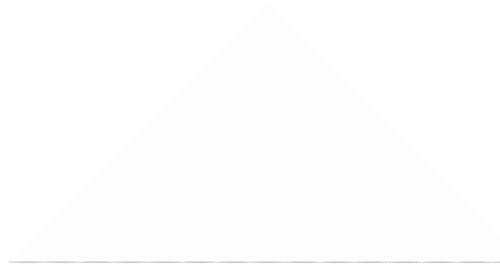


Appendix 7 - Soil Map Units Crossed by the Project



Soil Map Units Crossed by the Project

Map Unit Symbol	Map Unit Name	Farmland Class ¹	Hydric Rating	Drainage Class	Depth to Bedrock	Electrical Conductivity (dS/m)	Sodium Adsorption Rate	Kw Factor ²	Wind Erodibility Group ³	Crop Productivity Index	Clay Minerals with Swell Potential	Project Components	Additional Temporary Workspace Acreage	Permanent Impacts Acreage	Temporary Impacts Acreage
Aa	Aastad loam	Yes	No	Moderately well drained	No Bedrock Identified	0	0	0.2	6	94	Montmorillonitic	Pipeline	0.114784	0.25418	0.253166
G193A	Aastad-Forman loams, 0 to 3 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	1.3	0.6	0.24	6	92	Smectitic	Pipeline	0.286845	6.851714	7.866022
At	Aastad-Tonka complex	Yes, if drained	No	Moderately well drained	No Bedrock Identified	0	0	0.2	6	83	Smectitic	Pipeline	0.10409	0.269788	0.171324
G195A	Aastad-Tonka complex, 0 to 3 percent slopes	Yes, if drained	No	Moderately well drained	No Bedrock Identified	1.3	0.6	0.24	6	79	No	Pipeline	0.054554	0.664931	0.746963
G473A	Aberdeen-Nahon silt loams, till substratum, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	4.7	6.2	0.32	6	59	Smectitic	Pipeline	--	0.144805	0.139546
G472A	Aberdeen-Nahon silty clay loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	4.8	6.2	0.32	6	59	Smectitic	Pipeline	4.32636	31.706354	35.204982
G472A	Aberdeen-Nahon silty clay loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	4.8	6.2	0.32	6	59	Smectitic	Launcher/Receiver	--	0.001382	--
G472A	Aberdeen-Nahon silty clay loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	4.8	6.2	0.32	6	59	Smectitic	Access Road	--	1.396563	0.501833
G475A	Aberdeen-Nahon-Heil silt loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	4.8	6.2	0.32	6	50	No	Pipeline	0.612735	5.596357	6.828746
AcA	Alcester silty clay loam, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.37	6	97	No	Pipeline	--	0.215461	0.107148
AcB	Alcester silty clay loam, 2 to 6 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	1	0	0.37	6	92	Montmorillonitic	Pipeline	0.142678	0.039333	0.035374
AcB	Alcester silty clay loam, cool, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.37	6	92	Montmorillonitic	Pipeline	0.149275	0.287476	0.400154
G633A	Aquents loamy, ponded, 0 to 2 percent slopes	No	Yes	Very poorly drained	No Bedrock Identified	1.9	2.7	0.49	4L	32	No	Pipeline	0.105987	0.614448	0.052495
Ar	Arlo clay loam	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	1.4	0.4	0.2	4L	44	No	Pipeline	1.362324	2.734679	2.554781
Vo	Arlo silty clay loam	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	1.7	0.7	0.24	4L	46	No	Pipeline	--	0.396509	0.584309
Ba	Badger-Tonka silty clay loams, coteau, 0 to 1 percent slopes	Yes, if drained	No	Somewhat poorly drained	No Bedrock Identified	3.3	1.8	0.28	4L	64	Smectitic	Pipeline	--	0.218708	0.256742
Ba	Badus silty clay loam	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	3.3	1.8	0.28	4L	64	Montmorillonitic	Pipeline	0.252257	4.172846	4.028956
Ba	Badus silty clay loam	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	3.3	1.8	0.28	4L	64	Montmorillonitic	Access Road	--	0.670204	0.219601
Ba	Badus silty clay loam	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	3.3	1.8	0.28	4L	64	Montmorillonitic	Capture Facility	--	0.357551	--
Ba	Baltic silty clay loam	No	Yes	Poorly drained	No Bedrock Identified	3.3	1.8	0.28	4L	64	Montmorillonitic	Pipeline	0.938717	1.220411	1.134484
Bc	Baltic silty clay loam	No	Yes	Poorly drained	No Bedrock Identified	2.6	0.8	0.28	4L	32	Montmorillonitic	Pipeline	0.286445	0.992082	1.408884
Ba	Baltic silty clay loam, 0 to 1 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	3.3	1.8	0.28	4L	64	Smectitic	Pipeline	0.139527	2.9368	1.554772
Bb	Baltic silty clay loam, ponded	No	Yes	Very poorly drained	No Bedrock Identified	2.8	0.9	0.28	4L	9	No	Pipeline	0.386864	1.350814	1.108994
BbB	Barnes-Buse loams, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.9	0.4	0.24	6	75	No	Pipeline	--	0.640394	0.68902
G612C	Barnes-Buse loams, 3 to 9 percent slopes, very stony	SWI	No	Well drained	No Bedrock Identified	1.5	0.5	0.24	6	39	No	Pipeline	--	0.337068	0.364348
BbC	Barnes-Buse loams, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1.9	0.4	0.24	6	60	No	Pipeline	0.660431	3.672365	3.053998
BcB	Barnes-Buse-Svea loams, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.9	0.4	0.24	6	74	No	Pipeline	3.551521	19.801746	17.428101
BcB	Barnes-Buse-Svea loams, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.9	0.4	0.24	6	74	No	MLV	--	0.057375	--
BcB	Barnes-Buse-Svea loams, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.9	0.4	0.24	6	74	No	Access Road	--	0.018226	--
BcC	Barnes-Buse-Svea loams, 2 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1.9	0.4	0.24	6	62	Montmorillonitic	Pipeline	0.198388	1.051187	0.819723
G123B	Barnes-Cavour loams, 3 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1.4	0	0.24	6	61	Smectitic	Pipeline	0.186834	3.517179	2.970993
G131A	Barnes-Cresbard-Tonka complex, 0 to 3 percent slopes	Yes, if drained	No	Well drained	No Bedrock Identified	1.4	0	0.24	6	72	Smectitic	Pipeline	1.573843	4.159489	4.04228
G131B	Barnes-Cresbard-Tonka complex, 0 to 6 percent slopes	Yes, if drained	No	Well drained	No Bedrock Identified	1.4	0	0.24	6	69	Smectitic	Pipeline	0.791705	1.144242	1.384936
BdA	Barnes-Svea loams, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.8	0.9	0.24	6	79	Montmorillonitic	Pipeline	0.111973	0.476846	0.475681
G155B	Barnes-Svea loams, 0 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.5	0.5	0.24	6	82	No	Pipeline	0.802215	2.067499	0.700401
BdB	Barnes-Svea loams, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.9	0.4	0.24	6	83	No	Pipeline	0.108517	1.857947	1.919421
Z141A	Barnes-Svea loams, coteau, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.3	0.4	0.24	6	87	No	Pipeline	0.349181	0.836297	1.299912
BdA	Beadle clay loam, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.8	0.9	0.24	6	79	Montmorillonitic	Pipeline	--	0.321826	0.367989
BaA	Beadle loam, 0 to 2 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.24	6	74	Smectitic	Pipeline	4.14018	51.730746	54.871066
BeA	Beadle loam, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.24	6	74	Smectitic	Pipeline	--	0.22283	0.22421
BaB	Beadle loam, 2 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.24	6	67	Smectitic	Pipeline	3.772634	31.794982	34.341804
BaB	Beadle loam, 2 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.24	6	67	Smectitic	Launcher/Receiver	--	0.516527	--
BaB	Beadle loam, 2 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.24	6	67	Smectitic	Access Road	--	0.014533	--
BeB	Beadle loam, 2 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.24	6	67	Smectitic	Pipeline	0.051652	1.155053	1.251637
BaC	Beadle loam, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.24	6	54	No	Pipeline	1.186066	2.446891	2.933088
BdA	Beadle-Dudley complex, 0 to 2 percent slopes	No	No	Well drained	No Bedrock Identified	1.8	0.9	0.24	6	79	Montmorillonitic	Pipeline	5.136992	28.567658	30.836051
BeA	Beadle-Dudley complex, 0 to 2 percent slopes	No	No	Well drained	No Bedrock Identified	1	0	0.24	6	74	Montmorillonitic	Pipeline	0.514609	8.837678	10.707979
BfA	Beadle-Dudley complex, 0 to 2 percent slopes	No	No	Well drained	No Bedrock Identified	#N/A	#N/A	0.24	6	61	Montmorillonitic	Pipeline	--	--	0.002988
G453A	Bearden silt loam, 0 to 2 percent slopes	Yes	No	Somewhat poorly drained	No Bedrock Identified	3.9	3.1	0.32	4L	81	Smectitic	Pipeline	0.367902	1.659605	1.600647
G453A	Bearden silt loam, saline, 0 to 2 percent slopes	No	No	Somewhat poorly drained	No Bedrock Identified	10.4	7.3	0.32	4L	56	Smectitic	Pipeline	0.262249	0.382444	0.414531
G432B	Bearden-Huffman silt loams, 1 to 6 percent slopes	SWI	No	Somewhat poorly drained	No Bedrock Identified	3.2	4.2	0.32	4L	72	Smectitic	Pipeline	0.230709	0.349434	0.700699
G439A	Bearden-Tonka, silty substratum silt loams, 0 to 2 percent slopes	Yes, if drained	No	Somewhat poorly drained	No Bedrock Identified	3.9	3.1	0.32	4L	73	Smectitic	Pipeline	0.423817	1.234676	1.403417
C190C	Bearpaw loam, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1.7	0.8	0.28	6	62	No	Pipeline	0.622211	1.655681	1.805425
C192C	Bearpaw-Greenway loams, 0 to 3 percent slopes	SWI	No	Well drained	No Bedrock Identified	1.7	0.8	0.28	6	81	No	Pipeline	0.344351	1.080933	1.11251
C192B	Bearpaw-Greenway loams, 3 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1.7	0.8	0.28	6	79	No	Pipeline	2.836191	4.786492	4.80033
G871A	Beotia silt loam, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.6	1.2	0.32	6	98	No	Pipeline	1.60487	7.544708	7.373436
G872A	Beotia-Rondell silt loams, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.6	1.2	0.32	6	91	No	Pipeline	0.226724	0.962919	1.429843
G873A	Beotia-Winship silt loams, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.6	1.2	0.32	6	93	Montmorillonitic	Pipeline	0.373183	3.224868	3.354383
G874A	Beotia-Winship silt loams, till substratum, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.6	0.9	0.32	6	92	No	Pipeline	--	0.238055	0.284579
BeE	Betts loam, 6 to 25 percent slopes	No	No	Well drained	No Bedrock Identified	3	0.5	0.24	4L	23	No	Pipeline	--	2.87526	2.770086
BeD	Betts stony loam, 6 to 40 percent slopes	No	No	Well drained	No Bedrock Identified	2.7	0.5	0.15	8	10	No	Pipeline	0.365706	2.126692	0.870578
EoF	Betts-Ethan loams, 15 to 40 percent slopes	No	No	Well drained	No Bedrock Identified	1	0	0.28	4L	18	No	Pipeline	0.060355	0.223888	0.182615
BeE	Betts-Ethan loams, 15 to 40 percent slopes	No	No	Well drained	No Bedrock Identified	1	0	0.28	4L	18	No	Pipeline	--	0.366766	0.240936
ZsD	Betts-Talmo loams, hilly	No	No	Well drained	No Bedrock Identified	3	0.5	0.24	4L	20	No	Pipeline	0.099149	0.41413	0.164477
BnA	Blendon fine sandy loam, 0 to 2 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.15	3L	66	No	Pipeline	--	0.004669	--
Bn	Bon loam, 0 to 2 percent slopes, rarely flooded	Yes	No	Moderately well drained	No Bedrock Identified	1	0.5	0.2	6	84	No	Pipeline	0.843959	4.644471	4.367419
La	Bon loam, 0 to 2 percent slopes, rarely flooded	Yes	No	Moderately well drained	No Bedrock Identified	1	0	0.28	6	70	No	Pipeline	0.085837	0.585563	0.572217
LbA	Bon loam, 0 to 2 percent slopes, rarely flooded	Yes	No	Moderately well drained	No Bedrock Identified	1	0.5	0.2	6	84	No	Pipeline	0.529835	3.021567	2.784715
Bo	Bon loam, channelled, 0 to 2 percent slopes, frequently flooded	No	No	Moderately well drained	No Bedrock Identified	1	0.5	0.2	6	34	No	Pipeline	0.831293	1.118823	0.861605
Bx	Bon loam, channelled, 0 to 2 percent slopes, frequently flooded	No	No	Moderately well drained	No Bedrock Identified	1	0.5	0.2	6	34	No	Pipeline	0.202189	1.029091	0.603727
LlA	Bon loam, channelled, 0 to 2 percent slopes, frequently flooded	Yes	No	Moderately well drained	No Bedrock Identified	1	0.5	0.2	6	34	No	Pipeline	0.206623	0.360259	0.356724
Bo	Bon soils, frequently flooded	No	No	Moderately well drained	No Bedrock Identified	1	0.5	0.2	6	34	No	Pipeline	--	0.259088	--
LeA	Bon-Northville complex, nearly level	SWI	No	Moderately well drained	No Bedrock Identified	1	0.2	0.28	6	91	No	Pipeline	0.180731	0.977169	0.857982

Soil Map Units Crossed by the Project

Map Unit Symbol	Map Unit Name	Farmland Class ¹	Hydric Rating	Drainage Class	Depth to Bedrock	Electrical Conductivity (dS/m)	Sodium Adsorption Rate	Kw Factor ²	Wind Erodibility Group ³	Crop Productivity Index	Clay Minerals with Swell Potential	Project Components	Additional Temporary Workspace Acreage	Permanent Impacts Acreage	Temporary Impacts Acreage
C201A	Bowbells loam, 0 to 3 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	1	1	0.28	6	95	No	Pipeline	0.38	4.936357	4.831469
C810B	Bowdle loam, 2 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	5	54	No	Pipeline	0.428487	0.460381	0.533956
G305B	Brantford, loamy skeletal-Vang loams, 2 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.24	6	44	No	Pipeline	0.20492	0.982298	0.584907
G305A	Brantford-Brantford, loamy-skeletal loams, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	0	0	0.28	5	44	No	Pipeline	0.089254	1.257305	1.458794
G305A	Brantford-Brantford, loamy-skeletal loams, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	0	0	0.28	5	44	No	MLV	--	0.016176	--
Z190A	Brookings silty clay loam, 0 to 2 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	1	0	0.28	6	96	No	Pipeline	0.203588	2.674107	3.136148
C732B	Bryant silt loam, 2 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.37	6	83	No	Pipeline	0.344353	3.977926	4.712648
C732C	Bryant silt loam, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.37	6	67	No	Pipeline	0.325498	0.657524	0.812594
BTD	Busse-Barnes loams, 9 to 20 percent slopes	No	No	Well drained	No Bedrock Identified	0	0	0.28	4L	34	No	Pipeline	0.241222	1.821307	1.570608
Z144E	Busse-Barnes loams, coteau, 9 to 20 percent slopes	No	No	Well drained	No Bedrock Identified	1.3	0.6	0.28	4L	41	No	Pipeline	0.458548	1.993054	1.870342
G613F	Busse-Barnes loams, very stony, 9 to 40 percent slopes	No	No	Well drained	No Bedrock Identified	1.7	0	0.24	4L	14	No	Pipeline	0.094788	0.050663	0.059258
G147D	Busse-Barnes-Darnen loams, 6 to 15 percent slopes	No	No	Well drained	No Bedrock Identified	1.4	0.4	0.24	6	46	No	Pipeline	0.059015	0.208749	0.294021
G583F	Busse-Kloten-Edgeley complex, 9 to 40 percent slopes	No	No	Well drained	1 to 2 feet	1.7	0	0.28	6	15	No	Pipeline	0.780594	0.823933	0.501194
Z140F	Busse-Langhei complex, coteau, 15 to 40 percent slopes	No	No	Well drained	No Bedrock Identified	1.3	0.6	0.28	4L	11	No	Pipeline	--	1.05312	1.332011
G194F	Busse-Langhei-Forman loams, 15 to 40 percent slopes	No	No	Well drained	No Bedrock Identified	1.7	0	0.24	4L	23	No	Pipeline	0.254669	0.270703	0.308297
ByC	Busse-Poinsett complex, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	0	0	0.28	4L	66	Smectitic	Pipeline	0.329918	2.870283	2.821562
ByD	Busse-Poinsett complex, 9 to 15 percent slopes	No	No	Well drained	No Bedrock Identified	0	0	0.28	4L	50	Smectitic	Pipeline	0.103305	0.307969	0.279441
G193E	Busse-Vida, moist-Forman loams, 9 to 25 percent slopes	No	No	Well drained	No Bedrock Identified	1.7	0	0.24	6	29	No	Pipeline	0.911015	1.417671	1.586153
G193E	Busse-Vida, moist-Forman loams, 9 to 25 percent slopes	No	No	Well drained	No Bedrock Identified	1.7	0	0.24	6	29	No	Access Road	--	0.011975	--
CaA	Carthage fine sandy loam, 0 to 2 percent slopes	SWI	No	Moderately well drained	No Bedrock Identified	1	0	0.24	6	88	No	Pipeline	0.184014	3.008201	3.010543
CaB	Carthage fine sandy loam, 2 to 6 percent slopes	SWI	No	Moderately well drained	No Bedrock Identified	1	0	0.24	6	82	No	Pipeline	0.177304	2.924423	2.8928
CbA	Carthage-Blendon fine sandy loams, 0 to 2 percent slopes	SWI	No	Moderately well drained	No Bedrock Identified	1	0	0.24	6	88	No	Pipeline	0.249062	2.01819	2.014466
CbA	Carthage-Blendon fine sandy loams, 0 to 2 percent slopes	SWI	No	Moderately well drained	No Bedrock Identified	1	0	0.24	6	88	No	Access Road	--	0.263235	--
CbA	Carthage-Blendon fine sandy loams, 0 to 2 percent slopes	SWI	No	Moderately well drained	No Bedrock Identified	1	0	0.24	6	88	No	Capture Facility	--	0.503154	--
CbB	Carthage-Blendon fine sandy loams, 2 to 6 percent slopes	SWI	No	Moderately well drained	No Bedrock Identified	2.9	0.5	0.15	3	62	Smectitic	Pipeline	0.109044	2.112356	1.460453
CrA	Cavo-Jeraluid loams, 0 to 4 percent slopes	No	No	Moderately well drained	No Bedrock Identified	8	9.7	0.32	6	26	Montmorillonitic	Pipeline	--	--	0.066772
G129A	Cavour-Ferney loams, 0 to 3 percent slopes	No	No	Moderately well drained	No Bedrock Identified	5.3	8.7	0.32	6	35	Smectitic	Pipeline	1.663931	20.070575	19.559592
G129A	Cavour-Ferney loams, 0 to 3 percent slopes	No	No	Moderately well drained	No Bedrock Identified	5.3	8.7	0.32	6	35	Smectitic	Launcher/Receiver	--	0.043575	--
G129A	Cavour-Ferney loams, 0 to 3 percent slopes	No	No	Moderately well drained	No Bedrock Identified	5.3	8.7	0.32	6	35	Smectitic	Access Road	--	--	0.089731
Ca	Chancellor silty clay loam, 0 to 2 percent slopes, frequently flooded	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	1.2	0	0.32	6	75	Smectitic	Pipeline	--	0.222901	0.338243
Cb	Chancellor silty clay loam, 0 to 2 percent slopes, frequently flooded	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	1.2	0	0.32	6	81	Smectitic	Pipeline	--	0.311683	0.420417
Ca	Chancellor-Tetonka complex, 0 to 2 percent slopes	Yes, if drained	No	Somewhat poorly drained	No Bedrock Identified	1.2	0	0.32	6	75	Smectitic	Pipeline	3.902557	12.181682	14.58338
Cc	Chancellor-Tetonka complex, 0 to 2 percent slopes	Yes, if drained	No	Somewhat poorly drained	No Bedrock Identified	1.2	0	0.32	6	75	Smectitic	Pipeline	1.875389	8.756	8.894107
Cc	Chancellor-Tetonka complex, 0 to 2 percent slopes	Yes, if drained	No	Somewhat poorly drained	No Bedrock Identified	1.2	0	0.32	6	75	Smectitic	Pump Station	--	0.107292	--
Cd	Chancellor-Viborg silty clay loams	Yes, if drained	Yes	Somewhat poorly drained	No Bedrock Identified	1.8	0.7	0.28	7	87	Montmorillonitic	Pipeline	0.384137	2.38698	2.819715
Ch	Chancellor-Viborg silty clay loams	Yes, if drained	Yes	Somewhat poorly drained	No Bedrock Identified	1.8	0.7	0.28	7	87	Montmorillonitic	Access Road	--	0.021689	--
Cd	Chancellor-Wakonda-Tetonka complex	SWI	Yes	Somewhat poorly drained	No Bedrock Identified	1.8	0.7	0.28	7	78	Montmorillonitic	Pipeline	0.529246	2.354088	2.861075
CaB	Clarno loam, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.24	6	82	No	Pipeline	1.470063	7.467178	9.165564
CaA	Clarno-Bonilla loams, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.24	6	88	No	Pipeline	0.212796	0.077842	0.057108
CbA	Clarno-Bonilla loams, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.24	6	88	No	Pipeline	2.676472	22.362766	27.2864
CbA	Clarno-Bonilla loams, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.24	6	88	No	Access Road	--	0.043355	--
CbA	Clarno-Bonilla loams, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.24	6	88	No	MLV	--	0.057391	--
CfA	Clarno-Bonilla loams, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.24	6	88	No	Pipeline	4.476297	29.372577	35.26339
CfB	Clarno-Bonilla loams, 1 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.24	6	84	No	Pipeline	1.165882	12.13193	13.774663
CgA	Clarno-Crossplain complex, 0 to 2 percent slopes	Yes, if drained	No	Well drained	No Bedrock Identified	1	0	0.24	6	82	No	Pipeline	5.870357	30.411932	35.110477
CeD	Clarno-Ethan loams, 9 to 16 percent slopes	No	No	Well drained	No Bedrock Identified	3.5	0	0.24	6	45	No	Pipeline	0.447673	2.118119	2.258246
CeB	Clarno-Ethan-Bonilla loams, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.24	6	78	No	Pipeline	9.139797	29.800668	32.241433
CeB	Clarno-Ethan-Bonilla loams, 1 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.24	6	78	No	Pipeline	9.139797	29.800668	32.241433
CkB	Clarno-Ethan-Bonilla loams, 1 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.24	6	78	No	Pipeline	1.669324	12.442971	14.895986
CeC	Clarno-Ethan-Bonilla loams, 2 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.24	6	69	No	Pipeline	1.669324	12.538234	14.895986
CeC	Clarno-Ethan-Bonilla loams, 2 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.24	6	69	No	MLV	--	0.057392	--
CeC	Clarno-Ethan-Bonilla loams, 2 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.24	6	69	No	Access Road	--	0.037871	--
Co	Colvin-Oldham silty clay loams	No	Yes	Very poorly drained	No Bedrock Identified	0	3.1	0.28	4L	41	Montmorillonitic	Pipeline	0.043147	1.018082	0.410208
G124A	Cresbard-Cavour loams, 0 to 3 percent slopes	No	No	Moderately well drained	No Bedrock Identified	3.4	6.2	0.32	6	58	Smectitic	Pipeline	1.573368	8.833371	8.451613
G124A	Cresbard-Cavour loams, 0 to 3 percent slopes	No	No	Moderately well drained	No Bedrock Identified	3.4	6.2	0.32	6	58	Smectitic	Access Road	--	--	0.83753
G124B	Cresbard-Cavour loams, 3 to 6 percent slopes	No	No	Moderately well drained	No Bedrock Identified	3.4	6.2	0.32	6	51	Smectitic	Pipeline	0.656341	5.52216	5.570966
G130A	Cresbard-Cavour-Ferney loams, 0 to 3 percent slopes	No	No	Moderately well drained	No Bedrock Identified	3.4	6.2	0.32	6	46	No	Pipeline	2.517934	8.473007	7.821761
G141B	Cresbard-Cavour-Forman loams, 0 to 6 percent slopes	No	No	Moderately well drained	No Bedrock Identified	3.4	6.2	0.32	6	59	No	Pipeline	0.367307	4.133949	4.359406
G141B	Cresbard-Cavour-Forman loams, 0 to 6 percent slopes	No	No	Moderately well drained	No Bedrock Identified	3.4	6.2	0.32	6	59	No	Access Road	--	0.053117	--
G141B	Cresbard-Cavour-Forman loams, 0 to 6 percent slopes	No	No	Moderately well drained	No Bedrock Identified	3.4	6.2	0.32	6	59	No	MLV	--	0.041215	--
G126A	Cresbard-Cavour-Heil complex, 0 to 3 percent slopes	No	No	Moderately well drained	No Bedrock Identified	3.4	6.2	0.32	6	45	Smectitic	Pipeline	0.572807	5.379644	6.768465
Ct	Crossplain-Tetonka complex	Yes, if drained	Yes	Somewhat poorly drained	No Bedrock Identified	1.8	0.4	0.17	6	74	Montmorillonitic	Pipeline	3.057779	19.425847	21.517566
Ct	Crossplain-Tetonka complex	Yes, if drained	No	Somewhat poorly drained	No Bedrock Identified	1.8	0.4	0.17	6	74	Montmorillonitic	Pipeline	3.057779	19.425847	21.517566
Ct	Crossplain-Tetonka complex, 0 to 1 percent slopes	Yes, if drained	Yes	Somewhat poorly drained	No Bedrock Identified	1.8	0.4	0.17	6	74	Montmorillonitic	Pipeline	0.075049	1.055681	1.522594
Cu	Cubden silty clay loam, 0 to 2 percent slopes	Yes	No	Somewhat poorly drained	No Bedrock Identified	2.5	1.6	0.32	4L	81	No	Pipeline	0.319654	1.549532	1.143211
Cu	Cubden-Badger silty clay loams, coteau, 0 to 2 percent slopes	Yes, if drained	No	Somewhat poorly drained	No Bedrock Identified	2.5	1.6	0.32	4L	81	No	Pipeline	1.475294	9.449155	8.078636
Cu	Cubden-Badger silty clay loams, coteau, 0 to 2 percent slopes	Yes, if drained	No	Somewhat poorly drained	No Bedrock Identified	2.5	1.6	0.32	4L	81	No	Access Road	--	0.005296	--
Cv	Cubden-Badger silty clay loams, coteau, 0 to 2 percent slopes	Yes, if drained	No	Somewhat poorly drained	No Bedrock Identified	2.5	1.6	0.32	4L	81	No	Pipeline	0.082265	1.300278	1.282142
J123A	Cubden-Badger silty clay loams, coteau, 0 to 2 percent slopes	SWI	No	Somewhat poorly drained	No Bedrock Identified	2.5	1.6	0.32	4L	81	No	Pipeline	--	0.364878	0.309386
Cw	Cubden-Tonka silty clay loams, coteau, 0 to 2 percent slopes	Yes, if drained	No	Somewhat poorly drained	No Bedrock Identified	2.5	1.6	0.32	4L	71	No	Pipeline	0.780643	4.769114	3.276509
Cx	Cubden-Tonka silty clay loams, coteau, 0 to 2 percent slopes	Yes, if drained	No	Somewhat poorly drained	No Bedrock Identified	2.5	1.6	0.32	4L	71	No	Pipeline	1.191859	7.217911	5.703858
J124A	Cubden-Tonka silty clay loams, coteau, 0 to 2 percent slopes	SWI	No	Somewhat poorly drained	No Bedrock Identified	2.5	1.6	0.32	4L	71	No	Pipeline	0.887972	4.929216	3.567919
C521B	Daglum-Rhoades loams, 0 to 6 percent slopes, shaly	No	No	Moderately well drained	No Bedrock Identified	7.1	11.7	0.28	6	30	Smectitic	Pipeline	0.197759	1.528865	1.335693

Soil Map Units Crossed by the Project

Map Unit Symbol	Map Unit Name	Farmland Class ¹	Hydric Rating	Drainage Class	Depth to Bedrock	Electrical Conductivity (dS/m)	Sodium Adsorption Rate	Kw Factor ²	Wind Erodibility Group ³	Crop Productivity Index	Clay Minerals with Swell Potential	Project Components	Additional Temporary Workspace Acreage	Permanent Impacts Acreage	Temporary Impacts Acreage
Z156B	Darmen loam, coteau, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.3	0	0.2	6	85	No	Pipeline	--	0.789157	0.814775
Da	Davis loam	Yes	No	Moderately well drained	No Bedrock Identified	1.3	0	0.24	6	91	No	Pipeline	0.413123	0.477951	0.515422
DaB	Davis loam, 2 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1.5	0	0.24	6	87	No	Pipeline	0.290578	0.510937	0.539308
LdA	Davis silt loam, fans, nearly level	Yes	No	Moderately well drained	No Bedrock Identified	1.3	0	0.28	6	92	No	Pipeline	0.051652	0.496197	0.685494
Dd	Davison-Crossplain clay loams, 0 to 2 percent slopes	Yes, if drained	No	Moderately well drained	No Bedrock Identified	1.9	0.9	0.17	4L	76	No	Pipeline	0.760798	5.152721	5.474883
Dc	Davison-Crossplain complex	Yes, if drained	No	Moderately well drained	No Bedrock Identified	2.9	0.8	0.2	6	78	No	Pipeline	0.248322	0.6374	0.437405
DKB	Delmont and Talmo soils, 2 to 9 percent slopes	No	No	Somewhat excessively drained	No Bedrock Identified	1	0	0.24	6	25	No	Pipeline	1.321446	2.156228	2.621727
DeA	Delmont loam, 0 to 2 percent slopes	No	No	Somewhat excessively drained	No Bedrock Identified	1	0	0.2	6	41	No	Pipeline	--	3.527057	4.294401
Sm	Delmont loam, 0 to 2 percent slopes	No	No	Somewhat excessively drained	No Bedrock Identified	1	0	0.2	6	41	No	Pipeline	0.191418	1.694067	0.985117
DeB	Delmont loam, 2 to 6 percent slopes	Yes, if irrigated	No	Somewhat excessively drained	No Bedrock Identified	1	0	0.24	6	32	No	Pipeline	0.261383	1.134088	1.099812
DeA	Delmont-Enet loams, 0 to 2 percent slopes	Yes, if irrigated	No	Somewhat excessively drained	No Bedrock Identified	1	0	0.2	6	41	No	Pipeline	0.129223	1.378729	1.456406
EdA	Delmont-Enet loams, 0 to 2 percent slopes	Yes, if irrigated	No	Somewhat excessively drained	No Bedrock Identified	1	0	0.2	6	50	No	Pipeline	1.000038	2.096646	3.024731
DFB	Delmont-Talmo complex, 2 to 6 percent slopes	No	No	Somewhat excessively drained	No Bedrock Identified	1	0	0.24	6	37	No	Pipeline	--	0.575894	0.798025
DeB	Delmont-Talmo loams, 2 to 6 percent slopes	No	No	Somewhat excessively drained	No Bedrock Identified	1	0	0.24	6	32	No	Pipeline	0.030083	0.173157	0.258167
DTB	Delmont-Talmo loams, 2 to 6 percent slopes	No	No	Somewhat excessively drained	No Bedrock Identified	1	0	0.24	6	34	No	Pipeline	0.055198	0.39496	0.429781
DeC	Delmont-Talmo loams, 6 to 9 percent slopes	No	No	Somewhat excessively drained	No Bedrock Identified	1	0	0.24	6	27	No	Pipeline	0.459135	1.491316	0.616783
DeC	Delmont-Talmo loams, 6 to 9 percent slopes	No	No	Somewhat excessively drained	No Bedrock Identified	1	0	0.24	6	27	No	Access Road	--	--	0.091447
DmA	Dempster silt loam, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	66	Smectitic	Pipeline	1.905261	4.97232	5.450442
DmA	Dempster silt loam, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	66	Smectitic	Access Road	--	0.016653	0.693303
DmA	Dempster silt loam, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	66	Smectitic	MLV	--	0.057392	--
DmB	Dempster silt loam, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	54	Smectitic	Pipeline	0.142711	3.758239	3.220702
DpC	Dempster-Delmont complex, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.32	6	40	Smectitic	Pipeline	0.050322	0.556904	0.562573
DgB	Dempster-Graceville silty clay loams, 1 to 5 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	7	64	No	Pipeline	0.014361	0.409971	0.491284
G738D	Dickey-Buse-Emlden complex, 6 to 15 percent slopes	No	No	Well drained	No Bedrock Identified	1	0	0.2	2	38	Smectitic	Pipeline	--	0.229234	0.209077
SyA	Dimo loam, nearly level	SWI	No	Somewhat poorly drained	No Bedrock Identified	1	0	0.2	6	75	Smectitic	Pipeline	0.093994	0.16687	0.011429
C825A	Divide loam, 0 to 2 percent slopes	Yes	No	Somewhat poorly drained	No Bedrock Identified	2	1.2	0.24	4L	62	No	Pipeline	0.239714	0.500004	0.342819
Z159A	Divide loam, 0 to 2 percent slopes, occasionally flooded	Yes, if drained	No	Somewhat poorly drained	No Bedrock Identified	1	0	0.2	4L	54	No	Pipeline	0.982916	1.938774	0.938018
Z159A	Divide loam, 0 to 2 percent slopes, occasionally flooded	Yes, if drained	No	Somewhat poorly drained	No Bedrock Identified	1	0	0.2	4L	54	No	Access Road	--	--	1.442917
Dg	Doger loamy fine sand	No	No	Well drained	No Bedrock Identified	0	0	0.17	2	37	No	Pipeline	0.036134	1.612133	1.271881
G795A	Doland-Emlden complex, 0 to 3 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.6	0	0.17	6	82	Smectitic	Pipeline	0.105649	0.983424	1.103685
C496A	Dovecreek silt loam, 0 to 2 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	1.4	0	0.28	6	89	Smectitic	Pipeline	--	0.688491	0.792138
C492A	Dovecreek-Fluvaquents channelled, complex, 0 to 2 percent slopes, flooded	No	No	Moderately well drained	No Bedrock Identified	1.4	0	0.28	6	51	Smectitic	Pipeline	0.748225	1.56611	1.706902
G040A	Dovray silty clay, undrained, 0 to 1 percent slopes	No	Yes	Very poorly drained	No Bedrock Identified	1.4	0.4	0.24	4	27	Smectitic	Pipeline	--	0.336653	0.171194
DKA	Dudley-Jerauld silt loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	5.7	10	0.37	6	28	No	Pipeline	--	1.752581	1.625452
Du	Dudley-Jerauld silt loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	5.7	10	0.49	4	7	No	Pipeline	0.328676	7.797258	9.637393
Dx	Dudley-Jerauld silt loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	5.7	10	0.37	6	28	No	Pipeline	1.339251	5.43285	6.300408
MdA	Dudley-Jerauld silt loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	5.7	10	0.37	6	28	No	Pipeline	0.251611	2.624937	2.400903
DtA	Dudley-Tetonka silt loams	No	No	Somewhat poorly drained	No Bedrock Identified	9	8.1	0.37	6	43	Montmorillonitic	Pipeline	1.078048	4.421056	3.099013
Du	Durrstein and Egas soils	No	Yes	Poorly drained	No Bedrock Identified	5.7	10	0.49	4	7	No	Pipeline	0.004861	0.957122	0.486067
E8A	Durrstein silty clay loam, nearly level	No	Yes	Poorly drained	No Bedrock Identified	10	18.7	0.43	7	30	No	Pipeline	0.506378	4.385805	1.722973
RhA	Eakin-Raber complex, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.32	6	83	No	Pipeline	0.585715	22.82819	23.128932
RhA	Eakin-Raber complex, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.32	6	83	No	Access Road	--	0.032624	--
RhA	Eakin-Raber complex, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.32	6	83	No	MLV	--	0.055201	--
RgB	Eakin-Raber complex, 2 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.32	6	76	No	Pipeline	0.35756	20.015193	19.887249
G495B	Eckman-Zell very fine sandy loams, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	0.3	0	0.28	3	77	Smectitic	Access Road	--	--	0.32186
G584D	Edgeley loam, 9 to 15 percent slopes	No	No	Well drained	2 to 3 feet	3	1.4	0.28	6	46	No	Pipeline	0.12622	0.734102	0.921001
C947B	Edgeley-Kloten complex, west, 0 to 6 percent slopes	SWI	No	Well drained	1 to 2 feet	2.2	0.9	0.24	6	58	Smectitic	Pipeline	0.111647	2.079407	2.108932
EaB	Egan silty clay loam, 3 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.8	0.6	0.28	7	82	No	Pipeline	1.287025	9.947365	12.000034
EaC	Egan silty clay loam, 6 to 11 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	72	No	Pipeline	1.147539	4.2409	3.9854
EbA	Egan-Beadle complex, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.4	0.5	0.28	7	87	No	Pipeline	--	1.216825	1.520465
EbB	Egan-Beadle complex, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.4	0.5	0.28	7	78	No	Pipeline	--	18.378623	20.570813
EbB	Egan-Beadle complex, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.4	0.5	0.28	7	78	No	Access Road	--	--	0.037145
EbC	Egan-Beadle complex, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	2.4	0.5	0.28	7	66	No	Pipeline	1.152342	6.174997	6.228702
Ecb	Egan-Chancellor silty clay loams, 0 to 4 percent slopes	SWI	No	Well drained	No Bedrock Identified	2.6	0.5	0.28	7	83	No	Pipeline	1.312337	5.933554	5.917819
EaB	Egan-Ethan complex, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.8	0.6	0.28	7	82	No	Pipeline	0.858931	1.810763	2.390524
EeB	Egan-Ethan complex, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.8	0.6	0.28	7	81	No	Pipeline	2.223254	12.274217	13.999832
EaC	Egan-Ethan complex, 5 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	72	No	Pipeline	0.469455	3.7471	4.450967
EeC2	Egan-Ethan complex, 6 to 9 percent slopes, eroded	No	No	Well drained	No Bedrock Identified	2.4	0.5	0.24	7	66	No	Pipeline	2.250155	14.138055	14.792557
EeB	Egan-Ethan-Trent complex, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.8	0.6	0.28	7	81	No	Pipeline	10.322328	62.306444	74.191296
EsB	Egan-Shindler complex, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.6	0.5	0.28	7	77	No	Pipeline	3.687519	12.280357	14.629453
EsC	Egan-Shindler complex, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	2.6	0.5	0.28	7	65	No	Pipeline	1.654459	3.428052	4.516025
EfA	Egan-Trent silty clay loams, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.8	0.6	0.28	7	92	No	Pipeline	0.41239	4.396075	4.921885
EgA	Egan-Viborg silty clay loams, 0 to 3 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.4	0.5	0.28	7	92	No	Pipeline	1.059769	10.713887	10.575942
WeA	Egan-Wentworth complex, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	93	No	Pipeline	0.200776	0.441036	0.507696
EgB	Egan-Wentworth complex, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	84	No	Pipeline	0.631942	4.359495	5.231503
EhB	Egan-Wentworth complex, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	84	No	Pipeline	3.788829	31.141608	33.904867
EhB	Egan-Wentworth complex, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	84	No	Launcher/Receiver	--	0.489541	--
EhB	Egan-Wentworth complex, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	84	No	Access Road	--	0.012899	--
EgB	Egan-Wentworth-Trent complex, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	84	No	Pipeline	1.459951	6.689796	11.083417
EgB	Egan-Wentworth-Trent complex, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	84	No	Pump Station	--	2.347514	--
EgB	Egan-Wentworth-Trent complex, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	84	No	Access Road	--	0.020002	--
EwB	Egan-Worthing complex, 0 to 6 percent slopes	No	No	Well drained	No Bedrock Identified	2.6	0.5	0.24	7	66	Smectitic	Pipeline	--	1.228578	1.44586

Soil Map Units Crossed by the Project

Map Unit Symbol	Map Unit Name	Farmland Class ¹	Hydric Rating	Drainage Class	Depth to Bedrock	Electrical Conductivity (dS/m)	Sodium Adsorption Rate	Kw Factor ²	Wind Erodibility Group ³	Crop Productivity Index	Clay Minerals with Swell Potential	Project Components	Additional Temporary Workspace Acreage	Permanent Impacts Acreage	Temporary Impacts Acreage
Eg	Egas silty clay loam	No	Yes	Poorly drained	No Bedrock Identified	12	1.9	0.24	4	8	No	Pipeline	1.694363	6.417076	4.821054
Sa	Egas silty clay loam	No	Yes	Poorly drained	No Bedrock Identified	10	4.2	0.28	4L	35	No	Pipeline	0.043498	0.229389	0.128777
EGa	Egeland-Embden complex, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.4	0.5	0.28	7	92	No	Pipeline	--	0.467874	0.483151
EGB	Egeland-Embden complex, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	84	No	Pipeline	0.1034	0.872427	0.885873
G371B	Egeland-Embden fine sandy loams, till substratum, 0 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.3	1.6	0.15	3	55	No	Pipeline	0.649481	2.618565	2.364387
G373B	Egeland-Letcher fine sandy loams, till substratum, 0 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1.3	1.6	0.15	3	52	No	Pipeline	0.660835	8.578375	8.806473
EmC	Egeland-Maddock sandy loams, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.15	3	36	No	Pipeline	--	0.351046	0.348353
Em	Elsmere loamy fine sand, loamy substratum	No	No	Somewhat poorly drained	No Bedrock Identified	0.3	0	0.17	2	67	No	Pipeline	0.185156	1.261156	1.627804
EnA	Enet loam, 0 to 2 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.17	6	60	No	Pipeline	0.547002	9.761284	10.337582
EnB	Enet loam, 2 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.17	6	54	No	Pipeline	0.181805	0.33453	0.3071
Z282B	Estelline-Kampeska silt loams, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	0.8	0	0.28	6	54	No	Pipeline	0.051653	0.742132	0.856242
ExC	Ethan, very stony-Egan complex, 2 to 9 percent slopes	No	No	Well drained	No Bedrock Identified	1.9	0.5	0.24	8	41	Smectitic	Pipeline	0.575414	2.538021	2.581132
BfD	Ethan-Betts loams, 9 to 15 percent slopes	No	No	Well drained	No Bedrock Identified	1	0	0.28	4L	30	No	Pipeline	0.514988	0.805379	0.720213
EcD	Ethan-Betts loams, 9 to 15 percent slopes	No	No	Well drained	No Bedrock Identified	1	0	0.28	4L	30	No	Pipeline	0.132873	0.182005	0.284368
EpD	Ethan-Betts loams, 9 to 15 percent slopes	No	No	Well drained	No Bedrock Identified	1	0	0.28	4L	30	No	Pipeline	0.252175	0.443255	0.55928
EoD	Ethan-Bon, channeled, loams, 0 to 20 percent slopes	No	No	Well drained	No Bedrock Identified	2.2	0.6	0.24	6	39	No	Pipeline	1.172782	2.167539	2.052211
ErE	Ethan-Clarno loams, 16 to 21 percent slopes	No	No	Well drained	No Bedrock Identified	2.6	0.8	0.24	4L	29	No	Pipeline	0.03158	0.509205	0.301165
ESe	Ethan-Clarno loams, 6 to 25 percent slopes, very stony	No	No	Well drained	No Bedrock Identified	2.6	0.8	0.24	8	14	No	Pipeline	0.551571	1.028419	0.727463
ETC	Ethan-Clarno loams, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.24	4L	61	No	Pipeline	--	0.708423	0.388372
ETD	Ethan-Clarno loams, 9 to 15 percent slopes	No	No	Well drained	No Bedrock Identified	2.6	0.8	0.24	8	26	No	Pipeline	1.257801	5.322881	6.772654
EsE	Ethan-Clarno stony complex, 6 to 25 percent slopes	No	No	Well drained	No Bedrock Identified	2.6	0.8	0.24	8	14	No	Pipeline	2.4121	4.373498	4.642597
ETD	Ethan-Davis stony complex, 3 to 21 percent slopes	No	No	Well drained	No Bedrock Identified	2.6	0.8	0.24	8	26	No	Pipeline	0.668163	2.449987	2.706141
ETD	Ethan-Davis stony complex, 3 to 21 percent slopes	No	No	Well drained	No Bedrock Identified	2.6	0.8	0.24	8	26	No	Access Road	--	0.000073	--
ETD	Ethan-Davis stony complex, 3 to 21 percent slopes	No	No	Well drained	No Bedrock Identified	2.6	0.8	0.24	8	26	No	MLV	--	0.040785	--
EtC	Ethan-Egan complex, 5 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.24	4L	61	No	Pipeline	0.541731	1.50867	1.452414
EuC	Ethan-Egan complex, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1.9	0.5	0.24	4L	61	No	Pipeline	6.396438	27.117522	31.365468
ZaD	Ethan-Houdek loams, hilly	No	No	Well drained	No Bedrock Identified	1	0	0.28	4L	41	No	Pipeline	0.154957	0.62431	0.509605
G845A	Exline-Aberdeen-Nahon silt loams, 0 to 2 percent slopes	No	No	Somewhat poorly drained	No Bedrock Identified	8.7	9.9	0.43	6	38	Smectitic	Pipeline	1.716504	9.815253	9.391333
G846A	Exline-Aberdeen-Nahon silt loams, till substratum, 0 to 2 percent slopes	No	No	Somewhat poorly drained	No Bedrock Identified	7.1	9.9	0.43	6	39	Smectitic	Pipeline	0.805033	8.607163	8.746
G848A	Exline-Heil silt loams, 0 to 2 percent slopes	No	No	Somewhat poorly drained	No Bedrock Identified	10.4	12.6	0.37	6	18	Smectitic	Pipeline	0.465157	4.182843	2.690531
G849A	Exline-Heil silt loams, till substratum, 0 to 2 percent slopes	No	No	Somewhat poorly drained	No Bedrock Identified	6.6	11.3	0.49	6	19	Smectitic	Pipeline	0.165135	0.408453	0.275094
G850B	Exline-Putney silt loams, 1 to 6 percent slopes	No	No	Moderately well drained	No Bedrock Identified	6.5	11.3	0.49	6	47	Smectitic	Pipeline	1.015819	4.704065	5.098116
G850B	Exline-Putney silt loams, 1 to 6 percent slopes	No	No	Moderately well drained	No Bedrock Identified	6.5	11.3	0.49	6	47	Smectitic	Access Road	--	--	1.296406
G133A	Ferney-Heil, till substratum complex, 0 to 3 percent slopes	No	No	Somewhat poorly drained	No Bedrock Identified	10.3	14.5	0.32	6	18	No	Pipeline	2.028856	11.531273	6.860866
G133A	Ferney-Heil, till substratum complex, 0 to 3 percent slopes	No	No	Somewhat poorly drained	No Bedrock Identified	10.3	14.5	0.32	6	18	No	Access Road	--	--	0.182612
G574A	Fluvaquents, channeled-La Prairie-Holmquist complex, 0 to 2 percent slopes, frequent irrigation	No	Yes	Very poorly drained	No Bedrock Identified	1	0	0.24	3	33	No	Pipeline	0.323551	0.585174	0.430862
G574A	Fluvaquents, channeled-La Prairie-Holmquist complex, 0 to 2 percent slopes, frequent irrigation	No	Yes	Very poorly drained	No Bedrock Identified	1	0	0.24	3	33	No	Access Road	--	--	0.257798
FdA	Fordville loam, coteau, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.17	6	59	Smectitic	Pipeline	--	1.143419	0.563222
Fra	Forestburg-Doger loamy fine sands, 0 to 3 percent slopes	No	No	Moderately well drained	No Bedrock Identified	1	0	0.1	2	52	Smectitic	Pipeline	0.367198	3.345971	2.816983
G191B	Forman-Aastad loams, 0 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.4	0.4	0.24	6	85	No	Pipeline	--	1.491562	1.351656
G193B	Forman-Aastad loams, 3 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.4	0.4	0.24	6	86	No	Pipeline	0.002753	0.58191	0.54876
G190B	Forman-Buse-Aastad loams, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.4	0.4	0.24	6	79	No	Pipeline	1.867418	7.294153	8.804101
G190B	Forman-Buse-Aastad loams, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.4	0.4	0.24	6	79	No	Access Road	--	0.024295	1.06276
G190B	Forman-Buse-Aastad loams, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.4	0.4	0.24	6	79	No	MLV	--	0.057392	--
G190C	Forman-Buse-Aastad loams, 3 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1.5	0.5	0.24	6	65	No	Pipeline	0.055982	2.536529	2.891971
G897D	Forman-Buse-Lowe, occasionally flooded loams, 0 to 15 percent slopes	No	No	Well drained	No Bedrock Identified	1.4	0	0.24	6	51	No	Pipeline	0.160228	0.236961	0.181999
G138A	Forman-Cavour loams, 0 to 3 percent slopes	SWI	No	Well drained	No Bedrock Identified	1.4	0	0.24	6	67	No	Pipeline	--	0.469234	0.478813
G139A	Forman-Cresbard loams, 0 to 3 percent slopes	SWI	No	Well drained	No Bedrock Identified	1.4	0	0.24	6	79	No	Pipeline	1.680638	29.145273	34.029199
G139B	Forman-Cresbard loams, 3 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1.4	0	0.24	6	76	No	Pipeline	0.769951	3.323359	3.267776
Ft	Forman-Cresbard-Tonka complex	SWI	No	Well drained	No Bedrock Identified	1.5	0	0.2	6	75	Smectitic	Pipeline	0.051653	0.257031	0.101287
G136A	Forman-Cresbard-Tonka complex, 0 to 3 percent slopes	SWI	No	Well drained	No Bedrock Identified	1.4	0	0.24	6	73	No	Pipeline	--	3.536803	4.139699
G489A	Gardena-Glyndon silt loams, 0 to 2 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	1.5	0.7	0.32	5	87	No	Access Road	--	--	0.178101
WmC	Glenham loam, rolling	SWI	No	Well drained	No Bedrock Identified	1.8	0.8	0.24	6	64	Smectitic	Pipeline	--	0.632998	0.605536
WmB	Glenham loam, undulating	Yes, if irrigated	No	Well drained	No Bedrock Identified	1.8	0.8	0.24	6	82	Smectitic	Pipeline	0.310017	5.521	5.253188
WpA	Glenham-Cavo loams, nearly level	No	No	Well drained	No Bedrock Identified	1.8	0.8	0.24	6	63	Smectitic	Pipeline	0.008307	0.28241	--
WpB	Glenham-Cavo loams, undulating	No	No	Well drained	No Bedrock Identified	1.8	0.8	0.24	6	58	Smectitic	Pipeline	0.087493	0.791985	0.80664
WuB	Glenham-Delmont loams, undulating	SWI	No	Well drained	No Bedrock Identified	1.8	0.8	0.24	6	66	No	Pipeline	--	1.211067	1.188021
WzC	Glenham-Java loams, rolling	SWI	No	Well drained	No Bedrock Identified	1.8	0.8	0.24	6	58	No	Pipeline	--	1.440405	1.409165
GnA	Glenham-Java-Cavo loams, 0 to 4 percent slopes	SWI	No	Well drained	No Bedrock Identified	1.8	0.8	0.24	6	65	No	Pipeline	--	0.428311	0.320767
GmB	Glenham-Java-Prosper loams, 1 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	77	No	Pipeline	1.754938	46.457797	46.784022
GrB	Glenham-Prosper loams, 1 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.28	6	82	No	Pipeline	0.093817	1.553998	1.587412
WnB	Glenham-Prosper loams, 1 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.28	6	82	No	Pipeline	1.165082	17.830183	17.503255
WnB	Glenham-Prosper loams, 1 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.28	6	82	No	Access Road	--	--	0.626958
GIA	Glenham-Prosper loams, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.28	6	86	No	Pipeline	0.115294	0.521125	0.468628
Gra	Glenham-Prosper loams, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.28	6	86	No	Pipeline	0.96641	10.594734	8.897941
Gra	Glenham-Prosper loams, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.28	6	86	No	MLV	--	0.057392	--
WnA	Glenham-Prosper loams, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.28	6	86	No	Pipeline	0.384799	4.334269	4.092157
GsA	Glenham-Prosper-Hoven complex, 0 to 4 percent slopes	No	No	Well drained	No Bedrock Identified	1.8	0.8	0.24	6	68	No	Pipeline	1.251566	21.520521	18.720192
Gua	Glenham-Stickney-Hoven complex, 0 to 4 percent slopes	No	No	Well drained	No Bedrock Identified	1.8	0.8	0.24	6	58	No	Pipeline	0.2186	9.326957	9.121174
Gr	Graceville silty clay loam	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	7	85	No	Pipeline	0.416206	4.63527	5.818407
C471A	Graill silty clay loam, 0 to 2 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	1.3	2.1	0.32	6	95	Smectitic	Pipeline	--	0.437932	0.343926
C457A	Grassna silt loam, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	98	Smectitic	Pipeline	--	1.55614	1.77145
Ga	Grat loam	No	Yes	Poorly drained	No Bedrock Identified	1.4	0.9	0.24	6	49	No	Pipeline	0.050556	2.336059	1.290851

Soil Map Units Crossed by the Project

Map Unit Symbol	Map Unit Name	Farmland Class ¹	Hydric Rating	Drainage Class	Depth to Bedrock	Electrical Conductivity (dS/m)	Sodium Adsorption Rate	Kw Factor ²	Wind Erodibility Group ³	Crop Productivity Index	Clay Minerals with Swell Potential	Project Components	Additional Temporary Workspace Acreage	Permanent Impacts Acreage	Temporary Impacts Acreage
Ga	Grat loam	No	Yes	Poorly drained	No Bedrock Identified	1.4	0.9	0.24	6	49	No	Access Road	--	0.021205	--
Ga	Grat loam	No	Yes	Poorly drained	No Bedrock Identified	1.4	0.9	0.24	6	49	No	MLV	--	0.057391	--
G720A	Great Bend-Beotia silt loams, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.3	1	0.32	6	95	No	Pipeline	6.81598	51.621743	56.671171
G720A	Great Bend-Beotia silt loams, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.3	1	0.32	6	95	No	Access Road	--	0.604413	0.744992
G720A	Great Bend-Beotia silt loams, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.3	1	0.32	6	95	No	MLV	--	0.172171	--
G720A	Great Bend-Beotia silt loams, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.3	1	0.32	6	95	No	Capture Facility	--	0.344351	--
G720B	Great Bend-Beotia silt loams, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.3	1	0.32	6	88	No	Pipeline	0.903299	2.538539	2.610004
G720B	Great Bend-Beotia silt loams, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.3	1	0.32	6	88	No	Access Road	--	0.231588	--
G721A	Great Bend-Beotia silt loams, till substratum, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.7	0.6	0.32	6	95	No	Pipeline	0.351466	1.621101	1.932397
G724A	Great Bend-Putney silt loams, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.5	0	0.37	6	87	No	Pipeline	0.591932	2.409692	2.812443
G722B	Great Bend-Zell silt loams, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.5	0	0.37	6	77	No	Pipeline	1.249304	3.725616	4.176558
G722C	Great Bend-Zell silt loams, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	2.5	0	0.32	6	66	No	Pipeline	0.833862	7.882109	8.603544
G722C	Great Bend-Zell silt loams, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	2.5	0	0.32	6	66	No	Access Road	--	--	0.411769
C270A	Hamerly loam, 0 to 3 percent slopes	Yes	No	Somewhat poorly drained	No Bedrock Identified	4.5	3.3	0.2	4L	76	No	Pipeline	0.120891	0.512336	0.203817
C270A	Hamerly loam, 0 to 3 percent slopes	Yes	No	Somewhat poorly drained	No Bedrock Identified	4.5	3.3	0.2	4L	76	No	Access Road	--	--	0.269218
HbB	Hand loam, 2 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.24	6	81	No	Pipeline	0.10511	0.079341	0.129616
HbA	Hand loam, nearly level	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.24	6	86	No	Pipeline	--	3.860693	3.83553
HgB	Hand-Ethan-Bonilla loams, 1 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.24	6	79	No	Pipeline	1.501159	4.15425	4.424861
HJB	Hand-Talmo complex, 2 to 6 percent slopes	No	No	Well drained	No Bedrock Identified	1	0	0.24	6	54	No	Pipeline	--	0.308501	0.375998
G865A	Harmony-Aberdeen silt loams, till substratum, 0 to 2 percent slopes	SWI	No	Moderately well drained	No Bedrock Identified	2.3	0.6	0.37	6	82	Smectitic	Pipeline	0.407804	8.172824	9.79294
G866A	Harmony-Aberdeen silty clay loams, 0 to 2 percent slopes	SWI	No	Moderately well drained	No Bedrock Identified	1.8	0.5	0.28	6	80	Smectitic	Pipeline	3.626928	31.975891	37.077498
G866A	Harmony-Aberdeen silty clay loams, 0 to 2 percent slopes	SWI	No	Moderately well drained	No Bedrock Identified	1.8	0.5	0.28	6	80	Smectitic	Access Road	--	--	0.034701
G862A	Harmony-Beotia silt loams, 0 to 2 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	2.4	1	0.37	6	92	Smectitic	Pipeline	2.112919	24.201602	27.458233
G863A	Harmony-Beotia silt loams, till substratum, 0 to 2 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	2.4	0.7	0.37	6	92	Smectitic	Pipeline	1.003868	6.778786	7.839178
G554A	Harriet loam, 0 to 1 percent slopes, occasionally flooded	No	Yes	Poorly drained	No Bedrock Identified	11.2	9.1	0.37	6	21	No	Pipeline	0.638967	2.694044	1.944702
C584A	Harriet loam, 0 to 2 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	11	9.8	0.37	6	26	Smectitic	Pipeline	0.852956	3.461995	2.405638
C584A	Harriet loam, 0 to 2 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	11	9.8	0.37	6	26	Smectitic	Access Road	--	0.008836	--
C584A	Harriet loam, 0 to 2 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	11	9.8	0.37	6	26	Smectitic	MLV	--	0.057392	--
C020A	Hell silt loam, 0 to 1 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	8.3	9.7	0.37	6	20	Smectitic	Pipeline	2.028808	12.156835	11.246031
C020A	Hell silt loam, 0 to 1 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	8.3	9.7	0.37	6	20	Smectitic	Access Road	--	0.481816	--
C020A	Hell silt loam, 0 to 1 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	8.3	9.7	0.37	6	20	Smectitic	Capture Facility	--	0.224989	--
G017A	Hell silt loam, till substratum, 0 to 1 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	6.8	11.5	0.43	5	11	Smectitic	Pipeline	0.050056	1.266685	0.869828
HeB	Henkin loam, 3 to 9 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.24	5	45	No	Pipeline	0.293613	0.404553	0.507234
HeB	Henkin loam, 3 to 9 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.24	5	45	No	Access Road	--	0.487322	--
HeB	Henkin loam, 3 to 9 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.24	5	45	No	MLV	--	0.016606	--
HsA	Henkin-Blendon fine sandy loams, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.28	6	77	No	Pipeline	0.067395	0.367345	0.30277
HkB	Henkin-Blendon fine sandy loams, 2 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.17	3	57	No	Pipeline	--	0.295928	0.29538
HsB	Henkin-Blendon fine sandy loams, 2 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.28	6	74	No	Pipeline	--	0.246205	0.22875
HeA	Hetland silty clay loam, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	92	No	Pipeline	--	1.337059	1.345648
HmA	Hetland silty clay loam, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	85	No	Pipeline	0.616145	7.655421	7.412865
HmB	Hetland silty clay loam, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	84	Smectitic	Pipeline	0.055888	0.582902	0.901879
HeA	Highmore silt loam, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.32	6	92	No	Pipeline	0.577946	16.77961	16.077092
HeA	Highmore silt loam, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.32	6	92	No	Access Road	--	0.05751	--
HeA	Highmore silt loam, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.32	6	92	No	Capture Facility	--	0.354228	--
HeB	Highmore silt loam, 2 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.24	5	45	No	Pipeline	--	0.771374	0.76358
HdA	Highmore-DeGrey silt loams, 0 to 2 percent slopes	No	No	Well drained	No Bedrock Identified	1	0	0.32	6	76	No	Pipeline	--	0.451907	0.524363
HmA	Highmore-Waika silt loams, 0 to 2 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.32	6	85	Smectitic	Pipeline	0.150796	2.949305	2.869052
HhA	Houdek loam, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.28	6	86	No	Pipeline	--	2.303157	2.459751
HhB	Houdek loam, 2 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.28	6	81	No	Pipeline	2.937668	18.200856	17.325898
HhB	Houdek loam, 2 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.28	6	81	No	Access Road	--	0.017197	--
HhB	Houdek loam, 2 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.28	6	81	No	MLV	--	0.057392	--
HhC	Houdek loam, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	64	No	Pipeline	0.073875	1.374942	1.689814
HcB	Houdek stony loam, 0 to 9 percent slopes	No	No	Well drained	No Bedrock Identified	1	0	0.15	7	4	No	Pipeline	0.222276	2.106978	1.8251
HIA	Houdek-Dudley complex, 0 to 2 percent slopes	No	No	Well drained	No Bedrock Identified	1	0	0.28	6	61	Smectitic	Pipeline	0.103305	5.021083	4.895588
HdB	Houdek-Dudley complex, 2 to 6 percent slopes	No	No	Well drained	No Bedrock Identified	1	0	0.28	6	63	No	Pipeline	0.536903	0.400843	0.387859
HIB	Houdek-Dudley complex, 2 to 6 percent slopes	No	No	Well drained	No Bedrock Identified	1	0	0.28	6	63	No	Pipeline	1.173113	9.138194	5.653946
HeB	Houdek-Ethan loams, 2 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.24	5	45	No	Pipeline	--	0.307317	0.455009
HuD	Houdek-Ethan loams, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	58	Smectitic	Pipeline	1.409321	16.380523	15.445184
HhB	Houdek-Ethan-Prosper loams, 1 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.28	6	78	Smectitic	Pipeline	0.01595	0.736171	0.732516
HtB	Houdek-Ethan-Prosper loams, 1 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.28	6	78	Smectitic	Pipeline	0.064262	6.261698	7.319001
HmB	Houdek-Jerauld complex, undulating	No	No	Well drained	No Bedrock Identified	1	0	0.32	6	84	Smectitic	Pipeline	0.044129	0.512444	0.451932
HKA	Houdek-Prosper loams, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.28	6	88	No	Pipeline	1.23444	21.913305	21.227802
HOA	Houdek-Prosper loams, 0 to 2 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	88	No	Pipeline	1.870694	25.637704	25.920071
HOA	Houdek-Prosper loams, 0 to 2 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	88	No	Access Road	--	0.093468	--
HOA	Houdek-Prosper loams, 0 to 2 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	88	No	MLV	--	0.057392	--
HpA	Houdek-Prosper loams, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	88	No	Pipeline	0.690111	9.635845	9.974123
HkB	Houdek-Prosper loams, 1 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.17	3	57	No	Pipeline	1.23444	21.913305	21.227802
HOB	Houdek-Prosper loams, 1 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	84	No	Pipeline	1.870694	25.637704	25.920071
HpB	Houdek-Prosper loams, 1 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.28	6	84	No	Pipeline	0.690111	9.635845	9.974123
HsA	Houdek-Stickney complex, 0 to 2 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	77	No	Pipeline	9.061083	58.009607	65.746967
HwA	Houdek-Stickney complex, 0 to 2 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	77	No	Pipeline	0.607485	8.043432	8.871861
HsB	Houdek-Stickney complex, 2 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	74	No	Pipeline	2.267936	8.556241	11.111621
HsB	Houdek-Stickney complex, 2 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	74	No	Access Road	--	--	0.142222

Soil Map Units Crossed by the Project

Map Unit Symbol	Map Unit Name	Farmland Class ¹	Hydric Rating	Drainage Class	Depth to Bedrock	Electrical Conductivity (dS/m)	Sodium Adsorption Rate	Kw Factor ²	Wind Erodibility Group ³	Crop Productivity Index	Clay Minerals with Swell Potential	Project Components	Additional Temporary Workspace Acreage	Permanent Impacts Acreage	Temporary Impacts Acreage
CnA	Houdek-Stickney-Tetonka complex, 0 to 2 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.37	6	75	Montmorillonitic	Pipeline	0.927926	2.459641	3.061496
Ht	Houdek-Stickney-Tetonka complex, 0 to 2 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.37	6	75	Montmorillonitic	Pipeline	8.031194	40.002156	45.727338
Ht	Houdek-Stickney-Tetonka complex, 0 to 2 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.37	6	75	Montmorillonitic	Access Road	--	--	0.159583
HxA	Houdek-Stickney-Tetonka complex, 0 to 2 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.37	6	75	Montmorillonitic	Pipeline	1.605433	17.018511	19.582021
HsD	Houdek-Talmo complex, hilly	No	No	Well drained	No Bedrock Identified	1	0	0.28	6	35	No	Pipeline	0.15532	1.965343	2.164282
Ho	Hoven silt loam, 0 to 1 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	4.3	12.5	0.43	6	15	Smectitic	Pipeline	0.373653	5.571246	4.860971
Hv	Hoven silt loam, 0 to 1 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	4.3	12.5	0.43	6	15	Smectitic	Pipeline	0.450777	4.107866	3.683484
Hy	Hoven silt loam, 0 to 1 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	4.3	12.5	0.43	6	15	Smectitic	Pipeline	--	0.033041	--
HuA	Huntimer silty clay loam, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.5	0.6	0.24	4	89	Smectitic	Pipeline	1.410606	9.642848	11.022997
ScA	Huntimer silty clay loam, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0.6	0.28	4	90	Smectitic	Pipeline	1.420161	7.578133	7.797717
ScA	Huntimer silty clay loam, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0.6	0.28	4	90	Smectitic	Access Road	--	0.70264	0.2761
ScA	Huntimer silty clay loam, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0.6	0.28	4	90	Smectitic	Capture Facility	--	0.037389	--
HuB	Huntimer silty clay loam, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.5	0.7	0.24	4	84	No	Pipeline	0.525762	4.624422	5.760214
SdB	Huntimer silty clay loam, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0.6	0.28	4	85	No	Pipeline	1.415449	6.203325	7.382689
JbD	Java-Betts loams, 6 to 15 percent slopes	No	No	Well drained	No Bedrock Identified	2	0.3	0.24	6	43	No	Pipeline	0.206689	6.950454	7.054975
JcD	Java-Betts stony complex, 3 to 12 percent slopes	No	No	Well drained	No Bedrock Identified	2	0.3	0.24	6	24	No	Pipeline	--	0.824305	0.998965
JgC	Java-Glenham loams, 3 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	2	0.3	0.24	6	63	No	Pipeline	0.087673	1.663696	1.567784
JgC	Java-Glenham loams, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	2	0.3	0.24	6	63	No	Pipeline	0.155523	3.834721	3.982627
MHB	Jerauld-Houdek complex, undulating	No	No	Moderately well drained	No Bedrock Identified	5.6	10.9	0.43	6	41	No	Pipeline	0.982777	3.582393	0.843274
MHB	Jerauld-Houdek complex, undulating	No	No	Moderately well drained	No Bedrock Identified	5.6	10.9	0.43	6	41	No	Access Road	--	--	1.37047
Z125B	Kings Lake-Buse-Waubay complex, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1.1	0.6	0.28	6	81	No	Pipeline	--	0.531769	0.482255
C589A	Koto-Harriet loams, 0 to 2 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	1.2	0.6	0.28	6	45	Smectitic	Pipeline	--	0.219715	0.103848
J143A	Kranzburg-Brookings silty clay loams, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	93	No	Pipeline	0.192569	4.001895	3.50097
J143B	Kranzburg-Brookings silty clay loams, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	87	No	Pipeline	1.08078	14.983812	14.972302
J143B	Kranzburg-Brookings silty clay loams, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	87	No	Access Road	--	0.030708	--
J143B	Kranzburg-Brookings silty clay loams, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	87	No	MLV	--	0.057392	--
KrB	Kranzburg-Buse-Waubay complex, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.3	0.5	0.28	6	83	No	Pipeline	0.201875	1.200619	1.22081
KrB	Kranzburg-Buse-Waubay complex, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.3	0.5	0.28	6	83	No	Access Road	--	--	0.035796
G796A	Kranzburg-Cresbard silt loams, 0 to 2 percent slopes	SWI	No	Well drained	No Bedrock Identified	2.4	0.6	0.32	6	81	Smectitic	Pipeline	0.337476	6.057715	6.797512
G793B	Kranzburg-Zell-Aastad complex, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.4	0.6	0.32	6	80	Smectitic	Pipeline	0.691219	2.124931	2.465522
G793B	Kranzburg-Zell-Aastad complex, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	2.4	0.6	0.32	6	80	Smectitic	Access Road	--	0.000358	--
G793C	Kranzburg-Zell-Aastad complex, 3 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	2.4	0.6	0.32	6	72	Smectitic	Pipeline	0.039473	0.301335	0.261939
G561A	La Prairie loam, 0 to 2 percent slopes, occasionally flooded	Yes	No	Moderately well drained	No Bedrock Identified	1	0.6	0.24	6	84	No	Pipeline	0.347699	0.688031	0.686553
G561A	La Prairie loam, 0 to 2 percent slopes, occasionally flooded	Yes	No	Moderately well drained	No Bedrock Identified	1	0.6	0.24	6	84	No	Access Road	--	--	0.093292
Lf	La Prairie-Fairdale loams, channeled	No	No	Moderately well drained	No Bedrock Identified	0	0	0.2	6	34	No	Pipeline	0.087569	0.168733	0.140857
G571A	LaDelle silt loam, 0 to 2 percent slopes, occasionally flooded	Yes	No	Moderately well drained	No Bedrock Identified	1.5	0.6	0.32	6	92	No	Pipeline	2.314237	7.864908	7.916907
G570A	LaDelle-Fluvaquents, channeled complex, 0 to 2 percent slopes, frequently flooded	No	No	Moderately well drained	No Bedrock Identified	1.5	0.6	0.32	6	45	No	Pipeline	0.395642	1.212456	0.594825
Lm	Lamo silt loam	SWI	No	Somewhat poorly drained	No Bedrock Identified	0	0	0.37	4L	64	Smectitic	Pipeline	--	1.992376	--
La	Lamo silty clay loam	Yes, if drained	No	Somewhat poorly drained	No Bedrock Identified	1	0	0.28	6	70	No	Pipeline	0.215681	0.316178	0.22953
La	Lamo silty clay loam, cool, 0 to 2 percent slopes, occasionally flooded	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	1	0	0.28	6	70	No	Pipeline	2.645846	6.044517	5.163039
G533A	Lamoure silty clay loam, somewhat poorly drained, 0 to 1 percent slopes, frequently flooded	Yes, if drained	Yes	Somewhat poorly drained	No Bedrock Identified	2	1.7	0.28	4L	57	Smectitic	Pipeline	0.399892	0.806178	0.429073
G533A	Lamoure silty clay loam, somewhat poorly drained, 0 to 1 percent slopes, frequently flooded	Yes, if drained	Yes	Somewhat poorly drained	No Bedrock Identified	2	1.7	0.28	4L	57	Smectitic	Access Road	--	--	0.035966
Lr	Lamoure-Rauville silty clay loams, channeled	No	Yes	Poorly drained	No Bedrock Identified	2	2	0.24	4L	33	No	Pipeline	0.113874	0.358207	0.25943
LnA	Lane silty clay loam, 0 to 2 percent slopes, rarely flooded	SWI	No	Moderately well drained	No Bedrock Identified	1	0.4	0.32	6	86	Smectitic	Pipeline	1.300079	7.309709	8.859146
LnA	Lane silty clay loam, 0 to 2 percent slopes, rarely flooded	SWI	No	Moderately well drained	No Bedrock Identified	1	0.4	0.32	6	86	Smectitic	Access Road	--	0.025652	--
LnA	Lane silty clay loam, 0 to 2 percent slopes, rarely flooded	SWI	No	Moderately well drained	No Bedrock Identified	1	0.4	0.32	6	86	Smectitic	Pump Station	--	1.721748	--
LpA	Lane-Jerauld silty clay loams, nearly level	No	No	Well drained	No Bedrock Identified	1.7	0.7	0.24	4	65	No	Pipeline	--	1.856781	1.85701
LnA	Lawet loam, 0 to 2 percent slopes	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	2.6	1.8	0.2	4L	59	Smectitic	Pipeline	0.08218	2.250853	0.976959
Lp	Lawet-Davison loams, 0 to 2 percent slopes	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	0	0	0.15	2	68	No	Pipeline	--	0.032646	0.05457
C816A	Lehr loam, 0 to 2 percent slopes	No	No	Somewhat excessively drained	No Bedrock Identified	1	0	0.28	5	47	No	Pipeline	0.081519	1.799919	1.780823
C808A	Lehr shaly, loam, 0 to 2 percent slopes	No	No	Somewhat excessively drained	No Bedrock Identified	0	0	0.28	5	44	No	Pipeline	--	0.664951	0.840589
C817B	Lehr-Bowdle loams, 2 to 6 percent slopes	No	No	Somewhat excessively drained	No Bedrock Identified	1	0	0.28	5	50	No	Pipeline	1.381468	8.008916	8.979688
C817B	Lehr-Bowdle loams, 2 to 6 percent slopes	No	No	Somewhat excessively drained	No Bedrock Identified	1	0	0.28	5	50	No	Access Road	--	--	0.072044
C809B	Lehr-Bowdle loams, 2 to 6 percent slopes, shaly	No	No	Somewhat excessively drained	No Bedrock Identified	0	0	0.28	6	49	No	Pipeline	--	0.204483	0.136558
Lp	Loup loamy fine sand	No	No	Somewhat poorly drained	No Bedrock Identified	0	0	0.15	2	68	No	Pipeline	0.183605	1.306755	0.705906
Lo	Lowe loam	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	1.4	1	0.2	4L	57	Montmorillonitic	Pipeline	0.050377	0.664871	0.238025
C054A	Lowe loam, 0 to 2 percent slopes, occasionally flooded	No	Yes	Poorly drained	No Bedrock Identified	4.2	3.1	0.17	4L	53	No	Pipeline	0.088793	0.375295	0.229518
G523A	Lowe-Fluvaquents, channeled complex, 0 to 2 percent slopes, frequently flooded	No	Yes	Very poorly drained	No Bedrock Identified	1	0	0.2	4L	21	Smectitic	Pipeline	0.329095	0.850653	0.667142
G055A	Ludden silty clay, 0 to 1 percent slopes, frequently flooded	No	Yes	Poorly drained	No Bedrock Identified	2.9	1.5	0.24	4	52	Smectitic	Pipeline	--	4.894134	5.923443
G055A	Ludden silty clay, 0 to 1 percent slopes, frequently flooded	No	Yes	Poorly drained	No Bedrock Identified	2.9	1.5	0.24	4	52	Smectitic	Access Road	--	--	0.088851
Ma	Macken silty clay loam, 0 to 1 percent slopes	Yes	Yes	Poorly drained	No Bedrock Identified	1	0	0.24	4	27	No	Pipeline	0.053286	0.777003	0.317553
MbA	Mauvais clay loam, 0 to 2 percent slopes	No	Yes	Somewhat poorly drained	No Bedrock Identified	4.9	0	0.17	4L	41	No	Pipeline	--	0.212019	--
C167A	Max-Arnegard loams, 0 to 3 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	1	0.17	6	83	No	Pipeline	0.079153	1.926897	2.023826
C167A	Max-Arnegard loams, 0 to 3 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	1	0.17	6	83	No	Access Road	--	--	0.156744
C168B	Max-Arnegard-Zahl loams, 0 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	1	0.17	6	77	No	Pipeline	0.659754	7.266908	6.611545
C168B	Max-Arnegard-Zahl loams, 0 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	1	0.17	6	77	No	Access Road	--	--	0.250556
C168C	Max-Zahl-Arnegard loams, 3 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.17	6	64	No	Pipeline	0.142584	2.074473	1.869976
C168C	Max-Zahl-Arnegard loams, 3 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.17	6	64	No	Access Road	--	--	0.257425
Z117A	McKranz-Badger silty clay loams, 0 to 2 percent slopes	SWI	No	Somewhat poorly drained	No Bedrock Identified	2.4	1.5	0.32	4L	79	No	Pipeline	0.084459	2.641846	2.032554
Z116A	McKranz-Hidewood, frequently flooded, silty clay loams, 0 to 2 percent slopes	SWI	No	Somewhat poorly drained	No Bedrock Identified	2.5	1.5	0.28	4L	67	No	Pipeline	0.014043	0.417409	0.203127
C424B	Minot silty clay, 2 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.2	4	78	No	Pipeline	0.531001	4.278116	5.030457
C558A	Miranda-Heil complex, 0 to 3 percent slopes	No	No	Moderately well drained	No Bedrock Identified	8.1	13	0.43	6	31	Smectitic	Pipeline	0.091826	0.553097	0.369959

Soil Map Units Crossed by the Project

Map Unit Symbol	Map Unit Name	Farmland Class ¹	Hydric Rating	Drainage Class	Depth to Bedrock	Electrical Conductivity (dS/m)	Sodium Adsorption Rate	Kw Factor ²	Wind Erodibility Group ³	Crop Productivity Index	Clay Minerals with Swell Potential	Project Components	Additional Temporary Workspace Acreage	Permanent Impacts Acreage	Temporary Impacts Acreage
OnA	Mobridge silt loam, 0 to 2 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	1	0	0.32	6	94	No	Pipeline	0.490977	25.387408	25.008486
OnA	Mobridge silt loam, 0 to 2 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	1	0	0.32	6	94	No	MLV	--	0.002192	--
G519A	Moritz-Lowe, occasionally flooded loams, 0 to 2 percent slopes	Yes, if drained	No	Somewhat poorly drained	No Bedrock Identified	2.7	1.6	0.2	4L	68	Smectitic	Pipeline	0.064177	1.237872	1.363666
G851A	Nahon-Aberdeen-Exline silt loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	6.4	8.4	0.32	6	46	Smectitic	Pipeline	7.037969	98.594625	65.61059
G851A	Nahon-Aberdeen-Exline silt loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	6.4	8.4	0.32	6	46	Smectitic	Access Road	--	0.044485	--
G851A	Nahon-Aberdeen-Exline silt loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	6.4	8.4	0.32	6	46	Smectitic	Launcher/Receiver	--	0.557659	--
G852A	Nahon-Aberdeen-Exline silt loams, till substratum, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	6.2	8.9	0.32	6	45	Smectitic	Pipeline	--	2.904016	2.713876
C661A	Niobell-Noonan loams, 0 to 3 percent slopes	No	No	Moderately well drained	No Bedrock Identified	4.2	9	0.28	6	62	Smectitic	Pipeline	0.521928	3.012788	2.944695
C661B	Niobell-Noonan loams, 3 to 6 percent slopes	No	No	Moderately well drained	No Bedrock Identified	4.2	9	0.28	6	60	Smectitic	Pipeline	21.56119	113.11443	122.436278
C661B	Niobell-Noonan loams, 3 to 6 percent slopes	No	No	Moderately well drained	No Bedrock Identified	4.2	9	0.28	6	60	Smectitic	Access Road	--	0.752184	0.16474
C661B	Niobell-Noonan loams, 3 to 6 percent slopes	No	No	Moderately well drained	No Bedrock Identified	4.2	9	0.28	6	60	Smectitic	Capture Facility	--	0.22467	--
C661B	Niobell-Noonan loams, 3 to 6 percent slopes	No	No	Moderately well drained	No Bedrock Identified	4.2	9	0.28	6	60	Smectitic	Launcher/Receiver	--	0.892533	--
C668A	Niobell-Noonan-Heil complex, 0 to 3 percent slopes	No	No	Moderately well drained	No Bedrock Identified	4.2	9	0.28	6	52	No	Pipeline	0.467477	0.709883	0.979224
C566B	Noonan-Miranda loams, 0 to 6 percent slopes	No	No	Moderately well drained	No Bedrock Identified	4.9	9.9	0.28	6	42	Smectitic	Pipeline	5.157818	31.96526	32.778343
C566B	Noonan-Miranda loams, 0 to 6 percent slopes	No	No	Moderately well drained	No Bedrock Identified	4.9	9.9	0.28	6	42	Smectitic	Access Road	--	0.13886	--
C566B	Noonan-Miranda loams, 0 to 6 percent slopes	No	No	Moderately well drained	No Bedrock Identified	4.9	9.9	0.28	6	42	Smectitic	Launcher/Receiver	--	0.205938	--
C665B	Noonan-Niobell-Williams loams, 0 to 6 percent slopes	No	No	Moderately well drained	No Bedrock Identified	4.9	9.9	0.28	6	58	No	Pipeline	0.518925	0.815368	0.884121
OHA	Oahe-Delmont loams, 0 to 2 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.24	6	48	No	Pipeline	0.206608	1.52569	1.064447
So	Oahe-Delmont loams, 2 to 6 percent slopes	No	No	Well drained	No Bedrock Identified	1	0	0.2	6	46	Smectitic	Pipeline	6.540454	10.597057	6.16534
So	Oahe-Delmont loams, 2 to 6 percent slopes	No	No	Well drained	No Bedrock Identified	1	0	0.2	6	46	Smectitic	MLV	--	0.057392	--
OHA	Oahe-Talmo loams, 0 to 2 percent slopes	No	No	Well drained	No Bedrock Identified	1	0	0.24	6	48	No	Pipeline	0.387191	5.50559	5.44571
OHB	Oahe-Talmo loams, 2 to 6 percent slopes	No	No	Well drained	No Bedrock Identified	1	0	0.24	6	38	No	Pipeline	0.025447	1.803393	1.768762
Ob	Obert silt clay loam, 0 to 1 percent slopes	No	Yes	Very poorly drained	No Bedrock Identified	1	0	0.32	8	29	No	Pipeline	0.066468	0.210427	0.194031
OnB	Onita silt loam, 2 to 5 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0.5	0.32	6	88	No	Pipeline	0.103306	0.54591	0.58363
OrA	Onita-DeGrey silt loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	1	0.5	0.28	6	76	No	Pipeline	0.135132	1.247195	0.932006
Os	Onita-Hoven silt loams	No	No	Moderately well drained	No Bedrock Identified	1	0.4	0.28	6	59	No	Pipeline	--	1.465535	1.104573
OsA	Onita-Hoven silt loams, 0 to 1 percent slopes	No	No	Moderately well drained	No Bedrock Identified	1	0.5	0.28	6	59	No	Pipeline	--	0.289173	0.3445
Pa	Parnell silt clay loam	No	Yes	Very poorly drained	No Bedrock Identified	1	0.7	0.24	7	31	No	Pipeline	0.058627	2.013033	1.496878
C003A	Parnell silt clay loam, 0 to 1 percent slopes	No	Yes	Very poorly drained	No Bedrock Identified	1.7	0	0.24	6	20	Smectitic	Pipeline	0.414116	2.093789	1.579258
C751A	Parshall fine sandy loam, 0 to 2 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.17	3	67	No	Pipeline	0.014513	0.515698	0.509748
G202A	Peever-Cavour complex, 0 to 3 percent slopes	No	No	Well drained	No Bedrock Identified	2.5	3.9	0.17	6	61	No	Pipeline	0.189691	1.603147	1.275867
Pp	Pits, gravel and sand	No	No	Excessively drained	No Bedrock Identified	1	0	0.15	5	5	No	Pipeline	0.174883	1.005357	0.63005
Pk	Plankinton silt loam	No	Yes	Poorly drained	No Bedrock Identified	3.1	0.5	0.32	6	51	No	Pipeline	0.000482	0.047288	0.171095
J162B	Poinsett-Buse-Waubay complex, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	81	No	Pipeline	1.915044	16.566997	16.357218
PnB	Poinsett-Buse-Waubay complex, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	81	No	Pipeline	0.049344	2.760688	2.771735
P5B	Poinsett-Buse-Waubay complex, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	81	No	Pipeline	1.743058	17.592239	16.982151
J162C	Poinsett-Buse-Waubay complex, 2 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	69	No	Pipeline	0.205897	3.542312	3.37052
P5C	Poinsett-Buse-Waubay complex, 2 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	69	No	Pipeline	0.114769	1.735377	1.639793
P5C	Poinsett-Buse-Waubay complex, 2 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	69	No	Access Road	--	0.017391	--
P5C	Poinsett-Buse-Waubay complex, 2 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	69	No	MLV	--	0.057391	--
PoC	Poinsett-Rusklyn silty clay loams, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1.6	0	0.28	7	68	No	Pipeline	0.103306	1.434618	1.460079
PrB	Poinsett-Rusklyn-Waubay silty clay loams, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	84	No	Pipeline	1.151387	7.739287	7.538023
J164A	Poinsett-Waubay silty clay loams, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	93	No	Pipeline	0.531378	4.10125	4.029359
PwA	Poinsett-Waubay silty clay loams, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	93	No	Pipeline	2.150453	14.364406	14.887058
J164B	Poinsett-Waubay silty clay loams, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	89	No	Pipeline	0.103306	2.031503	2.01285
PwB	Poinsett-Waubay silty clay loams, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	89	No	Pipeline	8.666794	54.161431	49.153944
PwB	Poinsett-Waubay silty clay loams, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	89	No	Access Road	--	0.027658	0.374042
PwB	Poinsett-Waubay silty clay loams, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.32	6	89	No	MLV	--	0.057416	--
PrA	Prosper loam, 0 to 2 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	2.5	0	0.24	6	93	No	Pipeline	0.468988	3.443832	4.141743
BcA	Prosper-Stickney loams, nearly level	SWI	No	Moderately well drained	No Bedrock Identified	2.2	0	0.2	6	84	No	Pipeline	0.051741	0.8845	0.846695
RcA	Raber-Cavo loams, 0 to 2 percent slopes	No	No	Well drained	No Bedrock Identified	1	0	0.28	6	60	No	Pipeline	--	1.235621	1.623375
RdA	Raber-Demky loams, 0 to 2 percent slopes	SWI	No	Well drained	No Bedrock Identified	1.8	0	0.28	6	75	No	Pipeline	--	1.34224	1.351776
RgC	Raber-Eakin complex, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	61	No	Pipeline	--	1.018394	1.127608
RpB	Raber-Peno loams, 2 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	65	Montmorillonitic	Pipeline	--	1.306473	1.661815
RpC	Raber-Peno loams, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	0	0.28	6	52	Montmorillonitic	Pipeline	--	0.846683	0.916154
C575A	Ranslo loam, 0 to 2 percent slopes	No	No	Somewhat poorly drained	No Bedrock Identified	4.1	16.7	0.28	6	29	Smectitic	Pipeline	--	0.041774	0.061754
C566A	Ranslo loam, 0 to 2 percent slopes, occasionally flooded	No	No	Somewhat poorly drained	No Bedrock Identified	4.1	16.7	0.28	6	29	No	Pipeline	0.003481	0.440763	0.191701
C578A	Ranslo-Harriet loams, 0 to 2 percent slopes, occasionally flooded	No	No	Somewhat poorly drained	No Bedrock Identified	4.1	16.7	0.28	6	29	Smectitic	Pipeline	5.933465	14.643031	11.793972
C578A	Ranslo-Harriet loams, 0 to 2 percent slopes, occasionally flooded	No	No	Somewhat poorly drained	No Bedrock Identified	4.1	16.7	0.28	6	29	Smectitic	Access Road	--	--	0.181081
G553A	Ranslo-Harriet loams, 0 to 2 percent slopes, occasionally flooded	No	No	Somewhat poorly drained	No Bedrock Identified	4.1	16.7	0.28	6	27	Smectitic	Pipeline	2.054627	5.623538	4.961078
Z250A	Rauville mucky silt clay loam, ponded, 0 to 1 percent slopes, frequently flooded	No	Yes	Very poorly drained	No Bedrock Identified	1.5	1.9	0.24	8	11	No	Pipeline	--	0.312393	0.163218
Ra	Rauville silty clay loam	No	Yes	Very poorly drained	No Bedrock Identified	1.6	2	0.28	4L	30	No	Pipeline	0.886669	5.254107	4.808734
G052A	Rauville silty clay loam, 0 to 1 percent slopes, frequently flooded	No	Yes	Very poorly drained	No Bedrock Identified	2	2	0.32	4L	24	Smectitic	Pipeline	0.297336	0.784964	0.920559
Z150A	Rauville silty clay loam, coteau, 0 to 1 percent slopes, frequently flooded	No	Yes	Very poorly drained	No Bedrock Identified	1.5	2	0.24	4L	23	No	Pipeline	0.730576	4.555841	3.03551
Z150A	Rauville silty clay loam, coteau, 0 to 1 percent slopes, frequently flooded	No	Yes	Very poorly drained	No Bedrock Identified	1.5	2	0.24	4L	23	No	Access Road	--	--	0.482757
G053A	Rauville silty clay loam, ponded, 0 to 1 percent slopes, frequently flooded	No	Yes	Very poorly drained	No Bedrock Identified	2	2	0.32	8	9	Smectitic	Pipeline	--	0.260126	--
ReA	Ree loam, 0 to 2 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.24	6	85	No	Pipeline	--	0.411661	0.431017
Z173B	Renshaw-Sioux complex, coteau, 2 to 6 percent slopes	No	No	Somewhat excessively drained	No Bedrock Identified	1	0	0.2	6	34	No	Pipeline	0.529293	0.378004	0.157484
Z173B	Renshaw-Sioux complex, coteau, 2 to 6 percent slopes	No	No	Somewhat excessively drained	No Bedrock Identified	1	0	0.2	6	34	No	Access Road	--	--	0.531388
Z167A	Renwash loam, 0 to 2 percent slopes, rarely flooded	Yes, if irrigated	No	Somewhat excessively drained	No Bedrock Identified	0.5	0	0.24	6	47	No	Pipeline	1.763772	1.555136	1.54505
Z167A	Renwash loam, 0 to 2 percent slopes, rarely flooded	Yes, if irrigated	No	Somewhat excessively drained	No Bedrock Identified	0.5	0	0.24	6	47	No	Access Road	--	0.412161	0.839232
Z167A	Renwash loam, 0 to 2 percent slopes, rarely flooded	Yes, if irrigated	No	Somewhat excessively drained	No Bedrock Identified	0.5	0	0.24	6	47	No	Capture Facility	--	1.404968	--
C030A	Rimlap silt loam, 0 to 1 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	1.5	0.8	0.32	6	51	Smectitic	Pipeline	--	0.301608	0.328975

Soil Map Units Crossed by the Project

Map Unit Symbol	Map Unit Name	Farmland Class ¹	Hydric Rating	Drainage Class	Depth to Bedrock	Electrical Conductivity (dS/m)	Sodium Adsorption Rate	Kw Factor ²	Wind Erodibility Group ³	Crop Productivity Index	Clay Minerals with Swell Potential	Project Components	Additional Temporary Workspace Acreage	Permanent Impacts Acreage	Temporary Impacts Acreage
C031A	Rimlap-Heil silt loams, 0 to 1 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	1.5	0.8	0.32	6	26	No	Pipeline	0.221781	2.559548	1.132189
G019A	Rimlap-Heil, till substratum silt loams, 0 to 1 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	0.9	0.8	0.32	6	36	Smectitic	Pipeline	--	0.068405	0.072087
Sa	Salmo silty clay loam	No	Yes	Poorly drained	No Bedrock Identified	10	4.2	0.28	4L	35	Montmorillonitic	Pipeline	0.029336	0.478205	0.228515
Sa	Salmo silty clay loam, 0 to 1 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	10	4.2	0.28	4L	35	Montmorillonitic	Pipeline	0.919991	2.269851	1.983314
Sa	Salmo silty clay loam, very wet	No	Yes	Poorly drained	No Bedrock Identified	10	4.2	0.28	4L	35	Montmorillonitic	Pipeline	0.704848	1.512698	1.163595
SKD2	Shindler-Egan complex, 9 to 15 percent slopes, eroded	No	No	Well drained	No Bedrock Identified	1.9	0.8	0.24	6	46	No	Pipeline	0.543841	0.669721	0.750863
Sh	Shue loamy fine sand	No	No	Somewhat poorly drained	No Bedrock Identified	1.1	0.6	0.1	2	54	No	Pipeline	1.215015	5.106109	3.260632
Sh	Shue loamy fine sand	No	No	Somewhat poorly drained	No Bedrock Identified	1.1	0.6	0.1	2	54	No	Access Road	--	--	0.546883
G267C	Sioux-Renshaw complex, 2 to 9 percent slopes	No	No	Excessively drained	No Bedrock Identified	1	0	0.15	6	29	No	Pipeline	0.051732	0.371907	0.296226
C005A	Southern silty clay loam, 0 to 1 percent slopes	No	Yes	Very poorly drained	No Bedrock Identified	4.9	0.9	0.28	8	5	Smectitic	Pipeline	0.103098	1.419403	0.760167
G004A	Southern silty clay loam, 0 to 1 percent slopes	No	Yes	Very poorly drained	No Bedrock Identified	3.9	0.9	0.28	4L	9	Smectitic	Pipeline	--	--	0.038708
Ss	Southern silty clay loam, 0 to 1 percent slopes	No	Yes	Very poorly drained	No Bedrock Identified	3	0	0.32	8	10	Smectitic	Pipeline	0.080596	0.350391	0.197437
Sp	Spottswood loam	SWI	No	Moderately well drained	No Bedrock Identified	1	0.8	0.24	6	71	Montmorillonitic	Pipeline	0.377049	3.923788	4.18211
Z161A	Spottswood loam, 0 to 2 percent slopes, occasionally flooded	Yes	No	Somewhat poorly drained	No Bedrock Identified	1	0	0.15	6	75	No	Pipeline	0.463704	1.494779	1.137376
Z161A	Spottswood loam, 0 to 2 percent slopes, occasionally flooded	Yes	No	Somewhat poorly drained	No Bedrock Identified	1	0	0.15	6	75	No	Access Road	--	0.16805	--
DsA	Stickney-Dudley silt loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	5.1	7.1	0.37	6	54	Smectitic	Pipeline	1.138131	9.979779	9.326371
DsA	Stickney-Dudley silt loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	5.1	7.1	0.37	6	54	Smectitic	Access Road	--	0.867482	--
St	Stickney-Dudley silt loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	7.3	1.4	0.37	6	51	Smectitic	Pipeline	1.039017	1.028136	1.178247
Sy	Stickney-Dudley silt loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	5.1	7.1	0.37	6	54	Smectitic	Pipeline	--	4.118058	3.703637
Su	Stickney-Dudley-Hoven silt loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	5.1	7.1	0.37	6	44	Montmorillonitic	Pipeline	0.311648	1.741402	1.199144
Sv	Stickney-Dudley-Hoven silt loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	5.1	7.1	0.37	6	44	Montmorillonitic	Pipeline	1.87319	5.819816	5.515053
Sv	Stickney-Dudley-Hoven silt loams, 0 to 2 percent slopes	No	No	Moderately well drained	No Bedrock Identified	5.1	7.1	0.37	6	44	Montmorillonitic	Access Road	--	--	0.309584
StA	Stickney-Java loams, 0 to 4 percent slopes	SWI	No	Moderately well drained	No Bedrock Identified	5.2	0.9	0.28	7	50	Montmorillonitic	Pipeline	0.218041	4.277533	4.245362
SvA	Stickney-Java-Hoven complex, 0 to 4 percent slopes	No	No	Moderately well drained	No Bedrock Identified	7.4	1.4	0.32	6	55	Smectitic	Pipeline	0.643374	7.300911	6.7608294
St	Stickney-Jerauld silt loam	No	No	Moderately well drained	No Bedrock Identified	7.3	1.4	0.37	6	51	Smectitic	Pipeline	0.084854	0.744125	0.779966
StA	Stickney-Tetonka complex, 0 to 2 percent slopes	SWI	No	Moderately well drained	No Bedrock Identified	5.2	0.9	0.28	7	70	Smectitic	Pipeline	--	0.645112	0.767927
J177A	Still lake-Graceland silt loams, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	0.9	0.3	0.28	6	94	No	Pipeline	--	2.655266	2.795436
J177B	Still lake-Graceland silt loams, 1 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	0.9	0.3	0.28	6	90	No	Pipeline	--	1.773149	1.718811
C491A	Straw-Fluxaquents channelled, complex, 0 to 2 percent slopes, frequently flooded	No	No	Well drained	No Bedrock Identified	1	0	0.28	6	42	Smectitic	Pipeline	1.344862	2.558649	1.873867
G123A	Svea-Cavour loams, 0 to 3 percent slopes	No	No	Moderately well drained	No Bedrock Identified	2.4	1.8	0.24	6	73	No	Pipeline	0.172182	1.213767	1.200478
C769B	Tally fine sandy loam, 2 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0	0.2	3	63	No	Pipeline	0.801418	1.471703	1.680627
TaE	Talmo gravelly loam, 9 to 25 percent slopes	No	No	Excessively drained	No Bedrock Identified	0	0	0.24	5	9	Smectitic	Pipeline	0.113364	1.46083	1.326892
TdE	Talmo-Delmont loams, 6 to 21 percent slopes	No	No	Excessively drained	No Bedrock Identified	0	0	0.24	6	12	Smectitic	Pipeline	0.969278	1.002811	1.254056
C486B	Tansem-Roseglen silt loams, 2 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1.8	0	0.32	6	84	Smectitic	Pipeline	0.404758	4.197428	5.034803
C37D	Telfer-Lihen loamy fine sands, 9 to 15 percent slopes	No	No	Somewhat excessively drained	No Bedrock Identified	1	0	0.1	2	24	No	Pipeline	--	0.493441	0.561825
C743B	Temvik-Grassna-Bearpaw complex, 0 to 6 percent slopes	Yes, if irrigated	No	Well drained	No Bedrock Identified	1	0.8	0.32	6	87	No	Pipeline	--	1.358437	1.562707
Te	Tetonka silt loam, 0 to 1 percent slopes	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	1	0	0.37	6	59	Smectitic	Pipeline	0.193487	1.188799	1.363091
Tp	Tetonka silt loam, 0 to 1 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	1	0	0.37	6	56	Smectitic	Pipeline	0.330607	8.194977	5.179239
Te	Tetonka silt loam, 0 to 2 percent slopes, frequently ponded	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	1	0	0.37	6	59	Smectitic	Pipeline	0.717257	2.428483	2.824869
Te	Tetonka-Hoven silt loams	No	Yes	Poorly drained	No Bedrock Identified	1	0	0.37	6	59	Smectitic	Pipeline	0.115196	1.922586	1.85946
C002A	Tonka silt loam, 0 to 1 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	1	0.5	0.32	6	45	Smectitic	Pipeline	0.406956	2.678035	2.645175
C004A	Tonka silt loam, 0 to 1 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	1	0.5	0.32	6	45	Smectitic	Pipeline	1.209647	4.557139	3.639424
G007A	Tonka silt loam, silty substratum, 0 to 1 percent slopes	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	1.5	0.5	0.32	6	43	Smectitic	Pipeline	0.234843	1.746988	1.209256
To	Tonka silty clay loam, 0 to 1 percent slopes	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	1	0	0.28	6	58	Smectitic	Pipeline	--	0.407068	0.201958
Z101A	Tonka silty clay loam, 0 to 1 percent slopes	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	1	0	0.28	6	58	Smectitic	Pipeline	0.061302	1.150079	0.432574
G008A	Tonka-Rimlap silt loams, 0 to 1 percent slopes	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	0.6	0.4	0.32	6	42	Smectitic	Pipeline	--	0.682742	0.518072
G643B	Urban land-Udorthents loamy complex, 0 to 6 percent slopes	No	<Null>	<Null>	No Bedrock Identified	<Null>	0	<Null>	<Null>	17	No	Pipeline	0.047777	0.528826	--
G643B	Urban land-Udorthents loamy complex, 0 to 6 percent slopes	No	<Null>	<Null>	No Bedrock Identified	<Null>	0	<Null>	<Null>	17	No	Access Road	--	0.103386	--
G643B	Urban land-Udorthents loamy complex, 0 to 6 percent slopes	No	<Null>	<Null>	No Bedrock Identified	<Null>	0	<Null>	<Null>	17	No	Capture Facility	--	0.484839	--
G011A	Vallers clay loam, 0 to 3 percent slopes	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	4.2	3.2	0.24	4L	41	Smectitic	Pipeline	0.079585	1.268098	0.648071
C021A	Vallers loam, 0 to 1 percent slopes	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	4.5	3.3	0.2	4L	46	No	Pipeline	0.057392	0.620267	0.543049
C021A	Vallers loam, 0 to 1 percent slopes	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	4.5	3.3	0.2	4L	46	No	Access Road	--	--	0.039071
C075A	Vallers loam, moderately saline, 0 to 1 percent slopes	No	Yes	Poorly drained	No Bedrock Identified	9.5	6.9	0.2	4L	37	No	Pipeline	0.248842	0.383399	0.318826
Va	Vallers-Hamerly loams	Yes, if drained	Yes	Poorly drained	No Bedrock Identified	2	0	0.24	4L	62	No	Pipeline	--	0.74201	0.368625
G302A	Vang loam, 0 to 2 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	0.5	0	0.24	6	63	No	Pipeline	0.223747	0.223359	0.243092
VbA	Viborg silty clay loam, 0 to 2 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	1.7	0.4	0.28	7	96	No	Pipeline	1.989619	9.724496	10.892201
VbA	Viborg silty clay loam, 0 to 2 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	1.7	0.4	0.28	7	96	No	Access Road	--	0.172668	--
VgB	Viborg-Egan silty clay loams, 2 to 6 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	1.7	0.4	0.28	7	87	No	Pipeline	0.417851	2.831315	3.460883
Z193C	Vienna-Buse complex, coteau, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	0.9	0.6	0.32	6	64	No	Pipeline	0.190408	0.721151	0.764264
C874C	Wabek-Appam complex, 6 to 9 percent slopes	No	No	Excessively drained	No Bedrock Identified	1	0	0.1	5	26	No	Pipeline	--	0.972224	1.266045
C878C	Wabek-Bowdle complex, 2 to 9 percent slopes	No	No	Excessively drained	No Bedrock Identified	1	0	0.17	6	42	Smectitic	Pipeline	0.854125	9.389786	11.594057
C878C	Wabek-Bowdle complex, 2 to 9 percent slopes	No	No	Excessively drained	No Bedrock Identified	1	0	0.17	6	42	Smectitic	Access Road	--	--	0.131742
C877B	Wabek-Lehr complex, 2 to 6 percent slopes	No	No	Excessively drained	No Bedrock Identified	1	0	0.17	6	39	No	Pipeline	0.600372	5.18993	11.494849
C877B	Wabek-Lehr complex, 2 to 6 percent slopes	No	No	Excessively drained	No Bedrock Identified	1	0	0.17	6	39	No	Access Road	--	0.021998	--
C877B	Wabek-Lehr complex, 2 to 6 percent slopes	No	No	Excessively drained	No Bedrock Identified	1	0	0.17	6	39	No	MLV	--	0.057391	--
C877C	Wabek-Lehr complex, 6 to 9 percent slopes	No	No	Excessively drained	No Bedrock Identified	1	0	0.17	6	32	Smectitic	Pipeline	0.587498	2.87127	2.929613
C870E	Wabek-Lehr-Appam complex, 9 to 25 percent slopes	No	No	Excessively drained	No Bedrock Identified	1	0	0.32	5	23	No	Pipeline	0.079688	0.077247	0.088894
Wa	Wakonda-Chancellor complex, 0 to 2 percent slopes	Yes, if drained	No	Somewhat poorly drained	No Bedrock Identified	1.4	0.9	0.32	4L	83	No	Pipeline	0.436526	1.945263	1.76543
W	Water	No	Unranked	<Null>	No Bedrock Identified	<Null>	<Null>	<Null>	<Null>	0	No	Pipeline	--	1.841066	0.077885
G997	Water, intermittent	No	<Null>	<Null>	No Bedrock Identified	<Null>	<Null>	<Null>	8	3	No	Pipeline	--	0.168885	--
J192A	Waubay-Badger silty clay loams, 0 to 2 percent slopes	Yes, if drained	No	Moderately well drained	No Bedrock Identified	1	0	0.28	6	91	No	Pipeline	0.051653	0.38595	0.300106
WaA	Wentworth silty clay loam, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	93	No	Pipeline	--	1.329068	1.600568
WeA	Wentworth silty clay loam, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	93	No	Pipeline	2.57334	13.465677	15.982466

Soil Map Units Crossed by the Project

Map Unit Symbol	Map Unit Name	Farmland Class ¹	Hydric Rating	Drainage Class	Depth to Bedrock	Electrical Conductivity (dS/m)	Sodium Adsorption Rate	Kw Factor ²	Wind Erodibility Group ³	Crop Productivity Index	Clay Minerals with Swell Potential	Project Components	Additional Temporary Workspace Acreage	Permanent Impacts Acreage	Temporary Impacts Acreage
WeA	Wentworth silty clay loam, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	93	No	Access Road	--	0.001528	--
WeA	Wentworth silty clay loam, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	93	No	MLV	--	0.057392	--
WbB	Wentworth silty clay loam, 2 to 6 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	84	No	Pipeline	0.258263	2.36547	2.597855
WHA	Wentworth-Chancellor silty clay loams, 0 to 2 percent slopes	Yes, if drained	No	Moderately well drained	No Bedrock Identified	1	0	0.28	6	95	No	Pipeline	11.445641	56.058707	65.021153
WHA	Wentworth-Chancellor silty clay loams, 0 to 2 percent slopes	Yes, if drained	No	Moderately well drained	No Bedrock Identified	1	0	0.28	6	95	No	Access Road	--	--	0.713624
WcA	Wentworth-Chancellor-Wakonda silty clay loams, 0 to 2 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	1.5	0.2	0.28	7	88	No	Pipeline	0.949737	4.077514	4.406312
WcA	Wentworth-Chancellor-Wakonda silty clay loams, 0 to 2 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	1.5	0.2	0.28	7	88	No	Access Road	--	0.01923	--
WcA	Wentworth-Chancellor-Wakonda silty clay loams, 0 to 2 percent slopes	Yes	No	Moderately well drained	No Bedrock Identified	1.5	0.2	0.28	7	88	No	MLV	--	0.057392	--
WcB	Wentworth-Ethan complex, 2 to 5 percent slopes	Yes	No	Well drained	No Bedrock Identified	2	0.7	0.28	7	78	No	Pipeline	0.09481	1.586227	1.82493
WHA	Wentworth-Trent complex, 0 to 2 percent slopes	Yes	No	Well drained	No Bedrock Identified	1	0	0.28	6	95	No	Pipeline	--	0.266342	0.346435
Wh	Whitewood silt loam	Yes, if drained	Yes	Somewhat poorly drained	No Bedrock Identified	0.9	0.6	0.32	7	83	No	Pipeline	0.019974	0.271492	0.414987
Wh	Whitewood silty clay loam	Yes, if drained	Yes	Somewhat poorly drained	No Bedrock Identified	0.9	0.6	0.32	7	83	No	Pipeline	2.462756	12.362169	12.077081
Wk	Whitewood silty clay loam, 0 to 2 percent slopes	Yes, if drained	Yes	Somewhat poorly drained	No Bedrock Identified	0.8	0.5	0.32	7	84	Smectitic	Pipeline	0.181178	0.83451	0.862867
C210A	Williams-Bowbells loams, 0 to 3 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.24	6	86	No	Pipeline	4.944536	44.689294	48.18454
C210A	Williams-Bowbells loams, 0 to 3 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.24	6	86	No	Access Road	--	0.025839	--
C210A	Williams-Bowbells loams, 0 to 3 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.24	6	86	No	MLV	--	0.057392	--
C210B	Williams-Bowbells loams, 3 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.24	6	83	No	Pipeline	17.982132	94.676411	107.441644
C210B	Williams-Bowbells loams, 3 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.24	6	83	No	Access Road	--	0.577703	--
C210B	Williams-Bowbells loams, 3 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.24	6	83	No	Pump Station	--	6.936571	--
C210C	Williams-Bowbells loams, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.24	6	66	No	Pipeline	2.824189	7.610255	8.059398
C210C	Williams-Bowbells loams, 6 to 9 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.24	6	66	No	Pump Station	--	0.253864	--
C149B	Williams-Bowbells-Tonka complex, 0 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.28	6	79	No	Pipeline	6.372431	31.046975	33.909929
C149B	Williams-Bowbells-Tonka complex, 0 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.28	6	79	No	Access Road	--	0.957378	0.292665
C667A	Williams-Niobell loams, 0 to 3 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.24	6	81	No	Pipeline	1.648256	16.557356	18.500097
C667B	Williams-Niobell loams, 3 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.24	6	77	No	Pipeline	0.999631	15.642484	17.233877
C147B	Williams-Niobell-Tonka complex, 0 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.24	6	74	No	Pipeline	0.634803	5.419321	6.770998
C772B	Williams-Noonan loams, 0 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.28	6	68	No	Pipeline	0.545574	4.569515	4.361733
C172D	Williams-Zahl loams, 3 to 15 percent slopes, very stony	No	No	Well drained	No Bedrock Identified	1	1	0.24	6	32	No	Pipeline	1.162113	5.154873	4.310999
C136B	Williams-Zahl loams, 3 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.24	6	76	No	Pipeline	2.926853	14.326772	14.718523
C136B	Williams-Zahl loams, 3 to 6 percent slopes	SWI	No	Well drained	No Bedrock Identified	1	1	0.24	6	76	No	Access Road	--	--	0.0846
C212D	Williams-Zahl loams, 6 to 15 percent slopes	No	No	Well drained	No Bedrock Identified	1	1	0.24	6	53	No	Pipeline	1.194392	2.661697	6.67658
C212D	Williams-Zahl loams, 6 to 15 percent slopes	No	No	Well drained	No Bedrock Identified	1	1	0.24	6	53	No	Access Road	--	--	0.05526
C177D	Williams-Zahl-Bowbells loams, 3 to 15 percent slopes	No	No	Well drained	No Bedrock Identified	1	1	0.24	6	61	No	Pipeline	8.211022	36.086525	41.011796
C177D	Williams-Zahl-Bowbells loams, 3 to 15 percent slopes	No	No	Well drained	No Bedrock Identified	1	1	0.24	6	61	No	Access Road	--	--	1.15189
C148C	Williams-Zahl-Parnell complex, 0 to 9 percent slopes	No	No	Well drained	No Bedrock Identified	1	1	0.28	6	51	No	Pipeline	2.36609	9.250325	9.027674
C132C	Williams-Zahl complex, 6 to 9 percent slopes	No	No	Well drained	No Bedrock Identified	1	1	0.24	6	61	No	Pipeline	0.336373	3.001288	3.400403
G868A	Winship-Tonka silt loams, 0 to 1 percent slopes	Yes, if drained	No	Somewhat poorly drained	No Bedrock Identified	1	0.3	0.32	6	71	No	Pipeline	0.665216	4.889699	5.8521
G869A	Winship-Tonka silt loams, till substratum, 0 to 1 percent slopes	Yes, if drained	No	Somewhat poorly drained	No Bedrock Identified	1.3	0.3	0.32	6	71	No	Pipeline	0.199608	0.234852	0.295268
Ws	Woonsocket-Whitelake fine sandy loams, 0 to 2 percent slopes	SWI	No	Moderately well drained	No Bedrock Identified	1.2	0	0.32	6	30	No	Pipeline	--	0.299604	0.274189
Wg	Worthing silty clay loam, 0 to 1 percent slopes	No	Yes	Very poorly drained	No Bedrock Identified	1.2	0	0.32	6	30	No	Pipeline	--	0.105134	0.191243
Wo	Worthing silty clay loam, 0 to 1 percent slopes	No	Yes	Very poorly drained	No Bedrock Identified	1.2	0	0.32	6	30	No	Pipeline	2.701198	10.703713	10.544694
Wo	Worthing silty clay loam, 0 to 1 percent slopes	No	Yes	Very poorly drained	No Bedrock Identified	1.2	0	0.32	6	30	No	Access Road	--	0.259087	--
Wo	Worthing silty clay loam, 0 to 1 percent slopes	No	Yes	Very poorly drained	No Bedrock Identified	1.2	0	0.32	6	30	No	Launcher/Receiver	--	0.026984	--
Wo	Worthing silty clay loam, 0 to 1 percent slopes	No	Yes	Very poorly drained	No Bedrock Identified	1.2	0	0.32	6	30	No	MLV	--	0.057392	--
Ws	Worthing silty clay loam, 0 to 1 percent slopes	No	Yes	Very poorly drained	No Bedrock Identified	1.2	0	0.32	6	30	No	Pipeline	1.054702	4.256786	3.945727
Mar	Worthing silty clay loam, ponded, 0 to 1 percent slopes	No	Yes	Very poorly drained	No Bedrock Identified	1.2	0	0.32	8	10	No	Pipeline	0.114759	0.746134	0.233821
Wr	Worthing-Davison complex, 0 to 2 percent slopes	No	Yes	Very poorly drained	No Bedrock Identified	2.4	0.4	0.24	4	57	Smectitic	Pipeline	2.783813	10.159549	10.23398
C967E	Zahl-Kloten west-Edgeley west, complex, 9 to 35 percent slopes	No	No	Well drained	1 to 2 feet	0	0	0.28	6	28	Smectitic	Pipeline	0.147151	0.372625	0.377209
C176E	Zahl-Max loams, 15 to 25 percent slopes	No	No	Well drained	No Bedrock Identified	1	1.4	0.24	4L	31	No	Pipeline	2.404778	3.63789	3.795419
C176E	Zahl-Max loams, 15 to 25 percent slopes	No	No	Well drained	No Bedrock Identified	1	1.4	0.24	4L	31	No	Access Road	--	--	0.432465
C175D	Zahl-Williams loams, 6 to 15 percent slopes	No	No	Well drained	No Bedrock Identified	1	1.4	0.24	4L	45	No	Pipeline	0.432634	2.386125	2.510818
C175C	Zahl-Williams-Zahill complex, 6 to 9 percent slopes	No	No	Well drained	No Bedrock Identified	1	1.4	0.24	4L	56	No	Pipeline	0.798273	2.721496	3.170154
C175C	Zahl-Williams-Zahill complex, 6 to 9 percent slopes	No	No	Well drained	No Bedrock Identified	1	1.4	0.24	4L	56	No	Access Road	--	0.057793	--
C175C	Zahl-Williams-Zahill complex, 6 to 9 percent slopes	No	No	Well drained	No Bedrock Identified	1	1.4	0.24	4L	56	No	Pump Station	--	0.632717	--
G722E	Zell-Great Bend silt loams, 6 to 25 percent slopes	No	No	Well drained	No Bedrock Identified	1.6	1.1	0.43	4L	53	No	Pipeline	--	0.380959	0.43322
G722E	Zell-Great Bend silt loams, 6 to 25 percent slopes	No	No	Well drained	No Bedrock Identified	1.6	1.1	0.43	4L	53	No	Access Road	--	--	0.195218

¹ Prime Farmland Soils: Y = Yes; Y if D = Yes if drained; N = No; SWI=statewide importance; UI = unique importance; NR = not rated.

² The Kw Factor quantifies the susceptibility of soil particles to detachment and movement by water. Values range from 0.02 to 0.64.

- 0.02 - 0.25 - Resistant to erosion by water
- 0.25 - 0.40 - Moderately susceptible to erosion by water
- 0.40 - 0.64 - Highly susceptible to erosion by water

³ The wind erodibility group is a numerical value indicating the susceptibility of soil to wind erosion, based on the predominant soil texture class of surface layer. Values range from 1 to 8.

- 1 - 2 - Highly susceptible to erosion by wind
- 3 - 6 - Moderately susceptible to erosion by wind
- 7 - 8 - Least susceptible to erosion by wind