SOLAR WAY SUBDIVISION CUMBERLAND, MAINE

MAJOR SUBDIVISION APPLICATION

SUBMITTED TO TOWN OF CUMBERLAND

March 28, 2017

Prepared By:



SOLAR WAY SUBDIVISION

CUMBERLAND, MAINE

Table of Contents

Section 1: Development Description

Including: Construction Plan, Construction Drawings List, and Location Map

Section 2: Title, Right, or Interest

Section 3: Financial Capacity/Technical Ability

Section 4: DEP NPRA PBR Application

Section 5: Wildlife and Fisheries Resources/Natural Areas

Section 6: Historic Sites

Section 7: Stormwater Management

Section 8: Water Supply

Section 9: Wastewater Disposal

Section 10: Maintenance of Common Facilities or Property

Section 11: Solid Waste

Section 12: Soils Report

Section 13: Wetland Report

Section 14: Trail Information

Section 15: Yurt Permit

SECTION 1: DEVELOPMENT DESCRIPTION

The site currently has two homes on 24.8 acres. It will add 3 additional homes. It will use a 750' gravel road for access.

It has two stream crossings, requiring a permit from DEP under the NRPA Standards.

The project will have the following construction schedule.

1. Permit Approvals April 2017

2. Road & Utility Construction June to November 2017

3. Lot sales 2017-2018

Construction Drawings List

Drawing #	Description
	Cover Sheet
C1.0	Existing Condition Plan
C1.1	Subdivision Plan
C1.2	Site Plan
C1.3	Net Residential Acreage Plan
C1.4	Conventional Lot Layout
C2.0	Plan & Profile w/ Erosion Control - Solar Way
C3.0	Erosion Control Notes & Details
C4.0	Site Details
D1.0	Drainage Analysis, Existing Condition
D2.0	Drainage Analysis, Developed Condition
	Plan of Property-Cullenberg Land Survey Drawing

TITLE, RIGHT, OR INTEREST **SECTION 2:**

Attached is the following:

- Agent Certificate
 Agent Authorization
 Good Standing
 Purchase & Sales Agreement
 Deed for the parcel

SECTION 3: FINANCIAL CAPACITY / TECHNICAL ABILITY

See attached Financial Capacity Letter. Below is the Technical Ability.

Civil Engineer

Pinkham & Greer Civil Engineers 28 Vannah Avenue Portland, ME 04103

Surveyor

Maine Survey Consultants, Inc. PO Box 485 Harrison, ME 04040

Soils Scientist

Mark Hampton Associates PO Box 1931 Portland, ME 04104-1931

Hydro Geologist

Sweet Associates 155 Gray Rd Falmouth, ME 04105

SECTION 4: DEP NRPA PBR APPLICATION

Attached is the DEP NRPA PRB Application.

SECTION 5: WILDLIFE AND FISHERIES RESOURCES / NATURAL AREAS

Attached is a Report from US Fish and Wildlife Service and a Letter from the State Department of Agriculture, Conservation & Forestry.

SECTION 6: HISTORIC RESOURCES

Attached is a letter from the Maine Historic Preservation Commission.

SECTION 7: STORMWATER MANAGEMENT REPORT

Attached is a Stormwater Management Report.

SECTION 8: WATER SUPPLY

This project will be serviced by private wells. Attached is a report by Sweet Associates.

SECTION 9: WASTEWATER DISPOSAL

This project will be serviced by private septic systems. See Section 12-Soils for test pit information. See attached email from Glenn Angell stating soils are suitable for septic by DHHS.

SECTION 10: MAINTENANCE OF COMMON FACILITIES OR PROPERTY

The common property and road will be maintained by the homeowner. The roads are being constructed to Town Standards for a private way. Attached is the Declaration of Protective Covenants, Reservations, Restrictions, and Easements of Solar Way Homeowners Association document for the maintenance of the facilities and the open space.

SECTION 11: SOLID WASTE

This project will have public trash collection. Demolition and construction debris will go to EcoMaine in Portland.

Construction waste is estimated at 60cy per unit or 180cy.

The stumps and grubbings will be ground up for erosion control.

Domestic waste will be 2.2 lbs per person per day. Total weight will be 5 tons per year.

SECTION 12: SOILS

Attached is the soils evaluation.

SECTION 13: WETLANDS

Attached is a wetland delineation letter by Mark Hampton Associates, Inc.

SECTION 14: TRAIL INFORMATION

Attached is trail information.

SECTION 15: YURT PERMIT

Attached is the Yurt Permit.

File: 16158



March 28, 2017

Ms. Carla Nixon Town of Cumberland 290 Tuttle Rd Cumberland, ME 04021

RE: FINAL SUBMITTAL, SOLAR WAY SUBDIVISION

Dear Carla,

We have repackaged the application for Solar Way Subdivision. The road has been redesigned to provide a 25 foot buffer along the stream. This allows this project to qualify for a Permit-By-Rule Stream Crossing from DEP. We expect that permit to be issued prior to the April Planning Board Meeting. We hope to receive final approval from the Board.

We have added some trees at the existing entrance to Solar Way. The culvert will be removed and a small mound added to provide some screening and ensure the entrance is not used.

We are very appreciative of the Board's efforts to make sure the procedures are followed and we have a solid approval In asking for preliminary and final approval in one meeting we believe it follow previous Board procedures.

Thank you very much for your consideration of our application.

Sincerely,

PINKHAM & GREER,

CIVILINGINEERS

homas S. Greer P.E

cc: Patrice Miller, File

Enclosures TSG/rjs

CUMBERLAND CODE

Appendix A Planning Board Application

r idiliting 1900	Man: R04
	Map:RU4 Lot:24
1. APPLICANT:	
	Telephone:207.749.8117
Address: 1 Solar Way	Cell:
Cumberland, ME 04021	Fax: Fax: Fax:
	E-mail: 3chomespatrice@gmail.com
Interest in property: Owns	
Interest in abutting properties, if any: No	
2. OWNER:	007.740.0447
	Telephone: 207.749.8117
	Cell:
Cumberland, ME 04021	Fax:
	E-mail: 3chomespatrice@gmail.com
3. APPLICANT'S ARCHITECT, LANDSCAPE A	ARCHITECT, ENGINEER, PLANNER OR
SURVEYOR:	One of D.E
Name: Pinkham & Greer, Thomas S.	
Address: 28 Vannah Ave	Cell:
Portland, ME 04103	Fax: 207.781.4245
(If more than one, please attach na	
and contact information for each)
	a a
4. PROJECT:	
Name of project: Solar Way Subdivision	
Address of site: 34 Hillside Avenue	Man: R04
Project data: Book:	1,1dp
Page:	Lot: <u>24</u>
Zoning district: RR1	Number of dwellings: 5
Overlay district:	Number of buildings:
Size of site: $\frac{24.84 \text{ Ac}}{24.84 \text{ Ac}}$	
Minor subdivision	Minor site plan
Major subdivision X	Major site plan
Other:	

5. OTHER INFORMATION:	Ne
 a) Is Board of Adjustment and Appeals approve 	val required? No
b) Are any ordinance waivers requested?	YesXNo
(I)	f 'Yes' attach a list of waivers and reasons for their request.)
c) Application fee per Town ordinance:\$2	2,100.00 (paid)
d) This application form and all accompanying	g materials must be submitted to the Town Planner at
least 21 days prior to the meeting at which	it is to be considered by the Planning Board.
The undersigned, being the applicant, owner	or legally authorized representative, states that all
information contained in this application is true an	nd correct to the best of his/her knowledge and hereby
does submit the information for review by the	Town and in accordance with applicable ordinances,
statutes and regulations of the Town, state and feder	
State of the country	1.0/19
1/may July	3/28/ / /
Signature of applicant/owner/representative	Date
218tratrite of abburging ammentehreseringnae	

Live Life Maine, LLC 1 Solar Way Cumberland, ME 04021 (207) 749-8117

February 8, 2017

To Whom It May Concern

This letter is to inform you that Thomas S. Greer and his associates of Pinkham & Greer Civil Engineers in Portland are hereby authorized to represent me throughout the approval process of 34 Hillside Avenue (Solar Way), Cumberland, Maine.

This includes representing me with the Town of Cumberland and the Department of Environmental Protection as well as any other State or local agencies who may become involved in the process.

Should you have any questions or concerns, please feel free to contact me.

Sincerely.

tie yfth Patrice Miller

Town of Cumberland Major Subdivision Submission Checklist

BASED ON APPENDIX D MAJOR SUBDIVISION SUBMISSION REQUIREMENTS

Subdivision Name			
	Solar Way Subo	division	
Applicant's Name _ 3/28/17	Live Life Mair	ne, LLC	Date
	project will be c	lassified as a majo	Code Enforcement Officer will or or minor subdivision.
	OFFICER AND	TOWN PLANNE	TH THE CODE OR PRIOR SUBMITTING OF CLASSIFICATION.
Major subdivision	X	Minor Subdivisi	on

The following is intended to provide a summary of the submission requirements for

The following is intended to provide a summary of the submission requirements for subdivision review and for the provision of evidence for Findings of Fact. For precise requirements, please refer to the Town of Cumberland Subdivision Ordinance.

THE TOWN PLANNER SHALL DETERMINE IF THE APPLICATION COMPLETE OR INCOMPLETE. ONLY COMPLETE APPLICATIONS SHALL BE REVIEWED BY THE PLANNING BOARD.

Waivers: Please make a check in the *Waiver Request* column for any requested waivers. Attach a separate sheet citing the Subdivision Ordinance section number, description, and reason for request. (Section 15.1)

Specify below the location of information, i.e., plan #, narrative, binder section...

i.e., plan #, narrative, binder section			bilider section
	Yes or No	Location of Information?	Waiver Requested?
General Submissions:			requesteur
15 copies of plans and materials. All sheet sized to be 24" x 36"	Yes	(2) 24x36 (13) 11x17	
1"=100' scale for general plan	No	C1.0, C1.1, C1.4	
1"=40' scale for construction of required improvements	Yes	C2.0, C1.2	
Traffic Info?	n/a		
Capacity to Serve letters?	n/a		
Financial and Technical Capacity (Sec.14)	Yes	Application, Section 3	

Sewer user permits required? Status?	n/a		
Deed restrictions, if any,			
describe	No		
deserree			
			·
Cover Sheet:			
Proposed subd. name &		0	
name of municipality	Yes	Cover Sheet	
Name & address of record			
owner, subdivider, and			
designer of preliminary	Yes	Cover Sheet	
plan			
Location Map:			
Scale 1"=1000"	No 1"=600'	Cover Sheet	
Shows area 1000'			
from property	Yes	Cover Sheet	
lines			
All existing	V	Cover Sheet	
subdivisions	Yes	Cover Sneet	
Approximate tract lines of	Yes	C1.0	
adjacent parcels	res	C1.0	
Approximate tract lines of			
parcels directly across	Yes	C1.0	
street			
Location of existing &			
proposed streets,		6	
easements, lot lines &			
bldg. lines of proposed	Yes	C1.1, C1.2, C1.3, C1.4	
subd. & adjacent		C2.0	
properties.			
Existing Conditions Plan			
Existing buildings	Yes	C1.0	
Watercourses	Yes	C1.0	
Legend	Yes	C1.0	
Wetlands	Yes	C1.0	
existing physical features			
(trees 10" diameter or	Yes		
more.Stone walls			
Trail System?	Yes	C1.1, C1.3	
~			
Subdivision Plan:			
Date of plan submission,	Yes	C1.1	
true north & graphic scale			

Net residential acreage calculations	Yes	C1.1	
Legend	Yes	C1.1	
Trail (connecting?)	Yes	C1.1	
Widths of			
existing/proposed streets,	Yes	C1.1	
easements & bldg. lines			
Names of			
existing/proposed streets,	Yes	C1.1	
easements & bldg. lines			
Boundaries &			
designations of zoning			
districts, parks, public	Yes	C1.1	
spaces			
Outline of proposed subd.	Yes	C1.1	
w/ street system	100	J111	
Future probable street	N 50		
system of remaining	N/A		
portion of tract.			
Opportunities for			
Connecting Road(s)	NO		
(13.2D)			
Space & setback of	Yes	C1.1	
district	V	C1.2	
Classification of road	Yes Yes	100 J 100 C	
Width of road(s)		C1.2	
Drainage type (open, closed, mix)	Yes	C1.1, C1.2, D2.0	
Type of byway provided	No		
(8.4D)	140		
N			
Names of adj.	Yes	C1.0, C1.1	
subdivisions	1000 and 200		
NI C C		0.4.0	
Names of owners of	Yes	C1.0	
record of adjacent acreage	Yes	C1.0	
record of adjacent acreage Any zoning districts	Yes	C1.0	
record of adjacent acreage Any zoning districts boundaries affecting subd.		C1.0	
record of adjacent acreage Any zoning districts boundaries affecting subd. Location & size of		C1.0	-
record of adjacent acreage Any zoning districts boundaries affecting subd. Location & size of existing or proposed	Yes		
record of adjacent acreage Any zoning districts boundaries affecting subd. Location & size of existing or proposed sewers, water mains,		C1.0, C1.1, C1.2, C2.0,	
record of adjacent acreage Any zoning districts boundaries affecting subd. Location & size of existing or proposed sewers, water mains, culverts, hydrants and	Yes		
record of adjacent acreage Any zoning districts boundaries affecting subd. Location & size of existing or proposed sewers, water mains, culverts, hydrants and drains on property	Yes	C1.0, C1.1, C1.2, C2.0,	
record of adjacent acreage Any zoning districts boundaries affecting subd. Location & size of existing or proposed sewers, water mains, culverts, hydrants and drains on property Connections w/existing	Yes	C1.0, C1.1, C1.2, C2.0,	
record of adjacent acreage Any zoning districts boundaries affecting subd. Location & size of existing or proposed sewers, water mains, culverts, hydrants and drains on property Connections w/existing sewer or water systems	Yes	C1.0, C1.1, C1.2, C2.0, D1.0, D2.0	
record of adjacent acreage Any zoning districts boundaries affecting subd. Location & size of existing or proposed sewers, water mains, culverts, hydrants and drains on property Connections w/existing sewer or water systems Private water supply	Yes	C1.0, C1.1, C1.2, C2.0,	
record of adjacent acreage Any zoning districts boundaries affecting subd. Location & size of existing or proposed sewers, water mains, culverts, hydrants and drains on property Connections w/existing sewer or water systems	Yes Yes N/A	C1.0, C1.1, C1.2, C2.0, D1.0, D2.0	

(option for Board)			
Test pit locations	Yes	C1.0, C1.1, C1.2, C2.0	
Well locations	Yes	C1.0, C1.1, C1.2, C2.0	
Signature & lic. # of site	N/A		
evaluator	19//3		
Existing streets: location,			
name(s), widths w/in and	Yes	C1.0	*
abutting			
Proposed streets: location,			
name(s), widths w/in and	Yes	C1.0	
abutting			
The above for any			
highways, easements,			
bldg. lines, alleys, parks,	Yes	Cover Sheet	
other open spaces w/in			
and abutting			
Grades & street profiles			
of all streets, sidewalks or			
other public ways	Yes	· C2.0	
proposed			
2'contour lines	Yes	C1.0, C1.2, C2.0, D1.0, D2	.b
High intensity soil survey		C1.0,	
by cert. soil scientist	Yes	Application Section 12	
Soil boundaries & names			
superimposed on plot plan	Yes	C1.0	
Deed reference & map of			
survey of tract boundary			
by reg. land surveyor tied	Yes	04.0	
to established reference	res	C1.0	· · · · · · · · · · · · · · · · · · ·
points			
Surface drainage or			
•			
stormwater mgmt plan w/profiles & cross			
•	Yes		
sections by a P.E.			
showing prelim. design			
and conveyances			
Proposed lot lines w/	V		
dimensions and suggested	Yes	C1.1, C1.2, C2.0	
bldg. locations.			
Location of temp. markers			
in field			
All parcels proposed to be			
dedicated to public use	N/A		
and conditions of such.			
Location of all natural			
features or site elements	N/A		
to be preserved			
Street lighting details			
Landscaping and grading			
plan including natural			
plan including natural			

Survey stamped by P.E.	No	to be Stamped after Final Approval
Soil surveys w/# of soil	.,,	The state of the s
scientist		
Septic plan w/# of prof.		
site evaluator	N/A	
Geological evals w/ reg.		
geologists number	N/A	
Architect's seal	N/A	
For Rt. One: 75'	19/74	
undisturbed buffer		
applicable to all buildings,		
structures, parking areas,	N/A	
drainage facilities and		
uses.		
Open Space?	Yes	C1.1
Any part of parcel in a	100	01.1
shoreland zone?	No	
Flood Map Number and		
	No	
rating? Stormwater Report?	Yes	Application Section 7
	Yes	All Sheets
Rivers, ponds, wetlands?	165	All Streets
Historic, archeological features?	No	Application Section 6
	Yes	Application Section 11
Solid waste disposal?	res	Application Section 11
Description d Nickey on Diame		
Required Notes on Plan:		
Fire Department notes		
Clearing limits note		
Re: approval limit of 90		
days before recording or		
null p. 10		
	-	
Final Plan Submissions:	See	
	Appendix	
A . 1 C 11	D	
Actual field survey of		
boundary lines w/ monumentation shown		
Assessor's approval of	7.0	
street names and		
assignment of lot numbers.		
Designation of all open		
spaces w/ notes on		
ownership	-	
Copies of declarations,		
agreements or other		
documents showing the		
manner in which open		
space or easements are to		

be held and maintained.		
Written offer for any		
conveyance to the Town		
of open space or		
easements along with		
written evidence that the		
Council is willing to	-	
accept such offer		
Evidence of Outside		
Agency Approvals		

As per Section 7.2 - REVIEW AND APPROVAL BY OTHER AGENCIES:

A. Where review and approval of any subdivisions or site plan by any other governmental agency is required, such approval shall be submitted to the Planning Board in writing prior to the submission of the Final Plan.

Please list below all outside agency approvals that are required for this subdivision.

Maine Department of Environmental Protection: List type of permit(s) required (e.g., SLODA, NRPA (tier type?), Maine Construction General Permit, etc.)

NRPA

US Army Corps of Engineers:

Part of NRPA

Maine Department of Transportation: *List type of permit(s) required.*

N/A

Maine Department of Inland Fisheries and Wildlife:

N/A

Other: (List)

CUMBERLAND CODE

Appendix H Application Checklist Major Subdivision – Preliminary Plan Review

Sub	division name	Solar Way Subdivision	n		
	olicant name	Live Life Maine, LLC			
	ner name	Live Life Maine, LLC			
			Check When	Satisfactory	Indicate Date When Satisfactory
			Applicant	CEO	Planning Bd.
1.	10 copies of final accompanying m		X		NEW AND ASSESSMENT OF THE PROPERTY OF THE PROP
2.	Location map		X		
3.	Name of subdivis	sion	X		
4.	Date		X	THE CONTRACTOR OF THE CONTRACT	
5.	Scale		X		
6.	North arrow		X		the shared was a second and the seco
7.	Topography (con	ntour intervals)	X		
8.	Name of owner		X		
9.	Name of enginee architect or plant		X		
10.	Name of adjoining owners or subdiving		x		***************************************
11.	Dimensions and of all property be	bearings or angles oundary lines	X		ESTORIO ESTORI
12.	Name, location a adjacent streets	nd width of	X	Mary and Application of the State of the Sta	
13.	Location and sizutilities and widt		n/a		
14.	Location and siz streams, swamps features, building		X		

SUBDIVISION OF LAND

15.	Existing deed restrictions	n/a	Non-section of the Contraction	Language and the same of the s
16.	Zoning district	X		promote and the second
17.	Proposed street layout (conformity with Official Map and	X		
2.52	Comprehensive Plan)	X		
18.	Right-of-way location width			
19.	Pavement width	X		
20.	Street names	X		
21.	Street elevations	X		
22.	Street grades	X		
23.	Sidewalks	n/a		
24.	Off-street parking (if applicable)	n/a		
25.	Storm sewers, catch basins and culverts	x		
26.	Landscaping	n/a		
27.	Erosion control	X		
28.	Streetlighting standards	n/a		
29.	Street signs	X		
30.	Water supply system	X		
31.	Fire hydrants	n/a		***************************************
32.	Sanitary sewage system	X	-	***
	Dimensions and area of lots	X		
34.	Soil characteristics	X		
35.	Location of temporary monuments	n/a 		
	Location of permanent monuments	X		May a second and a
37.	Location and size of proposed utilities and easements	X		

CUMBERLAND CODE

38. Location of nonutility easements	n/a	
39. Proposed restrictive covenants	X	
40. Proposed parks, playgrounds and other public areas	n/a	

To the Applicant:

If you are requesting a waiver from a particular requirement or you do not feel that the requirement is applicable to your proposed project, place an asterisk (*) in the space and explain your reasons in the space below or on attached sheets.

SUBDIVISION OF LAND

Appendix I Application Checklist Major Subdivision – Final Plan Review

Proposed subdivision name Solar Way Subdivision				
Apj	blicant name Live Life Maine, LLC			
Owner name Live Life Maine, LLC				
		Check When	Satisfactory	Indicate Date When Satisfactory
		Applicant	CEO	Planning Bd.
1.	10 copies of final plan and accompanying materials	x		
2.	Title	X		
3.	Scale	X	3.4	
4.	North arrow	X	Barriera a transportation and the state of t	
5,	Date of plan	X		
6.	Name, address and signature of owner	X		
7.	Name, address and signature of subdivider	x		
8.	Name, address and signature of licensed engineer, land surveyor, architect or planner	x	¥ .	
9.	Names of adjoining property owners or subdivisions	X		
10.	Check for conformity with preliminary plan	x	Modernion	
11.	Dimensions and bearings of property being subdivided	X		Market strayers (Alla Sect 1994 Selections)
12.	Location, names and widths of existing and proposed streets	x		A P STOCK FOR SHEETING A PROPERTY OF THE STOCK OF T
13.	Location and names of existing and proposed parks, playgrounds and other public areas	X		***************************************

CUMBERLAND CODE

Lot lines and accurate dimen bearings or angles	sions and X	Name of the last o	
15. Lot areas	X		
16. Building setback lines	x		no companies announced to be according
17. Curve data	X		· AFORMATION
18. Location, description and size of all monuments	x	***************************************	Marting Section Control of Contro
19. Certification by agencies as r	required		Agord Color
20. Restrictive covenants	X		
21. Street plans and profiles	x		
22. Typical cross sections of stre pavements, including curbs a gutters, sidewalks, manholes catch basins	ınd		
23. Landscaping	n/a 		
24. Plan and profiles showing lossize and invert elevations of and proposed sanitary sewers storm sewers	existing		
25. Plan and profiles showing lossize of all waterlines, gas line other underground utilities as structures	es, and		

To the Applicant:

If you are requesting a waiver from a particular requirement or you do not feel that the requirement is applicable to your proposed project, please place an asterisk (*) in the space and explain your reasons in the space below or on attached sheets.

Town of Yarmouth

14/15/A Diane & Alan Blanchard 169 Greely Rd Cumberland, ME. 04021

14/14 14/33 Central Maine Power Company 70 Farm View Drive New Gloucester, ME. 04260

SOLAR WAY SUBDIVISION

CUMBERLAND, MAINE

Table of Contents

Section 1: Development Description

Including: Construction Plan, Construction Drawings List, and Location Map

Section 2: Title, Right, or Interest

Section 3: Financial Capacity/Technical Ability

Section 4: DEP NPRA PBR Application

Section 5: Wildlife and Fisheries Resources/Natural Areas

Section 6: Historic Sites

Section 7: Stormwater Management

Section 8: Water Supply

Section 9: Wastewater Disposal

Section 10: Maintenance of Common Facilities or Property

Section 11: Solid Waste

Section 12: Soils Report

Section 13: Wetland Report

Section 14: Trail Information

Section 15: Yurt Permit

SECTION 1: DEVELOPMENT DESCRIPTION

The site currently has two homes on 24.8 acres. It will add 3 additional homes. It will use a 750' gravel road for access.

It has two stream crossings, requiring a permit from DEP under the NRPA Standards.

The project will have the following construction schedule.

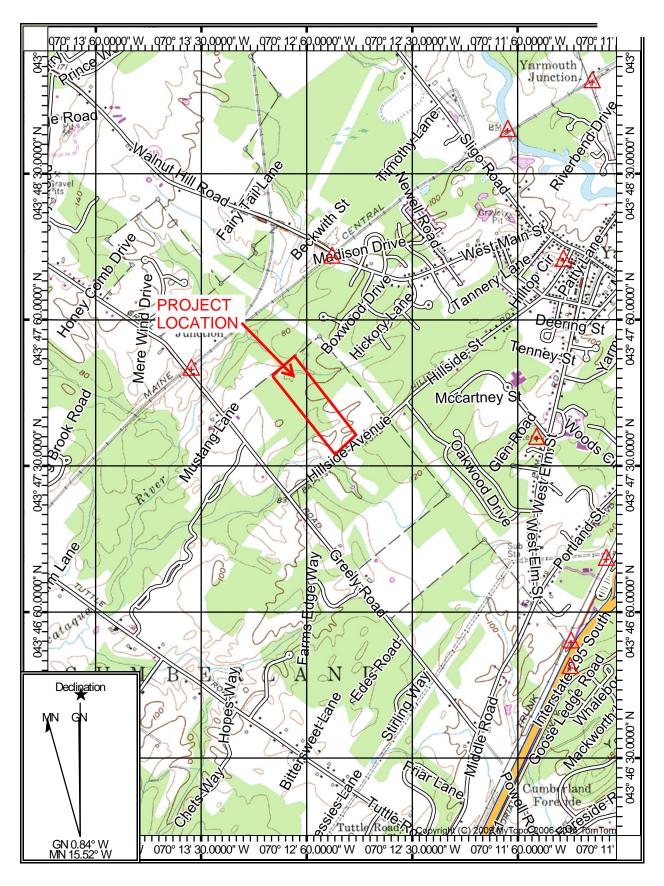
1. Permit Approvals April 2017

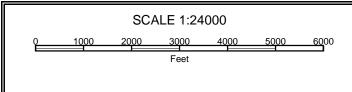
2. Road & Utility Construction June to November 2017

3. Lot sales 2017-2018

Construction Drawings List

Drawing #	Description
	Cover Sheet
C1.0	Existing Condition Plan
C1.1	Subdivision Plan
C1.2	Site Plan
C1.3	Net Residential Acreage Plan
C1.4	Conventional Lot Layout
C2.0	Plan & Profile w/ Erosion Control - Solar Way
C3.0	Erosion Control Notes & Details
C4.0	Site Details
D1.0	Drainage Analysis, Existing Condition
D2.0	Drainage Analysis, Developed Condition
	Plan of Property-Cullenberg Land Survey Drawing





34 Hillside Drive, Cumberland File: 16158

TITLE, RIGHT, OR INTEREST **SECTION 2:**

Attached is the following:

- Agent Certificate
 Agent Authorization
 Good Standing
 Purchase & Sales Agreement
 Deed for the parcel

Samuel M. Sherry, Esq.

Transactions, Litigation and Collection Since 1992

P. O. Box 7875 Portland, ME 04112-7875 Sam@FineAttorney.com Board Certified - Creditors Rights Law

Telephone: (207) 799-8485 Facsimile: (207) 482-0018

AGENT'S CERTIFICATE

- 1. The undersigned Registered Agent of Live Life Maine, LLC (the "Company") hereby certifies that as of January 5, 2017 the following are true and correct:
- 1. The Company was organized on August 3, 2015 and is in good standing with the Office of the Secretary of State for the State of Maine.
- 2. The Company's Members are as follows:

Mellissa R. Richter 50% Patrice Miller 50%

3. The officers of the Company are as follows:

REGISTERED AGENT: Samuel M. Sherry

4. Pursuant to the Operating Agreement, either Member is able to execute agreements on the Company's behalf if duly authorized by the Company.

IN WITNESS WHEREOF, I have executed my name as Registered Agent of the above-named Company this 5th of January, 2017

Samuel M. Sherry, Registered Agent

 $C: \label{likelihood} Live\ Life\ ME\ Agent's\ Cert\ 170105. doc$

Agent Authorization

We Patrice Miller and Melissa Richter authorized agents of Live Life Maine LLC. Herby authorize Patrice Miller to act as Authorized agent and sign on behalf of Live Life Maine LLC. for all documents required by the town of Cumberland for subdivision approval of land located at 34 Hillside Road in Cumberland Maine.

Patrice Miller, 50% Member

Date

Melissa Richter, 50% Member

Date



Department of the Secretary of State

Bureau of Corporations, Elections and Commissions

Corporate Name Search

Information Summary

Subscriber activity report

This record contains information from the CEC database and is accurate as of: Wed Nov 23 2016 08:39:28. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status	
LIVE LIFE MAINE, LLC	20160400DC	LIMITED LIABILITY COMPANY (DOMESTIC)	GOOD STANDING	
Filing Date	Expiration Date	Jurisdiction		
08/03/2015	N/A	MAINE		
Other Names		(A=Assumed ; F=Forme	er)	
LIVE SOLAR M	AINE, LLC	A		
Clerk/Registere	ed Agent			
SAMUEL M. SH PO BOX 7875	ERRY			
PORTLAND, MI	E 04112 7875			

PURCHASE AND SALE AGREEMENT

("days" means business days unless otherwise noted, see paragraph 23)

November	1 ,2016		10-1		3017 Effective Date
Offer Date			Effective Date is defined in Par	agraph 23 of this Agre	ement.
1. PARTIES: This Agre	ement is made between	Live Life M	aine LLC		
					("Buyer") and
					("Seller").
			fter set forth, Seller agrees situated in municipality of		
County of Cum	berland Stat	te of Maine loc	ated at	1 Solar Way	and
described in deed(s) reco	orded at said County's Re	gistry of Deeds	Book(s)33281	, Page(s)	24
3. FIXTURES: The Buy blinds, shutters, curtain stoves, sump pump, elector the following: no e	rer and Seller agree that a rods, built-in appliances, trical fixtures, landscaping exceptions	all fixtures, inclu , heating sources ng, and	ding but not limited to exist	ing storm window or kerosene-fired are inclu	s, screens, shades and/or heaters and wood/pellet ded with the sale except
Seller represents that all	mechanical components	of fixtures will l	be operational at the time of	closing except: no	exceptions
	RTY: The following item t, in "as is" condition with		operty as viewed on		are included with the
\$ 1.00 a deposit of earnest mon in the amount of \$	Buyer X has delive ey in the amount \$ will	ered; or will be delivered		hat an additional o	ys of the Effective Date, deposit of earnest money
right to terminate ends of	once Buyer has delivered to check upon delivery of the check upon delivery	said deposit(s).	ance with the above terms of the purchase	hase price shall be	e paid by wire, certified,
This Purchase and Sale	Agreement is subject to the	ne following con	ditions:		
-,-	CCEPTANCE:act as escrow agent until a	closing; this offer and, in the eve	none or shall be valid until int of non-acceptance, this of	earnest money sha	("Agency") shall hold (date) all be returned promptly
to Buyer.					
to Buyer.			•		
7. TITLE AND CLOSI the Maine Bar Associat execute all necessary pay Seller is unable to convexceed 30 calendar days to remedy the title. Selle closing date set forth ab accept the deed with the obligations hereunder and	ion shall be delivered to pers on see ey in accordance with the state of the person see ey in accordance with the state of the ser hereby agrees to make ove or the expiration of state title defect or may tend any earnest money shall	Buyer and this item 26 e provisions of a notified of the de a good-faith effect of the de a good	hantable title in accordance transaction shall be closed (closing date) or before his paragraph, then Seller sefect, unless otherwise agree fort to cure any title defect time period, Seller is unable treement in which case the the Buyer.	and Buyer shall proper, if agreed in whall have a reasoned to in writing by during such period to remedy the tite parties shall be	ards of Title adopted by pay the balance due and riting by both parties. If nable time period, not to y both Buyer and Seller, ed. If, at the later of the le, Buyer may close and relieved of any further
7. TITLE AND CLOSI the Maine Bar Associat execute all necessary pay Seller is unable to convexceed 30 calendar days to remedy the title. Selle closing date set forth ab accept the deed with the obligations hereunder and	ion shall be delivered to pers onsee ey in accordance with the state of the see hereby agrees to make ove or the expiration of some title defect or may tend any earnest money shall be conveyed by aovenants, conditions, eas	Buyer and this item 26 e provisions of a notified of the de a good-faith effect of the de a good	hantable title in accordance transaction shall be closed (closing date) or before his paragraph, then Seller sefect, unless otherwise agree fort to cure any title defect time period, Seller is unable treement in which case the	and Buyer shall proper, if agreed in whall have a reasoned to in writing by during such period to remedy the tite parties shall be	ards of Title adopted by pay the balance due and riting by both parties. If nable time period, not to y both Buyer and Seller, ed. If, at the later of the le, Buyer may close and relieved of any further
7. TITLE AND CLOSI the Maine Bar Associat execute all necessary payseller is unable to convexceed 30 calendar days to remedy the title. Self-closing date set forth abaccept the deed with the obligations hereunder and 8. DEED: The property encumbrances except continued current use of 9. POSSESSION, OCCURRE of tenants and occurrent services.	ion shall be delivered to pers onsee_ ey in accordance with the state of the person is the person in accordance with the state of the person in the time Seller is the person of state title defect or may tend any earnest money shall be conveyed by aovenants, conditions, easing the property. UPANCY, AND CONDITIONALLY, Shall be given to	Buyer and this item 26 e provisions of a notified of the de a good-faith effect reasonable erminate this Agell be returned to the ements and research. ETION: Unless a Buyer immedia	hantable title in accordance transaction shall be closed (closing date) or before his paragraph, then Seller sefect, unless otherwise agree fort to cure any title defect time period, Seller is unable greement in which case the the Buyer. Narranty rictions of record which described agreed in writing tely at closing. Said premise	and Buyer shall pore, if agreed in whall have a reasoned to in writing by during such period to remedy the tite parties shall be deed, and shall o not materially as, possession and see shall then be	ards of Title adopted by pay the balance due and riting by both parties. If nable time period, not to y both Buyer and Seller, ad. If, at the later of the le, Buyer may close and relieved of any further be free and clear of all and adversely affect the occupancy of premises, broom clean, free of all
7. TITLE AND CLOSI the Maine Bar Associat execute all necessary payseller is unable to convexceed 30 calendar days to remedy the title. Self-closing date set forth abaccept the deed with the obligations hereunder and 8. DEED: The property encumbrances except continued current use of 9. POSSESSION, OCCURE of tenants and occupossessions and debris, and occuposessions and oc	ion shall be delivered to pers onsee_ ey in accordance with the state of the person is the person in accordance with the state of the person in the time Seller is the person of state title defect or may tend any earnest money shall be conveyed by aovenants, conditions, easing the property. UPANCY, AND CONDITIONALLY, Shall be given to	Buyer and this item 26 e provisions of a notified of the de a good-faith effect reasonable erminate this Agell be returned to the ements and research and research are condition a	hantable title in accordance transaction shall be closed (closing date) or before his paragraph, then Seller sefect, unless otherwise agree fort to cure any title defect time period, Seller is unable greement in which case the the Buyer. Narranty rictions of record which described by the defect of the seller is unable greement in which case the seller is unable g	and Buyer shall pore, if agreed in whall have a reasoned to in writing by during such period to remedy the tite parties shall be deed, and shall o not materially as, possession and see shall then be	ards of Title adopted by pay the balance due and riting by both parties. If nable time period, not to y both Buyer and Seller, ad. If, at the later of the le, Buyer may close and relieved of any further be free and clear of all and adversely affect the occupancy of premises, broom clean, free of all
7. TITLE AND CLOSI the Maine Bar Associat execute all necessary payseller is unable to convexceed 30 calendar days to remedy the title. Self-closing date set forth abaccept the deed with the obligations hereunder and 8. DEED: The property encumbrances except continued current use of 9. POSSESSION, OCCURRENCE of tenants and occupossessions and debris, right to view the propert 10. RISK OF LOSS, premises shall be assumption to closing. If the	ion shall be delivered to pers onsee_ ey in accordance with the ser hereby agrees to make ove or the expiration of see title defect or may tend any earnest money shall be conveyed by aovenants, conditions, ease the property. UPANCY, AND CONDITIONALLY, and in substantially the set of the property of the	Buyer and this item 26 e provisions of a notified of the de a good-faith effect reasonable arminate this Agell be returned to the sements and resistance of	hantable title in accordance transaction shall be closed (closing date) or before his paragraph, then Seller sefect, unless otherwise agree fort to cure any title defect time period, Seller is unable treement in which case the the Buyer. Narranty Trictions of record which described agreed in writing tely at closing. Said premises at present, excepting reason URANCE: Prior to closing the premises insured again to closing, Buyer may be the premises "as-is" toge	and Buyer shall pore, if agreed in whall have a reasoned to in writing be during such period to remedy the tite parties shall be deed, and shall to not materially a session and ses shall then be onable use and we get, risk of loss, danst fire and other either terminate ther with an assignation.	ards of Title adopted by by the balance due and riting by both parties. If hable time period, not to by both Buyer and Seller, and. If, at the later of the le, Buyer may close and relieved of any further the free and clear of all and adversely affect the occupancy of premises, broom clean, free of all are. Buyer shall have the mage, or destruction of extended casualty risks this Agreement and be
the Maine Bar Associat execute all necessary payseller is unable to convexceed 30 calendar days to remedy the title. Self-closing date set forth abaccept the deed with the obligations hereunder and 8. DEED: The property encumbrances except continued current use of 9. POSSESSION, OCCURRENCE of tenants and occupossessions and debris, right to view the property 10. RISK OF LOSS, premises shall be assumption to closing. If the refunded the earnest more selected and selected the service of the service	ion shall be delivered to pers onsee_ey in accordance with the ser hereby agrees to make ove or the expiration of see title defect or may tend any earnest money shall be conveyed by a overants, conditions, east the property. UPANCY, AND CONDITIONALLY, shall be given to any in substantially the sey within 24 hours prior to DAMAGE, DESTRUCT and solely by the Seller. premises are damaged oney, or close this transa	Buyer and this item 26 e provisions of a notified of the de a good-faith effect reasonable arminate this Agell be returned to the sements and resistance of	hantable title in accordance transaction shall be closed (closing date) or before his paragraph, then Seller's efect, unless otherwise agree fort to cure any title defect time period, Seller is unable treement in which case the the Buyer. Narranty rictions of record which describe agreed in writing tely at closing. Said premies at present, excepting reason URANCE: Prior to closing the premises insured again to closing, Buyer may be the premises "as-is" toge	and Buyer shall pore, if agreed in whall have a reasoned to in writing be during such period to remedy the tite parties shall be deed, and shall to not materially a session and ses shall then be onable use and we get, risk of loss, danst fire and other either terminate ther with an assignation.	ards of Title adopted by by the balance due and riting by both parties. If hable time period, not to by both Buyer and Seller, and. If, at the later of the le, Buyer may close and relieved of any further the free and clear of all and adversely affect the occupancy of premises, broom clean, free of all are. Buyer shall have the mage, or destruction of extended casualty risks this Agreement and be

-					
if a suc pro coures;	ny, shall be determing he as electricity, wate rated as of the date of the date of the date of the date of the taxe to basis of the taxe the basis of the taxe	the closing the most recently avair and sewer will be paid through f closing: collected rent, associated. Real estate taxes shall be provided taxes for prior years. If the anish assessed for the preceding we assessed for the preceding the collection of the preceding the second second provided taxes.	date as required to collable cash price of the date of closing attion fees, (other)	omply with lender required the company that last by Seller. The followin/a of closing (based on not known at the time nument as soon as the	fuel in any tanks remaining on the uirements, if any. The amount owed delivered the fuel. Metered utilities ng items, where applicable, shall be The day of closing is municipality's fiscal year). Seller i of closing, they shall be apportioned new tax rate and valuation can be er tax as required by State of Maine
12. real to,	DUE DILIGENCE or personal property	E: Neither Seller nor Licensee n	nakes any warranties	regarding the condition	on, permitted use or value of Sellers pal codes, including, but not limited onals regarding any specific issue or
upo	Buyer's obligation to an Buyer's own opinion	to close under this Agreement is on as to the condition of the prop	s not subject to any perty.	due diligence investig	ations. Buyer is relying completely
inve	esugations undertake	to close under this Agreemer n. Buyer shall have deems necessary which may incl	days from the Effect	ive Date of this Agree	the results of any due diligence ment to perform such due diligence llowing:
Ger Sev Wa Wa	neral Building vage Disposal	Square Footage Code Conformance Registered Farmland Environmental Scan	Zoning Pests	Survey/MLI Lead Paint Flood Plain Chimney Tax Status*	Habitat Review/Waterfowl Coastal Shoreland Septic Energy Audit Lot Size/Acreage Arsenic Wood/Water (see par. 13)
orde Agr resu	er to undertake the a reement by notifying alt of any investigation Agreement, Buyer nower does not notify Se	bove investigations. If the resistance in the second in the special second in the special second is unsatisfactory to Buyer in Enact the second is unsatisfactory to Buyer in Enact the second in the	d consultants reason; ult of any investigat rified number of days Buyer's sole discretion thin the time period	able access to the propion is unsatisfactory to, and any earnest monn, and Buyer wishes to set forth above; other	iscretion. Seller agrees to cooperate perty and its systems and fixtures in o Buyer, Buyer may terminate this ey shall be returned to Buyer. If the pursue remedies other than voiding wise this contingency is waived. If bove, this contingency is waived by
* I	f the property is en nagement and Harves	rolled in the Maine Tree Gro t Plan within days.	wth Tax program,	Seller agrees to prov	ide Buyer with the current Forest
13. deve	eloped by the Maine	OSURE FORM: Buyer acknow Center for Disease Control and	rledges receipt of S l Prevention regarding	Seller's Property Disc og arsenic in private w	closure Form and the information vater supplies and arsenic in treated
14.	is not subject to days. If proof of this Agreement shall be returned is subject to find a. Buyer's obligate purchase price, Buyer is under as of the closing shall be returned to verification of Agreement. If the earnest more c. Buyer hereby a Seller's licensed d. After (b) is me provide Seller have despectified in (a) with such letter Buyer. This rigger. Buyer agrees to actual pre-paids f. Buyer's ability g. Buyer may choproof of funds	and tater than days from the day of	obtaining a and obtain financing to close and may ten showing that Buyer he loan requested with such letter within such letter within sits lender to communitate the loan denial within the tenter from another lenformation, is qualifier may terminate this sletter is received. The such letter within the such letter within the loan denial withi	of the funds acceptabes and proof is unacceptable ion of such time period over on these terms. If such minate this Agreement has made application of the ends once Buyer's lettericate the status of the nwilling to provide san two days of receipt. Indeer showing that Build for the loan requests Agreement and the cay up to \$\frac{1}{2}\$ able by Buyer's lender of another property. So Buyer shall notify Son and the status of the loan requests and the cay up to \$\frac{1}{2}\$ able by Buyer's lender the of another property. So Buyer shall notify Son and the cay up to \$\frac{1}{2}\$ able by Buyer's lender the loan requests the status of the loan requests and the cay up to \$\frac{1}{2}\$ able by Buyer's lender the loan requests the loan requests and the cay up to \$\frac{1}{2}\$ able by Buyer's lender the loan requests the loan requests and the cay up to \$\frac{1}{2}\$ able by Buyer's lender the loan requests the loan requests and the cay up to \$\frac{1}{2}\$ able by Buyer's lender the loan requests the loan requests and the cay up to \$\frac{1}{2}\$ able by Buyer's lender the loan requests the loan requests and the loan r	le to Seller within
Revis	sed 2017	Page 2 of 4 - P&S E	Suyer(s) Initials	Seller(s) Initia	ıls

13. BROKERAGE DISCLOSUR		•	•		inps:
N/A Licensee		() of	Agency	()
is a Seller Agent Buyer	Agent Disc I	Dual Agent [Transaction Broker	Agency	WILS ID
N/A		() of	* Martin Barriage and the second of the seco	. ()
N/A Licensee is a Seller Agent Buyer	Agent Disc I	MLS ID Oual Agent '	Transaction Broker	Agency	MLS ID
If this transaction involves Dischereby consent to this arrangem Agency Consent Agreement.	losed Dual Agen nent. In addition	cy, the Buyer a , the Buyer and	nd Seller acknowled Seller acknowled	edge the limited fiduciary duties lge prior receipt and signing of	s of the agents and a Disclosed Dual
16. DEFAULT/RETURN OF E default and Seller may employ forfeiture by Buyer of the earnes Buyer may employ all legal and the earnest money. Agency actin earnest money to either Buyer or Agency shall be entitled to recove party.	all legal and equit money. Seller equitable remeding as escrow ages Seller. In the even	uitable remedie 's failure to fulf es, including wi nt has the optio	es, including without any of Seller's of thout limitation, ten to require writter nev is made a party	out limitation, termination of the obligations hereunder shall constrmination of this Agreement and a releases from both parties prior to any lawsuit by virtue of acting	his Agreement and titute a default and I return to Buyer of or to disbursing the ag as escrow agent.
17. MEDIATION: Earnest mone All other disputes or claims arisin for injunctive relief) shall be subbound to mediate in good faith at to initiating litigation (other that subsequent litigation regarding that subsequent litigation. This cl	ng out of or relation omitted to mediated to each pay han n requests for interior in	ng to this Agree tion in accordar of the mediat junctive relief), n which the par	ment or the proper ice with generally a ion fees. If a party with then that party with ty who failed to firm	ty addressed in this Agreement (accepted mediation practices. But fails to submit a dispute or claim ill be liable for the other party's	other than requests uyer and Seller are to mediation prior s legal fees in any
18. PRIOR STATEMENTS: An completely expresses the obligation	y representations ons of the parties	s, statements and	d agreements are r	not valid unless contained herein	n. This Agreement
19. HEIRS/ASSIGNS: This Agr of the Seller and the assigns of th	eement shall exte e Buyer.	end to and be of	oligatory upon heir	s, personal representatives, succe	essors, and assigns
20. COUNTERPARTS: This As signatures were on one instrumer	greement may be nt. Original or far	signed on any axed or other elec	number of identical etronically transmit	counterparts with the same bind ted signatures are binding.	ling effect as if the
21. SHORELAND ZONE SEPT the Shoreland Zone. If the proper closing indicating whether the sy	ty does contain a	septic system I	ocated in the Shore	land Zone, Seller agrees to provi	ptic system within ide certification at
22. NOTICE: Any notice, communication or docum effective upon communication, v	entation to or fro	om the parties o	y requirements here t their Licensee. Or	eunder may be satisfied by prov nly withdrawals of offers and co	viding the required ounteroffers will be
23. EFFECTIVE DATE/BUSIN electronic copy of the fully exe authorized to fill in the Effective Agreement, including all addend observed Maine State/Federal has counted from the Effective Date, or such other established starting contrary, deadlines in this Agreedate.	cuted agreement Date on Page 1 I da made a part I olidays. Deadline unless another st g date, and endin	to be delivered hereof. Except hereof, shall me es in this Agree tarting date is ex- ing at 5:00 p.m.	I to the other part as expressly set for an business days of ment, including al pressly set forth, be Eastern Time on th	y which shall be the Effective th to the contrary, the use of the defined as excluding Saturdays, il addenda, expressed as "within eginning with the first day after the last day counted. Unless expression	Date. Licensee is term "days" in this Sundays and any n x days" shall be the Effective Date, ressly stated to the
24. CONFIDENTIALITY: Buyer lenders, appraisers, inspectors, in Buyer and Seller authorize the lender of the closing disclosure and copy of the closure and copy of the closing disclosure and copy of the closing disclosure and copy of the closure and copy	vestigators and o ender and/or clo	thers involved i sing agent prep	n the transaction no aring the closing of	ecessary for the purpose of closing disclosure and/or settlement state.	ng this transaction.
25. ADDENDA: Lead Paint	- Yes X N	o; Other -	Yes X No I	Explain:	
The Property Disclosure Form is	not an addendum	and not part of	this Agreement.		
26. OTHER CONDITIONS: This above referenced deed a entire parcel. Closing	and closing	is subject	to the succe	ssful subdivision appr	coval of
Revised 2017	Page 3 of 4 - P&S	Buyer(s) Initia	ls	Seller(s) Initials	

27. GENERAL PROVISIONS:

- a. A copy of this Agreement is to be received by all parties and, by signature, receipt of a copy is hereby acknowledged. If not fully understood, contact an attorney. This is a Maine contract and shall be construed according to the laws of Maine.
- b. Seller acknowledges that State of Maine law requires buyers of property owned by non-resident sellers to withhold a prepayment of capital gains tax unless a waiver has been obtained by Seller from the State of Maine Revenue Services.
- c. Buyer and Seller acknowledge that under Maine law payment of property taxes is the legal responsibility of the person who owns the property on April 1, even if the property is sold before payment is due. If any part of the taxes is not paid when due, the lien will be filed in the name of the owner as of April 1 which could have a negative impact on their credit rating. Buyer and Seller shall agree at closing on their respective obligations regarding actual payment of taxes after closing. Buyer and Seller should make sure they understand their obligations agreed to at closing and what may happen if taxes are not paid as agreed.
- d. Buyer acknowledges that Maine law requires continuing interest in the property and any back up offers to be communicated by the listing agent to the Seller.
- e. Whenever this Agreement provides for earnest money to be returned or released, agency acting as escrow agent must comply with the Maine Real Estate Commission rules which may require written notices or obtaining written releases from both parties.

Buyer's Mailing address is			
	10-1-17	And no	10-1-17
BUYER Live Life Maine LLC	DATE	BUYER	DATE
Seller accepts the offer and agrees to deliver agrees to pay agency a commission for service	the above-described poses as specified in the li	roperty at the price and upon the terms and sting agreement.	conditions set forth and
Seller's Mailing address is			
	20-1-17	aladi a	10-1-1
SELLER Patrice Miller	DATE	SELLER Melissa Richter	DATE
The parties acknowledge that until signed by will expire unless accepted by Buyer's signat (time) AM Pl	ure with communicatio	nre constitutes only an offer to sell on the at n of such signature to Seller by (date)	pove terms and the offer DATE
The Buyer hereby accepts the counter offer s	et forth above.		
BUYER	DATE	BUYER	DATE
	EXTE	NSION	
The closing date of this Agreement is extend	ed until	DATE	
		DATE	
SELLER	DATE	SELLER	DATE
BUYER	DATE	BUYER	DATE





SHORT FORM WARRANTY DEED

Patrice Miller of 34 Hillside Avenue, Cumberland, ME, 04021, FOR CONSIDERATION PAID, grants to Live Life Maine, LLC, a limited liability company, with mailing address of P.O. Box 8481, Portland, ME 04104, with WARRANTY COVENANTS, the following described real property located in the Town of Cumberland, County of Cumberland and State of Maine:

A certain lot or parcel of land, being Parcel B as shown on a plan entitled "Plan of Property" made for Patrice Miller dated July 8, 2014 by Cullenberg Land Surveying and situated on the northwesterly side of Hillside Avenue, in the Town of Cumberland, County of Cumberland and State of Maine, bounded and described as follows:

Beginning at an iron pipe found on the northwesterly sideline of Hillside Avenue at the easterly corner of land now or formerly of Louis V. Leblanc and Marla S. Leblanc as recorded in the Cumberland County of Registry of Deeds in Book 23115, Page 44; thence by following courses and distances:

NORTH 39° 14' 57" WEST along land now or formerly of said Leblanc, land now or formerly of Edward F. Libby, et al, as recorded in said Registry of Deeds in Book 23669, Page 306 and land now or formerly of Alan R. Blanchard and Diane E. Blanchard as recorded in said Registry of Deeds in Book 10644, Page 82, a distance of two thousand, one hundred twelve and 69/100 (2,112.69) feet to an iron pin found; thence

NORTH 53° 38' 25" EAST along land now or formerly of said Blanchard, a distance of five hundred fifty-one and 41/100 (551.41) feet to an iron pin found at land now or formerly of Central Maine Power Company as recorded in said Registry of Deeds in Book 28887, Page 66; thence

SOUTH 37° 09' 10" EAST along land now or formerly of Central Maine Power, a distance of one thousand, three hundred sixteen and 60/100 (1,316.60) feet to an iron pin set at the northerly corner of Parcel A as shown on said plan; thence

SOUTH 53° 48' 15" WEST along Parcel A, a distance of two hundred twenty-six and 56/100 (226.56) feet to an iron pin set; thence

SOUTH 38° 11' 53" EAST along Parcel A, a distance of seven hundred ninety-five and 24/100 (795.24) feet to an iron pin set on the northwesterly sideline of Hillside Avenue; thence

SOUTH 53° 47' 01" WEST along Hillside Avenue, a distance of two hundred sixty-two and 08/100 (262.08) feet to the point of beginning.

Bearings are referenced to grid north.

Excepting and reserving a fifty (50) foot right of way and easement for ingress and egress and all utilities along the southwesterly sideline of Parcel A.

Also excepting and reserving a temporary driveway easement until a driveway or roadway is constructed over and the above described fifty (50) foot easement from Parcel A to Hillside Avenue, over the existing gravel driveway southwest of the above described fifty (50) foot right of way. Such easement shall be automatically released upon the construction of the easement described in the previous paragraph.

This conveyance is made subject to any and all easements and appurtenances of record, insofar as the same may affect the subject premises.

Meaning and intending to convey and hereby conveying a portion of the same premises conveyed to the Grantor herein by deed of Daniel E. Keene, Judith M. Keene, Thomas H. Keene and Susan T. Keene dated July 11, 2014 and recorded in the Cumberland County Registry of Deeds in Book 31632, Page 282.

Witness my hand this 27th day of October, 2015,

WITNESS

STATE OF MAINE

Cumberland, ss.

October 27, 2015

Personally appeared the above named Patrice Miller and acknowledged the foregoing instrument to be her free act and deed.

Patrice Miller

Before me,

Notary Public/Attorney at Law

JAMES R. LEMIEUX #2755
Attorney at Law, State of Maine.

Printing Name to take acknowledgements pursuant to 4 M.R.S.A. 1056)

S:\CStoddard\DOCUMENT\CRS\Closings\2015\L\Live Life Maine, LLC 5873-15\deed.wpd

SECTION 3: FINANCIAL CAPACITY / TECHNICAL ABILITY

See attached Financial Capacity Letter. Below is the Technical Ability.

Civil Engineer

Pinkham & Greer Civil Engineers 28 Vannah Avenue Portland, ME 04103

Surveyor

Maine Survey Consultants, Inc. PO Box 485 Harrison, ME 04040

Soils Scientist

Mark Hampton Associates PO Box 1931 Portland, ME 04104-1931

Hydro Geologist

Sweet Associates 155 Gray Rd Falmouth, ME 04105



IRREVOCABLE LETTER OF CREDIT

February 6, 2017

Mr. Bill Shane, Town Manager Town of Cumberland 200 Main Street Cumberland, Maine 04096

RE: LIVE LIFE MAINE, LLC
State of Maine Charter Number 20163571DC

Letter of Credit: Loan Number L-16-149
Project Name: Solar Way Cumberland, ME 04021

Dear Sir:

MAINE CAPITAL GROUP hereby issues its Irrevocable Letter of Credit for the account of LIVE LIFE MAINE, LLC ("the Developer") in the name of the Town of Cumberland taken together amount of One Hundred Twenty Thousand and 00/100 (\$120,000.00). The Town of Cumberland may draw upon the Letter of Credit by presentation of a sight draft in the event that LIVE LIFE MAINE, LLC fails to complete by February 7, 2018, at the Developer's expense, the work on the road and other public improvements required for the referenced subdivision project, as specified in Schedule A, attached hereto. Said draft shall be accompanied by a written statement that the Developer has failed to complete such work and shall specify the line items which have not been completed. Said draft shall be signed by the Town Manager and bear on its face "Demand for Payment under MAINE CAPITAL GROUP Letter of Credit Number L-16-149"

LIVE LIFE MAINE, LLC will notify the Town of Cumberland for inspections in compliance with the Town's required inspection schedule and obtain its approval in writing as it completes each line item of the road construction and other improvements. The Stated Amount will be reduced as site work is completed and approved by the Town of Cumberland. The Town will notify the Developer and MAINE CAPITAL GROUP of each reduction in writing.

This Letter of Credit will automatically expire at the earliest of February 8, 2018, or when the Town of Cumberland acknowledges in writing to LIVE LIFE MAINE, LLC and MAINE CAPITAL GROUP that the work outlined above has been completed in accordance with the Town of Windham's road specifications and the approved plans for the LIVE LIFE MAINE, LLC Subdivision Project.



Drafts drawn upon this account must be for this Particular subdivision and to complete any work that is outlined above and that was not completed by February 8, 2018 or reasonable restoration of the project site. Furthermore, drafts must be accompanied by itemized estimates showing costs of work to be completed. Drafts must be presented to the Servicing Department of Maine Capital Group 4 City Center 3rd Floor Portland, ME 04101 before 3:00 P.M. on Friday a normal business day. Any demand for payment hereunder shall not exceed the Stated Amount. In the event that MAINE CAPITAL GROUP fails to honor a request for payment made under this paragraph, MAINE CAPITAL GROUP shall notify the Town in writing of the reason for the dishonor within three business days from the date of the submission of the draft hereunder. Such a dishonor shall not preclude the Town from submitting additional requests for payment in accordance with the terms of this paragraph.

Except as otherwise expressly stated herein, the Letter of Credit is subject to the Uniform Customs and Practice for Documentary Credits (1993 Revision), International Chamber of Commerce Publication Number 500, and any subsequent revisions thereof approved by the International Chamber of Commerce (the "Uniform Customs"). This Letter of Credit shall, as to matters not governed by the Uniform Customs, be governed by and construed in accordance with the laws in effect in the State of Maine.

This Letter of Credit, along with Schedule A attached hereto, sets forth in full the terms of our undertaking and this undertaking shall not in any way be amended or amplified by reference to any document, instrument or agreement referred to herein (except the Uniform Customs) or in which this Letter of Credit is referred to or to which this Letter of Credit relates and any such reference shall not be deemed to incorporate herein by reference any such document, instrument or agreement. This Letter of Credit is not transferable or assignable.

Sincerely

Shawn P. Lyden

President/

Commercial Loan Officer

Schedule A

Land Survey	1	·
General Contractor Fee	1	
Design Fee & Job Start Up	1	
Lot / Road Clearing	1	\$3,000.00
Utilities	1	\$10,000.00
Sewer	1	noishusulk
Water	1	
Road	1	\$107,000.00
Landscaping	1	
Site Work & Excavation	1	
Foundation Walls	1	

SECTION 4: DEP NRPA PBR APPLICATION

Attached is the DEP NRPA PRB Application.

File: 16158



28 VANNAH AVE. PORTLAND, ME. 04103 Tel: 207.781.5242 Fax: 207.781.4245

March 27, 2017

Ms. Audie Arbo Maine DEP 312 Canco Rd Portland, ME 04103

RE: NPRA PERMIT BY RULE, SOLAR WAY SUBDIVISION, CUMBERLAND

Dear Audie,

We have redesigned the access road to the subdivision lots such that it avoids being within 25 feet of the streams. Attached is a revised Permit-By-Rule Application for the two stream crossings.

We have reduced one crossing to 30 feet for the driveway to Lot 4 and located the road crossing further south such that the existing culvert will be removed and a new culvert will be installed.

We have required the contractor to install a silt fence along the 25 foot setback line to ensure no encroachment into the buffer.

This permit is predicated on the Town approving the project and the location of the road not in the center of the right-of-way.

Let me know if you have any questions.

Sincerely,

PINKHAM & GREER, CIVIL ENGINEERS

Thomas S. Greer, P.I

cc: (1) Carla Nixon, (1) Patrice Miller, (1) File

Enclosures

TSG/rjs

DEPARTMENT OF ENVIRONMENTAL PROTECTION NRPA PERMIT BY RULE NOTIFICATION FORM

(For use with DEP Regulation, Natural Resources Protection Act-Permit by Rule Standards, Chapter 305)

PLEASE TYPE OR PRIN	T IN BLACK INK ONLY					
Name of Applicant: (owner)	Live Solar Mai	ne, LLC	Name of Ager	nt:	Thomas S. G	reer, P.E.
Applicant Mailing Address:	1 Solar Way		Agent Phone area code):	# (include	207-781-524	2
Town/City:	Cumberland		PROJECT Info Name of Tow		Cumberland	
State and Zip code:	ME 04021		Name of Wetl Waterbody:	and or	Unnamed Stream	
Daytime Phone # (include area code):	207-749-8117		Map #:	R04	Lot#:	24
Detailed Directions to	Site: I-295N, Ex	it 10, left onto B	ucknam Rd,	left on U	JS-1N, exit Tuttle	Rd, right on
to Tuttle Rd, 1st r	ight onto Middle	Rd. 2nd left ont				
			UTM Northing (if known)) :	(if known)	ng:
Description of Projec	t: Construc	ion of two dri	veways ov	er the s	tream with uti	lities.
Part of a larger project (check one)→	■ No (ch	r the Fact? ☐ Yes eck one)→ ☐ No	below mean		ect 🛘 does (or) 🗎 doe average low water).	s not involve work
NRPA PERMIT BY RU I am filing notice of n				nts for Per	mit By Rule (PBR)	under DEP Rules
Chapter 305. I and r						
	Protected Natural Res.	Sec. (10) Stre	3 3		•	
Sec. (3) Intake Pipes		Sec. (11) State	e Transportation	Facil.	Sec. (18) Maintenar	ice Dredging
Sec. (4) Replacement	nt of Structures		toration of Natur		Sec. (19) Activities	in/on/over
Sec. (5) REPEALED			V Creation/Enhar		significant vern	
	of Rocks or Vegetation	Quality Imp		L	Sec. (20) Activities	located in/on/over
Sec. (7) Outfall Pipe		Sec. (14) REF			high or moderat	e value inland water-
Sec. (8) Shoreline st			lic Boat Ramps		fowl & wading	oird habitat or shore-
Sec. (9) Utility Cross	sing	☐ Sec. (16) Coa	stal Sand Dune F	Projects	bird feeding & ı	oosting areas
NOTIFICATION FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS: Attach a check for the correct fee, payable to: "Treasurer, State of Maine". The current fee for NRPA PBR Notifications can be found at the Department's website: http://www.maine.gov/dep/feesched.pdf Attach a U.S.G.S. topo map or Maine Atlas & Gazetteer map with the project site clearly marked. Attach Proof of Legal Name if applicant is a corporation, LLC, or other legal entity. Provide a copy of Secretary of State's registration information (available at http://icrs.informe.org/nei-sos-icrs/ICRS?MainPage=x). Individuals and municipalities are not required to provide any proof of identity, Attach photos of the proposed site where activity will take place as required in PBR Sections checked above. Attach all other required submissions as outlined in the PBR Sections checked above.						
I authorize staff of the access the project si valid until approved	te for the purpose of	determining compl	iance with the	rules. I als	so understand that	this permit is not
By signing this Not the rule and that the	ification Form, I rep	resent that the pi	oject meets a	ıll applical	oility requirements	and standards in
Signature of Agent or Applicant:	floor	ras S reis		Date	3/27/1	7
Applicant: Keep a copy as a record of permit. Send the form with attachments via certified mail or hand deliver to the Maine Dept. of Environmental Protection at the appropriate regional office listed below. The DEP will send a copy to the Town Office as evidence of the DEP's receipt of notification. No further authorization by DEP will be issued after receipt of notice. Permits are valid for two years. Work carried out in violation of any standard is subject to enforcement action. AUGUSTA DEP PORTLAND DEP BANGOR DEP PRESQUE ISLE DEP 17 STATE HOUSE STATION 312 CANCO ROAD 106 HOGAN ROAD 1235 CENTRAL DRIVE AUGUSTA, ME 04333-0017 PORTLAND, ME 04103 BANGOR, ME 04401 PRESQUE ISLE, ME 04769 (207)287-3901 (207)822-6300 (207)941-4570 (207)764-0477						
OFFICE USE ONLY	Ck.#		Staff		Staff	
PBR#	FP	Date	Acc.		Def.	After

Live Life Maine, LLC 1 Solar Way Cumberland, ME 04021 (207) 749-8117

February 8, 2017

To Whom It May Concern

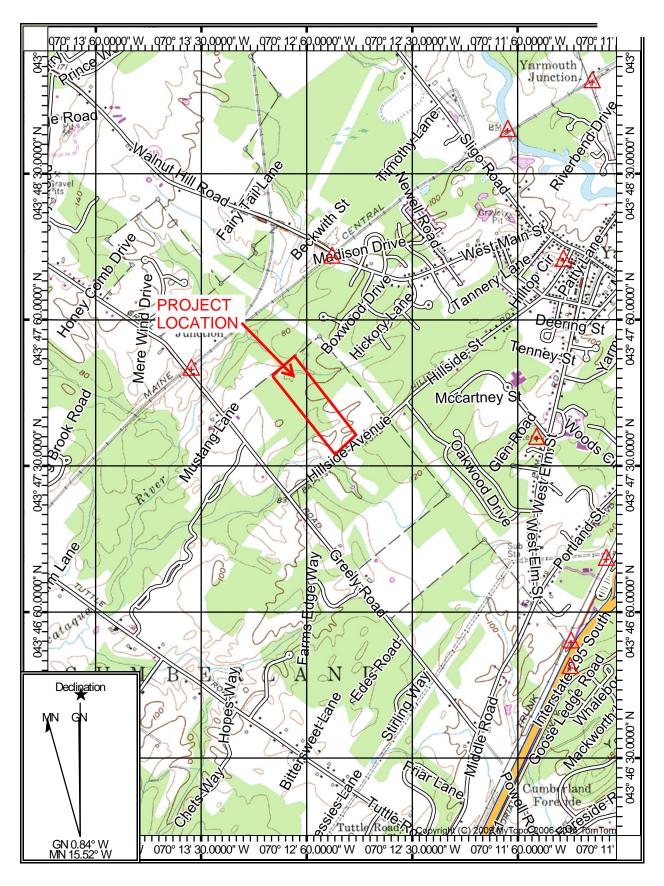
This letter is to inform you that Thomas S. Greer and his associates of Pinkham & Greer Civil Engineers in Portland are hereby authorized to represent me throughout the approval process of 34 Hillside Avenue (Solar Way), Cumberland, Maine.

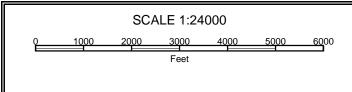
This includes representing me with the Town of Cumberland and the Department of Environmental Protection as well as any other State or local agencies who may become involved in the process.

Should you have any questions or concerns, please feel free to contact me.

Sincerely.

tie yfth Patrice Miller





34 Hillside Drive, Cumberland File: 16158

Samuel M. Sherry, Esq.

Transactions, Litigation and Collection Since 1992

P. O. Box 7875 Portland, ME 04112-7875 Sam@FineAttorney.com Board Certified - Creditors Rights Law

Telephone: (207) 799-8485 Facsimile: (207) 482-0018

AGENT'S CERTIFICATE

- 1. The undersigned Registered Agent of Live Life Maine, LLC (the "Company") hereby certifies that as of January 5, 2017 the following are true and correct:
- 1. The Company was organized on August 3, 2015 and is in good standing with the Office of the Secretary of State for the State of Maine.
- 2. The Company's Members are as follows:

Mellissa R. Richter 50% Patrice Miller 50%

3. The officers of the Company are as follows:

REGISTERED AGENT: Samuel M. Sherry

4. Pursuant to the Operating Agreement, either Member is able to execute agreements on the Company's behalf if duly authorized by the Company.

IN WITNESS WHEREOF, I have executed my name as Registered Agent of the above-named Company this 5^{th} of January, 2017

Samuel M. Sherry, Registered Agent

 $C: \label{likelihood} Live\ Life\ ME\ Agent's\ Cert\ 170105. doc$

Agent Authorization

We Patrice Miller and Melissa Richter authorized agents of Live Life Maine LLC. Herby authorize Patrice Miller to act as Authorized agent and sign on behalf of Live Life Maine LLC. for all documents required by the town of Cumberland for subdivision approval of land located at 34 Hillside Road in Cumberland Maine.

Patrice Miller, 50% Member

Date

Melissa Richter, 50% Member

Date



Department of the Secretary of State

Bureau of Corporations, Elections and Commissions

Corporate Name Search

Information Summary

Subscriber activity report

This record contains information from the CEC database and is accurate as of: Wed Nov 23 2016 08:39:28. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status	
LIVE LIFE MAINE, LLC	20160400DC	LIMITED LIABILITY COMPANY (DOMESTIC)	GOOD STANDING	
Filing Date	Expiration Date	Jurisdiction		
08/03/2015	N/A	MAINE		
Other Names		(A=Assumed ; F=Forme	er)	
LIVE SOLAR M	AINE, LLC	A		
Clerk/Registere	ed Agent			
SAMUEL M. SH PO BOX 7875	ERRY			
PORTLAND, MI	E 04112 7875			

PURCHASE AND SALE AGREEMENT

("days" means business days unless otherwise noted, see paragraph 23)

November	1 ,2016		10-1		3017 Effective Date
Offer Date			Effective Date is defined in Par	agraph 23 of this Agre	ement.
1. PARTIES: This Agre	ement is made between	Live Life M	aine LLC		
					("Buyer") and
					("Seller").
			fter set forth, Seller agrees situated in municipality of		
County of Cum	berland Stat	te of Maine loc	ated at	1 Solar Way	and
described in deed(s) reco	orded at said County's Re	gistry of Deeds	Book(s)33281	, Page(s)	24
3. FIXTURES: The Buy blinds, shutters, curtain stoves, sump pump, elector the following: no e	rer and Seller agree that a rods, built-in appliances, trical fixtures, landscaping exceptions	all fixtures, inclu , heating sources ng, and	ding but not limited to exist	ing storm window or kerosene-fired are inclu	s, screens, shades and/or heaters and wood/pellet ded with the sale except
Seller represents that all	mechanical components	of fixtures will l	be operational at the time of	closing except: no	exceptions
	RTY: The following item t, in "as is" condition with		operty as viewed on		are included with the
\$ 1.00 a deposit of earnest mon in the amount of \$	Buyer X has delive ey in the amount \$ will	ered; or will be delivered		hat an additional o	ys of the Effective Date, deposit of earnest money
right to terminate ends of	once Buyer has delivered to check upon delivery of the check upon delivery	said deposit(s).	ance with the above terms of the purchase	hase price shall be	e paid by wire, certified,
This Purchase and Sale	Agreement is subject to the	ne following con	ditions:		
-,-	CCEPTANCE:act as escrow agent until a	closing; this offer and, in the eve	none or shall be valid until int of non-acceptance, this of	earnest money sha	("Agency") shall hold (date) all be returned promptly
to Buyer.					
to Buyer.			•		
7. TITLE AND CLOSI the Maine Bar Associat execute all necessary pay Seller is unable to convexceed 30 calendar days to remedy the title. Selle closing date set forth ab accept the deed with the obligations hereunder and	ion shall be delivered to pers on see ey in accordance with the state of the person see ey in accordance with the state of the ser hereby agrees to make ove or the expiration of state title defect or may tend any earnest money shall	Buyer and this item 26 e provisions of a notified of the de a good-faith effect of the de a good	hantable title in accordance transaction shall be closed (closing date) or before his paragraph, then Seller sefect, unless otherwise agree fort to cure any title defect time period, Seller is unable treement in which case the the Buyer.	and Buyer shall proper, if agreed in whall have a reasoned to in writing by during such period to remedy the tite parties shall be	ards of Title adopted by pay the balance due and riting by both parties. If nable time period, not to y both Buyer and Seller, ed. If, at the later of the le, Buyer may close and relieved of any further
7. TITLE AND CLOSI the Maine Bar Associat execute all necessary pay Seller is unable to convexceed 30 calendar days to remedy the title. Selle closing date set forth ab accept the deed with the obligations hereunder and	ion shall be delivered to pers onsee ey in accordance with the state of the see hereby agrees to make ove or the expiration of some title defect or may tend any earnest money shall be conveyed by aovenants, conditions, eas	Buyer and this item 26 e provisions of a notified of the de a good-faith effect of the de a good	hantable title in accordance transaction shall be closed (closing date) or before his paragraph, then Seller sefect, unless otherwise agree fort to cure any title defect time period, Seller is unable treement in which case the	and Buyer shall proper, if agreed in whall have a reasoned to in writing by during such period to remedy the tite parties shall be	ards of Title adopted by pay the balance due and riting by both parties. If nable time period, not to y both Buyer and Seller, ed. If, at the later of the le, Buyer may close and relieved of any further
7. TITLE AND CLOSI the Maine Bar Associat execute all necessary payseller is unable to convexceed 30 calendar days to remedy the title. Self-closing date set forth abaccept the deed with the obligations hereunder and 8. DEED: The property encumbrances except continued current use of 9. POSSESSION, OCCURRE of tenants and occurrent services.	ion shall be delivered to pers onsee_ ey in accordance with the state of the person is the person in accordance with the state of the person in the time Seller is the person of state title defect or may tend any earnest money shall be conveyed by aovenants, conditions, easing the property. UPANCY, AND CONDITIONALLY, Shall be given to	Buyer and this item 26 e provisions of a notified of the de a good-faith effect reasonable erminate this Agell be returned to the ements and research. ETION: Unless a Buyer immedia	hantable title in accordance transaction shall be closed (closing date) or before his paragraph, then Seller sefect, unless otherwise agree fort to cure any title defect time period, Seller is unable greement in which case the the Buyer. Narranty rictions of record which described agreed in writing tely at closing. Said premise	and Buyer shall pore, if agreed in whall have a reasoned to in writing by during such period to remedy the tite parties shall be deed, and shall o not materially as, possession and see shall then be	ards of Title adopted by pay the balance due and riting by both parties. If nable time period, not to y both Buyer and Seller, ad. If, at the later of the le, Buyer may close and relieved of any further be free and clear of all and adversely affect the occupancy of premises, broom clean, free of all
7. TITLE AND CLOSI the Maine Bar Associat execute all necessary payseller is unable to convexceed 30 calendar days to remedy the title. Self-closing date set forth abaccept the deed with the obligations hereunder and 8. DEED: The property encumbrances except continued current use of 9. POSSESSION, OCCURE of tenants and occupossessions and debris, and occuposessions and oc	ion shall be delivered to pers onsee_ ey in accordance with the state of the person is the person in accordance with the state of the person in the time Seller is the person of state title defect or may tend any earnest money shall be conveyed by aovenants, conditions, easing the property. UPANCY, AND CONDITIONALLY, Shall be given to	Buyer and this item 26 e provisions of a notified of the de a good-faith effect reasonable erminate this Agell be returned to the ements and research and research are condition a	hantable title in accordance transaction shall be closed (closing date) or before his paragraph, then Seller sefect, unless otherwise agree fort to cure any title defect time period, Seller is unable greement in which case the the Buyer. Narranty rictions of record which described by the defect of the seller is unable greement in which case the seller is unable g	and Buyer shall pore, if agreed in whall have a reasoned to in writing by during such period to remedy the tite parties shall be deed, and shall o not materially as, possession and see shall then be	ards of Title adopted by pay the balance due and riting by both parties. If nable time period, not to y both Buyer and Seller, ad. If, at the later of the le, Buyer may close and relieved of any further be free and clear of all and adversely affect the occupancy of premises, broom clean, free of all
7. TITLE AND CLOSI the Maine Bar Associat execute all necessary payseller is unable to convexceed 30 calendar days to remedy the title. Self-closing date set forth abaccept the deed with the obligations hereunder and 8. DEED: The property encumbrances except continued current use of 9. POSSESSION, OCCURRENCE of tenants and occupossessions and debris, right to view the propert 10. RISK OF LOSS, premises shall be assumption to closing. If the	ion shall be delivered to pers onsee_ ey in accordance with the ser hereby agrees to make ove or the expiration of see title defect or may tend any earnest money shall be conveyed by aovenants, conditions, ease the property. UPANCY, AND CONDITIONALLY, and in substantially the set of the property of the	Buyer and this item 26 e provisions of a notified of the de a good-faith effect reasonable arminate this Agell be returned to the sements and resistance of	hantable title in accordance transaction shall be closed (closing date) or before his paragraph, then Seller sefect, unless otherwise agree fort to cure any title defect time period, Seller is unable treement in which case the the Buyer. Narranty Trictions of record which described agreed in writing tely at closing. Said premises at present, excepting reason URANCE: Prior to closing the premises insured again to closing, Buyer may be the premises "as-is" toge	and Buyer shall pore, if agreed in whall have a reasoned to in writing be during such period to remedy the tite parties shall be deed, and shall to not materially a session and ses shall then be onable use and we get, risk of loss, danst fire and other either terminate ther with an assignation.	ards of Title adopted by by the balance due and riting by both parties. If hable time period, not to by both Buyer and Seller, and. If, at the later of the le, Buyer may close and relieved of any further the free and clear of all and adversely affect the occupancy of premises, broom clean, free of all are. Buyer shall have the mage, or destruction of extended casualty risks this Agreement and be
the Maine Bar Associat execute all necessary payseller is unable to convexceed 30 calendar days to remedy the title. Self-closing date set forth abaccept the deed with the obligations hereunder and 8. DEED: The property encumbrances except continued current use of 9. POSSESSION, OCCURRENCE of tenants and occupossessions and debris, right to view the property 10. RISK OF LOSS, premises shall be assumption to closing. If the refunded the earnest more selected and selected the service of the service	ion shall be delivered to pers onsee_ey in accordance with the ser hereby agrees to make ove or the expiration of see title defect or may tend any earnest money shall be conveyed by a overants, conditions, east the property. UPANCY, AND CONDITIONALLY, shall be given to any in substantially the sey within 24 hours prior to DAMAGE, DESTRUCT and solely by the Seller. premises are damaged oney, or close this transa	Buyer and this item 26 e provisions of a notified of the de a good-faith effect reasonable arminate this Agell be returned to the sements and resistance of	hantable title in accordance transaction shall be closed (closing date) or before his paragraph, then Seller's efect, unless otherwise agree fort to cure any title defect time period, Seller is unable treement in which case the the Buyer. Narranty rictions of record which describe agreed in writing tely at closing. Said premies at present, excepting reason URANCE: Prior to closing the premises insured again to closing, Buyer may be the premises "as-is" toge	and Buyer shall pore, if agreed in whall have a reasoned to in writing be during such period to remedy the tite parties shall be deed, and shall to not materially a session and ses shall then be onable use and we get, risk of loss, danst fire and other either terminate ther with an assignation.	ards of Title adopted by by the balance due and riting by both parties. If hable time period, not to by both Buyer and Seller, and. If, at the later of the le, Buyer may close and relieved of any further the free and clear of all and adversely affect the occupancy of premises, broom clean, free of all are. Buyer shall have the mage, or destruction of extended casualty risks this Agreement and be

-					
if a suc pro coures;	ny, shall be determing he as electricity, wate rated as of the date of the date of the date of the date of the taxe to basis of the taxe the basis of the taxe	the closing the most recently avair and sewer will be paid through f closing: collected rent, associated. Real estate taxes shall be provided taxes for prior years. If the anish assessed for the preceding we assessed for the preceding the collection of the preceding the second second provided taxes.	date as required to collable cash price of the date of closing attion fees, (other)	omply with lender required the company that last by Seller. The followin/a of closing (based on not known at the time nument as soon as the	fuel in any tanks remaining on the uirements, if any. The amount owed delivered the fuel. Metered utilities ng items, where applicable, shall be The day of closing is municipality's fiscal year). Seller i of closing, they shall be apportioned new tax rate and valuation can be er tax as required by State of Maine
12. real to,	DUE DILIGENCE or personal property	E: Neither Seller nor Licensee n	nakes any warranties	regarding the condition	on, permitted use or value of Sellers pal codes, including, but not limited onals regarding any specific issue or
upo	Buyer's obligation to an Buyer's own opinion	to close under this Agreement is on as to the condition of the prop	s not subject to any perty.	due diligence investig	ations. Buyer is relying completely
inve	esugations undertake	to close under this Agreemer n. Buyer shall have deems necessary which may incl	days from the Effect	ive Date of this Agree	the results of any due diligence ment to perform such due diligence llowing:
Ger Sev Wa Wa	neral Building vage Disposal	Square Footage Code Conformance Registered Farmland Environmental Scan	Zoning Pests	Survey/MLI Lead Paint Flood Plain Chimney Tax Status*	Habitat Review/Waterfowl Coastal Shoreland Septic Energy Audit Lot Size/Acreage Arsenic Wood/Water (see par. 13)
orde Agr resu	er to undertake the a reement by notifying alt of any investigation Agreement, Buyer nower does not notify Se	bove investigations. If the resistance in the second in the special second in the special second is unsatisfactory to Buyer in Enact the second is unsatisfactory to Buyer in Enact the second in the	d consultants reason; ult of any investigat rified number of days Buyer's sole discretion thin the time period	able access to the propion is unsatisfactory to, and any earnest monn, and Buyer wishes to set forth above; other	iscretion. Seller agrees to cooperate perty and its systems and fixtures in o Buyer, Buyer may terminate this ey shall be returned to Buyer. If the pursue remedies other than voiding wise this contingency is waived. If bove, this contingency is waived by
* I	f the property is en nagement and Harves	rolled in the Maine Tree Gro t Plan within days.	wth Tax program,	Seller agrees to prov	ide Buyer with the current Forest
13. deve	eloped by the Maine	OSURE FORM: Buyer acknow Center for Disease Control and	rledges receipt of S l Prevention regarding	Seller's Property Disc og arsenic in private w	closure Form and the information vater supplies and arsenic in treated
14.	is not subject to days. If proof of this Agreement shall be returned is subject to find a. Buyer's obligate purchase price, Buyer is under as of the closing shall be returned to verification of Agreement. If the earnest more c. Buyer hereby a Seller's licensed d. After (b) is me provide Seller have despectified in (a) with such letter Buyer. This rigger. Buyer agrees to actual pre-paids f. Buyer's ability g. Buyer may choproof of funds	and tater than days from the day of	obtaining a and obtain financing to close and may ten showing that Buyer he loan requested with such letter within such letter within sits lender to communitate the loan denial within the tenter from another lenformation, is qualifier may terminate this sletter is received. The such letter within the such letter within the loan denial withi	of the funds acceptabes and proof is unacceptable ion of such time period over on these terms. If such minate this Agreement has made application of the ends once Buyer's lettericate the status of the nwilling to provide san two days of receipt. Indeer showing that Build for the loan requests Agreement and the cay up to \$\frac{1}{2}\$ able by Buyer's lender of another property. So Buyer shall notify Son and the status of the loan requests and the cay up to \$\frac{1}{2}\$ able by Buyer's lender the of another property. So Buyer shall notify Son and the cay up to \$\frac{1}{2}\$ able by Buyer's lender the loan requests the status of the loan requests and the cay up to \$\frac{1}{2}\$ able by Buyer's lender the loan requests the loan requests and the cay up to \$\frac{1}{2}\$ able by Buyer's lender the loan requests the loan requests and the cay up to \$\frac{1}{2}\$ able by Buyer's lender the loan requests the loan requests and the cay up to \$\frac{1}{2}\$ able by Buyer's lender the loan requests the loan requests and the cay up to \$\frac{1}{2}\$ able by Buyer's lender the loan requests the loan requests and the loan r	le to Seller within
Revis	sed 2017	Page 2 of 4 - P&S E	Suyer(s) Initials	Seller(s) Initia	ıls

13. BROKERAGE DISCLOSUR		•	•		inps:
N/A Licensee		() of	Agency	()
is a Seller Agent Buyer	Agent Disc I	Dual Agent [Transaction Broker	Agency	WILS ID
N/A		() of	* Martin Barriage and the second of the seco	. ()
N/A Licensee is a Seller Agent Buyer	Agent Disc I	MLS ID Oual Agent '	Transaction Broker	Agency	MLS ID
If this transaction involves Dischereby consent to this arrangem Agency Consent Agreement.	losed Dual Agen nent. In addition	cy, the Buyer a , the Buyer and	nd Seller acknowled Seller acknowled	edge the limited fiduciary duties lge prior receipt and signing of	s of the agents and a Disclosed Dual
16. DEFAULT/RETURN OF E default and Seller may employ forfeiture by Buyer of the earnes Buyer may employ all legal and the earnest money. Agency actin earnest money to either Buyer or Agency shall be entitled to recove party.	all legal and equit money. Seller equitable remeding as escrow ages Seller. In the even	uitable remedie 's failure to fulf es, including wi nt has the optio	es, including without any of Seller's of thout limitation, ten to require writter nev is made a party	out limitation, termination of the obligations hereunder shall constrmination of this Agreement and a releases from both parties prior to any lawsuit by virtue of acting	his Agreement and titute a default and I return to Buyer of or to disbursing the ag as escrow agent.
17. MEDIATION: Earnest mone All other disputes or claims arisin for injunctive relief) shall be subbound to mediate in good faith at to initiating litigation (other that subsequent litigation regarding that subsequent litigation. This cl	ng out of or relation omitted to mediated to each pay han n requests for interior in	ng to this Agree tion in accordar of the mediat junctive relief), n which the par	ment or the proper ice with generally a ion fees. If a party with then that party with ty who failed to firm	ty addressed in this Agreement (accepted mediation practices. But fails to submit a dispute or claim ill be liable for the other party's	other than requests uyer and Seller are to mediation prior s legal fees in any
18. PRIOR STATEMENTS: An completely expresses the obligation	y representations ons of the parties	s, statements and	d agreements are r	not valid unless contained herein	n. This Agreement
19. HEIRS/ASSIGNS: This Agr of the Seller and the assigns of th	eement shall exte e Buyer.	end to and be of	oligatory upon heir	s, personal representatives, succe	essors, and assigns
20. COUNTERPARTS: This As signatures were on one instrumer	greement may be nt. Original or far	signed on any axed or other elec	number of identical etronically transmit	counterparts with the same bind ted signatures are binding.	ling effect as if the
21. SHORELAND ZONE SEPT the Shoreland Zone. If the proper closing indicating whether the sy	ty does contain a	septic system I	ocated in the Shore	land Zone, Seller agrees to provi	ptic system within ide certification at
22. NOTICE: Any notice, communication or docum effective upon communication, v	entation to or fro	om the parties o	y requirements here t their Licensee. Or	eunder may be satisfied by prov nly withdrawals of offers and co	viding the required ounteroffers will be
23. EFFECTIVE DATE/BUSIN electronic copy of the fully exe authorized to fill in the Effective Agreement, including all addend observed Maine State/Federal has counted from the Effective Date, or such other established starting contrary, deadlines in this Agreedate.	cuted agreement Date on Page 1 I da made a part I olidays. Deadline unless another st g date, and endin	to be delivered hereof. Except hereof, shall me es in this Agree tarting date is ex- ing at 5:00 p.m.	I to the other part as expressly set for an business days of ment, including al pressly set forth, be Eastern Time on th	y which shall be the Effective th to the contrary, the use of the defined as excluding Saturdays, il addenda, expressed as "within eginning with the first day after the last day counted. Unless expression	Date. Licensee is term "days" in this Sundays and any n x days" shall be the Effective Date, ressly stated to the
24. CONFIDENTIALITY: Buyer lenders, appraisers, inspectors, in Buyer and Seller authorize the lender of the closing disclosure and copy of the closure and copy of the closing disclosure and copy of the closing disclosure and copy of the closure and copy	vestigators and o ender and/or clo	thers involved i sing agent prep	n the transaction no aring the closing of	ecessary for the purpose of closing disclosure and/or settlement state.	ng this transaction.
25. ADDENDA: Lead Paint	- Yes X N	o; Other -	Yes X No I	Explain:	
The Property Disclosure Form is	not an addendum	and not part of	this Agreement.		
26. OTHER CONDITIONS: This above referenced deed a entire parcel. Closing	and closing	is subject	to the succe	ssful subdivision appr	coval of
Revised 2017	Page 3 of 4 - P&S	Buyer(s) Initia	ls	Seller(s) Initials	

27. GENERAL PROVISIONS:

- a. A copy of this Agreement is to be received by all parties and, by signature, receipt of a copy is hereby acknowledged. If not fully understood, contact an attorney. This is a Maine contract and shall be construed according to the laws of Maine.
- b. Seller acknowledges that State of Maine law requires buyers of property owned by non-resident sellers to withhold a prepayment of capital gains tax unless a waiver has been obtained by Seller from the State of Maine Revenue Services.
- c. Buyer and Seller acknowledge that under Maine law payment of property taxes is the legal responsibility of the person who owns the property on April 1, even if the property is sold before payment is due. If any part of the taxes is not paid when due, the lien will be filed in the name of the owner as of April 1 which could have a negative impact on their credit rating. Buyer and Seller shall agree at closing on their respective obligations regarding actual payment of taxes after closing. Buyer and Seller should make sure they understand their obligations agreed to at closing and what may happen if taxes are not paid as agreed.
- d. Buyer acknowledges that Maine law requires continuing interest in the property and any back up offers to be communicated by the listing agent to the Seller.
- e. Whenever this Agreement provides for earnest money to be returned or released, agency acting as escrow agent must comply with the Maine Real Estate Commission rules which may require written notices or obtaining written releases from both parties.

Buyer's Mailing address is			
	10-1-17	And no	10-1-17
BUYER Live Life Maine LLC	DATE	BUYER	DATE
Seller accepts the offer and agrees to deliver agrees to pay agency a commission for service	the above-described poses as specified in the li	roperty at the price and upon the terms and sting agreement.	conditions set forth and
Seller's Mailing address is			
	20-1-17	aladi a	10-1-1
SELLER Patrice Miller	DATE	SELLER Melissa Richter	DATE
The parties acknowledge that until signed by will expire unless accepted by Buyer's signat (time) AM Pl	ure with communicatio	nre constitutes only an offer to sell on the at n of such signature to Seller by (date)	pove terms and the offer DATE
The Buyer hereby accepts the counter offer s	et forth above.		
BUYER	DATE	BUYER	DATE
	EXTE	NSION	
The closing date of this Agreement is extend	ed until	DATE	
		DATE	
SELLER	DATE	SELLER	DATE
BUYER	DATE	BUYER	DATE





SHORT FORM WARRANTY DEED

Patrice Miller of 34 Hillside Avenue, Cumberland, ME, 04021, FOR CONSIDERATION PAID, grants to Live Life Maine, LLC, a limited liability company, with mailing address of P.O. Box 8481, Portland, ME 04104, with WARRANTY COVENANTS, the following described real property located in the Town of Cumberland, County of Cumberland and State of Maine:

A certain lot or parcel of land, being Parcel B as shown on a plan entitled "Plan of Property" made for Patrice Miller dated July 8, 2014 by Cullenberg Land Surveying and situated on the northwesterly side of Hillside Avenue, in the Town of Cumberland, County of Cumberland and State of Maine, bounded and described as follows:

Beginning at an iron pipe found on the northwesterly sideline of Hillside Avenue at the easterly corner of land now or formerly of Louis V. Leblanc and Marla S. Leblanc as recorded in the Cumberland County of Registry of Deeds in Book 23115, Page 44; thence by following courses and distances:

NORTH 39° 14' 57" WEST along land now or formerly of said Leblanc, land now or formerly of Edward F. Libby, et al, as recorded in said Registry of Deeds in Book 23669, Page 306 and land now or formerly of Alan R. Blanchard and Diane E. Blanchard as recorded in said Registry of Deeds in Book 10644, Page 82, a distance of two thousand, one hundred twelve and 69/100 (2,112.69) feet to an iron pin found; thence

NORTH 53° 38' 25" EAST along land now or formerly of said Blanchard, a distance of five hundred fifty-one and 41/100 (551.41) feet to an iron pin found at land now or formerly of Central Maine Power Company as recorded in said Registry of Deeds in Book 28887, Page 66; thence

SOUTH 37° 09' 10" EAST along land now or formerly of Central Maine Power, a distance of one thousand, three hundred sixteen and 60/100 (1,316.60) feet to an iron pin set at the northerly corner of Parcel A as shown on said plan; thence

SOUTH 53° 48' 15" WEST along Parcel A, a distance of two hundred twenty-six and 56/100 (226.56) feet to an iron pin set; thence

SOUTH 38° 11' 53" EAST along Parcel A, a distance of seven hundred ninety-five and 24/100 (795.24) feet to an iron pin set on the northwesterly sideline of Hillside Avenue; thence

SOUTH 53° 47' 01" WEST along Hillside Avenue, a distance of two hundred sixty-two and 08/100 (262.08) feet to the point of beginning.

Bearings are referenced to grid north.

Excepting and reserving a fifty (50) foot right of way and easement for ingress and egress and all utilities along the southwesterly sideline of Parcel A.

Also excepting and reserving a temporary driveway easement until a driveway or roadway is constructed over and the above described fifty (50) foot easement from Parcel A to Hillside Avenue, over the existing gravel driveway southwest of the above described fifty (50) foot right of way. Such easement shall be automatically released upon the construction of the easement described in the previous paragraph.

This conveyance is made subject to any and all easements and appurtenances of record, insofar as the same may affect the subject premises.

Meaning and intending to convey and hereby conveying a portion of the same premises conveyed to the Grantor herein by deed of Daniel E. Keene, Judith M. Keene, Thomas H. Keene and Susan T. Keene dated July 11, 2014 and recorded in the Cumberland County Registry of Deeds in Book 31632, Page 282.

Witness my hand this 27th day of October, 2015,

WITNESS

STATE OF MAINE

Cumberland, ss.

October 27, 2015

Personally appeared the above named Patrice Miller and acknowledged the foregoing instrument to be her free act and deed.

Patrice Miller

Before me,

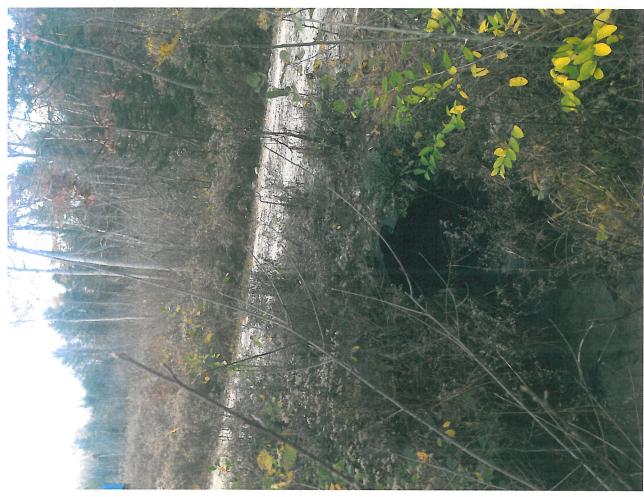
Notary Public/Attorney at Law

JAMES R. LEMIEUX #2755
Attorney at Law, State of Maine.

Printing Name to take acknowledgements pursuant to 4 M.R.S.A. 1056)

S:\CStoddard\DOCUMENT\CRS\Closings\2015\L\Live Life Maine, LLC 5873-15\deed.wpd

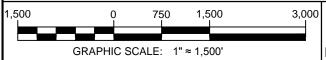












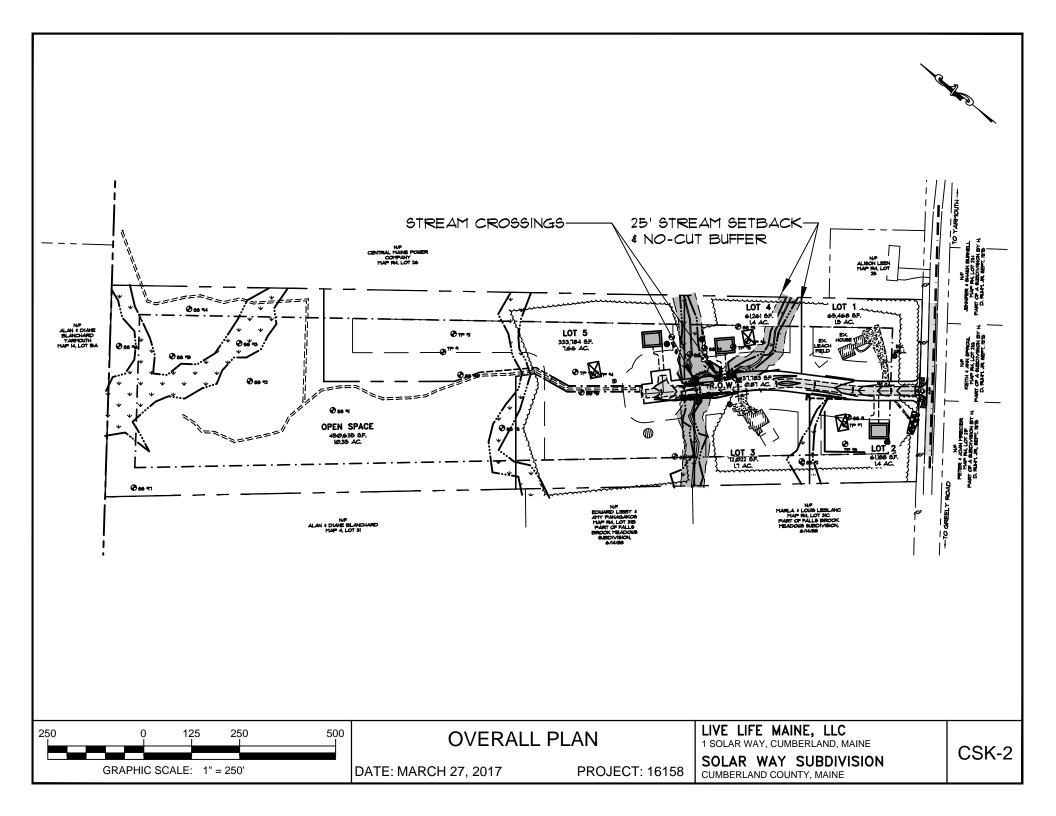
LOCATION PLAN

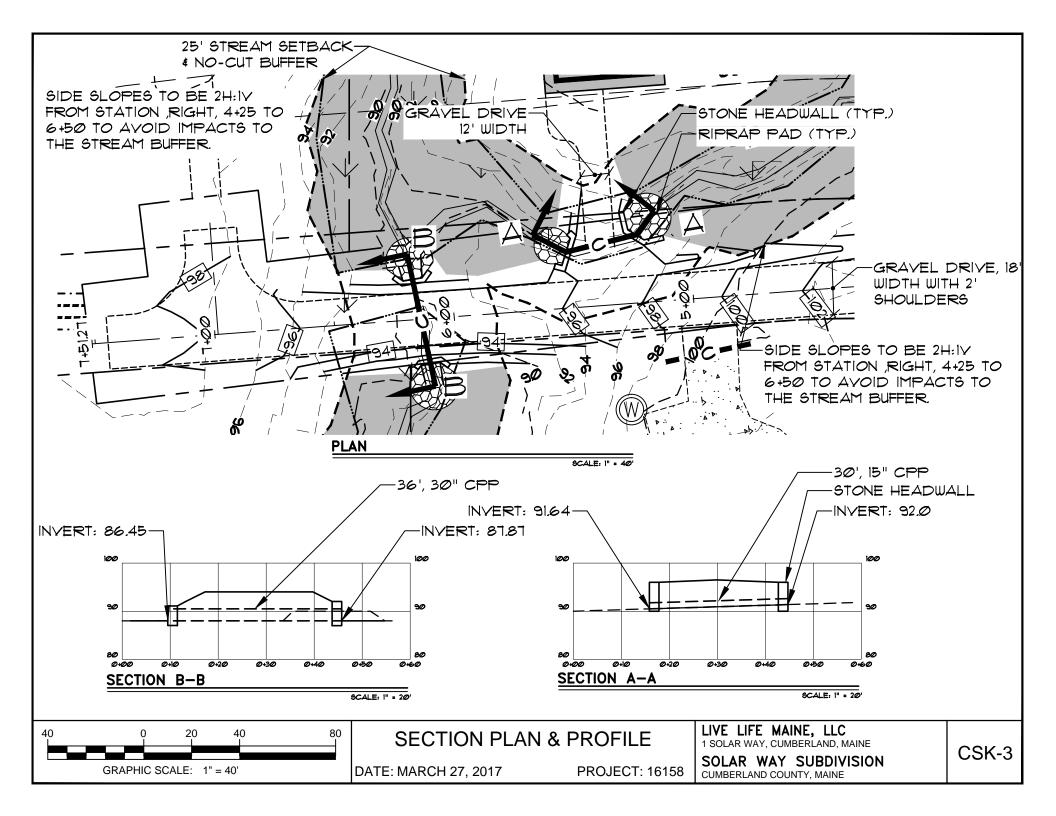
DATE: DECEMBER 9, 2016

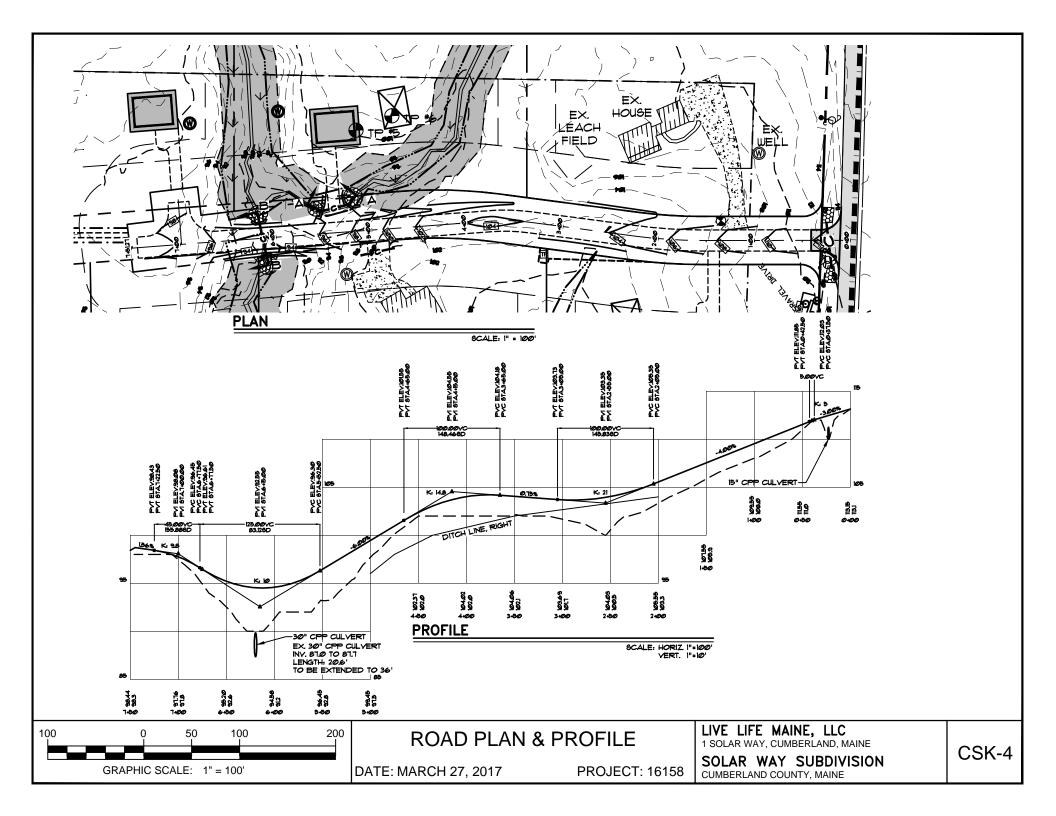
PROJECT: 16158

LIVE SOLAR MAINE, LLC
1 SOLAR WAY, CUMBERLAND, MAINE
SOLAR WAY SUBDIVISION
CUMBERLAND COUNTY, MAINE

CSK-1







SECTION 5: WILDLIFE AND FISHERIES RESOURCES / NATURAL AREAS

Attached is a Report from US Fish and Wildlife Service and a Letter from the State Department of Agriculture, Conservation & Forestry.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Maine Ecological Services Field Office 306 HATCHERY ROAD EAST ORLAND, ME 04431

PHONE: (207)469-7300 FAX: (207)469-6725 URL: www.fws.gov/mainefieldoffice/index.html



November 21, 2016

Consultation Code: 05E1ME00-2017-SLI-0086

Event Code: 05E1ME00-2017-E-00100 Project Name: Solar Way Subdivision

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies the threatened, endangered, candidate, and proposed species and designated or proposed critical habitat that may occur within the boundary of your proposed project or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be

completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC Web site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the Endangered Species Consultation Handbook at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

This species list also identifies candidate species under review for listing and those species that the Service considers species of concern. Candidate species have no protection under the Act but are included for consideration because they could be listed prior to completion of your project. Species of concern are those taxa whose conservation status is of concern to the Service (i.e., species previously known as Category 2 candidates), but for which further information is needed.

If a proposed project may affect only candidate species or species of concern, you are not required to prepare a Biological Assessment or biological evaluation or to consult with the Service. However, the Service recommends minimizing effects to these species to prevent future conflicts. Therefore, if early evaluation indicates that a project will affect a candidate species or species of concern, you may wish to request technical assistance from this office to identify appropriate minimization measures.

Please be aware that bald and golden eagles are not protected under the Endangered Species Act but are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.). Projects affecting these species may require development of an eagle conservation plan: http://www.fws.gov/windenergy/eagle_guidance.html Information on the location of bald eagle nests in Maine can be found on the Maine Field Office Web site: http://www.fws.gov/mainefieldoffice/Project%20review4.html

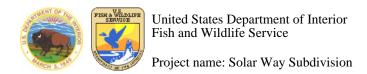
Additionally, wind energy projects should follow the wind energy guidelines: http://www.fws.gov/windenergy/ for minimizing impacts to migratory birds and bats. Projects may require development of an avian and bat protection plan.

Migratory birds are also a Service trust resource. Under the Migratory Bird Treaty Act, construction activities in grassland, wetland, stream, woodland, and other habitats that would result in the take of migratory birds, eggs, young, or active nests should be avoided. Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm and at:

http://www.towerkill.com; and at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



Official Species List

Provided by:

Maine Ecological Services Field Office
P. O. BOX A
EAST ORLAND, ME 04431
(207) 469-7300
http://www.fws.gov/mainefieldoffice/index.html

Consultation Code: 05E1ME00-2017-SLI-0086

Event Code: 05E1ME00-2017-E-00100

Project Type: ** OTHER **

Project Name: Solar Way Subdivision

Project Description: 34 Hillside Drive, Cumberland

5 lot subdivision

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

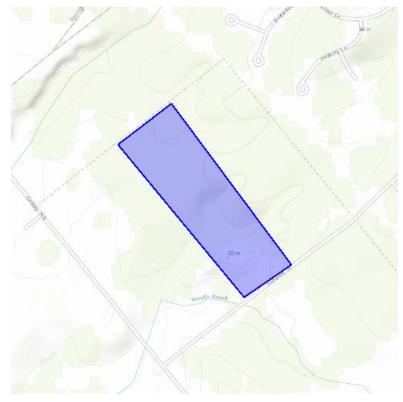




United States Department of Interior Fish and Wildlife Service

Project name: Solar Way Subdivision

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-70.21950244903564 43.79659279607699, -70.21435260772705 43.79210105579768, -70.21242141723633 43.79306138726611, -70.21731376647949 43.79780086170883, -70.21950244903564 43.79659279607699)))

Project Counties: Cumberland, ME



Endangered Species Act Species List

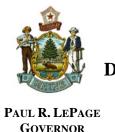
There are a total of 1 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Mammals	Status	Has Critical Habitat	Condition(s)
Northern long-eared Bat (Myotis	Threatened		
septentrionalis)			
Population: Wherever found			



Critical habitats that lie within your project area

There are no critical habitats within your project area.



STATE OF MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY

93 STATE HOUSE STATION AUGUSTA, MAINE 04333

WALTER E. WHITCOMB COMMISSIONER

February 28, 2017

Thomas Greer Pinkham & Greer 28 Vannah Ave Portland, ME 04103

Via email: rsawyer@pinkhamandgreer.com

Re: Rare and exemplary botanical features in proximity to: Project #16158, Solar Way Subdivision, Hillside Avenue, Cumberland, Maine

Dear Mr. Greer:

I have searched the Natural Areas Program's Biological and Conservation Data System files in response to your request received February 22, 2017 for information on the presence of rare or unique botanical features documented from the vicinity of the project in Cumberland, Maine. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area. This lack of data may indicate minimal survey efforts rather than confirm the absence of rare botanical features. You may want to have the site inventoried by a qualified field biologist to ensure that no undocumented rare features are inadvertently harmed.

If a field survey of the project area is conducted, please refer to the enclosed supplemental information regarding rare and exemplary botanical features documented to occur in the vicinity of the project site. The list may include information on features that have been known to occur historically in the area as well as recently field-verified information. While historic records have not been documented in several years, they may persist in the area if suitable habitat exists. The enclosed list identifies features with potential to occur in the area, and it should be considered if you choose to conduct field surveys.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

MOLLY DOCHERTY, DIRECTOR
MAINE NATURAL AREAS PROGRAM



PHONE: (207) 287-8044 FAX: (207) 287-8040 WWW.MAINE.GOV/DACF/MNAP Letter to Thomas Greer, Pinkham & Greer Comments RE: Solar Way Subdivision, Cumberland February 28, 2017 Page 2 of 2

The Natural Areas Program is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. The Natural Areas Program welcomes coordination with individuals or organizations proposing environmental alteration, or conducting environmental assessments. If, however, data provided by the Natural Areas Program are to be published in any form, the Program should be informed at the outset and credited as the source.

The Natural Areas Program has instituted a fee structure of \$75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for \$150.00 for two hours of our services.

Thank you for using the Natural Areas Program in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,

Don Cameron | Ecologist | Maine Natural Areas Program

207-287-8041 | don.s.cameron@maine.gov

D. Con

Rare and Exemplary Botanical Features within 4 miles of Project: #16158, Solar Way Subdivision, Hillside Avenue, Cumberland, Maine

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
Adder's Tongue Fe	ern					
	SC	S1	G5	1905-08-10	7	Non-tidal rivershore (non-forested, seasonally wet), Open wetland, not coastal nor rivershore (non-forested, wetland), Old field/roadside (non-forested, wetland or upland)
American Chestnu	ıt					
	SC	S4	G4	2001-02-13	2	Hardwood to mixed forest (forest, upland)
Engelmann's Spik	erush					
	PE	SH	G4G5Q	1916-08-31	2	Open wetland, not coastal nor rivershore (non-forested, wetland)
Fern-leaved False	Foxglove					
	SC	S3	G5	1902-09-02	13	Dry barrens (partly forested, upland), Hardwood to mixed forest (forest, upland)
Great Blue Lobelia	a					
	PE	SX	G5	1905-09	3	Forested wetland, Non-tidal rivershore (non-forested, seasonally wet)
Horned Pondweed	l					
	SC	S2	G5	1913-09-13	9	Tidal wetland (non-forested, wetland)
Marsh Milkwort						
	PE	SH	G5T4	1903-08-18	1	Dry barrens (partly forested, upland), Open wetland, not coastal nor rivershore (non-forested, wetland)
Mountain-laurel						
	SC	S2	G5	1985-08-01	13	Conifer forest (forest, upland), Hardwood to mixed forest (forest, upland)
Mountain Honeys	uckle					
	E	S2	G5	2009-07-16	12	Dry barrens (partly forested, upland), Hardwood to mixed forest (forest, upland)
Oak - Hickory For	est					
	<null></null>	S1	G4G5	2014-08-21	5	Hardwood to mixed forest (forest, upland)
Rattlesnake Hawk	weed					

Rare and Exemplary Botanical Features within 4 miles of Project: #16158, Solar Way Subdivision, Hillside Avenue, Cumberland, Maine

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
	E	S1	G5T4Q	1909-07	1	Dry barrens (partly forested, upland)
Salt-hay Saltmars	h					
	<null></null>	S3	G5	2009	24	Tidal wetland (non-forested, wetland)
	<null></null>	S3	G5	2011-09-09	62	Tidal wetland (non-forested, wetland)
Slender Knotweed	l					
	PE	SH	G5	1902-09-07	1	Dry barrens (partly forested, upland)
Spotted Wintergre	een					
	Е	S2	G5	2009-07-26	30	Conifer forest (forest, upland), Hardwood to mixed forest (forest, upland)
Upper Floodplain	Hardwood	Forest				
	<null></null>	S3	GNR	2010-06-23	20	Forested wetland
Variable Sedge						
	E	S1	G3	1985-07-16	5	Dry barrens (partly forested, upland), Hardwood to mixed forest (forest, upland)
	E	S1	G3	2012-08-09	1	Dry barrens (partly forested, upland), Hardwood to mixed forest (forest, upland)
Water-plantain Sp	earwort					
	PE	SH	G4	1903-07-29	2	Open water (non-forested, wetland)
Wild Leek						
	SC	S3	G5	2013-04-29	28	Hardwood to mixed forest (forest, upland),Forested wetland

Maine Natural Areas Program Page 2 of 2 www.maine.gov/dacf/mnap

STATE RARITY RANKS

- Critically imperiled in Maine because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.
- S2 Imperiled in Maine because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
- **S3** Rare in Maine (20-100 occurrences).
- **S4** Apparently secure in Maine.
- S5 Demonstrably secure in Maine.
- SU Under consideration for assigning rarity status; more information needed on threats or distribution.
- **SNR** Not yet ranked.
- **SNA** Rank not applicable.
- S#? Current occurrence data suggests assigned rank, but lack of survey effort along with amount of potential habitat create uncertainty (e.g. S3?).
- **Note:** State Rarity Ranks are determined by the Maine Natural Areas Program for rare plants and rare and exemplary natural communities and ecosystems. The Maine Department of Inland Fisheries and Wildlife determines State Rarity Ranks for animals.

GLOBAL RARITY RANKS

- G1 Critically imperiled globally because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extinction.
- G2 Globally imperiled because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
- **G3** Globally rare (20-100 occurrences).
- **G4** Apparently secure globally.
- **G5** Demonstrably secure globally.
- **GNR** Not yet ranked.
- **Note**: Global Ranks are determined by NatureServe.

STATE LEGAL STATUS

- Note: State legal status is according to 5 M.R.S.A. § 13076-13079, which mandates the Department of Conservation to produce and biennially update the official list of Maine's **Endangered** and **Threatened** plants. The list is derived by a technical advisory committee of botanists who use data in the Natural Areas Program's database to recommend status changes to the Department of Conservation.
- **E** ENDANGERED; Rare and in danger of being lost from the state in the foreseeable future; or federally listed as Endangered.
- THREATENED; Rare and, with further decline, could become endangered; or federally listed as Threatened.

NON-LEGAL STATUS

- SC SPECIAL CONCERN; Rare in Maine, based on available information, but not sufficiently rare to be considered Threatened or Endangered.
- PE Potentially Extirpated; Species has not been documented in Maine in past 20 years or loss of last known occurrence has been documented.

ELEMENT OCCURRENCE RANKS - EO RANKS

Element Occurrence ranks are used to describe the quality of a rare plant population or natural community based on three factors:

- <u>Size</u>: Size of community or population relative to other known examples in Maine. Community or population's viability, capability to maintain itself.
- <u>Condition</u>: For communities, condition includes presence of representative species, maturity of species, and evidence of human-caused disturbance. For plants, factors include species vigor and evidence of human-caused disturbance.
- <u>Landscape context</u>: Land uses and/or condition of natural communities surrounding the observed area. Ability of the observed community or population to be protected from effects of adjacent land uses.

These three factors are combined into an overall ranking of the feature of **A**, **B**, **C**, or **D**, where **A** indicates an **excellent** example of the community or population and **D** indicates a **poor** example of the community or population. A rank of **E** indicates that the community or population is **extant** but there is not enough data to assign a quality rank. The Maine Natural Areas Program tracks all occurrences of rare (S1-S3) plants and natural communities as well as A and B ranked common (S4-S5) natural communities.

Note: **Element Occurrence Ranks** are determined by the Maine Natural Areas Program for rare plants and rare and exemplary natural communities and ecosystems. The Maine Department of Inland Fisheries and Wildlife determines Element Occurrence ranks for animals.

Visit our website for more information on rare, threatened, and endangered species! http://www.maine.gov/dacf/mnap

SECTION 6: HISTORIC RESOURCES

Attached is a letter from the Maine Historic Preservation Commission.



File: 16158

28 VANNAH AVE. PORTLAND, ME. 04103 Tel: 207.781.5242 Fax: 207.781.4245

November 21, 2016

Mr. Kirk F. Mohney Maine Historic Preservation Commission 55 Capitol Street, 65 State House Station Augusta, ME, 04333-0065 NOV 23 2016 1730-16

RE: Solar Way Subdivision

Dear Mr. Mohney:

Enclosed please find material relating to a proposed Residential Subdivision to be located at 34 Hillside Drive in Cumberland. Please review this material and your files and inform us of any impact that this construction may have on historic, archaeological or architectural properties.

Sincerely,

PINKHAM & GREER, CIVIL-ENGINEERS

Thomas S. Greer, P.E.

TSG/rjs

Enclosures

Based on the information submitted, I have concluded that there will be no historic properties affected by the proposed undertaking, as defined by Section 106 of the National Historic Preservation Act.

Consequently, pursuant to 36 CFR 800.4(d)(1), no further Section 106 consultation is required unless additional resources are discovered during project implementation pursuant to 36 CFR 800.13.

Kirk F. Mohney,

State Historic Preservation Officer Maine Historic Preservation Commission

Date

12/1/16

SECTION 7: STORMWATER MANAGEMENT REPORT

Attached is a Stormwater Management Report.



28 VANNAH AVE. PORTLAND, ME. 04103 Tel: 207.781.5242 Fax: 207.781.4245

STORMWATER MANAGEMENT REPORT SOLAR WAY SUBDIVISION CUMBERLAND, MAINE

November 28, 2016 Revised February 6, 2017

Project Description:

Solar Way Subdivision will provide housing for 3 additional homes. Currently there are two existing homes on the 24.84 acre property. This project creates a five lot clustered subdivision. The site is located on the southerly side of Hillside Avenue near the Yarmouth-Cumberland town line.

The project will have 750 feet of private road servicing the 5 homes. The power and communication systems will be underground.

Existing Conditions:

The existing site has two fully developed homes. The front of the site is fairly open. It was clear cut not long ago. The rear of the site has some additional forested area. There are tote roads that access the full site.

There are wetlands that transect the site. These are stream based with defined channels, and easily seen on the existing conditions plan sheet C1.0.

The soils on site are buxton, scantic, and limerick-saco based on the Cumberland County Soils Medium Intensity Soils Map. These soils are heavily clay based soils.

Developed Conditions:

The developed conditions converts the existing driveway into a private gravel road 18' wide. The front 4 lots will be approximately 60,000 sq. ft. The last lot will be 7.8 acres. The rear of the parcel will be left undeveloped open space of 10.2 acres.

Drainage:

The existing drainage flows generally from east to west. The drainage basin is approximately 64 acres. The area above the site is partially open space with the power lines and a residential subdivision in the Yarmouth section.

Methodology:

This stormwater analysis was performed using HydroCad Software based on TR-55 modeling conditions. This model requires assumptions as to the land cover, slopes and soils. These are enhanced by the topography mapping, soils mapping, and on-site observations. The flows were determined using a Type III coastal storm and rainfall totals for the 24 hour period for a 1 year storm, 2.6", for a 2 year storm, 3.1", for a 10 year storm, 4.6", and for a 25 year storm, 5.8". These data are published in the manual for Stormwater Management for Maine: Best Management Practices, published by the Maine Department of Environmental Protection.

Model:

The hydrocad model was developed using 4 points of analysis corresponding to the swales and streams that cross the site. The peak flows leaving the site are equal to or less than the existing conditions flow. The two steam crossings create a small delay in the peak flows.

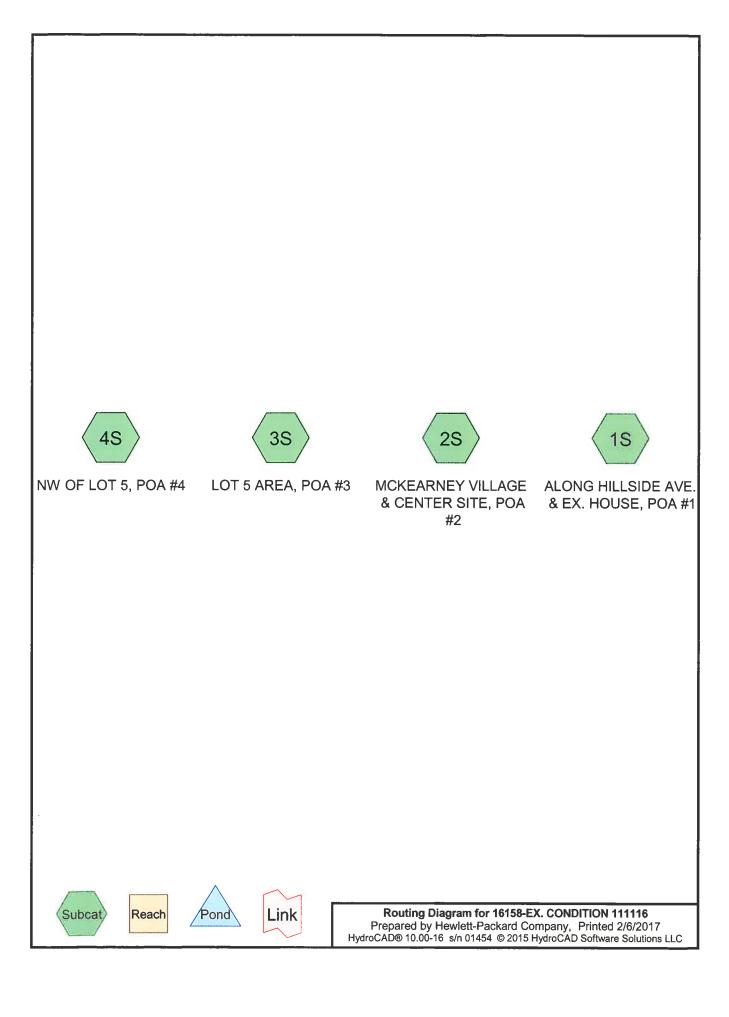
	TABLE 1 PEAK FLOWS (CFS)											
		Exi	sting			Deve	loped					
POA	2 yr	10 yr	25 yr	100 yr	2 yr	10 yr	25 yr	100 yr				
1	2.07	4.54	6.66	11.02	1.82	3.84	5.54	8.98				
2	19.55	42.23	61.57	101.33	19.22	38.97	50.85	89.22				
3	0.60	1.69	2.70	4.89	0.60	1.69	2.70	4.89				
4	2.84	7.47	11.71	20.87	2.84	7.47	11.71	20.87				

Conclusions:

This project makes a very light impact on the 24 acre site, with 3 additional homes. There will be a net reduction in peak flows leaving the site. There should be no unreasonable impact on downstream properties as a result of stormwater flows from this site.

Thomas S. Greer, P.E.

Page 2 of 2



16158-EX. CONDITION 111116

Prepared by Hewlett-Packard Company
HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Printed 2/6/2017

Page 2

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: ALONG HILLSIDE AVE. Runoff Area=165,284 sf 1.39% Impervious Runoff Depth>0.90" Flow Length=878' Tc=39.5 min CN=74 Runoff=2.07 cfs 0.283 af

Subcatchment 2S: MCKEARNEY

Runoff Area=2,058,116 sf 3.54% Impervious Runoff Depth>0.93"
Flow Length=2,764' Tc=70.4 min CN=75 Runoff=19.55 cfs 3.676 af

Subcatchment 3S: LOT 5 AREA, POA #3 Runoff Area=87,131 sf 0.00% Impervious Runoff Depth>0.54" Flow Length=652' Tc=37.1 min CN=66 Runoff=0.60 cfs 0.089 af

Subcatchment 4S: NW OF LOT 5, POA #4 Runoff Area=600,729 sf 0.00% Impervious Runoff Depth>0.60" Flow Length=2,031' Tc=92.1 min CN=68 Runoff=2.84 cfs 0.686 af

Total Runoff Area = 66.833 ac Runoff Volume = 4.734 af Average Runoff Depth = 0.85" 97.42% Pervious = 65.109 ac 2.58% Impervious = 1.724 ac Prepared by Hewlett-Packard Company

Printed 2/6/2017

Page 3

HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: ALONG HILLSIDE AVE. Runoff Area=165,284 sf 1.39% Impervious Runoff Depth>1.91" Flow Length=878' Tc=39.5 min CN=74 Runoff=4.54 cfs 0.603 af

Subcatchment 2S: MCKEARNEY

Runoff Area=2,058,116 sf 3.54% Impervious Runoff Depth>1.96"
Flow Length=2,764' Tc=70.4 min CN=75 Runoff=42.23 cfs 7.707 af

Subcatchment 3S: LOT 5 AREA, POA #3 Runoff Area=87,131 sf 0.00% Impervious Runoff Depth>1.34" Flow Length=652' Tc=37.1 min CN=66 Runoff=1.69 cfs 0.224 af

Subcatchment 4S: NW OF LOT 5, POA #4 Runoff Area=600,729 sf 0.00% Impervious Runoff Depth>1.44" Flow Length=2,031' Tc=92.1 min CN=68 Runoff=7.47 cfs 1.651 af

Total Runoff Area = 66.833 ac Runoff Volume = 10.184 af Average Runoff Depth = 1.83" 97.42% Pervious = 65.109 ac 2.58% Impervious = 1.724 ac

16158-EX. CONDITION 111116

Prepared by Hewlett-Packard Company

HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Printed 2/6/2017 Page 4

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: ALONG HILLSIDE AVE. Runoff Area=165,284 sf 1.39% Impervious Runoff Depth>2.79" Flow Length=878' Tc=39.5 min CN=74 Runoff=6.66 cfs 0.882 af

Subcatchment 2S: MCKEARNEY

Runoff Area=2,058,116 sf 3.54% Impervious Runoff Depth>2.85"

Flow Length=2,764' Tc=70.4 min CN=75 Runoff=61.57 cfs 11.207 af

Subcatchment 3S: LOT 5 AREA, POA #3 Runoff Area=87,131 sf 0.00% Impervious Runoff Depth>2.10" Flow Length=652' Tc=37.1 min CN=66 Runoff=2.70 cfs 0.349 af

Subcatchment 4S: NW OF LOT 5, POA #4 Runoff Area=600,729 sf 0.00% Impervious Runoff Depth>2.21" Flow Length=2,031' Tc=92.1 min CN=68 Runoff=11.71 cfs 2.537 af

Total Runoff Area = 66.833 ac Runoff Volume = 14.976 af Average Runoff Depth = 2.69" 97.42% Pervious = 65.109 ac 2.58% Impervious = 1.724 ac

16158-EX. CONDITION 111116

Type III 24-hr 100-YEAR Rainfall=8.10"

Prepared by Hewlett-Packard Company
HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Printed 2/6/2017

Page 5

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: ALONG HILLSIDE AVE. Runoff Area=165,284 sf 1.39% Impervious Runoff Depth>4.65" Flow Length=878' Tc=39.5 min CN=74 Runoff=11.02 cfs 1.469 af

Subcatchment 2S: MCKEARNEY

Runoff Area=2,058,116 sf 3.54% Impervious Runoff Depth>4.71"

Flow Length=2,764' Tc=70.4 min CN=75 Runoff=101.33 cfs 18.545 af

Subcatchment 3S: LOT 5 AREA, POA #3 Runoff Area=87,131 sf 0.00% Impervious Runoff Depth>3.76" Flow Length=652' Tc=37.1 min CN=66 Runoff=4.89 cfs 0.626 af

Subcatchment 4S: NW OF LOT 5, POA #4 Runoff Area=600,729 sf 0.00% Impervious Runoff Depth>3.89" Flow Length=2,031' Tc=92.1 min CN=68 Runoff=20.87 cfs 4.473 af

Total Runoff Area = 66.833 ac Runoff Volume = 25.113 af Average Runoff Depth = 4.51" 97.42% Pervious = 65.109 ac 2.58% Impervious = 1.724 ac

HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Page 1

Summary for Subcatchment 1S: ALONG HILLSIDE AVE. & EX. HOUSE, POA #1

Runoff

6.66 cfs @ 12.55 hrs, Volume=

0.882 af, Depth> 2.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type III 24-hr 25-YEAR Rainfall=5.82"

	Ar	ea (sf)	CN I	Description		
	1	27,632	70	Woods, Go	od, HSG C	
		5,743	77	Woods, Go	od, HSG D	
	•	15,040	73 I	Brush, Goo	d, HSG D	
	;	38,556	65 I	Brush, Goo	d, HSG C	
	4	47,688	74	>75% Gras	s cover, Go	ood, HSG C
		16,290	80 :	>75% Gras	s cover, Go	ood, HSG D
		2,303		Roofs, HSG		
*		12,032	96 (Gravel surfa	ace,	
	165,284 74 Weighted Average 162,981 98.61% Pervious Area					
	2,303 1.39% Impervious Area				ervious Are	a
	_					
,	Tc	Length	Slope			Description
	nin)	(feet)	(ft/ft)		(cfs)	
28	8.6	100	0.0400	0.06		Sheet Flow,
						Woods: Dense underbrush n= 0.800 P2= 3.14"
;	3.6	248	0.0520	1.14		Shallow Concentrated Flow,
						Woodland Kv= 5.0 fps
	7.3	530	0.0300	1.21		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
39	9.5	878	Total			

Summary for Subcatchment 2S: MCKEARNEY VILLAGE & CENTER SITE, POA #2

Runoff

61.57 cfs @ 12.94 hrs, Volume=

11.207 af, Depth> 2.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type III 24-hr 25-YEAR Rainfall=5.82"

	Area (sf)	CN	Description
-	783,682	77	Woods, Good, HSG D
	274,538	70	Woods, Good, HSG C
*	249,967	74	Woods, Good, HSG C/D
	455,273	73	Brush, Good, HSG D
	212,756	74	>75% Grass cover, Good, HSG C
	18,878	98	Roofs, HSG C
	9,099	96	Gravel surface, HSG C
	53,923	98	Paved parking, HSG C
	2,058,116	75	Weighted Average
	1,985,315		96.46% Pervious Area
	72,801		3.54% Impervious Area

16158-EX. CONDITION 111116

Prepared by Hewlett-Packard Company

Printed 2/6/2017

HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Page 2

	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
	44.0	130	0.0230	0.05		Sheet Flow,
						Woods: Dense underbrush n= 0.800 P2= 3.14"
	22.9	688	0.0100	0.50		Shallow Concentrated Flow,
	1.1	E10	0.0150	8.16	250.12	Woodland Kv= 5.0 fps Trap/Vee/Rect Channel Flow,
	1.1	519	0.0150	0.10	359.12	Bot.W=7.00' D=4.00' Z= 1.0 '/' Top.W=15.00'
						n= 0.040 Mountain streams
	0.4	294	0.0410	13.49	593.73	
						Bot.W=7.00' D=4.00' Z= 1.0 '/' Top.W=15.00'
						n= 0.040 Mountain streams
	1.4	759	0.0180	8.94	393.40	Trap/Vee/Rect Channel Flow,
						Bot.W=7.00' D=4.00' Z= 1.0 '/' Top.W=15.00'
	0.5	264	0.0150	8.16	250.42	n= 0.040 Mountain streams
	0.5	264	0.0150	0.10	359.12	Trap/Vee/Rect Channel Flow, Bot.W=7.00' D=4.00' Z= 1.0 '/' Top.W=15.00'
						n= 0.040 Mountain streams
	0.1	110	0.0550	15.63	687.67	Trap/Vee/Rect Channel Flow,
						Bot.W=7.00' D=4.00' Z= 1.0 '/' Top.W=15.00'
_						n= 0.040 Mountain streams
	70.4	2,764	Total			

Summary for Subcatchment 3S: LOT 5 AREA, POA #3

Runoff = 2.70 cfs @ 12.54 hrs, Volume=

0.349 af, Depth> 2.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type III 24-hr 25-YEAR Rainfall=5.82"

	A	rea (sf)	CN	Description		2000.
_		79,236	65	Brush, Goo	d, HSG C	
		1,266	96	Gravel surfa	ace, HSG C	
		6,629	70	Woods, Go	od, HSG C	
		87,131	66	Weighted A	verage	
		87,131		100.00% Pe	ervious Are	a
	Tc	Length	Slope	e Velocity	Capacity	Description
_	(min)	(feet)	(ft/ft	(ft/sec)	(cfs)	
	30.0	130	0.0150	0.07		Sheet Flow,
						Woods: Light underbrush n= 0.400 P2= 3.14"
	5.9	415	0.0280	1.17		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	1.2	107	0.0900	1.50		Shallow Concentrated Flow,
						Woodland Kv= 5.0 fps
_	37.1	652	Total			

16158-EX. CONDITION 111116

Prepared by Hewlett-Packard Company
HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Printed 2/6/2017

Page 3

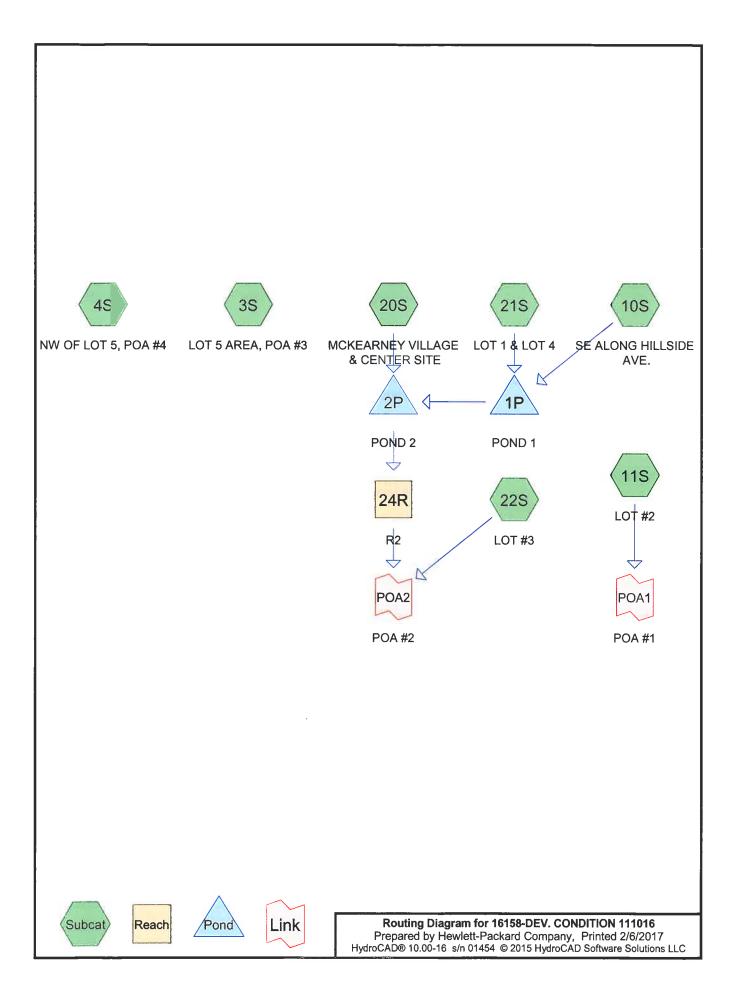
Summary for Subcatchment 4S: NW OF LOT 5, POA #4

Runoff = 11.71 cfs @ 13.25 hrs, Volume=

2.537 af, Depth> 2.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type III 24-hr 25-YEAR Rainfall=5.82"

	Α	rea (sf)	CN [Descri ption		
		64,570	73 E	Brush, Goo	d, HSG D	
		94,451	77 V	Voods, Go	od, HSG D	
	2	49,002	70 V	Voods, Go	od, HSG C	
	1	01,853	55 V	Voods, Go	od, HSG B	
		77,820		Brush, Goo	,	
		11,812			,	ood, HSG D
		1,221	96 (Gravel surf	ace, HSG D)
	6	00,729	68 V	Veighted A	verage	
	6	00,729	1	00.00% P	ervious Are	a
	Тс	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Description
	56.1	110	0.0090	0.03		Sheet Flow,
						Woods: Dense underbrush n= 0.800 P2= 3.14"
	32.1	1,397	0.0210	0.72		Shallow Concentrated Flow,
						Woodland Kv= 5.0 fps
	3.9	524	0.0340	2.26	22.63	Trap/Vee/Rect Channel Flow,
						Bot.W=7.00' D=1.00' Z= 3.0 '/' Top.W=13.00'
						n= 0.100 Heavy timber, flow below branches
	92.1	2,031	Total			



Printed 2/6/2017

Page 2

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 3S: LOT 5 AREA, POA #3 Runoff Area=87,131 sf 0.00% Impervious Runoff Depth>0.54"

Flow Length=652' Tc=37.1 min CN=66 Runoff=0.60 cfs 0.089 af

Subcatchment 4S: NW OF LOT 5, POA #4 Runoff Area=600,729 sf 0.00% Impervious Runoff Depth>0.60"

Flow Length=2,031' Tc=92.1 min CN=68 Runoff=2.84 cfs 0.686 af

Subcatchment 10S: SE ALONG HILLSIDE Runoff Area=67,013 sf 5.93% Impervious Runoff Depth>1.12"

Flow Length=638' Tc=36.2 min CN=78 Runoff=1.12 cfs 0.143 af

Subcatchment 11S: LOT #2 Runoff Area=98,914 sf 2.38% Impervious Runoff Depth>1.01"

Flow Length=322' Tc=22.1 min CN=76 Runoff=1.82 cfs 0.191 af

Subcatchment 20S: MCKEARNEY Runoff Area=1,557,537 sf 4.49% Impervious Runoff Depth>0.93"

Flow Length=2,478' Tc=70.4 min CN=75 Runoff=14.79 cfs 2.782 af

Subcatchment 21S: LOT 1 & LOT 4 Runoff Area=426,493 sf 1.87% Impervious Runoff Depth>0.93"

Flow Length=1,073' Tc=79.1 min CN=75 Runoff=3.78 cfs 0.758 af

Subcatchment 22S: LOT #3 Runoff Area=73,454 sf 2.73% Impervious Runoff Depth>1.01"

Flow Length=177' Tc=15.1 min CN=76 Runoff=1.58 cfs 0.142 af

Reach 24R: R2 Avg. Flow Depth=0.59' Max Vel=2.76 fps Inflow=18.98 cfs 3.679 af

n=0.070 L=237.0' S=0.0422'/ Capacity=390.24 cfs Outflow=18.95 cfs 3.669 af

Pond 1P: POND 1 Peak Elev=98.13' Storage=656 cf Inflow=4.26 cfs 0.901 af

Outflow=4.24 cfs 0.900 af

Pond 2P: POND 2 Peak Elev=89.61' Storage=1,088 cf Inflow=18.99 cfs 3.682 af

Outflow=18.98 cfs 3.679 af

Link POA1: POA #1 Inflow=1.82 cfs 0.191 af

Primary=1.82 cfs 0.191 af

Link POA2: POA #2 Inflow=19.22 cfs 3.811 af

Primary=19.22 cfs 3.811 af

Total Runoff Area = 66.834 ac Runoff Volume = 4.792 af Average Runoff Depth = 0.86" 97,04% Pervious = 64.853 ac 2.96% Impervious = 1.980 ac HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Page 3

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 3S: LOT 5 AREA, POA #3 Runoff Area=87,131 sf 0.00% Impervious Runoff Depth>1.34" Flow Length=652' Tc=37.1 min CN=66 Runoff=1.69 cfs 0.224 af

Subcatchment 4S: NW OF LOT 5, POA #4 Runoff Area=600,729 sf 0.00% Impervious Runoff Depth>1.44"
Flow Length=2,031' Tc=92.1 min CN=68 Runoff=7.47 cfs 1.651 af

Subcatchment 10S: SE ALONG HILLSIDE Runoff Area=67,013 sf 5.93% Impervious Runoff Depth>2.22" Flow Length=638' Tc=36.2 min CN=78 Runoff=2.25 cfs 0.285 af

Subcatchment 11S: LOT #2 Runoff Area=98,914 sf 2.38% Impervious Runoff Depth>2.07" Flow Length=322' Tc=22.1 min CN=76 Runoff=3.84 cfs 0.393 af

Subcatchment 20S: MCKEARNEY

Runoff Area=1,557,537 sf 4.49% Impervious Runoff Depth>1.96"

Flow Length=2,478' Tc=70.4 min CN=75 Runoff=31.96 cfs 5.832 af

Subcatchment 21S: LOT 1 & LOT 4

Runoff Area=426,493 sf 1.87% Impervious Runoff Depth>1.95"

Flow Length=1,073' Tc=79.1 min CN=75 Runoff=8.17 cfs 1.591 af

Subcatchment 22S: LOT #3

Runoff Area=73,454 sf 2.73% Impervious Runoff Depth>2.08"

Flow Length=177' Tc=15.1 min CN=76 Runoff=3.33 cfs 0.292 af

Reach 24R: R2 Avg. Flow Depth=0.88' Max Vel=3.48 fps Inflow=38.54 cfs 7.702 af

n=0.070 L=237.0' S=0.0422'/' Capacity=390.24 cfs Outflow=38.51 cfs 7.688 af

Pond 1P: POND 1 Peak Elev=99.63' Storage=4,123 cf Inflow=9.13 cfs 1.876 af

Outflow=8.36 cfs 1.874 af

Pond 2P: POND 2 Peak Elev=91.61' Storage=6,737 cf Inflow=39.81 cfs 7.706 af

Outflow=38.54 cfs 7.702 af

Link POA1: POA #1 Inflow=3.84 cfs 0.393 af

Primary=3.84 cfs 0.393 af

Link POA2: POA #2 Inflow=38.97 cfs 7.980 af

Primary=38.97 cfs 7.980 af

Total Runoff Area = 66.834 ac Runoff Volume = 10.268 af Average Runoff Depth = 1.84" 97.04% Pervious = 64.853 ac 2.96% Impervious = 1.980 ac

16158-DEV. CONDITION 111016

Prepared by Hewlett-Packard Company
HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Printed 2/6/2017

Page 4

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 3S: LOT 5 AREA, POA #3 Runoff Area=87,131 sf 0.00% Impervious Runoff Depth>2.10" Flow Length=652' Tc=37.1 min CN=66 Runoff=2.70 cfs 0.349 af

Subcatchment 4S: NW OF LOT 5, POA #4 Runoff Area=600,729 sf 0.00% Impervious Runoff Depth>2.21" Flow Length=2,031' Tc=92.1 min CN=68 Runoff=11.71 cfs 2.537 af

Subcatchment 10S: SE ALONG HILLSIDE Runoff Area=67,013 sf 5.93% Impervious Runoff Depth>3.17" Flow Length=638' Tc=36.2 min CN=78 Runoff=3.19 cfs 0.406 af

Subcatchment 11S: LOT #2 Runoff Area=98,914 sf 2.38% Impervious Runoff Depth>2.99" Flow Length=322' Tc=22.1 min CN=76 Runoff=5.54 cfs 0.566 af

Subcatchment 20S: MCKEARNEY

Runoff Area=1,557,537 sf 4.49% Impervious Runoff Depth>2.85"

Flow Length=2,478' Tc=70.4 min CN=75 Runoff=46.59 cfs 8.481 af

Subcatchment 21S: LOT 1 & LOT 4

Runoff Area=426,493 sf 1.87% Impervious Runoff Depth>2.84"

Flow Length=1,073' Tc=79.1 min CN=75 Runoff=11.90 cfs 2.314 af

Subcatchment 22S: LOT #3 Runoff Area=73,454 sf 2.73% Impervious Runoff Depth>3.00" Flow Length=177' Tc=15.1 min CN=76 Runoff=4.79 cfs 0.421 af

Reach 24R: R2 Avg. Flow Depth=1.02' Max Vel=3.78 fps Inflow=50.30 cfs 11.194 af n=0.070 L=237.0' S=0.0422 '/' Capacity=390.24 cfs Outflow=50.28 cfs 11.176 af

11-0.070 E-207.0 0-0.0422 7 Outputity 000.24 010 Outflow 00.20 010 11.170 ut

Pond 1P: POND 1 Peak Elev=100.90' Storage=10,992 cf Inflow=13.27 cfs 2.720 af
Outflow=10.69 cfs 2.717 af

Pond 2P: POND 2 Peak Elev=93.48' Storage=22,487 cf Inflow=56.42 cfs 11.198 af
Outflow=50.30 cfs 11.194 af

Link POA1: POA #1Inflow=5.54 cfs 0.566 af
Primary=5.54 cfs 0.566 af

Link POA2: POA #2 Inflow=50.85 cfs 11.598 af Primary=50.85 cfs 11.598 af

Total Runoff Area = 66.834 ac Runoff Volume = 15.076 af Average Runoff Depth = 2.71" 97.04% Pervious = 64.853 ac 2.96% Impervious = 1.980 ac

Page 5

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 3S: LOT 5 AREA, POA #3 Runoff Area=87,131 sf 0.00% Impervious Runoff Depth>3.76" Flow Length=652' Tc=37.1 min CN=66 Runoff=4.89 cfs 0.626 af

Subcatchment 4S: NW OF LOT 5, POA #4 Runoff Area=600,729 sf 0.00% Impervious Runoff Depth>3.89"

Flow Length=2,031' Tc=92.1 min CN=68 Runoff=20.87 cfs 4.473 af

Subcatchment 10S: SE ALONG HILLSIDE Runoff Area=67,013 sf 5.93% Impervious Runoff Depth>5.11" Flow Length=638' Tc=36.2 min CN=78 Runoff=5.08 cfs 0.655 af

Subcatchment 11S: LOT #2 Runoff Area=98,914 sf 2.38% Impervious Runoff Depth>4.90"

Flow Length=322' Tc=22.1 min CN=76 Runoff=8.98 cfs 0.928 af

Subcatchment 20S: MCKEARNEY Runoff Area=1,557,537 sf 4.49% Impervious Runoff Depth>4.71"

Flow Length=2,478' Tc=70.4 min CN=75 Runoff=76.68 cfs 14.034 af

Subcatchment 21S: LOT 1 & LOT 4 Runoff Area=426,493 sf 1.87% Impervious Runoff Depth>4.69"

Flow Length=1,073' Tc=79.1 min CN=75 Runoff=19.52 cfs 3.831 af

Subcatchment 22S: LOT #3 Runoff Area=73,454 sf 2.73% Impervious Runoff Depth>4.91"

Flow Length=177' Tc=15.1 min CN=76 Runoff=7.77 cfs 0.690 af

Reach 24R: R2 Avg. Flow Depth=1.39' Max Vel=4.50 fps Inflow=88.45 cfs 18.509 af

n=0.070 L=237.0' S=0.0422'/' Capacity=390.24 cfs Outflow=88.31 cfs 18.487 af

Pond 1P: POND 1 Peak Elev=101.96' Storage=21,881 cf Inflow=21.75 cfs 4.486 af

Outflow=20.39 cfs 4.481 af

Pond 2P: POND 2 Peak Elev=95.53' Storage=57,120 cf Inflow=93.47 cfs 18.516 af

Outflow=88.45 cfs 18.509 af

Link POA1: POA #1 Inflow=8.98 cfs 0.928 af

Primary=8.98 cfs 0.928 af

Link POA2: POA #2 Inflow=89.22 cfs 19.177 af

Primary=89.22 cfs 19.177 af

Total Runoff Area = 66.834 ac Runoff Volume = 25.236 af Average Runoff Depth = 4.53" 97.04% Pervious = 64.853 ac 2.96% Impervious = 1.980 ac

Prepared by Hewlett-Packard Company

Printed 2/6/2017 Page 1

HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Summary for Subcatchment 3S: LOT 5 AREA, POA #3

Runoff = 2.70 cfs @ 12.54 hrs, Volume=

0.349 af, Depth> 2.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type III 24-hr 25-YEAR Rainfall=5.82"

_	Α	rea (sf)	CN I	Descri ption		
	79,236 65 Brush, Good, HSG C				d, HSG C	
		1,266	96 (Gravel surfa	ace, HSG (
6,629 70 Woods, Good, HSG C						
		87,131	66 \	Weighted A	verage	
		87,131	•	100.00% Pe	ervious Are	a
	Tc	Length	Slope		Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	30.0	130	0.0150	0.07		Sheet Flow,
						Woods: Light underbrush n= 0.400 P2= 3.14"
	5.9	415	0.0280	1.17		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	1.2	107	0.0900	1.50		Shallow Concentrated Flow,
_						Woodland Kv= 5.0 fps
	37.1	652	Total			

Summary for Subcatchment 4S: NW OF LOT 5, POA #4

Runoff = 11.71 cfs @ 13.25 hrs, Volume=

2.537 af, Depth> 2.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type III 24-hr 25-YEAR Rainfall=5.82"

Area (sf)	CN	Description
64,570	73	Brush, Good, HSG D
94,451	77	Woods, Good, HSG D
249,002	70	Woods, Good, HSG C
101,853	55	Woods, Good, HSG B
77,820	65	Brush, Good, HSG C
11,812	80	>75% Grass cover, Good, HSG D
1,221	96	Gravel surface, HSG D
600,729	68	Weighted Average
600,729		100.00% Pervious Area

16158-DEV. CONDITION 111016

Prepared by Hewlett-Packard Company

Printed 2/6/2017

HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Page 2

	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
_	56.1	110	0.0090	0.03		Sheet Flow,
						Woods: Dense underbrush n= 0.800 P2= 3.14"
	32.1	1,397	0.0210	0.72		Shallow Concentrated Flow,
						Woodland Kv= 5.0 fps
	3.9	524	0.0340	2.26	22.63	Trap/Vee/Rect Channel Flow,
						Bot.W=7.00' D=1.00' Z= 3.0 '/' Top.W=13.00'
						n= 0.100 Heavy timber, flow below branches
_	92 1	2 031	Total			

2,031 Total

Summary for Subcatchment 10S: SE ALONG HILLSIDE AVE.

3.19 cfs @ 12.50 hrs, Volume= Runoff

0.406 af, Depth> 3.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type III 24-hr 25-YEAR Rainfall=5.82"

	А	rea (sf)	CN E	Descri ption		
_		14,100			od, HSG C	
		3,976			ing, HSG C	
*		34,609			•	ood, HSG C
*		7,045			-	ood, HSG D
		7,043			ace, HSG (·
_						
		67,013		Veighted A	•	
		63,037	-		vious Area	
		3,976	5	1.93% impe	ervious Are	a
	То	Longth	Slope	Volooity	Conneity	Description
	Tc	Length	Slope		Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	28.6	100	0.0400	0.06	•	Sheet Flow,
						Woods: Dense underbrush n= 0.800 P2= 3.14"
	5.7	383	0.0500	1.12		Shallow Concentrated Flow,
						Woodland Kv= 5.0 fps
	0.1	25	0.0100	5.26	6.46	
						15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31'
						n= 0.013 Corrugated PE, smooth interior
	1.8	130	0.0310	1.23		Shallow Concentrated Flow,
	_					Short Grass Pasture Kv= 7.0 fps
	36.2	638	Total			

Summary for Subcatchment 11S: LOT #2

5.54 cfs @ 12.31 hrs, Volume= Runoff

0.566 af, Depth> 2.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type III 24-hr 25-YEAR Rainfall=5.82"

Prepared by Hewlett-Packard Company

Printed 2/6/2017

HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Page 3

	Α	rea (sf)	CN	Description				
		5,743	77	Woods, Go	od, HSG D			
		12,538	70	Woods, Go	od, HSG C			
*		50,975	75	>75% Grass cover, Good, HSG C				
*		21,996	75	· · · · · · · · · · · · · · · · · · ·				
		2,358	98	Roofs, HSG	G C			
		5,304	96	Gravel surfa	ace, HSG (
		98,914	76	Weighted A	verage			
		96,556		97.62% Per				
		2,358		2.38% Impe	ervious Area	a		
				•				
	Tc	Length	Slope	Velocity	Capacity	Description		
	(min)	(feet)	(ft/ft	(ft/sec)	(cfs)	·		
	18.4	100	0.0300	0.09		Sheet Flow,		
						Woods: Light underbrush n= 0.400 P2= 3.14"		
	3.7	222	0.0400	1.00		Shallow Concentrated Flow,		
						Woodland Kv= 5.0 fps		
	22.1	322	Total					

Summary for Subcatchment 20S: MCKEARNEY VILLAGE & CENTER SITE

Runoff = 46.59 cfs @ 12.94 hrs, Volume=

8.481 af, Depth> 2.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type III 24-hr 25-YEAR Rainfall=5.82"

	Area (sf)	CN	Description
	550,006	77	Woods, Good, HSG D
	205,778	70	Woods, Good, HSG C
*	239,400	74	Woods, Good, HSG C/D
	216,390	73	Brush, Good, HSG D
*	213,824	75	>75% Grass cover, Good, HSG C
	16,012	98	Roofs, HSG C
	6,041	96	Gravel surface, HSG C
	53,923	98	Paved parking, HSG C
	29,004	55	Woods, Good, HSG B
*	27,159	75	>75% Grass cover, Good, HSG D
	1,557,537	75	Weighted Average
	1,487,602		95.51% Pervious Area
	69,935		4.49% Impervious Area

16158-DEV. CONDITION 111016

Prepared by Hewlett-Packard Company

Printed 2/6/2017

HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Page 4

	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
	44.0	130	0.0230	0.05		Sheet Flow,
						Woods: Dense underbrush n= 0.800 P2= 3.14"
	22.9	688	0.0100	0.50		Shallow Concentrated Flow,
						Woodland Kv= 5.0 fps
	1.1	519	0.0150	8.16	359.12	
						Bot.W=7.00' D=4.00' Z= 1.0 '/' Top.W=15.00'
						n= 0.040 Mountain streams
	0.4	294	0.0410	13.49	593.73	Trap/Vee/Rect Channel Flow,
						Bot.W=7.00' D=4.00' Z= 1.0 '/' Top.W=15.00'
						n= 0.040 Mountain streams
	1.8	737	0.0100	6.66	293.22	
						Bot.W=7.00' D=4.00' Z= 1.0 '/' Top.W=15.00'
						n= 0.040 Mountain streams
	0.2	110	0.0150	8.16	359.12	Trap/Vee/Rect Channel Flow,
						Bot.W=7.00' D=4.00' Z= 1.0 '/' Top.W=15.00'
_						n= 0.040 Mountain streams
	70.4	2,478	Total			

Summary for Subcatchment 21S: LOT 1 & LOT 4

Runoff = 11.90 cfs @ 13.08 hrs, Volume=

2.314 af, Depth> 2.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type III 24-hr 25-YEAR Rainfall=5.82"

	Area (sf)	CN	Description
	209,417	77	Woods, Good, HSG D
	58,087	70	Woods, Good, HSG C
*	371	74	Woods, Good, HSG C/D
	82,255	73	Brush, Good, HSG D
*	42,096	75	>75% Grass cover, Good, HSG D
*	16,766	75	>75% Grass cover, Good, HSG C
	3,601	98	Roofs, HSG C
	1,730	96	Gravel surface, HSG C
	4,378	98	Paved roads w/curbs & sewers, HSG C
	7,792	65	Brush, Good, HSG C
	426,493	75	Weighted Average
	418,514		98.13% Pervious Area
	7,979		1.87% Impervious Area

HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Page 5

	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
	49.8	100	0.0100	0.03		Sheet Flow,
						Woods: Dense underbrush n= 0.800 P2= 3.14"
	4.6	211	0.0230	0.76		Shallow Concentrated Flow,
						Woodland Kv= 5.0 fps
	2.6	213	0.0380	1.36		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	16.8	339	0.0180	0.34		Shallow Concentrated Flow,
						Forest w/Heavy Litter Kv= 2.5 fps
	5.3	210	0.0090	0.66		Shallow Concentrated Flow,
_						Short Grass Pasture Kv= 7.0 fps
	70.1	1.072	Total			

79.1 1,073 Total

Summary for Subcatchment 22S: LOT #3

Runoff = 4.79 cfs @ 12.21 hrs, Volume=

0.421 af, Depth> 3.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type III 24-hr 25-YEAR Rainfall=5.82"

	Α	rea (sf)	CN [Description		
		8,051	77 \	Voods, Go	od. HSG D	
		15,580		Woods, Go		
*		22,510	75 >	75% Gras	s cover, Go	ood, HSG C
		2,008	98 F	Roofs, HSG	C	
		4,239	96 (Gravel surfa	ace, HSG (
*		21,066	75 >	>75% Gras	s cover, Go	ood, HSG D
		73,454	76	Veighted A	verage	
		71,446	(97.27% Per	vious Area	
		2,008	2	2.73% Impe	ervious Are	a
	Tc	Length	Slope		Capacity	Description
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)_	
	14.4	100	0.0200	0.12		Sheet Flow,
						Grass: Dense n= 0.240 P2= 3.14"
	0.2	41	0.3400	2.92		Shallow Concentrated Flow,
						Woodland Kv= 5.0 fps
	0.5	36	0.0550	1.17		Shallow Concentrated Flow,
_						Woodland Kv= 5.0 fps
	15.1	177	Total			

Summary for Reach 24R: R2

Inflow Area = 47.085 ac, 3.99% Impervious, Inflow Depth > 2.85" for 25-YEAR event 11.194 af

Outflow = 50.28 cfs @ 13.30 hrs, Volume= 11.176 af, Atten= 0%, Lag= 1.8 min

16158-DEV. CONDITION 111016

Prepared by Hewlett-Packard Company

HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Printed 2/6/2017

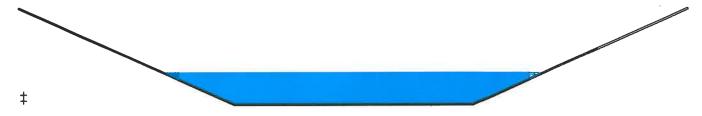
Page 6

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Max. Velocity= 3.78 fps, Min. Travel Time= 1.0 min Avg. Velocity = 1.95 fps, Avg. Travel Time= 2.0 min

Peak Storage= 3,150 cf @ 13.28 hrs
Average Depth at Peak Storage= 1.02'

Bank-Full Depth= 3.00' Flow Area= 57.0 sf, Capacity= 390.24 cfs

10.00' x 3.00' deep channel, n= 0.070 Sluggish weedy reaches w/pools Side Slope Z-value= 3.0 '/' Top Width= 28.00' Length= 237.0' Slope= 0.0422 '/' Inlet Invert= 90.00', Outlet Invert= 80.00'



Summary for Pond 1P: POND 1

Inflow Area = 11.329 ac, 2.42% Impervious, Inflow Depth > 2.88" for 25-YEAR event

Inflow = 13.27 cfs @ 12.99 hrs, Volume= 2.720 af

Outflow = 10.69 cfs @ 13.44 hrs, Volume= 2.717 af, Atten= 19%, Lag= 27.0 min

Primary = 10.69 cfs @ 13.44 hrs, Volume= 2.717 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Peak Elev= 100.90' @ 13.44 hrs Surf.Area= 7,973 sf Storage= 10,992 cf

Plug-Flow detention time= 8.3 min calculated for 2.708 af (100% of inflow) Center-of-Mass det. time= 7.9 min (851.2 - 843.3)

Volume	Inve			Description	
#1	97.0	00' 22,3	50 cf Custom	Stage Data (Pri	smatic) Listed below (Recalc)
Elevatio		Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	
97.0	00	141	0	0	
98.0	00	900	521	521	
100.0	00	4,127	5,027	5,548	
102.0	00	12,675	16,802	22,350	
Device	Routing	Invert	Outlet Devices	S	
#1	Primary	97.00'	15.0" Round		
			Inlet / Outlet In	vert= 97.00' / 9	neadwall, Ke= 0.500 6.60' S= 0.0105 '/' Cc= 0.900 or, Flow Area= 1.23 sf

#2 Primary

Inlet / Outlet Invert= 97.00' / 96.60' S= 0.0105 '/' Cc= 0.900
n= 0.010 PVC, smooth interior, Flow Area= 1.23 sf

101.50' Iong x 5.0' breadth Broad-Crested Rectangular Weir
Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
2.50 3.00 3.50 4.00 4.50 5.00 5.50

Prepared by Hewlett-Packard Company

Printed 2/6/2017

HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Page 7

Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.69 cfs @ 13.44 hrs HW=100.90' (Free Discharge)

-1=Culvert (Inlet Controls 10.69 cfs @ 8.71 fps)

-2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond 2P: POND 2

Inflow Area = 47.085 ac, 3.99% Impervious, Inflow Depth > 2.85" for 25-YEAR event

Inflow 11.198 af

56.42 cfs @ 12.97 hrs, Volume= 50.30 cfs @ 13.27 hrs, Volume= Outflow = 11.194 af, Atten= 11%, Lag= 17.8 min

Primary 50.30 cfs @ 13.27 hrs, Volume= = 11.194 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Peak Elev= 93.48' @ 13.27 hrs Surf.Area= 11,964 sf Storage= 22,487 cf

Plug-Flow detention time= 3.1 min calculated for 11.194 af (100% of inflow)

Center-of-Mass det. time= 3.0 min (847.4 - 844.5)

Volume	Invert	Avail.Storage	Storage D	Description
#1	87.60'	132,284 cf	Custom S	Stage Data (Prismatic) Listed below (Recalc)
Flevation	Surf	Area Inc	: Store	Cum Store

Elevation	Surf.Area	Inc.Store	Cum.Store
(feet)	(sq-ft)	(cubic-feet)	(cubic-feet)
87.60	64	0	0
90.00	1,200	1,517	1,517
92.00	6,281	7,481	8,998
94.00	13,968	20,249	29,247
96.00	25,236	39,204	68,451
98.00	38,597	63,833	132,284

Device	Routing	Invert	Outlet Devices
#1	Primary	87.70'	30.0" Round Culvert
			L= 40.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 87.70' / 87.00' S= 0.0175 '/' Cc= 0.900
			n= 0.010 PVC, smooth interior, Flow Area= 4.91 sf
#2	Primary	94.50'	10.0' long x 5.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50 4.00 4.50 5.00 5.50
			Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65
			2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=50.28 cfs @ 13.27 hrs HW=93.48' (Free Discharge)

1=Culvert (Inlet Controls 50.28 cfs @ 10.24 fps)

2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

16158-DEV. CONDITION 111016

Prepared by Hewlett-Packard Company

Printed 2/6/2017

HydroCAD® 10.00-16 s/n 01454 © 2015 HydroCAD Software Solutions LLC

Page 8

Summary for Link POA1: POA#1

Inflow Area = 2.271 ac, 2.38% Impervious, Inflow Depth > 2.99" for 25-YEAR event

Inflow = 5.54 cfs @ 12.31 hrs, Volume= 0.566 af

Primary = 5.54 cfs @ 12.31 hrs, Volume= 0.566 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link POA2: POA #2

Inflow Area = 48.772 ac, 3.95% Impervious, Inflow Depth > 2.85" for 25-YEAR event

Inflow = 50.85 cfs @ 13.29 hrs, Volume= 11.598 af

Primary = 50.85 cfs @ 13.29 hrs, Volume= 11.598 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Solar Way Subdivision CUMBERLAND, MAINE

November 28, 2016 Revised February 6, 2017

INSPECTION AND MAINTENANCE OF STORMWATER MANAGEMENT FACILITIES

Cumberland Foreside Village Owner of Lot 9 will be responsible for the inspection and maintenance of all stormwater management facilities, the establishment of any contract services required to implement the program, and the keeping of records and maintenance log book as described herein. At a minimum, the appropriate and relevant activities for each of the stormwater management facilities should be performed on the prescribed schedule. Periodic inspection and maintenance of these site features and devices is necessary to prevent erosion and remove pollutants from stormwater runoff.

Inspections and Reports:

This project is located in the MS4 section of Town. The Homeowners are required to file an annual report noting the conditions of the site, including erosion issues and drainage related items.

SWALES, DITCHES, CURBS AND PAVED AREAS:

Swales, ditches, curbs and paved areas are easily inspected during a site walk or even a ride-by. Since visual inspection is easy, their condition should be assessed during and/or after significant rainfall events such as thunder showers and periods of heavy or extended rainfall and during periods of significant snowmelt. Any damage or unusual condition such as sedimentation of a ditch, erosion, damaged curb or dying vegetation should be recorded, dated and initialed by the inspector when observed. Even if there is no damage, the inspector should make record of these inspections at least twice annually.

Paved areas should be visually inspected monthly during the winter. The inspector should pay particular attention to the build up of sand around catch basin grates and remove accumulations that block the free flow of surface runoff to the catch basins. The date and initials of the inspector should be recorded on the forms provided as well as a notation of any cleanup effort that was made and the approximate volume of sand that was removed.

SOLAR WAY SUBDIVISION CUMBERLAND, MAINE

INSPECTION / MAINTENANCE LOG

SWALES, DITCHES, CURBS AND PAVED AREAS

I: INSPECTED - C: CLEANED - R: REPAIRED **DATE INITIALS ACTION COMMENT** 5/14/15 ABC I, C EXAMPLE: Remove sand deposits and debris as necessary.

STORMWATER MANAGEMENT SYSTEM MAINTENANCE PROGRAM SUMMARY CHECKLIST

			Freq	uency	
			Semi-		Long-
Item	Commentary	Month	Annual	Annual	Term
Open Swale, Ditches & Inlet Structures	Inspect for debris accumulation, erosion and excessive vegetation. Mow monthly, remove debris, repair and revegetate any area of erosion	X Mow		X	
Pavement	Review for damage and buildup of debris and sand.	X	X Sweep		

HOUSEKEEPNG REPORT

SOLAR WAY SUBDIVISION CUMBERLAND, MAINE

November 28, 2016

Housekeeping:

This project is located in a stream watershed. Protection of the groundwater quality is ensured by having good housekeeping practices and maintenance of the stormwater systems. Spill prevention must be incorporated into the plan. The project should follow the following steps:

 Building Owners should be made aware of possible groundwater and surface water contamination based on their actions. The spilling of products such as small engine fuel, cleaning products and paints need to be cleaned up. The use of fertilizers and pesticides should be done cautiously and in accordance with manufacturers recommendations.

The maintenance of the landscaping and parking lots should include the sweeping of the parking lots and removal of the materials that may cause dust.

During construction follow the erosion control measures outlined on the plans.

During construction, develop a waste handling program that identified potential contaminates that could be introduced to the aquifer. Follow hazardous waste rules if any items used are considered a hazardous waste. It is critical to the site that uncontrolled releases be prevented.

Oil absorbent pads should be used while refueling equipment.

This site may require dewatering of trenches. During construction, monitor stormwater runoff from the equipment and ground areas to minimize contamination of groundwater.

SECTION 8: WATER SUPPLY

This project will be serviced by private wells. Attached is a report by Sweet Associates.

155 Gray Road Falmouth, Maine 04105 207.797.2110 fax: 207.878.2364 email: sweet@maine.rr.com www.sweetassociates.com

February 7, 2017

GROUNDWATER AVAILABILITY SOLAR WAY SUBDIVISIOIN HILLSIDE AVENUE, CUMBERLAND

The following is a review of the proposed Solar Way Subdivision to determine if there is sufficient groundwater available for the proposed five wells in the subdivision without draining wells outside the subdivision. Data for this review included a site plan by Pinkham and Greer Engineers, soil logs by Mark Hampton, CSS, the Maine Geological Survey Water Well Database, and other published geology maps.

The site is underlain by a relatively thin soil layer of primarily silty soils overlying metamorphosed sedimentary rocks. All the wells in the area are bedrock wells and the sedimentary rocks are known for average yields of groundwater. A review of the Water Well Database found one well on the subdivision property at 34 Hillside Avenue. That well shows 12 feet of silty soils overlying bedrock. There is 20 feet of casing and the well is 330 feet deep. The yield is 4 gallons per minute. That yield is more than adequate for a 3 bedroom home. A second well was listed at 37 Hillside Avenue across the road from the development. That well was drilled in 1994 and is 475 feet deep. The yield is 15 gallons per minute.

An analysis was made of the development to determine the predicted groundwater available within the development property and then compared with the amount of groundwater withdrawal expected from the 5 homes. The calculation assumes that only a small percentage of the water landing on the site will actually get into the bedrock fractures and be available for withdrawal by wells. The numbers used in the calculation are attached. The amount of water withdrawal is based on the Maine Plumbing Code which assigns a 90 gallon per day per bedroom use. The results of the calculation show that the volume of water available in the ground for withdrawal in a year is 2,831,994 gallons and the predicted withdrawal need from the 5 houses is 492,750 or only 17% of the available groundwater. These numbers do not take into account the water being returned to the ground through the septic systems which makes the need even smaller.

In summary, there is sufficient water for water wells serving the proposed 5 houses without affecting neighboring wells. It should be kept in mind that the calculations do not take into account extraordinary groundwater withdrawals such as filling a farm pond or watering a large acreage of crops.

RICHARD A.
SWEET

100

CERTIFIED

GEOLOGIS

Sincerely,

Richard A. Sweet

Certified Geologist #GE100

Groundwater Budget

Groundwater Input

DATA ENTRY	
42	inches of rain per year
24.83	area of land in acres

RESULT	
3,785,582	cubic feet of rain per year
28,319,937	gallon of rain per year
2,831,994	Annual Bedrock Recharge (10%)

Groundwater Export

DATA ENTRY	
5	Number of Houses
3	Number of Bedrooms
90	gpd per bedroom

RESULT	
1,350	Daily Water Use (gallons)
492,750	Yearly Water Use (gallons)

SECTION 9: WASTEWATER DISPOSAL

This project will be serviced by private septic systems. See Section 12-Soils for test pit information. See attached email from Glenn Angell stating soils are suitable for septic by DHHS.

Subject: RE: Solar Way Cumberland

Date: Wed, 18 Jan 2017 20:09:30 +0000

From: Angell, Glenn B < Glenn. B. Angell@maine.gov>

To:Lawson, Brent Brent <a href="mainto:sp

I'm sending this email as a follow-up to our site visit on this property this morning. Brent and I arrived at Solar Way Lane a little after 9 AM. Snow was falling and covered the ground. Mark gave a brief overview of the history of the property, the construction of the two existing houses (one about 3 years ago and the other about 2 years ago). Bill explained that the town had a letter in the lot file dated in the mid-1970's that the lot was not buildable (presumably for subsurface wastewater disposal systems.) We then proceeded to check test pits on each of the proposed three vacant lots.

The first lot we checked was the one closest to the road. This test pit had soils that were loamy to silt loams at the surface with a layer of very fine sands beneath that. Mottling was in the 14 to 15 inch depth range. I would class this as an 8-d.

The second lot we looked at was the back one. This test pit had finer textured soils. Mottling was at a depth of 10-13 inches. Given the textures in the top 15 inches that we looked at I would classify this as a 9-D although it is possible it is a profile 8 beneath that. We didn't look any deeper.

The third lot (the "middle" one) was the last one we looked at. Mottles were found at about 10-11 inches and textures were silt loams. I would class this the same as the back lot (9-D although it could be an 8-D).

In looking at all three test pits, I do not believe that those areas had much, if any, topsoil mined from them. The profiles had classic A horizons that appeared to be the remnants of a plow layer with well developed B horizons beneath them.

Given that these are all Condition D soils, I can see why site evaluators in the 1970's declared these lots as unbuildable. At that time, in order to locate a subsurface wastewater disposal system on a lot, you needed at least 15 inches of soil before encountering mottling. Thus, all three of these proposed lots would not have passed. However, today's Subsurface Rules allow subsurface wastewater disposal systems located OUTSIDE the shoreland zone to be located on lots with mottling as close as 9 inches beneath the surface of the ground. All three meet or exceed that and are thus developable for a subsurface wastewater disposal system.

I trust both of you made it back to your offices safely.

Glenn B. Angell, LSE #137
State Site Evaluator
Division of Environmental and Community Health
Drinking Water Program/Subsurface Wastewater Unit
Tel: (207) 592-2084

Maine Center for Disease Control and Prevention - Preserve ~Promote ~ Protect

SECTION 10: MAINTENANCE OF COMMON FACILITIES OR PROPERTY

The common property and road will be maintained by the homeowner. The roads are being constructed to Town Standards for a private way. Attached is the Declaration of Protective Covenants, Reservations, Restrictions, and Easements of Solar Way Homeowners Association document for the maintenance of the facilities and the open space.

DECLARATION OF PROTECTIVE COVENANTS, RESERVATIONS, RESTRICTIONS, AND EASEMENTS OF SOLAR WAY HOMEOWNERS ASSOCIATION

WITNESS THIS DECLARATION OF PROECTIVE COVENANTS. RESERVATIONS.

RESTRICTIONS, AND COMMON EASEMENTS, made this day of, 2017, by Live Life Maine, LLC, Patrice Miller & Melissa Richter 1 Solar Way, Cumberland, Maine 04021, hereinafter referred to as the "Declarant."
WHEREAS, Declarant has acquired by deed dated 7/11/14, and recorded in the Cumberland County Registry of Deeds in Book 31632, Page 282, a certain lot or parcel of land situated on Solar Way, in the Town of Cumberland, County of Cumberland, and State of Maine, containing approximately 24.84 acres; and
WHEREAS, Declarant is in the business of developing and selling real estate situated in said Town of Cumberland, which development is known as Solar Way and is more particularly described in a Plan of "Solar Way" made by Pinkham & Greer, dated, 2017, approved by the Town of Cumberland Planning Board on, 2017, and recorded in the Cumberland County Registry of Deeds in Plan Book, Page and

WHEREAS, Declarant desires to provide for the improvement of Solar Way Subdivision in accordance with a harmonious plan for the relative location of residential structure, garages, rights-of-way, easements, roads, common areas, and general land use, all to assure the purchasers of lots in Solar Way Subdivision, their heirs and assigns owning such lots, that the use, benefit, and enjoyment of the individual lots, common amenities, facilities, easements, and roads will not conflict with the harmonious plan; and

WHEREAS, the Declarant desires to create a residential area of Solar Way Subdivision providing for the greatest possible degree of health, safety, environmental beauty, and amenity for the property owners and inhabitants thereof, and to effect the foregoing purposes, desires to subject the property to protective covenants and common easements and to the provisions for a homeowners association for the administration and enforcement of same, the maintenance and improvement of certain common facilities, and the establishment, collection and disbursement of assessments, all as set forth hereinafter, each and all of which are for the benefit of the property and of each lot of the protective covenants and easements hereinafter set forth, maintaining and improving certain rights-of-way and other common facilities, and otherwise carrying out the functions of a homeowners associations and the provisions and objectives of this Declaration.

NOW, THEREFORE, Declarant hereby declares that the property shall be held, occupied, improved, transferred, sold, leased, and conveyed subject to the protective covenants and restrictions, the reservations and exceptions, the common rights and easements, and the provisions of a homeowners association hereinafter set forth, all of which are declared to be in furtherance of a uniform scheme for the development of the property and that said protective covenants, reservations, common easements, and provisions for a homeowners associations are intended to enhance and protect the value and desirability of the property as a whole, to mutually benefit each of the parcels located thereon, to create mutual, equitable servitudes upon each of the parcels in favor of each and all other parcels therein and to create reciprocal rights and privities of contract and estate between all persons acquiring or owning any interest in any portion of the property including Declarant, and Declarant's grantees, successors, administrators, and assigns and shall be deemed to run with the land and be a burden and benefit to and enforceable by all such persons, including

Declarant, and Declarant's grantees, successors, administrators, and assigns, and by the homeowners association.

ARTICLE 1 Definitions

The following words, shall, as used herein, have the following meanings, unless the context plainly requires otherwise:

- a. Road. All roads and ways as shown on the Plan of Solar Way Subdivision.
- b. <u>Association.</u> The homeowners association named Solar Way Homeowners Association, which Declarant has organized as a nonprofit corporation for the purpose of administering and enforcing the protective covenants and easements hereinafter set forth, maintaining and improving certain rights-of-way and other common facilities, and otherwise carrying out the functions of a homeowners association and the provisions and objectives of this Declaration.
- c. <u>Declarant.</u> Live Life Maine, LLC, as aforesaid, and any successor to all Declarant's right, title, and interest in and to the property.
- d. <u>Owner.</u> The record owner, whether one or more persons or entities, of the fee simple title to any lot or parcel, but not including Declarant.
- e. <u>Lot or Parcel.</u> Any one of the numbered lots within the property as shown upon the Plan, which may hereafter be conveyed by Declarant.

f.	Plan. The Plan labeled "Solar Way Subdivision," dated	, approved by the
	Planning Board of the Town of Cumberland, Maine, on	, 2017, and recorded in the
	Cumberland County Registry of Deeds in Plan Book	, Page

ARTICLE II Supplement Declarations

This Declaration may be amended from time to time by Supplemental Declarations duly executed by Declarant, or by the Solar Way Homeowners Association, pursuant to a vote of the owners in accordance with the Bylaws of the Solar Way Homeowners Association, and recorded in the Cumberland County Registry of Deeds. No such amendment shall render invalid any use of subdivision land within the property existing in accordance with this Declaration at the time of recording such Supplemental Declaration, and any such amendment shall be reasonably consistent with the uniform scheme of development established by this Declaration.

ARTICLE III Reservations and Exceptions

There is hereby excepted and reserved to the Declarant, for so long as it shall own any portion of the numbered parcels, and thereafter to the Association the following:

- a. <u>Road.</u> A right-of-way for all purposes over, across and through the Road, together with the right to install and maintain utility poles and lines and water and sewer lines and drainage areas adjacent to, within or under the traveled portion of said roads.
- b. <u>Common Areas.</u> The right of access to, across, and through the common areas as shown on the Plan.
- c. <u>Utilities.</u> Declarant reserves the right to grant easements for utility purposes to enter onto any lot within fifteen (15) feet of the road lot line for the purpose of constructing, reconstructing, installing, replacing, and maintaining an underground or an above ground utility therein and to extend, connect to, and use in common any previously installed utility by the lot owner providing that promptly after such entry the surface of the ground shall be restored to substantially the same condition as it was in prior to such entry.
- d. <u>Other.</u> The right to exercise throughout the property any rights or powers hereinafter conferred upon the Association by amended Declaration.

ARTICLE IV Protective Covenants and Restrictions

- a. Residential Use. No parcel shall be improved or used except for single family residential purposes, with no more than one principal residence and improvements accessory thereto. All houses shall be erected with a continuous foundation and shall include a heating system for year-round occupancy.
- b. <u>Road Maintenance.</u> The Declarant shall construct the roadways designated on the Plan in accordance with the Plans and specifications approved by the Planning Board for the Town of Cumberland. Thereafter, the Solar Way Homeowners Association shall have the right, duty, and obligation to maintain the roadways.
- c. <u>Design of Dwelling.</u> The design of residential dwelling and other acceptable buildings, including, but not limited to, materials, colors, textures, building shape, rooflines, window treatment, and site orientation shall be of a character harmonious with the natural beauty of the Solar Way environment.
- d. <u>Maintenance.</u> All parcels, including the common areas, shall be maintained in a neat, attractive manner and kept in good repair. Every domestic water supply system and sewage disposal system shall be kept and maintained in compliance with all federal, state, and local requirements and in compliance with the provisions of this Declaration.
- e. <u>Surface Water.</u> No owner of a lot, his agents, or successors in interest shall alter the natural course of surface water on any lot in a way which would alter the natural flow of such water across any other parcel, unless such alteration is approved by the owners of all parcels affected. This provision shall not be construed to prevent the proper improvements or maintenance of drainage easements shown on said Plan.
- f. <u>Compliance with Stormwater Management Report.</u> The Solar Way Homeowners Association shall comply with the maintenance requirements of the Stormwater Management System in accordance with the Stormwater Management Report approved by the Maine Department of Environmental Protection.

- g. <u>Pesticides.</u> The use of toxic pesticides on lawn or exterior yards is strictly prohibited. Only natural, organic substances to be used for fertilizers that are safe for children/animals.
- h. <u>Trash.</u> Trash, garbage, and other waste shall be kept in sanitary containers where they are not visible from the road or any other parcel. Large single sort recycle containers with covers to be used only on road at weekly pick up.
- i. <u>Tree Maintenance.</u> Any cutting of trees shall be done in compliance with the Plan. This section shall not preclude the removal of diseased or naturally damaged trees. No trees shall be permitted that would cast shadows on solar panels.
- j. <u>Lighting.</u> It is the intent of this Declaration to minimize the amount of outdoor lighting. Any exterior lights in excess of what is necessary for safety purposes and prohibited hereby. The Board of Directors shall be vested with the authority to make the determination as to what lighting may be excessive. No spot or floodlights shall be used to light a large area and motion detectors and other automatic devices used to extinguish lights when they are not needed shall be employed where practical. No halide bulbs, high pressure fixtures or other high intensity light sources, or bulbs of a wattage of more than 150 watts shall be used outside at any time except for temporary use during construction or for special and temporary purpose. Outside lights shall be limited to small house lights and small spotlights that illuminate a small area or highlight a small segment of the house. Exterior lighting should in general direct the light downward and not in the direction of other lots or residences. No exterior colored lights are allowed, except for temporary display as in connection with holiday celebrations and the like, and shall not remain in use or installed in any event for more than 30 days for any particular event, or for more than 60 days total in any calendar year.
- k. <u>Unregistered Motor Vehicles.</u> No unregistered motor vehicles may be kept on any property located in the subdivision except of located in area not visible from other lots or R.O.W.
- I. Tractor Trailers. No tractor trailers may be kept on any property located in the subdivision.
- m. Wood. Cut wood shall be stacked neatly behind or on the side of the residence.
- n. <u>Commercial Use.</u> The lots shall be used only for residential purposes, except for limited commercial use by the owner/occupant providing that such use does not create traffic substantially greater than that of normal residential use and that said use be approved by the appropriate Town official or board.
- o. <u>Nuisances.</u> No owner of a lot shall do or permit to be done any act upon the lot which may be, or is, or may become a nuisance as defined by state or local law, ordinances or regulation.
- p. <u>Signs.</u> No sign of any nature or description shall be displayed or placed upon any part of the premises except for a "For Sale" sign referring only to a lot or residence, or a sign erected by Declarant to identify the subdivision or assign not exceeding one square foot erected by a lot owner to identify his or her or their name.

ARTICLE V Solar Way Homeowners Association

The owner of each parcel within the property, or his heirs, successors, or assigns, shall automatically, during the period of his ownership and by virtue of said ownership, be a member of the Association so long as he retains title to any parcel on the Plan.

- a. <u>Purposes.</u> The purposes of the Association shall be the operation and maintenance of the roads in the subdivision, common drives and any other common facilities of limited or general use located within the common areas; the administration and enforcement of the protective covenants and easements set forth in this Declaration; the general protection or the property; and the performance of any functions relating to the use, maintenance, or improvement of the property required by this Declaration or which may be approved by vote of the owners.
- b. <u>Bylaws.</u> The Association shall be organized and operated pursuant to the Bylaws of Solar Way Homeowners Association, which Bylaws shall be recorded in the Cumberland County Registry of Deeds, as amended from time to time by the Association. A copy of the Bylaws is attached hereto as Exhibit A.
- c. <u>Voting.</u> Each owner, by virtue of his ownership of a parcel, shall automatically be entitled to the votes as provided for in the Bylaws of the Homeowners Association.

d. Assessments.

- i. Each owner shall be assessed by the Association, at least annually, a fee covering his share of the net costs of carrying out the functions and purposes of the Association. The fees shall be computed and collected in accordance with the Bylaws of the Association. The collection of the assessments may be made in advance and limited reserves may be maintained in order to ensure that the purposes and obligations of the Association are carried out in a timely manner.
- ii. Such assessments as collected by the Association shall include any municipal taxes as charged against the common areas or the roads. Each owner shall pay a share of such tax proportionate to the number of parcels owned by him.
- iii. Such assessments, together with interest thereon, and cost of collection as provided in said Bylaws shall be charged upon each parcel of the owner against whom each assessment is made. If any assessment is not paid when stated to be due, then such assessment shall become delinquent. If the assessment is not paid within thirty (30) days after the due date, the assessment shall bear interest at the rate of eighteen (18) percent per annum from the due date and any owner or owners, or the Association, may have lien against the lot so assessed which may be enforced in the same manner and with the same force and effect as a mechanics lien filed pursuant to 14 M.R.S.A. er seq. In the event a judgment is obtained, such judgment shall include interest on the assessment as above provided and reasonable attorney's fees to be fixed by the courts, together with the costs of the action.
- iv. Upon the purchase of a lot from the Declarant, a lot owner shall pay the sum of \$ as an initial fee to the Homeowners Association.

IN WITNESS WHEREOF, day of, 2017.	has executed this instrument this
	LIVE LIFE MAINE, LLC.
Witness	Patrice Miller
Witness	Melissa Richter
STATE OF MAINE, Cumberland, ss.	,2017
	ove-named Patrice Miller & Melissa Richter and acknowledged the and deed and the free act and deed of LIVE LIFE MAINE, LLC
	Before me,
	Notary Public/Attorney at Law Printed Name: My Commission Expires

Road Maintenance Requirements. The roads shall be repaired and maintained to safe and passable standards for two wheel drive vehicles. The roads shall be kept in at least the

condition established by the Town of Cumberland pursuant to its approvals of the Solar Way

Subdivision. Such plans being on file with the Town of Cumberland.

e.

SECTION 11: SOLID WASTE

This project will have public trash collection. Demolition and construction debris will go to EcoMaine in Portland.

Construction waste is estimated at 60cy per unit or 180cy.

The stumps and grubbings will be ground up for erosion control.

Domestic waste will be 2.2 lbs per person per day. Total weight will be 5 tons per year.

SECTION 12: SOILS

Attached is the soils evaluation.



SOIL EVALUATION • WETLAND DELINEATIONS • SOIL SURVEYS • WETLAND PERMITTING

4615

October 28, 2016

Mr. Tom Greer Pinkham & Greer Civil Engineers 28 Vannah Avenue Portland, ME 04103

Re: Preliminary soil evaluation, Solar Way Cumberland, ME

Dear Tom,

I completed a preliminary soil evaluation on a proposed 5 lot subdivision located on Solar Way off of Hillside Avenue Cumberland, Maine. The parcel is proposed to be developed into 5 single family house lots. There are two homes already occupying two of the lots. The soil evaluation was conducted in accordance with the Maine Subsurface Wastewater Disposal Rules dated August 2015, as amended. I evaluated two hand excavated soil test pits on each proposed lot. The soils found on the parcel are marine laucustrine soils with a limiting factor at approximately 16 to 18 inches. I was able to find suitable soils and area for a septic system on each proposed lot.

The soils as evaluated meet the minimum requirements of the state rules and as such are suitable for the location of a septic system. The disposal bed for a 3 bedroom home would possibly be a 1200 square feet stone bed, 30 feet wide and 40 feet long. In my opinion, there are suitable soils and area on each proposed lot for a septic system. A subsurface wastewater disposal design can be prepared at some future date.

If you have any questions or require additional information, please contact me.

Sincerely,

Mark J. Hampton L.S.E., C.S.S. Licensed Site Evaluator #263 Certified Soil Scientist #216

	SOIL PROF	ILE / CLAS	SIFICATIO	ON INFORMA	ATION DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES					
Projec	t Name:		Appl	licant Name:	Project Location (manifold 114.)					
	Solar Wa			er Conscience			Cunterla	el		
Explor	ration Symbol # _	on thickness		loring Probe	Explor	ation Symbol #	pz 1	Test Pit 🗆 E	Boring	
-	Organic nonz	Depth of explora	ation or to refus	e elev		_ " Organic hori	zon thickness " Depth of explor	Ground surfac	ce elev	
0	Texture	Consistency	Color	Redox Features	0.	Texture	Consistency	Color	Redox Features	
	fine soury	TILL	Paul			To Body Can	Micha	Dune	Tredox Features	
জ 10	AZSW4					Line sandy		- MA		
ches	Jaw	RIMU	Bun		10	hour	Trible	Dum		
Depth below mineral soil surface (inches)					Depth below mineral soil surface (inches)					
urfac	Sita		TIM	Commun	nrfac 20	514	Five	91004	Company	
soil s	CW	The	J''-1	Divid	oil si	004			pistrict	
eral s	NAM			173/07	<u>sals</u> 30-	Law				
mine	***************************************				mine					
NO 40					<u>8</u> 40-	.,				
th be	***************************************				th be					
Dept 50-	***************************************				d 50-					
	***************************************					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
60 -	Soil Classific	1-3-4		Or Groundwater	60-	Soil Classifi	cation Slop	e Limiting Facto	or —	
Soil Details by	<u> </u>	condition Perce	_ 1 , 0	Restrictive Layer Bedrock	Soil Details by		C 2	16	Restrictive Layer	
S.S	Soil Series/Phase N		☐ Hydric	Hydrologic	S.S	- 11 -	Condition Perce Name:	ent Depth	☐ Bedrock Hydrologic	
S >>			☐ Non-hy	ydric Soil Group	Soil >>			☐ Non-h		
Evolutation Sumbol # TV 2 # T. J. DV . T. D										
Explora				oring Probe	Explor	ation Symbol #	704 B	Test Pit □ F		
Explora	_ " Organic horiz	on thickness	Ground surface	oring Probe	Explor	_ " Organic horiz	zon thickness	Ground surface	Boring □ Probe e elev	
	_ " Organic horiz	on thickness Depth of explora	Ground surface ation or to refus	oring Probe		_ " Organic horiz	zon thickness ' Depth of explor	Ground surfact ation or to refus	Boring Probe e elev.	
Explora 0 -	_ " Organic horiz	on thickness	Ground surface ation or to refus Color	oring Probe	Explora 0 -	_ " Organic horiz	on thickness Depth of explor Consistency	Ground surfactation or to refus	Boring □ Probe e elev	
0 -	_ " Organic horiz	on thickness Depth of explora Consistency	Ground surface ation or to refus	oring Probe	0 -	_ " Organic horiz	zon thickness ' Depth of explor	Ground surfact ation or to refus	Boring Probe e elev.	
0 -	Texture	on thickness Depth of explora Consistency	Ground surface ation or to refus Color	oring Probe	0 -	Texture	zon thickness ' Depth of explor Consistency	Ground surface ation or to refuse Color	Boring Probe e elev.	
(inches)	_ " Organic horiz	on thickness Depth of explora Consistency	Ground surface ation or to refus Color	oring Probe	(inches)	_ " Organic horiz	on thickness Depth of explor Consistency	Ground surfactation or to refus	Boring Probe e elev.	
90 - 10-	Texture	on thickness Depth of explora Consistency	Ground surface ation or to refus Color But But Row	oring Probe e elev all Redox Features	se (inches)	Texture	zon thickness ' Depth of explor Consistency	Ground surface ation or to refuse Color Color MC MM BMM	Boring Probe e elev.	
90 - 10-	Texture	on thickness Depth of explora Consistency	Ground surface ation or to refus Color	oring Probe	se (inches)	Texture	zon thickness ' Depth of explor Consistency	Ground surface ation or to refuse Color	Boring Probe e elev.	
90 - 10-	Texture	on thickness Depth of explora Consistency	Ground surface ation or to refus Color But But Row	oring Probe e elev all Redox Features	se (inches)	Texture	zon thickness ' Depth of explor Consistency	Ground surface ation or to refuse Color Color MC MM BMM	Boring Probe e elev.	
90 - 10-	Texture	on thickness Depth of explora Consistency	Ground surface ation or to refus Color But But Row	oring Probe e elev ial Redox Features	se (inches)	Texture	zon thickness ' Depth of explor Consistency	Ground surface ation or to refuse Color Color MC MM BMM	Boring Probe e elev.	
90 - 10-	Texture	on thickness Depth of explora Consistency	Ground surface ation or to refus Color But But Row	oring Probe e elev ial Redox Features	se (inches)	Texture	zon thickness ' Depth of explor Consistency	Ground surface ation or to refuse Color Color MC MM BMM	Boring Probe e elev.	
90 - 10-	Texture	on thickness Depth of explora Consistency	Ground surface ation or to refus Color But But Row	oring Probe e elev ial Redox Features	se (inches)	Texture	zon thickness ' Depth of explor Consistency	Ground surface ation or to refuse Color Color MC MM BMM	Boring Probe e elev.	
90 - 10-	Texture	on thickness Depth of explora Consistency	Ground surface ation or to refus Color But But Row	oring Probe e elev ial Redox Features	se (inches)	Texture	zon thickness ' Depth of explor Consistency	Ground surface ation or to refuse Color Color MC MM BMM	Boring Probe e elev.	
h below mineral soil surface (inches)	Texture	on thickness Depth of explora Consistency	Ground surface ation or to refus Color But But Row	oring Probe e elev ial Redox Features	th below mineral soil surface (inches)	Texture	zon thickness ' Depth of explor Consistency	Ground surface ation or to refuse Color Color MC MM BMM	Boring Probe e elev.	
Depth below mineral soil surface (inches)	Texture	on thickness Depth of explora Consistency	Ground surface ation or to refus Color Color Fun Fun Stay	Oring Probe e elev ial Redox Features Oning Probe e elev in level Probe	Depth below mineral soil surface (inches)	Texture Texture Texture Total Classification of the control of	con thickness ' Depth of explor Consistency	Ground surface ation or to refuse Color The	Boring Probe e elev sal Redox Features	
Depth below mineral soil surface (inches)	Texture	on thickness Depth of explora Consistency Find ation Slope C S S S S S S S S S S S S S S S S S S	Ground surface ation or to refus Color Col	oring Probe e elev. al Redox Features DISTANCE Groundwater Restrictive Layer	Depth below mineral soil surface (inches)	Texture Texture Texture Total Classification of the control of	con thickness ' Depth of explor Consistency	Ground surface ation or to refuse Color Color Gray Gray Gray Gray Gray Emiling Factor	Boring Probe e elevsal Redox Features	
Depth below mineral soil surface (inches)	Texture Toganic horiz Texture Soli Classific Profile C	on thickness Depth of exploration Consistency Findu	Ground surface ation or to refus Color Col	Oring Probe e elev	Depth below mineral soil surface (inches)	Texture Texture Toganic horizing Texture Tex	con thickness ' Depth of explor Consistency Find Find Consistency Find Find Find Find Find Find Find Find	Ground surface ation or to refuse Color Color Ground Surface Color Col	Boring Probe e elev. sal Redox Features Redox Features	
etails by Depth below mineral soil surface (inches)	Texture Soil Classific Borrofile Coll Soil Series/Phase N	on thickness Depth of exploration Consistency Findu	Ground surface ation or to refus Color Col	oring Probe e elev	Solution below mineral soil surface (inches) 10-0-10-10-10-10-10-10-10-10-10-10-10-10	Texture Texture Toganic horizing the second secon	con thickness ' Depth of explor Consistency Find Find Consistency Find Find Find Find Find Find Find Find	Ground surface ation or to refuse Color Color Gray Gray Gray Gray Gray Limiting Factor	Boring Probe e elev. sal Redox Features Or Groundwater Hydrologic Hydrologic	
Soil Details by Depth below mineral soil surface (inches)	Texture Toganic horiz Texture Soil Classific Profile Soil Series/Phase N	on thickness Depth of exploration of	Ground surface ation or to refus Color Col	oring Probe e elev. al Redox Features Probe Groundwater Restrictive Layer Bedrock Hydrologic Vdric Soil Group	Soil Details by Depth below mineral soil surface (inches)	Texture Texture Toganic horizing the second secon	con thickness ' Depth of explor Consistency Find Find Consistency Find Find Find Find Find Find Find Find	Ground surface ation or to refuse Color Color Gray Gray Gray Gray Gray Hydric Hydric Attorney Hydric Hydric Attorney Hydric Hydric Hydric Attorney Attorney Hydric Hydric Hydric Attorney Hydric Hydric	Boring Probe e elev. sal Redox Features Diffusion Groundwater Restrictive Layer Bedrock Hydrologic	
Depth below mineral soil surface (inches)	Texture Toganic horiz Texture Soil Classific Profile Soil Series/Phase N	on thickness Depth of exploration of	Ground surface ation or to refus Color Col	oring Probe e elev. al Redox Features Groundwater Bedrock Hydrologic	Soil Details by Depth below mineral soil surface (inches) Soil Details by Depth below mineral soil surface (inches)	Soil Classific Profile Collaborate Collabo	con thickness ' Depth of explor Consistency Find Find Consistency Find Find Find Find Find Find Find Find	Ground surface ation or to refuse Color Color Gray Gray Gray Gray Gray Hydric Hydric Attorney Hydric Hydric Attorney Hydric Hydric Hydric Attorney Attorney Hydric Hydric Hydric Attorney Hydric Hydric	Boring Probe e elev. sal Redox Features Or Groundwater Hydrologic Hydrologic	
Soil Details by Depth below mineral soil surface (inches)	Texture Texture Soil Classific Profile Soil Series/Phase N	on thickness Depth of exploration of	Ground surface ation or to refus Color Col	oring Probe e elev. al Redox Features Probe Groundwater Restrictive Layer Bedrock Hydrologic Vdric Soil Group	Soil Details by Depth below mineral soil surface (inches) Soil Details by Depth below mineral soil surface (inches)	Soil Classific Profile Soil Series/Phase	con thickness ' Depth of explor Consistency Find Find Consistency Find Find Find Find Find Find Find Find	Ground surface ation or to refuse Color Color Gray Gray Gray Gray Gray Hydric Hydric Attorney Hydric Hydric Attorney Hydric Hydric Hydric Attorney Attorney Hydric Hydric Hydric Attorney Hydric Hydric	Boring Probe e elev. sal Redox Features Or Groundwater Hydrologic Hydrologic	

Pro		Name:	ILE / CL	ASSIF		N INFORM	ATIC	NC	SUBSI	DET/ URFACE	AILED D	ESCR	RIPTION O	OF JECT SITES
	-	lar Way			Clea	cant Name: V GM Science	. Con	store		Project I	ocation	(muni	cipality):	
Ex	plora	ition Symbol # _	M5	₽ Test	Pit □ Bo	ring Probe	_		ation Symbol #					
-		_ " Organic horiz	on thicknes	s Grou	nd surface	elev.	_		_ " Organic horiz			Groun	d surface	oring Probe
	•	Texture	Depth of ex	,					'	Depth o	f explora	ition or	r to refusa	ıl
	0 _	FINESARY		Da	Color AL	Redox Features		0 _	Texture	Consis	stency	trans	Color	Redox Features
	-	lan	Frible		scour.			-	finc (way	F. 10	.	twing	SAL-	
hes)	10-	time sardy	ride	8	ww.		ies)	10-	fine sady	6.75				
(inc.	-						(inc)		The state of the s	77.4.2	<u>~</u>	Bu	Ph.	
face	20-	Situ	Aw	9,	all	Compros	ace	20-	5114					
sur		Trau		J.		pirw	surf		Ca	FIN		91	2	mun
Soi	30-						soil	30-	1000					DISTINCT
Depth below mineral soil surface (inches)							Depth below mineral soil surface (inches)	0.0 12						
.E	40-						E iii	40-						***************************************
oelo							elov	40						
pth	50-					***************************************	pth	50-				~~~~~~~~~~~		
De		***************************************			***************************************		De	- wc					***************************************	
	₆₀ _	***************************************						00						
l	S.E.	Soil Classific	ation	Slope L	imiting Factor	☐ Groundwater	<u> </u>	60 → S.E.	Soil Classific	cation	Slope	Lim	niting Factor	Groundwater
Soil Details by	>>	Profile C	ondition	Percent	Depth	Restrictive Layer Bedrock	Soil Details by	b b	Profile C	Condition	Percer	_	16 "	Restrictive Layer Bedrock
oil De	S.S.	Soil Series/Phase N	Name:		☐ Hydric	Hydrologic	I Det	S.S.	Soil Series/Phase I		Percer		Depth Hydric	Hydrologic
(v)	bb				☐ Non-hyd	Soil Group	So	ÞÞ					☐ Non-hyd	ric Soil Group
Exp	olora	tion Symbol # _					E	kplora	tion Symbol # _	MB	2	Test P	it □ Bo	ring □ Probe
_		" Organic horizo	on thickness	Groun	nd surface	elev	_		_ " Organic horiz	on thickn	ess (Ground	surface	elev.
	ا ه	Texture	Depth of ex Consisten	1		Redox Features		1		1		tion or	to refusa	
	"	ting way	F icht	10	W(Nedox realures		0 -	Texture	Consis		O JU	olor	Redox Features
		1.0			Bun				A Sandy	7 1094		130	W	
(say:	10	Chel	or chu	R	WW.	***************************************	ches)	10	tine shirty	F1+6	6	5m	4.4	
ace (inches)		7,7,7					ace (inches)					-	V.	
	20	5/4	Fin	9	(OU	Gmun		20-	C116					ZMAM
Sur	ŀ	- CAY				nittet	Depth below mineral soil sur		CAL			712	Y	
os le	30	Win					al so	30	low	**************				Duy
inera	ļ					***************************************	inera			******************				
¥ .	40				****		<u>د</u>	40						
Depth below mineral soil	ļ					***************************************	belc							
epth	50						epth	50	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
۵	[**************************	ă							
	6ø 🕸							60		***************************************				
þ	S.E.	Soil Classifica	ation	Slope Li	imiting Factor	Groundwater	by (S.E.	Soil Classific	ation	Slope	Limi		☐ Groundwater
etails	>>			Percent	Depth "	Restrictive Layer Bedrock	tails	>>	Profile C	Condition	Percen	- -	Depth "	Restrictive Layer Bedrock
Soil Details by	S.S.	Soil Series/Phase N	lame:		☐ Hydric	Hydrologic	Soil Details by	S.S.	Soil Series/Phase N	Name:			☐ Hydric	Hydrologic
<u>s</u>					□ Non-hyd	Soil Group		>>					□ Non-hyd	Soil Group
Sign	natur	e	INVE	STIGATO	OR INFOR	RMATION AND	SIG			341000	5.			
		Mars)	. Hay	x					Date 11 2711	6				
Nan	ne P	rinted	r. Han	ptan				(Cert/Lic/Reg. #	63/214	2			
Title	. 6	Licensed Site	Evaluator	☐ Cert	ified Soil S	cientist Ce	rtified			fessional		er	affix pro	fessional seal



SOIL EVALUATION • WETLAND DELINEATIONS • SOIL SURVEYS • WETLAND PERMITTING

4615

Solar Way Subdivision Hillside Avenue Live Life Maine, LLC Cumberland, ME

Soil Narrative Report

DATE:

Soil Profiles observed on January 11, 2017

BASE MAP:

Base plan provided by Pinkham & Greer Civil Engineers

scale 1 inch equals 100 feet and one foot contours.

GROUND CONTROL:

Soil survey boundaries located by Mark Hampton Associates,

Inc. for Class B Soil Survey

Class B-High Intensity Soil Survey (Minimum Standards)

Mapping units of 1/2 acre or larger.

Scale of 1"= 200 feet or larger.

Up to 25% inclusions in mapping units of which no more than 15% may be dissimilar soils.

Ground Control – test pits located by means of compass, chaining, pacing or taping from know survey control points.

Base Map –5 foot contour intervals

Provided:

Mapping units of 1/2 acre or larger

Base map scale of 1"= 100 feet.

Up to 25 percent inclusions in mapping units of which no more than 15 percent is dissimilar soils.

Baseline information and test pits located by Mark Hampton Associates, Inc. Ground topographic survey with 2 foot contours and ground control provided.

The accompanying soil profile descriptions, soil map, and this soil narrative report were done in accordance with the standards adopted by the Maine Association of Professional Soil Scientists, and the Maine Board of Certification of Geologists and Soil Scientists.

C.S.S. #216, L.S.E. #263 2/2/17
Date





SOIL EVALUATION • WETLAND DELINEATIONS • SOIL SURVEYS • WETLAND PERMITTING

4615

Solar Way Subdivision Hillside Avenue Live Life Maine, LLC Cumberland, ME

Lamoine

(Aeric Haplaquepts)

SETTING

PARENT MATERIAL: Derived from glaciomarine or glaciolaucustrine

sediments

LANDFORM: Coastal lowlands and river valleys POSITION IN LANDSCAPE: Intermediate positions on landform

SLOPE GRADIENT RANGES: (A) 0-3%, (B) 3-8%, (C) 8-15%, (D) 15-25%

COMPOSITION AND SOIL CHARACTERISTICS

DRAINAGE CLASS: Somewhat poorly drained with a perched watertable

from 0.5 to 2.0 feet below the surface at some time from November to June or during periods of heavy

precipitation.

TYPICAL PROFILE: Surface Layer: Dark Brown, fine sandy loam 0-7"

Subsurface Layer: Lt. Olive brown silt loam, 7-14"
Subsoil Layer: Olive silty clay loam, 14-21"
Substratum: Olive, silty clay loam, 21-65"

HYDROLOGIC GROUP: Group D

SURFACE RUNOFF: Moderate to moderately slow

PERMEABILITY: Slow to very slow DEPTH TO BEDROCK: Greater than 65 inches

HAZARD TO FLOODING: None

INCLUSIONS (Within Mapping Unit)

CONTRASTING: Buxton, Scantic

USE AND MANAGEMENT

Development: The limiting factor for building site development is wetness due to the presence of a high watertable for a portion of the year. Proper foundation drainage or site modification is recommended.





SOIL EVALUATION • WETLAND DELINEATIONS • SOIL SURVEYS • WETLAND PERMITTING

4615

Solar Way Subdivision Hillside Avenue Live Life Maine, LLC Cumberland, ME

> Scantic (Aquic Haplorthod)

SETTING

PARENT MATERIAL: Derived from glaciomarine or glaciolaucustrine sediments

LANDFORM: Coastal lowlands and river valleys POSITION IN LANDSCAPE: Lower positions on landform

POSITION IN LANDSCAPE: Lower positions on land SLOPE GRADIENT RANGES: (A) 3-8%, (B) 3-8%

COMPOSITION AND SOIL CHARACTERISTICS

DRAINAGE CLASS: Poorly drained with a perched watertable from 0.0 to 1.0

feet below the surface at some time from October to May

or during periods of heavy precipitation.

TYPICAL PROFILE: Surface Layer: Dark grayish brown, silt loam 0-9"

Substratum: Olive gray silt loam, 9-16"
Gray silty clay loam, 16"+

HYDROLOGIC GROUP: Group D

SURFACE RUNOFF: Moderate to moderately slow

PERMEABILITY: Slow to very slow
DEPTH TO BEDROCK: Greater than 65 inches

HAZARD TO FLOODING: None

INCLUSIONS (Within Mapping Unit)

CONTRASTING: Lamoine, Buxton

USE AND MANAGEMENT

Development: The limiting factor for building site development is wetness due to the presence of a high watertable for a portion of the year. Proper foundation drainage or site modification is recommended.



Cert/Lic/Reg. # 263 | 216

☐ Professional Engineer

affix professional seal

☐ Certified Geologist

Name Printed

Certified Soil Scientist

FORM F Rev. 07/11

SOIL PROFILE / CLASSIFICATION INFORMA							ON	SUBSI	DETAILED (DESCRIPTION	OF
Pr	Project Name: Applicant Name: Live Life Maine Lic SUBSURFACE CONDITIONS AT PROJECT SITES Project Location (municipality): Clubbul mod										
E:	cplora	ition Symbol#_ _ " Organic horiz	55.5 @	Test Pit Bo	oring Probe	E	xplora	tion Symbol #	556 E	Test Pit B	oring Probe
		"	Depth of explora	ntion or to refusa	al	$\parallel \parallel ^{-}$		"	Depth of explora	ation or to refus	al
	0 _	Texture Sult	Consistency	Color	Redox Features		0 –	Texture	Consistency	Color	Redox Features
	_	HAME	- Clark	TOVOC				JI Jan	FIRL	3 WY	
ies)	10-	Sille	Fin	Stay	Compun	les)	` 10-	S) F	prime	Bun	
Depth below mineral soil surface (inches)		Class	MW	J.	Dishiret	Depth below mineral soil surface (inches)	,	CHAY		9124	CMMU
ace	20 –	ATTAL			JI SIM CA	ace	20-	Clay	111034	7,000	17
sun						surf		1000			DISTANT
Soil	30-					Soil	30-				
nera						nera					
E	40-					k m	40-				
befor						belo					
#E	50-					b I	50-				
🋎						a	30				
	60						60				
۾	S.E.	Soil Classific	ation Slope	,	us Groundwater			Soil Classific		Limiting Factor	42 Groundwater
etails	>>	Profile C	ondition Percer		Restrictive Layer Bedrock	Details by	>>	Profile C	ondition Perce	16"	Restrictive Layer Bedrock
Soil Details	S.S.	Soil Series/Phase N		Hydric	Hydrologic	ii De	0.0.	Soil Series/Phase N	lame:	□ Hydric	Hydrologic
(Soil Group	Soil	>>	Lawi	VE 2DD	₽ Non-hy	dric Soil Group
Ex	plora		S57 P			E	xplora	tion Symbol # _	556	Test Pit □ Bo	oring Probe
-		" Organic horiz	on thickness Depth of explora	Ground surface	elev	-		" Organic horize	on thickness	Ground surface	elev
	ا ه	Texture	Consistency	Color	Redox Features		1	1	Depth of explora		. 1
	٦	Sil	mile	DW.(redox realties		0	Texture	Consistency	Color	Redox Features
		57/1	Rivil	Bun			Ì	Candy	71179	Ban	
(inches)	10-		((1,1))	bunc	C Ita	(inches)	10-	July July	Frish	Bear	
(in		77 19	Fim	Wiay	COMPANY	e (inc	-	SzHu		1 py	Comme
rlace	20	han			District	face	20	Clau	TIM	7 1	<u> </u>
il su	[700				i su	-	han			DISTORT
al so	30					al so	30				
iner						iner	-				
JI MO	40					J WC	40				
Depth below mineral soil surface	ŀ					Depth below mineral soil surfac					
epth	50					epth	50				
۵											
	60	Soil Classifica	New Corner	Transferance access			60				
ls by	S.E.	Suil Classing	Slope	Limiting Factor	Groundwater Restrictive Layer	<u>ئ</u>	S.E.	Soil Classifica	Slope	Limiting Factor	Groundwater
Soil Details by		Profile Co Soil Series/Phase N	ondition Percen	t Depth	Bedrock Hydrologic	etails	>>	Profile Co	ondition Percer	it Depth	Resilitative Layer
Soil	S.S.	13000	ags si	☐ Hydric Mon-hyd	., l	Soil Details by	S.S.	Soil Series/Phase N	ame:	D Hydric	Hydrotopic -
_					Soil Group				10310	Non-hyd	Inc Soil Group
Slg	natur	9 11	INVESTIC	ATOR INFOR	RMATION AND	SIGI	VATU	RE		HAS	1 17-9
	ne Pr	Mary	· Hany	1900				Date 2/2/17		#2	15
		Marie	J. Ha	moon			C	Cert/Lic/Reg. #Z	65/216	100 (840)	13/61
Title	.	Licensed Site I	Evaluator 🗷	Certified Soil S	cientist	rtified			essional Engine	er affix or	Essional seal

Projec	SOIL PROFILE / CLASSIFICATION INFORMAT						ATION DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES					
	Mame:	Sch divini	n A	oplicant Name:	e L	45		Project Location	n (municipality):	OJECT SITES		
Explor	ation Symbol # _	559		Boring □ Probe						oring □ Probe		
	_ " Organic horiz	on thickness	Ground surfa	ace elev.			" Organic horiz	on thickness	Ground surface	oning Li Probe		
	"	Depth of explora	ation or to ref	fusal				Depth of explor	ation or to refus	al		
0 -	Texture	Consistency	Color	Redox Features		0 _	Texture	Consistency	Color	Redox Features		
	Sitt	FIANL	Block			•	Sandy	Silvala	Duffen	TCGOX T Caldles		
						-			Bun	,		
Depth below mineral soil surface (inches)	Siller		Say	Compun	res)	10-	Sunda	Fridale	Burn			
inci	Clay	P1W	0.	301141	Depth below mineral soil surface (inches)	-						
8 20-	Max		<u>`</u>	District	8	20-	9/19	Fim	9/124	CMYWW		
urfa					Lrfa	20-	- July		9 1	billand		
<u>=</u>					is is		Warn			prirace		
S 30-					S	30-						
Deci					Jer.							
E 40-					Ë	40						
ŏ.					80	40-						
å Ö					a c		***************************************					
₹ 50 -					ept	50 –						
60-												
	Soil Classific	The second secon		ctor Groundwater		60	Soil Classific	ation Slope	e Limiting Factor	There's a second		
Soil Details by	<u>් ප</u>	2		II Restrictive Layer	s by	S.E.	27	0 2	13 "	E Groundwater		
S.S.	O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ondition Percei		Hydrologic	Soil Details		Profile C	ondition Perce		☐ Bedrock		
	Sca	WHICPD	■ Hyd □ Non	iric	1 8	S.S.	Soil Series/Phase N		☐ Hydric	Hydrologic		
<u> </u>		WFICT B	LI NON	Sail Group	S	>>	Laws	14 570	■ Non-hyd	dric Soil Group		
	_ " Organic horizo	n thickness	Ground surfa	Boring Probe	-^	.pioi a	" Organic horize	5512 D	Test Pit □ Bo	oring Probe		
0 _	Texture	Consistency	Color	Redox Features	-	o		Depth of explora Consistency	Ground surface ation or to refusa	elev Il Redox Features		
0 -	1	1	Color	Redox Features		0	Texture	Depth of explora	Color	al .		
	1	Consistency	Color	Redox Features	l's		Texture	Consistency	Color Day (al .		
	1	Consistency	Color	Redox Features	iches)	0 _	Texture	Consistency Field	Color	Redox Features		
	Texture Sandy Sandy	Consistency	Color	Redox Features	(inches)		Texture Si H Loa SNW	Consistency	Color Day (al .		
ace (inches)	1	Consistency Fig. 134	Color	Redox Features	face (inches)		Texture Sift Loan SIVIWAN CITY CAMP	Consistency Field	Color Day (Redox Features		
ace (inches)	Texture Sandy Sandy Some	Consistency	Color	Redox Features	surface (inches)	10	Texture Si H Loa SNW	Consistency Field	Color Day (Redox Features		
ace (inches)	Texture Sandy Sandy	Consistency Fig. 134	Color	Redox Features	soil surface (inches)	10-	Texture Sift Loan SIVIWAN CITY CAMP	Consistency Field	Color Day (Redox Features		
ace (inches)	Texture Sandy Sandy Some	Consistency Fig. 134	Color	Redox Features	eral soil surface (inches)	10	Texture Sift Loan SIVIWAN CITY CAMP	Consistency Field	Color Day (Redox Features		
ace (inches)	Texture Sandy Sandy Some	Consistency Fig. 134	Color	Redox Features	nineral soil surface (inches)	10-	Texture Sift Loan SIVIWAN CITY CAMP	Consistency Field	Color Day (Redox Features		
ace (inches)	Texture Sandy Sandy Some	Consistency Fig. 134	Color	Redox Features	w mineral soil surface (inches)	10-	Texture Sift Loan SIVIWAN CITY CAMP	Consistency Field	Color Day (Redox Features		
ace (inches)	Texture Sandy Sandy Some	Consistency Fig. 134	Color	Redox Features	below mineral soil surface (inches)	20-	Texture Sift Loan SIVIWAN CITY CAMP	Consistency Field	Color Day (Redox Features		
ace (inches)	Texture Sandy Sandy Some	Consistency Fig. 134	Color	Redox Features	pth below mineral soil surface (inches)	20-	Texture Sift Loan SIVIWAN CITY CAMP	Consistency Field	Color Day (Redox Features		
h below mineral soil surface (inches)	Texture Sandy Sandy Some	Consistency Fig. 134	Color	Redox Features	th below mineral soil surface (inch	20-	Texture Sift Loan SIVIWAN CITY CAMP	Consistency Field	Color Day (Redox Features		
Depth below mineral soil surface (inches) 6	Texture Sandy Sandy Some	Consistency Fig. 134	Color	Redox Features	Depth below mineral soil surface (inches)	20-	Texture Sift Loan SIVIWAN CITY CAMP	Consistency Field	Color Day (Redox Features		
Depth below mineral soil surface (inches) 9	Texture Sandy Sandy Clay Clay Tan	Consistency This is the second of the secon	Bush	Redox Features		20-	Texture SI H Loa SIN war Chay	Depth of explora Consistency Field Field	Color Day (Redox Features		
Depth below mineral soil surface (inches) 9	Texture Sandy Sandy Some	Consistency Finds	Color Butter Brute Limiting Face	Redox Features CINATURE TOTAL STOURN AND THE STOU		10 20 30 40 50 60 S.E.	Texture Texture Texture Texture Soil Classifica	Depth of explora Consistency Fridal Ridd Final Slope	Color Day Gray Gray Gray Gray Gray Gray Umilting Factor	Redox Features		
Depth below mineral soil surface (inches) 9	Texture Switch Switc	Consistency Think Thi	Bour Color C	Redox Features		10 20 30 40 50 60	Texture Si He Low Chry Chry Soil Classifica E D	Depth of explora Consistency Field	Color Day Gray G	Redox Features		
Depth below mineral soil surface (inches) 9	Soil Classificat Profile Coil Soil Series/Phase Na	Consistency Final Fin	Color Both Color Col	Redox Features Cor Groundwater Restrictive Layer Bedrock Hydrologic		20- 30- 40- 50- 60- 8 S.E.	Texture Si He Low Chry Chry Soil Classifica E D	Depth of explora Consistency Figure Right Figure fittion Slope / Z Indition Percen	Color Day Grant Grant	Redox Features		
stails by Depth below mineral soil surface (inches)	Texture Switch Switc	Consistency Final Fin	Color Button Brown Limiting Fac 14 Depth	Redox Features Company of the Compa	etails by	10 20 30 40 50 60 S.E.	Texture Si Hamiltonia College College Soil Classifica E T Profile Co	Depth of explora Consistency Figure 1 Right 1 Figure 2 Ition Slope 1 Ition Percentage:	Color Color Gray Gray	Redox Features White Printed Resident Figure of the state of the s		
Depth below mineral soil surface (inches) 9	Soil Classificat Profile Coil Soil Series/Phase Na	Consistency Final Fin	Color Button Button Color Button Button Color	Redox Features Company of the Compa	Soil Details by	20- 30- 40- 50- 50- S.E.	Soil Classifica Profile Co Soil Series/Phase Ne	Depth of explora Consistency Ridd Ridd Ridd Final Fi	Color Day Gray G	Redox Features White County of the county		
Depth below mineral soil surface (inches) 9	Soil Classification of the Color of the Colo	Consistency Final Fin	Color Button Button Color Button Button Color	Redox Features Company of the Compa	Soil Details by	20- 30- 40- 50- 5S.E.	Texture Si Profile Soil Classifica Profile Co Soil Series/Phase Ne Lumu in	Depth of explora Consistency Figure 1 Right 1 Figure 2 Ition Slope 1 Ition Percentage:	Color Color Gray Gray	Redox Features White Printed Resident Figure of the state of the s		
Soil Details by Depth below mineral soil surface (inches)	Texture Sandy Sandy Sandy Classificat Profile Co Soil Series/Phase Na Lamany La	Consistency Final Fin	Color Button Button Color Button Button Color	Redox Features Company of the Compa	Soil Details by	20- 30- 40- 50- 5S.E.	Soil Classifica Profile Co Soil Series/Phase Ne	Depth of explora Consistency Figure 1 Right 1 Figure 2 Ition Slope 1 Ition Percentage:	Color Color Gray Gray	Redox Features White Printed Resident Typical Typica		
Soil Details by Depth below mineral soil surface (inches)	Texture Sandy Sandy Sandy Classificat Profile Co Soil Series/Phase Na Lamany La	Consistency Final Fin	Color Button Button Color Button Button Color	Redox Features Company of the Compa	Soil Details by	20- 30- 40- 50- S.E.	Soil Classifica Profile Company Control Contro	Depth of explora Consistency Figure 1 Right 1 Figure 2 Ition Slope 1 Ition Percentage:	Color Color Gray Gray	Redox Features White Printed Resident Figure of the state of the s		

SOIL PROFILE / CLASSIFICATION INFORM						DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES			
Project 5	Name: an Way Sc	belivisian	App	olicant Name: The Life Wain	y LLC		Project Location	(municipality):	0000131123
Explora	ation Symbol #	SS 13 P	Test Pit 🗆 I	Boring Probe	Explora	tion Symbol #	5514	Test Pit □ B	oring □ Probe
		zon thickness		ce elev			on thickness		
)	Depth of explor	1	ı I			Depth of explor	ation or to refus	al
0 -	Texture	Consistency	Color	Redox Features	0	Texture	Consistency	Color	Redox Features
	- war	Scillote.	Swar			Sum	Triby	Bun	
ि इ. 10-					(S) 10-	Saude	5. 17.		
Depth below mineral soil surface (inches)	- Aut	Ci	Cay	Mul	Depth below mineral soil surface (inches)	- 42x-	NIVY	Buin	
(j)	C III	MM	-0	Distract	(i)	C:41		A tal.	Comm
80 20 - 12	WELL			3031144	je 20 ~	57717	Fine	9/04	- T
ns ji					li su				Distract
S 30-					S 30-	140			
lera					J E				
E 40-					Ē				
NO S					<u>80</u> 40 –				
ğ =					든				
90 - pt					d 50−				
					-				
60-		Aller Association (Control of the Control of the Co			60-				
≧ S.E	Soil Classifi	cation Slop		Groundwater Restrictive Layer	≧ S.E.	Soil Classific	I .		-CI Grownowater
Soil Details by		Condition Perce	<	Bedrock	Soil Details by		Condition Perce	' ' ' ' ' ' ' '	Restrictive Layer Bedrock
S.S			■ Hydri	ic Hydrologic	S.S.	Soil Series/Phase	Name:	☐ Hydric	Hydrologic
S >>	Scar	OHC PD	□ Non-	hydric Soil Group	S >>	Lano	ine SPD	☐ Non-hy	dric Soil Group
Explora	tion Symbol #	5515	Test Pit □ F	Boring □ Probe	Evalora	tion Cumbal #	55/6		
		on thickness			Cxpiora	" Organic horiz	on thickness	Ground aurface	onng D Probe
		Depth of explora					Depth of explora	ation or to refus:	al
0 -	Texture	Consistency	Color	Redox Features	ا م	Texture	Consistency	Color	Redox Features
	SIL	with	Palle			5)	Fritole	Day	
	STIF LITTLE	2.00	B/6/4			31 H	7.144	1 sun	
Ce (inches)	Situ	<i>C</i> .		1,	Depth below mineral soil surface (inches) 9	- OM	711171	Bun	
(inc	Cau	Fin	9504	10WMV	(inc	5/19	-	gray	CAWING
			١	7711	9 20 -	QN	M	J'm	
Depth below mineral soil surfa	Man			JIST MU	sur	hea			DI/17.Us
S 30 -					Soil				
<u>ह</u>					<u> 6</u> 30				
ine					l je				
≥ 40-					≥ 40-				
pelo					pelo				
£ 50-					th 20 -				
Ö					2 3 7				
60-	Soil Classifie	cation Slop	e Limiting Fact	Of cell	607	Soil Classific	nation Col-		
A S.E.	8 -	D 16		Restrictive Layer	≧ S.E.	_	Slope 20	A Mariante	Groundwater
)etai	Profile (Soil Series/Phase	Condition Perce	nt Depth	Bedrock Hydrologic	etails	Profile C	ondition Perce	nt Pends	D Bedrok
Soil Details by	ano		☐ Hydri	c '	Soil Details by	Soil Series/Phase I		Hydric	Hydrologic
w "	ano	14 C JP L	O Non-l	Soil Group	8 >>	Lawi		Ngn-hy	Soil Group
		INVEST	GATOR INFO	ORMATION AND	SIGNATI	URE		11/	
Signatu	re Waw	1. 1 4. 11	100			Date 2/2/1-	2	1.41 - 1/2	- /
Name F		- mp	1-1-			0-481-10-4		13.0	A SEC.
Title	N/T/NC	1. HKWD	1W			3 1-	263/216		- (-3/4)
	Licensed Site	Evaluator &	Certified Soil	Scientist	rtified Geol	ogist 🗆 Pro	fessional Engine	er affix pr	ofessional seal

PAGE ____ OF ____

SOIL PROFILE / CLASSIFICATION INFORMATION **DETAILED DESCRIPTION OF** SUBSURFACE CONDITIONS AT PROJECT SITES Applicant Name: Project Location (municipality): Solar Way Due Lite Maine. amber and Exploration Symbol # _5517 ■ Test Pit Boring Probe Exploration Symbol # ☐ Test Pit ☐ Boring ☐ Probe ___ " Organic horizon thickness Ground surface elev. _ ___ " Organic horizon thickness Ground surface elev. " Depth of exploration or to refusal " Depth of exploration or to refusal Texture Consistency Color Redox Features Texture Consistency Color Redox Features Pay Fr. My Brown Depth below mineral soil surface (inches) Depth below mineral soil surface (inches) CAMULLA 20 71 30 30 40 50 .S.E ھ Limiting Factor Limiting Factor Groundwater Soil Classification Groundwater S.E. 2 ፉ Details **>>** Restrictive Layer Details **>>** ☐ Bedrock Profile Percent Profile Condition Percent S.S. Hydrologic Soil Series/Phase Name: ☐ Hydric S.S. Soil ☐ Hydric Soil **D** Non-hydric anome SPD * ☐ Non-hydric Soil Group Exploration Symbol # ☐ Test Pit ☐ Boring ☐ Probe Exploration Symbol # _ ☐ Test Pit ☐ Boring ☐ Probe " Organic horizon thickness Ground surface elev. " Organic horizon thickness Ground surface elev. " Depth of exploration or to refusal " Depth of exploration or to refusal Texture Consistency Color Redox Features Texture Consistency Color Redox Features Depth below mineral soil surface (inches) 10 Depth below mineral soil surface (inches) 10 20 30 40 50 60 Limiting Factor Groundwater Soil Classification Soil Classification Slope S.E. S.E. δ ☐ Restrictive Layer **>>** Soil Details **>>** Condition Details ☐ Bedrock Profile Percent Profile Condition Percent Soil Series/Phase Name S.S. Hydrologic Soil Series/Phase Name: S.S. ☐ Hydric * Soil ☐ Non-hydric Soil Group INVESTIGATOR INFORMATION AND SIGNATURE HAMP TON Signature Date 2/2/17 Cert/Lic/Reg. #203 / 214 Name Printed Hamp TEN D Licensed Site Evaluator ■ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer dffix professional segi

155 Gray Road Falmouth, Maine 04105 207.797.2110 fax: 207.878.2364 email: sweet@maine.rr.com www.sweetassociates.com

February 7, 2017

GROUNDWATER AVAILABILITY SOLAR WAY SUBDIVISIOIN HILLSIDE AVENUE, CUMBERLAND

The following is a review of the proposed Solar Way Subdivision to determine if there is sufficient groundwater available for the proposed five wells in the subdivision without draining wells outside the subdivision. Data for this review included a site plan by Pinkham and Greer Engineers, soil logs by Mark Hampton, CSS, the Maine Geological Survey Water Well Database, and other published geology maps.

The site is underlain by a relatively thin soil layer of primarily silty soils overlying metamorphosed sedimentary rocks. All the wells in the area are bedrock wells and the sedimentary rocks are known for average yields of groundwater. A review of the Water Well Database found one well on the subdivision property at 34 Hillside Avenue. That well shows 12 feet of silty soils overlying bedrock. There is 20 feet of casing and the well is 330 feet deep. The yield is 4 gallons per minute. That yield is more than adequate for a 3 bedroom home. A second well was listed at 37 Hillside Avenue across the road from the development. That well was drilled in 1994 and is 475 feet deep. The yield is 15 gallons per minute.

An analysis was made of the development to determine the predicted groundwater available within the development property and then compared with the amount of groundwater withdrawal expected from the 5 homes. The calculation assumes that only a small percentage of the water landing on the site will actually get into the bedrock fractures and be available for withdrawal by wells. The numbers used in the calculation are attached. The amount of water withdrawal is based on the Maine Plumbing Code which assigns a 90 gallon per day per bedroom use. The results of the calculation show that the volume of water available in the ground for withdrawal in a year is 2,831,994 gallons and the predicted withdrawal need from the 5 houses is 492,750 or only 17% of the available groundwater. These numbers do not take into account the water being returned to the ground through the septic systems which makes the need even smaller.

In summary, there is sufficient water for water wells serving the proposed 5 houses without affecting neighboring wells. It should be kept in mind that the calculations do not take into account extraordinary groundwater withdrawals such as filling a farm pond or watering a large acreage of crops.

RICHARD A.
SWEET
100
CERTIFIED
GEOLOGIS

Sincerely,

Richard A. Sweet

Certified Geologist #GE100

Groundwater Budget

Groundwater Input

DATA ENTRY	
42	inches of rain per year
24.83	area of land in acres

RESULT	
3,785,582	cubic feet of rain per year
28,319,937	gallon of rain per year
2,831,994	Annual Bedrock Recharge (10%)

Groundwater Export

DATA ENTRY	
5	Number of Houses
3	Number of Bedrooms
90	gpd per bedroom

RESULT	
1,350	Daily Water Use (gallons)
492,750	Yearly Water Use (gallons)

SECTION 13: WETLANDS

Attached is a wetland delineation letter by Mark Hampton Associates, Inc.



SOIL EVALUATION . WETLAND DELINEATIONS . SOIL SURVEYS . WETLAND PERMITTING

4615 August 23, 2016

Mr. Tom Greer Pinkham & Greer Civil Engineers 28 Vannah Avenue Portland, ME 04103

Re: Wetland Delineation, 20+ acre parcel Hillside Avenue Cumberland, ME

Dear Tom,

Today, I completed a wetland delineation on an 20+ acre parcel located on Hillside Avenue Cumberland, ME. The wetland delineation was completed in accordance with the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual for the Northcentral and Northeast Regions dated January 2012. These manuals require the presence of three parameters for a wetland to be present, wetland hydrology, hydrophytic vegetation, and hydric soils.

The wetlands I found on the parcel were flagged with yellow flagging. The flagging was labeled in an alphanumeric sequence. The wetland flags were located by gps equipment capable of locating a point to within three feet. The wetland data has been forwarded to your office. The wetlands found onsite are forested wetlands. The wetlands on the parcel are related to drainage moving across the site from northeast to southwest. The wetlands on the parcel located adjacent to any of the streams will meet the definition of wetlands of special significance as defined by Maine Department of Environmental Protection.

If you have any questions or require additional information, please contact me.

Sincerely,

Mark J. Hampton C.S.S., L.S.E Certified Soil Scientist #216 Licensed Site Evaluator #263

SECTION 14: TRAIL INFORMATION

Attached is trail information.

Karyn MacNeill, CPRP Director

200 Main Street Yarmouth, Maine 04096

www.yarmouthcommunityservices.org



Jason R. Veilleux Assistant Director

Phone (207) 846-2406 FAX (207) 846-2421

ycsadmin@yarmouth.me.us

January 24, 2017

Dear future West Side Trail abutter:

As part of our process moving ahead with design and funding for the West Side Trail, Central Maine Power Company (CMP) has requested that we alert each of the abutters and receive confirmation that you have received information about West Side Trail Phase 2 to date. To efficiently meet their request, we are asking that you reply to this letter. Below you will find some information about the trail's progress and upcoming work ahead.

In August 2016, West Side Trail Committee and the Town of Yarmouth contacted each abutter by mail and advertised in the newspapers that a public meeting would be held to discuss aspects of the trail being designed near your residence. That public meeting took place at the Log Cabin on Monday, August 15, 2016. There were several items discussed, as well as a question and answer period for abutters and residents.

The West Side Trail Committee and town staff will be in touch this Spring with additional details and updates including the following topics: anticipated and final route, design of the trail, and timing of construction. At this time, information has not changed regarding the trail's Phase 2 design. We are responsibly waiting on the confirmation of funding before taking any additional steps.

While we will provide numerous opportunities to discuss the trail details with residents, we will host at least one additional public meeting before any construction begins.

We are excited to extend this trail in Yarmouth. If you have any questions or concerns, please reply to me by email or feel free to reach out to me by phone at (207) 846-2406.

Thank you in advance for being supportive of this process. We are required to report that you received this letter and identify your support of this trail, so please give us a call, email, or a send us a letter.

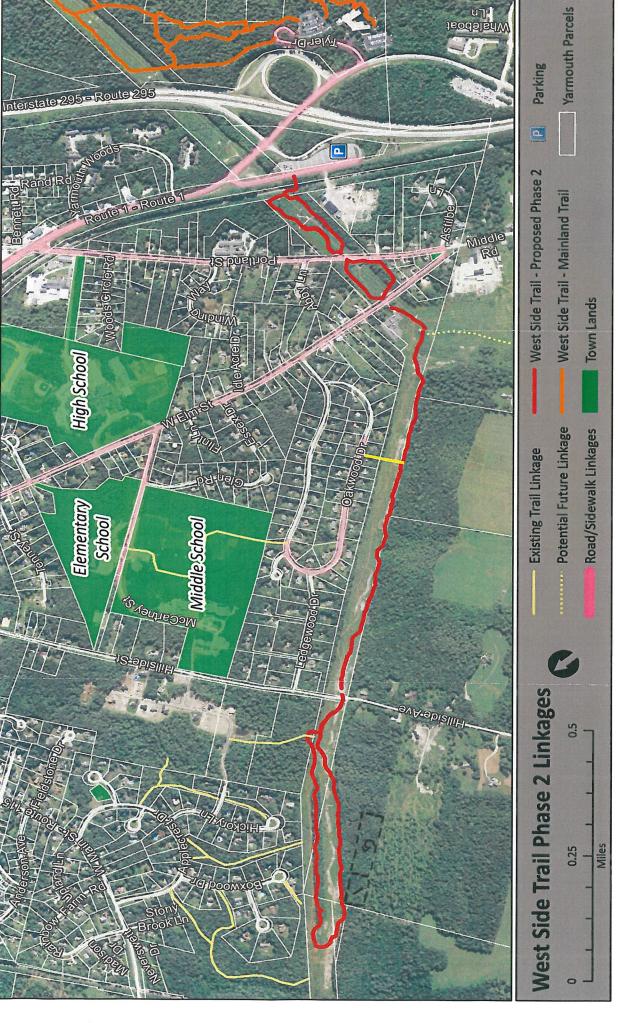
Regards,

Karyn MacNeill

Director

Yarmouth Community Services

Fatrice Miller - 34 Hillside Ave (undoer)and, ME



HJC 7.6.2016

Karyn Garofoli, CPRP Director 200 Main Street Yarmouth, Maine 04096

www.yarmouthcommunityservices.org



Jason R. Veilleux Assistant Director

Phone (207) 846-2406 FAX (207) 846-2421

info@yarmouthcommunityservices.org

NOTICE OF REQUEST

(To Owners of Abutting Property)

Please take notice that the West Side Trail Committee of the Town of Yarmouth is filing a request for a Land Use Permit with Central Maine Power Company (CMP), 83 Edison Drive, August, Maine 04336 for a multi-use trail located in the Town of Yarmouth, along the CMP transmission (power lines) corridor that runs from the Route 295 Exit 15 Park & Ride Facility to the Pan Am railroad tracks just north of the Applewoods Subdivision. Attached is a preliminary trail layout plan for you to see what it may look like. This plan will evolve over time based on your input and review by CMP, Town and State agencies. One short section of the trail passes through the Town of Cumberland and several of the abutting parcels are in Cumberland. We are in communication with town officials and will give all abutters the same consideration during the planning and trail construction process.

The proposed trail represents Phase 2 of the West Side Trail development, a project that was conceived in 1988 as part of the Town's Public Access and Recreation Plan. The Town was granted a license to construct the trail in 1991, began construction of Phase 1 in 2011, and completed it in 2015. The Phase 1 trail extends from Wyman Station at the tip of Cousins Island, to the Tyler Technology facility located on Route One. The 7.8 mile long trail network has been built entirely by volunteers and has been funded by private contributions and grants.

The primary trail uses include hiking, trail running, mountain biking, snowshoeing, cross country skiing, and (most recently) fat-tire mountain biking in winter. The proximity of the Phase 2 trails to Yarmouth schools and village neighborhoods will create a valuable recreational resource that is accessible to a large portion of our Yarmouth population. It will also provide an off-road location for our school teams and physical education programs to safely run and train.

The goal of Phase 2 of the West Side Trail is to create a Universal Access (UA) trail, that would be accessible to individuals with disabilities (e.g., motorized mobility devices). Although it would not be paved, the trail will be wide enough, and the surface firm enough to accommodate these types of devices. Based on our experience building this kind of trail, we anticipate that the terrain will allow us to build most of the new trail to the Universal Access standard.

PUBLIC MEETING

A Public Meeting will be held at 7:00 pm on August 15, 2016 at the Log Cabin located at 196 Main Street in Yarmouth. This meeting will provide you an opportunity to learn more about the project and ask questions of the project team. Our goal is to make contact with every abutter prior to submitting the trail request to CMP. We hope to see you at the meeting.

For additional information please contact: Dan Ostrye, dostrye@maine.rr.com, West Side Trail Coordinator

This *Notice of Request* will be filed at Central Maine Power Company's Real Estate Department, 83 Edison Drive, Augusta, Maine 04336 on: August 25, 2016

Written comments from any interested person must be sent to Central Maine Power Company's Real Estate Department, 83 Edison Drive, Augusta, Maine 04336, within 15 working days of the filing date of the request to receive consideration.



February 21, 2017

Ms. Patrice Miller Live Life Maine, LLC 1 Solar Way Cumberland, ME 04021

RE: PUBLIC ACCESS TO CMP LAND

Dear Patrice,

The Central Maine Power's policy for public access to its land is on our website. CMP allows a variety of non-motorized, recreational access as you will find described on the website. Your access across CMP land adjacent to your Solar Way Subdivision for hiking and biking purposes would be acceptable under our policy.

For more information on recreational uses please visit our website at:

http://www.cmpco.com/UsageAndSafety/LandUse/recreationaluses.html

Let me know if you have any questions.

Sincerely,

Central Maine Power Company

Alice Richards, Supervisor

Real Estate Services







West Side Trail Alignment
Phase 1 (in red) & Phase 2 (in brown)



To Finish the Trail We Need Your Help:

Volunteer on Trail Days

Contribute to the West Side Trail Fund Contact Yarmouth Community Services or drop off a check at the Community Services office made out to the "Town of Yarmouth" and indicate it is for the West Side Trail Fund in the memo section.

Like Us on Facebook facebook.com/YarmouthTrails

For Updates and Announcements Please join our email list. http://tinyurl.com/wstlist

For More Information Contact
Dan Ostrye, dostrye@maine.rr.com

YARMOUTH WEST SIDE TRAIL

Connecting neighborhoods from Cousins Island to North Yarmouth



ABOUT THE TRAIL

The West Side Trail is a multi-use recreational trail that, upon completion, will stretch from the Cousins Island power station to Route 1 and eventually into Cumberland via the CMP power line corridor. This is a grassroots effort made possible by a lease agreement between CMP and the Town of Yarmouth. It is being built by local volunteers and is has been funded through private donations and grants. To date, nearly 8 miles of trail have been built between Route 1 and the southern tip of Cousins Island.

The trail is designed primarily for hiking, trail running, mountain biking and snow shocing. Some areas, depending on the topography, will support cross-country skiing as well. No motorized vehicles will be allowed except for specialized handicap devices, as well as emergency and maintenance vehicles.

Most sections of the Phase 1 trail are "single track" loop trail generally two to three feet wide. Phase 2 trails will be wider to accommodate a wider range of user abilities.



FREQUENTLY ASKED QUESTIONS (GENERAL)

Q. Who is paying for the trail?

A. The trail is **funded primarily through private donations and grants** both in the construction phase and future maintenance. Building Phase 2 to universal access standards may create opportunities for other funding mechanisms.

Q. What will be the environmental impact?

A. One of the primary goals of the trail design is to have as little impact on the environment as possible. The narrow trail design will reduce the amount of soil and vegetation that will need to be altered. It will also have little to no impact on the local wildlife. State of the art design standards will be incorporated, like utilizing switchbacks and bench cuts, to ensure the trail will not contribute to erosion in steeper terrain.

Q. What is a "sustainable trail"?

A. The West Side Trail is being designed using sustainable trail standards. Typically the terrain dictates the best route for the trail by avoiding wet and other high maintenance areas (e.g., open fields) and ensuring the trail is never too steep. A sustain-able trail has as little impact on the landscape as possible and requires minimal ongoing maintenance.

Q. Will hunting be allowed along the trail?

A. The addition of the trail will not affect hunting access along the power line corridor. State and local rules allow shotgun and bow hunting in defined areas, and this will not change. Both hunters and recreational users must exercise good judgment, like wearing blaze orange, and follow all state and town rules during hunting season.

FREQUENTLY ASKED QUESTIONS (CONTINUED)

Q. Will dogs be allowed on the trail?

A. Yes, dogs will be allowed on the trail. However, leashes are recommended and are required on some trail sections.

Q. What is the plan for the project?

A. The project is broken into two phases. Completed in 2015, Phase 1 stretches from Wyman Station on Cousins Island to Route 1 at the Tyler Technologies campus. Phase 2 will run from Route 1 to North Yarmouth along the "western" boundary of Yarmouth. Before construction begins on each segment a preliminary layout will be flagged and a meeting with the abutting property owners will be held to discuss the proposed layout, answer any questions and address any concerns.

Q. What are trail days?

A. More than a fifty trail days have been held in since work started in 2011. Hundreds of volunteers have turned out to rake, dig, trim and clear a large section of trail. The community support for the trail has been tremendous and is growing every day. More trail days will be scheduled as we expand and maintain the trail network. Thanks to all the volunteers who are making the trail a reality!

ev //1

SECTION 15: YURT PERMIT

Attached is the Yurt Permit.

TOWN OF CUMBERLAND

BUILDING PERMIT

17-008 PERMIT NO. **ISSUE DATE** 1/31/2017 **FEE AMOUNT** \$25.00 Access. Struct. **TYPE**

MAP/LOT

R04 / 24A

CONTRACTOR

NAME

LIVE LIFE MAINE LLC

NAME

LOCATION 16 SOLAR WAY

PHONE

BEDROOMS

0

SCHEDULE OF REQUIRED INSPECTIONS

ESTIMATED COST

\$0.00

INSPECTION	DATE	INSPECTOR
FOUNDATION		
PLUMBING ROUGH-IN		
PLUMBING FINAL		
ELECTRICAL SERVICE		
ELECTRICAL ROUGH-IN		
ELECTRICAL FINAL		
FRAMING		
SEPTIC BASE		
SEPTIC FINAL		
_		
FINAL OCC.		

INSPECTION NOTES

CONDITIONS

Yurt for storage and personal use. No overnight sleeping.

* PLEASE NOTE *

NO OCCUPANCY WITHOUT COMPLETED INSPECTION SCHEDULE. THIS IS AN OCCUPANCY PERMIT WHEN ON PURPLE PAPER WITH A FINAL OCC. DATE.

The issuance of this permit does notimply approval by any other agency including: State of Maine Dept. of Environmental Protection, United States Army Corps of Engineers. The obtaining of all permits (including plumbing and electrical) is the responsibility of the owner or authorized agent.

FIVE INSPECTIONS REQUIRED:

- 1. FOOTING INSPECTION.
- 2. FOUNDATION INSPECTION.
- 4. INSULATION PRE-SHEETROCK.
- 5. FINAL INSPECTION (CERTIFICATE OF OCCUPANCY)

APPROVED PLANS MUST BE RETAINED ON JOB AND THIS CARD KEPT POSTED UNTIL FINAL INSPECTION HAS BEEN MADE. WHERE A CERTIFICATE OF 3. FRAMING BEFORE INSULATION. OCCUPANCY IS REQUIRED, SUCH BUILDING SHALL NOT BE OCCUPIED UNTIL FINAL INSPECTION HAS BEEN MADE.

WHERE APPLICABLE, SEPARATE PERMITS ARE REQUIRED FOR ELECTRICAL, PLUMBING AND MECHANICAL INSTALLATIONS.

SOLAR WAY SUBDIVISION

Hillside Ave, Cumberland, Maine

Owner/Applicant

LIVE LIFE MAINE, LLC I SOLAR WAY CUMBERLAND, ME 04021

Developer

LIVE LIFE MAINE, LLC I SOLAR WAY CUMBERLAND, ME 04021

Civil Engineer

PINKHAM & GREER CIVIL ENGINEERS
28 VANNAH AVENUE
PORTLAND, MAINE Ø41Ø3
207-781-5242

Surveyor

MAINE SURVEY CONSULTANTS, INC. P.O. BOX 485 HARRISON, ME 04040 201-583-6159

Wetlands Mapping & Soils Scientist

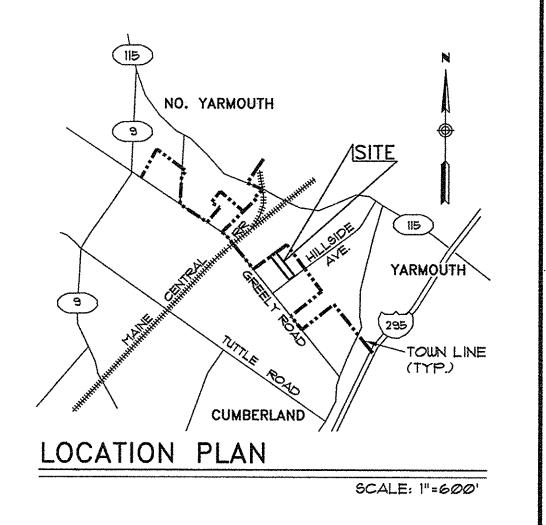
MARK HAMPTON \$ ASSOCIATES, INC. P.O. BOX 1931 PORTLAND, MAINE Ø41Ø4-1931 2Ø7-773-865Ø

Hydrogeologist

DICK SWEET, SWEET ASSOCIATES 155 GRAY ROAD FALMOUTH, ME 04105 207-797-2110

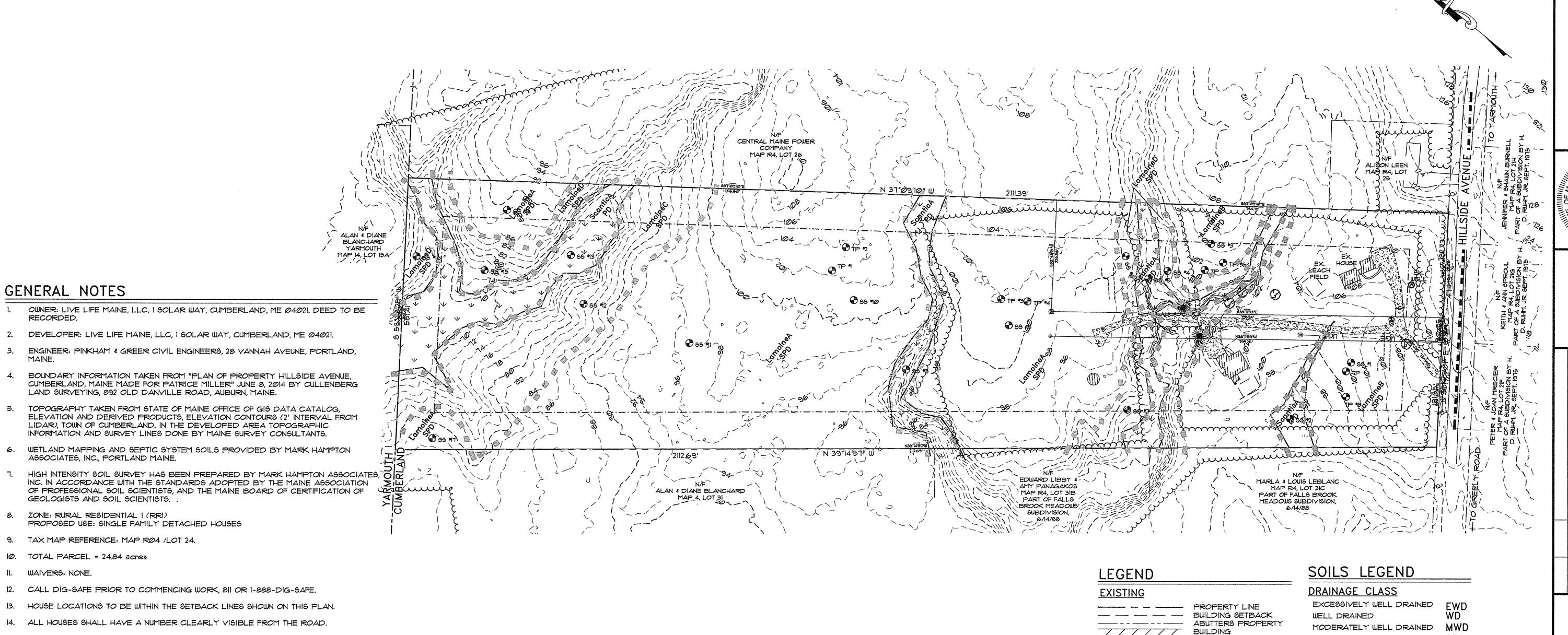
DRAWING LIST

SHEET	<u>TITLE</u>
COVER	COVER
CI.Ø	EXISTING CONDITION PLAN
CI.I	SUBDIVISION PLAN
C1.2	SITE PLAN
Cl.3	NET RESIDENTIAL ACREAGE PLAN
Cl.4	CONVENTIONAL LOT LAYOUT
C2.Ø	PLAN & PROFILE W/ EROSION CONTROL - SOLAR WAY
C3.Ø	EROSION CONTROL NOTES & DETAILS
C4.0	SITE DETAILS
D1.Ø	DRAINAGE ANALYSIS, EXISTING CONDITION
D2.Ø	DRAINAGE ANALYSIS, DEVELOPED CONDITION



CURRENT SUBMITTAL: MARCH 28, 2017

SUBMITTED TO TOWN OF CUMBERLAND



14. ALL HOUSES SHALL HAVE A NUMBER CLEARLY VISIBLE FROM THE ROAD. 15. ALL NEW DWELLINGS IN THIS SUBDIVISION SHALL INCLUDE AN AUTOMATIC FIRE

LAND SURVEYING, 892 OLD DANVILLE ROAD, AUBURN, MAINE.

ASSOCIATES, INC., PORTLAND MAINE.

GEOLOGISTS AND SOIL SCIENTISTS.

ZONE: RURAL RESIDENTIAL I (RRI)

9. TAX MAP REFERENCE: MAP RØ4 /LOT 24.

10. TOTAL PARCEL = 24.84 acres

11. WAIVERS: NONE.

PROPOSED USE: SINGLE FAMILY DETACHED HOUSES

PROTECTION SPRINKLER SYSTEM CONFORMING TO APPLICABLE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARDS AND APPROVED BY THE CUMBERLAND FIRE CHIEF.

16. COMMON OPEN SPACE FOR THE HOMEOWNERS IS INCLUDED IN THIS SUBDIVISION AND IS TO BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION.

17. AN EASEMENT FOR PRIVATE PEDESTRIAN ACCESS TO THE COMMON OPEN SPACE IS TO BE MAINTAINED OVER LOT 5.

18. CONSTRUCTION WILL COMMENCE WITH FINAL APPROVAL AND AS LOTS ARE SOLD.

19. LOTS TO BE SERVICED BY INDIVIDUAL SEPTIC SYSTEMS AND WELLS. SEPTIC SYSTEMS MUST BE LOCATED AS SHOWN ON THIS PLAN OR AN ALTERNATE LOCATION APPROVED BY THE TOWN STAFF.

20. POWER, TELEPHONE AND CABLE SERVICES ARE TO BE UNDERGROUND FROM AN EXISTING POLE ON HILLSIDE AVENUE.

21. THE DEVELOPER WILL BE RESPONSIBLE FOR MAINTAINING THE ROAD, INCLUDING PLOWING, UNTIL SUCH TIME AS THE ROAD IS TAKEN OVER BY THE HOMEOWNERS ASSOCIATION.

22. ALL CONSTRUCTION AND SITE ALTERATIONS SHALL BE DONE IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT CONTROL BMPS" PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION, MAY 2016.

23. IRON RODS TO BE SET AT ALL CORNERS OF LOTS BY THE DEVELOPER.

24. STREET NAME: SOLAR WAY

GENERAL NOTES

25. NO CONSTRUCTION OR FILLING OF WETLANDS OTHER THAN THAT SHOWN ON THE PLAN ARE ALLOWED. A NRPA PERMIT IS REQUIRED BY DEP.

26. ALL DRIVEWAY ACCESS WILL BE FROM WITHIN THE SUBDIVISION.

27. WELLS MUST BE LOCATED OUTSIDE OF THE "WELL EXCLUSION" ZONE SHOWN, WELL CASING MUST EXTEND A MINIMUM OF 15' BELOW THE BEDROCK SURFACE.

28. HIGH GROUNDWATER TABLES ARE A CONSIDERATION FOR MAINE SOILS. HOUSES WITH BASEMENTS ARE RECOMMENDED TO HAVE PROPER FOUNDATION DRAINAGE TO ACCOMMODATE THESE CONDITIONS.

///// BUILDING ---- WETLAND LIMIT ZONING DISTRICT TOWN LINE BENCHMARK BOUND FOUND @IPF IRON PIPE FOUND **⊙**IPS IRON PIPE SET SEPTIC SYSTEM SOILS BOUNDARY

₽ тр ••

(3)

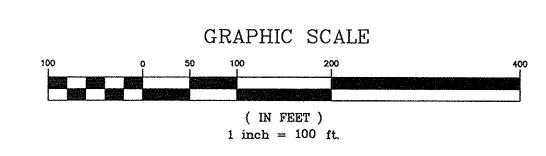
TEST PIT

TREE

SOMEWHAT POORLY DRAINED SPD PD POORLY DRAINED VPD VERY POORLY DRAINED

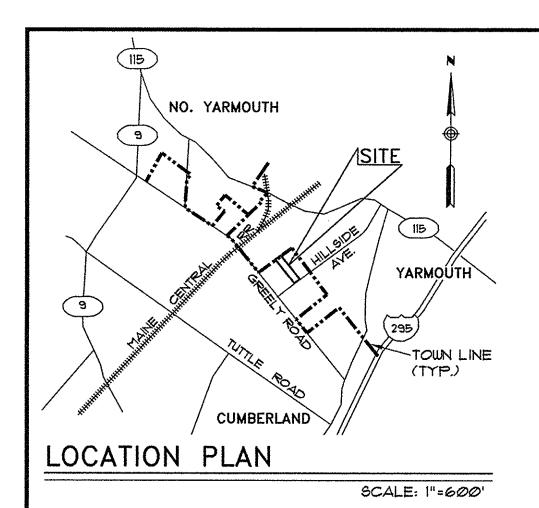
SLOPE DESIGNATION Ø-3% 3-8% 8-15% 15-25% 巴 25%

NOTE: HIGH INTENSITY SOIL SURVEY HAS BEEN PREPARED BY MARK HAMPTON ASSOCIATES, INC. IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE MAINE ASSOCIATION OF PROFESSIONAL SOIL SCIENTISTS, AND THE MAINE BOARD OF CERTIFICATION OF GEOLOGISTS AND SOIL SCIENTISTS.



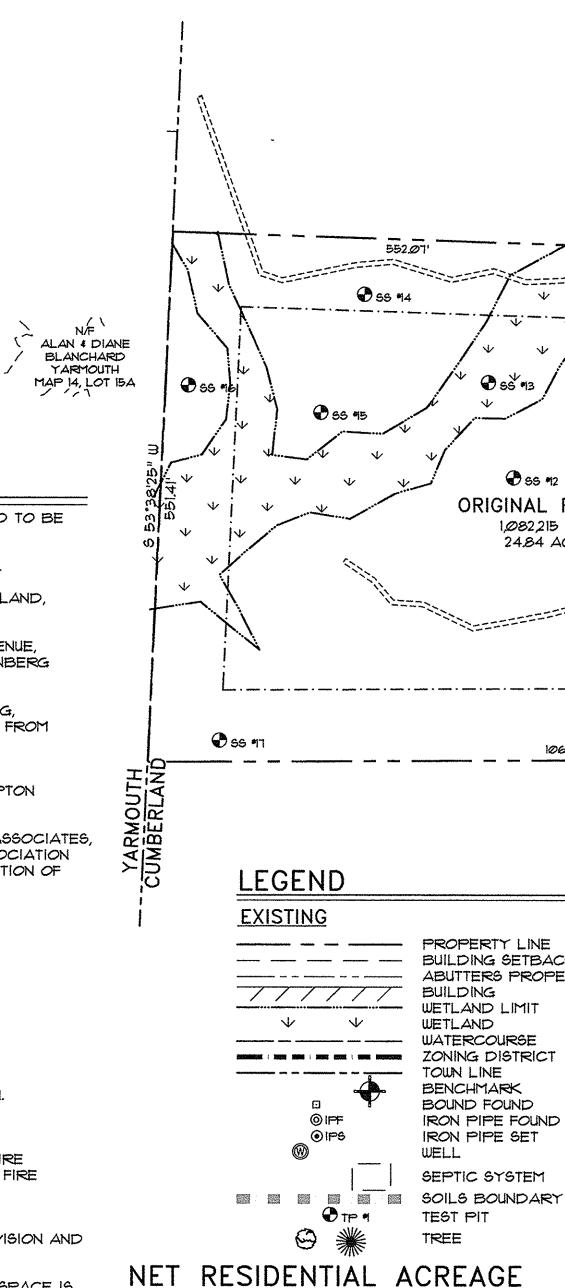
LIVE LIFE 1 SOLAR \ CUMBERL SUBDIVISION
JE, CUMBERLAND, N

MAP/LOT R04 / 24



GENERAL NOTES

- OWNER: LIVE LIFE MAINE, LLC, I SOLAR WAY, CUMBERLAND, ME 04021. DEED TO BE RECORDED.
- 2. DEVELOPER: LIVE LIFE MAINE, LLC, I SOLAR WAY, CUMBERLAND, ME Ø4Ø21.
- ENGINEER: PINKHAM & GREER CIVIL ENGINEERS, 28 VANNAH AVEUNE, PORTLAND, MAINE.
- BOUNDARY INFORMATION TAKEN FROM "PLAN OF PROPERTY HILLSIDE AVENUE. CUMBERLAND, MAINE MADE FOR PATRICE MILLER" JUNE 8, 2014 BY CULLENBERG LAND SURVEYING, 892 OLD DANVILLE ROAD, AUBURN, MAINE.
- TOPOGRAPHY TAKEN FROM STATE OF MAINE OFFICE OF GIS DATA CATALOG, ELEVATION AND DERIVED PRODUCTS, ELEVATION CONTOURS (2' INTERVAL FROM LIDAR), TOWN OF CUMBERLAND. IN THE DEVELOPED AREA TOPOGRAPHIC INFORMATION AND SURVEY LINES DONE BY MAINE SURVEY CONSULTANTS.
- WETLAND MAPPING AND SEPTIC SYSTEM SOILS PROVIDED BY MARK HAMPTON ASSOCIATES, INC., PORTLAND MAINE.
- HIGH INTENSITY SOIL SURVEY HAS BEEN PREPARED BY MARK HAMPTON ASSOCIATES, INC. IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE MAINE ASSOCIATION OF PROFESSIONAL SOIL SCIENTISTS, AND THE MAINE BOARD OF CERTIFICATION OF GEOLOGISTS AND SOIL SCIENTISTS.
- ZONE: RURAL RESIDENTIAL I (RRI) PROPOSED USE: SINGLE FAMILY DETACHED HOUSES
- 9. TAX MAP REFERENCE: MAP RØ4 /LOT 24.
- 10. TOTAL PARCEL = 24.84 acres
- WAIVERS: NONE.
- 12. CALL DIG-SAFE PRIOR TO COMMENCING WORK, 811 OR 1-888-DIG-SAFE
- 13. HOUSE LOCATIONS TO BE WITHIN THE SETBACK LINES SHOWN ON THIS PLAN.
- 14. ALL HOUSES SHALL HAVE A NUMBER CLEARLY VISIBLE FROM THE ROAD.
- 15. ALL NEW DWELLINGS IN THIS SUBDIVISION SHALL INCLUDE AN AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM CONFORMING TO APPLICABLE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARDS AND APPROVED BY THE CUMBERLAND FIRE CHIEF.
- 16. COMMON OPEN SPACE FOR THE HOMEOWNERS IS INCLUDED IN THIS SUBDIVISION AND IS TO BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
- AN EASEMENT FOR PRIVATE PEDESTRIAN ACCESS TO THE COMMON OPEN SPACE IS TO BE MAINTAINED OVER LOT 5.
- 18. CONSTRUCTION WILL COMMENCE WITH FINAL APPROVAL AND AS LOTS ARE SOLD.
- LOTS TO BE SERVICED BY INDIVIDUAL SEPTIC SYSTEMS AND WELLS. SEPTIC SYSTEMS MUST BE LOCATED AS SHOWN ON THIS PLAN OR AN ALTERNATE LOCATION APPROVED BY THE TOWN STAFF.
- 20. POWER, TELEPHONE AND CABLE SERVICES ARE TO BE UNDERGROUND FROM AN EXISTING POLE ON HILLSIDE AVENUE.
- THE DEVELOPER WILL BE RESPONSIBLE FOR MAINTAINING THE ROAD, INCLUDING PLOWING, UNTIL SUCH TIME AS THE ROAD IS TAKEN OVER BY THE HOMEOWNERS ASSOCIATION.
- 22. ALL CONSTRUCTION AND SITE ALTERATIONS SHALL BE DONE IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT CONTROL BMPS" PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION, MAY 2016.
- 23. IRON RODS TO BE SET AT ALL CORNERS OF LOTS BY THE DEVELOPER
- 24. STREET NAME: SOLAR WAY
- 25. NO CONSTRUCTION OR FILLING OF WETLANDS OTHER THAN THAT SHOWN ON THE PLAN ARE ALLOWED. A NRPA PERMIT IS REQUIRED BY DEP.
- 26. ALL DRIVEWAY ACCESS WILL BE FROM WITHIN THE SUBDIVISION.
- 27. WELLS MUST BE LOCATED OUTSIDE OF THE "WELL EXCLUSION" ZONE SHOWN, WELL CASING MUST EXTEND A MINIMUM OF 15' BELOW THE BEDROCK SURFACE.
- 28. HIGH GROUNDWATER TABLES ARE A CONSIDERATION FOR MAINE SOILS. HOUSES WITH BASEMENTS ARE RECOMMENDED TO HAVE PROPER FOUNDATION DRAINAGE TO ACCOMMODATE THESE CONDITIONS.
- 29. THE OWNER OF LOT 5 RESERVES THE RIGHT TO SUBDIVIDE LOT 5 TO CREATE TWO SINGLE FAMILY HOME LOTS IF THE ZONING CHANGES IN THE FUTURE. THE DIVISION WOULD HAVE TO MEET THE FUTURE ZONING ORDINANCE REQUIREMENTS. NO FURTHER SUBDIVISION OF LOTS I TO 4 IS ALLOWED.



TP 4 TEST PIT TREE NET RESIDENTIAL ACREAGE TOTAL PARCEL: 1,082,215 SQ. FT.

9 55 44

95 42

ORIGINAL PARCEL

1,082,215 S.F.

24.84 AC.

BUILDING SETBACK

BUILDING

WETLAND

TOWN LINE

WELL

BENCHMARK

BOUND FOUND IRON PIPE FOUND

IRON PIPE SET

SEPTIC SYSTEM

5.03 LOTS

WETLAND LIMIT

ABUTTERS PROPERTY

DEDUCTIONS:				
A. PERCENTAGE OF PARCEL FOR ROADS & PARKING, ACTUAL *NOT INCLUDED IN C.	16 <i>,</i> 043			
B. LACK OF ACCESS, ISOLATED OR UNAVAILABLE AREAS	Ø			
C. AREAS DIFFICULT TO DEVELOP				
1. SLOPES OF 20% OR MORE	80,348			
2. WETLANDS NOT INCLUDED IN 1.	86,556			
3. 100 YEAR FLOODPLAIN	Ø			
D. RIGHT-OF-WAYS OR EASEMENT *NOT INCLUDED IN A. OR C.	23,361			
8. RESOURCE PROTECTION DISTRICT	0			
TOTAL:	875,9Ø7 ÷ 174,24Ø			

- 1. UTILITY EASEMENT TO BE REESTABLISHED TO THE NEW RIGHT-OF-WAY.
- 2. ACCESS TO THE EXISTING HOUSES TO BE REESTABLISHED TO THE NEW RIGHT-OF-WAY.

ZONE INFORMATION

BUFFER

WELL EXCLUSION ZONE

TEST PIT REQUIRED

BITUMINOUS PAVEMENT

WETLAND IMPACT

CMP TRANSFORMER EASEMENT

IRON ROD W/CAP *IITT TO BE SET IF AUTHORIZED BY THE DEVELOPER

ZONE: RURAL RESIDENTIAL 1 PERMITTED USE: SINGLE FAMILY DETACHED SPACE STANDARDS CLUSTER MINIMUM LOT SIZE 4 ACRES 60000 SF. MINIMUM STREET FRONTAGE 100 FEET 200 FEET MINIMUM FRONT YARD 50 FEET 50 FEET MINIMUM REAR YARD 75 FEET 75 FEET

* COMBINED WIDTH AT LEAST 15 FEET

RIGHT-OF-WAY CURVE TABLE

CENTRAL MAINE POWER

COMPANY MAP R4, LOT 26

PRIVATE 15' WIDE PEDESTRIA

EASEMENT TO OPEN SPACE-

FOR LOT OWNERS

N 39°14'57" W

SUBDIVISION PLAT

._========>

OPEN SPACE

211269

......

======= TRAIL

C4

ALAN & DIANE BLANCHARD

MAP 4, LOT 31

450635 SF. 10.35 AC.

3Ø FEET * MINIMUM SIDE YARD 3Ø FEET *

EXISTING LOT LINES & EASEMENTS TO BE VACATED RIGHT-OF-WAY LINE TABLE IMPERVIOUS INFORMATION

WETLAND IMPACTS 1007 Sq. Ft. 203 Sq. Ft. 1,419 Sq. Ft. TOTAL: 2,629 Sq. Ft

> (333,784 S.F. 766 AC.

WETLAND IMPACT B

WETLAND IMPACT C-

EDWARD LIBBY

AMY PANAGAKOS

MAP R4, LOT 31B

PART OF FALLS

BROOK MEADOWS

SUBDIVISION,

203 Sq. Ft.

1,419 Sq. Ft.

TIME DEADING DISTANCE EXISTING IMPERVIOUS: 22,232 SF PROPOSED IMPERVIOUS: ±35,938 SF

INCREASE OF:

LIINE	BEARING	DISTANCE
L1	S 44*48'47" W	30'
L2	S 45'11'13" E	50'
L3	N 44'48'47" E	30'
L4	S 45°11'13" E	27.64'
L5	N 44°48'47" E	50'

CURVE | RADIUS | ARC LENGTH | CHORD LENGTH | CHORD BEARING | DELTA ANGLE 30.72 65.45 500'

N 82°12'26" W 88°01'06' N 34°26'52" W 7°30'02" N 37*56'32" W 14*29'21" 126.44' 126.11 113.8 N 37*56'32" W 14*29'21" 450' 113.5 71.95 N 34°26'52" W 7°30'02" N 07'47'34" E 91'58'54" 32.11 28.77

EXCEPTIONS: NO DETAILED SURVEY REPORT.

ITHE SEAL AND SIGNATURE OF DELMORE A, MAXFIELD, JR PLS ON THIS PLAN IS FOR THE DIMENSIONAL ACCURACY OF THE INTERIOR LOT LINES ONLY. CONFORMANCE OF THE ACTUAL STAKE OUT OF THE PROPOSED LOTS TO THIS PLAN WILL ONLY BE ENCOMPASSED BY SAID SEAL AND SIGNATURE IF PERFORMED UNDER THE DIRECTION OF SAID DELMORE A. MAXFIELD, JR PLS.

3NOT VALID OR TRUE COPY OF ORIGINAL UNLESS SIGNED AND EMBOSSED BY SURVEYOR

13,706 SF

2)THIS SURVEY CONFORMS TO THE CURRENT STANDARDS ADOPTED BY THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS, EXCEPTIONS AS NOTED ABOVE.

PARCEL A

174,288.70 SQ. FT.

6 38"#53" E

EXISTING CONDITION PLAN

NET RESIDENTIAL ACREAGE PLAN CONVENTIONAL LOT LAYOUT

EROSION CONTROL NOTES & DETAILS

DRAINAGE ANALYSIS, EXISTING CONDITION

DRAINAGE ANALYSIS, DEVELOPED CONDITION

SUBDIVISION PLAN, APPROVED BY THE

TOWN OF CUMBERLAND PLANNING BOARD

SUBDIVISION PLAN

SITE PLAN

SITE DETAILS

W "E5"||"88

TEMPORARY

DRIVEWAY

PLAN & PROFILE W/ EROSION CONTROL - SOLAR WAY

SCALE: 1"=200'

GREER ... ENGINEERS PINKHAM & C

ALISON LEEN MAP R4, LOT

-WETLAND IMPACT A

1007 Sq. Ft.

MARLA & LOUIS LEBLANC

MAP R4, LOT 3IC

PART OF FALLS BROOK

MEADOWS SUBDIVISION,

6/14/88

GRAPHIC SCALE

(IN FEET

2111,391

1 inch = 100 ft.

DRAWINGS INCLUDED IN THIS SUBMITTAL:

COVER - COVER

CI3

C4.0

DIØ

30505' >>

5 37'09'10" E

PARCEL B

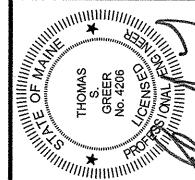
20.84 ACRES

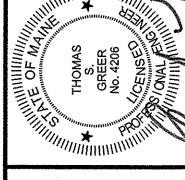
907,92761 SQ. FT.

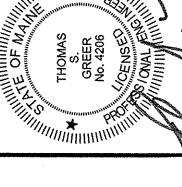
2112.691

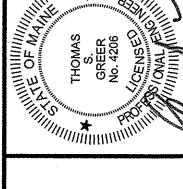
N 3914'57" W

DATE:



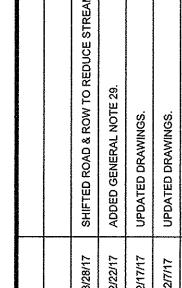




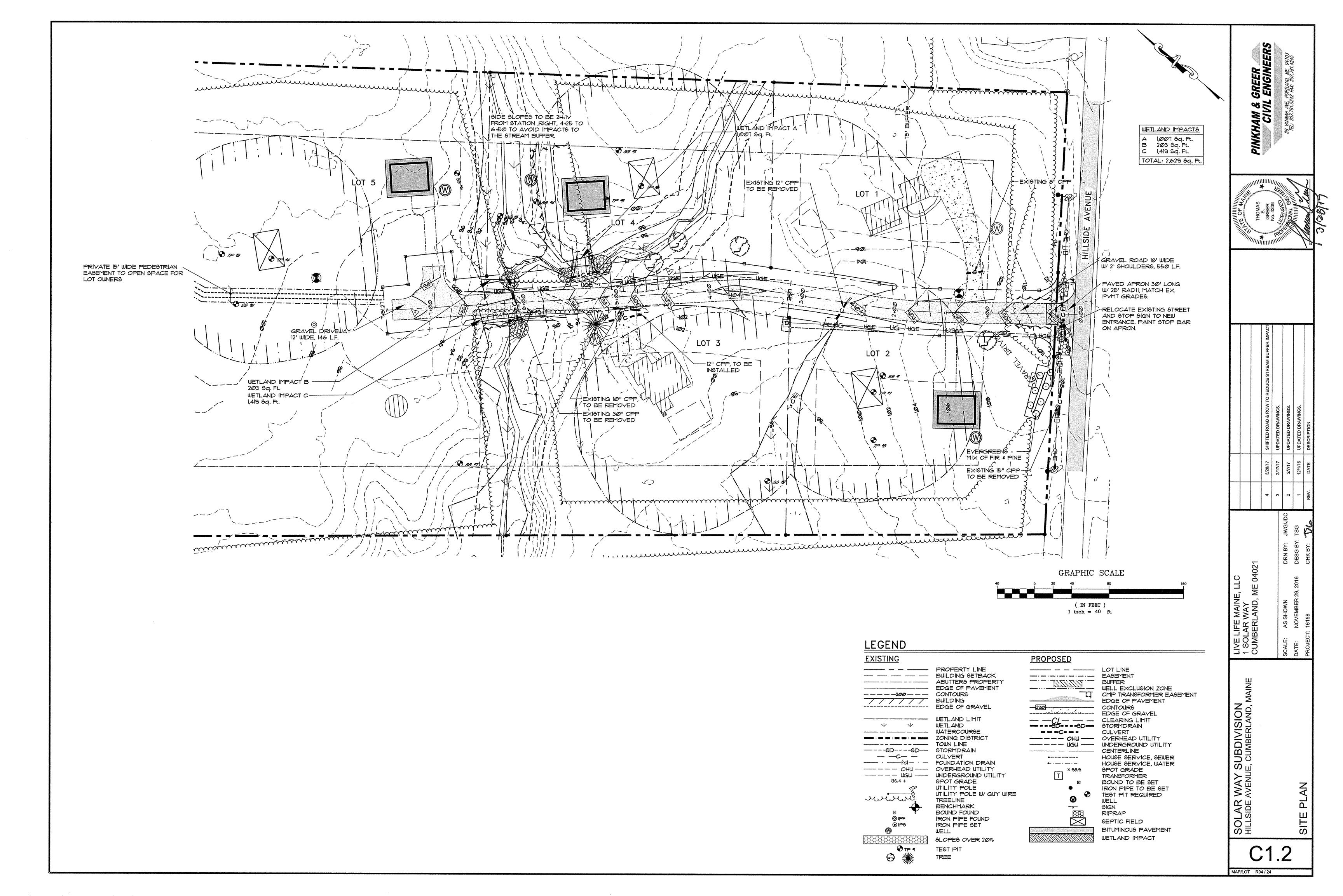


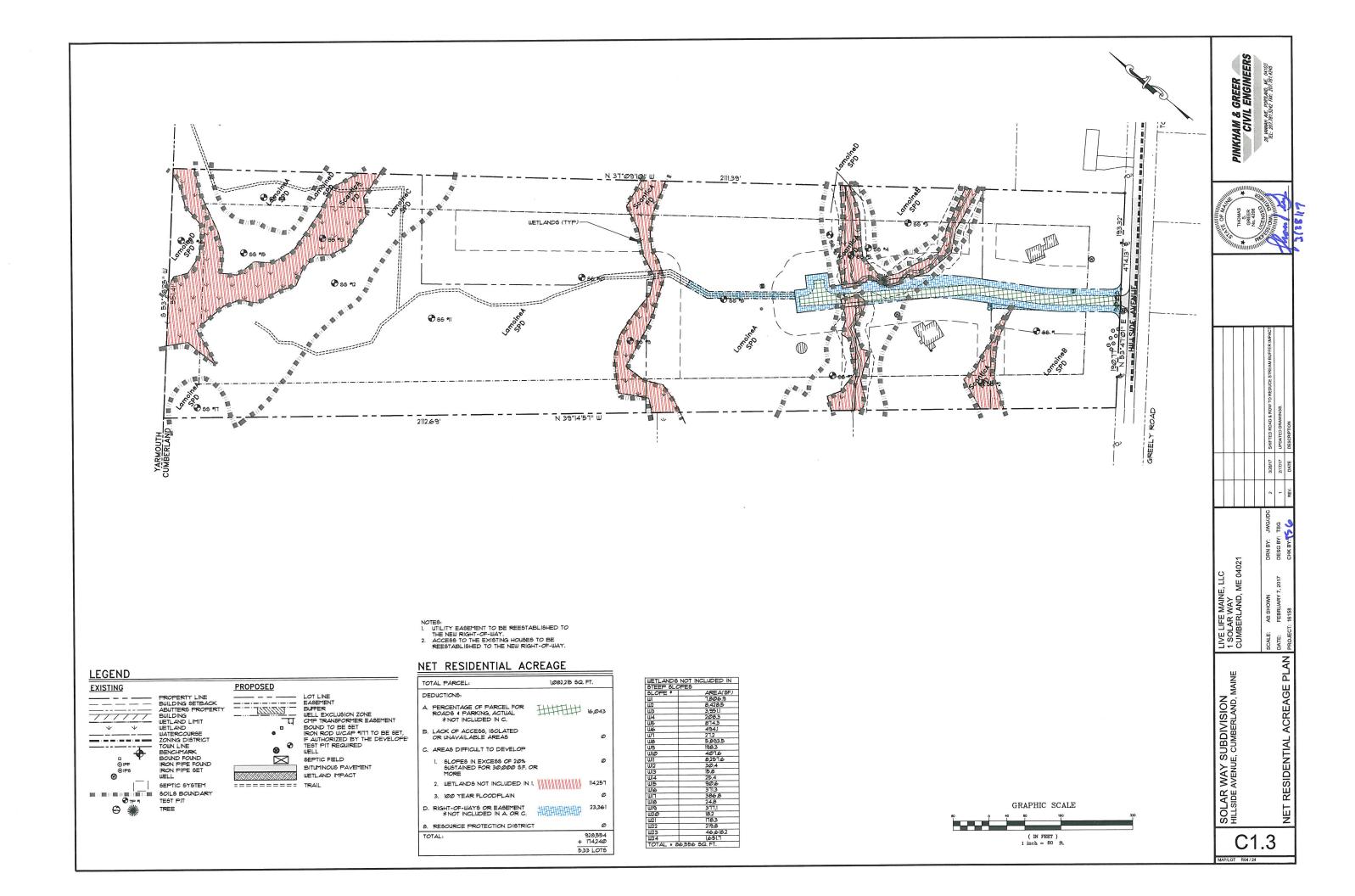


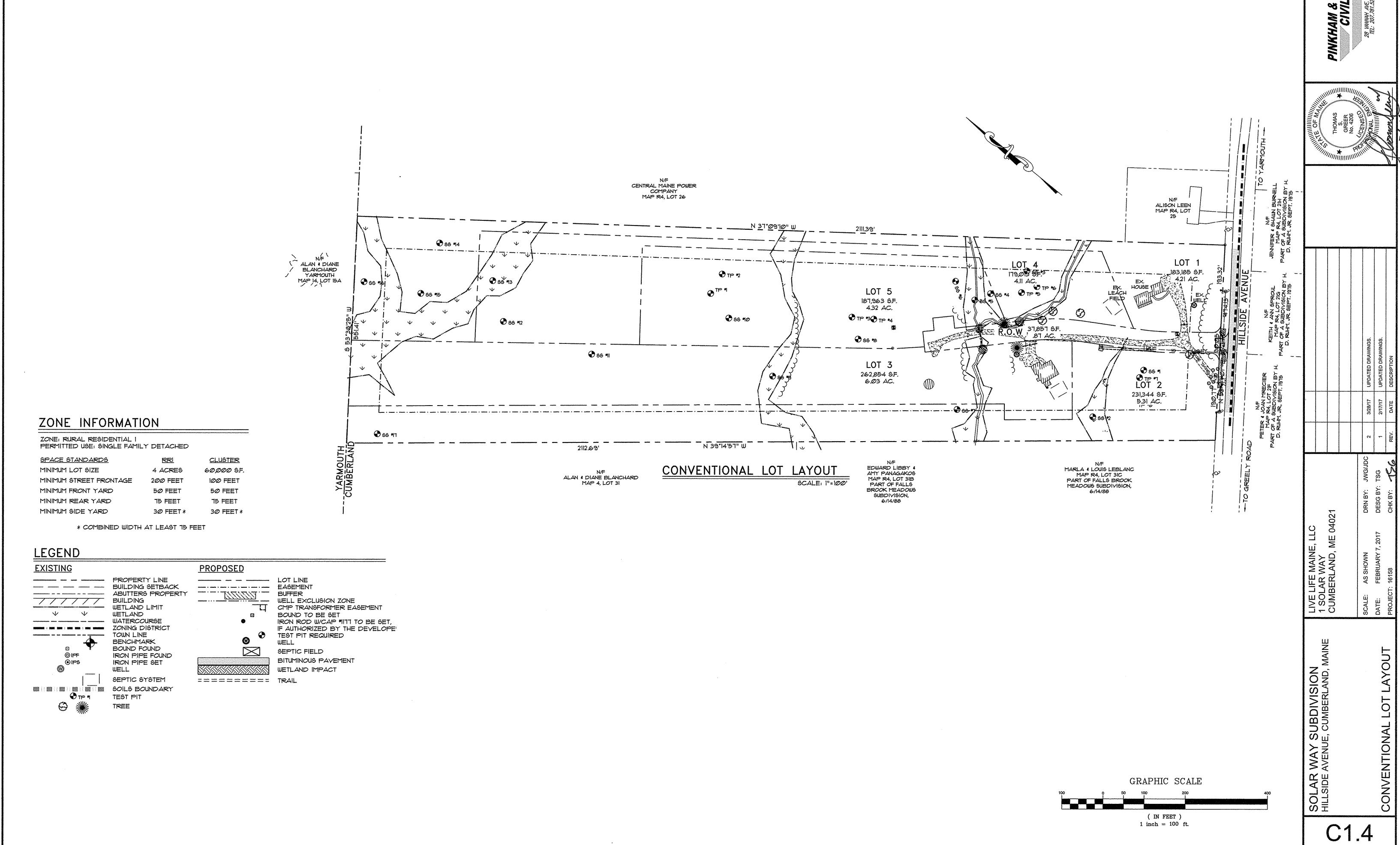
문 원리



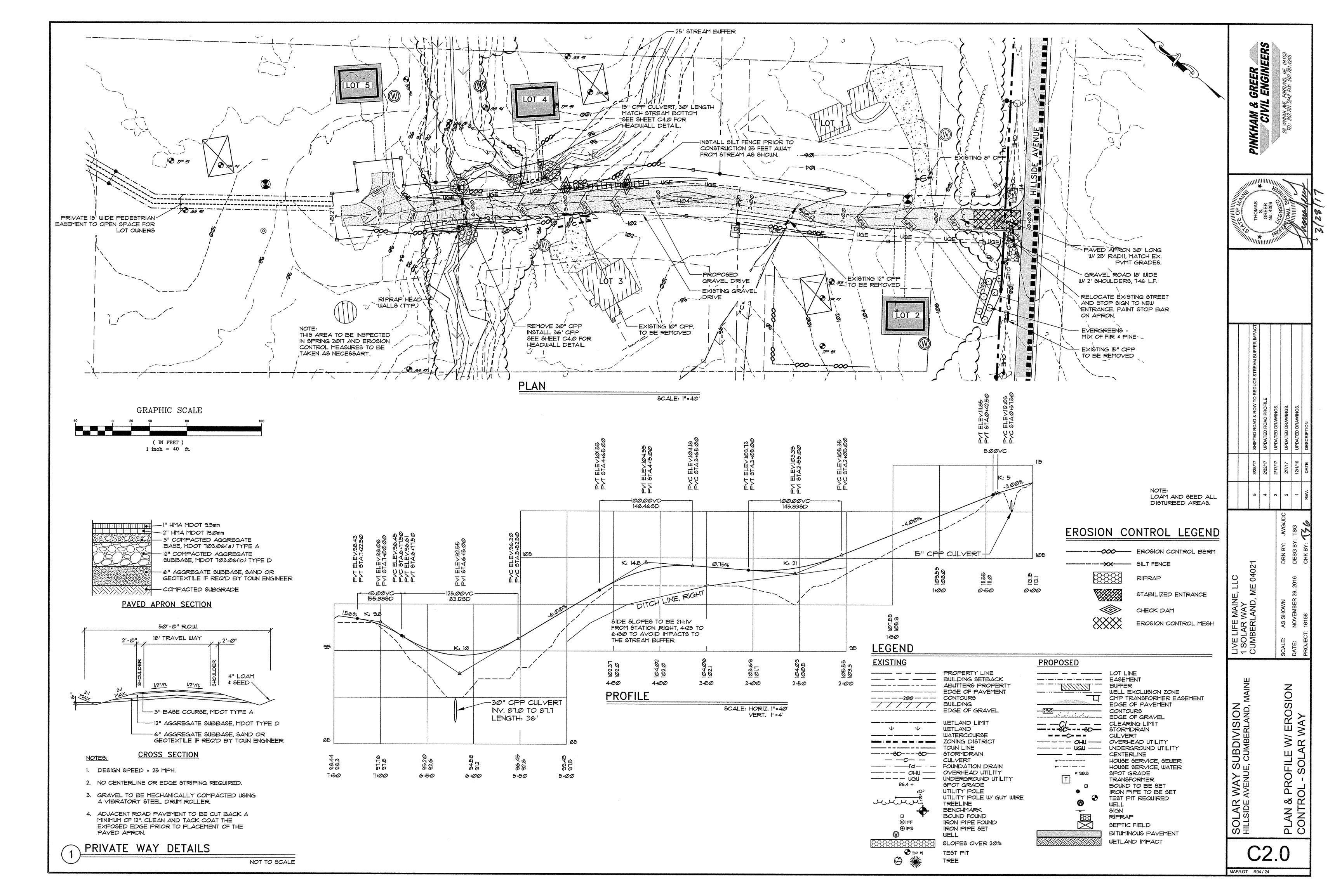
DATE







PINKHAM & GREER
CIVIL ENGINEERS



EROSION CONTROL NOTES

GENERAL:

THE DRAWINGS DEPICT THE REQUIRED SOIL EROSION CONTROL MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE CONSTRUCTION SITE IN SUCH A MANNER THAT:

I. SOIL EROSION IS KEPT TO A MINIMUM.

- 2. NO SEDIMENT LEAVES THE CONSTRUCTION SITE PROPER 3. ALL POSSIBLE MEASURES ARE EMPLOYED TO PREVENT SEDIMENT FROM ENTERING DRAINAGE COURSES AND WETLANDS EVEN BEYOND THE DETAILS SHOWN ON THIS PLAN IF NECESSARY.
- ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT 2. MATERIAL CONTROL BMPS PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MAY
- THE CONTRACTOR IS RESPONSIBLE FOR ALL FINES RESULTING FROM EROSION OR SEDIMENTATION FROM THE SITE TO SURROUNDING PROPERTIES, WATERBODIES, OR WETLAND AS A RESULT OF THIS PROJECT.
- LOAM AND SEED ALL DISTURBED AREAS AS SOON AS POSSIBLE AFTER DISTURBANCE, BUT NO LONGER THAN I DAYS. LOAM AND SEED ANY DISTURBED AREA WITHIN 15' OF WETLANDS OR WATERBODEIS WITHIN 48 HOURS OR PRIOR TO AND STORM EVENT. USE WINTER SEED RATES AND SPECIFICATIONS IF APPROPRIATE.
- INSPECT SOIL EROSION MEASURES WEEKLY AND AFTER SIGNIFICANT STORM EVENTS. MAKE ALL NECESSARY REPAIRS TO FACILITIES AS SOON AS POSSIBLE, BUT NO LONGER THAN 2 DAYS. CLEAN AND RESET SILT FENCES AND STONE CHECK DAMS WHICH ACCUMULATE SEDIMENT AND DEBRIS.
- PROTECT AND STABILIZE ALL AREAS NOT SCHEDULED FOR EROSION PREVENTION OR STABILIZATION BUT THAT SHOW SIGNS OF EROSION. NOTIFY OWNER OF ANY SIGNIFICANT EROSION PROBLEM.
- 6. APPLY MULCH TO BARE SOILS WITHIN I DAYS OF INITIAL DISTURBANCE OF SOILS, WITHIN 48 HOURS IF WITHIN 75' OF WETLAND OR WATERBODY, PRIOR TO ANY RAIN EVENT, OR PRIOR TO ANY WORK SHUTDOWN LASTING MORE THAN ONE DAY.
- TEMPORARILY SEED WITHIN I DAYS ANY AREA WHICH WILL BE LEFT DISTURBED AND UNWORKED FOR MORE THAN 14 DAYS WITH THE TEMPORARY SEED MIX LISTED BELOW. IF AREA IS WITHIN 75' OF A WETLAND OR WATERBODY, SEED WITHIN 48 HOURS. PERMANENTLY SEED ANY AREA WHICH CAN BE LOAMED AS SOON AS POSSIBLE WITH THE PERMANENT SEED MIX LISTED BELOW. DO NOT USE PERMANENT SEED MIX AFTER SEPTEMBER 15.
- 8. MULCH ALL AREAS SEEDED SO THAT SOIL IS NOT VISIBLE THROUGH THE MULCH REGARDLESS OF THE APPLICATION RATE. DURING THE GROWING SEASON (APRIL 15 - SEPT. 30) USE EROSION CONTROL MESH (OR MULCH AND NETTING) ON:
 - -THE BASE OF GRASSED WATERWAYS -SLOPES STEEPER THAN 15%
- -WITHIN 100 ft. OF STREAMS AND WETLANDS BETWEEN OCT. I AND APRIL 14 USE EROSION CONTROL MESH (OR MULCH AND NETTING) ON:
 - -SIDE SLOPES OF GRASSED WATERWAYS -SLOPES STEEPER THAN 8%
- 9. INSTALL EROSION CONTROL MESH IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. MESH TO BE EQUAL TO NORTH AMERICAN GREEN PRODUCT CI25BN.
- 10. FOLLOW SILT FENCE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS FOR INSTALLATION OF SILT FENCE. SECURE ENTIRE BOTTOM OF FENCE EITHER BY BURYING BOTTOM OF FENCE IN A TRENCH OR BERMING WITH SOIL OR CHIPPED GRUBBINGS, REFER TO SILT FENCE DETAILS.
- PLACE AND GRADE LOAM IN A REASONABLY UNIFORM MANNER. WORK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM SEED BED IS PREPARED. REMOVE FROM SURFACE ALL STONES LARGER THAN 2" AND ALL OTHER UNSUITABLE MATERIAL. LIME AND FERTILIZER SHOULD BE MIXED INTO SOIL PRIOR TO ROLLING EXCEPT IF INCLUDED IN HYDROSEED MIXTURE, PERMANENT STABLILIZATION OF REVEGETATED AREAS IS CONSIDERED AS 90% CATCH.
- 12. ALL CULVERT OR PIPE OUTFALL PROTECTION MUST BE INSTALLED WITHIN 48 HOURS OF INSTALLING NEW PIPE OR CULVERT.
- 13. DITCHES AND CHANNELS DESIGNATED TO BE LINED WITH RIPRAP AND/OR EROSION CONTROL MESH MUST BE INSTALLED WITHIN 48 HOURS OF COMPLETING THE GRADING OF THAT SECTION OF DITCH OR CHANNEL
- 14. ALL CATCH BASINS, NEW OR EXISTING, THAT MAY RECEIVE RUNOFF FROM DISTURBED AREAS MUST BE PROTECTED BY INSTALLING AND MAINTAINING SILT SACKS DURING CONSTRUCTION.
- 15. WATER FROM CONSTRUCTION TRENCH DEWATERING OR TEMPORARY STREAM DIVERSION WILL PASS FIRST THROUGH A FILTER BAG OR SECONDARY CONTAINMENT STRUCTURE (E.G. HAY BALE OR EROSION CONTROL MIX LINED POOL) PRIOR TO DISCHARGE. THE DISCHARGE SITE SHALL BE SELECTED TO AVOID FLOODING, ICING, AND SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE SHALL THE FILTER BAG OR CONTAINMENT STRUCTURE BE LOCATED WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE.

TOPSOIL

SUITABLE TOPSOIL SALVAGED FROM SITE OR SCREENED, LOOSE AND FRIABLE SANDY LOAM OR LOAM AS DEFINED BY THE USDA SOIL CONSERVATION SERVICE CLASSIFICATION SYSTEM, FREE FROM ADMIXTURE OF SUBSOIL, REFUSE, LARGE STONES, CLODS, ROOTS, WEEDS RHIZOMES OR OTHER UNDESIREABLE FOREIGN MATTER AS DETERMINED BY THE INSPECTING AUTHORITY. CONTRACTOR SHALL SUBMIT REPORTS OF LOAM TEST RESULTS PERFORMED BY AN INDEPENDENT TESTING LABORATORY FOR TOPSOIL FROM DIFFERENT SOURCES PRIOR TO PLACING. THE COST OF TESTING SHALL BE INCIDENTAL TO THE COST OF TOPSOIL TOPSOIL SHALL MEET THE FOLLOWING SPECIFICATIONS:

SAND - 0.08 IN. TO 0.002 IN. DIAMETER (% BY VOLUME)	45	- 7
SILT - 0.002 IN. TO 0.00008 IN. DIAMETER (% BY VOLUME)	20	- 4
CLAY - LESS THAN 0.00008 IN. DIAMETER (% BY VOLUME)	5	- 1

ORGANICS (SHALL MEET THE REQUIREMENTS OF MOOT STANDARD SPECIFICATION 117.09 PEAT HUMUS) (% BY VOLUME). 10 - 20

CALCIUM (CA) (% SATURATION)	60 - 80
MAGNESIUM (MG) (% SATURATION)	10 - 25
POTASSIUM (K) (% SATURATION)	. 2.1 - 3.0
PHOSPHORUS (P) (POUNDS/ACRE)	10 - 40
PH	6.0 - 6.5

MAXIMUM STONE SIZE (INCHES)..........3/4

PERMEABILITY (INCHES PER HOUR)....3 - 10

USE PERMANENT SEED MIXES AND RATES BETWEEN 5/15 AND 9/30. USE TEMPORARY SEED MIXES FOR PERIODS LESS THAN 12 MONTHS. IF USING TEMPORARY SEED MIXES AND RATES BETWEEN 10/1 AND 5/14, RE-SEED WITH PERMANENT SEED MIX AFTER 5/15.

PERMANENT SEED:

MDOT 117,03(a) METHOD NUMBER 3

TEMPORARY SEED:

OATS	80.00 LBS/ACRE	4/01 - 5/14
ANNUAL RYEGRASS	40.00 LBS/ACRE	
SUDANGRASS	40.00 LBS/ACRE	5/15 - 8/14
ANNUAL RYEGRASS	80.00 LBS/ACRE	5/15 - 9/14
WINTER RYE	112.00 LBS/ACRE	9/15 - 9/30
WINTER RYE (W/ MULCH COVER)	112.00 LBS/ACRE	10/01 - 3/31

LIME AND FERTILIZER:

APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 POUNDS PER 1000 SQUARE FEET). APPLY FERTILIZER (10-20-20) AT A RATE OF 800 POUNDS PER ACRE (18.4 POUNDS PER 1000 SQUARE FEET).

MULCH:		
STRAW OR HAY (ANCHORED) STRAW OR HAY (ANCHORED)		PROTECTED AREA WINDY AREAS
SHREDDED OR CHOPPED	· · · · · · · · · · · · · · · · · · ·	and the control of th
JUTE MESH	. AS REQUIRED	MODERATE TO HIG VELOCITY AREAS
EXCELSIOR MAT	. AS REQUIRED	STEEP SLOPES
MULCH ANCHORING		
PEG AND TWINE	WOOD CELLULOSE	FIBER

<u>HOUSEKEEPING</u>

LAY CULVERT

MATCH DITCHLINE

INVERTS TO

THIS PROJECT IS LOCATED IN A STREAM WATERSHED. PROTECTION OF THE GROUNDWATER QUALITY IS ENSURED BY HAVING GOOD HOUSEKEEPING PRACTICES AND MAINTENANCE OF THE STORMWATER SYSTEMS, SPILL PREVENTION MUST BE INCORPORATED INTO THE PLAN. THE PROJECT SHOULD FOLLOW THE FOLLOWING STEPS:

HOMEOWNERS SHOULD BE MADE AWARE OF POSSIBLE GROUNDWATER AND SURFACE WATER CONTAMINATION BASED ON THEIR ACTIONS. THE SPILLING OF PRODUCTS SUCH AS SMALL ENGINE FUEL, CLEANING PRODUCTS AND PAINTS NEED TO BE CLEANED UP. THE USE OF FERTILIZERS AND PESTICIDES SHOULD BE DONE CAUTIOUSLY AND IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

THE MAINTENANCE OF THE LANDSCAPING AND PARKING AREAS SHOULD INCLUDE THE SWEEPING OF THE PARKING AREAS AND REMOVAL OF THE MATERIALS THAT MAY CAUSE DUST.

DURING CONSTRUCTION FOLLOW THE EROSION CONTROL MEASURES OUTLINED IN THE DESIGN DRAWINGS.

DURING CONSTRUCTION, DEVELOP A WASTE HANDLING PROGRAM THAT IDENTIFIES POTENTIAL CONTAMINATES THAT COULD BE INTRODUCED TO THE AQUIFER. FOLLOW HAZARDOUS WASTE RULES IF ANY ITEMS USED ARE CONSIDERED A HAZARDOUS WASTE. IT IS CRITICAL TO THE SITE THAT UNCONTROLLED RELEASES BE PREVENTED.

OIL ABSORBENT PADS SHOULD BE USED WHILE REFUELING EQUIPMENT.

THIS SITE MAY REQUIRE DEWATERING OF TRENCHES. DURING CONSTRUCTION, MONITOR STORMWATER RUNOFF FROM THE EQUIPMENT AND GROUND AREAS TO MINIMIZE CONTAMINATION OF GROUNDWATER.

DRIVEWAY CULVERT

TYPICAL DRIVEWAY CULVERT DETAIL

—2' MIN. COVER (TYP)

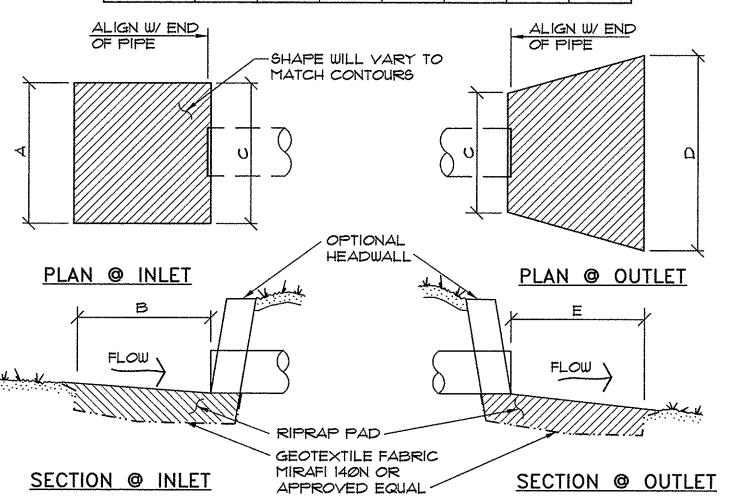
NOT TO SCALE

STABILIZING SITE FOR THE WINTER:

- 1. STANDARD CONDITIONS REQUIRING THE TIMELY STABILIZATION OF DITCHES AND CHANNELS THE CONTRACTOR WILL CONSTRUCT AND STABILIZE ALL STONE-LINED DITCHES AND CHANNELS ON THE SITE BY NOVEMBER 1. THE CONTRACTOR WILL CONSTRUCT AND STABILIZE ALL GRASS-LINED DITCHES AND CHANNELS ON THE SITE BY SEPTEMBER 15. IF THE CONTRACTOR FAILS TO STABILIZE A DITCH OR CHANNEL TO BE GRASS-LINED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE DITCH FOR LATE FALL AND WINTER:
- a. INSTALL A SOD LINING IN THE DITCH THE CONTRACTOR WILL LINE THE DITCH WITH PROPERLY INSTALLED SOD BY OCTOBER I. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL, AND ANCHORING THE SOD WITH JUTE OR PLASTIC MESH TO PREVENT THE SOD STRIPS FROM SLOUGHING DURING FLOW CONDITIONS.
- D. INSTALL A STONE LINING IN THE DITCH THE CONTRACTOR WILL LINE THE DITCH WITH STONE RIPRAP BY NOVEMBER I. THE CONTRACTOR WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE AND LINING THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH. IF NECESSARY, THE CONTRACTOR WILL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINING SO TO PREVENT THE STONE LINING FROM REDUCING THE DITCH'S CROSS-SECTIONAL AREA.
- 2. STANDARD CONDITIONS REQUIRING THE TIMELY STABILIZATION OF DISTURBED SLOPES THE CONTRACTOR WILL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 1. THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15. ANY AREA HAVING A GRADE GREATER THAN 15% (10H:1V) IS A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER:
- a. STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS BY OCTOBER THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 15% OF THE DISTURBED SLOPE BEFORE NOVEMBER 1, THEN THE CONTRACTOR WILL COVER THE SLOPE WITH A LAYER OF WOODWASTE COMPOST AS DESCRIBED IN ITEM C OF THIS CONDITION OR WITH STONE RIPRAP AS DESCRIBED IN ITEM D OF THIS CONDITION.
- b. STABILIZE THE SLOPE WITH SOD THE CONTRACTOR WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY OCTOBER I. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE CONTRACTOR WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:IV).
- C. STABILIZE THE SLOPE WITH WOODWASTE COMPOST THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOODWASTE COMPOST ON THE SLOPE BY NOVEMBER I. PRIOR TO PLACING THE WOODWASTE COMPOST, THE CONTRACTOR WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE CONTRACTOR WILL NOT USE WOODWASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:IV) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
- d. STABILIZE THE SLOPE WITH STONE RIPRAP THE CONTRACTOR WILL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER I. THE CONTRACTOR WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR DRAINAGE AND SOIL SEPARATION.
- 3. STANDARD CONDITIONS REQUIRING THE TIMELY STABILIZATION OF DISTURBED SOILS BY SEPTEMBER 15 THE CONTRACTOR WILL SEED AND MULCH ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15%. IF THE CONTRACTOR FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER:
- a. STABILIZING THE SOIL WITH TEMPORARY VEGETATION BY OCTOBER I THE CONTRACTOR WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS, IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 15% OF THE DISTURBED SOIL BEFORE NOVEMBER I, THEN THE CONTRACTOR WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM C OF THIS STANDARD CONDITION.
- b. STABILIZE THE SOIL WITH SOD THE CONTRACTOR WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER I. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.
- C. STABILIZE THE SOIL WITH MULCH BY NOVEMBER I THE CONTRACTOR WILL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1,000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE CONTRACTOR WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE CONTRACTOR WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

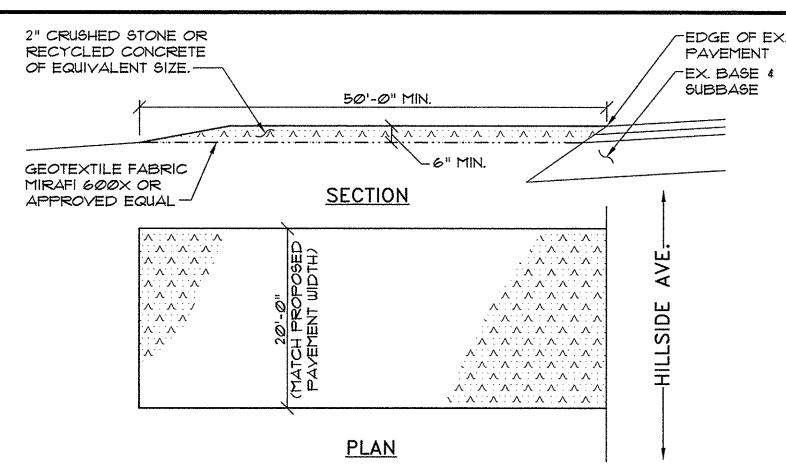
RIPRAP PAD MUST BE INSTALLED WITHIN 48 HOURS OF INSTALLING NEW PIPE OR CULVERT.

PIPE	А	В	С	D	E	PAD DEPTH	D ₅₀
UDSF OUTLETS			3 FT.	3 FT.	3 FT.	10"	4"
12"¢	3 FT.	2 FT.	3 FT.	9 FT.	8 FT.	15"	6"
15"¢	3.75 FT.	2.5 FT.	3.75 FT.	11.5 FT.	10 FT.	15"	6"
24"¢	4 FT.	3 FT.	4 FT.	14.5 FT.	12 FT.	24"	8"



RIPRAP PADS & HEADWALLS DETAILS

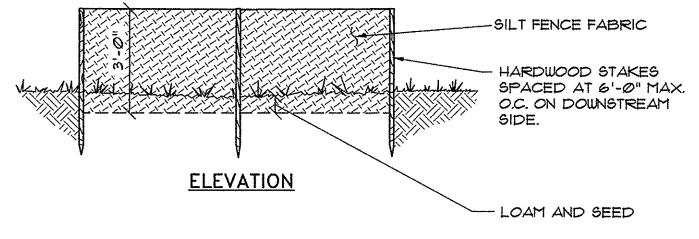
NOT TO SCALE

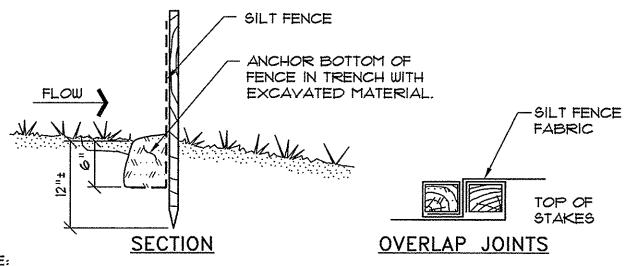


- I. MAINTAIN ENTRANCE IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. IF WASHING IS REQUIRED PREVENT SEDIMENT FROM ENTERING WATERWAYS, DITCHES OR STORM DRAINS.
- 2. REMOVE STABILIZED CONSTRUCTION ENTRANCE TO FINISH ROAD CONSTRUCTION 4 PAVEMENT.

STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE

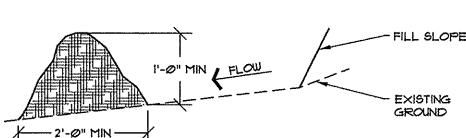




CONTRACTORS OPTION TO USE SEDIMENT BARRIER OR SILT FENCE FOR SLOPE PROTECTION.

NOTES:

F. PH: 50 - 80



SILT FENCE

1. EROSION CONTROL MIX CAN BE MANUFACTURED ON OR OFF THE SITE. IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR FLUME GRIT AND FRAGMENTED WOOD GENERATED FROM WATER-FLUME LOG HANDLING

WOOD CHIPS. GROUND CONSTRUCTION DEBRIS, REPROCESSED WOOD PRODUCTS OR BARK CHIPS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX. EROSION CONTROL MIX SHALL CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT

THE MIX COMPOSITION SHALL MEET THE FOLLOWING STANDARDS: A. ORGANIC MATERIAL: BETWEEN 20% - 100% (DRY WEIGHT BASIS) B. PARTICLE SIZE: BY WEIGHT, 100% PASSING 6" SCREEN, 70-85% PASSING 0.75" SCREEN C. THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED. D. LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX.

E. SOLUBLE SALTS CONTENT SHALL BE LESS THAN 4.0 MMHOS/CM.

- 2. ON SLOPES LESS THAN 5% OR AT THE BOTTOM OF SLOPES 2:1 OR LESS UP TO 20 FEET LONG, THE BARRIER MUST CONFORM TO THE ABOVE DIMENSIONS. ON THE LONGER OR STEEPER SLOPES, THE BARRIER SHOULD BE WIDER TO ACCOMMODATE THE ADDITIONAL FLOW.
- 3. THE BARRIER MUST BE PLACED ALONG A RELATIVELY LEVEL ELEVATION. IT MAY BE NECESSARY TO CUT TALL GRASSES OR WOODY VEGETATION TO AVOID CREATING VOIDS AND BRIDGES THAT WOULD ENABLE FINES TO WASH UNDER THE BARRIER THROUGH THE GRASS BLADES OR PLANT STEMS.
- 4. LOCATIONS WHERE OTHER BMP'S SHOULD BE USED: A. AT LOW POINTS OF CONCENTRATED FLOW
 - B. BELOW CULVERT OUTLET APRONS C. WHERE A PREVIOUS STAND-ALONE EROSION CONTROL MIX APPLICATION HAS FAILED D. AT THE BOTTOM OF STEEP PERIMETER SLOPES THAT ARE MORE THAN 50 FEET FROM TOP TO BOTTOM (LARGE UPGRADIENT WATERSHED) E. AROUND CATCH BASINS AND CLOSED STORM DRAIN SYSTEMS.
- 5. THE EROSION CONTROL MIX BARRIERS SHOULD BE INSPECTED REGULARLY AND AFTER EACH LARGE RAINFALL. REPAIR ALL DAMAGED SECTIONS OF BERM IMMEDIATELY BY REPLACING OR ADDING ADDITIONAL MATERIAL PLACED ON THE BERM TO THE DESIRED HEIGHT AND WIDTH.
- 6. IT MAY BE NECESSARY TO REINFORCE THE BARRIER WITH SILT FENCE OR STONE CHECK DAMS IF THERE ARE SIGNS OF UNDERCUTTING OR THE IMPOUNDMENT OF LARGE VOLUMES OF WATER
- 7. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE
- 8. REPLACE SECTIONS OF BERM THAT DECOMPOSE, BECOME CLOGGED WITH SEDIMENT OR OTHERWISE BECOME INEFFECTIVE. THE BARRIER SHOULD BE RESHAPED AS NEEDED.
- 9. EROSION CONTROL MIX BARRIERS CAN BE LEFT IN PLACE AFTER CONSTRUCTION. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER BARRIER IS NO LONGER REQUIRED SHOULD BE SPREAD TO CONFORM TO THE EXISTING GRADE AND BE SEEDED AND MULCHED. WOODY VEGETATION CAN BE PLANTED INTO THE BARRIERS, OR THEY CAN BE OVER-SEEDED WITH LEGUMES. IF THE BARRIER NEEDS TO BE REMOVED, IT CAN BE SPREAD OUT

EROSION CONTROL MIX SEDIMENT BARRIER SURFACE DRAINAGE SEDIMENT CONTROL

NOT TO SCALE

I CONTROI DETAILS

EER

SUBDIVISION, CUMBERLAND, N

EROSION NOTES & I $\overline{O} =$

MAP/LOT R04 / 24

TRAIL DESIGN NOTES

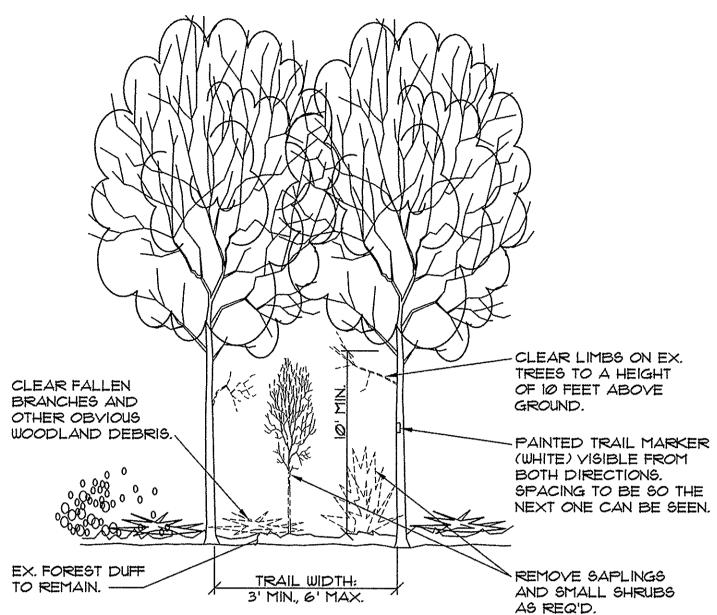
- PROPOSED TRAILS SHALL CONFORM TO THE FOLLOWING STANDARDS:

 A. TRAIL IMPROVEMENTS SHALL DEMONSTRATE ADHERENCE TO PRINCIPLES OF
- QUALITY TRAIL DESIGN.

 B. TRAILS SHALL HAVE A VERTICAL CLEARANCE OF NOT LESS THAN TEN (10) FEET.

 C. THE WIDTH OF THE TRAIL SURFACE MAY VARY DEPENDING UPON TYPE OF USE TO BE ACCOMMODATED, BUT IN NO CASE SHALL IT BE LESS THAN THREE (3) FEET
- OR GREATER THAN SIX (6) FEET.

 D. NO TRAIL SHALL BE DESIGNED WITH THE INTENT TO ACCOMMODATE MOTORIZED VEHICLES.

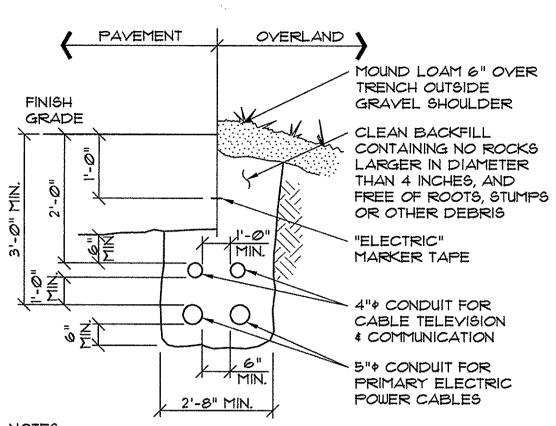


TES: THE TRAIL IS PRIVATE FOR THE

1. THE TRAIL IS PRIVATE FOR THE 5 HOME OWNERS AND THEIR GUESTS.
2. MINOR GRADING AND SHAPING OF THE TRAIL IS REQUIRED TO REMOVE RUTS.
3. ALL AREAS DISTURBED NEED TO BE LOAMED AND SEEDED.

WOODS TRAIL SECTION

NOT TO SCALE



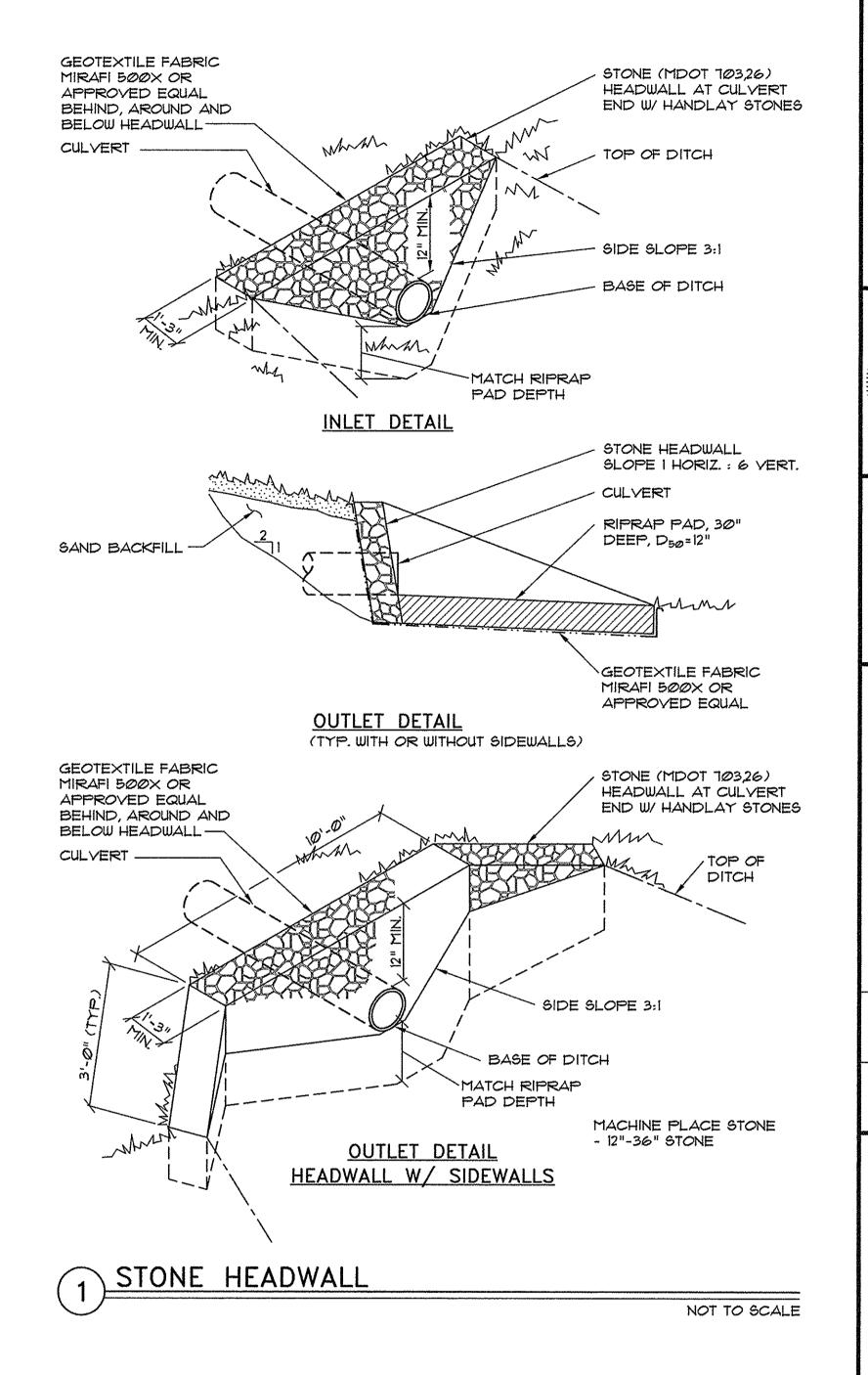
NOTES:

1. INSTALLATION SHALL NOT ALLOW INTER-TWINING OF CABLES.

- DIRECT BURY ELECTRICAL CABLES MAY BE USED IF ALLOWED BY CENTRAL MAINE POWER.
- DIRECT BURY CABLES EXCEPT UNDER PAVED AREAS. PROVIDE SCH. 40 PVC CONDUIT UNDER PAVED AREAS, EXTEND CONDUIT 5'-0" BEYOND EDGE OF PAVEMENT.
- 4. CONFIRM CONDUIT SIZES WITH INDIVIDUAL UTILITY COMPANIES PRIOR TO INTALLATION.
- 5. COORDINATE FINAL LAYOUT WITH INDIVIDUAL UTILITY COMPANIES.

CABLE TRENCH SECTION

NOT TO SCALE



PINKHAM & GREER

CIVIL ENGINEERS
28 WWWH AVE. PORTLAND, WE. 04103
TEL: 207.781.5242 FAX: 207.781.4245

THOMAS S. GREER NO. 4206 NA. 1816

SOLAR WAY SUBDIVISION

1 SOI

HILLSIDE AVENUE, CUMBERLAND, MAINE

CUMI

C4.0

MAP/I OT R04 / 24

