

**LEGEND**

- PERMIT BOUNDARY
- WASTE UNIT BOUNDARY
- PERIMETER ACCESS ROAD
- 500 TOP OF LINER ELEVATION
- CLOMR 100-YEAR FLOODPLAIN
- LEACHATE COLLECTION PIPE
- LEACHATE SUMP LOCATION
- LEACHATE SUMP RISER PIPES

**NOTES**

1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY DALLAS AERIAL SURVEYS ON FEBRUARY 15, 2010.
2. BOUNDARY AND IMPROVEMENT SURVEY DEVELOPED BY MEJIA ENGINEERING COMPANY ON AUGUST 15, 2011 AND JUNE 9, 2014.
3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
4. THE NEED FOR FLEXIBILITY TO ACCOMMODATE ADJUSTMENTS AND MODIFICATIONS IS ANTICIPATED CONSIDERING THE SIZE, COMPLEXITY, AND LIFE OF THE PROJECT.
5. ALL CELLS ARE DESIGNATED TO POTENTIALLY RECEIVE CLASS I NON-HAZARDOUS INDUSTRIAL WASTE. ELEVATION SHOWN IS FOR 3' THICK COMPACTED SOIL LINER. CELLS THAT WILL RECEIVE ONLY MUNICIPAL SOLID WASTE WILL HAVE 2' THICK COMPACTED SOIL LINER.
6. ENTRANCE FACILITIES TO BE RELOCATED OR WASTE UNITS MODIFIED TO REDUCE AREA AT TIME OF COMPLETING CELLS S-5 TO S-8.

REV. NO.	DATE	DESCRIPTION

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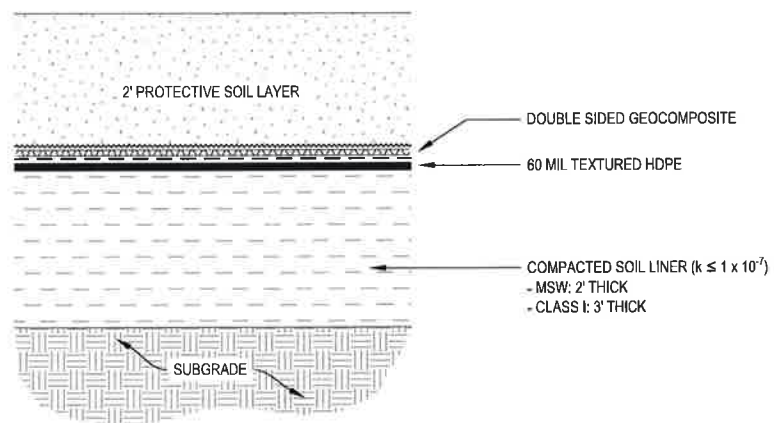


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**PESCADITO ENVIRONMENTAL RESOURCE CENTER  
WEBB COUNTY, TEXAS  
MSW 2374**

**LINER PLAN**

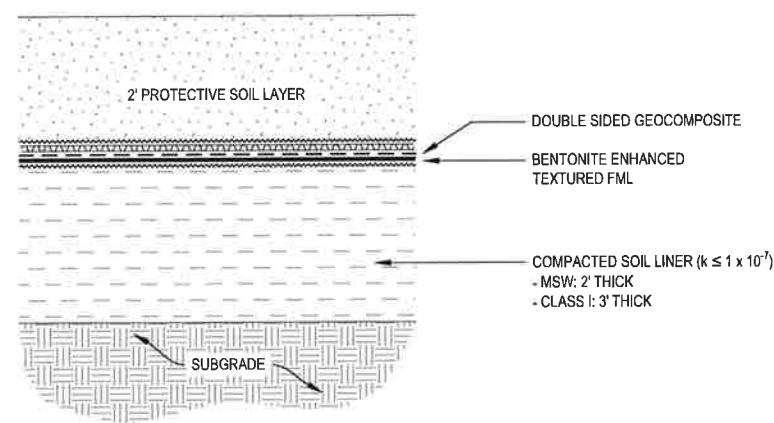
PROJ. NO.:	148866	DATE:	MARCH 2015
DESIGNED BY:	---	DRAWING NO.:	III <b>D.3-1</b>
DRAWN BY:	MTE		
CHECKED BY:	RDS		
APPROVED BY:	MWO		1 OF 11 SHEETS



**BOTTOM LINER DETAIL  
OPTION 1**

1  
D.3-2

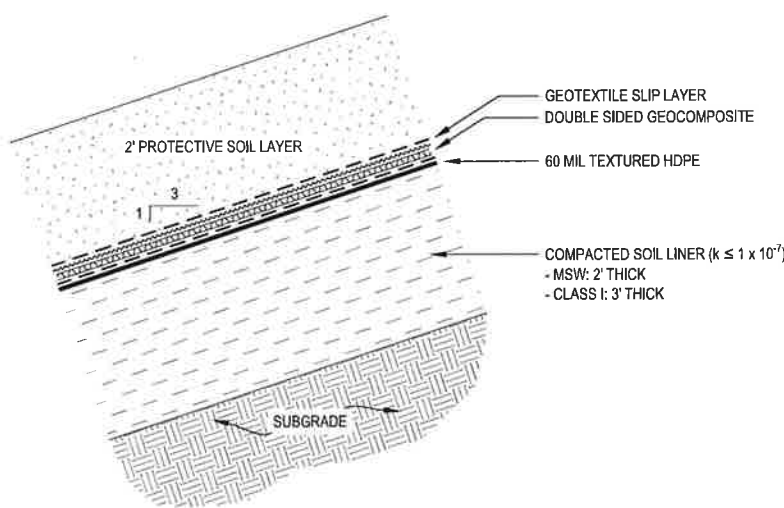
SCALE: 1"=3'



**BOTTOM LINER DETAIL  
OPTION 2**

2  
D.3-2

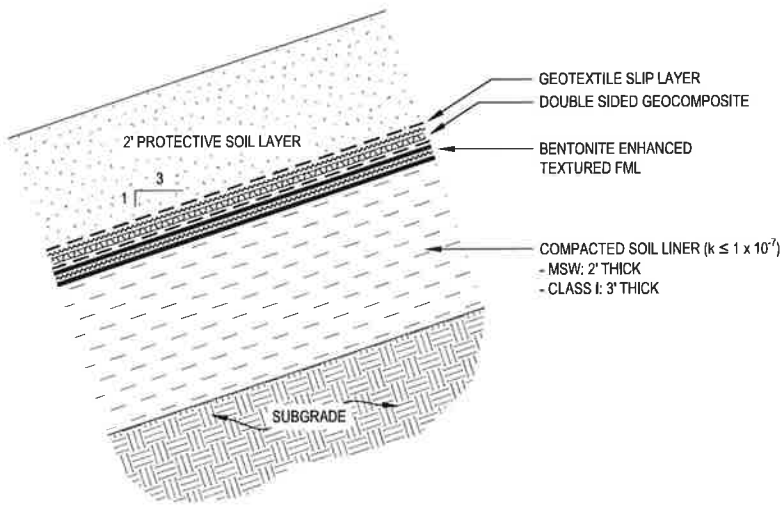
SCALE: 1"=3'



**SIDEWALL DETAIL  
OPTION 1**

3  
D.3-2

SCALE: 1"=3'



**SIDEWALL  
OPTION 2**

4  
D.3-2

SCALE: 1"=3'

NOTES:  
1. GEOSYNTHETIC MATERIALS SHOWN WITH EXAGGERATED THICKNESS FOR CLARITY.

**LINE AND SHADING LEGEND**

GEOTEXTILE (WOVEN)		DOUBLE SIDED GEOCOMPOSITE	
GEONET/GEOTEXTILE			
GEOTEXTILE (NON-WOVEN)			
	GEOMEMBRANE		PLYWOOD
	GEOSYNTHETIC CLAY LINER		BENTONITE ENHANCED FML
	TOPSOIL		NATIVE SOIL
	GENERAL FILL		CONCRETE
	SELECT GRANULAR FILL		RIPRAP
	SOIL BARRIER LAYER FILL		BITUMINOUS PAVING
	SELECT AGGREGATE FILL		GRAVEL
	COMPACTED SOIL		AGGREGATE BASE COURSE

REV. NO.	DATE	DESCRIPTION

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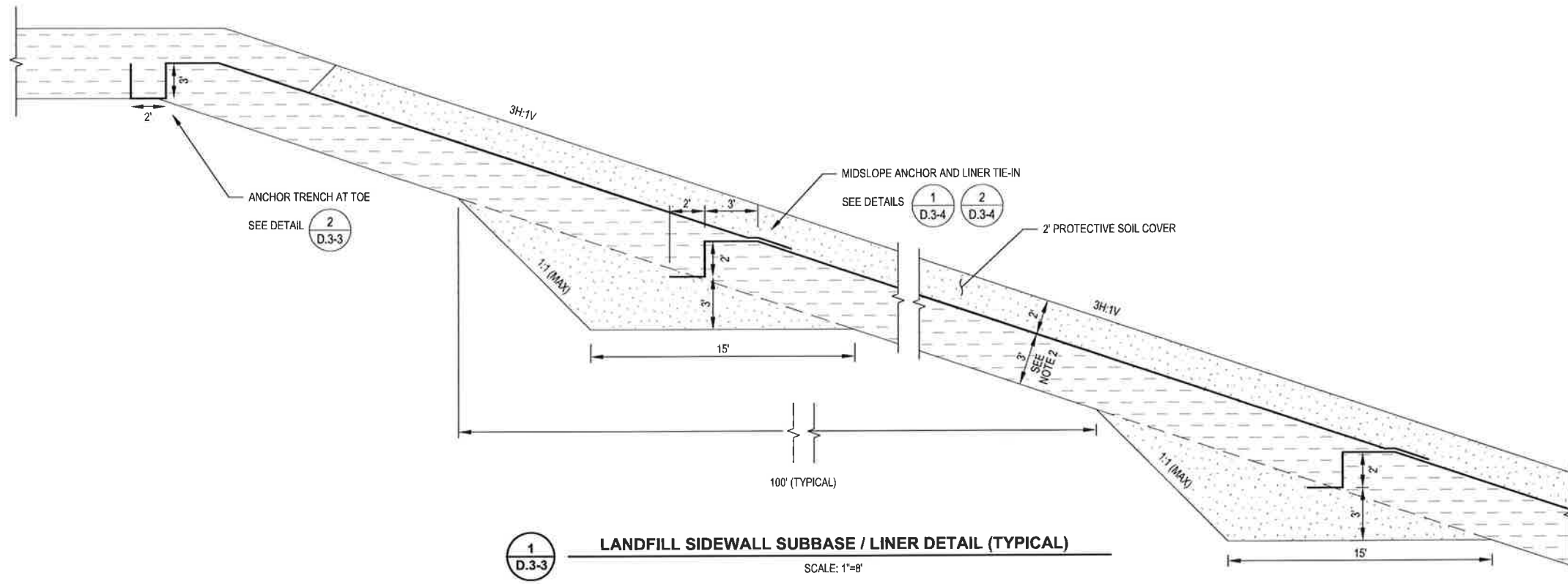
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**PESCADITO ENVIRONMENTAL RESOURCE CENTER  
WEBB COUNTY, TEXAS  
MSW 2374**

**LINER DETAILS**

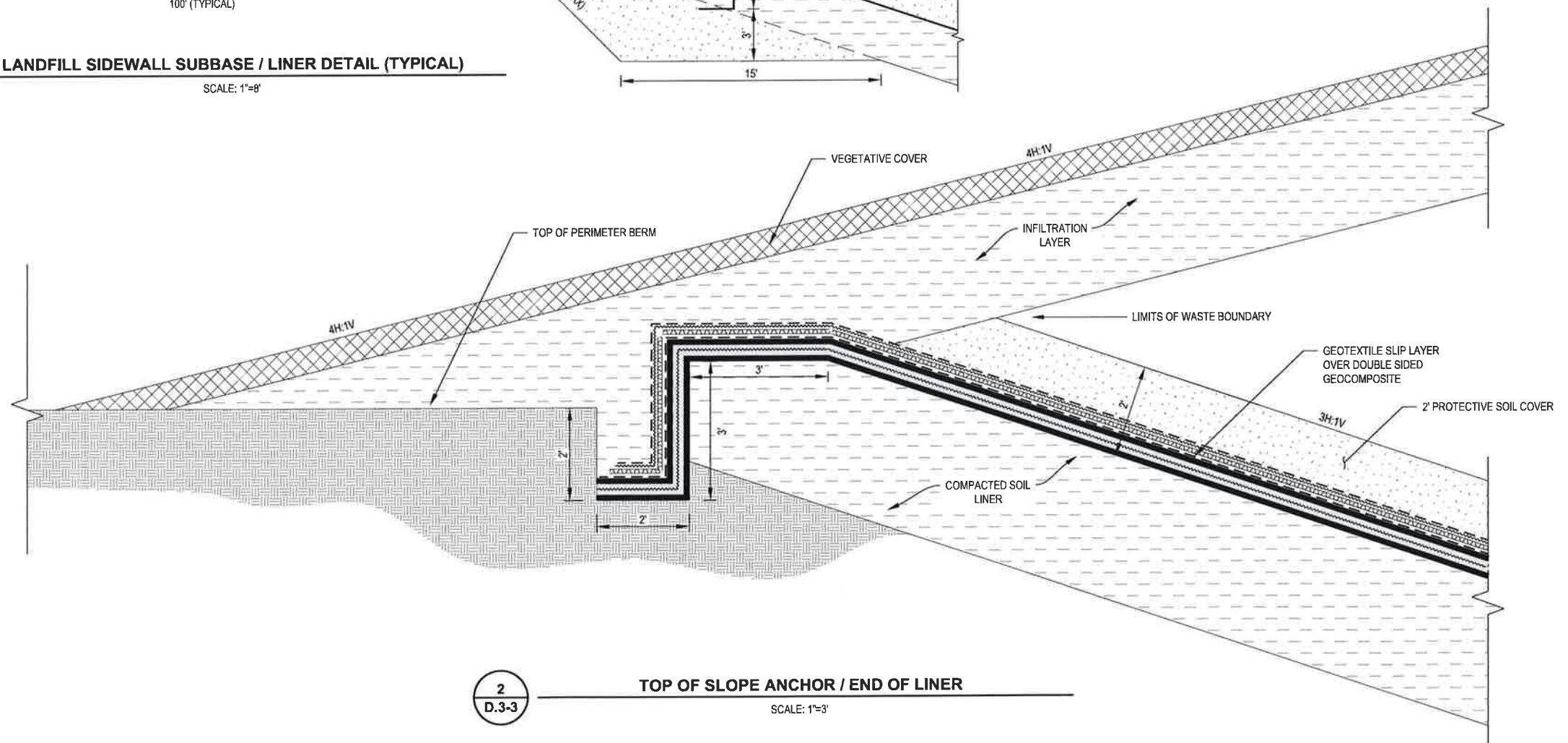
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DESIGNED BY:	-	DRAWING NO.:	III D.3-2
DRAWN BY:	MTE		
CHECKED BY:	RDS		
APPROVED BY:	MWO		2 OF 11 SHEETS



- NOTES:
1. GEOSYNTHETIC MATERIALS SHOWN WITH EXAGGERATED THICKNESS FOR CLARITY.
  2. 3' THICK COMPACTED SOIL LINER SHOWN FOR CELLS TO RECEIVE CLASS I WASTES. CELLS TO RECEIVE MUNICIPAL SOLID WASTE ONLY MAY HAVE 2' THICK COMPACTED SOIL LINER.
  3. LINER AND PROTECTIVE COVER THICKNESS MEASURED PERPENDICULAR TO SLOPE.

**LINE AND SHADING LEGEND**

GEOTEXTILE (WOVEN)		DOUBLE SIDED GEOCOMPOSITE
GEONET/GEOTEXTILE		
GEOTEXTILE (NON-WOVEN)		
GEOMEMBRANE		PLYWOOD
GEOSYNTHETIC CLAY LINER		BENTONITE ENHANCED FML
TOPSOIL		NATIVE SOIL
GENERAL FILL		CONCRETE
SELECT GRANULAR FILL		RIPRAP
SOIL BARRIER LAYER FILL		BITUMINOUS PAVING
SELECT AGGREGATE FILL		GRAVEL
COMPACTED SOIL		AGGREGATE BASE COURSE



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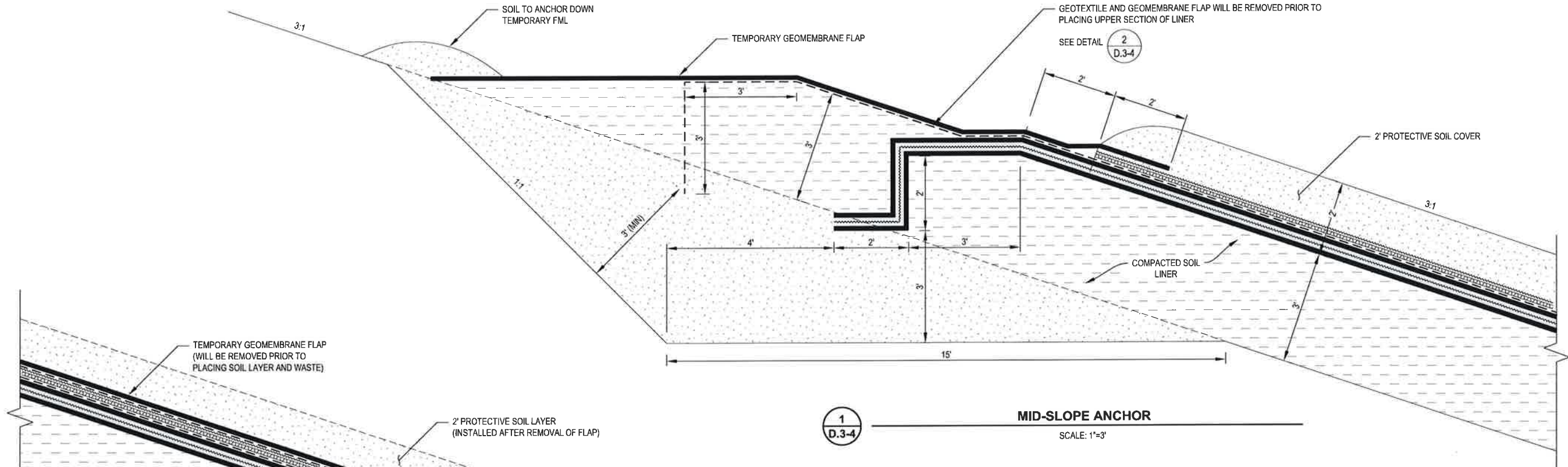
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*Michael W. Oden*

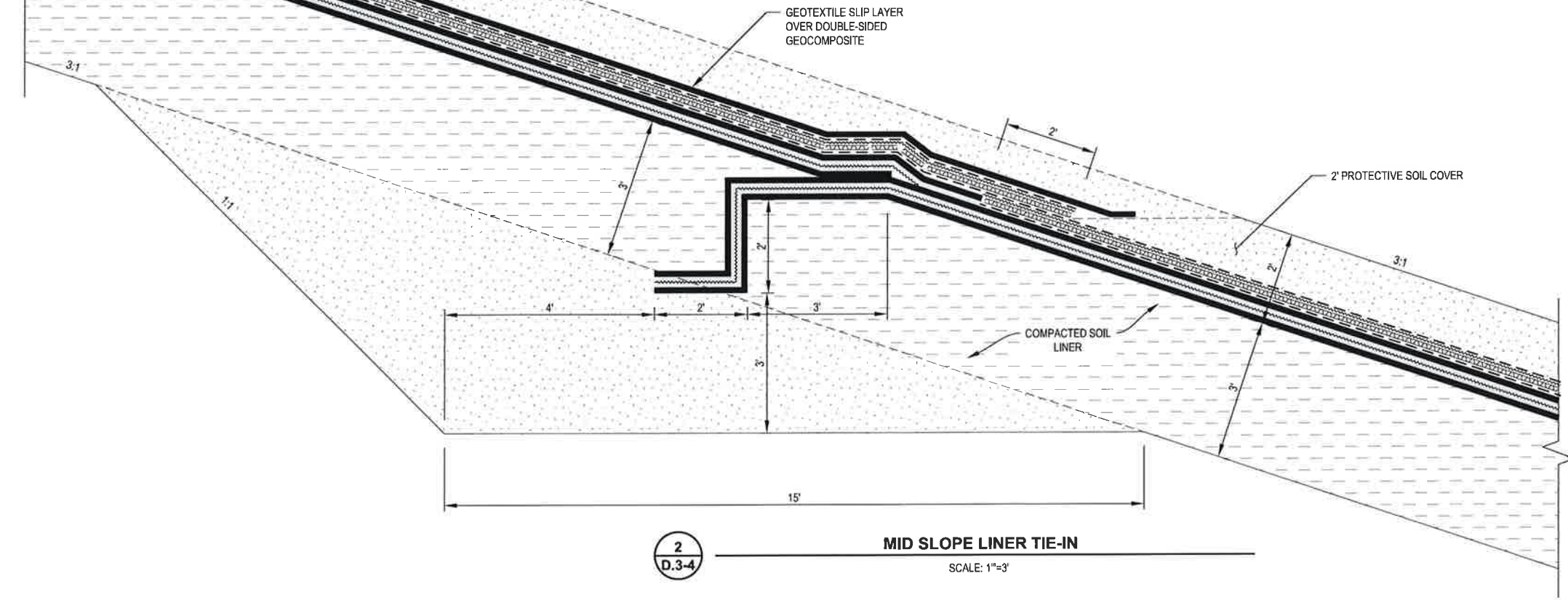
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**WEBB COUNTY, TEXAS**  
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**LINER DETAILS**

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**1**  
D.3-4  
**MID-SLOPE ANCHOR**  
SCALE: 1"=3'



**2**  
D.3-4  
**MID SLOPE LINER TIE-IN**  
SCALE: 1"=3'

- NOTES:**
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**LINE AND SHADING LEGEND**

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	SELECT AGGREGATE FILL		GRAVEL
	COMPACTED SOIL		AGGREGATE BASE COURSE

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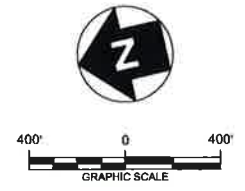
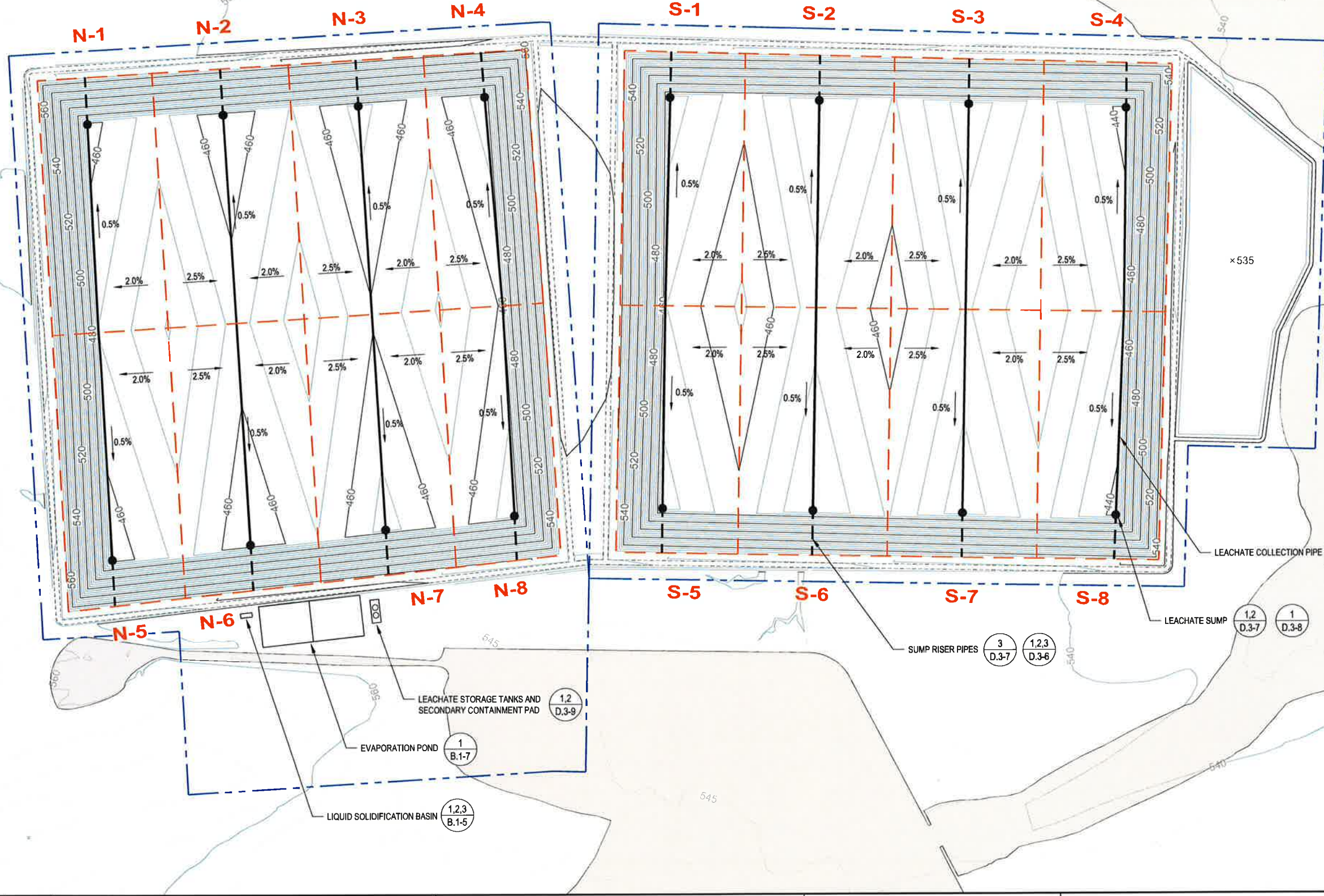


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*Michael W. Oden*

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MSW 2374**

**LINER DETAILS**

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**LEGEND**

- PERMIT BOUNDARY
- WASTE UNIT BOUNDARY
- PERIMETER ACCESS ROAD
- 500 TOP OF LINER ELEVATION
- CLOMR 100-YEAR FLOODPLAIN
- LEACHATE COLLECTION PIPE
- LEACHATE SUMP LOCATION
- LEACHATE SUMP RISER PIPES

**NOTES**

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5. NOT ALL FACILITIES WILL BE CONSTRUCTED AT THE SAME TIME.

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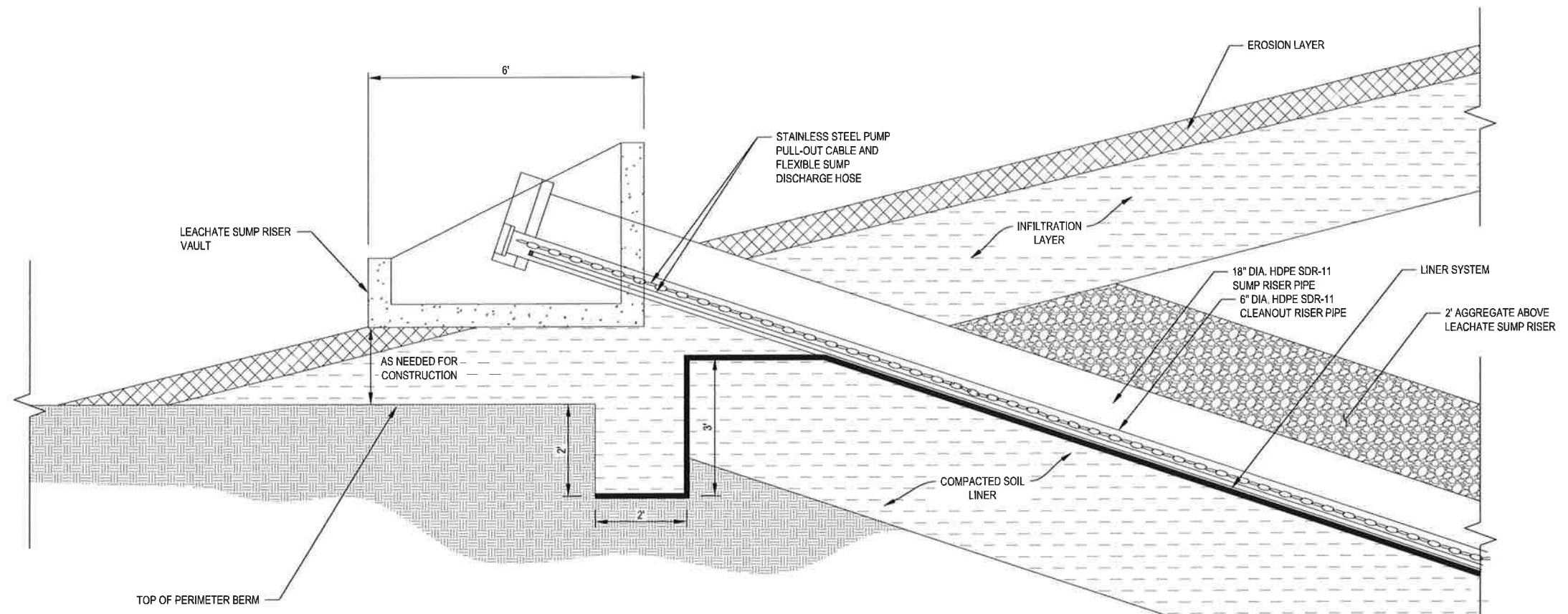
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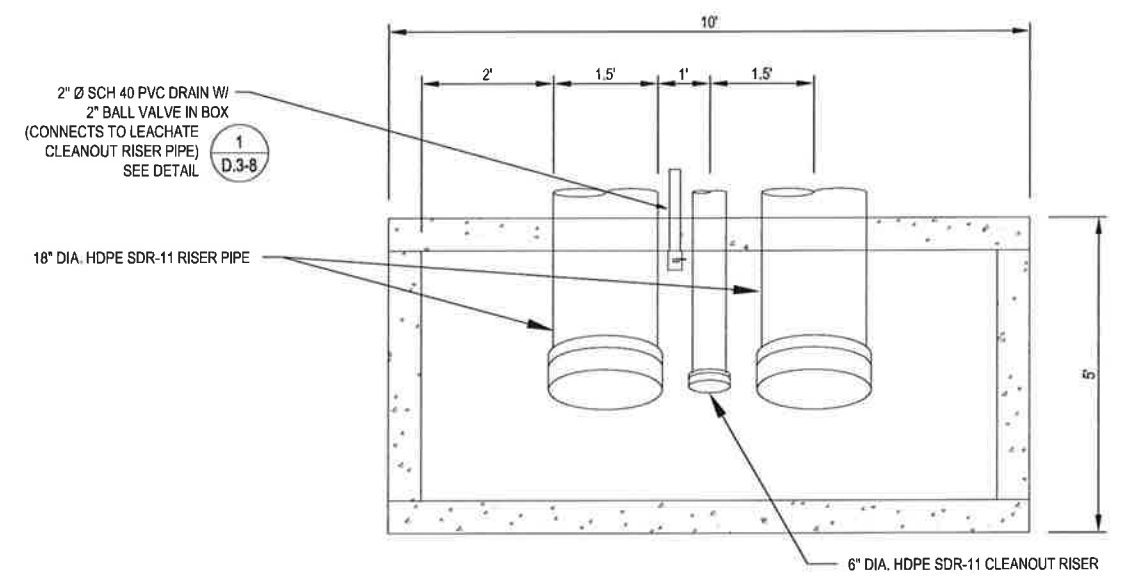
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**LEACHATE COLLECTION SYSTEM PLAN**

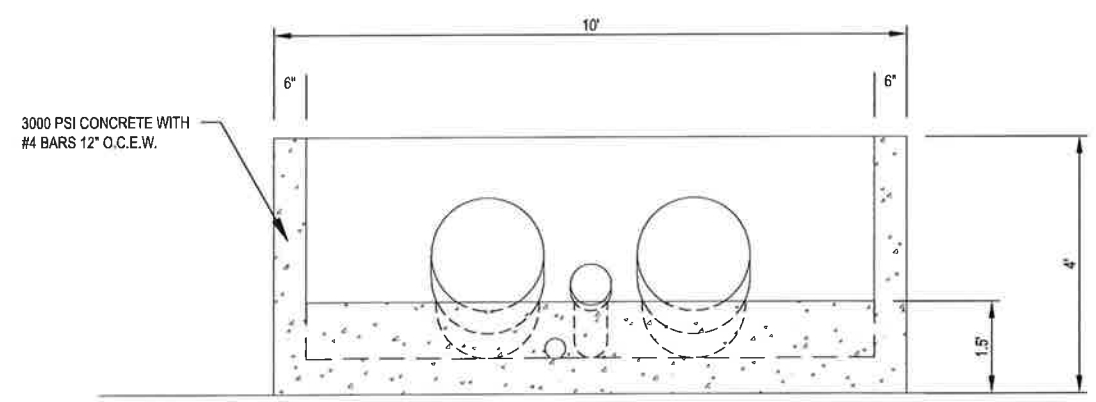
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DESIGNED BY:	-	DRAWING NO.:	III
DRAWN BY:	MTE		<b>D.3-5</b>
CHECKED BY:	RDS		
APPROVED BY:	MWO		5 OF 11 SHEETS



**1**  
D.3-6  
**TOP OF SLOPE AT LEACHATE SUMP RISER AND VAULT**  
NOT TO SCALE



**2**  
D.3-6  
**RISER VAULT PLAN**  
NOT TO SCALE



**3**  
D.3-6  
**RISER VAULT SECTION**  
NOT TO SCALE

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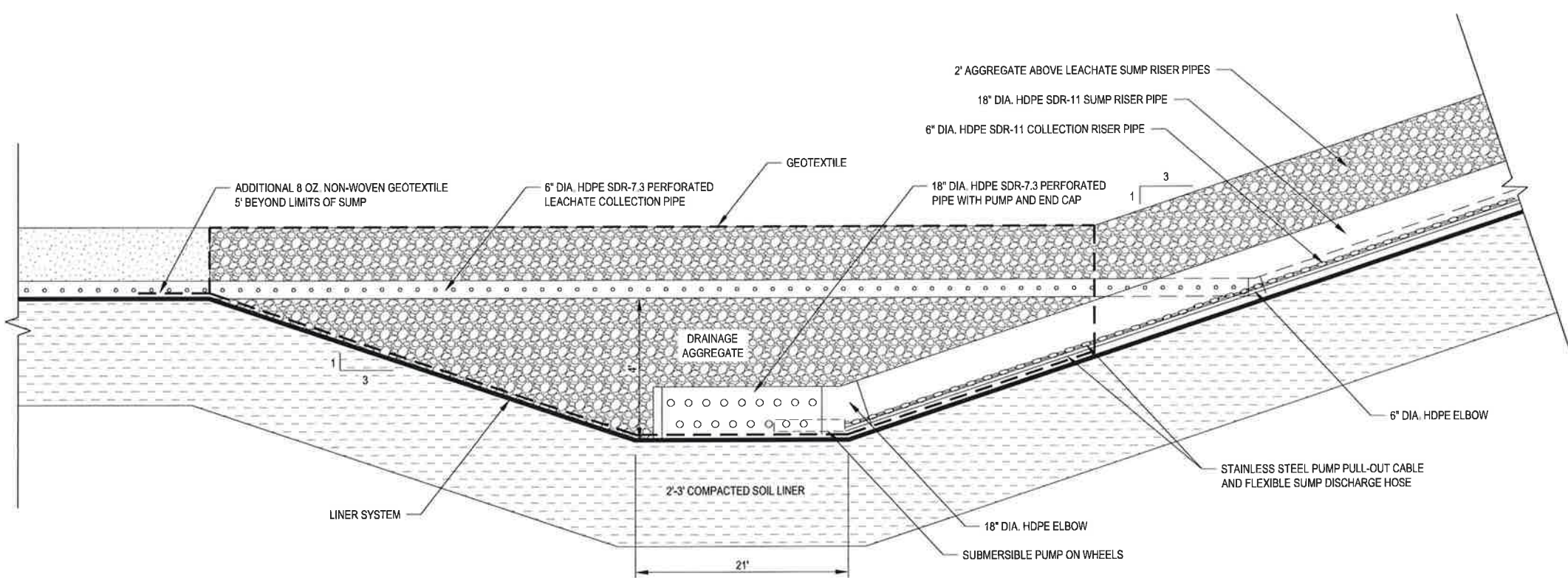
STATE OF TEXAS  
MICHAEL W. ODEN  
REGISTERED PROFESSIONAL ENGINEER  
67185

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**WEBB COUNTY, TEXAS**  
**MSW 2374**

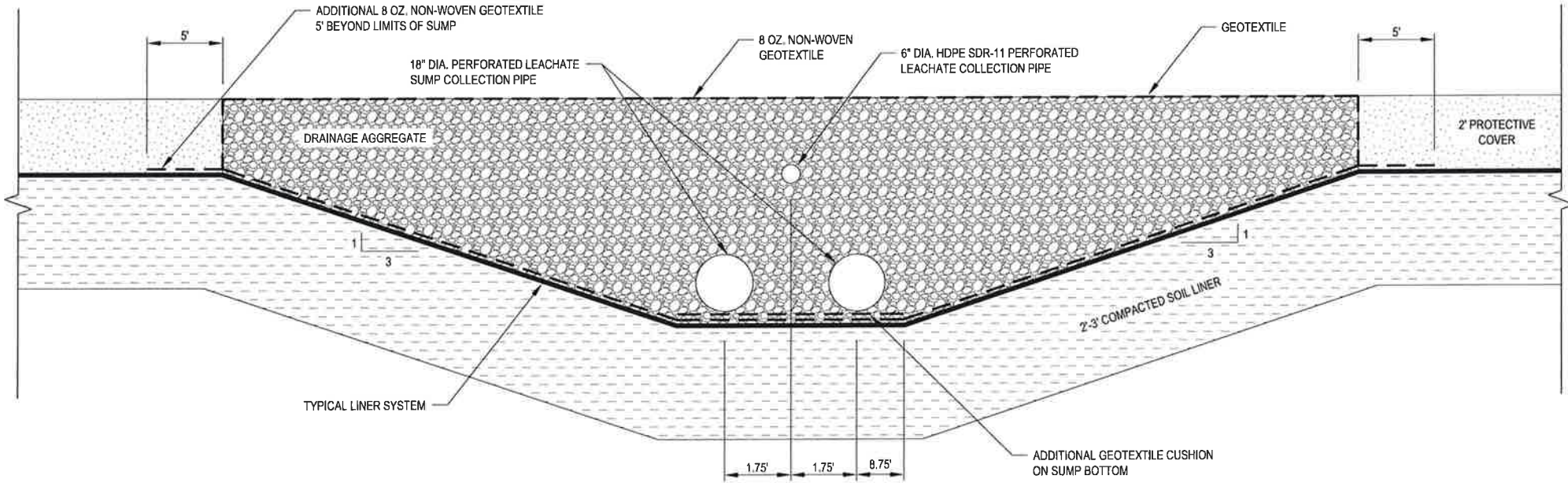
**LEACHATE COLLECTION DETAILS**

PROJ. NO.:	148866	DATE:	MARCH 2015
DESIGNED BY:	-	DRAWING NO.:	<b>III</b> <b>D.3-6</b>
DRAWN BY:	MTE		
CHECKED BY:	RDS		
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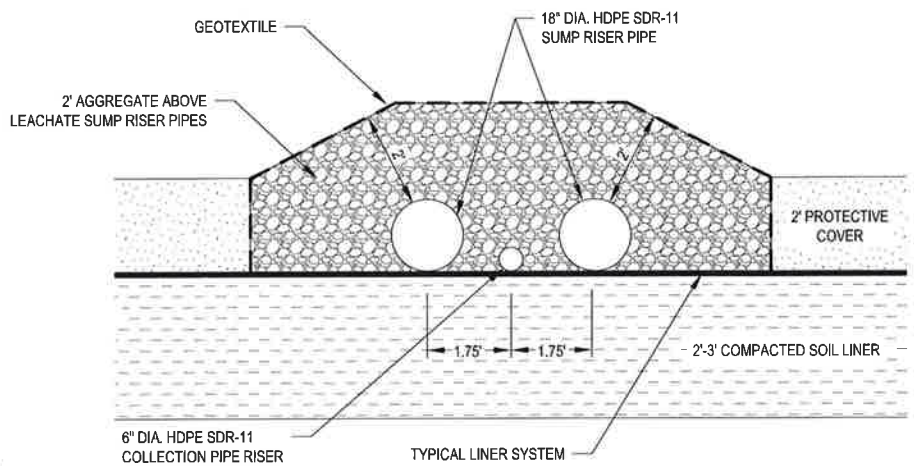
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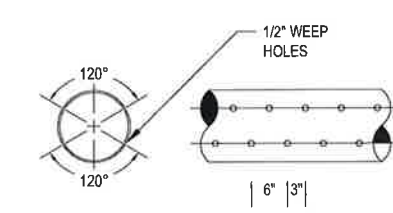
**1**  
D.3-7  
**LEACHATE SUMP PROFILE**  
NOT TO SCALE



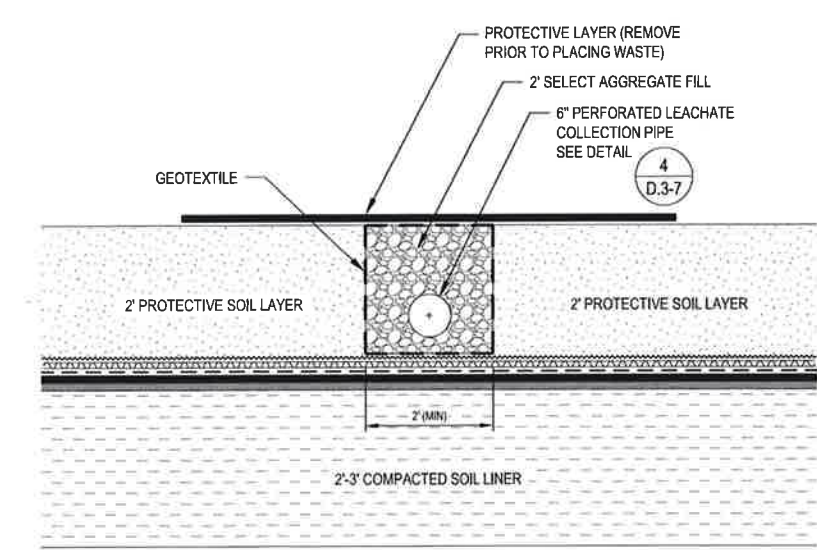
**2**  
D.3-7  
**LEACHATE SUMP SECTION**  
NOT TO SCALE



**3**  
D.3-7  
**SUMP RISER PIPES**  
NOT TO SCALE



**4**  
D.3-7  
**PERFORATED PIPE**  
NOT TO SCALE



**5**  
D.3-7  
**LEACHATE COLLECTION PIPE**  
NOT TO SCALE

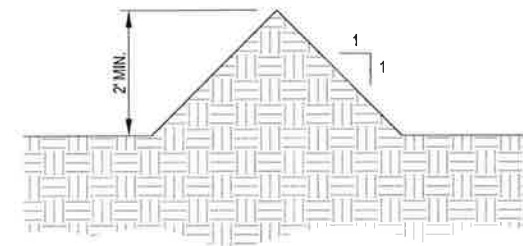
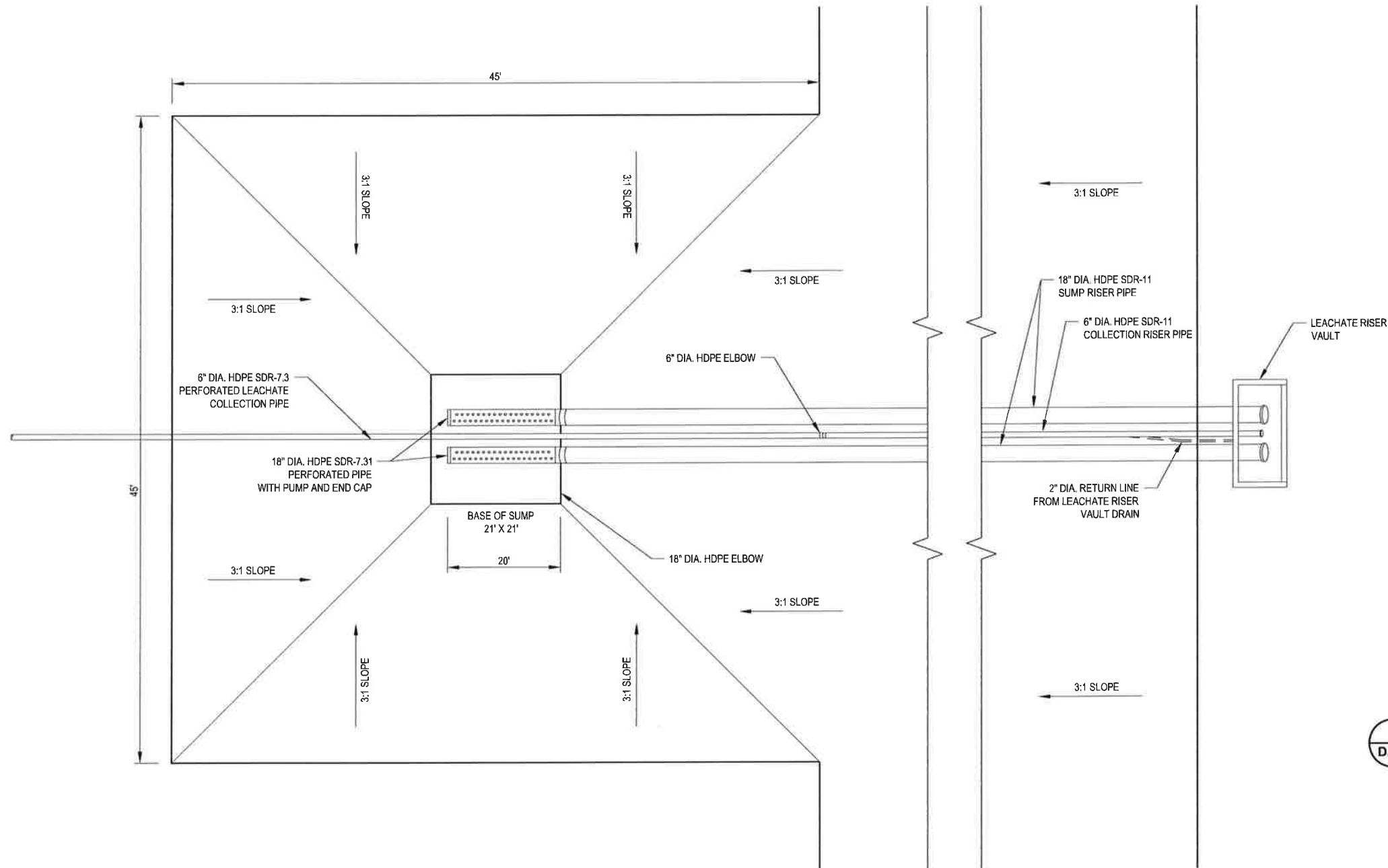
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 MICHAEL W. ODEN  
 67165  
 REGISTERED PROFESSIONAL ENGINEER

**PESCADITO ENVIRONMENTAL RESOURCE CENTER**  
**WEBB COUNTY, TEXAS**  
**MSW 2374**  
**LEACHATE COLLECTION DETAILS**

PROJ. NO.: 148866	DATE: MARCH 2015
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**WORKING FACE BERM  
FOR RUN ON AND RUN OFF CONTROL**  
NOT TO SCALE

**1**  
D.3-8 **LEACHATE SUMP PLAN**  
NOT TO SCALE

**2**  
D.3-8

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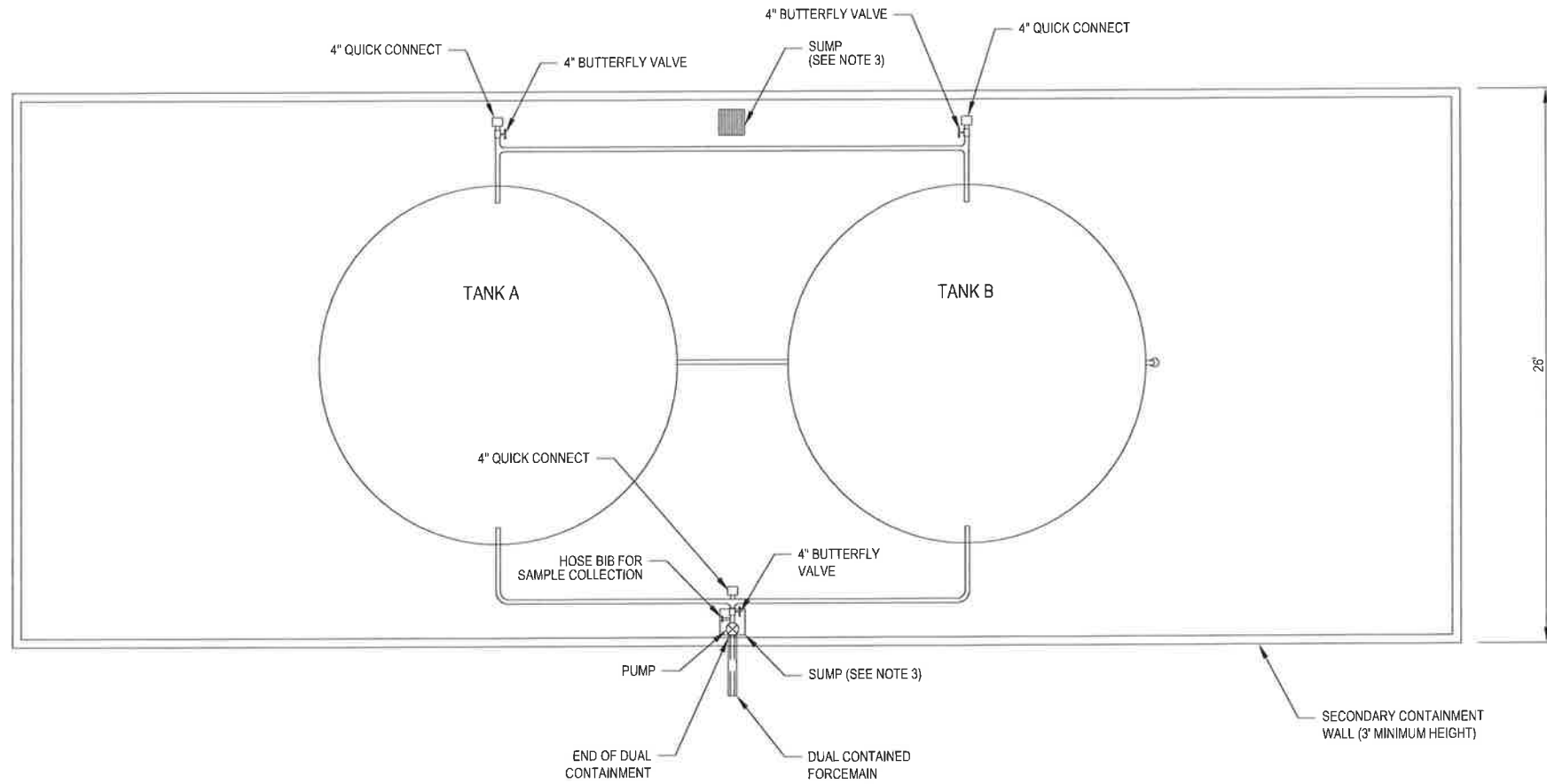
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WEBB COUNTY, TEXAS  
MSW 2374**

**LEACHATE COLLECTION DETAILS**

PROJ. NO.: 148866	DATE: MARCH 2015
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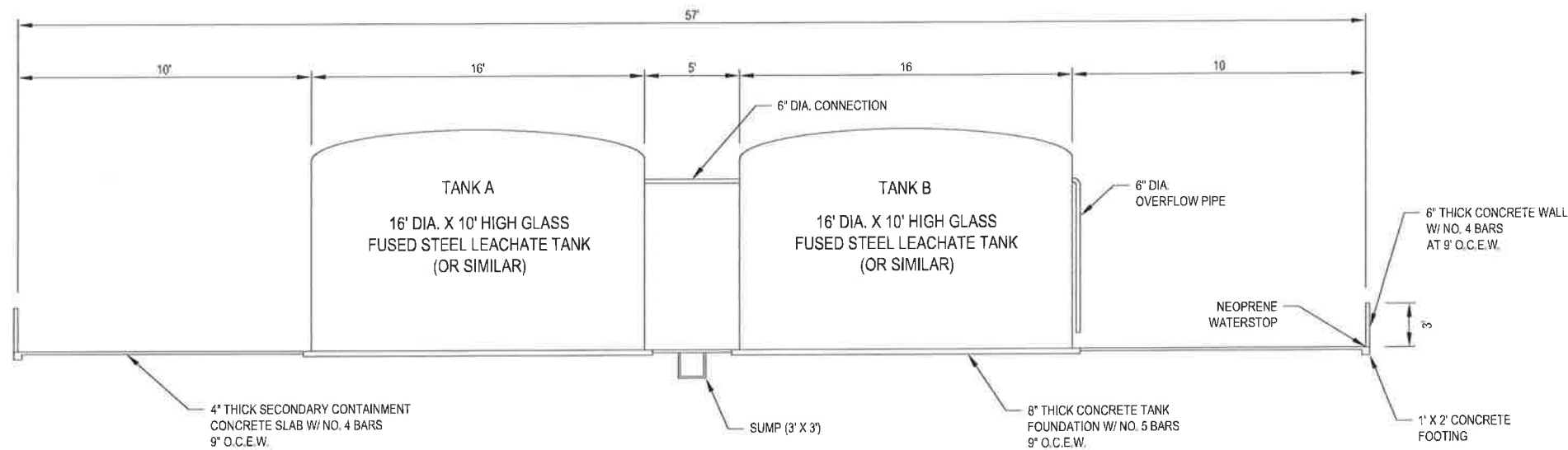




NOTES:

1. REFER TO APPENDIX III-D.6 FOR DISCUSSION ON THE LEACHATE STORAGE FACILITY.
2. REFER TO APPENDIX III-D.6 FOR THE SECONDARY CONTAINMENT VOLUME CALCULATIONS FOR THE LEACHATE STORAGE FACILITY.
3. SUMPS ARE 3' WIDE AND 3' DEEP.
4. CONCRETE SECTIONS MAY VARY PENDING FINAL TANK SELECTION, SIZE, AND DESIGN.

**1**  
D.3-9  
**LEACHATE STORAGE TANK FACILITY PLAN**  
NOT TO SCALE



**2**  
D.3-9  
**LEACHATE STORAGE TANK FACILITY SECTION**  
NOT TO SCALE

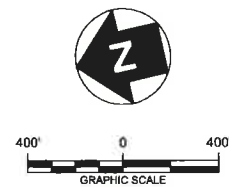
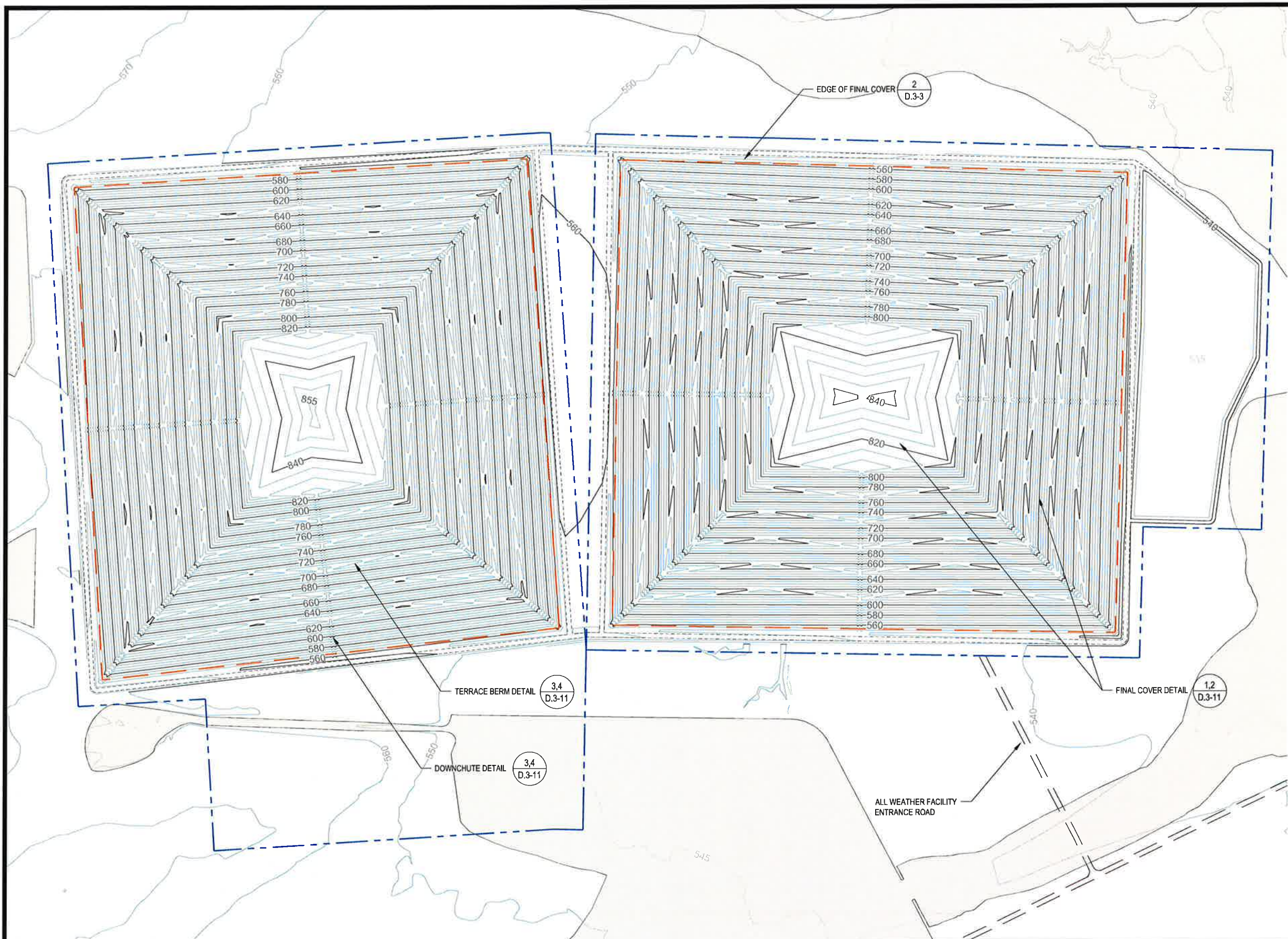
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STATE OF TEXAS  
67165

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**WEBB COUNTY, TEXAS**  
**MSW 2374**  
**LEACHATE STORAGE DETAILS**

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**LEGEND**

- PERMIT BOUNDARY
- WASTE UNIT BOUNDARY
- PERIMETER ACCESS ROAD
- CLOMR 100-YEAR FLOODPLAIN

**NOTES**

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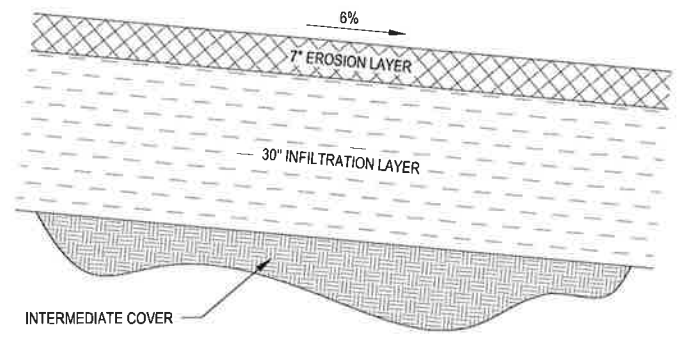
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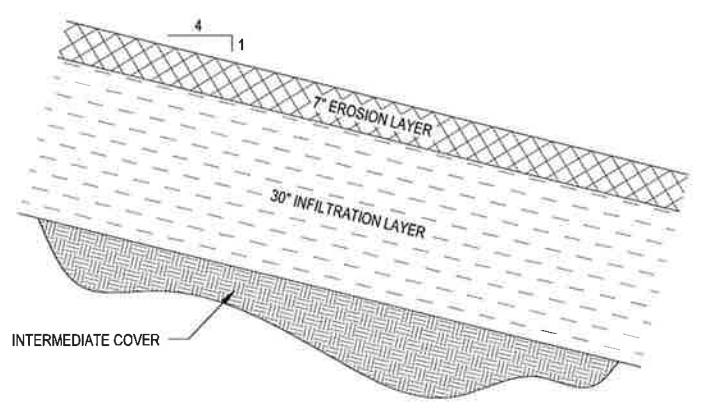
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 WEBB COUNTY, TEXAS  
 MSW 2374**

**FINAL COVER PLAN**

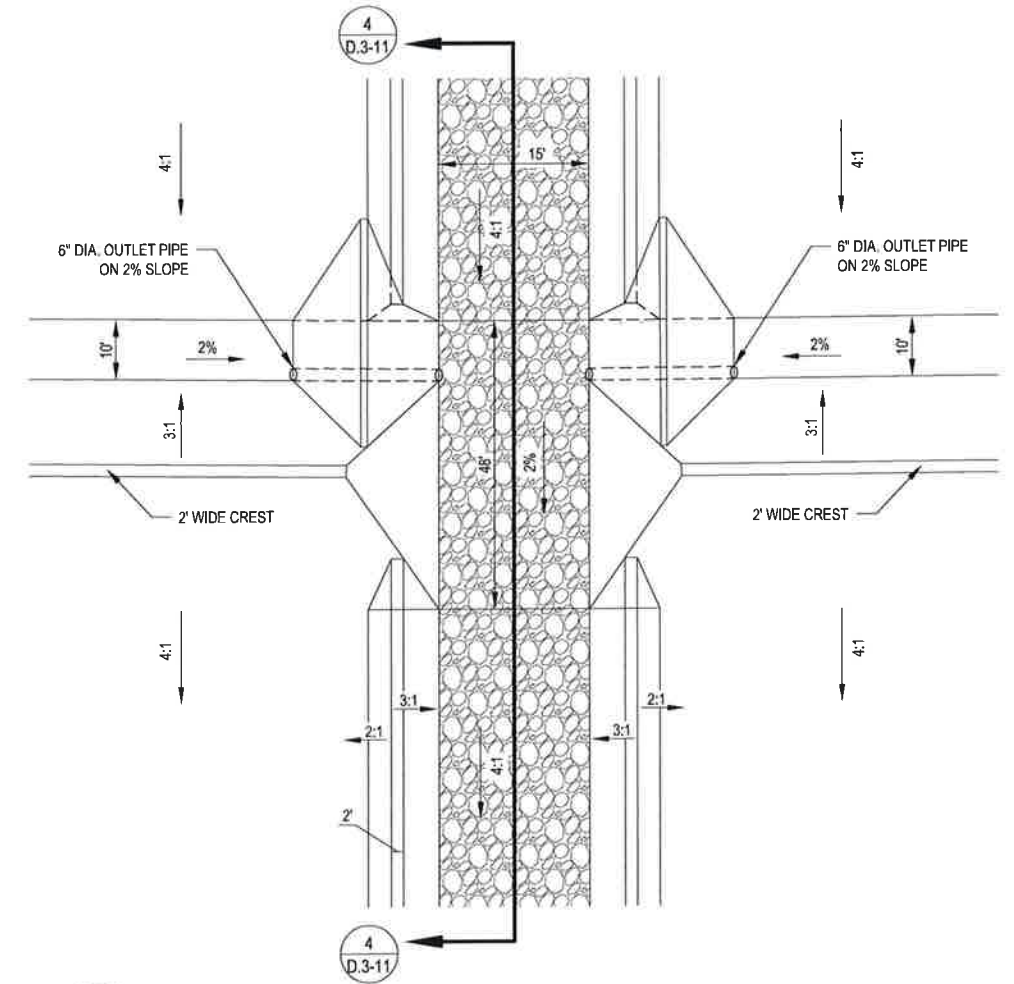
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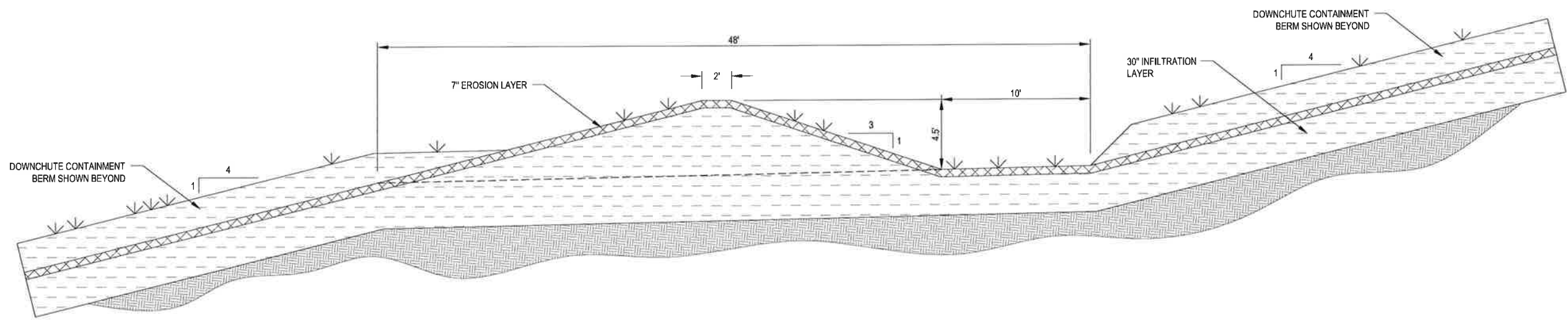
**1**  
D.3-11  
**FINAL COVER - TOP SLOPE**  
NOT TO SCALE



**2**  
D.3-11  
**FINAL COVER - SIDE SLOPE**  
NOT TO SCALE



**3**  
D.3-11  
**TERRACE BERM AND DOWNCHUTE - SECTION VIEW**  
NOT TO SCALE



**4**  
D.3-11  
**TERRACE BERM AND DOWNCHUTE - PROFILE VIEW**  
NOT TO SCALE

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STATE OF TEXAS  
MICHAEL W. ODEN  
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REGISTERED PROFESSIONAL ENGINEER

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WEBB COUNTY, TEXAS  
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**FINAL COVER DETAILS**

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