NAVIGATOR HEARTLAND GREENWAY PIPELINE SYSTEM: APPLICATION SUBMITTED UNDER SDCL CHAPTER 49-41B

EXHIBIT C

Supplementary Tables

Soil Characteristics for Each Soil Map Unit Crossed by the HGPS Centerline

Table C-1
Soils Characteristics of Soil Map Units Crossed by the Heartland Greenway Pipeline System Centerlines

Map Unit Name	Map Unit Symbol	Pipeline Crossing Length (miles)	Prime Farmland [a]	Hydric Soils [a]	Soil Rutting Hazard [a]	Compaction Potential	Water Erodibility Potential [a, b]	Wind Erodibility Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Re-vegetation Potential
Aurora to Hartley											
Brookings County											
Brookings silty clay loam, 0 to 2 percent slopes	Bf	0.92	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Buse-Barnes loams, 6 to 9 percent slopes	BgC	0.07	Farmland of Statewide Importance	No	High	Moderate	Moderate	Moderate	Yes	No	High
Doland loam, 2 to 6 percent slopes	DoB	0.21	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Flandreau-Maddock complex, 2 to 6 percent slopes	FmB	<0.01	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Hamerly-Badger complex, 0 to 2 percent slopes	Hb	0.09	Prime Farmland if Drained	No	High	Moderate	Moderate	Moderate	No	No	High
Kranzburg-Brookings silty clay loams, 0 to 2 percent slopes	KrA	0.13	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Kranzburg-Brookings silty clay loams, 1 to 6 percent slopes	KrB	0.92	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High

Table C-1
Soils Characteristics of Soil Map Units Crossed by the Heartland Greenway Pipeline System Centerlines

Map Unit Name	Map Unit Symbol	Pipeline Crossing Length (miles)	Prime Farmland [a]	Hydric Soils [a]	Soil Rutting Hazard [a]	Compaction Potential	Water Erodibility Potential [a, b]	Wind Erodibility Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Re-vegetation Potential
Mckranz-Badger silty clay loams, 0 to 2 percent slopes	Mt	0.17	Prime Farmland if Drained	No	High	Moderate	High	Moderate	No	No	High
Strayhoss loam, 2 to 6 percent slopes	SrB	0.54	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Strayhoss-Maddock complex, 2 to 6 percent slopes	StB	0.36	Prime Farmland if Irrigated	No	High	Moderate	High	Low	No	No	High
Vienna-Brookings complex, 1 to 6 percent slopes	VbB	0.45	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Rauville silty clay loam, coteau, 0 to 1 percent slopes, frequently flooded	Z150A	0.27	Not Prime Farmland	Yes	High	High	Moderate	Moderate	No	No	Low
Lamoure silty clay loam, coteau, 0 to 1 percent slopes, occasionally flooded	Z152A	0.09	Prime Farmland if Drained	No	High	Moderate	Moderate	Moderate	No	No	High

Table C-1
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Map Unit Name	Map Unit Symbol	Pipeline Crossing Length (miles)	Prime Farmland [a]	Hydric Soils [a]	Soil Rutting Hazard [a]	Compaction Potential	Water Erodibility Potential [a, b]	Wind Erodibility Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Re-vegetation Potential
Lamoure-Rauville silty clay loams, channeled, 0 to 2 percent slopes, frequently flooded	Z153A	0.41	Not Prime Farmland	Yes	High	High	Moderate	Moderate	No	No	Low
Lowe, occasionally flooded-Ludden, frequently flooded, complex, 0 to 1 percent slopes	Z155A	0.39	Prime Farmland if Drained	Yes	High	High	Moderate	Moderate	No	No	High
Marysland loam, 0 to 1 percent slopes, occasionally flooded	Z158A	0.10	Prime Farmland if Drained	Yes	High	High	Moderate	Moderate	No	No	High
Divide loam, 0 to 2 percent slopes, occasionally flooded	Z159A	0.57	Prime Farmland if Drained	No	High	Moderate	Moderate	Moderate	No	No	High
Moritz, occasionally flooded-Lamoure, frequently flooded, complex, 0 to 2 percent slopes	Z160A	0.10	Prime Farmland if Drained	No	High	Moderate	Moderate	Moderate	No	No	High

Table C-1
Soils Characteristics of Soil Map Units Crossed by the Heartland Greenway Pipeline System Centerlines

Map Unit Name	Map Unit Symbol	Pipeline Crossing Length (miles)	Prime Farmland [a]	Hydric Soils [a]	Soil Rutting Hazard [a]	Compaction Potential	Water Erodibility Potential [a, b]	Wind Erodibility Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Re-vegetation Potential
Fordtown loam, 0 to 2 percent slopes, rarely flooded	Z166A	0.95	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Renshaw-Fordville loams, coteau, 0 to 2 percent slopes	Z171A	1.00	Prime farmland if Irrigated	No	High	Moderate	Moderate	Low	No	No	High
Renshaw-Fordville loams, coteau, 2 to 6 percent slopes	Z171B	0.23	Prime farmland if Irrigated	No	High	Moderate	Moderate	Low	No	No	High
Moody County											
Alcester silty clay loam, cool, 0 to 2 percent slopes	Ac	0.12	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Alwilda sandy loam	Ad	0.05	Prime Farmland if Irrigated	No	Moderate	Moderate	Low	Moderate	No	No	High
Blendon fine sandy loam, cool, 0 to 3 percent slopes	BeA	0.07	Prime Farmland	No	Moderate	Moderate	Moderate	Moderate	No	No	High
Bon loam, 0 to 2 percent slopes, occasionally flooded	Bo	0.51	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High

Table C-1
Soils Characteristics of Soil Map Units Crossed by the Heartland Greenway Pipeline System Centerlines

Map Unit Name	Map Unit Symbol	Pipeline Crossing Length (miles)	Prime Farmland [a]	Hydric Soils [a]	Soil Rutting Hazard [a]	Compaction Potential	Water Erodibility Potential [a, b]	Wind Erodibility Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Re-vegetation Potential
Chaska loam, channeled, 0 to 3 percent slopes, frequently flooded	Ch	0.20	Not Prime Farmland	Yes	High	High	Moderate	Moderate	No	No	Low
Clamo silty clay	Cm	0.13	Prime Farmland if Drained	Yes	High	High	Moderate	Moderate	No	No	High
Davis loam, 0 to 2 percent slopes	DaA	0.19	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Davis loam, 2 to 9 percent slopes	DaB	0.08	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Davison-Crossplain clay loams	Dc	1.40	Prime Farmland if Drained	No	High	Moderate	Moderate	Moderate	No	No	High
Dempster silt loam, 0 to 2 percent slopes	DmA	0.04	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Dempster silt loam, 2 to 6 percent slopes	DmB	0.04	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Dimo clay loam	Do	0.15	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Doland loam, 2 to 6 percent slopes	DsB	0.92	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High

Table C-1
Soils Characteristics of Soil Map Units Crossed by the Heartland Greenway Pipeline System Centerlines

Map Unit Name	Map Unit Symbol	Pipeline Crossing Length (miles)	Prime Farmland [a]	Hydric Soils [a]	Soil Rutting Hazard [a]	Compaction Potential	Water Erodibility Potential [a, b]	Wind Erodibility Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Re-vegetation Potential
Doland-Bonilla loams, 0 to 2 percent slopes	DvA	0.88	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Enet loam, 0 to 2 percent slopes	EnA	0.10	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Flandreau loam, 0 to 2 percent slopes	FaA	0.22	Prime Farmland	No	High	Moderate	Moderate	Low	No	Yes	High
Flandreau loam, 2 to 6 percent slopes	FaB	1.28	Prime Farmland	No	High	Moderate	Moderate	Low	No	Yes	High
Flandreau-Maddock complex, 2 to 6 percent slopes	FmB	0.17	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Graceville silty clay loam	Ga	0.18	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Grovena loam, 2 to 6 percent slopes	GrB	0.31	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Grovena-Bonilla loams, 0 to 2 percent slopes	GvA	0.67	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Houdek clay loam, 0 to 2 percent slopes	HoA	0.46	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High

Table C-1
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Map Unit Name	Map Unit Symbol	Pipeline Crossing Length (miles)	Prime Farmland [a]	Hydric Soils [a]	Soil Rutting Hazard [a]	Compaction Potential	Water Erodibility Potential [a, b]	Wind Erodibility Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Re-vegetation Potential
Houdek clay loam, 2 to 6 percent slopes	HoB	5.57	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Houdek-Shindler clay loams, 5 to 9 percent slopes	HsC	1.07	Farmland of Statewide Importance	No	High	Moderate	Moderate	Low	No	No	High
Houdek-Shindler clay loams, 6 to 25 percent slopes	HsD	0.35	Not Prime Farmland	No	High	Moderate	Moderate	Low	Yes	No	Moderate
Houdek-Talmo complex, 6 to 40 percent slopes	HtD	0.05	Not Prime Farmland	No	High	Moderate	Moderate	Low	Yes	No	Moderate
Kranzburg-Brookings silty clay loams, 1 to 6 percent slopes	KaB	1.36	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Lamo silty clay loam, cool, 0 to 2 percent slopes, occasionally flooded	La	1.30	Prime Farmland if Drained	Yes	High	High	Moderate	Low	No	No	High
Lamo silty clay loam, frequently flooded	Lb	0.76	Not Prime Farmland	Yes	High	High	Moderate	Moderate	No	No	Low

Table C-1
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Map Unit Name	Map Unit Symbol	Pipeline Crossing Length (miles)	Prime Farmland [a]	Hydric Soils [a]	Soil Rutting Hazard [a]	Compaction Potential	Water Erodibility Potential [a, b]	Wind Erodibility Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Re-vegetation Potential
Moody-Nora complex, 2 to 6 percent slopes	MnB	1.79	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Moody silty clay loam, cool, 2 to 6 percent slopes	MoB	2.94	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Moody-Trent complex, 0 to 2 percent slopes	MtA	1.26	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Nora-Moody silty clay loams, 5 to 9 percent slopes	NmC	0.06	Farmland of Statewide Importance	No	High	Moderate	High	Low	No	No	High
Orthents, gravelly	Og	0.04	Not Prime Farmland	No	Low	Low	Low	Low	Yes	No	Moderate
Shindler-Houdek clay loams, 15 to 40 percent slopes	ShE	0.11	Not Prime Farmland	No	High	Moderate	Moderate	Low	Yes	No	Moderate
Wakonda-Chancellor complex, 0 to 2 percent slopes	Wa	1.37	Prime Farmland if Drained	No	High	Moderate	High	Moderate	No	No	High
Worthing silty clay loam, 0 to 1 percent slopes	Wo	0.17	Not Prime Farmland	Yes	High	High	Moderate	Low	No	No	Low

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Map Unit Name	Map Unit Symbol	Pipeline Crossing Length (miles)	Prime Farmland [a]	Hydric Soils [a]	Soil Rutting Hazard [a]	Compaction Potential	Water Erodibility Potential [a, b]	Wind Erodibility Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Re-vegetation Potential
Lamoure-Rauville silty clay loams, channeled, 0 to 2 percent slopes, frequently flooded	Z153A	0.20	Not Prime Farmland	Yes	High	High	Moderate	Moderate	No	No	Low
Sioux-Renshaw complex, coteau, 9 to 15 percent slopes	Z174D	0.04	Not Prime Farmland	No	Moderate	Moderate	Low	Low	Yes	No	Moderate
Estelline-Sioux complex, coteau, 2 to 6 percent slopes	Z183B	0.18	Not Prime Farmland	No	High	Moderate	High	Low	No	No	Moderate
Minnehaha County											
Alcester silty clay loam, cool, 0 to 2 percent slopes	AcA	0.09	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Benclare-Corson complex, 0 to 2 percent slopes	BcA	0.07	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Chancellor silty clay loam, 0 to 2 percent slopes, frequently flooded	Cb	0.05	Prime Farmland if Drained	Yes	High	High	Moderate	Low	No	No	High

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Chaska loam, 0 to 2 percent slopes	Cd	0.09	Prime Farmland if Drained	No	High	Moderate	Moderate	Moderate	No	No	High
Chaska loam, channeled, 0 to 3 percent slopes, frequently flooded	Ch	0.38	Not Prime Farmland	Yes	High	High	Moderate	Moderate	No	No	Low
Clamo silty clay, 0 to 1 percent slopes	Cm	0.12	Prime Farmland if Drained	Yes	High	High	Moderate	Moderate	No	No	High
Corson silty clay, 2 to 6 percent slopes	CoB	0.40	Prime Farmland	No	High	Moderate	Low	Low	No	No	High
Corson-Henkin complex, 6 to 9 percent slopes	CpC	0.10	Farmland of Statewide Importance	No	High	Moderate	Low	Moderate	Yes	No	High
Crofton-Nora complex, 9 to 15 percent slopes	CrD	0.08	Not Prime Farmland	No	High	Moderate	High	Low	Yes	No	Moderate
Davis loam, 0 to 2 percent slopes	DcA	0.06	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Davison-Crossplain clay loams, 0 to 2 percent slopes	Dd	0.20	Prime Farmland if Drained	No	High	Moderate	Moderate	Moderate	No	No	High

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Delmont-Enet loams, 2 to 6 percent slopes	DeB	0.18	Prime Farmland if Irrigated	No	High	Moderate	Moderate	Low	No	No	High
Dempster silt loam, 0 to 2 percent slopes	DmA	0.05	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Dempster silt loam, 2 to 6 percent slopes	DmB	0.11	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Dobalt loam, 2 to 6 percent slopes	DxB	0.18	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Dobalt-Bonilla loams, 0 to 2 percent slopes	DyA	0.25	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Flandreau loam, 0 to 2 percent slopes	FaA	0.09	Prime Farmland	No	High	Moderate	Moderate	Low	No	Yes	High
Flandreau loam, 2 to 6 percent slopes	FaB	1.03	Prime Farmland	No	High	Moderate	Moderate	Low	No	Yes	High
Flandreau-Thurman complex, 2 to 6 percent slopes	FtB	0.24	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Graceville silty clay loam, 0 to 2 percent slopes	GrA	0.08	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High

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Grovena loam, 2 to 6 percent slopes	GsB	1.68	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Grovena-Bonilla loams, 0 to 2 percent slopes	GvA	0.30	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Houdek-Shindler clay loams, 6 to 9 percent slopes	HsC	0.08	Farmland of Statewide Importance	No	High	Moderate	Low	Low	No	No	High
Houdek-Talmo complex, 9 to 15 percent slopes	HtD	0.06	Not Prime Farmland	No	High	Moderate	Low	Low	No	No	Moderate
Ihlen-Rock outcrop complex, 4 to 35 percent slopes	IrE	0.13	Not Prime Farmland	No	High	Moderate	High	Low	Yes	Yes	Moderate
Lamo silty clay loam, channeled	Lb	0.41	Not Prime Farmland	Yes	High	Moderate	Low	Moderate	No	No	Low
Moody silty clay loam, cool, 2 to 6 percent slopes	MdB	3.92	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Moody-Gayville complex, 0 to 3 percent slopes	MgA	0.11	Not Prime Farmland	No	High	Moderate	High	Low	No	No	Moderate

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Moody-Nora complex, 2 to 6 percent slopes	MnB	3.63	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Moody-Nora silty clay loams, 6 to 9 percent slopes	MnC	2.11	Farmland of Statewide Importance	No	High	Moderate	High	Low	Yes	No	High
Moody-Trent complex, 0 to 2 percent slopes	MtA	4.50	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Nora-Crofton complex, 6 to 9 percent slopes	NcC	3.21	Farmland of Statewide Importance	No	High	Moderate	High	Low	Yes	No	High
Obert silty clay loam, 0 to 1 percent slopes	Ob	0.89	Not Prime Farmland	Yes	High	High	Moderate	Low	No	No	Low
Splitrock silty clay loam, 0 to 2 percent slopes	SpA	0.29	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Splitrock silty clay loam, 2 to 6 percent slopes	SpB	1.02	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Thurman-Flandreau complex, 6 to 9 percent slopes	TfC	0.54	Not Prime Farmland	No	Moderate	Moderate	Moderate	Moderate	Yes	No	Moderate

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Trent silty clay loam, 0 to 3 percent slopes	Tr	0.56	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Wakonda-Chancellor complex, 0 to 2 percent slopes	Wa	0.63	Prime Farmland if Drained	No	High	Moderate	High	Moderate	No	No	High
Whitewood silty clay loam, 0 to 2 percent slopes	Wk	1.02	Prime Farmland if Drained	Yes	High	High	Moderate	Low	No	No	High
POET Chancellor Lateral											
Turner County											
Bon loam, channeled, 0 to 2 percent slopes, frequently flooded	Cc	0.05	Not Prime Farmland	No	High	Moderate	Moderate	Low	No	No	Moderate
Delmont-Enet loams, high precipitation, 2 to 6 percent slopes	DehB	0.13	Prime Farmland if Irrigated	No	High	Moderate	Moderate	Low	No	No	High
Egan silty clay loam, 3 to 6 percent slopes	EaB	<0.01	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High

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Egan-Ethan complex, 2 to 6 percent slopes	EeB	0.27	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Egan-Trent silty clay loams, 0 to 2 percent slopes	EfA	0.12	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Egan-Wentworth complex, 2 to 6 percent slopes	EgB	0.36	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Ethan-Egan complex, 5 to 9 percent slopes	EtC	0.04	Farmland of Statewide Importance	No	High	Moderate	Moderate	Moderate	No	No	High
Lamo silty clay loam, cool, 0 to 2 percent slopes, occasionally flooded	La	0.14	Prime Farmland if Drained	Yes	High	High	Moderate	Low	No	No	High
Tetonka silt loam, 0 to 1 percent slopes	Te	0.17	Prime Farmland if Drained	Yes	High	High	High	Low	No	No	High
Wentworth-Chancellor-Wakonda silty clay loams, 0 to 2 percent slopes	WcA	0.58	Prime Farmland	No	High	Moderate	High	Low	No	No	High

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Worthing silty clay loam, 0 to 1 percent slopes	Wo	0.07	Not Prime Farmland	Yes	High	High	Moderate	Low	No	No	Low
Lincoln County											
Alcester silty clay loam, 0 to 2 percent slopes	AcA	0.14	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Bon soils, frequently flooded	Bo	0.22	Not Prime Farmland	No	High	High	Moderate	Low	No	No	Moderate
Chancellor-Tetonka complex, 0 to 2 percent slopes	Ca	2.22	Prime Farmland if Drained	No	High	Moderate	Moderate	Low	No	No	High
Chancellor-Viborg silty clay loams	Cd	0.66	Prime Farmland if Drained	Yes	High	High	Moderate	Low	No	No	High
Chancellor-Wakonda-Tetonka complex	Ch	0.27	Farmland of Statewide Importance	Yes	High	High	Moderate	Low	No	No	High
Clamo silty clay loam	Co	0.61	Prime Farmland if Drained	Yes	High	High	Moderate	Moderate	No	No	High

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Egan silty clay loam, 3 to 6 percent slopes	EaB	2.10	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Egan-Chancellor silty clay loams, 0 to 4 percent slopes	EcB	0.66	Farmland of Statewide Importance	No	High	Moderate	Moderate	Low	No	No	High
Egan-Shindler complex, 2 to 6 percent slopes	EsB	1.49	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Egan-Shindler complex, 6 to 9 percent slopes	EsC	0.98	Farmland of Statewide Importance	No	High	Moderate	Moderate	Low	Yes	No	High
Graceville silty clay loam	Gr	0.44	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Baltic silty clay loam, ponded	Mh	0.02	Not Prime Farmland	Yes	High	High	Moderate	Low	No	No	Low
Shindler-Egan complex, 9 to 15 percent slopes, eroded	SkD2	0.04	Not Prime Farmland	No	High	Moderate	Moderate	Low	Yes	No	Moderate
Shindler and Talmo soils, 6 to 30 percent slopes	StD	0.04	Not Prime Farmland	No	High	Moderate	Moderate	Low	Yes	No	Moderate

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Soils Characteristics of Soil Map Units Crossed by the Heartland Greenway Pipeline System Centerlines

Map Unit Name	Map Unit Symbol	Pipeline Crossing Length (miles)	Prime Farmland [a]	Hydric Soils [a]	Soil Rutting Hazard [a]	Compaction Potential	Water Erodibility Potential [a, b]	Wind Erodibility Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Re-vegetation Potential
Tetonka silt loam, 0 to 2 percent slopes, frequently ponded	Te	0.31	Prime Farmland if Drained	Yes	High	High	High	Low	No	No	High
Wentworth silty clay loam, 0 to 2 percent slopes	WeA	2.11	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Wentworth-Chancellor silty clay loams, 0 to 2 percent slopes	WhA	7.52	Prime Farmland if Drained	No	High	Moderate	Moderate	Low	No	No	High
Worthing silty clay loam, 0 to 1 percent slopes	Ws	0.74	Not Prime Farmland	Yes	High	High	Moderate	Low	No	No	Low
POET Hudson Lateral											
Lincoln County											
Alcester silty clay loam, 0 to 2 percent slopes	AcA	0.76	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Alcester silty clay loam, 2 to 6 percent slopes	AcB	0.49	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Alcester silty clay loam, channeled	Af	0.18	Not Prime Farmland	No	High	Moderate	Moderate	Low	No	No	Moderate

Table C-1
Soils Characteristics of Soil Map Units Crossed by the Heartland Greenway Pipeline System Centerlines

Map Unit Name	Map Unit Symbol	Pipeline Crossing Length (miles)	Prime Farmland [a]	Hydric Soils [a]	Soil Rutting Hazard [a]	Compaction Potential	Water Erodibility Potential [a, b]	Wind Erodibility Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Re-vegetation Potential
Chancellor-Tetonka complex, 0 to 2 percent slopes	Ca	0.93	Prime Farmland if Drained	No	High	Moderate	Moderate	Low	No	No	High
Chancellor-Viborg silty clay loams	Cd	0.31	Prime Farmland if Drained	Yes	High	High	Moderate	Low	No	No	High
Chancellor-Wakonda-Tetonka complex	Ch	0.03	Farmland of Statewide Importance	Yes	High	High	Moderate	Low	No	No	High
Crofton-Nora complex, 11 to 17 percent slopes, eroded	CpD2	1.68	Not Prime Farmland	No	High	Moderate	High	Moderate	Yes	No	Moderate
Delmont loam, 0 to 2 percent slopes	DeA	0.16	Prime Farmland if Irrigated	No	High	Moderate	Moderate	Low	No	No	High
Egan silty clay loam, 3 to 6 percent slopes	EaB	2.49	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Egan-Shindler complex, 2 to 6 percent slopes	EsB	0.13	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Egan-Shindler complex, 6 to 9 percent slopes	EsC	0.73	Farmland of Statewide Importance	No	High	Moderate	Moderate	Low	Yes	No	High

Table C-1
Soils Characteristics of Soil Map Units Crossed by the Heartland Greenway Pipeline System Centerlines

Map Unit Name	Map Unit Symbol	Pipeline Crossing Length (miles)	Prime Farmland [a]	Hydric Soils [a]	Soil Rutting Hazard [a]	Compaction Potential	Water Erodibility Potential [a, b]	Wind Erodibility Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Re-vegetation Potential
Graceville silty clay loam	Gr	0.83	Prime Farmland	No	High	Moderate	Moderate	Low	No	No	High
Lamo silty clay loam, cool, 0 to 2 percent slopes, occasionally flooded	La	0.46	Prime Farmland if Drained	Yes	High	High	Moderate	Low	No	No	High
Moody silty clay loam, 0 to 2 percent slopes	MoA	0.21	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Moody silty clay loam, 2 to 6 percent slopes	MoB	2.39	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Moody-Nora complex, warm, 2 to 6 percent slopes	MpB	0.31	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Moody-Nora silty clay loams, 6 to 10 percent slopes, eroded	MpC2	3.09	Farmland of Statewide Importance	No	High	Moderate	High	Low	Yes	No	High
Salmo silty clay loam, very wet	Sa	0.15	Not Prime Farmland	Yes	High	High	Moderate	Moderate	No	No	Low
Shindler clay loam, 9 to 15 percent slopes	ShD	0.15	Not Prime Farmland	No	High	Moderate	Moderate	Low	Yes	No	Moderate

Table C-1
Soils Characteristics of Soil Map Units Crossed by the Heartland Greenway Pipeline System Centerlines

Map Unit Name	Map Unit Symbol	Pipeline Crossing Length (miles)	Prime Farmland [a]	Hydric Soils [a]	Soil Rutting Hazard [a]	Compaction Potential	Water Erodibility Potential [a, b]	Wind Erodibility Potential [a, c]	Steep Slopes [a, d]	Shallow Bedrock [a, e]	Re-vegetation Potential
Shindler clay loam, 25 to 40 percent slopes	ShF	0.02	Not Prime Farmland	No	High	Moderate	Moderate	Low	Yes	No	Moderate
Shindler and Talmo soils, 6 to 30 percent slopes	StD	0.02	Not Prime Farmland	No	High	Moderate	Moderate	Low	Yes	No	Moderate
Tetonka silt loam, 0 to 2 percent slopes, frequently ponded	Te	0.40	Prime Farmland if Drained	Yes	High	High	High	Low	No	No	High
Wentworth silty clay loam, 0 to 2 percent slopes	WeA	2.20	Prime Farmland	No	High	Moderate	High	Low	No	No	High
Wentworth-Chancellor silty clay loams, 0 to 2 percent slopes	WhA	7.55	Prime Farmland if Drained	No	High	Moderate	Moderate	Low	No	No	High

Note: Areas classified by the Natural Resources Conservation Services as "Water" are not included in this table.
Source: USDA-Natural Resources Conservation Service Web Soil Survey, 2021

[a] As designated by the Natural Resources Conservation Service.
[b] Water Erodibility Potential – Based on the K-Factor which indicates the susceptibility of a soil to sheet and rill erosion by water: High (0.48-0.69), Moderate (0.25-0.47), Low (0.02-0.24)
[c] Wind Erodibility Potential – Based on wind erodibility group classification: High (1.0-2.0), Moderate (3.0-4.0), Low (≥ 5.0)
[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.

Waterbodies Crossed by the HGPS Centerline

Table C-2
Surface Waterbodies Crossed by the Heartland Greenway Pipeline System Centerlines

Approximate Milepost	Feature ID / Feature Name	Flow Regime	Beneficial Use [a]	Supports Use Designation [b]	Crossing Length (feet)
Aurora to Hartley					
Brookings County					
3.4	SO1018 / Medary Creek	Perennial	Warmwater marginal fish life propagation waters, Limited-contact recreation waters, Fish and wildlife propagation, recreation, and stock watering waters, Irrigation waters	Non-support (E. Coli)	44.52
3.5	SP9978_DT	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	26.37
7.3	SO1019	Perennial	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	25.28
Moody County					
8.9	SP9976_DT	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	33.12
10.4	SP9974_DT	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	20.68
10.6	SP9973_DT / Big Sioux River	Perennial	Domestic water supply waters, Warmwater semipermanent fish life propagation waters, Limited-contact recreation waters, Fish and wildlife propagation, recreation, and stock watering waters, Irrigation waters	Non-support (Mercury in fish tissue, TSS)	117.26
13.5	SP9972_DT	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	52.33
17.3	SP9971_DT	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	30.68
20.7	SO1022	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	10.96
22.1	SO1023	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	3.20
23.6	SO1025 / Big Sioux River	Perennial	Domestic water supply waters, Warmwater semipermanent fish life propagation waters, Limited-contact recreation waters, Fish and wildlife propagation, recreation, and stock watering waters, Irrigation waters	Non-support (Mercury in fish tissue, TSS)	163.13
30.0	SO2009 / Brookfield Creek	Perennial	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	31.51
Minnehaha County					

Table C-2
Surface Waterbodies Crossed by the Heartland Greenway Pipeline System Centerlines

Approximate Milepost	Feature ID / Feature Name	Flow Regime	Beneficial Use [a]	Supports Use Designation [b]	Crossing Length (feet)
42.7	SP9969_DT	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	231.99
43.3	SP9968_DT	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	42.29
46.4	SP9967_DT / West Pipestone Creek	Perennial	Warmwater marginal fish life propagation waters, Limited-contact recreation waters, Fish and wildlife propagation, recreation, and stock watering waters, Irrigation waters	Insufficient Data / Unassessed	39.40
48.7	SO1027 / Split Rock Creek	Perennial	Warmwater semipermanent fish life propagation waters, Immersion recreation waters, Limited-contact recreation waters, Fish and wildlife propagation, recreation, and stock watering waters, Irrigation waters	Non-support (E. Coli)	113.28
50.0	SO1028	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	19.24
50.1	SO1029	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	31.94
56.4	SP9966_DT	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	83.28
56.6	SP9965_DT / Beaver Creek	Perennial	Warmwater marginal fish life propagation waters, Limited-contact recreation waters, Fish and wildlife propagation, recreation, and stock watering waters, Irrigation waters	Non-support (E. Coli)	43.30
56.7	SP9964_DT	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	24.08
56.8	SP9963_DT	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	28.21
56.9	SP9962_DT	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	68.55
58.6	SP9961_DT / Fourmile Creek	Intermittent	Warmwater marginal fish life propagation waters, Limited-contact recreation waters, Fish and wildlife propagation, recreation, and stock watering waters, Irrigation waters	Insufficient Data / Unassessed	9.76
58.7	SP9960_DT	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	15.04
59.9	SO2011	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	3.19
60.5	SO2010	Perennial	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	2.77

Table C-2
Surface Waterbodies Crossed by the Heartland Greenway Pipeline System Centerlines

Approximate Milepost	Feature ID / Feature Name	Flow Regime	Beneficial Use [a]	Supports Use Designation [b]	Crossing Length (feet)
62.4	SP9959_DT	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	43.68
POET Chancellor					
Turner County					
1.3	NHD 1 / Long Creek	Intermittent	Warmwater marginal fish life propagation waters, Limited-contact recreation waters, Fish and wildlife propagation, recreation, and stock watering waters, Irrigation waters	Insufficient Data / Unassessed	TBD [c]
Lincoln County					
2.4	NHD 2	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
3.1	NHD 3	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
3.5	NHD 4	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
4.4	NHD 5	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
4.6	NHD 6	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
5.3	NHD 7	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
7.7	NHD 8 / Beaver Creek	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
7.8	NHD 9	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
9.0	NHD 10	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
9.2	NHD 11	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
10.8	NHD 12	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
11.0	NHD 13	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]

Table C-2 Surface Waterbodies Crossed by the Heartland Greenway Pipeline System Centerlines					
Approximate Milepost	**Feature ID / Feature Name**	**Flow Regime**	**Beneficial Use [a]**	**Supports Use Designation [b]**	**Crossing Length (feet)**
12.4	NHD 14	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
19.1	NHD 15	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
21.2	NHD 16	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
22.5	NHD 17 / Big Sioux River	Perennial	Warmwater semipermanent fish life propagation waters, Immersion recreation waters, Limited-contact recreation waters, Fish and wildlife propagation, recreation, and stock watering waters, Irrigation waters	Non-support (Total Suspended Solids, E. Coli)	TBD [c]
POET Hudson					
Lincoln County					
0.0	NHD 18	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
2.1	NHD 19	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
3.2	NHD 20	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
3.7	NHD 21	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
4.1	NHD 22	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
4.5	NHD 23	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
8.9	NHD 24	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
10.0	NHD 25 / Pattee Creek	Intermittent	Warmwater semipermanent fish life propagation waters, Limited-contact recreation waters, Fish and wildlife propagation, recreation, and stock watering waters, Irrigation water	Insufficient Data / Unassessed	TBD [c]
14.8	NHD 26	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
16.2	NHD 27 / Little Beaver Creek	Perennial	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]

Table C-2
Surface Waterbodies Crossed by the Heartland Greenway Pipeline System Centerlines

Approximate Milepost	Feature ID / Feature Name	Flow Regime	Beneficial Use [a]	Supports Use Designation [b]	Crossing Length (feet)
16.3	NHD 28 / Little Beaver Creek	Perennial	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
16.8	NHD 29	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
17.3	NHD 30 / South Beaver Creek	Perennial	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
18.1	NHD 31	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
18.9	NHD 32	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
19.3	NHD 33	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
22.6	NHD 34 / Beaver Creek	Perennial	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]
23.6	NHD 35	Intermittent	Irrigation and fish and wildlife propagation, recreation, and stock watering	N/A	TBD [c]

Note: In accordance with the 2020 Navigable Waters Protection Rule, ephemeral streams are not considered waters of the U.S.
N/A – Not applicable
TBD – To be determined
[a] Chapter 74:51:03 of the Administrative Rules of South Dakota designates the beneficial uses assigned to each specific stream in the state.
[b] Support of designated uses from the 2022 South Dakota Integrated Report for Surface Water Quality Assessment (South Dakota Department of Agricultures and Natural Resources); N/A indicates the stream segment was not assessed.
[c] Crossing length will be determined following the completion of the 2022/2023 field season.