

**MAJOR SUBDIVISION
PRELIMINARY PLAN APPLICATION
TO TOWN OF WINDHAM**

FOR

**DEPOT STREET RESIDENTIAL
DEVELOPMENT**

**DEPOT STREET
WINDHAM, MAINE**

PREPARED FOR

**MCL REALTY, LLC
PO BOX 1206
WINDHAM, ME 04062**

PREPARED BY

DM ROMA
CONSULTING ENGINEERS

**PO BOX 1116
WINDHAM, ME 04062**

NOVEMBER 18, 2019

Preliminary Plan - Major Subdivision

Project Name: DEPOT STREET RESIDENTIAL DEVELOPMENT

Tax Map: 38 Lot: 37-A

Number of lots/dwelling units: 32 Estimated road length: N/A PRIVATE DRIVEWAY

Is the total disturbance proposed > 1 acre? ☒ Yes ☐ No

Contact Information

1. Applicant

Name: MCL REALTY, LLC

Mailing Address: PO BOX 1206, WINDHAM, ME 04062

Telephone: _____ Fax: _____ E-mail: _____

2. Record owner of property

X (Check here if same as applicant)

Name: _____

Mailing Address: _____

Telephone: _____ Fax: _____ Email: _____

3. Contact Person/Agent (if completed and signed by applicant's agent, provide written documentation of authority to act on behalf of applicant)

Name: DUSTIN ROMA

Company Name: DM ROMA CONSULTING ENGINEERS

Mailing Address: PO BOX 1116, WINDHAM, ME 04062

Telephone: 310 - 0506 Fax: _____ E-mail: DUSTIN@DMROMA.COM

I certify all the information in this application form and accompanying materials is true and accurate to the best of my knowledge.


Signature

11-18-19
Date

Preliminary Plan - Major Subdivision: Submission Requirements

A. Mandatory Written Information		Applicant	Staff
1	A fully executed and signed application form	X	
2	Evidence of payment of the application and escrow fees	X	
3	Proposed name of the subdivision	X	
4	Verification of right, title, or interest in the property, and any abutting property, by deed, purchase and sales agreement, option to purchase, or some other proof of interest.	X	
5	Copy of the most recently recorded deed for the parcel, along with a copy of all existing deed restrictions, easements, rights-of-way, or some other proof of interest	X	
6	Copy of any existing or proposed covenants or deed restrictions intended to cover all or part of the lots or dwellings in the subdivision	X	
7	Copy of any existing or proposed easements on the property	X	
8	Name, registration number and seal of the Maine Licensed Professional Land Surveyor who conducted the survey	X	
9	Name, registration number and seal of any other licensed professional of the state who prepared the plan (if applicable)	X	
10	An indication of the type of sewage disposal to be used in the subdivision		
	i. If connecting to public sewer, provide a letter from Portland Water District stating the District has the capacity to collect and treat the waste water	PENDING	
	ii. If using subsurface waste water disposal systems (septic), submit test pit analyses prepared by a Maine Licensed Site Evaluator or Certified Soil Scientist. Test pit locations must be shown on a map.	N/A	
11	Indicate type of water supply system(s) to be used in the subdivision.	PUBLIC	
12	If connecting to public water, submit a written statement from the Portland Water District indicating there is adequate supply and pressure for the subdivision.	PENDING	
13	Names and addresses of the record owner, applicant, and adjoining property owners	X	
14	An acceptable title opinion proving right of access to the proposed subdivision or site for any property proposed for development on or off of a private way or private road.	N/A	
15	The name and contact information for the road association who's private way or road is used to access the subdivision.	N/A	

		Applicant	Staff
16	Financial Capacity.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	i. Estimated costs of development, and itemization of major costs	X	
	ii. Financing - provide one of the following:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	a. Letter of commitment to fund from financial institution, governmental agency, or other funding agency	PENDING	
	b. Annual corporate report with explanatory material showing availability of liquid assets to finance development		
	c. Bank statement showing availability of funds if personally financing development		
	d. Cash equity commitment		
	e. Financial plan for remaining financing		
	f. Letter from financial institution indicating an intention to finance		
	iii. If a corporation, Certificate of Good Standing from the Secretary of State	X	
17	Technical Capacity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	i. A statement of the applicant's experience and training related to the nature of the development, including developments receiving permits from the Town.	X	
	ii. Resumes or similar documents showing experience and qualifications of full-time, permanent or temporary staff contracted with or employed by the applicant who will design the development.	X	

B. Mandatory Plan Information			
1	Name of subdivision, date and scale	X	
2	Stamp of the Maine License Professional Land Surveyor that conducted the survey, including at least one copy of original stamped seal that is embossed and signed	X	
3	Stamp with date and signature of the Maine Licensed Professional Engineer that prepared the plans.	X	
4	North arrow identifying all of the following: Grid North, Magnetic North, declination between Grid and Magnetic, and whether Magnetic or Grid bearings were used in the plan design	X	
5	Location map showing the subdivision within the municipality	X	
6	Vicinity plan showing the area within 250 feet, to include:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	i. approximate location of all property lines and acreage of parcels	X	
	ii. locations, widths, and names of existing, filed, or proposed streets, easements or building footprints	X	
	iii. location and designations of any public spaces	X	
	iv. outline of proposed subdivision, together with its street system and indication of future probably street system, if the proposed subdivision encompasses only part of the applicants entire property.	X	
7	Standard boundary survey of parcel, including all contiguous land in common ownership within the last 5 years	X	
8	Proposed lot lines with approximate dimensions and area of each lot.	X	
9	Contour lines at 2-foot intervals, or at intervals required by the Board, showing elevations in relation to the required datum.	X	

		Applicant	Staff
10	Typical cross sections of the proposed grading for roadways, sidewalks, etc., including width, type of pavement, elevations, and grades.	×	
11	Wetland areas shall be delineated on the survey. If none, please note.	×	
12	Number of acres within the proposed subdivision, location of property lines, existing buildings, vegetative cover type, specimen trees, if present, and other essential existing physical features.	×	
13	Rivers, streams, and brooks within or adjacent to the proposed subdivision. If any portion of the proposed subdivision is located in the direct watershed of a great pond, note which great pond.	×	
14	Zoning district in which the proposed subdivision is located, and the location of any zoning boundaries affecting the subdivision.	×	
15	Location & size of existing and proposed sewers, water mains, culverts, bridges, and drainage ways on or adjacent to the property to be subdivided. The Board may require this information to be depicted via cross-section, plan or profile views.	×	
16	Location, names, and present width of existing streets, highways, easements, building lines, parks, and other open spaces on or adjacent to the subdivision	×	
17	Location and widths of any streets, public improvements, or open space within the subdivision (if any) shown on the official map and the comprehensive plan	×	
18	All parcels of land proposed to be dedicated to public use and the conditions of such dedication.	×	
19	Location of any open space to be preserved or common areas to be created, and general description of proposed ownership, improvement, and management	×	
20	Approximate location of treeline after development	×	
21	Delineate boundaries of any flood hazard areas and the 100-year flood elevation as depicted on the Town's Flood Insurance Rate Map	×	
22	Show any areas within or adjacent to the proposed subdivision which have been identified by the Maine Department of Inland Fisheries and Wildlife "Beginning with Habitat project maps or within the Comprehensive Plan..	×	
23	Show areas within or adjacent to the proposed subdivision which are either listed on or eligible for the National Register of Historic Places, or have been identified in the comprehensive plan or by the Maine Historic Preservation Commission as sensitive or likely to contain such sites	×	
24	Erosion & Sedimentation control plan, prepared in accordance with MDEP Stormwater Law Chapter 500 Basic Standards, and the MDEP Maine Erosion and Sediment Control Best Management Practices, published March 2003.	×	
25	Stormwater management plan, prepared by a Maine Licensed Professional Engineer in accordance with the most recent edition of Stormwater Management for Maine: BMPS Technical Design Manual, published by the MDEP 2006.	×	
26	For Cluster Subdivisions that do not maximize the development potential of the property being subdivided, a conceptual master plan for the remaining land showing future roads, Open Space, and lot layout, consistent with the requirements of 911.K., Cluster Developments will be submitted.	N/A	

C. Submission information for which a waiver may be granted.		Applicant	Staff
1	High-intensity soil survey by a Certified Soil Scientist	WAIVER	
2	Landscape Plan	X	
3	Hydrogeologic assessment - required if i) subdivision is not served by public sewer and <u>either</u> any part of the subdivision is over a sand and gravel aquifer <u>or</u> has an average density of more than one dwelling unit per 100,000 square feet, or ii) where site considerations or development design indicate greater potential of adverse impacts on groundwater quality.	N/A	
	a) map showing basic soil types		
	b) depth to the water table at representative points		
	c) Drainage conditions throughout the subdivision		
	d) data on existing ground water quality		
	e) analysis and evaluation of the effect of the subdivision on groundwater		
	f) map showing location of any subsurface wastewater disposal systems and drinking water wells within the subdivision & within 200 feet of the subdivision boundaries.		
4	Estimate of the amount and type of vehicular traffic to be generated on a daily basis and at peak hours	PENDING	
5	Traffic Impact Analysis for subdivisions involving 28 or more parking spaces or projected to generate more than 140 vehicle trips per day.	PENDING	
6	If any portion of the subdivision is in the direct watershed of a great pond,		
	i) phosphorous impact analysis and control plan	N/A	
	ii) long term maintenance plan for all phosphorous control measures		
	iii) contour lines at an interval of 2 feet		
	iv) delineate areas with sustained slopes greater than 25% covering more than one acre		
Electronic Submission		X	

**TOWN OF WINDHAM
SUBDIVISION & SITE PLAN APPLICATION**

Performance and Design Standards Waiver Request Form

(Section 808 – Site Plan Review, Waivers)
(Section 908 – Subdivision Review, Waivers)

For each waiver request from the Performance and Design Standards detailed in Section 811 or Section 911 of the Town of Windham Land Use Ordinance, as applicable, please submit a separate completed copy of this waiver request form.

Subdivision or Project Name:

Tax Map: Lot:

**Waivers are requested from the following Performance and Design Standards
(add rows as necessary):**

Ordinance Section	Standard	Mark which waiver this form is for
552-D-8-G	PRIVATE ROAD CONNECTION REQUIREMENT	X
910.C.1.C.1	HIGH INTENSITY SOIL SURVEY	X

- a. Describe how a waiver from the standard indicated above will improve the ability of the project to take the property's pre-development natural features into consideration. Natural features include, but are not limited to, topography, location of water bodies, location of unique or valuable natural resources, relation to abutting properties or land uses. Attach a separate sheet if necessary.

THE FURTHEST DWELLING UNIT FROM DEPOT STREET IS 330 FEET AWAY, AND THERE IS AN EMERGENCY SECONDARY ACCESS DIRECTLY FROM THE SOUTH WINDHAM FIRE STATION PROPERTY.

ALL SOILS ON THE PROPERTY ARE MAPPED AS EITHER SOIL GROUP D OR WETLANDS, SO OUR ANALYSIS ASSUMES POOR SOIL CONDITIONS. THE BUILDINGS WILL REQUIRE A GEOTECHNICAL ANALYSIS OF THE SOILS FOR FOUNDATION DESIGN, WHICH WILL BE COMPLETED AS PART OF THE BUILDING PERMIT PACKAGE.

(continued next page)

Ordinance Section: 552-D-8-G

b. Will the waiver have an impact on any of the following criteria?

	Yes	No
Water or air pollution		×
Light pollution or glare		×
Water supply		×
Soil erosion		×
Traffic congestion or safety		×
Pedestrian safety or access		×
Supply of parking		×
Sewage disposal capacity		×
Solid waste disposal capacity		×
Scenic or natural beauty, aesthetics, historic sites, or rare or irreplaceable natural areas		×
Flooding or drainage issues on abutting properties		×
The Town's ability to provide the subdivision with public safety services (if subdivision)		×

If granting the waiver will result in an impact on any of the criteria above, please provide more detail below.

PROJECT NARRATIVE

SECTION 1 – PROPOSED USE NARRATIVE

The property is a 2.1-acre lot with frontage access from Depot Street. The parcel was previously part of a commercial condominium (See plan sheet 2) and has been separated from the condominium. The proposed development includes the construction of 32 dwelling units in 6 buildings. Two of the buildings are intended to be 3 stories with 12 units each. Four of the buildings will be duplex style. A paved driveway with parking spaces for 64 vehicles will be constructed, which equates to 2 parking spaces per dwelling unit. The dwellings are intended to be rented apartments, and may be converted to condominium ownership in the future. The project will be served by public water and public sewer from the Portland Water District, and will connect into new infrastructure that is currently being designed and planned for construction by the District and Town. A new sewer pump station will be built by the Town and District, and will be located on the subject property. Electrical service and a gas service will be extended to the units underground.

SECTION 2 – RECORD OWNER INFORMATION

See Application Form

SECTION 3 – ABUTTING PROPERTY OWNERS

See Boundary Survey and Subdivision Plan

SECTION 4 – TITLE, RIGHT, OR INTEREST

See attached deed.

SECTION 5 – COVENANTS OR DEED RESTRICTIONS

The lots are intended to be apartments under common ownership, and may be converted to condominium ownership in the future. The owner or condominium association will maintain all common facilities including driveways, stormwater management components, roadways, septic systems and lawn areas.

SECTION 6 – EASEMENTS

The existing easement for access and utilities will be modified to be placed over the new driveway and utility corridor.

SECTION 7 – LICENSED PROFESSIONALS

The plans and applications were prepared by DM Roma Consulting Engineers. Dustin Roma is a Maine Licensed Professional Engineer PE#12131. The wetland boundaries were delineated by Alex Finamore, a licensed site evaluator and wetland scientist with Mainely Soils, LLC.

SECTION 8 – TECHNICAL ABILITY

The design professionals at DM Roma Consulting Engineers and Mainely Soils have been performing similar consulting and design work in Southern Maine for many years, including many projects in Windham and the surrounding communities.

SECTION 9 – UTILITIES

The project will be served with domestic potable water and sewer collection by the Portland Water District. The District will review the project development plans and provide a letter indicating their ability to serve the project upon completion of their review.

SECTION 10 – WATER SUPPLY AND SEWAGE DISPOSAL

See section 9.

SECTION 11 – SOLID WASTES

A proposed dumpster location has been shown on the plans, and will be hauled by a private contractor. The dumpster will be screened with a fence.

SECTION 12 – VEHICLE TRAFFIC

A vehicle traffic memorandum is currently being prepared and will be submitted upon completion.

SECTION 13 – UNIQUE NATURAL AREAS

There are no known unique natural areas within the project vicinity.

SECTION 14 – STORMWATER MANAGEMENT

The project requires a Stormwater Permit from the Maine Department of Environmental Protection. The project design includes the installation of Filterra stormwater treatment devices that will flow to a subsurface Stormtech Chamber System to provide water quality treatment and channel protection volume peak-flow attenuation. Calculations

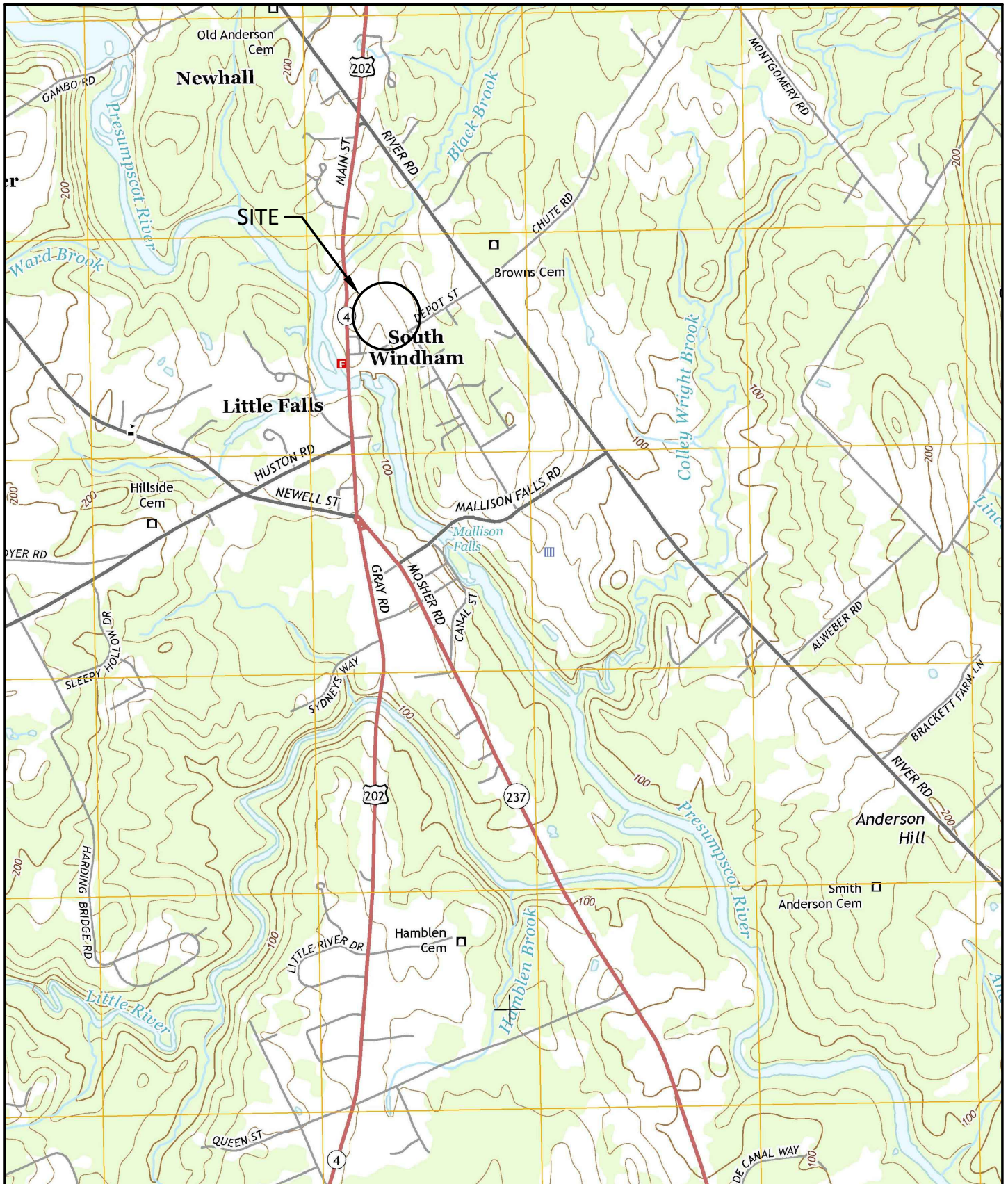
are attached showing how the project has been designed to meet the MDEP Chapter 500 General Standards. Once the MDEP has accepted the Stormwater Permit Application as complete, we will submit a copy of the design calculations and maintenance plan for Town review.

SECTION 15 – FINANCIAL CAPACITY

The expected construction costs to complete the sitework portion of the project, excluding building foundations, are as follows:

• Clear and grub site	\$15,000
• Common Excavation to Subgrade	\$60,000
• Construct gravel drives & parking	\$60,000
• Bituminous Pavement	\$50,000
• Electrical Conduit & Risers	\$20,000
• Sewer Service	\$35,000
• Stormwater BMPs	\$80,000
• Water service	\$25,000
• Loam & Seed	\$20,000
• Erosion Control & Misc.	\$25,000
 Total Construction Costs	 \$390,000

The applicant already owns the land, so land costs were not included in the project budget. A letter indicating the ability to fund the project will be submitted with the final plan.



VICINITY MAP

DEPOT STREET DEVELOPMENT
WINDHAM, MAINE

FOR:
MCL REALTY, LLC

SCALE: 1"=2000'
DATE: 8-19-2019
JOB NUMBER: 17035

DM ROMA

CONSULTING ENGINEERS

PO BOX 1116
WINDHAM, ME 04062
(207) 310 - 0506



MAINE

Department of the Secretary of State

Bureau of Corporations, Elections and Commissions

Corporate Name Search

Information Summary

[Subscriber activity report](#)

This record contains information from the CEC database and is accurate as of: Mon Nov 18 2019 12:36:45. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status
MCL REALTY LLC	20091364DC	LIMITED LIABILITY COMPANY (DOMESTIC)	GOOD STANDING

Filing Date	Expiration Date	Jurisdiction
11/26/2008	N/A	MAINE

Other Names (A=Assumed ; F=Former)

NEW MCL REALTY LLC	F
--------------------	---

Clerk/Registered Agent

TIMOTHY J. BRYANT
PO BOX 9546
PORTLAND, ME 04112

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\(\\$30.00\)](#)

[Long Form with
amendments
\(\\$30.00\)](#)

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MAINE WARRANTY DEED

State of Maine

County of Cumberland, SS.

Peter V. Anania, President of Anania & Associates. of Cumberland, County, Maine, for consideration paid, hereby grants to MCL Realty LLC of Gorham, Cumberland County, Maine, with Warranty Covenants, the land together with the buildings and improvements thereon located at 7 Mechanic Street, Windham, Cumberland, County, Maine, bounded and described as follows:

Attached as Schedule A

Peter V. Anania duly authorized President of Anania & Associates sets his hand and seal this First day of January, 2008.

Anania & Associates


Peter V. Anania, President


Witness

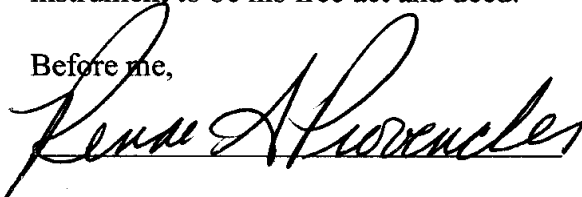
State of Maine

County of Cumberland, SS.

January 1, 2008

Then personally appeared the above named Peter V. Anania and acknowledged the foregoing instrument to be his free act and deed.

Before me,


Notary Public

SEAL

Renae A. Provencher
Notary Public, State of Maine
My Commission Expires September 9, 2011

EXHIBIT A

A certain lot or parcel of land with the buildings thereon situated in the Town of Windham, County of Cumberland and State of Maine, located on the Windham side of the river in the village of South Windham, and bounded and described as follows, to wit:

Beginning at the northwest corner of land now or formerly of Frank Bryant which lays on the easterly side of Mechanic Street; thence northeasterly along the line of said Bryant land sixty (60) feet, more or less, to the northeast corner of said Bryant land; thence southerly along the line of said Bryant land forty-six (46) feet, more or less, to the northerly sideline of land now or formerly of George P. Adjutant; thence easterly along the line of said Adjutant land two hundred thirty-two feet and six inches (232' 6"), more or less, to the easterly corner of said Adjutant land; thence southerly along the line of said Adjutant land one hundred twenty-eight feet and four inches (128' 4"), more or less, to the road leading from the Gray Road to the Maine Central Depot and known as Depot Street; thence easterly along said Depot Street two hundred and forty (240) feet, more or less, to the southwesterly corner of land now or formerly of the Maine Central Railroad Company; thence northerly along the line of said Maine Central Railroad Company land four hundred and sixty (460) feet, more or less, to a point in the westerly sideline of said Maine Central Railroad track location; thence in a northwesterly direction along the sideline of said Maine Central Railroad location one hundred thirty-six feet and four inches (136' 4"), more or less, to an iron hub at the southeast corner of land now or formerly of Fred Cash; thence in a westerly direction along the line of said Cash land four hundred thirty-six (436) feet, more or less, to an iron hub in the easterly line of land now or formerly of William C. Jordan; thence in a southerly direction along the line of said Jordan land and land now or formerly of Silas Edwards two hundred seventy-four feet and five inches (274' 5"), more or less, to the southeast corner of said Edwards land; thence in a southwesterly direction along the line of said Edwards land thirty-five feet and seven inches (35' 7"), more or less, to the easterly sideline of said Mechanic Street; thence southerly along the easterly sideline of said Mechanic Street fifty-nine feet and six inches (59' 6"), more or less, or to the point of beginning.

Being the first parcel described in a deed to Genevieve C. True and Frank C. True from Genevieve C. True dated August 17, 1992, and recorded at the Cumberland County Registry of Deeds in Book 10234, Page 202.

EXCEPTING from the above parcel the following outconveyances of record:

1. Deed from Josephine E. Nichols to Aaron G. Peabody dated October 4, 1915, and recorded at the Cumberland County Registry of Deeds in Book 956, Page 465.
2. Deed from Josephine E. Nichols to John Gerry dated September 25, 1917, and recorded at the said Registry in Book 1002, Page 323.
3. Deed from Josephine E. Nichols to L. C. Andrew dated October 21, 1936, and

recorded at said Registry in Book 1659, Page 289.

4. Deed from Emily N. Dow to L. C. Andrew dated April 30, 1956, and recorded at said Registry in Book 2594, Page 46.
5. Deed from John C. Nichols, et al. to Laurence C. Andrew dated July 28, 1948, and recorded at said Registry in Book 2605, Page 455.
6. Deed from Emily N. Dow to L. C. Andrew dated April 30, 1955, and recorded at said Registry in Book 2605, Page 467.

TOGETHER WITH a right of way reserved in a deed from Emily N. Dow to L. C. Andrew dated April 30, 1955 and recorded in the Cumberland County Registry of Deeds in Book 2605, Page 467.

ALSO, all my right, title, and interest in another certain lot or parcel of land located in the village of South Windham, County of Cumberland and State of Maine, and bounded and described as follows, viz:

Beginning at the southeasterly corner of land now or formerly of Silas B. Edwards; thence northerly on the division line between said Edwards land and land now or formerly of Josephine E. Nichols seven feet and nine inches (7' 9") to an iron hub; thence southwesterly thirteen feet and eight inches (13' 8") to an iron hub set in the division line between land of said Edwards and Nichols; thence easterly on said division line ten feet or to the point of beginning.

Reference is made to a deed from Silas B. Edwards to Josephine E. Nichols dated January 14, 1913, and recorded at the Cumberland County Registry of Deeds in Book 909, Page 27.

Said premises are subject to such a state of facts as an accurate survey might disclose and to any and all provisions or any ordinance, municipal regulation, executive order or public or private law, easement, agreement, right of way, building and building line restrictions as appearing of record.

Meaning and intending to convey the same premises conveyed to Carol Ricci from Genevieve C. True and Frank C. True by deed dated November 30, 2001 and recorded at the Cumberland County Registry of Deeds in Book 17029, Page 304; further reference may be had to a subsequent deed from Carol Ricci to Carol Ricci dated March 25, 2004 and recorded at said Registry in Book 21206, Page 67.

O:\CTC\Anania & Associates\purchase of Mechanics Street\Deed.doc

Received
Recorded Register of Deeds
Feb 05, 2009 03:09:14P
Cumberland County
Pamela E. Lovley



To: Dustin Roma
DM Roma Consulting Engineers
PO BOX 1116 Windham, ME
04062

Date: September 12, 2019

From: Alexander A. Finamore, CWS, LSE
Mainely Soils, LLC

Re: Depot Street Lot, Windham, ME – Wetland Delineation
Memorandum

At the request of DM Roma Consulting Engineers (the “Client”), Mainely Soils, LLC conducted on-site wetland and waterbody delineations at an approximately 2.08 acre parcel located on the north side of Depot Street in Windham, Maine. The property owner proposes to develop residential units on the property. These field investigations were performed to provide baseline environmental data to inform the proposed expansion of use of the site. The natural resources assessments described in this report were completed in September 2019. In addition to describing the identified resources this report describes the existing conditions within the study area, and the methodologies employed for the assessments.

PROJECT DESCRIPTION

The project site is located within a zone of Village Commercial development along the Main Street corridor in the Town of Windham. The proposed development site is currently vacant open land. Surrounding land use of the site is residential to the west and commercial/industrial to the north, east, and south. Access to the site is from Depot Street to the south. In total, the wetland and waterbody delineation survey area encompassed approximately 2.08 acres identified by the Town of Windham as Tax Map 38, LOT 37A.

SITE DESCRIPTION

The Study Area occurs in the Sebago-Ossipee Hills & Plains biophysical region of Maine (Schlawin & Cutko, 2014). The Sebago-Ossipee Hills & Plains biophysical region is characterized by variable topography, ranging from plains to low hills of low relief along the Atlantic coast. Interior areas are high hills to semi-mountainous, parts of which were glaciated. Vegetation is characterized by tall, cold-deciduous broadleaf forests that have a high proportion of mesophytic species. Bedrock geology is varied and complex, consisting of sedimentary, igneous, and metamorphic rocks. Forest vegetation includes oak-hickory, white-red-jack pine, maple-beech-birch, and aspen-birch cover types. The survey area is located within the Presumpscot River watershed (Hydrologic Unit Classification (HUC) 8 identification 01060001).

The Natural Resource Conservation Service soil survey mapping identifies native soils at the site as formed within glaciomarine or glaciolacustrine deposits on coastal lowlands and river valleys (Scantic series) (Web Soil Survey, 2019). The Scantic series is a poorly drained soil map unit with areas of wetlands.

Study Methodology

Mainely Soils conducted wetland delineation field work within the survey area on September 9, 2019. The boundary of wetlands were delineated in accordance with the Army Corps of Engineers 1987 Wetland Delineation Manual (1987 Manual) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0) (Regional Supplement, 2012). All wetland delineations were conducted using the Routine Determination Methods, which requires that a wetland contain a dominance of hydrophytic vegetation, hydric soils, and

evidence of hydrology in order to be considered a wetland. Wetland boundaries were located and demarcated using blue survey flagging, with each flag labeled with the corresponding alphabetic wetland identification code and a flag number (i.e. A-1). Wetland flag locations were recorded in the field using a Trimble® GPS unit capable of sub meter accuracy, post processed, and transferred and provided to the Client for incorporation into Project mapping.

One wetland area was identified within the study area. Additional field notes were also taken to record the classification of each wetland in accordance with the Classification of Wetlands and Deepwater Habitats of the United States, general site characteristics, unique qualities observed during the site assessment, and other considerations relevant to investigation findings and the future completion of a wetlands functions and values assessment in accordance with the Highway Methodology Workbook: Supplement. Representative photographs of each wetland were taken, field sketches were labeled of the wetland boundary on an aerial photograph-based map, and notes were recorded on the flagging sequence for each wetland.

Mainly Soils also surveyed the site for streams, in accordance with the State of Maine Natural Resources Protection Act stream criteria and definitions. One stormwater drainage associated with stormwater culvert outfalls was identified within Wetland A1, but no streams were identified within the study area.

Vernal pools are small (usually less than one acre), seasonal wetlands that lack perennial inlet or outlet streams and have no permanent fish populations (Calhoun and deMaynadier 2004). Vernal pools are valuable wetland wildlife habitat because of their potentially high biological productivity and use as breeding habitat by specialized animal communities. The characteristics of vernal pools including size, duration of flooding, substrate type and vegetative community are directly affected by a variety of factors such as landscape setting, surficial geology, soil type, and surrounding vegetation (Maine Audubon Society 1999).

As onsite investigations took place in September outside of the vernal pool indicator breeding season, a preliminary Vernal pool survey was conducted on the subject site to identify and potential pool locations. No depressions holding water with the potential to contain vernal pool species were identified anywhere within the Study Area.

Study Results

Using the methodologies described above, a wetland delineation was performed on September 9, 2019. A description of the identified resources follows. Supporting attachments include Representative Photographs (Attachment 1). Wetland Delineation Data Forms can be provided upon request.

Wetlands at the project site consisted of one contiguous wetland feature. The wetland drained in a southerly direction towards Depot Street. Wetland hydrology was provided from four stormwater outfalls near the northern extents of the site. The wetland was classified as a palustrine forested seasonally saturated wetland dominated by deciduous shrubby vegetation (PSS1E)(Cowardin et al, 1979) located in a natural depression in the surrounding landscape. Wetlands onsite were identified as Wetland A1 on the onsite flagging. Dominant wetland vegetation within Wetland A1 consisted of red maple (*Acer rubrum*), black willow (*Salix nigra*), arrowwood (*Viburnum dentatum*), speckled alder (*Alnus incana*), Morrow's honeysuckle (*Lonicera morrowii*), fringed sedge (*Carex crinita*), rough stemmed goldenrod (*Solidago rugosa*), jewelweed (*Impatiens capensis*), sensitive fern (*Onoclea sensibilis*), royal fern (*Osmunda regalis*), and cinnamon fern (*Osmunda cinnamomea*). Soils consisted of a dark mucky surface with overlaying a depleted silt loam substratum. Evidence of wetland hydrology at the time of delineation was a water table and saturation observed up to the mineral soil surface and water stained vegetation.

One drainage feature was observed associated with four stormwater outfalls along the northern extents of the site. The stormwater outfalls were associated with a large industrial yard to the north and contained iron stained waters. No jurisdictional streams were observed onsite.

No potential vernal pool locations were identified onsite during field investigations.

Summary

The information contained in this memorandum was collected in order to provide detailed, on-site information regarding wetland and waterbody resources. This information is intended to be used for project planning purposes and to support permitting needs. One scrub-shrub wetland area was delineated on the site, and was identified as Wetland A1. Wetland A1 was located in a large depression in the central portion of the site. Wetland A1 exhibited a saturated hydroperiod, and provided groundwater discharge, floodflow alteration, and stormwater/water quality maintenance functions.

Wetlands are regulated by the U.S. Army Corps of Engineers under the federal Clean Water Act, and by the Maine Department of Environmental Protection under the Maine Natural Resources Protection Act (NRPA). The State of Maine further differentiates wetlands under NRPA by regulating certain wetlands as “wetlands of special significance” (WOSS). It is of the wetland scientist’s opinion that no wetlands onsite meet the definition of a WOSS.

Wetlands within the survey area may be further regulated under municipal ordinances, such as Shoreland Zone, Site Plan Review, or other local ordinances. Impacts to wetlands resulting from proposed project development require that permits first be obtained from the MDEP and the USACE before proceeding with construction, and where applicable, municipal governing bodies. Consultation with these agencies early in the project design process is encouraged.

References:

- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitat in the United States. U.S. Fish and Wildlife Service. FWS/OBD-79/31 103pp.
- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- McMahon, J.S. 1990. The Biophysical Regions of Maine: Patterns in the Landscape and Vegetation. University of Maine.
- U.S. Army Corps of Engineers (USACE). 2012. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region. ERDC/EL TR-12-01. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- Web Soil Survey. 2018. U.S. Department of Agriculture – Natural Resources Conservation Service.
<http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

Attachment 1

Representative Site Photos

Natural Resource Photographs –9/9/2019
Depot Street lot, Raymond, Maine



Photo 1: View looking northerly into Wetland A1 from flag 4.



Photo 2: View looking northerly within forested Wetland A1 along the stormwater drainage flowing in a southerly direction.

Natural Resource Photographs –9/9/2019
Depot Street lot, Raymond, Maine



Photo 3: View of stormwater outflow culverts along the northern extents of the site.



Photo 4: View looking south within Wetland A1 near flag 28.

Natural Resource Photographs –9/9/2019
Depot Street lot, Raymond, Maine



Photo 5: View of culvert inlet to the south of the site that drains Wetland A1 under Depot Street.



Photo 6: View of Wetland A1 from flag 25

Hydrologic Soil Group—Cumberland County and Part of Oxford County, Maine



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

10/14/2019
Page 1 of 4

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 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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: Cumberland County and Part of Oxford County, Maine
 Survey Area Data: Version 16, 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: Jun 7, 2019—Jul 2, 2019

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
BgB	Nicholville very fine sandy loam, 0 to 8 percent slopes	C	2.5	12.9%
Cu	Cut and fill land		7.8	40.1%
HfD2	Hartland very fine sandy loam, 15 to 25 percent slopes, eroded	B	1.4	7.2%
HrB	Lyman-Tunbridge complex, 0 to 8 percent slopes, rocky	D	2.4	12.6%
Md	Made land		0.5	2.7%
Sn	Scantic silt loam, 0 to 3 percent slopes	D	4.7	24.4%
Totals for Area of Interest			19.5	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.

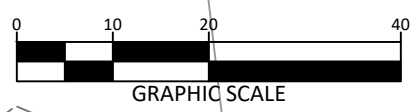
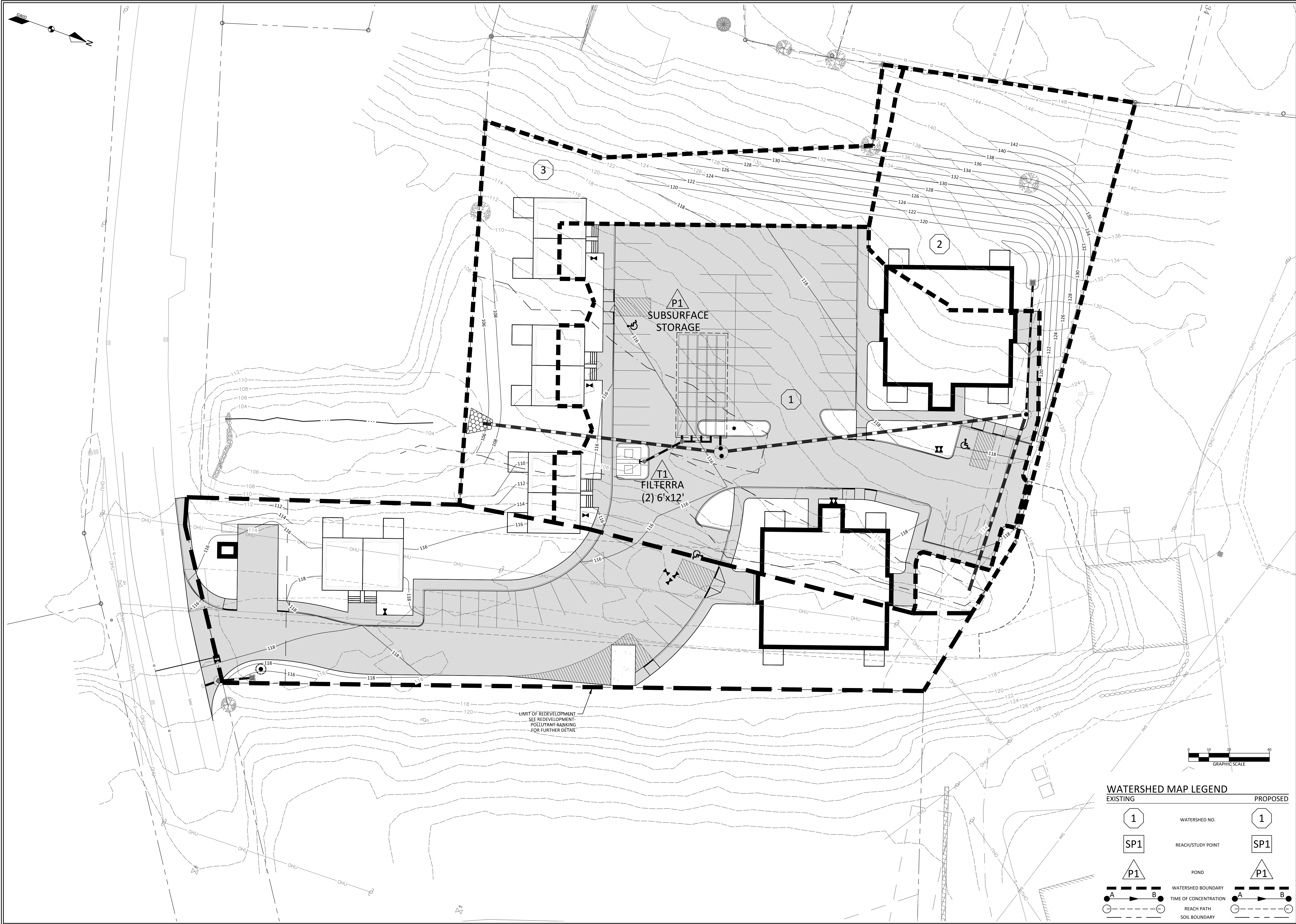
If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

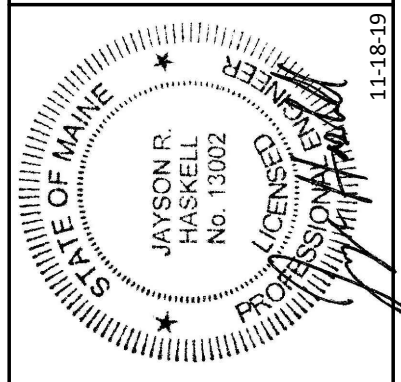
Component Percent Cutoff: None Specified

Tie-break Rule: Higher



WATERSHED MAP LEGEND			
EXISTING		PROPOSED	
	WATERSHED NO.		WATERSHED NO.
	REACH/STUDY POINT		REACH/STUDY POINT
	POND		POND
	WATERSHED BOUNDARY		WATERSHED BOUNDARY
	TIME OF CONCENTRATION		TIME OF CONCENTRATION
	REACH PATH		REACH PATH
	SOIL BOUNDARY		SOIL BOUNDARY

PRELIMINARY
PLAN
NOT FOR
CONSTRUCTION

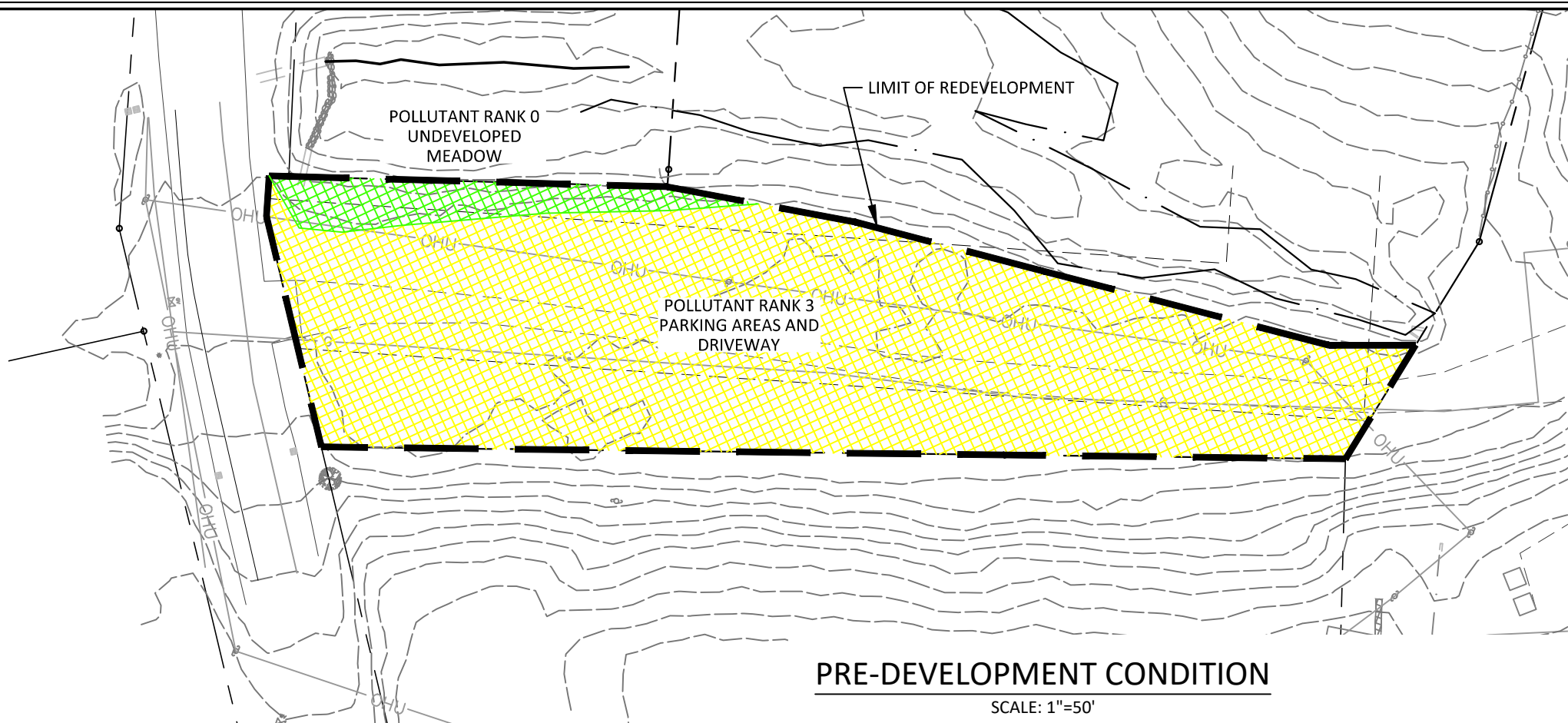


DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 310-0506

REV	DATE	BY	DESCRIPTION
A	10-11-19	JPC	ISSUED FOR MDEP PRE-APPLICATION
B	11-18-19	DMR	ISSUED FOR PRELIMINARY SUBDIVISION REVIEW

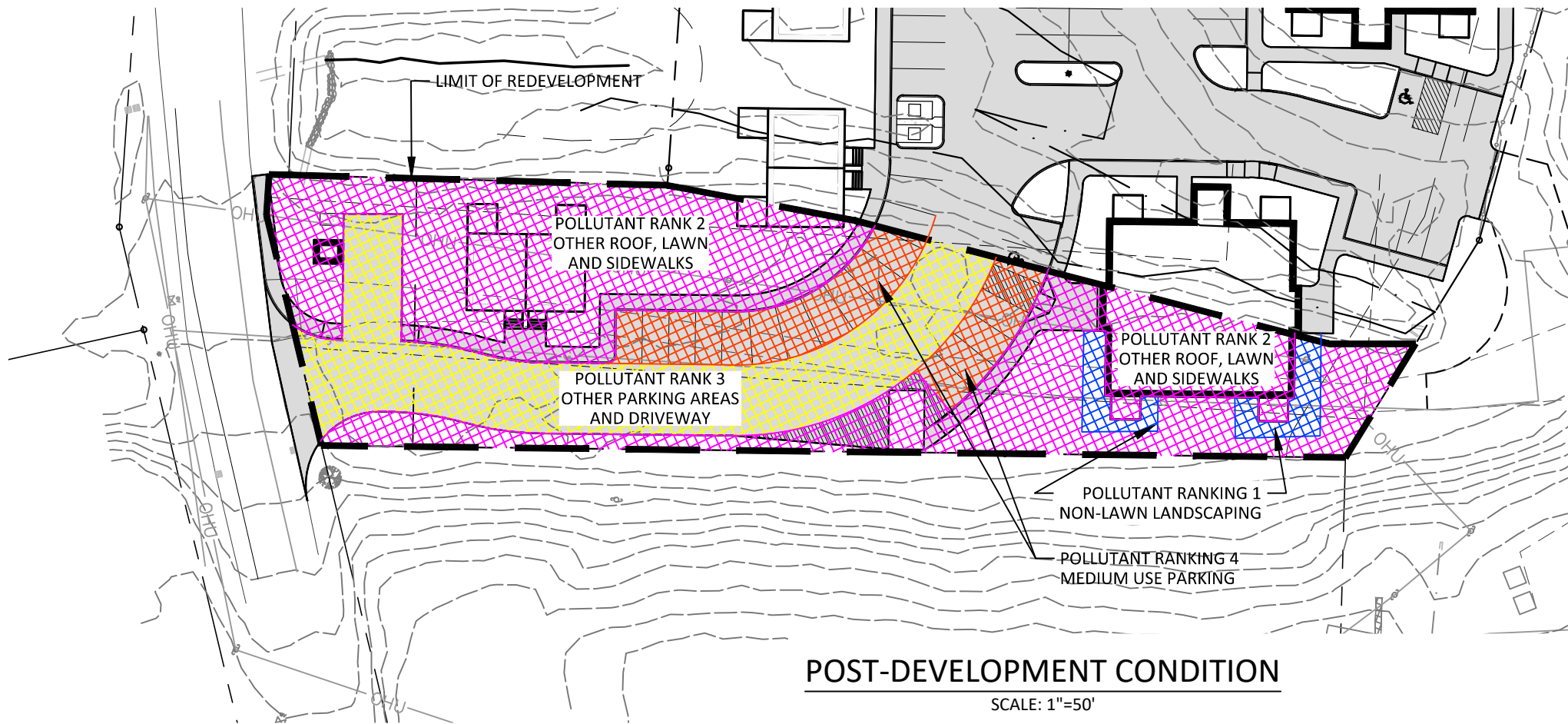
WATERSHED MAP - DEVELOPED CONDITION
DEPOT STREET RESIDENTIAL DEVELOPMENT
DEPOT STREET
WINDHAM, MAINE
FOR RECORD OWNER:
MCL REALTY, LLC
PO BOX 1206
WINDHAM, ME 04062

17035 JOB NUMBER:
1" = 20' SCALE:
11-18-2019 DATE:
SHEET 1 OF 1
WM-1



PRE-DEVELOPMENT CONDITION


SCALE: 1"=50'



POST-DEVELOPMENT CONDITION

SCALE: 1"=50'

-  POLLUTANT RANK 4
OTHER ROAD & MEDIUM USE PARKING LOTS
-  POLLUTANT RANK 3
OTHER PARKING LOTS, DRIVEWAYS & FLAT ROOFS
-  POLLUTANT RANK 2
OTHER ROOF, BIKEWAYS, WALKWAYS, LAWN
-  POLLUTANT RANK 1
NON-GRASS LANDSCAPE & STORMWATER SYSTEM
-  POLLUTANT RANK 1
UNDEVELOPED FOREST OR MEADOW



CONSULTING ENGINEERS
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WINDHAM, ME 04062
(207) 310 - 0506

REV	DATE	BY	DESCRIPTION
A	X-X-XX	XXX	XXX

REDEVELOPMENT - POLLUTANT RANKING

DEPOT STREET RESIDENTIAL DEVELOPMENT
WINDHAM, MAINE

FOR: MCL REALTY, LLC
PO BOX 1206
WINDHAM, MAINE 04062

1" = 50'
SCALE:

10-16-2019
DATE:

SHEET 1 OF 2

RPR-1

REDEVELOPMENT STORMWATER TREATMENT CALCULATIONS

Depot Street Residential Development

Existing Conditions

Land Use	Area (SF)	Area (Ac.)	Pollutant Rank	Existing Impact
High Use Parking Lots and Roads	0	0.00	5	0.00
Other Road and Medium Use Parking Lots	0	0.00	4	0.00
Other parking lots & driveways/Flat Roof	25,153	0.58	3	1.73
Other roof, bikeways, grass, walkways	0	0.00	2	0.00
Non-grass landscape/stormwater system	0	0.00	1	0.00
Undeveloped Area	1,816	0.04	0	0.00
Totals	26,969	0.62		1.73

Existing Impact Rating / Redevelopment Area = 2.80

Proposed Conditions

Land Use	Area (SF)		Pollutant Rank	Proposed Impact
High Use Parking Lots and Roads	0	0.00	5	0.00
Other Road and Medium Use Parking Lots	2,959	0.07	4	0.27
Other parking lots & driveways/Flat Roof	6,830	0.16	3	0.47
Other roof, bikeways, grass, walkways	16,299	0.37	2	0.75
Non-grass landscape/stormwater system	881	0.02	1	0.02
Forest/Meadow	0	0.00	0	0.00
Totals	26,969	0.62		1.51

Proposed Impact Rating / Redevelopment Area = 2.44

Treatment Requirements

Ranked Impact Change Due to Redevelopment = -0.36

Percentage of Developed Area to be treated (Table 3) = 0%



CONSULTING ENGINEERS

Stormwater Treatment Table

Depot Street Residential Development - New Development Areas Only

	New Paved Area (SF)	New Rooftop Area* (SF)	New Landscaped Area (SF)	Treatment Provided	Paved Area Treated In Filter Basins (SF)	Landscaped Area Treated In Filter Basins (SF)	Treatment Device
WS-1	24,273	7,081	4,539	Yes	24,273	4,539	Filterra
WS-2	0	1,177	3,240	No	0	0	None
WS-3	0	2,154	6,560	No	0	0	None
Total	24,273	10,412	14,339		24,273	4,539	

* All new buildings are required to install a roofline drip edge to provide treatment for rooftop impervious surface. The building's impervious area treated in a drip edge is included in the watershed and overall treatment calculations below, but not included in the BMP sizing calculations for each treatment device.

**This table only takes into account developed areas outside of the existing development. See Redevelopment Calculations for additional development areas.

Total New Impervious Area =	34,685
Impervious Area Requiring Treatment (95%) =	32,951
Impervious Area Treatment Provided =	34,685
	100%
Total New Developed Area =	49,024
Developed Area Requiring Treatment (80%) =	39,219
Developed Area Treatment Provided =	39,224
	80%