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- SEE DETAIL 6/C801 FOR OFF CAP TRANSITION TO RIPRAP DOWNCHUTE.

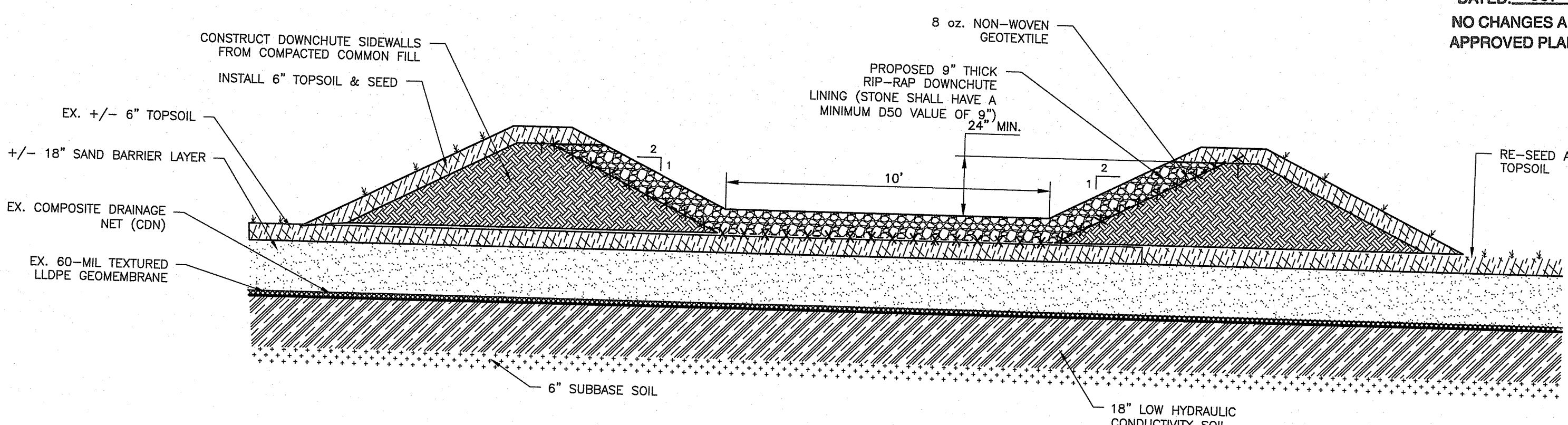
**2 TYPICAL BENCH/TERRACE CROSS-SECTION**  
SCALE: 1"=3'



**NOTE:**

- CONTRACTOR WILL BE REQUIRED TO BACKFILL EACH DAY DEPLOYMENT OF GEOMEMBRANE IN ANCHOR TRENCH AND WELD TOE OF SLOPE TIE-IN WELD TO EXISTING BASELINE/FINAL COVER GEOMEMBRANE BY END OF EACH DAY THAT GEOMEMBRANE IS DEPLOYED.

**5 PROPOSED EAST ANCHOR TRENCH DETAIL**  
SCALE: 1"=2'



**NOTES:**

- THIS DETAIL TO BE USED WHERE THE BENCH/TERRACE FROM DETAIL 2/C801 DISCHARGES OFF THE CLOSURETURF FINAL COVER.
- CONTRACTOR SHALL NOT DAMAGE THE EXISTING FINAL COVER SOILS OR UNDERLYING GEOSYNTHETICS, ANY REPAIRS WILL BE CONTRACTOR'S RESPONSIBILITY. EXISTING FINAL COVER PROFILE BASED ON DRAWINGS TITLED "PHASE VI LANDFILL LICENSING PERMIT APPLICATION" DATED APRIL 2007 BY GZA/PARE CORP.

**6 OFF LANDFILL BENCH/TERRACE DOWNCHUTE DETAIL**  
NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS  
SPECIFIED IN THE LETTER OF APPROVAL  
DATED: OCT - 3 2024 FILE #: 24-0117  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Environmental Management  
AUG 29 2024  
Office of Water Resources

PHILLIP N. JAGODA  
No. 9923  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL

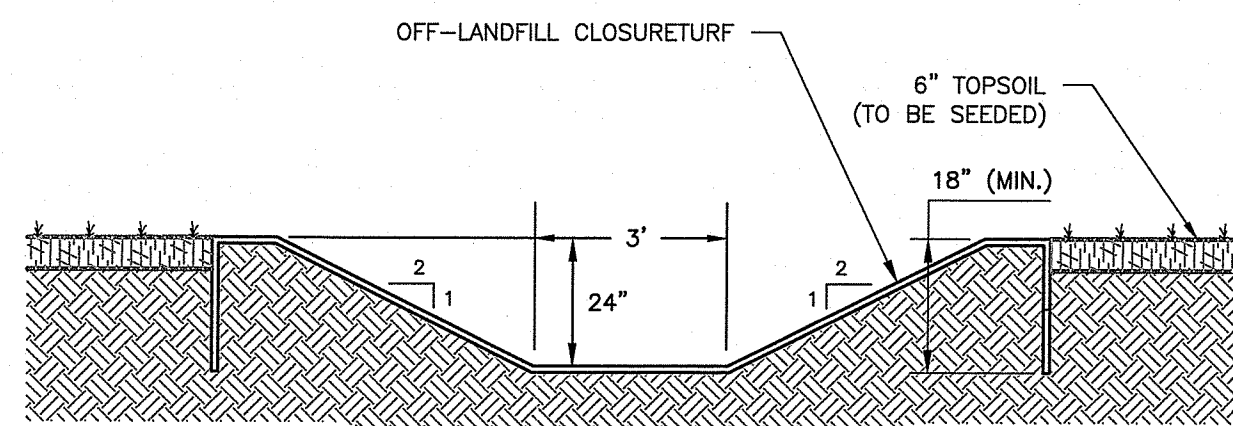
RHODE ISLAND RESOURCE RECOVERY CORPORATION  
PHASE VI AREAS 1 & 2 NORTH SLOPE CLOSURETURF™ PROJECT  
JOHNSTON, RI

DETAIL SHEET - II  
PLAT 43-LOTS 22,23,24,30,116,117,137,194,402  
DATE: SEPTEMBER 2023 DRAWN BY: DGB  
DWG SCALE: AS SHOWN CHECKED BY: CSD  
PROJECT NO.: 331-870  
APPROVED BY: PNJ

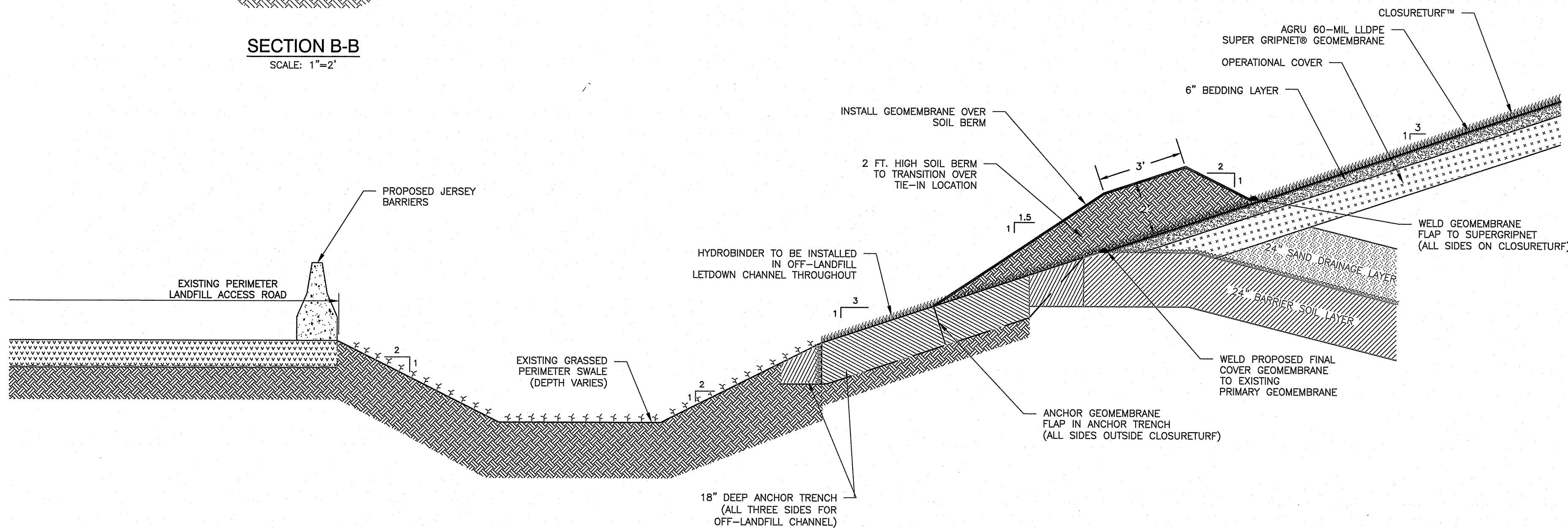
DRAWING NO.: **C801**  
SHEET 11 OF 15

NO	DATE	DESCRIPTION
1	10/03/23	Issue for RIRRC review
2	10/03/23	Issue for RIRRC review
3	10/03/23	Issue for RIRRC review
4	10/03/23	Issue for RIRRC review
5	10/03/23	Issue for RIRRC review
6	10/03/23	Issue for RIRRC review
7	10/03/23	Issue for RIRRC review
8	10/03/23	Issue for RIRRC review
9	10/03/23	Issue for RIRRC review
10	10/03/23	Issue for RIRRC review
11	10/03/23	Issue for RIRRC review
12	10/03/23	Issue for RIRRC review
13	10/03/23	Issue for RIRRC review
14	10/03/23	Issue for RIRRC review
15	10/03/23	Issue for RIRRC review
16	10/03/23	Issue for RIRRC review
17	10/03/23	Issue for RIRRC review
18	10/03/23	Issue for RIRRC review
19	10/03/23	Issue for RIRRC review
20	10/03/23	Issue for RIRRC review

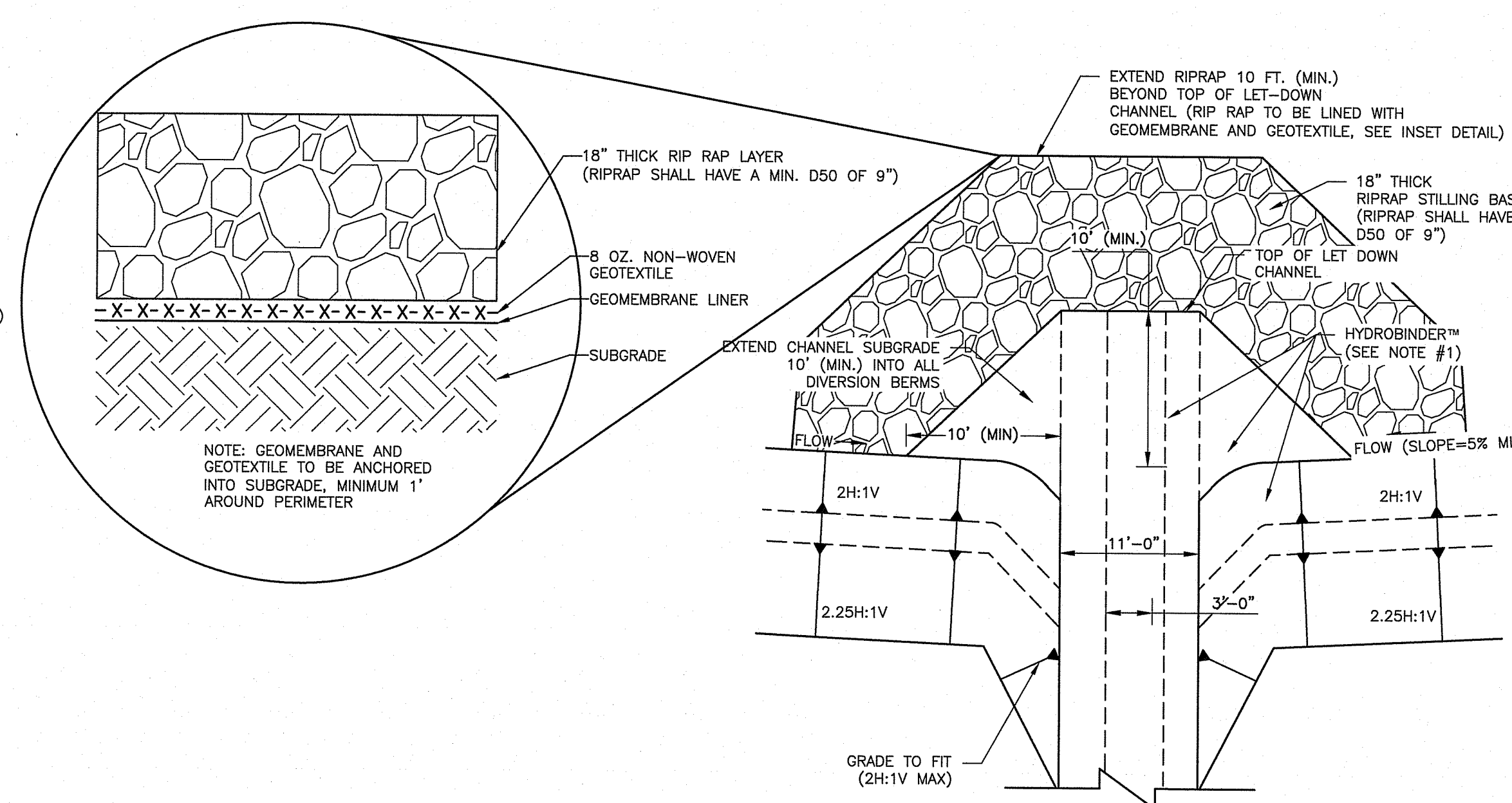
**Civil & Environmental Consultants, Inc.**  
31 Bellows Road - Raynham, MA 02767  
Ph: 774.501.2176 • 866.312.2024 • Fax: 774.501.2669  
www.cedcinc.com



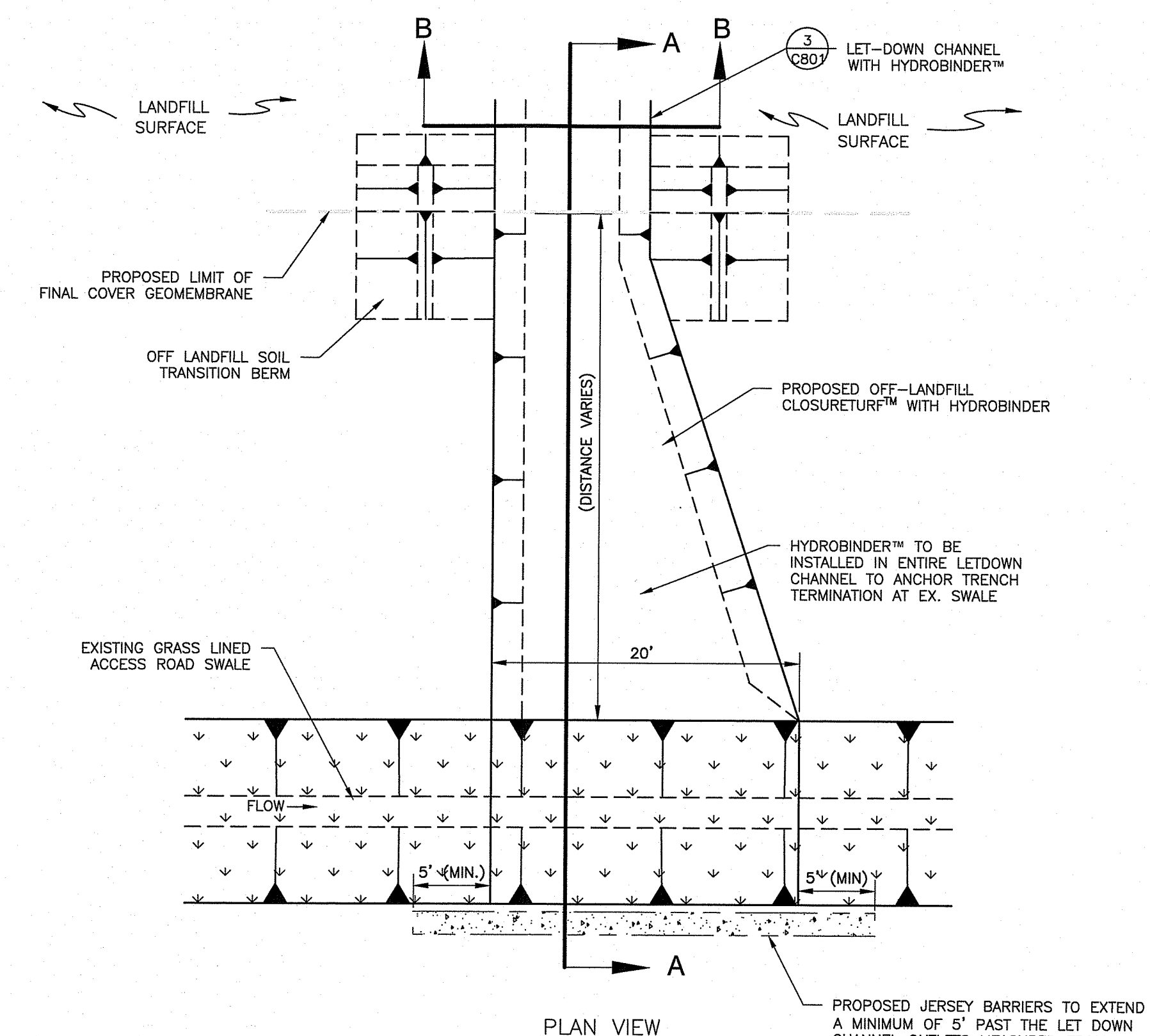
**SECTION B-B**  
SCALE: 1"=2'



**SECTION A-A**  
SCALE: 1"=2'



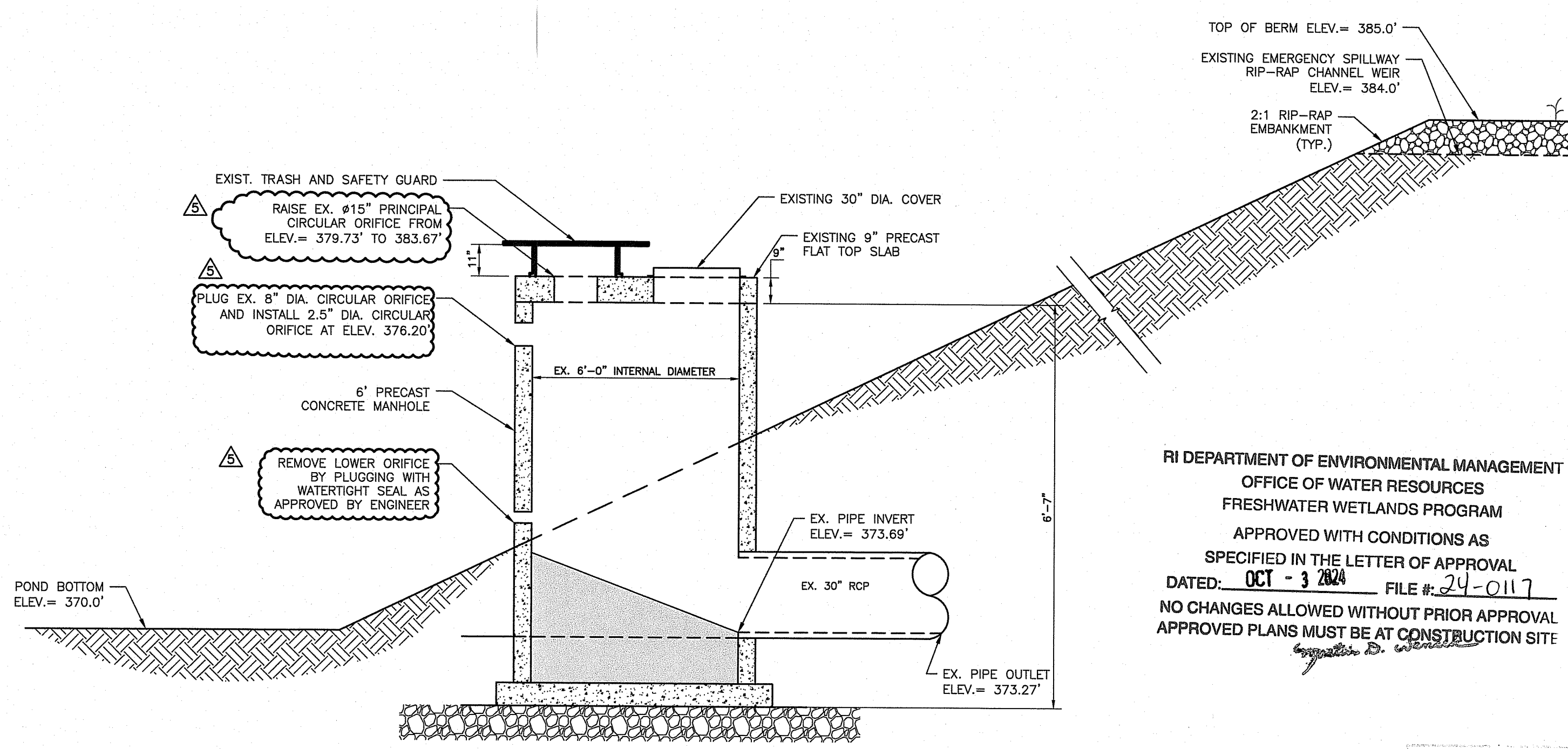
**2 FINAL COVER LET-DOWN CHANNEL INLET DETAIL**  
SCALE: 1"=8'



**PLAN VIEW**

- NOTES:**
- HYDROBINDER™ TO BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
  - OFF-LANDFILL CLOSURETURF™ TO HAVE HYDROBINDER INSTALLED.
  - CONTRACTOR TO RECONSTRUCT ALL DISTURBED AREAS OF THE EXISTING PERIMETER SWALE AT CONCLUSION OF PROJECT.

**1 FINAL COVER LET-DOWN CHANNEL OUTLET DETAIL**  
SCALE: 1"=8'



**SECTION**

- NOTES:**
- CONTRACTOR SHALL MAKE MODIFICATIONS TO THE OUTLET STRUCTURE AS NOTED IN THIS DETAIL.
  - EXISTING 4" AND 8" ORIFICE OUTLETS TO BE SEALED WATERTIGHT WITH MORTAR AND BRICKS.
  - CONTRACTOR MAY ADD 12" THICK RISER FOR THE TOP MODIFICATION, APPROVAL FROM RIRRC/ENGINEER REQUIRED.

**3 EX. POND 4 OUTLET MODIFICATIONS**  
SCALE: 1"=3'

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED: **OCT - 3 2024** FILE #: **24-0117**  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Environmentals Management  
AUG 29 2024  
Office of Water Resources

PHILLIP N. JAGODA  
No. 9923  
REGISTERED PROFESSIONAL ENGINEER

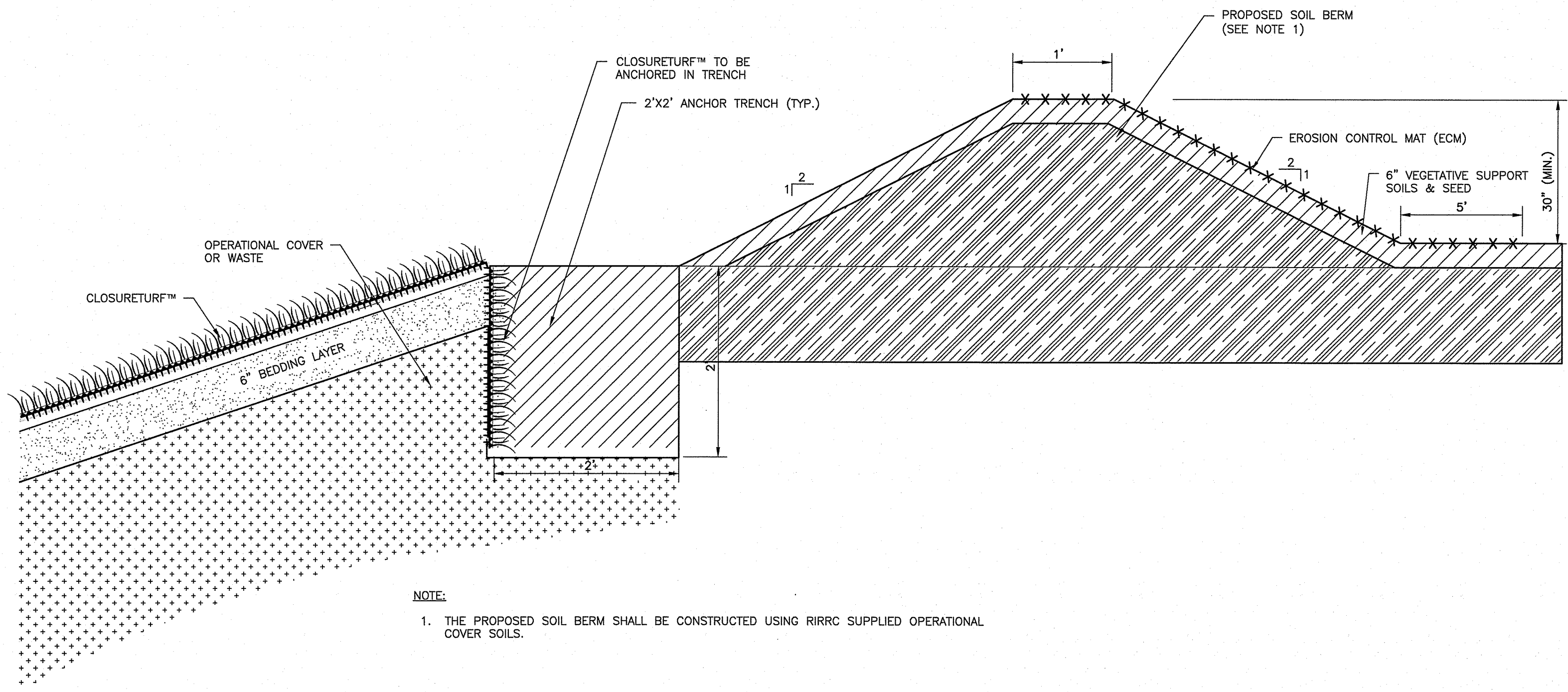
REVISION RECORD	
NO.	DESCRIPTION

**Civil & Environmental Consultants, Inc.**  
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**PHASE VI AREAS 1 & 2 NORTH SLOPE CLOSURETURF™ PROJECT**  
**JOHNSTON, RI**

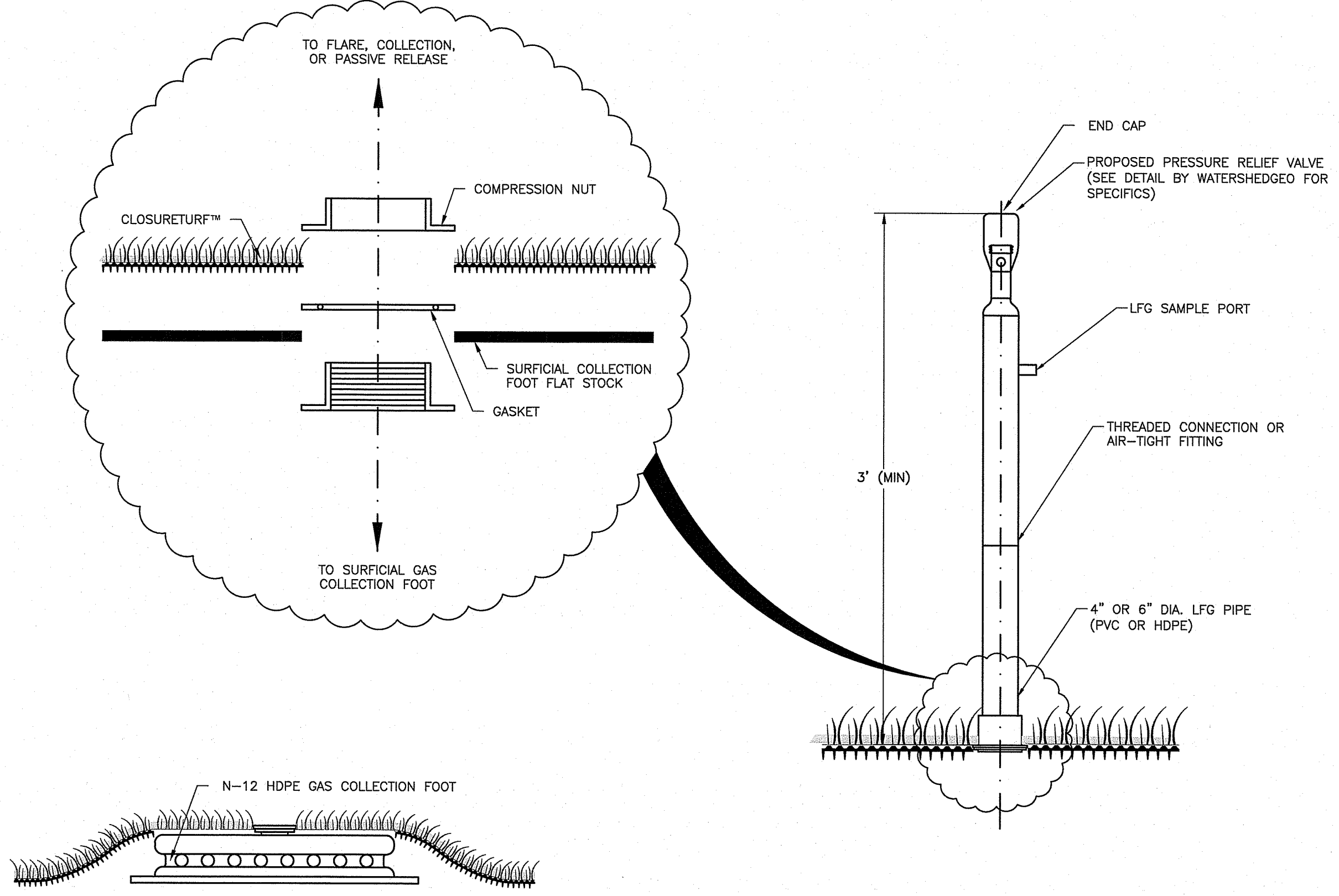
**DETAIL SHEET - III**  
PLAT 43-LOTS 22,23,24,30,116,117,137,194,402  
DATE: SEPTEMBER 2023 (DRAWN BY: CSD)  
DWS SCALE: AS SHOWN (CHECKED BY: 331470)  
PROJECT NO.: 331470  
APPROVED BY: PNU



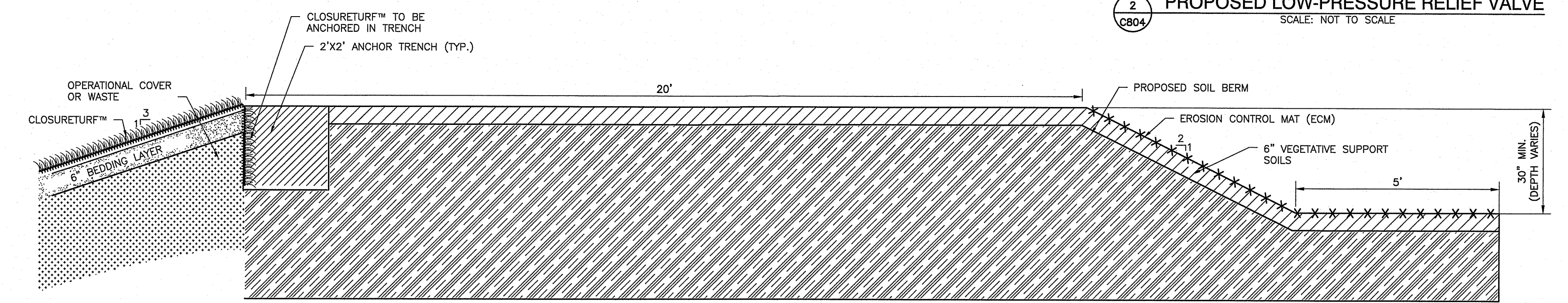


NOTE:  
1. THE PROPOSED SOIL BERM SHALL BE CONSTRUCTED USING RIRRC SUPPLIED OPERATIONAL COVER SOILS.

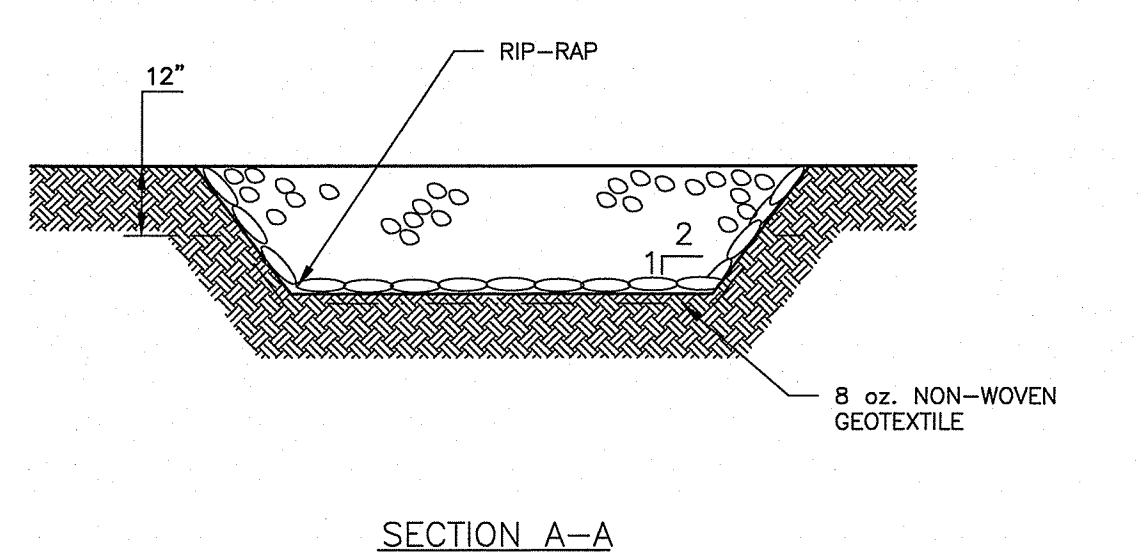
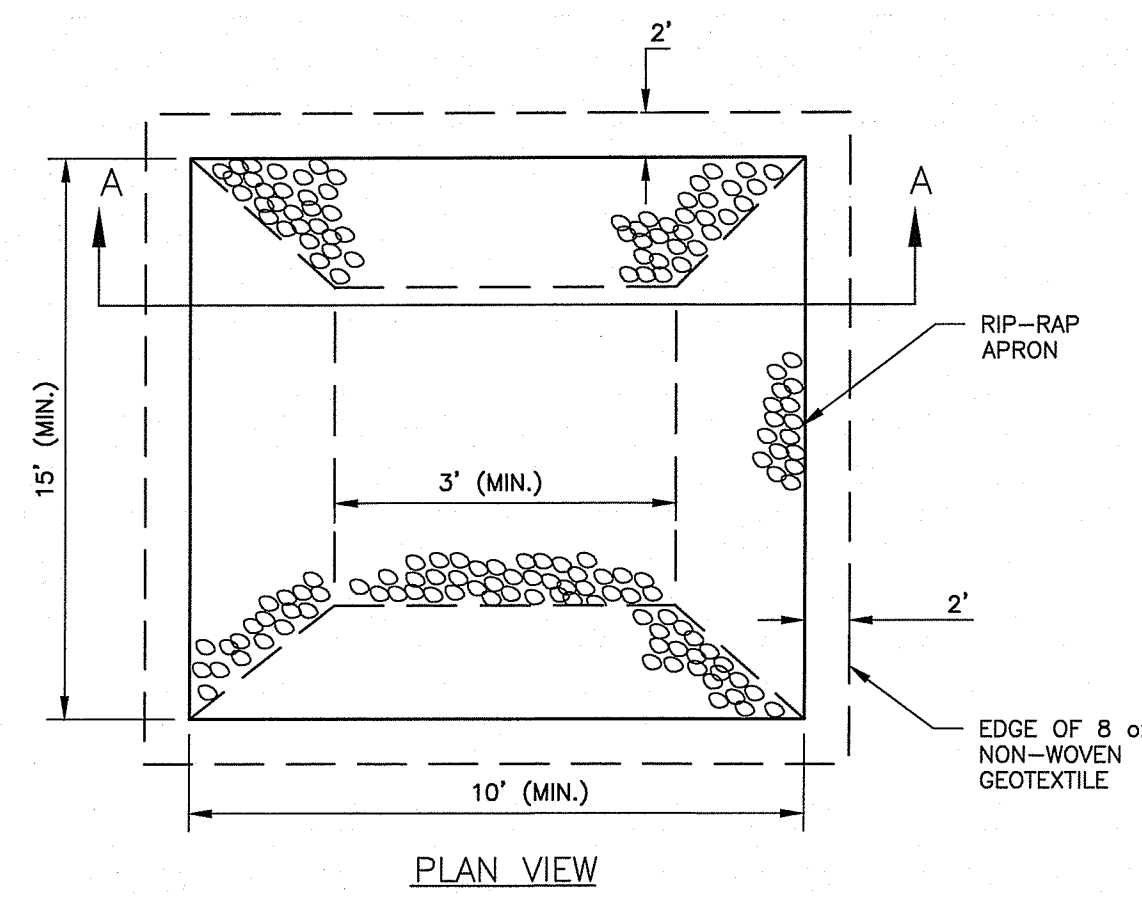
1 TOP OF SLOPE ANCHOR TRENCH/SOIL BERM DETAIL WEST SIDE  
SCALE: NOT TO SCALE



2 PROPOSED LOW-PRESSURE RELIEF VALVE  
SCALE: NOT TO SCALE

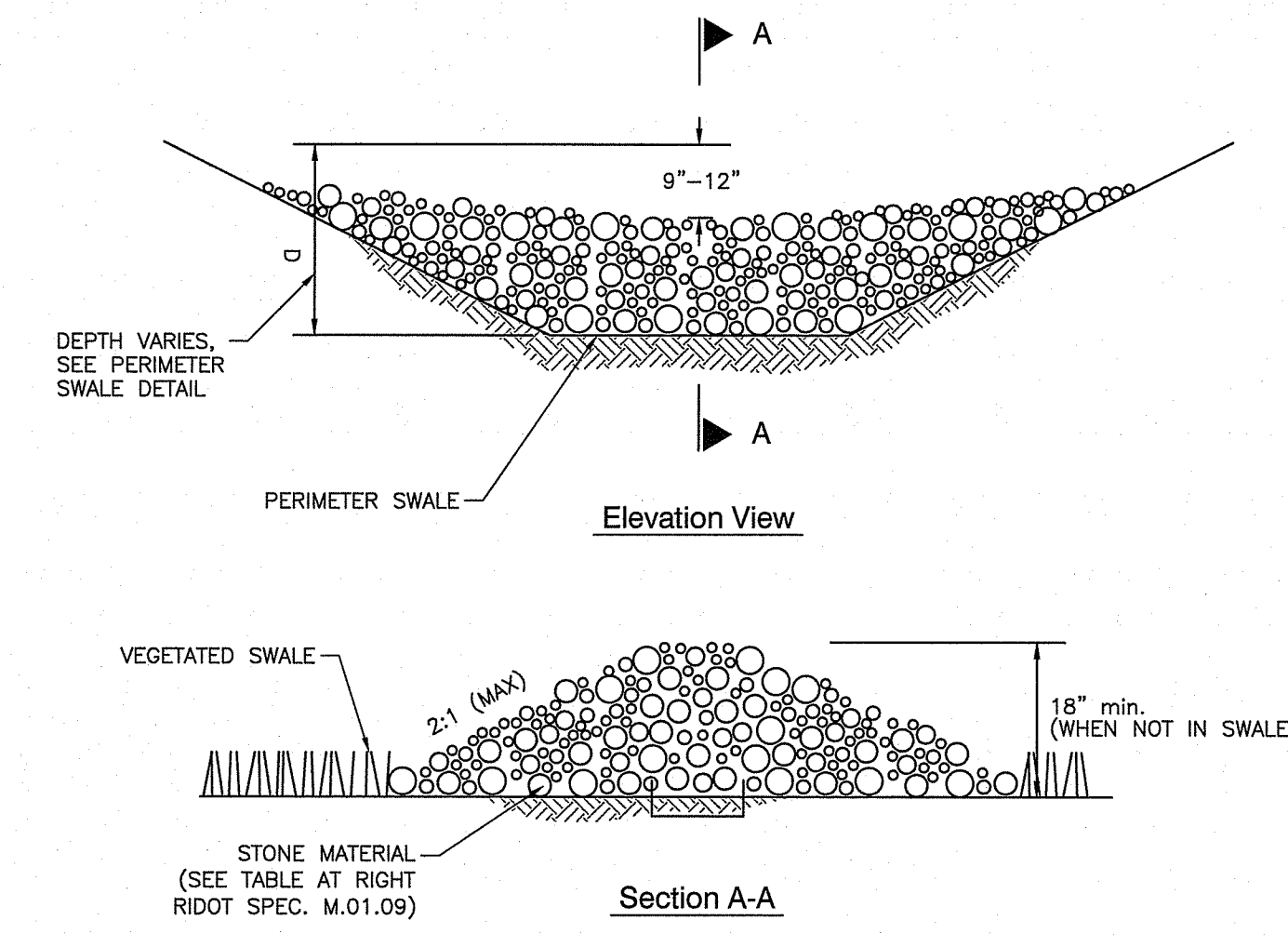


3 TOP OF SLOPE ANCHOR TRENCH/SOIL BERM DETAIL EAST SIDE  
SCALE: NOT TO SCALE



NOTE:  
1. RIP-RAP SHALL BE WELL GRADED FROM A MINIMUM SIZE OF 6\"/>

4 RIP-RAP INLET APRON DETAIL  
SCALE: NOT TO SCALE

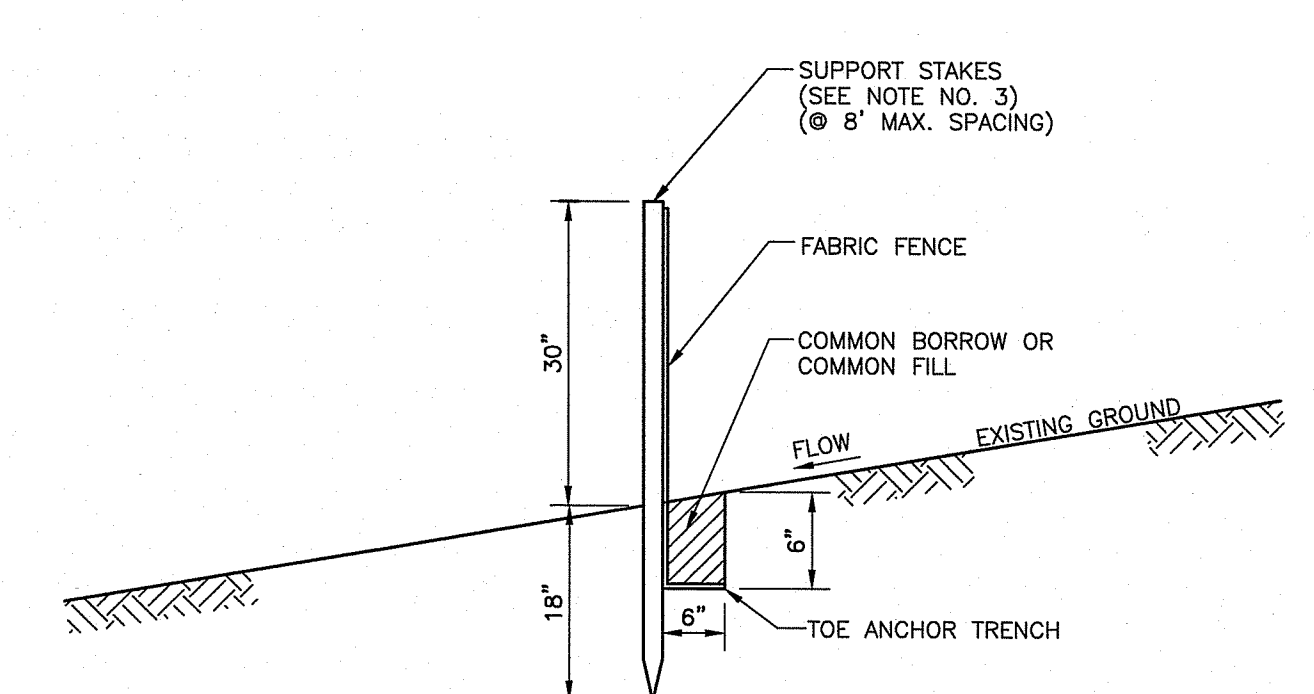


NOTES:  
1. STONE SIZE SHALL AT A MINIMUM MEET THE REQUIREMENTS OF RIDOT STANDARD SPECIFICATIONS M.01.09, TABLE 1 GRADATION II AS PROVIDED BELOW:

SIEVE	GRADATION % PASSING
2-1/4"	100
2"	90-100
1-1/2"	30-55
1-1/4"	0-25
1"	0-5

NOTES:  
1. STONE CHECK DAMS ARE TO BE INSTALLED IN LOCATIONS AS SHOWN ON THE PLAN OR AS REQUIRED BY OWNER/ENGINEER TO MINIMIZE EROSION AND SEDIMENT RUNOFF.  
2. CHECK DAMS SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR, OR WITHIN THE PERIMETER SWALES FOR TEMPORARY EROSION CONTROL UNTIL THE VEGETATION BECOMES WELL-ESTABLISHED.  
3. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES 3/4 THE CHECK DAM HEIGHT.

5 STONE CHECK DAM DETAIL  
SCALE: NOT TO SCALE



NOTES:  
1. FILTER FABRIC FENCE MUST BE INSTALLED AT EXISTING LEVEL GRADE. BOTH ENDS OF EACH FENCE SECTION MUST BE EXTENDED AT LEAST 8 FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.  
2. SEDIMENT MUST BE REMOVED WHERE ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FENCE.  
3. USE 2"x2" WOOD OR EQUIVALENT STEEL STAKES.

6 SILT FENCE DETAIL  
SCALE: NOT TO SCALE

Environmental Management  
AUG 29 2024  
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JOHNSTON, RI

DETAIL SHEET - V  
PLAT 43-LOTS 22,23,24,30,116,117,137,194,402  
DATE: SEPTEMBER 2023 DRAWN BY: DGB  
AS SHOWN CHECKED BY: CSD  
PROJECT NO.: 331-870  
APPROVED BY: PNJ

PHILLIP N. JAGODA  
No. 9923  
REGISTERED PROFESSIONAL ENGINEER

DRAWING NO.: **C804**  
SHEET 14 OF 14

