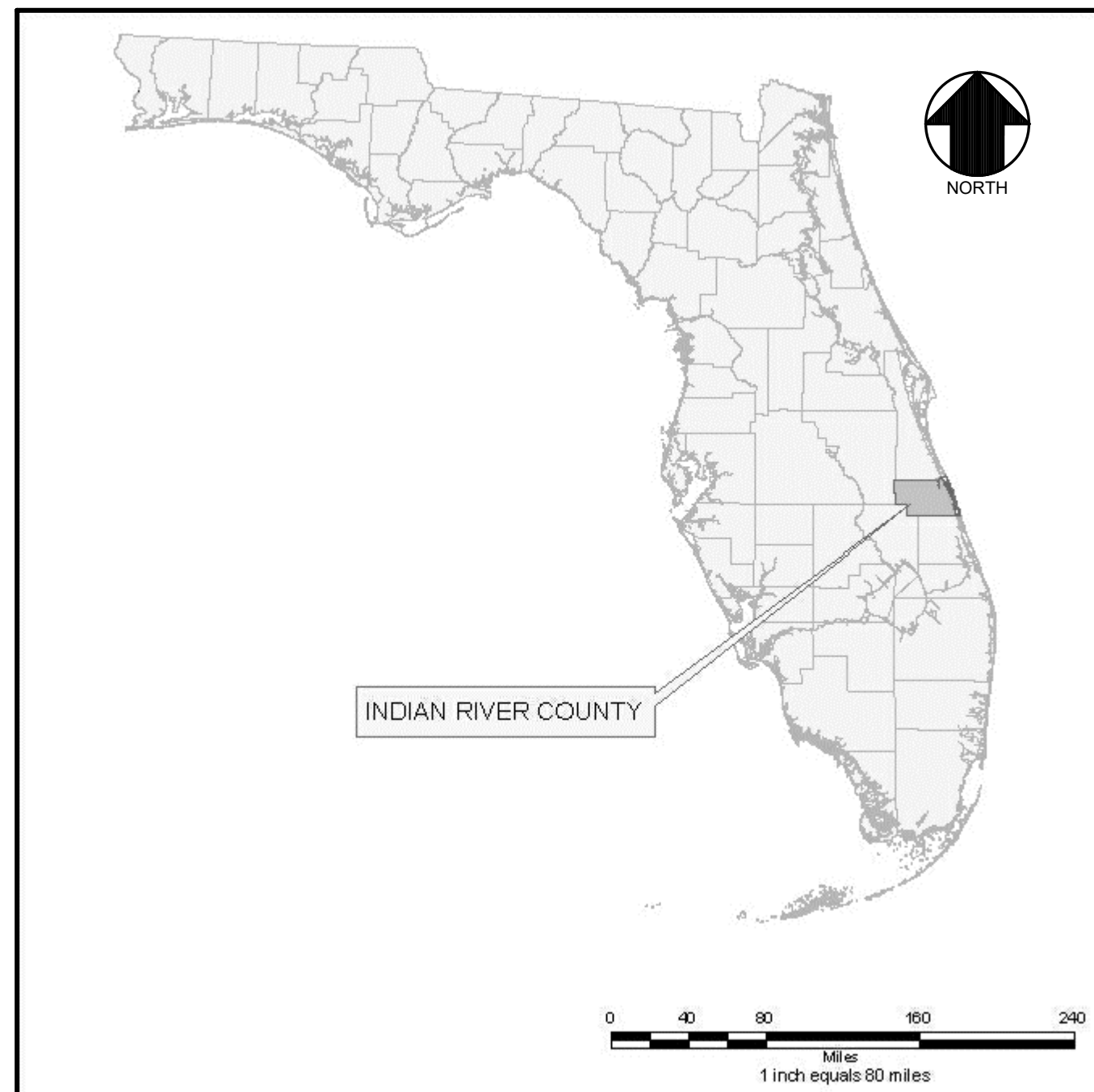


# INDIAN RIVER COUNTY, FLORIDA

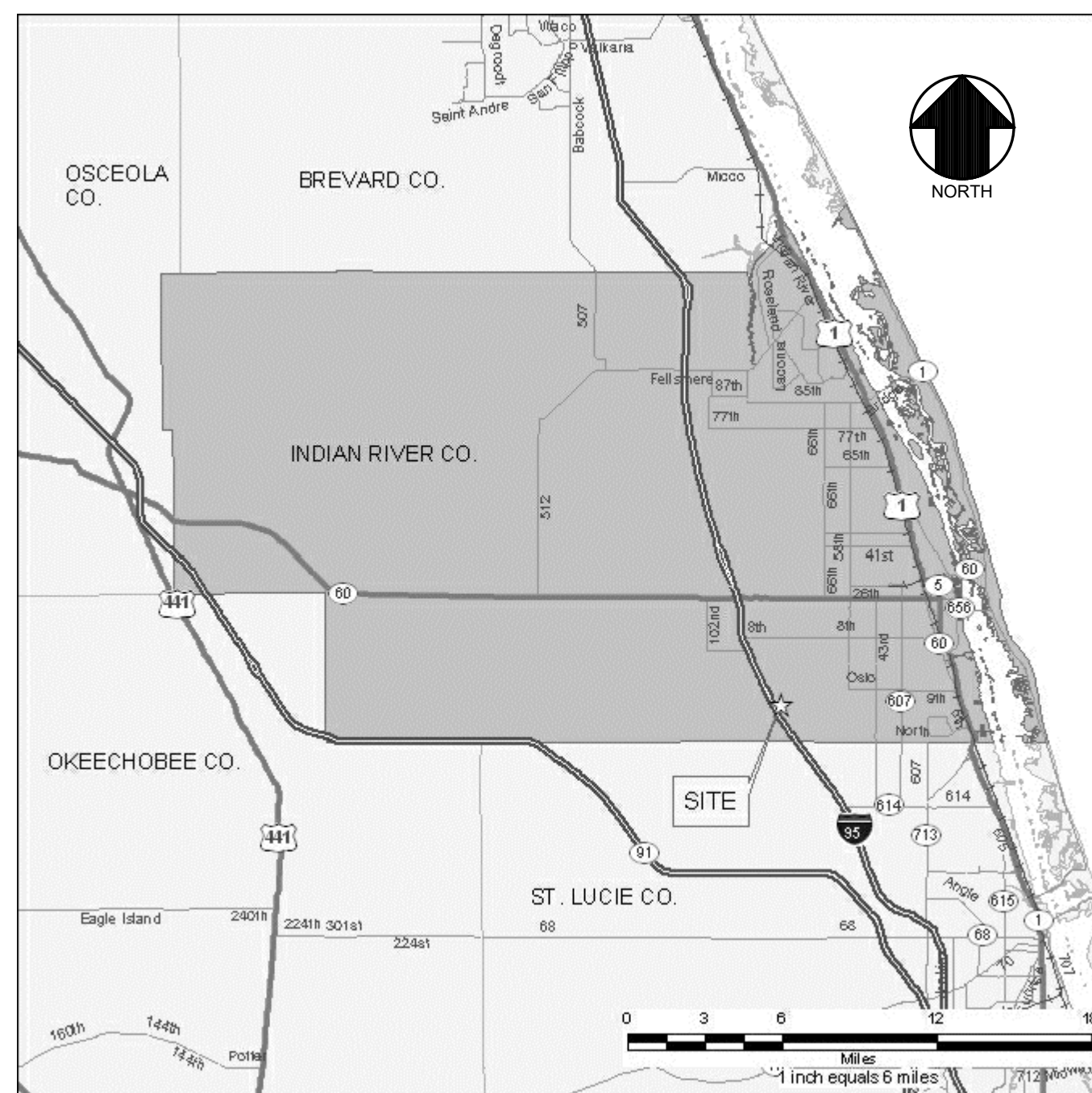
## SOLID WASTE DISPOSAL DISTRICT

### PHASE II - CELL 3

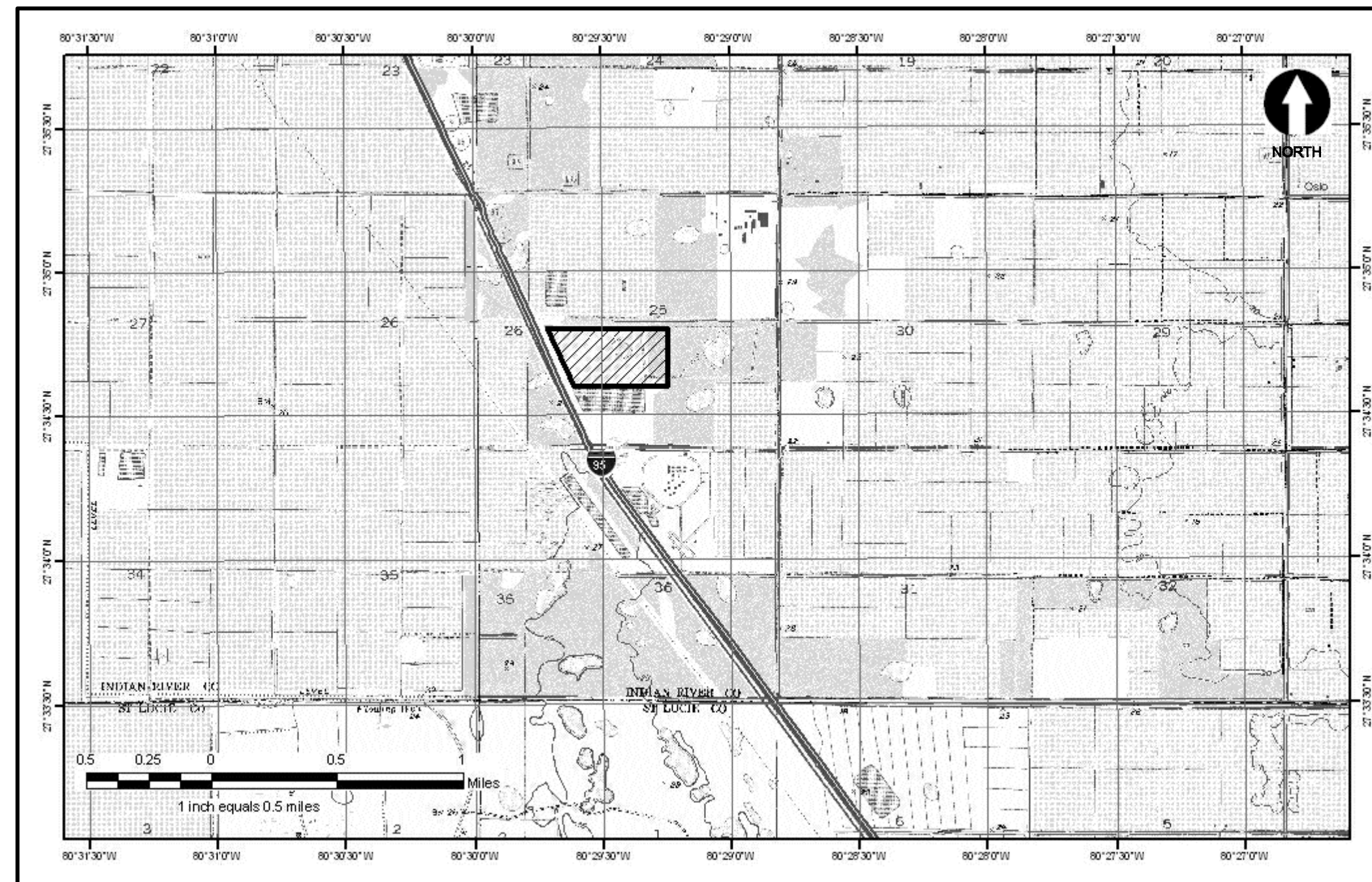
#### INDIAN RIVER COUNTY LANDFILL CONSTRUCTION DRAWINGS DECEMBER 2023



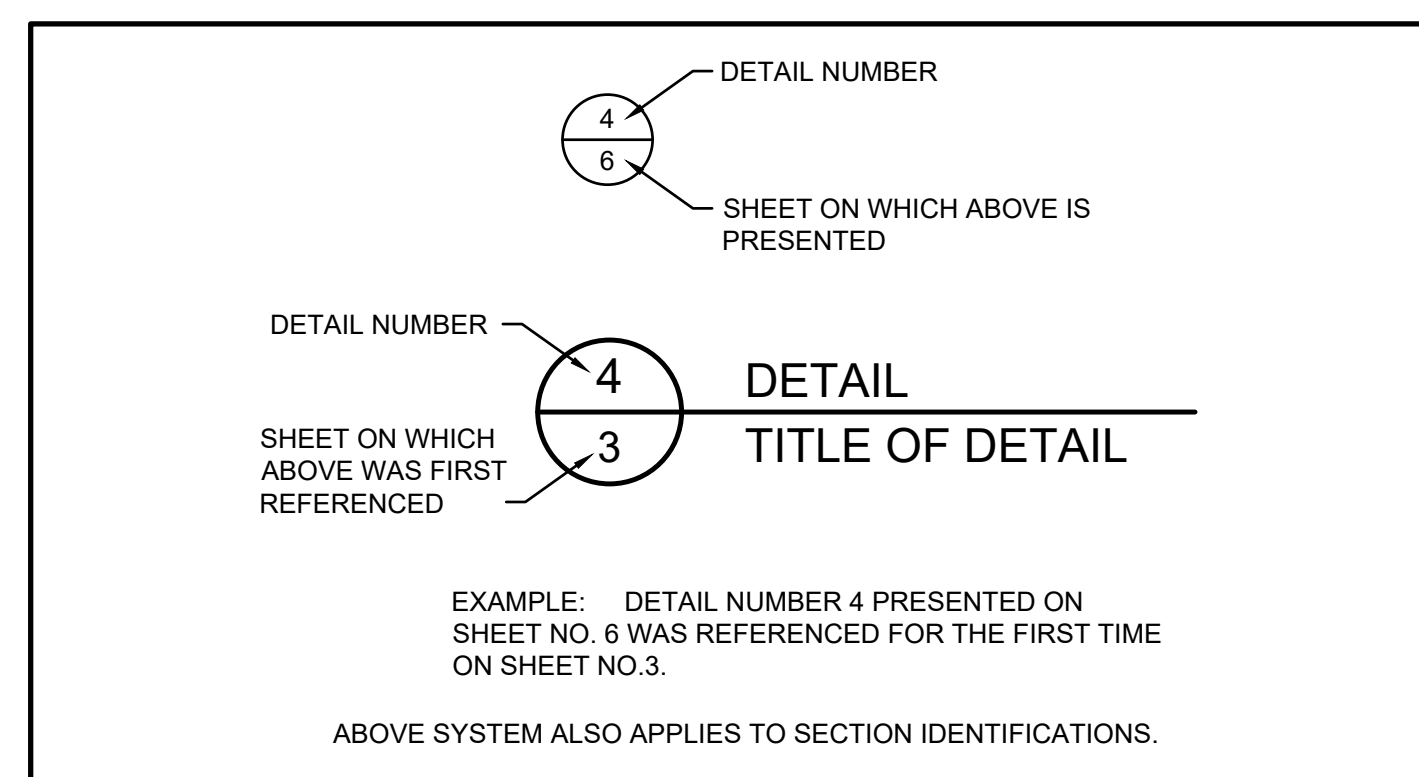
STATE MAP



LOCATION MAP



VICINITY MAP



DETAIL / SECTION IDENTIFICATION LEGEND

DRAWING INDEX	
DRAWING NO.	DRAWING TITLE
1	TITLE SHEET
2	GENERAL NOTES
3	EXISTING SITE CONDITIONS
4	TOP OF SUBBASE GRADING PLAN
5	TOP OF LINER PROTECTIVE COVER GRADING PLAN
6	LANDFILL CELL 3 ACCESS ROAD
7	LCS AND LDS ENLARGED PLAN
8	CONSTRUCTION CONTROL POINT DATA
9	LANDFILL CROSS SECTIONS
10	LINER SYSTEM DETAILS
11	LEACHATE COLLECTION SYSTEM (LCS) DETAILS
12	LEACHATE DETECTION SYSTEM (LDS) DETAILS
13	LINER PENETRATION DETAILS
14	LCS AND LDS DETAILS 1
15	LCS AND LDS DETAILS 2
16	LCS AND LDS DETAILS 3
17	ELECTRICAL SYMBOLS, ABBREVIATIONS, AND NOTES
18	ELECTRICAL PLAN
19	ELECTRICAL DETAILS I
20	ELECTRICAL DETAILS II
21	ELECTRICAL RISER DIAGRAMS
22	LEACHATE DETECTION CONTROL PANEL DETAILS
23	STORM WATER POLLUTION PREVENTION PLAN
24	STORMWATER POLLUTION PREVENTION DETAILS

REV	DATE	DESCRIPTION	DRN	APP
-	12/13/2023	ISSUE FOR BID	JJV	KBT

1200 RIVERPLACE BOULEVARD, SUITE 710 JACKSONVILLE, FLORIDA 32207 USA PHONE: 904.858.1818 - FAX: 904.396.1143 CERTIFICATE OF AUTHORIZATION NO. 4321		1325 74th AVENUE SW VERO BEACH, FLORIDA 32968 USA PHONE: 772.770.5112	
TITLE: TITLE SHEET			
PROJECT: PHASE II - CELL 3 CONSTRUCTION			
SITE: INDIAN RIVER COUNTY LANDFILL			
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.			
SIGNATURE	DATE	DESIGN BY: KBT	DATE: DECEMBER 2023
		DRAWN BY: JJV	PROJECT NO.: FL9363A
		CHECKED BY: TC	FILE: FL9363A-C01
		REVIEWED BY: SA	DRAWING NO.:
		APPROVED BY: KBT	1 OF 24



INDIAN RIVER COUNTY LANDFILL

1325 74th AVENUE SW  
VERO BEACH, FLORIDA 32968 USA  
(772) 770-5112



GEOSYNTEC CONSULTANTS



1200 RIVERPLACE BLVD. SUITE 710  
JACKSONVILLE, FLORIDA 32207  
(904) 858-1818

FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION

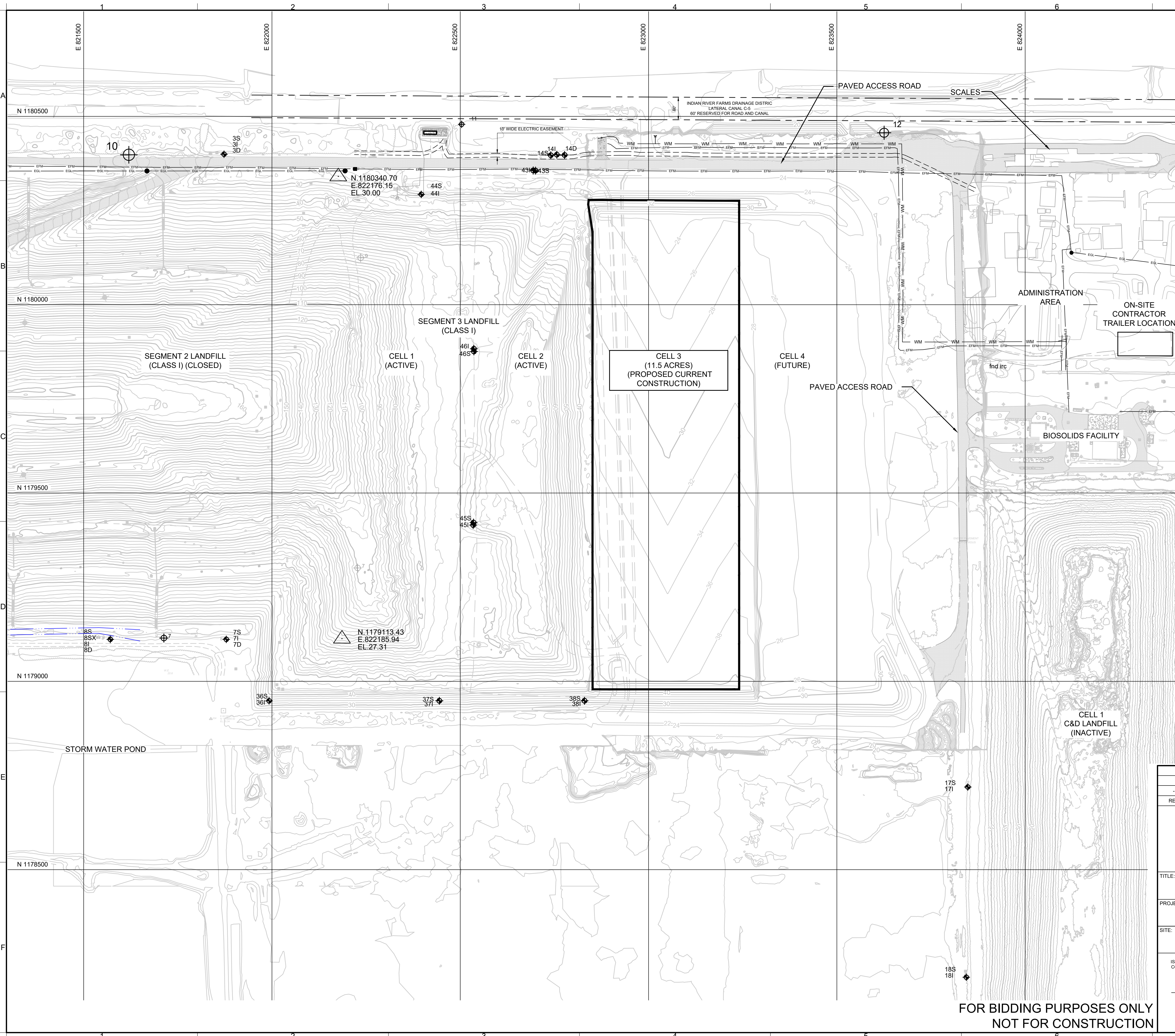
GENERAL NOTES:

1. THE SCOPE OF THE WORK INCLUDES THE FOLLOWING:
  - CLEARING, GRUBBING, AND/OR STRIPPING THE CONSTRUCTION AREA AS DIRECTED BY THE ENGINEER OR THE OWNER;
  - USE OF APPROPRIATE DUST CONTROL MEASURES DURING EARTHWORK OPERATIONS;
  - FURNISH MATERIALS FOR GENERAL/STRUCTURAL FILL THAT MEETS THE TECHNICAL SPECIFICATIONS, PLACEMENT AND COMPACTION TO THE TOP OF LINER SUBBASE GRADES SHOWN ON THE CONSTRUCTION DRAWINGS;
  - PROOFROLLING OF COMPACTED OR PREPARED LINER SUBBASE SURFACE PRIOR TO PLACEMENT OF THE GEOSYNTHETICS LINER;
  - CONSTRUCTION OF CELL 3 - SEGMENT 3 EXPANSION DOUBLE LINER SYSTEM, INCLUDING ANCHOR TRENCH AND TEMPORARY INTERCELL BERM/RAIN FLAPS;
  - CONSTRUCTION OF EROSION AND SEDIMENT CONTROL STRUCTURES (INCLUDING SILT CHECK DAMS, STRAW BALE BARRIERS IN PERIMETER DITCHES, AND SILT FENCE) AS NECESSARY TO FACILITATE CONSTRUCTION AND MINIMIZE EROSION DURING STORM EVENTS; AND
  - CLEARING, GRUBBING, EXCAVATION, BACKFILLING, COMPACTION, GRADING, AND PROOFROLLING NECESSARY TO FACILITATE CONSTRUCTION OF PREVIOUSLY MENTIONED COMPONENTS OF PHASE II CELL 3 - SEGMENT 3 EXPANSION.
2. HORIZONTAL COORDINATES VALUES ARE BASED UPON THE NORTH AMERICAN DATA OF 1983 (NAD83), ADJUSTED TO 1999 COORDINATE SYSTEM, FLORIDA EAST ZONE.
3. CONTOURS AND SPOT ELEVATION ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).
4. THE CONTRACTOR SHALL ABIDE BY THE SITE HEALTH AND SAFETY PLAN.
5. THE CONTRACTOR SHALL PERFORM ALL SURVEYING FOR CONSTRUCTION CONTROL UNDER THE SUPERVISION OF A LICENSED SURVEYOR REGISTERED IN THE STATE OF FLORIDA.
6. LOCATION OF ALL UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE DRAWINGS. CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND LOCATE ALL UNDERGROUND UTILITIES INCLUDING THE EXISTING GRAVITY LINE (EGL) AND EXISTING FORCE MAIN (EFM).
7. THE CONTRACTOR SHALL ESTABLISH ON SITE OFFICE AND PERSONNEL FACILITIES AND SHALL BE RESPONSIBLE FOR UTILITY CONNECTIONS.
8. THE CONTRACTOR SHALL INFORM THE OWNER'S REPRESENTATIVE OF ANY CHANGES IN FIELD CONDITIONS SINCE THE DATE OF THE AERIAL PHOTOGRAPHY, WHICH MAY AFFECT THE DESIGN GRADES PRESENTED IN THESE DRAWINGS. ANY MODIFICATION TO THE DESIGN GRADES AS A RESULT OF THE CHANGES IN FIELD CONDITIONS SHALL BE AT THE APPROVAL OF THE ENGINEER.
9. THE CONTRACTOR SHALL INFORM THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES IDENTIFIED IN THE INFORMATION PRESENTED IN THESE DRAWINGS PRIOR TO PROCEEDING WITH ANY CONSTRUCTION ACTIVITY IN AREAS THAT DISCREPANCIES HAVE BEEN IDENTIFIED.
10. THE CONTRACTOR SHALL INFORM THE OWNER'S REPRESENTATIVE OF ANY FIELD CONDITION THAT MAY IMPEDE THE CONTRACTOR FROM ACHIEVING THE DESIGN GRADES PRESENTED ON THESE DRAWINGS. ANY MODIFICATION TO THE DESIGN GRADES SHALL BE AT THE APPROVAL OF THE OWNER OR THE ENGINEER.
11. THE CONTRACTOR SHALL DISCUSS LOCATION OF MATERIALS STOCKPILES WITH THE OWNER'S REPRESENTATIVE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF TEMPORARY ROADS AT THE SITE NECESSARY FOR CONSTRUCTION ACTIVITIES INCLUDED IN THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION OF TEMPORARY CROSSING TO THE EXCAVATED MATERIAL STOCKPILE AREAS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION OF TEMPORARY DIVERSION BERMS, BEYOND WHAT IS SHOWN ON THESE DRAWINGS, TO CONTROL SURFACE WATER RUNOFF FROM SURROUNDING AREAS ONTO THE CONSTRUCTION SITE. THE LOCATION AND DIMENSIONS OF DIVERSION BERMS MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO THE CONSTRUCTION OF DIVERSION BERMS.
14. DETAILS ARE SHOWN TO SCALE AS NOTED EXCEPT FOR GEOSYNTHETICS, WHICH ARE SHOWN AT AN EXAGGERATED SCALE FOR CLARITY. MATERIAL THICKNESSES ARE MINIMUMS, AND TOLERANCES SHALL BE WITHIN THE LIMITS GIVEN IN THE TECHNICAL SPECIFICATIONS AND CONSTRUCTION QUALITY ASSURANCE (CQA) PLAN.
15. THE 3H:1V SIDESLOPE AND BASE OF PHASE II CELL 3 SHALL HAVE A LINER SYSTEM CONSISTING, FROM BOTTOM TO TOP, OF: (1) 6-IN THICK PREPARED SUBBASE LAYER (THIS WILL REQUIRE REGRADING AND SITE PREPARATION ONLY); (2) GEOSYNTHETIC CLAY LINER; (3) SECONDARY 60-MIL THICK TEXTURED HDPE GEOMEMBRANE; (4) SECONDARY GEOCOMPOSITE DRAINAGE LAYER; (5) PRIMARY 60-MIL THICK TEXTURED HDPE GEOMEMBRANE; (6) PRIMARY GEOCOMPOSITE DRAINAGE LAYER; AND (7) 2-FT THICK MINIMUM LINER PROTECTIVE LAYER.
16. THE NONWOVEN GEOTEXTILE SHALL BE SEAMED USING TERASYN SUPPLIED BY ATLANTIC THREAD & SUPPLY CO., INC. (1-800-847-1001) OR APPROVED EQUAL. THE THREAD AND SEAM SHALL PROVIDE A MINIMUM SEAM STRENGTH OF 220 LB/IN.
17. THE THICKNESS OF THE LINER PROTECTIVE LAYER SHALL BE 2 FT MINIMUM ON THE 3H:1V SIDESLOPE AND AT THE BASE OF PHASE II CELL 3. MEASUREMENTS OF LINER PROTECTIVE LAYER THICKNESS SHALL BE BASED ON BEFORE AND AFTER SURVEYS CONDUCTED BY A REGISTERED LAND SURVEYOR IN THE STATE OF FLORIDA. THE BEFORE SURVEY FOR THE LINER PROTECTIVE LAYER SHALL BE THE TOP OF PRIMARY GEOCOMPOSITE DRAINAGE LAYER SURVEY.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND DISPOSING OF DEBRIS THAT RESULT FROM CONSTRUCTION ACTIVITIES INCLUDED IN THIS PROJECT, AT THE COMPLETION OF THE PROJECT, TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE, AND AT NO COST TO THE OWNER.
19. CONSTRUCTION MUST BE CONSISTENT WITH THE PERMIT ISSUED BY THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WASTE MANAGEMENT FOR INDIAN RIVER COUNTY LANDFILL. THE ENGINEER MUST CERTIFY EACH PHASE OF CONSTRUCTION.
20. THE CONTRACTOR SHALL BECOME THOROUGHLY FAMILIAR WITH THE PROJECT SPECIFICATIONS, THE CONSTRUCTION QUALITY ASSURANCE PLAN, AND THE CONSTRUCTION DRAWINGS PRIOR TO THE COMMENCEMENT OF THE PROJECT. THE CONTRACTOR SHALL INFORM THE OWNER'S REPRESENTATIVE IN WRITING OF ANY CONCERNS ABOUT THE INFORMATION PRESENTED IN THESE DOCUMENTS. FAILURE TO NOTIFY THE OWNER'S REPRESENTATIVE OR CONTINUANCE WITH CONSTRUCTION ACTIVITIES WILL BE CONSTRUED AS CONTRACTOR'S ACCEPTANCE OF THE INFORMATION PRESENTED IN THESE DOCUMENTS.
21. NECESSARY BARRICADES, SIGNS, AND OTHER TRAFFIC CONTROL METHODS AS NEEDED FOR THE PROTECTION AND SAFETY OF THE PUBLIC SHALL BE PROVIDED AND MAINTAINED THROUGHOUT THE CONSTRUCTION ALONG INTERIOR ROADWAYS.

ACCD0045\geosyntec\INDIAN RIVER CNTY OF CELL 3\Project Files\Drawings\SP1-1903A-C02.dwg

-		12/13/2023	ISSUE FOR BID	JJV	KBT
REV	DATE	DESCRIPTION		DRN	APP
 					
1200 RIVERPLACE BOULEVARD, SUITE 710 JACKSONVILLE, FLORIDA 32207 USA PHONE: 904.858.1818 - FAX: 904.396.1143 CERTIFICATE OF AUTHORIZATION NO. 4321					
1325 74th AVENUE SW VERO BEACH, FLORIDA 32968 USA PHONE: 772.770.5112					
TITLE: GENERAL NOTES					
PROJECT: PHASE II - CELL 3 CONSTRUCTION					
SITE: INDIAN RIVER COUNTY LANDFILL					
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.					
SIGNATURE		DESIGN BY:	KBT	DATE:	DECEMBER 2023
DATE		DRAWN BY:	JJV	PROJECT NO.:	FL9363A
KWASI BABU-TWENBOAH LICENSE NO. 42460		CHECKED BY:	TC	FILE:	FL9363A-C02
		REVIEWED BY:	SA	DRAWING NO.:	
		APPROVED BY:	KBT		2 OF 24

FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION



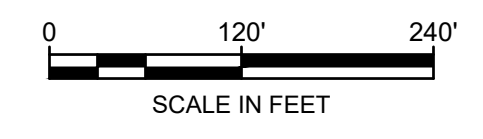
**LEGEND**

— 110 —	EXISTING GROUND ELEVATION (FEET, NGVD)
=====	PAVED ROAD
-----	UNPAVED ROAD
~~~~~	TREE LINE
○	UTILITY POLE
---	CULVERT
N 1178500 E 824000	STATE PLANE COORDINATES
WM	EXISTING WATERMAIN
EG	EXISTING GRAVITY LINE
EF	EXISTING FORCEMAIN
MH 9	EXISTING MANHOLE
⊕ 14	EXISTING GAS MONITORING PROBE
◆ 19S ◆ 19I	EXISTING GROUNDWATER MONITORING WELL

**BENCHMARKS**

△	N 1180340.70 E 822176.15 ELEV. 30.00
△	N 1179113.43 E 822185.94 ELEV. 27.31

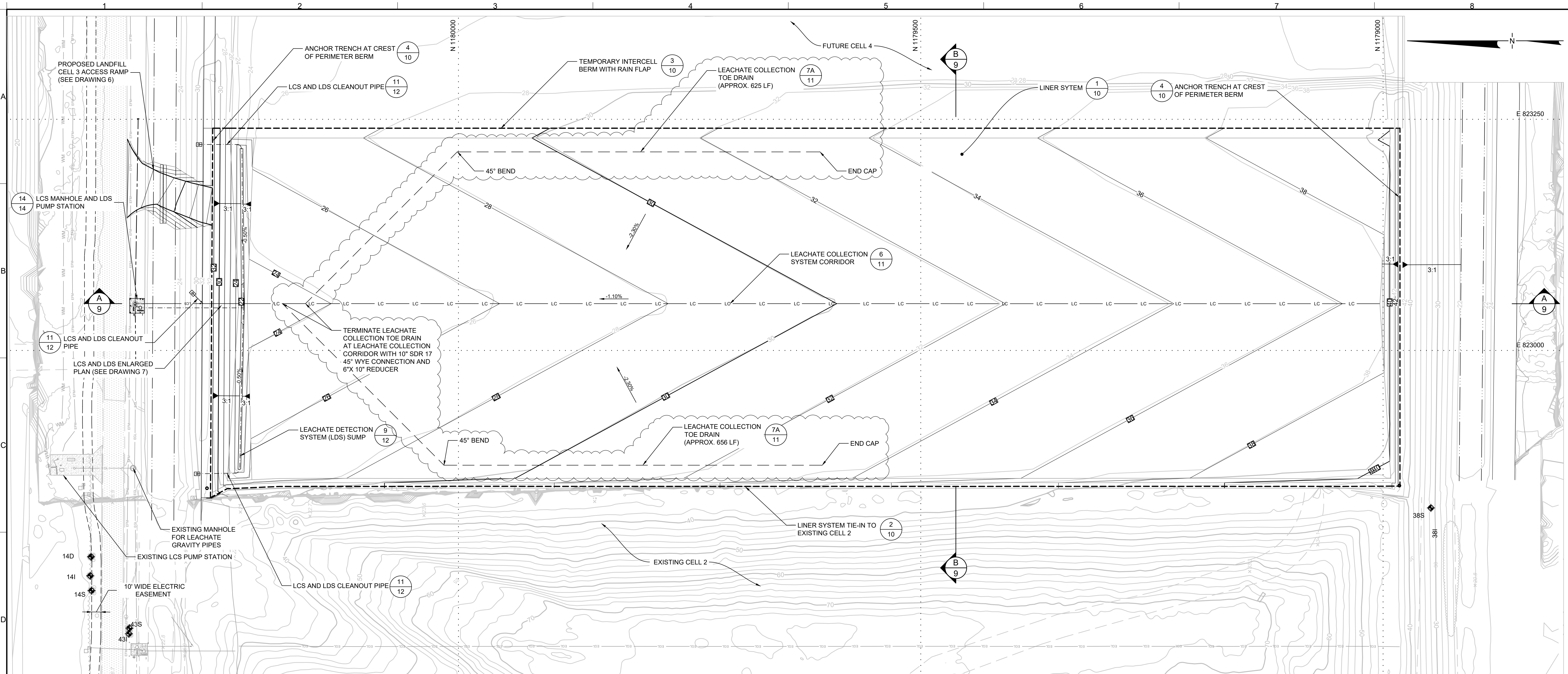
- NOTES:**
1. TOPOGRAPHIC INFORMATION OUTSIDE THE ACTIVE LANDFILL AREA WAS OBTAINED FROM SURVEY PREPARED BY ALERT 5 INTERNATIONAL & MASTELLER, COMPLETED IN DECEMBER 2022.
  2. EXISTING WASTE ELEVATION WAS OBTAINED FROM SURVEY PREPARED BY ALERT 5 INTERNATIONAL & MASTELLER, MOLER & TAYLOR INC., DATED NOVEMBER 2021, AND CERTIFIED BY AREA OF INTEREST SOLUTIONS, INC.
  3. THE GRADES SHOWN FOR CELLS 3 AND 4 IS THE PHASE 1 SITE PREP ASBUILT SURVEY PREPARED BY PEAVEY & ASSOCIATES, ISSUED ON THE 8 DECEMBER 2023.
  4. THE HORIZONTAL COORDINATE VALUES ARE BASED UPON THE NORTH AMERICAN DATA OF 1983 (NAD83), ADJUSTED TO 1999 COORDINATE SYSTEM, FLORIDA EAST ZONE.
  5. CONTOURS AND SPOT ELEVATION ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).



REV	DATE	DESCRIPTION	DRN	APP
-	12/13/2023	ISSUE FOR BID	JJV	KBT
1200 RIVERPLACE BOULEVARD, SUITE 710 JACKSONVILLE, FLORIDA 32207 USA PHONE: 904.858.1818 - FAX: 904.396.1143 CERTIFICATE OF AUTHORIZATION NO. 4321		1325 74th AVENUE SW VERO BEACH, FLORIDA 32968 USA PHONE: 772.770.5112		
TITLE: EXISTING SITE CONDITIONS				
PROJECT: PHASE II - CELL 3 CONSTRUCTION				
SITE: INDIAN RIVER COUNTY LANDFILL				
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		DESIGN BY:	KBT	DATE: DECEMBER 2023
SIGNATURE		DRAWN BY:	JJV	PROJECT NO.: FL9363A
DATE		CHECKED BY:	TC	FILE: FL9363A-C03
KWASI BADU-TWENGOAH LICENSE NO. 42460		REVIEWED BY:	SA	DRAWING NO.:
		APPROVED BY:	KBT	3 OF 24

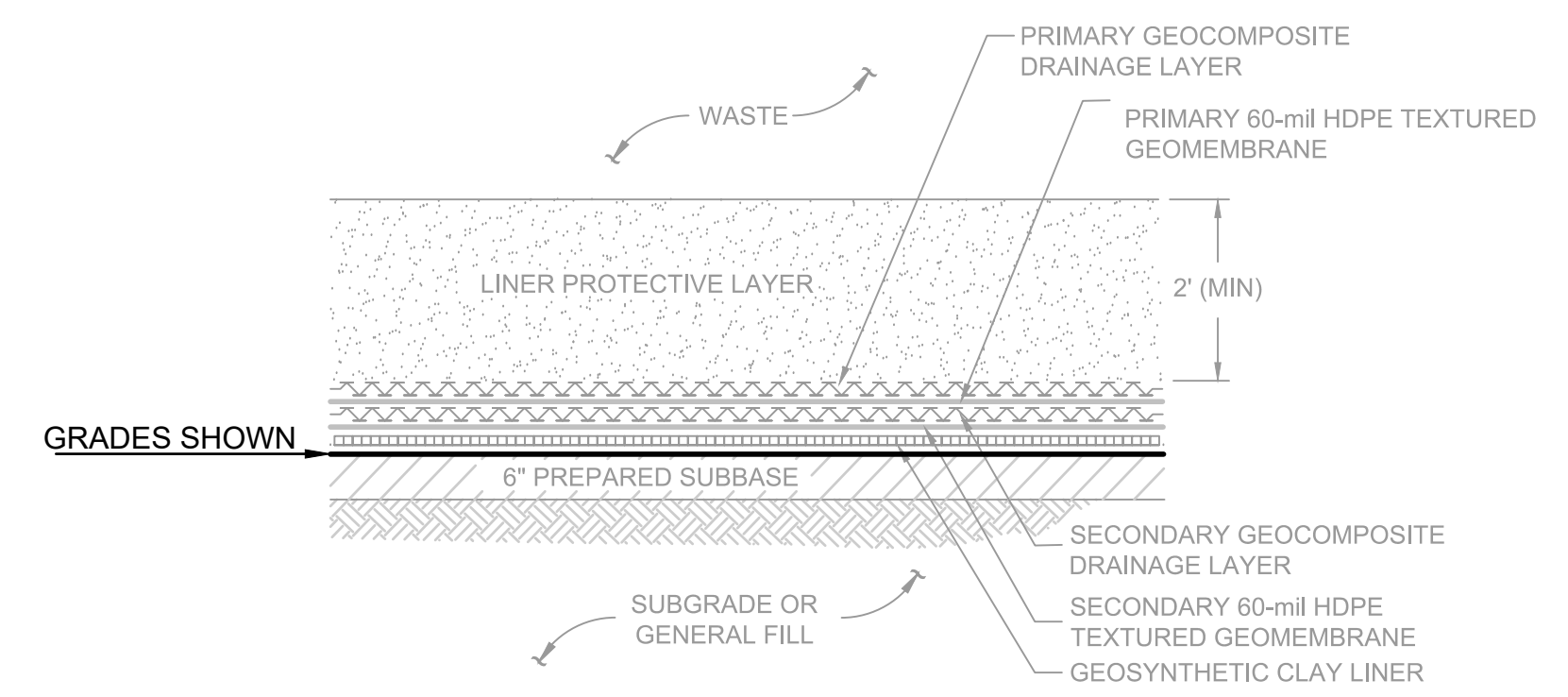
**FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION**

ACCDoc\Geosyntec\INDIAN RIVER COUNTY OF CELL 3 Project Final Drawings\IFL9363A-C03.dwg



**LEGEND**

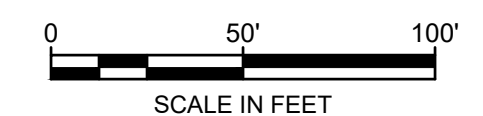
- EXISTING GROUND ELEVATION (FEET, NGVD)
- PROPOSED TOP OF LINER ELEVATION (FEET, NGVD)
- PERIMETER ELEVATION (PHASE I GRADES) (FEET, NGVD)
- PAVED ROAD
- EXISTING PERIMETER ROAD AND UNPAVED ROAD
- UTILITY POLE
- EXISTING GROUNDWATER MONITORING WELL
- CULVERT
- STATE PLANE COORDINATES
- EXISTING WATERMAIN
- EXISTING GRAVITY LINE
- PERIMETER CHANNEL BOTTOM
- PROPOSED LEACHATE GRAVITY PIPE
- PROPOSED LEACHATE COLLECTION CORRIDOR
- PROPOSED LEACHATE COLLECTION SYSTEM (LCS) PIPE
- PROPOSED LEACHATE DETECTION SYSTEM (LDS) PIPE
- PROPOSED LIMIT OF LINER
- CONSTRUCTION CONTROL POINT (WILL BE GENERATED FOR CONSTRUCTION SET)



**GRADING KEY MAP  
LINER SYSTEM AT BASE**  
SCALE: 1" = 2'

**NOTES:**

1. TOPOGRAPHIC INFORMATION OUTSIDE THE ACTIVE LANDFILL AREA WAS OBTAINED FROM SURVEY PREPARED BY ALERT 5 INTERNATIONAL & MASTELLER, COMPLETED IN DECEMBER 2022.
2. HORIZONTAL COORDINATES VALUES ARE BASED UPON THE NORTH AMERICAN DATA OF 1983 (NAD83), ADJUSTED TO 1999 COORDINATE SYSTEM, FLORIDA EAST ZONE.
3. CONTOURS AND SPOT ELEVATION ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).
4. GRADES SHOWN HERE ARE THE TOP OF LINER SUBBASE. THESE WERE COMPLETED AS PART OF PHASE I CELL 3-4 CONSTRUCTION. CONTRACTOR SHALL USE AS-BUILT DRAWINGS TO VERIFY THAT THE PROPOSED GRADES ARE MET; OTHERWISE PERFORM REGRADING AND SITE PREPARATION (FILL OR CUT) TO MEET THE PROPOSED GRADES SHOWN HEREIN.
5. TOE DRAIN IS CURRENTLY PENDING PERMIT MODIFICATION APPROVAL BY FDEP.



ACD:\000\Geosyntec\INDIAN RIVER COUNTY CELL 3\Project Files\DRAWINGS\FL9363A-C06.dwg

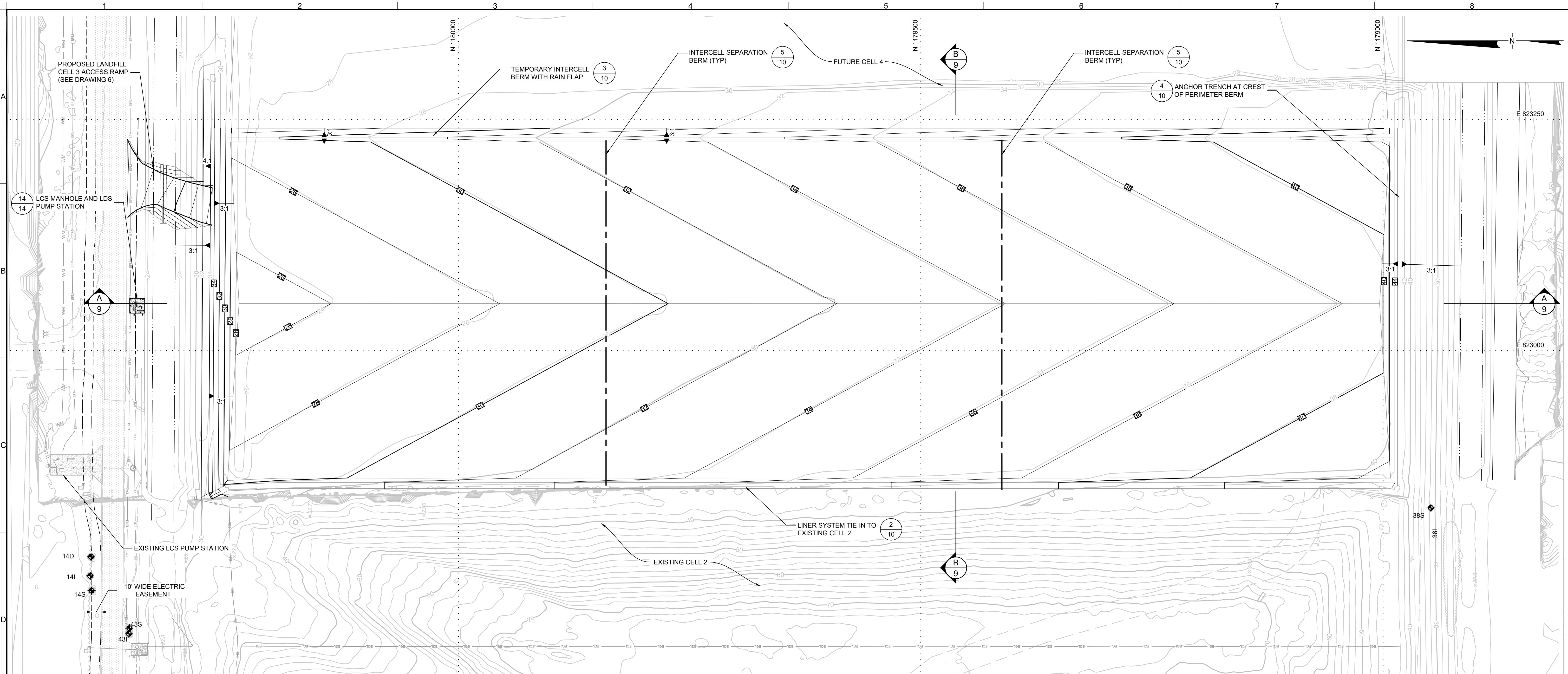
**FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION**

REV	DATE	DESCRIPTION	DRN	APP
-	12/13/2023	ISSUE FOR BID	JJV	KBT

1200 RIVERPLACE BOULEVARD, SUITE 710  
JACKSONVILLE, FLORIDA 32207 USA  
PHONE: 904.858.1818 - FAX: 904.396.1143  
CERTIFICATE OF AUTHORIZATION NO. 4321

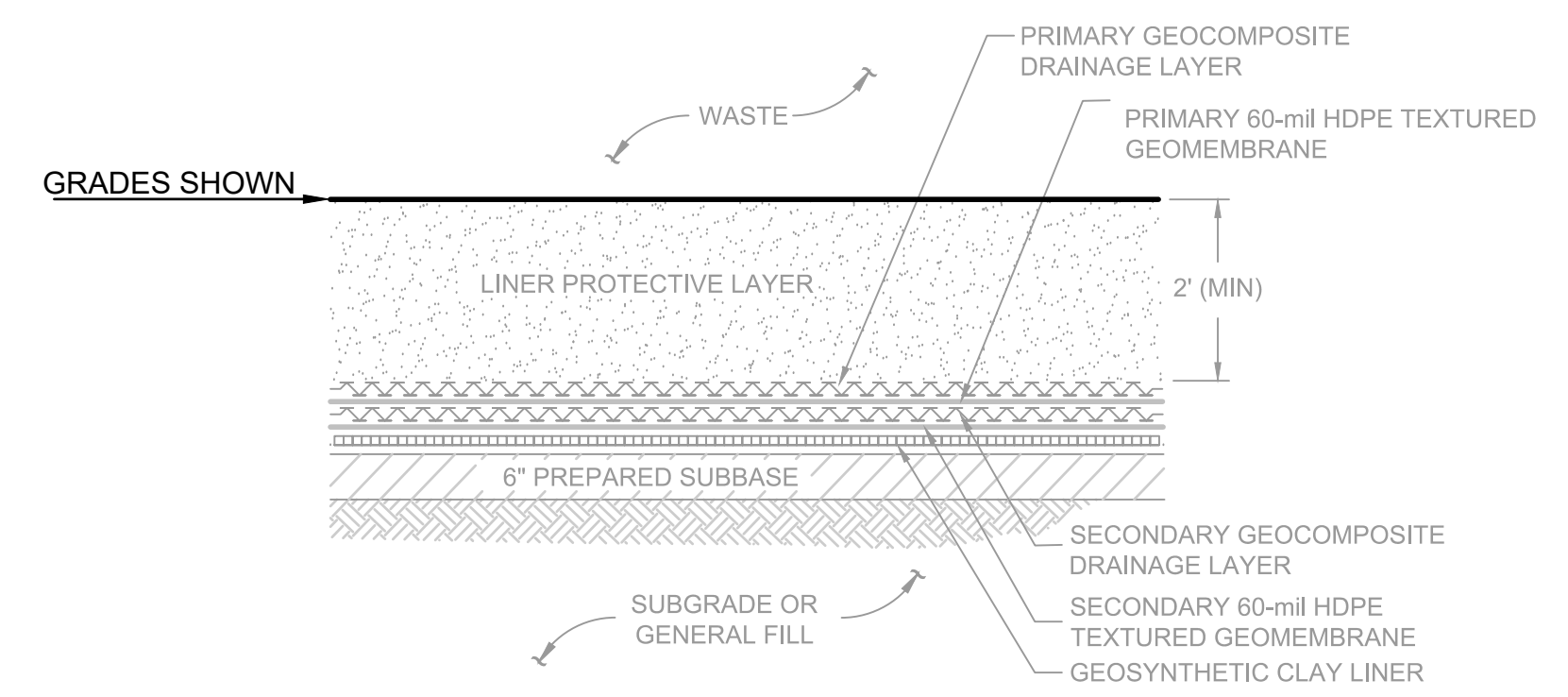
1325 74th AVENUE SW  
VERO BEACH, FLORIDA 33568 USA  
PHONE: 772.770.5112

TITLE:		<b>TOP OF SUBBASE GRADING PLAN</b>	
PROJECT:		<b>PHASE II - CELL 3 CONSTRUCTION</b>	
SITE:		<b>INDIAN RIVER COUNTY LANDFILL</b>	
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.	DESIGN BY:	KBT	DATE: DECEMBER 2023
SIGNATURE _____ DATE _____ KWASI BADU-TWENGOBAH LICENSE NO. 42460	DRAWN BY:	JJV	PROJECT NO.: FL9363A
	CHECKED BY:	TC	FILE: FL9363A-C06
	REVIEWED BY:	SA	DRAWING NO.:
	APPROVED BY:	KBT	<b>4</b> OF <b>24</b>



**LEGEND**

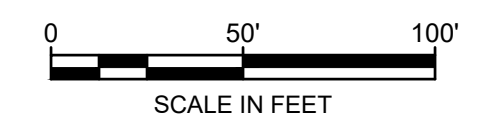
- EXISTING GROUND ELEVATION (FEET, NGVD)
- PROPOSED TOP OF LINER PROTECTIVE LAYER ELEVATION (FEET, NGVD)
- PERIMETER ELEVATION (PHASE I GRADES) (FEET, NGVD)
- PAVED ROAD
- EXISTING PERIMETER ROAD AND UNPAVED ROAD
- UTILITY POLE
- EXISTING GROUNDWATER MONITORING WELL
- CULVERT
- STATE PLANE COORDINATES
- EXISTING WATERMAIN
- EXISTING GRAVITY LINE
- PERIMETER CHANNEL BOTTOM
- PROPOSED LEACHATE GRAVITY PIPE
- CONSTRUCTION CONTROL POINT (WILL BE GENERATED FOR CONSTRUCTION SET)



**GRADING KEY MAP  
LINER SYSTEM AT BASE**  
SCALE: 1" = 2'

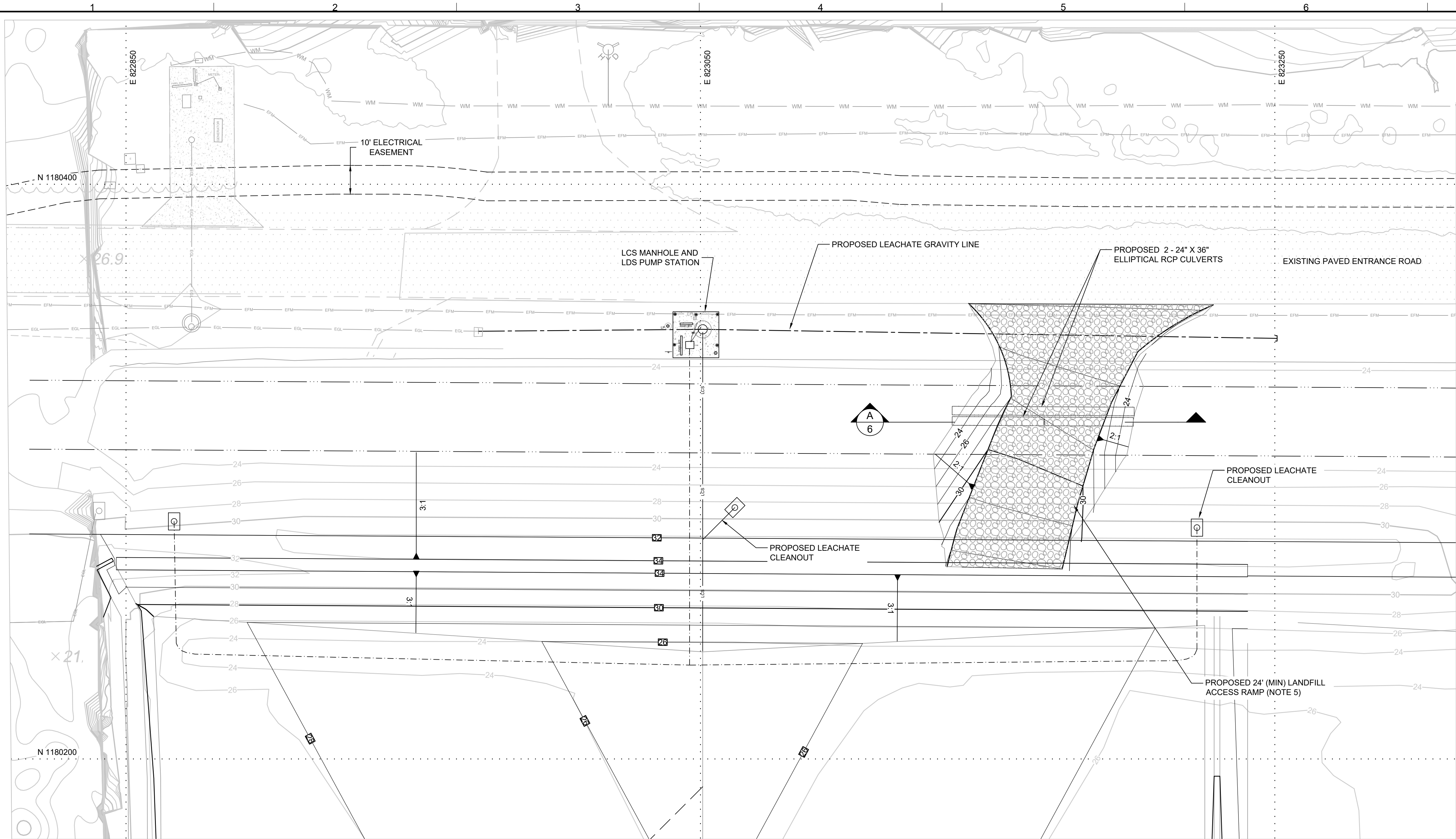
**NOTES:**

1. TOPOGRAPHIC INFORMATION OUTSIDE THE ACTIVE LANDFILL AREA WAS OBTAINED FROM SURVEY PREPARED BY ALERT 5 INTERNATIONAL & MASTELLER, COMPLETED IN DECEMBER 2022.
2. HORIZONTAL COORDINATES VALUES ARE BASED UPON THE NORTH AMERICAN DATA OF 1983 (NAD83), ADJUSTED TO 1999 COORDINATE SYSTEM, FLORIDA EAST ZONE.
3. CONTOURS AND SPOT ELEVATION ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).
4. GRADES SHOWN HERE ARE THE TOP OF LINER SUBBASE. THESE WERE COMPLETED AS PART OF PHASE I CELL 3-4 CONSTRUCTION. CONTRACTOR SHALL USE AS-BUILT DRAWINGS TO VERIFY THAT THE PROPOSED GRADES ARE MET; OTHERWISE PERFORM REGRADING AND SITE PREPARATION (FILL OR CUT) TO MEET THE PROPOSED GRADES SHOWN HEREIN.



REV	DATE	DESCRIPTION	JJV	KBT	DRN	APP				
	12/13/2023	ISSUE FOR BID								
1200 RIVERPLACE BOULEVARD, SUITE 710 JACKSONVILLE, FLORIDA 32207 USA PHONE: 904.858.1818 - FAX: 904.396.1143 CERTIFICATE OF AUTHORIZATION NO. 4321			1325 74th AVENUE SW VERO BEACH, FLORIDA 33968 USA PHONE: 772.770.5112							
<b>TITLE: TOP OF LINER PROTECTIVE COVER GRADING PLAN</b>										
<b>PROJECT: PHASE II - CELL 3 CONSTRUCTION</b>										
<b>SITE: INDIAN RIVER COUNTY LANDFILL</b>										
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.			DESIGN BY:	KBT	DATE:	DECEMBER 2023				
SIGNATURE			DRAWN BY:	JJV	PROJECT NO.:	FL9363A				
DATE			CHECKED BY:	TC	FILE:	FL9363A-C07				
Kwasu Badu-Tweneboah LICENSE NO. 42460			REVIEWED BY:	SA	DRAWING NO.:					
			APPROVED BY:	KBT	5	OF	24			

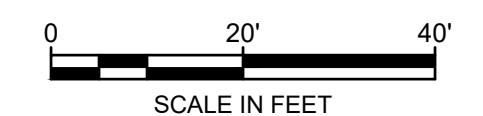
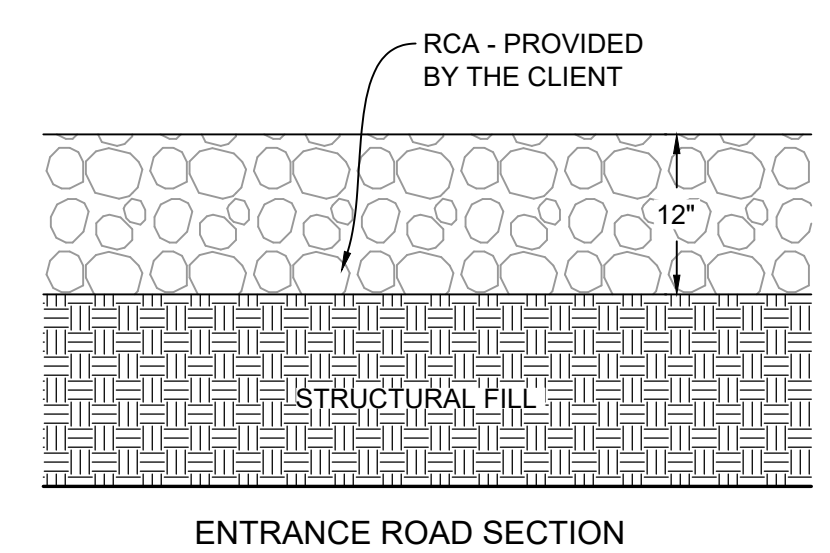
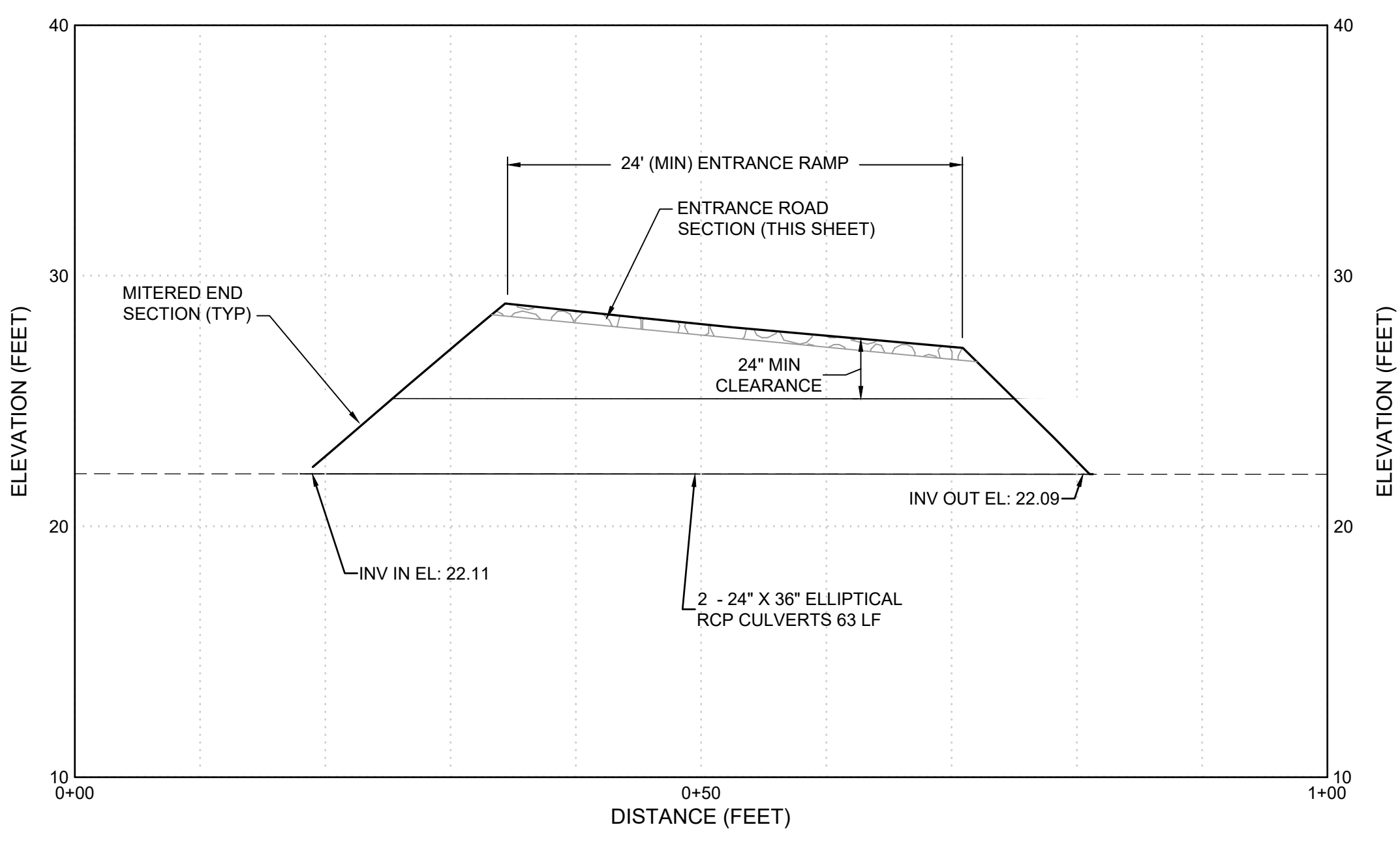
**FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION**



**LEGEND**

	EXISTING GROUND ELEVATION (FEET, NGVD)
	PROPOSED TOP OF LINER PROTECTIVE LAYER ELEVATION (FEET, NGVD)
	PERIMETER ELEVATION (PHASE I GRADES) (FEET, NGVD)
	PAVED ROAD
	EXISTING PERIMETER ROAD AND UNPAVED ROAD
	STATE PLANE COORDINATES
	EXISTING WATERMAIN
	EXISTING GRAVITY LINE
	PERIMETER CHANNEL BOTTOM
	PROPOSED LEACHATE GRAVITY PIPE
	PROPOSED LEACHATE COLLECTION SYSTEM (LCS) PIPE
	PROPOSED LEACHATE DETECTION SYSTEM (LDS) PIPE
	CONSTRUCTION CONTROL POINT (WILL BE GENERATED FOR CONSTRUCTION SET)

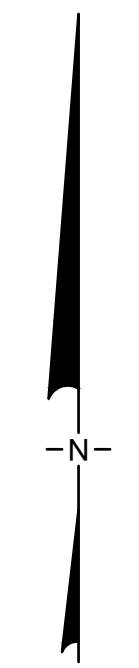
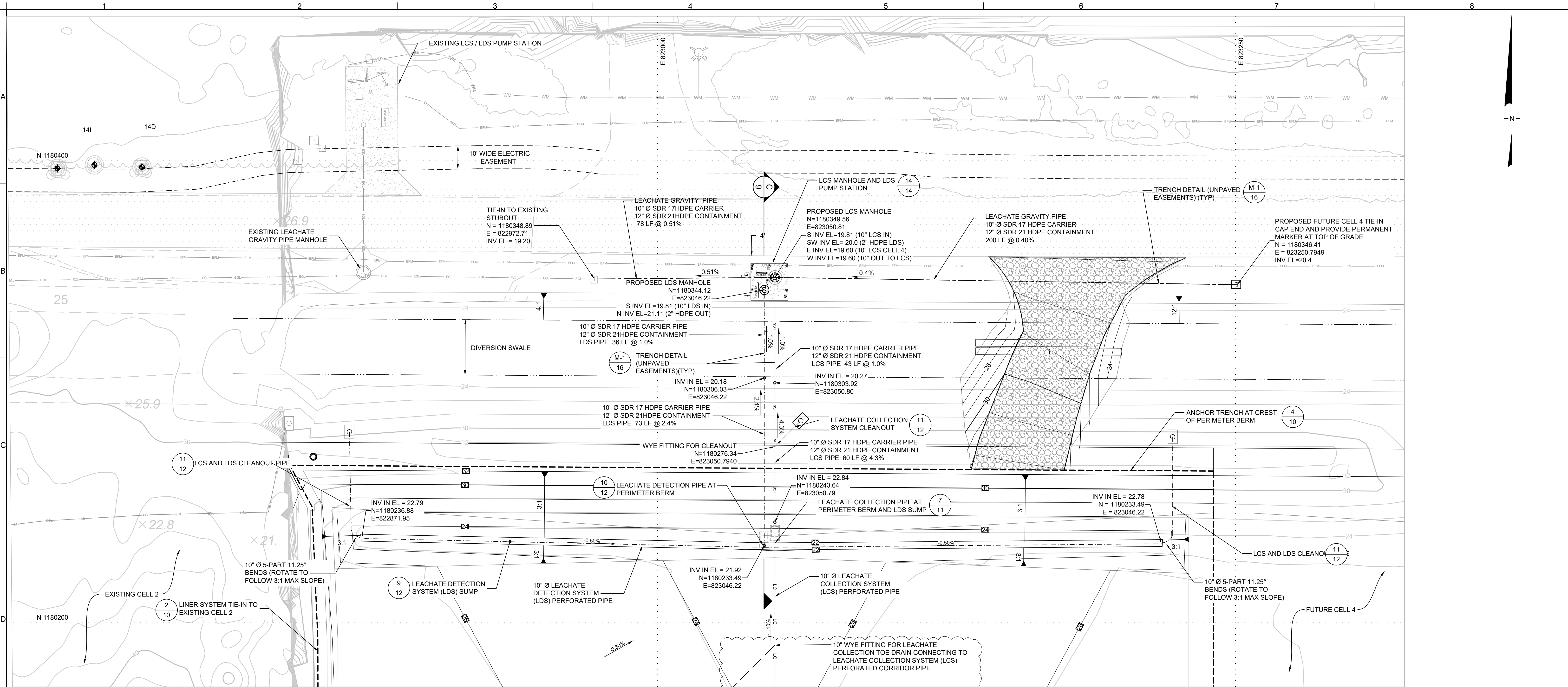
- NOTES:**
- TOPOGRAPHIC INFORMATION OUTSIDE THE ACTIVE LANDFILL AREA WAS OBTAINED FROM SURVEY PREPARED BY ALERT 5 INTERNATIONAL & MASTELLER, COMPLETED IN DECEMBER 2022.
  - HORIZONTAL COORDINATES VALUES ARE BASED UPON THE NORTH AMERICAN DATA OF 1983 (NAD83), ADJUSTED TO 1999 COORDINATE SYSTEM, FLORIDA EAST ZONE.
  - CONTOURS AND SPOT ELEVATION ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).
  - GRADES SHOWN HERE ARE THE TOP OF LINER SUBBASE. THESE WERE COMPLETED AS PART OF PHASE I CELL 3-4 CONSTRUCTION. CONTRACTOR SHALL USE AS-BUILT DRAWINGS TO VERIFY THAT THE PROPOSED GRADES ARE MET; OTHERWISE PERFORM REGRADING AND SITE PREPARATION (FILL OR CUT) TO MEET THE PROPOSED GRADES SHOWN HEREIN.
  - CONSTRUCT ROADS IN ACCORDANCE WITH FDOT DESIGN STANDARD 515. 24 INCH MINIMUM CLEARANCE BETWEEN TOP OF ACCESS ROAD AND CULVERT SHALL BE MAINTAINED. 6' WIDE SHOULDERS TO HAVE A 6H:1V SLOPE.



REV	DATE	DESCRIPTION	DRN	APP
-	12/13/2023	ISSUE FOR BID	JJV	KBT
1200 RIVERPLACE BOULEVARD, SUITE 710 JACKSONVILLE, FLORIDA 32207 USA PHONE: 904.858.1818 - FAX: 904.396.1143 CERTIFICATE OF AUTHORIZATION NO. 4321				
1325 74th AVENUE SW VERO BEACH, FLORIDA 33968 USA PHONE: 772.770.5112				
<b>TITLE:</b> LANDFILL CELL 3 ACCESS ROAD				
<b>PROJECT:</b> PHASE II - CELL 3 CONSTRUCTION				
<b>SITE:</b> INDIAN RIVER COUNTY LANDFILL				
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.				
SIGNATURE		DESIGN BY:	KBT	DATE:
DATE		DRAWN BY:	JJV	PROJECT NO.:
KWASI BADI-TWENBOAH LICENSE NO. 42460		CHECKED BY:	TC	FILE:
		REVIEWED BY:	SA	DRAWING NO.:
		APPROVED BY:	KBT	6 OF 24

**FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION**

ACD:\00\Geosyntec\INDIAN RIVER CNTY OF CELL 3\Project Files\DRAWINGS\SI\18053A-C05.dwg

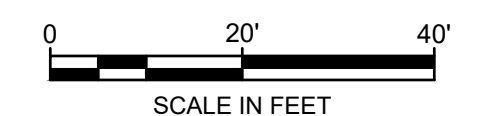


**LEGEND**

- EXISTING GROUND ELEVATION (FEET, NGVD)
- PROPOSED TOP OF LINER ELEVATION (FEET, NGVD)
- PERIMETER ELEVATION (PHASE I GRADES) (FEET, NGVD)
- PAVED ROAD
- EXISTING PERIMETER ROAD AND UNPAVED ROAD
- UTILITY POLE
- EXISTING GROUNDWATER MONITORING WELL
- CULVERT
- STATE PLANE COORDINATES
- EXISTING WATERMAIN
- EXISTING GRAVITY LINE
- PERIMETER CHANNEL BOTTOM
- PROPOSED LEACHATE GRAVITY PIPE
- PROPOSED LEACHATE COLLECTION CORRIDOR
- PROPOSED LEACHATE COLLECTION SYSTEM (LCS) PIPE
- PROPOSED LEACHATE DETECTION SYSTEM (LDS) PIPE
- PROPOSED LIMIT OF LINER
- CONSTRUCTION CONTROL POINT (WILL BE GENERATED FOR CONSTRUCTION SET)

**NOTES:**

1. TOPOGRAPHIC INFORMATION OUTSIDE THE ACTIVE LANDFILL AREA WAS OBTAINED FROM SURVEY PREPARED BY ALERT 5 INTERNATIONAL & MASTELLER, COMPLETED IN DECEMBER 2022.
2. HORIZONTAL COORDINATES VALUES ARE BASED UPON THE NORTH AMERICAN DATA OF 1983 (NAD83), ADJUSTED TO 1999 COORDINATE SYSTEM, FLORIDA EAST ZONE.
3. CONTOURS AND SPOT ELEVATION ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).
4. GRADES SHOWN HERE ARE THE TOP OF LINER SUBBASE. THESE WERE COMPLETED AS PART OF PHASE I CELL 3-4 CONSTRUCTION. CONTRACTOR SHALL USE AS-BUILT DRAWINGS TO VERIFY THAT THE PROPOSED GRADES ARE MET; OTHERWISE PERFORM REGRADING AND SITE PREPARATION (FILL OR CUT) TO MEET THE PROPOSED GRADES SHOWN HEREIN.
5. TOE DRAIN IS CURRENTLY PENDING PERMIT MODIFICATION APPROVAL BY FDEP.



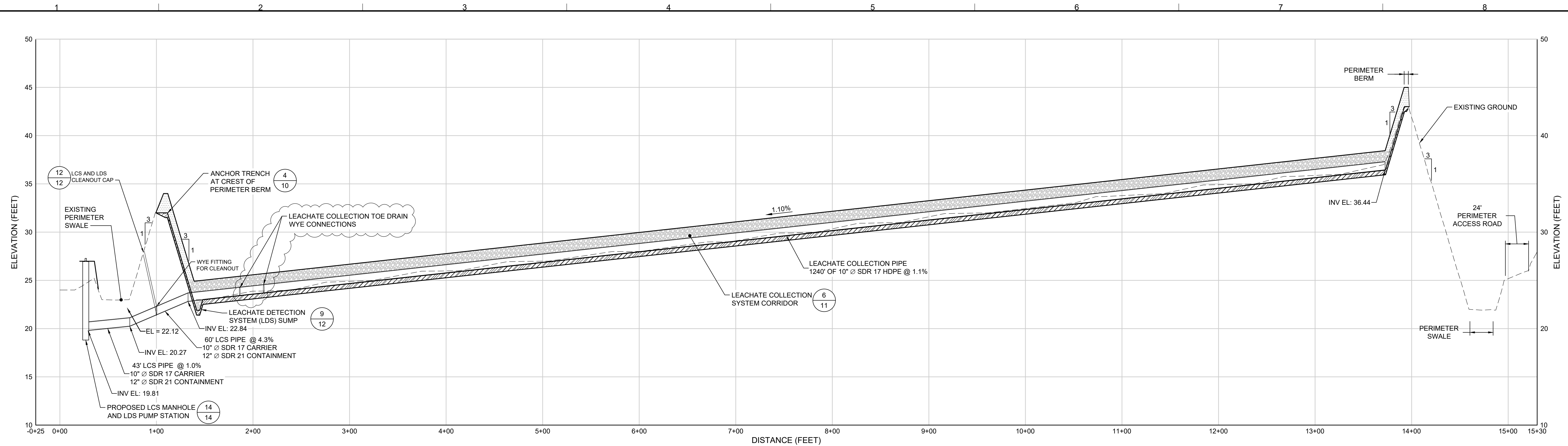
**FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION**

REV	DATE	DESCRIPTION				DRN	KBT	APP	
-	12/13/2023	ISSUE FOR BID				JJV	KBT		
1200 RIVERPLACE BOULEVARD, SUITE 210 JACKSONVILLE, FLORIDA 32207 USA PHONE: 904.858.1818 - FAX: 904.396.1143 CERTIFICATE OF AUTHORIZATION NO. 4321									
TITLE: LCS AND LDS ENLARGED PLAN									
PROJECT: PHASE II - CELL 3 CONSTRUCTION									
SITE: INDIAN RIVER COUNTY LANDFILL									
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.									
SIGNATURE		DESIGN BY:	KBT	DATE:	DECEMBER 2023				
DATE		DRAWN BY:	JJV	PROJECT NO.:	FL9363A				
		CHECKED BY:	TC	FILE:	FL9363A-C14				
		REVIEWED BY:	SA	DRAWING NO.:					
		APPROVED BY:	KBT		7 OF 24				

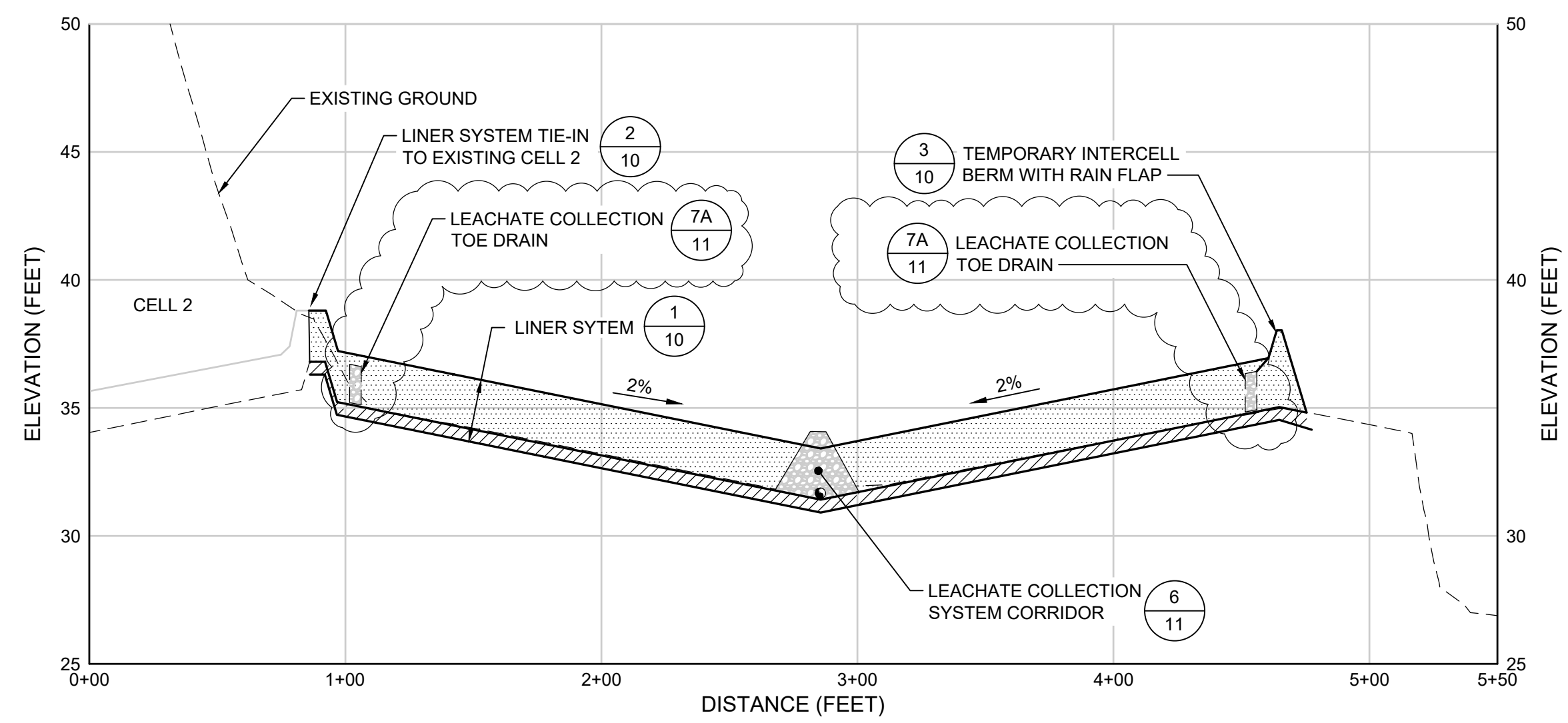
ACC:0001\Geosyntec\INDIAN RIVER COUNTY OF CELL 3\Project Files\DRAWINGS\FL9363A-C14.dwg



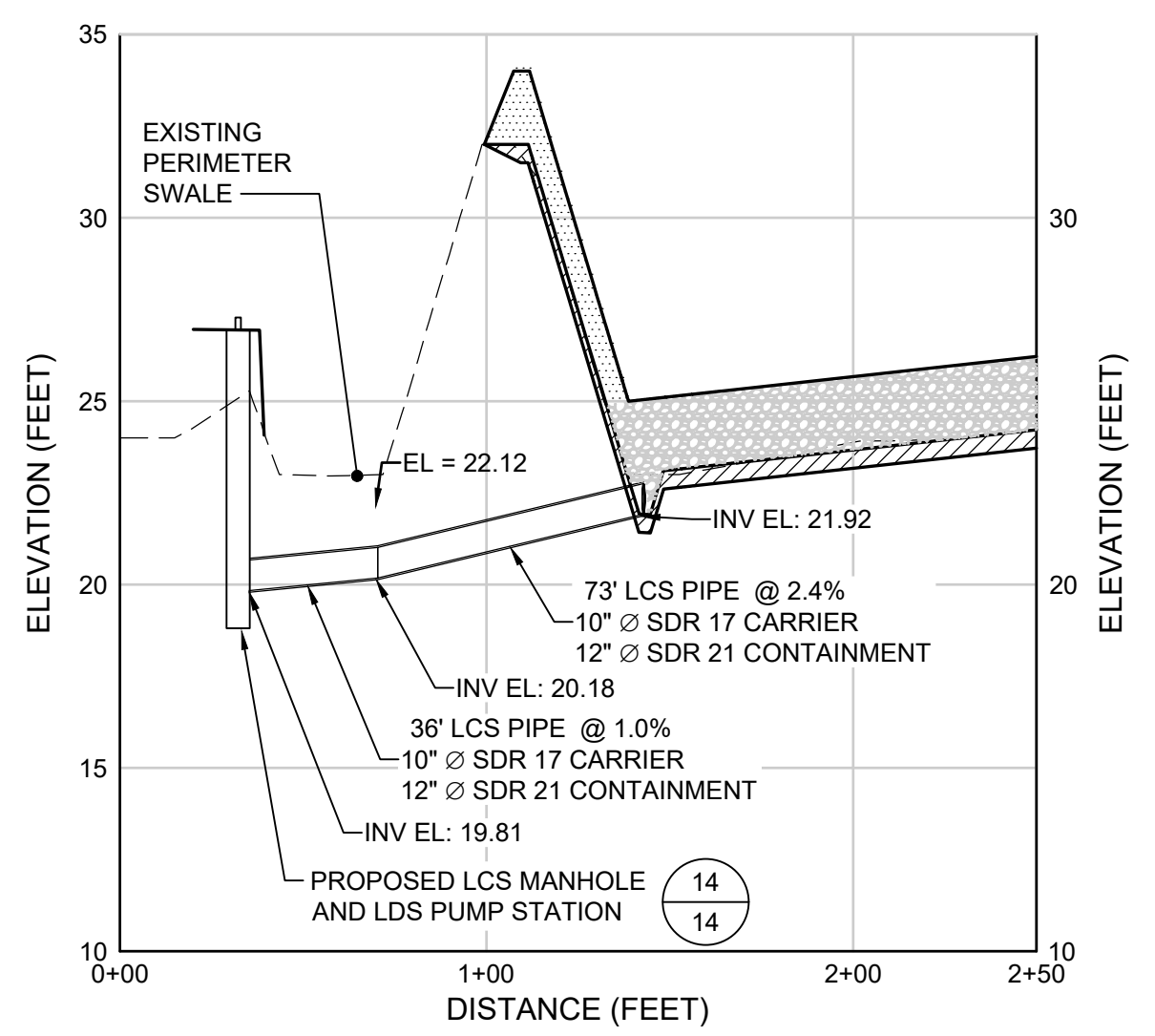




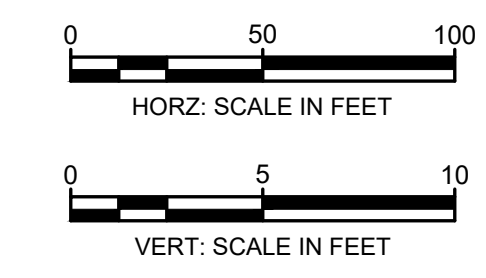
**A**  
SECTION  
4 SECTION A (ALONG LEACHATE COLLECTION CORRIDOR)  
SCALE: 1" = 50' HORIZONTAL 1" = 5' VERTICAL





**B**  
SECTION  
4 SECTION B (WEST - EAST)  
SCALE: 1" = 50' HORIZONTAL 1" = 5' VERTICAL



**C**  
SECTION  
7 SECTION C (LEACHATE DETECTION SYSTEM OUTLET)  
SCALE: 1" = 50' HORIZONTAL 1" = 5' VERTICAL

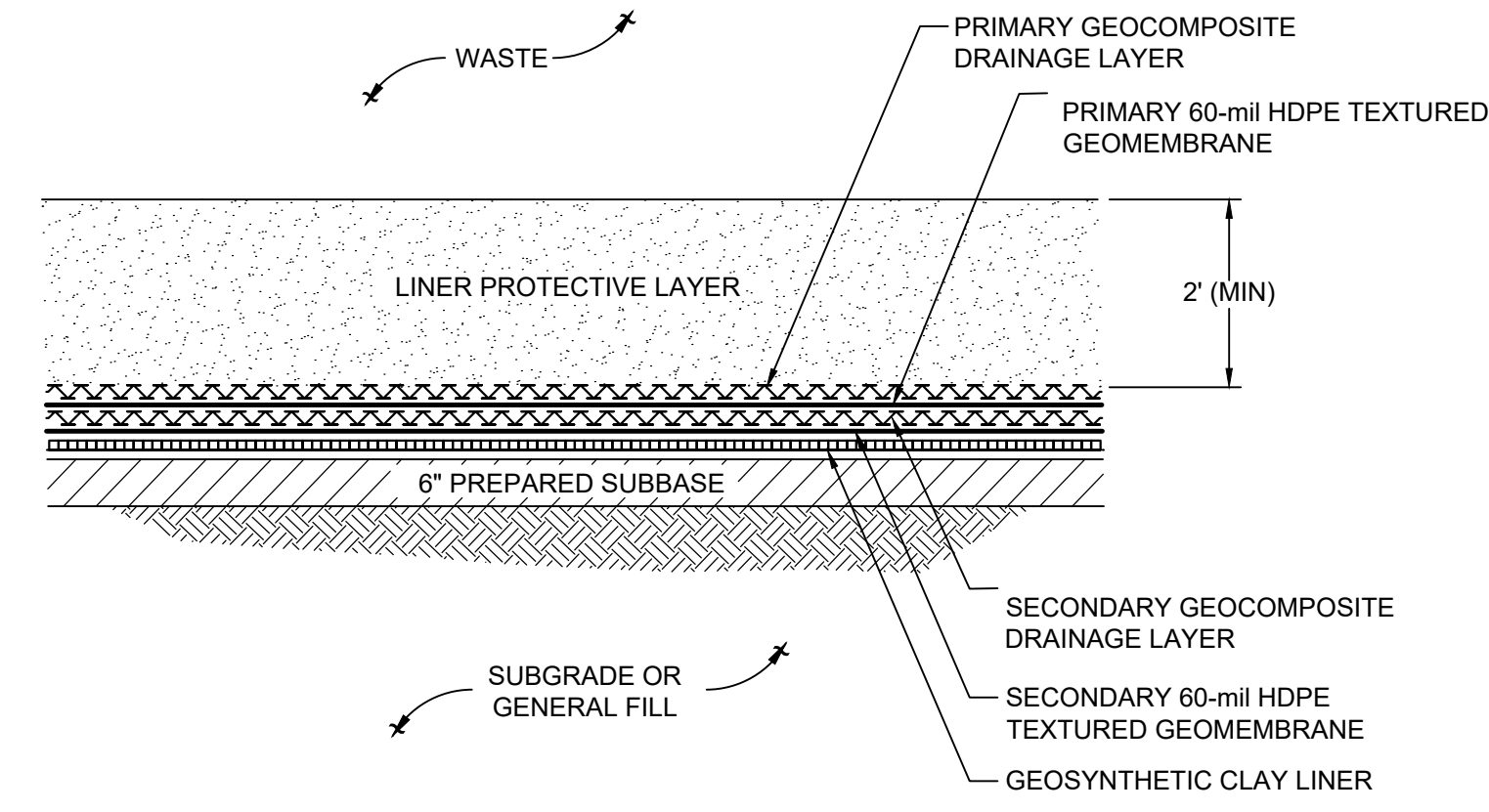


- NOTE:
1. TYPE OF STABILIZER MATERIAL USED AND METHOD OF PLACEMENT FOR EACH SHALL MEET THE REQUIREMENTS OF THE TECHNICAL SPECIFICATIONS IN THE BID DOCUMENTS.
  2. GEOTEXTILES SHALL BE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS.
  3. TOE DRAIN IS CURRENTLY PENDING PERMIT MODIFICATION APPROVAL BY THE FDEP.

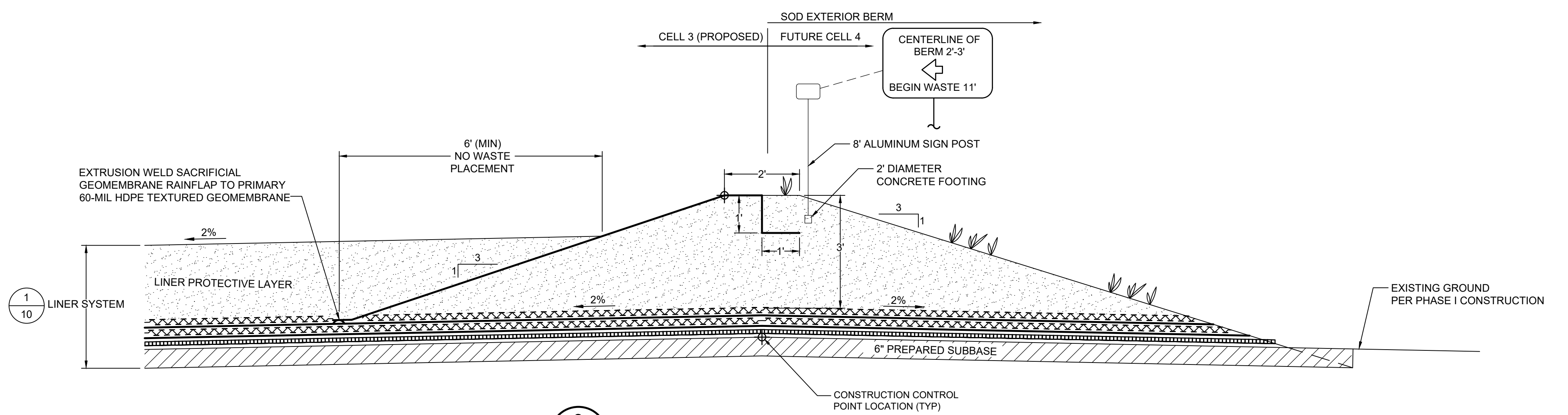
REV	DATE	DESCRIPTION	DRN	APP	
-	12/13/2023	ISSUE FOR BID	JJV	KBT	
 					
1200 RIVERPLACE BOULEVARD, SUITE 210 JACKSONVILLE, FLORIDA 32207 USA PHONE: 904.858.1818 - FAX: 904.396.1143 CERTIFICATE OF AUTHORIZATION NO. 4321					
1325 74th AVENUE SW VERO BEACH, FLORIDA 32968 USA PHONE: 772.770.5112					
<b>TITLE: LANDFILL CROSS SECTIONS</b>					
<b>PROJECT: PHASE II - CELL 3 CONSTRUCTION</b>					
<b>SITE: INDIAN RIVER COUNTY LANDFILL</b>					
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		DESIGN BY: KBT DRAWN BY: JJV CHECKED BY: TC REVIEWED BY: SA APPROVED BY: KBT	DATE: DECEMBER 2023 PROJECT NO.: FL9363A FILE: FL9363A-C10 DRAWING NO.: 9 OF 24		

FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION

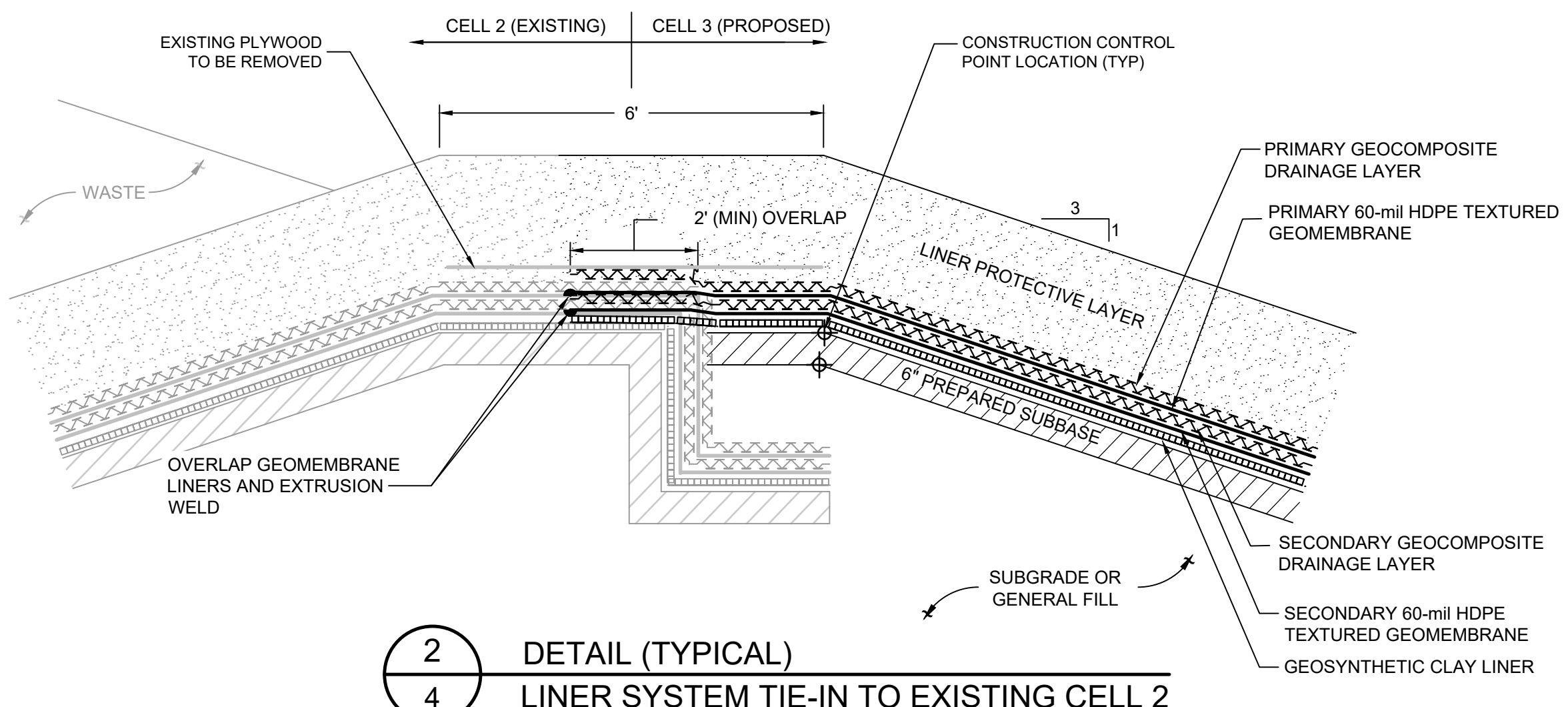
ACCDoc\Geosyntec\INDIAN RIVER COUNTY OF CELL 3\Project Files\DRAWINGS\SP\LD9363A-C10.dwg



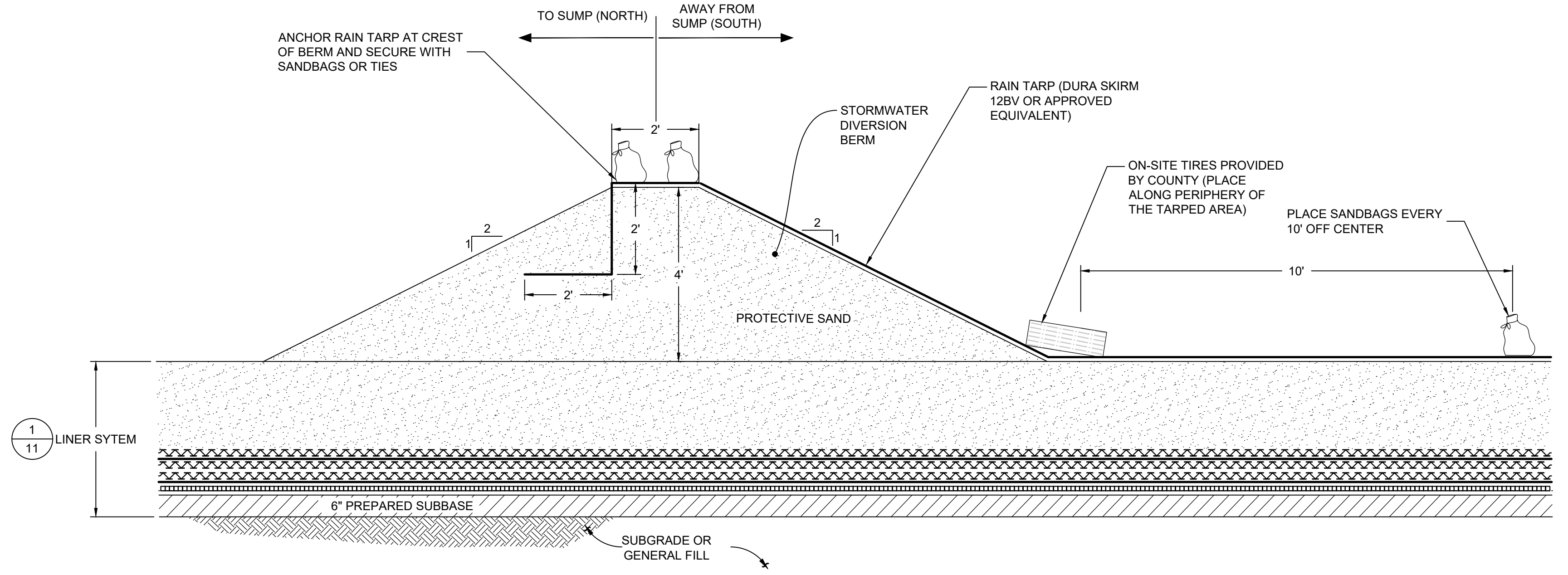
**1**  
**4** DETAIL (TYPICAL)  
LINER SYSTEM  
SCALE: 1" = 2'



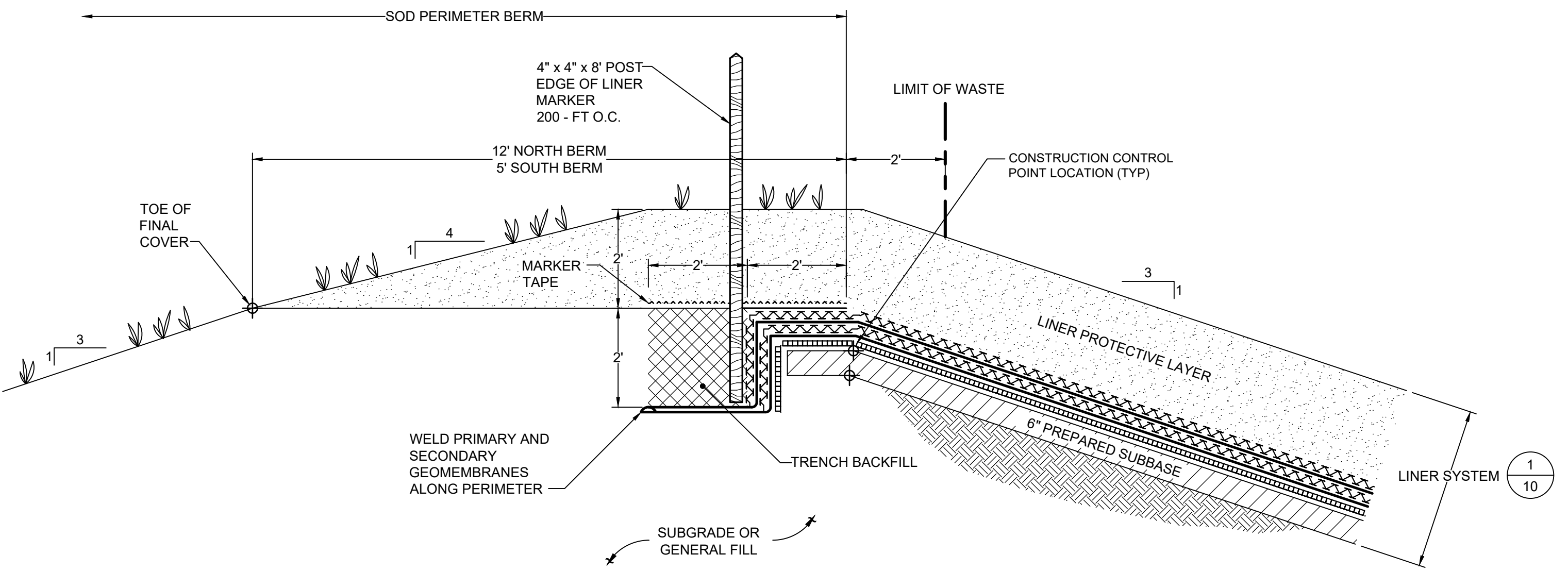
**3**  
**5** DETAIL  
TEMPORARY INTERCELL BERM WITH RAIN FLAP  
SCALE: 1" = 2'



**2**  
**4** DETAIL (TYPICAL)  
LINER SYSTEM TIE-IN TO EXISTING CELL 2  
SCALE: 1" = 2'



**5**  
**5** DETAIL  
INTERCELL SEPARATION BERM  
SCALE: 1" = 2'



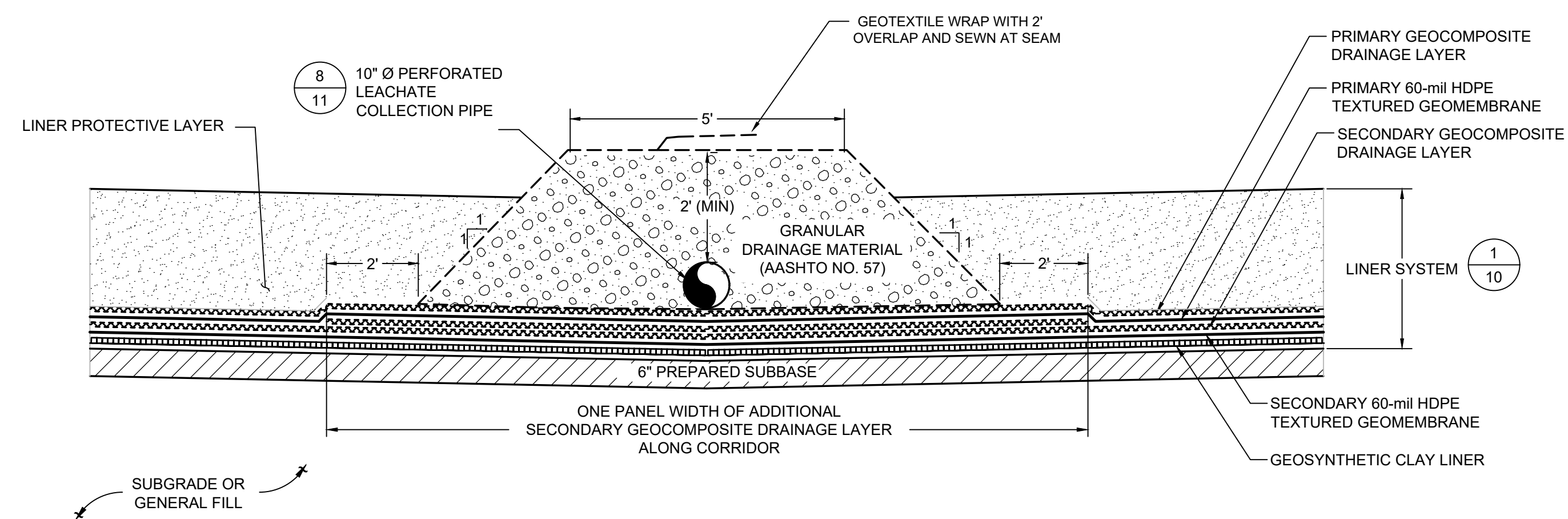
**4**  
**4** DETAIL (TYPICAL)  
ANCHOR TRENCH AT CREST OF PERIMETER BERM  
SCALE: 1" = 2'

- NOTES:
1. DETAILS ARE SHOWN TO SCALE AS NOTED EXCEPT FOR GEOSYNTHETICS, WHICH ARE SHOWN AT AN EXAGGERATED SCALE FOR CLARITY. MATERIAL THICKNESSES ARE MINIMUMS, AND TOLERANCES SHALL BE WITHIN THE LIMITS OUTLINED IN THE TECHNICAL SPECIFICATIONS AND CONSTRUCTION QUALITY ASSURANCE (CQA) PLAN.
  2. SUBBASE SHALL BE PREPARED AS DESCRIBED IN THE TECHNICAL SPECIFICATIONS AND THE CQA PLAN.
  3. MATERIAL AND INSTALLATION SPECIFICATIONS / REQUIREMENTS FOR THE LINER SYSTEM AND LEACHATE COLLECTION/DETECTION SYSTEM GEOSYNTHETIC COMPONENTS ARE DESCRIBED IN THE TECHNICAL SPECIFICATIONS AND THE CQA PLAN.

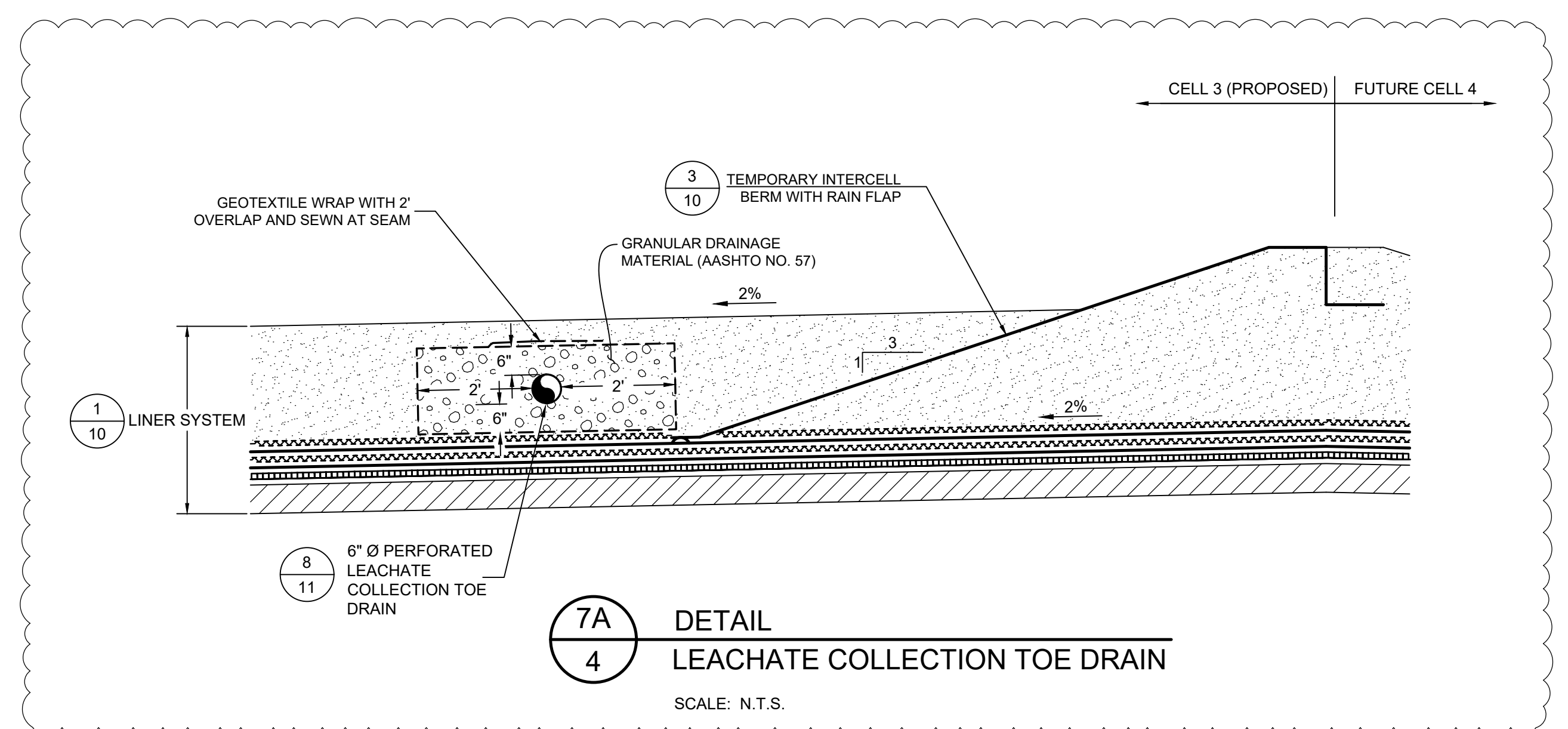
FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	DRN	APP
-	12/13/2023	ISSUE FOR BID	JJV	KBT
1200 RIVERPLACE BOULEVARD, SUITE 710 JACKSONVILLE, FLORIDA 32207 USA PHONE: 904.858.1818 - FAX: 904.396.1143 CERTIFICATE OF AUTHORIZATION NO. 4321				
1325 74th AVENUE SW VERO BEACH, FLORIDA 33968 USA PHONE: 772.770.5112				
TITLE: LINER SYSTEM DETAILS				
PROJECT: PHASE II - CELL 3 CONSTRUCTION				
SITE: INDIAN RIVER COUNTY LANDFILL				
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.				
SIGNATURE		DESIGN BY: KBT	DATE: DECEMBER 2023	
DATE		DRAWN BY: JJV	PROJECT NO.: FL9363A	
KWASI BABU-TWENGOBAH LICENSE NO. 42460		CHECKED BY: TC	FILE: FL9363A-C11	
		REVIEWED BY: SA	DRAWING NO.:	
		APPROVED BY: KBT	10	24

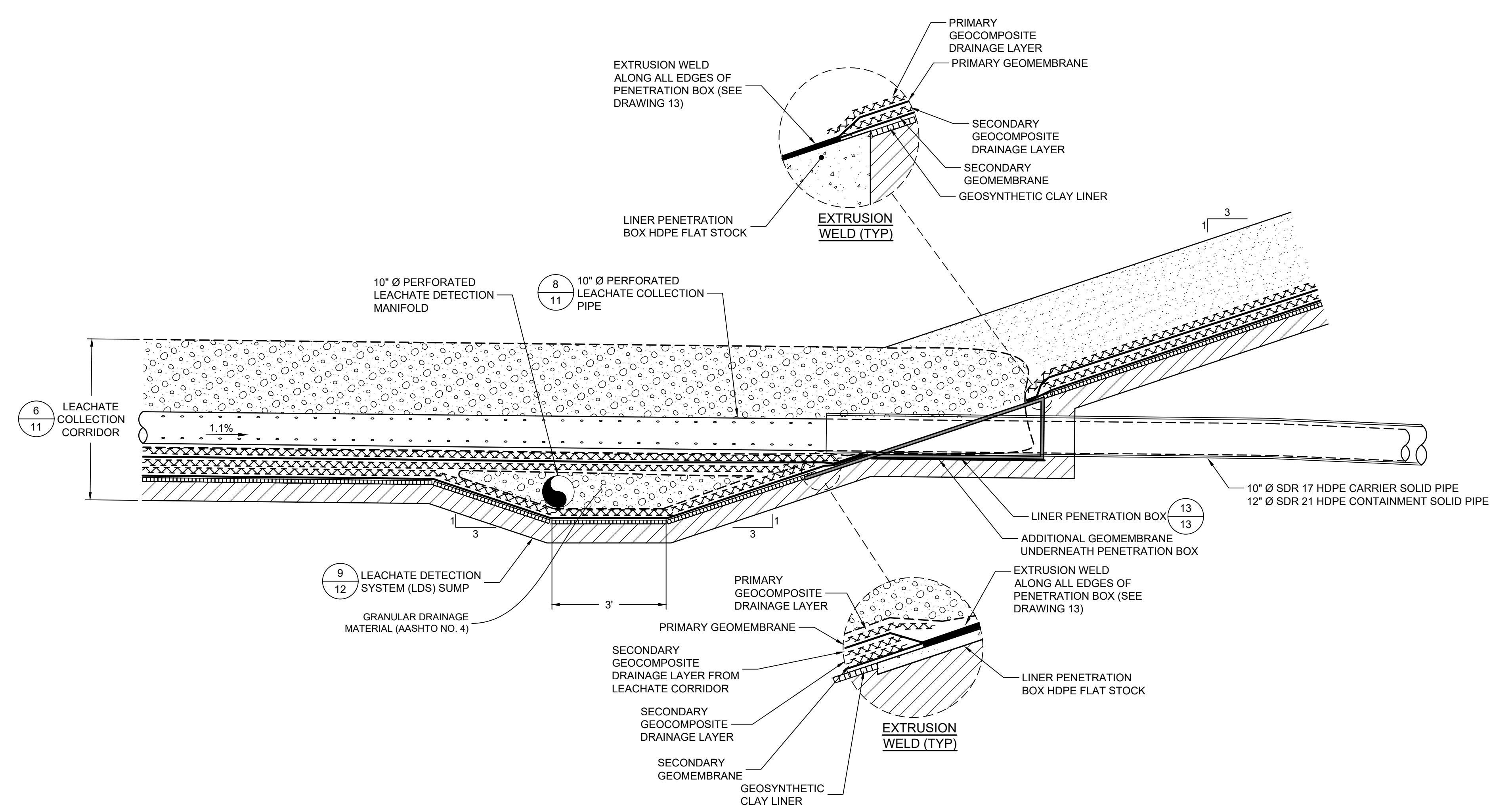
ACCD0005\geosyntec\INDIAN RIVER COUNTY OF CELL 3\Project Files\DRAWINGS\9363A-C11.dwg



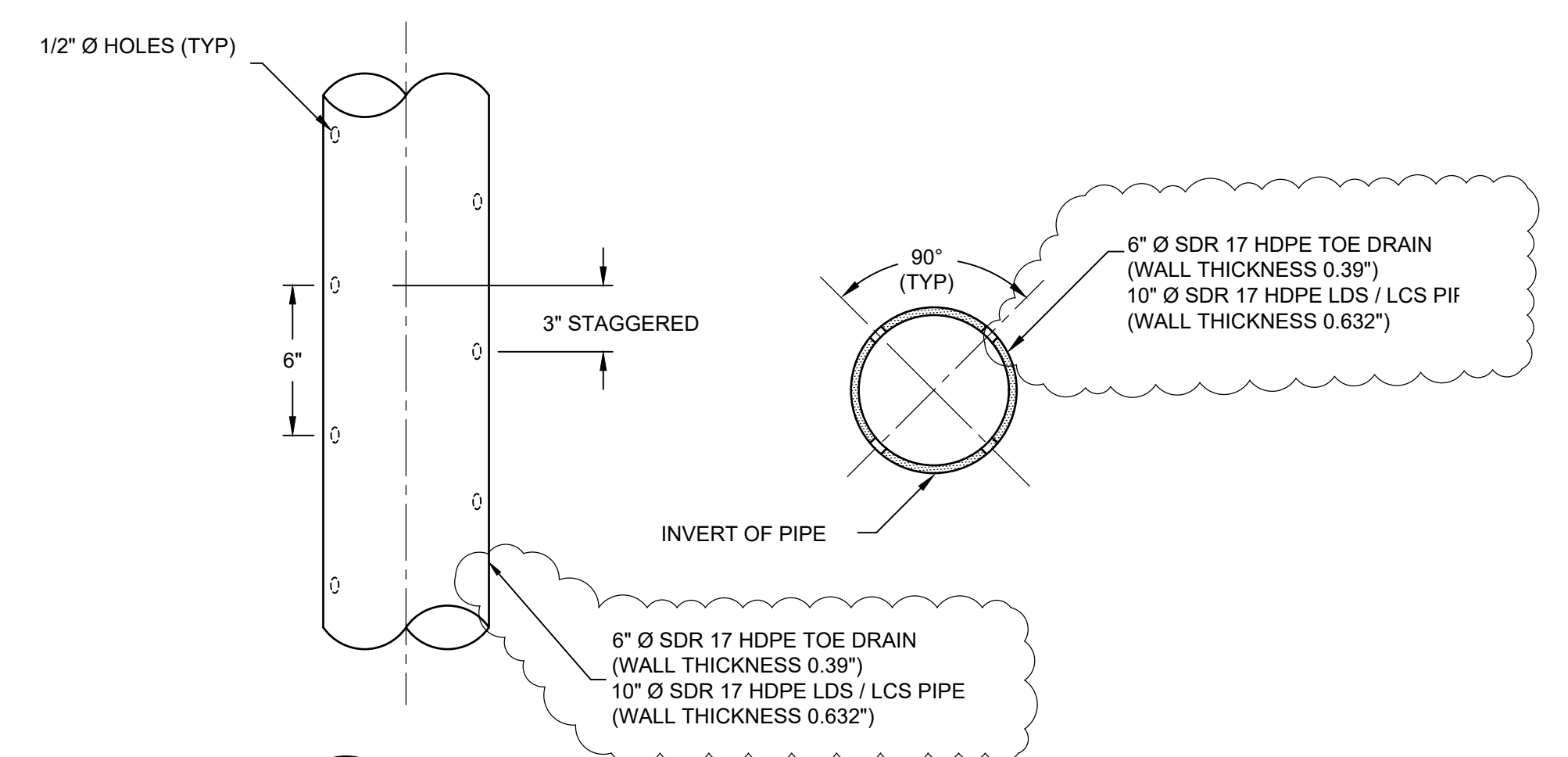
**6** **5** **DETAIL**  
**LEACHATE COLLECTION SYSTEM CORRIDOR**  
 SCALE: NOT TO SCALE (N.T.S.)



**7A** **4** **DETAIL**  
**LEACHATE COLLECTION TOE DRAIN**  
 SCALE: N.T.S.



**7** **11** **DETAIL**  
**LEACHATE COLLECTION PIPE AT PERIMETER BERM AND LDS SUMP**  
 SCALE: N.T.S.



**8** **11** **DETAIL**  
**LCS AND LDS COLLECTION PIPE PERFORATIONS**  
 SCALE: N.T.S.

- NOTES:
- DETAILS ARE SHOWN TO SCALE AS NOTED EXCEPT FOR GEOSYNTHETICS, WHICH ARE SHOWN AT AN EXAGGERATED SCALE FOR CLARITY. MATERIAL THICKNESSES ARE MINIMUMS, AND TOLERANCES SHALL BE WITHIN THE LIMITS OUTLINED IN THE TECHNICAL SPECIFICATIONS AND CONSTRUCTION QUALITY ASSURANCE (COA) PLAN.
  - SUBBASE SHALL BE PREPARED AS DESCRIBED IN THE TECHNICAL SPECIFICATIONS AND THE COA PLAN.
  - MATERIAL AND INSTALLATION SPECIFICATIONS / REQUIREMENTS FOR THE LINER SYSTEM AND LEACHATE COLLECTION/DETECTION SYSTEM GEOSYNTHETIC COMPONENTS ARE DESCRIBED IN THE TECHNICAL SPECIFICATIONS AND THE COA PLAN.
  - TOE DRAIN IS CURRENTLY PENDING PERMIT MODIFICATION APPROVAL BY THE FDEP.

REV	DATE	DESCRIPTION	DRN	APP
-	12/13/2023	ISSUE FOR BID	JJV	KBT

1200 RIVERPLACE BOULEVARD, SUITE 710  
 JACKSONVILLE, FLORIDA 32207 USA  
 PHONE: 904.858.1818 - FAX: 904.396.1143  
 CERTIFICATE OF AUTHORIZATION NO. 4321

1325 74th AVENUE SW  
 VERO BEACH, FLORIDA 32968 USA  
 PHONE: 772.770.5112

TITLE: **LEACHATE COLLECTION SYSTEM (LCS) DETAILS**

PROJECT: **PHASE II - CELL 3 CONSTRUCTION**

SITE: **INDIAN RIVER COUNTY LANDFILL**

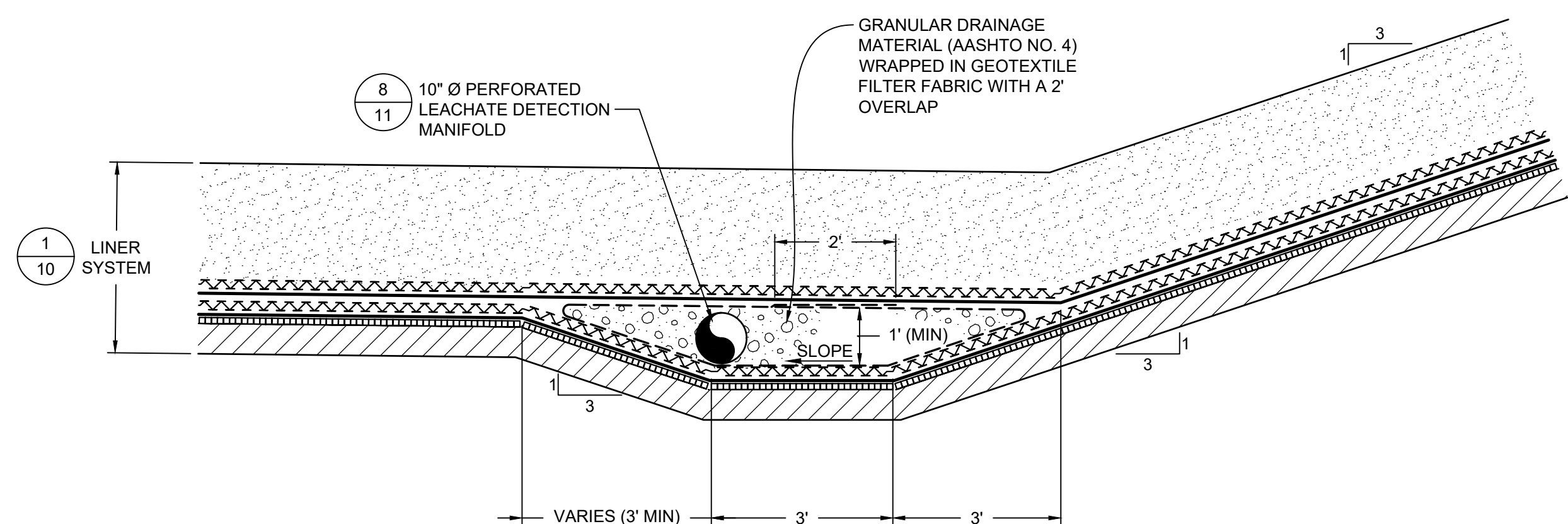
DESIGN BY: KBT	DATE: DECEMBER 2023
DRAWN BY: JJV	PROJECT NO.: FL9363A
CHECKED BY: TC	FILE: FL9363A-C12
REVIEWED BY: SA	DRAWING NO.:
APPROVED BY: KBT	<b>11</b> OF <b>24</b>

THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_  
 KWASI BABU-TWENBOAH LICENSE NO. 42460

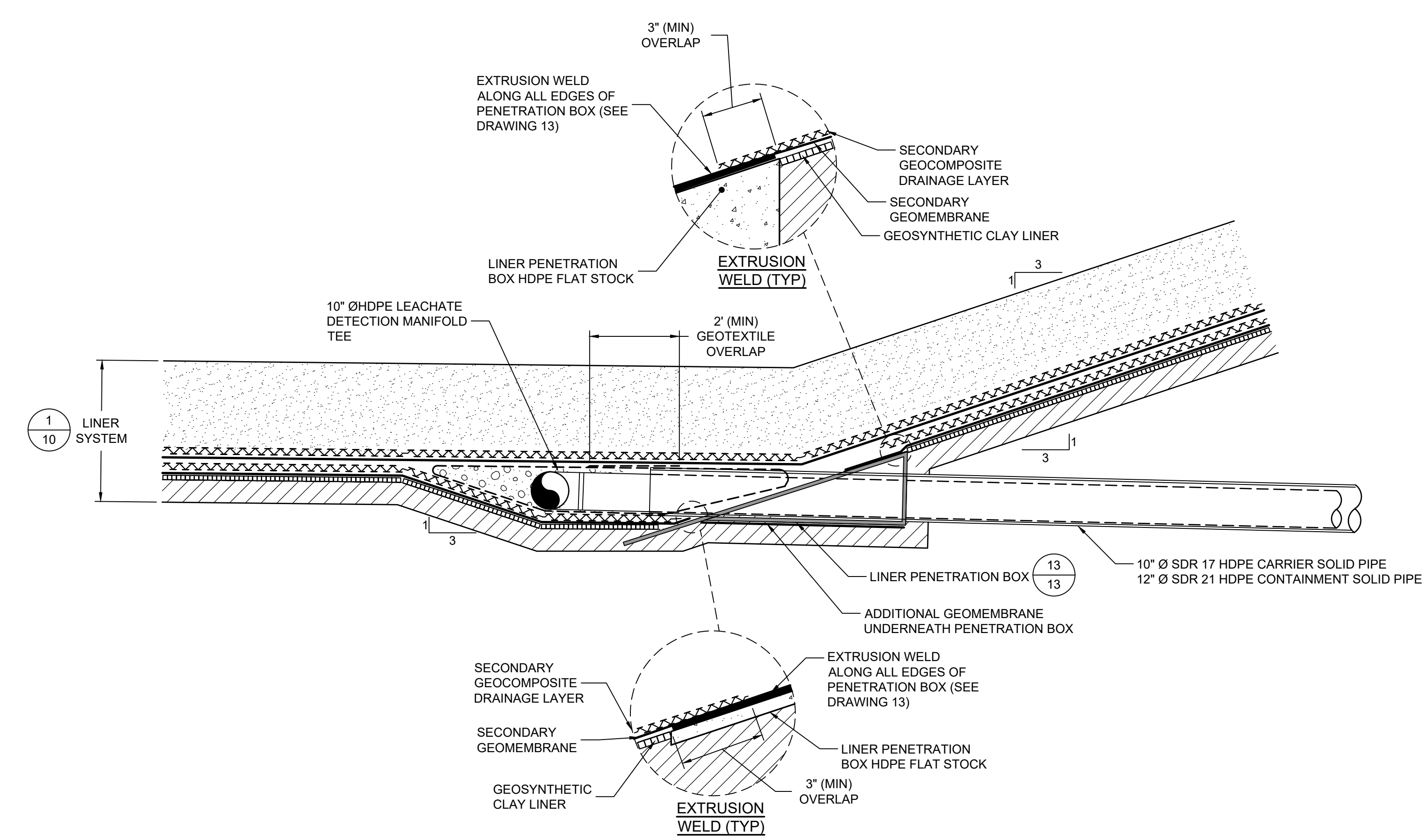
**FOR BIDDING PURPOSES ONLY  
 NOT FOR CONSTRUCTION**

ACD:\000\000\INDIAN RIVER COUNTY OF CELL 3\Project Files\DRAWINGS\01\_1805A-C12.dwg

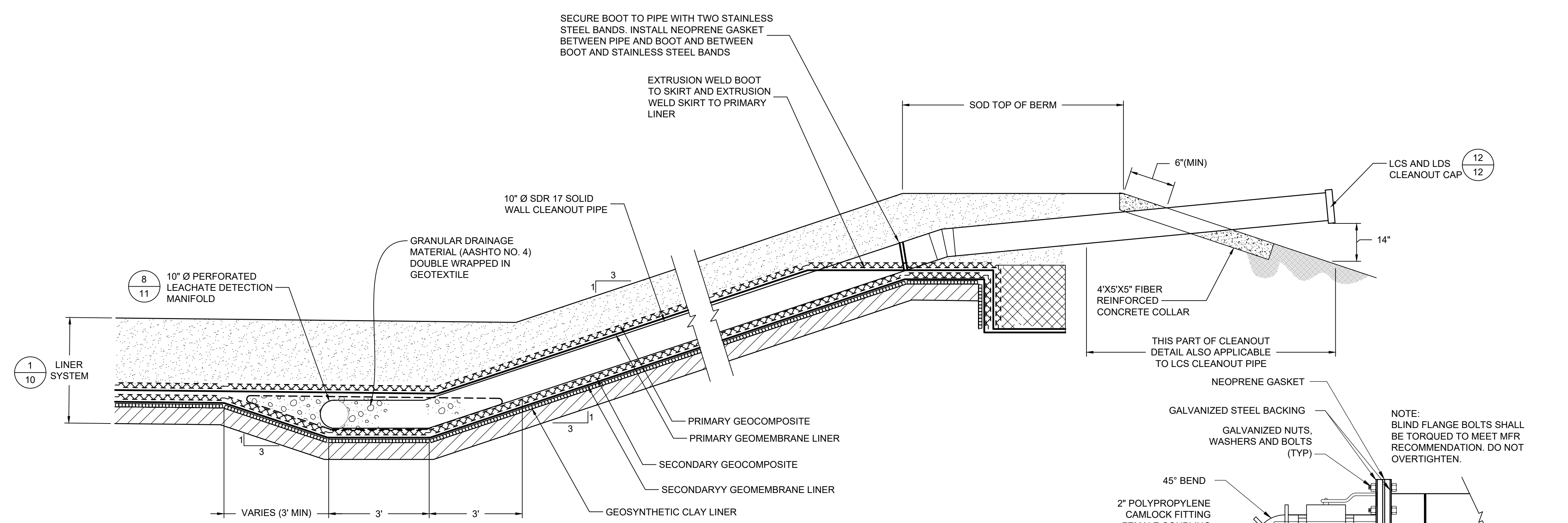


- NOTES:**
1. WRAP DETECTION SUMP GRANULAR DRAINAGE MATERIAL (AASHTO NO. 4) WITH GEOTEXTILE TO PROTECT UPPER AND LOWER LINER.
  2. PROVIDE DOUBLE GEOCOMPOSITE UNDER PRIMARY COLLECTION SYSTEM MANIFOLD GRANULAR DRAINAGE MATERIAL ENVELOPE AS SHOWN.
  3. GEOSYNTHETIC CLAY LINER TO BE PLACED DIRECTLY UNDER SECONDARY LINER.
  4. OVERLAP GEOTEXTILE A MINIMUM OF 24" OVER GRANULAR DRAINAGE MATERIAL, AND SECURE ALONG LENGTH OF SEAM.

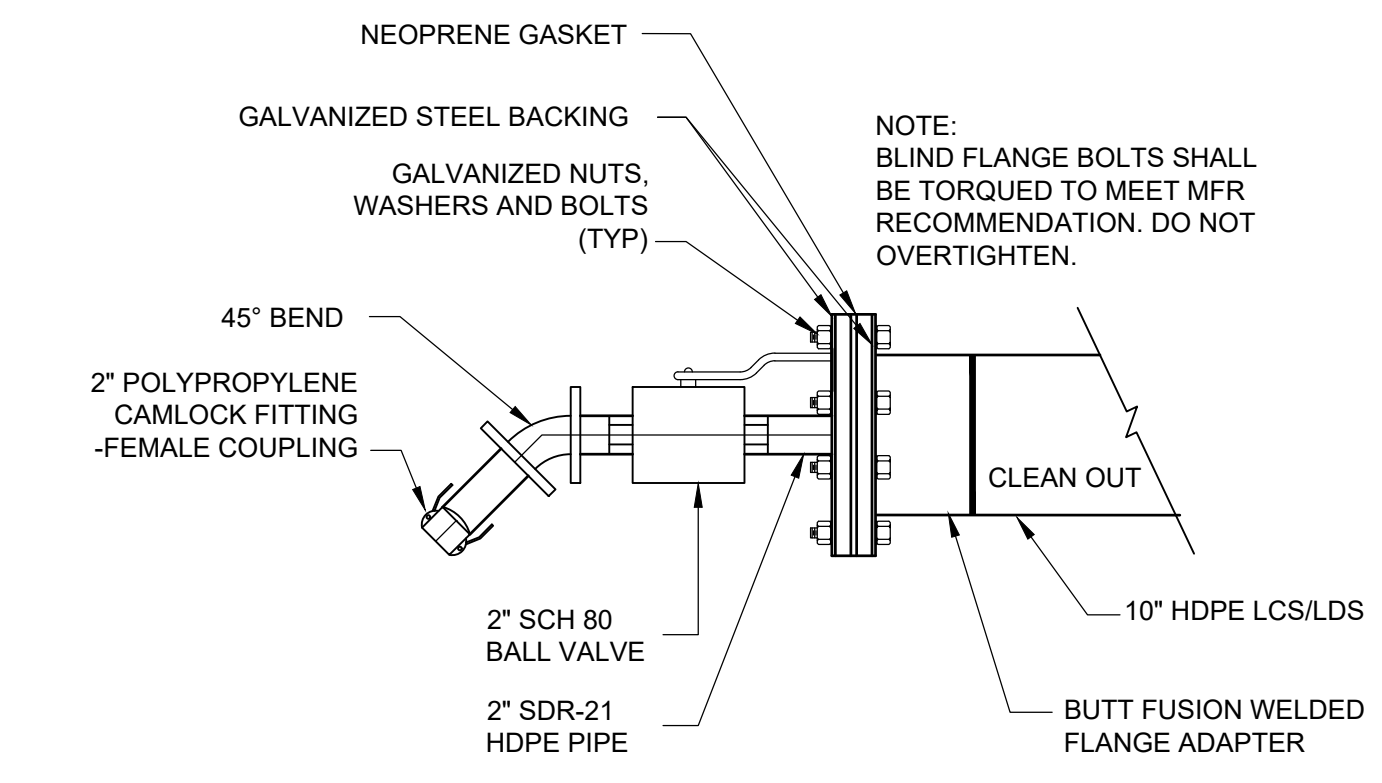
**9 SECTION**  
**7 LEACHATE DETECTION SYSTEM (LDS) SUMP**  
 SCALE: NOT TO SCALE



**10 DETAIL**  
**7 LEACHATE DETECTION PIPE AT PERIMETER BERM**  
 SCALE: N.T.S.



**11 DETAIL**  
**4 LCS AND LDS CLEANOUT PIPE**  
 SCALE: N.T.S.



**12 DETAIL**  
**12 LCS AND LDS CLEANOUT CAP**  
 SCALE: N.T.S.

- NOTES:**
1. DETAILS ARE SHOWN TO SCALE AS NOTED EXCEPT FOR GEOSYNTHETICS, WHICH ARE SHOWN AT AN EXAGGERATED SCALE FOR CLARITY. MATERIAL THICKNESSES ARE MINIMUMS, AND TOLERANCES SHALL BE WITHIN THE LIMITS OUTLINED IN THE TECHNICAL SPECIFICATIONS AND CONSTRUCTION QUALITY ASSURANCE (CQA) PLAN.
  2. SUBBASE SHALL BE PREPARED AS DESCRIBED IN THE TECHNICAL SPECIFICATIONS AND THE CQA PLAN.
  3. MATERIAL AND INSTALLATION SPECIFICATIONS / REQUIREMENTS FOR THE LINER SYSTEM AND LEACHATE COLLECTION/DETECTION SYSTEM GEOSYNTHETIC COMPONENTS ARE DESCRIBED IN THE TECHNICAL SPECIFICATIONS AND THE CQA PLAN.

REV	DATE	DESCRIPTION	DRN	APP
-	12/13/2023	ISSUE FOR BID	JJV	KBT

1200 RIVERPLACE BOULEVARD, SUITE 710  
 JACKSONVILLE, FLORIDA 32207 USA  
 PHONE: 904.858.1818 - FAX: 904.396.1143  
 CERTIFICATE OF AUTHORIZATION NO. 4321

1325 74th AVENUE SW  
 VERO BEACH, FLORIDA 33968 USA  
 PHONE: 772.770.5112

**TITLE: LEACHATE DETECTION SYSTEM (LDS) DETAILS**

**PROJECT: PHASE II - CELL 3 CONSTRUCTION**

**SITE: INDIAN RIVER COUNTY LANDFILL**

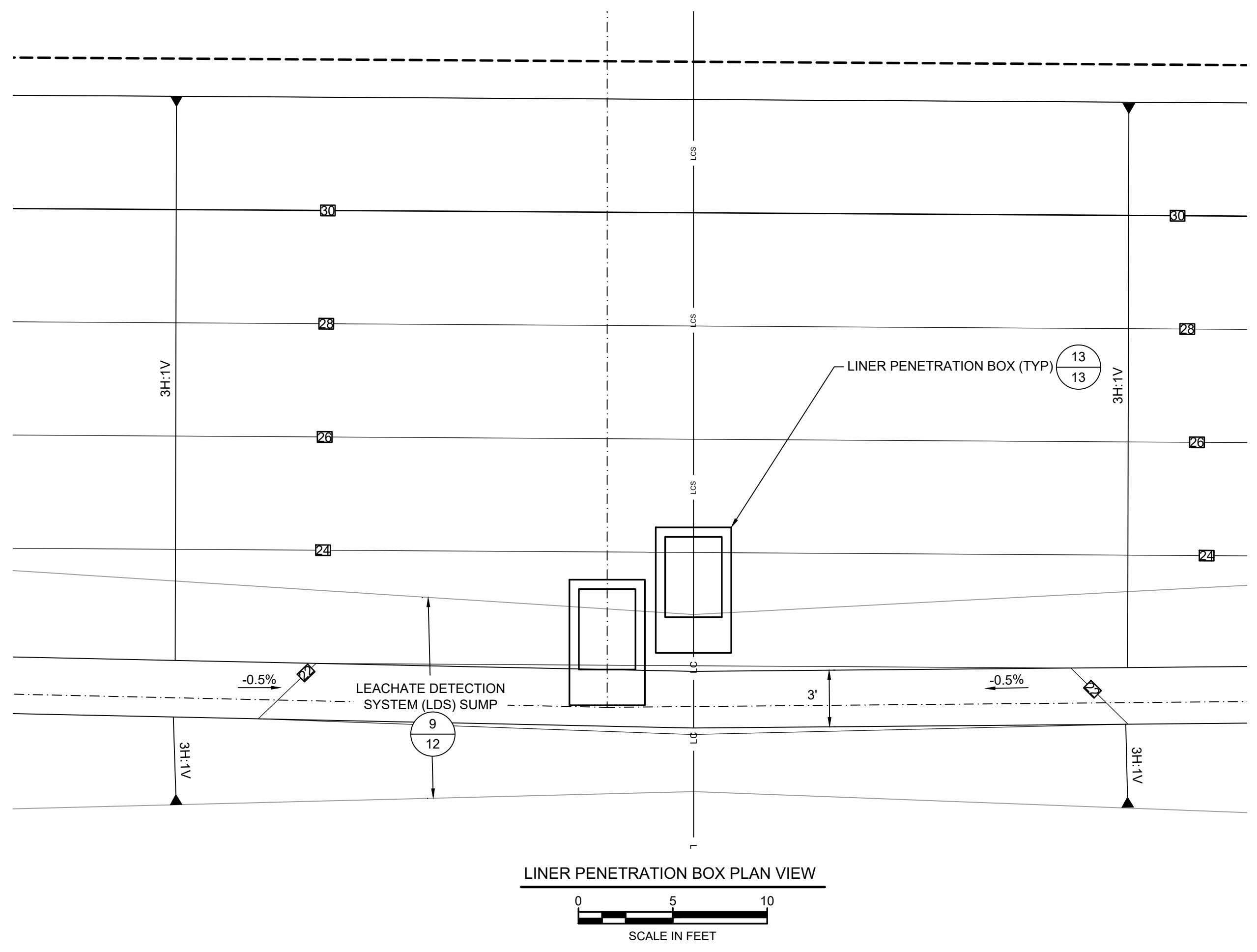
DESIGN BY: KBT	DATE: DECEMBER 2023
DRAWN BY: JJV	PROJECT NO.: FL9363A
CHECKED BY: TC	FILE: FL9363A-C13
REVIEWED BY: SA	DRAWING NO.:
APPROVED BY: KBT	<b>12</b> OF <b>24</b>

THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_  
 KWASI BABUTWIENBOAH LICENSE NO. 42460

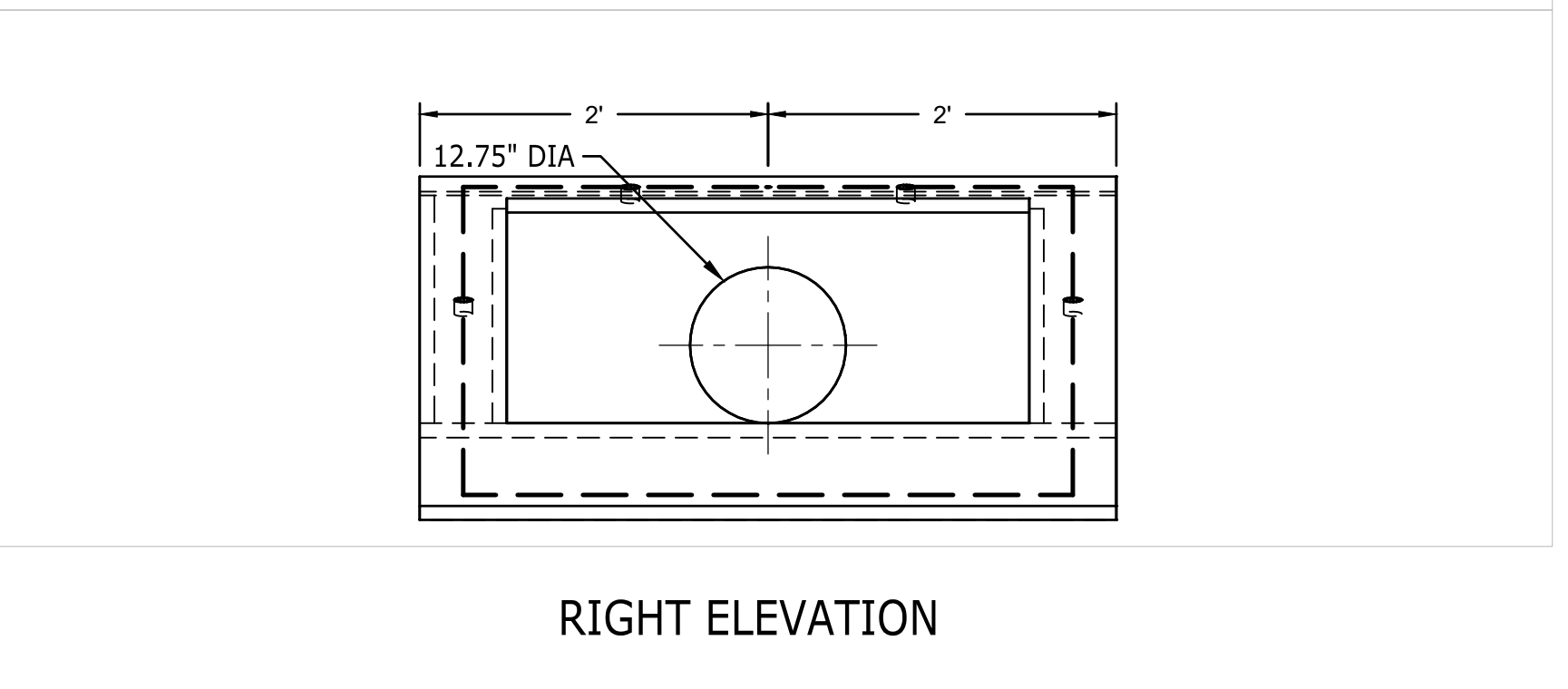
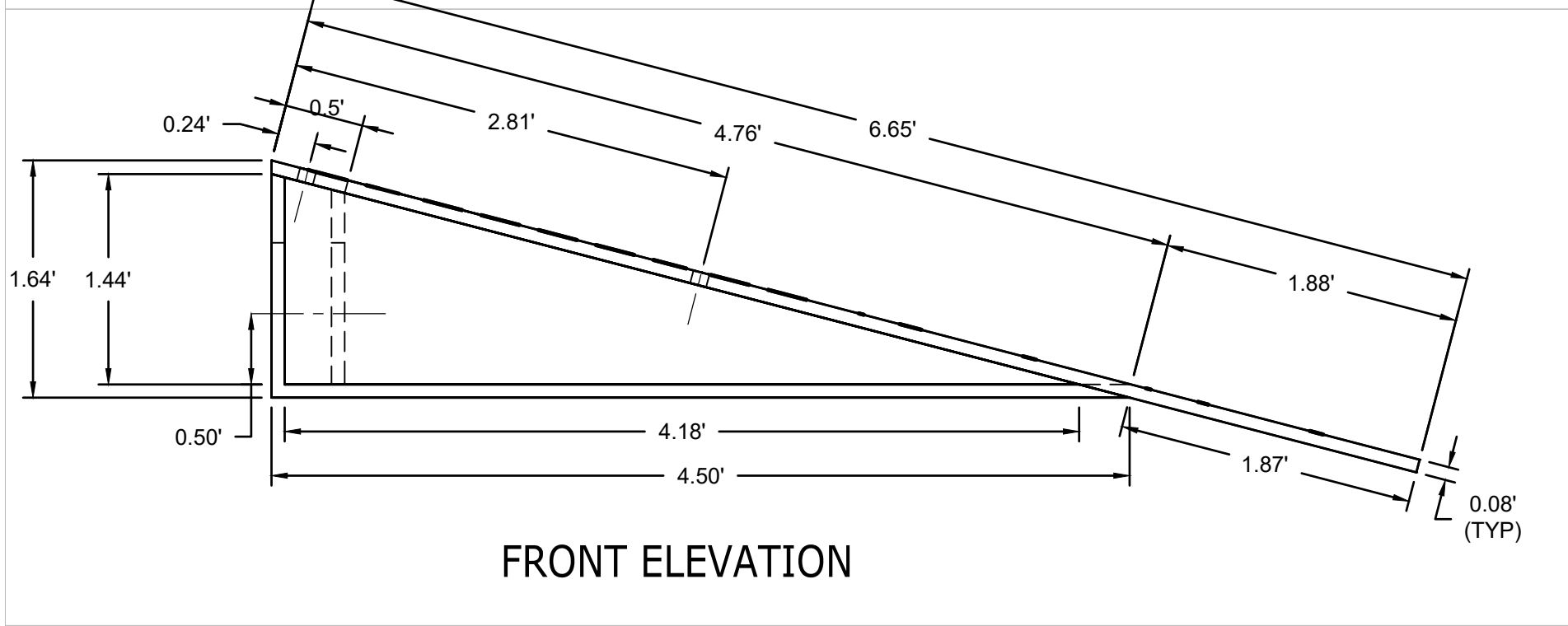
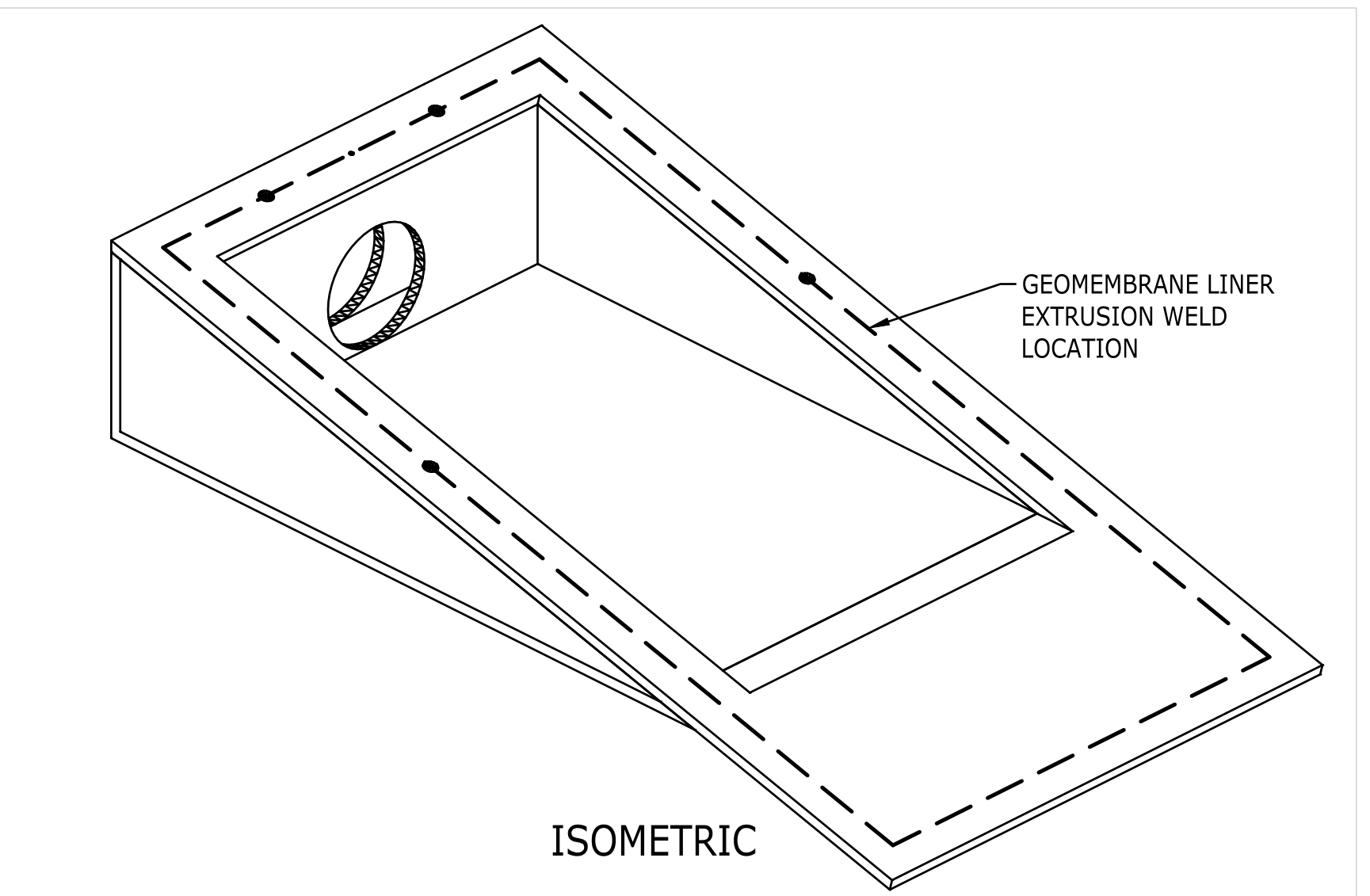
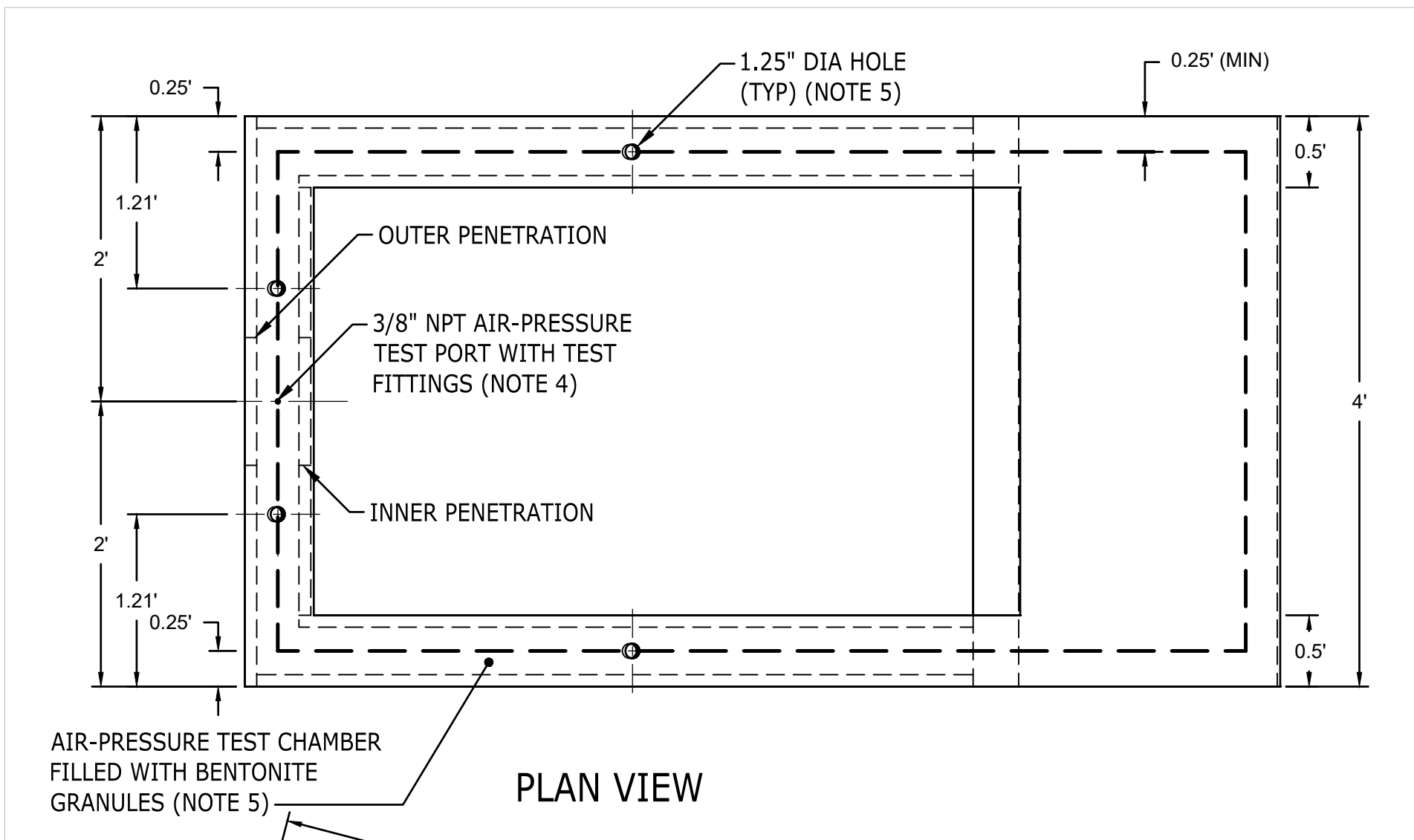
**FOR BIDDING PURPOSES ONLY  
 NOT FOR CONSTRUCTION**

AC:\Drawings\INDIAN RIVER COUNTY OF CELL 3\Project Files\DRAWINGS\9363A-C13.dwg



**LEGEND**

	PROPOSED TOP OF LINER ELEVATION (FEET, NGVD)
	PROPOSED LEACHATE COLLECTION CORRIDOR
	PROPOSED LEACHATE COLLECTION SYSTEM (LCS) PIPE
	PROPOSED LEACHATE DETECTION SYSTEM (LDS) PIPE
	PROPOSED LIMIT OF LINER
	CONSTRUCTION CONTROL POINT (WILL BE GENERATED FOR CONSTRUCTION SET)



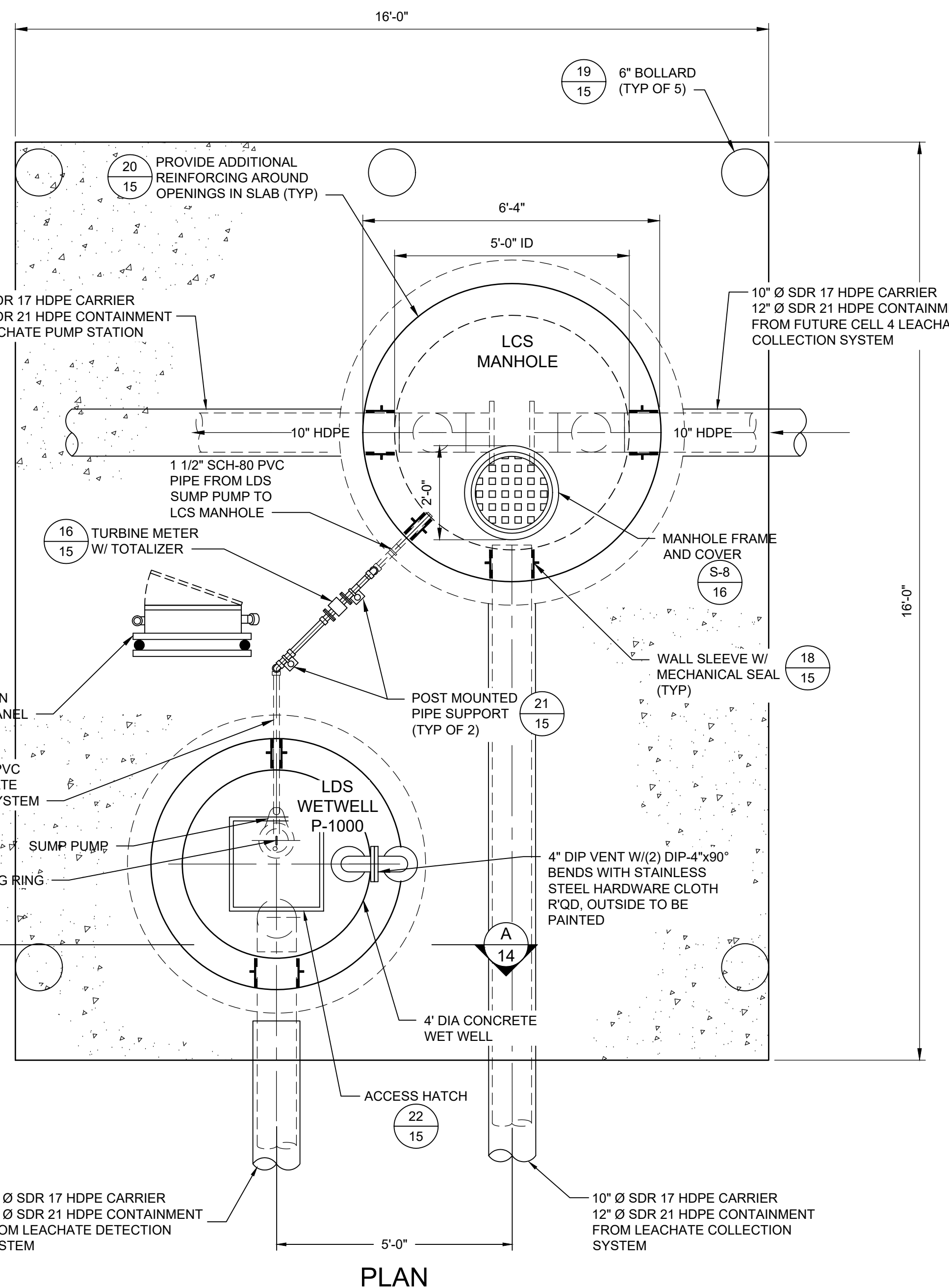
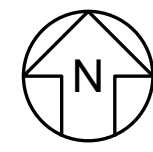
- NOTES:**
- LINER PENETRATION BOXES WILL BE CONSTRUCTED USING 1-INCH THICK FLAT STOCK AND IN ACCORDANCE WITH TECHNICAL SPECIFICATION SECTION 13005.
  - TEN-INCH PIPE SEGMENTS AND SOLID END TERMINATIONS WILL BE FACTORY WELDED TO LINER PENETRATION BOXES WITH LENGTHS SHOWN AND TESTED IN ACCORDANCE WITH TECHNICAL SPECIFICATION SECTION 13005. WELDS WILL BE TESTED PRIOR TO DELIVERY IN ACCORDANCE WITH TECHNICAL SPECIFICATION SECTION 02770.
  - GEOMEMBRANE LINER EXTRUSION WELD LOCATION IS NOT SHOWN ON FRONT ELEVATION OF LINER PENETRATION BOXES FOR CLARITY.
  - LINER PENETRATION BOXES AND ATTACHED CONTAINMENT PIPING WILL BE AIR-PRESSURE TESTED IN THE FIELD AFTER INSTALLATION AND WILL BE IN ACCORDANCE WITH TECHNICAL SPECIFICATION SECTION 13005.
  - AIR-PRESSURE TEST CHAMBER WILL BE BACKFILLED WITH BENTONITE GRANULES USING 1.25-INCH DIA HOLES AFTER AIR-PRESSURE TESTING IS COMPLETED. EACH HOLE WILL BE SEALED WITH HDPE EXTRUDATE AFTER BENTONITE FILLING IS COMPLETED.
  - THE LINER PENETRATION BOX IS APPLICABLE WHERE THE LCS AND LDS DRAINAGE CORRIDORS INTERCEPTS THE LINER SIDESLOPE AT A NEAR-PERPENDICULAR ANGLE.

13 **DETAIL**  
13 **LINER PENETRATION BOX**  
 SCALE: N.T.S

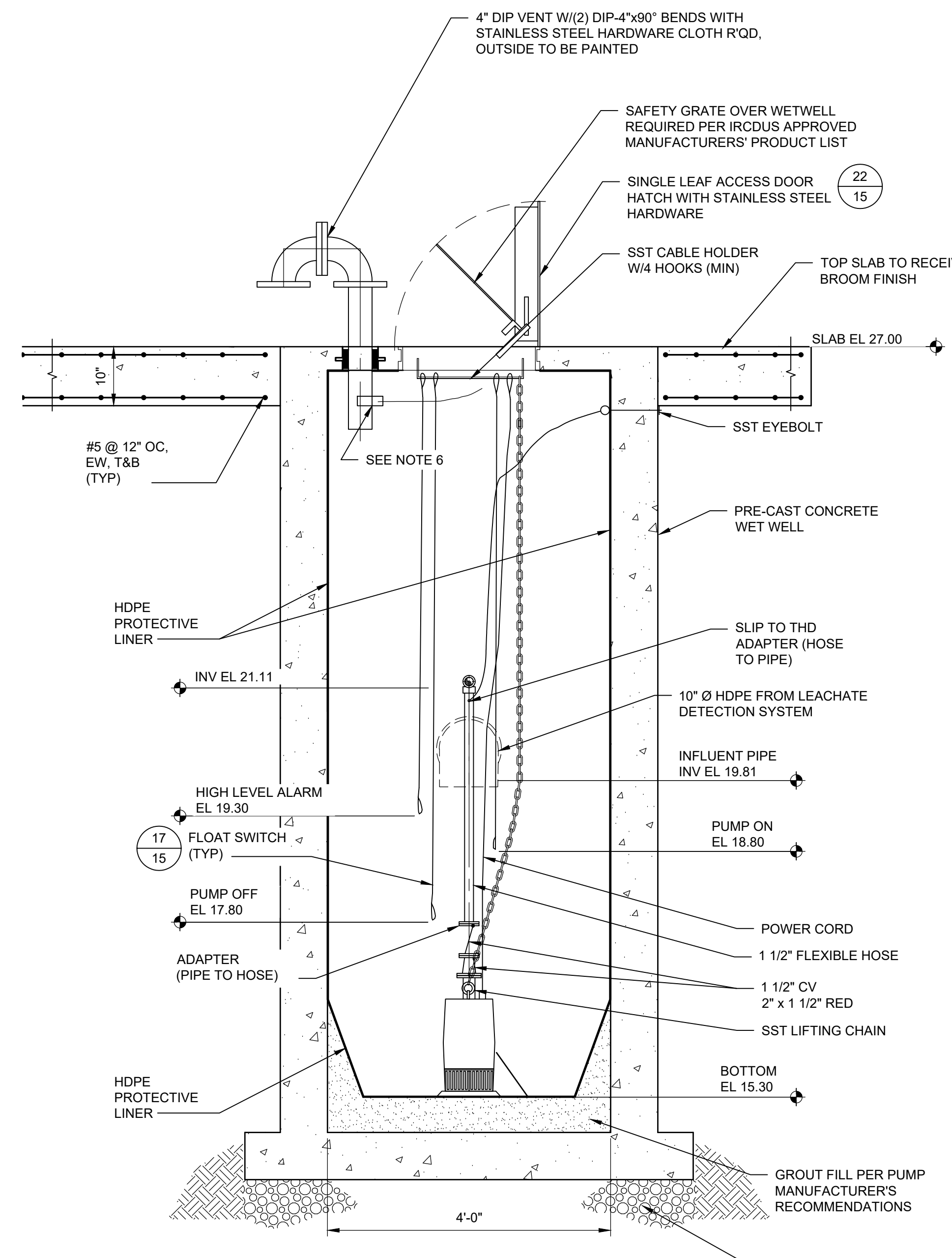
**FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION**

	12/13/2023	ISSUE FOR BID	JVV	KBT
REV	DATE	DESCRIPTION	DRN	APP
		1200 RIVERPLACE BOULEVARD, SUITE 710 JACKSONVILLE, FLORIDA 32207 USA PHONE: 904.858.1818 - FAX: 904.396.1143 CERTIFICATE OF AUTHORIZATION NO. 4321		
		1325 74th AVENUE SW VERO BEACH, FLORIDA 32968 USA PHONE: 772.770.5112		
TITLE: <b>LINER PENETRATION DETAILS</b>				
PROJECT: <b>PHASE II - CELL 3 CONSTRUCTION</b>				
SITE: <b>INDIAN RIVER COUNTY LANDFILL</b>				
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		DESIGN BY: KBT	DATE: DECEMBER 2023	
		DRAWN BY: JVJ	PROJECT NO.: FL9363A	
		CHECKED BY: TC	FILE: FL9363A-C13A	
		REVIEWED BY: SA	DRAWING NO.:	
		APPROVED BY: KBT	<b>13</b>	<b>24</b>
SIGNATURE DATE KWASI BABU-TWENGOBAH LICENSE NO. 42460				

ACCD0005\geosyntec\INDIAN RIVER COUNTY OF CELL 3\Project Files\DRAWINGS\SI\1303A-C13A.dwg



**14** **14** **DETAIL**  
**LCS MANHOLE AND LDS PUMP STATION**  
SCALE: NOT TO SCALE



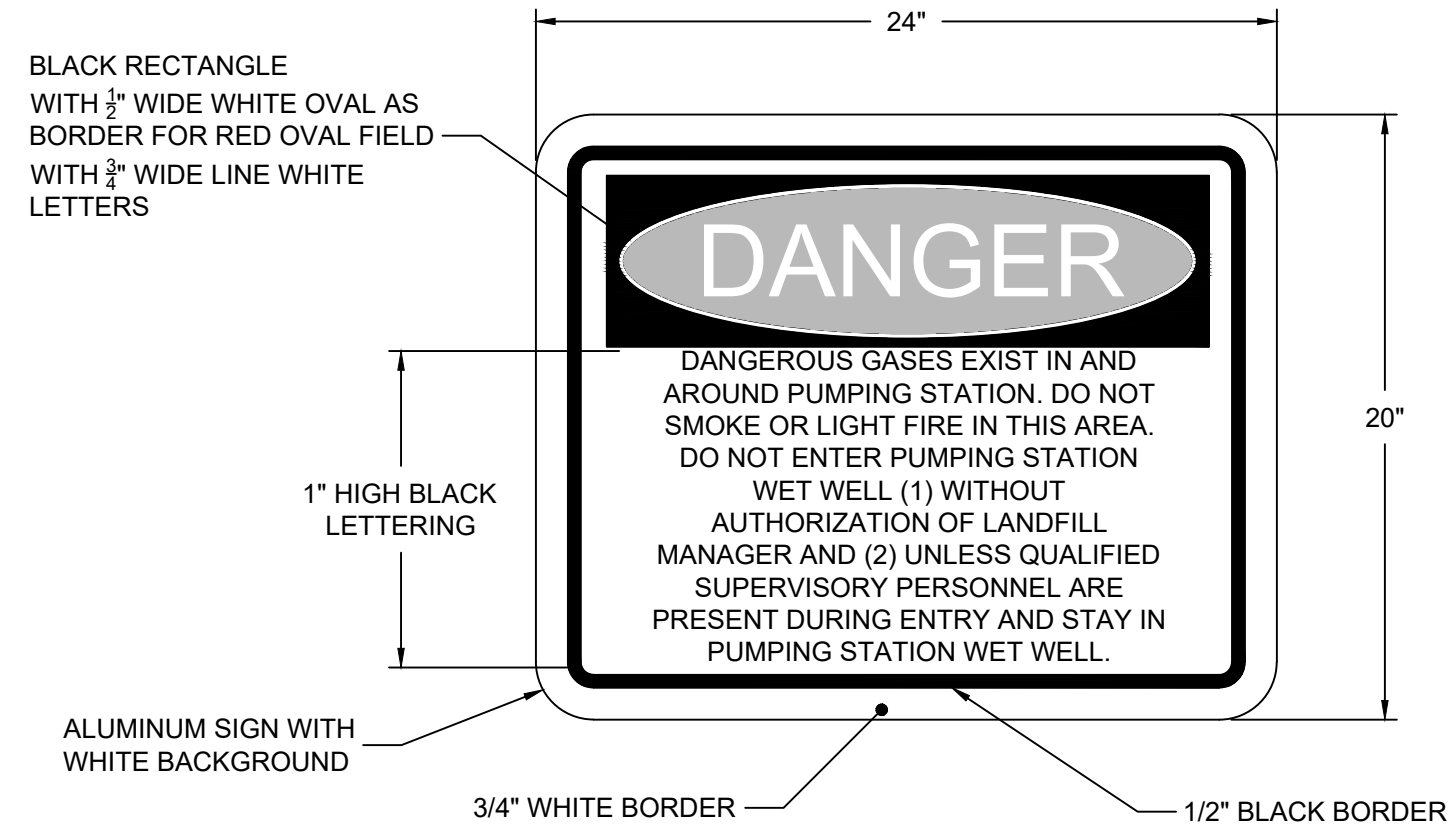
**A** **14** **DETAIL**  
**LDS MANHOLE SECTION**  
SCALE: NOT TO SCALE

**WET WELL GENERAL NOTES:**

1. ALL EQUIPMENT, ANCHOR BOLT SIZES, LOCATIONS, CLEARANCES, ETC. SHALL BE IN CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND THE APPROVED SHOP DRAWINGS.
2. ALL STRUCTURES SHALL HAVE HDPE PROTECTIVE LINER INSTALLED.
3. ALL BACKFILL SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS.
4. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL TRADES AND SUBCONTRACTORS.
5. SEE ELECTRICAL DRAWINGS FOR LOCATION OF ELECTRICAL/ CONTROL PANEL AND CONNECTING CONDUITS.
6. CONTRACTOR TO PROTECT WET WELL LINER/COATING DURING INSTALLATION AND REPAIR AS DIRECTED.
7. HATCH COVERS SHALL BE H-20 RATED AND PROVIDE UNRESTRICTED VERTICAL ACCESS TO PUMPS AND VALVES.
8. PROVIDE NON-SHRINK GROUT AT ALL OPENINGS INTO THE STRUCTURES.
9. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS AGAINST FLOATATION OF WET WELL UNTIL ALL BACKFILL IS IN PLACE.
10. CAST-IN-PLACE CONCRETE SHALL BE 4500 PSI AND PRECAST CONCRETE SHALL BE 5000 PSI. SEE SPECIFICATIONS 03300 AND 02605, RESPECTIVELY.
11. REINFORCING STEEL SHALL BE GRADE 60 FABRICATED AND PLACED IN ACCORDANCE WITH ACI CODE SPLICES AND SHALL BE SIX (6) TIMES THE BAR DIAMETER NUMBER SIZE OR 18" MINIMUM UNLESS OTHERWISE NOTED (STAG. SPL., TYP).
12. ALL BACKFILL AROUND THE PUMP STATION SITE SHALL BE COMPACTED @ 98% OF MAXIMUM DENSITY, PER ASTM D1557. COMPACT TO A DEPTH OF AT LEAST ONE FOOT BELOW SLAB ON GRADE.
13. CHAMFER EXPOSED CONCRETE EDGES 3/4" (TYP).
14. ALL PIPING AT THE PUMP STATION SITE SHALL BE RESTRAINED.
15. STAINLESS STEEL CABLE HOLDER SHALL BE LOCATED ON OPPOSITE SIDE OF WETWELL FROM THE INFLUENT PIPE.
16. BUOYANCY CALCULATIONS SHALL BE REQUIRED FOR ALL PUMP STATIONS ALONG WITH THE REQUIRED PUMP STATION CALCULATIONS.
17. MAINTAIN MINIMUM OF 6" BETWEEN ANY PIPING, FITTINGS ETC. AND PRECAST CONCRETE.
18. A SAFETY GRATE WITH STAINLESS STEEL HARDWARE IS REQUIRED FOR ALL WETWELLS PER IRCUDS APPROVED MANUFACTURERS' PRODUCT LIST
19. STAINLESS STEEL LIFTING BAILS SHALL BE USED FOR PUMPS IN LIFT STATIONS.
20. ALL HARDWARE TO BE 316 STAINLESS STEEL.
21. FOR CLEAR COVER REQUIREMENTS FOR CAST-IN-PLACE CONCRETE REINFORCEMENT, REFER TO SPECIFICATION 03300.
22. ASSUME ALLOWABLE BEARING PRESSURE FOR CAST-IN-PLACE SLAB ON GRADE OVER PREPARED SUBGRADE PER NOTES ABOVE: 1000 PSF.
23. PRECAST WETWELL SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA AS REQUIRED BY SPECIFICATION 02605.

**NOTES:**

1. SEE ELECTRICAL PLANS FOR INFORMATION ON PANELS, WIRING, FPL METER, SERVICE DISCONNECT, AND CONDUITS TO WETWELLS.
2. PROVIDE FLAT AREA ON BOTTOM FOR PUMP.
3. PROVIDE ADEQUATE LENGTHS OF HOSE TO ALLOW EASY REMOVAL OF THE LDS PUMP.
4. SEE SPECIFICATIONS FOR PROTECTIVE LINER DETAILS.
5. IF UNSTABLE MATERIAL IS PRESENT, OVER EXCAVATE 3'-0" AND BACKFILL WITH 3.0 FOOT DEPTH OF FDOT NO. 57 GRAVEL.
6. OPENINGS FOR CONDUITS. SEE ELECTRICAL PLANS FOR DETAILS. PENETRATIONS SHALL BE SEALED IN ACCORDANCE WITH THE SPECIFICATIONS.
7. DESIGN AND DETAIL TAKEN FROM PERMIT MOD 0128769-022-SC AND CELL 2 CONSTRUCTION DRAWINGS PREPARED BY CDM SMITH.

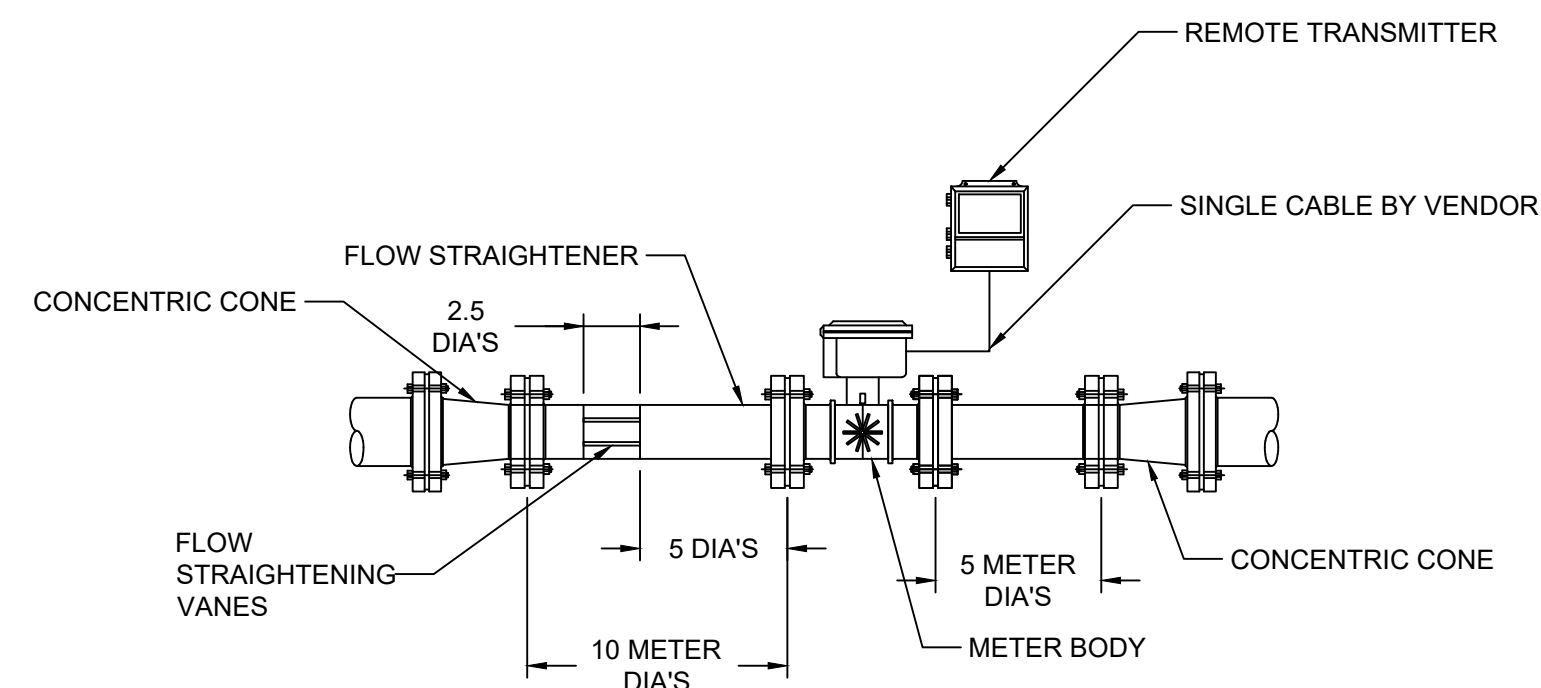


- NOTES:**
1. ALL SIGNS SHALL BE SECURED TO POST WITH SS HARDWARE.
  2. IN ADDITION TO THE WARNING AND PUMP STATION NUMBER SIGNS ON THE SOUTHERN SIDE, THE CONTRACTOR SHALL INSTALL NO SMOKING, CONFINED SPACE ENTRY AND METHANE GAS HAZARD SIGNS AT EACH PUMP STATION. THESE 10"x14" SIGNS SHALL BE OSHA COMPLIANT AND MADE OF ALUMINUM.
  3. CONTRACTOR TO SUBMIT PROPOSED SIGNS FOR APPROVAL IN ACCORDANCE WITH SECTION 01300.
  4. MOUNT SIGNS IN ACCORDANCE WITH FDOT STANDARD 700-010, SLIP BASE AND FOUNDATION DETAIL ?

**15** **14** **DETAIL**  
**WARNING SIGN**  
SCALE: N.T.S.

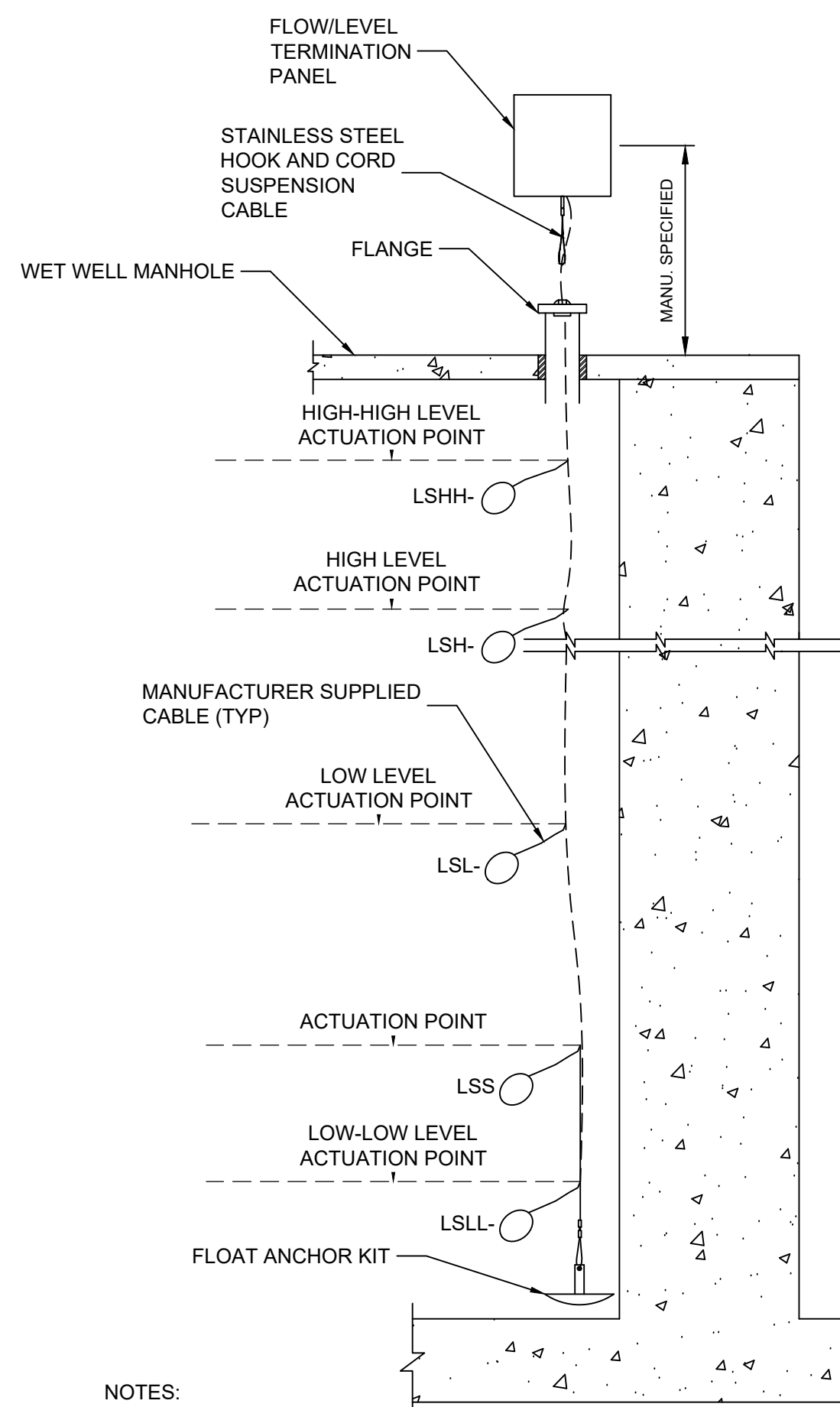
REV	DATE	DESCRIPTION	DRN	APP
-	12/13/2023	ISSUE FOR BID	JJV	KBT
 1200 RIVERPLACE BOULEVARD, SUITE 710 JACKSONVILLE, FLORIDA 32207 USA PHONE: 904.858.1818 - FAX: 904.396.1143 CERTIFICATE OF AUTHORIZATION NO. 4321				
 1325 74th AVENUE SW VERO BEACH, FLORIDA 33968 USA PHONE: 772.770.5112				
<b>TITLE: LCS AND LDS DETAILS 1</b>				
<b>PROJECT: PHASE II - CELL 3 CONSTRUCTION</b>				
<b>SITE: INDIAN RIVER COUNTY LANDFILL</b>				
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.				
DESIGN BY: KBT		DATE: DECEMBER 2023		
DRAWN BY: JJV		PROJECT NO.: FL9363A		
CHECKED BY: TC		FILE: FL9363A-C15		
REVIEWED BY: SA		DRAWING NO.:		
APPROVED BY: KBT		<b>14</b> OF <b>24</b>		

**FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION**



**16** DETAIL  
**14** TURBINE FLOW METER

SCALE: NOT TO SCALE (N.T.S.)

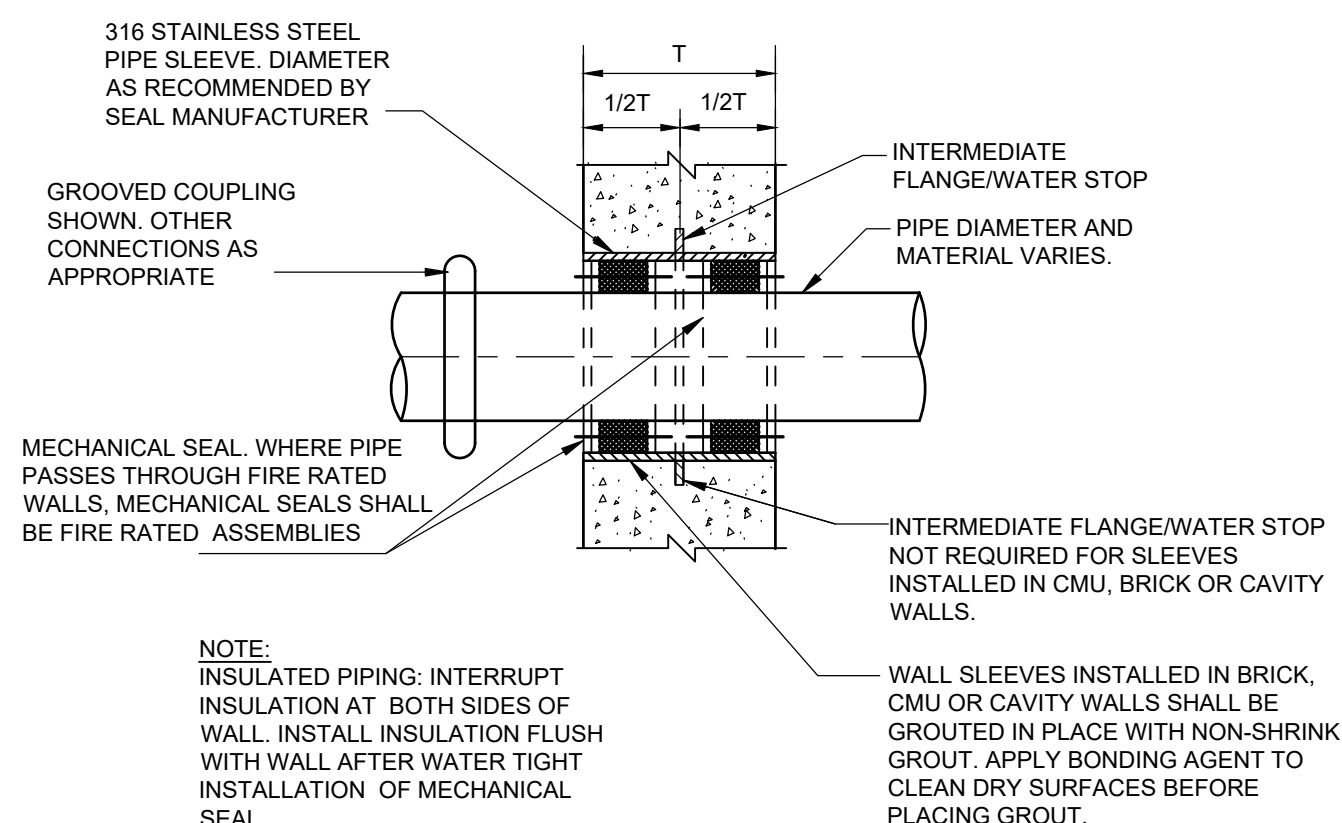


NOTES:

1. PROVIDE 15" X 15" MINIMUM SIZED FLOAT TERMINATION PANEL. PROVIDE J-HOOK INSIDE PANEL TO COIL EXTRA CABLE. PROVIDE TERMINATION BLOCKS. ALL CABLES AND WIRES SHALL BE LABELED.

**17** DETAIL  
**15** FLOAT SWITCH (CABLE SUSPENSION)

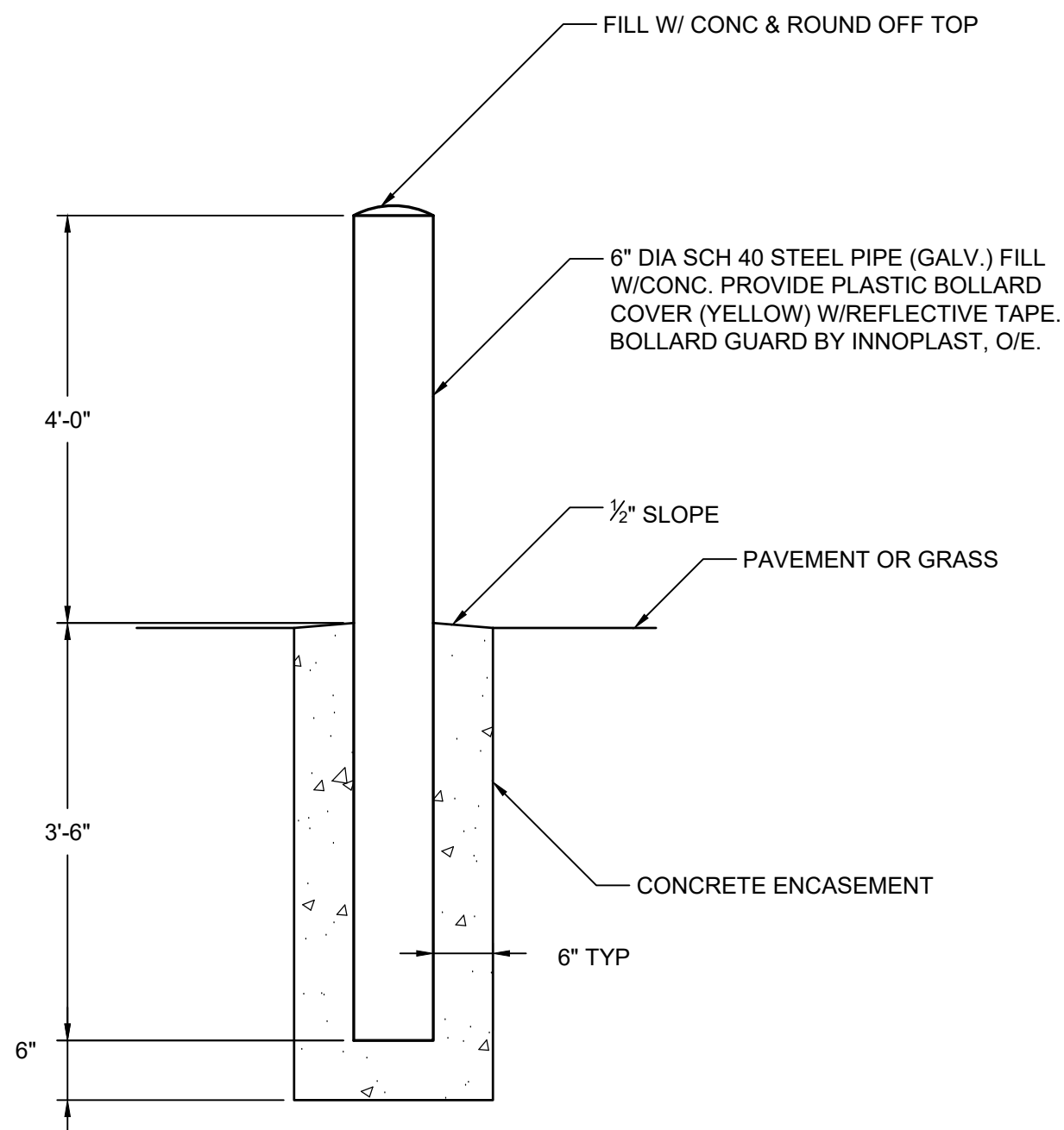
SCALE: N.T.S.



NOTE:  
INSULATED PIPING: INTERRUPT INSULATION AT BOTH SIDES OF WALL. INSTALL INSULATION FLUSH WITH WALL AFTER WATER TIGHT INSTALLATION OF MECHANICAL SEAL.

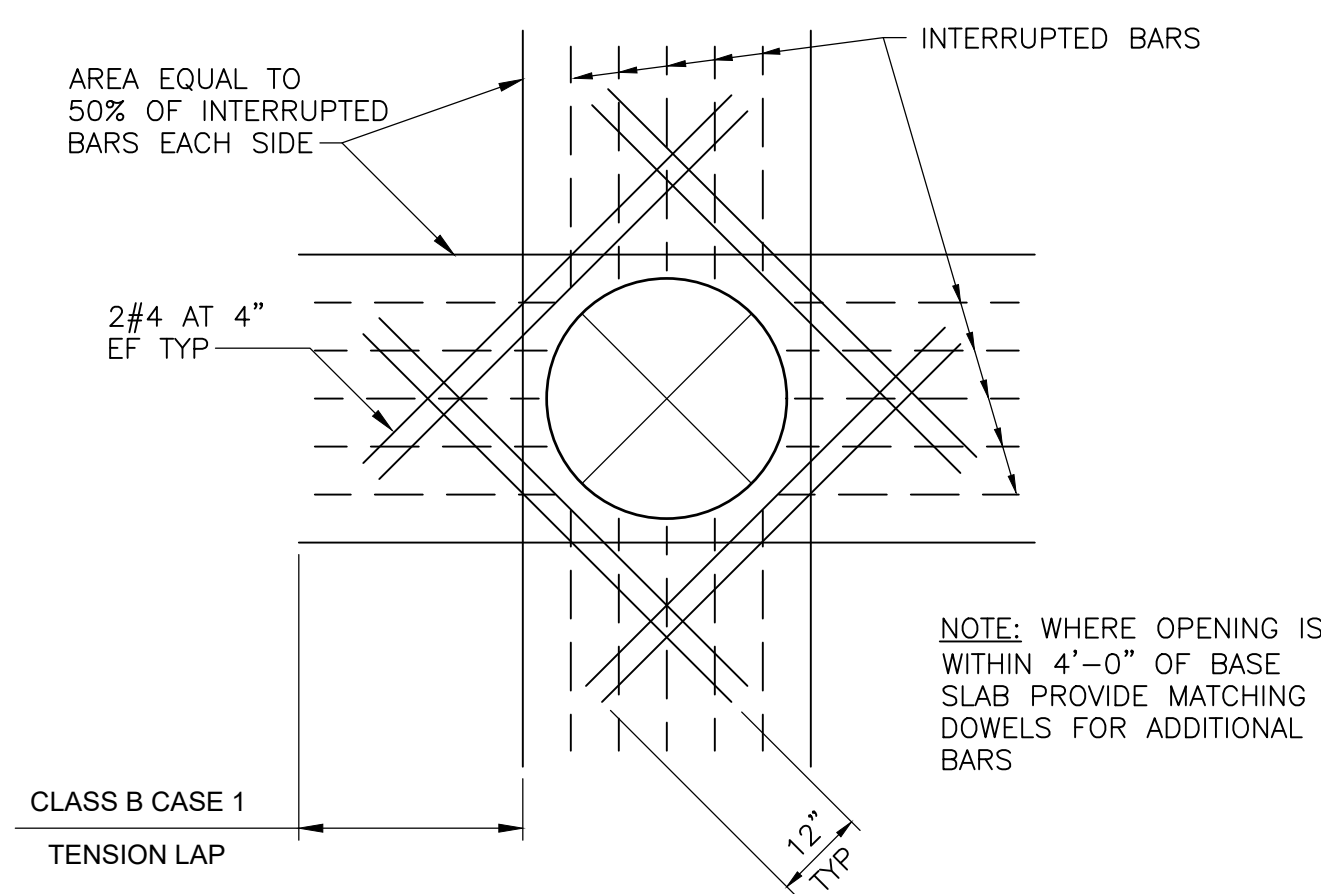
**18** DETAIL  
**15** WALL SLEEVE WITH MECH. SEAL

SCALE: N.T.S.



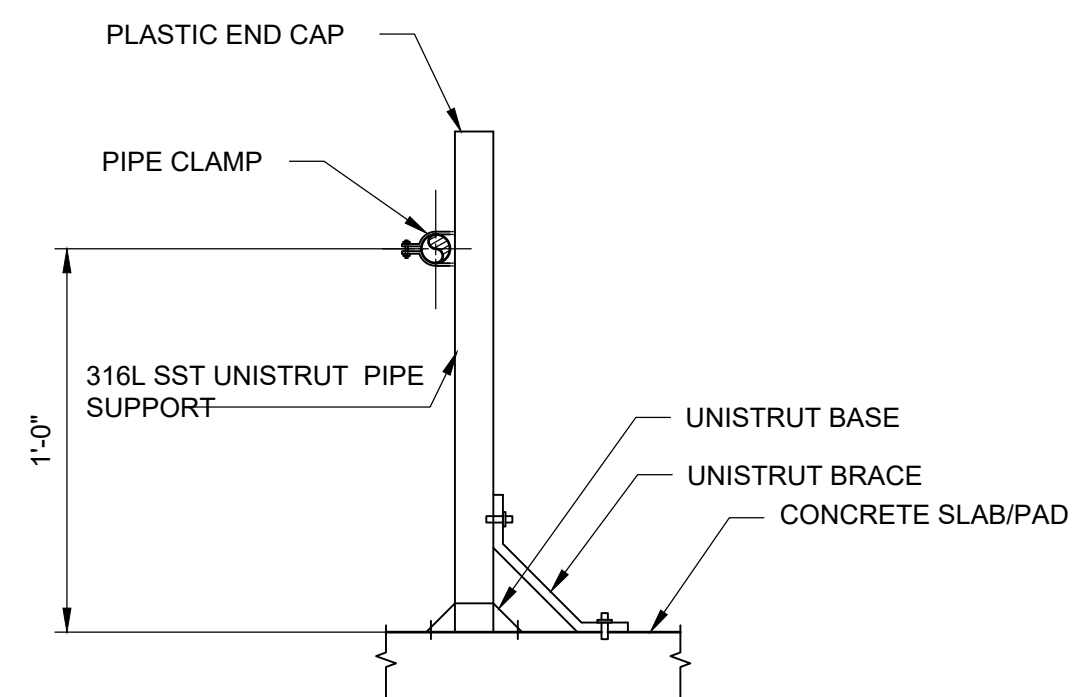
**19** DETAIL  
**15** BOLLARD POST

SCALE: N.T.S.



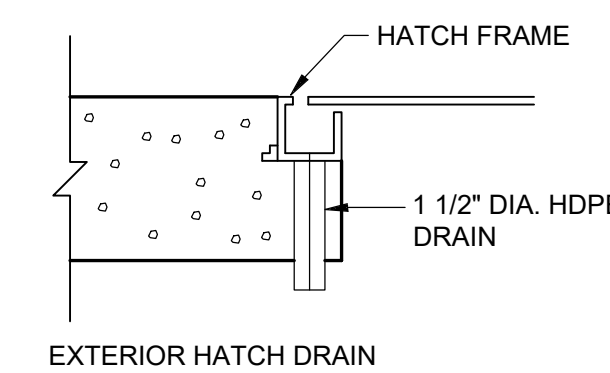
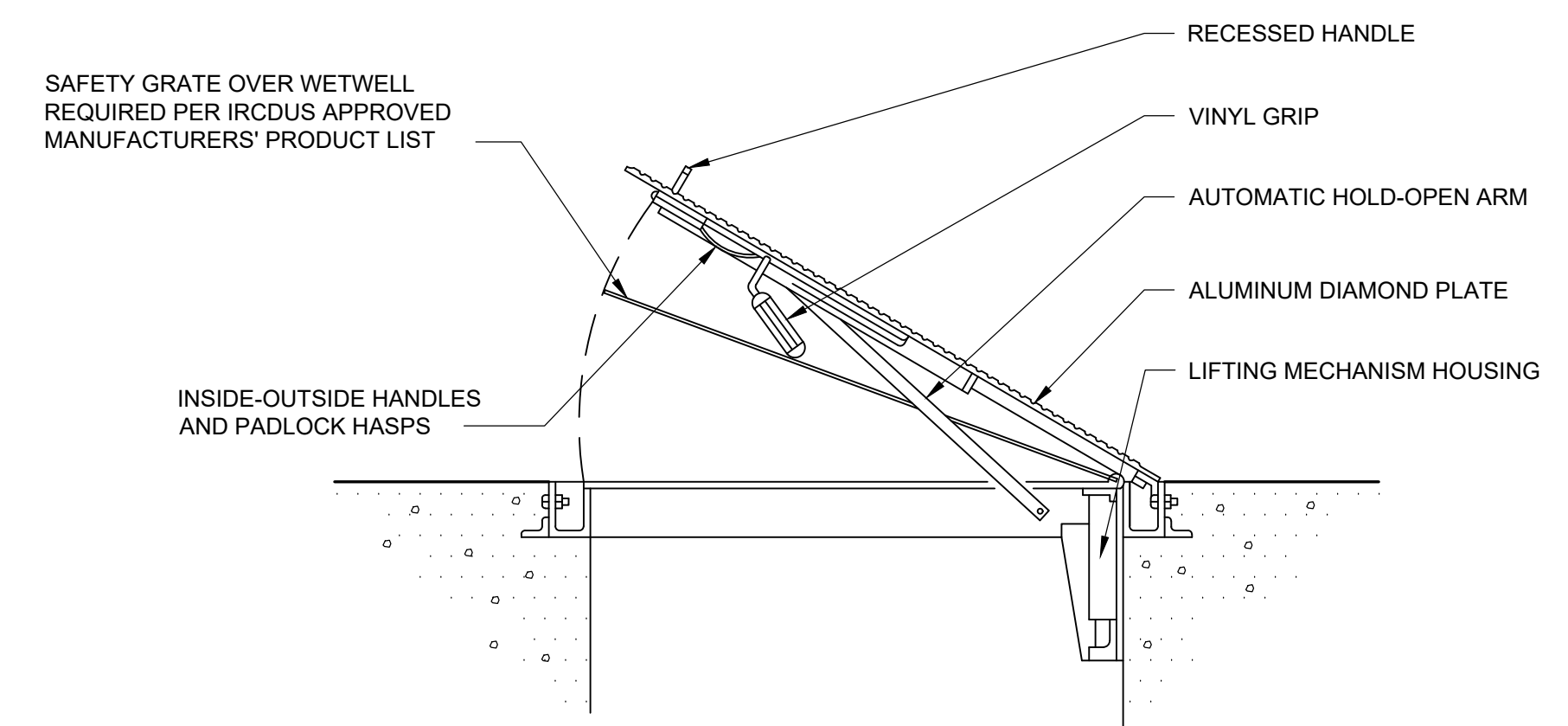
**20** DETAIL  
**14** REINFORCEMENT AROUND OPENINGS(2)

SCALE: N.T.S.



**21** DETAIL  
**14** POST MOUNTED PIPE SUPPORT

SCALE: N.T.S.



SINGLE LEAF HATCH

HATCH NOTES

1. ALUMINUM HATCHES TO BE SUPPLIED WITH STAINLESS STEEL HARDWARE.
2. ALL HATCHES TO BE SUPPLIED WITH SAFETY CHAINS. CORNER POST WITH FLOOR INSERTS MUST ALSO BE PROVIDED FOR SINGLE LEAF HATCHES.
3. HATCHES TO OPEN AWAY FROM ELECTRICAL PANEL.

**22** DETAIL  
**14** TYPICAL HATCH DETAILS AND SCHEDULE

QUANTITY	LOCATION	SIZE	LEAF	DRAIN	REMARKS
1	LDS WET WELL	2'-0" x 2'-0"	SINGLE	YES	SPRING ASSIST, H-20 RATING
1	LCS WET WELL	4'-0" x 2'-1"	SINGLE	YES	SPRING ASSIST, H-20 RATING

SCALE: N.T.S.

NOTES:

1. DESIGN AND DETAIL TAKEN FROM PERMIT MOD 0128769-022-SC AND CELL 2 CONSTRUCTION DRAWINGS PREPARED BY CDM SMITH.

REV	DATE	DESCRIPTION	DRN	APP
-	12/13/2023	ISSUE FOR BID	JJV	KBT

1200 RIVERPLACE BOULEVARD, SUITE 710  
JACKSONVILLE, FLORIDA 32207 USA  
PHONE: 904.858.1818 - FAX: 904.396.1143  
CERTIFICATE OF AUTHORIZATION NO. 4321

1325 74th AVENUE SW  
VERO BEACH, FLORIDA 32969 USA  
PHONE: 772.770.5112

TITLE: **LCS AND LDS DETAILS 2**

PROJECT: **PHASE II - CELL 3 CONSTRUCTION**

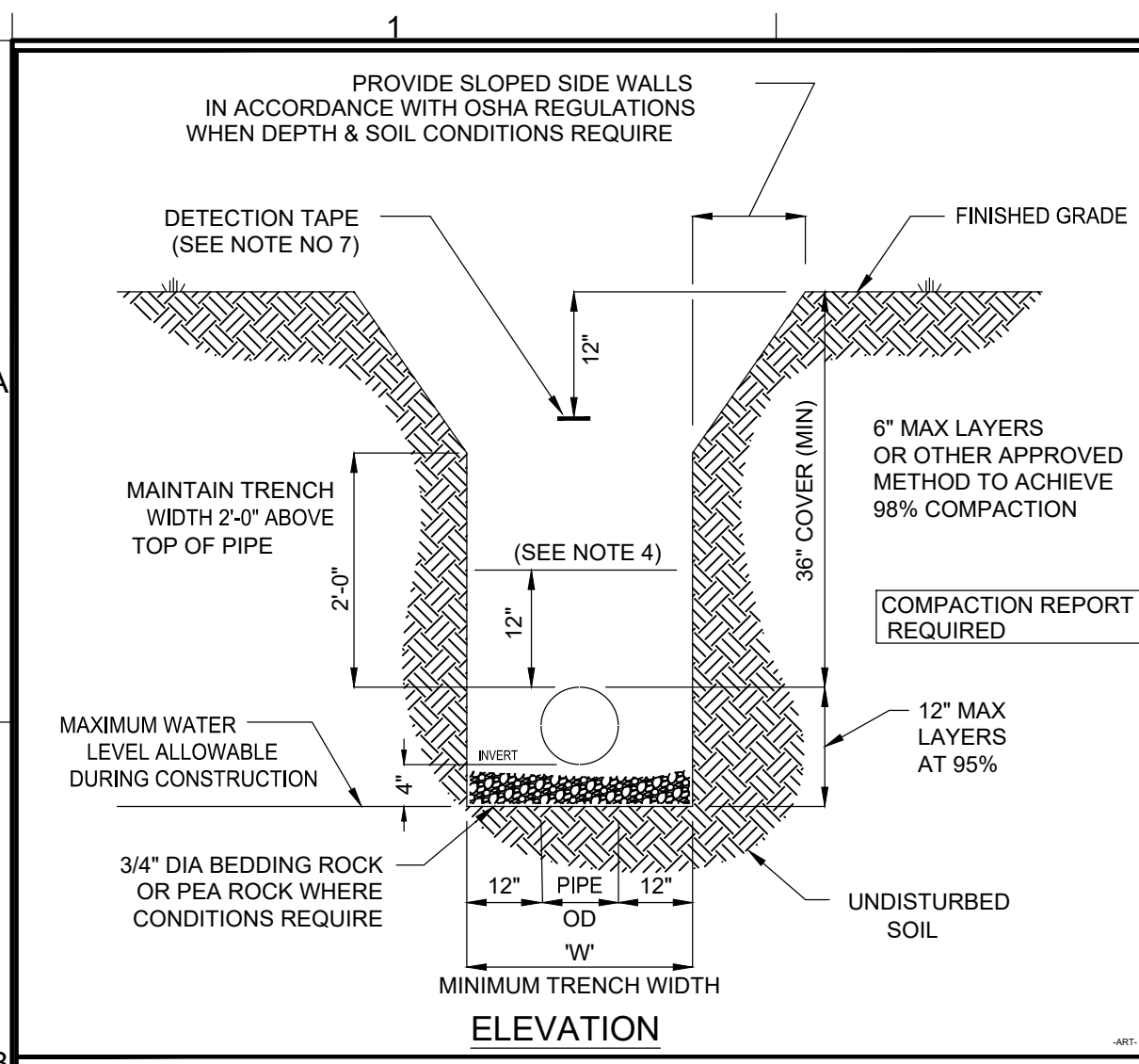
SITE: **INDIAN RIVER COUNTY LANDFILL**

DESIGN BY: KBT	DATE: DECEMBER 2023
DRAWN BY: JJV	PROJECT NO.: FL9363A
CHECKED BY: TC	FILE: FL9363A-C16
REVIEWED BY: SA	DRAWING NO.: 15 OF 24
APPROVED BY: KBT	

THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.

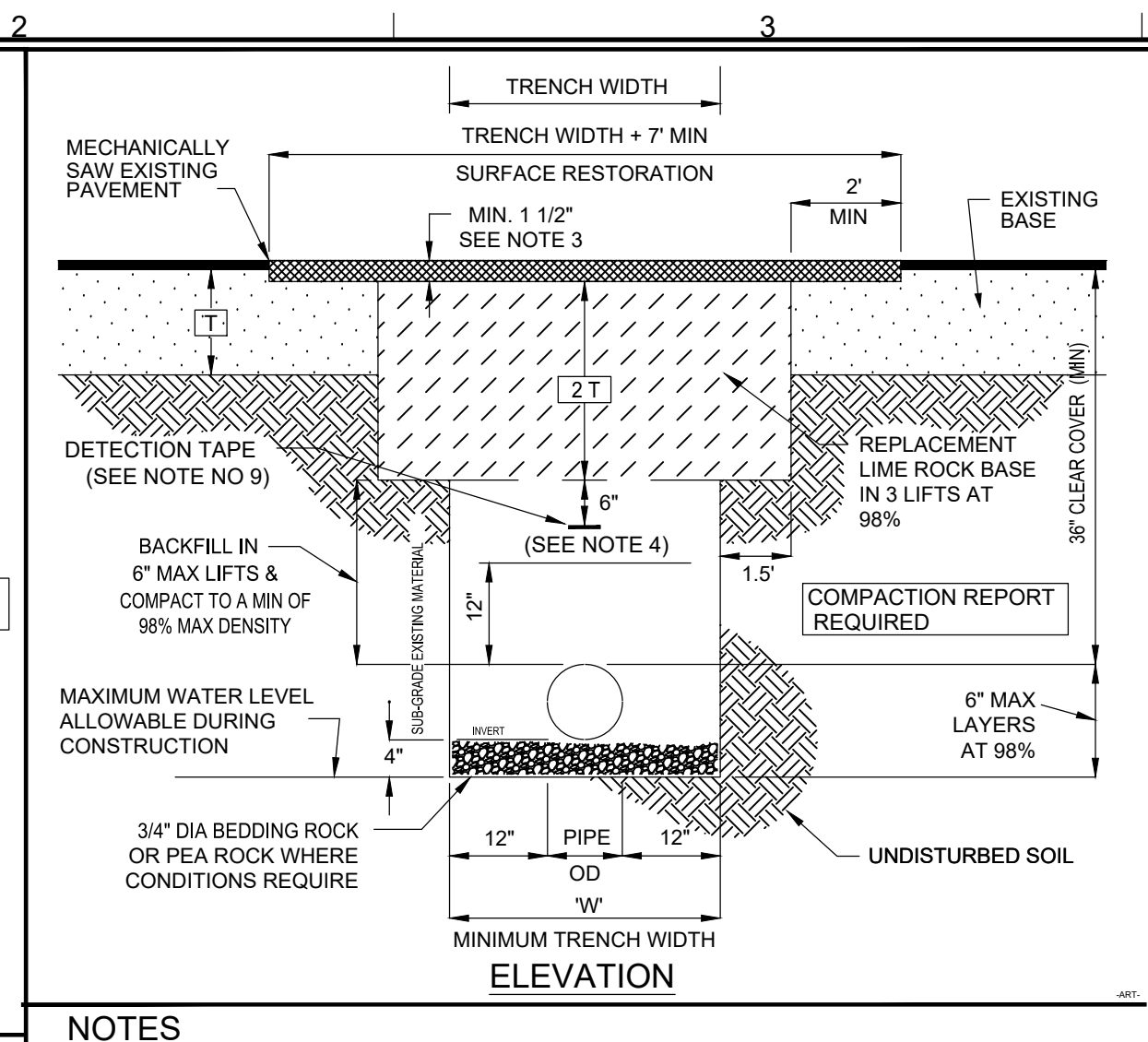
SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_  
KWASI BADIU-TWENGBRAH LICENSE NO. 42460

FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION



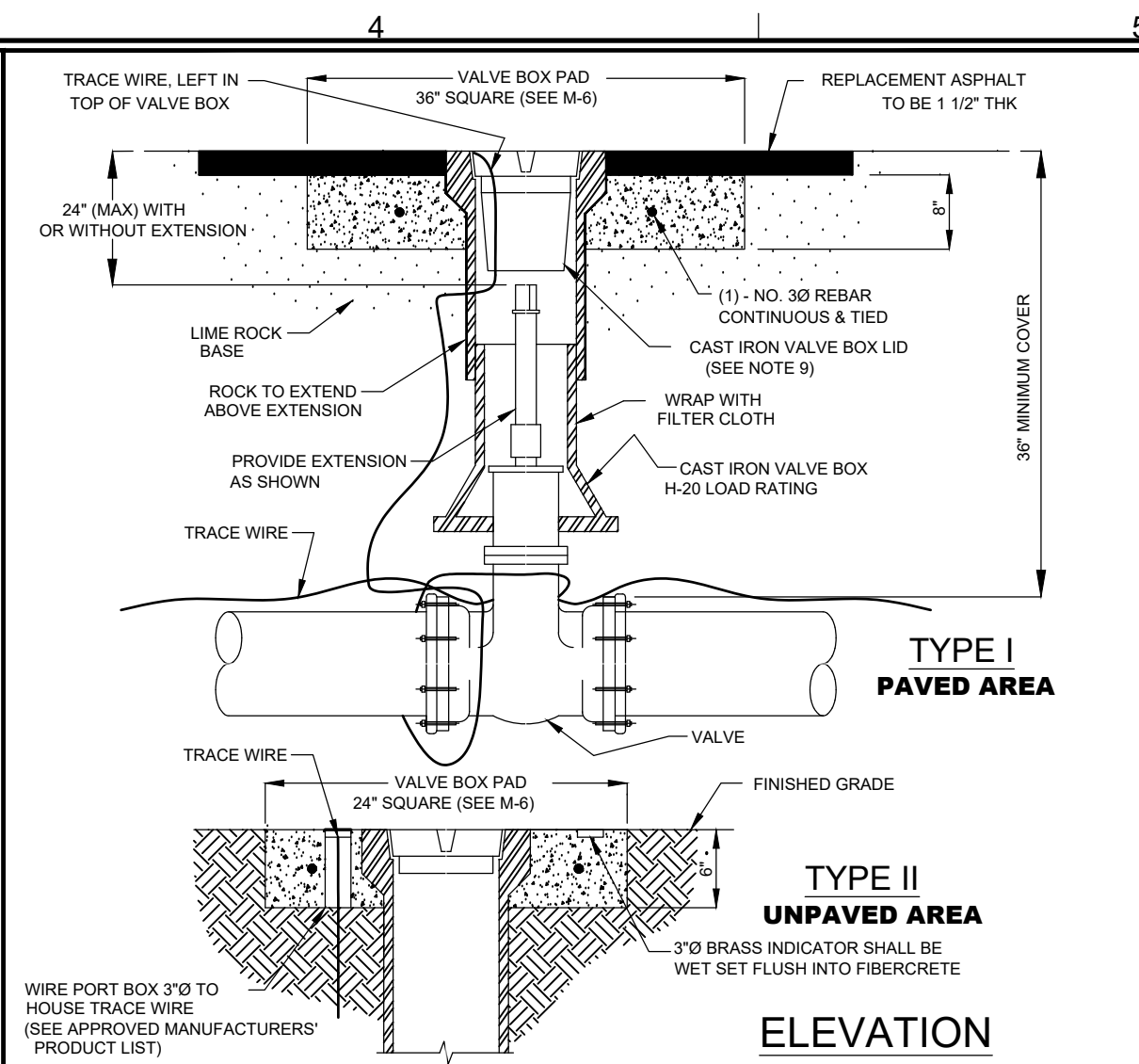
**NOTES**

- WHERE SOIL CONDITIONS CANNOT BE MAINTAINED AS SHOWN ABOVE, PROVIDE METHOD OF CONSTRUCTION TO IRCUDS FOR APPROVAL.
- SHEETING WILL BE REQUIRED AS DETERMINED IN THE FIELD IN ACCORDANCE WITH OSHA REGULATIONS.
- COMPACTION PERCENTAGES SHOWN REFER TO AASHTO T-180 MODIFIED PROCTOR METHOD.
- MECHANICAL COMPACTION NOT ALLOWED BELOW THIS LEVEL OTHER THAN HAND VIBRATORY MEANS. COMPACTION REPORTS REQUIRED.
- MINIMUM TRENCH WIDTH "W" = PIPE O.D. PLUS 2'-0".
- 2" DETECTION TAPE WITH METALLIC BACKING TO BE INSTALLED OVER MAIN 6" BELOW BOTTOM OF BASE COURSE. TAPE TO BE MARKED "CAUTION-WATER LINE BELOW", "CAUTION-FORCE MAIN BELOW", OR "CAUTION-REUSE MAIN BELOW". TRACE WIRE SHALL BE USED CONTINUOUSLY ON ALL PIPE. SEE TRACE WIRE DETAIL M-13.
- ALL RESTORATION IN EXCESS OF RIGHT-OF-WAYS OR WHEN REQUIRED BY OTHER JURISDICTIONAL AGENCIES SHALL CONFORM TO IRCUDS SPECIFICATIONS OR THE OTHER JURISDICTIONAL AGENCY SPECIFICATION, WHICHEVER IS MORE STRINGENT.
- ALL PIPE TO BE LOCATED A MINIMUM OF 5' O.C. (TYPICAL) FROM EDGE OF PAVEMENT. PER FDOT INDEX 105.
- EXCAVATABLE FLOWABLE FILL IS ALLOWED WITH PRIOR APPROVAL OF PROPOSED MATERIAL STRENGTH BY COUNTY PUBLIC WORKS ENGINEER OR DESIGNER.



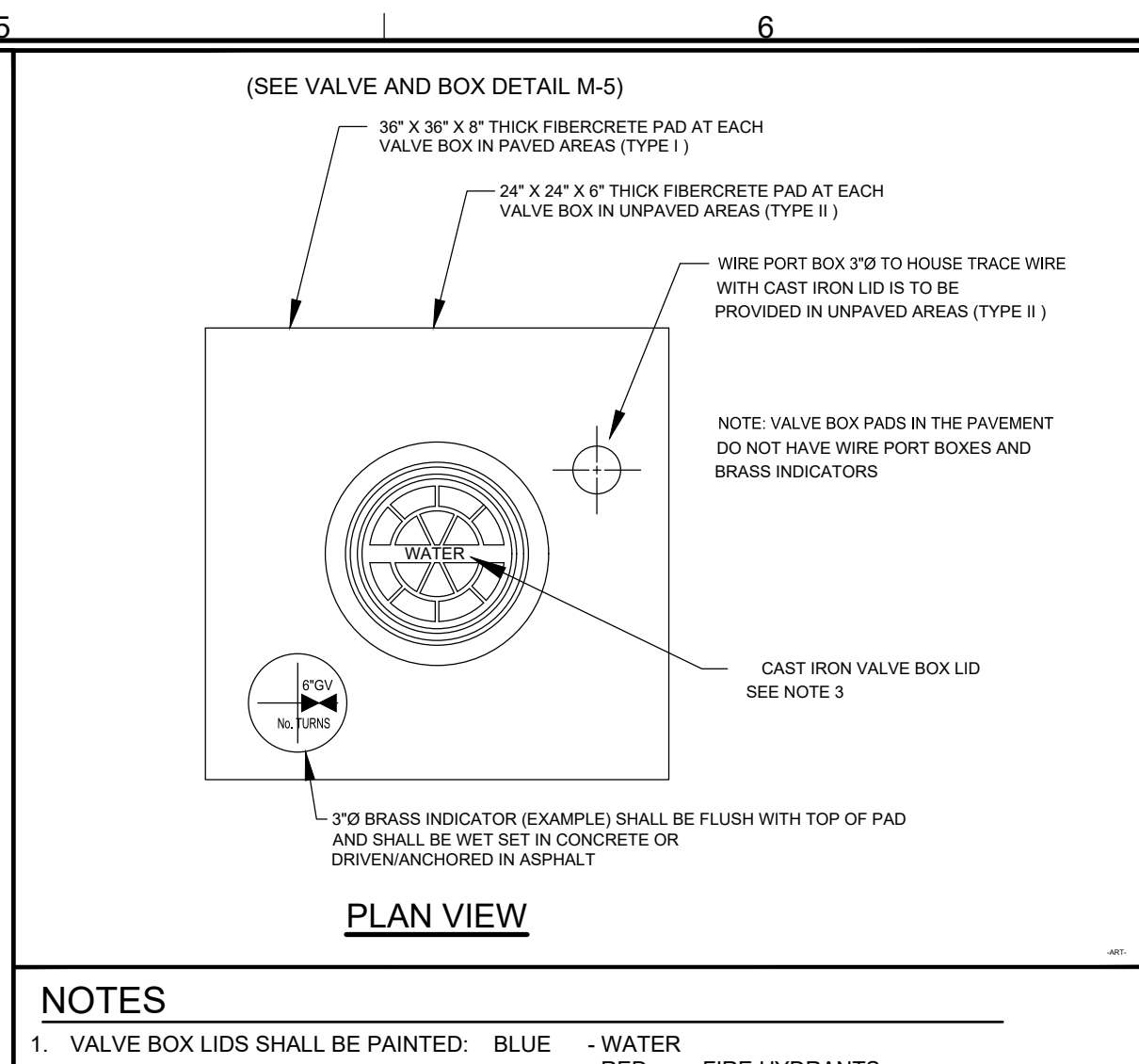
**NOTES**

- WHERE SOIL CONDITIONS CANNOT BE MAINTAINED AS SHOWN ABOVE, PROVIDE METHOD OF CONSTRUCTION TO IRCUDS FOR APPROVAL.
- SHEETING WILL BE REQUIRED AS DETERMINED IN THE FIELD IN ACCORDANCE WITH OSHA REGULATIONS.
- NEW SURFACE MATERIALS SHALL BE CONSISTENT IN DEPTH WITH EXISTING MATERIALS AND SHALL HAVE LAPPED JOINTS. (1-1/2" MIN. THK). PAVEMENT MATERIAL TYPE TO BE SPECIFIED.
- MECHANICAL COMPACTION NOT ALLOWED BELOW THIS LEVEL OTHER THAN HAND VIBRATORY MEANS.
- COMPACTION PERCENTAGES SHOWN REFER TO AASHTO T-180 MODIFIED PROCTOR METHOD.
- ALL ROADWAY RESTORATION SHALL COMPLY WITH INDIAN RIVER COUNTY PUBLIC WORKS/FDOT STANDARDS (SEE PUBLIC WORKS FOR TYPICAL CONSTRUCTION DRAWINGS).
- COMPACTION REPORTS REQUIRED BY IRCUDS.
- MINIMUM TRENCH WIDTH "W" = PIPE O.D. PLUS 2'-0".
- 2" DETECTION TAPE WITH METALLIC BACKING TO BE INSTALLED OVER MAIN 6" BELOW BOTTOM OF BASE COURSE. TAPE TO BE MARKED "CAUTION-WATER LINE BELOW", "CAUTION-FORCE MAIN BELOW", OR "CAUTION-REUSE MAIN BELOW". TRACE WIRE SHALL BE USED CONTINUOUSLY ON ALL PIPE. SEE TRACE WIRE DETAIL M-13.
- COMPACT SHOULDER TO A MINIMUM OF 98% OF MAXIMUM DENSITY IN RIGHT-OF-WAY.
- ALL PIPE TO BE LOCATED A MINIMUM OF 9' O.C. (TYPICAL) FROM EDGE OF PAVEMENT. ALL RESTORATION (SODDING) SHALL BE PER FDOT INDEX 105.
- EXCAVATABLE FLOWABLE FILL IS ALLOWED WITH PRIOR APPROVAL OF PROPOSED MATERIAL STRENGTH BY COUNTY PUBLIC WORKS ENGINEER OR DESIGNER.



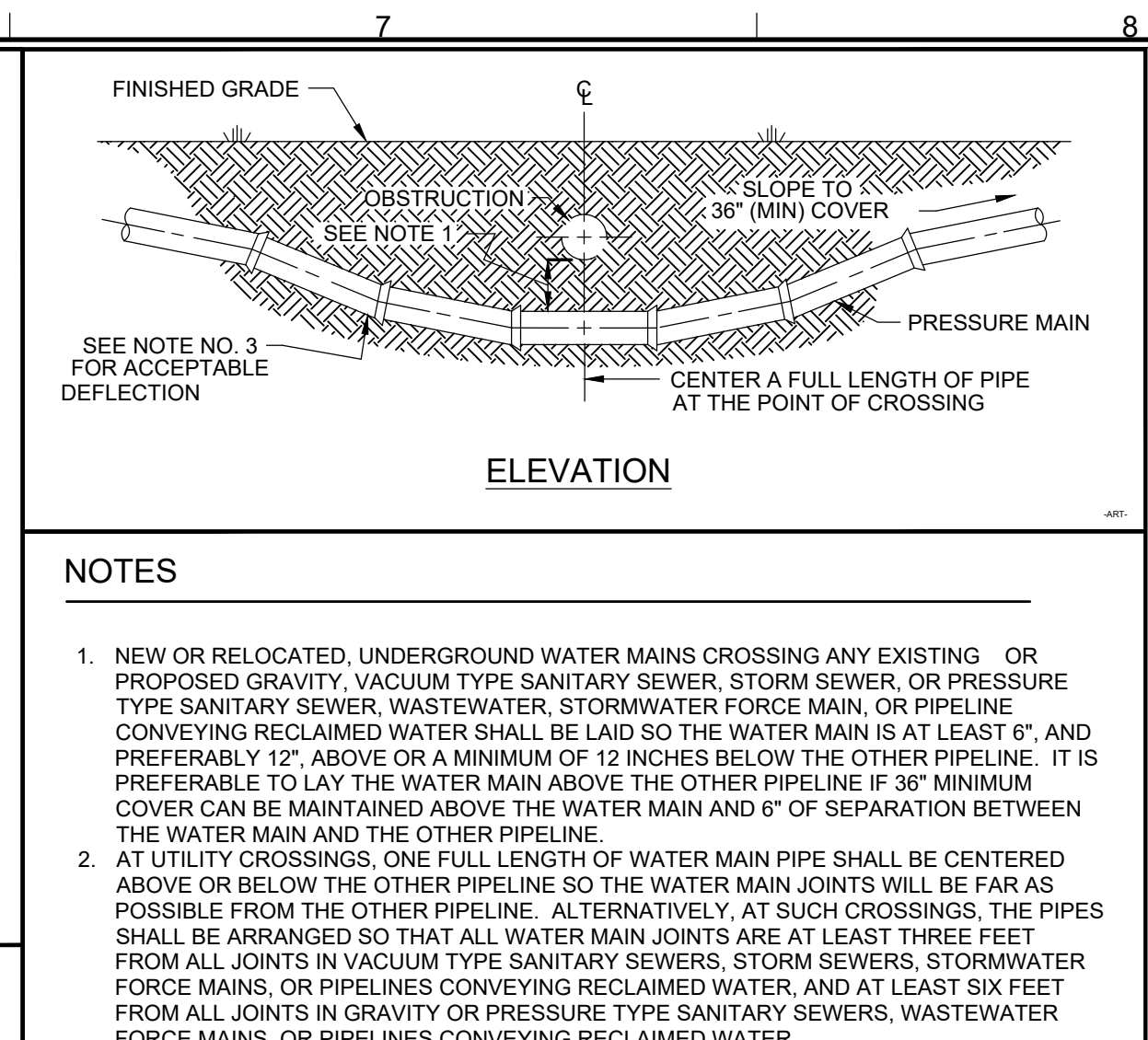
**NOTES**

- ALL VALVE BOXES SHALL BE SHAFT/SCREW TYPE OR SHAFT/SLIP TYPE AND CANNOT REST ON THE VALVE.
- ALL VALVE BOLTS SHALL BE STAINLESS STEEL WITH BRASS NUTS.
- PERMANENT LAND MARKERS ARE TO BE INSTALLED ADJACENT TO ALL VALVES IN UNPAVED AREAS AS DIRECTED BY IRCUDS. (SEE PERMANENT LAND MARKER DETAIL M-9).
- ALL VALVES REQUIRE STATE PLANE COORDINATES.
- TRACER WIRE IS REQUIRED. (SEE TRACE WIRE DETAIL M-13).
- REFLECTIVE MARKERS ARE TO BE LOCATED IN ROADWAY FOR ALL VALVES. (DETAIL W-1)
- REFLECTIVE MARKERS FOR:
  - FIRE HYDRANT - BLUE
  - WATER MAIN VALVE - WHITE
  - FORCE MAIN VALVE - GREEN
  - REUSE MAIN VALVE - PURPLE
  - BROKE - BROWN
- REFLECTIVE MARKERS SHALL NOT BE PLACED IN BIKE LANES.
- VALVE BOX LID LOCATED IN PAVEMENT SHALL BE A MINIMUM 24 LBS. WITH A MINIMUM 6" LONG THROAT.
- VALVE BOX SHALL COMPLY WITH FDOT STANDARDS AS APPLICABLE.
- VALVE EXTENSIONS OVER 36" REQUIRE IRCUDS ENGINEERING APPROVAL.
- VALVE SPACING ON WATER MAINS SHALL NOT EXCEED 1,000' MAXIMUM.



**NOTES**

- VALVE BOX LIDS SHALL BE PAINTED:
  - BLUE - WATER
  - RED - FIRE HYDRANTS
  - GREEN - FORCE MAINS
  - PURPLE - REUSE MAINS
  - BROWN - BRINE
- IN UNPAVED AREAS (SEE M-5, TYPE II) A BRASS VALVE INDICATOR IS TO BE PROVIDED WITH ENGRAVED DIAGRAM OF VALVE LOCATION AND DESCRIPTION. (SEE EXAMPLE ABOVE) INDICATOR SHALL BE FLUSH WITH VALVE PAD.
- VALVE BOX LID LOCATED IN PAVEMENT SHALL BE A CAST IRON, STAY-PUT COVER, MINIMUM 24 LBS. WITH A MINIMUM 6" LONG THROAT AND SHALL BE MARKED WITH RAISED LETTERS: "WATER", "SEWER", "BRINE", OR "REUSE WATER" AS APPLICABLE.
- VALVE BOX SHALL COMPLY WITH FDOT STANDARDS AS APPLICABLE.
- NO VALVE RINGS ARE TO BE USED.
- IN TYPE I, PAVED AREAS, THE VALVE BOX PAD TOP ELEVATION SHALL BE EVEN WITH THE ROCK GRADE TO ALLOW BOTH LAYERS OF ASPHALT TO COVER THE VALVE BOX PAD WITH THE FINAL ASPHALT LAYER FLUSH WITH THE TOP OF THE VALVE BOX. (SEE VALVE AND BOX DETAIL M-5)



**NOTES**

- NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY, VACUUM TYPE SANITARY SEWER, STORM SEWER, OR PRESSURE TYPE SANITARY SEWER, WASTEWATER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE WATER MAIN IS AT LEAST 6", AND PREFERABLY 12", ABOVE OR A MINIMUM OF 12 INCHES BELOW THE OTHER PIPELINE. IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE IF 36" MINIMUM COVER CAN BE MAINTAINED ABOVE THE WATER MAIN AND 6" OF SEPARATION BETWEEN THE WATER MAIN AND THE OTHER PIPELINE.
- AT UTILITY CROSSINGS, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER, AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER.
- CONSTRUCT STANDARD CROSSING NOT TO EXCEED 75% OF THE MANUFACTURER'S MAXIMUM JOINT DEFLECTION.
- OTHER METHODS OF RESTRAINT MAY BE USED AS APPROVED BY IRCUDS IN LIEU OF DEFLECTING THE PIPE AS SHOWN ABOVE.
- TRACER WIRE SHALL BE INSTALLED ABOVE THE PIPE. (SEE DETAIL M-13)
- ALL WATER AND SEWER PIPING SHALL BE LOCATED A MINIMUM HORIZONTAL SEPARATION EQUAL TO THE DEPTH OF THE PIPE FROM ANY PERMANENT ABOVE GROUND STRUCTURES (I.E. WALLS, TREES, TRANSFORMER PADS, ETC.) AND A MINIMUM HORIZONTAL SEPARATION EQUAL TO FOUR (4) FEET FROM ANY UNDERGROUND UTILITIES (I.E. GAS MAINS, TELEPHONE LINES, CABLE LINES, IRRIGATION MAINS, ETC.)

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES

**TRENCH DETAIL (UNPAVED EASEMENTS)**

DRAWING NO. **M-1**

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES

**TRENCH DETAIL (PAVED AREAS & SHOULDERS)**

DRAWING NO. **M-2**

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES

**VALVE AND BOX**

DRAWING NO. **M-5**

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES

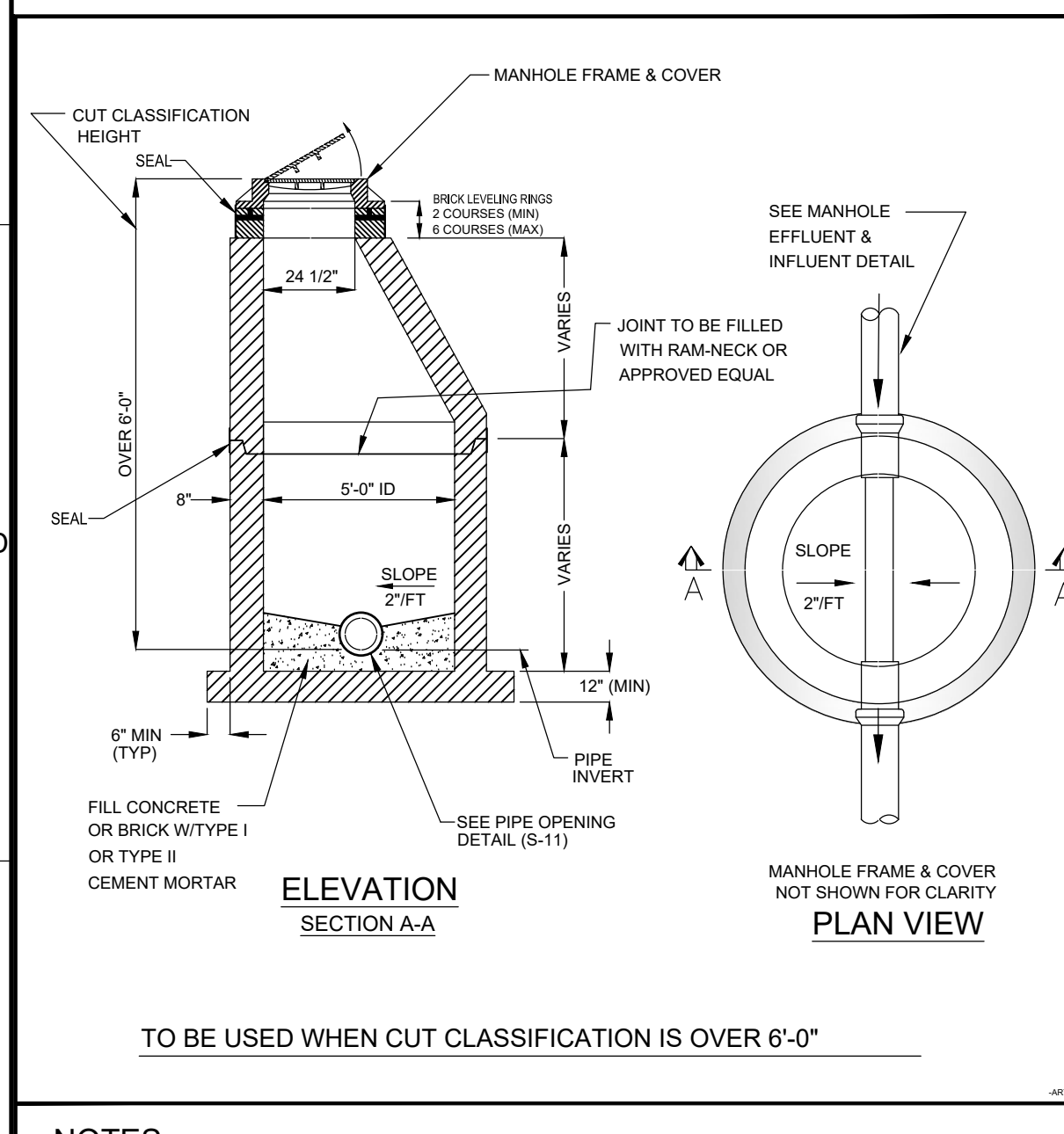
**VALVE BOX PAD**

DRAWING NO. **M-6**

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES

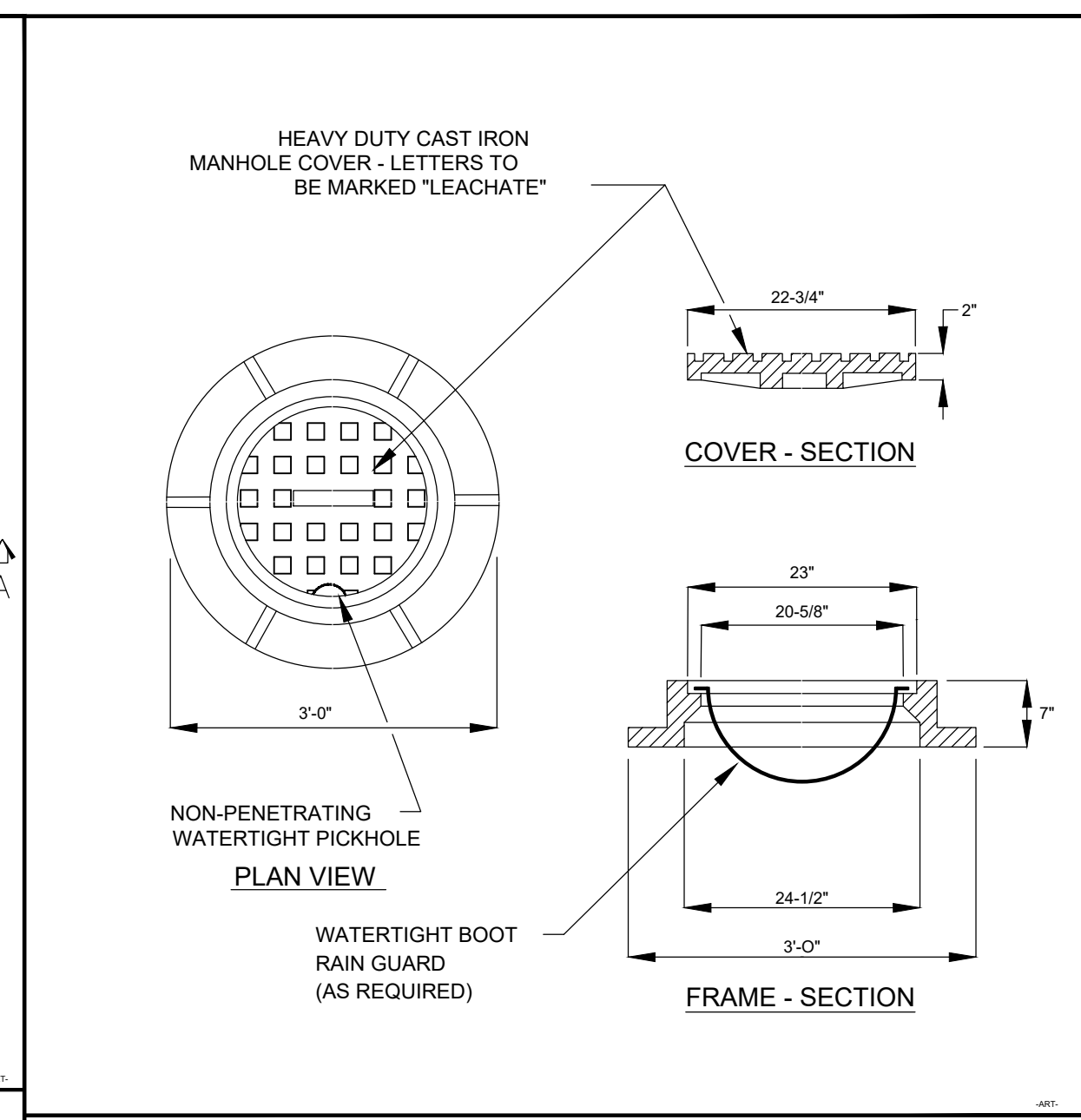
**UTILITY CROSSINGS**

DRAWING NO. **M-4**



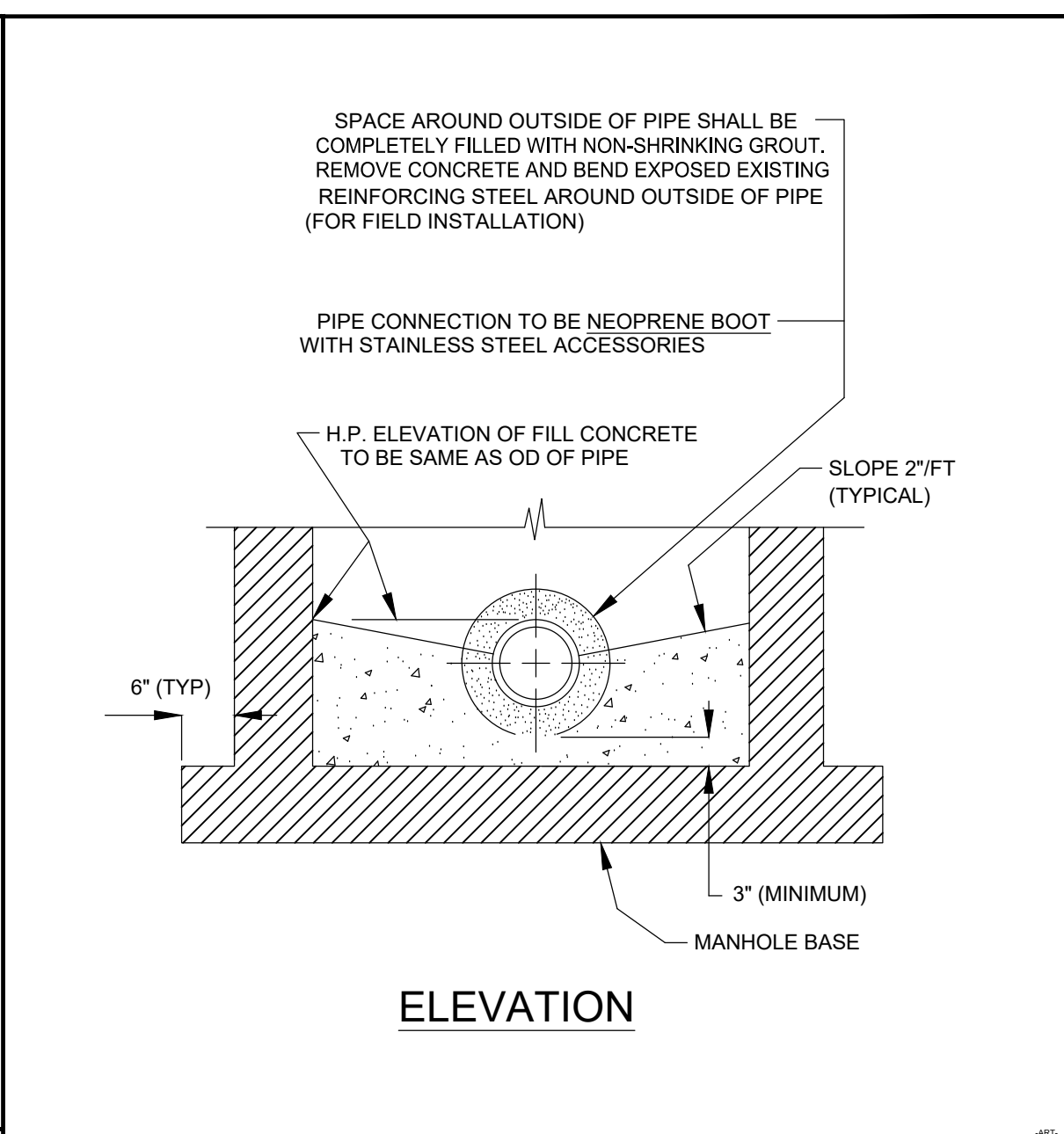
**NOTES**

- SEE MANHOLE SPECIFICATIONS ON DRAWING NO. S-5
- SEE STANDARD MANHOLE CASTING DRAWING NO. S-4
- SEE PIPE OPENING DETAIL DRAWING NO. S-11
- SEE MANHOLE EFFLUENT & INFLUENT DETAIL DRAWING NO. S-12
- SEAL SHALL BE USED AT ALL JOINTS. SEE DRAWING S-5, NOTE 20.



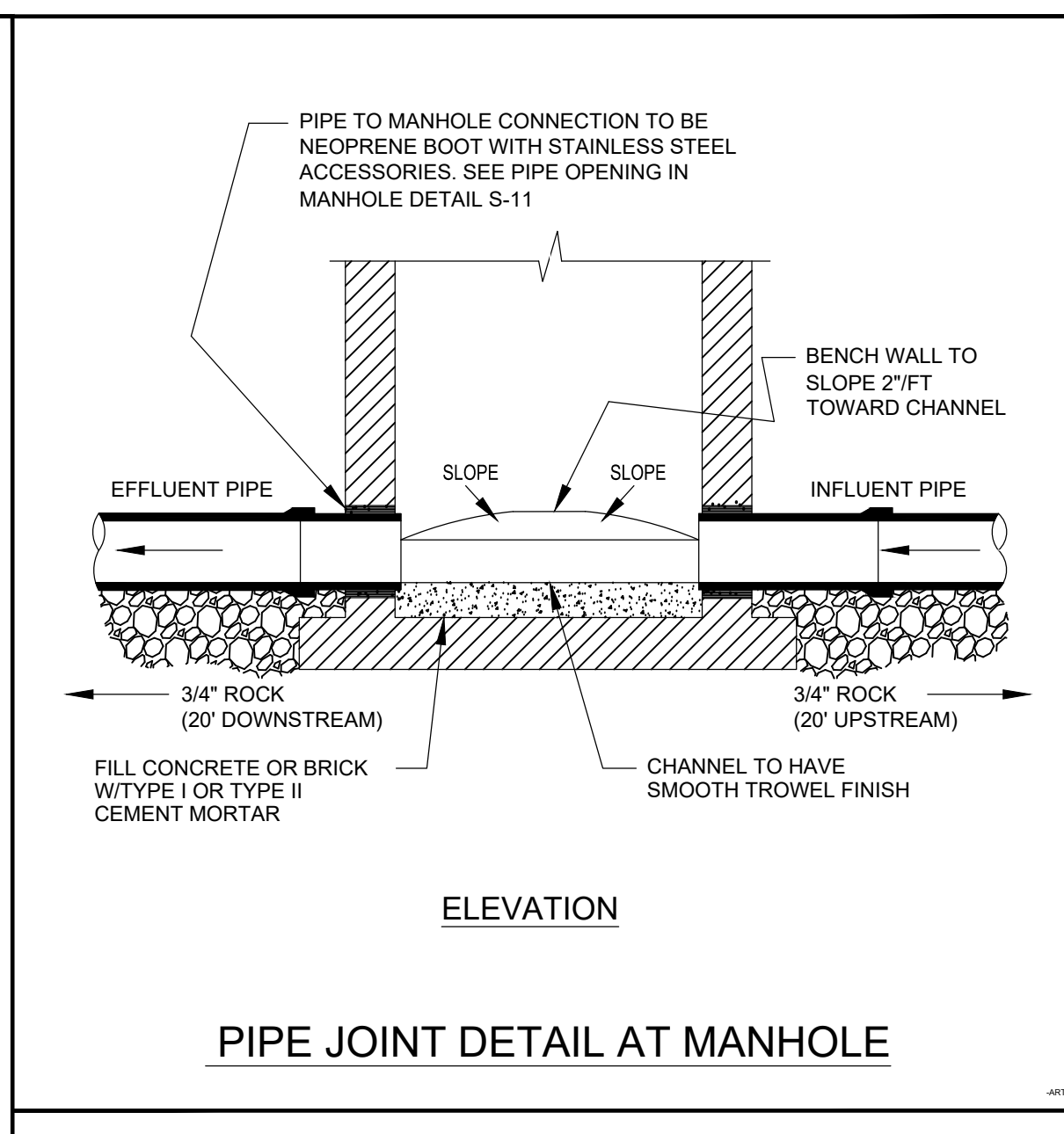
**NOTES**

- A WATERTIGHT BOOT RAIN GUARD SHALL BE PROVIDED FOR ALL MANHOLE FRAME/COVERS AND APPROVED BY INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES.
- ALL MATERIALS ARE TO BE PER IRCUDS APPROVED MANUFACTURERS' PRODUCT LIST.
- A U.S. FOUNDRY 420 RING AND "C" COVER IS SHOWN IN ABOVE DRAWING.



**NOTES**

- SEE MANHOLE SPECIFICATIONS ON DRAWING NO. S-5, NOTES 2,4,5,7,10, AND 16.
- ALL MATERIALS ARE TO BE PER IRCUDS APPROVED MANUFACTURERS' PRODUCT LIST.



**NOTE**

- PIPE JOINT DETAIL IS TYPICAL FOR ALL PIPE TO MANHOLE CONNECTIONS.
- ALL MATERIALS ARE TO BE PER IRCUDS APPROVED MANUFACTURERS' PRODUCT LIST.
- 3/4" ROCK TO BE USED AS BEDDING FOR 20' UPSTREAM AND DOWNSTREAM OF MANHOLE.
- SEE MANHOLE SPECIFICATIONS ON DRAWING S-5, NOTE 16.

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES

**MANHOLE STANDARD-DEEP**

DRAWING NO. **S-8**

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES

**STANDARD MANHOLE CASTING**

DRAWING NO. **S-4**

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES

**PIPE OPENING IN MANHOLE DETAIL**

DRAWING NO. **S-11**

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES

**MANHOLE INFLUENT & EFFLUENT PIPING DETAIL**

DRAWING NO. **S-12**

**Geosyntec consultants**

1200 RIVERPLACE BOULEVARD, SUITE 710 JACKSONVILLE, FLORIDA 32207 USA  
PHONE: 904.858.1818 - FAX: 904.396.1143  
CERTIFICATE OF AUTHORIZATION NO. 4321

1325 74th AVENUE SW VERO BEACH, FLORIDA 32969 USA  
PHONE: 772.770.5112

REV: 12/13/2023  
DATE: 12/13/2023  
DESCRIPTION: ISSUE FOR BID  
DRN: JJV  
APP: KBT

TITLE: **LCS AND LDS DETAILS 3**

PROJECT: **PHASE II - CELL 3 CONSTRUCTION**

SITE: **INDIAN RIVER COUNTY LANDFILL**

DESIGN BY: KBT  
DATE: DECEMBER 2023

DRAWN BY: JJV  
PROJECT NO.: FL9363A

CHECKED BY: TC  
FILE: FL9363A-C16A

REVIEWED BY: SA  
DRAWING NO.: 16 OF 24

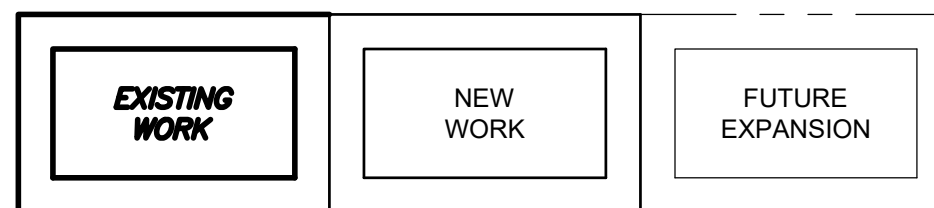
APPROVED BY: KBT

FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION



ONE LINE OR CONTROL DIAGRAM	PLAN	DESCRIPTION																
	CB	LOW VOLTAGE AIR OR MOLDED CASE CIRCUIT BREAKER, 3 POLE UNLESS OTHERWISE NOTED.																
		COMBINATION MOTOR CIRCUIT PROTECTOR AND MAGNETIC MOTOR STARTER, FULL VOLTAGE NON-REVERSING UNLESS OTHERWISE NOTED: *FVR - FULL VOLTAGE REVERSING RVNR - REDUCED VOLTAGE NON-REVERSING RVAT - REDUCED VOLTAGE AUTOTRANSFORMER RVSS - REDUCED VOLTAGE SOLID STATE																
		NON-FUSIBLE DISCONNECT SWITCH, (NEMA 4XSS) 600 VOLT, 3 POLE *AMPERE RATING NOTED IF OTHER THAN 30A (DIAGRAMMATICALLY SHOWN, CONTRACTOR SHALL FIELD LOCATE)																
	T	TRANSFORMER, RATINGS AND CONNECTIONS AS NOTED, UNLESS OTHERWISE NOTED ON THE SINGLE LINE DIAGRAMS. ALL DRY TYPE TRANSFORMERS SERVICING ADMINISTRATIVE AND LABORATORY SPACES SHALL HAVE A K FACTOR OF 4. ISOLATION TRANSFORMERS SHALL HAVE A K-20 RATING																
		CURRENT TRANSFORMER *QUANTITY A = PRIMARY AMPERES																
		POTENTIAL TRANSFORMER *QUANTITY V = PRIMARY VOLTAGE																
	G	GENERATOR, RATINGS AND CONNECTIONS AS NOTED																
		AUTOMATIC OR MANUAL TRANSFER SWITCH NO. 1 (ATS-1), (MITS-1) "N" INDICATES NORMAL OR PREFERRED SOURCE "S" INDICATES STANDBY OR ALTERNATE SOURCE 100A INDICATES CONTINUOUS CURRENT RATING																
	M	MOTOR, NUMERAL INDICATES HORSEPOWER																
		PUSHBUTTON, MOMENTARY CONTACT, SPRING RETURN, NORMALLY CLOSED																
		PUSHBUTTON, MOMENTARY CONTACT, SPRING RETURN, NORMALLY OPEN																
	ES	EMERGENCY STOP PUSHBUTTON WITH RED MUSHROOM HEAD OPERATOR (MAINTAINED CONTACT)																
	PBL	START-STOP PUSHBUTTON CONTROL STATION (MOMENTARY CONTACT) WITH LOCKOUT DEVICE ON STOP																
	PBM	START-STOP PUSHBUTTON CONTROL STATION, MAINTAINED CONTACT WITH LOCKOUT DEVICE ON STOP																
	S/S	OFF/ON SELECTOR SWITCH																
	LR	LOCAL/REMOTE SELECTOR SWITCH																
		3 POSITION SELECTOR SWITCH, MAINTAINED CONTACT O-OPEN X-CLOSED <table border="1"> <thead> <tr> <th>POSITION</th> <th>TOP CONTACT</th> <th>MIDDLE CONTACT</th> <th>BOTTOM CONTACT</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>X</td> <td>O</td> <td>O</td> </tr> <tr> <td>B</td> <td>O</td> <td>X</td> <td>O</td> </tr> <tr> <td>C</td> <td>O</td> <td>O</td> <td>X</td> </tr> </tbody> </table> NAMEPLATE (A/B/C) HOA - HAND/OFF/AUTO HOR - HAND/OFF/REMOTE LOR - LOCAL/OFF/REMOTE	POSITION	TOP CONTACT	MIDDLE CONTACT	BOTTOM CONTACT	A	X	O	O	B	O	X	O	C	O	O	X
POSITION	TOP CONTACT	MIDDLE CONTACT	BOTTOM CONTACT															
A	X	O	O															
B	O	X	O															
C	O	O	X															
	GDVF #	GAS DETECTOR / VENTILATION FAILURE ALARM # INDICATES TYPE OF UNIT 1=MASTER, 2=REMOTE																
		MOTOR STARTER COIL, NUMBER AS INDICATED TO DENOTE INTERLOCKING ONLY																
		CONTROL RELAY COIL, NUMBER AS INDICATED																

ONE LINE OR CONTROL DIAGRAM	PLAN	DESCRIPTION
		PILOT LIGHT, COLOR AS NOTED *R - RED G - GREEN B - BLUE W - WHITE A - AMBER
		PILOT LIGHT, PUSH-TO-TEST TYPE, COLOR AS NOTED ABOVE.
	* - ##	FIELD INSTRUMENT, TAG NO. AS INDICATED * INDICATES INSTRUMENT TYPE DEFINED ON LOOP SHEETS OR P & ID ## INDICATES LOOP NO.
	LS OR ■	LIQUID LEVEL (FLOAT) SWITCH
	PS OR ■	PRESSURE OR VACUUM SWITCH
	TS OR (T) OR ■	TEMPERATURE SWITCH OR THERMOSTAT
	FS OR ■	FLOW SWITCH (AIR, WATER, ETC.)
	ZS OR ■	POSITION (LIMIT) SWITCH
	WS OR ■	TORQUE SWITCH
		CONDUCTORS OR CONDUITS CROSSING PATHS BUT NOT CONNECTED
		CONDUCTORS ELECTRICALLY CONNECTED
	S	SOLENOID VALVE
		LIGHTNING ARRESTER
		GROUND OR GROUND ROD
		FUSE, AMPERE RATING AS NOTED
	HTR	STRIP HEATER OR HEATING ELEMENT
		INDUCTOR
		CONTACT, NORMALLY OPEN (NO)
		CONTACT, NORMALLY CLOSED (NC)
		OVERLOAD RELAY HEATER
		KEY INTERLOCK
	TB	TERMINAL OR TEST BLOCK
	RTD	RESISTANCE TEMPERATURE DETECTOR
	VE OR - -	VIBRATION DETECTOR
	DM	DAMPER MOTOR
	ETM	ELAPSED TIME METER
		MOTOR OPERATED VALVE OR GATE
		INDICATES LIMITS OF ELECTRICAL EQUIPMENT OR WIRING ENCLOSURE



SYMBOL	DESCRIPTION
	INCANDESCENT, COMPACT FLUORESCENT OR H.I.D. TYPE LIGHTING FIXTURE "A" - FIXTURE TYPE (SEE LIGHTING FIXTURE SCHEDULE) "b" - CONTROLLED BY SWITCH "b" "3" - CIRCUIT NUMBER
	HOME RUN TO DESIGNATED EQUIPMENT. BRANCH CIRCUIT CONDUIT WITH 2 NO. 12 AWG BRANCH CIRCUIT CONDUCTORS AND 1 NO. 12 AWG GROUND CONDUCTOR UNLESS OTHERWISE NOTED. NUMBER OF ARROWS INDICATE NUMBER OF CIRCUITS. FOR MINIMUM SIZE CONDUIT PERMITTED REFER TO THE SPECIFICATIONS.
	CONDUIT CONCEALED IN WALL, IN SLAB ABOVE, ABOVE CEILING, IN OR BELOW FLOOR OR UNDERGROUND.
	CONDUIT RUN EXPOSED. RUN PARALLEL OR PERPENDICULAR TO STRUCTURE OR WALL.
	"X" INDICATES EXPLOSION PROOF CONDUIT SEAL FITTING.
	CONCRETE ENCASED DUCTBANK. WIDTH VARIES, SEE DUCTBANK SECTION/DETAILS FOR REQUIREMENTS AND WIDTH
	CONDUIT STUBBED OUT AND CAPPED
	DENOTES A QUANTITY OF TWO (2) 3-INCH CONDUITS EACH CONTAINING THREE NO. 3/0 AWG CONDUCTORS AND 1 NO. 2 AWG GROUND CONDUCTOR.
	DENOTES A QUANTITY OF TWO INSTRUMENT CABLES. EACH CABLE TO CONSIST OF TWO NO. 16 AWG CONDUCTORS TWISTED TOGETHER AND COVERED WITH A METALLIC SHIELD AND AN OVERALL PROTECTIVE JACKET. REFER TO THE SPECIFICATIONS FOR THE EXACT CABLE TO BE PROVIDED.
	SAME AS ABOVE EXCEPT CABLE TO CONSIST OF THREE NO. 16 AWG CONDUCTORS TWISTED, SHIELDED AND COVERED WITH AN OVERALL PROTECTIVE JACKET. REFER TO THE SPECIFICATIONS FOR THE EXACT CABLE TO BE PROVIDED.
	THREE 4-INCH CONDUITS
	FLEXIBLE METAL CONDUIT "WHIP" (3/4" C., 2#12, 1#12G UNLESS OTHERWISE NOTED) FOR RECESSED LIGHTING FIXTURES AND LIQUID TIGHT MOTOR CONNECTIONS
	CONDUIT SEAL FITTING SHOWN IN OTHER THAN CODE REQUIRED LOCATIONS.
	INDICATES MOTOR STARTER AND/OR MOTOR CONTROL EQUIPMENT WITHIN THE ENCLOSURE.
	SINGLE POLE SWITCH "a" INDICATES FIXTURES CONTROLLED.
	POWER PANELBOARD (PP) OR DISTRIBUTION PANELBOARD (DP)
	DUPEX RECEPTACLE, 20A, 120V, 2P, 3W * GFCI - GROUND FAULT CIRCUIT INTERRUPTER TYPE WP - WEATHERPROOF T - TRANSIENT VOLTAGE SURGE SUPPRESSOR IC - ISOLATED GROUND 4 - CIRCUIT NUMBER
	JUNCTION BOX
	PULL BOX
	TERMINAL CABINET
	OCCUPANCY SENSOR
	PHOTOCELL
	EMERGENCY EYEWASH/SHOWER ALARM STATION WITH FLOW SWITCH(ES)
	INDICATED EQUIPMENT AND MATERIALS TO BE DEMOLISHED
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 4 CONSTRUCTION (OR GASKETED AND SUITABLE FOR USE IN A WET LOCATION WHERE NEMA STANDARDS DO NOT APPLY) UNLESS OTHERWISE NOTED.
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL CONFORM TO N.E.C. REQUIREMENTS FOR THE HAZARDOUS AREA CLASSIFICATION SHOWN.
	GROUND SYSTEM GRID OR LOOP, 36" BELOW FINISHED GRADE UNLESS OTHERWISE NOTED.
	EXOTHERMIC WELD CONNECTION
	3/4" x 10'-0" GROUND ROD, UNLESS SPECIFIED OTHERWISE.
	GROUND ROD TEST WELL STATION (SEE DETAIL SHEET FOR REQUIREMENTS)
	CHEMICAL GROUND ROD

ABBREVIATIONS	
A	AMPS
AC	ALTERNATING CURRENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AL	ALUMINUM
AIC	AMPERE INTERRUPTING CAPACITY
AMP	AMPERE
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
BKR	BREAKER
C	CONDUIT
CB	CIRCUIT BREAKER
CGD	COMBUSTIBLE GAS DETECTOR
CKT	CIRCUIT
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CR	CONTROL RELAY
CS	CONTROL SWITCH/CONTROL STATION
CU	COPPER
CWS	CONDUIT WALL SEAL
DIA	DIAMETER
DMU	DIGITAL METERING UNIT
DN	DOWN
EC	EMPTY CONDUIT
ELEC	ELECTRICAL
ELEV	ELEVATION
EM	EMERGENCY
ENCL	ENCLOSURE OR ENCLOSED
EQUIP	EQUIPMENT
EX	EXISTING
FU	FUSE
GCP	GENERATOR CONTROL PANEL
GEN	GENERATOR
G, GND	GROUND
GFI	GROUND FAULT INTERRUPTER
HH	HANDHOLE
HT	HEIGHT
HP	HORSEPOWER
HZ	HERTZ
ID	IDENTIFICATION
INSTR	INSTRUMENT
K	KILO (PREFIX)
kcmil	1000 CIRCULAR MILS
KVA	KILOVOLT AMPERES
KW	KILOWATTS
LTG	LIGHTING
LV	LOW VOLTAGE
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MFR	MANUFACTURER
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MTD	MOUNTED
N	NEUTRAL
NC	NORMALLY CLOSED
NO	NORMALLY OPEN OR NUMBER
NTS	NOT TO SCALE
OH	OVERHEAD
PB	PULL BOX
OL	OVERLOAD
PCP	PUMP CONTROL PANEL
PH	PHASE
PMH	POWER MANHOLE
PNL	PANEL OR PANELBOARD
PR	PAIR
PRI	PRIMARY
PVC	POLYVINYL CHLORIDE
RECP	RECEPTACLE
REQD	REQUIRED
QTY	QUANTITY
SA	SURGE ARRESTER
SEC	SECONDS OR SECONDARY
SH	SHIELDED/SPACE HEATER
SHH	SIGNAL HANDHOLE
SPD	SURGE PROTECTIVE DEVICE
SS	STAINLESS STEEL
SV	SOLENOID VALVE
SW	SWITCH
TC	TIME TO CLOSE OR TRAY CABLE
TO	TIME TO OPEN
TS	TWISTED SHIELDED/THERMAL SWITCH
TYP	TYPICAL
UG	UNDERGROUND
V	VOLTS
VA	VOLT AMPS
W	WATTS, WIDTH, WITH, WIRE
WP	WEATHERPROOF
XP	EXPLOSION PROOF
XFMR	TRANSFORMER

**NOTES:**

- DESIGN AND DETAIL TAKEN FROM PERMIT MOD 0128769-022-SC AND CELL 2 CONSTRUCTION DRAWINGS PREPARED BY CDM SMITH.
- THIS IS A STANDARD LEGEND. SOME SYMBOLS MAY NOT APPEAR ON THESE DRAWINGS.
- IN GENERAL CONDUIT ROUTING FOR EQUIPMENT AND DEVICES IS NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING ALL CONDUITS WHICH SHALL INCLUDE CONDUITS SHOWN ON ONE-LINE AND RISER DIAGRAMS AND HOME-RUNS SHOWN ON PLAN DRAWINGS. REFER TO SPECIFICATIONS FOR MATERIALS AND INSTALLATION REQUIREMENTS.
- THE WIRING DIAGRAMS, QUANTITY AND SIZE OF WIRES AND CONDUITS REPRESENT A SUGGESTED ARRANGEMENT BASED UPON SELECTED STANDARD COMPONENTS OF ELECTRICAL EQUIPMENT. MODIFICATIONS ACCEPTABLE TO THE ENGINEER MAY BE MADE BY THE CONTRACTOR TO ACCOMMODATE EQUIPMENT ACTUALLY PURCHASED. THE BASIC SEQUENCE AND METHOD OF CONTROL MUST BE MAINTAINED AS INDICATED ON THE DRAWINGS AND/OR SPECIFICATIONS.
- ALL CONDUITS SHALL BE INSTALLED CONCEALED UNLESS OTHERWISE NOTED.
- INTERPRETATION OF ELECTRICAL DRAWINGS: CIRCUIT IDENTIFICATION, ROUTING, AND SIZES OF CONDUITS AND WIRES ARE SHOWN ON THE FOLLOWING DRAWINGS:
  - A. POWER ONE LINE DIAGRAMS: POWER, CONTROL AND SIGNAL WIRING REQUIREMENTS FOR ELECTRICAL DISTRIBUTION EQUIPMENT AND UTILIZATION EQUIPMENT POWERED FROM SWITCHGEAR, SWITCHBOARDS, MOTOR CONTROL CENTERS AND MAJOR POWER DISTRIBUTION PANELBOARDS ARE TYPICALLY SHOWN ON THE ONE LINE DIAGRAMS. THE PARAMETERS IDENTIFIED ON THE ONE LINE DIAGRAMS ARE: CIRCUIT IDENTIFICATION, CIRCUIT ORIGIN AND DESTINATION, CONDUIT SIZE, WIRE SIZE AND QUANTITY FOR COMPLETE CIRCUIT LENGTH, AND AUXILIARY DEVICES ASSOCIATED WITH THE CONTROL/PROTECTION OF THE POWERED EQUIPMENT, AND SIZE OF THE GROUNDING ELECTRODE CONDUCTORS.
  - B. INSTRUMENTATION AND CONTROL RISER DIAGRAMS: POWER, CONTROL, SIGNAL AND DATA HIGHWAY WIRING REQUIREMENTS FOR INSTRUMENTS AND CONTROL DEVICES CONTROLLED/MONITORED FROM INSTRUMENTATION AND CONTROL PANELS SUCH AS RTUS, PLCs, TERMINAL CABINETS, AND REMOTE I/O PANELS ARE TYPICALLY SHOWN ON THE INSTRUMENTATION AND CONTROL ONE LINE DIAGRAMS. THE PARAMETERS IDENTIFIED ON THE ONE LINE DIAGRAMS ARE: CIRCUIT IDENTIFICATION, CIRCUIT ORIGIN AND DESTINATION, CONDUIT SIZE, WIRE SIZE, QUANTITY AND TYPE FOR COMPLETE CIRCUIT LENGTH, AND AUXILIARY DEVICES ASSOCIATED WITH THE CONTROL/PROTECTION OF THE POWERED EQUIPMENT.
  - C. FLOOR PLANS: FOR DETERMINING THE LENGTH OF CIRCUITS LOCATED WITHIN STRUCTURES. FLOOR PLANS SHOW THE LOCATION OF ELECTRICAL DISTRIBUTION EQUIPMENT, CONTROL PANELS, UTILIZATION EQUIPMENT, INSTRUMENTS, ANCILLARY EQUIPMENT AND DEVICES AND THE ANTICIPATED PENETRATION LOCATIONS WHERE CONDUITS EXIT/ENTER THE STRUCTURE. HOMERUNS MAY ALSO BE SHOWN FROM MISCELLANEOUS EQUIPMENT NOT SHOWN ON A ONE LINE OR RISER DIAGRAM.
  - D. SITE PLANS: FOR DETERMINING THE LENGTH OF CIRCUITS EXTERIOR TO STRUCTURES AND TO IDENTIFY THE SPECIFIC REQUIREMENTS OF THE UNDERGROUND CONDUITS OR DUCT BANKS. SITE PLANS SHOW THE GENERAL ROUTING OF UNDERGROUND CONDUITS AND DUCT BANKS WITH SECTIONS INDICATING THE CONDUIT SIZE, ARRANGEMENT AND CIRCUIT ROUTING.
  - E. NOTE THAT CONDUIT SIZE WITHIN STRUCTURE IS INDICATED ON ONE-LINE DIAGRAM AND UNDERGROUND SIZE IS INDICATED ON DUCT BANK SECTIONS.

REV	DATE	DESCRIPTION	DRN	APP
-	12/13/2023	ISSUE FOR BID	JJV	KBT

1200 RIVERPLACE BOULEVARD, SUITE 710  
JACKSONVILLE, FLORIDA 32207 USA  
PHONE: 904.858.1818 - FAX: 904.396.1143  
CERTIFICATE OF AUTHORIZATION NO. 4321

1325 74th AVENUE SW  
VERO BEACH, FLORIDA 32968 USA  
PHONE: 770.770.5112

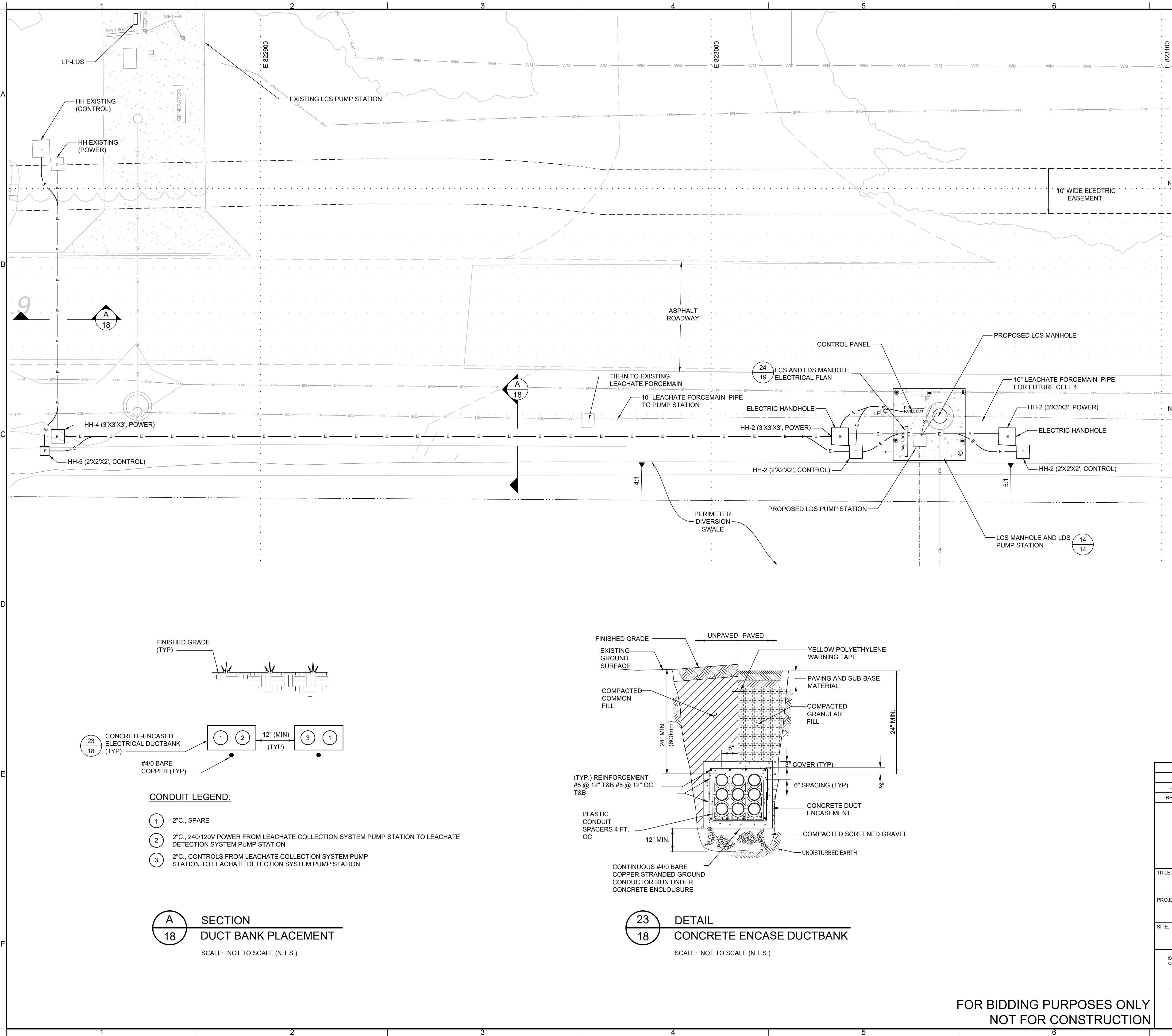
TITLE: **ELECTRICAL SYMBOLS, ABBREVIATIONS, AND NOTES**

PROJECT: **PHASE II - CELL 3 CONSTRUCTION**

SITE: **INDIAN RIVER COUNTY LANDFILL**

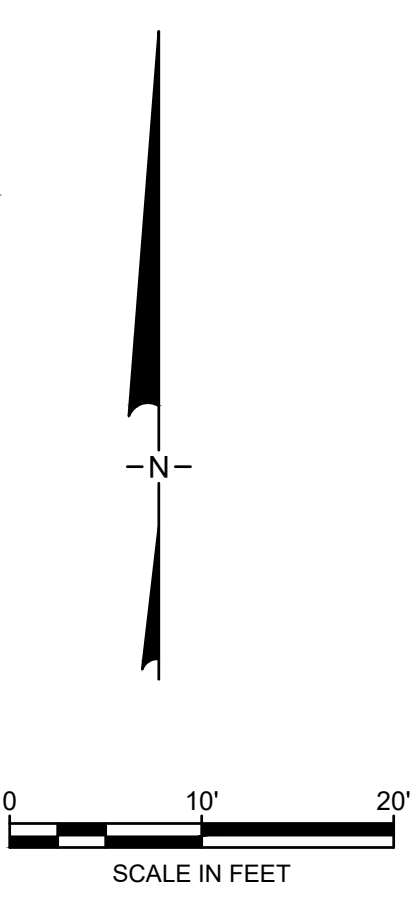
DESIGN BY:	AK	DATE:	DECEMBER 2023
DRAWN BY:	JJV	PROJECT NO.:	FL9363A
CHECKED BY:	TC	FILE:	FL9363A-C19
REVIEWED BY:	SA	DRAWING NO.:	
APPROVED BY:	KBT		17 OF 24

FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION

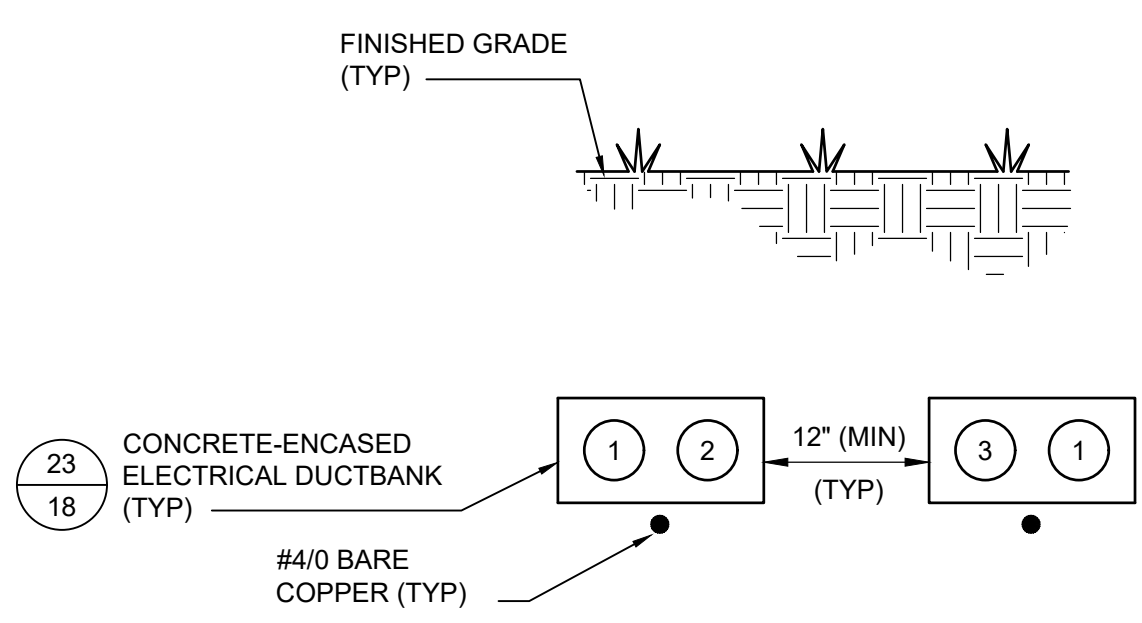


**LEGEND**

	EXISTING GROUND ELEVATION (FEET, NGVD)
	PAVED ROAD
	EXISTING PERIMETER ROAD AND UNPAVED ROAD
	EXISTING UTILITY
	CULVERT
	STATE PLANE COORDINATES
	EXISTING WATERMAIN
	EXISTING GRAVITY LINE
	EXISTING FORCEMAIN
	PROPOSED ELECTRICAL LINE



- NOTES:**
- TOPOGRAPHIC INFORMATION OUTSIDE THE ACTIVE LANDFILL AREA WAS OBTAINED FROM SURVEY PREPARED BY ALERT S INTERNATIONAL & MASTELLER, COMPLETED IN DECEMBER 2022.
  - HORIZONTAL COORDINATES VALUES ARE BASED UPON THE NORTH AMERICAN DATA OF 1983 (NAD83), ADJUSTED TO 1999 COORDINATE SYSTEM, FLORIDA EAST ZONE.
  - CONTOURS AND SPOT ELEVATION ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).
- ELECTRICAL NOTES:**
- DESIGN AND DETAIL TAKEN FROM PERMIT MOD 0128769-022-SC AND CELL 2 CONSTRUCTION DRAWINGS PREPARED BY CDM SMITH.
  - DO NOT SCALE THE ELECTRICAL DRAWINGS REFER TO THE CIVIL, MECHANICAL, DRAWINGS, AND APPROVED MANUFACTURER'S SHOP DRAWINGS FOR THE EXACT LOCATION OF ALL EQUIPMENT.
  - ALL WORK SHALL COMPLY WITH NEC AND LOCAL CODES.
  - CONDUCTORS SHALL NOT BE SPLICED EXCEPT AS NOTED IN SPECS.
  - ALL CONDUITS SHALL HAVE A BOND WIRE SIZED PER TABLE 250.122 OF THE NEC (UNLESS OTHERWISE NOTED).
  - CONTRACTOR SHALL FIELD VERIFY EXISTING UNDERGROUND UTILITIES, PIPING, ETC. REROUTE NEW CONDUITS, DUCTBANK, MANHOLES, PULL BOXES, ETC., AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.
  - COORDINATE WITH FPL BEFORE DIGGING IN THE FPL EASEMENT TO AVOID DAMAGING THE FPL UNDERGROUND FEEDERS.
  - AFTER DUCTBANK INSTALLATION, REPAIR ASPHALT ROADWAY PER SHEET CD-10.

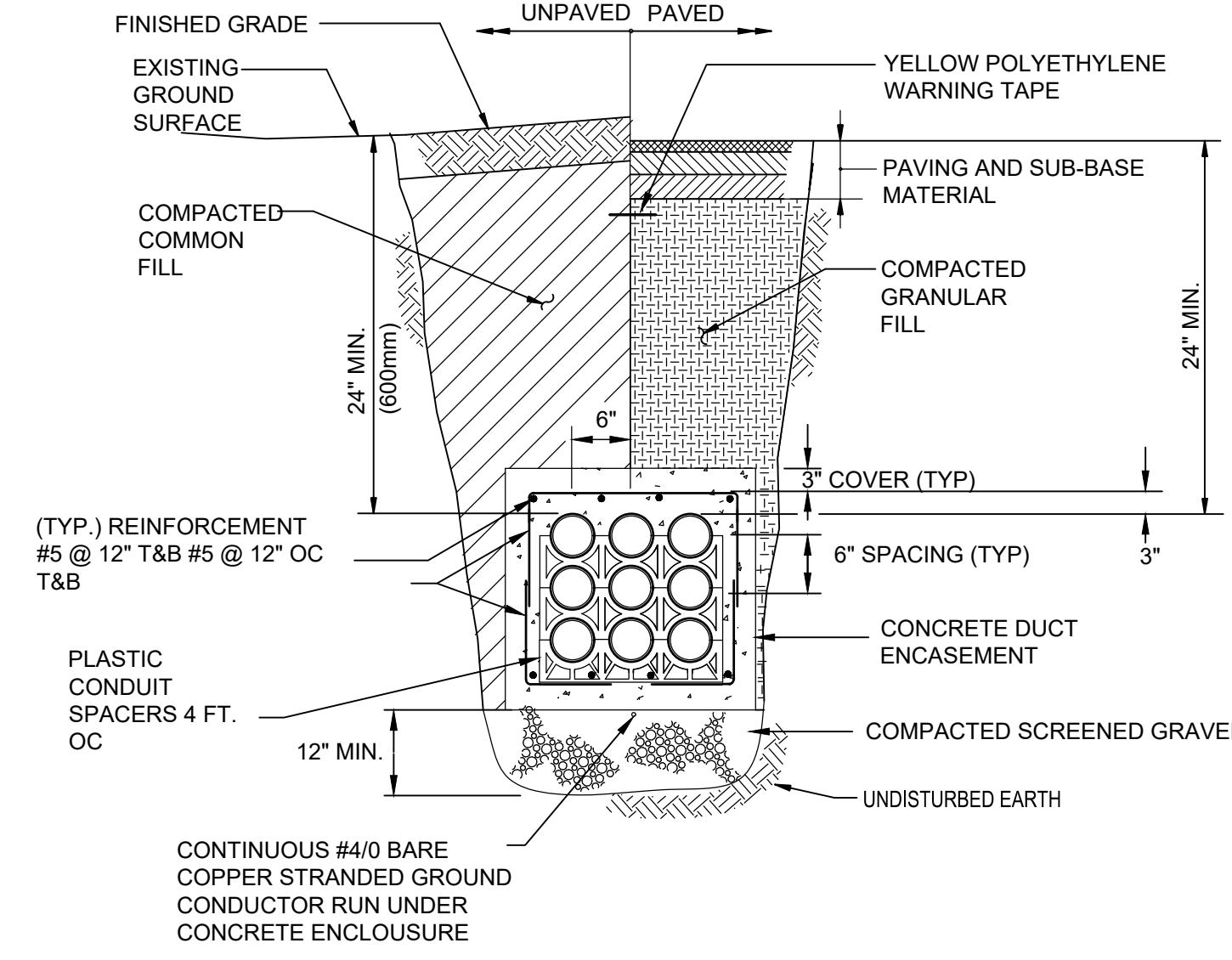


- CONDUIT LEGEND:**
- 2"C., SPARE
  - 2"C., 240/120V POWER FROM LEACHATE COLLECTION SYSTEM PUMP STATION TO LEACHATE DETECTION SYSTEM PUMP STATION
  - 2"C., CONTROLS FROM LEACHATE COLLECTION SYSTEM PUMP STATION TO LEACHATE DETECTION SYSTEM PUMP STATION

**A**  
18

**SECTION**  
DUCT BANK PLACEMENT

SCALE: NOT TO SCALE (N.T.S.)



**23**  
18

**DETAIL**  
CONCRETE ENCASE DUCTBANK

SCALE: NOT TO SCALE (N.T.S.)

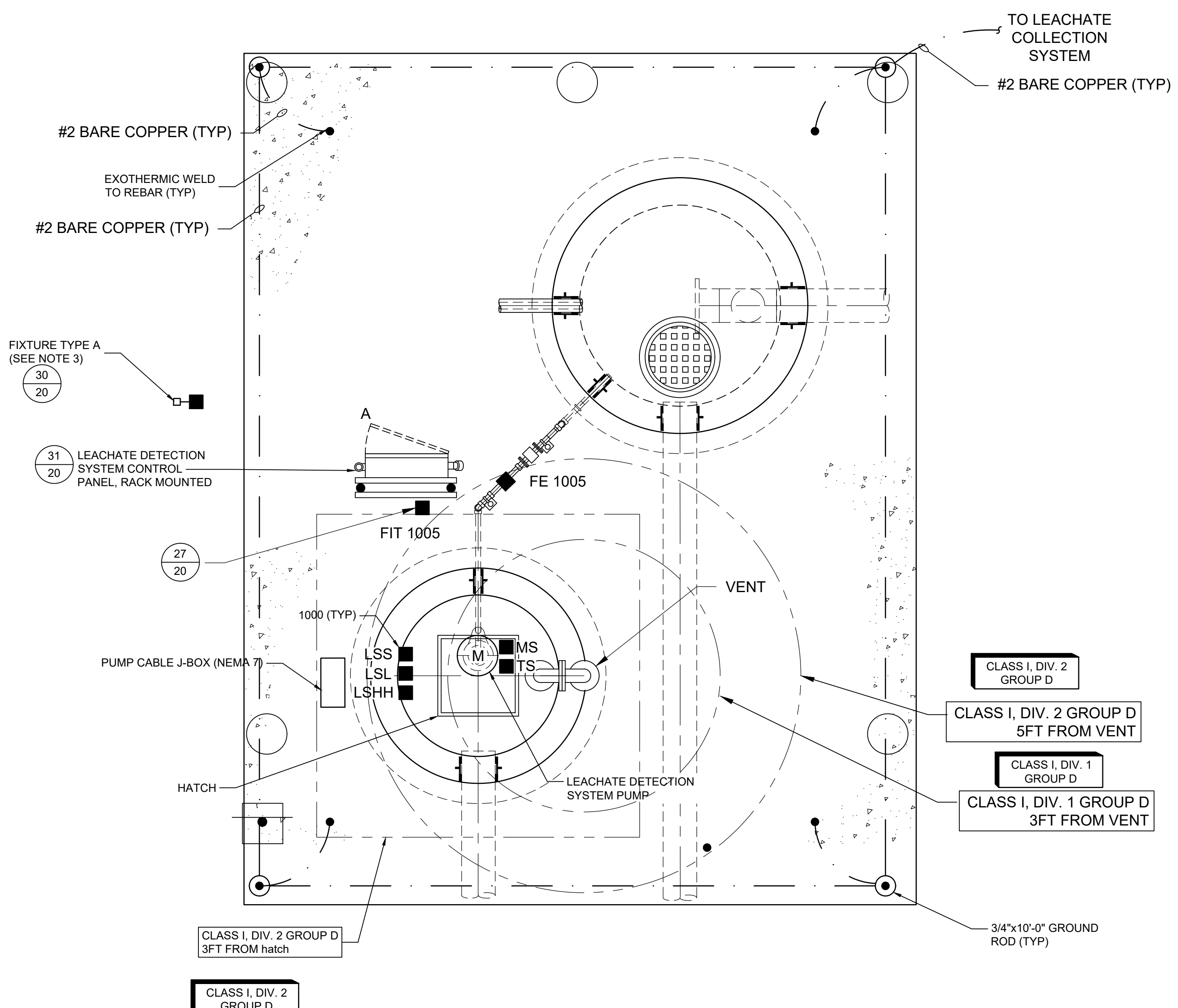
REV	DATE	DESCRIPTION	JJV	KBT
-	12/13/2023	ISSUE FOR BID	JJV	KBT
REV	DATE	DESCRIPTION	DRN	APP
<p>1200 RIVERPLACE BOULEVARD, SUITE 710 JACKSONVILLE, FLORIDA 32207 USA PHONE: 904.858.1818 - FAX: 904.396.1143 CERTIFICATE OF AUTHORIZATION NO. 4321</p> <p>1325 74th AVENUE SW VERO BEACH, FLORIDA 32968 USA PHONE: 772.770.5112</p>				
<p>TITLE: <b>ELECTRICAL PLAN</b></p>				
<p>PROJECT: <b>PHASE II - CELL 3 CONSTRUCTION</b></p>				
<p>SITE: <b>INDIAN RIVER COUNTY LANDFILL</b></p>				
<p>THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.</p>				
SIGNATURE		DESIGN BY:	AK	DATE:
DATE		DRAWN BY:	JJV	PROJECT NO.:
		CHECKED BY:	TC	FILE:
		REVIEWED BY:	SA	DRAWING NO.:
		APPROVED BY:	KBT	<b>18</b> OF <b>24</b>

**FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION**

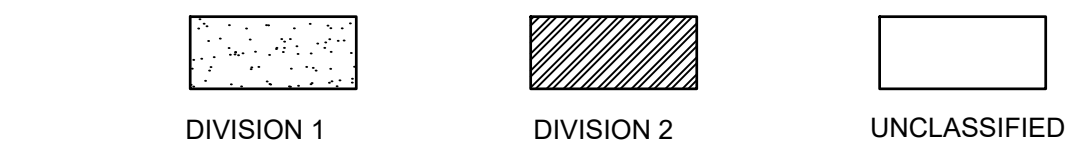
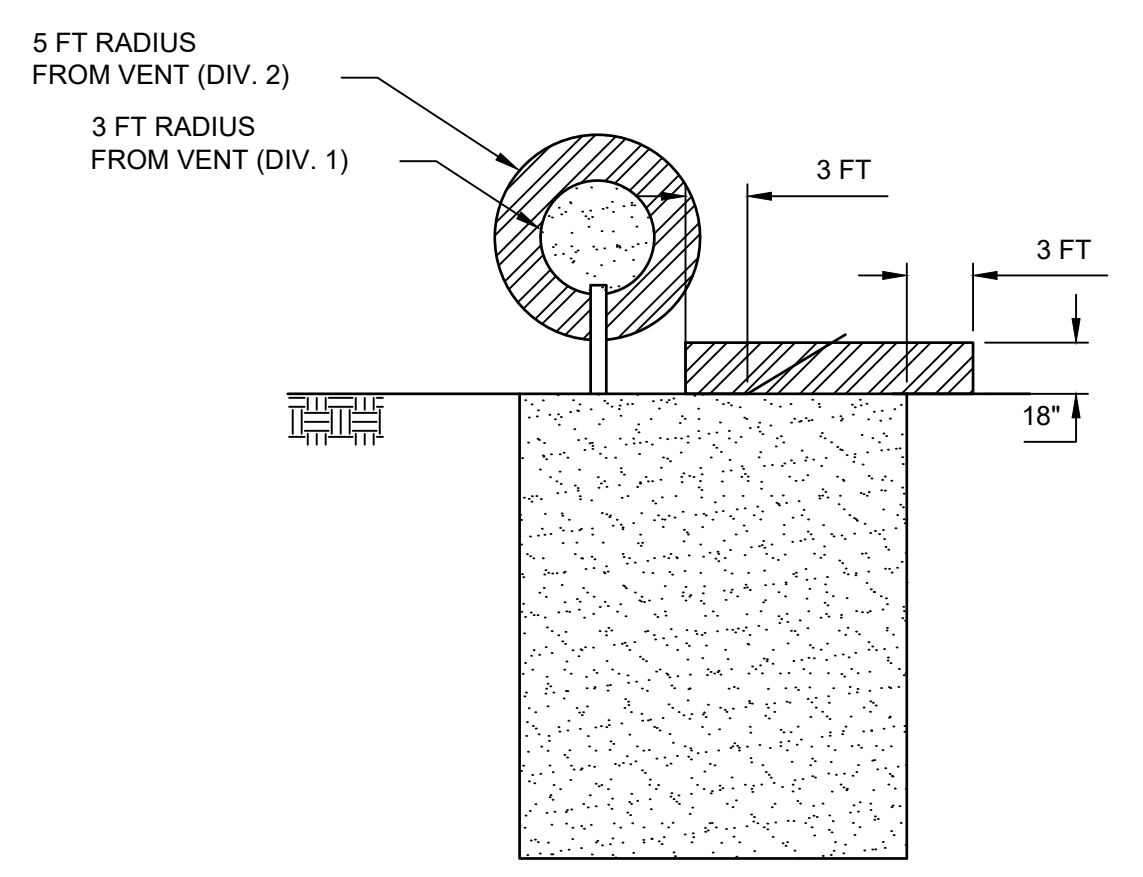
AC:\Doc\Geosyntec\INDIAN RIVER COUNTY OF CELL 3\Project Files\DRAWINGS\FPL\ER3A-C18.dwg

1 2 3 4 5 6 7 8

A B C D E F



**24** **DETAIL**  
**18** **LCS AND LDS MANHOLE ELECTRICAL PLAN**  
 SCALE: NOT TO SCALE (N.T.S.)





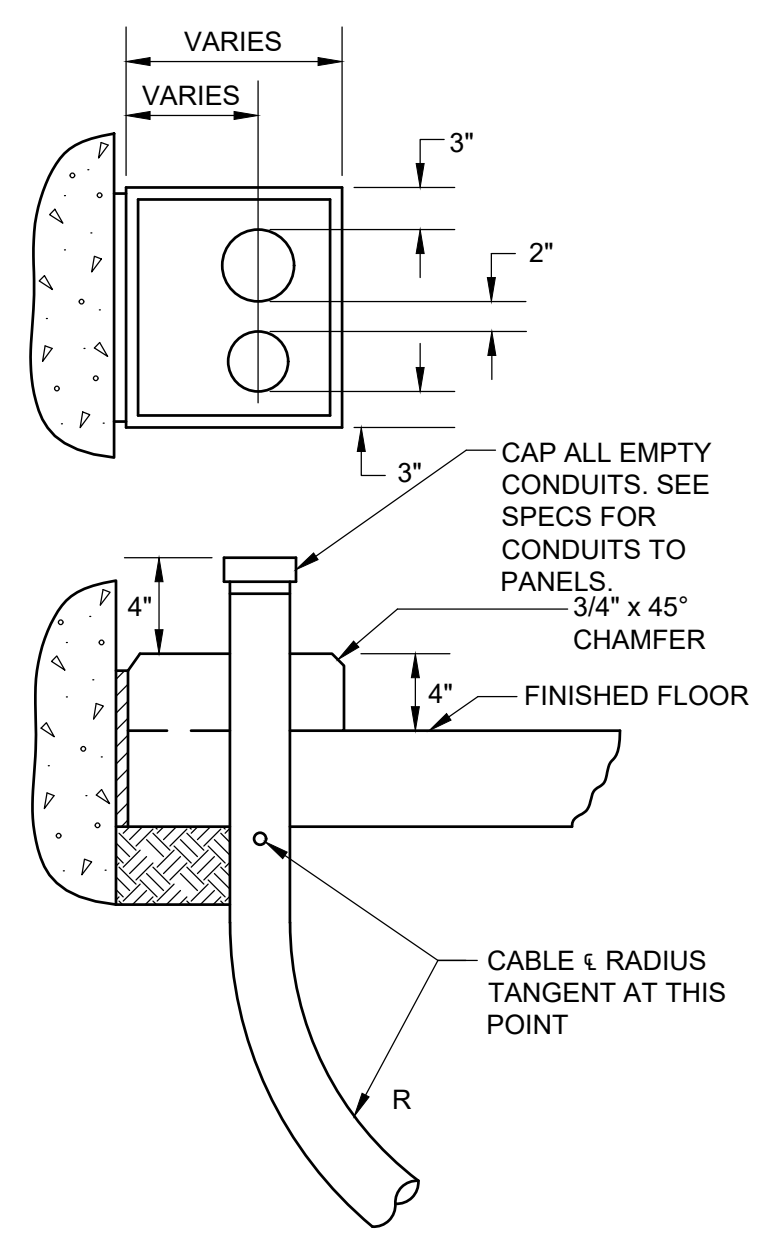
**25** **DETAIL**  
**19** **LCS AND LDS PUMP STATION WET WELL**  
 SCALE: N.T.S.

- NOTES:**
- DESIGN AND DETAIL TAKEN FROM PERMIT MOD 0128769-022-SC AND CELL 2 CONSTRUCTION DRAWINGS PREPARED BY CDM SMITH.
  - REFER TO THE RISER DIAGRAMS, SHEET 21, FOR CONDUIT AND WIRE REQUIREMENTS.
  - POLE MOUNTED LED LIGHT FIXTURE, 96 LED's (13936 LUMENS, 135 LUMENS PER WATT) DIE CAST ALUMINUM HOUSING WITH INTEGRAL COOLING FINS, TWO-PIECE DIE CAST ALUMINUM DRIVER COMPARTMENT SEALED WITH A ONE-PIECE SILICONE GASKET, IES FULL CUTOFF OPTICS, DARK SKY CERTIFIED, SILVER METALLIC POLYESTER POWDER COAT FINISH, 350 mA HIGH-PERFORMANCE LED DRIVER, L70 AT 90,000+ IN 25° C ENVIRONMENTS, 90% POWER FACTOR, UNIVERSAL VOLTAGE (120-277V), 10KV SURGE PROTECTOR, TERMINAL BLOCK SUPPLIED AS STANDARD, TYPE III LIGHT DISTRIBUTION, CRI OF 75 FOR 5000K, ROUND POLE PLATE ADAPTER, PHOTOCELL CONTROL, ETL LISTED FOR WET LOCATIONS, IP65 RATED, DLC LISTED, 5 YEAR WARRANTY ON ENTIRE SYSTEM. VISIONAIRE LIGHTING: VLX LED SERIES VLX-1-T3-96LC-3-4K-UNV-AM-SL.

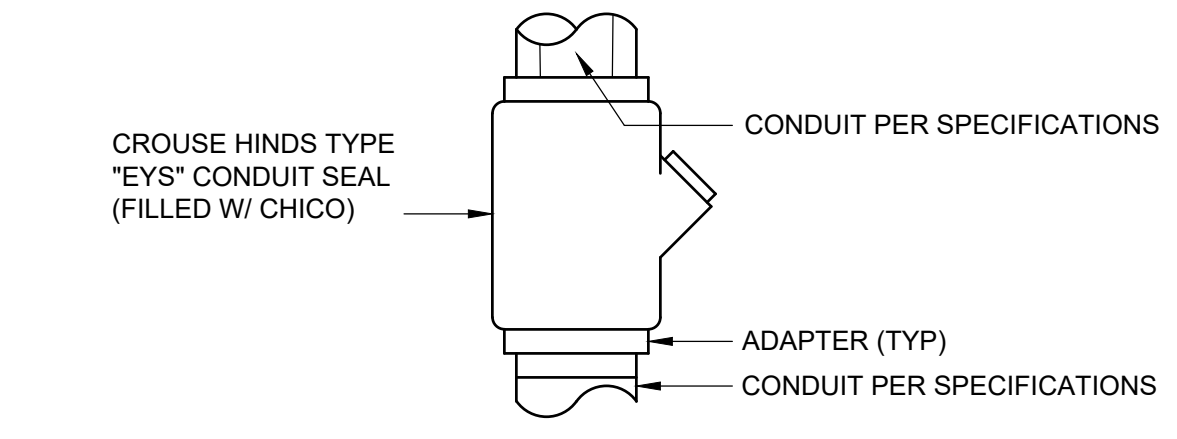
ACCD:\Drawings\INDIAN RIVER COUNTY OF CELL 3\Project Files\DRAWINGS\911\_18053A-C20.dwg

**FOR BIDDING PURPOSES ONLY  
 NOT FOR CONSTRUCTION**

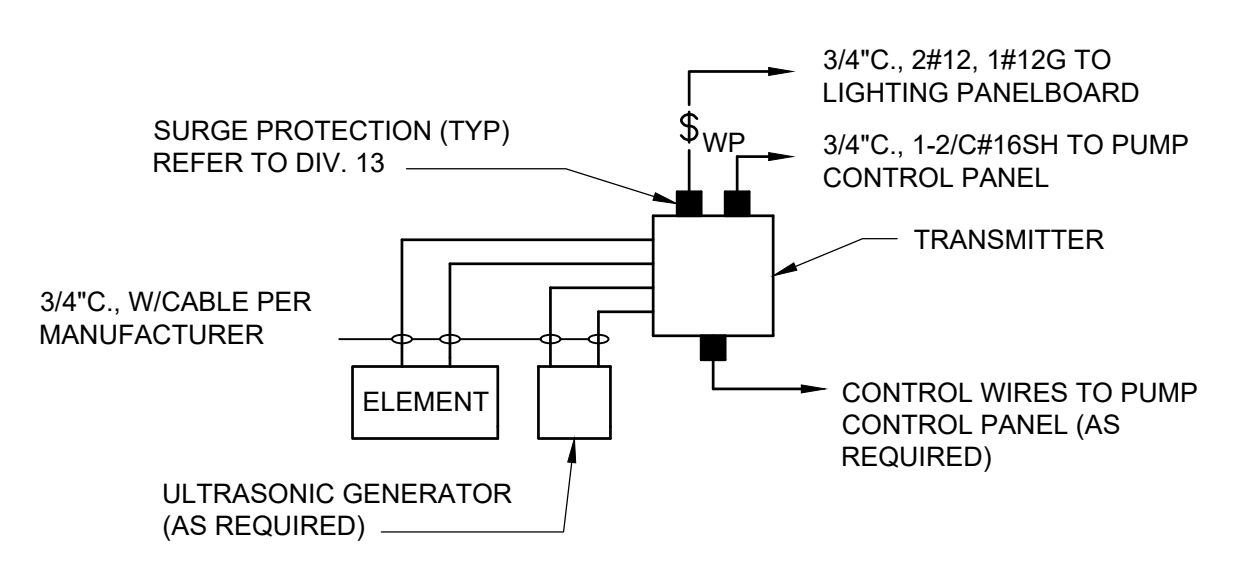
REV	DATE	DESCRIPTION	DRN	APP
-	12/13/2023	ISSUE FOR BID	JJV	KBT
 				
1200 RIVERPLACE BOULEVARD, SUITE 710 JACKSONVILLE, FLORIDA 32207 USA PHONE: 904.858.1818 - FAX: 904.396.1143 CERTIFICATE OF AUTHORIZATION NO. 4321				
1325 74th AVENUE SW VERO BEACH, FLORIDA 33968 USA PHONE: 772.770.5112				
TITLE: <b>ELECTRICAL DETAILS I</b>				
PROJECT: <b>PHASE II - CELL 3 CONSTRUCTION</b>				
SITE: <b>INDIAN RIVER COUNTY LANDFILL</b>				
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		DESIGN BY: AK	DATE: DECEMBER 2023	
SIGNATURE		DRAWN BY: JJV	PROJECT NO.: FL9363A	
DATE		CHECKED BY: TC	FILE: FL9363A-C20	
KWASI BADU-TWENBOAH LICENSE NO. 42460		REVIEWED BY: SA	DRAWING NO.:	
		APPROVED BY: KBT	<b>19</b> OF <b>24</b>	



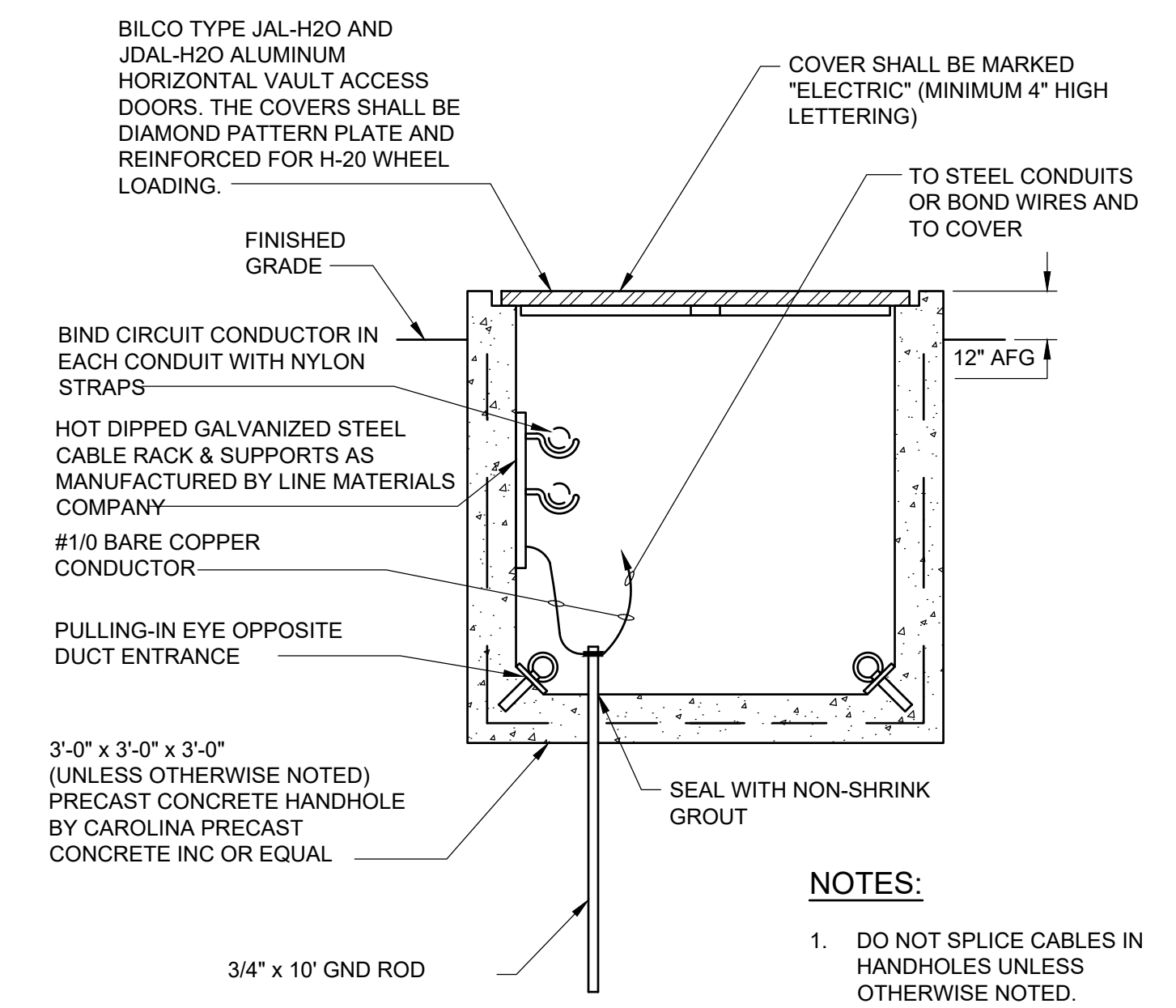
**26** **20** **DETAIL**  
**TYPICAL CONDUIT THROUGH SLAB**  
SCALE: NOT TO SCALE (N.T.S.)



**27** **20** **DETAIL**  
**CONDUIT SEAL CONNECTION**  
SCALE: NOT TO SCALE (N.T.S.)

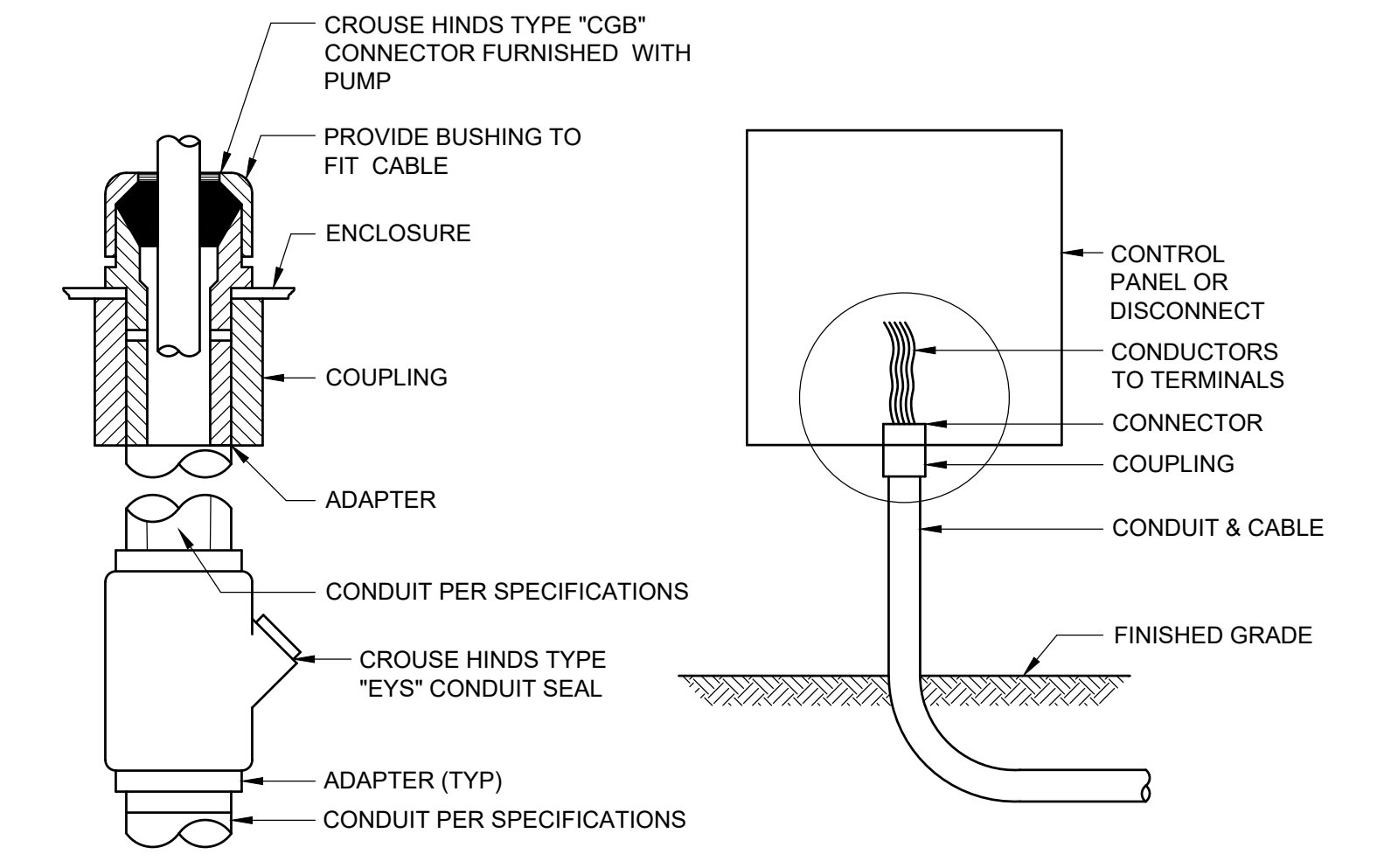


**28** **20** **DETAIL**  
**TYPICAL TRANSMITTER**  
SCALE: N.T.S.



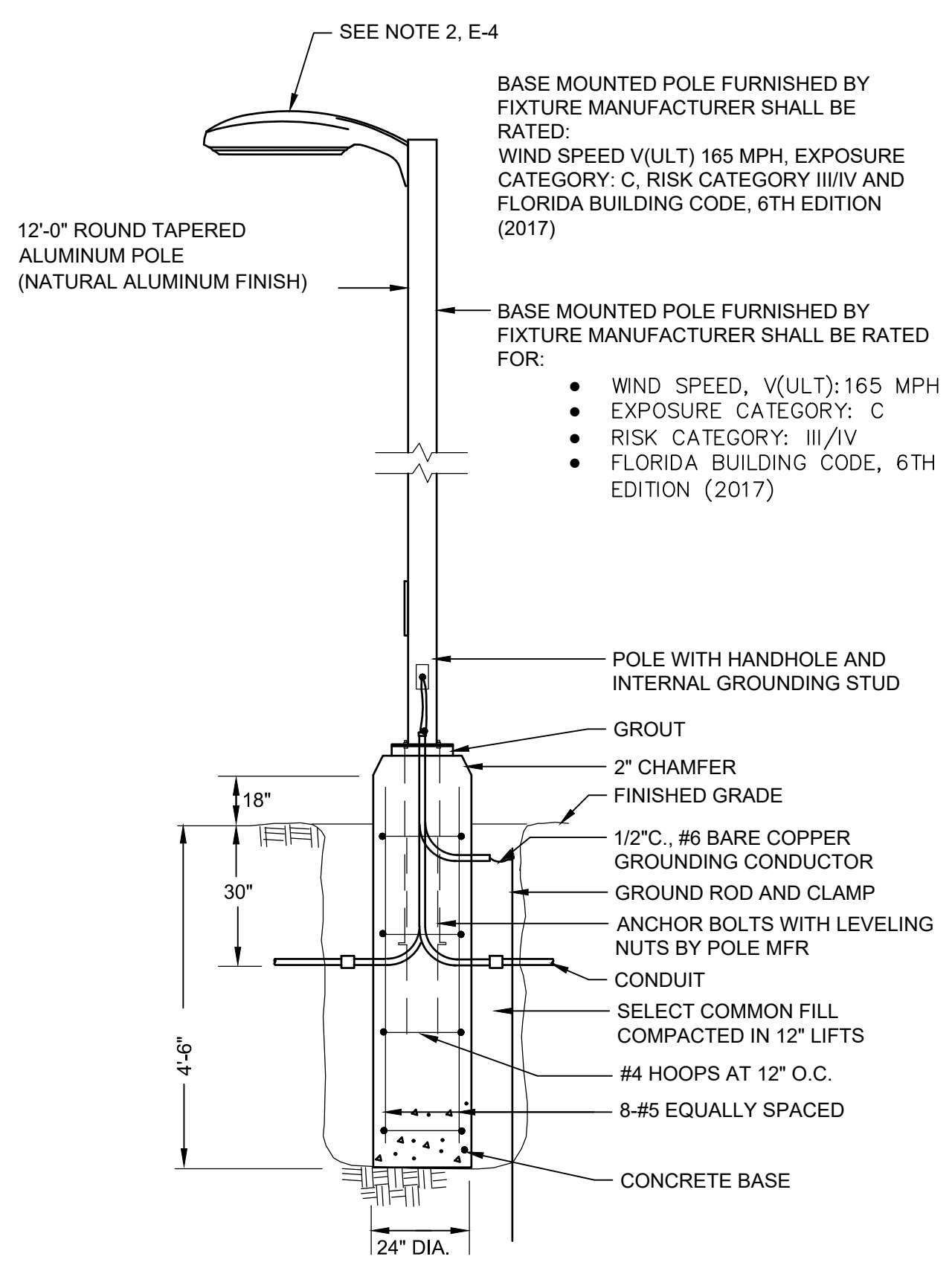
- NOTES:**
- DO NOT SPLICE CABLES IN HANDHOLES UNLESS OTHERWISE NOTED.
  - ALL MOUNTING HARDWARE SHALL BE 316 SS.
  - HANDHOLES TO BE PLACED ON 6" BASE OF NO. 57 STONE.

**29** **20** **DETAIL**  
**ELECTRICAL HANDHOLE**  
SCALE: N.T.S.

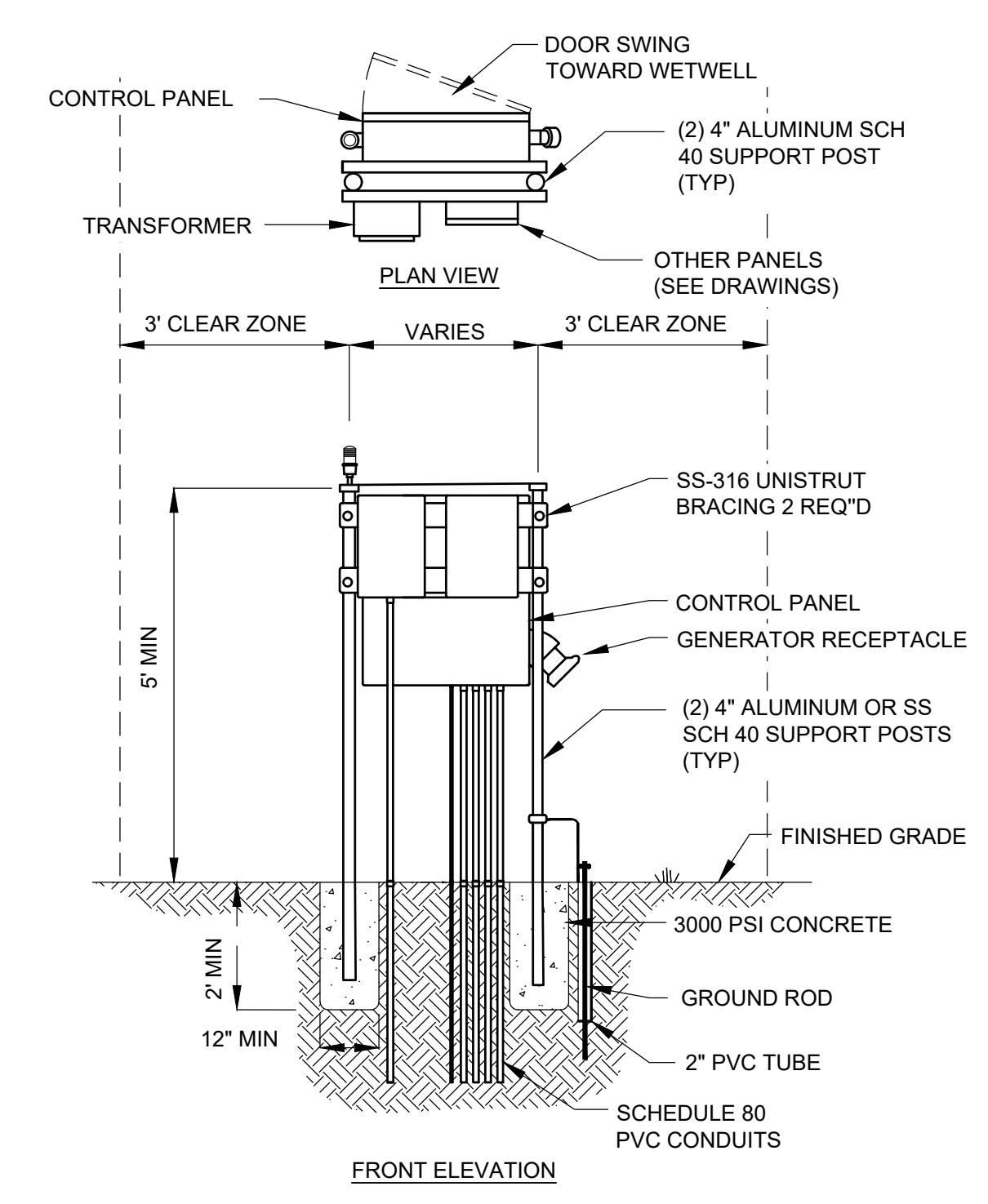


**30** **20** **DETAIL**  
**WATER-TIGHT CONNECTION**  
SCALE: N.T.S.

- NOTES:**
- DESIGN AND DETAIL TAKEN FROM PERMIT MOD 0128769-022-SC AND CELL 2 CONSTRUCTION DRAWINGS PREPARED BY CDM SMITH.
  - REFER TO THE RISER DIAGRAMS, SHEET 21, FOR CONDUIT AND WIRE REQUIREMENTS.
  - POLE MOUNTED LED LIGHT FIXTURE. 96 LED's (13936 LUMENS, 135 LUMENS PER WATT) DIE CAST ALUMINUM HOUSING WITH INTEGRAL COOLING FINS, TWO-PIECE DIE CAST ALUMINUM DRIVER COMPARTMENT SEALED WITH A ONE-PIECE SILICONE GASKET, IES FULL CUTOFF OPTICS, DARK SKY CERTIFIED, SILVER METALLIC POLYESTER POWDER COAT FINISH, 350 mA HIGH-PERFORMANCE LED DRIVER, L70 AT 90,000+ IN 25° C ENVIRONMENTS, 90% POWER FACTOR, UNIVERSAL VOLTAGE (120-277V), 10kV SURGE PROTECTOR, TERMINAL BLOCK SUPPLIED AS STANDARD, TYPE III LIGHT DISTRIBUTION, CRI OF 75 FOR 5000K, ROUND POLE PLATE ADAPTER, PHOTOCELL CONTROL, ETL LISTED FOR WET LOCATIONS, IP65 RATED, DLC LISTED, 5 YEAR WARRANTY ON ENTIRE SYSTEM. VISIONAIRE LIGHTING: VLX LED SERIES VLX-1-T3-96LC-3-4K-UNV-AM-SL.



**31** **20** **DETAIL**  
**POLE MOUNTED FIXTURE (TYPE A)**  
SCALE: N.T.S.



- SUBMIT CALCULATIONS BY A FLORIDA P.E. SHOWING THAT THE RACK IS SUITABLE FOR:
- WIND SPEED, V(ULT): 165 MPH
  - EXPOSURE CATEGORY: C
  - RISK CATEGORY: C
  - FLORIDA BUILDING CODE, 6TH EDITION (2017)

**32** **20** **DETAIL**  
**PANEL MOUNTING RACK**  
SCALE: N.T.S.

REV	DATE	DESCRIPTION	DRN	APP
-	12/13/2023	ISSUE FOR BID	JJV	KBT
 1200 RIVERPLACE BOULEVARD, SUITE 710 JACKSONVILLE, FLORIDA 32207 USA PHONE: 904.858.1818 - FAX: 904.396.1143 CERTIFICATE OF AUTHORIZATION NO. 4321				
 1325 74th AVENUE SW VERO BEACH, FLORIDA 33968 USA PHONE: 772.770.5112				
<b>ELECTRICAL DETAILS II</b>				
<b>PHASE II - CELL 3 CONSTRUCTION</b>				
<b>INDIAN RIVER COUNTY LANDFILL</b>				
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.				
SIGNATURE		DESIGN BY:	AK	DATE:
DATE		DRAWN BY:	JJV	PROJECT NO.:
KWASI BABU-TWENBOAH LICENSE NO. 42460		CHECKED BY:	TC	FILE:
		REVIEWED BY:	SA	DRAWING NO.:
		APPROVED BY:	KBT	<b>20</b> OF <b>24</b>

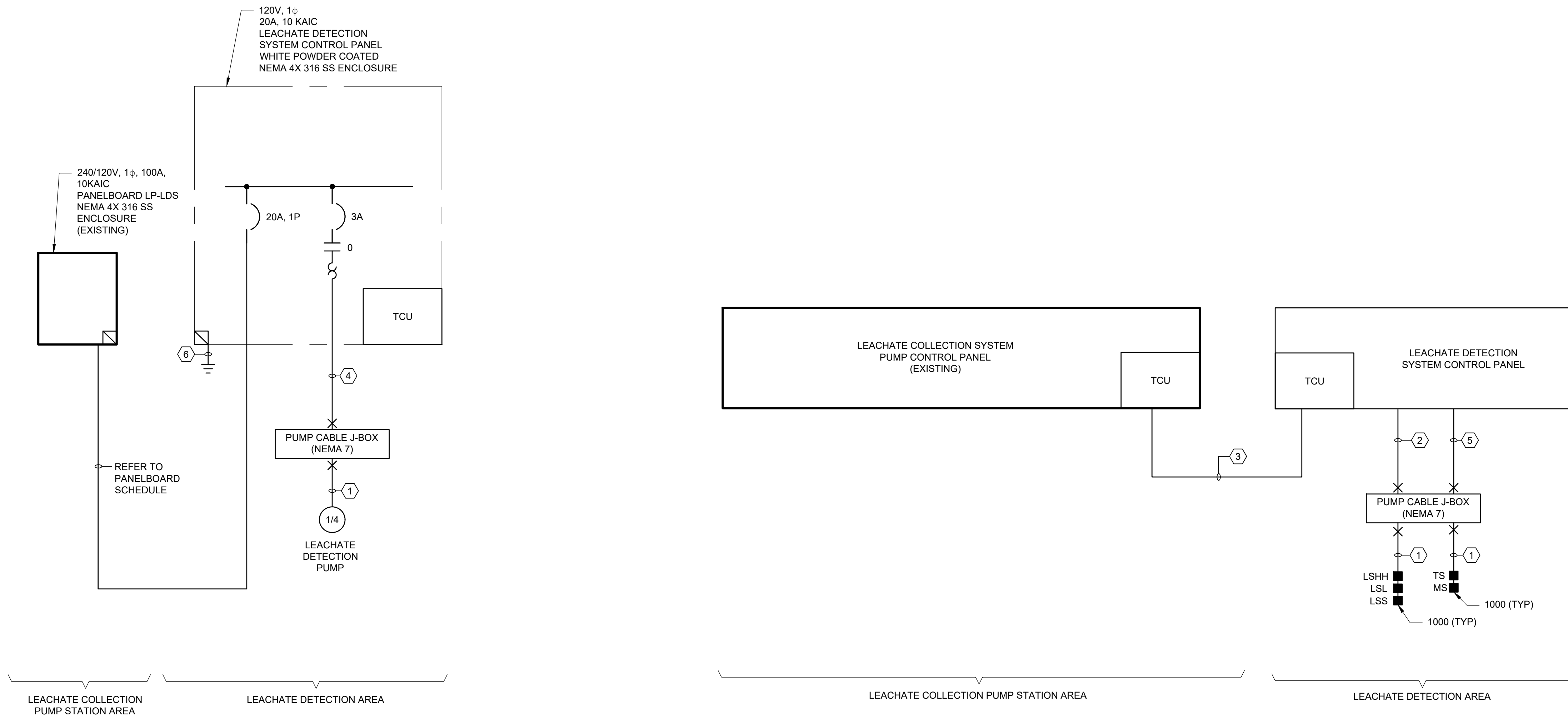
**FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION**

ACCD0005\geosyntec\INDIAN RIVER COUNTY OF CELL 3\Project Files\Drawings\SI\18053A-C21.dwg

**NOTES:**



- DESIGN AND DETAIL TAKEN FROM PERMIT MOD 0126769-022-SC AND CELL 2 CONSTRUCTION DRAWINGS PREPARED BY CDM SMITH.
- INSTALLATION SHALL MEET NEC ARTICLES 500 AND 501 FOR CLASSIFIED AREAS.
- ADD CIRCUIT 9 TO EXISTING LDS PANEL.

CONDUIT AND WIRE LEGEND (NUMBERS REFERENCE THIS SHEET ONLY)	
NO.	DESCRIPTION
①	1"., WITH CABLE PER MFR
②	3/4"., 6#14, 1#12G
③	2"., CABLE PER TCU MFR
④	3/4"., 2#12, 1#12G
⑤	3/4"., 4#14, 1#12G
⑥	3/4"., #6 BARE COPPER TO GROUND

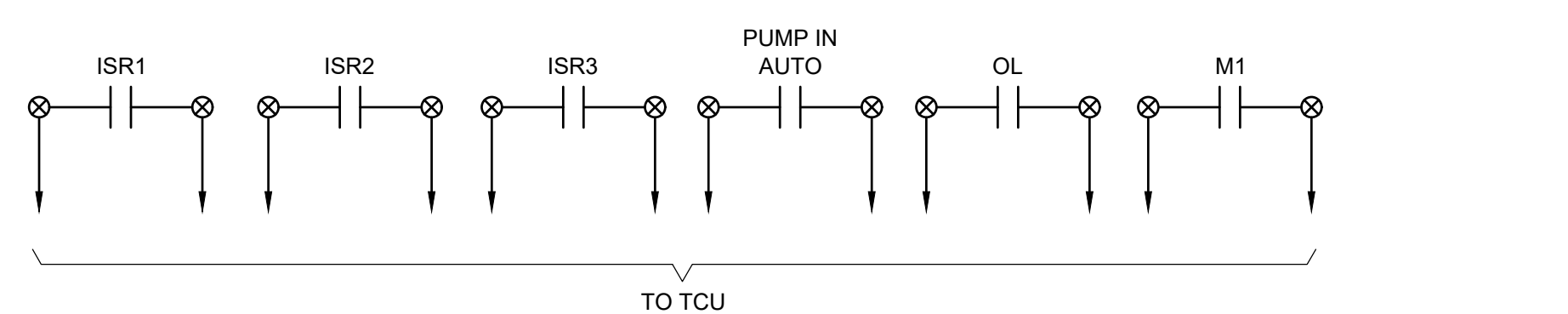
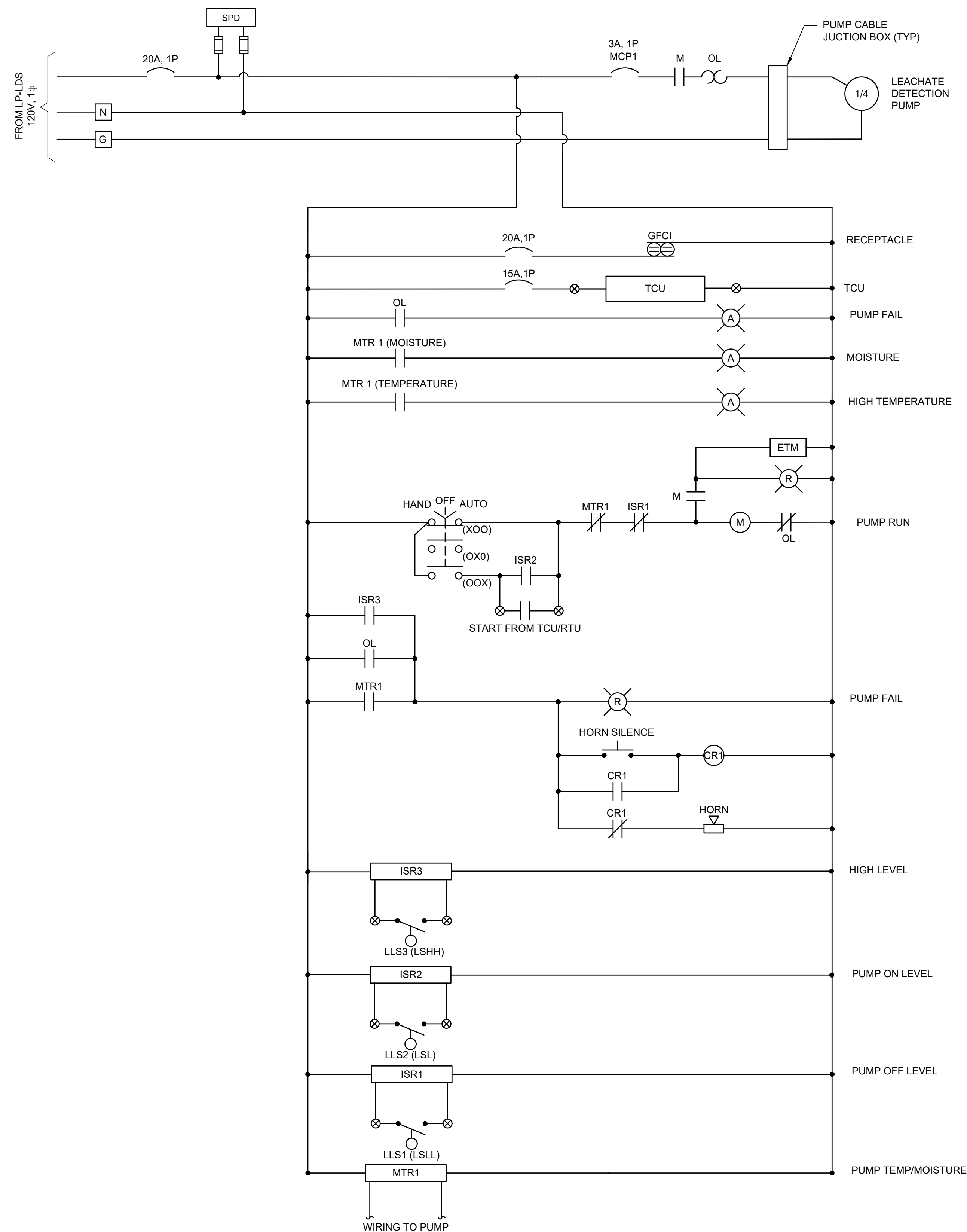


**LEACHATE COLLECTION/DETECTION SYSTEM CONTROL AND INSTRUMENTATION  
RISER DIAGRAM**

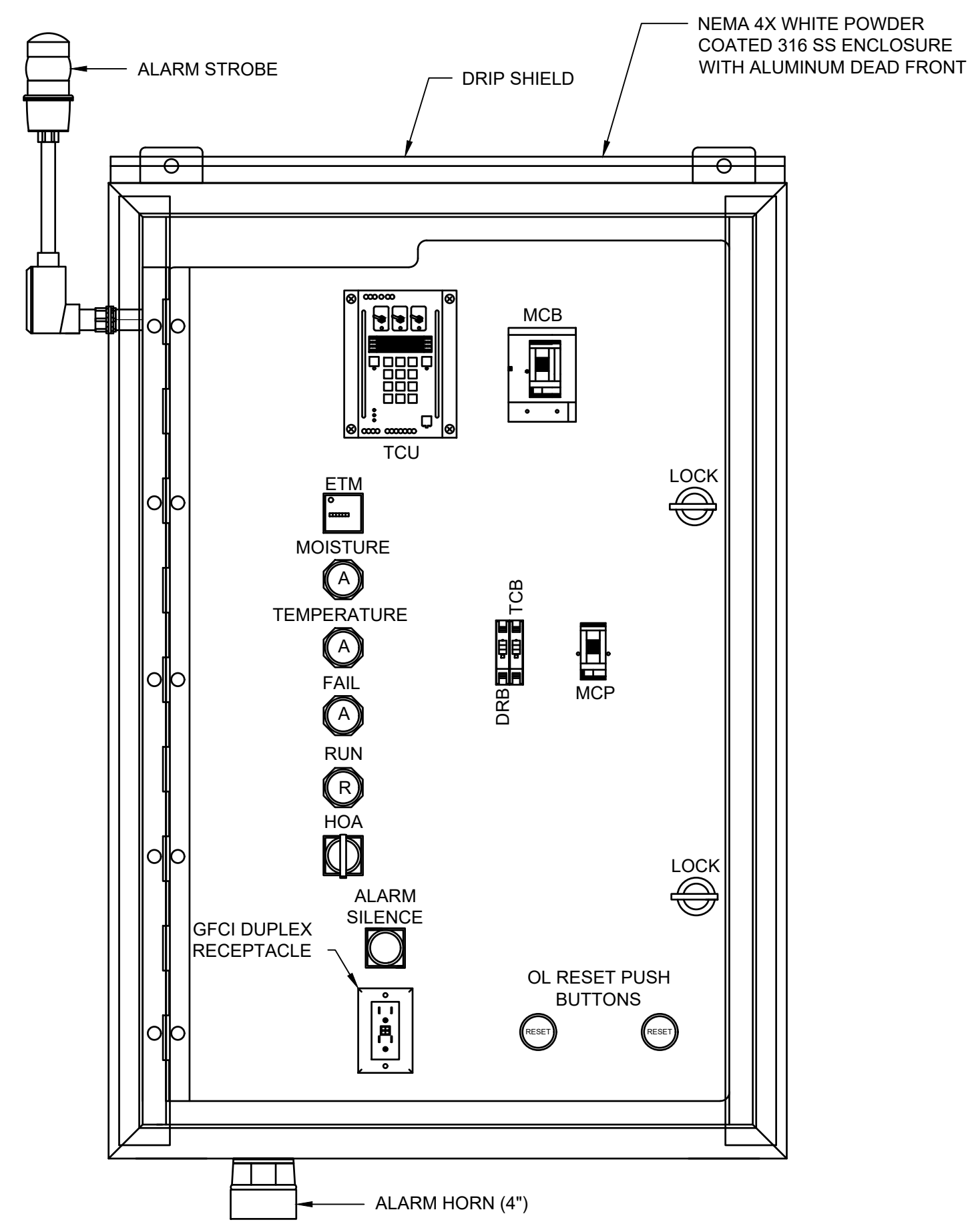
30 AMP MAIN BREAKER 100 AMP BUS RATING				PANELBOARD LP-LDS				LOCATION: LEACHATE DETECTION SYSTEM			
120/240 VOLTS				12 POLES				ENCLOSURE RATING: NEMA 4X			
1 PHASE				3 WIRE				60 Hz.			
10 KA SHORT CIRCUIT RATING				ELECTRONIC GRADE: NO				MOUNTING: RACK			
CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES	CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES
		LINE 1	LINE 2					LINE 1	LINE 2		
1	FIT-1005	0.1		20 /1	1	2	SPARE			20 /1	
3	LIGHT		0.1	20 /1	1	4	SPARE			20 /1	
5	RECEPTACLE	0.2		20 /1	1	6	SPARE			20 /1	
7	PANEL LDS		0.5	30 /1	2	8	SPARE			20 /1	
9	CELL 3 LDS PANEL (NOTE 3)	0.5		30 /1	2	10	SURGE PROTECTOR			15 /2	
11	SPARE			20 /1		12					
TOTAL LINE KVA THIS SIDE		0.3	0.6			TOTAL LINE KVA THIS SIDE		0	0		
						TOTAL KVA PER LINE		0.3	0.6		
						TOTAL KVA		0.9			
NOTES:						NOTES CONT.:					
1. BRANCH CIRCUIT WIRING: 3/4" C, 2#12 & 1#12G						2. BRANCH CIRCUIT WIRING: 3/4" C, 2#10 & 1#10G					

REV	DATE	DESCRIPTION	DRN	APP
-	12/13/2023	ISSUE FOR BID	JJV	KBT
 				
1200 RIVERPLACE BOULEVARD, SUITE 710 JACKSONVILLE, FLORIDA 32207 USA PHONE: 904.858.1818 - FAX: 904.396.1143 CERTIFICATE OF AUTHORIZATION NO. 4321				
1325 74th AVENUE SW VERO BEACH, FLORIDA 32968 USA PHONE: 772.770.5112				
TITLE: ELECTRICAL RISER DIAGRAMS				
PROJECT: PHASE II - CELL 3 CONSTRUCTION				
SITE: INDIAN RIVER COUNTY LANDFILL				
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.				
SIGNATURE	DATE	DESIGN BY: AK	DATE: DECEMBER 2023	
		DRAWN BY: JJV	PROJECT NO.: FL9363A	
		CHECKED BY: TC	FILE: FL9363A-C22	
		REVIEWED BY: SA	DRAWING NO.:	
		APPROVED BY: KBT	21	OF 24

**FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION**



LEACHATE DETECTION SYSTEM CONTROL PANEL  
CONTROL DIAGRAM



LEACHATE DETECTION SYSTEM CONTROL PANEL  
PANEL LAYOUT

PUMP CONTROL PANEL ABBREVIATIONS

- A ALARM INDICATOR
- CPT CONTROL POWER TRANSFORMER
- CR\* CONTROL RELAY NO.\*
- DRB DUPLEX RECEPTACLE BREAKER
- ETM ELAPSED TIME METER
- GCB GENERATOR CIRCUIT BREAKER
- GFDR GROUND FAULT DUPLEX RECEPTACLE
- GND GROUND
- GR GENERATOR RECEPTACLE
- HOA HANDS-OFF-AUTOMATIC SELECTOR
- ISR INTRINSICALLY SAFE RELAY
- LLS LIQUID LEVEL SWITCH
- LSHH LEVEL SWITCH HIGH HIGH
- LSH LEVEL SWITCH HIGH
- LSLL LEVEL SWITCH LOW LOW
- LSL LEVEL SWITCH LOW
- LDSCP LEACHATE DETECTION SYSTEM CONTROL PANEL
- LOSCP LEACHATE COLLECTION SYSTEM CONTROL PANEL
- MCB MAIN CIRCUIT BREAKER
- MCP MOTOR CIRCUIT PROTECTOR
- MTR MOTOR MOISTURE/TEMPERATURE RELAY
- N NEUTRAL
- OL OVERLOAD RELAY
- PCP PUMP CONTROL PANEL
- PM PHASE MONITOR
- R PUMP RUN INDICATORS (PUSH-TO-TEST)
- SS STAINLESS STEEL
- TB TERMINAL BLOCK
- TCB TCU CIRCUIT BREAKER
- TCU DATA FLOW SYSTEMS TCU-001 PUMP CONTROLLER
- SPD SURGE PROTECTIVE DEVICES

NOTES:

1. DESIGN AND DETAIL TAKEN FROM PERMIT MOD 0128769-022-SC AND CELL 2 CONSTRUCTION DRAWINGS PREPARED BY CDM SMITH.
2. CONTROL PANEL SHALL MEET APPLICABLE REQUIREMENTS OF SECTION 16191, PARAGRAPH 2.02.B.
3. REFER TO PROCESS DIAGRAMS FOR AND SECTION 11207 FOR ADDITIONAL OPERATION AND CONTROL REQUIREMENTS.
4. ALL CONDUITS SHALL ENTER/EXIT THROUGH BOTTOM OF PUMP CONTROL PANEL.
5. THE BOTTOM OF PUMP CONTROL PANEL SHALL BE 36" ABOVE FINISHED SLAB.

REV	DATE	DESCRIPTION	DRN	APP
-	12/13/2023	ISSUE FOR BID	JJV	KBT

1200 RIVERPLACE BOULEVARD, SUITE 710  
JACKSONVILLE, FLORIDA 32207 USA  
PHONE: 904.858.1818 - FAX: 904.396.1143  
CERTIFICATE OF AUTHORIZATION NO. 4321

1325 74th AVENUE SW  
VERO BEACH, FLORIDA 32968 USA  
PHONE: 772.770.5112

TITLE: LEACHATE DETECTION CONTROL PANEL DETAILS

PROJECT: PHASE II - CELL 3 CONSTRUCTION

SITE: INDIAN RIVER COUNTY LANDFILL

DESIGN BY: AK	DATE: DECEMBER 2023
DRAWN BY: JJV	PROJECT NO.: FL9363A
CHECKED BY: TC	FILE: FL9363A-C23
REVIEWED BY: SA	DRAWING NO.:
APPROVED BY: KBT	22 OF 24

THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_  
KWASI BADU-TWENBOAH LICENSE NO. 42460

FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION

THE CONTRACTOR IS RESPONSIBLE FOR EMPLOYING ANY AND ALL MEASURES TO PREVENT EROSION, SEDIMENTATION, AND THE RELEASE OF TURBID DISCHARGES FROM THE CONSTRUCTION SITE PER LOCAL, STATE, AND FEDERAL REQUIREMENTS.

THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AND IMPLEMENTING A STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE SWPPP SHALL BE SUBMITTED TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION ACTIVITIES. THE COMPLETE AND FINAL SWPPP SHALL INCLUDE THE SITE PLAN, EROSION CONTROL PLAN, A NARRATIVE DESCRIPTION, PROJECT NOTES, CONTACT INFORMATION AND SWPPP COMPLIANCE AGREEMENTS FOR ALL CONTRACTORS AND SUBCONTRACTORS, A COPY OF THE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES, COPY OF INSPECTION AND CORRECTIVE ACTION REPORTS AND SWPPP AMENDMENTS MADE DURING CONSTRUCTION. THIS SWPPP PLAN SHEET IS INTENDED TO BE DISPLAYED ONSITE TO MEET NPDES NOI REQUIREMENTS. THE CONTRACTOR SHOULD MODIFY THIS SWPPP THROUGHOUT CONSTRUCTION AS SITE CONDITIONS CHANGE.

THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE RESPONSIBLE PARTY OR SUBCONTRACTOR ACCOUNTABLE FOR IMPLEMENTING EACH MEASURE DESCRIBED IN THE SWPPP AND DELEGATING SWPPP RESPONSIBILITIES. THE CONTRACTOR MUST PREPARE AND SIGN THE FOLLOWING CERTIFICATION: "I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER." ALL SUBCONTRACTORS ARE REQUIRED TO SIGN A COPY OF THE CERTIFICATION AND ALL CERTIFICATIONS ARE TO BE HELD BY THE CONTRACTOR AS PART OF THE COMPLETE SWPPP.

THE CONTRACTOR SHALL DEVELOP AND APPROVE A STORMWATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH THE GENERAL REQUIREMENTS AND/OR ANY SPECIAL CONDITIONS OF ALL PERMITS WHICH AUTHORIZE THE CONSTRUCTION OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING, MONITORING AND MODIFYING THE SWPPP FOR CONSTRUCTION ACTIVITIES TO MEET CHANGING PROJECT SITE CONDITIONS.

THE CONTRACTOR SHALL APPLY FOR AND COMPLY WITH A GENERIC PERMIT FOR STORMWATER DISCHARGE FROM THE LARGE AND SMALL CONSTRUCTION SITES FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) ALL FEES SHALL BE PAID BY THE CONTRACTOR

1.0 SITE DESCRIPTION: EXISTING SOLID WASTE DISPOSAL SITE/INDUSTRIAL FACILITY.

1.A NATURE OF CONSTRUCTION ACTIVITY:

A LANDFILL EXPANSION VIA CONSTRUCTION OF A NEW CELL, SEGMENT 3 CELL 2, AND THE PARTIAL CLOSURE OF AN EXISTING CELL, SEGMENT 2, ARE PROPOSED.

1.B SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES:

THE CONTRACTOR SHALL PROVIDE A DETAILED SEQUENCE OF CONSTRUCTION FOR ALL CONSTRUCTION ACTIVITIES AS REQUIRED BY CONDITION OF PERMIT. THE CONTRACTOR SHALL IDENTIFY THE SEQUENCE OF MAJOR ACTIVITIES FOR CONTROLLING EROSION AND TRAPPING SEDIMENT.

FOR EACH CONSTRUCTION PHASE, INSTALL PERIMETER CONTROLS PRIOR TO OTHER WORK FOR THE CONSTRUCTION PHASE. REMOVE PERIMETER CONTROLS ONLY AFTER ALL UPSTREAM AREAS ARE STABILIZED AND A WRITTEN APPROVAL IS RECEIVED FROM THE ENGINEER.

1.C AREA ESTIMATES:

TOTAL SITE AREA: 275 ACRES  
TOTAL AREA TO BE DISTURBED: APPROXIMATELY 45 ACRES

1.D RUNOFF DATA:

APPROXIMATE RUNOFF COEFFICIENTS:  
BEFORE: 0.9  
AFTER: 0.9

SOILS DATA: SEE GEOTECHNICAL ENGINEERING REPORT: "INDIAN RIVER COUNTY PROPOSED NEW LANDFILL AREA" PREPARED BY KSM ENGINEERING AND TESTING DATED OCTOBER 18, 2017.

OUTFALL INFORMATION: CONTROL STRUCTURE WITH PIPE CONNECTION - NO CHANGES PROPOSED

STRUCTURE(S) NUMBER(S): 1  
RECEIVING WATER BODIES: INDIAN RIVER FARMS WATER CONTROL DISTRICT'S C-6 CANAL TO THE INDIAN RIVER LAGOON

1.E SITE MAP:

- \* DRAINAGE PATTERNS: DISTURBED AREA TO BE GRADED TO DRAIN TO PROPOSED STRUCTURES. STORMWATER STRUCTURES WILL DISCHARGE TO THE EXISTING SWALES AND INTERIOR DITCH AND WILL FOLLOW THE EXISTING DRAINAGE PATTERN.

- \* APPROXIMATE SLOPES: THE SITE GRADES AND SLOPES ARE PRESENTED IN THE DRAINAGE PLAN SHEET.

- \* AREAS OF SOIL DISTURBANCE: ALL AREAS WITHIN THE LIMITS OF CONSTRUCTION AS SHOWN ON SITE PLAN.
- \* AREAS NOT TO BE DISTURBED: AREAS OUTSIDE LIMITS OF CONSTRUCTION.
- \* AREAS TO BE STABILIZED: TEMPORARY STABILIZATION PRACTICES ARE REQUIRED FOR AREAS OF TEMPORARY SOIL DISTURBANCE. PERMANENT STABILIZATION IS SHOWN ON THE PAVING, DRAINAGE AND PIPING PLAN SHEET.

2.0 CONTROLS

2.A EROSION AND SEDIMENT CONTROLS:

THE CONTRACTOR SHALL DEVELOP A SWPPP FOR REVIEW AND APPROVAL BY OWNER TO MANAGE THE STORMWATER RUNOFF TO MINIMIZE EROSION AND TRANSPORT OF SEDIMENTS. AS WORK PROGRESSES, THE CONTRACTOR SHALL MODIFY THE PLAN TO ADAPT TO SEASONAL VARIATION, CHANGES IN CONSTRUCTION ACTIVITIES, AND THE NEED FOR BETTER PRACTICES.

ABSOLUTELY NO WORK WILL BE ALLOWED WITHIN ANY CONSERVATION AREA, BUFFER AREA, MITIGATION AREA OR DESIGNATED WETLAND AREA, UNLESS OTHERWISE SPECIFICALLY DESCRIBED BY THE CONSTRUCTION PLANS AND GRANTED BY PERMIT FROM GOVERNMENTAL AGENCY HAVING JURISDICTION OVER THE PROJECT.

PRIOR TO CLEARING AND GRUBBING, THE LIMITS OF CONSTRUCTION SHALL BE CLEARLY MARKED ALONG THE PROPOSED RIGHT OF WAY LINE TO PROTECT NATURAL AREAS FROM ENCRoACHMENT OF CONSTRUCTION ACTIVITIES.

ALL FILL EMBANKMENT AND GRADED AREAS SHALL BE PROTECTED AGAINST EROSION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF EMBANKMENTS AND SHALL REPLACE ANY PORTION, WHICH IN THE OPINION OF THE ENGINEER, HAS BECOME DISPLACED DUE TO EROSION OR DUE TO CARELESSNESS OR NEGLIGENCE ON THE PART OF THE CONTRACTOR.

2.A.1 STABILIZATION PRACTICES:

THE CONTRACTOR SHALL DESCRIBE THE STABILIZATION PRACTICES PROPOSED TO CONTROL EROSION. THE CONTRACTOR SHALL INITIATE ALL STABILIZATION MEASURES AS SOON AS PRACTICAL, BUT IN NO CASE MORE THAN 7 DAYS, IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. THE STABILIZATION PRACTICES SHALL INCLUDE AT LEAST THE FOLLOWING, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

TEMPORARY:

- \* ARTIFICIAL COVERINGS.
  - \* SOD.
- PERMANENT:
- \* SOD IN ACCORDANCE WITH PLANS. ALL PLANS 3:1 (H:V) AND STEEPER TO BE SODDED SHALL RECEIVE STAKED SOD.

2.A.2 STRUCTURAL PRACTICES:

THE CONTRACTOR SHALL DESCRIBE THE PROPOSED STRUCTURAL PRACTICES TO CONTROL OR TRAP SEDIMENT AND OTHERWISE PREVENT THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE. SEDIMENT CONTROLS SHALL BE IN PLACE BEFORE DISTURBING SOIL UPSTREAM OF THE CONTROL. THE STRUCTURAL PRACTICES SHALL INCLUDE AT LEAST THE FOLLOWING, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

TEMPORARY:

- \* SILT FENCE IN ACCORDANCE WITH F.D.O.T. DESIGN STANDARD INDEX 102.
- \* SANDBAGS TO CONTROL EROSION AND TRAP SILT.
- \* INLET PROTECTION IN ACCORDANCE WITH F.D.O.T. DESIGN STANDARD INDEX 102.
- \* SEDIMENT BASIN: TEMPORARY STAGING AREAS TO INCLUDE TEMPORARY SEDIMENTATION BASINS.
- \* STORMWATER CONVEYANCE: STABILIZED CHANNEL TO CONVEY RUNOFF AND CONTROL VELOCITIES
- \* FLOATING TURBIDITY BARRIER IN ACCORDANCE WITH F.D.O.T. DESIGN STANDARD INDEX 103.
- \* SLOPE CONTROLS SUCH AS EROSION CONTROL BLANKETS OR TACKIFIERS ON STEEP SLOPES.

PERMANENT:

- \* SOD IN ACCORDANCE WITH PLANS. ALL PLANS 3:1 (H:V) AND STEEPER TO BE SODDED SHALL RECEIVE STAKED SOD.

2.B STORMWATER MANAGEMENT:

THE FACILITIES HAVE BEEN PERMITTED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE UNITED STATES ARMY CORPS OF ENGINEERS.

2.C OTHER CONTROLS:

2.C.1 WASTE DISPOSAL:

THE CONTRACTOR SHALL DESCRIBE THE PROPOSED METHODS TO PREVENT THE DISCHARGE OF SOLID MATERIALS, INCLUDING BUILDING MATERIALS, TO WATERS OF THE UNITED STATES. THE PROPOSED METHODS SHALL INCLUDE AT LEAST THE FOLLOWING, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

- \* PROVIDING LITTER CONTROL AND COLLECTION WITHIN THE PROJECT DURING CONSTRUCTION ACTIVITIES.
- \* DISPOSING OF ALL FERTILIZER OR OTHER CHEMICAL CONTAINERS ACCORDING TO EPA'S STANDARD PRACTICES AS DETAILED BY THE MANUFACTURER.
- \* DISPOSING OF SOLID MATERIALS INCLUDING BUILDING AND CONSTRUCTION MATERIALS OFF THE PROJECT SITE BUT NOT IN SURFACE WATERS, OR WETLANDS.

2.C.2 OFFSITE VEHICLE TRACKING & DUST CONTROL:

THE CONTRACTOR SHALL DESCRIBE THE PROPOSED METHODS FOR MINIMIZING OFFSITE VEHICLE TRACKING OF SEDIMENTS AND GENERATING DUST. THE PROPOSED METHODS SHALL INCLUDE AT LEAST THE FOLLOWING, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

- \* COVERING LOADED HAUL TRUCKS WITH TARPAULINS.
- \* REMOVING EXCESS DIRT FROM ROADS DAILY.
- \* STABILIZING CONSTRUCTION ENTRANCES ACCORDING TO FDOT DESIGN STANDARDS.
- \* USING ROADWAY SWEEPERS DURING DUST GENERATING ACTIVITIES SUCH AS EXCAVATION AND MILLING OPERATIONS, IF APPLICABLE.

2.C.3 STATE AND LOCAL REGULATIONS FOR WASTE DISPOSAL, SANITARY SEWER, OR SEPTIC TANK REGULATIONS:

THE CONTRACTOR SHALL DESCRIBE THE PROPOSED PROCEDURES TO COMPLY WITH APPLICABLE STATE AND LOCAL REGULATIONS FOR WASTE DISPOSAL, AND SANITARY SEWER OR SEPTIC SYSTEMS.

2.C.4 FERTILIZERS AND PESTICIDES:

THE CONTRACTOR SHALL DESCRIBE THE PROCEDURES FOR APPLYING FERTILIZERS AND PESTICIDES. THE PROPOSED PROCEDURES SHALL COMPLY WITH APPLICABLE SUBSECTIONS OF SECTION 570 OF THE SPECIFICATIONS.

2.C.5 TOXIC SUBSTANCES:

THE CONTRACTOR SHALL PROVIDE A LIST OF TOXIC SUBSTANCES THAT ARE LIKELY TO BE USED ON THE JOB AND PROVIDE A PLAN ADDRESSING THE GENERATION, APPLICATION, MIGRATION, STORAGE AND DISPOSAL OF THESE SUBSTANCES.

2.C.6 STATE AND LOCAL PLANS AND PERMITS TO BE OBTAINED:

- \* FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION (FDEP) ENVIRONMENTAL RESOURCE PERMIT MODIFICATION: CONTRACTOR TO CONFIRM CONSTRUCTION IS AUTHORIZED.
- \* FDEP NOTICE OF INTENT FOR STORMWATER DISCHARGE (NPDES); CONTRACTOR TO OBTAIN.
- \* THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, INSTALLATION, PERMITTING AND OPERATION OF AN ADEQUATE DEWATERING SYSTEM TO DEWATER EXCAVATIONS FOR CONSTRUCTION IF REQUIRED.
- \* CONTRACTOR TO OBTAIN ST. JOHNS RIVER WATER MANAGEMENT DISTRICT PERMIT FOR DEWATERING.
- \* A DEWATERING PLAN SHALL BE DEVELOPED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL. PRIOR TO THE INITIATION OF ANY DEWATERING.
- \* THE CONTRACTOR SHALL COMPLETE AND FILE A NOTICE OF INTENT (NOI) FORM AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES ON THE SITE.
- \* WHEN ALL DISTURBED SOILS HAVE BEEN STABILIZED AND TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN REMOVED, THIS CONSTITUTES "ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITIES". AT THIS TIME THE CONTRACTOR SHALL COMPLETE AND FILE A NOTICE OF TERMINATION (NOT) TO THE APPROPRIATE PERMITTING AGENCIES. PRIOR TO SUBMITTING A NOI, THE CONTRACTOR SHALL OBTAIN WRITTEN ACCEPTANCE FROM THE OWNER CONFIRMING FINAL STABILIZATION.

3.0 MAINTENANCE/INSPECTION PROCEDURES:

THE CONTRACTOR SHALL PROVIDE A PLAN FOR MAINTAINING AND INSPECTING ALL EROSION AND SEDIMENT CONTROLS THROUGHOUT CONSTRUCTION. THE MAINTENANCE PLAN SHALL, AT A MINIMUM, COMPLY WITH THE FOLLOWING:



- \* NO MORE THAN 10 ACRES OF THE SITE SHALL BE DENUDED AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.
- \* ALL CONTROL MEASURES SHALL BE INSPECTED BY THE CONTRACTOR. THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOMEONE APPOINTED BY THE CONTRACTOR, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.25 INCHES OR GREATER.
- \* ALL TURBIDITY CONTROL MEASURES SHALL BE MAINTAINED IN GOOD WORKING ORDER IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
- \* BUILT UP SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
- \* SILT FENCE SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
- \* DIVERSION DIKES/SWALES SHALL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.
- \* STABILIZED AREAS SHALL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
- \* REPAIR ALL OTHER BMPs IMMEDIATELY FOLLOWING DAMAGE OR DISPLACEMENT.
- \* MONITOR FLOATING TURBIDITY BARRIERS TO ASSURE THEY ARE WORKING AS INTENDED.
- \* A MAINTENANCE INSPECTION REPORT SHALL BE MADE AFTER EACH INSPECTION. THE REPORTS SHALL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND EROSION PLANS, OR STORM WATER MANAGEMENT PLANS. THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN. THEN REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.
- \* THE CONTRACTOR WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.
- \* PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE CONTRACTOR. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

4.0 NON-STORMWATER DISCHARGES:

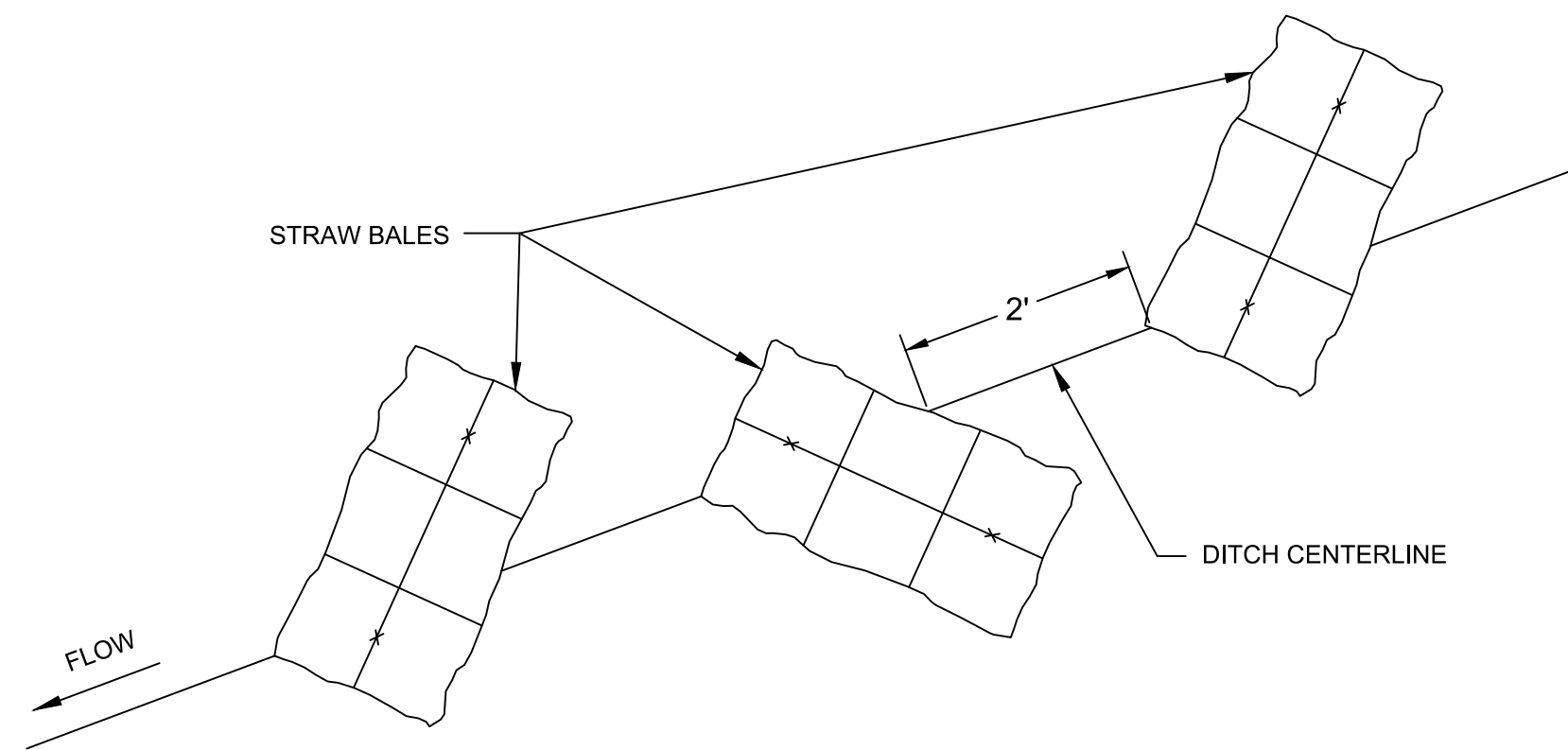
THE CONTRACTOR SHALL IDENTIFY ALL ANTICIPATED NON-STORMWATER DISCHARGES (EXCEPT FLOWS FROM FIRE FIGHTING ACTIVITIES). THE CONTRACTOR SHALL DESCRIBE THE PROPOSED MEASURES TO PREVENT POLLUTION OF THESE NON-STORMWATER DISCHARGES. IF THE CONTRACTOR ENCOUNTERS CONTAMINATED SOIL OR GROUNDWATER NOT INDICATED ON THE CONSTRUCTION DRAWINGS, ALL CONSTRUCTION ACTIVITIES SHALL STOP, AND THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD FOR FURTHER INSTRUCTIONS.

NON-STORMWATER DISCHARGES FOR THIS PROJECT ARE EXPECTED TO INCLUDE UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION), PAVEMENT WASH WATER (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS SUBSTANCES HAVE OCCURRED) AND ANY WATER USED FOR DUST CONTROL. IF SAID DISCHARGES DO OCCUR, THEY WILL BE DIRECTED TO THE STORMWATER POND PRIOR TO DISCHARGE. TURBID UNTREATED WATER FROM THE STORMWATER POND SHALL NOT BE DISCHARGED INTO RECEIVING WATERS. TURBID AND OTHER NON-STORMWATER DISCHARGES SHALL BE TREATED SO AS TO NOT ALLOW A DISCHARGE OF POLLUTED STORMWATER. APPROPRIATE TREATMENT MAY INCLUDE TURBIDITY CONTROLS, SETTLING PONDS, THE PROPER USE OF FLOCCULATING AGENTS, OR OTHER APPROPRIATE MEANS.

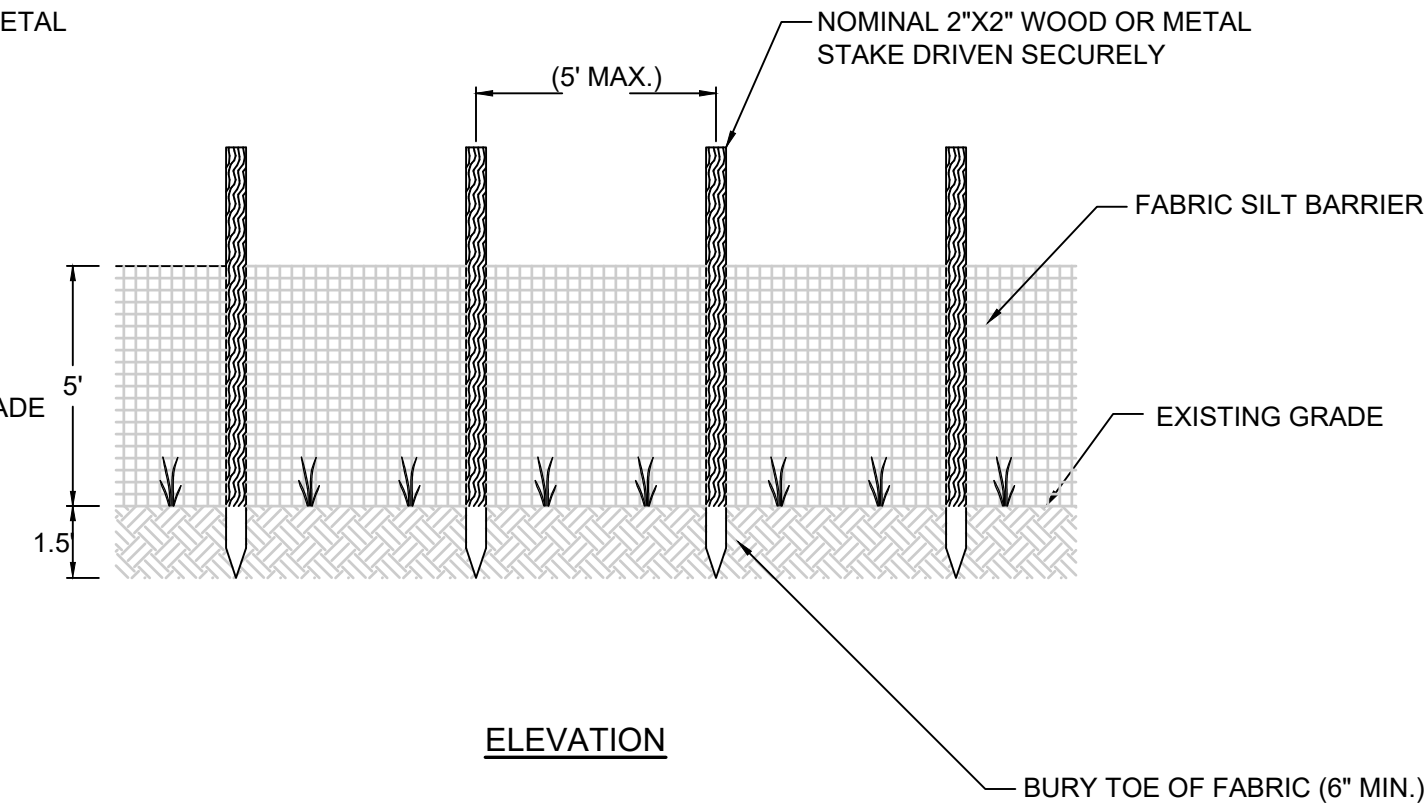
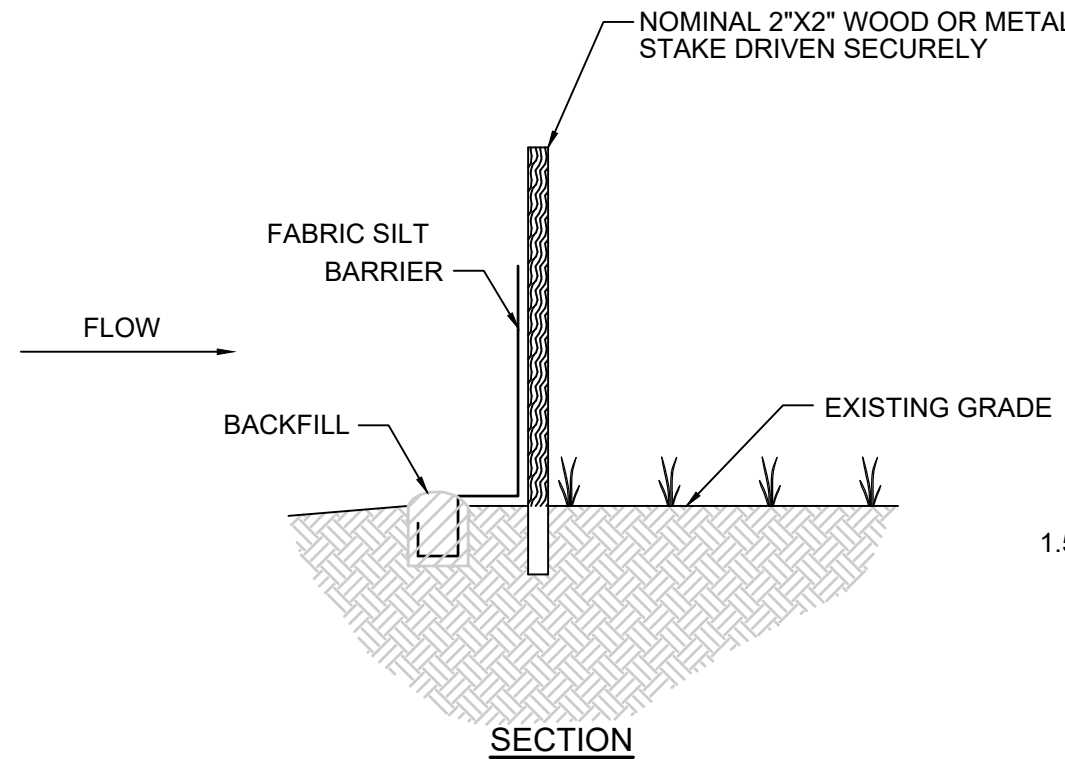
AC:\Doc\Geosyntec\INDIAN RIVER CNTY LF CELL 3\Project\FinalDrawings\FL9363A-C17.dwg

-	12/13/2023	ISSUE FOR BID	JJV	KBT	
REV	DATE	DESCRIPTION	DRN	APP	
 					
1200 RIVERPLACE BOULEVARD, SUITE 710 JACKSONVILLE, FLORIDA 32207 USA PHONE: 904.858.1818 - FAX: 904.396.1143 CERTIFICATE OF AUTHORIZATION NO. 4321					
1325 74th AVENUE SW VERO BEACH, FLORIDA 32969 USA PHONE: 772.770.5112					
TITLE: <b>STORM WATER POLLUTION PREVENTION PLAN</b>					
PROJECT: <b>PHASE II - CELL 3 CONSTRUCTION</b>					
SITE: <b>INDIAN RIVER COUNTY LANDFILL</b>					
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.			DESIGN BY: KBT	DATE: DECEMBER 2023	
SIGNATURE			DRAWN BY: JJV	PROJECT NO.: FL9363A	
DATE			CHECKED BY: TC	FILE: FL9363A-C17	
KWASI BADIU-TWENEGBOAH LICENSE NO. 42460			REVIEWED BY: SA	DRAWING NO.:	
			APPROVED BY: KBT	<b>23</b> OF <b>24</b>	

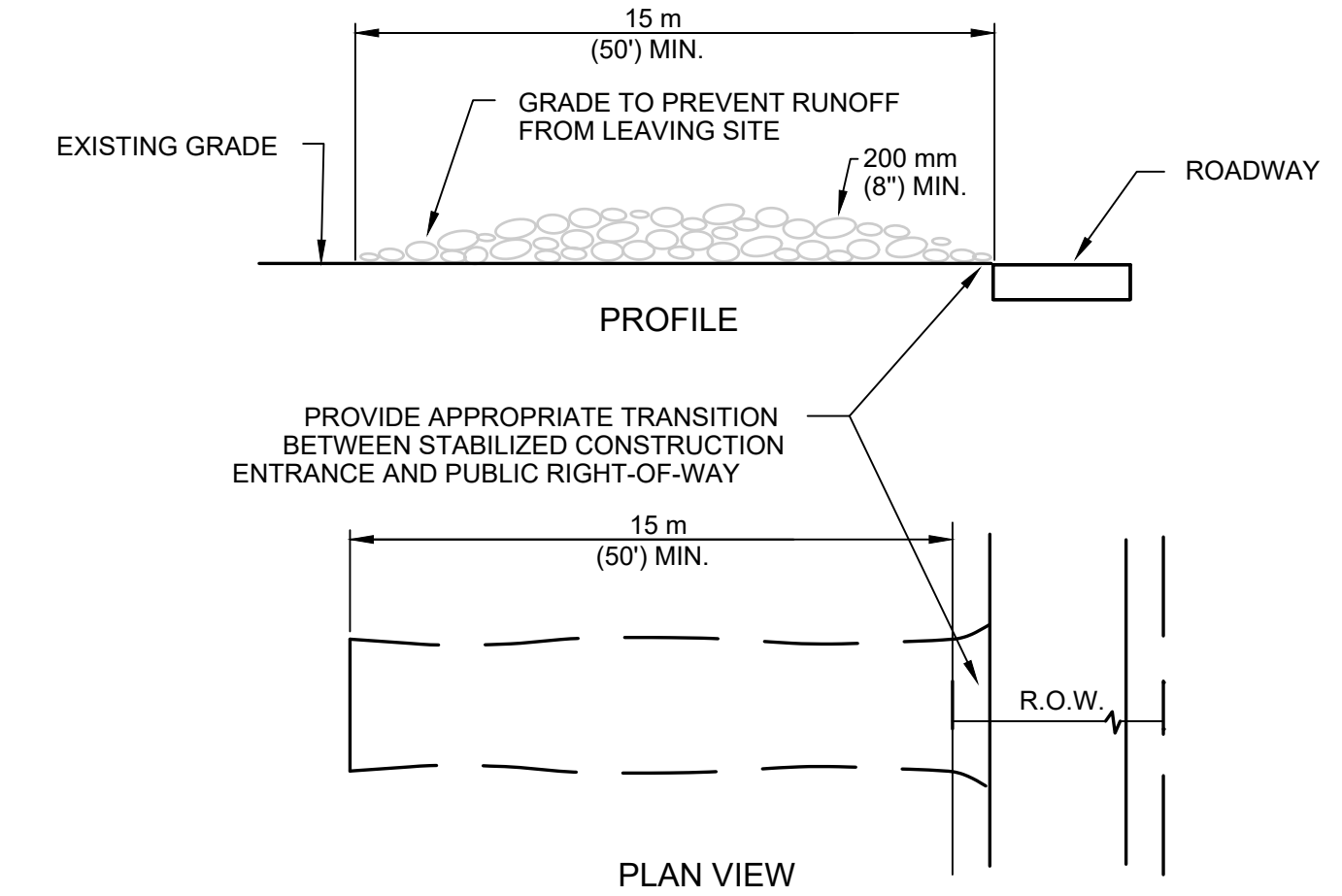
**FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION**



**32**  
**24** DETAIL  
**SILT CHECK DAM (TYPICAL)**  
(NOTE 1)  
SCALE: NOT TO SCALE (N.T.S.)

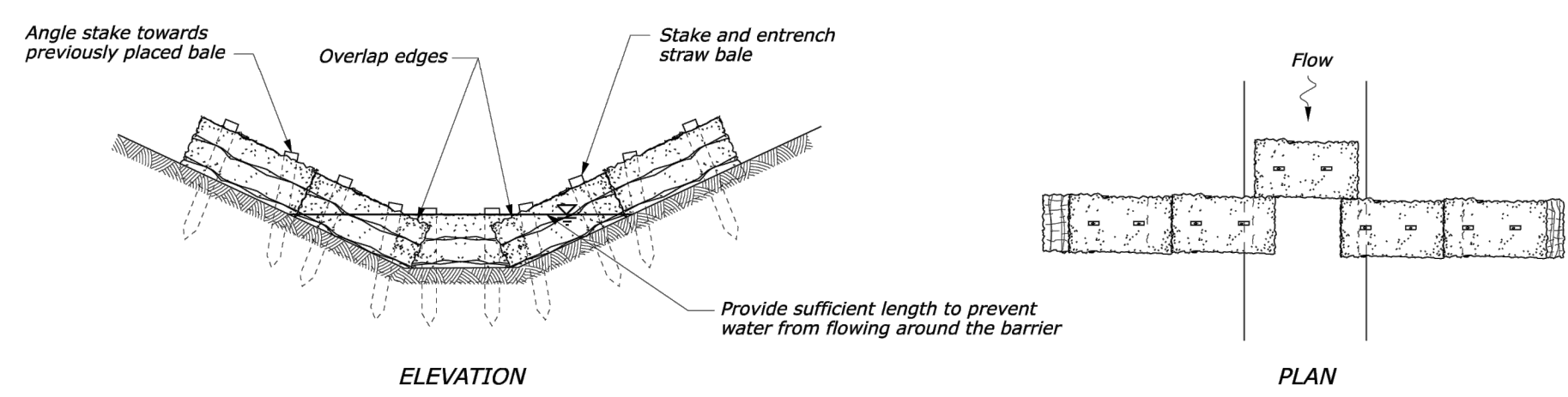


**33**  
**24** DETAIL  
**SILT FENCE (TYPICAL)**  
(NOTE 2)  
SCALE: N.T.S.

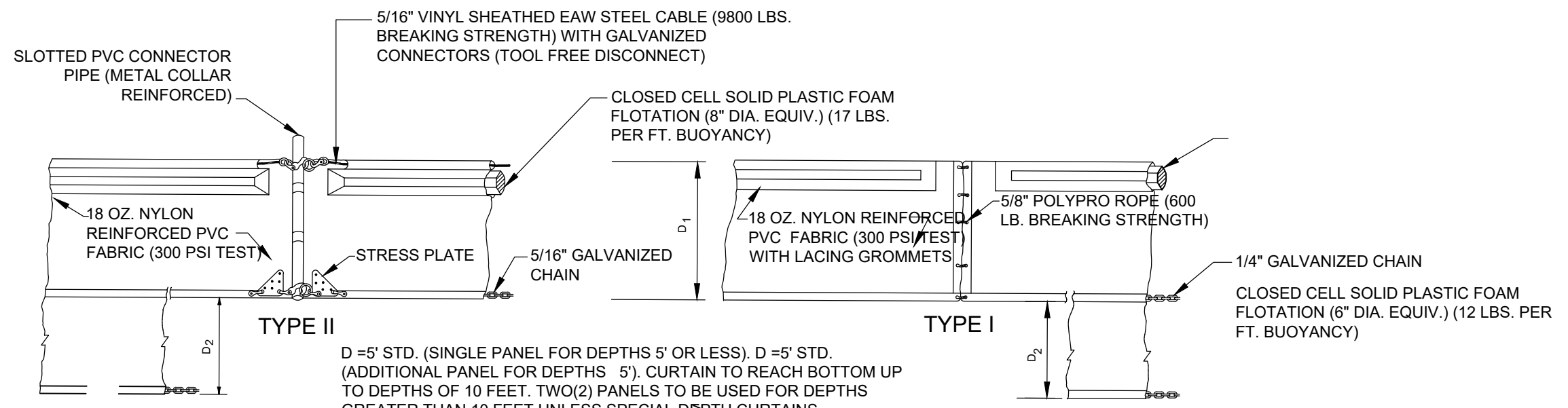


- NOTES:
1. STONE SIZE: 75-125 mm (3-5") OPEN GRADED ROCK.
  2. LENGTH: AS EFFECTIVE BUT NOT LESS THAN 15 m (50').
  3. THICKNESS: NOT LESS THAN 200 mm (8").
  4. WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS.
  5. WASHING: WHEN NECESSARY, VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE AND DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
  6. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AS WELL AS REPAIR AND CLEAN OUT OF ANY MEASURE DEVICES USED TO TRAP SEDIMENT. ALL SEDIMENTS THAT IS SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
  7. DRAINAGE: ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

**34**  
**24** DETAIL  
**STABILIZED CONSTRUCTION ENTRANCE AND EXIT**  
SCALE: N.T.S.



**35**  
**24** DETAIL  
**STRAW BALE BARRIER IN DITCH**  
(NOTE 3)  
SCALE: N.T.S.

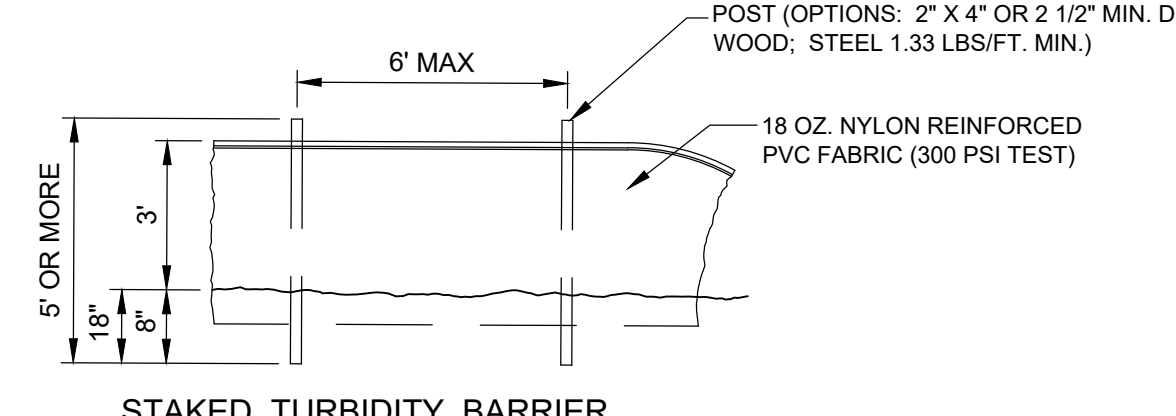
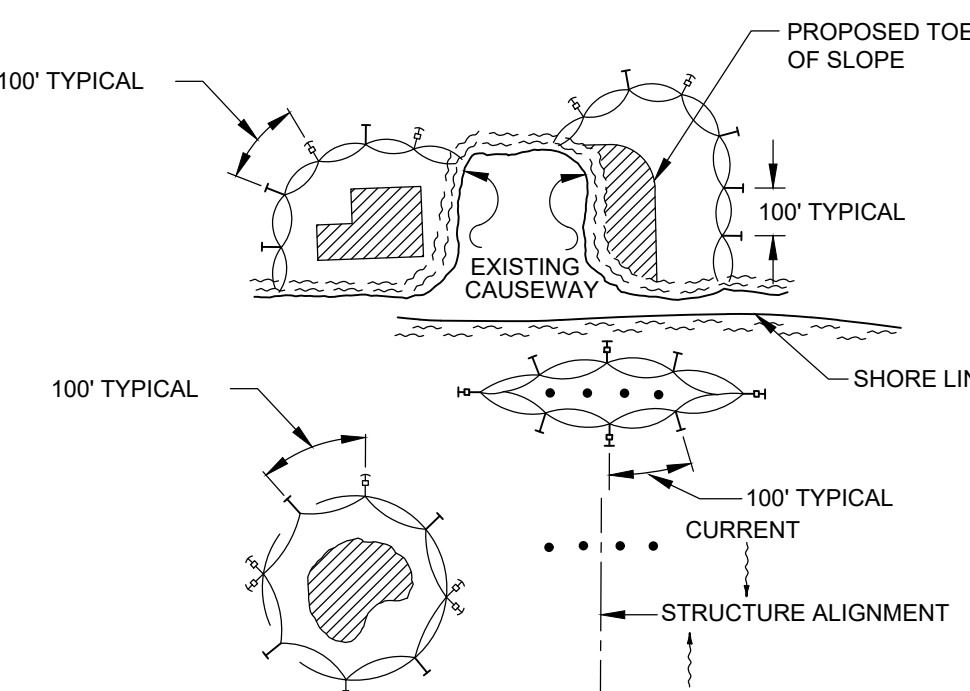


NOTE: COMPONENTS OF TYPES I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.

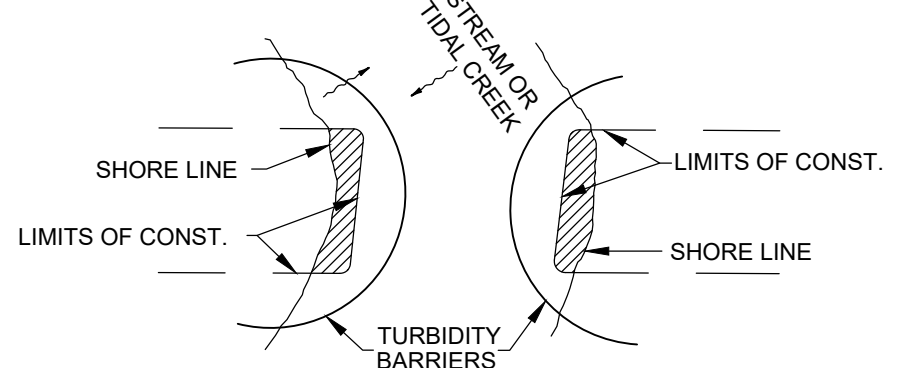
- LEGEND
- PILE LOCATIONS
  - ▨ DREDGE OR FILL AREA
  - ⊙ MOORING BUOY/WANCHOR
  - ANCHOR
  - ↔ BARRIER MOVEMENT DUE TO CURRENT ACTION

- GENERAL NOTES
1. FLOATING TURBIDITY BARRIERS ARE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR FLOATING TURBIDITY BARRIER, LF.
  2. STAKED TURBIDITY BARRIERS ARE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED TURBIDITY BARRIER, LF.

**FLOATING TURBIDITY BARRIERS**

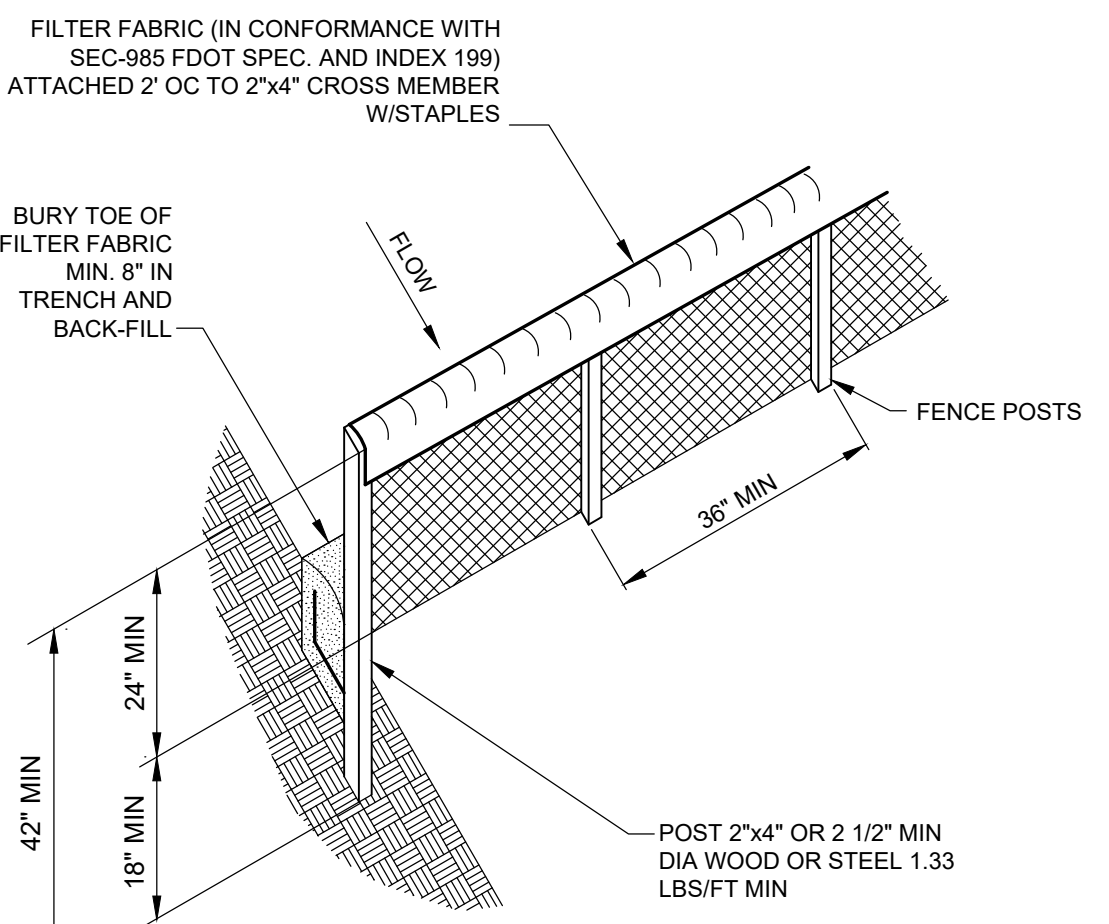


**STAKED TURBIDITY BARRIER**





NOTE: TURBIDITY BARRIERS FOR FLOWING STREAMS AND TIDAL CREEKS MAY BE EITHER FLOATING, OR STAKED TYPES OR ANY COMBINATIONS OF TYPES THAT WILL SUIT SITE CONDITIONS AND MEET EROSION CONTROL AND WATER QUALITY REQUIREMENTS. THE BARRIER TYPE(S) WILL BE AT THE CONTRACTORS OPTION UNLESS OTHERWISE SPECIFIED IN THE PLANS, HOWEVER PAYMENT WILL BE UNDER THE PAY ITEM(S) ESTABLISHED IN THE PLANS FOR FLOATING TURBIDITY BARRIER AND/OR STAKED TURBIDITY BARRIER. POSTS IN STAKED TURBIDITY BARRIERS TO BE INSTALLED IN VERTICAL POSITION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

**36**  
**24** DETAIL  
**TURBIDITY BARRIER**  
SCALE: N.T.S.



**37**  
**24** DETAIL  
**STAKED SILT FENCE**  
SCALE: N.T.S.

- NOTE:
1. SILT CHECK DAMS SHALL BE PLACED EVERY 100' ALONG THE DRAINAGE DITCH ON SOUTH SIDE OF THE VERTICAL EXPANSION ACCESS ROAD.
  2. SILT FENCE SHALL BE PLACED WITHIN 100' OF ALL DISTURBED AREAS UNTIL COMPLETION OF CONSTRUCTION.
  3. STRAW BALE BARRIERS SHALL BE INSTALLED EVERY 200' WITHIN THE PERIMETER DITCH.

REV	DATE	DESCRIPTION	DRN	APP
-	12/13/2023	ISSUE FOR BID	JJV	KBT
 				
<b>TITLE:</b> STORMWATER POLLUTION PREVENTION DETAILS				
<b>PROJECT:</b> PHASE II - CELL 3 CONSTRUCTION				
<b>SITE:</b> INDIAN RIVER COUNTY LANDFILL				
<small>THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.</small>				
DESIGN BY: KBT		DATE: DECEMBER 2023		
DRAWN BY: JJV		PROJECT NO.: FL9363A		
CHECKED BY: TC		FILE: FL9363A-C27		
REVIEWED BY: SA		DRAWING NO.:		
APPROVED BY: KBT		<b>24</b> OF <b>24</b>		

FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION