



**BEAR DEN PROJECT**

**Plan of Development**

**APPENDIX B**

**Facility Plot Plans and Typical right-of-Way Cross Sections**





**BEAR DEN PROJECT**

**Plan of Development**

**Facility Plot Plans and Typical right-of-Way Cross Sections**

**Prepared for:  
BUREAU OF LAND MANAGEMENT**

**JUNE 2013**

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## **LIST OF FIGURES**

Phase 1 Site Plan

Proposed Plot Plan – BakkenLink Interconnect

Typical Construction - New/Improved Road Cross Section

Typical Construction - Right-of-Way Private Land

Typical Construction - Right-of-Way ND Department of Trust Lands

Typical Construction - Right-of-Way BLM and USFS National Forest Land

Typical Construction - Right-of-Way Wetlands

Typical Construction - Side Slope Private Land

Typical Construction - Side Slope ND Department of Trust Lands

Typical Construction – Side Slope BLM and USFS National Forest Land

Typical Drawing – Lateral Connection In-line Meter Locations

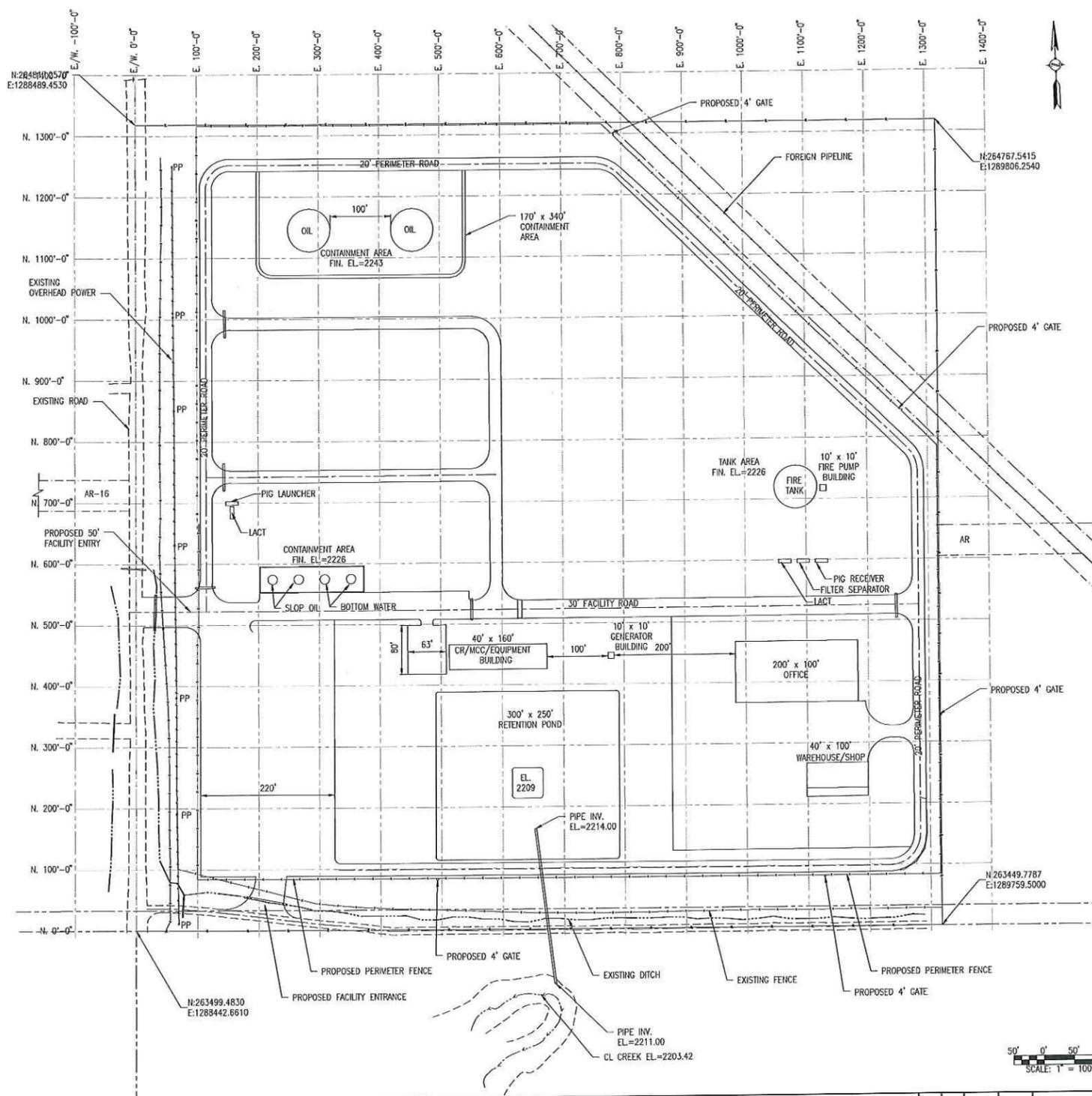
Typical Drawing – Lateral Connection In-line Meter Locations 1 Acre Lot

Typical Drawing – Well Pad Plot Plan

Typical Drawing – Mainline Valve (Oil and Water)

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McKENZIE COUNTY, NORTH DAKOTA  
 FIFTH PRINCIPAL MERIDIAN  
 SECTION 29, T-149-N, R-98-W



Plot Info: 5-03-13 -- 4:13pm-facarr-P:\SHARED\Centerpoint-Energy - Becrs Den\CA - CADD\Facilities\Models\Civ\_Struct\Centerpoint\_base-PHASE 1.dwg

**PRELIMINARY**

**CenterPoint Energy**  
 Bolken Crude Services, LLC, (CEBCS),  
 P.O. Box 21734, Shreveport, LA 71151  
 318-429-2805  
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**PHASE 1  
 SITE PLAN**

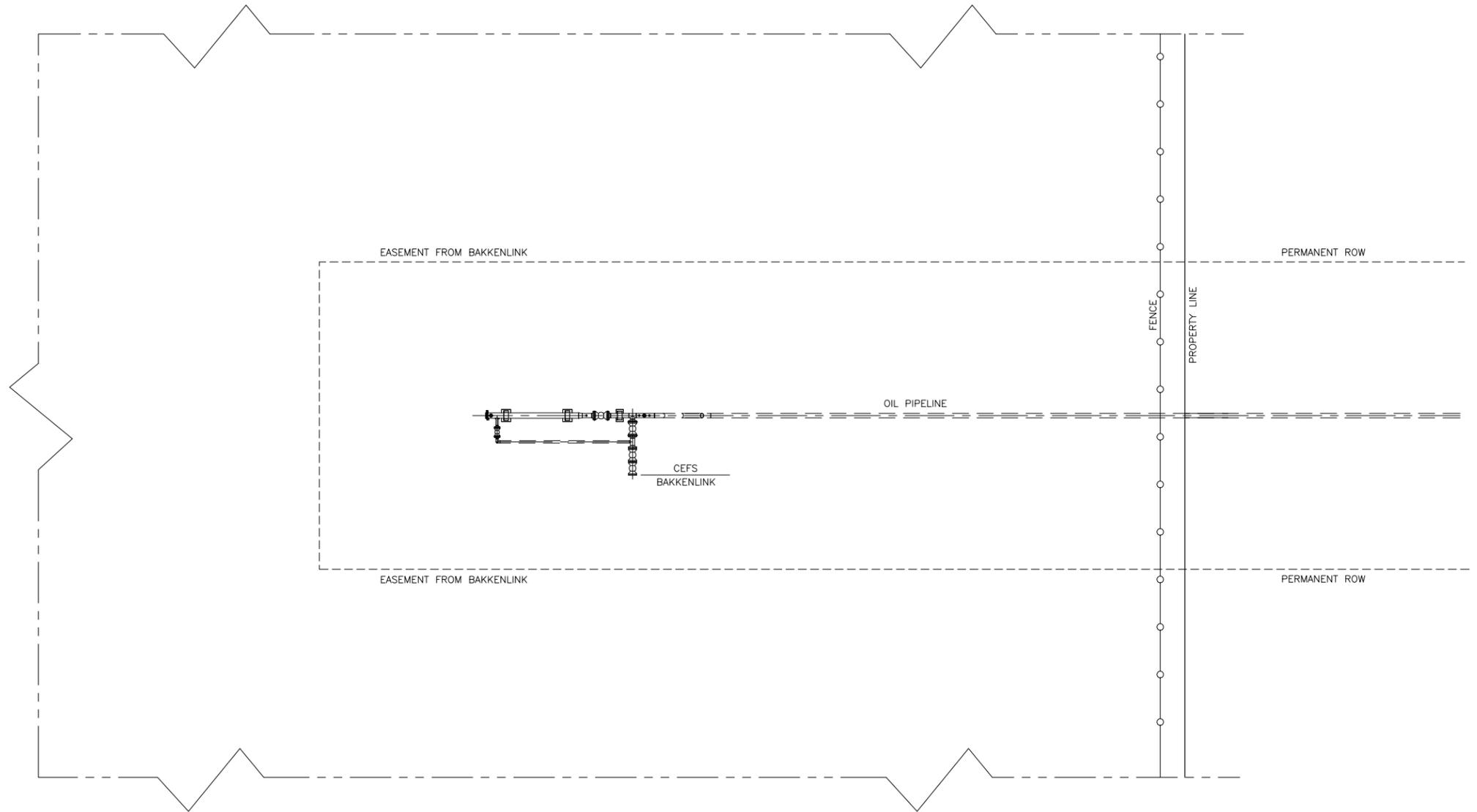
Region: McKenzie County, North Dakota

Drawn GC	Date 5/02/2013	Scale AS SHOWN	Fac. no 300	Rev A
Checked AG	Eng app AG	Design WC	Dwg no 300-100-C-001	

WILLBROS ENGINEERS (U.S.), LLC TELEPHONE: 318-429-2805	JOB NO: 52153-1275-31-001	DWG NO	TITLE	REV	BY	APP	DATE	DESCRIPTION
			REFERENCE DRAWINGS					REVISIONS



Plot Info: 2-18-13 1:26pm-00221367-Z:\01\_CEFS Drawings and Documents\12\_Drafting\09\_Design Tools\PIG LAUNCHERS & RECEIVERS\PROPOSED PLOT.dwg



SCALE

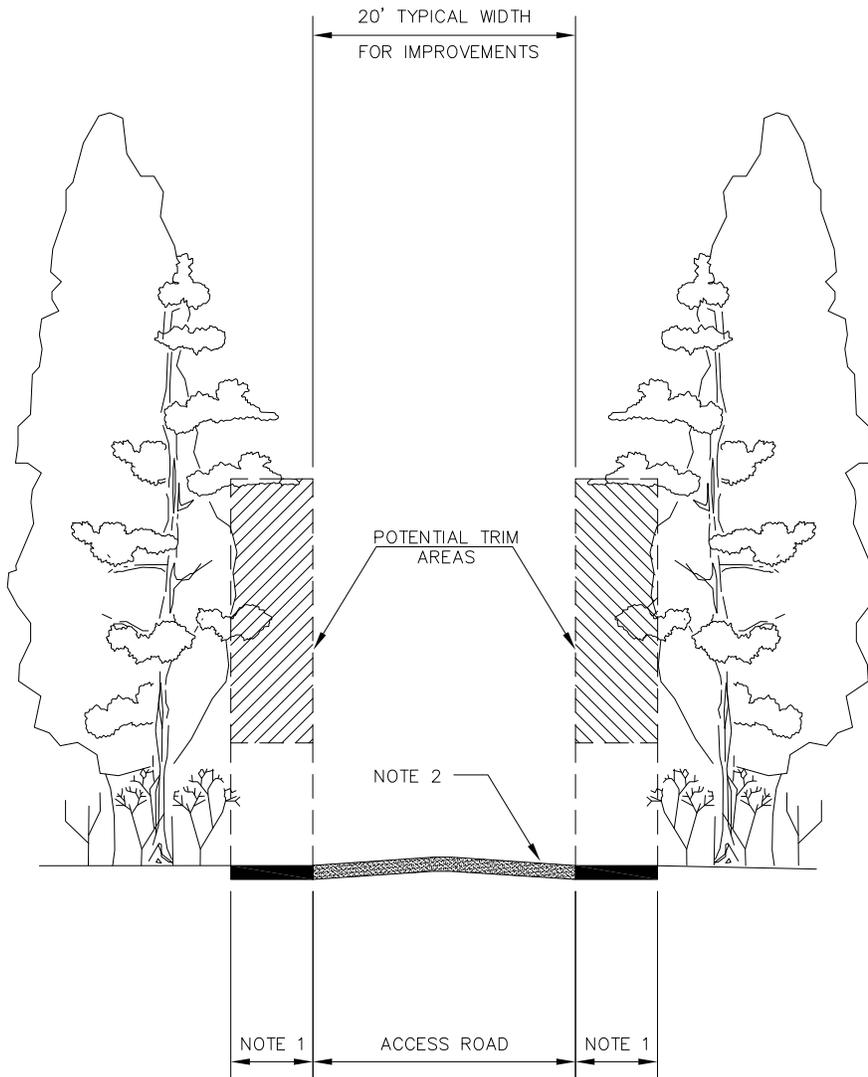
NOTE:  
1. PERMANENT ROW VARIES BETWEEN 30' AND 50'.  
FOR ACTUAL ROW SEE ALIGNMENT SHEET.

**CenterPoint Energy**  
Field Services  
P.O. Box 21734 Shreveport, LA 71151  
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**PROPOSED PLOT PLAN  
BAKKENLINK INTERCONNECT**

DWG NO	TITLE	REV	BY	APP	DATE	DESCRIPTION	Drawn	Date	Scale	Fac. no	XXX	Rev
	REFERENCE DRAWINGS					REVISIONS	Checked	Eng app	Design	Dwg no	XXX-XXX-X-XXX	-

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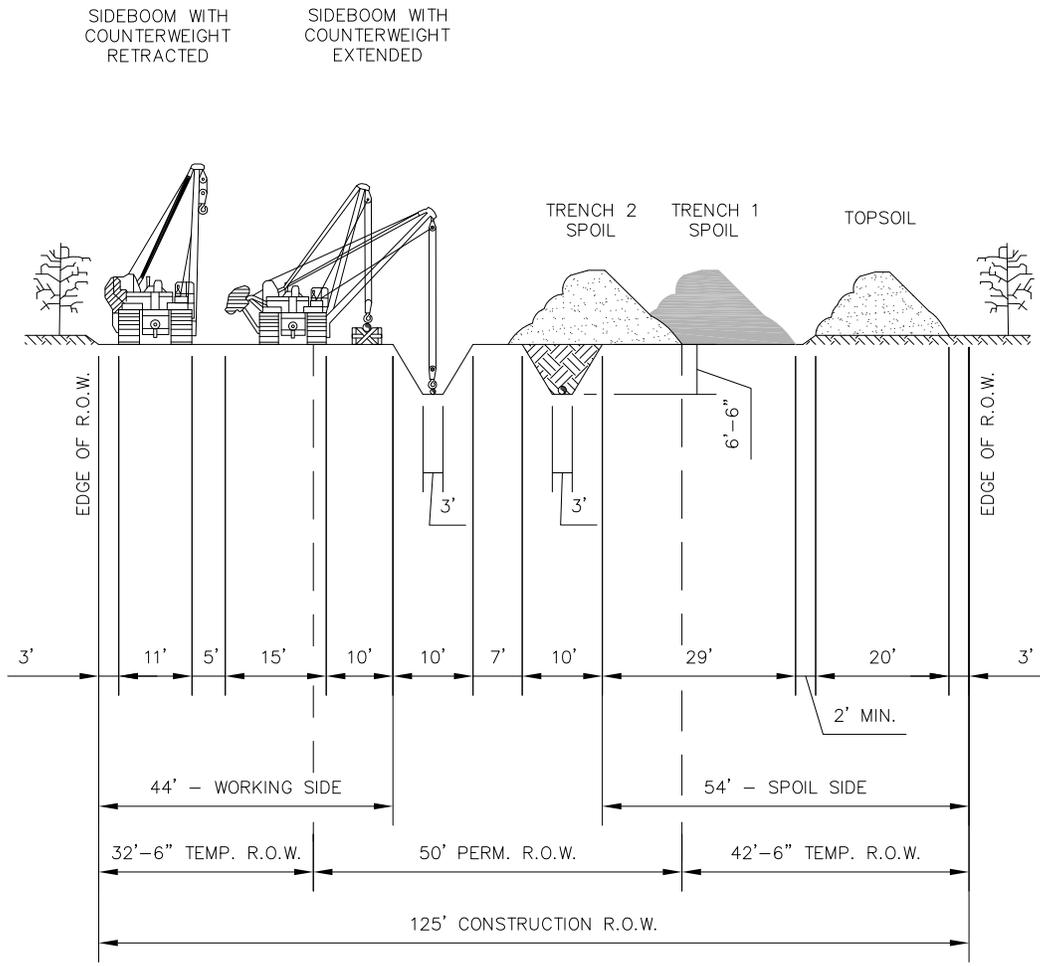


- NOTES:
1. POTENTIAL WIDENING OF EXISTING ROADS UP TO 5' PER SIDE WITH BASE MATERIAL (IF NEEDED).
  2. 6" OF ROCK COVER OR NORTH DAKOTA EQUIVALENT.

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**TYPICAL CONSTRUCTION  
NEW/IMPROVED ROAD CROSS SECTION**

Drawn SNS	Date 10/30/12	Scale NONE	Rev 0
Checked -	Eng app -	Dwg no STD-1010	



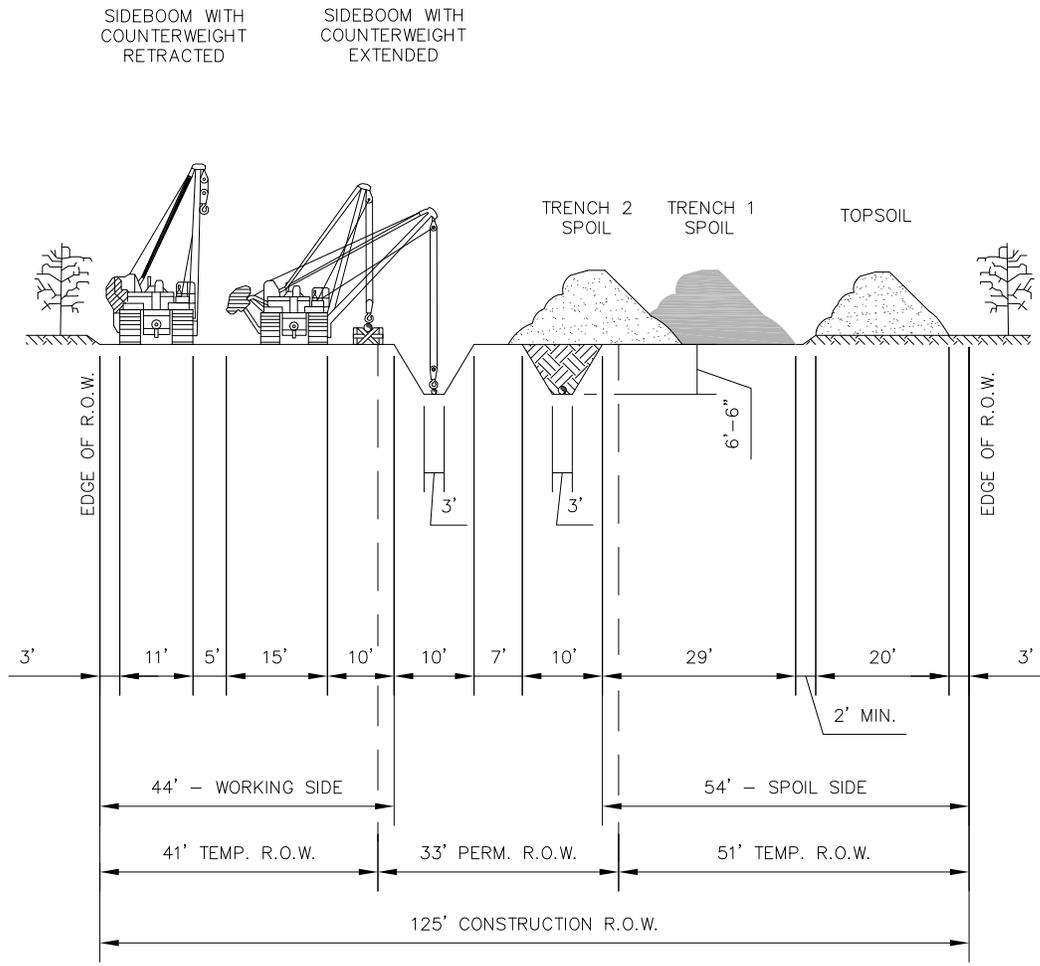
- NOTE:
1. DIMENSIONS ARE TYPICAL. SEE ALIGNMENT SHEETS FOR ACTUAL RIGHT-OF-WAY CONFIGURATIONS AND CLEARING LIMITS.
  2. TOPSOIL SHALL BE STRIPPED AND SEGREGATED FROM THE FULL RIGHT-OF-WAY PER LANDOWNER REQUEST.


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 318-429-2805  
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TYPICAL CONSTRUCTION  
 RIGHT-OF-WAY  
 PRIVATE LAND

Drawn SNS	Date 10/31/12	Scale NONE	Rev 1
Checked -	Eng app -	Dwg no STD-1011	1

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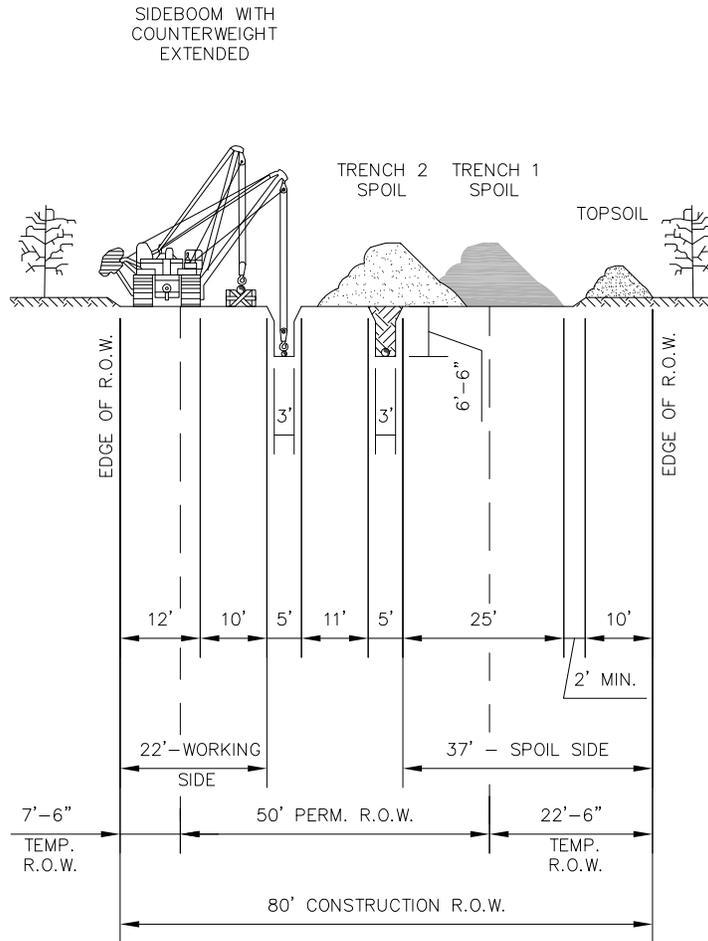
- NOTE:
1. DIMENSIONS ARE TYPICAL. SEE ALIGNMENT SHEETS FOR ACTUAL RIGHT-OF-WAY CONFIGURATIONS AND CLEARING LIMITS.
  2. TOPSOIL SHALL BE STRIPPED AND SEGREGATED FROM THE FULL RIGHT-OF-WAY.

	Field Services
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**TYPICAL CONSTRUCTION  
 RIGHT-OF-WAY  
 ND DEPARTMENT OF TRUST LANDS**

Drawn SNS	Date 10/31/12	Scale NONE	Rev
Checked -	Eng app -	Dwg no STD-1012	1

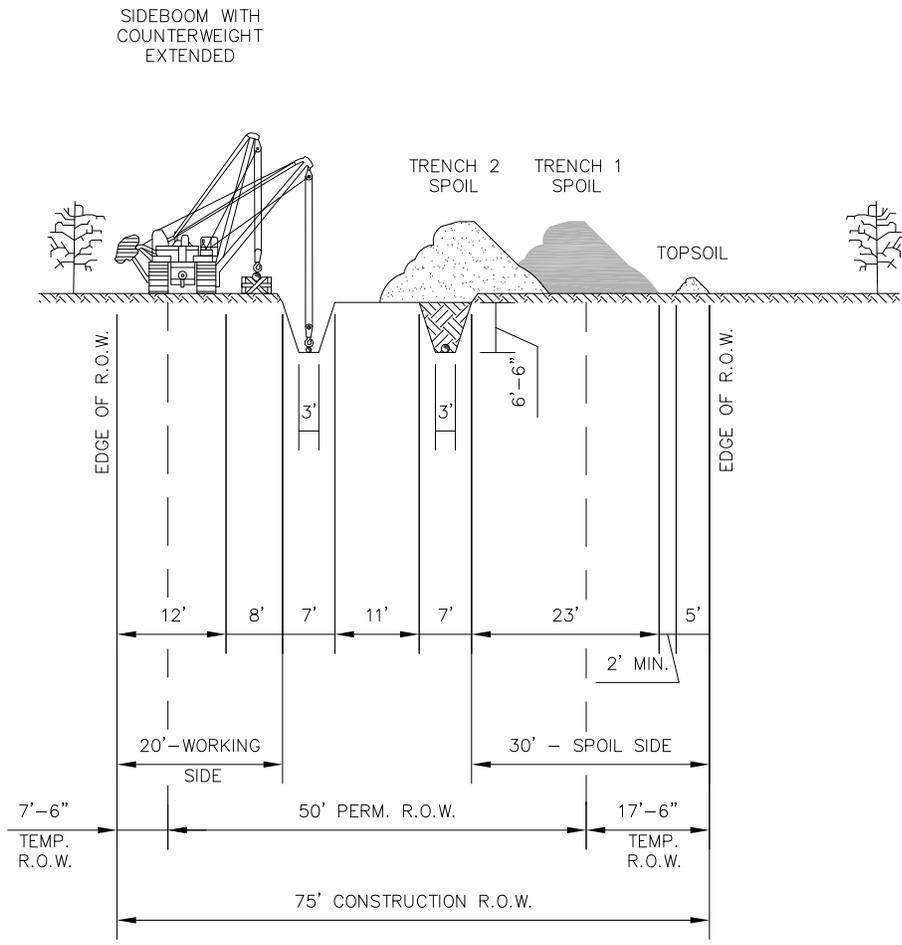
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- NOTE:
1. DIMENSIONS ARE TYPICAL. SEE ALIGNMENT SHEETS FOR ACTUAL RIGHT-OF-WAY CONFIGURATIONS AND CLEARING LIMITS.
  2. TOPSOIL SHALL BE STRIPPED AND SEGREGATED FROM THE FULL RIGHT-OF-WAY.

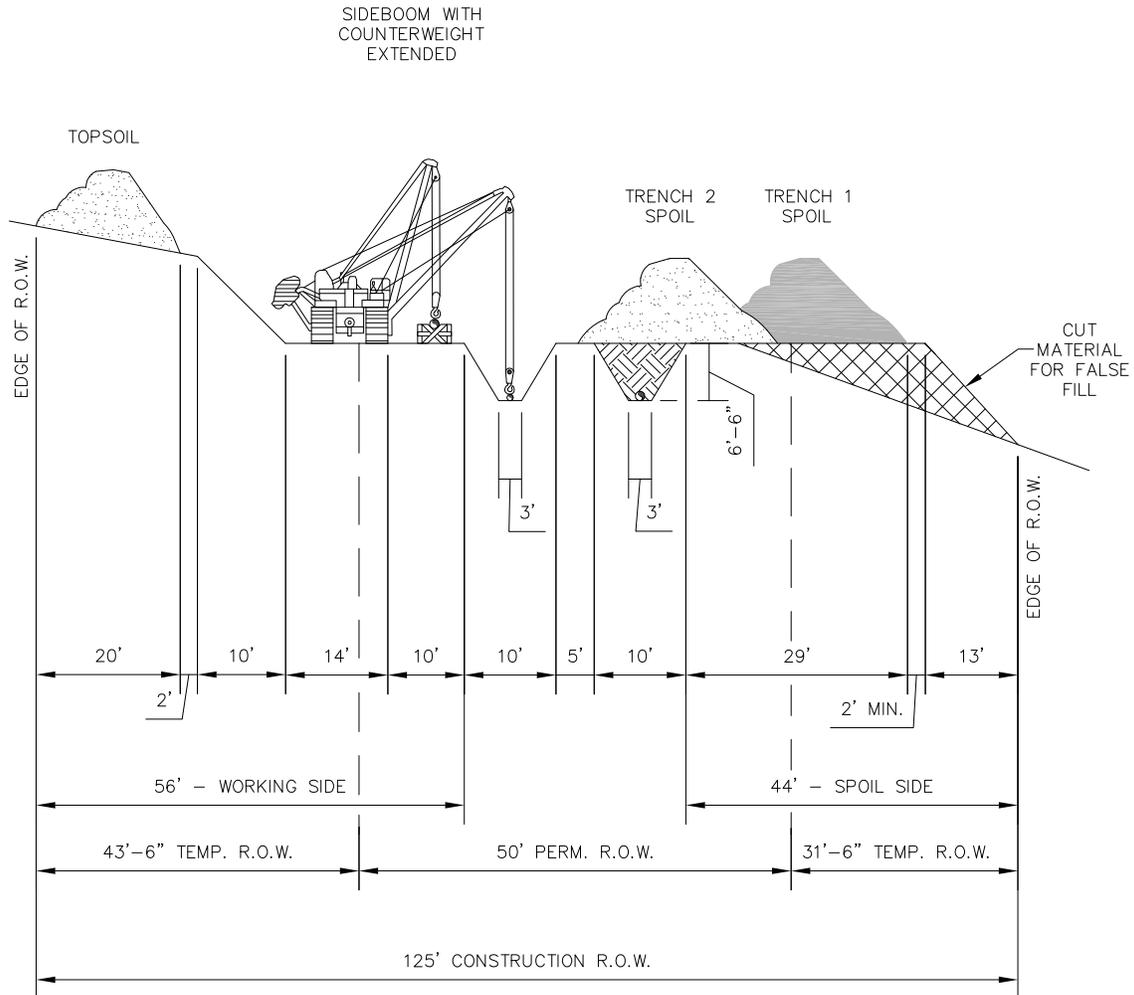
		Field Services P.O. Box 21734 Shreveport, LA 71151 318-429-2805 www.centerpointenergy.com	
		TYPICAL CONSTRUCTION RIGHT-OF-WAY BLM AND USFS NATIONAL FOREST LAND	
Drawn SNS	Date 10/31/12	Scale NONE	Rev
Checked -	Eng app -	Dwg no STD-1013	2

Plot Info: 12-13-12 - 10:42am - 00220823-Z:\01\_CEFS Drawings and Documents\12\_Drafting\04\_Standards\01\_Standard Drawings\STD-1018.dwg



- NOTE:
1. DIMENSIONS ARE TYPICAL. SEE ALIGNMENT SHEETS FOR ACTUAL RIGHT-OF-WAY CONFIGURATIONS AND CLEARING LIMITS.
  2. TOPSOIL SHALL BE STRIPPED AND SEGREGATED FROM THE TRENCH LINE ONLY.
  3. EQUIPMENT WORKING MATS TO BE USED AS NEEDED.

		Field Services P.O. Box 21734 Shreveport, LA 71151 318-429-2805 www.centerpointenergy.com	
		<b>TYPICAL CONSTRUCTION RIGHT-OF-WAY WETLANDS</b>	
Drawn SNS	Date 10/31/12	Scale NONE	Rev
Checked -	Eng app -	Dwg no STD-1018	<b>3</b>

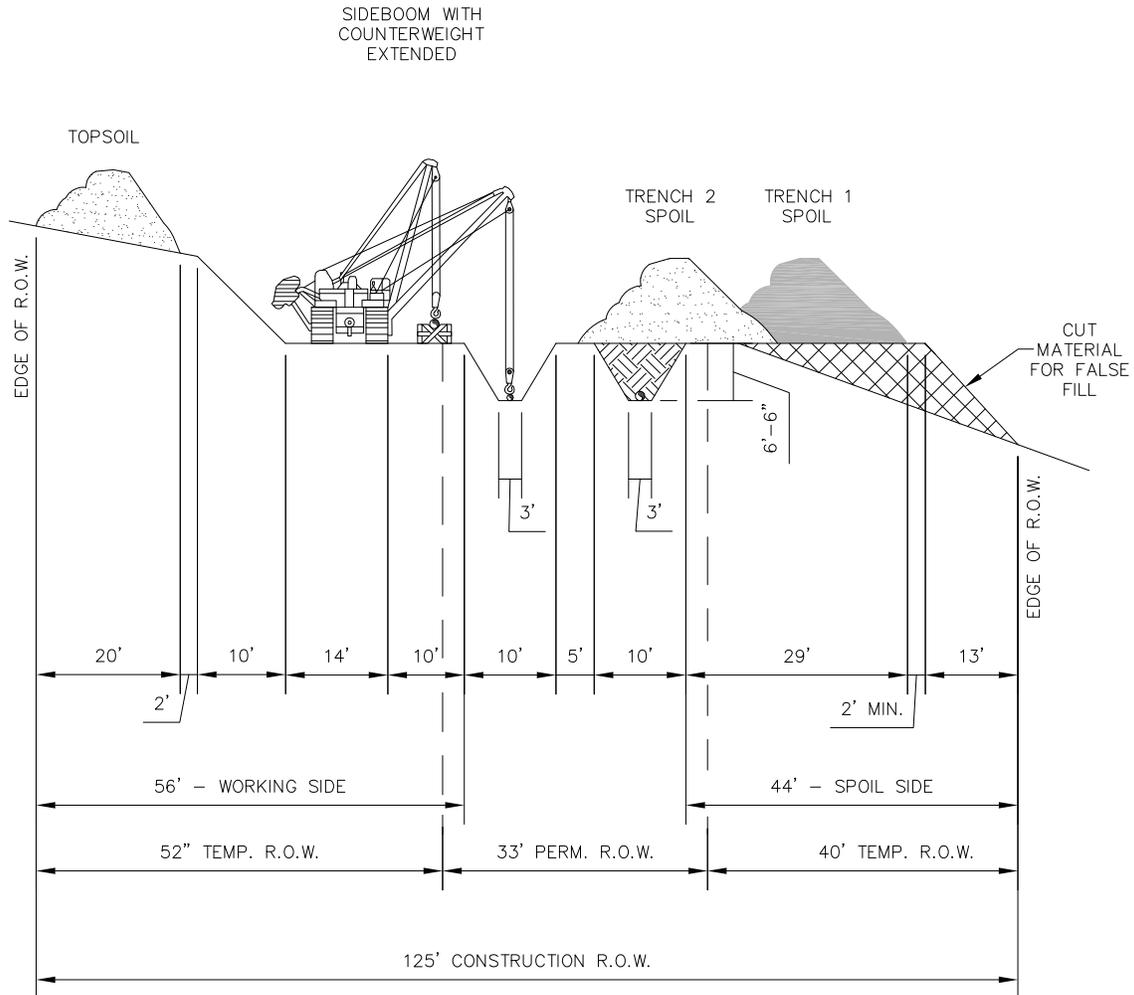


PROFILE

NOTES:

1. DIMENSIONS ARE TYPICAL, SEE ALIGNMENT SHEETS FOR ACTUAL RIGHT-OF-WAY CONFIGURATIONS AND CLEARING LIMITS.
2. LEAVE GAPS IN SPOIL PILES AT OBVIOUS DRAINAGES. DO NOT PUSH UPLAND SOILS INTO CANALS OR WETLANDS.
3. TOPSOIL SHALL BE STRIPPED AND SEGREGATED FROM THE FULL RIGHT-OF-WAY.

		Field Services		P.O. Box 21734 Shreveport, LA 71151 318-429-2805 www.centerpointenergy.com
		TYPICAL CONSTRUCTION SIDE SLOPE PRIVATE LAND		
Drawn SNS	Date 10/31/12	Scale NONE	Rev 2	
Checked -	Eng app -	Dwg no STD-1014		



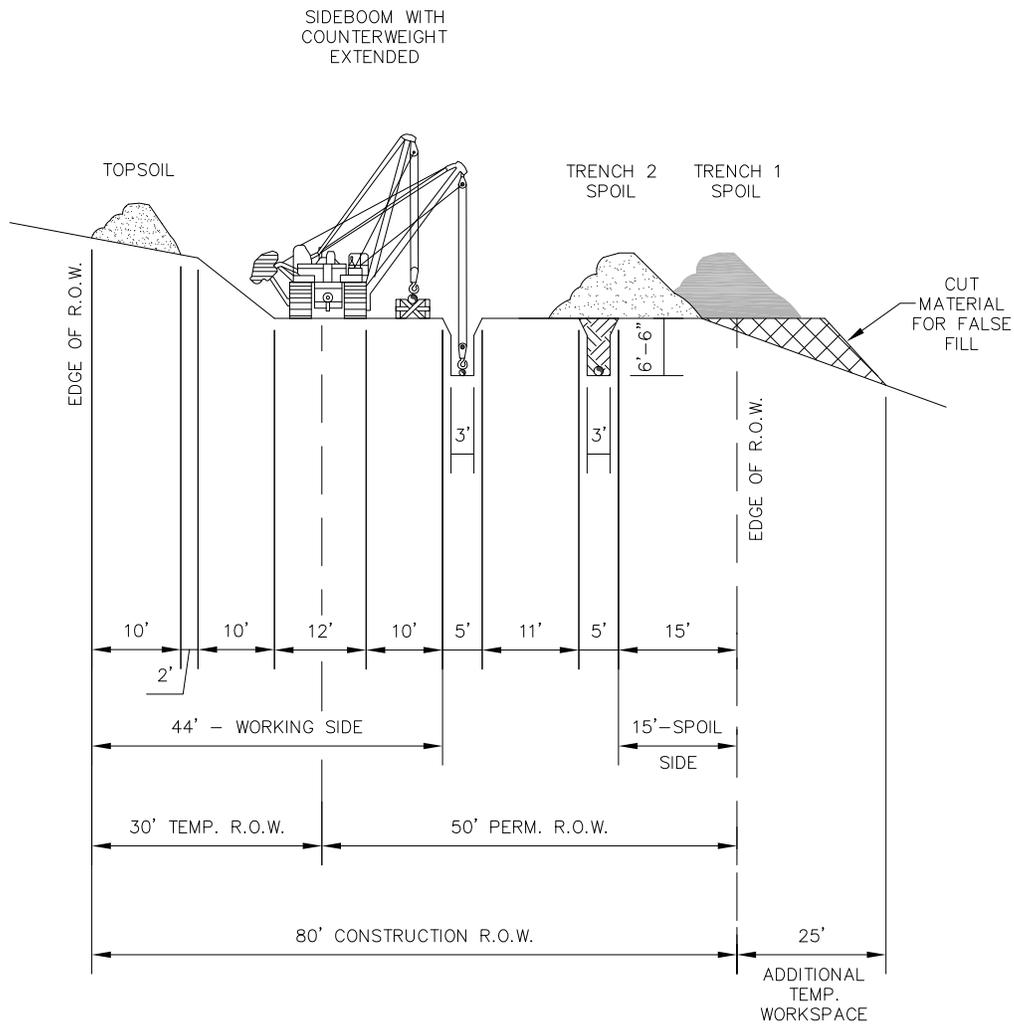
PROFILE

NOTES:

1. DIMENSIONS ARE TYPICAL, SEE ALIGNMENT SHEETS FOR ACTUAL RIGHT-OF-WAY CONFIGURATIONS AND CLEARING LIMITS.
2. LEAVE GAPS IN SPOIL PILES AT OBVIOUS DRAINAGES. DO NOT PUSH UPLAND SOILS INTO CANALS OR WETLANDS.
3. TOPSOIL SHALL BE STRIPPED AND SEGREGATED FROM THE FULL RIGHT-OF-WAY.

		Field Services	
		P.O. Box 21734 Shreveport, LA 71151 318-429-2805 www.centerpointenergy.com	
<b>TYPICAL CONSTRUCTION SIDE SLOPE ND DEPARTMENT OF TRUST LANDS</b>			
Drawn SNS	Date 10/31/12	Scale NONE	Rev 2
Checked -	Eng app -	Dwg no STD-1015	

Plot Info: 12-13-12 - 10:14am - 00220823-Z: \\01\_CEFSS Drawings and Documents\12\_Drafting\04\_Standards\01\_Standards\01\_Standards\STD-1015.dwg



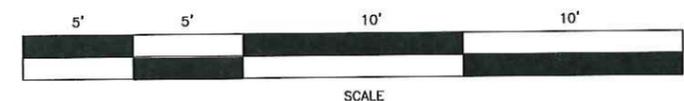
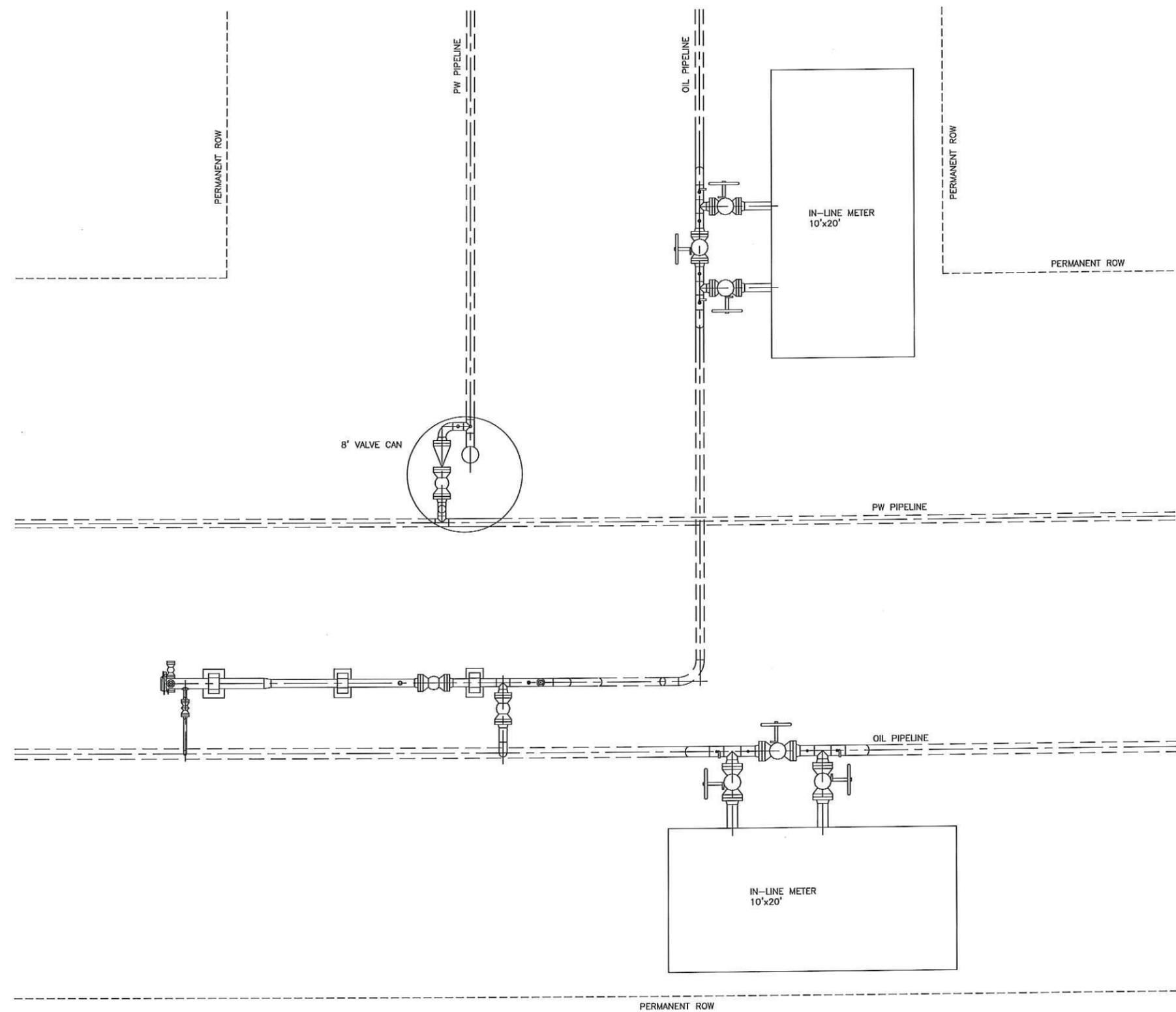
PROFILE

NOTES:

1. DIMENSIONS ARE TYPICAL, SEE ALIGNMENT SHEETS FOR ACTUAL RIGHT-OF-WAY CONFIGURATIONS AND CLEARING LIMITS.
2. LEAVE GAPS IN SPOIL PILES AT OBVIOUS DRAINAGES. DO NOT PUSH UPLAND SOILS INTO CANALS OR WETLANDS.
3. TOPSOIL SHALL BE STRIPPED AND SEGREGATED FROM THE FULL RIGHT-OF-WAY.

		Field Services		P.O. Box 21734 Shreveport, LA 71151 318-429-2805 www.centerpointenergy.com
		TYPICAL CONSTRUCTION SIDE SLOPE BLM AND USFS NATIONAL FOREST LAND		
Drawn SNS	Date 10/31/12	Scale NONE	Rev 2	
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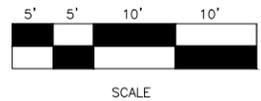
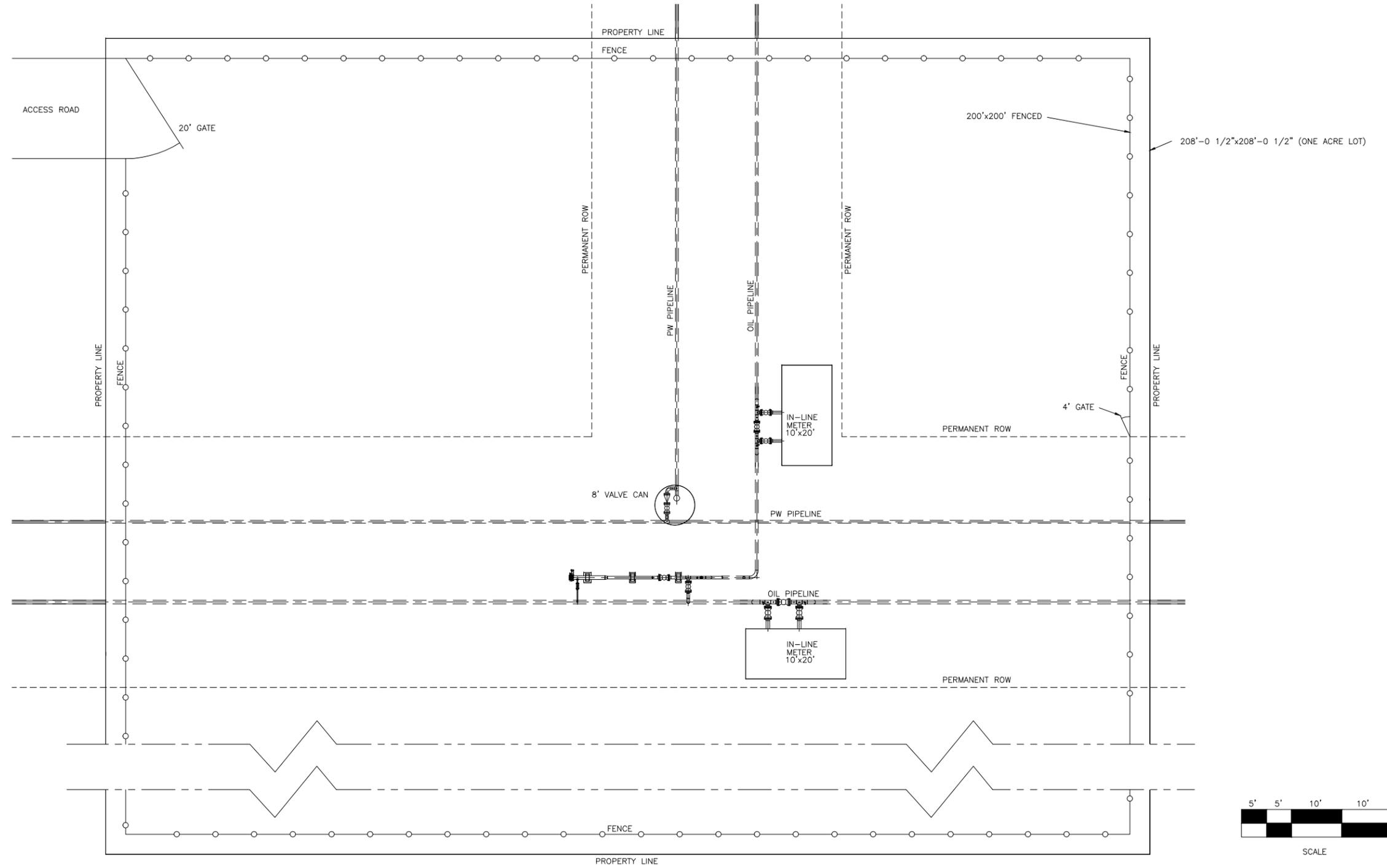
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NOTE:  
1. PERMANENT ROW VARIES BETWEEN 30' AND 50'.  
FOR ACTUAL ROW SEE ALIGNMENT SHEET.

		Field Services		P.O. Box 21734 Shreveport, LA 71151		318-429-2805		www.centerpointenergy.com		
		<b>TYPICAL DRAWING LATERAL CONNECTION IN-LINE METER LOCATIONS</b>		Drawn BWS	Date 5/9/13	Scale 3/32"=1'-0"	Fac. no XXX	Rev		
DWG NO	TITLE	REV	BY	APP	DATE	DESCRIPTION	Checked -	Eng app -	Design -	Dwg no XXX-XXX-X-XXX
	REFERENCE DRAWINGS					REVISIONS				

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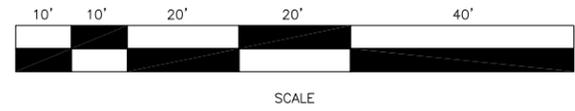
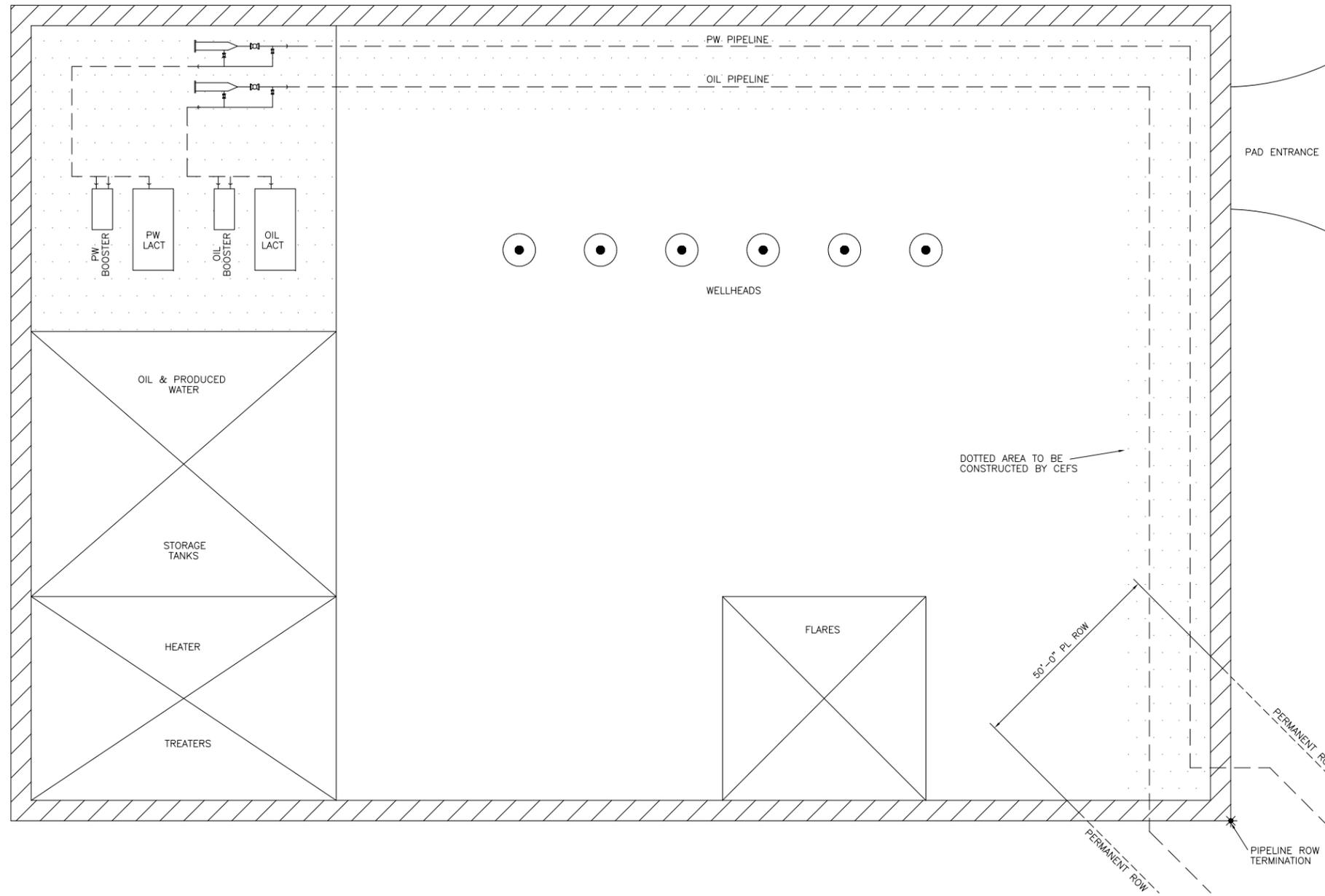


NOTE:  
1. PERMANENT ROW VARIES BETWEEN 30' AND 50'.  
FOR ACTUAL ROW SEE ALIGNMENT SHEET.

	Field Services P.O. Box 21734 Shreveport, LA 71151 318-429-2805 www.centerpointenergy.com			
	TYPICAL DRAWING LATERAL CONNECTION IN-LINE METER LOCATIONS 1 ACRE LOT			
Drawn BWS	Date 5/9/13	Scale 3/32"=1'-0"	Fac. no XXX	Rev -
Checked -	Eng app -	Design -	Dwg no XXX-XXX-X-XXX	

DWG NO	TITLE	REV	BY	APP	DATE	DESCRIPTION
	REFERENCE DRAWINGS					REVISIONS

Plot Info: 2-18-13 1:25pm-0022:1367-Z:\01\_CEFIS Drawings and Documents\12\_Drafting\09\_Design Tools\PIG LAUNCHERS & RECEIVERS\PROPOSED PLOT WELL PAD.dwg



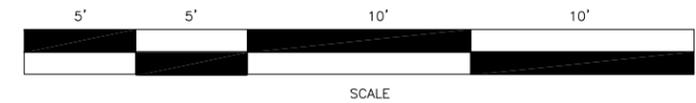
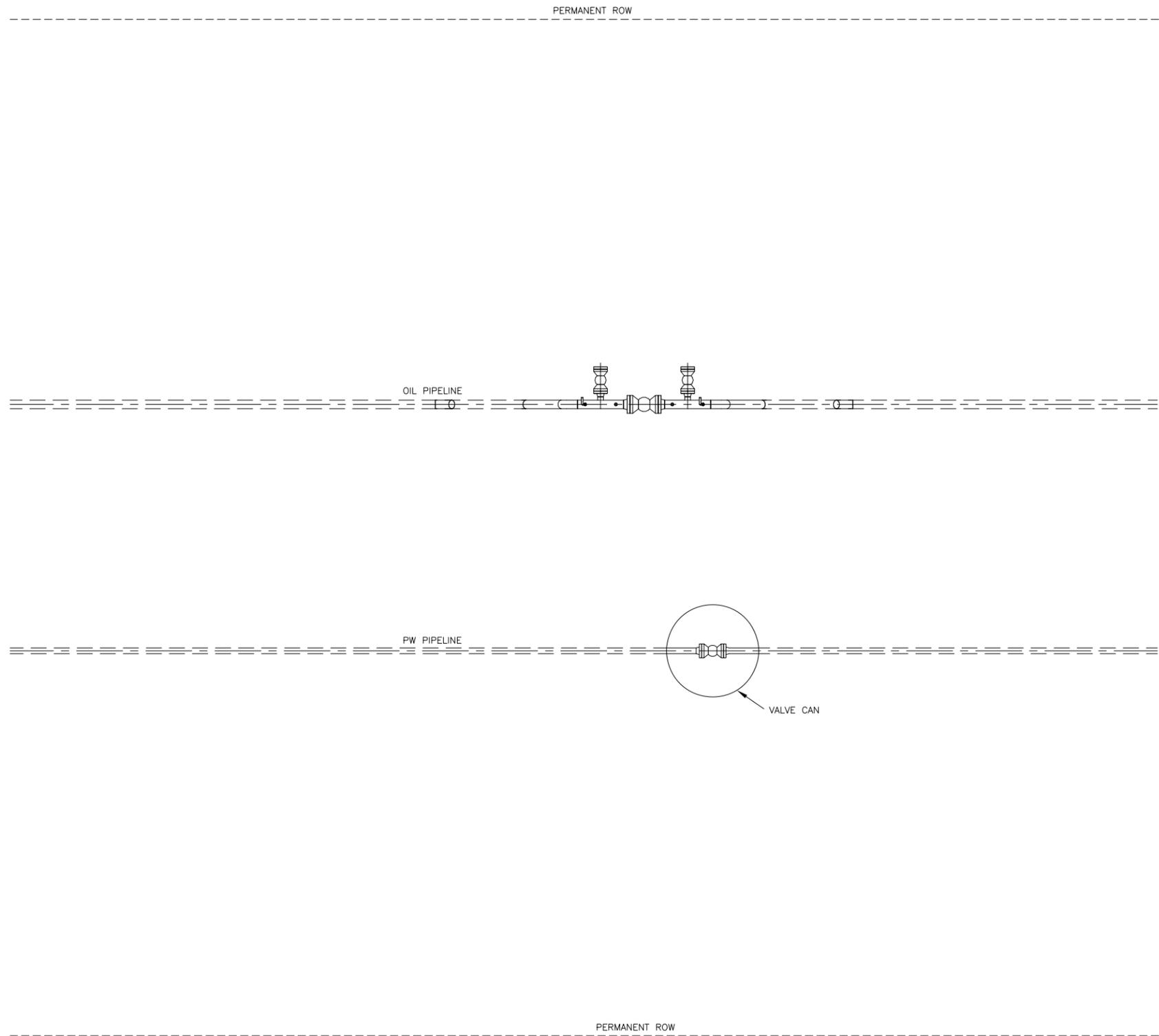
NOTE:  
1. PERMANENT ROW VARIES BETWEEN 30' AND 50'.  
FOR ACTUAL ROW SEE ALIGNMENT SHEET.

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Field Services  
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TYPICAL DRAWING  
WELL PAD PLOT PLAN

DWG NO	TITLE	REV	BY	APP	DATE	DESCRIPTION	Drawn	Date	Scale	Fac. no	Rev
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NOTE:  
1. PERMANENT ROW VARIES BETWEEN 30' AND 50'.  
FOR ACTUAL ROW SEE ALIGNMENT SHEET.

**CenterPoint Energy**  
Field Services  
P.O. Box 21734 Shreveport, LA 71151  
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**TYPICAL DRAWING  
MAINLINE VALVE (OIL AND WATER)**

DWG NO	TITLE	REV	BY	APP	DATE	DESCRIPTION	Drawn	BWS	Date	2/18/13	Scale	1/4"=1'-0"	Fac. no	XXX	Rev	
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