

Acheron
Engineering, Environmental & Geologic Consultants
www.AcheronEngineering.com

January 28, 2019

Amanda Lessard, Planner
Town of Windham
8 School Road
Windham, Maine 04062

RE: Final Major Subdivision Application Durant Homestead, Residential Subdivision.

Dear, Amanda

Please find attached five copies of the Final Major Subdivision Permit Application for the Durant Homestead Subdivision project, located on Chute Road. Included with the executed application is a \$50.00 application fee, Maine General Permit authorization letter, NAE-2018-02825 from the U.S. Corps of Engineers, Maine Department of Environmental Protection (MEDEP) Order #L-23215-L3-D-N/L-23215-TC-E-N dated January 25, 2019 granting project approval under the Site Location of Development Act and Natural Resources Protection Act, statement from Maine Inland Fisheries and Wildlife and the sealed Final Subdivision Plan.

Since preliminary approval by the Windham Planning Board, Matt Hancock Properties received additional review comments from the MEDEP. Stormwater, comments were received on October 11, 2018 from the Division of Watershed Management and geology comments from the Environmental Geology Unit were received on November 7, 2018. MEDEP review comments, Matt Hancock properties response to comments and a revised set of plans incorporating the required changes are included in the application.

Please let me know if you have any questions or concerns

Sincerely,
Acheron



Kirk J. Ball, PE

Enclosure: Final Major Subdivision Application (5)

Cc: Matt Hancock, MHP
David Fowler, MHP

TOWN OF WINDHAM, MAINE

***FINAL MAJOR SUBDIVISION APPLICATION FOR
DURANT HOMESTEAD SUBDIVISION***

SUBMITTED BY:

***MATT HANCOCK PROPERTIES, LLC
PO Box 295
CASCO, MAINE 04015***

WITH ASSISTANCE BY:

Acheron Engineering Services.
Engineering, Environmental & Geologic Consultants
www.AcheronEngineering.com
147 Main Street 24466 Powell Road
Newport, Maine 04953 Brooksville, Florida 34602
(207) 368-5700 (352) 796-6236

SUBMITTAL DATE:
JANUARY, 2019

Mandatory Written Information

Executed Application Form

Evidence Escrow >25% of Initial Preliminary Plan Deposit

Copies of MEDEP and ACOE Approvals

Correspondence with MEDEP

Maine DIFW Statement

TOWN OF WINDHAM MAJOR SUBDIVISION APPLICATION

Final Plan

(Section 910 – Subdivision Review, Submission Requirements)

The original signed copy of this application must be accompanied by:

- The required application and review escrow fees,
- Five (5) collated submission packets, which must include
 - Full size paper copies of each plan, map, or drawing, and
 - A bound copy of the required information found in Section 910 of the Land Use Ordinance.
 - The checklist below offers a brief description of these requirements for the purpose of determining the completeness of a submission. Please use the Ordinance for assembling the submission packets.
- Electronic submission in PDF format of:
 - All plans, maps, and drawings.
 - These may be submitted as a single PDF file or a PDF for each sheet in the plan set.
 - A PDF of the required information found in Section 910 of the Land Use Ordinance

The submission deadline for Final plans is three (3) weeks before the Planning Board meeting for which it will be scheduled.

Applicants are strongly encouraged to schedule a brief submission meeting with Planning Staff, to walk through the application checklist at the time a Planning Board submission is made. This will allow applicants to receive a determination of completeness, or a punch list of outstanding items, at the time a submission is made.

If you have questions about the submission requirements, please contact:

Windham Planning Department	(207) 894-5960, ext. 2
Amanda Lessard, Planner	allessard@windhammaine.us
Ben Smith, Planning Director	bwsmith@windhammaine.us

Final Plan - Major Subdivision

Project Name: Durant Homestead Subdivision

Tax Map: 6 **Lot:** 25

Number of lots/dwelling units: 25 **Estimated road length:** 2,500 feet

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

Contact Information

1. Applicant

Name: Matt Hancock Properties, LLC

Mailing Address: PO Box 295, Casco, Maine 04015

Telephone: 207-655-5886 Fax: _____ E-mail: matt@mtabram.com

2. Record owner of property

X (Check here if same as applicant)

Name: _____

Mailing Address: _____

Telephone: _____ Fax: _____ E-mail: _____

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

Name: Kirk Ball, PE

Company Name: Acheron Engineering Services

Mailing Address: 147 Main Street, Newport, Maine 04953

Telephone: 207-368-5700 Fax: 207-368-5120 E-mail: kball@acheronengineering.com

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

Signature Kirk Ball Date 01/28/2019

Applicant
t Staff

Final Plan - Major Subdivision: Submission Requirements**A. Mandatory Written Information**

1	A fully executed application form	X	
2	Evidence that the escrow account balance is greater than 25% of the initial Preliminary Plan deposit	X	
3	If public open space is to be provided, written offers of cession to the Town of Windham shall be provided	N/A	
4	If the subdivider reserves title to spaces within the subdivision, provide copies of agreements or other documents.	N/A	
5	Copies of any outside agency approvals	X	
6	Statement from the Maine Inland Fisheries & Wildlife that no significant wildlife habitat exists on the site	X	
7	Digital transfer of subdivision plan data (GIS format)		

B. Mandatory Plan Information

1	All information presented on the Preliminary Plan, and any amendments suggested or required by the Board.	X	
2	Map and lot numbers for all lots as assigned by the Town of Windham Assessing Department	X	
3	Seal of the Maine Licensed Professional who prepared the plan	X	
4	All public open space for which offers of cession are made by the subdivider and those spaces to which title is reserved by the subdivider	N/A	
5	Location of all permanent monuments	X	

Electronic Submission

X	
---	--

From: Amanda L. Lessard <allessard@windhammaine.us>
Sent: Tuesday, December 04, 2018 6:27 PM
To: 'kball@acheronengineering.com'
Cc: 'Matt Hancock'; 'David Fowler'; bgourley@acheronengineering.com; 'Adam Robinson'; Kara Taylor
Subject: RE: Durant Homestead, Major Subdivision, Final Plan Application

Kirk,
Sorry for the slow response. To answer your questions:

- There is a sufficient escrow balance that we will not require payment of the final plan review escrow fee. Note that where your preliminary plan application was reduced by 1 lot, we can credit \$300 towards your final plan application fee, so that the final plan fee will be \$50.
- Kara Taylor in the Assessing Department is the best contact to get map and lot numbers for the project. I've copied her on this email.

Amanda

Amanda Lessard, Planner
Town of Windham
8 School Road
Windham, ME 04062

office: (207) 894-5900 x 6121
cell: (207) 400-7618
fax: (207) 892-1916
www.windhammaine.us

NOTICE: Under Maine's Freedom of Access ("Right to Know") law, documents – including emails – in the possession of public officials about town business are considered public records. This means if anyone asks to see it, we are required to provide it. There are very few exceptions. We welcome citizen comments and want to hear from our constituents, but please keep in mind that what you write in an email is not private and will be made available to any interested party.

From: kball@acheronengineering.com <kball@acheronengineering.com>
Sent: Monday, November 26, 2018 1:46 PM
To: Amanda L. Lessard <allessard@windhammaine.us>
Cc: 'Matt Hancock' <matt@mtabram.com>; 'David Fowler' <dfowler@nextphaseenergyservices.com>; bgourley@acheronengineering.com; 'Adam Robinson' <arobinson@wemapit.com>
Subject: Durant Homestead, Major Subdivision, Final Plan Application

Amanda, good afternoon.

We hope that you had an enjoyable holiday!

Couple of quick questions for the Durant Homestead Final Plan Application. Can you provide the current escrow balance for the project to confirm if there is more than \$1,000 (25% of initial escrow payment)? Next, can you provide map and lot numbers for the project? If not who should we contact in the assessing department?

Thanks
Kirk

Kirk Ball, PE
Acheron Engineering
207-368-5700

This electronic message is intended to be viewed only by the individual or entity to which it is addressed and may contain privileged and/or confidential information intended for the exclusive use of the addressee(s). If you are not the intended recipient, please be aware that any disclosure, printing, copying, distribution or use of this information is prohibited. If you have received this message in error, please notify the sender immediately and destroy this message and its attachments from your system.



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

MAINE GENERAL PERMIT (GP)
AUTHORIZATION LETTER AND SCREENING SUMMARY

MATT HANCOCK
MATT HANCOCK PROPERTIES, LLC
P.O. BOX 295
CASCO, MAINE 04015

CORPS PERMIT # NAE-2018-02825
CORPS GP ID# Non-screen
STATE ID# NRPA

DESCRIPTION OF WORK:

Place permanent fill in freshwater wetlands off Chute Road at Windham, Maine in order to construct an access road and associated infrastructure for a 25-lot single-family subdivision. The project will result in approximately 14,569 s.f. of permanent wetland impact. This work is shown on the attached plans entitled "SITE LOCATION MAP DURANT HOMESTEAD" in one sheet dated "8-01-18", "PROPOSED SITE PLAN DURANT HOMESTEAD" in six sheets dated "8-01-18" and "SECTIONS DURANT HOMESTEAD" in one sheet dated "8-01-18".
See ADDITIONAL CONDITIONS attached.

LAT/LONG COORDINATES: 43.744633° N -70.412334° W USGS QUAD: GORHAM, ME

I. CORPS DETERMINATION:

Based on our review of the information you provided, we have determined that your project will have only minimal individual and cumulative impacts on waters and wetlands of the United States. Your work is therefore authorized by the U.S. Army Corps of Engineers under the Federal Permit, the Maine General Permit which can be found at: [www.nae.usace.army.mil/Portals/74/docs/regulatory/StateGeneralPermits/ME/Maine General Permit 2015.pdf](http://www.nae.usace.army.mil/Portals/74/docs/regulatory/StateGeneralPermits/ME/Maine%20General%20Permit%202015.pdf) Accordingly, we do not plan to take any further action on this project.

You must perform the activity authorized herein in compliance with all the terms and conditions of the GP [including any attached Additional Conditions and any conditions placed on the State 401 Water Quality Certification including any required mitigation]. Please review the enclosed GP carefully, including the GP conditions beginning on page 5, to familiarize yourself with its contents. You are responsible for complying with all of the GP requirements; therefore you should be certain that whoever does the work fully understands all of the conditions. You may wish to discuss the conditions of this authorization with your contractor to ensure the contractor can accomplish the work in a manner that conforms to all requirements.

If you change the plans or construction methods for work within our jurisdiction, please contact us immediately to discuss modification of this authorization. This office must approve any changes before you undertake them.

Condition 37 of the GP (page 16) provides one year for completion of work that has commenced or is under contract to commence prior to the expiration of the GP on October 13, 2020. You will need to apply for reauthorization for any work within Corps jurisdiction that is not completed by October 13, 2021.

This authorization presumes the work shown on your plans noted above is in waters of the U.S. Should you desire to appeal our jurisdiction, please submit a request for an approved jurisdictional determination in writing to the undersigned.

No work may be started unless and until all other required local, State and Federal licenses and permits have been obtained. This includes but is not limited to a Flood Hazard Development Permit issued by the town if necessary.

II. STATE ACTIONS: PENDING [X], ISSUED [], DENIED [] DATE _____

APPLICATION TYPE: PBR: _____, TIER 1: X, TIER 2: _____, TIER 3: _____, LURC: _____, DMR LEASE: _____, NA: _____

III. FEDERAL ACTIONS:


JOINT PROCESSING MEETING: non-screen LEVEL OF REVIEW: CATEGORY 1: X CATEGORY 2: _____

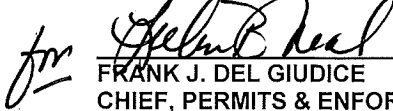
AUTHORITY (Based on a review of plans and/or State/Federal applications): SEC 10 _____, 404 X 10/404 _____, 103 _____

EXCLUSIONS: The exclusionary criteria identified in the general permit do not apply to this project.

FEDERAL RESOURCE AGENCY OBJECTIONS: EPA n/a, USF&WS n/a, NMFS n/a

If you have any questions on this matter, please contact my staff at 978-318-8676 at our Augusta, Maine Project Office. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0


COLIN M. GREENAN
PROJECT MANAGER
MAINE PROJECT OFFICE

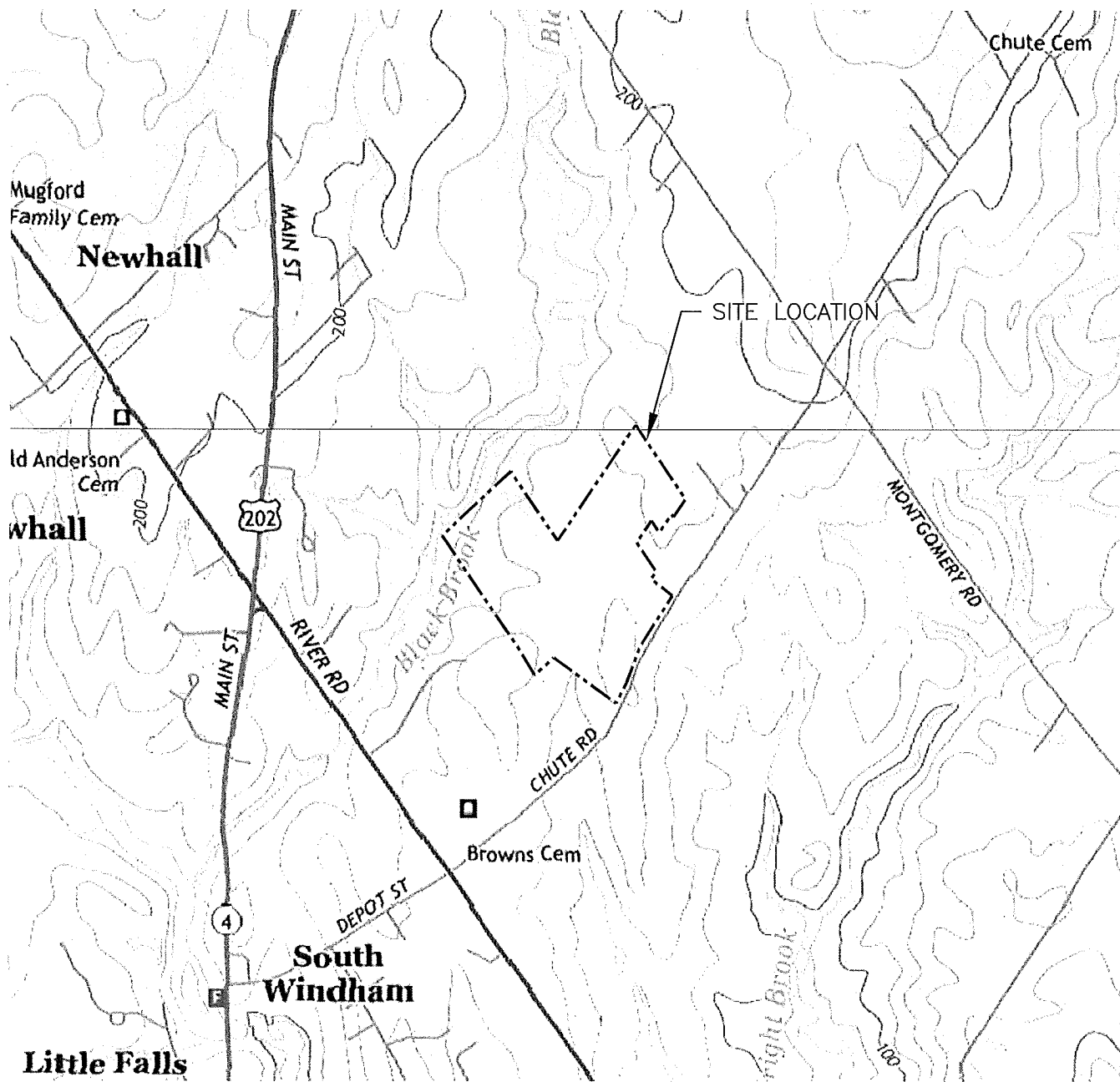
 11-15-18
FRANK J. DEL GIUDICE
CHIEF, PERMITS & ENFORCEMENT BRANCH
REGULATORY DIVISION



**US Army Corps
of Engineers®**
New England District

**PLEASE NOTE THE FOLLOWING ADDITIONAL CONDITIONS FOR
DEPARTMENT OF THE ARMY
GENERAL PERMIT
NO. NAE-2018-02825**

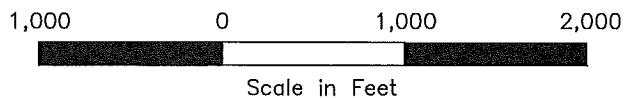
1. The permittee shall assure that a copy of this permit is at the work site whenever work is being performed and that all personnel performing work at the site of the work authorized by this permit are fully aware of the terms and conditions of the permit. This permit, including its drawings and any appendices and other attachments, shall be made a part of any and all contracts and sub-contracts for work which affects areas of Corps of Engineers' jurisdiction at the site of the work authorized by this permit. This shall be done by including the entire permit in the specifications for the work. If the permit is issued after construction specifications but before receipt of bids or quotes, the entire permit shall be included as an addendum to the specifications. The term "entire permit" includes permit amendments. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions of the entire permit, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps of Engineers jurisdiction.
2. This authorization requires you to 1) notify us before beginning work so we may inspect the project, and 2) submit a Compliance Certification Form. You must **complete and return the enclosed Work Start Notification Form** to this office at least two weeks before the anticipated starting date. You must **complete and return the enclosed Compliance Certification Form** within one month following the completion of the authorized work and any required mitigation (but not mitigation monitoring, which requires separate submittals).
3. Adequate sedimentation and erosion control devices, such as geotextile silt fences or other devices capable of filtering the fines involved, shall be installed and properly maintained to minimize impacts during construction. These devices must be removed upon completion of work and stabilization of disturbed areas. The sediment collected by these devices shall be removed and placed upland, in a manner that will prevent its later erosion and transport to a waterway or wetland.
4. All exposed soils resulting from the construction shall be promptly seeded and mulched in order to achieve vegetative stabilization.
5. The buyers of lots in this subdivision shall be provided a copy of this permit and plans.
6. No additional filling of waters of the United States (wetlands or waterways) for lot development is authorized without written approval from the Corps. Mitigation in the form of In-Lieu-Fee may be required for additional wetland and/or stream bottom impacts, cumulatively for the subdivision.
7. No tree cutting shall occur between June 1st and July 31st of any year and to the maximum extent practicable, tree cutting shall occur between October 16th and April 9th of any year in order to minimize potential impacts to federally threatened northern long-eared bats.



SITE LOCATION MAP



BURMAN
LAND & TREE COMPANY, LLC.



SITE LOCATION MAP
DURANT HOMESTEAD
CHUTE ROAD
WINDHAM, MAINE

Job No.: BLT #17-005

Scale: 1" = 1000'

Date: 8-01-18

Sheet: B-1

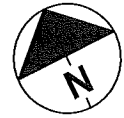
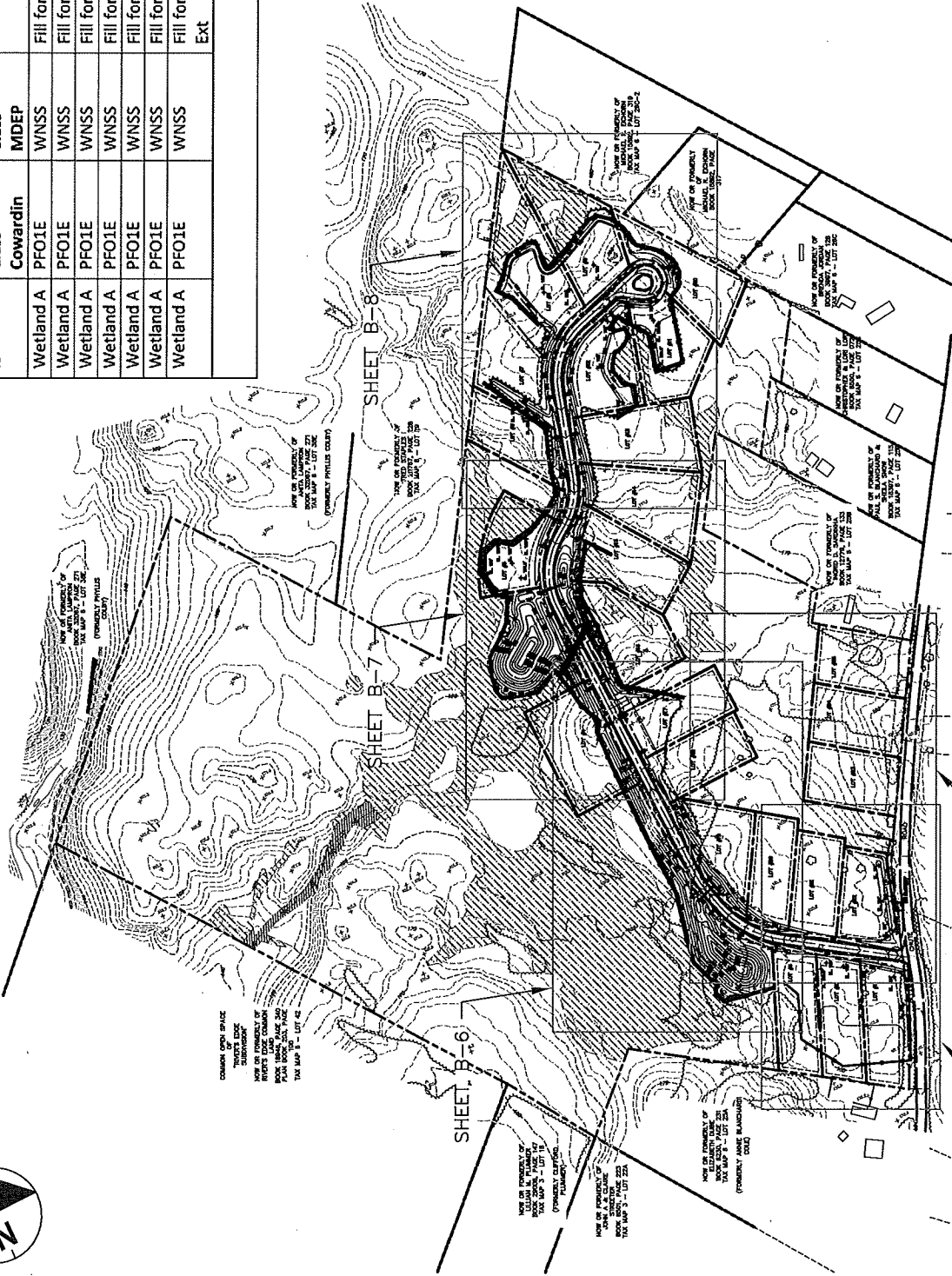


Table 1: Proposed Wetland Alteration

Wetland ID	Wetland Class - Cowardin	Wetland Class - MDEP	Proposed Activity	Square Feet of Impact	Acreage of Impact
Wetland A	PFO1E	WNSS	Fill for SW Pond 1 Fill Ext	341 sq.ft.	0.008 acre
Wetland A	PFO1E	WNSS	Fill for SW Pond 1 Fill Ext	2,221 sq.ft.	0.05 acre
Wetland A	PFO1E	WNSS	Fill for Road Crossing	11,011 sq.ft.	0.25 acre
Wetland A	PFO1E	WNSS	Fill for Road Crossing Fill Ext	337 sq.ft.	0.008 acre
Wetland A	PFO1E	WNSS	Fill for Road Crossing Fill Ext	443 sq.ft.	0.01 acre
Wetland A	PFO1E	WNSS	Fill for SW Pond 2	141 sq.ft.	0.003 acre
Wetland A	PFO1E	WNSS	Fill for Lot 16 Leachfield Fill Ext	75 sq.ft.	0.002 acre
TOTAL				14,569 sq. ft.	0.33 acre



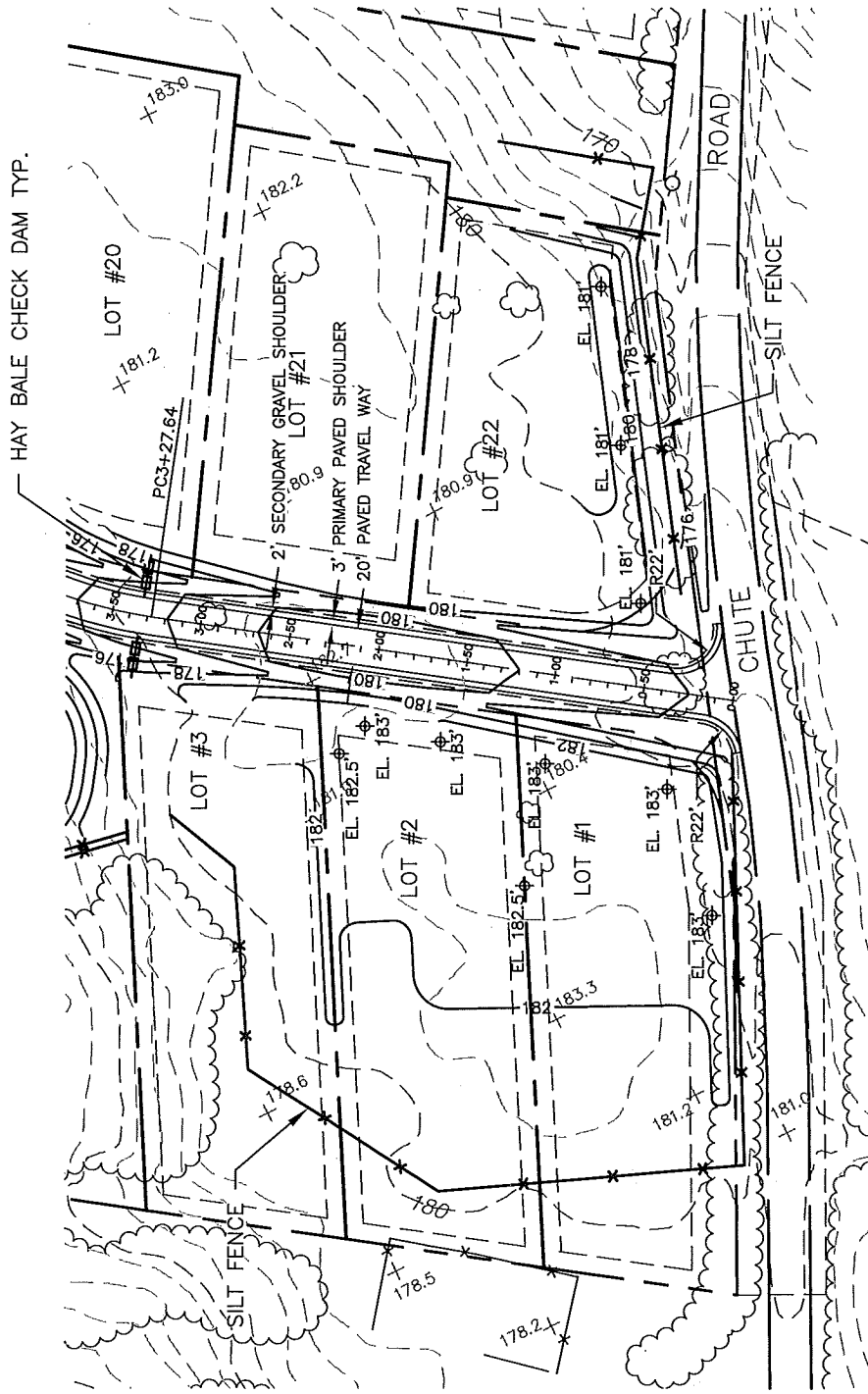
PROPOSED SITE PLAN
DURANT HOMESTEAD
CHUTE ROAD
WINDHAM, MAINE

Job No.: BLT #17-005 Scale: 1" = 400'
Date: 8-01-18 Sheet: B-4

400 0 400 800

Scale: 1" = 400'

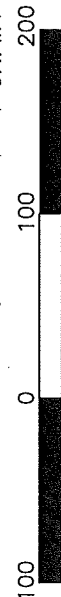
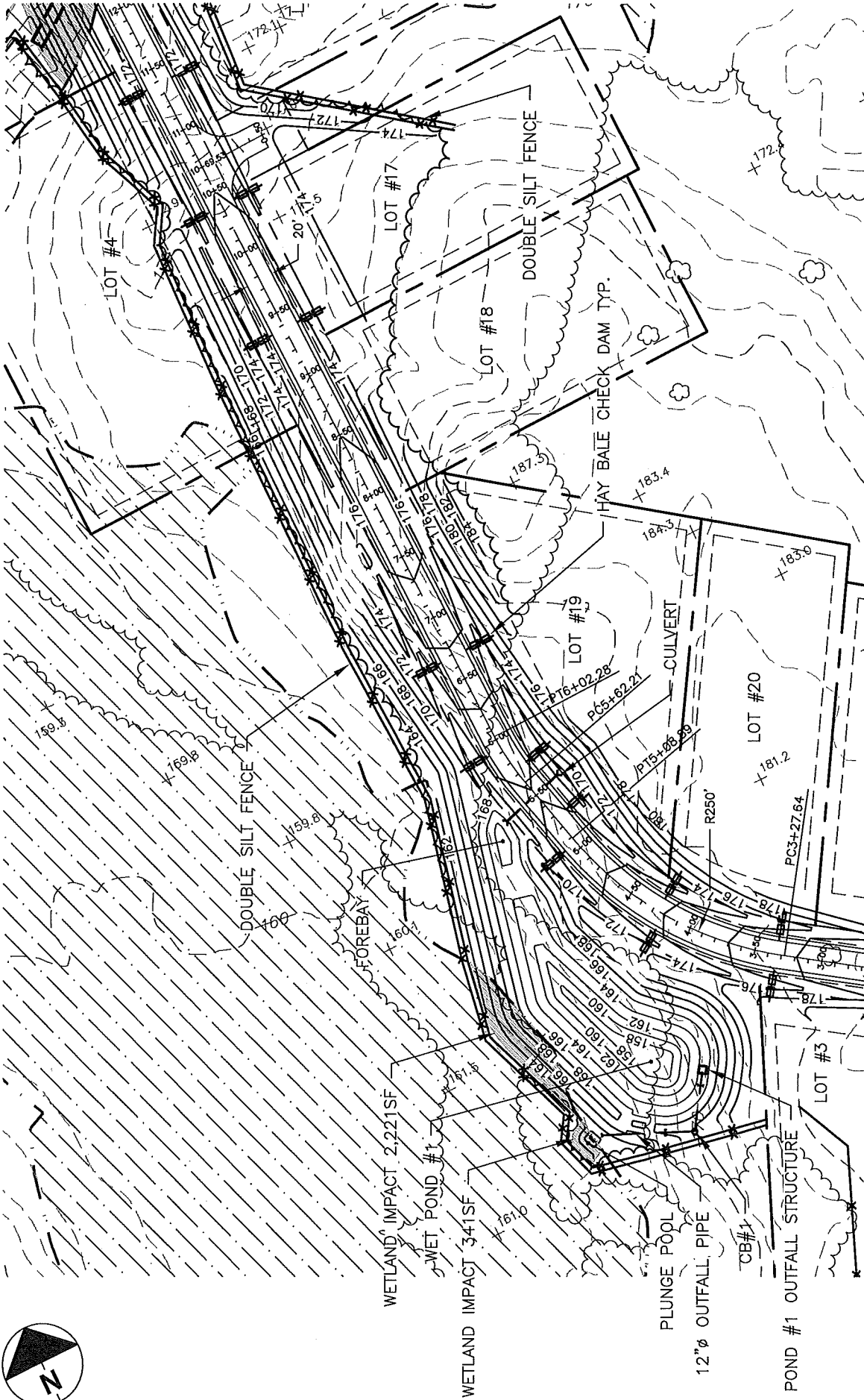
No.	Revised Drawing per comments and Lot Change	BPG	AMB	09/27/18
1				
No.	Revision Description	Drwn.	Chk'd	Date



BURMAN
LAND & TREE COMPANY, LLC

1	Revised Drawing per comments and Lot Change	BPG	AMB	09/27/18
—	—	—	—	—
No.	Revision Description	Drwn.	Chk'd	Date

Job No.: BLT #17-005	Scale: 1" = 100'
Date: 8-01-18	Sheet: B-5



Scale: 1" = 100'

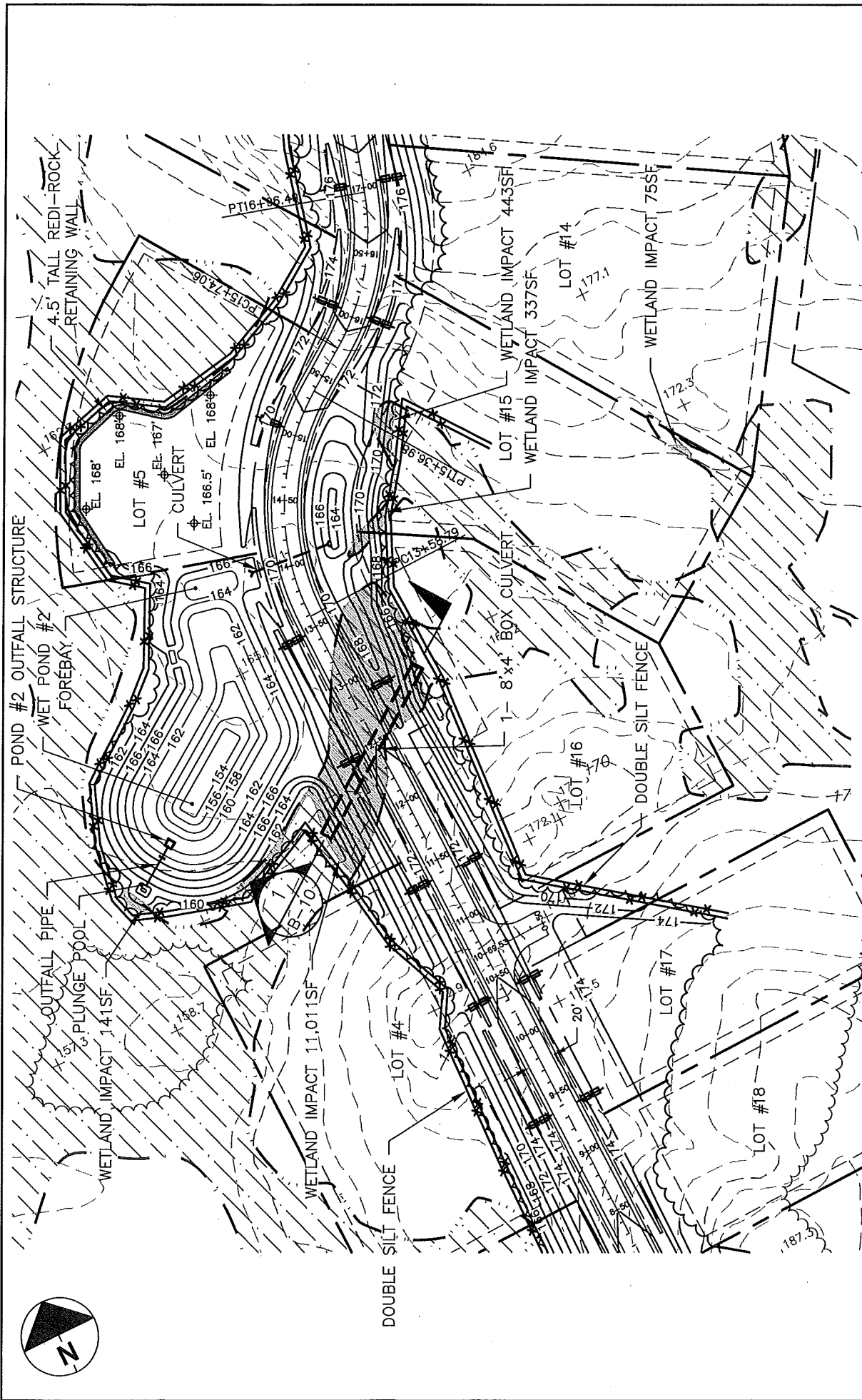


BURMAN
LAND & TREE COMPANY, LLC.

PROPOSED SITE PLAN
DURANT HOMESTEAD
CHUTE ROAD
WINDHAM, MAINE

No.	Revision Description	Drwn.	Chk'd	Date
1	Revised Drawing per comments and Lot Change	BPG	AMB	09/27/18
—	—	—	—	—

Job No.: BLT #17-005	Scale: 1" = 100'
Date: 8-01-18	Sheet: B-6



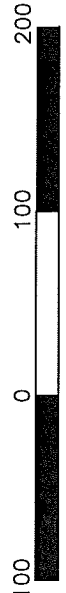
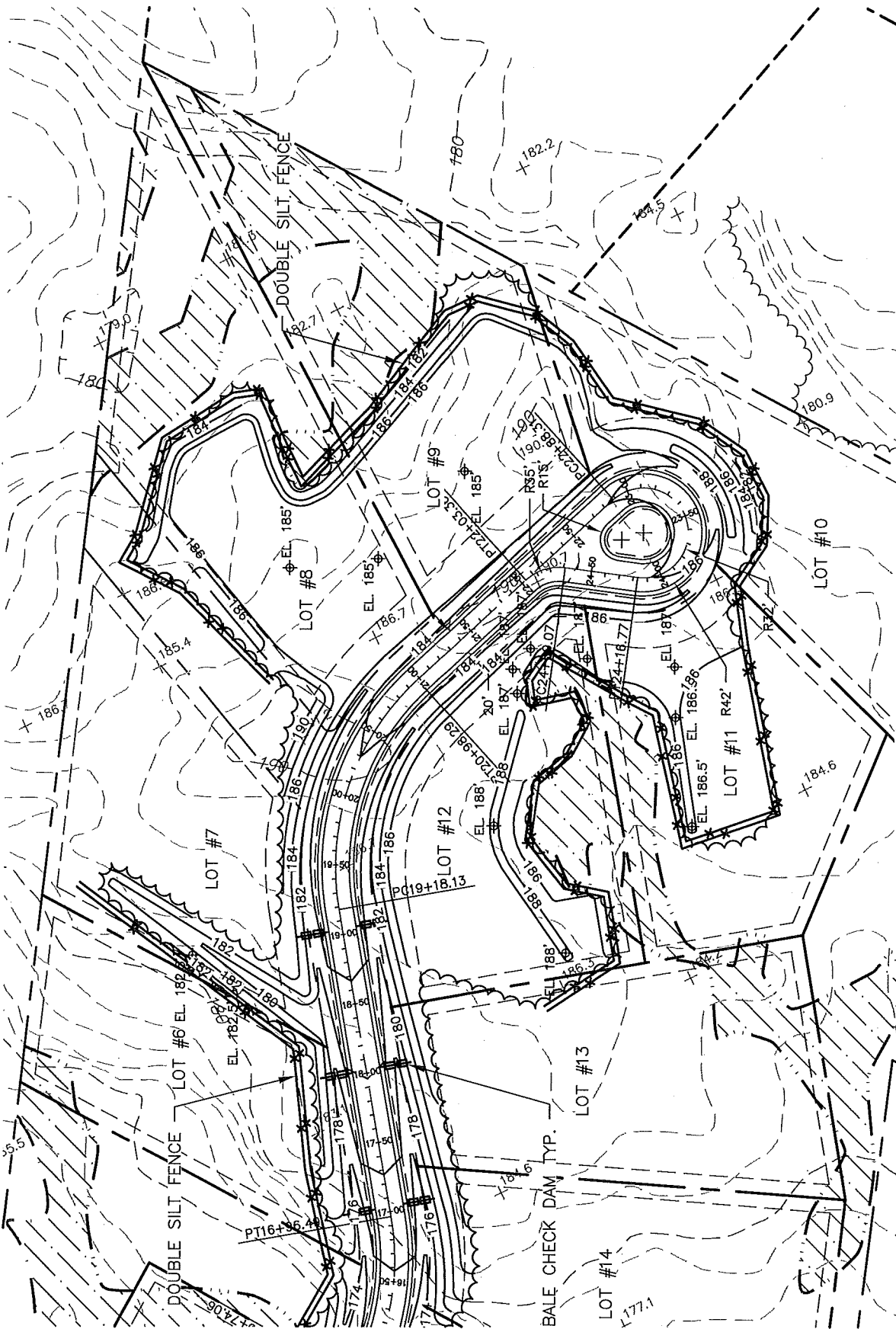
BURMAN
 LAND & TREE COMPANY, LLC.

PROPOSED SITE PLAN
 DURANT HOMESTEAD
 CHUTE ROAD
 WINDHAM, MAINE

Job No.: BLT #17-005 Scale: 1" = 100'
 Date: 8-01-18 Sheet: B-7

Scale: 1" = 100'

No.	Revision Description	Drwn.	Chk'd	Date
1	Revised Drawing per comments and Lot Change	BPG	AMB	09/27/18
—	—	—	—	—



Scale: 1" = 100'

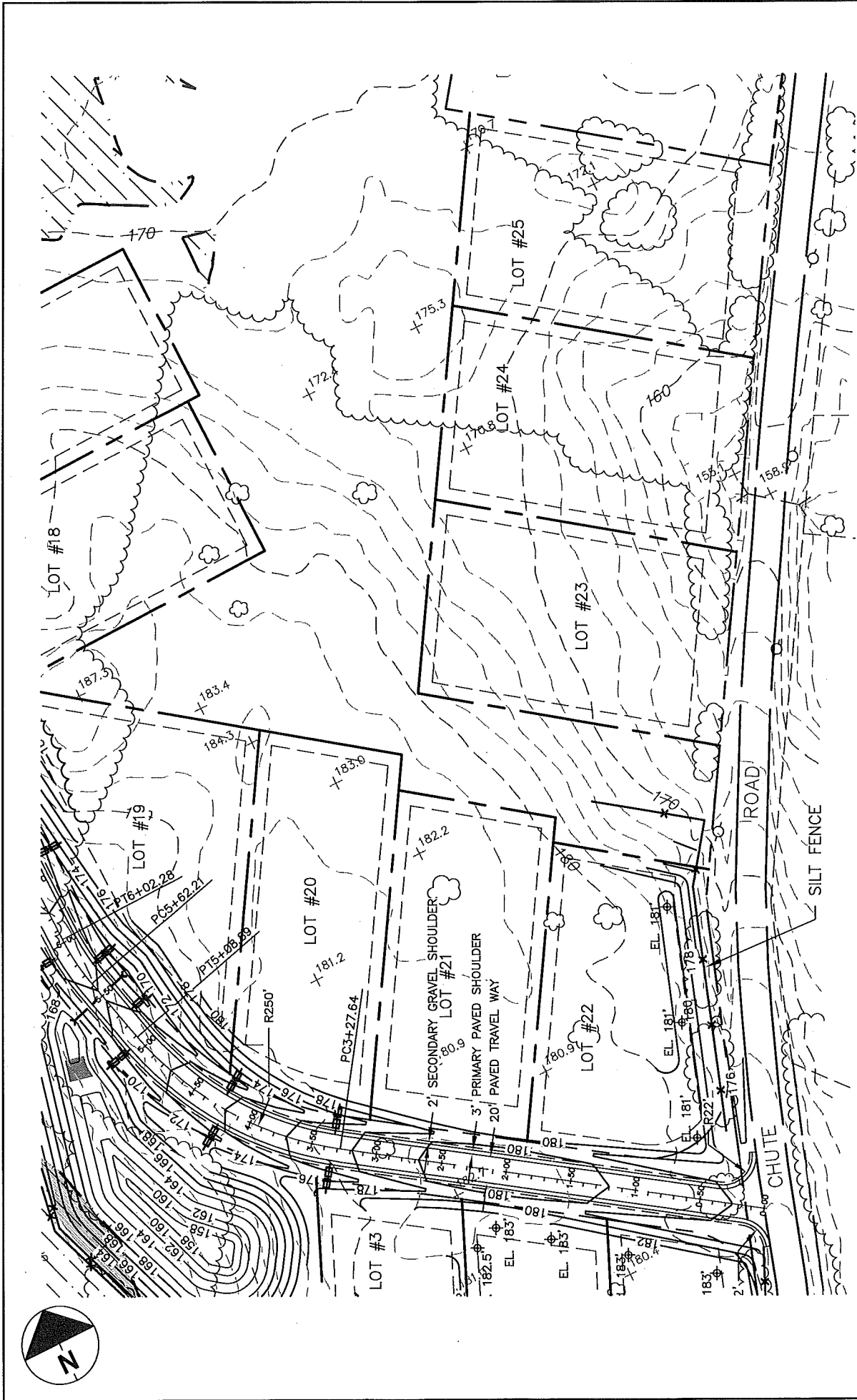


BURMAN
LAND & TREE COMPANY, LLC.

PROPOSED SITE PLAN
DURANT HOMESTEAD
CHUTE ROAD
WINDHAM, MAINE

No.	Revision Description	Drwn.	Chk'd	Date
1	Revised Drawing per comments and Lot Change	BPG	AMB	09/27/18
—	—	—	—	—

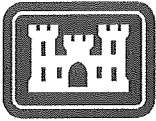
Job No.: BLT #17-005	Scale: 1" = 100'
Date: 8-01-18	Sheet: B-8



PROPOSED SITE PLAN
DURANT HOMESTEAD
CHUTE ROAD
WINDHAM, MAINE

Job No.: BLT #17-005	Scale: 1" = 100'
Date: 8-01-18	Sheet: B-9

No.	Revision Description	Drwn.	Chk'd	Date
1	Revised Drawing per comments and Lot Change	BPG	AMB	09/27/18
-	-	-	-	-



**US Army Corps
of Engineers®**
New England District

**GENERAL PERMIT
WORK-START NOTIFICATION FORM**
(Minimum Notice: Two weeks before work begins)

MAIL TO: Colin M. Greenan
U.S. Army Corps of Engineers, New England District
Maine Project Office
442 Civic Center Drive, Suite 350
Augusta, Maine 04330

A Corps of Engineers Permit (No. NAE-2018-02825) was issued to Matt Hancock Properties, LLC. The permit authorized the permittee to place permanent fill in freshwater wetlands off Chute Road at Windham, Maine in order to construct an access road and associated infrastructure for a 25-lot single-family subdivision.

The people (e.g., contractor) listed below will do the work, and they understand the permit's conditions and limitations.

PLEASE PRINT OR TYPE

Name of Person/Firm: _____

Business Address: _____

Telephone: () _____ () _____

Proposed Work Dates: Start: _____

Finish: _____

PERMITTEE'S SIGNATURE: _____ DATE: _____

PRINTED NAME: _____ TITLE: _____

FOR USE BY THE CORPS OF ENGINEERS

PM: GREENAN Submittals Required: No

Inspection Recommendation: random MEGP compliance



**US Army Corps
of Engineers®**
New England District

(Minimum Notice: Permittee must sign and return notification
within one month of the completion of work.)

COMPLIANCE CERTIFICATION FORM

Corps of Engineers Permit No: NAE-2018-02825

Name of Permittee: Matt Hancock Properties, LLC

Permit Issuance Date: 11/15/2018

Please sign this certification and return it to the following address upon completion of the activity and any mitigation required by the permit. You must submit this after the mitigation is complete, but not the mitigation monitoring, which requires separate submittals.

* MAIL TO: U.S. Army Corps of Engineers, New England District *
* Policy & Technical Support Branch *
* Regulatory Division *
* 696 Virginia Road *
* Concord, Massachusetts 01742-2751 *

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit was completed in accordance with the terms and conditions of the above referenced permit, and any required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

Printed Name

Date of Work Completion

() _____
Telephone Number

() _____
Telephone Number



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

IN THE MATTER OF

MATT HANCOCK PROPERTIES, LLC) SITE LOCATION OF DEVELOPMENT ACT
Windham, Cumberland County) NATURAL RESOURCES PROTECTION ACT
DURANT HOMESTEAD SUBDIVISION) FRESHWATER WETLAND ALTERATION
L-23215-L3-D-N (approval)) WATER QUALITY CERTIFICATION
L-23215-TC-E-N (approval)) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S. §§ 481–489-E and §§ 480-A–480-JJ, Section 401 of the Federal Water Pollution Control Act (33 U. S. C. § 1341), and Chapters 310, 315, 335, 372, 375, 500, 501, and 502 of Department rules, the Department of Environmental Protection has considered the application of MATT HANCOCK PROPERTIES, LLC with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. History of Project: In Department Order #L-23215-L3-A-N/L-23215-TB-B-N, dated July 17, 2007, the Department approved the development of the Durant Homestead Subdivision, a 26-lot subdivision on an approximately 65.5-acre parcel of land. The Order authorized the alteration of approximately 13,415 square feet of freshwater wetlands. On May 22, 2007, the Department received an application (#L-23215-TB-C-N) for changes to the wetland alterations on the parcel. This application was withdrawn on August 24, 2007. The project was never built. The project site is located on the west side of Chute Road in the Town of Windham.

B. Summary: The applicant proposes to subdivide the 65.5-acre parcel of land into 25 residential lots ranging in size from approximately 0.69 to 1.15 acres and two open space lots totaling 40.37 acres, all as shown on a set of plans the first of which is entitled “Matt Hancock Properties, Durant Subdivision,” prepared by Acheron Engineering Services, and dated July 30, 2018, with a last revision date of January 24, 2019. The proposed project includes approximately 17.5 acres of developed area, of which 3.8 acres are impervious area.

The applicant is also seeking approval under the Natural Resources Protection Act (NRPA) to alter 14,569 square feet of freshwater wetlands at seven locations as described in Finding 17.

C. Current Use of Site: The site of the proposed project is currently undeveloped fields, woodland, and forested wetlands. There are no structures on the property. The parcel was selectively harvested. The parcel is identified as Lot 25 on Map 6 of the Town of Windham’s tax maps.

2. FINANCIAL CAPACITY:

The total cost of the project is estimated to be \$540,000. The applicant submitted a letter from RBC Wealth Management, dated April 18, 2018 indicating that the applicant has sufficient funds in its account to meet the estimated cost of the proposed project.

The Department finds that the applicant has demonstrated adequate financial capacity to comply with Department standards.

3. TECHNICAL ABILITY:

The applicant provided resume information for key persons involved with the project and a list of projects successfully constructed by the applicant. The applicant also retained the services of Acheron Engineering Services, a professional engineering firm, to assist in the design and engineering of the project.

The Department finds that the applicant has demonstrated adequate technical ability to comply with Department standards.

4. NOISE:

The Department finds that no regulated sources of noise have been identified. The applicant proposes to limit construction on the site to the hours between 7:00 A.M. and 7:00 P.M. Construction noise generated during these hours is not regulated pursuant to 38 M.R.S. § 484(3)(A).

The Department finds that the applicant has made adequate provision for the control of excessive environmental noise from the proposed project.

5. SCENIC CHARACTER:

The project is located on the west side of Chute Road bounded on all sides by woodland and forested wetland, in a rural area of Windham adjacent to similar residential subdivisions. Along Chute Road, the parcel is relatively level and there is very little relief in the area to offer a vantage point from which to view the project. Single-family residences line Chute Road. Existing wooded buffers will be maintained between the development and abutting properties. The proposed project consists solely of residential development and open space.

Based on the project's location and design, the Department finds that the proposed project will not have an unreasonable adverse effect on the scenic character of the surrounding area.

6. WILDLIFE AND FISHERIES:

The Maine Department of Inland Fisheries and Wildlife (MDIFW) reviewed the proposed project. In its comments, MDIFW stated that it found no records of any Essential or Significant Wildlife Habitats, or other wildlife habitats of special concern associated with this site. No fisheries concerns were identified.

The Department finds that the applicant has made adequate provision for the protection of wildlife and fisheries.

7. HISTORIC SITES AND UNUSUAL NATURAL AREAS:

The Maine Historic Preservation Commission reviewed the proposed project and stated that it will have no effect upon any structure or site of historic, architectural, or archaeological significance as defined by the National Historic Preservation Act of 1966.

The Maine Natural Areas Program database does not contain any records documenting the existence of rare or unique botanical features on the project site and, as discussed in Finding 6, MDIFW did not identify any unusual wildlife habitats located on the project site.

The Department finds that the proposed development will not have an adverse effect on the preservation of any historic sites or unusual natural areas either on or near the development site.

8. BUFFER STRIPS:

The applicant proposes to provide forested, limited-disturbance and meadow stormwater buffers, as discussed in Finding 10. The stormwater buffers will be protected from alteration through the execution of a deed restriction. The applicant proposes to use the deed restriction language contained in Appendix G of Chapter 500 and submitted a draft deed restriction that meets Department requirements.

Prior to the start of construction, the location of the stormwater buffers located in the two Open Space lots must be permanently marked on the ground. The deed for the parcel must contain deed restrictions relative to these stormwater buffers and have attached to it a plot plan, drawn to scale, that specifies the location of the stormwater buffers on the parcel. The applicant must execute and record the required deed restrictions within 60 days of the date of this Order. The applicant must submit a copy of the recorded deed restrictions, including the plot plan, to the Bureau of Land Resources (BLR) within 60 days of its recording.

Prior to the start of construction on Lots 1, 2, 3, 13, 14, 17, 23, and 25, the deed for each lot must contain deed restrictions relative to the stormwater buffer and have attached to it a plot plan for the lot, drawn to scale, that specifies the location of the stormwater buffer on the lot. Also, prior to the start of construction on Lots 1, 2, 3, 13, 14, 17, 23, and 25,

the applicant must submit a copy of the recorded deed restriction including the plot plan to the BLR. Prior to construction on each of these lots, the location of the stormwater buffer must be permanently marked on the ground.

Provided the stormwater buffer areas are protected from future disturbance as outlined above, the Department finds that the applicant has made adequate provision for buffer strips.

9. SOILS:

The applicant submitted a Class B High Intensity soil survey map and report, prepared by a certified soils scientist and a geotechnical report, prepared by a registered professional geologist based on the soils found at the project site. These reports were reviewed by staff from the Division of Environmental Assessment (DEA) of the Bureau of Water Quality.

The applicant indicated blasting associated with construction of the project is likely and submitted a site-specific blasting plan in the application for blasting that occurs within 500 feet of non-owned off-site structures such as buildings and wells. The blasting plan, dated July 18, 2018, was prepared by a qualified blaster and was determined to meet the blasting standards contained in 38 M.R.S. § 490-Z(14).

The Department finds that, based on this report, the Blasting Plan, and DEA's review, the soils on the project site present no limitations to the proposed project that cannot be overcome through standard engineering practices.

10. STORMWATER MANAGEMENT:

The proposed project includes approximately 17.5 acres of developed area, of which 3.8 acres are impervious area. It lies within the watershed of Black Brook and Colley Wright Brook. The applicant submitted a stormwater management plan based on the Basic, General, and Flooding Standards contained in Chapter 500 Stormwater Management rules (06-096 C.M.R. ch. 500, effective August 12, 2015). The proposed stormwater management system consists of grass swales, two wet ponds, four meadow buffers, and ten forested, limited-disturbance buffers.

A. Basic Standards:

(1) Erosion and Sedimentation Control: The applicant submitted an Erosion and Sedimentation Control Plan (Section 14 of the application) that is based on the performance standards contained in Appendix A of Chapter 500 and the Best Management Practices outlined in the Maine Erosion and Sediment Control BMPs, which were developed by the Department. This plan and plan sheets containing erosion control details were reviewed by, and revised in response to the comments of, the BLR.

Erosion control details will be included on the final construction plans and the erosion control narrative will be included in the project specifications to be provided to the construction contractor.

(2) Inspection and Maintenance: The applicant submitted a maintenance plan that addresses both short and long-term maintenance requirements. The maintenance plan is based on the standards contained in Appendix B of Chapter 500. This plan was reviewed by, and revised in response to the comments of, BLR. A homeowners' association will be established that will be responsible for the maintenance of all common facilities including the stormwater management system. The Declaration of Covenants and Restrictions for the association was reviewed and found to meet Department requirements. Prior to the formation of the homeowners' association, the applicant will be responsible for all such maintenance.

Storm sewer grit and sediment materials removed from stormwater control structures during maintenance activities must be disposed of in compliance with the Maine Solid Waste Management Rules.

(3) Housekeeping: The proposed project will comply with the performance standards outlined in Appendix C of Chapter 500.

Based on BLR's review of the erosion and sedimentation control plan and the maintenance plan, the Department finds that the proposed project meets the Basic Standards contained in Chapter 500(4)(B).

B. General Standards:

Pursuant to Chapter 500(4)(C)(2)(a)(iii), the applicant has chosen to limit the percentage of developed land area to less than 60% of the land available for development. As a result, the percentage of total developed area requiring treatment is 75% and the percentage of total impervious area requiring treatment is 90%. The applicant's stormwater management plan includes general treatment measures that will mitigate for the increased frequency and duration of channel erosive flows due to runoff from smaller storms, provide for effective treatment of pollutants in stormwater, and mitigate potential temperature impacts. This mitigation is being achieved by using Best Management Practices (BMPs) that will control runoff from no less than 90% of the impervious area and no less than 76% of the developed area.

The forested, limited disturbance and meadow stormwater buffers located on lots and the two open space lots will be protected from alteration through the execution of a deed restriction as outlined in Finding 8. The applicant proposes to use the deed restriction language contained in Appendix G of Chapter 500.

The stormwater management system proposed by the applicant was reviewed by, and revised in response to comments from, BLR. After a final review, BLR commented that

the proposed stormwater management system is designed in accordance with the General Standards contained in Chapter 500(4)(C).

Based on the stormwater system's design and BLR's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the General Standards contained in Chapter 500(4)(C).

C. Flooding Standard:

The applicant is proposing to utilize a stormwater management system based on estimates of pre- and post-development stormwater runoff flows obtained by using Hydrocad, a stormwater modeling software that utilizes the methodologies outlined in Technical Releases #55 and #20, U.S.D.A., Soil Conservation Service and detains stormwater from 24-hour storms of 2-, 10-, and 25-year frequency. The post-development peak flow from the site will not exceed the pre-development peak flow from the site and the peak flow of the receiving water will not be increased as a result of stormwater runoff from the development site.

BLR commented that the proposed system is designed in accordance with the Flooding Standard contained in Chapter 500(4)(F).

Based on the system's design and BLR's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the Flooding Standard contained in Chapter 500(4)(F) for peak flow from the project site, and channel limits and runoff areas.

11. GROUNDWATER:

The project site is not located over a mapped sand and gravel aquifer. Other than drinking water, the proposed project does not propose any withdrawal from the groundwater. Wastewater will be disposed of via individual subsurface wastewater disposal systems on each lot as described in Finding 13.

Based on DEA's review of the information discussed in Findings 12 and 13, the Department finds that the proposed project will not unreasonably deplete groundwater resources. Therefore, the Department further finds that the proposed project will not have an unreasonable adverse effect on groundwater quality or quantity.

12. WATER SUPPLY:

Water for the development will be supplied by individual wells. The applicant submitted an assessment of groundwater supplies that are available on the project site and an analysis of potential impacts to on-site wells resulting from on-site wastewater disposal. These assessments were prepared by a certified geologist and were reviewed by, and revised in response to comments from, the DEA.

Water supply well casings must be set and grouted a minimum of 20 feet into the solid bedrock surface, if bedrock is encountered at a depth less than 10 feet. Wells must not be located in the exclusion areas identified on the Well & Septic System Location Plan, included in the set of plans referenced in Finding 1.

Provided individual wells areas are protected as discussed above, the Department finds that the applicant has made adequate provision for securing and maintaining a sufficient and healthful water supply.

13. WASTEWATER DISPOSAL:

Wastewater will be disposed of by an individual subsurface wastewater disposal system on each lot. The applicant submitted the soil survey map and report discussed in Finding 9 and an analysis of potential impacts to off-site groundwater quality resulting from on-site wastewater disposal prepared by a certified geologist. Each individual system must be designed to meet the requirements of the Maine State Plumbing Code. This information was reviewed by, and revised in response to comments from, DEA.

Individual wastewater disposal field locations were identified on the Well & Septic System Location Plan included in the set of plans referenced in Finding 1 and were determined based on the nitrate-nitrogen impact analysis. DEA commented that the nitrate-nitrogen impact assessment was based on wastewater flows generated by a 3-bedroom dwelling, and therefore, single-family residences for the proposed project must be limited to dwellings with three bedrooms or less.

Relocation of an individual subsurface wastewater disposal system will require review and approval from the BLR prior to installation of the system.

Based on the soil survey map and report, the analysis of potential impacts to off-site groundwater quality, and DEA's comments, the Department finds that the proposed wastewater disposal systems will be built on suitable soil types and that Maine's Drinking Water Standard for nitrates will be met at the project's property lines provided that subsurface wastewater disposal systems are located as shown on the set of plans referenced in Finding 1 and dwellings are limited to three bedrooms or less.

14. SOLID WASTE:

When completed, the proposed project is anticipated to generate six tons of household solid waste per year. All general solid wastes from the proposed project will be disposed of utilizing the Town's curbside pickup service. The Town contracts this service to Pine Tree Waste who hauls municipal solid waste to its transfer station in Westbrook and then on to the Juniper Ridge Landfill, which is currently in substantial compliance with the Maine Solid Waste Management Rules.

The proposed project will generate approximately 400 cubic yards of stumps and grubblings. All stumps and grubblings generated will be chipped and ground on site, and

used as erosion control mix and landscape mulching in compliance with the Solid Waste Management Regulations of the State of Maine.

The proposed project will generate approximately 50 cubic yards of construction debris and demolition debris per lot. All construction and demolition debris generated will be disposed of at the Pine Tree Waste transfer station in Westbrook, which is currently in substantial compliance with the Maine Solid Waste Management Rules.

Based on the above information, the Department finds that the applicant has made adequate provision for solid waste disposal.

15. FLOODING:

The proposed project is not located within the 100-year flood plain of any river or stream.

The Department finds that the proposed project is unlikely to cause or increase flooding or cause an unreasonable flood hazard to any structure.

16. WETLAND IMPACTS:

The applicant proposes to directly alter 14,569 square feet of forested freshwater wetland at seven locations on the parcel to construct the proposed project. The proposed alteration is shown on the set of plans referenced in Finding 1. The applicant avoided wetland impacts by designing the road to cross the wetlands in narrow locations and at a right angle to the narrow wetland area. The applicant minimized wetland fill by reducing road side slopes from 3:1 to 2:1 where the road crosses the wetlands. Given the location of wetlands throughout the parcel, crossing the wetlands to access upland portions of the project site are unavoidable. According to the Department's Geographic Information System, there are no mapped Significant Wildlife Habitats associated with the project site.

Prior to the start of construction on Lots 4, 5, 8, 9, 11, 12, 13, 14, 15, and 16, the location of wetlands on these lots must be permanently marked on the ground and the deed for each lot that contains any portion of a wetland must have attached to it a plot plan for the lot, drawn to scale, that specifies the location of the wetland on the lot. The Subdivision Plan, included in the set of plans referenced in Finding 1, includes a note that any further alteration of wetlands is not authorized without prior Department approval.

The Department finds that the applicant has avoided and minimized wetland impacts to the greatest extent practicable, and that the proposed project represents the least environmentally damaging alternative that meets the overall purpose of the project provided that the location of the wetlands on Lots 4, 5, 8, 9, 11, 12, 13, 14, 15, and 16 are permanently marked on the ground prior to the start of construction on each lot.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S. §§ 480-A–480-JJ and Section 401 of the Federal Water Pollution Control Act:

- A. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life provided that the location of the wetlands on Lots 4, 5, 8, 9, 11, 12, 13, 14, 15, and 16 are permanently marked on the ground prior to the start of construction on each lot, as described in Finding 16.
- B. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S. §§ 481–489-E:

- A. The applicant has provided adequate evidence of financial capacity and technical ability to develop the project in a manner consistent with state environmental standards.
- B. The applicant has made adequate provision for fitting the development harmoniously into the existing natural environment and the development will not adversely affect existing uses, scenic character, air quality, water quality or other natural resources in the municipality or in neighboring municipalities.
- C. The proposed development will be built on soil types which are suitable to the nature of the undertaking and will not cause unreasonable erosion of soil or sediment nor inhibit the natural transfer of soil.
- D. The proposed development meets the standards for storm water management in 38 M.R.S. § 420-D and the standard for erosion and sedimentation control in 38 M.R.S. § 420-C provided that sewer grit and sediment are disposed of properly and that deed restrictions for the designated stormwater buffers are recorded, as described in Finding 8.
- E. The proposed development will not pose an unreasonable risk that a discharge to a significant groundwater aquifer will occur.
- F. The applicant has made adequate provision of utilities, including water supplies, sewerage facilities and solid waste disposal required for the development and the development will not have an unreasonable adverse effect on the existing or proposed utilities in the municipality or area served by those services provided that drinking water wells and subsurface wastewater disposal systems are located as shown on the set of plans referenced in Finding 1 and installed as described in Findings 12 and 13.

- G. The activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties nor create an unreasonable flood hazard to any structure.

THEREFORE, the Department APPROVES the application of MATT HANCOCK PROPERTIES, LLC to construct a 27-lot residential subdivision as described in Finding 1, SUBJECT TO THE FOLLOWING CONDITIONS and all applicable standards and regulations:

1. The Standard Conditions of Approval, a copy attached.
2. In addition to any specific erosion control measures described in this or previous orders, the applicant shall take all necessary actions to ensure that its activities or those of its agents do not result in noticeable erosion of soils or fugitive dust emissions on the site during the construction and operation of the project covered by this approval.
3. Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.
4. The applicant shall include in all conveyances of subdivision lots deed restrictions making the conveyance subject to all terms and conditions of this Department permit and any applicable municipal approval. These terms and conditions may be incorporated by specific and prominent reference to the permit in the deed. All conveyances required by this approval to contain restrictions shall include in the restrictions the requirement that any subsequent conveyance shall specifically include the same restrictions.
5. The applicant shall give a copy of this permit, including the standard conditions, and a copy of the approved subdivision plan to each lot buyer at least 14 days prior to the date of closing on the sale or lease of the lot. The applicant also shall maintain a file containing signed and dated statements by lot buyers or lessees acknowledging that they have received and read their copy of this permit and the subdivision plan prior to the closing on their lot. The file shall also contain a copy of the signed and dated deed or lease containing the restrictive covenants required under this approval. The applicant shall make this file available for inspection upon request by the Department.
6. The applicant shall execute and record all required deed restrictions, including the stormwater buffer deed restrictions, within 60 days of the date of this Order unless the deed restriction is to be placed on a subdivision lot (Lots 1, 2, 3, 13, 14, 17, 23, and 25). In that situation, the applicant shall execute and record the required deed restriction prior to the start of construction on the lot. The applicant shall submit a copy of the recorded deed restriction, including the plot plan, to the BLR within 60 days of its recording.
7. Prior to the start of construction, the location of forested and meadow stormwater buffers on individual lots shall be permanently marked on the ground.

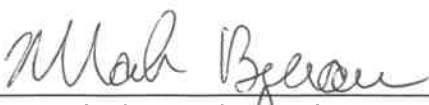
8. Storm sewer grit and sediment materials removed from stormwater control structures shall be disposed of in compliance with the Maine Solid Waste Management Rules.
9. Individual water supply well casings shall be set and grouted a minimum of 20 feet into the solid bedrock surface, if bedrock is less than 10 feet in depth at well sites. Wells shall not be located in the exclusion areas identified on the Well & Septic System Location Plan included in the set of plans referenced in Finding 1.
10. Each individual subsurface wastewater disposal system shall not exceed the design flow for a 3-bedroom dwelling and shall be located as shown on the Well & Septic System Location Plan included in the set of plans referenced in Finding 1. Relocation of an individual subsurface wastewater disposal system shall require review and approval from the BLR prior to installation of the system.
11. Prior to the start of construction on Lots 4, 5, 8, 9, 11, 12, 13, 14, 15, and 16, the location of wetlands on these lots shall be permanently marked on the ground and the deed for each lot that contains any portion of a wetland must have attached to it a plot plan for the lot, drawn to scale, that specifies the location of the wetland on the lot.

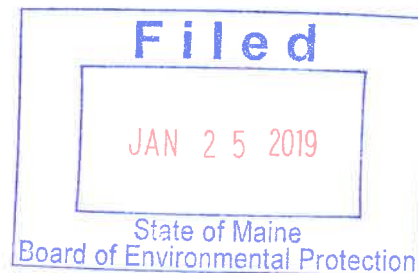
THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED IN AUGUSTA, MAINE, THIS 25TH DAY OF JANUARY, 2019.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:


For: Melanie Loyzim, Acting Commissioner



PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

RLG/L23215DNEN/ATS#83464, 83466

Department of Environmental Protection
SITE LOCATION OF DEVELOPMENT (SITE)
STANDARD CONDITIONS

- A. Approval of Variations from Plans.** The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation. Further subdivision of proposed lots by the applicant or future owners is specifically prohibited without prior approval of the Board, and the applicant shall include deed restrictions to that effect.
- B. Compliance with All Applicable Laws.** The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
- C. Compliance with All Terms and Conditions of Approval.** The applicant shall submit all reports and information requested by the Board or the Department demonstrating that the applicant has complied or will comply with all preconstruction terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
- D. Advertising.** Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.
- E. Transfer of Development.** Unless otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Board where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval shall be granted only if the applicant or transferee demonstrates to the Board that the transferee has the technical capacity and financial ability to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant.
- F. Time frame for approvals.** If the construction or operation of the activity is not begun within four years, this approval shall lapse and the applicant shall reapply to the Board for a new approval. The applicant may not begin construction or operation of the development until a new approval is granted. A reapplication for approval may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.
- G. Approval Included in Contract Bids.** A copy of this approval must be included in or attached to all contract bid specifications for the development.
- H. Approval Shown to Contractors.** Work done by a contractor pursuant to this approval shall not begin before the contractor has been shown by the developer a copy of this approval.

(2/81)/Revised December 27, 2011



Natural Resources Protection Act (NRPA) Standard Conditions

THE FOLLOWING STANDARD CONDITIONS SHALL APPLY TO ALL PERMITS GRANTED UNDER THE NATURAL RESOURCES PROTECTION ACT, 38 M.R.S. § 480-A ET SEQ., UNLESS OTHERWISE SPECIFICALLY STATED IN THE PERMIT.

- A. Approval of Variations From Plans. The granting of this permit is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.
- B. Compliance With All Applicable Laws. The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
- C. Erosion Control. The applicant shall take all necessary measures to ensure that his activities or those of his agents do not result in measurable erosion of soils on the site during the construction and operation of the project covered by this Approval.
- D. Compliance With Conditions. Should the project be found, at any time, not to be in compliance with any of the Conditions of this Approval, or should the applicant construct or operate this development in any way other the specified in the Application or Supporting Documents, as modified by the Conditions of this Approval, then the terms of this Approval shall be considered to have been violated.
- E. Time frame for approvals. If construction or operation of the activity is not begun within four years, this permit shall lapse and the applicant shall reapply to the Board for a new permit. The applicant may not begin construction or operation of the activity until a new permit is granted. Reapplications for permits may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.
- F. No Construction Equipment Below High Water. No construction equipment used in the undertaking of an approved activity is allowed below the mean high water line unless otherwise specified by this permit.
- G. Permit Included In Contract Bids. A copy of this permit must be included in or attached to all contract bid specifications for the approved activity.
- H. Permit Shown To Contractor. Work done by a contractor pursuant to this permit shall not begin before the contractor has been shown by the applicant a copy of this permit.

STORMWATER STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL

Standard conditions of approval. Unless otherwise specifically stated in the approval, a department approval is subject to the following standard conditions pursuant to Chapter 500 Stormwater Management Law.

- (1) Approval of variations from plans. The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the permittee. Any variation from these plans, proposals, and supporting documents must be reviewed and approved by the department prior to implementation. Any variation undertaken without approval of the department is in violation of 38 M.R.S. §420-D(8) and is subject to penalties under 38 M.R.S. §349.
- (2) Compliance with all terms and conditions of approval. The applicant shall submit all reports and information requested by the department demonstrating that the applicant has complied or will comply with all terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
- (3) Advertising. Advertising relating to matters included in this application may not refer to this approval unless it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.
- (4) Transfer of project. Unless otherwise provided in this approval, the applicant may not sell, lease, assign, or otherwise transfer the project or any portion thereof without written approval by the department where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval may only be granted if the applicant or transferee demonstrates to the department that the transferee agrees to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant. Approval of a transfer of the permit must be applied for no later than two weeks after any transfer of property subject to the license.
- (5) Time frame for approvals. If the construction or operation of the activity is not begun within four years, this approval shall lapse and the applicant shall reapply to the department for a new approval. The applicant may not begin construction or operation of the project until a new approval is granted. A reapplication for approval may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.
- (6) Certification. Contracts must specify that "all work is to comply with the conditions of the Stormwater Permit." Work done by a contractor or subcontractor pursuant to this approval may not begin before the contractor and any subcontractors have been shown a copy of this approval with the conditions by the permittee, and the permittee and each contractor and subcontractor has certified, on a form provided by the department, that the approval and conditions have been received and read, and that the work will be carried out in accordance with the approval and conditions. Completed certification forms must be forwarded to the department.

- (7) Maintenance. The components of the stormwater management system must be adequately maintained to ensure that the system operates as designed, and as approved by the Department. If maintenance responsibility is to be transferred from the permittee to another entity, a transfer request must be filed with the Department which includes the name and contact information for the person or entity responsible for this maintenance. The form must be signed by the responsible person or agent of the responsible entity.
- (8) Recertification requirement. Within three months of the expiration of each five-year interval from the date of issuance of the permit, the permittee shall certify the following to the department.
- (a) All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.
 - (b) All aspects of the stormwater control system are operating as approved, have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system, as necessary.
 - (c) The stormwater maintenance plan for the site is being implemented as approved by the Department, and the maintenance log is being maintained.
 - (d) All proprietary systems have been maintained according to the manufacturer's recommendations. Where required by the Department, the permittee shall execute a 5-year maintenance contract with a qualified professional for the coming 5-year interval. The maintenance contract must include provisions for routine inspections, cleaning and general maintenance.
 - (e) The Department may waive some or all of these recertification requirements on a case-by-case basis for permittees subject to the Department's Multi-Sector General Permit ("MSGP") and/or Maine Pollutant Discharge Elimination System ("MEPDES") programs where it is demonstrated that these programs are providing stormwater control that is at least as effective as required pursuant to this Chapter.
- (9) Transfer of property subject to the license. If any portion of the property subject to the license containing areas of flow or areas that are flooded are transferred to a new property owner, restrictive covenants protecting these areas must be included in any deeds or leases, and recorded at the appropriate county registry of deeds. Also, in all transfers of such areas and areas containing parts of the stormwater management system, deed restrictions must be included making the property transfer subject to all applicable terms and conditions of the permit. These terms and conditions must be incorporated by specific and prominent reference to the permit in the deed. All transfers must include in the restrictions the requirement that any subsequent transfer must specifically include the same restrictions unless their removal or modification is approved by the Department. These restrictions must be written to be enforceable by the Department, and must reference the permit number.
- (10) Severability. The invalidity or unenforceability of any provision, or part thereof, of this permit shall not affect the remainder of the provision or any other provisions. This permit shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.



DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: November 2018

Contact: (207) 287-2452

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's (DEP) Commissioner: (1) an administrative process before the Board of Environmental Protection (Board); or (2) a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S. § 480-HH(1)) or a general permit for a tidal energy demonstration project (38 M.R.S. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

This information sheet, in conjunction with a review of the statutory and regulatory provisions referred to herein, can help a person to understand his or her rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

The laws concerning the DEP's *Organization and Powers*, 38 M.R.S. §§ 341-D(4) & 346; the *Maine Administrative Procedure Act*, 5 M.R.S. § 11001; and the DEP's *Rules Concerning the Processing of Applications and Other Administrative Matters* ("Chapter 2"), 06-096 C.M.R. ch. 2.

DEADLINE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written appeal within 30 days of the date on which the Commissioner's decision was filed with the Board. Appeals filed more than 30 calendar days after the date on which the Commissioner's decision was filed with the Board will be dismissed unless notice of the Commissioner's license decision was required to be given to the person filing an appeal (appellant) and the notice was not given as required.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017. An appeal may be submitted by fax or e-mail if it contains a scanned original signature. It is recommended that a faxed or e-mailed appeal be followed by the submittal of mailed original paper documents. The complete appeal, including any attachments, must be received at DEP's offices in Augusta on or before 5:00 PM on the due date; materials received after 5:00 pm are not considered received until the following day. The risk of material not being received in a timely manner is on the sender, regardless of the method used. The appellant must also send a copy of the appeal documents to the Commissioner of the DEP; the applicant (if the appellant is not the applicant in the license proceeding at issue); and if a hearing was held on the application, any intervenor in that hearing process. All of the information listed in the next section of this information sheet must be submitted at the time the appeal is filed.

INFORMATION APPEAL PAPERWORK MUST CONTAIN

Appeal materials must contain the following information at the time the appeal is submitted:

1. *Aggrieved Status.* The appeal must explain how the appellant has standing to maintain an appeal. This requires an explanation of how the appellant may suffer a particularized injury as a result of the Commissioner's decision.
2. *The findings, conclusions, or conditions objected to or believed to be in error.* The appeal must identify the specific findings of fact, conclusions regarding compliance with the law, license conditions, or other aspects of the written license decision or of the license review process that the appellant objects to or believes to be in error.
3. *The basis of the objections or challenge.* For the objections identified in Item #2, the appeal must state why the appellant believes that the license decision is incorrect and should be modified or reversed. If possible, the appeal should cite specific evidence in the record or specific licensing requirements that the appellant believes were not properly considered or fully addressed.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.
5. *All the matters to be contested.* The Board will limit its consideration to those matters specifically raised in the written notice of appeal.
6. *Request for hearing.* If the appellant wishes the Board to hold a public hearing on the appeal, a request for public hearing must be filed as part of the notice of appeal, and must include an offer of proof in accordance with Chapter 2. The Board will hear the arguments in favor of and in opposition to a hearing on the appeal and the presentations on the merits of an appeal at a regularly scheduled meeting. If the Board decides to hold a public hearing on an appeal, that hearing will then be scheduled for a later date.
7. *New or additional evidence to be offered.* If an appellant wants to provide evidence not previously provided to DEP staff during the DEP's review of the application, the request and the proposed evidence must be submitted with the appeal. The Board may allow new or additional evidence, referred to as supplemental evidence, to be considered in an appeal only under very limited circumstances. The proposed evidence must be relevant and material, and (a) the person seeking to add information to the record must show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process; or (b) the evidence itself must be newly discovered and therefore unable to have been presented earlier in the process. Specific requirements for supplemental evidence are found in Chapter 2 § 24.

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license application file is public information, subject to any applicable statutory exceptions, and is made easily accessible by the DEP. Upon request, the DEP will make application materials available during normal working hours, provide space to review the file, and provide an opportunity for photocopying materials. There is a charge for copies or copying services.
2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer general questions regarding the appeal process.
3. *The filing of an appeal does not operate as a stay to any decision.* If a license has been granted and it has been appealed, the license normally remains in effect pending the processing of the appeal. Unless a stay of the decision is requested and granted, a license holder may proceed with a project pending the outcome of an appeal, but the license holder runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge receipt of an appeal, and will provide the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials accepted by the Board Chair as supplementary evidence, any materials submitted in response to the appeal, and relevant excerpts from the DEP's application review file will be sent to Board members with a recommended decision from DEP staff. The appellant, the license holder if different from the appellant, and any interested persons are notified in advance of the date set for Board consideration of an appeal or request for public hearing. The appellant and the license holder will have an opportunity to address the Board at the Board meeting. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, the license holder, and interested persons of its decision.

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court (see 38 M.R.S. § 346(1); 06-096 C.M.R. ch. 2; 5 M.R.S. § 11001; and M.R. Civ. P. 80C). A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board's Executive Analyst at (207) 287-2452, or for judicial appeals contact the court clerk's office in which your appeal will be filed.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.

From: Green, Robert L <Robert.L.Green@maine.gov>
Sent: Friday, October 12, 2018 11:19 AM
To: kball@acheronengineering.com
Subject: FW: Windham - Durant Homestead Subdivision

Good morning,

Stormwater review comments for the referenced project are provided below.

Bob.

Robert L. Green, Jr., Project Manager
Bureau of Land Resources
tel: 207-615-2214
fax: 207-822-6303

From: Waddell, David A
Sent: Thursday, October 11, 2018 4:51 PM
To: Green, Robert L <Robert.L.Green@maine.gov>
Subject: Windham - Durant Homestead Subdivision

Bob,
I have reviewed the application for Durant Homestead Subdivision, in Windham, Maine. The following list of comments are minor but need to be addressed for a final approval:

Basic Standard

- Erosion control notes need to be in the on plan sheet set.
- Silt fencing detail notes should specify that all sediment barriers must be installed along the contour.
- Sediment barriers on the location plan are shown installed crossing contours. Note that the ends of all barrier sections need to be turned upslope to retain runoff.
- Sediment barrier locations should not be shown within the concentrated flows. Plan shows the barrier across the outlets from wet ponds, cross culverts (inlet and outlets). Please correct.
- Hay bale barriers are for emergency use only. Barrier detail does not show the haybales entrenched by 4 inches.
- Hay bale check dams must be replaced by stone check dams. Detail needs to be provided.
- Locations of the stone check dams need to be shown on location plan.
- Ditch lining is fabric is implied but no detail provided or locations on location plan.

General Standard

- Buffers "E" and "O" concentrates flows within the buffer area and do not provide adequate treatment.
- Driveway locations on lots 24-26 must be located to preserve buffer integrity.
- Easements should be provided for all buffers that are not contained fully on the lots they treat.

David A. Waddell
Assistant Environmental Engineer
Division of Watershed Management

Bureau of Water Quality
17 State House Station
Augusta, ME 04333
Email: David.A.Waddell@Maine.gov

Watershed Management:

Basic Standard

- *Erosion control notes need to be in the on plan sheet set.*

The General Notes and Index sheet of the attached drawing package has been revised to include all erosion control notes.

- *Silt fencing detail notes should specify that all sediment barriers must be installed along the contour.*

Detail sheet D-2 of the attached drawing package has been revised to include a note indicated that all sediment barriers must be installed along the contour.

- *Sediment barriers on the location plan are shown installed crossing contours. Note that the ends of all barrier sections need to be turned upslope to retain runoff.*

Location of sediment barriers shown on sheets C-6, C-7, and C-8 have been revised to be parallel to contours, with ends turned upslope.

- *Sediment barrier locations should not be shown within the concentrated flows. Plan shows the barrier across the outlets from wet ponds, cross culverts (inlet and outlets). Please correct.*

Sheets C-6, C-7, and C-8 have been revised showing sediment barriers outside areas of concentrated stormwater flows.

- *Hay bale barriers are for emergency use only. Barrier detail does not show the haybales entrenched by 4 inches.*

The haybale barrier detail has been removed from sheet D-2.

- *Hay bale check dams must be replaced by stone check dams. Detail needs to be provided.*

Haybale check dams have been removed and replace with stone check dams and detail added. Please see sheet C-6 and D-2.

- *Locations of the stone check dams need to be shown on location plan.*

Location of stone check dams are shown on C-6 and spacing table added on sheet D-2.

- *Ditch lining is fabric is implied but no detail provided or locations on location plan.*

Ditch lining fabric location has been added to sheet C-6 and D-2.

General Standard

- *Buffers “E” and “O” concentrates flows within the buffer area and do not provide adequate treatment.*

Buffers “E” and “O” have been removed from the design. To meet the required treatment level for the project, the grading for the road has been revised between station 1+34 to 2+65, so that stormwater from an additional 68 feet of road and ditches is conveyed to Wet Pond #1 for treatment. Please refer to revised drawing sheets C-4, C-5, C-7, C-9 and C-10, along with the revised portions of Section 12 of the application, attached.

- *Driveway locations on lots 24-26 must be located to preserve buffer integrity.*

Driveways for lots 23 and 25 have been added to sheet C-5.

- *Easements should be provided for all buffers that are not contained fully on the lots they treat.*

Buffer easements for the project’s common area/open space will be filed when the common space is conveyed to the Durant Homestead Home Owners Association.



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION
AUGUSTA, MAINE
04333

PAUL R. LEPAGE
GOVERNOR

PAUL MERCER
COMMISSIONER

Project Review Memorandum

BUREAU OF WATER QUALITY, DIVISION OF ENVIRONMENTAL ASSESSMENT

Date: 11-7-18
To: Robert L. Green, Jr., Project Manager Land Div., Bureau of Land Resources
From: William T. Noble, Certified Geologist Environmental Geology Unit
Re: Additional Information: Durant Homestead Subdivision, Windham,
Project No. L-023215-L3-D-N.

Review of additional and revised information on this proposed project, included with a response letter, dated 10-29-18, received on 11-5-18, has been completed. The submittal has been provided to address a project review memorandum, dated 9-17-18. Comments are as follows (*comment item numbers coincide with those in the 9-17-18 review memo*):

3. In response to this comment item, which requested logs for the SWTP series of test pits (*except for SWTP 8 and SWTP-8A which were submitted*), a Soil Documentation Report for Stormwater Systems, dated 12-11-17, has been provided. No further response is requested, but it is noted that logs/locations for SWTP-8 and SWTP-8A were omitted from this report (*only 7 TP locations are cited*), although the TPs are located at proposed Wetpond 1, as indicated on other project plans.
4. The label for the clay liner in the detail on plan sheet D-1 should reference General Note 9 instead of General Note 18 on drawing no. i (*aka sheet 1 of 16*). In addition, the label should reference the liner NOTE on plan sheet C-13.
7. How water will be supplied to the project should be clarified. A NOTE regarding water supply well construction has been added to plan sheet C-2 in response to this comment item, and the revised development description states that lots will have a well on each lot. However, the response letter states that there is a local requirement to provide public water to the project.
10. The response to this comment item indicates that a reduced separation distance between the proposed disposal field and well at lot 3 can be permitted in compliance with Table 7A of the Subsurface Wastewater Disposal Rules. Although this is provided for in the SSWD Rules, it is not clear why the proposed well location cannot simply be moved.
11. If the "Preliminary Subdivision Plan", which shows proposed locations of disposal fields and wells, will be recorded at the registry of deeds as is stated in the response to this comment item, then the word "preliminary" should be deleted from the title of this plan.
15. The response to this comment item states that an existing oil tank and other debris at the project site have been removed, but that an existing unused well (*referenced in Condition 11 in a Department Order, dated 7-17-07*) has not yet been abandoned. The well should be abandoned in accordance with standard industry practices (*e.g. Groundwater and Wells, Johnson Division, St. Paul, MN*) and/or Chapter 7 of the Well Drillers and Pump Installers Rules (*10-144 CMR 232*). A DEP well abandonment guidance document can also be found at https://www.maine.gov/dep/spills/publications/guidance/documents/dep_well_abandonment_guidance.pdf. This requirement could be attached as a condition of the site location approval of this project. A notice or report should be provided when this task has been completed.

lwndurant2.docx



PROTECT OUR GROUNDWATER

Acheron

Engineering, Environmental & Geologic Consultants
www.AcheronEngineering.com

November 28, 2018

Robert Green
Maine Department of Environmental Protection
312 Canco Road
Portland, Maine 04103

RE: Site Location of Development Permit Application, Project L-023215-L3-D-N, Response to Comments by the Environmental Geology Unit for the Durant Homestead, Residential Subdivision, Windham, Maine

Mr. Green:

Below are responses to review comments by the Environmental Geology Unit, dated November 7, 2018. Review comments are in italic font followed by Matt Hancock Properties, LLC response in regular font.

Environmental Geology Unit:

4. *The label for the clay liner in the detail on plan sheet D-1 should reference General Note 9 in-stead of General Note 18 on drawing no. i (aka sheet 1 of 16). In addition, the label should refer-ence the liner NOTE on plan sheet C-13.*

Plan sheet D-1 and C-13 have been revised and are attached.

7. *How water will be supplied to the project should be clarified. A NOTE regarding water supply well construction has been added to plan sheet C-2 in response to this comment item, and the revised development description states that lots will have a well on each lot. However, the response letter states that there is a local requirement to provide public water to the project.*

Water will be supplied to the project by individual wells on each lot. The local requirement to provide public water was triggered if the project included 26 residential lots. This requirement is the reason for reduction of the lots from 26 to 25.

10. *The response to this comment item indicates that a reduced separation distance between the proposed disposal field and well at lot 3 can be permitted in compliance with Table 7A of the Subsurface Wastewater Disposal Rules. Although this is provided for in the SSWD Rules, it is not clear why the proposed well location cannot simply be moved.*

Movement of the well within Lot #3 will either not meet the SSWD set back requirements from disposal systems on the surrounding lots or will be in an area with potentially elevated nitrate levels from Lot#21.

11. *If the "Preliminary Subdivision Plan", which shows proposed locations of disposal fields and wells, will be recorded at the registry of deeds as is stated in the response to this comment item, then the word "preliminary" should be deleted from the title of this plan.*

The Town of Windham recently approved the Major Subdivision Preliminary Application for the project. Matt Hancock Properties will file a Major Subdivision Final Application with the Town of Windham, once all other applicable permits are obtained for the project. At the time of filing, the word "preliminary" will be removed from the plan to be recorded.

15. *The response to this comment item states that an existing oil tank and other debris at the project site have been removed, but that an existing unused well (referenced in Condition 11 in a Department Order, dated 7-17-07) has not yet been abandoned. The well should be abandoned in accordance with standard industry practices (e.g. Groundwater and Wells, Johnson Division, St. Paul, MN) and/or Chapter 7 of the Well Drillers and Pump Installers Rules (10-144 CMR 232). A DEP well abandonment guidance document can also be found at https://www.maine.gov/dep/spills/publications/guidance/documents/dep_well_abandonment_guidance.pdf. This requirement could be attached as a condition of the site location approval of this project. A notice or report should be provided when this task has been completed.*

No further comment required from Matt Hancock Properties.

Please let me know if you have any questions or concerns and please advise how the department will handle a refund of the permit fee, due to the reduction of the number of lots.

Sincerely,
Acheron



Kirk J. Ball, PE

Enclosure: Revised Plans C-13 & D-1, (2)

Cc: Matt Hancock, MHP
David Fowler, MHP



STATE OF MAINE
DEPARTMENT OF
INLAND FISHERIES & WILDLIFE
284 STATE STREET
41 STATE HOUSE STATION
AUGUSTA ME 04333-0041

CHANDLER E. WOODCOCK
COMMISSIONER

June 21, 2017

Aleita Burman
Burman Land & Tree Company, LLC
P.O. Box 145
Orrington, ME 04474

RE: Information Request - 60 Chute Road subdivision, Windham

Dear Lee:

Per your request received June 16, 2017, we have reviewed current Maine Department of Inland Fisheries and Wildlife (MDIFW) information for known locations of Endangered, Threatened, and Special Concern species; designated Essential and Significant Wildlife Habitats; and fisheries habitat concerns within the vicinity of the *60 Chute Road subdivision Project* in Windham.

Our Department has not mapped any Essential Habitats that would be directly affected by your project.

Endangered, Threatened, and Special Concern Species

Bats

Of the eight species of bats that occur in Maine, the three *Myotis* species are protected under Maine's Endangered Species Act (MESA) and are afforded special protection under 12 M.R.S §12801 - §12810. The three *Myotis* species include little brown bat (*M. lucifugus*, State Endangered); northern long-eared bat (*M. septentrionalis*, State Endangered); and eastern small-footed bat (*M. leibii*, State Threatened). The five remaining bat species are listed as Special Concern: big brown bat (*Eptesicus fuscus*); red bat (*Lasiurus borealis*), hoary bat (*Lasiurus cinereus*), silver-haired bat (*Lasionycteris noctivagans*), and tri-colored bat (*Perimyotis subflavus*).

While a comprehensive statewide inventory for bats has not been completed, it is likely that several of these species occur within the project area during migration and/or the breeding season. We recommend that you contact the U.S. Fish and Wildlife Service--Maine Fish and Wildlife Complex (Wende Mahaney, 207-902-1569) for further guidance, as the northern long-eared bat is also listed as a Threatened Species under the Federal Endangered Species Act. Otherwise, our Agency does not anticipate significant impacts to any of the bat species as a result of this project.

Significant Wildlife Habitat

Significant Vernal Pools

At this time, MDIFW Significant Wildlife Habitat (SWH) maps indicate no known presence of SWHs within the project area, which include Waterfowl and Wading Bird Habitats, Deer Wintering Areas, Seabird Nesting Islands, Shorebird Areas, and Significant Vernal Pools. However, a comprehensive statewide inventory for Significant Vernal Pools has not been completed. Therefore, we strongly recommend that surveys for vernal pools be conducted within the project boundary by qualified wetland scientists prior to final project design to determine whether there are Significant Vernal Pools present in the area. These surveys should extend up to 250 feet beyond the anticipated project footprint because of potential performance standard requirements for off-site Significant Vernal Pools, assuming such pools are located on land owned or controlled by the applicant. Once surveys are completed, our Department will need to review and verify any vernal pool data prior to final determination of significance.

Fisheries Habitat

Without details, it is difficult to know what impacts your project may have on the mapped streams within the search area. That being said, MDIFW makes the following general recommendations as they pertain to streams.

We recommend that a 100-foot undisturbed vegetated buffer be maintained along these streams. Buffers should be measured from the edge of stream or associated fringe and floodplain wetlands. Maintaining and enhancing buffers along streams that support coldwater fisheries is critical to the protection of water temperatures, water quality, natural inputs of coarse woody debris, and various forms of aquatic life necessary to support conditions required by many fish species. Stream crossings should be avoided, but if a stream crossing is necessary, or an existing crossing needs to be modified, it should be designed to provide full fish passage. Small streams, including intermittent streams, can provide crucial rearing habitat, cold water for thermal refugia, and abundant food for juvenile salmonids on a seasonal basis and undersized crossings may inhibit these functions. Generally, MDIFW recommends that all new, modified, and replacement stream crossings be sized to span 1.2 times the bankfull width of the stream. In addition, we generally recommend that stream crossings be open bottomed (i.e. natural bottom), although embedded structures which are backfilled with representative streambed material have been shown to be effective in not only providing habitat connectivity for fish but also for other aquatic organisms. We encourage you to contact our Region A Fisheries staff (207-657-2345) for crossing design recommendations that best maintain fish passage. Construction Best Management Practices should be closely followed to avoid erosion, sedimentation, alteration of stream flow, and other impacts as eroding soils from construction activities can travel significant distances as well as transport other pollutants resulting in direct impacts to fish and fisheries habitat. In addition, we recommend that any necessary instream work occur between July 15 and October 1.

This consultation review has been conducted specifically for known MDIFW jurisdictional features and should not be interpreted as a comprehensive review for the presence of other regulated features that may occur in this area. Prior to the start of any future site disturbance we recommend additional consultation with the municipality, and other state resource agencies including the Maine Natural Areas Program and Maine Department of Environmental Protection in order to avoid unintended protected resource disturbance.

Letter to Aleita Burman
Comments RE: 60 Chute Road subdivision, Windham
June 21, 2017

Please feel free to contact my office if you have any questions regarding this information, or if I can be of any further assistance.

Best regards,

A handwritten signature in blue ink, appearing to read "John Perry", with a stylized flourish at the end.

John Perry
Environmental Review Coordinator

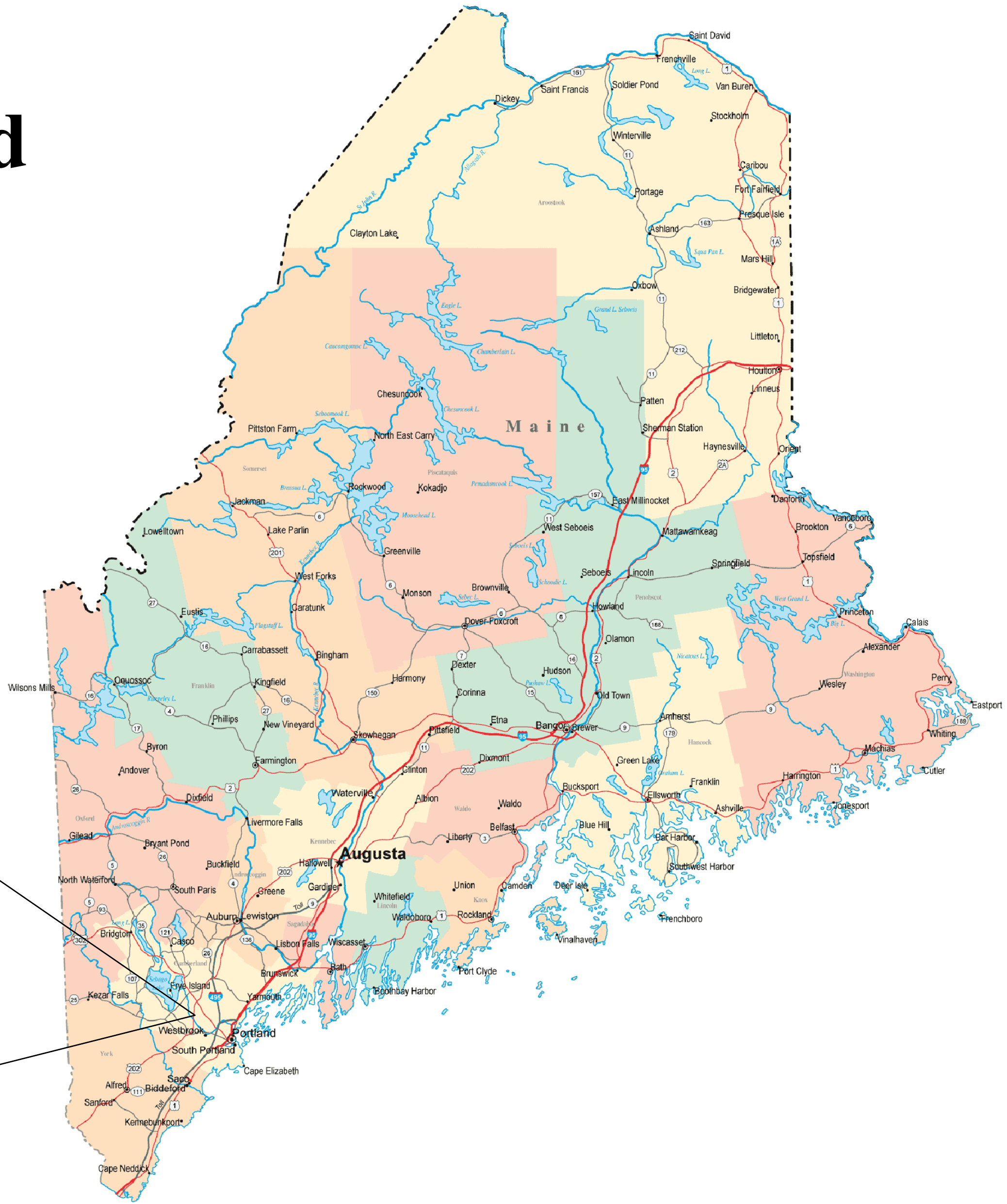
Matt Hancock Properties

PO. Box 295
Casco, Maine 04015

Owner Matt Hancock Properties PO. Box 295 Casco, Maine 04015 Tel: (207)-	Engineer of Record Kirk J. Ball, P.E. Acheron Engineering Services 147 Main Street Newport, ME 04953 Tel: 207-368-5700
Boundry Survey Plisga & Day 72 Main Street Bangor, ME. 04401 Tel: (207)-947-0019	Code Enforcement Director Town of Windham Christopher Hanson 8 School Road Windham, ME. 04062 Tel: (207)-894-5960 ext. 1

Durant Homestead

Chute Road
Windham, Maine 04062



ACHERON ENGINEERING SERVICES
Engineering, Environmental & Geologic Consultants

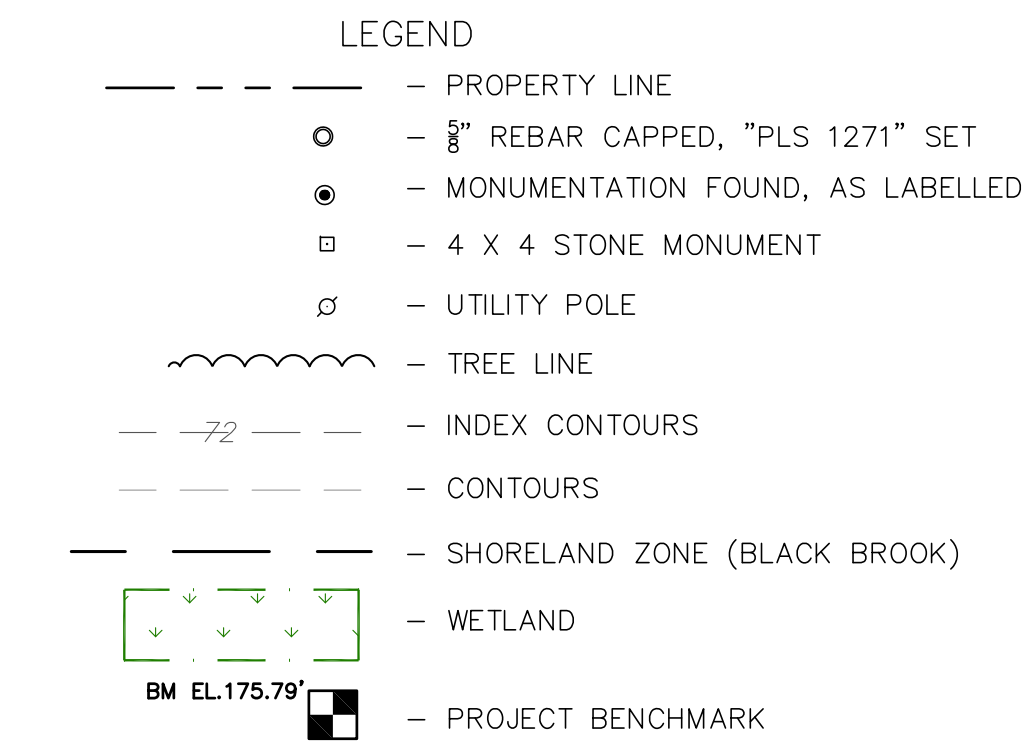
www.AcheronEngineering.com

147 Main St.
Newport, ME. 04953
(207)-368-5700

24466 Powell Rd.
Brooksville, FL. 34602
(352)-796-6236

Acheron International, Inc.

- NOTES:
- OWNER OF RECORD: MATT HANCOCK PROPERTIES, PO BOX 295, CASCO, ME. 04015. BOOK 3319, PAGE 124.
 - TOPOGRAPHIC FEATURES ON THIS PLAN ARE BASED ON WORK DONE BY AERIAL SURVEY AND PHOTO, INC. NORRIDGEWOOD, ME.. ELEVATIONS FOR GROUND CONTROL WERE PERFORMED BY MAIN-LAND DEVELOPMENT CONSULTANTS, LIVERMORE FALLS, ME. ALL BEARINGS ARE REFERENCED TO MAINE WEST ZONE NAD-83.
 - PROPERTY BOUNDARY SURVEY COMPLETED BY PLUSGA AND DAY SURVEYORS, INC. ON JUNE 15, 2018.
 - SOIL SURVEY HAS BEEN PREPARED BY ALEITA BURMAN OF BURMAN LAND AND TREE COMPANY, LLC. TEST PITS FOR STORMWATER SYSTEMS WAS COMPLETED ON DECEMBER 6, 2017. SITE SOILS SURVEY WAS COMPLETED ON JULY, 2018. IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE MAINE ASSOCIATION OF PROFESSIONAL SOIL SCIENTISTS, AND THE MAINE BOARD OF CERTIFICATION OF GEOLOGISTS AND SOIL SCIENTISTS.
 - ZONING DISTRICT: SECTION 406 LAND USE ORDINANCE
DISTRICT: FARM USE: HOME OCCUPATION 1
 - TOTAL AREA: 65.55 ACRES, MORE OR LESS.



DO NOT USE FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY



Existing Conditions Site Plan
and Location Map
Durant Homestead
Chute Road, Windham, Maine
Matt Hancock Properties
PO Box 295
Casco, Maine 04015

Job Number:
79800
Drawing No:
C-1
Sheet 2 of 16

ACHERON ENGINEERING SERVICES
Engineering, Environmental & Geologic Consultants
www.AcheronEngineering.com
147 Main St
Newport, ME 04953
(207)-568-5700
24466 Powell Rd
Brooksville, FL 34602
(852)-796-6236
Acheron International, Inc.

Drwn By: BFG	Revised per comments by Town of Windham, DEP & ACOE.	10-9-18	Date
Desg By: KJB		Chkd	
Chkd By: KJB		Drwn	
Aprvd By: KJB		No.	
Date: 7-30-18		Revision Description	



Job Number:
79800

Drawing No:
C-2

Sheet 3 of 16

No.	Revision Description	Drawn	Checked	Date
1	Revised per comments by Town of Windham, DEP & ACOE.	BFG	KLB	10-9-18

LEGEND

- - - - - PROPERTY LINE
- 72- - - - - CONTOURS
- WETLAND
- - - - - LIMIT OF SOIL SURVEY DELINEATION
- - - - - SOIL BOUNDARY
- ② - SOIL LABEL (SEE SOILS REPORT 07-13-18)
- - - - - TREE LINE
- 18 - MAINLAND TEST PITS DATED, 06/2006
- TP22 - SOIL SOLUTIONS TEST PITS DATED, 08/2017
- SWTP 4 - BURMAN STORMWATER TEST PITS DATED, 12/2017
- SSTP21 - BURMAN SOIL SURVEY TEST PITS DATED, 07/2018
- - - - - STORMWATER SUBCATCHMENT BOUNDARY
- - - - - STORMWATER FLOW PATH SEGMENT
- 1S - SUB CATCHMENT
- WET POND
- POINT OF ANALYSIS
- SCF - SHALLOW CONCENTRATED FLOW
- SF - SHEET FLOW
- CF - CHANNEL FLOW
- PROJECT BENCHMARK

PRE-DEVELOPMENT STORMWATER RUN OFF TABLE					
POINT OF ANALYSIS	SUB CATCHMENT(s)	AREA (ACRES)	PEAK RUN OFF 2 Yr - STORM	PEAK RUN OFF 10 Yr - STORM	PEAK RUN OFF 25 Yr - STORM
1L	1S	5.85	4.65 CFS	9.63 CFS	13.95 CFS
2L	2S	5.38	4.49 CFS	9.12 CFS	13.11 CFS
3L	3S	49.42	24.47 CFS	48.76 CFS	69.53 CFS
4L	4S	7.21	7.89 CFS	15.42 CFS	21.77 CFS
TOTAL		67.86	41.50 CFS	82.93 CFS	118.36 CFS

PRE-DEVELOPMENT STORMWATER MANAGEMENT SUBCATCHMENT MODEL SUMMARY TABLE					
POINT OF ANALYSIS	SUBCATCHMENT(s)				
	1S	2S	3S	4S	
RUN OFF AREA (sf)	254,993	234,249	2,152,640	314,233	
FLOW LENGTH (ft)	631	476	2,367	369	
CN VALUE	77	78	79	80	
Tc (MIN)	24.8	25.3	74.9	17.3	
PEAK RUN OFF 2-Yr (cfs)	4.65	4.49	24.47	7.89	
PEAK RUN OFF 10-Yr (cfs)	9.63	9.12	48.76	15.42	
PEAK RUN OFF 25-Yr (cfs)	13.95	13.11	69.53	21.77	

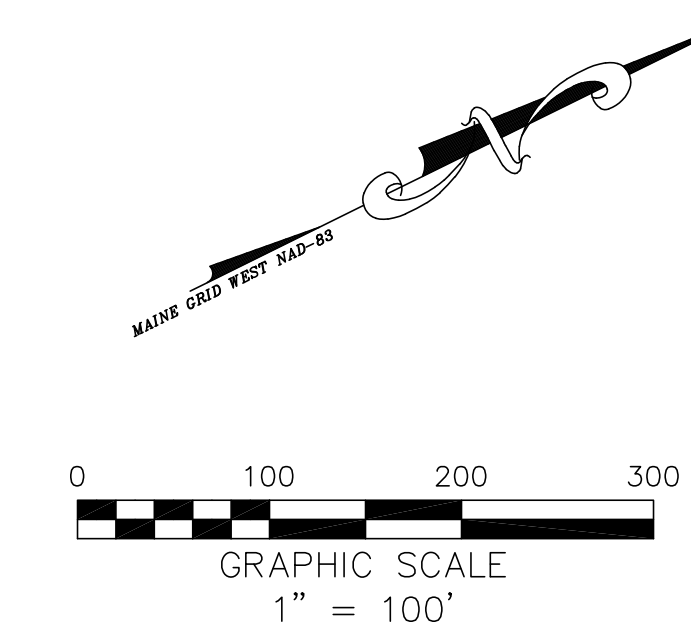
COMMON OPEN SPACE OF "RIVER'S EDGE SUBDIVISION"

NOW OR FORMERLY OF RIVER'S EDGE COMMON LAND BOOK 18946, PAGE 340 PLAN BOOK 203, PAGE 105 TAX MAP 6 - LOT 42

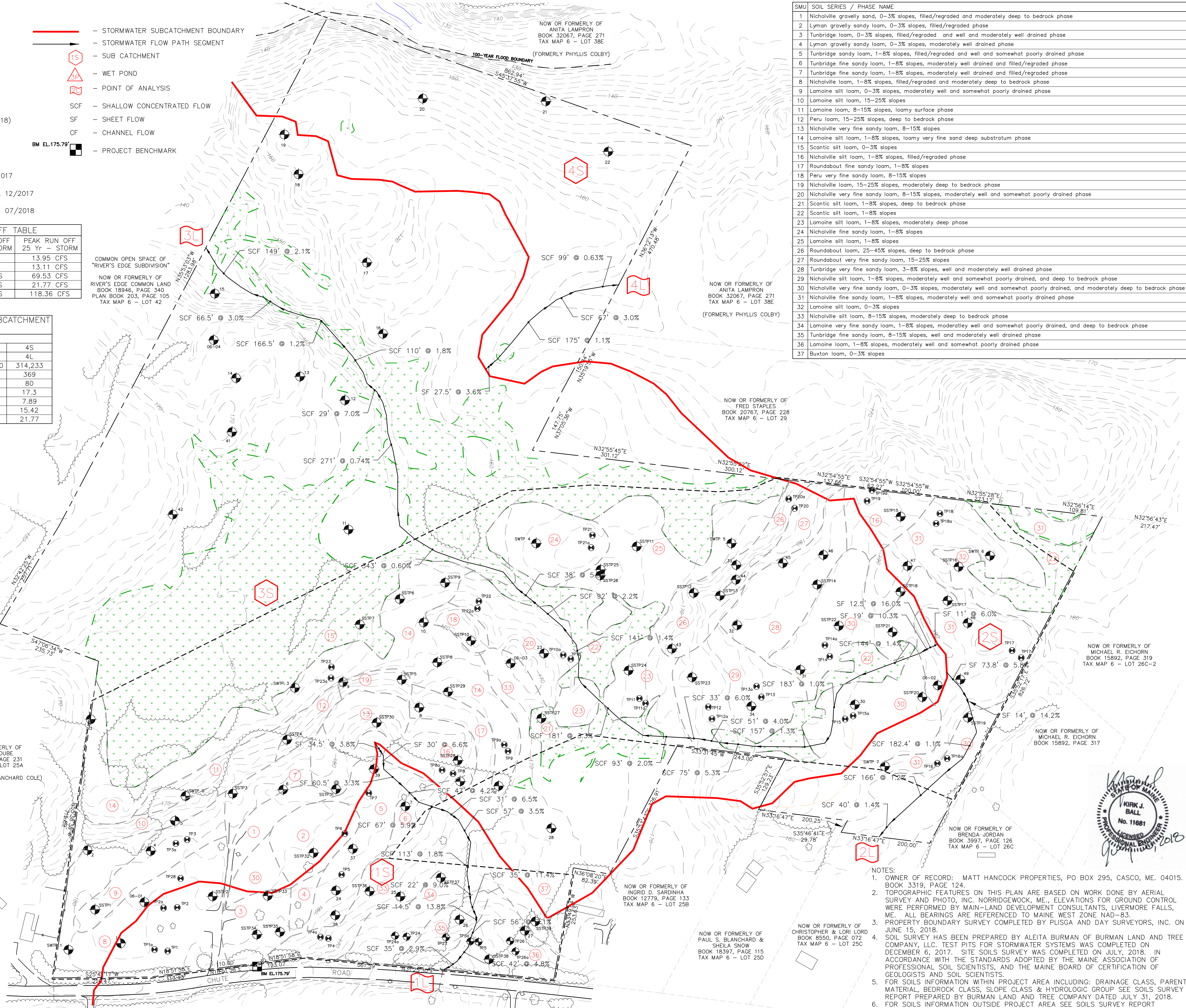
NOW OR FORMERLY OF LILLIAN M. PLUMMER BOOK 29006, PAGE 147 TAX MAP 3 - LOT 18 (FORMERLY CUFFORD PLUMMER)

NOW OR FORMERLY OF JOHN A. & CLAIRE STREETER BOOK 8501, PAGE 223 TAX MAP 3 - LOT 22A

NOW OR FORMERLY OF ELIZABETH DUBE BOOK 6230, PAGE 231 TAX MAP 6 - LOT 25A (FORMERLY ANNIE BLANCHARD COLE)



DO NOT USE FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY



SMU	SOIL SERIES / PHASE NAME
1	Nicholville gravelly sand, 0-3% slopes, filled/regraded and moderately deep to bedrock phase
2	Lyman gravelly sandy loam, 0-3% slopes, filled/regraded phase
3	Tunbridge loam, 0-3% slopes, filled/regraded and well and moderately well drained phase
4	Lyman gravelly sandy loam, 0-3% slopes, moderately well drained phase
5	Tunbridge sandy loam, 1-8% slopes, filled/regraded and well and somewhat poorly drained phase
6	Tunbridge fine sandy loam, 1-8% slopes, moderately well drained and filled/regraded phase
7	Tunbridge fine sandy loam, 1-8% slopes, moderately well drained and filled/regraded phase
8	Nicholville loam, 1-8% slopes, filled/regraded and moderately deep to bedrock phase
9	Lamoine silt loam, 0-3% slopes, moderately well and somewhat poorly drained phase
10	Lamoine silt loam, 15-25% slopes
11	Lamoine loam, 8-15% slopes, loamy surface phase
12	Peru loam, 15-25% slopes, deep to bedrock phase
13	Nicholville very fine sandy loam, 8-15% slopes
14	Lamoine silt loam, 1-8% slopes, loamy very fine sand deep substratum phase
15	Scantic silt loam, 0-3% slopes
16	Nicholville silt loam, 1-8% slopes, filled/regraded phase
17	Roundabout fine sandy loam, 1-8% slopes
18	Peru very fine sandy loam, 8-15% slopes
19	Nicholville loam, 15-25% slopes, moderately deep to bedrock phase
20	Nicholville very fine sandy loam, 8-15% slopes, moderately well and somewhat poorly drained phase
21	Scantic silt loam, 1-8% slopes, deep to bedrock phase
22	Scantic silt loam, 1-8% slopes
23	Lamoine silt loam, 1-8% slopes, moderately deep phase
24	Nicholville fine sandy loam, 1-8% slopes
25	Lamoine silt loam, 1-8% slopes
26	Roundabout loam, 25-45% slopes, deep to bedrock phase
27	Roundabout very fine sandy loam, 15-25% slopes
28	Tunbridge very fine sandy loam, 3-8% slopes, well and moderately well drained phase
29	Nicholville silt loam, 1-8% slopes, moderately well and somewhat poorly drained, and deep to bedrock phase
30	Nicholville very fine sandy loam, 0-3% slopes, moderately well and somewhat poorly drained, and moderately deep to bedrock phase
31	Nicholville fine sandy loam, 1-8% slopes, moderately well and somewhat poorly drained phase
32	Lamoine silt loam, 0-3% slopes
33	Nicholville silt loam, 8-15% slopes, moderately deep to bedrock phase
34	Lamoine very fine sandy loam, 1-8% slopes, moderately well and somewhat poorly drained, and deep to bedrock phase
35	Tunbridge fine sandy loam, 8-15% slopes, well and moderately well drained phase
36	Lamoine loam, 1-8% slopes, moderately well and somewhat poorly drained phase
37	Buxton loam, 0-3% slopes

- NOTES:
- OWNER OF RECORD: MATT HANCOCK PROPERTIES, PO BOX 295, CASCO, ME. 04015. BOOK 3319, PAGE 124.
 - TOPOGRAPHIC FEATURES ON THIS PLAN ARE BASED ON WORK DONE BY AERIAL SURVEY AND PHOTO, INC. NORRIDGEWOCK, ME., ELEVATIONS FOR GROUND CONTROL WERE PERFORMED BY MAIN-LAND DEVELOPMENT CONSULTANTS, LIVERMORE FALLS, ME. ALL BEARINGS ARE REFERENCED TO MAINE WEST ZONE NAD-83.
 - PROPERTY BOUNDARY SURVEY COMPLETED BY PLUGSA AND DAY SURVEYORS, INC. ON JUNE 15, 2018.
 - SOIL SURVEY HAS BEEN PREPARED BY ALEITA BURMAN OF BURMAN LAND AND TREE COMPANY, LLC. TEST PITS FOR STORMWATER SYSTEMS WAS COMPLETED ON DECEMBER 6, 2017. SITE SOILS SURVEY WAS COMPLETED ON JULY 31, 2018. IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE MAINE ASSOCIATION OF PROFESSIONAL SOIL SCIENTISTS, AND THE MAINE BOARD OF CERTIFICATION OF GEOLOGISTS AND SOIL SCIENTISTS.
 - FOR SOILS INFORMATION WITHIN PROJECT AREA INCLUDING: DRAINAGE CLASS, PARENT MATERIAL, BEDROCK CLASS, SLOPE CLASS & HYDROLOGIC GROUP SEE SOILS SURVEY REPORT PREPARED BY BURMAN LAND AND TREE COMPANY DATED JULY 31, 2018.
 - FOR SOILS INFORMATION OUTSIDE PROJECT AREA SEE SOILS SURVEY REPORT PREPARED BY MAIN-LAND DEVELOPMENT CONSULTANTS, DATED JUNE, 2006.



Drwn By: BEG

Desg By: BPG / KJB

Chkd By: KJB

Aprd By: KJB

Date: 7-30-18

Revised per comments by Town of Windham, DEP # AOCCE.

No. Revision Description

ACHERON ENGINEERING SERVICES

Engineering, Environmental & Geologic Consultants

www.AcheronEngineering.com

147 Main St.

Newport, ME. 04953

(207)-368-5700

24466 Powell Rd.

Brooksville, FL 34602

(352)-796-6236

Acheron International, Inc.

Pre-Development Stormwater Management Plan

Durant Homestead

Chute Road, Windham, Maine

Matt Hancock Properties

PO Box 295

Casco, Maine 04015

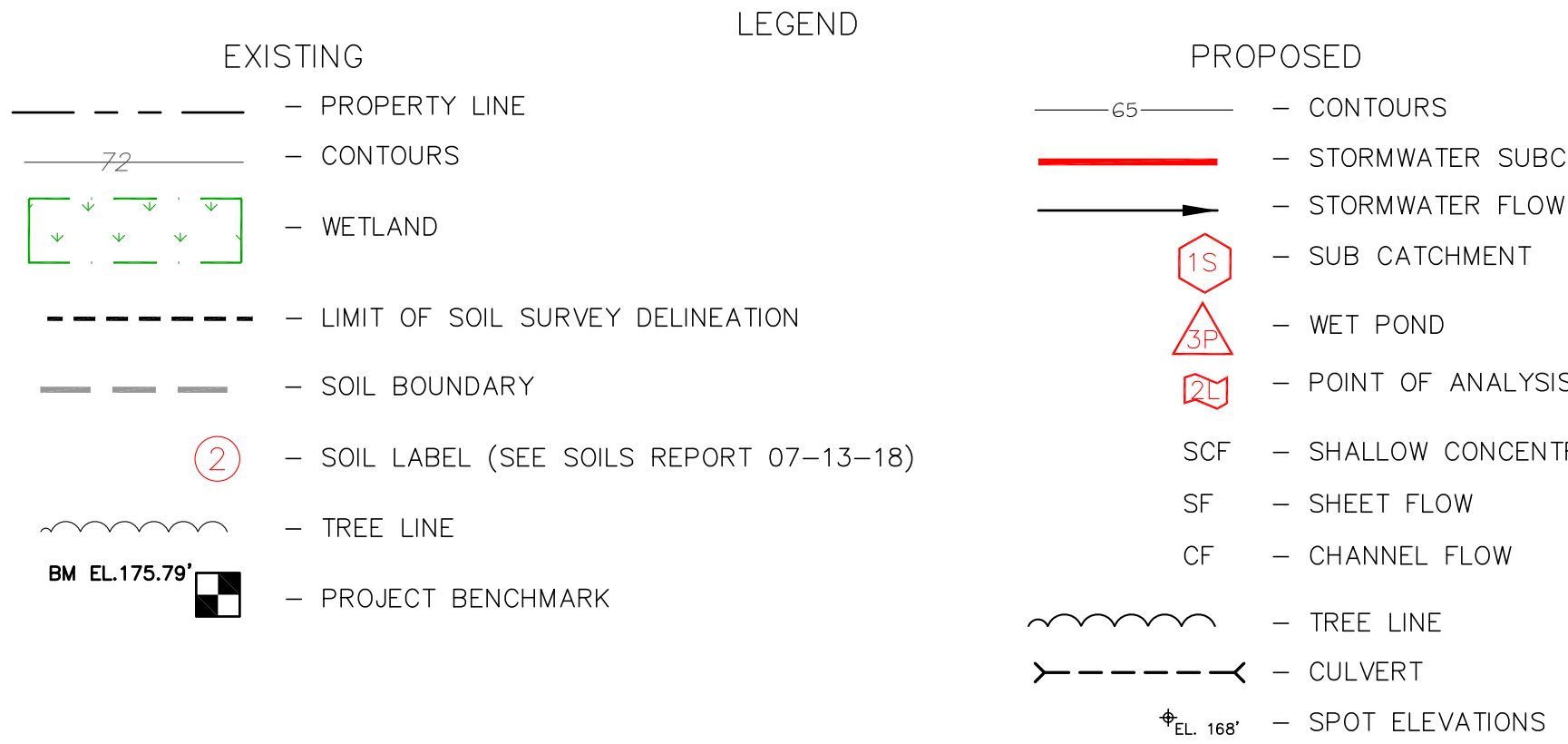
Job Number:

79800

Drawing No:

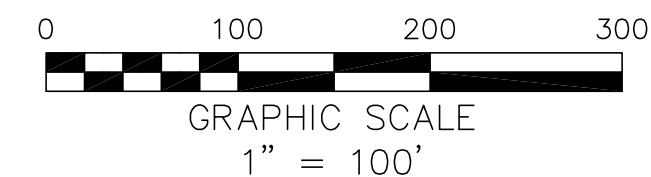
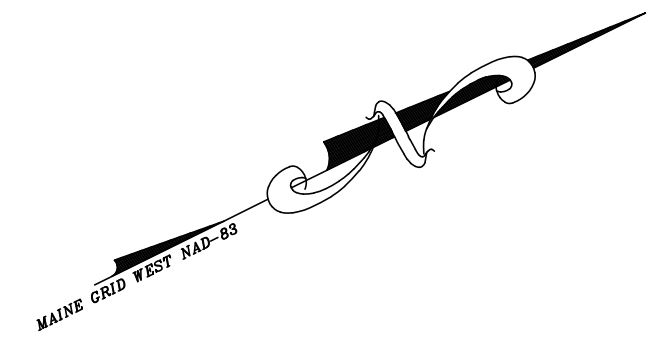
C-3

Sheet 4 of 16

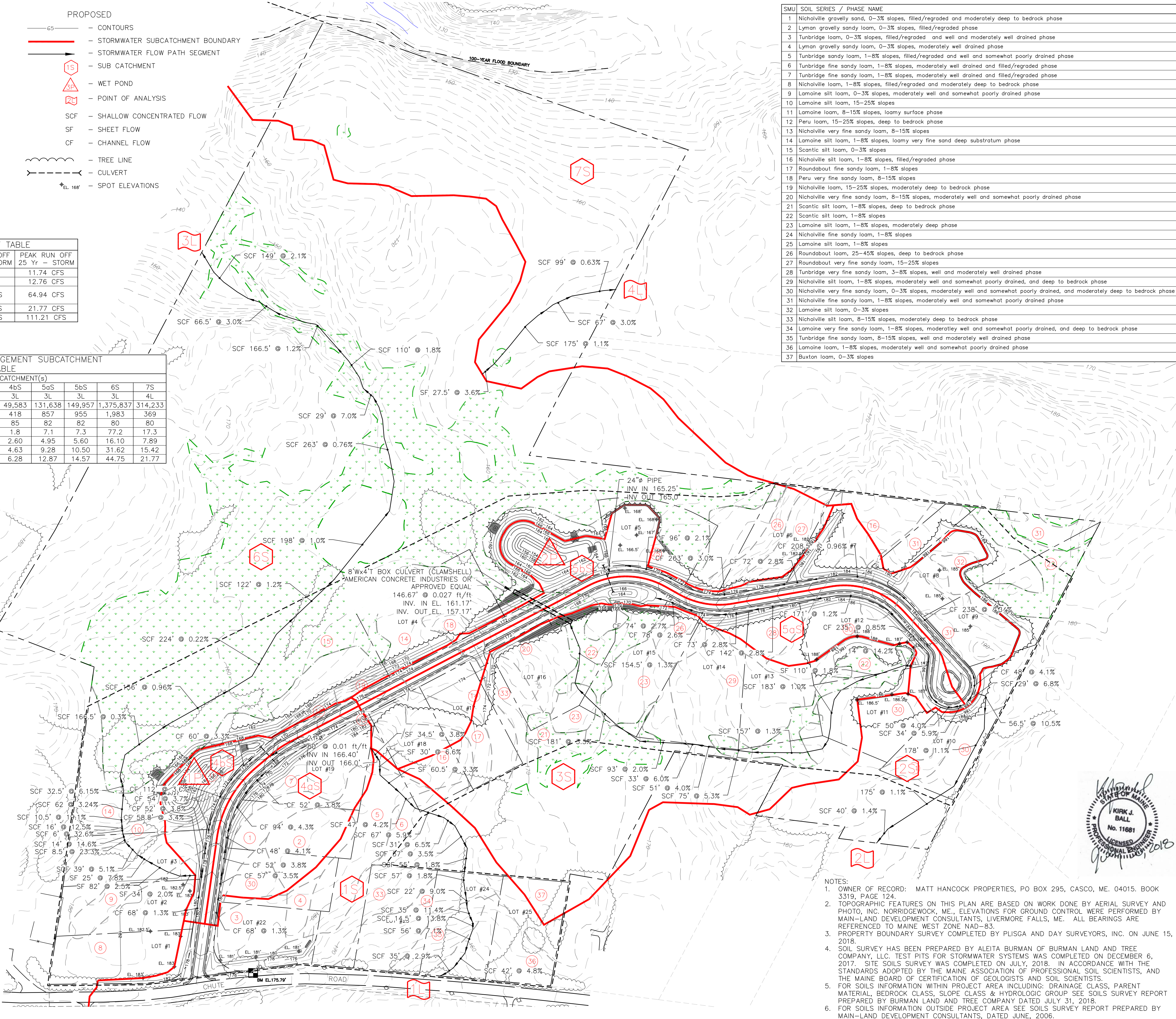


POST-DEVELOPMENT STORMWATER RUN OFF TABLE					
POINT OF ANALYSIS	SUB CATCHMENT(s)	AREA (ACRES)	PEAK RUN OFF 2 Yr - STORM	PEAK RUN OFF 10 Yr - STORM	PEAK RUN OFF 25 Yr - STORM
1L	1S	5.19	4.13 CFS	8.24 CFS	11.74 CFS
2L	2S	4.39	4.49 CFS	8.96 CFS	12.76 CFS
3L	3S, 4aS, 4bS, 5aS, 5bS & 6S	51.06	24.36 CFS	46.54 CFS	64.94 CFS
4L	7S	7.21	7.89 CFS	15.42 CFS	21.77 CFS
TOTAL		67.85	40.87 CFS	79.16 CFS	111.21 CFS

POST-DEVELOPMENT STORMWATER MANAGEMENT SUBCATCHMENT MODEL SUMMARY TABLE										
	SUBCATCHMENT(s)									
	1S	2S	3S	4aS	4bS	5aS	5bS	6S	7S	
POINT OF ANALYSIS	1L	2L	3L	3L	3L	3L	3L	3L	4L	
RUN OFF AREA (sf)	226,186	191,225	420,547	96,671	49,583	131,638	149,957	1,375,837	314,233	
FLOW LENGTH (ft)	630	449	1,038	384	418	857	955	1,983	369	
CN VALUE	79	79	80	81	85	82	82	80	80	
Tc (MIN)	31.9	17.8	48.1	1.7	1.8	7.1	7.3	77.2	17.3	
PEAK RUN OFF 2-Yr (cfs)	4.13	4.49	6.60	4.19	2.60	4.95	5.60	16.10	7.89	
PEAK RUN OFF 10-Yr (cfs)	8.24	8.96	12.91	8.01	4.63	9.28	10.50	31.62	15.42	
PEAK RUN OFF 25-Yr (cfs)	11.74	12.76	18.23	11.19	6.28	12.87	14.57	44.75	21.77	



DO NOT USE FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY



SMU	SOIL SERIES / PHASE NAME
1	Nicholville gravelly sand, 0-3% slopes, filled/regraded and moderately deep to bedrock phase
2	Lyman gravelly sandy loam, 0-3% slopes, filled/regraded phase
3	Tunbridge loam, 0-3% slopes, filled/regraded and well and moderately well drained phase
4	Lyman gravelly sandy loam, 0-3% slopes, moderately well drained phase
5	Tunbridge sandy loam, 1-8% slopes, filled/regraded and well and somewhat poorly drained phase
6	Tunbridge fine sandy loam, 1-8% slopes, moderately well drained and filled/regraded phase
7	Tunbridge fine sandy loam, 1-8% slopes, moderately well drained and filled/regraded phase
8	Nicholville loam, 1-8% slopes, filled/regraded and moderately deep to bedrock phase
9	Lamoine silt loam, 0-3% slopes, moderately well and somewhat poorly drained phase
10	Lamoine silt loam, 15-25% slopes
11	Lamoine loam, 8-15% slopes, loamy surface phase
12	Peru loam, 15-25% slopes, deep to bedrock phase
13	Nicholville very fine sandy loam, 8-15% slopes
14	Lamoine silt loam, 1-8% slopes, loamy very fine sand deep substratum phase
15	Scantic silt loam, 0-3% slopes
16	Nicholville silt loam, 1-8% slopes, filled/regraded phase
17	Roundabout fine sandy loam, 1-8% slopes
18	Peru very fine sandy loam, 8-15% slopes
19	Nicholville loam, 15-25% slopes, moderately deep to bedrock phase
20	Nicholville very fine sandy loam, 8-15% slopes, moderately well and somewhat poorly drained phase
21	Scantic silt loam, 1-8% slopes, deep to bedrock phase
22	Scantic silt loam, 1-8% slopes
23	Lamoine silt loam, 1-8% slopes, moderately deep phase
24	Nicholville fine sandy loam, 1-8% slopes
25	Lamoine silt loam, 1-8% slopes
26	Roundabout loam, 25-45% slopes, deep to bedrock phase
27	Roundabout very fine sandy loam, 15-25% slopes
28	Tunbridge very fine sandy loam, 3-8% slopes, well and moderately well drained phase
29	Nicholville silt loam, 1-8% slopes, moderately well and somewhat poorly drained, and deep to bedrock phase
30	Nicholville very fine sandy loam, 0-3% slopes, moderately well and somewhat poorly drained, and moderately deep to bedrock phase
31	Nicholville fine sandy loam, 1-8% slopes, moderately well and somewhat poorly drained phase
32	Lamoine silt loam, 0-3% slopes
33	Nicholville silt loam, 8-15% slopes, moderately deep to bedrock phase
34	Lamoine very fine sandy loam, 1-8% slopes, moderately well and somewhat poorly drained, and deep to bedrock phase
35	Tunbridge fine sandy loam, 8-15% slopes, well and moderately well drained phase
36	Lamoine loam, 1-8% slopes, moderately well and somewhat poorly drained phase
37	Buxton loam, 0-3% slopes

- NOTES:
- OWNER OF RECORD: MATT HANCOCK PROPERTIES, PO BOX 295, CASCO, ME. 04015. BOOK 3319, PAGE 124.
 - TOPOGRAPHIC FEATURES ON THIS PLAN ARE BASED ON WORK DONE BY AERIAL SURVEY AND PHOTO, INC. NORRIDGEWOCK, ME., ELEVATIONS FOR GROUND CONTROL WERE PERFORMED BY MAIN-LAND DEVELOPMENT CONSULTANTS, LIVERMORE FALLS, ME. ALL BEARINGS ARE REFERENCED TO MAINE WEST ZONE NAD-83.
 - PROPERTY BOUNDARY SURVEY COMPLETED BY PLUSGA AND DAY SURVEYORS, INC. ON JUNE 15, 2018.
 - SOIL SURVEY HAS BEEN PREPARED BY ALEITA BURMAN OF BURMAN LAND AND TREE COMPANY, LLC. TEST PITS FOR STORMWATER SYSTEMS WAS COMPLETED ON DECEMBER 6, 2017. SITE SOILS SURVEY WAS COMPLETED ON JULY, 2018. IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE MAINE ASSOCIATION OF PROFESSIONAL SOIL SCIENTISTS, AND THE MAINE BOARD OF CERTIFICATION OF GEOLOGISTS AND SOIL SCIENTISTS.
 - FOR SOILS INFORMATION WITHIN PROJECT AREA INCLUDING: DRAINAGE CLASS, PARENT MATERIAL, BEDROCK CLASS, SLOPE CLASS & HYDROLOGIC GROUP SEE SOILS SURVEY REPORT PREPARED BY BURMAN LAND AND TREE COMPANY DATED JULY 31, 2018.
 - FOR SOILS INFORMATION OUTSIDE PROJECT AREA SEE SOILS SURVEY REPORT PREPARED BY MAIN-LAND DEVELOPMENT CONSULTANTS, DATED JUNE, 2006.

ACHERON ENGINEERING SERVICES
Engineering, Environmental & Geologic Consultants

147 Main St.
Newport, ME 04953
(207)-368-5700

www.AcheronEngineering.com
24466 Powell Rd.
Brooksville, FL 34602
(352)-796-6236
Acheron International, Inc.

Post Development Stormwater
Management Plan
Durant Homestead
Chute Road, Windham, Maine

Matt Hancock Properties
PO Box 295
Casco, Maine 04015

Job Number:
79800

Drawing No:
C-4

Sheet 5 of 16

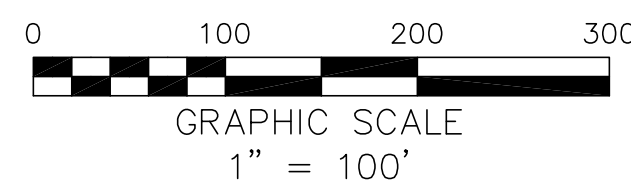
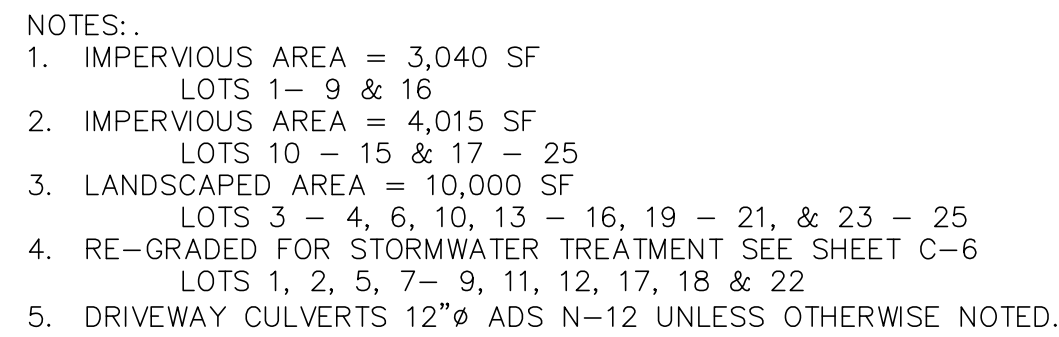
Drwn By: BFG
Desg By: BFG / KJB
Chkd By: KJB
Apprd By: KJB
Date: 7-30-18

Revised per comments by Town of Windham, DEP & ACCE.
Revised per comments by DEP for Stormwater.

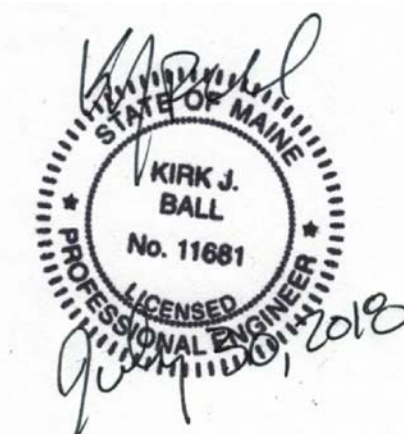
No. Revision Description
Date

1. OWNER OF RECORD: MATT HANCOCK PROPERTIES, PO BOX 295, CASCO, ME. 04015. BOOK 3319, PAGE 124.
2. TOPOGRAPHIC FEATURES ON THIS PLAN ARE BASED ON WORK DONE BY AERIAL SURVEY AND PHOTO, INC. NORRIDGEWOCK, ME., ELEVATIONS FOR GROUND CONTROL WERE PERFORMED BY MAIN-LAND DEVELOPMENT CONSULTANTS, LIVERMORE FALLS, ME. ALL BEARINGS ARE REFERENCED TO MAINE WEST ZONE NAD-83.
3. PROPERTY BOUNDARY SURVEY COMPLETED BY PLISGA AND DAY SURVEYORS, INC. ON JUNE 15, 2018.
4. SOIL SURVEY HAS BEEN PREPARED BY ALEITA BURMAN OF BURMAN LAND AND TREE COMPANY, LLC. TEST RESULTS FOR STORMWATER SYSTEMS WAS COMPLETED ON DECEMBER 6, 2017. SITE SOILS SURVEYED ON JULY 31, 2018 IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE MAINE ASSOCIATION OF PROFESSIONAL SOIL SCIENTISTS, AND THE MAINE BOARD OF CERTIFICATION OF GEOLOGISTS AND SOIL SCIENTISTS.
5. FOR SOILS INFORMATION WITHIN PROJECT AREA INCLUDING: DRAINAGE CLASS, PARENT MATERIAL, BEDROCK CLASS, SLOPE CLASS & HYDROLOGIC GROUP SEE SOILS SURVEY REPORT PREPARED BY BURMAN LAND AND TREE COMPANY DATED JULY 31, 2018.
6. FOR SOILS INFORMATION OUTSIDE PROJECT AREA SEE SOILS SURVEY REPORT PREPARED BY MAIN-LAND DEVELOPMENT CONSULTANTS, DATED JUNE, 2006.

1. OWNER OF RECORD: MATT HANCOCK PROPERTIES, PO BOX 295, CASCO, ME. 04015. BOOK 3319, PAGE 124.
2. TOPOGRAPHIC FEATURES ON THIS PLAN ARE BASED ON WORK DONE BY AERIAL SURVEY AND PHOTO, INC. NORRIDGEWOCK, ME., ELEVATIONS FOR GROUND CONTROL WERE PERFORMED BY MAIN-LAND DEVELOPMENT CONSULTANTS, LIVERMORE FALLS, ME. ALL BEARINGS ARE REFERENCED TO MAINE WEST ZONE NAD-83.
3. PLATFORTHY BOUNDARY SURVEY COMPLETED BY PLISGA AND DAY SURVEYORS, INC. ON JUNE 15, 2018.
4. SOIL SURVEY HAS BEEN PREPARED BY ALEITA BURMAN OF BURMAN LAND AND TREE COMPANY, LLC. TEST PITS FOR STORMWATER SYSTEMS WAS COMPLETED ON DECEMBER 6, 2017. SITE SOILS SURVEY WAS COMPLETED ON JULY, 2018. IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE MAINE ASSOCIATION OF PROFESSIONAL SOIL SCIENTISTS, AND THE MAINE BOARD OF CERTIFICATION OF GEOLOGISTS AND SOIL SCIENTISTS.
5. SOILS INFERRED WITHIN PROJECT AREA INCLUDING: B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR, CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GG, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NN, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UU, UV, UW, UX, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ.
6. FOR SOILS INFORMATION OUTSIDE PROJECT AREA SEE SOILS SURVEY REPORT PREPARED BY MAIN-LAND DEVELOPMENT CONSULTANTS, DATED JUNE, 2006.



DO NOT USE FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY



Post Development Stormwater
Treatment Site Plan

Durant Homestead
Chute Road, Windham, Maine

*Matt Hancock Properties
PO Box 295
Casco, Maine 04015*

ACHERON ENGINEERING SERVICES
Engineering, Environmental & Geologic Consultants

www.AcheronEngineering.com

147 Main St.
Newport, ME 04953
(207)-368-5700

24466 Powell Rd.
Brooksville, FL 34602
(352)-796-6236

Acheron International, Inc.

Drawn By: BPG
Desg By: BPG / KJB
Chkd By: KJB
Aprvd By: KJB
Date: 7-30-18

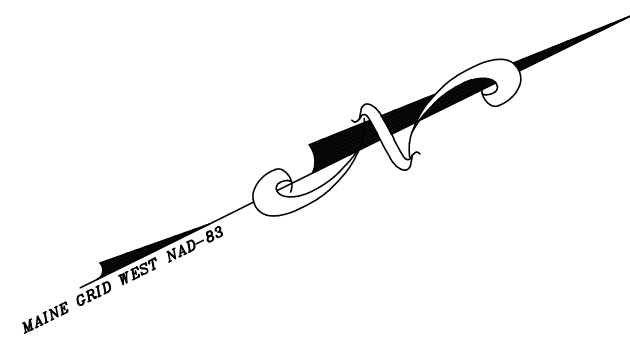
1	Revised per comments by Town of Windham, DEP & ACOE.	BFG	K1B	10-9-18	
2	Revised per comments by DEP for Stormwater.	BFG	K1B	10-22-18	
No.	Revision Description	Drawn	Checked	Date	

Job Number:
79800

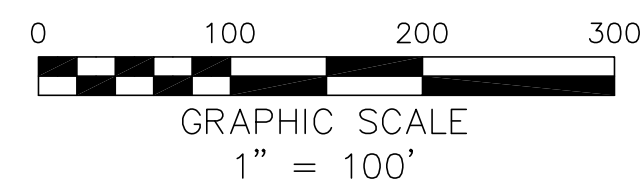
Drawing No:
C-5

Sheet 6 of 16

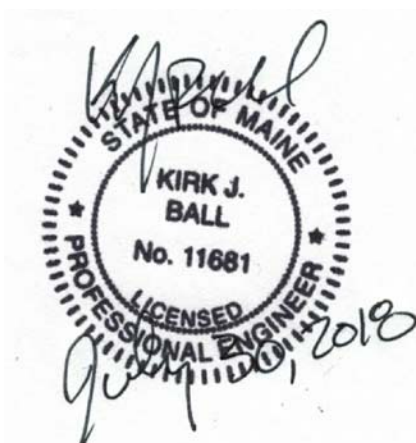
EXISTING		LEGEND		PROPOSED	
---	PROPERTY LINE	---	LOT PROPERTY LINES	---	LOT PROPERTY LINES
---	INDEX CONTOURS	---	LOT SETBACKS	---	LOT SETBACKS
---	CONTOURS	---	CONTOURS	---	CONTOURS
---	WETLAND	---	WETLAND IMPACT	---	WETLAND IMPACT
---	CULVERT	---	TREE LINE	---	TREE LINE
---	TREE LINE	---	CULVERT	---	CULVERT
---	PROJECT BENCHMARK	---	STONE RETAINING WALL LOT #6	---	STONE RETAINING WALL LOT #6
		---	SPOT ELEVATIONS	---	SPOT ELEVATIONS
		---	DOUBLE SILT FENCE	---	DOUBLE SILT FENCE
		---	SILT FENCE	---	SILT FENCE
		---	STONE CHECK DAM	---	STONE CHECK DAM
		---	SEED & EROSION CONTROL BLANKET	---	SEED & EROSION CONTROL BLANKET



- NOTES:
1. OWNER OF RECORD: MATT HANCOCK PROPERTIES, PO BOX 295, CASCO, ME. 04015. BOOK 3319, PAGE 124.
 2. TOPOGRAPHIC FEATURES ON THIS PLAN ARE BASED ON WORK DONE BY AERIAL SURVEY AND PHOTO, INC. NORRIDGEWOCK, ME.; ELEVATIONS FOR GROUND CONTROL WERE PERFORMED BY MAIN-LAND DEVELOPMENT CONSULTANTS, LIVERMORE FALLS, ME. ALL BEARINGS ARE REFERENCED TO MAINE WEST ZONE NAD-83.
 3. PROPERTY BOUNDARY SURVEY COMPLETED BY PLISGA AND DAY SURVEYORS, INC. ON JUNE 15, 2018.



DO NOT USE FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY



Subdivision Grading
Site Plan
Durant Homestead
Chute Road, Windham, Maine
Matt Hancock Properties
PO Box 295
Casco, Maine 04015

Job Number:
79800

Drawing No:
C-6

Sheet 7 of 16

ACHERON ENGINEERING SERVICES
Engineering, Environmental & Geologic Consultants

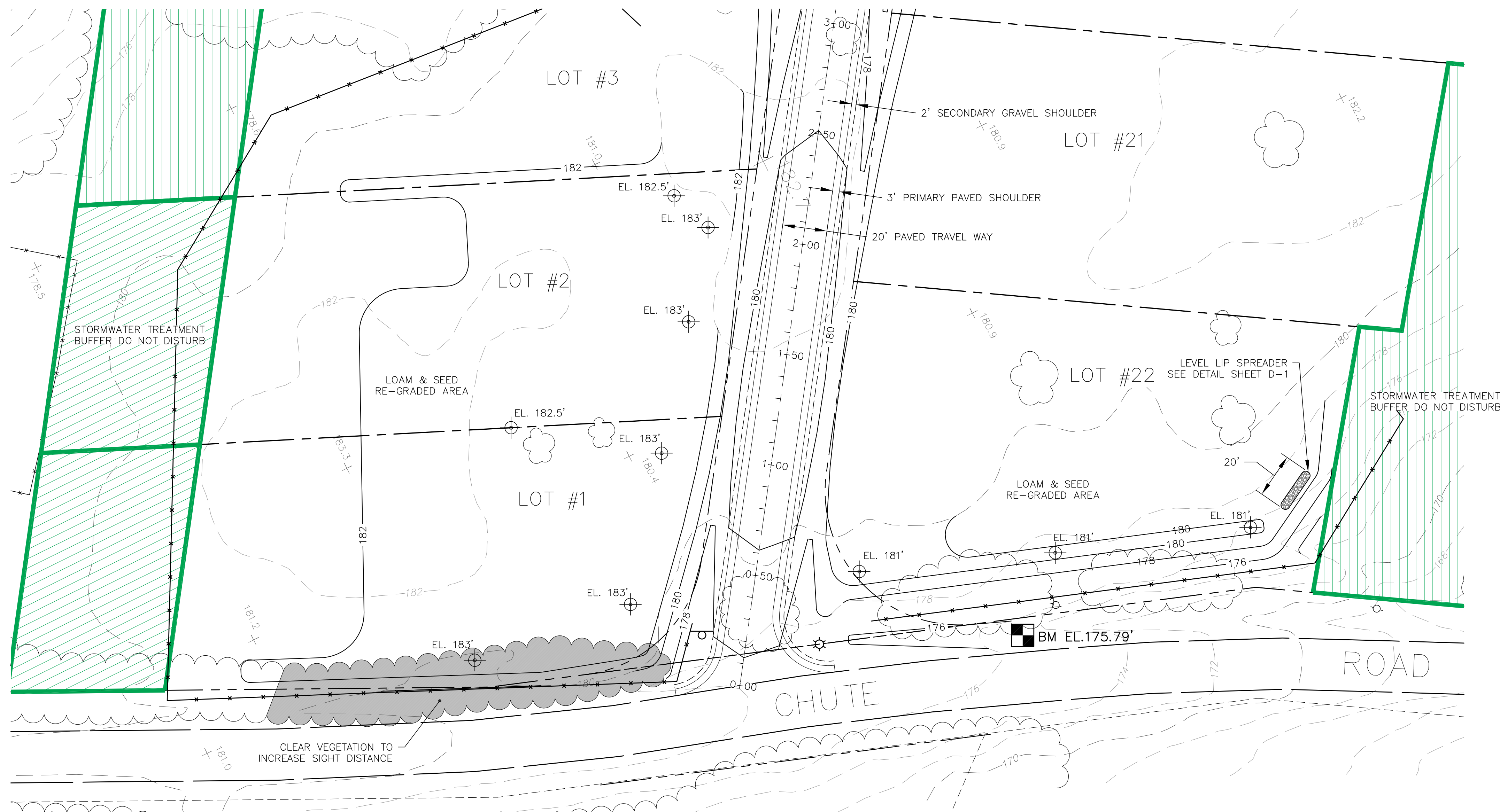
www.acheronengineering.com
147 Main St.
Newport, ME. 04953
(207)-368-5700

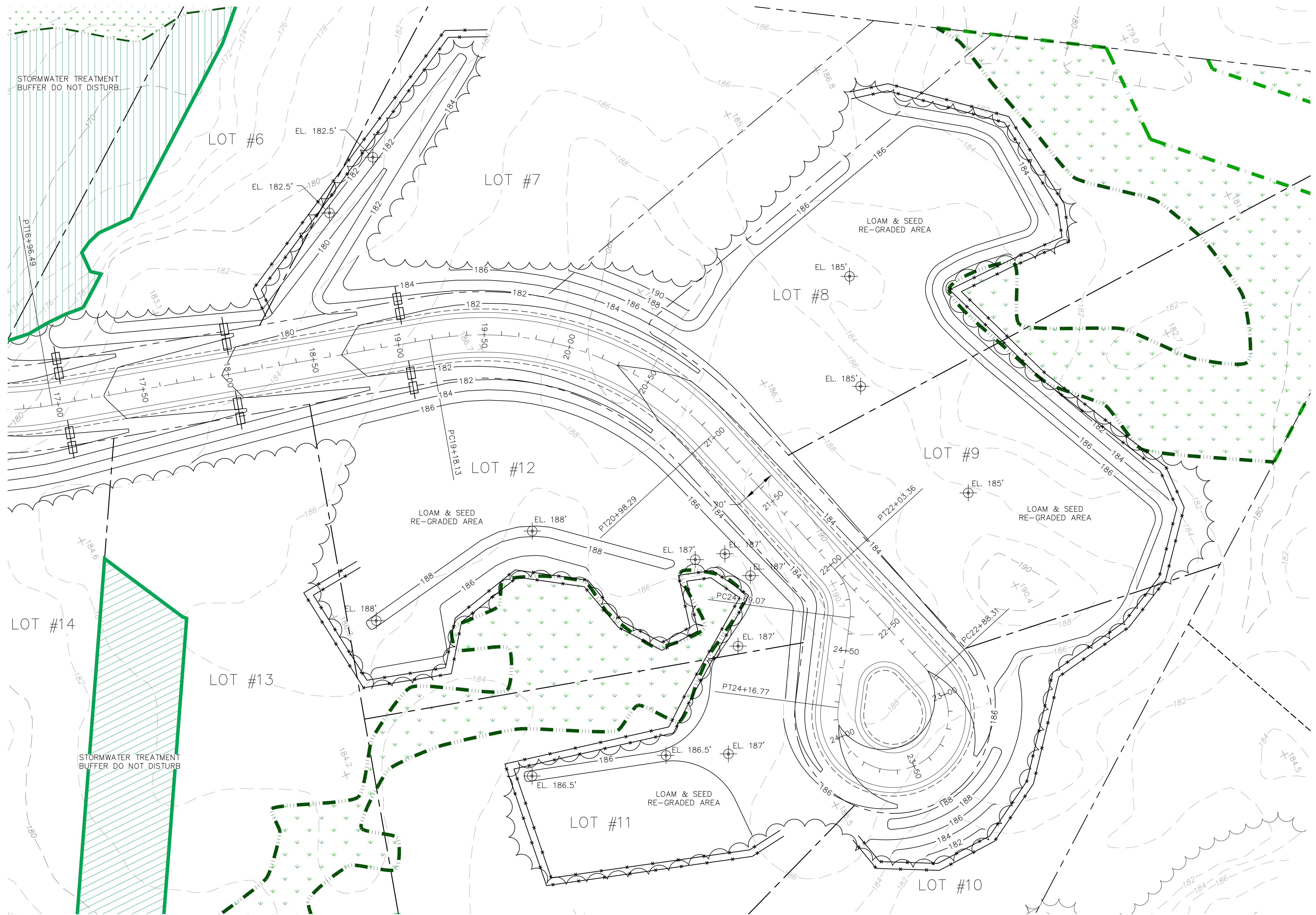
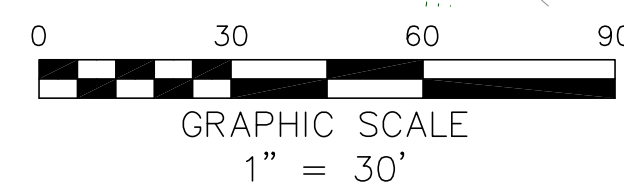
24466 Powell Rd.
Brooksville, FL 34602
(352)-796-6236

Acheron International, Inc.

Drawn By: BFG
Desg By: BFG / KJB
Chkd By: KJB
Apprd By: KJB
Date: 7-30-18

No.	Revision Description	Drawn	Chkd	Date
1	Revised per comments by Town of Windham, DEP & ACOE.	BFG	KJB	10-9-18
2	Revised per comments by DEP for Stormwater.	BFG	KJB	10-22-18





CUL-DE-SAC PLAN VIEW
SCALE: 1" = 30'

- EXISTING
- PROPERTY LINE
 - INDEX CONTOURS
 - CONTOURS
 - WETLAND
 - TREE LINE
- LEGEND
- PROPOSED
- 65' CONTOURS
 - TREE LINE
 - CULVERT
 - CENTER LINE
 - EDGE OF PAVEMENT
 - EDGE OF SECONDARY ROAD SHOULDER
 - SPOT ELEVATIONS
 - DOUBLE SILT FENCE
 - SILT FENCE
 - STORMWATER BUFFER

DO NOT USE FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY



Proposed Lot Grading
Lots 7-12
Durant Homestead
Chute Road, Windham, Maine
Matt Hancock Properties
PO Box 295
Casco, Maine 04015

Job Number:
79800

Drawing No:
C-8

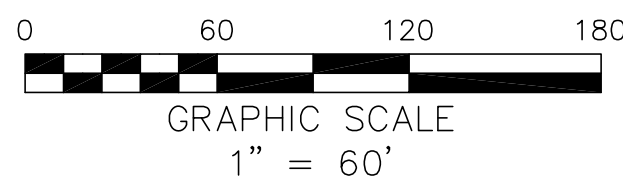
Sheet 9 of 16

ACHERON ENGINEERING SERVICES
Engineering, Environmental & Geologic Consultants
www.AcheronEngineering.com
147 Main St.
Newport, ME. 04953
(207)-368-5700

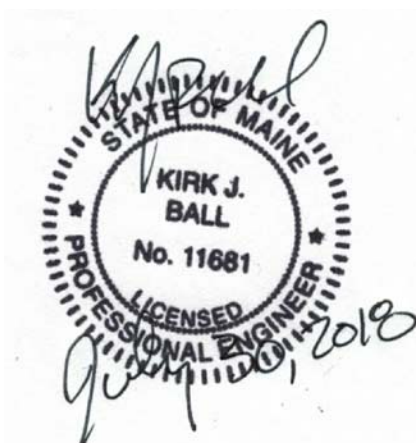
24466 Powell Rd.
Brooksville, FL 34602
(352)-796-6236
Acheron International, Inc.

Down By: BFG
Desg By: BFG / KJB
Chkd By: KJB
Aprvd By: KJB
Date: 7-30-18

No.	Revision Description	Drawn	Chkd	Date
1	Revised per comments by Town of Windham, DEP & ACOE.	BFG	KJB	10-9-18
2	Revised per comments by DEP for Stormwater.	BFG	KJB	10-22-18



DO NOT USE FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY



Subdivision Access Road

Site Plan

Durant Homestead
Chute Road, Windham, Maine
Matt Hancock Properties
PO Box 295
Casco, Maine 04015

Job Number:
79800

Drawing No:
C-9

Sheet 10 of 16

ACHERON ENGINEERING SERVICES
Engineering, Environmental & Geologic Consultants

www.AcheronEngineering.com
147 Main St.
Newport, ME 04953
(207)-368-5700

Drwn By: BFG
Desg By: BFG / KJB
Chkd By: KJB
Aprvd By: KJB
Date: 7-30-18

1
2

Revised per comments by Town of Windham, DEP & ACOE.
Revised per comments by DEP for Stormwater.

No.
Revision Description

Drwn By: BFG
Desg By: BFG / KJB
Chkd By: KJB
Aprvd By: KJB
Date: 7-30-18

1
2

Revised per comments by Town of Windham, DEP & ACOE.
Revised per comments by DEP for Stormwater.

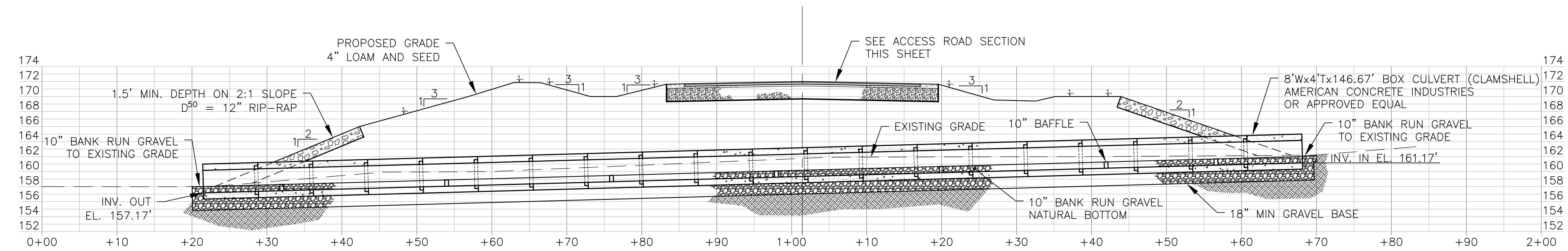
No.
Revision Description

CONCRETE:
COMPRESSION STRENGTH MIN. 5,000PSI @ 28 DAYS
AIR-ENTRAINMENT MIN. 5%-6%

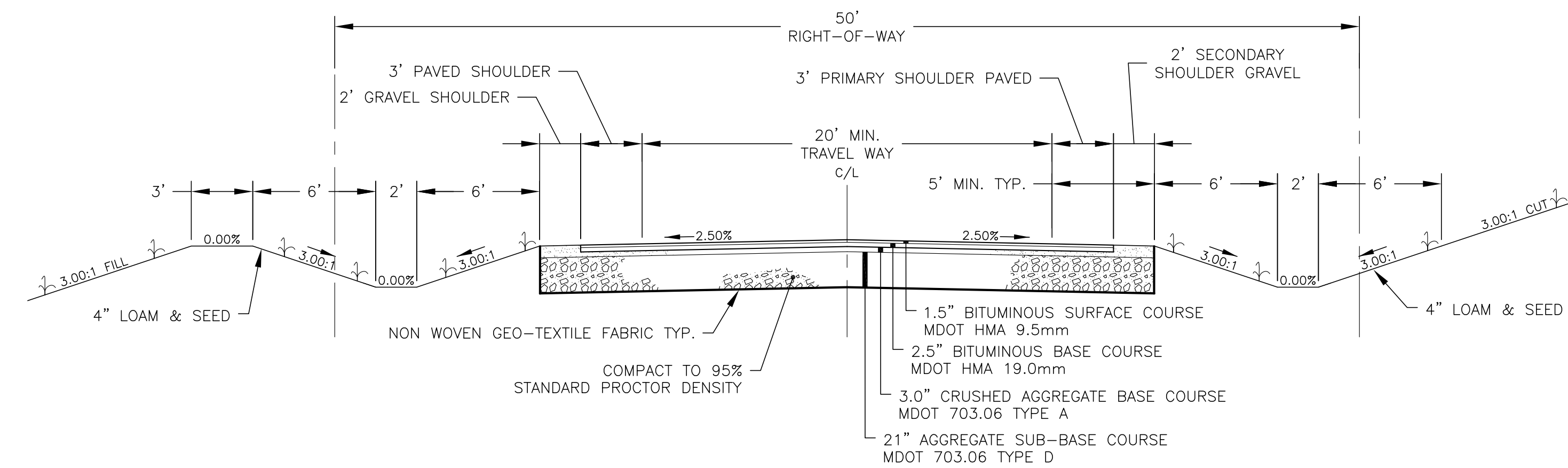
STRUCTURAL REINFORCEMENT:
REBAR PER ASTM A615, GRADE 60
WWF PER ASTM A1064, GRADE 70
INTEGRATE REBAR WITH LIFTING INSERTS

BAR CLEARANCE:
2" CLR EXTERIOR; 1.5" CLR INTERIOR

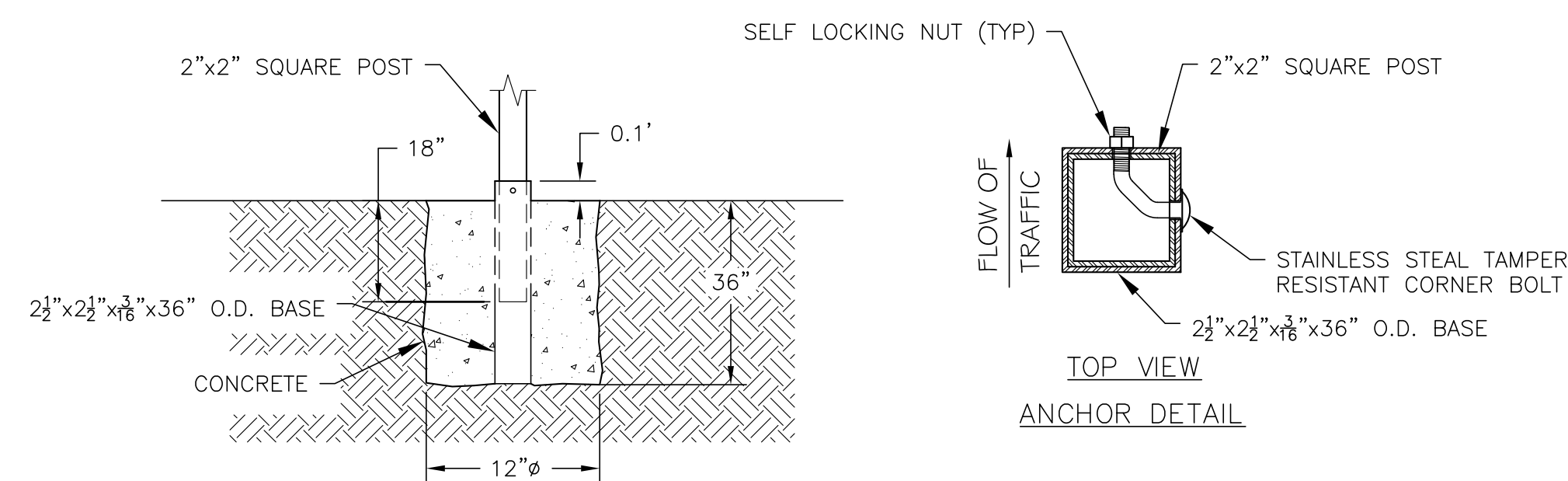
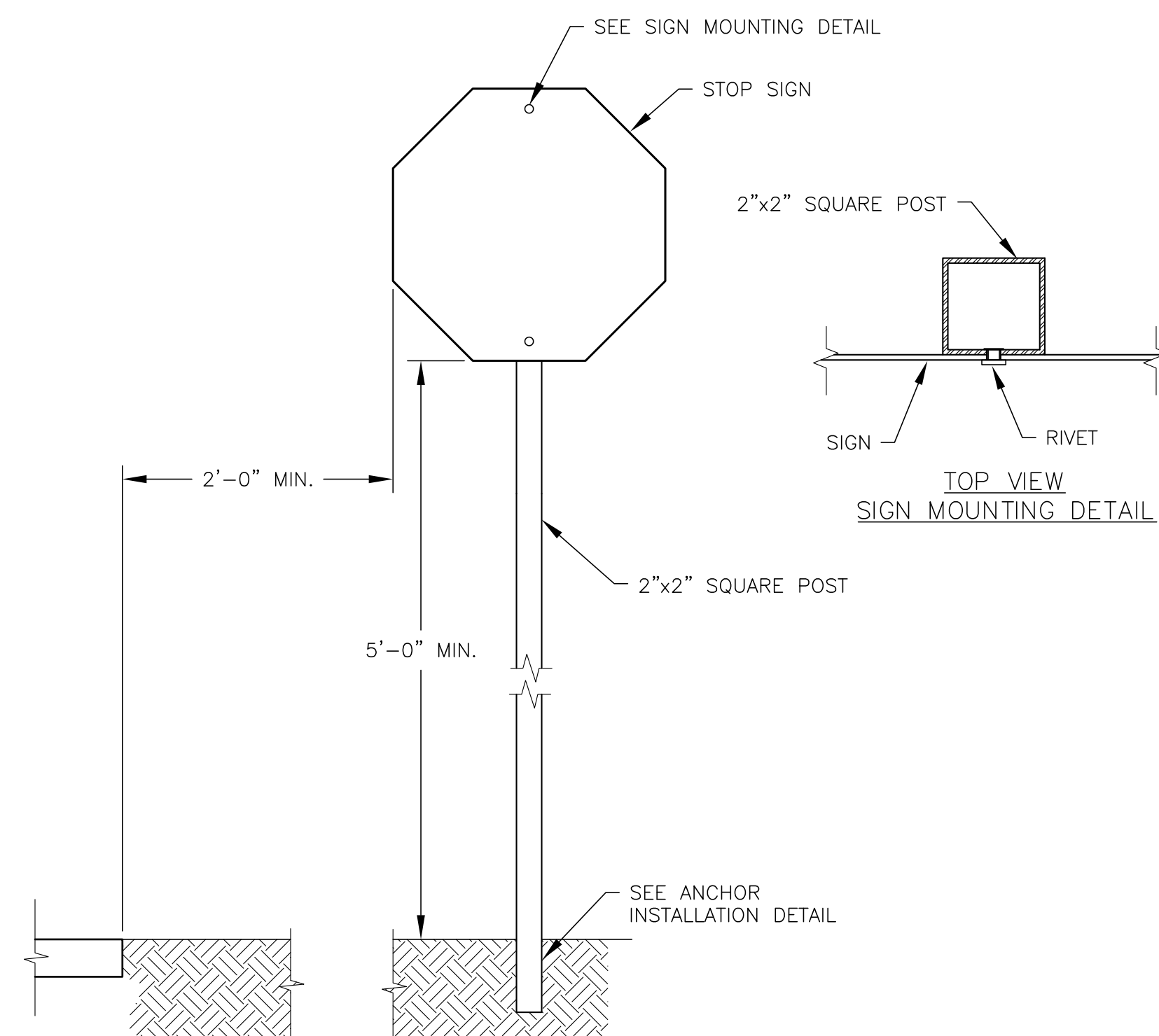
MANUFACTURING & MATERIALS:
CONFORM STRICTLY TO ASTM C1433 & AASHTO
MINIMUM SOIL COVER 2'
DESIGNED FOR H20 WHEEL LOAD RATING



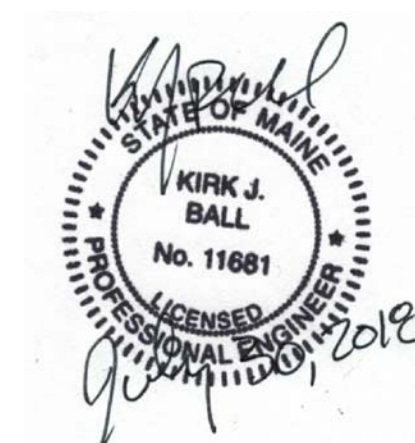
SCALE: HORZ. 1" = 10'
VERT. 1" = 10'



SCALE: 1" = 5'



SIGN POST DETAIL
NOT TO SCALE



DO NOT USE FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY

Subdivision Access Road Typical Section and Culvert Crossing

*Matt Hancock Properties
PO Box 295
Casco, Maine 04015*

Job Number:
79800

Drawing No:
C-11

Sheet 12 of 16

Drawn By: BPG
 Desg By: BPG / KJB
 Chkd By: KJB
 Aprvd By: KJB
 Date: 7-30-18

ACHERON ENGINEERING SERVICES
Engineering, Environmental & Geologic Consultants

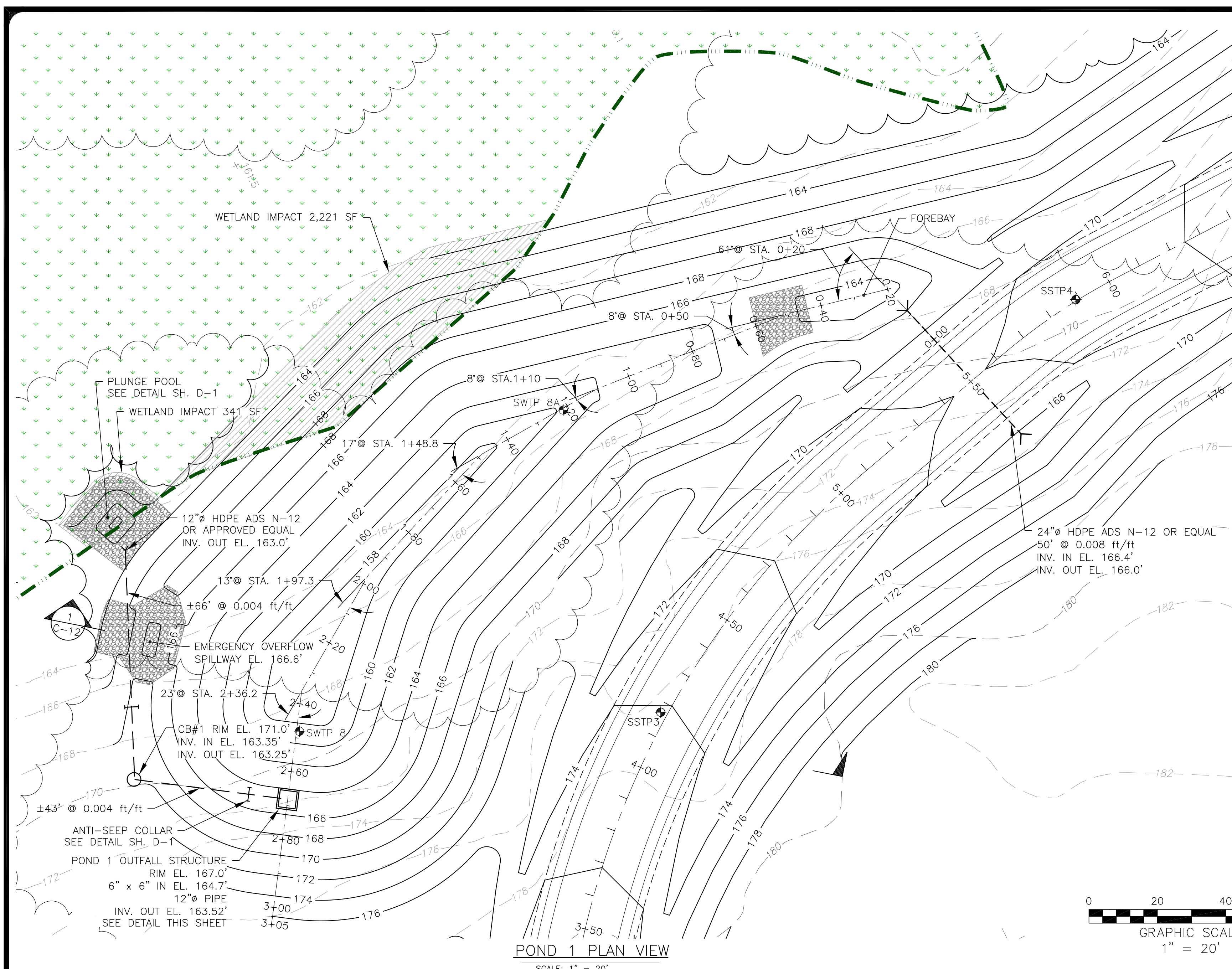
147 Main St.
Newport, ME. 04953
(207)-368-5700

www.AchersonEngineering.com

24466 Powell Rd.
Brooksville, FL 3460
(352)-796-6236

Acherson Internat

No.	Revision Description	Drwn	Chkd	Date
1	Revised per comments by Town of Windham, DEF # ACOE.	BFG	KJB	10-9-18



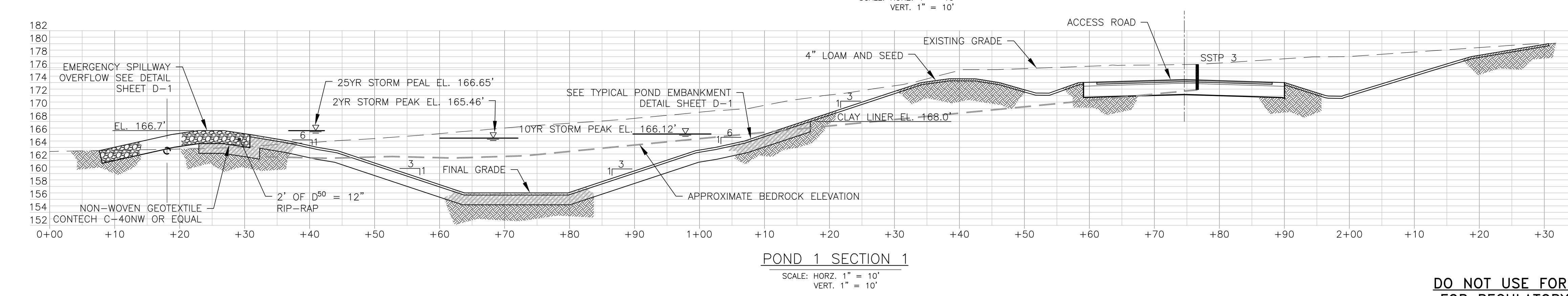
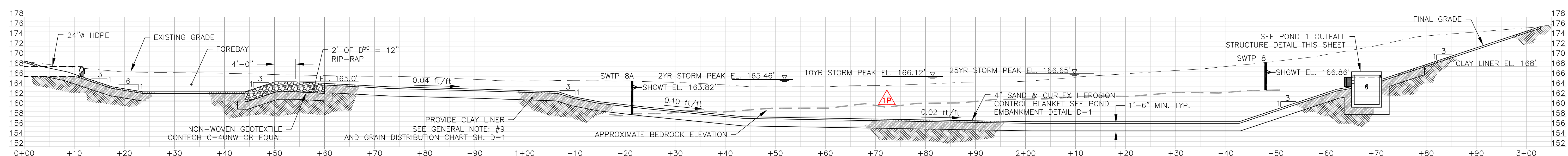
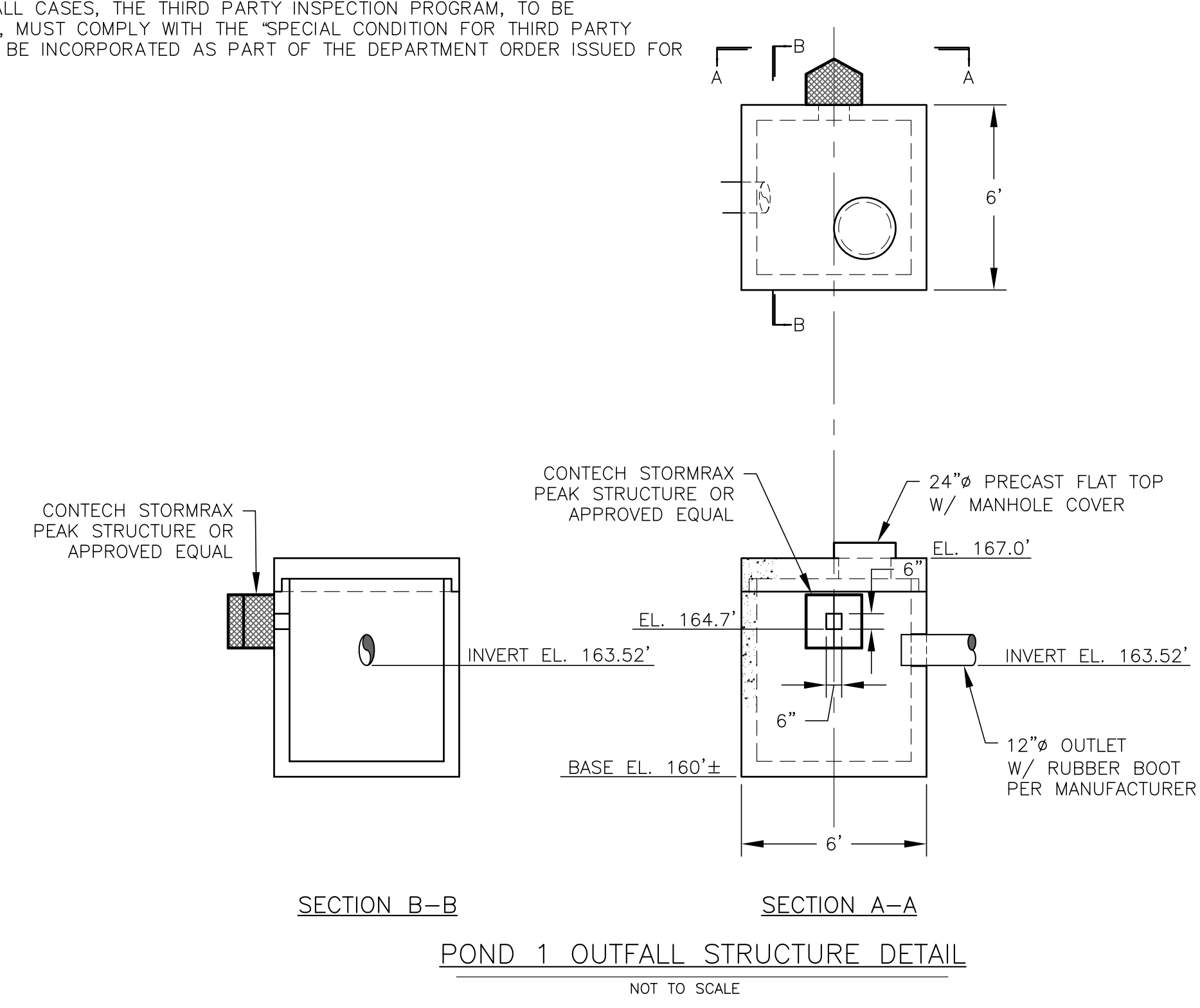
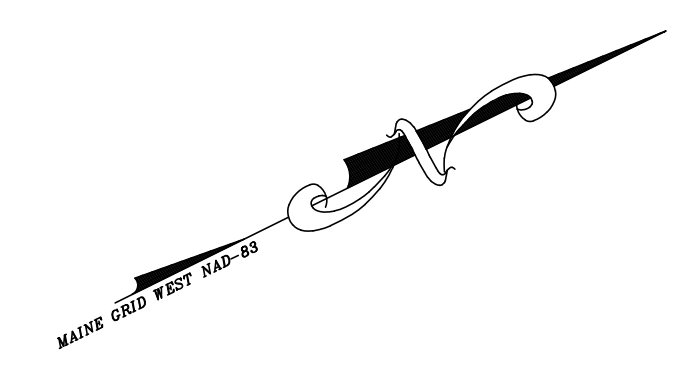
NOTES:
WETPONDS:

- A. INSPECTION BY A PROFESSIONAL ENGINEER WILL CONSIST OF WEEKLY VISITS TO THE SITE TO INSPECT THE INSTALLATION OF EACH POND'S EMBANKMENT CONSTRUCTION, STORMWATER INLET, UNDERDRAINED GRAVEL OUTLET, GRAVEL OUTLET FILTER MATERIAL MAKEUP AND PLACEMENT, OUTLET CONTROL STRUCTURE, CLAY LINER (IF APPLICABLE), AND EMERGENCY SPILLWAY CONSTRUCTION FROM INITIAL GROUND DISTURBANCE TO FINAL STABILIZATION OF THE POND.
- B. CLAY LINER MIN THICKNESS = 1.5'
- C. PLACE LINER IN 9" LOOSE LIFTS
- D. COMPACT CLAY LINER TO 95% STANDARD PROCTOR DENSITY PER ASTM D-2434.
- E. MINIMUM LINER PERMEABILITY 1x10-6/ Cm/SEC PER ASTM D-2432.
- F. LINER PLASTICITY INDEX NOT LESS THAN 15% PER ASTM D-423/424.
- G. SEE SHEET D-1 FOR MINIMUM & MAXIMUM GRAIN SIZE DISTRIBUTION FOR CLAY LINER.
- CONTRACTOR TO PROVIDE ALL TESTING RESULTS TO OWNER & ENGINEER FOR APPROVAL.

CONSTRUCTION OVERSIGHT:

THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION MAY REQUIRE THIRD-PARTY INSPECTIONS OF THE DEVELOPMENT'S EROSION AND SEDIMENTATION CONTROLS DURING CONSTRUCTION AND IMMEDIATELY AFTER FINAL STABILIZATION. IN ALL CASES, THE THIRD PARTY INSPECTION PROGRAM, TO BE IMPLEMENTED BY THE APPLICANT, MUST COMPLY WITH THE "SPECIAL CONDITION FOR THIRD PARTY INSPECTION PROGRAM" THAT WILL BE INCORPORATED AS PART OF THE DEPARTMENT ORDER ISSUED FOR THE DEVELOPMENT.

- EXISTING
- PROPERTY LINE
 - INDEX CONTOURS
 - CONTOURS
 - WETLAND
 - TREE LINE
- LEGEND
- PROPOSED
- CONTOURS
 - WETLAND IMPACT
 - RIP-RAP
 - TREE LINE
 - CULVERT
 - ANTI-SEEP COLLAR
 - CATCH BASIN
 - PIPE
 - CENTER LINE
 - EDGE OF PAVEMENT
 - EDGE OF SECONDARY ROAD SHOULDER
 - CLAY LINER
 - SAND
 - LOAM AND SEED



DO NOT USE FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY



Stormwater Management Plan
Pond #1 Plan & Sections

Durant Homestead
Chute Road, Windham, Maine
Matt Hancock Properties
PO Box 295
Casco, Maine 04015

Drawn By: BFG
Desg By: BFG / KJB
Chkd By: KJB
Apprv By: KJB
Date: 7-30-18

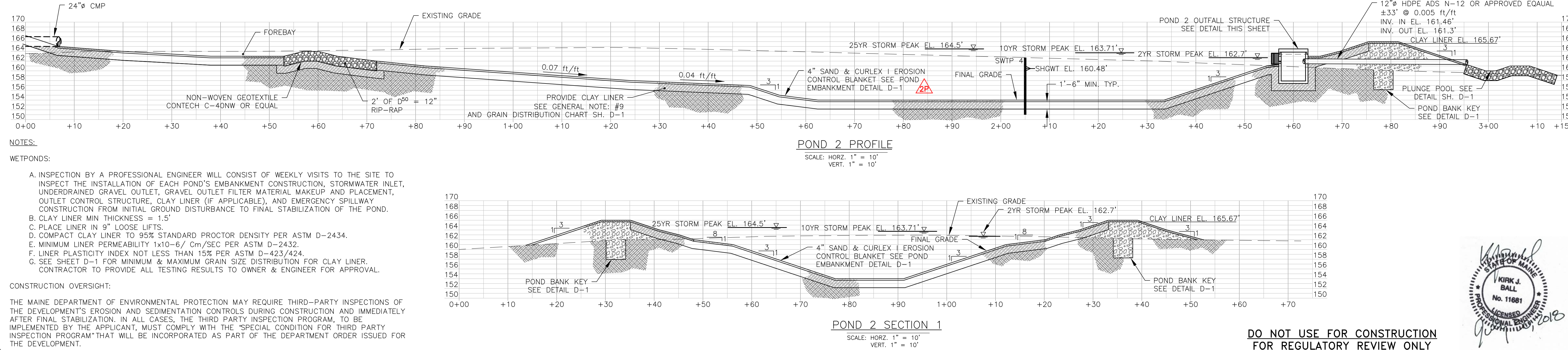
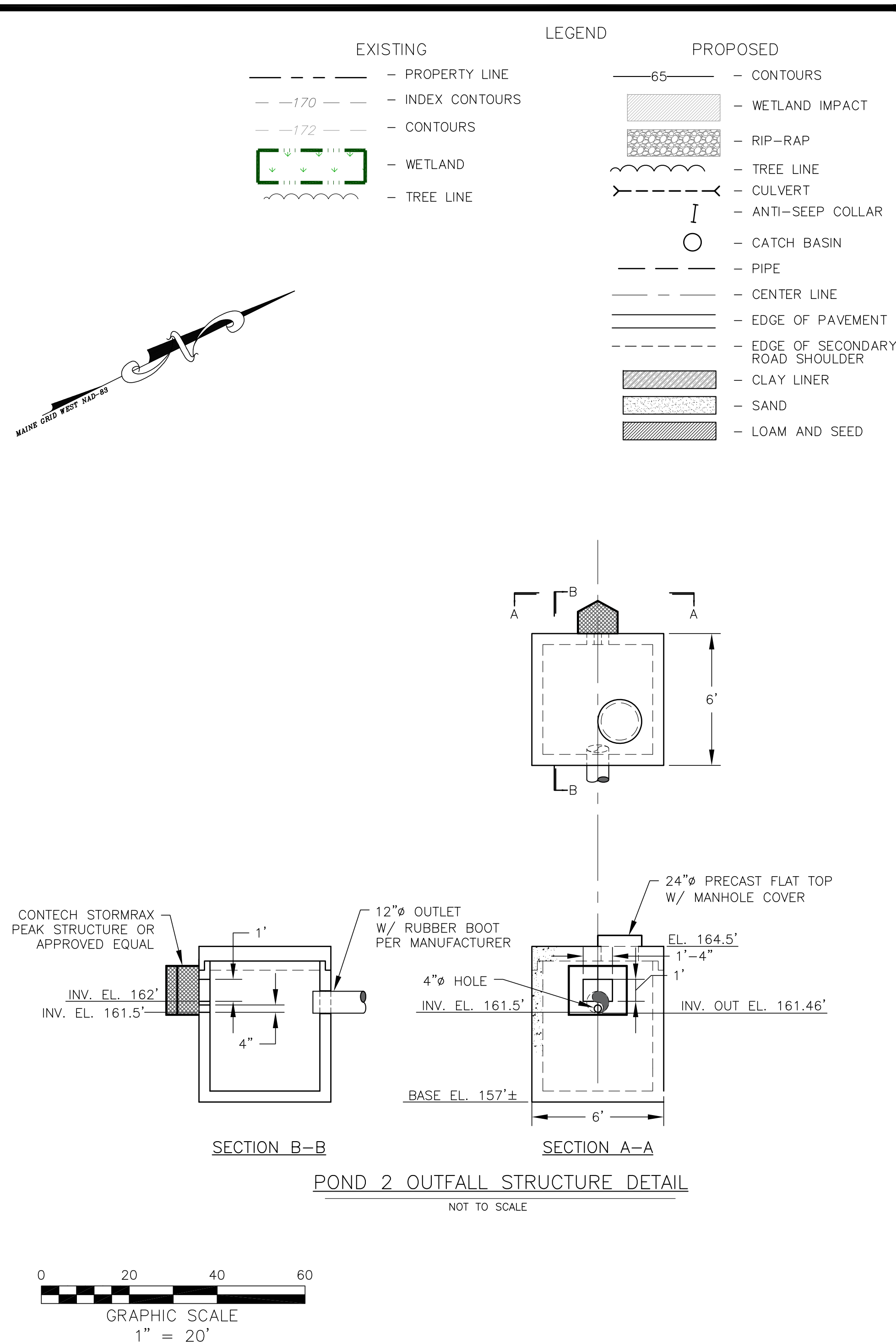
Reviewed per comments by Town of Windham, DEP & ACOE.
Reviewed per comments by DEP for Stormwater.
No. Revision Description

Job Number:
79800

Drawing No:
C-12

Sheet 13 of 16

ACHERON ENGINEERING SERVICES
Engineering, Environmental & Geologic Consultants
www.acheronengineering.com
24466 Powell Rd.
Brooksville, FL 34602
(352)-796-6236
Acheron International, Inc.



DO NOT USE FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY

No.		<i>Revision Description</i>	BPG <i>Dwnn</i>	KJB <i>Chtkd</i>	10-9-118 <i>Date</i>
1		Revised per comments by Town of Windham, DEF & AGOE.			

Drawn By: BPG
 Desg By: BPG / KJB
 Chkd By: KJB
 Apprd By: KJB
 Date: 7-30-18

ACHERON ENGINEERING SERVICES
Engineering, Environmental & Geologic Consultants

www.AcheronEngineering.com

147 Main St.
Newport, ME 04953
(207)-368-5700

24466 Powell Rd.
Brooksville, FL 34602
(352)-796-0236

Acheron International, Inc.

Stormwater Management Plan
Pond #2 Plan & Sections

Durant Homestead
Chute Road, Windham, Maine

Matt Hancock Properties
PO Box 295
Casco, Maine 04015

Job Number:
79800

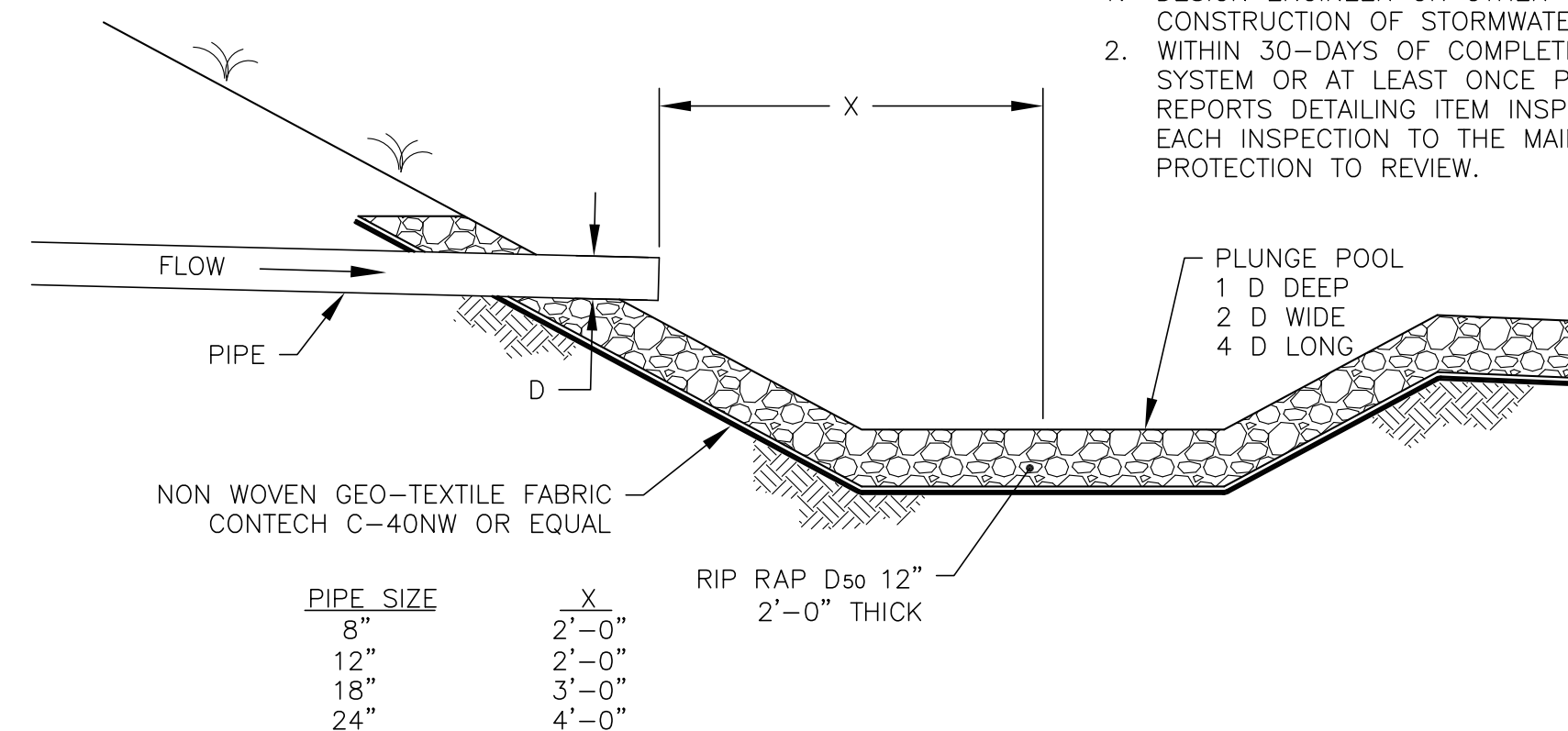
Drawing No:

Sheet 14 of 16

A circular professional engineer seal for the State of Maine. The outer ring contains the text "STATE OF MAINE" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside the ring, the name "KIRK J. BALL" is printed above the license number "No. 11681". Below the license number, the words "LICENSED" and "PROFESSIONAL ENGINEER" are printed. A handwritten signature "KJB" is written across the top of the seal, and the date "9/20/2018" is handwritten at the bottom right.

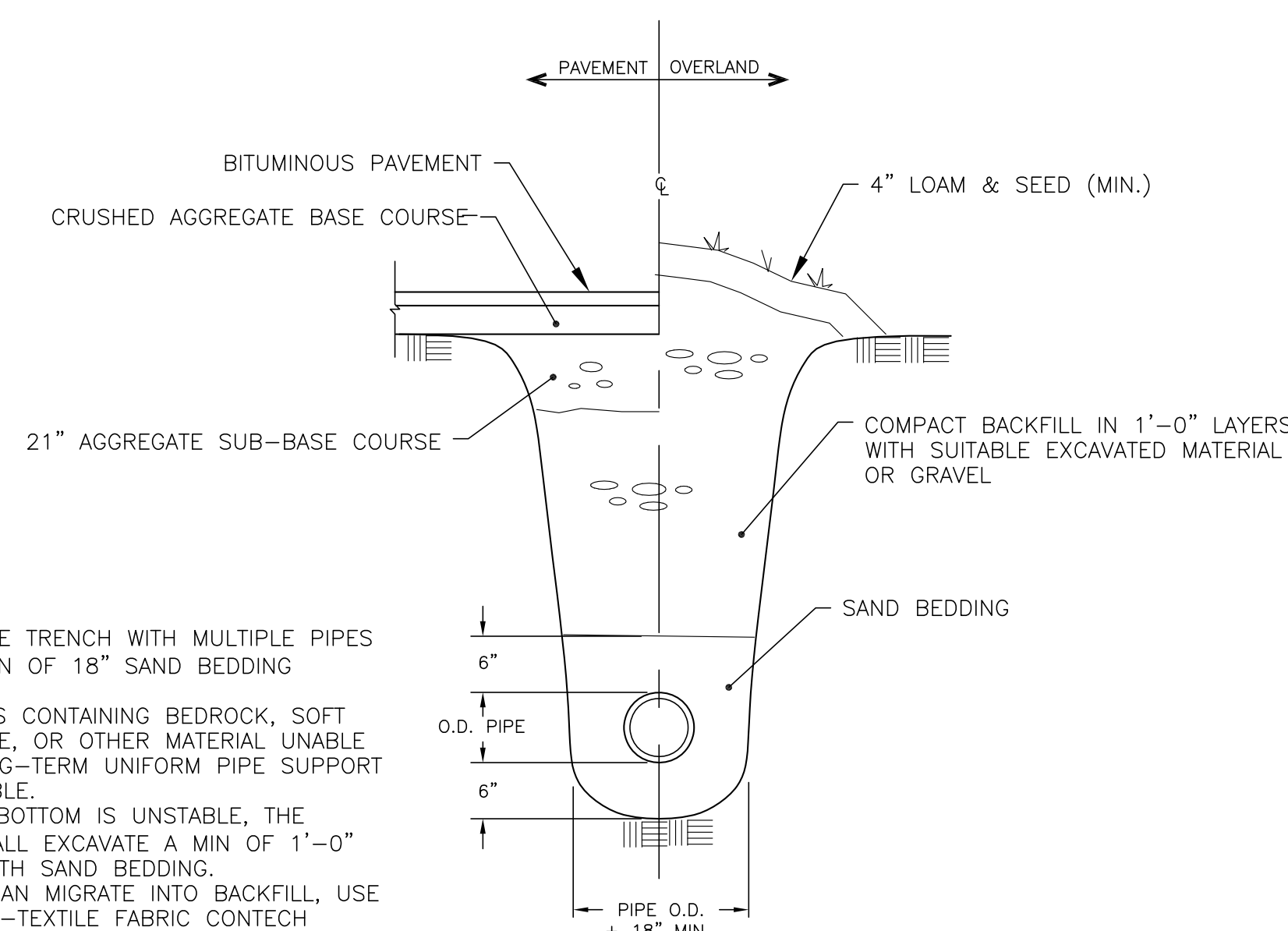


EMERGENCY OVERFLOW ELEVATION TABLE			
POND	EL. A	EL. B	EL. C
1	166.7'	168.0'	164.0'
2	165.5'	166.0'	164.0'

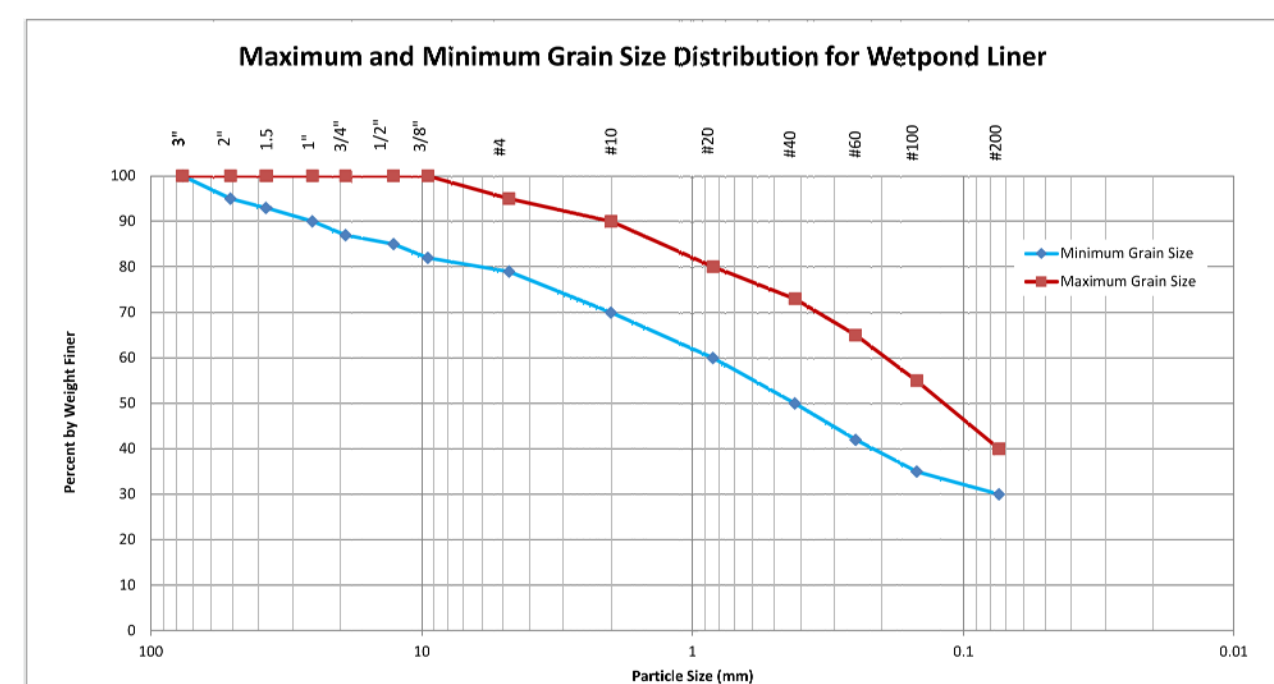
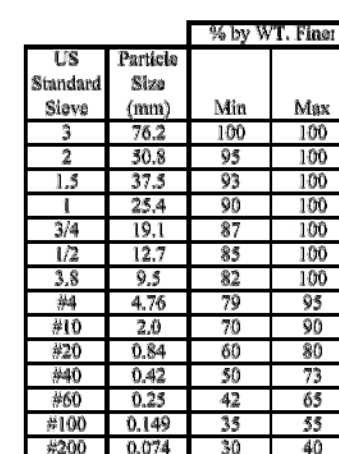


PLUNGE POOL DETAIL

NOT TO SCALE

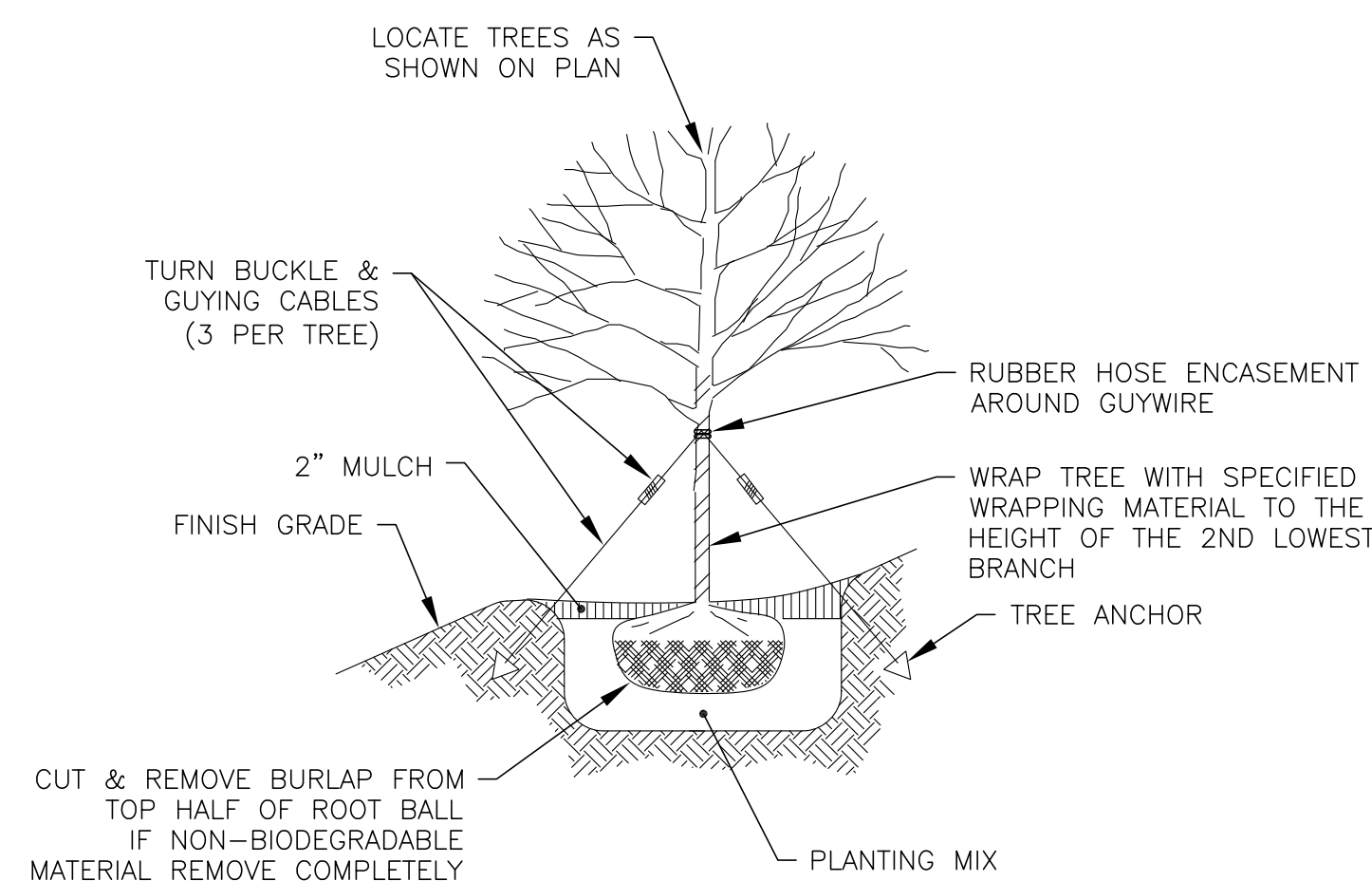
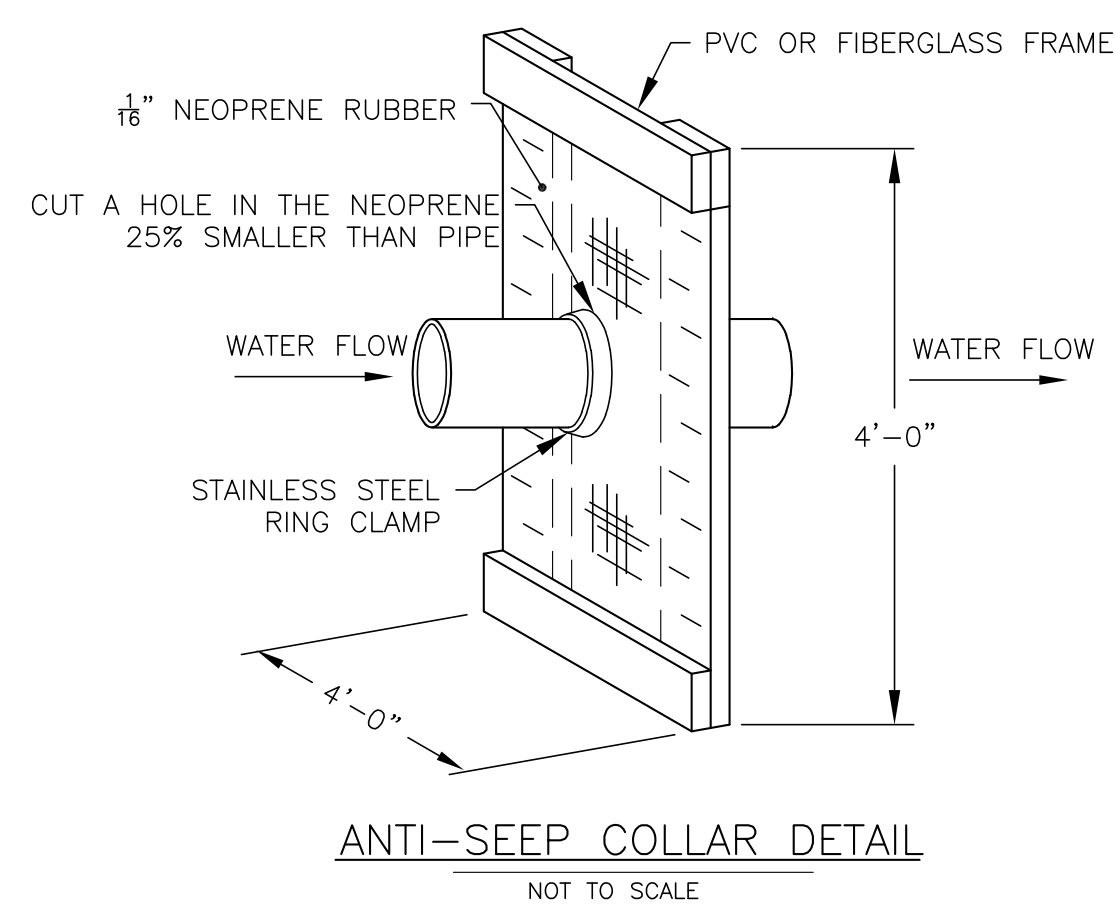
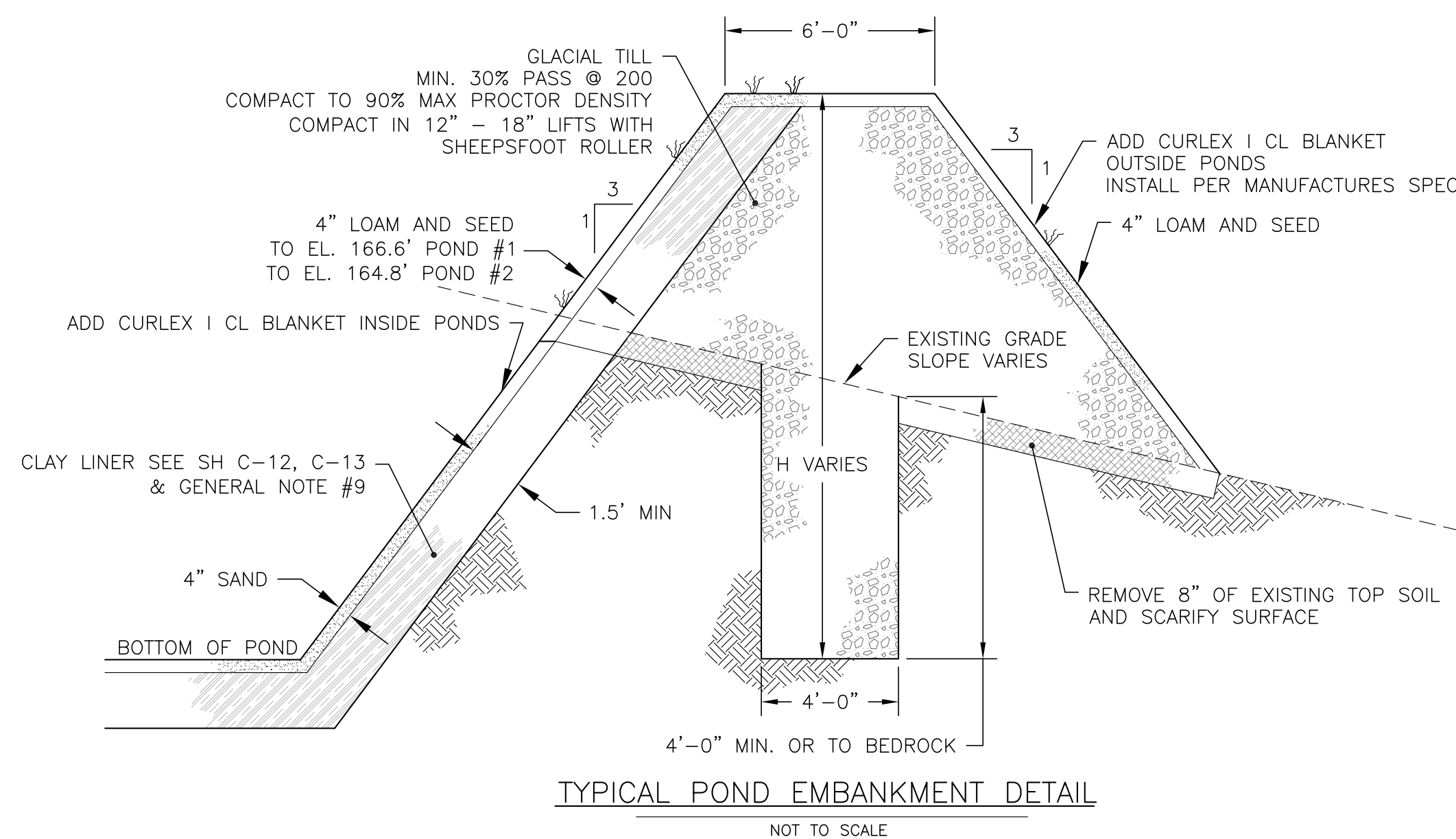
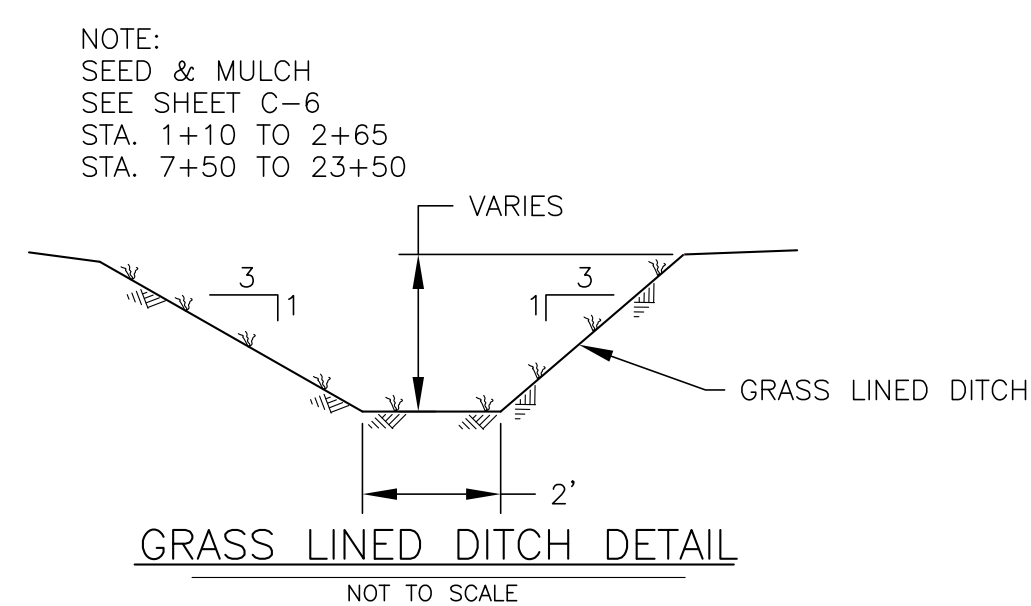


TYPICAL TRENCH DETAIL
NOT TO SCALE

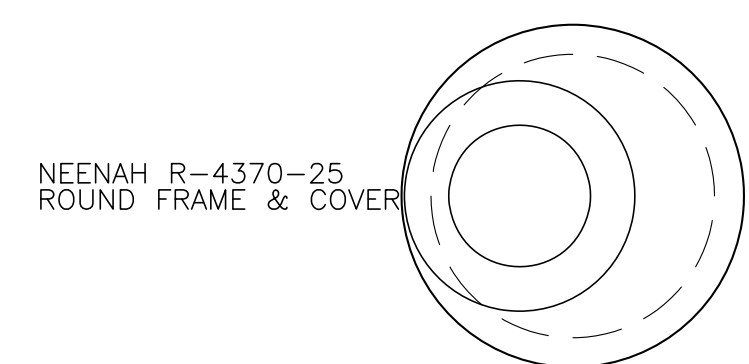


NOTE:
THE SEED MIXTURE SHALL CONSIST OF SEEDS PROPORTIONED
BY WEIGHT AS FOLLOWS:

	Pounds/acre
Kentucky Bluegrass	20 lbs
Creeping Red Fescue	20 lbs
Perennial Ryegrass	5 lbs

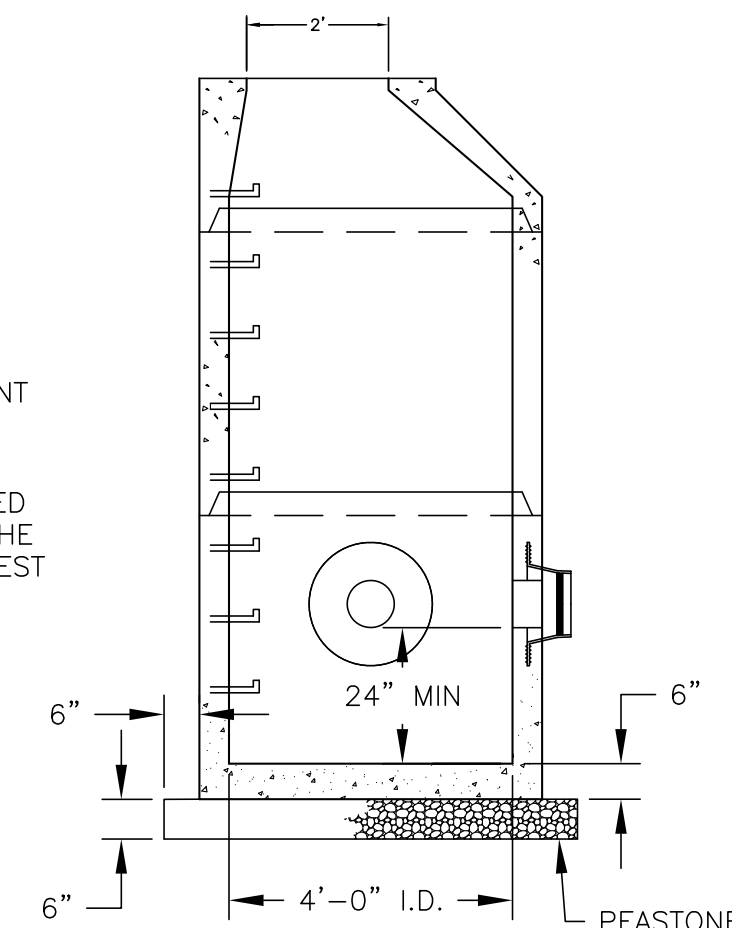


TREE STAKING DETAIL
NOT TO SCALE



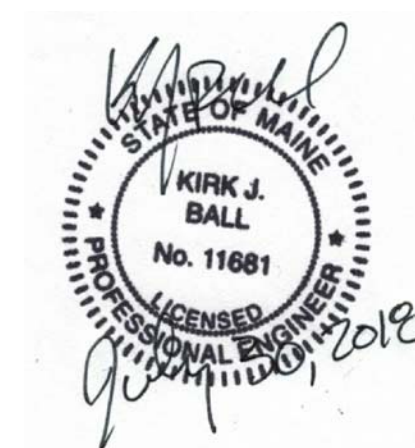
MANHOLE NOTES:

1. EXTERIOR ASPHALT COATED
2. LOCK JOINT FLEXIBLE PIPE SLEEVES, CAST IN
3. MANHOLE STEPS @ 12" O.C.



SECTION
CATCH BASIN DETAIL

DO NOT USE FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY

[illegible]

Drawn By: BPG
 Desg By: BPG / KJB
 Chkd By: KJB
 Aprvd By: KJB
 Date: 7-30-18

ACHERON ENGINEERING SERVICES
Engineering, Environmental & Geologic Consultants

www.AcheronEngineering.com
147 Main St.
Newport, ME 04953
(207)-368-5700
(207)-368-5700
24466 Powell Rd.
Brooksville, FL 34602
(352)-796-6236

Construction Details

Durant Homestead
Chute Road, Windham, Maine

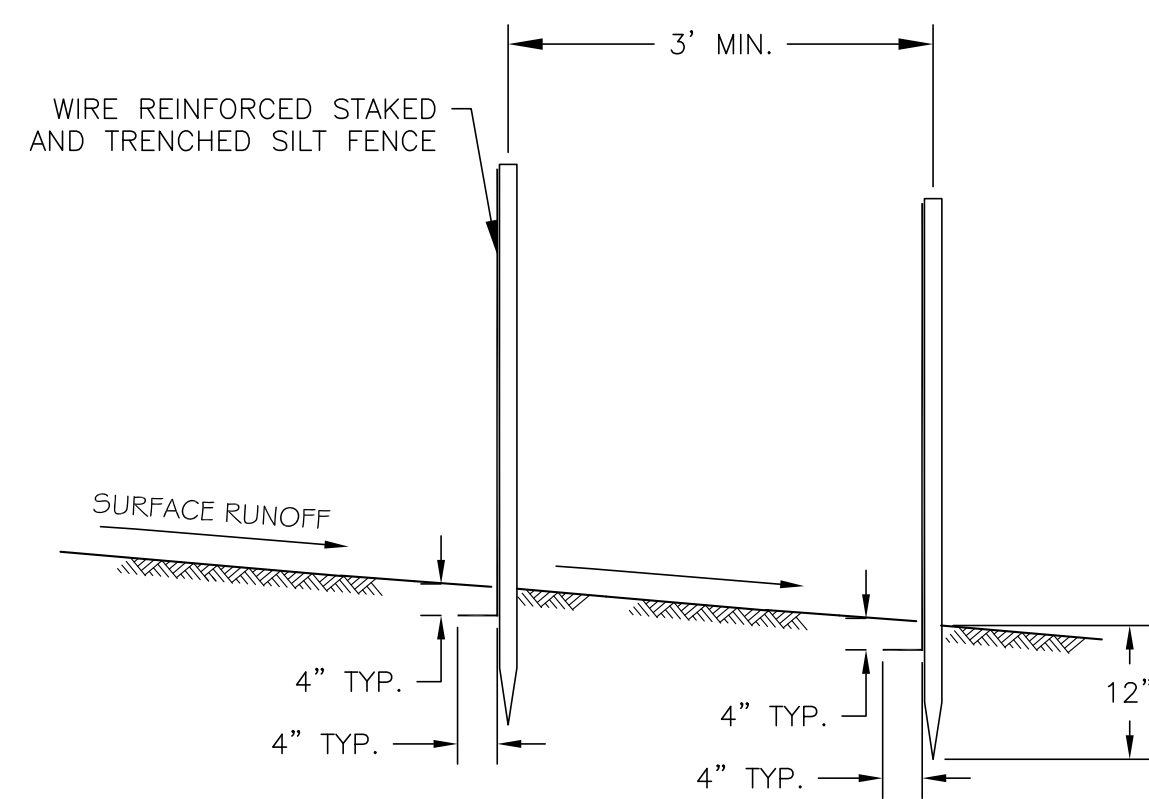
*Matt Hancock Properties
PO Box 295
Casco, Maine 04015*

Job Number:
79800

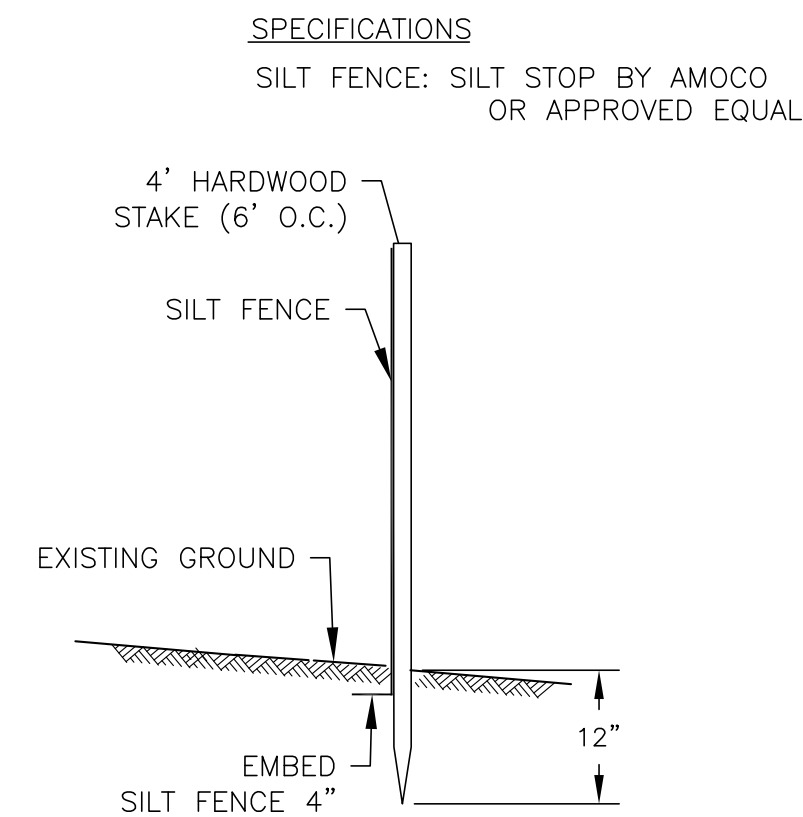
Drawing No:
D-1

Sheet 15 of 16

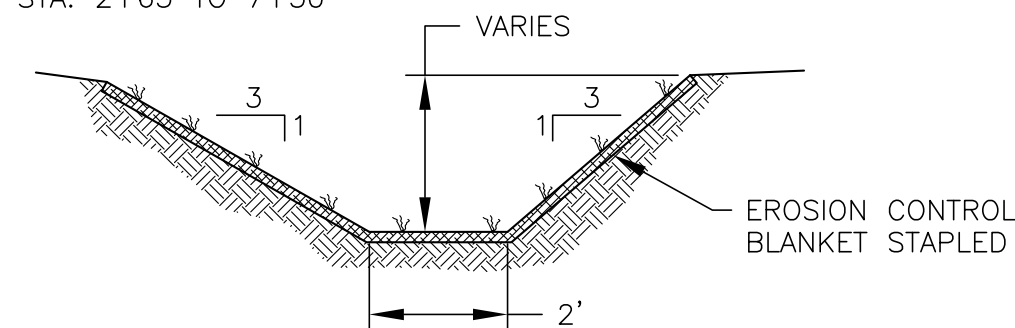
1. SEDIMENT BARRIERS MUST BE INSTALLED PRIOR TO SOIL DISTURBANCE.
2. ALL BARRIERS SHOULD BE INSTALLED ON THE LAND CONTOUR AND EACH END CURVED UPHILL TO PREVENT BYPASS AND RETAIN RUNOFF.



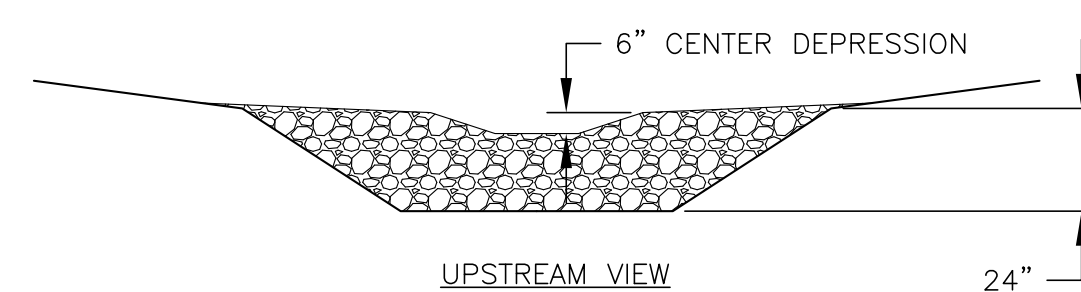
NOT TO SCALE



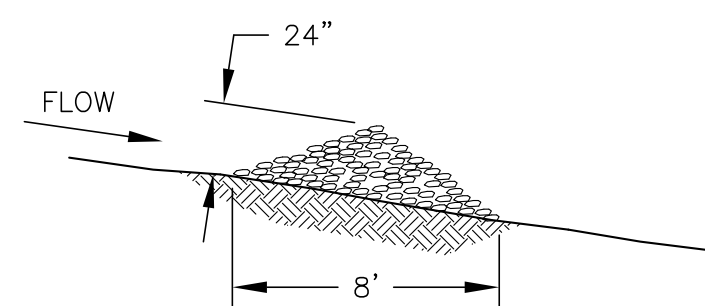
NOT TO SCALE



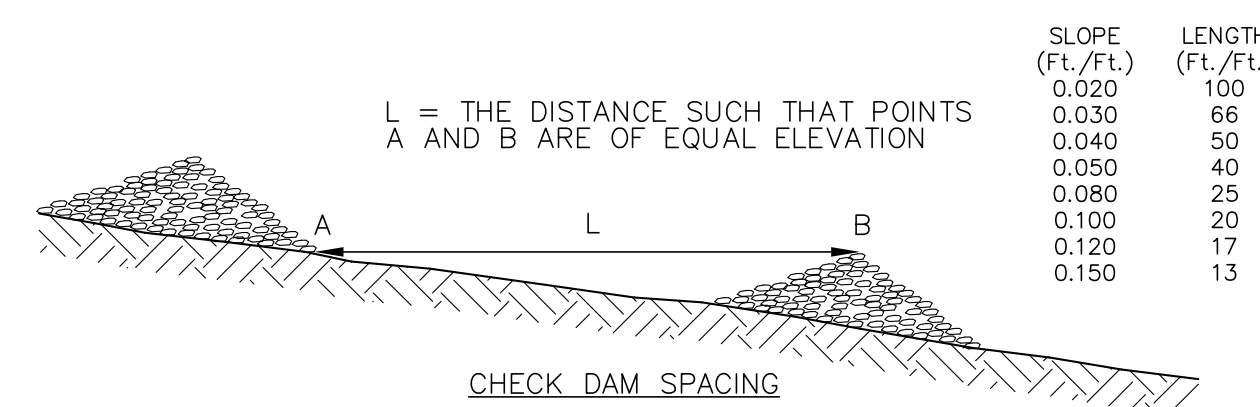
NOT TO SCALE



UPSTREAM VIEW



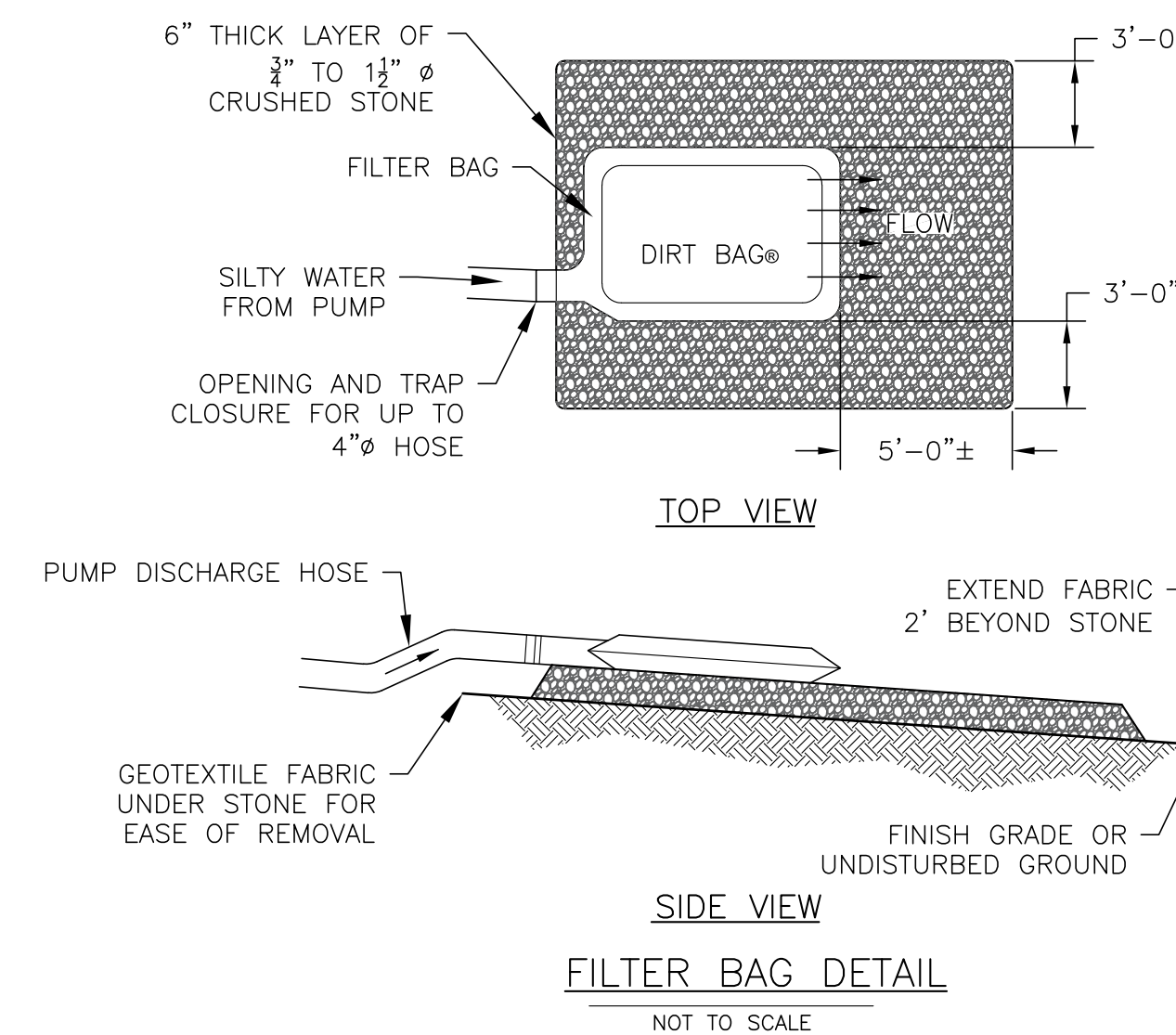
CROSS-SECTION



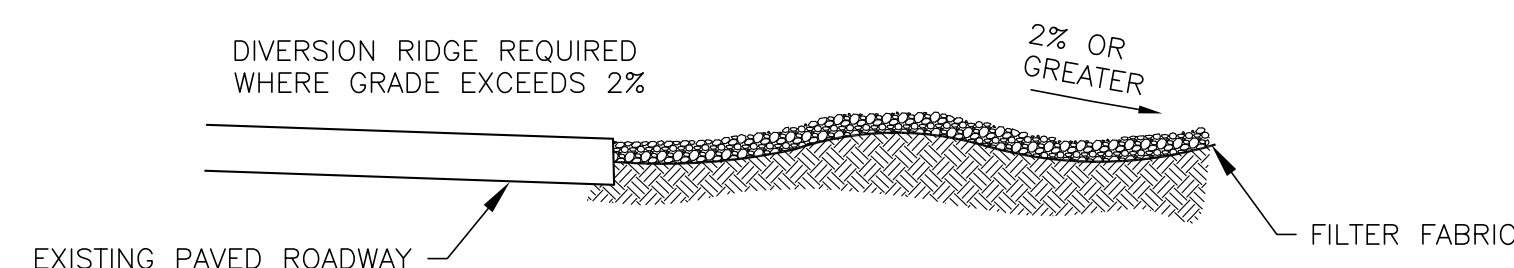
CHECK DAM SPACING

NOT TO SCALE

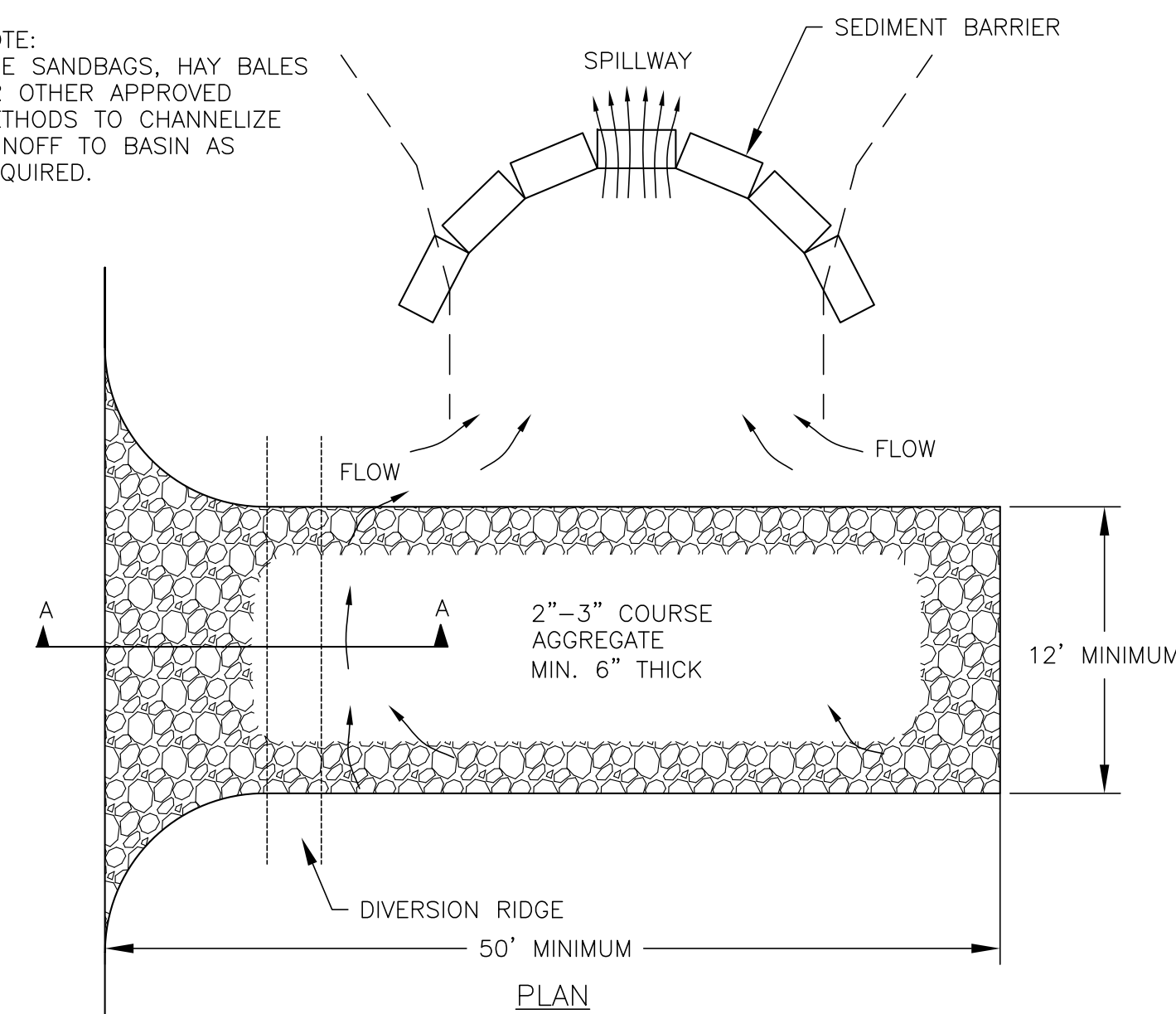
NOTE:
IN LIEU OF SILT FENCE EROSION CONTROL MIX CAN BE USED IF CONDITIONS BELOW ARE MET:
EROSION CONTROL MIX MAY NOT BE USED WITHIN 20 FT OF A WETLAND.
FOLLOW MAINE EROSION AND SEDIMENT CONTROL PRACTICES FIELD GUIDE 2014.
EROSION CONTROL MIX BERM:
THE ECM BERM SHOULD BE A MINIMUM OF 12" HIGH AND A MINIMUM OF TWO FEET WIDE. ON LONGER OR STEEPER SLOPES, THE BERM WILL NEED TO BE WIDER AND HIGHER. BERM COMPOSED OF ECM CAN BE RESHAPED WHEN NECESSARY.
EROSION CONTROL MIX:
THE MIX MUST BE WELL-GRADED WITH AN ORGANIC COMPONENT THAT IS BETWEEN 50 AND 100% OF DRY WEIGHT, AND THAT IS COMPOSED OF FIBROUS AND ELONGATED FRAGMENTS. THE MINERAL PORTION OF THE MIX SHOULD BE NATURALLY INCLUDED IN THE PRODUCT WITH NO LARGER ROCKS (>4") OR LARGE AMOUNTS OF FINES (SILTS AND CLAYS). IN STUMP GRINDING, THE MINERAL SLOI ORIGINATES FROM THE ROOT BALL AND SHOULD NOT BE REMOVED BEFORE GRINDING. THE MIX SHOULD BE FREE OF REFUSE, MATERIAL TOXIC TO PLANT GROWTH OR UNSUITABLE MATERIAL (BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS).



FILTER BAG DETAIL



SECTION
A-A



NOT TO SCALE

NOTE:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

No.	2	Revised per comments by DEP for Stormwater.	BFG <i>Drawn</i>	KJB <i>Check</i>	10-22-18 <i>Date</i>
-----	---	---	---------------------	---------------------	-------------------------

Drawn By: BPG
 Desig By: BPG / KJB
 Chkd By: KJB
 Aprvd By: KJB
 Date: 7-30-18

ACHERON ENGINEERING SERVICES
Engineering, Environmental & Geologic Consultants

www.AcheronEngineering.com
147 Main St.
Newport, ME 04953
(207)-368-5700

24466 Powell Rd.
Brooksville, FL 34602
(352)-796-6236
Acheron International, Inc.

Subdivision Access Road
Erosion Control Details
Durant Homestead
Chute Road, Windham, Maine
Matt Hancock Properties
PO Box 295
Casco, Maine 04015

Job Number:
79800

Drawing No: D-3

Sheet 16 of 16

DO NOT USE FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY



Mandatory Plan Information

Notes:

(1) Documents referenced on this plan are recorded in the Cumberland County Registry of Deeds unless otherwise noted.

(2) Bearings are oriented to Grid North of the Maine State Coordinate System, West Zone, NAD 83.

(3) Reference is made to the following plans:

a. Subdivision Plan of River's Edge Subdivision, River Road, Windham, Maine for Colebrook Corporation by Sebago Technics dated September 24, 2002 recorded in Plan Book 203, Page 105.

b. Property Plan, Chute Road, Windham, Maine made for Kenneth Jordan by Robert P. Titcomb, Inc. dated April 22, 1980 recorded in Plan Book 126, Page 37.

c. Plan Showing a Standard Boundary Survey made for Edith M. Durant located on the northwesterly sideline of the Chute Road, Windham, Maine by Bruce R. Bowman, Inc. dated July 29, 1992 recorded in Plan Book 192, Page 189.

d. Plan of Property for Peter Kluchnik, Webb Road, South Windham, Maine by Land Use Consultants, Inc. dated January 19, 1977 recorded in Plan Book 116, Page 22.

(4) The premises is subject to utility easements conveyed to Central Maine Power Co. and New England Telephone and Telegraph Company as described in Volume 6103, Page 183 and Volume 6884, Page 233. See plan for approximate locations.

(5) Chute Road (f.k.a. Wyer Ledge Road) right of way is depicted hereon based on geometry contained within the description of the subject premises in Volume 33191, Page 124. No additional road research was conducted.

(6) Reference is made to the subdivision plan of the subject premises by Main-Land Development Consultants, Inc. approved September 24, 2007 recorded in Plan Book 207, Page 635 and the subsequent Vacancy and Termination Order dated October 22, 2012 recorded in Volume 30081, Page 168.

(7) Planimetric detail as provided by Aerial Survey & Mapping, Norridgewock, Maine.

(8) For source of title see deed to Matt Hancock Properties, Inc. recorded in Volume 33191, Page 124. Subject premises is identified by the Town of Windham as Tax Map 6, Lot 25.

(9) Total area subdivided equals 65.55 acres.

(10) Wetland impact = 14,569 sf OR 0.33 acres

(11) Open Space area: Total = 40.37 acres, Developable = 27.2 acres

(12) Percent of developable land in open space = $56\% \left(\frac{27.2 \text{ acres}}{48.53 \text{ acres}} \right) \times 100$

(13) Where bedrock is encountered at a depth of 10 feet or less at any well, install water supply wells with casing set and grouted a minimum of 20 feet below the solid bedrock surface.

(14) Disposal field footprints as shown on this plan are based on sizing using quick 4 hi-cap plastic chambers, except on Lots 12, 13, 15 and 16 where smaller system footprints using Eljen In-Drain type systems are shown. approved propriety devices with a smaller footprint are recommended to be used on these lots to avoid and minimize alteration of nearby wetlands.

(15) Lots 19, 20 and 21: compact soils in the leachfield footprints and fill extensions are to be removed and replaced with suitable backfill to the lower limit of compaction. The backfill should be tilled into the original soil to a 6-inch depth in the leachfield footprint and fill extensions to form a transitional horizon.

(16) Lot 3: LPI approval required for a reduction in setback between the leachfield and the drilled well, to include greater depth of well casing or liner seal below ground level, as per Table 7a in Section 7 of the Subsurface Wastewater Disposal Rules (as amended August 03, 2015).

(17) All residential homes shall be equipped with a sprinkler system in accordance with the latest edition of NFPA-13D.

(18) Buffers A-N to be marked with permanent signs describing use.

(19) Fill or alteration of wetlands other than what is shown on the plan is not authorized without prior approval from the Department of Environmental Protection.

(20) Road and stormwater design provided by Acheron Engineering, 147 Main St., Newport, ME 04953; <https://acheronengineering.com>.

Planning Board Approval

This is to certify that after reviewing the subdivision shown by this plan and considering each of the criteria set forth in 30-A.M.R.S.A. § 4404, as amended, and considering each of the criteria set forth in the subdivision ordinance of the Town of Windham, the undersigned having made findings of fact establishing that the proposed subdivision meets all of the criteria set forth therein, and therefore the subdivision is approved.

Date: _____

The Town of Windham Planning Board

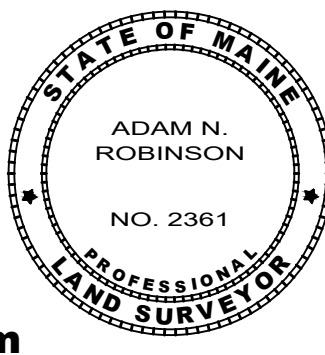
PLISGA & DAY LAND SURVEYORS

72 MAIN STREET
BANGOR, MAINE
DATE: January 24, 2019
PROJ. NO. 17010

Email: info@WeMapIt.com
Phone: (207) 947-0019
Toll-Free: 1-800-734-0019

DRAWING FILE: 17010.dwg

www.WeMapIt.com



Survey Standard:

These plans were prepared from information obtained by a survey conforming substantially to the requirements of Technical Standards contained in Chapter 90, Part 2, of the Rules of the Board of Licensure for Professional Land Surveyors, effective April 1, 2001. Monuments not set at all angle points. Records research conducted from 2006 to the present.

Adam N. Robinson

Adam N. Robinson, Maine Licensed
Professional Land Surveyor No. 2361

Durant Homestead Lot Developed Area Summary

Description	Impervious Area (sf)	Developed Area (sf)
Lot #1	3,040	25,956
Lot #2	3,040	25,787
Lot #3	3,040	13,040
Lot #4	3,040	13,040
Lot #5	3,040	22,194
Lot #6	3,040	13,040
Lot #7	3,040	23,716
Lot #8	3,040	28,231
Lot #9	3,040	22,096
Lot #10	4,015	14,015
Lot #11	4,015	27,457
Lot #12	4,015	20,794
Lot #13	4,015	14,015
Lot #14	4,015	14,015
Lot #15	4,015	14,015
Lot #16	3,040	13,040
Lot #17	4,015	30,040
Lot #18	4,015	28,775
Lot #19	4,015	14,015
Lot #20	4,015	14,015
Lot #21	4,015	14,015
Lot #22	4,015	29,327
Lot #23	4,015	14,015
Lot #24	4,015	14,015
Lot #25	4,015	14,015
Totals	90,625	477,081

Curve Table

Curve	Radius	Arc length	Chord bearing	Chord length
C1	60.00'	78.03'	N 18°23'20" W	72.64'
C2	275.00'	199.38'	N 34°52'25" W	195.04'
C3	205.00'	45.63'	N 07°43'34" W	45.54'
C4	205.00'	202.93'	N 27°00'36" E	194.75'
C5	155.00'	105.43'	N 35°52'59" E	103.41'
C6	205.00'	68.90'	N 26°01'32" E	68.57'
C7	6.00'	5.24'	N 10°38'31" E	5.07'
C8	6.00'	11.56'	S 69°34'18" E	9.85'
C9	205.00'	66.26'	N 64°29'09" E	65.97'
C10	57.00'	228.81'	S 08°44'43" W	103.32'
C11	11.27'	7.08'	N 75°24'44" W	6.97'
C12	155.00'	155.14'	S 45°04'17" W	148.75'
C13	205.00'	139.44'	S 35°52'59" W	136.76'
C14	125.00'	123.74'	S 27°00'36" W	118.75'
C15	155.00'	34.50'	S 07°43'34" E	34.43'
C16	225.00'	163.13'	S 34°52'25" E	159.58'
C17	60.00'	110.47'	N 71°36'40" E	95.51'
C18	275.00'	15.19'	S 54°03'43" E	15.18'
C19	205.00'	62.76'	N 07°25'17" E	62.52'
C20	205.00'	140.17'	N 35°46'50" E	137.46'
C21	155.00'	75.65'	S 41°23'11" W	74.90'
C22	155.00'	29.78'	S 21°54'02" W	29.73'
C23	57.00'	154.88'	N 28°24'46" W	111.44'
C24	57.00'	73.93'	N 86°35'13" E	68.86'
C25	205.00'	68.55'	N 25°58'37" E	68.23'
C26	205.00'	70.89'	N 45°27'46" E	70.53'
C27	125.00'	82.91'	N 36°22'02" E	81.40'
C28	125.00'	40.83'	S 08°00'29" W	40.65'
C29	225.00'	68.50'	S 22°49'32" E	68.24'
C30	225.00'	94.63'	N 43°35'45" W	93.93'

Lands n/f of
River's Edge Common Land
Volume 18946, Page 340
Plan Book 203, Page 105
Tax Map 6 - Lot 42

River's Edge Subdivision - Common Open Space
See plan reference a.

Lands n/f of
John A. & Claire H. Streeter
Volume 8501, Page 223
Tax Map 3 - Lot 22A

Lands n/f of
Elizabeth W. Dube
Volume 6230, Page 231
Tax Map 6 - Lot 25A

STATE OF MAINE
CUMBERLAND, ss, REGISTRY OF DEEDS

Received _____
at _____ h _____ m _____ M, and recorded _____
in Plan File _____

ATTEST: _____

REGISTER _____

Record owner:
Matt Hancock Properties, LLC
PO Box 295
Casco, ME 04015