

**Planning Board Meeting
December 8, 2020 – 7:00 PM
Town Office Conference Room**



Meeting Materials

**Planning Board
Tuesday, December 8, 2020
7:00 PM – Town Hall**

Please Note: This electronic version of the packet includes meeting materials from both the canceled November 24th meeting as well as new materials for December 8th.

CALL TO ORDER

MINUTES

October 27, 2020

November 10, 2020

COMMUNICATIONS

OLD BUSINESS

Formal Site Plan Review – NextGrid – Lewiston Junction Road – Map 3 Lot 9A

NEW BUSINESS

Shoreland Zoning Application – Gerald and Margaret Dugal – 49 Mountain View Drive
– Map 49 Lot 31

Shoreland Zoning Application – Peter and Jane Savas – 219 Black Island Road – Map 25 Lot 27

Findings of Fact and Conclusions of Law for:

Formal Shoreland Zoning Application – Range Pond State Park, State of Maine, Dept. of
Agriculture, Conservation and Forestry, Bureau of Parks and Lands
– 26 State Park Road – Map 6 Lot 40A

Formal Site Plan Review – Affordable Homes, Inc – Poland Corner Road – Map 11 Lot 5

ANY OTHER BUSINESS

ADJOURNMENT

POLAND PLANNING BOARD
MINUTES OF MEETING
October 27, 2020
Approved on _____, 2020

CALL TO ORDER – Chairperson Porter called the meeting to order at 7:00pm with Members Cheryl Skilling, Stephanie Floyd, Jimmy Walker, CEO Scott Neal, and Sarah Merrill present. Member George Greenwood is absent without notice.

MINUTES – October 13, 2020 – Member Floyd moved to approve the minutes. Member Walker seconded the motion. Discussion: None Vote: 4-yes 0-no

COMMUNICATIONS – None

OLD BUSINESS – None

NEW BUSINESS – Formal Shoreland Zoning Application – Range Pond State Park, State of Maine, Dept. of Agriculture, Conservation and Forestry, Bureau of Parks and Lands – 26 State Park Road – Map 6 Lot 40A

Rob Prue of Pine Tree Engineering Inc and David Rodrigues from the Bureau of Parks and Lands presented the project to the Board. The project would relocate the control building/booth further away from Empire Road and add a second incoming lane with the new booth between the lanes. These changes will keep traffic from backing up onto Empire Road during busy times and allow for two people in the booth to be able to work safely.

Member Floyd moved to approve the checklist as complete. Member Walker seconded the motion. Discussion: None Vote: 4-yes 0-no

Member Floyd moved to approve the Formal Shoreland Zoning Application with the following conditions: the public hearing is waived, and the site walk is waived. Member Walker seconded the motion. Discussion: None Vote: 4-yes 0-no

Findings of Fact and Conclusions of Law for:

Minor Subdivision Application – Caleb Verrill – Wild Turkey Way
– Map 9 Lot 28 Sub-lots 2B and 3

Member Floyd moved to approve the Findings of Fact. Member Walker seconded the motion. Discussion: None Vote: 3-yes 0-no 1-abstained (Member Skilling abstained to avoid a conflict of interest).

ANY OTHER BUSINESS – None

**POLAND PLANNING BOARD
MINUTES OF MEETING
October 27, 2020
Approved on _____, 2020**

ADJOURN – Member Floyd moved to adjourn the meeting at 7:30 pm. Member Walker seconded the motion. Discussion: None Vote: 4-yes 0-no

Recorded by: Sarah Merrill

Planning Board

_____ James Porter, Chairperson	_____ <u>Absent without Notice</u> George Greenwood, Member
_____ Stephane Floyd, Vice Chairperson	_____ Cheryl Skilling, Member
_____ James Walker, Member	

POLAND PLANNING BOARD
MINUTES OF MEETING
November 10, 2020
Approved on _____, 2020

CALL TO ORDER – Chairperson Porter called the meeting to order at 7:00pm with Members George Greenwood, James Walker, CEO Scott Neal, and Sarah Merrill present. Members Stephani Floyd and Cheryl Skilling are absent with notice.

MINUTES – October 27, 2020 – The minutes are being held to the next meeting as there was not a quorum to approve them.

COMMUNICATIONS – None

OLD BUSINESS – None

NEW BUSINESS – Formal Site Plan Review – Blue Wave Solar – Johnson Hill Road – Map 13 Lot 50

Chris Byers, Dale Knapp, and Colin Sexton presented the plan to the Board. Blue Wave would like to operate a solar farm on approximately 18.6 acres. The Board had questions and would like some additional information.

Member Greenwood moved to table the application pending further information.
Member Walker seconded the motion. Discussion: None Vote: 3-yes 0-no

Formal Site Plan Review – Affordable Homes, Inc – Poland Corner Road – Map 11 Lot 5
Orrin Welch and Wes Harden presented the project to the Board. Mr. Welch would like to bring 20 storage containers, sized 8' x 20', onto the property near the water tower. The containers will be used as storage for tenants and two containers will be used by Mr. Welch to store materials for the park. Mr. Welch would like tenants of Affordable Homes, Inc, at both Northern Springs and Maple View Estates, to be able to use the storage containers.

Member Greenwood moved to approve the checklist as complete. Member Walker seconded the motion. Discussion: None Vote: 3-yes 0-no

Member Greenwood moved to approve the Formal Site Plan Review Application with the following conditions: the storage containers are only to be used by the tenants of Northern Springs, Maple View Estates, and Orrin Welch, the public hearing is waived, and the site walk is waived. Member Walker seconded the motion.
Discussion: None Vote: 3- yes 0-no

ANY OTHER BUSINESS – None

POLAND PLANNING BOARD
MINUTES OF MEETING
November 10, 2020
Approved on _____, 2020

ADJOURN – Member Greenwood moved to adjourn the meeting at 8:21 pm. Member Walker seconded the motion. Discussion: None Vote: 3-yes 0-no

Recorded by: Sarah Merrill

Planning Board

James Porter, Chairperson

George Greenwood, Member

Absent with Notice
Stephane Floyd, Vice Chairperson

Absent with Notice
Cheryl Skilling, Member

James Walker, Member



November 18, 2020

Ref: 55304.00

Town of Poland
Planning Board
1231 Maine Street
Poland, ME 04274

Re: **NextGrid – Lewiston Junction Road Solar
Conditional Approval**

Dear Board Members:

On June 9, 2020, the Town of Poland's Planning Board conditionally approve NextGrid's Lewiston Junction Road solar project subject to certain conditions. On behalf of NextGrid, Vanasse, Hangen, Brustlin, Inc. (VHB) is pleased to provide the following submittals:

- **Revised Site Plans (Attachment 1):** The previously submitted Site Plans have been revised so as to provide for a twenty-foot wide road as agreed upon with the Planning Board. In addition, a property boundary survey has been completed and is included in these Site Plans.
- **Road Name Application (Attachment 2):** An application is attached to name the new road that will be installed to support the solar facility.
- **Stormwater Management Plan (Attachment 3):** A stormwater management memo is provided to demonstrate how the proposed design will treat stormwater.

We would appreciate your confirmation that, with these submittals, the Lewiston Junction Road Solar project is fully approved. Please do not hesitate to contact me at GPaquette@VHB.com or (207) 889-3102, if you have any questions regarding the Project.

Sincerely,

Gil Paquette
Director, Energy/Environmental Services

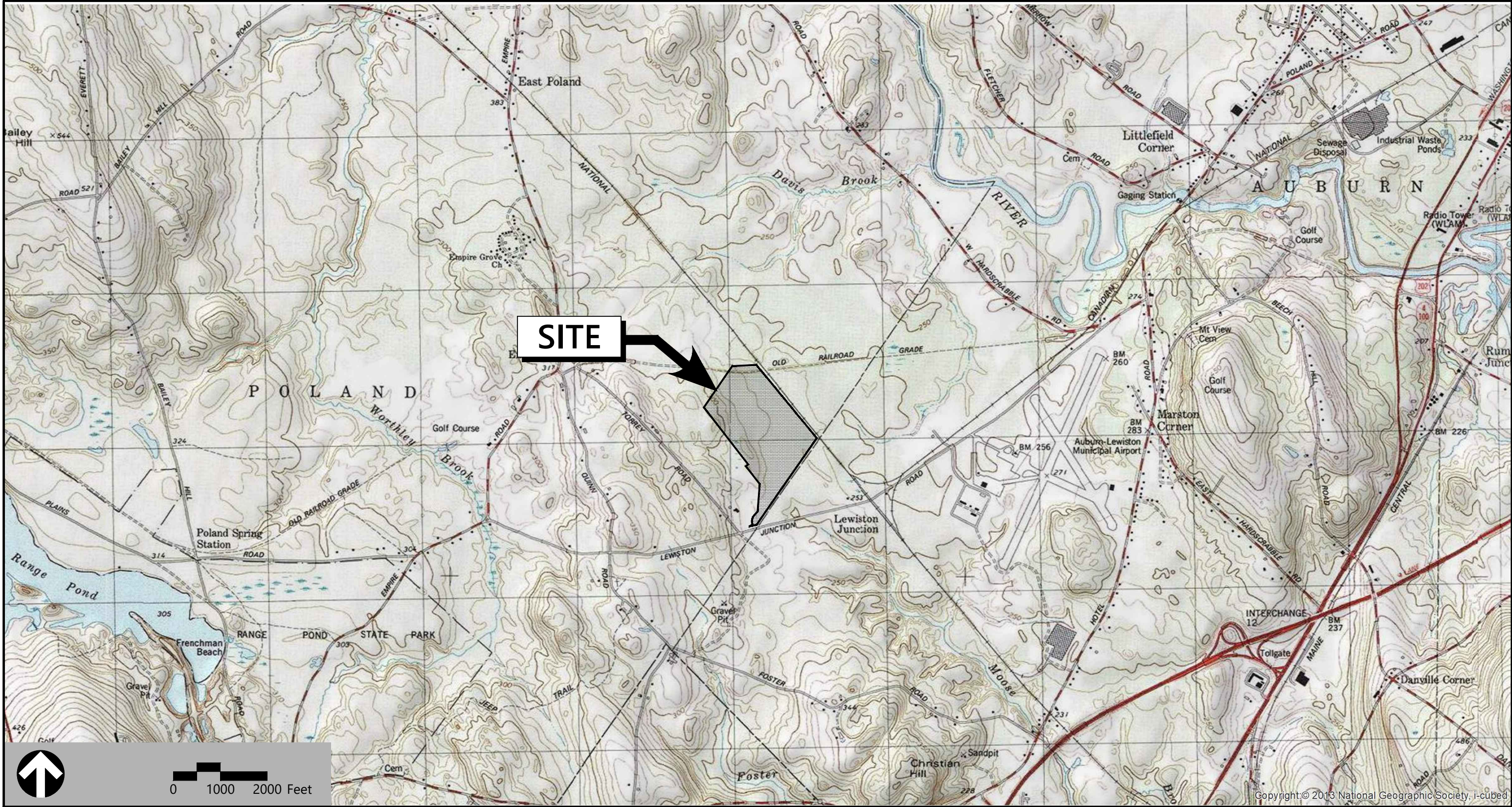
ATTACHMENT 1
REVISED SITE PLANS

Site Plans

Issued for	Permitting
Date Issued	February 28, 2020
Latest Issue	November 4, 2020

NextGrid Solar Farm

Lewiston Junction
Poland, Maine 04274



Owner

Thompsonrolec Enterprises, LLC
P.O. Box 1911
Lewiston, Maine 04241

Applicant

NextGrid Inc.
P.O. Box 7775 #73069
San Francisco, CA 94120

Assessor's Information:

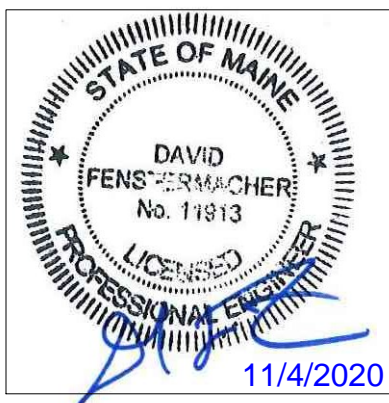
Map 3, Lot 9A

Sheet Index

No.	Drawing Title	Latest Issue
C1.0	Legend and General Notes	November 4, 2020
C2.0	Master Plan	November 4, 2020
C3.1	Erosion and Sediment Control Site Plan 1	November 4, 2020
C3.2	Erosion and Sediment Control Site Plan 2	November 4, 2020
C4.1	Site Details 1	November 4, 2020
C4.2	Site Details 2	November 4, 2020

Reference Drawings

No.	Drawing Title	Latest Issue
Sv-1	ALTA/NSPS Land Title Survey	October 7, 2020
Sv-2	ALTA/NSPS Land Title Survey Property Descriptions	October 7, 2020



Legend

Exist.	Prop.		Exist.	Prop.	
		PROPERTY LINE			CONCRETE
		PROJECT LIMIT LINE			HEAVY DUTY PAVEMENT
		RIGHT-OF-WAY/PROPERTY LINE			BUILDINGS
		EASEMENT			RIPRAP
		BUILDING SETBACK			CONSTRUCTION EXIT
		PARKING SETBACK			
		BASELINE			TOP OF CURB ELEVATION
		CONSTRUCTION LAYOUT			BOTTOM OF CURB ELEVATION
		ZONING LINE			SPOT ELEVATION
		TOWN LINE			TOP & BOTTOM OF WALL ELEVATION
					BORING LOCATION
		LIMIT OF DISTURBANCE			TEST PIT LOCATION
		WETLAND LINE WITH FLAG			MONITORING WELL
		FLOODPLAIN			
		BORDERING LAND SUBJECT TO FLOODING			UNDERDRAIN
		WETLAND BUFFER ZONE			DRAIN
		NO DISTURB ZONE			ROOF DRAIN
		200' RIVERFRONT AREA			SEWER
					FORCE MAIN
					OVERHEAD WIRE
		GRAVEL ROAD			WATER
		EDGE OF PAVEMENT			FIRE PROTECTION
		BITUMINOUS BERM			DOMESTIC WATER
		BITUMINOUS CURB			GAS
		CONCRETE CURB			ELECTRIC
		CURB AND GUTTER			STEAM
		EXTRUDED CONCRETE CURB			TELEPHONE
		MONOLITHIC CONCRETE CURB			FIRE ALARM
		PRECAST CONC. CURB			CABLE TV
		SLOPED GRAN. EDGING			
		VERT. GRAN. CURB			CATCH BASIN CONCENTRIC
		LIMIT OF CURB TYPE			CATCH BASIN ECCENTRIC
		SAWCUT			DOUBLE CATCH BASIN CONCENTRIC
					DOUBLE CATCH BASIN ECCENTRIC
					GUTTER INLET
		BUILDING			DRAIN MANHOLE CONCENTRIC
		BUILDING ENTRANCE			DRAIN MANHOLE ECCENTRIC
		LOADING DOCK			TRENCH DRAIN
		BOLLARD			PLUG OR CAP
		DUMPSTER PAD			CLEANOUT
		SIGN			FLARED END SECTION
		DOUBLE SIGN			HEADWALL
		STEEL GUARDRAIL			SEWER MANHOLE CONCENTRIC
		WOOD GUARDRAIL			SEWER MANHOLE ECCENTRIC
		PATH			CURB STOP & BOX
		TREE LINE			WATER VALVE & BOX
		WIRE FENCE			TAPPING SLEEVE, VALVE & BOX
		FENCE			SIAMESE CONNECTION
		STOCKADE FENCE			FIRE HYDRANT
		STONE WALL			WATER METER
		RETAINING WALL			POST INDICATOR VALVE
		STREAM / POND / WATER COURSE			WATER WELL
		DETENTION BASIN			
		HAY BALES			GAS GATE
		SILT FENCE			GAS METER
		SILT SOCK / STRAW WATTLE			
					ELECTRIC MANHOLE
		MINOR CONTOUR			ELECTRIC METER
		MAJOR CONTOUR			LIGHT POLE
					TELEPHONE MANHOLE
		PARKING COUNT			
		COMPACT PARKING STALLS			TRANSFORMER PAD
		DOUBLE YELLOW LINE			UTILITY POLE
		STOP LINE			GUY POLE
		CROSSWALK			GUY WIRE & ANCHOR
		ACCESSIBLE CURB RAMP			HAND HOLE
		ACCESSIBLE PARKING			PULL BOX
		VAN-ACCESSIBLE PARKING			
					MATCHLINE

Abbreviations

General	
ABAN	ABANDON
ACR	ACCESSIBLE CURB RAMP
ADJ	ADJUST
APPROX	APPROXIMATE
BIT	BITUMINOUS
BS	BOTTOM OF SLOPE
BWLL	BROKEN WHITE LANE LINE
CONC	CONCRETE
DYCL	DOUBLE YELLOW CENTER LINE
EL	ELEVATION
ELEV	ELEVATION
EX	EXISTING
FDN	FOUNDATION
FFE	FIRST FLOOR ELEVATION
GRAN	GRANITE
GTD	GRADE TO DRAIN
LA	LANDSCAPE AREA
LOD	LIMIT OF DISTURBANCE
MAX	MAXIMUM
MIN	MINIMUM
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PERF	PERFORATED
PROP	PROPOSED
REM	REMOVE
RET	RETAIN
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
SWEL	SOLID WHITE EDGE LINE
SWLL	SOLID WHITE LANE LINE
TS	TOP OF SLOPE
TYP	TYPICAL
Utility	
CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
DCB	DOUBLE CATCH BASIN
DMH	DRAIN MANHOLE
CIP	CAST IRON PIPE
COND	CONDUIT
DIP	DUCTILE IRON PIPE
FES	FLARED END SECTION
FM	FORCE MAIN
F&G	FRAME AND GRATE
F&C	FRAME AND COVER
GI	GUTTER INLET
GT	GREASE TRAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HH	HANDHOLE
HW	HEADWALL
HYD	HYDRANT
INV	INVERT ELEVATION
I=	INVERT ELEVATION
LP	LIGHT POLE
MES	METAL END SECTION
PIV	POST INDICATOR VALVE
PWW	PAVED WATER WAY
PVC	POLYVINYLCHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R=	RIM ELEVATION
RIM=	RIM ELEVATION
SMH	SEWER MANHOLE
TSV	TAPPING SLEEVE, VALVE AND BOX
UG	UNDERGROUND
UP	UTILITY POLE

Purpose of Plans

- THE PURPOSE OF THIS PLAN IS TO SHOW THE DEVELOPMENT OF A SOLAR FARM IN POLAND, MAINE.

General

- CONTRACTOR SHALL NOTIFY "DIG-SAFE" (811 OR 1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
- ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH STATE AND LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).
- AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE 6 INCHES LOAM AND SEED.
- WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS. WORK WITHIN STATE RIGHTS-OF-WAY SHALL CONFORM TO THE LATEST EDITION OF THE STATE HIGHWAY DEPARTMENT'S STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
- UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
- TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL AND NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
- CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
- DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
- CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
- THIS PROJECT DISTURBS MORE THAN ONE ACRE OF LAND AND FALLS WITHIN THE MPDES MAINE CONSTRUCTION GENERAL PERMIT (MCGP) PROGRAM. PRIOR TO THE START OF CONSTRUCTION CONTRACTOR IS TO FILE A NOTICE OF INTENT WITH THE MDEP AND PREPARE AN EROSION AND SEDIMENT CONTROL PLAN IN ACCORDANCE WITH THE MPDES REGULATIONS.

Utilities

- THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR IT'S REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES. NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.
- WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.
- SET CATCH BASIN RIMS, AND INVERTS OF SEWERS, DRAINS, AND DITCHES IN ACCORDANCE WITH ELEVATIONS ON THE GRADING AND UTILITY PLANS.
 - PAVEMENTS AND CONCRETE SURFACES: FLUSH
 - ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
 - LANDSCAPE, LOAM AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION.
- RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:
 - PAVEMENTS AND CONCRETE SURFACES: FLUSH
 - ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
 - LANDSCAPE, LOAM AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION.
- THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, FIRE ALARM, ETC.). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH OWNER AND DESIGN REPRESENTATIVE.
- CONTRACTOR SHALL MAKE ARRANGEMENTS FOR AND SHALL BE RESPONSIBLE FOR PAYING FEES FOR POLE RELOCATION AND FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, FIRE ALARM, AND ANY OTHER PRIVATE UTILITIES, WHETHER WORK IS PERFORMED BY CONTRACTOR OR BY THE UTILITIES COMPANY.
- UTILITY PIPE MATERIALS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED ON THE PLAN:
 - STORM DRAINAGE PIPES SHALL BE SMOOTH INTERIOR CORRUGATED HIGH DENSITY POLYETHYLENE (HDPE) UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND SHALL FURNISH EXCAVATION, INSTALLATION, AND BACKFILL OF ELECTRICAL FURNISHED SITEWORK RELATED ITEMS SUCH AS PULL BOXES, CONDUITS, DUCT BANKS, LIGHT POLE BASES, AND CONCRETE PADS. SITE CONTRACTOR SHALL FURNISH CONCRETE ENCASEMENT OF DUCT BANKS IF REQUIRED BY THE UTILITY COMPANY AND AS INDICATED ON THE DRAWINGS.
- ALL DRAINAGE AND SANITARY STRUCTURE INTERIOR DIAMETERS (4" MIN.) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS AND LOCAL MUNICIPAL STANDARDS. FOR MANHOLES THAT ARE 20 FEET IN DEPTH AND GREATER, THE MINIMUM DIAMETER SHALL BE 5 FEET.

Layout and Materials

- DIMENSIONS ARE FROM THE EDGE OF GRAVEL, EDGE OF CONCRETE, UNLESS OTHERWISE NOTED.
- SEE ELECTRICAL DRAWINGS FOR EXACT PANEL DIMENSIONS.
- PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LAND SURVEYOR (PLS).
- PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT AND/OR GRAVEL DRIVE ELEVATIONS AT INTERFACE WITH PROPOSED DRIVES, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.

Demolition

- CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING MANMADE SURFACE FEATURES WITHIN THE LIMIT OF WORK INCLUDING BUILDINGS, STRUCTURES, PAVEMENTS, SLABS, CURBING, FENCES, UTILITY POLES, SIGNS, ETC. UNLESS INDICATED OTHERWISE ON THE DRAWINGS. REMOVE AND DISPOSE OF EXISTING UTILITIES, FOUNDATIONS AND UNSUITABLE MATERIAL BENEATH AND FOR A DISTANCE OF 10 FEET BEYOND THE PROPOSED BUILDING FOOTPRINT INCLUDING EXTERIOR COLUMNS.
- EXISTING UTILITIES SHALL BE TERMINATED, UNLESS OTHERWISE NOTED, IN CONFORMANCE WITH LOCAL, STATE AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES.
- CONTRACTOR SHALL DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.
- THE DEMOLITION LIMITS DEPICTED IN THE PLANS IS INTENDED TO AID THE CONTRACTOR DURING THE BIDDING AND CONSTRUCTION PROCESS AND IS NOT INTENDED TO DEPICT EACH AND EVERY ELEMENT OF DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE DETAILED SCOPE OF DEMOLITION BEFORE SUBMITTING ITS BID/PROPOSAL TO PERFORM THE WORK AND SHALL MAKE NO CLAIMS AND SEEK NO ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING EXECUTION OF THE WORK.
- UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTES OR POLLUTANTS AT THE PROJECT SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS OF LOSS, DAMAGE, EXPENSE, DELAY, INJURY OR DEATH ARISING FROM THE PRESENCE OF HAZARDOUS MATERIAL AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOREOVER, THE ENGINEER SHALL HAVE NO ADMINISTRATIVE OBLIGATIONS OF ANY TYPE WITH REGARD TO ANY CONTRACTOR AMENDMENT INVOLVING THE ISSUES OF PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF ASBESTOS OR OTHER HAZARDOUS MATERIALS.

Existing Conditions Information

- BASE PLAN: THE PROPERTY LINES AND TOPOGRAPHY HAVE BEEN PROVIDED BY MAINE GIS. TOPOGRAPHY IS BASED ON 2M DEM LIDAR FLIGHTS BETWEEN THE YEARS OF 2006 - 2013.
 - DELINEATION OF THE WETLANDS AND PLACEMENT OF THE FLAGS WAS PERFORMED BY: VHB DURING NOVEMBER 2019.
 - FLAGS MARKING THE WETLANDS WERE LOCATED BY: VHB USING GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) RECEIVERS WITH SUB-METER ACCURACY.
 - APPROXIMATE WETLANDS WERE MAPPED USING TOPOGRAPHY, VEGETATION AND SOILS INFORMATION AS GUIDELINES.
- TOPOGRAPHY: ELEVATIONS ARE BASED ON NGVD 88.

Document Use

- THESE PLANS AND CORRESPONDING CADD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE, AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF VHB. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO VHB.
- CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
- SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.



500 Southborough Drive
Suite 105B
South Portland, ME 04106
207.889.3150

NextGrid Solar Farm
Lewiston Junction Road
Poland, Maine 04274

No.	Revision	Date	Appr'd
1	GRADING/STORMWATER UPDATES	8/26/2020	EKG
2	ADDRESS TOWN COMMENTS	10/13/2020	CMG
3	PLAN REVISIONS	11/4/2020	CMG


Designed by	PGG	Checked by	CMG
Issued for		Date	

Permitting February 28, 2020

Not Approved for Construction

Drawing Title

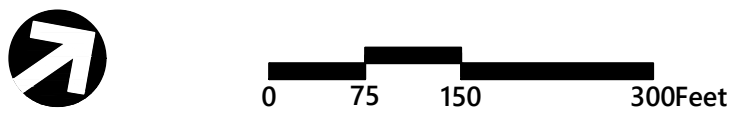
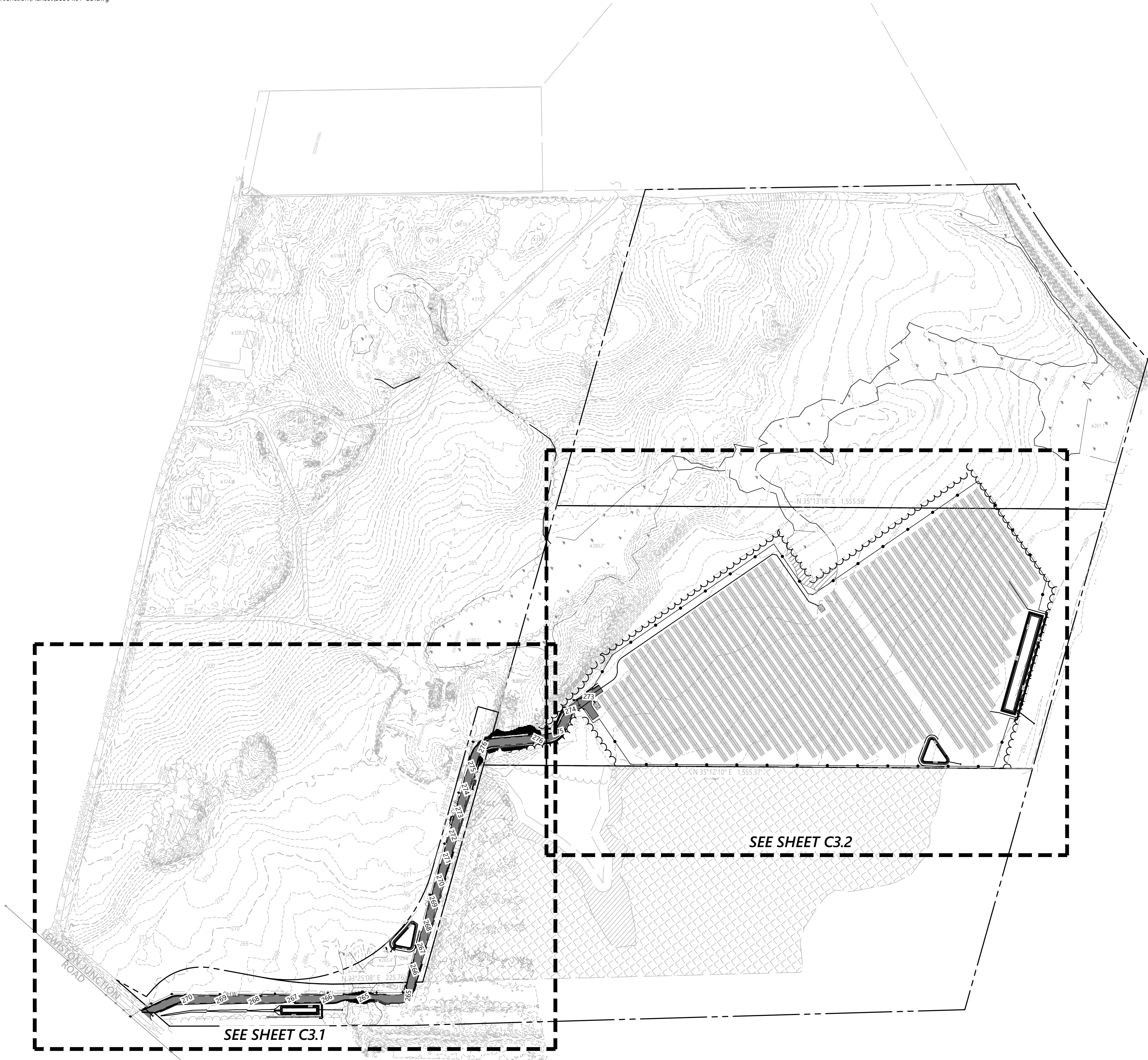
Legend and General Notes



11/4/2020

Sheet 1 of 6

Project Number 55304.01



NextGrid Solar Farm
Lewiston Junction Road
Poland, Maine 04274

No.	Revision	Date	Appr'd.
1	GRADING/STORMWATER UPDATES	8/26/2020	EKG
2	ADDRESS TOWN COMMENTS	10/13/2020	CMG
3	PLAN REVISIONS	11/4/2020	CMG

Designed by	Checked by
PGG	CMG
Issued for	Date
Permitting	February 28, 2020

Not Approved for Construction
Drawing Title
Master Plan

STATE OF MAINE
DAVID FENSTERMAKER
No. 11813
LICENSED PROFESSIONAL ENGINEER
11/4/2020

C2.0
Sheet 2 of 6
Project Number 55304.01

Zoning Summary Chart

Zoning District(S):	General Purpose 3 (G-3)	
Overlay District(S):	Wildlife Management District	
Zoning Regulation Requirements	Required*	Provided
FRONTAGE	384 Feet	2,535 Feet
FRONT YARD SETBACK	50 Feet	1,210 Feet
SIDE YARD SETBACK	40 Feet	120 Feet
REAR YARD SETBACK	25 Feet	>25 Feet

* Zoning regulation requirements as specified in the Town of Poland Zoning Ordinance

Wetland Impact Summary

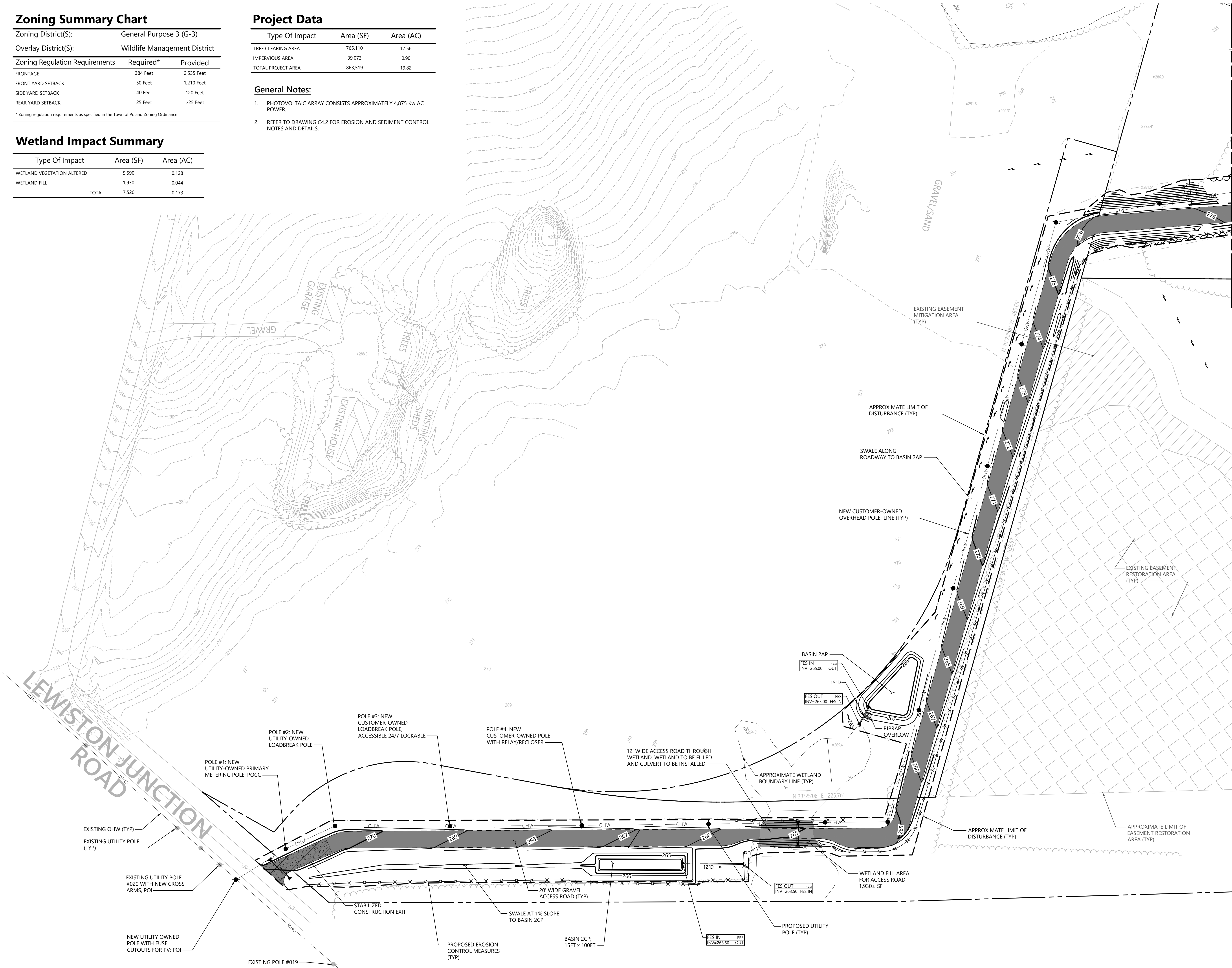
Type Of Impact	Area (SF)	Area (AC)
WETLAND VEGETATION ALTERED	5,590	0.128
WETLAND FILL	1,930	0.044
TOTAL	7,520	0.173

Project Data

Type Of Impact	Area (SF)	Area (AC)
TREE CLEARING AREA	765,110	17.56
IMPERVIOUS AREA	39,073	0.90
TOTAL PROJECT AREA	863,519	19.82

General Notes:

- PHOTOVOLTAIC ARRAY CONSISTS APPROXIMATELY 4.875 Kw AC POWER.
- REFER TO DRAWING C4.2 FOR EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.

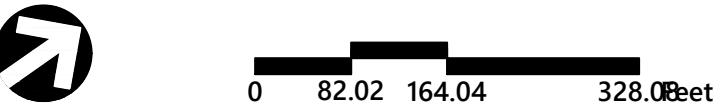


MATCHLINE - SEE SHEET C3.2



vhb.com

500 Southborough Drive
Suite 105B
South Portland, ME 04106
207.889.3150



NextGrid Solar Farm Lewiston Junction Road Poland, Maine 04274

No.	Revision	Date	Appr'd.
1	GRADING/STORMWATER UPDATES	8/26/2020	EKG
2	ADDRESS TOWN COMMENTS	10/13/2020	CMG
3	PLAN REVISIONS	11/4/2020	CMG

Designed by	PGG	Checked by	CMG
Issued for		Date	February 28, 2020

Permitting

Not Approved for Construction
Drawing Title
**Erosion and Sediment
Control Site Plan 1**



C3.1

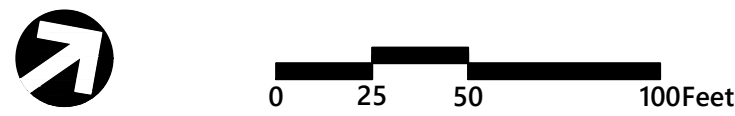
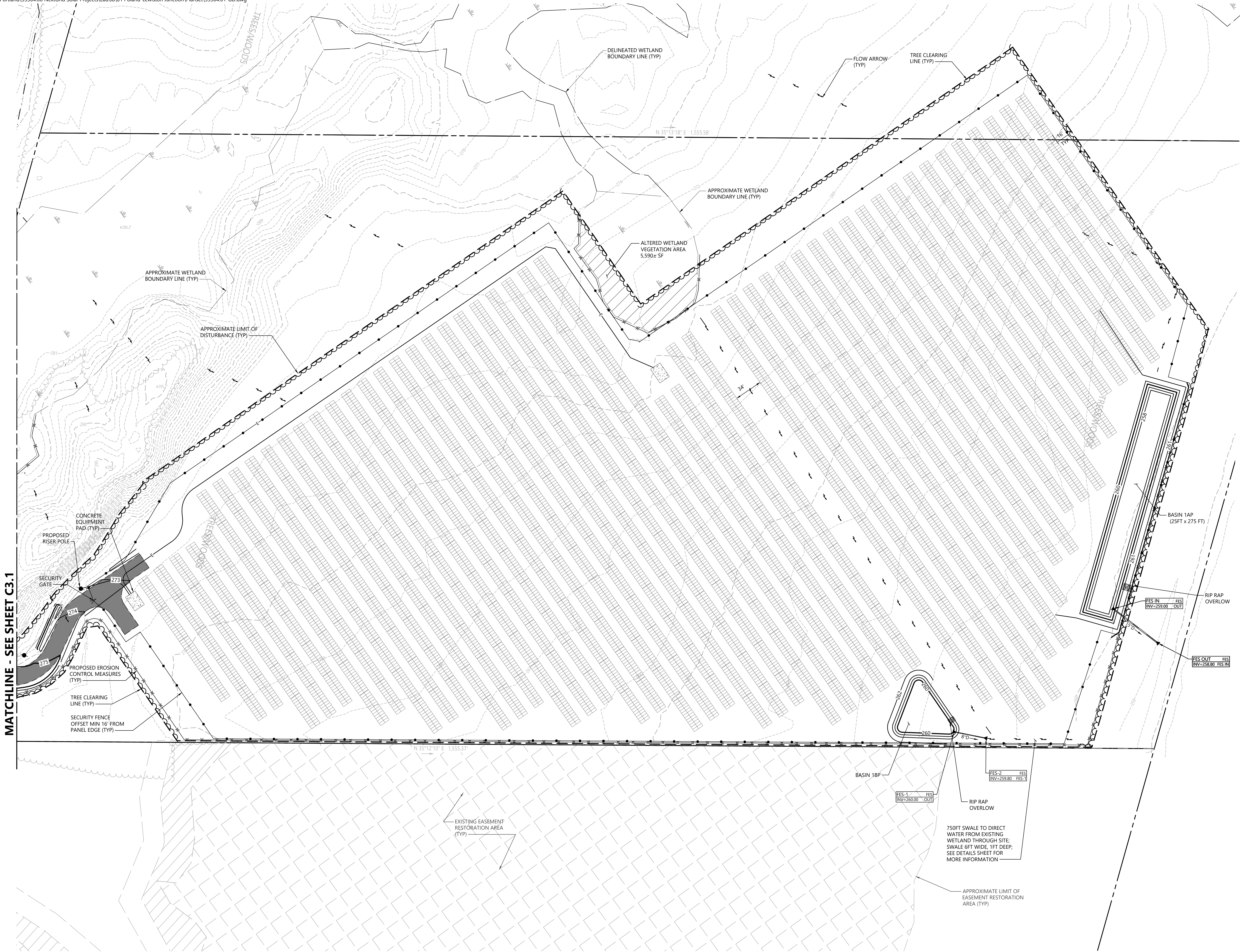
Sheet 3 of 6

Project Number 55304.01



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MATCHLINE - SEE SHEET C3.1



NextGrid Solar Farm
Lewiston Junction Road
Poland, Maine 04274

No.	Revision	Date	Appr'd.
1	GRADINGS/STORMWATER UPDATES	8/26/2020	EKG
2	ADDRESS TOWN COMMENTS	10/13/2020	CMG
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Designed by	PGG	Checked by	CMG
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Issued for **Permitting** Date **February 28, 2020**

Not Approved for Construction
Drawing Title
**Erosion and Sediment
Control Site Plan 2**



Drawing Number

C3.2

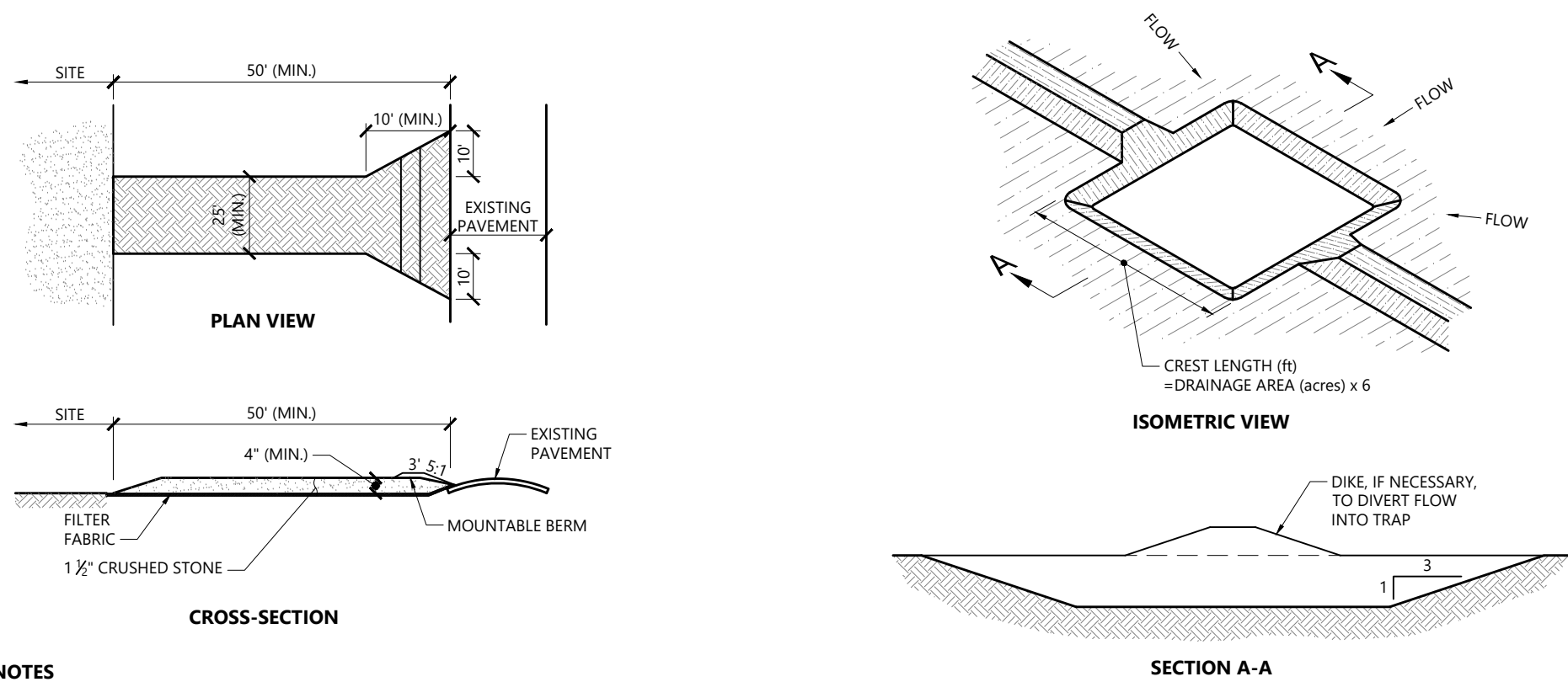
Sheet 4 of 6

Project Number
55304.01



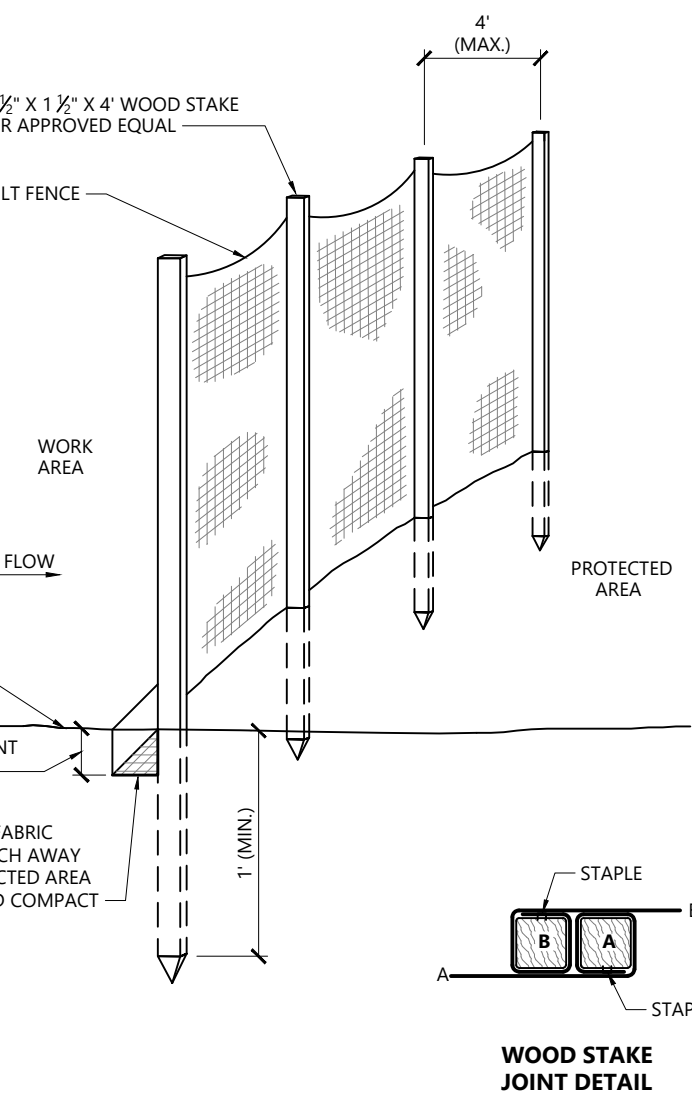
Temporary Stone Checkdam

N.T.S. Source: VHB REV



Stabilized Construction Exit

N.T.S. Source: VHB REV LD_682

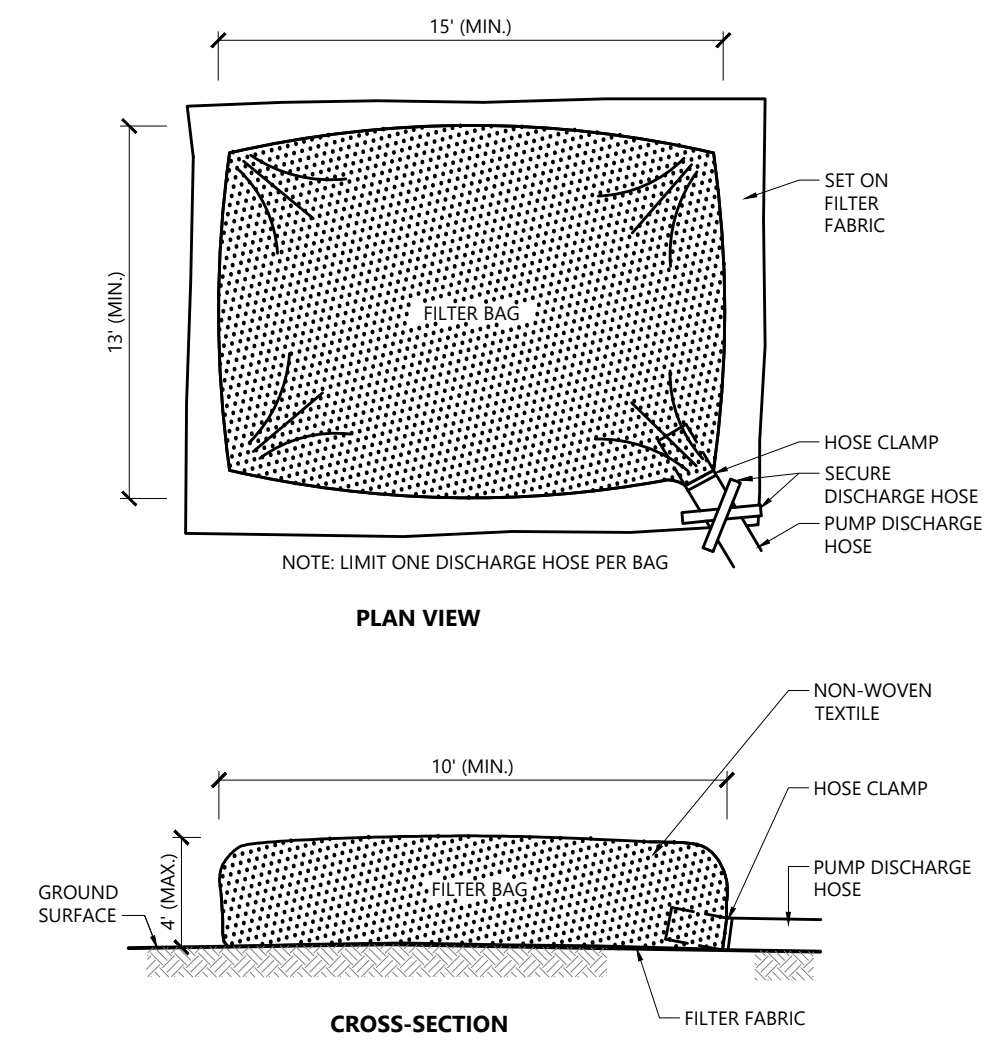


Silt Fence Barrier

N.T.S. Source: VHB REV LD_650

Temporary Sediment Trap

N.T.S. Source: NH Stormwater Manual

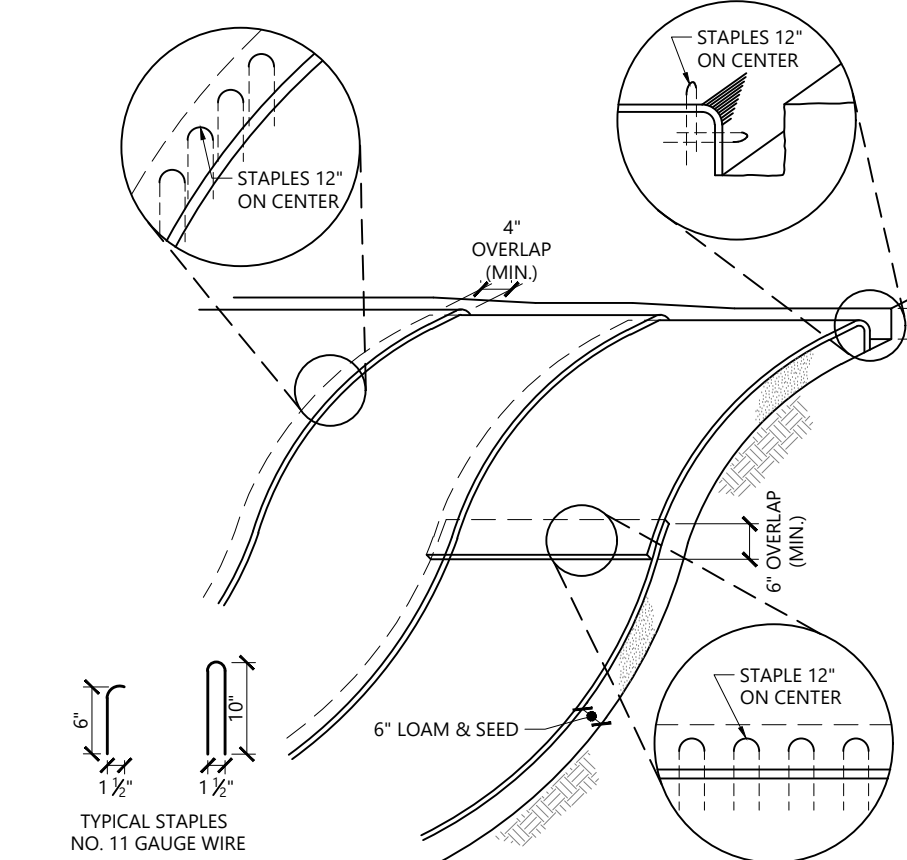


Dewatering Filter Bag

N.T.S. Source: VHB REV LD_691

Siltsock / Silt Fence Barrier

N.T.S. Source: VHB REV LD_658-A



Erosion Control Blanket Slope Installation

N.T.S. Source: VHB REV LD_680

Construction Sequence

1. SURVEY AND STAKE LIMITS OF CLEARING AND GRUBBING.
2. SURVEY AND STAKE (50 FT OC) LIMITS OF CLEARING AND DISTURBANCE.
3. INSTALL TEMPORARY EROSION CONTROL MEASURES (SILT FENCING, SILT SOCKS, CONSTRUCTION EXITS, ETC).
4. CLEAR AND GRUB WITHIN LIMIT OF ACCESS ROAD. LIMITS OF CLEARING INDICATE AREAS WHERE TREES WILL BE CUT AND STUMPS WILL REMAIN IN THE GROUND.
5. STRIP LOAM AND PAVEMENT OR RECLAIM EXISTING PAVEMENT WITHIN LIMITS OF WORK AND STOCKPILE EXCESS MATERIAL.
6. CONSTRUCT TEMPORARY SEDIMENTATION BERMS AS REQUIRED.
7. INSTALL DRAINAGE SYSTEM, AND OTHER UTILITIES IN ACCORDANCE WITH THE PLANS AND DETAILS.
8. PERFORM FINAL / FINE GRADING INCLUDING SLOPE STABILIZATION BLANKETS.
9. PERFORM ALL REMAINING SITE CONSTRUCTION (I.E. CONCRETE AND GRAVEL AREAS).
10. LOAM AND SEED ALL DISTURBED AREAS.
11. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER FINAL SURFACING IS INSTALLED, AND LANDSCAPING AREAS ARE ESTABLISHED AND STABILIZED.
12. CLEAN ALL DRAINAGE BASINS, STRUCTURES, PIPES, AND SUMPS WITHIN THE PROJECT LIMITS OF ALL SILT AND DEBRIS

General

1. CONTRACTOR SHALL READ, BE FAMILIAR WITH, AND SHALL FOLLOW THE MAINE EROSION AND SEDIMENT CONTROL BMPs MANUAL (LATEST EDITION) AND MAINE EROSION AND SEDIMENT CONTROL FIELD GUIDE FOR CONTRACTORS (LATEST EDITION), AND SHALL BE ACCOUNTABLE TO THE THIRD PARTY INSPECTOR FOR THE PROJECT AND THE MAINE DEP IN ACCORDANCE WITH MAINE DEP REGULATIONS.
2. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL TEMPORARY EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
3. CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
4. MINIMUM TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES ARE SHOWN ON THE EROSION AND SEDIMENTATION CONTROL PLAN. THE CONTRACTOR SHALL ADHERE TO THE MINIMUM PROVISIONS SHOWN. ADDITIONALLY, TEMPORARY MEASURES SHALL BE SELECTED AND CONSTRUCTED BY THE CONTRACTOR IN CONSULTATION WITH THE ENGINEER TO ACCOMMODATE CHANGING FIELD CONDITIONS THAT DEVELOP DURING CONSTRUCTION.
5. PUMPED WATER FROM DEWATERING ACTIVITIES SHALL BE DISCHARGED INTO SETTLING BASINS, FILTER BAGS OR OTHER APPROVED METHODS PRIOR TO DISCHARGE INTO THE ON-SITE STORMWATER MANAGEMENT SYSTEM. ALL WATER FROM DEWATERING ACTIVITIES SHALL BE RECHARGED ON-SITE OR DIRECTED TO THE DETENTION BASIN FOR DISCHARGE.
6. NO MORE THAN 1 ACRE SHOULD BE UNSTABILIZED AT ONE TIME WITHOUT REGULAR INSPECTION OR LIMITED TO AN AREA THAT CAN BE MULCHED IN ONE DAY.
7. NO MORE THAN 10 ACRES SHALL BE DISTURBED AT ANY ONE TIME WITHOUT TEMPORARY STABILIZATION MEASURES IN PLACE.

Seeding/Mulching

1. FERTILIZER, SUPERPHOSPHATE, AND LIME SHALL BE APPLIED AT RATES RECOMMENDED BY THE TESTING AGENCY AND APPROVED BY THE ENGINEER.
2. PERMANENT SEED SHALL BE SUPPLIED IN THE FOLLOWING PROPORTIONS AND APPLIED AT A RATE OF FIVE POUNDS PER 1,000 SF:
SEED TYPE (% PROPORTION/% GERMINATION MIN./% PURITY MIN.)
CREeping FESCUE (50/85/95)
KENTUCKY BLUEGRASS (40/85/90)
MANHATTAN PERENNIAL RYE (10/90/95)
3. AREA BENEATH THE SOLAR ARRAY SHALL BE PLANTED WITH A MEADOW SEED MIX AND NOT MOWED MORE THAN TWICE A YEAR. CONTRACTOR TO PROVIDE FINAL MEADOW SEED MIX TO ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
4. TEMPORARY SEED SHALL BE SUPPLIED IN THE FOLLOWING PROPORTIONS AND APPLIED AT A RATE OF 100 POUNDS PER ACRE:
SEED TYPE (% WEIGHT MIN./% GERMINATION MIN.)
WINTER RYE (80/85)
RED FESCUE - CREEPING (4/80)
PERENNIAL RYE GRASS (3/90)
RED CLOVER (3/90)
5. MULCH SHALL BE APPLIED TO AREAS IMMEDIATELY AFTER THEY HAVE BEEN SEEDED. MULCH SHALL CONSIST OF HAY, STRAW, HYDRO-MULCH, EROSION CONTROL BLANKETS, EROSION CONTROL MIX OR APPROVED EQUAL.
6. HAY OR STRAW MULCH SHALL BE AIR-DRIED, AND FREE OF UNDESIRABLE SEEDS AND COARSE MATERIALS. MULCH SHALL BE APPLIED AT A MINIMUM RATE OF 75 LB PER 1,000 SF. MULCH SHALL BE ANCHORED WITH NETTING WHEN APPLIED TO SLOPES LESS THAN 15 PERCENT.
7. EROSION CONTROL BLANKETS SHALL BE PROVIDED ON ALL SLOPES STEEPER THAN OF 1-FOOT RISE TO 3-FEET HORIZONTAL. BLANKETS SHALL BE 50-50 BN (NORTH AMERICAN GREEN; CURLER BLANKETS (AMERICAN EXCELSIOR COMPANY); POLYUITE STYLE 465 GT (SYNTHETIC INDUSTRIES); OR APPROVED EQUIVALENT. BLANKETS SHALL BE SECURED AS RECOMMENDED BY THE MANUFACTURER.
8. EROSION CONTROL MIX SHALL MEET THE FOLLOWING STANDARDS:
A. ORGANIC MATTER CONTENT SHALL BE BETWEEN 80%-100% DRY WEIGHT BASIS.
B. PARTICLE SIZE BY WEIGHT: 100% PASSING THE 6" SCREEN
70% TO 85% PASSING THE 0.75" SCREEN
C. ORGANIC PORTION SHALL BE FIBROUS AND ELONGATED
D. SOLUBLE SALTS CONTENT SHALL BE < 4.0 MMHOS/CM, AND
E. pH SHALL BE BETWEEN 5.0 AND 8.0.

Temporary Erosion Control Measures

1. CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM AMOUNT OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED TO PREVENT EROSION. AREAS REMAINING UNSTABILIZED FOR A PERIOD OF MORE THAN 15 DAYS SHALL BE TEMPORARILY MULCHED. TOTAL EXPOSED AREAS SHALL BE LIMITED TO NO MORE THAN CAN BE MULCHED IN ONE DAY.
2. TEMPORARY MULCH SHALL BE APPLIED TO UNSTABILIZED AREAS WITHIN 100-FT OF STREAMS, WETLANDS, AND OTHER WATER RESOURCES WITHIN 7 DAYS OF EXPOSING SOIL AND PRIOR TO ANY STORM EVENT.
3. DUST SHALL BE CONTROLLED THROUGH THE USE OF WATER.
4. CONTRACTOR SHALL PROVIDE TEMPORARY SEDIATION/DEWATERING BASINS, IF NECESSARY AND/OR AS DIRECTED BY THE ENGINEER, TO CONTROL SEDIMENTATION AND STORMWATER RUNOFF DURING THE CONSTRUCTION PERIOD. CONTRACTOR SHALL SUBMIT PROPOSED BASIN LOCATIONS, DESIGNS, ETC. TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION.
5. EARTH MATERIAL STOCKPILES SHALL BE LOCATED IN AREAS THAT HAVE A MINIMUM POTENTIAL FOR EROSION AND KEPT AS FAR AWAY AS POSSIBLE FROM EXISTING DRAINAGE COURSES, PROTECTED NATURAL RESOURCES, TREE DRIP LINES AND OUTSIDE OF THE 100-YEAR FLOOD PLAIN. SEDIMENT BARRIERS SHALL BE INSTALLED DOWNGRADIENT OF STOCKPILES. STORMWATER SHOULD BE DIRECTED AWAY FROM STOCKPILE LOCATIONS.
6. REPAIR, CLEAN, AND REPLACE ANY SEDIMENT CONTROLS DAMAGED DURING AND/OR AFTER RAINFALL EVENTS.
7. EROSION CONTROL BLANKETS SHALL BE PLACED IN THE FLOW LINE OF ALL VEGETATED SWALES NOT OTHERWISE PROTECTED BY STONE.
8. EROSION CONTROL BLANKETS OR NETTING OVER LOOSE MULCH SHALL BE APPLIED TO ALL VEGETATED SLOPES GREATER THAN 3:1.
9. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
B. A MINIMUM OF 90% VEGETATED GROWTH HAS BEEN ESTABLISHED;
C. A MINIMUM OF 3-INCHES OF NON-EROSIVE MATERIAL, SUCH AS STONE OR RIPRAP, HAS BEEN INSTALLED;
D. EROSION CONTROL BLANKETS OR EROSION CONTROL MIX HAVE BEEN PROPERLY INSTALLED.

Permanent Erosion Control Measures

1. THE CONTRACTOR SHALL SUBMIT A WRITTEN MANUAL, PREPARED FOR THE OWNER, THAT OUTLINES A SCHEDULE FOR PROPER MAINTENANCE OF THE LAWN. THIS SCHEDULE SHOULD INCLUDE TIMING AND METHODS FOR MOWING, WATERING, AERATION, FERTILIZATION, LIMING, AND OTHER LAWN MAINTENANCE

- OPERATIONS:
1. SEEDING SHALL BE DONE BETWEEN APRIL 1 TO JUNE 1, OR BETWEEN AUGUST 15 TO OCTOBER 15.
 3. ALL DISTURBED AREAS NOT COVERED BY BUILDINGS, PAVING, OR OTHERWISE DEVELOPED, SHALL BE COVERED WITH 6 INCHES LOAM AND SEEDED.

Winter Construction

1. WINTER CONSTRUCTION PERIOD: OCTOBER 15 THRU APRIL 15.
2. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT A MAXIMUM OF 1 ACRE OF THE SITE IS UNSTABILIZED AT ANY ONE TIME OR LIMITED TO AN AREA THAT CAN BE MULCHED IN ONE DAY.
3. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB PER 1,000 SF OR 3 TONS/ACRE. MULCH SHALL BE APPLIED AND ANCHORED SO THAT THE GROUND SURFACE IS NOT VISIBLE THROUGHOUT THE MULCH. MULCH SHALL NOT BE APPLIED OVER SNOW.
4. MULCH SHALL NOT BE APPLIED WHERE THE SNOW DEPTH EXCEEDS ONE INCH. SNOW SHALL BE REMOVED PRIOR TO APPLICATION.
5. EROSION CONTROL BLANKETS SHALL BE APPLIED TO ALL VEGETATED SLOPES GREATER THAN 3:1.
6. A DOUBLE ROW OF SEDIMENT BARRIERS SHALL BE INSTALLED WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE.
7. DURING PERIODS WHEN TEMPERATURES ARE ABOVE FREEZING, AREAS SHALL BE FINE GRADED AND PROTECTED WITH EITHER MULCH, OR TEMPORARILY SEEDED AND MULCHED UNTIL THE FINAL TREATMENT CAN BE APPLIED.
8. AFTER NOVEMBER 1 EXPOSED AREAS THAT HAVE BEEN LOAMED AND FINAL GRADED MAY BE DORMANT SEEDED AT A RATE OF 3 TIME THE PERMANENT SEED RATE AFTER THE FIRST KILLING FROST AND OVERWINTER MULCHED OR ANCHORED WITH EROSION CONTROL BLANKETS.
9. WINTER INSPECTIONS SHALL BE PERFORMED ONE A WEEK AND AFTER EACH RAINFALL, SNOWSTORM, OR THAW FOR VEGETATION GROWTH, EROSION, AND MAINTENANCE NEEDS.
A. ALL AREAS (INSUFFICIENTLY VEGETATED (LESS THAN 75% CATCH)) SHALL BE STABILIZED FOR OVERWINTER PROTECTION.

Site Inspection & Maintenance

1. CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS AND BEFORE AND AFTER EACH STORM EVENT.
2. CONTRACTOR SHALL MAINTAIN WRITTEN INSPECTION AND MAINTENANCE LOGS FOR THE EROSION CONTROL MEASURES FOR THE DURATION OF THE CONSTRUCTION PERIOD. LOGS SHALL BE MADE AVAILABLE TO THE OWNER, ENGINEER, MUNICIPALITY, AND MAINE DEP UPON REQUEST.
3. TEMPORARY MULCHING: ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED TO AREAS WHERE LESS THAN 90% OF THE SOIL SURFACE IS COVERED WITH MULCH.
4. CATCH BASIN/SILT SACK SEDIMENT TRAPS: SEDIMENT SHALL BE REMOVED FROM TRAPS WHEN ACCUMULATION DEPTH IS GREATER THAN OR EQUAL TO 1/2 THE DESIGN DEPTH OF THE TRAP. TRAPS SHALL BE REPLACED IF THE ARE DAMAGE, TORN, ETC.
5. SILT SOCK BARRIERS, SILT FENCE BARRIERS, AND STONE CHECK DAMS: SILT SOCK BARRIERS, SILT FENCE, AND STONE CHECK DAMS SHALL BE REPAIRED IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. SEDIMENT TRAPPED BEHIND BARRIERS/CHECK DAM SHALL BE REMOVED WHEN SEDIMENT DEPTH REACHES 6 INCHES. BARRIERS SHALL BE REPLACES WITH A TEMPORARY CHECK DAM IF THERE ARE SIGNS OF UNDERCUTTING OR IMPOUNDING LARGE VOLUMES OF WATER BEHIND THEM.
6. EROSION CONTROL BLANKETS: IF WASHOUTS OR BREAKAGE OCCURS, SLOPES SHALL BE REPAIRED, AND BLANKETS SHALL BE RE-INSTALLED.
7. STABILIZED CONSTRUCTION EXITS: EXITS SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. IF EXIT BECOMES INEFFECTIVE IT SHALL BE RECONSTRUCTED AND/OR REPLACED.
8. TEMPORARY SEDIMENTATION/DEWATERING BASINS: SEDIMENT IN TEMPORARY BASINS SHALL BE REMOVED AS NECESSARY DEPENDING ON THEIR USE AND DESIGN.
9. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE SYSTEMS.
10. LONG-TERM MAINTENANCE OF THE PERMANENT EROSION CONTROL MEASURES SHALL BE THE RESPONSIBILITY OF THE OWNER.

vhb

500 Southborough Drive
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South Portland, ME 04106
207.889.3150

NextGrid Solar Farm

Lewiston Junction Road
Poland, Maine 04274

No.	Revision	Date	Appr'd.
1	GRADING/STORMWATER UPDATES	8/26/2020	EKG
2	ADDRESS TOWN COMMENTS	10/13/2020	CMG
3	PLAN REVISIONS	11/4/2020	CMG

Designed by PGG Checked by CMG

Issued for February 28, 2020

Not Approved for Construction

Drawing Title

Site Details 2

STATE OF MAINE

DAVID FENIS-CHAMBERLAIN

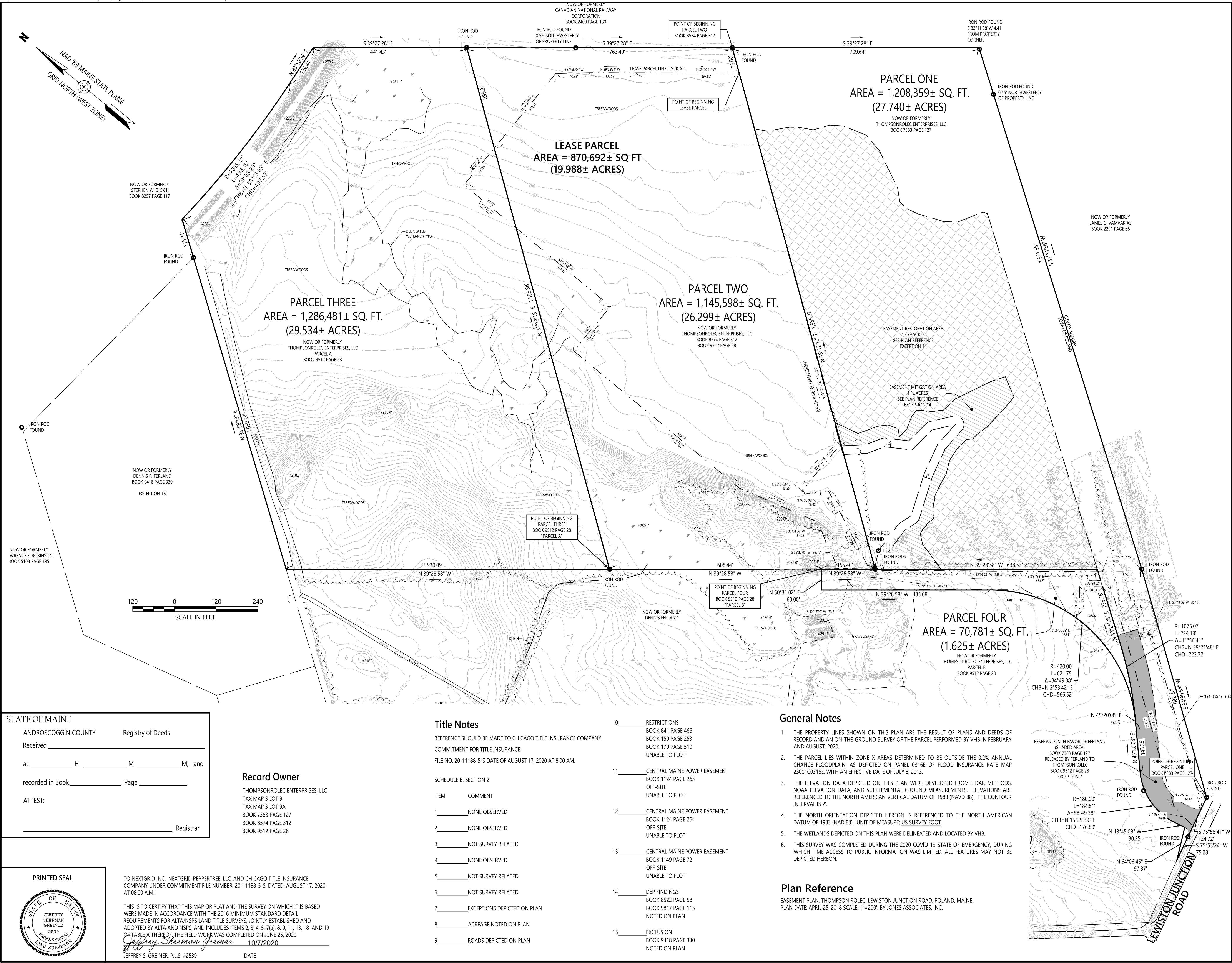
Professional Engineer

11/4/2020

C4.2

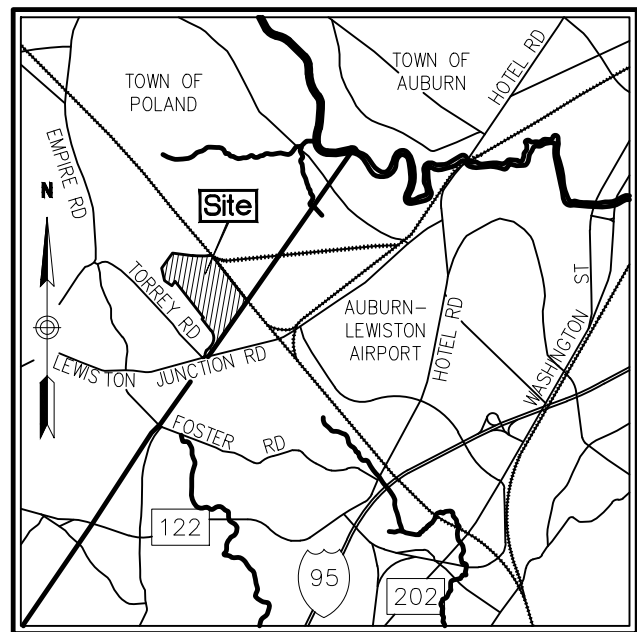
Sheet 6 of 6

Project Number 55304.01



vhb

500 Southborough Drive
Suite 105B
South Portland, ME 04106
207.889.3150



Locus Map

(NOT TO SCALE)

Legend

- IRON ROD
- BOUND
- ABUTTER LINE
- PROPERTY LINE
- EASEMENT LINE

NextGrid Solar

Lewiston Junction Road, Poland
Androscoggin County, Maine

No.	Revision	Date	Apprd.
3	Update Certification	10/7/2020	JSG
2	Lease Parcel Modified	10/2/2020	JSG
1	Lease Parcel Added	9/24/2020	JSG
Designed by		Checked by	
Issued for		Date	Sept. 15, 2020

Not Issued for Construction

ALTA/NSPS
Land Title Survey

Drawing Number

Sv-1

Sheet 1 of 2

Project Number
55304.00

Record Parcel Descriptions

PARCEL ONE - BOOK 7383, PAGE 127

BEGINNING A [SIC] 5/8-INCH REBAR (PLS 509) FOUND IN 2007 ON THE NORTHERLY RIGHT-OF-WAY LINE OF LEWISTON JUNCTION ROAD, THE POLAND-AUBURN TOWN LINE, AT THE MOST WESTERLY CORNER OF SAID JAMES G. VAMVAKIAS (BOOK 2196-PAGE 94), AND AT THE MOST SOUTHERLY CORNER OF DENNIS R. & CINDY F. FERLAND (BOOK 7089-PAGE 5).

THENCE N 88°01'21" W ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF LEWISTON JUNCTION ROAD, A DISTANCE OF 124.72 FEET TO A 5/8 INCH REBAR SET IN 2008.

THENCE N 88°06'38" W ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF LEWISTON JUNCTION ROAD, A DISTANCE OF 75.28 FEET TO A 5/8 INCH REBAR SET IN 2008 AT THE REMAINING LAND OF THE GRANTOR.

THENCE S 80°06'43" E ALONG THE REMAINING LAND OF THE GRANTOR, A DISTANCE OF 97.37 FEET TO A 5/8 INCH REBAR SET IN 2008.

THENCE N 02°14'50" E ALONG THE REMAINING LAND OF THE GRANTOR AND THE NORTHWESTERLY LINE OF A COMMON RIGHT-OF-WAY, A DISTANCE OF 30.25 FEET TO A 5/8 INCH REBAR SET IN 2008.

THENCE NORTHEASTERLY ALONG THE REMAINING LAND OF THE GRANTOR, THE NORTHWESTERLY LINE OF A COMMON RIGHT-OF-WAY AND ON A CURVE CONCAVE TO THE SOUTHEAST, HAVIN GA LENGTH OF 184.81 FEET AND A RADIUS OF 180 FEET, TO A 5/8-INCH REBAR SET IN 2008. THE CHORD BETWEEN THE LAST MENTIONED 5/8-INCH REBAR SET BEING N 31°39'31" E AND 176.80 FEET.

THENCE N 61°20'06" E ALONG THE REMAINING LAND OF THE GRANTOR AND THE NORTHWESTERLY LINE OF A COMMON RIGHT-OF-WAY, A DISTANCE OF 149.84 FEET TO A 5/8 INCH REBAR SET IN 2008.

THENCE NORTHEASTERLY ALONG THE NORTHWESTERLY LINE OF A COMMON RIGHT-OF-WAY, THE REMAINING LAND OF THE GRANTOR AND ON A CURVE CONCAVE TO THE NORTHWEST, HAVING A LENGTH OF 223.55 FEET AND A RADIUS OF 1075.06 FEET, TO A 5/8-INCH REBAR SET IN 2008. THE CHORD BETWEEN THE LAST MENTIONED 5/8-INCH REBAR SET IN BEING N 55°22'41" E AND 223.15 FEET.

THENCE N 49°25'15" E ALONG THE REMAINING LAND OF THE GRANTOR, A DISTANCE OF 225.76 FEET TO A 5/8 INCH REBAR SET IN 2007.

THENCE N 51°13'21" E ALONG REMAINING LAND OF SAID GRANTOR, A DISTANCE OF 1555.36 FEET TO A 5/8 INCH REBAR SET IN 2007 ON THE SOUTHWESTERLY LINE OF THE ST. LAWRENCE & ATLANTIC RAILROAD COMPANY (BOOK 2409-PAGE 130).

THENCE S 23°26'44" E ALONG THE SOUTHWESTERLY LINE OF SAID ST. LAWRENCE & ATLANTIC RAILROAD COMPANY, A DISTANCE OF 710.21 FEET TO A 5/8 INCH REBAR (PLS 509) FOUND IN 2007 ON THE POLAND-AUBURN TOWN LINE AND AT THE MOST NORTHERLY CORNER OF SAID VAMVAKIAS (BOOK 2273-PAGE 121).

THENCE SOUTHWESTERLY ALONG THE POLAND-AUBURN TOWN LINE AND ALONG THE NORTHWESTERLY LINE OF SAID VAMVAKIAS THE LAST MENTIONED REBAR AND THE REBAR AT THE POINT OF BEGINNING BEING S 49°13'27" W AND 1571.33 FEET.

THENCE SOUTHWESTERLY ALONG THE POLAND-AUBURN TOWN LINE AND ALONG THE NORTHWESTERLY LINE OF SAID VAMVAKIAS, AND A BARBED WIRE FENCE, BACK TO THE POINT OF BEGINNING, THE TIE LINE BETWEEN THE LAST MENTIONED REBAR AND THE REBAR AT THE POINT OF BEGINNING BEING S 50°42'23" W AND 682.01 FEET.

MEANING AND INTENDING TO DESCRIBE 27.84 ACRES.

PARCEL TWO - BOOK 8574, PAGE 312

BEGINNING AT A 5/8-INCH REBAR SET IN 2007 AT THE MOST NORTHERLY CORNER OF THOMPSONROLEC ENTERPRISES, LLC (BOOK 7383, PAGE 127) AND ON THE SOUTHWESTERLY LINE OF ST. LAWRENCE & ATLANTIC RAILROAD COMPANY (BOOK 2409, PAGE 130), SAID REBAR BEING NORTH 23 DEGREES, 26 MINUTES, 44 SECONDS WEST ALONG THE SOUTHWESTERLY LINE OF SAID ST. LAWRENCE & ATLANTIC RAILROAD COMPANY, A DISTANCE OF 710.21 FEET FROM A 5/8-INCH REBAR (PLS 509) FOUND IN 2007 ON THE POLAND-AUBURN TOWN LINE, AT THE MOST NORTHERLY CORNER OF SAID JAMES G. VAMVAKIAS (BOOK 2273, PAGE 121) AND AT THE MOST EASTERLY CORNER OF SAID THOMPSONROLEC ENTERPRISES, LLC (BOOK 7383, PAGE 127).

THENCE SOUTH 51 DEGREES, 13 MINUTES, 21 SECONDS WEST ALONG THE NORTHWESTERLY LINE OF SAID THOMPSONROLEC ENTERPRISES, LLC, A DISTANCED OF 1555.36 FEET TO A 5/8-INCH REBAR SET IN 2007 ON THE NORTHEASTERLY LINE OF THE REMAINING LAND NOW OR FORMERLY OF FERLAND;

THENCE NORTH 23 DEGREES, 26 MINUTES, 44 SECONDS WEST ALONG REMAINING LAND NOW OR FORMERLY OF FERLAND, A DISTANCE OF 763.44 FEET TO A 5/8-INCH REBAR SET IN 2007;

THENCE NORTH 51 DEGREES, 13 MINUTES, 21 SECONDS EAST ALONG THE SOUTHEASTERLY LINE OF THE REMAINING LAND NOW OR FORMERLY OF FERLAND, A DISTANCE OF 1555.36 FEET TO A 5/8-INCH REBAR SET IN 2007 ON SAID SOUTHWESTERLY LINE OF ST. LAWRENCE & ATLANTIC RAILROAD COMPANY;

THENCE SOUTH 23 DEGREES, 26 MINUTES, 44 SECONDS EAST ALONG THE SOUTHWESTERLY LINE OF SAID ST. LAWRENCE & ATLANTIC RAILROAD COMPANY, A DISTANCE OF 762.44 FEET BACK TO THE POINT OF BEGINNING.

MEANING AND INTENDING TO DESCRIBE 26.29 ACRES OF LAND.

PARCEL THREE - BOOK 9512, PAGE 28, PARCEL A

BEGINNING AT A POINT AT THE NORTHWESTERLY CORNER OF LAND NOW OR FORMERLY OF THOMPSONROLEC ENTERPRISES, LLC AND DESCRIBED IN A DEED DATED DECEMBER 28, 2012 AND RECORDED IN THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS IN BOOK 8574, PAGE 312;

THENCE N 21°22'23" W A DISTANCE OF NINE HUNDRED THIRTY AND 52/100 FEET (930.52') TO A POINT ON THE SOUTHEASTERLY SIDELINE OF LAND NOW OR FORMERLY DENNIS R. FERLAND AS DESCRIBED IN A DEED DATED JULY 20, 2016 AND RECORDED IN SAID REGISTRY IN BOOK 9418, PAGE 330;

THENCE N 52°02'45" E ALONG THE SOUTHEASTERLY SIDELINE OF SAID FERLAND A DISTANCE OF ONE THOUSAND FIFTY AND 29/100 FEET (1050.29') TO A POINT ON THE NORTHEASTERLY SIDELINE OF THE FORMER PORTLAND & RUMFORD FALLS RY. AS WAS OPERATED BY THE MAINE CENTRAL RAILROAD COMPANY;

THENCE, SOUTHEASTERLY ALONG THE NORTHEASTERLY SIDELINE OF SAID PORTLAND & RUMFORD FALLS RY. ON A NON-TANGENT CURVE TO THE LEFT WITH A RADIUS OF TWO THOUSAND EIGHT HUNDRED FIFTEEN AND 29/100 (2815.29') AND AN ARC LENGTH OF FOUR HUNDRED NINETY-EIGHT AND 55/100 FEET (498.55') TO A POINT, SAID CURVE ALSO HAVING A CHORD BEARING OF S 73°00'30" E AND A CHORD DISTANCE OF FOUR HUNDRED NINETY-SEVEN AND 90/100 FEET (497.90');

THENCE S 78°04'54" E ALONG THE NORTHERLY SIDELINE OF SAID PORTLAND & RUMFORD FALLS RY. A DISTANCE OF ONE HUNDRED TWENTY-FOUR AND 09/100 FEET (124.09') TO A POINT ON THE WESTERLY SIDELINE OF LAND NOW OR FORMERLY THE ST. LAWRENCE & ATLANTIC RAILROAD, CO. AS DESCRIBED IN A DEED DATED MAY 18, 1989 AND RECORDED IN SAID REGISTRY IN BOOK 2409, PAGE 130;

THENCE S 21°20'40" E ALONG THE SOUTHWESTERLY SIDELINE OF SAID ST. LAWRENCE & ATLANTIC RAILROAD, CO. A DISTANCE OF FOUR HUNDRED FORTY-ONE AND 71/100 FEET (441.71') TO A POINT AT THE NORTHEASTERLY CORNER OF LAND OF SAID THOMPSONROLEC ENTERPRISES, LLC;

THENCE S 53°17'42" W A DISTANCE OF ONE THOUSAND FIVE HUNDRED FIFTY-FIVE AND 88/100 FEET (1555.88') TO THE POINT OF BEGINNING.

THE ABOVE-DESCRIBED PARCEL CONTAINS 29.54 ACRES MORE OR LESS.

PARCEL FOUR - BOOK 9512, PAGE 28, PARCEL B

BEGINNING AT A POINT ON THE SOUTHWESTERLY SIDELINE OF LAND NOW OR FORMERLY (SIC) THOMPSONROLEC ENTERPRISES, LLC AND DESCRIBED IN A DEED DATED DECEMBER 28, 2012 AND RECORDED IN THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS IN BOOK 8574, PAGE 312. SAID POINT ALSO BEING S 21°22'23" E A DISTANCE OF SIX HUNDRED EIGHT AND 44/100 (608.44') FROM THE NORTHWESTERLY CORNER OF SAID THOMPSONROLEC ENTERPRISES, LLC;

THENCE S 21°22'23" E IN PART ALONG THE SOUTHWESTERLY SIDELINE OF SAID THOMPSONROLEC ENTERPRISES, LLC AND ALONG THE SOUTHWESTERLY SIDELINE OF LAND NOW OR FORMERLY OF THOMPSONROLEC ENTERPRISES, LLC AS DESCRIBED IN A DEED DATED MARCH 7, 2008 AND RECORDED IN SAID REGISTRY IN BOOK 7383, PAGE 127 A DISTANCE OF SEVEN HUNDRED NINETY-THREE AND 53/100 FEET (793.53') TO A POINT;

THENCE, S 51°29'36" W ALONG THE NORTHWESTELRY SIDELINE OF LAND OF SAID THOMPSONROLEC ENTERPRISES, LLC (B7383/P127) A DISTANCE OF TWO HUNDRED TWENTY-FIVE AND 76/100 FEET (225.76') TO A POINT CURVATURE;

THENCE, SOUTHWESTERLY ALONG THE NORTHWESTERLY SIDELINE OF LAND OF SAID THOMPSONROLEC ENTERPRISES, LLC (B7383/P127) ON A CURVE TO THE RIGHT WITH A RADIUS OF ONE THOUSAND SEVENTY-EIGHT AND 03/100 FEET (1078.03') AND AN ARC LENGTH OF TWO HUNDRED THIRTY AND 71/100 FEET (230.71') TO A POINT;

THENCE, EASTERLY AND NORTHERLY ON A CURVE TO THE LEFT WITH A RADIUS OF FOUR HUNDRED TWENTY AND 00/100 FEET (420.00') AND AN ARC LENGTH OF SIX HUNDRED TWENTY-ONE AND 47/100 FEET (621.47') TO A POINT. SAID CURVE ALSO HAVING A CHORD BEARING OF N 21°01'00" E AND A CHORD DISTANCE OF FIVE HUNDRED SIXTY-SIX AND 31/100 FEET (566.31').

THENCE, N 21°22'23" W A DISTANCE OF FOUR HUNDRED EIGHTY-FIVE AND 68/100 FEET (485.68') TO A POINT;

THENCE, N 68°37'37" E A DISTANCE OF SIXTY AND 00/100 FEET (60.00') TO THE POINT OF BEGINNING.

THE ABOVE-DESCRIBED PARCEL CONTAINS 1.65 ACRES MORE OR LESS.

As-Surveyed Parcel Descriptions

PARCEL ONE

BEGINNING AT AN IRON ROD FOUND ON THE NORTHERLY SIDELINE OF LEWISTON JUNCTION ROAD, ON THE POLAND-AUBURN TOWN LINE AND AT THE WESTERLY CORNER OF LAND NOW OR FORMERLY OF JAMES G. VAMVAKIAS IN THE ANDROSCOGGIN REGISTRY OF DEEDS BOOK 2291, PAGE 66;

THENCE S 75°58'41" W FOR A DISTANCE OF 124.72 FEET TO AN IRON ROD FOUND ON THE NORTHERLY SIDELINE OF LEWISTON JUNCTION ROAD;

THENCE S 75°53'24" W FOR A DISTANCE OF 75.28 FEET TO A POINT ON THE NORTHERLY SIDELINE OF LEWISTON JUNCTION ROAD, AND LAND NOW OR FORMERLY OF DENNIS FERLAND;

THENCE N 64°06'45" E FOR A DISTANCE OF 97.37 FEET ALONG LAND OF FERLAND TO A POINT;

THENCE N 13°45'08" W FOR A DISTANCE OF 30.25 FEET ALONG LAND OF FERLAND TO A POINT;

THENCE ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 180.00 FEET, AN ARC LENGTH OF 184.81 FEET, A DELTA OF 58°49'38", A CHORD BEARING OF N 15°39'39" E, AND A CHORD LENGTH OF 176.80 FEET ALONG LAND OF FERLAND TO A POINT;

THENCE N 45°20'08" E FOR A DISTANCE OF 143.25 FEET ALONG LAND OF FERLAND TO A POINT AT THE MOST WESTERLY POINT OF PARCEL FOUR, DESCRIBED BELOW;

THENCE CONTINUING ON A BEARING OF N 45°20'08" E FOR A DISTANCE OF 6.59 FEET ALONG PARCEL FOUR TO A POINT;

THENCE ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 1075.07 FEET, AN ARC LENGTH OF 224.31 FEET, A DELTA OF 11°56'41", A CHORD BEARING OF N 39°21'48" E, AND A CHORD LENGTH OF 223.72 FEET ALONG PARCEL FOUR TO A POINT;

THENCE N 39°25'08" E FOR A DISTANCE OF 225.76 FEET ALONG PARCEL FOUR TO A POINT AT THE SOUTHEASTERLY CORNER OF PARCEL FOUR;

THENCE N 39°28'58" W FOR A DISTANCE OF 638.53 FEET ALONG PARCEL FOUR TO AN IRON ROD FOUND IN THE NORTHEASTERLY SIDELINE OF PARCEL FOUR AND THE SOUTHWESTERLY CORNER OF PARCEL TWO;

THENCE N 35°12'10" E FOR A DISTANCE OF 1555.37 FEET ALONG THE SOUTHEASTERLY SIDELINE OF PARCEL TWO TO AN IRON ROD FOUND ON THE SOUTHWESTERLY SIDELINE OF LAND NOW OR FORMERLY OF THE CANADIAN NATIONAL RAILWAY CORPORATION IN REGISTRY BOOK 2409, PAGE 130;

THENCE S 39°27'28" E FOR A DISTANCE OF 709.64 ALONG THE SOUTHWESTERLY SIDELINE OF THE CANADIAN NATIONAL RAILWAY TO A POINT IN THE POLAND-AUBURN TOWN LINE AND LAND OF VAMVAKIAS;

THENCE S 33°11'58" W FOR A DISTANCE OF 1571.55 FEET ALONG THE POLAND-AUBURN TOWN LINE AND LAND OF VAMVAKIAS TO AN IRON ROD FOUND;

THENCE S 34°39'54" W FOR A DISTANCE OF 682.20 FEET ALONG THE POLAND-AUBURN TOWN LINE AND LAND OF VAMVAKIAS TO THE POINT OF BEGINNING.

SAID PARCEL ONE CONTAINS 27.740 ACRES, MORE OR LESS.

PARCEL TWO

BEGINNING AT AN IRON ROD FOUND IN THE SOUTHWESTERLY LINE OF LAND NOW OR FORMERLY OF THE CANADIAN NATIONAL RAILWAY CORPORATION IN THE ANDROSCOGGIN REGISTRY OF DEEDS BOOK 2409, PAGE 130, AND THE MOST NORTHERLY CORNER OF LAND OF PARCEL ONE, DESCRIBED ABOVE;

THENCE S 35°12'10" W FOR A DISTANCE OF 1555.37 FEET ALONG PARCEL ONE TO AN IRON ROD FOUND AT THE NORTHWESTERLY CORNER OF PARCEL ONE AND THE NORTHEASTERLY SIDELINE OF PARCEL FOUR, DESCRIBED BELOW;

THENCE N 39°28'58" W FOR A DISTANCE OF 155.40 FEET TO THE NORTHEASTELRY CORNER OF PARCEL FOUR AT LAND NOW OR FORMERLY OF DENNIS FERLAND;

THENCE CONTINUING ALONG A BEARING OF N 39°28'58" W FOR A DISTANCE OF 608.44 FEET ALONG LAND OF FERLAND TO AN IRON ROD FOUND AT THE SOUTHWESTERLY CORNER OF PARCEL THREE, DESCRIBED BELOW;

THENCE N 35°13'18" E FOR A DISTANCE OF 1555.58 FEET TO AN IRON ROD FOUND AT THE SOUTHEASTERLY CORNER OF PARCEL THREE AND THE SOUTHWESTERLY SIDELINE OF THE CANADIAN NATIONAL RAILWAY CORPORATION;

THENCE S 39°27'28" E FOR A DISTANCE OF 763.40 FEET ALONG THE SOUTHWESTERLY SIDELINE OF THE CANADIAN NATIONAL RAILWAY CORPORATION TO THE POINT OF BEGINNING.

SAID PARCEL TWO CONTAINS 26.299 ACRES, MORE OR LESS.

PARCEL THREE

BEGINNING AT AN IRON ROD FOUND AT THE NORTHWESTERLY CORNER OF PARCEL TWO ON THE NORTHEASTERLY SIDELINE OF LAND NOW OR FORMERLY OF DENNIS FERLAND;

THENCE N 39°28'58" W FOR A DISTANCE OF 930.09 FEET ALONG LAND OF FERLAND TO A POINT IN THE SOUTHEASTERLY SIDELINE OF LAND NOW OR FORMERLY OF DENNIS R. FERLAND IN THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS BOOK 9418, PAGE 330;

THENCE N 33°58'13" E FOR A DISTANCE OF 1050.29 FEET TO A POINT IN THE SOUTHERLY SIDELINE OF LAND NOW OR FORMERLY OF STEPHEN W. DICK, II, IN REGISTRY BOOK 8257, PAGE 117;

THENCE ALONG A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 2815.29 FEET, AN ARC LENGTH OF 498.18 FEET, A DELTA OF 10°08'20", A CHORD BEARING OF N 88°55'05" E, AND A CHORD LENGTH OF 497.53 FEET ALONG LAND OF DICK TO A POINT;

THENCE N 83°50'54" E FOR A DISTANCE OF 124.44 FEET ALONG LAND OF DICK TO A POINT IN THE SOUTHWESTERLY SIDELINE OF LAND NOW OR FORMERLY OF THE CANADIAN NATIONAL RAILWAY CORPORATION IN REGISTRY BOOK 2409, PAGE 130;

THENCE S 39°27'28" E FOR A DISTANCE OF 441.43 FEET ALONG THE SOUTHWESTERLY SIDELINE OF THE CANADIAN NATIONAL RAILWAY CORPORATION TO AN IRON ROD FOUND AT THE MOST NORTHERLY CORNER OF PARCEL TWO;

THENCE S 35°13'18" E FOR A DISTANCE OF 1555.58 FEET TO THE POINT OF BEGINNING.

SAID PARCEL THREE CONTAINS 29.534 ACRES, MORE OR LESS.

PARCEL FOUR

BEGINNING AT A POINT IN THE SOUTHWESTERLY SIDELINE OF PARCEL TWO AND THE NORTHEASTERLY SIDELINE OF LAND NOW OR FORMERLY OF DENNIS FERLAND, SAID POINT BEING LOCATED S 39°28'58" E, A DISTANCE OF 608.44 FEET FROM AN IRON ROD AT THE NORTHWESTERLY CORNER OF PARCEL TWO, DESCRIBED ABOVE, AND THE SOUTHWESTERLY CORNER OF PARCEL THREE, DESCRIBED ABOVE;

THENCE S 39°28'58" E FOR A DISTANCE OF 155.40 FEET TO AN IRON ROD FOUND AT THE SOUTHWESTERLY CORNER OF PARCEL TWO, AND THE NORTHWESTERLY CORNER OF PARCEL ONE, DESCRIBED ABOVE;

THENCE CONTINUING ALONG THE SOUTHWESTERLY SIDELINE OF PARCEL ONE S 39°28'58" E FOR A DISTANCE OF 638.53 FEET TO A POINT AT THE SOUTHWESTERLY CORNER OF PARCEL ONE;

THENCE S 33°25'08" W FOR A DISTANCE OF 225.76 FEET ALONG PARCEL ONE TO A POINT;

THENCE ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 1075.07 FEET, AN ARC LENGTH OF 224.13 FEET, A DELTA OF 11°56'41", A CHORD BEARING OF S 39°21'48" W, AND A CHORD LENGTH OF 223.72 FEET ALONG PARCEL ONE TO A POINT;

THENCE S 45°20'08" W FOR A DISTANCE OF 6.59 FEET ALONG PARCEL ONE TO A POINT AT LAND OF DENNIS FERLAND;

THENCE ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 420.00 FEET, AN ARC LENGTH OF 621.75 FEET, A DELTA OF 84°49'08", A CHORD BEARING OF N 2°53'42" E, AND A CHORD BEARING OF 566.52 FEET ALONG LAND OF FERLAND TO A POINT;

THENCE N 39°28'58" W FOR A DISTANCE OF 485.68 FEET ALONG LAND OF FERLAND TO A POINT;

THENCE N 50°31'02" E FOR A DISTANCE OF 60.00 FEET TO THE POINT OF BEGINNING.

SAID PARCEL FOUR CONTAINS 1.625 ACRES, MORE OR LESS.

THENCE S 59°06'22" E FOR A DISTANCE OF 17.61 FEET TO A POINT;

THENCE N 50°52'12" E FOR A DISTANCE OF 77.72 FEET TO A POINT;

THENCE S 38°38'03" E FOR A DISTANCE OF 90.83 FEET, CROSSING THE COMMON BOUNDARY LINE BETWEEN PARCEL FOUR AND PARCEL ONE, TO A POINT;

THENCE THROUGH PARCEL ONE S 34°31'19" W FOR A DISTANCE OF 655.39 FEET TO A POINT;

THENCE S 7°09'44" W FOR A DISTANCE OF 79.89 FEET TO A POINT;

THENCE N 75°58'41" E FOR A DISTANCE OF 61.64 FEET TO A POINT;

THENCE N 34°15'38" E FOR A DISTANCE OF 518.29 FEET TO A POINT;

THENCE N 53°49'56" W FOR A DISTANCE OF 30.10 FEET TO A POINT;

THENCE N 34°19'35" E FOR A DISTANCE OF 193.61 FEET TO A POINT;

THENCE N 39°27'53" W FOR A DISTANCE OF 70.88 FEET TO A POINT IN THE COMMON BOUNDARY LINE BETWEEN PARCEL ONE AND PARCEL FOUR;

THENCE THROUGH PARCEL FOUR N 39°05'22" W FOR A DISTANCE OF 655.81 FEET TO A POINT;

THENCE N 23°10'25" E FOR A DISTANCE OF 179.00 FEET, CROSSING THE COMMON BOUNDARY LINE BETWEEN PARCEL FOUR AND PARCEL TWO, TO A POINT;

THENCE THROUGH PARCEL TWO N 23°10'25" E FOR A DISTANCE OF 179.00 FEET TO A POINT;

THENCE N 22°07'00" E FOR A DISTANCE OF 79.15 FEET TO A POINT;

THENCE N 46°58'03" W FOR A DISTANCE OF 68.42 FEET TO A POINT;

THENCE N 26°04'26" E FOR A DISTANCE OF 13.55 FEET TO A POINT;

THENCE S 89°41'22" E FOR A DISTANCE OF 168.65 FEET TO A POINT;

THENCE N 35°18'31" E FOR A DISTANCE OF 1,107.35 FEET TO THE POINT OF BEGINNING.

SAID LEASE PARCEL CONTAINS 870,692 SQUARE FEET, MORE OR LESS, OR 19.988 ACRES, MORE OR LESS.

Lease Parcel Description

BEGINNING ON THE COMMON BOUNDARY LINE BETWEEN PARCEL ONE, RECORDED IN BOOK 7383, PAGE 127 OF THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS, AND PARCEL TWO, RECORDED IN BOOK 8574, PAGE 312 OF SAID REGISTRY, SAID POINT BEING LOCATED S 35°12'10" W AT A DISTANCE OF 76.00 FEET FROM AN IRON ROD FOUND AT THE NORTHEAST CORNER OF SAID PARCEL ONE AND THE SOUTHEAST CORNER OF SAID PARCEL TWO AT THE SOUTHERLY BOUNDARY OF LAND NOW OR FORMERLY OF THE CANADIAN NATIONAL RAILWAY CORPORATION, RECORDED IN BOOK 2409, PAGE 130 OF SAID REGISTRY, AS DEPICTED ON SAID PLAN;

THENCE THROUGH PARCEL TWO N 39°20'21" W FOR A DISTANCE OF 297.66 FEET TO A POINT;

THENCE N 39°22'54" W FOR A DISTANCE OF 130.52 FEET TO A POINT;

THENCE 40°38'54" W FOR A DISTANCE OF 99.33 FEET TO A POINT;

THENCE N 90°00'00" W FOR A DISTANCE OF 278.14 FEET TO A POINT ON THE COMMON BOUNDARY LINE BETWEEN PARCEL TWO AND PARCEL THREE, RECORDED IN BOOK 9512, PAGE 28 AS PARCEL "A" IN SAID REGISTRY, SAID POINT BEING LOCATED S 35°13'18" W AT A DISTANCE OF 299.97 FEET FROM AN IRON ROD FOUND AT THE NORTHEASTERLY CORNER OF PARCEL TWO AND THE SOUTHEASTERLY CORNER OF PARCEL THREE AT THE SOUTHERLY BOUNDARY OF LAND OF THE CANADIAN NATIONAL RAILWAY CORPORATION;

THENCE THROUGH PARCEL THREE, CONTINUING N 90°00'00" W FOR A DISTANCE OF 136.74 FEET TO A POINT;

THENCE S 0°13'39" W FOR A DISTANCE OF 194.79 FEET TO A POINT ON THE COMMON BOUNDARY LINE BETWEEN PARCEL THREE AND PARCEL TWO;

THENCE THROUGH PARCEL TWO S 0°13'39" W FOR A DISTANCE OF 352.47 FEET TO A POINT;

THENCE N 89°41'00" W FOR A DISTANCE OF 166.11 FEET TO A POINT;

THENCE S 0°10'42" W FOR A DISTANCE OF 618.37 FEET TO A POINT;

THENCE S 16°03'10" E FOR A DISTANCE OF 248.88 FEET TO A POINT;

THENCE S 30°04'06" W FOR A DISTANCE OF 54.25 FEET TO A POINT;

THENCE S 25°37'05" W FOR A DISTANCE OF 92.45 FEET TO A POINT ON THE COMMON BOUNDARY LINE BETWEEN PARCEL TWO AND PARCEL FOUR, RECORDED IN BOOK 9512, PAGE 28 AS PARCEL "B" IN SAID REGISTRY;

THENCE THROUGH PARCEL FOUR S 12°18'00" W FOR A DISTANCE OF 73.21 FEET TO A POINT;

THENCE S 39°14'55" E FOR A DISTANCE OF 487.41 FEET TO A POINT;

THENCE S 13°33'40" E FOR A DISTANCE OF 112.61 FEET TO A POINT;



500 Southborough Drive
Suite 105B
South Portland, ME 04106
207.889.3150

NextGrid Solar

Lewiston Junction Road, Poland
Androscoggin County, Maine

No.	Revision	Date	Apprd.
2	Lease Parcel Description Modified	10/2/2020	JSG
1	Lease Parcel Description Added	9/24/2020	JSG
Designed by		Checked by	

Issued for

Date

Sept. 15, 2020

Not Issued for Construction

Drawing Title
ALTA/NSPS
Land Title Survey
Property Descriptions

Drawing Number

Sv-2

ATTACHMENT 2
ROAD NAME APPLICATION

TOWN OF POLAND



Road Name Application

Parcel ID #:	
Closest Existing Road:	

Property Owner/Applicant Information

Owner Name:	
Mailing Address:	
Phone Number:	
Email Address:	

Name request for new road:

1st Choice: _____

2nd Choice: _____

3rd Choice: _____

I hereby acknowledge that I have read this application and pertinent sections of the ordinances, and state that the information in this document is to the best of my knowledge true and accurate.

Applicant Signature: _____

Date: _____

10/27/2020

CEO STATEMENT

I have checked the Town of Poland road names and find the following:

☐ None of the names suggested are in use or similar to other road names

☐ Another road is using one of the names: _____

☐ One or more of the names is similar to an existing road: _____

CEO Signature: _____ Date: _____

PLANNING BOARD

The Planning Board recommends the following name: _____

Chairperson Signature: _____ Date: _____

BOARD OF SELECTPERSONS

The Board of Selectpersons Approves the following name: _____

Chairperson Signature: _____ Date: _____

ATTACHMENT 3
STORMWATER MANAGEMENT PLAN



To: Town of Poland, Maine

Date: November 4, 2020
Project #: 55304.01

Memorandum

From: VHB
500 Southborough Drive
Suite 105B
South Portland, ME 04106

Re: Proposed NextGrid Solar Farm
Lewiston Junction Road
Poland, Maine 04274

Project Summary

The Applicant, NextGrid Solar, is proposing the construction of a 4.875 MWac Solar energy facility, associated electrical equipment, perimeter security fencing, and gravel site access roadways (the "Project"). The Site is located at Lewiston Junction Road in Poland, Maine (see Figure 1: Site Location Map) on an approximate 19.85-acre parcel. The Site is bounded by forestland and an unnamed wetland area to the north, railroad right of way to the east, a forest restoration area to the south, and vacant woods/farmland to the west. The project is located within the Sabbathday Pond-Upper Royal River Watershed. There is an unnamed wetland resource area located north of the site development area. There is a larger freshwater forested wetland area that spans the entire western and northerly portion of the site. Additionally, there is a smaller wetland area located along the Poland/Auburn town line. Wetland delineation and placement of flags were performed by VHB in November 2019. Flags marking the wetlands were located by Global Navigation Satellite System (GNSS) receivers with sub-meter accuracy and are shown on the site plans.

Existing Conditions

The Site consists of one lot, identified as Town of Poland, Maine, Tax Map 03 Lot 09A. The lot is currently undeveloped with the northern approximate 2/3 of the property heavily forested. The southern (approximate 1/3) of the site portion of the site is an existing restoration area consisting of large dirt berms. The project is located within Zone X area of minimal flood hazard as shown on the Town of Poland, Maine FEMA Flood Insurance Rate Map, Panel 23001C0316E and 23001C0312E, dated 7/8/2013 attached. Underlying soils have been mapped by the Natural Resources Conservation Service (NRCS) as gravely sandy soils categorized as Hydrologic Soils Group Type A, attached.

The Site is located on a hillside with stormwater runoff primarily flowing northwest to southeast across the site. A majority of the hillside runoff flows to the wetland area northwest of the site which primarily drains to the north and to the south. A small portion of the wetland area extends east into the site area which drains towards the railroad tracks.



The existing conditions drainage area characteristics are summarized in Table 1 below.

Table 1 Existing Conditions Drainage Area Characteristics Summary

Discharge Points		Subcatchment(s)		Area (Acres)	Tc (Min.)	CN
DP1	Lewiston Junction	EX1A	Northern portion of site	7.53	61.7	64
DP1	Lewiston Junction	EX1B	Central portion of site	12.23	31.9	44
DP1	Lewiston Junction	EX1C	Finger Wetland	8.21	102.0	51
DP2	Lewiston Junction South	EX1C	Southern portion of site	28.88	59.4	68
Total				56.85	n/a	71*

*Weighted CN value

Proposed Conditions

The proposed development includes the installation and operation of a 4.875 MWac solar array and will include a gravel access road, ancillary equipment including concrete transformer pads, associated stormwater infrastructure, and perimeter security fencing.

Grades were minimally altered and wherever possible, existing drainage and grading patterns were maintained. Although significant grading is not proposed, substantial tree clearing (approximately 16.6 acres) will be required for the solar panel installation and operation. The area beneath the solar panels will be revegetated with a meadow mix and not mowed more than twice per year which will help to stabilize the topsoil from erosion and provide water quality treatment for stormwater runoff. In addition, four (4) surface detention basins are proposed, each designed to attenuate the peak flows for the 2-, 10- and 25-year storm events.

The area underneath the solar arrays will be planted with a meadow seed mix, and not mowed more than twice a year. According to the National Engineering Handbook, May 2010, Figure 15-4, forest with heavy ground litter has the same velocity characteristics as hay meadows, therefore, for the purposes of calculating the time of concentration for a meadow condition, the forest with heavy litter option in HydroCAD was selected and has been utilized to represent cover type for both the existing and proposed conditions.

Stormwater Management

A hydrologic model, using TR-20 methodology, was developed to evaluate the existing and proposed drainage conditions on the Site. The results of the analyses indicate that there is no increase in peak discharge rates between the pre- and post-development conditions for the 2-, 10-, and 25-year storm events. These rainfall events are based on a 24-hour storm duration using a Type III distribution curve. Rainfall volumes used for this analysis were based on data provided by NOAA's National Weather Service Precipitation Frequency Estimates; they were 3.14, 4.72, 5.71 inches, respectively.



The proposed conditions drainage area characteristics are summarized in Table 2 below.

Table 2 Proposed Conditions Drainage Area Characteristics Summary

Discharge Points		Subcatchment(s)		Area (Acres)	Tc (Min.)	CN
DP1	Lewiston Junction	PR1A	Northern portion of site	10.21	55.4	66
DP1	Lewiston Junction	PR1B	Central portion of site	12.24	72.7	45
DP1	Lewiston Junction	PR1C	Finger Wetland	5.50	62.8	42
DP2	Lewiston Junction	PR2A	Road A	1.57	68.0	79
DP2	Lewiston Junction	PR2B	Southern portion of site	26.10	59.4	66
DP2	Lewiston Junction South	PR2C	Road B	1.22	9.3	78
Total				56.84		60*

*Weighted CN value

The proposed development qualifies for a Maine DEP Permit By Rule (PBR), however has been designed to meet the regulations set in Chapter 500 – Stormwater Management Rules, Basic and Flooding Standards. The proposed development is also subject to local requirements as stated in the Comprehensive Land Use Code for the Town of Poland, Maine. The requirements include a design that shall reflect, as nearly possible, natural runoff conditions and evaluation of offsite impacts if post development runoff exceeds predevelopment runoff conditions.

The proposed stormwater management system will preserve natural drainage ways as much as is feasible and will generally maintain existing drainage patterns. The proposed detention basins have been designed to attenuate peak flows using outlet control structures and overflow weirs, so that the resulting post construction peak discharge rate is less than the pre-construction discharge rates (see Table 3 and supporting HydroCAD reports, attached). The outlet control structures, and emergency spillways have been designed to convey the 25-year, 24-hour storm event.

Table 3 Peak Stormwater Runoff Rates Summary

Discharge Point		Condition	Peak Rate Runoff (cfs)		
			2-Year	10-Year	25-Year
DP-1	Lewiston Junction	Existing	1.39	5.88	10.28
		Proposed	0.54	4.10	9.41
DP-2	Lewiston Junction South	Existing	7.92	21.56	31.46
		Proposed	6.91	19.72	29.27

Detention Basins

Basins are designed to capture, temporarily hold, and gradually release a volume of stormwater runoff to attenuate and delay stormwater runoff peaks thereby reducing peak rates of runoff for post development conditions.



Memorandum

Basin 1AP – Basin 1AP is designed to handle the flow from the northern portion of the developed panel area. The surface basin will be 3 feet deep with a 15-inch outlet pipe located 1 foot from the bottom of the pond and a broad crested weir located 0.8 feet from the top of the pond. The outlets are positioned to discharge to the existing swale along the train tracks east of the Site.

Basin 1BP – Basin 1BP will handle the flow from the southern portion of the panel development. The surface basin is designed to be 2 feet deep with an 8-inch outlet pipe from the bottom of the basin as well as an overflow weir located 0.7 feet from the top of the basin. The outlets are positioned to discharge to the swale internal to the site, eventually discharging to the existing swale along the train tracks east of the Site.

Basin 2AP – Basin 2AP is designed to attenuate flows from the northern part of the proposed gravel road. As proposed an approximate 500-foot long swale along the western side of the gravel road will discharge to basin 2AP. This basin will discharge to the adjacent wetlands via a 6-inch pipe from the bottom of the basin as well as an overflow weir located 0.6 feet from the top of the basin for the larger storm events.

Basin 2CP – Basin 2CP is designed to treat and attenuate discharge across the southern portion of the gravel road. Before stormwater is discharged to the wetlands via a 12-inch pipe, it is attenuated in a proposed basin running linear along the southern side of the gravel road.

The site contractor will be responsible for the implementation of an Erosion and Sediment Control Plan in accordance with the Maine Pollutant Discharge Elimination System (MPDES) Maine Construction General Permit (MCGP). The Erosion and Sediment Control Plan outlines components to be employed to provide erosion and sedimentation control during the construction period.

Swale 1CR

In addition to the stormwater basins, a swale (1CR) approximately 1-foot deep and 6-feet wide will capture the water that discharges from the smaller wetland that extends into the Site to convey and bypass through the solar array field. The discharge area analyzed was based on the topography and provides a path for the stormwater to pass through the proposed solar site as it would under existing conditions.

Conclusion

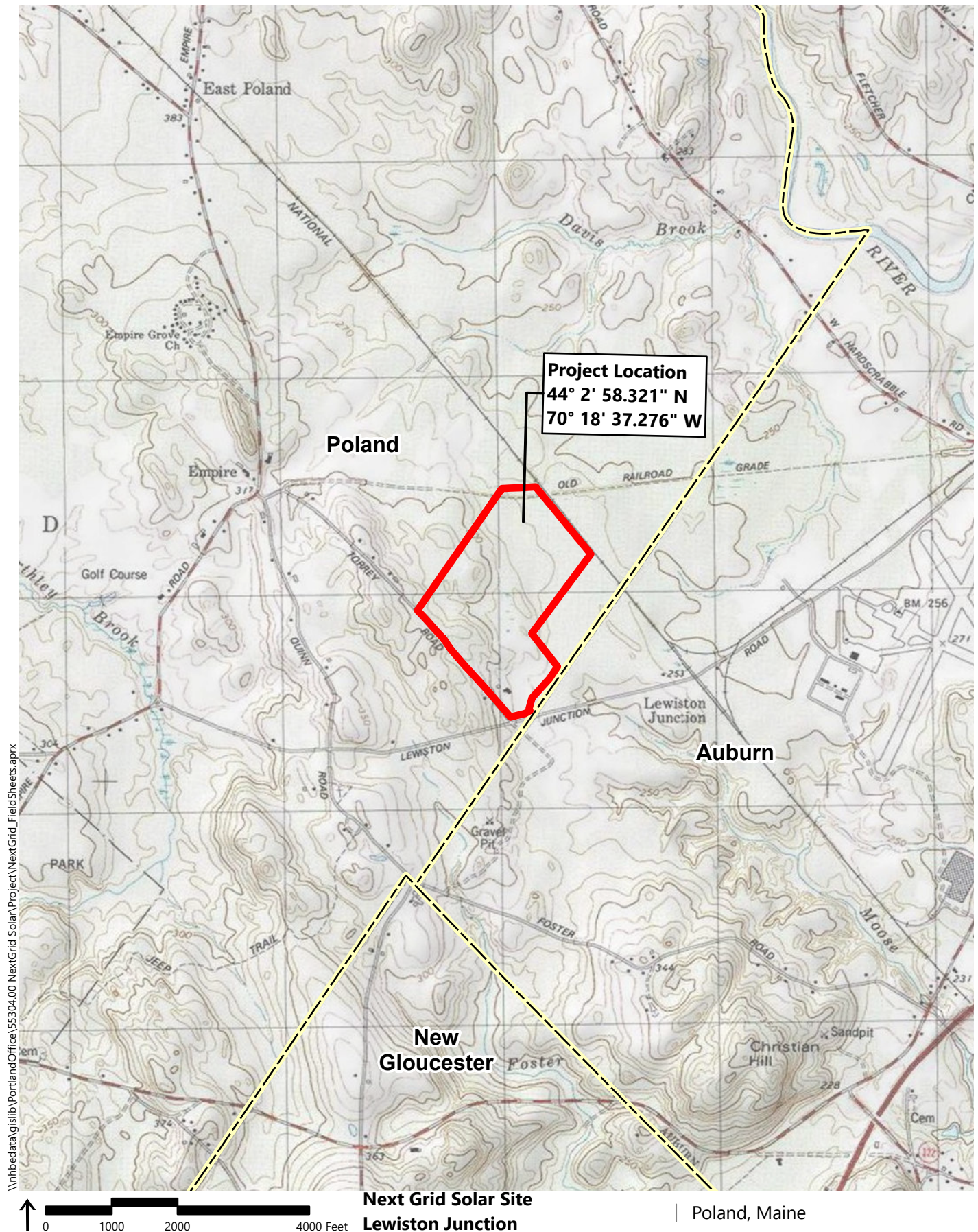
By implementing standard stormwater management techniques, the proposed development can successfully mitigate its impacts on peak stormwater runoff rates. Furthermore, the Basic and Flooding Standards as regulated by Stormwater Management Law can be addressed through the proposed implementation of standard practices (i.e. subsurface detention basin, deep sump catch basins, isolator row) as well as implementation of erosion and sedimentation control and inspection and maintenance that are accepted by the local government and the Maine Department of Environmental Protection.

Ref: 55304.01
October 16, 2020

Attachments

Figures

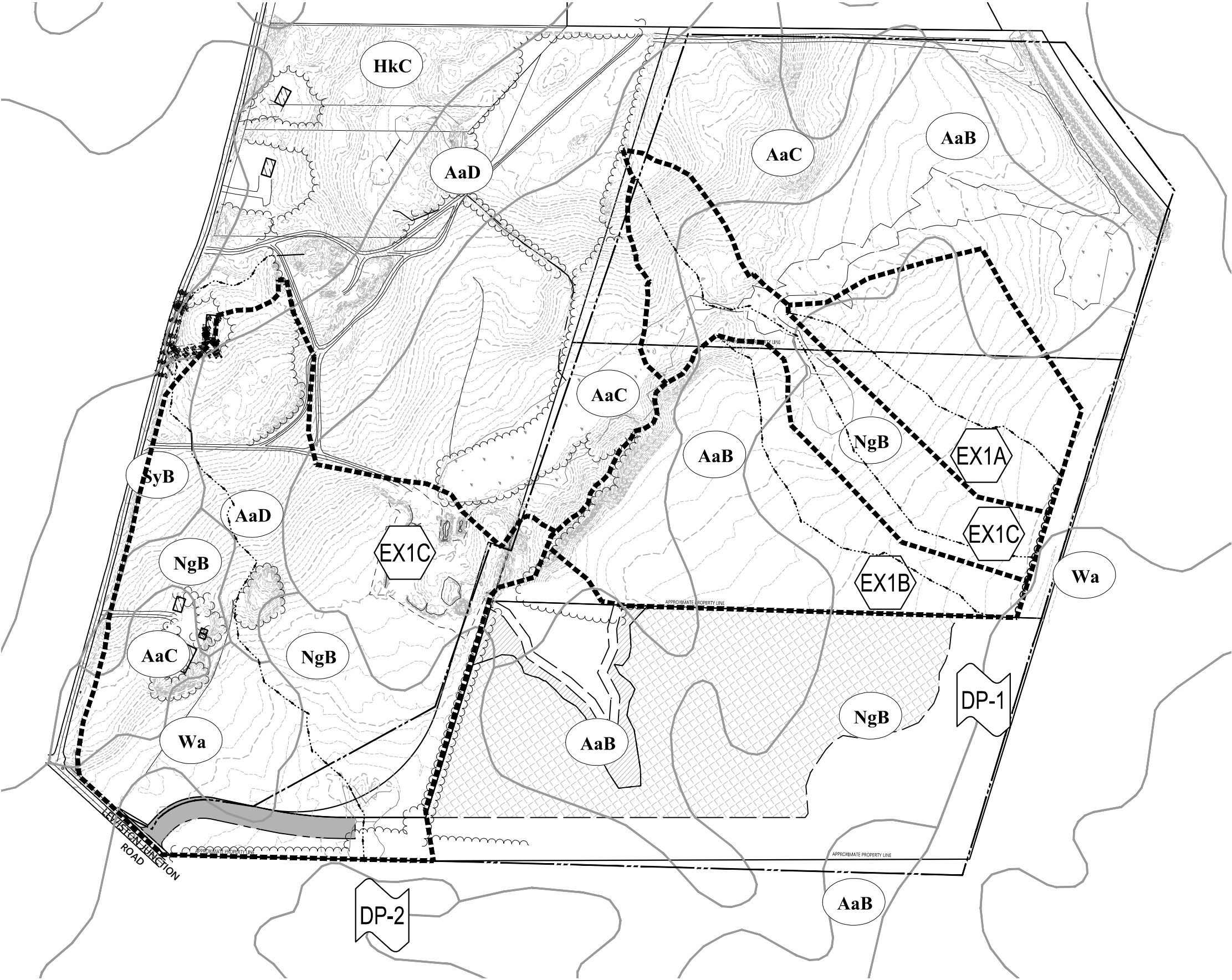
- Figure 1: Site Locus Map
- Figure 2: Existing Drainage Conditions
- Figure 3: Proposed Drainage Conditions



Legend

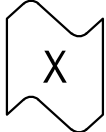
- Project Limits
- Town Boundary

USGS Locus Map

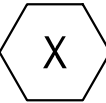


Legend

SYMBOLS




DESIGN POINT




DRAINAGE AREA DESIGNATION


LINETYPES



DRAINAGE AREA BOUNDARY




TIME OF CONCENTRATION FLOW LINE




SOIL TYPE BOUNDARY


SCS SOIL CLASSIFICATIONS




AaB
ADAMS LOAMY SAND,
0 TO 8 PERCENT SLOPES




AaC
ADAMS LOAMY SAND,
8 TO 15 PERCENT SLOPES



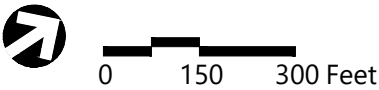
NgB
NINIGRET FINE SANDY LOAM,
8 TO 15 PERCENT SLOPES,
ERODED

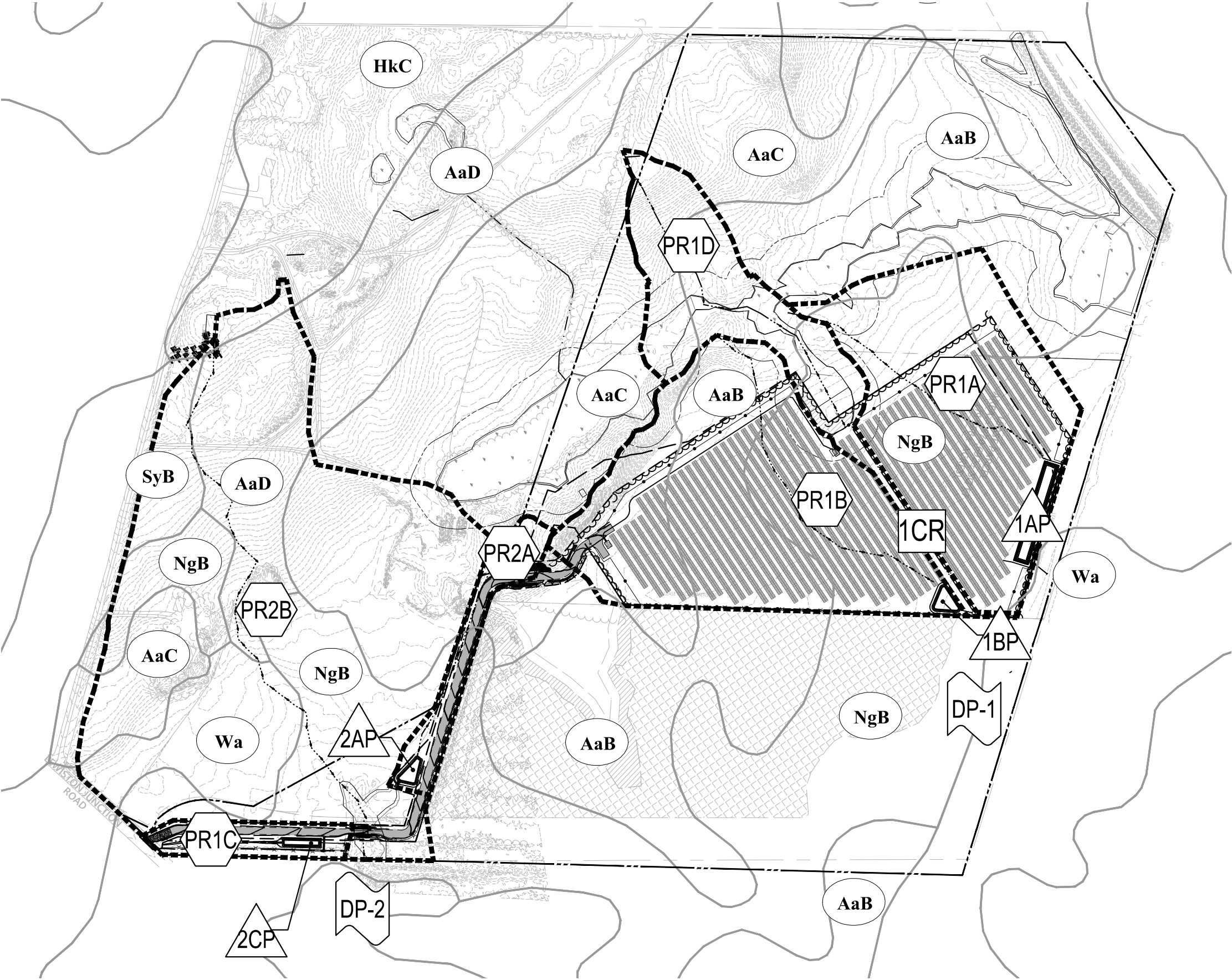


HkC
HINCKLEY GREVELLY SANDY
LOAM, 8 TO 15 PERCENT
SLOPES



Wa
WALPOLE FINE SANDY LOAM





Legend

X

DESIGN POINT

X

DRAINAGE AREA DESIGNATION

XBP

POND

DRAINAGE AREA BOUNDARY

TIME OF CONCENTRATION FLOW LINE

SOIL TYPE BOUNDARY

AaB

ADAMS LOAMY SAND, 0 TO 8 PERCENT SLOPES

AaC

ADAMS LOAMY SAND, 8 TO 15 PERCENT SLOPES

NgB

NINIGRET FINE SANDY LOAM, 8 TO 15 PERCENT SLOPES, ERODED

HkC

HINCKLEY GREVELLY SANDY LOAM, 8 TO 15 PERCENT SLOPES

Wa

WALPOLE FINE SANDY LOAM

Proposed Drainage Conditions
Proposed NextGrid Solar Farm
Lewiston Junction
Poland, Maine 04274

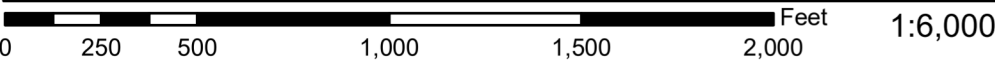
Figure 3
10/15/2020

Appendix A: Support Data

- FEMA Map
- NRCS Soils Map
- Rainfall Data

National Flood Hazard Layer FIRMMette

70°18'45"W 44°3'5"N



70°18'7"W 44°2'39"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/24/2020 at 10:20 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMMette



70°19'7"W 44°3'19"N



USGS The National Map: Orthoimagery. Data refreshed April 2020

0 250 500 1,000 1,500 2,000 Feet 1:6,000

70°18'30"W 44°2'54"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/24/2020 at 10:23 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Hydrologic Soil Group—Androscoggin and Sagadahoc Counties, Maine
(Poland - Lewiston Junction Road)

Map Scale: 1:15,500 if printed on A landscape (11" x 8.5") sheet.

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

Hydrologic Soil Group—Androscoggin and Sagadahoc Counties, Maine
(Poland - Lewiston Junction Road)

MAP LEGEND

Area of Interest (AOI)









 Area of Interest (AOI)

Soils

Soil Rating Polygons

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points

 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Androscoggin and Sagadahoc Counties, Maine

Survey Area Data: Version 20, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Oct 13, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AaB	Adams loamy sand, 0 to 8 percent slopes	A	178.2	17.8%
AaC	Adams loamy sand, 8 to 15 percent slopes	A	99.0	9.9%
AaD	Adams loamy sand, 15 to 30 percent slopes	A	17.9	1.8%
BgB	Nicholville very fine sandy loam, 0 to 8 percent slopes	C	2.2	0.2%
BuB2	Lamoine-Buxton complex, 0 to 8 percent slopes	C/D	0.9	0.1%
CfB	Charlton fine sandy loam, 0 to 8 percent slopes	A	7.1	0.7%
ChC	Charlton very stony fine sandy loam, 8 to 15 percent slopes	A	45.6	4.6%
GP	Sand and gravel pits		6.9	0.7%
HkB	Hinckley gravelly sandy loam, 0 to 8 percent slopes	A	8.9	0.9%
HkC	Hinckley gravelly sandy loam, 8 to 15 percent slopes	A	73.2	7.3%
HkD	Hinckley gravelly sandy loam, 15 to 25 percent slopes	A	10.6	1.1%
Le	Leicester very stony fine sandy loam	C/D	1.3	0.1%
MkB	Merrimac fine sandy loam, 0 to 8 percent slopes	A	11.5	1.1%
MkC2	Merrimac fine sandy loam, 8 to 15 percent slopes, eroded	A	3.4	0.3%
NgB	Ninigret fine sandy loam, 0 to 8 percent slopes	C	325.0	32.5%
Pa	Peat and Muck	A/D	2.4	0.2%
So	Scarboro fine sandy loam	A/D	16.9	1.7%
SxB	Sutton loam, 0 to 8 percent slopes	C	5.6	0.6%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
SyB	Sutton very stony loam, 0 to 8 percent slopes	C	15.8	1.6%
SyC	Sutton very stony loam, 8 to 15 percent slopes	C	0.1	0.0%
SzA	Swanton fine sandy loam, 0 to 3 percent slopes	D	15.4	1.5%
Wa	Walpole fine sandy loam	A/D	151.1	15.1%
Wg	Whately fine sandy loam	D	2.2	0.2%
Totals for Area of Interest			1,001.1	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher



NOAA Atlas 14, Volume 10, Version 3
Location name: Poland, Maine, USA*
Latitude: 44.0431°, Longitude: -70.322°
Elevation: 315.6 ft**
 * source: ESRI Maps
 ** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orlan Wilhite

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aerals](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.293 (0.238-0.360)	0.356 (0.289-0.438)	0.459 (0.371-0.566)	0.544 (0.437-0.675)	0.661 (0.511-0.857)	0.749 (0.565-0.991)	0.842 (0.613-1.16)	0.949 (0.647-1.33)	1.11 (0.720-1.60)	1.24 (0.782-1.82)
10-min	0.415 (0.338-0.510)	0.504 (0.410-0.620)	0.650 (0.526-0.802)	0.771 (0.619-0.956)	0.937 (0.724-1.21)	1.06 (0.800-1.41)	1.19 (0.869-1.64)	1.35 (0.917-1.88)	1.57 (1.02-2.26)	1.75 (1.11-2.58)
15-min	0.488 (0.397-0.600)	0.593 (0.482-0.729)	0.764 (0.619-0.943)	0.906 (0.729-1.12)	1.10 (0.852-1.43)	1.25 (0.942-1.65)	1.40 (1.02-1.93)	1.58 (1.08-2.21)	1.84 (1.20-2.66)	2.06 (1.30-3.03)
30-min	0.650 (0.529-0.798)	0.790 (0.642-0.971)	1.02 (0.825-1.26)	1.21 (0.972-1.50)	1.47 (1.14-1.91)	1.67 (1.26-2.21)	1.87 (1.36-2.57)	2.11 (1.44-2.95)	2.46 (1.60-3.55)	2.75 (1.74-4.05)
60-min	0.811 (0.660-0.997)	0.987 (0.802-1.21)	1.27 (1.03-1.57)	1.51 (1.22-1.87)	1.84 (1.42-2.38)	2.08 (1.57-2.76)	2.34 (1.71-3.22)	2.64 (1.80-3.69)	3.08 (2.00-4.45)	3.44 (2.17-5.06)
2-hr	1.09 (0.891-1.33)	1.31 (1.07-1.60)	1.67 (1.36-2.05)	1.98 (1.60-2.43)	2.39 (1.86-3.08)	2.70 (2.05-3.55)	3.03 (2.23-4.14)	3.41 (2.34-4.74)	3.97 (2.61-5.70)	4.44 (2.83-6.49)
3-hr	1.29 (1.06-1.56)	1.54 (1.27-1.88)	1.96 (1.60-2.40)	2.31 (1.88-2.84)	2.79 (2.18-3.58)	3.15 (2.40-4.12)	3.53 (2.60-4.80)	3.97 (2.74-5.49)	4.62 (3.05-6.60)	5.16 (3.31-7.52)
6-hr	1.69 (1.40-2.04)	2.02 (1.67-2.44)	2.56 (2.10-3.11)	3.01 (2.46-3.67)	3.62 (2.85-4.61)	4.08 (3.14-5.31)	4.57 (3.39-6.17)	5.14 (3.57-7.06)	5.98 (3.97-8.48)	6.68 (4.32-9.65)
12-hr	2.15 (1.79-2.59)	2.58 (2.14-3.10)	3.27 (2.71-3.95)	3.85 (3.16-4.67)	4.64 (3.67-5.87)	5.23 (4.05-6.76)	5.86 (4.38-7.86)	6.59 (4.62-8.98)	7.67 (5.13-10.8)	8.57 (5.58-12.3)
24-hr	2.61 (2.19-3.12)	3.14 (2.63-3.75)	4.01 (3.34-4.80)	4.72 (3.91-5.69)	5.71 (4.56-7.19)	6.45 (5.03-8.29)	7.24 (5.46-9.65)	8.16 (5.76-11.0)	9.53 (6.43-13.3)	10.7 (7.01-15.2)
2-day	3.03 (2.55-3.59)	3.66 (3.08-4.34)	4.69 (3.93-5.58)	5.55 (4.62-6.64)	6.73 (5.40-8.41)	7.60 (5.97-9.71)	8.54 (6.50-11.3)	9.66 (6.87-13.0)	11.3 (7.71-15.7)	12.7 (8.44-18.0)
3-day	3.33 (2.81-3.93)	4.01 (3.38-4.74)	5.12 (4.31-6.07)	6.04 (5.05-7.20)	7.31 (5.89-9.10)	8.25 (6.51-10.5)	9.27 (7.08-12.2)	10.5 (7.47-14.0)	12.3 (8.38-16.9)	13.8 (9.17-19.4)
4-day	3.59 (3.04-4.22)	4.30 (3.64-5.06)	5.46 (4.60-6.45)	6.42 (5.38-7.63)	7.74 (6.26-9.61)	8.73 (6.90-11.1)	9.79 (7.49-12.9)	11.0 (7.90-14.7)	12.9 (8.82-17.7)	14.4 (9.63-20.2)
7-day	4.27 (3.64-5.00)	5.03 (4.28-5.90)	6.28 (5.32-7.39)	7.31 (6.16-8.65)	8.74 (7.09-10.8)	9.80 (7.78-12.3)	10.9 (8.39-14.2)	12.2 (8.81-16.2)	14.1 (9.72-19.2)	15.6 (10.5-21.7)
10-day	4.92 (4.21-5.75)	5.72 (4.88-6.69)	7.03 (5.98-8.24)	8.11 (6.85-9.56)	9.60 (7.82-11.8)	10.7 (8.53-13.4)	11.9 (9.14-15.3)	13.2 (9.57-17.4)	15.0 (10.4-20.5)	16.5 (11.2-22.9)
20-day	6.91 (5.95-8.02)	7.81 (6.71-9.07)	9.28 (7.94-10.8)	10.5 (8.92-12.3)	12.2 (9.96-14.7)	13.4 (10.7-16.6)	14.7 (11.3-18.7)	16.1 (11.8-21.0)	17.9 (12.5-24.1)	19.3 (13.1-26.5)
30-day	8.58 (7.41-9.92)	9.56 (8.25-11.1)	11.2 (9.60-13.0)	12.5 (10.7-14.6)	14.3 (11.8-17.3)	15.8 (12.6-19.3)	17.2 (13.2-21.6)	18.6 (13.7-24.1)	20.4 (14.4-27.3)	21.7 (14.9-29.7)
45-day	10.7 (9.24-12.3)	11.8 (10.2-13.5)	13.6 (11.7-15.7)	15.0 (12.9-17.5)	17.1 (14.1-20.5)	18.7 (15.0-22.7)	20.3 (15.6-25.3)	21.7 (16.1-28.1)	23.6 (16.7-31.5)	24.9 (17.1-34.0)
60-day	12.4 (10.8-14.2)	13.6 (11.8-15.6)	15.6 (13.5-17.9)	17.2 (14.8-19.9)	19.4 (16.1-23.2)	21.2 (17.1-25.7)	22.9 (17.7-28.4)	24.5 (18.2-31.6)	26.4 (18.8-35.2)	27.8 (19.2-37.7)

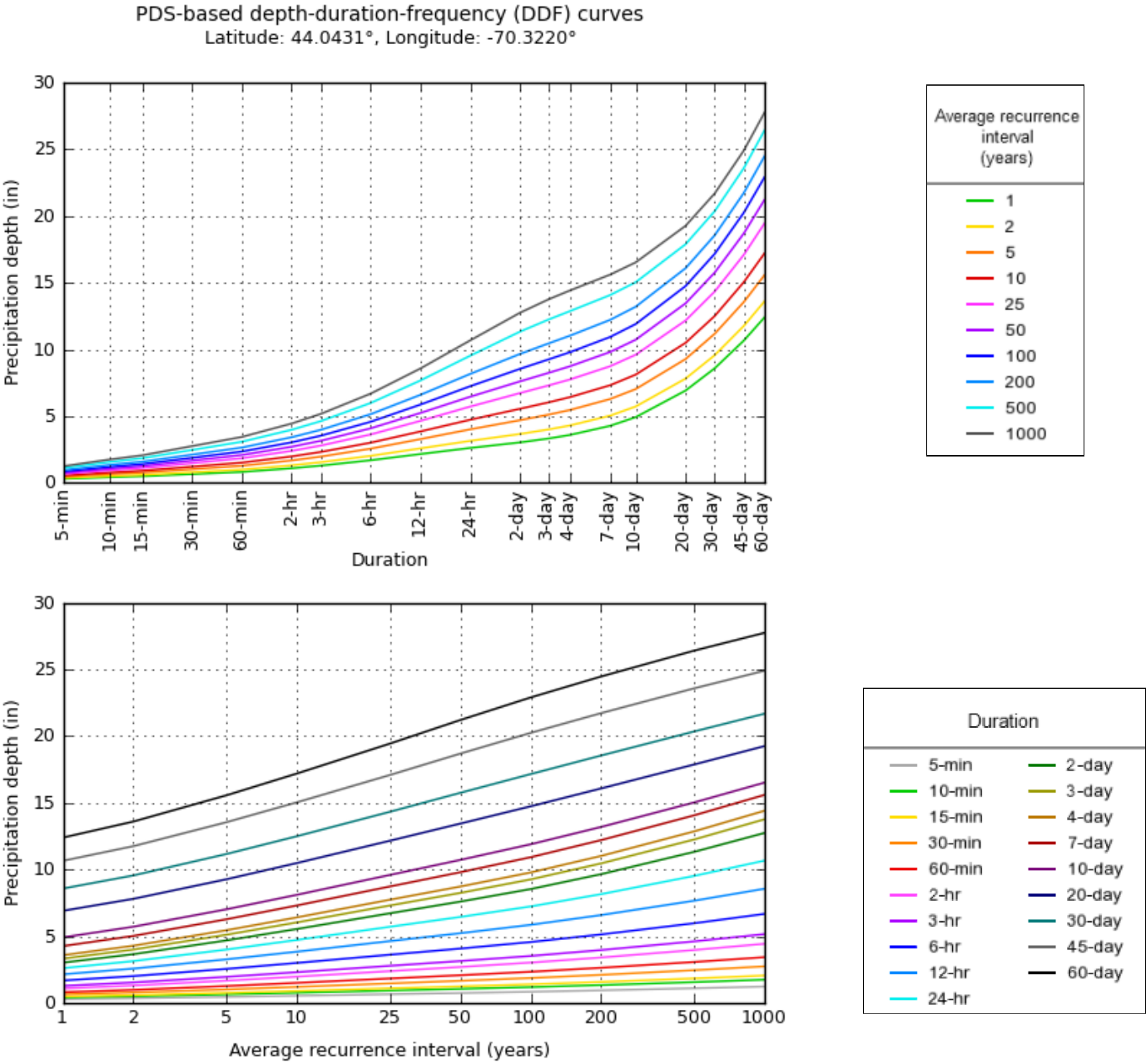
¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

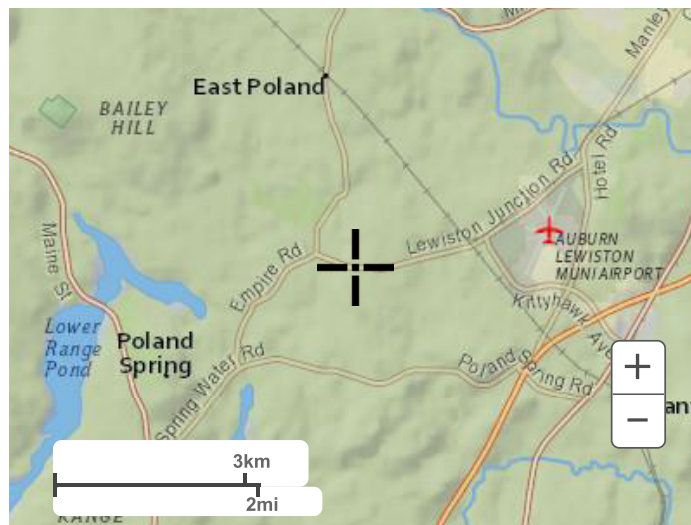
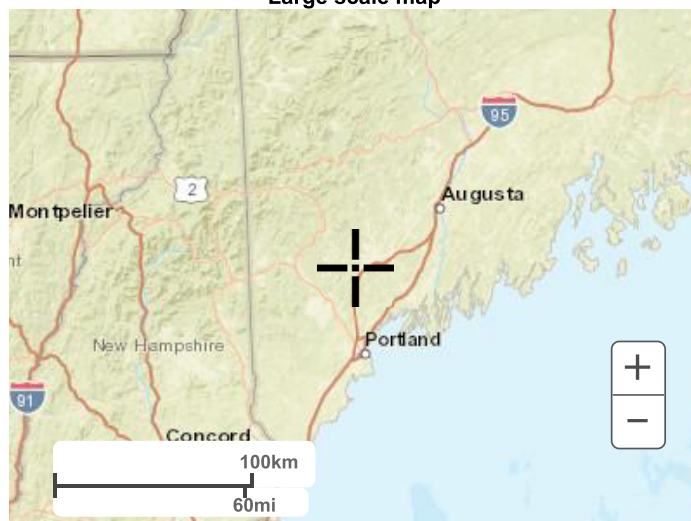
[Back to Top](#)

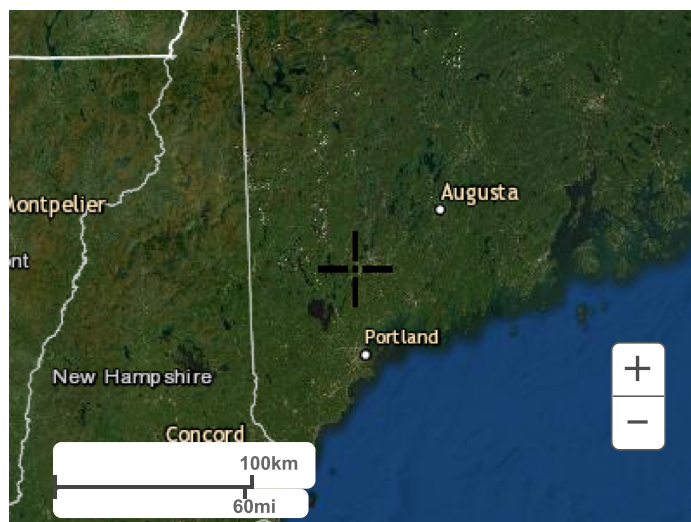
PF graphical



Maps & aerials

Small scale terrain

**Large scale terrain****Large scale map****Large scale aerial**



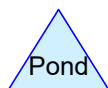
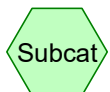
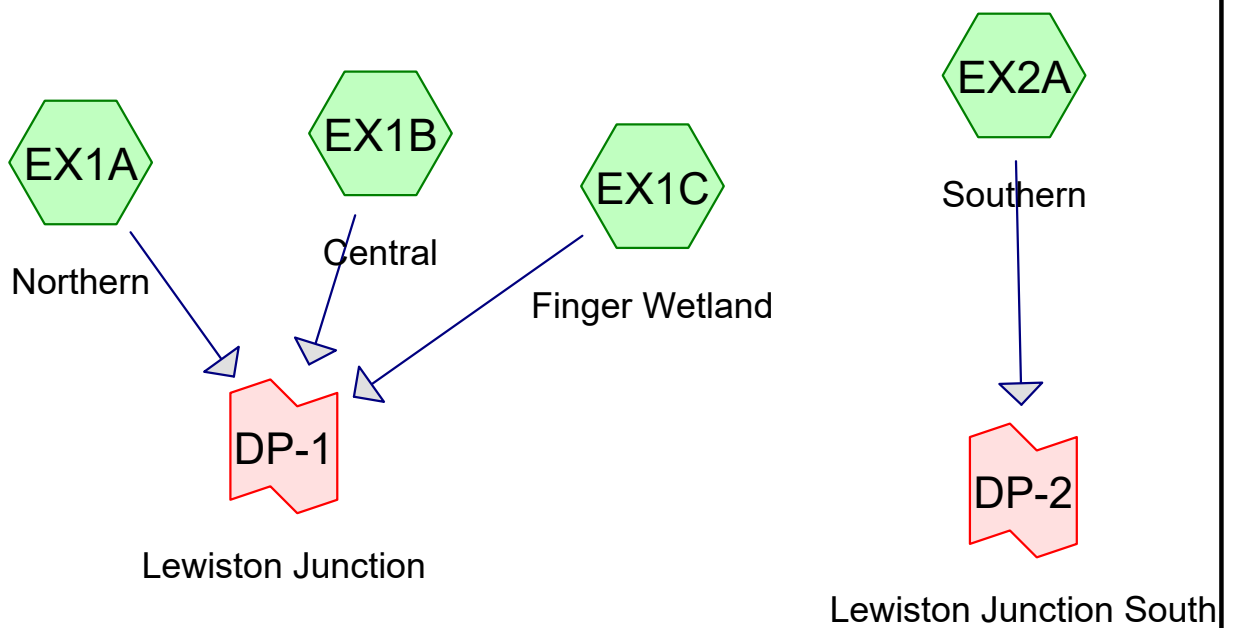
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1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

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Appendix B: Hydrologic Calculations

- Existing HydroCAD Report
- Proposed HydroCAD Report



55304.01-EX HYDROCAD

Prepared by VHB

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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
2.735	96	Gravel surface, HSG A (EX2A)
0.008	96	Gravel surface, HSG C (EX2A)
0.268	30	Meadow, non-grazed, HSG A (EX1B, EX2A)
0.865	71	Meadow, non-grazed, HSG C (EX2A)
14.847	63	Small grain, straight row, Good, HSG A (EX2A)
6.587	83	Small grain, straight row, Good, HSG C (EX2A)
0.071	98	Unconnected pavement, HSG A (EX2A)
15.984	30	Woods, Good, HSG A (EX1A, EX1B, EX1C, EX2A)
15.454	70	Woods, Good, HSG C (EX1A, EX1B, EX1C, EX2A)
0.031	77	Woods, Good, HSG D (EX1B)
56.849	60	TOTAL AREA

55304.01-EX HYDROCAD

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Type III 24-hr 2-YEAR Rainfall=3.14"

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Page 3

Summary for Subcatchment EX1A: Northern

Runoff = 1.37 cfs @ 13.01 hrs, Volume= 0.333 af, Depth= 0.53"

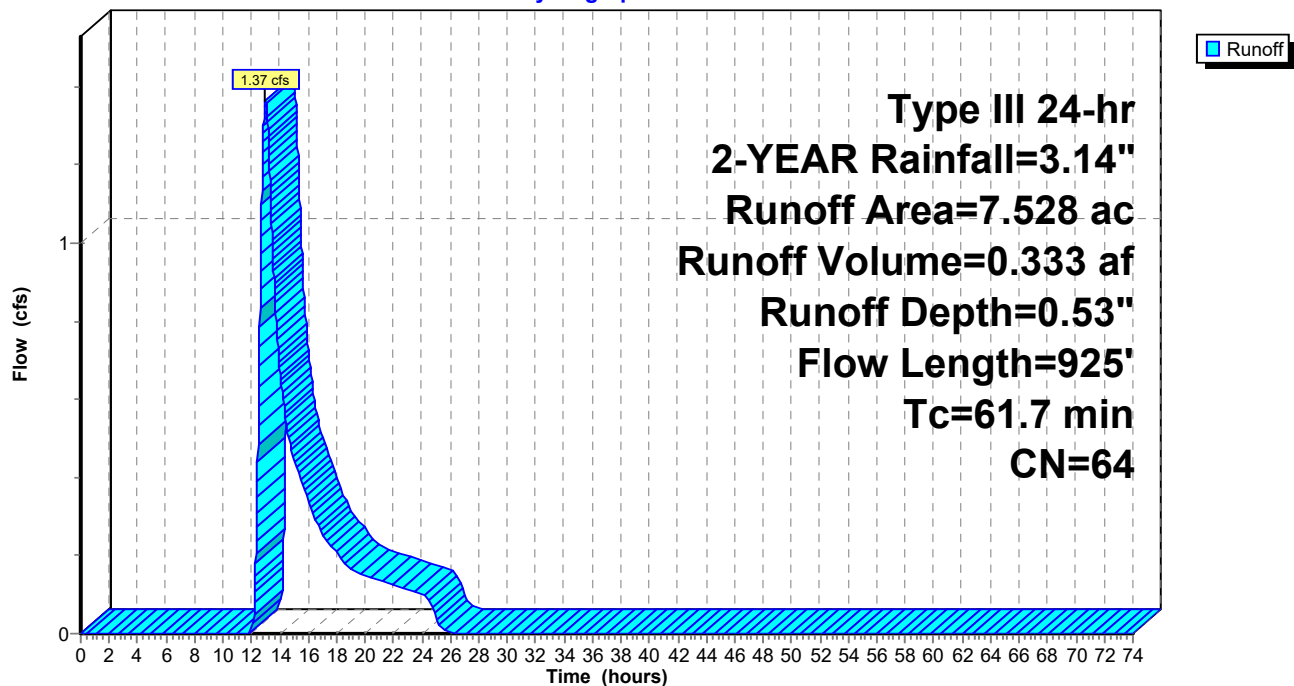
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-YEAR Rainfall=3.14"

Area (ac)	CN	Description
0.288	30	Woods, Good, HSG A
0.922	30	Woods, Good, HSG A
6.318	70	Woods, Good, HSG C
7.528	64	Weighted Average
7.528		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	50	0.0250	0.04		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
41.9	875	0.0194	0.35		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
61.7	925	Total			

Subcatchment EX1A: Northern

Hydrograph



55304.01-EX HYDROCAD

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Type III 24-hr 2-YEAR Rainfall=3.14"

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Page 4

Summary for Subcatchment EX1B: Central

Runoff = 0.04 cfs @ 17.26 hrs, Volume= 0.027 af, Depth= 0.03"

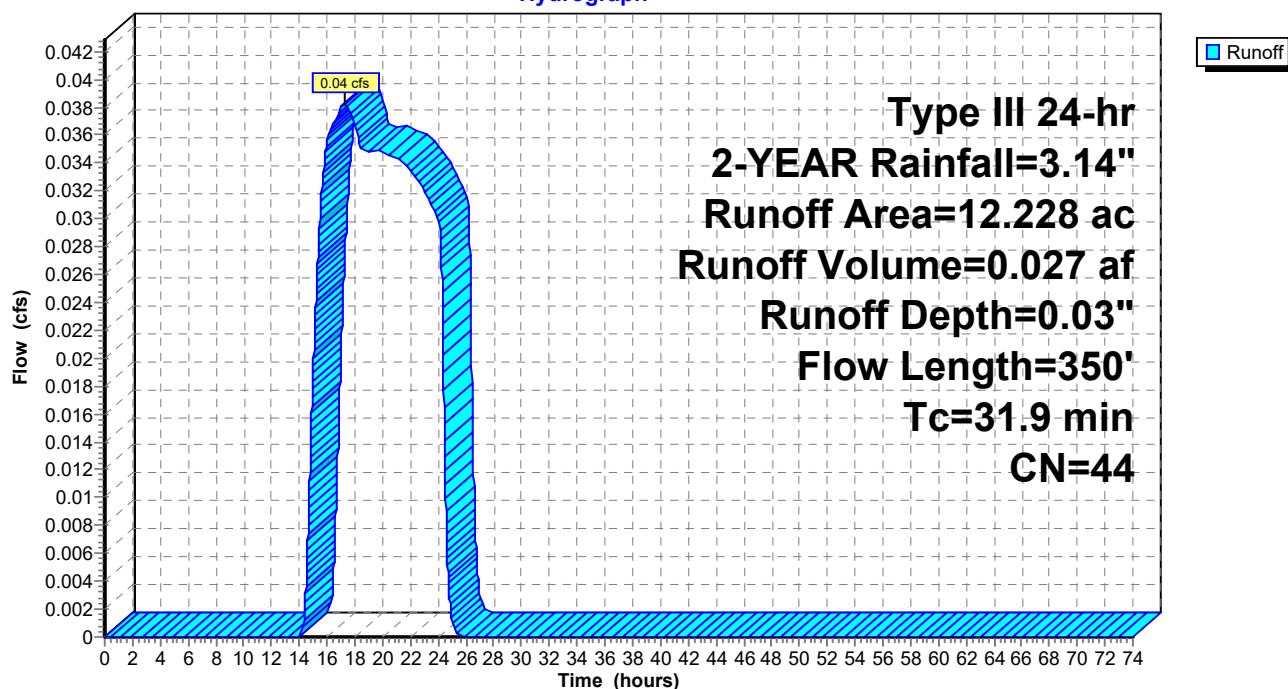
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-YEAR Rainfall=3.14"

Area (ac)	CN	Description
0.031	77	Woods, Good, HSG D
7.777	30	Woods, Good, HSG A
4.186	70	Woods, Good, HSG C
0.233	30	Meadow, non-grazed, HSG A
12.228	44	Weighted Average
12.228		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.4	50	0.0300	0.05		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
3.9	140	0.0571	0.60		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
9.6	160	0.0123	0.28		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
31.9	350	Total			

Subcatchment EX1B: Central

Hydrograph



55304.01-EX HYDROCAD

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Type III 24-hr 2-YEAR Rainfall=3.14"

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Page 5

Summary for Subcatchment EX1C: Finger Wetland

Runoff = 0.15 cfs @ 15.08 hrs, Volume= 0.094 af, Depth= 0.14"

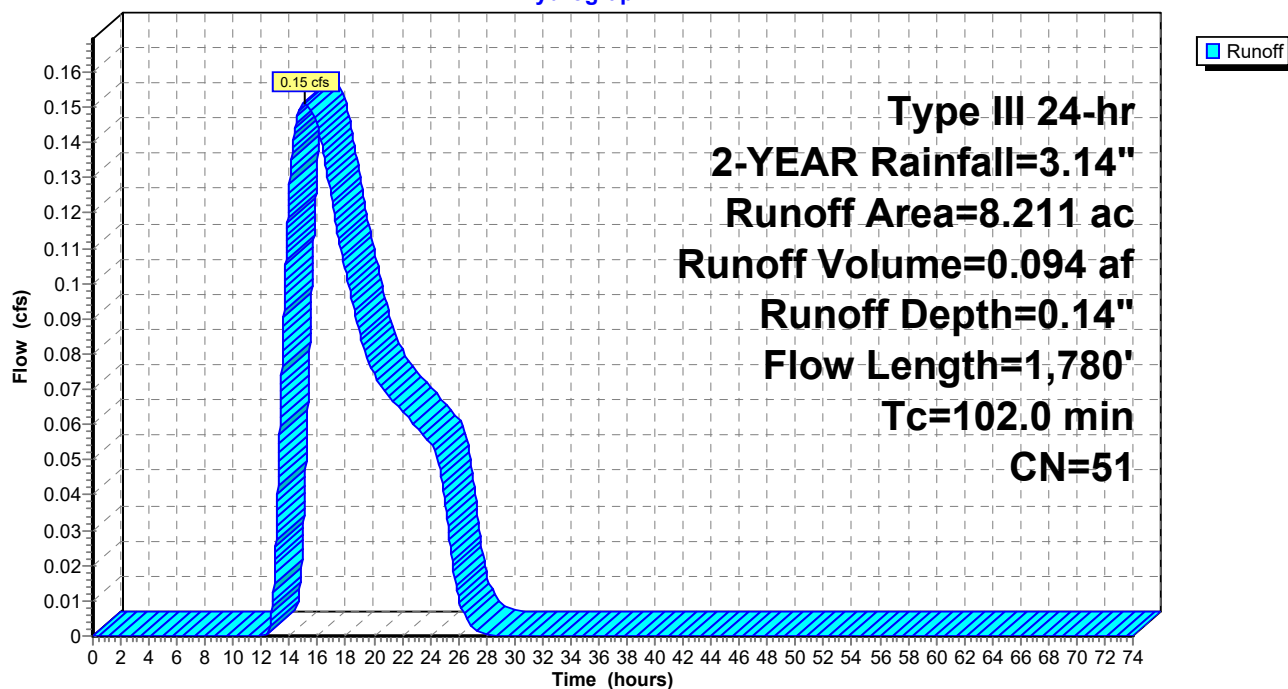
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-YEAR Rainfall=3.14"

Area (ac)	CN	Description
4.277	70	Woods, Good, HSG C
3.934	30	Woods, Good, HSG A
8.211	51	Weighted Average
8.211		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	50	0.0200	0.04		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
2.2	60	0.0330	0.45		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
4.0	220	0.1318	0.91		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
36.0	750	0.0193	0.35		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
38.1	700	0.0150	0.31		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
102.0	1,780	Total			

Subcatchment EX1C: Finger Wetland

Hydrograph



Summary for Subcatchment EX2A: Southern

Runoff = 7.92 cfs @ 12.92 hrs, Volume= 1.685 af, Depth= 0.70"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-YEAR Rainfall=3.14"

Area (ac)	CN	Description
0.008	96	Gravel surface, HSG C
0.058	70	Woods, Good, HSG C
0.147	63	Small grain, straight row, Good, HSG A
13.746	63	Small grain, straight row, Good, HSG A
0.046	63	Small grain, straight row, Good, HSG A
0.252	63	Small grain, straight row, Good, HSG A
0.040	63	Small grain, straight row, Good, HSG A
0.127	63	Small grain, straight row, Good, HSG A
0.027	63	Small grain, straight row, Good, HSG A
0.024	63	Small grain, straight row, Good, HSG A
0.406	63	Small grain, straight row, Good, HSG A
6.587	83	Small grain, straight row, Good, HSG C
0.615	70	Woods, Good, HSG C
0.271	71	Meadow, non-grazed, HSG C
0.007	71	Meadow, non-grazed, HSG C
0.587	71	Meadow, non-grazed, HSG C
0.024	30	Meadow, non-grazed, HSG A
0.011	30	Meadow, non-grazed, HSG A
2.381	30	Woods, Good, HSG A
0.264	30	Woods, Good, HSG A
0.270	30	Woods, Good, HSG A
0.148	30	Woods, Good, HSG A
0.031	63	Small grain, straight row, Good, HSG A
0.072	96	Gravel surface, HSG A
2.167	96	Gravel surface, HSG A
0.229	96	Gravel surface, HSG A
0.017	96	Gravel surface, HSG A
0.018	96	Gravel surface, HSG A
0.201	96	Gravel surface, HSG A
0.030	96	Gravel surface, HSG A
0.012	98	Unconnected pavement, HSG A
0.037	98	Unconnected pavement, HSG A
0.022	98	Unconnected pavement, HSG A
28.883	68	Weighted Average
28.812		99.75% Pervious Area
0.071		0.25% Impervious Area
0.071		100.00% Unconnected

55304.01-EX HYDROCAD

Prepared by VHB

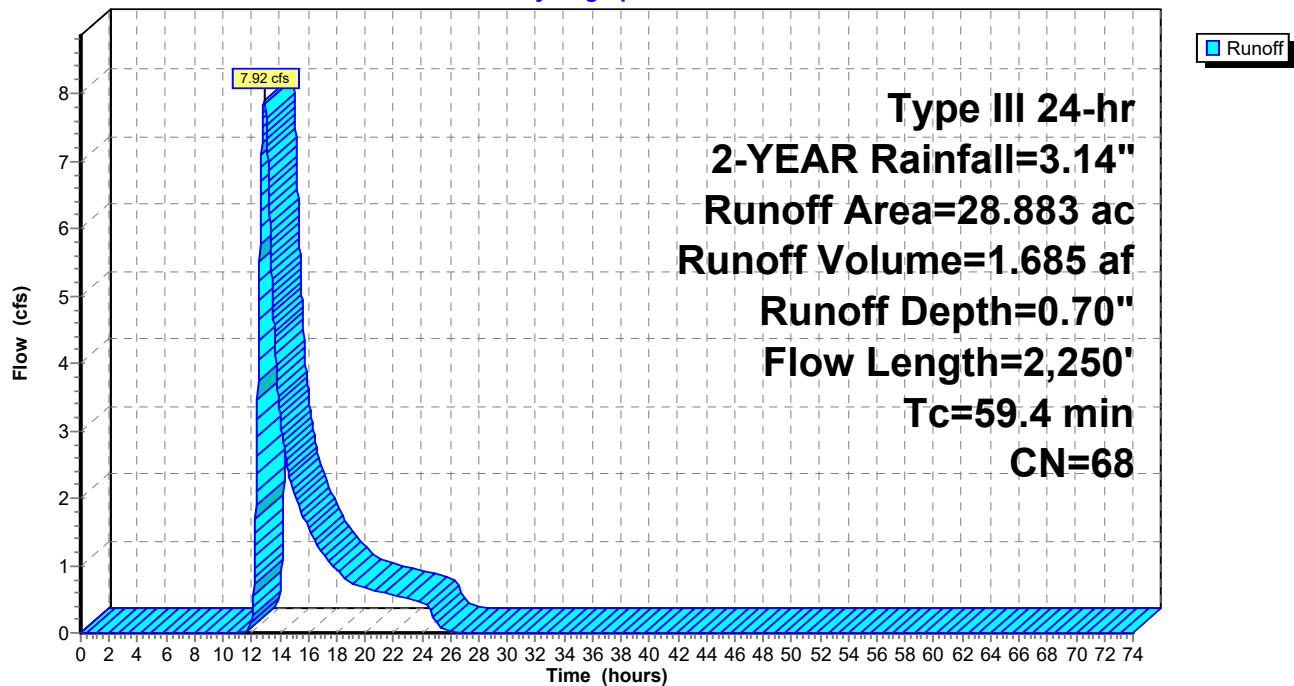
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Type III 24-hr 2-YEAR Rainfall=3.14"

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Page 7

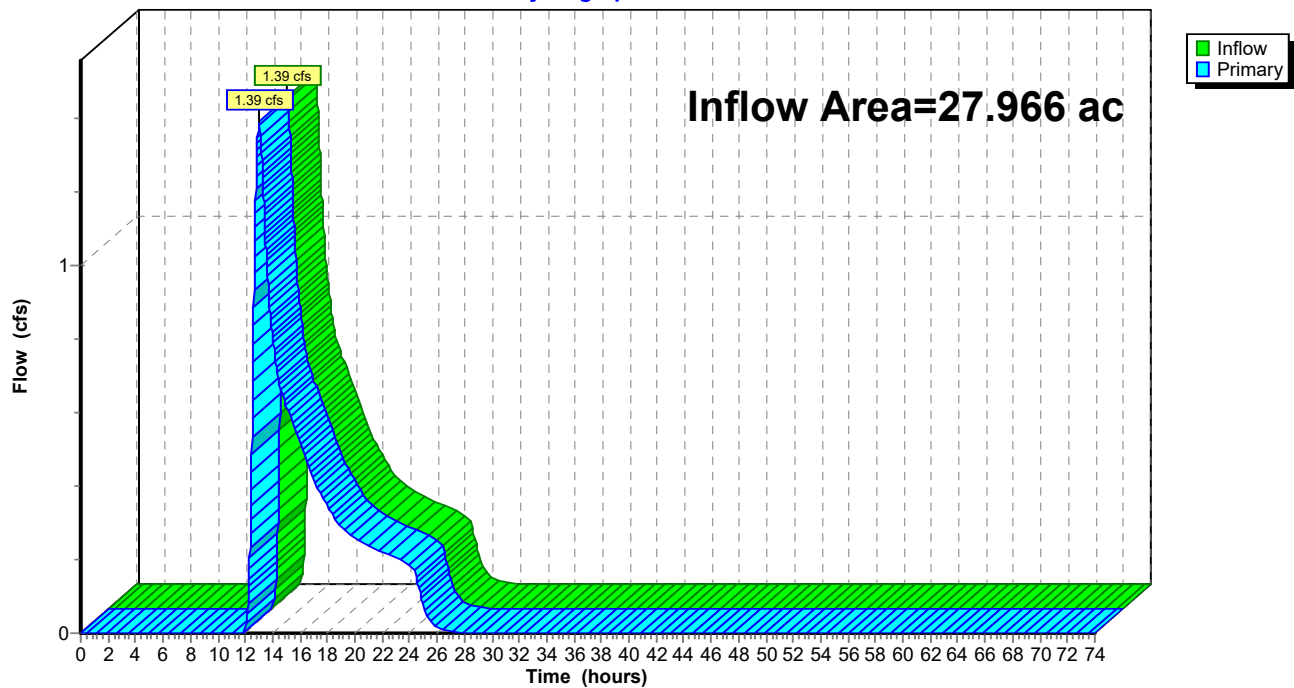
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	50	0.1600	0.30		Sheet Flow, Cultivated: Residue>20% n= 0.170 P2= 3.14"
0.7	50	0.0300	1.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
3.6	110	0.0409	0.51		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
22.0	330	0.0100	0.25		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
3.8	185	0.0135	0.81		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
3.8	100	0.0300	0.43		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
15.1	1,250	0.0388	1.38		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
7.7	175	0.0229	0.38		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
59.4	2,250	Total			

Subcatchment EX2A: Southern**Hydrograph**

Summary for Link DP-1: Lewiston Junction

Inflow Area = 27.966 ac, 0.00% Impervious, Inflow Depth = 0.19" for 2-YEAR event
Inflow = 1.39 cfs @ 13.02 hrs, Volume= 0.454 af
Primary = 1.39 cfs @ 13.02 hrs, Volume= 0.454 af, Atten= 0%, Lag= 0.0 min

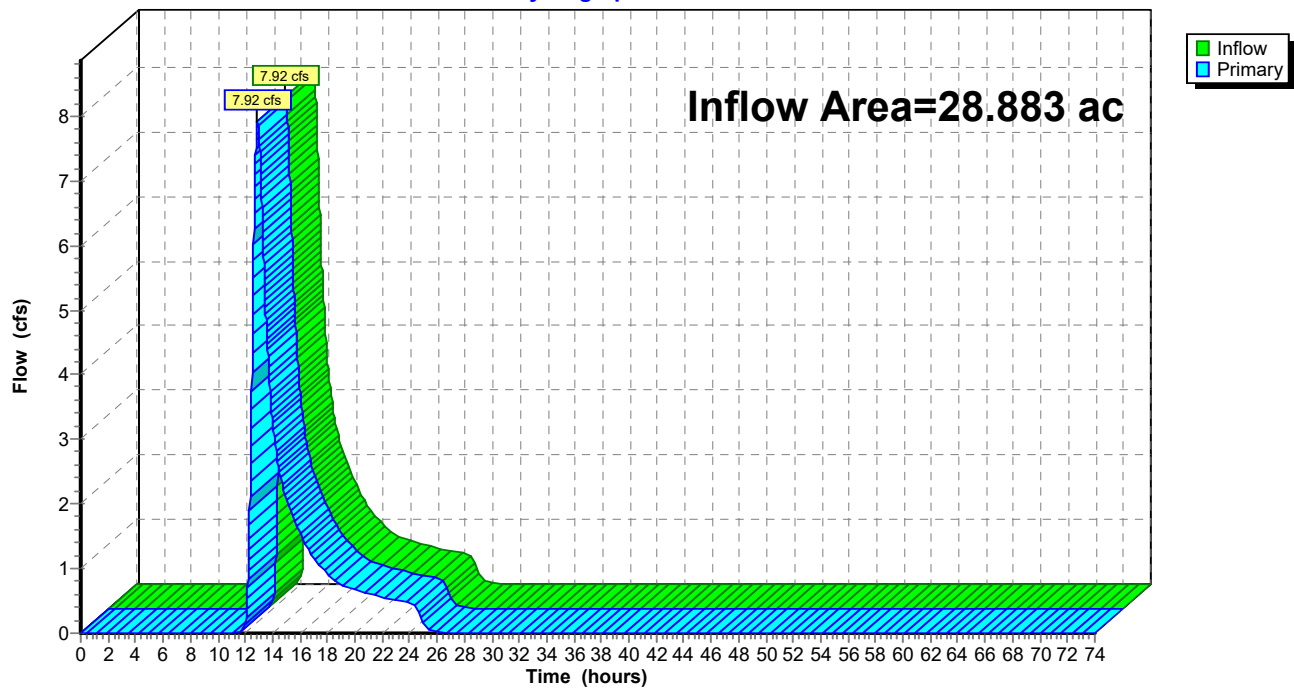
Primary outflow = Inflow, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs

Link DP-1: Lewiston Junction**Hydrograph**

Summary for Link DP-2: Lewiston Junction South

Inflow Area = 28.883 ac, 0.25% Impervious, Inflow Depth = 0.70" for 2-YEAR event
Inflow = 7.92 cfs @ 12.92 hrs, Volume= 1.685 af
Primary = 7.92 cfs @ 12.92 hrs, Volume= 1.685 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs

Link DP-2: Lewiston Junction South**Hydrograph**

55304.01-EX HYDROCAD

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Type III 24-hr 10-YEAR Rainfall=4.72"

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Page 10

Summary for Subcatchment EX1A: Northern

Runoff = 4.40 cfs @ 12.90 hrs, Volume= 0.879 af, Depth= 1.40"

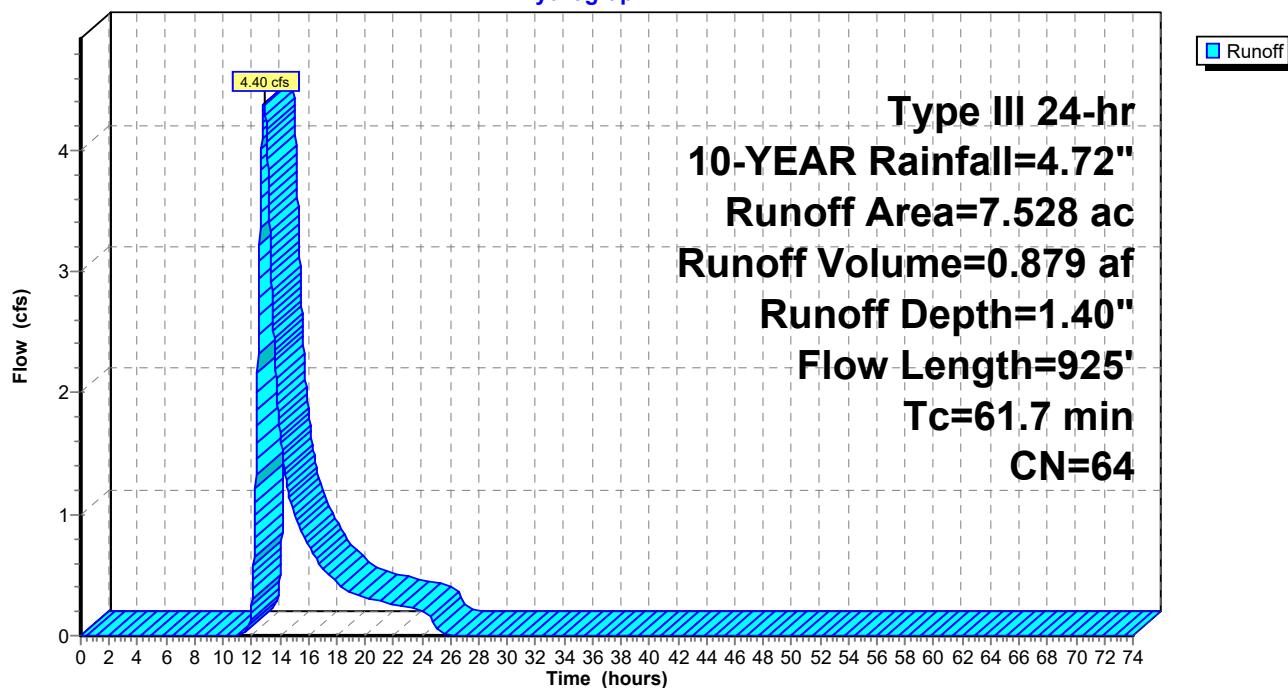
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-YEAR Rainfall=4.72"

Area (ac)	CN	Description
0.288	30	Woods, Good, HSG A
0.922	30	Woods, Good, HSG A
6.318	70	Woods, Good, HSG C
7.528	64	Weighted Average
7.528		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	50	0.0250	0.04		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
41.9	875	0.0194	0.35		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
61.7	925	Total			

Subcatchment EX1A: Northern

Hydrograph



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Type III 24-hr 10-YEAR Rainfall=4.72"

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Page 11

Summary for Subcatchment EX1B: Central

Runoff = 0.98 cfs @ 12.75 hrs, Volume= 0.323 af, Depth= 0.32"

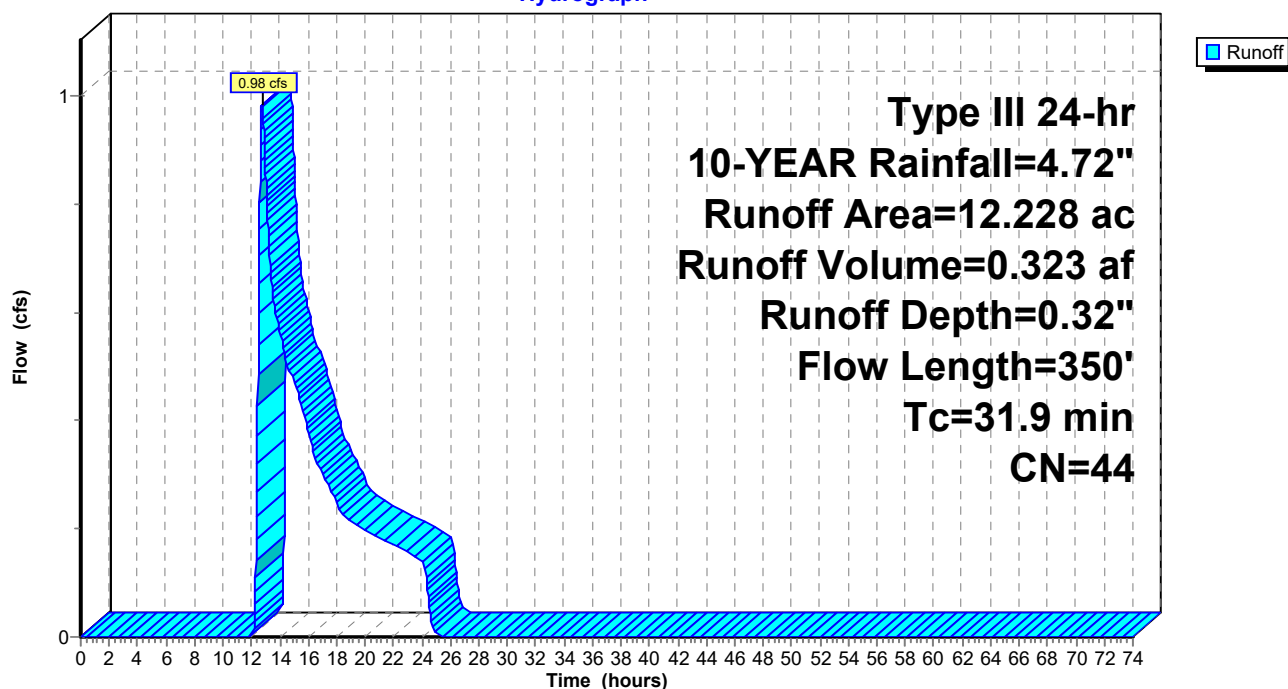
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-YEAR Rainfall=4.72"

Area (ac)	CN	Description
0.031	77	Woods, Good, HSG D
7.777	30	Woods, Good, HSG A
4.186	70	Woods, Good, HSG C
0.233	30	Meadow, non-grazed, HSG A
12.228	44	Weighted Average
12.228		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.4	50	0.0300	0.05		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
3.9	140	0.0571	0.60		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
9.6	160	0.0123	0.28		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
31.9	350	Total			

Subcatchment EX1B: Central

Hydrograph



55304.01-EX HYDROCAD

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Type III 24-hr 10-YEAR Rainfall=4.72"

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Page 12

Summary for Subcatchment EX1C: Finger Wetland

Runoff = 1.17 cfs @ 13.71 hrs, Volume= 0.432 af, Depth= 0.63"

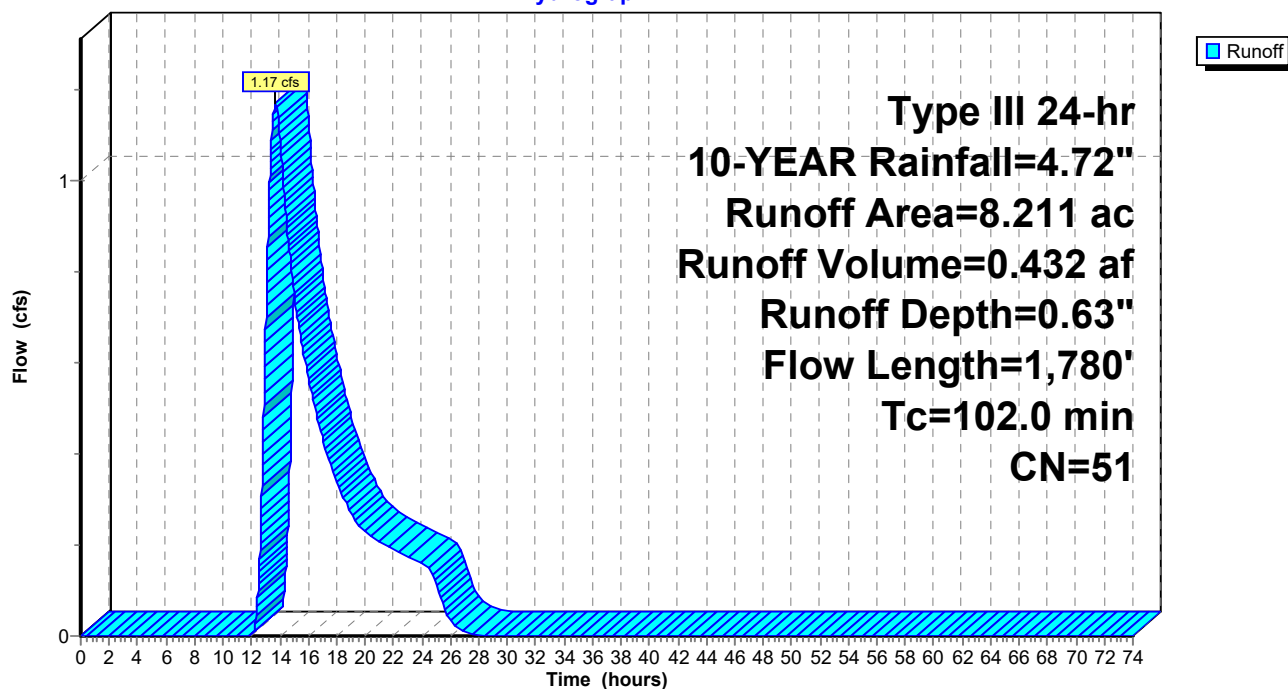
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-YEAR Rainfall=4.72"

Area (ac)	CN	Description
4.277	70	Woods, Good, HSG C
3.934	30	Woods, Good, HSG A
8.211	51	Weighted Average
8.211		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	50	0.0200	0.04		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
2.2	60	0.0330	0.45		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
4.0	220	0.1318	0.91		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
36.0	750	0.0193	0.35		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
38.1	700	0.0150	0.31		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
102.0	1,780	Total			

Subcatchment EX1C: Finger Wetland

Hydrograph



Summary for Subcatchment EX2A: Southern

Runoff = 21.56 cfs @ 12.86 hrs, Volume= 4.051 af, Depth= 1.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-YEAR Rainfall=4.72"

Area (ac)	CN	Description
0.008	96	Gravel surface, HSG C
0.058	70	Woods, Good, HSG C
0.147	63	Small grain, straight row, Good, HSG A
13.746	63	Small grain, straight row, Good, HSG A
0.046	63	Small grain, straight row, Good, HSG A
0.252	63	Small grain, straight row, Good, HSG A
0.040	63	Small grain, straight row, Good, HSG A
0.127	63	Small grain, straight row, Good, HSG A
0.027	63	Small grain, straight row, Good, HSG A
0.024	63	Small grain, straight row, Good, HSG A
0.406	63	Small grain, straight row, Good, HSG A
6.587	83	Small grain, straight row, Good, HSG C
0.615	70	Woods, Good, HSG C
0.271	71	Meadow, non-grazed, HSG C
0.007	71	Meadow, non-grazed, HSG C
0.587	71	Meadow, non-grazed, HSG C
0.024	30	Meadow, non-grazed, HSG A
0.011	30	Meadow, non-grazed, HSG A
2.381	30	Woods, Good, HSG A
0.264	30	Woods, Good, HSG A
0.270	30	Woods, Good, HSG A
0.148	30	Woods, Good, HSG A
0.031	63	Small grain, straight row, Good, HSG A
0.072	96	Gravel surface, HSG A
2.167	96	Gravel surface, HSG A
0.229	96	Gravel surface, HSG A
0.017	96	Gravel surface, HSG A
0.018	96	Gravel surface, HSG A
0.201	96	Gravel surface, HSG A
0.030	96	Gravel surface, HSG A
0.012	98	Unconnected pavement, HSG A
0.037	98	Unconnected pavement, HSG A
0.022	98	Unconnected pavement, HSG A
28.883	68	Weighted Average
28.812		99.75% Pervious Area
0.071		0.25% Impervious Area
0.071		100.00% Unconnected

55304.01-EX HYDROCAD

Prepared by VHB

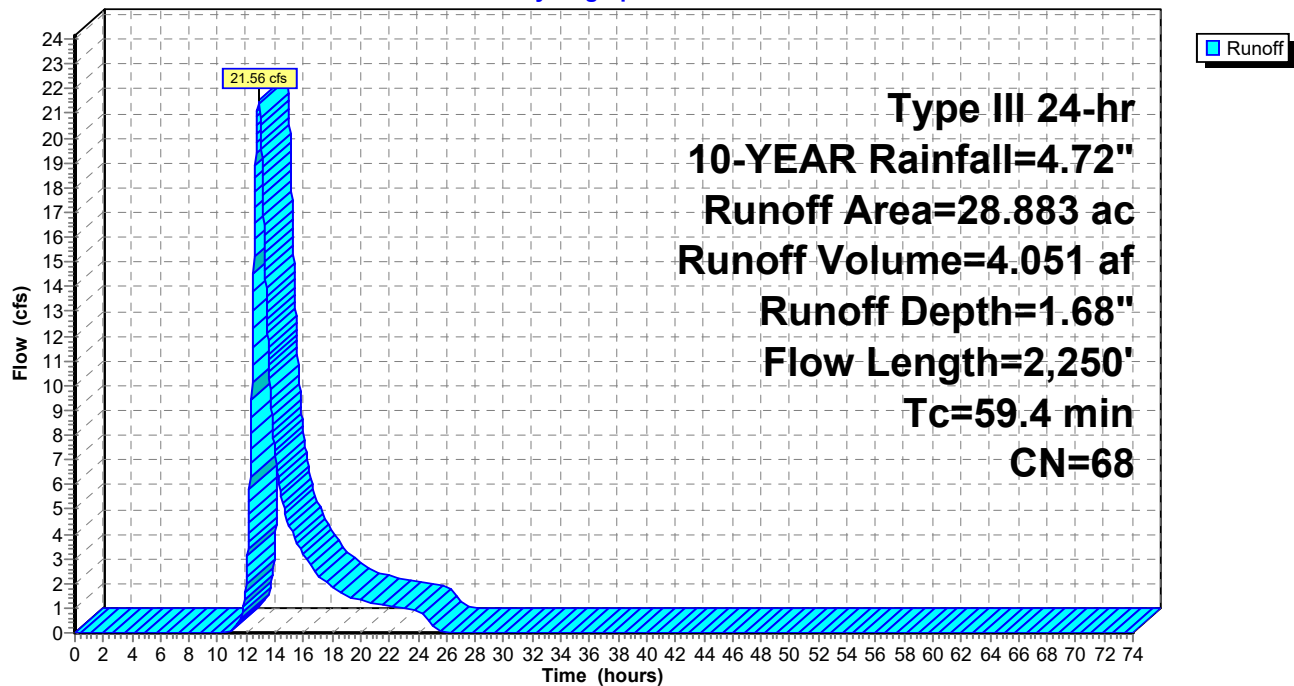
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Type III 24-hr 10-YEAR Rainfall=4.72"

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Page 14

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	50	0.1600	0.30		Sheet Flow, Cultivated: Residue>20% n= 0.170 P2= 3.14"
0.7	50	0.0300	1.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
3.6	110	0.0409	0.51		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
22.0	330	0.0100	0.25		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
3.8	185	0.0135	0.81		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
3.8	100	0.0300	0.43		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
15.1	1,250	0.0388	1.38		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
7.7	175	0.0229	0.38		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
59.4	2,250	Total			

Subcatchment EX2A: Southern**Hydrograph**

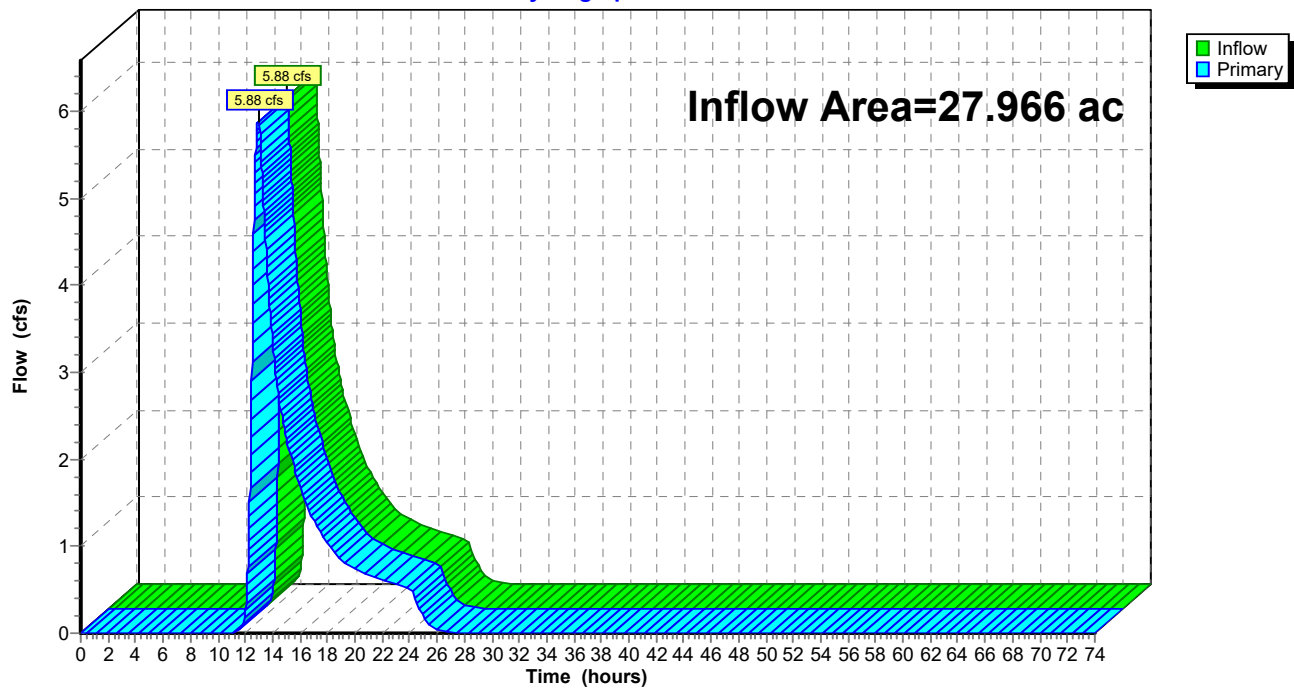
Summary for Link DP-1: Lewiston Junction

Inflow Area = 27.966 ac, 0.00% Impervious, Inflow Depth = 0.70" for 10-YEAR event
Inflow = 5.88 cfs @ 12.95 hrs, Volume= 1.635 af
Primary = 5.88 cfs @ 12.95 hrs, Volume= 1.635 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs

Link DP-1: Lewiston Junction

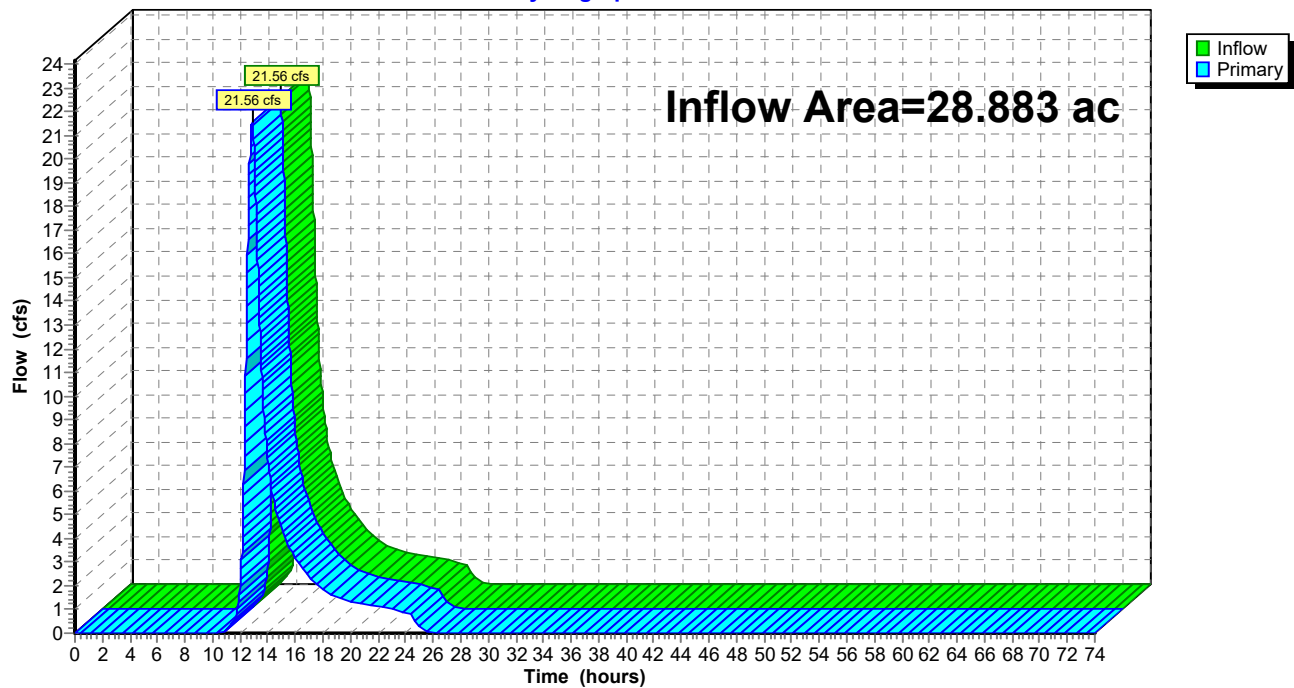
Hydrograph



Summary for Link DP-2: Lewiston Junction South

Inflow Area = 28.883 ac, 0.25% Impervious, Inflow Depth = 1.68" for 10-YEAR event
Inflow = 21.56 cfs @ 12.86 hrs, Volume= 4.051 af
Primary = 21.56 cfs @ 12.86 hrs, Volume= 4.051 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs

Link DP-2: Lewiston Junction South**Hydrograph**

55304.01-EX HYDROCAD

Prepared by VHB

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Type III 24-hr 25-YEAR Rainfall=5.71"

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Page 17

Summary for Subcatchment EX1A: Northern

Runoff = 6.73 cfs @ 12.88 hrs, Volume= 1.292 af, Depth= 2.06"

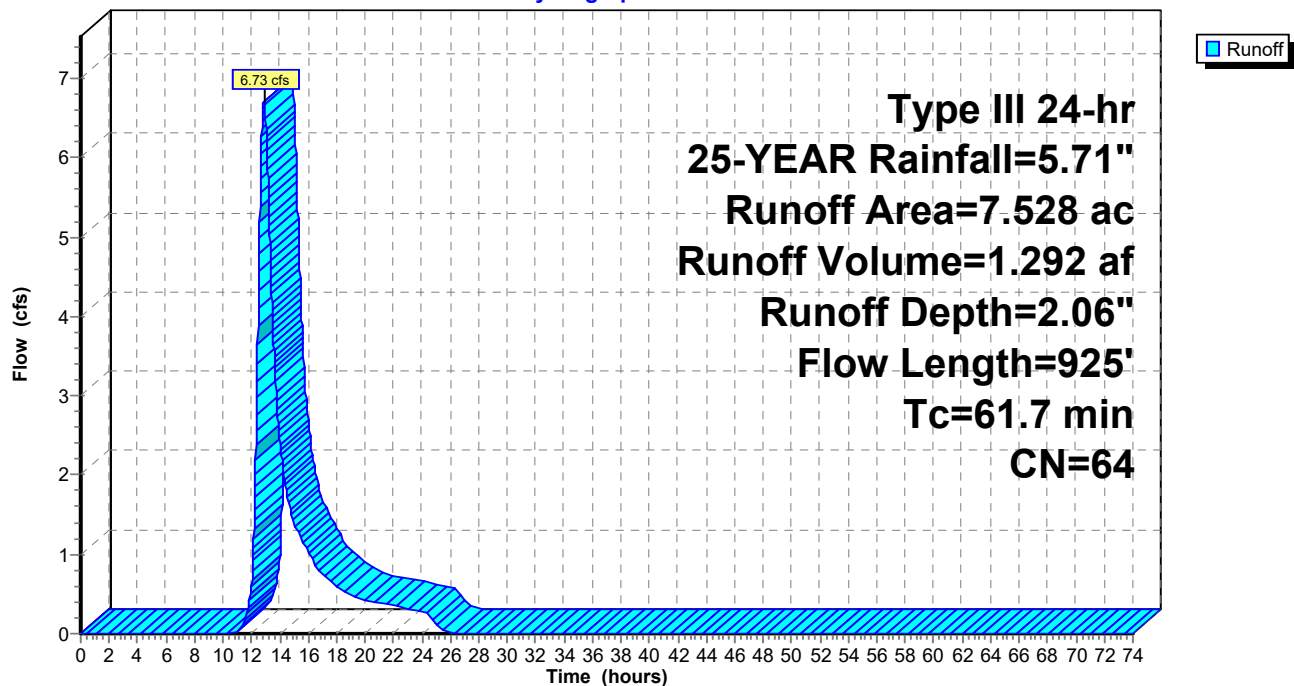
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-YEAR Rainfall=5.71"

Area (ac)	CN	Description
0.288	30	Woods, Good, HSG A
0.922	30	Woods, Good, HSG A
6.318	70	Woods, Good, HSG C
7.528	64	Weighted Average
7.528		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	50	0.0250	0.04		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
41.9	875	0.0194	0.35		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
61.7	925	Total			

Subcatchment EX1A: Northern

Hydrograph



55304.01-EX HYDROCAD

Prepared by VHB

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Type III 24-hr 25-YEAR Rainfall=5.71"

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Page 18

Summary for Subcatchment EX1B: Central

Runoff = 2.93 cfs @ 12.64 hrs, Volume= 0.642 af, Depth= 0.63"

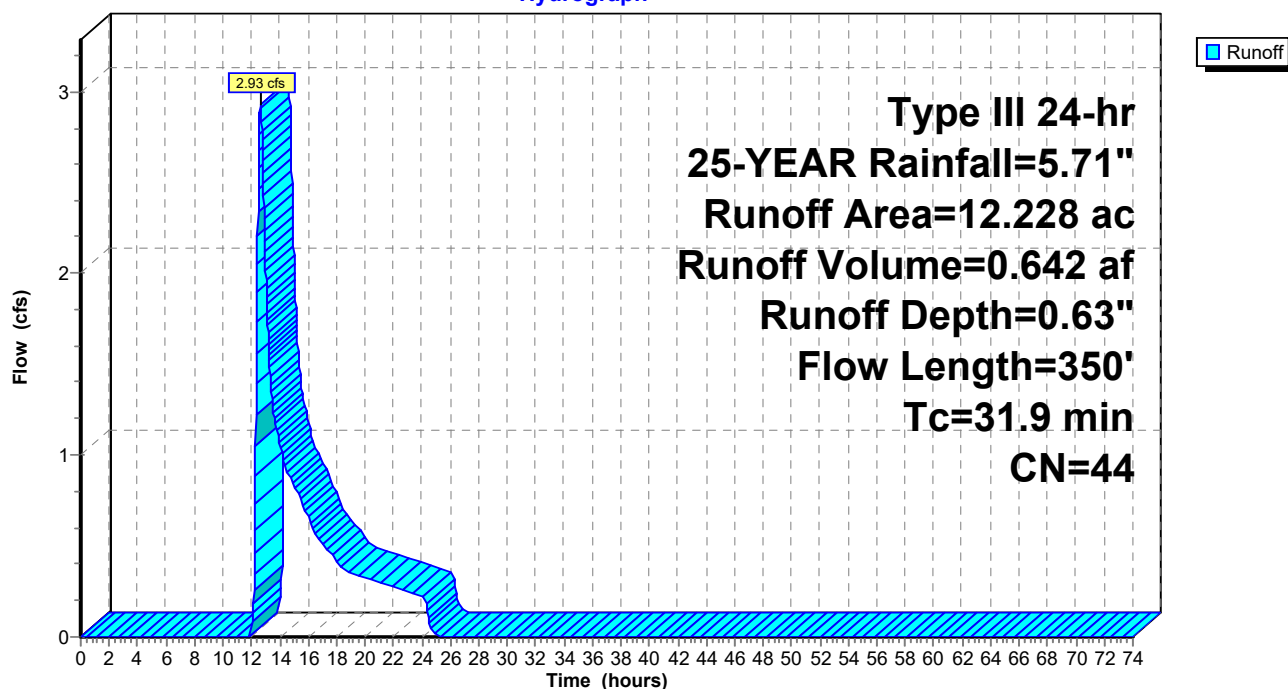
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-YEAR Rainfall=5.71"

Area (ac)	CN	Description
0.031	77	Woods, Good, HSG D
7.777	30	Woods, Good, HSG A
4.186	70	Woods, Good, HSG C
0.233	30	Meadow, non-grazed, HSG A
12.228	44	Weighted Average
12.228		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.4	50	0.0300	0.05		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
3.9	140	0.0571	0.60		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
9.6	160	0.0123	0.28		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
31.9	350	Total			

Subcatchment EX1B: Central

Hydrograph



55304.01-EX HYDROCAD

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Type III 24-hr 25-YEAR Rainfall=5.71"

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Page 19

Summary for Subcatchment EX1C: Finger Wetland

Runoff = 2.27 cfs @ 13.60 hrs, Volume= 0.733 af, Depth= 1.07"

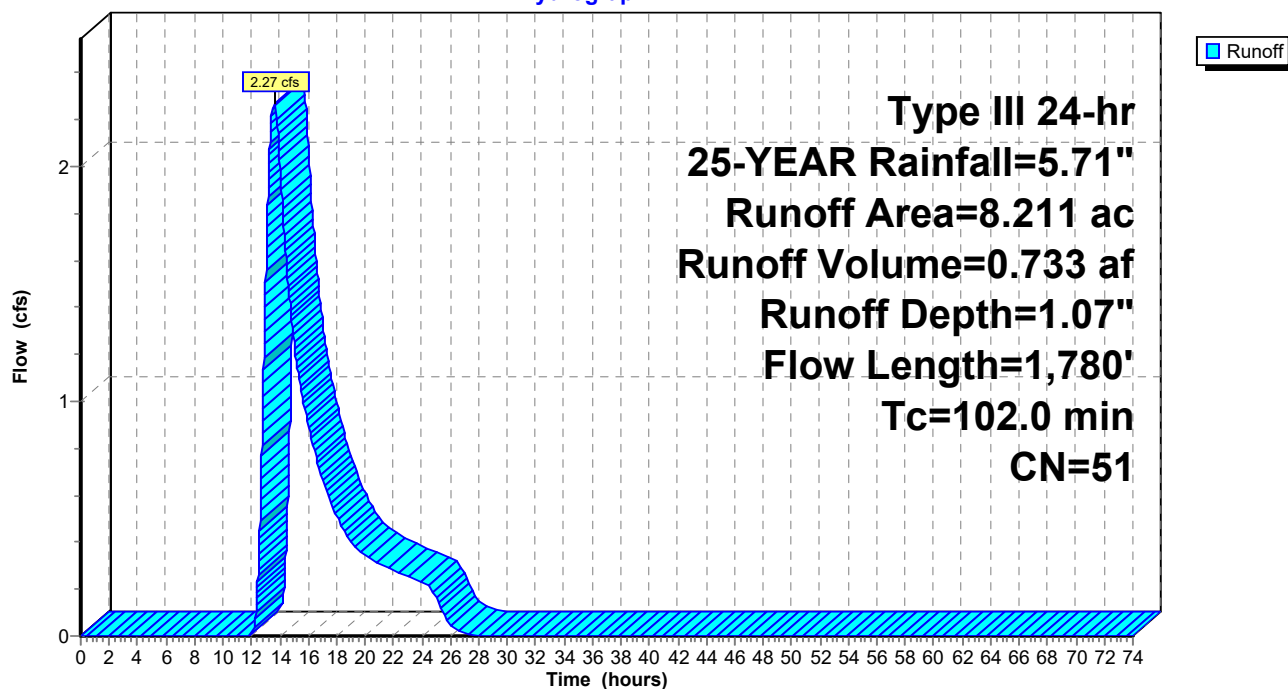
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-YEAR Rainfall=5.71"

Area (ac)	CN	Description
4.277	70	Woods, Good, HSG C
3.934	30	Woods, Good, HSG A
8.211	51	Weighted Average
8.211		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	50	0.0200	0.04		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
2.2	60	0.0330	0.45		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
4.0	220	0.1318	0.91		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
36.0	750	0.0193	0.35		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
38.1	700	0.0150	0.31		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
102.0	1,780	Total			

Subcatchment EX1C: Finger Wetland

Hydrograph



55304.01-EX HYDROCAD

Type III 24-hr 25-YEAR Rainfall=5.71"

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Page 20

Summary for Subcatchment EX2A: Southern

Runoff = 31.46 cfs @ 12.85 hrs, Volume= 5.777 af, Depth= 2.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-YEAR Rainfall=5.71"

Area (ac)	CN	Description
0.008	96	Gravel surface, HSG C
0.058	70	Woods, Good, HSG C
0.147	63	Small grain, straight row, Good, HSG A
13.746	63	Small grain, straight row, Good, HSG A
0.046	63	Small grain, straight row, Good, HSG A
0.252	63	Small grain, straight row, Good, HSG A
0.040	63	Small grain, straight row, Good, HSG A
0.127	63	Small grain, straight row, Good, HSG A
0.027	63	Small grain, straight row, Good, HSG A
0.024	63	Small grain, straight row, Good, HSG A
0.406	63	Small grain, straight row, Good, HSG A
6.587	83	Small grain, straight row, Good, HSG C
0.615	70	Woods, Good, HSG C
0.271	71	Meadow, non-grazed, HSG C
0.007	71	Meadow, non-grazed, HSG C
0.587	71	Meadow, non-grazed, HSG C
0.024	30	Meadow, non-grazed, HSG A
0.011	30	Meadow, non-grazed, HSG A
2.381	30	Woods, Good, HSG A
0.264	30	Woods, Good, HSG A
0.270	30	Woods, Good, HSG A
0.148	30	Woods, Good, HSG A
0.031	63	Small grain, straight row, Good, HSG A
0.072	96	Gravel surface, HSG A
2.167	96	Gravel surface, HSG A
0.229	96	Gravel surface, HSG A
0.017	96	Gravel surface, HSG A
0.018	96	Gravel surface, HSG A
0.201	96	Gravel surface, HSG A
0.030	96	Gravel surface, HSG A
0.012	98	Unconnected pavement, HSG A
0.037	98	Unconnected pavement, HSG A
0.022	98	Unconnected pavement, HSG A
28.883	68	Weighted Average
28.812		99.75% Pervious Area
0.071		0.25% Impervious Area
0.071		100.00% Unconnected

55304.01-EX HYDROCAD

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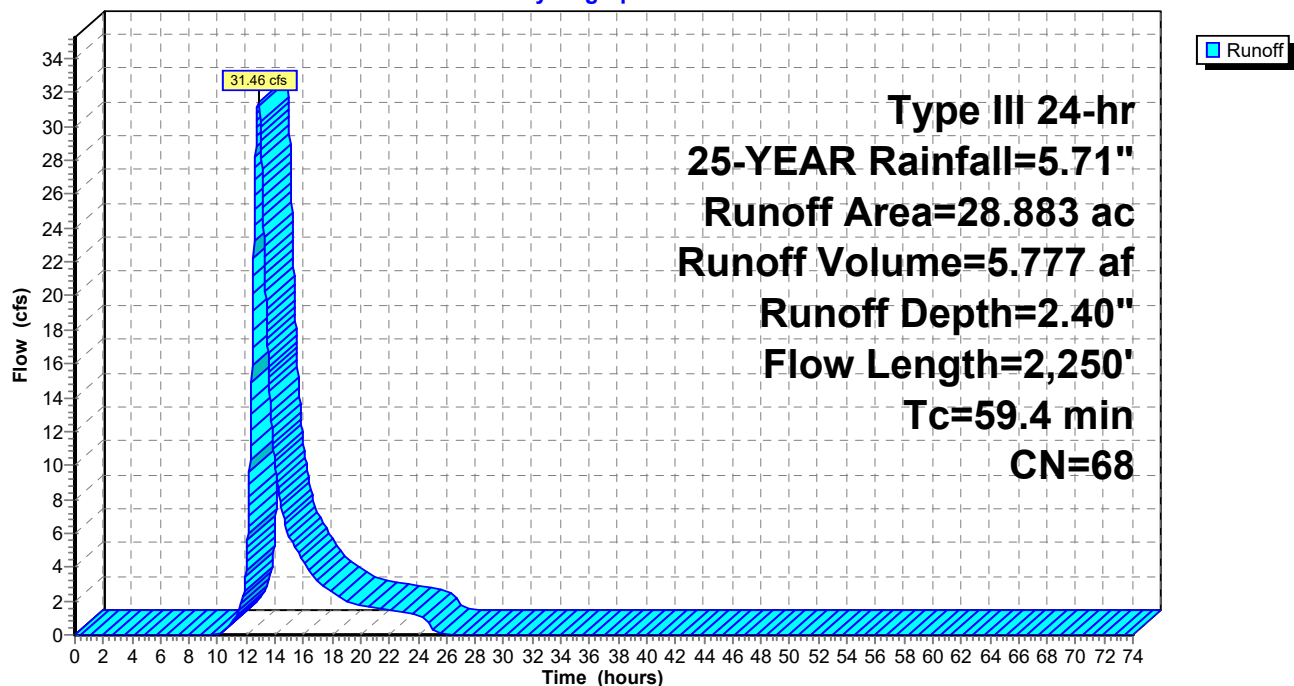
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Type III 24-hr 25-YEAR Rainfall=5.71"

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Page 21

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	50	0.1600	0.30		Sheet Flow, Cultivated: Residue>20% n= 0.170 P2= 3.14"
0.7	50	0.0300	1.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
3.6	110	0.0409	0.51		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
22.0	330	0.0100	0.25		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
3.8	185	0.0135	0.81		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
3.8	100	0.0300	0.43		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
15.1	1,250	0.0388	1.38		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
7.7	175	0.0229	0.38		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
59.4	2,250	Total			

Subcatchment EX2A: Southern**Hydrograph**

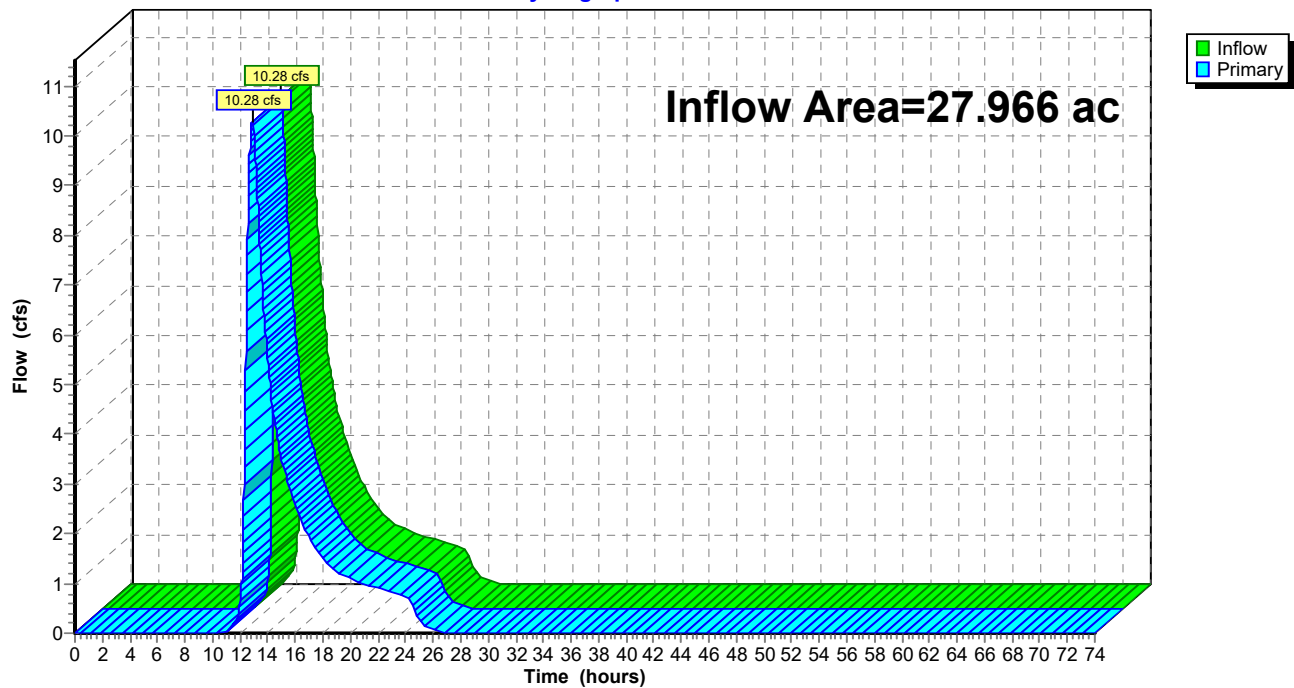
Summary for Link DP-1: Lewiston Junction

Inflow Area = 27.966 ac, 0.00% Impervious, Inflow Depth = 1.14" for 25-YEAR event
Inflow = 10.28 cfs @ 12.86 hrs, Volume= 2.667 af
Primary = 10.28 cfs @ 12.86 hrs, Volume= 2.667 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs

Link DP-1: Lewiston Junction

Hydrograph



Summary for Link DP-2: Lewiston Junction South

Inflow Area = 28.883 ac, 0.25% Impervious, Inflow Depth = 2.40" for 25-YEAR event
Inflow = 31.46 cfs @ 12.85 hrs, Volume= 5.777 af
Primary = 31.46 cfs @ 12.85 hrs, Volume= 5.777 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs

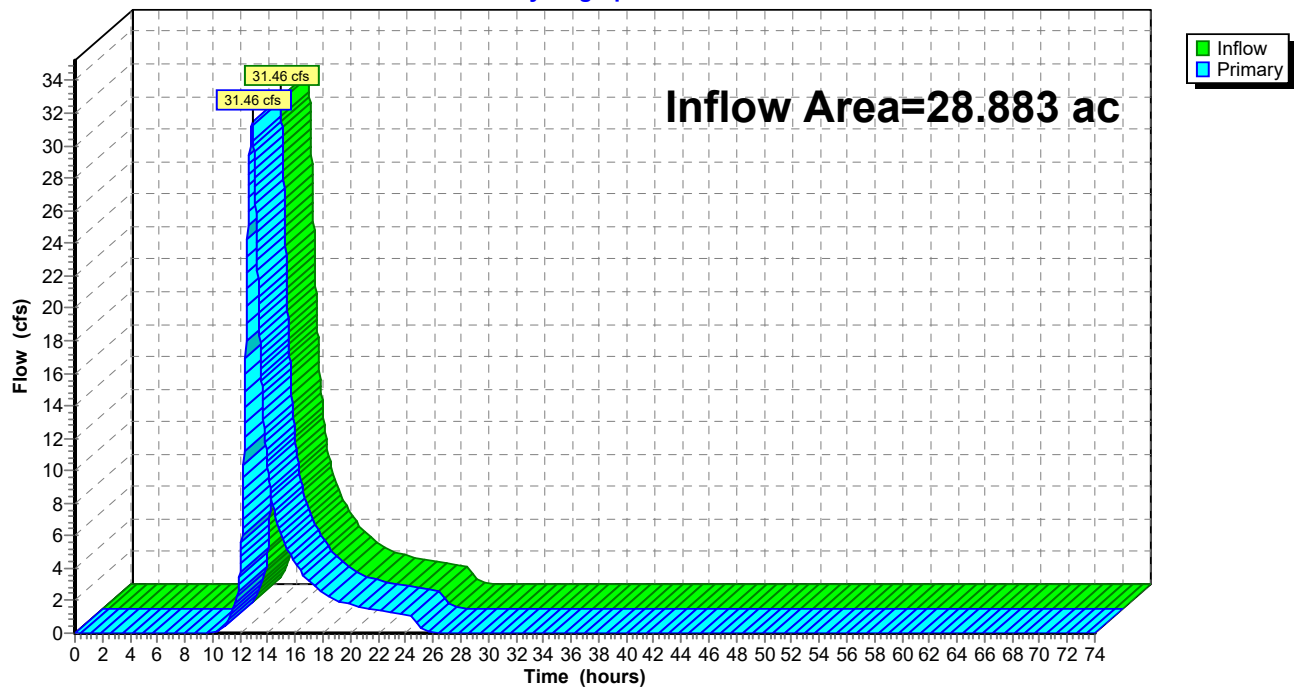
Link DP-2: Lewiston Junction South**Hydrograph**

TABLE OF CONTENTS

Project Reports

- 1 Routing Diagram
- 2 Area Listing (all nodes)

2-YEAR Event

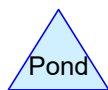
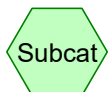
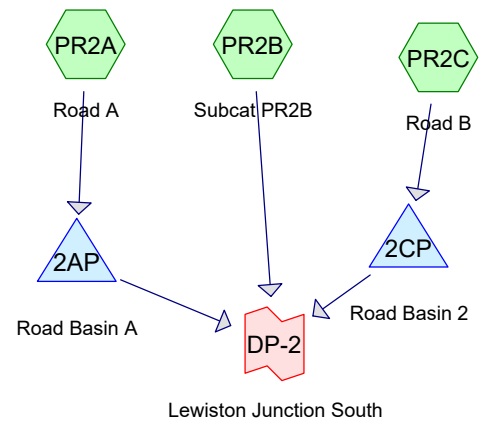
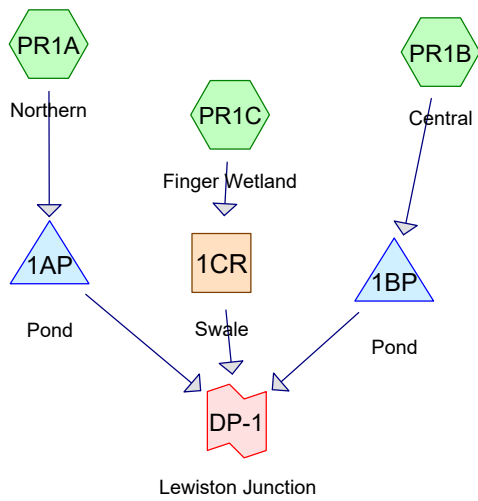
- 3 Subcat EX1A: Northern
- 4 Subcat EX1B: Central
- 5 Subcat EX1C: Finger Wetland
- 6 Subcat EX2A: Southern
- 8 Link DP-1: Lewiston Junction
- 9 Link DP-2: Lewiston Junction South

10-YEAR Event

- 10 Subcat EX1A: Northern
- 11 Subcat EX1B: Central
- 12 Subcat EX1C: Finger Wetland
- 13 Subcat EX2A: Southern
- 15 Link DP-1: Lewiston Junction
- 16 Link DP-2: Lewiston Junction South

25-YEAR Event

- 17 Subcat EX1A: Northern
- 18 Subcat EX1B: Central
- 19 Subcat EX1C: Finger Wetland
- 20 Subcat EX2A: Southern
- 22 Link DP-1: Lewiston Junction
- 23 Link DP-2: Lewiston Junction South



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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
2.908	96	Gravel surface, HSG A (PR1B, PR2A, PR2B)
0.608	96	Gravel surface, HSG C (PR2A, PR2B, PR2C)
5.926	30	Meadow, non-grazed, HSG A (PR1A, PR1B, PR1C, PR2B)
11.549	71	Meadow, non-grazed, HSG C (PR1A, PR1B, PR1C)
0.031	78	Meadow, non-grazed, HSG D (PR1A, PR1C)
0.392	39	Pasture/grassland/range, Good, HSG A (PR1B, PR2A, PR2B)
0.125	74	Pasture/grassland/range, Good, HSG C (PR2A, PR2B, PR2C)
14.542	63	Small grain, straight row, Good, HSG A (PR2A, PR2B)
6.120	83	Small grain, straight row, Good, HSG C (PR2A, PR2B, PR2C)
0.007	98	Unconnected pavement, HSG A (PR1B, PR2B)
0.006	98	Unconnected pavement, HSG C (PR1B)
10.127	30	Woods, Good, HSG A (PR1A, PR1B, PR1C, PR2B)
4.493	70	Woods, Good, HSG C (PR1A, PR1C, PR2A, PR2B, PR2C)

Summary for Subcatchment PR1A: Northern

Runoff = 2.44 cfs @ 12.87 hrs, Volume= 0.522 af, Depth= 0.61"

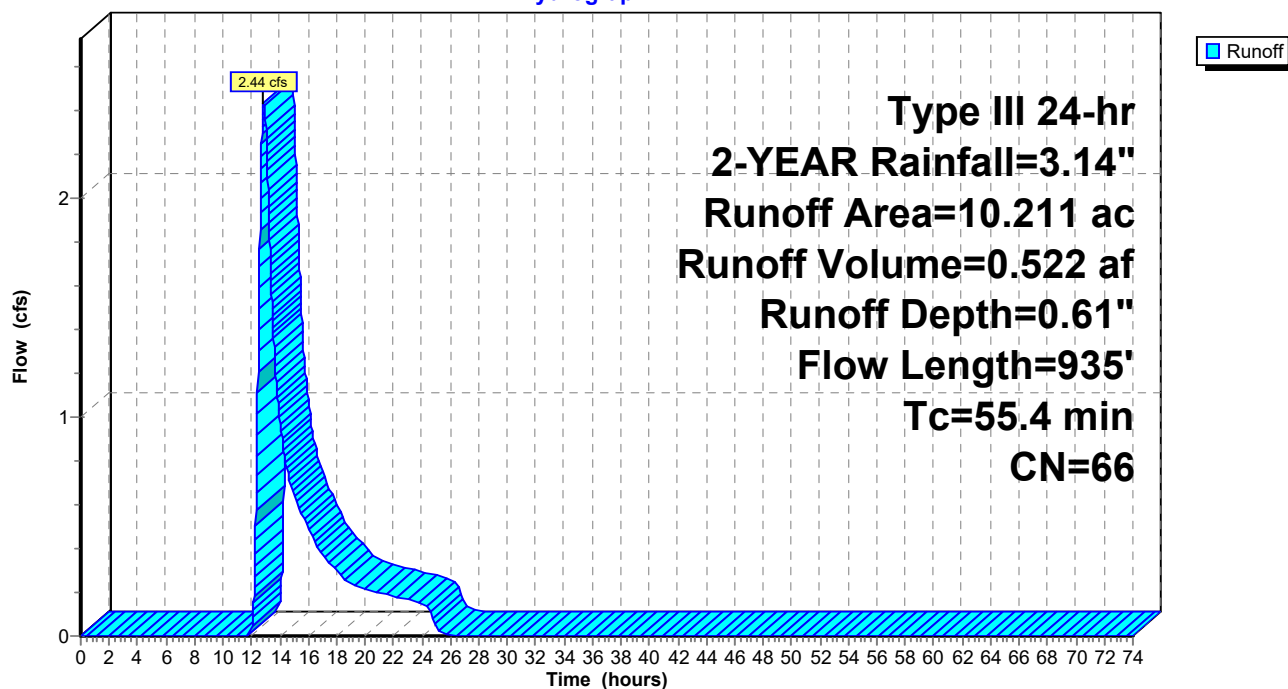
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-YEAR Rainfall=3.14"

Area (ac)	CN	Description
0.020	78	Meadow, non-grazed, HSG D
0.190	30	Meadow, non-grazed, HSG A
6.587	71	Meadow, non-grazed, HSG C
0.731	30	Woods, Good, HSG A
0.265	30	Woods, Good, HSG A
2.419	70	Woods, Good, HSG C
10.211	66	Weighted Average
10.211		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	50	0.0250	0.04		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
7.2	325	0.0225	0.75		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
28.4	560	0.0173	0.33		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
55.4	935	Total			

Subcatchment PR1A: Northern

Hydrograph



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Type III 24-hr 2-YEAR Rainfall=3.14"

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Page 4

Summary for Subcatchment PR1B: Central

Runoff = 0.05 cfs @ 16.88 hrs, Volume= 0.038 af, Depth= 0.04"

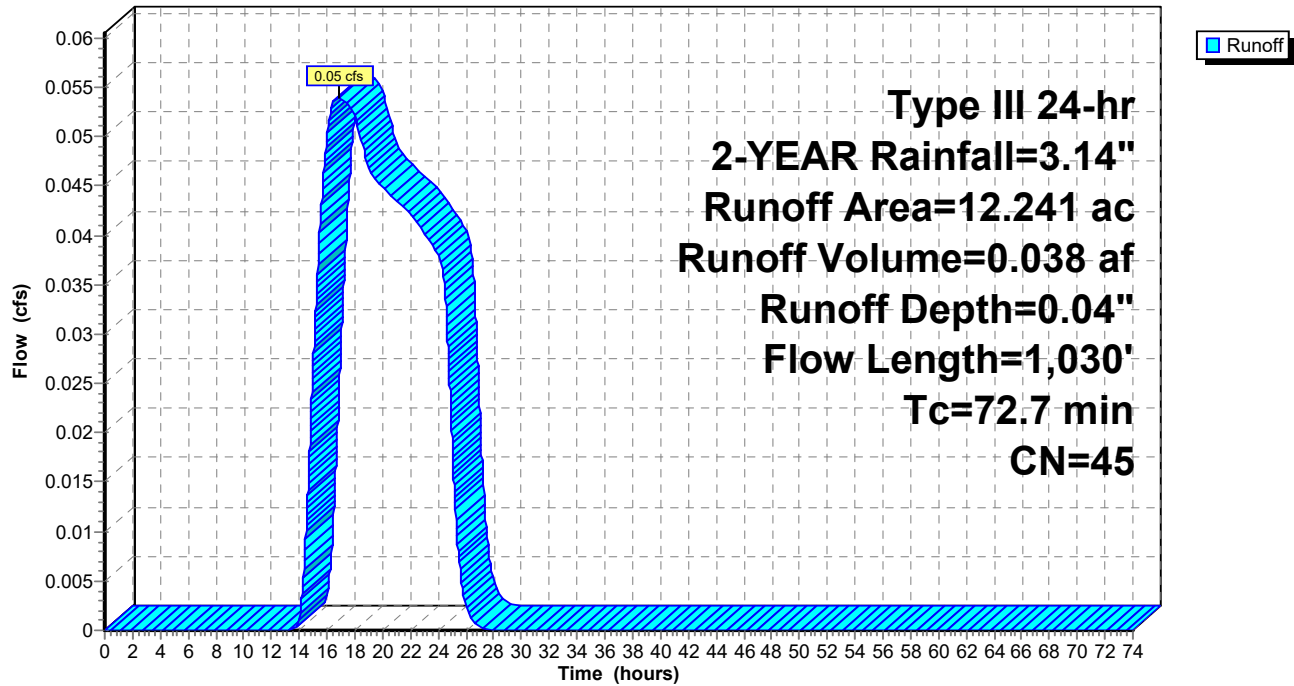
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-YEAR Rainfall=3.14"

Area (ac)	CN	Description
4.208	71	Meadow, non-grazed, HSG C
0.006	98	Unconnected pavement, HSG C
2.024	30	Woods, Good, HSG A
0.006	98	Unconnected pavement, HSG A
0.102	96	Gravel surface, HSG A
5.664	30	Meadow, non-grazed, HSG A
0.229	39	Pasture/grassland/range, Good, HSG A
12.241	45	Weighted Average
12.228		99.89% Pervious Area
0.013		0.11% Impervious Area
0.013		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	50	0.0200	0.04		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
1.7	135	0.0737	1.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.6	45	0.0333	0.46		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
47.7	800	0.0125	0.28		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
72.7	1,030	Total			

Subcatchment PR1B: Central

Hydrograph



Summary for Subcatchment PR1C: Finger Wetland

Runoff = 0.01 cfs @ 22.96 hrs, Volume= 0.005 af, Depth= 0.01"

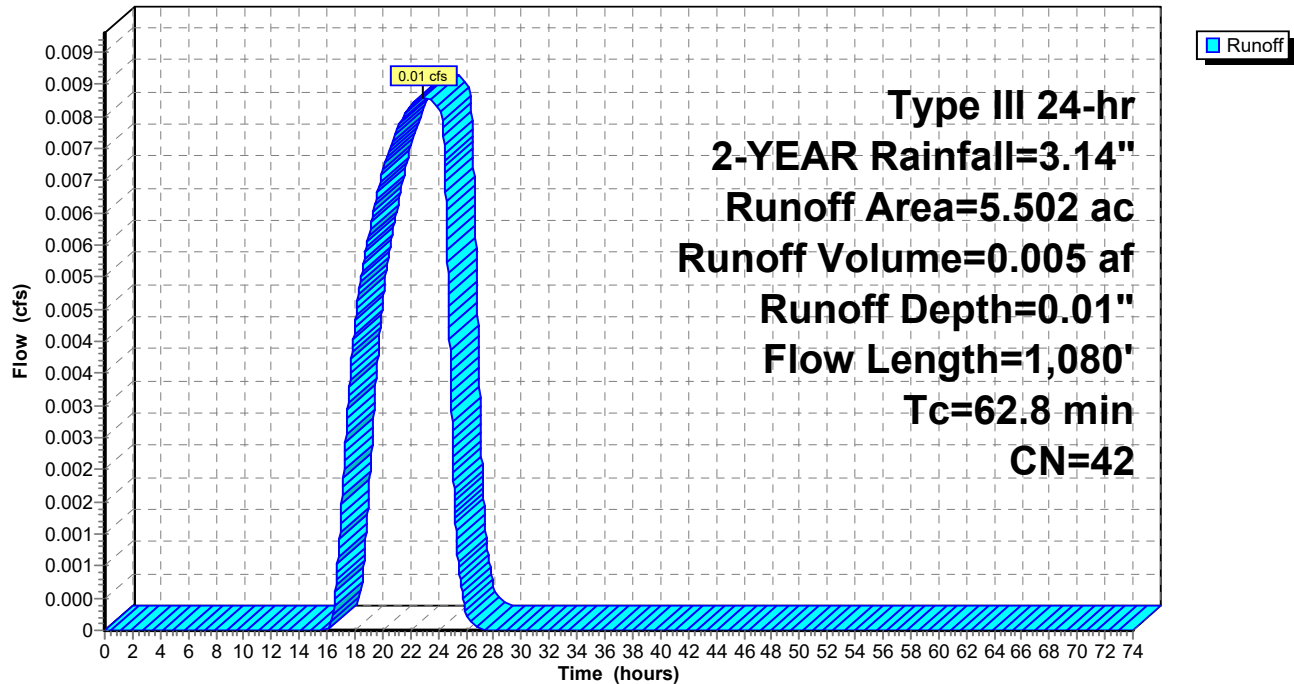
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-YEAR Rainfall=3.14"

Area (ac)	CN	Description
0.011	78	Meadow, non-grazed, HSG D
0.017	30	Meadow, non-grazed, HSG A
0.754	71	Meadow, non-grazed, HSG C
0.797	70	Woods, Good, HSG C
3.923	30	Woods, Good, HSG A
5.502	42	Weighted Average
5.502		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	50	0.0200	0.04		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
1.1	60	0.0330	0.91		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
4.0	220	0.1318	0.91		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
36.0	750	0.0193	0.35		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
62.8	1,080	Total			

Subcatchment PR1C: Finger Wetland

Hydrograph



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Type III 24-hr 2-YEAR Rainfall=3.14"

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Page 8

Summary for Subcatchment PR2A: Road A

Runoff = 0.85 cfs @ 12.93 hrs, Volume= 0.169 af, Depth= 1.29"

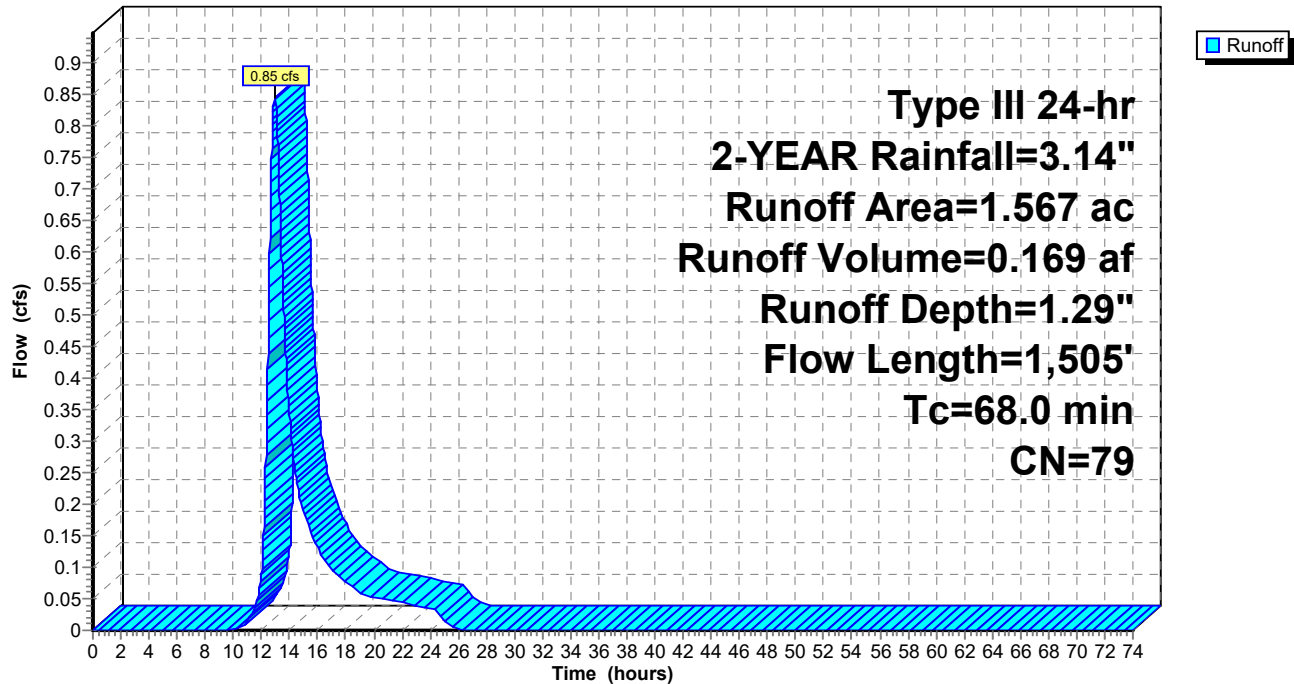
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-YEAR Rainfall=3.14"

Area (ac)	CN	Description
0.017	70	Woods, Good, HSG C
0.483	83	Small grain, straight row, Good, HSG C
0.223	96	Gravel surface, HSG C
0.007	96	Gravel surface, HSG C
0.115	74	Pasture/grassland/range, Good, HSG C
0.107	39	Pasture/grassland/range, Good, HSG A
0.044	39	Pasture/grassland/range, Good, HSG A
0.203	96	Gravel surface, HSG A
0.117	96	Gravel surface, HSG A
0.249	63	Small grain, straight row, Good, HSG A
1.567	79	Weighted Average
1.567		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.6	50	0.1200	0.08		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
19.8	750	0.0640	0.63		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
37.6	705	0.0156	0.31		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
68.0	1,505	Total			

Subcatchment PR2A: Road A

Hydrograph



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Page 10

Summary for Subcatchment PR2B: Subcat PR2B

Runoff = 5.95 cfs @ 12.94 hrs, Volume= 1.333 af, Depth= 0.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-YEAR Rainfall=3.14"

Area (ac)	CN	Description
0.000	96	Gravel surface, HSG C
0.117	96	Gravel surface, HSG C
0.058	70	Woods, Good, HSG C
0.004	63	Small grain, straight row, Good, HSG A
0.257	63	Small grain, straight row, Good, HSG A
0.068	63	Small grain, straight row, Good, HSG A
13.817	63	Small grain, straight row, Good, HSG A
0.147	63	Small grain, straight row, Good, HSG A
5.449	83	Small grain, straight row, Good, HSG C
0.418	70	Woods, Good, HSG C
0.013	70	Woods, Good, HSG C
0.006	74	Pasture/grassland/range, Good, HSG C
0.000	74	Pasture/grassland/range, Good, HSG C
0.011	39	Pasture/grassland/range, Good, HSG A
0.024	30	Meadow, non-grazed, HSG A
2.503	30	Woods, Good, HSG A
0.264	30	Woods, Good, HSG A
0.270	30	Woods, Good, HSG A
0.148	30	Woods, Good, HSG A
1.898	96	Gravel surface, HSG A
0.072	96	Gravel surface, HSG A
0.249	96	Gravel surface, HSG A
0.017	96	Gravel surface, HSG A
0.018	96	Gravel surface, HSG A
0.201	96	Gravel surface, HSG A
0.030	96	Gravel surface, HSG A
0.000	98	Unconnected pavement, HSG A
0.031	30	Meadow, non-grazed, HSG A
26.091	66	Weighted Average
26.090		100.00% Pervious Area
0.000		0.00% Impervious Area
0.000		100.00% Unconnected

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Type III 24-hr 2-YEAR Rainfall=3.14"

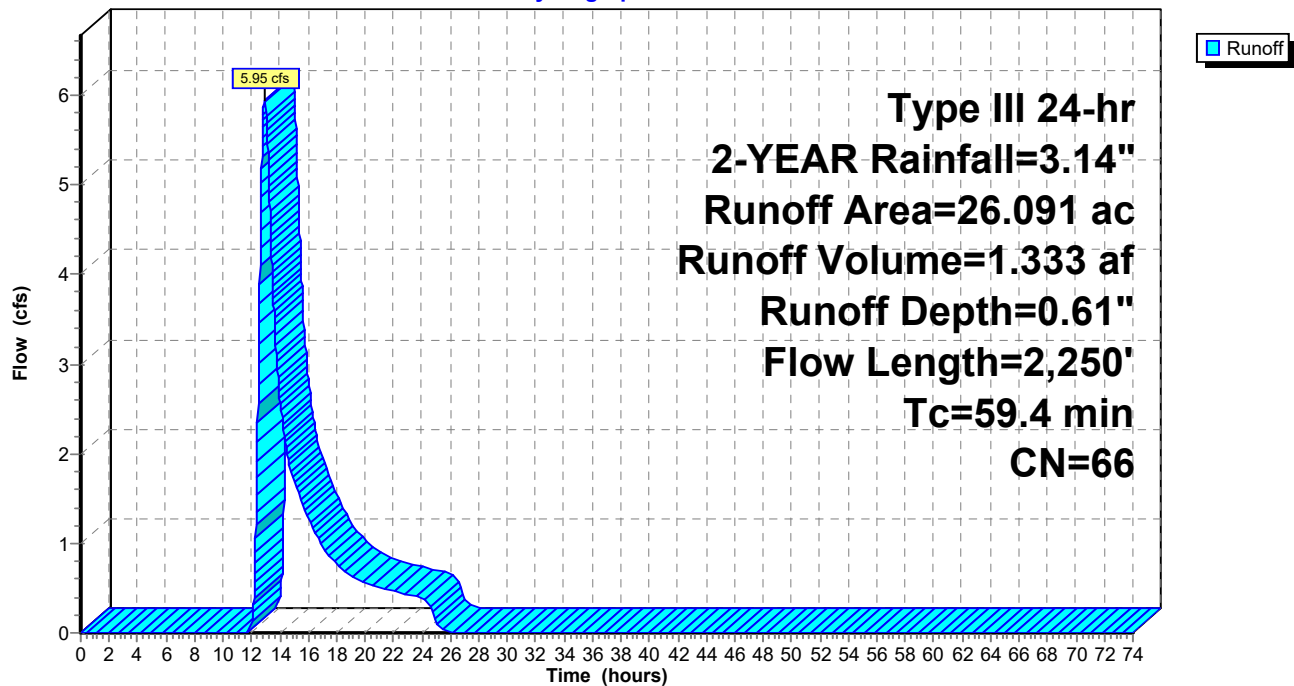
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Page 11

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	50	0.1600	0.30		Sheet Flow, Cultivated: Residue>20% n= 0.170 P2= 3.14"
0.7	50	0.0300	1.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
3.6	110	0.0409	0.51		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
22.0	330	0.0100	0.25		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
3.8	185	0.0135	0.81		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
3.8	100	0.0300	0.43		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
15.1	1,250	0.0388	1.38		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
7.7	175	0.0229	0.38		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
59.4	2,250	Total			

Subcatchment PR2B: Subcat PR2B

Hydrograph



Summary for Subcatchment PR2C: Road B

Runoff = 1.53 cfs @ 12.14 hrs, Volume= 0.125 af, Depth= 1.23"

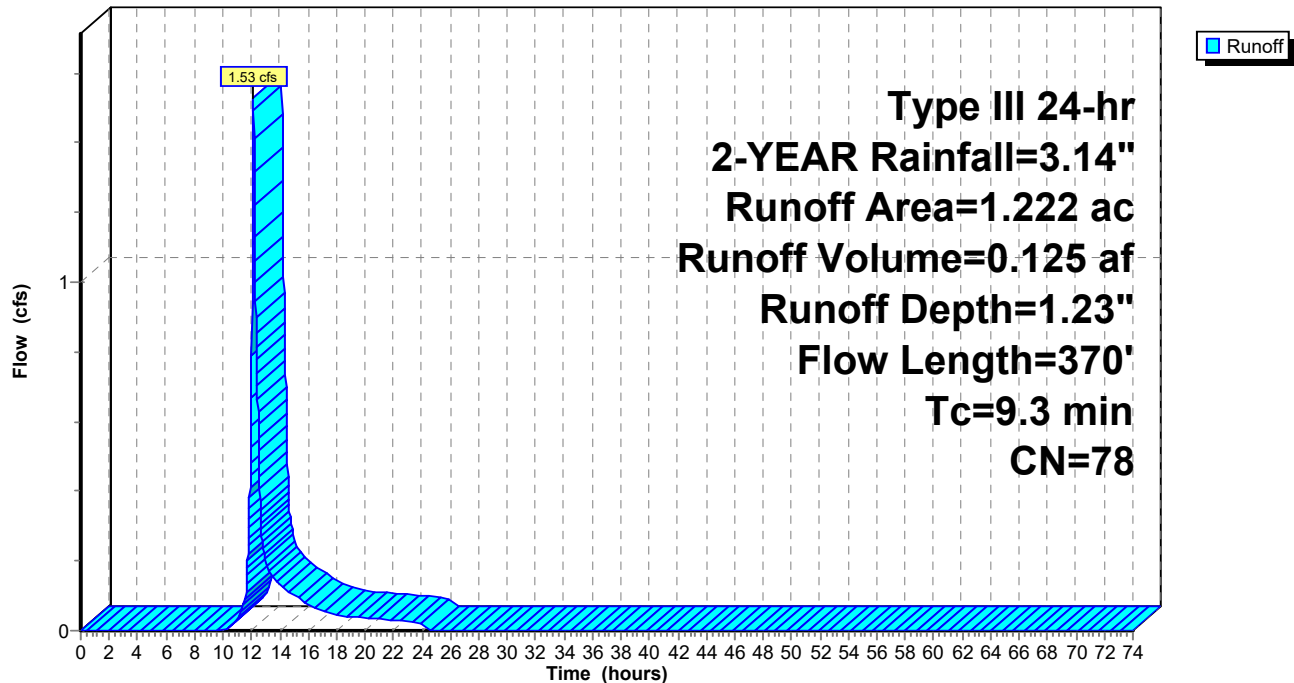
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-YEAR Rainfall=3.14"

Area (ac)	CN	Description
0.003	74	Pasture/grassland/range, Good, HSG C
0.000	70	Woods, Good, HSG C
0.189	83	Small grain, straight row, Good, HSG C
0.260	96	Gravel surface, HSG C
0.770	70	Woods, Good, HSG C
1.222	78	Weighted Average
1.222		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	50	0.0200	0.15		Sheet Flow, Grass: Short n= 0.150 P2= 3.14"
3.6	320	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
9.3	370	Total			

Subcatchment PR2C: Road B

Hydrograph



Summary for Reach 1CR: Swale

Inflow Area = 5.502 ac, 0.00% Impervious, Inflow Depth = 0.01" for 2-YEAR event
 Inflow = 0.01 cfs @ 22.96 hrs, Volume= 0.005 af
 Outflow = 0.01 cfs @ 24.12 hrs, Volume= 0.005 af, Atten= 1%, Lag= 69.7 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs

Max. Velocity= 0.29 fps, Min. Travel Time= 35.1 min

Avg. Velocity = 0.29 fps, Avg. Travel Time= 35.1 min

Peak Storage= 17 cf @ 23.53 hrs

Average Depth at Peak Storage= 0.00' , Surface Width= 6.03'

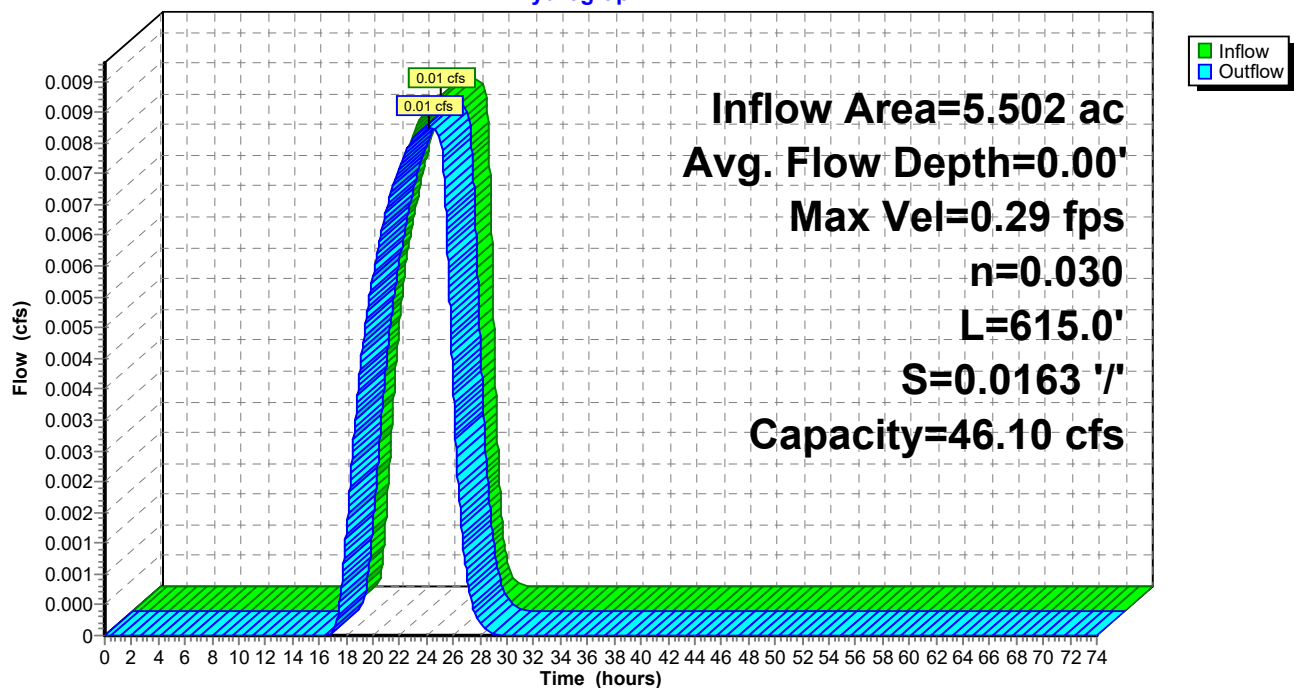
Bank-Full Depth= 1.00' Flow Area= 9.0 sf, Capacity= 46.10 cfs

6.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding

Side Slope Z-value= 3.0 '/' Top Width= 12.00'

Length= 615.0' Slope= 0.0163 '/'

Inlet Invert= 270.00', Outlet Invert= 260.00'

**Reach 1CR: Swale****Hydrograph**

Summary for Pond 1AP: Pond

Inflow Area = 10.211 ac, 0.00% Impervious, Inflow Depth = 0.61" for 2-YEAR event
 Inflow = 2.44 cfs @ 12.87 hrs, Volume= 0.522 af
 Outflow = 0.54 cfs @ 15.70 hrs, Volume= 0.339 af, Atten= 78%, Lag= 169.8 min
 Primary = 0.54 cfs @ 15.70 hrs, Volume= 0.339 af

Routing by Stor-Ind method, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
 Peak Elev= 259.43' @ 15.70 hrs Surf.Area= 0.219 ac Storage= 0.269 af

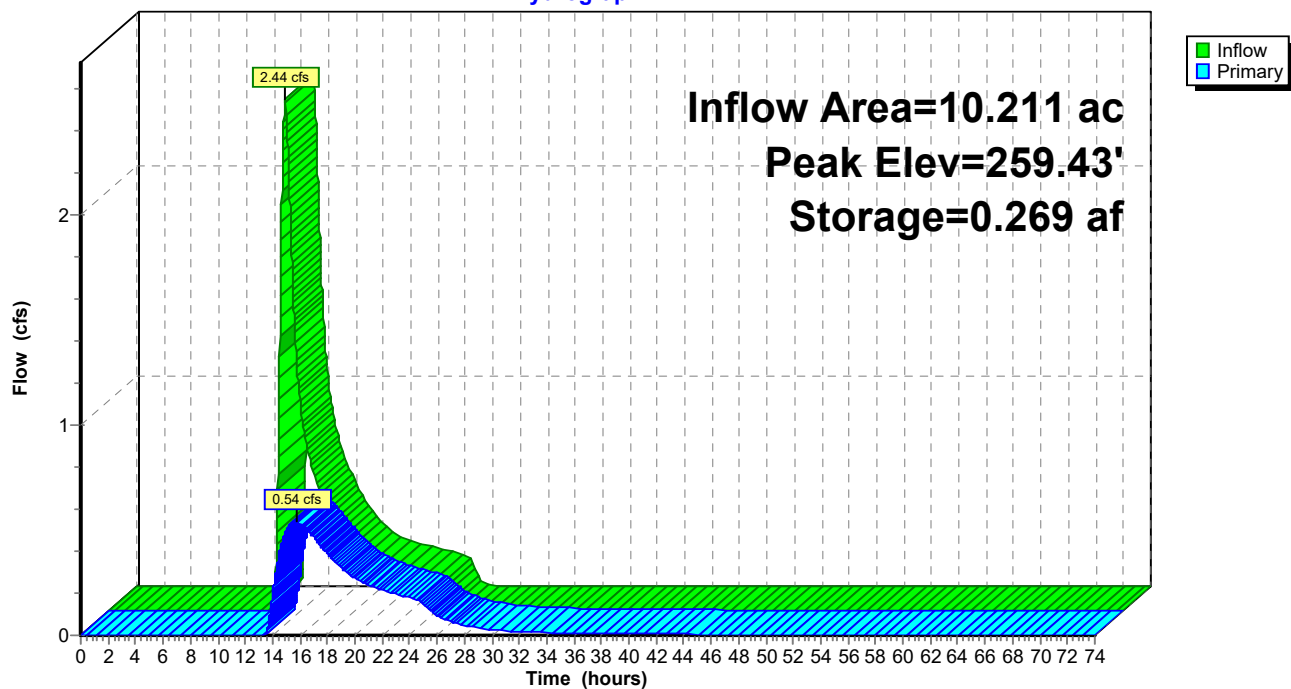
Plug-Flow detention time= 389.2 min calculated for 0.339 af (65% of inflow)
 Center-of-Mass det. time= 268.5 min (1,207.2 - 938.7)

Volume	Invert	Avail.Storage	Storage Description
#1	258.00'	0.667 af	275.00'W x 25.00'L x 3.00'H Prismatic Z=3.0

Device	Routing	Invert	Outlet Devices
#1	Primary	260.20'	8.0' long x 12.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.57 2.62 2.70 2.67 2.66 2.67 2.66 2.64
#2	Primary	259.00'	15.0" Round Culvert L= 60.6' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 259.00' / 258.80' S= 0.0033 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=0.54 cfs @ 15.70 hrs HW=259.43' (Free Discharge)

1=Broad-Crested Rectangular Weir(Controls 0.00 cfs)
 2=Culvert (Barrel Controls 0.54 cfs @ 2.15 fps)

Pond 1AP: Pond**Hydrograph**

Summary for Pond 1BP: Pond

Inflow Area = 12.241 ac, 0.11% Impervious, Inflow Depth = 0.04" for 2-YEAR event
 Inflow = 0.05 cfs @ 16.88 hrs, Volume= 0.038 af
 Outflow = 0.05 cfs @ 19.48 hrs, Volume= 0.038 af, Atten= 15%, Lag= 156.3 min
 Primary = 0.05 cfs @ 19.48 hrs, Volume= 0.038 af

Routing by Stor-Ind method, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
 Peak Elev= 260.15' @ 19.48 hrs Surf.Area= 2,728 sf Storage= 390 cf

Plug-Flow detention time= 202.8 min calculated for 0.038 af (99% of inflow)
 Center-of-Mass det. time= 200.9 min (1,382.8 - 1,181.9)

Volume	Invert	Avail.Storage	Storage Description
#1	260.00'	6,625 cf	Custom Stage Data (Irregular) Listed below (Recalc)

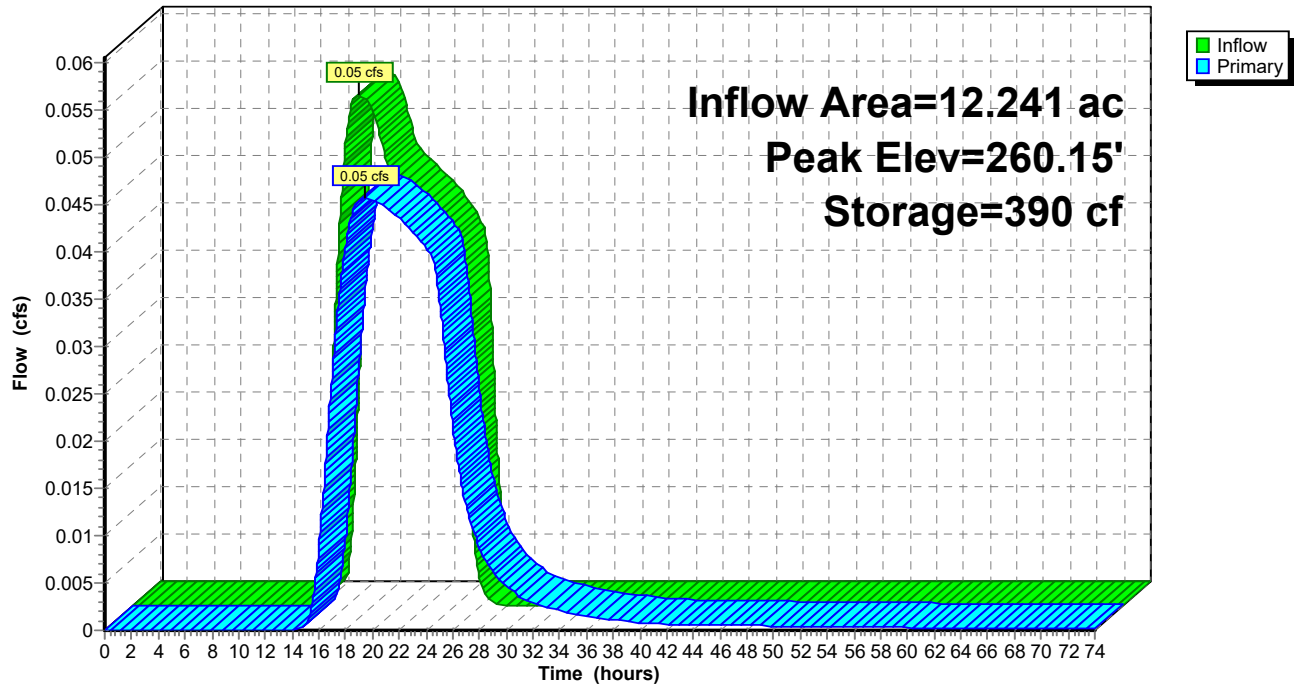
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
260.00	2,635	215.0	0	0	2,635
261.00	3,305	230.0	2,964	2,964	3,211
262.00	4,030	250.0	3,662	6,625	4,012

Device	Routing	Invert	Outlet Devices
#1	Primary	261.30'	6.0' long x 8.0' 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) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74
#2	Primary	260.00'	8.0" Round Culvert L= 48.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 260.00' / 259.80' S= 0.0042 ' / Cc= 0.900 n= 0.013, Flow Area= 0.35 sf

Primary OutFlow Max=0.05 cfs @ 19.48 hrs HW=260.15' (Free Discharge)

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

2=Culvert (Barrel Controls 0.05 cfs @ 1.22 fps)

Pond 1BP: Pond**Hydrograph**

Summary for Pond 2AP: Road Basin A

Inflow Area = 1.567 ac, 0.00% Impervious, Inflow Depth = 1.29" for 2-YEAR event
 Inflow = 0.85 cfs @ 12.93 hrs, Volume= 0.169 af
 Outflow = 0.72 cfs @ 13.25 hrs, Volume= 0.168 af, Atten= 14%, Lag= 19.4 min
 Primary = 0.72 cfs @ 13.25 hrs, Volume= 0.168 af

Routing by Stor-Ind method, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
 Peak Elev= 265.54' @ 13.25 hrs Surf.Area= 2,430 sf Storage= 1,304 cf

Plug-Flow detention time= 76.1 min calculated for 0.168 af (100% of inflow)
 Center-of-Mass det. time= 73.4 min (977.9 - 904.5)

Volume	Invert	Avail.Storage	Storage Description
#1	265.00'	5,447 cf	Custom Stage Data (Irregular) Listed below

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
265.00	2,090	200.0	0	0	2,090
266.00	2,715	220.0	2,396	2,396	2,791
267.00	3,400	240.0	3,051	5,447	3,558

Device	Routing	Invert	Outlet Devices
#1	Primary	266.40'	7.0' long x 7.0' 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) 2.40 2.52 2.70 2.68 2.68 2.67 2.66 2.65 2.65 2.65 2.66 2.65 2.66 2.68 2.70 2.73 2.78
#2	Primary	265.00'	15.0" Round Culvert L= 15.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 265.00' / 265.00' S= 0.0000 ' S= 0.0000 ' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

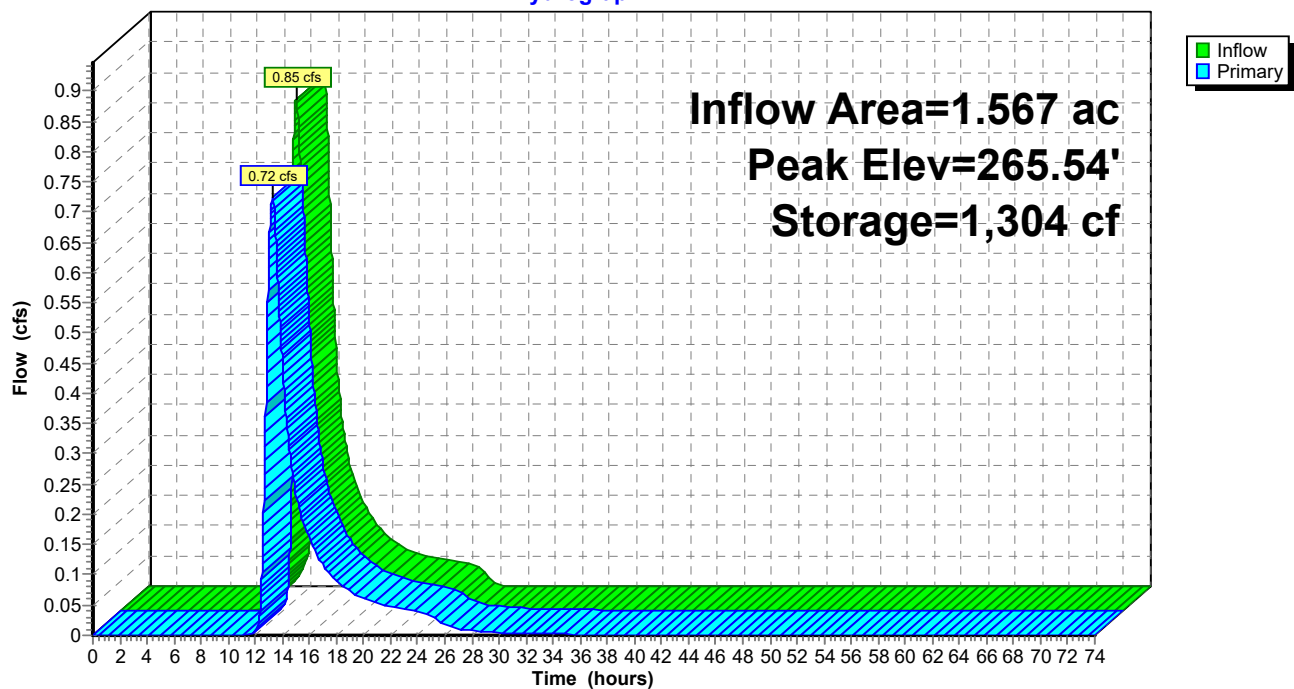
Primary OutFlow Max=0.72 cfs @ 13.25 hrs HW=265.54' (Free Discharge)

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

2=Culvert (Barrel Controls 0.72 cfs @ 2.08 fps)

Pond 2AP: Road Basin A

Hydrograph



Summary for Pond 2CP: Road Basin 2

Inflow Area = 1.222 ac, 0.00% Impervious, Inflow Depth = 1.23" for 2-YEAR event
 Inflow = 1.53 cfs @ 12.14 hrs, Volume= 0.125 af
 Outflow = 0.82 cfs @ 12.36 hrs, Volume= 0.125 af, Atten= 46%, Lag= 13.3 min
 Primary = 0.82 cfs @ 12.36 hrs, Volume= 0.125 af

Routing by Stor-Ind method, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
 Peak Elev= 264.24' @ 12.36 hrs Surf.Area= 0.047 ac Storage= 0.030 af

Plug-Flow detention time= 78.0 min calculated for 0.125 af (100% of inflow)
 Center-of-Mass det. time= 75.2 min (928.5 - 853.3)

Volume	Invert	Avail.Storage	Storage Description
#1	263.50'	0.140 af	15.00'W x 100.00'L x 2.50'H Prismatic Z=3.0

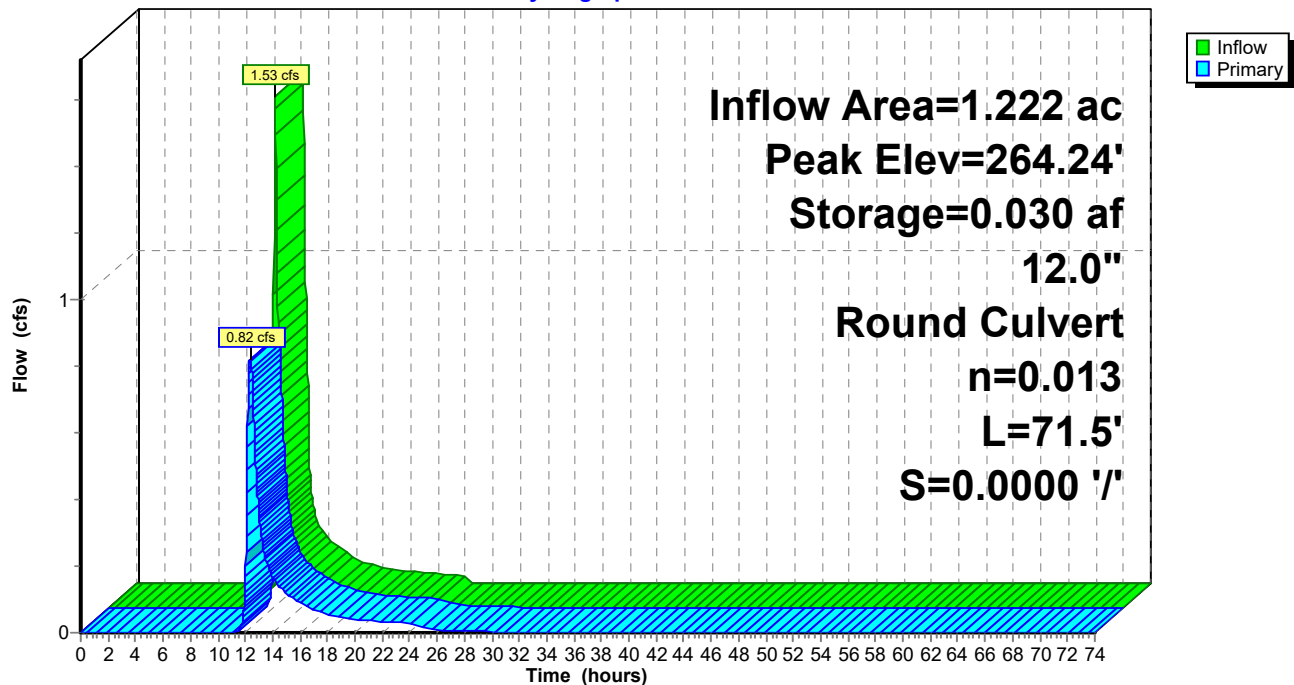
Device	Routing	Invert	Outlet Devices
#1	Primary	263.50'	12.0" Round Culvert L= 71.5' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 263.50' / 263.50' S= 0.0000 '/ Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.82 cfs @ 12.36 hrs HW=264.24' (Free Discharge)

←**1=Culvert** (Barrel Controls 0.82 cfs @ 1.83 fps)

Pond 2CP: Road Basin 2

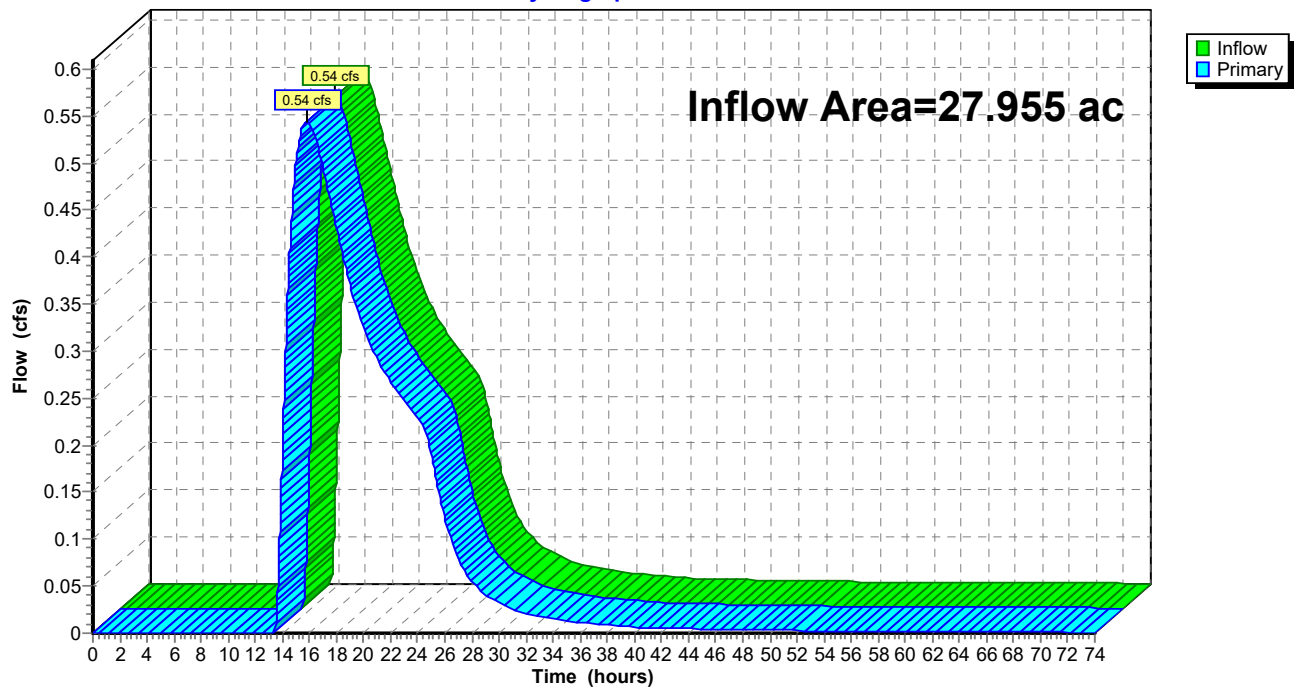
Hydrograph



Summary for Link DP-1: Lewiston Junction

Inflow Area = 27.955 ac, 0.05% Impervious, Inflow Depth > 0.16" for 2-YEAR event
Inflow = 0.54 cfs @ 15.79 hrs, Volume= 0.382 af
Primary = 0.54 cfs @ 15.79 hrs, Volume= 0.382 af, Atten= 0%, Lag= 0.0 min

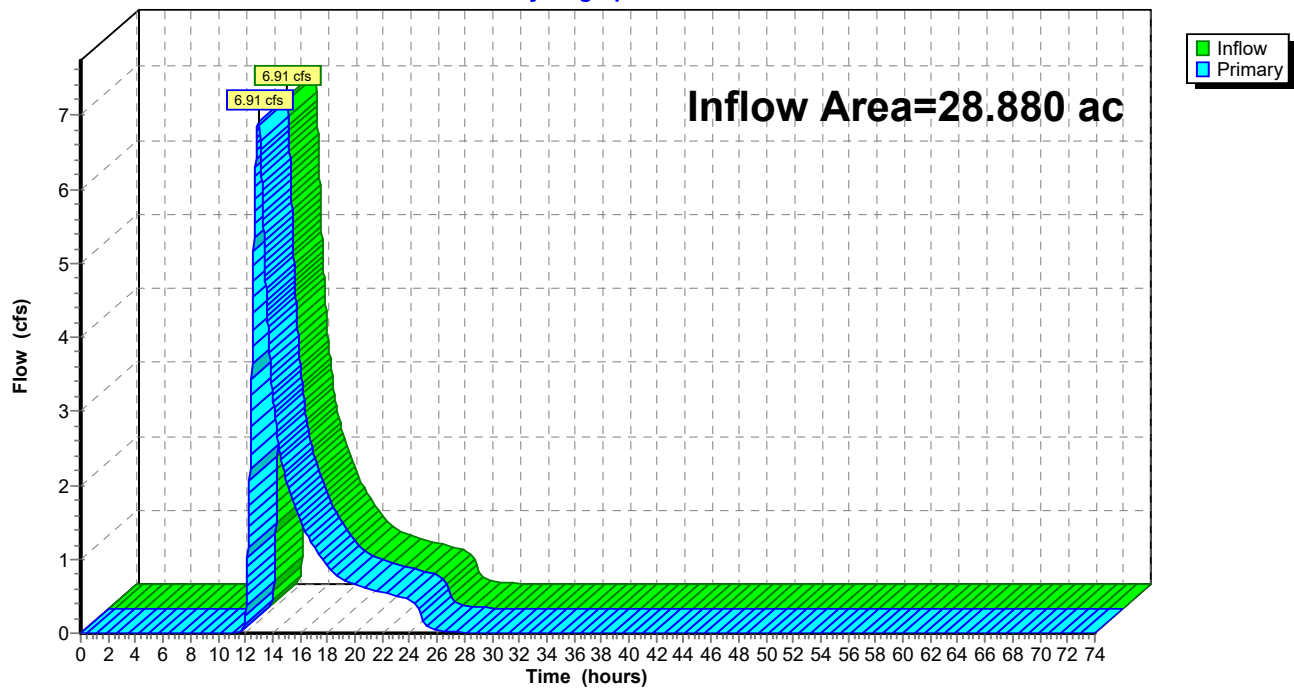
Primary outflow = Inflow, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs

Link DP-1: Lewiston Junction**Hydrograph**

Summary for Link DP-2: Lewiston Junction South

Inflow Area = 28.880 ac, 0.00% Impervious, Inflow Depth = 0.68" for 2-YEAR event
Inflow = 6.91 cfs @ 12.95 hrs, Volume= 1.625 af
Primary = 6.91 cfs @ 12.95 hrs, Volume= 1.625 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs

Link DP-2: Lewiston Junction South**Hydrograph**

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Type III 24-hr 10-YEAR Rainfall=4.72"

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Page 23

Summary for Subcatchment PR1A: Northern

Runoff = 7.15 cfs @ 12.80 hrs, Volume= 1.310 af, Depth= 1.54"

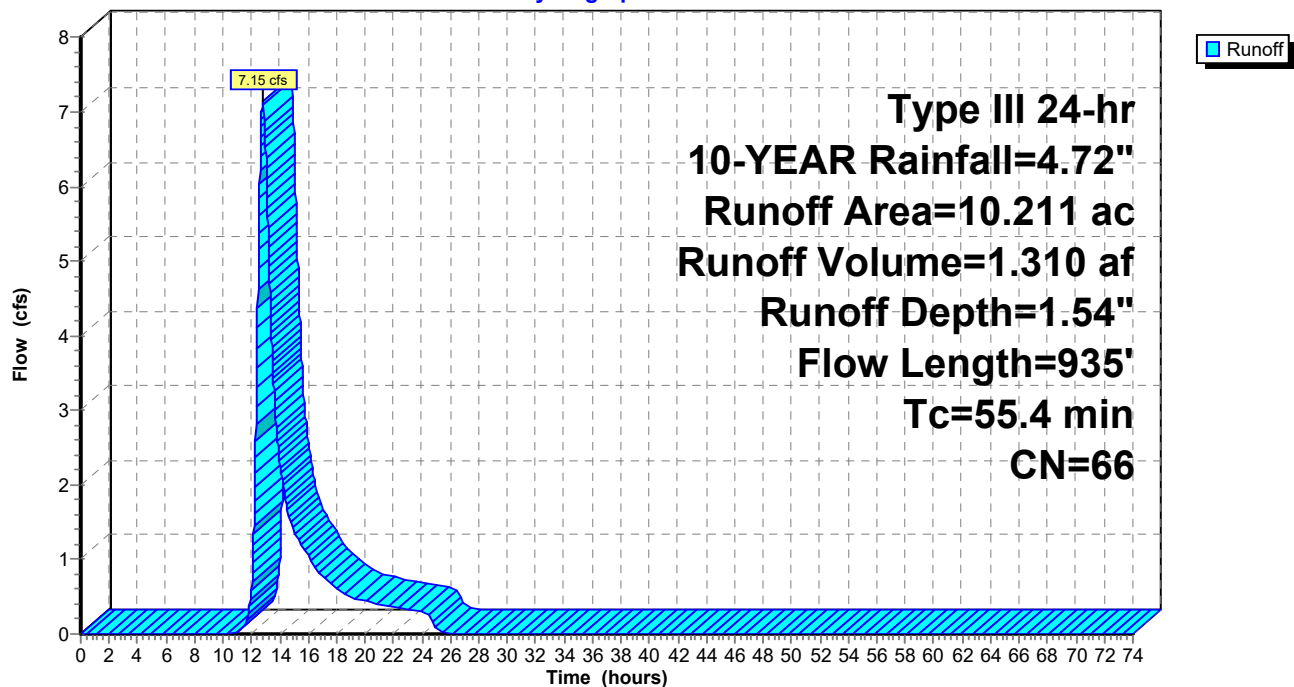
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-YEAR Rainfall=4.72"

Area (ac)	CN	Description
0.020	78	Meadow, non-grazed, HSG D
0.190	30	Meadow, non-grazed, HSG A
6.587	71	Meadow, non-grazed, HSG C
0.731	30	Woods, Good, HSG A
0.265	30	Woods, Good, HSG A
2.419	70	Woods, Good, HSG C
10.211	66	Weighted Average
10.211		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	50	0.0250	0.04		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
7.2	325	0.0225	0.75		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
28.4	560	0.0173	0.33		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
55.4	935	Total			

Subcatchment PR1A: Northern

Hydrograph



55304.01-PR HYDROCAD

Type III 24-hr 10-YEAR Rainfall=4.72"

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Page 24

Summary for Subcatchment PR1B: Central

Runoff = 0.86 cfs @ 13.43 hrs, Volume= 0.364 af, Depth= 0.36"

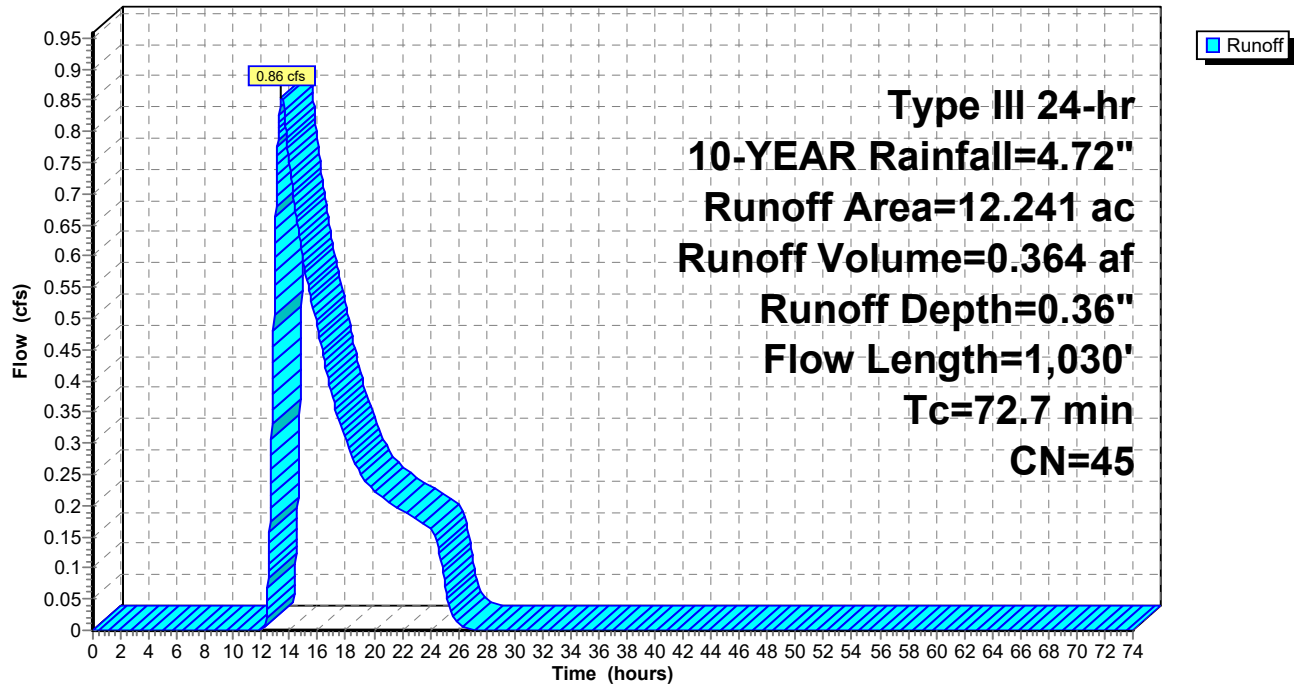
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-YEAR Rainfall=4.72"

Area (ac)	CN	Description
4.208	71	Meadow, non-grazed, HSG C
0.006	98	Unconnected pavement, HSG C
2.024	30	Woods, Good, HSG A
0.006	98	Unconnected pavement, HSG A
0.102	96	Gravel surface, HSG A
5.664	30	Meadow, non-grazed, HSG A
0.229	39	Pasture/grassland/range, Good, HSG A
12.241	45	Weighted Average
12.228		99.89% Pervious Area
0.013		0.11% Impervious Area
0.013		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	50	0.0200	0.04		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
1.7	135	0.0737	1.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.6	45	0.0333	0.46		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
47.7	800	0.0125	0.28		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
72.7	1,030	Total			

Subcatchment PR1B: Central

Hydrograph



Summary for Subcatchment PR1C: Finger Wetland

Runoff = 0.21 cfs @ 13.55 hrs, Volume= 0.111 af, Depth= 0.24"

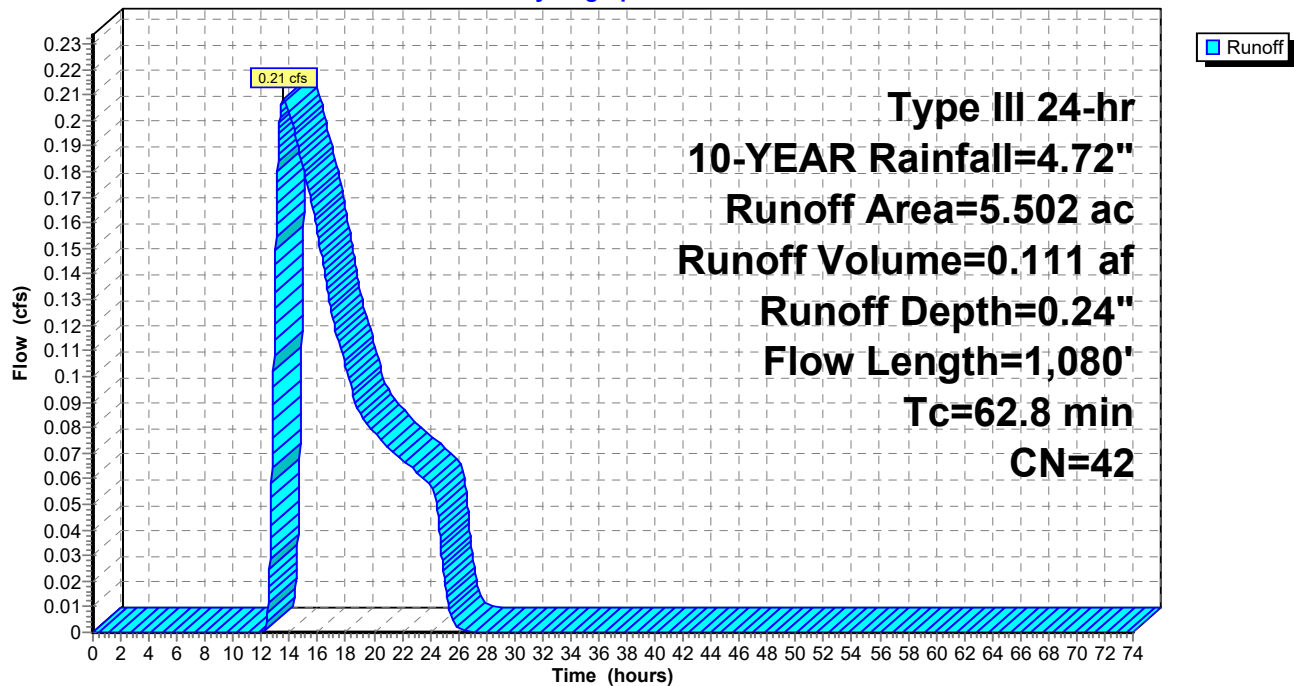
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-YEAR Rainfall=4.72"

Area (ac)	CN	Description
0.011	78	Meadow, non-grazed, HSG D
0.017	30	Meadow, non-grazed, HSG A
0.754	71	Meadow, non-grazed, HSG C
0.797	70	Woods, Good, HSG C
3.923	30	Woods, Good, HSG A
5.502	42	Weighted Average
5.502		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	50	0.0200	0.04		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
1.1	60	0.0330	0.91		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
4.0	220	0.1318	0.91		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
36.0	750	0.0193	0.35		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
62.8	1,080	Total			

Subcatchment PR1C: Finger Wetland

Hydrograph



Summary for Subcatchment PR2A: Road A

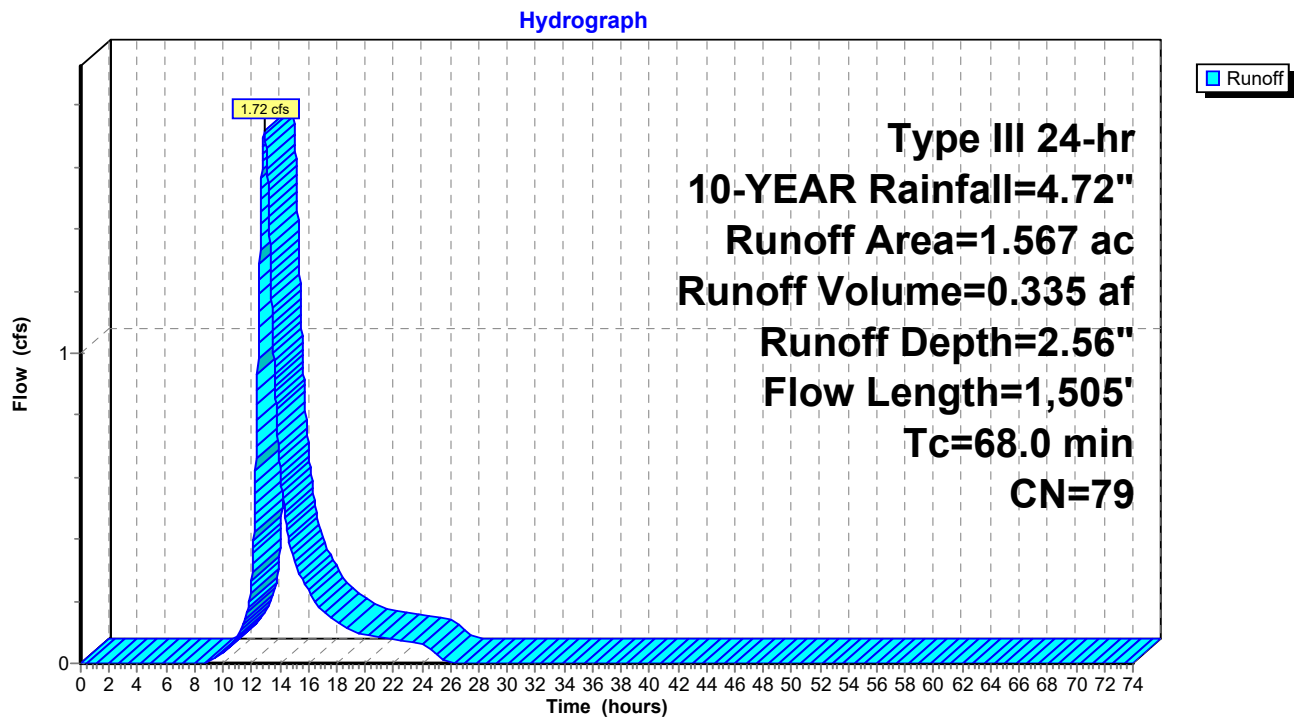
Runoff = 1.72 cfs @ 12.92 hrs, Volume= 0.335 af, Depth= 2.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-YEAR Rainfall=4.72"

Area (ac)	CN	Description
0.017	70	Woods, Good, HSG C
0.483	83	Small grain, straight row, Good, HSG C
0.223	96	Gravel surface, HSG C
0.007	96	Gravel surface, HSG C
0.115	74	Pasture/grassland/range, Good, HSG C
0.107	39	Pasture/grassland/range, Good, HSG A
0.044	39	Pasture/grassland/range, Good, HSG A
0.203	96	Gravel surface, HSG A
0.117	96	Gravel surface, HSG A
0.249	63	Small grain, straight row, Good, HSG A
1.567	79	Weighted Average
1.567		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.6	50	0.1200	0.08		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
19.8	750	0.0640	0.63		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
37.6	705	0.0156	0.31		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
68.0	1,505	Total			

Subcatchment PR2A: Road A



Summary for Subcatchment PR2B: Subcat PR2B

Runoff = 17.53 cfs @ 12.87 hrs, Volume= 3.348 af, Depth= 1.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-YEAR Rainfall=4.72"

Area (ac)	CN	Description
0.000	96	Gravel surface, HSG C
0.117	96	Gravel surface, HSG C
0.058	70	Woods, Good, HSG C
0.004	63	Small grain, straight row, Good, HSG A
0.257	63	Small grain, straight row, Good, HSG A
0.068	63	Small grain, straight row, Good, HSG A
13.817	63	Small grain, straight row, Good, HSG A
0.147	63	Small grain, straight row, Good, HSG A
5.449	83	Small grain, straight row, Good, HSG C
0.418	70	Woods, Good, HSG C
0.013	70	Woods, Good, HSG C
0.006	74	Pasture/grassland/range, Good, HSG C
0.000	74	Pasture/grassland/range, Good, HSG C
0.011	39	Pasture/grassland/range, Good, HSG A
0.024	30	Meadow, non-grazed, HSG A
2.503	30	Woods, Good, HSG A
0.264	30	Woods, Good, HSG A
0.270	30	Woods, Good, HSG A
0.148	30	Woods, Good, HSG A
1.898	96	Gravel surface, HSG A
0.072	96	Gravel surface, HSG A
0.249	96	Gravel surface, HSG A
0.017	96	Gravel surface, HSG A
0.018	96	Gravel surface, HSG A
0.201	96	Gravel surface, HSG A
0.030	96	Gravel surface, HSG A
0.000	98	Unconnected pavement, HSG A
0.031	30	Meadow, non-grazed, HSG A
26.091	66	Weighted Average
26.090		100.00% Pervious Area
0.000		0.00% Impervious Area
0.000		100.00% Unconnected

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Type III 24-hr 10-YEAR Rainfall=4.72"

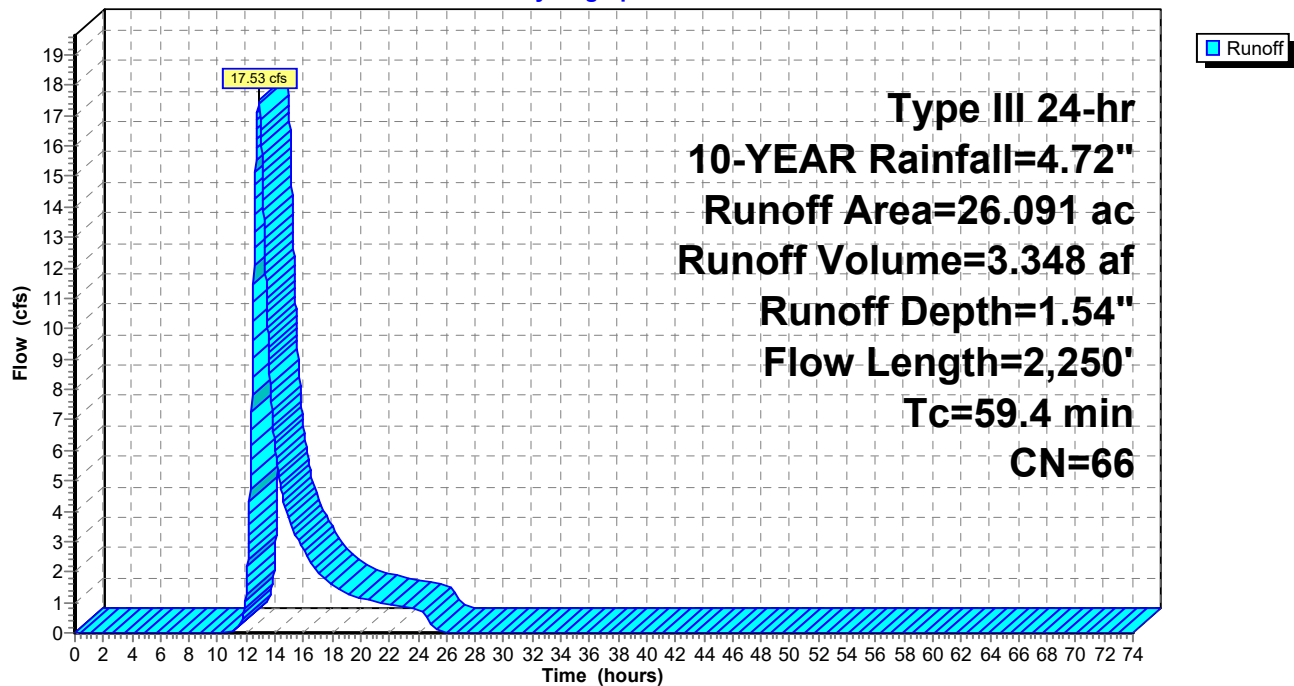
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Page 31

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	50	0.1600	0.30		Sheet Flow, Cultivated: Residue>20% n= 0.170 P2= 3.14"
0.7	50	0.0300	1.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
3.6	110	0.0409	0.51		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
22.0	330	0.0100	0.25		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
3.8	185	0.0135	0.81		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
3.8	100	0.0300	0.43		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
15.1	1,250	0.0388	1.38		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
7.7	175	0.0229	0.38		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
59.4	2,250	Total			

Subcatchment PR2B: Subcat PR2B

Hydrograph



Summary for Subcatchment PR2C: Road B

Runoff = 3.16 cfs @ 12.13 hrs, Volume= 0.252 af, Depth= 2.48"

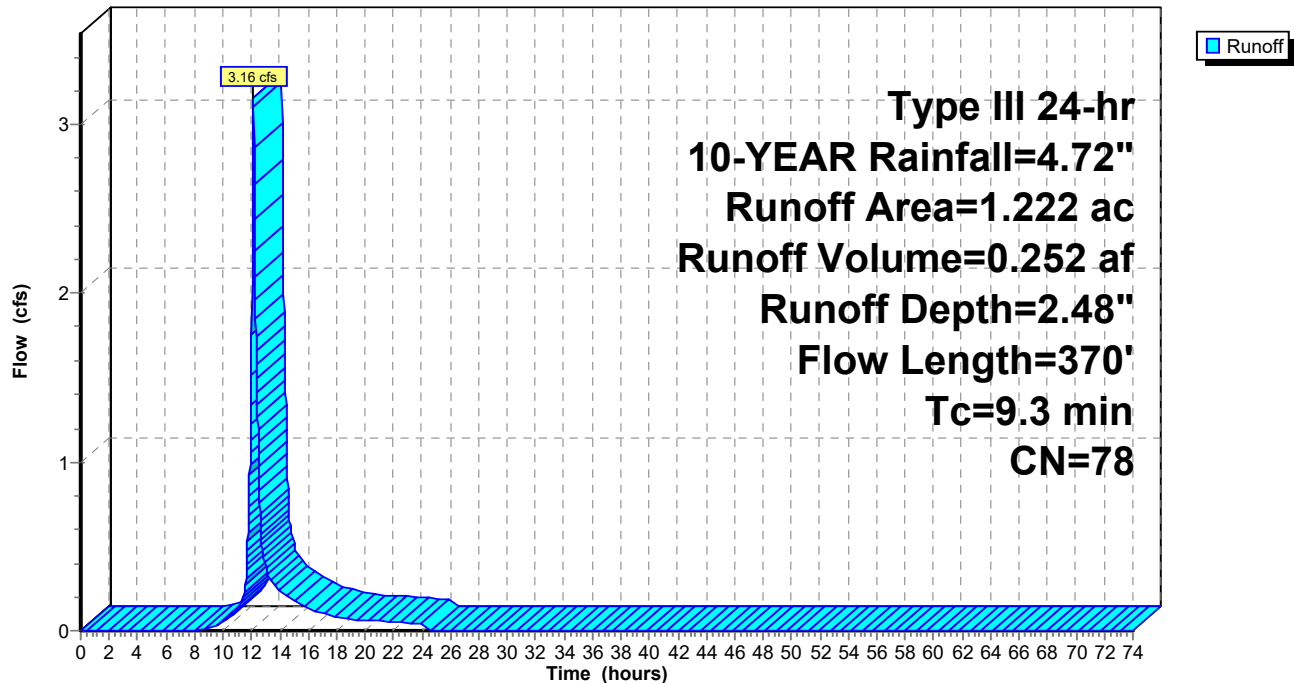
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-YEAR Rainfall=4.72"

Area (ac)	CN	Description
0.003	74	Pasture/grassland/range, Good, HSG C
0.000	70	Woods, Good, HSG C
0.189	83	Small grain, straight row, Good, HSG C
0.260	96	Gravel surface, HSG C
0.770	70	Woods, Good, HSG C
1.222	78	Weighted Average
1.222		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	50	0.0200	0.15		Sheet Flow, Grass: Short n= 0.150 P2= 3.14"
3.6	320	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
9.3	370	Total			

Subcatchment PR2C: Road B

Hydrograph



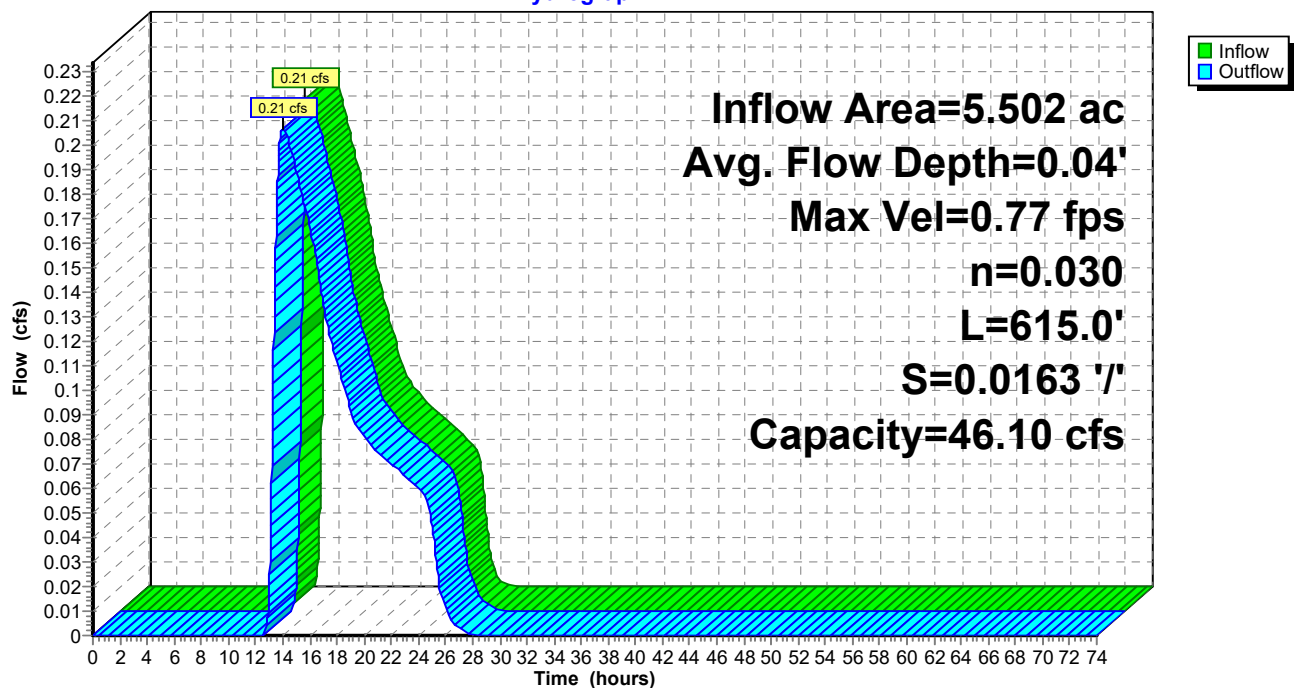
Summary for Reach 1CR: Swale

Inflow Area = 5.502 ac, 0.00% Impervious, Inflow Depth = 0.24" for 10-YEAR event
 Inflow = 0.21 cfs @ 13.55 hrs, Volume= 0.111 af
 Outflow = 0.21 cfs @ 14.02 hrs, Volume= 0.111 af, Atten= 1%, Lag= 28.3 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
 Max. Velocity= 0.77 fps, Min. Travel Time= 13.2 min
 Avg. Velocity = 0.50 fps, Avg. Travel Time= 20.3 min

Peak Storage= 164 cf @ 13.80 hrs
 Average Depth at Peak Storage= 0.04' , Surface Width= 6.26'
 Bank-Full Depth= 1.00' Flow Area= 9.0 sf, Capacity= 46.10 cfs

6.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding
 Side Slope Z-value= 3.0 '/' Top Width= 12.00'
 Length= 615.0' Slope= 0.0163 '/'
 Inlet Invert= 270.00', Outlet Invert= 260.00'

**Reach 1CR: Swale****Hydrograph**

Summary for Pond 1AP: Pond

Inflow Area = 10.211 ac, 0.00% Impervious, Inflow Depth = 1.54" for 10-YEAR event
 Inflow = 7.15 cfs @ 12.80 hrs, Volume= 1.310 af
 Outflow = 3.32 cfs @ 13.57 hrs, Volume= 1.128 af, Atten= 54%, Lag= 46.0 min
 Primary = 3.32 cfs @ 13.57 hrs, Volume= 1.128 af

Routing by Stor-Ind method, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
 Peak Elev= 260.20' @ 13.57 hrs Surf.Area= 0.253 ac Storage= 0.450 af

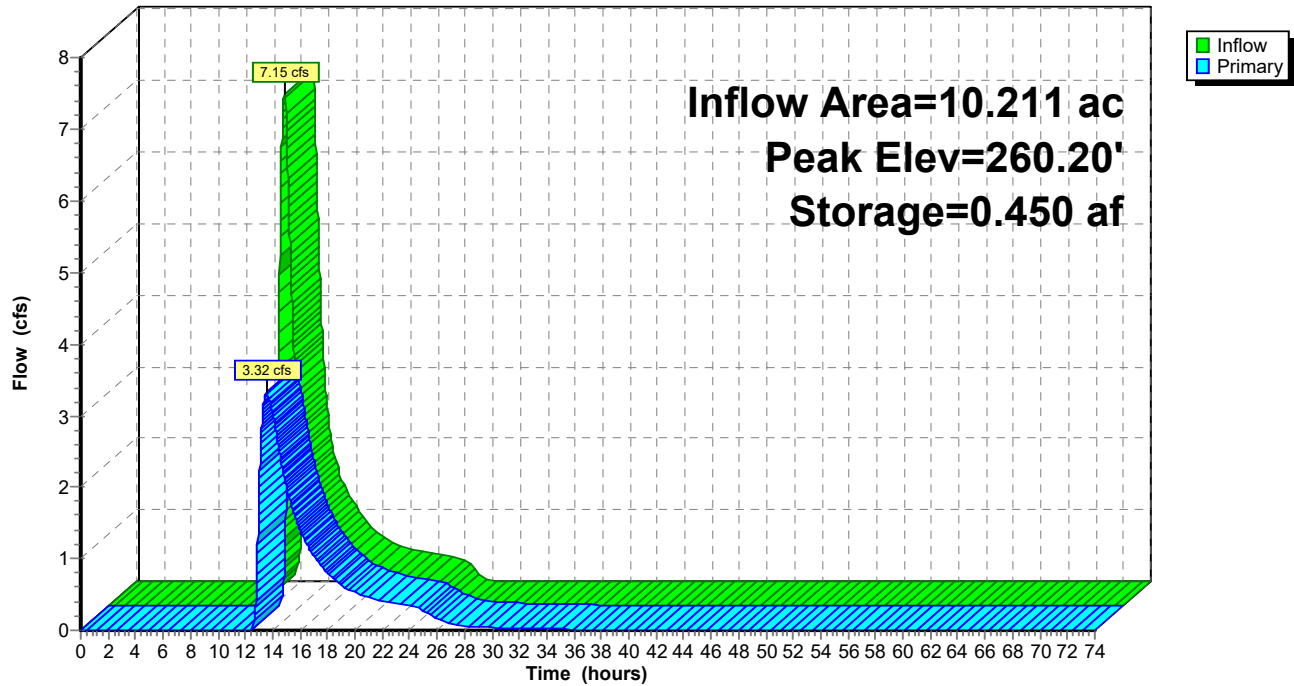
Plug-Flow detention time= 186.6 min calculated for 1.128 af (86% of inflow)
 Center-of-Mass det. time= 124.0 min (1,031.5 - 907.5)

Volume	Invert	Avail.Storage	Storage Description
#1	258.00'	0.667 af	275.00'W x 25.00'L x 3.00'H Prismatic Z=3.0

Device	Routing	Invert	Outlet Devices
#1	Primary	260.20'	8.0' long x 12.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.57 2.62 2.70 2.67 2.66 2.67 2.66 2.64
#2	Primary	259.00'	15.0" Round Culvert L= 60.6' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 259.00' / 258.80' S= 0.0033 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=3.32 cfs @ 13.57 hrs HW=260.20' (Free Discharge)

1=Broad-Crested Rectangular Weir (Weir Controls 0.00 cfs @ 0.04 fps)
 2=Culvert (Barrel Controls 3.32 cfs @ 3.51 fps)

Pond 1AP: Pond**Hydrograph**

Summary for Pond 1BP: Pond

Inflow Area = 12.241 ac, 0.11% Impervious, Inflow Depth = 0.36" for 10-YEAR event
 Inflow = 0.86 cfs @ 13.43 hrs, Volume= 0.364 af
 Outflow = 0.70 cfs @ 14.27 hrs, Volume= 0.364 af, Atten= 19%, Lag= 50.4 min
 Primary = 0.70 cfs @ 14.27 hrs, Volume= 0.364 af

Routing by Stor-Ind method, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
 Peak Elev= 260.64' @ 14.27 hrs Surf.Area= 3,058 sf Storage= 1,833 cf

Plug-Flow detention time= 63.6 min calculated for 0.364 af (100% of inflow)
 Center-of-Mass det. time= 63.2 min (1,083.1 - 1,019.9)

Volume	Invert	Avail.Storage	Storage Description
#1	260.00'	6,625 cf	Custom Stage Data (Irregular) Listed below (Recalc)

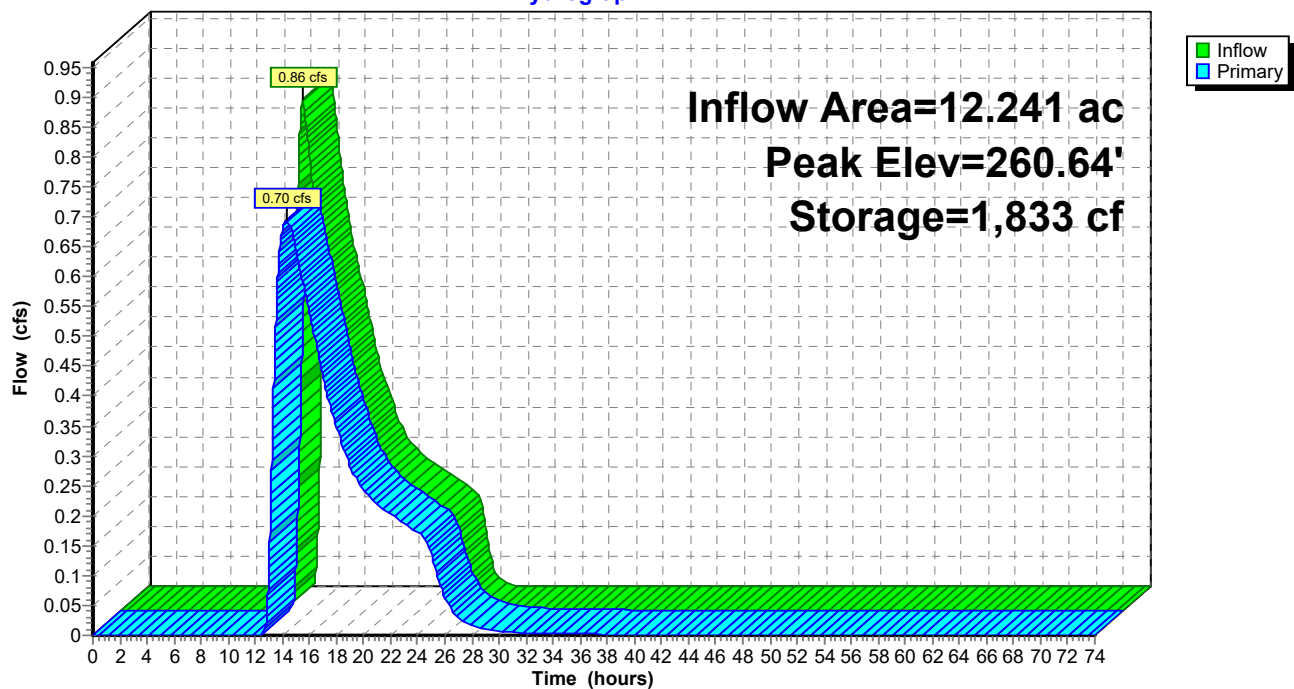
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
260.00	2,635	215.0	0	0	2,635
261.00	3,305	230.0	2,964	2,964	3,211
262.00	4,030	250.0	3,662	6,625	4,012

Device	Routing	Invert	Outlet Devices
#1	Primary	261.30'	6.0' long x 8.0' 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) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74
#2	Primary	260.00'	8.0" Round Culvert L= 48.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 260.00' / 259.80' S= 0.0042 ' / Cc= 0.900 n= 0.013, Flow Area= 0.35 sf

Primary OutFlow Max=0.70 cfs @ 14.27 hrs HW=260.64' (Free Discharge)

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

2=Culvert (Barrel Controls 0.70 cfs @ 2.56 fps)

Pond 1BP: Pond**Hydrograph**

Summary for Pond 2AP: Road Basin A

Inflow Area = 1.567 ac, 0.00% Impervious, Inflow Depth = 2.56" for 10-YEAR event
 Inflow = 1.72 cfs @ 12.92 hrs, Volume= 0.335 af
 Outflow = 1.59 cfs @ 13.13 hrs, Volume= 0.334 af, Atten= 8%, Lag= 12.3 min
 Primary = 1.59 cfs @ 13.13 hrs, Volume= 0.334 af

Routing by Stor-Ind method, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
 Peak Elev= 265.82' @ 13.13 hrs Surf.Area= 2,600 sf Storage= 1,955 cf

Plug-Flow detention time= 51.5 min calculated for 0.334 af (100% of inflow)
 Center-of-Mass det. time= 50.1 min (934.6 - 884.5)

Volume	Invert	Avail.Storage	Storage Description
#1	265.00'	5,447 cf	Custom Stage Data (Irregular) Listed below

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
265.00	2,090	200.0	0	0	2,090
266.00	2,715	220.0	2,396	2,396	2,791
267.00	3,400	240.0	3,051	5,447	3,558

Device	Routing	Invert	Outlet Devices
#1	Primary	266.40'	7.0' long x 7.0' 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) 2.40 2.52 2.70 2.68 2.68 2.67 2.66 2.65 2.65 2.65 2.66 2.65 2.66 2.68 2.70 2.73 2.78
#2	Primary	265.00'	15.0" Round Culvert L= 15.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 265.00' / 265.00' S= 0.0000 ' S= 0.0000 ' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

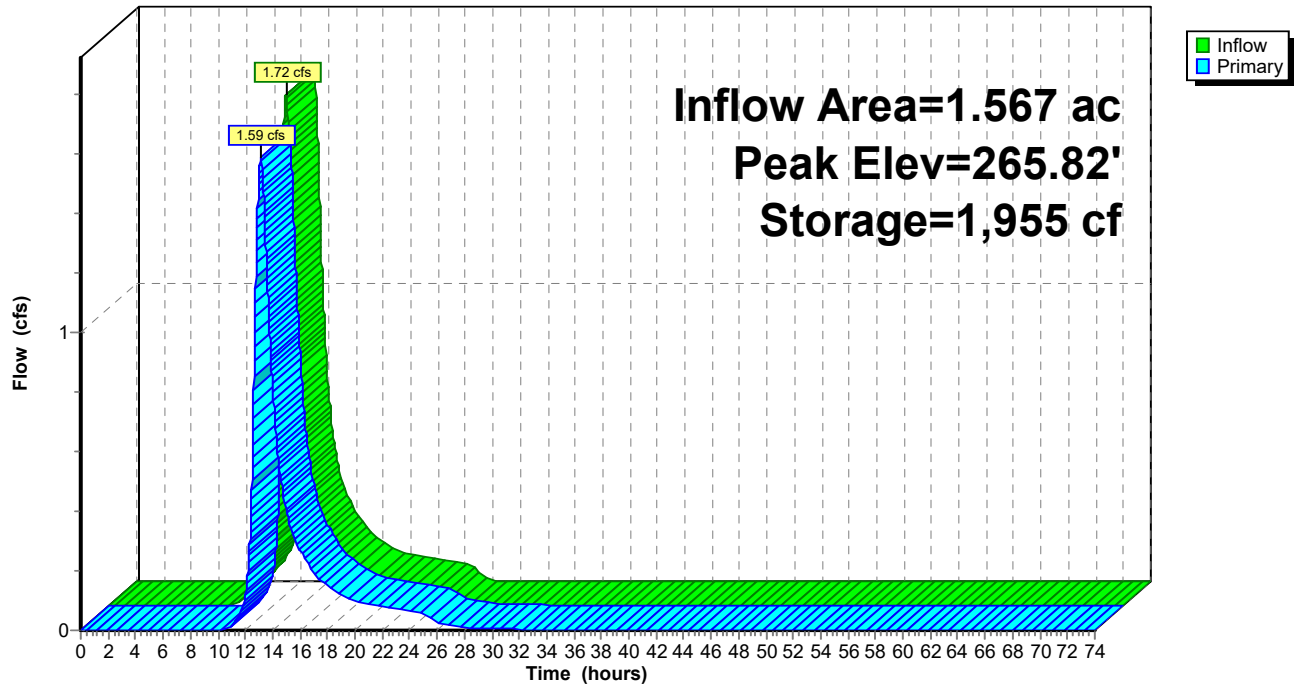
Primary OutFlow Max=1.59 cfs @ 13.13 hrs HW=265.82' (Free Discharge)

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

2=Culvert (Barrel Controls 1.59 cfs @ 2.66 fps)

Pond 2AP: Road Basin A

Hydrograph



Summary for Pond 2CP: Road Basin 2

Inflow Area = 1.222 ac, 0.00% Impervious, Inflow Depth = 2.48" for 10-YEAR event
 Inflow = 3.16 cfs @ 12.13 hrs, Volume= 0.252 af
 Outflow = 1.82 cfs @ 12.31 hrs, Volume= 0.252 af, Atten= 42%, Lag= 10.4 min
 Primary = 1.82 cfs @ 12.31 hrs, Volume= 0.252 af

Routing by Stor-Ind method, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
 Peak Elev= 264.71' @ 12.31 hrs Surf.Area= 0.055 ac Storage= 0.054 af

Plug-Flow detention time= 53.2 min calculated for 0.252 af (100% of inflow)
 Center-of-Mass det. time= 51.8 min (884.6 - 832.8)

Volume	Invert	Avail.Storage	Storage Description
#1	263.50'	0.140 af	15.00'W x 100.00'L x 2.50'H Prismatic Z=3.0

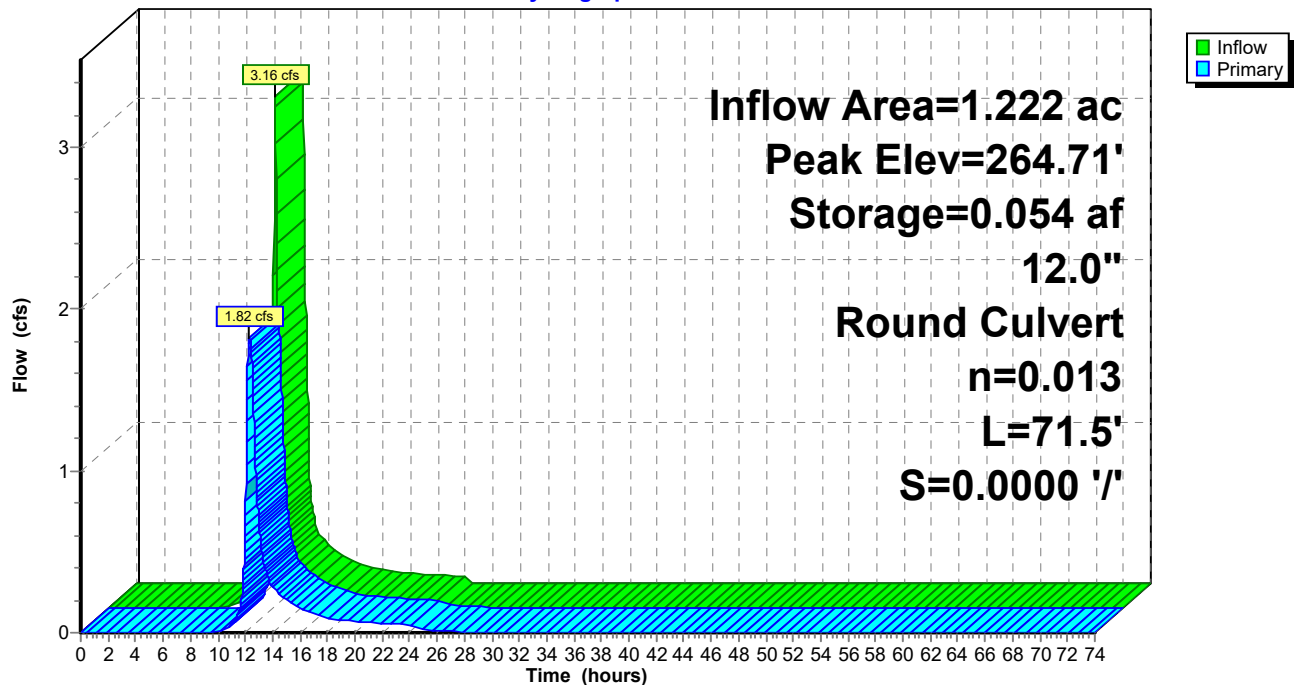
Device	Routing	Invert	Outlet Devices
#1	Primary	263.50'	12.0" Round Culvert L= 71.5' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 263.50' / 263.50' S= 0.0000 '/ Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.82 cfs @ 12.31 hrs HW=264.71' (Free Discharge)

←1=Culvert (Barrel Controls 1.82 cfs @ 2.43 fps)

Pond 2CP: Road Basin 2

Hydrograph



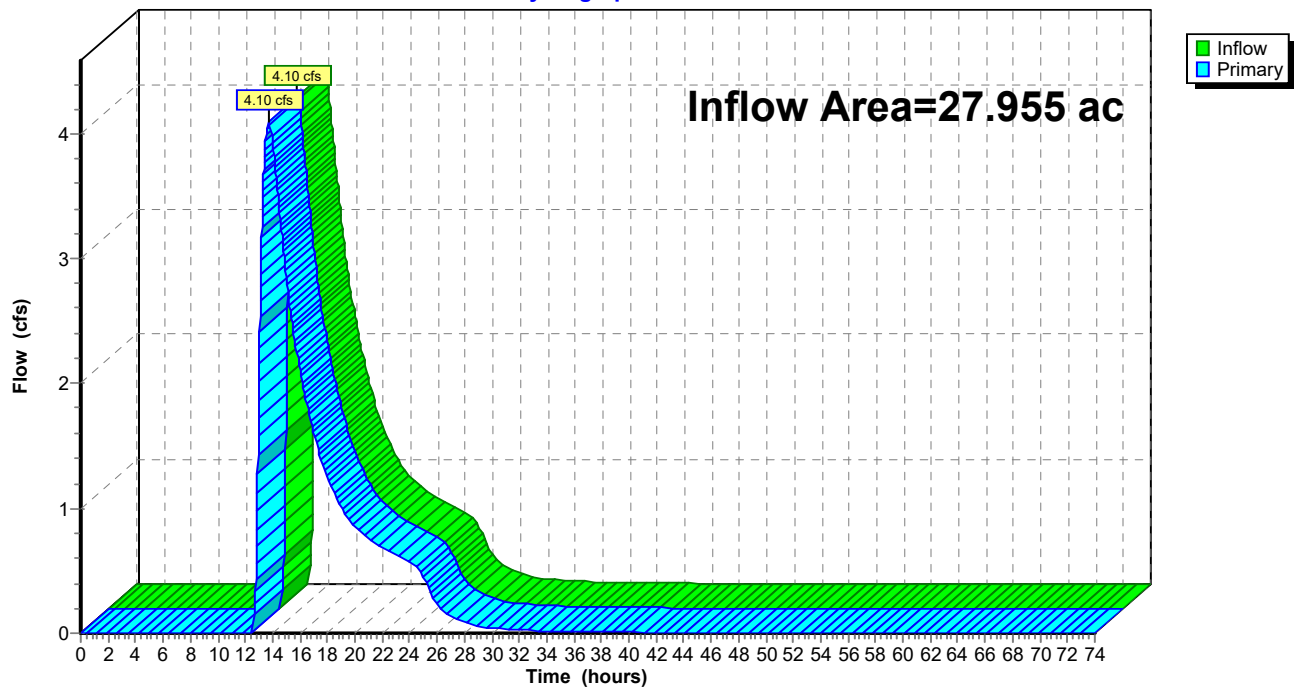
Summary for Link DP-1: Lewiston Junction

Inflow Area = 27.955 ac, 0.05% Impervious, Inflow Depth > 0.69" for 10-YEAR event

Inflow = 4.10 cfs @ 13.69 hrs, Volume= 1.603 af

Primary = 4.10 cfs @ 13.69 hrs, Volume= 1.603 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs

Link DP-1: Lewiston Junction**Hydrograph**

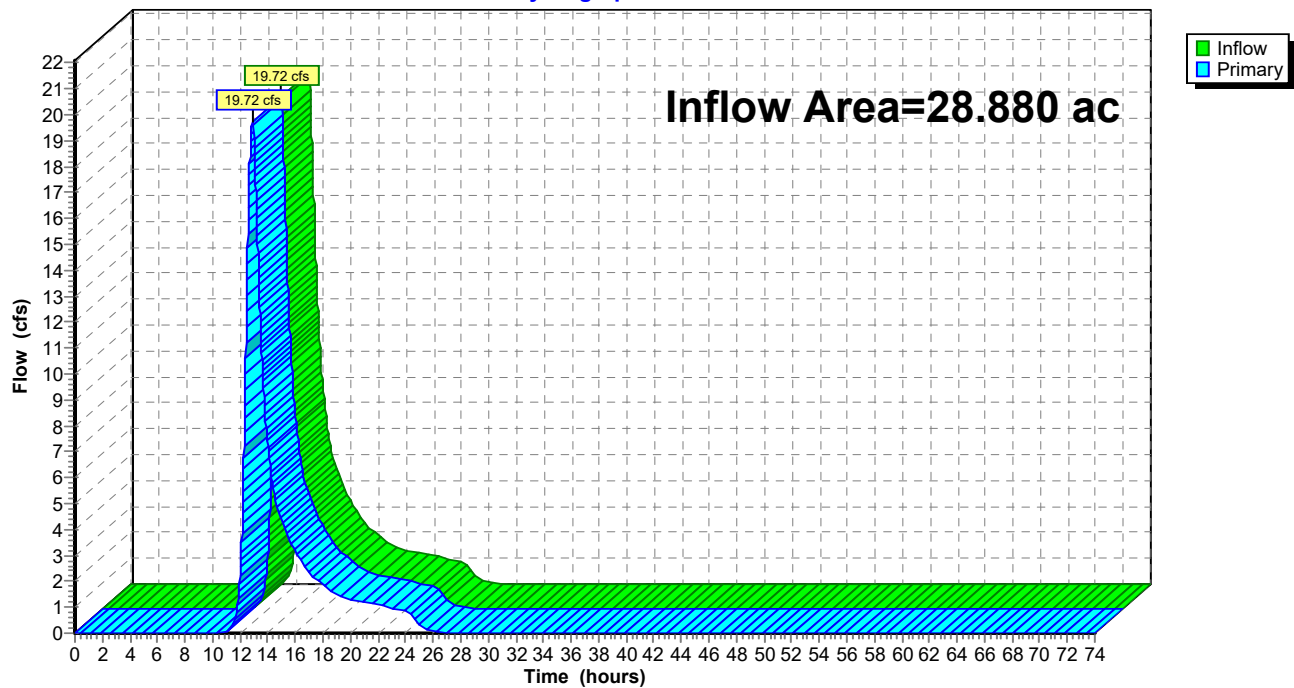
Summary for Link DP-2: Lewiston Junction South

Inflow Area = 28.880 ac, 0.00% Impervious, Inflow Depth = 1.63" for 10-YEAR event

Inflow = 19.72 cfs @ 12.87 hrs, Volume= 3.933 af

Primary = 19.72 cfs @ 12.87 hrs, Volume= 3.933 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs

Link DP-2: Lewiston Junction South**Hydrograph**

Summary for Subcatchment PR1A: Northern

Runoff = 10.67 cfs @ 12.79 hrs, Volume= 1.896 af, Depth= 2.23"

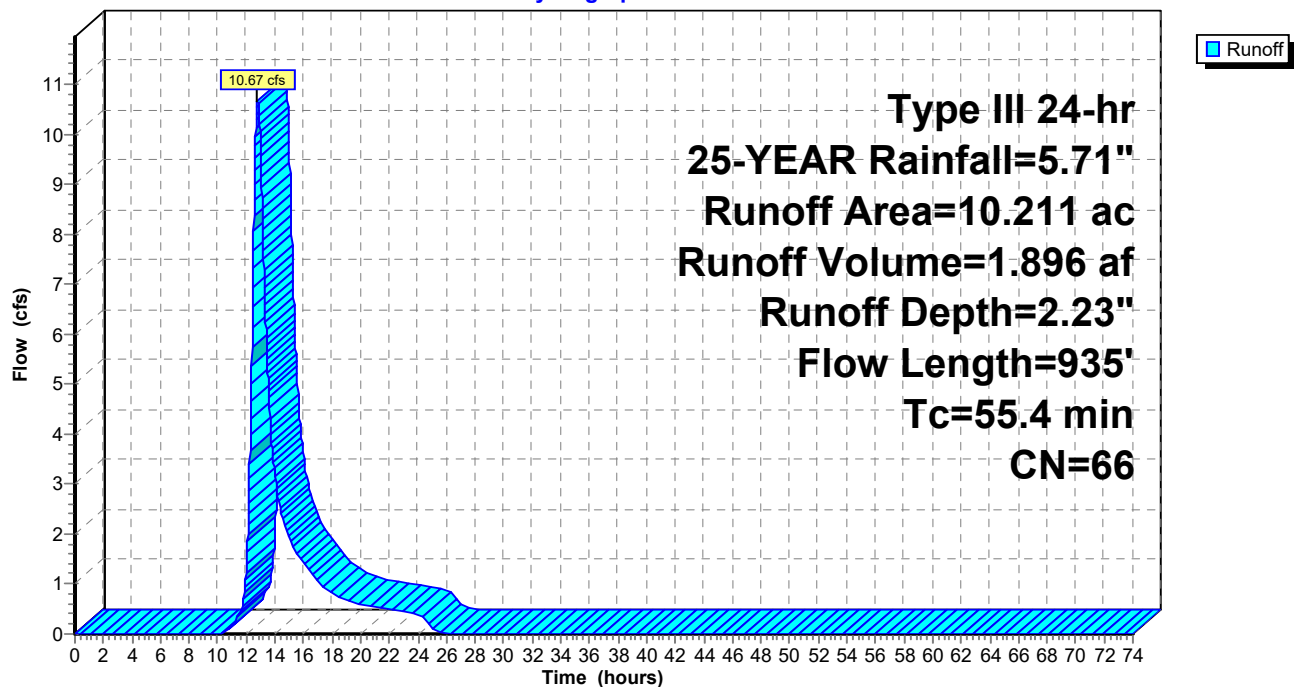
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-YEAR Rainfall=5.71"

Area (ac)	CN	Description
0.020	78	Meadow, non-grazed, HSG D
0.190	30	Meadow, non-grazed, HSG A
6.587	71	Meadow, non-grazed, HSG C
0.731	30	Woods, Good, HSG A
0.265	30	Woods, Good, HSG A
2.419	70	Woods, Good, HSG C
10.211	66	Weighted Average
10.211		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	50	0.0250	0.04		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
7.2	325	0.0225	0.75		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
28.4	560	0.0173	0.33		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
55.4	935	Total			

Subcatchment PR1A: Northern

Hydrograph



Summary for Subcatchment PR1B: Central

Runoff = 2.21 cfs @ 13.25 hrs, Volume= 0.702 af, Depth= 0.69"

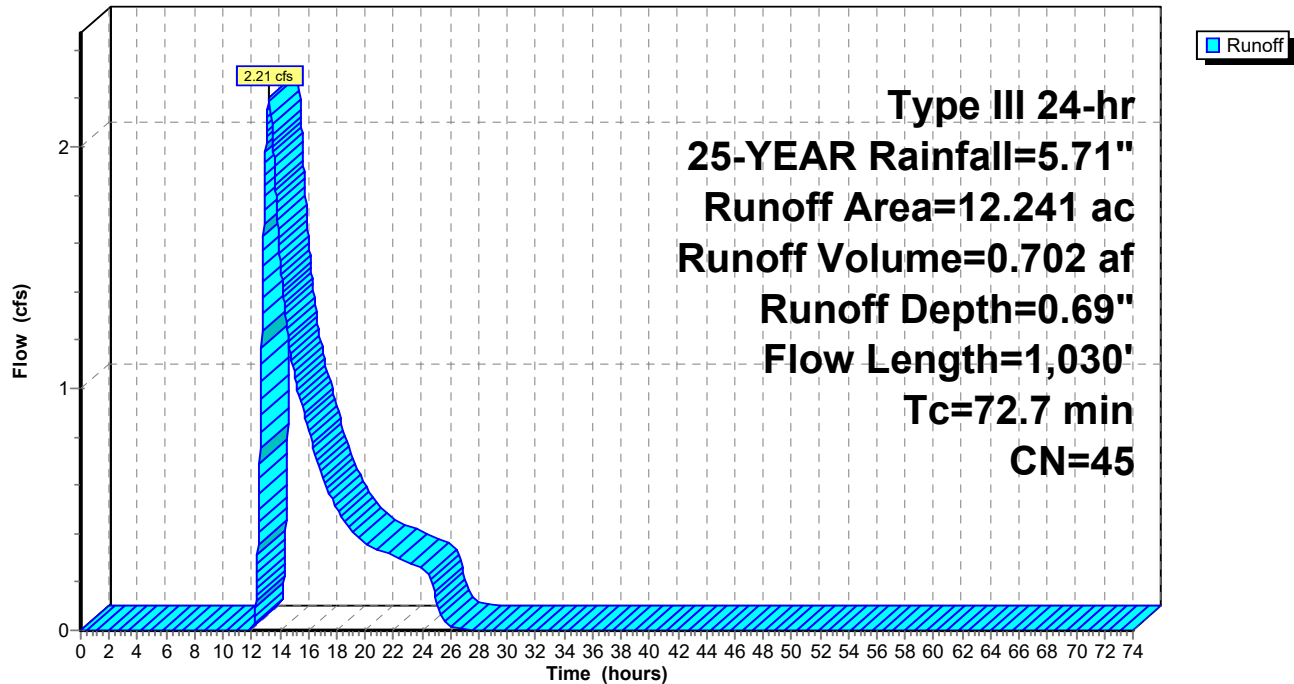
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-YEAR Rainfall=5.71"

Area (ac)	CN	Description
4.208	71	Meadow, non-grazed, HSG C
0.006	98	Unconnected pavement, HSG C
2.024	30	Woods, Good, HSG A
0.006	98	Unconnected pavement, HSG A
0.102	96	Gravel surface, HSG A
5.664	30	Meadow, non-grazed, HSG A
0.229	39	Pasture/grassland/range, Good, HSG A
12.241	45	Weighted Average
12.228		99.89% Pervious Area
0.013		0.11% Impervious Area
0.013		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	50	0.0200	0.04		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
1.7	135	0.0737	1.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.6	45	0.0333	0.46		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
47.7	800	0.0125	0.28		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
72.7	1,030	Total			

Subcatchment PR1B: Central

Hydrograph



Summary for Subcatchment PR1C: Finger Wetland

Runoff = 0.68 cfs @ 13.18 hrs, Volume= 0.238 af, Depth= 0.52"

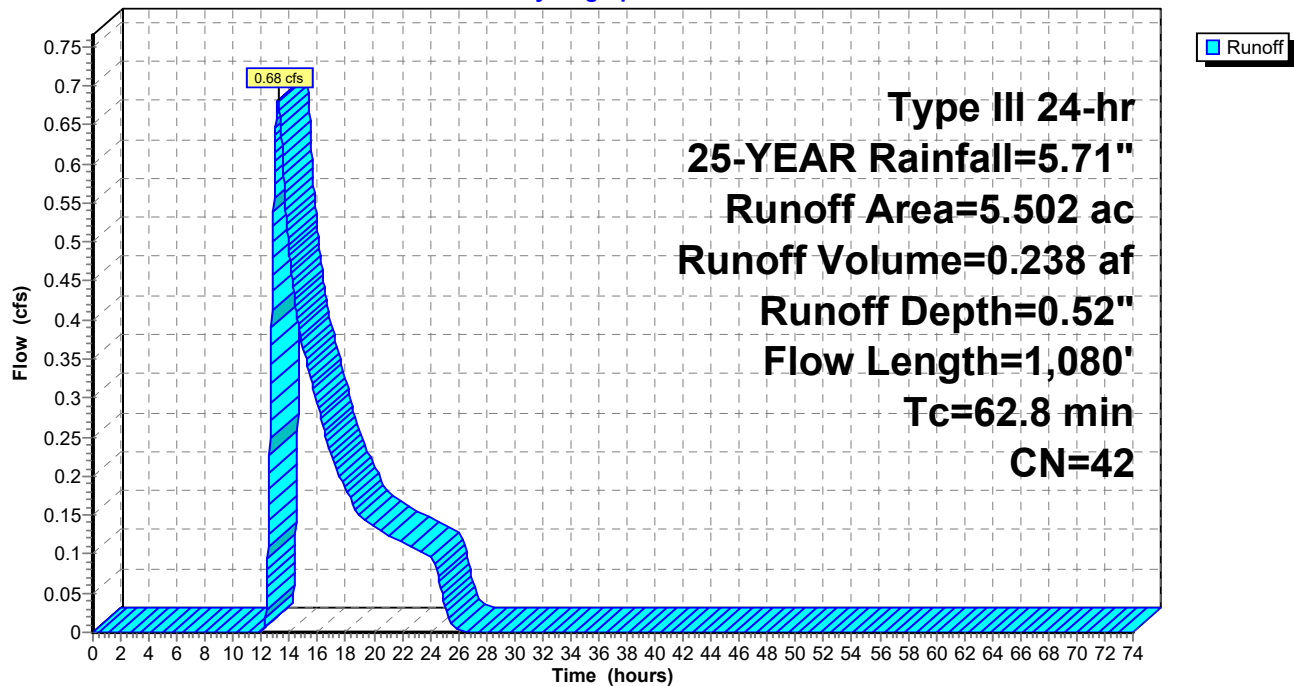
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-YEAR Rainfall=5.71"

Area (ac)	CN	Description
0.011	78	Meadow, non-grazed, HSG D
0.017	30	Meadow, non-grazed, HSG A
0.754	71	Meadow, non-grazed, HSG C
0.797	70	Woods, Good, HSG C
3.923	30	Woods, Good, HSG A
5.502	42	Weighted Average
5.502		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	50	0.0200	0.04		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
1.1	60	0.0330	0.91		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
4.0	220	0.1318	0.91		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
36.0	750	0.0193	0.35		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
62.8	1,080	Total			

Subcatchment PR1C: Finger Wetland

Hydrograph



Summary for Subcatchment PR2A: Road A

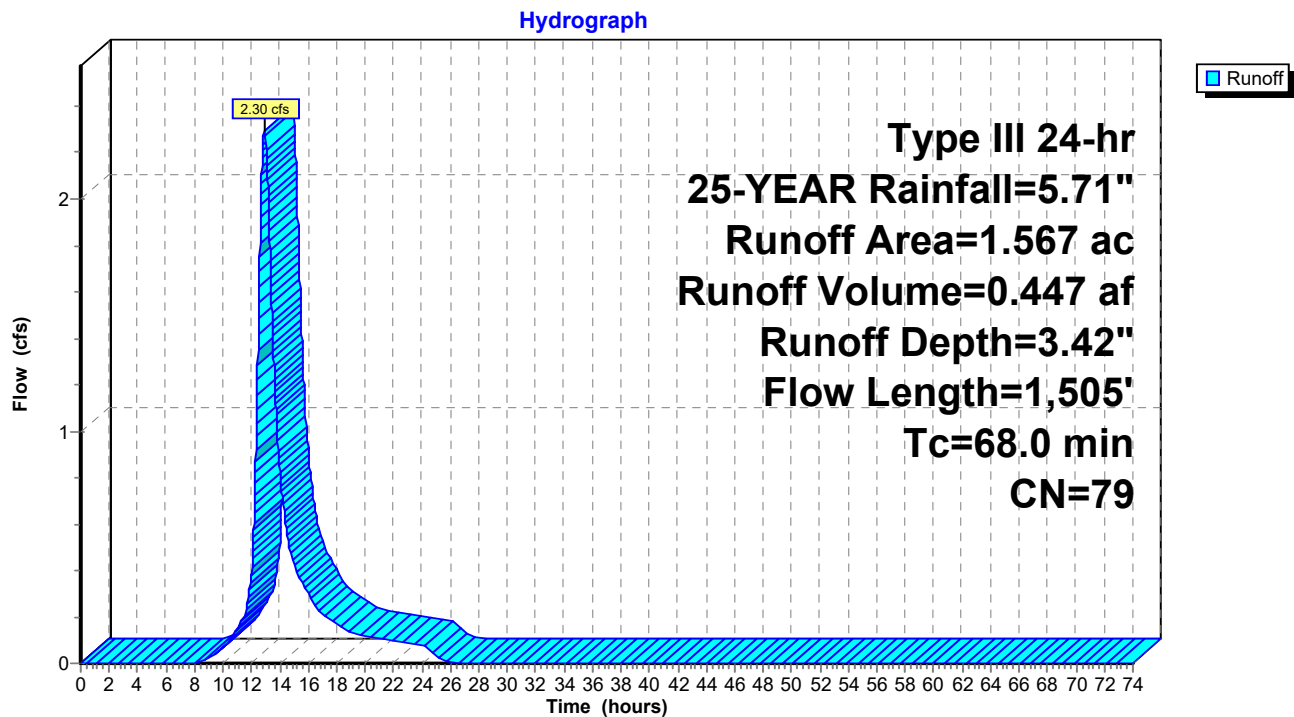
Runoff = 2.30 cfs @ 12.92 hrs, Volume= 0.447 af, Depth= 3.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-YEAR Rainfall=5.71"

Area (ac)	CN	Description
0.017	70	Woods, Good, HSG C
0.483	83	Small grain, straight row, Good, HSG C
0.223	96	Gravel surface, HSG C
0.007	96	Gravel surface, HSG C
0.115	74	Pasture/grassland/range, Good, HSG C
0.107	39	Pasture/grassland/range, Good, HSG A
0.044	39	Pasture/grassland/range, Good, HSG A
0.203	96	Gravel surface, HSG A
0.117	96	Gravel surface, HSG A
0.249	63	Small grain, straight row, Good, HSG A
1.567	79	Weighted Average
1.567		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.6	50	0.1200	0.08		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.14"
19.8	750	0.0640	0.63		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
37.6	705	0.0156	0.31		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
68.0	1,505	Total			

Subcatchment PR2A: Road A



Summary for Subcatchment PR2B: Subcat PR2B

Runoff = 26.13 cfs @ 12.86 hrs, Volume= 4.843 af, Depth= 2.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-YEAR Rainfall=5.71"

Area (ac)	CN	Description
0.000	96	Gravel surface, HSG C
0.117	96	Gravel surface, HSG C
0.058	70	Woods, Good, HSG C
0.004	63	Small grain, straight row, Good, HSG A
0.257	63	Small grain, straight row, Good, HSG A
0.068	63	Small grain, straight row, Good, HSG A
13.817	63	Small grain, straight row, Good, HSG A
0.147	63	Small grain, straight row, Good, HSG A
5.449	83	Small grain, straight row, Good, HSG C
0.418	70	Woods, Good, HSG C
0.013	70	Woods, Good, HSG C
0.006	74	Pasture/grassland/range, Good, HSG C
0.000	74	Pasture/grassland/range, Good, HSG C
0.011	39	Pasture/grassland/range, Good, HSG A
0.024	30	Meadow, non-grazed, HSG A
2.503	30	Woods, Good, HSG A
0.264	30	Woods, Good, HSG A
0.270	30	Woods, Good, HSG A
0.148	30	Woods, Good, HSG A
1.898	96	Gravel surface, HSG A
0.072	96	Gravel surface, HSG A
0.249	96	Gravel surface, HSG A
0.017	96	Gravel surface, HSG A
0.018	96	Gravel surface, HSG A
0.201	96	Gravel surface, HSG A
0.030	96	Gravel surface, HSG A
0.000	98	Unconnected pavement, HSG A
0.031	30	Meadow, non-grazed, HSG A
26.091	66	Weighted Average
26.090		100.00% Pervious Area
0.000		0.00% Impervious Area
0.000		100.00% Unconnected

55304.01-PR HYDROCAD

Prepared by VHB

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Type III 24-hr 25-YEAR Rainfall=5.71"

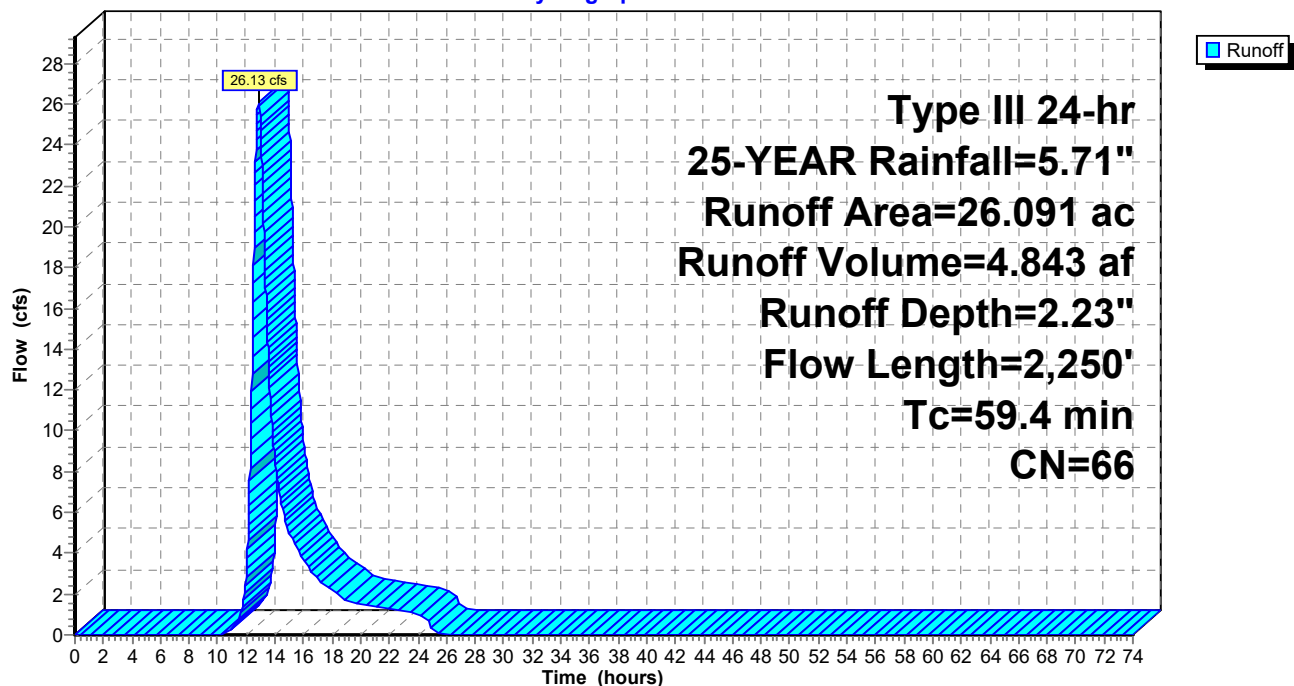
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Page 51

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	50	0.1600	0.30		Sheet Flow, Cultivated: Residue>20% n= 0.170 P2= 3.14"
0.7	50	0.0300	1.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
3.6	110	0.0409	0.51		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
22.0	330	0.0100	0.25		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
3.8	185	0.0135	0.81		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
3.8	100	0.0300	0.43		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
15.1	1,250	0.0388	1.38		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
7.7	175	0.0229	0.38		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
59.4	2,250	Total			

Subcatchment PR2B: Subcat PR2B

Hydrograph



Summary for Subcatchment PR2C: Road B

Runoff = 4.25 cfs @ 12.13 hrs, Volume= 0.339 af, Depth= 3.32"

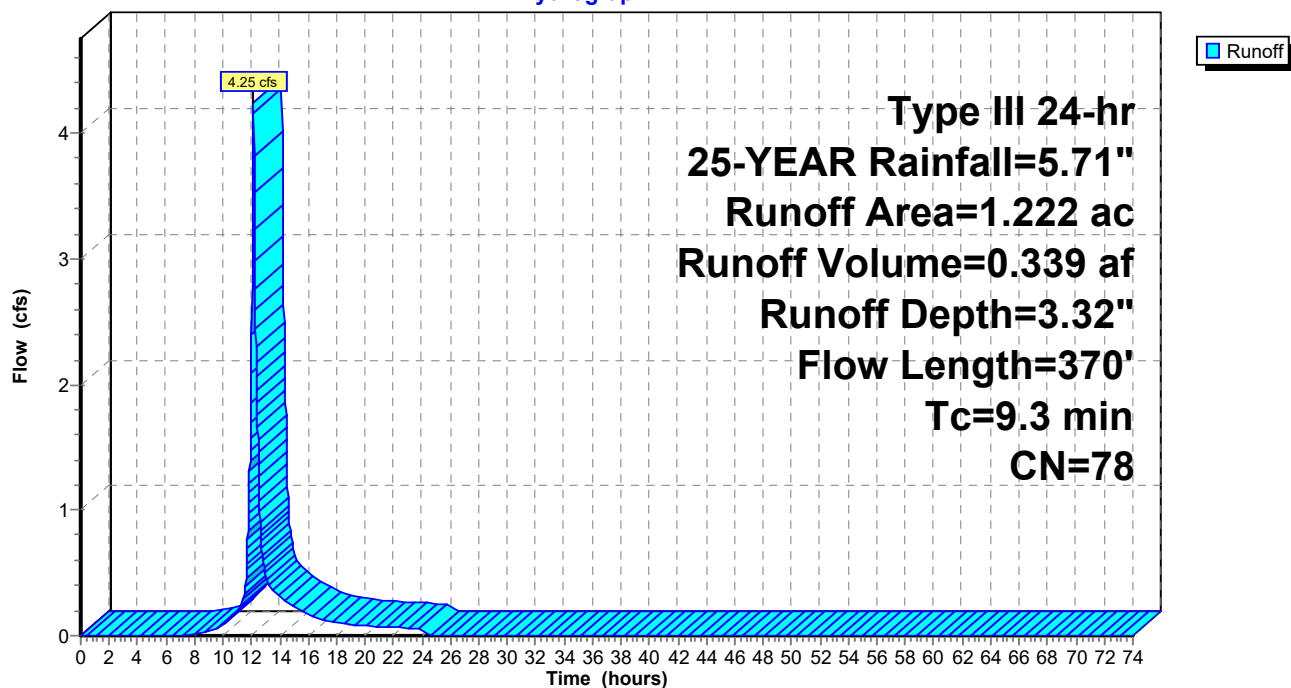
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-YEAR Rainfall=5.71"

Area (ac)	CN	Description
0.003	74	Pasture/grassland/range, Good, HSG C
0.000	70	Woods, Good, HSG C
0.189	83	Small grain, straight row, Good, HSG C
0.260	96	Gravel surface, HSG C
0.770	70	Woods, Good, HSG C
1.222	78	Weighted Average
1.222		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	50	0.0200	0.15		Sheet Flow, Grass: Short n= 0.150 P2= 3.14"
3.6	320	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
9.3	370	Total			

Subcatchment PR2C: Road B

Hydrograph



Summary for Reach 1CR: Swale

Inflow Area = 5.502 ac, 0.00% Impervious, Inflow Depth = 0.52" for 25-YEAR event
 Inflow = 0.68 cfs @ 13.18 hrs, Volume= 0.238 af
 Outflow = 0.67 cfs @ 13.42 hrs, Volume= 0.238 af, Atten= 2%, Lag= 14.1 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs

Max. Velocity= 1.21 fps, Min. Travel Time= 8.4 min

Avg. Velocity = 0.63 fps, Avg. Travel Time= 16.2 min

Peak Storage= 339 cf @ 13.28 hrs

Average Depth at Peak Storage= 0.09' , Surface Width= 6.53'

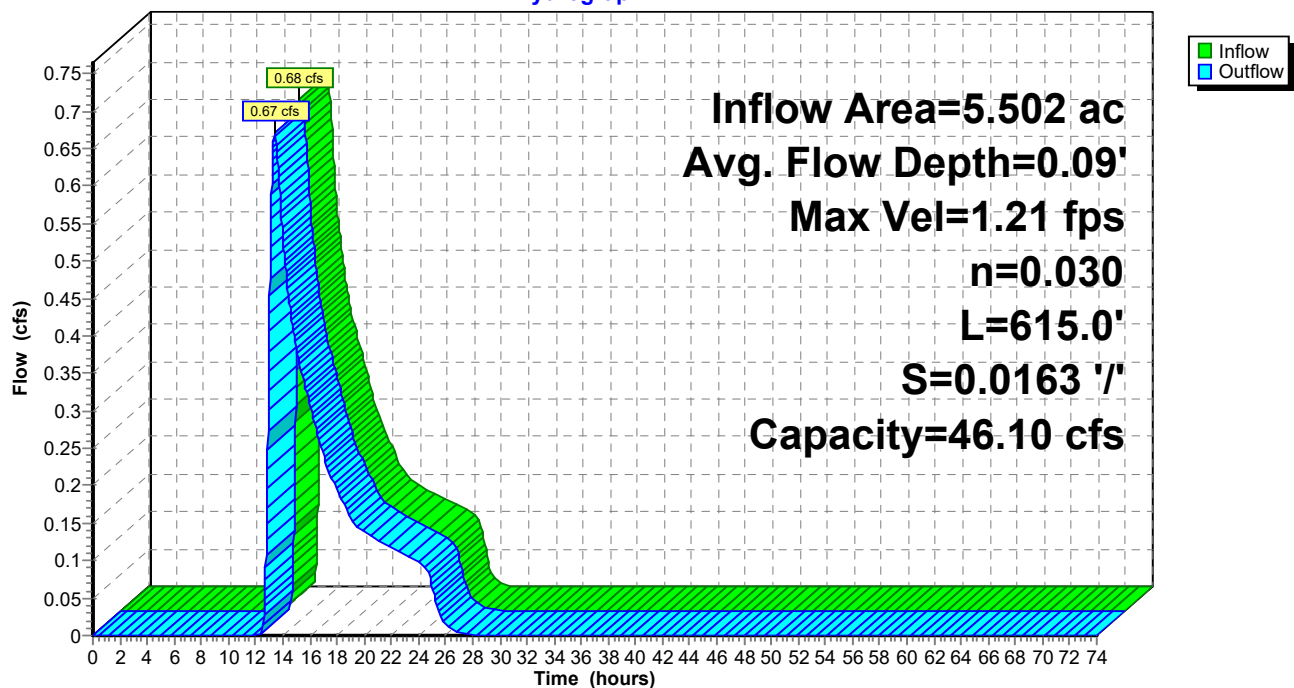
Bank-Full Depth= 1.00' Flow Area= 9.0 sf, Capacity= 46.10 cfs

6.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding

Side Slope Z-value= 3.0 '/' Top Width= 12.00'

Length= 615.0' Slope= 0.0163 '/'

Inlet Invert= 270.00', Outlet Invert= 260.00'

**Reach 1CR: Swale****Hydrograph**

Summary for Pond 1AP: Pond

Inflow Area = 10.211 ac, 0.00% Impervious, Inflow Depth = 2.23" for 25-YEAR event
 Inflow = 10.67 cfs @ 12.79 hrs, Volume= 1.896 af
 Outflow = 7.88 cfs @ 13.16 hrs, Volume= 1.713 af, Atten= 26%, Lag= 22.2 min
 Primary = 7.88 cfs @ 13.16 hrs, Volume= 1.713 af

Routing by Stor-Ind method, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
 Peak Elev= 260.50' @ 13.16 hrs Surf.Area= 0.267 ac Storage= 0.529 af

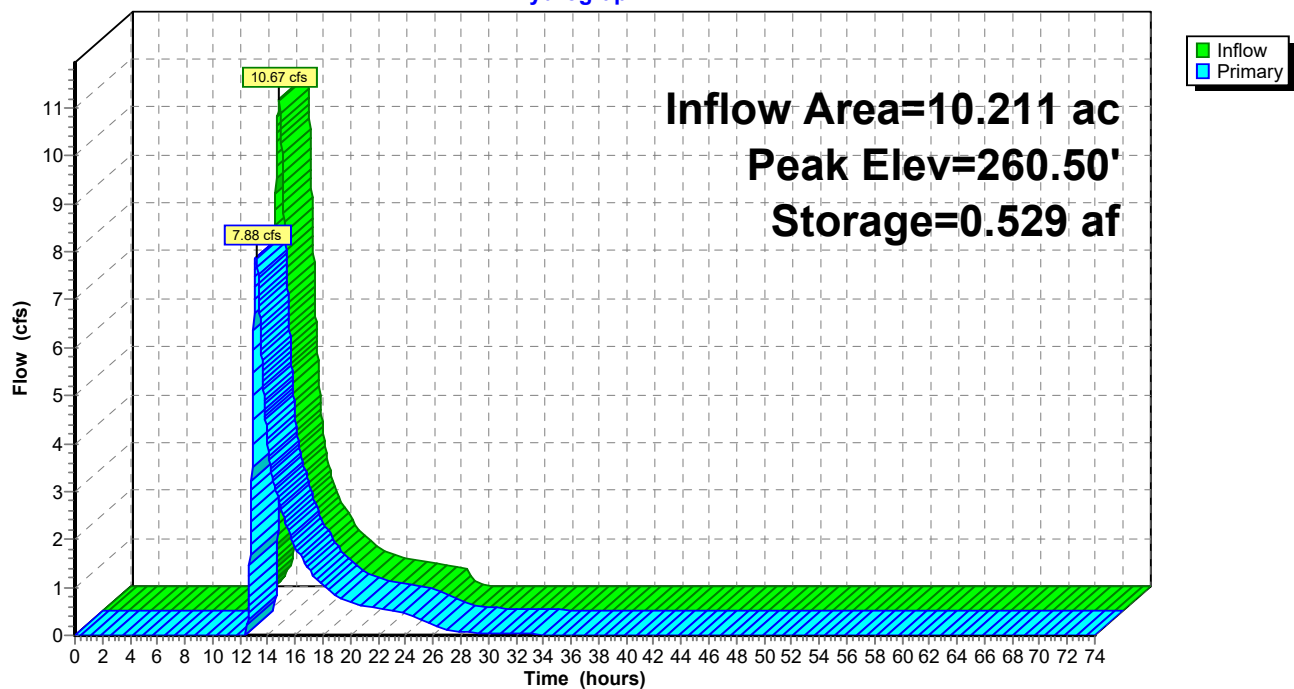
Plug-Flow detention time= 142.1 min calculated for 1.713 af (90% of inflow)
 Center-of-Mass det. time= 94.8 min (991.0 - 896.3)

Volume	Invert	Avail.Storage	Storage Description
#1	258.00'	0.667 af	275.00'W x 25.00'L x 3.00'H Prismatic Z=3.0

Device	Routing	Invert	Outlet Devices
#1	Primary	260.20'	8.0' long x 12.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.57 2.62 2.70 2.67 2.66 2.67 2.66 2.64
#2	Primary	259.00'	15.0" Round Culvert L= 60.6' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 259.00' / 258.80' S= 0.0033 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=7.88 cfs @ 13.16 hrs HW=260.50' (Free Discharge)

1=Broad-Crested Rectangular Weir (Weir Controls 3.49 cfs @ 1.43 fps)
 2=Culvert (Barrel Controls 4.39 cfs @ 3.76 fps)

Pond 1AP: Pond**Hydrograph**

Summary for Pond 1BP: Pond

Inflow Area = 12.241 ac, 0.11% Impervious, Inflow Depth = 0.69" for 25-YEAR event
 Inflow = 2.21 cfs @ 13.25 hrs, Volume= 0.702 af
 Outflow = 1.72 cfs @ 13.81 hrs, Volume= 0.702 af, Atten= 22%, Lag= 33.3 min
 Primary = 1.72 cfs @ 13.81 hrs, Volume= 0.702 af

Routing by Stor-Ind method, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
 Peak Elev= 261.39' @ 13.81 hrs Surf.Area= 3,578 sf Storage= 4,300 cf

Plug-Flow detention time= 54.7 min calculated for 0.702 af (100% of inflow)
 Center-of-Mass det. time= 54.4 min (1,040.5 - 986.1)

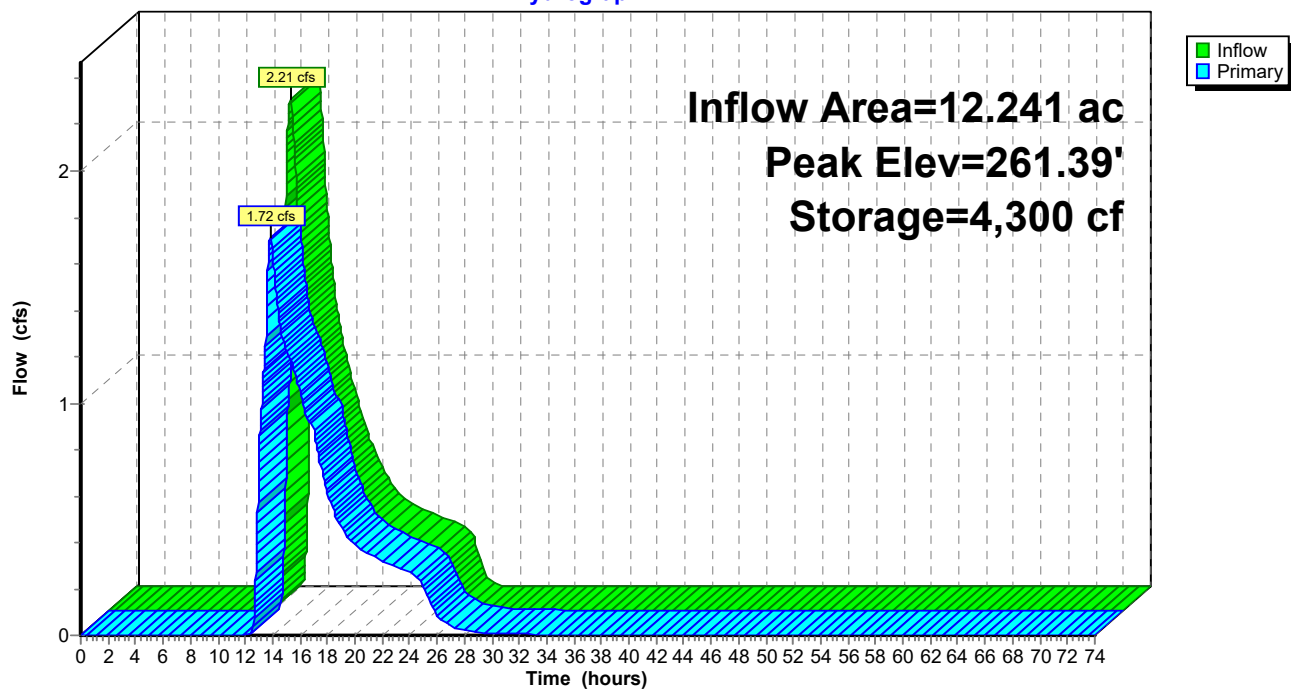
Volume	Invert	Avail.Storage	Storage Description		
#1	260.00'	6,625 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
260.00	2,635	215.0	0	0	2,635
261.00	3,305	230.0	2,964	2,964	3,211
262.00	4,030	250.0	3,662	6,625	4,012

Device	Routing	Invert	Outlet Devices
#1	Primary	261.30'	6.0' long x 8.0' 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) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74
#2	Primary	260.00'	8.0" Round Culvert L= 48.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 260.00' / 259.80' S= 0.0042 ' / Cc= 0.900 n= 0.013, Flow Area= 0.35 sf

Primary OutFlow Max=1.71 cfs @ 13.81 hrs HW=261.39' (Free Discharge)

1=Broad-Crested Rectangular Weir (Weir Controls 0.38 cfs @ 0.72 fps)

2=Culvert (Barrel Controls 1.33 cfs @ 3.81 fps)

Pond 1BP: Pond**Hydrograph**

Summary for Pond 2AP: Road Basin A

Inflow Area = 1.567 ac, 0.00% Impervious, Inflow Depth = 3.42" for 25-YEAR event
 Inflow = 2.30 cfs @ 12.92 hrs, Volume= 0.447 af
 Outflow = 2.16 cfs @ 13.09 hrs, Volume= 0.446 af, Atten= 6%, Lag= 10.5 min
 Primary = 2.16 cfs @ 13.09 hrs, Volume= 0.446 af

Routing by Stor-Ind method, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
 Peak Elev= 265.97' @ 13.09 hrs Surf.Area= 2,693 sf Storage= 2,313 cf

Plug-Flow detention time= 43.5 min calculated for 0.446 af (100% of inflow)
 Center-of-Mass det. time= 43.1 min (919.4 - 876.2)

Volume	Invert	Avail.Storage	Storage Description
#1	265.00'	5,447 cf	Custom Stage Data (Irregular) Listed below

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
265.00	2,090	200.0	0	0	2,090
266.00	2,715	220.0	2,396	2,396	2,791
267.00	3,400	240.0	3,051	5,447	3,558

Device	Routing	Invert	Outlet Devices
#1	Primary	266.40'	7.0' long x 7.0' 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) 2.40 2.52 2.70 2.68 2.68 2.67 2.66 2.65 2.65 2.65 2.66 2.65 2.66 2.68 2.70 2.73 2.78
#2	Primary	265.00'	15.0" Round Culvert L= 15.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 265.00' / 265.00' S= 0.0000 ' S= 0.0000 ' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

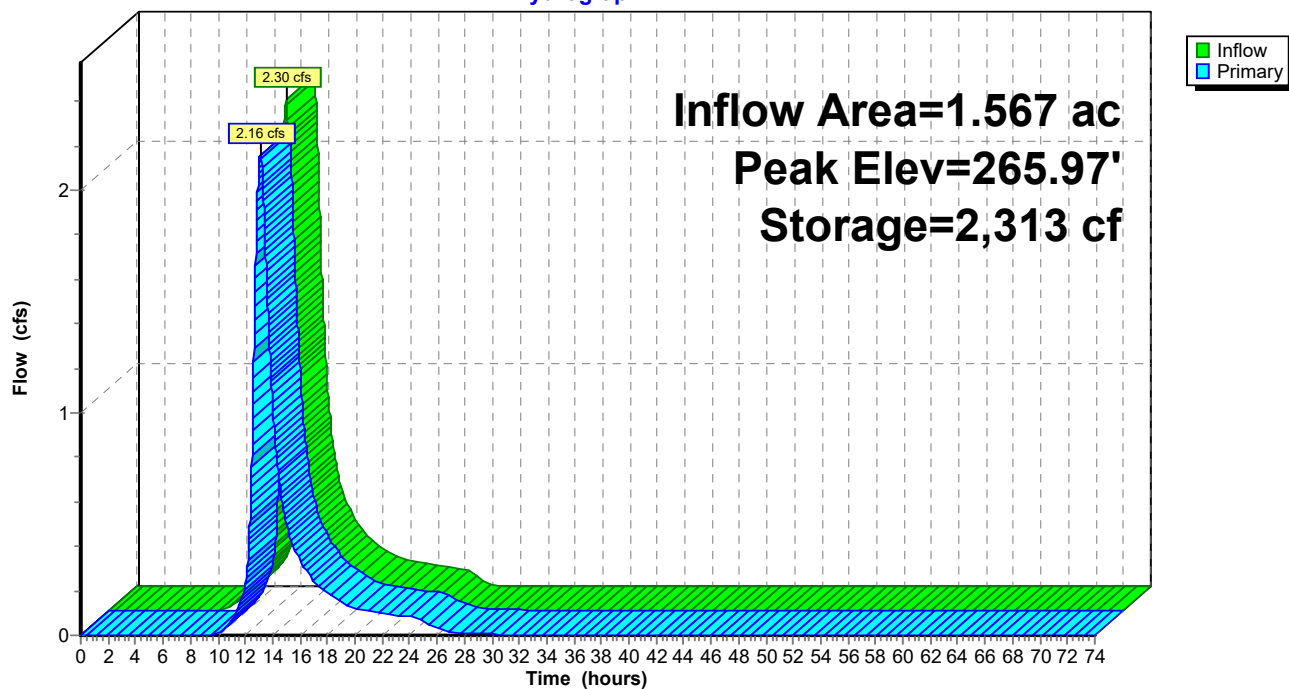
Primary OutFlow Max=2.16 cfs @ 13.09 hrs HW=265.97' (Free Discharge)

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

2=Culvert (Barrel Controls 2.16 cfs @ 2.93 fps)

Pond 2AP: Road Basin A

Hydrograph



Summary for Pond 2CP: Road Basin 2

Inflow Area = 1.222 ac, 0.00% Impervious, Inflow Depth = 3.32" for 25-YEAR event
 Inflow = 4.25 cfs @ 12.13 hrs, Volume= 0.339 af
 Outflow = 2.34 cfs @ 12.31 hrs, Volume= 0.338 af, Atten= 45%, Lag= 11.0 min
 Primary = 2.34 cfs @ 12.31 hrs, Volume= 0.338 af

Routing by Stor-Ind method, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs
 Peak Elev= 265.02' @ 12.31 hrs Surf.Area= 0.060 ac Storage= 0.071 af

Plug-Flow detention time= 46.7 min calculated for 0.338 af (100% of inflow)
 Center-of-Mass det. time= 45.6 min (869.9 - 824.3)

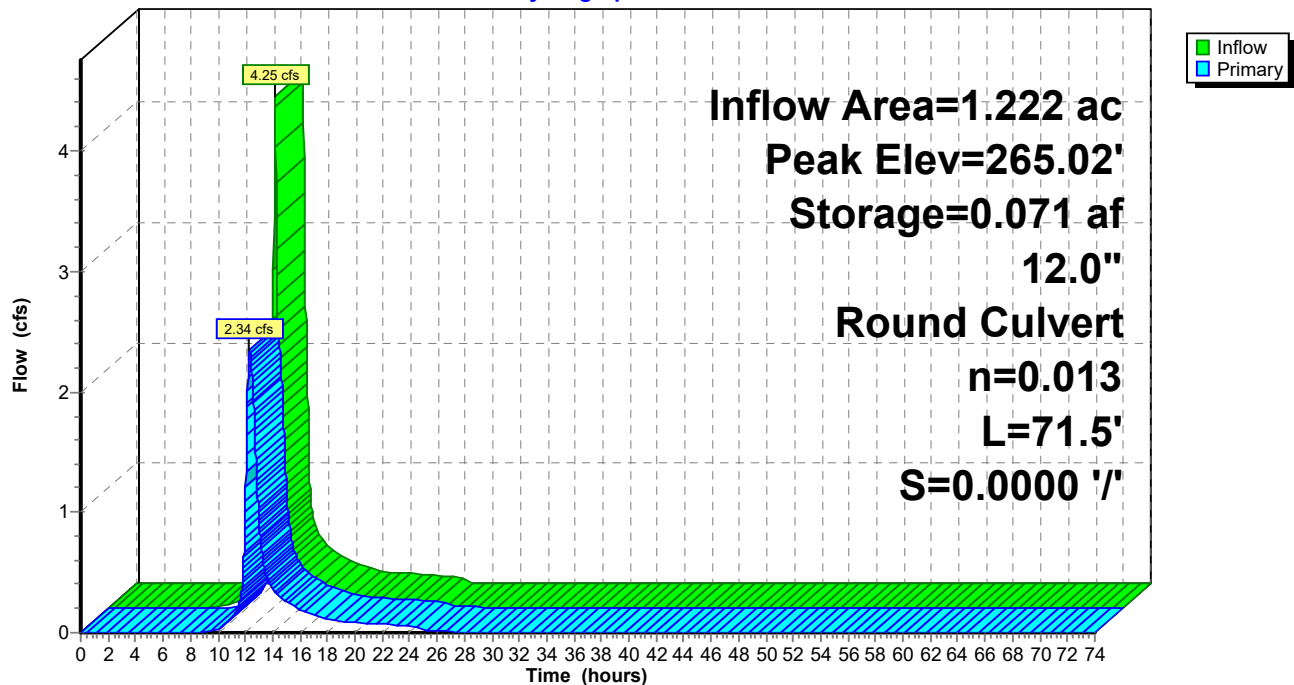
Volume	Invert	Avail.Storage	Storage Description
#1	263.50'	0.140 af	15.00'W x 100.00'L x 2.50'H Prismatic Z=3.0

Device	Routing	Invert	Outlet Devices
#1	Primary	263.50'	12.0" Round Culvert L= 71.5' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 263.50' / 263.50' S= 0.0000 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.34 cfs @ 12.31 hrs HW=265.02' (Free Discharge)
 ←1=Culvert (Barrel Controls 2.34 cfs @ 2.98 fps)

Pond 2CP: Road Basin 2

Hydrograph



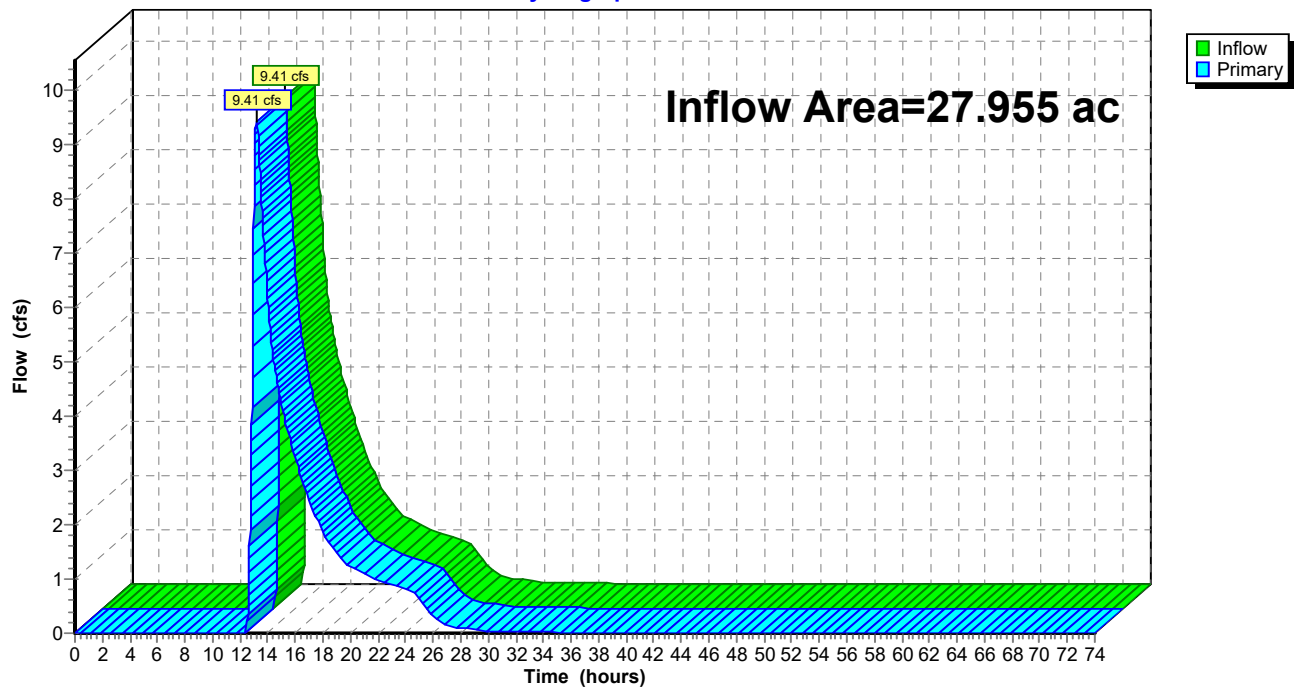
Summary for Link DP-1: Lewiston Junction

Inflow Area = 27.955 ac, 0.05% Impervious, Inflow Depth = 1.14" for 25-YEAR event

Inflow = 9.41 cfs @ 13.20 hrs, Volume= 2.653 af

Primary = 9.41 cfs @ 13.20 hrs, Volume= 2.653 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs

Link DP-1: Lewiston Junction**Hydrograph**

Summary for Link DP-2: Lewiston Junction South

Inflow Area = 28.880 ac, 0.00% Impervious, Inflow Depth = 2.34" for 25-YEAR event
Inflow = 29.27 cfs @ 12.86 hrs, Volume= 5.627 af
Primary = 29.27 cfs @ 12.86 hrs, Volume= 5.627 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-74.00 hrs, dt= 0.02 hrs

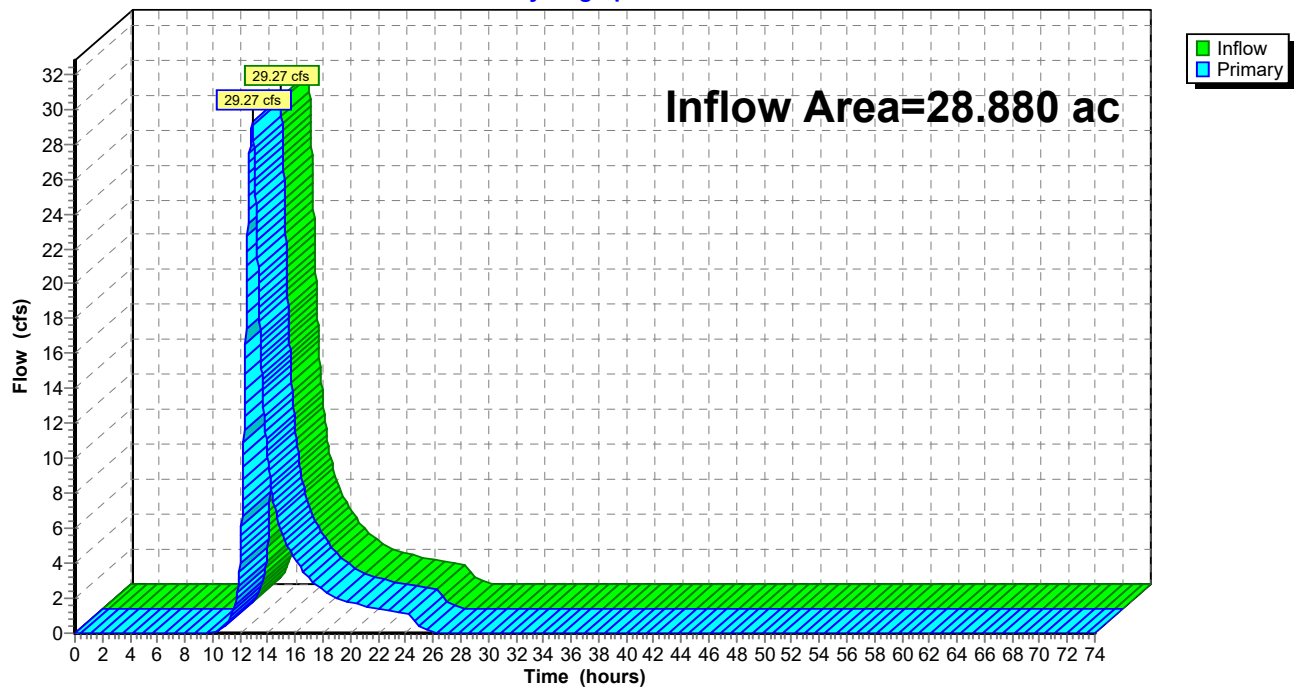
Link DP-2: Lewiston Junction South**Hydrograph**

TABLE OF CONTENTS**Project Reports**

- 1 Routing Diagram
- 2 Area Listing (all nodes)

2-YEAR Event

- 3 Subcat PR1A: Northern
- 4 Subcat PR1B: Central
- 6 Subcat PR1C: Finger Wetland
- 8 Subcat PR2A: Road A
- 10 Subcat PR2B: Subcat PR2B
- 12 Subcat PR2C: Road B
- 13 Reach 1CR: Swale
- 14 Pond 1AP: Pond
- 16 Pond 1BP: Pond
- 18 Pond 2AP: Road Basin A
- 20 Pond 2CP: Road Basin 2
- 21 Link DP-1: Lewiston Junction
- 22 Link DP-2: Lewiston Junction South

10-YEAR Event

- 23 Subcat PR1A: Northern
- 24 Subcat PR1B: Central
- 26 Subcat PR1C: Finger Wetland
- 28 Subcat PR2A: Road A
- 30 Subcat PR2B: Subcat PR2B
- 32 Subcat PR2C: Road B
- 33 Reach 1CR: Swale
- 34 Pond 1AP: Pond
- 36 Pond 1BP: Pond
- 38 Pond 2AP: Road Basin A
- 40 Pond 2CP: Road Basin 2
- 41 Link DP-1: Lewiston Junction
- 42 Link DP-2: Lewiston Junction South

25-YEAR Event

- 43 Subcat PR1A: Northern
- 44 Subcat PR1B: Central
- 46 Subcat PR1C: Finger Wetland
- 48 Subcat PR2A: Road A
- 50 Subcat PR2B: Subcat PR2B
- 52 Subcat PR2C: Road B
- 53 Reach 1CR: Swale
- 54 Pond 1AP: Pond
- 56 Pond 1BP: Pond
- 58 Pond 2AP: Road Basin A
- 60 Pond 2CP: Road Basin 2

55304.01-PR HYDROCAD

Prepared by VHB

HydroCAD® 10.10-3a s/n 01038 © 2020 HydroCAD Software Solutions LLC

Table of Contents

Printed 10/15/2020

- 61 Link DP-1: Lewiston Junction
- 62 Link DP-2: Lewiston Junction South

Ref: 55304.01
October 16, 2020

Attachment C: Inspection and Maintenance Log

NextGrid Solar Farm

Lewiston Junction

Poland, Maine 04274

PREPARED FOR

NextGrid Inc.
P.O. Box 7775 #73069
San Francisco, CA 94120

PREPARED BY



500 Southborough Drive
Suite 105B
South Portland, ME 04106
207.889.3150

August 2020



Table of Contents

Introduction	1
Inspection & Maintenance	1
Responsible Party	1
During Construction	1
Erosion and Sediment Control Plan	1
Post-Construction	2
Inspection & Maintenance Plan	2
Regular Maintenance	2
Vegetated Areas	2
Structures and Culverts	2
Stone Mattress	2
Meadow Vegetated Buffers	2
Detention Basin	2
Swales	2
Record Keeping	3
Re-Certification	3
Duration of Maintenance	3
Inspection & Maintenance Checklist	3
Inspection & Maintenance Checklist - Construction	
Inspection & Maintenance Checklist – Post-Construction	
Grading and Detail Plans	
Spill Response Procedure	4
Emergency Notification Phone Numbers	5
Hazardous Waste / Oil Spill Report	6
Emergency Response Equipment	8



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Introduction

VHB has prepared the following Stormwater Management System Inspection & Maintenance Manual and Spill Response Procedures for the NextGrid Solar Farm located at Lewiston Junction, Poland, Maine. The Site primarily drains to the east, primarily towards the adjacent train tracks which is collected by an existing swale (along the tracks) and flows south. The intent of this plan is to provide the applicant/owner with a list of procedures that document the inspection and maintenance requirements and spill procedures for this development.

Inspection & Maintenance

The following inspection and maintenance program is necessary to keep the Stormwater Management System functioning properly. By following the enclosed procedures, the applicant will be able to maintain the functional design of the Stormwater Management System and maximize its ability to remove sediment and other contaminants from site generated stormwater runoff.

Responsible Party

The oversight of the inspection and maintenance program will be provided by:

NextGrid Inc.
P.O. Box 7775 #73069
San Francisco, CA 94120

During Construction

The following procedures shall be implemented during construction. The Contractor shall adhere to the Erosion and Sediment Control (ESC) Plan associated with the Maine Construction General Permit (MCGP).

Erosion and Sediment Control Plan

- Impervious area, erosion control measures, materials storage areas exposed to precipitation and construction exits shall be inspected, at a minimum, once a week. Additional inspections shall be performed before and within 24 hours after a rainfall event and prior to permanent stabilization.
- BMPs shall be repaired upon discovery of problem and no later than the end of the next working day.
- Significant repairs to BMPs shall be completed within 7 calendar days and prior to a rainfall event.
- A Construction Inspection & Maintenance Log shall be completed for each inspection and maintenance activity.
- Inspection shall be performed by a person with knowledge of erosion and stormwater control which include the standards and conditions in the permit.
- The Inspection & Maintenance Logs shall be accessible to the Maine Department of Environmental Protection staff and a copy shall be provided upon request.
- The permittee shall retain copies of the logs for a period of at least three years from the completion of permanent stabilization.



Post-Construction

The following procedures shall be implemented after construction. The Inspection & Maintenance Plan does not include items and requirements specifically associated with the equipment located on the concrete pads.

Inspection & Maintenance Plan

By implementing the following procedures, the applicant will be able to maintain the functional design of the Stormwater Management System and maximize the system's ability to remove sediment and other contaminants from site generated stormwater runoff.

Regular Maintenance

- Routinely pick up and remove litter from the access road and gravel areas.
- Remove all trash litter from the access road and dispose of properly.

Vegetated Areas

- Inspect two times per year in Spring and Late Fall.
- Armor eroded areas or divert runoff to stabilized areas.
- Mow vegetation no more than twice in a 12-month period.

Detention Basin

- The grass on the side slopes and in the buffer areas should be mowed, and grass clippings, organic matter, and accumulated trash and debris removed, at least twice during the growing season.
- Eroded or barren spots should be reseeded immediately after inspection to prevent additional erosion and accumulation of sediment.
- Sediment should be removed from the basin as necessary. Removal procedures should not take place until the floor of the basin is thoroughly dry.
- Detention basins should be inspected at least twice a year to ensure proper stabilization and function.
- Light equipment, which will not compact the underlying soil, should be used to remove the top layer.

Swales

- The grass on the side slopes and in the buffer areas should be mowed, and grass clippings, organic matter, and accumulated trash and debris removed, at least twice during the growing season.
- Eroded or barren spots should be reseeded immediately after inspection to prevent additional erosion and accumulation of sediment.
- Sediment should be removed from the swales as necessary. Removal procedures should not take place until the floor of the basin is thoroughly dry.
- Swales should be inspected at least twice a year to ensure proper stabilization and function.

Record Keeping

- Inspections of the stormwater management system shall be conducted in accordance with the Inspection & Maintenance Checklist provided in this Manual.
- A Post-Construction Inspection & Maintenance Log shall be completed for each inspection and maintenance activity.



- Inspection shall be performed by a person with knowledge of erosion and stormwater control which include the standards and conditions in the permit.
- The Inspection & Maintenance Logs shall be accessible to the Maine Department of Environmental Protection staff and a copy shall be provided upon request.
- The permittee shall retain copies of the logs for a period of at least three years from the completion of permanent stabilization.

Re-Certification

- Re-certification shall be submitted within three months of the expiration of each five-year interval from the date of issuance of the permit.
- Submission of re-certification shall include: Identification of repair and erosion problems, Inspection and repair of stormwater system, and evidence that the maintenance plan has been implemented and modifications approved by the City.

Duration of Maintenance

Maintenance as described in the Inspection & Maintenance Plan shall be performed by the Responsible Party unless and until the system is formally accepted by its successor, heirs and assigns, the City or other entity.

Inspection & Maintenance Checklist

The following pages contain an Inspection & Maintenance Checklists for Construction and Post-Construction requirements and a reduced copy of the Erosion and Sediment Control Plan and Detail Sheets. These forms/plans are provided to assist the applicant with the inspection and maintenance of the Stormwater Management System.

Stormwater Management System
Inspection & Maintenance Checklist - Construction

Best Management Practice	Inspection Frequency	Date Inspected	Inspector Initials	Minimum Maintenance and Key Items to Check	Cleaning or Repair Needed (List Items)	Date of Cleaning or Repair	Performed by:
Gravel Access Road	Weekly and after any rainfall	/ /		Filled voids, erosion, breakout			
Silt Sock Erosion Control Barriers	Weekly and after rainfall $\geq 0.5"$	/ /		Flow around or under barrier, Sediment build up > half barrier height, excessive sag, erosion			
Stone Checkdam	Weekly and after any rainfall	/ /		Sediment build up, broken barrier or stakes			
Stabilized Construction Exit	Weekly and after any rainfall	/ /		Filled voids, runoff/sediments into street			
Erosion Control Blanket	Weekly and after any rainfall	/ /		Cracking, erosion, breakout, sediment buildup			
Diversion Channels	Weekly and after any rainfall	/ /		Maintained, moved as necessary to correct locations, Check for erosion or breakout			
Temporary Sedimentation Basins	Weekly and after any rainfall	/ /		Cracking, erosion, breakout, sediment buildup, contaminants			
Materials Storage Areas	Weekly and after any rainfall	/ /		Maintained, spills, breakout			

Inspector Name and Qualifications _____

Stormwater Management System
Inspection & Maintenance Checklist – Post-Construction

Best Management Practice	Inspection Frequency	Date Inspected	Inspector Initials	Minimum Maintenance and Key Items to Check	Cleaning or Repair Needed Yes/No	Date of Cleaning or Repair	Performed by:
Vegetated Areas, Swales and Slopes	Spring and Late Fall	/ /		Inspect for erosion and bare areas Remove trash and debris as necessary Armor or divert flow to stabilized areas. Mow no more than twice per 12 months.			
Detention Basins	Spring and Late Fall. Clean as needed based on sediment accumulation	/ /		Inspect and repair erosion at inlets, outlets, and within basins Clean and dispose sediments and trash legally Replace dislodged stone or exposed filter fabric			
Stormwater Outfalls	Spring and Late Fall	/ /		Inspect and repair erosion. Inspect and repair stone berms that flow is distributed. Clean and dispose sediments			

Inspector Name and Qualifications _____



Spill Response Procedure

Spill response procedure is limited to during the construction of the facility. Spill prevention equipment and training for post-construction operations will be provided by the property management company.

A. Initial Notification

In the event of a spill the facility and/or construction manager or supervisor will be notified immediately.

Facility Manager (name): _____

Facility Manager (phone): _____

Construction Manager (name): _____

Construction Manager (phone): _____

The supervisor or manager will assess the incident and initiate containment control measures with the appropriate spill containment equipment included in the spill kit kept on-site. The supervisor will first contact the Fire Department and then notify the Police Department. The fire department is ultimately responsible for matters of public health and safety and should be notified immediately.

B. Further Notification

The Maine Department of Environmental Protection (DEP) and the EPA may be notified depending upon the nature and severity of the spill. The Fire Chief will be responsible for determining the level of cleanup and notification required. The attached list of emergency phone numbers shall be posted in the main construction/facility office and readily accessible to all employees. A hazardous waste spill report shall be completed as necessary using the attached form.



Emergency Notification Phone Numbers

1.	FACILITY MANAGER NAME: _____ ALTERNATE CONTACT: NAME: _____	PHONE: _____ CELL: _____, _____ HOME PHONE: _____ PHONE: _____ BEEPER/CELL: _____, _____ HOME PHONE: _____
2.	FIRE & POLICE DEPARTMENT	EMERGENCY: 911
3.	CLEANUP CONTRACTOR: _____ ADDRESS: _____ _____	PHONE: _____
4.	MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP)	Oil Spills: (800) 482-0777 Hazardous Materials: (800) 452-4664 Central Maine Regional Office: (800) 452-1942
5.	NATIONAL RESPONSE CENTER ALTERNATE: U.S. ENVIRONMENTAL PROTECTION AGENCY	PHONE: (800) 424-8802 EMERGENCY: (800) 424-8802 BUSINESS (Region 1): (888) 372-7341
6.	MAINE EMERGENCY MANAGEMENT AGENCY	PHONE: (800) 452-8735



Hazardous Waste / Oil Spill Report

Date: ____/____/____ Time: ____ AM / PM

Exact location _____

Type of equipment: _____ Make: _____ Size: _____

License or S/N: _____ Weather Conditions: _____

On or near water ☐ Yes If yes, name of body of water: _____

☐ No

Type of chemical / oil spilled: _____

Amount of chemical / oil spilled: _____

Cause of spill: _____

Measures taken to contain or clean up spill: _____

Amount of chemical / oil recovered: _____ Method: _____

Material collected as a result of clean up

_____ drums containing: _____

_____ drums containing: _____

_____ drums containing: _____

Location and method of debris disposal: _____

Name and address of any person, firm, or corporation suffering damages: _____

Procedures, method, and precautions instituted to prevent a similar occurrence from recurring: : _____

Spill reported to General Office by: _____ Time: _____ AM / PM

Spill reported to DEP / National Response Center by: _____

DEP Date: ____/____/____ Time: _____ AM / PM Inspector: _____

NRC Date: ____/____/____ Time: _____ AM / PM Inspector: _____

Additional comments: _____



C. Assessment - Initial Containment

The supervisor or manager will assess the incident and initiate containment control measures with the appropriate spill containment equipment included in the spill kit kept on-site. A list of recommended spill equipment to be kept on site is included on the following page.



Emergency Response Equipment

The following equipment and materials shall be maintained at all times and stored in a secure area for long-term emergency response need.

--	SORBENT PADS	2 BALES
--	SORBENT BOOM	100 FEET
--	SAND BAGS (empty)	50
--	SEWER PIPE PLUGS	
--	12 INCH DIAM.	1
--	SPEEDI-DRI ABSORBENT	5 40# BAGS
--	SQUARE END SHOVELS	1
--	PICK	1
--	PRY BAR	1
--	DRAIN COVERS	2



Planning Board Office

1231 Maine Street,
Poland, Maine 04274-7328

Findings of Fact & Conclusion of Law

Application Type: Site Plan

Owners Name: NextGrid Renewable Energy (c/o Gil Paquette, VHB, 500 Scarborough Drive, Suite 105B, South Portland, ME 04106-6928)

Located at: Lewiston Junction Road

Parcel ID: 0003-0009A

Zoning Districts: General Purpose-32 (G-3)

SITE PLAN REVIEW STANDARDS

A. Preservation of Landscape:

This application to convert 17+/- acres of mostly agricultural land to a 5.243MW solar array. The total parcel size is eighty-five (85) acres. The natural contours of the land will be mostly preserved. A wooded buffer remains around the perimeter of the site.

There are no scenic vistas defined in the Comprehensive Plan associated with this property and the proposed area is not located on slopes exceeding twenty (20%) percent with this application. Based on the information above and in the record the Planning Board finds that standards of this section will be met.

B. Relation of Proposed Buildings to Environment:

There are no new buildings proposed with this application; therefore, the Board finds that this section is not applicable.

C. Compatibility with Residential Areas:

Once construction is completed, traffic to the site will be limited to maintenance. The system can be monitored remotely. The solar arrays will be visually buffered by surrounding woodland. The panels are designed to absorb, not reflect light. Based on the information above and in the record the Board finds that the standards of this section will be met.

D. Vehicular Access:

The width of the access road varies throughout the site. A road name has not been approved. Based on the information above and in the record the Board finds that the standards of this section will be met, provided the access road is upgraded to a minimum 20 feet wide including a travel lane and shoulders throughout the property and that a road name is submitted and approved by the Town of Poland.

E. Access to Routes 11, 26, 121 and 122:

The site will not have access from Routes 11, 26, 121 and 122; therefore, this section does not apply.

F. Surface Water:

The site is in the Sabbathday Pond-Upper Royal River watershed. Meadow buffers will prevent erosion and will provide some treatment of stormwater. A Stormwater Permit-by-Rule must be issued by the Maine Department of Environmental Protection. A full stormwater plan has not been submitted; therefore, the actual impacts of stormwater have not been established or reviewed.

In November 2019 wetlands were delineated. The project will impact 6,365 square feet of freshwater wetlands, a Tier 1 permit from the Maine Department of Environmental Protection has been submitted.

Based on this information and in the record, the Board finds that the standards of this section will be met provided a full stormwater report is submitted if the project is approved by the Maine Public Utilities Commission.

G. Conservation, Erosion and Sediment Control:

The solar array area will be seeded to become a meadow when construction is completed. An Erosion and Sedimentation Plan was submitted to protect the land from eroding and sedimentation build-up. A Stormwater Permit-by-Rule from the Maine Department of Environmental Protection will be required. Based on this information and in the record the Board finds that the standards of this section will be met.

H. Phosphorus Export:

The parcel is located in the Sabbathday Pond-Upper Royal River watershed; therefore, the Board finds that this section is not applicable.

I. Site Conditions:

The standards described in the 509.9.1 General Review Standards will be followed. Based on this information and in the record the Board finds that the standards of this section will be met.

J. Signs:

Required safety and warning signs are all that will be used for this project; therefore, the Board finds that this section is not applicable.

K. Special Features:

No special features are proposed with this project; therefore, the Board finds that this section is not applicable.

L. Exterior Lighting:

This application does not include any new exterior lighting; therefore, the Board finds that this section is not applicable.

M. Emergency Vehicle Access:

A Knox Box will be installed at the gate for emergency personnel to get access to the site. The applicant will coordinate accessibility to the site with local emergency personnel. A sixteen foot buffer will be maintained between the arrays and the perimeter fence to accommodate maintenance and emergency vehicles. Based on this information and in the record the Board finds that the standards of this section will be met.

N. Municipal Services:

The internal road will be maintained by the applicant. No new public infrastructure is being built. Based on this information and in the record the Board finds that the standards of this criteria will be met.

O. Water Supply:

No water service is required for this use; therefore, this standard is not applicable.

P. Ground Water:

No evidence of fuels, chemicals, flammable or hazardous materials being used or stored on the site was submitted; therefore, this standard is not applicable.

Q. Air Emissions:

The solar arrays will have no point or non-point source air pollution; therefore, the standards of this section are not applicable.

R. Odor Control:

The solar arrays do not generate any odors; therefore, the standards of this section are not applicable.

S. Noise

Noise will be produced by the inverters and converters necessary for a solar array. Noise is only created when solar power is being generated; therefore, there is no noise at night. Daytime noise is a small hum. If any blasting is required during construction it will be done in accordance with the blasting plan. Based on this information, the standards of this section have been met.

T. Sewage Disposal

No subsurface wastewater disposal system will be installed on the site; therefore, the Board finds that this section is not applicable.

U. Waste Disposal

After construction, no waste will be generated at this site. Construction waste (wood pallets, cardboard boxes) will be disposed of at a licensed disposal facility. Based on the information above and in the record the Board finds that the standards of this criteria will be met.

V. Buffer Areas

The plan includes maintaining mature vegetation along the road to buffer the visual impact of the solar arrays. Based on this information and in the record the Board finds that the standards of this section will be met.

W. Adequate Financial and Technical Capacity

Project construction is estimated at \$5,520,000. Madison Energy Investments, LLC and NextGrid Inc. have a long-term agreement to purchase the power. Madison Energy Investments, LLC backed by Stonepeak Infrastructure Partners operate a \$250M to construct and own solar energy and storage projects in the US.

Gil Paquette, Director, Energy/Environmental Services, of VHB, Inc. is experienced in solar site design.

The applicant has demonstrated that they have highly experienced staff working on this project and that the assembled team has the financial and technical capacity to complete the project. Based on this information and in the record the Board finds that the standards of this section will be met.

X. Conformance with the Comprehensive Plan

The solar array is in conformance with the Comprehensive Plan and is a permitted use within the G-3 Zoning district. Based on this information and in the record the Board finds that the standards of this section will be met.

Conclusion

- The application was heard and approved on June 9, 2020

Therefore, the Town of Poland Planning Board hereby approves the Formal Site Plan for NextGrid, Inc. for the installation of a solar farm as described in the application dated March 13, 2020 and the above findings of facts.

Conditions of Approval:


1. If the Maine Public Utilities Commission (PUC) approves the project, NextGrid, Inc. must return to the Planning Board with the following information:

- a. A full survey,**
- b. a full stormwater plan,**
- c. a road name application,**
- d. a road that is twenty (20) feet wide as per CLUC requirements**

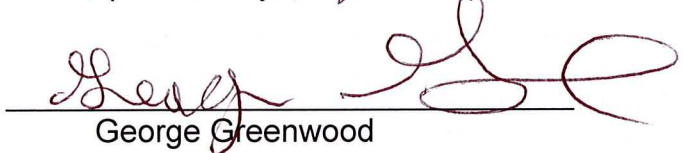
Pursuant to Section 304.5.B of the CLUC anyone aggrieved of this decision may file a written appeal within thirty (30) days of date of this decision in accordance with Rule 80-B of the Maine Rules of Civil Procedure.

Date Approved: June 9, 2020
Poland Planning Board

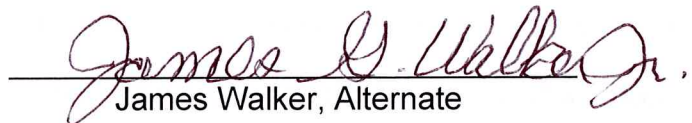
 8/26/20
James Porter, Chairperson


Stephanie Floyd, Vice -Chairperson

Secretary


George Greenwood

Cheryl Skilling


James Walker, Alternate

Town of Poland

Planning Board

DEPARTMENTAL REVIEW OF PROPOSED SITE APPLICATION

Date: 11 / 25 / 2020

To: Tom Printup, Fire Chief
1231 Maine Street
Poland, ME 04274

In accordance with Chapter 606, Site Review, of the Comprehensive Land Use Code for the Town of Poland, an applicant for development approval is required to ask that Municipal Departments to comment on their capacity of capital facilities to serve a proposed development. Therefore, the Planning Board, by way of the applicant, is notifying you of the following proposed project and requests your comments

Applicant: NextGrid
Address: P.O. Box 1911
Lewiston, ME 04241
Location: Map # 3 Lot # 9A Sublot #
Road Location: Lewiston Junction Road
Project overview: Solar Farm
Scheduled Planning Board Meeting Date 12 / 8 / 2020

Applicants:

1. Should attach all relevant sections of their plans to prevent delays.
2. Mail this form letter along with a copy of the application so that each department head receives it at least fourteen days prior to the scheduled meeting. (See reverse for list of Department Heads)
3. Confirm with the department heads that they have delivered their response to the Planning Board Office in time for the meeting.

For the Department Head

I have reviewed this application and provide the following:

- ☐ The project has no impact on the Department.
- ☒ The Department has adequate existing capital facilities to serve the project.
- ☐ The Department does not have adequate existing capital facilities to serve the project for the reasons listed. (Please submit reasons on department letterhead)
- ☐ I need more information on the application.

Signed: TL R Printup
Head of Department

Date: 11 / 25 / 2020

RETURN THIS FORM TO:

Please return by: Date: 12 / 1 / 2020

Planning Board Office
Town of Poland
1231 Maine Street
Poland, Maine 04274-7328

TOWN OF POLAND



Road Name Application

Parcel ID #:	003-0009A
Closest Existing Road:	Lewiston Junction Road

Property Owner/Applicant Information

Owner Name:	Gil Paquette on behalf of NextGrid Renewable Energy
Mailing Address:	VHB, 500 Southborough Drive, Suite 105B, South Portland, ME 04106-6928
Phone Number:	207-889-3102 / 207-310-1996
Email Address:	GPaquette@vhb.com

Name request for new road:

1st Choice: NextGrid Lane

2nd Choice: Kilowatt Road

3rd Choice: Culig Williams Drive

I hereby acknowledge that I have read this application and pertinent sections of the ordinances, and state that the information in this document is to the best of my knowledge true and accurate.

Applicant Signature:

Date:

10/27/2020

CEO STATEMENT

I have checked the Town of Poland road names and find the following:

☒ None of the names suggested are in use or similar to other road names

☐ Another road is using one of the names: _____

☐ One or more of the names is similar to an existing road: _____

CEO Signature: Date: 11-25-20

PLANNING BOARD

The Planning Board recommends the following name: _____

Chairperson Signature: _____ Date: _____

BOARD OF SELECTPERSONS

The Board of Selectpersons Approves the following name: _____

Chairperson Signature: _____ Date: _____

TOWN OF POLAND



Planning Board Agenda Request

FOR OFFICIAL USE ONLY

Date Received	
Time Received	
Received By	
Parcel ID	
Meeting Date	

Meetings are normally conducted from 7:00 to 9:00 pm in the Town Office Conference Room on the second and fourth Tuesday of each month.

November / 24 / 2020

Date of the meeting you are requesting to be scheduled for

Applicant's Name:	<i>Gerald M. & Margaret M. Dugal</i>
Mailing Address:	<i>8 Theodore Avenue</i>
Town, State, Zip:	<i>Andover, MA 01810-2940</i>
Phone Number:	

Type of Application:	<input type="radio"/> Sketch Plan <input type="radio"/> Site Review <input checked="" type="radio"/> Shoreland <input type="radio"/> Subdivision <input type="radio"/> Informational		
Map, Lot:	Map 049 -- Lot 031		
Road Location:	Mountain View Drive		
Zoning:	Limited Residential	Lake Watershed:	Upper Range Pond
Project Description:	211.8 sq.ft. deck built in 2020 beyond what was approved in 2019. Removing an additional 220.7 sq. ft. of Paved Drive, paved walkway & fire pit		

IMPORTANT INFORMATION:

- This office must receive the original application, plus nine (9) copies, one digital PDF copy (on either cd or usb), and appropriate fees by Friday at 1:00 pm, eleven days (11) prior to the stated meeting to be put on the upcoming agenda.
- New business is scheduled on the agenda in the order this office receives this form.
- If you want your application reviewed for contents prior to the meeting, it must be in this office fourteen days prior to the stated meeting.
- Should the board choose to adjourn before all business is addressed, all remaining business will be tabled until the next available meeting.
- Unfinished business is conducted before new business is addressed.

Applicant Signature:	<u><i>Stuart Davis - Agent</i></u>	Date: <i>November 24, 2020</i>
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SHORELAND ZONING APPLICATION

Prepared for:

Gerald M. & Margaret M. Dugal

49 Mountain View Drive
Poland, Maine 04274

Regarding property located at:

**49 Mountain View Drive
Poland, Maine 04274**

**Revisions of Shoreland Zoning Application as Approved by Town of
Poland Planning Board on April 19, 2019**

Prepared by:

DAVIS LAND SURVEYING

Stuart A. Davis
Professional Land Surveyor #2208
64 Old County Road
Oxford, Maine 04270

November 24, 2020

Davis Land Surveying, LLC
64 Old County Road
Oxford, Maine 04270

(207)345-9991 office
(207) 782-3685 office
(207) 240-9949 cell
Email: stuart@davislandsurveying.net
www.davislandsurveying.net

November 24, 2018

Town of Poland
Planning Board
1231 Maine Street
Poland, ME 04274

RE 49 Mountain View Drive ~ Shoreland Zoning Application

Dear Planning Board members,

Enclosed please find a Shoreland Zoning Application and supporting documents for an additional 211.8 sq.ft. deck that was inadvertently built in 2020. A previous Application as presented and approved on April 9, 2019 on behalf of Gerald & Margaret Dugal asking for approval for putting a 20' x 22' addition on a full foundation (440.7 sq.ft.) and a deck (112 sq.ft.) along the front of the proposed addition. The newly constructed addition and deck, as approved are located on the westerly side of the existing residence. (Exhibit B). All the current improvements lie outside the Federally Designated Flood Hazard Zone with the Base Flood Elevation being at 309'.

The property currently consists of the main structure, portion of previously approved front deck and portion of deck inadvertently built in 2020, garage, shed, paved drive and existing walk ways. The current existing impervious area within 100 feet consists of $\pm 5,559.6$ sq.ft. which includes the existing camp w/decks, garage, shed, walk ways and existing paved drive and being at $\pm 21\%$.

The property is located at 49 Mountain View Drive and being shown as Lot 31 on the Town of Poland Tax Map 49 (Exhibit 3). The property contains 26,606 sq.ft. consisting of $\pm 105'$ of frontage on Mountain View Drive and about $\pm 136'$ of shore frontage and is located within the Limited Residential District.

Exhibit A shows the existing conditions, property lines, existing improvements. The only proposed changes being made are by adding additional deck space of 211.8 to the west side of the existing residence as shown (Exhibit B).

The proposed changes besides the new additional deck space (211.8 sq.ft.) will be the reduction of additional driveway by 93.5 sq.ft., paved walkway along east side of the existing residence (115 sq.ft.) and a fire pit (12.2sq.ft.) for a total removal of 220.7 sq.ft. Areas removed will be re-seeded and turned into lawn area upon completion of said removal. With the proposed changes of the additional deck space and removal of items listed, the impervious area will remain at $\pm 21\%$.

Extreme portions of the property fall within a Special Flood Hazard Zone (Exhibit 7), however none of the existing buildings and or current improvements fall within the flood zone. All proposed improvements will not be impacted by said flood zone and there are no known wetlands and or any other impacts within the lot.

The proposed improvements as shown have been designed in conformance with your Land Use Code requirements and we look forward to the opportunity to discuss the project with the Planning Board and welcome any comments and suggestions in hopes of securing an approval, with conditions, if necessary.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Stuart Davis", with a stylized flourish at the end.

Stuart Davis PLS

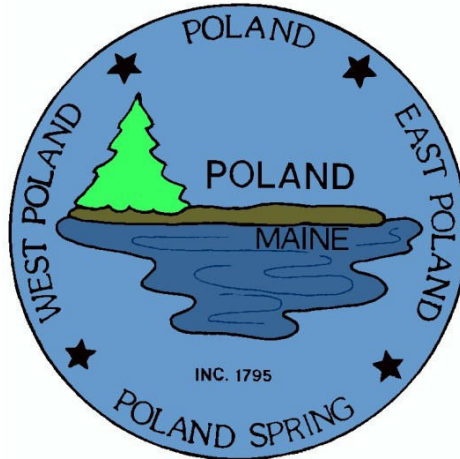
Table of Contents:

Exhibit 1	Formal Shoreland Zoning Application & Checklist
Exhibit 2	Authorization Letter
Exhibit 3	Tax Map 49
Exhibit 4	Deed - Book 9346, Page 6
Exhibit 5	Tax Assessor's Information Card – Map 49, Lot 31
Exhibit 6	Abutters list
Exhibit 7	Portion of FEMA Flood Hazard Map Panel 23001C0382E

Project Plans:

Exhibit A	Application Approved April 19, 2019
Exhibit B	Proposed Improvements - 2020

Formal Shoreland Zoning Application



Town of Poland Planning Board

Application Form – Page 2

Submission Checklist – Page 5

Phosphorus Calculation Form – Page 7

Fee Schedule – Page 9

Agenda Request – Page 10

INSTRUCTIONS:

1. Please complete pages two through ten. Obtain or get copies of information as required by the application on these pages.
2. Use the checklist on pages five and six to make sure submission requirements are met. The checklist is a summary of the standard requirements in the Comprehensive Land Use Code.
3. All waiver requests will require a written statement.
4. **A total of ten (10) copies of the application and required submissions as well as one digital PDF copy (on either cd or usb). Please submit these copies and the original application as well as any fees (see fee schedule) to the Code Enforcement Office by 1:00 pm eleven (11) days prior to the stated meeting.**

Applicant Name: *Gerald & Margaret Dugal*

Date of Board Review: *November 24, 2020*

Application

PARCEL INFORMATION:			
Parcel ID:	MAP 049 - Lot 031		
Lake Watershed:	Upper Range Pond		
Road Location:	Mountain View Drive		
Lot Size:	26,606 (sq. ft.)	Year Created:	1971
Shore Frontage:	±136' (ft.)	Road Frontage:	105.1 (ft.)
Zone:	Limited Residential	Flood Zone:	See Exhibit 7 - Along Shoreline
Aquifer Overlay:	N/A	Current Use:	Seasonal

OWNER INFORMATION:	
Name:	Gerald M. & Margaret M. Dugal
Mailing Address:	8 Theodore Avenue - Andover, MA 01810-2940
Phone #:	

APPLICANT INFORMATION:	
Applicant Is:	<input type="checkbox"/> Landowner <input checked="" type="checkbox"/> Contractor <input type="checkbox"/> Renter <input type="checkbox"/> Buyer <small>*If applicant is landowner, write "SAME" below. If not the landowner, please submit a letter of permission to construct on or use the land, and complete below.</small>
Name:	Anne Perron
Mailing Address:	40 Jackson Road - Poland, ME 04270
Phone #:	(207) 577-1829

THIS APPLICATION IS FOR:	
<input type="checkbox"/> New Development <input type="checkbox"/> Change of Use <input type="checkbox"/> Expansion of Use <input checked="" type="checkbox"/> Expansion/Replacement of Structure(s) <input type="checkbox"/> Resumption of Use	

Existing Lot Conditions

1. GENERAL	
A. Does this lot have any development? (If no, go to proposed development)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
B. Is there an existing well?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
C. Is there an existing Septic System?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
D. Is there an existing road entry? <ul style="list-style-type: none"> If YES include any changes or modifications on plans. If NO please submit a copy of appropriate Road/Entrance Application. 	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
E. Will there be any existing structures removed? <ul style="list-style-type: none"> If YES, submit information about the structure and how it will be disposed of. 	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. EXISTING LAND DEVELOPMENT & IMPROVEMENTS NOT INCLUDING BUILDINGS	
A. Size of lawns:	N/A (sq. ft.)
B. Size of fields:	N/A (sq. ft.)
C. Size of driveways/roads:	2,690.6 (sq. ft.)
D. Size of paths or other non-vegetated areas: (walkways, patio & fire pit)	422.5 (sq. ft.)
E. Size of wetlands already filled	N/A (sq. ft.)

3. EXISTING MAIN STRUCTURE			
A. Ground Footprint:	±1,633.1	(sq. ft.)	
B. Total gross floor space (exterior dimensions of all floors):	±1,361.6	(sq. ft.)	
C. Road frontage setback:	±122	(ft.)	
D. Side setback:	±31	(ft.)	
E. Rear setback:	N/A	(ft.)	
F. Distance to Great Pond:	±41	(ft.)	
G. Distance to stream:	N/A	(ft.)	
H. Distance to wetlands:	N/A	(ft.)	
Foundation:	<input checked="" type="checkbox"/> Full Basement	<input type="checkbox"/> Frost Walls	<input type="checkbox"/> Slab <input type="checkbox"/> Piers
4. EXISTING ACCESSORY STRUCTURE			
A. Total number of structures:	2		
B. Total ground footprint:	±813.4	(sq. ft.)	
C. Total floor space:	±813.4	(sq. ft.)	
D. Closest road setback:	±45 Garage - ±85 Shed	(ft.)	
E. Closest side setback:	±7 Garage - ±0.3 Shed	(ft.)	
F. Closest rear setback:	N/A	(ft.)	
G. Distance to Great Pond:	±66 Garage - ±75 Shed	(ft.)	
H. Distance to Streams:	N/A	(ft.)	
I. Distance to Wetlands:	N/A	(ft.)	
5. TOTAL EXISTING IMPERVIOUS SURFACES			
A. Add 2c + 2d + 3a + 4b:	±5,559.6	(sq. ft.)	
B. Divide this by lot size in square feet x 100%:	21	%	
*This number cannot exceed 15%			

Proposed Development

1. WETLANDS TO BE IMPACTED:	N/A (sq. ft.)
2. CHANGES IN LANDSCAPE(Can be negative value for size reduction)	
A. Changes in lawn size:	(sq. ft.)
B. Changes in buffers:	N/A (sq. ft.)
C. Changes in naturally wooded areas:	N/A (sq. ft.)
D. Total opening in forest canopy:	N/A (sq. ft.)
3. CHANGES IN FOOTPRINT(S) AND DEVELOPED AREA(S)	
A. Changes in building footprint(s):	(sq. ft.)
B. Changes in driveway/roadway:	-93.5 (sq. ft.)
C. Changes in patios, walkways, etc:	-127.2 (sq. ft.)
D. Total changes to impervious surfaces (3a + 3b + 3c):	-8.9 (sq. ft.)
4. PERCENTAGE OF LOT COVERED BY IMPERVIOUS SURFACES	
A. 5. (Total existing impervious surfaces) + 3d (above)/total lot square footage x 100%	21 %
*This number cannot exceed 15%	

Required Submissions

Attach drawings and/or statements describing the following items if applicable:

- Provide a copy of deed and Tax Assessors Information Card.
- Provide a map of the general area showing land features within at least a ½ mile of this lot.
- Provide site plans(s) of your lot with existing development and its dimensions shown.

- *Include: Dimensions, location, and distances of lot lines. Lawns, wooded areas, roadways, high water lines, driveways, septic system, walkways, and structures.*
- *Show names of roads and water bodies*
- Provide site plan(s) of your lot with proposed development and its dimensions shown (*may be combined on existing development drawing*).
- Provide detailed plans of proposed structural development and changes.
- Provide phosphorus loading calculations.
- Provide prepared buffer plan if needed for building expansion.
- Anticipated date for start of construction.
- Anticipated date for completion of construction.
- Submission requirements shall follow sections 508.30 and 509.8 of the Comprehensive Land Use Code. Copies of the code are available for viewing at the Town Office, Library, and on the Code Enforcement page of the website, www.polandtownoffice.org. Copies can be purchased in the Code Enforcement Office.
- Use Checklist on page five for a summary of usual requirements.
- Any other requirements unique to your project added by the Planning Board.

Please list all state and federal approvals, permits, and licenses required for the project:

Disclosure

1. I hereby acknowledge that I have read this application and pertinent sections of the ordinances, and state that the information in this document is to the best of my knowledge true and accurate. I agree to comply with all of the Town of Poland's ordinances and the State of Maine's statutes regulating the activities sought in this application as well as any permit(s) approved for this application.
2. I understand that all construction of structures shall conform to the *Maine Uniform Building and Energy Code* and the *NFPA 101 Life Safety Code, 2009*.
3. I understand that any approval is valid for only the use(s) as specified in this application. The permitting authority must approve any change(s) made to the use(s) sought in the application. Any approval issued for this application is approved on the basis of truthful information provided by the applicant(s), and as allowed by the ordinances of the town.
4. I understand that it is my responsibility to assure that the lot description herein accurately describes its ownership, its boundary lines, and the setback measurements from the legal boundary lines.
5. I understand that I have the burden of proof as to the legal right to use the property, and that approval of this application in no way relieves me of this burden. Any approval issued does not constitute a resolution in favor of me or the landowner in any matters regarding the property boundaries, ownership, or similar ties.
6. I understand that all necessary **Building and Use Permits** shall be secured from the Code Enforcement Office after the Planning Board grants approval of this application.
7. I understand that a **Certificate of Occupancy** shall be required prior to the start of any use or occupancy associated with this application unless a signed written waiver is issued with the permit. Fines and penalties may be issued if use or occupancy is stated prior to the issuance of the certificate.
8. I understand that the approval becomes invalid if construction or use has not commenced within twelve (12) months of the approval date, construction is suspended for more than six (6) months and no notice for just cause is submitted prior to the end of the six (6) months, or it is found that false statements have been furnished in this application.
9. I understand that if I fail to comply with the aforementioned statements, a **"STOP WORK"** order may be issued for which I will immediately halt any construction and/or use(s) that are approved for this application. This failure may also require that I return the property to its natural state or as closely thereto before the use(s) was/were approved.
10. I understand that failure to follow these requirements will lead to **Violation Notices** and Citations that have fines and penalties. This in turn can lead to civil proceedings in District Court.
11. I understand that all **state and federal permits** are my responsibility as the applicant and/or owner.

Applicant Signature:

Stuart Davis - Agent

Date: November 24, 2020

Submissions Checklist

The following list is the information required by section 508.30 and 509.8 of the Comprehensive Land Use Code for the Town of Poland. Please check in the column on the left if the information has been provided, a waiver has been requested, or you believe the information is not applicable to your application. If a waiver has been requested, or the information is not applicable, a written explanation is required.

FOR APPLICANT USE				FOR PLANNING BOARD USE			
Provided	Waiver	N/A	<u>Section 509.8A "Submission Requirements"</u>	Received	On File	Waived	N/A
X			Site Plan drawings				
X			Signed copy of application				
X			Name & Address of owner				
X			Name & Address of all abutters within 500 feet of your lot				
X			Map of general location				
X			Show all adjacent properties				
X			Name, Map & Lot numbers on drawings				
X			Copy of Deeds & Agreements				
X			Name of designer on plans				
			<u>Section 508.30 Shoreland Areas</u>				
X			Structure & Site Plan drawing				
X			New structure set back 100' from lake, 75' from streams & wetlands				
		X	Water dependent structures indicated				
X			Setbacks or structures shown in drawings				
X			Show all structures				
X			Side and road setbacks shown				
		X	Need for larger than required setbacks				
		X	Steep slopes shown				
		X	Multiple Principle Structures have required land area				
			<u>Piers, Wharves, Bridges</u>				
		X	Shore access soils described				
		X	Locations of development and natural beaches shown				
		X	Effect on fish & wildlife				
X			Dimensions of structures shown				
		X	Superstructure on piers				
		X	Use of pier superstructures				
		X	Permanent structures have DEP permit				
			<u>Individual Private Campsites</u>				
		X	Show land area for each site				
		X	Campsite setbacks are shown				
		X	Type of development for sites				
		X	Amount of clearing for vegetation				
		X	Sewage disposal plan				
		X	SSWS approved if used > 120 days				
			<u>Parking Areas</u>				
		X	Parking areas setbacks shown				
		X	Parking areas sized & designed for storm water				
			<u>(Part one) Driveways Only</u>				

FOR APPLICANT USE				FOR PLANNING BOARD USE			
Provided	Waiver	N/A	<u>Section 509.8A "Submission Requirements"</u>	Received	On File	Waived	N/A
X			Setbacks as required				
		X	State reasons for location in Resource Protection				
		X	Culverts				
			<u>(Part two) Road Only</u>				
		X	Setbacks as required				
		X	Reasons stated for location in Resource Protection				
		X	Road expansion according to Chapter 8				
		X	Road slopes shown < 2H:1V				
		X	Road Grades < 10%				
		X	Buffer plan between road and water body				
		X	Ditch relief shown				
		X	Turnout spacing shown				
		X	Drainage dips when < 10% slope				
		X	Culverts shown				
		X	Show relief sizing and stabilization				
			<u>Storm water runoff</u>				
		X	Plans show storm water runoff and retaining areas				
		X	<u>Clearing of vegetation for development OR individual campsites</u>				
		X	Cutting of vegetation < 100' from shoreline				
		X	Preservation of buffer strip				
		X	Plan showing existing trees and planned cutting				
		X	Clearing < 40% basal area in any 10 year period				
		X	Preservation of vegetation < 3' high				
		X	Pruning of limbs on lower 1/3 of trees				
		X	Plan of removal and replacement of dead and diseased trees				
		X	Tree removal plan > 100' and < 250 ' from shoreline				
X			Non-conforming lot legally existing				
		X	Fields reverted to woodlands follow forested rules				
			<u>Shoreland Access Held In Common</u>				
		X	Proper water frontage for number of lots that hold access in common				
			<u>Single Family Home in Resource Protection District</u>				
X			No place on lot outside Resource Protection where home can be located				
		X	Lot undeveloped				
X			Location of all improvements				
		X	Slopes > 20%				
X			Development 1 ft. above 100 year floodplain				
X			Development outside floodplain				
X			Total ground footprint < 1500 sq. ft.				
		X	Structures > 150 ft. from waterline				
X			<u>Phosphorus Calculations</u>				
		X	<u>Copies of state, federal permits (if applicable)</u>				

This application was first looked at by the Planning Board on ____ / ____ / ____ but does not create vested rights in the initiation of the review process.

By vote of the Board this application requires an on-site inspection: _____ Yes _____ No

If yes, an onsite inspection is scheduled for ____ / ____ / ____ at ____ : ____ ____ AM ____ PM

By vote of the Board this application requires a public hearing: _____ Yes _____ No

If yes, public hearing is scheduled for ____ / ____ / ____ at ____ : ____ ____ AM ____ PM

Conditions of Approval: _____

Planning Board Chair

____ / ____ / ____
Date



Phosphorus Calculation Form



The Code Enforcement Officer or Planning Board shall review and approve a Phosphorus Management Control Application based on one of the following methods.

POINT SYSTEM

The Applicant shall meet or exceed thirty (30) points based on the following schedule:

PROPOSED PHOSPHORUS CONTROL MEASURES (Check those proposed)	POINTS ALLOWED (By CEO or Planning Board)
10 Points for correcting an existing erosion problem on the project site.	
10 Points for a clearing limitation of <15,000 sq. ft. or <20% of lot.	
15 Points for a clearing limitation of <10,000 sq. ft. or <15% of lot.	15
15 Points for the installation of rock lined drip edges or other infiltration system to serve the new construction.	15
20 Points for a 50 foot wide buffer.	
25 Points for a 75 foot wide buffer.	
30 Points for a 100 foot wide buffer.	
TOTAL	30

Authorized Signature:

Date:

Code Enforcement Officer or Planning Board Chair

Gerald M. & Margaret M. Dugal
49 Mountain View Drive
Poland, Maine 04274

August 28, 2018

Town of Poland
Planning Board
1231 Maine Street
Poland, Maine 04274

Dear Board Members,

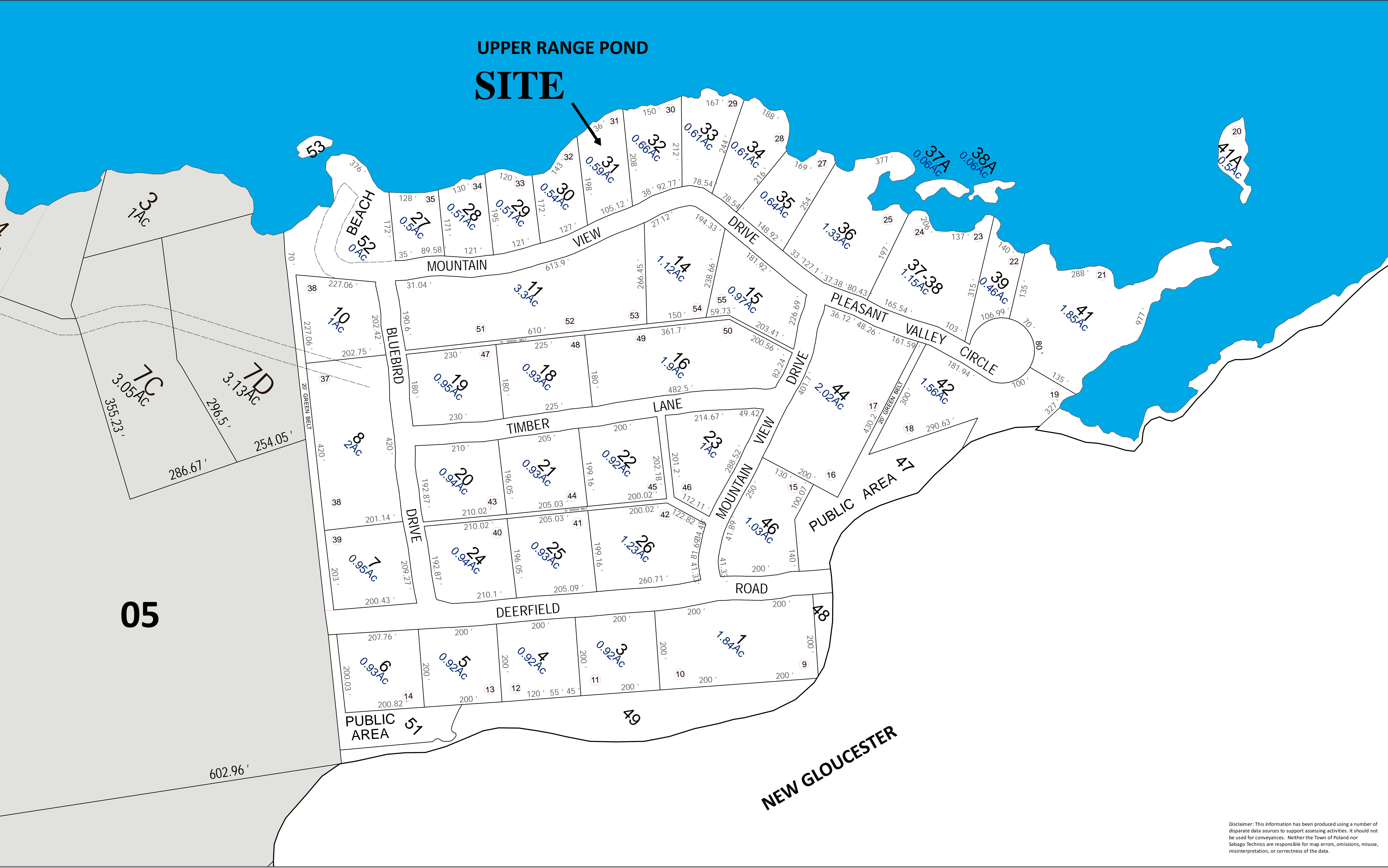
I authorize Stuart Davis of Davis Land Surveying, LLC to act as my agent in presenting the Shoreland Zoning Application as presented before you.

Sincerely,

Gerald M. & Margaret M. Dugal

A handwritten signature in black ink, appearing to read 'AP', with a long, horizontal, wavy line extending to the right.

Anne Perron - Contractor



Disclaimer: This information has been produced using a number of disparate data sources to support assessing activities. It should not be used for conveyances. Neither the Town of Poland nor Sebago Technics are responsible for map errors, omissions, misuse, misinterpretation, or correctness of the data.

N O T
A N
O F F I C I A L
C O P Y

N O T
A N
O F F I C I A L
C O P Y

WARRANTY DEED

N O T
GERALD M. DUGAL and MARGARET M. DUGAL of Andover, County of Essex and
Commonwealth of Massachusetts, with a mailing address of 8 Theodore Avenue, Andover, MA
01810, C O P Y

for consideration paid, grant to

GERALD M. DUGAL and MARGARET M. DUGAL with a mailing address of 8 Theodore
Avenue, Andover, MA 01810 and **MARTIN J. DUGAL** with a mailing address of 823 E. Third
Street, Boston, MA 02127,

with *Warranty Covenants*, as joint tenants, the land with any buildings thereon situated in the
Town of Poland, County of Androscoggin and State of Maine, being Lot Numbered Thirty-One
(31) on a Plan of Poland Spring Country Estates made for Range, Inc. by Wayne P. Libby dated
May 24, 1971, recorded in Androscoggin County Registry of Deeds, Plan Book 22, Page 12 and
13 to which Plan reference may be had for a more particular description.

Together with a right of way in common with the owners of other lots as shown on said Plan of
Poland Spring Country Estates over the ways as shown on said Plan, and a right to use the
recreational facilities on said Plan in common with other lot owners.

The above premises are conveyed subject to the restrictions contained in a deed from Range, Inc.
to James F. and June R. Ashley dated November 30, 1972, recorded in the Androscoggin County
Registry of Deeds in Book 1065, Page 589.

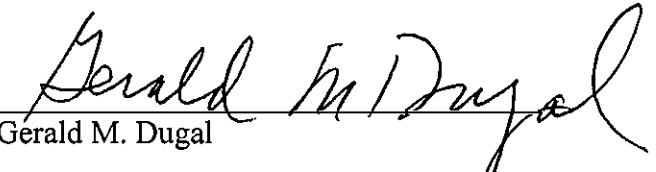
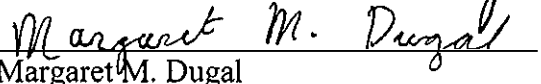
Also conveying all rights, easements, privileges and appurtenances belonging to the premises.

BEING the same premises conveyed to Gerald M. Dugal and Margaret M. Dugal by Warranty
Deed from James F. Ashley and June R Ashley dated June 18, 1986, recorded in the
Androscoggin County Registry of Deeds in Book 1943, Page 356.

This deed is given without additional consideration and is a gift from these grantors to their son,
this grantee.

Witness our hands and seals this 14th day of April, 2016

Witness:


Gerald M. Dugal

Margaret M. Dugal

NO MAINE R.E. TAX
TRANSFER TAX PAID

N O T
A N
O F F I C I A L
C O P Y

N O T
A N
O F F I C I A L
C O P Y

STATE OF MAINE

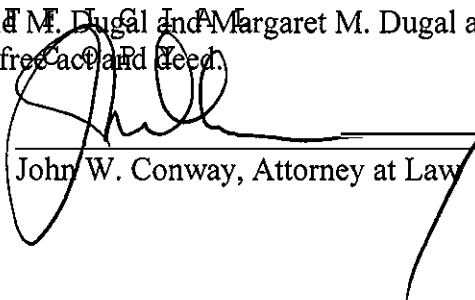
Androscoggin, ss.

N O T
A N

N O T April 14, 2016
A N

Personally appeared the above named Gerald M. Dugal and Margaret M. Dugal and acknowledged the foregoing instrument to be their free act and deed.

Before me,


John W. Conway, Attorney at Law

(Warranty Deed prepared without title search by this office)

Redoc-Dugal-49-WD

ANDROSCOGGIN COUNTY
TINA M CHOUINARD
REGISTER OF DEEDS



Property Card: 49 MOUNTAIN VIEW DR. Poland, ME



Parcel ID: 0049-0031
Trio Account #: 2877

Owner: DUGAL, GERALD M. & MARGARET M.
Co-Owner: (JT)
Mailing Address:
8 THEODORE AVE.
ANDOVER, MA 01810

Valuation	Building Sketch
Card Number: 1 Acreage: 0.59 Land Value: \$237,450 Building Value: \$129,570 Total Value: \$129,570 Taxes: \$5,212	NO SKETCH AVAILABLE
Building Information	
Year Built: 1973 Remodded: 0 Living Area (sqft): 644 Basement: Full Basement Finished Basement: 644 Number of Rooms: 6 Number of Bedrooms: 4 Number of Full Baths: 2 Number of Half Baths: 0	Stories: Exterior Walls: OTHER Roofing Materials: Asphalt Shingles Foundation: Concrete Insulation: Capped Only Fireplace: 1 Heating: Electric A/C: None Attic: None



500 foot Abutters List Report

Poland, ME
August 16, 2018

Subject Property:

Parcel Number: 0049-0031
CAMA Number: 0049-0031
Property Address: 49 MOUNTAIN VIEW DR.

Mailing Address: DUGAL, GERALD M. & MARGARET M.
(JT)
8 THEODORE AVE.
ANDOVER, MA 01810

Abutters:

Parcel Number: 0049-0011
CAMA Number: 0049-0011
Property Address: 56 MOUNTAIN VIEW DR.

Mailing Address: WATERMAN, DEAN C.
56 MOUNTAIN VIEW DR.
POLAND, ME 04274

Parcel Number: 0049-0014
CAMA Number: 0049-0014
Property Address: 48 MOUNTAIN VIEW DR.

Mailing Address: PENTHENY, JANE E.
48 MOUNTAIN VIEW DR.
POLAND, ME 04274

Parcel Number: 0049-0015
CAMA Number: 0049-0015
Property Address: 32 MOUNTAIN VIEW DR.

Mailing Address: BLAKE, PAMELA H.
32 MOUNTAIN VIEW DR.
POLAND, ME 04274

Parcel Number: 0049-0016
CAMA Number: 0049-0016
Property Address: 3 TIMBER LANE

Mailing Address: HANCOCK, LARRY L.
3 TIMBER LANE
POLAND, ME 04274

Parcel Number: 0049-0018
CAMA Number: 0049-0018
Property Address: 23 TIMBER LANE

Mailing Address: MOTLEY, MARK LYNN
23 TIMBER LANE
POLAND, ME 04274

Parcel Number: 0049-0019
CAMA Number: 0049-0019
Property Address: 31 TIMBER LANE

Mailing Address: BUERGIN, STEPHEN B.
31 TIMBER LANE
POLAND, ME 04274

Parcel Number: 0049-0027
CAMA Number: 0049-0027
Property Address: 71 MOUNTAIN VIEW DR.

Mailing Address: JUMPER, BRIAN M.
17 HILLSIDE AVE.
FALMOUTH, ME 04105

Parcel Number: 0049-0028
CAMA Number: 0049-0028
Property Address: 65 MOUNTAIN VIEW DR.

Mailing Address: MCWILLIAMS, MAUREEN B.
3 MORELAND AVE.
ANDOVER, MA 01810

Parcel Number: 0049-0029
CAMA Number: 0049-0029
Property Address: 61 MOUNTAIN VIEW DR.

Mailing Address: KINNEY, STEPHEN
P. O. BOX 480
POLAND, ME 04274

Parcel Number: 0049-0030
CAMA Number: 0049-0030
Property Address: 53 MOUNTAIN VIEW DR.

Mailing Address: DERRY, JOHN H.
20 WHITE TAIL LANE
SUDBURY, MA 01776



www.cai-tech.com

Data shown on this report is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this report.



500 foot Abutters List Report

Poland, ME
August 16, 2018

Parcel Number: 0049-0032
CAMA Number: 0049-0032
Property Address: 47 MOUNTAIN VIEW DR.

Mailing Address: MCDONALD, EDWARD
93 LINDEN DR.
COHASSET, MA 02025

Parcel Number: 0049-0033
CAMA Number: 0049-0033
Property Address: 43 MOUNTAIN VIEW DR.

Mailing Address: HARRISON, ALFRED W.
555 TOMAHAWK COURT
PALM BEACH GARDENS, FL 33410

Parcel Number: 0049-0034
CAMA Number: 0049-0034
Property Address: 41 MOUNTAIN VIEW DR.

Mailing Address: CLARK, ROBERT A,
64 WARREN AVE.
WOBURN, MA 01801

Parcel Number: 0049-0035
CAMA Number: 0049-0035
Property Address: 37 MOUNTAIN VIEW DR.

Mailing Address: WEISSMAN, ARTHUR
3185 LINDENWOOD LANE
FAIRFAX, VA 22031

Parcel Number: 0049-0036
CAMA Number: 0049-0036
Property Address: 31 MOUNTAIN VIEW DR.

Mailing Address: HASLIP, RICHARD R.
31 MOUNTAIN VIEW DR.
POLAND, ME 04274

Parcel Number: 0049-0052
CAMA Number: 0049-0052
Property Address: UPPER RANGE POND

Mailing Address: POLAND SPRING COUNTRY ESTATES
% DEBORAH CONWAY 6 BLUEBIRD DR.
POLAND, ME 04274



www.cai-tech.com

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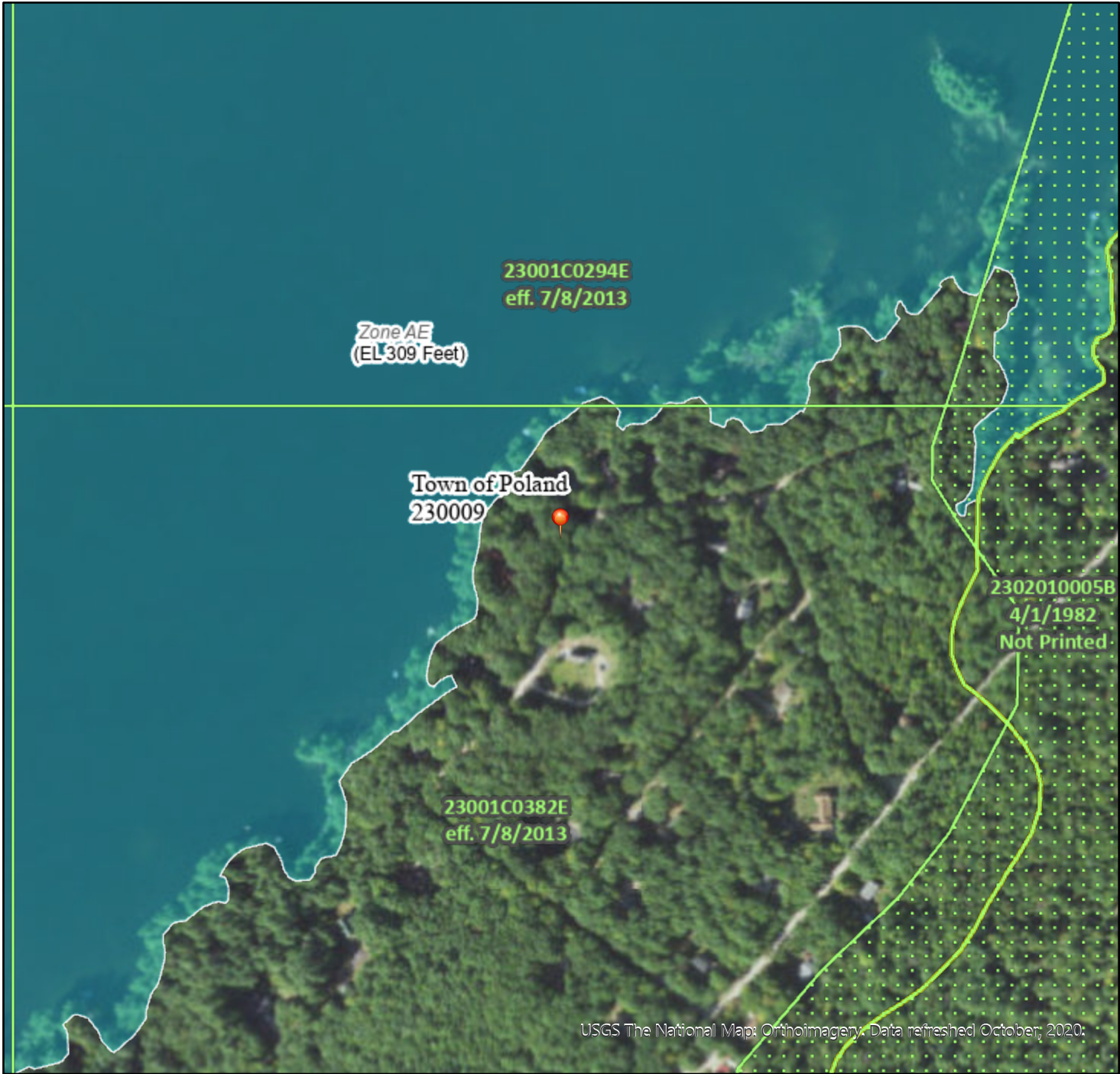
8/16/2018

Page 2 of 2

National Flood Hazard Layer FIRMMette



70°24'23"W 44°0'10"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000

70°23'45"W 43°59'44"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- | | | |
|-----------------------------|--|---|
| SPECIAL FLOOD HAZARD AREAS | | Without Base Flood Elevation (BFE)
Zone A, V, A99 |
| | | With BFE or Depth Zone AE, AO, AH, VE, AR |
| | | Regulatory Floodway |
| OTHER AREAS OF FLOOD HAZARD | | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X |
| | | Future Conditions 1% Annual Chance Flood Hazard Zone X |
| | | Area with Reduced Flood Risk due to Levee. See Notes. Zone X |
| | | Area with Flood Risk due to Levee Zone D |
| OTHER AREAS | | NO SCREEN Area of Minimal Flood Hazard Zone X |
| | | Effective LOMRs |
| | | Area of Undetermined Flood Hazard Zone D |
| GENERAL STRUCTURES | | Channel, Culvert, or Storm Sewer |
| | | Levee, Dike, or Floodwall |
| OTHER FEATURES | | 20.2 Cross Sections with 1% Annual Chance Water Surface Elevation |
| | | 17.5 Coastal Transect |
| | | Base Flood Elevation Line (BFE) |
| | | Limit of Study |
| | | Jurisdiction Boundary |
| | | Coastal Transect Baseline |
| | | Profile Baseline |
| MAP PANELS | | Digital Data Available |
| | | No Digital Data Available |
| | | Unmapped |



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **10/22/2020 at 10:51 AM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **footways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies the FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 19. The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRM for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, NNGS12
National Geodetic Survey
SSMC-3, #5202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (401) 713-3042, or visit its website at <http://www.ngs.noaa.gov>.

Base map information shown on this FIRM was derived from the Maine Office of Geographic Information Systems (MEGIS) at a scale of 1:4,800 or better from photography dated 2001 or later.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baselines**, in some cases, may deviate significantly from the channel centerline or upper outside the SFHA.

Based on updated topographic information, this map reflects more detailed and up-to-date stream channel configurations and floodplain delineations than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streamings in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unreviewed streams may differ from what is shown on previous maps.

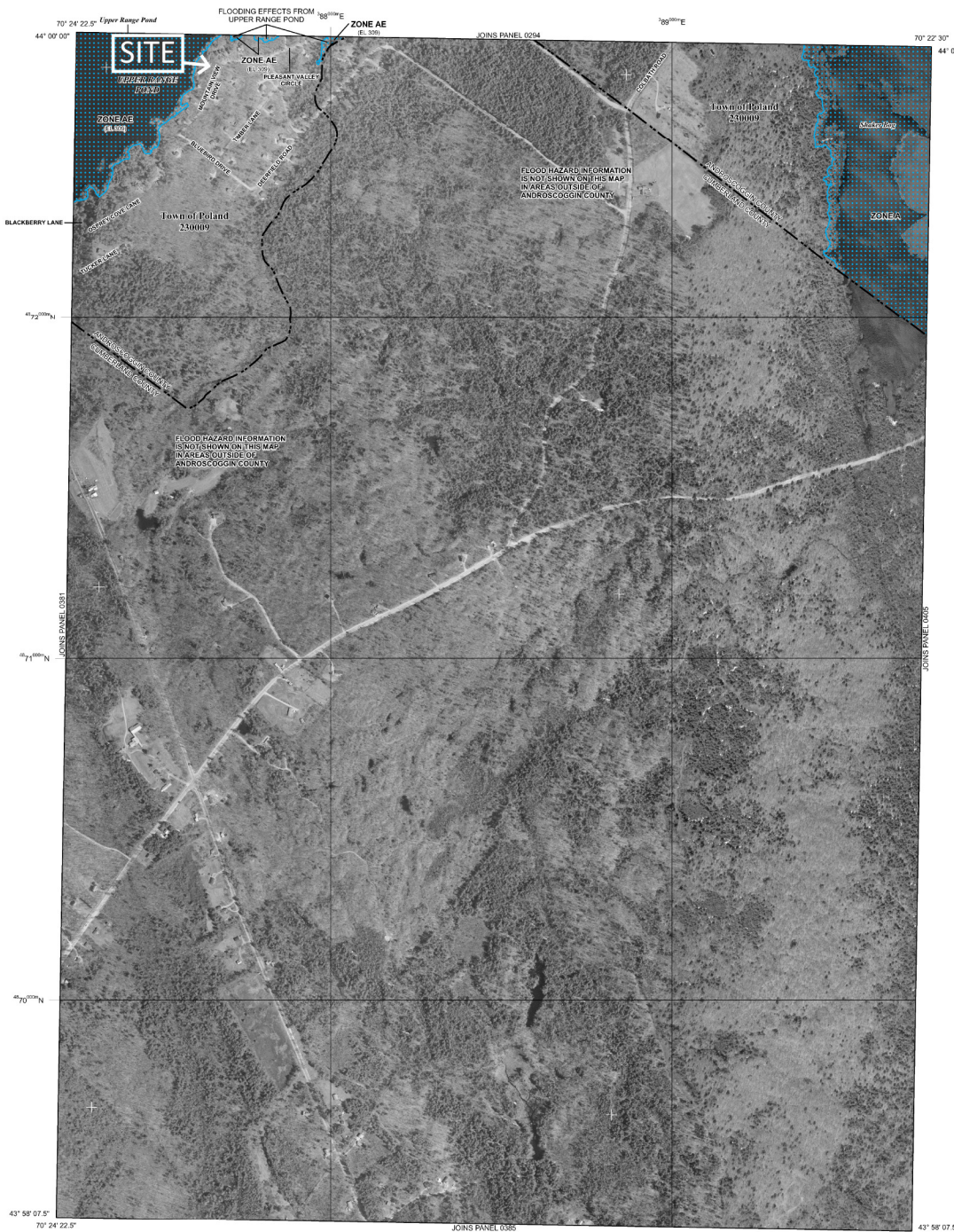
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels, community map repository addresses, and a Listing of Communities table containing National Flood Insurance Program data for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map**, how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information xChange (FMIX)** at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business/fip>.

State of Maine Floodway Note: Under the Maine Revised Statutes Annotated (M.R.S.A.) Title 38 § 439-A, 7C where the floodway is not designated on the Flood Insurance Rate Map, the floodway is considered to be the channel of a river or other water course and the adjacent areas to a distance of one-half the width of the floodplain, as measured from the normal high water mark to the upland limit of the floodplain, unless a technical evaluation certified by a registered professional engineer is provided demonstrating the actual floodway based upon approved FEMA modeling methods.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AH, AO, AR, AV, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined; for areas of sheet flow, velocities also determined.
- ZONE AR** Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently derelict. Zone AR indicates that the former flood control system is being retained to provide protection from the 1% annual chance or greater flood.
- ZONE AV** Areas to be included in the 1% annual chance flood by a federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from the 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% Annual Chance Floodplain Boundary

0.2% Annual Chance Floodplain Boundary

Floodway boundary

Zone boundary

CBRS and OPA boundary

Boundary dividing Special Flood Hazard Area zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.

Base Flood Elevation (in feet and value, elevation in feet)

Base Flood Elevation value where uniform within panel, elevation in feet

*Referenced to the North American Vertical Datum of 1988

Cross section line

Traverse line

Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere

5000-foot ticks: Maine State Plane West Zone (FIPS Zone 1802), Tennessee Mercator projection

1000-meter Universal Transverse Mercator grid values, zone 19

Bench mark (see explanation in Notes to Users section of this FIRM panel)

Base Station

MAP REPOSITORIES

Refer to Map Repository List on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP

JUL 8, 2013

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-438-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET

150 0 150 300 METERS

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0382E

FIRM

FLOOD INSURANCE RATE MAP

ANDROSCOGGIN COUNTY, MAINE

(ALL JURISDICTIONS)

PANEL 382 OF 470

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY: POLAND, TOWN OF

NUMBER: 23001C0382E

PANEL: 0382E

SUFFIX: E

Notice to User: The **Map Number** shown below should be used when placing map orders: the **Community Number** shown above should be used on insurance applications for the subject community.

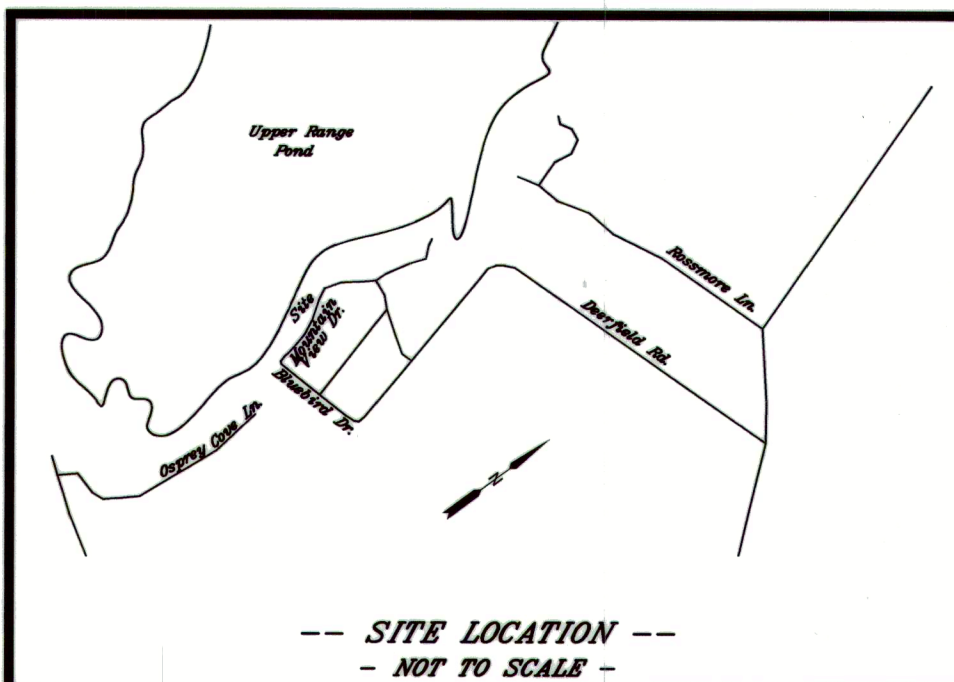
MAP NUMBER

23001C0382E

EFFECTIVE DATE

JULY 8, 2013

Federal Emergency Management Agency



NOTES:

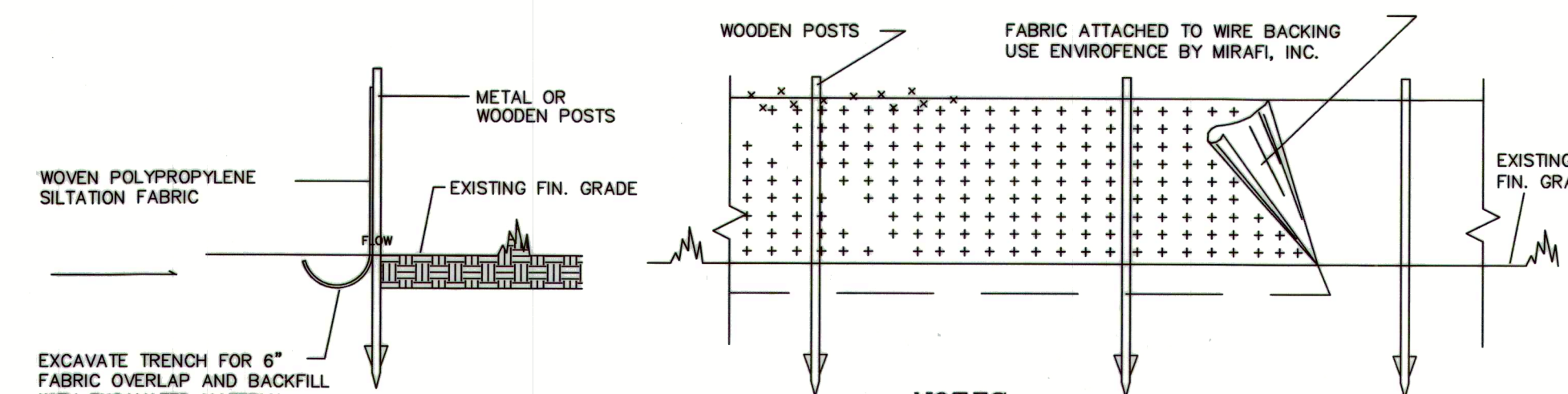
- 1) BEARINGS ARE REFERENCED TO PLAN REFERENCE #1.
- 2) DEED REFERENCES ARE MADE TO THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS - AUBURN, MAINE.
- 3) PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED CONDITIONS OF THE PROPERTY LOCATED AT 49 MOUNTAIN VIEW DRIVE, POLAND, ME.
- 4) PROPOSED DECK AND ADDITION FALL WITHIN 75' OF THE SHORE AND HAVE A COMBINED AREA OF 389.7 - or - 30% OF ALL STRUCTURES WITHIN 75' FROM SHORE AS PER SHORE LAND ZONING NON-CONFORMANCE STANDARDS, CHAPTER 5 SECTION 504 OF POLAND LAND USE ORDINANCE.

REFERENCES:

- 1) PLAN TITLED "POLAND SPRING COUNTRY ESTATES" DATED OCTOBER 1971, FOR RANGE, INC., BY LIBBY CONST. & SURVEYING - RANDOLPH, MAINE, RECORDED IN THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS BOOK 22, PAGE 12.

LEGEND

- 5/8" CAPPED REBAR SET
- ⊕ MANHOLE
- UTILITY POLE



SILT FENCE DETAIL
NOT TO SCALE

NOTES

REFERENCE IS MADE TO THE BEST MANAGEMENT PRACTICE FOR EROSION AND SEDIMENT CONTROL: 6-1 SEDIMENT BARRIERS.
SILTATION FABRIC WITH INTEGRAL MESH AND POSTS MAY BE USED.

Impervious Area Calculation:	
Building Overhang	1187.9 sq. ft.
Garage w/overhang & patio	885.0 sq. ft.
Shed & wood deck & walkway	239.0 sq. ft.
Driveway & Steps	3543.0 sq. ft.
Total = 5854.9 sq. ft.	

Percentage of Lot Impervious Area Calculation:	
$\frac{5854.9}{26,605.9} \times 100 = 22\%$	

Total Structure Area 25' - 100'	
100' to 75'	75' to 25'
House 221 sq.ft.	House 999.8 sq.ft.
Garage & Shed = 661 sq.ft.	Garage & Shed = 216.4 sq.ft.
Total = 882/30 = 264.6 sq.ft.	Front Patio = 83.6 sq.ft.
	Total = 1299.9/30 = 389.97 sq.ft.

Allowed Addition & Deck	
$440.7 - 48.5(OH) - 93.6(Brick Walk) = 298.6$	
$389.97 - 298.6 + 20.4 = 111.77 \text{ For Deck}$	
Deck = $8 \times 14 = 112 \text{ sq. ft.}$	

Proposed Impervious Area Calculation:	
Building Overhang	1187.9 sq. ft.
Garage w/overhang & patio	792.0 sq. ft.
Shed & wood deck & walkway	239.0 sq. ft.
Driveway & Steps	3152.4 sq. ft.
Addition minus overhangs	392.2 sq. ft.
Addition minus overhangs	91.4 sq. ft.
Total = 5854.9 sq. ft.	

Proposed Percentage of Lot Impervious Area Calculation:	
$\frac{5854.9}{26,605.9} \times 100 = 22\%$	

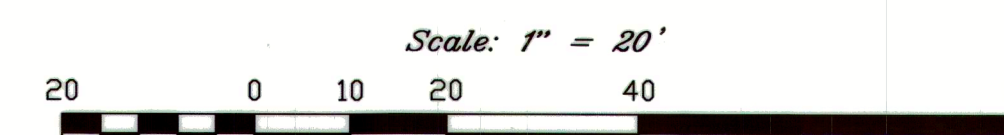
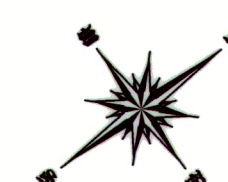
N/F
John H. Derry & Lois G. Schiappa
2001/106 10/16/1986
53 Mountain View Drive
Tax Map 49, Lot 30

N/F
Reeve S. & Jeanne F. Boulter
7064/343 02/23/2007
47 Mountain View Drive
Tax Map 49, Lot 32

LOT 32 (REF. #1)

LOT 33 (REF. #1)

LOT 30 (REF. #1)



AREA:

26,605.9 sq. ft.
± 0.6 acres

OWNER OF RECORD:

Gerald M. & Margaret M. Dugal Jr.
9346/6 04/14/2016
49 Mountain View Drive
Tax Map 49, Lot 31

RECORDING INFORMATION:

ANDROSCOGGIN COUNTY REGISTRY OF DEEDS - STATE OF MAINE
RECEIVED 5-20-2019 AT 11 HOUR 42 MIN. a.m.
AND RECORDED IN PLAN BOOK 52, PAGE 192
ATTEST REGISTRAR

DAVIS LAND SURVEYING, LLC

64 OLD COUNTY ROAD
OXFORD, MAINE 04270
OFFICE PHONE (207) 345-9891 or (207) 782-3685
CELL (207) 240-9949
EMAIL: stuart@davislandsurveying.net
www.davislandsurveying.net
August 15, 2018
FILE: 350 JOB NO.: 18058

SHORELAND ZONING APPLICATION

Proposed Conditions

49 Mountain View Drive -- Poland, Maine
Gerald & Margaret Dugal
49 Mountain View Drive, Poland, Maine 04274

TOWN OF POLAND PLANNING BOARD:
CHAIRPERSON:

DATE:

CERTIFICATION:

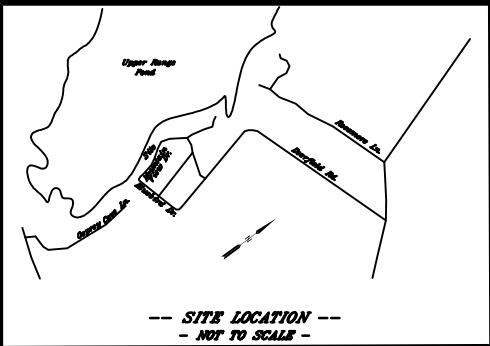
TO THE BEST OF MY KNOWLEDGE, I HAVE USED ORDINARY AND PRUDENT CONDUCT EXPECTED OF PROFESSIONAL LAND SURVEYORS AND THE RESULTS SHOWN HERE REPRESENT THE LICENSEE'S RESPONSIBILITY TO THE PUBLIC AS REQUIRED UNDER THE STANDARDS OF PRACTICE AS DEFINED BY THE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS (M.R.S.A. TITLE 32, CHAPTER 121 DATED APRIL, 2001).

EXCEPT AS FOLLOWS:

- 1) NO WRITTEN REPORT TO DATE
- 2) NO DEED DESCRIPTION TO DATE

PLAN PREPARED BY: S.A.B.

PLAN CHECKED BY: S.A.B. THIS PLAN IS NOT VALID UNLESS EMBOSSED ABOVE



NOTES:

- 1) BEARINGS ARE REFERENCED TO PLAN REFERENCE #1.
- 2) DEED REFERENCES ARE MADE TO THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS - AUBURN, MAINE.
- 3) PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED CONDITIONS OF THE PROPERTY LOCATED AT 49 MOUNTAIN VIEW DRIVE, POLAND, ME.
- 4) PROPOSED DECK AND ADDITION FALL WITHIN 75' OF THE SHORE AND HAVE A COMBINED AREA OF 389.7 - or - 30% OF ALL STRUCTURES WITHIN 75' FROM SHORE AS PER SHORE LAND ZONING NON-CONFORMANCE STANDARDS, CHAPTER 5 SECTION 504 OF POLAND LAND USE ORDINANCE.

REFERENCES:

- 1) PLAN TITLED "POLAND SPRING COUNTRY ESTATES" DATED OCTOBER 1971, FOR RANGE, INC., BY LIBBY CONST. & SURVEYING - RANDOLPH, MAINE, RECORDED IN THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS BOOK 22, PAGE 12.

LEGEND

- 5/8" CAPPED REBAR SET
- ⊕ MANHOLE
- UTILITY POLE

Existing Impervious Area Calculation - 2020:

Impervious Area Calculation:	
Addition & Building w/Overhang	1,633.1 sq. ft.
Garage w/overhang & patio	885.0 sq. ft.
Shed & front wood deck	49.8 sq. ft.
Driveway & Steps	2,752.5 sq. ft.
Approved portion deck	112.0 sq. ft.
Paved Walk	115.0 sq. ft.
Fire Pit	12.2 sq. ft.
Total = 5,559.6 sq. ft.	

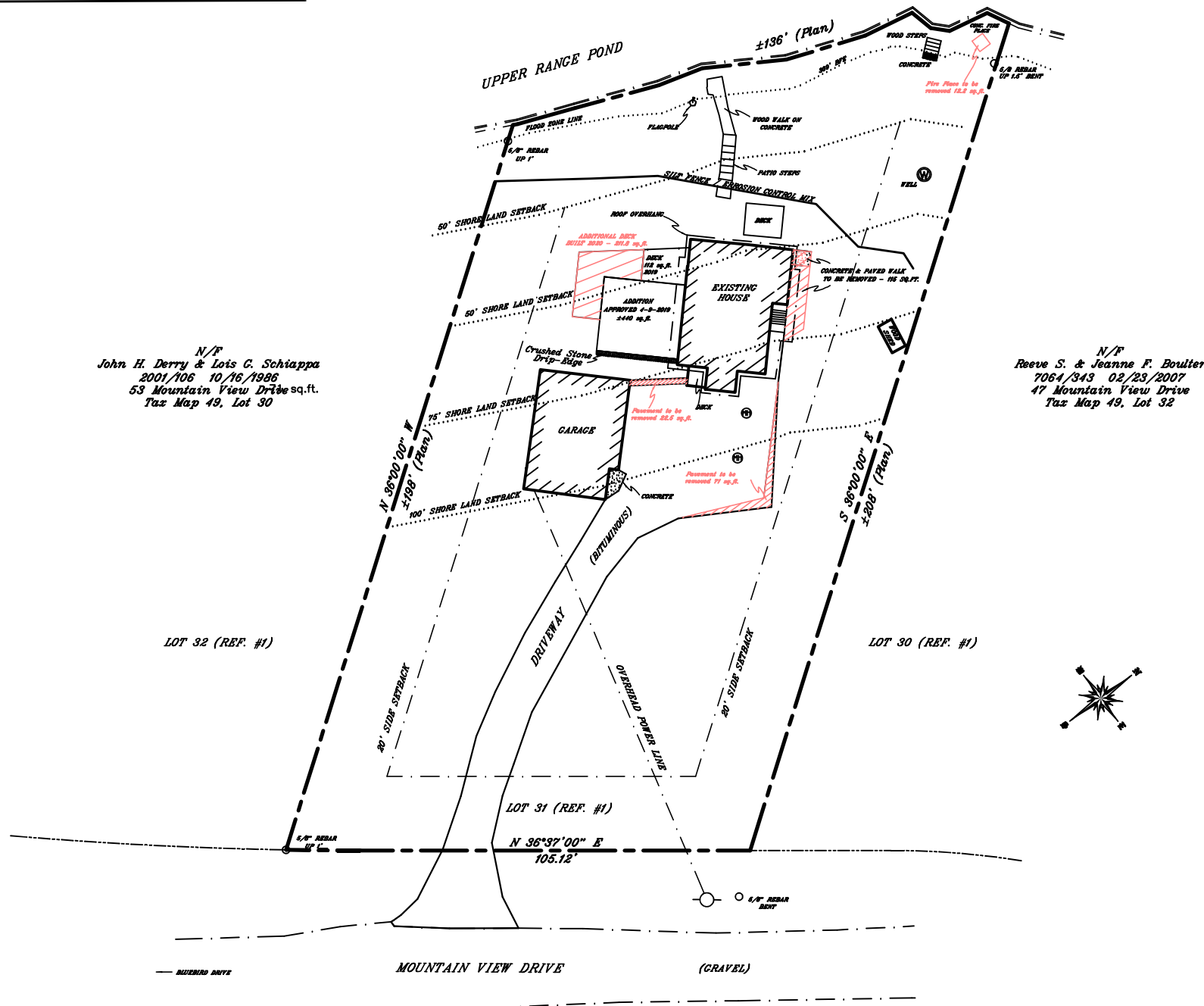
Percentage of Lot Impervious Area Calculation:	
$\frac{5,559.6}{26,605.9} \times 100 = 21\%$	

Total Structure Area 25' - 100'	
100' to 75'	75' to 25'
House & Addition 798.1 sq.ft.	House, Addition & Deck 1,337.7 sq.ft.
Garage & Shed = 662.2 sq.ft.	Garage = 126.6 sq.ft.
Front Deck = 42.8 sq.ft.	Front Patio = 87.3 sq.ft.
Total = 1,503.1	Walkway & steps 122.3 sq.ft.
	Total = 1,673.9

Proposed Impervious Area Calculation - 2020:

Proposed Impervious Area Calculation:	
Addition & Building w/Overhang	1,633.1 sq. ft.
Garage w/overhang & patio	885.0 sq. ft.
Shed & wood front deck	49.8 sq. ft.
Revised Driveway & Steps	2,659.0 sq. ft.
New portion deck	211.8 sq. ft.
Approved portion deck	112.0 sq. ft.
(-8.9') Total = 5,550.7 sq. ft.	

Proposed Percentage of Lot Impervious Area Calculation:	
$\frac{5,550.7}{26,605.9} \times 100 = 21\%$	



~ ADDITIONAL REMOVAL NEEDED ~

BUILT EXTRA 2020
211.8 sq.ft.

CONCRETE FIRE PIT (3.5X3.5) = 12.2 SQ.FT.
WALK WAY (5X21) = 115 SQ.FT.
DRIVE WAY = 71 SQ.FT.
PAVE BY GARAGE (1.5X15) = 22.5 SQ.FT.

NEEDED 211.8 sq.ft. -- ADDITIONAL 220.7 sq.ft.
(Difference of 8.9 sq.ft.)

AREA:

26,605.9 sq. ft.
± 0.6 acres

OWNER OF RECORD:

Gerald M. & Margaret M. Dugal Jr.
9346/6 04/14/2016
49 Mountain View Drive
Tax Map 49, Lot 31

RECORDING INFORMATION:

ANDROSCOGGIN COUNTY REGISTRY OF DEEDS - STATE OF MAINE

RECEIVED _____ AT _____ HOUR _____ MIN. _____ M.

AND RECORDED IN PLAN BOOK _____, PAGE _____

ATTEST _____ REGISTRAR

DAVIS LAND SURVEYING, LLC

64 OLD COUNTY ROAD
OXFORD, MAINE 04270

OFFICE PHONE (207) 345-9991 or (207) 782-3685
CELL (207) 240-9949

EMAIL: stuart@davislandsurveying.net
www.davislandsurveying.net

November 5, 2020

FILE: 427 JOB NO.: 20-106

--- SHORELAND ZONING APPLICATION ---

Proposed Conditions

49 Mountain View Drive -- Poland, Maine

Gerald & Margaret Dugal

49 Mountain View Drive, Poland, Maine 04274

TOWN OF POLAND PLANNING BOARD:

DATE:

CHAIRPERSON:

CERTIFICATION:

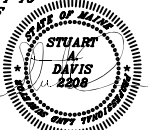
TO THE BEST OF MY KNOWLEDGE I HAVE USED ORDINARY AND PRUDENT CONDUCT EXPECTED OF PROFESSIONAL LAND SURVEYORS AND THE RESULTS SHOWN HERE REPRESENT THE LICENSEE'S RESPONSIBILITY TO THE PUBLIC AS REQUIRED UNDER THE STANDARDS OF PRACTICE AS DEFINED BY THE BOARD OF LICENSES FOR PROFESSIONAL LAND SURVEYORS (M.R.S.A. TITLE 34, CHAPTER 181 DATED APRIL, 2001).

EXCEPT AS FOLLOWS:

- 1) NO WRITTEN REPORT TO DATE
- 2) NO DEED DESCRIPTION TO DATE

PLAN PREPARED BY: S.A.B.

PLAN CHECKED BY: S.A.B. THIS PLAN IS NOT VALID UNLESS EMBOSSED ABOVE



JONES
ASSOCIATES
Foresters, Surveyors and
Environmental Consultants



November 30, 2020

Town of Poland Planning Board
1231 Maine Street
Poland, Maine 04274

Town of Poland Planning Board Members:

Enclosed you will find a Formal Shoreland Zoning Application for a proposed project located at 219 Black Island Road in Poland, Maine (Tax Map 25, Lot 27).

Peter and Jane Savas, landowners of the property, are proposing to reconstruct their existing home on the property. This proposed reconstruction will remove 1.5% of the existing impervious areas of the property, bringing the percentage of lot covered by impervious surfaces from 8.2% to 6.8%. More specific calculations can be observed on the "Savas Residence Partial Site Plan – Option A," prepared by Kevin Browne Architecture.

The Savases are proposing this reconstruction of their existing home and driveway in order to resolve several issues where some permits may have been issued and structures were not placed in the proper location and the town failed to follow up with the owners at the time. While these issues were created by prior owners, the Savases have every intention of addressing these issues to the best of their abilities.

Problems on this property date back to 1980. Building permit #358 was issued for the dwelling and attached garage that required for the structures to be set back 75 feet from Thompson Lake. At the time, the property was owned by a Mr. and Mrs. Caradonna. The Caradonnas actually built the structure closer to Thompson Lake than the permit allowed for. A survey plan completed by Jones Associates, Inc., with the revised date of January 19, 2016, indicates that the structure is only setback 66 feet from Thompson Lake and the driveway is only setback 55 feet from the Lake. The construction activities by the Caradonnas violated the Town Ordinance requirements, but an inspection by the town at the time never identified the problem. These violations have existed for 40 years and there have been a number of building permits issued and inspections performed by Town staff since then.

280 Poland Spring Road
Auburn, Maine 04210
(207) 241-0235
Email: rjones@jonesai.com
Website: www.jonesai.com

Building Permit #1179 was issued in 1985 for an 8' x 12' storage building for boat equipment that required for the structure to be setback 25 feet from the high water mark (HWM) of Thompson Lake. At the time, the property was owned by a Mr. and Mrs. Sheppard. The Sheppards actually constructed the storage building only 18 feet from the HWM of Thompson Lake. Again, the construction activities violated the Town Ordinance. This violation has existed for 35 years.

Building Permit #1332 was issued in 1986 for a 12' x 20' deck that required a 75 foot setback from Thompson Lake. At the time, the property was still owned by the Sheppards. Though this deck is no longer on the property, a 1987 tax card shows that the deck would have only been set back 70 feet from Thompson Lake. This is the second violation of setback requirements by the Sheppards.

Building Permit #777 was issued in 1993 for a detached 24' x 24' garage on slab that required a 100 foot setback from Thompson Lake, a 40 foot rear and side setback, and a 75 foot setback from the center line of the road. The property was still owned by the Sheppards. This garage was only built 84 feet from the HWM of Thompson Lake. This is the third violation of setback requirements by the Sheppards and it does not appear that the application materials were field verified by the Code Enforcement Officer.

Building Permit #2004-051 was issued in 2004 for a renovation to the second floor of the dwelling, the removal of a balcony and deck, the replacement of the doors and windows, the replacement of a deck with flag stone paving (no larger than the existing deck), and the replacement on an interior stairway. At this time, the property was owned by Peter and Jane Savas. They purchased the property in 2003, and still own it today in November of 2020.

Building Permit #2006-045 was issued in 2006 for erosion repairs along the north shoreline (riprap), the installation of a 1,000 gallon underground propane tank along the northeast side of the house, land preparation for a future expansion (sunroom), removal of 1,000 sq. ft. of paving next to the house, and the replacement of the deck with a patio/walkway. Setbacks included a 50 foot setback from the right of way, 40 feet from rear and side property lines, and no improvements could bring any structure closer to the HWM.

The Savases worked closely with the Art Dunlap, the Code Enforcement Officer at the time, to determine the best way to stabilize the property. Erosion plans were prepared with input from the Androscoggin Valley Soils and Water Conservation District (AVSWCD) and Shaker Hill Nursery to address erosion issues. That information was submitted to MDEP in March of 2005, but the application was rejected pending state approvals, a detailed plan and additional fee. The Savases continued to work with Mr. Dunlap and, in March of 2006, he issued the permit above. Mr. & Mrs. Savas completed the work in the summer of 2006 without MDEP approval.

It is evident that the Savases worked very closely with Art Dunlap and meticulously followed his guidance. Because of the work they completed, the site is now very stable and there are no erosion control problems on this property today.

Given the above information, it is clear that there were many opportunities to address setback issues caused by previous landowners. Many previous plot plans that were used for prior permits showed inconsistent measurements and it is unclear as to why these discrepancies were not addressed. It is also unclear as to why these discrepancies were not noticed during field verifications by the Code Enforcement Officer at the time..

The Savases have spent tens of thousands of dollars at the request of Art Dunlap's request to correct problems that they adopted for previous landowners. While they would have preferred to spend those funds on improvements required in the existing structure, they instead delayed structural improvements because they agreed that, environmentally, the site improvements they made would prevent any future erosion issues and would better protect the water quality of Thompson Lake.

That said, is apparent that the Savases have prioritized resolving past violations (those of which they had no part in creating) to the best of their ability. Their proposition to reconstruct their existing home, will significantly reduce the amount of impervious areas that are not in compliance. Currently, there is 6,298 sq. ft. of impervious area located within 100 feet of Thompson Lake. The Savases proposed reconstruction would only leave 3,819 sq. ft. of impervious area within 100 feet of Thompson Lake. This is a significant reduction of approximately 60% of the original impervious area within 100 feet of Thompson Lake.

The Savases proposed construction can only help better protect the water quality of Thompson Lake. More specific calculations and plans of what the Savases are proposing to construct and remove can be seen on the attached plan (Option A) prepared by Kevin Browne Architecture.

Jones Associates, Inc., along with the Savasas, are looking forward to discussing this project with Town on the December 8th Planning Board meeting and working to find solutions for prior violations that occurred before the Savases purchased the property.

Thanks you for your attention.

Sincerely,

A handwritten signature in black ink, appearing to read "Rick Jones", written in a cursive style.

Rick Jones

Formal Shoreland Zoning Application



Town of Poland Planning Board

Application Form – Page 2

Submission Checklist – Page 5

Phosphorus Calculation Form – Page 7

Fee Schedule – Page 9

Agenda Request – Page 10

INSTRUCTIONS:

1. Please complete pages two through ten. Obtain or get copies of information as required by the application on these pages.
2. Use the checklist on pages five and six to make sure submission requirements are met. The checklist is a summary of the standard requirements in the Comprehensive Land Use Code.
3. All waiver requests will require a written statement.
4. **A total of ten (10) copies of the application and required submissions as well as one digital PDF copy (on either cd or usb). Please submit these copies and the original application as well as any fees (see fee schedule) to the Code Enforcement Office by 1:00 pm eleven (11) days prior to the stated meeting.**

Applicant Name: Jane and Peter Savas

Date of Board Review: 12/8/2020

Application

PARCEL INFORMATION:			
Parcel ID:	Tax Map 25, Lot 27		
Lake Watershed:	Thompson Lake		
Road Location:	219 Black Island Road		
Lot Size:	~88,849 (sq. ft.)	Year Created:	1982
Shore Frontage:	~400 (ft.)	Road Frontage:	~275 (ft.)
Zone:	Limited Residential	Flood Zone:	23001C0280E (Zone AE)
Aquifer Overlay:	N/A	Current Use:	Residential

OWNER INFORMATION:	
Name:	Jane Savas and Peter Savas
Mailing Address:	360 Newbury St, Unit 509, Boston, MA 02115
Phone #:	508-254-8054

APPLICANT INFORMATION:	
Applicant Is:	<input type="checkbox"/> Landowner <input checked="" type="checkbox"/> Contractor <input type="checkbox"/> Renter <input type="checkbox"/> Buyer <small>*If applicant is landowner, write "SAME" below. If not the landowner, please submit a letter of permission to construct on or use the land, and complete below.</small>
Name:	Rick Jones; Jones Associates, Inc.
Mailing Address:	280 Poland Spring Road, Auburn, Maine 04210
Phone #:	207-241-0235

THIS APPLICATION IS FOR:	
<input type="checkbox"/> New Development <input type="checkbox"/> Change of Use <input type="checkbox"/> Expansion of Use <input checked="" type="checkbox"/> Expansion/Replacement of Structure(s) <input type="checkbox"/> Resumption of Use	

Existing Lot Conditions

1. GENERAL	
A. Does this lot have any development? (If no, go to proposed development)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
B. Is there an existing well?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
C. Is there an existing Septic System?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
D. Is there an existing road entry? <ul style="list-style-type: none"> If YES include any changes or modifications on plans. If NO please submit a copy of appropriate Road/Entrance Application. 	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
E. Will there be any existing structures removed? <ul style="list-style-type: none"> If YES, submit information about the structure and how it will be disposed of. 	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
2. EXISTING LAND DEVELOPMENT & IMPROVEMENTS NOT INCLUDING BUILDINGS	
A. Size of lawns:	~11,400 (sq. ft.)
B. Size of fields:	0 (sq. ft.)
C. Size of driveways/roads:	3,143 (sq. ft.)
D. Size of paths or other non-vegetated areas: (includes walkways and patios, etc)	1,165 (sq. ft.)
E. Size of wetlands already filled	0 (sq. ft.)

3. EXISTING MAIN STRUCTURE		
A. Ground Footprint:	2,308	(sq. ft.)
B. Total gross floor space (exterior dimensions of all floors):	~3,797	(sq. ft.)
C. Road frontage setback:	~100	(ft.)
D. Side setback:	~65 ft to east and ~220 ft to west	(ft.)
E. Rear setback:	~80	(ft.)
F. Distance to Great Pond:	~65	(ft.)
G. Distance to stream:	N/A	(ft.)
H. Distance to wetlands:	N/A	(ft.)
Foundation:	<input type="checkbox"/> Full Basement <input type="checkbox"/> Frost Walls <input checked="" type="checkbox"/> Slab <input type="checkbox"/> Piers	
4. EXISTING ACCESSORY STRUCTURE		
A. Total number of structures:	3 (includes garage, shed, boat racks)	
B. Total ground footprint:	695	(sq. ft.)
C. Total floor space:	695	(sq. ft.)
D. Closest road setback:	~50	(ft.)
E. Closest side setback:	~18	(ft.)
F. Closest rear setback:	~145	(ft.)
G. Distance to Great Pond:	~18	(ft.)
H. Distance to Streams:	N/A	(ft.)
I. Distance to Wetlands:	N/A	(ft.)
5. TOTAL EXISTING IMPERVIOUS SURFACES		
A. Add 2c + 2d + 3a + 4b:	7,311	(sq. ft.)
B. Divide this by lot size in square feet x 100%:	8.22	%
*This number cannot exceed 15%		

Proposed Development

1. WETLANDS TO BE IMPACTED:	0	(sq. ft.)
2. CHANGES IN LANDSCAPE(Can be negative value for size reduction)		
A. Changes in lawn size:	no anticipated changes (sq. ft.)	
B. Changes in buffers:	no anticipated changes (sq. ft.)	
C. Changes in naturally wooded areas:	no anticipated changes (sq. ft.)	
D. Total opening in forest canopy:	no anticipated changes (sq. ft.)	
3. CHANGES IN FOOTPRINT(S) AND DEVELOPED AREA(S)		
A. Changes in building footprint(s):	+232	(sq. ft.)
B. Changes in driveway/roadway:	-1,177	(sq. ft.)
C. Changes in patios, walkways, etc:	-357	(sq. ft.)
D. Total changes to impervious surfaces (3a + 3b + 3c):	-1,302	(sq. ft.)
4. PERCENTAGE OF LOT COVERED BY IMPERVIOUS SURFACES		
A. 5. (Total existing impervious surfaces) + 3d (above)/total lot square footage x 100%	6.7	%
*This number cannot exceed 15%		

Required Submissions

Attach drawings and/or statements describing the following items if applicable:


- Provide a copy of deed and Tax Assessors Information Card.
- Provide a map of the general area showing land features within at least a ½ mile of this lot.
- Provide site plans(s) of your lot with existing development and its dimensions shown.

- *Include: Dimensions, location, and distances of lot lines. Lawns, wooded areas, roadways, high water lines, driveways, septic system, walkways, and structures.*
- *Show names of roads and water bodies*
- Provide site plan(s) of your lot with proposed development and its dimensions shown (*may be combined on existing development drawing*).
- Provide detailed plans of proposed structural development and changes.
- Provide phosphorus loading calculations.
- Provide prepared buffer plan if needed for building expansion.
- Anticipated date for start of construction.
- Anticipated date for completion of construction.
- Submission requirements shall follow sections 508.30 and 509.8 of the Comprehensive Land Use Code. Copies of the code are available for viewing at the Town Office, Library, and on the Code Enforcement page of the website, www.polandtownoffice.org. Copies can be purchased in the Code Enforcement Office.
- Use Checklist on page five for a summary of usual requirements.
- Any other requirements unique to your project added by the Planning Board.

Please list all state and federal approvals, permits, and licenses required for the project:

Disclosure

1. I hereby acknowledge that I have read this application and pertinent sections of the ordinances, and state that the information in this document is to the best of my knowledge true and accurate. I agree to comply with all of the Town of Poland's ordinances and the State of Maine's statutes regulating the activities sought in this application as well as any permit(s) approved for this application.
2. I understand that all construction of structures shall conform to the *Maine Uniform Building and Energy Code* and the *NFPA 101 Life Safety Code, 2009*.
3. I understand that any approval is valid for only the use(s) as specified in this application. The permitting authority must approve any change(s) made to the use(s) sought in the application. Any approval issued for this application is approved on the basis of truthful information provided by the applicant(s), and as allowed by the ordinances of the town.
4. I understand that it is my responsibility to assure that the lot description herein accurately describes its ownership, its boundary lines, and the setback measurements from the legal boundary lines.
5. I understand that I have the burden of proof as to the legal right to use the property, and that approval of this application in no way relieves me of this burden. Any approval issued does not constitute a resolution in favor of me or the landowner in any matters regarding the property boundaries, ownership, or similar ties.
6. I understand that all necessary **Building and Use Permits** shall be secured from the Code Enforcement Office after the Planning Board grants approval of this application.
7. I understand that a **Certificate of Occupancy** shall be required prior to the start of any use or occupancy associated with this application unless a signed written waiver is issued with the permit. Fines and penalties may be issued if use or occupancy is stated prior to the issuance of the certificate.
8. I understand that the approval becomes invalid if construction or use has not commenced within twelve (12) months of the approval date, construction is suspended for more than six (6) months and no notice for just cause is submitted prior to the end of the six (6) months, or it is found that false statements have been furnished in this application.
9. I understand that if I fail to comply with the aforementioned statements, a **"STOP WORK"** order may be issued for which I will immediately halt any construction and/or use(s) that are approved for this application. This failure may also require that I return the property to its natural state or as closely thereto before the use(s) was/were approved.
10. I understand that failure to follow these requirements will lead to **Violation Notices** and Citations that have fines and penalties. This in turn can lead to civil proceedings in District Court.
11. I understand that all **state and federal permits** are my responsibility as the applicant and/or owner.

Applicant Signature:		Date: November, 25, 2020
-----------------------------	---	---------------------------------

Submissions Checklist

The following list is the information required by section 508.30 and 509.8 of the Comprehensive Land Use Code for the Town of Poland. Please check in the column on the left if the information has been provided, a waiver has been requested, or you believe the information is not applicable to your application. If a waiver has been requested, or the information is not applicable, a written explanation is required.

FOR APPLICANT USE				FOR PLANNING BOARD USE			
Provided	Waiver	N/A	<u>Section 509.8A "Submission Requirements"</u>	Received	On File	Waived	N/A
X			Site Plan drawings				
X			Signed copy of application				
X			Name & Address of owner				
X			Name & Address of all abutters within 500 feet of your lot				
X			Map of general location				
X			Show all adjacent properties				
X			Name, Map & Lot numbers on drawings				
X			Copy of Deeds & Agreements				
X			Name of designer on plans				
			<u>Section 508.30 Shoreland Areas</u>				
X			Structure & Site Plan drawing				
X			New structure set back 100' from lake, 75' from streams & wetlands				
X			Water dependent structures indicated				
X			Setbacks or structures shown in drawings				
X			Show all structures				
X			Side and road setbacks shown				
X			Need for larger than required setbacks				
X			Steep slopes shown				
X			Multiple Principle Structures have required land area				
			<u>Piers, Wharves, Bridges</u>				
		N/A	Shore access soils described				
		N/A	Locations of development and natural beaches shown				
		N/A	Effect on fish & wildlife				
		N/A	Dimensions of structures shown				
		N/A	Superstructure on piers				
		N/A	Use of pier superstructures				
		N/A	Permanent structures have DEP permit				
			<u>Individual Private Campsites</u>				
		N/A	Show land area for each site				
		N/A	Campsite setbacks are shown				
		N/A	Type of development for sites				
		N/A	Amount of clearing for vegetation				
		N/A	Sewage disposal plan				
		N/A	SSWS approved if used > 120 days				
		N/A	<u>Parking Areas</u>				
		N/A	Parking areas setbacks shown				
		N/A	Parking areas sized & designed for storm water				
			<u>(Part one) Driveways Only</u>				

FOR APPLICANT USE				FOR PLANNING BOARD USE			
Provided	Waiver	N/A	<u>Section 509.8A "Submission Requirements"</u>	Received	On File	Waived	N/A
X			Setbacks as required				
X			State reasons for location in Resource Protection				
		N/A	Culverts				
			<u>(Part two) Road Only</u>				
		N/A	Setbacks as required				
		N/A	Reasons stated for location in Resource Protection				
		N/A	Road expansion according to Chapter 8				
		N/A	Road slopes shown < 2H:1V				
		N/A	Road Grades < 10%				
		N/A	Buffer plan between road and water body				
		N/A	Ditch relief shown				
		N/A	Turnout spacing shown				
		N/A	Drainage dips when < 10% slope				
		N/A	Culverts shown				
		N/A	Show relief sizing and stabilization				
			<u>Storm water runoff</u>				
		N/A	Plans show storm water runoff and retaining areas				
			<u>Clearing of vegetation for development OR individual campsites</u>				
		N/A	Cutting of vegetation < 100' from shoreline				
		N/A	Preservation of buffer strip				
			Plan showing existing trees and planned cutting				
		N/A	Clearing < 40% basal area in any 10 year period				
		N/A	Preservation of vegetation < 3' high				
		N/A	Pruning of limbs on lower 1/3 of trees				
		N/A	Plan of removal and replacement of dead and diseased trees				
		N/A	Tree removal plan > 100' and < 250 ' from shoreline				
		N/A	Non-conforming lot legally existing				
		N/A	Fields reverted to woodlands follow forested rules				
			<u>Shoreland Access Held In Common</u>				
		N/A	Proper water frontage for number of lots that hold access in common				
			<u>Single Family Home in Resource Protection District</u>				
		N/A	No place on lot outside Resource Protection where home can be located				
		N/A	Lot undeveloped				
		N/A	Location of all improvements				
		N/A	Slopes > 20%				
		N/A	Development 1 ft. above 100 year floodplain				
		N/A	Development outside floodplain				
		N/A	Total ground footprint < 1500 sq. ft.				
		N/A	Structures > 150 ft. from waterline				
		N/A	<u>Phosphorus Calculations</u>				
		N/A	<u>Copies of state, federal permits (if applicable)</u>				

This application was first looked at by the Planning Board on ___ / ___ / ___ but does not create vested rights in the initiation of the review process.

By vote of the Board this application requires an on-site inspection: _____ Yes _____ No

If yes, an onsite inspection is scheduled for ___ / ___ / ___ at ___ : ___ AM ___ PM

By vote of the Board this application requires a public hearing: _____ Yes _____ No

If yes, public hearing is scheduled for ___ / ___ / ___ at ___ : ___ AM ___ PM

Conditions of Approval: _____

Planning Board Chair

___ / ___ / ___
Date



Phosphorus Calculation Form



The Code Enforcement Officer or Planning Board shall review and approve a Phosphorus Management Control Application based on one of the following methods.

POINT SYSTEM

The Applicant shall meet or exceed thirty (30) points based on the following schedule:

PROPOSED PHOSPHORUS CONTROL MEASURES (Check those proposed)	POINTS ALLOWED (By CEO or Planning Board)
10 Points for correcting an existing erosion problem on the project site.	
10 Points for a clearing limitation of <15,000 sq. ft. or <20% of lot.	
15 Points for a clearing limitation of <10,000 sq. ft. or <15% of lot.	
15 Points for the installation of rock lined drip edges or other infiltration system to serve the new construction.	
20 Points for a 50 foot wide buffer.	
25 Points for a 75 foot wide buffer.	
30 Points for a 100 foot wide buffer.	
TOTAL	

Authorized Signature: _____

Date: _____

Code Enforcement Officer or Planning Board Chair



Phosphorus Calculation Alternate Form



Watershed:		
Water Quality Category:		
Level of Protection:		
Per Acre Phosphorus Allocation: <i>(from table 612.17.A.1.a in the CLUC)</i>	(lbs./ac./yr.)	(oz./ac./yr.)
Total Buildable Land Area: <i>(DO NOT INCLUDE land that is wetland or steep slopes)</i>	(sq. ft.)	(acres)
Maximum Permitted Phosphorus Export from Project: <i>(PPE-lbs, PPE-oz)</i>	(lbs./yr.)	(oz./yr.)

Impervious Surface Type	Sq. Ft.	Acres	Pre-Treat Export	B	WP	Inf.	Adjusted Phos. Export
Buffer Values:	WI=		Soil GRP=		Slopes=		
Buffer Values:	WI=		Soil GRP=		Slopes=		
Buffer Values:	WI=		Soil GRP=		Slopes=		
Buffer Values:	WI=		Soil GRP=		Slopes=		
Buffer Values:	WI=		Soil GRP=		Slopes=		
Buffer Values:	WI=		Soil GRP=		Slopes=		
(TE) Total Phosphorus Export:							(lbs./yr.)
(TPA) Phosphorus Availability:							(lbs./yr.)

Comparison of PPE to TPA:

(lbs./yr.)
*Must be =>0
(oz./yr.)

ADDITIONAL INFORMATION:

--

Authorized Signature:	Date:
<i>Code Enforcement Officer or Planning Board Chair</i>	



Fee Schedule



Site Review & Formal Shoreland Zoning

Type	Description	Amount	Units/Comments
Application – Sketch Plans	Rough Design	\$75.00	Each application (no other fees)
Application – Formal		\$150.00	Each application + fees below
Notification of Abutters	All Abutters within 500 ft of property must be notified.	\$0.75	Per Notification.
Approval Extension	Planning Board Only	\$50.00	One extension only
Escrow	Minimum Amount	\$700.00	When required by Planning Board
Extension of Approval		\$100.00	Before approval expires
Auto Graveyards/Recycling		\$5.00	Per vehicle storage slot (parking space)
Junkyard, Storage Lots		\$1.50	Per ft. of outside storage
Towers	Residential	First \$1,000 cost of work - \$20; Remaining cost of work \$5 per \$1,000	
Towers	Commercial	First \$1,000 cost of work - \$20; Remaining cost of work \$10 per \$1,000	

Reduced Fees: The Planning Board may, upon application therefore, allow reduced total site review fees to \$50.00 in any case which it determines that the work for which permit is sought will be performed within the Shoreland Zone. The project shall be intended solely for the purpose of protecting a Great Pond, Stream, River, or other Natural Resource through the implementation of Conservation, Best Management Practices, or other environmental safeguards. Also, the project shall not result in the enlargement of any building or structure or an intensification of the existing use of the property.

TOWN OF POLAND



Planning Board Agenda Request

FOR OFFICIAL USE ONLY

Date Received	
Time Received	
Received By	
Parcel ID	
Meeting Date	

Meetings are normally conducted from 7:00 to 9:00 pm in the Town Office Conference Room on the second and fourth Tuesday of each month.

____ 12 ____ / ____ 8 ____ / ____ 2020 ____


Date of the meeting you are requesting to be scheduled for

Applicant's Name:	Rick Jones; Jones Associates, Inc.
Mailing Address:	280 Poland Spring Road
Town, State, Zip:	Auburn, Maine 04210
Phone Number:	207-241-0325

Type of Application:	<input type="radio"/> Sketch Plan <input type="radio"/> Site Review <input checked="" type="radio"/> Shoreland <input type="radio"/> Subdivision <input type="radio"/> Informational		
Map, Lot:	Tax Map 25, Lot 27		
Road Location:	219 Black Island Road		
Zoning:	Limited Residential	Lake Watershed:	Thompson Lake
Project Description:	The Savases are proposing to reconstruct the existing dwelling and driveway on their property to resolve several existing violations. These violations were created by prior landowners. More information can be found in the attached cover letter.		

IMPORTANT INFORMATION:

- This office must receive the original application, plus nine (9) copies, one digital PDF copy (on either cd or usb), and appropriate fees by Friday at 1:00 pm, eleven days (11) prior to the stated meeting to be put on the upcoming agenda.
- New business is scheduled on the agenda in the order this office receives this form.
- If you want your application reviewed for contents prior to the meeting, it must be in this office fourteen days prior to the stated meeting.
- Should the board choose to adjourn before all business is addressed, all remaining business will be tabled until the next available meeting.
- Unfinished business is conducted before new business is addressed.

Applicant Signature:	 _____	Date: November 25, 2020
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N O T N O T
A N A N
O F F I C I A L O F F I C I A L
C O P Y W A R R A N T Y D E E D C O P Y

THOMAS E. DAVEY, RUTH V. DAVEY, JOHN J. DAVEY, LISA M. DAVEY,
and MICHAEL E. DAVEY, all of Massachusetts, for Consideration paid, grant to PETER G.
SAVAS and JANE E. SAVAS, as JOINT TENANTS, both of Holliston, Massachusetts, with
WARRANTY COVENANTS, a certain lot or parcel of land, with any buildings thereon,
situated in POLAND, County of ANDROSCOGGIN, and State of MAINE, bounded and
described as follows:

A certain lot or parcel of land situated on Megquier Island, a portion of which
island lies in Oxford, County of Oxford and State of Maine, and another portion
which lies in Poland, County of Androscoggin and State of Maine, designated on
said lot plan as property of Paul H. Anderson, Jr. to wit: Lot 18 on the lot plan of
Megquier Island aforesaid, recorded in the Androscoggin County Registry of
Deeds in Plan Book 21, Page 27.

Also conveyed herewith is a right of way as now laid out and used from the Kohut
Road, so-called, to the Black Island causeway, over and across Black Island as
shown on the Plan of said Island recorded in Androscoggin County Registry of
Deeds in Book of Plans, Volume 3, Book 13, Page 671, over the Megquier Island
causeway, so-called and over the road leading to Lot #18 as depicted on the lot
plan of Megquier Island aforesaid, recorded in the Androscoggin County Registry
of Deeds Plan in Book 21, Page 27. All roads and rights of way are in common
with other lot owners and grantees accept the obligation of sharing with these
other lot owners the expenses of the upkeep of said roads and rights of way.

This parcel is subject to the Declaration and Agreements to Covenants and
Restrictions recorded in the Oxford County Registry of Deeds in Book 693, Page
314 and Book 859, Pages 102 and 103.

Being the same premises described in the deed from Leonard E. Sheppard and
Alice L. Sheppard to Thomas E. Davey, Ruth V. Davey, John J. Davey, Lisa M.
Davey and Michael E. Davey dated June 21, 1999 and recorded in the
Androscoggin County Registry of Deeds in Book 4261, Page 315.

MAINE REAL ESTATE
TRANSFER TAX PAID

IN WITNESS WHEREOF, the Grantors have executed this instrument on this 7th day of October, 2003.

NOT
AN
OFFICIAL
COPY

Witness

NOT
AN
OFFICIAL
COPY

Witness

Witness

Witness

Witness

NOT
AN
OFFICIAL
COPY

Thomas E. Davey

Ruth V. Davey

John J. Davey

Michael E. Davey

Lisa M. Davey

COMMONWEALTH OF MASSACHUSETTS
COUNTY OF Worcester

Oct 7, 2003

Then personally appeared the above-named Thomas E. Davey, Ruth V. Davey, John J. Davey, Michael E. Davey and Lisa M. Davey and acknowledged the foregoing instrument to be their free act and deed.

Before me,

Print Name: [Signature]

Notary Public

My Commission Expires: _____

SEAL

d:\F:\USERS\ DARLENE\CLIENTS\Northeast\SAVAS\WARRANTY DEED.doc

Thomas A. Newcomb
Notary Public
My Commission Expires
April 7, 2006

ANDROSCOGGIN COUNTY
Tina M. Charnard
REGISTER OF DEEDS



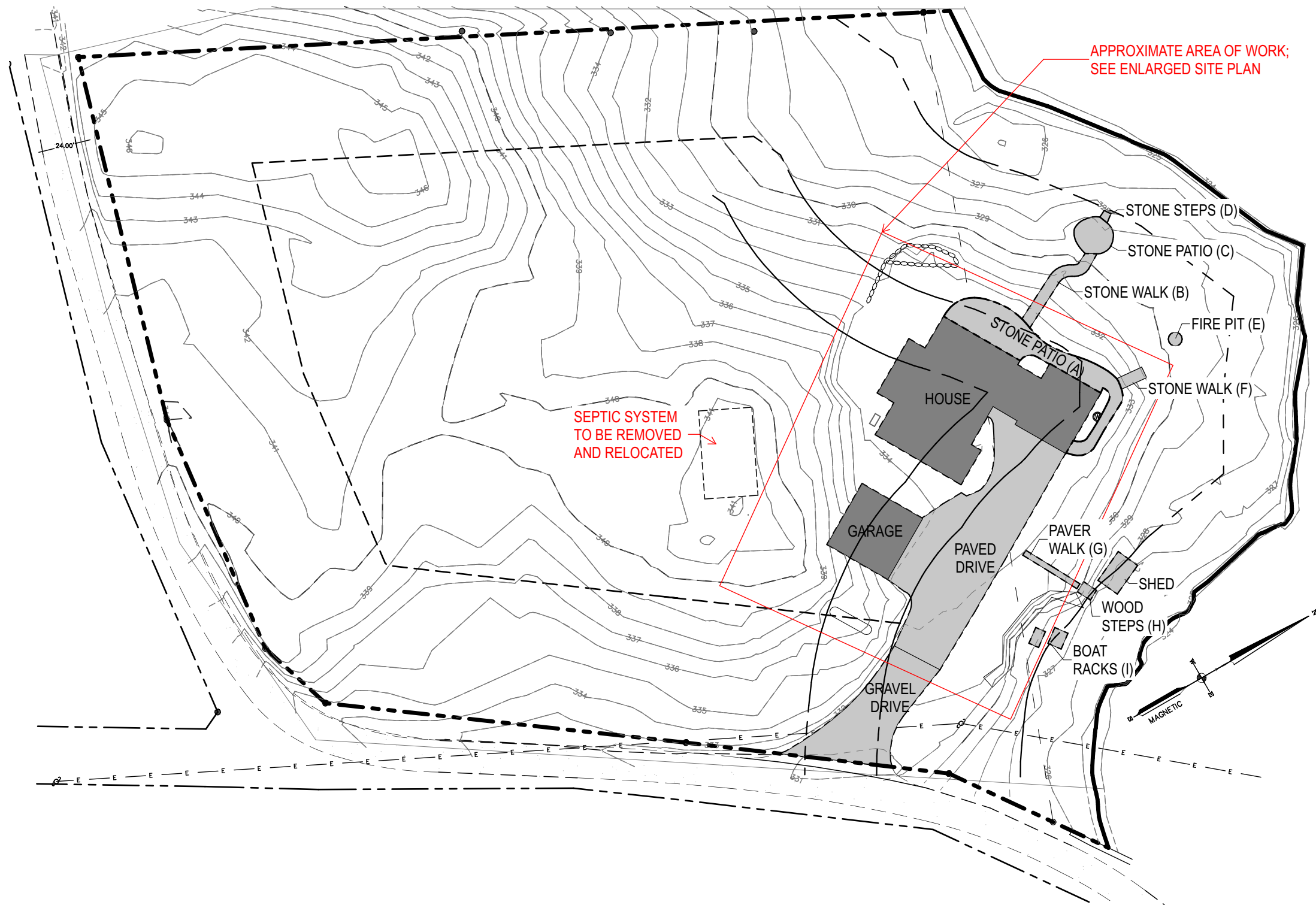
Property Card: 219 BLACK ISLAND RD.
Poland, ME



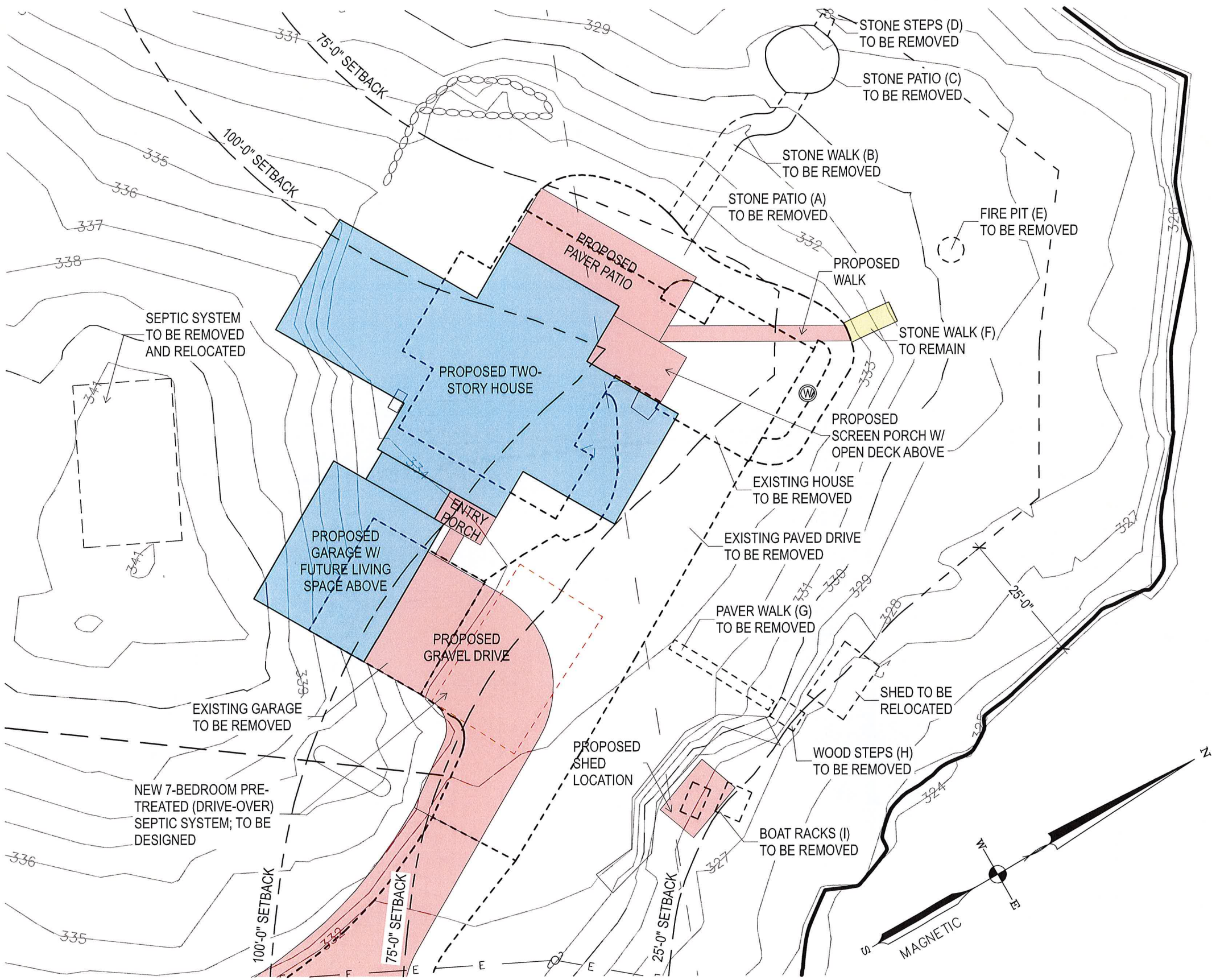
Parcel ID: 0025-0027
Trio Account #: 2189

Owner: SAVAS, PETER G.
Co-Owner:
Mailing Address: 219 BLACK ISLAND RD
OXFORD, ME 04270

Valuation	Building Sketch
Card Number: 1 Acreage: 2 Land Value: \$525,780 Building Value: \$227,830 Total Value: \$227,830 Taxes: \$10,701	NO SKETCH AVAILABLE
Building Information	
Year Built: 1982 Remodded: 2004 Living Area (sqft): 0 Basement: No Basement Finished Basement: 0 Number of Rooms: 0 Number of Bedrooms: 0 Number of Full Baths: 2 Number of Half Baths: 1	Stories: Exterior Walls: CLAPBOARD Roofing Materials: Asphalt Shingles Foundation: Concrete Slab Insulation: Full Fireplace: 1 Heating: Electric A/C: None Attic: None



EXISTING IMPERVIOUS SURFACE - DETAILED LIST					
	SETBACK FROM HIGH WATER LINE (SF)				
	<25'	25'-75'	75'-100'	>100'	TOTAL
HOUSE	0	163	1,391	754	2,308
GARAGE	0	0	359	234	593
DRIVEWAY	0	1,960	1,158	25	3,143
SHED	65	37	0	0	102
WALKWAYS/PATIOS:					
(A) STONE PATIO	0	324	380	0	704
(B) STONE WALK	0	139	0	0	139
(C) STONE PATIO	0	139	0	0	139
(D) STONE STEPS	0	9	0	0	9
(E) FIRE PIT	0	18	0	0	18
(F) STONE WALK	0	38	0	0	38
(G) PAVER WALK	0	44	0	0	44
(H) WOOD STEPS	4	18	0	0	22
(I) BOAT RACKS	21	31	0	0	52
TOTAL WALKWAYS/PATIOS	25	760	380	0	1,165
TOTAL EXISTING IMPERVIOUS SURFACE	90	2,920	3,288	1,013	7,311
% OF 88,849 SF LOT					8.2%



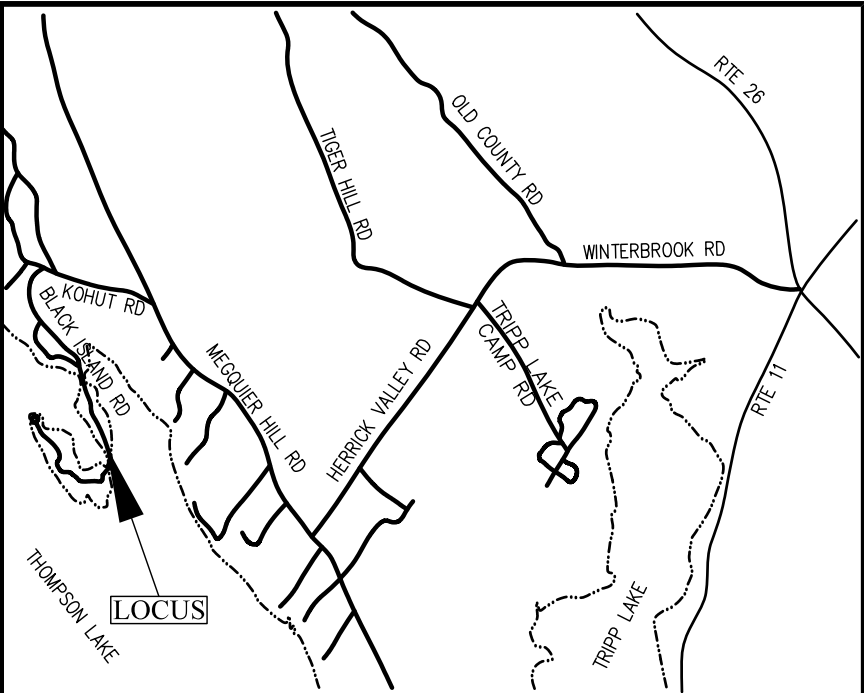
ENTIRE LOT IMPERVIOUS SURFACE - OVERVIEW - OPTION A						
SETBACK FROM HIGH WATER LINE (SF)						
	<25'	25'-75'	75'-100'	>100'	TOTAL	% OF LOT
EXISTING	90	2,920	3,288	1,013	7,311	8.2%
PROPOSED	0	836	2,938	2,235	6,009	6.8%
DIFFERENCE	-90	-2,084	-350	1,222	-1,302	-1.5%

ENTIRE LOT IMPERVIOUS SURFACE - DETAILED LIST - OPTION A						
SETBACK FROM HIGH WATER LINE (SF)						
	<25'	25'-75'	75'-100'	>100'	TOTAL	
HOUSE - EXISTING	0	163	1,391	754	2,308	
HOUSE - PROPOSED	0	0	930	1,483	2,413	
DIFFERENCE	0	-163	-461	729	105	
GARAGE - EXISTING	0	0	359	234	593	
GARAGE - PROPOSED	0	0	62	658	720	
DIFFERENCE	0	0	-297	424	127	
DRIVEWAY - EXISTING	0	1,960	1,158	25	3,143	
DRIVEWAY - PROPOSED	0	655	1,238	73	1,966	
DIFFERENCE	0	-1,305	80	48	-1,177	
SHED - EXISTING	65	37	0	0	102	
SHED - PROPOSED	0	102	0	0	102	
DIFFERENCE	-65	65	0	0	0	
WALKWAYS/PATIOS - EX.	25	760	380	0	1,165	
WALKWAYS/PATIOS - PROPOSED	0	79	708	21	808	
DIFFERENCE	-25	-681	328	21	-357	

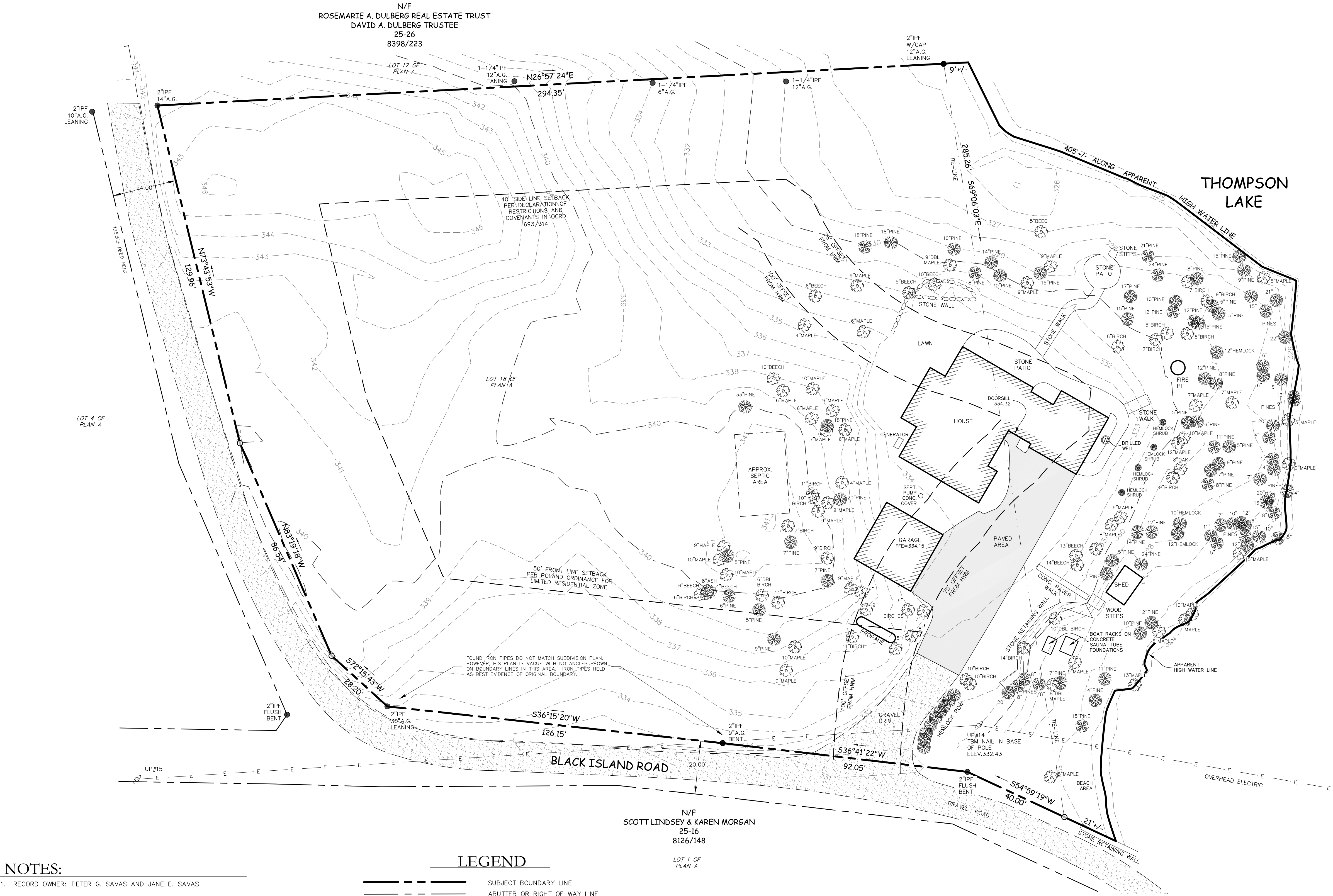
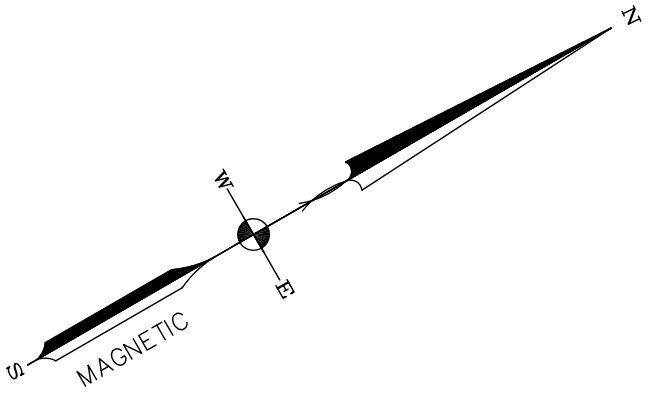
SAVAS RESIDENCE

PARTIAL SITE PLAN - OPTION A

SCALE: 1" = 20'



LOCATION PLAN

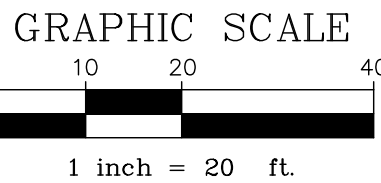


NOTES:

- RECORD OWNER: PETER G. SAVAS AND JANE E. SAVAS
- PARCEL DEED REFERENCE: SEE DEED FROM THOMAS E. DAVEY, RUTH V. DAVEY, JOHN J. DAVEY, LISA M. DAVEY AND MICHAEL E. DAVEY, TO PETER G. SAVAS AND JANE E. SAVAS DATED OCTOBER 7, 2003, RECORDED AT THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS IN BOOK 5666, PAGE 196.
- ALL BOOK AND PAGE REFERENCES REFER TO THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS EXCEPT AS NOTED.
- PARCEL TAX MAP REFERENCE: TOWN OF POLAND, MAP 25, LOT 27
- TOTAL AREA OF PARCEL 2.0+/- ACRES.
- ALL BEARINGS ARE REFERENCED TO MAGNETIC NORTH AS OBSERVED WITH HAND COMPASS ON DECEMBER 7, 2015.
- ELEVATIONS SHOWN ARE TIED TO NAVD 1988 BY NETWORK RTK GPS. PARIS, MAINE BASE USED.
- THE LOCATION, SIZE, AND DEPTH OF UNDERGROUND UTILITY LINES, TANKS, AND OR STRUCTURES NOT DETERMINED BY THIS SURVEY.
- PLAN REFERENCES:
A.) LOT PLAN OF MEGUIER ISLAND, THOMPSON LAKE PROPERTY OF PAUL H. ANDERSON, JR. SURVEYED BY DANA DOUGLASS, JR. DATED DECEMBER 1970 RECORDED IN SAID REGISTRY IN PLAN BOOK 21, PAGE 27.

LEGEND

- SUBJECT BOUNDARY LINE
- ABUTTER OR RIGHT OF WAY LINE
- STONE WALL
- CONTOUR
- OVERHEAD ELECTRIC
- N/F
- 000/000
- 000-000
- DECIDUOUS / CONIFEROUS TREE
- IRON PIPE/ROD/REBAR FOUND
- 5/8" REBAR W/ CAP TO BE SET
- UTILITY POLE



CERTIFICATION:

I HEREBY CERTIFY THAT THIS BOUNDARY SURVEY CONFORMS TO THE STATE OF MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS, STANDARDS OF PRACTICE (CHAPTER 90, SECTIONS 1 & 2).

Michael A. Hartman
MICHAEL A. HARTMAN, P.L.S. #2433
FOR JONES ASSOCIATES INC.



REVISIONS			
NO.	DATE	DESCRIPTION	BY
1.	1/19/16	ADDED EXISTING BOAT RACKS	MH
2.	6/23/20	ADDED ADDITIONAL TOPO AREA	MH

PLAN OF LAND OF
PETER & JANE SAVAS
219 BLACK ISLAND ROAD
POLAND, MAINE

PREPARED FOR: **PETER G. & JANE E. SAVAS**
10 COUNTY ROAD
HOLLISTON, MA 01746

PREPARED BY:
JONES ASSOCIATES INC.
Foresters, Surveyors And
Environmental Consultants

RECORD OWNERS:
PETER G. & JANE E. SAVAS
10 COUNTY ROAD
HOLLISTON, MA 01746

PLAN DATE:
DECEMBER 17, 2015

SCALE: 1"=20'

PROJ. #: 15-086PO

280 POLAND SPRING ROAD, AUBURN, MAINE 04210
(207) 241-0235



500 foot Abutters List Report

Poland, ME
November 25, 2020

Subject Property:

Parcel Number: 0025-0027
CAMA Number: 0025-0027
Property Address: 219 BLACK ISLAND RD.

Mailing Address: SAVAS, PETER G.
219 BLACK ISLAND RD
OXFORD, ME 04270

Abutters:

Parcel Number: 0025-0008
CAMA Number: 0025-0008
Property Address: 190 BLACK ISLAND RD.

Mailing Address: VITO, DONALD P.
43 PLAYSTEAD RD.
NEWTON, MA 02158

Parcel Number: 0025-0009
CAMA Number: 0025-0009
Property Address: BLACK ISLAND RD.

Mailing Address: BLACK AND MEGQUIER ISLAND
%STARBIRD 304 BLACK ISLAND RD.
OXFORD, ME 04270

Parcel Number: 0025-0011
CAMA Number: 0025-0011
Property Address: BLACK ISLAND RD.

Mailing Address: BLACK & MEGQUIER ISLAND
% STARBIRD 304 BLACK ISLAND RD.
OXFORD, ME 04270

Parcel Number: 0025-0012
CAMA Number: 0025-0012
Property Address: 189 BLACK ISLAND RD.

Mailing Address: MANNING, ROBERT L. II
P. O. BOX 163
BETHEL, ME 04217

Parcel Number: 0025-0016
CAMA Number: 0025-0016
Property Address: 222 BLACK ISLAND RD.

Mailing Address: LINDSAY, SCOTT A.
262 HARRIS RD.
CUMBERLAND, ME 04021

Parcel Number: 0025-0017
CAMA Number: 0025-0017
Property Address: BLACK ISLAND RD.

Mailing Address: WRIGHT, RICHARD S.
29 HIGHLAND CIRCLE
WAYLAND, MA 01778

Parcel Number: 0025-0018
CAMA Number: 0025-0018
Property Address: 226 BLACK ISLAND RD.

Mailing Address: WRIGHT, CATHERINE A
29 HIGHLAND CIRCLE
WAYLAND, MA 01778

Parcel Number: 0025-0019
CAMA Number: 0025-0019
Property Address: 230 BLACK ISLAND RD.

Mailing Address: WATTERS, IAN D.
19 GOVERNOR SAWYER LANE
DOVER, NH 03820

Parcel Number: 0025-0019
CAMA Number: 0025-0019
Property Address: 230 BLACK ISLAND RD.

Mailing Address: WATTERS, IAN D.
19 GOVERNOR SAWYER LANE
DOVER, NH 03820

Parcel Number: 0025-0019
CAMA Number: 0025-0019
Property Address: 230 BLACK ISLAND RD.

Mailing Address: WATTERS, IAN D.
19 GOVERNOR SAWYER LANE
DOVER, NH 03820



www.cai-tech.com

11/25/2020

Data shown on this report is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this report.

Page 1 of 2



500 foot Abutters List Report

Poland, ME
November 25, 2020

Parcel Number: 0025-0019
CAMA Number: 0025-0019
Property Address: 230 BLACK ISLAND RD.

Mailing Address: WATTERS, IAN D.
19 GOVERNOR SAWYER LANE
DOVER, NH 03820

Parcel Number: 0025-0020
CAMA Number: 0025-0020
Property Address: 242 BLACK ISLAND RD.

Mailing Address: MADDEN, MARTIN C.
50 SOUTH ST.
WEST NEWBURY, MA 01985

Parcel Number: 0025-0021
CAMA Number: 0025-0021
Property Address: 244 BLACK ISLAND RD.

Mailing Address: POWERS, JOHN R.
244 BLACK ISLAND RD.
OXFORD, ME 04270

Parcel Number: 0025-0022
CAMA Number: 0025-0022
Property Address: 254 BLACK ISLAND RD.

Mailing Address: GUBRUD, DAVID S
6 JOSS HILL RD
SCARBOROUGH, ME 04074

Parcel Number: 0025-0024
CAMA Number: 0025-0024
Property Address: 271 BLACK ISLAND RD.

Mailing Address: CRAWFORD, ALBERT N.
10 LANTERN LANE
MILFORD, MA 01757

Parcel Number: 0025-0025
CAMA Number: 0025-0025
Property Address: 255 BLACK ISLAND RD.

Mailing Address: ENYEDY, MARK J.
24 CONCORD SQUARE APT. 3
BOSTON, MA 02118

Parcel Number: 0025-0026
CAMA Number: 0025-0026
Property Address: 241 BLACK ISLAND RD.

Mailing Address: DULBERG, DAVID A. (TRUSTEE)
241 BLACK ISLAND RD.
OXFORD, ME 04270



www.cai-tech.com

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11/25/2020

Page 2 of 2

Additional Information on 219 Black Island Road from CEO



CEO Office Tel: 207-998-4604
Main Office Tel: 207-998-4601
E-mail: nadams@polandtownoffice.org

Code Enforcement Office

1231 Maine Street,
Poland, Maine 04274

Date: March 29, 2016

Owner: Peter G. & Jane E. Savas
10 County Road
Holliston, MA 01746

Parcel ID: 0025-0027

Hand Delivered and Email

Located at: 219 Black Island Road

Zoning District): Limited Residential (LR) and Rural Residential-1 (R-1)

Dear Mr. and Mrs. Savas,

You were in my office regarding the possibility of an expansion to the existing dwelling and constructing a detached garage located on the above referenced lot. The expansion would be located within the one-hundred (100') feet of the Normal High Water Line (NHWL) of Thompson Lake (Great Pond). During our conversations you displayed a survey which was drawn by Michael Hartman, PLS# 2433, professional surveyor from Jones and Associates, Inc. The survey showed part of dwelling within seventy-five (75') feet from the NHWL and the part of the detached garage within one-hundred (100') feet from the NHWL. Below is a list of the permits issued from the Town:

- Building permit #358, issued in 1980 for the dwelling and attached garage. The minutes of the Planning Board state the following *"Peter and Linda Caradonna – Megquier Island, Poland, made a request for a building permit described as Map 25 lot 27 - #18 on subdivision plan. According to Mr. Chick (Town Manager at time) the lot of record is grandfathered and is 75 ft. back from the water, the leachfield is 100 ft. the house and garage is to code. Approximately a 2 acre lot. Have plumbing Permit. Claude Rounds made a motion to authorize Mr. Chick to issue a Building Permit to Mr. & Mrs. Caradonna, William Eldridge seconded the motion, it passed and the Permit was issued 10-14-1980"*
- Building permit # 1179, issued in 1985 for an 8' x 12' storage building for boat equipment. Permit states Board of Appeals approved the location on 9/3/1985 with a setback of twenty-five (25') feet from the NHWL.
- Building Permit #1332, issued in 1986 for 12' x 20' deck with a setback seventy-five (75') from the NHWL
- Building Permit #1333, issued in 1986 for a 24' dock
- Building Permit #777, issued in 1993 for a detached 24' x 24' garage on slab. The building permit stated, Planning Board approved the permit on 4/13/1993. Minutes from the Planning Board meeting: *"Motion: David Corcoran; to grant a shoreland zoning permit Map 25 Lot 27 to construct a 24' x 24'*

garage. Excavation to take place between May 15 and October 15 with sedimentation and erosion control measures taken." The building permit included the following setback requirements:

- One Hundred (100') foot front (NHWL),
- Forty (40') foot rear,
- Forty (40') foot side, and
- Seventy-Five (75') foot center line of Road.

- Building Permit # 13, issued in 1996 for the following:
 - 2- 4' x 10' dock sections
 - 1- 4' x 10' ramp to shore

The application included a plot plan with the following setbacks to the NHWL shown:

- Dwelling- seventy-six (76') and eighty foot ten Inches (80' 10")
- Detached garage – one hundred (100')
- Deck - seventy-five (75')

- Building Permit # 20-173, issued in 2000 for the following:
 - Covert attached 20' x 24' garage to living space for a family/game room
 - Structure is not to increase in size or volume
- Building Permit # 2004-051, issued in 2004 for the following:
 - Renovate second floor by removing two small dormers and replacing with one larger dormer
 - Also remove balcony and deck on North side of dwelling and replace door and windows
 - Replace deck with flag stone paving but no larger than existing deck
 - Replace interior stairway
 - Certificate of Occupancy is required before use of any structure may begin
- Building Permit #2006-045, issued in 2006 for the following:
 - Repair erosion along north shoreline with rip rap
 - Install a 1,000 gallon propane tank underground along northeast side of house
 - Prepare land by sun room for future expansion
 - Remove approx. 1,000 sq. ft. of paving next to house
 - Replaced decking with patio/walkway(The permit stated that the patio/porch area was six hundred forty-eight (648) square feet)
 - Certificate of Occupancy is required before use of any structure may begin

Setbacks on approved permit were as follows:

- Fifty (50) feet from edge of Right of Way
- Forty (40) feet from Side and Rear lines
- No closer than existing house to water

- Building Permit # 2009-113 issued in 2009 for the following:
 - Repair rotted kneewall, wall studs, trim boards, remove skylights, and bring wall perpendicular to resist water retention. Repair all rot in area.

Throughout the file there were several correspondences mostly pertaining to shoreline stabilization, removing pavement areas, and replacing deck with a stone patio. Almost all of these correspondences included the 1996 plot plan. There were other letters and notices located in the file but are not relevant.

Given all the information above I have made the following conclusion for the permitted structures located on the lot:

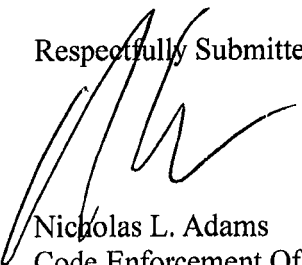
- The dwelling was permitted under the 1974 Shoreland Zoning Ordinance with a seventy-five (75') foot NHWL setback
- The 8' x 12' boat shed was permitted under the 1974 Shoreland Zoning Ordinance, a variance was granted by the Board of Appeals from the seventy-five (75') foot NHWL setback to a twenty-five (25) foot NHWL setback
- A deck was permitted under the 1974 Shoreland Zoning Ordinance for a total square footage of two-hundred forty (240) square feet with a seventy-five (75') foot NHWL setback.
- The detached 24' x 24' garage was permitted under the 1991 Shoreland Zoning Ordinance with a one hundred (100') foot NHWL setback.
- The stone patios were permitted with a total square footage of six hundred forty-eight (648) square feet, with a setback stating no closer to the water than existing deck.

The survey you submitted was digital therefore I could not scale the setbacks however the seventy-five (75') foot and one hundred (100') foot NHWL setback lines were depicted on the survey, the survey illustrates the following structures with an approximate NHWL setback:

- Dwelling with attached stone patio, seventy (70') feet
- Detached garage, eighty (80') feet
- Other Patios, walkways, and boat racks not able to determine the setback distance, however given that the Town does not have permits for the two boat racks on sonotubes, stone patios in excess of six hundred forty-eight (648) square feet and/or stone patio/walkways closer to the NHWL than the existing house/deck, these structures are unpermitted, and appear to be in violation of the ordinance.

In conclusion, the 1974 Shoreland Zoning ordinance required a seventy-five (75') foot setback from the NHWL, the 1991 and current Shoreland Zoning ordinance require a one hundred (100') foot setback from the NHWL. Therefore, all permitted structures that don't meet the required setback at time of permitting and all unpermitted structures appear to be in violation of the minimum NHWL setback requirement. Furthermore, it appears the Permit by Rule (No. 37287) from the Maine Department of Environmental Protection (MDEP) was denied, the one thousand (1,000) square feet of pavement has not been removed and I couldn't determine the amount of impervious surfaces for the lot area within the Limited Residential Shoreland Zone. Please contact this office as soon as possible to discuss the matter and work on a plan of action to correct the apparent violations.

Respectfully Submitted,



Nicholas L. Adams
Code Enforcement Officer

CC: Bradley Plante, Town Manager
Colin Clark, Maine Department of Environmental Protection
Dustin Dorr, Maine Department of Environmental Protection

ENC: 1974, 1991, and current Shoreland Zoning Ordinance excerpts
Copy of Survey

Shoreland Zoning Ordinance for the Town of Poland, Maine

Section 1. Purposes

The purposes of this Ordinance are to further the maintenance of safe and healthful conditions; prevent and control water pollution; protect spawning grounds, fish, aquatic life, bird and other wildlife habitat; control building sites, placement of structures and land uses; and conserve shore cover, visual as well as actual points of access to inland and coastal waters and natural beauty.

Section 2. Applicability

This Ordinance applies to all land areas within 250 ft., horizontal distance, of the normal high water mark of Thompson Lake; Upper, Middle and Lower Range Ponds; Tripp, Mud and Worthley Ponds; Shaker and Estes Bogs; Range, Worthley, Davis, Potash, Cousins, Winter and Meadow Brooks, and the Little Androscoggin River.

Section 3. Effective Date

The effective date of this Ordinance is July 1, 1974. A certified copy of this Ordinance shall be filed with the County Register of Deeds, according to the requirements of State law.

Section 4. A. Validity and Severability

Should any section or provision of this Ordinance be declared by the courts to be invalid, such decision shall not invalidate any other section or provision of this Ordinance.

B. Conflict with Other Ordinances, Laws, Regulations:
Should any section or provision of this ordinance be in conflict with any other duly adopted ordinance or regulation of the Town of Poland or the State of Maine, the more stringent provision shall apply.

Section 5. Amendments
This Ordinance may be amended by a majority vote of the governing body. The State Planning Office shall be notified by Certified Mail, of amendments to this Ordinance, prior to the effective date of such amendments. A file of return receipts from such mailings shall be maintained as a permanent record.

Section 6. Districts and the Zoning Map

The areas to which this Ordinance is applicable are hereby divided into the following districts as shown on the Official Shoreland Zoning Map:

1. Resource Protection District
2. General Development District
3. Limited Residential-Recreational District

The Official Shoreland Zoning Map, and all future amendments thereto, is hereby made part of and incorporated into this Ordinance.

- 1914
4. Signs relating to trespassing and hunting shall be permitted without restriction as to number provided that no such sign shall exceed two (2) square feet in area.
 5. No sign shall extend higher than ten (10) feet above the ground.
 6. Signs may be illuminated only by shielded, non-flashing lights.

L. Soils

1. All land uses shall be located on soils in or upon which the proposed uses or structures can be established or maintained without causing adverse environmental impacts, including severe erosion, mass soil movement, and water pollution, whether during or after construction. Proposed uses requiring subsurface waste disposal, and commercial or industrial development and other similar intensive land uses, shall require a soils report, prepared by a State-certified soil scientist or geologist based on an on-site investigation. Suitability considerations shall be based primarily on criteria employed in the National Cooperative Soil Survey as modified by on-site factors such as depth to water table and depth to refusal.

M. Structures

1. All principal structures in the Resource Protection and Limited Residential-Recreational Districts shall be set back at least 75 feet from the normal high water mark of the bodies of water to which this ordinance applies, as set forth in Section 2.
2. The first floor elevation or openings of all buildings and structures shall be elevated at least two feet above the elevation of the 100 year flood, the flood of record or, in the absence of these, the flood as defined by soil types identifiable as recent flood plain soils.
3. No roof shall rise more than 35 feet above the ground,

N. Timber Harvesting

1. No substantial accumulation of slash shall be left within fifty (50) feet of the normal high water mark of the water bodies of Section 2. At distances greater than fifty (50) feet from the normal high water mark of such waters and extending to the limits of the area covered by this Ordinance, all slash shall be disposed of in such a manner that it lies on the ground and no part thereof extends more than four feet above the ground.
2. Skid trails, log yards, and other sites where the operation of logging machinery results in the exposure of substantial areas of mineral soil shall be located such that an unscarified filter strip is retained between the exposed mineral soil and the normal high water mark of any pond, river, or salt water body as defined. The width of this strip shall vary according to the average slope of the land as follows:

FILE COPY

AMENDMENT TO SHORELAND ZONING
ORDINANCE

May 21, 1991

To: Judith A. Akers, Town Clerk of Poland. A certified copy of an amendment to
the **SHORELAND ZONING ORDINANCE**.

Raymond R. Sweeney

Earl H. Brantlett

John A. Narky

Daniel B. Breyer

MUNICIPAL OFFICERS OF POLAND

A true copy of an amendment to the "**SHORELAND
ZONING ORDINANCE**", as certified to me by the
Municipal Officers of Poland on May 21, 1991.

Judith A. Akers
TOWN CLERK OF POLAND

Enacted June 1, 1991 J. A. Akers, Town Clerk

Principal and Accessory Structures

1. All new principal and accessory structures shall be set back at least one hundred (100) feet from the normal high-water line of great ponds classified GPA and rivers that flow to great ponds classified GPA, and seventy-five (75) feet from the normal high-water line of other water bodies, tributary streams, or the upland edge of a wetland

In addition:

- a. The water body or wetland setback provision shall neither apply to structures which require direct access to the water as an operational necessity, such as piers, docks and retaining walls
- b. All principal structures along Significant River Segments as listed in Title 38 M.R.S.A., Section 437, shall be set back a minimum of one hundred and twenty-five (125) feet from the normal high-water line and shall be screened from the river by existing vegetation. This provision does not apply to structures related to hydropower facilities.

A municipality may within its ordinance, authorize the Planning Board to increase the required setback of a proposed structure, as a condition to permit approval, if necessary to accomplish the purposes of this ordinance. Instances where a greater setback may be appropriate include, but not be limited to, areas of steep slope; shallow or erodible soils; or where an adequate vegetative buffer does not exist.

2. Principal or accessory structures and expansions of existing structures which are permitted in the Resource Protection, Limited Residential, and Stream Protection Districts, shall not exceed thirty-five (35) feet in height. This provision shall apply to structures such as transmission towers, windmills, antennas, and similar structures having no floor area.
3. The first floor elevation or openings of all buildings and structures including basements shall be elevated at least one foot above the elevation of the 100 year flood, the flood of record, or in the absence of these, the flood as defined by soil types identified as recent flood plain soils.
4. The total area of all structures, parking lots and other non-vegetated surfaces, within the shoreland zone shall not exceed 15% (fifteen) percent of the lot or a portion thereof, located within the shoreland zone, including land area previously developed.
5. Notwithstanding the requirements stated above, stairways or similar structures may be allowed with a permit from the Code Enforcement Officer, to provide shoreline access in areas of steep slopes or unstable soils provided; that the structure is limited to a maximum of four (4) feet in width; that the structure does not extend below or over the normal high-water line of a water body or upland edge of a wetland, (unless permitted by the Department of Environmental Protection pursuant to the Natural Resources Protection Act, Title 38, Section 480-C); and that the applicant demonstrates that no reasonable access alternative exists on the property.



Code Enforcement Office

1231 Maine Street,
Poland, Maine 04274-7328

Memorandum

Date: January 30, 2017

To: Board of Selectmen
From: Nicholas L. Adams *NLA*
CC: Bradley Plante, Town Manager
Peter and Jane Savas, property owners
Natalie Burns, Town Attorney
Colin Clark, MDEP

Re: 219 Black Island Road, Consent Agreement

At the October 18, 2016 Board meeting, Mr. Savas presented the Board with a proposed consent agreement for his land use violations. At which time the Board authorized me to work with the Town Attorney Natalie Burns and MDEP, and bring a revised consent agreement back to the Board for consideration.

Since October I have had several conversations with all parties involved and I have drafted a new agreement, which is attached to this memo. The agreement wasn't amended much, the majority of what Colin Clark from MDEP, Natalie and myself mutually agree to, is that all structures/impervious surfaces that do not have a valid permit and are in violation of the CLUC shall be removed. Below is a brief summary of various sections in the new agreement:

- The dwelling and detached garage may stay in place,
- The driveway must be moved to meet the one hundred (100') foot Normal High Water Line (NHWL) setback,
- The boat house must be moved to meet twenty-five (25') foot NHWL setback and fifty (50') foot front setback,
- All patio or decks areas that are not setback seventy (70') feet from the NHWL must be removed,
- Only one walkway/stairway is allowed for access, and
- All areas that are disturbed must be revegetated.

There is a lot more information within the agreement but I highlighted some of the most contentious violations. Mr. Savas, is asking for approval to allow the stone patio near the shoreline and all three (3) walkway/stairways to remain, that he states a previous CEO verbally approved. I have explained to Mr. Savas, that the Town is obligated by state law to enforce the CLUC. That being said, if the Town was to agree to allowing a violation that doesn't have a valid permit to stay, the Town may be subject to an enforcement action from MDEP.

I think the drafted agreement is fair, I understand that some of these violations were performed by prior owners and not the Savas's. Nevertheless, as stated above it's my opinion the Town cannot allow a violation to remain. Feel free to contact me with any questions or concerns.

ADMINISTRATIVE CONSENT AGREEMENT

This Administrative Consent Agreement is entered into this ____ day of _____, 2016 by and between Peter G. Savas and Jane E. Savas (The Landowners), with a mailing address of 472 Beacon Street, Apartment 3, Boston, MA 02115, and the Town of Poland, a municipal corporation located in the County of Androscoggin, State of Maine, with a mailing address of 1231 Maine Street, Poland, ME 04274 (The Town);

WHEREAS, The Landowners purchased property located at 219 Black Island Road in Poland, Parcel ID: Map 25, Lot 27, (The Property) from Thomas E. Davey et al. on October 7, 2003 by deed recorded at the Androscoggin County Registry of Deeds in Book 5666, Page 197; and

WHEREAS, The Landowners have secured a survey of the property prepared by Jones Associates, Inc. dated December 17, 2015 with revised date of January 19, 2016 (Survey) attached hereto as Exhibit A; and

WHEREAS, The Property is located within the Limited Residential Shoreland Zoning District and is subject to regulations under the provisions of The Town's current Comprehensive Land Use Code (CLUC) and, prior to the CLUC, was subject to The Town's former Shoreland Zoning Ordinance(s); and

WHEREAS, The Town Code Enforcement Officer, Nicholas Adams (CEO) has become aware of past zoning violations associated with The Property by his review of The Survey as outlined in his letter to The Landowners dated March 29, 2016 (CEO's Letter) attached hereto as Exhibit B; and

WHEREAS, The Landowners provided a response to the CEO's Letter prepared by Stoneybrook Consultants, Inc. dated May 25, 2016 (Landowners' Response) attached hereto as Exhibit C; and

WHEREAS, The Landowners' Response stated that many of the violations were created by prior owners of The Property; and,

WHEREAS, The Landowners' Response outlines numerous permits granted by Town officials and boards; and,

WHEREAS, The Town finds the following violations have occurred on this property;

1. The home and driveway built in 1980 violates the seventy-five (75') foot setback from the normal high water line (NHWL) of Thompson Lake (Resource), the requirement in effect in 1980. The NHWL setbacks measured on The Survey is sixty-six (66') feet for the home and fifty-five (55') feet for the driveway.
2. The boat shed constructed in 1985 violates a variance granted by the Town of Poland Board of Appeals allowing the boat shed to be constructed with a twenty-five (25') foot NHWL setback. The NHWL setback for the constructed boat shed measured on The Survey is eighteen (18') feet.
3. A deck constructed in 1986 violated the seventy-five (75') foot setback from the NHWL. The NHWL setback of the constructed deck is estimated on The Survey as seventy (70') feet.
4. The deck was removed and was replaced with flagstone paving, with the permit issued by the Town stating that the flagstone paving shall not be any larger than the existing deck.
5. The detached garage built in 1993 violates the one hundred (100') foot NHWL setback. The NHWL setback of the detached garage as measured on The Survey is eighty-four (84') feet.
6. The flagstone paving was replaced with a stone patio. The permit issued by The Town was for six hundred and forty-eight (648) square feet of patio area, with the permitted NHWL setback being no closer than the existing flagstone paving, which The Survey depicts as seventy (70') feet.
7. The three separate walkways/stairways for access to the shoreline violate the provisions of Section 508.27(M)(2)(a) of the CLUC, which allows a single footpath, not to exceed six (6) feet in width, as long as it does not create a cleared line of sight through any buffer and maintains a well distributed stand of trees and other natural vegetation. Under the provisions of Section 508.27(B)(f) of the CLUC, stairways are allowed in areas of steep slopes of twenty percent (20%) or greater over the area for which the access is needed or is located on unstable soils. Stairways require a permit from the Code Enforcement Officer and are limited to a maximum of four (4) feet in width.

WHEREAS, The Landowners and The Town desire to correct past violations as noted to the extent practical; and

WHEREAS, violations of the CLUC are subject to enforcement under the CLUC pursuant to

NOW, THEREFORE. The Town and The Landowners agree as follows:

1. The Landowners will remove the driveway and locate a new driveway entirely outside of the one hundred (100') foot NHWL setback; and
2. The Landowners will relocate or reconstruct/rebuild the boat shed to a location with at least a twenty-five (25') NHWL setback and at location acceptable to the CEO and that is in compliance with the CLUC and the previously granted variance; and
3. The Landowners, will remove all but one walkway for access to the shoreline; and
4. The Landowners, will remove all stone patios/walkways in excess of six hundred and forty-eight (648) square feet of area and which are not in compliance with the previously existing seventy (70') foot NHWL setback. The patios area shall not be expanded or enclosed within the NHWL setback; and
5. All disturbed areas shall be revegetated with grass, shrubs, trees, or a combination thereof, and no further structural development and impervious areas shall be permitted within the NHWL setback; and
6. The Town agrees to allow all improvements shown on the restoration plan (The Plan) to remain in place, attached hereto as Exhibit B. By virtue of this agreement the NHWL setback established for the existing structures shall only be for the structures shown on The Plan. All new structures and impervious areas shall meet the NHWL setback in existence at time of the submittal of the application; and
7. If, The Landowners want to pursue construction of new structures or impervious areas within the lot, then The Landowners shall file an application with Town of Poland Planning Board (Planning Board). The Planning Board will review any application under the provisions of the CLUC in effect at the time of submittal and shall not consider any structures that did not lawfully exist at the time of construction of said structure; and
8. This Agreement shall be binding on The Landowners, their heirs, successors and assigns; and

9. The Landowners agree to pay all costs incurred by The Town in the preparation and execution of this Administrative Consent Agreement, including The Town's attorney's fees; and
10. The Landowners agree to, within thirty (30) days of the signing of this Administrative Consent Agreement, record this agreement and the exhibit's at the Androscoggin County Registry of Deeds, and shall provide a copy of the duly recorded instrument to The Town's Code Enforcement Officer, and
11. The Town agrees that it will take no further enforcement action concerning the above described violations, provided that The Landowner complies fully with the requirements of this Administrative Consent Agreement. In the event that The Landowners fail to comply with those requirements, The Town may pursue an enforcement action under the provisions of 30-A M.R.S.A. Section 4452, and

At a meeting of the Poland Board of Selectmen on _____, 2016, the Board of Selectmen approved the resolution of the above described land use violations.

Done and dated at Poland, Maine this _____ day of _____, 2016

Town of Poland:

By: /s/ _____ /s/ _____
Walter J. Gallagher, Chairman Stanley L. Tetenman, Vice Chairman

/s/ _____ /s/ _____
Janice A. Kimball Stephen Robinson

/s/ _____
James G. Walker, Jr.

STATE OF MAINE

_____ COUNTY

_____, 2016

Personally appeared the above-named Walter J. Gallagher, Chair of the Town of Poland Board of Selectmen, and each acknowledged the foregoing to be his free act and deed in his capacity and the free act and deed of the Town of Poland.

Before me,

Notary Public/Attorney at Law

Print Name: _____

My Commission Expires: _____

Done and dated at Poland, Maine this _____ day of _____, 2016

Landowners:

/s/ _____
Peter G. Savas

/s/ _____
Jane E. Savas

STATE OF MAINE

_____ COUNTY

_____, 2016

Personally appeared the above-named Peter G. Savas and acknowledged the foregoing to be his free act and deed.

Before me,

Notary Public/Attorney at Law

Print Name: _____
My Commission Expires: _____

STATE OF MAINE
_____ COUNTY _____, 2016

Personally appeared the above-named Jane E. Savas and acknowledged the foregoing to be her free act and deed.

Before me,

Notary Public/Attorney at Law
Print Name: _____
My Commission Expires: _____

Old Consent Agreement



Code Enforcement Office

1231 Maine Street, Poland, Maine 04274
(207) 998-4604 sneal@polandtownoffice.org

November 12, 2020

To: Board of Selectpersons
Re: 219 Black Island Rd. Consent Agreement

Map/Lot: 0025-0027

On February 21, 2017, Peter Savas of 219 Black Island Rd. came before the Board to discuss a proposed consent agreement. Mr. Savas at that time was proposing to renovate his home. Because of the violations found by then CEO Nicholas Adams, based on the site plan provided by Mr. Savas, the only way forward was a consent agreement. At the conclusion of the February 21, 2017, meeting with the Board of Selectpersons Mr. Savas felt he had more information in storage that was pertinent to this agreement and stated he would come back in the spring. Mr. Savas never came back before the Board and no consent agreement was ever entered into.

In September of this year I was contacted by Mr. Savas and his architect Kevin Browne. They are now proposing to tear down the existing home and replace it with a new home. The proposed new home if approved by the Planning Board would rectify all the violations stated in the March 29, 2016, letter from Mr. Adams except for the driveway. In the new proposed site plan 655 square feet of the driveway will remain inside the 75' mark. This proposal was sent to Colin Clark and Dustin Door at the Maine Department of Environmental Protection for review. At the time this letter was written the Maine Department of Environmental Protection has not responded to multiple calls and emails. If the Board approves the consent agreement, then Mr. Savas can move forward with his application to the Planning Board.

I think the drafted agreement is fair to all parties. Feel free to contact me with any questions or concerns.

Sincerely,

Scott Neal
Code Enforcement Officer

ADMINISTRATIVE CONSENT AGREEMENT

219 Black Island Road, Poland, Maine

This AGREEMENT is entered into this ___ day of November, 2020, by and between **Peter G. Savas & Jane E. Savas**, whose mailing address is 360 Newbury Street, Unit 509, Boston, Massachusetts 02115 (“Savas”), and the **Town of Poland**, a municipal corporation located in the County of Androscoggin, State of Maine, with a mailing address of 1231 Maine Street, Poland, Maine 04274 (the “Town”).

WHEREAS, Savas owns real property located at 219 Black Island Road, Poland, Maine, which is further identified on Town Assessor’s Map 25 as Lot 27, and which is more particularly described in a deed from Thomas E. Davey, Ruth V. Davey, John J. Davey, Lisa M. Davey, and Michael E. Davey to Peter G. Savas and Jane E. Savas, dated October 10, 2003 and recorded in the Androscoggin County Registry of Deeds in Book 5666, Page 196 (the “Property”); and

WHEREAS, the Property contains a number of improvements or structures, namely a single-family dwelling, a detached garage, a driveway, a shed, a fire pit, a set of boat racks, a wooden set of stairs, and a number of stone walkways, sets of stairs, and patios (collectively the “Improvements”), all of which are more particularly shown on a survey of the Property, prepared by Kevin Browne Architecture, a copy of which is attached hereto as **Exhibit A**, and is incorporated by reference herein (the “Plan”); and

WHEREAS, the Property is located entirely within the Limited Residential Shoreland Zoning District, as defined and regulated by the Town of Poland Comprehensive Land Use Code (the “Code”), as the Property is adjacent to Thompson Lake, a waterbody categorized as a “Great Pond” by the State of Maine; and

WHEREAS, Section 507.2(G) of the Code requires that all structures within the Limited Residential Shoreland Zoning District be set back a minimum of one-hundred (100) feet from the Normal High Water Line of any Great Pond; and

WHEREAS, prior to 1991, the shoreland zoning ordinance in effect within the Town of Poland (the “1974 Ordinance”) required all structures to be set back at least seventy-five (75) feet from the Normal High Water Line (“NHWL”) of any Great Pond; and

WHEREAS, the Town has determined that a number of the Property’s Improvements are in violation of the Code, to wit:

- (a) The single-family dwelling and its attached stone patio, which were constructed in 1980, are located no more than seventy (70) feet from the NHWL of Thompson Lake, in violation of the 1974 Ordinance and the Code; and
- (b) The detached garage, which was permitted and constructed in 1993, is located no more than eighty (80) feet from the NHWL of Thompson Lake,

in violation of the Code and the issued permit; and

- (c) The shed, which was permitted and constructed in 1985, and which received a setback variance from the Town of Poland Board of Appeals, allowing for construction set back twenty-five (25) feet from the Normal High Water Line of Thompson Lake is located less than twenty-five (25) feet from said Normal High Water Line, in violation of the terms of the variance, the 1974 Ordinance, and the Code; and
- (d) The driveway leading from Black Island Road to the dwelling is entirely located less than seventy-five (75) feet from the NHWL of Thompson Lake, in violation of the 1974 Ordinance and the Code; and
- (e) The paver walk, stone walk, stone patio, stone steps, fire pit, and wood steps identified on the Plan as B, C, D, E, F, G, and H, are all located less than 100 feet from the NHWL of Thompson Lake, and did not receive a permit from the Town prior to their construction, in violation of the Code; and
- (f) The boat racks identified on the Plan as I, are located less than 100 feet from the Normal High Water Line of Thompson Lake and did not receive a permit from the Town prior to their construction, in violation of the Code; and

WHEREAS, Savas wishes to submit an application for the large-scale renovation of the Property to the Town's Planning Board; and

WHEREAS, Section 405.1 of the Code states that "[p]ermits for new construction or uses on the property or properties in question are not allowed until after the [outstanding zoning] violation(s) is/are corrected;" and

WHEREAS, Savas and the Town wish to avoid litigation over the above-described zoning issue, and allow Savas to pursue Planning Board approval for their proposed renovations to the Property:

NOW THEREFORE, in consideration of the mutual promises and covenants contained herein, the parties agree as follows:

1. Savas acknowledges the accuracy and enforceability of the Code violations listed in this Agreement and further acknowledges that pursuant to Section 304.3 of the Code, the time period within which Savas may have challenged the determination of these violations has expired.

2. Except as set forth in Section 5, below, Savas shall completely remove all of the above-listed Improvements from the Property, or shall otherwise ensure that none of the Improvements are located within the applicable setback from the NHWL of Thompson Lake.

3. Following the removal or relocation of the Improvements, Savas shall revegetate and restore the affected areas to the satisfaction of the Town's Code Enforcement Officer.

4. The removal and remediation required in Sections 2 and 3 of this Agreement shall be completed to the satisfaction of the Code Enforcement Officer *either*: (1) within 365 days of the date of this Agreement, or (2) within any timeframe required by the Planning Board pursuant to any approval received by Savas, provided that such Planning Board approval must be received within 180 days of the date of this Agreement.

5. Notwithstanding the foregoing, Savas may, subject to review and approval by the Maine Department of Environmental Protection ("MDEP"), retain an approximately 655 square foot portion of the current driveway that is located within the applicable seventy-five (75) foot setback from the NHWL of Thompson Lake in its current location, as more particularly shown on the Plan. Should MDEP not approve this provision, Savas shall remove said portions of said driveway consistent with the timelines contained in this Agreement.

6. The Town will not, however, consider this portion of the driveway to be legally nonconforming, and the same may not be expanded or relocated except in compliance with the Code.

7. Savas agrees to pay to the Town the amount of \$_____, which represents the cost of preparing this Agreement.

8. This Agreement shall be binding on Savas, their heirs, successors and assigns, and it shall be duly recorded by Savas in the Androscoggin County Registry of Deeds within thirty (30) days of the date of this Agreement, with a copy of the duly recorded instrument contemporaneously provided to the Code Enforcement Officer. Savas shall be responsible for all recording costs.

9. Savas acknowledges that they has reviewed this Agreement and understand the requirements and terms set forth herein.

10. This Agreement may be signed in counterpart originals.

[Signatures on Following Page]

Witness

Peter G. Savas

Witness

Jane E. Savas

**TOWN OF POLAND
BOARD OF SELECTPERSONS**

Witness

Mary-Beth Taylor

Witness

Suzette Moulton

Witness

Joseph Cimino

Witness

Stephen Robinson

Witness

Stanley L. Tetenman

STATE OF MAINE
ANDRSCOGGIN, ss.

_____, 2020

Personally appeared before me the above-named Peter G. Savas and Jane E. Savas and acknowledged the foregoing instrument to be their free act and deed.

Before me,

Notary Public/Attorney at Law

Print Name: _____

STATE OF MAINE
ANDROSCOGGIN, ss.

_____, 2020

Personally appeared before me _____ of the above named Board of
Selectpersons and acknowledged the foregoing instrument to be his/her free act and deed in
his/her said capacity and the free act and deed of said Board of Selectpersons.

Before me,

Notary Public/Attorney at Law

Print Name: _____

Scott Neal

From: Clark, Colin A <Colin.A.Clark@maine.gov>
Sent: Thursday, November 19, 2020 11:26 AM
To: Scott Neal; Jane Savas
Cc: Peter Savas; Rick Jones; Kevin Browne; Dorr, Dustin
Subject: RE: Consent Agreement

Ok thank for the follow up. I will let Dustin Talk about the NRPA side of things with the driveway. SLZ wise the driveway is supposed to be set back to the 100 foot mark unless no reasonable alternative exists then the PB could approve the 75 ft location given the size of the lot they would have to demonstrate why no reasonable alternative exists on the site for the driveway. The PB could not approve anything less than 50ft setback if they went that way but again the size of the lot could make that difficult to prove.

In terms of Greatest Practical Extent (GPE) if there is room outside the 100 then that is where they would have to go especially if there is a flat spot at 125 it would be up to their architect to work with the grade of the land. In terms of canopy they would have to revegetate the area and then be in compliance with the clearing standards for the new location so that should not be an issue. On the reveg folks have to think long term on what the site will come back to and they would have to plant all levels of veg as well so that would enhance the buffer and work towards protecting water quality. This is all assuming they are removing more than 50% of the market value of the structure currently in place.

Hope this helps a bit let me know if I can help out in any other way

Take care

Colin A. Clark
Shoreland Zoning Coordinator in the Bureau of Land Resources
Maine Department of Environmental Protection
Tel (207) 441-7419
www.maine.gov/dep

From: Scott Neal <sneal@polandtownoffice.org>
Sent: Thursday, November 19, 2020 11:15 AM
To: Clark, Colin A <Colin.A.Clark@maine.gov>; Jane Savas <jesavas@gmail.com>
Cc: Peter Savas <pgsavas@aol.com>; Rick Jones <rjones@jonesai.com>; Kevin Browne <kevin@kevinbrownearchitecture.com>; Dorr, Dustin <Dustin.Dorr@maine.gov>
Subject: RE: Consent Agreement

EXTERNAL: This email originated from outside of the State of Maine Mail System. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Colin,

It was never my intention for this consent agreement to replace the Planning board review for greatest practical extent or 50% market value. The only thing the consent agreement will allow would be the 655 square feet of driveway remaining on the proposed site plan. This plan would then go to the Planning Board for review. It would be great if either you or Dustin could give some guidance on the driveway. This proposed site plan eliminates every other violation of the 75' setback. I understand the 50% rule on this property but I am a little unclear on greatest practical extent as it

EXTERNAL: This email originated from outside of the State of Maine Mail System. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Scott,

Thank you for the attachments and updates. Once we have a chance to review, we will reach out if we have questions.

Best,

Jane and Peter Savas

On Nov 13, 2020, at 1:59 PM, Scott Neal <sneal@polandtownoffice.org> wrote:

I have attached the information I am providing the Board of Selectpersons for the proposed consent agreement. The meeting is at 7pm on Tuesday November 17, 2020 at the Town Hall adjacent to the Town Office. Masks and social distancing are required to attend this meeting. If you have further questions feel free to contact me.

Scott Neal
Code Enforcement Officer
Town of Poland
sneal@polandtownoffice.org
(207) 998-4604

<Letter to the Board and Proposed Consent Agreement.pdf><Savas Existing and Proposed Site Plan.pdf><Savas Old Consent Agreement 11.12.2020.pdf><Savas Old Violation Letter 11.12.2020.pdf>

pertains to this property. I understand the rule is in place to move these properties back to be more compliant. If you look at this property without looking at the elevations you would say this is easy, place the home outside the 100'. When you look at the property with the elevations it is more likely this home would need to be placed 125' back at the only level spot on this property with the exception of where it is now. Is pushing this back to 125' and opening up a larger area of the canopy and requiring them to re-vegetate the existing site the most practical extent or is making sure they get the building back as far as they can into the hill the most practical extent. If the home ends up behind 100' the driveway inside 75' would most likely be moved as well and there would be no need for the consent agreement. If you could please give me your thoughts on this it would be appreciated.

Scott Neal
Code Enforcement Officer
Town of Poland
sneal@polandtownoffice.org
(207) 998-4604

From: Clark, Colin A <Colin.A.Clark@maine.gov>
Sent: Tuesday, November 17, 2020 4:29 PM
To: Jane Savas <jesavas@gmail.com>; Scott Neal <sneal@polandtownoffice.org>
Cc: Peter Savas <pgsavas@aol.com>; Rick Jones <rjones@jonesai.com>; Kevin Browne <kevin@kevinbrownearchitecture.com>; Dorr, Dustin <Dustin.Dorr@maine.gov>
Subject: RE: Consent Agreement

Sorry for the delay in response your email was sent to the Junk Suspect folder. I have reviewed the CA and one of the important pieces on this issue is whether or not more than 50% of the Market Value of the structure is being removed. Just like a legally existing camp would be if more than 50% of the Market Value is removed then it need to be moved back to the Greatest Practical Extent or to the current setback line. I spoke with Rick Jones and he assured me that less than 50% is being removed but may need to have an appraisal done to confirm therefore the town could conditional approve it and ask for that proof prior to construction.

Scott I left similar messages on both your voicemails as well

Once again sorry for delay I will be more diligent on checking the spam and junk folders

Take care

Colin A. Clark
Shoreland Zoning Coordinator in the Bureau of Land Resources
Maine Department of Environmental Protection
Tel (207) 441-7419
www.maine.gov/dep

From: Jane Savas <jesavas@gmail.com>
Sent: Friday, November 13, 2020 2:24 PM
To: Scott Neal <sneal@polandtownoffice.org>
Cc: Peter Savas <pgsavas@aol.com>; Rick Jones <rjones@jonesai.com>; Kevin Browne <kevin@kevinbrownearchitecture.com>; Clark, Colin A <Colin.A.Clark@maine.gov>; Dorr, Dustin <Dustin.Dorr@maine.gov>
Subject: Re: Consent Agreement



Planning Board Office

1231 Maine Street,
Poland, Maine 04274-7328

Findings of Fact & Conclusion of Law

Date: October 20, 2020

Application Type: Formal Shoreland Zoning Application

Owners Name: State of Maine, Department of Agriculture, Conservation and Forestry, Bureau of Parks and Lands

Located at: 26 State Park Rd.

Parcel ID: 0006-0040A

Zoning Districts: Rural Residential 2, Aquifer Overlay 1, Aquifer Overlay 2, Limited Residential, Resource Protection, and Wetland.

Project Description:

On October 27, 2020, the Bureau of Parks and Lands submitted a Formal Shoreland Zoning Application to add a new control station with a second lane closer to the parking area and remove the existing control station.

303.2.G. In addition to the standards contained elsewhere in Comprehensive Land Use Code (CLUC), the Planning Board shall consider the following in the Shoreland Area as defined:

1. Will maintain safe and healthful conditions

The proposed building will not interfere with the general health or safety of any neighbors. Based on this information the Planning Board (Board) finds that this criterion will be met.

2. Will not result in water pollution, erosion, or sedimentation to surface waters

Based on the plan submitted the Board finds that the issues of water pollution, erosion, or sedimentation to surface waters have been properly addressed. Based on this information the Board finds that this criterion will be met.

3. Will adequately provide for disposal of all wastewater

A vault privy is proposed for this project. Based on this information the Board finds that this criterion will be met.

4. Will not have an adverse impact on spawning grounds, fish, aquatic life, birds, or other wildlife habitat

The structure and the new road are located completely on land and will not have an impact on the spawning grounds, fish, aquatic life, birds, or other wildlife habitat. Based on this information the Board finds this criterion will be met.

5. Will conserve shore cover and visual, as well as actual, points of access to inland waters

The Applicant is proposing to revegetate all disturbed areas. Based on this information above and in the record the Board finds that this criterion will be met.

6. Will protect archaeological and historic resources as designated in the Town of Poland Comprehensive Plan

The parcel and abutting parcels do not appear to be associated with any archaeological or historic resources as designated in the Comprehensive Plan. Therefore, the Board finds that this section is not applicable.

7. Will avoid problems associated with floodplain development and use

The structure associated with this application has a finished floor level that is at least one foot above base flood elevation. Based on this information above and in the record the Board finds that this criterion will be met.

504.3 Non-Conforming Structures

504.3. A. Expansions of Non-Conforming Structures

Expansions of non-conforming structures are not proposed with this application. Therefore, the Board finds that this section is not applicable.

504.3. B. Relocation of Non-Conforming Structures

The Applicant has not proposed to relocate any existing non-conforming structure. Therefore, the Board finds that this section is not applicable.

507.3.C. Reconstruction or Replacement of Non-Conforming Structures

The Board must determine if the proposed structure meets the setbacks to the greatest practical extent. The Board considered the size of the lot, the slope of the land, the potential for soil erosion, the location of other similar structures on the adjacent property, the location of the existing rain gardens and underdrainage, the location of the existing septic system, and the type and amount of vegetation that may need to be removed if the structure would be relocated. The Applicant has not proposed to relocate or replace any existing structures. Therefore, the Board finds that this section is not applicable.

504.3. D. Change of Use of a Nonconforming Structure

This application is not for a change of use of the existing non-conforming structure; therefore, the Board finds that this section is not applicable.

504.3. E. Planning Board Special Review for a Legal Non-Conforming Single-Family Dwelling Located in a Shoreland Zoning District

Setback reductions were not applied for. Therefore, the Board finds that this section is not applicable.

508.27 Shoreland Zoning Standards

508.27.B. Principal and Accessory Structures

Chapter 5 §504.3 provides the performance standards for relocation and/or reconstruction of non-conforming structures. The Applicant has proposed a new accessory structure that meets all required setbacks. Therefore, the Board finds that this section is not applicable.

508.27.C. Multiple Principal Structures

This application does not include multiple principal structures; therefore, the Board finds that this section is not applicable.

508.27.D. Piers, Docks, Wharves, Bridges, and Other Structures and Uses

This application does not include any piers, docks, wharves, bridges, or similar structures; therefore, the Board finds that this section is not applicable.

508.27.E. Individual Private Campsites

This application does not include any individual private campsites; therefore, the Board finds that this section is not applicable.

508.27.F. Parking Areas

There are no proposed parking areas with this application nor is the parcel located in the Resource Protection Shoreland Zoning District; therefore, the Board finds that this section is not applicable.

508.27.G. Roads and Driveways

Parts of the existing road and the expansion of the second lane are located in the Resource Protection Shoreland Zoning District but, are allowed to be expanded per section 508.27.G.2 of the CLUC. Based on this information the Board finds that this criterion will be met.

508.27.H. Storm Water Runoff

The clearing of trees will be less than 10,000 square feet or less than 15% and a 50' buffer will be maintained between the forested wetland and the road. Based on this information and in the record the Planning Board finds that this criterion will be met.

508.27.I. Essential Services

The Applicant has proposed new transmission lines outside the resource protection zone. Based on this information and in the record the Planning Board finds that this criterion will be met.

508.27.J. Mineral Exploration and Excavation Permits

The application is not for mineral exploration or any other mining or gravel pit operations; therefore, the Board finds that this section is not applicable.

508.27.K. Agriculture

The Applicant is not proposing any livestock grazing areas, manure stockpiles, or any agriculture activities within the parcel; therefore, the Board finds that this section is not applicable.

508.27.M. Clearing or Removal of Vegetation for Development Other Than Timber Harvesting or Individual Private Campsites

The proposed removal of any vegetation will be permitted by the Code Enforcement Office and a replanting plan will be needed. Based on this information the Board finds that this criterion will be met.

Conclusion

- The application checklist was approved as complete on October 27, 2020, at which time the Board voted to waive the requirement for a site walk and public hearing.
- The Applicant has provided the Board with a Deed (Book 949, Page 170) showing reasonable right, title, or interest in the property.
- The Board has concluded that they have the jurisdiction to review the application under Chapter 5 §508.27 (Land Uses in the Shoreland Area).

Therefore, the Town of Poland Planning Board hereby approves (4-0) with the following conditions, the application for State of Maine, Department of Agriculture, Conservation and Forestry, Bureau of Parks and Lands to add a new control station with a second lane closer to the parking area and remove the existing control station, as described in the application dated October 27, 2020, and the approved site plan dated October 15, 2020, and the above findings of facts.

Conditions of Approval

- Soil Erosion Control and Stormwater Management Measures shall be in place prior to construction. The Code Enforcement Officer may require additional measures be taken.
- Soil disturbance during the period March 1st to May 1st is prohibited.
- Any disturbed soils shall be revegetated immediately upon completion of construction and any disturbed soils within 100 ft. of the high-water mark shall be revegetated per the approved plan.
- This approval will expire twelve (12) months from the date of Planning Board approval if the project or the use has not been started within this allotted time.
- Building/use permits shall be obtained prior to the start of construction/use.
- A certified person in erosion control practices by the Maine Department of Environmental Protection must be present at the site each day earthmoving activity occurs for a duration that is sufficient to ensure that proper erosion and sedimentation control practices are followed. This is required until erosion and sedimentation control measures have been installed, which will either stay in place permanently or stay in place until the area is sufficiently covered with vegetation necessary to prevent soil erosion.
- The Applicant has agreed to follow the recommendations by Androscoggin County Soil and Water Conservation District regarding pre and post storm water, erosion, and phosphorus issues within the parcel.

- Plan approval is also conditioned upon compliance by the Applicant with the Plans and specifications which have been received by the Planning Board in connection with the development proposal as well as with any oral or written commitments regarding the project which were specifically made by the Applicant to the Board in the course of its deliberations.
- The Applicant must apply for and obtain all applicable permits for the proposed development under the Natural Resources Protection Act, Title 38 M.R.S.A. section 480-C, the Site Location of Development Act, the Erosion and Sedimentation Control law, Title 38 M.R.S.A. section 420-C, the Stormwater Management Law, the Federal Clean Waters Act as delegated to the State of Maine, and all other applicable state and federal laws regulating the use or development of land.
- The new site plan must be recorded with the Androscoggin County Registry of Deeds within 90 days of approval.

Pursuant to Section 304.5.B of the CLUC anyone aggrieved of this decision may file a written appeal within thirty (30) days of date of this decision in accordance with Rule 80-B of the Maine Rules of Civil Procedure.

Date Approved: October 27, 2020
Poland Planning Board

James Porter , Chairperson

Stephanie Floyd, Vice -Chairperson

Cheryl Skilling

Absent without Notice
George Greenwood, Secretary

Cheryl Skilling

James Walker, Alternate



Planning Board Office

1231 Maine Street,
Poland, Maine 04274-7328

Findings of Fact & Conclusion of Law

Application Type: Formal Site plan

Owners Name: Affordable Homes, Inc (753 Empire Rd. Poland, Maine 04274)

Located at: Northern Springs Mobile Home Park

Parcel ID: 0011-0005

Zoning District: Rural Residential 3

509.8 SUBMISSIONS

The Planning Board voted on November 10, 2020, that the application included all the mandatory submissions requirements for the proposed 20 shipping containers to be used as accessory structures and rented to Northern Springs Mobile Home Park tenants. The new accessory structures will be placed on existing impervious surfaces. Based on this information and in the record the Planning Board finds that this criterion will be met.

509.9 SITE PLAN REVIEW STANDARDS

A. Preservation of Landscape:

The Applicant is not proposing any landscape changes to the parcel. Based on this information above and in the record the Planning Board finds that this criterion will be met.

B. Relation of Proposed Buildings to Environment:

The proposed accessory structures will be painted brown or green and will be placed in an existing maintenance area away from the existing homes. Based on this information above and in the record the Planning Board finds that this criterion will be met.

C. Compatibility with Residential Areas:

The property has been a mobile home park several years and the proposed 20 shipping containers used as accessory structures will not alter the existing character of the lot. There is ample parking located on the lot for the proposed use and the proposal will not create any unsightly views, noise, odor, or lighting pollution. Based on this information above and in the record the Planning Board finds that this criterion will be met.

D. Vehicular Access:

This parcel does not appear to contain more than five hundred (500') feet of street frontage on a single street and consists of more than ten (10) acres; therefore, a conceptual access master plan is not required.

Furthermore, the applicant is not proposing any changes to the existing Maine Department of Transportation (MDOT) approved curb cuts. Based on this information and in the record the Planning Board finds that this criterion will be met.

E. Access to Route:

The Maine Department of Transportation (MDOT) has approved the existing location of the driveway entrance. Based on this information and in the record the Planning Board finds that this criterion will be met.

F. Surface Water:

The Applicant has not proposed any changes to the site only the addition of the 20 shipping containers on existing impervious surfaces. Based on this information and in the record the Planning Board finds that this criterion will be met.

G. Conservation, Erosion, and Sediment Control:

The placement of the 20 new shipping containers is on existing impervious surfaces. No vegetation will be disturbed, and erosion control will be in place during construction. Based on this information and in the record the Planning Board finds that this criterion will be met.

H. Phosphorus Export:

No new impervious surfaces will be created; therefore, the Board finds that this section is not applicable.

I. Site Conditions:

The proposed 20 new shipping containers will create minimal changes to the existing parking area. Based on this information and in the record the Planning Board finds that this criterion will be met.

J. Signs:

No new signs are proposed. Based on this information and in the record the Planning Board finds that this criterion will be met.

K. Special Features:

The Applicant is not proposing to install any new mechanical equipment. Based on this information and in the record the Planning Board finds that this criterion will be met.

L. Exterior Lighting:

The Applicant has not proposed to install any new lighting. Based on this information and in the record the Planning Board finds that this criterion will be met.

M. Emergency Vehicle Access:

The proposed 20 new shipping containers will not require emergency access to all sides of the building. The Fire Chief has visited the site and has adequate access to the retention pond and the storage containers from the access road. Based on this information and in the record the Planning Board finds that this criterion will be met.

N. Municipal Services:

All Town departments have not disclosed any concerns with the application as it stands. Based on this information and in the record the Planning Board finds that this criterion will be met.

O. Water Supply:

The property has access to the public water supply. Based on this information and in the record the Planning Board finds that this criterion will be met.

P. Ground Water:

The parcel is not located in an aquifer overlay district. The existing and proposed development shall not result in undue effect of the quality or quantity of ground water. Based on this information and in the record the Planning Board finds that this criterion will be met.

Q. Air Emissions:

The proposed 20 shipping containers will not create any dust, ash, smoke, or other particulate matter and will meet or exceed the standards set by the MDEP. Based on this information and in the record the Planning Board finds that this criterion will be met.

R. Odor Control:

The proposed 20 shipping containers will not produce any offensive or harmful odors. Based on this information and in the record the Planning Board finds that this criterion will be met.

S. Noise:

The Applicant has stated that the proposed 20 shipping containers will meet the Town and MDEP'S minimum noise standards. Based on this information and in the record the Planning Board finds that this criterion will be met.

T. Sewage Disposal

No subsurface waste changes are required for the proposed 20 shipping containers. Based on this information and in the record the Planning Board finds that this criterion will be met.

U. Waste Disposal

The Applicant is proposing no visible on-site waste disposal. Based on this information and in the record the Planning Board finds that this criterion will be met.

V. Buffer Areas

No changes are proposed to the existing buffer areas. Based on this information above and in the record the Planning Board finds that this criterion will be met.

W. Adequate Financial and Technical Capacity

The Applicant has proposed to install each unit as he can afford to install it. Based on this information and in the record the Planning Board finds that this criterion will be met.

X. Conformance with the Comprehensive Plan

The existing historical use of the property is a conforming use in the Rural Residential 3 zoning district and will be in conformance with the Comprehensive Plan. Based on this information and in the record the Planning Board finds that this criterion will be met.

Conclusion

- The Board reviewed the Site Plan application on November 10, 2020, at which time the Board deemed the application as completed and decided to not hold a public hearing or site walk for the application.
- The Applicant has provided the Board with a deed, Book 4981 Page 110, showing reasonable right, title, or interest in the property.
- The Board has concluded that they have the jurisdiction to review the application under Ch. 5 §509.2.A.3.

Therefore, the Town of Poland Planning Board hereby approves, by a vote of 3-0, with the following conditions the application for Affordable Homes, Inc for the proposed 20 shipping containers used as accessory structures as described in the application dated November 10, 2020, the site plan dated October 28, 2020, and the above findings of facts.

Conditions of Approval:

- Plan approval is also conditioned upon compliance by the Applicant with the Plans and specifications which have been received by the Planning Board in connection with the development proposal as well as with any oral or written commitments regarding the project which were specifically made by the Applicant to the Board in the course of its deliberations
- This approval will expire twelve (12) months from the date of Planning Board approval if the project or the use has not been started within this allotted time
- Building/use permits shall be obtained prior to the start of construction/use
- The Applicant must apply for and obtain all applicable permits for the proposed development under the Natural Resources Protection Act, Title 38 M.R.S.A. section 480-C, the Site Location of Development Act, the Erosion and Sedimentation Control law, Title 38 M.R.S.A. section 420-C, the Stormwater Management Law, the Federal Clean Waters Act as delegated to the State of Maine, and all other applicable state and federal laws regulating the use or development of land.
- The proposed storage containers may only be used by the tenants of Northern Spring Mobile Home Park, Maplewood Estates, and Affordable Homes, Inc.

Pursuant to Section 304.5.B of the CLUC anyone aggrieved of this decision may file a written appeal within thirty (30) days of date of this decision in accordance with Rule 80-B of the Maine Rules of Civil Procedure.

Date Approved: November 10, 2020
Poland Planning Board

James Porter, Chairman

Absent with Notice

Stephanie Floyd, Vice Chairman

George Greenwood, Secretary

Absent with Notice

Cheryl Skilling, Member

James Walker, Member