Hop Hill Solar and Storage Project

ATTACHMENT N: SOIL TABLE

Soil		Acres in	Percent of Siting	Acres in Solar Array	Percent of Solar Array	Acres in Transmission Line Corridor Siting	Percent of Transmission Line Corridor Siting	Wind Erodibility	Water Erodibility K	Slopes Greater	Primary Soil	Bedrock Expected at Less
Unit	Soil Name	Siting Area	Area	Siting Area	Siting Area	Area	Area	Group*	factor**	Than 30%	Туре	Than 60 Inches
BmA	Burke silt loam, 0 to 2 percent slopes	0.13	0.00	0.13	0.00			5	0.64	no	silt loam	no
BmAB	Burke silt loam, 0 to 5 percent slopes	592.06	2.69	269.28	2.41	322.78	2.98	5	0.64	no	silt loam	no
BmB	Burke silt loam, 2 to 5 percent slopes	0.53	0.00	0.53	0.00			5	0.64	no	silt loam	no
BmC	Burke silt loam, 5 to 8 percent slopes	2.73	0.01	2.73	0.02			5	0.64	no	silt loam	no
BmE3	Burke silt loam, 15 to 30 percent slopes, severely eroded	129.53	0.59	9.34	0.08	120.19	1.11	5	0.64	no	silt loam	no
BnB	Burke silt loam, shallow, 0 to 5 percent slopes	480.26	2.18	421.17	3.77	59.08	0.54	5	0.64	no	silt loam	no
BoC2	Burke very fine sandy loam, 5 to 8 percent slopes, eroded	1.50	0.01	1.50	0.01			3	0.64	no	sandy loam	no
BoD2	Burke very fine sandy loam, 0 to 15 percent slopes, eroded	35.05	0.16	35.05	0.31			3	0.64	no	sandy loam	no
BrC2	Burke very fine sandy loam, shallow, 0 to 8 percent slopes,	0.09	0.00	0.09	0.00			3	0.55	no	sandy loam	no
	eroded											
EnB	Endicott silt loam, 0 to 5 percent slopes	95.01	0.43			95.01	0.88	5	0.64	no	silt loam	no
EnD	Endicott silt loam, 5 to 15 percent slopes	187.35	0.85			187.35	1.73	5	0.64	no	silt loam	no
EoE	Endicott variant silt loam, 0 to 40 percent slopes	748.58	3.40			748.58	6.91	5	0.64	yes	silt loam	no
EuAB	Esquatzel silt loam, 0 to 5 percent slopes	20.53	0.09			20.53	0.19	3	0.64	no	silt loam	no
FeC	Finley fine sandy loam, 0 to 15 percent slopes	173.95	0.79			173.95	1.60	3	0.28	no	sandy loam	no
FfE	Finley stony fine sandy loam, 0 to 30 percent slopes	448.97	2.04	261.52	2.34	187.46	1.73	5	0.17	no	sandy loam	no
HeE	Hezel loamy fine sand, 0 to 30 percent slopes	120.91	0.55			120.91	1.12	2	0.64	no	sand	no
KnE	Kiona very stony silt loam, 0 to 30 percent slopes	1,171.35	5.32	770.48	6.89	400.87	3.70	7	0.24	no	silt loam	no
KnF	Kiona very stony silt loam, 30 to 65 percent slopes	1,031.12	4.68	289.36	2.59	741.76	6.84	7	0.24	yes	silt loam	no
LcE	Lickskillet very stony silt loam, 0 to 30 percent slopes	491.57	2.23			491.57	4.53	7	0.24	no	silt loam	yes
LcF	Lickskillet very stony silt loam, 30 to 65 percent slopes	588.01	2.67			588.01	5.42	7	0.24	yes	silt loam	yes
ReB	Ritzville silt loam, 0 to 5 percent slopes	2,106.11	9.56	1,593.64	14.26	512.47	4.73	5	0.64	no	silt loam	no
ReE3	Ritzville silt loam, 15 to 30 percent slopes, severely eroded	710.71	3.23	237.10	2.12	473.61	4.37	5	0.64	no	silt loam	no
ReF	Ritzville silt loam, 30 to 65 percent slopes	250.81	1.14	154.12	1.38	96.69	0.89	5	0.64	yes	silt loam	no
RfD2	Ritzville very fine sandy loam, 0 to 15 percent slopes, eroded	11.38	0.05	11.38	0.10			3	0.64	no	sandy loam	no
ScAB	Scooteney silt loam, 0 to 5 percent slopes	143.11	0.65	112.09	1.00	31.02	0.29	5	0.64	no	silt loam	no
ShAB	Shano silt loam, 0 to 5 percent slopes	209.07	0.95	185.89	1.66	23.18	0.21	5	0.64	no	silt loam	no
ShB	Shano silt loam, 2 to 5 percent slopes	0.23	0.00	0.23	0.00			5	0.64	no	silt loam	no
ShC	Shano silt loam, 5 to 8 percent slopes	0.00	0.00	0.00	0.00			5	0.64	no	silt loam	no
ShD	Shano silt loam, 8 to 15 percent slopes	13.43	0.06	13.43	0.12			5	0.64	no	silt loam	no
SnD2	Shano very fine sandy loam, 0 to 15 percent slopes, eroded	21.49	0.10	21.49	0.19			3	0.64	no	sandy loam	no
SnE2	Shano very fine sandy loam, 15 to 30 percent slopes, eroded	9.02	0.04	9.02	0.08			3	0.64	no	sandy loam	no
SsE	Starbuck rocky silt loam, 5 to 45 percent slopes	8.74	0.04	8.74	0.08			6	0.37	yes	silt loam	yes
W	Water	1.08	0.00	1.08	0.01							
WaB	Walla Walla silt loam, 0 to 5 percent slopes	303.09	1.38			303.09	2.80	5	0.55	no	silt loam	no
WaD	Walla Walla silt loam, 5 to 15 percent slopes	415.17	1.89			415.17	3.83	5	0.55	no	silt loam	no

Soil Unit Soil Name	Acres in Siting Area	Percent of Siting Area	Acres in Solar Array Siting Area	Percent of Solar Array Siting Area	Acres in Transmission Line Corridor Siting Area	Percent of Transmission Line Corridor Siting Area	Wind Erodibility Group*	Water Erodibility K factor**	Slopes Greater Than 30%	Primary Soil Type	Bedrock Expected at Less Than 60 Inches
WaE3 Walla Walla silt loam, 15 to 30 percent slopes, severely eroded	168.89	0.77	Ŭ		168.89	1.56	5	0.55	no	silt loam	no
WaF Walla Walla silt loam, 30 to 65 percent slopes	214.73	0.98			214.73	1.98	5	0.55	yes	silt loam	no
WdAB Warden silt loam, 0 to 5 percent slopes	1,857.29	8.43			1,857.29	17.13	5	0.55	no	silt loam	no
WdE3 Warden silt loam, 15 to 30 percent slopes, severely eroded	184.95	0.84			184.95	1.71	5	0.55	no	silt loam	no
WfC2 Warden very fine sandy loam, 0 to 15 percent slopes	191.86	0.87			191.86	1.77	3	0.55	no	sandy loam	no
WsB Willis silt loam, 0 to 5 percent slopes	1,075.03	4.88	768.24	6.87	306.78	2.83	5	0.55	no	silt loam	no
WsE3 Willis silt loam, 15 to 30 percent slopes, severely eroded	571.06	2.59	421.64	3.77	149.42	1.38	5	0.64	no	silt loam	no
WsF Willis silt loam, 30 to 65 percent slopes	72.09	0.33	71.16	0.64	0.93	0.01	5	0.55	yes	silt loam	no
WtD Willis silt loam, shallow, 0 to 15 percent slopes	6,073.37	27.58	5,508.97	49.28	564.40	5.21	5	0.64	no	silt loam	no
x Digital Data not Available	1,088.36	4.94	-	-	1,088.36	10.04	_	_	_	_	_
Total	22,020	_	11,179	-	10,841	_					1
Soils in moderate to high water erosion potential soils areas	17,017.15	77.28	9,848.22	88.10	7,168.93	66.13					
Soils in slope greater than 30%	2,914.08	13.23	523.38	4.68	2,390.70	22.05					
Soils that are primarily silt loam	19,916.65	90.45	10,838.28	96.95	9,078.37	83.74					
Soils with bedrock reported at less than 40 inches	1,088.32	4.94	8.74	0.08	1,079.58	9.96					

*A wind erodibility group (WEG) consists of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible.

**Erosion factor K (Kw for the whole soil) indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.