

#### SUBDIVISION AMENDMENT APPLICATION

#### **CUMBERLAND FORESIDE VILLAGE**

TOWN OF CUMBERLAND, ME









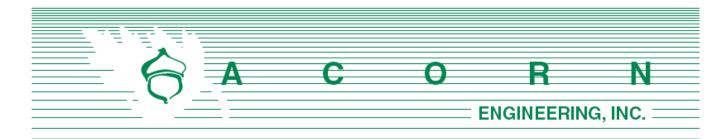
Prepared By:

ACORN ENGINEERING, INC.

for

HERITAGE VILLAGE DEVELOPMENT GROUP LLC

**DECEMBER 22, 2023** 



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CUMBERLAND FORESIDE VILLAGE SUBDIVISION AMENDMENT PLAN SET, DATED 12/22/23

## Section A

Cover Letter/Project Narrative

Cumberland Planning Board Town of Cumberland, Maine Cumberland, ME 04101 December 21, 2023

Subject: Town of Cumberland Subdivision Amendment

Cumberland Foreside Village, 5th Amendment

Applicant: Heritage Village Development Group LLC, (Peter Kennedy)

Ms. Nixon:

On behalf of Heritage Village Development Group LLC and owner Peter Kennedy, Acorn Engineering, Inc. (Acorn) is pleased to submit this application to amend the Cumberland Foreside Village subdivision.

This application is submitted for construction of a 60-foot extension of Sky View Drive within the existing right-of-way. The proposed road extension will include a 24-foot traveled way, curbs, a 5-foot paved sidewalk, underground utilities, and a closed drainage system. A hammerhead turnaround as previously approved will be located approximately 110 feet from the end of roadway. Stormwater management and erosion control measures have been addressed on the plans and in writing within the application materials.

The project area is subject to an existing Maine Department of Environmental Protection (MDEP) Approval Order # L-21578-L2-A-N and a Maine Department of Transportation (MDOT) Permit ID 01-00070-A-M. There will be no existing easements or lines line revised as part of the proposed amendment.

At this time, the applicant proposes to keep the new extension a private way. The applicant/owner intends to construct the new extension to generally meet Town mixed-use commercial access roadway standards so that in the future, it could be accepted by the Town. Overall, the roadway extension will result in approximately 2,342 square feet of new impervious surface. The minimal amount of impervious surface qualifies the project to be exempt from modifying the existing MDEP permit under state statute Title 38 §488.29. MDEP will be notified of the project and the amount of impervious surface to be created.

The application fee including review escrow of \$450 is also attached to this submission. We look forward to working with you on this project.

Craig Burgess

Craig A. Burgess, PE Project Manager Acorn Engineering, Inc.

## **Section B**

**Subdivision Application** 

#### APPENDIX B

#### APPLICATION FOR MAJOR OR MINOR SUBDIVISIONS

<b>Applicant's Contact Information</b>	
Name: Heritage Village Development Group LLC	c/o Peter Kennedy
Mailing Address: _12 Carroll Street, Falmouth, M	
Phone#: Office: Cell:	207-831-4586 Fax:
Interest in property: Owner	
Interest in abutting properties, if any: none	
<b>Property Owner's Contact Information</b>	
Name: Same as applicant	
Mailing Address:	
Email Address:	
Phone#: Office: Cell:	Fax:
	itect, Engineer, Planner or Surveyor Contact
<u>Information</u> (If more than one, please att Name: Acorn Engineering, Inc. Craig Burgess, PE	
Mailing Address: PO Box 3372, Portland, Maine	
Email Address: cburgess@acorn-engineering.co	
_	Fax:
THOREM. Office. <u>Zur-rrs-zuss</u> Cen.	1 ax
<b>Project Information</b>	
Name of Project:Cumberland Foreside Village	ge
Address of site: Sky View Drive	
CCRD Book/Page #:	Tax Map/Lot #: _ Overlay District (If any): None
Zoning District: Heritage Village - Contract Zone	_ Overlay District (If any): None
Site size (acres):# of Lots:	# Buildings: # Dwellings:
Minor Subdivision _ X _ Major Subd	livision Conservation Subdivision
OTHER INFORMATION	
<b>1.</b> Is Board of Adjustment and Appeals ap	aprovel required? No
2. Are any ordinance waivers requested?	Yes X No (If yes, attach a list of waivers requested
and reason for the request.)	1cs100 (if yes, attach a list of warvers requested
3. Application fee per Town ordinance: \$	100
4 This application form and all accompan	nying materials must be submitted to the Town Planner
	which it is to be considered by the Planning Board.
at reast 21 days prior to the meeting at	when it is to be constacted by the Hamming Board.
The undersigned, being the applicant, own	ner or legally authorized representative, states that all
	s true and correct to the best of his/her knowledge and
hereby does submit the information for re-	view by the Town and in accordance with applicable
ordinances, statutes and regulations of the	· · · · · · · · · · · · · · · · · · ·
C . B	
Signature of Applicant/Owner/Represer	12/22/2023
Signature of Applicant/Owner/Represer	ntative Date

#### APPENDIX D

### MAJOR TRADITIONAL OR CLUSTERED SUBDIVISION SUBMISSION REQUIREMENTS AND CHECKLIST

The subdivision plan for a major traditional or clustered subdivision shall consist of an electronic submission and two (2) paper copies of all required application materials. Major subdivision review is a two-step process: 1) preliminary plan review and approval; 2) final plan review and approval. Occasionally, both preliminary and final approval may be granted by the Planning Board at the same meeting if all required information for both preliminary and final approval have been submitted, reviewed and approved by staff.

#### **PRELIMINARY PLAN**

- **A.** Preliminary plan location map. The preliminary plan shall be accompanied by a location map drawn at a scale of not over 1,000 feet to the inch to show the relation of the proposed subdivision to the adjacent properties and to the general surrounding area. The preliminary plan shall show all the area within 1,000 feet of any property line of the proposed subdivision. Within such area the location map shall show:
  - 1. All existing subdivisions and approximate tract lines of adjacent parcels together with the names of the record owners of all adjacent parcels of land, those directly abutting or directly across any street adjoining the proposed subdivision.
  - 2 Locations, widths and names of existing, filed or proposed streets, easements, and building lines pertaining to the proposed subdivision and to the adjacent properties.
  - 3. The boundaries and designations of zoning districts, parks and other public spaces.
  - **4.** An outline of the proposed subdivision together with its street system and an indication of the future probable street system of the remaining portion of the tract, if the preliminary plan submitted covers only part of the subdivider's entire holding.
- **B.** Preliminary plan maps and information. The preliminary plan shall be submitted in 2 copies of one or more maps or drawings which may be printed or reproduced on paper with all dimensions shown in feet or decimals of a foot, drawn to a scale of one inch equals not more than 100 feet or, for plans describing construction of required improvements, a scale of one inch equals 40 feet; drawings are not to exceed 24 inches by 36 inches. All materials must also be provided in an electronic format. All plans shall be accompanied by the following information:
  - 1. Proposed subdivision name or identifying title and the name of the municipality.
  - 2 Name and address of record owner, subdivider and designer of preliminary plan.
  - 3. Date of plan submission, true North point and graphic scale.
  - **4.** Number of acres within the proposed subdivision, location of property lines, existing easements, buildings, watercourses and other essential existing physical features.
  - 5. The names of all subdivisions immediately adjacent and the names of owners of record of adjacent acreage.

- **6.** The space standard and setback provisions of the Chapter 315, Zoning, applicable to the area to be subdivided and any zoning district boundaries affecting the subdivision.
- 7. The location and size of any existing or proposed sewers and water mains, culverts, hydrants, and drains on the property to be subdivided. This shall show the connections with existing sewer or water systems. Where public water and/or sewerage is not to be provided, alternative means of water supply and sewage treatment and disposal shall be shown, both horizontally and vertically. If on-site groundwater wells are proposed, the effect of withdrawal of groundwater may be required by the Board as set forth in this chapter.
- **8** If individual or collective private sewage disposal system(s) is (are) proposed, the location and results of tests to ascertain subsurface soils and groundwater conditions shall be signed and numbered by a licensed site evaluator. If a cluster system or collective private sewage disposal system(s) is (are) proposed, a hydrogeologic investigation shall be submitted meeting the sewage disposal standards as set forth in this chapter. A hydrogeologic investigation may be required by the Board for individual systems as set forth in this chapter.
- **9.** Location, names and present and proposed widths of existing and proposed streets, highways, easements, building lines, alleys, parks and other public open spaces both within and abutting the subdivision. Grades and street profiles of all streets, sidewalks or other public ways proposed by the subdivider shall be shown.
- 10. Contour lines at intervals of two feet or at such intervals as the Planning Board may require, based on United States Geological Survey datum and referred to mean sea level.
- 11. A high-intensity soil survey shall be conducted by a certified soil scientist to identify soils within the proposed development in accordance with United States Department of Agriculture Natural Resources Conservation Service National Cooperative Soil Classification. The soil boundaries and names shall be superimposed on a plot plan of the proposed development.
- 12 Deed reference and map of survey of tract boundary made and certified by a registered land surveyor, tied into established reference points. Deed restrictions, if any, shall be described.
- 13. A surface drainage plan or stormwater management plan, with profiles and cross sections drawn by a professional engineer registered in the State of Maine, showing preliminary design of all facilities and conveyances necessary to meet the stormwater management standards as set forth in this chapter.
- 14. The proposed lot lines with dimensions and suggested locations of buildings.
- 15. The location of temporary markers adequate to enable the Board to locate readily and appraise the basic layout in the field.
- **16.** All parcels of land proposed to be dedicated to public use and the conditions of such dedication.
- 17. The location of all natural features or site elements to be preserved.
- **18.** A grading and landscaping plan, including natural features to be preserved.

19. Plans shall bear the seals or numbers of the registered professionals responsible for preparing appropriate sections of the plan. Surveys shall be stamped by registered professional engineers, soil surveys shall bear the numbers of a soil scientist, subsurface sewage disposal plans shall bear the number of the professional site evaluator responsible for those evaluations, geological evaluations shall bear a registered geologist's number and architectural work shall bear the architect's seal.

#### **FINAL PLAN**

**C.** The final subdivision plan for a major traditional or clustered subdivision shall consist of an electronic submission and two (2) paper copies of all required application materials. All materials must also be provided in an electronic format.

#### The final plan shall show:

- 1. All of the information presented on the preliminary plan and location map and any amendments thereto required by the Board or otherwise added to the plan. Engineering plans submitted shall be final plans on which construction may be based.
- **2.** The name, registration number and seal of the engineer, land surveyor, geologist, soil scientist, architect or planning consultant who prepared the plan.
- **3.** Street names and lines, pedestrian ways, lanes, easements, rights-of-way and areas to be reserved for or dedicated to public use.
- **4.** The length of all straight lines, the deflection angles, radii, length of curves and central angles of all curves, tangent distance and tangent bearings for each street.
- 5. An actual field survey of the boundary lines of the tract, giving complete descriptive data by bearings and distances, made and certified by a licensed land surveyor. The corners of the tract shall be located on the ground and marked by monuments as herein required and shall be referenced as shown on the plan.
- **6.** Sufficient data acceptable to the municipal officials to determine readily the location, bearing and length of every lot line and boundary line and to reproduce such lines upon the ground. Where practical these should be tied to reference points previously established.
- 7. The survey of the outside boundaries of the tract and the computation of the lot lines shall be performed to an accuracy of one foot in 5,000 feet. If requested by the Planning Board, the surveyor shall furnish copies of computation sheets for outside boundaries showing.
  - a. Sketch of traverse lines.
  - **b.** Closures;
  - c. Adjustments;
  - d. Coordinates; and
  - e. Computation of outside boundaries.

- **8.** By proper designation, all public open space for which offers of cession are made by the subdivider and those spaces to which the title is reserved by him.
- **9.** Lots and blocks within the subdivision numbered in accordance with local practice.
- **10.** Proposed homeowners' covenants and restrictions.
- 11. Required MDEP stormwater maintenance documents.
- **D.** There shall be submitted to the Board with final plan:
  - 1. Copies of declarations, agreements or other documents showing the manner in which open space or easements are to be held and maintained.
  - 2. Where conveyance of public open space or easements to the Town is contemplated, a written offer to make such conveyance to the Town and written evidence that the municipal officers are willing to accept such conveyances and are satisfied with the terms and conditions of the proposed conveyance and with the legal sufficiency of the proposed transfer documents. Such written evidence shall not constitute an acceptance by the municipality of any such public open space.

### COMPLETION CHECKLIST FOR MAJOR TRADITIONAL OR CLUSTERED SUBDIVISION SUBMISSION REQUIREMENTS

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

		Location of information in packet, e.g. plan #, page #	Waiver Request?
General Submissions:			
15 copies of plans and materials. All sheet sized to be 24" x 36"	<b>V</b>		
1"=100' scale for general plan	<b>V</b>		
1"=40' scale for construction of required improvements	<b>*</b>		
Traffic Info?	N/A		
Capacity to Serve letters?	N/A		
Financial and Technical Capacity (Sec.14)	<b>V</b>		
Sewer user permits required? Status?	N/A		
Deed restrictions, if any, describe on separate sheet	N/A		
Cover Sheet:			
Proposed subdivision name	<b>✓</b>		

	Check if provided	Location of information in packet, e.g. plan #, page #	Waiver Request
Name & address of record owner, subdivider, and designer of preliminary plan	<b>V</b>		
Location Map:		Plan Sheet C-01	
Scale 1"=1000"	<b>V</b>		
Shows area 1000' from property lines	-		
All existing subdivisions	•		
Approximate tract lines of adjacent parcels	<b>*</b>		
Approximate tract lines of parcels directly across street	<b>V</b>		
Location of existing & proposed streets, easements, lot lines & bldg. lines of proposed subdivision & adjacent properties.	<b>*</b>		
Existing Conditions Plan:			
Existing buildings	<b>V</b>		
Watercourses	<b>V</b>		
Legend	<b>V</b>		
Wetlands	N/A		
Existing physical features (trees 10" diameter or more. Stone walls	N/A		
Trail System?	N/A		
Subdivision Plan:			
Date of plan submission, true north & graphic scale	<b>V</b>		
Net residential acreage calculations	N/A		
Legend	<b>V</b>		
Trail (connecting?)  Widths of existing/proposed streets, easements & bldg. lines	N/A		
Names of existing/ proposed streets, easements & bldg. lines	<b>*</b>		
Boundaries & designations of zoning districts, parks, public spaces	N/A		
Outline of proposed subdivision w/ street system	<b>V</b>		
Future probable street system of remaining portion of tract.	N/A		

		Location of information in packet, e.g. plan #, page #	Waiver Request
Opportunities for Connecting Road(s) (13.2D)	<b>✓</b>		
Space and Setback of district	<b>V</b>		
Classification of road	N/A		
Width of road(s)	<b>V</b>		
Drainage type (open, closed, mix)	<b>V</b>		
Type of byway provided (8.4D)	N/A		
Names of adjacent subdivisions	<b>V</b>		
Names of owners of record of adjacent acreage	<b>V</b>		
Any zoning district boundaries affecting subdivision	N/A		
Location & size of existing or proposed sewers, water mains, culverts, hydrants and drains on property			
Connections w/existing sewer or water systems	<b>V</b>		
Private water supply shown	N/A		
Private septic shown	N/A		
Hydro-geologic study	N/A		
(option for Board)	N/A		
Test pit locations	N/A		
Well locations	N/A		
Signature & lic. # of site evaluator	N/A		
Existing streets: location, name(s), widths w/in and abutting	<b>V</b>		
Proposed streets: location, name(s), widths w/in and abutting			
The above for any highways, easements, bldg. lines, alleys, parks, other open spaces w/in and abutting			
Grades & street profiles of all streets, sidewalks or other public ways proposed	<b>*</b>		
2'contour lines	<b>V</b>		
High intensity soil survey by cert. soil scientist	N/A		
Soil boundaries & names superimposed on plot plan	N/A		
Deed reference & map of survey of tract boundary by reg. land surveyor tied to established reference points	N/A		

	Check if provided	Waiver Request
Surface drainage or stormwater mgmt plan w/profiles & cross sections by a P.E. showing prelim. design and conveyances	<b>*</b>	
Proposed lot lines w/ dimensions and suggested bldg. locations.	N/A	
Location of temp. markers in field	N/A	
All parcels proposed to be dedicated to public use and conditions of such.	N/A	
Location of all natural features or site elements to be preserved	N/A	
Street lighting details	N/A	
Landscaping and grading plan including natural features to be preserved	N/A	
Survey stamped by P.E.	N/A	
Soil surveys w/# of soil scientist	N/A	
Septic plan w/ # of prof. site evaluator	N/A	
Geological evals w/ reg. geologists number	N/A	
Architect's seal	N/A	
For Rt. One: 75' undisturbed buffer applicable to all buildings, structures, parking areas, drainage facilities and uses.	N/A	
Open Space?	N/A	
Any part of parcel in a shoreland zone?	N/A	
Flood Map Number and rating?	N/A	
Stormwater Report?		
Rivers, ponds, wetlands?	N/A	
Historic, archeological features?	N/A	
Solid waste disposal?	N/A	
Required Notes on Plan:		
Fire Department notes	N/A	
Clearing limits note	N/A	
Re: approval limit of 90 days before recording or null p. 10	N/A	
Actual field survey of boundary lines w/ monumentation shown	N/A	
Assessor's approval of street names and assignment of lot numbers.	N/A	

	Check if provided	Location of information in packet, e.g. plan #, page #	Waiver Request
Designation of all open spaces w/ notes on ownership	N/A		
Copies of declarations, agreements or other documents showing the manner in which open space or easements are to	N/A		
Written offer for any conveyance to the Town of open space or easements along with written evidence that the Council is willing to accept such offer	N/A		
Evidence of Outside Agency Approvals	N/A		

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

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

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

•	<b>Maine Department</b>	of Environmental	<b>Protection:</b>	No amendment neede	d
•	Maine Debai unent	or Environmental	II OUCCHOII.	NO amenument necue	

Other: (Please List):_			

## Heritage Village Development Group, LLC c/o Peter D. Kennedy 12 Carroll Street Falmouth, Maine 04105 (207) 831-4586, pdkennedy4@gmail.com

December 13, 2023

To Whom it May Concern:

This letter is to inform you that Acorn Engineering, Inc. in Portland, Maine is authorized to represent me throughout the permitting process for my project located within Cumberland Foreside Village Subdivision in the Town of Cumberland.

Sincerely,

Peter D. Kennedy

Telle A. Henry

Heritage Village Development Group, LLC

## **Section C**

Right, Title, & Interest

Recorded 10/10/2017 e 2150 p.m. Book 34376, Pge 332

#### SHORT FORM QUITCLAIM DEED WITH COVENANT

CUMBERLAND FORESIDE VILLAGE, LLC, a Maine limited liability company, with a mailing address of 50 Gray Road, Falmouth, ME 04105 (the "Grantor"), FOR CONSIDERATION PAID, grants to HERITAGE VILLAGE DEVELOPMENT GROUP, LLC, a Maine limited liability company, with a mailing address of 2630 Harbourside Drive, Longboat Key, FL 34228 (the "Grantee"), with QUITCLAIM COVENANT, certain real property, together with any improvements thereon, situated in the Town of Cumberland, County of Cumberland and State of Maine, and more particularly described on Exhibit A attached hereto and made a part hereof.

IN WITNESS WHEREOF, Cumberland Foreside Village, LLC has caused this instrument to be executed by David Chase, its Manager thereunto duly authorized, this 10<sup>th</sup> day of October, 2017.

WITNESS:

Name: BHILLIP H GLEACON

CUMBERLAND FORESIDE VILLAGE, LLC

David Chase

Title: Manager

State of Maine County of Cumberland, ss.

October 10, 2017

PERSONALLY APPEARED the above-named David Chase, Manager, of Cumberland Foreside Village, LLC as aforesaid, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said limited liability company.

Befdre me,

Notary Public Attorney at Law

Print Name: PHILIB H. 6 LEAGON

Commission Expires:

#### EXHIBIT A

#### **Property Description**

Certain lots or parcels of land, together with the buildings and improvements thereon, situated on the Northerly side of U.S. Route 1, in the Town of Cumberland, County of Cumberland, State of Maine, and being more particularly described as follows:

All remaining land of the Grantor as shown on Fourth Amended Subdivision Plan, Cumberland Foreside Village for Cumberland Foreside Village, LLC by Owen Haskell, Inc. dated January 26, 2007 and recorded at the Cumberland County Registry of Deeds in Plan Book 217, Page 85, as may have been further amended (the "Plan").

The above described real estate includes, but is not limited to, the lots, common areas, and streets not previously conveyed as shown on the Plan.

Excepting from the above described premises the following parcels of land:

- 1) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Town of Cumberland dated December 29, 2005 and recorded at the Cumberland County Registry of Deeds in Book 23628, Page 18.
- Warranty Deed from Cumberland Foreside Village, LLC to CGM Ventures, LLC dated November 4, 2011 and recorded at the Cumberland County Registry of Deeds in Book 29099, Page 83.
- 3) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to 68 Route 1, LLC dated July 3, 2014 and recorded at the Cumberland County Registry of Deeds in Book 31615, Page 105.
- 4) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Integrative Health Center of Maine, LLC dated November 21, 2014 and recorded at the Cumberland County Registry of Deeds in Book 31931, Page 68.
- 5) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Graiver Homes, LLC dated August 13, 2015 and recorded at the Cumberland County Registry of Deeds in Book 32515, Page 311.
- 6) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Graiver Homes, LLC dated December 10, 2015 and recorded at the Cumberland County Registry of Deeds in Book 32787, Page 153.
- 7) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Graiver Homes, LLC dated February 10, 2016 and recorded at the Cumberland County Registry of Deeds in Book 32912, Page 331.
- 8) Quitclaim Deed with Covenant from Cumberland Foreside Village, Inc. to Graiver Homes, LLC dated April 1, 2016 and recorded at the Cumberland County Registry of Deeds in Book 33022, Page 62.
- 9) Warranty Deed from Cumberland Foreside Village LLC to Florence Nightingale dated December 23, 2015 and recorded at the Cumberland County Registry of Deeds in Book 33036, Page 268.

- 10) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Graiver Homes, Inc. dated June 30, 2016 and recorded at the Cumberland County Registry of Deeds in Book 33238, Page 132.
- 11) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to WG Enterprises, LLC dated July 6, 2016 and recorded at the Cumberland County Registry of Deeds in Book 33255, Page 160.
- 12) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Christopher M. King and Bridget L. Ling dated July 26, 2016 and recorded at the Cumberland County Registry of Deeds in Book 33314, Page 342.
- 13) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Graiver Homes, Inc. dated September 1, 2016 and recorded at the Cumberland County Registry of Deeds in Book 33409, Page 223.
- 14) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to C and A Holdings, LLC dated September 9, 2016 and recorded at the Cumberland County Registry of Deeds in Book 33431, Page 42.
- 15) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Marcast, LLC dated September 26, 2016 and recorded at the Cumberland County Registry of Deeds in Book 33479, Page 80.
- 16) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Graiver Homes, Inc. dated December 16, 2016 and recorded at the Cumberland County Registry of Deeds in Book 33697, Page 57.
- 17) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Graiver Homes, Inc. dated January 16, 2017 and recorded at the Cumberland County Registry of Deeds in Book 33768, Page 69.
- 18) Quitclaim Deed with Covenant from Cumberland Foreside Village, LLC to Graiver Homes, Inc. dated March 6, 2017 and recorded at the Cumberland County Registry of Deeds in Book 33865, Page 139.
- 19) Commercial Lot 9 as shown on Fourth Amended Subdivision Plan, Cumberland Foreside Village for Cumberland Foreside Village, LLC by Owen Haskell, Inc. dated January 26, 2007 and recorded at the Cumberland County Registry of Deeds in Plan Book 217, Page 85.

This conveyance is made subject to all restrictions, covenants, conditions, and easements of record that may affect the premises herein conveyed.

For Grantor's source of title see: Deed from Peter D. Kennedy dated December 27, 2005, and recorded at Cumberland County Registry of Deeds in Book 23459, Page 231, as affected by Corrective Deed from Peter D. Kennedy dated September 26, 2006, and recorded at Cumberland County Registry of Deeds in Book 24404, Page 24; Deed from the Town of Cumberland dated January 23, 2006 and recorded at Cumberland County Registry of Deeds in Book 23628, Page 23; Deed from the Dina Duffey dated March 19, 2012 and recorded at Cumberland County Registry of Deeds in Book 29433, Page 72; Deed from the Town of Cumberland dated July 22, 2015 and recorded at Cumberland County Registry of Deeds in Book 32477, Page 266; and Deed from the Florence Nightingale dated December 23, 2015 and recorded at Cumberland County Registry of Deeds in Book 32827, Page 24.

## **Section D**

200 Foot Radius Abutter List

Name	Location	Map/Lot	Mailing Address
Maine Colloids, LLC	62 US Route One	R01/11/C	PO Box 4894, Portland,
			ME 04112
Randall, Eleanor A	80 US Route One	R01/13	80 US Route One,
			Cumberland Foreside,
			ME 04110
Pomme Rouge	92 US Route One	R01/13/A	392 Lane Rd, Greene,
Properties Corp			ME 04236
Cumberland Foreside	102 US Route One	R01/13/B	488 NE 18th St, #4612,
Partners, LLC			Miami, FL 33132
Huber, Nathaniel G	83 US Route One	U05/2	83 US Route One,
			Cumberland Foreside,
			ME 04110
Anania, Christopher M	30 Conifer Ridge Rd	U04/A2	30 Conifer Ridge Rd,
			Cumberland Foreside,
			ME 04110
Caron, Scott Ryan	22 Conifer Ridge Rd	U04/A1	22 Conifer Ridge Rd,
,			Cumberland Foreside,
			ME 04110
Chamberlain, Todd R	35 Conifer Ridge Rd	U04/A3	35 Conifer Ridge Rd,
			Cumberland Foreside,
			ME 04110
Pronovost, Eric R	27 Conifer Ridge Rd	U04/A4	27 Conifer Ridge Rd,
			Cumberland Foreside,
			ME 04110
Caswell, Benson T	19 Conifer Ridge Rd	U04/A5	19 Conifer Rdge Rd,
			Cumberland Foreside,
			ME 04110
Cimino, Elizabeth K	37 Granite Ridge Rd	U04/8/A20	24480 Reserve Court,
Trustee			Apt. 102, Bonita
			Springs, FL 34134
Schneit, Francine	35 Granite Ridge Rd	U04/8/AU19	35 Granite Ridge Road,
			Cumberland Foreside,
			ME 04110
Penrose, Carolyn	31 Granite Ridge Rd	U04/8/AU18	31 Granite Ridge Rd,
			Cumberland Foreside,
			ME 04110
Foley, Thomas A	29 Granite Ridge Rd	U04/8/AU17	29 Granite Ridge Rd,
			Cumberland Foreside,
			ME 04110
Dilworth Family, 2020	25 Granite Ridge Rd	U04/8/AU16	PO Box 349, Norway,
Irrevocable Trust			ME 04268
Begert, Jane N	23 Granite Ridge Rd	U04/8/AU15	C/O Michele Johns &
			Nicholas Desiderio, PO
			Box 1056, Yarmouth,
			ME 04086

Goldfarb, Matthew S	17 Granite Ridge Rd	U04/8/AU14	17 Granite Ridge Rd, Cumberland Foreside, ME 04110
Schick, Timothy F	15 Granite Ridge Rd	U04/8/AU13	15 Granite Ridge Rd, Cumberland Foreside, ME 04110
Peard, Patricia A	9 Granite Ridge Rd	U04/8/AU12	9 Granite Ridge Rd, Cumberland Foreside, ME 04110
Matulonis, Robert	7 Granite Ridge Rd	U04/8/AU11	7 Granite Ridge Rd, Cumberland Foreside, ME 04110
Chapin, Gary L Trustee	5 Granite Ridge Rd	U04/8/AU10	5 Granite Ridge Rd, Cumberland Foreside, ME 04110
Bonville, Steven E	3 Granite Ridge Rd	U04/8/AU9	3 Granite Ridge Rd, Cumberland Foreside, ME 04110
Oneill, Frank J	1 Granite Ridge Rd	U04/8/AU7	1 Granite Ridge Rd, Cumberland Foreside, ME 04110
Woodbury, Douglas E	2 Granite Ridge Rd	U04/8/AU8	2 Granite Ridge Rd, Cumberland Foreside, ME 04110
Hunter, Marcia	7 True Spring Dr	U04/8/AU6	7 True Spring Dr, Cumberland Foreside, ME 04110
Koshliek, Vicki L	5 True Spring Dr	U04/8/AU5	5 True Spring Dr, Cumberland Foreside, ME 04110
Moroney, Brian	4 Amy Lane	U04/8/AU4	4 Amy Lane, Cumberland Foreside, ME 04110
Strang Burgess, Meredith N	6 Amy Lane	U04/8/AU3	6 Amy Lane, Cumberland Foreside, ME 04110
Gauthier, Janis K	10 Amy Lane	U04/8/AU2	10 Amy Lane, Cumberland Foreside, ME 04110
Parker, David A	11 Amy Lane	U04/8/AU1	11 Amy Lane, Cumberland Foreside, ME 04110
Gauthier Emile, Paul Trustee	29 Falcon Dr	U04/8/BU12	29 Falcon Dr, Cumberland Foreside, ME 04110

Berger, John & Susan L	27 Falcon Dr	U04/8/BU11	27 Falcon Dr, Cumberland Foreside, ME 04110
Volk, Gail J, Trustee	23 Falcon Dr	U04/8/BU10	23 Falcon Dr, Cumberland Foreside, ME 04110
Hintze, Robert W - Trustee	21 Falcon Dr	U04/8/BU9	21 Falcon Dr, Cumberland Foreside, ME 04110
Mcclean, May Ann	22 Falcon Dr	U04/8/B/U14	22 Falcon Dr, Cumberland Foreside, ME 04110
Thomas, Charles C Jr	20 Falcon Dr	U04/8/BU13	PO Box 616, Bar Harbor, ME 04609
Griffin, Thomas	17 Falcon Dr	U04/8/B/U8	17 Falcon Dr, Cumberland, ME 04110
Nastro, Timothy J	15 Falcon Dr	U04/8/BU7	15 Falcon Dr, Cumberland, ME 04110
Knupp, Robert	4 Eagles Way	U04/8/BU6	4 Eagles Way, Cumberland Foreside, ME 04110
Goble, Teri L	6 Eagles Way	U04/8/BU5	12411 Verandah Blvd, Fort Meyers, FL 33905
Walsh, Joan E	10 Eagles Way	U04/8/BU4	10 Eagles Way, Cumberland Foreside, ME 04110
Cassidy, Jennifer L	12 Eagles Way	U04/8/BU3	34 Tortoise Lane, Tequesta, FL 33469
Rosquete, Elizabeth	5 Eagles Way	U04/8/BU1	5 Eagles Way, Cumberland Foreside, ME 04110
Garon, Loaline R	7 Eagles Way	U04/8/BU2	7 Eagles Way, Cumberland Foreside, ME 04110
Friends School of Portland	11 US Route One	R01/10	11 US Route One, Cumberland Foreside, ME 04110
Kumiszcza, Joseph F Jr	3 Middle Rd	R01/52/E	3 Middle Rd, Cumberland Center, ME 04021
Harmon, Jared J	10 Tall Pines Way	R01/52/G	10 Tall Pines Way, Cumberland, ME 04021
Theriault, Richard J	4 Tall Pines Way	R01/52/J	4 Tall Pines Way, Cumberland, ME 04021
Avery, Jill S	15 Middle Rd	R01/52/F	15 Middle Rd, Cumberland, ME 04021

Belwood Investments,	23 Middle Rd	R01/52/D	2330 E Bidwell St, Suite
LLC			170, Folsom, CA, 95630
Ebaugh, Sandra D	27 Middle Rd	R01/52/I	PO Box 66745,
			Falmouth, ME, 04105
Storey, Jaclyn A	25R Shirley Lane	R01/49/I	25R Shirley Lane,
			Cumberland, ME 04021
Storey, Dale E	25 Shirley Lane	R01/49/F	25 Shirley Lane,
			Cumberland Center,
			ME 04021
Storey-King, Shirley	28 Shirley Lane	R01/49/D	28 Shirley Lane,
			Cumberland Center,
			ME 04021
King, Caleb	33 Deep Creek Dr	R01/49/C	33 Deep Creek Dr,
			Cumberland Center,
			ME 04021
Hotham, Janet R	63 Middle Rd	R01/29/B	63 Middle Rd,
			Cumberland Center,
			ME 04021
Farley, Miglena	Middle Rd	R01/45	15 Waterfall Way,
			Cumberland, ME 04021
Storey, Jeffery R	22 Storey Brook Lane	R01/38/C	22 Storey Brook Lane,
			Cumberland, ME 04021
Storey, Michael J	18 Storey Brook Lane	R01/38/E	224 Middle Road,
			Cumberland, ME 04021
Self-Storage Portfolio	430 US Route One,	U62/5/1	2901 Butterfield Rd,
XVI DST	Falmouth		Oak Brook, IL 60523
Mingo, Matthew P	1 Quaker Lane,	U62/1/1	1 Quaker Lane,
	Famouth		Falmouth, ME 04105
Poirier, Norman J	411 Middle Rd,	R01/42	411 Middle Rd,
	Falmouth		Falmouth, ME 04105

## **Section E**

Financial & Technical Capacity



December 14, 2023

Town of Cumberland Carla Nixon, Town Planner 290 Tuttle Road Cumberland, ME 04021

RE: Skyview Drive Road Extension Project

I have worked with Peter Kennedy and his company, Heritage Village Development Group, LLC, for many years. This letter is to confirm that Peter has the creditworthiness and financial capacity to support the estimated \$550,000.00 cost of the required infrastructure needed to extend the road known as Skyview Drive in Cumberland, Maine.

Please note that an application for financing, should Peter request financial assistance, has not been submitted to the Bank for this project. While this letter is not an approval letter nor a commitment to lend, I am in full support of any financing Peter may request for this project. Full underwriting will need to take place in order to provide such a commitment, should financing be requested.

If you have any questions, please contact me lharris@gorhamsavings.bank or call me at (207) 222-1484.

Sincerely,

Lindsay Harris Vice President

Commercial Banking

Lindsay Harris

#### COMPANY PROFILE



Acorn Engineering, Inc. is a Portland-based civil and environmental engineering firm of nine full-time employees and four construction inspectors. Acorn's team has a diverse portfolio providing Maine with quality engineering and environmental services as well as state-wide construction administration on behalf of the Maine Department of Transportation.

A cornerstone of Acorn Engineering is the attention to quality and exceptional level of service on every project, regardless of size. Our engineers and scientists pride themselves on their extensive experience, which is backed by a broad knowledge of civil and environmental engineering practices from smaller residential projects to larger commercial projects that integrate environmental assessment and site redevelopment.

Acorn Engineering has demonstrated the ability to breakdown and synthesize widely disseminated regulations into accepted engineering practices and practical site assessment and development. As a result of Acorn's efforts, the Cumberland County Soil & Water Conservation District recently recognized Acorn as the Contractor of the Year. This was the first award associated with the nationally recognized Long Creek Restoration Project and the first time the Cumberland County Soil & Water Conservation District ever recognized an engineering firm as their Contractor of the Year.

Acorn's expertise covers the areas of: civil/site design, evaluation, development, and permitting; and construction phase services such as construction administration, construction documents, project bidding, and site inspection including erosion and sedimentation control. Acorn's experience also includes the field of environmental engineering and compliance such as: Phase I and Phase II environmental site assessments, soil and groundwater remediation planning and design; Maine's Voluntary Response Action Program (VRAP); and stormwater treatment system design and permitting.

Acorn's engineers have designed, permitted, and overseen construction on numerous single-family and multifamily residential projects including traditional subdivision designs featuring on-site sewage/septic disposal and drilled wells. Furthermore, Acorn has demonstrated extensive experience and capabilities with municipalities, the Maine Department of Transportation (MDOT), Maine Department of Environmental Protection (MDEP), soil & water conservation districts, conservation commissions, municipalities, and the private sector on environmental and site development projects as demonstrated by the following:

- Listed on Maine DEP's Pre-Qualified Vendor List for Environmental Consulting Services
- Listed on Maine DOT's Pre-Qualified Consultants for eight service areas (listed under Section I.D)
- Cumberland County Soil & Water Conservation District Contractor of the Year for work on the Long Creek Restoration Project

#### REPRESENTATIVE PROJECTS



#### • Public Works Redevelopment - Meeting House Hill

Over the past two Acorn years, Engineering has worked in close association with the City of South Portland, neighbors, and private clients on the development of the former Public Works facility. The 6-acre site is nestled in the middle of the Meeting House Hill residential neighborhood and is currently



a mix of storage buildings, fuel fill stations, miscellaneous stockpiles, and pavement. The site will be redeveloped into a mix of multifamily townhomes and single-family dwellings comprising 38 units along with a public park and community gardens.

In addition to the environmental remediation, Voluntary Response Action Program (VRAP), and other environmental considerations given the previous land use, the project is subject to a Maine DEP stormwater management law. The redevelopment design results in a reduction in impervious area of over 50% and reduces land use intensity across the site. Though not required, several stormwater BMP's have been implemented into the site as a best practice, further attenuating and treating stormwater runoff. In addition to the significant redevelopment plan, Acorn has designed an infrastructure plan to separate the storm and sewer mains. This will include installing 400 feet of new storm drain along the existing O'Neil Street right-of-way and 700 feet of new storm drain along the proposed O'Neil Street right-of-way extension. Overall, this effort will reduce the effects of combined sewer overflows (CSO) into Casco Bay which occur due to wet-weather events and the wastewater treatment plant's inability to provide capacity for both storm and sanitary sewer flows.

As part of this project, Acorn held a multitude of meetings with the City including the assistant City manager, the former Mayor, the entire planning division, and the chief engineer of Public Works. Furthermore, Acorn has collaborated with department heads of the Fire, Parks, Public Works, and Water Resource departments to ensure a feasible and ideal project for all parties. As a result, the process was truly a collaborative effort with a number of stakeholders weighing in on the design.

#### REPRESENTATIVE PROJECTS



#### Munjoy Heights

Acorn provided civil/site engineering and permitting for the design of Munjoy Heights – a six townhome, 29unit development on the steep slopes of Munjoy Hill in the City of Portland. Acorn designed and developed construction drawings for the sanitary sewers, storm drains, water mains, driveways and pedestrian circulation, retaining wall locations, building locations, and drainage infrastructure to be built in compliance with City standards.



A key component to the project was coordinating with the City on the future combined sewer separation project and the site's overall stormwater management. Additionally, discussions with neighbors and stakeholders were paramount in the project's success.

The innovative urban infill project compliments the Munjoy Hill neighborhood with a communal design and plentiful native landscaping that replaced invasive species which previously dominated the eroding banks prior to the development. The \$22 million project features a courtyard, terraced landscaping, a Portland Trails-maintained path that connects the redevelopment to the existing trail system, and low impact development (LID) techniques that meet MDEP Chapter 500 regulations. The stormwater management includes an underdrained sand filter and chambers that detain and treat stormwater on site in tandem with strategically placed rain gardens.

The project required extensive coordination and collaboration between the client, City of Portland, Portland Trails, the structural engineer, the architect, and the contractor to successfully complete the project with the first "woonerf" in the state and maintaining the existing public walking path through the property.

#### REPRESENTATIVE PROJECTS



#### • 200 Valley St

Working with Avesta Housing, Acorn Engineering provided civil engineering and permitting for Avesta's 60-unit project in the St. John Valley neighborhood. This urban infill project replaces the existing single-family house and abutting vacant lots into affordable new housing opportunities with two levels of covered parking, amenities, and a rebuilt project frontage with new sidewalks, street trees, and bicycle hitches.



As part of the project, Acorn

developed a transportation and parking analysis to ensure that the provided parking will adequately serve the redevelopment. Furthermore, the design team identified and implemented multiple strategies to encourage residents to efficiently utilize the many modes of transportation available on the Portland peninsula.

#### • Little Dolphin Drive & Jocelyn Place

In collaboration with the South Portland Housing Authority and Risbara Holdings, Acorn provided civil engineering design and permitting of a multi-use subdivision at the end of Little Dolphin Drive in Scarborough. Proposed uses include a two-story office building and a three-story 60-unit senior housing facility with associated parking and landscaped areas.

In addition to a voluntary neighborhood meeting, the project



went through a 3-step master plan phase with the Town of Scarborough in which the project was collaborated on with Planning Staff, the Planning Board, and neighbors.

The project is subject to Maine DEP and US Army Corps permits. To adequately treat stormwater on the site, Acorn has designed multiple stormwater BMPs meeting Maine DEP Chapter 500 regulations resulting in a low impact design.

## **Section F**

Stormwater Management Report



## SKY VIEW DRIVE EXTENSION STORMWATER MANAGEMENT REPORT

**Prepared For:** 

Heritage Village Development Group LLC c/o Peter Kennedy 12 Carroll Street, Falmouth, Maine

Prepared By:

Acorn Engineering, Inc. PO Box 3372 Portland, Maine 04104



December 2023

#### **INTRODUCTION**

Acorn Engineering, Inc. has been retained by Heritage Village Development Group LLC and its owner Peter Kennedy to develop a plan for the extension of Sky View Drive as outlined on the 5<sup>th</sup> Amended Subdivision Plan, dated October 20, 2022.

#### **EXISTING CONDITIONS**

Currently Sky View Drive has been developed to station 5+50 within the existing ROW. In addition, Sky View Drive has been designed to be extended to station 9+00 as part of the subdivision amendment in April 2023. An existing Grassed Underdrained Soil Filter (GUSF) currently accepts stormwater flows from a portion of this road section, detains, and provided water quality before discharging toward the Route 1 ROW.

Per the Erosion Control Plan prepared November 14, 2017 by Pinkham & Greer Civil Engineers for Town Site Plan Submission, the Grassed Underdrain Soil Filter was originally designed to treat half of Sky View Drive when it was 1,800+ feet long.

Per Stormwater Management Report prepared for the development in October 2022, the existing GUSF has an estimated detention/water quality treatment capacity of 2,890 cubic feet and a treatment area of 1,500 square feet.

Back calculating using this information the pond has an approximate treatment capacity of:

- 2,890 CF water quality volume = 34,686 square feet of impervious area (not including landscaped area)
- 1,500 SF treatment area = 30,000 square feet of impervious area (not including landscaped area)

Using the smaller area, we assume the pond can handle 30,000 square feet of impervious area. In the existing condition, runoff from roughly 4,500 square feet of impervious area and 3,500 square feet of landscaped area is directed to this pond.

#### PROPOSED DEVELOPMENT

The project includes a 405-foot extension of Sky View Drive from station 5+50 to station 9+55. The road section will include 24 feet of paved drive aisles, curbing, 5-foot grassed esplanade, 5-foot-wide paved sidewalk, and associated vegetated sideslopes to match existing topography. This design will supersede the 350-foot extension that was designed and approved as part of the Subdivision Amendment in April 2023.

The 405-foot extension of road will consist of 12,400 square feet of impervious cover and 2,000 of landscaped area that will be graded to direct runoff to the existing GUSF in the Sky View Drive ROW.

#### STORMWATER WATER QUANTITY AND QUALITY

With the addition of the proposed impervious area, runoff from a total of 16,900 sf of paved surface and 5,500 of landscaped area will be directed to the GUSF within the Sky View Drive ROW. In general conformance with current sizing criteria in Chapter 7 of Maine DEP's BMP manual, the volume required is 1,592 cubic feet and provided is 2,950 cubic feet. As such, the GUSF has the water quality and quantity capacity to handle runoff associated with the extension of Sky View Drive.

#### **CONCLUSION**

Sky View Drive has been through many designs in the past two decades. The existing GUSF has been constructed to take stormwater flows from what is currently designed along with extensions that had been planned in previous iterations of the road and subdivision layout. The pond has adequate capacity to handle the proposed stormwater flows anticipated from the proposed road extension and no additional stormwater BMP's are required.

## Section G

**Erosion & Sedimentation Control Report** 



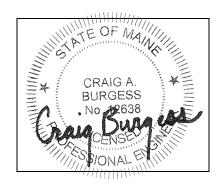
# SKY VIEW DRIVE EXTENSION EROSION & SEDIMENTATION CONTROL REPORT

#### **Prepared For:**

Heritage Village Development Group LLC c/o Peter Kennedy 12 Carroll Street, Falmouth, Maine

Prepared By:

Acorn Engineering, Inc. 500 Washington Avenue Portland, Maine 04103



December 2023

## INTRODUCTION

The following Erosion and Sedimentation Control Report was developed in accordance with the Maine DEP Chapter 500 Stormwater Management Appendix A and B (1), Amended August 12, 2015. This narrative also meets the standards required in the Maine DEP's Erosion & Sediment Control BMP's Manual, revised in 2016.

#### 1.0 EXISTING CONDITIONS

The proposed project site is located within the existing Cumberland Foreside Village subdivision.

The project features a 405-foot extension of Sky View Drive along with associated underground utilities.

## 1.1 <u>Existing Soils</u>

Onsite soil information includes the following:

- Soil Conservation Service Medium Intensity Soil Survey for Cumberland County
- United States Department of Agriculture Web Soil Survey

Given the soils information, listed above, no onsite wastewater is proposed; the applicant does not intend to perform a more intense hydric soil boundary delineation

## 1.2 Existing Erosion Problems

There are no signs of erosion.

#### 1.3 Critical Areas

There are no critical areas that require special attention during construction.

## 1.4 Protected Natural Resource

The client is not aware of the presence of any existing significant natural features located on the site as listed in Section 14-526 (b) 1. of the Land Use Code. The project is not located within a watershed classified as an Urban Impaired Stream by the Maine DEP.

#### 1.5 Previous Construction Activity (5 years)

Acorn Engineering, Inc. is not aware of any construction related activities within the project limits within the past 5 years.

## 1.6 <u>Timber Harvesting</u>

Acorn Engineering, Inc. is not aware of any timber harvesting within the past five years.

#### 2.0 EROSION CONTROL MEASURES AND SITE STABILIZATION

As part of the site development, the following temporary and permanent erosion and sedimentation control devices shall be implemented. Devices shall be installed as described in this report or within the plan set. See the Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices for further reference.

## 2.1 Temporary Erosion Control Measures

The following temporary erosion and sedimentation control measures are planned for the project's construction period:

- 2.1.1 Crushed stone stabilized construction entrances shall be placed at all access points to the project site where there are disturbed areas. The following specifications shall be followed at a minimum:
  - Stone size shall be 2-3 inches, or reclaimed or recycled concrete equivalent.
  - The thickness of the entrance stone layer shall be no less than 6 inches.
  - The entrance shall not be less than 20 feet wide, however not less than the full width of points where ingress or egress occurs. The length shall not be less than 50 feet in length.
  - Geotextile fabric (woven or non-woven) shall be placed over the entire entrance area.
  - The entrance/exit shall be maintained to the extent that it will prevent the tracking of sediment onto public road ways.
- 2.1.2 Siltation fence or erosion control berm shall be installed down gradient of any disturbed areas to trap runoff borne sediments until permanent stabilization is achieved. The silt fence or erosion control berm shall be installed per the details provided in the plan set and inspected before and immediately after each rainfall and at least daily during prolonged rainfall. Repairs shall be made if there are any signs of erosion or sedimentation below the fence line or berm. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind the fence or berm, the barrier shall be replaced with a stone check dam.
- 2.1.3 Hay mulch including hydro seeding is intended to provide cover for denuded or seeded areas until revegetation is established. Mulch placed between April 15<sup>th</sup> and November 1<sup>st</sup> on slopes of less than 15 percent shall be covered by fabric netting and anchored with staples in accordance with the manufacturer's recommendation. Mulch placed between November 1<sup>st</sup> and April 15<sup>th</sup> on slopes equal to or steeper than 8 percent and equal to or flatter than 2:1 shall use mats or fabric netting and anchored with staples in accordance with the manufacturer's recommendation.
- 2.1.4 At any time of the year, all slopes greater than 3:1 shall be stabilized with Double Net Erosion Control Blanket Bionet SC150BN by North American

- Green or Approved Equal, or Erosion Control Mix Slope Protection as detailed within the plans.
- 2.1.5 Sky View Drive shall be swept to control mud and dust from the construction site as necessary. Add additional stone to the stabilized construction entrance to minimize the tracking of material off the site and onto the surrounding roadways.
- 2.1.6 During demolition, clearing and grubbing operations, stone check dams shall be installed at any areas of concentrated flow. The maximum height of the check dam shall not exceed 2 feet. The center of the check dam shall be 6 inches below the outer edges of the dam. The contractor shall mulch the side slopes and install stone check dams for all newly excavated ditch lines within 24 hours of their creation.
- 2.1.7 Silt fence stake spacing shall not exceed 6 feet unless the fence is supported with 14-gauge wire in which case the maximum spacing shall not exceed 10 feet. The silt fence shall be "toed" into the ground.
- 2.1.8 Storm drain inlet protection shall be provided to storm drains using any of the following: hay bale drop inlet structures, silt fence drop inlet sediment filter, gravel and wire mesh drop inlet sediment filter, or curb inlet sediment filter. Barriers shall be inspected after every rainfall event and repaired as necessary. Sediments shall be removed when accumulation has reached ½ the design height.
- 2.1.9 Dust control shall be accomplished using any of the following: water, calcium chloride, stone, or an approved MDEP product. Dust control shall be applied as needed to accomplish dust control.
- 2.1.10 Temporary loam, seed, and mulching shall be used in areas where no other erosion control measure is used. Application rates for seeding are provided at the end of this report.
- 2.1.11 Stockpiles shall be stabilized within 7 days of formation unless a scheduled rain event occurs prior to the 7-day window, in which case the stockpile shall be stabilized prior to the rain event. Methods of stabilization shall be mulch, erosion control mix, or erosion control blankets/mats. Silt fence or a wood waste compost filter berm shall be placed downhill of any soil stockpile location.
- 2.1.12 For disturbance between November 1 and April 15, please refer to winter stabilization plan in this report and the Maine Erosion and Sediment Control BMP manual for further information.
- 2.1.13 It is of the utmost importance that stormwater runoff and potential sediment from the construction site be diverted around the proposed underdrains until the trench is backfilled.

## 2.2 Permanent Erosion Control Measures

The following permanent erosion control measures are intended for post disturbance areas of the project.

- 2.2.1 All disturbed areas during construction, not subject to other proposed conditions, shall receive a minimum 4" of loam, limed, and mulched. Erosion control blankets or mats shall be placed over the mulch in areas noted in paragraph 4.1 of this report.
- 2.2.2 All stormwater devices shall be installed, and tributary areas stabilized prior receiving stormwater.
- 2.2.3 Refer to the Maine Erosion and Sediment Control BMP manual for additional information.

## 3.0 DETAILS AND SPECIFICATIONS

3.1 Erosion & Sedimentation Control Details and Specifications are included in the plan set.

#### 4.0 STABILIZATION PLAN FOR WINTER CONSTRUCTION

Winter Construction consists of earthwork disturbance between the dates of November 1 and April 15. If a construction site is not stabilized with pavement, a road gravel base, 75% mature vegetation cover or riprap by November 15, then the site shall be protected with overwinter stabilization. Any area not stabilized with pavement, vegetation, mulching, erosion control mix, erosion control mats, riprap, or gravel base on a road shall be considered open.

The contractor shall limit the work area to areas that work will occur in during the subsequent 15 days and so that it can be mulched one day prior to a snow event. The contractor shall stabilize work areas prior to opening additional work areas to minimize areas without erosion control measures.

The following measures shall be implemented during winter construction periods:

## 4.1 Sediment Barriers

During frozen conditions, sediment barriers may consist of erosion control mix berms or any other recognized sediment barriers as frozen soil prevents the proper installation of hay bales or silt fences.

## 4.2 Mulching

All areas shall be considered to be denuded until seeded and mulched. Hay and straw mulch shall be applied at a rate of 150 lb. per 1,000 square feet or 3 tons/acre (twice the normal accepted rate of 75-lbs./1,000 s.f. or 1.5 tons/acre) and shall be properly

anchored. Erosion control mix must be applied with a minimum 4-inch thickness. Mulch shall not be spread on top of snow. The snow shall be removed down to a one-inch depth or less prior to application. After each day of final grading, the area shall be properly stabilized with anchored hay or straw or erosion control matting. An area shall be considered to have been stabilized when exposed surfaces have been either mulched or adequately anchored so that ground surface is not visible through the mulch. Between the dates of November 1 and April 15, all mulch shall be anchored by either mulch netting, tracking or wood cellulose fiber. The cover will be considered sufficient when the ground surface is not visible through the mulch. After November 1st, mulch and anchoring of all exposed soil shall occur at the end of each final grading workday.

## 4.3 <u>Soil Stockpiling</u>

Stockpiles of soil or subsoil shall be mulched for over winter protection with hay or straw at twice the normal rate or with a four-inch layer of erosion control mix. This shall be done within 24 hours of stocking and re-established prior to any rainfall or snowfall.

## 4.4 Seeding

Between the dates of October 15<sup>th</sup> and April 1<sup>st</sup>, loam or seed shall not be required. During periods of above freezing temperatures finished areas shall be fine graded and either protected with mulch or temporarily seeded and mulched until the final treatment can be applied. If the date is after November 1<sup>st</sup> and if the exposed area has not been loamed, final grading with a uniform surface, then the area may be dormant seeded at a rate of 3 times higher than specified for permanent seed and then mulched.

Dormant seeding may be placed prior to the placement of mulch or erosion control blankets. If dormant seeding is used for the site, all disturbed areas shall receive 4" of loam and seed at an application rate of 5 lbs./1,000 s.f. All areas seeded during the winter shall be inspected in the spring for adequate catch. All areas insufficiently vegetated (less than 75% catch) shall be revegetated by replacing loam, seed and mulch. If dormant seeding is not used for the site, all disturbed areas shall be revegetated in the spring.

#### 4.5 Over winter stabilization of disturbed soils

By September 15<sup>th</sup>, all disturbed soils on areas having a slope less than 15% shall be seeded and mulched. If the disturbed areas are not stabilized by this date, then one of the following actions shall be taken to stabilize the soil for late fall and winter:

- Stabilize the soil with temporary vegetation By October 1st, seed the disturbed soil with winter rye at a seeding rate of 3lbs per 1,000 s.f., lightly mulch the seeded soil with hay or straw at 75 lbs per 1,000 s.f., and anchor the mulch with plastic netting. Monitor growth of the rye over the next 30 days. If the rye fails to grow at least three inches or fails to cover at least 75% of the disturbed soil before November 1st, then mulch the area for over-winter protection.
- Stabilize the soil with sod Stabilize the disturbed soil with properly installed sod by October 1<sup>st</sup>. Proper installation includes pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil.
- Stabilize the soil with mulch By November 15<sup>th</sup>, mulch the disturbed soil by spreading hay or straw at a rate of at least 150 lbs per 1,000 s.f. on the area so that no soil is visible through the mulch. Immediately after applying the mulch, anchor the mulch with plastic netting to prevent wind from moving the mulch off the disturbed soil.

#### 4.6 Over winter stabilization of disturbed slopes

All stone-covered slopes shall be constructed and stabilized by November 15<sup>th</sup>. All slopes to be vegetated shall be seeded and mulched by September 1<sup>st</sup>. A slope is considered a grade greater than 15%. If a slope to be vegetated is not stabilized by September 1<sup>st</sup>, then one of the following action shall be taken to stabilize the slope for late fall and winter:

- Stabilize the soil with temporary vegetation and erosion control mats By October 1<sup>st</sup> the disturbed slope shall be seeded with winter rye at a seeding rate of 3 lbs per 1,000 s.f. and then install erosion control mats or anchored mulch over the seeding. If the rye fails to grow at least three inches or fails to cover at least 75% of the slope by November 1<sup>st</sup>, then the contractor shall cover the slope with a layer of erosion control mix or with stone riprap.
- Stabilize the soil with sod The disturbed slope shall be stabilized with properly installed sod by October 1<sup>st</sup>. Proper installation includes the contractor pinning the sod onto the slope with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil. The contractor shall not use late-season sod installation to stabilize slopes having a grade greater than 3H:1V or having groundwater seeps on the slope face.

- Stabilize the soil with erosion control mix Erosion control mix shall be properly installed by November 15<sup>th</sup>. The contractor shall not use erosion control mix to stabilize slopes having grades greater than 2H:1V or having groundwater seeps on the slope face.
- Stabilize the soil with stone riprap Place a layer of stone riprap on the slope by November 15<sup>th</sup>. A registered professional engineer shall be hired to determine the stone size needed for stability on the slope and to design a filter layer for underneath the riprap.

## 5.0 <u>INSPECTION AND MAINTENANCE</u>

A person with knowledge of erosion and stormwater control, including the standards and conditions in the permit, shall conduct periodic visual inspections of installed erosion control measures. The frequency of inspection shall occur at least once every two weeks, as well as after a "storm event". A "storm event" shall consist 0.5 inches of rain within a 24-hour period. The following Erosion and Sediment Control - Best Management Practices (BMP's) shall inspected in the manner as described.

## 5.1 Sediment Barriers

Hay bale barriers, silt fences and filter berms shall be inspected and repaired for the following if there are any signs of erosion or sedimentation below them. If there are signs of undercutting at the center or the edges of the barrier, or impounding of large volumes of water behind them, sediment barriers shall be replaced with a temporary check dam. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the fabric shall be replaced promptly. Sediment deposits should be removed when deposits reach approximately one-half the height of the barrier. Filter berms should be reshaped as needed. Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required should be dressed to conform to the existing grade, prepared and seeded.

## 5.2 <u>Stabilized Stone Construction Entrances</u>

The exit shall be maintained in a condition that will prevent tracking of sediment onto public rights-of-way. When the control pad becomes ineffective, the stone shall be removed along with the collected soil material and redistributed on site in a stable manner. The entrance should then be reconstructed. The contractor shall sweep or wash pavement at exits, which have experienced mud-tracking on to the pavement or traveled way. When washing is required, it shall be done on an area stabilized with aggregate, which drains into an approved sediment trapping device. All sediment shall be prevented from entering storm drains, ditches, or waterways.

## 6.3 Mulched Areas

All mulches must be inspected periodically, in particular after rainstorms, to check for rill erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be immediately applied. Nets must be inspected after rain events for dislocation or failure. If washouts or breakage occur, re-install the nets as necessary after repairing damage to the slope. Where mulch is used in conjunction with ornamental plantings, inspect periodically throughout the year to determine if mulch is maintaining coverage of the soil surface. Repair as needed.

#### 6.4 Dust Control

When temporary dust control measures are used, repetitive treatment shall be applied as needed to accomplish control.

## 6.5 Stormwater Appurtenances

All underdrains, storm drains, and catch basins need to be operating effectively and free of debris.

## 6.6 <u>Erosion and Sedimentation Control Inspections:</u>

Acorn Engineering has personnel qualified to conduct Erosion and Sedimentation Control Inspections. For further information, contact:

Contact: Craig Burgess, PE Telephone: (207) 775-2655

## Qualifications:

- ➤ Maine Professional Engineering License #12635
- > Maine DEP Certified in Maintenance & Inspection of Stormwater BMP's Cert #1

The Contractor has sole responsibility for complying with the Erosion and Sedimentation Report/Plan, including control of fugitive dust. The Contractor shall be responsible for any monetary penalties resulting from failure to comply with these standards.

## 6.0 IMPLEMENTATION SCHEDULE

The following implementation sequence is intended to maximize the effectiveness of the above described erosion control measures. Contractors should avoid overexposing disturbed areas and limit the amount of stabilization area.

- 1. Install a stabilized construction entrance in all locations where construction traffic will enter and exit the site.
- 2. Install perimeter silt fence or erosion control berm.
- 3. Install all other erosion control devices as necessary throughout the remainder of this schedule.
- 4. Commence installation of drainage infrastructure.
- 5. Commence earthwork operations, associated with the roadway construction.
- 6. Commence installation of utilities.
- 7. Continue earthwork and grading to subgrade as necessary for construction.
- 8. Complete installation of drainage infrastructure, as well as other utility work.
- 9. Complete remaining earthwork operations.
- 10. Install sub-base and base gravels in paved areas.
- 11. Install paving and curbing.
- 12. Loam, lime, fertilize, seed and mulch disturbed areas and complete all landscaping.
- 13. Once the site is stabilized and mulching of landscape areas is complete, remove all temporary erosion control measures.
- 14. Touch up areas without a vigorous catch of grass with loam and seed.
- 15. Complete site signage and striping.
- 16. Execute proper maintenance of all temporary and permanent erosion control measures throughout the project.

The above implementation sequence should be generally followed by the site contractor. However, the contractor may construct several items simultaneously. The contractor shall submit to the owner a schedule of the completion of the work. If the contractor is to commence the construction of more than one item above, they shall limit the amount of exposed areas to those areas in which work is expected to be undertaken during the following 30 days.

The contractor shall re-vegetate disturbed areas as rapidly as possible. All areas shall be permanently stabilized within 7 days of final grading or before a storm event. The contractor shall incorporate planned inlets and drainage systems as early as possible into the construction phase.

## 7.0 <u>CONCLUSION</u>

The above erosion control narrative is intended to minimize the development impact by implementing temporary and permanent erosion control measures. The contractor shall also refer to the Maine Erosion and Sediment Control BMP manual for additional information.

## 8.0 ATTACHMENTS

• Temporary Seeding Plan

#### TEMPORARY SEEDING PLAN

## Site Preparation

The seeded areas shall be feasibly graded out to provide the use of equipment for seedbed preparation, seeding, mulch application, and mulch anchoring. If necessary, the site may require additional temporary erosion control measures outlined in the Erosion Control report.

## Seedbed Preparation

Fertilizer shall be applied to the site at a rate of 13.8 pounds per 1,000 square feet. The composition of the fertilizer shall be 10-10-10 (N-P2O5-K2O) or equivalent.

Limestone shall be applied to the site at a rate of 138 pounds per 1,000 square feet.

## Seeding

The composition and amount of temporary seed applied to a site shall be determined by the following table:

Seed	Pounds / 1,000 S.F.	Recommended Seeding Dates
Winter Rye	2.57	Aug-15 to Oct-1
Oats	1.84	Apr-1 to Jul-1
		Aug-15 to Sep-15
Annual Ryegrass	0.92	Apr-1 to Jul-1
Sudangrass	0.92	May-15 to Aug-15
Perennial	0.92	Aug-15 to Sep-15

## Mulching

Mulch shall be applied at a rate of 70 lbs – 90 lbs per 1,000 square feet. The mulch shall be installed at a minimum depth of 4 inches. The seeded area shall be mulched immediately after seed is applied. Mulching during the winter season shall be double the normal amount.

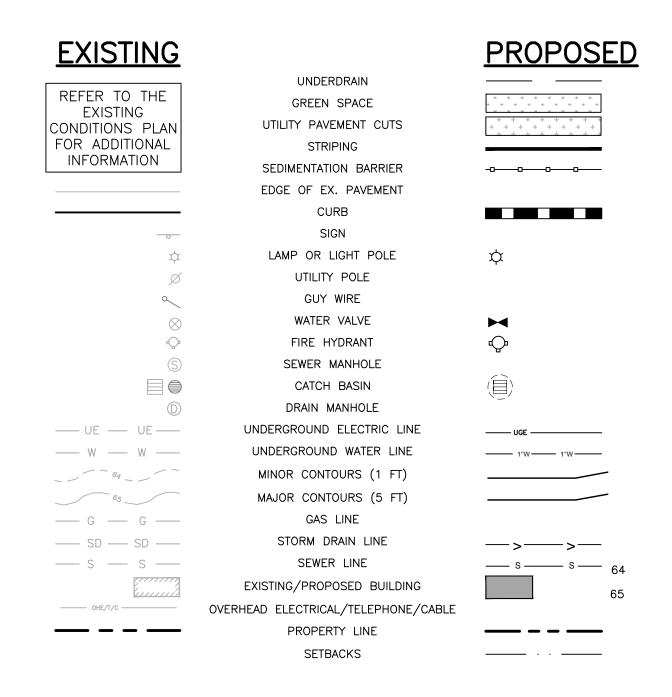
#### Conclusion

Please refer to the Maine Erosion and Sediment Control BMP manual for additional information pertaining to temporary seeding and mulching.

# CUMBERLAND FORESIDE VILLAGE SUBDIVISION AMENDMENT -SKY VIEW DRIVE EXTENSION

HERITAGE VILLAGE DEVELOPMENT GROUP, LLC CUMBERLAND, MAINE

# **LEGEND**



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FIFTH AMENDED SUBDIVISION PLAN

PLAN & PROFILE

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EROSION CONTROL NOTES & DETAILS

# PROJECT TEAM

# CIVIL ENGINEER

ACORN ENGINEERING, INC. PORTLAND, MAINE CONTACT: CRAIG BURGESS, P.E. (207) 775-2655

# **SURVEYOR**

OWEN HASKELL, INC. FALMOUTH, MAINE CONTACT: ELLEN C. BREWER, P.L.S. (207) 774-0424



# **DEVELOPER**

HERITAGE VILLAGE DEVELOPMENT GROUP, LLC. 12 CARROLL STREET FALMOUTH, MAINE CONTACT: PETER KENNEDY

# **UTILITIES**

# SEWER/WATER

PORTLAND WATER DISTRICT 225 DOUGLASS STREET
PO BOX 3553
PORTLAND, MAINE 04104 ATTN: MEANS DIVISION (207) 774-5961

# **ELECTRIC**

CENTRAL MAINE POWER COMPANY (CMP) 162 CANCO ROAD PORTLAND, MAINE 04103 CONTACT: JAMIE COUGH (207) 828-2882

# <u>TELEPHONE</u>

CONSOLIDATED COMMUNICATIONS (FORMERLY FAIRPOINT) 45 FOREST AVENUE PORTLAND, MAINE 04101 CONTACT: PAT MORRISON (207) 745-9363



Portland Water District

CENTRAL MAINE

**POWER** 

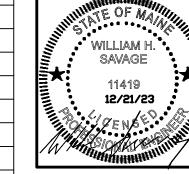
# **CABLE**

SPECTRUM CABLE 118 JOHNSON ROAD
PORTLAND, MAINE, 04102
CONTACT: STEVEN HOLMES
(207) 631-1618

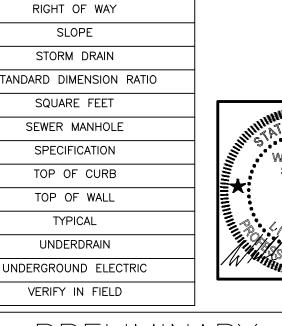


# **ABBREVIATIONS**

APPROX.	APPROXIMATE
BC	BOTTOM OF CURB
ВМР	BEST MANAGEMENT PRACTICE
BOT.	воттом
CAD	COMPUTER AIDED DESIGN
СВ	CATCH BASIN
CF	CUBIC FOOT
CIP	CAST IN PLACE
CL	CENTERLINE
CM	CONSTRUCTION MANAGER
CMP	CENTRAL MAINE POWER
CONC.	CONCRETE
CPP	CORRUGATED PLASTIC PIPE
CY	CUBIC YARD
DI	DUCTILE IRON PIPE
DIA.	DIAMETER
DIM.	DIMENSION
EA.	EACH
ELEC.	ELECTRICAL
ELEV.	ELEVATION
EQUIV.	EQUIVALENT
EST.	ESTIMATE
EX.	EXISTING
FFE	FINISH FLOOR ELEVATION
FT.	FEET
	HIGH DENSITY POLY ETHYLENE
HDPE	INNER DIAMETER
ID	INCH
IN.	INVERT
INV.	LENGTH
L	
MAX.	MAXIMUM
MDEP	MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
MDOT	MAINE DEPARTMENT OF TRANSPORTATION
	MECHANICAL, ELECTRICAL, PLUMBII
M.E.P	DESIGNER
MFG.	MANUFACTURED
MH	MANHOLE
MIN.	MINIMUM
O.C.	ON CENTER
OD	OUTSIDE DIAMETER
OHE/T/C	OVERHEAD  ELECTRIC/TELEPHONE/CABLE
PC	PRECAST
PE	PROFESSIONAL ENGINEER
PL	PROPERTY LINE
PLS	PROFESSIONAL LAND SURVEYOR
PROP.	PROPOSED
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
PWD	PORTLAND WATER DISTRICT
 R	RADIUS
RD	ROOF DRAIN
RET.	RETAINING
REI.	RIGHT OF WAY
	SLOPE
S	STORM DRAIN
SD	STANDARD DIMENSION RATIO
SDR	
SF	SQUARE FEET
SMH	SEWER MANHOLE
SPEC.	SPECIFICATION
TC	TOP OF CURB
TW	TOP OF WALL
TYP.	TYPICAL
UD	UNDERDRAIN



PRELIMINARY NOT ISSUED FOR CONSTRUCTION



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SUBDIVISION AMENDMENT APP

**EXTENSION** 

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SK≺

SHEET

COVER

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**VICINITY MAP** 

SCALE: 1:150

# GENERAL NOTES:

- 1. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANIES AND DIG SAFE AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION FOR UTILITIES. OTHERWISE IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES AND LOCATE ANY POTENTIAL CONFLICTS WITH THE APPROVED PLANS PRIOR TO CONSTRUCTION.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF ALL EROSION CONTROL MEASURES SHOWN ON THE PLAN. IF DEEMED NECESSARY BY THE OWNER OR OWNER'S REPRESENTATIVE (IF APPLICABLE), ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED AT NO ADDITIONAL COST TO THE OWNER.
- 3. THE CONTRACTOR SHALL PREPARE THEIR OWN MATERIAL SCHEDULE BASED ON THE PLANS AND FIELD VERIFICATION BY THE CONTRACTOR. ALL MATERIAL SCHEDULES SHOWN WITHIN THE PLAN SET ARE FOR GENERAL INFORMATION ONLY.
- 4. ALL CONSTRUCTION METHODS, TESTING AND MATERIALS SHALL CONFORM TO THE MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, THE CITY OF PORTLAND AND SERVICING UTILITY REQUIREMENTS, IF ANY. IN CASES WHERE THESE CONFLICT THE MOST STRINGENT SPECIFICATION SHALL APPLY AT NO ADDITIONAL COST TO THE OWNER.
- 5. THE SITE CONTRACTOR SHALL MAINTAIN A SET OF PAPER AND CAD DRAWINGS WHICH SHALL RECORD THE ACTUAL LOCATION, DIMENSIONS, ELEVATIONS, MATERIALS OF THEIR WORK, INDICATING THEREON ALL VARIATIONS FROM THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH ONE COMPLETE SET OF REPRODUCIBLE RECORD DRAWINGS, IN .DWG FORMAT AND PAPER, STAMPED "AS—BUILT". IF AUTOCAD CAPABILITY IS NOT AVAILABLE, EXCLUDE FROM BID IN WRITING.
- 6. THE CONTRACTOR WILL REMAIN SOLELY AND COMPLETELY RESPONSIBLE FOR ENFORCEMENT OF AND COMPLIANCE WITH 1) ALL CONTRACT PLANS AND SPECIFICATIONS, 2) APPLICABLE INTERNATIONAL BUILDING CODE REQUIREMENTS, AND 3) ALL SITE WORKING CONDITIONS AND SAFETY REQUIREMENTS, DAY AND NIGHT, FOR BOTH PERSONS AND PROPERTY, IN EACH CASE BOTH BY THE CONTRACTOR AND ITS SUBCONTRACTORS. THESE INCLUDE ALL OSHA, NIOSH, U.S. EPA AND ANY OTHER APPLICABLE GOVERNMENTAL REGULATIONS.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ACCESS TO THE SITE AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY MARKINGS, SIGNAGE AND INCIDENTALS TO MAINTAIN A SAFE VEHICLE AND PEDESTRIAN ACCESS THOUGH THE LIFE OF THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE PORTLAND PUBLIC SAFETY DIVISION ROUTINELY REGARDING TEMPORARY IMPACTS OR CHANGES TO SITE ACCESS CONDITIONS.
- 8. TRAFFIC CONTROL SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 9. CONTRACTOR TO DETERMINE SOIL CLASSIFICATION INDEPENDENTLY FOR TRENCH, SHORING, AND OTHER SIMILAR CONSTRUCTION MEANS AND METHODS APPLICATIONS.
- 10. NO HOLES, TRENCHES, OR STRUCTURES SHALL BE LEFT OPEN OR UNATTENDED OVERNIGHT IN ANY AREA ACCESSIBLE TO THE PUBLIC OR WITHIN THE PUBLIC RIGHT—OF—WAY.
- 11. THE CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION SURVEY OF INTERIOR SUBGRADE AND ABOVE GRADE ACCESSIBLE WALLS, CEILINGS, FLOORS, ROOF AND VISIBLE EXTERIOR AS VIEWED FROM THE GRADE LEVEL. THIS SHALL BE COMPLETED AT A MINIMUM ADJACENT STRUCTURES. PROVIDE A COPY OF THE SURVEY TO THE OWNER. DOCUMENT WITH PICTURES AT A MINIMUM.
- 12. THE CONTRACTOR SHALL PROVIDE A GPS MODEL OF THE PROPERTY TO PROVIDE TO ACORN ENGINEERING.
- 13. THE CONTRACTOR SHALL SURVEY ROCK SURFACE PRIOR TO EXCAVATION AND DEVELOP VOLUME CALCULATIONS TO SHARE WITH THE ENGINEER, ACORN ENGINEERING INC. (ACORN), IF ANY.
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL TREES AND SHRUBS ON THE PROJECT WHICH ARE
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY TRENCH PAVEMENT THAT HAS EXPERIENCED EXCESSIVE SETTLEMENT, CRACKING, OR OPENING OF JOINTS. REPAIRS MAY INCLUDE OVERLAY. REMOVAL OF WORK MAY BE NECESSARY AFTER THE FINAL ACCEPTANCE OF WORK OR PRIOR TO THE END OF THE WARRANTY PERIOD. THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

## CIVIL SITE NOTES

NOT TO BE REMOVED.

- 1. THE CONTRACTOR SHALL SUBMIT IN WRITING ANY REQUESTS TO ACORN TO MODIFY THE CONTRACT DOCUMENTS
- 2. ALL SHOP, ERECTION, AND CONSTRUCTION DRAWINGS SHALL BE CHECKED AND STAMPED BY THE CONTRACTOR PRIOR TO SUBMISSION FOR ACORN'S REVIEW. ANY UNCHECKED OR NON—STAMPED SUBMITTALS WILL BE RETURNED WITHOUT REVIEW.
- 3. CONTRACTOR SHALL THOROUGHLY INSPECT AND SURVEY EXISTING STRUCTURES AND SITE TO VERIFY CONDITIONS THAT AFFECT THE WORK SHOWN ON THE DRAWINGS. CONTRACTOR TO NOTIFY ACORN OF ANY DISCREPANCIES PRIOR TO PROCEEDING.
- 4. DETAILS SHOWN APPLY TO ALL SIMILAR CONDITIONS UNLESS OTHERWISE INDICATED.
- 5. ALTHOUGH ALL DUE DILIGENCE HAS BEEN APPLIED TO MAKE THE DRAWINGS AS COMPLETE AS POSSIBLE, NOT ALL DETAILS ARE ILLUSTRATED, NOR IS EVERY EXCEPTION CONDITION ADDRESSED WITHIN THE CONTRACT DOCUMENTS.
- 6. ALL PROPRIETARY CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL WORK, INCLUDING DIMENSION AND LAYOUT VERIFICATION, MATERIALS COORDINATION, SHOP DRAWING REVIEW, AND THE WORK OF ANY SUBCONTRACTORS.
- 8. UNLESS OTHERWISE SPECIFICALLY INDICATED, THE DRAWINGS DO NOT DESCRIBE OR DIRECT MEANS OR METHODS OF CONSTRUCTION.
- 9. THE CONTRACTOR, IN THE PROPER SEQUENCE, SHALL PERFORM OR SUPERVISE ALL WORK NECESSARY TO ACHIEVE THE FINAL COMPLETED STRUCTURE, AND TO PROTECT THE STRUCTURE, WORKMEN, AND OTHERS DURING THE CONSTRUCTION. SUCH WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR EXCAVATION, FORMWORK, SCAFFOLDING, SAFETY DEVICES AND PROGRAMS OF ALL KINDS, SUPPORT AND BRACING FOR CRANES AND OTHER ERECTION EQUIPMENT.
- 10. DO NOT BACKFILL AGAINST RETAINING WALLS UNTIL SUPPORTING SLABS AND FLOOR FRAMING ARE IN PLACE AND SECURELY ANCHORED, UNLESS ADEQUATE BRACING IS PROVIDED. PRIOR TO BACKFILLING, CONCRETE SHALL BE CURED PER STRUCTURAL ENGINEER'S SPECIFICATIONS.
- 11. TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL ALL FLOORS, WALLS, ROOFS AND OTHER SUPPORTING ELEMENTS ARE IN PLACE, IF APPLICABLE.
- 12. ALL PAVEMENT JOINTS SHALL BE SAWCUT AND APPLIED WITH TACK COAT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.
- 13. ACORN BEARS NO RESPONSIBILITY FOR THE ABOVE ITEMS, AND SITE OBSERVATION VISITS DO NOT IN ANY WAY INCLUDE INSPECTION OF THEM.
- 14. EXCAVATIONS ACCOMPLISHED AS PART OF THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH SUBPART P OF 29 CRF PART 1926.650—.652 (CONSTRUCTION STANDARD FOR EXCAVATIONS).
- 15. ALL TRENCH PAVEMENT REPAIR SHALL BE COMPLETED WITH THE USE OF A STREET PAVER WITH A SCREED WIDTH CAPABLE OF SPANNING THE FULL WIDTH OF THE TRENCH UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.

# SPECIAL INSPECTION NOTES

- 1. ALL SITE DRAINAGE-RELATED WORK SHALL BE REVIEWED BY ACORN.
- 2. NORMAL REVIEWS BY LOCAL BUILDING DEPARTMENT. NOTIFY 48 HOURS PRIOR TO REQUIRED REVIEW.
- 3. REQUIRED SPECIAL INSPECTIONS PER I.B.C. SECTION 1705.6 BY AN APPROVED SPECIAL INSPECTOR RETAINED BY OWNER. CONTRACTOR TO COORDINATE SPECIAL INSPECTIONS.
- 4. SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.
- 4.1. DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR SHALL BE TO OBSERVE AND/OR TEST THE WORK ASSIGNED AND OUTLINE ABOVE FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS, ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION.

- 4.2. THE SPECIAL INSPECTOR SHALL FURNISH REGULAR REPORTS TO THE BUILDING OFFICIAL, THE ARCHITECT AND ENGINEER OF RECORD, AND OTHER DESIGNATED PERSONS. PROGRESS REPORTS FOR CONTINUOUS INSPECTION SHALL BE FURNISHED WEEKLY. INDIVIDUAL REPORTS OF PERIODIC INSPECTIONS SHALL BE FURNISHED WITHIN ONE WEEK OF INSPECTION DATES. THE REPORTS SHALL NOTE UNCORRECTED DEFICIENCIES, AND NET CHANGES TO THE APPROVED CONSTRUCTION DOCUMENTS AUTHORIZED BY THE ENGINEER OF RECORD.
- 4.3. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT WITHIN TEN DAYS OF THE FINAL INSPECTION STATING WHETHER THE WORK REQUIRING A SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE AND BELIEF, IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE INTERNATIONAL BUILDING CODE. WORK NOT IN COMPLIANCE SHALL BE NOTED IN THE REPORT.
- 4.4. SPECIAL INSPECTOR SHALL BE EMPLOYED BY OWNER AND COORDINATED BY THE CONTRACTOR.

## LAYOUT NOTES:

- 1. MONUMENTS DELINEATING PROPERTY LINES OR RIGHT OF WAYS SHALL NOT BE DISTURBED DURING CONSTRUCTION OPERATIONS.
  IN THE CASE A MONUMENT IS DISTURBED, AT THE CONTRACTOR'S EXPENSE, THE MONUMENT SHALL BE RESET TO ITS ORIGINAL LOCATION AND ELEVATION BY A LICENSED PROFESSIONAL LAND SURVEYOR.
- 2. ALL DIMENSIONS ON THE FOLLOWING SHEETS TAKE PRECEDENT OVER SCALED DIMENSIONS. EACH DRAWING WITH A BAR SCALE MEANS THAT THE DRAWING/DETAIL HAS BEEN SCALED AS ACCURATELY AS POSSIBLE, AND THE BAR SCALE IS FOR GENERAL REFERENCE ONLY. IF NO BAR SCALE IS PRESENT, THEN THERE IS NO SCALE TO THAT DRAWING/DETAIL. AT NO TIME SHOULD DRAWINGS BE SCALED FROM. ANY DISCREPANCIES BETWEEN DRAWINGS, DETAILS, SPECIFICATIONS AND THE FIELD CONDITION SHALL BE IMMEDIATELY REPORTED TO ACORN FOR FURTHER DIRECTIONS BEFORE ANY ADDITIONAL WORK PROCEEDS.
- 3. SIGNAGE, STRIPING, AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- 4. THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A LICENSED PROFESSIONAL LAND SURVEYOR TO PROVIDE A MINIMUM OF TWO TEMPORARY BENCHMARKS WITHIN THE SITE AND TO LOCATE PROPOSED STRUCTURE CORNERS.
- 5. CONTRACTOR TO ENSURE THAT ACCESS, INCLUDING BUT NOT LIMITED TO WALKWAYS, DRIVEWAYS, AND MAILBOXES ADJACENT TO THE PROJECT REMAIN FUNCTIONAL AND AVAILABLE FOR USE AT ALL TIMES.

# PERMITTING NOTES

- 1. THIS PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF THE LATEST APPROVED SUBDIVISION AMENDMENT FROM THE TOWN OF CUMBERLAND.
- 2. THE CONTRACTOR SHALL REVIEW THE ABOVE REFERENCED PERMITS PRIOR TO SUBMITTING A BID FOR THIS PROJECT, AND INCLUDE COSTS AS NECESSARY TO COMPLY WITH THE CONDITIONS OF THESE PERMITS.
- 3. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY REQUIRES A STREET OPENING PERMIT FROM THE TOWN OF CUMBERLAND. ADDITIONALLY, COORDINATE WITH THE DEPARTMENT OF PUBLIC WORKS.

## GRADING AND DRAINAGE NOTES:

- 1. TOPSOIL STRIPPED FROM THE SITE THAT IS SUITABLE FOR REUSE AS LOAM (MEETS THE REQUIREMENTS WITHIN SECTION 615 OF THE MDOT STANDARD SPECIFICATIONS, MOST RECENT VERSION AND IS FREE OF TRACEABLE AMOUNTS OF CONTAMINANTS) SHALL BE STOCKPILED WITHIN THE PROPOSED LIMIT OF WORK AREA. THE CONTRACTOR SHALL NOT ASSUME THAT ANY STRIPPED TOPSOIL WILL BE ACCEPTABLE FOR REUSE WITH THEIR ESTIMATE.
- 2. THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY; NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR DEWATERING. DEWATERING SHALL INCLUDE TREATMENT OF SILT THROUGH THE USE OF A DIRTBAG BY ACF ENVIRONMENTAL OR APPROVED EQUIVALENT. FLOWS FROM DEWATERING ACTIVITIES SHALL NOT BE DISCHARGED INTO SANITARY SEWERS.
- 3. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ANY EASEMENT OR TEMPORARY CONSTRUCTION RIGHTS AS NECESSARY BY PRIVATE ADJACENT LAND OWNERS. THE CONTRACTOR SHALL NOT DISTURB ANY SOIL BEYOND THE PROPERTY LINE WITHOUT NOTIFYING AND OBTAINING SUCH EASEMENT OR TEMPORARY CONSTRUCTION RIGHT FROM THE ADJACENT LAND OWNERS. PRIOR TO THE CONTRACTOR PRICING THE WORK, THEY SHALL PROVIDE ACORN WITH PROOF OF SUCH EASEMENT OR TEMPORARY RIGHTS. SHOULD EASEMENTS OR TEMPORARY RIGHTS NOT BE AVAILABLE, THE CONTRACTOR SHALL INCLUDE COST FOR BRACING AND SHORING AS NECESSARY.
- 4. THE MINIMUM SLOPE SHALL MEET OR EXCEED 1.0% IN ALL CASES WHERE NOT NOTED ON THE GRADING PLAN. SLOPES IDENTIFIED ON THE GRADING PLAN TAKE PRECEDENT. ALL SLOPES SHALL BE AWAY FROM BUILDINGS AND TOP OF PAVEMENT SHALL BE AT OR BELOW EXISTING FINISH FLOOR ELEVATIONS.
- 5. CONTRACTOR TO REVIEW EXISTING SOIL CONDITIONS, TEST PITS, AND BORINGS. THERE WILL BE NO ADDITIONAL PAYMENT FOR UNSUITABLE SOILS.
- 6. ALL STORM DRAIN PIPE SHALL BE SMOOTH BORE INTERIOR PROVIDING A MANNINGS ROUGHNESS COEFFICIENT OF N=0.012 OR LESS.
- 7. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
- 8. NATIVE SOILS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LIMIT THE DISTURBANCE TO SUBGRADE SOILS. SHOULD THE SUBGRADE BECOME YIELDING OR DIFFICULT TO WORK, CONTACT ACORN. THE DISTURBED AREAS SHALL BE EXCAVATED AND BACKFILLED WITH COMPACTED SELECT FILL OR CRUSHED STONE AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 9. ALL SUBGRADE PREPARATION IS SUBJECT TO THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER, IF APPLICABLE.

# EROSION CONTROL NOTES:

- 1. DISTURBED AREAS ARE DEFINED AS THOSE SURFACES WHERE EXISTING VEGETATION OR STRUCTURES HAVE BEEN REMOVED, EXPOSING NATIVE SOIL TO THE ELEMENTS.
- 2. ALL ROUTINE WORK ACTIVITIES SHALL BE CONDUCTED IN SUCH A WAY TO LIMIT THE AMOUNT OF DISTURBED AREA AT ONE TIME TO THE EXTENT PRACTICABLE.
- 3. PRIOR TO THE START OF ANY CLEARING/LAND DISTURBING ACTIVITIES, THE CONTRACTOR SHALL INSTALL APPLICABLE EROSION CONTROL DEVICES SUCH AS PERIMETER SILT FENCE, AND OTHER APPLICABLE MEASURES. IN THE EVENT THE CONTRACTOR IS NOT SURE A EROSION CONTROL MEASURE SHOULD BE IMPLEMENTED, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD TO CONFIRM IMPLEMENTATION OF ANY EROSION CONTROL DEVICES.
- 4. ALL GROUND AREAS GRADED FOR CONSTRUCTION SHALL BE GRADED, LOAMED, SEEDED AND MULCH SHALL BE APPLIED AS SOON AS POSSIBLE WITHIN 7 DAYS FOLLOWING THE COMPLETION OF ANY SOIL DISTURBANCE, AND PRIOR TO ANY STORM EVENT.
- 5. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED TO THE SATISFACTION OF THE TOWN. THE CONTRACTOR SHALL REFERENCE THE APPROVED EROSION AND SEDIMENTATION CONTROL REPORT FOR TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL DEVICES IN ADDITION TO THE PLAN SET. THE CONTRACTOR SHALL ALSO REFER TO THE MAINE D.E.P.'S PERMIT CONDITIONS, FINDINGS OF FACT AND ORDER (IF ANY), AND THE CURRENT MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR ADDITIONAL INFORMATION.
- 6. PRIOR TO PAVING, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT FROM STORM DRAINS, CATCH BASINS, AND APPURTENANCES.
- 7. REFER TO THE EROSION CONTROL DETAILS & NOTES FOR ADDITIONAL INFORMATION.

# UTILITY NOTES:

- 1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED UPON RECORDS OF VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO TEST PIT TO DETERMINE THE EXACT LOCATION AND ELEVATION OF UTILITIES TO COORDINATE WITH THE PROPOSED CONNECTIONS OR CROSSING. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO ACORN FOR FURTHER DIRECTIONS BEFORE ANY ADDITIONAL WORK PROCEEDS.
- 2. CONTRACTOR SHALL, AT NO ADDITIONAL COST TO THE OWNER, CONDUCT EXPLORATORY EXCAVATIONS AT LOCATIONS WHERE PROPOSED EXCAVATION WILL INTERSECT WITH EXISTING UTILITIES, PRIOR TO THE ORDERING OF STRUCTURES.
- 3. ALL NEW SANITARY MANHOLES SHALL BE VACUUM TESTED AND SHOWN TO PASS PRIOR TO BACKFILLING. TESTING SHALL BE COMPLETED IN ACCORDANCE WITH TECHNICAL REPORT #16 (TR-16): GUIDES FOR THE DESIGN OF WASTEWATER TREATMENT WORKS, PREPARED BY THE NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION.
- 4. SEWER MANHOLES SHALL BE 4' ID UNLESS OTHERWISE STATED ON THE PLANS.
- 5. CONTRACTOR TO PROVIDE 5.5' OF COVER FROM TOP OF PIPE TO FINISH GRADE FOR WATER MAINS.
- 6. THRUST BLOCKS SHALL BE USED FOR THRUST RESTRAINT ON WATER MAINS. DETAIL AND LIMITS FOR THRUST BLOCKS ARE SHOWN WITHIN THE PLAN SET.
- 7. WATER INFRASTRUCTURE SHALL BE TESTED IN ACCORDANCE WITH THE PORTLAND WATER DISTRICT DOCUMENT "WATER AND SEWER CONSTRUCTION SPECIFICATIONS AND PROCEDURE", MOST RECENT REVISION.
- 8. ALL REQUIRED FITTINGS FOR THE WATER MAIN ARE NOT SHOWN ON DRAWINGS. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY FITTINGS REQUIRED TO CONSTRUCT THE WATER MAIN IN ACCORDANCE WITH TOWN OF CUMBERLAND, STATE OF MAINE, AND AMERICAN WATER WORKS ASSOCIATION STANDARDS AND REGULATIONS.
- 9. CONTRACTOR SHALL COORDINATE WORK REGARDING ANY WATER MAIN CONNECTION AND WATER MAIN SHUTDOWN WITH THE PORTLAND WATER DISTRICT AT LEAST SEVEN (7) DAYS PRIOR TO CONSTRUCTION.
- 10. ALL WATER PIPE INSTALLATION SHALL CONFORM WITH THE PORTLAND WATER DISTRICT SPECIFICATIONS AND PROCEDURES, MOST RECENT EDITION.
- 11. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- 12. SEWER, GAS, TELEPHONE, ELECTRICITY, CABLE, WATER AND ANY OTHER UTILITY CONNECTIONS SHALL BE REVIEWED BY PLUMBING, ELECTRICAL, AND MECHANICAL DESIGNER FOR CONSISTENCY WITH THEIR PLANS PRIOR TO CONSTRUCTION.
- 13. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL THE NECESSARY PERMITS FOR THE INSTALLATION OF THE UTILITIES AND STORMDRAINS WITHIN THE PUBLIC RIGHT OF WAY. THE CONTRACTOR SHALL SUBMIT A MAINTENANCE OF TRAFFIC PLAN TO THE CITY IN ACCORDANCE WITH TOWN OF CUMBERLAND STANDARDS PRIOR TO ANY WORK.
- 14. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL BOXES, FITTINGS, CONNECTORS, COVER PLATES AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL AT NO EXTRA EXPENSE TO THE OWNER.
- 15. ALL UTILITY PIPES SHALL SLOPE UNIFORMLY BETWEEN ELEVATIONS INDICATED ON THE DRAWINGS. NO CRESTS OR SAGS IN THE PIPING WILL BE PERMITTED. ALL HORIZONTAL AND VERTICAL BENDS IN PRESSURIZED PIPE LINES SHALL BE SUITABLY RESTRAINED WITH THRUST BLOCKS OR RETAINER GLANDS. RETAINER GLANDS ALLOWED FOR DUCTILE IRON PIPE ONLY. PROVIDE ALL BENDS, HORIZONTAL AND VERTICAL, AS REQUIRED TO MEET THE GRADES AND ALIGNMENTS INDICATED ON THE DRAWINGS.
- 16. ALL WASTEWATER PIPING, EXCLUDING BUILDING DRAINS, AND ALL PRESSURIZED PIPING, TO INCLUDE WATER MAINS, INSTALLED BENEATH STRUCTURES SHALL BE ENCASED IN CONCRETE.
- 17. WHERE NEW PIPING IS TO BE CONNECTED TO EXISTING PIPING, THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ADAPTERS, FITTINGS AND ADDITIONAL PIPE AS REQUIRED TO ENSURE A COMPLETE AND PROPERLY FUNCTIONING CONNECTION. CONTRACTOR TO VERIFY LOCATION, ELEVATION, ORIENTATION AND MATERIAL OF CONSTRUCTION. ADAPTERS AND FITTINGS ARE INCIDENTAL TO THE PIPE INSTALLATION.
- 18. WHENEVER POSSIBLE, WATER LINES SHOULD BE INSTALLED OVER WASTEWATER LINES. A MINIMUM SEPARATION OF 18 INCHES BETWEEN THE BOTTOM OF THE WATER LINE AND THE TOP OF THE WASTEWATER LINE SHALL BE MAINTAINED WHERE POSSIBLE. WHERE A WATER LINE CROSSES UNDER THE WASTEWATER LINE, A FULL LENGTH OF WASTEWATER PIPE SHALL BE CENTERED ABOVE THE WATER LINE SO THAT BOTH JOINTS WILL BE AS FAR FROM THE WATER LINE AS POSSIBLE,
- 19. GROUNDWATER SHALL BE CONTROLLED TO A LEVEL OF AT LEAST ONE FOOT BELOW SUBGRADE OF THE PIPE OR STRUCTURE.
  THE CONTRACTOR SHALL MAINTAIN THE LOWERED GROUNDWATER LEVEL UNTIL CONSTRUCTION HAS BEEN COMPLETED TO SUCH
  AN EXTENT THAT THE STRUCTURES OR PIPES WILL NOT BE FLOATED OR OTHERWISE DAMAGED.
- 20. ALL ADJUSTMENTS TO FINISHED GRADE ARE TO BE COMPLETED BY THE CONTRACTOR. THE CONTRACTOR SHALL CONFIRM STRUCTURES THAT REQUIRE ADJUSTMENT WITH THE ENGINEER OR OWNERS REPRESENTATIVE PRIOR TO ADJUSTING FRAMES.

# DEMOLITION NOTES:

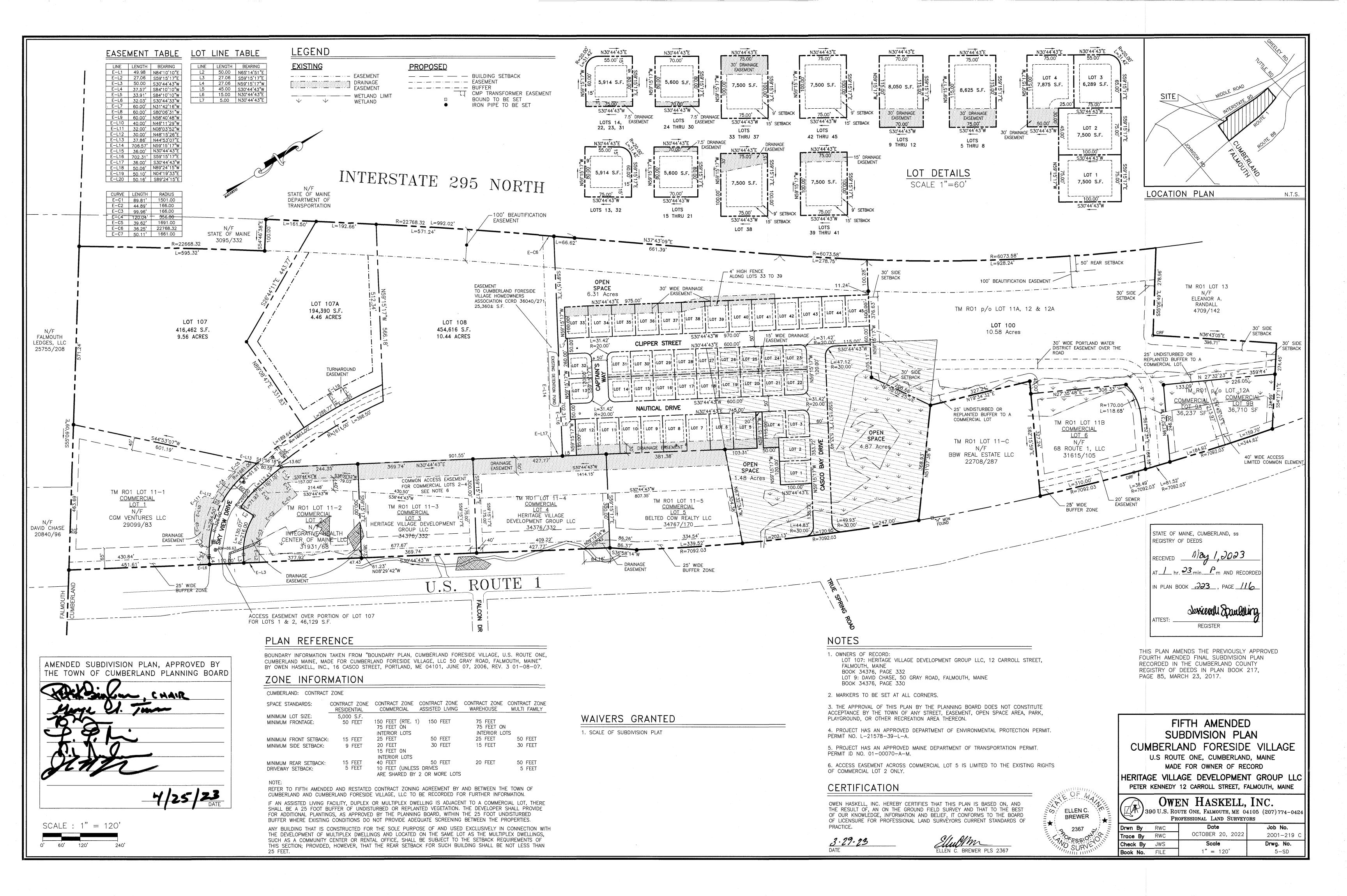
- 1. THE FOLLOWING ITEMS ARE TYPICAL OF MATERIAL WHICH MAY BE ON SITE:
  - ROCK AND CONCRETE FOUNDATIONS
  - CONCRETE SLABS
  - BITUMINOUS ASPHALT PAVEMENTCONCRETE PADS AND BLOCKS
  - FENCE POST AND FENCINGUNDERGROUND UTILITY LINES
  - ABOVE AND OR BELOW FUEL OIL AND PROPANE GAS TANKS
- STORM DRAIN PIPES AND APPURTENANCE STRUCTURESOTHER TRASH & MISCELLANEOUS SOLID WASTES
- 2. THE CONTRACTOR IS ADVISED TO VISIT THE SITE TO CONFIRM DEMOLITION ITEMS SINCE THE LIST IS NOT INCLUSIVE OF THE SITE CONDITIONS WHICH MAY BE ENCOUNTERED
- 3. ALL DISPOSAL OF DEMOLITION DEBRIS OR WASTE SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, & FEDERAL REGULATIONS. CONTRACTORS SHALL PROVIDE OWNER WITH APPROPRIATE "BILLS OF LADING" DEMONSTRATING PROPER DISPOSAL OF ALL MATERIALS.

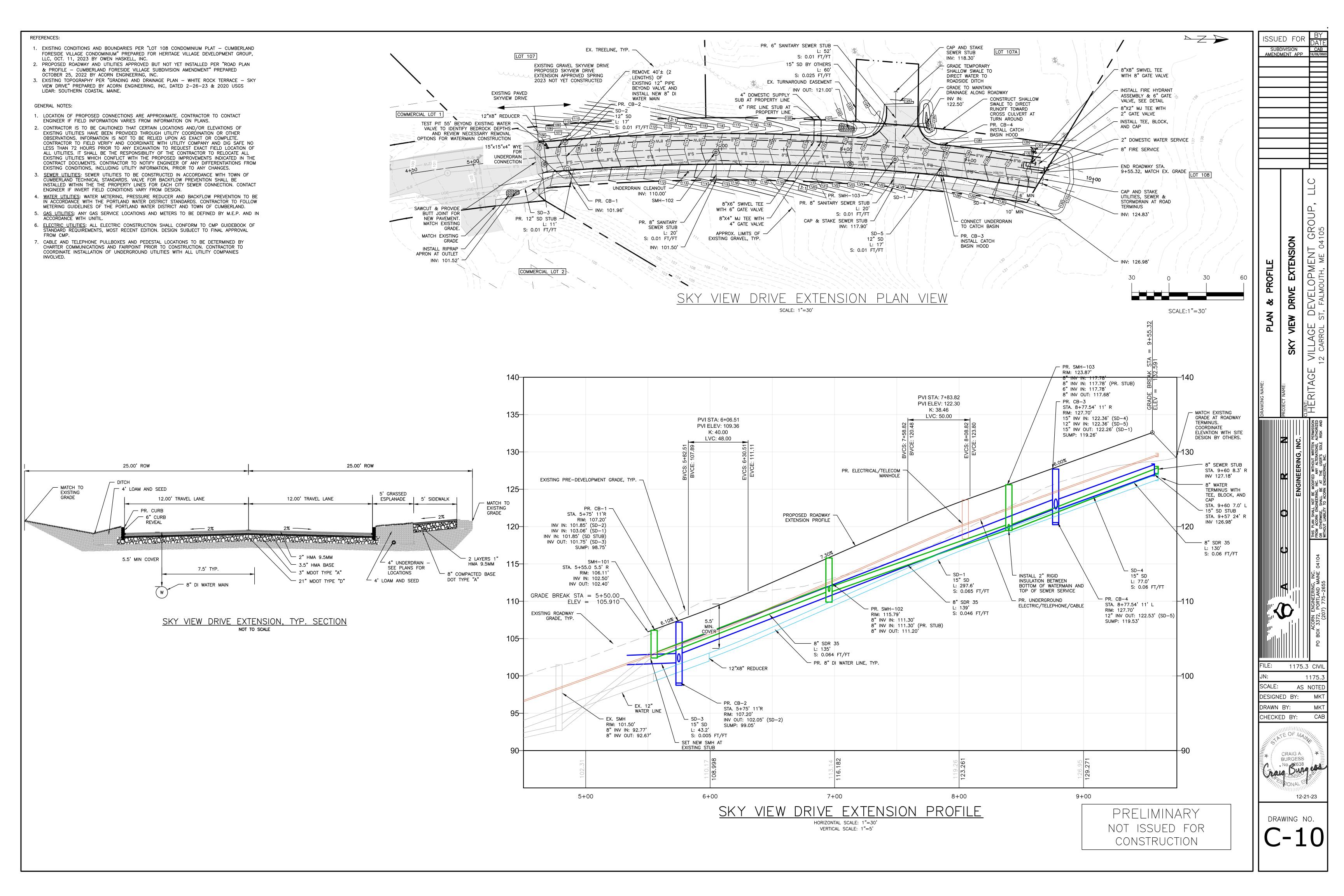
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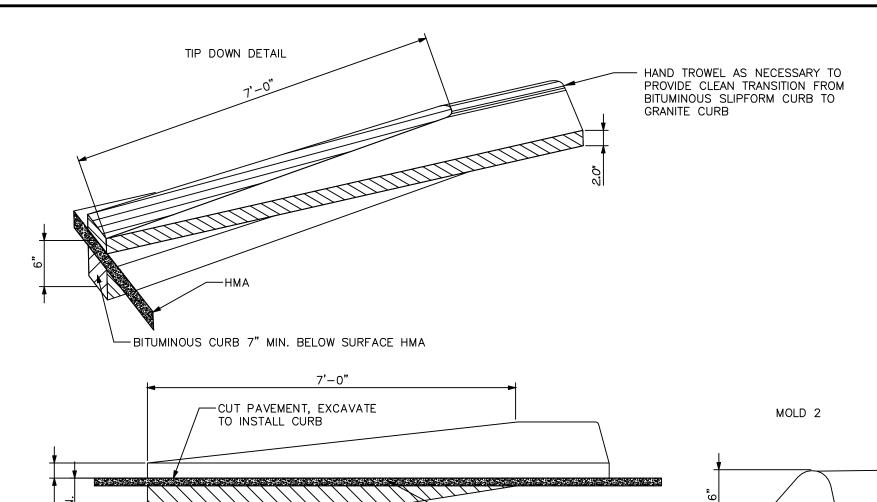
EXTENSION NOTES DRIVE GENERAL SKY 1175.3 DETAIL 1175. AS NOTE DESIGNED BY: DRAWN BY: CHECKED BY: WINTE OF MAIN CRAIG A. BURGESS

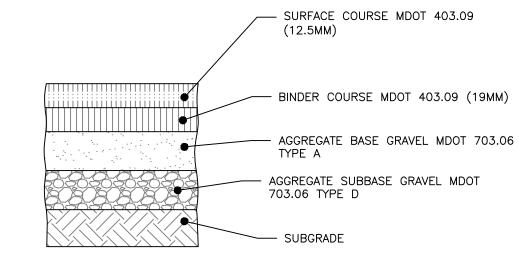
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SUBDIVISION AMENDMENT APP









1. TYPE "A" FRAMES ARE TO HAVE 3 FLANGES. 2. TYPE "B" FRAMES ARE TO HAVE 4 FLANGES.

BACK FLANGE - TYPE "B" ONLY.

FLOW DIRECTION

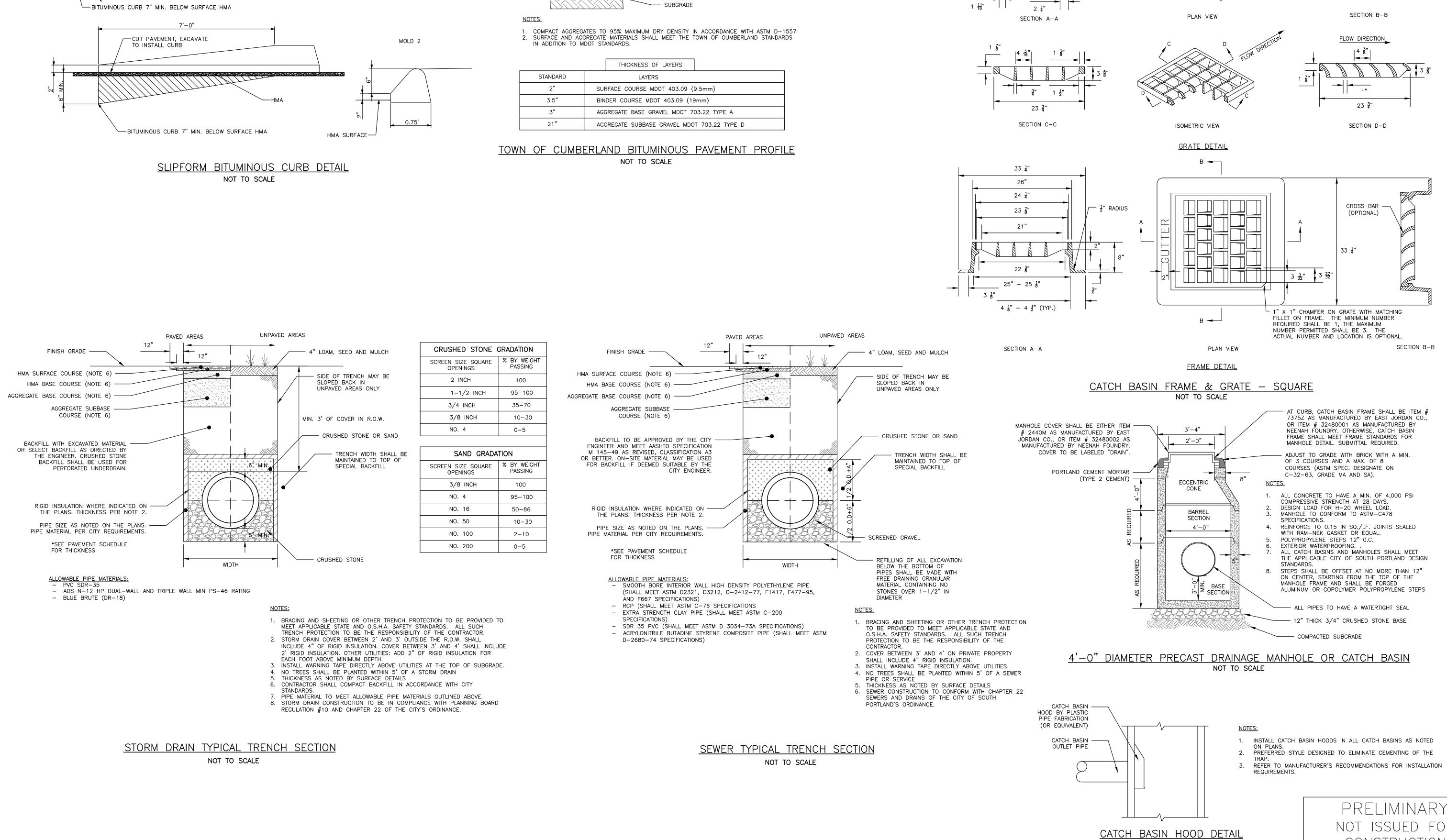
23 **7**"

5. DIMENSIONS ARE NOMINAL.

3. THE WORD "GUTTER" IS TO BE MOLDED INTO THE

4. FRAMES AND GRATES ARE TO BE GRAY CAST IRON

OR DUCTILE IRON CONFORMING TO AASHTO M306.



PRELIMINARY NOT ISSUED FOR CONSTRUCTION

NOT TO SCALE

MATE OF MAIN CRAIG A. BURGESS

DESIGNED BY:

CHECKED BY:

DRAWN BY:

AMENDMENT APP

**EXTENSION** 

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DETAILS

UTILITY

SITE

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2 <del>3</del>"

21 **중"** 

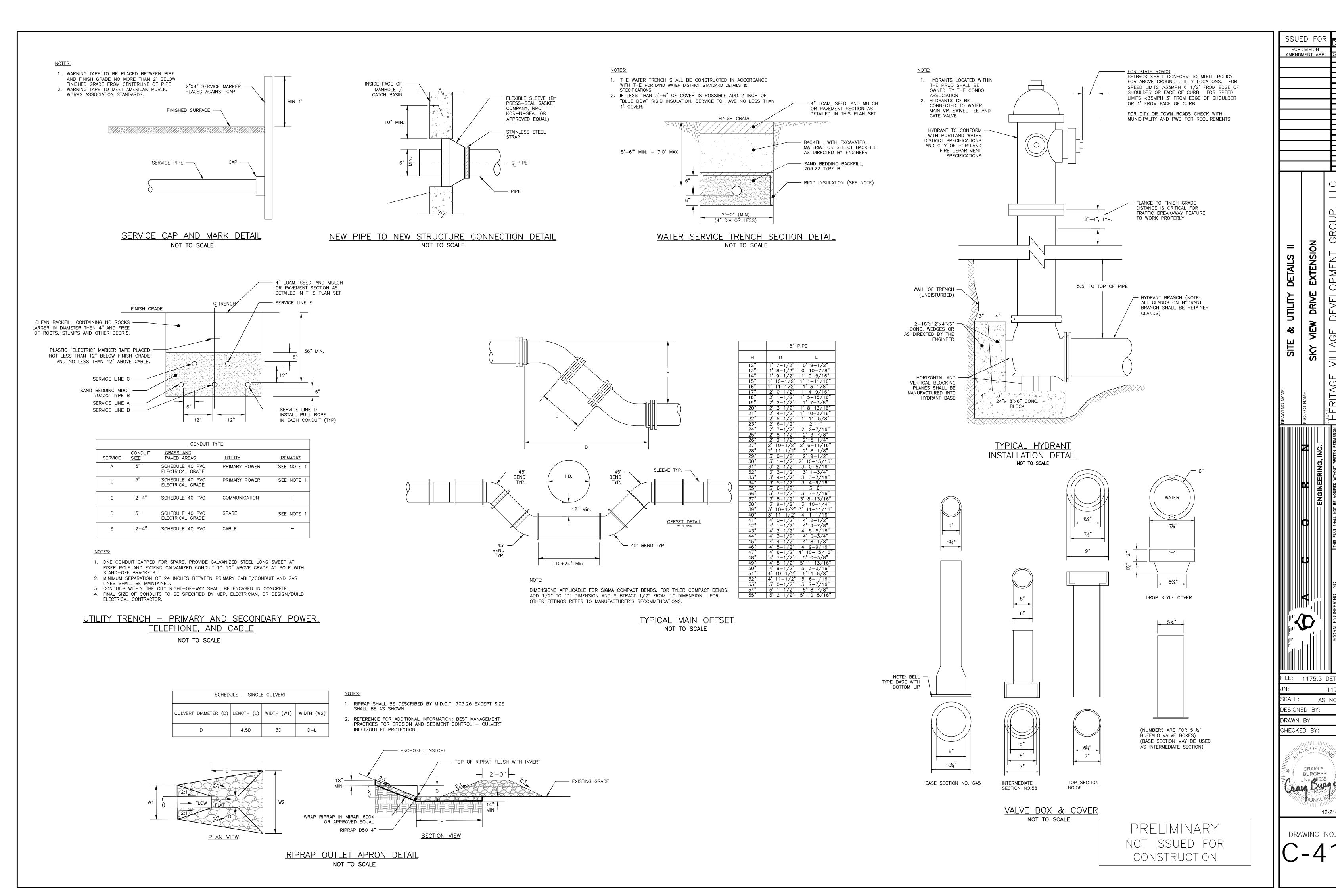
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AS NOTE

## 1.0 <u>EROSION CONTROL MEASURES AND SITE STABILIZATION</u>

AS PART OF THE SITE DEVELOPMENT, THE FOLLOWING TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE IMPLEMENTED. DEVICES SHALL BE INSTALLED AS DESCRIBED IN THIS REPORT OR WITHIN THE PLAN SET. SEE THE MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES FOR FURTHER REFERENCE.

#### 1.1 <u>TEMPORARY EROSION CONTROL MEASURES</u>

THE FOLLOWING TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ARE PLANNED FOR THE PROJECT'S CONSTRUCTION PERIOD:

- 1.1.1 CRUSHED STONE STABILIZED CONSTRUCTION ENTRANCES SHALL BE PLACED AT ALL ACCESS POINTS TO THE PROJECT SITE WHERE THERE ARE DISTURBED AREAS.
  THE FOLLOWING SPECIFICATIONS SHALL BE FOLLOWED AT A MINIMUM:

  STONE SIZE SHALL BE 2-3 INCHES, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- · THE THICKNESS OF THE ENTRANCE STONE LAYER SHALL BE NO LESS THAN 6 INCHES.
  · THE ENTRANCE SHALL NOT BE LESS THAN 20 FEET WIDE, HOWEVER NOT LESS THAN THE FULL WIDTH OF POINTS WHERE INGRESS OR EGRESS OCCURS. THE LENGTH
- SHALL NOT BE LESS THAN 50 FEET IN LENGTH.

  GEOTEXTILE FABRIC (WOVEN OR NON-WOVEN) SHALL BE PLACED OVER THE ENTIRE ENTRANCE AREA.
- THE ENTRANCE/EXIT SHALL BE MAINTAINED TO THE EXTENT THAT IT WILL PREVENT THE TRACKING OF SEDIMENT ONTO PUBLIC ROAD WAYS.

  1.1.2 SILTATION FENCE OR EROSION CONTROL BERM SHALL BE INSTALLED DOWN GRADIENT OF ANY DISTURBED AREAS TO TRAP RUNOFF BORNE SEDIMENTS UNTIL PERMANENT STABILIZATION IS ACHIEVED. THE SILT FENCE OR EROSION CONTROL BERM SHALL BE INSTALLED PER THE DETAILS PROVIDED IN THE PLAN SET AND INSPECTED BEFORE AND IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. REPAIRS SHALL BE MADE IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THE FENCE LINE OR BERM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF
- WATER BEHIND THE FENCE OR BERM, THE BARRIER SHALL BE REPLACED WITH A STONE CHECK DAM.

  1.1.3 HAY MULCH INCLUDING HYDRO SEEDING IS INTENDED TO PROVIDE COVER FOR DENUDED OR SEEDED AREAS UNTIL REVEGETATION IS ESTABLISHED. MULCH PLACED BETWEEN APRIL 15TH AND NOVEMBER 1ST ON SLOPES OF LESS THAN 15 PERCENT SHALL BE COVERED BY FABRIC NETTING AND ANCHORED WITH STAPLES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. MULCH PLACED BETWEEN NOVEMBER 1ST AND APRIL 15TH ON SLOPES EQUAL TO OR STEEPER THAN 8 PERCENT AND EQUAL TO OR FLATTER THAN 2:1 SHALL USE MATS OR FABRIC NETTING AND ANCHORED WITH STAPLES IN ACCORDANCE WITH THE MANUFACTURER'S
- 1.1.4 AT ANY TIME OF THE YEAR, ALL SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED WITH DOUBLE NET EROSION CONTROL BLANKET BIONET SC150BN BY NORTH AMERICAN GREEN OR APPROVED EQUAL, OR EROSION CONTROL MIX SLOPE PROTECTION AS DETAILED WITHIN THE PLANS.
- 1.1.5 SKY VIEW DRIVE AND US ROUTE 1 SHALL BE SWEPT TO CONTROL MUD AND DUST FROM THE CONSTRUCTION SITE AS NECESSARY. ADD ADDITIONAL STONE TO THE STABILIZED CONSTRUCTION ENTRANCE TO MINIMIZE THE TRACKING OF MATERIAL OFF THE SITE AND ONTO THE SURROUNDING ROADWAYS.
- 1.1.6 DURING DEMOLITION, CLEARING AND GRUBBING OPERATIONS, STONE CHECK DAMS SHALL BE INSTALLED AT ANY AREAS OF CONCENTRATED FLOW. THE MAXIMUM HEIGHT OF THE CHECK DAM SHALL NOT EXCEED 2 FEET. THE CENTER OF THE CHECK DAM SHALL BE 6 INCHES BELOW THE OUTER EDGES OF THE DAM. THE CONTRACTOR SHALL
- MULCH THE SIDE SLOPES AND INSTALL STONE CHECK DAMS FOR ALL NEWLY EXCAVATED DITCH LINES WITHIN 24 HOURS OF THEIR CREATION.

  1.1.7 SILT FENCE STAKE SPACING SHALL NOT EXCEED 6 FEET UNLESS THE FENCE IS SUPPORTED WITH 14 GAUGE WIRE IN WHICH CASE THE MAXIMUM SPACING SHALL NOT EXCEED 10 FEET. THE SILT FENCE SHALL BE "TOED" INTO THE GROUND.
- 1.1.8 STORMDRAIN INLET PROTECTION SHALL BE PROVIDED TO STORMDRAINS THROUGH THE USE OF ANY OF THE FOLLOWING: HAY BALE DROP INLET STRUCTURES, SILT FENCE DROP INLET SEDIMENT FILTER, GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER, OR CURB INLET SEDIMENT FILTER. BARRIERS SHALL BE INSPECTED AFTER EVERY
- RAINFALL EVENT AND REPAIRED AS NECESSARY. SEDIMENTS SHALL BE REMOVED WHEN ACCUMULATION HAS REACHED ½ THE DESIGN HEIGHT.

  1.1.9 DUST CONTROL SHALL BE ACCOMPLISHED BY THE USE OF ANY OF THE FOLLOWING: WATER, CALCIUM CHLORIDE, STONE, OR AN APPROVED MDEP PRODUCT. DUST CONTROL SHALL BE APPLIED AS NEEDED TO ACCOMPLISH DUST CONTROL.
- 1.1.10 TEMPORARY LOAM, SEED, AND MULCHING SHALL BE USED IN AREAS WHERE NO OTHER EROSION CONTROL MEASURE IS USED. APPLICATION RATES FOR SEEDING ARE PROVIDED AT THE END OF THIS REPORT.

  1.1.11 STOCKPILES SHALL BE STABILIZED WITHIN 7 DAYS OF FORMATION UNLESS A SCHEDULED RAIN EVENT OCCURS PRIOR TO THE 7 DAY WINDOW, IN WHICH CASE THE
- STOCKPILE SHALL BE STABILIZED PRIOR TO THE RAIN EVENT. METHODS OF STABILIZATION SHALL BE MULCH, EROSION CONTROL MIX, OR EROSION CONTROL BLANKETS/MATS. SILT FENCE OR A WOOD WASTE COMPOST FILTER BERM SHALL BE PLACED DOWNHILL OF ANY SOIL STOCKPILE LOCATION.
- 1.1.12 FOR DISTÚRBANCE BETWEEN NOVEMBER 1 AND APRIL 15, PLEASE REFER TO WINTER STABILIZATION PLAN IN THIS REPORT AND THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR FURTHER INFORMATION.
- 1.1.13 IT IS OF THE UTMOST IMPORTANCE THAT STORMWATER RUNOFF AND POTENTIAL SEDIMENT FROM THE CONSTRUCTION SITE BE DIVERTED AROUND THE PROPOSED UNDERDRAINS UNTIL THE TRENCH IS BACKFILLED.

## 1.2 <u>PERMANENT EROSION CONTROL MEASURES</u>

THE FOLLOWING PERMANENT EROSION CONTROL MEASURES ARE INTENDED FOR POST DISTURBANCE AREAS OF THE PROJECT.

- 1.2.1 ALL DISTURBED AREAS DURING CONSTRUCTION, NOT SUBJECT TO OTHER PROPOSED CONDITIONS, SHALL RECEIVE A MINIMUM 4" OF LOAM AND SHALL BE LIMED, AND
  - EROSION CONTROL BLANKETS OR MATS SHALL BE PLACED OVER THE MULCH IN AREAS NOTED IN PARAGRAPH 4.2 OF THIS REPORT.

    1.2.2 ALL STORMWATER DEVICES SHALL BE INSTALLED AND TRIBUTARY AREAS STABILIZED PRIOR RECEIVING STORMWATER.
  - 1.2.2 ALL STORMWATER DEVICES SHALL BE INSTALLED AND TRIBUTARY AREAS STABILIZED PRIOR RECEIVING STORMWATER 1.2.3 REFER TO THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR ADDITIONAL INFORMATION.
- 2.0 <u>EROSION AND SEDIMENTATION CONTROL PLAN</u>
- 2.1 THE EROSION AND SEDIMENTATION CONTROL PLAN IS INCLUDED WITHIN THE PLAN SET.

## 3.0 <u>DETAILS AND SPECIFICATIONS</u>

3.1 EROSION CONTROL DETAILS AND SPECIFICATIONS ARE INCLUDED IN THE PLAN SET.

## 4.0 STABILIZATION PLAN FOR WINTER CONSTRUCTION

WINTER CONSTRUCTION CONSISTS OF EARTHWORK DISTURBANCE BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15. IF A CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 75% MATURE VEGETATION COVER OR RIPRAP BY NOVEMBER 15, THEN THE SITE SHALL BE PROTECTED WITH OVER-WINTER STABILIZATION. ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MIX, EROSION CONTROL MATS, RIPRAP, OR GRAVEL BASE ON A ROAD SHALL BE CONSIDERED OPEN.

THE CONTRACTOR SHALL LIMIT THE WORK AREA TO AREAS THAT WORK WILL OCCUR IN DURING THE SUBSEQUENT 15 DAYS AND SO THAT IT CAN BE MULCHED ONE DAY PRIOR TO A SNOW EVENT. THE CONTRACTOR SHALL STABILIZE WORK AREAS PRIOR TO OPENING ADDITIONAL WORK AREAS TO MINIMIZE AREAS WITHOUT EROSION CONTROL MEASURES.

## THE FOLLOWING MEASURES SHALL BE IMPLEMENTED DURING WINTER CONSTRUCTION PERIODS:

# 4.1 <u>SEDIMENT BARR</u>

DURING FROZEN CONDITIONS, SEDIMENT BARRIERS MAY CONSIST OF EROSION CONTROL MIX BERMS OR ANY OTHER RECOGNIZED SEDIMENT BARRIERS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES OR SILT FENCES.

## 4.2 <u>MULCHING</u> ALL AREAS SHALL

ALL AREAS SHALL BE CONSIDERED TO BE DENUDED UNTIL SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75—LBS./1,000 S.F. OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. EROSION CONTROL MIX MUST BE APPLIED WITH A MINIMUM 4 INCH THICKNESS. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW SHALL BE REMOVED DOWN TO A ONE—INCH DEPTH OR LESS PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA SHALL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED OR ADEQUATELY ANCHORED SO THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER MULCH NETTING, TRACKING OR WOOD CELLULOSE FIBER. THE COVER WILL BE CONSIDERED SUFFICIENT WHEN THE GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. AFTER NOVEMBER 1ST, MULCHING AND ANCHORING OF ALL EXPOSED SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORKDAY.

# 4.3 <u>SOIL STOCKPILING</u>

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR WITH A FOUR-INCH LAYER OF EROSION CONTROL MIX. THIS SHALL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL.

# 4.4 <u>SEEDIN</u>

BETWEEN THE DATES OF OCTOBER 15TH AND APRIL 1ST, LOAM OR SEED SHALL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS NOT BEEN LOAMED, FINAL GRADING WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED.

DORMANT SEEDING MAY BE PLACED PRIOR TO THE PLACEMENT OF MULCH OR EROSION CONTROL BLANKETS. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED AT AN APPLICATION RATE OF 5 LBS/1,000 S.F. ALL AREAS SEEDED DURING THE WINTER SHALL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS INSUFFICIENTLY VEGETATED (LESS THAN 75% CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING.

# 4.5 OVER WINTER STABILIZATION OF DISTURBED SOILS

BY SEPTEMBER 15TH, ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15% SHALL BE SEEDED AND MULCHED. IF THE DISTURBED AREAS ARE NOT STABILIZED BY THIS DATE, THEN ONE OF THE FOLLOWING ACTIONS SHALL BE TAKEN TO STABILIZE THE SOIL FOR LATE FALL AND WINTER:

· STABILIZE THE SOIL WITH TEMPORARY VEGETATION — BY OCTOBER 1ST, SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3LBS PER 1,000 S.F., LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 LBS PER 1,000 S.F., AND ANCHOR THE MULCH WITH PLASTIC NETTING. MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1ST,

· <u>STABILIZE THE SOIL WITH SOD</u> — STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1ST. PROPER INSTALLATION INCLUDES PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GROWTH INTO THE DISTURBED SOIL.

· <u>STABILIZE THE SOIL WITH MULCH</u> — BY NOVEMBER 15TH, MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 LBS PER 1,000 S.F. ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. IMMEDIATELY AFTER APPLYING THE MULCH, ANCHOR THE MULCH WITH NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

# 4.6 <u>OVER WINTER STABILIZATION OF DISTURBED SLOPES</u>

THEN MULCH THE AREA FOR OVER-WINTER PROTECTION.

ALL STONE—COVERED SLOPES SHALL BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15TH. ALL SLOPES TO BE VEGETATED SHALL BE SEEDED AND MULCHED BY SEPTEMBER 1ST. A SLOPE IS CONSIDERED A GRADE GREATER THAN 15%. IF A SLOPE TO BE VEGETATED IS NOT STABILIZED BY SEPTEMBER 1ST, THEN ONE OF THE FOLLOWING ACTION SHALL BE TAKEN TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER:

STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS — BY OCTOBER 1ST THE DISTURBED SLOPE SHALL BE SEEDED WITH WINTER RYE AT A SEEDING RATE OF 3 LBS PER 1,000 S.F. AND THEN INSTALL EROSION CONTROL MATS OR ANCHORED MULCH OVER THE SEEDING. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE SLOPE BY NOVEMBER 1ST, THEN THE CONTRACTOR SHALL COVER THE SLOPE WITH A LAYER OF EROSION CONTROL MIX OR WITH STONE RIPRAP.

STABILIZE THE SOIL WITH SOD — THE DISTURBED SLOPE SHALL BE STABILIZED WITH PROPERLY INSTALLED SOD BY OCTOBER 1ST. PROPER INSTALLATION INCLUDES THE

· STABILIZE THE SOIL WITH SOD — THE DISTURBED SLOPE SHALL BE STABILIZED WITH PROPERLY INSTALLED SOD BY OCTOBER 1ST. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GROWTH INTO THE DISTURBED SOIL. THE CONTRACTOR SHALL NOT USE LATE—SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 3H:1V OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

· <u>STABILIZE THE SOIL WITH EROSION CONTROL MIX</u> — EROSION CONTROL MIX SHALL BE PROPERLY INSTALLED BY NOVEMBER 15TH. THE CONTRACTOR SHALL NOT USE EROSION CONTROL MIX TO STABILIZE SLOPES HAVING GRADES GREATER THAN 2H:1V OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

· <u>STABILIZE THE SOIL WITH STONE RIPRAP</u> — PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15TH. A REGISTERED PROFESSIONAL ENGINEER SHALL BE HIRED TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY ON THE SLOPE AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

# 5.0 <u>INSPECTION AND MAINTENANCE</u>

5.1 <u>SEDIMENT BARRIERS</u>

A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT PERIODIC VISUAL INSPECTIONS OF INSTALLED EROSION CONTROL MEASURES. THE FREQUENCY OF INSPECTION SHALL OCCUR AT LEAST ONCE EVERY TWO WEEKS, AS WELL AS AFTER A "STORM EVENT". A "STORM EVENT" SHALL CONSIST 0.5 INCHES OF RAIN WITHIN A 24 HOUR PERIOD. THE FOLLOWING EROSION AND SEDIMENT CONTROL — BEST MANAGEMENT PRACTICES (BMP'S) SHALL INSPECTED IN THE MANNER AS DESCRIBED.

HAY BALE BARRIERS, SILT FENCES AND FILTER BERMS SHALL BE INSPECTED AND REPAIRED FOR THE FOLLOWING IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES OF THE BARRIER, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY CHECK DAM. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE—HALF THE HEIGHT OF THE BARRIER. FILTER BERMS SHOULD BE RESHAPED AS NEEDED. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHOULD BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

## 5.2 <u>STABILIZED STONE CONSTRUCTION ENTRANCES</u>

THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. WHEN THE CONTROL PAD BECOMES INEFFECTIVE, THE STONE SHALL BE REMOVED ALONG WITH THE COLLECTED SOIL MATERIAL AND REDISTRIBUTED ON SITE IN A STABLE MANNER. THE ENTRANCE SHOULD THEN BE RECONSTRUCTED. THE CONTRACTOR SHALL SWEEP OR WASH PAVEMENT AT EXITS, WHICH HAVE EXPERIENCED MUD-TRACKING ON TO THE PAVEMENT OR TRAVELED WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE, WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS.

## 5.3 MILLOHED AREAS

ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS, TO CHECK FOR RILL EROSION. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED. NETS MUST BE INSPECTED AFTER RAIN EVENTS FOR DISLOCATION OR FAILURE. IF WASHOUTS OR BREAKAGE OCCUR, RE—INSTALL THE NETS AS NECESSARY AFTER REPAIRING DAMAGE TO THE SLOPE. WHERE MULCH IS USED IN CONJUNCTION WITH ORNAMENTAL PLANTINGS, INSPECT PERIODICALLY THROUGHOUT THE YEAR TO DETERMINE IF MULCH IS MAINTAINING COVERAGE OF THE SOIL SURFACE. REPAIR AS NEEDED.

## 5.4 <u>DUST CONTROL</u>

WHEN TEMPORARY DUST CONTROL MEASURES ARE USED, REPETITIVE TREATMENT SHALL BE APPLIED AS NEEDED TO ACCOMPLISH CONTROL.

# 5.5 <u>STORMWATER APPURTENANCES</u>

ALL UNDERDRAINS, STORM DRAINS, AND CATCH BASINS NEED TO BE OPERATING EFFECTIVELY AND FREE OF DEBRIS.

## 5.6 <u>EROSION AND SEDIMENTATION CONTROL INSPECTIONS:</u>

ACORN ENGINEERING HAS PERSONNEL QUALIFIED TO CONDUCT EROSION AND SEDIMENTATION CONTROL INSPECTIONS. FOR FURTHER INFORMATION CONTACT:

CONTACT: WILL SAVAGE, PE TELEPHONE: (207) 775-2655

## QUALIFICATIONS:

Ø MAINE PROFESSIONAL ENGINEERING LICENSE #11419

Ø MAINE DEP - CERTIFIED IN MAINTENANCE & INSPECTION OF STORMWATER BMP'S CERT #14 Ø CERTIFIED EROSION, SEDIMENT AND STORM WATER INSPECTOR (CESSWI) CERT #0293

Ø CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC) CERT. #4620

THE CONTRACTOR HAS SOLE RESPONSIBILITY FOR COMPLYING WITH THE EROSION AND SEDIMENTATION REPORT/PLAN, INCLUDING CONTROL OF FUGITIVE DUST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MONETARY PENALTIES RESULTING FROM FAILURE TO COMPLY WITH THESE STANDARDS.

6.0 IMPLEMENTATION SCHEDULE

THE FOLLOWING IMPLEMENTATION SEQUENCE IS INTENDED TO MAXIMIZE THE EFFECTIVENESS OF THE ABOVE DESCRIBED EROSION CONTROL MEASURES. CONTRACTORS SHOULD AVOID

OVEREXPOSING DISTURBED AREAS AND LIMIT THE AMOUNT OF STABILIZATION AREA.

- 1. INSTALL A STABILIZED CONSTRUCTION ENTRANCE IN ALL LOCATIONS WHERE CONSTRUCTION TRAFFIC WILL ENTER AND EXIT THE SITE.
  2. INSTALL PERIMETER SILT FENCE OR EROSION CONTROL BERM.
- 3. INSTALL ALL OTHER EROSION CONTROL DEVICES AS NECESSARY THROUGHOUT THE REMAINDER OF THIS SCHEDULE.
- 4. COMMENCE INSTALLATION OF DRAINAGE INFRASTRUCTURE.
  5. PRIORITIZE THE DOWNHILL SIDE TO CONTAIN RUNOFF WITHIN THE SITE WHILE PROVIDING AN ENGINEERED OUTLET WITH SILTATION BARRIER TO THE MUNICIPAL STORMWATER SYSTEM WITHIN SPRING STREET.
- 6. COMMENCE EARTHWORK OPERATIONS, WALL AND FOUNDATION INSTALLATION.
  7. COMMENCE INSTALLATION OF UTILITIES.
- 8. CONTINUE EARTHWORK AND GRADING TO SUBGRADE AS NECESSARY FOR CONSTRUCTION.
  9. COMPLETE INSTALLATION OF DRAINAGE INFRASTRUCTURE, AS WELL AS OTHER UTILITY WORK.
- 10. COMPLETE REMAINING EARTHWORK OPERATIONS.
- 11. INSTALL SUB-BASE AND BASE GRAVELS IN PAVED AREAS.
  12. INSTALL PAVING, CURBING AND BRICKWORK.
- 13. LOAM, LIME, FERTILIZE, SEED AND MULCH DISTURBED AREAS AND COMPLETE ALL LANDSCAPING.
  14. ONCE THE SITE IS STABILIZED, 90% CATCH OF GRASS HAS BEEN OBTAINED, OR MULCHING OF LANDSCAPE AREAS IS COMPLETE REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.
- 15. TOUCH UP AREAS WITHOUT A VIGOROUS CATCH OF GRASS WITH LOAM AND SEED.

  16. COMPLETE SITE SIGNAGE AND STRIPING.

17. EXECUTE PROPER MAINTENANCE OF ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.

THE ABOVE IMPLEMENTATION SEQUENCE SHOULD BE GENERALLY FOLLOWED BY THE SITE CONTRACTOR. HOWEVER, THE CONTRACTOR MAY CONSTRUCT SEVERAL ITEMS SIMULTANEOUSLY. THE CONTRACTOR SHALL SUBMIT TO THE OWNER A SCHEDULE OF THE COMPLETION OF THE WORK. IF THE CONTRACTOR IS TO COMMENCE THE CONSTRUCTION OF MORE THAN ONE ITEM ABOVE, THEY SHALL LIMIT THE AMOUNT OF EXPOSED AREAS TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDERTAKEN DURING THE FOLLOWING 30 DAYS.

THE CONTRACTOR SHALL RE-VEGETATE DISTURBED AREAS AS RAPIDLY AS POSSIBLE. ALL AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF FINAL GRADING OR BEFORE

A STORM EVENT. THE CONTRACTOR SHALL INCORPORATE PLANNED INLETS AND DRAINAGE SYSTEMS AS EARLY AS POSSIBLE INTO THE CONSTRUCTION PHASE.

7.0 SEEDING PLAN

7.1 SITE PREPARATION

THE SEEDED AREAS SHALL BE FEASIBLY GRADED OUT TO PROVIDE THE USE OF EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. IF NECESSARY, THE SITE MAY REQUIRE ADDITIONAL TEMPORARY EROSION CONTROL MEASURES OUTLINED IN THE EROSION CONTROL REPORT.

7.2 SEEDBED PREPARATION

FERTILIZER SHALL BE APPLIED TO THE SITE AT A RATE OF 13.8 POUNDS PER 1,000 SQUARE FEET. THE COMPOSITION OF THE FERTILIZER SHALL BE 10-10-10 (N-P205-K20) OR

# LIMESTONE SHALL BE APPLIED TO THE SITE AT A RATE OF 138 POUNDS PER 1,000 SQUARE FEET.

# 7.3 SEEDIN

THE COMPOSITION AND AMOUNT OF TEMPORARY SEED APPLIED TO A SITE SHALL BE DETERMINED BY THE FOLLOWING TABLE:

TEMPORARY SEED APPLICATION RATES			
SEED	LBS / ACRE	RECOMMENDED SEEDING DATES	
WINTER RYE	2.57	8/15 TO 10/1	
OATS	1.84	4/1 TO 7/1 8/15 TO 9/15	
ANNUAL RYGRASS	0.92	4/1 TO 7/1	
SUDANGRASS	0.92	5/15 TO 8/15	
PERENNIAL	0.92	8/15 TO 9/15	
TOTAL	7.17 LBS/ACRE		

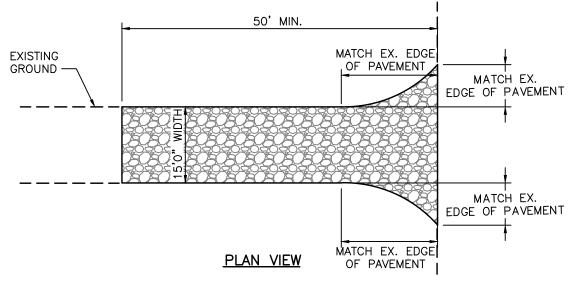
PERMANENT SEED	APPLICATION RATES	
SEED	LBS / ACRE	
KENTUCKY BLUEGRASS	20.00	
CREEPING RED FESCUE	20.00	
PERENNIAL RYEGRASS	4.80	
TOTAL	44.8 LBS/ACRE	

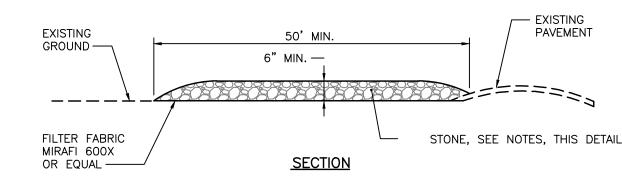
# 7.4 MULCHING

MULCH SHALL BE HARDWOOD AND APPLIED AT A RATE OF 70 LBS — 90 LBS PER 1,000 SQUARE FEET. THE MULCH SHALL BE INSTALLED AT A MINIMUM DEPTH OF 4 INCHES. THE SEEDED AREA SHALL BE MULCHED IMMEDIATELY AFTER SEED IS APPLIED. MULCHING DURING THE WINTER SEASON SHALL BE DOUBLE THE NORMAL AMOUNT. REFER TO DETAIL FOR MORE INFORMATION.

# 8.0 <u>CONCLUSION</u>

THE ABOVE EROSION CONTROL NARRATIVE IS INTENDED TO MINIMIZE THE DEVELOPMENT IMPACT BY IMPLEMENTING TEMPORARY AND PERMANENT EROSION CONTROL MEASURES. THE CONTRACTOR SHALL ALSO REFER TO THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR ADDITIONAL INFORMATION.



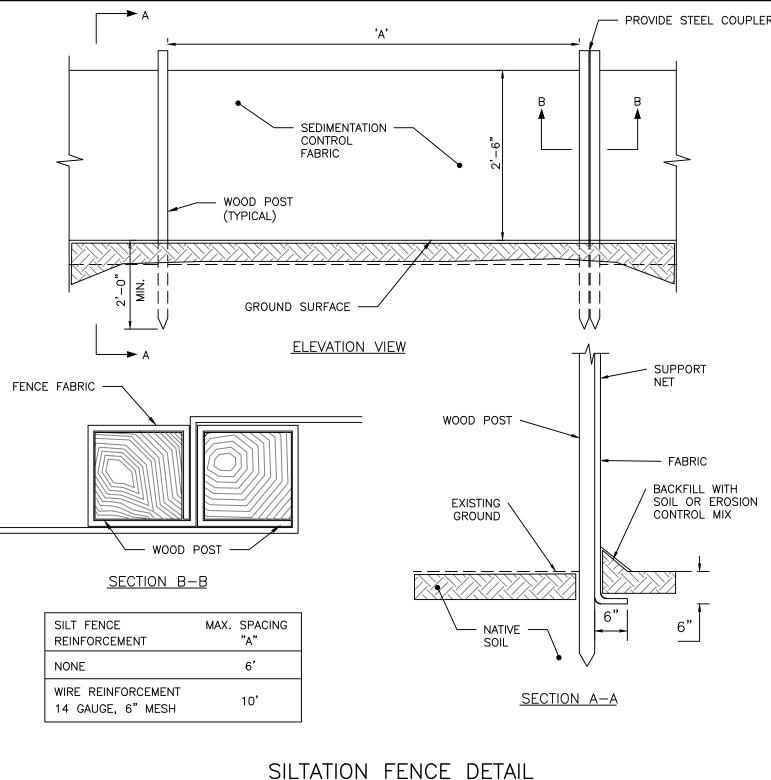


# NOTES:

- 1. CONTRACTOR SHALL ADD STONE TO ENTRANCE AS MUD/SILT MATERIAL ACCUMULATES
- 2. STONE SHALL BE 2"-3" COARSE AGGREGATE
  3. CONSTRUCTION ENTRANCE SHALL BE GRADED TO NOT ALLOW ANY STORMWATER TO BE CONVEYED OFF SITE. IN SITUATIONS WHERE THIS IS NOT POSSIBLE, ANY STORMWATER CONVEYED OFFSITE SHALL BE TREATED OR RETAINED IN A MANNER APPROVED BY ENGINEER.
  - 5. CONSTRUCTION ENTRANCE SHALL BE GRADED IN A MANNER THAT PREVENTS TRACKING OF SEDIMENTS ONTO PUBLIC RIGHT—OF—WAY

4. WHEN NECESSARY, ON-SITE VEHICLES SHALL HAVE THEIR WHEELS CLEANED PRIOR TO LEAVING

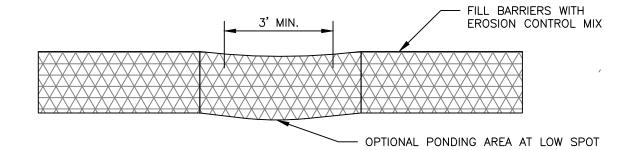
STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE



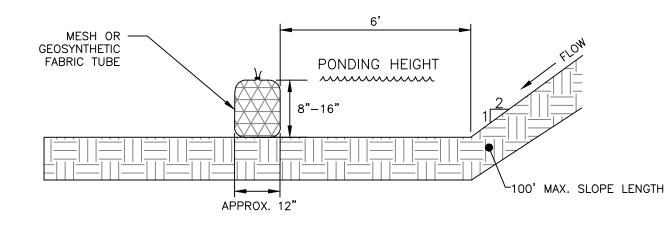
# SILTATION FENCE DETAIN NOT TO SCALE

## OTES:

- 1. FULL CONTACT WITH THE GROUND IS CRITICAL TO PREVENT SHORT CIRCUITING UNDER THE TUBE THE GROUND SURFACE SHOULD BE SMOOTH AND LEVEL. IN WOODED AREAS, PROTRUDING ROOTS AND DEBRIS MAY NEED TO BE REMOVED. IN GRASSED AREAS, THE GRASS NEEDS TO BE EITHER MOWED OR COMPRESSED DOWN.
- 2. STAKING MAY BE NECESSARY ON STEEP SLOPES.
- 3. UPON FINAL STABILIZATION, THE TUBE CAN BE CUT OPEN AND THE MATERIAL SPREAD OUT ONTO THE GROUND. THE MESH MATERIAL SHOULD BE REMOVE.
- 4. LOOSE COMPOST MAY BE BACKFILLED ALONG THE UPSLOPE SIDE OF THE COMPOST FILTER SOCK, FILLING THE SEAM BETWEEN THE SOIL SURFACE AND THE DEVICE, IMPROVING FILTRATION AND SEDIMENT RETENTION.

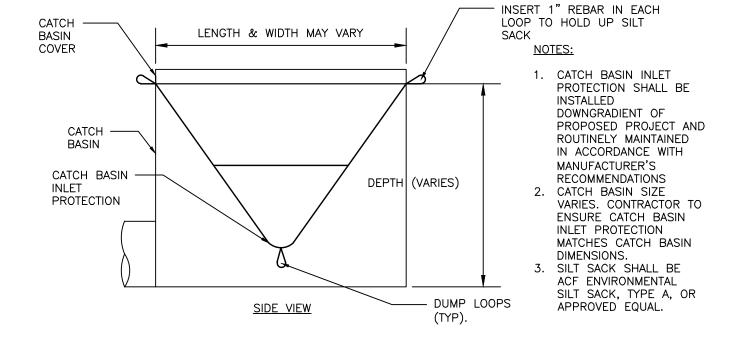


# FRONT VIEW



# FILTER SOCK DETAIL NOT TO SCALE

SIDE VIEW



CATCH BASIN INLET PROTECTION NOT TO SCALE

PRELIMINARY NOT ISSUED FOR CONSTRUCTION ISSUED FOR BY DATE
SUBDIVISION CAB
AMENDMENT APP 12/22/2023

EROSION CONTROL NOTES & DETAILS

SKY VIEW DRIVE EXTENSION

ACORN ENGINEERING, INC.

ACORN ENGINEERING, INC.

BOX 3372, PORTLAND MAINE 04104

FROM ACORN ENGINE

1175.3 DETAIL

DESIGNED BY:

DRAWN BY:

AS NOTE

CRAIG A.
BURGESS
No. 22638

12-21-23

DRAWING NO.