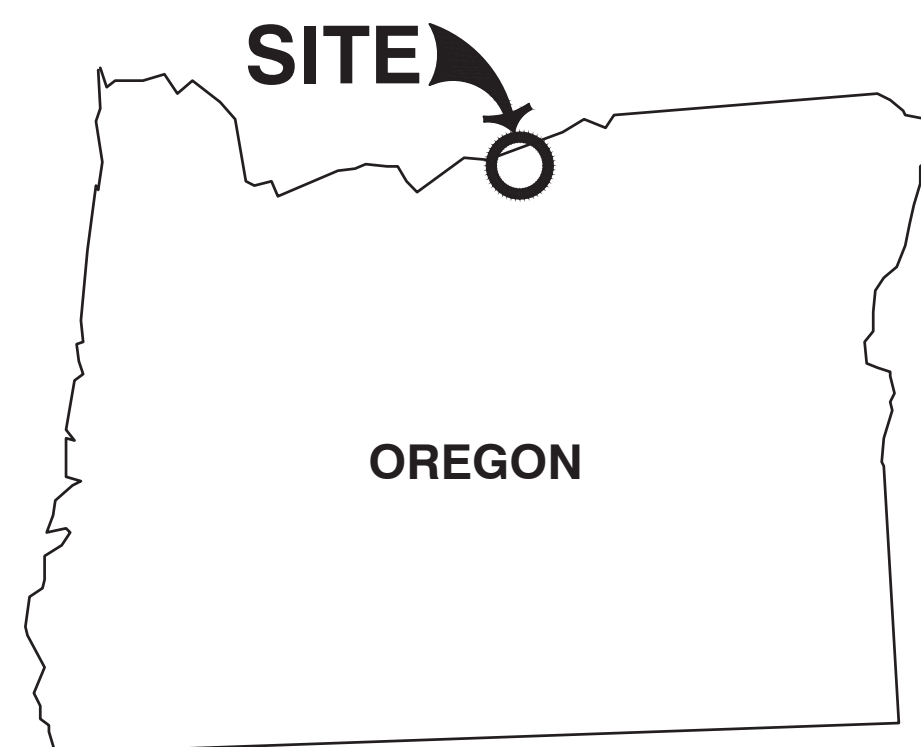


# PART B - PERMIT

## LANDFILL L-14 DESIGN DRAWINGS

### CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST ARLINGTON, OREGON



SHEET INDEX	
DRAWING NO.	DRAWING TITLE
P-000	TITLE SHEET
P-300	SUBGRADE PLAN
P-301	TOP OF PROTECTIVE COVER
P-302	TOP OF WASTE GRADING PLAN
P-303	LANDFILL CROSS SECTIONS
P-304	LANDFILL CROSS SECTIONS
P-800	LINER SYSTEM AND ANCHOR TRENCH DETAILS
P-801	RISER PIPE DETAILS
P-802	SUMP AND LEACHATE COLLECTION SYSTEM DETAILS
P-803	SUMP AND SIDESLOPE RISER PIPE LAYOUT
P-804	SUMP LAYOUT DETAILS
P-805	LINER TERMINATION DETAILS



PREPARED FOR  
**WASTE MANAGEMENT**  
 CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST, INC.  
 18177 CEDAR SPRINGS LANE  
 ARLINGTON, OREGON 97812  
 (541) 454-2630

- REFERENCE**
- THE HORIZONTAL COORDINATES ARE BASED ON OREGON STATE PLANE COORDINATE SYSTEM, NORTH ZONE, INTERNATIONAL FOOT, NAD83.
  - VERTICAL COORDINATES ARE BASED ON NAVD88.
  - EXISTING TOPOGRAPHY COLLECTED BY MILLER CREEK ASSOCIATES ON APRIL 24, 2019.

REVISION RECORD

**C&E**  
**Civil & Environmental Consultants, Inc.**  
 4045 NW 64th Street - Suite 415 - Oklahoma City, OK 73116  
 Ph: 405.246.9411  
 www.cechc.com

**CHEMICAL WASTE  
MANAGEMENT OF THE NORTHWEST  
ARLINGTON, OR**

**TITLE SHEET**

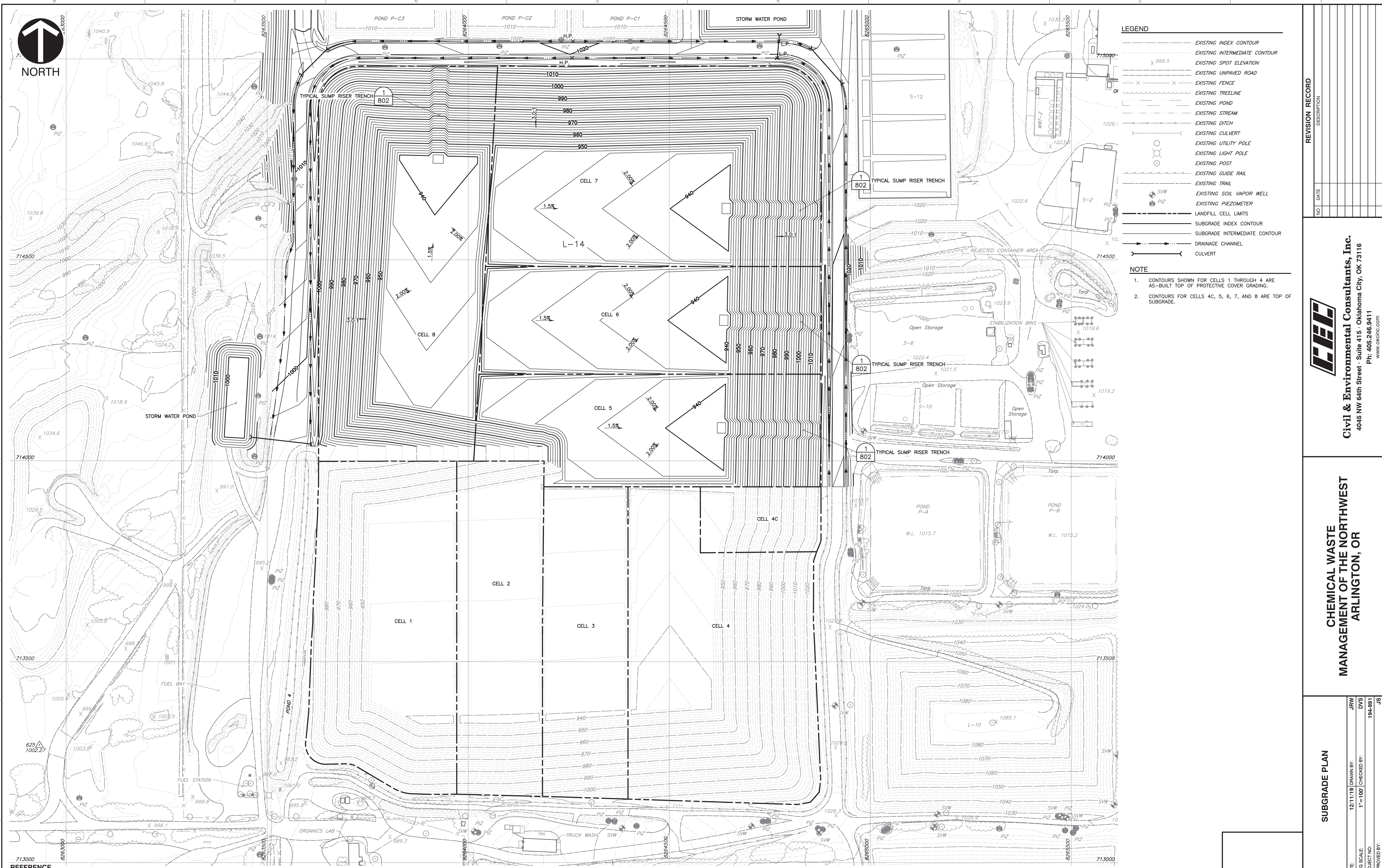
DATE: 12/11/19 DRAWN BY: JRW  
 DWS SCALE: AS SHOWN CHECKED BY: DVS  
 PROJECT NO: 194-991  
 APPROVED BY: JS

DRAWING NO.: **P-000**

A:\2019\194-991-000\DWG\DWG1\194991-001-P-000.dwg - 001 LSC/16/2020 - JRW - LA 2/10/2020 2:08 PM



NORTH



LEGEND

- - - - - EXISTING INDEX CONTOUR
- - - - - EXISTING INTERMEDIATE CONTOUR
- - - - - EXISTING SPOT ELEVATION
- - - - - EXISTING UNPAVED ROAD
- - - - - EXISTING FENCE
- - - - - EXISTING TREELINE
- - - - - EXISTING POND
- - - - - EXISTING STREAM
- - - - - EXISTING DITCH
- - - - - EXISTING CULVERT
- - - - - EXISTING UTILITY POLE
- - - - - EXISTING LIGHT POLE
- - - - - EXISTING POST
- - - - - EXISTING GUIDE RAIL
- - - - - EXISTING TRAIL
- - - - - EXISTING SOIL VAPOR WELL
- - - - - EXISTING PIEZOMETER
- - - - - LANDFILL CELL LIMITS
- - - - - SUBGRADE INDEX CONTOUR
- - - - - SUBGRADE INTERMEDIATE CONTOUR
- - - - - DRAINAGE CHANNEL
- - - - - CULVERT

NOTE

1. CONTOURS SHOWN FOR CELLS 1 THROUGH 4 ARE AS-BUILT TOP OF PROTECTIVE COVER GRADING.
2. CONTOURS FOR CELLS 4C, 5, 6, 7, AND 8 ARE TOP OF SUBGRADE.

- REFERENCE
1. THE HORIZONTAL COORDINATES ARE BASED ON OREGON STATE PLANE COORDINATE SYSTEM, NORTH ZONE, INTERNATIONAL FOOT, NAD83.
  2. VERTICAL COORDINATES ARE BASED ON NAVD88.
  3. EXISTING TOPOGRAPHY COLLECTED BY MILLER CREEK ASSOCIATES ON APRIL 24, 2019.



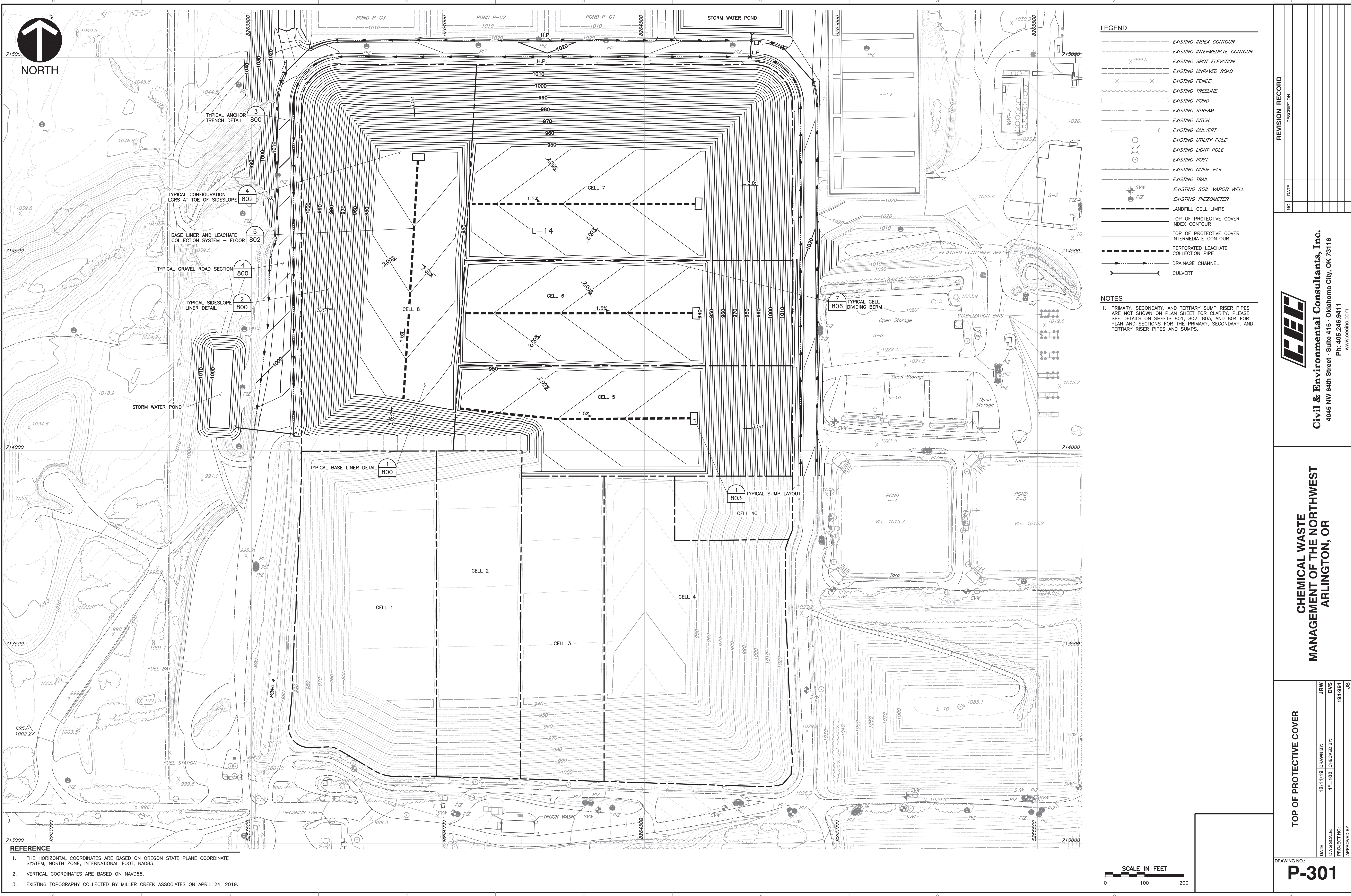
NO	DATE	DESCRIPTION

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 Ph: 405.246.9411  
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**CHEMICAL WASTE  
 MANAGEMENT OF THE NORTHWEST  
 ARLINGTON, OR**

<b>SUBGRADE PLAN</b>	
DATE: 12/11/19	DRAWN BY: JRW
DWG SCALE: 1"=100'	CHECKED BY: DVS
PROJECT NO: 194-991	APPROVED BY: JS
DRAWING NO.: <b>P-300</b>	

A: 12/19/19 1:04:59 PM - 991 - 1000 (Imp) (DWT) 194991 - 001 - P - 300 (Imp) - 3001 LS12/16/2020 - AM11 - LA 2/10/2020 2:09 PM



**LEGEND**

- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- EXISTING SPOT ELEVATION
- EXISTING UNPAVED ROAD
- EXISTING FENCE
- EXISTING TREELINE
- EXISTING POND
- EXISTING STREAM
- EXISTING DITCH
- EXISTING CULVERT
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING POST
- EXISTING GUIDE RAIL
- EXISTING TRAIL
- EXISTING SOIL VAPOR WELL
- EXISTING PIEZOMETER
- LANDFILL CELL LIMITS
- TOP OF PROTECTIVE COVER INDEX CONTOUR
- TOP OF PROTECTIVE COVER INTERMEDIATE CONTOUR
- PERFORATED LEACHATE COLLECTION PIPE
- DRAINAGE CHANNEL
- CULVERT

**NOTES**

1. PRIMARY, SECONDARY, AND TERTIARY SUMP RISER PIPES ARE NOT SHOWN ON PLAN SHEET FOR CLARITY. PLEASE SEE DETAILS ON SHEETS 801, 802, 803, AND 804 FOR PLAN AND SECTIONS FOR THE PRIMARY, SECONDARY, AND TERTIARY RISER PIPES AND SUMPS.

**REVISION RECORD**

NO.	DATE	DESCRIPTION

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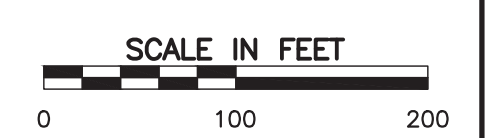
**CHEMICAL WASTE  
 MANAGEMENT OF THE NORTHWEST  
 ARLINGTON, OR**

**TOP OF PROTECTIVE COVER**

DRAWING NO.:	<b>P-301</b>
DATE:	12/11/19
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PROJECT NO.:	194-991
DRAWN BY:	JRW
CHECKED BY:	DVS
APPROVED BY:	JS

**REFERENCE**

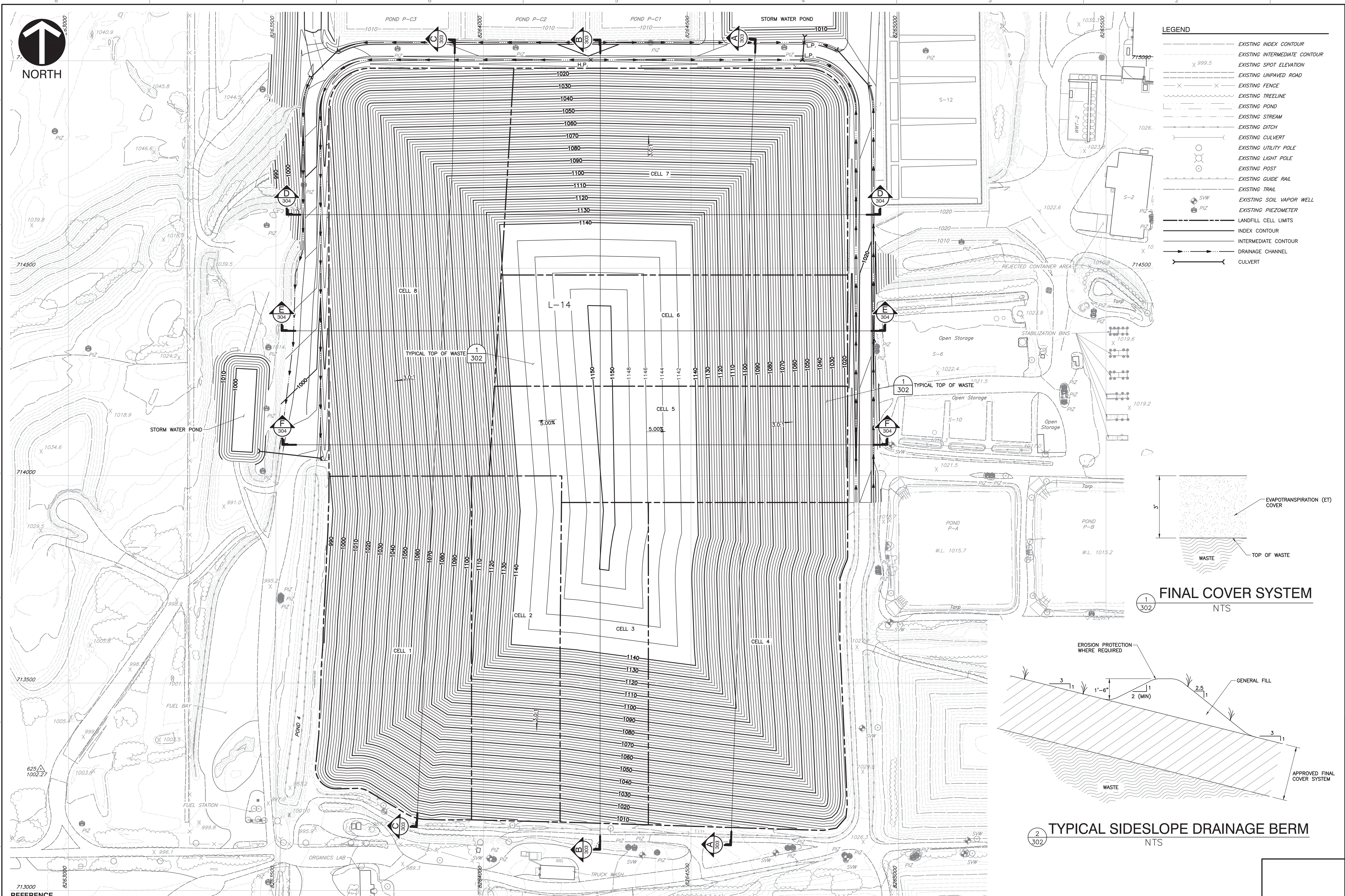
- THE HORIZONTAL COORDINATES ARE BASED ON OREGON STATE PLANE COORDINATE SYSTEM, NORTH ZONE, INTERNATIONAL FOOT, NAD83.
- VERTICAL COORDINATES ARE BASED ON NAVD88.
- EXISTING TOPOGRAPHY COLLECTED BY MILLER CREEK ASSOCIATES ON APRIL 24, 2019.



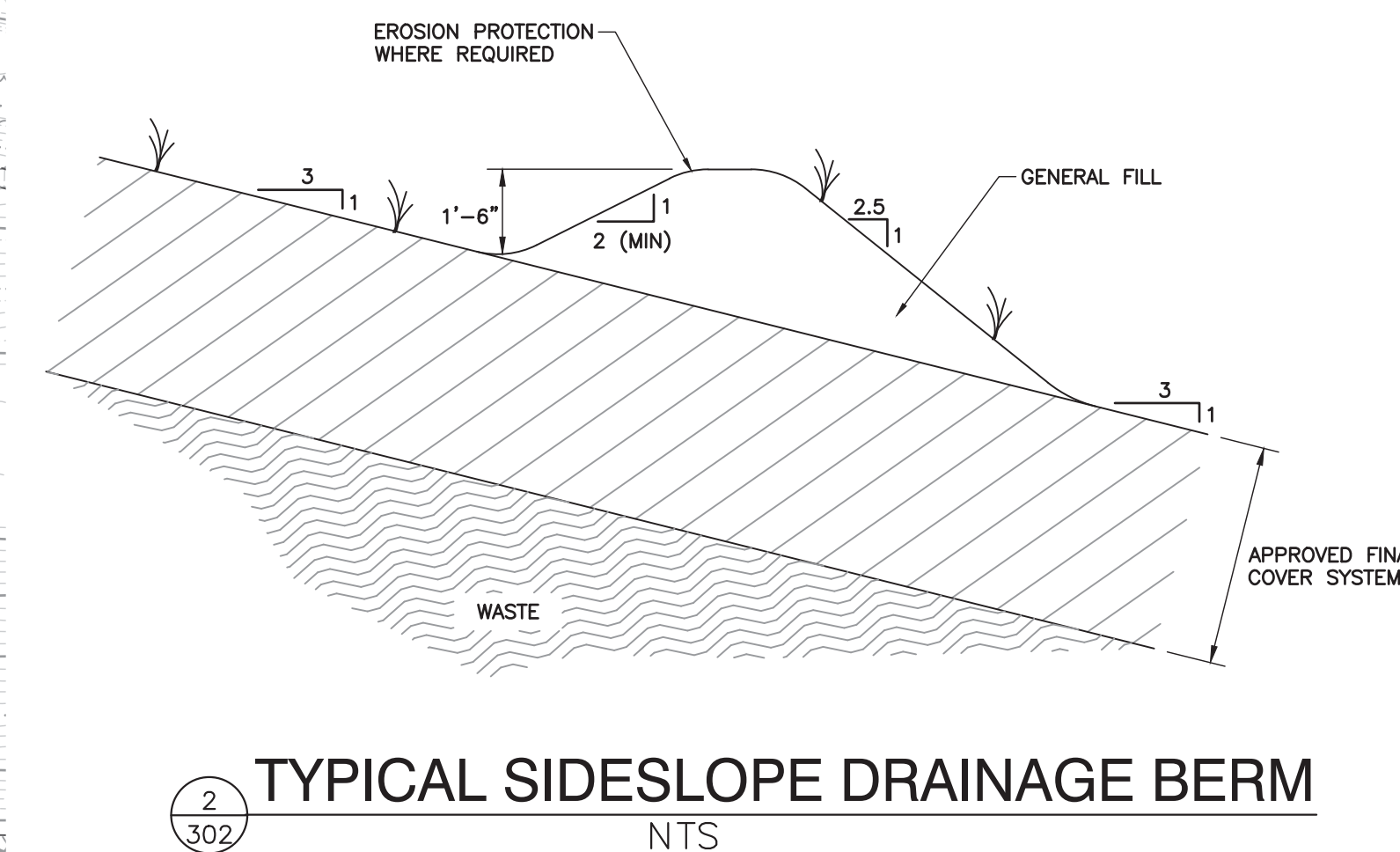
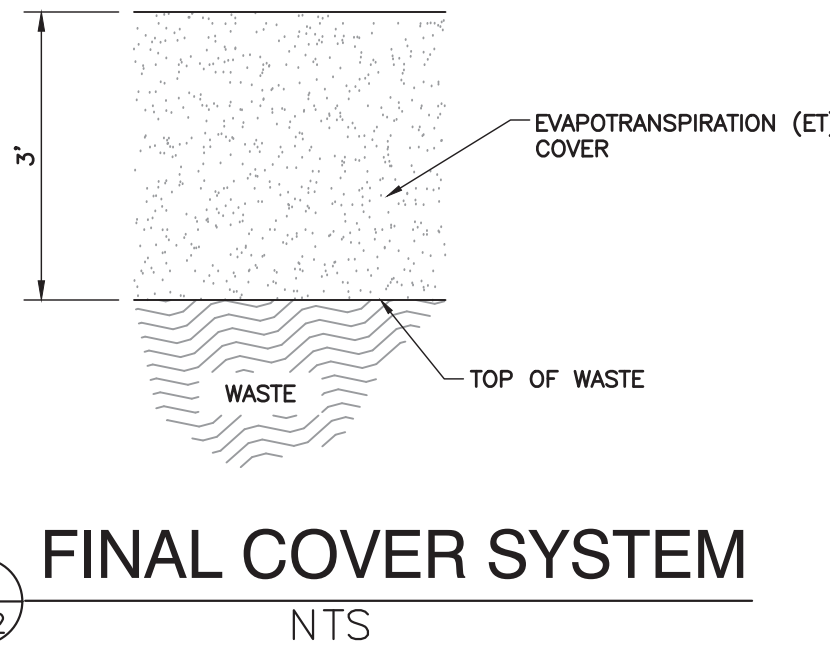
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NORTH



LEGEND	
	EXISTING INDEX CONTOUR
	EXISTING INTERMEDIATE CONTOUR
	EXISTING SPOT ELEVATION
	EXISTING UNPAVED ROAD
	EXISTING FENCE
	EXISTING TREELINE
	EXISTING POND
	EXISTING STREAM
	EXISTING DITCH
	EXISTING CULVERT
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING POST
	EXISTING GUIDE RAIL
	EXISTING TRAIL
	EXISTING SOIL VAPOR WELL
	EXISTING PIEZOMETER
	LANDFILL CELL LIMITS
	INDEX CONTOUR
	INTERMEDIATE CONTOUR
	DRAINAGE CHANNEL
	CULVERT



**REFERENCE**

1. THE HORIZONTAL COORDINATES ARE BASED ON OREGON STATE PLANE COORDINATE SYSTEM, NORTH ZONE, INTERNATIONAL FOOT, NAD83.
2. VERTICAL COORDINATES ARE BASED ON NAVD88.
3. EXISTING TOPOGRAPHY COLLECTED BY MILLER CREEK ASSOCIATES ON APRIL 24, 2019.

REVISION RECORD		
NO.	DATE	DESCRIPTION

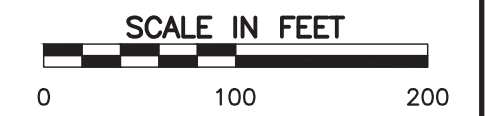
**Civil & Environmental Consultants, Inc.**  
4045 NW 64th Street - Suite 415 - Oklahoma City, OK 73116  
Ph: 405.246.9411  
www.cecinc.com

**CHEMICAL WASTE  
MANAGEMENT OF THE NORTHWEST  
ARLINGTON, OR**

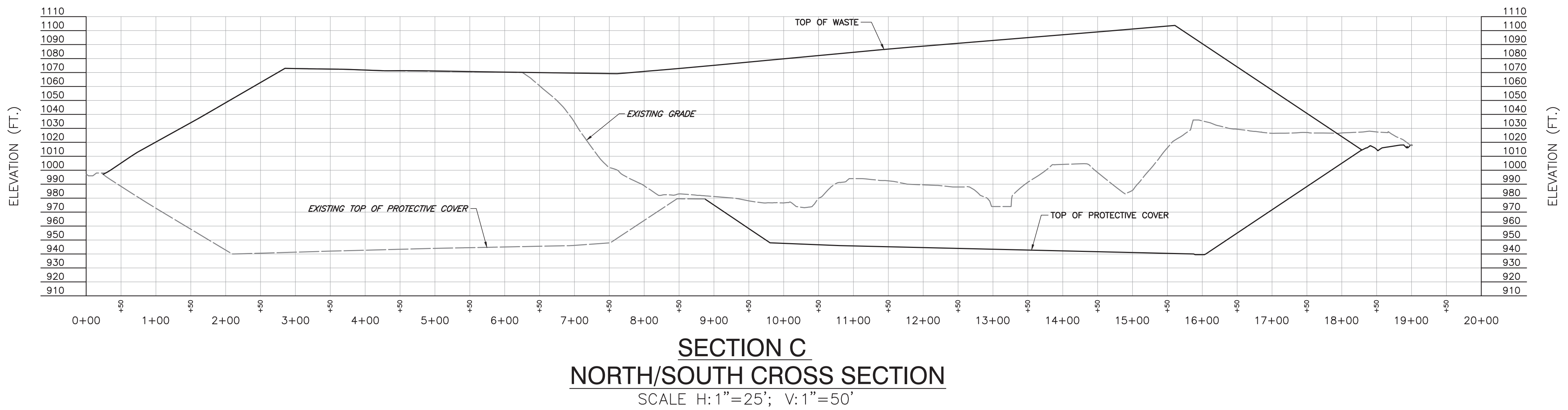
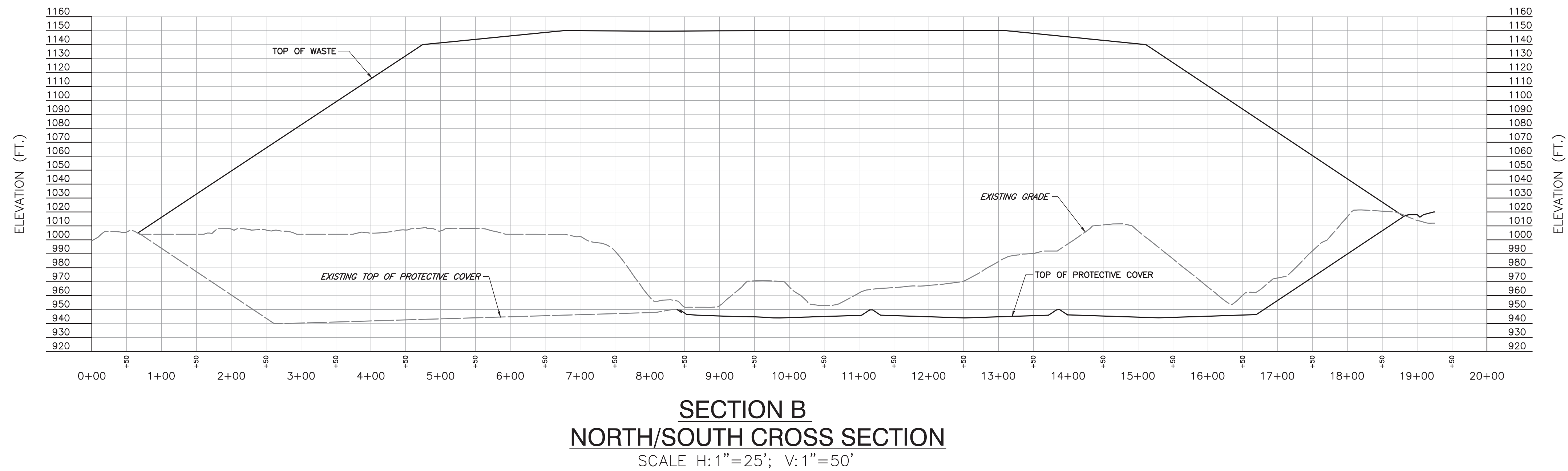
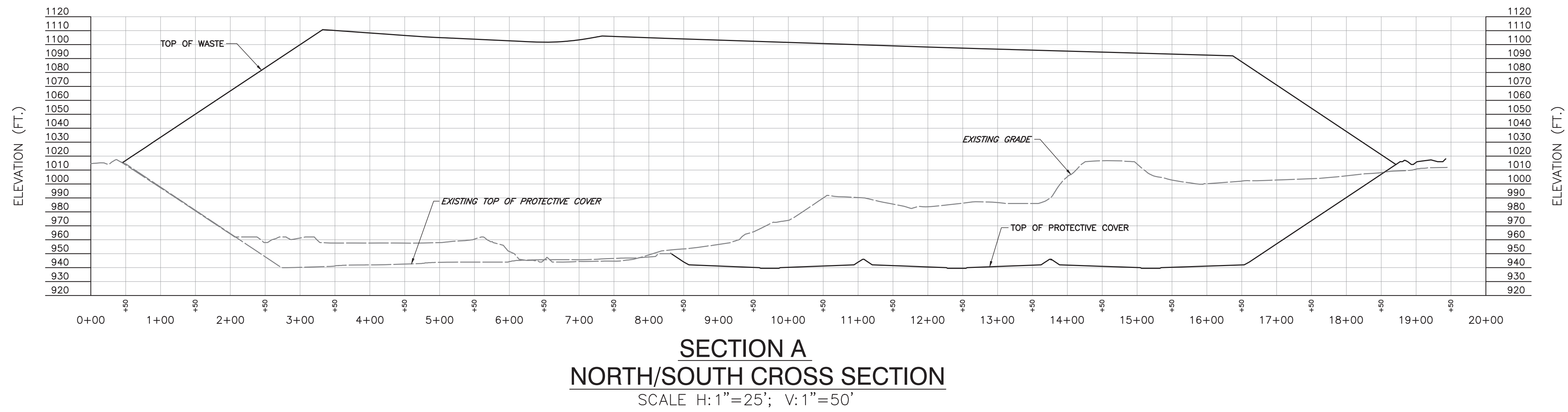
**TOP OF WASTE GRADING PLAN**

DRAWING NO.: **P-302**

DATE: 12/11/19 DRAWN BY: JRW  
DVS  
PROJECT NO: 194-991  
APPROVED BY: JS



A:\1919\194-991\194-991-000\Drawings\TOP OF WASTE GRADING PLAN - 302.dwg - 12/11/2019 2:24 PM



REVISION RECORD	
NO	DATE

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**CHEMICAL WASTE  
MANAGEMENT OF THE NORTHWEST  
ARLINGTON, OR**

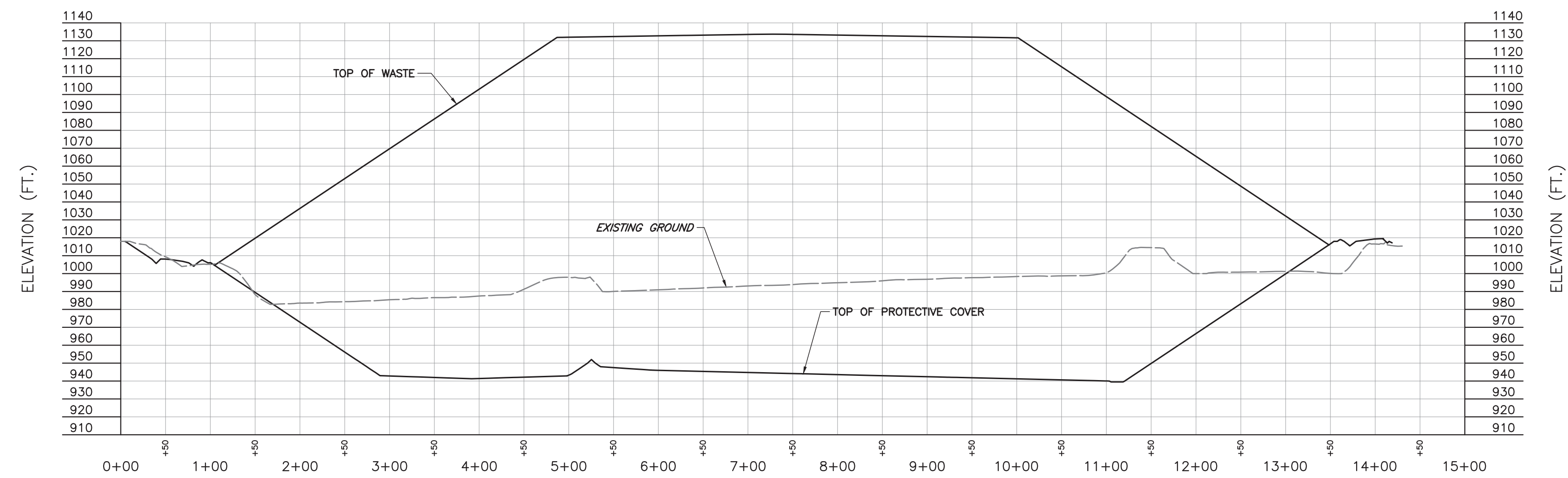
**LANDFILL CROSS SECTIONS**

DATE:	12/11/19	DRAWN BY:	DVS
DWG SCALE:	AS SHOWN	CHECKED BY:	194-991
PROJECT NO.:	194-991	APPROVED BY:	JS

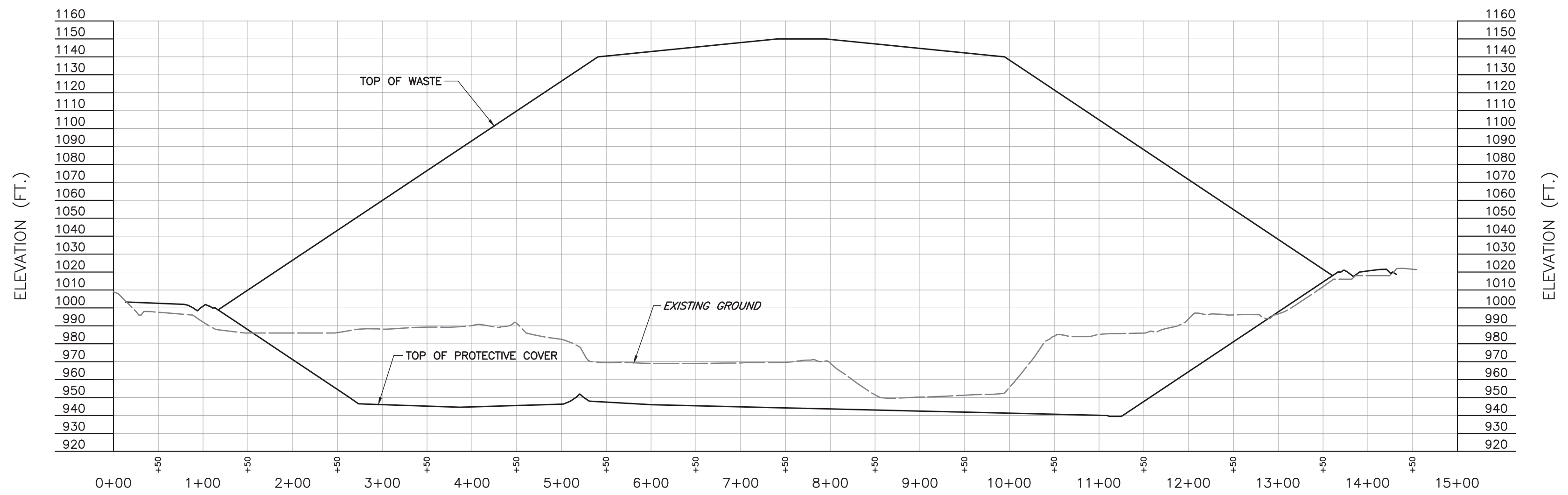
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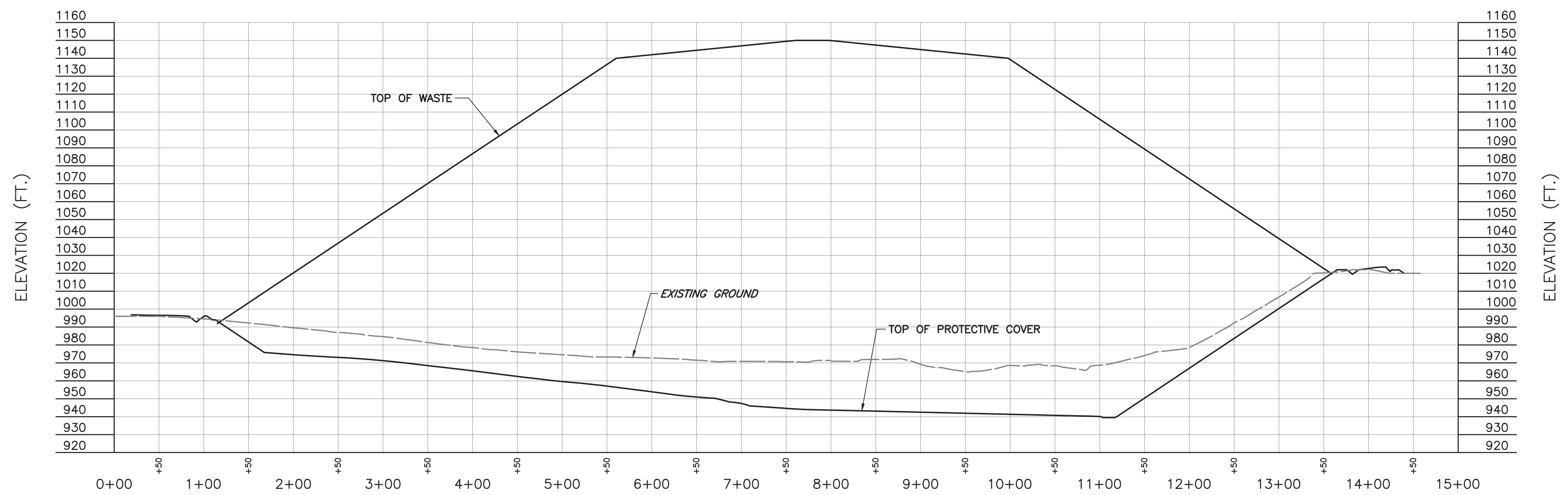
A:\2019\194-991-000\DWG\DWG1\194991-001-P-304.dwg - 304 - L1 - 2/10/2020 2:21 PM



**SECTION D**  
**EAST/WEST CROSS SECTION**  
SCALE H: 1"=25'; V: 1"=50'



**SECTION E**  
**EAST/WEST CROSS SECTION**  
SCALE H: 1"=25'; V: 1"=50'



**SECTION F**  
**EAST/WEST CROSS SECTION**  
SCALE H: 1"=25'; V: 1"=50'

REVISION RECORD	
NO	DATE
DESCRIPTION	

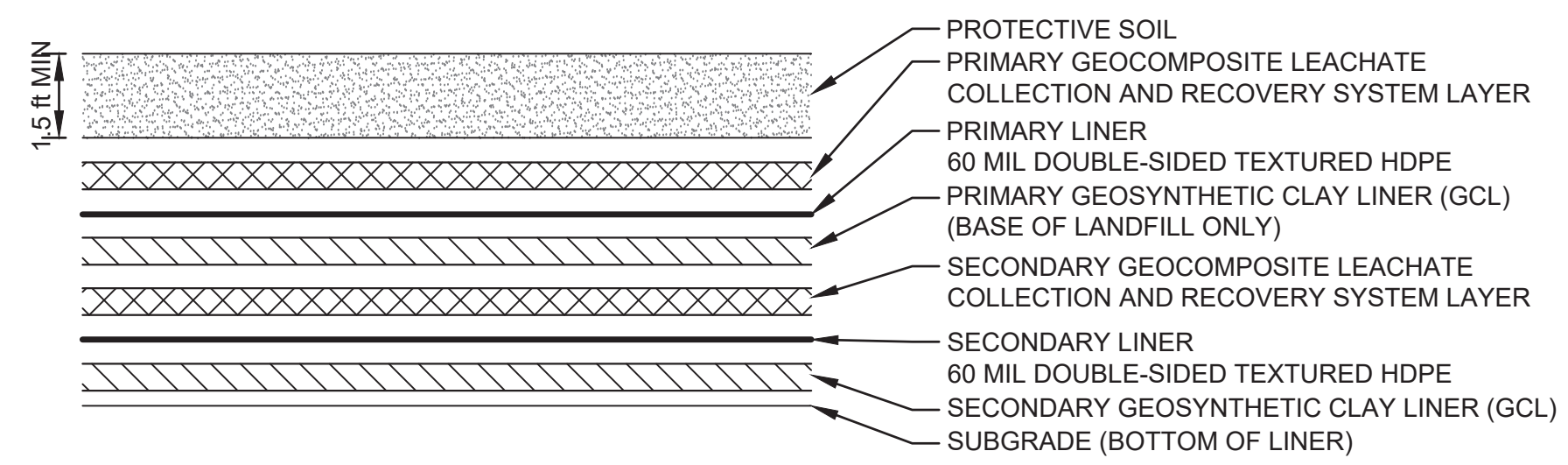
**Civil & Environmental Consultants, Inc.**  
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**CHEMICAL WASTE  
MANAGEMENT OF THE NORTHWEST  
ARLINGTON, OR**

**LANDFILL CROSS SECTIONS**

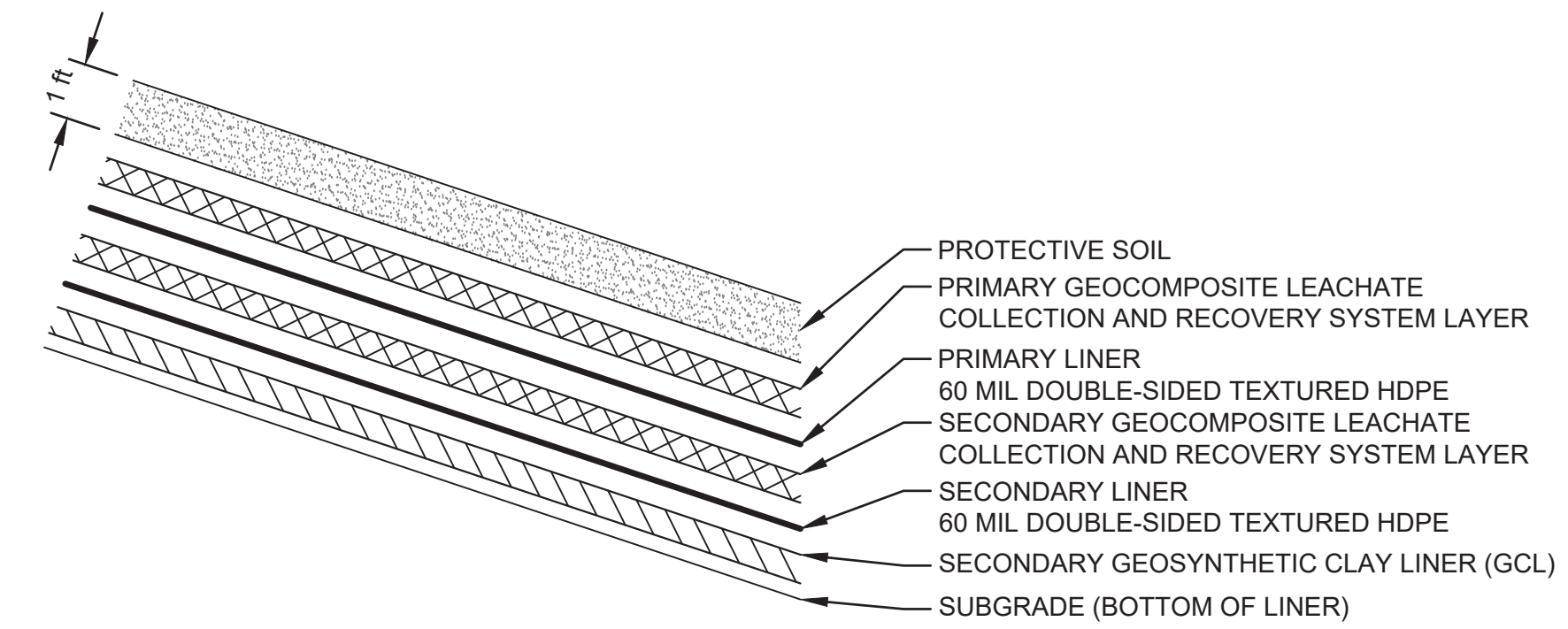
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PROJECT NO.:	194-991	APPROVED BY:	JS

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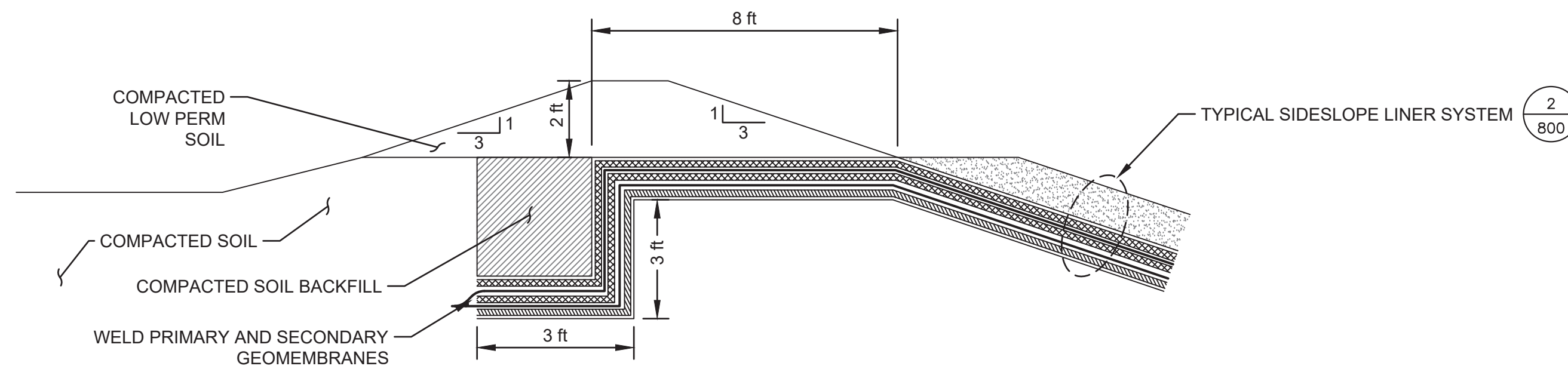


BASE LINER AND LEACHATE COLLECTION SYSTEM

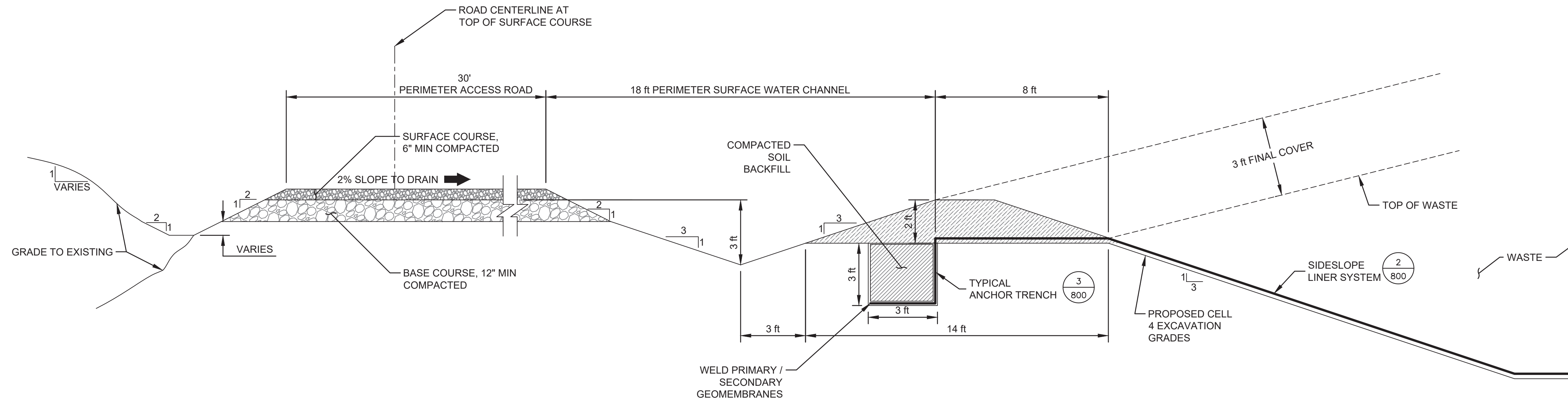
1  
800  
TYPICAL BASE LINER DETAIL  
NTS



2  
800  
TYPICAL SIDESLOPE LINER DETAIL  
NTS



3  
800  
TYPICAL ANCHOR TRENCH DETAIL  
NTS



4  
800  
TYPICAL GRAVEL ROAD SECTION  
NTS

REVISION RECORD

NO	DATE	DESCRIPTION

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C.A. #493 EXP. 03/20

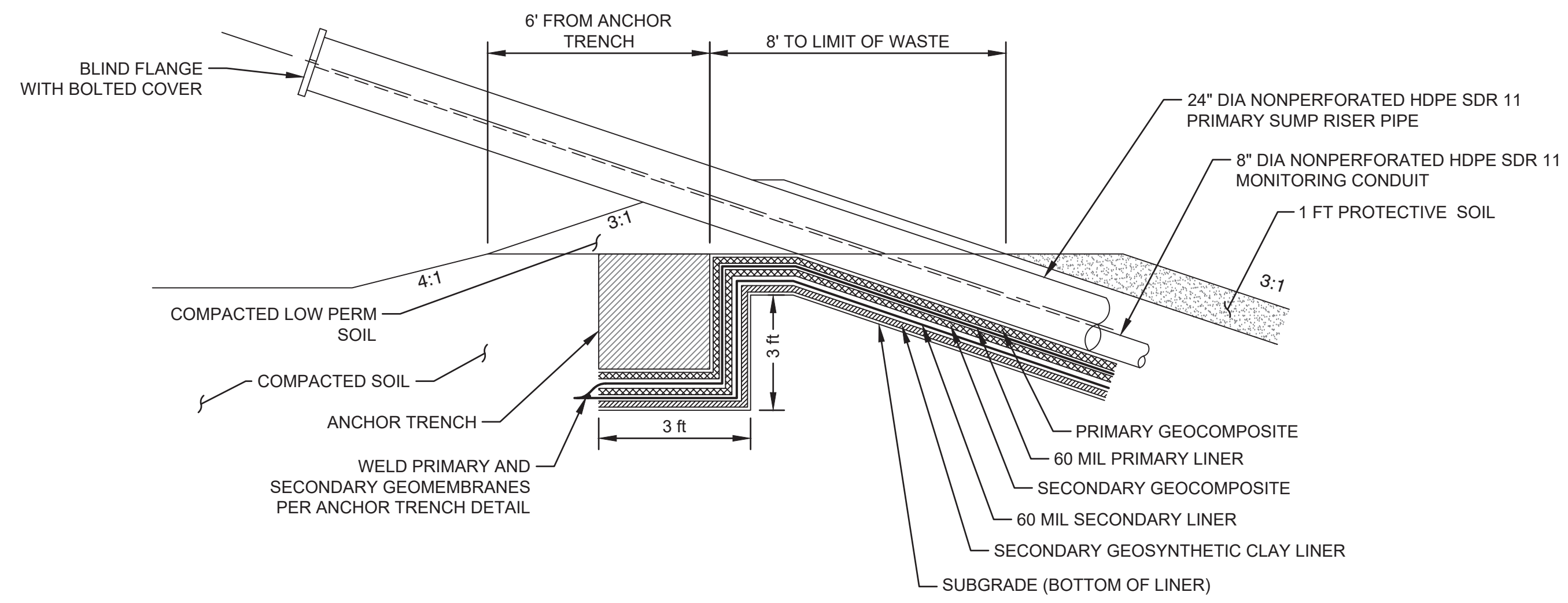
**CHEMICAL WASTE  
MANAGEMENT OF THE NORTHWEST  
ARLINGTON, OR**

**LINER SYSTEM AND  
ANCHOR TRENCH DETAILS**

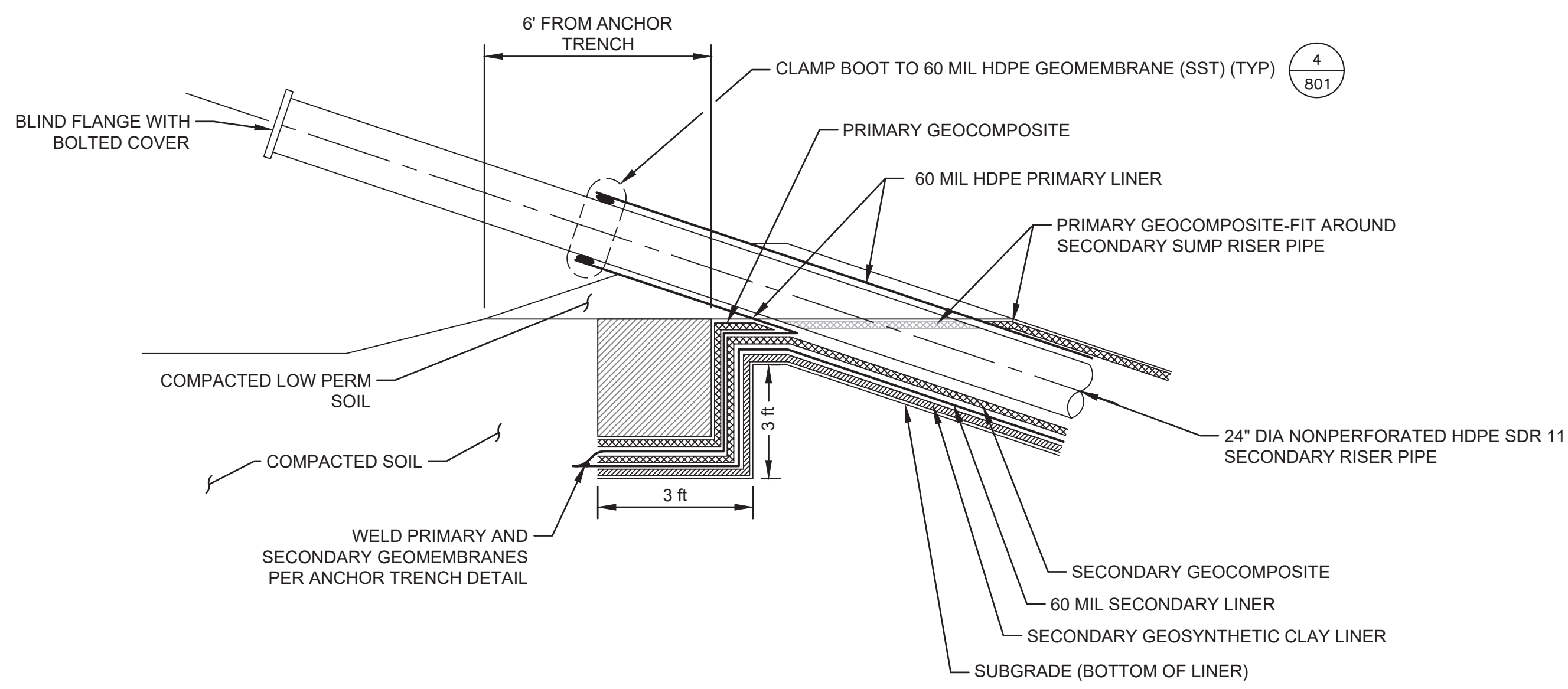
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DATE: 12/11/19  
DVS SCALE: AS SHOWN  
PROJECT NO: 194-991  
APPROVED BY: J.S.

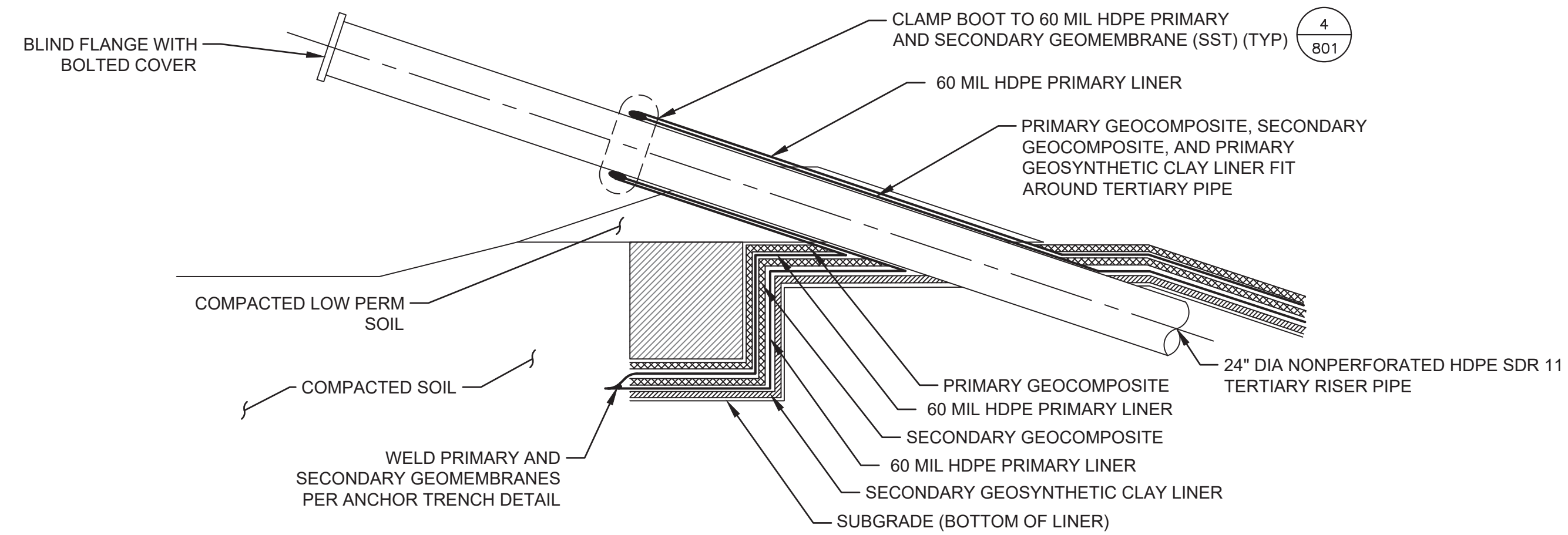
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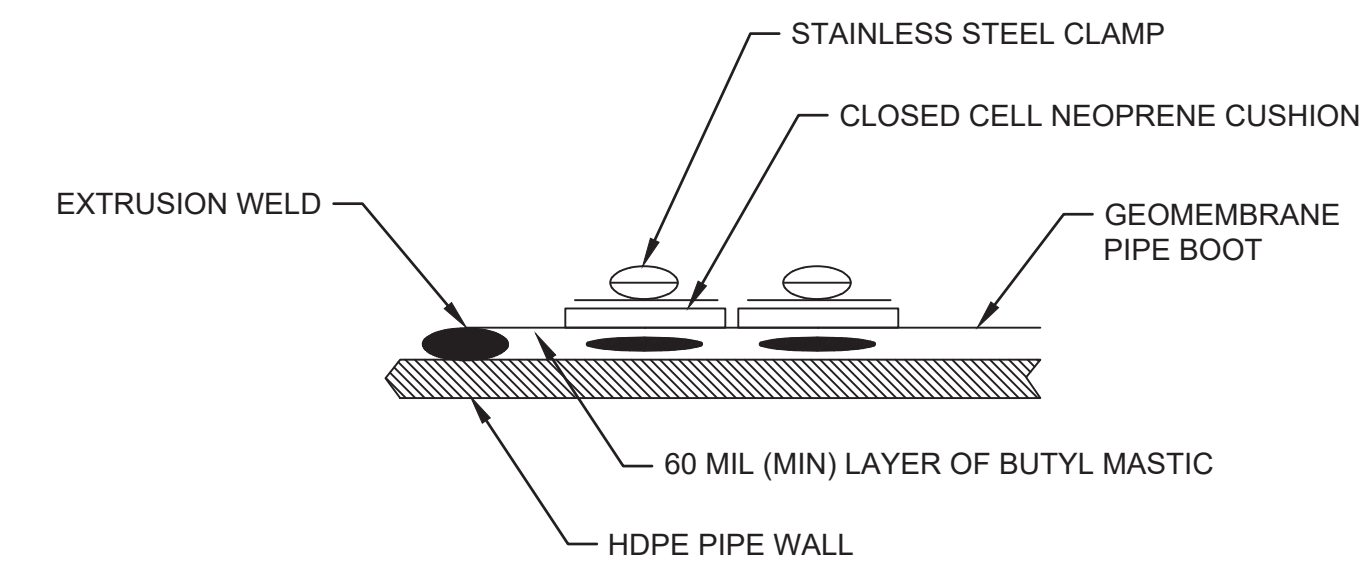
1  
801  
TYPICAL PRIMARY SUMP RISER PIPE TERMINATION  
NTS



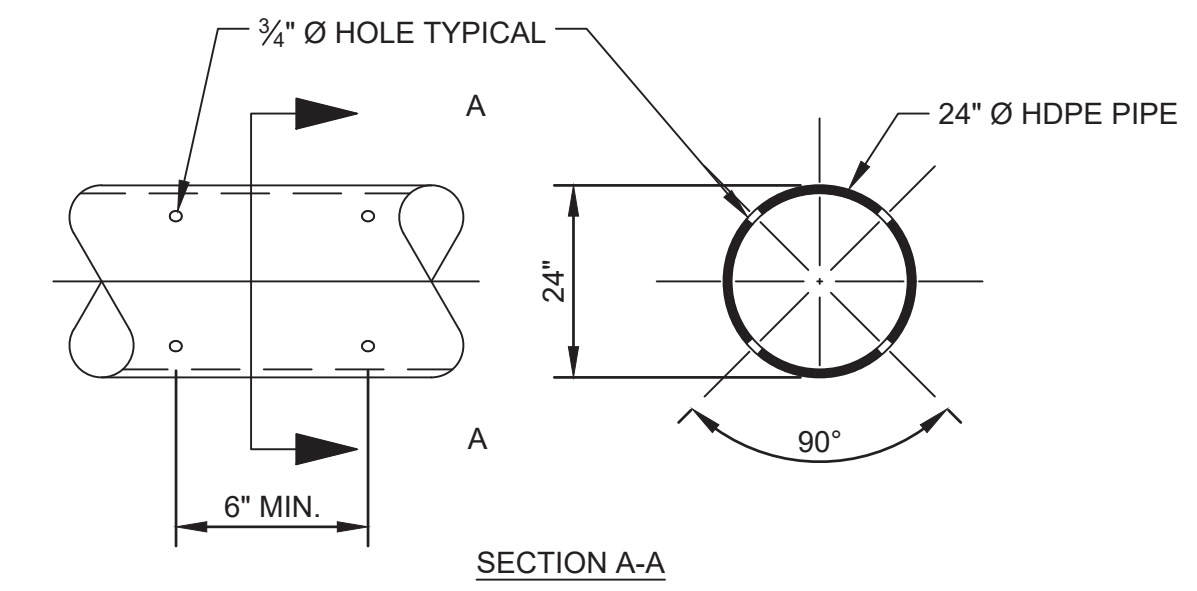
2  
801  
TYPICAL SECONDARY SUMP RISER PIPE TERMINATION  
NTS



3  
801  
TYPICAL TERTIARY SUMP RISER PIPE TERMINATION  
NTS



4  
801  
CLAMP ASSEMBLY  
NTS



5  
801  
SUMP PIPE PERFORATION DETAIL  
NTS

NO	DATE	DESCRIPTION

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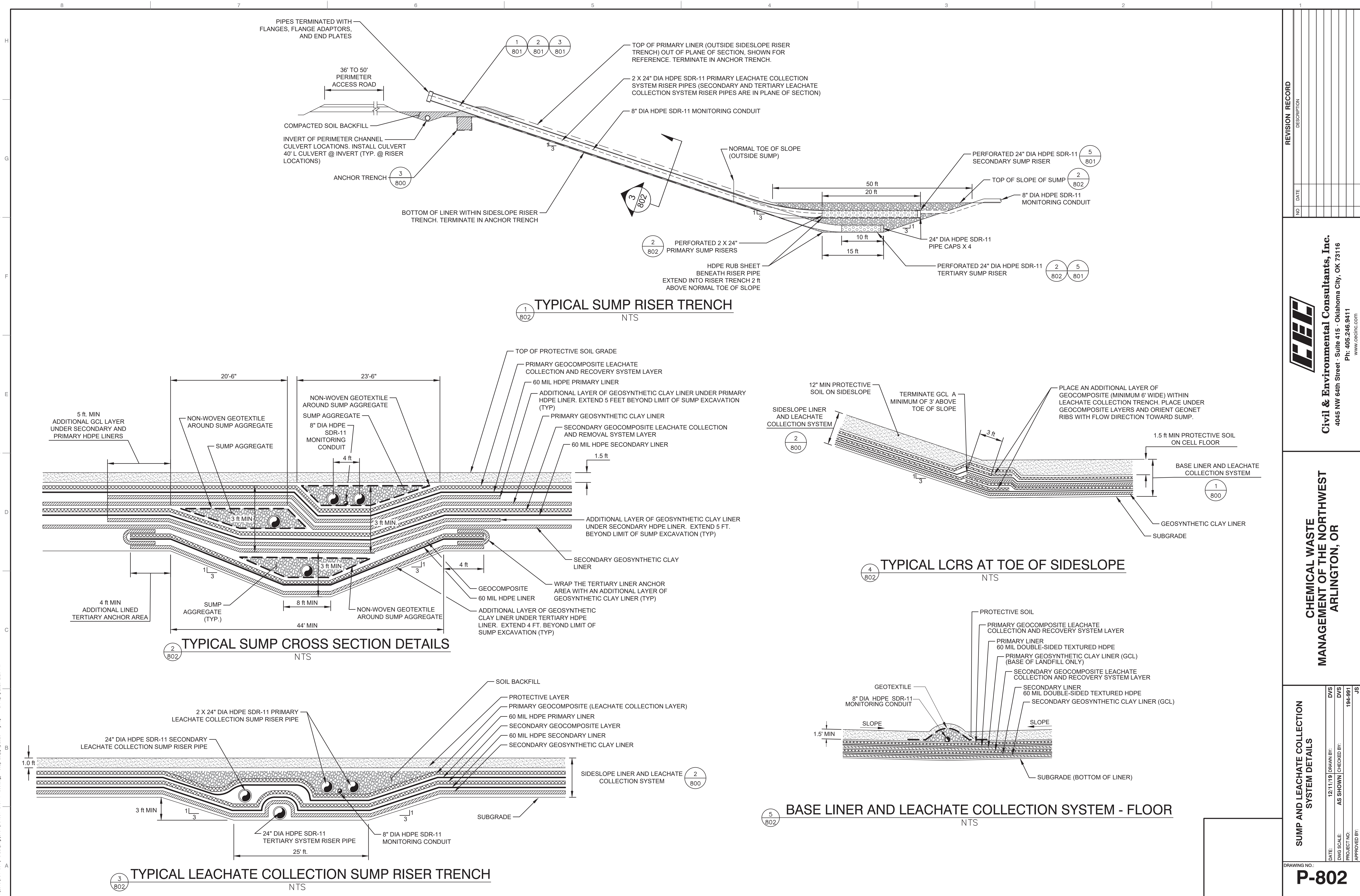
**CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST ARLINGTON, OR**

RISER PIPE DETAILS	
DATE:	12/11/19
DRAWN BY:	DVS
CHECKED BY:	DVS
PROJECT NO.:	194-991
APPROVED BY:	JS

DRAWING NO. **P-801**

A:\2019\194-991-0002\DWG\DWG1\194991-001-P-801.dwg - P-801 - LP 2/10/2020 2:28 PM





NO.	DATE	DESCRIPTION

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**CHEMICAL WASTE  
 MANAGEMENT OF THE NORTHWEST  
 ARLINGTON, OR**

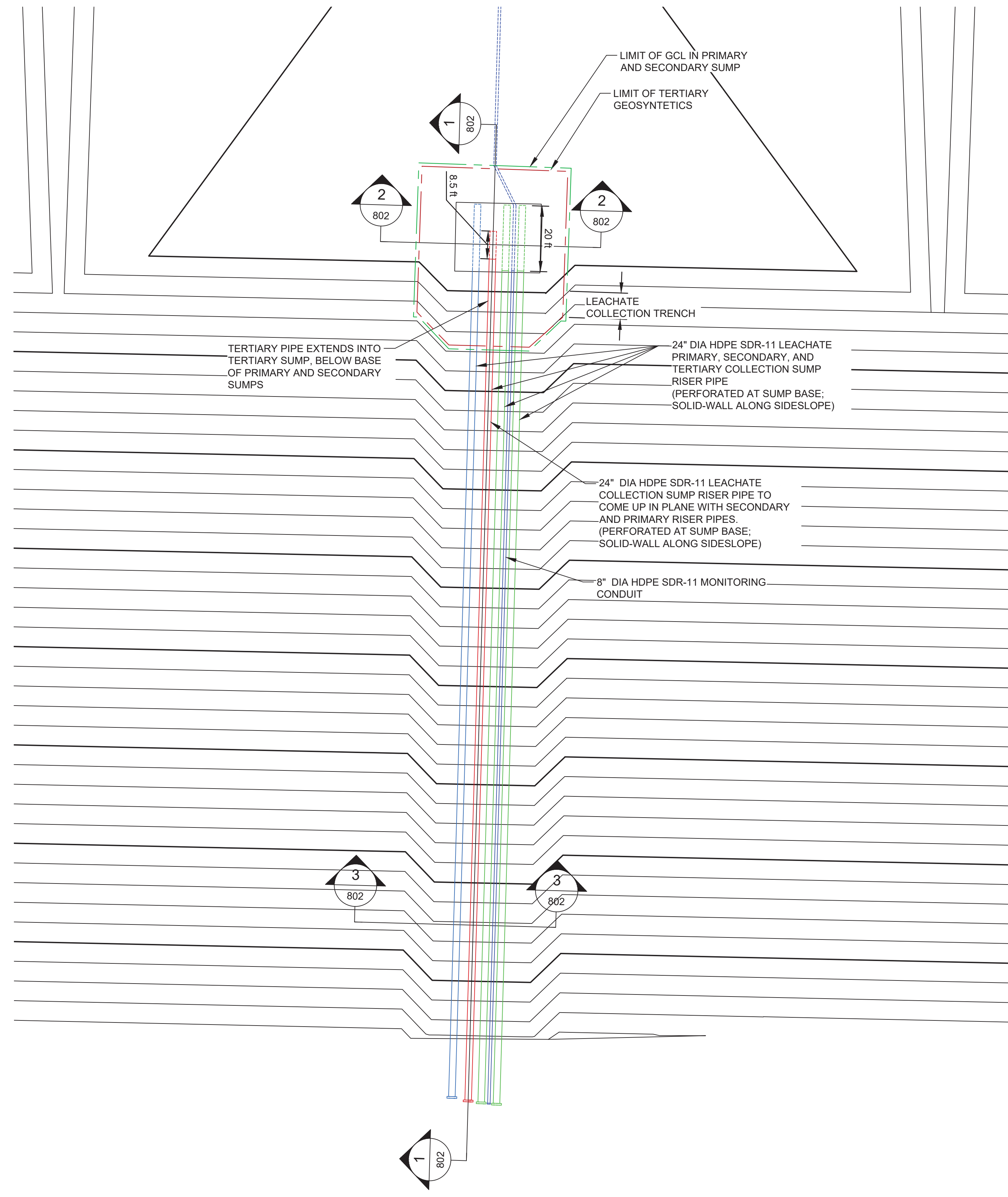
**SUMP AND LEACHATE COLLECTION  
 SYSTEM DETAILS**

DRAWING NO.: **P-802**

DATE: 12/11/19  
 DVS SCALE: AS SHOWN  
 PROJECT NO: 194-991  
 DRAWN BY: DVS  
 CHECKED BY: DVS  
 APPROVED BY: JS

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A:\2019\194-991-0002\DWG\DWG1\194991-001-F-803.rvt - LA 2/10/2020 2:27 PM



**LEGEND**

	PROPOSED GRADE (2' AND 10' CONTOURS)
	TERTIARY SUMP GEOSYNTHETIC LIMITS
	PRIMARY AND SECONDARY SUMP GEOSYNTHETIC LIMITS
	24" PRIMARY SUMP RISER PIPE (DASHED WHERE PERFORMED)
	24" SECONDARY SUMP RISER PIPE (DASHED WHERE PERFORMED)
	24" TERTIARY SUMP RISER PIPE (DASHED WHERE PERFORMED)
	8" MONITORING CONDUIT (DASHED WHERE PERFORMED)

**TYPICAL SUMP LAYOUT**  
 SCALE IN FEET  
 0 20 40

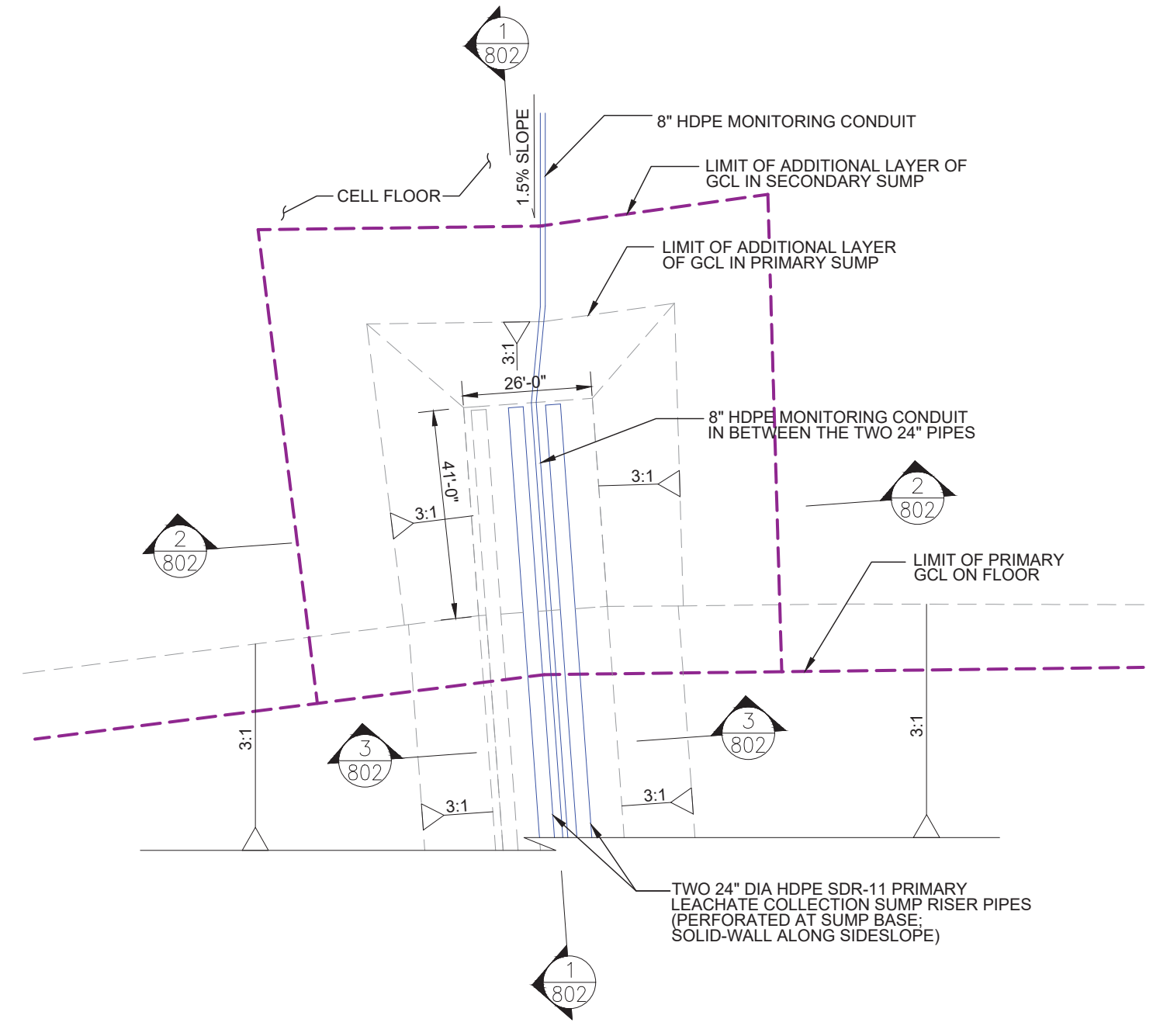
REVISION RECORD	
NO.	DATE

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CHEMICAL WASTE  
 MANAGEMENT OF THE NORTHWEST  
 ARLINGTON, OR

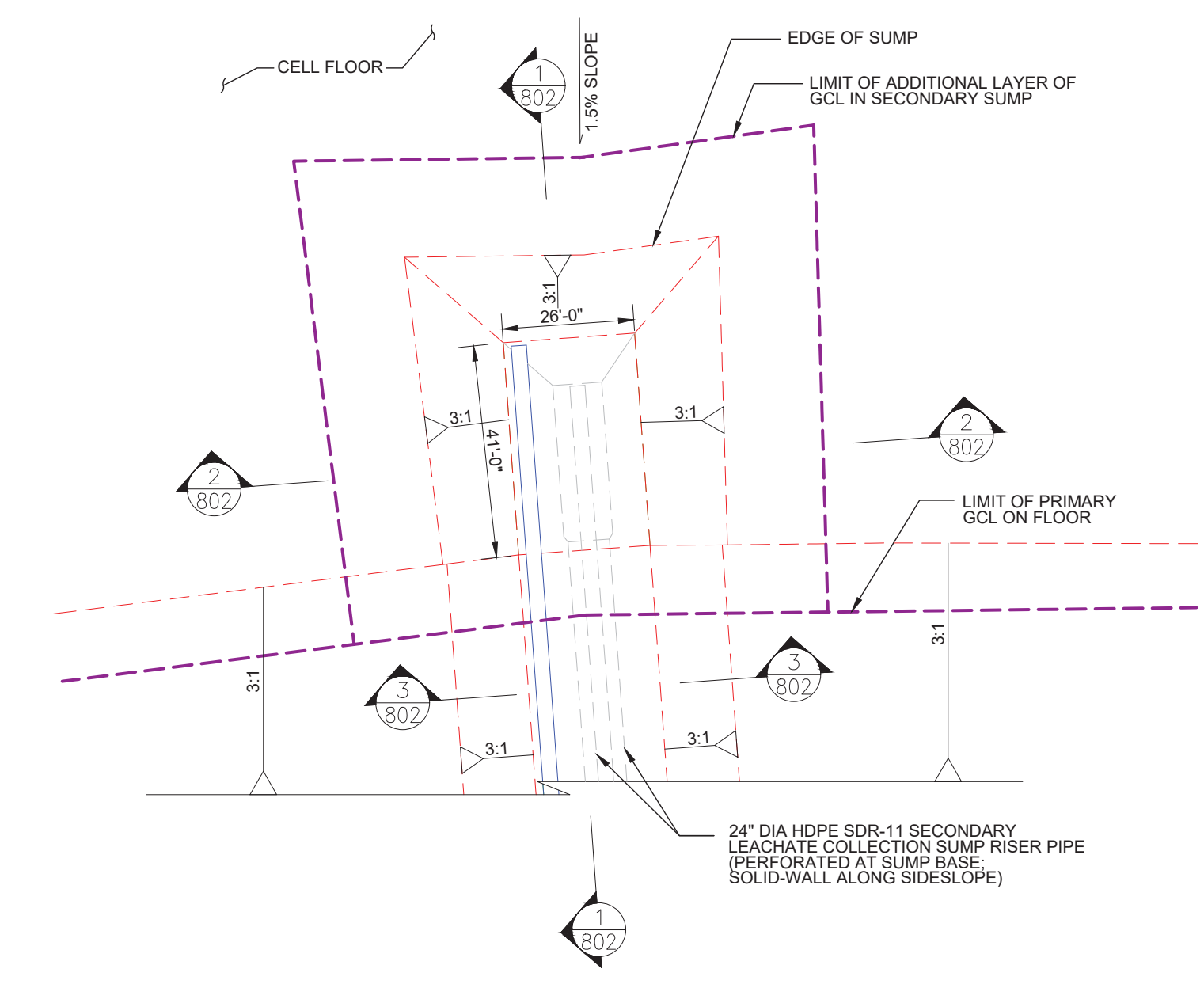
<b>SUMP AND SIDESLOPE RISER PIPE LAYOUT</b>	
DATE:	12/11/19
DWG SCALE:	AS SHOWN
PROJECT NO.:	194-991
APPROVED BY:	DVS
	DVS
	194-991
	JS

DRAWING NO.: **P-803**

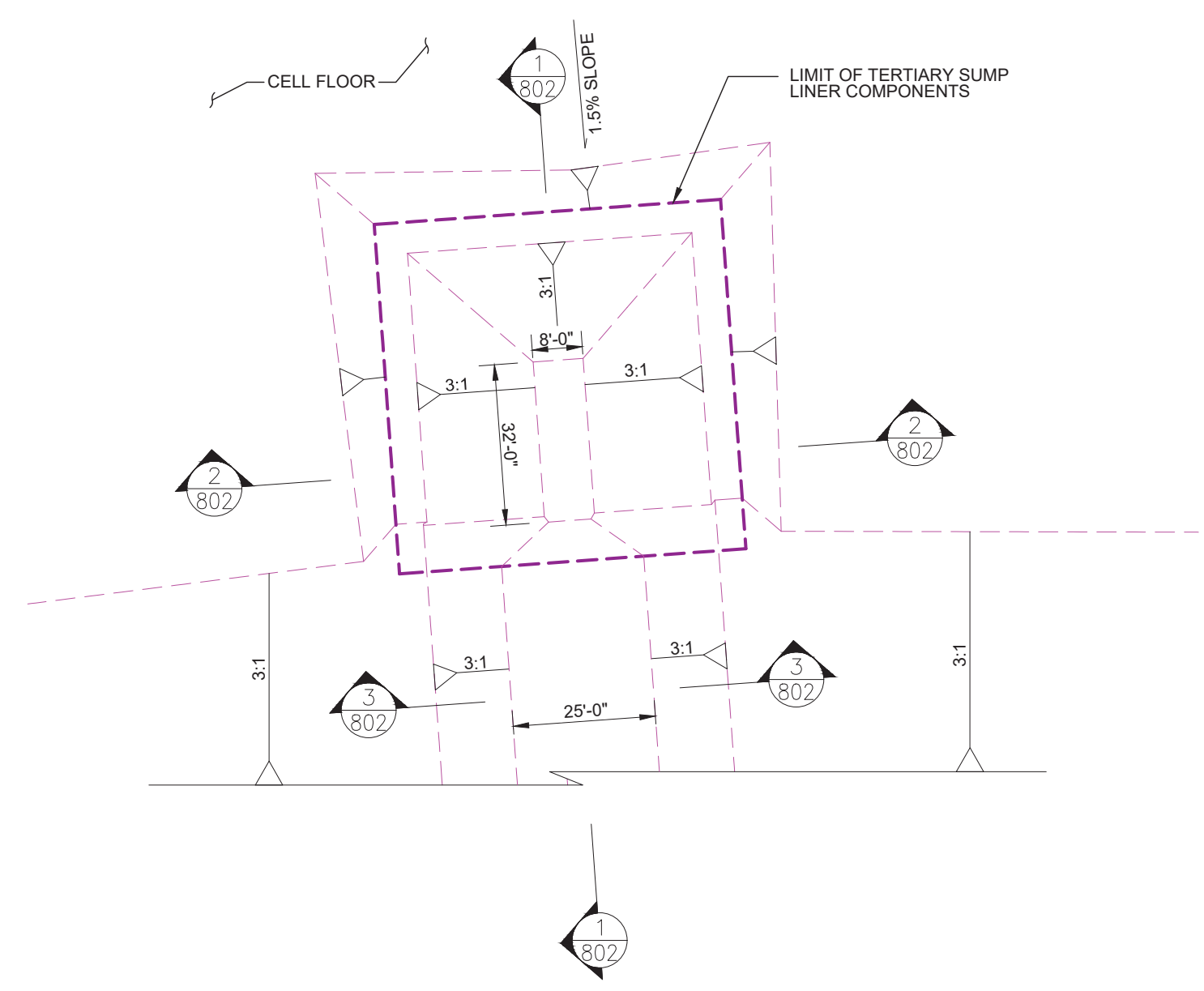


**1**  
805 PRIMARY COLLECTION SYSTEM SUMP  
NTS

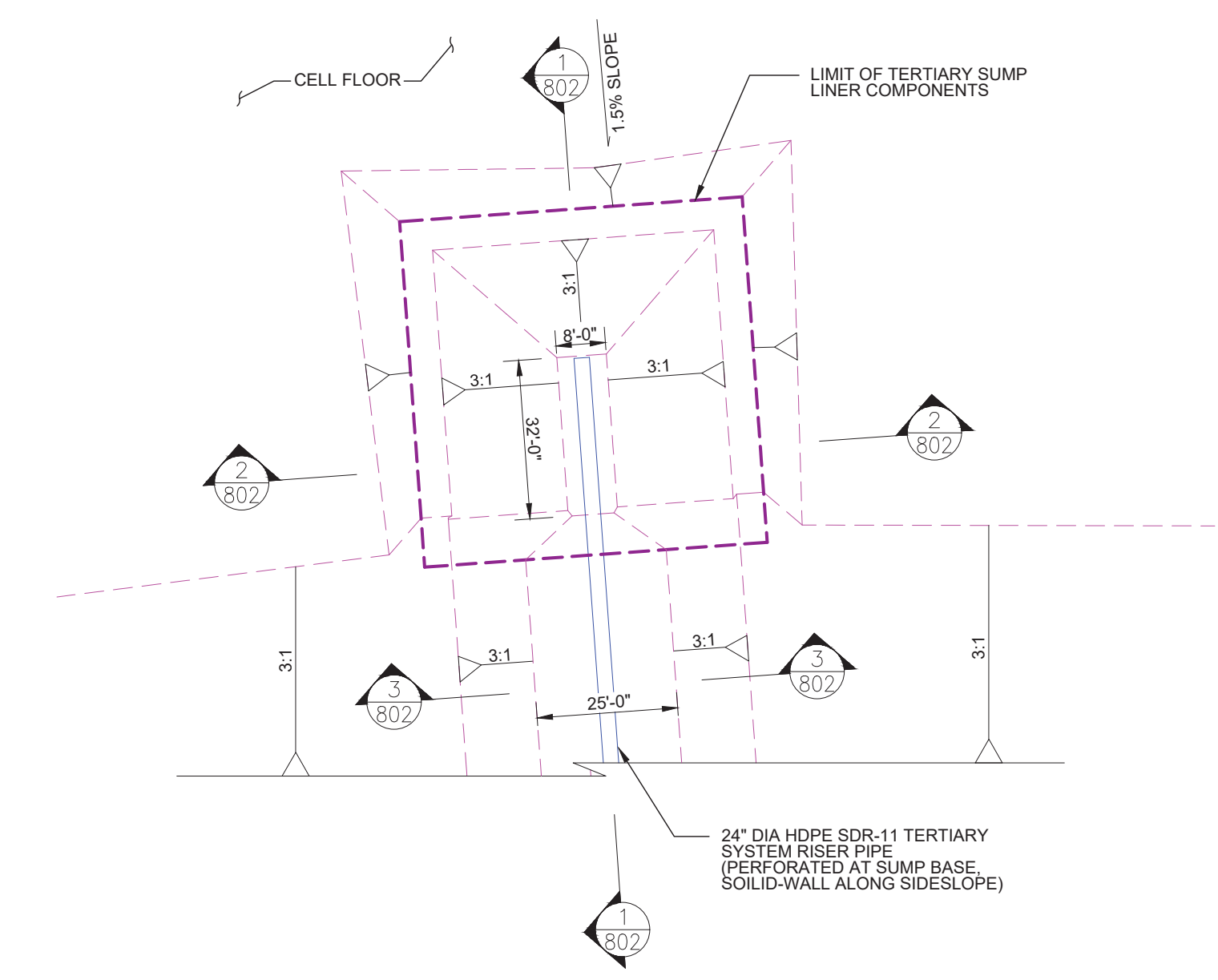
NOTE  
1. SECONDARY PIPING AND BREAK LINES SHOWN 50% FOR REFERENCE.



**2**  
805 SECONDARY LINER SYSTEM SUMP  
NTS



**3**  
805 TOP OF SUBGRADE  
NTS



**4**  
805 TERTIARY SUMP  
NTS

NOTE  
1. THE SUMPS ARE THE SAME SIZE IN CELLS 5, 6, 7, AND 8.

NO.	DATE	DESCRIPTION

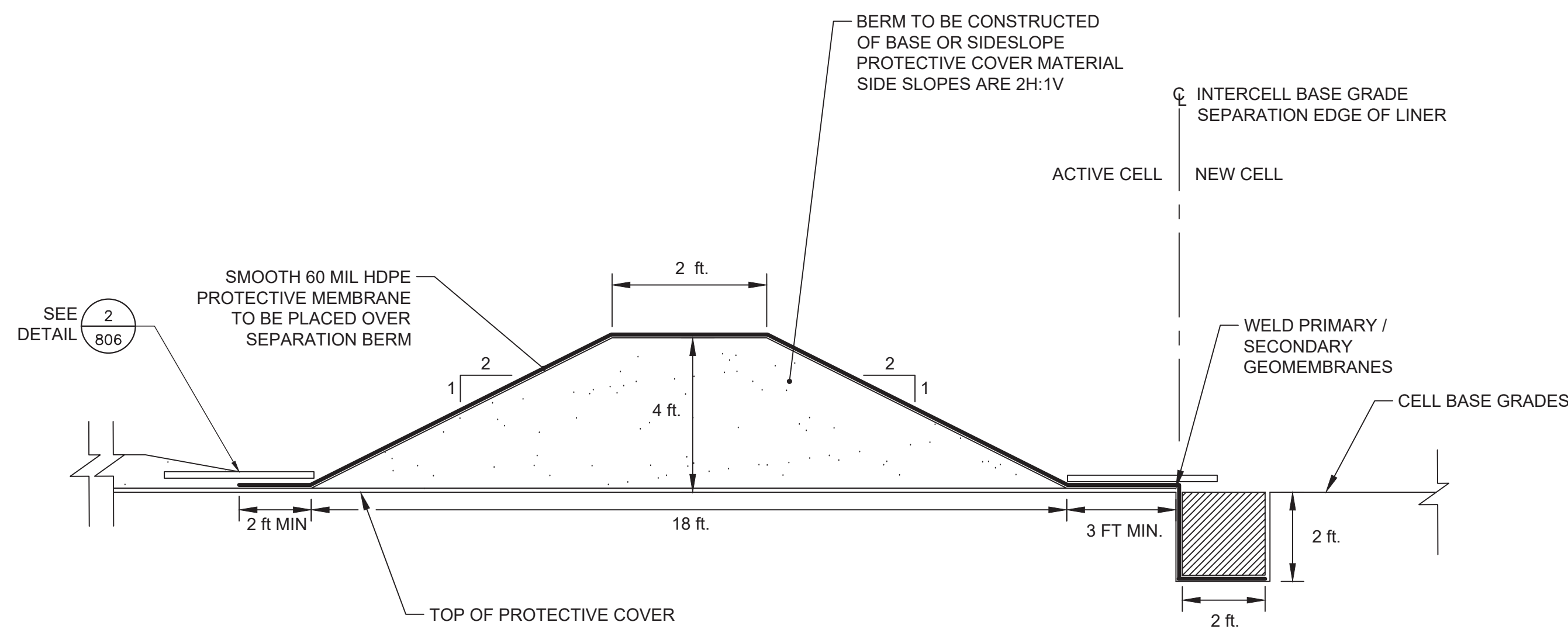
**C&E**  
**Civil & Environmental Consultants, Inc.**  
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Ph: 405.246.9411  
www.ceinc.com

**CHEMICAL WASTE  
MANAGEMENT OF THE NORTHWEST  
ARLINGTON, OR**

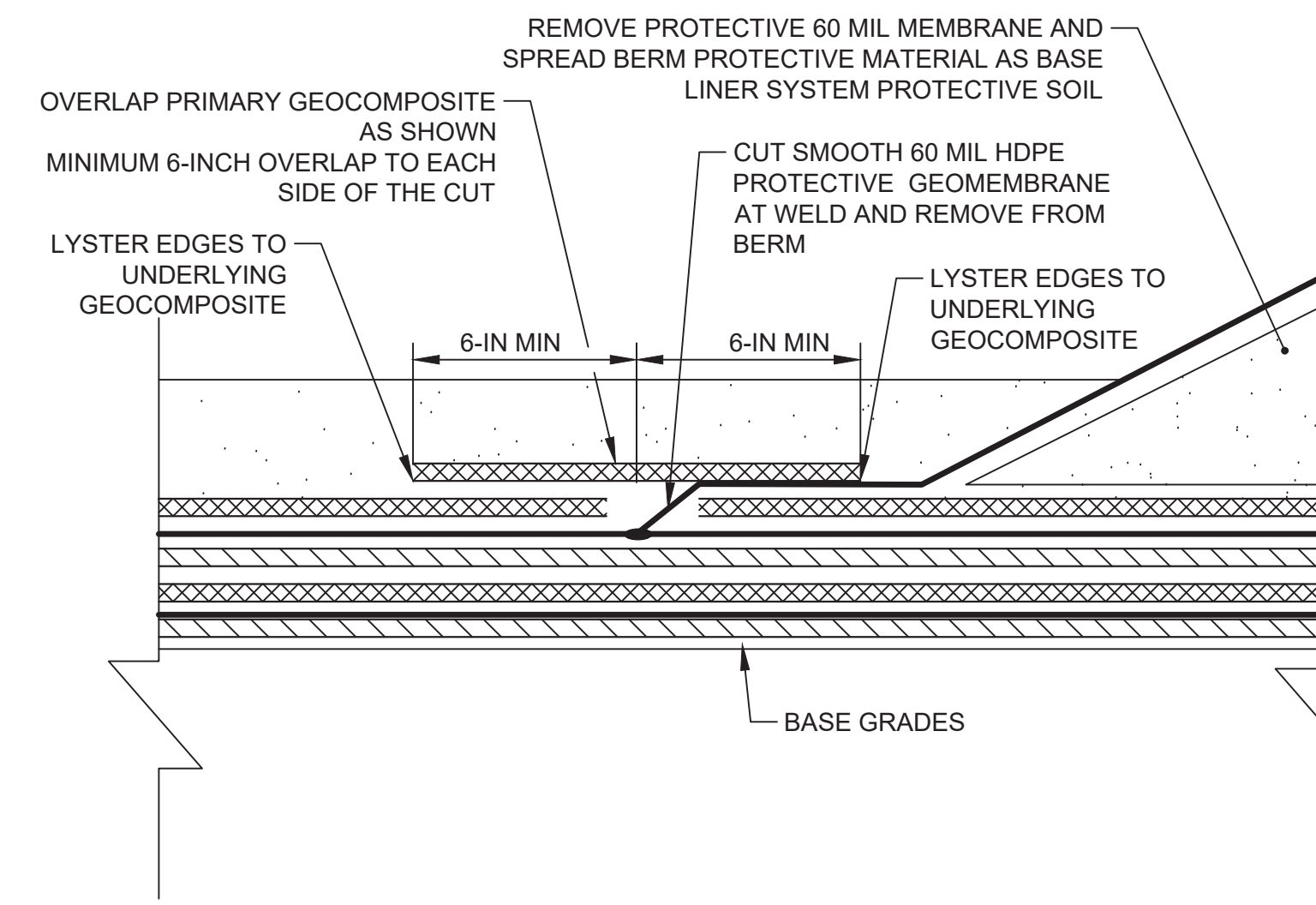
SUMP LAYOUT DETAILS	
DATE:	12/11/19   DRAWN BY: DVS
DWG SCALE:	AS SHOWN   CHECKED BY: DVS
PROJECT NO.:	194-991
APPROVED BY:	JS

DRAWING NO.:  
**P-804**

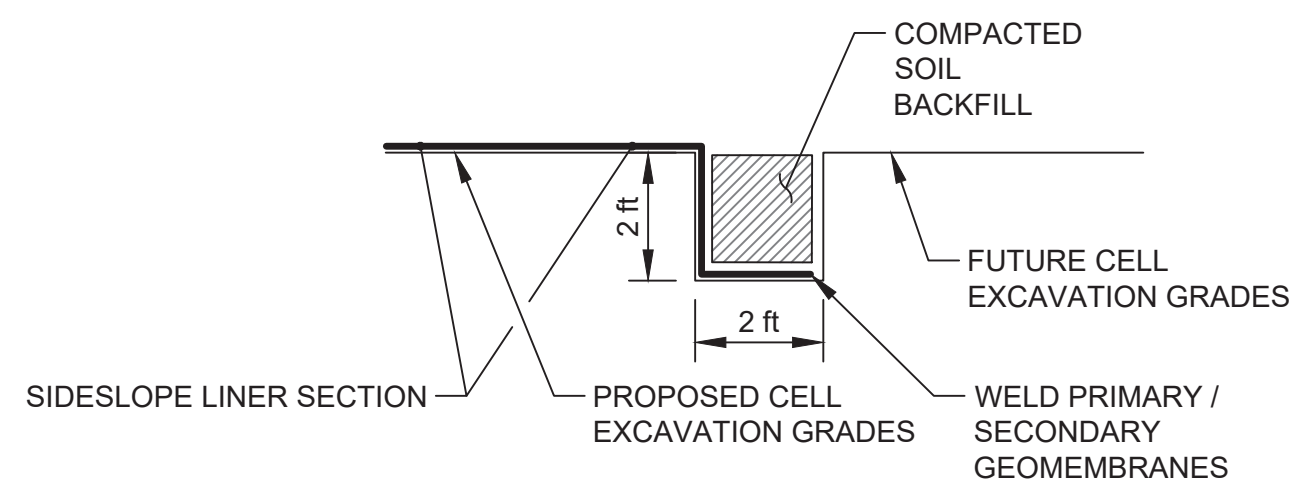
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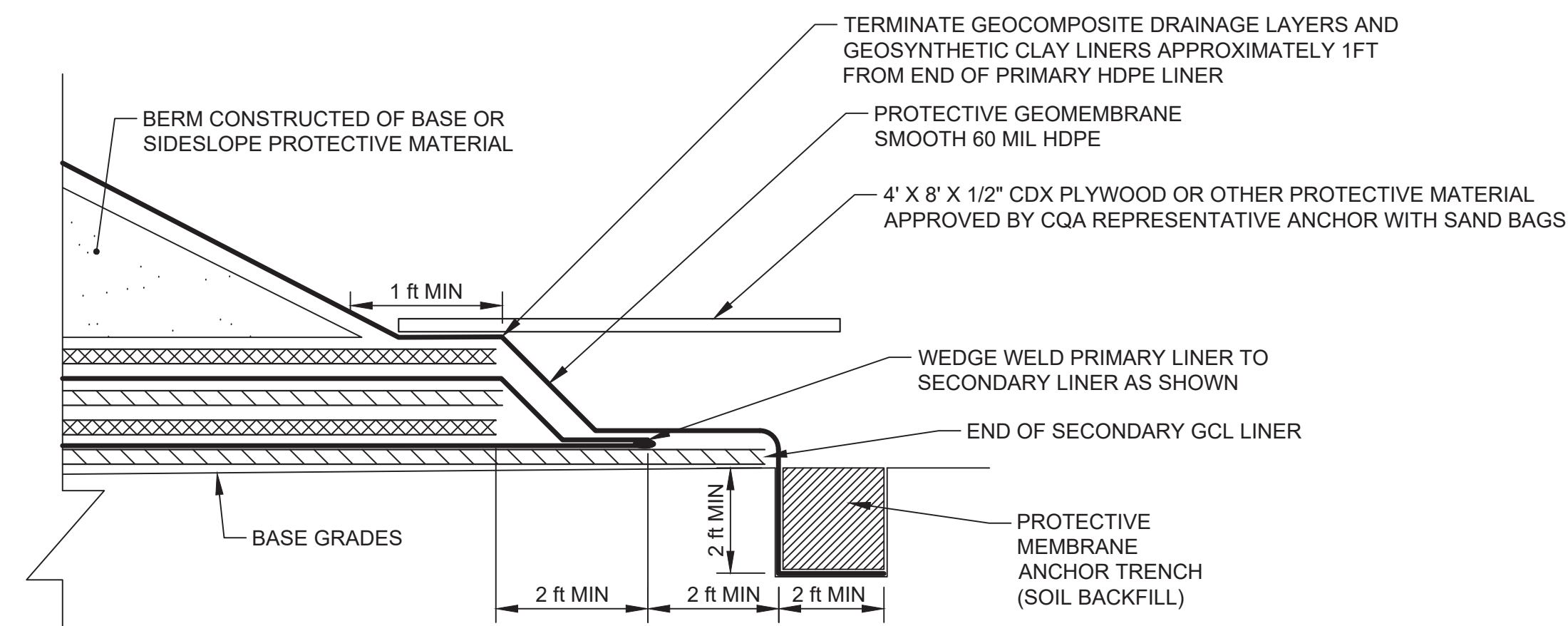
1  
806 TYPICAL INTERCELL BERM  
NTS



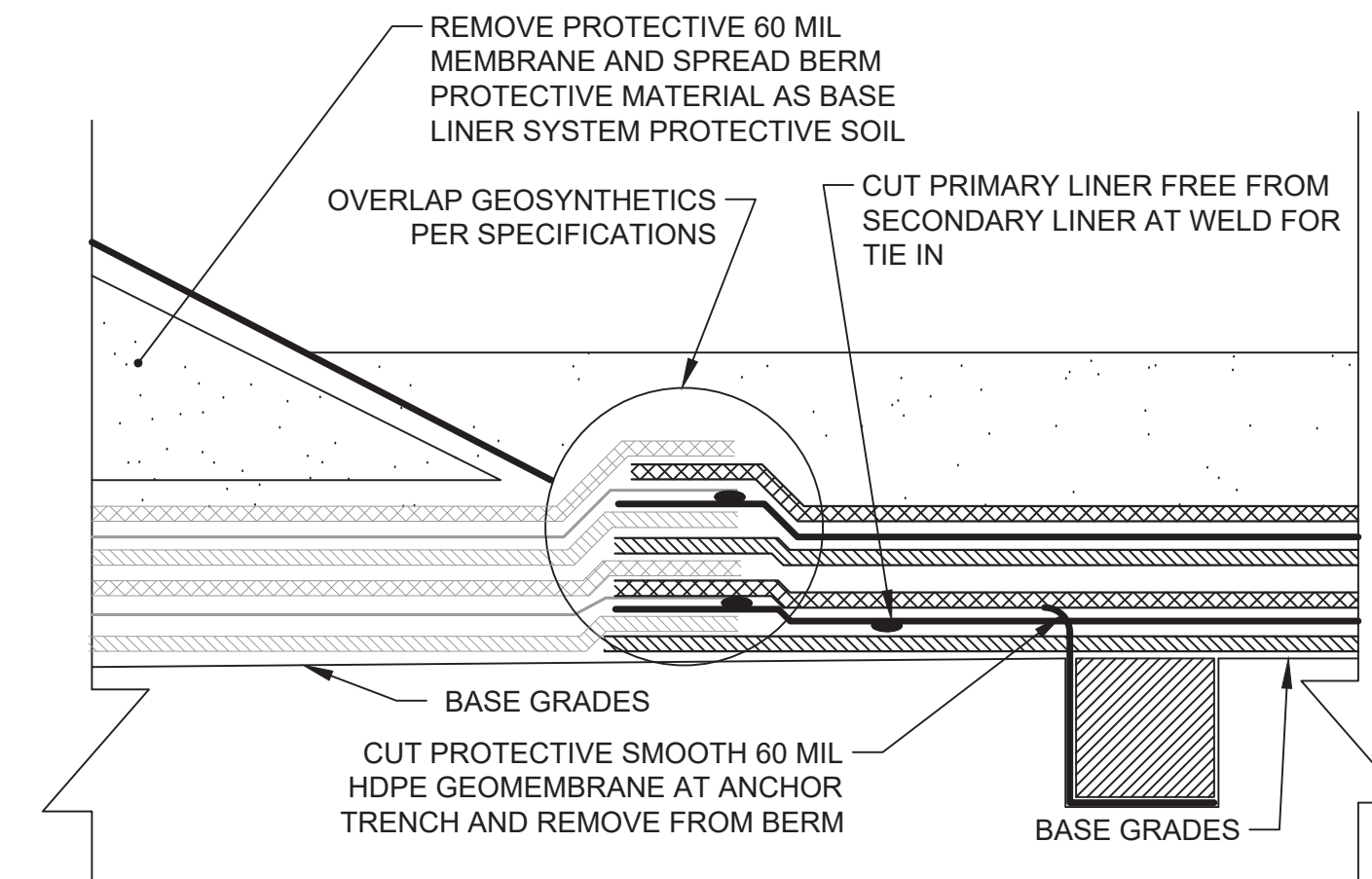
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806 TYPICAL INTERCELL BERM TERMINATION AND PRIMARY GEOCOMPOSITE REPAIR  
NTS



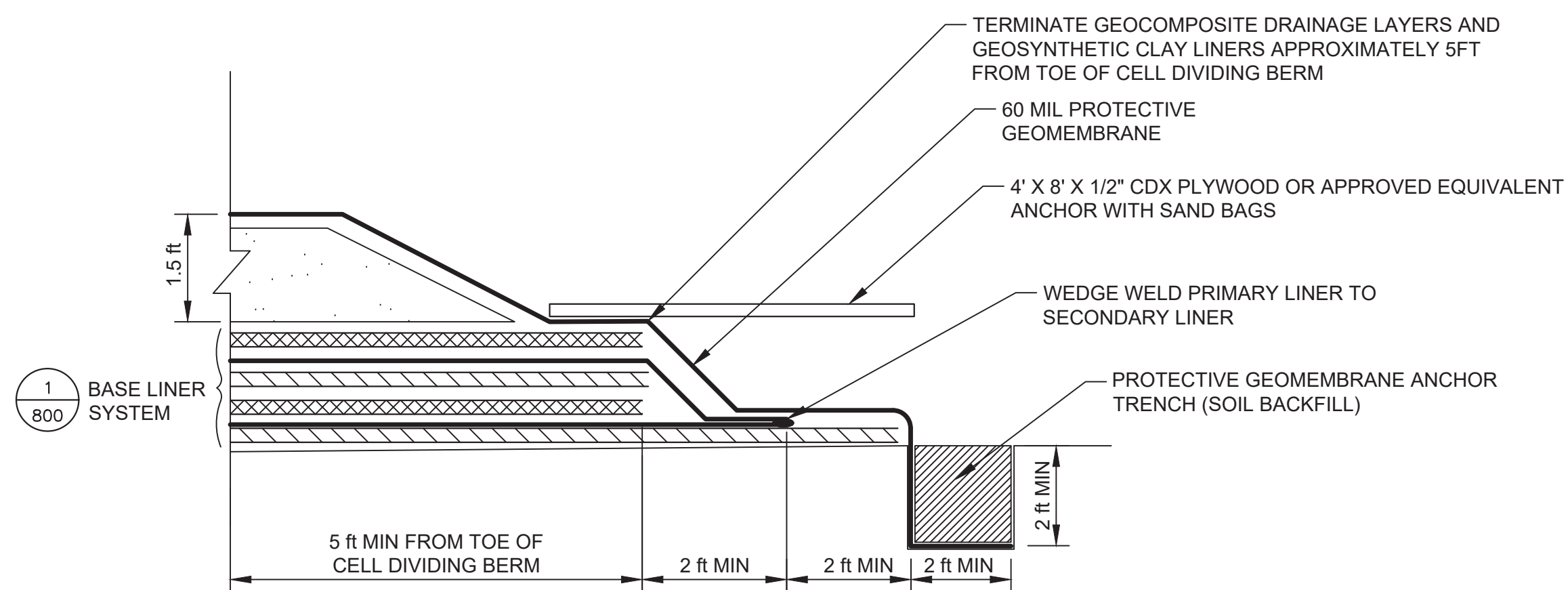
3  
806 TYPICAL INTERCELL AND CELL SIDESLOPE TERMINATION  
NTS



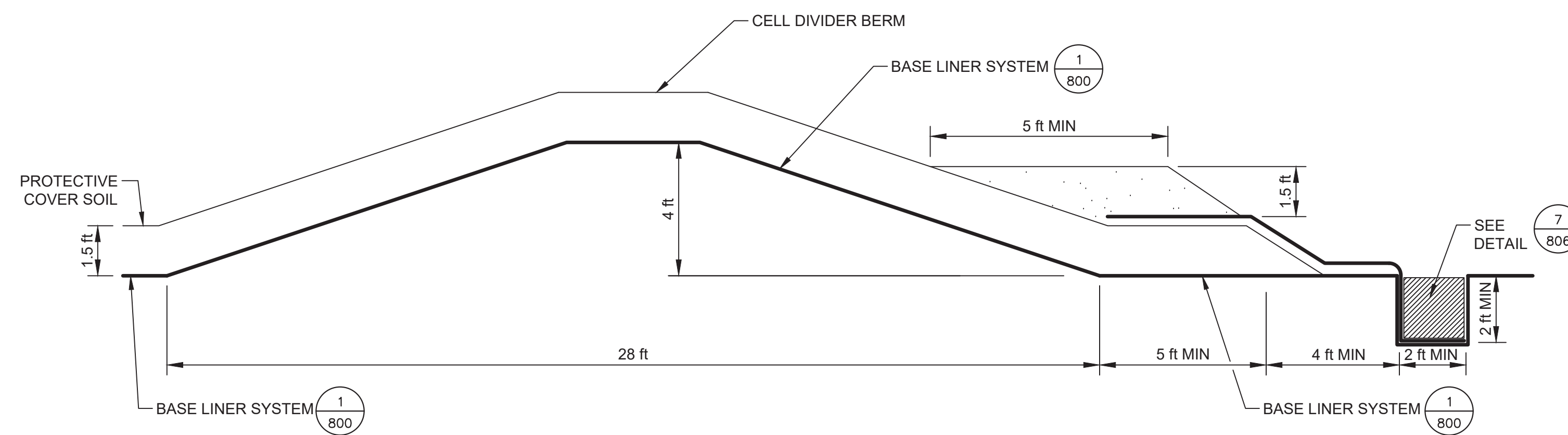
4  
806 TYPICAL INTERCELL BASE LINER TERMINATION DETAIL  
NTS



5  
806 TYPICAL BASE LINER TIE IN  
NTS



6  
806 TYPICAL BASE LINER TERMINATION - CELL DIVIDING BERM  
NTS



7  
806 TYPICAL CELL DIVIDING BERM  
NTS

NO.	DATE	DESCRIPTION

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CHEMICAL WASTE  
MANAGEMENT OF THE NORTHWEST  
ARLINGTON, OR

LINER TERMINATION DETAILS

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