APPENDIX H – SSURGO SOIL TYPES FOR THE STUDY AND PROJECT AREAS

Flickertail Solar Project

Table.1. Soil Map Units in the Project Area

Soil Map Unit	Hydric Classification	K-factor	Wind Erodibility Group	Farm Class	Acres in the Project Area
Bearden silt loam, moderately saline, clayey substratum, 0 to 2 percent slopes	7	0.37	4L	Not prime farmland	551
Hilaire-Espelie loamy fine sands, 0 to 2 percent slopes	33	0.28	2	Not prime farmland	449
Aberdeen-Galchutt-Fargo complex, 0 to 2 percent slopes	33	0.28	4	Farmland of statewide importance	413
Elmville loam, slightly saline, 0 to 2 percent slopes	10	0.32	4L	All areas are prime farmland	341
Bearden silt loam, slightly saline, clayey substratum, 0 to 2 percent slopes	10	0.37	4L	All areas are prime farmland	212
Tiffany loam, clayey substratum, 0 to 1 percent slopes	85	0.28	4L	Prime farmland if drained	204
Fargo-Enloe complex, 0 to 1 percent slopes	100	0.20	4	Prime farmland if drained	186
Elmville fine sandy loam, slightly saline, 0 to 2 percent slopes	10	0.32	3	All areas are prime farmland	157
Hilaire-Espelie-Thiefriver, moderately saline complex, 0 to 2 percent slopes	48	0.28	2	Not prime farmland	156
Aberdeen-Ryan silty clay loams, 0 to 2 percent slopes	35	0.28	4	Not prime farmland	151
Overly silty clay loam, 0 to 2 percent slopes	5	0.28	4L	All areas are prime farmland	117
Aberdeen fine sandy loam, 0 to 2 percent slopes	3	0.32	3	Farmland of statewide importance	108
Delamere fine sandy loam, clayey substratum, 0 to 1 percent slopes	10	0.24	3	All areas are prime farmland	75
Maddock-Hilaire-Espelie loamy fine sands, 0 to 6 percent slopes	25	0.28	2	Not prime farmland	58
Ryan-Fargo silty clays, 0 to 1 percent slopes	100	0.17	4	Not prime farmland	53
Galchutt silt loam, 0 to 2 percent slopes	10	0.55	4L	All areas are prime farmland	50
Orthents-Aquents-Urban Land, highway complex, 0 to 35 percent slopes	25	--	0	Not prime farmland	49
Galchutt-Wheatville, slightly saline silt loams, 0 to 2 percent slopes	15	0.55	4L	All areas are prime farmland	34
Perella silty clay loam, clayey substratum, 0 to 1 percent slopes	85	0.49	4L	Prime farmland if drained	26
Endoaquolls, loamy, borrow areas, 0 to 2 percent slopes	100	0.49	6	Not prime farmland	17
Overly-Nutley silty clay loams, 2 to 6 percent slopes	5	0.37	4L	All areas are prime farmland	16
Elmville loam, moderately saline, 0 to 2 percent slopes	10	0.32	4L	Not prime farmland	15

Flickertail Solar Project

Soil Map Unit	Hydric Classification	K-factor	Wind Erodibility Group	Farm Class	Acres in the Project Area
Thiefriver loam, moderately saline, 0 to 1 percent slopes	95	0.28	3	Not prime farmland	6
Gardena-Eckman silt loams, 2 to 6 percent slopes	5	0.32	4L	All areas are prime farmland	5
Mantador-Delamere-Elmville loams, slightly saline, clayey substratum, 0 to 2 percent slopes	10	0.43	5	All areas are prime farmland	5
Mantador-Delamere-Elmville fine sandy loams, slightly saline, clayey substratum, 0 to 2 percent slopes	10	0.32	3	All areas are prime farmland	3
Fargo silty clay, 0 to 1 percent slopes	100	0.24	4	Prime farmland if drained	3
Thiefriver fine sandy loam, moderately saline, 0 to 1 percent slopes	95	0.28	3	Not prime farmland	2
Thiefriver loam, slightly saline, 0 to 1 percent slopes	95	0.28	3	Not prime farmland	1

Table. 2. Soil Map Units in the Study Area

Soil Map Unit	Hydric Classification	K-factor	Wind Erodibility Group	Farm Class	Acres in the Study Area
Aberdeen-Galchutt-Fargo complex, 0 to 2 percent slopes	33	0.28	4	Farmland of statewide importance	1,310
Hilaire-Espelie-Thiefriver, moderately saline complex, 0 to 2 percent slopes	48	0.28	2	Not prime farmland	1,048
Mantador-Delamere-Elmville fine sandy loams, slightly saline, clayey substratum, 0 to 2 percent slopes	10	0.32	3	All areas are prime farmland	967
Elmville loam, slightly saline, 0 to 2 percent slopes	10	0.32	4L	All areas are prime farmland	889
Mantador-Delamere-Elmville loams, slightly saline, clayey substratum, 0 to 2 percent slopes	10	0.43	5	All areas are prime farmland	876
Elmville fine sandy loam, slightly saline, 0 to 2 percent slopes	10	0.32	3	All areas are prime farmland	821
Fargo-Enloe complex, 0 to 1 percent slopes	100	0.20	4	Prime farmland if drained	596
Wheatville silt loam, 0 to 2 percent slopes	10	0.32	4L	All areas are prime farmland	479
Overly silty clay loam, 0 to 2 percent slopes	5	0.28	4L	All areas are prime farmland	464
Bearden silt loam, moderately saline, clayey substratum, 0 to 2 percent slopes	7	0.37	4L	Not prime farmland	375
Fargo silty clay, 0 to 1 percent slopes	100	0.24	4	Prime farmland if drained	354
Maddock-Hilaire-Espelie loamy fine sands, 0 to 6 percent slopes	25	0.28	2	Not prime farmland	307
Tiffany loam, clayey substratum, 0 to 1 percent slopes	85	0.28	4L	Prime farmland if drained	288
Hilaire-Espelie loamy fine sands, 0 to 2 percent slopes	33	0.28	2	Not prime farmland	229
Overly-Nutley silty clay loams, 2 to 6 percent slopes	5	0.37	4L	All areas are prime farmland	220
Thiefriver fine sandy loam, moderately saline, 0 to 1 percent slopes	95	0.28	3	Not prime farmland	219
Galchutt-Wheatville, slightly saline silt loams, 0 to 2 percent slopes	15	0.55	4L	All areas are prime farmland	218
Perella silty clay loam, clayey substratum, 0 to 1 percent slopes	85	0.49	4L	Prime farmland if drained	217
Orthents-Aquents-Urban Land, highway complex, 0 to 35 percent slopes	25	<Null>	<Null>	Not prime farmland	197
Thiefriver loam, slightly saline, 0 to 1 percent slopes	95	0.28	3	Not prime farmland	166
Wyndmere loam, slightly saline, stratified substratum, 0 to 2 percent slopes	10	0.28	5	All areas are prime farmland	158
Fargo-Hegne silty clays, 0 to 1 percent slopes	100	0.17	4	Prime farmland if drained	156

Soil Map Unit	Hydric Classification	K-factor	Wind Erodibility Group	Farm Class	Acres in the Study Area
Espelie fine sandy loam, 0 to 1 percent slopes	90	0.02	3	Not prime farmland	146
Fargo-Nutley silty clays, 0 to 2 percent slopes	60	0.17	4	Prime farmland if drained	146
Wyndmere fine sandy loam, slightly saline, stratified substratum, 0 to 2 percent slopes	10	0.64	3	All areas are prime farmland	142
Bearden-Kindred silty clay loams, clayey substratum, 0 to 2 percent slopes	10	0.28	4L	All areas are prime farmland	139
Ryan-Fargo silty clays, 0 to 1 percent slopes	100	0.17	4	Not prime farmland	117
Wheatville-Mantador-Delamere silt loams, slightly saline, clayey substratum, 0 to 2 percent slopes	15	0.43	5	All areas are prime farmland	109
Cashel-Fluvaquents, channeled complex, wooded, 0 to 35 percent slopes, frequently flooded	42	0.28	4L	Not prime farmland	101
Galchutt silt loam, 0 to 2 percent slopes	10	0.55	4L	All areas are prime farmland	93
Fargo silty clay loam, 0 to 1 percent slopes	100	0.64	4L	Prime farmland if drained	88
Glyndon loam, slightly saline, stratified substratum, 0 to 2 percent slopes	13	0.28	6	All areas are prime farmland	88
Nutley silty clay, 6 to 9 percent slopes	10	0.17	4	Farmland of statewide importance	84
Bearden silt loam, slightly saline, clayey substratum, 0 to 2 percent slopes	10	0.37	4L	All areas are prime farmland	78
Mantador-Delamere-Wyndmere fine sandy loams, slightly saline, stratified substratum, 0 to 2 percent slopes	5	0.64	3	All areas are prime farmland	77
Nutley-Fargo, dry, silty clays, 2 to 6 percent slopes	10	0.17	4	All areas are prime farmland	72
Wheatville silt loam, moderately saline, 0 to 2 percent slopes	10	0.32	4L	Not prime farmland	49
Thiefriver loam, moderately saline, 0 to 1 percent slopes	95	0.28	3	Not prime farmland	48
Delamere fine sandy loam, clayey substratum, 0 to 1 percent slopes	10	0.24	3	All areas are prime farmland	39
Aberdeen fine sandy loam, 0 to 2 percent slopes	3	0.32	3	Farmland of statewide importance	38
Wahpeton silty clay, wooded, 0 to 2 percent slopes, occasionally flooded	12	0.32	4L	All areas are prime farmland	37
Wahpeton silty clay, 0 to 2 percent slopes, occasionally flooded	12	0.17	4	All areas are prime farmland	36
Aylmer-Thiefriver, moderately saline-Serden complex, 0 to 9 percent slopes	30	0.10	3	Not prime farmland	35

Soil Map Unit	Hydric Classification	K-factor	Wind Erodibility Group	Farm Class	Acres in the Study Area
Tiffany fine sandy loam, clayey substratum, 0 to 1 percent slopes	88	0.24	3	Prime farmland if drained	34
Thiefriver loam, moderately saline, 0 to 1 percent slopes, occasionally ponded	95	0.28	3	Not prime farmland	33
Aberdeen silt loam, 0 to 2 percent slopes	15	0.28	3	Farmland of statewide importance	26
Wheatville silt loam, slightly saline, 0 to 2 percent slopes	10	0.28	4	All areas are prime farmland	26
Espelie fine sandy loam, 0 to 1 percent slopes, frequently ponded	95	0.32	4L	Not prime farmland	26
Gardena silt loam, clayey substratum, 0 to 2 percent slopes	5	0.37	4L	All areas are prime farmland	25
Water	0	<Null>	<Null>	Not prime farmland	24
Elmville fine sandy loam, moderately saline, 0 to 2 percent slopes	10	0.32	3	Not prime farmland	23
Aberdeen-Ryan silty clay loams, 0 to 2 percent slopes	35	0.28	4	Not prime farmland	22
Endoaquolls, loamy, borrow areas, 0 to 2 percent slopes	100	0.32	4L	Not prime farmland	19
Elmville loam, moderately saline, 0 to 2 percent slopes	10	0.49	6	Not prime farmland	19
LaDelle silty clay loam, 0 to 2 percent slopes, occasionally flooded	13	0.37	6	All areas are prime farmland	17
Fargo silty clay, depressional, 0 to 1 percent slopes	100	0.20	4	Prime farmland if drained	16
Borup silt loam, slightly saline, stratified substratum, 0 to 1 percent slopes	88	0.49	4L	Prime farmland if drained	15
Galchutt-Enloe-Fargo silty clay loams, 0 to 2 percent slopes	48	0.24	6	Prime farmland if drained	14
Hecla-Garborg loamy fine sands, stratified substratum, 0 to 2 percent slopes	8	0.43	4L	Farmland of statewide importance	13
Perella loam, clayey substratum, 0 to 1 percent slopes	85	0.64	2	Prime farmland if drained	13
Dovray silty clay, 0 to 1 percent slopes	100	0.49	4L	Prime farmland if drained	12
Perella silty clay loam, stratified substratum, 0 to 1 percent slopes	90	0.24	4	Prime farmland if drained	12
Wheatville-Mantador-Delamere silt loams, moderately saline, clayey substratum, 0 to 2 percent slopes	15	0.32	4L	Not prime farmland	9
Mantador-Delamere-Wyndmere loams, slightly saline, stratified substratum, 0 to 2 percent slopes	8	0.37	4L	All areas are prime farmland	5
Augsburg silt loam, slightly saline, 0 to 1 percent slopes	95	0.64	5	Prime farmland if drained	5

Soil Map Unit	Hydric Classification	K-factor	Wind Erodibility Group	Farm Class	Acres in the Study Area
Tiffany loam, stratified substratum, 0 to 1 percent slopes	85	0.49	4L	Prime farmland if drained	1