12.0 STORMWATER MANAGEMENT

The intent of this section is to determine and analyze pre-and post-development runoff conditions during various storm events. The methodology, results, and management scheme are described below.

12.1 NARRATIVE

Development Location

The applicant is proposing to construct a solar farm near Route 139 in the towns of Benton, Clinton, and Unity Township, Maine. The proposed development is sited on multiple lots and has a total project area of 860± acres. The total project area includes the entire area inside the solar array fence line, the area to be maintained outside the fence and the shade management area. A series of gravel access drives, totaling 44,200'± is being proposed. The main site entrances for the project utilizes Bessey Lane, an existing gravel road off of Route 139, as well as Palmer Road. The access drives will be terminated, within the solar arrays, with "T" style or hammerhead turnarounds. The total impervious area for the project, including the access drive, inverter skids and the posts for the solar array panels, is 24.66± acres. As part of the Site Law application, the project must meet the MDEP's Basic, General and Flooding standards.

The project's runoff flows either directly to the Sebasticook River or to Fifteenmile Stream, Spring Brook, and other unnamed tributaries that ultimately flow to the Sebasticook River.

Surface Water on or Abutting the Site

The Project area has mapped freshwater wetlands (see Section 7.0 for additional details).

Downstream Ponds and Lakes

There are no downstream ponds or lakes.

General Topography

• The general topography within the project area includes moderate slopes ranging from approx. 2-14% slopes. See topographic data on the attached Site Plans (Exhibit 1-1).

Flooding

 The site has not experienced historic flooding. The site does not lie within a "special flood hazard area" as depicted on the FIRM maps prepared by the Federal Emergency Management Agency (see Section 19.0 for additional details).

Alterations to Natural Drainage Ways

• No significant changes to the current existing channel geometry and/or alignment are proposed for this work (Exhibit 1-1).

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Alterations to Land Cover

• Some changes will be made to the land cover for the access drive and installation of the panels (Exhibit 1-1).

Modeling Assumptions

• The runoff curve numbers (CN's) determined by ground cover and soil types (Section 11), were calculated to compare the pre- and post-development conditions. Soils found on the site were primarily a combination of Hydrologic Group C/D and D soils. The curve number calculations were adjusted to add the revised land cover (meadow) associated with the proposed development. No significant changes to the curve numbers were noted, therefore there were no significant changes in the runoff as a result of the proposed Project. The supporting calculations are contained in Exhibit 12-1

Water Quantity Control

• Water quantity calculations were performed using a runoff curve number (CN) comparison as a check. It was determined there was no significant change in the CN. Therefore, there would be no significant change in the runoff rate. The area within the panels will be maintained as a meadow and will not be mowed more than twice per year. This area will self-treat the runoff from the solar panels. The supporting calculations are contained in Exhibit 12-1, and Exhibit 1-1 shows the location and configuration of the stormwater management system.

Water Quality Treatment

 Water quality treatment was accomplished by using a combination of buffers and an underdrain soil filter for storm water treatment. The ground cover within the array will be maintained as a meadow field, will not be mowed more than twice per year and is considered self-treating. The supporting calculations are contained in Exhibit 12-1, and Exhibit 1-1 shows the location and configuration of the stormwater management buffers and underdrain soil filter.

Offset Credits

Not applicable.

Compensation Fees

Not applicable.

Development Impacts

• The development will not impact the receiving waters. The project has addressed the Maine DEP's Basic, BMP and Flooding standards. In meeting those standards the receiving water, adjacent properties, downstream properties and downstream flow control structures have all been reviewed and potential impacts have been addressed. See the civil site plans in Exhibit 1-1 and the calculations in Exhibit 12-1.

12.2 MAPS

The Project area is depicted on a topographic map provided as Figure 1-1 in Section 1.0.

A NRCS soils map has been overlaid onto the pre- and post-development drainage plans (Exhibit 1-1) and the Project soil survey results are included as Exhibit 11-1 (Section 11.0).

12.3 DRAINAGE PLANS

See the attached pre- and post-development drainage plans (Exhibit 1-1).

- 1. <u>Contours</u>. See the civil site plans for pre- and post-development plans.
- 2. Plan Elements. See the civil site plans for pre- and post-development plans.
- 3. Land Cover Types and Boundaries. See the civil site plans for pre- and post-development plans.
- 4. <u>Soil Group Boundaries</u>. See soils information provided on pre- and post-development plans (Exhibit 1-1).
- 5. <u>Stormwater Quantity Subwatershed Boundaries</u>. See the civil site plans for the pre- and post-development plans.
- 6. <u>Stormwater Quality Subwatershed Boundaries</u>. See the civil site plans for the subwatersheds boundaries for the quality analysis.
- 7. Watershed Analysis Points. See the civil site plans for pre- and post-development plans.
- 8. <u>Hydrologic Flow Lines</u>. See the civil site plans for pre- and post-development plans.
- 9. Runoff Storage Areas. See the civil site plans for pre- and post-development plans.
- 10. Roads and Drives. See the civil site plans for the location of the roads and drives.
- 11. Facilities. See the civil site plans for the location of the roads and equipment staging area.
- 12. <u>Drainage Systems</u>. See the civil site plans for the location of the culverts as part of the drainage system for the Project.
- 13. Natural and Man-made Drainage Ways. See the civil site plans.
- 14. Wetlands. See the civil site plans and Section 7.0.
- 15. Flooded Areas. Currently the property is not affected by flooding.
- 16. Benchmark. The contractor will set the benchmark prior to construction.
- 17. <u>Stormwater Detention, Retention, and Infiltration Facilities</u>. As part of the stormwater management plan, an underdrain soil filter will be utilized to treat the quantity of the stormwater runoff. See the stormwater calculations for the design features of the structure (Exhibit 12-1). See the civil site plans for the location and size of the filter (Exhibit 1-1).

- 18. <u>Stormwater Treatment Facilities</u>. See the civil site plans (Exhibit 1-1) and stormwater calculations (Exhibit 12-1) for the location, size, and design calculations of the stormwater treatment structures.
- 19. Drainage Easements. Not applicable.

12.4 RUNOFF ANALYSIS

- 1. Curve Number Computations. The CN calculations are included in Exhibit 12-1.
- 2. Time of Concentration Calculations. Not applicable.
- 3. <u>Travel Time Calculations</u>. Not applicable.
- 4. Peak Discharge Calculations. Not applicable.
- 5. Reservoir Routing Calculations. Not applicable.

12.5 FLOODING STANDARD SUBMISSION

The flooding standard was met by meadow buffers within the solar array, roadside buffers, stone bermed level lip spreaders with vegetated buffers, an underdrain soil filter, and constructing level spreaders. These stormwater BMPs reduce the flow rate of the stormwater prior to the runoff leaving the property (see the supporting calculations in Exhibit 12-1). The civil site plans and details include the location and configuration of the stormwater management system.

12.6 GENERAL STANDARDS SUBMISSION

- 1. Narrative. The general standard had to be met for this project due to the amount of development on the site. This was accomplished by using a combination of buffers and an underdrain soil filter for stormwater treatment. The disturbed area for the solar farm is 860± acres, which includes the access drive, graded areas, equipment pads, area for the panel posts, and any areas with disturbed or exposed soil. The developed area for the solar farm is 24.66± acres, which includes the access drives, equipment pads and area for the panel posts. The impervious area for the solar farm is 24.66± acres, which includes the access drive, equipment pads and the area for the panel posts. The area within the panels will be maintained as a meadow and not mowed more than twice per year. This area will self-treat the runoff from the solar panels.. See the supporting calculations in Exhibit 12-1. See the civil site plans for the location and configuration of the stormwater management buffers and the underdrain soil filter.
- <u>Drainage Plans</u>. See the civil site plans for the topographic features, buildings, drainageways, cover types, easements, subcatchment boundaries, hydrologic flow lines, and soils group boundaries for the pre- and post-development conditions. See the post-development drainage plans for the type and locations of the stormwater treatment methods.

Calculations.

- a. Water Volume- See calculations in Exhibit 12-1.
- b. *Buffer Sizing-* See calculations in Exhibit 12-1.

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- 4. Details, Designs, and Specifications.
 - a. Ponds- Not applicable.
 - b. *Underdrain Soil Filter-* See the civil site plans and details (Exhibit 1-1), soil survey data (Section 11.0, Exhibit 11-1), and supporting calculations (Exhibit 12-1).
 - c. Infiltration- Not applicable.
 - d. *Vegetated Buffers* See the civil site plans and details (Exhibit 1-1), soil survey data (Section 11.0, Exhibit 11-1), and supporting calculations (Exhibit 12-1).
- 5. Phosphorous Removal. Not applicable.
- 6. Responsible Party for Long-Term Maintenance. Once the project construction is complete and is acceptable to the Owner, the Owner or assigned responsible party will be responsible for routine inspection and necessary maintenance. Responsibility for inspections and maintenance shall be defined to mean accountability for the actions taking place. In no way shall this document be construed to mean that the Owner is qualified to perform any of those duties. The inspector shall be a qualified professional in the area of erosion and sedimentation control and storm water management. Acceptable professionals could include licensed professional engineers, or a contractor that is certified in erosion and sedimentation control by the State of Maine. All repairs and replacements shall be performed in accordance with the final, approved project plans and specifications.

12.7 COMPONENTS OF THE MAINTENANCE PLAN

1. Person Responsible for Implementing the Maintenance Plan.

Contact information: Three Corners Solar, LLC

30 Danforth Street Portland, ME 04101 Tel. (844) 524-4142

If contact information changes over the life of the Project, the Owner will provide updated information.

2. Specifies the Transfer Mechanism. The Owner, Three Corners Solar, LLC, or assigned responsible party will be responsible for the inspections and maintenance of the Project. The contractor will be responsible for the routine inspections and maintenance during construction. During construction, the site will be inspected in accordance with the MDEP BMPs by someone with knowledge of erosion and stormwater control, including the standards and conditions in the permit. Responsibilities include the road, side slopes, ditches, and erosion and sedimentation control management measures. Once the Owner has accepted the Project as complete, the responsibility for routine inspections and maintenance will be the Owners. Following is a list of measures for inspection and maintenance of the Project during and after construction.

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- 3. Facilities to be Maintained. List of measure for general inspection include:
 - a. Ditches
 - b. Culverts
 - c. Silt fence and/or bark mulch berms
 - d. Buffers
 - e. Roadside slopes
 - f. Underdrain soil filter
 - g. Level spreaders
- 4. <u>Inspection and Maintenance Tasks</u>. See the Inspection and Maintenance Plan provided in Exhibit 12-2.
- 5. <u>Identify Any Deed Covenants, Restrictions, or Easements on the Site</u>. The vegetated buffers have deed restrictions for runoff treatment. See the draft deed restriction language in Exhibit 12-3. See the civil site plans in Exhibit 1-1 for the buffer locations.
- 6. Maintenance Log. See the Inspection and Maintenance Plan provided in Exhibit 12-2.
- 7. Third Party Contracts. Not applicable.
- 8. <u>Maintenance by a Homeowner's Association</u>. Not applicable.
- 9. Maintenance of Facilities by a Municipality or Quasi-Municipal District. Not applicable.
- 10. <u>General Inspection and Maintenance Requirements</u>. Facilities requiring regular maintenance at the Project site include the stormwater management system, access drive ditches, and areas of stormwater buffers. See the Inspection and Maintenance Plan in Exhibit 12-2.

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Exhibit 12-1

Stormwater Calculations

Project Name Project Number Date Done by **3 Corners Solar 261.21.01** 1/30/2022 JAO BA=Buffer Adjacent to Small Imp BL=Buffer w/level spreader DT=Buffer w/ditch turnout USF=Underdrain Soil Filter RB=Roadside buffer DB=Detention basin WP=Wet pond INF=Infiltration BRS=Roadside Buffer with Rock Sandwich

QUALITY CALCULATIONS FOR LINEAR PORTION

Sebasticook River

% of Project Treated for Watershed= Total Impervious Area for Watershed=

76.42%21.11
0.18

>= Acres Acres

Acres

75%

Access Rd width=

Main Road width=

24 12

Exempt Impervious Area thru Connected Wetlands=
Total Impervious Area for Watershed=

0.18 20.93 Existing NC= remain as is

16

Driveway width=

Roadway	Access	Station to Station	% of area	BMP	Side of road	BMP cover	Existing	New	Imp Area	Treatment
Alignment or	Main			No.	being Tx	Forest	Imp Area	Imp. Area	to be Tx	Factor
Turbine Site	Drive			(or none)	right, left, both	Meadow	Width	(acres)	(acres)	

Main Road 0

Main Road 0	Main	0	450	100%	None	Both		12	0.1240	0.2479	1
Main Road 0	Main	450	940	100%	BL4	Both	Forest	12	0.1350	0.2700	0.4
Main Road 0	Main	940	1170	50%	BL5	Right	Meadow	12	0.0317	0.0634	0.4
Main Road 0	Main	1170	1670	50%	BL5	Right	Meadow		0.1377	0.1377	0.4
Main Road 0	Main	940	1170	50%	BL1	Left	Meadow	12	0.0317	0.0634	0.4
Main Road 0	Main	1170	1495	50%	BL1	Left	Meadow		0.0895	0.0895	0.4
Inverter Pad 1	Inverter			100%	BL1		Meadow		0.0230	0.0230	0.4
Main Road 0	Main	1495	1670	50%	BL5	Left	Meadow		0.0482	0.0482	0.4
Main Road 0	Main	1670	2900	50%	BL6	Left	Meadow		0.3388	0.3388	0.4
Main Road 0	Main	1670	1685	50%	BL6	Right	Meadow		0.0041	0.0041	0.4
Main Road 0	Main	1685	3160	50%	RB3	Right	Meadow		0.4063	0.4063	0.4
Inverter Pad 2	Inverter			100%	BL6		Meadow		0.0230	0.0230	0.4
Inverter Pad 3	Inverter			100%	BL3		Meadow		0.0230	0.0230	0.4
Main Road 0	Main	2900	3160	50%	BL3	Left	Meadow		0.0716	0.0716	0.4
Main Road 0	Main	3160	3560	100%	BL3	Both	Meadow		0.2204	0.2204	0.4
Main Road 0	Main	3560	3890	100%	None	Both			0.1818	0.1818	1
Main Road 0	Main	3890	4100	50%	None	Left			0.0579	0.0579	1
Main Road 0	Main	3890	4100	50%	BL7	Right	Forest		0.0579	0.0579	0.4
Main Road 0	Main	4100	4335	100%	BL8	Both	Forest		0.1295	0.1295	0.4
Main Road 0	Main	4335	4800	50%	BL8	Left	Forest		0.1281	0.1281	0.4
Main Road 0	Main	4335	4940	50%	None	Right			0.1667	0.1667	1
Main Road 0	Main	4800	5055	50%	RB4	Left	Meadow		0.0702	0.0702	0.4

Main Road 0	Main	4940	6000	5Qeval Ca	lc Lin g§ gbas	st ionak tRiver	Forest	0.2920	0.2920	Page 2 0.4
Main Road 0	Main	5055	5175	50%	None	Left		0.0331	0.0331	1
Main Road 0	Main	5175	5400	50%	RB5	Left	Meadow	0.0620	0.0620	0.4
Main Road 0	Main	5400	5425	50%	BL9	Left	Forest	0.0069	0.0069	0.4
Main Road 0	Main	5425	5620	50%	RB6	Left	Meadow	0.0537	0.0537	0.4
Main Road 0	Main	5630	6085	50%	BL10	Left	Meadow	0.1253	0.1253	0.4
Inverter Pad 4	Inverter			100%	BL11		Meadow	0.0184	0.0184	0.4
Main Road 0	Main	6000	6815	50%	RB7	Right	Meadow	0.2245	0.2245	0.4
Main Road 0	Main	6085	6950	50%	BL11	Left	Meadow	0.2383	0.2383	0.4
Inverter Pad 5	Inverter				BL12		Meadow	0.0818	0.0818	0.4
Main Road 0	Main	6950	7270	50%	BL12	Left	Meadow	0.0882	0.0882	0.4
Main Road 0	Main	6815	7270	50%	BL12	Right	Meadow	0.1253	0.1253	0.4
Main Road 0	Main	7270	7480	50%	RB8	Left	Meadow	0.0579	0.0579	0.4
Main Road 0	Main	7270	7480	50%	None	Right		0.0579	0.0579	1
Main Road 0	Main	7480	7840	100%	None	Both		0.1983	0.1983	
Main Road 0	Main	7840	7880	50%	BL13	Left	Meadow	0.0110	0.0110	0.4
Main Road 0	Main	7840	8470	50%	BL13	Right	Meadow	0.1736	0.1736	0.4
Inverter Pad 7	Inverter			100%	BL13		Meadow	0.0182	0.0182	0.4
Main Road 0	Main	7880	8060	50%	RB9	Left	Meadow	0.0496	0.0496	0.4
Main Road 0	Main	8060	8265	50%	BL14	Left	Meadow	0.0565	0.0565	0.4
Main Road 0	Main	8265	8510	50%	BL13	Left	Meadow	0.0675	0.0675	0.4
Inverter Pad 7	Inverter			100%	BL14		Meadow	0.0182	0.0182	0.4
Main Road 0	Main	8470	8850	50%	RB10	Right	Meadow	0.1047	0.1047	0.4
Main Road 0	Main	8510	9100	50%	BL15	Left	Meadow	0.1625	0.1625	0.4
Main Road 0	Main	8850	9100	50%	BL15	Right	Meadow	0.0689	0.0689	0.4
Inverter Pad 9	Inverter	2422	2010	100%	BL15	1 6	Meadow	0.0184	0.0184	0.4
Main Road 0	Main	9100	9840	50%	BL16	Left	Meadow	0.2039	0.2039	0.4
Main Road 0	Main	9100	10200	50%	BL16	Right	Meadow	0.3030	0.3030	0.4
Main Road 0	Main	9840	10705	50%	RB11	Left	Meadow	0.2383	0.2383	0.4
Inverter Pad 11	Inverter			100%	RB11		Meadow	0.0367	0.0367	0.4
Inverter Pad 12	Inverter	10705	11005	100%	RB11	1 044	Meadow	0.0633	0.0633	0.4
Main Road 0	Access Main	10705 10200	11265 10705	50% 50%	RB11 BL17	Left	Meadow	0.1028 0.1391	0.1028 0.1391	0.4
Main Road 0		10200	11025	50%	BL17 BL17	Right Right	Meadow	0.0588	0.1391	0.4
Main Road 0 Main Road 0	Access Access	11025	11325	50%	RB12	Right	Meadow Meadow	0.0551	0.0566	0.4
Main Road 0		11265	11525	50%	BL18	Left	Meadow	0.0606	0.0606	0.4
Main Road 0	Access	11325	12630	50%	BL18	Right	Meadow	0.0006	0.0000	0.4
Inverter Pad 13	Access Inverter	11323	12030	100%	BL18	Rigiti	Meadow	0.0230	0.2397	
Main Road 0	Access	11595	12100	50%	None	Left	IVIEAUOW	0.0230	0.0230	1
Main Road 0	Access	12100	12300	50%	RB12A	Left	Meadow	0.0367	0.0327	0.4
Main Road 0	Access	12300	12630	50%	BL18	Left	Meadow	0.0606	0.0606	
Main Road 0	Access	12630	12800	50%	None	Right	IVICACOW	0.0000	0.0312	0.4
Main Road 0	Access	12800	13290	50%	BL19	Right	Meadow	0.0900	0.0312	0.4
Main Road 0	Access	12630	13290	50%	BL19	Left	Meadow	0.0900	0.0900	0.4
Inverter Pad 14	Inverter	12000	10230	100%	BL19	Loit	Meadow	0.0292	0.1212	0.4
Inverter Pad 15	Inverter			100%	BL19		Meadow	0.0232	0.0232	

Main Road 0	Turnaround		1000% C	alc Li g <u>(</u>Spec bast	cook River	Meadow	0.0673	0.0673	Page 3	0.4

150 Road

150 Road	Main	15012	15060	50%	BL3	Left	Meadow		0.0132	0.0132	0.4
150 Road	Main	15060	15425	50%	RB19	Left	Meadow		0.1006	0.1006	0.4
150 Road	Main	15012	15800	50%	BL20	Right	Forest		0.2171	0.2171	0.4
150 Road	Main	15425	15735	50%	None	Left			0.0854	0.0854	1
150 Road	Main	15735	15850	50%	RB20	Left	Meadow		0.0317	0.0317	0.4
150 Road	Main	15800	16005	50%	BL21	Right	Meadow		0.0565	0.0565	0.4
150 Road	Main	15850	16250	50%	None	Left			0.1102	0.1102	1
150 Road	Main	16005	16250	50%	None	Right		12	0.0337	0.0675	1
150 Road	Main	16250	16380	100%	Exempt	Both			Exempt	Exempt	Exempt
150 Road	Main	16380	16605	50%	None	Left		12	0.0310	0.0620	1
150 Road	Main	16380	16510	50%	None	Right			0.0358	0.0358	1
150 Road	Main	16510	16900	50%	BL22	Right	Meadow		0.1074	0.1074	0.4
150 Road	Main	16605	16900	50%	BL23	Left	Meadow		0.0813	0.0813	0.4
Inverter Pad 17	Inverter			100%	BL23		Meadow		0.0230	0.0230	0.4
150 Road	Main	16900	17200	100%	BL24	Both	Meadow		0.1653	0.1653	0.4
150 Road	Main	17200	17300	100%	BL24	Both	Meadow	12	0.0275	0.0551	0.4
150 Road	Main	17300	17670	50%	RB21	Right	Meadow	12	0.0510	0.1019	0.4
150 Road	Main	17300	17680	50%	BL25	Left	Meadow	12	0.0523	0.1047	0.4
150 Road	Main	17665	17680	50%	BL25	Right	Meadow		0.0041	0.0041	0.4
Inverter Pad 16	Inverter			100%	BL25		Meadow		0.0230	0.0230	0.4
150 Road	Main	17680	18200	50%	RB22	Right	Meadow		0.1433	0.1433	0.4
150 Road	Main	17680	18220	50%	BL26	Left	Forest		0.1488	0.1488	0.4
150 Road	Main	18200	18220	50%	BL26	Right	Forest		0.0055	0.0055	0.4
150 Road	Main	18220	18400	50%	RB23	Right	Meadow		0.0496	0.0496	0.4
150 Road	Main	18400	18915	50%	RB23	Right	Meadow	12	0.0709	0.1419	0.4
150 Road	Main	18220	18400	50%	BL27	Left	Meadow		0.0496	0.0496	0.4
150 Road	Main	18400	18600	50%	BL27	Left	Meadow	12	0.0275	0.0551	0.4
150 Road	Main	18600	19630	50%	None	Left	Meadow	12	0.1419	0.2837	1
150 Road	Main	18915	19385	50%	None	Right		12	0.0647	0.1295	1
150 Road	Main	19385	19665	50%	RB24	Right	Meadow	12	0.0386	0.0771	0.4
150 Road	Main	19630	19850	50%	BL28	Left	Meadow	12	0.0303	0.0606	0.4
150 Road	Main	19850	19910	50%	BL28	Left	Meadow		0.0165	0.0165	0.4
150 Road	Main	19665	19850	50%	None	Right		12	0.0255	0.0510	1
150 Road	Main	19850	19975	50%	None	Right			0.0344	0.0344	1
150 Road	Main	19910	20400	50%	None	Left			0.1350	0.1350	1
150 Road	Main	19975	20400	50%	None	Right			0.1171	0.1171	1
150 Road	Main	20400	20640	100%	BL29	Both	Forest		0.1322	0.1322	0.4
		•	•			•	•	l.	l.	L.	

150 Road	Main	20640	20910	1000% al Ca	lc Li B∣S ⊛bas	ti <mark>ogoodk</mark> River	Forest		0.1488	0.1488	Page 4 0.4
150 Road	Main	20910	21115	100%	None	Both		12	0.0565	0.1129	1
150 Road	Main	21115	21215	100%	Exempt	Both			Exempt	Exempt	Exempt
150 Road	Main	21215	21355	100%	None	Both			0.0771	0.0771	1
150 Road	Main	21355	21800	50%	BL31	Left	Forest		0.1226	0.1226	0.4
150 Road	Main	21800	21865	50%	None	Left			0.0179	0.0179	1
150 Road	Main	21355	21970	50%	BL31	Right	Forest		0.1694	0.1694	0.4
150 Road	Main	21865	21970	50%	BL31	Left	Forest		0.0289	0.0289	0.4
150 Road	Main	21970	22530	50%	BL32	Left	Meadow		0.1543	0.1543	0.4
150 Road	Main	21970	22530	50%	None	Right			0.1543	0.1543	1
150 Road	Main	22530	22720	50%	None	Left			0.0523	0.0523	1
150 Road	Main	22720	22955	50%	RB26	Left	Meadow		0.0647	0.0647	0.4
Inverter Pad 20	Inverter			100%	RB26		Meadow		0.0232	0.0232	0.4
150 Road	Main	22530	23400	50%	BL33	Right	Meadow		0.2397	0.2397	0.4
150 Road	Main	22955	23580	50%	RB27	Left	Meadow		0.1722	0.1722	0.4
150 Road	Main	23400	23800	50%	None	Right			0.1102	0.1102	1
150 Road	Main	23580	23750	50%	None	Left			0.0468	0.0468	1
150 Road	Main	23750	24125	50%	BL34	Left	Meadow		0.1033	0.1033	0.4
Inverter Pad 21	Inverter	20.00	21120	50%	None	2011	moddon		0.0230	0.0230	1
Inverter Pad 21	Inverter			50%	BL34		Meadow		0.0230	0.0230	0.4
150 Road	Main	23800	24110	50%	RB28	Right	Meadow		0.0854	0.0854	0.4
150 Road	Main	24110	24125	50%	BL34	Right	Meadow		0.0041	0.0034	0.4
150 Road	Main	24125	24310	50%	RB29	Right	Meadow		0.0510	0.0510	0.4
Inverter Pad 22	Inverter	24120	24310	50%	BL34	Trigiti	Meadow		0.0230	0.0230	0.4
Inverter Pad 22	Inverter			50%	BL35		Meadow		0.0230	0.0230	0.4
150 Road	Main	24125	24650	50%	BL35	Left	Meadow		0.1446	0.0230	0.4
150 Road	Main	24310	24650	50%	BL35	Right	Meadow		0.0937	0.0937	0.4
150 Road	Main	24650	25230	50%	RB30	Right	Meadow		0.1598	0.1598	0.4
150 Road	Main	24650	25040	50%	None	Left	Wicadow		0.1074	0.1074	1
Inverter Pad 23	Inverter	24000	20040	50%	None	Lon			0.0450	0.0450	<u>.</u> 1
Inverter Pad 23	Inverter			50%	BL36		Meadow		0.0450	0.0450	0.4
150 Road	Main	25040	25975	50%	BL36	Left	Meadow		0.2576	0.2576	0.4
150 Road	Main	25230	25400	50%	None	Right	Wioddow		0.0468	0.0468	1
150 Road	Main	25400	25690	50%	BL36	Right	Meadow		0.0799	0.0799	0.4
Inverter Pad 24	Inverter	20100	20000	50%	BL36	rtigitt	Meadow		0.0656	0.0656	0.4
Inverter Pad 24	Inverter			50%	None		Meadow		0.0656	0.0656	1
Inverter Pad 25	Inverter			100%	RB31		Meadow		0.0527	0.0527	0.4
150 Road	Turnaround			100%	BL36		Meadow		0.0240	0.0240	0.4
150 Road	Turnaround			100%	RB31		Meadow		0.0382	0.0382	0.4
150 Road	Main	25690	26525	50%	BL37	Right	Meadow		0.2300	0.2300	0.4
150 Road	Main	25975	26250	50%	None	Left	IVICAGOVV		0.2300	0.2300	
150 Road	Main	26250	26445	50%	RB32	Left	Meadow		0.0738	0.0738	0.4
150 Road	Main	26445	26465	50%	BL37	Left	Meadow		0.0055	0.0055	0.4
150 Road	Main	26465	27020	50%	RB33	Left	Meadow		0.0055	0.0055	0.4
150 Road	Main	26525	26695	50%	None	Right	IVICAUUW		0.1329	0.1329	1
150 Road	Main	26695	27300	50%	BL38	Right	Meadow		0.0466	0.0466	0.4

150 Road	Main	27020	27325	5@ly⊗l Ca	ılc Li g <u>(</u>Sø basti	io <u>co</u> ork River	Meadow	0.0840	0.0840	Page 5 0.4
150 Road	Main	27325	27810	50%	BL39	Left	Meadow	0.1336	0.1336	0.4
150 Road	Main	27810	28200	50%	RB35	Left	Meadow	0.1074	0.1074	0.4
Inverter Pad 26	Inverter	27810	28200	100%	RB35		Meadow	0.0627	0.0627	0.4
150 Road	Main	27300	28050	50%	RB34	Right	Meadow	0.2066	0.2066	0.4
150 Road	Main	28050	28200	50%	None	Both		0.0413	0.0413	1
150 Road	Main	00000	20200	1000/	Exament.	Doth		Cvament.	Exampt.	Evenont.
150 R0au	Main	28200	28300	100%	Exempt	Both		Exempt	Exempt	Exempt
150 Road	Main	28200	29069	100%	- I -	Both		0.4237	0.4237	Exempt 1
	-				- I -					1 1
150 Road	Main			100%	None			0.4237	0.4237 0.0404	1 1 1
150 Road 150 Road	Main Turnaround			100% 100%	None None			0.4237 0.0404	0.4237 0.0404	1 1 1
150 Road 150 Road	Main Turnaround			100% 100%	None None			0.4237 0.0404	0.4237 0.0404	1 1 1

300 Road

300 Road	Drive	30012	30690	100%	None	Both		0.1868	0.1868	1
300 Road	Drive	30690	30860	100%	RB13	Both	Meadow	0.0468	0.0468	0.4
300 Road	Drive	30860	31395	100%	None	Both		0.1474	0.1474	1
300 Road	Drive	31395	31685	100%	RB14	Both	Meadow	0.0799	0.0799	0.4
300 Road	Drive	31685	31985	100%	None	Both		0.0826	0.0826	1
300 Road	Drive	31985	32115	100%	RB15	Both	Meadow	0.0358	0.0358	0.4
300 Road	Drive	32115	32740	100%	None	Both		0.1722	0.1722	1
300 Road	Drive	32740	32900	100%	RB16	Both	Forest	0.0441	0.0441	0.4
300 Road	Drive	32900	33100	100%	None	Both		0.0551	0.0551	1
300 Road	Drive	33100	33250	100%	RB17	Both	Forest	0.0413	0.0413	0.4
300 Road	Drive	33250	34265	100%	None	Both		0.2796	0.2796	1
300 Road	Drive	34265	34380	100%	RB18	Both	Forest	0.0317	0.0317	0.4
300 Road	Drive	34380	35969	100%	None	Both		0.4377	0.4377	1

400 Road

400 Road	Main	40000	40360	100%	BL40	Both	Meadow	10	0.1157	0.1983	0.4
400 Road	Main	40360	40485	100%	RB36	Both	Meadow	10	0.0402	0.0689	0.4
400 Road	Main	40485	40675	100%	RB36	Both	Meadow		0.1047	0.1047	0.4
Inverter Pad 38	Inverter			100%	RB36		Meadow		0.0230	0.0230	0.4
400 Road	Main	40675	40925	100%	BL41	Both	Meadow		0.1377	0.1377	0.4
400 Road	Main	40925	41140	100%	RB37	Both	Meadow		0.1185	0.1185	0.4
Inverter Pad 39	Inverter			100%	RB37		Meadow		0.0230	0.0230	0.4
400 Road	Main	41140	41155	100%	BL43	Both	Meadow		0.0083	0.0083	0.4
400 Road	Main	41155	41215	100%	BL42	Both	Meadow		0.0331	0.0331	0.4
400 Road	Main	41215	44182	100%	RB38	Both	Meadow		1.6347	1.6347	0.4
400 Road	Turnaround			100%	RB38	Both	Meadow		0.0406	0.0406	0.4
Inverter Pad 35	Inverter			100%	RB38	Both	Meadow		0.0230	0.0230	0.4

Inverter Pad 34	Inverter				alcLipapSeedbas	ti pootk River	Meadow	0.0230	0.0230 P	
Inverter Pad 32	Inverter			100%	RB38	Both	Meadow	0.0230	0.0230	0.4
Inverter Pad 33	Inverter			100%	RB38	Both	Meadow	0.0230	0.0230	0.4
Inverter Pad 30	Inverter			100%	RB38	Both	Meadow	0.0230	0.0230	0.4
Inverter Pad 31	Inverter			100%	RB38	Both	Meadow	0.0230	0.0230	0.4
Inverter Pad 28	Inverter			100%	RB38	Both	Meadow	0.0230	0.0230	0.4
Inverter Pad 29	Inverter			100%	RB38	Both	Meadow	0.0230	0.0230	0.4
					500 Road					
500 B		50000	50405	1000/			- Ind.	0.4004	0.4004	
500 Road	Drive	50000	50465	100%	BL1	Both	Meadow	0.1281	0.1281	0.4
500 Road	Drive	50465	50760	50%	BL1	Right	Meadow	0.0406	0.0406	0.4
500 Road	Drive	50465	50760	50%	RB1	Left	Meadow	0.0406	0.0406	0.4
500 Road	Drive	50760	51675	50%	BL2	Right	Meadow	0.1260	0.1260	0.4
500 Road	Drive	50760	50780	50%	BL2	Left	Meadow	0.0028	0.0028	0.4
500 Road	Drive	50780	52300	50%	RB2	Left	Meadow	0.2094	0.2094	0.4
500 Road	Drive	51675	52750	50%	None	Right		0.1481	0.1481	1
500 Road	Drive	52300	52930	50%	None	Left		0.0868	0.0868	1
500 Road	Drive	52750	52930	50%	BL3	Right	Meadow	0.0248	0.0248	0.4
					600 Road					
					000 Road	<u> </u>				
600 Road	Access	60012	61420	50%	BL43	Left	Meadow	0.2586	0.2586	0.4
600 Road	Access	60012	61610	50%	BL42	Right	Meadow	0.2935	0.2935	0.4
600 Road	Access	61420	61610	50%	RB39	Left	Meadow	0.0349	0.0349	0.4
600 Road	Turnaround			75%	RB39		Meadow	0.0239	0.0239	0.4
600 Road	Turnaround			25%	BL42		Meadow	0.0080	0.0080	0.4
Inverter Pad 36	Inverter			100%	RB39		Meadow	0.0324	0.0324	0.4
Inverter Pad 37	Inverter			100%	BL42		Meadow	0.0218	0.0218	0.4
					700 Road	_				
700 Road	Access	70010	70675	100%	RB10	Right		0.2443	0.2443	0.4
10011044	Λ	70675	70820	100%	None	Both		0.0533	0.0533	1
700 Road	Access	10010				1	-t			
	Inverter	70070		100%	RB10			0.0229	0.0229	0.4
700 Road	Inverter	70070		100% 100%	RB10 RB10			0.0229 0.0184	0.0229 0.0184	
700 Road Inverter Pad 8		70070								0.4 0.4 1
700 Road Inverter Pad 8 Inverter Pad 9	Inverter Inverter	70070		100%	RB10			0.0184	0.0184	

800 Road

800 Road	Access	80012	80175	100%	None	Both		0.0599	0.0599	1
800 Road	Access	80175	80769	100%	RB25	Both	Meadow	0.2182	0.2182	0.4
Inverter Pad 18	Inverter			100%	RB25		Meadow	0.0376	0.0376	0.4
800 Road	Turnaround			100%	RB25		Meadow	0.0211	0.0211	0.4

900 Road

900 Road	Access	90012	90200	50%	BL31	Left	Forest	0.0345	0.0345	0.4
900 Road	Access	90012	90200	50%	BL32	Right	Meadow	0.0345	0.0345	0.4
900 Road	Access	90200	90628	100%	RB31	Both	Meadow	0.1572	0.1572	0.4
900 Road	Turnaround			100%	RB31		Meadow	0.0443	0.0443	0.4
Inverter Pad 19	Inverter			100%	RB31		Meadow	0.0383	0.0383	0.4

Project Name 3 Corners Solar
Project Number 261.21.01
Date 1/31/2022
Done by JAO

BA=Buffer Adjacent to Small Imp BL=Buffer w/level spreader DT=Buffer w/ditch turnout USF=Underdrain Soil Filter RB=Roadside buffer DB=Detention basin WP=Wet pond INF=Infiltration

QUALITY CALCULATIONS FOR NON LINEAR PORTION

Total NEW NONLIN impervious area for project=	73643	sf	=	1.69	acres
Total NEW NONLIN landscaped area for project=	0	sf	=	0.00	acres
Total NEW NONLINEAR area of project=	73643	sf	=	1.69	acres

NONLinear Area Subcatchment # BMP Type & # Imp (sf) Land (sf) Description If Applicable SUB1 Substation 60325 Self treating pad O&M1 USF1 6775 Underdrain Soil Filter 1 O&M2 USF2 Underdrain Soil Filter 2 2846 TOTAL 69946 0

SUMMARY FOR THE NONLINEAR PORTION OF THE PROJECT

IMP Area Required area to be treated (sf)=

Total NONLIN IMP Area Being Treated (sf)=

DEVEL Area Required area to be treated (sf)=

Total NONLIN DEVEL Area Being Treated (sf)=

NONLinear Area Not Being Treated (sf)=

3697

69960.85

69946

95.0% >=95%

69946

95.0% >=80%

RB Buffer Calcs Page 1

Project Name 3 Corners Solar

Project Number **261.21.01**Date 1/30/2022

Done by JAO

RB=Roadside Buffer Imp=Impervious area Land=Landscaped Area

W=Width B=Buffer

REQUIRED BUFFER FLOW PATH LENGTHS ~BUFFER ADJACENT TO DOWN HILL SIDE OF ROAD~

Access/Met Tower Roads

 # of Travel Ways to Buffer
 Length of Flow Forest
 Length of Flow Meadow

 1
 35
 50

 2
 55
 80

Crane Paths

# of Travel Ways	Length of Flow	Length of Flow
to Buffer	Forest	Meadow
1	55	80
2	80	110

Sebasticook River Watershed

BMP Type & #	Roadway Align.	Type of	# of Travel	Buffer Type	Treatment	Standard Buffer	Adjusted Buffer
	or Turbine Site	Road	Ways (1 or 2)	(Forest or Meadow)	Factor	Length (ft)	Length (ft)
RB1	500 Road	Drive	1	Meadow	0.40	50	50
RB2	500 Road	Drive	1	Meadow	0.40	50	50
RB3	Main Road 0	Main	1	Meadow	0.40	50	50
RB4	Main Road 0	Main	1	Meadow	0.40	50	50
RB5	Main Road 0	Main	1	Meadow	0.40	50	50
RB6	Main Road 0	Main	1	Meadow	0.40	50	50
RB7	Main Road 0	Main	1	Meadow	0.40	50	50
RB8	Main Road 0	Main	1	Meadow	0.40	50	50
RB9	Main Road 0	Main	1	Meadow	0.40	50	50

^{*} Buffer slopes may not exceed 20%

^{**} Buffers may not be located in a wetland

^{***} Roadside slopes may be included in a meadow buffer if the slope is less than 4:1 and if the soils allow infiltration

RB Buffer Calcs Page 2

RB10	Main Road 0	Main	1	Meadow	0.40	50	50
RB11	Main Road 0	Main	1	Meadow	0.40	50	50
RB12	Main Road 0	Access	1	Meadow	0.40	50	50
RB12A	Main Road 0	Access	1	Meadow	0.40	50	50
RB13	300 Road	Drive	2	Meadow	0.40	50	50
RB14	300 Road	Drive	2	Meadow	0.40	50	50
RB15	300 Road	Drive	2	Meadow	0.40	50	50
RB16	300 Road	Drive	2	Forest	0.40	35	35
RB17	300 Road	Drive	2	Forest	0.40	35	35
RB18	300 Road	Drive	2	Forest	0.40	35	35
RB19	150 Road	Main	1	Meadow	0.40	50	50
RB20	150 Road	Main	1	Meadow	0.40	50	50
RB21	150 Road	Main	1	Meadow	0.40	50	50
RB22	150 Road	Main	1	Meadow	0.40	50	50
RB23	150 Road	Main	1	Meadow	0.40	50	50
RB24	150 Road	Main	1	Meadow	0.40	50	50
RB25	800 Road	Access	2	Meadow	0.40	80	80
RB26	150 Road	Main	1	Meadow	0.40	50	50
RB27	150 Road	Main	1	Meadow	0.40	50	50
RB28	150 Road	Main	1	Meadow	0.40	50	50
RB29	150 Road	Main	1	Meadow	0.40	50	50
RB30	150 Road	Main	1	Meadow	0.40	50	50
RB31	Inverter Pad 25	Inverter	2	Meadow	0.40	50	50
RB32	150 Road	Main	1	Meadow	0.40	50	50
RB33	150 Road	Main	1	Meadow	0.40	50	50
RB34	150 Road	Main	1	Meadow	0.40	50	50
RB35	150 Road	Main	1	Meadow	0.40	50	50
RB36	400 Road	Main	2	Meadow	0.40	80	80
RB37	400 Road	Main	2	Meadow	0.40	80	80
RB38	400 Road	Main	2	Meadow	0.40	80	80
RB39	600 Road	Access	1	Meadow	0.40	50	50

BL Buffer Calcs Page 1

Project Name Project Number 261.21.01 BL=Buffer with a Level Lip Spread L=Length Imp=Impervious area W=Width Land=Landscaped Area B=Buffer

Done by JAO C1=Loamy Sand or Sandy Loam C2=Silt Loam, Clay Loam or Silty Clay Loam

REQUIRED BUFFER FLOW PATH LENGTHS ~BUFFERS WITH LEVEL LIP SPREADERS~

0-8% Buffer Slope

Soils	Length of Flow	Berm L for Fore	ested Buffer(ft)	Berm L for Mead	Berm L for Meadow Buffer(ft)		
	Thru Buffer (ft)	Per acre Imp	Per acre Land	Per acre Imp	Per acre Land		
Α	75	75	25	125	35		
	100	65	20	75	25		
	150	50	15	60	20		
В	75	100	30	150	45		
	100	80	25	100	30		
	150	65	20	75	25		
C1	75	125	35	150	45		
	100	100	30	125	35		
	150	75	25	100	30		
C2	100	150	45	200	60		
	150	100	30	150	45		
D	150	150	45	200	60		

9-15% Buffer Slope

Length of Flow	Berm L for For	ested Buffer(ft)	Berm L for Meadow	Buffer(ft)
Thru Buffer (ft)	Per acre Imp	Per acre Land	Per acre Imp	Per acre Land
75	90	30	150	42
100	78	24	90	30
150	60	18	72	24
75	120	36	180	54
100	96	30	120	36
150	78	24	90	30
75	150	42	180	54
100	120	36	150	42
150	90	30	120	36
100	180	54	240	72
150	120	36	180	54
150	180	54	240	72

Sebasticook River Watershed

							from table	from table		
BMP Type & #	Roadway Align.	Imp (acres)	Buffer Type	Treatment	Soil Type	Buffer	Standard Buffer	L of Berm	Standard Berm	Adjusted Buffer
	or Turbine Site		(forest/meadow)	Factor		Slope	Length (ft)	per ac. imp	Length (ft)	Length (ft)
BL1	Main Road 0	0.3446	Meadow	0.4	D	4%	150	200	69	150
BL2	500 Road	0.1288	Meadow	0.4	D	11%	150	240	31	150
BL3	Inverter Pad 3	0.3530	Meadow	0.4	D	14%	150	240	85	150
BL4	Main Road 0	0.2700	Forest	0.4	D	5%	150	150	40	150
BL5	Main Road 0	0.2493	Meadow	0.4	D	2%	150	200	50	150
BL6	Main Road 0	0.3660	Meadow	0.4	D	5%	150	200	73	150
BL7	Main Road 0	0.0579	Forest	0.4	D	8%	150	150	9	150

BL Buffer Calcs Page 2

BL8	Main Road 0	0.2576	Forest	0.4	D	10%	150	180	46	150
BL9	Main Road 0	0.2989	Forest	0.4	D	7%	150	150	45	150
BL10	Main Road 0	0.1253	Meadow	0.4	D	6%	150	200	25	150
BL11	Inverter Pad 4	0.2567	Meadow	0.4	D	5%	150	200	51	150
BL12	Inverter Pad 5	0.2953	Meadow	0.4	D	5%	150	200	59	150
BL13	Main Road 0	0.2703	Meadow	0.4	D	2%	150	200	54	150
BL14	Main Road 0	0.0747	Meadow	0.4	D	3%	150	200	15	150
BL15	Main Road 0	0.2498	Meadow	0.4	D	4%	150	200	50	150
BL16	Main Road 0	0.5069	Meadow	0.4	D	5%	150	200	101	150
BL17	Main Road 0	0.1979	Meadow	0.4	D	7%	150	200	40	150
BL18	Main Road 0	0.3839	Meadow	0.4	D	3%	150	200	77	150
BL19	Main Road 0	0.3308	Meadow	0.4	D	6%	150	200	66	150
BL20	150 Road	0.2171	Forest	0.4	D	6%	150	150	33	150
BL21	150 Road	0.0565	Meadow	0.4	D	9%	150	240	14	150
BL22	150 Road	0.1074	Meadow	0.4	D	3%	150	200	21	150
BL23	150 Road	0.1043	Meadow	0.4	D	3%	150	200	21	150
BL24	150 Road	0.2204	Meadow	0.4	D	5%	150	200	44	150
BL25	150 Road	0.1318	Meadow	0.4	D	7%	150	200	26	150
BL26	150 Road	0.1543	Forest	0.4	D	8%	150	150	23	150
BL27	150 Road	0.1047	Meadow	0.4	D	3%	150	200	21	150
BL28	150 Road	0.0771	Meadow	0.4	D	2%	150	200	15	150
BL29	150 Road	0.1322	Forest	0.4	D	8%	150	150	20	150
BL30	150 Road	0.1488	Forest	0.4	D	6%	150	150	22	150
BL31	150 Road	0.3555	Forest	0.4	D	3%	150	150	53	150
BL32	150 Road	0.1888	Meadow	0.4	D	4%	150	200	38	150
BL33	150 Road	0.2397	Meadow	0.4	D	3%	150	200	48	150
BL34	150 Road	0.1535	Meadow	0.4	D	5%	150	200	31	150
BL35	Inverter Pad 22	0.2613	Meadow	0.4	D	3%	150	200	52	150
BL36	Inverter Pad 23	0.4721	Meadow	0.4	D	2%	150	200	94	150
BL37	150 Road	0.2355	Meadow	0.4	D	3%	150	200	47	150
BL38	150 Road	0.2507	Meadow	0.4	D	2%	150	200	50	150
BL39	150 Road	0.1336	Meadow	0.4	D	1%	150	200	27	150
BL40	400 Road	0.1983	Meadow	0.4	D	3%	150	200	40	150
BL41	400 Road	0.1377	Meadow	0.4	D	3%	150	200	28	150
BL42	400 Road	0.3563	Meadow	0.4	D	3%	150	200	71	150
BL43	400 Road	0.2669	Meadow	0.4	D	4%	150	200	53	150

Project Name 3 Corners Solar Project Number 261.21.01 Date 1/31/2022 Done by JAO

BIORETENTION CELL OR UNDERDRAIN SOIL FILTER CALCULATIONS

USF1

Filter Surface Area Check

Subcatchment #	BMP Type & #	Imp (sf)	Land (sf)
O&M1	USF1	6775	0
<u> </u>	TOTAL	6775	0

Volume req'd	Pretreated	Vol req'd, 25%	Sediment Pre-	L of Pre	Depth of	5% Imp	2% Land	Total
(cubic feet)	(yes or no)	Red. For pretreat	Treat V(cft)	Treat A*	Cell (in)	(sf)	(sf)	Area (sf)
564.58	no	N/A	N/A	N/A	12	338.75	0	338.75

^{*}Length of pretreatment trough is based on an 8" deep trough with 3:1 side slopes (overall width 4')

SOIL FILTER ELEVATIONS

215.5	Top of Berm
6	Spillway Height (6in min)
215.00	Top of Spillway/Storage
214.00	Top of Soil Filter Media
212.50	Bottom Soil Filter Media
14	Depth of Gravel (in)
211.33	Bottom of Gravel/USF
211.67	Underdrain Elevation
4	Underdrain Diameter (in)
6	Underdrain Cover (Min 4")

STORAGE CALCULATIONS

Elevation	Area	Volume	Filter Surface Area >=
214.00	404	0	338.75
214.5	584	247.00	
215	778	340.50	
			must be > or =
Cumm. Storag	ge	587.50	565

USF2

						Filter St	ırtace Area	a Check
Volume req'd	Pretreated	Vol req'd, 25%	Sediment Pre-	L of Pre	Depth of	5% Imp	2% Land	Total
(cubic feet)	(ves or no)	Red. For pretreat	Treat V(cft)	Treat A*	Cell (in)	(sf)	(sf)	Area (sf)
(Gabio icct)	(303 01 110)	real for preticat	Treat V(oit)	110ut A	5 0 ()	(51)	(0.)	7 ti Ga (GI)

*Length of pretre	eatment troug	h is based	on an 8"	deep trough wit	h 3:1 side	slopes
(overall width 4'))					

Subcatchment #	BMP Type & #	Imp (sf)	Land (sf)
O&M2	USF2	2846	0
	TOTAL	2846	0

SOIL FILTER ELEVATIONS

	Top of Berm
6	Spillway Height (6in min)
214.50	Top of Spillway/Storage
213.50	Top of Soil Filter Media
212.00	Bottom Soil Filter Media
14	Depth of Gravel (in)
210.83	Bottom of Gravel/USF
211.17	Underdrain Elevation
4	Underdrain Diameter (in)
6	Underdrain Cover (Min 4")

STORAGE CALCULATIONS

Elevation	Area	Volume	Filter Surface Area >=
213.50	215	0	142.30
214	485	175.00	
214.5	828	328.25	
			must be > or =
Cumm. Stora	ge	503.25	237

East Page 1

 Project Name
 3 Corners Solar

 Project Number
 261.21.01

 Date
 1/30/2022

 Done by
 JAO

Benton, Clinton, Unity Township Kennebec, Waldo County Sebasticook River

CN Value Calcs East

Q=ciA

PRE DEVELOPMENT

Watershed ID	AREA (SF)		WO	ODS	_		Mea	dow			La	wn		Gravel	Impervious	% of Area	CN Value	Weighted CN
		Α	В	С	D	Α	В	С	D	Α	В	С	D	All	All			
		30	55	70	77	30	58	71	78	49	69	79	84	96	98			Value
1	1866048				1801996									64052		100.0%	77.7	77.7

POST DEVELOPMENT

Ī	Watershed ID	AREA (SF)		WO	ODS			Mea	dow			La	wn		Gravel	Impervious	% of Area	CN Value	Weighted CN
			Α	В	С	D	Α	В	С	D	Α	В	С	D	All	All			
			30	55	70	77	30	58	71	78	49	69	79	84	96	98			Value
I.	1	1866048				72863				1729132					64052		100%	78.6	78.58
													,	·			0%		0.0
	·																0%		0.0

Total Area = 1866048 100.00% **CN Value = 78.6**42.84

North Page 1

Project Name
Project Number
Date
Done by

3 Corners Solar
261.21.01
1/30/2022
JAO

CN Value Calcs North

Q=ciA

PRE DEVELOPMENT

Watershed ID	AREA (SF)		WO	ODS			Mea	dow			La	wn		Gravel	Impervious	% of Area	CN Value	Weighted CN
		Α	В	С	D	Α	В	С	D	Α	В	С	D	All	All			
		30	55	70	77	30	58	71	78	49	69	79	84	96	98			Value
2	6329983				6086302				243681							19.2%	77.0	14.8
5	26586580				24945417				1641163							80.8%	77.1	62.2

Total Area = 32916562 100.00% CN Value = 77.1 755.66

POST DEVELOPMENT

Watershed ID	AREA (SF)		WO	ODS			Mea	dow			La	wn		Gravel	Impervious	% of Area	CN Value	Weighted CN
		Α	В	С	D	Α	В	С	D	Α	В	С	D	All	All			
		30	55	70	77	30	58	71	78	49	69	79	84	96	98			Value
2	6329983				431956				5769919					128107		19%	78.3	15.1
5	26586790				16121394				10173223					292173		81%	77.6	62.7

South Page 1

Project Name Project Number Date Done by

3 Corners Solar 261.21.01 1/30/2022 JAO

CN Value Calcs SOUTH

Q=ciA

PRE DEVELOPMENT

Watershed ID	AREA (SF)		WO	ODS			Mea	dow			La	wn		Gravel	Impervious	% of Area	CN Value	Weighted CN
		Α	В	С	D	Α	В	С	D	Α	В	С	D	All	All			
		30	55	70	77	30	58	71	78	49	69	79	84	96	98			Value
3	20070544				19051393				974308					29082	15760	43.8%	77.1	33.8
4	17015118				16689010				326108							37.1%	77.0	28.6
7	6546715				6367667				179049							14.3%	77.0	11.0
8	2174507				1915642				245142				11428	333	1962	4.7%	77.2	3.7

Total Area = 45806884 100.00% CN Value = 77.1

POST DEVELOPMENT

Watershed ID	AREA (SF)		WO	ODS			Mea	dow			La	wn		Gravel	Impervious	% of Area	CN Value	Weighted CN
		Α	В	С	D	Α	В	С	D	Α	В	С	D	All	All			ı
		30	55	70	77	30	58	71	78	49	69	79	84	96	98			Value
3	20070544				14636693				5317544					116306		44%	77.4	33.9
4	17015118				8113259				8716020					185839		37%	77.7	28.9
7	6546715				5328875				1158844					58997		14%	77.3	11.1
8	2174507				940179				1083455				11428	135739	3706	5%	78.8	3.7

Total Area = 45806884 1051.58 CN Value = 77.6

West Page 1

Project Name
Project Number
Date
Done by

3 Corners Solar
261.21.01
1/30/2022
JAO

CN Value Calcs WEST

Q=ciA

PRE DEVELOPMENT

Watershed ID	AREA (SF)		WO	ODS			Mea	dow			La	wn		Gravel	Impervious	% of Area	CN Value	Weighted CN
		Α	В	С	D	Α	В	С	D	Α	В	С	D	All	All			
		30	55	70	77	30	58	71	78	49	69	79	84	96	98			Value
6	11566956				11566956											100.0%	77.0	77.0
																0.0%		
																		0.0
																	<u> </u>	

Total Area = 11566956 100.00% CN Value = 77.0 265.54

POST DEVELOPMENT

ſ	Watershed ID	AREA (SF)		WOODS		Meadow		Lawn			Gravel	Impervious	% of Area	CN Value	Weighted CN				
			Α	В	С	D	Α	В	С	D	Α	В	С	D	All	All			
			30	55	70	77	30	58	71	78	49	69	79	84	96	98			Value
	6	11566745				6671390				4809824					85531		100%	77.6	77.6
ſ																			
ſ																			

Total Area = 11566745 265.54 100.00% CN Value = 77.6

T-Line Page 1

Project Name
Project Number
Date
Done by

3 Corners Solar
261.21.01
1/30/2022
JAO

CN Value Calcs T-LINE

Q=ciA

PRE DEVELOPMENT

Watershed ID	AREA (SF)		WO	ODS			Mea	dow			La	ıwn		Gravel	Impervious	% of Area	CN Value	Weighted CN
		Α	В	С	D	Α	В	С	D	Α	В	С	D	All	All			
		30	55	70	77	30	58	71	78	49	69	79	84	96	98			Value
9	3609580				2423477				1168323						17780	15.5%	77.4	12.0
10	2648118				2489020				105420					53677		11.4%	77.4	8.8
11	1936390				1936390											8.3%	77.0	6.4
12	3072673				2598076				365342						109254	13.2%	77.9	10.3
13	1139418				953984				161781				18650	3686	1317	4.9%	77.3	3.8
14	123803				108143				14095						1565	0.5%	77.4	0.4
15	325427				310793								4355	2954	7326	1.4%	77.7	1.1
16	1972194				1828361				143833							8.5%	77.1	6.5
17	331190				297508								16410	2637	14635	1.4%	78.4	1.1
18	987744				928560								28023	25495	5666	4.3%	77.8	3.3
19	2346538				2346538											10.1%	77.0	7.8
20	1033756				773682	,			260074							4.4%	77.3	3.4
21	3131236				2335055				388110				350032	41545	16493	13.5%	78.3	10.5
22	573144				263795				266815					28259	14274	2.5%	78.9	1.9

POST DEVELOPMENT

Watershed ID	AREA (SF)		WO	ODS			Mea	dow			La	awn		Gravel	Impervious	% of Area	CN Value	Weighted CN
		Α	В	С	D	Α	В	С	D	Α	В	С	D	All	All			_
		30	55	70	77	30	58	71	78	49	69	79	84	96	98			Value
9	3609580				2127753				1464047						17780	15.5%	77.5	12.0
10	2648118				2138651				474609					34858		11.4%	77.4	8.8
11	1936390				1859788				76602							8.3%	77.0	6.4
12	3072673				2284828				678591						109254	13.2%	78.0	10.3
13	1139418				629058				490393				18650		1317	4.9%	77.6	3.8
14	123803				67145				55093						1565	0.5%	77.7	0.4
15	325427				279456				31337				4355	2954	7326	1.4%	77.8	1.1
16	1972194				1295579				676615							8.5%	77.3	6.6
17	331190				19523				277985				16410	2637	14635	1.4%	79.3	1.1
18	987744				765275				161283				30023	9949	21213	4.3%	78.0	3.3
19	2346538				2108461				238077							10.1%	77.1	7.8
20	1033756				539999				493757							4.4%	77.5	3.4
21	3131236				2206199				543926				323074	41545	16493	13.5%	78.3	10.5
22	573144				263799				266815					28255	14274	2.5%	78.9	1.9

Project Name
Project Number
Date
Done by

3 Corners Solar
261.21.01
1/30/2022
JAO

Pre & Post Development Summary

	Watershed	Subcatcment	CN
PRE	East		77.7
POST	East		78.6
	CHANGE		0.9
PRE	North		77.1
POST	North		77.7
	CHANGE		0.7
PRE	South		77.1
POST	South		77.6
	CHANGE		0.5
PRE	West		77.0
POST	West		77.6
	CHANGE		0.6

MDEP Site Location of Development Act Permit Application

SECTION 12: STORMWATER MANAGEMENT

Exhibit 12-2

Stormwater Inspection and Maintenance Plan

Inspection and Maintenance Plan

Long Term Maintenance Plan

Inspect a minimum of 2 times annually on or about May 1 and November 1 and after severe storms.

1. Ditches

- a. Rip-rap lined ditches
 - ♦ Inspect semi-annually.
- b. Maintenance
 - Remove sediment buildup, leaves, litter or other debris from the bottom and side slopes.
 - Reposition stones to restore channel to original dimensions.
- c. Vegetated Ditches
 - Inspect the ditch lining monthly for slumping of the lining, downcutting of the ditches base, or undercutting of the banks.
- d. Maintenance
 - Repair within a reasonable timeframe.
 - ♦ Mow or brush-cut annually to prevent the establishment of woody vegetation

2. Pipes

- a. Inspect for sediment buildup.
- b. Maintenance
 - ♦ Flush pipes and remove sediment at which time the depth of sediment at any location in the pipe exceeds 3 inches.
- 3. Rip-Rap Aprons and Level Spreaders
 - a. Inspect semi-annually or after severe storms for dislodged stones or slumping of the stone lining.
 - b. Maintenance
 - Reposition stones to restore the pools original dimensions and a uniform surface.
 - Clean any accumulated sediments and debris from the plunge pool.
 - Cut and remove any woody vegetation growing within the pool.

4. Vegetation

- a. Inspect vegetated areas each spring.
- b. Maintenance
 - Re-seed and mulch areas where cover is less than 90%.
 - Rework, seed and mulch areas that have spotty plant germination and are sparsely vegetated, or where soil erosion is evident.

5. Buffers

• Delineate and maintain delineation of buffer limits.

- ♦ Inspect buffers for evidence of erosion or concentrated flows.
- ♦ Inform abutters of limitations on activities in buffers in order to maintain vegetation and organic duff.
- Repair, seed, and mulch eroded areas.
- ♦ Do not remove vegetation or trees other than dead plants and debris for the forested buffer.
- ♦ May mow meadow buffer no more than twice per growing season.
- ♦ Maintain a specific and stable footpath and do not walk unnecessarily within the buffer.

6. Road Grading

a. Maintenance

- The road shall be graded to maintain the proposed roadway crown and to prevent the creation of berms or ruts that may channelize flow.
- ♦ The roads shall be swept as needed to maintain. In particular, sweeping will occur in late winter or early spring to remove the winter's accumulation of sand and abrasives.

7. Underdrain Soil Filters

a. Inspect after every major storm event in the first few months to ensure proper function and once every six months after that to ensure that the filter is draining within 24 hours.

b. Maintenance.

- ♦ The top several inches of the filter shall be replaced with fresh material when the water ponds on the surface of the bed for more than 72 hours.
- Sediment and plant debris should be removed from the pretreatment structure for the Underdrain Soil Filter at least annually.
- Filters with grass cover should be mowed no more than 2 times per growing season to maintain grass heights less than 12 inches.
- Fertilization of the Underdrain Soil Filter area should be avoided unless absolutely necessary to establish vegetation.
- Harvesting and pruning the Soil Filter needs to be done occasionally for the excessive growth. Remove the invasive plants as necessary.

- 1. Side slopes of gravel surfaces:
 - a. Inspections
 - Inspect slopes for rill erosion due to concentrated flows
 - b. Maintenance
 - Replace topsoil and reseed eroded slopes.
- 2. Level Spreaders and Plunge Pool Outlets
 - lack Inspect and verify that top of stone is level (+/-1").
 - Repair level lip to distribute flows uniformly across the buffer
 - ♦ Inspect stone to ensure that it remains clean, free of sediment and in place as designed.
 - Remove sediments, Replace any dislodged stone and maintain lip level to disperse flows uniformly across buffer area.
- 3. Vegetated Buffers
 - Delineate and maintain delineation of buffer limits.
 - ♦ Inspect wooded and meadow buffers for evidence of erosion or concentrated flows.
 - ♦ Inform abutters of limitations on activities in buffers in order to maintain vegetation and organic duff.
 - Repair, seed, and mulch eroded areas.
 - Do not remove vegetation or trees other than dead plants and debris for the forested buffer.
 - May mow meadow buffers no more than twice per growing season.
 - ♦ Maintain a specific and stable footpath and do not walk unnecessarily within the buffer.

4. Underdrain Soil Filters

a. Inspect after every major storm event in the first few months to ensure proper function and once every six months after that to ensure that the filter is draining within 24 hours.

b. Maintenance.

- Sediment and plant debris should be removed from the pretreatment structure for the Underdrain Soil Filter at least annually.
- Filters with grass cover should be mowed no more than 2 times per growing season.
- ♦ Harvesting and pruning the Soil Filter needs to be done occasionally for the excessive growth. Remove the invasive plants as necessary.

- 5. <u>Identify any Deed Covenants, Restrictions, or Easements on the Site</u> The vegetated buffers have deed restrictions for runoff treatment. See the draft deed restriction language at the end of this section. See the project plans for the buffer locations.
- 6. <u>Maintenance Log</u> See below.

Stormwater Management Inspection Log

Silt Fencing: a. Bottom of fence b. Sediment Build-Up	Inspected By/ Date:	Action Taken/ Date
c. Rips, Tears, Holes		
Ditches and Swales: a. Check Dams b. Erosion of Ditches c. Slumping of Ditch Banks	Inspected By/ Date:	Action Taken/ Date
d. Short-Circuiting by Check Dams e. Accumulation of Sediment		
Roadside Slopes: a. Erosion of slopes b. Established vegetation	Inspected By/ Date:	Action Taken/ Date
Culverts: a. Pipe Openings b. Sumps c. Frost Action d. Inlet / Outlet Protection	Inspected By/ Date:	Action Taken/ Date
Level Spreader & Spillway: a. Short-Circuiting b. Sediment Build-Up c. Spillway Erosion	Inspected By/ Date:	Action Taken/ Date
Buffers: a. Sediment Build-Up b. Erosion, Bare Soil c. Vegetation	Inspected By/ Date:	Action Taken/ Date
Underdrain Soil Filter: a. Sediment Build-Up b. Draining Properly c. Established Vegetation d. Remove Unwanted Plants	Inspected By/ Date:	Action Taken/ Date

*NOTE: Refer to Inspection & Maintenance Plan for inspection intervals, acceptable and unacceptable conditions, and remedies for unacceptable conditions.

MDEP Site Location of Development Act Permit Application

SECTION 12: STORMWATER MANAGEMENT

Exhibit 12-3

Draft Deed Restrictions

DECLARATION OF RESTRICTIONS

(Forested Buffer, Limited Disturbance)

THIS DECLARATION OF RESTRICTIONS is by a mailing address of c/o "Declarant"), pursuant to a permit received from	made this	day of	, 2022,
by	, LLC, a	limited liabilit	y company with
a mailing address of c/o		, (herein r	eferred to as the
"Declarant"), pursuant to a permit received from	the Maine Department o	f Environmental 1	Protection under
the Stormwater Management Law, to preserve	buffer areas on a parce	el of land in	,
County, Maine described in the and recorded at the County Regis	stry of Deeds in Book	, Page	
WHEREAS, the Declarant is the developer of a constructed on the above-referenced parcel of lar			
Environmental Protection Order #			
WHEREAS, the Declarant is the owner of a lease, a Memorandum of whice of Deeds in Book Page (the "Project I controls certain real property necessary for the Project I controls certain real project I controls certain real project I controls certain real proje	ch being recorded at the Lease"), pursuant to which	ch Project Lease	ounty Registry the Declarant
,County, M			
WHEREAS, pursuant to Finding of the Or the terms and conditions herein, over a portion "Restricted Buffer") described as follows: SEE S	on of said real property		
WHEREAS, pursuant to the Stormwater Managerules promulgated by the Maine Board of Envir Declarant has agreed to impose certain restriction	onmental Protection ("S	tormwater Mana	gement Rules"),

rules promulgated by the Maine Board of Environmental Protection ("Stormwater Management Rules"), Declarant has agreed to impose certain restrictions on the Restricted Buffer Area as more particularly set forth herein and has agreed that these restrictions may be enforced by the Maine Department of Environmental Protection or any successor (hereinafter the "MDEP"),

NOW, THEREFORE, the Declarant hereby declares that the Restricted Buffer Area is and shall be held, transferred, sold, conveyed, occupied and maintained subject to the conditions and restrictions set forth herein during the term hereof. The Restrictions shall run with the Restricted Buffer Area and shall be binding on all parties having any right, title or interest in and to the Restricted Buffer Area, or any portion thereof, and their heirs, personal representatives, successors, and assigns. Any present or future owner or occupant of the Restricted Buffer Area or any portion thereof, by the acceptance of a deed of conveyance of all or part of the Covenant Area or an instrument conveying any interest therein, whether or not the deed or instrument shall so express, shall be deemed to have accepted the Restricted Buffer Area subject to the Restrictions and shall agree to be bound by, to comply with and to be subject to each and every one of the Restrictions hereinafter set forth.

1. **Restrictions on Restricted Buffer Area**. Unless the owner or occupant of the Restricted Buffer Area, or any successors or assigns, obtains the prior written approval of the MDEP, the Restricted Buffer Area must remain undeveloped for the term of this Declaration. To maintain the ability of the Restricted Buffer Area to filter and absorb stormwater, and to maintain compliance with the Stormwater Management Law and the permit issued thereunder to the Declarant, the use of the Restricted Buffer Area is hereinafter limited as follows.

- a. No soil, loam, peat, sand, gravel, concrete, rock or other mineral substance, refuse, trash, vehicle bodies or parts, rubbish, debris, junk waste, pollutants or other fill material may be placed, stored or dumped on the Restricted Buffer Area, nor may the topography of the area be altered or manipulated in any way;
- b. Any removal of trees or other vegetation within the Restricted Buffer Area must be limited to the following:
 - (i) No purposefully cleared openings may be created and an evenly distributed stand of trees and other vegetation must be maintained. An "evenly distributed stand of trees" is defined as maintaining a minimum rating score of 24 points in any 25 foot by 50 foot rectangle (1,250 square feet) area, as determined by the rating scheme in Table 11:

Table 11.

Point System for Determining an Evenly
Distributed Stand of Trees

Diameter of tree at 4½ feet above ground level	Points
2 - 4 inches	1
4 - 8 inches	2
8 - 12 inches	4
>12 inches	8

Where existing trees and other vegetation result in a rating score less than 24 points, no trees may be cut or sprayed with biocides except for the normal maintenance of dead, windblown or damaged trees and for pruning of tree branches below a height of 12 feet provided two thirds of the tree's canopy is maintained;

- (ii) No undergrowth, ground cover vegetation, leaf litter, organic duff layer or mineral soil may be disturbed except that one winding path, that is no wider than six feet and that does not provide a downhill channel for runoff, is allowed through the area;
- c. No building or other temporary or permanent structure may be constructed, placed or permitted to remain on the Restricted Buffer Area, except for a sign, utility pole (whether constructed of wood, steel or other materials) and appurtenant equipment such as guys and guy anchors, or fence;
- d. No trucks, cars, dirt bikes, ATVs, bulldozers, backhoes, or other motorized vehicles or mechanical equipment may be permitted on the Restricted Buffer Area;
- e. Any level lip spreader directing flow to the Restricted Buffer Area must be regularly inspected and adequately maintained to preserve the function of the level spreader.

Any activity on or use of the Restricted Buffer Area during the term of this Declaration that is inconsistent with the purpose of these Restrictions is prohibited. Any future alterations or changes in use of the Restricted Buffer Area during the term of this Declaration must receive prior approval in writing from the MDEP. The MDEP may approve such alterations and changes in use if such alterations and uses do not impede the stormwater control and treatment capability of the Restricted Buffer Area or if adequate and appropriate alternative means of stormwater control and treatment are provided.

- 2. **Enforcement**. The MDEP may enforce any of the Restrictions set forth in Section 1 above.
- 3. **Term; Binding Effect**. The term of this Declaration shall expire upon the decommissioning of the Project as described in the Order. The restrictions set forth herein shall be binding on any present or future owner or occupant of the Restricted Buffer Area during the term hereof. If the Restricted Buffer Area is at any time owned or leased by more than one owner/occupant, each owner/occupant shall be bound by the foregoing restrictions to the extent that any of the Restricted Buffer Area is included within such owner/occupant's property.
- 4. **Amendment**. Any provision contained in this Declaration may be amended or revoked only by the recording of a written instrument or instruments specifying the amendment or the revocation signed by the Lessee of the Project Lease and by the MDEP.
- 5. **Effective Provisions of Declaration**. Each provision of this Declaration, and any agreement, promise, covenant and undertaking to comply with each provision of this Declaration, shall be deemed a land use restriction running with the land as a burden and upon the title to the Restricted Buffer Area during the term hereof.
- 6. **Severability**. Invalidity or unenforceability of any provision of this Declaration in whole or in part shall not affect the validity or enforceability of any other provision or any valid and enforceable part of a provision of this Declaration.
- 7. **Governing Law**. This Declaration shall be governed by and interpreted in accordance with the laws of the State of Maine.

, LLC	
By:	
Print:	
Its:	
STATE OF	, 2022
COUNTY OF	
Personally appeared before me the above named	, the
of said, LLC, who sword (his/her) knowledge, information and belief and acknowledge act and deed and the free act and deed of said company.	e to the truth of the foregoing to the best of ed the foregoing instrument to be (his/her) free
	Notary Public

SCHEDULE A

[Plan/Description of Restricted Buffer Area]

DECLARATION OF RESTRICTIONS

(Non-Wooded Meadow Buffer)

THIS DECLARATION OF RESTRICTIONS is	made this	day of	, 2022,
THIS DECLARATION OF RESTRICTIONS is by	, LLC, a	limited liability	company with
a mailing address of c/o		, (herein refe	erred to as the
"Declarant"), pursuant to a permit received from t	the Maine Departmen	nt of Environmental P	rotection under
the Stormwater Management Law, to preserve	buffer areas on a par	rcel of land in	,
County, Maine described in the	Deed to	dated	
County, Maine described in the and recorded at the County Registry	of Deeds in Book _	, Page	
WHEREAS, the Declarant is the developer of a c			
constructed on the above-referenced parcel of lan			
Environmental Protection Order #	da	ated	(the "Order");
WHEREAS, the Declarant is the owner of a lease	ehold interest pursuar	nt a certain [Solar Lai	nd Lease]
dated, a Memorandum of w	hich being recorded a	nt the	County
Registry of Deeds in Book Page (the '	'Project Lease"), purs	suant to which Project	et Lease the
Declarant controls certain real property necessary	for the Project at the	e above-referenced pa	arcel of land
situated in,	County, Maine, herei	n referred to as the "	property";
WHEREAS, pursuant to Finding of the Or	der, Declarant desire	s to place certain res	strictions, under
the terms and conditions herein, over a portion			
"Restricted Buffer") described as follows: SEE S			
WHEREAS, pursuant to the Stormwater Manage rules promulgated by the Maine Board of Environment Declarant has agreed to impose certain restriction	onmental Protection	("Stormwater Manag	gement Rules"),

forth herein and has agreed that these restrictions may be enforced by the Maine Department of Environmental Protection or any successor (hereinafter the "MDEP"),

NOW, THEREFORE, the Declarant hereby declares that the Restricted Buffer Area is and shall be held, transferred, sold, conveyed, occupied and maintained subject to the conditions and restrictions set forth herein during the term hereof. The Restrictions shall run with the Restricted Buffer Area and shall be binding on all parties having any right, title or interest in and to the Restricted Buffer Area, or any portion thereof, and their heirs, personal representatives, successors, and assigns. Any present or future owner or occupant of the Restricted Buffer Area or any portion thereof, by the acceptance of a deed of conveyance of all or part of the Covenant Area or an instrument conveying any interest therein, whether or not the deed or instrument shall so express, shall be deemed to have accepted the Restricted Buffer Area subject to the Restrictions and shall agree to be bound by, to comply with and to be subject to each and every one of the Restrictions hereinafter set forth.

1. **Restrictions on Restricted Buffer Area**. Unless the owner or occupant of the Restricted Buffer Area, or any successors or assigns, obtains the prior written approval of the MDEP, the Restricted Buffer Area must remain undeveloped for the term of this Declaration. To maintain the ability of the Restricted Buffer Area to filter and absorb stormwater, and to maintain compliance with the Stormwater Management Law and the permit issued thereunder to the Declarant, the use of the Restricted Buffer Area is hereinafter limited as follows.

- a. No soil, loam, peat, sand, gravel, concrete, rock or other mineral substance, refuse, trash, vehicle bodies or parts, rubbish, debris, junk waste, pollutants or other fill material will be placed, stored or dumped on the Restricted Buffer Area, nor may the topography or the natural mineral soil of the area be altered or manipulated in any way, except to accommodate installation and maintenance of the solar panels and related facilities addressed in the Order;
- b. A dense cover of grassy vegetation must be maintained over the Restricted Buffer Area, except that shrubs, trees and other woody vegetation may also be planted or allowed to grow in the area. The Restricted Buffer Area may not be maintained as a lawn or used as a pasture. If vegetation in the Restricted Buffer Area is mowed, it may be mown no more than two times per year.
- c. No building or other temporary or permanent structure may be constructed, placed or permitted to remain on the Restricted Buffer Area, except for the solar panels and related facilities addressed in the Order, a sign, utility pole or fence (whether constructed of wood, steel or other materials) and appurtenant equipment such as guys and guy anchors;
- d. No trucks, cars, dirt bikes, ATVs, bulldozers, backhoes, or other motorized vehicles or mechanical equipment may be permitted on the Restricted Buffer Area, except for vehicles used in mowing and as may be required for installation and maintenance of the solar panels and related facilities addressed in the Order;
- e. Any level lip spreader directing flow to the Restricted Buffer Area must be regularly inspected and adequately maintained to preserve the function of the level spreader.

Any activity on or use of the Restricted Buffer Area during the term of this Declaration that is inconsistent with the purpose of these Restrictions is prohibited. Any future alterations or changes in use of the Restricted Buffer Area during the term of this Declaration must receive prior approval in writing from the MDEP. The MDEP may approve such alterations and changes in use if such alterations and uses do not impede the stormwater control and treatment capability of the Restricted Buffer Area or if adequate and appropriate alternative means of stormwater control and treatment are provided.

- 2. **Enforcement**. The MDEP may enforce any of the Restrictions set forth in Section 1 above.
- 3. **Term; Binding Effect**. The term of this Declaration shall expire upon the decommissioning of the Project as described in the Order. The restrictions set forth herein shall be binding on any present or future owner or occupant of the Restricted Buffer Area during the term hereof. If the Restricted Buffer Area is at any time owned or leased by more than one owner/occupant, each owner/occupant shall be bound by the foregoing restrictions to the extent that any of the Restricted Buffer Area is included within such owner/occupant's property.
- 4. **Amendment**. Any provision contained in this Declaration may be amended or revoked only by the recording of a written instrument or instruments specifying the amendment or the revocation signed by the Lessee of the Project Lease and by the MDEP.
- 5. **Effective Provisions of Declaration**. Each provision of this Declaration, and any agreement, promise, covenant and undertaking to comply with each provision of this Declaration, shall be deemed a land use restriction running with the land as a burden and upon the title to the Restricted Buffer Area during the term hereof.

	shall not affect the validity or enforceability of any other provision or any valid and enforceable part of a provision of this Declaration.
7.	Governing Law . This Declaration shall be governed by and interpreted in accordance with the laws of the State of Maine.
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ST	ATE OF
Per of (hi act	rsonally appeared before me the above named
	Notary Public

6. Severability. Invalidity or unenforceability of any provision of this Declaration in whole or in part

SCHEDULE A

[Plan/Description of Restricted Buffer Area]