DAKOTA ACCESS, LLC

DAKOTA ACCESS PIPELINE PROJECT
SOUTH DAKOTA ENERGY FACILITY PERMIT APPLICATION

DOCKET NO. HP14-002

ENERGY FACILITY PERMIT APPLICATION
AND
EXHIBITS B-D

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Exhibit C

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Soil Characteristics for Each Soil Map Unit within the Project area

Map Unit Name	Map Unit Symbol [a]	Pipeline Crossing Length (feet)	Prime Farmland [a]	Hydric Soils [a]	Compaction Potential [a]	Erosion Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Shallow Natric Layer [a,f]	Re-vegetation Potential
Pipeline										
Campbell County										
Tonka silt loam, undrained, 0 to 1 percent slopes	C001A	577	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Parnell silty clay loam, undrained, 0 to 1 percent slopes	C008A	375	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Heil silt loam, undrained, 0 to 1 percent slopes	C020A	488	Not Prime Farmland	Yes	High	Low	No	No	Yes	Low
Ludden silty clay loam, strongly saline, 0 to 1 percent slopes, occasionally flooded	C058A	168	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Zahl-Max loams, 15 to 25 percent slopes	C153E	1,556	Not Prime Farmland	Yes	High	High	No	No	No	Low
Vida very stony loam, 3 to 15 percent slopes	C172D	199	Not Prime Farmland	Yes	Moderate	Low	Yes	No	No	Low
Vida-Zahl loams, 6 to 9 percent slopes	C175C	14,532	Not Prime Farmland	Yes	High	Moderate	Yes	No	No	Low
Vida-Zahl loams, 6 to 15 percent slopes	C175D	328	Not Prime Farmland	Yes	High	Moderate	Yes	No	No	Low
Bowbells loam, 0 to 3 percent slopes	C201A	4,696	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Williams-Bowbells loams, 0 to 3 percent slopes	C210A	9,463	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Williams-Bowbells loams, 3 to 6 percent slopes	C210B	52,691	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Williams-Vida loams, 3 to 6 percent slopes	C212B	2,303	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Williams-Vida loams, 6 to 9 percent slopes	C212C	27,013	Farmland of Statewide Importance	Yes	High	Moderate	Yes	No	No	Moderate

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Map Unit Name	Map Unit Symbol [a]	Pipeline Crossing Length (feet)	Prime Farmland [a]	Hydric Soils [a]	Compaction Potential [a]	Erosion Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Shallow Natric Layer [a,f]	Re-vegetation Potential
Hamerly loam, 0 to 3 percent slopes	C270A	970	Prime Farmland	Yes	High	Low	No	No	No	High
Farnuf loam, 0 to 2 percent slopes	C416A	897	Farmland of Statewide Importance	No	High	Low	No	No	No	High
Farnuf loam, 2 to 6 percent slopes	C416B	1,704	Farmland of Statewide Importance	No	High	Low	No	No	No	High
Straw-Fluvaquents channeled, complex, 0 to 2 percent slopes, frequently flooded	C491A	810	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Ranslo-Harriet loams, 0 to 2 percent slopes, occasionally flooded	C578A	1,049	Not Prime Farmland	Yes	High	Low	No	No	Yes	Low
Bryant silt loam, 2 to 6 percent slopes	C732B	1,175	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Bryant-Grassna silt loams, 0 to 2 percent slopes	C745A	953	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	High
Bryant-Grassna silt loams, 2 to 6 percent slopes	C745B	1,083	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	High
Williams-Noonan loams, 0 to 6 percent slopes	C772B	567	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Bowdle loam, 0 to 2 percent slopes	C810A	2,581	Farmland of Statewide Importance	No	High	Moderate	No	No	No	High
Bowdle loam, 2 to 6 percent slopes	C810B	5,755	Farmland of Statewide Importance	No	High	Moderate	No	No	No	High
Lehr loam, 0 to 2 percent slopes	C816A	3,710	Not Prime Farmland	Yes	High	Moderate	No	No	No	Moderate

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Map Unit Name	Map Unit Symbol [a]	Pipeline Crossing Length (feet)	Prime Farmland [a]	Hydric Soils [a]	Compaction Potential [a]	Erosion Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Shallow Natric Layer [a, f]	Re-vegetation Potential
Lehr loam, 2 to 6 percent slopes	C816B	6,321	Not Prime Farmland	Yes	High	Moderate	No	No	No	Moderate
Vida very stony loam, 3 to 15 percent slopes	C819B	8,786	Not Prime Farmland	Yes	High	Moderate	No	No	No	Moderate
Wabek-Lehr-Appam complex, 9 to 25 percent slopes	C870E	203	Not Prime Farmland	Yes	High	High	Yes	No	No	Low
Wabek-Appam complex, 6 to 9 percent slopes	C874C	563	Not Prime Farmland	Yes	Moderate	High	No	No	No	Low
Wabek-Lehr complex, 6 to 9 percent slopes	C877C	1,993	Not Prime Farmland	Yes	Moderate	High	No	No	No	Low
Pits, gravel and sand, 0 to 60 percent slopes	C990F	243	Not Prime Farmland	No	Not Rated	High	Yes	No	No	Low
McPherson County										
Tonka-Nishon silt loams, 0 to 1 percent slopes	C004A	228	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Heil silt loam, undrained, 0 to 1 percent slopes	C020A	238	Not Prime Farmland	Yes	High	Low	No	No	Yes	Low
Vallers loam, undrained, 0 to 1 percent slopes	C022A	112	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Nishon-Heil silt loams, 0 to 1 percent slopes	C031A	326	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Vida-Williams loams, 3 to 6 percent slopes	C136B	1,364	Farmland of Statewide Importance	Yes	High	Moderate	No	No	No	High
Williams-Bowbells-Tonka, undrained complex, 0 to 6 percent slopes	C150B	1,730	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Vida-Williams-Bowbells loams, 3 to 15 percent slopes	C177D	1,294	Not Prime Farmland	Yes	High	Moderate	Yes	No	No	Moderate
Bowbells loam, 3 to 6 percent slopes	C201B	987	Prime Farmland	Yes	High	Low	No	No	No	High

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Soil Characteristics for Each Soil Map Unit within the Project area

Map Unit Name	Map Unit Symbol [a]	Pipeline Crossing Length (feet)	Prime Farmland [a]	Hydric Soils [a]	Compaction Potential [a]	Erosion Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Shallow Natric Layer [a, f]	Re-vegetation Potential
Williams-Bowbells loams, 0 to 3 percent slopes	C210A	1,622	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Williams-Bowbells loams, 3 to 6 percent slopes	C210B	7821	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Niobell-Noonan loams, 3 to 6 percent slopes	C661B	1,295	Not Prime Farmland	Yes	High	Moderate	No	No	No	Moderate
Bryant-Grassna silt loams, 0 to 2 percent slopes	C745A	5,121	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Bryant-Grassna silt loams, 2 to 6 percent slopes	C745B	7,395	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Bowdle loam, 0 to 2 percent slopes	C810A	2,317	Farmland of Statewide Importance	No	High	Low	No	No	No	Moderate
Lehr loam, 0 to 2 percent slopes	C816A	909	Not Prime Farmland	No	High	Moderate	No	No	No	Moderate
Lehr loam, 2 to 6 percent slopes	C816B	617	Not Prime Farmland	No	High	Moderate	No	No	No	Moderate
Lehr-Bowdle loams, 2 to 6 percent slopes	C817B	1,592	Not Prime Farmland	No	High	Moderate	No	No	No	Moderate
Edmunds County										
Tonka-Nishon silt loams, 0 to 1 percent slopes	C004A	3,290	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Parnell silty clay loam, undrained, 0 to 1 percent slopes	C008A	989	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Heil silt loam, undrained, 0 to 1 percent slopes	C020A	346	Not Prime Farmland	Yes	High	Low	No	No	Yes	Low
Williams-Bowbells-Tonka, undrained complex, 0 to 6 percent slopes	C150B	68,424	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High

Exhibit C Soil Characteristics for Each Soil Map Unit within the Project area										
Map Unit Name	**Map Unit Symbol** [a]	**Pipeline Crossing Length (feet)**	**Prime Farmland** [a]	**Hydric Soils** [a]	**Compaction Potential** [a]	**Erosion Potential** [a, c]	**Steep Slopes** [a, d]	**Shallow Bedrock** [a, e]	**Shallow Natric Layer** [a,f]	**Re-vegetation Potential**
Vida-Zahl loams, 6 to 9 percent slopes	C175C	5,016	Not Prime Farmland	Yes	High	Moderate	Yes	No	No	Moderate
Vida-Williams-Bowbells loams, 3 to 15 percent slopes	C177D	147	Not Prime Farmland	Yes	High	Moderate	Yes	No	No	Moderate
Williams-Bowbells loams, 3 to 6 percent slopes	C210B	76,709	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Williams-Bowbells loams, 6 to 9 percent slopes	C210C	4,705	Farmland of Statewide Importance	Yes	Moderate	Moderate	No	No	No	High
Mondamin silty clay loam, 0 to 2 percent slopes	C420A	5,463	Prime Farmland if Irrigated	Yes	Low	Low	No	No	No	Moderate
Mondamin silty clay loam, 2 to 6 percent slopes	C420B	5,103	Prime Farmland if Irrigated	Yes	Low	Moderate	No	No	No	Moderate
Mondamin-Heil complex, 0 to 2 percent slopes	C430A	1,423	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Grassna silt loam, 0 to 2 percent slopes	C457A	174	Prime Farmland	Yes	High	Low	No	No	No	High
Niobell-Noonan loams, 3 to 6 percent slopes	C661B	1,379	Not Prime Farmland	Yes	High	Moderate	No	No	No	Moderate
Bowbells-Niobell loams, 0 to 3 percent slopes	C670A	5,584	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Bryant silt loam, 0 to 2 percent slopes	C732A	278	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Bryant silt loam, 2 to 6 percent slopes	C732B	6,955	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High

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Soil Characteristics for Each Soil Map Unit within the Project area

Map Unit Name	Map Unit Symbol [a]	Pipeline Crossing Length (feet)	Prime Farmland [a]	Hydric Soils [a]	Compaction Potential [a]	Erosion Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Shallow Natric Layer [a, f]	Re-vegetation Potential
Temvik-Bryant complex, 2 to 6 percent slopes	C741B	1,463	Prime Farmland if Irrigated	Yes	Moderate	Low	No	No	No	Moderate
Temvik-Grassna silt loams, 2 to 6 percent slopes	C742B	1,209	Prime Farmland if Irrigated	Yes	Moderate	Low	No	No	No	Moderate
Bryant-Grassna silt loams, 2 to 6 percent slopes	C745B	2,062	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Bowdle loam, 2 to 6 percent slopes	C810B	138	Farmland of Statewide Importance	No	High	Moderate	No	No	No	High
Faulk County										
Tonka-Nishon silt loams, 0 to 1 percent slopes	C004A	3,707	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Parnell silty clay loam, undrained, 0 to 1 percent slopes	C008A	151	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Nishon silt loam, 0 to 1 percent slopes	C030A	2,964	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Zahl-Williams-Zahill complex, 6 to 9 percent slopes	C135C	538	Not Prime Farmland	Yes	High	Moderate	No	No	No	Moderate
Vida-Williams-Bowbells loams, 3 to 9 percent slopes	C138C	3,601	Farmland of Statewide Importance	Yes	High	Moderate	Yes	No	No	Moderate
Zahill-Straw complex, 2 to 25 percent slopes	C139E	697	Not Prime Farmland	Yes	High	High	Yes	No	No	Low
Williams-Bowbells-Tonka, undrained complex, 0 to 6 percent slopes	C150B	21,122	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Max-Arnegard loams, 0 to 3 percent slopes	C167A	666	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate

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Map Unit Name	Map Unit Symbol [a]	Pipeline Crossing Length (feet)	Prime Farmland [a]	Hydric Soils [a]	Compaction Potential [a]	Erosion Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Shallow Natric Layer [a,f]	Re-vegetation Potential
Max-Arnegard-Zahl loams, 0 to 6 percent slopes	C168B	13,494	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Williams-Zahill-Bowbells loams, 3 to 15 percent slopes	C173D	4,654	Not Prime Farmland	Yes	High	Moderate	Yes	No	No	Low
Bowbells loam, 0 to 3 percent slopes	C201A	317	Prime Farmland	Yes	High	Low	No	No	No	High
Williams-Bowbells loams, 0 to 3 percent slopes	C210A	30,402	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Williams-Bowbells loams, 3 to 6 percent slopes	C210B	21,107	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Straw loam, 0 to 2 percent slopes	C490A	1,357	Prime Farmland	Yes	High	Low	No	No	No	High
Straw-Fluvaquents channeled, complex, 0 to 2 percent slopes, frequently flooded	C491A	2,050	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Noonan-Miranda loams, 0 to 6 percent slopes	C556B	4,199	Not Prime Farmland	Yes	High	Low	No	No	Yes	Moderate
Ranslo-Harriet loams, 0 to 2 percent slopes, occasionally flooded	C578A	1,095	Not Prime Farmland	Yes	High	Low	No	No	Yes	Moderate
Harriet loam, 0 to 2 percent slopes	C584A	426	Not Prime Farmland	Yes	High	Low	No	No	Yes	Moderate
Niobell-Noonan-Max loams, 0 to 3 percent slopes	C650A	4,985	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Niobell-Noonan loams, 0 to 3 percent slopes	C661A	3,790	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Williams-Niobell loams, 3 to 6 percent slopes	C667B	5,076	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Max-Niobell-Noonan loams, 3 to 6 percent slope	C672B	8,195	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate

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Soil Characteristics for Each Soil Map Unit within the Project area

Map Unit Name	Map Unit Symbol [a]	Pipeline Crossing Length (feet)	Prime Farmland [a]	Hydric Soils [a]	Compaction Potential [a]	Erosion Potential [a,c]	Steep Slopes [a,d]	Shallow Bedrock [a,e]	Shallow Natric Layer [a,f]	Re-vegetation Potential
Bryant-Grassna silt loams, 0 to 2 percent slopes	C745A	3,180	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Tally fine sandy loam, 0 to 2 percent slopes	C769A	2,932	Prime Farmland if Irrigated	Yes	High	Moderate	No	No	No	Moderate
Tally fine sandy loam, 2 to 6 percent slopes	C769B	203	Prime Farmland if Irrigated	Yes	High	Moderate	No	No	No	Moderate
Williams-Bowbells-Noonan loams, 0 to 3 percent slopes	C773A	2,567	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Bowdle loam, 0 to 2 percent slopes	C810A	2,814	Farmland of Statewide Importance	No	Low	Low	No	No	No	High
Lehr loam, 0 to 2 percent slopes	C816A	273	Not Prime Farmland	No	Low	Low	No	No	No	Moderate
Lehr loam, 2 to 6 percent slopes	C816B	212	Not Prime Farmland	No	High	Moderate	No	No	No	Moderate
Pits, gravel and sand, 0 to 60 percent slopes	C990F	540	Not Prime Farmland	No	Not Rated	Low	Yes	No	No	Low
Spink County										
Beadle-Stickney complex, 0 to 2 percent slopes	BeA	38,081	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Beadle-Stickney complex, 0 to 2 percent slopes, very stony	BfA	2,639	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Tonka silt loam, undrained, 0 to 1 percent slopes	C001A	272	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Tonka-Rimlap silt loams, 0 to 1 percent slopes	C010A	477	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Heil silt loam, undrained, 0 to 1 percent slopes	C020A	274	Not Prime Farmland	Yes	High	Low	No	No	Yes	Moderate

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Map Unit Name	Map Unit Symbol [a]	Pipeline Crossing Length (feet)	Prime Farmland [a]	Hydric Soils [a]	Compaction Potential [a]	Erosion Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Shallow Natric Layer [a, f]	Re-vegetation Potential
Lowe loam, 0 to 2 percent slopes, occassionally flooded	C054A	2,460	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Zahl-Zahill loams, 15 to 40 percent slopes	C058A	479	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Zahl-Zahill complex, 15 to 40 percent slopes	C133F	164	Not Prime Farmland	Yes	High	High	Yes	No	No	Low
Williams-Niobell-Tonka complex, 0 to 6 percent slopes	C147B	6,410	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Max-Arnegard loams, 0 to 3 percent slopes	C167A	8,850	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Max-Arnegard-Zahl loams, 0 to 6 percent slopes	C168B	27,589	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Max-Zahl-Arnegard loams, 3 to 9 percent slopes	C168C	697	Farmland of Statewide Importance	Yes	High	Moderate	Yes	No	No	Moderate
Noonan-Miranda loams, 0 to 6 percent slopes	C556B	3,317	Not Prime Farmland	Yes	High	Low	No	No	Yes	Moderate
Miranda-Heil complex, 0 to 3 percent slopes	C558A	1,150	Not Prime Farmland	Yes	High	Low	No	No	Yes	Moderate
Ranslo loam, 0 to 2 percent slopes	C575A	610	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Niobell-Noonan loams, 0 to 3 percent slopes	C661A	2,409	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Williams-Niobell loams, 0 to 3 percent slopes	C667A	8,100	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Williams-Niobell loams, 3 to 6 percent slopes	C667B	498	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Niobell-Noonan-Heil complex, 0 to 3 percent slopes	C668A	2,647	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate

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Crossplain-Tetonka complex, 0 to 1 percent slopes	Ct	619	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Delmont-Enet loams, 0 to 2 percent slopes	DeA	1,854	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Dudley-Jerauld silt loams, 0 to 2 percent slopes	Du	3,827	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Ethan-Hand loams, 9 to 20 percent slopes	EnD	3,203	Not Prime Farmland	Yes	High	High	No	No	No	Moderate
Cresbard-Cavour loams, 0 to 3 percent slopes	G124A	1,658	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Cavour-Ferney loams, 0 to 3 percent slopes	G129A	2,097	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Ferney-Heil, till substratum complex, 0 to 3 percent slopes	G133A	1,017	Not Prime Farmland	Yes	High	Low	No	No	Yes	Moderate
Forman-Cresbard-Tonka complex, 0 to 3 percent slopes	G136A	219	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Forman-Cresbard loams, 0 to 3 percent slopes	G139A	1,409	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Forman-Buse-Aastad loams, 1 to 6 percent slopes	G190B	5,910	Prime Farmland	Yes	High	Low	No	No	No	High
Forman-Buse-Aastad loams, 3 to 9 percent slopes	G190C	704	Farmland of Statewide Importance	Yes	High	Moderate	No	No	No	High
Aastad-Forman loams, 0 to 3 percent slopes	G193A	627	Prime Farmland	Yes	High	Low	No	No	No	High
Buse-Vida, moist-Forman loams, 9 to 25 percent slopes	G193E	514	Not Prime Farmland	Yes	High	High	Yes	No	No	Low
Aastad-Tonka complex, 0 to 3 percent slopes	G195A	375	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate

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Map Unit Name	Map Unit Symbol [a]	Pipeline Crossing Length (feet)	Prime Farmland [a]	Hydric Soils [a]	Compaction Potential [a]	Erosion Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Shallow Natric Layer [a, f]	Re-vegetation Potential
Bearden silt loam, saline, 0 to 2 percent slopes	G453A	484	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Aberdeen-Nahon-Heil silt loams, till substratum, 0 to 2 percent slopes	G476A	517	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Lowe loam, very poorly drained, 0 to 1 percent slopes, frequently flooded	G522A	238	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Lamoure silty clay loam, somewhat poorly drained, 0 to 1 percent slopes, frequently flooded	G533A	243	Prime Farmland if Drained	Yes	High	Moderate	No	No	No	Moderate
Playmoor silty clay loam, 0 to 2 percent slopes, frequently flooded	G543A	67	Not Prime Farmland	Yes	High	High	No	No	No	Low
Ranslo-Harriet loams, 0 to 2 percent slopes, occasionally flooded	G553A	903	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Ranslo silty clay loam, 0 to 1 percent slopes, occasionally flooded	G557A	605	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Great Bend-Beotia silt loams, 0 to 2 percent slopes	G720A	1,509	Prime Farmland	Yes	High	Low	No	No	No	High
Great Bend-Beotia silt loams, till substratum, 0 to 2 percent slopes	G721A	2,642	Prime Farmland	Yes	High	Low	No	No	No	High
Great Bend-Zell silt loams, 2 to 6 percent slopes	G722B	2,538	Prime Farmland	Yes	High	Low	No	No	No	High
Kranzburg-Cresbard silt loams, 0 to 2 percent slopes	G796A	1,657	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Harmony-Beotia silt loams, till substratum, 0 to 2 percent slopes	G863A	2,598	Prime Farmland	Yes	High	Low	No	No	No	High

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Map Unit Name	**Map Unit Symbol [a]**	**Pipeline Crossing Length (feet)**	**Prime Farmland [a]**	**Hydric Soils [a]**	**Compaction Potential [a]**	**Erosion Potential [a, c]**	**Steep Slopes [a, d]**	**Shallow Bedrock [a, e]**	**Shallow Natric Layer [a,f]**	**Re-vegetation Potential**
Harmony-Aberdeen silt loams, till substratum, 0 to 2 percent slopes	G865A	5,387	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Beotia-Rondell silt loams, 0 to 2 percent slopes	G872A	169	Prime Farmland	Yes	High	Low	No	No	No	High
Beotia-Winship silt loams, till substratum, 0 to 2 percent slopes	G874A	457	Prime Farmland	Yes	High	Low	No	No	No	High
Hand-Bonilla loams, 0 to 3 percent slopes	HcA	1,804	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Hand-Carthage fine sandy loams, 0 to 3 percent slopes	HdA	3,003	Prime Farmland if Irrigated	Yes	High	Moderate	No	No	No	Moderate
Hand-Ethan loams, 6 to 9 percent slopes	HfC	1,296	Farmland of Statewide Importance	Yes	High	Moderate	Yes	No	No	High
Hand-Ethan-Bonilla loams, 1 to 6 percent slopes	HgB	6,550	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Hand-Ethan-Bonilla loams, 2 to 9 percent slopes	HgC	700	Farmland of Statewide Importance	Yes	High	Moderate	No	No	No	High
Hand-Ethan-Carthage complex, 1 to 6 percent slopes	HhB	2,318	Prime Farmland if Irrigated	Yes	High	Moderate	No	No	No	Moderate
Hand-Talmo complex, 2 to 6 percent slopes	HjB	6,866	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Hand-Talmo complex, 6 to 9 percent slopes	HjC	2,281	Not Prime Farmland	Yes	High	Moderate	Yes	No	No	Low
Houdek-Ethan-Prosper loams, 1 to 6 percent slopes	HtB	809	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate

Exhibit C
Soil Characteristics for Each Soil Map Unit within the Project area

Map Unit Name	Map Unit Symbol [z]	Pipeline Crossing Length (feet)	Prime Farmland [a]	Hydric Soils [a]	Compaction Potential [a]	Erosion Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Shallow Natric Layer [a,f]	Re-vegetation Potential
Houdek-Stickney complex, 0 to 2 percent slopes	HwA	1,497	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Houdek-Stickney-Tetonka complex, 0 to 2 percent slopes	HxA	3,053	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Hoven silt loam, 0 to 1 percent slopes	Hy	140	Not Prime Farmland	Yes	High	High	Low	No	No	Low
Jerauld-Hoven silt loams, 0 to 2 percent slopes	Jh	545	Not Prime Farmland	Yes	High	Low	No	No	Yes	Low
Stickney-Dudley silt loams, 0 to 2 percent slopes	St	2,314	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Stickney-Dudley-Hoven silt loams, 0 to 2 percent slopes	Su	5,628	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Tetonka silt loam, 0 to 1 percent slopes	Te	308	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Beadle County										
Beadle loam, 0 to 2 percent slopes	BaA	46,942	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Beadle loam, 2 to 6 percent slopes	BaB	18,082	Farmland of Statewide Importance	Yes	High	Moderate	No	No	No	High
Beadle loam, 6 to 9 percent slopes	BaC	3,832	Farmland of Statewide Importance	Yes	High	Moderate	Yes	No	No	Moderate
Beadle-Dudley complex, 0 to 2 percent slopes	BdA	13,192	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Betts stony loam, 6 to 40 percent slopes	BeD	2,667	Not Prime Farmland	No	High	Low	Yes	No	No	Low
Betts-Ethan loams, 9 to 21 percent slopes	BfD	3,993	Not Prime Farmland	No	High	High	Yes	No	No	Low

Exhibit C
Soil Characteristics for Each Soil Map Unit within the Project area

Map Unit Name	Map Unit Symbol [a]	Pipeline Crossing Length (feet)	Prime Farmland [a]	Hydric Soils [a]	Compaction Potential [a]	Erosion Potential [a,c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Shallow Natric Layer [a,f]	Re-vegetation Potential
Bon silt loam	Bo	1,508	Prime Farmland	Yes	High	Low	No	No	No	High
Bon silt loam, channeled	Bx	2,995	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Carthage fine sandy loam, 2 to 6 percent slopes	CaB	126	Farmland of Statewide Importance	Yes	Moderate	Moderate	No	No	No	High
Carthage fine sandy loam, 6 to 9 percent slopes	CaC	363	Farmland of Statewide Importance	Yes	Moderate	Moderate	Yes	No	No	Moderate
Carthage-Blendon fine sandy loams, 0 to 2 percent slopes	CbA	1,155	Farmland of Statewide Importance	Yes	Moderate	Moderate	No	No	No	Moderate
Davis loam, 2 to 9 percent slopes	DaB	2,881	Farmland of Statewide Importance	No	High	Low	No	No	No	High
Delmont loam, 0 to 2 percent slopes	DeA	181	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Dudley-Stickney silt loams, 0 to 3 percent slopes	DsA	10,617	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Dudley-Tetonka silt loams	DtA	2,573	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Egas silty clay loam	Eg	624	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Elsmere loamy fine sand, loamy substratum	Em	1,142	Not Prime Farmland	Yes	Moderate	Moderate	No	No	No	Moderate
Enet loam, 0 to 2 percent slopes	EnA	3,429	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Forestburg-Doger loamy fine sands, 0 to 3 percent slopes	FrA	996	Not Prime Farmland	Yes	High	Moderate	No	No	No	Moderate
Houdek-Prosper loams, 0 to 2 percent slopes	GbA	7,025	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High

Exhibit C Soil Characteristics for Each Soil Map Unit within the Project area										
Map Unit Name	**Map Unit Symbol** [a]	**Pipeline Crossing Length (feet)**	**Prime Farmland** [a]	**Hydric Soils** [a]	**Compaction Potential** [a]	**Erosion Potential** [a, c]	**Steep Slopes** [a, d]	**Shallow Bedrock** [a, e]	**Shallow Natric Layer** [a,f]	**Re-vegetation Potential**
Bend-Edwin silt loams, 2 to 6 percent slopes	GzB	2,962	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Houdek-Ethan loams, 6 to 9 percent slopes	HeC	1,801	Farmland of Statewide Importance	Yes	High	Moderate	Yes	No	No	Moderate
Houdek-Prosper loams, 0 to 2 percent slopes	HoA	8,703	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Houdek-Prosper loams, 2 to 6 percent slopes	HoB	3,513	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Hoven silt loam	Hv	460	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
LaDelle silt loam	La	1,415	Prime Farmland	Yes	High	Low	No	No	No	High
Lane silt loam, 0 to 2 percent slopes	LnA	3,091	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Prosper-Davison loams, 0 to 3 percent slopes	PrA	1,570	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Shue loamy fine sand	Sh	380	Not Prime Farmland	Yes	Moderate	Moderate	No	No	No	Moderate
Spottswood loam	Sp	878	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Tetonka-Hoven silt loams	Te	721	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Edwin silt loam, 6 to 12 percent slopes	ZeC	529	Not Prime Farmland	No	High	High	Yes	No	No	Low
Kingsbury County										

Exhibit C Soil Characteristics for Each Soil Map Unit within the Project area										
Map Unit Name	**Map Unit Symbol** [a]	**Pipeline Crossing Length (feet)**	**Prime Farmland** [a]	**Hydric Soils** [a]	**Compaction Potential** [a]	**Erosion Potential** [a, c]	**Steep Slopes** [a, d]	**Shallow Bedrock** [a, e]	**Shallow Natric Layer** [a,f]	**Re-vegetation Potential**
Beadle loam, 2 to 6 percent slopes	BdB	692	Prime Farmland if Irrigated	Yes	High	Moderate	No	No	No	Moderate
Beadle-Dudley complex, 0 to 2 percent slopes	BeA	1,629	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Bon loam	Bn	991	Prime Farmland	Yes	High	Low	No	No	No	High
Bon loam, channeled	Bo	1,229	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Clarno-Bonilla loams, 0 to 2 percent slopes	CbA	19,702	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Clarno-Ethan-Bonilla loams, 1 to 6 percent slopes	CeB	19,022	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Clarno-Ethan-Bonilla loams, 2 to 9 percent slopes	CeC	385	Farmland of Statewide Importance	Yes	High	Moderate	Yes	No	No	Moderate
Crossplain-Tetonka complex	Ct	5,894	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Delmont-Talmo loams, 2 to 6 percent slopes	DtB	605	Not Prime Farmland	Yes	High	Moderate	No	No	No	Moderate
Ethan-Bon, channeled, loams, 0 to 20 percent slopes	EoD	2,540	Not Prime Farmland	No	High	High	Yes	No	No	Low
Ethan-Clarno loams, 9 to 15 percent slopes	EtD	1,376	Not Prime Farmland	No	High	High	Yes	No	No	Low
Houdek-Prosper loams, 1 to 6 percent slopes	HpB	1,373	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Houdek-Stickney complex, 0 to 2 percent slopes	HsA	28,613	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High

Exhibit C Soil Characteristics for Each Soil Map Unit within the Project area										
Map Unit Name	**Map Unit Symbol [a]**	**Pipeline Crossing Length (feet)**	**Prime Farmland [a]**	**Hydric Soils [a]**	**Compaction Potential [a]**	**Erosion Potential [a, c]**	**Steep Slopes [a, d]**	**Shallow Bedrock [a, e]**	**Shallow Natric Layer [a, f]**	**Re-vegetation Potential**
Houdek-Stickney complex, 2 to 6 percent slopes	HsB	2,344	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Houdek-Stickney-Tetonka complex	Ht	22,045	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Stickney-Dudley silt loams	St	368	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Stickney-Dudley-Hoven silt loams	Sv	6,524	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Miner County										
Arlo clay loam	Ar	265	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Baltic silty clay loam	Ba	597	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Bon silt loam	Bo	1,002	Prime Farmland	Yes	High	Low	No	No	No	High
Clarno-Bonilla loams, 0 to 3 percent slopes	CfA	17,587	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Clarno-Bonilla loams, 1 to 6 percent slopes	CfB	8,985	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Clarno-Crossplain loams, 0 to 2 percent slopes	CgA	30,699	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Clarno-Ethan complex, 2 to 6 percent slopes	CkB	1,159	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Clarno-Stickney-Tetonka complex, 0 to 2 percent slopes	CnA	152	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High

Exhibit C Soil Characteristics for Each Soil Map Unit within the Project area										
Map Unit Name	**Map Unit Symbol** [z]	**Pipeline Crossing Length (feet)**	**Prime Farmland** [z]	**Hydric Soils** [a]	**Compaction Potential** [a]	**Erosion Potential** [a, c]	**Steep Slopes** [a, d]	**Shallow Bedrock** [a, e]	**Shallow Natric Layer** [a,f]	**Re-vegetation Potential**
Crossplain-Tetonka complex	Ct	10,595	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Enet-Delmont loams, 0 to 4 percent slopes	EdA	2,439	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Ethan-Clarno complex, 6 to 9 percent slopes	EgC	331	Farmland of Statewide Importance	Yes	High	Moderate	Yes	No	No	Moderate
Clarno-Stickney-Tetonka complex, 0 to 2 percent slopes	La	411	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Tetonka silt loam	Te	504	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Lake County										
Badus silty clay loam	Ba	974	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Clarno-Ethan loams, 9 to 16 percent slopes	Bc	346	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Beadle-Dudley complex, 0 to 2 percent slopes	BdA	144	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Clarno loam, 0 to 2 percent slopes	CaA	778	Prime Farmland	Yes	High	Low	No	No	No	High
Clarno loam, 2 to 6 percent slopes	CaB	6,891	Prime Farmland	Yes	High	Low	No	No	No	High
Clarno loam, 6 to 9 percent slopes	CaC	1,817	Farmland of Statewide Importance	Yes	High	Moderate	No	No	No	High
Clarno-Ethan loams, 2 to 6 percent slopes	CeB	649	Prime Farmland	Yes	High	Low	No	No	No	High

Exhibit C Soil Characteristics for Each Soil Map Unit within the Project area										
Map Unit Name	**Map Unit Symbol** [a]	**Pipeline Crossing Length (feet)**	**Prime Farmland** [a]	**Hydric Soils** [a]	**Compaction Potential** [a]	**Erosion Potential** [a, c]	**Steep Slopes** [a, d]	**Shallow Bedrock** [a, e]	**Shallow Natric Layer** [a, f]	**Re-vegetation Potential**
Clarno-Ethan loams, 6 to 9 percent slopes	CeC	7,462	Farmland of Statewide Importance	Yes	High	Moderate	Yes	No	No	Moderate
Clarno-Ethan loams, 9 to 16 percent slopes	CeD	3,138	Not Prime Farmland	Yes	High	Moderate	Yes	No	No	Low
Egan silty clay loam, 6 to 9 percent slopes	EaC	3,206	Farmland of Statewide Importance	Yes	High	Moderate	Yes	No	No	Moderate
Egan-Beadle complex, 0 to 2 percent slopes	EbA	969	Prime Farmland	Yes	High	Low	No	No	No	High
Egan-Beadle complex, 2 to 6 percent slopes	EbB	10,790	Prime Farmland	Yes	High	Low	No	No	No	High
Egan-Beadle complex, 6 to 9 percent slopes	EbC	3,995	Farmland of Statewide Importance	Yes	High	Moderate	Yes	No	No	Moderate
Egan-Ethan complex, 2 to 6 percent slopes	Eeb	1,985	Prime Farmland	Yes	High	Low	No	No	No	High
Egan-Ethan complex, 6 to 9 percent slopes, eroded	EeC2	4,220	Not Prime Farmland	Yes	High	Moderate	Yes	No	No	Low
Egan-Viborg silty clay loams, 0 to 3 percent slopes	EgA	1,306	Prime Farmland	Yes	High	Low	No	No	No	High
Egan-Wentworth silty clay loams, 2 to 6 percent slopes	EhB	13,703	Prime Farmland	Yes	High	Low	No	No	No	High
Ethan-Betts loams, 21 to 40 percent slopes	EoF	249	Not Prime Farmland	No	High	High	Yes	No	No	Low
Ethan-Clarno loams, 16 to 21 percent slopes	ErE	652	Not Prime Farmland	No	High	High	Yes	No	No	Low
Ethan-Davis stony complex, 3 to 21 percent slopes	EsE	3,708	Not Prime Farmland	Yes	High	Low	Yes	No	No	Low
Ethan-Davis stony complex, 3 to 21 percent slopes	EtD	1,033	Not Prime Farmland	Yes	High	Low	Yes	No	No	Low
Houdek-Prosper loams, 0 to 3 percent slopes	HpA	2,050	Prime Farmland	Yes	High	Low	No	No	No	High

Exhibit C Soil Characteristics for Each Soil Map Unit within the Project area										
Map Unit Name	Map Unit Symbol [a]	Pipeline Crossing Length (feet)	Prime Farmland [a]	Hydric Soils [a]	Compaction Potential [a]	Erosion Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Shallow Natric Layer [a,f]	Re-vegetation Potential
Lamo silty clay loam	La	407	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Worthing silty clay loam, ponded	Mar	302	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Prosper loam, 0 to 2 percent slopes	PrA	2,209	Prime Farmland	Yes	High	Low	No	No	No	High
Rauville silty clay loam	Ra	753	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Huntimer silty clay loam, 0 to 2 percent slopes	ScA	3,781	Prime Farmland	Yes	High	Low	No	No	No	High
Huntimer silty clay loam, 2 to 6 percent slopes	SdB	5,537	Prime Farmland	Yes	High	Low	No	No	No	High
Stickney-Tetonka complex, 0 to 2 percent slopes	StA	503	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Talmo-Delmont loams, 6 to 21 percent slopes	TdE	205	Not Prime Farmland	Yes	High	High	Yes	No	No	Moderate
Tetonka silt loam	Te	1,505	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Viborg silty clay loam, 0 to 2 percent slopes	VbA	2,825	Prime Farmland	Yes	High	Low	No	No	No	High
Viborg-Egan silty clay loams, 2 to 6 percent slopes	VgB	1,984	Prime Farmland	Yes	High	Low	No	No	No	High
Wentworth-Egan silty clay loams, 0 to 2 percent slopes	WeA	406	Prime Farmland	Yes	High	Low	No	No	No	High
Whitewood silty clay loam	Wh	5,997	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Worthing silty clay loam	Wo	2,130	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
McCook County										

Exhibit C
Soil Characteristics for Each Soil Map Unit within the Project area

Map Unit Name	Map Unit Symbol [a]	Pipeline Crossing Length (feet)	Prime Farmland [a]	Hydric Soils [a]	Compaction Potential [a]	Erosion Potential [a,c]	Steep Slopes [a,d]	Shallow Bedrock [a,e]	Shallow Natric Layer [a,f]	Re-vegetation Potential
Egan-Ethan complex, 5 to 9 percent slopes	EaC	2,041	Farmland of Statewide Importance	Yes	High	Moderate	No	No	No	High
Huntimer silty clay loam, 0 to 2 percent slopes	HuA	560	Prime Farmland	Yes	High	Low	No	No	No	High
Wentworth silty clay loam, 0 to 2 percent slopes	WaA	1,081	Prime Farmland	Yes	High	Low	No	No	No	High
Wentworth silty clay loam, 2 to 5 percent slopes	WbB	1,067	Prime Farmland	Yes	High	Low	No	No	No	High
Wentworth-Ethan complex, 2 to 5 percent slopes	WcB	1,190	Prime Farmland	Yes	High	Low	No	No	No	High
Whitewood silt loam	Wh	393	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Worthing silty clay loam	Wo	2,746	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Minnehaha County										
Alcester silty clay loam, 2 to 6 percent slopes	AcB	400	Prime Farmland	No	High	Low	No	No	No	High
Baltic silty clay loam, 0 to 1 percent slopes	Ba	1,191	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Betts-Ethan loams, 15 to 40 percent slopes	BeE	140	Not Prime Farmland	Yes	High	High	Yes	No	No	Low
Chancellor silty clay loam, 0 to 1 percent slopes	Cb	621	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Chancellor-Tetonka complex, 0 to 1 percent slopes	Cc	6,775	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Davison-Crossplain clay loams, 0 to 2 percent slopes	Dd	4,335	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Egan-Ethan complex, 2 to 6 percent slopes	EaB	1,400	Prime Farmland	Yes	High	Low	No	No	No	High

Exhibit C
Soil Characteristics for Each Soil Map Unit within the Project area

Map Unit Name	Map Unit Symbol [a]	Pipeline Crossing Length (feet)	Prime Farmland [a]	Hydric Soils [a]	Compaction Potential [a]	Erosion Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Shallow Natric Layer [a,f]	Re-vegetation Potential
Egan-Ethan-Trent complex, 1 to 6 percent slopes	EeB	52,056	Prime Farmland	Yes	High	Low	No	No	No	High
Egan-Trent silty clay loams, 0 to 2 percent slopes	EfA	1,243	Prime Farmland	Yes	High	Low	No	No	No	High
Egan-Wentworth-Trent silty clay loams, 1 to 6 percent slopes	EgB	9,562	Prime Farmland	Yes	High	Low	No	No	No	High
Ethan-Betts loams, 9 to 15 percent slopes	EpD	688	Not Prime Farmland	Yes	High	High	Yes	No	No	Low
Ethan-Clarno loams, 6 to 25 percent slopes, very stony	EsE	1,302	Not Prime Farmland	Yes	High	Low	Yes	No	No	Low
Ethan-Clarno loams, 9 to 15 percent slopes	EtD	7,427	Not Prime Farmland	Yes	High	High	Yes	No	No	Low
Ethan-Egan complex, 6 to 9 percent slopes	EuC	25,140	Farmland of Statewide Importance	Yes	High	Moderate	Yes	No	No	Moderate
Ethan, very stony-Egan complex, 2 to 9 percent slopes	ExC	915	Not Prime Farmland	Yes	High	High	Yes	No	No	Low
Huntimer silty clay loam, 0 to 2 percent slopes	HuA	5,483	Prime Farmland	Yes	High	Low	No	No	No	High
Huntimer silty clay loam, 2 to 6 percent slopes	HuB	2,576	Prime Farmland	Yes	High	Low	No	No	No	High
Lamo silty clay loam, 0 to 1 percent slopes	La	174	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Obert silty clay loam, 0 to 1 percent slopes	Ob	350	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Salmo silty clay loam, 0 to 1 percent slopes	Sa	1,139	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Tetonka silt loam, 0 to 1 percent slopes	Te	209	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate

Exhibit C
Soil Characteristics for Each Soil Map Unit within the Project area

Map Unit Name	Map Unit Symbol [a]	Pipeline Crossing Length (feet)	Prime Farmland [a]	Hydric Soils [a]	Compaction Potential [a]	Erosion Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Shallow Natric Layer [a,f]	Re-vegetation Potential
Wakonda-Chancellor silty clay loams, 0 to 2 percent slopes	Wa	2,824	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Wentworth-Chancellor-Wakonda silty clay loams, 0 to 2 percent slopes	WcA	1947	Prime Farmland	Yes	High	Low	No	No	No	High
Wentworth-Trent silty clay loams, 0 to 2 percent slopes	WhA	862	Prime Farmland	Yes	High	Low	No	No	No	High
Whitewood silty clay loam, 0 to 2 percent slopes	Wk	462	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Worthing silty clay loam, 0 to 1 percent slopes	Wo	1,482	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Worthing-Davison complex, 0 to 2 percent slopes	Wr	4,981	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Turner County										
Baltic silty clay loam, 0 to 1 percent slopes	Ba	1,134	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Chancellor-Tetonka silty clay loams	Ca	206	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Delmont-Enet loams, 2 to 6 percent slopes	DeB	278	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Dempster-Graceville silty clay loams, 1 to 5 percent slopes	DgB	72	Prime Farmland	Yes	High	Low	No	No	No	High
Egan-Ethan complex, 2 to 6 percent slopes	EeB	2,733	Prime Farmland	Yes	High	Low	No	No	No	High
Egan-Wentworth-Trent silty clay loams, 1 to 6 percent slopes	EgB	4,986	Prime Farmland	Yes	High	Low	No	No	No	High
Ethan-Egan complex, 5 to 9 percent slopes	EtC	824	Farmland of Statewide Importance	Yes	High	Moderate	No	No	No	High

Exhibit C
Soil Characteristics for Each Soil Map Unit within the Project area

Map Unit Name	Map Unit Symbol [a]	Pipeline Crossing Length (feet)	Prime Farmland [a]	Hydric Soils [a]	Compaction Potential [a]	Erosion Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Shallow Natric Layer [a,f]	Re-vegetation Potential
Huntimer silty clay loam, 0 to 2 percent slopes	HuA	923	Prime Farmland	Yes	High	Low	No	No	No	High
Tetonka silt loam	Te	489	Prime Farmland if Drained	No	High	Low	No	No	No	Moderate
Lincoln County										
Alcester silty clay loam, 0 to 2 percent slopes	AcA	262	Prime Farmland	Yes	High	Low	No	No	No	High
Bon soils, frequently flooded	Bo	849	Not Prime Farmland	No	High	Low	No	No	No	Moderate
Chancellor-Tetonka silty clay loams	Ca	12,119	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Chancellor-Viborg silty clay loams	Cd	10,857	Prime Farmland if Drained	Yes	High	Low	No	No	No	Moderate
Chancellor-Wakonda-Tetonka complex	Ch	1,141	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Davis loam	Da	868	Prime Farmland	Yes	High	Low	No	No	No	High
Delmont loam, 2 to 6 percent slopes	DeB	1,108	Prime Farmland if Irrigated	Yes	High	Low	No	No	No	Moderate
Delmont and Talmo soils, 2 to 9 percent slopes	DkB	585	Not Prime Farmland	Yes	High	Low	No	No	No	Moderate
Egan silty clay loam, 3 to 6 percent slopes	EaB	11,345	Prime Farmland	Yes	High	Low	No	No	No	High
Egan-Chancellor silty clay loams, 0 to 4 percent slopes	EcB	4,508	Farmland of Statewide Importance	Yes	High	Low	No	No	No	High
Egan-Shindler complex, 2 to 6 percent slopes	EsB	9,013	Prime Farmland	Yes	High	Low	No	No	No	High

Exhibit C
Soil Characteristics for Each Soil Map Unit within the Project area

Map Unit Name	Map Unit Symbol [a]	Pipeline Crossing Length (feet)	Prime Farmland [a]	Hydric Soils [a]	Compaction Potential [a]	Erosion Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Shallow Natric Layer [a,f]	Re-vegetation Potential

[a] As designated by the Natural Resources Conservation Service.
[b] Represents total length (in feet) crossed by the pipeline facilities.
[c] Erosion Potential – Based on land capability class and subclass: High (subclass Ve-VIIIe), Moderate (subclass IIIe-IVe), and Low (remaining subclasses).
[d] Steep Slopes - Represents soils with slopes greater than 8 percent.
[e] Shallow bedrock – Represents soils with unconsolidated rock 60 inches or less from the surface.
[e] Shallow Natric layers – Represents subsoil layers with a large accumulation of sodium salts that can reduce plant growth within 18 inches or less from the surface.

Waterbodies Crossed by the Project

Exhibit C Waterbodies Crossed by the Dakota Access Project					
Approximate Milepost[a]	Waterbody Name	Flow Regime	State Classification	Supports Use Designation	Crosses Centerline
Campbell County					
210.6	Unnamed Tributary of Lake Pocasse	Ephemeral	-	-	Yes
211.0	Unnamed Tributary of Lake Pocasse	Ephemeral	-	-	Yes
211.7	Unnamed Tributary of Spring Creek	Ephemeral	-	-	Yes
212.6	Unnamed Tributary of Spring Creek	Ephemeral	-	-	Yes
212.8	Unnamed Tributary of Spring Creek	Ephemeral	-	-	Yes
212.9	Unnamed Tributary of Spring Creek	Intermittent	-	-	Yes
213.6	Unnamed Tributary of Spring Creek	Ephemeral	-	-	Yes
214.0	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
214.3	Unnamed Pond	Open water	-	-	No
215.0	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
215.8	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
216.1	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
216.1	Unnamed Pond	Open water	-	-	No
216.7	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
216.8	Unnamed Tributary of Spring Creek	Ephemeral	-	-	Yes
217.6	Unnamed Tributary of Spring Creek	Ephemeral	-	-	Yes
218.4	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
218.5	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
219.0	Spring Creek	Perennial	-	-	Yes
219.5	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
219.8	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
222.0	Unnamed Pond	Open water	-	-	Yes
222.2	Unnamed Tributary of McClarem Lake	Ephemeral	-	-	Yes
223.7	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
224.7	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes

Exhibit C Waterbodies Crossed by the Dakota Access Project					
Approximate Milepost[a]	**Waterbody Name**	**Flow Regime**	**State Classification**	**Supports Use Designation**	**Crosses Centerline**
226.1	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
228.4	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
229.8	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
232.7	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
234.1	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
238.8	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
McPherson County					
243.5	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
Edmunds County					
247.1	Unnamed Pond	Open water	-	-	No
251.4	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
254.3	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
255.4	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
257.6	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
257.9	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
267.9	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
276.1	Unnamed Tributary of Stafford Dam	Ephemeral	-	-	Yes
277.7	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
280.6	Unnamed Tributary of North Fork Snake Creek	Ephemeral	-	-	Yes
281.5	Unnamed Tributary of North Fork Snake Creek	Ephemeral	-	-	Yes
Faulk County					
283.5	Unnamed Tributary of North Fork Snake Creek	Intermittent	-	-	Yes
287.3	Unnamed Tributary of North Fork Snake Creek	Ephemeral	-	-	Yes
288.9	Unnamed Tributary of North Fork Snake Creek	Intermittent	-	-	Yes
291.0	Unnamed Tributary of North Fork Snake Creek	Intermittent	-	-	Yes
292.3	Unnamed Tributary of North Fork Snake Creek	Ephemeral	-	-	Yes

Exhibit C Waterbodies Crossed by the Dakota Access Project					
Approximate Milepost[a]	**Waterbody Name**	**Flow Regime**	**State Classification**	**Supports Use Designation**	**Crosses Centerline**
292.7	Unnamed Tributary of North Fork Snake Creek	Intermittent	-	-	Yes
293.0	Unnamed Tributary of North Fork Snake Creek	Ephemeral	-	-	Yes
293.8	Unnamed Pond	Intermittent	-	-	No
293.9	North Fork Snake Creek	Perennial	-	-	Yes
300.3	Unnamed Tributary of South Fork Snake Creek	Intermittent	-	-	Yes
301.7	Unnamed Pond	Open water	-	-	No
302.1	Unnamed Tributary of South Fork Snake Creek	Intermittent	-	-	No
302.6	Unnamed Tributary of South Fork Snake Creek	Intermittent	-	-	Yes
303.3	Unnamed Tributary of South Fork Snake Creek	Intermittent	-	-	Yes
305.0	Unnamed Tributary of South Fork Snake Creek	Ephemeral	-	-	Yes
305.0	Unnamed Pond	Open water	-	-	No
305.9	South Fork Snake Creek	Perennial	-	-	Yes
305.9	Unnamed Tributary of South Fork Snake Creek	Ephemeral	-	-	Yes
Spink County					
315.9	Dove Creek	Perennial	-	-	Yes
321.2	Agricultural Ditch	Ephemeral	-	-	Yes
322.4	Turtle Creek	Perennial	Fish/Wildlife Prop, Rec, Stock; Irrigation Waters; Limited Contract Recreation; Warmwater Marginal Fish Life	Full Support; Full Support; Nonsupport; Non Support	HDD[b]
324.5	Unnamed Tributary of Turtle Creek	Intermittent	-	-	Yes
328.7	Unnamed Pond	Open water	-	-	No
335.7	Unnamed Tributary of James River	Intermittent	-	-	Yes
A0.7	Unnamed Tributary of James River	Intermittent	-	-	Yes
A1.7	Unnamed Tributary of James River	Intermittent	-	-	Yes
A2.9	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
A4.7	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes

Exhibit C Waterbodies Crossed by the Dakota Access Project					
Approximate Milepost[a]	**Waterbody Name**	**Flow Regime**	**State Classification**	**Supports Use Designation**	**Crosses Centerline**
Beadle County					
348.0	James River	Perennial	Fish/Wildlife Prop, Red, Stock; Irrigation Waters; Limited Contact Recreation; Warmwater Semipermanent Fish Life	Full Support; Full Support Nonsupport Nonsupport	HDD[b]
348.2	Unnamed Tributary of James River	Intermittent	-	-	Yes
349.4	Unnamed Tributary of James River	Intermittent	-	-	Yes
351.1	Unnamed Tributary of James River	Ephemeral	-	-	Yes
352.1	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
352.5	Foster Creek	Perennial	-	-	Yes
353.2	Unnamed Tributary of Foster Creek	Intermittent	-	-	Yes
353.8	Unnamed Tributary of Foster Creek	Intermittent	-	-	Yes
356.1	Unnamed Tributary of Lake Byron	Intermittent	-	-	Yes
357.8	Unnamed Tributary of Lake Byron	Intermittent	-	-	Yes
358.4	Unnamed Tributary of Lake Byron	Ephemeral	-	-	Yes
358.7	Unnamed Tributary of Lake Byron	Intermittent	-	-	Yes
359.0	Unnamed Tributary of Lake Byron	Intermittent	-	-	Yes
360.2	Unnamed Pond	Open water	-	-	No
361.9	Unnamed Tributary of Unnamed lake	Intermittent	-	-	Yes
363.0	Shue Creek	Perennial	-	-	Yes
363.7	Unnamed Tributary of Shue Creek	Ephemeral	-	-	No
364.7	Unnamed Tributary of Shue Creek	Ephemeral	-	-	Yes
364.8	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
365.1	Unnamed Tributary of Shue Creek	Intermittent	-	-	Yes
366.5	Unnamed Tributary of Shue Creek	Intermittent	-	-	Yes
367.9	Pearl Creek	Intermittent	-	-	Yes
369.0	Unnamed Pond	Open water	-	-	No

Exhibit C Waterbodies Crossed by the Dakota Access Project					
Approximate Milepost[a]	Waterbody Name	Flow Regime	State Classification	Supports Use Designation	Crosses Centerline
371.0	Middle Pearl Creek	Intermittent	-	-	Yes
372.2	Unnamed Tributary of Middle Pearl Creak	Intermittent	-	-	Yes
373.2	Unnamed Tributary of Middle Pearl Creek	Intermittent	-	-	Yes
373.8	Unnamed Tributary of Middle Pearl Creek	Intermittent	-	-	Yes
374.0	Unnamed Pond	Open water	-	-	No
Kingsbury County					
375.3	South Fork Pearl Creek	Intermittent	-	-	Yes
375.4	South Fork Pearl Creak	Intermittent	-	-	No
375.5	Unnamed Tributary of South Fork Pearl Creek	Intermittent	-	-	Yes
377.2	Unnamed Tributary of South Fork Pearl Creek	Intermittent	-	-	Yes
378.4	Unnamed Pond	Open water	-	-	No
378.8	Unnamed Tributary of Lake Iroquois	Intermittent	-	-	Yes
379.7	Unnamed Tributary of Lake Iroquois	Intermittent	-	-	Yes
385.8	Red Stone Creek	Intermittent	-	-	Yes
387.5	Unnamed Tributary of Red Stone Creek	Intermittent	-	-	Yes
388.6	Unnamed Tributary of Red Stone Creek	Intermittent	-	-	Yes
389.3	Unnamed Pond	Open water	-	-	No
391.5	Rock Creek	Intermittent	-	-	No
391.7	Rock Creek	Intermittent	-	-	Yes
392.4	Unnamed Tributary of Unnamed Pond	Intermittent	-	-	Yes
393.3	Unnamed Pond	Open water	-	-	Yes
395.0	West Fork Vermillion River	Intermittent	-	-	Yes
Miner County					
396.7	Unnamed Tributary of West Fork Vermillion River	Intermittent	-	-	Yes
398.6	Unnamed Tributary of West Fork Vermillion River	Intermittent	-	-	Yes
399.2	Unnamed Tributary of West Fork Vermillion River	Ephemeral	-	-	Yes

Exhibit C Waterbodies Crossed by the Dakota Access Project					
Approximate Milepost[a]	**Waterbody Name**	**Flow Regime**	**State Classification**	**Supports Use Designation**	**Crosses Centerline**
399.7	Unnamed Tributary of West Fork Vermillion River	Ephemeral	-	-	Yes
400.8	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
400.9	Unnamed Tributary of West Fork Vermillion River	Intermittent	-	-	Yes
401.6	Unnamed Tributary of West Fork Vermillion River	Ephemeral	-	-	Yes
401.8	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
402.0	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
402.5	Unnamed Stream	Intermittent	-	-	Yes
403.3	Unnamed Tributary of West Fork Vermillion River	Ephemeral	-	-	Yes
403.5	Unnamed Tributary of West Fork Vermillion River	Ephemeral	-	-	Yes
403.7	Unnamed Pond	Open water	-	-	No
403.9	Unnamed Tributary of West Fork Vermillion River	Ephemeral	-	-	Yes
404.0	Unnamed Tributary of West Fork Vermillion River	Ephemeral	-	-	Yes
404.5	Unnamed Tributary West Fork Vermillion River	Intermittent	-	-	Yes
404.8	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
407.6	Agricultural Irrigation ditch	Ephemeral	-	-	Yes
408.2	Unnamed Tributary of Otter Lake	Ephemeral	-	-	Yes
409.3	Unnamed Pond	Open water	-	-	No
409.6	Unnamed Tributary of Otter Lake	Ephemeral	-	-	Yes
410.4	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
Lake County					
410.7	Unnamed Pond	Open water	-	-	No
410.7	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
410.9	Unnamed Pond	Open water	-	-	No
410.9	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
411.0	Unnamed Pond	Open water	-	-	No
411.0	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes

Exhibit C Waterbodies Crossed by the Dakota Access Project					
Approximate Milepost[a]	Waterbody Name	Flow Regime	State Classification	Supports Use Designation	Crosses Centerline
411.1	Unnamed Pond	Open water	-	-	No
412.0	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
412.3	Unnamed Pond	Open water	-	-	No
412.6	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
412.8	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
412.9	Agricultural Irrigation Ditch	Ephemeral	-	-	No
413.0	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
413.3	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
413.3	Unnamed Pond	Open water	-	-	No
413.9	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
414.0	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
414.1	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
414.2	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
414.7	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
414.8	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
414.9	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
415.0	Unnamed Pond	Open water	-	-	No
415.0	Roadside Ditch	Ephemeral	-	-	Yes
415.2	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
415.3	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
415.4	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
415.4	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
415.6	Unnamed Tributary of East Fork Vermillion River	Intermittent	-	-	Yes
415.6	Unnamed Pond	Open water	-	-	No
415.7	East Fork Vermillion River	Perennial	-	-	Yes
415.8	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes

Exhibit C Waterbodies Crossed by the Dakota Access Project					
Approximate Milepost[a]	Waterbody Name	Flow Regime	State Classification	Supports Use Designation	Crosses Centerline
416.2	Unnamed Tributary of East Fork Vermillion River	Intermittent	-	-	Yes
416.4	Unnamed Tributary of East Fork Vermillion River	Intermittent	-	-	Yes
416.5	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
416.7	Unnamed Tributary of East Fork Vermillion River	Intermittent	-	-	Yes
416.9	Unnamed Tributary of Unnamed Pond	Intermittent	-	-	Yes
417.0	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
417.1	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
417.3	Unnamed Tributary of Unnamed East Fork Vermillion River	Ephemeral	-	-	Yes
417.5	Unnamed Tributary of Unnamed East Fork Vermillion River	Intermittent	-	-	Yes
417.7	Unnamed Tributary of Unnamed East Fork Vermillion River	Ephemeral	-	-	Yes
417.7	Unnamed Tributary of Unnamed East Fork Vermillion River	Ephemeral	-	-	Yes
417.9	Unnamed Tributary of Unnamed East Fork Vermillion River	Intermittent	-	-	Yes
418.2	Unnamed Tributary of Unnamed East Fork Vermillion River	Intermittent	-	-	Yes
418.5	Unnamed Tributary of Unnamed East Fork Vermillion River	Intermittent	-	-	Yes
418.8	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
419.1	Unnamed Tributary of Unnamed East Fork Vermillion River	Intermittent	-	-	Yes
419.2	Unnamed Tributary of Unnamed East Fork Vermillion River	Ephemeral	-	-	Yes
419.4	Unnamed Tributary of Unnamed East Fork Vermillion River	Intermittent	-	-	Yes
419.8	Unnamed Tributary of Unnamed East Fork Vermillion River	Ephemeral	-	-	Yes
419.9	Unnamed Tributary of Unnamed East Fork Vermillion River	Ephemeral	-	-	Yes

Exhibit C Waterbodies Crossed by the Dakota Access Project					
Approximate Milepost[a]	**Waterbody Name**	**Flow Regime**	**State Classification**	**Supports Use Designation**	**Crosses Centerline**
420.2	Unnamed Tributary of Unnamed East Fork Vermillion River	Intermittent	-	-	Yes
420.4	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
420.5	Unnamed Tributary of Unnamed East Fork Vermillion River	Ephemeral	-	-	Yes
421.5	Unnamed Tributary of Unnamed East Fork Vermillion River	Ephemeral	-	-	Yes
421.6	Unnamed Tributary of Unnamed East Fork Vermillion River	Ephemeral	-	-	Yes
421.8	Unnamed Tributary of Unnamed East Fork Vermillion River	Ephemeral	-	-	Yes
422.2	Unnamed Tributary of Unnamed East Fork Vermillion River	Intermittent	-	-	Yes
424.0	Agricultural Irrigation Ditch	Ephemeral	-	-	No
424.2	Unnamed Tributary of Unnamed East Fork Vermillion River	Intermittent	-	-	Yes
424.8	Unnamed Tributary of Unnamed East Fork Vermillion River	Ephemeral	-	-	Yes
425.1	Unnamed Tributary of Unnamed East Fork Vermillion River	Ephemeral	-	-	Yes
426.2	Unnamed Tributary of North Buffalo Creek	Ephemeral	-	-	Yes
426.9	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
427.6	Unnamed Tributary of North Buffalo Creek	Intermittent	-	-	Yes
427.7	Unnamed Tributary of North Buffalo Creek	Intermittent	-	-	Yes
428.9	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
429.1	Unnamed Tributary of Unnamed Pond	Ephemeral	-	-	Yes
McCook County					
430.1	Unnamed Tributary of Buffalo Lake	Intermittent	-	-	Yes
430.8	Unnamed Tributary of Buffalo Lake	Intermittent	-	-	Yes
Minnehaha County					
431.2	Unnamed Tributary of Buffalo Lake	Intermittent	-	-	Yes

Exhibit C Waterbodies Crossed by the Dakota Access Project					
Approximate Milepost[a]	Waterbody Name	Flow Regime	State Classification	Supports Use Designation	Crosses Centerline
431.8	Unnamed Tributary of Buffalo Lake	Intermittent	-	-	Yes
432.3	Unnamed Tributary of Buffalo Lake	Intermittent	-	-	Yes
433.3	Unnamed Tributary of West Branch Skunk Creek	Ephemeral	-	-	Yes
433.7	Unnamed Tributary of West Branch Skunk Creek	Ephemeral	-	-	Yes
434.2	Unnamed Tributary of West Branch Skunk Creek	Intermittent	-	-	Yes
434.9	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
435.2	Unnamed Tributary of West Branch Skunk Creek	Ephemeral	-	-	Yes
435.4	Unnamed Tributary of West Branch Skunk Creek	Ephemeral	-	-	Yes
435.8	Unnamed Tributary of West Branch Skunk Creek	Ephemeral	-	-	Yes
435.9	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
436.2	West Branch Skunk Creek	Intermittent	-	-	Yes
436.2	Unnamed Pond	Open water	-	-	No
436.4	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
437.2	Unnamed Tributary of West Branch Skunk Creek	Intermittent	-	-	Yes
439.4	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
439.5	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
439.7	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
440.7	Unnamed Tributary of West Branch Skunk Creek	Ephemeral	-	-	Yes
442.0	Unnamed Tributary of West Branch Skunk Creek	Intermittent	-	-	Yes
442.3	Unnamed Tributary of West Branch Skunk Creek	Intermittent	-	-	Yes
445.4	Unnamed Tributary of West Branch Skunk Creek	Intermittent	-	-	Yes
446.0	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
446.3	Unnamed Tributary of Skunk Creek	Intermittent	-	-	Yes
446.4	Unnamed Pond	Open water	-	-	No
447.1	Unnamed Tributary of Skunk Creek	Intermittent	-	-	Yes
447.8	Unnamed Tributary of Skunk Creek	Intermittent	-	-	Yes

Exhibit C Waterbodies Crossed by the Dakota Access Project					
Approximate Milepost*	**Waterbody Name**	**Flow Regime**	**State Classification**	**Supports Use Designation**	**Crosses Centerline**
448.1	Unnamed Tributary of Skunk Creek	Intermittent	-	-	Yes
448.8	Unnamed Tributary of Skunk Creek	Intermittent	-	-	Yes
449.0	Unnamed Tributary of Skunk Creek	Intermittent	-	-	Yes
449.4	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
449.7	Unnamed Tributary of Skunk Creek	Intermittent	-	-	Yes
450.8	Unnamed Tributary of Skunk Creek	Intermittent	-	-	Yes
452.1	Unnamed Tributary of Wall Lake	Intermittent	-	-	Yes
452.4	Unnamed Tributary of Wall Lake	Intermittent	-	-	Yes
453.5	Unnamed Tributary of Wall Lake	Intermittent	-	-	Yes
453.9	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
454.0	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
454.6	Unnamed Tributary of Unnamed Pond	Intermittent	-	-	Yes
455.4	Unnamed Tributary of Skunk Creek	Intermittent	-	-	Yes
455.8	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
Turner County					
B0.1	Unnamed Tributary of Skunk Creek	Intermittent	-	-	Yes
Lincoln County					
472.2	Unnamed Tributary of Nine Mile Creek	Ephemeral	-	-	No
473.0	Agricultural Irrigation Ditch	Ephemeral	-	-	No
473.7	Unnamed Tributary of Nine Mile Creek	Intermittent	-	-	Yes
474.0	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
474.6	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
475.0	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
476.4	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
477.0	Unnamed Tributary of Big Sioux River	Intermittent	-	-	Yes
478.7	Agricultural Irrigation Ditch	Ephemeral	-	-	No

Exhibit C Waterbodies Crossed by the Dakota Access Project					
Approximate Milepost[a]	Waterbody Name	Flow Regime	State Classification	Supports Use Designation	Crosses Centerline
478.9	Unnamed Tributary of Big Sioux River	Intermittent	-	-	No
480.3	Unnamed Tributary of Big Sioux River	Intermittent	-	-	Yes
481.5	Unnamed Tributary of Big Sioux River	Ephemeral	-	-	Yes
481.6	Big Sioux River	Perennial	Fish/Wildlife Prop, Rec, Stock; Immersion Recreation; Irrigation Waters; Limited Contact Recreation, Warmwater Semipermanent fish life	Full Support; Nonsupport; Full Support; Nonsupport; Nonsupport	HDD[b]
B2.9	Unnamed Tributary of Beaver Creek	Intermittent	-	-	Yes
B3.2	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
B4.3	Unnamed Tributary of Beaver Creek	Intermittent	-	-	Yes
B4.4	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
B5.2	Unnamed Tributary of Beaver Creek	Ephemeral	-	-	Yes
B5.9	Unnamed Tributary of Beaver Creek	Intermittent	-	-	Yes
B8.1	Unnamed Tributary of Beaver Creek	Intermittent	-	-	Yes
B8.9	Unnamed Tributary of Beaver Creek	Intermittent	-	-	Yes
B9.5	Unnamed Tributary of Beaver Creek	Intermittent	-	-	Yes
B10.6	Unnamed Tributary of Beaver Creek	Intermittent	-	-	Yes
B10.7	Unnamed Tributary of Beaver Creek	Intermittent	-	-	Yes
B11.1	Agricultural Irrigation Ditch	Ephemeral	-	-	Yes
B11.5	Unnamed Tributary of Beaver Creek	Intermittent	-	-	Yes
B12.9	Unnamed Tributary of Beaver Creek	Intermittent	-	-	Yes
B15.1	Unnamed Tributary of Nine Mile Creek	Intermittent	-	-	Yes
B15.4	Unnamed Tributary of Nine Mile Creek	Intermittent	-	-	Yes

[a] Mileposts proceeded with the letter A reference the reroute in Spink County, and mileposts proceeded with the letter B reference the reroute in Turner and Lincoln counties.
[b] HDD= Waterbody will be crossed via horizontal directional drill (HDD).

Federal and State Listed Threatened and Endangered Species in South Dakota

Federally Listed Threatened and Endangered Species in South Dakota						
Common Name	**Scientific Name**	**Federal Status**	**Federal County Listing**	**Potential Impact**	**Habitat Requirement**	**Determination of Effect**
Mammals						
Northern long-eared bat	*Myotis septentrionalis*	T	Beadle, Campbell, Edmunds, Faulk, Kingsbury, Lake, Lincoln, McCook, McPherson, Miner, Minnehaha, Spink, Turner	No effect	Summer roosting habitat underneath bark or in crevices of live and dead trees. Winter habitat includes caves and mines with large entrances.	The USFWS has issued an interim 4(d) rule. The implementation of the interim 4(d) rule for the northern long-eared bat exempts certain activities within the white nose syndrome (WNS) buffer zone – those areas within 150 miles of WNS-positive counties – provided certain conservation measures are implemented. In areas outside of the 150-mile WNS buffer zone, incidental take from lawful activities would be exempted. All of South Dakota is outside of the WNS 150-mile buffer zone; thus, construction and operation of the Project area within South Dakota would be exempt from the Endangered Species Act take prohibition.
Birds						
Interior least tern	*Sterna antillarum athalassos*	E	Campbell	No effect	Interior least tern nesting habitat includes open shorelines, riverine sandbars, and mudflats along Missouri and Mississippi Rivers drainages.	The Project does not cross the Missouri River within South Dakota. No suitable habitat within the Project area.
Piping plover	*Charadrius melodus*	T	Campbell, Kingsbury	No effect	Sandy or gravelly beaches and sandbars or alkaline wetlands.	No suitable nesting habitat was identified during Project field surveys. Critical habitat for the piping plover is along the Missouri River; the Project does not cross the Missouri River within South Dakota. This species is highly mobile and would likely avoid the construction area.
Red knot	*Calidris canutus rufa*	T	Beadle, Campbell, Edmunds, Faulk, Kingsbury, Lake, Lincoln, McCook, McPherson, Miner, Minnehaha, Spink, Turner	No effect	Breeds in the Arctic tundra areas, such as sparsely vegetated habitat. When non-breeding they prefer primarily intertidal, marine habitats, coastal inlets, estuaries, and bays.	No suitable habitat within the Project area.

Federally Listed Threatened and Endangered Species in South Dakota						
Common Name	**Scientific Name**	**Federal Status**	**Federal County Listing**	**Potential Impact**	**Habitat Requirement**	**Determination of Effect**
Sprague's pipit	*Anthus spragueii*	C	Campbell, McPherson	No effect	Prefer native grasslands of intermediate height and sparse to intermediate vegetation density, low forb density, and little bare ground but low litter depth. Introduced grasslands may be utilized, but to a much lesser extent. Nests on the ground from early May to mid-October.	Breeding habitat range is in the northern part of the state. Some of the Project area may be within this range; however, there are no occurrences documented within the Project area (SDNHP, 2014 and eBird, 2014)
Whooping crane	*Grus americana*	E	Beadle, Campbell, Clark, Edmunds, Faulk, Kingsbury, McCook, McPherson, Miner, Spink, Turner	No effect	During migration, this species utilizes wetlands and cropland ponds for feeding and roosting. Seasonal and semi-permanent wetlands are the most commonly used.	The Project area is within the migratory range of this species (Cornell Lab of Ornithology, 2014). Only one whooping crane occurrence record is located in Kingsbury County within one mile of the Project (SDNHP, 2014). This species is highly mobile and would likely avoid construction.
Fishes						
Pallid sturgeon	*Scaphirhynchus albus*	E	Campbell, Lincoln	May affect, not likely to adversely affect	Prefer a fast flowing turbid river with a firm sand or gravel bottom. Areas at the end of chutes or sandbars are commonly used for feeding.	The Missouri River (Campbell County) will not be crossed in South Dakota, and the Big Sioux River (Lincoln County) will be crossed via HDD. Dakota Access plans to withdraw water from the Big Sioux River for HDD installation activities and hydrostatic testing of the HDD segment. Dakota Access would implement conditions on permitted intake structures at the Big Sioux River as described in the USFWS Recovery Plan for the Pallid Sturgeon (USFWS, 2014). Potential indirect impacts on pallid sturgeon would be avoided and minimized through implementation of the HDD Contingency Plan.

Federally Listed Threatened and Endangered Species in South Dakota						
Common Name	**Scientific Name**	**Federal Status**	**Federal County Listing**	**Potential Impact**	**Habitat Requirement**	**Determination of Effect**
Topeka shiner	*Notropis topeka*	E	Beadle, Kingsbury, Lake, Lincoln, McCook, Miner, Minnehaha, Spink, Turner	May affect, likely to adversely affect	Found in small prairie streams that exhibit perennial or nearly perennial flow. Substrate usually is clean gravel, cobble, or sand.	Nine waterbodies crossed by the Project in South Dakota were identified by the USFWS as containing known occurrences (James River, Shue Creek, Pearl Creek, Middle Pearl Creek, Redstone Creek, Rock Creek, West Fork Vermillion River, East Fork Vermillion River, and Big Sioux River). Four waterbodies (James River, Pearl Creek, East Fork Vermillion River, and Big Sioux River) would be crossed using HDD construction methods, thus avoiding direct adverse effects at these locations. Field surveys of the remaining five waterbodies identified that one of these waterbodies, the West Fork Vermillion, would be crossed at the headwaters of the stream where it is an emergent wetland with no perennial flow. Therefore, the West Fork Vermillion River is not suitable habitat for the species. The four remaining streams (Shue Creek, Redstone Creek, Middle Pearl Creek, and Rock Creek) include known occurrences and potential suitable spawning habitat.
Invertebrates						
Dakota skipper	*Hesperia dacotae*	T	Edmunds, McPherson	No effect	Dakota skippers only utilize high quality undisturbed (i.e., remnant, uncultivated) prairie; including, wet tallgrass prairie and dry mixed grass prairie.	No native grasslands were identified within Edmunds and McPherson counties during field surveys.
Vascular Plants						
Western prairie fringed orchid	*Platanthera praeclara*	T	Lake, Lincoln, McCook, Miner, Minnehaha, Turner	No effect	Prefers moist tallgrass prairie and sedge meadows.	No western prairie fringed orchids were identified within the Project area based on field survey results. In addition, the species seems to have been extirpated from South Dakota (USFWS, 2015 and U.S. Geological Survey, 2014a).

E= Endangered
T= Threatened
C= Candidate

State Listed Threatened and Endangered Species in South Dakota					
Common Name	**Scientific Name**	**State Status[a]**	**Potential Impact**	**Habitat Requirement**	**Determination of Effect**
Mammals					
Black-footed ferret	*Mustela nigripes*	E	No impact anticipated	Associated exclusively with large (10,000 acres or more) prairie dog towns. Use burrows for shelter and feed on prairie dogs and other species within the habitat.	Historically, the species was present within the state; however, large prairie dog complexes needed to support a black-footed ferret population do not currently exist within the Project area.
Northern river otter	*Lontra canadensis*	T	No impact anticipated	Rivers with high quality water and an abundant food supply.	Within the Project area, this species has been documented within the Big Sioux River and James River watersheds (South Dakota Game, Fish, and Parks [SDGFP], 2014a and South Dakota Natural Heritage Program [SDNHP], 2014). However, both of these rivers will be crossed via HDD, therefore avoiding impacts to the riverine habitats utilized by the otter.
Swift fox	*Vulpes velox*	T	No impact anticipated	Prefer short or mixed grass prairies with flat to gently rolling terrain and sparse vegetation that allows for good mobility and visibility.	Although historically the range of this species was within the Project area, the species does not currently reside within the Project area (NatureServe, 2014).
Birds					
American dipper	*Cinclus mexicanus*	T	No impact anticipated	Cold and clear, fast-moving streams with gravel, stone, or sand bottoms which support invertebrates. Streams with structures over the water such as waterfalls, rocks and boulders are needed for nesting.	The range of this species is not within the Project area (Cornell Lab of Ornithology, 2014).
Bald eagle	*Haliaeetus leucocephalus*	T	No impact anticipated	Breeds and winters in areas close to a coast, river or lake. Prefers conifers for nesting and roosting and tends to avoid areas with high human traffic.	There are few forested areas along the pipeline route for nesting. Occurrence data from the SDNHP documented a nest approximately one mile from the Project area. Field surveys did not identify bald eagles within the Project area. This species is highly mobile and would likely avoid construction.
Eskimo curlew	*Numenius borealis*	E	No impact anticipated	Variety of grassland habitats.	The Project area is within the migratory range of this species (NatureServe, 2014). This species is highly mobile and would likely avoid construction.
Interior least tern	*Sterna antillarum athalassos*	E	No impact anticipated	Interior least tern nesting habitat includes open shorelines, riverine sandbars, and mudflats along Missouri and Mississippi Rivers drainages.	The Project does not cross the Missouri River within South Dakota. No suitable habitat within the Project area.
Osprey	*Pandion haliaetus*	T	No impact anticipated	Prefer habitat near water including, saltmarshes, rivers, ponds, and reservoirs. Osprey places their nest in open areas on poles, channel markers, and dead trees, often over water.	The Project area is within the migratory range of this species (Cornell Lab of Ornithology, 2014). This species is highly mobile and would likely avoid construction.

State Listed Threatened and Endangered Species in South Dakota					
Common Name	**Scientific Name**	**State Status[a]**	**Potential Impact**	**Habitat Requirement**	**Determination of Effect**
Peregrine falcon	*Falco peregrines*	E	No impact anticipated	Inhabits any open habitat with a wide view of the surrounding area, close proximity to water and rocky cliffs or even tall buildings available for nesting.	No nesting habitat is within the Project area (NatureServe, 2014). This species is highly mobile and would likely avoid the construction area.
Piping plover	*Charadrius melodus*	T	No impact anticipated	Sandy or gravelly beaches and sandbars or alkaline wetlands.	No suitable nesting habitat was identified during Project field surveys. Critical habitat for the piping plover is along the Missouri River; the Project does not cross the Missouri River within South Dakota. This species is highly mobile and would likely avoid the construction area.
Whooping crane	*Grus americana*	E	No impact anticipated	During migration, this species utilizes wetlands and cropland ponds for feeding and roosting. Seasonal and semi-permanent wetlands are the most commonly used.	The Project area is within the migratory range of this species (Cornell Lab of Ornithology, 2014). Only one whooping crane occurrence record is located in Kingsbury County within one mile of the Project (SDNHP, 2014). This species is highly mobile and would likely avoid construction.
Reptiles					
Eastern hognose snake	*Heterodon platirhinos*	T	No impact anticipated	Prefer woodlands with sandy soil, fields, farmland and coastal areas.	The range of this species is not located within the Project area (NatureServe, 2014).
False map turtle	*Graptemys pseudogeographica*	T	No impact anticipated	Inhabits slow moving rivers, river sloughs, oxbow lakes, lakes and reservoirs containing abundant aquatic vegetation and basking sites.	The range of this species within South Dakota is limited to the Missouri River area. The Project enters South Dakota east of the Missouri River (NatureServe, 2014).
Lined snake	*Tropidoclonion lineatum*	E	No impact anticipated	Prefers open prairie hillsides and rocky, woodland areas	The range of this species within South Dakota is limited to the southeast corner of the state. Suitable habitat may be present within the Project area; however, this species is highly mobile and would likely avoid construction.
Fishes					
Banded killifish	*Fundulus diaphanous*	E	No impact anticipated	Habitat ranges from quiet waters of lakes and ponds with ample vegetation to muddy streams without vegetation.	The current species habitat range is not located within the Project area (SDGFP, 2014b).
Blacknose shiner	*Notropis heterolepis*	E	No impact anticipated	Prefers clear, cool streams with sand and gravel beds, and deep pools with abundant vegetation both in the water and on lands bordering the streams. This species has only been found in two pristine streams located in south-central South Dakota.	No suitable habitat within the Project area.

State Listed Threatened and Endangered Species in South Dakota					
Common Name	**Scientific Name**	**State Status[a]**	**Potential Impact**	**Habitat Requirement**	**Determination of Effect**
Finescale dace	*Chrosomus neogaeus*	E	No impact anticipated	Occur most often in cool, clear mountain streams and less often in lakes, reservoirs, or large rivers. Prefer moderate water velocities, associate with a variety of substrates.	The Project area is outside of the current species range (NatureServe, 2014).
Longnose sucker	*Catostomus catostomus*	T	No impact anticipated	Found in cool, spring-fed streams where it feeds on the bottom on crustaceans, snails, insect larvae, and larvae.	The Project area is outside of the current species range (NatureServe, 2014).
Northern pearl dace	*Margariscus nachtriebi*	T	No impact anticipated	Occurs in cool bogs, ponds, lakes, and clear streams.	The species distribution is not located within the Project area. Limited to Counties within southwestern South Dakota (U.S. Geological Survey, 2014b)
Northern redbelly dace	*Chrosomus eos*	T	No impact anticipated	Prefers areas with beds of aquatic vegetation in spring-fed streams.	Believed to be extirpated from the Big Sioux drainage (SDGFP, 2014c)
Pallid sturgeon	*Scaphirhynchus albus*	E	No impact anticipated	Prefer a fast flowing turbid river with a firm sand or gravel bottom. Areas at the end of chutes or sandbars are commonly used for feeding.	The Missouri River (Campbell County) will not be crossed in South Dakota, and the Big Sioux River (Lincoln County) will be crossed via HDD, therefore no impacts will occur to this species.
Sicklefin chub	*Macrhybopsis meeki*	E	No impact anticipated	Prefer large, turbid rivers with a diversity of depths and velocities forming braided channels, sand bars, sand flats, and gravel bars.	No suitable habitat within the Project area.
Sturgeon chub	*Macrhybopsis gelida*	T	No impact anticipated	Prefer large, turbid rivers with a range of depths and velocities forming braided channels, gravel bars, and sand flats and bars.	No suitable habitat within the Project area.

E= Endangered
T= Threatened
[a] South Dakota state listed species do not have county listings, they are listed state-wide.

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DAKOTA ACCESS, LLC

DAKOTA ACCESS PIPELINE PROJECT
SOUTH DAKOTA ENERGY FACILITY PERMIT APPLICATION

DOCKET NO. HP14-002

ENERGY FACILITY PERMIT APPLICATION
AND
EXHIBITS B-D

Application - DAPL 1
Exhibit B - DAPL 3
Exhibit C - DAPL 4
Exhibit D - DAPL 5

DAKOTA ACCESS, LLC

Exhibit D

Dakota Access Project Plans

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1.0 INTRODUCTION

Dakota Access, LLC and Energy Transfer Crude Oil Company, LLC (COMPANY) will implement this Stormwater Pollution Prevention Plan (SWPPP) during construction of the Dakota Access Pipeline (DAPL) Project and the Energy Transfer Crude Oil Pipeline (ETCOP) Project (Project). The primary purpose of the SWPPP is to minimize the impacts of stormwater runoff during Project construction activities through the implementation of Best Management Practices (BMP).

1.1 RESPONSIBILITY FOR IMPLEMENTATION

The Construction Manager is responsible for implementation of the SWPPP. As stated in the construction contract or as otherwise agreed, the Contractor may be responsible for all or part of the implementation of the SWPPP. Where Environmental Inspectors (EI) or Chief Inspectors (CI) are utilized, they will fulfill the responsibilities as described herein. If neither an EI nor CI is utilized for the Project, those responsibilities will be assumed by the Construction Manager (CM) or a designee.

2.0 SITE DESCRIPTION

2.1 PROJECT NAME, LOCATION, AND PURPOSE

Project Name: Dakota Access Pipeline (DAPL) Project and Energy Transfer Crude Oil Pipeline (ETCOP) Project.

Project Purpose: ETC's primary objective for the proposed Project is to allow for transport of approximately 400,000BPD of crude oil between Stanley, ND and Nederland, TX. The crude oil transported will provide supplemental crude oil supply for markets in the United States. In addition, the proposed project will open railroad transport for other products produced locally that otherwise would not be accessible to other markets.

Project Location: The DAPL and ETCOP projects consist of a Gathering Area, a Mainline Transmission Pipeline, and the Conversion of an existing natural gas transmission line to crude oil. The Gathering System commences at Stanley, North Dakota and ends at Johnson Corner, North Dakota. There are six proposed pump stations along the Gathering System, namely Stanley, Ramberg, Epping, Trenton, Watford City, and Johnson Corner. The Mainline Transmission Pipeline begins at Johnson Corner, North Dakota and ends southeast of the proposed Illinois Patoka Custody Transfer and Metering Station. Approximately 992 miles of mainline make up the DAPL project. The ETCOP project begins at the Patoka Custody

Transfer and Metering Station and consists of approximately 24 miles of new Mainline Transmission Pipeline. This will eventually tie into the future expansion of 757 miles of conversion pipeline that extends from Johnsonville, Illinois to Nederland, Texas.

There will be tanks constructed at the six pump stations along the Gathering System. There will be one 50,000 barrel tank at Stanley, one 200,000 barrel tank and one 100,000 barrel tank at Ramberg, one 100,000 barrel tank at Epping, one 100,000 barrel tank at Trenton, two 100,000 barrel tanks at Watford City, and one 200,000 barrel tank at Johnson Corner.

There will be mainline valve sites on both sides of major water body and major highway crossings for isolation in the event of emergency shutdown. In addition to the mainline valves, multiple pump stations and one custody transfer metering station will also be installed along the Mainline Transmission Pipeline. The proposed custody transfer station will be located near Patoka, Illinois. Launcher and Receiver traps will also be installed along the Mainline Transmission Pipeline at locations less than 100 miles apart.

A proposed rail yard and rail loading facility will also potentially be integrated into the DAPL project. The location of the rail yard will be on the east side of Historical Route 66 and on the west side of Niemanville Trail / Co Rd 225E in Litchfield, Illinois.

2.2 NATURE OF THE CONSTRUCTION ACTIVITY

ETC proposes to install the new pipeline within a variable-width construction right-of-way. Actual workspace width will depend on site engineering and available workspace constraints. In general, the pipeline will be constructed using an approximate 150-foot-wide construction right-of-way, which includes a new proposed 50-foot-wide permanent easement and 100-foot-wide temporary easement. The temporary easement will be allowed to revert to its original land use following construction. All pump stations and mainline valve sites to be constructed will be located on tracts of sufficient size to accommodate all aboveground appurtenances along the right-of-way.

2.3 SEQUENCE OF MAJOR SOIL-DISTURBING EVENTS

The following represents a typical sequence of major soil-disturbing events during the Project:

- Installation of stabilized construction entrances and surface water (including wetlands) protection BMPs.

- Clearing of the Project Right-Of-Way area as necessary. This may include clearing of brush and trees to create right-of-way needed for temporary workspace, soil storage, construction activities, and areas needed for access to particular construction sites within the Project area.
- Installation of additional BMPs for erosion and stormwater management, as needed.
- Pipe stringing, bending, welding, and testing.
- Excavation of ditch (trackhoes or similar equipment will be used to excavate the ditch to the required depth).
- Installation of pipe in ditch.
- Tie-ins of the sections of pipeline which will be welded together in the ditch.
- Backfilling the ditch line (excavated soil will be used to cover the pipe).
- Hydrostatic testing of the pipeline as necessary.
- Removal of temporary erosion/sediment controls when other construction activity is completed and final stabilization is achieved.

3.0 CONTROLS

This section describes controls used to prevent or control stormwater pollution. The COMPANY BMPs are based on the current best accepted practices endorsed by the American Gas Association, Gas Research Institute, Association of Pipeline Contractors, EPA, and USACE. Appendix A contains diagrams showing typical installation of BMPs.

The Project's EI is responsible for determining the schedule and placement of BMPs. This plan will be updated by the Contractor, EI, and/or CI to identify the location and schedule of planned or installed controls as the need for these controls is determined.

When used from this point forward in this Plan, "EI" will refer to the responsible person, whether it is the EI, CI, Health, Safety and Environmental (HSE) Coordinator, or Project Manager or other responsible person.

The following represents a typical sequence of major soil-disturbing events during the Project and the control measures that will be implemented.

- Clearing of the Project area as necessary. This may include clearing of brush and trees in the right-of-way, in areas adjacent to the right-of-way needed for soil storage, and/or in areas needed for access to particular construction sites within the Project area. The Project's EI will implement such measures as temporary slope breakers, silt fencing, and hay/straw bales prior to any soil-disturbing activities, and will install additional BMPs for erosion and stormwater management, as needed based on existing site conditions.

- Excavation of ditch (trackhoes or similar equipment will be used to excavate the ditch to the required depth). The Project's EI will implement such measures as temporary slope breakers, silt fencing, and hay/straw bales prior to excavation activities, and will install additional BMPs for erosion and stormwater management, as needed based on existing site conditions.

- Backfilling the ditch line (excavated soil will be used to cover the pipe). The Project's EI will implement such measures as temporary slope breakers, silt fencing, and hay/straw bales prior to backfilling, and will install additional BMPs for erosion and stormwater management, as needed based on existing site conditions.

- Performing cleanup and stabilization. This phase will begin after backfilling and will continue throughout the remainder of the Project's construction. This phase will include minor grading to level small areas, and revegetation. Project areas to be stabilized by vegetation will be seeded and mulched.

- The Project's EI will remove temporary erosion/sediment controls when other construction activity is completed and final stabilization is achieved.

3.1 EROSION AND SEDIMENT CONTROLS

3.1.1 Short- and Long-Term Goals and Criteria (as applicable)

(a) The construction phase erosion and sediment controls are designed to retain sediment on-site to the greatest extent practicable.

(b) Control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections or

other information indicate that a control has been installed and/or used inappropriately and/or incorrectly, the control shall be replaced and/or modified as needed.

(c) If sediment escapes the Project area, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impact (e.g., fugitive sediment in street could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets).

(d) Sediment must be removed from sediment traps when capacity has been reduced by 50 percent.

(e) Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

3.1.2 Temporary Erosion Control Measures

The following temporary erosion and sediment controls will be utilized as necessary:

Temporary Slope Breakers: Temporary slope breakers (water bars/terraces) will be installed as necessary (at the EI's discretion) diagonally across the right-of-way on slopes to control erosion by reducing and shortening the velocity, length and concentration of runoff according to the figures provided in Appendix A. These breakers will divert water to a well-vegetated area. If a vegetated area is not available, erosion control barriers will be installed to filter the runoff at the outlet of the slope breakers and off of the construction right-of-way. Silt fence, hay/straw bales, or sandbags may be used in place of temporary slope breakers at the discretion of the EI.

Natural vegetation acts as an effective filter medium for silt removal from surface runoff. Its use as a sediment barrier results in less disturbance to the land than other methods. In areas where natural vegetation is not present or does not constitute a suitable barrier, temporary sediment and/or erosion control barriers will be installed. Temporary sediment barriers, typically hay/straw bale filters or silt fences, dissipate the energy of flowing water to allow settlement of sediment from surface water runoff.

Silt Fence/Hay/Straw Bales: Silt fences and hay/straw bales will be installed in accordance with figures provided in Appendix A. The silt fences and/or hay/straw bales will be installed as necessary to prevent erosion and sediment laden runoff from stormwater discharges. These measures will remain in place until permanent revegetation measures have been judged

successful. Silt fence and hay bale structures are also used to control erosion and sedimentation for hydrostatic test water discharges. Bale filters are effective for small rills that can be spanned by one or two bales. Bales are constructed of hay (or straw) that is securely bound to form a berm, which is held in place by two stakes driven through each bale. The first stake is driven at an angle toward the previously positioned bale, and the second stake is driven perpendicular to ground surface. The bindings of the bales will be horizontal. Filter fabric fences (silt fences) perform the same function as hay bale berms, but have the advantage of ease of installation, versatility, and light weight.

A silt fence is a geotextile fabric with fence posts spaced no more than 10 feet apart. Both silt fences and hay/straw bales will be installed according to the manufacturer's instructions where site conditions allow. Otherwise, the silt fence will be imbedded in the ground a minimum of 6 inches. Where two sections are joined, they will be overlapped a minimum of 6 inches. Accumulated sediment will be removed regularly and the silt fencing inspected to ensure the bottom of the silt fence remains imbedded in the ground. A sufficient stockpile of silt fence will be maintained on-site for emergency use.

Hay bales may be left in place. These barriers are required after the initial disturbance of the soil and are typically installed at the following locations:

- At the outlet of a temporary slope breaker when vegetation is not enough to control erosion.
- Along banks of waterbodies between the graded right-of-way and the waterbody after clearing.
- Downslope of any stockpiled soil in the vicinity of waterbodies and wetlands.
- At the base of slopes adjacent to road crossings where vegetation has been disturbed.
- At sideslope and downslope boundaries of the construction where runoff is not otherwise directed by temporary slope breakers.
- In the right-of-way at boundaries between wetlands and adjacent disturbed upland areas to prevent flow of sediment into the wetland where runoff is not otherwise directed by a temporary slope breaker.

- At the edge of the right-of-way to prevent siltation of ponds, wetlands, or other waterbodies adjacent to the downslope of the right-of-way or as necessary to contain spoil and sediment within the right-of-way.

- For hydrostatic test water discharges, the water should be released directly into the silt fence/hay bale structures in conjunction with other approved velocity dissipating devices.

Temporary Trench Plugs: Temporary trench plugs prevent water diversion from waterbodies or drainage tiles into upland portions of the pipeline trench during construction and prevent silt-laden stormwater from flowing down the trench into waterbodies. The EI or CI will determine the need for and spacing of trench plugs. Otherwise, the Contractor will install hard trench plugs (undisturbed soil) on either side of waterbody crossings or drain tiles. Topsoil will not be used for trench plugs.

3.1.3 Stabilization Practices

The stabilization measures of the pipeline right-of-way incorporate permanent erosion and sedimentation measures. However, in the event that final restoration cannot be implemented immediately post-construction, temporary erosion and sedimentation control measures will be employed as specified by the Contractor until the weather is suitable for final cleanup.

For pipeline construction in areas with sloping terrain, COMPANY will use permanent trench plugs for soil stabilization.

3.1.3.1 Upland Areas

Temporary Stabilization:

- Temporary stabilization measures will be initiated as soon as practicable in portions of the right-of-way where construction activities have temporarily or permanently ceased. Where the initiation of stabilization measures by the 14th day is precluded by weather, stabilization measures will be initiated as soon as machinery is able to access the right-of-way. If activities resume within 21 days from when the activities ceased, stabilization measures do not have to be initiated by the 14th day following cessation of the activity. These guidelines are based on National Pollutant Discharge Elimination System (NPDES) requirements and may be modified based on state-specific PDES regulations.

- In the event that construction is completed more than 30 days before the seeding season for perennial vegetation, areas adjacent to waterbodies will be mulched with

3 tons/acre of straw, or its equivalent, to a minimum of 100 feet on either side of the waterbody. These guidelines are based on NPDES requirements and may be modified based on state-specific PDES regulations.

- Temporary sediment barriers may be removed from an area when that area is successfully revegetated (i.e., if the right-of-way surface condition is similar to adjacent undisturbed lands). These guidelines are based on NPDES requirements and may be modified based on state-specific PDES regulations.

Permanent Stabilization:

- Erosion and sedimentation control practices (installation of structures, revegetation, and maintenance practices) will be implemented to minimize the potential for soil erosion or sedimentation of streams and to restore the right-of-way and any other disturbed areas. Final grading will be completed within 10 days of construction completion (including the installation of permanent erosion control measures in the areas of steep slopes only), weather permitting. Construction debris will be removed from the right-of-way and the right-of-way will be graded so that the soil is left in proper condition for planting.

- The right-of-way on off-road sections will be graded to preconstruction contours, as practical, with a small crown of soil left over the ditch to compensate for settling, as approved by the CM, EI, and/or CI. Openings will be left in the completed crown to restore lateral surface drainage to preconstruction patterns.

- Where topsoil has been segregated, the topsoil will be spread back along the right-of-way in an even layer.

- Fences that were cut and replaced by gaps during construction will be repaired to at least their equivalent state during preconstruction activities.

- Permanent slope breakers will be constructed after final grading and prior to seeding in accordance with the applicable regulations to replace temporary barriers at pedestrian, trail, road, waterbody, and wetland crossings.

3.1.3.2 **Revegetation and Seeding**

Seed, fertilizer, and agricultural lime application will be accomplished at the following rates and mixtures unless otherwise instructed by applicable permits or land managing agency requirements:

- Seed Mixture: German Foxtail Millet "hulled" at a rate of 20 pounds per acre, with "hulled" Bermuda grass at a rate of 10 pounds per acre.
- Fertilizer: 5-19-19 at a rate of 300 pounds per acre.
- Agricultural Lime: at a rate of 2,000 pounds per acre.
- Final revegetation standards that will be used by COMPANY for stabilization of the right-of-way will be determined through discussions with the individual state and local agencies and through the permit process.
- The right-of-way will be seeded after final grading in accordance with recommended seeding dates, weather and soil conditions permitting.
- Turf, ornamental shrubs, and other landscaping materials will be restored in accordance with landowner agreements. Selection is based on adaptation of plants to the soils and climate, ease of establishment, suitability for specific use, longevity or ability to re-seed, maintenance required, aesthetic values, and landowner agreement. Personnel familiar with local horticultural and turf establishment practices must perform the restoration work.
- Where broadcast or hydro seeding is to be done, the seedbed will be prepared as necessary to ensure sites for seeds to lodge and germinate.
- Where hand broadcast seeding is used, the seed will be applied at one-half the rate in each of two separate passes.
- The seedbed will be prepared to a depth of 3 to 4 inches using appropriate equipment to provide a firm, smooth seedbed that is free of debris.
- The Project area should be seeded as deemed appropriate by the CM and/or EI. If seeding cannot be done soon after final grading, temporary erosion and sediment controls will be used and seeding of permanent cover will be done at the beginning of

the next seeding season. Meanwhile, temporary stabilization measures will be implemented as appropriate.

- Slopes steeper than 3:1 will be seeded immediately after final grading in accordance with recommended seeding dates, weather permitting.
- Seed will be purchased in accordance with the Pure Live Seed (PLS) specifications for seed mixes and used within 12 months of testing.
- Legume seed will be treated with an inoculant specific to the species. The manufacturer's recommended inoculant rates will be used.
- The seed will be uniformly applied and covered 0.5 to 1 inch deep, depending on seed size. A seed drill equipped with cultipacker is preferred, but broadcast or hydro seeding can be used at double the recommended seeding rates. Where broadcast seeding is used, the seedbed will be firmed with a cultipacker, roller, or similar method after seeding.
- Other alternative seed mixes specifically requested by the landowner or land-managing agency may be used.
- Areas that are seeded after the recommended seeding date should be mulched if permitted.

3.1.3.3 Wetland Restoration

- COMPANY's approach to wetland mitigation and restoration involves a combination of impact minimization during construction, substrate and hydrology restoration, and vegetation establishment involving successful natural processes as a key component.
- The construction workspace for the Project will be been designed to limit impacts to wetlands.
- During the restoration phase, segregated topsoil will be replaced over the trenchline and wetland contours and drainage patterns will be restored to approximate original condition. Surface rocks and boulders that had been windrowed during the construction phase will be distributed in a natural pre-construction configuration in the temporary work

areas. Following restoration of the substrate, wetlands will typically be seeded with annual ryegrass or other seed mixture as directed by regulatory agencies.

3.1.3.4 Riparian Areas

Riparian areas are defined as "on or pertaining to the bank of a natural course of water" (stream, pond, lake, or wetland). The EPA defines "riparian areas" as areas adjacent to streams and lakes where the high water table creates distinct soil and vegetative characteristics from the *adjacent* uplands.

- Following installation of the pipeline, stream banks and riparian areas will be re-contoured and stabilized. Banks will typically be stabilized with an herbaceous mixture and erosion control fabric such as jute netting. Rock riprap may be used to stabilize particularly erosive or unstable areas at the recommendation/approval of the state agencies and by the USACE.

3.1.4 Other Surface Applications

Other surface applications will be applied as outlined below unless otherwise instructed by applicable permits or land managing agency requirements:

(a) Mulch: After seeding, mulch may be applied as determined necessary by the EI at a rate of approximately 2 tons/acre on the entire right-of-way except on wetlands, lawns, agricultural crop areas, and areas where hydro-mulch is used. Mulching before seeding may be done if construction or restoration activity is interrupted for an extended period, such as when seeding cannot be completed due to seeding period restrictions. Except for site-specific locations that may be identified during construction, mulch before seeding if final cleanup (including final grading and installation of permanent erosion controls in the areas of steep slopes) is not completed in an area within approximately 10 days after construction completion.

If mulching occurs before seeding, the Contractor shall increase mulch application on slopes within 100 feet of waterbodies and wetlands to a rate of 3 tons/acre. Up to 1 ton/acre of wood chips may be added to mulch if areas are top-dressed with 11 pounds/acre available nitrogen (at least 50 percent of which is slow release).

If a mulch blower is used, the strands will not be shredded to less than 8 inches in length to allow anchoring. The mulch will be anchored immediately after placement to minimize

loss by wind and water. When anchoring by mechanical means, the Contractor shall use a mulch-anchoring tool to properly crimp the mulch to a depth of 2 to 3 inches.

When anchoring with liquid mulch binders, the Contractor shall use the rates recommended by the manufacturer. The Contractor shall not use liquid mulch binders within 100 feet of wetlands or waterbodies.

(b) Matting/Netting: Matting or netting consists of jute, wood excelsior, or similar materials, and will be installed by the Contractor to anchor mulch and stabilize the surface of the soil during the critical period of vegetative establishment, where directed by the EI.

Matting or netting will be applied to critical, sensitive areas (e.g., steep slopes, banks of waterbodies, bar ditches) as specified by the EI. On waterbody banks, the matting or netting will be installed at the time of the final bank re-contouring. In the event that erosion control fabric is not readily available, COMPANY will temporarily use mulch anchored via crimping (or some other means) or hydromulch until the erosion control fabric material becomes available. Matting or netting will be anchored with pegs or staples as recommended by the manufacturer.

3.2 STORMWATER MANAGEMENT

Stormwater management will be conducted through stormwater flow attenuation, velocity dissipation devices, and water filtration. COMPANY's construction procedures describe the criteria for placement and use of stormwater control methods/devices. The EI will have the authority to determine the location of these controls.

If herbicides or pesticides are to be used for vegetation maintenance, the applications of those substances will be in accordance with applicable landowner and land management or state agency specifications. COMPANY will not use herbicides or pesticides in or within 100 feet of any waterbody except as specified by the appropriate land management or state agency.

3.3 OTHER CONTROLS

3.3.1 Waste Materials

(a) Trash, litter, and debris will be collected for off-site disposal; it will not be discarded along the right-of-way. Refuse will be disposed of according to state and local regulations.

(b) Solid waste that contains (or at any time contained) oil, grease, solvents, or other petroleum products, falls within the scope of the oil and hazardous substances control, cleanup,

and disposal procedures of COMPANY's Spill Prevention Control and Countermeasures (SPCC) plan. This material shall be segregated for handling and disposal as hazardous waste under the provisions of the plan.

3.3.2 Offsite Vehicle Tracking

(a) A stabilized construction entrance will be used, if appropriate, to reduce vehicle tracking of soil and sediments. Access to the right-of-way will normally be from existing public roads. Attempts will be made to locate roadway crossings/access points to ensure that safe and accessible conditions exist throughout the construction phase. Use of 50-foot-long crushed stone access pads, sweeping, culvert installation, matting, and other forms of rutting protection may be used subject to local permit conditions. Periodic sweeping and scraping will remove sediment tracked onto public roads. If crushed stone access pads are used in active agricultural areas, the stone will be placed on a synthetic fabric to facilitate later removal.

(b) The stabilized construction entrances will be installed before clearing and grading. Once other construction activities permanently cease in an area, that area will be stabilized by reseeding and/or mulching as needed. Once revegetation has been judged successful, temporary erosion/sediment control structures will be removed.

4.0 MAINTENANCE

Erosion and sediment control measures and other protective measures identified in this SWPPP must be maintained in effective operating condition. If site inspections required by Section 5 of this SWPPP identify erosion control devices that are not operating properly, maintenance shall be performed before the next anticipated storm event, or as necessary to maintain the continued effectiveness of erosion controls. If maintenance prior to the next anticipated storm event is impractical, maintenance must be scheduled and accomplished as soon as practicable. Temporary sediment barriers will remain in place until permanent revegetation measures have been judged successful.

5.0 INSPECTIONS

The EI will inspect disturbed areas of the Project area that have not been finally stabilized (including areas used for storage of materials that are exposed to precipitation, staging areas, temporary contractor yards, access roads, structural control measures, and locations where vehicles enter or exit the site). The Project area should be considered stabilized when construction activity ceases and a uniform vegetative cover (see below) has been established.

Areas that are not revegetated should be considered to have achieved final stabilization when they have a permanent cover that will prevent erosion of soil by wind or water. At that time, activity under this plan, including inspections, will cease. Inspections shall be conducted as follows and/or in accordance with the applicable National or State-Specific Pollution Discharge Elimination System guidelines:

- Conduct **daily inspections and following any storm event of 0.5 inch of precipitation or greater**, except those portions of the site that have been finally or temporarily stabilized, for which inspections will be conducted at least weekly. Inspections should continue until disturbed areas are completely stabilized (for areas to be revegetated, this means that perennial vegetation cover has reached a uniform cover of at least 70 percent of the preconstruction cover).

- **Inspect control measures** daily in areas of active construction or equipment operation and on a weekly basis in areas with no construction. Inspect within 24 hours of the end of a storm event that is 0.5 inch of rainfall or greater. Control measures will be maintained in good working order; if repair is necessary, it should be initiated within 24 hours of report.

- **Inspect disturbed areas** for evidence of or potential for pollutants entering the drainage system. Sediment from silt fences should be removed regularly and the fence inspected to ensure that the bottom of the fence remains imbedded in ground. Damaged hay/straw bales will be replaced with new bales as necessary.

- **Inspect material storage areas** where materials are exposed to precipitation for evidence of potential for pollutants entering the drainage system.

- **Inspect vehicle entrances** for evidence of off-site sediment tracking.

- **Inspect discharge points**, if accessible, to determine if erosion control measures are effective in preventing significant impacts to receiving waters. If these points are inaccessible, inspectors should inspect nearby downstream locations.

- **Inspect vegetation** after the first and second growing season after seeding to determine the success of revegetation. Wetland revegetation is considered successful if at least 80 percent of the total cover is native species and the level of diversity of the native species present after construction is at least 50 percent of the level originally found in

the wetland. Restoration shall be considered successful if the right-of-way surface condition is similar to adjacent undisturbed lands.

- **Complete an inspection report** of each inspection. Inspection forms and form instructions provided in Appendix C provide additional guidance.

See Section 7 for additional detail on requirements for construction activity and inspection documentation and record keeping.

6.0 PLAN MODIFICATION

This plan may need to be modified and/or updated based on information and experience gathered during actual construction activities (e.g., include or modify BMPs designed to correct problems, etc.). If changes to the design, construction, or maintenance that can have significant effect on the potential for discharging pollutants in stormwater at the site occur, this plan should be modified accordingly by the Contractor, EI, and/or CI. In addition, if the plan proves to be ineffective in controlling pollutants, any necessary modifications to the application of the practices presented in this plan should be made by the Contractor, EI, and/or CI in order to prevent the discharge of pollutants into stormwater.

7.0 REQUIRED REPORTS, DOCUMENTATION, AND RECORDKEEPING

7.1 RECORDS RETENTION

All permit-related documents will be retained as part of the SWPPP for at least three years from the date that the site is finally stabilized as required by COMPANY's document retention policies. The following documentation will be kept on file at the construction site:

- A copy of this SWPPP and referenced attachment(s)
- Inspection reports
- Log of construction and BMP installation/maintenance activities and/or construction alignment sheets/construction plans showing the placement of BMPs.
- Notice of Intent and Notice of Termination

7.2 INSPECTION REPORTS

A separate report will be developed for each inspection. Inspection reports will identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report will contain a certification that the facility is in compliance with this SWPPP. In addition, inspection reports should:

- Summarize the scope of the inspection.
- Provide the name(s), title(s), and qualifications of personnel making the inspection.
- Indicate the date(s) of the inspection.
- Provide weather information and a description of any discharges occurring at the time of the inspection.
- Provide weather information for the period since the last inspection (or since commencement of construction activity if first inspection), including:
    - A best-estimate of the beginning of each storm event
    - Duration of each storm event
    - Approximate amount of rainfall for each storm event (in inches)
    - If any discharges occurred
- Indicate the location(s) of discharges of sediment or other pollutants from the site.
- Indicate the location(s) of BMPs that need to be maintained.
- Indicate the location(s) of BMPs that failed to operate as designed or proved inadequate for that particular location and plans for correction of the problem (including implementation dates of corrective action).
- Indicate location(s) where additional BMPs are needed that did not exist at the time of inspection.

7.3 LOG OF CONSTRUCTION AND BMP INSTALLATION AND MAINTENANCE ACTIVITIES

In addition to inspection and maintenance reports, keep a record of construction activity on the site with this SWPPP. In particular, keep record of the following:

- The dates when major grading activities occur in a particular area.
- The date when construction activities cease in an area, temporarily or permanently.
- The date when an area is stabilized, temporarily or permanently.
- Erosion control maintenance activities.

8.0 SWPPP CERTIFICATION

8.1 COMPANY'S CERTIFICATION

I certify under penalty of law that this document and its appendices were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed: _____ Date: _____

Print Name: _____

Title: _____

Company: _____

8.2 CONTRACTOR'S/SUBCONTRACTOR'S CERTIFICATION

I certify under penalty of law that I understand the terms and conditions of the governing PDES permit that authorizes the stormwater discharges associated with industrial activity from the construction site identified as part of this certification.

Signed: _____ Date: _____

Print Name: _____

Title: _____

Company: _____

I certify under penalty of law that I understand the terms and conditions of the governing PDES permit that authorizes the stormwater discharges associated with industrial activity from the construction site identified as part of this certification.

Signed: _____ Date: _____

Print Name: _____

Title: _____

Company: _____

I certify under penalty of law that I understand the terms and conditions of the governing PDES permit that authorizes the stormwater discharges associated with industrial activity from the construction site identified as part of this certification.

Signed: _____ Date: _____

Print Name: _____

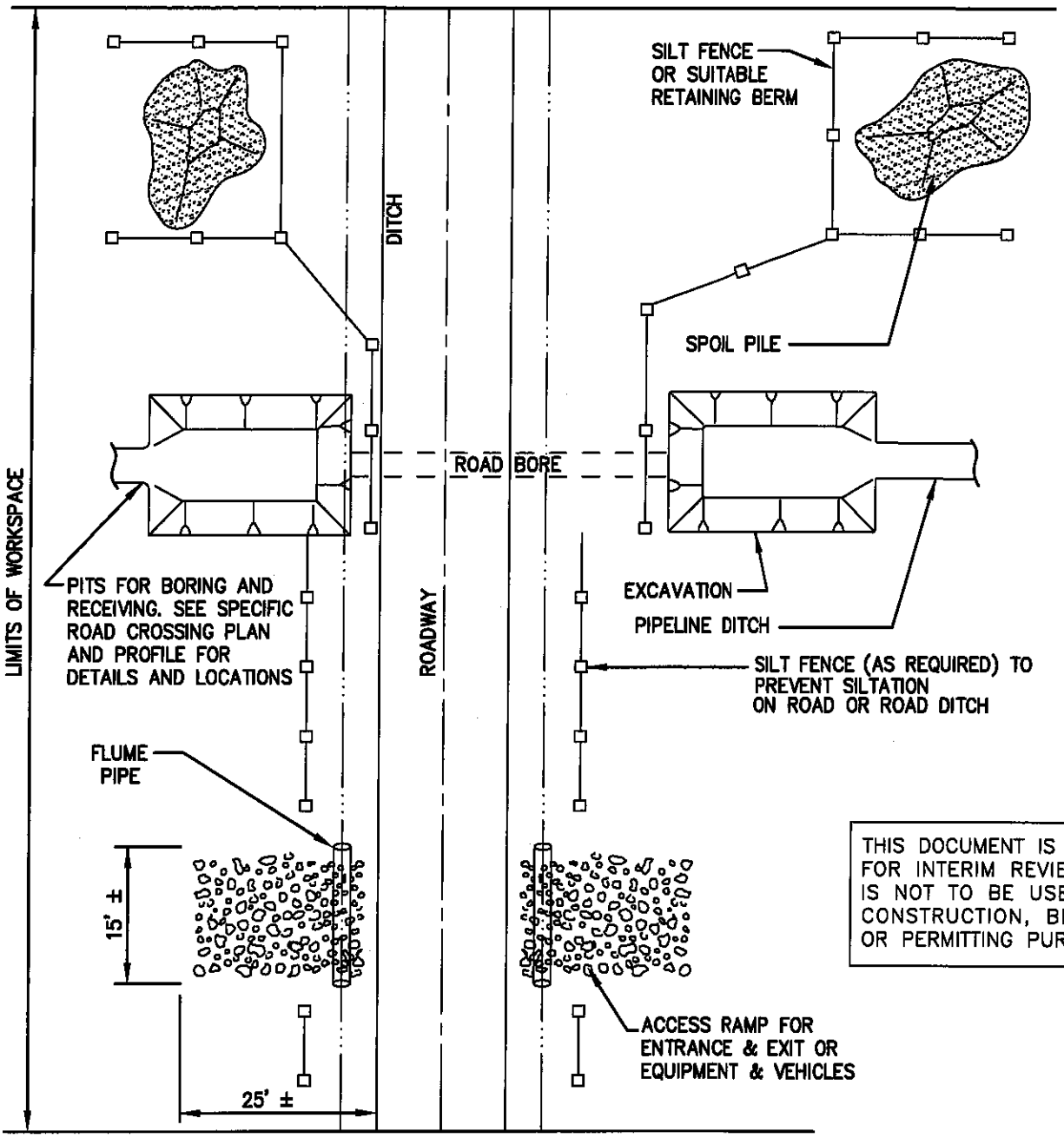
Title: _____

Company: _____

APPENDIX A

BEST MANAGEMENT PRACTICES FIGURES

TYPICAL BORED CROSSINGS CONTROL DETAILS



THIS DOCUMENT IS ISSUED FOR INTERIM REVIEW AND IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, OR PERMITTING PURPOSES.

NOTES:

1. SEE DRAWING FOR EQUIPMENT CROSSING DETAILS.
2. SEE ALIGNMENT SHEETS FOR EXTRA WORKSPACE REQUIREMENTS FOR EACH SPECIFIC ROAD.

REV.	DATE	BY	DESCRIPTION	CHK.
A	08/14	DAH	ISSUED FOR REVIEW	

PROJECT NO. 10395700

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TYPICAL BORED CROSSING CONTROL DETAILS

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CHECKED BY: DAH	DATE: 08/05/14		
SCALE: N.T.S.	APP.:		

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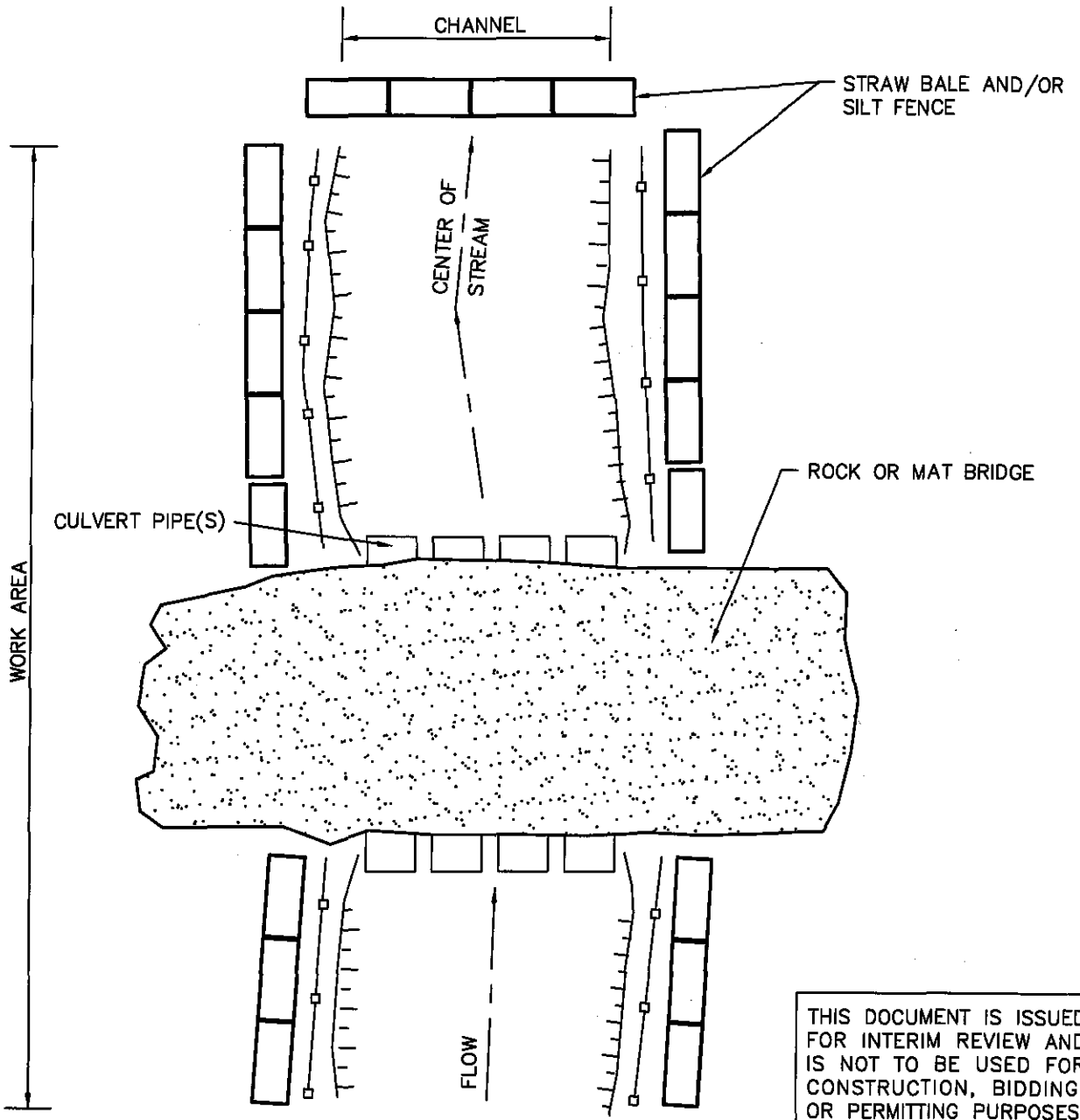

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NOTE:
1. USE AS MANY CULVERT PIPE(S) AS REQUIRED TO ENSURE NORMAL STREAM FLOW IS NOT OBSTRUCTED BY ROCK OR MAT BRIDGE.

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TYPICAL ROCK OR MAT BRIDGE WITH CULVERTS

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CHECKED BY: DAH	DATE: 08/05/14		
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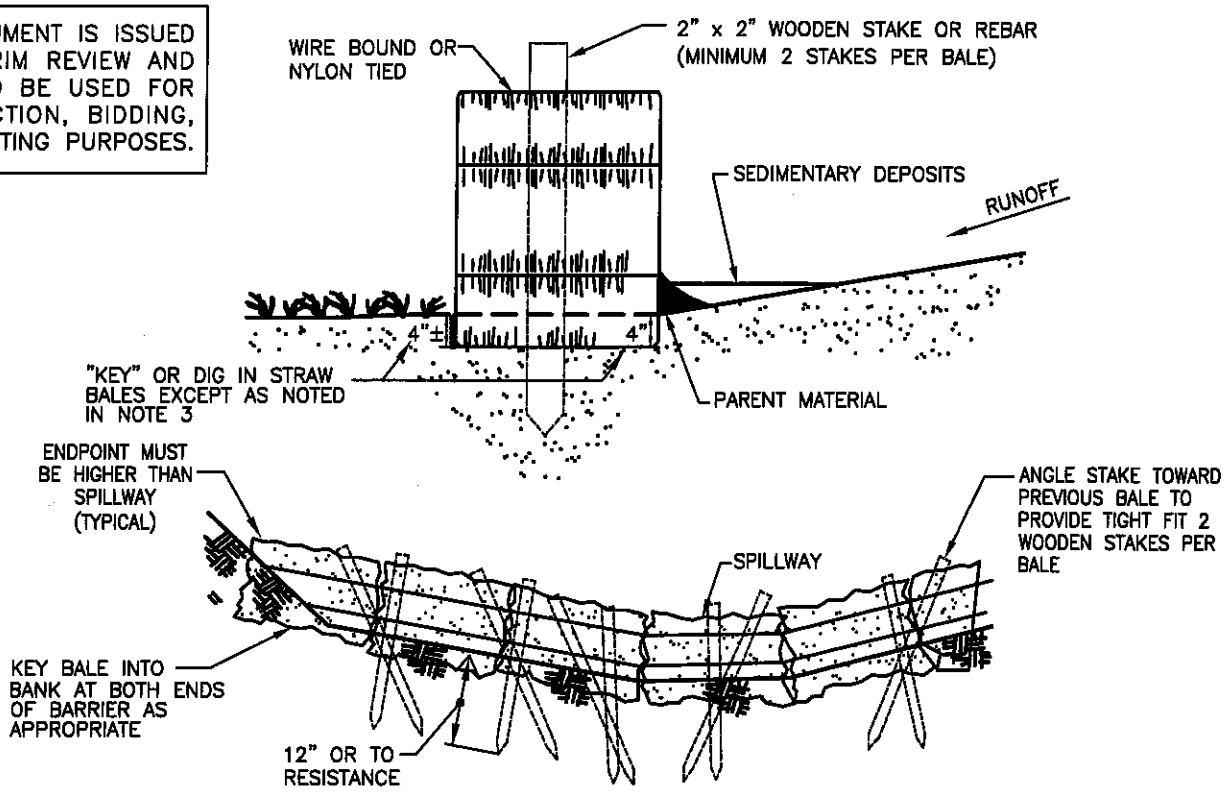

PROFILE

NOTES:

1. STRAW BALE SEDIMENT BARRIERS MAY BE INSTALLED AT THE FOLLOWING LOCATIONS:
   - THE BASE OF ALL SLOPES ABOVE ROADS, SPRINGS, WETLANDS, IMPOUNDMENTS AND STREAMS;
   - THE DOWNSLOPE RIGHT-OF-WAY EDGE WHERE ANY OF THE ABOVE-MENTIONED LOCATIONS ARE ADJACENT TO THE RIGHT-OF-WAY;
   - BETWEEN TOPSOIL/SPOIL STOCKPILES AND STREAMS OR WETLANDS AS NEEDED;
   - ALONG R.O.W. BOUNDARIES IN WETLAND CONSTRUCTION;
   - ACROSS CONSTRUCTION R.O.W. AT ALL WATERBODY CROSSINGS;
   - AS SPECIFIED IN THE SPILL PREVENTION, CONTAINMENT, AND COUNTERMEASURE PLAN;
   - AS DIRECTED BY THE INSPECTOR.
2. STRAW BALE SEDIMENT BARRIERS SHALL CONSIST OF A ROW OF STRAW BALES, PLACED ON THE FIBER-CUT EDGE (TIES NOT IN CONTACT WITH THE GROUND). BALES SHALL BE TIGHTLY ABUTTED TO ONE ANOTHER. THE BARRIER SHALL BE ONE BALE HIGH. ONLY CERTIFIED "NOXIOUS WEED-FREE" STRAW SHALL BE USED WHENEVER POSSIBLE.
3. ENTRENCH ("KEY") STRAW BALES INTO THE GROUND TO A DEPTH OF 4" EXCEPT IN FROZEN, SATURATED, OR EXTREMELY ROCKY SOILS. PLACE PARENT MATERIAL ON UPSTREAM SIDE OF STRAW BALES TO PREVENT UNDERMINING.
4. WALK ON STRAW BALES TO INSURE ADEQUATE BALE-TO-SOIL CONTACT.
5. ANCHOR STRAW BALES SECURELY IN PLACE WITH TWO WOODEN OR STEEL REBAR STAKES DRIVEN THROUGH THE TOPS OF THE BALES. THE STAKES SHALL PENETRATE THE GROUND A DISTANCE OF 12" UNLESS ROCK OR AN IMPERMEABLE LAYER IS ENCOUNTERED:
   - THE FIRST, CENTER AND END BALES OF THE BARRIER SHALL HAVE STAKES DRIVEN VERTICALLY THROUGH THE BALE;
   - BALES, OTHER THAN THOSE LOCATED AT THE ENDS OR CENTER OF THE BARRIER, SHALL HAVE THE FIRST STAKE DRIVEN THROUGH THE TOP OF THE BALE AT AN ANGLE SO THAT THE STAKE PASSES THROUGH THE PREVIOUSLY PLACED BALE, IN ORDER TO PROVIDE TIGHT CONTACT BETWEEN BALES. THE SECOND STAKE SHALL BE DRIVEN VERTICALLY THROUGH THE TOP OF THE BALE.

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EROSION CONTROL STRAW BALE SEDIMENT BARRIER

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CHECKED BY: DAH	DATE: 08/05/14	P12-3	A
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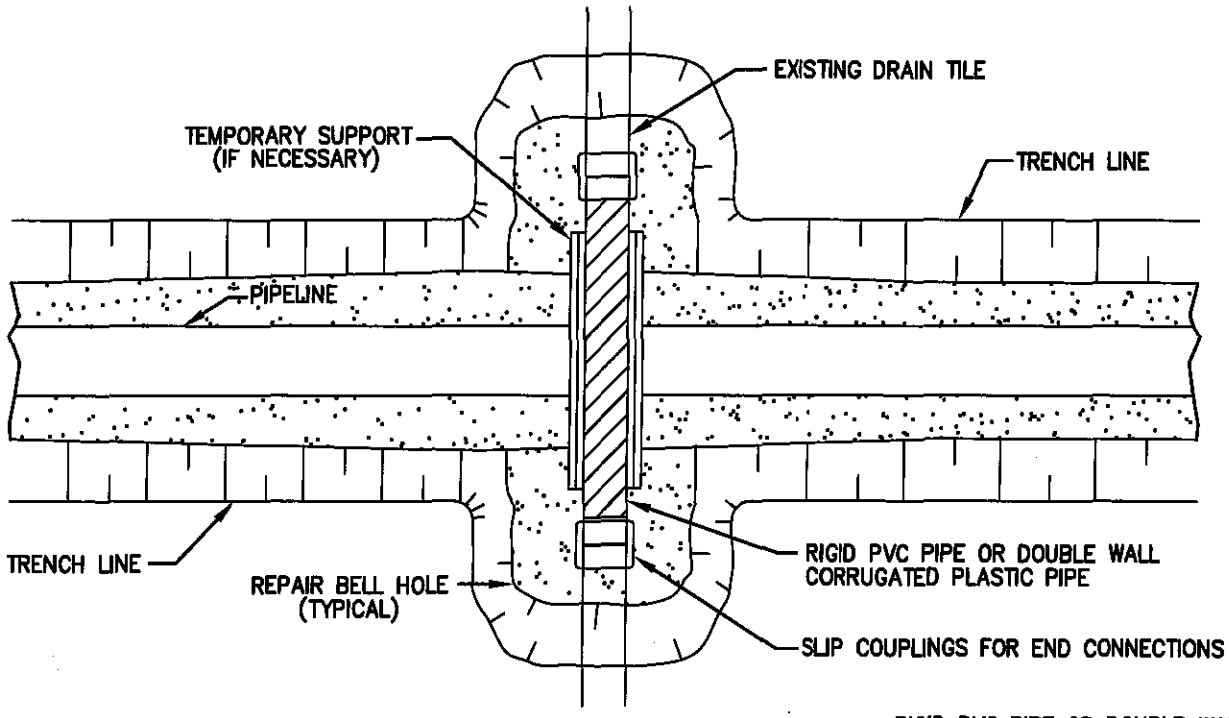
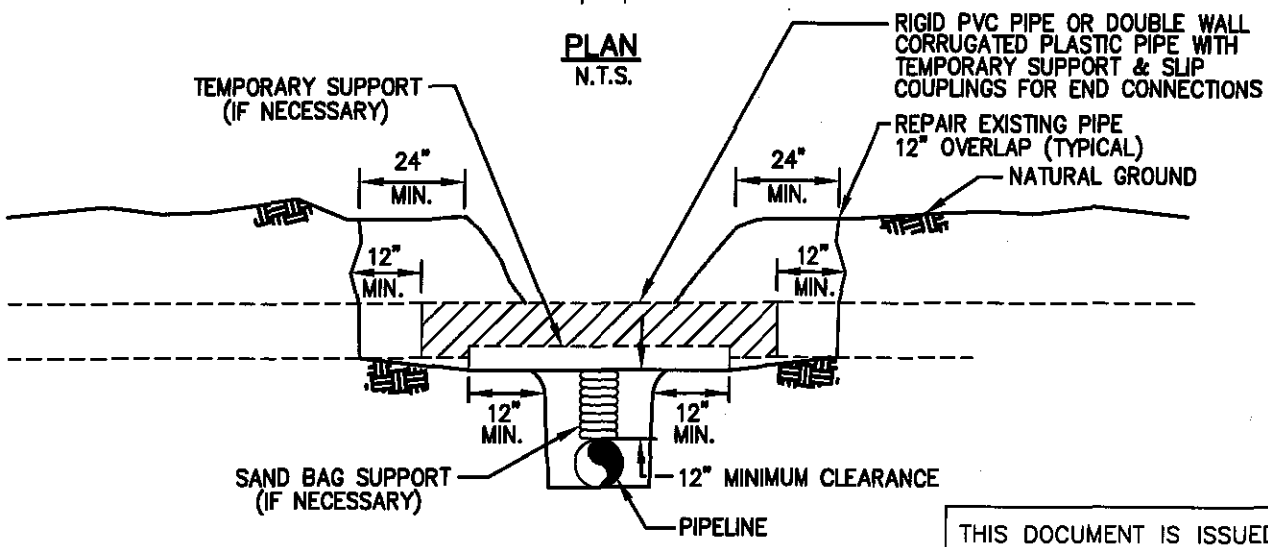


PLAN
N.T.S.



CROSS SECTION
N.T.S.

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NOTES:

1. IMMEDIATELY REPAIR TILE IF WATER IS FLOWING THROUGH TILE AT TIME OF TRENCHING.
2. SCREEN ALL EXPOSED ENDS OF TILE LINES.

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PROJECT NO. 10395700

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DRAINAGE AND IRRIGATION
TEMPORARY DRAIN TILE REPAIR (TDR)

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CHECKED BY: DAH	DATE: 08/05/14	P12-4	A
SCALE: N.T.S.	APP.:		

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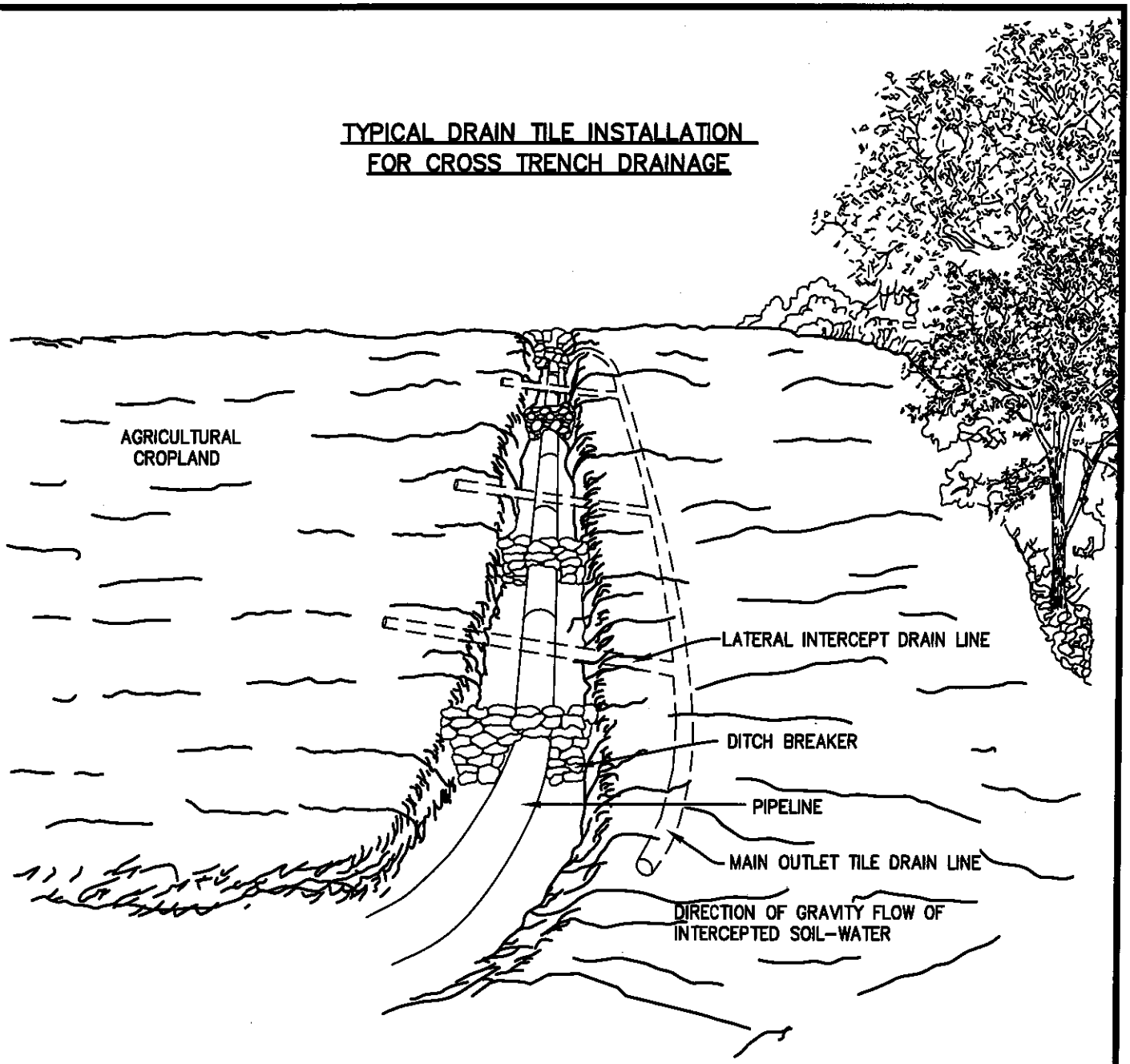
TYPICAL DRAIN TILE INSTALLATION FOR CROSS TRENCH DRAINAGE



NOTES:

1. CROSS TRENCH DRAINAGE MAY BE UTILIZED IN SLOPING AREAS OR IN AGRICULTURAL CROPLAND AREAS WHERE REQUIRED.
2. FINAL ALIGNMENT OF TILE LINES TO BE BASED ON OUTLETTING FOR GRAVITY FLOW.

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PROJECT NO. 10395700

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TYPICAL DRAIN TILE INSTALLATION FOR CROSS TRENCH DRAINAGE

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SCALE: N.T.S.	APP.:		

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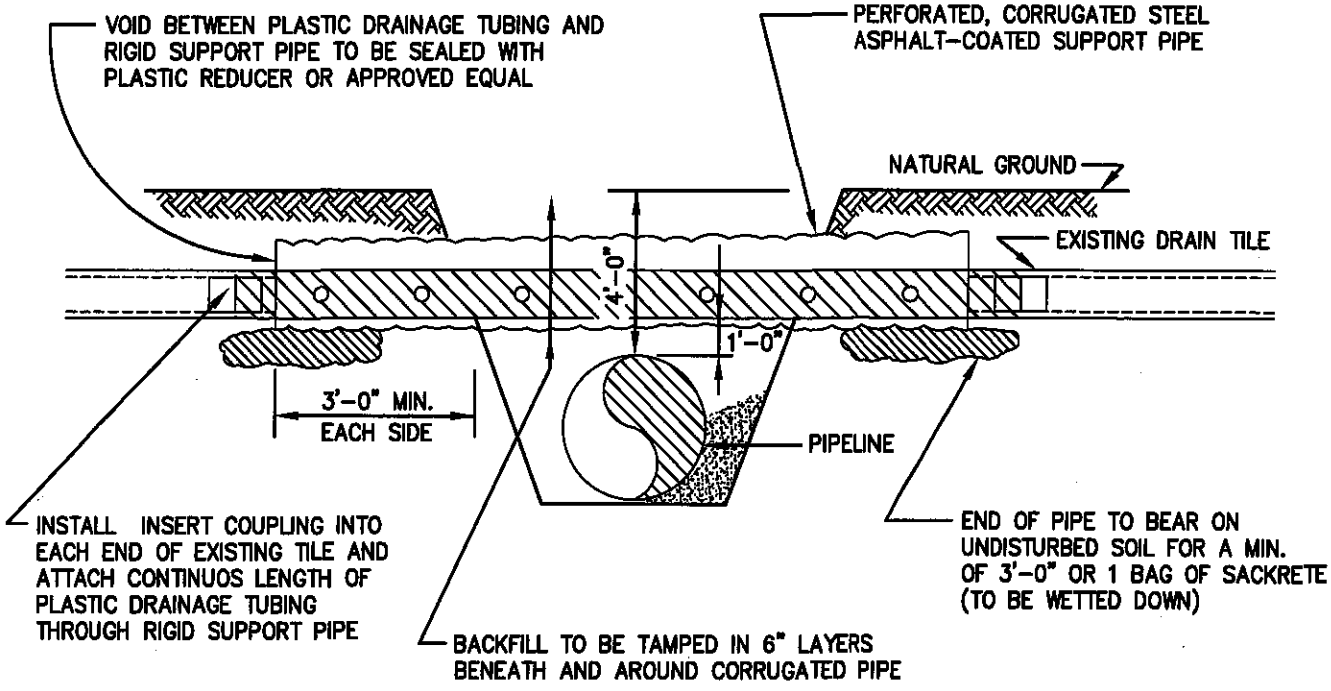
DRAIN TILE RESTORATION



TUBING SIZE	CORRUGATED PIPE SIZE
4"	6"
6"	8"
8"	10"
10"	12"
12"	16"
16"	20"

THIS DOCUMENT IS ISSUED FOR INTERIM REVIEW AND IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, OR PERMITTING PURPOSES.

NOTES:

1. ALL CORRUGATED PIPE TO BE OF 16 GAUGE GALVANIZED STEEL
2. PLASTIC DRAINAGE TUBING AND CORRUGATED PIPE TO BE INSTALLED SO THAT THE HOLES ARE CENTERED ON EACH SIDE OF THE BOTTOM OF PIPE
3. ALL MATERIAL TO BE CONTRACTOR SUPPLIED.

REV.	DATE	BY	DESCRIPTION	CHK.
A	08/14	DAH	ISSUED FOR REVIEW	

PROJECT NO. 10395700

DAPL/ETCOP

DRAIN TILE RESTORATION

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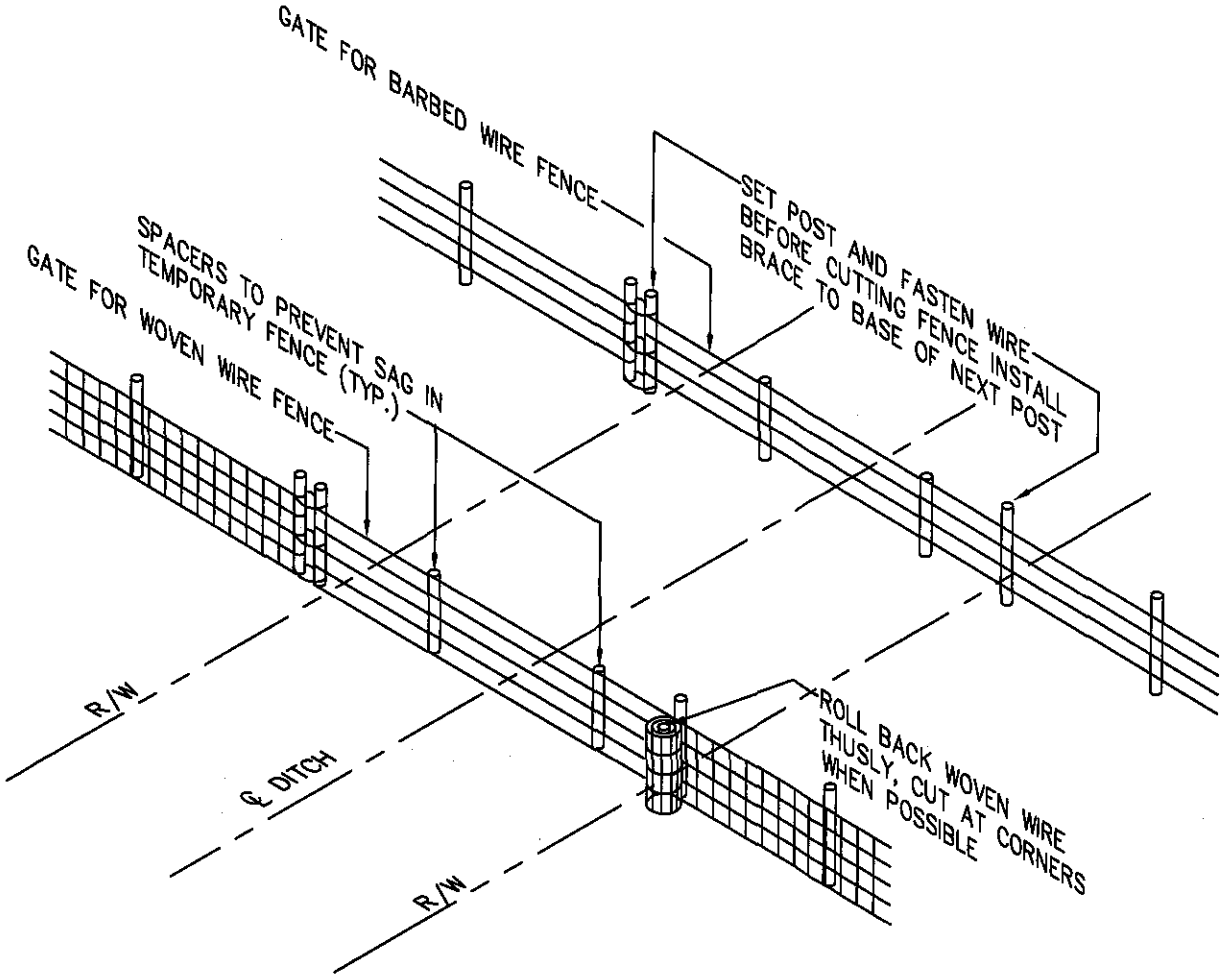

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A	08/14	DAH	ISSUED FOR REVIEW	

PROJECT NO. 10395700

DAPL/ETCOP

TEMPORARY FENCE DETAIL FOR WOVEN WIRE & BARBED WIRE FENCES

DRAWN BY: DAH	DATE: 08/07/14	DWG. NO.	REV.
CHECKED BY: DAH	DATE: 08/07/14	P12-7	A
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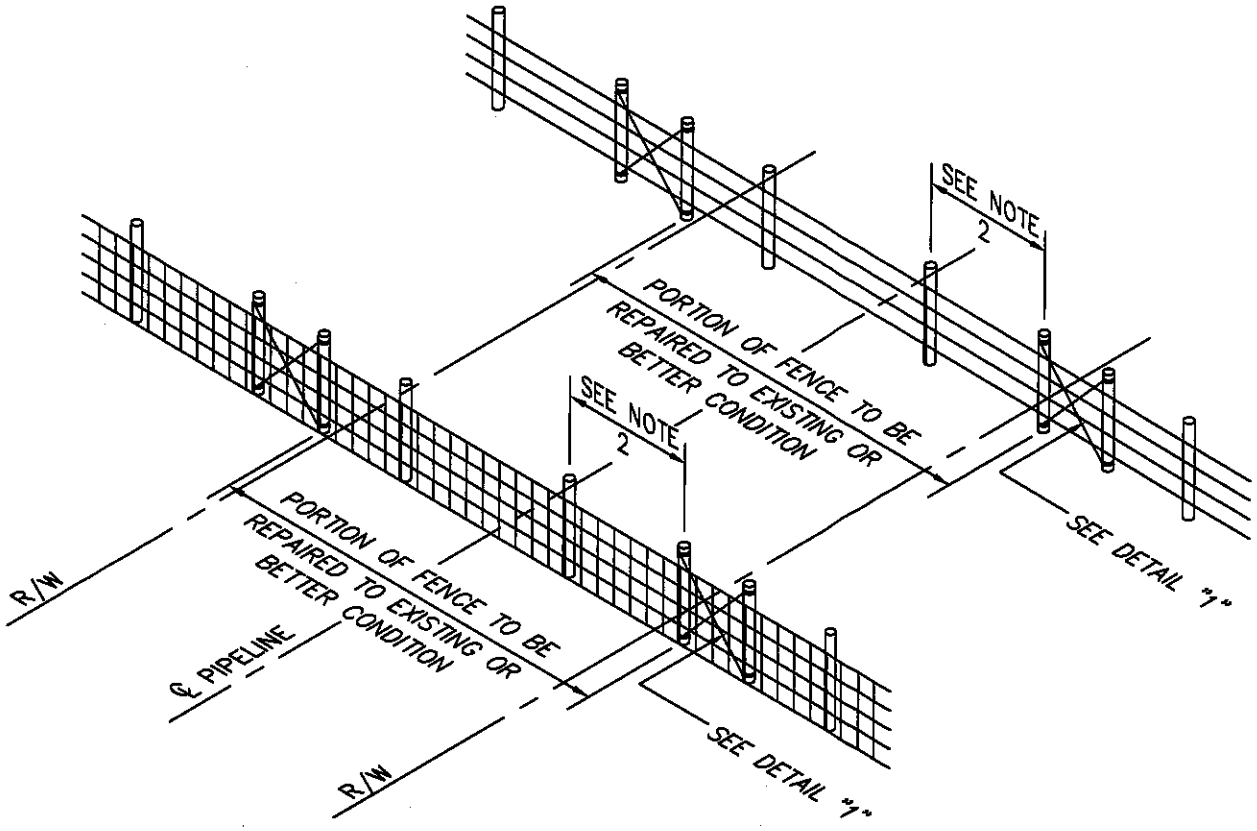

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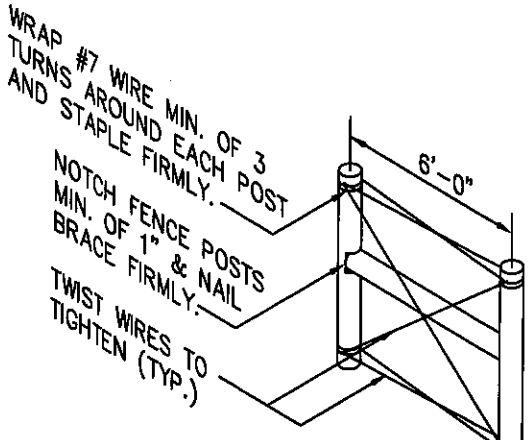
NOTES:

1. ALL NEW FENCE POSTS MUST EXTEND A MINIMUM OF 2' BELOW GRADE & HAVE A HEIGHT EQUAL TO EXISTING POSTS.
2. POST TO BE A MAXIMUM OF 10' CENTER TO CENTER.
3. POST AT EACH END OF REPAIRED SECTION TO BE H BRACED TO THE ADJOINING POSTS.
4. ALL FENCES SHALL BE REPAIRED WITH NEW WIRE OF LIKE MESH AS EXISTING FENCE , OR WIRE MATCHING EXISTING GAUGE AND SPECIFICATIONS & OF THE SAME NUMBER OF STRANDS & NUMBER OF WIRES EXISTING ON THE FENCE PRIOR TO CONSTRUCTION OF THE PIPELINE.
5. ALL POST ON PERMANENT RIGHT OF WAY TO BE PAINTED PER COMPANY PAINTING SPECIFICATIONS.



DETAIL "1"
N.T.S.

REV.	DATE	BY	DESCRIPTION	CHK.
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PROJECT NO. 10395700

DAPL/ETCOP

WOVEN WIRE & BARBED WIRE FENCE REPLACEMENT FENCE DETAIL

DRAWN BY: DAH	DATE: 08/07/14	DWG. NO.	REV.
CHECKED BY: DAH	DATE: 08/07/14	P12-8	A
SCALE: N.T.S.	APP.:		

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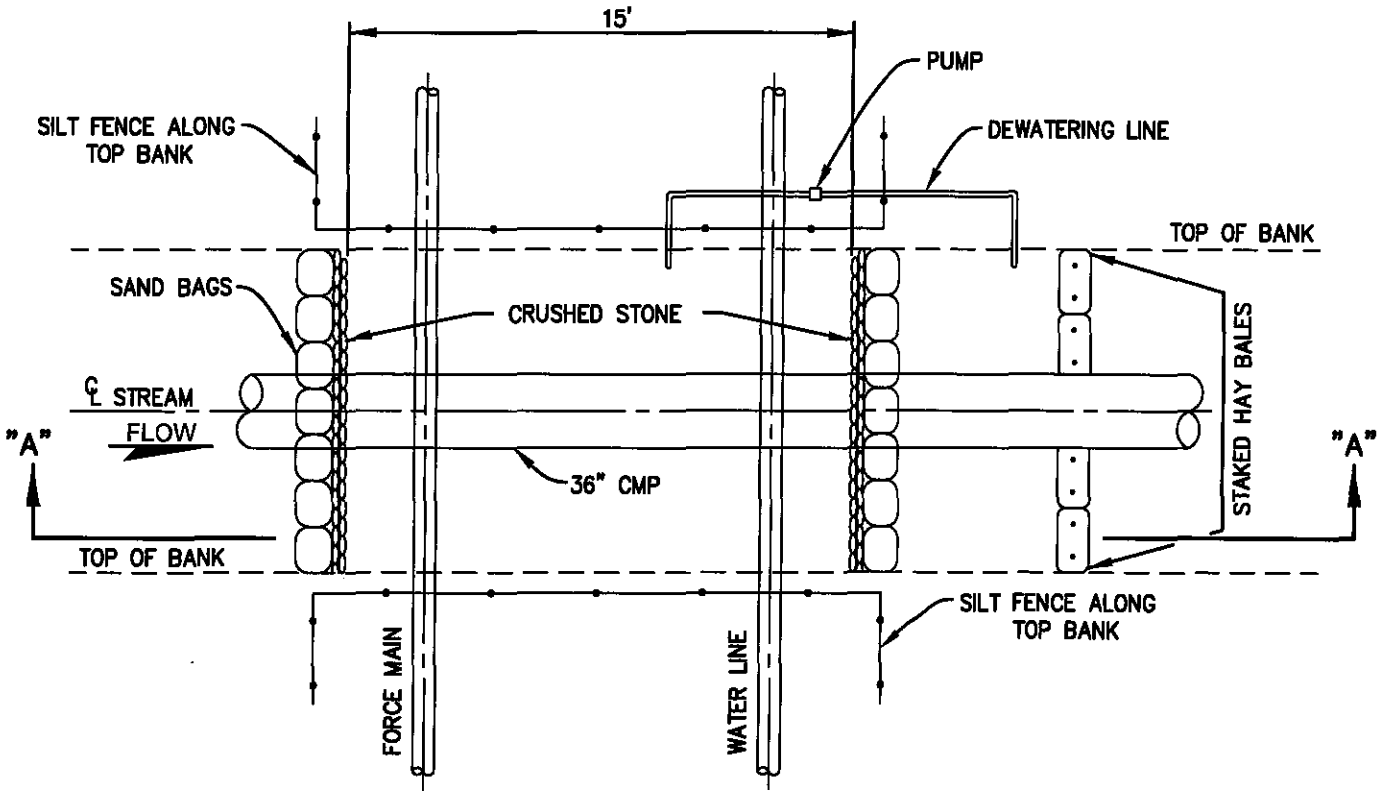
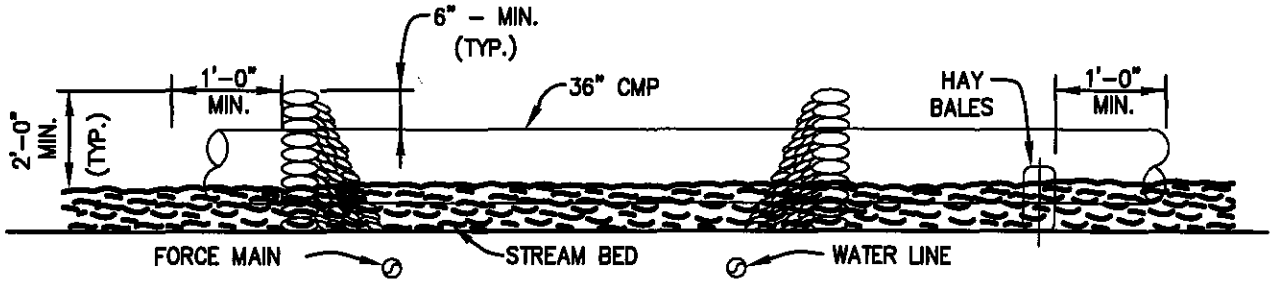


PLAN – TEMPORARY STREAM DIVERSION
N.T.S.



SECTION "A–A"
N.T.S.

NOTES:

1. CONTRACTOR SHALL MAINTAIN STREAM FLOW AT ALL TIMES.
2. ALL SANDBAGS, CRUSHED STONE AND FILL SHALL BE REMOVED AFTER INSTALLATION OF CROSSING AND STREAM BED AND BANKS SHALL BE RESTORED TO ORIGINAL SHAPE AND ELEVATION.
3. LIMIT OF DISTURBANCE TO BE 30' LONG x 15' WIDE (450 S.F. TOTAL).
4. STAGING AREAS: MATERIALS AND EQUIPMENT TO BE STAGED ALONG ABANDONED ROAD BED IN THE UPLANDS.
5. USE WET MEADOW SEED MIX AS SPECIFIED IN LANDSCAPING DETAILS TO RESEED ALL DISTURBED AREAS.

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DAPL/ETCOP

PROPOSED PIPELINE
TEMPORARY STREAM DIVERSION

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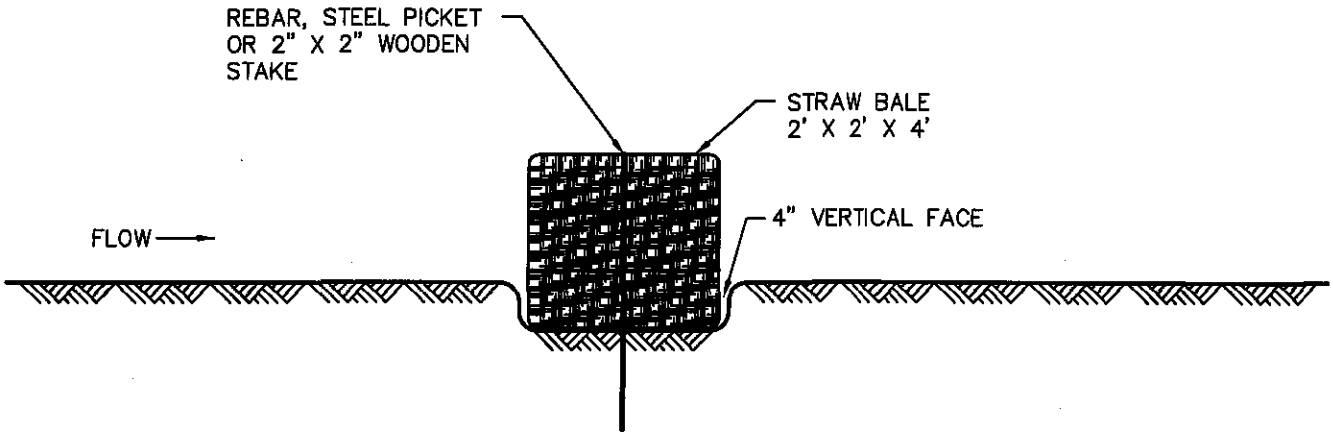
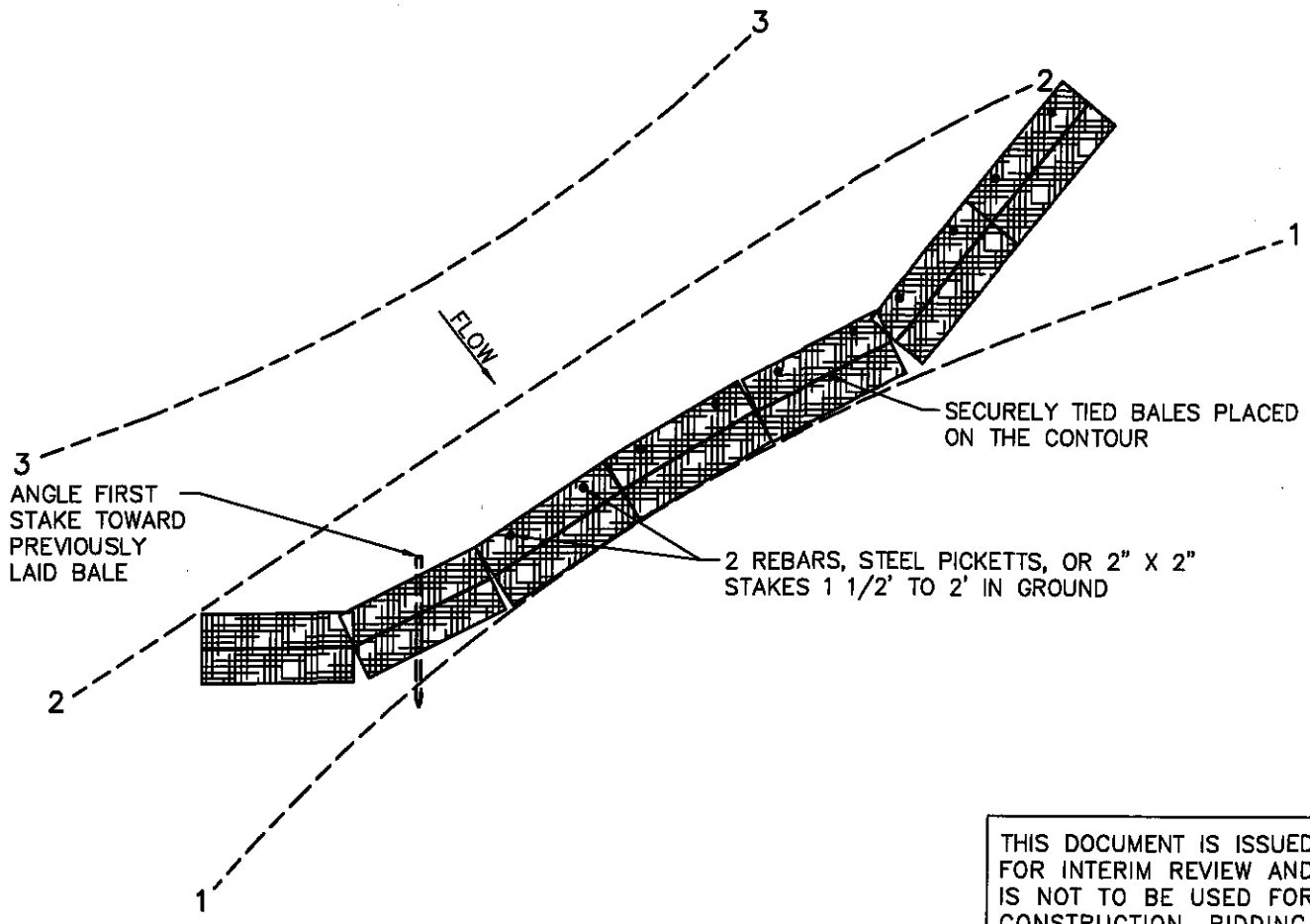


EMBEDDING DETAIL



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PROJECT NO. 10395700

DAPL/ETCOP

TYPICAL STRAW BALE FILTER

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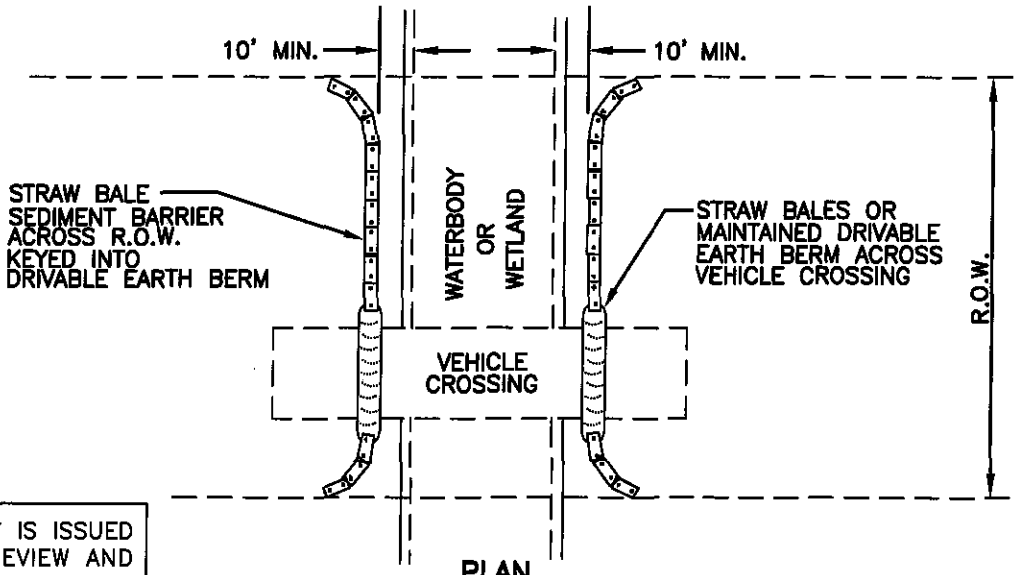
INSTALLATIONS AT VEHICLE CROSSINGS OF WATERBODIES AND WETLANDS



PLAN

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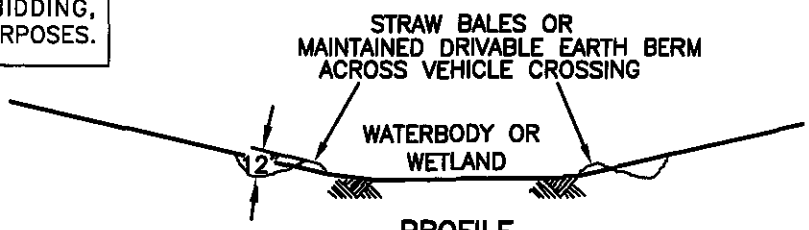

PROFILE

NOTES:

1. PLACE STRAW BALES SO THEY ARE EFFECTIVE BUT DO NOT HINDER CONSTRUCTION. IF NECESSARY, A 15' GAP IN STRAW BALE BARRIERS SHALL BE PROVIDED, AS NEEDED, TO ACCOMMODATE TRAFFIC ON TEMPORARY CONSTRUCTION ROADS. THE GAP SHALL BE CLOSED AT THE END OF EACH WORK DAY USING STRAW BALE BARRIERS, OR A DRIVABLE EARTH BERM TIED INTO ADJACENT STRAW BALES. THE BALES USED TO CLOSE THE GAP SHALL BE PLACED ON THE UPHILL SIDE OF THE STRAW BALE BARRIER, THE END BALES OF THE GAP SEGMENT SHALL OVERLAP A MINIMUM OF 12".
2. A MAINTAINED DRIVABLE EARTH BERM MAY BE INSTALLED ACROSS VEHICLE CROSSING IN LIEU OF STRAW BALES DURING ACTIVE CONSTRUCTION.
3. BERM MUST BE TIED INTO STRAW BALES.
4. BERM MUST BE MAINTAINED TO ENSURE SEDIMENT TRAPPING CAPACITY.
5. WHEN ACTIVE CONSTRUCTION IS COMPLETE, INSTALL STRAW BALES ACROSS ENTIRE R.O.W.
6. MONITOR FOR UNDERMINING OR FLOW-AROUND. INSPECT BALE POSITION TO ASSURE THAT THEY REMAIN CLOSE TOGETHER. MAINTAIN STRAW BALE BARRIERS BY REPLACING DAMAGED BALES AND REMOVING SEDIMENT LOAD. WHEN SEDIMENT LOAD IS GREATER THAN 40% BEHIND THE BARRIER, SEDIMENT SHALL BE REMOVED AND PLACED IN AN AREA WHERE IT SHALL NOT REENTER THE BARRIER OR A WATERWAY. IF SEDIMENT BEHIND STRAW BALE BARRIERS CANNOT BE REMOVED, A SECOND ROW OF BALES SHALL BE INSTALLED UPSLOPE OF THE BARRIER.
7. WHERE STRAW BALES AND SILT FENCE ARE INSTALLED AS A UNIT, THE STRAW BALES SHALL BE INSTALLED ON THE DOWN SLOPE SIDE OF THE SILT FENCE.
8. EROSION CONTROL STRUCTURES SHALL BE INSPECTED DAILY IN AREAS OF ACTIVE CONSTRUCTION. STRUCTURES SHALL BE INSPECTED WEEKLY AT INACTIVE CONSTRUCTION AREAS AND WITHIN 24 HOURS OF EACH RAINFALL EVENT WITH 0.5 INCH OR MORE. STRUCTURES SHALL BE REPAIRED AS NECESSARY.
9. STRAW BALE BARRIERS SHALL BE REMOVED ONLY AS DIRECTED BY THE PIPELINE INSPECTOR.

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PROJECT NO. 10395700

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EROSION CONTROL
STRAW BALE SEDIMENT BARRIER

DRAWN BY: DAH	DATE: 08/07/14	DWG. NO.	REV.
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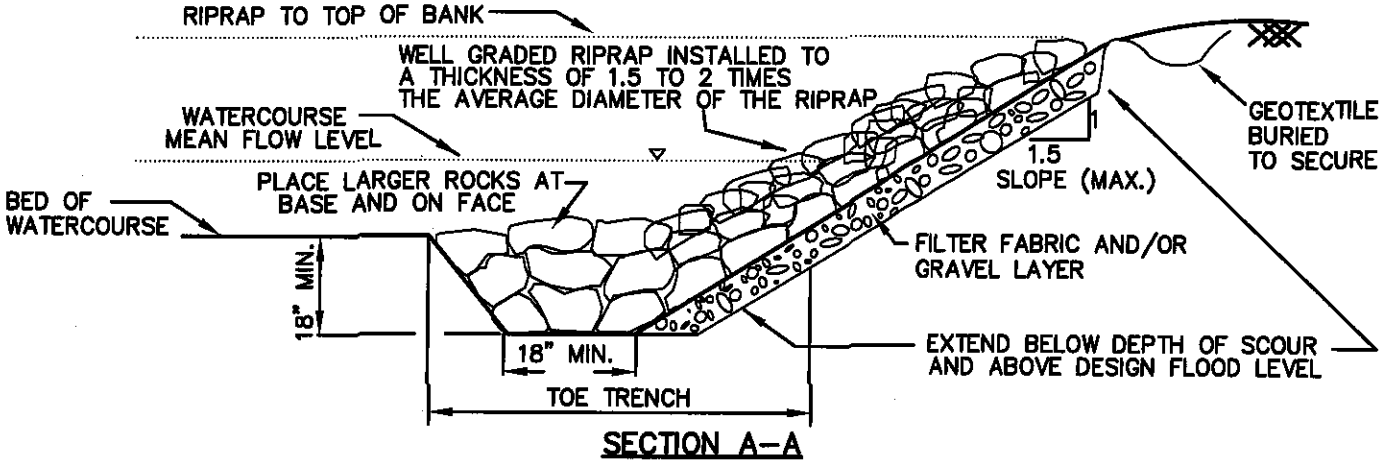
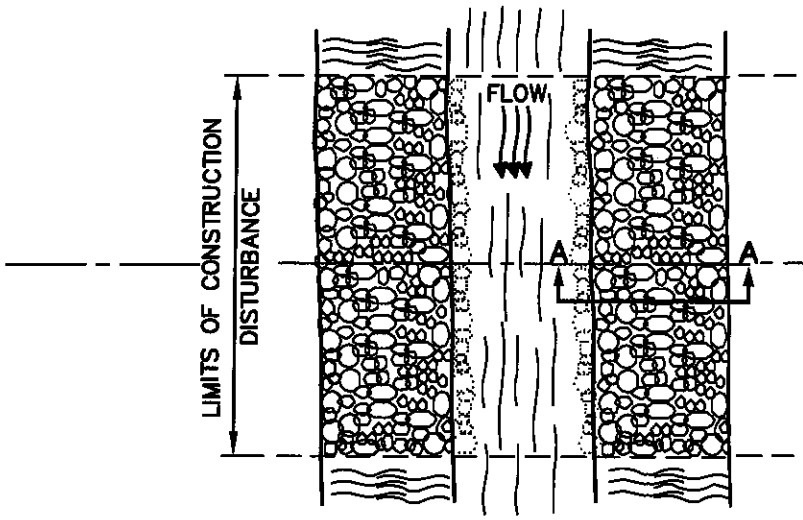


SECTION A–A



PLAN VIEW

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NOTES:

1. STREAM BANK RIPRAP STRUCTURES SHALL CONSIST OF A LAYER OF STONE UNDERLAIN WITH APPROVED GEOTEXTILE FILTER FABRIC OR A GRAVEL FILTER BLANKET DESIGNED TO PROTECT AND STABILIZE AREAS PRONE TO EROSION.
2. GRAVEL FILTER BLANKET SHALL MEET THE FOLLOWING SPECIFICATIONS:
   - HAVE A PERMEABILITY GREATER THAN THAT OF THE SUBGRADE SOIL;
   - IF A WELL-GRADED GRAVEL OR SAND-GRAVEL LAYER IS USED, THE LAYER SHALL BE A MINIMUM OF 6" THICK AND SPREAD IN A UNIFORM LAYER OVER THE SUBGRADE;
   - IF WATER TURBULENCE COULD RESULT IN EROSION OF BANK MATERIAL BETWEEN LARGE ROCKS (AS DETERMINED BY THE REPRESENTATIVE ENVIRONMENTAL INSPECTOR), A GEOTEXTILE FILTER FABRIC SHALL BE USED BETWEEN THE GRAVEL LAYER AND THE RIPRAP.
3. THE GEOTEXTILE FILTER FABRIC SHALL BE PERMATEX 4000 SERIES OR AN APPROVED EQUIVALENT MEETING THE FOLLOWING SPECIFICATIONS:
   (A) BE COMMERCIAL QUALITY NONWOVEN FABRIC DESIGNED FOR RIPRAP UNDERLAYMENT;
   (B) BE A MINIMUM OF 20 MILS IN THICKNESS;
   (C) HAVE A GRAB STRENGTH BETWEEN 90 TO 120 POUNDS;
   (D) HAVE A GREATER THAN 4% OPEN AREA (U.S. STANDARD SIEVE NUMBER 100 (0.15 MM.);
   (E) HAVE A DENSITY OF 8 oz. PER SQUARE YARD.
4. THE USE OF RIPRAP SHALL BE LIMITED TO AREAS WHERE FLOWING CONDITIONS PREVENT EFFECTIVE VEGETATIVE STABILIZATION TECHNIQUES.

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PROJECT NO. 10395700

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EROSION CONTROL
RIPRAP AT WATERBODY BANKS

DRAWN BY: DAH	DATE: 08/07/14	DWG. NO.	REV.
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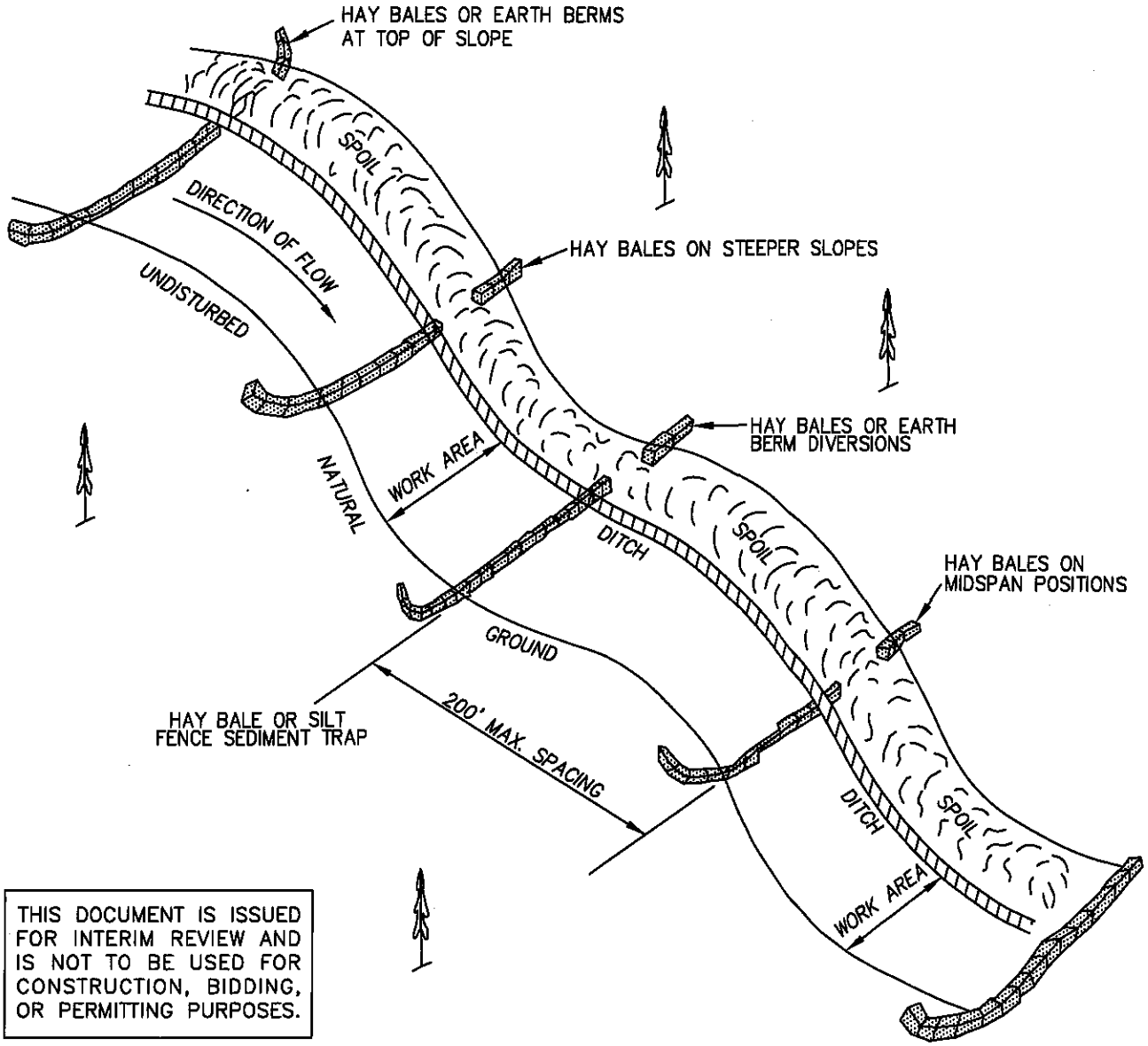

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TEMPORARY S&E CONTROL MEASURES SLOPE DIRECTION WITH SLOPE SLOPE PERCENT >15%

DRAWN BY: DAH	DATE: 08/05/14	DWG. NO. P12-13	REV. A
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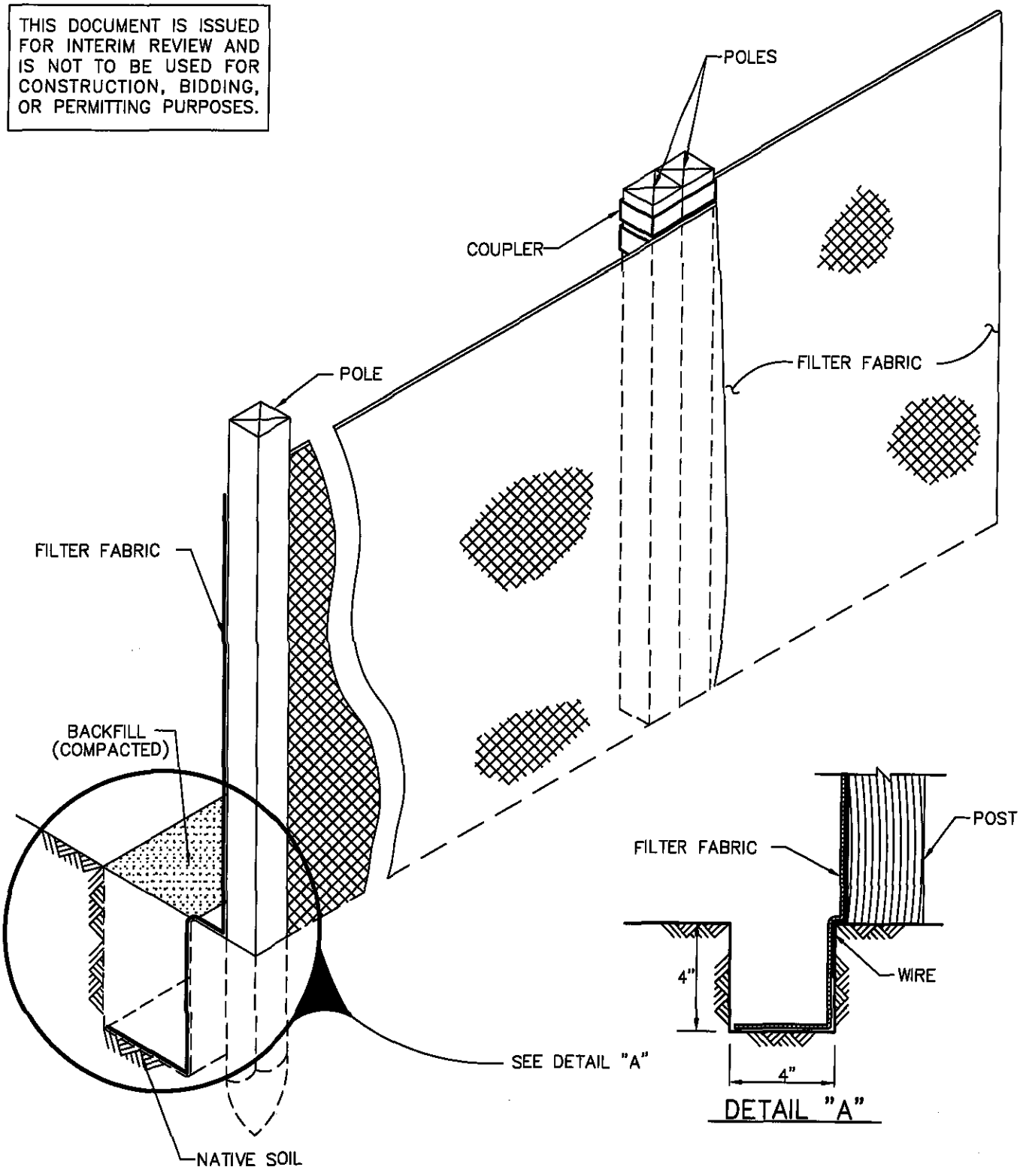

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DAPL/ETCOP

TYPICAL SILT FENCE

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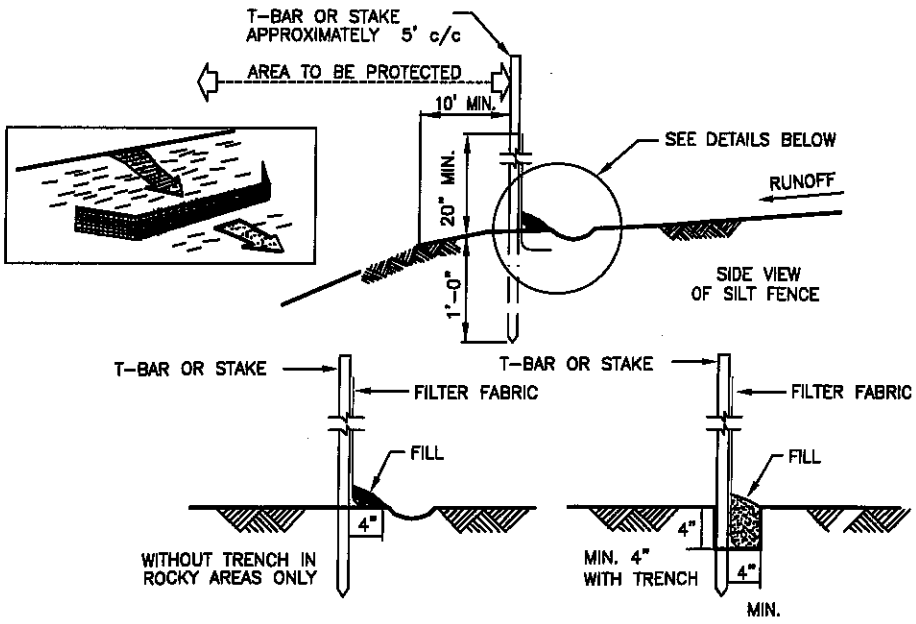

NOTE:

1. GENERALLY WHEN A LONG SEDIMENT BARRIER IS REQUIRED, SILT FENCE WILL BE UTILIZED RATHER THAN STRAW BALES AT:

- THE BASE OF ALL SLOPES ABOVE ROADS, SPRINGS, WETLANDS, IMPOUNDMENTS AND PERENNIAL AND INTERMITTENT STREAMS.
- THE DOWN SLOPE RIGHT-OF-WAY EDGE WHERE ANY OF THE ABOVE MENTIONED LOCATIONS ARE ADJACENT TO THE RIGHT-OF-WAY.
- BETWEEN TOPSOIL/SPOIL STOCKPILES AND PERENNIAL OR INTERMITTENT STREAMS OR WETLANDS WHERE BUFFER ZONE REQUIREMENTS CANNOT BE MET.
- ALONG R.O.W. BOUNDARIES OF WETLAND CONSTRUCTION.
- ACROSS CONSTRUCTION R.O.W. AT ALL WATERBODY CROSSINGS.
- AS SPECIFIED IN THE SPILL PREVENTION, CONTAINMENT, AND COUNTERMEASURE PLAN.
- AS DIRECTED BY THE INSPECTOR.

2. THE SILT FENCE SHALL BE CONSTRUCTED AS FOLLOWS:

- FABRIC USED FOR THE SILT FENCE SHALL BE A "STANDARD STRENGTH" GEOTEXTILE, SUCH AS MIRAFI 100X OR AN APPROVED EQUIVALENT.
- THE FABRIC SHALL BE CUT FROM A CONTINUOUS FABRIC ROLL.
- THE HEIGHT OF THE FENCE SHALL NOT EXCEED 36".
- SPLICES SHALL ONLY BE DONE AT POSTS AND SHALL CONSIST OF A MINIMUM OF 6" OF OVERLAP WITH BOTH ENDS SECURED TO THE POST.
- POSTS SHALL BE POSITIONED A MAXIMUM OF 5' APART.
- POSTS SHALL CONSIST OF 2"X2" WOODEN STAKES OF SUFFICIENT LENGTH TO EXTEND A MINIMUM OF 12" INTO THE GROUND.
- FABRIC SHALL BE STAPLED OR WIRED TO POSTS A MAXIMUM OF EVERY 9".

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3. THE SILT FENCE SHALL BE INSTALLED AS SPECIFIED BY THE MANUFACTURER OR AS FOLLOWS:

- A TRENCH, 4" WIDE AND 4" DEEP, SHALL BE EXCAVATED ALONG THE CONTOUR. THE POST SHALL BE DRIVEN INTO THE BOTTOM OF THE TRENCH ON THE DOWSTREAM SIDE OF THE FILTER FABRIC. THE TRENCH SHALL BE BACK FILLED AND COMPACTED, ENSURING 4" OF FENCE IS BURIED WITHIN THE TRENCH.
- IN AREAS WHERE THE TERRAIN IS TOO ROCKY FOR TRENCHING, A 4" GROUND FLAP WITH ROCK FILL TO HOLD IT IN PLACE SHALL BE USED.

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EROSION CONTROL SILT FENCE SEDIMENT BARRIER

DRAWN BY: DAH	DATE: 08/07/14	DWG. NO.	REV.
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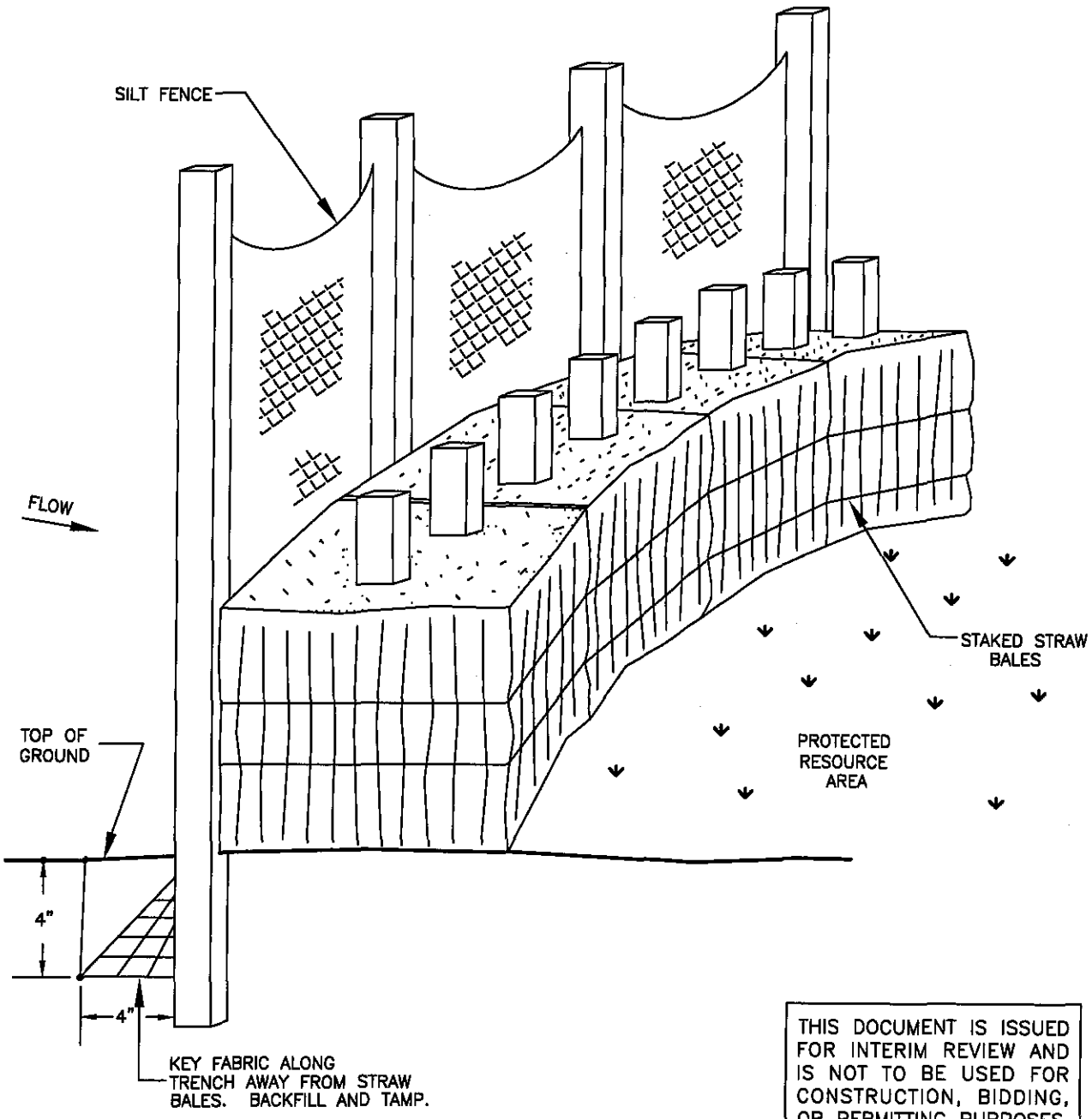

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NOTE:

1. WHERE EXTREMELY ERODIBLE SOIL CONDITIONS EXIST AND AT THE DIRECTION OF THE INSPECTOR, A COMBINED STRAW BALE AND SILT FENCE SEDIMENT CONTROL BARRIER SHALL BE INSTALLED.

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DAPL/ETCOP

EROSION CONTROL STRAW BALE AND SILT FENCE

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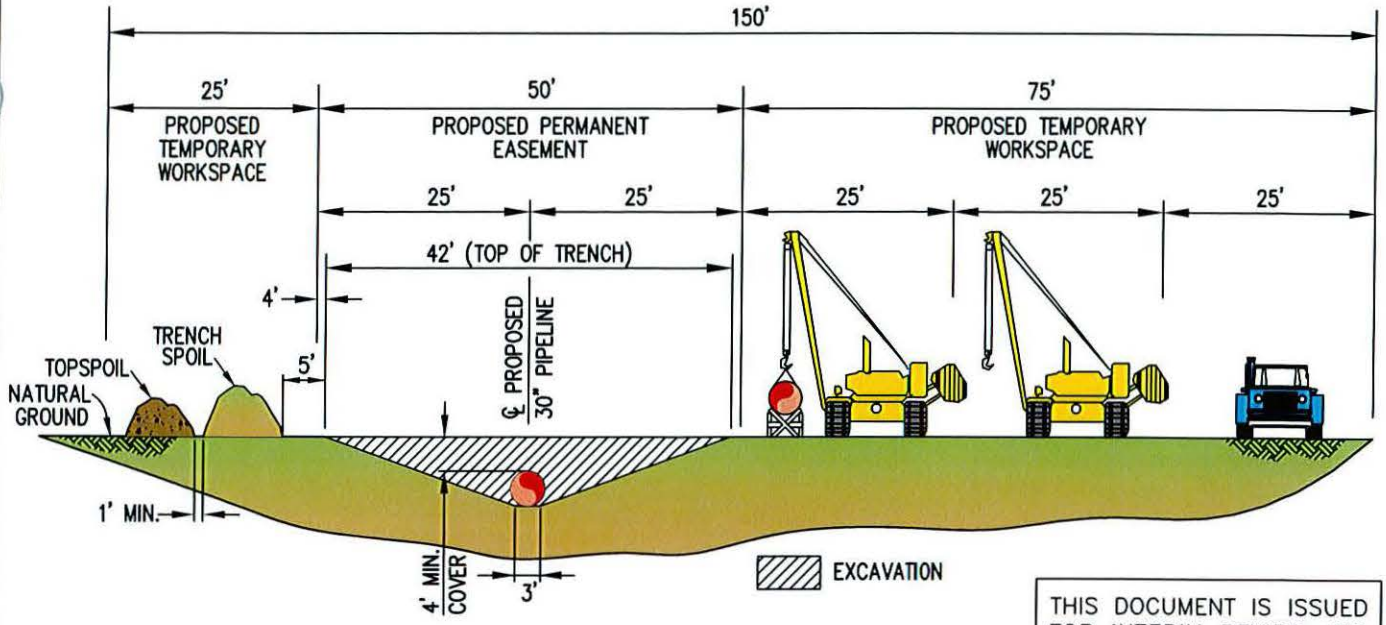

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NOTES:

1. CONSTRUCTION RIGHT-OF-WAY WILL TYPICALLY BE 150 FEET WIDE CONSISTING OF 50 FEET PERMANENT EASEMENT AND UP TO 100 FEET OF TEMPORARY WORKSPACE. EXTRA TEMPORARY WORK SPACE WILL BE NECESSARY AT MAJOR ROAD, RAIL AND RIVER CROSSINGS AND OTHER SPECIAL CIRCUMSTANCES, AS REQUIRED. CERTAIN SITUATIONS MAY REQUIRE A NARROWER WIDTH.
2. UTILIZE THE "TRENCH ONLY" TOPSOIL SALVAGE METHOD AT LOCATIONS SUCH AS RIPARIAN AREAS OR UNMANAGED WOODLAND, WHERE IDENTIFIED ON THE CONSTRUCTION DRAWINGS, OR AS DIRECTED BY THE PIPELINE INSPECTOR.
3. THE TRENCH ONLY METHOD IS NOT TO BE USED ON AGRICULTURAL LAND EXCEPT AS DIRECTED BY THE INSPECTOR (PER LANDOWNER REQUEST).
4. FOR TRENCH ONLY STRIPPING, THE STRIPPED AREA SHALL BE WIDE ENOUGH TO ACCOMMODATE TRENCHING EQUIPMENT.
5. DEPTH OF TOPSOIL STRIPPING IS A MINIMUM OF 12 INCHES.
6. STOCKPILE TOPSOIL AS SHOWN OR IN ANY CONFIGURATION APPROVED BY THE PIPELINE INSPECTOR. KEEP TOPSOIL AND SPOIL PILES CLEAN OF ALL CONSTRUCTION DEBRIS. MAINTAIN A MINIMUM 12 INCHES OF SEPERATION BETWEEN TOPSOIL AND TRENCH SPOIL PILES.
7. LEAVE GAPS IN TOPSOIL AND SPOIL PILES AT OBVIOUS DRAINAGES. DO NOT PUSH UPLAND SOILS INTO CREEKS OR WETLANDS. DO NOT USE TOPSOIL FOR PADDING.
8. AVOID SCALPING VEGETATED GROUND SURFACE WHEN BACKFILLING SPOIL AND TOPSOIL PILES.
9. SAME LAYOUT APPLIES WHERE CONSTRUCTION R.O.W. DOES NOT ABUT EXISTING R.O.W.
10. TEMPORARILY SUSPEND TOPSOIL HANDLING OPERATIONS DURING INORDINATELY WINDY CONDITIONS UNTIL MITIGATIVE MEASURES TO MINIMIZE WIND EROSION CAN BE IMPLEMENTED.
11. TOPSOIL AND TRENCH SPOIL RELATIVE POSITIONS CAN, AS DIRECTED BY THE PIPELINE INSPECTOR, BE REVERSED.

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A	8/08/14	DAH	ISSUED FOR REVIEW	

PROJECT NO. 10395700

DAPL/ETCOP

CONSTRUCTION RIGHT-OF-WAY ARRANGEMENT

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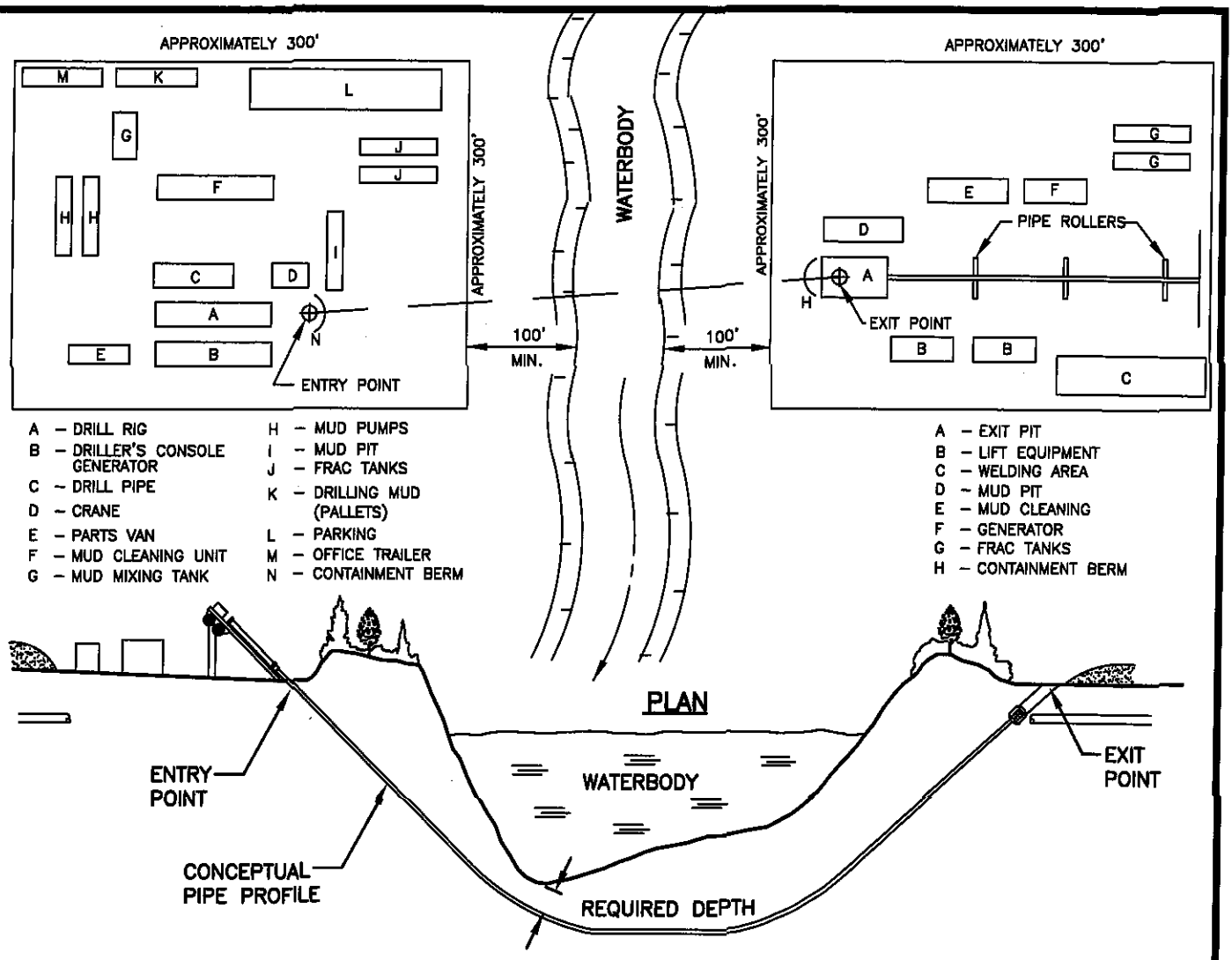

PROFILE

NOTES:

1. SET UP DRILLING EQUIPMENT A MINIMUM OF 300 FEET FROM THE EDGE OF THE WATERCOURSE. DO NOT CLEAR OR GRADE WITHIN THE 100 FOOT ZONE.
2. ENSURE THAT ONLY BENTONITE BASED DRILLING MUD IS USED. DO NOT ALLOW THE USE OF ANY ADDITIVES TO THE DRILLING MUD WITHOUT THE APPROVAL OF THE APPROPRIATE REGULATORY AUTHORITIES AND CLIENTS REPRESENTATIVE.
3. INSTALL SUITABLE DRILLING MUD TANKS OR SUMPS TO PREVENT CONTAMINATION OF WATERCOURSE.
4. INSTALL BERMS DOWNSLOPE FROM THE DRILL ENTRY AND ANTICIPATED EXIT POINTS TO CONTAIN ANY RELEASE OF DRILLING MUD.
5. DISPOSE OF DRILLING MUD IN ACCORDANCE WITH THE APPROPRIATE REGULATORY AUTHORITY REQUIREMENTS.

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WATERBODY CROSSING
HORIZANTAL DIRECTIONAL DRILL

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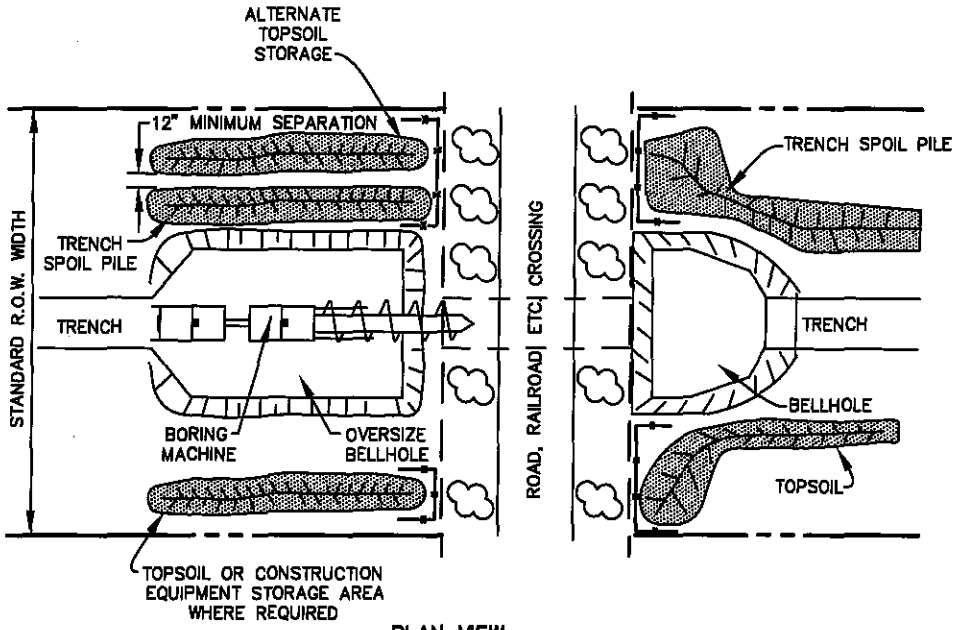

PLAN VIEW
N.T.S.

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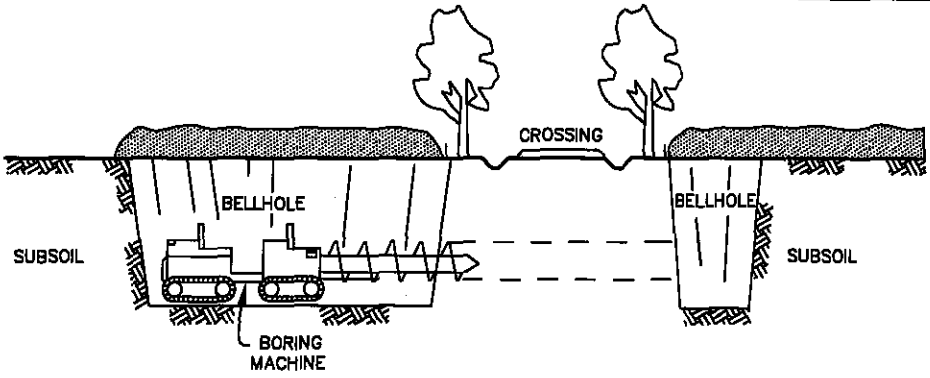


PROFILE
N.T.S.

NOTES:

1. STRIP TOPSOIL FROM BELLHOLE AREA IN UNMANAGED WOODLANDS. STRIP TOPSOIL FROM THE BELLHOLE AND SPOIL STORAGE AREA ON AGRICULTURAL LAND.
2. EXCAVATE BELLHOLE, STORING TRENCH SPOIL ON OPPOSITE SIDE OF RIGHT-OF-WAY FROM TOPSOIL, OR ADJACENT TO TOPSOIL MAINTAINING A 12" MINIMUM SEPARATION TO AVOID MIXING TOPSOIL AND TRENCH SPOIL.
3. AFTER COMPLETION OF PIPE TIE-INS, BACKFILL AND COMPACT. LEAVE A CROWN TO ALLOW FOR SUBSIDENCE.
4. INSTALL TEMPORARY EROSION CONTROL PROCEDURES AS SPECIFIED BY THE PIPELINE INSPECTOR.

REV.	DATE	BY	DESCRIPTION	CHK.
A	08/14	DAH	ISSUED FOR REVIEW	

PROJECT NO. 10395700

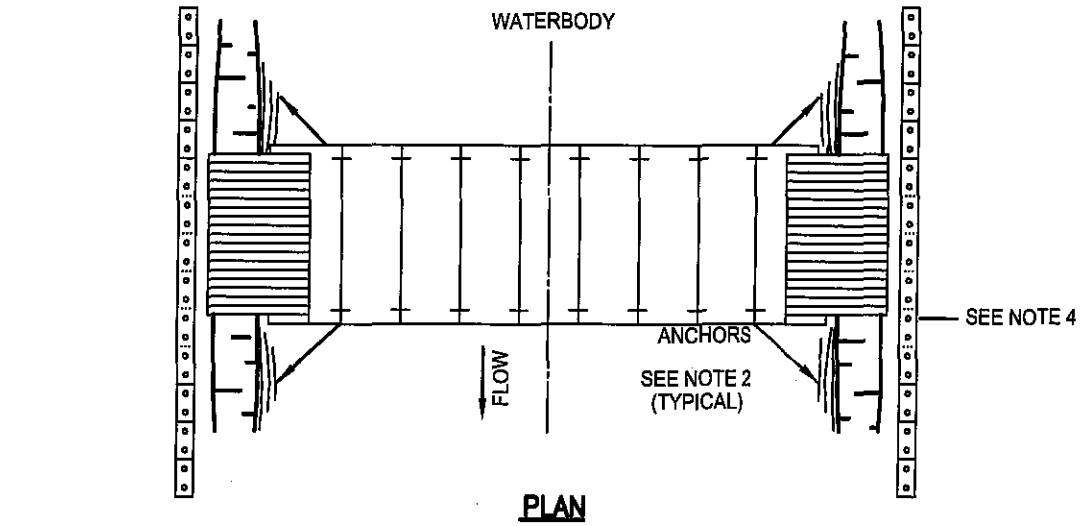
DAPL/ETCOP

TOPSOIL SALVAGE CROSSING BORE (CB)

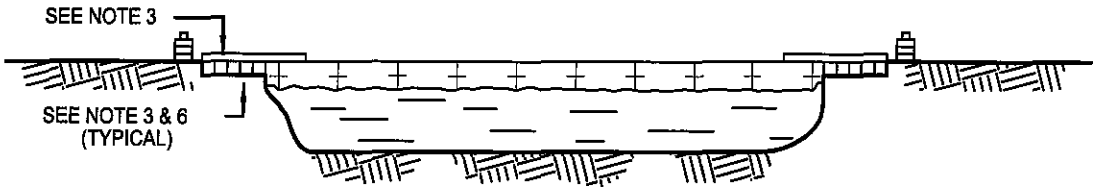
DRAWN BY: DAH	DATE: 08/07/14	DWG. NO. P12-19	REV. A
CHECKED BY: DAH	DATE: 08/07/14		
SCALE: N.T.S.	APP.:		

012604

FILE: R:\Pro 10395700\DISCIPLINE\CAD\DRAWINGS\99-TYPICAL\10395700-P12-19.dwg PLOT DATE: 2014 BY: ROBLEDO, RAMON



PLAN



PROFILE

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NOTES:

1. THIS TYPE OF BRIDGE IS GENERALLY USED ON WIDE, CROSSINGS.
2. BRIDGE SHALL BE ANCHORED AND/OR TIED OFF TO ANCHOR BLOCKS FOR STABILITY.
3. IF REQUIRED, UTILIZE APPROACH FILLS OF CLEAN ROCK MATERIAL, SWAMP MATS, SKIDS OR OTHER SUITABLE MATERIALS TO AVOID CUTTING THE BANKS WHEREVER FEASIBLE. ENSURE ADEQUATE FREEBOARD. ENSURE THAT FILL MATERIAL, IF USED, DOES NOT SPILL INTO WATERCOURSE.
4. CONSTRUCT SEDIMENT BARRIERS ACROSS THE ENTIRE CONSTRUCTION R.O.W. TO PREVENT SILT LADEN WATER AND SPOIL FORM FLOWING BACK INTO WATERBODY. BARRIERS MAY BE TEMPORARILY REMOVED TO ALLOW CONSTRUCTION ACTIVITIES BUT MUST BE REPLACED BY THE END OF EACH WORK DAY. SILT FENCE, STRAW BALES OR SANDBAGS MAY BE USED INTERCHANGEABLY.
5. REMOVE FLOATING BRIDGES AS SOON AS POSSIBLE AFTER PERMANENT SEEDING UNLESS OTHERWISE DIRECTED BY REPRESENTATIVE. THE STRUCTURE IS TO BE REMOVED IF THERE IS MORE THAN ONE MONTH BETWEEN FINAL GRADING AND SEEDING, AND ALTERNATIVE ACCESS TO THE CONSTRUCTION R.O.W. IS AVAILABLE.
6. DISPOSE OF A ROCK AS DIRECTED BY COMPANY REPRESENTATIVE.
7. RESTORE AND STABILIZE BED AND BANKS TO APPROXIMATE PRE-CONSTRUCTION CONDITIONS.

REV.	DATE	BY	DESCRIPTION	CHK.
A	08/14	DAH	ISSUED FOR REVIEW	

PROJECT NO. 10395700

DAPL/ETCOP

PROPOSED PIPELINE
WATERBODY BRIDGE FLEXI FLOAT TYPE (FF)

DRAWN BY: DAH	DATE: 08/07/14	DWG. NO. P12-20	REV. A
CHECKED BY: DAH	DATE: 08/07/14		
SCALE: N.T.S.	APP.:		

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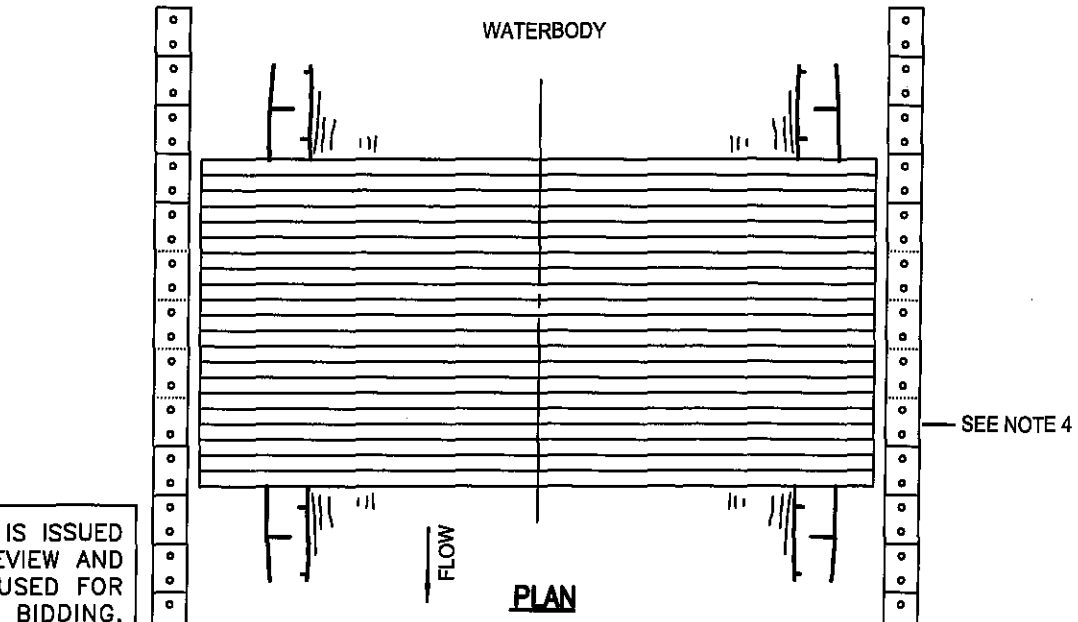
FILE: R:\Pro 03957\DISCIPLINE\CAD\DRAWINGS\99-TYPICAL\10395700-P12-20.dwg PLOT DATE: 2014 BY: ROBLEDO, RAMON



PLAN

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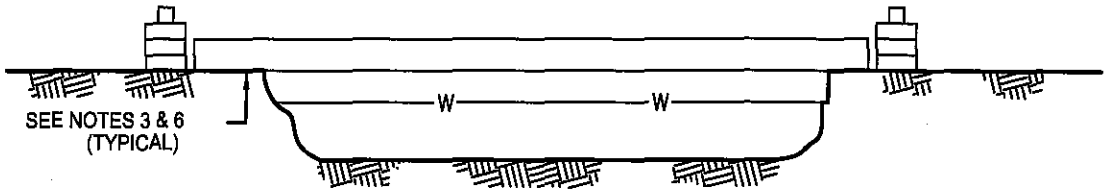


PROFILE

NOTES:

1. THIS TYPE OF BRIDGE IS GENERALLY USED ON NARROW CROSSINGS, LESS THAN 20 FEET WIDE WITH APPROPRIATE BANK CONFIGURATION. MULTIPLE MATS MAY BE LAYERED FOR HEAVIER EQUIPMENT CROSSINGS.
2. BRIDGE SHALL BE TEMPORARILY REMOVED IF HIGH WATER RENDERS IT UNSAFE TO USE.
3. IF REQUIRED, UTILIZE APPROACH FILLS OF CLEAN ROCK MATERIAL, SWAMP MATS, SKIDS OR OTHER SUITABLE MATERIALS TO AVOID CUTTING THE BANKS WHEREVER FEASIBLE. ENSURE ADEQUATE FREEBOARD. ENSURE THAT FILL MATERIAL, IF USED, DOES NOT SPILL INTO WATERCOURSE INCLUDING REMOVAL OF DIRT FROM DECK DURING OPERATION.
4. CONSTRUCT SEDIMENT BARRIERS ACROSS THE ENTIRE CONSTRUCTION R.O.W. TO PREVENT SILT LADEN WATER AND SPOIL FORM FLOWING BACK INTO WATERBODY. BARRIERS MAY BE TEMPORARILY REMOVED TO ALLOW CONSTRUCTION ACTIVITIES BUT MUST BE REPLACED BY THE END OF EACH WORK DAY. SILT FENCE, STRAW BALES OR SANDBAGS MAY BE USED INTERCHANGEABLY.
5. REMOVE TIMBER MATS AS SOON AS POSSIBLE AFTER PERMANENT SEEDING UNLESS OTHERWISE DIRECTED BY REPRESENTATIVE. THE STRUCTURE IS TO BE REMOVED IF THERE IS MORE THAN ONE MONTH BETWEEN FINAL GRADING AND SEEDING, AND ALTERNATIVE ACCESS TO THE CONSTRUCTION R.O.W. IS AVAILABLE.
6. DISPOSE OF A ROCK AS DIRECTED BY COMPANY REPRESENTATIVE.
7. RESTORE AND STABILIZE BED AND BANKS TO APPROXIMATE PRE-CONSTRUCTION CONDITIONS.

REV.	DATE	BY	DESCRIPTION	CHK.
A	08/14	DAH	ISSUED FOR REVIEW	

PROJECT NO. 10395700

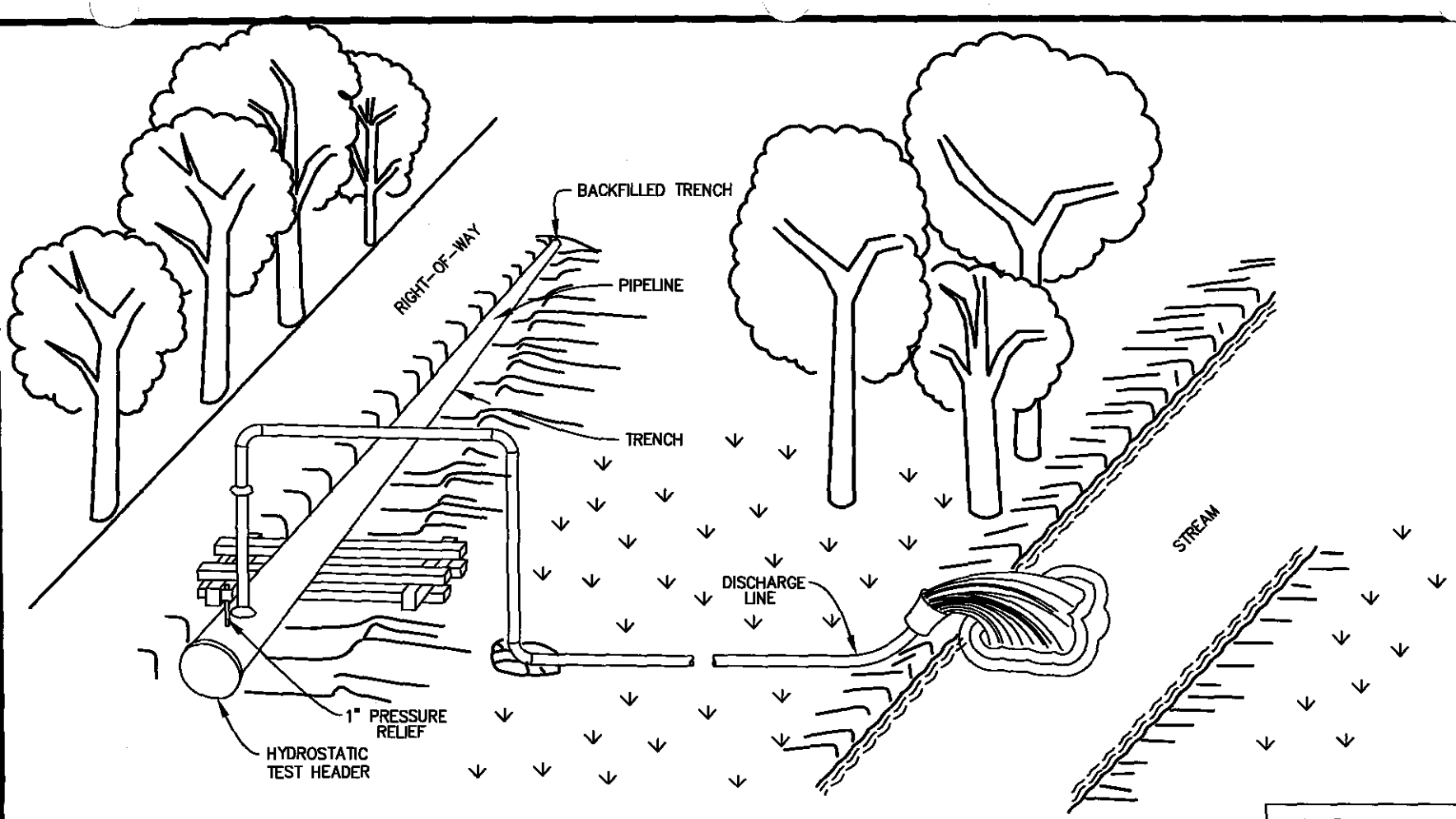
DAPL/ETCOP

PROPOSED PIPELINE
WATERBODY BRIDGE TIMBER MAT (TM)

DRAWN BY: DAH	DATE: 08/07/14	DWG. NO.	REV.
CHECKED BY: DAH	DATE: 08/07/14	P12-21	A
SCALE: N.T.S.	APP.:		

012606

FILE: R:\Pro 03957\DISCIPLINE\CAD\DRAWINGS\99-TYPICAL\10395700-P12-21.dwg PLOT DATE: 2014 BY: ROBLEDO, RAMON



TYPICAL HYDROSTATIC TEST DEWATERING INTO STREAM

N.T.S.

NOTES:

1. PRESSURE IS RELEASED INITIALLY THROUGH 1" PRESSURE RELIEF. WATER IS THEN RELEASED THROUGH DISCHARGE LINE TO COMPANY APPROVED METHOD OF DISSIPATION WATER.
2. COMPANY MAY ALSO APPROVE OTHER METHODS OF DISSIPATING WATER.
3. THIS METHOD MAY ALSO BE INITIATED WHEN PUMPING WATER FROM DITCH.

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PROJECT NO. 10395700

DAPL/ETCOP

TYPICAL HYDROSTATIC TEST DEWATERING INTO STREAM

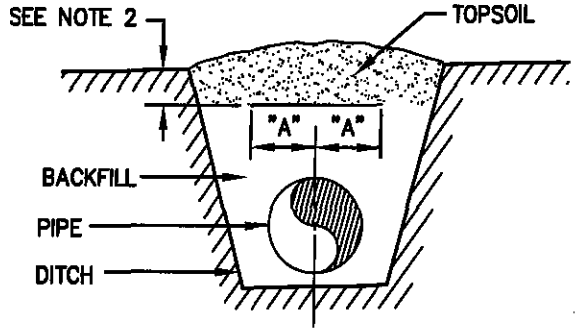
DRAWN BY: DAH	DATE: 08/07/14	DWG. NO. P12-22	REV. A
CHECKED BY: DAH	DATE: 08/07/14		
SCALE: N.T.S.	APP.:		

012607

FILE: R:\Projects\103957\DISCIPLINE\CAD\DRAWINGS\99-TYPICAL\10395700--P12-22.dwg PLOT DATE: 8/7/2014 BY: ROBLEDO, RAMON

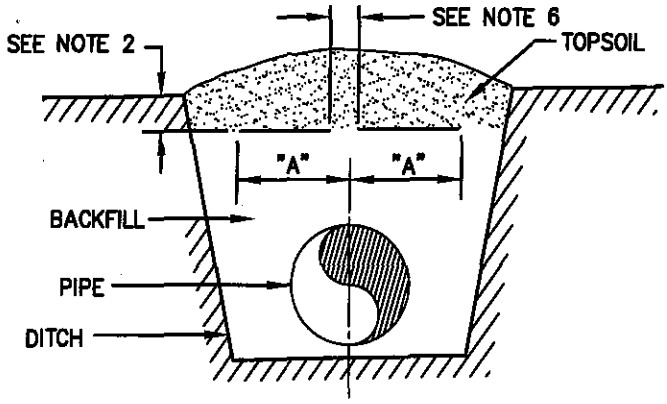
PIPELINE MARKING TAPE INSTALLATION

SINGLE R.O.W.



PIPE DIA.	TAPE WIDTH	"A"
6"	24"	12"
8"	24"	12"
10"	24"	12"
12"	24"	12"
14"	24"	12"
16"	24"	12"

DOUBLE R.O.W.



PIPE DIA.	TAPE WIDTH	"A"
20"	24"	25"
24"	24"	25"
30"	24"	25"
34"	24"	25"
36"	24"	25"
42"	24"	26"
48"	24"	36"

NOTES:

1. PIPELINE MARKING TAPE SHALL BE INSTALLED AT OPEN CUT ROAD AND IN-GROUND UTILITY CROSSINGS AND AT ALL CLASS 2, 3 & 4 LOCATIONS, OR AS DIRECTED BY COMPANY.
2. TAPE IS TO BE INSTALLED 1 FOOT (1') BELOW GRADE EXCEPT IN AGRICULTURAL AREAS, WHERE IT SHALL BE LAID 1'-8" BELOW GRADE. FOR CONVENIENCE, TAPE CAN BE INSTALLED LEVEL AT ROAD CROSSINGS, 1 FOOT (1') BELOW ROAD DITCHES.
3. TAPE IS TO BE INSTALLED ACROSS AND 15 FEET (15') UPSTREAM AND DOWNSTREAM OR ROAD OR UTILITY RIGHT'S-OF-WAY, INCLUDING EXPOSED PORTION OF BORED CROSSINGS.
4. TAPE IS TO BE INSTALLED 15 FEET (15') UPSTREAM AND DOWNSTREAM OF UTILITY CROSSING IF NO RIGHT-OF-WAY EXISTS.
5. TOP OF BACKFILL SHALL BE AS LEVEL AS POSSIBLE PRIOR TO INSTALLATION OF TAPE.
6. GAP BETWEEN ADJACENT TAPES SHALL BE 2".

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PROJECT NO. 10395700

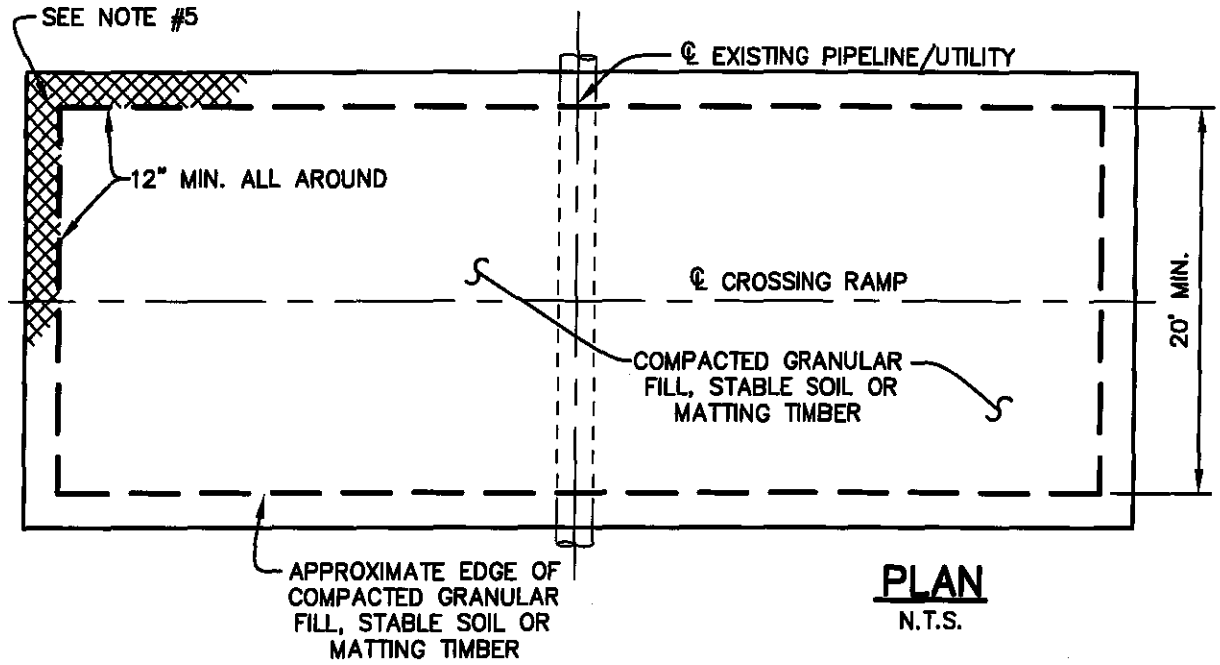
DAPL/ETCOP

PIPELINE MARKING TAPE INSTALLATION

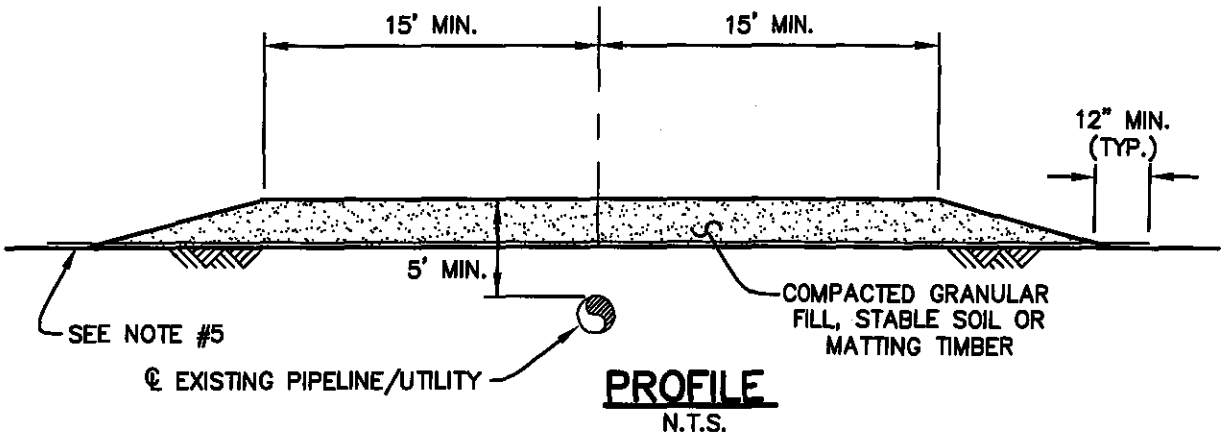
DRAWN BY: DAH	DATE: 08/07/14	DWG. NO.	REV.
CHECKED BY: DAH	DATE: 08/07/14	P12-23	A
SCALE: N.T.S.	APP.:		

012608

FILE: R:\Pro 03957\DISCIPLINE\CAD\DRAWINGS\99-TYPICAL\10395700-P12-23.dwg PLOT DATE: 2014 BY: ROBLEDO, RAMON



PLAN
N.T.S.



PROFILE
N.T.S.

NOTES:

1. CONTRACTOR TO NOTIFY EXISTING PIPELINE/UTILITY COMPANY PRIOR TO INSTALLATION OF CROSSING RAMP.
2. LENGTH OF RAMP TO VARY IN ACCORDANCE WITH CROSSING ANGLE. MINIMUM CROSSING ANGLE TO BE 45 DEGREES.
3. VEHICLES OR EQUIPMENT USING CROSSINGS SHALL PROCEED SLOWLY & WITH CAUTION TO MINIMIZE IMPACT LOADING & REDUCTION ON DEPTH OF COVER OVER PIPELINE/UTILITY.
4. ON COMPLETION OF CONSTRUCTION, CONTRACTOR TO REMOVE COMPLETE RAMP & RESTORE AREA TO THE SATISFACTION OF THE EXISTING PIPELINE/UTILITY COMPANY & THE CLIENT INSPECTOR.
5. GEOTEXTILE FABRIC (& GEOTEXTILE GRID WHERE REQUIRED) SHALL BE INSTALLED TO PROTECT NATIVE TOP SOIL AS DIRECTED BY THE CLIENT INSPECTOR WHEN IMPORTED GRANULAR FILL, NATIVE SUBSOIL FILL OR MATTING TIMBER MATERIAL IS UTILIZED. IMPORTED GRANULAR FILL MATERIAL OR NATIVE SUBSOIL FILL MATERIAL TO BE REMOVED & DISPOSED OF AS DIRECTED BY THE CLIENT INSPECTOR.

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PROJECT NO. 10395700

DAPL/ETCOP

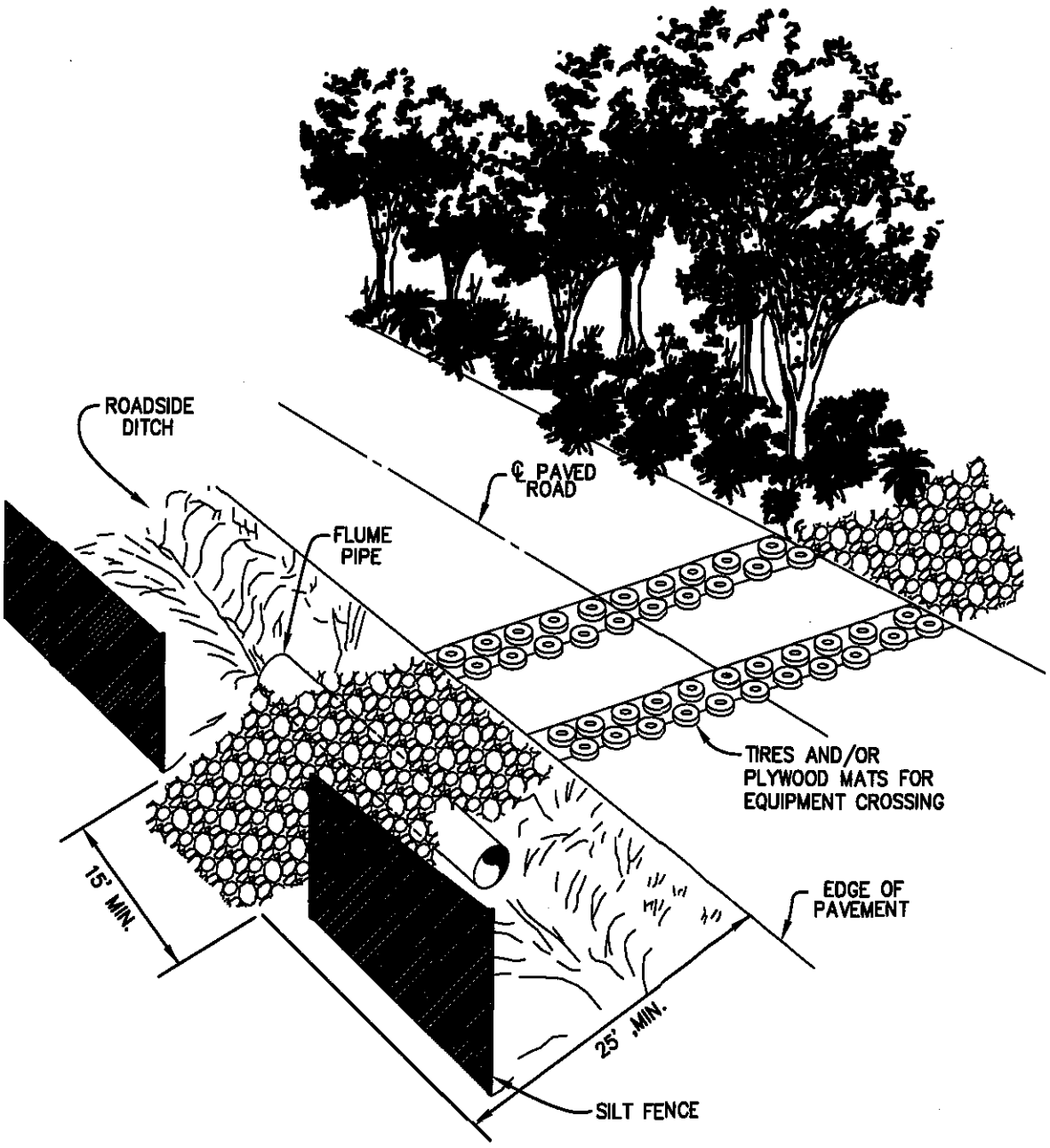
TYPICAL TEMPORARY CROSSING RAMP OVER EXISTING PIPELINE/UTILITY

DRAWN BY: DAH	DATE: 08/07/14	DWG. NO. P12-24	REV. A
CHECKED BY: DAH	DATE: 08/07/14		
SCALE: N.T.S.	APP.:		

012609

FILE: R:\Pro 03957\DISCIPLINE\CAD\DRAWINGS\99-TYPICAL\10395700-P12-24.dwg PLOT DATE: 2014 BY: ROBLEDO, RAMON

TYPICAL PAVED ROAD CROSSING CONTROL DETAILS



NOTES:

CRUSHED STONE RAMP (WITH FABRIC MAT IN AGRICULTURAL AREAS) TO CONSTRUCTED FOR ENTRANCE AND EXIT OF VEHICLES AND EQUIPMENT.

ALL VEHICLES SHALL TRAVEL ON ACCESS RAMP WHEN ENTERING OR EXITING THE RIGHT-OF-WAY.

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PROJECT NO. 10395700

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TYPICAL PAVED ROAD CROSSING CONTROL DETAILS

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CHECKED BY: DAH	DATE: 08/07/14		
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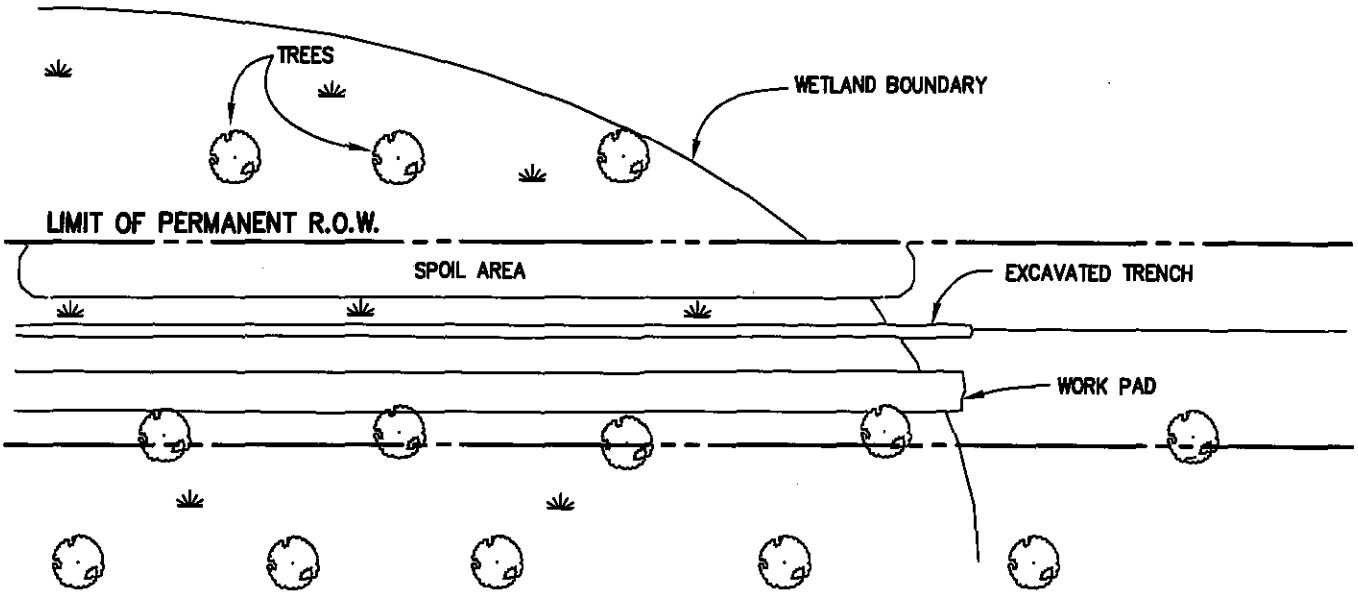

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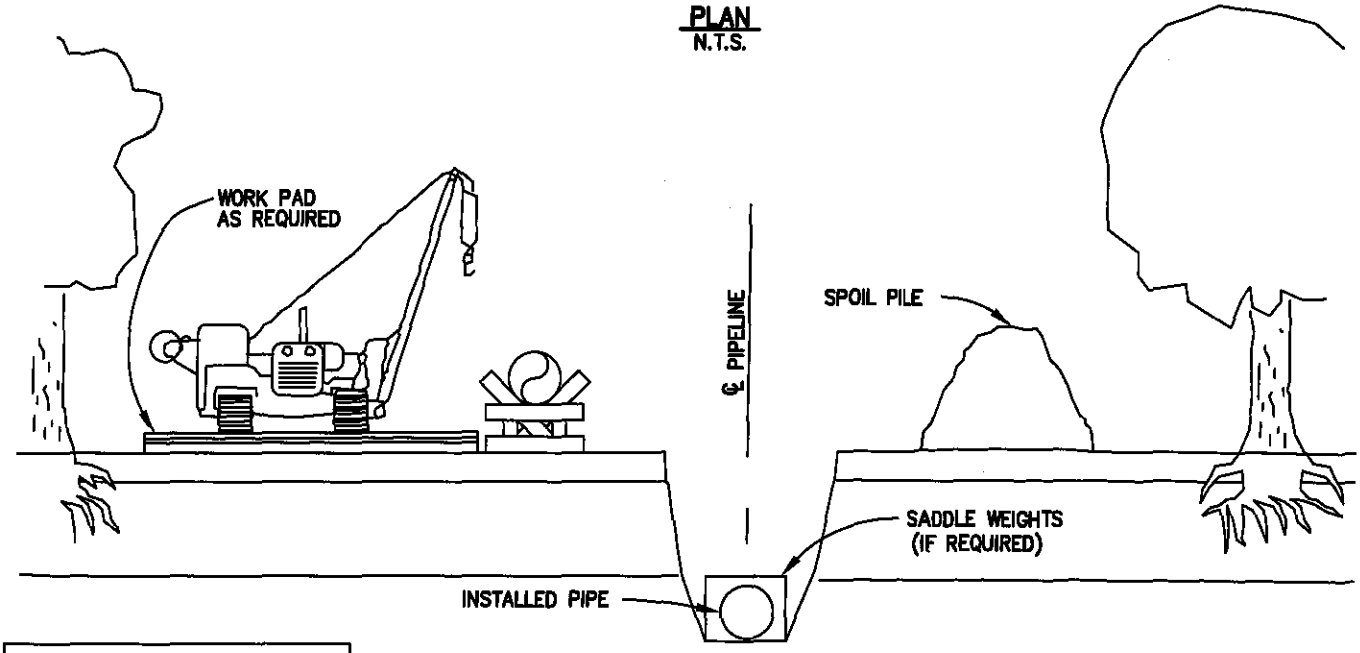

CROSS SECTION THROUGH RIGHT-OF-WAY

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NOTES

1. WORK PAD AND / OR EQUIPMENT MATS TO BE INSTALLED AS REQUIRED.
2. STUMPS TO BE REMOVED FROM WORKING RIGHT-OF-WAY.

REV.	DATE	BY	DESCRIPTION	CHK.
A	08/14	DAH	ISSUED FOR REVIEW	

PROJECT NO. 10395700

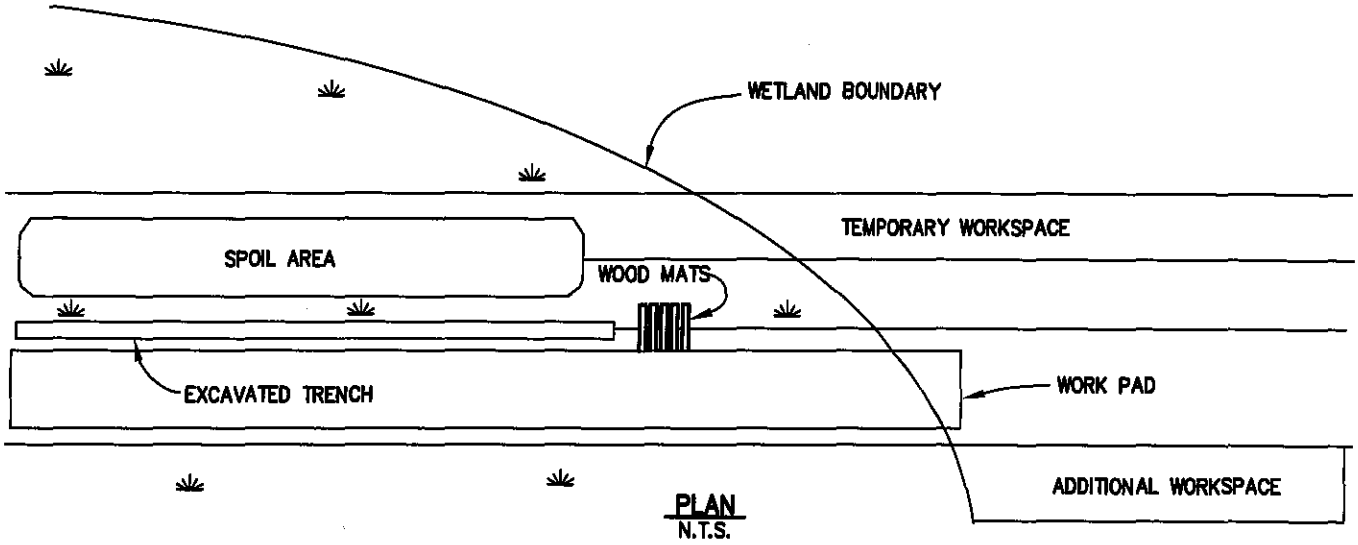
DAPL/ETCOP

FORESTED WETLAND

DRAWN BY: DAH	DATE: 08/07/14	DWG. NO. P12-26	REV. A
CHECKED BY: DAH	DATE: 08/07/14		
SCALE: N.T.S.	APP.:		

012611

FILE: R:\Pro 03957\DISCIPLINE\CAD\DRAWINGS\99-TYPICAL\10395700-P12-26.dwg PLOT DATE: 2014 BY: HERNANDEZ, DANIEL



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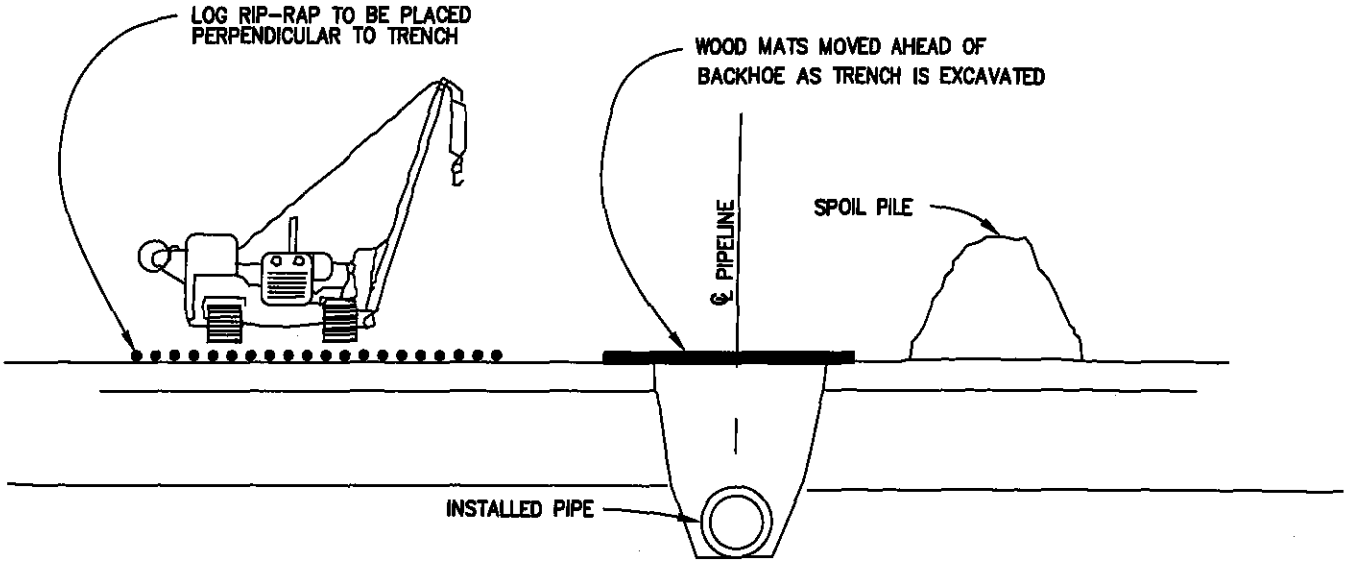

CROSS SECTION THROUGH RIGHT-OF-WAY

NOTES

1. WORK PAD OF RIP-RAP CONSTRUCTED FOR ACCESS OF TRACKED EQUIPMENT ONLY.
2. PIPE SECTION TO BE FABRICATED IN WORK AREA AND CARRIED INTO WETLAND.
3. ACCESS FOR VEHICLES AROUND WETLAND.
4. TRENCH TO BE EXCAVATED BY BACKHOE POSITIONED ON WOOD MATS.

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A	08/14	DAH	ISSUED FOR REVIEW	

PROJECT NO. 10395700

DAPL/ETCOP

SATURATED WETLAND

DRAWN BY: DAH	DATE: 08/07/14	DWG. NO. P12-27	REV. A
CHECKED BY: DAH	DATE: 08/07/14		
SCALE: N.T.S.	APP.:		

012612

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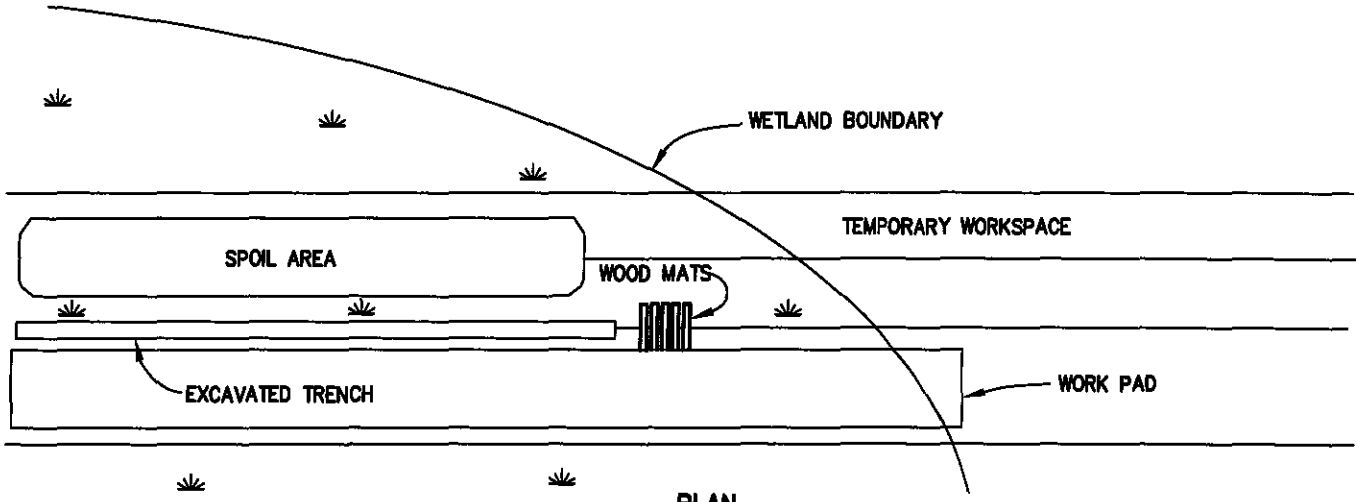

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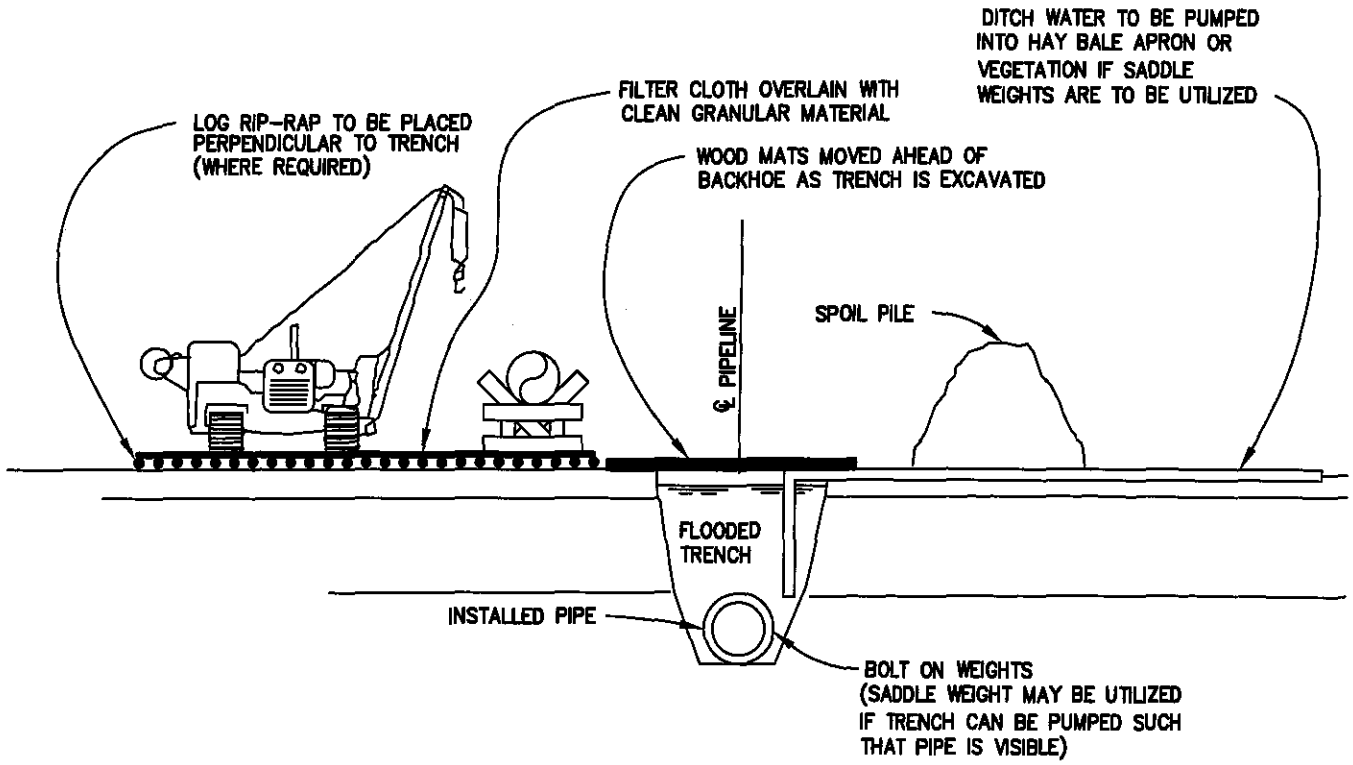

CROSS SECTION THROUGH RIGHT-OF-WAY

NOTES

1. WORK PAD OF LOG RIP-RAP AND / OR FILTER CLOTH WITH GRANULAR MATERIAL TO BE CONSTRUCTED FOR ACCESS FOR ALL EQUIPMENT.
2. TRENCH TO BE EXCAVATED BY BACKHOE POSITIONED ON WOOD MATS.
3. PIPE TO BE FABRICATED ON WORK PAD WITHIN WETLAND.

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A	08/14	DAH	ISSUED FOR REVIEW	

PROJECT NO. 10395700

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SATURATED WETLAND

DRAWN BY: DAH	DATE: 08/07/14	DWG. NO. P12-28	REV. A
CHECKED BY: DAH	DATE: 08/07/14		
SCALE: N.T.S.	APP.:		

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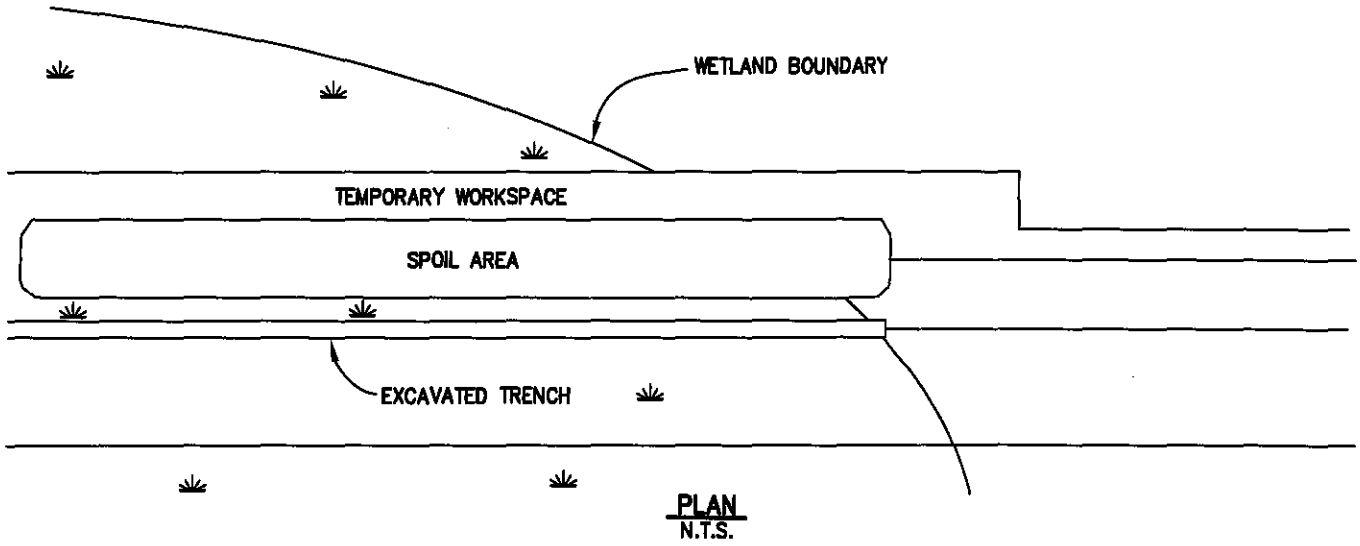
012613



PLAN
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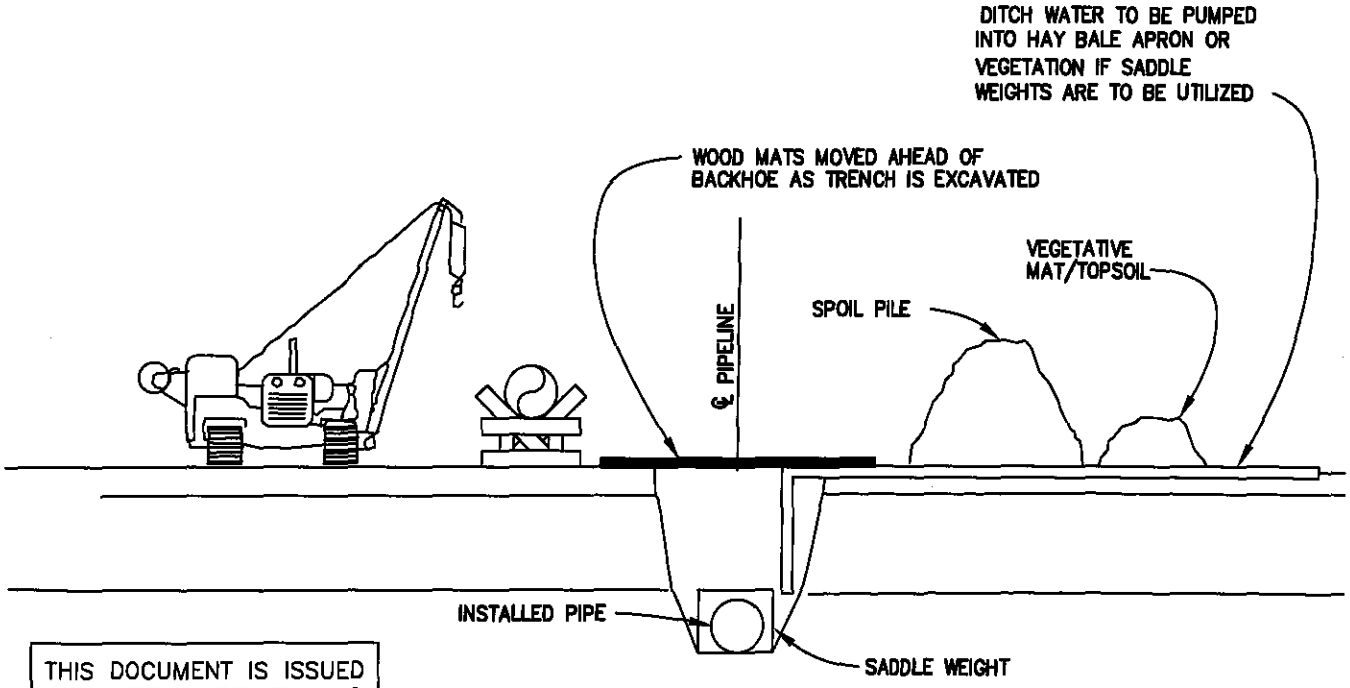

CROSS SECTION THROUGH RIGHT-OF-WAY

THIS DOCUMENT IS ISSUED FOR INTERIM REVIEW AND IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, OR PERMITTING PURPOSES.

NOTES

1. NO-WORK PAD NECESSARY. ACCESS FOR ALL EQUIPMENT AND VEHICLES THROUGH WETLANDS.
2. PIPE SECTION FABRICATED WITHIN WETLAND.
3. TOPSOIL/VEGETATIVE MAT STRIPPED INTO SPOIL PILE AND IN VICINITY OF TRENCH.

REV.	DATE	BY	DESCRIPTION	CHK.
A	08/14	DAH	ISSUED FOR REVIEW	

PROJECT NO. 10395700

DAPL/ETCOP

NON-SATURATED WETLAND

DRAWN BY: DAH	DATE: 08/07/14	DWG. NO. P12-29	REV. A
CHECKED BY: DAH	DATE: 08/07/14		
SCALE: N.T.S.	APP.:		

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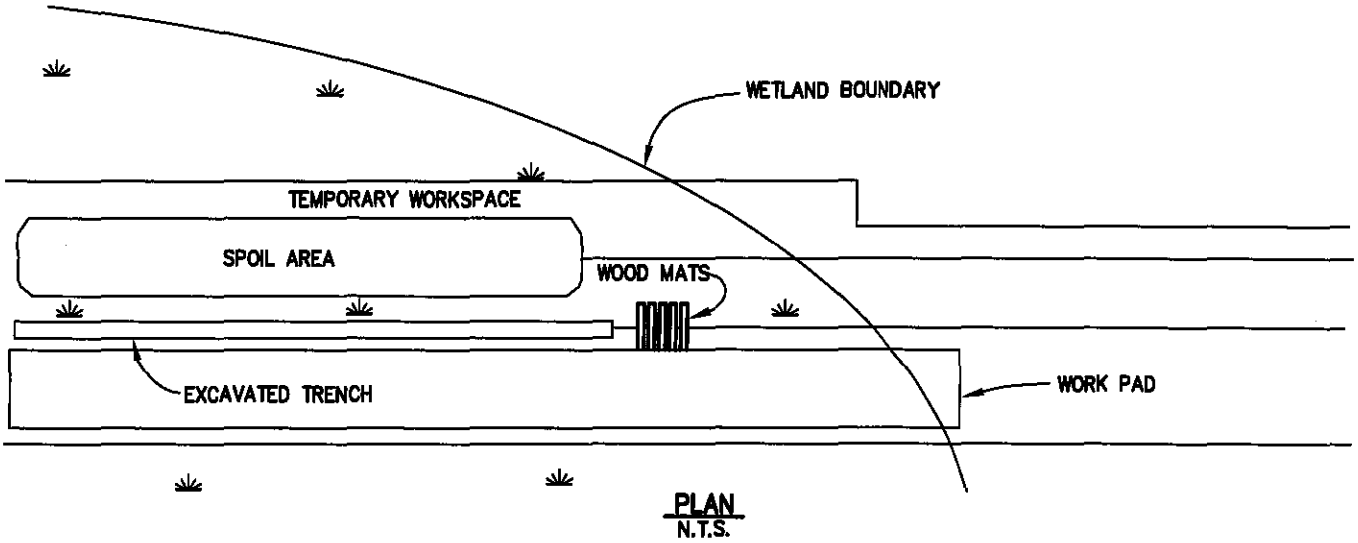

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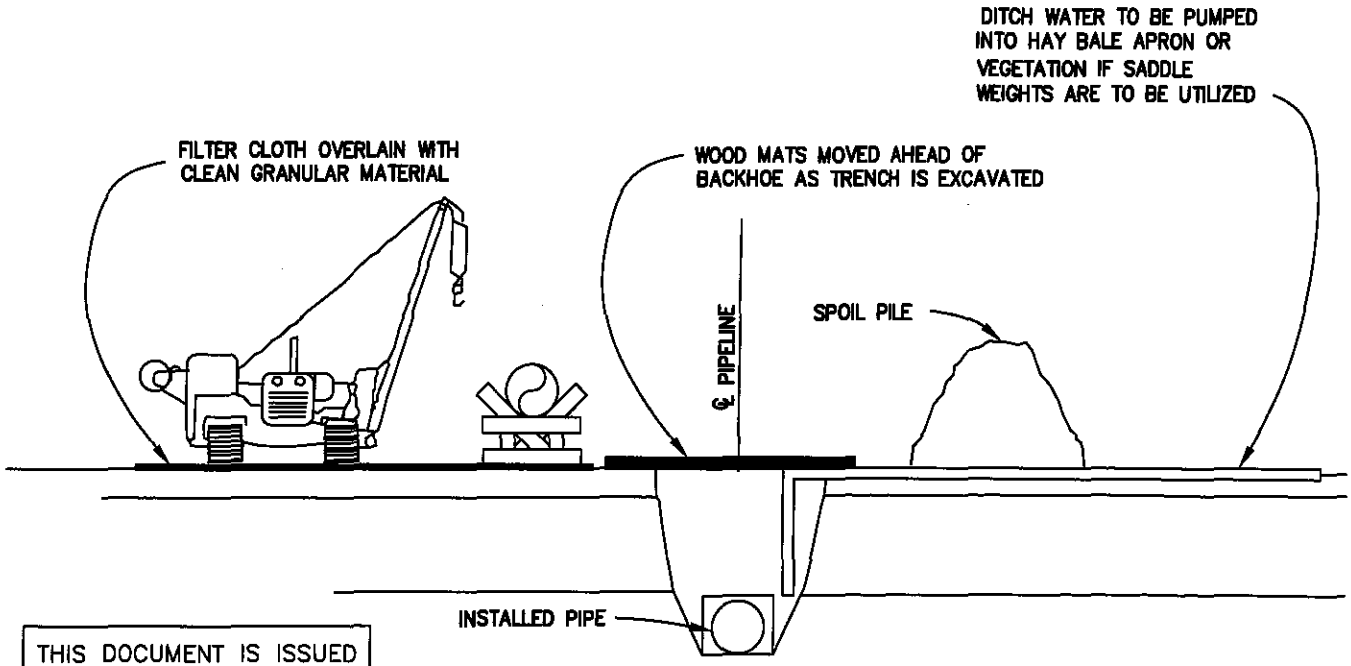

CROSS SECTION THROUGH RIGHT-OF-WAY

THIS DOCUMENT IS ISSUED FOR INTERIM REVIEW AND IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, OR PERMITTING PURPOSES.

NOTES

1. WORK PAD OF FILTER CLOTH WITH GRANULAR MATERIAL TO BE CONSTRUCTED FOR ACCESS OF ALL EQUIPMENT AND VEHICLES.
2. PIPE TO BE FABRICATED ON WORK PAD WITHIN WETLAND.
3. TRENCH TO BE EXCAVATED BY BACKHOE POSITIONED ON WOOD MATS.

REV.	DATE	BY	DESCRIPTION	CHK.
A	08/14	DAH	ISSUED FOR REVIEW	

PROJECT NO. 10395700

DAPL/ETCOP

NON-SATURATED WETLAND

DRAWN BY: DAH	DATE: 08/07/14	DWG. NO. P12-30	REV. A
CHECKED BY: DAH	DATE: 08/07/14		
SCALE: N.T.S.	APP.:		

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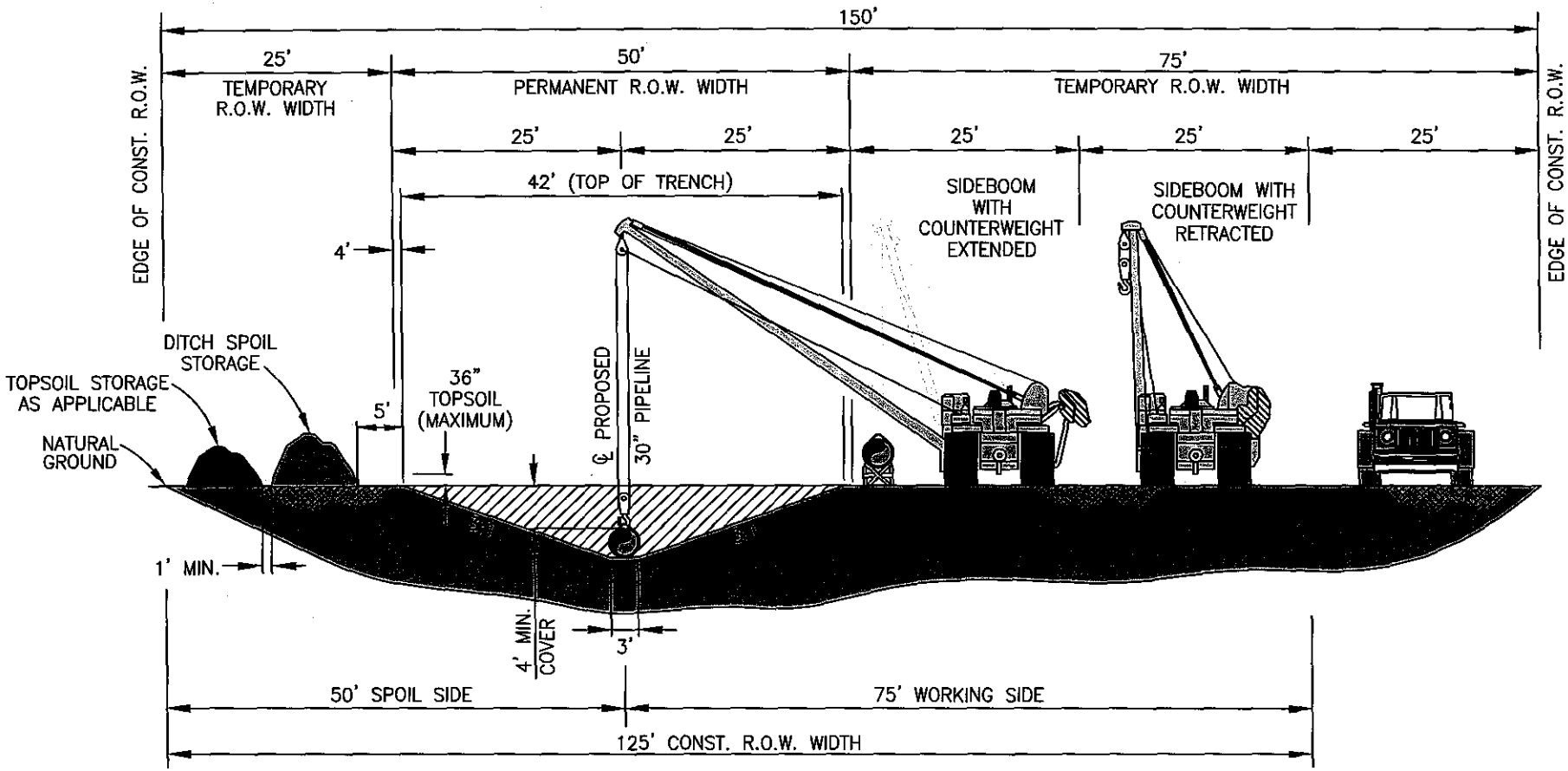
FILE: R:\Pro 03957\DISCIPLINE\CAD\DRAWINGS\99-TYPICAL\10395700-P12-30.dwg PLOT DATE: 2014 BY: HERNANDEZ, DANIEL



NOTE:
DEPTH OF TOPSOIL STRIPPING IS A MINIMUM OF 12 INCHES.

THIS DOCUMENT IS ISSUED FOR INTERIM REVIEW AND IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, OR PERMITTING PURPOSES.

REV.	DATE	BY	DESCRIPTION	CHK.
A	8/20/14	DAH	ISSUED FOR REVIEW	

PROJECT NO. 10395700

DAPL/ETCOP

CONSTRUCTION RIGHT-OF-WAY ARRANGEMENT

DRAWN BY: DAH	DATE: 08/18/14	DWG. NO. P12-31	REV. A
CHECKED BY: DAH	DATE: 08/18/14		
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APPENDIX B

SPILL PREVENTION, CONTROL, AND COUNTERMEASURES PLAN

Dakota Access Pipeline

Draft Spill Prevention, Containment, and Countermeasures Plan

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APPENDICES

1.0 INTRODUCTION

ETC has developed this Spill Prevention, Containment, and Countermeasures (SPCC) Plan for the ETC Dakota Access Pipeline Project (Project) to provide preventative and mitigative measures to minimize the environmental impact associated with inadvertent spills or releases of fuel, lubricant, or hazardous materials during construction of the Project. These measures will be implemented by the construction contractor or ETC inspection staff (unless otherwise indicated) during construction of the Project. Each construction contractor (Contractor) on the Project will be required to prepare a job-specific SPCC Plan which will be submitted to ETC prior to commencement of construction.

2.0 PLANNING AND PREVENTION

ETC requires its Contractors to implement proper planning and preventive measures to minimize the likelihood of spills, and to quickly and successfully clean up a spill, should one occur. ETC has developed this SPCC Plan to set forth minimum standards for handling and storing regulated substances and for cleaning up spills. Potential sources of construction-related spills include storage tank leaks, machinery and equipment failure, and fuel handling and transfer accidents. The Contractor will be responsible for implementing, at a minimum, the following planning and prevention measures.

2.1 ROLES AND RESPONSIBILITIES

2.1.1 Spill Coordinator

- A Spill Coordinator shall be designated and employed by the Contractor, subject to approval by ETC.
- The Spill Coordinator shall mobilize on-site personnel, equipment, and materials for containment and/or cleanup commensurate with the extent of the spill.
- The Spill Coordinator shall assist the appropriate Emergency Response Contractor (Appendix H) and monitor containment activities to ensure that the actions are consistent with the requirements of this SPCC Plan.
- The Spill Coordinator and/or Chief Environmental Inspector or the Field Construction Manager, in consultation with appropriate agencies, shall determine when it is necessary to evacuate spill sites to safeguard human health.
- The Spill Coordinator shall notify the Environmental Manager and Chief Environmental Inspector immediately of any spill.
- The Spill Coordinator will assist the Chief Environmental Inspector in completion of a spill report form.

- The Spill Coordinator will identify available Emergency Response Contractors, who are subject to ETC approval.
- The Spill Coordinator should not contact an agency regarding a spill without authorization from the Environmental Manager and/or Chief Environmental Inspector.

2.1.2 Environmental Manager

- The "Environmental Manager" referred to in this SPCC Plan will be a designated ETC employee or a third-party Designee.
- The Environmental Manager will have a Chief Inspector located at the construction sites. The Chief Inspector may act on the behalf of the Environmental Manager on certain issues that will be defined before construction is started.
- The Chief Inspector will monitor the Contractor's compliance with the provisions of this SPCC Plan.
- All "reportable spills" must be reported immediately to the Construction Manager, Environmental Manager, and Chief Inspector ("reportable spills" will be defined by state-specific guidelines. See Appendix C). The Chief Inspector, with assistance from the Spill Coordinator, is responsible for completing a Spill Report Form (Appendix A) within 24 hours of the occurrence of a reportable spill.
- The Spill Coordinator and/or Environmental Manager or the Project Manager, in consultation with appropriate agencies, shall determine when it is necessary to evacuate spill sites to safeguard human health.
- The Environmental Manager will promptly report spills to the appropriate federal, state, and local agencies as required and coordinate with these agencies regarding contacting additional parties or agencies.

2.1.3 Field Construction Manager

- The "Field Construction Manager" referred to in this SPCC Plan will be the Chief Inspector, a designated ETC employee, or a third-party designee who is responsible for the management of construction activities on this Project (representing the Construction Manager for ETC).
- The Field Construction Manager is the initial point of contact of the Spill Coordinator when a spill occurs, and determines the containment measures that may be required.
- The Field Construction Manager is responsible for documenting the general information regarding any spills such as work stoppages, injuries, fires, and the extent of exposure to workers on the site.

- The Field Construction Manager is responsible for coordinating any emergency response services that may be required such as the Fire Department, the Sheriff Department, or for contacting Emergency Response Contractors.

2.1.4 Authorized Personnel

- Authorized Personnel are representatives of the Contractor who are designated to handle fuel, lubricants, or other regulated substances.
- Authorized Personnel shall be familiar with the requirements of the SPCC Plan and the consequences of non-compliance.

2.1.5 Construction Superintendent

The Contractor's Construction Superintendent or representative must immediately notify the Environmental Manager and Chief Inspector of any spill of a petroleum product or hazardous liquid, regardless of volume.

2.1.6 Construction Personnel

- Construction Personnel are representatives of the Contractor involved with installation of the Project.
- Construction Personnel shall notify the Construction Superintendent or Spill Coordinator immediately of any spill of a petroleum product or hazardous liquid, regardless of volume.

2.1.7 Responsibility of Administration

The Contractor is responsible for the administration of its SPCC Plan.

3.0 GENERAL BEST MANAGEMENT PRACTICES

3.1 TYPICAL FUELS, LUBRICANTS AND HAZARDOUS MATERIALS

The table in Appendix G identifies fuels, lubricants and coolants generally present on pipeline construction spreads and identifies typical total volumes, storage, and transportation methods. Contractors will have appropriate Material Safety Data Sheets (MSDS) on-site as required by the Occupational Safety and Health Administration (OSHA).

3.2 PREVENTIVE ACTIONS

The following preventive actions and procedures will be accomplished prior to construction.

3.2.1 Storage, Refueling, and Lubrication Areas

Contractors will designate and establish storage, refueling, and lubrication areas prior to construction which will minimize the environmental and safety impacts associated with inadvertent releases of fuel, lubricants, or hazardous substances, as per the following guidelines.

- Refueling and storing potentially hazardous materials will not occur within a 150-foot radius of any private wells or within a 400-foot radius of any municipal or community water supply wells.
- Storage of fuel, lubricants, or hazardous materials within 100 feet of perennial waterbodies, wetland boundaries, or within a municipal watershed will not be conducted.
- No hazardous or potentially hazardous materials, other than essential equipment fuel (*e.g.*, gasoline and diesel fuel) or standard lubricants (*e.g.*, engine oils and grease) will be transported into the right-of-way or construction area without Environmental Manager coordination and approval.
- All petroleum products used by the Contractor necessary for fueling and maintenance of construction equipment shall be stored at a well-maintained and supervised location. Diesel fuel, gasoline, and lubricating oils shall be stored in bermed and lined containment structures or other approved fabricated containment reservoirs.
- All vehicle maintenance waste (oils and lubricants) shall be collected in proper containers within the designated storage, refueling, and lubrication areas. Vehicle washing will be conducted in an area that will ensure that none of the wash water enters any waterbody or wetland. All vehicle wastes will be properly disposed of at facilities permitted to receive hydrocarbon vehicle waste.

3.2.2 Special Refueling Activities

When unique conditions require refueling within 100 feet of the banks of a waterbody, a wetland boundary, or within any municipal watersheds, this activity must be approved in advance by the Environmental Inspector following a review that no reasonable alternatives exist and incorporation of any necessary additional emergency response measures. At a minimum, the review will consider the environmental risks of relocating equipment to an authorized refuel/lubrication area verses risks involved with refuel/lubrication in-place. Additional emergency response measures include availability absorbent materials or other secondary spill containment materials for immediate application prior to commencing refueling activities.

3.2.3 Contingency Supplies

Each construction crew shall have on-hand sufficient supplies of absorbent materials, barrier material, and DOT-approved containers to allow for rapid containment and recovery of any potential spill.

3.2.4 Waste Removal

Standing procedures and individual responsibilities regarding excavation, transport, and off-site disposal of any soil material contaminated by a spill will be established prior to construction.

3.3 NOTIFICATIONS

Whenever any spill of a hazardous or potentially hazardous substance occurs, the Environmental Manager will be notified. The Environmental Manager will help direct further response actions in accordance with EPA guidelines and assist throughout the cleanup and disposal of wastes.

3.4 HAZARDOUS MATERIALS SPILL RESPONSE TRAINING

The Contractor shall instruct construction personnel in the operation and maintenance of equipment to prevent an accidental discharge or spill of fuel, oil, and lubricants. Personnel shall also be made aware of the pollution control laws, rules, and regulations applicable to their work.

A spill prevention briefing shall be scheduled and conducted by the Contractor prior to the initiation of construction to assure adequate understanding of this SPCC Plan. The topics to be addressed at the briefing shall include the following:

- SPCC Plan contents;
- Possible equipment failure and malfunction;
- Precautionary measures;
- Standard operating procedures in case of a spill;
- Equipment, materials, and supplies to be maintained by the Contractor and made available for cleanup of a spill.

3.5 CONTRACTOR'S WASTE DISPOSAL

All wastes generated during construction shall be stored at the Contractor's Field Warehouse, or other approved collection site, in DOT-approved containers.

3.6 MITIGATION ACTIONS

The following guidelines specify the procedures used to control a release, notify appropriate officials, clean up waste, and document corrective actions.

3.6.1 Control of Spills or Releases

Controlling spills and releases shall be accomplished by stopping or segregating the source of the release, using the required stockpiled materials to contain the spill and, if warranted, stopping operations within the affected areas.

3.6.2 Notifications

The Contractor shall first notify the Environmental Manager and Chief Inspector of any spill. If the spill is of a reportable quantity, the Environmental Manager shall notify the required agencies, and, if the situation warrants, the Field Construction Manager shall notify the appropriate local police, fire department, and/or area residents.

The Contractor shall have designated employees on-call 24-hours-per-day for notification of the emergency response companies referenced in Appendix H.

3.6.3 Cleanup and Disposal Actions

The Contractor's Spill Coordinator will direct cleanup of all releases. Contaminated soils, absorbent materials, and other waste generated by the spill/release will be placed in DOT-approved storage/shipping containers (see Appendix E). The containers will be labeled indicating the contents and placed in a designated accumulation point for disposal. Depending on the type of waste generated, the containers shall be transported and disposed of in accordance with appropriate EPA disposal criteria by permitted transporters and disposers.

In the event that a fuel spill occurs within a controlled containment dike, in lieu of a pump/valve drainage system, the Contractor shall immediately engage a certified vacuum cleanup service in the vicinity.

Arrangements shall be made for spill cleanup vacuum services within various vicinities. These companies will be on-call 24-hours-per-day to provide emergency cleanup services, as required by the Contractor.

3.6.4 Records

The Contractor shall maintain written records of all actions taken during the course of a spill event.

4.0 SPILL PROCEDURE

4.1 REPORTABLE QUANTITY SPILLS

Unless otherwise directed, the reporting, disposal, and pre-cleanup sampling requirements in this section apply to all spills of reportable quantities (Appendix C).

4.2 IMMEDIATE SPILL RESPONSE ACTIONS

The Contractor shall implement this SPCC Plan using the following steps in response to a spill of hazardous materials:

Immediate Safeguards

- Evacuate the area of personnel, if warranted.
- Stop operation of affected equipment/area, if warranted.
- Turn off utilities to the area, if necessary.
- Cordon the area to prevent entry of unnecessary personnel or equipment. Establish a single point of ingress and egress to control access to the spill area.
- Take whatever steps possible to eliminate the source of the leak or spill (e.g., shut off valves, upright containers, stop pumps).
- Accumulate as much information as possible as to the nature and size of the spill. Use the Construction Spill Report Form (see Appendix A) for the type of information required.

Spill Event Log Establishment

Documentation of all spill-related activities will include the following information in the log:

- Time and date of initial notification of spill and approximate time the spill occurred.
- Start and completion time of all key activities.
- A detailed description of all activities undertaken and identification of personnel accomplishing these activities.
- Note time of all correspondence, personnel involved with the correspondence, and nature of the correspondence.
- The log shall be maintained until initial actions to clean up the spill are complete (approximately 24 hours, unless conditions extend the response to the emergency).

Notifications

All notifications shall be accomplished at the direction of the Spill Coordinator or Construction Director.

- Notify the Environmental Manager of any spill and provide the necessary information by using the Construction Spill Report Form (Appendix A).
- Make other Contractor and Company and agency notifications per the SPCC Plan, or as instructed by the Environmental Manager and Section 4.3, Reporting Requirements, of this Plan.
- Notify local police, fire department or hazardous material units, if assistance is necessary.
- Notify local residents, if necessary.

Spill Control

For spills on land or pavement:

- Plug all storm drains the spill may gain access to.
- Construct terrace dam or ditch to stop the spill's flow.
- Scatter hay, straw, sand, absorbent pads, or other similar materials to absorb the spill.
- If free-standing fluid is present, actions can be taken to skim fluids and place into DOT-approved containers.

For spills on water:

- Ensure that all possible efforts are made to limit the migration of the surface spill until properly equipped cleanup teams can arrive.
- Create a back current to limit out-flow of material.
- Use absorbent floats and/or booms, if available.
- Create shoreline earth berms to prevent spill from reaching surface waters. Use skimmers, pumps or available absorbent materials to remove spill from water, should spill breach berms.

Area Spill Cleanup

- Follow site cleanup and decontamination requirements which are provided in this SPCC Plan.
- Remove cleanup debris from spill area. Basic guidance is provided in Section 4.4, Disposal of Cleanup Debris and Materials.

Spill Materials Disposal

All spill material shall be disposed of in accordance with EPA Regulations. General guidance is provided in Section 4.6, Cleanup Requirements.

4.3 REPORTING REQUIREMENTS

The following reporting requirements by the Contractor are required in addition to applicable reporting requirements under the Clean Water Act (CWA), Toxic Substances Control Act (TSCA), or the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and other documents which establish the SPCC reporting requirements.

Notify the Environmental Manager and Chief Inspector in the event of any leaks or spills. Use the Construction Spill Report Form (see Appendix A) for providing necessary information. The Chief Inspector will provide guidance based on the potential impact of the spill.

4.4 DISPOSAL OF CLEANUP DEBRIS AND MATERIALS

All contaminated soils, solvents, rags, and other materials resulting from the cleanup actions will be properly stored, labeled, and disposed of in accordance with the appropriate EPA regulations. Some general guidance follows:

- Soils and/or other contaminated materials shall be placed in DOT-approved sealed containers.
- Containers shall be labeled with required waste label(s), dated, and inventoried.
- Containers may be stored at the construction site in the identified staging areas for up to 90 days.
- All containers shall be disposed of in accordance with EPA Regulations using permitted transporters and permitted disposal facilities.
- All hazardous waste containers shall be properly manifested prior to departure from the construction area. The Contractor and ETC will maintain all manifest records with the Project file for at least three years after the containers were shipped for disposal.

4.5 DETERMINATION OF SPILL BOUNDARIES IN THE ABSENCE OF VISIBLE TRACES

For spills where there are insufficient visible traces, yet there is evidence of a leak or spill, the boundaries of the spill shall be determined using a statistically based sampling scheme. The Environmental Manager will provide sampling assistance.

4.6 CLEANUP REQUIREMENTS

4.6.1 General Requirements:

- All soil within the spill area (i.e., visible traces of soil and a buffer of one lateral foot around the visible traces) must be excavated.
- All excavation material shall be disposed of as mentioned in Section 4.4, Disposal of Cleanup Debris and Materials, and the appropriate EPA Regulations.
- All cleanup soil and wastes shall be collected in DOT-approved containers. See Appendix E for a listing of approved containers.
- Appendix D contains guidance on how to manage the area used to temporarily store waste containers.
- Appendix F contains guidance on inspection procedures for stored waste containers required by EPA Regulations.
- The ground shall be restored to its original configuration by back-filling with clean soil.
- Cleanup requirements of a spill area shall be completed within 48 hours after notification or knowledge of the spill.

4.6.2 Effect of Emergency or Adverse Weather

Completion of cleanup may be delayed beyond 48 hours in case of circumstances including, but not limited to:

- Civil emergency;
- Adverse weather conditions;
- Lack of access to the site;
- Emergency operating conditions.
- The occurrence of a spill on a weekend or after-hours. Overtime costs are not acceptable reasons to delay response.
- Completion of cleanup may be delayed only for the duration of the adverse conditions. If the adverse weather conditions, or time lapse due to other emergencies, have left insufficient visible traces, a statistically based sampling scheme to determine the spill boundaries will be developed and implemented.

4.7 RECORDS

All records that document spill events and corrective actions taken will be maintained in the project files for three years from the date the corrective actions were completed. Documentation and certification of area decontamination shall be conducted upon completion of and during all cleanup operations. The records and certifications shall be completed, as follows:

- Identification of the source of the spill (e.g., type of equipment or container).
- Estimated or actual date and time of the spill occurrence.
- The date and time cleanup was completed or terminated (if cleanup was delayed by emergency or adverse weather, the nature and duration of the delay).
- A brief description of the spill location.
- Pre-cleanup sampling data used to establish the spill boundaries if required due to insufficient visible traces, and a brief description of the sampling methodology used to establish the spill boundaries.
- A brief description of the solid surfaces cleaned and of the wash/rinse method used.
- Approximate depth of soil excavation and the amount of soil removed.
- A certification statement signed by the Construction Director, Spill Coordinator, and the Environmental Manager stating the cleanup requirements have been met and the information contained in the record is true to the best of his/her knowledge.
- The estimated cost of pre- or post-cleanup and sampling by man-hours, dollars, or both.

4.8 RESPONSIBILITY FOR PROCEDURE

Address any questions to the ETC Environmental Manager (name and address to be announced).

APPENDIX A
CONSTRUCTION SPILL REPORT FORM

Date of Spill:_____ Date of Spill Discovery:_____
Time of Spill:_____ Time of Spill Discovery:_____
Location Name:_____ Region:_____
Name and Title of Discoverer:_____
Type of material spilled and manufacturer's name:_____
Legal Description of spill location:_____
Directions from nearest community:_____
Estimated volume of spill:_____ Estimated Material Recovered:_____
Weather Conditions:_____
Topography and surface conditions of spill site:_____
Spill medium (pavement, sandy soil, water, etc.):_____
Proximity of spill to surface waters: _____
Did the spill reach a waterbody? _____ Yes _____ No
If so, was a sheen present? _____ Yes _____ No
Describe the causes and circumstances resulting in the spill:_____

_____

_____

Describe the extent of observed contamination, both horizontal and vertical (i.e., spill-stained soil in a 5-foot radius to a depth of 1 inch): _____

_____

_____

Describe immediate spill control and/or cleanup methods used and implementation schedule:

_____

Current status of cleanup actions:_____

Name/Company/Address/Phone Number for the following:
Construction Superintendent:_____

_____

Spill Coordinator:_____

_____

Environmental Manager:_____

_____

Person Who Reported the Spill:_____

_____

Environmental Inspector:_____

_____

Form completed by:_____ Date:_____

Spill Coordinator must complete this for any spill, regardless of size, and submit the form to the ETC Environmental Manager and Chief Environmental Inspector within 24 hours of the occurrence.

APPENDIX B
REPORTABLE QUANTITIES

PURPOSE:

This procedure identifies reportable quantities for releases of oil or hazardous substances in accordance with the CERCLA of 1980, the CWA, the Oil Pollution Act of 1990 (OPA 90) and the TSCA.

RESPONSIBILITY FOR ADMINISTRATION:

Contractor's Spill Coordinator is responsible for administration of this procedure.

GENERAL:

I. Reportable quantity is the quantity of a release which requires notification of an agency.

II. Any amount of oil spill into navigable waters is reportable. Oil spills onto land may be required to be reported, depending upon quantity spilled and state regulations. Refer to Appendix C.

III. Appendix C lists Reportable Quantities (RQs) specified by the EPA.

IV. RQs for Toxic Hazardous Wastes are based on the toxic contaminant. The RQ means the quantity of the waste, not the quantity of the toxic contaminant. If toxic waste has two or more contaminants, the RQ is based on the lowest RQ for those contaminants.

PROCEDURES:

I. If oil is discharged into or upon the navigable waters of the United States, or adjoining shorelines:

   A. Report the spill to the National Response Center (800) 424-8802.

   B. Submit a written report within 60 days to the EPA Regional Administrator and the state agency, if the project has discharged quantities of oil into or upon the navigable waters of the United States or adjoining shorelines, which:

      1. Is more than 1,000 gallons of oil in a single spill event; or

      2. Is in harmful quantities as defined by 40 CFR Part 110, Oil Pollution Prevention regulations, in two spill events occurring within a twelve month period. Harmful quantity includes a film or sheen or discoloration of the surface of the water of adjoining shorelines or a sludge or emulsion deposited beneath the surface of the water or upon adjoining shorelines.

   C. The report to the EPA Regional Administrator and the state agency will include:

      1. Name of facility;

      2. Name(s) of the owner or operator of the facility;

      3. Location of the facility;

      4. Date and year of initial facility operation;

      5. Maximum storage or handling capacity of the facility and normal daily throughput;

6. Description of facility, including maps, flow diagrams and topographical maps;
7. A complete copy of the SPCC Plan with amendments;
8. The cause of the spill, including a failure analysis of the system or subsystem in which the failure occurred;
9. The corrective actions and/or countermeasures taken, including description of equipment repairs and replacements;
10. Additional preventive measures taken or contemplated to minimize the possibility of recurrence; and,
11. Any additional information the EPA Regional Administrator may require pertinent to the SPCC Plan or spill event.

II. If a hazardous waste or hazardous substance has been released into the environment in quantities equal to or in excess of reportable quantities listed in 40 CFR 302, the NRC must be notified.

A. Contact the required agencies with the pertinent spill information.

B. Provide verbal notification of the following information:

1. Name and telephone number of reporter;
2. Name and address of facility;
3. Type of substance discharged;
4. Quantity of substance discharged;
5. Location of discharge;
6. Actions the person reporting the discharge proposes to take to contain, cleanup and remove the substances, if any; and,
7. Any other information concerning the discharge which may be requested by the Agency at the time of notification.

III.

A. If a hazardous waste, hazardous substance or extremely hazardous substance has been released in quantities equal to or in excess of reportable quantities the State Emergency Planning Commission and Local Emergency Planning Committee must be notified. Contact the required agencies with the pertinent spill information as soon as possible.

B. Submit a written report on the incident to the appropriate state and local agency. The report will include the following:

1. Name, address and telephone number of the owner or operator;
2. Name, address and telephone number of the facility;
3. Date, time and type of incident;
4. Name and quantity of material(s) involved;
5. The extent of injuries, if any;
6. An assessment of actual or potential hazards to human health or the environment, where this is applicable;
7. Assessment of the scope and magnitude of the spill;

8. Description of the immediate actions that have been taken and the estimated quantity and disposition of recovered material that resulted from the incident; and,
9. Provide an implementation schedule for undertaking suggested measures to eliminate the spill.

Spill incident reports will be maintained in the project files for a minimum period of three years.

APPENDIX C
STATE REQUIREMENTS

These guidelines are intended to help the Environmental Manager determine what is a reportable spill. In addition to the guidelines listed below, any substantial natural gas release which could cause an agency to initiate an unneeded emergency response should be considered reportable. The Environmental Manager and Spill Coordinator shall maintain a copy of federal reportable quantities (RQs) established under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). A complete list of CERCLA-regulated hazardous substances and associated RQs are listed in Table 302.4 in 40 CFR § 302.4. This list can also be found online at: http://www.epa.gov/ceppo/pubs/title3.pdf.

State Specific Reporting Requirements

The state-specific reporting requirements will be determined during the development of the project and upon identification of hazardous materials which might be present within the proposed areas of construction. The requirements will include any initial and follow-up reporting requirements and any additional Regulatory Agencies which need notification in the event of a release.

APPENDIX D
HANDLING CONTAINERS AND DRUMS

PURPOSE:

This procedure provides general requirements for the design of areas used to store containers and drums, in accordance with EPA regulations 40 CFR Part 112 and 40 CFR Part 265.170.

RESPONSIBILITY FOR ADMINISTRATION:

The Contractor's Spill Coordinator will be responsible for this procedure.

GENERAL:

I. This procedure covers container and drum storage areas storing oils and petroleum distillates and non-permitted Hazardous Waste container and drum storage areas.

II. It is not necessary to permit Hazardous Waste container and storage areas if the waste is stored for less than 90 days. Secondary containment is not required for non-permitted Hazardous Waste container and drum storage areas.

PROCEDURE:

I. All containers and drums must be stored to avoid contact with the ground and standing water and protected to prevent rupture or leakage and to facilitate inspection.

II. The areas with containers and drums in which oil and petroleum distillate are stored and have the potential to be spilled off site must be designed to contain spills and releases. Appropriate secondary containment may include dikes, berms or retaining walls sufficiently impermeable (10^{-5} centimeters per second) to contain spill oils.

III. The following applies to hazardous waste containers and drums:

A. Containers and drums holding ignitable or reactive Hazardous Waste must be stored at least 50 feet from the property line of boundary. Follow manufacturers' instructions regarding appropriate storage of product containers and drums.

B. Hazardous Waste containers and drums must be separated and protected from incompatible materials by means of dike, berm, retaining wall or other approved means. Incompatible materials are wastes which, when mixed, can produce effects which are harmful to human health and the environment, such as (1) heat and pressure, (2) fire or explosion, (3) violent reaction, (4) toxic fumes or, (5) flammable fumes.

C. Hazardous Waste containers and drums must be inspected weekly. That inspection shall be documented, as per requirements listed in Appendix F.

IV. The Contractor shall comply with all rules for Hazardous Waste Generators for satellite accumulation under 40 CFR 262.24(c)(1)(ii):
   A. Mark each container with the words "Hazardous Waste."
   B. Containers must be in good condition and kept closed except when adding or emptying waste. In addition, containers must not contain waste that is incompatible with the containers.

V. Conditionally Exempt Small Quantity Generators and Small Quantity Generators of Hazardous Waste must comply with the following:
   A. Meet all conditions outlined in Procedure Section II.
   B. Mark each drum or container with the words "Hazardous Waste."
   C. Label each drum or container with the date it is first used and the date it is last used.

RECORDS:

Storage area inspection records must be kept with the project files for a minimum period of three (3) years.

RESPONSIBILITY FOR PROCEDURE:

Address any questions to the Environmental Manager (Name and address to be announced.)

APPENDIX E
DOT-APPROVED CONTAINERS

PURPOSE:

This procedure provides a listing of containers which have been approved by the EPA for storage of contaminated materials or wastes. These drums may be ordered from drum suppliers by specification number:

I. Specification 5 - steel barrel or drum with removable head:
   - A. Body seams welded;
   - B. Chime (reinforced rim) reinforced;
   - C. Heads closed by 12 gauge bolted ring with drop forged lugs;
   - D. Marked "DOT-5."

II. Specification 5B - steel barrel or drum with removable head:
   - A. Body seams welded;
   - B. Chime (reinforced rim) reinforced;
   - C. Heads closed by 12 gauge bolted ring with drop forged lugs;
   - D. Marked "DOT-5B."

III. Specification 6D Overpack; cylindrical steel overpack, straight sided, for inside plastic container. Specification 6D Overpack must be used with the specification 2S of 2SL plastic container.

IV. Specification 2S - polyethylene container:
   - A. No removable heads;
   - B. Constructed with new polyethylene resin;
   - C. Marked "DOT-2S;"
   - D. Must fit snugly in overpack container (Spec. 6D).

V. Specification 2SL - molded or thermoformed polyethylene container:
   - A. No removable heads;
   - B. Constructed with new polyethylene resin;
   - C. Marked "DOT-2SL;"
   - D. Must fit snugly in overpack container (Spec. 6D).

VI. Specification 17C - single trip container, steel drum:
   - A. Removable heads are authorized;
   - B. Crowned head;
   - C. Heads closed by 12 gauge bolted ring with drop forged lugs;
   - D. Marked "DOT-17C."

APPENDIX F
INSPECTION OF WASTE DRUMS AND CONTAINERS

PURPOSE:

This procedure outlines inspection requirements for waste drums and containers as required by Federal Regulations 40 CFR 262 - 265 and 40 CFR 761.

RESPONSIBILITY:

The Contractor's Spill Coordinator is responsible for implementation of this procedure.

GENERAL:

I. Drums and containers used to store hazardous substances and wastes shall be inspected for leaks, malfunctions, deterioration, operator errors and discharges which may lead to a release into the environment or a threat to human health.

II. If problems are discovered during the inspection, remedial action shall be taken immediately. The action taken will be noted on the inspection report form.

PROCEDURE:

I. Each waste drum and container shall be inspected and records maintained on a Waste Container Inspection Form. Inspection records shall include the date and time of the inspection, the name of the inspector, observations and the date and nature of any problems, repairs and remedial action.

A. Waste drum and container storage areas shall be inspected weekly for the following:

1. Leaking containers, deterioration of containers and deterioration of the spill containment system.
2. Drums and containers shall be properly labeled and dated.
3. Drums and containers shall be stored on pallets or drum racks.

B. If a drum or container is leaking, the incident shall be recorded on the inspection form and immediately cleaned up according to the SPCC Plan.

RECORDS:

I. Inspection records shall be maintained in the project files for three (3) years from the date of inspection.

II. A report of the remedial action taken for leaks shall be prepared and kept with either the original inspection forms, inspection log or in the records of the project. These records shall be maintained for three (3) years with the project files.

RESPONSIBILITY FOR PROCEDURE:

Address any questions to the Company Environmental Manager (Name and address to be announced.)

WASTE CONTAINER INSPECTION FORM

Facility:_____ Type of Container:_____

_

Date	Deficiencies Noted	Inspected By

APPENDIX G
TYPICAL PETROLEUM STORAGE AND HANDLING VOLUMES ON CONSTRUCTION SPREAD

	Fluids	Typical Amounts	Storage	Typical Transport Mode
Fuels	Diesel	6,000-12,000 Gallons	1-3 Tanks or Tankers stored at Contractor locations 5 gallon cans, 100 gallon storage in pickups, etc.	1-3 Fuel Trucks, 1-3 "Fuel Skids"
	Military Aviation Kerosene [1]	6,000-12,000 Gallons		
	Kerosene [1]	6,000-12,000 Gallons		
	Gasoline	5,000 Gallons		
Lubricant	Engine Oil	< 500 Gallons	Bulk Storage or Retail Packaging at Contractor Yard Warehouse	1-3 "Grease" Trucks
	Transmission/ Drive Train Oil	< 500 Gallons		
	Hydraulic Oil	< 500 Gallons		
	Gear Oil	< 500 Gallons		
	Lubricating Grease	20-30 cases of 24 cans per case		
Coolants	Ethylene Glycol	100 Gallons		
	Propylene Glycol	100 Gallons		

[1] Used straight or as additives only in extremely cold weather.

APPENDIX H
EMERGENCY RESPONSE CONTRACTORS; DISPOSAL AND TREATMENT FACILITIES

The Contractor must dispose of all wastes according to applicable state and local requirements. A listing of potential Emergency Spill Response Contractors and waste disposal facilities is provided below. This list was developed from state-wide databases. This list represents firms operating at the time the data base was produced. These firms are not necessarily endorsed by ETC. The Contractor is responsible for verifying if a contractor or facility is currently operating under appropriate permits or licenses. Selection of an Emergency Response Contractor or disposal facility is subject to approval by ETC. The Contractor is responsible for ensuring wastes are disposed of properly.

Spill Response Contractors located along the proposed route will be determined during project planning.

APPENDIX C

INSPECTION FORMS AND INSTRUCTIONS

PROJECT
STORM WATER POLLUTION PREVENTION PLAN

INSPECTION AND MAINTENANCE REPORT

Signature of Inspector: _____

Printed Name of Inspector: _____

Title of Inspector: _____

Qualifications of Inspector: _____

Date: _____

Current Weather Information: _____

Weather Information Since Last Inspection:

Beginning Date/Time of Last

Storm Event: _____

Duration of Last Storm Event: _____

Amount of Rainfall: _____ Inches

Discharges Since Last

Inspection/Storm Event: _____

NOTE: Inspection documents are to be maintained for a minimum of 3 years.

PROJECT
STORM WATER POLLUTION PREVENTION PLAN

INSPECTION AND MAINTENANCE REPORT

Earth Dikes/Berms

Is the dike stabilized? _____

_____

_____

_____

Is there evidence of washout or over-topping? _____

_____

_____

_____

If water is present in the drainage ports, does it:

- Have a sheen on it? _____
- Have an acceptable TDS? _____
- Show excessive turbidity? _____

Maintenance required for Earthen Dike: _____

_____

_____

_____

To be performed by:_____ On or before: _____

NOTE: Modifications to control measures **must** be made no more than 7 days after the inspection.

PROJECT
STORM WATER POLLUTION PREVENTION PLAN

INSPECTION AND MAINTENANCE REPORT

Roads and Locations Where Vehicles Enter or Exit the Construction Site

Are sediment traps or barriers along road construction zones preventing runoff into adjacent wetlands, lakes, etc.? _____

_____

_____

_____

At locations where construction equipment exits onto paved roads, are the existing best management practices successfully minimizing off site tracking of sediments? _____

_____

_____

_____

Maintenance Required: _____

_____

_____

_____

_____

To be performed by: _____ On or before: _____

_____

NOTE: Modifications to control measures **must** be made no more than 7 days after the inspection.

PROJECT
STORM WATER POLLUTION PREVENTION PLAN

INSPECTION AND MAINTENANCE REPORT

Straw Bale and Filter Fence Barriers

Do the barriers have tears or holes in them? _____

Are there any missing barriers? _____

Are the barriers properly aligned? _____
Where sediment has reached one-third the height of the barrier, has it been removed? _____

Have straw bales with excessive sediment saturation been replaced? _____

Maintenance required for barriers: _____
_____
_____

To be performed by: _____ On or before: _____

SWPPP Upgrades:

If any deficiencies in pollution control structures or procedures were identified above, have those deficiencies been corrected and the Storm Water Management Plan modified, if appropriate? Explain.

_____
_____
_____
_____
_____

NOTE: Modifications to control measures **must** be made no more than 7 days after the inspection.

PROJECT
STORM WATER POLLUTION PREVENTION PLAN

INSPECTION AND MAINTENANCE REPORT

General

Have there been any uncontrolled releases of mud or muddy water or measurable quantities of sediment found off site? _____ Yes _____No

If Yes, describe measures taken to clean up fugitive sediment: _____

_____

_____

_____

_____

_____

_____

_____

If Yes, describe measures taken to prevent a future occurrence: _____

_____

_____

_____

_____

_____

_____

_____

PROJECT
STORM WATER POLLUTION PREVENTION PLAN

INSPECTION AND MAINTENANCE REPORT

Location	Diversion Structure	Sediment Trap	Date Excavated	Date Filled	Date Dressed	Signs of Erosion	Stabilized ?	Ground Covered?	Date of Inspection

NOTE: If signs of erosion become apparent, stabilize by backfilling and leveling and use of mulch, sod, seeding, or other means of preventing further erosion.

Date: _____ Inspector's Name (Print and Initial) _____

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PROJECT
STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT

Maintenance required for:

_____

_____

_____

To be performed by: _____ On or before: _____

NOTE: Modifications to control measures **must** be made no more than 7 days after the inspection.

NOTE: Inspection documents are to be retained for a minimum of 3 years.

NOTE: Check flowline trenches for the following:

Settlement below natural grade

Washouts of spoil along excavated trenches

Muddy/contaminated rainwater

Placement of spoil upslope of trench

Agricultural Impact Mitigation Plan

AGRICULTURAL IMPACT MITIGATION PLAN

Dakota Access Pipeline Project (DAPL)

Final Draft

State of South Dakota

Energy Transfer

September 2014

Revised April 2015 in response to PUC Data Request

CONTENTS

Appendices

Acronyms and Abbreviations

DAPL	Dakota Access Pipeline, LLC (Project Sponsor)
EI/AI	Environmental Inspector/Agricultural Inspector

1 INTRODUCTION

Dakota Access Pipeline, LLC (DAPL) is planning a new 30-inch pipeline to transport crude oil from the Bakken Shale region of North Dakota to Illinois. The eastern terminus of the pipeline will connect with an existing pipeline that will transport the crude oil to the Gulf Coast for processing.

The South Dakota section of the pipeline comprises a 277-mile corridor that will run from north central South Dakota to southeast South Dakota. The proposed pipeline will enter South Dakota in Campbell County and diagonally traverse the state, exiting at the crossing of the Big Sioux River in Lincoln County, South Dakota.

The purpose of this document is to present the proposed measures for minimizing impacts to and restoring agricultural lands during and after pipeline construction.

2 PLAN LIMITATIONS

Mitigation measures identified in this plan apply only to agricultural land and do not apply to urban land, road and railroad right-of-way, interstate natural gas pipelines, mined and disturbed land not used for agriculture. The identified mitigation measures will be implemented as long as they do not conflict with federal, state, and local permits, approvals and regulations.

3 SEQUENCE OF CONSTRUCTION EVENTS AND SCHEDULE

Pipeline construction is anticipated to commence Spring of 2016 following the receipt of required permits and approvals. Pipeline construction will take approximately 9 months to complete.

The sequence of events for pipeline construction will begin with advance notification of landowners and governmental agencies. Following notification, activities will be undertaken in the following sequence:

- Complete final surveys, stake centerline and workspace;
- Access road installation;
- Grubbing and clearing of the construction corridor;
- Installation of stormwater and erosion control measures;
- Placement of pipe and other supplies along the construction corridor;
- Pipeline welding and bending where necessary
- Excavation of the pipeline trench;
- Temporary repairs to tile lines, if encountered;
- Placement of the pipeline with the trench;
- Permanent repairs to tile lines damaged during construction activities;
- Backfill of the trench and rough grading,
- Hydrostatic testing of the pipeline;
- Final grading and restoration;
- Revegetation and post restoration monitoring; and
- Removal of erosion control measures.

4 POINTS OF CONTACT

Each landowner will be provided the name, telephone number, email address, and mailing address of the DAPL landowner representative two weeks prior to construction. This DAPL representative will be the primary contact person for the landowner throughout construction for easement issues. Landowner representatives will be assigned to that geographic area and be responsible for the liaison activities on behalf of DAPL.

In addition to the landowner representative, a team of experienced Environmental and/or Agricultural Inspectors (EIs/AIs), will be involved in project construction, the initial restoration, and the post-construction monitoring and follow-up restoration.

5 DEFINITIONS

Agricultural Land	Land that is actively managed for cropland, hayland or pasture and land in government set-aside programs.
Cropland	Land actively managed for growing row crops, small grains or hay.
Drainage Structures or Underground Improvements	Any permanent structure used for draining agricultural lands, including tile systems and buried terrace outlets.
Easements	The agreement(s) and/or interest in privately owned Agricultural Land held by DAPL by virtue of which it has the right to construct, operate and maintain the pipeline together with such other rights and obligations as may be set forth in such agreement.
Environmental Construction Plan (ECP)	Document to present basic environmental construction techniques will be implemented to protect the environment and to minimize potential effects of pipeline and related facilities construction and maintenance.
Pipeline	Any pipe, pipes, or pipelines used for the transportation or transmission of any solid, liquid, or gaseous substance, except water, in

	intrastate or interstate commerce.
Landowner	Person listed on the tax assessment rolls as responsible for the payment of real estate taxes imposed on the property.
Non-Agricultural Land	Any land that is not "Agricultural Land" as defined above.
Pipeline Construction	A substantial disturbance to agricultural land associated with installation, replacement, removal, operation or maintenance of a pipeline.
Soil Conservation Practices	Any land conservation practice recognized by federal or state soil conservation agencies including, but not limited to, grasslands and grassed waterways, hay land planting, pasture, and tree plantings.
Soil Conservation Structures	Any permanent structure recognized by federal or state soil conservation agencies including but not limited to toe walls, drop inlets, grade control works, terraces, levees, and farm ponds.
Right-of-Way (ROW)	Includes the permanent and temporary easements that DAPL acquires for the purpose of constructing and operating the Pipeline.
Tenant	Any person lawfully residing on or in possession of the land, which makes up the "Right-of-Way" (ROW) as defined in this Plan.
Tile	Any artificial subsurface drainage system including clay and concrete, tile, vitrified sewer tile, corrugated plastic tubing and stone drains.
Till	Till is to loosen the soil in preparation for planting or seeding by plowing, chiseling, disking, or similar means. Agricultural land planted using no-till planting practices is also considered tilled.
Topsoil	The upper part of the soil which is the most favorable material for plant growth and which can ordinarily be distinguished from subsoil by its higher organic content and darker color.
Surface Drains	Any surface drainage system such as shallow surface field drains, grassed waterways, open

	ditches, or any other constructed facilities for the conveyance of surface water.

6 AGRICULTURAL MITIGATION MEASURES

The following describes how DAPL proposes to minimize and repair impacts to agricultural lands.

a. CLEARING BRUSH AND TREES ALONG THE EASEMENT

DAPL will be responsible for negotiating compensation related to cutting of any brush and timber for construction of the pipeline with the landowner. Options for removal include: the landowner harvesting any marketable timber/vegetation, the contractor cutting and windrowing along the ROW for Landowner's use, chipped, burned, or hauled off for proper disposal. Unless otherwise restricted by federal, state or local regulations and to the extent that the requests are deemed reasonable, DAPL will follow Landowner's easement agreement regarding the removal of tree stumps and disposal of trees, brush, and stumps of no value to the landowner. Methods of disposal can include, but are not limited to, burning, chipping, or removal from the property and be approved by the DAPL representative and coordinated with the landowner prior to implementation.

Unless otherwise restricted by federal, state of local regulations and to the extent that the requests are deemed reasonable, DAPL will follow Landowner's easement agreement regarding the removal of tree stumps and disposal of trees, brush, and stumps of no value to the landowner. Methods of disposal can include, but not limited to burning, chipping or completed removal from the property and be approved by the DAPL Chief Inspector & Lead Environmental Inspector prior to implementation.

b. TOPSOIL SEPARATION AND REPLACEMENT

Topsoil and subsoil excavated for pipeline installation will be separated and segregated in separate stockpiles, and returned to the excavation in reverse order to restore the site to pre-construction condition. The depth of the topsoil to be stripped will be a maximum depth of 12 inches or actual depth of top soil if less than 12 inches or as agreed upon with the landowner. Upon request from the landowner, DAPL will measure topsoil depth at selected locations before and after construction.

The stored topsoil and subsoil will have sufficient separation to prevent mixing during the storage period. Topsoil will not be used to construct field entrances or drives, will not be stored or stockpiled at locations that will be used as a traveled way by construction, or be removed from the property, without the written consent of the landowner. Drainage gaps in the topsoil and subsoil piles will be left to avoid blocking drainage across the right of way.

Topsoil will not be removed where the pipeline is installed by plowing, jacking, boring, or other methods that do not require the opening of a trench.

The topsoil will be replaced so the upper portion of the pipeline excavation and the crowned surface, and the cover layer of the area used for subsoil storage, contains only the topsoil originally removed.

In most areas, ditch-line crowns will be installed to allow for and counter-act ditch settling. In the event the landowner will not allow a ditch-line crown, DAPL may have to regrade the right of way in

subsequent growing season. In this situation, DAPL may regrade the construction right of way and till down to 12 inches to manipulate the soil such that the original contours and elevation are restored. The depth of the replaced topsoil will conform as nearly as possible to the depth removed. Where excavations are made for road, stream, drainage ditch, or other crossings, the original depth of topsoil will be replaced as nearly as possible.

c. Prevention of Erosion

DAPL will follow best management practices and industry standards for erosion and sedimentation control during construction and post-construction. DAPL will develop a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP will detail the project specific stormwater and soil erosion prevention measures. In addition to the SWPPP stipulations, all of the regulations and conditions associated with the required South Dakota DNR NPDES permit will require the Contractor's full compliance. An approved SWPPP and South Dakota DNR NPDES permit will be required before any earth disturbing construction activities can take place.

d. Aboveground Facilities

The location for any aboveground structures will be selected in coordination with respective landowners. If use of agricultural land use is appropriate and/or necessary, aboveground structures will be located in a manner to minimize interference with agricultural operations. Compensation for aboveground structures will be negotiated as part of landowner compensation.

e. Pumping Water from Open Trenches

Trench and/or pit dewatering is necessary due to accumulation of precipitation and/or groundwater in open trenches; the Contractor will locate discharges within the Project ROW whenever feasible to avoid potential impacts to adjacent areas. Should a discharge need to occur outside of the ROW, prior landowner approval will be obtained and the area will be restored to pre-construction conditions. Pumping will occur in a manner that will avoid damaging adjacent agricultural land, crops, and/or pasture. Erosion and sedimentation control measures will be implemented and may include the use of dewatering structures, splash plates, sediment bags, haybales, and silt fence. The removal and disposal of trench water will comply with applicable drainage laws and local ordinances relating to such activities as well as provisions of the federal Clean Water Act.

Prior to initiating dewatering activities, the EI must check the water discharge situation to ensure that the best management practices are applied in such a way to avoid erosion and sedimentation offsite.

At each location where dewatering is to be conducted, the contractor must consider the following conditions in planning the dewatering event.

a. **Water Discharge Setting** – The contractor shall assess each water discharge situation to include:

(1) Soil Type - The soil type the discharged water would flow over. The management of discharged water traveling over sandy soil is more likely to soak into the ground as compared to clay soils.

(2) Ground Surface - The topography in the area that would influence the surface flow of the discharged water.

(3) Adjustable Discharge Rate - The flow rate of the discharged water (which may need to vary) can be managed based on the site conditions to minimize instances of water from reaching a sensitive resource area such as a wetland or waterbody. (Example - Water discharged at 500 gallons per minute may soak into the ground while if discharged at a higher flow rate would cause water to flow via overland runoff into a sensitive resource area)

(4) Discharge Outfall - The amount of hose and number/size of pumps needed to attempt to discharge water at a location, which drains away from waterbodies or wetlands.

b. **Pump Intake -** Use floating suction hose or other similar measures to prevent sediment from being sucked from bottom of trench.

c. **Overwhelming Existing Drainage -** If the discharge (assumed to be clean) does enter a stream, the flow added to the stream cannot exceed 50 percent of the peak storm event flow (to prevent adding high water volumes to a small stream channel that causes erosion due to imposing high flow conditions on the stream.

d. **Filtering Mechanism**

(1) All dewatering discharges will be directed through a filtering device as indicated below.

i) Well-Vegetated Upland Area – Water can be directed to a well-vegetated upland area through a geotextile filter bag. Geotextile bags need to be sized appropriately for the discharge flow and suspended sediment particle size.

ii) Straw Bale Dewatering Structure – Where the dewatering discharge point cannot be located in an upland area due to site conditions and/or distance, the discharge should be directed into a straw bale dewatering structure. The size of the straw bale dewatering structure is dependent on the maximum water discharge rate. A straw bale dewatering structure should be used in conjunction with a geotextile filter bag to provide additional filtration near sensitive resource areas.

iii) Alternative dewatering methods (e.g., use of water cannons) may be approved by DAPL on a site-specific basis.

f. Temporary and Permanent Repair of Drain Tiles

The following methods for repair of drain tiles are proposed:

a. **Movement of Drain Tiles before Construction:** DAPL will install with landowner consent parallel tile drains along the proposed right-of-way in advance of pipeline construction to maintain the drainage of the field tile drain system. After construction, the parallel tile drains will be connected across the pipeline right-of-way to facilitate a re-united overall tile drain system in the agricultural field.

b. **Pipeline Clearance from Drain Tile:** Where underground drain tile is encountered within in the project profile, the pipeline will be installed in such a manner that the permanent tile repair

can be installed with at least 24 inches of clearance from the pipeline or as agreed upon with landowner.

c. **Temporary Repair:** The following standards will be used to determine if temporary repair of agricultural drainage tile lines encountered during pipeline construction is required.

(1) Any underground drain tile damaged, cut, or removed and found to be flowing or which subsequently begins to flow will be temporarily repaired as soon as practicable, and the repair will be maintained as necessary to allow for its proper function during construction of the pipeline. The temporary repairs will be maintained in good condition until permanent repairs are made.

(2) If tile lines are dry and water is not flowing, temporary repairs are not required if the permanent repair is made within ten days of the time the damage occurred.

(3) Temporary repair is not required if the angle between the trench and the tile lines places the tile end points too far apart for temporary repair to be practical.

(4) If temporary repair of the line is not made, the upstream exposed tile line will not be obstructed but will nonetheless be screened or otherwise protected to prevent the entry of foreign materials and small animals into the tile line system, and the downstream tile line entrance will be capped or filtered to prevent entry of mud or foreign material into the line if the water level rises in the trench.

d. **Marking:** Any underground drain tile damaged, cut, or removed will be marked by placing a highly visible flag in the trench spoil bank directly over or opposite such tile. This marker will not be removed until the tile has been permanently repaired.

e. **Permanent Repairs:** Tile disturbed or damaged by pipeline construction will be repaired to its original or better condition. Permanent repairs will be completed as soon as is practical after the pipeline is installed in the trench and prior to backfilling of the trench over the tile line. Permanent repair and replacement of damaged drain tile will be performed in accordance with the following requirements:

(1) All damaged, broken, or cracked tile will be removed.

(2) Only unobstructed tile will be used for replacement.

(3) The tile furnished for replacement purposes will be of a quality, size and flow capacity at least equal to that of the tile being replaced.

(4) Tile will be replaced so that its original gradient and alignment are restored, except where relocation or rerouting is required for angled crossings. Tile lines at a sharp angle to the trench will be repaired in the manner shown in Appendix A.

(5) The replaced tile will be firmly supported to prevent loss of gradient or alignment due to soil settlement. The method used will be comparable to that shown in Appendix A.

(6) Before completing permanent tile repairs, all tile lines will be examined visually, by probing, or by other appropriate means on both sides of the trench within any work area to check for tile that might have been damaged by construction equipment. If tile lines are found to be damaged, they must be repaired to operate as well after construction as before construction began.

f. **Inspection:** Prior to backfilling of the applicable trench area, each permanent tile repair will be inspected for compliance by the DAPL Tile Inspector.

g. **Backfilling:** The backfill surrounding the permanently repaired drain tile will be completed at the time of the repair and in a manner that ensures that any further backfilling will not damage or misalign the repaired section of the tile line.

h. **Subsurface Drainage:** Subsequent to pipeline construction and permanent repair, if it becomes apparent the tile line in the area disturbed by construction is not functioning correctly or that the land adjacent to the pipeline is not draining properly, which can reasonably be attributed to the pipeline construction, DAPL will make further repairs or install additional tile as necessary to restore subsurface drainage.

g. Removal of Rocks and Debris from the Right-of-Way

Excess rocks will be removed from the right-of-way. On completion, the topsoil in the easement area will be free of all rocks larger than three inches in average diameter that are not native to the topsoil prior to excavation, and similar to adjacent soil not disturbed by construction. The top 24 inches of the trench backfill will not contain rocks in any greater concentration or size than exist in the adjacent natural soils. Consolidated rock removed by blasting or mechanical means shall not be placed in the backfill above the natural bedrock profile or above the frost line. In addition, DAPL will examine areas adjacent to the easement and along access roads and will remove any large rocks or debris that may have rolled or blown from the right-of-way or fallen from vehicles.

Rock that cannot remain in or be used as backfill will be disposed of at locations and in a manner mutually satisfactory to the company's environmental inspector and the landowner. All debris attributable to the pipeline construction and related activities will be removed and disposed of properly; such debris includes spilled oil, grease, fuel, or other petroleum or chemical products. Such products and any contaminated soil will be removed for proper disposal or treated by appropriate in situ remediation.

h. Restoration after Soil Compaction and Rutting

Agricultural land compacted by heavy project equipment, including off right-of-way access roads, will be deep tilled to alleviate soil compaction upon completion of construction on the property. In areas where topsoil was removed, tillage will precede replacement of topsoil. At least three passes with the deep tillage equipment shall be made. Tillage shall be at least 18 inches deep in land used for crop production and 12 inches deep on other lands,(except where shallow tile systems are encountered), and shall be performed under soil moisture conditions which permits effective working of the soil. If agreed in advance, this tillage may be performed by the landowners or tenants using their own equipment.

Rutted land will be graded and tilled until restored as near as practical to its preconstruction condition. On lands where topsoil was removed, rutting will be remedied before topsoil is replaced.

i. Restoration of Terraces, Waterways and other Erosion Control Structures

Existing soil conservation practices and structures damaged by pipeline construction, such as surface drains, embankments and terraces, grass waterways will be restored to pre-construction elevation, grade and condition. Any drain lines or flow diversion devices impacted by pipeline construction will be

repaired or modified as needed. Soil used to repair embankments intended to retain water shall be well compacted. Disturbed vegetation will be reestablished, including a cover crop when appropriate. Restoration of terraces will be in accordance with Standard Drawings in Appendix A.

j. Revegetation of Untilled Land

Agricultural land not in row crop or small grain production at the time of construction, such as hay fields and land in conservation or set-aside programs, will be reseeded following completion of deep tillage and replacement of the topsoil. The seed mix used will restore the original or a comparable ground cover unless otherwise requested by the landowner.

Land that is normally used for crops that will not be planted due to pipeline construction will be seeded with an appropriate cover crop following replacement of the topsoil and completion of deep tillage, unless otherwise agreed to with the landowner. Cover crop seeding may be delayed if construction is completed too late in the year for a cover crop to establish and in such instances is not required if the landowner or tenant proposed to till the land the following year.

k. Future Drain Tiles and Soil Conservation Structure Installation

At locations where future drain tile or soil conservation practices and structures are made known to DAPL in writing prior to securing the easement on the property, the pipeline will be installed at a depth that will permit proper clearance between the pipeline and the proposed tile installation, or allow for proper installation of the conservation practices. DAPL will consult with the landowner concerning the landowner's plans for these future actions.

l. Restoration of Land Slope and Contour

The slope, contour, grade, and drainage pattern of the disturbed area will be restored as nearly as possible to its preconstruction condition. However, the trench may be crowned to allow for anticipated settlement of the backfill. DAPL will remediate areas of excessive or insufficient settlement in the trench area where it visibly affects land contour or alters surface drainage. Disturbed areas where erosion causes excessive rills or channels or areas of heavy sediment deposition, will be regraded as needed. On steep slopes, methods such as sediment barriers, slope breakers, or mulching will be used as necessary to control erosion until vegetation can be reestablished.

m. Siting and Restoration of Areas Used for Field Entrances and Temporary Roads

The location of temporary roads to be used for construction purposes will be negotiated with the landowner and the Tenant. The temporary roads will be designed to not impede proper drainage and will be built to minimize soil erosion on or near the temporary roads.

Post construction and restoration temporary field entrances or access roads will be removed and the land made suitable for its previous use, in agreement with the landowner. Areas affected will be regraded and deep tilled as required. If by agreement or at landowner request, and approved by local public road authorities, a field entrance or road is left in place, it will be left in a graded and serviceable condition.

n. Construction in Wet Conditions

Construction in wet soil conditions will not commence or continue at times when or locations where the passage of heavy construction equipment may cause rutting to the extent that the topsoil and subsoil are mixed, or underground drainage structures may be damaged. To facilitate construction in soft soils, DAPL may elect to remove and stockpile the topsoil from the traveled way, install mats or padding, or use other methods.

7 COMPENSATION FOR DAMAGES

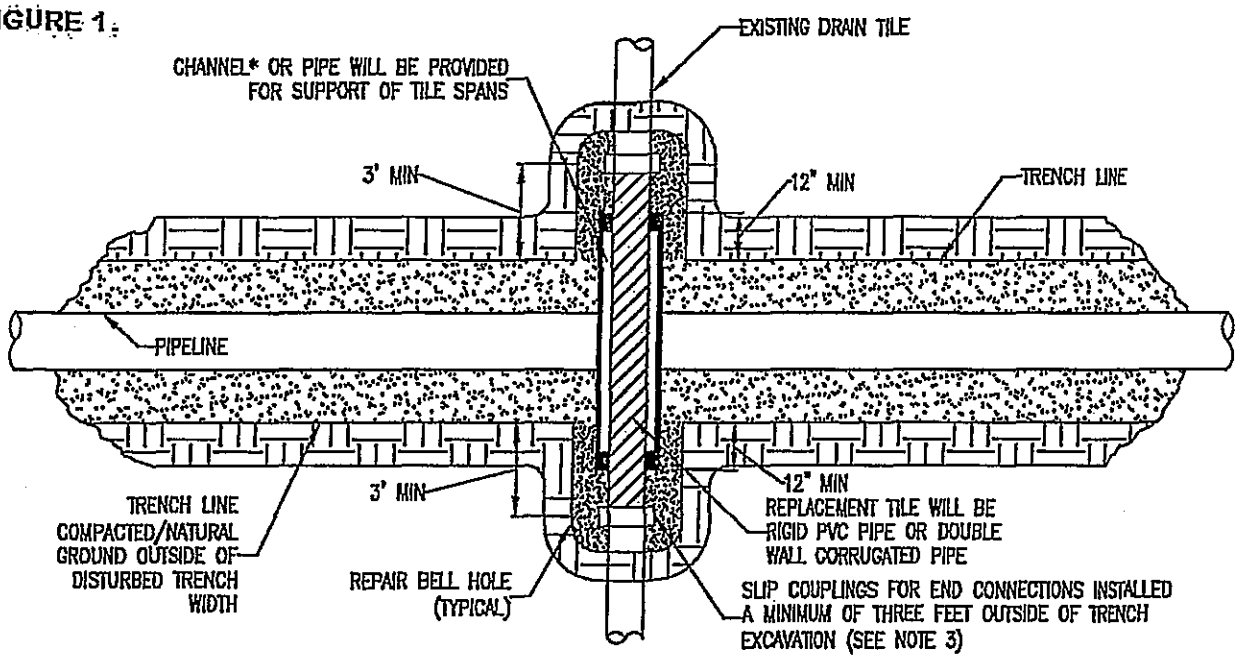
DAPL will be responsible for compensating the landowner for damages during construction. For crops, value of the loss will be established based on current crop values in the area of the impact per South Dakota Department of Agriculture statistics. DAPL will also compensate the landowner for loss of use of agricultural land, if attributable to pipeline construction. Supplemental soil sampling, testing and additional restoration activities to restore agricultural land to its pre-construction conditions will be undertaken by DAPL upon request of the landowner.

DAPL will also be responsible to compensate landowners for other physical property damage attributable to pipeline construction, such as fences, driveways and other structures.

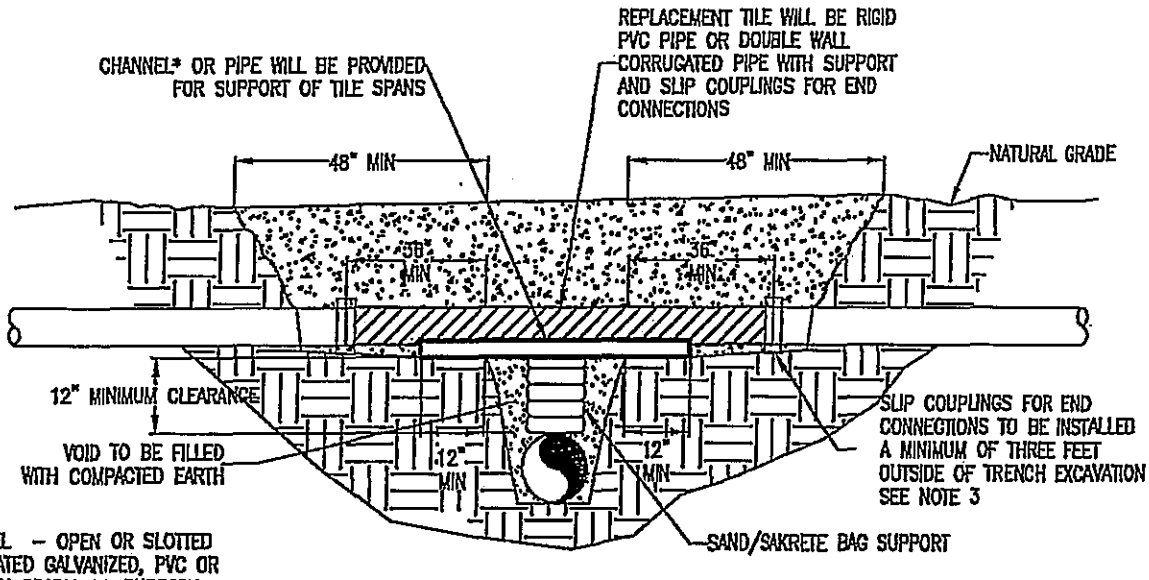
Appendix A

Tile Repair Drawings

FIGURE 1:



PLAN
N.T.S.



*CHANNEL – OPEN OR SLOTTED CORRUGATED GALVANIZED, PVC OR ALUMINUM CRADLE TO SUPPORT DRAIN TILE.

CROSS SECTION
N.T.S.

NOTE:

1. IMMEDIATELY REPAIR TILE IF WATER IS FLOWING THROUGH TILE AT TIME OF TRENCHING. IF NO WATER IS FLOWING AND TEMPORARY REPAIR IS DELAYED, OR NOT MADE BY THE END OF THE WORK DAY, A SCREEN OR APPROPRIATE 'NIGHT CAP' SHALL BE PLACED ON OPEN ENDS OF TILE TO PREVENT ENTRAPMENT OF ANIMALS ETC.
2. CHANNEL OR PIPE (OPEN OR SLOTTED) MADE OF CORRUGATED GALVANIZED PIPE, PVC OR ALUMINUM WILL BE USED FOR SUPPORT OF DRAIN TILE SPANS.
3. INDUSTRY STANDARDS SHALL BE FOLLOWED TO ENSURE PROPER SEAL OF REPAIRED DRAIN TILES.

TEMPORARY DRAIN TILE REPAIR

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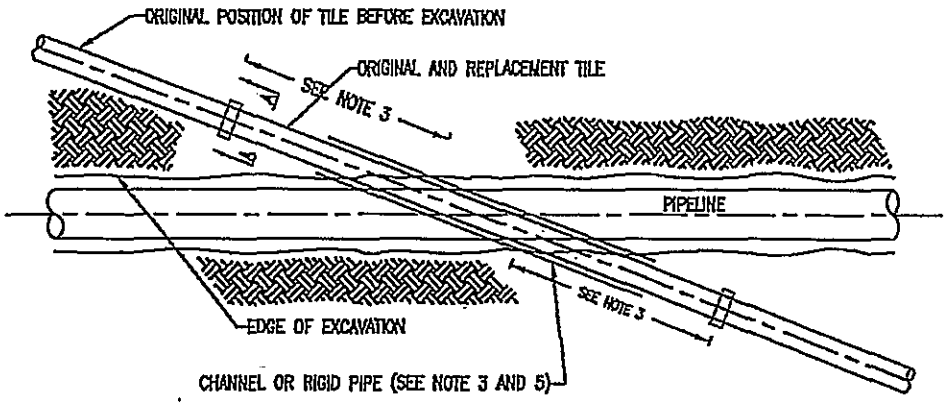
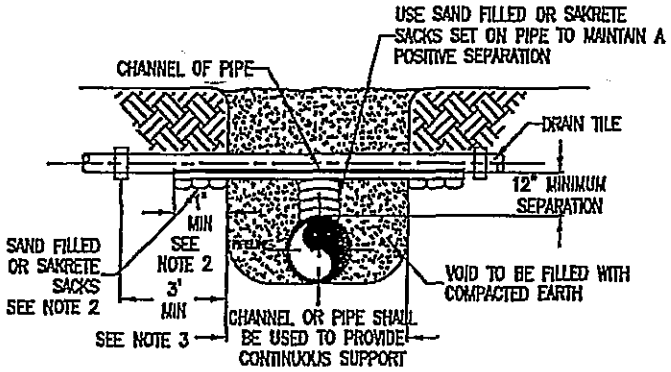
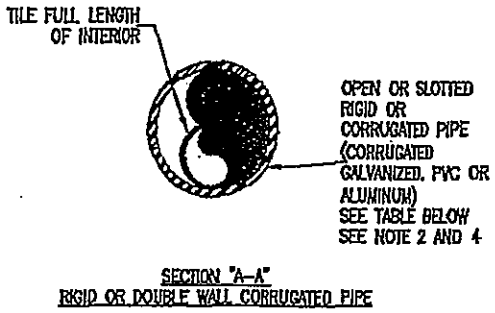
FIGURE 2.



PLAN VIEW





SECTION "A–A"
RIGID OR DOUBLE WALL CORRUGATED PIPE

END VIEWS

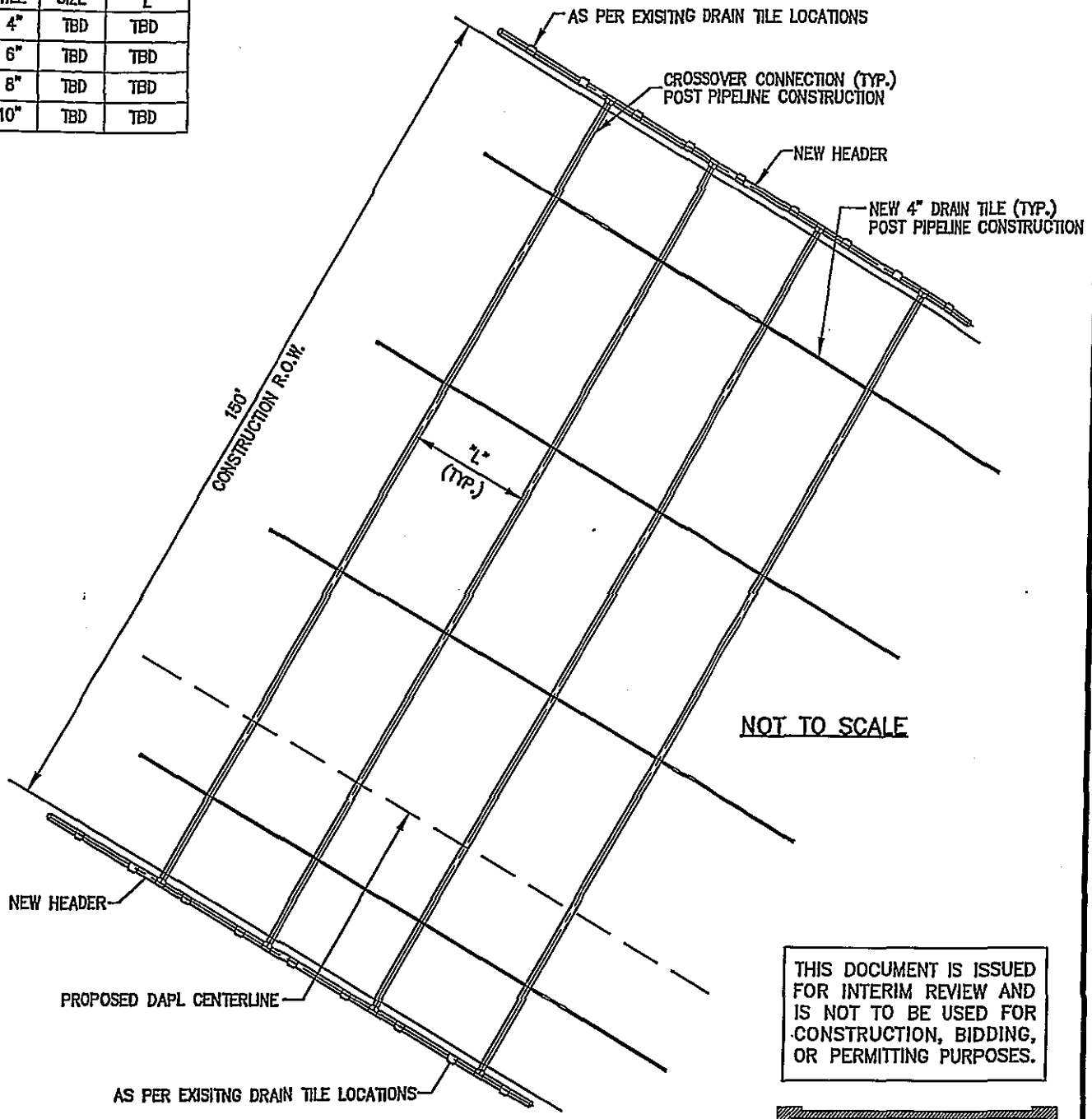
MINIMUM SUPPORT TABLE			
TILE SIZE	CHANNEL SIZE	PIPE SIZE	
3"	4" @ 5.4 #/ft	4"	STD. WT.
4"-5"	5" @ 6.7 #/ft	6"	STD. WT.
8"-9"	7" @ 9.8 #/ft	9"-10"	STD. WT.
10"	10" @ 15.3 #/ft	12"	STD. WT.

NOTE:

1. TILE REPAIR AND REPLACEMENT SHALL MAINTAIN ORIGINAL ALIGNMENT GRADIENT AND WATER FLOW TO THE GREATEST EXTENT POSSIBLE. IF THE TILE NEEDS TO BE RELOCATED, THE INSTALLATION ANGLE MAY VARY DUE TO SITE SPECIFIC CONDITIONS AND LANDOWNER RECOMMENDATIONS.
2. 1'–0" MINIMUM LENGTH OF CHANNEL OR RIGID PIPE (OPEN OR SLOTTED CORRUGATED GALVANIZED, PVC OR ALUMINUM CRADLE) SHALL BE SUPPORTED BY UNDISTURBED SOIL, OR IF CROSSING IS NOT AT RIGHT ANGLES TO PIPELINE, EQUIVALENT LENGTH PERPENDICULAR TO TRENCH. SHIM WITH SAKRETE, OR SAND BAGS TO UNDISTURBED SOIL FOR SUPPORT AND DRAINAGE GRADIENT MAINTENANCE (TYPICAL BOTH SIDES).
3. DRAIN TILES WILL BE PERMANENTLY CONNECTED TO EXISTING DRAIN TILES A MINIMUM OF THREE FEET OUTSIDE OF EXCAVATED TRENCH LINE USING INDUSTRY STANDARDS TO ENSURE PROPER SEAL OF REPAIRED DRAIN TILES INCLUDING SLIP COUPLINGS.
4. DIAMETER OF RIGID PIPE SHALL BE OF ADEQUATE SIZE TO ALLOW FOR THE INSTALLATION OF THE TILE FOR THE FULL LENGTH OF THE RIGID PIPE.
5. OTHER METHODS OF SUPPORTING DRAIN TILE MAY BE USED IF ALTERNATE PROPOSED IS EQUIVALENT IN STRENGTH TO THE CHANNEL/PIPE SECTIONS SHOWN AND IF APPROVED BY COMPANY REPRESENTATIVES AND LANDOWNER IN ADVANCE. SITE SPECIFIC ALTERNATE SUPPORT SYSTEM TO BE DEVELOPED BY COMPANY REPRESENTATIVES AND FURNISHED TO CONTRACTOR FOR SPANS IN EXCESS OF 20', TILE GREATER THEN 10" DIAMETER, AND FOR "HEADER" SYSTEMS.
6. ALL MATERIAL TO BE FURNISHED BY CONTRACTOR.
7. PRIOR TO REPAIRING TILE, CONTRACTOR SHALL PROBE LATERALLY INTO THE EXISTING TILE TO FULL WIDTH OF THE RIGHTS OF WAY TO DETERMINE IF ADDITIONAL DAMAGE HAS OCCURRED. ALL DAMAGED/DISTURBED TILE SHALL BE REPAIRED AS NEAR AS PRACTICABLE TO ITS ORIGINAL OR BETTER CONDITION.

PERMANENT DRAIN TILE REPAIR

DRAIN TILE	HEADER SIZE	SPACING "L"
4"	TBD	TBD
6"	TBD	TBD
8"	TBD	TBD
10"	TBD	TBD



THIS DOCUMENT IS ISSUED FOR INTERIM REVIEW AND IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, OR PERMITTING PURPOSES.

ISSUED FOR REVIEW
09/02/14

NOTES:
1. HEADERS WILL BE CONNECTED TO EXISTING DRAIN TILE PRE-CONSTRUCTION.
2. CROSSOVER PIPING WILL BE INSTALLED POST PIPELINE INSTALLATION.

REV.	DATE	BY	DESCRIPTION	CHK.
A	9/2/14	DAH	ISSUED FOR REVIEW	

PROJECT NO. 10395700

DAPL/ETCOP

TYPICAL DRAIN TILE HEADER SYSTEM

DRAWN BY: DAH	DATE: 09/02/14	DWG. NO.	REV.
CHECKED BY: DAH	DATE: 09/02/14	P12--49	A
SCALE: N.T.S.	APP.:		

012671

Horizontal Directional Drill Contingency Plan

DAKOTA ACCESS, LLC
An ENERGY TRANSFER Company

HORIZONTAL DIRECTIONAL DRILL CONTINGENCY PLAN

Dakota Access, LLC
Dakota Access Pipeline Project (DAPL)

1.0 INTRODUCTION

Portions of the proposed DAPL Project will be installed using horizontal directional drilling (HDD) technology. This baseline directional drill contingency plan provides specific procedures and steps to detect and respond to any inadvertent release of drilling fluids for the above-described canal crossings. A site specific HDD contingency plan may be provided by the contractor selected to perform the HDD, that plan would meet or exceed the standards established in this document.

Elements of this plan include:

- Preparation;
- Monitoring Procedures;
- Notification Procedures;
- Corrective Action and Cleanup; and
- Abandonment.

2.0 PREPARATION

An Environmental Inspector will be employed throughout construction and restoration of this Project. All work will be performed in compliance with environmental permits, laws, and regulations. The Pipeline Construction Contractor – supervisory personnel will be provided environmental training prior to commencing work, and the Contractors will be provided a Project specific Environmental Clearance Package including copies of all environmental permits secured for the Project in advance of commencing activities.

Best management practices employed during this Project include the use of erosion control devices and turbidity control measures to protect sensitive resources (e.g. wetlands and waterbodies). Furthermore, containment equipment including earth-moving equipment, portable pumps, hand tools, sand, hay bales, silt fencing, turbidity screens, and/or lumber will be readily available at the project site in the event of a frac-out and vacuum truck will be employed as necessary.

3.0 MONITORING PROCEDURES

The Drilling Contractor personnel will monitor operations during drilling activities. Monitoring will include:

- Inspection along the drill path, including surface waters along the path for evidence of a release.
- Continuous examination of drilling fluid pressures and return flows.
- The Drilling Contractor will provide information regarding drilling conditions to the company representative and the Pipeline Construction Contractor during the course of drilling activities.
- Monitoring will be documented by the Pipeline Construction Contractor.

4.0 NOTIFICATION PROCEDURES

If an inadvertent release is discovered, steps will be taken by Drilling Contractor to contain the release as described below in the Corrective Action and Cleanup Section below (Section 5.0).

If monitoring indicates an in-stream or wetland release has occurred, the Drilling Contractor will immediately notify DAPL's construction management and environmental management personnel. The Drilling Contractor's crew will take immediate corrective action to contain the release and to prevent or minimize impacts. DAPL will notify the U.S. Army Corps of Engineers (USACE), and County Environmental Department as soon as possible (within 24 hours), and provide details of the nature of the release and corrective actions being taken, completed, and/or planned. DAPL will work with the respective agencies regarding additional measures that may be warranted. If it is determined that the release cannot be remedied without causing additional negative environmental impacts, DAPL will request that drilling operations continue.

5.0 CORRECTIVE ACTION AND CLEANUP

By monitoring drilling operations continuously, DAPL intends to correct problems before they occur. However, if a release does occur, the following measures will be implemented to stop or minimize the release and to clean it up:

- The Drilling Contractor will decide what modifications to make to the drilling technique or composition of drilling fluid (i.e., thickening of fluid by increasing bentonite content) to reduce or stop minor losses of drilling fluid.
- If a minor bore path void is encountered during drilling, making a slight change in the direction of the bore path may avoid loss of circulation.
- If the borehead becomes lodged resulting in loss of drilling pressure, the borehole may be sized by moving the borehead back and forth to dislodge the stuck materials.
- If public health and safety are threatened, drilling fluid circulation pumps will be turned off. This measure will be taken as a last resort because of the potential for drill-hole collapse resulting from loss of down-hole pressure.

Land Release:

- If a land release is detected, the drilling crew will take immediate corrective action to contain the release and to prevent or minimize migration off site.
- Steps will be taken (such as installing berms, silt fence and/or hay bales) to prevent silt-laden water from flowing into protected resources.
- The contractor will construct pits and/or berms around the frac-out point to contain inadvertent releases onto the ground.
- Vacuum trucks may be called in as necessary to assist in the removal of released material.
- If the amount of an on-land release does not allow practical collection, the affected area will be diluted with fresh water and allowed to dry.
- If hand tools cannot contain a small on-land release, small collection sumps (less than 5 cubic yards) may be constructed to pump the release material into the mud-processing system.

- Once the release is contained and materials are removed, it will be disposed of properly.

Wetland or Waterbody Release:

- If a release occurs within a waterbody, USACE will be contacted as soon as possible (within 24 hours) by DAPL. DAPL will inform USACE about any threat to public health and safety and explain whether or not the release can be corrected without incurring additional environment impact. If necessary, drilling operations will be reduced or suspended to assess the extent of the release and to implement corrective actions.
  - Temporary dams (e.g. sand bags) may be installed to isolate the fluid from a frac-within a protected feature.
  - Vacuum trucks will be called in as necessary to assist in timely, effective removal of released drilling mud.
  - Once the release is contained and materials are removed, it will be properly disposed of.

6.0 ABANDONMENT

If corrective actions do not prevent or control releases from occurring into a protected feature, DAPL may opt to re-drill the hole along a different alignment within their easement rights or suspend the installation altogether. Other issues may require abandoning the hole, such as refusal or misalignment. In any case, the following procedures will be implemented to abandon the drill hole:

- The method for sealing the abandoned drill hole is to pump thickened drilling fluid into the hole as the drill assembly is extracted and using cement grout to make a cap.
- Closer to the surface (within approximately 10 feet of the surface), a soil cap will be installed by filling with soil extracted during construction of the pit and berms.
- The borehole entry location will be graded and seeded by the contractor to its original grade and condition after the drill hole has been abandoned.

Blast Plan

Dakota Access Pipeline
North & South Dakota, Iowa, Illinois

A. Scope of Blasting Project

Blasting will take place along the ***Dakota Access Pipeline*** right-of-way. The Blasting Contractor will blast only in the areas where the rock cannot be economically excavated by conventional means. It is anticipated that this may occur anywhere along the right-of-way, site-specific locations will be determined as project progresses. As much as possible due to safety reasons, drilling and blasting will occur through the natural dirt overburden. Blasting activities will take place during daylight hours Monday through Saturday.

B. Types of Blasting

Primary type of blasting will be for ditch excavation. Blasting may also be required during the right-of-way grading operation.

If any streams and wetland areas require blasting to perform the ditch excavation, the streams and wetland areas will be tested for rock and shot by the mainline blasting crew. Once blasted, the creeks will be fixed back to original condition and all ECD's replaced until the time of the tie ins.

C. Location of Shots and Proximity to Existing Facilities

No blasting will occur within 15 feet of existing loaded pipelines or within 10 feet of other structures that may be of concern. All blasting located along adjacent power line rights-of-way shall be conducted in a manner that will not cause damage to the power company property and facilities. The blast be drilled through natural dirt overburden or covered by blasting mats and/or other material as needed to protect nearby existing facilities, structures, highways, railroads or significant natural resources from thrown rock fragments.

D. Method to be Used to Minimize Hole-to-Hole Propagation

Hole-to-hole propagation problems are not anticipated with the proposed product and pattern for the following reasons:

1. Only cartridge explosives will be used.

2. The amount and type of explosives anticipated does not lend to the likelihood of propagation issues.

E. Types of Explosives / Initiation System to be Used

1. Dyno Nobel Unimax®: An extra gelatin dynamite with a specific gravity of 1.51 g/cc, a detonation rate of 17,400 f/s (unconfined) and a calculated energy of 1,055 c/g.
2. D-GEL 1000 is a desensitized, nitroglycerin-based dynamite formulated to reduce sensitivity to sympathetic detonation (hole-to-hole propagation) with

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superior water resistance. The product has a specific gravity of 1.36 g/cc and a detonation rate of 16,900 f/s (unconfined) and a calculated energy of 1045 c/g.

3. DYNOMAX PRO is desensitized extra gelatin dynamite designed to satisfy the majority of explosive application requirements consistently delivering delivering high detonation velocity and excellent water resistance while reducing cartridge to cartridge gap sensitivity and hole-to-hole propagation problems. The product has a specific gravity of 1.45g/cc and a detonation rate of 19,700 f/s (unconfined) and a calculated energy of 1055 c/g.

4. Dyno Nobel TX: A cap sensitive high explosive with a specific gravity of 1.17 g/cc and a detonation rate of 16,400 f/s (unconfined) and a calculated energy of 1170 c/g.

5. Dyno Nobel Blastex TX: A cast booster sensitive, water resistant, packaged emulsion explosive specifically formulated to provide increased resistance to hydrostatic and/or dynamic transitory shock pressures which can result when used in wet and/or water saturated geologies. The product has a specific gravity of 1.26g/cc and a detonation rate of 15,400 f/s (unconfined) and a calculated energy of 808 c/g.

6. Orica Senatel Pulsar : The premier, packaged, detonator-sensitive emulsion explosive for pipeline, trenching and site preparation projects is Senatel™Pulsar™ energized emulsion. This product is packaged in a semi-rigid, film cartridge for loading into ragged holes in surface rock. Senatel™Pulsar™ will not propagate yet it has energetic additives to give added breaking power and heave with excellent pre-compression resistance. The product has a specific gravity of 1.23g/cc and a detonation rate of 14,740 f/s (unconfined) and a calculated energy of 950 c/g.

7. Dyno Nobel NONEL® 25 Millisecond Delay Connectors or Dyno Nobel NONEL EZ Det® (nonelectric) 25/350 millisecond delay.

8. A Dyno Nobel NONEL nonelectric shock tube system detonator will initiate all shots. This NONEL will be attached at one point only for initiation of the entire shot and will not be used for down hole priming.

F. Drill and Blast Pattern

The drilling program will be based on 2 rows of 3 inch diameter holes drilled with a grid spacing of approximately 4 feet wide by 5-7 feet along the ditch line. If rock breakage is not optimum a third row of holes will be added to the blast pattern (dice "5" pattern). The drill pattern will be established using a powder factor between 2.0 and 4.0 pounds per cubic yard to achieve the desired explosive energy ratio needed to break the rock and pull the ditch. This shot pattern may be adjusted on a site-specific basis to compensate for different geology, nearby structures, utilities or other sensitive areas.

G. Charge Weight and Delays

Delays will be used accordingly to control the vibration as well as limiting the transmission of energy below the damaging levels at any existing structure. The delay pattern will be created to provide the energy relief immediately down the ditch in preference to a horizontal direction. The main type of delays will be NONEL® EZ-Det 25/350 or 25/500 which are color-coded for easy identification of delay length. The amount of dynamite used in each hole will be limited to the manufacturer's recommendations and specifications. The Blasting Contractor will also use multiple caps per hole (decking) as needed to meet maximum charge per delay requirements as necessary.

H. Flyrock Control Plan

All shots will be carefully designed by the Licensed Blaster to control flyrock. All hole loading activity will be supervised by the Licensed Blaster. The Licensed Blaster will communicate with the drillers to obtain geological information for each shot.

A good quality, non-bridging stemming material that completely fills any voids in the drill hole will also be used to reduce the amount of flyrock. A minus 3/8" crushed rock is typically used for this purpose. This stemming size has been a standard for U.S. Corps of Engineers for decades.

I. Selection of Blasting Products and Methods

These blasting products were chosen because of many years of dependable use and positive results on pipeline projects throughout the world which are demonstrated by the:

- quality, safety and reliability of the product
- support offered by the manufacturer
- availability
- price

A nonelectric detonator will initiate all shots. A completely nonelectric system (including initiation) for several important reasons:

1. Due to the proximity of the high voltage power lines, stray current may be an issue that could result in the premature firing of an electric detonator.

2. The numerous radio equipped trucks belonging to all personnel (surveyors, inspectors and other subcontractors) on the project mandate that all shots be totally nonelectric to eliminate accidental detonation of electric caps. Furthermore, there may be other commercial and/or non-commercial radio users in the area not associated with the project (logging operations, quarry sites, etc.) who could compromise the safety of the blasting operations.

3. The nonelectric detonator shock tube system works instantaneously (like electric blasting caps). This allows for precise and reliable initiation of shots in congested areas, adjacent to highways or in other locations where blast initiation control is an issue.

J. Monitoring, Reporting and Controlling Ground Cracking and Displacement

It is not expected that this type of rock will fracture in such a way as to cause any kind of ground displacement. Following each blast, the area will be examined for signs of ground cracking. Any indication of overbreak (cracks greater than half the distance to the existing pipeline) will be brought to the attention of the Company Inspector and noted on the blast report. The shot pattern and/or loading will be adjusted to minimize or eliminate overbreak.

K. Explosives Storage and Transportation Procedures

Explosives storage and transportation will follow the guidelines and regulations of all federal, state and local agencies.

L. Peak Particle Velocity Monitoring and Control

Each blast will be monitored by a licensed blaster or other person experienced in monitoring blasts using a seismograph. The seismograph will be placed at the "point of interest". In most cases, this will be next to the foundation of the closest building, power line foundation, utility or well. In all cases, both the sensor and seismograph will be protected from flyrock.

This recorder gives a direct peak particle velocity (PPV) reading that is indicated on a tape as well as decibel reading to capture sound levels.

The industry standard for many years has been 12 inches per second maximum PPV on any underground structures. ***DAPL*** expects the PPV's to be kept under 6 inches per second or lower on any underground structures & 2 inches per second or lower on wells and above ground inhabited structures.

After each blast, a blast report with a print out of the seismograph readings will be will be compiled and a copy presented to the Company inspector for Company records.

M. Fire Prevention

Following the required waiting period after each shot, the blast area will be inspected for any indication of fire or fire hazard. Particular attention will be paid to the vegetated areas outside of the R.O.W. Normally, the explosives vaporize at the instant of detonation and there is no fiber or other material left to smolder or be a source of concern.

1. The blasting operation will generally take place after the grading operation has graded the right-of-way to bare mineral soil. The blaster shall ensure that the

initiating detonator is placed on bare mineral soil and that there is no vegetation within a 20-foot radius.

2. The shock tube initiating system will be initiated a minimum of 250 feet from the nearest loaded hole.

3. When fire danger is high due to forest conditions, a 2-man fire watch team will patrol each blast area for a period of 1hour after the required waiting period.

N. Environmental Concerns

All residents within 300 feet of the blast will be notified of blasting activity and offered a pre-blast survey of their residence or structure of concern. In any case, communications with property owners will be maintained.

All necessary measures will be taken to exclude livestock from the blasting area. During the normal safety check prior to blasting, the area will be checked for both livestock and wildlife. The blast will not be initiated until the area is clear.

Dakota Access Pipeline
North & South Dakota, Iowa, Illinois

EXPLOSIVES SAFETY PROGRAM

1. ***The Blasting Contractor*** will follow all Federal and State regulations.

   A. Bureau of Alcohol, Tobacco and Firearms – 27CFR 181 (Commerce in Explosives).

   B. Occupational Safety and Health Administration – 29CFR 1926.90 (Safety and Health Regulations for Construction Blasting and Use of Explosives).

   C. Carriage by Public Highway – 49CFR 177 (self-explanatory).

   D. Explosives and Blasting Agents – OSHA, 29CFR 1910.109 (Safety in the Workplace When Using Explosives).

   E. Guidelines to be Followed by Natural Gas Pipeline Companies in the Planning, Locating, Clearing and Maintenance of Right-of-Way and the Construction of Above Ground Facilities – 18CFR 2.69.

2. General Regulations

   A. Only authorized and qualified personnel shall handle explosives and shall always be under the direct supervision of a blaster licensed, if required, by the state of use.

   B. No flame, heat, radio transmitter or spark-producing device shall be permitted in or near explosives during handling, transport or use.

   C. No person shall be allowed to handle, use or work in the area while under the influence of liquor, narcotic or dangerous drugs.

   D. Explosives shall be accounted for at all times. Explosives not in use shall be kept in locked, approved storage magazines. A running inventory shall be maintained at all times. Appropriate authorities shall be notified of any loss, theft or unauthorized entry into a magazine.

   E. No explosives shall be abandoned.

   F. No fires shall be fought where contact with explosives is imminent. All personnel shall be cleared and area guarded against other intruders.

   G. Separate Class I and II magazines shall be used for transport of detonators and explosives from magazine storage area to blast site. Magazines shall be kept locked except for removal of material for use. In addition, explosives will be loaded directly to each shot point from the magazines on approved ground transportation equipment.

H. When blasting in areas of congestion or in close proximity of other structures or services, special precaution will be taken to avoid damage or personal injury.

I. Every reasonable precaution shall be used to notify others of use of explosives (visual, audible, flags, barricades, etc.). No onlookers or unauthorized personnel will be permitted within 500 feet during loading or blasting. Flaggers shall be stationed on roadways that pass through the danger zone to stop traffic during blasting operations.

J. All necessary precautions shall be taken to prevent accidental current discharge from any possible source. The exclusive use of a nonelectric initiation system will eliminate this possibility in nearly every situation with the possible exception of lightning strikes.

1. Electrical storms

a. All blasting operations shall be suspended and all persons shall be removed from the blasting areas during the approach and progress of an electrical storm. The following rules must be followed:

1. A lightning detector should be used to monitor the proximity of lightning to the shot. When the storm is 10 miles distant as identified by the lightning detector, notify all persons in the blasting crew of approaching storm. Stop all loading of holes and evacuate all personnel, except blaster and assistant, to a safe distance (500 feet) from the blast area.

2. If the blast cannot be initiated before the storm arrives (within 10 miles as indicated by the lightning detector), the blaster shall evacuate the site to a safe distance.

3. Personnel may return to worksite when the storm has passed and is 10 miles distant as determined by the lightning detector or after the completion of blast which allows for inspection of site and/or misfire.

4. If no lightning detector is available, the "1 second per mile" rule of thumb may be used. This rule of thumb is used to estimate the distance of the storm between sight and sound. When lightning is sighted the sound wave typically travels at approximately 1 mile per second. So, if the lightning is spotted and 10 seconds elapses it is about 10 miles away.

K. Empty packing material shall not be used again for any purpose. It shall be burned at an approved location. Typically, this will be in the excavated trench or other designated area.

L. Damaged or deteriorated blasting supplies shall not be used.

M. Delivery and issue of explosives shall only be under, by and to authorized persons and into authorized magazine or temporary storage handling areas.

N. Blasting operations shall not be carried out in the proximity of other utilities or property owners without prior approval. "ONE CALL" notification requirements shall be followed.

O. All loading and firing shall be directed and supervised by a competent and experienced person.

P. No loaded holes shall be left unattended or unprotected. No explosives or blasting agents shall be abandoned on the right-of-way. Explosives shall not be primed until immediately before use and shall not be allowed to lay overnight in drilled holes.

Q. All jurisdictional authorities shall be granted unrestricted access to all explosive records as well as site access for procedural inspections. All personnel not involved with the current blasting operation must check in with the blaster before entering the blasting zone.

R. Warning signs, indicating the blast area, shall be erected and maintained at all approaches to the blast area. Warning sign lettering shall be readable from a reasonable distance and on a contrasting background.

S. The warning signs will be erected and maintained at all approaches to the blast area. Flaggers will be stationed on all roadways passing within 500 feet of the blast area and be responsible to stop all traffic during blasting operations. All personnel not involved in the actual blast shall stand back at least 500 feet from the time the blast signal is given until the "All Clear" has been sounded. An audible blasting signal (air horn or siren) shall be used. The following blast signals will be used during blasting.

1. Warning Signal A series of two long horn or siren sounds will be made 2 minutes prior to the blast.

2. Blast Signal One prolonged horn or siren sound will be sounded one minute prior to the blast.

3. All Clear Signal Two short blasts on the horn or siren sound will be sounded following the blast once the blast area has been inspected and deemed safe.

T. All blasting will be performed with a nonelectric initiation system and shall follow standard industry guidelines in regard to use and safety.

U. Blaster qualifications shall meet all federal, state and local standards.

V. Misfires

1. If there are any misfires, all employees shall remain away from the suspected misfire area for at least 15 minutes. Misfires shall be handled under the direction of the blaster in charge. All leads shall be carefully traced and a search made for unexploded charges.
2. If a misfire is found, the blaster shall provide proper safeguards for excluding all employees from the danger zone.
3. No other work shall be done except that necessary to remove the hazard of the misfire and only those employees necessary to do the work shall remain in the danger zone.
4. No attempt shall be made to extract explosives from any charged or misfired hole! A new primer shall be inserted into the hole and the hole shall be reshot. If re-firing of the misfired hole presents a hazard, the explosives may be removed by washing out with water or, where the misfire is underwater, blown out with air.
5. No drilling, digging or picking shall be permitted until all missed holes have been detonated or the authorized representative has approved that work can proceed.
6. Prior to the end of the working day, any misfires shall be located and rendered safe.

DAKOTA ACCESS, LLC

Sunoco Pipeline L.P.
Facility Response Plan
Dakota Access Pipeline North Response Zone

Dakota Access, LLC
1300 Main Street
Houston, Texas 77002

VERSION 1.0
June 2015

Developed Under the Guidelines:

- 49 CFR Part 194 Subpart B Oil Spill Response Manual Appendix A
- 49 CFR Part 195 402 (e)
- South Dakota Environmental Protection Oil Pipeline Plan Requirements (34A-18).
- American Petroleum Industry (API) RP 1174 - Recommended Practice for Pipeline Emergency Preparedness and Response.
- North Dakota Administrative Code 69-09-03-02

DAPL-ETCO Operations Management, LLC has been retained by Dakota Access, LLC as operator of the Dakota Access Pipeline. Sunoco Pipeline L. P. has been appointed as operator of the Dakota Access Pipeline on behalf of DAPL-ETCO Operations Management, LLC.

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APPENDICES

Changes to this Plan will be documented on this page. Plan review and modifications will be initiated and coordinated by the Environmental, Health, Safety, and Security Department (EHS&S) in conjunction with the Area Supervisor/Manager of Operations.

CHANGE NUMBER	DATE OF CHANGE	DESCRIPTION OF CHANGE	PAGE NUMBER
1	June 2015	Initial Draft	

1.0 INFORMATION SUMMARY

1.1 Purpose of Plan

The purpose of this Facility Response Plan (FRP) is to provide guidelines to quickly, safely, and effectively respond to a spill from the Dakota Access Pipeline (DAPL) system. The pipeline is owned by Dakota Access, LLC. DAPL-ETCO Operations Management, LLC has been retained by Dakota Access, LLC as operator of the Dakota Access Pipeline. Sunoco Pipeline L. P. has been appointed as operator of the Dakota Access Pipeline on behalf of DAPL-ETCO Operations Management, LLC.

This Plan is intended to satisfy the requirements of the Oil Pollution Act of 1990 (OPA 90), and has been prepared in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and applicable Area Contingency Plans (ACP). Specifically, this Plan is intended to satisfy:

- Pipeline and Hazardous Materials Safety Administration (PHMSA), U.S. Department of Transportation requirements for an OPA 90 plan (49 CFR 194)
- South Dakota Environmental Protection Oil Pipeline Plan Requirements (34A-18).
- American Petroleum Industry (API) RP 1174 - Recommended Practice for Pipeline Emergency Preparedness and Response.
- North Dakota Administrative Code 69-09-03-02

A DOT/PHMSA Cross Reference Matrix is provided in **APPENDIX A.**

1.2 Response Zone Information Summary

The information summary for the DAPL North Response Zone is presented on the following pages:

TABLE 1-1 – DAPL NORTH RESPONSE ZONE INFO. SUMMARY

Owner: Dakota Access, LLC 1300 Main Street Houston, Texas 77002 Phone: (713) 989-2000	**Operator:** Sunoco Pipeline L.P. Western Area One Fluor Daniel Drive Sugar Land, Texas 77478
Product	Crude Oil
Qualified Individuals:	TBD Senior Manager (Office) (Home) (Mobile)
	TBD Manager Pipeline Operation (Office) (Home) (Mobile)
	TBD Supervisor Pipeline Operations-Technical (Office) (Home) (Mobile)
Pipeline Description:	The DAPL pipeline system transports crude oil in North Dakota and South Dakota.
Response Zone:	The Response Zone is the DAPL pipeline system in North and South Dakota. The Response Zone has the potential for "significant and substantial harm" and has the potential for a "worst case discharge"

TABLE 1-2 – DESCRIPTION OF LINE SEGMENTS/STATIONS

	Description	Counties/Parishes	Product
Line Sections	Stanley to Ramberg 12"	Mountrail & Ramberg, ND	Crude Oil
	Ramberg to Epping 20"	Williams, ND	Crude Oil
	Epping to Trenton 20"	Williams (McKenzie Maybe), ND	Crude Oil
	Trenton to Watford City 24"	Williams & McKenzie, ND	Crude Oil
	Watford City to Johnsons Corner 30"	McKenzie, ND	Crude Oil
	Johnsons Corner to Redfield 30"	McKenzie, Dunn, Mercer, Morton & Emmons, ND/ Campbell, McPherson, Edmunds, Faulk, Spink, Beadle, Kingsbury, Miner, Lake, McCook, Minnehaha, Turner, Lincoln, SD	Crude Oil
Stations	Stanley	Mountrail, ND	Crude Oil
	Ramberg	Williams, ND	Crude Oil
	Epping	Williams, ND	Crude Oil
	Trenton	Williams, ND	Crude Oil
	Watford City	McKenzie, ND	Crude Oil
	Johnsons Corner	McKenzie, ND	Crude Oil
	Redfield	Spink, SD	
Alignment Maps Location(s): (Piping, Plan Profiles)	Maintained in the company's DSS mapping program		
Spill Detection and Mitigation Procedures:	Refer to **SECTION 3**		
Worst Case Discharge:	**75,000 bbls** (Tankage at Johnsons Corner)		
Statement of	Basis for Operator's Determination of Significant and Substantial Harm		

Significant and Substantial Harm:	• The pipeline in the Response Zone is greater than 6 5/8 inches and longer than 10 miles • At least one section of pipeline crosses a river, meeting the requirement for location within one mile of an environmentally sensitive area • Therefore, the potential to cause significant and substantial harm is present within the entire Response Zone
Date Plan Prepared:	June 19, 2015

The information contained in this Plan is intended to be used as guidelines for the spill responder. Actual circumstances will vary and will dictate the procedures to be followed, some of which may not be included in this manual.

1.3 Operator Certification

In accordance with section 311 (j) (5) (F) of the Federal Water Pollution Control Act, as amended by Section 4202 of the Oil Pollution Act of 1990, I do hereby certify to the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation that Sunoco Pipeline, L.P. has obtained, through contract or other approved means, the necessary private personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge or a substantial threat of such a discharge.

Furthermore, Sunoco Pipeline, L.P. has reviewed the National Contingency Plan (NCP) and the Canada-United States Joint Inland Pollution Contingency Plans. This response plan is consistent with the NCP and the above mentioned Contingency Plans.

TBD
DISTRICT SUPERVISOR
SUNOCO PIPELINE L.P.

2.0 NOTIFICATION PROCEDURES

2.1 Notification Overview

The Qualified Individual is responsible for initiating and coordinating a response shall be responsible to ensure that all agency notifications are performed. Local government response agencies should be notified first followed by federal and state agencies. Depending on the specifics of the situation, there may be a requirement to perform agency notifications, internal notifications, drug and alcohol testing, Operator Qualification (OQ) suspension of task qualification and written follow-up. In situations where the reporting requirements are not clear or delegation of duties is necessary, HES or DOT Compliance, for jurisdictional pipelines, should be consulted for guidance.

In general, the notification sequence for a release is as follows:

- Station/Operations personnel will identify and control the source of the release (if safe to do so) and will notify the Qualified Individual and Operations Control Center.
- The Qualified Individual will assume the role of Incident Commander (Qualified Individual) and will conduct notifications in general accordance with federal requirements, the States of North Dakota and South Dakota Notification Guidelines. These guidelines, along with additional notification forms/procedures are presented in **APPENDIX B** of this plan.

2.2 Information Required for Notifications

The following information should be available and provided when making initial and follow-up notifications:

Name of pipeline:

Time of discharge:

Location of discharge:

Name of oil involved:

Reason for discharge (e.g., material failure, excavation damage, corrosion):

Estimated volume of oil discharged:

Weather conditions on scene:

Actions taken or planned by persons on scene:

The following tables contain contact information for the facility response team, emergency response personnel, regulatory agencies, and local service providers:

TABLE 2-1 – FACILITY RESPONSE TEAM CONTACT INFORMATION

FACILITY RESPONSE TEAM		
Name/Title	**Contact Information**	**Response Time**
TBD Senior Manager **Qualified Individual**		Varies depending on location of release
TBD Manager Pipeline Operations **Qualified Individual**		Varies depending on location of release
TBD Supervisor Pipeline Operations-Technical **Qualified Individual**		Varies depending on location of release

TABLE 2-2 – LOCAL ERP CONTACT INFORMATION

EMERGENCY RESPONSE PERSONNEL CONTACT INFORMATION			
Name/Title	**Contact Information**	**Response Time**	**Responsibilities During Response Action**
TBD Senior Manager **Qualified Individual**		Varies	Incident Commander
TBD Manager Pipeline Operations **Alternate Qualified Individual**		Varies	Operations
TBD Supervisor Pipeline Operations **Alternate Qualified Individual**		Varies	Planning
TBD Field Engineer		Varies	Logistics
TBD Emergency Response Manager **Alternate Qualified Individual**		Varies	Agency Liaison
TBD Health & Safety Specialist		Varies	Safety
TBD DOT Compliance Coordinator		Varies	DOT Liaison

In the event the local Emergency Response Personnel require assistance in managing an incident, the District Manager will request the assistance of the company's Incident Management Team (IMT). The IMT consists of nationwide company personnel capable of managing large scale incidents. The IMT members have received position-specific ICS training and drill on an annual basis. The IMT positions are listed in **APPENDIX G.**

TABLE 2-3 – REGULATORY AGENCY CONTACT INFORMATION

REGULATORY AGENCY CONTACT INFORMATION		
Agency	**Phone Number**	**Reporting Requirements**
Federal Agencies		
National Response Center (NRC) *NRC will contact all other federal agencies including USDOT/PHMSA and EPA*	(800)424-8802 or (202) 267-2675	**Any spill on water.** Telephonic notification is required within 1 **hour** following the discovery of a release that resulted in any discharge to water
U.S. Department of Transportation/Pipeline Hazardous Materials Safety Administration (PHMSA)	(800)424-8802 or (202) 267-2675	**Telephonic Notification** At the earliest practicable moment following discovery of a release of the hazardous liquid resulting in an event described above, the operator shall give notice of any failure that: • Caused a death or a personal injury requiring hospitalization • Resulted in either a fire or explosion not intentionally set by the operator • Caused estimated property damage, including cost of clean-up and recovery, value of lost product, and damage to the property of the operator or others, or both, exceeding $50,000 • Resulted in pollution of any stream, river, lake, reservoir, or other similar body of water that violated applicable water quality standards, caused a discoloration of the surface of the water or adjoining shoreline, or deposited a sludge or emulsion beneath the surface of the water or upon adjoining shorelines or • In the judgment of the operator was significant even though it did not meet the criteria of any of the above. **Written Reporting** A 7000-1 report is required within 30 days after discovery of the accident for each failure in a pipeline system regulated by DOT 195 in which there is a release of the hazardous liquid transported resulting in any of the following:

U.S. Department of Transportation/Pipeline Hazardous Materials Safety Administration (PHMSA) Continued…		• Explosion or fire not intentionally set by the operator
		• Release of 5 gallons or more of hazardous liquid except that no report is required for a release of less than 5 barrels resulting from a pipeline maintenance activity if the release is:
		  • Not otherwise reportable under this section
		  • Not on water
		  • Confined to company property or pipeline right-of-way and
		  • Cleaned up promptly
		• Death of any person
		• Personal injury necessitating hospitalization
		• Estimated property damage, including cost of clean-up and recovery, value of lost product, and damage to the property of the operator or others, or both, exceeding $50,000.
		• A supplemental report shall be filed within 30 days of receiving any changes in the information reported or additions to the original DOT 7000-1 report.

State Agencies		
North Dakota		
North Dakota Department of Environment Health	(701) 328-5210 1-800-472-2121 (24 hour hotline)	Any spill or discharge of liquid or solid waste which may cause pollution of waters of the state must be reported immediately. The owner, operator, or person responsible for a spill or discharge must notify the department or the North Dakota hazardous materials emergency assistance and spill reporting number as soon as possible and provide all relevant information about the spill.
State Emergency Response Committee **Counties:** Mountrail, Williams, McKenzie, Dunn, Mercer, Morton, Emmons	(701)-328-8100	

State Agencies Continued		
South Dakota		
South Dakota Department of Environment and Natural Resources (DENR) State Emergency Response Committee **Counties:** Campbell, McPherson, Edmunds, Faulk, Spink, Beadle, Kingsbury, Miner, Lake, McCook, Minnehaha, Turner, Lincoln	Main Line 1-605-773-3296 After Hours 1- 605-773-3231 Main Line 800-433-2288 After Hours 605-773-3231	A release or spill of a regulated substance must be reported to DENR immediately if the release or spill threatens the waters of the state, causes an immediate danger to human health or safety, exceeds 25 gallons, causes a sheen on surface waters, contains any substance that exceeds the ground water quality standards of ARSD chapter 74: 54: 01, contains any substance that exceeds the surface water quality standards of ARSD chapter 74: 54: 01, harms or threatens to harm wildlife or aquatic life, or contains crude oil in field activities under SDCL chapter 45-9 is greater than 1 barrel.

TABLE 2-4 – EMERGENCY SERVICES CONTACT INFORMATION

EMERGENCY SERVICES BY COUNTY/PARISH	
Organization	**Phone Number**
North Dakota	
Mountrail County, ND	
Sheriff	(701) 628-2975
Fire	(701) 862-3151
LEPC (Emergency Manager)	(701) 628-2909
Williams County, ND	
Sheriff	(701) 577-7700
Fire	(701) 572-2196
LEPC (Emergency Manager)	(701) 570-6845
McKenzie County, ND	
Sheriff	(701) 444-3654
Fire	(701) 444-3516
LEPC (Emergency Manager)	(701) 444-6833
Dunn County, ND	
Sheriff	(701) 573-4449
Fire	(701) 764-5006
LEPC (Emergency Manager)	(701) 573-4343
Mercer County, ND	
Sheriff	(701) 745-3333
Fire	(701) 447-2436
LEPC (Emergency Manager)	(701) 983-4408
Morton County, ND	
Sheriff	(701) 667-3330
Fire	(701) 667-3288
LEPC (Emergency Manager)	(701) 667-3307
Emmons County, ND	
Sheriff	(701) 254-4411
Fire	(701) 422-3377
LEPC (Emergency Manager)	(701) 254-4807
South Dakota	
Campbell County, SD	
Sheriff	(605) 955-3355
Fire	(605) 955-3598
LEPC (Emergency Manager)	(605) 955-3598
McPherson County, SD	
Sheriff	(605) 439-3400
Fire	(605) 439-3626
LEPC (Emergency Manager)	(605) 439-3667
Edmunds County, SD	
Sheriff	(605) 426-6002
Fire	(605) 283-2655
LEPC (Emergency Manager)	(605) 287-4394
Faulk County, SD	
Sheriff	(605) 598-6229
Fire	(605) 324-3475
LEPC (Emergency Manager)	(605)598-6229
Spink County, SD	
Sheriff	(605) 472-4595
Fire	(605) 472-1907
LEPC (Emergency Manager)	(605) 472-4591

EMERGENCY SERVICES BY COUNTY/PARISH	
Organization	**Phone Number**
Beadle County, SD	
Sheriff	(605) 353-8424
Fire	(605) 353-8520
LEPC (Emergency Manager)	(605) 353-8421
Kingsbury County, SD	
Sheriff	(605) 854-3339
Fire	(605) 690-9977
LEPC (Emergency Manager)	(605) 854- 3711
Miner County, SD	
Sheriff	(605) 772-4671
Fire	(605) 772-5759
LEPC (Emergency Manager)	(605)772-4533
Lake County, SD	
Sheriff	(605) 256-7615
Fire	(605) 256-3523
LEPC (Emergency Manager)	(605)256-7611
McCook County, SD	
Sheriff	(605) 425-2761
Fire	(605) 363-3100
LEPC (Emergency Manager)	(605) 421-1302
Minnehaha County, SD	
Sheriff	(605) 367-4300
Fire	(605) 367-8092
LEPC (Emergency Manager)	(605) 367-4290
Turner County, SD	
Sheriff	(605) 297-3225
Fire	(605) 648-2937
LEPC (Emergency Manager)	(605) 661-5900
Lincoln County, SD	
Sheriff	(605) 764-5651
Fire	(605) 764-5126
LEPC (Emergency Manager)	(605) 321- 0220

TABLE 2-5 - CONTRACTOR CONTACT INFORMATION

CONTRACTOR INFORMATION	
Organization	**Phone Number**
USCG Classified OSRO's	
National Response Corporation (Umbrella Network; Numerous contractors throughout the response area.)	(800) 899-4672
Clean-Up Contractors	
Safety-Kleen Bismarck, ND	(701) 222-8262
Hydro-Klean Sioux Falls, SD	(605) 988-0300
Seneca Companies South Sioux City, NE	(402) 494-7941 (800) 369-5500
Excavation Services	
Jones Contractors, Inc. Epping, ND	(701) 989-0545 (731) 426-2764
B&B Contactors Aberdeen, SD	(605) 725-1468 (605) 228-3200
Wildlife Rehabilitation	
International Bird Rescue, Berkeley, CA Research Center, Galveston	(510) 841-9086 (409) 740-4728 (888) 447-1743
Wildlife Center of Texas Sharon Schmaltz	(713) 861-9453 Office (281) 731-8826 Mobile (713) 279-1417 Pager
Tri-State Bird Rescue Research Center, Newark, DE	(302) 737-7241 (800) 710-0695

3.0 SPILL DETECTION AND ON-SCENE SPILL MITIGATION PROCEDURES

3.1 Spill Detection

Detection of a discharge from a pipeline system may occur in a number of ways including:

- Detection by the pipeline controllers
- Visual detection by Company field personnel or pipeline patrols
- Visual detection by the public

The pipeline system is controlled and monitored continuously by a SCADA system located in Sugar Land, Texas. This system provides the pipeline controllers oversight through real-time access to pertinent information regarding oil movements, pressures, temperature and equipment status and control. The SCADA system allows for remote operation of key equipment including pump stations and isolation valves.

Automated Detection

The pipelines are equipped with pressure and flow monitors, which exercise local control and transmit data to the control center. These systems are set to alarm or shut down on preset deviations of pressure flow. In case of an alarm, control center personnel will take the appropriate actions in accordance with standard operating procedures. A summary of the operating procedures is provided below.

Trained personnel in the control center will monitor the SCADA system for the following parameters:

- Flow rates
- Pressure
- Valve positions

AVAILABILITY - ALL LINES

Operating Procedures for the Automated System

- **SCADA System 6-Second Data Access**
  The control center personnel monitor and control pipeline operations with the SCADA system in the Pipeline Control Center. The ultimate decision on leak detection lies with the Pipeline Control Center.

AVAILABILITY - ALL LINES

- **Communication Flexibility/Redundancy**
  The Company's SCADA system acquires data via a satellite network. Satellite communications allow large volumes of data to be transmitted both to and from all field locations very rapidly. Network configuration and transmission protocols provide the flexibility to establish guaranteed delivery transmissions as required. Communication system redundancy provides accurate and reliable data to pipeline operators.

AVAILABILITY - ALL LINES

- **Parameter Alarms**
  A parameter alarm is a data value limit (high or low) which can be set by the Pipeline Control operator to alert upset conditions regardless of whether the Operator is actively monitoring the data point in question. Operators are required to establish parameter alarm settings on mainline pressures and flow rates for all operating line segments. In combination with ten-second data acquisition rates, parameter alarms provide near instantaneous notification of potential upset conditions on all operation mainlines.

AVAILABILITY - ALL LINES

- **Trending**
  The SCADA system includes a trending facility which graphically displays pressures, temperature, and flow rate data for each mainline pump and oil receiving location on the system. This system can provide valuable insight into operations history and can help the operator proactively address potential upset conditions.

AVAILABILITY - ALL LINES

- **Tank Gauging with Parameter Alarms**
  Tank gauge data is available to Pipeline Control for use by pipeline operators. Company systems are gauged automatically by the SCADA computer and the data is made available to the operator on demand. Parameter alarms (see above) are also available for tank levels, to ensure no potential tank discharge.

AVAILABILITY - ALL LINES

- **Training**
  All operators are compliant with DOT 195 Operator Qualification Requirements.

Visual Detection by Company Personnel

Aerial patrol flights will be made 26 times a year not to exceed 21 days apart. If unable to fly, area personnel will walk or drive the right-of-way. The intent of the patrol is to observe the area directly over the pipeline right-of-way for leaks, exposed pipes, washes, missing markers, and other unusual conditions. Construction on either side of the pipeline right-of-way is also monitored. Discharges to the land or surface waters may also be detected by Company personnel during regular operations and inspections. Should a leak be detected, the appropriate actions are taken including but not limited to:

- Notifications as per **SECTION 2**
- A preliminary assessment of the incident area
- **If appropriate, initiate initial response actions per SECTION 4**

TABLE 4-1 provides a checklist for initial response actions.

Visual Detection by the Public

Right-of-way marker signs are installed and maintained at road crossing and other noticeable points and provide an Operations Control 24-hour number for reporting emergency situations. The Company also participates in the "call before you dig" or "One Call" utility notification services which can be contacted to report a leak and determine the owner/operator of the pipeline. If the notification is made to a local office or pump station, the Company representative receiving the call will generally implement the following actions:

- Notify the Pipeline Control and region/designated office
- Dispatch Company field personnel to the site to confirm discharge and conduct preliminary assessment
- Notify their immediate area supervisor and provide assessment results
- Follow the Procedure for Investigating Incoming Call Reports of Potential Pipeline Releases

Pipeline Shutdown

If any of these situations are outside the expected values, abnormal conditions are considered to exist. If abnormal conditions exist, Pipeline Control will take the appropriate actions to ensure that a release does not occur. If a discharge has occurred, Pipeline Control will take actions to limit the magnitude. In either case, appropriate actions taken by Company personnel could include, but are not limited to:

- Shut down affected line segment if there is an indication of a leak
- Isolate line segment
- Depressurize line
- Start internal and external notifications
- Mobilize additional personnel as required

3.2 Spill Mitigation Procedures

Each spill mitigation situation is unique and must be treated according to the circumstance present. In every situation, however, **personnel safety must be assessed as the first priority**. The potential for ignition and/or toxic exposure must be promptly evaluated. An example of Spill mitigation procedures is presented below:

TABLE 3-1 – SPILL MITIGATION PROCEDURES

TYPE	MITIGATION PROCEDURE
Failure of Transfer Equipment	1. Personnel and public safety are the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Terminate transfer operations and close block valves. 3. Drain product into containment areas if possible. 4. Eliminate sources of vapor cloud ignition by shutting down all engines and motors.
Tank Overfill/Failure	1. Personnel and public safety are the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Shut down or divert source of incoming flow to tank. 3. Transfer fluid to another tank with adequate storage capacity (if possible). 4. Shut down source of vapor cloud ignition by shutting down all engines and motors. 5. Ensure that dike discharge valves are closed. 6. Monitor diked containment area for leaks and potential capacity limitations. 7. Begin transferring spilled product to another tank as soon as possible
Piping Rupture/Leak (under pressure and no pressure)	1. Personnel and public safety are the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Shut down pumps. Close the closest block valves on each side of the rupture. 3. Drain the line back into contained areas (if possible). Alert nearby personnel of potential safety hazards. 4. Shut down source of vapor cloud ignition by shutting down all engines and motors. 5. If piping is leaking and under pressure, then relieve pressure by draining into a containment area or back to a tank (if possible). Then repair line according to established procedures.

TYPE	MITIGATION PROCEDURE
Fire/Explosion	1. Personnel and public safety are the first priority Evacuate nonessential personnel or personnel at risk of injury. 2. Notify local fire and police departments. 3. Attempt to extinguish fire if it is in incipient (early) stage and **if it can be done safely**. 4. Shut down transfer or pumping operation. Attempt to divert or stop flow of product to the hazardous area (if it can be done safely). 5. Eliminate sources of vapor cloud ignition shutting down all engines and motors. 6. Control fire before taking steps to contain spill.
Manifold Failure	1. Personnel and public safety are the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Terminate transfer operations immediately. 3. Isolate the damaged area by closing block valves on both sides of the leak/rupture. 4. Shut down source of vapor cloud ignition by shutting down all engines and motors. 5. Drain fluids back into containment areas (if possible).

3.3 Response Equipment

Emergency equipment is available to allow personnel to respond safely and quickly to emergency situations. Fire extinguishers are located throughout the facility and meet National Fire Prevention Association (NFPA) and OSHA standards. The majority of the response equipment will be supplied by the OSRO(s) listed in **TABLE 2-5**. This equipment is maintained regularly and inspected on a monthly basis. OSRO resources and response times are verified periodically.

Response equipment is mobilized and deployed by the Maintenance Station Foreman or District Supervisor or their designee. The following is a description of company owned response equipment and the respective staging locations:

Watford City Station in North Dakota:

- 4 totes of firefighting foam
- 1 radio repeater and 12 radio's
- 1 response tent/command post
- 20 portable 4 gas monitors

Redfield Pump Station located in South Dakota:

- 1,000 feet of 10" skirt containment boom
- 1,000 feet of 5" sorbent boom
- Enclosed 18' response trailer
- Boom accessories (rope, anchors & buoy's)
- 18' response boat with motor (slow water boom deployment)
- 1 radio repeater and 12 radio's
- 1 response tent/command post
- 14 portable 4 gas monitors

Sioux Falls Field Office located in South Dakota:

- 1,000 feet of 10" skirt containment boom
- 1,000 feet of 5" sorbent boom
- Boom accessories (rope, anchors & buoy's)
- 18' response boat with motor (slow water boom deployment)
- 2 portable 4 gas monitors

Sunoco Pipeline, L.P. inspects and exercises company-owned equipment in accordance with the National Preparedness for Response Exercise Program (PREP) guidelines.

Sunoco Pipeline, L.P. requires an annual certification from each OSRO to assure compliance with the National Preparedness for Response Exercise Program (PREP) guidelines.

Each listed OSRO has their own response equipment, a minimum of 1,000 feet of containment boom, absorbents, boats, and vacuum trucks. Lists of the OSRO's equipment resources may be found in their services contract. OSRO response equipment is inspected and refurbished after each use. The primary OSRO's equipment is inspected, minimally, on a bi-monthly basis. Sunoco Pipeline, L.P. has contractually secured personnel and equipment necessary to respond, to the maximum extent practicable, to a worst case discharge or a substantial threat of such discharge in this response zone.

An equipment list and list of trained personnel necessary to continue operation of the equipment and staff the oil spill removal organization for the first 7 days of a response for each of the OSRO contractors listed in **TABLE 2-5** is provided in **APPENDIX C**.

In addition to the company owned response equipment listed above, the following response equipment has been donated to the Three Affiliated Tribes located at Buffalo Ranch North Dakota:

- 1,000 feet of 10" skirt containment boom
- 1,000 feet of 5" sorbent boom
- Enclosed 18' response trailer
- Boom accessories (rope, anchors & buoy's)
- 18' response boat with motor (slow water boom deployment)
- 1 radio repeater and 12 radio's
- 1 response tent/command post
- 14 portable 4 gas monitors

Sunoco Pipeline L.P. is not responsible for maintaining or inspecting the equipment donated to the Three Affiliated Tribes.

4.0 RESPONSE ACTIVITIES

Sunoco Pipeline, L.P. personnel will work in unison, following Incident Command protocols, to cooperate with and assist Fire, Police and other first responders with:

- Halting or redirecting traffic on roads and railroads in the affected area as appropriate.
- Assessing the extent and coverage of a potential vapor cloud, using the current DOT Emergency Response Guidebook to determine safe approach distances.
- Sunoco Pipeline, L.P. and Emergency Response Personnel will establish hot, warm and cold zones for emergency response operations following Incident Command protocols
- Gas meter equipment as specified below will be used to establish emergency responders' approach distances and hot / warm / cold zones.

In the event of a failure of a pipeline, the Sunoco Pipeline, L.P. will employ instrumentation (appropriate for the product contained in the pipeline at the time of failure) to access and determine the extent and coverage of a potential vapor cloud, if present.

The instrumentation used in the determination will have the following capabilities:

Petroleum Products

- Combustible gas meter with 0-100% read out. Alarm calibrated to sound at 10% of LEL.
- Ability to quantify the following gases: O2, H2S, LEL and CO
- Industrial Scientific MX6, MSA Altair 5X or equivalent gas meter

4.1 Spill Response Actions. In the event of a spill, actions will be taken to protect personnel and public safety, as well as the environment. The checklist provided below is an example of some of the activities conducted during a spill. Table 4-1 is an example of a Spill Response Checklist.

TABLE 4-1 – SPILL RESPONSE ACTION CHECKLIST

RESPONSE ACTION	PERSONNEL TAKING ACTION	DATE/TIME ACTION TAKEN
DOCUMENT ALL ACTIONS TAKEN		
First Person to Discover Spill		
Immediately notify Qualified Individual and Operations Control Center or posted emergency contacts. Take appropriate action to protect life and ensure safety of personnel.		
Immediately shut down terminal operations (if applicable). If applicable, remotely controlled motor operated valves will be closed by the Operations Center as soon as a leak is detected. It may not be best to immediately close valves due to line drain or line depressurization.		
Secure the scene. Isolate the area and assure the safety of people and the environment. Keep people away from the scene and outside the safety perimeter.		
Advise personnel in the area of any potential threat and/or initiate evacuation procedures.		
Qualified Individual		
Assume role of Incident Commander until relieved.		
Conduct preliminary assessment of health and safety hazards.		
Request medical assistance if an injury has occurred.		
Evacuate nonessential personnel, notify emergency response agencies to provide security and evacuate surrounding area (if necessary).		
Make appropriate regulatory notifications. • National Response Center • Appropriate State Agency (See List of Federal, State, & Local agencies along with notification procedures in **TABLES 2-3 and 2-4**)		
Call out spill response contractors (See List in **TABLE 2-5**)		
Atmospheric conditions in the release area should be monitored using a four gas meter – ensuring oxygen, H2S, carbon dioxide and lower explosive limit (LEL) are all at safe levels. Atmospheric monitoring should continue throughout the response activities. These activities should be consistent with Sunoco Pipeline L.P. Health & Safety policy.		

RESPONSE ACTION	PERSONNEL TAKING ACTION	DATE/TIME ACTION TAKEN
Qualified Individual (Continued)		
If safe to do so, direct facility responders to shut down and control the source of the spill. Be aware of potential hazards associated with product and ensure that flammable vapor concentrations are within safe atmosphere before sending personnel into the spill area.		
If safe to do so, direct facility responders to shut down potential ignition sources in the vicinity of the spill, including motors, electrical pumps, electrical power, etc. Keep drivers away from truck rack if spill occurs there.		
If safe to do so, direct facility responders to stabilize and contain the situation. This may include berming or deployment of containment and/or sorbent boom.		
For low flash oil (<100ºF), consider applying foam over the oil, using water spray to reduce vapors, grounding all equipment handling the oil, and using non-sparking tools.		
If there is a potential to impact shorelines, consider lining shoreline with sorbent or diversion boom to reduce impact.		
Notify Local Emergency Responders. Obtain the information necessary to complete the Accident Report - Hazardous Liquid Pipeline Systems (**APPENDIX B**) and phone this information to the Emergency Response Manager.		
On-Scene Coordinator		
Activate all or a portion of local ERP (as necessary). Liaison Officer will maintain contact with notified regulatory agencies.		
Ensure the local ERP has mobilized spill response contractors (if necessary). **It is much better to demobilize equipment and personnel if not needed than to delay contacting them if they are needed.**		
Document all response actions taken, including notifications, agency/media meetings, equipment and personnel mobilization and deployment, and area impacted.		
Water Based Spills: Initiate spill tracking and surveillance operations utilizing information in **SECTION 4.2**. Determine extent of pollution via surveillance aircraft or vehicle. Estimate volume of spill utilizing information in **SECTION 4.3**. Send photographer /videographer if safe.		
Land Based Spills: Initiate spill tracking and surveillance if applicable.		
SECONDARY RESPONSE ACTIONS (Refer to ICS job descriptions in **APPENDIX D**)		

4.2 Spill Tracking and Surveillance

The following guidelines should be utilized when tracking a spill and/or conducting spill surveillance:

- Surveillance of an oil spill should begin as soon as possible following discovery to enable response personnel to assess spill size, movement, and potential impact locations;
- Dispatch observers to crossings downstream or down gradient to determine the spill's maximum reach;
- Clouds, shadows, sediment, floating organic matter, submerged sand banks or wind-induced patterns on the water may resemble an oil slick if viewed from a distance;
- Sorbent pads may be used to detect oil or water;
- Use surface vessels to confirm the presence of any suspected oil slicks (if safe to do so); consider directing the vessels and photographing the vessels from the air, the latter to show their position and size relative to the slick;
- It is difficult to adequately observe oil on the water surface from a boat, dock, or shoreline;
- Spill surveillance is best accomplished through the use of helicopters or small planes; helicopters are preferred due to their superior visibility and maneuverability;
- If fixed-wing planes are to be used, high-wing types provide better visibility than low-wing types;
- All observations should be documented in writing and with photographs and/or videotapes;
- Describe the approximate dimensions of the oil slick based on available reference points (i.e. vessel, shoreline features, facilities); use the aircraft or vessel to traverse the length and width of the slick while timing each pass; calculate the approximate size and area of the slick by multiplying speed and time;
- Record aerial observations on detailed maps, such as topographic maps
- In the event of reduced visibility, such as dense fog or cloud cover, boats may have to be used to patrol the area and document the location and movements of the spill; however, this method may not be safe if the spill involves a highly flammable product;
- Surveillance is also required during spill response operations to gauge the effectiveness of response operations; to assist in locating skimmers; and to assess the spill's size, movement, and impact.

An example of a spill surveillance checklist is presented on **TABLE 4-2**.

TABLE 4-2 – SPILL SURVEILLANCE CHECKLIST

SPILL SURVEILLANCE CHECKLIST	
General Information	
Date:	Tidal or river stage (flood, ebb, slack, low water):
Time:	On-Scene Weather Conditions:
Incident Name:	Platform (helicopter, fixed-wing aircraft, boat, shore):
Observers Name:	Flight path/trackline:
Observers' Affiliation:	Altitude where observation taken:
Location of Source:	Areas not observed (i.e. foggy locations, restricted air spaces, shallow water areas):
Oil Observations	
Slick location(s):	Color and appearance (i.e. rainbow, dull or silver sheen, black or brown in color or mousse):
Slick dimensions:	Percent coverage:
Orientation of slick(s):	Is oil recoverable (Y/N)?:
Distribution of oil (i.e. windrows, streamers, pancakes or patches):	
Considerations	
• During surveillance, go beyond known impacted areas to check for additional oil spill sites • Include the name and phone number of the person making the observations • Clearly describe the locations where oil is observed and the areas where no oil has been seen	
Other Observations	

SPILL SURVEILLANCE CHECKLIST
Response Operations
Equipment deployment locations:
Boom deployment locations:
Environmental Operations
Locations of convergence lines, terrain, and sediment plumes:
Locations of debris and other features that could be mistaken for oil:
Wildlife present in area (locations and approximate numbers):
Spill Sketch (Use Additional Pages if Needed)

4.3 Estimating Spill Volumes

Early in a spill response, estimation of spill volume is required in order to:

- Report to agencies
- Determine liquid recovery requirements
- Determine personnel and equipment requirements
- Estimate disposal and interim storage requirements

Some rapid methods to estimate spill size are:

- Transfer operations: Multiply the pumping rate by the elapsed time that the leak was in progress, plus the drainage volume of the line between the two closest valves or isolation points (volume loss = pump rate [bbls/min] x elapsed time [min] + line contents [bbl])
- Tank overfills: Elapsed time multiplied by the pumping rate
- Visual assessment of the surface area and thickness (**TABLE 4-3**); **this method may yield unreliable results because:**
    - Interpretation of sheen color varies with different observers
    - Appearance of a slick varies depending upon amount of available sunlight, sea-state, and viewing angle
    - Different products may behave differently, depending upon their properties

TABLE 4-3 - OIL THICKNESS ESTIMATION CHART

OIL THICKNESS ESTIMATIONS				
STANDARD FORM	**Approx. Film Thickness**		**Approx. Quantity of Oil in Film**	
	Inches	**Millimeters**	**gallons/mile²**	**liters/km²**
Barely Visible	0.0000015	0.00004	25	44
Silvery	0.000003	0.00008	50	88
Slightly Colored	0.000006	0.00015	100	179
Brightly Colored	0.000012	0.0003	200	351
Dull	0.00004	0.001	666	1,167
Dark	0.00008	0.002	1,332	2,237
Thickness of light oils: 0.0010 inches to 0.00010 inches				
Thickness of heavy oils: 0.10 inches to 0.010 inches				

4.4 Emergency Response Personnel

The local Emergency Response Personnel (ERP) has been created and organized to plan for and manage emergencies. The local ERP is composed of Company personnel from offices within the Area. Additional personnel from outlying offices may be used (if needed). The local ERP will develop strategies and priorities for a response, then will supervise contractors, handle safety and security matters, and will provide logistical support for contractor personnel. The local ERP will handle all communications with the media and the public. Job descriptions for each local ERP member are provided in **APPENDIX D**. The local ERP will train by participating in exercises as noted in **SECTION 6.**

Activation of the local ERP may be accomplished in stages. Initially, the First Responder assumes the role of Incident Commander (IC). During a spill incident, the initial IC may be able to respond without assistance from the local ERP. If the situation requires more resources, he may request additional personnel or management support from the local ERP. This request is made to the Qualified Individual (QI). Depending on the situation, the QI may then assume the role of Incident Commander. The QI would then call out the other local ERP members.

In the event the local Emergency Response Personnel require assistance in managing an incident, the District Manager will request the assistance of the company's Incident Management Team (IMT). The IMT consists of nationwide company personnel capable of managing large scale incidents. The IMT members have received position-specific ICS training and drill on an annual basis. The IMT positions are listed in **APPENDIX G**.

4.5 Incident Command System/Unified Command

The Incident Command System (ICS) will be used by the local ERP for spill response. The ICS position descriptions are defined in **APPENDIX D** and can be expanded or contracted as necessary.

The Unified Command System (UCS) is the accepted method of organizing key spill management entities within the Incident Command System. The primary entities include:

- Federal On-Scene Coordinator (FOSC)
- State On-Scene Coordinator (SOSC)
- Company Incident Commander

These three people share decision-making authority within the Incident Command System and are each responsible for coordinating other federal, state, and company personnel to form an effective integrated emergency management team. Refer to **APPENDIX D** for detailed description of the ICS roles and responsibilities as well as organizational interfaces with external parties.

5.0 TRAINING PROCEDURES

5.1 Exercise Requirements and Schedules

The Company participates in the National Preparedness for Response Exercise Program (PREP) in order to satisfy the exercise requirements of PHMSA and EPA. Emergency responders, regulatory agencies and other stake holders are routinely invited to observe or participate in table top and equipment deployment drills.

The District Supervisor is responsible for the following aspects:

- Scheduling
- Maintaining records
- Implementing
- Evaluation of the Company's training and exercise program
- Post-drill evaluation improvements

5.2 Post Incident Review

In the case of the following spills from a 49 CFR Part 195 regulated pipeline, a Standard Incident Debriefing Form as noted in **TABLE 5-1** will be completed:

- Any spill resulting in an explosion or fire
- Any spill resulting in the death of any person
- Any spill resulting in an injury requiring inpatient hospitalization
- Any spill impacting a lake, reservoir, stream, river or similar body of water
- Any spill resulting in more than $50,000.00 in damage including the cost of damage to facilities, spill cleanup, emergency response, value of lost product and damage to property

In the case of spills from other facilities a Standard Incident Debriefing Form as noted in **TABLE 5-1** will be completed on an as determined basis which will be dictated by individual circumstances.

Pertinent facility personnel involved in the incident shall be debriefed (by the Company) within the calendar quarter after termination of operations. A Standard Incident Debriefing Form is provided in **TABLE 5-1**. The primary purpose of the post-incident review is to identify actual or potential deficiencies in the Plan and determine the changes required to correct the efficiencies.

The post-incident review is also intended to identify which response procedures, equipment, and techniques were effective and which were not and the reason(s) why. This type of information is very helpful in the development of a functional Plan by eliminating or modifying those response procedures that are less effective and emphasizing those that are highly effective. This process should also be used for evaluating training drills or exercises. Key agency personnel that were involved in the response may be invited to attend the post-incident review. A copy of the Incident debriefing form may be sent to agency personnel who were invited to the drill, but were unable to attend.

TABLE 5-1 – STANDARD INCIDENT DEBRIEFING FORM

See Appendix F - Standard Incident Debriefing Form

5.3 Training Program

A Health, Environment and Safety Training Program has been developed to include a detailed discussion of training required for personnel, regulations covered by the training, frequency of the specific training, method of training (i.e. computer based, classroom, live training by demonstration, etc.) and training duration.

Training requirements are presented in Table 5-2, below:

TABLE 5-2 – TRAINING REQUIREMENTS

Training Type	Training Characteristics
Training in Use of Oil Spill Plan	• All field personnel will be trained to properly report/monitor spills • Plan will be reviewed annually with all employees and contract personnel • A record of Personnel Response Training will be maintained.

OSHA Training Requirements (HAZWOPER)	• All company responders designated in Plan must have 24 hours of initial spill response training:
	  • Laborers having potential for minimal exposure must have 24 hours of initial oil spill response instruction and 8 hours of actual field experience
	  • Spill responders having potential exposure to hazardous substances at levels exceeding permissible exposure limits must have 40 hours of initial training offsite and 24 hours of actual field experience
	  • On-site management/supervisors required to receive same training as equipment operators/general laborers plus 8 hours of specialized hazardous waste management training
	  • Managers/employees require 8 hours of annual refresher training

Spill Management Team Personnel Training	• Will follow company policies.
Training for Casual Laborers or Volunteers	• Company will not use casual laborers/volunteers for operations requiring HAZWOPER training.
Hydrogen Sulfide (H_2S) Monitoring and Procedures	• Will follow company Health, Environment, and Safety Training Program and Respiratory Protection Program.
Wildlife	• Only trained personnel approved by USFWS and appropriate state agency will be used to treat oiled wildlife

Training Type	Training Characteristics
Training Documentation and Record Maintenance	• Training activity records will be retained five years for all personnel following completion of training • Company will retain training records indefinitely for individuals assigned specific duties in Plan • Training records will be retained.
Emergency Response Training	The Company has established and conducts a continuing training program to instruct emergency response personnel to: • Carry out emergency procedures established under 195.402 that relate to their assignments; • Know the characteristics and hazards of the hazardous liquids or carbon dioxide transported, including, in case of flammable HVL, flammability of mixtures with air, odorless vapors, and water reactions; • Recognize conditions that are likely to cause emergencies, predict the consequences of facility malfunctions or failures and hazardous liquids or carbon dioxide spills, and take appropriate corrective action; • Take steps necessary to control any accidental release of hazardous liquid or carbon dioxide and to minimize the potential for fire, explosion, toxicity, or environmental damage; and • Learn the proper use of fire-fighting procedures and equipment, fire suits, and breathing apparatus by utilizing, where feasible, a simulated pipeline emergency condition. At intervals not exceeding 15 months, but at least once each calendar year, the Company shall: • Review with personnel their performance in meeting the objectives of the emergency response training program set forth in 195.403(a), and • Make appropriate changes to the emergency response training program as necessary to ensure that it is effective. The Company requires and verifies that its supervisors maintain a thorough knowledge of that portion of the emergency response procedures established under 195.402 for which they are responsible to ensure compliance.

Training Type	Training Characteristics
Minimum requirements for operator qualification of individuals performing covered tasks on a pipeline facility	The Company has a written qualification program that includes provisions to: • Identify covered tasks; • Ensure through evaluation that individuals performing covered tasks are qualified; • Allow individuals that are not qualified pursuant to 49 CFR 195 Subpart G to perform a covered task if directed and observed by an individual that is qualified; • Evaluate an individual if the operator has reason to believe that the individual's performance of a covered task contributed to an accident as defined in Part 195; • Evaluate an individual if the operator has reason to believe that the individual is no longer qualified to perform a covered task; • Communicate changes that affect covered tasks to individuals performing these covered tasks; and • Identify those covered tasks and the intervals at which evaluation of the individual's qualifications is needed. **RECORDS** Each operator shall maintain records that demonstrate compliance with 49 CFR Part 195, Subpart G. Qualification records shall include: • Identification of qualified individuals • Identification of covered tasks the individual is qualified to perform • Date(s) of current qualification Records supporting an individual's current qualification shall be maintained while the individual is performing the covered task. Records of prior qualification and records of individuals no longer performing covered tasks shall be retained for a period of five years.
Breathing	• HES Respiratory Protection Training
Exposure	Personal Protective Equipment • HES Personal Protective Equipment • Emergency Response Guidebook: Purpose and Uses • Hazard Communication - Generic ComplianceWire (CW) course • HES HAZCOM (face -2-face)

MX6 Instrument	• HES MX6 Gas Meter User Training • HES Operation and Maintenance of Monitoring Equipment
Fit-Testing	• HES Respirator Fit-Testing
HES Emergency Response Plan Review (FRC, State Plan) This is face-2-face area specific training.	HAZWOPER Awareness - Generic CW course • Emergency Response Guidebook: Purpose and Uses • Hazard Communication - Generic CW course • HES HAZCOM (face -2-face) • PREP Emergency Response Plan Review
Incident Command System (ICS) National Incident Management System (NIMS)	Computer Based Training • ICS 100 • ICS 200 • ICS 700 • ICS 800

6.0 WORST CASE DISCHARGE SUMMARY

6.1 Worst Case Discharge Scenario

The equipment and personnel to respond to a spill are available from several sources and are provided with the equipment and contractors in **TABLE 2-5**. The following sections are discussions of these scenarios.

Worst case discharge calculations are provided in **SECTION 6.3**.

Upon discovery of a spill, the following procedures would be followed:

1. The First Responder would notify the Area Supervisor/Manager of Operations and Operations Control Center and notifications would be initiated in accordance with **SECTION 2.0**. The First Responder would advise the Area Supervisor/Manager of Operations with any concerns of public safety.

2. The Area Supervisor/Manager of Operations would assume the role of Incident Commander/Qualified Individual until relieved and would initiate response actions and notifications in accordance with **SECTION 2.0**. If this were a small spill, the local/company personnel may handle all aspects of the response. Among those actions would be to:

    - Conduct safety assessment and evacuate personnel as needed in accordance with **SECTION 3.2**
    - Direct facility responders to shut down ignition sources
    - Direct facility personnel to position resources in accordance with **SECTION 4.0** and **SECTION 7.0**
    - Complete spill report form provided in **APPENDIX B**
    - Ensure regulatory agencies are notified

3. If this were a small or medium spill, the Qualified Individual/Incident Commander may elect for the First Responder to remain the Incident Commander or to activate selected portions of the Emergency Response Personnel. However, for a large spill, the Qualified Individual would assume the role of Incident Commander and would activate the entire Emergency Response Personnel in accordance with activation procedures described in **SECTION 4.4**.

4. The Incident Commander would then initiate spill assessment procedures including surveillance operations, trajectory calculations, and spill volume estimating in accordance with **SECTIONS 4.2 and 4.3.**

5. The Incident Commander would then utilize checklists in **SECTION 4.0** as a reminder of issues to address. The primary focus would be to establish incident priorities and objectives and to brief staff accordingly.

6. The Emergency Response Personnel would develop the following plans, as appropriate (some of these plans may not be required during a small or medium spill):
    - Site Safety and Health
    - Site Security
    - Incident Action
    - Decontamination
    - Disposal
    - Demobilization

7. The response would continue until an appropriate level of cleanup is obtained.

6.2 Planning Volume Calculations

Once the worst case discharge volume has been calculated, response resources must be identified to meet the requirements of 49 CFR 194.105(b). Calculations to determine sufficient amount of response equipment necessary to respond to a worst case discharge are described below. A demonstration of the planning volume calculations is provided below.

DOT/PHMSA Portion of Pipeline/Facilities

The worst case discharge (WCD) for the DOT portion of the pipeline and facilities, as defined in 49 CFR 194.105(b), as the largest volume of the following:

1. The pipeline's maximum shut-down response time in hours (based on historic discharge data or in the absence of such data, the operators best estimate), multiplied by the maximum flow rate expressed in barrels per hour (based on the maximum daily capacity of the pipeline), plus the largest drainage volume after shutdown of the line section(s) in the response zone expressed in barrels; or
2. The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels (cubic meters), based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventative action taken; or
3. If the response zone contains one or more breakout tanks, the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels.

Under PHMSA's current policy, operators are allowed to reduce the worst case discharge volume derived from 49 CFR 194.105(b)(3) by no more than 75% if an operator is taking certain spill prevention measures for their breakout tanks and presents supporting information in the response plan. An operator can reduce the worst case discharge volume based on breakout tanks in the response zones as follows:

TABLE 6-1 PHMSA PERCENT REDUCTION ALLOWED

SPILL PREVENTION MEASURES	PERCENT REDUCTION ALLOWED
Secondary containment capacity greater than 100% capacity of tank and designed according to NFPA 30	50%
Tank built, rebuilt, and repaired according to API Std 620/650/653	10%
Automatic high-level alarms/shutdowns designed according to NFPA/API RP 2350	5%
Testing/cathodic protection designed according to API Std 650/651/653	5%
Tertiary containment/drainage/treatment per NFPA 30	5%*
Maximum allowable credit or reduction	75%

The worst case discharge is based on the largest volume of the three criteria given above.

The Company has determined the worst case discharge of a catastrophic tank failure using the allowed reductions listed in Table 6-1 (70% reduction).

All of the breakout tanks in the pipeline system are within adequate secondary containment, built according API Standard 650, have automatic high-level alarms/shutdowns designed according to NFPA/API RP 2350, testing/cathodic protection designed according to API Standard 650, therefore, the discharge volumes for the largest tank were determined by adjusting the total tank volume downward by 70% per the company guidelines.

The line sections with the highest throughput and largest drainage volume between block valves on pump stations were chosen to calculate the pipeline worst case discharge. Although the entire discharge volume of each line was used for the worst case discharge, in an actual spill event, it would take days to drain the line completely. The line would be sealed early in the response effort. Considering the volume of release from a line break compared to that of historic discharge in each zone and to the volumes released from a tank failure, a tank failure was found to represent the worst case scenario.

The maximum historic discharge is not applicable for WCD covered by this plan. Given below are the tank and pipeline WCD calculations for this plan. The largest tank volume is as follows:

LOCATION	VOLUME (BBLS)
Johnsons Corner, ND	250,000
Johnsons Corner, ND	250,000

6.3 Worst Case Discharge Volume Calculations

Tanks

The worst case tank volume is calculated as follows:

Largest Tank X Credit for Containment Tank Standards = Tank Standards Credit

The Company has implemented all of the spill prevention measures listed on the previous page, except tertiary containment. Therefore, the percent reduction allowed for credit equals 70% and the worst case discharge volume in tanks is 30% of the total volume of the largest tank.

250,000 bbls X 0.30 = 75,000 bbls

Pipelines

The worst case discharge for the pipeline segment.

WCD = [(DT + ST) x MF] + DD
25,174 = [(0.2) x 25,000] + 20,174

Where:
WCD = worst case discharge (bbl)
DT + ST = maximum detection time + maximum shut down time in adverse weather
MF = maximum flow rate (bph)
DD = drain down volume (bbl)

WCD = **25,174 barrels** located at Mile Post 294 in South Dakota.
As detailed above, the discharges for the pipeline are less than discharges from the tanks; therefore, the DOT/PHMSA WCD volume for this plan is: **75,000 barrels.**

6.4 Product Characteristics and Hazards

Pipeline systems described in this plan may transport various types of commodities including but not limited to:

- Crude Oil

The key chemical and physical characteristics of each of these oils and/or other small quantity products/chemicals are identified in **TABLE 6-2**, below.

TABLE 6-2 CHEMICAL AND PHYSICAL CHARACTERISTICS

COMMON NAME	SDS NAME	HEALTH HAZARD	FLASH POINT	SPECIAL HAZARD	REACTIVITY	HEALTH HAZARD WARNING STATEMENT
Crude Oil	Appropriate Product Name	1	3	C, H2S	0	May Contain benzene, a carcinogen, hydrogen sulfide, which is harmful if inhaled; flashpoint varies widely.

Health Hazard	**4 = Extremely Hazardous** **3 = Hazardous** **2 = Warning** **1 = Slightly Hazardous** **0 = No Unusual Hazard**	**Fire Hazard (Flash Point)**	**4 = Below 73° F, 22° C** **3 = Below 100° F, 37° C** **2 = Below 200° F, 93° C** **1 = Above 200° F, 93° C** **0 = Will not burn**
Special Hazard	**A = Asphyxiant** **C = Contains Carcinogen** **W = Reacts with Water** **Y = Radiation Hazard** **COR = Corrosive** **OX = Oxidizer** **H2S = Hydrogen Sulfide** **P = Contents under Pressure** **T = Hot Material**	**Reactivity Hazard**	**4 = May Detonate at Room Temperature** **3 = May Detonate with Heat or Shock** **2 = Violent Chemical Change with High Temperature and Pressure** **1 = Not Stable if Heated** **0 = Stable**

7.0 RESPONSE ZONE MAPS AND ASSOCIATED REFERENCE MATERIAL

7.1 Map Overview

Pipeline Sensitivity Maps are being developed to include in **APPENDIX E**. The District Overview map includes the entire DAPL North Response Zone and illustrates the eighteen (18) Pipeline Sensitivity Map locations.

The pipeline sensitivity maps will indicate the locations of the worst case discharge, distance between each line section in the response zone, public drinking water intakes within 5 miles of any pipeline segment, and any potentially environmentally sensitive areas located within 1 mile of any pipeline segment.

The following maps are included in this section:

- North Response Zone Overview
- Aberdeen
- Bismarck
- De Smet
- Eureka
- Gettysburg
- Glen Ullin
- Hazen
- Killdear
- Linton
- Mobridge
- Parshall
- Redfield
- Salem
- Sioux Falls
- Stanley
- Watertown
- Watford City
- Williston

A Pipeline Map Feature Index Table, **TABLE E-1**, will be presented following the maps. The Pipeline Map Feature Index Table will provide an explanation of potentially sensitive areas that are numerically coded on the Pipeline Sensitivity Maps.

8.0 RESPONSE PLAN REVIEW AND UPDATE PROCEDURES

8.1 Facility Response Plan Review Guidelines

In accordance with 49 CFR Part 194.121, this Plan will be reviewed annually and modified to address new or different operating conditions or information included in the Plan. Upon review of the response plan for each five-year period, revisions will be submitted to PHMSA provided the changes to the current plan are needed. If revisions are not needed, a current plan will be submitted to PHMSA.

Company internal policy states that the Plan will be reviewed at least annually and modified as appropriate. In the event the Company experiences a Worst Case Discharge, the effectiveness of the plan will be evaluated and updated as necessary. If a new or different operating condition or information would substantially affect the implementation of the Plan, the Company will modify the Plan to address such a change and, within 30 days of making such a change, submit the change to PHMSA. Examples of changes in operating conditions that would cause a significant change to the Plan include the following:

CONDITIONS REQUIRING REVISIONS AND SUBMISSIONS

- Relocation or replacement of the transportation system in a way that substantially affects the information included in the Plan, such as a change to the Worst Case Discharge volume.
- A change in the type of oil handled, stored, or transferred that materially alters the required response resources.
- A change in key personnel (Qualified Individuals).
- A change in the name of the Oil Spill Removal Organization (OSRO).
- Any other changes that materially affect the implementation of the Plan.
- A change in the National Oil and Hazardous Substances Pollution Contingency Plan or Area Contingency Plan that has significant impact on the equipment appropriate for response activities.

All requests for changes must be made through the District Supervisor and will be submitted to PHMSA by the Emergency Planning and Preparedness Group.

Appendix A- DOT/PHMSA Cross Reference Matrix

TABLE A.1 - DOT/PHMSA CROSS REFERENCE MATRIX

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
Information Summary (Section 1)	
• For the core plan:	N/A
• Name and address of operator	SECTION 1.1
• For each Response Zone which contains one or more line sections that meet the criteria for determining significant and substantial harm (§194.103), listing and description of Response Zones, including county(s) and state(s)	TABLE 1.2
• For each Response Zone appendix:	N/A
• Information summary for core plan	SECTION 1.1
• QI names and telephone numbers, available on 24-hr basis	TABLE 1.1
• Description of Response Zone, including county(s) and state(s) in which a worst case discharge could cause substantial harm to the environment	TABLE 1.1, TABLE 1.2
• List of line sections contained in Response Zone, identified by milepost or survey station or other operator designation	TABLE 1.2
• Basis for operator's determination of significant and substantial harm	TABLE 1.2
• The type of oil and volume of the worst case discharge	TABLE 1.2, SECTION 6.0
• Certification that the operator has obtained, through contract or other approved means, the necessary private personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge or threat of such discharge	SECTION 1.3
Notification Procedures (Section 2)	
• Notification requirements that apply in each area of operation of pipelines covered by the plan, including applicable state or local requirements	SECTION 2
• Checklist of notifications the operator or Qualified Individual is required to make under the response plan, listed in the order of priority	TABLE 2.2, TABLE 2.3
• Name of persons (individuals or organizations) to be notified of discharge, indicating whether notification is to be performed by operating personnel or other personnel	TABLE 2.2, TABLE 2.3
• Procedures for notifying Qualified Individuals	SECTION 2.1, TABLE 2.2
• Primary and secondary communication methods by which notifications can be made	TABLE 2.3

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION

• Information to be provided in the initial and each follow-up notification, including the following:
  • Name of pipeline
  • Time of discharge
  • Location of discharge
  • Name of oil recovered
  • Reason for discharge (e.g. material failure, excavation damage, corrosion)
  • Estimated volume of oil discharged
  • Weather conditions on scene
  • Actions taken or planned by persons on scene
	SECTION 2.2

Spill Detection and On-Scene Spill Mitigation Procedures (Section 3)	
• Methods of initial discharge detection	SECTION 3.1
• Procedures, listed in order of priority, that personnel are required to follow in responding to a pipeline emergency to mitigate or prevent any discharge from the pipeline	SECTION 3.2, TABLE 3.1

• List of equipment that may be needed in response activities based on land and navigable waters including:
  • Transfer hoses and pumps
  • Portable pumps and ancillary equipment
  • Facilities available to transport and receive oil from a leaking pipeline
  • Identification of the availability, location, and contact phone numbers to obtain equipment for response activities on a 24-hour basis
  • Identification of personnel and their location, telephone numbers, and responsibilities for use of equipment in response activities on a 24-hour basis
	SECTION 3.3, APPENDIX C

Response Activities (Section 4)	
• Responsibilities of, and actions to be taken by, operating personnel to initiate and supervise response actions pending the arrival of the Qualified Individual or other response resources identified in the response plan	SECTION 4.1, TABLE 4.1
• Qualified Individual's responsibilities and authority, including notification of the response resources identified in the response plan	SECTION 4.1, TABLE 4.1
• Procedures for coordinating the actions of the operator or Qualified Individual with the action of the OSC responsible for monitoring or directing those actions	TABLE 4.1
• Oil spill response organizations (OSRO) available through contract or other approved means, to respond to a worst case discharge to the maximum extent practicable	TABLE 2.5, APPENDIX C

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION

• For each organization identified under paragraph (d), a listing of:
  • Equipment and supplies available
  • Trained personnel necessary to continue operation of the equipment and staff the oil spill removal organization for the first seven days of the response
	APPENDIX C

List of Contacts (Section 5)	
• List of persons the Plan requires the operator to contact	TABLE 1.1, TABLE 2.1
• Qualified individuals for the operator areas of operation	TABLE 1.1
• Applicable insurance representatives or surveyors for the operator's areas of operation	TABLE 1.1
• Persons or organizations to notify for activation of response resources	TABLE 2.1, TABLE 2.2, TABLE 2.4
Training Procedures (Section 6)	
• Description of training procedures and programs of the operations	SECTION 5
Drill Procedures (Section 7)	
• Announced and unannounced drills	TABLE 5.2

• Types of drills and their frequencies; for example:
  • Manned pipeline emergency procedures and qualified individual notification drills conducted quarterly
  • Drills involving emergency actions by assigned operating or maintenance personnel and notification of qualified individual on pipeline facilities which are normally unmanned conducted quarterly
  • Shore-based spill management team (SMT) tabletop drills conducted yearly
  • Oil spill removal organization field equipment deployment drills conducted yearly
  • A drill that exercises entire response plan for each Response Zone, would be conducted at least once every three years
	SECTION 5

Response Plan Review and Update Procedures (Section 8)	
• Procedures to meet §194.121	SECTION 8.1
• Procedures to review plan after a worst case discharge and to evaluate and record the plan's effectiveness	SECTION 8.1
Response Zone Appendices (Section 9)	
• Name and telephone number of the qualified individual	TABLE 1.1
• Notification procedures	SECTION 2

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
• Spill detection and mitigation procedures	SECTION 3.0
• Name, address, and telephone number of oil spill response organizations	TABLE 2.5
• Response activities and response resources including— • Equipment and supplies necessary to meet §194.115, and • The trained personnel necessary to sustain operation of the equipment and to staff the oil spill removal organization and spill management team for the first 7 days of the response	TABLE 2.5, APPENDIX C
• Names and telephone numbers of Federal, state and local agencies which the operator expects to assume pollution response responsibilities	TABLE 2.3, TABLE 2.4
• The worst case discharge volume	SECTION 6.0
• The method used to determine the worst case discharge volume, with calculations	SECTION 6.3
• A map that clearly shows: • Location of worst case discharge • Distance between each line section in the Response Zone: • Each potentially affected public drinking water intake, lake, river, and stream within a radius of five miles of the line section • Each potentially affected environmentally sensitive area within a radius of one mile of the line section	APPENDIX E
• Piping diagram and plan-profile drawing of each line section; (may be kept separate from the response plan if the location is identified)	APPENDIX E
• For every oil transported by each pipeline in the response zone, emergency response data that: • Include name, description, physical and chemical characteristics, health and safety hazards, and initial spill handling and firefighting methods • Meet 29 CFR 1910.1200 or 49 CFR 172.602	SECTION 6.4

Appendix B- Notifications

- DOT Reporting Form
- North Dakota Reporting Guidelines
- South Dakota Reporting Guidelines

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.

OMB NO: 2137-0047

EXPIRATION DATE: 7/31/2015

U.S. Department of Transportation
Pipeline and Hazardous Materials
Safety Administration

ACCIDENT REPORT – HAZARDOUS LIQUID PIPELINE SYSTEMS

Report Date _____

No. _____
(DOT Use Only)

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. Public reporting for this collection of information is estimated to be approximately 10 hours per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A – KEY REPORT INFORMATION

Report Type: *(select all that apply)* ☐ Original ☐ Supplemental ☐ Final

1. Operator's OPS-issued Operator Identification Number (OPID): /___/___/___/___/___/___/
2. Name of Operator: _____
3. Address of Operator:
   - 3.a _____ (Street Address)
   - 3.b _____ (City)
   - 3.c State: /___/___/
   - 3.d Zip Code: /___/___/___/___/___/ - /___/___/___/___/
4. Local time *(24-hr clock)* and date of the Accident:
   /___/___/___/___/ Hour /___/___/ Month /___/___/ Day /___/___/ Year
5. Location of Accident:
   Latitude: /___/___/ . /___/___/___/___/___/
   Longitude: -/___/___/ . /___/___/___/___/___/
6. National Response Center Report Number (if applicable):
   /___/___/___/___/___/___/___/
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):
   /___/___/___/___/ Hour /___/___/ Month /___/___/ Day /___/___/ Year
8. Commodity released: *(select only one, based on predominant volume released)*
   - ☐ Crude Oil
   - ☐ Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions
     - O Gasoline (non-Ethanol)
     - O Diesel, Fuel Oil, Kerosene, Jet Fuel
     - O Mixture of Refined Products (transmix or other mixture)
     - O Other ⇨ Name: _____
   - ☐ HVL or Other Flammable or Toxic Fluid which is a Gas at Ambient Conditions
     - O Anhydrous Ammonia
     - O LPG (Liquefied Petroleum Gas) / NGL (Natural Gas Liquid)
     - O Other HVL ⇨ Name: _____
   - ☐ CO_2 (Carbon Dioxide)
   - ☐ Biofuel / Alternative Fuel (including ethanol blends)
     - O Fuel Grade Ethanol
     - O Ethanol Blend ⇨ % Ethanol: /___/___/
     - O Biodiesel ⇨ Blend (e.g. B2, B20, B100): B/___/___/___/
     - O Other ⇨ Name: _____
9. Estimated volume of commodity released unintentionally: /___/___/___/,/___/___/___/./___/ Barrels
10. Estimated volume of intentional and/or controlled release/blowdown: /___/___/___/,/___/___/___/./___/ Barrels
    (only reported for HVL and CO_2 Commodities)
11. Estimated volume of commodity recovered: /___/___/___/,/___/___/___/./___/ Barrels

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12. Were there fatalities? O Yes O No
If Yes, specify the number in each category:

12.a Operator employees / / / / /

12.b Contractor employees working for the Operator / / / / /

12.c Non-Operator emergency responders / / / / /

12.d Workers working on the right-of-way, but NOT associated with this Operator / / / / /

12.e General public / / / / /

12.f Total fatalities (sum of above) / / / / /

13. Were there injuries requiring inpatient hospitalization? O Yes O No
If Yes, specify the number in each category:

13.a Operator employees / / / / /

13.b Contractor employees working for the Operator / / / / /

13.c Non-Operator emergency responders / / / / /

13.d Workers working on the right-of-way, but NOT associated with this Operator / / / / /

13.e General public / / / / /

13.f Total injuries (sum of above) / / / / /

14. Was the pipeline/facility shut down due to the Accident?
O Yes O No ⇨ Explain: _____

If Yes, complete Questions 14.a and 14.b: *(use local time, 24-hr clock)*

14.a Local time and date of shutdown / / / / / (Hour) / / / (Month) / / (Day) / / / (Year)

14.b Local time pipeline/facility restarted / / / / / (Hour) / / / (Month) / / (Day) / / / (Year) O Still shut down* *(*Supplemental Report required)*

15. Did the commodity ignite? O Yes O No

16. Did the commodity explode? O Yes O No

17. Number of general public evacuated: / / / / / / / / /

18. Time sequence: *(use local time, 24-hour clock)*

18.a Local time Operator identified failure / / / / / (Hour) / / / (Month) / / (Day) / / / (Year)

18.b Local time Operator resources arrived on site / / / / / (Hour) / / / (Month) / / (Day) / / / (Year)

PART B – ADDITIONAL LOCATION INFORMATION

*1. Was the origin of the Accident onshore?
O Yes *(Complete Questions 2-12)* O No *(Complete Questions 13-15)*

If Onshore:

2. State: /__/__/

3. Zip Code: /__/__/__/__/__/ - /__/__/__/__/

4. _____ City 5 _____ County or Parish

6. Operator-designated location: *(select only one)*
☐ Milepost/Valve Station *(specify in shaded area below)*
☐ Survey Station No. *(specify in shaded area below)*
/__/

7. Pipeline/Facility name: _____

8. Segment name/ID: _____

9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)? O Yes O No

10. Location of Accident: *(select only one)*
☐ Totally contained on Operator-controlled property
☐ Originated on Operator-controlled property, but then flowed or migrated off the property
☐ Pipeline right-of-way

11. Area of Accident (as found): *(select only one)*
☐ Tank, including attached appurtenances
☐ Underground ⇨ Specify: O Under soil
O Under a building O Under pavement
O Exposed due to excavation
O In underground enclosed space (e.g., vault)
O Other _____
Depth-of-Cover (in): /__/__/__/__/__/
☐ Aboveground ⇨ Specify:
O Typical aboveground facility piping or appurtenance
O Overhead crossing
O In or spanning an open ditch
O Inside a building O Inside other enclosed space
O Other _____
☐ Transition Area ⇨ Specify: O Soil/air interface O Wall sleeve O Pipe support or other close contact area
O Other _____

12. Did Accident occur in a crossing?: O Yes O No
If Yes, specify type below:
☐ Bridge crossing ⇨ Specify: O Cased O Uncased
☐ Railroad crossing ⇨ *(select all that apply)*
O Cased O Uncased O Bored/drilled
☐ Road crossing ⇨ *(select all that apply)*
O Cased O Uncased O Bored/drilled
☐ Water crossing
⇨ Specify: O Cased O Uncased
Name of body of water, if commonly known:
_____
Approx. water depth (ft) at the point of the Accident:
/__/__/__/__/__/
(select only one of the following)
O Shoreline/Bank crossing
O Below water, pipe in bored/drilled crossing
O Below water, pipe buried below bottom (NOT in bored/drilled crossing)
O Below water, pipe on or above bottom

If Offshore:

13. Approximate water depth (ft.) at the point of the Accident:
/__/__/__/__/__/__/

14. Origin of Accident:
☐ In State waters
⇨ Specify: State: /__/__/__/
Area: _____
Block/Tract #: /__/__/__/__/__/
Nearest County/Parish: _____
☐ On the Outer Continental Shelf (OCS)
⇨ Specify: Area: _____
Block #: /__/__/__/__/__/

15. Area of Accident: *(select only one)*
☐ Shoreline/Bank crossing or shore approach
☐ Below water, pipe buried or jetted below seabed
☐ Below water, pipe on or above seabed
☐ Splash zone of riser
☐ Portion of riser outside of Splash Zone, including riser bend
☑ Platform

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PART C – ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:
   - ☐ Interstate
   - ☐ Intrastate

2. Part of system involved in Accident: *(select only one)*
   - ☐ Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances ⇨ O Atmospheric or Low Pressure / O Pressurized
   - ☐ Onshore Terminal/Tank Farm Equipment and Piping
   - ☐ Onshore Equipment and Piping Associated with Belowground Storage
   - ☐ Onshore Pump/Meter Station Equipment and Piping
   - ☐ Onshore Pipeline, Including Valve Sites
   - ☐ Offshore Platform/Deepwater Port, Including Platform-mounted Equipment and Piping
   - ☐ Offshore Pipeline, Including Riser and Riser Bend

3. Item involved in Accident: *(select only one)*
   - ☐ Pipe ⇨ Specify: O Pipe Body O Pipe Seam
     - 3.a Nominal diameter of pipe (in): _____
     - 3.b Wall thickness (in): _____
     - 3.c SMYS (Specified Minimum Yield Strength) of pipe (psi): _____
     - 3.d Pipe specification: _____
     - 3.e Pipe Seam ⇨ Specify: O Longitudinal ERW - High Frequency; O Longitudinal ERW - Low Frequency; O Longitudinal ERW – Unknown Frequency; O Spiral Welded ERW; O Spiral Welded SAW; O Spiral Welded DSAW; O Lap Welded; O Seamless; O Other _____; O Single SAW; O DSAW; O Flash Welded; O Continuous Welded; O Furnace Butt Welded
     - 3.f Pipe manufacturer: _____
     - 3.g Year of manufacture: _____
     - 3.h Pipeline coating type at point of Accident ⇨ Specify: O Fusion Bonded Epoxy; O Coal Tar; O Asphalt; O Polyolefin; O Extruded Polyethylene; O Field Applied Epoxy; O Cold Applied Tape; O Paint; O Composite; O None; O Other _____
     - ☐ Weld, including heat-affected zone ⇨ Specify: O Pipe Girth Weld O Other Butt Weld O Fillet Weld O Other _____

     If Pipe Girth Weld is selected, complete items 3.a through h. above. If the values differ on either side of the girth weld, enter one value in 3.a. through h. and list the different value(s) in Part H - Narrative Description of the Accident.
   - ☐ Valve O Mainline ⇨ Specify: O Butterfly; O Check; O Gate; O Plug; O Ball; O Globe; O Other _____
     - 3.i Mainline valve manufacturer: _____
     - 3.j Year of manufacture: _____
     - O Relief Valve
     - O Auxiliary or Other Valve
   - ☐ Pump
   - ☐ Meter/Prover
   - ☐ Scraper/Pig Trap
   - ☐ Sump/Separator
   - ☐ Repair Sleeve or Clamp
   - ☐ Hot Tap Equipment
   - ☐ Stopple Fitting
   - ☐ Flange
   - ☐ Relief Line
   - ☐ Auxiliary Piping (e.g. drain lines)
   - ☐ Tubing
   - ☐ Instrumentation
   - ☐ Tank/Vessel ⇨ Specify: O Single Bottom System; O Double Bottom System; O Tank Shell; O Chime; O Roof/Roof Seal; O Roof Drain System; O Mixer; O Pressure Vessel Head or Wall; O Appurtenance; O Other _____
   - ☐ Other _____

4. Year item involved in Accident was installed: _____

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5. Material involved in Accident: *(select only one)*
   - ☐ Carbon Steel
   - ☐ Material other than Carbon Steel ⇨ Specify: _____

6. Type of Accident involved: *(select only one)*
   - ☐ Mechanical Puncture ⇨ Approx. size: /__/__/__/__/./__/in. (axial) by /__/__/__/__/./__/in. (circumferential)
   - ☐ Leak ⇨ Select Type: O Pinhole O Crack O Connection Failure O Seal or Packing O Other
   - ☐ Rupture ⇨ Select Orientation: O Circumferential O Longitudinal O Other _____
     Approx. size: /__/__/__/__/./__/ in. (widest opening) by /__/__/__/__/__/./__/in. (length circumferentially or axially)
   - ☐ Overfill or Overflow
   - ☐ Other ⇨ Describe: _____

PART D – ADDITIONAL CONSEQUENCE INFORMATION

1. Wildlife impact: O Yes O No
   - 1.a If Yes, specify all that apply:
     - ☐ Fish/aquatic
     - ☐ Birds
     - ☐ Terrestrial
2. Soil contamination: O Yes O No
3. Long term impact assessment performed or planned: O Yes O No
4. Anticipated remediation: O Yes O No (not needed)
   - 4.a If Yes, specify all that apply:
     ☐ Surface water ☐ Groundwater ☐ Soil ☐ Vegetation ☐ Wildlife
5. Water contamination: O Yes ⇨ *(Complete 5.a – 5.c below)* O No
   - 5.a Specify all that apply:
     - ☐ Ocean/Seawater
     - ☐ Surface
     - ☐ Groundwater
     - ☐ Drinking water ⇨ *(Select one or both)* O Private Well O Public Water Intake
   - 5.b Estimated amount released in or reaching water: /__/__/__/./__/__/__/./__/__/ Barrels
   - 5.c Name of body of water, if commonly known: _____

6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program? O Yes O No

7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)? O Yes O No
   - 7.a If Yes, specify HCA type(s): *(select all that apply)*
     - ☐ Commercially Navigable Waterway
       Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?
       O Yes O No
     - ☐ High Population Area
       Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?
       O Yes O No
     - ☐ Other Populated Area
       Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?
       O Yes O No
     - ☐ Unusually Sensitive Area (USA) – Drinking Water
       Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?
       O Yes O No
     - ☐ Unusually Sensitive Area (USA) – Ecological
       Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?
       O Yes O No

8. Estimated Property Damage:

8.a Estimated cost of public and non-Operator private property damage
$ /__/__/__/,/__/__/__/,/__/__/__/

8.b Estimated cost of commodity lost $ /__/__/__/,/__/__/__/,/__/__/__/

8.c Estimated cost of Operator's property damage & repairs $ /__/__/__/,/__/__/__/,/__/__/__/

8.d Estimated cost of Operator's emergency response $ /__/__/__/,/__/__/__/,/__/__/__/

8.e Estimated cost of Operator's environmental remediation $ /__/__/__/,/__/__/__/,/__/__/__/

8.f Estimated other costs $ /__/__/__/,/__/__/__/,/__/__/__/

Describe _____

8.g Total estimated property damage (sum of above) $ /__/__/__/,/__/__/__/,/__/__/__/

PART E – ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig): /__/__/__/__/__/__/

2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig): /__/__/__/__/__/__/

3. Describe the pressure on the system or facility relating to the Accident: *(select only one)*
   - ☐ Pressure did not exceed MOP
   - ☐ Pressure exceeded MOP, but did not exceed 110% of MOP
   - ☐ Pressure exceeded 110% of MOP

4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?
   - ☐ No
   - ☐ Yes ⇨ *(Complete 4.a and 4.b below)*

   4.a Did the pressure exceed this established pressure restriction? O Yes O No

   4.b Was this pressure restriction mandated by PHMSA or the State? O PHMSA O State O Not mandated

5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?
   - ☐ No
   - ☐ Yes ⇨ *(Complete 5.a – 5.e below)*

   5.a Type of upstream valve used to initially isolate release source: O Manual O Automatic O Remotely Controlled

   5.b Type of downstream valve used to initially isolate release source: O Manual O Automatic O Remotely Controlled O Check Valve

   5.c Length of segment initially isolated between valves (ft): /__/__/__/,/__/__/__/

   5.d Is the pipeline configured to accommodate internal inspection tools?
   - ☐ Yes
   - ☐ No ⇨ Which physical features limit tool accommodation? *(select all that apply)*
     - O Changes in line pipe diameter
     - O Presence of unsuitable mainline valves
     - O Tight or mitered pipe bends
     - O Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)
     - O Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)
     - O Other ⇨ Describe: _____

   5.e For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?
   - ☐ No
   - ☐ Yes ⇨ Which operational factors complicate execution? *(select all that apply)*
     - O Excessive debris or scale, wax, or other wall build-up
     - O Low operating pressure(s)
     - O Low flow or absence of flow
     - O Incompatible commodity
     - O Other ⇨ Describe: _____

   5.f Function of pipeline system: *(select only one)*
   - ☐ > 20% SMYS Regulated Trunkline/Transmission
   - ☐ ≤ 20% SMYS Regulated Trunkline/Transmission
   - ☐ > 20% SMYS Regulated Gathering
   - ☐ ≤ 20% SMYS Regulated Gathering

6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?
☐ No
☐ Yes ⇨ 6.a Was it operating at the time of the Accident? O Yes O No
6.b Was it fully functional at the time of the Accident? O Yes O No
6.c Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident? O Yes O No
6.d Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident? O Yes O No

7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?
☐ No
☐ Yes ⇨ 7.a Was it operating at the time of the Accident? O Yes O No
7.b Was it fully functional at the time of the Accident? O Yes O No
7.c Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident? O Yes O No
7.d Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident? O Yes O No

8. How was the Accident initially identified for the Operator? *(select only one)*
☐ CPM leak detection system or SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations)
☐ Static Shut-in Test or Other Pressure or Leak Test
☐ Controller
☐ Air Patrol
☐ Notification from Public
☐ Notification from Third Party that caused the Accident
☐ Local Operating Personnel, including contractors
☐ Ground Patrol by Operator or its contractor
☐ Notification from Emergency Responder
☐ Other _____

8.a If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify the following: *(select only one)*
O Operator employee O Contractor working for the Operator

9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident? *(select only one)*
☐ Yes, but the investigation of the control room and/or controller actions has not yet been completed by the Operator *(Supplemental Report required)*
☐ No, the facility was not monitored by a controller(s) at the time of the Accident
☐ No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the Operator did not investigate)*
_____
_____
_____

☐ Yes, specify investigation result(s): *(select all that apply)*
O Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator) and other factors associated with fatigue
O Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator) and other factors associated with fatigue *(provide an explanation for why not)*
_____
_____
_____
O Investigation identified no control room issues
O Investigation identified no controller issues
O Investigation identified incorrect controller action or controller error
O Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response
O Investigation identified incorrect procedures
O Investigation identified incorrect control room equipment operation
O Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response
O Investigation identified areas other than those above ⇨ Describe: _____
_____
_____
_____

PART F – DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?
   - O No
   - O Yes ⇨ *1.a Specify how many were tested: / / /
     *1.b Specify how many failed: / / /
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?
   - O No
   - O Yes ⇨ *2.a Specify how many were tested: / / /
     *2.b Specify how many failed: / / /

PART G – APPARENT CAUSE

Select only one box from PART G in the shaded column on the left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing, or root causes of the Accident in the narrative (PART H).

G1 - Corrosion Failure – *only one **sub-cause** can be picked from shaded left-hand column

☐ **External Corrosion**

1. Results of visual examination:
   - O Localized Pitting O General Corrosion
   - O Other _____
2. Type of corrosion: *(select all that apply)*
   - O Galvanic O Atmospheric O Stray Current O Microbiological O Selective Seam
   - O Other _____
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*
   - O Field examination O Determined by metallurgical analysis
   - O Other _____
4. Was the failed item buried under the ground?
   - O Yes ⇨ 4.a Was failed item considered to be under cathodic protection at the time of the Accident?
     - O Yes ⇨ Year protection started: / / / / /
     - O No

     4.b Was shielding, tenting, or disbonding of coating evident at the point of the Accident?
     - O Yes O No

     4.c Has one or more Cathodic Protection Survey been conducted at the point of the Accident?
     - O Yes, CP Annual Survey ⇨ Most recent year conducted: / / / / /
     - O Yes, Close Interval Survey ⇨ Most recent year conducted: / / / / /
     - O Yes, Other CP Survey ⇨ Most recent year conducted: / / / / /
     - O No
   - O No ⇨ 4.d Was the failed item externally coated or painted? O Yes O No
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?
   - O Yes O No

☐ **Internal Corrosion**

6. Results of visual examination:
   O Localized Pitting O General Corrosion O Not cut open
   O Other _____
7. Cause of corrosion: *(select all that apply)*
   O Corrosive Commodity O Water drop-out/Acid O Microbiological O Erosion
   O Other _____
8. The cause(s) of corrosion selected in Question 7 is based on the following: *(select all that apply)*
   O Field examination O Determined by metallurgical analysis
   O Other _____
9. Location of corrosion: *(select all that apply)*
   O Low point in pipe O Elbow O Other_____
10. Was the commodity treated with corrosion inhibitors or biocides? O Yes O No
11. Was the interior coated or lined with protective coating? O Yes O No
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?
    O Not applicable - Not mainline pipe O Yes O No
13. Were corrosion coupons routinely utilized?
    O Not applicable - Not mainline pipe O Yes O No

Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.

14. List the year of the most recent inspections:
    14.a API Std 653 Out-of-Service Inspection / / / / / O No Out-of-Service Inspection completed
    14.b API Std 653 In-Service Inspection / / / / / O No In-Service Inspection completed

Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.

15. Has one or more internal inspection tool collected data at the point of the Accident?
    O Yes O No

    15.a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:
    O Magnetic Flux Leakage Tool / / / / /
    O Ultrasonic / / / / /
    O Geometry / / / / /
    O Caliper / / / / /
    O Crack / / / / /
    O Hard Spot / / / / /
    O Combination Tool / / / / /
    O Transverse Field/Triaxial / / / / /
    O Other _____ / / / / /

16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?
    O Yes ⇨ Most recent year tested: / / / / / Test pressure (psig): / / / / / /
    O No

17. Has one or more Direct Assessment been conducted on this segment?
    O Yes, and an investigative dig was conducted at the point of the Accident ⇨ Most recent year conducted: / / / / /
    O Yes, but the point of the Accident was not identified as a dig site ⇨ Most recent year conducted: / / / / /
    O No

18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?
    O Yes O No

    18.a If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:
    O Radiography / / / / /
    O Guided Wave Ultrasonic / / / / /
    O Handheld Ultrasonic Tool / / / / /
    O Wet Magnetic Particle Test / / / / /
    O Dry Magnetic Particle Test / / / / /
    O Other _____ / / / / /

G2 - Natural Force Damage - *only one **sub-cause** can be picked from shaded left-hand column

☐ **Earth Movement, NOT due to Heavy Rains/Floods**	1. Specify: O Earthquake O Subsidence O Landslide O Other _____
☐ **Heavy Rains/Floods**	2. Specify: O Washout/Scouring O Flotation O Mudslide O Other _____
☐ **Lightning**	3. Specify: O Direct hit O Secondary impact such as resulting nearby fires
☐ **Temperature**	4. Specify: O Thermal Stress O Frost Heave O Frozen Components O Other _____
☐ **High Winds**	
☐ **Other Natural Force Damage**	5. Describe: _____

Complete the following if any Natural Force Damage sub-cause is selected.

6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event? O Yes O No

6.a If Yes, specify: (*select all that apply*) O Hurricane O Tropical Storm O Tornado O Other _____

G3 – Excavation Damage - *only one **sub-cause** can be picked from shaded left-hand column

☐ **Excavation Damage by Operator (First Party)**	
☐ **Excavation Damage by Operator's Contractor (Second Party)**	
☐ **Excavation Damage by Third Party**	
☐ **Previous Damage due to Excavation Activity**	**Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.** 1. Has one or more internal inspection tool collected data at the point of the Accident? O Yes O No 1.a If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: O Magnetic Flux Leakage / / / / / O Ultrasonic / / / / / O Geometry / / / / / O Caliper / / / / / O Crack / / / / / O Hard Spot / / / / / O Combination Tool / / / / / O Transverse Field/Triaxial / / / / / O Other _____ / / / / / 2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained? O Yes O No 3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident? O Yes ⇨ Most recent year tested: / / / / / Test pressure (psig): / / /, / / / / O No 4. Has one or more Direct Assessment been conducted on the pipeline segment? O Yes, and an investigative dig was conducted at the point of the Accident ⇨ Most recent year conducted: / / / / / O Yes, but the point of the Accident was not identified as a dig site ⇨ Most recent year conducted: / / / / / O No

5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?
O Yes O No

5.a If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:

O Radiography / / / / /
O Guided Wave Ultrasonic / / / / /
O Handheld Ultrasonic Tool / / / / /
O Wet Magnetic Particle Test / / / / /
O Dry Magnetic Particle Test / / / / /
O Other _____ / / / / /

Complete the following if Excavation Damage by Third Party is selected as the sub-cause.

6. Did the Operator get prior notification of the excavation activity? O Yes O No

6.a If Yes, Notification received from: *(select all that apply)* O One-Call System O Excavator O Contractor O Landowner

Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.

7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)? OYes O No

8. Right-of-Way where event occurred: *(select all that apply)*

☐ Public ⇨ Specify: O City Street O State Highway O County Road O Interstate Highway O Other

☐ Private ⇨ Specify: O Private Landowner O Private Business O Private Easement

☐ Pipeline Property/Easement
☐ Power/Transmission Line
☐ Railroad
☐ Dedicated Public Utility Easement
☐ Federal Land
☐ Data not collected
☐ Unknown/Other

9. Type of excavator: *(select only one)*

O Contractor O County O Developer O Farmer O Municipality O Occupant
O Railroad O State O Utility O Data not collected O Unknown/Other

10. Type of excavation equipment: *(select only one)*

O Auger O Backhoe/Trackhoe O Boring O Drilling O Directional Drilling
O Explosives O Farm Equipment O Grader/Scraper O Hand Tools O Milling Equipment
O Probing Device O Trencher O Vacuum Equipment O Data not collected O Unknown/Other

11. Type of work performed: *(select only one)*

O Agriculture O Cable TV O Curb/Sidewalk O Building Construction O Building Demolition
O Drainage O Driveway O Electric O Engineering/Surveying O Fencing
O Grading O Irrigation O Landscaping O Liquid Pipeline O Milling
O Natural Gas O Pole O Public Transit Authority O Railroad Maintenance O Road Work
O Sewer (Sanitary/Storm) O Site Development O Steam O Storm Drain/Culvert O Street Light
O Telecommunications O Traffic Signal O Traffic Sign O Water O Waterway Improvement
O Data not collected O Unknown/Other

12. Was the One-Call Center notified? O Yes O No

*12.a If Yes, specify ticket number: /

*12.b If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:

_____

13. Type of Locator: O Utility Owner O Contract Locator O Data not collected O Unknown/Other

14. Were facility locate marks visible in the area of excavation? O No O Yes O Data not collected O Unknown/Other

15. Were facilities marked correctly? O No O Yes O Data not collected O Unknown/Other

16. Did the damage cause an interruption in service? O No O Yes O Data not collected O Unknown/Other

16.a If Yes, specify duration of the interruption: /___/___/___/___/ hours

17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well)*:

☐ One-Call Notification Practices Not Sufficient: *(select only one)*

- O No notification made to the One-Call Center
- O Notification to One-Call Center made, but not sufficient
- O Wrong information provided

☐ Locating Practices Not Sufficient: *(select only one)*

- O Facility could not be found/located
- O Facility marking or location not sufficient
- O Facility was not located or marked
- O Incorrect facility records/maps

☐ Excavation Practices Not Sufficient: *(select only one)*

- O Excavation practices not sufficient (other)
- O Failure to maintain clearance
- O Failure to maintain the marks
- O Failure to support exposed facilities
- O Failure to use hand tools where required
- O Failure to verify location by test-hole (pot-holing)
- O Improper backfilling

☐ One-Call Notification Center Error

☐ Abandoned Facility

☐ Deteriorated Facility

☐ Previous Damage

☐ Data Not Collected

☐ Other / None of the Above *(explain)* _____

G4 - Other Outside Force Damage - *only one **sub-cause** can be picked from shaded left-hand column

☐ **Nearby Industrial, Man-made, or Other Fire/Explosion as Primary Cause of Accident**

☐ **Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged In Excavation**

1. Vehicle/Equipment operated by: *(select only one)*
   O Operator O Operator's Contractor O Third Party

☐ **Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring**

2. Select one or more of the following IF an extreme weather event was a factor:
   O Hurricane O Tropical Storm O Tornado
   O Heavy Rains/Flood O Other _____

☐ **Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation**

☐ **Electrical Arcing from Other Equipment or Facility**

☐ **Previous Mechanical Damage NOT Related to Excavation**

Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.

3. Has one or more internal inspection tool collected data at the point of the Accident?
   O Yes O No

   3.a If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:

   O Magnetic Flux Leakage / / / / /
   O Ultrasonic / / / / /
   O Geometry / / / / /
   O Caliper / / / / /
   O Crack / / / / /
   O Hard Spot / / / / /
   O Combination Tool / / / / /
   O Transverse Field/Triaxial / / / / /
   O Other _____ / / / / /

4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained? O Yes O No

5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?
   O Yes ⇨ Most recent year tested: / / / / /
   Test pressure (psig): / / /,/ / / /
   O No

6. Has one or more Direct Assessment been conducted on the pipeline segment?
   O Yes, and an investigative dig was conducted at the point of the Accident
   ⇨ Most recent year conducted: / / / / /
   O Yes, but the point of the Accident was not identified as a dig site
   ⇨ Most recent year conducted: / / / / /
   O No

(This section continued on next page with Question 7.)

7. Has one or more non-destructive examination been conducted at the point of the Accident

	since January 1, 2002? O Yes O No 7.a If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: O Radiography / / / / / O Guided Wave Ultrasonic / / / / / O Handheld Ultrasonic Tool / / / / / O Wet Magnetic Particle Test / / / / / O Dry Magnetic Particle Test / / / / / O Other _____ / / / / /
☐ **Intentional Damage**	8. Specify: O Vandalism O Terrorism O Theft of transported commodity O Theft of equipment O Other _____
☐ **Other Outside Force Damage**	9. Describe: _____

G5 - Material Failure of Pipe or Weld

Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."

*Only one **sub-cause** can be picked from shaded left-hand column

1. The sub-cause selected below is based on the following: *(select all that apply)*

☐ Field Examination ☐ Determined by Metallurgical Analysis ☐ Other Analysis _____

☐ Sub-cause is Tentative or Suspected; Still Under Investigation *(Supplemental Report required)*

☐ **Construction-, Installation-, or Fabrication-related**	2. List contributing factors: *(select all that apply)* ☐ Fatigue- or Vibration-related O Mechanically-induced prior to installation (such as during transport of pipe) O Mechanical Vibration O Pressure-related O Thermal O Other _____ ☐ Mechanical Stress ☐ Other _____
☐ **Original Manufacturing-related (NOT girth weld or other welds formed in the field)**	
☐ **Environmental Cracking-related**	3. Specify: O Stress Corrosion Cracking O Sulfide Stress Cracking O Hydrogen Stress Cracking O Other _____

Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.

4. Additional factors: *(select all that apply)* O Dent O Gouge O Pipe Bend O Arc Burn O Crack O Lack of Fusion
O Lamination O Buckle O Wrinkle O Misalignment O Burnt Steel
O Other _____

5. Has one or more internal inspection tool collected data at the point of the Accident? O Yes O No

5.a If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:

O Magnetic Flux Leakage Tool / / / / /
O Ultrasonic / / / / /
O Geometry / / / / /
O Caliper / / / / /
O Crack / / / / /
O Hard Spot / / / / /
O Combination Tool / / / / /
O Transverse Field/Triaxial / / / / /
O Other _____ / / / / /

6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?
O Yes ⇨ Most recent year tested: / / / / / Test pressure (psig): / / / / / /
O No

7. Has one or more Direct Assessment been conducted on the pipeline segment?
O Yes, and an investigative dig was conducted at the point of the Accident ⇨ Most recent year conducted: / / / / /
O Yes, but the point of the Accident was not identified as a dig site ⇨ Most recent year conducted: / / / / /
O No

8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?
O Yes O No

8.a If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:

O Radiography / / / / /
O Guided Wave Ultrasonic / / / / /
O Handheld Ultrasonic Tool / / / / /
O Wet Magnetic Particle Test / / / / /
O Dry Magnetic Particle Test / / / / /
O Other _____ / / / / /

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G6 - Equipment Failure - *only one **sub-cause** can be picked from shaded left-hand column

☐ **Malfunction of Control/Relief Equipment**	1. Specify: *(select all that apply)* O Control Valve O Instrumentation O SCADA O Communications O Block Valve O Check Valve O Relief Valve O Power Failure O Stopple/Control Fitting O ESD System Failure O Other _____
☐ **Pump or Pump-related Equipment**	2. Specify: O Seal/Packing Failure O Body Failure O Crack in Body O Appurtenance Failure O Other _____
☐ **Threaded Connection/Coupling Failure**	3. Specify: O Pipe Nipple O Valve Threads O Mechanical Coupling O Threaded Pipe Collar O Threaded Fitting O Other _____
☐ **Non-threaded Connection Failure**	4. Specify: O O-Ring O Gasket O Seal (NOT pump seal) or Packing O Other _____
☐ **Defective or Loose Tubing or Fitting**	
☐ **Failure of Equipment Body (except Pump), Tank Plate, or other Material**	
☐ **Other Equipment Failure**	5. Describe: _____

Complete the following if any Equipment Failure sub-cause is selected.

6. Additional factors that contributed to the equipment failure: *(select all that apply)*
   - O Excessive vibration
   - O Overpressurization
   - O No support or loss of support
   - O Manufacturing defect
   - O Loss of electricity
   - O Improper installation
   - O Mismatched items (different manufacturer for tubing and tubing fittings)
   - O Dissimilar metals
   - O Breakdown of soft goods due to compatibility issues with transported commodity
   - O Valve vault or valve can contributed to the release
   - O Alarm/status failure
   - O Misalignment
   - O Thermal stress
   - O Other _____

G7 - Incorrect Operation - *only one **sub-cause** can be picked from shaded left-hand column

☐ **Damage by Operator or Operator's Contractor NOT Related to Excavation and NOT due to Motorized Vehicle/Equipment Damage**	
☐ **Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow**	1. Specify: O Valve misalignment O Incorrect reference data/calculation O Miscommunication O Inadequate monitoring O Other _____
☐ **Valve Left or Placed in Wrong Position, but NOT Resulting in a Tank, Vessel, or Sump/Separator Overflow or Facility Overpressure**	
☐ **Pipeline or Equipment Overpressured**	
☐ **Equipment Not Installed Properly**	
☐ **Wrong Equipment Specified or Installed**	
☐ **Other Incorrect Operation**	2. Describe: _____

Complete the following if any Incorrect Operation sub-cause is selected.

3. Was this Accident related to: *(select all that apply)*
   - O Inadequate procedure
   - O No procedure established
   - O Failure to follow procedure
   - O Other: _____

4. What category type was the activity that caused the Accident?
   - O Construction
   - O Commissioning
   - O Decommissioning
   - O Right-of-Way activities
   - O Routine maintenance
   - O Other maintenance
   - O Normal operating conditions
   - O Non-routine operating conditions (abnormal operations or emergencies)

5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program? O Yes O No

   5.a If Yes, were the individuals performing the task(s) qualified for the task(s)?
   - O Yes, they were qualified for the task(s)
   - O No, but they were performing the task(s) under the direction and observation of a qualified individual
   - O No, they were not qualified for the task(s) nor were they performing the task(s) under the direction and observation of a qualified individual

G8 – Other Accident Cause - *only one **sub-cause** can be picked from shaded left-hand column

☐ **Miscellaneous**	1. Describe: _____
☐ **Unknown**	2. Specify: O Investigation complete, cause of Accident unknown O Still under investigation, cause of Accident to be determined* *(*Supplemental Report required)*

PART H – NARRATIVE DESCRIPTION OF THE ACCIDENT *(Attach additional sheets as necessary)*

PART I – PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name (type or print)

Preparer's Telephone Number

Preparer's Title (type or print)

Preparer's E-mail Address

Preparer's Facsimile Number

Authorized Signer's Name

Date

Authorized Signer Telephone Number

Authorized Signer's Title

Authorized Signer's E-mail Address

North Dakota

Hazardous Waste				
When to Report	**Notification Numbers**	**What to Report**	**Written Follow-Up Reports**	**Citation**
Immediately - any spill or discharge of waste which may cause pollution of waters of the state Within 24 hours (unless 1 pound or less and immediately contained & cleaned up)	National Response Center (800) 424-8802 if water is threatened or impacted and North Dakota Dept. of Health (701) 328-5210 or ND Dept. of Emergency Services & Div. of State Radio (800) 472-2121	See attached online reporting form (http://www.nd.gov/des/planning/haz-chem/report/)	Within thirty days of detection of a release to the environment, a report containing the following information must be submitted to the department (of health): (1) Likely route of migration of the release; (2) Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate); (3) Results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within thirty days, these data must be submitted to the department as soon as they become available; (4) Proximity to downgradient drinking water, surface water, and populated areas; and (5) Description of response actions taken or planned.	NDAC 33-24-05-109. Response to leaks or spills and disposition of leaking or unfit-for-use tank systems.

RCRA Exempt Oil and Gas				
When to Report	**Notification Numbers**	**What to Report**	**Written Follow-Up Reports**	**Citation**
Verbally report within 24 hours any release that: 1) is one barrel or greater, or 2) travels offsite and Within a reasonable time frame the operator must notify surface owners upon whose land the incident occurred or traveled	North Dakota Industrial Commission Oil and Gas Division (701) 328-8020 or North Dakota Emergency Management 24-Hour Hotline (800)-472-2121 and National Response Center (800) 424-8802 if water is threatened or impacted	See attached RCRA Exempt Reporting Form for online reporting of RCRA exempt oil field releases (crude oil, water, oil/water emulsion, drilling fluids / cuttings, well completion, treatment, and stimulation fluids, tank bottoms from product and exempt waste containment, workover wastes, packing fluids, pipe scale and other solids, hydrocarbon-bearing soil, pigging wastes from gathering lines, and oil reclamation wastes): https://www.dmr.nd.gov/oilgas/spills/eirform.asp	Written report within 10 days after cleanup including the following information: operator , description of the facility, legal description of the location, date of occurrence, date of cleanup, amount and type of each fluid involved, amount of each fluid recovered, steps taken to remedy the situation, cause, and action taken to prevent reoccurrence	Chapter 38-08, Title 38 of North Dakota Century Code: 43-02-03-30 NOTIFICATION OF FIRES, LEAKS, SPILLS, OR BLOWOUTS

North Dakota

Non- Exempt Oil and Gas and General Environmental Release				
When to Report	**Notification Numbers**	**What to Report**	**Written Follow-Up Reports**	**Citation**
Immediately report all incidents which may potentially impact human health or safety, waters of the state, either surface water or ground water, or other impacts to the environment, must be reported.	North Dakota Dept. of Health 1 (701) 328-5210 or ND Dept. of Emergency Services & Div. of State Radio (800) 472-2121 and National Response Center (800) 424-8802 if water is threatened or impacted	See attached Environmental Incident Report form for online reporting of environemntal releases at https://www.dmr.nd.gov/oilgas/spills/eirform.asp	As directed by North Dakota Department of Health contact the NDDH to obtain information on what reporting will be required)	NDAC 33-16-02.1-11 paragraph 4, bottom of page 22

Non- Exempt Oil and Gas and General Environmental Release				
When to Report	**Notification Numbers**	**What to Report**	**Written Follow-Up Reports**	**Citation**
If a release is considered a potential danger to persons offsite	911 & Local Emergency Planning Commission	Pertinent information for protection of public and emergency responders (material, hazards, wind direction, etc.) as required.	As requested	Dept. of Environmental and Natural Resources verbal instruction

Butane and Ethane				
When to Report	**Notification Numbers**	**What to Report**	**Written Follow-Up Reports**	**Citation**
If a release is considered a potential danger to persons offsite	911 & Local Emergency Planning Commission	Pertinent information for protection of public and emergency responders (material, hazards, wind direction, etc.)	As Requested	Dept. of Environmental health verbal instruction

South Dakota

Hazardous Waste

When to Report	Notification Numbers	What to Report	Written Follow-Up Reports	Citation
For waste generators that generate between l00 kilograms and 1,000 kilograms of hazardous waste per month, if a release could threaten human health outside the fac ility or the generator knows the spill has reached surface water	National Response Center (800) 424-8802 South Dakota Department of Environment and Natural Resources (605) 773-3153 (Office hours) (605) 773-3296 (Office hours, Spill report) (605) 773-323 1 (24-hour)	The report, to be made immediately, shou ld indicate: l. The name, address, and EPA identification number of the generator. 2. The date, time, and type of incident. 3. The quantity and type of hazardous waste involved. 4. The extent of injuries, if any. 5. The estimated quantity and dispos ition of any recovered material	The report, to be made immediately, should indicate: l. Name and telephone number of the reporter. 2. Name and address of the facility. 3. Time and type of incident. 4. Name and quantity of materials involved. 5. The extent of injuries, if any. 6. Possible hazards to human health or the environment, outside the facility. Within 15 days after the incident, a written report must be submitted to the Department, providing the above information and describing the quantity and disposition of any material recovered from the incident.	South Dakota Administrative Rules, Title 74, Section 74:28:23:0 l, adopting by reference 40 CFR 262.34(d) South Dakota Administrative Rules, Title 74, Section 74:28:23: 0 l, adopting by reference 40 CFR 262.34(a), referring to 40 CFR 265.56

RCRA Exempt Oil and Gas

When to Report	Notification Numbers	What to Report	Written Follow-Up Reports	Citation
Fires, breaks, leaks, releases, and blowouts as soon as they are discovered. l. Threatens or is in a position to threaten an adjacent body of water,causes an immediate danger to human health or safety, or harms or threatens to harm wildlife or aquatic life. 2. Crude oil in field activities that exceeds the reportable quantity 1 barrel. 3. Petroleum or petroleum product that is greater than 25 gallons, causes a sheen on surface water, or exceeds any water quality standards. 4. Gas that exceeds 1,000,000 cubic feet. If a gas loss of less than 1,000,000 cubic feet causes the evacuation of an area or threatens public health, it must be reported immediately.	South Dakota Dept. of Environment & Natural Resources (605) 773-3296 (605) 773-3231 (24 hr) and / or National Response Center (800) 424-8802 if water is threatened or impacted	Provide the fo llowing information (DENR may also request further details): l. The specific location of the discharge. 2. The type and amount of regulated substance discharged. 3. The responsible person's name, address, and telephone number. 4. An explanation of any response action that was taken. 5. The list of agencies notified. 6. The suspected cause of the discharge. 7. The date and time of the discharge to the extent known. 8. The immediate known impacts of the discharge.	A written repott must be submitted within 30 days, inc luding in formation on: l. The location of the incident by quarter-quarter section, township, and range. 2. The date and time of the incident and the amount of oil or gas lost or destroyed. 3. The responsible person's or operator's name, address, and telephone number. 4. The surface owner's name, address, and telephone number. 5. The suspected cause of the incident and any steps or procedures used to remedy the situation, including plans for soil disposal and treatment and any additional assessment and remediation.	South Dakota Administrative Rules, Title 74, Section 74: 12:04: l 0

South Dakota

Non- Exempt Oil and Gas and General Environmental Release				
When to Report	**Notification Numbers**	**What to Report**	**Written Follow-Up Reports**	**Citation**
Report releases immediately if any one of the following conditions is met: 1. The release threatens or is in a position to threaten surface waters or groundwaters of the state. 2. The release threatens or poses an immediate danger to human health or safety. 3. The discharge harms or threatens wildlife or aquatic life. 4. The release is greater than 25 gallons, or exceeds 1 barrel or 42 gallons if it is a release of crude oil related to field activities regulated under state oil and gas conservation laws. 5. The release causes a sheen on surface water, or exceeds any groundwater or surface water quality standard.	South Dakota Dept. of Environment & Natural Resources (605) 773-3296 (605) 773-3231 (24 hr) and / or National Response Center (800) 424-8802 if water is threatened or impacted	Provide the following information (DENR may also request further details): 1. The specific location of the discharge. 2. The type and amount of regulated substance discharged. 3. The responsible person's name, address, and telephone number. 4. An explanation of any response action that was taken. 5. The list of agencies notified. 6. The suspected cause of the discharge. 7. The date and time of the discharge to the extent known. 8. The immediate known impacts of the discharge.	DENR will send a follow-up report to the responsible party (see South Dakota Incident Form at page South Dakota - 7), which must be completed and submitted to the above address within 30 days. In addition, the Department requires cleanup of spills and will review the adequacy of cleanup activities.	South Dakota Legislative Code 74:34:01:04

Non- Exempt Oil and Gas and General Environmental Release				
When to Report	**Notification Numbers**	**What to Report**	**Written Follow-Up Reports**	**Citation**
If a release is considered a potential danger to persons offsite	911 & Local Emergency Planning Commission	Pertinent information for protection of public and emergency responders (material, hazards, wind direction, etc.) as required.	As requested	Dept. of Environmental and Natural Resources verbal instruction

Butane and Ethane				
When to Report	**Notification Numbers**	**What to Report**	**Written Follow-Up Reports**	**Citation**
If a release is considered a potential danger to persons offsite	911 & Local Emergency Planning Commission	Pertinent information for protection of public and emergency responders (material, hazards, wind direction, etc.) as required.	As requested	Dept. of Environmental and Natural Resources verbal instruction

Appendix C- OSRO Contractor Information

- National Response Corporation (NRC)

AMENDMENT NUMBER THREE
PROVISION OF RESPONSE RESOURCES AGREEMENT# SLO1012005
NATIONAL RESPONSE CORPORATION

THIS AMENDMENT NUMBER THREE OF PROVISION OF RESPONSE RESOURCES AGREEMENT # SLO1012005 (this "Third Amendment") is entered into as of January 24, 2014, by and between Sunoco Pipeline L.P. and/or Sunoco Partners Marketing & Terminals L.P. ("Client"), and National Response Corporation ("Provider").

WITNESSETH:

Provider and Client are parties to that certain "Provision Of Response Resources Agreement" dated as of January 1, 2005 (the "Response Resources Agreement"), and amended pursuant to First Amendment of Response Resources Agreement dated as of May 10, 2005 ("First Amendment") and Second Amendment of Response Resources Agreement dated as of May 6, 2013 ("Second Amendment"). Provider and Client wish to amend the Response Resources Agreement and the aforementioned Amendments for the purposes of amending the Annual Retainer Fee and sections 2.6 and 12.1.

NOW THEREFORE, in consideration of the promises set forth in the Agreement and for other good and valuable consideration, the receipt of which is hereby acknowledged, and intending to be legally bound, the parties hereto agree as follows:

ARTICLE I
AMENDMENTS TO AGREEMENT

1.1 **Amendment.** In the event there is a conflict between the terms and conditions of this Amendment and the terms and conditions of the Response Resources Agreement and/or the First and Second Amendments, the terms and conditions of this Third Amendment shall control. The Response Resources Agreement, the First and Second Amendments, and this Third Amendment shall hereinafter be referred to collectively as the "Agreement".

1.2 **Amended Sections.** This Third Amendment hereby amends the following section(s) of the Response Resources Agreement:

- Section 2.6. The first sentence is hereby deleted and replaced in its entirety with the following:

  > Notwithstanding any provision of this Agreement to the contrary, the Provider may, in its discretion, cease to deploy Response Resources for Response Activities of the Client or to provide any other services provided herein, if the Client fails to make or secure payment in accordance with, and within the time periods provided within, this Agreement so long as Provider provides Client with notice of such intent to withhold services and a reasonable time to cure any deficiencies.

- Section 12.1 is hereby deleted and replaced in its entirety with the following:

National Response Corporation

Resource Availability By Type

Equipment Types: Boom/Portable Storage/Skimmer/Support Equipment/Vacuum System/Vessel

Zone: Williston, ND

Williston ND - Case# DM15-0085

April 20, 2015

00 to 06 hours (* Does not include recall/mobilization time)

ContractorLocation

Boom

>=6 and <18 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
8" Boom	0	10,000	0	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
6" Boom	0	300	0	0	ICN	Environmental Restoration LLC	Sidney	MT	01:05
10" Boom	BM10-001	1,000	0	0	NRC	Basin Transload Beulah	Beulah	ND	02:51
Sub Total >=6 and <18 inch:		**11300**	**0**	**0**					

18"

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Containment Boom	0	8,500	0	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
18" Boom	0	1,700	0	0	ICN	Garner Environmental Services, Inc.	Williston	ND	00:06
18" Boom	0	1,200	0	0	ICN	Environmental Restoration LLC	Sidney	MT	01:05
18" Boom	0	4,500	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Sub Total 18":		**15900**	**0**	**0**					
Total Boom:		**27200**	**0**	**0**					

Portable Storage

Portable Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
55 Gallon Drum	0	88	0	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
Tote Tank	0	12	0	72	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
Pillow Tank	ELS-39	1	0	24	NRC	Global Companies LLC (Columbus, ND)	Columbus	ND	01:50
Pillow Tank	ELS-40	1	0	24	NRC	Global Companies LLC (Columbus, ND)	Columbus	ND	01:50
Pillow Tank	ELS-41	1	0	24	NRC	Global Companies LLC (Columbus, ND)	Columbus	ND	01:50
Pillow Tank	ELS-38	1	0	24	NRC	Global Companies LLC (Columbus, ND)	Columbus	ND	01:50
Pillow Tank	ELS-42	1	0	24	NRC	Basin Transload Beulah	Beulah	ND	02:51
Pillow Tank	ELS-43	1	0	24	NRC	Basin Transload Beulah	Beulah	ND	02:51
Pillow Tank	ELS-58	1	0	24	NRC	Basin Transload Beulah	Beulah	ND	02:51
Pillow Tank	ELS-59	1	0	24	NRC	Basin Transload Beulah	Beulah	ND	02:51
Sub Total Portable Tank:		**108**	**0**	**264**					
Total Portable Storage:		**108**	**0**	**264**					

Skimmer

Drum

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Small Drum Skimmer	0	2	342	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
23' Drum Skimmer	0	2	342	0	ICN	Garner Environmental Services, Inc.	Williston	ND	00:06
36" Drum Skimmer	0	2	494	0	ICN	Garner Environmental Services, Inc.	Williston	ND	00:06

012763

00 to 06 hours (* Does not include recall/mobilization time)

						Contractor	Location		
Elastec TDS118 Skimmer	0	2	480	0	ICN	Environmental Restoration LLC	Sidney	MT	01:05
Sub Total Drum:		**8**	**1658**	**0**					

Floating Suction

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Floating Suction Skimmer	0	1	274	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Sub Total Floating Suction:		**1**	**274**	**0**					

Oleophilic Disk

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Crucial ORD Disk Skimmer	ORD-003	1	342	0	NRC	Global Companies LLC (Columbus, ND)	Columbus	ND	01:50
Crucial ORD Disk Skimmer	ORD-005	1	342	0	NRC	Basin Transload Beulah	Beulah	ND	02:51
Sub Total Oleophilic Disk:		**2**	**684**	**0**					
Total Skimmer:		**11**	**2616**	**0**					

Support Equipment

Blower

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Various Blower	0	7	0	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
Sub Total Blower:		**7**	**0**	**0**					

Communications

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Mobile Command Unit	0	1	0	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
Mobile Command Center	0	1	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Office Trailer	0	1	0	0	ICN	Clean Harbors Environmental Services	Regina	Canada	04:43
Sub Total Communications:		**3**	**0**	**0**					

Compressor

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Compressor	0	4	0	0	ICN	Franz Construction, Inc.	Sidney	MT	01:06
Compressor	0	1	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Sub Total Compressor:		**5**	**0**	**0**					

Crane Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Crane Truck	0	1	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Sub Total Crane Truck:		**1**	**0**	**0**					

Dump Truck/Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Tractor	0	5	0	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
Dump Truck	0	1	0	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
Dump Truck	0	12	0	0	ICN	Strata Corporation (Earthmover)	Williston	ND	00:06
End Dumps	0	13	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Dump Truck	0	3	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Sub Total Dump Truck/Trailer:		**34**	**0**	**0**					

Earth Moving Equipment

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)

00 to 06 hours (* Does not include recall/mobilization time)

						Contractor	Location		
Backhoe	0	1	0	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
Dozer	0	4	0	0	ICN	Strata Corporation (Earthmover)	Williston	ND	00:06
Excavator	0	6	0	0	ICN	Strata Corporation (Earthmover)	Williston	ND	00:06
Rubber Tire Backhoe	0	1	0	0	ICN	Garner Environmental Services, Inc.	Williston	ND	00:06
Rubber Track Front Loader	0	1	0	0	ICN	Garner Environmental Services, Inc.	Williston	ND	00:06
Skidsteer	0	1	0	0	ICN	Environmental Restoration LLC	Sidney	MT	01:05
Scraper	0	30	0	0	ICN	Franz Construction, Inc.	Sidney	MT	01:06
Grader	0	12	0	0	ICN	Franz Construction, Inc.	Sidney	MT	01:06
Dozer	0	20	0	0	ICN	Franz Construction, Inc.	Sidney	MT	01:06
Track Hoe	0	3	0	0	ICN	Franz Construction, Inc.	Sidney	MT	01:06
Excavator	0	6	0	0	ICN	Franz Construction, Inc.	Sidney	MT	01:06
Back-Hoe	0	2	0	0	ICN	Franz Construction, Inc.	Sidney	MT	01:06
Extend-A Hoe	0	2	0	0	ICN	Franz Construction, Inc.	Sidney	MT	01:06
Loader	0	31	0	0	ICN	Franz Construction, Inc.	Sidney	MT	01:06
Skid-Steer	0	8	0	0	ICN	Franz Construction, Inc.	Sidney	MT	01:06
Roller	0	10	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Loader	0	26	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Excavator	0	29	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Skid Steer	0	15	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Grader	0	2	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Scraper	0	5	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Dozer	0	10	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Sub Total Earth Moving Equipment:		**225**	**0**	**0**					

Flatbed Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Equipment Trailer	0	1	0	0	ICN	Environmental Restoration LLC	Sidney	MT	01:05
Stakebed	0	2	0	0	ICN	Environmental Restoration LLC	Sidney	MT	01:05
Flatbed Trailer	0	4	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Tandem Trailer	0	1	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Flat Deck Trailer	0	4	0	0	ICN	Clean Harbors Environmental Services	Regina	Canada	04:43
Sub Total Flatbed Trailer:		**12**	**0**	**0**					

Generator

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Generator	0	14	0	0	ICN	Franz Construction, Inc.	Sidney	MT	01:06
Generator	0	1	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Generator	0	1	0	0	ICN	Clean Harbors Environmental Services	Regina	Canada	04:43
Sub Total Generator:		**16**	**0**	**0**					

Pick-Up Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Pick-Up Truck	0	2	0	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
UTV	0	2	0	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
Pick-Up Truck	0	2	0	0	ICN	Strata Corporation (Earthmover)	Williston	ND	00:06
Pick-Up Truck	0	3	0	0	ICN	Environmental Restoration LLC	Sidney	MT	01:05
Pick-Up Truck	0	71	0	0	ICN	Franz Construction, Inc.	Sidney	MT	01:06
Pick-Up Truck	0	48	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Pick-Up Truck	0	7	0	0	ICN	Clean Harbors Environmental Services	Regina	Canada	04:43
Sub Total Pick-Up Truck:		**135**	**0**	**0**					

00 to 06 hours (* Does not include recall/mobilization time)

ContractorLocation

Pressure Washer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Pressure Washer	0	1	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Pressure Washer	0	1	0	0	ICN	Clean Harbors Environmental Services	Regina	Canada	04:43
High Pressure Water Blaster	0	4	0	0	ICN	Clean Harbors Environmental Services	Regina	Canada	04:43
Mobile Hotsy	0	1	0	0	ICN	Clean Harbors Environmental Services	Regina	Canada	04:43
Sub Total Pressure Washer:		**7**	**0**	**0**					

Roll-Off Container

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Vacuum Box Containers	0	16	0	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
20 yd Roll Off Container	0	6	0	0	ICN	Garner Environmental Services, Inc.	Williston	ND	00:06
Sub Total Roll-Off Container:		**22**	**0**	**0**					

SCBA

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
SCBA	0	6	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Sub Total SCBA:		**6**	**0**	**0**					

Steam Cleaner

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Steamer	0	1	0	0	ICN	Clean Harbors Environmental Services	Regina	Canada	04:43
Sub Total Steam Cleaner:		**1**	**0**	**0**					

Support Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Support Truck	0	5	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Sub Total Support Truck:		**5**	**0**	**0**					

Truck - Semi

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Roll Off Truck Bobtail	0	1	0	0	ICN	Garner Environmental Services, Inc.	Williston	ND	00:06
Tractor	0	14	0	0	ICN	Franz Construction, Inc.	Sidney	MT	01:06
Tractor	0	1	0	0	ICN	Clean Harbors Environmental Services	Regina	Canada	04:43
Sub Total Truck - Semi:		**16**	**0**	**0**					

Utility Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Vessel Transport Trailer	0	1	0	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
Boat Trailer	0	2	0	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
Response Trailer	0	2	0	0	ICN	Garner Environmental Services, Inc.	Williston	ND	00:06
Boom Trailer	0	1	0	0	ICN	Environmental Restoration LLC	Sidney	MT	01:05
Utility Trailer	0	2	0	0	ICN	Environmental Restoration LLC	Sidney	MT	01:05
Fast Response Trailer	738	1	0	0	NRC	Global Companies LLC (Columbus, ND)	Columbus	ND	01:50
Fast Response Trailer	739	1	0	0	NRC	Basin Transload Beulah	Beulah	ND	02:51
Small Trailer	0	18	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Sub Total Utility Trailer:		**28**	**0**	**0**					

Utility Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Utility Vehicle	0	2	0	0	ICN	Environmental Restoration LLC	Sidney	MT	01:05

Sub Total Utility Truck:	**2**	**0**	**0**

Van Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Red Enclosed Trailer	0	2	0	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
Lab Trailer	0	1	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Decon Trailer	0	1	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Boom Trailer	0	2	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Van Trailers	0	1	0	0	ICN	Clean Harbors Environmental Services	Regina	Canada	04:43
Sub Total Van Trailer:		**7**	**0**	**0**					
Total Support Equipment:		**532**	**0**	**0**					

Vacuum System

Vacuum Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Trailer Skid Vac	0	1	343	71	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
Vacuum Trailer	0	1	542	71	ICN	Strata Corporation (Earthmover)	Williston	ND	00:06
Vacuum Trailer	0	1	343	20	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Sub Total Vacuum Trailer:		**3**	**1228**	**162**					

Vacuum Transfer Unit

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Cyclone Vactor Guzzler	0	2	686	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
Vacuum Transfer Unit	0	1	343	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
Cusco Portable Vacuum Tranfer Unit	0	1	549	71	ICN	Garner Environmental Services, Inc.	Williston	ND	00:06
Sub Total Vacuum Transfer Unit:		**4**	**1578**	**71**					

Vacuum Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
High Powered Vacuum Truck	0	5	1,715	355	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
Vacuum Tanker	0	1	343	119	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
Vacuum Truck	0	1	528	71	ICN	Strata Corporation (Earthmover)	Williston	ND	00:06
Vacuum Truck	0	1	4,032	71	ICN	Environmental Restoration LLC	Sidney	MT	01:05
Vacuum Truck	0	1	343	71	ICN	Strata Corporation (Earthmover)	Minot	ND	03:04
Vacuum Truck	0	1	343	71	ICN	Clean Harbors Environmental Services	Regina	Canada	04:43
Presvac	0	3	1,029	213	ICN	Clean Harbors Environmental Services	Regina	Canada	04:43
Sub Total Vacuum Truck:		**13**	**8333**	**971**					
Total Vacuum System:		**20**	**11139**	**1204**					

Vessel

Deployment Craft (< 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
18' Deployment Craft	0	2	0	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
28' Deployment Craft	0	1	0	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
Response Boat Custom Flat	0	2	0	0	ICN	Garner Environmental Services, Inc.	Williston	ND	00:06
17' Deployment Craft	0	1	0	0	ICN	Environmental Restoration LLC	Sidney	MT	01:05
28' Deployment Craft	0	1	0	0	ICN	Environmental Restoration LLC	Sidney	MT	01:05
17' Deployment Craft	0	1	0	0	ICN	Environmental Restoration LLC	Sidney	MT	01:05
Sub Total Deployment Craft (< 25 foot):		**8**	**0**	**0**					

00 to 06 hours (* Does not include recall/mobilization time)

ContractorLocation

Deployment Craft (> 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
30' Deployment Craft	0	1	0	0	ICN	Clean Harbors Environmental Services	Williston	ND	00:04
Sub Total Deployment Craft (> 25 foot):		**1**	**0**	**0**					
Total Vessel:		**9**	**0**	**0**					
Total 00 to 06 hours:			**13755**	**1,468.00**					
Running Total from 0 to unknown:			**13755**	**1468**					

Boom

18"

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
18" Boom	0	200	0	0	ICN	Euroway Industrial Services	Winnipeg	Canada	09:18
18" Boom	0	1,400	0	0	ICN	Beltrami Industrial Services	Solway	MN	11:24
18" Boom	0	1,000	0	0	ICN	OSI Environmental, Inc.	Bemidji	MN	11:37
Sub Total 18":		**2600**	**0**	**0**					
Total Boom:		**2600**	**0**	**0**					

Portable Storage

Frac Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Frac Tank	0	2	0	952	ICN	Beltrami Industrial Services	Solway	MN	11:24
Sub Total Frac Tank:		**2**	**0**	**952**					

Portable Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Poly Tank	0	1	0	12	ICN	Clean Harbors Environmental Services	Winnipeg	Canada	09:10
Sub Total Portable Tank:		**1**	**0**	**12**					
Total Portable Storage:		**3**	**0**	**964**					

Skimmer

Drum

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Medium Drum Skimmer	0	1	240	0	ICN	Euroway Industrial Services	Winnipeg	Canada	09:18
Sub Total Drum:		**1**	**240**	**0**					
Total Skimmer:		**1**	**240**	**0**					

Support Equipment

Communications

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Command Post Trailer	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	11:24
Sub Total Communications:		**1**	**0**	**0**					

Compressor

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Compressor	0	1	0	0	ICN	Clean Harbors Environmental Services	Winnipeg	Canada	09:10
Air Compressor	0	1	0	0	ICN	Prairie Consulting Group	Watertown	SD	10:54
Compressor	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	11:24
Sub Total Compressor:		**3**	**0**	**0**					

Crane Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Sideboom/Padded	0	1	0	0	ICN	Hulcher Services, INC.	Laurel	MT	08:24
Sideboom/Steel	0	1	0	0	ICN	Hulcher Services, INC.	Laurel	MT	08:24
Sub Total Crane Truck:		**2**	**0**	**0**					

06 to 12 hours (* Does not include recall/mobilization time)

ContractorLocation

Dump Truck/Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Dump Truck	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	11:24
Dump Truck	0	1	0	0	ICN	Olympus Technical Services, Inc.	Helena	MT	11:32
Sub Total Dump Truck/Trailer:		**2**	**0**	**0**					

Earth Moving Equipment

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
977 Track Loader	0	1	0	0	ICN	Hulcher Services, INC.	Laurel	MT	08:24
Crawler Loader	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	11:24
Backhoe	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	11:24
Skidsteer Loader	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	11:24
Caterpillar	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	11:24
Excavator	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	11:24
Backhoe	0	1	0	0	ICN	Olympus Technical Services, Inc.	Helena	MT	11:32
Skidsteer	0	1	0	0	ICN	Olympus Technical Services, Inc.	Helena	MT	11:32
Excavator	0	1	0	0	ICN	Olympus Technical Services, Inc.	Helena	MT	11:32
Skidsteer	0	1	0	0	ICN	Olympus Technical Services, Inc.	Helena	MT	11:32
Sub Total Earth Moving Equipment:		**10**	**0**	**0**					

Flatbed Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Flatbed Trailer	0	1	0	0	ICN	Euroway Industrial Services	Winnipeg	Canada	09:18
Flatbed Trailer	0	1	0	0	ICN	Euroway Industrial Services	Winnipeg	Canada	09:18
Lowboy Trailer	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	11:24
Sub Total Flatbed Trailer:		**3**	**0**	**0**					

Fork Lift

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Forklift	0	1	0	0	ICN	OSI Environmental, Inc.	Moorhead	MN	09:31
Forklift	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	11:24
Forklifts	0	1	0	0	ICN	OSI Environmental, Inc.	Bemidji	MN	11:37
Sub Total Fork Lift:		**3**	**0**	**0**					

Generator

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Generator	0	2	0	0	ICN	Euroway Industrial Services	Winnipeg	Canada	09:18
Generator	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	11:24
Generator	0	1	0	0	ICN	OSI Environmental, Inc.	Bemidji	MN	11:37
Sub Total Generator:		**4**	**0**	**0**					

Pick-Up Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Pick-Up Truck	0	3	0	0	ICN	Clean Harbors Environmental Services	Winnipeg	Canada	09:10
Pick-Up Truck	0	2	0	0	ICN	Prairie Consulting Group	Watertown	SD	10:54
Pick-Up Truck	0	4	0	0	ICN	Beltrami Industrial Services	Solway	MN	11:24
Pick-Up Truck	0	2	0	0	ICN	OSI Environmental, Inc.	Bemidji	MN	11:37
Sub Total Pick-Up Truck:		**11**	**0**	**0**					

Pressure Washer

06 to 12 hours (* Does not include recall/mobilization time)

ContractorLocation

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Pressure Washer-Hot	0	1	0	0	ICN	Clean Harbors Environmental Services	Winnipeg	Canada	09:10
Waterblast Unit	0	1	0	0	ICN	Clean Harbors Environmental Services	Winnipeg	Canada	09:10
Pressure Washer	0	1	0	0	ICN	Prairie Consulting Group	Watertown	SD	10:54
Pressure Washer	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	11:24
Pressure Washer	0	1	0	0	ICN	OSI Environmental, Inc.	Bemidji	MN	11:37
Sub Total Pressure Washer:		**5**	**0**	**0**					

Roll-off Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Roll-off Truck	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	11:24
Sub Total Roll-off Truck:		**1**	**0**	**0**					

SCBA

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
SCBA	0	2	0	0	ICN	Beltrami Industrial Services	Solway	MN	11:24
SCBA	0	1	0	0	ICN	OSI Environmental, Inc.	Bemidji	MN	11:37
Sub Total SCBA:		**3**	**0**	**0**					

Steam Cleaner

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Steamer Truck	0	1	0	0	ICN	Clean Harbors Environmental Services	Winnipeg	Canada	09:10
Sub Total Steam Cleaner:		**1**	**0**	**0**					

Truck - Semi

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Tractor	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	11:24
Sub Total Truck - Semi:		**1**	**0**	**0**					

Utility Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Box Truck	0	1	0	0	ICN	OSI Environmental, Inc.	Moorhead	MN	09:31
Response Truck	0	1	0	0	ICN	OSI Environmental, Inc.	Bemidji	MN	11:37
Box Truck	0	1	0	0	ICN	OSI Environmental, Inc.	Bemidji	MN	11:37
Sub Total Utility Truck:		**3**	**0**	**0**					

Van Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Response Trailer with Semi	0	1	0	0	ICN	Prairie Consulting Group	Watertown	SD	10:54
Recovery Spill Trailer	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	11:24
Response Trailer	0	1	0	0	ICN	OSI Environmental, Inc.	Bemidji	MN	11:37
Sub Total Van Trailer:		**3**	**0**	**0**					

Workboat Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Workboat Trailer	0	1	0	0	ICN	Euroway Industrial Services	Winnipeg	Canada	09:18
Sub Total Workboat Trailer:		**1**	**0**	**0**					
Total Support Equipment:		**57**	**0**	**0**					

Vacuum System

Vacuum Trailer

06 to 12 hours (* Does not include recall/mobilization time)

ContractorLocation

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Vacuum Trailer	0	1	0	0	ICN	Olympus Technical Services, Inc.	Helena	MT	11:32
Vacuum Trailer	0	1	0	24	ICN	Olympus Technical Services, Inc.	Helena	MT	11:32
Sub Total Vacuum Trailer:		**2**	**0**	**24**					

Vacuum Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Vacuum Straight Truck	0	1	343	71	ICN	Clean Harbors Environmental Services	Winnipeg	Canada	09:10
Pump Truck	0	1	651	71	ICN	OSI Environmental, Inc.	Moorhead	MN	09:31
Vacuum Truck	0	1	343	71	ICN	Beltrami Industrial Services	Solway	MN	11:24
Vacuum Truck	0	1	343	71	ICN	OSI Environmental, Inc.	Bemidji	MN	11:37
Pump Truck	0	1	651	71	ICN	OSI Environmental, Inc.	Bemidji	MN	11:37
Sub Total Vacuum Truck:		**5**	**2331**	**355**					
Total Vacuum System:		**7**	**2331**	**379**					

Vessel

Deployment Craft (< 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
16' Deployment Craft	0	1	0	0	ICN	Euroway Industrial Services	Winnipeg	Canada	09:18
18' Deployment Craft	0	1	0	0	ICN	Prairie Consulting Group	Watertown	SD	10:54
Sub Total Deployment Craft (< 25 foot):		**2**	**0**	**0**					
Total Vessel:		**2**	**0**	**0**					
Total 06 to 12 hours:			**2571**	**1,343.00**					
Running Total from 0 to unknown:			**16326**	**2811**					

National Response Corporation
Resource Availability By Type

Equipment Types: Support Equipment

Zone: Bismarck, ND

dEMO - Case# DM15-0099
May 04, 2015

00 to 06 hours (* Does not include recall/mobilization time)

Support Equipment

Earth Moving Equipment

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Roller	0	10	0	0	ICN	Minot	ND	02:51
Loader	0	26	0	0	ICN	Minot	ND	02:51
Excavator	0	29	0	0	ICN	Minot	ND	02:51
Skid Steer	0	15	0	0	ICN	Minot	ND	02:51
Grader	0	2	0	0	ICN	Minot	ND	02:51
Scraper	0	5	0	0	ICN	Minot	ND	02:51
Dozer	0	10	0	0	ICN	Minot	ND	02:51
Backhoe	0	1	0	0	ICN	Williston	ND	04:38
Dozer	0	4	0	0	ICN	Williston	ND	04:39
Excavator	0	6	0	0	ICN	Williston	ND	04:39
Rubber Tire Backhoe	0	1	0	0	ICN	Williston	ND	04:41
Rubber Track Front Loader	0	1	0	0	ICN	Williston	ND	04:41
Scraper	0	30	0	0	ICN	Sidney	MT	04:51
Track Hoe	0	3	0	0	ICN	Sidney	MT	04:51
Excavator	0	6	0	0	ICN	Sidney	MT	04:51
Back-Hoe	0	2	0	0	ICN	Sidney	MT	04:51
Extend-A Hoe	0	2	0	0	ICN	Sidney	MT	04:51
Loader	0	31	0	0	ICN	Sidney	MT	04:51
Skid-Steer	0	8	0	0	ICN	Sidney	MT	04:51
Grader	0	12	0	0	ICN	Sidney	MT	04:51
Dozer	0	20	0	0	ICN	Sidney	MT	04:51
Skidsteer	0	4	0	0	ICN	Sidney	MT	04:52
Sub Total Earth Moving Equipment:		225	0	0				

Roll-Off Container

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Vacuum Box Containers	0	16	0	0	ICN	Williston	ND	04:38
20 yd Roll Off Container	0	6	0	0	ICN	Williston	ND	04:41
Sub Total Roll-Off Container:		22	0	0				
Total Support Equipment:		247	0	0				
Total 00 to 06 hours:			0	0				
Running Total from 0 to unknown:			0	0				

06 to 12 hours (* Does not include recall/mobilization time)

Support Equipment

Earth Moving Equipment

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Crawler Loader	0	1	0	0	ICN	Solway	MN	07:48
Backhoe	0	1	0	0	ICN	Solway	MN	07:48
Skidsteer Loader	0	1	0	0	ICN	Solway	MN	07:48
Caterpillar	0	1	0	0	ICN	Solway	MN	07:48
Excavator	0	1	0	0	ICN	Solway	MN	07:48
Track Loader	0	1	0	0	ICN	Roseville	MN	10:59
977 Track Loader	0	1	0	0	ICN	Laurel	MT	11:03
Backhoe-Loader	0	1	0	0	ICN	Eveleth	MN	11:07
Skid Steer-Loader	0	1	0	0	ICN	Eveleth	MN	11:07
Backhoe	0	1	0	0	ICN	North Platte	NE	11:09
Wheel Loader	0	1	0	0	ICN	North Platte	NE	11:09
Uniloader	0	1	0	0	ICN	North Platte	NE	11:09
Trackhoe-Mini	0	1	0	0	ICN	North Platte	NE	11:09
Toolcat	0	1	0	0	ICN	North Platte	NE	11:09
325 Excavator	0	1	0	0	ICN	North Platte	NE	11:10
966 Wheel Loader	0	1	0	0	ICN	North Platte	NE	11:10
Backhoe	0	1	0	0	ICN	Duluth	MN	11:39
Skid Steer	0	1	0	0	ICN	Duluth	MN	11:39
Mini Excavator	0	1	0	0	ICN	Duluth	MN	11:39
Mini Excavator	0	1	0	0	ICN	Duluth	MN	11:39
Skid Steer with Tracks	0	1	0	0	ICN	Duluth	MN	11:39
track Loader	0	1	0	0	ICN	Hudson	WI	11:40
Excavator	0	2	0	0	ICN	Hudson	WI	11:40
Skid Steer	0	1	0	0	ICN	Hudson	WI	11:40
Sub Total Earth Moving Equipment:		**25**	**0**	**0**				

Roll-Off Container

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Roll-Off Box	0	2	0	0	ICN	Anoka	MN	10:34
Roll-Off Container	0	20	0	0	ICN	Eveleth	MN	11:07
Haz Roll-Off	0	4	0	0	ICN	North Platte	NE	11:09
Non-Haz Roll-Off	0	1	0	0	ICN	North Platte	NE	11:09
Sub Total Roll-Off Container:		**27**	**0**	**0**				
Total Support Equipment:		**52**	**0**	**0**				
Total 06 to 12 hours:			**0**	**0**				
Running Total from 0 to unknown:			**0**	**0**				

National Response Corporation Resource Availability By Type

Equipment Types: Vacuum System

Zone: Bismarck, ND

dEMO - Case# DM15-0099
May 04, 2015

00 to 06 hours (* Does not include recall/mobilization time)

Vacuum System

Vacuum Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Vacuum Truck	0	1	343	71	ICN	Minot	ND	02:51
High Powered Vacuum Truck	0	5	1715	355	ICN	Williston	ND	04:38
Vacuum Tanker	0	1	343	119	ICN	Williston	ND	04:38
Vacuum Truck	0	1	528	71	ICN	Williston	ND	04:39
Vacuum Truck	0	1	4032	71	ICN	Sidney	MT	04:52
Pump Truck	0	1	651	71	ICN	Moorhead	MN	05:27
Sub Total Vacuum Truck:		**10**	**7612**	**758**				
Total Vacuum System:		**10**	**7612**	**758**				
Total 00 to 06 hours:			**7612**	**758**				
Running Total from 0 to unknown:			**7612**	**758**				

06 to 12 hours (* Does not include recall/mobilization time)

Vacuum System

Vacuum Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Vacuum Straight Truck	0	1	343	71	ICN	Winnipeg	Canad	07:46
Vacuum Truck	0	1	343	71	ICN	Solway	MN	07:48
Vacuum Truck	0	1	343	71	ICN	Bemidji	MN	08:00
Pump Truck	0	1	651	71	ICN	Bemidji	MN	08:00
Vacuum Truck	0	1	343	71	ICN	Regina	Canad	08:42
Presvac	0	3	1029	213	ICN	Regina	Canad	08:42
Vacuum Truck	0	3	1029	213	ICN	Anoka	MN	10:34
Pump Truck	0	4	2604	284	ICN	Anoka	MN	10:34
Vacuum Truck	0	4	1372	572	ICN	Eveleth	MN	11:07
Pump Truck	0	2	1302	142	ICN	Eveleth	MN	11:07
Vacuum Truck	0	2	686	142	ICN	Eveleth	MN	11:07
Vacuum Truck	0	3	1029	210	ICN	North Platte	NE	11:09
Vacuum Truck	0	1	343	70	ICN	North Platte	NE	11:10
Vacuum Truck	0	2	686	240	ICN	Hudson	WI	11:40
Vacuum Truck	0	1	343	120	ICN	Hudson	WI	11:40
Vacuum Truck	0	2	686	142	ICN	Cannon Falls	MN	11:43
Sub Total Vacuum Truck:		**32**	**13132**	**2703**				
Total Vacuum System:		**32**	**13132**	**2703**				
Total 06 to 12 hours:			**13132**	**2703**				
Running Total from 0 to unknown:			**20744**	**3461**				

National Response Corporation Resource Availability By Type

Equipment Types: Skimmer/Vessel

Zone: Bismarck, ND

dEMO - Case# DM15-0099
May 04, 2015

00 to 06 hours (* Does not include recall/mobilization time)

Skimmer

Drum

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Small Drum Skimmer	0	2	342	0	ICN	Williston	ND	04:38
23' Drum Skimmer	0	2	342	0	ICN	Williston	ND	04:41
36" Drum Skimmer	0	2	494	0	ICN	Williston	ND	04:41
Elastec TDS118 Skimmer	0	2	480	0	ICN	Sidney	MT	04:52
Sub Total Drum:		**8**	**1658**	**0**				

Floating Suction

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Floating Suction Skimmer	0	1	274	0	ICN	Minot	ND	02:51
Sub Total Floating Suction:		**1**	**274**	**0**				

Oleophilic Disk

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Crucial ORD Disk Skimmer	ORD-005	1	342	0	NRC	Beulah	ND	01:45
Crucial ORD Disk Skimmer	ORD-003	1	342	0	NRC	Columbus	ND	04:52
Sub Total Oleophilic Disk:		**2**	**684**	**0**				
Total Skimmer:		**11**	**2616**	**0**				

Vessel

Deployment Craft (< 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
18' Deployment Craft	0	2	0	0	ICN	Williston	ND	04:38
28' Deployment Craft	0	1	0	0	ICN	Williston	ND	04:38
Response Boat Custom Flat	0	2	0	0	ICN	Williston	ND	04:41
17' Deployment Craft	0	1	0	0	ICN	Sidney	MT	04:52
28' Deployment Craft	0	1	0	0	ICN	Sidney	MT	04:52
17' Deployment Craft	0	1	0	0	ICN	Sidney	MT	04:52
Sub Total Deployment Craft (< 25 foot):		**8**	**0**	**0**				

Deployment Craft (> 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
30' Deployment Craft	0	1	0	0	ICN	Williston	ND	04:38
Sub Total Deployment Craft (> 25 foot):		**1**	**0**	**0**				
Total Vessel:		**9**	**0**	**0**				
Total 00 to 06 hours:			**2616**	**0**				
Running Total from 0 to unknown:			**2616**	**0**				

06 to 12 hours (* Does not include recall/mobilization time)

Skimmer

Drum

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Medium Drum Skimmer	0	1	240	0	ICN	Winnipeg	Canad	07:53
Medium Drum Skimmer	0	1	240	0	ICN	Eveleth	MN	11:07
Elastec Mini Max Skimmer	0	1	137	0	ICN	North Platte	NE	11:09
Elastec TDS118 Skimmer	0	1	480	0	ICN	North Platte	NE	11:09
Crucial 1D18P48 Skimmer	0	2	686	0	ICN	Cannon Falls	MN	11:43
Sub Total Drum:		**6**	**1783**	**0**				

Floating Suction

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Douglas SkimPac	0	1	240	0	ICN	North Platte	NE	11:09
Sub Total Floating Suction:		**1**	**240**	**0**				

Multi Skimmer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Action 24 Skimmer	0	1	823	0	ICN	Duluth	MN	11:39
Action 24 Skimmer	AP-24-110	1	823	0	NRC	Superior	WI	11:42
Action 24 Skimmer	AP-24-120	1	823	0	NRC	Superior	WI	11:42
Sub Total Multi Skimmer:		**3**	**2469**	**0**				
Total Skimmer:		**10**	**4492**	**0**				

Vessel

Deployment Craft (< 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
18' Deployment Craft	0	1	0	0	ICN	Watertown	SD	06:18
16' Deployment Craft	0	1	0	0	ICN	Winnipeg	Canad	07:53
17' Deployment Craft	0	1	0	0	ICN	Roseville	MN	10:59
14' Deployment Craft	0	2	0	0	ICN	Eveleth	MN	11:07
18' Deployment Craft	0	1	0	0	ICN	North Platte	NE	11:09
18' Deployment Craft	0	1	0	0	ICN	Duluth	MN	11:39
15' Deployment Craft	0	1	0	0	ICN	Duluth	MN	11:39
18' Deployment Craft	WB-208	1	0	0	NRC	Superior	WI	11:42
17' Deployment Craft	0	1	0	0	ICN	Cannon Falls	MN	11:43
12' Deployment Craft	0	1	0	0	ICN	Cannon Falls	MN	11:43
21' Deployment Craft	0	1	0	0	ICN	Cannon Falls	MN	11:43
Sub Total Deployment Craft (< 25 foot):		**12**	**0**	**0**				
Total Vessel:		**12**	**0**	**0**				
Total 06 to 12 hours:			**4492**	**0**				
Running Total from 0 to unknown:			**7108**	**0**				

National Response Corporation **Equipment Types:** Portable Storage

Resource Availability By Type

Zone: Bismarck, ND

dEMO - Case# DM15-0099

May 04, 2015

06 to 12 hours (* Does not include recall/mobilization time)

Portable Storage

Frac Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Frac Tank	0	2	0	952	ICN	Solway	MN	07:48
Mobile Storage Trailer	0	2	0	1000	ICN	Eveleth	MN	11:07
Sub Total Frac Tank:		**4**	**0**	**1952**				
Total Portable Storage:		**4**	**0**	**1952**				
Total 06 to 12 hours:			**0**	**1952**				
Running Total from 0 to unknown:			**0**	**1952**				

National Response Corporation

Resource Availability By Type

Equipment Types: Boom/Portable Storage/Skimmer/Support Equipment/Vacuum System/Vessel

Zone: Sioux Falls, SD

Williston ND - Case# DM15-0085

April 20, 2015

00 to 06 hours (* Does not include recall/mobilization time)

ContractorLocation

Boom

>=6 and <18 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Absorbent Boom 8"x40' Bundle	0	25	0	0	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
10" Containment Boom	0	1,300	0	0	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
10" Fast Water Boom	0	200	0	0	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
12" Boom	0	200	0	0	ICN	OSI Environmental, Inc.	Anoka	MN	05:44
Sub Total >=6 and <18 inch:		**1725**	**0**	**0**					

18"

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
18" Boom	0	8,000	0	0	ICN	Environmental Restoration LLC	Omaha	NE	04:33
18" Boom	0	1,900	0	0	ICN	Clean Harbors Environmental Services	Cannon Falls	MN	05:45
Sub Total 18":		**9900**	**0**	**0**					
Total Boom:		**11625**	**0**	**0**					

Portable Storage

Dracone/Bladder

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
55 Gallon Drum DOT	0	25	0	25	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
55 Gallon Poly	0	10	0	0	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
Sub Total Dracone/Bladder:		**35**	**0**	**25**					

Frac Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Mini Frac Tank	0	1	0	240	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
Sub Total Frac Tank:		**1**	**0**	**240**					

Portable Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
3000 Gallon Poly Tank	0	4	0	284	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
95 Gallon Poly Overpack	0	10	0	20	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
85 Gallon Steel Overpack	0	10	0	0	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
Portable Tank	0	1	0	0	ICN	OSI Environmental, Inc.	Anoka	MN	05:44
Sub Total Portable Tank:		**25**	**0**	**304**					
Total Portable Storage:		**61**	**0**	**569**					

Skimmer

Drum

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)

012780

00 to 06 hours (* Does not include recall/mobilization time)

						ContractorLocation			
Elastec TDS118 Skimmer	0	1	240	0	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
Crucial 1D18P48 Skimmer	0	2	686	0	ICN	Clean Harbors Environmental Services	Cannon Falls	MN	05:45
Sub Total Drum:		**3**	**926**	**0**					
Total Skimmer:		**3**	**926**	**0**					

Support Equipment

Ancillary Gear

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
3" Hydrocarbon Hose	0	70	0	0	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
2" Hydrocarbon Hose	0	160	0	0	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
Sub Total Ancillary Gear:		**230**	**0**	**0**					

Blower

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Leaf Blower	0	1	0	0	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
Sub Total Blower:		**1**	**0**	**0**					

Compressor

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Air Compressor	0	1	0	0	ICN	Prairie Consulting Group	Watertown	SD	02:43
Compressor	0	1	0	0	ICN	OSI Environmental, Inc.	Anoka	MN	05:44
Compressor	0	1	0	0	ICN	Clean Harbors Environmental Services	Cannon Falls	MN	05:45
Sub Total Compressor:		**3**	**0**	**0**					

Crane Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Sidebooms/Padded	0	2	0	0	ICN	Hulcher Services, INC.	Bondurant	IA	05:58
Sub Total Crane Truck:		**2**	**0**	**0**					

Dump Truck/Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Dump Truck	0	1	0	0	ICN	OSI Environmental, Inc.	Anoka	MN	05:44
Sub Total Dump Truck/Trailer:		**1**	**0**	**0**					

Earth Moving Equipment

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Skid Steer	0	1	0	0	ICN	Environmental Restoration LLC	Omaha	NE	04:33
Mini-Excavator	0	1	0	0	ICN	Environmental Restoration LLC	Omaha	NE	04:33
Uniloader	0	1	0	0	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
Drum Grabber	0	1	0	0	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
Trackhoe Mini	0	1	0	0	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
Backhoe	0	1	0	0	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
Track Loader	0	1	0	0	ICN	Environmental Restoration LLC	Roseville	MN	05:46
325 Excavator	0	1	0	0	ICN	Hulcher Services, INC.	Bondurant	IA	05:58
977 Track Loader	0	1	0	0	ICN	Hulcher Services, INC.	Bondurant	IA	05:58
D6T Dozer	0	1	0	0	ICN	Hulcher Services, INC.	Bondurant	IA	05:58
966 Wheel Loader	0	1	0	0	ICN	Hulcher Services, INC.	Bondurant	IA	05:58
Sub Total Earth Moving Equipment:		**11**	**0**	**0**					

Flatbed Trailer

00 to 06 hours (* Does not include recall/mobilization time)

ContractorLocation

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Flatbed Trailer	0	1	0	0	ICN	Environmental Restoration LLC	Roseville	MN	05:46
Sub Total Flatbed Trailer:		**1**	**0**	**0**					

Fork Lift

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Forklift	0	1	0	0	ICN	OSI Environmental, Inc.	Anoka	MN	05:44
Sub Total Fork Lift:		**1**	**0**	**0**					

Generator

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Generator	0	2	0	0	ICN	OSI Environmental, Inc.	Anoka	MN	05:44
Generator	0	2	0	0	ICN	Clean Harbors Environmental Services	Cannon Falls	MN	05:45
Generator	0	1	0	0	ICN	Environmental Restoration LLC	Roseville	MN	05:46
Sub Total Generator:		**5**	**0**	**0**					

Pick-Up Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Pick-Up Truck	0	2	0	0	ICN	Prairie Consulting Group	Watertown	SD	02:43
3/4 Ton or Smaller	0	3	0	0	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
Pick-Up Truck	0	4	0	0	ICN	OSI Environmental, Inc.	Anoka	MN	05:44
Pick-Up Truck	0	4	0	0	ICN	Clean Harbors Environmental Services	Cannon Falls	MN	05:45
Pick-Up Truck	0	4	0	0	ICN	Environmental Restoration LLC	Roseville	MN	05:46
Sub Total Pick-Up Truck:		**17**	**0**	**0**					

Pressure Washer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Pressure Washer	0	1	0	0	ICN	Prairie Consulting Group	Watertown	SD	02:43
Pressure Washer	0	2	0	0	ICN	OSI Environmental, Inc.	Anoka	MN	05:44
Hydro Jetter	0	1	0	0	ICN	OSI Environmental, Inc.	Anoka	MN	05:44
Pressure Washer- Cold	0	2	0	0	ICN	Clean Harbors Environmental Services	Cannon Falls	MN	05:45
Pressure Washer- Hot	0	3	0	0	ICN	Clean Harbors Environmental Services	Cannon Falls	MN	05:45
Pressure Washer	0	1	0	0	ICN	Environmental Restoration LLC	Roseville	MN	05:46
Sub Total Pressure Washer:		**10**	**0**	**0**					

Roll Off Container

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Haz-Roll Off	0	6	0	0	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
Sub Total Roll Off Container:		**6**	**0**	**0**					

Roll-Off Container

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Roll-Off Box	0	2	0	0	ICN	OSI Environmental, Inc.	Anoka	MN	05:44
Sub Total Roll-Off Container:		**2**	**0**	**0**					

SCBA

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
SCBA	0	6	0	0	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
SCBA	0	2	0	0	ICN	OSI Environmental, Inc.	Anoka	MN	05:44
SCBA	0	4	0	0	ICN	Clean Harbors Environmental Services	Cannon Falls	MN	05:45
SCBA	0	3	0	0	ICN	Environmental Restoration LLC	Roseville	MN	05:46

Sub Total SCBA:	**15**	**0**	**0**

Truck - Semi

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Tractor Trailer Trucks	0	1	0	0	ICN	OSI Environmental, Inc.	Anoka	MN	05:44
Roll-Off Truck	0	1	0	0	ICN	Clean Harbors Environmental Services	Cannon Falls	MN	05:45
Sub Total Truck - Semi:		**2**	**0**	**0**					

Utility Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Response Trailer	0	1	0	0	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
Response Trailer	0	1	0	0	ICN	OSI Environmental, Inc.	Anoka	MN	05:44
Cargo Trailer	0	1	0	0	ICN	Environmental Restoration LLC	Roseville	MN	05:46
Boom Trailer	0	1	0	0	ICN	Environmental Restoration LLC	Roseville	MN	05:46
Sub Total Utility Trailer:		**4**	**0**	**0**					

Utility Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Box Truck	0	2	0	0	ICN	OSI Environmental, Inc.	Anoka	MN	05:44
Response Truck	0	2	0	0	ICN	OSI Environmental, Inc.	Anoka	MN	05:44
Rack Truck	0	1	0	0	ICN	Clean Harbors Environmental Services	Cannon Falls	MN	05:45
Sub Total Utility Truck:		**5**	**0**	**0**					

Van Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Response Trailer with Semi	0	1	0	0	ICN	Prairie Consulting Group	Watertown	SD	02:43
Van Trailer	0	2	0	0	ICN	OSI Environmental, Inc.	Anoka	MN	05:44
Response Trailer	0	3	0	0	ICN	Clean Harbors Environmental Services	Cannon Falls	MN	05:45
Boom Trailer	0	1	0	0	ICN	Clean Harbors Environmental Services	Cannon Falls	MN	05:45
Sub Total Van Trailer:		**7**	**0**	**0**					
Total Support Equipment:		**323**	**0**	**0**					

Vacuum System

Loader

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Guzzler- Air Mover	0	1	343	71	ICN	Clean Harbors Environmental Services	Cannon Falls	MN	05:45
Sub Total Loader:		**1**	**343**	**71**					

Vacuum Transfer Unit

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Vacuum Transfer Unit	0	1	343	12	ICN	Clean Harbors Environmental Services	Cannon Falls	MN	05:45
Sub Total Vacuum Transfer Unit:		**1**	**343**	**12**					

Vacuum Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Vac Truck	0	1	343	70	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
Vacuum Truck	0	3	1,029	213	ICN	OSI Environmental, Inc.	Anoka	MN	05:44
Pump Truck	0	4	2,604	284	ICN	OSI Environmental, Inc.	Anoka	MN	05:44
Vacuum Truck	0	2	686	142	ICN	Clean Harbors Environmental Services	Cannon Falls	MN	05:45
Sub Total Vacuum Truck:		**10**	**4662**	**709**					

00 to 06 hours (* Does not include recall/mobilization time)

				ContractorLocation
Total Vacuum System:	**12**	**5348**	**792**	

Vessel

Deployment Craft (< 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
18' Deployment Craft	0	1	0	0	ICN	Prairie Consulting Group	Watertown	SD	02:43
15' Deployment Craft	0	1	0	0	ICN	Environmental Restoration LLC	Omaha	NE	04:33
20' Deployment Craft	0	1	0	0	ICN	Environmental Restoration LLC	Omaha	NE	04:33
18' Deployment Craft	0	1	0	0	ICN	Haz-Mat Response, Inc.	Omaha	NE	04:52
17' Deployment Craft	0	1	0	0	ICN	Clean Harbors Environmental Services	Cannon Falls	MN	05:45
12' Deployment Craft	0	1	0	0	ICN	Clean Harbors Environmental Services	Cannon Falls	MN	05:45
21' Deployment Craft	0	1	0	0	ICN	Clean Harbors Environmental Services	Cannon Falls	MN	05:45
17' Deployment Craft	0	1	0	0	ICN	Environmental Restoration LLC	Roseville	MN	05:46
Sub Total Deployment Craft (< 25 foot):		**8**	**0**	**0**					
Total Vessel:		**8**	**0**	**0**					
Total 00 to 06 hours:			**6274**	**1,361.00**					
Running Total from 0 to unknown:			**6274**	**1361**					

06 to 12 hours (* Does not include recall/mobilization time)

ContractorLocation

Boom

>=6 and <18 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
10" Boom	0	800	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
6" Boom	0	400	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
6" Absorbent Boom	0	1	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
10" Boom	0	1,200	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
10" Fast Water Boom	0	850	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
12" Boom	0	2,000	0	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
10" Boom	BM10-001	1,000	0	0	NRC	Basin Transload Beulah	Beulah	ND	10:16
10" Boom	0	1,500	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
10" Boom	0	850	0	0	ICN	Eagle Environmental Services	Wichita	KS	11:36
Super Mini Boom	0	150	0	0	ICN	Eagle Environmental Services	Wichita	KS	11:36
Sub Total >=6 and <18 inch:		**8751**	**0**	**0**					

>18 and <42 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
21" Boom	0	3,400	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
21" Boom	0	50	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Sub Total >18 and <42 inch:		**3450**	**0**	**0**					

18"

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
18" Boom	0	1,400	0	0	ICN	Beltrami Industrial Services	Solway	MN	08:10
18" Boom	0	1,000	0	0	ICN	OSI Environmental, Inc.	Bemidji	MN	08:13
18" Boom	BM21-714	1,500	0	0	NRC	Environmental Troubleshooters	Superior	WI	09:00
18" Boom	BM21-715	1,500	0	0	NRC	Environmental Troubleshooters	Superior	WI	09:00
18" Boom	0	1,000	0	0	ICN	Heritage Environmental Services Inc.	Kansas City	MO	09:14
18" Boom	0	500	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
18" Boom	0	4,500	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
18" Boom	0	400	0	0	ICN	Eagle Environmental Services	Wichita	KS	11:36
18" Boom	0	1,000	0	0	ICN	Future Environmental, Inc.	Peoria	IL	11:49
Sub Total 18":		**12800**	**0**	**0**					
Total Boom:		**25001**	**0**	**0**					

Portable Storage

Dracone/Bladder

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Bladder	0	1	0	100	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Canflex FCB-43E Bladder	BC-60	1	0	100	NRC	Environmental Troubleshooters	Superior	WI	09:00
Canflex FCB-43E Bladder	BC-80	1	0	100	NRC	Environmental Troubleshooters	Superior	WI	09:00
Sub Total Dracone/Bladder:		**3**	**0**	**300**					

Frac Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Frac Tank	0	2	0	952	ICN	Beltrami Industrial Services	Solway	MN	08:10
Mini Frac Tank	0	2	0	476	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Frac Tank	0	1	0	500	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37

06 to 12 hours (* Does not include recall/mobilization time)

						ContractorLocation			
Mobile Storage Trailer	0	2	0	1,000	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Mini Frac Tank	0	1	0	240	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Frac Tank	0	1	0	238	ICN	Eagle Environmental Services	Wichita	KS	11:36
Frac Tank	0	1	0	476	ICN	Eagle Environmental Services	Wichita	KS	11:36
Sub Total Frac Tank:		**10**	**0**	**3882**					

Portable Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
55 Gallon Poly	0	5	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
3000 Poly Tank	0	3	0	213	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
1500 Poly Tank	0	5	0	180	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Poly Tank	0	1	0	12	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Poly Tank	0	4	0	84	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Poly Tank	0	1	0	7	ICN	Environmental Troubleshooters	Duluth	MN	08:59
55 Gallon Steel Drums	0	10	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
55 Gallon Steel Drums	0	10	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Poly Tank	0	3	0	213	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
55 Gallon Drum DOT	0	100	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Poly Tank	0	3	0	108	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Storage Trailer	0	1	0	95	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Portable Tanks	0	2	0	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Pillow Tank	ELS-42	1	0	24	NRC	Basin Transload Beulah	Beulah	ND	10:16
Pillow Tank	ELS-43	1	0	24	NRC	Basin Transload Beulah	Beulah	ND	10:16
Pillow Tank	ELS-58	1	0	24	NRC	Basin Transload Beulah	Beulah	ND	10:16
Pillow Tank	ELS-59	1	0	24	NRC	Basin Transload Beulah	Beulah	ND	10:16
Poly Tank	0	2	0	6,000	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
55 Gallon Drum DOT	0	25	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
95 Gallon Poly Overpack	0	15	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
85 Gallon Steel Overpack	0	10	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Oil Water Seperator Unit	0	4	0	0	ICN	Eagle Environmental Services	Wichita	KS	11:36
Poly Tank	0	1	0	71	ICN	Eagle Environmental Services	Wichita	KS	11:36
Portable Tank	0	3	0	285	ICN	Future Environmental, Inc.	Peoria	IL	11:49
Portable Tank	0	4	0	572	ICN	Future Environmental, Inc.	Peoria	IL	11:49
Sub Total Portable Tank:		**216**	**0**	**7936**					
Total Portable Storage:		**229**	**0**	**12118**					

Skimmer

Drum

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Elastec Mini Max Skimmer	0	1	137	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Elastec TDS118 Skimmer	0	1	480	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Small Drum Skimmer	0	1	171	0	ICN	Heritage Environmental Services Inc.	Kansas City	MO	09:14
Elastec TDS118 Skimmer	0	1	240	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Elastec Mini Max Skimmer	0	1	137	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Elastec TDS118G Skimmer	0	1	480	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Medium Drum Skimmer	0	1	240	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Elastec TDS118 Skimmer	0	1	240	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Elastec TDS118 Skimmer	0	1	240	0	ICN	Eagle Environmental Services	Wichita	KS	11:36
Sub Total Drum:		**9**	**2365**	**0**					

Floating Suction

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Douglas SkimPac	0	1	240	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Douglas SkimPac	0	1	240	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Floating Suction Skimmer	0	1	274	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Douglas 4300 SkimPac	0	2	960	0	ICN	Veolia Environmental Services	Neenah	WI	11:46
Sub Total Floating Suction:		**5**	**1714**	**0**					

Multi Skimmer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Action 24 Skimmer	0	1	823	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Action 24 Skimmer	AP-24-110	1	823	0	NRC	Environmental Troubleshooters	Superior	WI	09:00
Action 24 Skimmer	AP-24-120	1	823	0	NRC	Environmental Troubleshooters	Superior	WI	09:00
Sub Total Multi Skimmer:		**3**	**2469**	**0**					

Oleophilic Disk

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Crucial ORD Disk Skimmer	ORD-005	1	342	0	NRC	Basin Transload Beulah	Beulah	ND	10:16
Sub Total Oleophilic Disk:		**1**	**342**	**0**					
Total Skimmer:		**18**	**6890**	**0**					

Support Equipment

Air Monitoring and Detection Equipment

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Negative Air Machines	0	2	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Sub Total Air Monitoring and Detection Equipment:		**2**	**0**	**0**					

Ancillary Gear

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
SCBA	0	6	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Full Face Respirator	0	17	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Manifold Breathing System	0	1	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
95 Gallon Poly Overpack	0	10	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
85 Gallon Steel Overpack	0	10	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Hose Variety	0	470	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Drum Grabber	0	3	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Cutting Torches	0	1	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Water Sampling Multi Meter	0	1	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Anchors	0	12	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Drum Grabber	0	10	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
High Intensity Light Plant	0	3	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Manifold Breathing System	0	2	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
110 Gallon Poly Overpack	0	6	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
85 Gallon Steel Overpack	0	20	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
95 Gallon Poly Overpack	0	20	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
55 Gallon Stainless Steel Drum	0	6	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
55 Gallon Poly	0	20	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
2" Chemical Hose	0	250	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Hydrocarbon Hose Variety	0	2,000	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37

06 to 12 hours (* Does not include recall/mobilization time)

							ContractorLocation			
Power Pack	0	1	0	0	ICN	Veolia Environmental Services	Wausau	WI	10:24
Hydrocarbon Hose	0	170	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Sub Total Ancillary Gear:		**3039**	**0**	**0**					

ATV

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
ATV- Gator	0	2	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Sub Total ATV:		**2**	**0**	**0**					

Blower

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Boom Inflator/Leaf Blower	0	3	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Blower	0	2	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Blower	0	2	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Blower	0	1	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Ventilation Unit	0	2	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Boom Inflator	0	3	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Boom Inflator	0	1	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Sub Total Blower:		**14**	**0**	**0**					

Communications

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Command Post Trailer	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	08:10
Office River Trailer	0	1	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Mobile Command Center	0	1	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Sub Total Communications:		**3**	**0**	**0**					

Compressor

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Air Compressor	0	2	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Compressor	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	08:10
Air Compressor	0	1	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Air Compressor	0	1	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Compressor	0	2	0	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Air Compressor	0	1	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Compressor	0	1	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Sub Total Compressor:		**9**	**0**	**0**					

Crane

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Crane	0	1	0	0	ICN	Hulcher Services, INC.	Hudson	WI	06:19
Sub Total Crane:		**1**	**0**	**0**					

Crane Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Grapple Truck	0	1	0	0	ICN	Hulcher Services, INC.	Hudson	WI	06:19
Crane Truck	0	1	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Sub Total Crane Truck:		**2**	**0**	**0**					

Dump Truck/Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)

06 to 12 hours (* Does not include recall/mobilization time)

						ContractorLocation			
Dump Truck	0	1	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
End Dump	0	1	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Dump Truck	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	08:10
Dump Truck	0	1	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Dump Truck	0	1	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Dump Truck	0	1	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
End Dump	0	1	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
End Dumps	0	13	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Dump Truck	0	3	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Sub Total Dump Truck/Trailer:		**23**	**0**	**0**					

Earth Moving Equipment

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
track Loader	0	1	0	0	ICN	Hulcher Services, INC.	Hudson	WI	06:19
Excavator	0	2	0	0	ICN	Hulcher Services, INC.	Hudson	WI	06:19
Skid Steer	0	1	0	0	ICN	Hulcher Services, INC.	Hudson	WI	06:19
325 Excavator	0	1	0	0	ICN	Hulcher Services, INC.	North Platte	NE	07:33
966 Wheel Loader	0	1	0	0	ICN	Hulcher Services, INC.	North Platte	NE	07:33
Backhoe	0	1	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Wheel Loader	0	1	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Uniloader	0	1	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Trackhoe-Mini	0	1	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Toolcat	0	1	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Crawler Loader	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	08:10
Backhoe	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	08:10
Skidsteer Loader	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	08:10
Caterpillar	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	08:10
Excavator	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	08:10
Backhoe	0	1	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Skid Steer	0	1	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Mini Excavator	0	1	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Mini Excavator	0	1	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Skid Steer with Tracks	0	1	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Backhoe	0	1	0	0	ICN	Heritage Environmental Services Inc.	Kansas City	MO	09:14
Excavator	0	1	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Uniloader	0	2	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Trackhoe - mini	0	1	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Wheel Loader	0	1	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Backhoe-Loader	0	1	0	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Skid Steer-Loader	0	1	0	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Track Loader	0	1	0	0	ICN	Hulcher Services, INC.	Galesburg	IL	10:33
Excavator	0	1	0	0	ICN	Hulcher Services, INC.	Galesburg	IL	10:33
Uni Loader	0	1	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Trackhoe	0	1	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Trencher (Uniloader Mount)	0	1	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Excavator (JD 200)	0	1	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
D 6 Dozer with winch	0	1	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Kubota Tractor	0	1	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Loader	0	26	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Excavator	0	29	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09

06 to 12 hours (* Does not include recall/mobilization time)

						ContractorLocation			
Skid Steer	0	15	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Grader	0	2	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Scraper	0	5	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Roller	0	10	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Dozer	0	10	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Sub Total Earth Moving Equipment:		**134**	**0**	**0**					

Flatbed Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Skid Steer	0	1	0	0	ICN	Hulcher Services, INC.	North Platte	NE	07:33
Lowboy Trailer	0	1	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Response Trailer	0	1	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Lowboy Trailer	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	08:10
LowBoy Trailer	0	1	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Response Trailer	0	1	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Lowboy Trailer	0	1	0	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Deck Trailer	0	2	0	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Lowboy Trailer	0	1	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Response Trailer	0	1	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Flatbed Trailer	0	4	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Tandem Trailer	0	1	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Sub Total Flatbed Trailer:		**16**	**0**	**0**					

Fork Lift

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Forklift	0	1	0	0	ICN	OSI Environmental, Inc.	Moorhead	MN	06:33
Forklift	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	08:10
Forklifts	0	1	0	0	ICN	OSI Environmental, Inc.	Bemidji	MN	08:13
Forklift	0	2	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Forklifts	0	2	0	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Sub Total Fork Lift:		**7**	**0**	**0**					

Generator

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Generator	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	08:10
Generator	0	1	0	0	ICN	OSI Environmental, Inc.	Bemidji	MN	08:13
Generator	0	1	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Generator	0	5	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Generator	0	4	0	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Generator	0	1	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Sub Total Generator:		**13**	**0**	**0**					

Light Plant

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Light Plant	0	5	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Portable Light Set	0	5	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Light Tower	0	2	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Sub Total Light Plant:		**12**	**0**	**0**					

Pick-Up Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)

06 to 12 hours (* Does not include recall/mobilization time)

						ContractorLocation			
Pick-Up Truck	0	4	0	0	ICN	Beltrami Industrial Services	Solway	MN	08:10
Pick-Up Truck	0	2	0	0	ICN	OSI Environmental, Inc.	Bemidji	MN	08:13
Pick-Up Truck	0	1	0	0	ICN	Heritage Environmental Services Inc.	Kansas City	MO	09:14
Pick-Up Truck	0	11	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Pick-Up Truck	0	9	0	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Pick-up truck	0	2	0	0	ICN	Veolia Environmental Services	Wausau	WI	10:24
Pick-Up Truck	0	48	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Pick-Up Truck	0	2	0	0	ICN	Veolia Environmental Services	Neenah	WI	11:46
Sub Total Pick-Up Truck:		**79**	**0**	**0**					

Power Pack

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Power Pack	DPP-AP-24-11	1	0	0	NRC	Environmental Troubleshooters	Superior	WI	09:00
Diesel Power Pack	DPP-10-120	1	0	0	NRC	Environmental Troubleshooters	Superior	WI	09:00
Power Pack	0	2	0	0	ICN	Veolia Environmental Services	Neenah	WI	11:46
Sub Total Power Pack:		**4**	**0**	**0**					

Pressure Washer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Pressure Washer- Hot	0	3	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Pressure Washer- Cold	0	1	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Pressure Washer	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	08:10
Pressure Washer	0	1	0	0	ICN	OSI Environmental, Inc.	Bemidji	MN	08:13
Pressure Washer	0	1	0	0	ICN	Heritage Environmental Services Inc.	Kansas City	MO	09:14
Pressure Washer - Hot	0	3	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Pressure Washer	0	4	0	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Pressure Washer-Hot	0	1	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Pressure Washer- Cold	0	1	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Pressure Washer	0	1	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Sub Total Pressure Washer:		**17**	**0**	**0**					

Roll-Off Container

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Haz Roll-Off	0	4	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Non-Haz Roll-Off	0	1	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Haz Roll-Off	0	16	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Non-Haz Roll-Off	0	2	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Roll-Off Container	0	20	0	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Haz Roll-Off	0	12	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Non-Haz Roll-Off	0	1	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Sub Total Roll-Off Container:		**56**	**0**	**0**					

Roll-off Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Roll-off Truck	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	08:10
Roll-Off Truck	0	1	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Sub Total Roll-off Truck:		**2**	**0**	**0**					

Sand Blaster

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Sand Blaster	0	1	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37

ContractorLocation

Sub Total Sand Blaster:	**1**	**0**	**0**

SCBA

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
SCBA	0	2	0	0	ICN	Beltrami Industrial Services	Solway	MN	08:10
SCBA	0	1	0	0	ICN	OSI Environmental, Inc.	Bemidji	MN	08:13
SCBA	0	22	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Full Face Respirator	0	22	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
SCBA	0	8	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Manifold Breathing System	0	1	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Full Face Respirator	0	10	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
SCBA	0	6	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Sub Total SCBA:		**72**	**0**	**0**					

Side Boom

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Sideboom	0	2	0	0	ICN	Hulcher Services, INC.	Hudson	WI	06:19
Sideboom-Padded	0	3	0	0	ICN	Hulcher Services, INC.	Hudson	WI	06:19
Sideboom-Padded	0	2	0	0	ICN	Hulcher Services, INC.	North Platte	NE	07:33
Sideboom-Padded	0	2	0	0	ICN	Hulcher Services, INC.	Galesburg	IL	10:33
Sub Total Side Boom:		**9**	**0**	**0**					

Spares Van Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Semi Trailer	0	1	0	0	ICN	Future Environmental, Inc.	Peoria	IL	11:49
Sub Total Spares Van Trailer:		**1**	**0**	**0**					

Support Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Support Truck	0	5	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Sub Total Support Truck:		**5**	**0**	**0**					

Truck - Semi

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Tractor	0	1	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
16' Response Truck	0	1	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Tractor	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	08:10
Tractor	0	3	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Roll-Off Truck	0	1	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
21-2 Ton Stakebed Truck	0	1	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Tractor Trailer Trucks	0	6	0	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Semi Tractor	0	2	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Sub Total Truck - Semi:		**16**	**0**	**0**					

Utility Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Guzzler Trailer	0	2	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
River Trailer	0	1	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Fast Response Trailer	714	1	0	0	NRC	Environmental Troubleshooters	Superior	WI	09:00
Fast Response Trailer	715	1	0	0	NRC	Environmental Troubleshooters	Superior	WI	09:00
Response Trailer	0	1	0	0	ICN	Heritage Environmental Services Inc.	Kansas City	MO	09:14

06 to 12 hours (* Does not include recall/mobilization time)

						Contractor	Location		
Guzzler Trailer	0	1	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Low Pressure Transfer Trailer	0	1	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
IDLH Trailer	0	1	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
River Trailer	0	1	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Fast Response Trailer	739	1	0	0	NRC	Basin Transload Beulah	Beulah	ND	10:16
Small Trailer	0	18	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Sub Total Utility Trailer:		**29**	**0**	**0**					

Utility Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Box Truck	0	1	0	0	ICN	OSI Environmental, Inc.	Moorhead	MN	06:33
Response Truck	0	1	0	0	ICN	OSI Environmental, Inc.	Bemidji	MN	08:13
Box Truck	0	1	0	0	ICN	OSI Environmental, Inc.	Bemidji	MN	08:13
Box Truck	0	2	0	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Stake Truck	0	3	0	0	ICN	Veolia Environmental Services	Neenah	WI	11:46
Service Trucks	0	3	0	0	ICN	Future Environmental, Inc.	Peoria	IL	11:49
Sub Total Utility Truck:		**11**	**0**	**0**					

Van Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Roll-Off Trailer	0	1	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Recovery Spill Trailer	0	1	0	0	ICN	Beltrami Industrial Services	Solway	MN	08:10
Response Trailer	0	1	0	0	ICN	OSI Environmental, Inc.	Bemidji	MN	08:13
ER Trailers	0	3	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
Roll-Off Trailer	0	1	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Equipment Trailer	0	5	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Response Truck	0	2	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Response Trailer	0	3	0	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Van Trailer	0	3	0	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Roll-Off Trailer	0	3	0	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Emergency Response Traile	0	1	0	0	ICN	Veolia Environmental Services	Wausau	WI	10:24
Lab Trailer	0	1	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Boom Trailer	0	2	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Decon Trailer	0	1	0	0	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Response Trailer	0	1	0	0	ICN	Veolia Environmental Services	Neenah	WI	11:46
Spill Response Trailer	0	1	0	0	ICN	Future Environmental, Inc.	Peoria	IL	11:49
Sub Total Van Trailer:		**30**	**0**	**0**					

Workboat Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Workboat Trailer	WBT-208	1	0	0	NRC	Environmental Troubleshooters	Superior	WI	09:00
Sub Total Workboat Trailer:		**1**	**0**	**0**					
Total Support Equipment:		**3610**	**0**	**0**					

Vacuum System

Loader

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Guzzler Dry Vac	0	3	1,029	36	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Vacuum Box	0	1	343	71	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Sub Total Loader:		**4**	**1372**	**107**					

06 to 12 hours (* Does not include recall/mobilization time)

ContractorLocation

Mini-Vac

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Guzzler Dry Vac	0	1	343	12	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Vacuum Box	0	1	343	71	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
HEPA Vac	0	3	1,029	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Sub Total Mini-Vac:		**5**	**1715**	**83**					

Vacuum Trailer

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Vacuum Trailer	0	1	343	20	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Sub Total Vacuum Trailer:		**1**	**343**	**20**					

Vacuum Transfer Unit

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Guzzler Dry Vac	0	1	343	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Sub Total Vacuum Transfer Unit:		**1**	**343**	**0**					

Vacuum Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
Vacuum Truck	0	2	686	240	ICN	Hulcher Services, INC.	Hudson	WI	06:19
Vacuum Truck	0	1	343	120	ICN	Hulcher Services, INC.	Hudson	WI	06:19
Pump Truck	0	1	651	71	ICN	OSI Environmental, Inc.	Moorhead	MN	06:33
Vacuum Truck	0	1	343	70	ICN	Hulcher Services, INC.	North Platte	NE	07:33
Vacuum Truck	0	3	1,029	210	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
Vacuum Truck	0	1	343	71	ICN	Beltrami Industrial Services	Solway	MN	08:10
Vacuum Truck	0	1	343	71	ICN	OSI Environmental, Inc.	Bemidji	MN	08:13
Pump Truck	0	1	651	71	ICN	OSI Environmental, Inc.	Bemidji	MN	08:13
Vacuum Truck	0	5	1,715	120	ICN	Heritage Environmental Services Inc.	Kansas City	MO	09:14
Vacuum Tanker	0	1	343	119	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Vacuum Truck	0	4	1,372	280	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
Vacuum Truck	0	4	1,372	572	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Pump Truck	0	2	1,302	142	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Vacuum Truck	0	2	686	142	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
Vacuum Truck	0	2	686	96	ICN	Veolia Environmental Services	Wausau	WI	10:24
Vacuum Truck	0	1	343	71	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
Vacuum Truck	0	1	343	71	ICN	Strata Corporation (Earthmover)	Minot	ND	11:09
Vacuum Truck	0	5	1,715	655	ICN	Veolia Environmental Services	Fort Atkinson	WI	11:22
Vacuum Truck	0	1	343	80	ICN	Eagle Environmental Services	Wichita	KS	11:36
Liquid Vac Truck	0	1	3,086	71	ICN	Future Environmental, Inc.	Peoria	IL	11:49
Sub Total Vacuum Truck:		**40**	**17695**	**3343**					
Total Vacuum System:		**51**	**21468**	**3553**					

Vessel

Deployment Craft (< 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner		City	State	*Time Away (hr:mm)
18' Deployment Craft	0	1	0	0	ICN	Haz-Mat Response, Inc.	North Platte	NE	07:34
18' Deployment Craft	0	1	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
15' Deployment Craft	0	1	0	0	ICN	Environmental Troubleshooters	Duluth	MN	08:59
18' Deployment Craft	WB-208	1	0	0	NRC	Environmental Troubleshooters	Superior	WI	09:00

06 to 12 hours (* Does not include recall/mobilization time)

						Contractor	Location		
16' Deployment Craft	0	1	0	0	ICN	Heritage Environmental Services Inc.	Kansas City	MO	09:14
18' Deployment Craft	0	2	0	0	ICN	Haz-Mat Response, Inc.	Olathe	KS	09:37
14' Deployment Craft	0	2	0	0	ICN	OSI Environmental, Inc.	Eveleth	MN	09:40
14' Deployment Craft	0	1	0	0	ICN	Veolia Environmental Services	Wausau	WI	10:24
18' Deployment Craft	0	1	0	0	ICN	Haz-Mat Response, Inc.	Great Bend	KS	10:39
21' Deployment Craft	0	2	0	0	ICN	Veolia Environmental Services	Neenah	WI	11:46
Sub Total Deployment Craft (< 25 foot):		**13**	**0**	**0**					
Total Vessel:		**13**	**0**	**0**					
Total 06 to 12 hours:			**28358**	**15,670.90**					
Running Total from 0 to unknown:			**34632**	**17032**					

National Response Corporation Resource Availability By Type

Equipment Types: Boom

Zone: Sioux Falls, SD

Demo - Sioux Falls - Case# DM15-0101
May 04, 2015

00 to 06 hours (* Does not include recall/mobilization time)

Boom

>=6 and <18 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Absorbent Boom 8"x40' Bundle	0	25	0	0	ICN	Omaha	NE	04:52
10" Containment Boom	0	1300	0	0	ICN	Omaha	NE	04:52
10" Fast Water Boom	0	200	0	0	ICN	Omaha	NE	04:52
12" Boom	0	200	0	0	ICN	Anoka	MN	05:44
Sub Total >=6 and <18 inch:		**1725**	**0**	**0**				
Total Boom:		**1725**	**0**	**0**				
Total 00 to 06 hours:			**0**	**0**				
Running Total from 0 to unknown:			**0**	**0**				

06 to 12 hours (* Does not include recall/mobilization time)

Boom

>=6 and <18 inch

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
10" Boom	0	800	0	0	ICN	North Platte	NE	07:34
6" Boom	0	400	0	0	ICN	Duluth	MN	08:59
6" Absorbent Boom	0	1	0	0	ICN	Duluth	MN	08:59
10" Boom	0	1200	0	0	ICN	Olathe	KS	09:37
10" Fast Water Boom	0	850	0	0	ICN	Olathe	KS	09:37
12" Boom	0	2000	0	0	ICN	Eveleth	MN	09:40
10" Boom	BM10-001	1000	0	0	NRC	Beulah	ND	10:16
10" Boom	0	1500	0	0	ICN	Great Bend	KS	10:39
10" Boom	0	850	0	0	ICN	Wichita	KS	11:36
Super Mini Boom	0	150	0	0	ICN	Wichita	KS	11:36
Sub Total >=6 and <18 inch:		**8751**	**0**	**0**				
Total Boom:		**8751**	**0**	**0**				
Total 06 to 12 hours:			**0**	**0**				
Running Total from 0 to unknown:			**0**	**0**				

National Response Corporation Resource Availability By Type

Equipment Types: Vacuum System

Zone: Sioux Falls, SD

Demo - Sioux Falls - Case# DM15-0101
May 04, 2015

00 to 06 hours (* Does not include recall/mobilization time)

Vacuum System

Vacuum Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Vac Truck	0	1	343	70	ICN	Omaha	NE	04:52
Vacuum Truck	0	3	1029	213	ICN	Anoka	MN	05:44
Pump Truck	0	4	2604	284	ICN	Anoka	MN	05:44
Vacuum Truck	0	2	686	142	ICN	Cannon Falls	MN	05:45
Sub Total Vacuum Truck:		**10**	**4662**	**709**				
Total Vacuum System:		**10**	**4662**	**709**				
Total 00 to 06 hours:			**4662**	**709**				
Running Total from 0 to unknown:			**4662**	**709**				

06 to 12 hours (* Does not include recall/mobilization time)

Vacuum System

Vacuum Truck

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Vacuum Truck	0	2	686	240	ICN	Hudson	WI	06:19
Vacuum Truck	0	1	343	120	ICN	Hudson	WI	06:19
Pump Truck	0	1	651	71	ICN	Moorhead	MN	06:33
Vacuum Truck	0	1	343	70	ICN	North Platte	NE	07:33
Vacuum Truck	0	3	1029	210	ICN	North Platte	NE	07:34
Vacuum Truck	0	1	343	71	ICN	Solway	MN	08:10
Vacuum Truck	0	1	343	71	ICN	Bemidji	MN	08:13
Pump Truck	0	1	651	71	ICN	Bemidji	MN	08:13
Vacuum Truck	0	5	1715	120	ICN	Kansas City	MO	09:14
Vacuum Tanker	0	1	343	119	ICN	Olathe	KS	09:37
Vacuum Truck	0	4	1372	280	ICN	Olathe	KS	09:37
Vacuum Truck	0	4	1372	572	ICN	Eveleth	MN	09:40
Pump Truck	0	2	1302	142	ICN	Eveleth	MN	09:40
Vacuum Truck	0	2	686	142	ICN	Eveleth	MN	09:40
Vacuum Truck	0	2	686	96	ICN	Wausau	WI	10:24
Vacuum Truck	0	1	343	71	ICN	Great Bend	KS	10:39
Vacuum Truck	0	1	343	71	ICN	Minot	ND	11:09
Vacuum Truck	0	5	1715	655	ICN	Fort Atkinson	WI	11:22
Vacuum Truck	0	1	343	80	ICN	Wichita	KS	11:36
Liquid Vac Truck	0	1	3086	71	ICN	Peoria	IL	11:49
Sub Total Vacuum Truck:		**40**	**17695**	**3343**				
Total Vacuum System:		**40**	**17695**	**3343**				
Total 06 to 12 hours:			**17695**	**3343**				
Running Total from 0 to unknown:			**22357**	**4052**				

National Response Corporation Resource Availability By Type

Equipment Types: Skimmer/Vessel

Zone: Sioux Falls, SD

Demo - Sioux Falls - Case# DM15-0101
May 04, 2015

00 to 06 hours (* Does not include recall/mobilization time)

Skimmer

Drum

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Elastec TDS118 Skimmer	0	1	240	0	ICN	Omaha	NE	04:52
Crucial 1D18P48 Skimmer	0	2	686	0	ICN	Cannon Falls	MN	05:45
Sub Total Drum:		**3**	**926**	**0**				
Total Skimmer:		**3**	**926**	**0**				

Vessel

Deployment Craft (< 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
18' Deployment Craft	0	1	0	0	ICN	Watertown	SD	02:43
15' Deployment Craft	0	1	0	0	ICN	Omaha	NE	04:33
20' Deployment Craft	0	1	0	0	ICN	Omaha	NE	04:33
18' Deployment Craft	0	1	0	0	ICN	Omaha	NE	04:52
17' Deployment Craft	0	1	0	0	ICN	Cannon Falls	MN	05:45
12' Deployment Craft	0	1	0	0	ICN	Cannon Falls	MN	05:45
21' Deployment Craft	0	1	0	0	ICN	Cannon Falls	MN	05:45
17' Deployment Craft	0	1	0	0	ICN	Roseville	MN	05:46
Sub Total Deployment Craft (< 25 foot):		**8**	**0**	**0**				
Total Vessel:		**8**	**0**	**0**				
Total 00 to 06 hours:			**926**	**0**				
Running Total from 0 to unknown:			**926**	**0**				

06 to 12 hours (* Does not include recall/mobilization time)

Skimmer

Drum

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Elastec Mini Max Skimmer	0	1	137	0	ICN	North Platte	NE	07:34
Elastec TDS118 Skimmer	0	1	480	0	ICN	North Platte	NE	07:34
Small Drum Skimmer	0	1	171	0	ICN	Kansas City	MO	09:14
Elastec Mini Max Skimmer	0	1	137	0	ICN	Olathe	KS	09:37
Elastec TDS118 Skimmer	0	1	240	0	ICN	Olathe	KS	09:37
Elastec TDS118G Skimmer	0	1	480	0	ICN	Olathe	KS	09:37
Medium Drum Skimmer	0	1	240	0	ICN	Eveleth	MN	09:40
Elastec TDS118 Skimmer	0	1	240	0	ICN	Great Bend	KS	10:39
Elastec TDS118 Skimmer	0	1	240	0	ICN	Wichita	KS	11:36
Sub Total Drum:		**9**	**2365**	**0**				

Floating Suction

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Douglas SkimPac	0	1	240	0	ICN	North Platte	NE	07:34
Douglas SkimPac	0	1	240	0	ICN	Olathe	KS	09:37
Floating Suction Skimmer	0	1	274	0	ICN	Minot	ND	11:09
Douglas 4300 SkimPac	0	2	960	0	ICN	Neenah	WI	11:46
Sub Total Floating Suction:		**5**	**1714**	**0**				

Multi Skimmer

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Action 24 Skimmer	0	1	823	0	ICN	Duluth	MN	08:59
Action 24 Skimmer	AP-24-110	1	823	0	NRC	Superior	WI	09:00
Action 24 Skimmer	AP-24-120	1	823	0	NRC	Superior	WI	09:00
Sub Total Multi Skimmer:		**3**	**2469**	**0**				

Oleophilic Disk

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Crucial ORD Disk Skimmer	ORD-005	1	342	0	NRC	Beulah	ND	10:16
Sub Total Oleophilic Disk:		**1**	**342**	**0**				
Total Skimmer:		**18**	**6890**	**0**				

Vessel

Deployment Craft (< 25 foot)

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
18' Deployment Craft	0	1	0	0	ICN	North Platte	NE	07:34
18' Deployment Craft	0	1	0	0	ICN	Duluth	MN	08:59
15' Deployment Craft	0	1	0	0	ICN	Duluth	MN	08:59
18' Deployment Craft	WB-208	1	0	0	NRC	Superior	WI	09:00
16' Deployment Craft	0	1	0	0	ICN	Kansas City	MO	09:14
18' Deployment Craft	0	2	0	0	ICN	Olathe	KS	09:37
14' Deployment Craft	0	2	0	0	ICN	Eveleth	MN	09:40
14' Deployment Craft	0	1	0	0	ICN	Wausau	WI	10:24
18' Deployment Craft	0	1	0	0	ICN	Great Bend	KS	10:39
21' Deployment Craft	0	2	0	0	ICN	Neenah	WI	11:46
Sub Total Deployment Craft (< 25 foot):		**13**	**0**	**0**				
Total Vessel:		**13**	**0**	**0**				
Total 06 to 12 hours:			**6890**	**0**				
Running Total from 0 to unknown:			**7816**	**0**				

National Response Corporation Resource Availability By Type

Equipment Types: Portable Storage

Zone: Sioux Falls, SD

Demo - Sioux Falls - Case# DM15-0101
May 04, 2015

00 to 06 hours (* Does not include recall/mobilization time)

Portable Storage

Frac Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Mini Frac Tank	0	1	0	240	ICN	Omaha	NE	04:52
Sub Total Frac Tank:		**1**	**0**	**240**				
Total Portable Storage:		**1**	**0**	**240**				
Total 00 to 06 hours:			**0**	**240**				
Running Total from 0 to unknown:			**0**	**240**				

012802

06 to 12 hours (* Does not include recall/mobilization time)

Portable Storage

Frac Tank

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Frac Tank	0	2	0	952	ICN	Solway	MN	08:10
Mini Frac Tank	0	2	0	476	ICN	Olathe	KS	09:37
Frac Tank	0	1	0	500	ICN	Olathe	KS	09:37
Mobile Storage Trailer	0	2	0	1000	ICN	Eveleth	MN	09:40
Mini Frac Tank	0	1	0	240	ICN	Great Bend	KS	10:39
Frac Tank	0	1	0	238	ICN	Wichita	KS	11:36
Frac Tank	0	1	0	476	ICN	Wichita	KS	11:36
Sub Total Frac Tank:		**10**	**0**	**3882**				
Total Portable Storage:		**10**	**0**	**3882**				
Total 06 to 12 hours:			**0**	**3882**				
Running Total from 0 to unknown:			**0**	**4122**				

National Response Corporation Resource Availability By Type

Equipment Types: Support Equipment

Zone: Sioux Falls, SD

Demo - Sioux Falls - Case# DM15-0101
May 04, 2015

00 to 06 hours (* Does not include recall/mobilization time)

Support Equipment

Earth Moving Equipment

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Skid Steer	0	1	0	0	ICN	Omaha	NE	04:33
Mini-Excavator	0	1	0	0	ICN	Omaha	NE	04:33
Uniloader	0	1	0	0	ICN	Omaha	NE	04:52
Drum Grabber	0	1	0	0	ICN	Omaha	NE	04:52
Trackhoe Mini	0	1	0	0	ICN	Omaha	NE	04:52
Backhoe	0	1	0	0	ICN	Omaha	NE	04:52
Track Loader	0	1	0	0	ICN	Roseville	MN	05:46
325 Excavator	0	1	0	0	ICN	Bondurant	IA	05:58
977 Track Loader	0	1	0	0	ICN	Bondurant	IA	05:58
D6T Dozer	0	1	0	0	ICN	Bondurant	IA	05:58
966 Wheel Loader	0	1	0	0	ICN	Bondurant	IA	05:58
Sub Total Earth Moving Equipment:		**11**	**0**	**0**				

Roll-Off Container

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Roll-Off Box	0	2	0	0	ICN	Anoka	MN	05:44
Sub Total Roll-Off Container:		**2**	**0**	**0**				
Total Support Equipment:		**13**	**0**	**0**				
Total 00 to 06 hours:			**0**	**0**				
Running Total from 0 to unknown:			**0**	**0**				

012804

06 to 12 hours (* Does not include recall/mobilization time)

Support Equipment

Earth Moving Equipment

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
track Loader	0	1	0	0	ICN	Hudson	WI	06:19
Excavator	0	2	0	0	ICN	Hudson	WI	06:19
Skid Steer	0	1	0	0	ICN	Hudson	WI	06:19
325 Excavator	0	1	0	0	ICN	North Platte	NE	07:33
966 Wheel Loader	0	1	0	0	ICN	North Platte	NE	07:33
Wheel Loader	0	1	0	0	ICN	North Platte	NE	07:34
Backhoe	0	1	0	0	ICN	North Platte	NE	07:34
Uniloader	0	1	0	0	ICN	North Platte	NE	07:34
Trackhoe-Mini	0	1	0	0	ICN	North Platte	NE	07:34
Toolcat	0	1	0	0	ICN	North Platte	NE	07:34
Excavator	0	1	0	0	ICN	Solway	MN	08:10
Backhoe	0	1	0	0	ICN	Solway	MN	08:10
Skidsteer Loader	0	1	0	0	ICN	Solway	MN	08:10
Caterpillar	0	1	0	0	ICN	Solway	MN	08:10
Crawler Loader	0	1	0	0	ICN	Solway	MN	08:10
Backhoe	0	1	0	0	ICN	Duluth	MN	08:59
Skid Steer	0	1	0	0	ICN	Duluth	MN	08:59
Mini Excavator	0	1	0	0	ICN	Duluth	MN	08:59
Mini Excavator	0	1	0	0	ICN	Duluth	MN	08:59
Skid Steer with Tracks	0	1	0	0	ICN	Duluth	MN	08:59
Backhoe	0	1	0	0	ICN	Kansas City	MO	09:14
Uniloader	0	2	0	0	ICN	Olathe	KS	09:37
Trackhoe - mini	0	1	0	0	ICN	Olathe	KS	09:37
Excavator	0	1	0	0	ICN	Olathe	KS	09:37
Wheel Loader	0	1	0	0	ICN	Olathe	KS	09:37
Backhoe-Loader	0	1	0	0	ICN	Eveleth	MN	09:40
Skid Steer-Loader	0	1	0	0	ICN	Eveleth	MN	09:40
Track Loader	0	1	0	0	ICN	Galesburg	IL	10:33
Excavator	0	1	0	0	ICN	Galesburg	IL	10:33
Uni Loader	0	1	0	0	ICN	Great Bend	KS	10:39
Trackhoe	0	1	0	0	ICN	Great Bend	KS	10:39
Excavator (JD 200)	0	1	0	0	ICN	Great Bend	KS	10:39
D 6 Dozer with winch	0	1	0	0	ICN	Great Bend	KS	10:39
Kubota Tractor	0	1	0	0	ICN	Great Bend	KS	10:39
Trencher (Uniloader Mount)	0	1	0	0	ICN	Great Bend	KS	10:39
Loader	0	26	0	0	ICN	Minot	ND	11:09
Excavator	0	29	0	0	ICN	Minot	ND	11:09
Skid Steer	0	15	0	0	ICN	Minot	ND	11:09
Grader	0	2	0	0	ICN	Minot	ND	11:09
Roller	0	10	0	0	ICN	Minot	ND	11:09
Scraper	0	5	0	0	ICN	Minot	ND	11:09
Dozer	0	10	0	0	ICN	Minot	ND	11:09
Sub Total Earth Moving Equipment:		**134**	**0**	**0**				

Roll-Off Container

Description	Stencil #	Quantity	EDRC	Storage	Owner	City	State	*Time Away (hr:mm)
Haz Roll-Off	0	4	0	0	ICN	North Platte	NE	07:34
Non-Haz Roll-Off	0	1	0	0	ICN	North Platte	NE	07:34
Haz Roll-Off	0	16	0	0	ICN	Olathe	KS	09:37
Non-Haz Roll-Off	0	2	0	0	ICN	Olathe	KS	09:37
Roll-Off Container	0	20	0	0	ICN	Eveleth	MN	09:40
Haz Roll-Off	0	12	0	0	ICN	Great Bend	KS	10:39
Non-Haz Roll-Off	0	1	0	0	ICN	Great Bend	KS	10:39
Sub Total Roll-Off Container:		**56**	**0**	**0**				
Total Support Equipment:		**190**	**0**	**0**				
Total 06 to 12 hours:			**0**	**0**				

Appendix D- Incident Command System Job Descriptions

APPENDIX D

The following job descriptions and guidelines are intended to be used as a tool to assist Local ERP members and IMT members in their particular positions within the Incident Command System (ICS):

- Incident Commander
- Public Information Officer
- Liaison Officer
- Safety Officer
- Operations Section Chief
- Staging Group Leader
- Repair Group Leader
- Containment Group Leader
- Planning Section Chief
- Environmental Group Leader
- Situation Group Leader
- Logistics Section Chief
- Communications Group Leader
- Security/Medical Group Leader
- Supply/Ground Support Group Leader
- Finance Section Chief
- Accounting Group Leader
- Claims Group Leader
- Legal Group Leader
- Business Resumption Section Chief
- Repair Coordinator

INCIDENT COMMANDER

The Incident Commander (IC) manages all activities related to an emergency response and acts as Qualified Individual (QI). As such, the Incident Commander needs to be familiar with the contents of the Facility Response Plan (FRP), Oil Spill Response Plan (OSRP), Emergency Response Action Plan (ERAP), and the Spill Prevention Control and Countermeasure Plan (SPCC). The Incident Commander (IC) must also be familiar with the operation of the Incident Command System (ICS) and the Unified Command Structure (UCS).

The primary goal of this system is to establish and maintain control of the emergency response. If the emergency involves a multi-jurisdictional response (Federal and State), the Unified Command Structure (UCS) should be established. **Realize that the Federal On-Scene Coordinator (FOSC) does have the authority to override the Incident Commander and assume control of the response**. Every effort should be made to establish a collaborative relationship to manage the incident site with the appropriate responding agencies.

As soon as possible following an incident, a critique of the response shall be conducted and follow-up action items identified. Participants may include Operations Control personnel, Company supervisors, and employees and outside agencies involved in the response.

Responsibilities:

- Maintain Activity Log.
- Establish Incident Command/Unified Command Post.
- Activate necessary section(s) of the Incident Command System (ICS) to deal with the emergency. Fill out the appropriate section(s) of the Incident Command organization chart and post it at the Incident Command Center.
- Develop goals and objectives for response.
- Work with Safety Officer and Planning Section Chief to develop a Site Safety Plan (SSP).
- Approve, authorize, and distribute Incident Action Plan (IAP) and SSP.
- Conduct planning meetings and briefings with the section chiefs.
- As Qualified Individual coordinate actions with Federal On-Scene Coordinator (FOSC) and State On-Scene Coordinator (SOSC).
- In a multi-jurisdictional response, ensure all agencies are represented in the ICS.
- Coordinate /approve media information releases with the FOSC, SOSC, and Public Information Officer (PIO).
- Keep management informed of developments and progress.
- Authorize demobilization of resources as they are no longer needed.
- Complete Incident Debriefing Form

PUBLIC INFORMATION OFFICER

The Public Information Officer (PIO) provides critical contact between the media/public and the emergency responders. The PIO is responsible for developing and releasing information about the incident to the news media, incident personnel, appropriate agencies and public. When the response is multi-jurisdictional (involves the federal and state agencies), the PIO must coordinate gathering and releasing information with these agencies.

The PIO needs to communicate that the Company is conducting an effective response to the emergency. The PIO is responsible for communicating the needs and concerns of the public to the Incident Commander (IC).

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from IC.
- Participate in all planning meetings and briefings.
- Obtain outside information that may be useful to incident planning.
- Develop goals and objectives regarding public information.
- Arrange for necessary workspace, materials, telephones and staffing for Public Information Center (PIC).
- Establish a PIC, ensuring all appropriate agencies participate.
- Provide a single point of media contact for the IC.
- Coordinate media access to the response site as approved by the IC.
- Obtain approval for release of information from the IC.
- Arrange for meetings between media and emergency responders.
- Maintain list of all media present.
- Participate in Post Incident Review.

LIAISON OFFICER

If a Unified Command Structure is not established, a Liaison Officer is appointed as the point of contact for personnel assigned to the incident from assisting or cooperating agencies.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Incident Commander (IC).
- Participate in planning meetings and briefings.
- Identify and maintain communications link with agency representatives, assisting, and coordinating agencies.
- Identify current or potential inter-organizational issues and advise IC as appropriate.
- Coordinate with Legal Group Leader and Public Information Officer (PIO) regarding information and documents released to government agencies.
- Participate in Post Incident Review

SAFETY OFFICER

The Safety Officer is responsible for assessing and monitoring hazardous and unsafe situations at the emergency response site(s). The Safety Officer must develop measures that assure the safety of the public and response personnel. This involves maintaining an awareness of active and developing situations, ensuring the preparation and implementation of the Site Safety Plan (SSP) and assessing safety issues related to the Incident Action Plans (IAP).

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Incident Commander (IC).
- Develop, implement, and disseminate SSP with IC and section chiefs.
- Participate in planning meetings and briefings.
- Establish safety staff if necessary.
- Identify emergency contact numbers. Fill out emergency contact chart and post in the Incident Command Center.
- Conduct safety briefings with all emergency responders.
- Investigate accidents that have occurred during emergency response.
- Ensure proper hazard zones are established.
- Ensure all emergency responders have appropriate level of training.
- Ensure proper Personal Protective Equipment (PPE) is available and used.
- Advise Security/Medical/Group Leader concerning PPE requirements.
- Ensure emergency alarms/warning systems are in place as needed.
- Participate in Post Incident Review

OPERATIONS SECTION CHIEF

The Operations Section Chief is responsible for the management of all operations applicable to the field response and site restoration activities. Operations directs field activities based on the Incident Action Plan (IAP) and Site Safety Plan (SSP).

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Incident Commander (IC).
- Participate in Incident Command planning meetings and briefings.
- Conduct planning meetings and briefings for Operations Section.
- Develop operations portion of IAP.
- Supervise the implementation of the IAP.
- Make or approve expedient changes to the IAP.
- Request resources needed to implement IAP.
- Approve list of resources to be released.
- Ensure safe tactical operations.
- Establish a staging area for personnel and equipment.
- Confirm first responder actions.
- Confirm the completion of rescue/evacuation and administering of first aid.
- Confirm site perimeters have been established.
- Coordinate activities of public safety responders, contractors, and mutual assistance organizations.
- Participate in Post Incident Review

STAGING GROUP LEADER

The Staging Group Leader is responsible for managing all activities within the staging area(s). The Staging Group Leader will collect, organize, and allocate resources to the various response locations as directed by Operations Section Chief.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Operations Section Chief.
- Participate in Operations' planning meetings and briefings.
- Advise Operations Section Chief of equipment location and operational status.
- Periodically advise Operations Section Chief on inventory status of consumable items (sorbent pads, sorbent boom, etc.).
- Coordinate with Logistics Section Chief regarding inbound equipment, personnel, and supplies.
- Participate in development of Operations' portion of Incident Action Plan (IAP).
- Establish check-in function and inventory control as appropriate.
- Allocate personnel/equipment to site(s) as requested.
- Establish and maintain boundaries of staging area(s).
- Demobilize/relocate staging area as needed.
- Post signs for identification and traffic control.
- Participate in Post Incident Review.

REPAIR GROUP LEADER

The Repair Group Leader is responsible for supervising the repair and restoration of pipeline facilities.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Operations Section Chief.
- Periodically advise Operations Section Chief on status of restoration activities.
- Conduct frequent hazard assessments and coordinate safety needs with Operations Section Chief and Safety Officer.
- Participate in Operations' planning meetings and briefings.
- Participate in development of Operations' portion of Incident Action Plan (IAP).
- Conduct facility restoration activities in accordance with Company procedures, Site Safety Plan (SSP) and IAP.
- Determine and request additional materials, equipment, and personnel as needed.
- Ensure all equipment is decontaminated prior to being released.
- Participate in Post Incident Review

CONTAINMENT GROUP LEADER

The Containment Group Leader is responsible for supervising the containment and recovery of spilled product and contaminated environmental media both on land and on water.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Operations Section Chief.
- Participate in Operations' planning meetings and briefings.
- Participate in development of Operations' portion of Incident Action Plan (IAP).
- Conduct activities in accordance with the IAP.
- Assess overall situation for containment and recovery needs and supervise group activities.
- Periodically advise the Operations Section Chief on the status of containment and recovery actions.
- Ensure hazard zones are established and maintained.
- Ensure adequate communication equipment for the containment group response.
- Determine and request additional resources as needed.
- Participate in Post Incident Review.

PLANNING SECTION CHIEF

The Planning Section Chief is responsible for collecting, evaluating, and disseminating information related to the current and future events of the response effort. The Planning Section Chief must understand the current situation; predict the future course of events; predict future needs; develop response and cleanup strategies; and review the incident once complete.

The Planning Section Chief must coordinate activities with the Incident Commander (IC) and other Section Chiefs to ensure that current and future needs are appropriately handled.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from the IC.
- Establish and maintain communication with IC and other Section Chiefs.
- Advise IC on any significant changes of incident status.
- Conduct planning meetings and briefings for Planning section.
- Coordinate and provide input to the preparation of the Incident Action Plan (IAP).
- Participate in Incident Command planning meetings and briefings.
- In a multi-jurisdictional response, ensure that all agencies are represented in the Planning Section.
- Coordinate future needs for the emergency response.
- Determine response personnel needs.
- Determine personnel needs and request personnel for Planning section.
- Assign technical specialists (archaeologists, historians, biologists, etc.) where needed.
- Collect and analyze information on the situation.
- Assemble information on alternative response and cleanup strategies.
- Ensure situation status unit has a current organization chart of the Incident Command Organization.
- Provide periodic spill movement/migration prediction.
- Participate in Post Incident Review

ENVIRONMENTAL GROUP LEADER

The Environmental Group Leader is responsible for ensuring that all areas impacted by the release are identified and cleaned up following company and regulatory standards. The Environmental Group Leader supports Planning and Operations to minimize and document the environmental impact of the release.

The Environmental Group Leader must plan for future site considerations such as long-term remediation and alternative response strategies in unusually sensitive areas. In a Unified Command Structure (UCS), representatives from the federal and state responding agencies will be included in this group.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from the Planning Section Chief.
- Participate in Planning section meetings and briefings.
- Participate in development of Planning's portion of Incident Action Plan (IAP).
- Coordinate environmental activities with responding regulatory agencies.
- Periodically advise the Planning Section Chief on status of group activities.
- Request additional personnel/specialists to support response effort.
- Determine environmental group resource needs.
- Identify and develop a prioritized list of natural, cultural, and economic (NCE) resources at risk.
- Initiate and coordinate Natural Resources Damage Assessment (NRDA) activities.
- Develop a management plan for recovered contaminated media and ensure coordination with Containment Group Leader.
- Ensure proper management of injured/oiled wildlife.
- Determine alternative cleanup strategies for response.
- Participate in Post Incident Review

SITUATION GROUP LEADER

The Situation Group Leader is responsible for the collection, evaluation, display, and dissemination of all information related to the emergency response effort. The Situation Group Leader must establish and maintain communications with all portions of the Incident Command and the response site in order to collect the information. The Situation Group Leader also attempts to predict spill movement/migration and identifies areas that may be impacted by the emergency.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from the Planning Section Chief.
- Participate in Planning section meetings and briefings.
- Participate in development of Planning's portion of Incident Action Plan (IAP).
- Maintain a master list of response resources ordered, in staging and in use.
- Collect and display current status of requested response resources.
- Collect and display current status of resources, current spill location, personnel, and weather.
- Analyze current information to determine spill trajectory and potential impacts.
- Disseminate information concerning the situation status upon request from the emergency responders.
- Provide photographic services and maps.
- Establish periodic reconnaissance of impacted area to support information needs.
- Collect information on the status of the implementation of Incident Action Plans. Display this information in the Incident Command Center.
- Participate in Post Incident Review

LOGISTICS SECTION CHIEF

The Logistics Section Chief is responsible for procuring facilities, services, and material in support of the emergency response effort.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from the Incident Commander (IC).
- Participate in Incident Command planning meetings and briefings.
- Conduct planning meetings and briefings for Logistics section.
- Participate in the preparation of the Incident Action Plan (IAP).
- Identify service and support requirements for planned operations.
- Identify sources of supply for identified and potential needs.
- Advise IC on current service and support requirements.
- Procure needed materials, equipment and services from sources by means consistent with the timing requirements of the IAP and Operations.
- Ensure all purchases are documented.
- Participate in Post Incident Review

COMMUNICATIONS GROUP LEADER

The Communications Group Leader is responsible for ensuring that the Incident Command and emergency responders have reliable and effective means of communication. This may involve activation of multiple types of communications equipment and coordination among multiple responding agencies and contractors.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Logistics Section Chief.
- Periodically advise Logistics Section Chief on status of communications group.
- Participate in Logistics section planning meetings and briefings.
- Participate in development of Logistics' portion of Incident Action Plan (IAP).
- Establish an Incident Command communications center.
- Ensure Incident Commander (IC) has communications compatible with other response agencies.
- Identify all communications circuits/equipment used by emergency responders and keep a chart updated with this information.
- Determine the type and amount of communications required to support the response effort (computer, radio, telephone, fax, etc.).
- Ensure timely establishment of adequate communications equipment and systems.
- Advise Logistics Section Chief on communications capabilities/limitations.
- Establish an equipment inventory control system for communications gear.
- Ensure all equipment is tested and repaired.
- Participate in Post Incident Review

SECURITY/MEDICAL GROUP LEADER

The Security/Medical Group Leader is responsible for developing a plan to deal with medical emergencies, obtaining medical aid and transportation for emergency response personnel, and preparation of reports and records.

The Security/Medical Group Leader is responsible for providing safeguards needed to protect personnel and property from loss or damage. The Security/Medical Group Leader also controls access to the emergency site and Incident Command Center.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Logistics Section Chief.
- Periodically advise Logistics Section Chief on the status of security and medical problems.
- Participate in Logistics meetings and briefings.
- Participate in development of Logistics' portion of Incident Action Plan (IAP).
- Determine and develop security/medical support plan needs.
- Request medical or security personnel, as needed.
- Work with Safety Officer to identify coordinate local emergency medical services.
- Coordinate with Safety Officer and Operations Section Chief to establish the Site Safety Plan (SSP) with site boundaries, hazard zones, escape routes, staging areas, Command Center and Personal Protective Equipment (PPE) requirements.
- Coordinate/develop an identification system in order to control access to the incident site.
- Participate in Post Incident Review

SUPPLY/GROUND SUPPORT GROUP LEADER

The Supply/Ground Support Group Leader is responsible for procurement and the disposition of personnel, equipment, and supplies; receiving and storing all supplies for the incident; maintaining an inventory of supplies; and servicing non-expendable supplies and equipment. The Supply/Ground Support Group Leader supports the following: transportation of personnel; supplies, food, equipment; and fueling, service, maintenance and repair of vehicles and equipment.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Logistics Section Chief.
- Periodically advise Logistics Section Chief on status of supply/ground support group.
- Participate in Logistics meetings and briefings.
- Participate in development of Logistics' portion of Incident Action Plan (IAP).
- Communicate with Staging Group Leader concerning material, equipment and personnel that are inbound and the approximate time of arrival.
- Coordinate with other Section Chiefs to ascertain the priority of needed materials, equipment and services.
- Coordinate with Finance Section Chief to establish accounts, purchase orders, AFEs and procedures as necessary.
- Establish an inventory control system for materials and equipment.
- Maintain roads, when necessary.
- Participate in Post Incident Review

FINANCE SECTION CHIEF

The Finance Section Chief is responsible for accounting, legal, right-of-way and risk management functions that support the emergency response effort. In this role, the primary responsibility is supporting the Command Staff and Logistics Section matters pertaining to expenses during and following the emergency response.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Incident Commander (IC).
- Participate in Incident Command planning meetings and briefings.
- Conduct planning meetings and briefings for Finance section.
- Participate in preparation of the Incident Action Plan (IAP).
- Participate in planning meetings.
- Participate in Unified Command System (UCS) as incident warrants.
- Request assistance of corporate accounting, legal, right-of-way or risk management as needed.
- Assist with contracting administration.
- Participate in Post Incident Review.

ACCOUNTING GROUP LEADER

The Accounting Group Leader is responsible for accumulating and dispensing funding during an emergency response. All charges directly attributed to the incident should be accounted for in the proper charge areas.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Finance Section Chief.
- Periodically advise Finance Section Chief.
- Participate in Finance planning meetings and briefings.
- Participate in development of Finance's portion of Incident Action Plan (IAP).
- Make recommendations for cost savings to Finance and Logistics Section Chiefs.
- Establish accounts as necessary to support the Logistics section.
- Ensure all invoices are documented, verified, and paid accordingly.
- Involve corporate accounting group for assistance as necessary.
- Participate in Post Incident Review

CLAIMS GROUP LEADER

The Claims Group Leader is responsible for managing all risk management and right-of-way issues at, during, and following an emergency response. It is important that all claims are investigated and handled expediently.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Finance Section Chief.
- Participate in Finance planning meetings and briefings.
- Participate in development of Finance's portion of Incident Action Plan (IAP).
- Periodically inform affected parties of status of emergency response.
- Review and authorize payment of all claims.
- Provide needs of evacuated persons or groups.
- Purchase or acquire property.
- Inform and update necessary insurance groups and underwriters.
- Involve corporate Risk Management or Land, Records, and Claims as needed.
- Participate in Post Incident Review

LEGAL GROUP LEADER

The Legal Group Leader is responsible for advising the Incident Command Staff and Section Chiefs on all matters that may involve legal issues.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Finance Section Chief.
- Periodically advise Finance Section Chief of status.
- Participate in Finance planning meetings and briefings.
- Participate in development of Finance's portion of Incident Action Plan (IAP).
- Conduct investigations per Incident Commander's (IC) request.
- Provide skilled negotiators.
- Communicate to all affected emergency response personnel if work product is declared "Attorney-Client Privilege. "
- Participate in Post Incident Review

BUSINESS RESUMPTION SECTION CHIEF

The Business Resumption Section Chief is responsible for managing and directing activities of the repair crews and contractors.

Responsibilities:

- Establish and direct the repairs activities.
- Ensure that all work is done in a manner to ensure the safety of all employees and the public.
- Establish and direct any required staging activities.
- Participate in Post Incident Review

REPAIR COORDINATOR

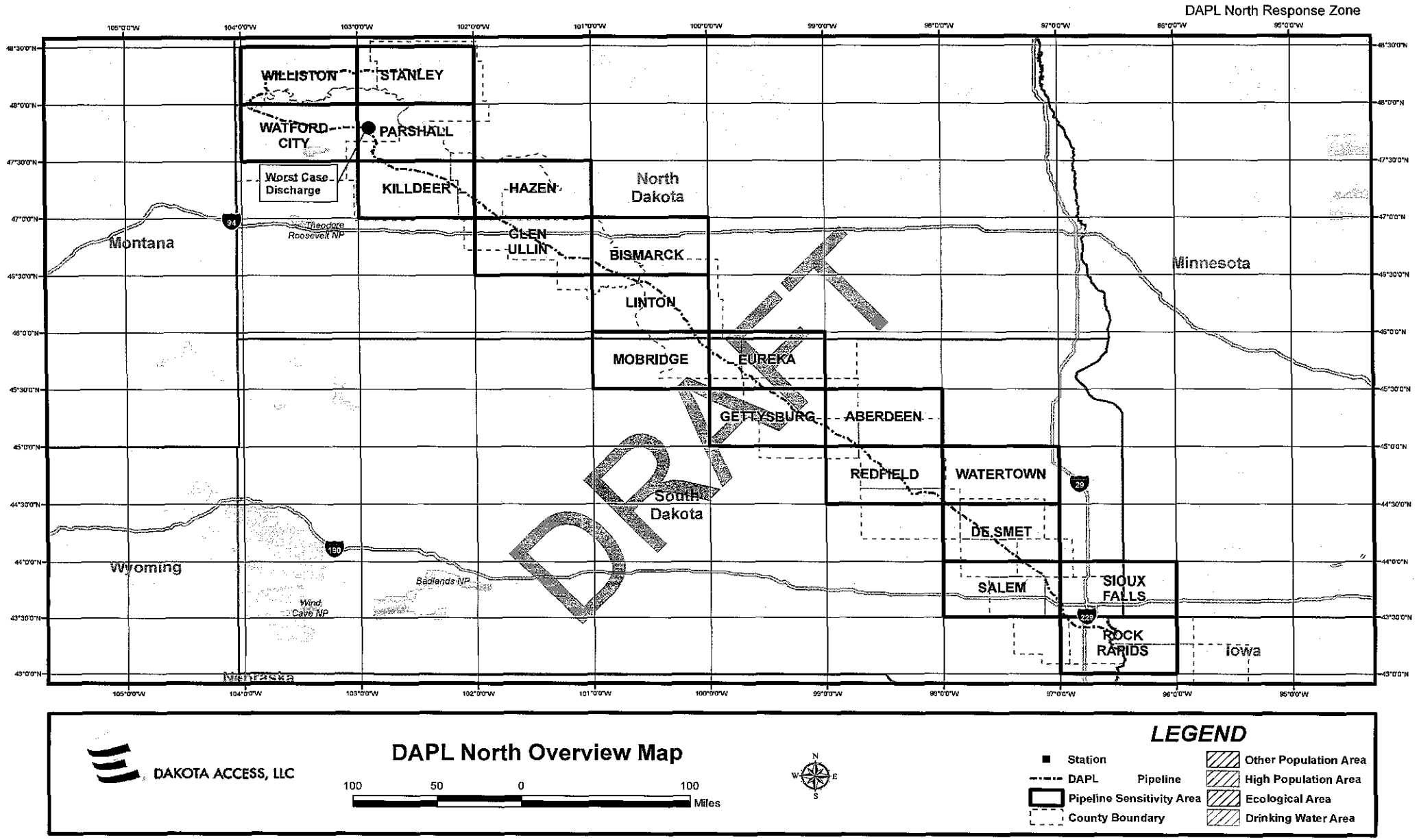
The Repair Coordinator is responsible for the timely, efficient, and safe repair of the damaged pipeline segment so that loss of service will be as brief as possible without compromising safety or integrity of repair. Ensure that temporary and/or permanent repair of the affected asset is done in accordance with approved methods.

Responsibilities:

- Determine extent and cause of damage.
- Obtain necessary materials, personnel and equipment to repair damage.
- Plan and execute repairs.
- Verify that repairs are complete and sound using proven test methods (x-ray, hydrostatic test or other accepted methods) and in compliance with DOT requirements.
- Supervise completion of repair by the use of proper back-fill materials and techniques.
- Return the ROW to acceptable condition.
- Inform the Incident Commander when pipeline is ready for return to service.
- Coordinate activities with HES and DOT representatives.
- Participate in Post Incident Review.

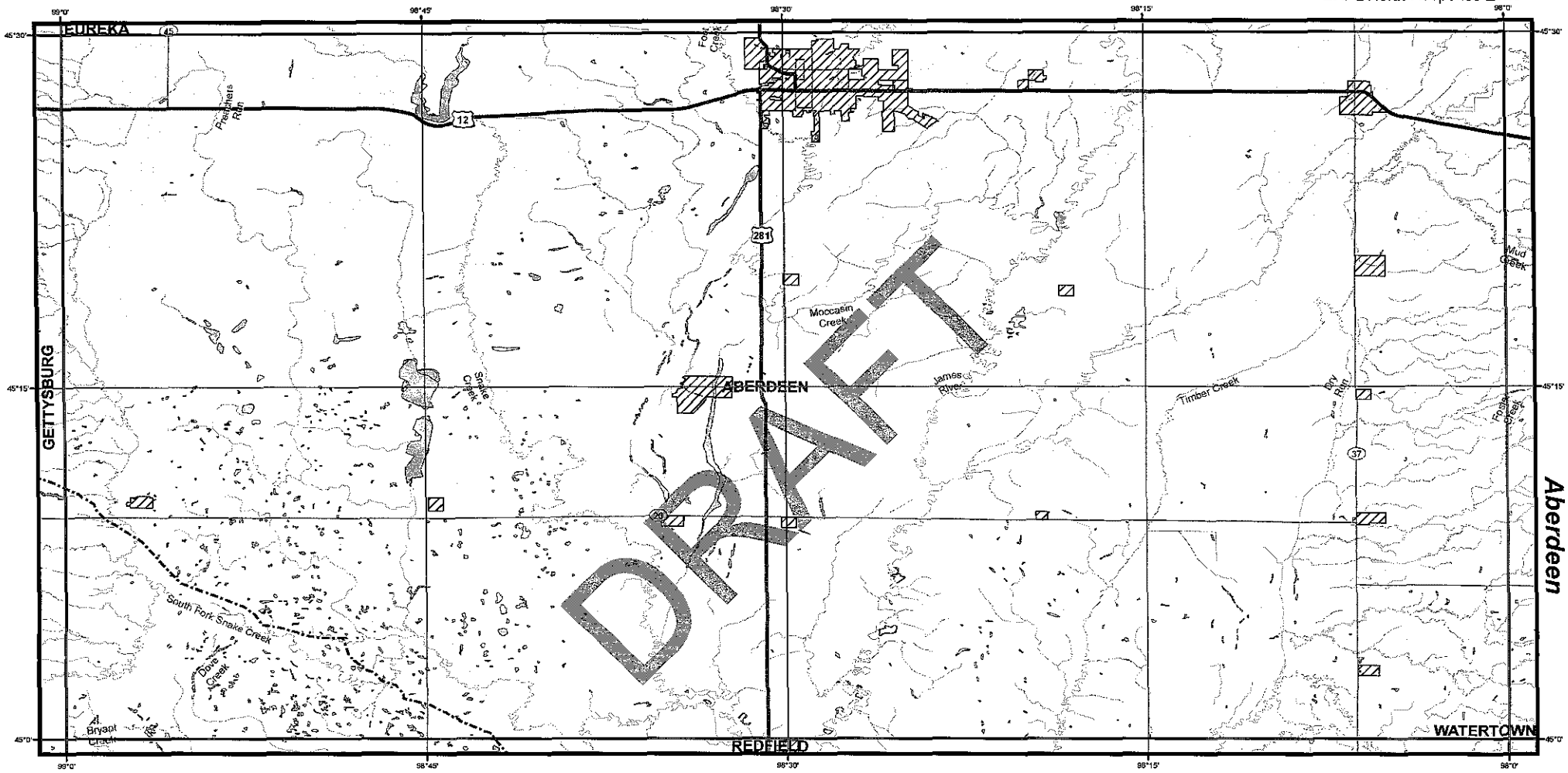
Appendix E- Response Zone Maps

- Aberdeen
- Bismarck
- De Smet
- Eureka
- Gettysburg
- Glen Ullin
- Hazen
- Killdear
- Linton
- Mobridge
- Parshall
- Redfield
- Salem
- Sioux Falls
- Stanley
- Watertown
- Watford City
- Williston


DAPL North Response Zone
WILLISTON
STANLEY
WATFORD CITY
PARSHALL
Worst Case Discharge
KILLDEER
HAZEN
GLEN ULLIN
BISMARCK
LINTON
MOBRIDGE
EUREKA
GETTYSBURG
ABERDEEN
REDFIELD
WATERTOWN
DE SMET
SALEM
SIOUX FALLS
ROCK RAPIDS
North Dakota
South Dakota
Montana
Minnesota
Iowa
Wyoming
Nebraska
Theodore Roosevelt NP
Badlands NP
Wind Cave NP
DRAFT
DAKOTA ACCESS, LLC
DAPL North Overview Map
100 50 0 100
Miles
LEGEND
Station
DAPL Pipeline
Pipeline Sensitivity Area
County Boundary
Other Population Area
High Population Area
Ecological Area
Drinking Water Area

012830

DAPL North Response Zone



DAKOTA ACCESS, LLC

Aberdeen

10 5 0 10 Miles

LEGEND

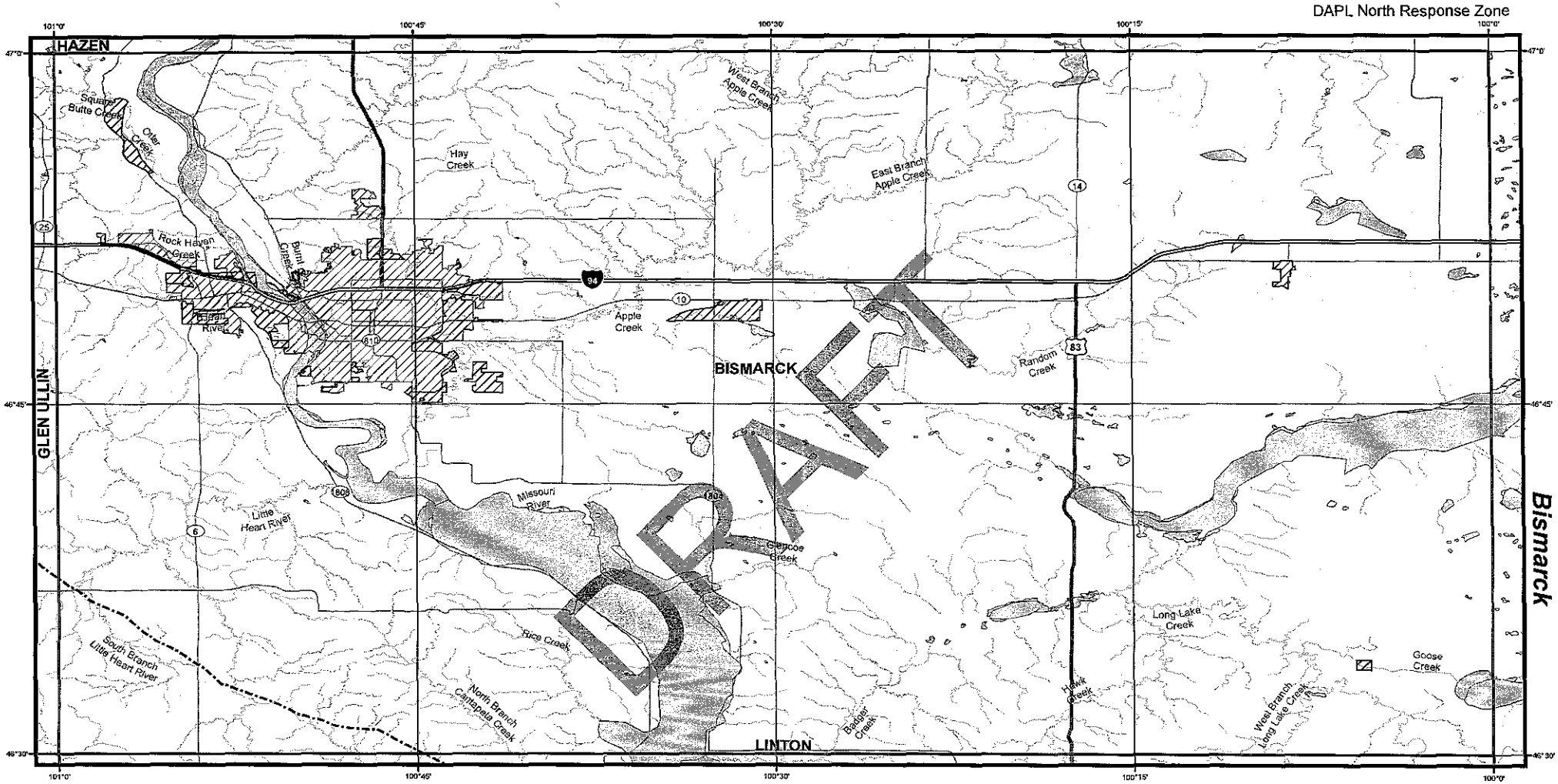
- DAPL
- Stations
- Schools
- Water Intake
- Hospitals

Pipeline

- Parks/Recreation Areas
- OPA
- HPA
- ECO
- DWA

012831

DAPL North Response Zone



DAKOTA ACCESS, LLC

Bismarck

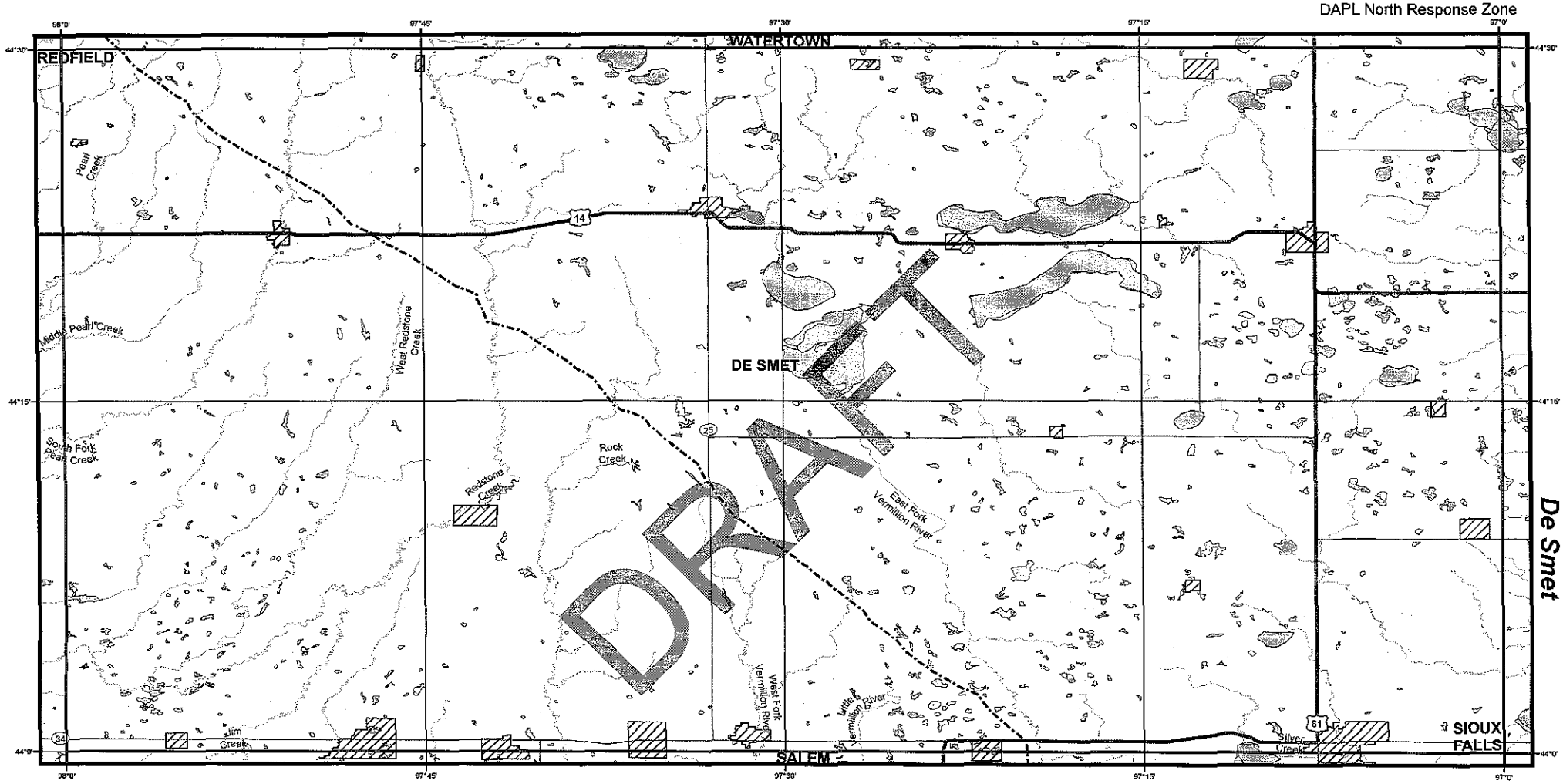
10 5 0 10 Miles

LEGEND

- DAPL I
- Stations
- Schools
- Water Intake
- Hospitals
- Pipeline
- Parks/Recreation Areas
- OPA
- HPA
- ECO
- DWA

012832

DAPL North Response Zone



DAKOTA ACCESS, LLC

De Smet

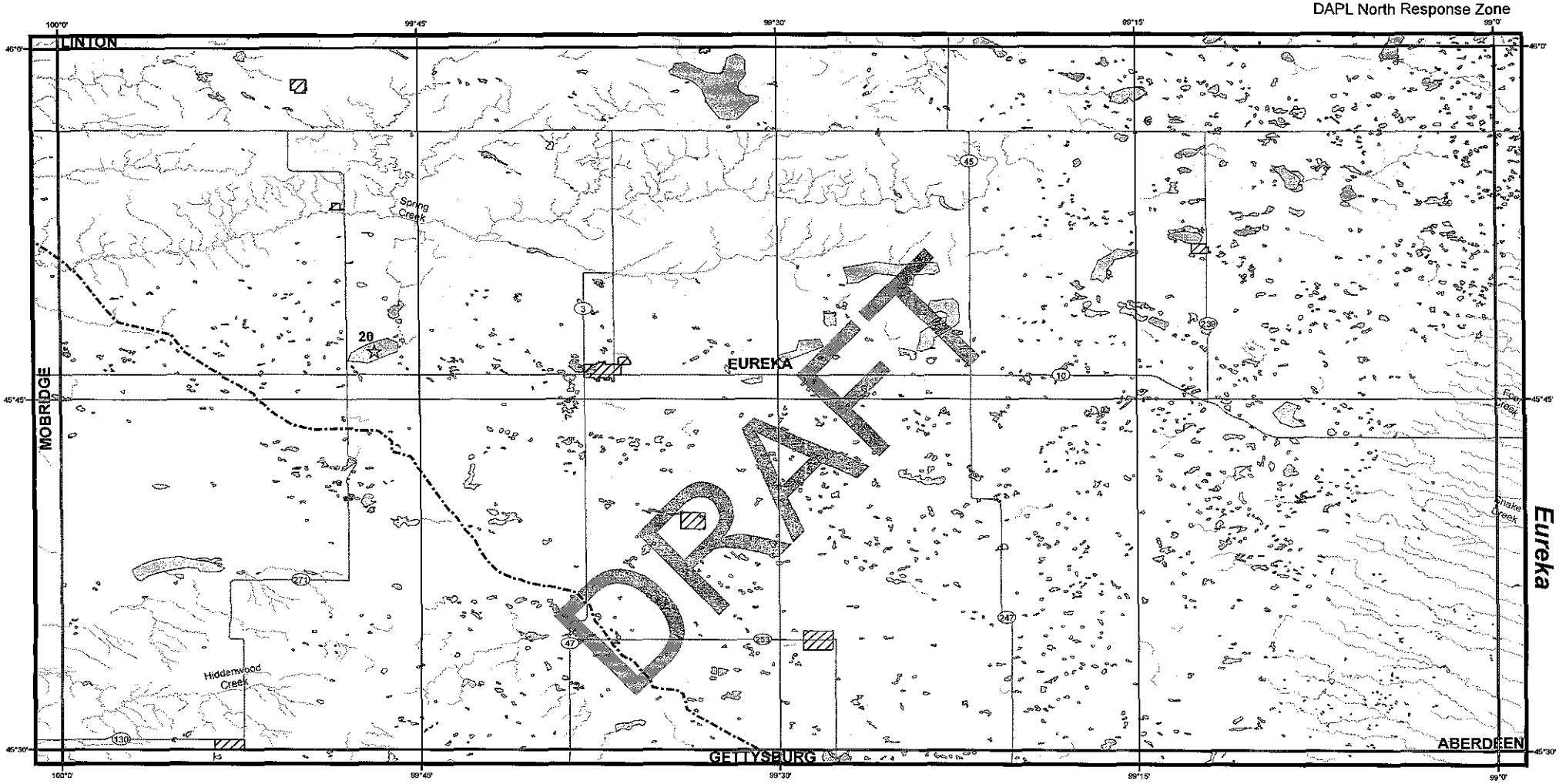
10 5 0 10 Miles

LEGEND

- DAPL Pipeline
- Stations
- Schools
- Water Intake
- Hospitals
- Parks/Recreation Areas
- OPA
- HPA
- ECO
- DWA

012833

DAPL North Response Zone



DAKOTA ACCESS, LLC

Eureka

10 5 0 10 Miles

LEGEND

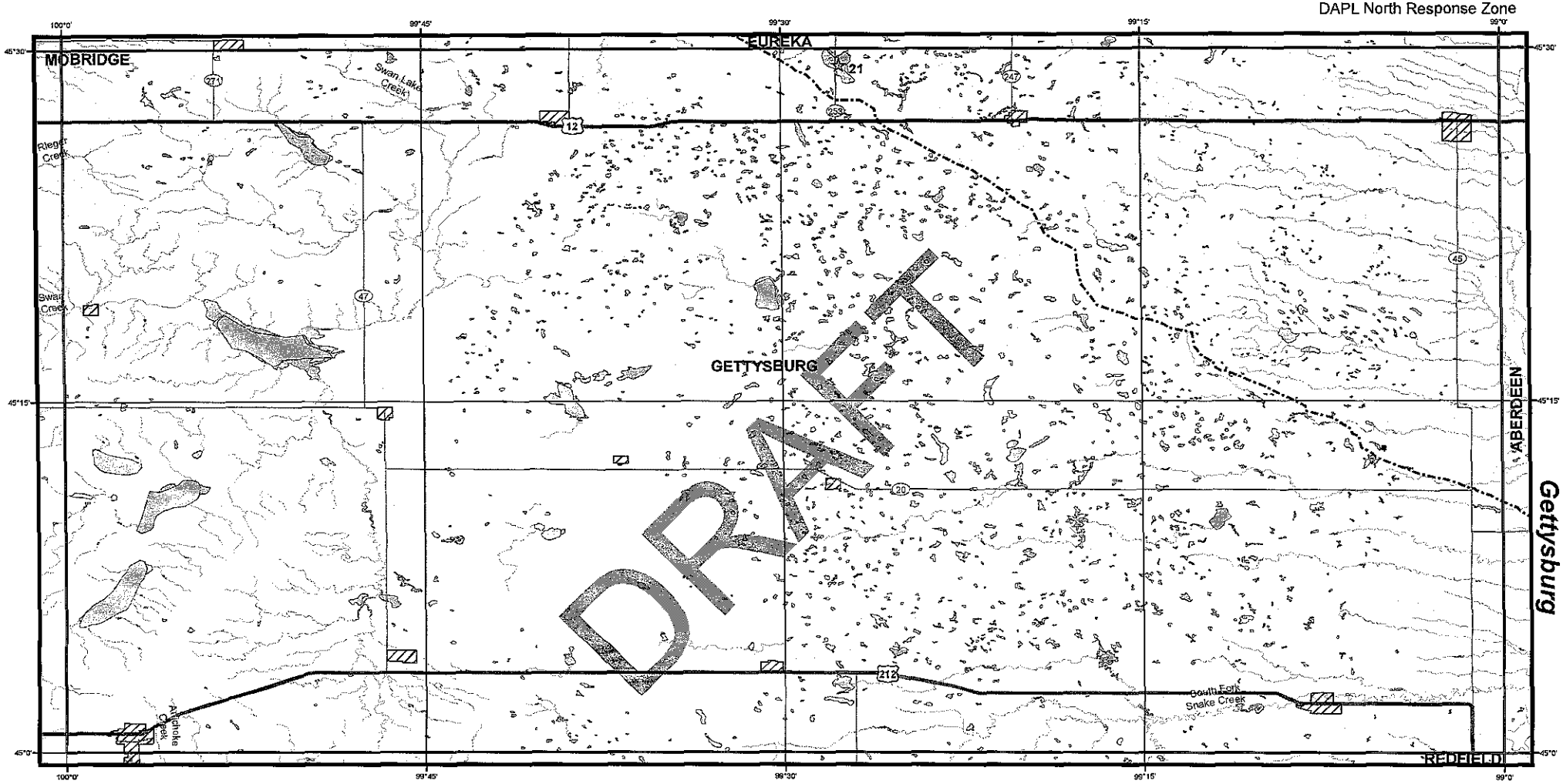
- DAPL I
- Stations
- Schools
- Water Intake
- Hospitals

Pipeline

- Parks/Recreation Areas
- OPA
- HPA
- ECO
- DWA

012834

DAPL North Response Zone



DAKOTA ACCESS, LLC

Gettysburg

10 5 0 10 Miles

LEGEND

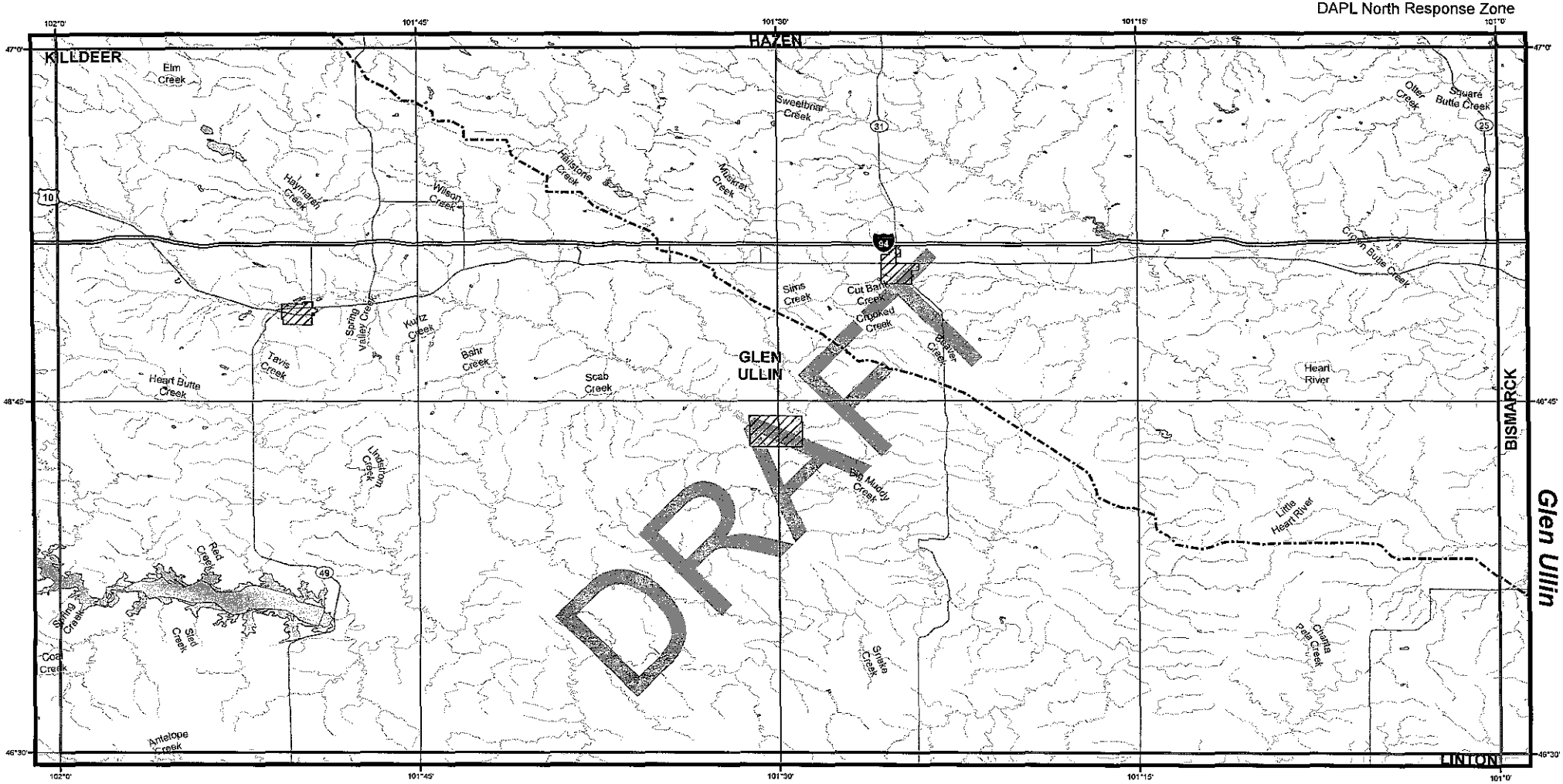
- DAPL I
- Stations
- Schools
- Water Intake
- Hospitals

Pipeline

- Parks/Recreation Areas
- OPA
- HPA
- ECO
- DWA

012835

DAPL North Response Zone



DAKOTA ACCESS, LLC

Glen Ullin

10 5 0 10 Miles

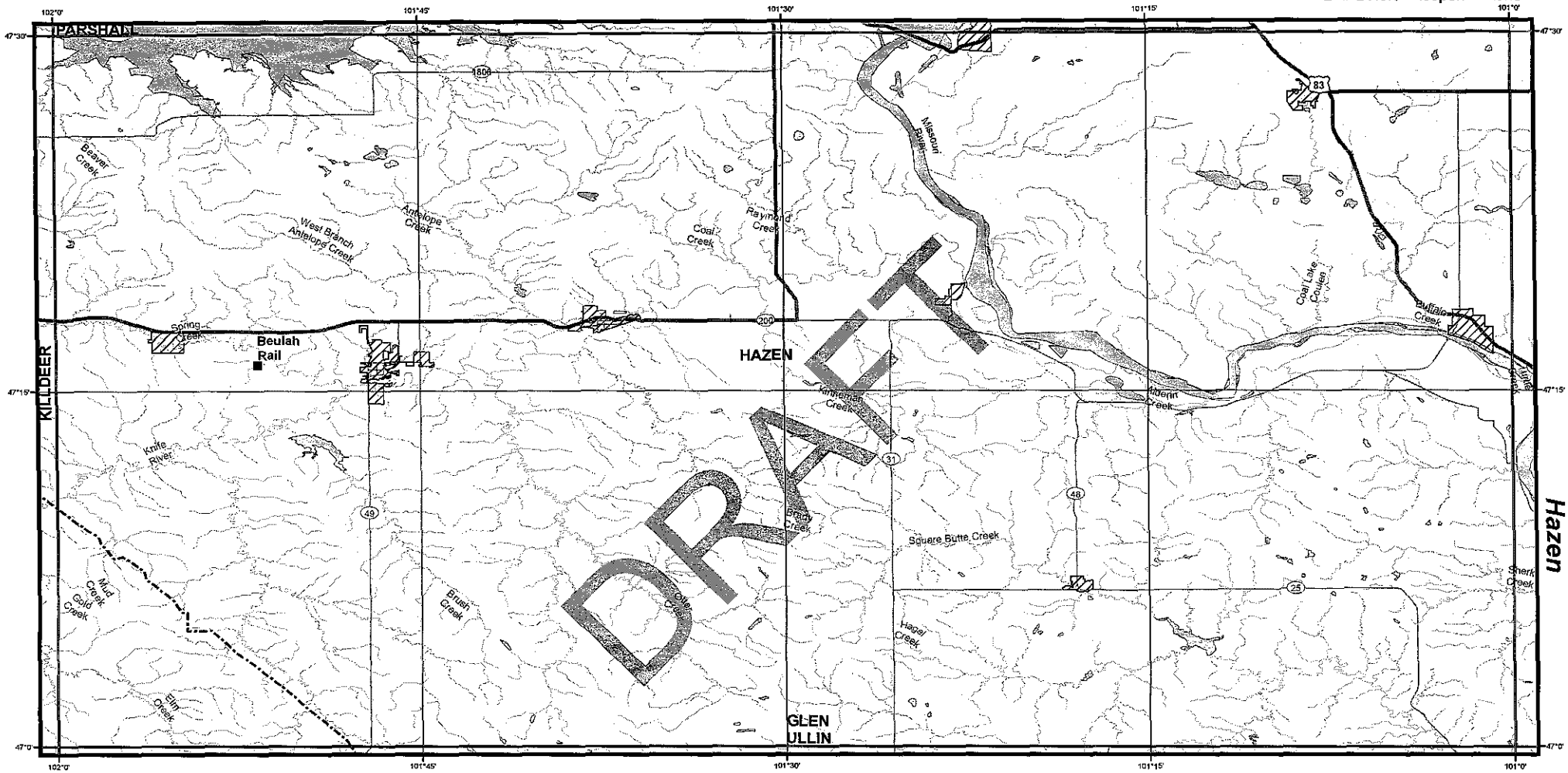
N W E S

LEGEND

- DAPL I Pipeline
- Stations
- Schools
- Water Intake
- Hospitals
- Parks/Recreation Areas
- OPA
- HPA
- ECO
- DWA

012836

DAPL North Response Zone



DAKOTA ACCESS, LLC

Hazen

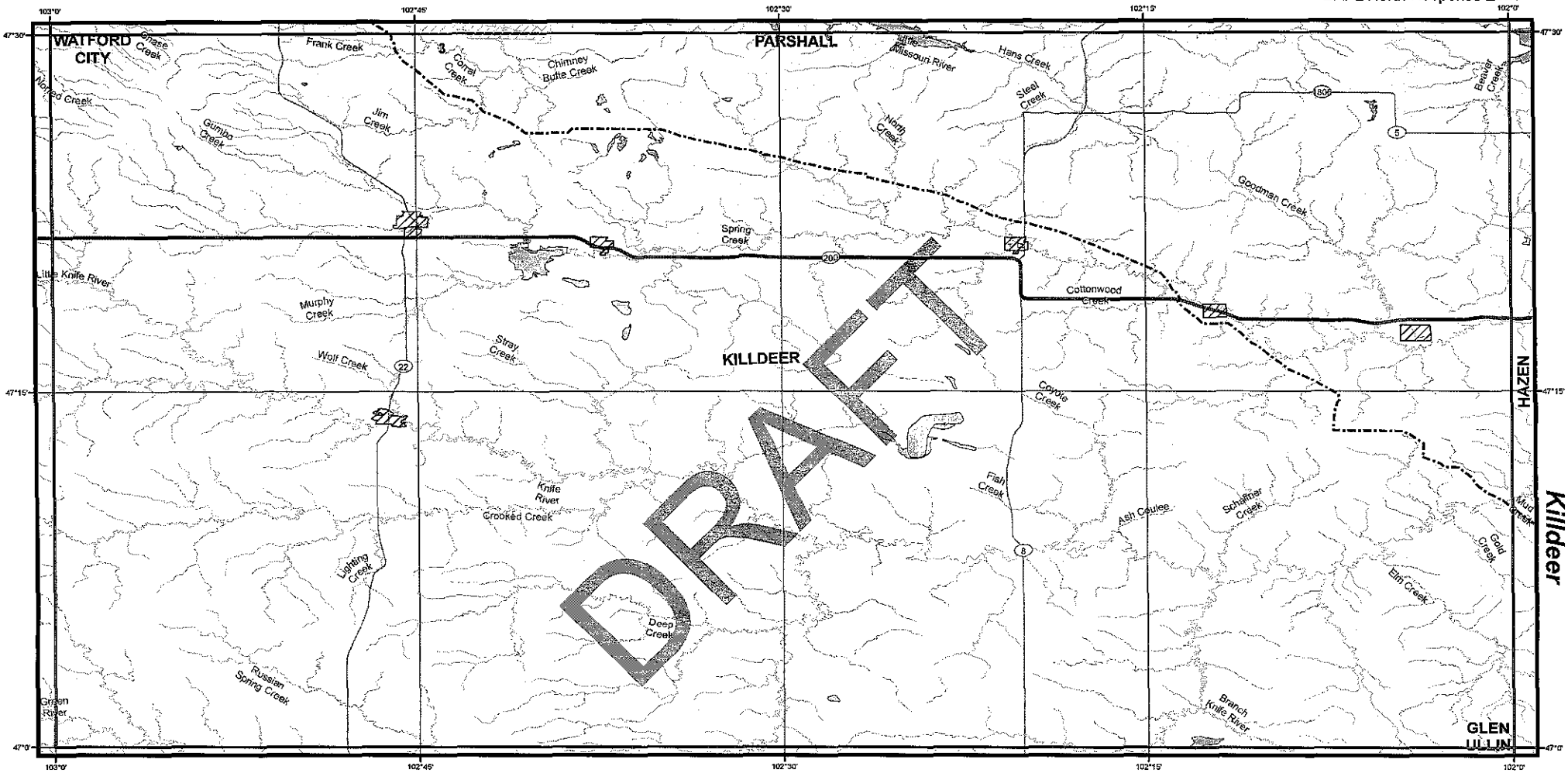
10 5 0 10 Miles

LEGEND

- DAPL
- Pipeline
- Stations
- Schools
- Water Intake
- Hospitals
- Parks/Recreation Areas
- OPA
- HPA
- ECO
- DWA

012837

DAPL North Response Zone



DAKOTA ACCESS, LLC

Killdeer

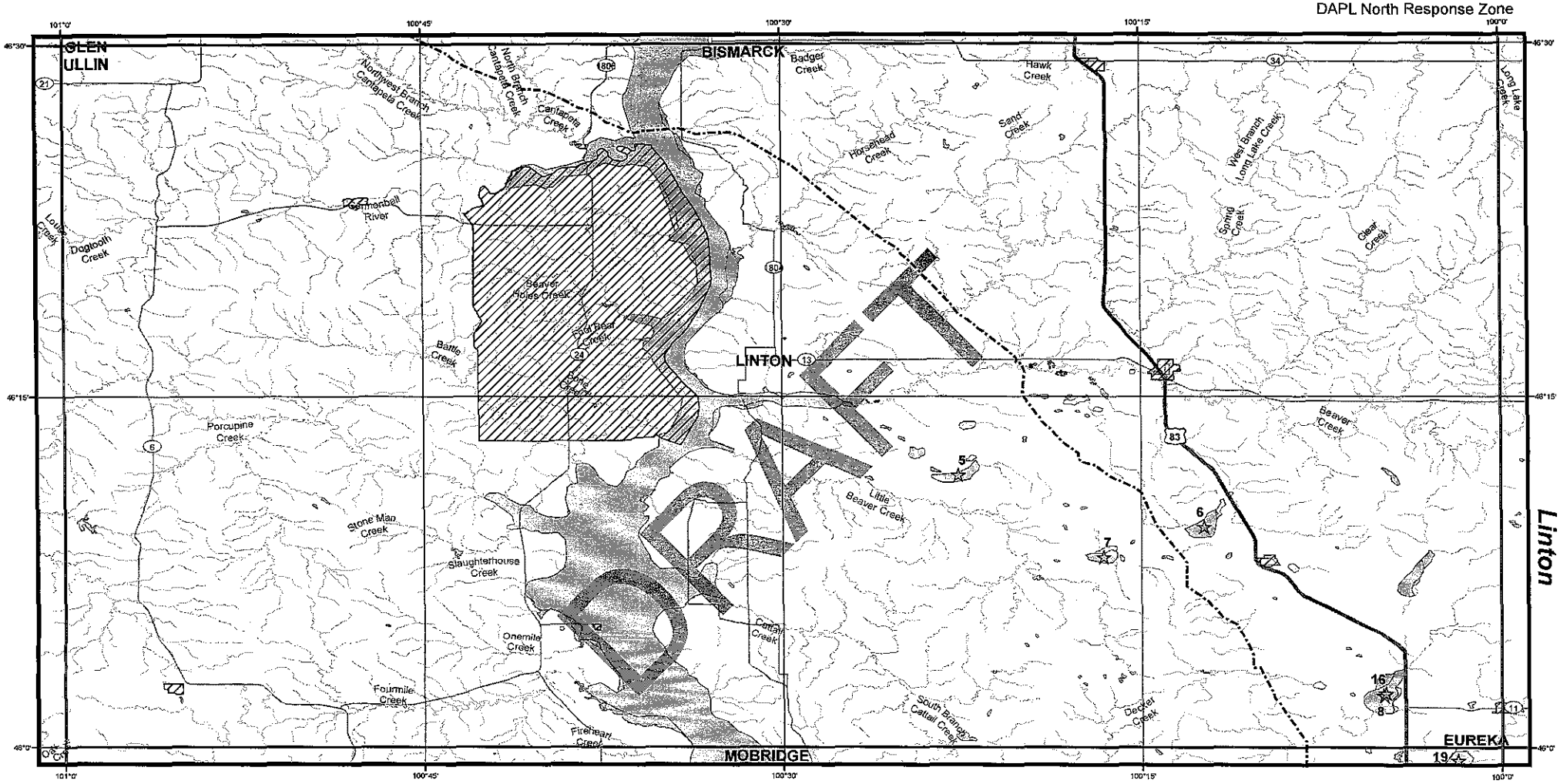
10 5 0 10 Miles

LEGEND

- DAPL I
- Stations
- Schools
- Water Intake
- Hospitals
- Pipeline
- Parks/Recreation Areas
- OPA
- HPA
- ECO
- DWA

012838

DAPL North Response Zone



DAKOTA ACCESS, LLC

Linton

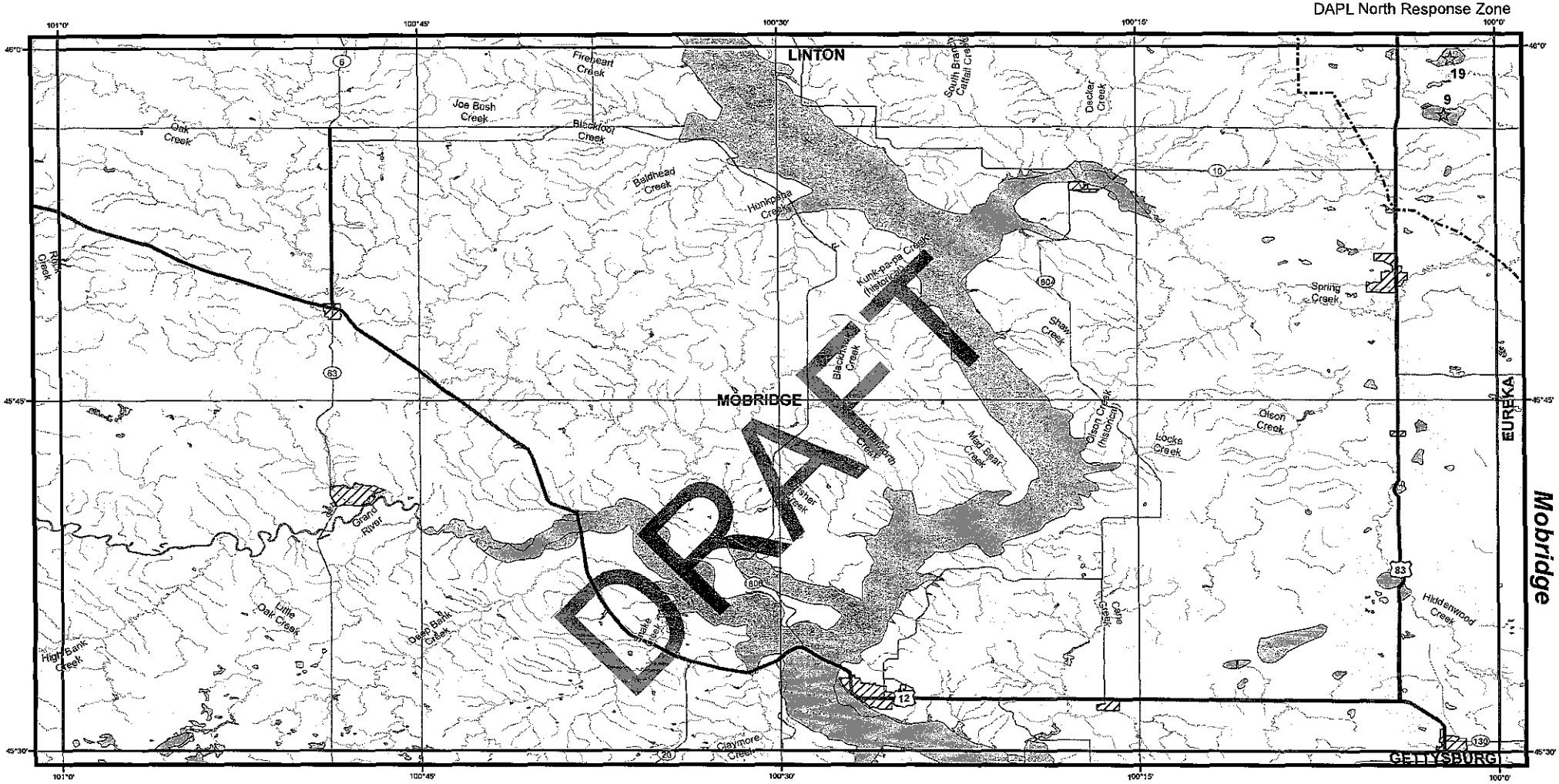
10 5 0 10 Miles

LEGEND

- DAPL
- Pipeline
- Stations
- Schools
- Water Intake
- Hospitals
- Parks/Recreation Areas
- OPA
- HPA
- ECO
- DWA

012839

DAPL North Response Zone



DAKOTA ACCESS, LLC

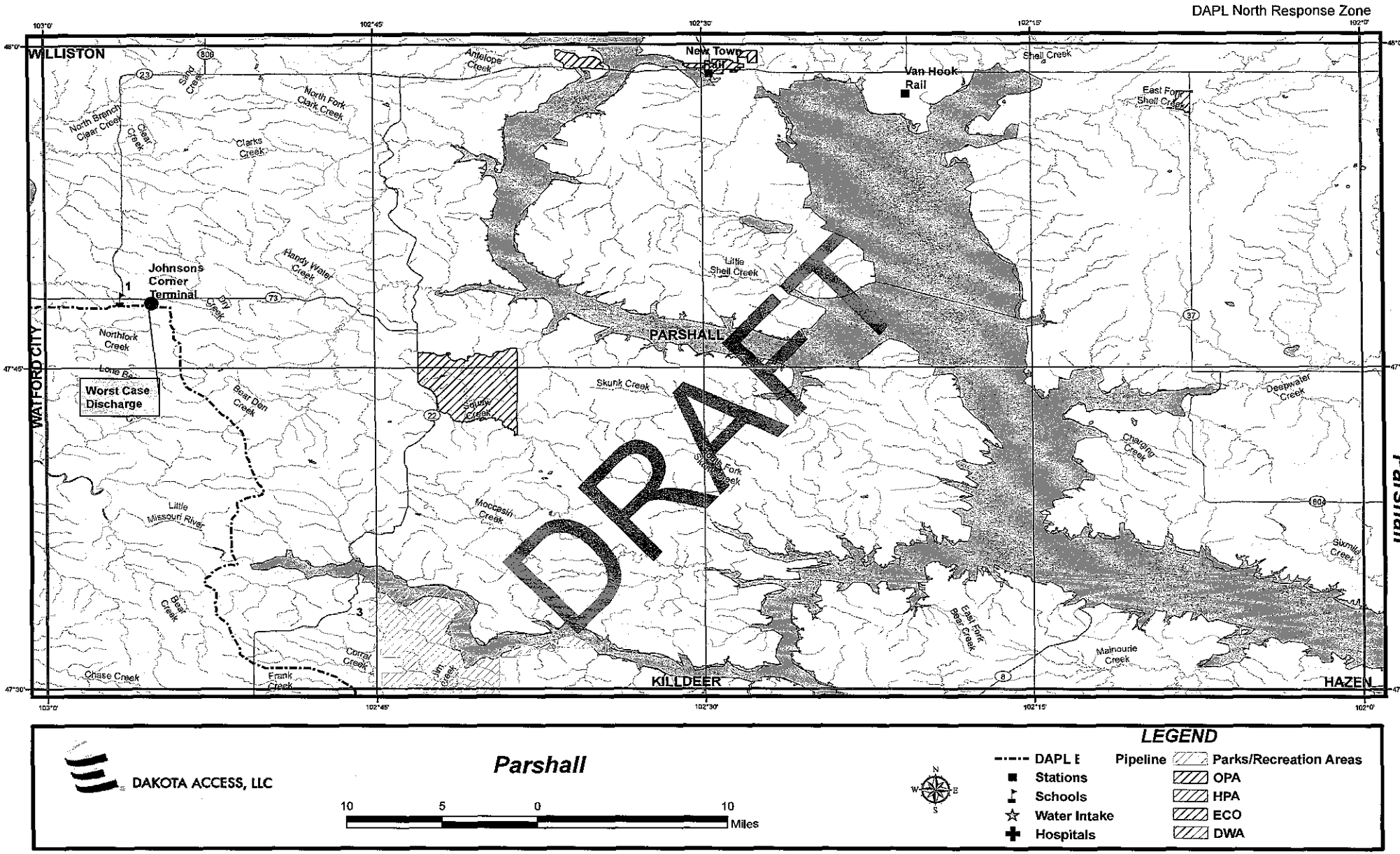
Mobridge

10 5 0 10 Miles

LEGEND

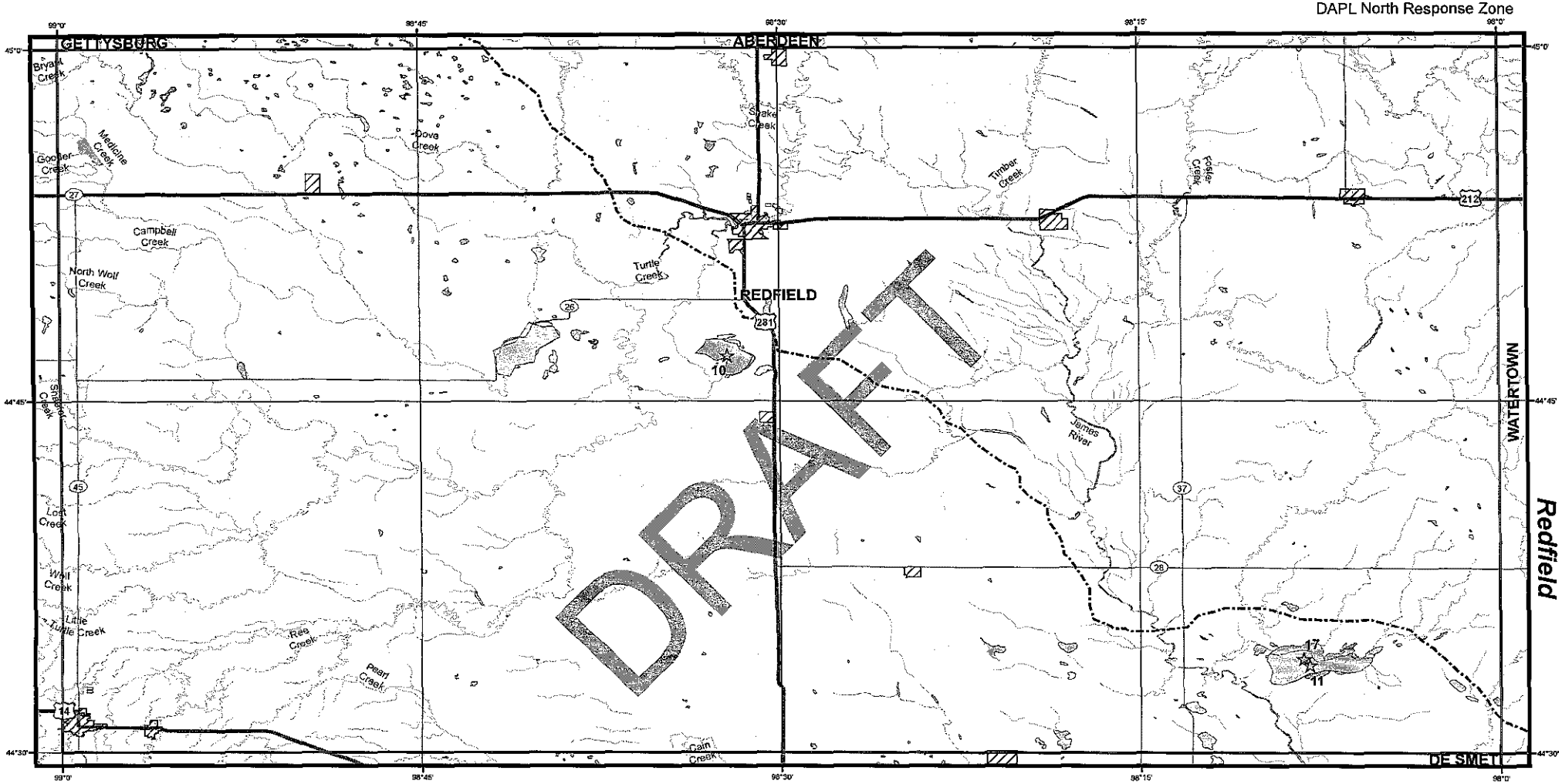
DAPL Pipeline		Parks/Recreation Areas
Stations		OPA
Schools		HPA
Water Intake		ECO
Hospitals		DWA

012840


DAPL North Response Zone
WILLISTON
WATFORD CITY
New Town Rail
Van Hook Rail
Johnsons Corner Terminal
Worst Case Discharge
PARSHALL
KILLDEER
HAZEN
Parshall
DRAFT
Antelope Creek
Shell Creek
East Fork Shell Creek
North Branch Clear Creek
Clear Creek
North Fork Clark Creek
Clarks Creek
Handy Water Creek
Little Shell Creek
Dry Creek
Northfork Creek
Lone Bo
Bear Den Creek
Squaw Creek
Skunk Creek
Deepwater Creek
Charging Creek
South Fork Shell Creek
Little Missouri River
Moccasin Creek
Sixmile Creek
East Fork Bear Creek
Malnourie Creek
Bear Creek
Corral Creek
Jim Creek
Chase Creek
Frank Creek
103°0'
102°45'
102°30'
102°15'
102°0'
48°0'
47°45'
47°30'
DAKOTA ACCESS, LLC
Parshall
10 5 0 10 Miles
LEGEND
DAPL Pipeline
Stations
Schools
Water Intake
Hospitals
Parks/Recreation Areas
OPA
HPA
ECO
DWA

012841

DAPL North Response Zone



DAKOTA ACCESS, LLC

Redfield

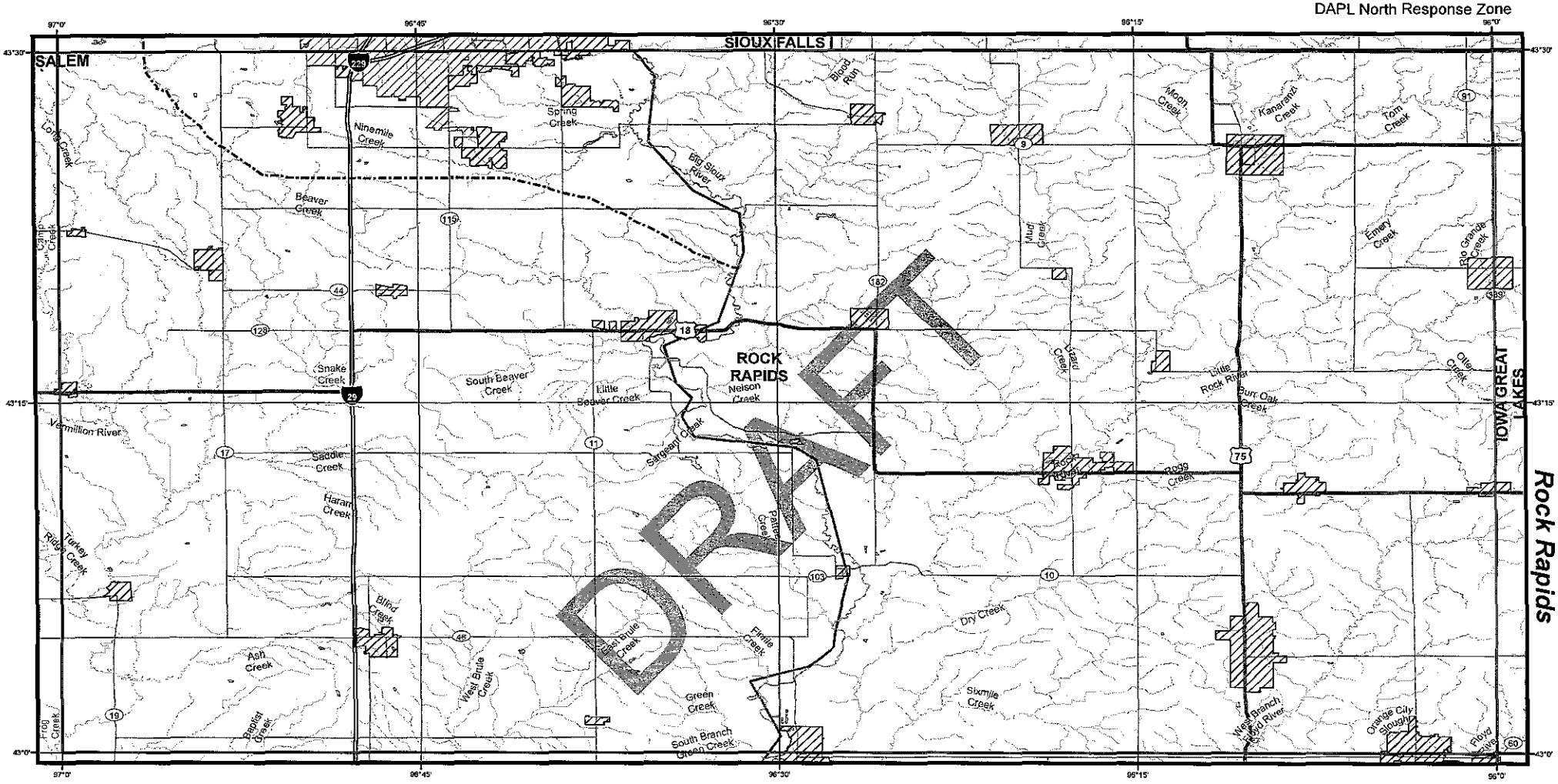
10 5 0 10 Miles

LEGEND

- DAPL I
- Stations
- Schools
- Water Intake
- Hospitals
- Pipeline
- Parks/Recreation Areas
- OPA
- HPA
- ECO
- DWA

012842

DAPL North Response Zone



DAKOTA ACCESS, LLC

Rock Rapids

10 5 0 10 Miles

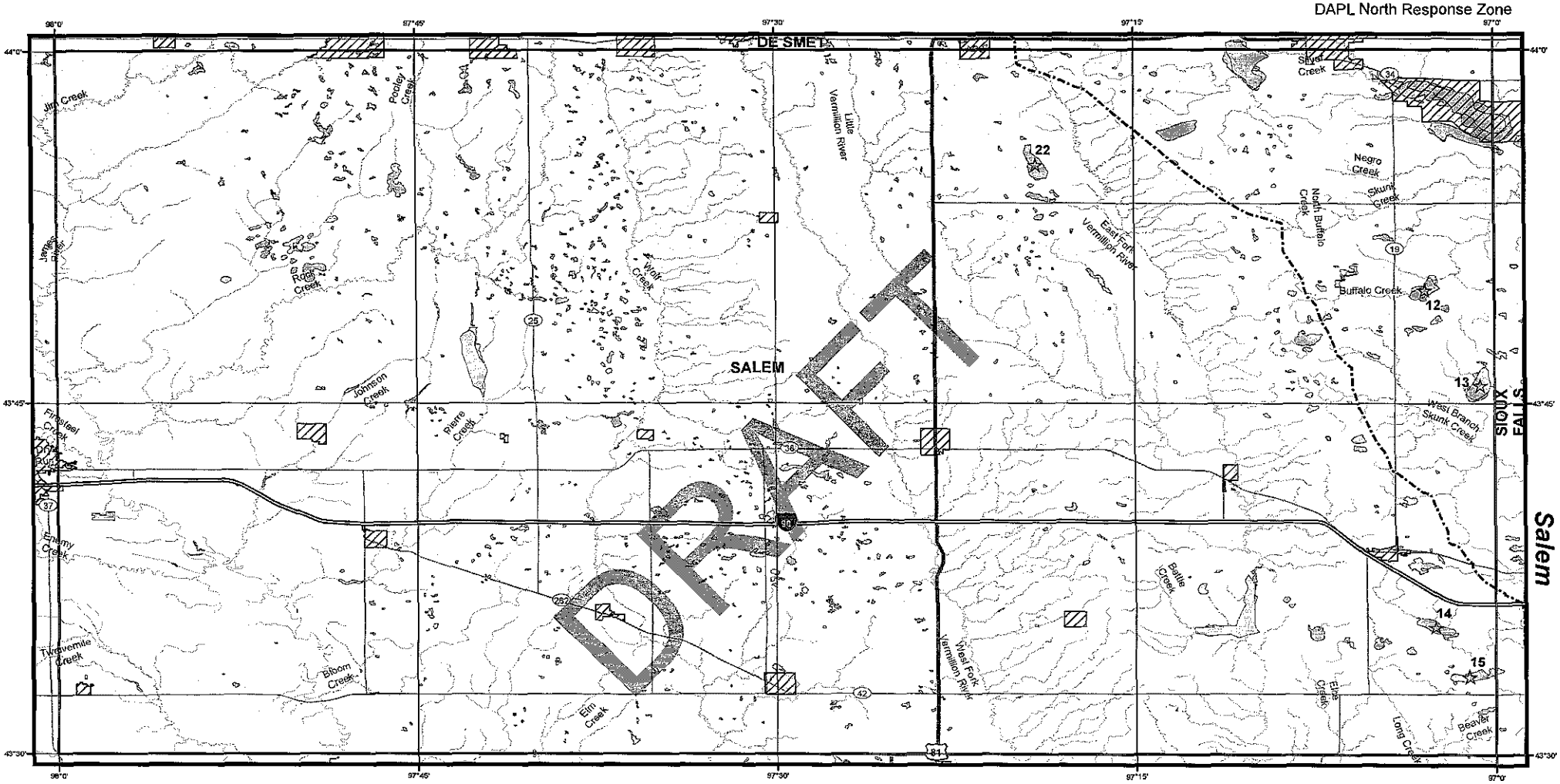
N W E S

LEGEND

- DAPL / Pipeline
- Stations
- Schools
- Water Intake
- Hospitals
- Parks/Recreation Areas
- OPA
- HPA
- ECO
- DWA

012843

DAPL North Response Zone



DAKOTA ACCESS, LLC

Salem

10 5 0 10 Miles

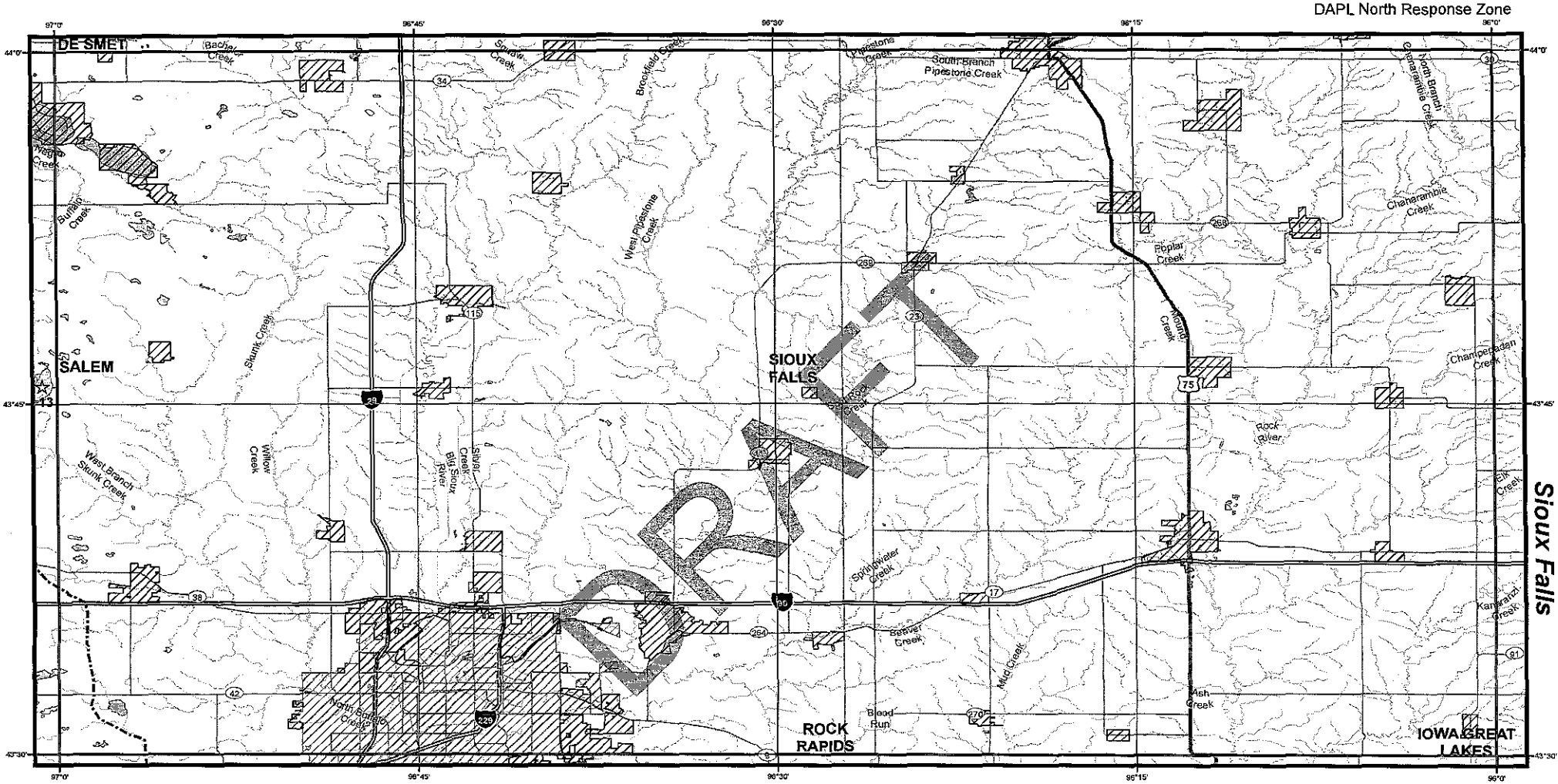
N W E S

LEGEND

DAPL	Pipeline	Parks/Recreation Areas
Stations		OPA
Schools		HPA
Water Intake		ECO
Hospitals		DWA

012844

DAPL North Response Zone



DAKOTA ACCESS, LLC

Sioux Falls

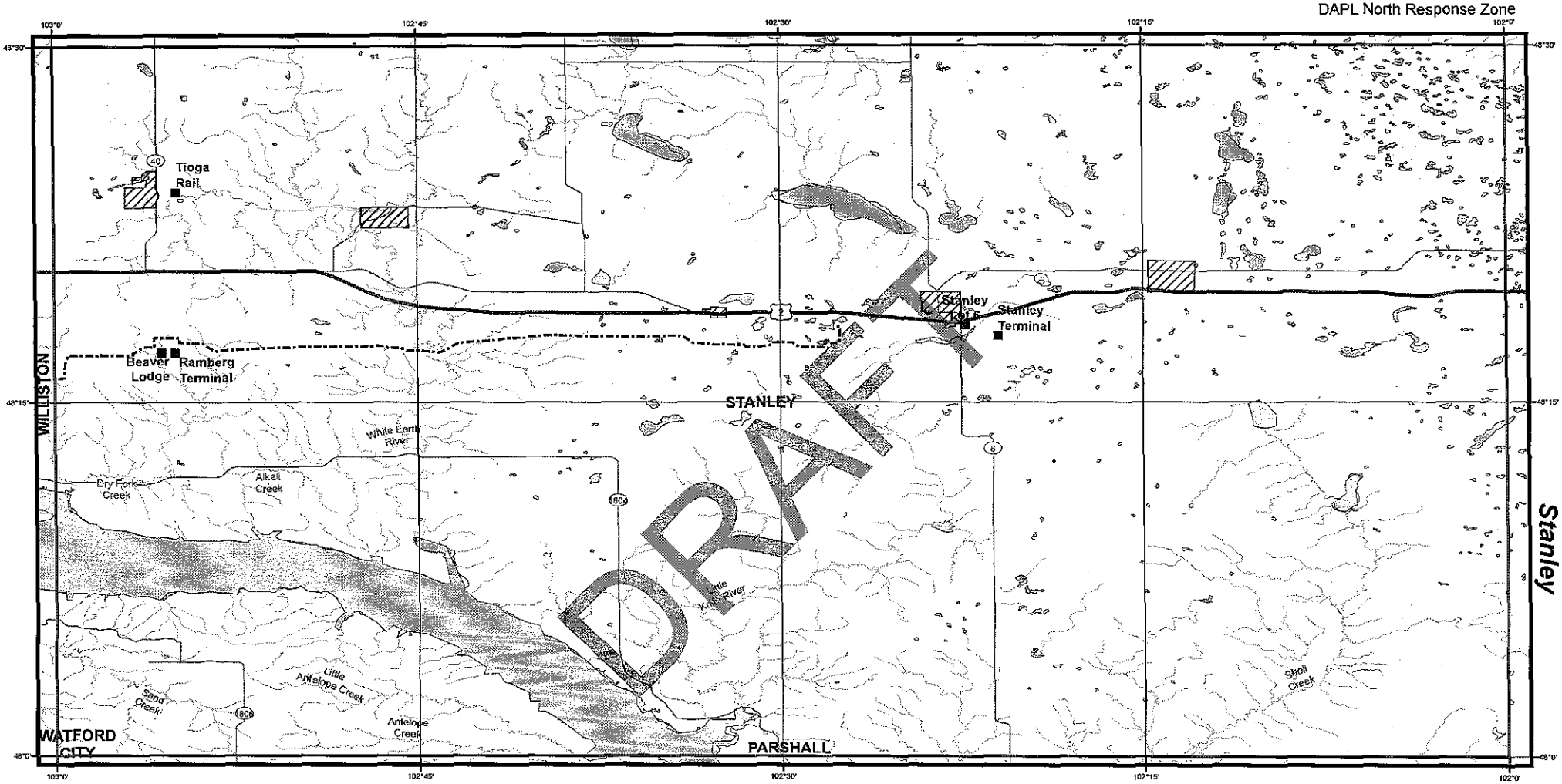
10 5 0 10 Miles

LEGEND

- DAPL Pipeline
- Stations
- Schools
- Water Intake
- Hospitals
- Parks/Recreation Areas
- OPA
- HPA
- ECO
- DWA

012845

DAPL North Response Zone



DAKOTA ACCESS, LLC

Stanley

10 5 0 10 Miles

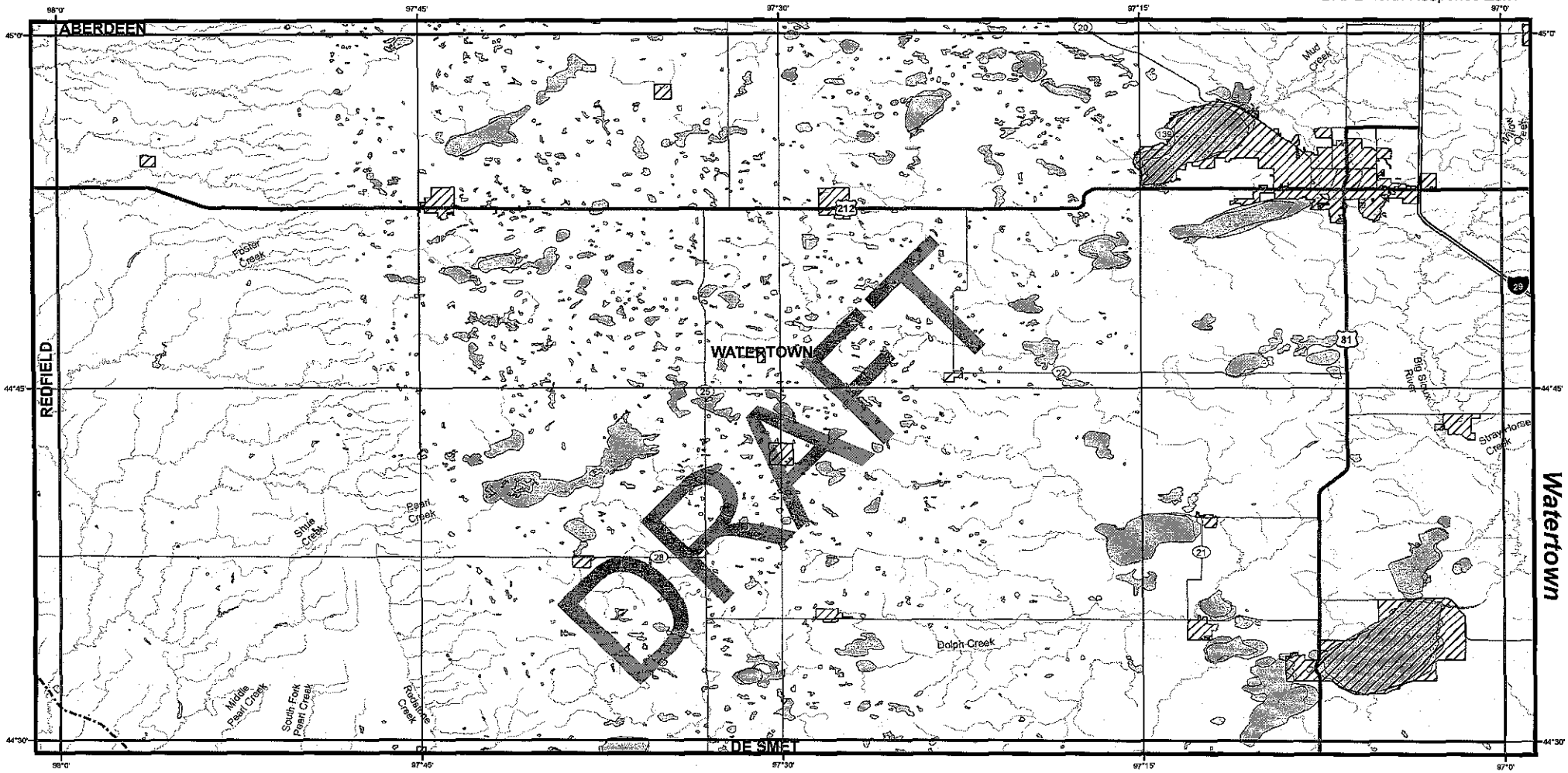
N W E S

LEGEND

DAPL I	Pipeline	Parks/Recreation Areas
Stations		OPA
Schools		HPA
Water Intake		ECO
Hospitals		DWA

012846

DAPL North Response Zone



DAKOTA ACCESS, LLC

Watertown

10 5 0 10 Miles

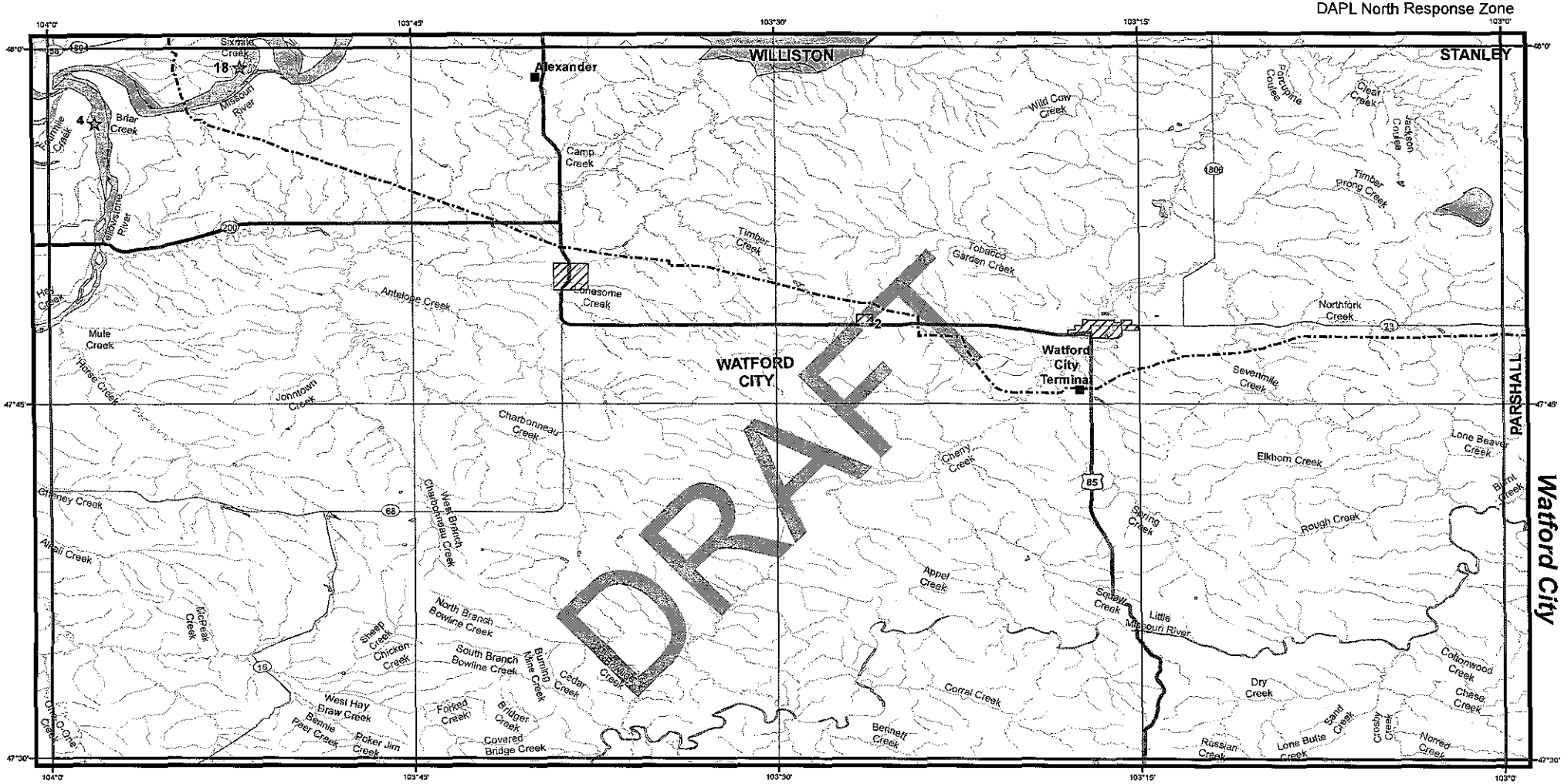
N W E S

LEGEND

- DAPL Pipeline
- Stations
- Schools
- Water Intake
- Hospitals
- Parks/Recreation Areas
- OPA
- HPA
- ECO
- DWA

012847

DAPL North Response Zone



DAKOTA ACCESS, LLC

Watford City

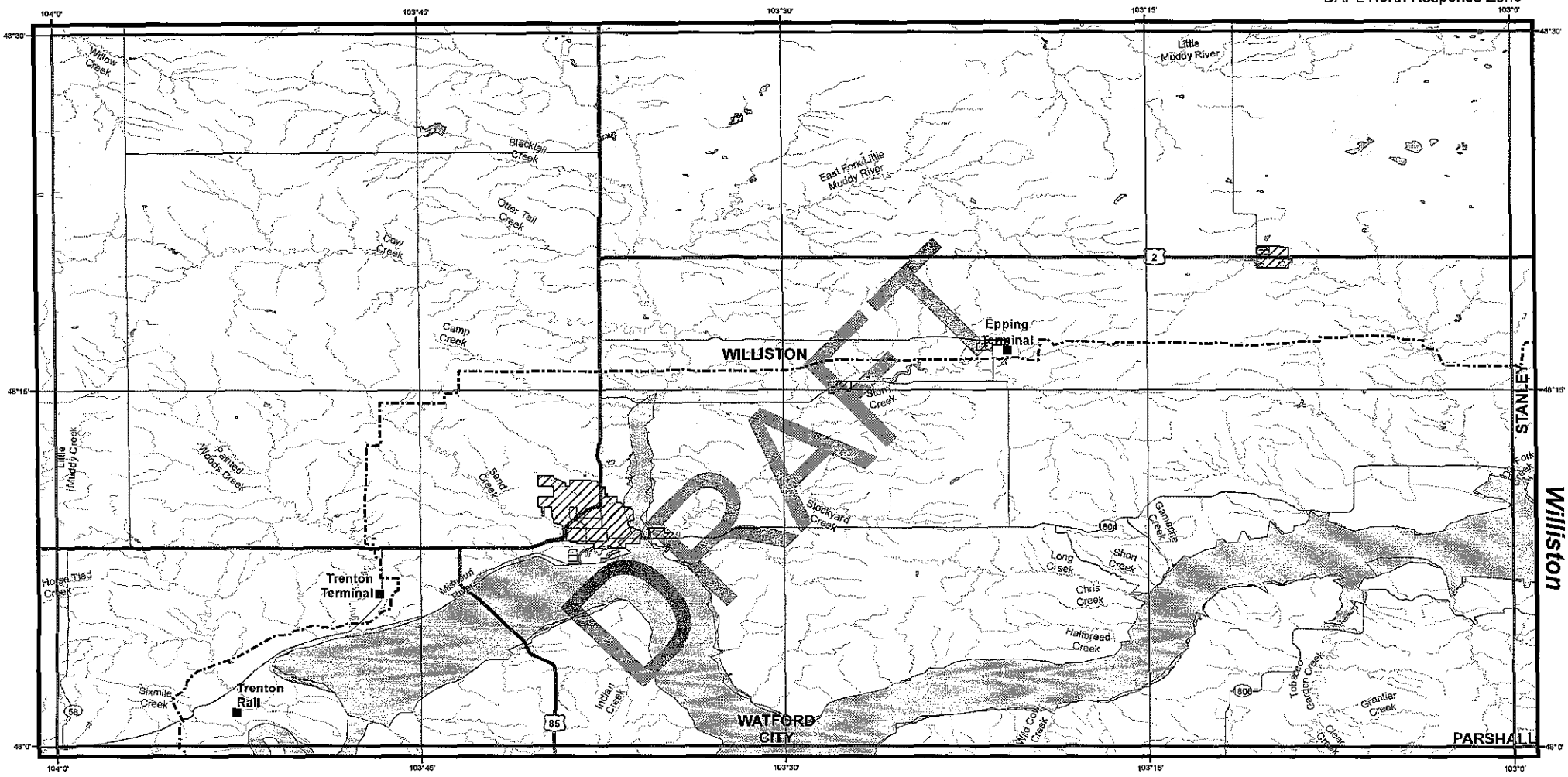
10 5 0 10 Miles

LEGEND

DAPL I	Pipeline	Parks/Recreation Areas	
Stations		OPA	
Schools		HPA	
Water Intake		ECO	
Hospitals		DWA	

012848

DAPL North Response Zone



DAKOTA ACCESS, LLC

Williston

10 5 0 10 Miles

N W E S

LEGEND

DAPL	Pipeline	Parks/Recreation Areas	
Stations		OPA	
Schools		HPA	
Water Intake		ECO	
Hospitals		DWA	

012849

DAPL North Map References

Schools	
Map Number	**Name**
1	Johnson Corners Christian Academy
Parks	
Map Number	**Name**
2	Fort Lincoln State Park
3	Little Misssouri State Park
Municipal Water Intake	
Map Number	**System Name**
4	Yellowstone River
5	Walther Slough
6	Baumgartner Lake
7	Schwahn Lake
8	Rice Lake
9	Unknown
10	Twin Lakes
11	Lake Byron
12	Buffalo Lake
13	Clear Lake
14	Grass Lake
15	Fensterman Slough
16	Rice Lake
17	Byron, Lake
18	Missouri River
19	Lake Intermittent
20	Lake Intermittent
21	Lake Intermittent
22	Lake Intermittent

Appendix F- Standard Incident Debriefing Form

Drill/Exercise/Incident Response PREP Self-Assessment Form

Exercise/Drill Title:	
Location:	
Date of Exercise/Drill:	
Starting Time:	**Ending Time:**
Date Evaluation Completed:	
Evaluator Name:	**Company:**
Evaluator Name:	**Company:**
Evaluator Name:	**Company:**
Evaluator Name:	**Company:**
Type of Exercise/Drill:	
☐ Table Top Drill ☐ Equipment Deployment ☐ Emergency Procedures ☐ Actual Spill/Release ☐ Qualified Individual ☐ Emergency Telephone Number Verification Exercise/Drill was: ☐ Announced ☐ Unannounced Scenario: ☐ Average Most Probable ☐ Maximum Most Probable ☐ Worst Case	
Summary of Exercise/Incident:	
• •	

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Drill/Exercise/Incident Response PREP Self-Assessment Form

1. Notifications: *Test the notifications procedures identified in the Area Contingency Plan (ACP) and the Facility Response Plan (FRP), where applicable.* **NRC Report # 1075053**	
Were the notification procedures identified in the FRP tested?	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Was the spill response organization, including Response Contractor notified in a timely manner, following plan procedures?	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Notifications to government agencies were made in a timely manner following plan procedures?	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Observations identified:	
1. 1 Agencies Notified: Identify all agencies that were notified:	
Federal: ☐ EPA ☐ USCG ☐ PHMSA ☐ OSHA ☐ Department of Homeland Security ☐ NRC **Report #:** State: ☐ MI- DEP ☐ ☐ State Police ☐ Other (Canadian Officials - please list) Local: ☐ LEPC ☐ Office of Emergency Management ☐ Fire Department ☐ Police Department ☐ Sherriff's Dept. ☐ Other:	
Observations identified:	
2. Staff Mobilization: *Demonstrate the ability to assemble the spill response organization identified in the Facility Response Plan.*	
Was the Spill Management Team (SPMT) identified in the FRP?	☐ Yes ☐ No ☐ NA
Was the SPMT mobilized for the incident or event?	☐ Yes ☐ No ☐ NA
Observations identified:	
3. Ability to Operate Within the Response Management System Described in the Plan:	
3.1 Unified Command: Demonstrate the ability to form or interface within a Unified Command. (Simulated interaction with Fire Chief, Police and responding local agencies)	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to consolidate the concerns of the other members of the unified command into a unified strategic plan with tactical operations.	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
3.1.1 Federal Representation: Was a Federal Representative involved in the drill/incident?	☐ Yes ☐ No ☐ NA ☐ Not Tested
Demonstrate the ability to function within the Unified Command structure, and reflect federal concerns and goals.	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
3.1.2 State Representation: Was a State Representative involved in the drill/ incident.	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed

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Drill/Exercise/Incident Response PREP Self-Assessment Form

Demonstrate the ability to function within the Unified Command structure, and reflect state concerns and goals. (Simulated)	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
3.1.3 Local Government Representation: Was a Local Representative involved in the drill/incident?	☐ Yes ☐ No ☐ NA ☐ Not Tested
Demonstrate the ability to function within the Unified Command structure and reflect local government concerns and goals.	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
List the federal, state and local representatives involved: Local Government -.	
Observations identified:	
3.1.4 Responsible Party Representative: Was a Responsible Party Representative involved in the drill/incident?	☐ Yes ☐ No ☐ NA ☐ Not Tested
Demonstrate the ability to function within the Unified Command structure and reflect responsibility party concerns and goals.	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
List the federal, state and local representatives involved: Responsible party representatives involved -.	
Observations identified:	
3.2 Response Management System:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Did the SPMT operate within the framework of the response management system identified in their respective plans?	
Observations identified:	
3.2.1 Operation Section:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to coordinate or direct operations related to the implementation of the IAP?	
Observations identified:	
3.2.2. Planning Section:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to consolidate the various concerns of the members of the unified command into "joint" planning recommendations and specific long-range strategic plans?	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to develop short-range tactical plans for the operations division.	
Observations identified:	

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Drill/Exercise/Incident Response PREP Self-Assessment Form

Planning – Situation Unit	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to collect, compile, display and disseminate current response information including: the amount and type of product spilled/released, location, trajectory, natural resources impacted, locations of the spill response command post, staging and operational areas utilizing written forms, charts, tables and photographs in a location and scale that is sufficient for the needs of the response management team, including maintenance of the incident situation. display.	
Observations identified: **Note: Examine if having a Situational Unit Leader would benefit the process for future exercises.**	
Planning – Resource Unit	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to maintain the status of all incident resources.	
Observations identified:	
Planning – Environmental Unit	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to prepare environmental data including assessments, modeling, surveillance, resources at risk, and impacts on environmentally sensitive sites.	
Observations identified:	
Planning – General Planning	
Observations identified:	
3.2.3 Logistics:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to provide the necessary support of both the short-term and long-term action plans.	
Observations identified:	
3.2.4 Finance:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to document the daily expenditures of the organization, forecast and provide cost estimates for continuing operations.	
Observations identified:	
3.2.5 Public Affairs:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to form a joint information center and provide the necessary interface between the unified command and the media.	

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Drill/Exercise/Incident Response PREP Self-Assessment Form

Observations identified:	
3.2.6 Safety:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to monitor, assess and/or anticipate hazardous and unsafe situations and ensure compliance with safety standards.	
Observations identified:	
3.2.7 Legal:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to provide the unified command with suitable legal advice and assistance.	
Observations identified:	
3.2.8 Liaison Affairs:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to integrate assisting and or cooperating agency Representatives into the organization.	
Observations identified:	
4. Discharge Control:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability of the spill response organization to control and stop the discharge at the source.	
Observations identified:	
4.1 Emergency Services:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to assemble and deploy emergency resources identified in the FRP.	
Observations identified:	
4.2 Firefighting:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to assemble and deploy the firefighting resources identified in the response plan.	
Observations identified:	
4.3 Lightering:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Did the SPMT demonstrate the ability to assemble and deploy the lightering resources identified in the response plan.	

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Drill/Exercise/Incident Response PREP Self-Assessment Form

Observations identified:	
5. Assessment:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to provide an initial assessment of the discharge and provide continuing assessments of the effectiveness of the tactical operations.	
Observations identified:	
6. Containment:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to contain the discharge at the source or in various locations for recovery operations.	
Observations identified: Lewis Environmental did a nice job planning out	
7. Recovery:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to recover, mitigate, and remove the discharged product? Includes mitigation and removal activities, e.g. dispersant use, In-Situ Burn (ISB) or bioremediation use.	
Observations identified:	
7.1 On-Water Recovery:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to assemble, deploy and effectively operate the on-water response resources identified in the FRP.	
Observations identified:	
7.2 Shore-Based Recovery:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to assemble and deploy the shore side clean-up resources identified in the FRP?	
Observations identified:	
8. Protection:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to protect the environmentally and eco-sensitive areas identified in the ACP and the FRP.	
Observations identified: .	
8.1 Protective Booming:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to implement the protection strategies contained in the ACP and the FRP.	
Observations identified:	
8.2 Water Intake Protection:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed

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Drill/Exercise/Incident Response PREP Self-Assessment Form

Demonstrate the ability to quickly identify water intakes and implement the proper protection procedures from the ACP, FRP or develop a plan for use.	
Observations identified: Note: Team discussed reservoir dam protection.	
8.3 Wildlife Recovery and Rehabilitation:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Did the spill response organization demonstrate the ability to quickly identify these resources at risk and implement the proper protection procedures from the ACP, FRP or develop a plan for use.	
Observations identified:	
8.4 Population Protection (Protect Public Health and Safety):	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to quickly identify health hazards associated with the discharged product and the population at risk from these hazards, and to implement the proper protection procedures or develop a plan for use?	
Observations identified:	
9. Disposal:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability of the spill response organization to dispose of the recovered material and contaminated debris? Note: Discussed potential clean-up of any contaminated materials used during response.	
Observations identified:	
Disposal - Waste Management:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to properly manage the recovered material and contaminated debris, and to develop the waste management plan for approval by the Unified Command? The plan will include appropriate procedures for obtaining permits and/or waivers, water characterization, waste minimization, volumetric determination, and overall waste management and final disposition, as appropriate. Note: Interface with the liaison officer to facilitate contacts with appropriate state and local agencies.	
Observations identified:	
10. Communications:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to establish an effective communications system for the spill response organization?	
Observations identified:	
10.1 Internal Communications:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed

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Drill/Exercise/Incident Response PREP Self-Assessment Form

Demonstrate the ability to establish an intra-organization communications system. This encompasses communications at the command post and between the command post and deployed resources.	
Observations identified:	
10.2 External Communications:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to establish communications both within the response organization and other entities (e.g., RRT, claimants, media, regional or HQ agency offices, non-governmental organizations, etc.).	
Observations identified:	
11. Transportation:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to provide effective multi-mode transportation both for execution of the discharge and support functions.	
Observations identified:	
11.1 Land Transportation:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to provide effective land transportation for all elements of the response.	
Observations identified:	
11.2 Waterborne Transportation:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to provide effective waterborne transportation for all elements of the response.	
Observations identified:	
11.3 Aviation Operations	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to provide effective airborne transportation and/or spill tracking for the response.	
Observations identified:	
12. Personnel Support:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to provide the necessary support of all personnel associated with the response.	
Observations identified:	
12.1 Management:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to provide administrative management of all personnel involved in the response. This requirement includes the ability to move personnel	

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Drill/Exercise/Incident Response PREP Self-Assessment Form

into or out of the response organization with established procedures.	
Observations identified:	
12.2 Lodging (Berthing):	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to provide overnight accommodations on a continuing basis for a sustained response.	
Observations identified:	
12.3 Food (Messing)	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to provide suitable feeding arrangements for personnel involved with the management of the response?	
Observations identified:	
12.4 Operational and Administrative Spaces:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to provide suitable operational and administrative spaces for personnel involved with the management of the response.	
Observations identified:	
12.5 Emergency Procedures:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to provide emergency services for personnel involved in the response.	
Observations identified: Team discussed residential evacuations and sheltering in place plans.	
13. Equipment Maintenance and Support:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to maintain and support all equipment associated with the response.	
Observations identified:	
13.1 Response Equipment:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to provide effective maintenance and support for all response equipment.	
Observations identified:	
13.2 Response Equipment:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to provide effective maintenance and support for all equipment that supports the response? This requirement includes communications equipment, transportation equipment, administrative equipment, etc.	
Observations identified:	

Drill/Exercise/Incident Response PREP Self-Assessment Form

14. Procurement:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to establish an effective procurement system.	
Observations identified:	
14.1 Personnel:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to procure sufficient personnel to mount and sustain an organized response? Includes insuring that all personnel have qualifications and training required for their position within the response organization.	
Observations identified:	
14.2 Response Equipment:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to procure sufficient response equipment to mount and sustain an organized response.	
Observations identified:	
14.3 Support Equipment:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to procure sufficient support equipment to support and sustain an organized response.	
Observations identified:	
15. Documentation:	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability of the spill response organization to document all operational and support aspects of the response.	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to provide detailed records of decisions and actions taken.	☐ Yes ☐ No ☐ NA ☐ Not Tested ☐ Not Observed
Demonstrate the ability to collect, compile and preserve all documents associated With the response?	
Observations identified:	

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Appendix G- Incident Management Team (IMT)

	TEAM A	TEAM B	TEAM C	TEAM D
IC				
OSC				
OSC-B/U				
PSC				
PSC-B/U				
STUL				
STUL-B/U				
RSUL				
RSUL-B/U				
DCUL				
DCUL-B/U				
EUL				
LSC				
LSC- B/U				
LNO				
LNO-Staff				
TechSpec				
ROW				
ROW				
SFO				
SFO - B/U				
FSC				
PIO				
Situation- Staff				
IT				
Comms				