

260-C-18
Hillcrest Ave.
Street Extension
Tim Higgins

2013-170



PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life - www.portlandmaine.gov

Planning & Urban Development Department
Jeff Levine, Director

Planning Division
Alexander Jaegerman, Director

August 15, 2013

Tim Higgins
Higgins Builders
PO Box 8142
Portland, ME 04104

Al Palmer
Gorrill Palmer Consulting Engineers
PO Box 1237
15 Shaker Road
Gray, ME 04039

Project Name: Hillcrest Avenue Street Extension/SF Home
Applicant: Tim Higgins, Higgins Builders
Planner: Nell Donaldson/Phil DiPierro

Project ID: 2013-170
CBL: 260-C-18

Dear Mr. Higgins and Mr. Palmer:

On August 15, 2013, the Planning Authority approved with conditions a Level I: Site Alteration plan for the construction of approximately 150' of Hillcrest Avenue to city standards. The decision is based upon the application, documents, and plans as submitted by Gorrill-Palmer Consulting Engineers, Inc. with revisions dated 8/1/13. The proposal was reviewed for conformance with the standards of Portland's land use ordinance, including Sections 14-526 (Site Plan) and 14-403 (Street Access).

WAIVERS

Sidewalk: Based on the following grounds, the Planning Authority waives the site plan standard requiring sidewalks in accordance with Section 14-498 of the land use ordinance:

3. A safe alternative walking route is reasonably and safely available. Given that Hillcrest Avenue provides access to few properties, low traffic volumes are expected and a shared roadway condition is deemed acceptable.
6. Strict adherence to the sidewalk requirement would result in the loss of significant site features related to landscaping or topography that are deemed to be of greater public value.

Curbing: The Planning Authority waives the granite curbing requirement of Section 14-403 of the city's land use ordinance, based on the following grounds:

1. The cost to construct the curbing is in excess of 5% of the projected overall project cost.

5. Runoff from the site does not require curbing for stormwater management. As designed, runoff from the roadway will be treated on the adjacent lot, which requires the elimination of curbing on the street itself.

SITE PLAN/14-403 REVIEW

The Planning Authority found that the Level I site plan is in conformance with the standards of the land use code subject to the following condition of approval, which shall be met prior to the issuance of a building permit:

1. As the project falls inside the Nason's Brook Watershed, the applicant shall provide an urban impaired stream compensation fee in the amount of \$215, made payable to the City of Portland and delivered to the Planning Authority;

The approval is based on the submitted site plan. If you need to make any modifications to the approved site plan, you must submit a revised site plan for staff review and approval.

STANDARD CONDITIONS OF APPROVAL

Please note the following standard conditions of approval and requirements for all approved site plans:

1. **Storm Water Management Condition of Approval** The developer/contractor/subcontractor must comply with conditions of the construction stormwater management plan and sediment and erosion control plan based on City standards and state guidelines.
2. **Develop Site According to Plan** The site shall be developed and maintained as depicted on the site plan and in the written submission of the applicant. Modification of any approved site plan or alteration of a parcel which was the subject of site plan approval after May 20, 1974, shall require the prior approval of a revised site plan by the Planning Board or Planning Authority pursuant to the terms of Chapter 14, Land Use, of the Portland City Code.
3. **Separate Building Permits Are Required** This approval does not constitute approval of building plans, which must be reviewed and approved by the City of Portland's Inspection Division.
4. **Site Plan Expiration** The site plan approval will be deemed to have expired unless work has commenced within one (1) year of the approval or within a time period up to three (3) years from the approval date as agreed upon in writing by the City and the applicant. Requests to extend approvals must be received before the one (1) year expiration date.
5. **Performance Guarantee and Inspection Fees** A performance guarantee covering the site improvements, inspection fee payment of 2.0% of the guarantee amount and seven (7) final sets of plans must be submitted to and approved by the Planning Division and Public Services Department prior to the release of a building permit, street opening permit or certificate of occupancy for site plans. If you need to make any modifications to the approved plans, you must submit a revised site plan application for staff review and approval.

6. **Defect Guarantee** A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.
7. **Preconstruction Meeting** Prior to the release of a building permit or site construction, a pre-construction meeting shall be held at the project site. This meeting will be held with the contractor, Development Review Coordinator, Public Service's representative and owner to review the construction schedule and critical aspects of the site work. At that time, the Development Review Coordinator will confirm that the contractor is working from the approved site plan. The site/building contractor shall provide three (3) copies of a detailed construction schedule to the attending City representatives. It shall be the contractor's responsibility to arrange a mutually agreeable time for the pre-construction meeting.
8. **Department of Public Services Permits** If work will occur within the public right-of-way such as utilities, curb, sidewalk and driveway construction, a street opening permit(s) is required for your site. Please contact Carol Merritt at 874-8300, ext. 8828. (Only excavators licensed by the City of Portland are eligible.)
9. **As-Built Final Plans** Final sets of as-built plans shall be submitted digitally to the Planning Division, on a CD or DVD, in AutoCAD format (*.dwg), release AutoCAD 2005 or greater.

The Development Review Coordinator must be notified five (5) working days prior to the date required for final site inspection. The Development Review Coordinator can be reached at the Planning Division at 874-8632. All site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy.

If there are any questions, please contact Nell Donaldson at (207) 874-8723.

Sincerely,

Alexander Jaegerman
 Alexander Jaegerman, FAICP (BB)
 Planning Division Director

Attachments:

1. Performance Guarantee Packet

cc: Jeff Levine, AICP, Director of Planning and Urban Development
 Alexander Jaegerman, FAICP, Planning Division Director
 Barbara Barhydt, Development Review Services Manager
 Nell Donaldson, Planner/Senior Planner
 Phillip DiPierro, Development Review Coordinator/Planning
 Marge Schmuckal, Zoning Administrator, Inspections Division
 Tammy Munson, Inspection Division Director
 Lannie Dobson, Administration, Inspections Division
 Gayle Guertin, Administration, Inspections Division
 Michael Bobinsky, Public Services Director
 Katherine Earley, Engineering Services Manager, Public Services
 Bill Clark, Project Engineer, Public Services
 David Margolis-Pinco, Deputy City Engineer, Public Services
 Doug Roncarati, Stormwater Coordinator, Public Services



Gorrill-Palmer Consulting Engineers, Inc.

Engineering Excellence Since 1998

PO Box 1237
15 Shaker Rd.
Gray, ME 04039

207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

August 6, 2013

Nell Donaldson
Planner
Portland Planning Division
4th Floor, Portland City Hall
389 Congress Street
Portland, Maine 04101

Subject: Hillcrest Avenue Street Extension/Single Family Home
Letter of Correspondence #1

Dear Nell,

This letter is in response to review comments contained in your letter dated July 29, 2013.

For ease of review each comment as been repeated followed by our response.

14-403 Street Extension

Comment:

- 1. The application includes curbing and sidewalk waivers as granted by David Margolis-Pineo of the Department of Public Services in May of 2013.*

Response: No response necessary.

Comment:

- 2. In conversations on site, the applicant has indicated that the existing tree stand north of the proposed roadway will remain largely intact, thereby satisfying the street tree requirement. Please Identify tree saves and/or tree save areas in the revised plans.*

Response: The tree save areas have been added to the roadway plan.

David Senus Comments

Comment:

- 1. i) Basic Standard: The applicant has provided plans, notes and details to address erosion and sediment control requirements, inspection and maintenance requirements, and good housekeeping practices in general accordance with Appendix A, B, & C of MaineDEP Chapter 500.*

Response: No response necessary.

Comment:

ii) General Standard: As noted by the Applicant, the new roadway (Level 1 Site Plan Application) will create 1,863 sq. ft. of new impervious area. Following the requirements outlined in the City's Ordinance, and per previous determinations provided by the City on Level 1 Site Alteration projects, the applicant is required to provide water quality treatment for 75% of the new impervious area, or an area equivalent to 75%* of the new impervious area(*project is considered a*

Ms. Nell Donaldson
August 6, 2013
Page 2

linear project under general standards). Given the grading and layout of the street extension (a crowned road at the crest of a hill), integration of stormwater quality treatment within the right-of-way may be difficult to achieve; therefore treatment of stormwater on the private single family residential property is an acceptable alternative to direct roadway treatment. Given the small scale of the project impacts, when preparing a design to meet the general standards, the Applicant does not need to provide stormwater modeling data, soils data, design calculations, or sizing data for the proposed BMP; however the BMP should be designed to provide water quality treatment. The plan should note the location of the BMP, the drainage features and/or grading associated with the BMP, and provide a design detail for the system. Although a review of the single family residential property has not been provided under this review memo, we encourage the Applicant to design a stormwater management system that provides treatment and does not result in any additional, concentrated runoff onto the adjacent, downhill property.

Response: A filtration BMP has been added to the Single Family Residential Lot plans which will provide treatment of stormwater runoff.

Comment:

iii) Flooding Standard: The roadway project will result in an increase in impervious area of approximately 1,863 square feet. The resultant increase in flow will be minimal, and therefore we support a waiver from meeting the Flooding Standard.

Response: No response necessary.

Comment:

iv) Urban Impaired Stream Standard: The project falls within the Nason's Brook Watershed, which is classified as an Urban Impaired Stream by the MaineDEP. The City of Portland requires that all development, except single and two-family homes, subject to City of Portland review shall be required to comply with the Urban Impaired Stream Standard pursuant to MaineDEP Chapter 500 Stormwater Management Rules if they are located within an Urban Impaired Stream watershed (Technical Manual, Section 5.II.A). A project in the direct watershed of an urban impaired stream must pay a compensation fee or mitigate project impacts by treating, reducing, or eliminating an off-site or on-site pre-development impervious stormwater source following the guidance outlined in MaineDEP Chapter 500 standards. The Level I Site Alteration application associated with the extension of Hillcrest Ave shall be subject to meeting the Urban Impaired Stream Standard; the single family home permitted under a Level I Minor Residential Application will not be subject to this standard. The Applicant has proposed to pay a compensation fee in order to comply with this Standard and should submit calculations identifying the fee associated with this project, per this Standard.

Response: The project will result in 1,863 square feet (0.043 acres) of new impervious area. Per the MDEP Chapter 500 rules, the required compensation fee for non-roof impervious area is \$5,000 per acre. The fee for this project is $0.043 \times \$5,000 = \215 . The fee payment of \$215 will be submitted upon request.

Ms. Nell Donaldson
August 6, 2013
Page 3

Comment:

- 2. The Stormwater Management Plan will need to include a stormwater inspection and maintenance plan for all stormwater BMP's designed to meet the General Standards, developed in accordance with and in reference to MaineDEP Chapter 500 guidelines and Chapter 32 of the City of Portland Code of Ordinances.*

Response: Stormwater inspection and maintenance notes have been added to the single family residence plan sheet.

Comment:

- 3. The Applicant has requested a waiver from the requirement to install underdrains within the proposed street, as the existing, unaccepted and private portion of Hillcrest Avenue does not appear to have underdrains. DPS will need to provide a determination on this waiver request. If the waiver is granted, the Typical Residential Roadway Cross Section detail should be revised to not include underdrains. Note that the Department of Public Services has indicated that they are willing to waive the underdrain requirement.*

Response: The underdrains have been removed from the detail.

Comment:

- 4. The Applicant has proposed to construct a swale on the eastern side of Hillcrest Avenue to direct runoff to the southwest. Additional information should be provided, such as stabilization requirements for the swale and any downhill areas not shown on the plan.*

Response: A note to install erosion control mesh over the disturbed area on the southeasterly side of Hillcrest Avenue has been added to the roadway plans.

Single Family Site Plan

Comment:

- 1. Please revise the grading plan so that it is clear that neighboring properties are not negatively impacted by stormwater surface drainage, ie adding drip edge around the foundation, berming and swaling so that stormwater is directed to a drywell or stormwater infiltration area, rain garden, etc.*

Response: Grading has been revised, a drip strip and a filtration BMP have been added.

Comment:

- 2. Please move the outlet to the foundation drain so that it is no closer than 10 feet to any property line.*

Response: The foundation drain has been revised.

Comment:

- 1. In addition, per the request of zoning, please revise the site plan as necessary to match the size of the deck shown on the associated building plans.*

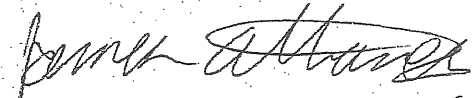
Response: The deck size has been revised.

Ms. Nell Donaldson
August 6, 2013
Page 4

The revised plans, and this letter will be submitted electronically. If you have any further questions please contact us.

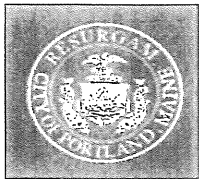
Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.


Alton M. Palmer, P.E.
Senior Vice President

FOR

Copy: Timothy Higgins



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Planning & Urban Development Department
Jeff Levine, AICP, Director

Planning Division
Alexander Jaegerman, Director

July 29, 2013

Tim Higgins
Higgins Builders
PO Box 8142
Portland, ME 04104

Al Palmer
Gorrill Palmer Consulting Engineers
PO Box 1237
15 Shaker Road
Gray, ME 04039

RE: Staff Review Comments for Level I: Site Alteration & Single Family Home

Project Name: Hillcrest Avenue Street Extension/SF Home
Applicant: Tim Higgins, Higgins Builders
Planner: Nell Donaldson/Phil DiPierro

Project ID: 2013-170
CBL: 260-C-18

Dear Mr. Higgins:

Thank you for submitting an application for the construction of approximately 150' of Hillcrest Avenue and the associated single family home. The Planning Authority is evaluating this proposal as a preliminary plan subject to the following applicable Land Use Code provisions:

- Site Plan Ordinance, Article V
- Section 14-403 Street Extension

The city's findings, based on the preliminary plans, are as follows.

14-403 Street Extension

1. Transportation Standards

The application includes curbing and sidewalk waivers as granted by David Margolis-Pineo of the Department of Public Services in May of 2013.

There are no additional transportation-related comments at this time.

2. Environmental Quality Standards

In conversations on site, the applicant has indicated that the existing tree stand north of the proposed roadway will remain largely intact, thereby satisfying the street tree requirement. Please identify tree saves and/or tree save areas in the revised plans.

David Senus, consulting Civil Engineer, provides the following comments on water quality and stormwater management:

- I. *A Level I Site Plan Submission is required to include a stormwater management plan and a soil erosion control plan (City of Portland Land Use Code, Article V. Site Plan, Section 14-527(b) (12) and (13)). Level I Site Alteration Plans are required to conform with City Code of Ordinances, Section 14-526(b) 3, Environmental Quality Standards; specifically the Basic, General, Flooding & Urban Impaired Stream standards defined in Section 5 of the Technical Manual. We offer the following comments related to each of these Standards:*
 - i) *Basic Standard: The Applicant has provided plans, notes, and details to address erosion and sediment control requirements, inspection and maintenance requirements, and good housekeeping practices in general accordance with Appendix A, B, & C of MaineDEP Chapter 500.*
 - ii) *General Standard: As noted by the Applicant, the new roadway (Level I Site Plan Application) will create 1,863 sq ft of new impervious area. Following the requirements outlined in the City's Ordinance, and per previous determinations provided by the City on Level 1 Site Alteration projects, the Applicant is required to provide water quality treatment for 75%* of the new impervious area, or an area equivalent to 75%* of the new impervious area (*project is considered a linear project under general standards). Given the grading and layout of the street extension (a crowned road at the crest of a hill), integration of stormwater quality treatment within the right-of-way may be difficult to achieve; therefore treatment of stormwater on the private single family residential property is an acceptable alternative to direct roadway treatment. Given the small scale of the project impacts, when preparing a design to meet the general standards, the Applicant does not need to provide stormwater modeling data, soils data, design calculations, or sizing data for the proposed BMP; however the BMP should be designed to provide water quality treatment. The plan should note the location of the BMP, the drainage features and/or grading associated with the BMP, and provide a design detail for the system. Although a review of the single family residential property has not been provided under this review memo, we encourage the Applicant to design a stormwater management system that provides treatment and does not result in any additional, concentrated runoff onto the adjacent, downhill property.*
 - iii) *Flooding Standard: The roadway project will result in an increase in impervious area of approximately 1,863 square feet. The resultant increase in flow will be minimal, and therefore we support a waiver from meeting the Flooding Standard.*
 - iv) *Urban Impaired Stream Standard: The project falls within the Nason's Brook Watershed, which is classified as an Urban Impaired Stream by the MaineDEP. The City of Portland requires that all development, except single and two-family homes, subject to City of Portland review shall be required to comply with the Urban Impaired Stream Standard pursuant to MaineDEP Chapter 500 Stormwater Management Rules if they are located within an Urban Impaired Stream watershed (Technical Manual, Section 5. II. A.). A project in the direct watershed of an urban impaired stream must*

pay a compensation fee or mitigate project impacts by treating, reducing, or eliminating an off-site or on-site pre-development impervious stormwater source following the guidance outlined in MaineDEP Chapter 500 standards. The Level I Site Alteration application associated with the extension of Hillcrest Ave shall be subject to meeting the Urban Impaired Stream Standard; the single family home permitted under a Level 1 Minor Residential Application will not be subject to this standard. The Applicant has proposed to pay a compensation fee in order to comply with this Standard and should submit calculations identifying the fee associated with this project, per this Standard.

2. *The Stormwater Management Plan will need to include a stormwater inspection and maintenance plan for all stormwater BMP's designed to meet the General Standards, developed in accordance with and in reference to MaineDEP Chapter 500 guidelines and Chapter 32 of the City of Portland Code of Ordinances.*
3. *The Applicant has requested a waiver from the requirement to install underdrains within the proposed street, as the existing, unaccepted and private portion of Hillcrest Avenue does not appear to have underdrains. DPS will need to provide a determination on this waiver request. If the waiver is granted, the Typical Residential Roadway Cross Section detail should be revised to not include underdrains. Note that the Department of Public Services has indicated that they are willing to waive the underdrain requirement.*
4. *The Applicant has proposed to construct a swale on the eastern side of Hillcrest Avenue to direct runoff to the southwest. Additional information should be provided, such as stabilization requirements for the swale and any downhill areas not shown on the plan.*

Note that the comments above are based on the city's Site Plan Ordinance, Section 14-526(b)3b and on previous cases involving increases in impervious surface in public rights-of-way.

3. Public Infrastructure and Community Safety Standards

No comments at this time.

4. Site Design Standards

No comments at this time.

Single Family Site Plan

Please submit a revised site plan that includes the following information:

- o Please revise the grading plan so that it is clear that neighboring properties are not negatively impacted by stormwater surface drainage, ie. adding drip edge around the foundation, berming and swaling so that stormwater is directed to a drywell or stormwater infiltration area, rain garden, etc.,
- o Please move the outlet to the foundation drain so that it is no closer than 10 feet to any property line.

In addition, per the request of zoning, please revise the site plan as necessary to match the size of the deck shown on the associated building plans.

Planning Staff Recommendation

Please submit one (1) complete electronic set of revised plans, along with documentation, to address the comments above. Upon receipt of the revised material, the City of Portland will review the additional plans and information for conformance with applicable ordinances. The Planning Authority may request additional information during the continued review of the proposal according to applicable laws, ordinances and regulations. Please be aware that an application expires within 120 days of the date upon which this written request for additional information was made.

If you have any questions or feel that a meeting would be helpful in formulating your revised plans, feel free to contact me at 874-8723 or by email at hcd@portlandmaine.gov.

Sincerely,



Nell Donaldson
Planner

Electronic Distribution:

Alexander Jaegerman, Planning Division Director
Barbara Barhydt, Development Review Services Manager
Danielle West-Chuhta, Associate Corporation Counsel
Marge Schmuckal, Zoning Administrator
Katherine Earley, City Engineer, Public Services
David Margolis-Pineo, Deputy City Engineer
Captain Chris Pirone, Fire
Jeff Tarling, City Arborist
Tom Errico, P.E., TY Lin Associates
David Senus, P.E., Woodard & Curran

City of Portland
Development Review Application
Planning Division Transmittal Form

Application Number: 2013-170 **Application Date:** 07/09/2013
CBL: 260 C018001 **Application Type:** Level I Site Alteration

Project Name: Hillcrest Ave. Street Extension

Address: 25 HILLCREST AVE

Project Description: Propose to extend Hillcrest Ave. an additional 150 ft. and constructing the street to City standards in order to construct a 2 story single family home.

Zoning: R3

Other Required Reviews:		
<input type="checkbox"/> Traffic Movement	<input checked="" type="checkbox"/> 14-403 Streets	<input type="checkbox"/> Housing Replacement
<input type="checkbox"/> Storm Water	# Units _____	<input type="checkbox"/> Historic Preservation
<input type="checkbox"/> Subdivision	<input type="checkbox"/> Flood Plain	<input type="checkbox"/> Other:
# Lots _____	<input type="checkbox"/> Shoreland	
<input type="checkbox"/> Site Location	<input type="checkbox"/> Design Review	
# Unit _____		

Distribution List:

	<i>Null Donaldson</i> Philip DiPierro		
Planner	Philip DiPierro	Parking	John Peverada
Zoning	Marge Schmuckal	Design Review	Alex Jaegerman
Traffic Engineer	Tom Errico	Corporation Counsel	Danielle West-Chuhta
Civil Engineer	David Senus	Sanitary Sewer	John Emerson
Fire Department	Chris Pirone	Inspections	Tammy Munson
City Arborist	Jeff Tarling	Historic Preservation	Deb Andrews
Engineering	David Margolis-Pineo	DRC Coordinator	Phil DiPierro
		Outside Agency	

Comments needed by 7/16/2013

CITY OF PORTLAND
DEPARTMENT OF PLANNING & URBAN DEVELOPMENT

389 Congress Street
 Portland, Maine 04101

INVOICE FOR FEES

Application No: 2013-170	Applicant: Higgins Builders
Project Name: Hillcrest Ave. Street Extension	Location: 25 HILLCREST AVE
CBL: 260 C018001	Development Type: Level I Site Alteration
Invoice Date: 07/09/2013	

Previous Balance	-	Payment Received	+	Current Fees	-	Current Payment	=	Total Due	Payment Due Date
\$0.00		\$0.00		\$200.00		\$200.00		\$0.00	On Receipt

Previous Balance **\$0.00**

Fee Description	Qty	Fee/Deposit Charge
Level I Site Alteration	1	\$200.00
		<u>\$200.00</u>
	Total Current Fees:	+ \$200.00
	Total Current Payments:	- \$200.00
	Amount Due Now:	\$0.00

CBL 260 C018001
Bill to: Higgins Builders
 83 Bay Street
 Portland, ME 04104

Application No: 2013170
Invoice Date: 07/09/2013
Invoice No: 41746
Total Amt Due: \$0.00
Payment Amount:

Make checks payable to the *City of Portland*, ATTN: Jennifer Yeaton, 4th Floor, 389 Congress Street, Portland, ME 0410



July 8, 2013

Barbara Barhydt
Development Review Services Coordinator
Portland Planning Division
4th Floor, Portland City Hall
389 Congress Street
Portland, Maine 04101

Subject: Hillcrest Avenue Improvements and Construction of a Single-Family House
Level I Site Alteration Application

Dear Barbara,

Gorrill-Palmer Consulting Engineers, Inc. is pleased to submit the attached Level I- Site Alteration Application for the extension of Hillcrest Avenue on behalf of our client, Tim Higgins, Higgins Builders (applicant). A corresponding Level I- Minor Residential Application for the construction of a single family home on Hillcrest Avenue has also been submitted under separate cover. Mr. Higgins is seeking to construct an additional 150 feet of Hillcrest Avenue to City standards and to construct a 2-story single family residence on the abutting lot.

Project Description

Currently, Hillcrest Avenue at the project location is an unaccepted private street. The applicant proposes to construct approximately 150 feet of Hillcrest Avenue, from the existing paved portion, to City standards in order to provide the necessary frontage along an accepted City Street to construct a single family residence.

Zoning

The project is located in the R-3 Residential Zone and is proposed within the existing City Right of Way.

Right, Title and Interest

We have enclosed a copy of the Warranty Deed granting the site on which the single family house is proposed to Higgins Builders from Elma E. Marzilli.

State and Federal Permits

No State or Federal Permits are required for this proposal.

*Ms. Barbara Barhydt
July 8, 2013
Page 2 of 4*

Existing and/or Proposed Easements or Other Burdens

No new easements are proposed as part of this project. Approximately 165 feet of Hillcrest Avenue has been improved to City standards from the intersection of Brighton Avenue up to the proposed extension. According to the submitted boundary survey, there are no existing easements or encumbrances on the site on which the single family house is proposed.

Waivers

The applicant submitted a waiver request to the City on April 30, 2013 requesting waivers from the sidewalk and curbing requirement. The waiver was approved by the City as noted in the attached email from Dave Pineo dated May 8, 2013.

A waiver from the requirement to install underdrains within the proposed improved street is requested since the existing portion of Hillcrest Avenue does not appear to have underdrains.

Financial Capacity

We have attached a letter from Kimberly Donnelly, Vice President and Director of Business Banking of Gorham Savings Bank as evidence of financial capacity. Higgins Builders has constructed numerous single-family residential projects in the area and has adequate technical capacity to complete the project.

Site Plan Standards

The following provides a description of the project according to applicable site plan standards of Section 14-526 of the City of Portland Land Use Code:

- a. **Transportation:** Hillcrest Street will be constructed to City standards and is proposed to connect seamlessly into the existing street and adjacent street network.
- b. **Environmental Quality:** No significant natural features, as defined in Section 14-526 (b) 1 of the Land Use Code would be impacted by the proposed construction of Hillcrest Avenue. The proposed construction is to improve an existing gravel roadway, bringing it to City standards.

Stormwater Management: Since the roadway improvements result in approximately 1,863 square feet of new impervious area, the project shall conform with the Chapter 500 standards outlined in Section 5 of the City of Portland Technical Manual.

Ms. Barbara Barhydt

July 8, 2013

Page 3 of 4

The project is within the Nason's Brook watershed which is listed by the MDEP as an Urban Impaired Stream. The applicant proposes to pay the compensation fee in order to comply with the Urban Impaired Stream Standard.

Erosion Control notes and details are included in the plan set. The notes and details comply with the Basic Standard.

Section 14-526.b.3.B of the Ordinance requires "All development except level I minor residential development shall comply with the standards of Section 5 of the Technical Manual including basic, general, and flooding standards as applicable..."

Section 5.II.C of the Technical Manual does not require Level I site plans to meet the general and flooding standards. Therefore, as Section 14-526.b.3.B indicates that Level I Developments shall comply with Section 5 of the Technical Standards, and Section 5.II.C of the Technical Standards does not require Level I site plans to meet the General or Flooding Standards, it appears that the proposed roadway extension is not required to meet either the General or Flooding Standards.

- c. **Public Infrastructure and Community Safety:** To the best of our knowledge, no master plans and facilities plans, as listed in Section 15 of the Technical Manual apply to this project. The design and orientation of the house and property provide clear delineation between public and private space. The design includes windows on all four sides of the structure, providing adequate opportunity for surveillance of outside spaces, in accordance with CPTED principles. Adequate access for emergency vehicles is provided via Hillcrest Avenue. The building will be sprinklered in accordance with NFPA 13 D. Water for domestic use and the required sprinkler system will be supplied from the existing water main within Hillcrest Avenue via a 1 ½" connection. An existing fire hydrant is located at the corner of Brighton Avenue and Kent Street.
- d. **Site Design Standards:** The site is not located within a designated historic district and will not impact a designated historic landscape. Elevation drawings of the proposed structure are enclosed.

Ms. Barbara Barhydt
July 8, 2013
Page 4 of 4

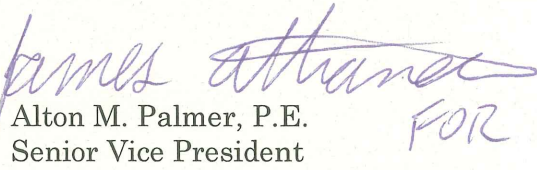
Conclusion

As required by the City of Portland Code of Ordinances, Gorrill-Palmer Consulting Engineers, Inc. submits the enclosed application materials for your review. We look forward to discussing this and any other project-related matters with you.

Please feel free to contact our office with any questions.

Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.


Alton M. Palmer, P.E.
Senior Vice President FOR

Enclosure

Copy: Mr. David Margolis-Pineo, Portland DPS
Mr. Tim Higgins

MP
HOLD TO LIGHT TO VIEW WATERMARK IN PAPER. HEAVY SENSITIVE RED IMAGE DISAPPEARS WITH HEAT. DETECTION DEVICE REVEALS A LOCK WHICH TESTS.

14209



America's Most Convenient Bank®
52-7445-2112

**GORRILL-PALMER
CONSULTING ENGINEERS, INC.**

15 SHAKER ROAD
P.O. BOX 1237
GRAY, MAINE 04039
(207) 657-6910

PAY TO THE
ORDER OF

City of Portland

Two Hundred and 00/100 *****

City of Portland
389 Congress Street
Portland, ME 04101

MEMO 2790 - Level I Site Plan Application



Will C. Hasbald
AUTHORIZED SIGNATURE

\$ **200.00

DOLLARS

7/3/2013

Security Features. Details on back

⑈0114209⑈ ⑆211274450⑆ 029185122⑈

GORRILL-PALMER CONSULTING ENGINEERS, INC.

City of Portland

2790 - Level I Site Plan Application

7/3/2013

14209

200.00



Level I – Site Alteration Development Review Application Portland, Maine

Planning and Urban Development Department
Planning Division

Portland's Planning and Urban Development Department coordinates the development review process for site plan, subdivision and other applications under the City's Land Use Code. Attached is the application form for a Level I: Site Alteration site plan.

Level I: Site Alteration Development includes:

- Alteration of a watercourse or wetland as defined in Section 14-47 of the City Code.
- Alteration of a site. The disturbance of land areas of less than one (1) acre that are stripped, graded, grubbed, filled or excavated. The Planning Authority shall exempt from review the loam and seeding of lawns and the cumulative placement of less than fifteen (15) cubic yards of fill on any lot provided such loaming or placement does not alter a drainage course, swale, wetland or redirect water onto adjoining property and does not violate any other provision of the Portland City Code or state or federal law. "Disturbed area" does not include routine maintenance, but does include re-development and new impervious areas.
- The construction of any temporary or permanent parking area, paving of existing unpaved surface parking areas between 1,000 and 7,500 square feet, or creation of other impervious surface areas between 1,000 and 7,500 square feet.
- The rehabilitation or reconstruction, but not new construction, of piers, docks, wharves, bridges, retaining walls, and other structures located within the shoreland zone.
- A site alteration in which vehicle access is proposed from more than one (1) street;

The Land Use Code (including Article V), the Technical Manual, and the Design Manual are available on the City's web site at <http://www.portlandmaine.gov/planning/default.asp> or copies may be purchased at the Planning Division Office.

Planning Division
Fourth Floor, City Hall
389 Congress Street
(207) 874-8721 or (207) 874-8719

Office Hours
Monday thru Friday
8:00 a.m. – 4:30 p.m.

PROJECT NAME: _Hillcrest Avenue - Extension of Street_____

PROPOSED DEVELOPMENT ADDRESS:

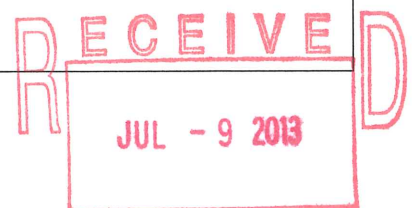
___Hillcrest Avenue, Portland_____

PROJECT DESCRIPTION:

_Propose to extend Hillcrest Avenue an additional 150 feet, constructing the street to City standards,___
_in order to construct a 2-story single family house.____

CHART/BLOCK/LOT: _260/C/18_____


CONTACT INFORMATION:	Applicant's Contact for electronic plans Name: Alton Palmer e-mail: apalmer@gorrillpalmer.com work #: (207) 657-6910
Applicant – must be owner, Lessee or Buyer Name: Timothy Higgins, Higgins Builders, Inc. Business Name, if applicable: Address: 83 Bay Street City/State : Portland, Maine Zip Code: 04104	Applicant Contact Information Work # Home# Cell # (207) 838-5870 Fax# e-mail:
Owner – (if different from Applicant) Name: See applicant above Address: City/State : Zip Code:	Owner Contact Information Work # Home# Cell # Fax# e-mail:
Agent/ Representative Name: Gorrill Palmer Consulting Engineers Address: P.O. Box 1237 City/State : Gray, Maine Zip Code: 04039	Agent/Representative Contact information Work # (207) 657-6910 Cell # (207) 415-5903 e-mail: apalmer@gorrillpalmer.com
Billing Information Name: See Applicant Info Above Address: City/State : Zip Code:	Billing Information Work # Cell # Fax# e-mail:



Taxes
[Handwritten signature]

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Planning Authority and Code Enforcement's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

This application is for a Site Plan review only, a Performance Guarantee, Inspection Fee, Building Permit Application and associated fees will be required prior to construction.

Signature of Applicant: <u>AGENT</u> 	Date: <u>7-3-13</u>
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Please refer to Article V, Site Plan of the City of Portland Land Use Code for detailed information concerning the City's site plan review process, thresholds and standards. Should you have any questions regarding the submittal requirements or any other aspect of the site plan review process, please contact the Planning Division.

PROJECT DATA

The following information is required where applicable, in order complete the application

Total Site Area	12,101 sq. ft.
Proposed Total Disturbed Area of the Site	sq. ft.
IMPERVIOUS SURFACE AREA	
• Proposed Total Paved Area	4,370 sq. ft.
• Existing Total Impervious Area	3,082 sq. ft.
• Proposed Total Impervious Area	4,945 sq. ft.
• Proposed Impervious Net Change	1,863 sq. ft.
PARKING SPACES	
• Existing Number of Parking Spaces	0
• Proposed Number of Parking Spaces	2
TOTAL Number of Parking Spaces	2

General Submittal Requirements – Level I Site Alteration

Applicant Checklist	Planner Checklist	Number of Paper Copies	Submittal Requirement
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Completed application form.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Application fees.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Written description of project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Evidence of right, title and interest.
<input type="checkbox"/> <u>N/A</u>	<input type="checkbox"/>	1	Copies of required state and/or federal permits.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Written assessment of proposed project's compliance with applicable zoning requirements.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Written description of existing and proposed easements or other burdens.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Written requests for waivers from individual site plan and/or technical standards.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Evidence of financial and technical capacity.

Site Plans and Boundary Survey Requirements – Level I Site Alteration

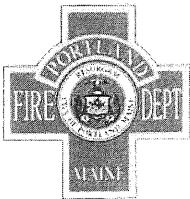
Applicant Checklist	Planner Checklist	Number of Copies	Submittal Requirement
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Boundary Survey meeting the requirements of Section 13 of the City of Portland Technical Manual.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Site Plan Including the following:
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Existing structures with distance from property line (including location of proposed piers, docks or wharves if in Shoreland Zone)
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Location and dimension of existing and proposed paved areas.
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Location and details of proposed infrastructure improvements (e.g. - curb and sidewalk improvements, utility connections, roadway improvements).
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Identification of and proposed protection measures for any significant natural features on the site (including wetlands, ponds, watercourses, floodplains, significant wildlife habitats and fisheries or other important natural features listed in Section 14-526 (b)1. of the Land Use Code.
<input type="checkbox"/> N/A	<input type="checkbox"/>		▪ Details of proposed pier rehabilitation (Shoreland areas only).
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Existing utilities.
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Existing and proposed grading and contours.
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Proposed stormwater management and erosion controls.
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Total area and limits of proposed land disturbance.
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Existing vegetation to be preserved and proposed site landscaping.
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Existing and proposed easements or public or private rights of way.

Site Plan Standards for Review of Level I: Site Alteration

Level I: Site alteration plans shall only be subject to the following site plan standards, as applicable, as contained in section 14-526:

- (a) Transportation standards:
 1. Impact on surrounding street systems,
 2. Access and circulation, and
 4. Parking
- (b) Environmental quality standards
 1. Preservation of significant natural features,
 2. Landscaping and landscape preservation, and
 3. Water quality, stormwater management and erosion control.
- (c) Public infrastructure and community safety standards.
 1. Consistency with city master plans.
- (d) Site design standards
 5. Historic resources,
 6. Exterior lighting,
 8. Signage and wayfinding, and
 9. Zoning related design standards.

Except as provided in article III, or to conditions imposed under section 14-526(e) only, or to those submission requirements set forth in section 14-527 as relate solely thereto.



PORTLAND FIRE DEPARTMENT SITE REVIEW FIRE DEPARTMENT CHECKLIST



A separate drawing[s] shall be provided to the Portland Fire Department for all site plan reviews.

1. Name, address, telephone number of applicant.
2. Name address, telephone number of architect
3. Proposed uses of any structures [NFPA and IBC classification]
4. Square footage of all structures [total and per story]
5. Elevation of all structures
6. Proposed fire protection of all structures
 - **As of September 16, 2010 all new construction of one and two family homes are required to be sprinkled in compliance with NFPA 13D. This is required by City Code. (NFPA 101 2009 ed.)**
7. Hydrant locations

June 12, 2013

Re: Hillcrest Avenue
Portland, Maine

To Whom It May Concern:

Tim Higgins authorizes Gorrill-Palmer Consulting Engineers, Inc. to execute land development permit applications on behalf of Higgins Builders for the referenced project.

If you have any questions or if I can be of any further assistance, please contact me.

Very truly yours,



[Your Title]

Owner-Builder.

WARRANTY DEED
Joint Tenancy
Maine Statutory Short Form

KNOW ALL PERSONS BY THESE PRESENTS, That

Elma E. Marzilli

of 22 Hillcrest Avenue, Portland, ME 04102

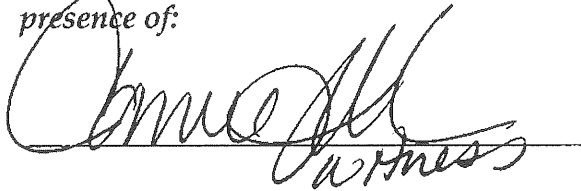
for consideration paid, grant to **Higgins Builders, Inc.**

of P.O. Box 8142, Portland, ME 04104

with **warranty covenants**, as joint tenants the land in the City of Portland , County of Cumberland, and State of Maine, described on the attached **EXHIBIT A**.

WITNESS our/my hand(s) and seal(s) this 29th day of May, 2013.

*Signed, Sealed and Delivered in
presence of:*




Elma E. Marzilli

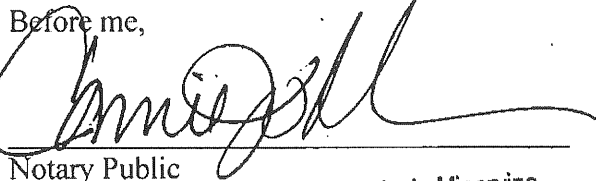
MAINE REAL ESTATE TAX PAID

STATE OF MAINE

May 29, 2013

COUNTY OF *Cumberland*

Then personally appeared the above named Elma E. Marzilli and acknowledged the foregoing instrument to be her free act and deed.

Before me,


Notary Public

Printed Name: _____

Connie Jo Minervino
Notary Public, Maine

My Commission Expires: _____

My Commission Exp. 12/29/2014

Exhibit A

Doc#: 30028 Bk:30684 Pg: 46

A certain lot or parcel of land, situated in the City of Portland, in the County of Cumberland and State of Maine, bounded and described as follows:

Beginning at the point of intersection of the northerly side line of Hillcrest Avenue with the southwesterly side line of Meriline Avenue;

Thence southwesterly along said northerly side line of Hillcrest Avenue, two hundred thirteen and one tenth (213.1) feet to the northeasterly side line of Philbrick Avenue;

Thence northwesterly along said northeasterly side line of Philbrick Avenue, seventy-nine and five tenth (79.5) feet to a point;

Thence in a northeasterly direction, one hundred eighty and nine tenths (180.9) feet to a point on the southwesterly side line of Meriline Avenue, one hundred fifty-three and sixty-two hundredths (153.62) feet northwesterly, measured along said southwesterly sideline of Meriline Avenue, from the point of beginning;

Thence southeasterly along said southwesterly side line of Meriline Avenue, one hundred fifty-three and sixty-two hundredths (153.62) feet to the point of beginning.

Excepting from the above described premises, the following described land in Portland, County of Cumberland and State of Maine, described as follows:

Beginning one hundred eleven and one tenth (111.1) feet from the point of intersection of the northerly side line of Hillcrest Avenue with the southwesterly side line of Meriline Avenue;

Thence southwesterly along said northerly side line of Hillcrest Avenue, one hundred two (102.0) feet to the northeasterly side line of Philbrick Avenue;

Thence northwesterly along said northeasterly side line of Philbrick Avenue, seventy-nine and five tenths (79.5) feet to a point;

Thence in a northeasterly direction, one hundred two (102.0) feet to a point on the southwesterly corner of land now or formerly owned by said Antonio Marzilli and Elma E. Marzilli, one hundred fourteen and five tenths (114.5) feet northwesterly, measured along said southwesterly sideline of said Marzilli land, from the point of beginning;

Thence southeasterly along said southwesterly side line of Meriline Avenue, one hundred fourteen and five tenths (114.5) feet to the point of beginning.

Reference is hereby made to a f Warranty Deed from Glenwood Square Community Club to; Antonio Marzilli and Elma E. Marzilli, dated August 24, 1964, and recorded August 25, 1964, in Book 2846, Page 375 in the Cumberland County Registry of Deeds. Antonio Marzilli died January 13, 2005 leaving Elma E. Marzilli as surviving joint tenant.

Received
Recorded Register of Deeds
May 30, 2013 10:09:23A
Cumberland County
Pamela E. Lovley

E.E.M.



June 13, 2013

Gorrill-Palmer Consulting Engineers, Inc.
15 Shaker Road
Gray, ME 04039

RE: Project at Hillcrest Avenue, Portland


To Whom It May Concern,

Tim Higgins of 48 Ocean Street SP LLC has an established relationship with Gorham Savings Bank and has been a paid as agreed customer. Based on the information provided to the Bank, he has the financial capacity to complete the project at Hillside Avenue in Portland. A commitment if issued would be subject to full underwriting of the request.

If you have any further questions, I can be reached at 207-222-1499.

Sincerely,

A handwritten signature in cursive script that reads "Kimberly A. Donnelly".

Kimberly A. Donnelly 
VP, Director of Business Banking

James Attianese

From: Al Palmer
Sent: Thursday, June 13, 2013 8:48 AM
To: James Attianese
Subject: FW: Waiver Request - Hillcrest Ave
Attachments: David Margolis-Pineo.vcf; ATT00001.htm

From: Doug Reynolds
Sent: Wednesday, May 08, 2013 2:14 PM
To: Al Palmer
Subject: Fwd: Waiver Request - Hillcrest Ave

Fyi

Sent from my iPhone

Begin forwarded message:

From: David Margolis-Pineo <DMP@portlandmaine.gov>
Date: May 8, 2013 2:13:03 PM EDT
To: Doug Reynolds <DReynolds@gorrillpalmer.com>, "Tim Higgins(timahiggins@live.com)" <timahiggins@live.com>
Cc: Barbara Barhydt <BAB@portlandmaine.gov>, Jeremiah Bartlett <JBartlett@portlandmaine.gov>, Michael Bobinsky <mbobinsky@portlandmaine.gov>, Philip DiPierro <PD@portlandmaine.gov>, Tom Errico <thomas.errico@tylin.com>
Subject: Waiver Request - Hillcrest Ave

Tim and Doug,

City staff has reviewed your waiver request to eliminate the sidewalk and curbing on Hillcrest Avenue as part of a proposed code 14-403 street extension.

After extensive review, staff is in agreement that you have met the sidewalk and curbing waiver requirement.

If you chose to continue your project and extend Hillcrest Ave under the requirements of code section 14-403, please be sure to provide a grading and drainage plan as well as all of the other necessary requirements.

Good luck with your project. If you have any questions, please contact me.

David Margolis-Pineo
Deputy City Engineer

April 30, 2013

Barbara Barhydt
Development Review Services Coordinator
Portland Planning Division
4th Floor, Portland City Hall
389 Congress Street
Portland, Maine 04101

Subject: Hillcrest Avenue
Sidewalk & Curbing Waiver Request

Dear Barbara,

Gorrill-Palmer has been retained by Tim Higgins to evaluate the development of four parcels at the intersection of Hillcrest Avenue and Meriline Avenue in Portland as a single family residence. Hillcrest and Meriline Avenues are not accepted city streets, however an existing 16 foot gravel travel way exists within the right-of-way. The parcels to be developed are historical lots 337 – 340, comprising of approximately 0.30 acres, as shown on the attached boundary plan.

Based upon discussions with City Staff to date, development of this lot will require improvement of the roadway frontage per Ordinance Section 14-403 to meet the City Technical Standards. To meet this section of the Ordinance, approximately 140 feet of 28 foot wide roadway would be required to be constructed.

As discussed in a meeting with Staff, construction of a full width section of roadway with sidewalks and curbing would be cost prohibitive to the development of this parcel. Staff recommended that the applicant could apply for the waiver of the sidewalk and curbing based upon Ordinance Section 14-506 Modifications prior to development of plans for the roadway or house construction. Based upon this recommendation, this letter is intended to provide information to support the waiver request to eliminate sidewalk and curbing on Hillcrest Avenue.

Ordinance Section 14-506 (b) states that the planning authority may waive the sidewalk and curbing if the application meets two of the requirements listed.

Ms. Barbara Barhydt
April 30, 2013
Page 2 of 3

Sidewalk:

Section 14-506 (b).Sidewalk.1 There is no reasonable expectation for pedestrian usage coming from, going to and traversing the site.

At this time, only four additional residences are located beyond the subject lot. As there are only a limited number of residences beyond the proposed lot, it is not anticipated that significant pedestrian traffic would be using sidewalks that would be constructed. It is noted that access to the Portland Trail is located at the end of Hillcrest Avenue. A parking area is located at the trail access, thereby further reducing the potential for pedestrian usage.

Section 14-506 (b).Sidewalk.3 A safe alternative-walking route is reasonably and safely available, for example, by way of a sidewalk on the other side of the street that is lightly traveled.

As mentioned above, only four additional residences are located beyond the subject property. It is that applicant's opinion that due to the very limited vehicular traffic on the roadway, a safe alternative walking route would be within the 28' wide roadway within the right-of-way.

Curbing:

Section 14-506 (b).Curbing.1. The cost to construct the curbing, including any applicable street opening fees, is in excess for 5% of the overall project cost.

Based upon the provided preliminary opinion of cost, attached, the total cost to construct the roadway with curb is approximately \$26,627, of which \$8,843 would be granite curb. The curbing would be approximately 33.2% of the project cost, which is greater than 5% of the project cost.

Section 14-506 (b).Curbing.5. Runoff from the development site or within the street does not require curbing for stormwater management.

The topography of Hillcrest Avenue in this area flows generally from the south to the north, toward the proposed house lot. The lot directly across from the proposed lot is developed as a single family home. Introduction of curbing along the frontage

Ms. Barbara Barhydt
April 30, 2013
Page 3 of 3

of this lot would create the potential for ponding along the frontage of the lot, due to the fact that the existing lawn drains toward the roadway and is level with the existing gravel road.

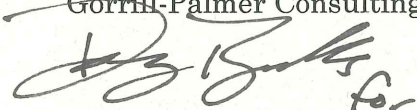
As mentioned previously, the flow is directed toward the frontage of the parcel to be developed. Drainage across the roadway is directed into the parcel and the house lot would be graded to allow the flow to continue to the rear of the lot. Introduction of curbing on development parcel side of the roadway would direct flow in a westward direction toward the end of Hillcrest Avenue. The existing gravel roadway beyond the project limits does not have any ditching along the north side of the roadway and would not provide any outlet for the roadway water. It is the applicants opinion that curbing would not be necessary for drainage and would serve to reduce the ability to disconnect the impervious surface associated with the proposed pavement. Nationally, a focus for stormwater treatment in impaired watersheds is to disconnect impervious surface and allow it to flow across a pervious surface such as a lawn to allow infiltration, filtering and treatment of the flow. Installation of the curbing in this instance would serve to reduce opportunities for treatment.

It is the applicants' opinion that this project meets the minimum of two waiver requirements for both sidewalk and curbing and looks forward to Staff's review of this letter.

Please feel free to contact our office with any questions.

Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.



Alton M. Palmer, P.E.
Senior Vice President

Enclosure

Copy: Mr. David Margolis-Pineo, Portland DPS
Mr. Tim Higgins

7/29/13

unaccepted paper street.

LEVEL I: SITE ALTERATION

HUGGESS 14-403. 150

	Standards	Preliminary Plan	1 st Revision
Transportation	1. Impact on street system		WEB - cost - not a school walking route?
	2. Access & Circulation	no curbing?] PMP granted 5/8/13 no SW?	SW - safe alternative exist? no reasonable expectation??
	4. Parking	XXXXXXXXXX ?	
	1. Preservation of Natural Features		
Environmental	2. Landscaping & Landscape Pres (JT)	street trees in ROW? type? everything trees in ROW? - show new tree line - presence	25-3500 2 trees/unit. - treatment on SF lot.
	3. Water Quality, Storm Water Mgt, DS, Erosion Control	no street Underdrain waiver? 1, 8, 603 SF new impervium?	
	1. Consistency with Master Plans (GP)	hydrant location?	
Public Infrastructure & Comm. Safety	5. Historic Resources		
	6. Exterior Lighting	no street lights (every 120' on blk)	
Site Design	8. Signage and Wayfinding		
	9. Zoning Related Design Standards	N/A.	

General standards? 70' - no street trees - cut first w/ curable
no streetlights req. (990SF)
↳ concrete - waived b/c Δ in imp < 1KSF
(level 1) + to result in adopted ROW

VUElectronic?

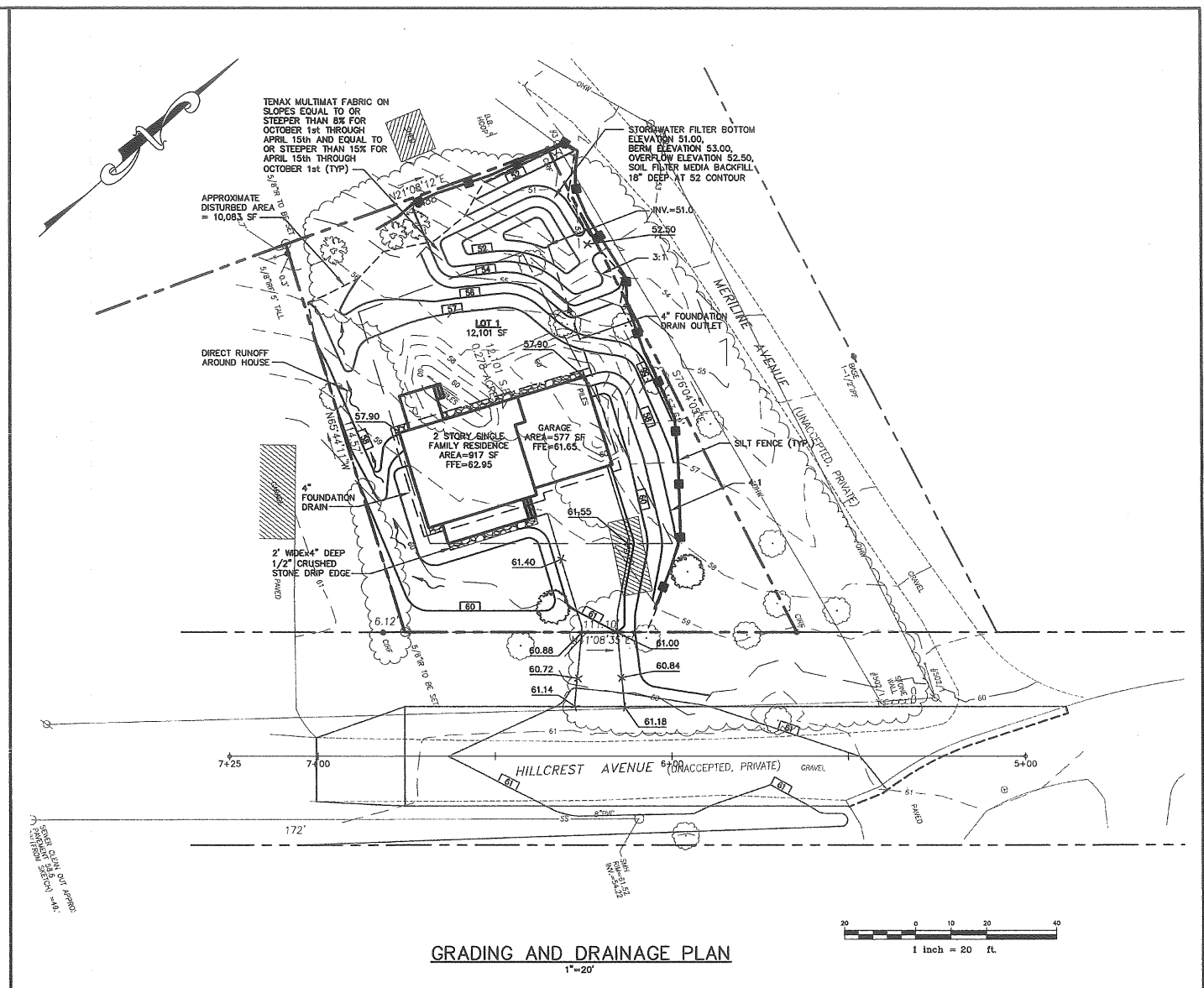
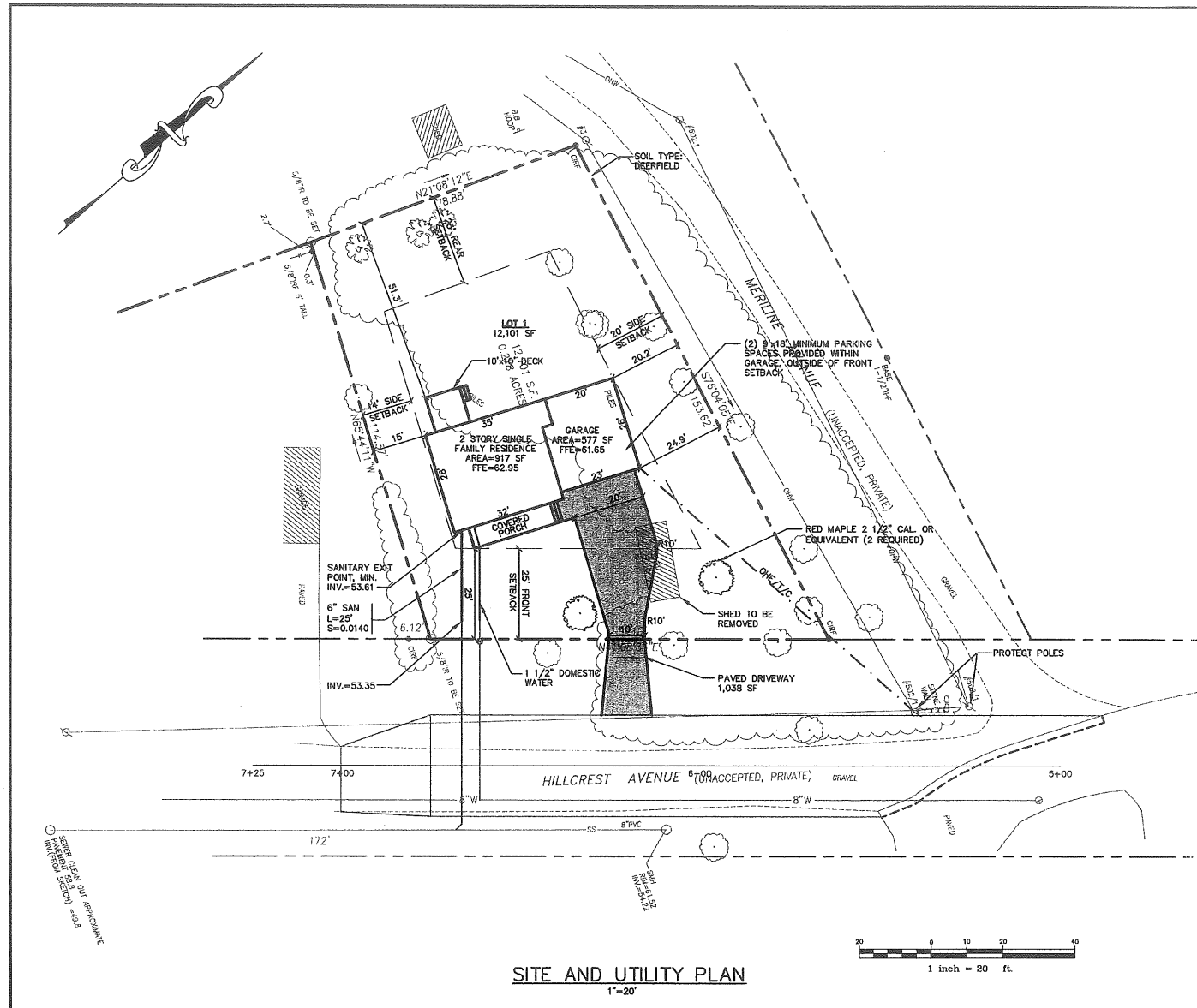
MISSING:

Memorandum
 Department of Planning and Urban Development
 Pre-Application Meeting Request



To request a pre-application meeting please fill out the form below with as much detail as possible. Return the form along with any electronic drawings or supporting documentation via e-mail to Desiree Kelly, dmk@portlandmaine.gov. Two 30 minute meetings will be scheduled each Wednesday from 12:00-1:00 p.m. in Room 209, 2nd Floor of City Hall. These meetings are by appointment only and can be scheduled by Desiree Kelly at the e-mail address above or by telephone 207-874-8720.

Contact Information	
Name:	Tim Higgins
E-Mail Address:	timahiggins@live.com
Phone:	207-838-5870
Proposed Project Information	
Chart, Block, Lot (s)	260 C018001
Address	25 Hillcrest Avenue
Current Use	Undeveloped
Proposed Use	Single Family House
Lot Size	Approx. 12,000 sf
New Building or Addition Sq. Ft.	Floor Area Approx. 1,100 sf
New impervious surface area	Approx. 3,500 sf
Brief description of proposed project:	
Development of a single family home on an improved but not permanently paved street.	
For Office Use Only	Date: April 17th
Time: 12:30	



SPACE AND BULK REQUIREMENTS - R3 ZONE

MINIMUM LOT SIZE:	6,500 S.F.
MINIMUM FRONTAGE:	50 FT.
MINIMUM SETBACKS:	
FRONT YARD	25 FT.
REAR YARD	25 FT.
SIDE YARD*	
1 STORY	8 FT.
1 1/2 STORY	8 FT.
2 STORY	14 FT.
2 1/2 STORY	16 FT.
SIDE YARD ON SIDE STREET	20 FT.
MAXIMUM LOT COVERAGE:	35% OF LOT AREA
MINIMUM LOT WIDTH:	65 FT.
MAXIMUM STRUCTURE HEIGHT:	35 FT.

* THE WIDTH OF ONE (1) SIDE YARD MAY BE REDUCED ONE (1) FOOT FOR EVERY FOOT THAT THE OTHER SIDE YARD IS CORRESPONDINGLY INCREASED, BUT NO SIDE YARD SHALL BE LESS THAN EIGHT (8) FEET IN WIDTH.

GRADING AND DRAINAGE NOTES:

- ALL DISTURBED AREAS THAT ARE NOT PAVED SHALL RECEIVE 4" LOAM & SEED.
- COMMON BORROW SHALL MEET MDOT SPECIFICATION 703.18.
- THE GRADING AND DRAINAGE SYSTEM ON THE PROPERTY SHALL BE CONSTRUCTED AND LOCATED AS DEPICTED ON THE APPROVED SITE PLAN AND SAID GRADING AND DRAINAGE SYSTEM SHALL NOT BE MODIFIED WITHOUT FURTHER APPROVAL FROM THE PLANNING AUTHORITY.

GENERAL NOTES

- TOPOGRAPHIC DATA AND EXISTING CONDITIONS ARE BASED UPON A GROUND SURVEY CONDUCTED BY OWEN HASKELL, INC. ON MAY 24, 2013.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- MAINTENANCE OF EROSION CONTROL MEASURES IS OF PARAMOUNT IMPORTANCE TO THE OWNER AND THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTIONS OF THE OWNER OR THEIR REPRESENTATIVES AT NO ADDITIONAL COST TO THE OWNER.
- ALL WATER UTILITY MATERIALS AND INSTALLATION METHODS SHALL CONFORM TO PORTLAND WATER DISTRICT STANDARDS. DISINFECTION OF WATER LINES SHALL CONFORM TO AWWA STANDARD C651, LATEST REVISION.
- ALL SEWER MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
- ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, AND CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
- LOT OWNER IS RESPONSIBLE FOR LAYOUT AND EXTENSION OF ELECTRIC SERVICE, COORDINATE WITH CMP.
- THE LOT SHALL BE PROVIDED WITH AT LEAST TWO (2) TREES MEETING THE CITY'S ARBORICULTURE SPECIFICATIONS AND WHICH ARE CLEARLY VISIBLE FROM THE STREET LINE AND ARE LOCATED 50 AS TO VISUALLY WIDEN THE NARROW DIMENSION OR PROPORTION OF THE UNIT.
- SEWER AND WATER SERVICES SHALL BE INSTALLED BY THE DEVELOPER 5' INTO THE PROPERTY. CONNECTION TO THE HOUSE WILL BE THE RESPONSIBILITY OF THE LOT OWNER.
- EQUIVALENT STREET TREE SHALL INCLUDE RETENTION OF EXISTING TREES OF SAME OR GREATER CALIPER.
- ALL WORK SHALL BE DONE IN CONFORMANCE WITH THE CITY OF PORTLAND TECHNICAL STANDARDS, SECTION VII EROSION AND SEDIMENTATION CONTROL STANDARDS FOR SINGLE AND TWO FAMILY HOMES.
- ANY CURBING REMOVED WITHIN THE RIGHT-OF-WAY IS THE PROPERTY OF THE CITY OF PORTLAND AND SHALL BE DELIVERED TO THE PUBLIC WORKS FACILITY ON OUTER CONGRESS STREET.
- SOIL TYPE: DeB

STORMWATER FILTER:

THE SOIL FILTER WILL BE INSPECTED WITHIN THE FIRST THREE MONTHS AFTER CONSTRUCTION; THEREAFTER THE FILTER WILL BE INSPECTED 2 TIMES PER YEAR (PREFERABLY IN SPRING AND FALL) TO ENSURE THAT THE FILTER IS DRAINING WITHIN 24 TO 48 HOURS OF A RAIN EVENT EQUIVALENT TO 1" OR MORE. FAILURE TO DRAIN IN 72 HOURS WILL REQUIRE PART OR ALL OF THE SOIL FILTER MEDIA TO BE REMOVED AND REPLACED WITH NEW MATERIAL MEETING THE SOIL FILTER GRADATION. THE FACILITIES WILL BE INSPECTED AFTER MAJOR STORMS AND ANY IDENTIFIED DEFICIENCIES WILL BE CORRECTED. HARVESTING AND WEEDING OF EXCESSIVE GROWTH SHALL BE PERFORMED AS NEEDED. INSPECT FOR UNWANTED OR INVASIVE PLANTS AND REMOVE AS NECESSARY.

ROOFLINE DRIP STRIP:

THE FACILITIES WILL BE INSPECTED AFTER MAJOR STORMS AND ANY IDENTIFIED DEFICIENCIES WILL BE CORRECTED. INSPECT FOR UNWANTED OR INVASIVE PLANTS AND REMOVE AS NECESSARY. REMOVE DEBRIS FROM THE SURFACE.

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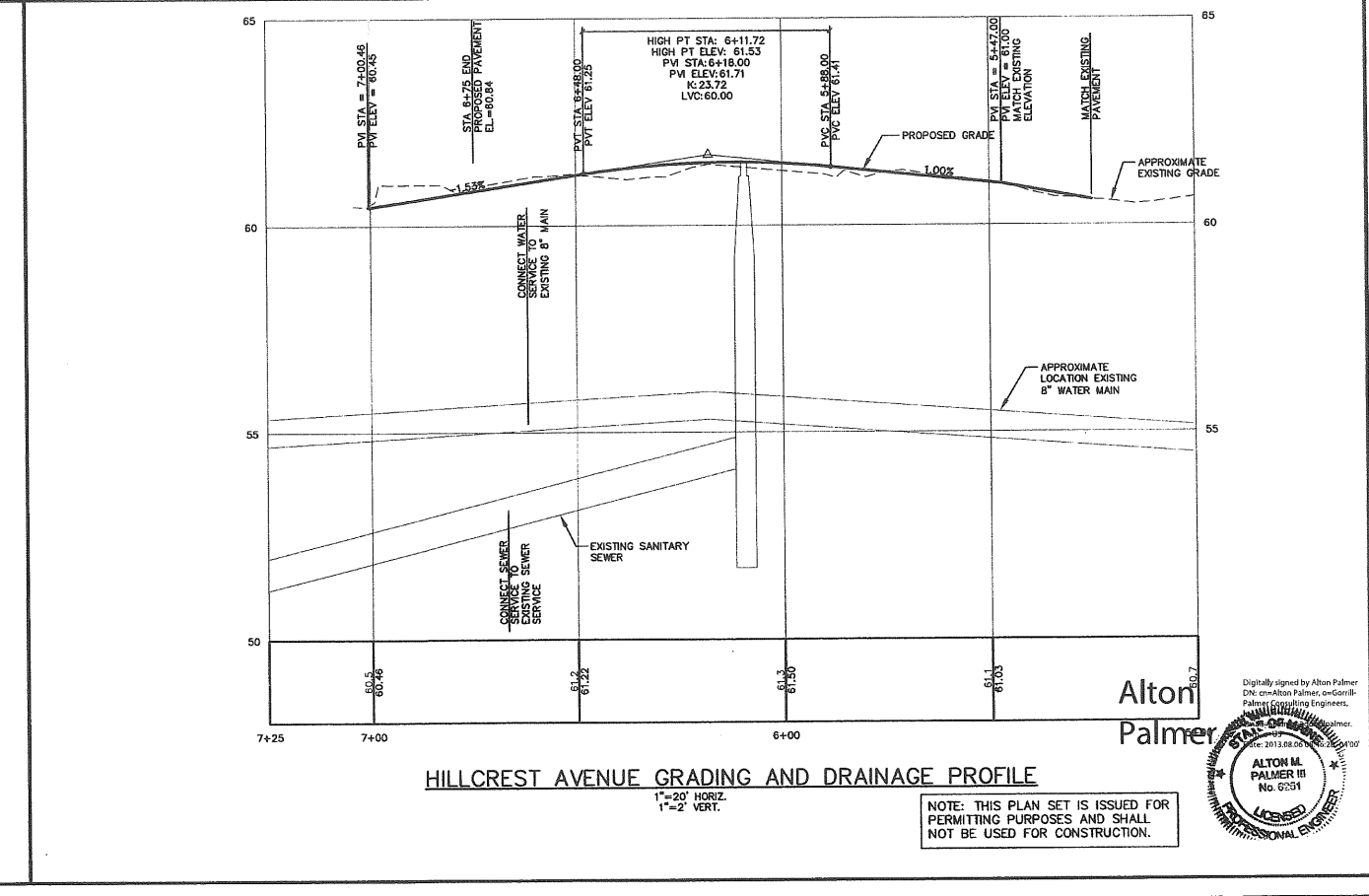
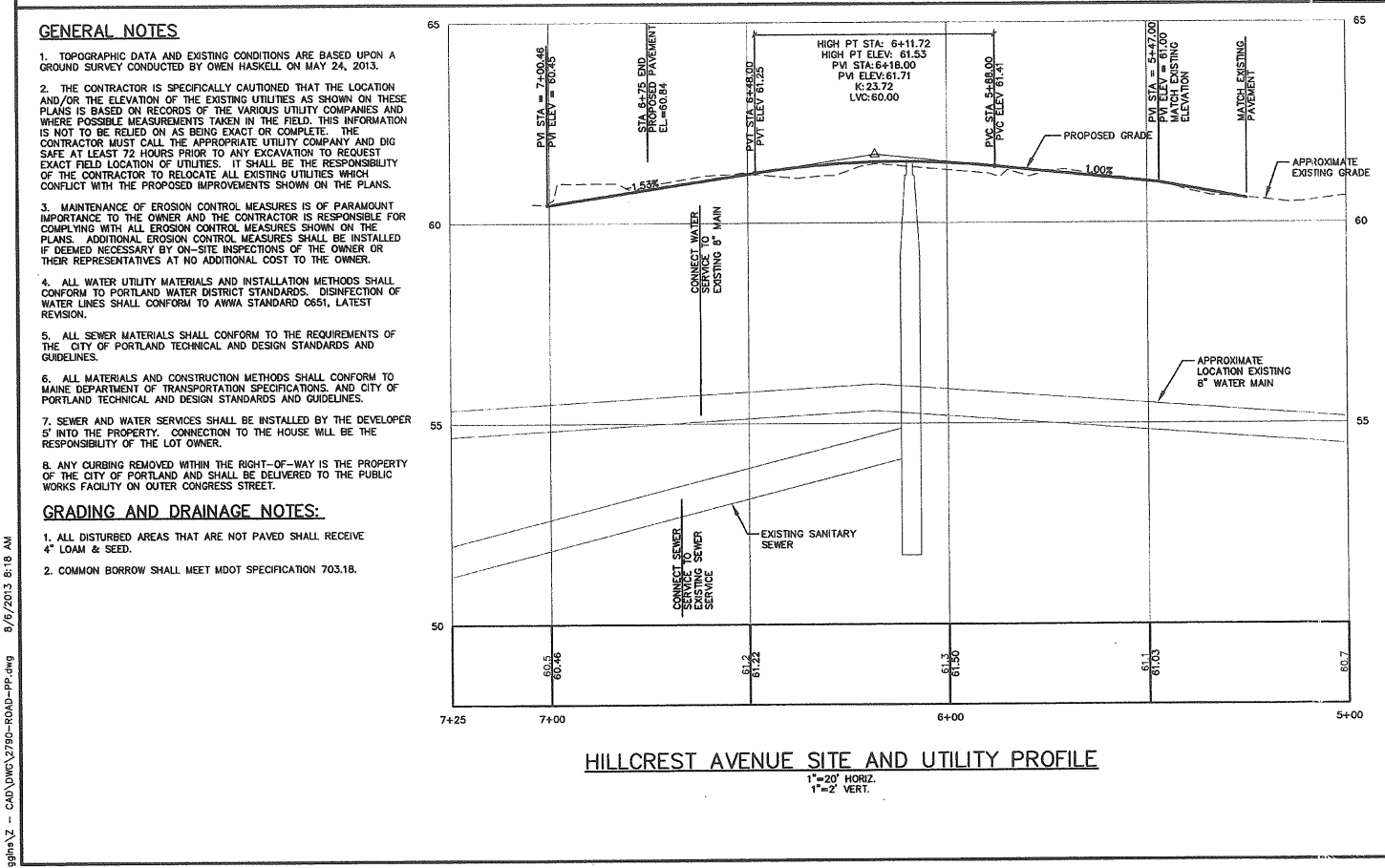
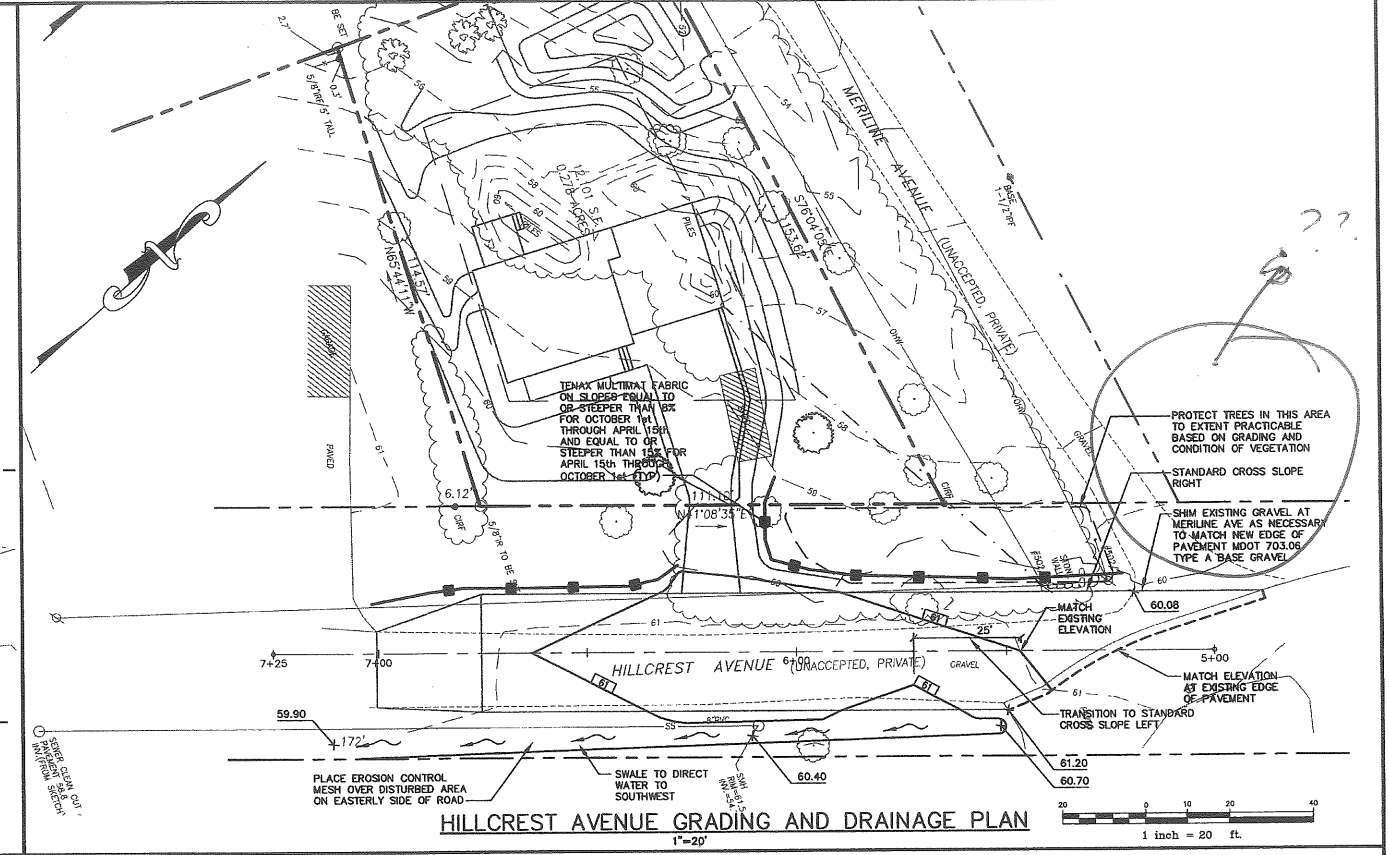
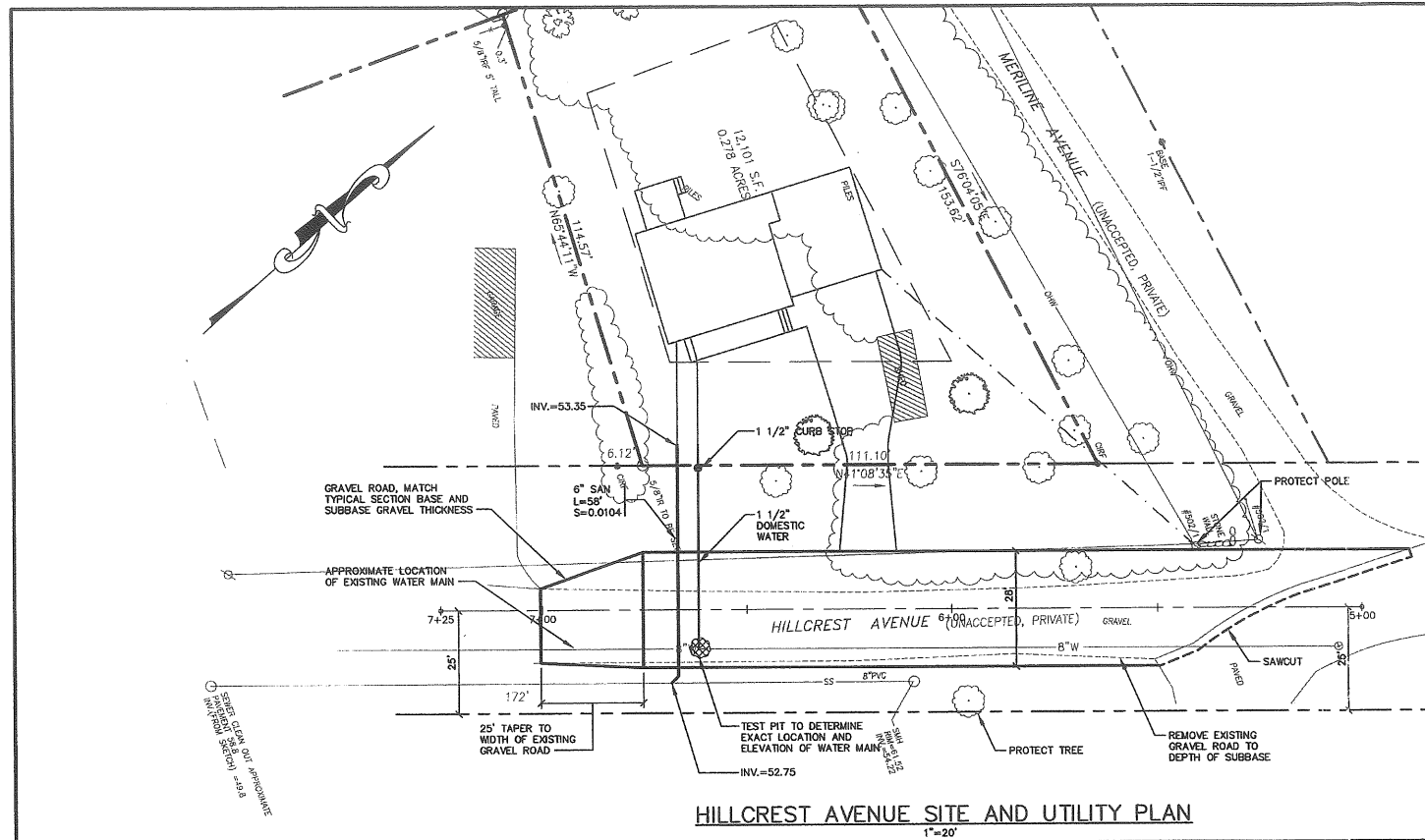
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MUNICIPAL REVIEW	8/1/13	AMP
Issued For	7/8/13	AMP

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Drawing Name:	Site, Utility, Grading and Drainage Plans
Project:	Hillcrest Avenue Single Family Residence Portland, Maine
Client:	Timothy Higgins 83 Bay Street, Portland Maine 04104

Drawing No.	1
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GENERAL NOTES

- TOPOGRAPHIC DATA AND EXISTING CONDITIONS ARE BASED UPON A GROUND SURVEY CONDUCTED BY OWEN HASKELL ON MAY 24, 2013.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- MAINTENANCE OF EROSION CONTROL MEASURES IS OF PARAMOUNT IMPORTANCE TO THE OWNER AND THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTIONS OF THE OWNER OR THEIR REPRESENTATIVES AT NO ADDITIONAL COST TO THE OWNER.
- ALL WATER UTILITY MATERIALS AND INSTALLATION METHODS SHALL CONFORM TO PORTLAND WATER DISTRICT STANDARDS. DISINFECTION OF WATER LINES SHALL CONFORM TO AWWA STANDARD C651, LATEST REVISION.
- ALL SEWER MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
- ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, AND CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
- SEWER AND WATER SERVICES SHALL BE INSTALLED BY THE DEVELOPER 5' INTO THE PROPERTY. CONNECTION TO THE HOUSE WILL BE THE RESPONSIBILITY OF THE LOT OWNER.
- ANY CURBING REMOVED WITHIN THE RIGHT-OF-WAY IS THE PROPERTY OF THE CITY OF PORTLAND AND SHALL BE DELIVERED TO THE PUBLIC WORKS FACILITY ON OUTER CONGRESS STREET.

GRADING AND DRAINAGE NOTES:

- ALL DISTURBED AREAS THAT ARE NOT PAVED SHALL RECEIVE 4" LOAM & SEED.
- COMMON BORROW SHALL MEET MDOT SPECIFICATION 703.1B.

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ISSUED FOR	7/8/13	AMP

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 Checked: AMP Scale: 1"=20' Job No.: 2790
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Drawing Name: **Hillcrest Avenue Plan and Profile**
 Project: **Hillcrest Avenue**
 Portland, Maine
 Client: **Timothy Higgins**
 83 Bay Street, Portland Maine 04104

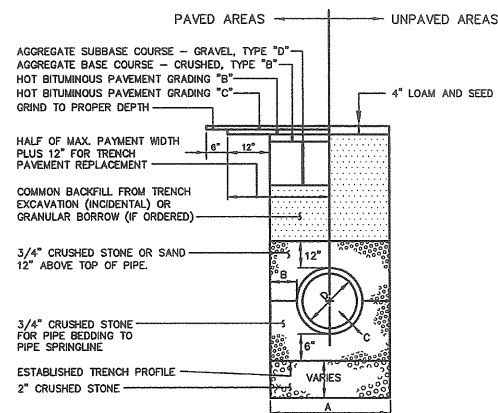
Drawing No. **2**

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Alton Palmer
 Digitally signed by Alton Palmer
 DN: cn=Alton Palmer, o=Corril-Palmer Consulting Engineers, ou=Portland, st=ME, email=alton@corrilpalmer.com, c=US
 Date: 2013.08.06 10:07
 ALTON M. PALMER III
 No. 07531
 LICENSED PROFESSIONAL ENGINEER

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NOTES:
DEPTH OF BITUMINOUS PAVEMENT AND AGGREGATE COURSES SHALL BE DETERMINED BY STREET CLASSIFICATION.
ANY ALTERNATE TRENCHING OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY OF PORTLAND, DEPARTMENT OF PUBLIC SERVICES.



NOTES:

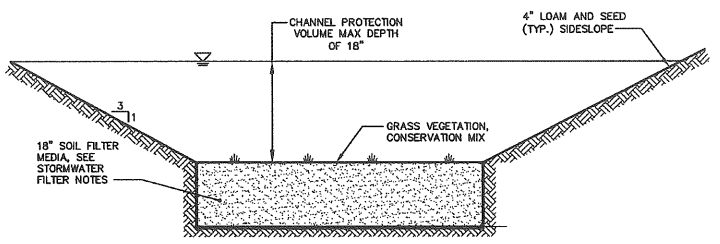
- ALTERNATIVE CONSTRUCTION METHODS OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY.
- IN PAVED AREAS, DEPTHS OF GRAVEL AND HOT MIX ASPHALT PAVEMENT SHALL MATCH THE GREATER OF EXISTING CONDITIONS OR THE REQUIREMENTS FOR THE CORRESPONDING STREET CLASSIFICATION.
- DIMENSION B SHALL BE SUFFICIENT TO ALLOW CRUSHED STONE BEDDING TO BE PLACED AND COMPACTED UNDER THE HAUNCHES OF THE PIPE, BUT IN ALL CASES DIMENSION B SHALL BE AT LEAST 9".
- DIMENSION A IS THE MAXIMUM WIDTH ALLOWED FOR CALCULATING PAY QUANTITIES UNDER GRANULAR BORROW, CRUSHED STONE, STRUCTURAL EARTH EXCAVATION, AND STRUCTURAL ROCK EXCAVATION. DIMENSION A SHALL BE BASED ON PIPE DIAMETER D, AS SET FORTH IN THE FOLLOWING TABLE.

PIPE DIAMETER, D (INCHES)	MAX. TRENCH WIDTH (FEET)
4	4.0
6	4.0
8	4.0
10	4.0
12	5.0
15	5.0
18	5.0
21	5.0
24	6.0
27	6.0
30	6.0
36	6.0
42	7.0
48	7.0

TYPICAL PIPE TRENCH INSTALLATION
NOT TO SCALE

STORMWATER FILTER NOTES:

- SOIL SPECIFICATIONS:
- THE SOIL FILTER MEDIA SHALL BE A LAYERED SYSTEM CONSISTING OF THE FOLLOWING FROM THE BOTTOM:
 - 12" OF LOAMY COARSE SAND, SEE TABLE 1.
 - 2" LAYER OF TOPSOIL (SEE "C" BELOW) ROTOTILLED INTO THE LOAMY COARSE SAND LAYER.
 - 6" OF NON-CLAYEY, LOAMY TOPSOIL, SUCH AS USDA SANDY LOAM TOPSOIL WITH 5-8% HUMIFIED ORGANIC MATTER. SUPERHUMUS OR EQUIVALENT MAY BE ADDED TO THE TOPSOIL TO INCREASE ORGANIC CONTENT, SEE TABLE 3.
 - SOIL FILTER MEDIA MIXTURE SHALL HAVE A PERMEABILITY OF 2.4 IN./HR. TO 4 IN./HR UPON COMPACTION BETWEEN 90% AND 92% STANDARD PROCTOR (ASTM D690).



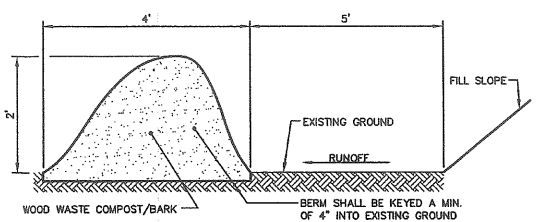
GRASS VEGETATION	
CREeping RED FESCUE	20 LBS/ACRE
TALL FESCUE	20 LBS/ACRE
BIRDFOOT TREEFOIL	8 LBS/ACRE

STORMWATER FILTER DETAIL
NOT TO SCALE

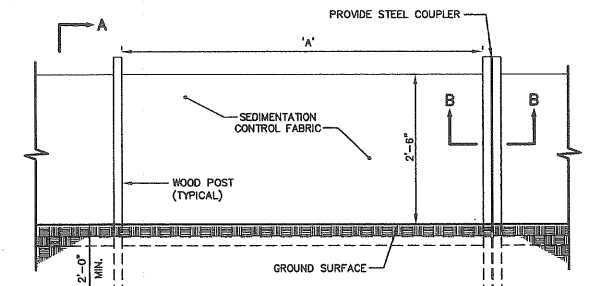
SIEVE SIZE	% PASSING BY WEIGHT
#10	85-100
#20	70-100
#60	15-40
#200	8-15
#200 CLAY SIZE	<2.0

SIEVE SIZE	% PASSING BY WEIGHT
#4	75-95
#10	60-90
#40	35-85
#200	20-70
#200 CLAY SIZE	<2.0

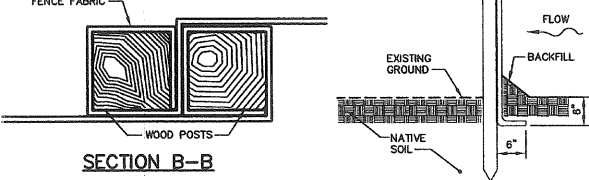
- NOTES:
- THE WOOD WASTE COMPOST/BARK MIX SHALL CONFORM TO THE FOLLOWING STANDARDS:
 - MOISTURE CONTENT - 30-60%
 - pH - 5.0 - 8.0
 - SCREEN SIZE - 100% LESS THAN 3", MAX. 70% LESS THAN 1".
 - NO LESS THAN 40% ORGANIC MATERIAL (DRY WEIGHT) BY LOSS OF IGNITION.
 - NO STONES LARGER THAN 2" IN DIAMETER.
 - SILTS, CLAYS OR SUGAR SANDS ARE NOT ACCEPTABLE IN THE MIX.
 - THE COMPOST BERM SHALL BE PLACED, UNCOMPACTED, ALONG A RELATIVELY LEVEL CONTOUR.
 - THE WOOD WASTE COMPOST/BARK FILTER BERM MAY BE USED IN LIEU OF SILTATION FENCE, AT THE TOE OF SHALLOW SLOPES, ON FROZEN GROUND, LEDGE OUT CROPS, VERY ROOTED FORESTED AREA OR AT THE EDGE OF GRAVEL PARKING AREAS.
 - BERMS SHALL REMAIN IN PLACE UNTIL UPSTREAM AREA IS COMPLETED OR 70% CATCH OF VEGETATION IS ATTAINED. BERMS SHALL BE REMOVED BY SPREADING SUCH THAT NATIVE EARTH CAN BE SEEN BELOW.
 - WOODWASTE COMPOST BARK FILTER SHALL NOT BE USED IN WETLAND AREAS.



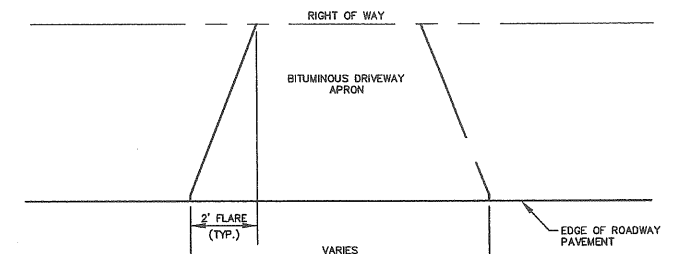
WOOD WASTE COMPOST/BARK FILTER BERM DETAIL
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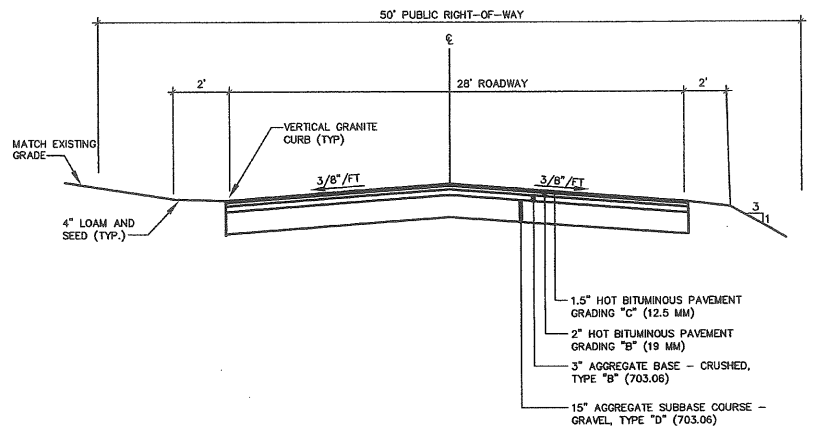
SILT FENCE	
SILT FENCE REINFORCEMENT	MAXIMUM SPACING "A"
NONE	6"
WIRE REINFORCEMENT	10"
14 GAUGE, 6" MESH	



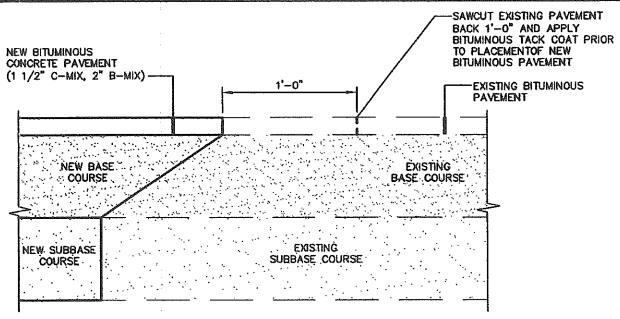
SECTION B-B
SECTION A-A
SILTATION FENCE
NOT TO SCALE



DRIVEWAY APRON LAYOUT DETAIL
NOT TO SCALE

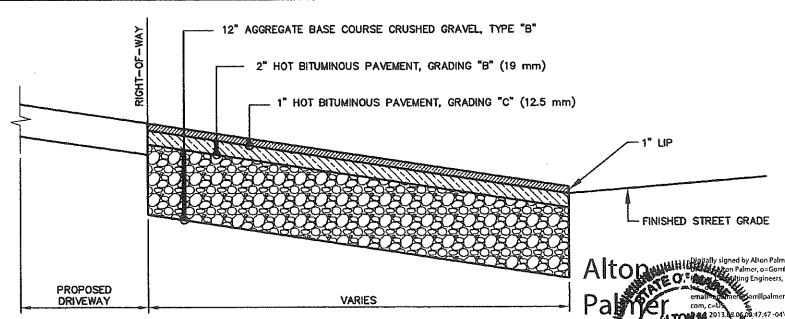


TYPICAL LOCAL RESIDENTIAL STREET
NOT TO SCALE



PAVEMENT SAWCUT
NOT TO SCALE

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BITUMINOUS DRIVEWAY APRON
NOT TO SCALE

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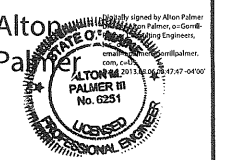
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Project: **Hillcrest Avenue**
Portland, Maine
Client: **Timothy Higgins**
83 Bay Street, Portland Maine 04104

Drawing No.
3



14.3.5 EROSION CONTROL MEASURES AND SITE STABILIZATION

THE PRIMARY EMPHASIS OF THE EROSION/SEDIMENTATION CONTROL PLAN, WHICH WILL BE IMPLEMENTED FOR THIS PROJECT, IS AS FOLLOWS:

- DEVELOPMENT OF A CAREFUL CONSTRUCTION SEQUENCE.
RAPID REVEGETATION OF DENuded AREAS TO MINIMIZE THE PERIOD OF SOIL EXPOSURE.
RAPID STABILIZATION OF DRAINAGE PATHS TO AVOID RILL AND GULLY EROSION.
THE USE OF ON-SITE MEASURES TO CAPTURE SEDIMENT (HAY BALES/ STONE CHECK DAMS/SILT FENCE, ETC.)

THE FOLLOWING TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL DEVICES WILL BE IMPLEMENTED AS PART OF THE SITE DEVELOPMENT. THESE DEVICES SHALL BE INSTALLED AS INDICATED ON THE PLANS OR AS DESCRIBED WITHIN THIS REPORT. FOR FURTHER REFERENCE, SEE THE LATEST EDITION OF THE MAINE EROSION AND SEDIMENT CONTROL BMPs.

A. DETAILED AND SPECIFICATIONS

WATER FROM CONSTRUCTION TRENCH DRAINAGE SHALL PASS FIRST THROUGH A FILTER BAG OR SECONDARY CONTAINMENT STRUCTURE (E.G. HAY BALE LINED POOL) PRIOR TO DISCHARGE. THE DISCHARGE SITE SHALL BE SELECTED TO AVOID FLOODING, ICING, AND SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE SHALL THE FILTER BAG OR CONTAINMENT STRUCTURE BE LOCATED WITHIN 50 FEET OF A PROTECTED NATURAL RESOURCE.

B. INSPECTION AND MONITORING

MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL IN THE SPRING INSPECT AND REPAIR ANY DAMAGES AND/OR UNESTABLISHED SPOTS. ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 90% OF AREAS VEGETATED WITH WOODED GROWTH.

C. TEMPORARY EROSION CONTROL MEASURES

THE FOLLOWING MEASURES ARE PLANNED AS TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION:

- 1. SILTATION FENCE OR WOOD WASTE COMPOST BERMS SHALL BE INSTALLED DOWNSTREAM OF ANY DISTURBED AREAS TO TRAP RUNOFF... BORNE SEDIMENTS UNTIL GRASS AREAS ARE REVEGETATED.
2. STRAW OR HAY MULCH INCLUDING HYDROSEEDING IS INTENDED TO PROVIDE COVER FOR DENuded OR SEEDED AREAS UNTIL REVEGETATION IS ESTABLISHED.
3. TEMPORARY STOCKPILES OF STUMPS, GRUBBINGS, OR COMMON EXCAVATION WILL BE PROTECTED AS FOLLOWS:
4. ALL DENuded AREAS THAT ARE WITHIN 100 FEET OF AN UNDISTURBED WETLAND, WHICH HAVE BEEN ROUGH GRADED AND ARE NOT LOCATED WITHIN A BUILDING PAD, PARKING AREA, OR ACCESS DRIVE SUBBASE AREA, SHALL RECEIVE MULCH OR EROSION CONTROL MESH...
5. FOR WORK, WHICH IS CONDUCTED BETWEEN OCTOBER 15TH AND APRIL 15TH OF ANY CALENDAR YEAR, ALL DENuded AREAS, SHALL BE COVERED WITH HAY MULCH OR EROSION CONTROL MIX.
6. POWNAL ROAD SHALL BE SWEEPED TO CONTROL MUD AND DUST AS NECESSARY.
7. DURING GRUBBING OPERATIONS STONE CHECK DAMS SHALL BE INSTALLED AT ANY EVIDENT CONCENTRATED FLOW DISCHARGE POINTS AND AS DIRECTED ON THE EROSION CONTROL PLANS.
8. SILT FENCING WITH A MINIMUM STAKE SPACING OF 6 FEET SHALL BE USED, UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT OF MINIMUM 14 GAUGE AND WITH A MAXIMUM MESH SPACING OF 6 INCHES.
9. WOOD WASTE COMPOST/BARK BERMS MAY BE USED IN LIEU OF SILTATION FENCING.
10. STORM DRAIN CATCH BASIN INLET PROTECTION SHALL BE PROVIDED THROUGH THE USE OF STONE SEDIMENT BARRIERS OR APPROVED SEDIMENT BAGS.
11. WATER AND/OR CALCIUM CHLORIDE SHALL BE FURNISHED AND APPLIED IN ACCORDANCE WITH MOOT SPECIFICATIONS - SECTION 637 - DUST CONTROL.
12. LOAM AND SEED IS INTENDED TO SERVE, AS THE PRIMARY PERMANENT REVEGETATIVE MEASURE FOR ALL DENuded AREAS NOT PROVIDED WITH OTHER EROSION CONTROL MEASURES, SUCH AS RIPRAP. APPLICATION RATES ARE PROVIDED IN THE SEEDING PLAN.

D. PERMANENT EROSION CONTROL MEASURES

THE FOLLOWING PERMANENT EROSION CONTROL MEASURES HAVE BEEN DESIGNED AS PART OF THE EROSION/SEDIMENTATION CONTROL PLAN:

- 1. ALL AREAS DISTURBED DURING CONSTRUCTION, BUT NOT SUBJECT TO OTHER RESTORATION (PAVING, RIPRAP, ETC.) WILL BE LOAMED, LIMED, FERTILIZED, MULCHED, AND SEEDED.
2. ALL STORM DRAIN PIPE OUTLETS SHALL HAVE RIPRAP APRONS AT THEIR OUTLET TO PROTECT THE OUTLET AND RECEIVING CHANNEL FROM SCOUR AND DETRIORATION.
3. CATCH BASINS SHALL BE PROVIDED WITH SEDIMENT SUMPS AND INLET HOODS (THE SNOOT) FOR ALL OUTLET PIPES THAT ARE 18" IN DIAMETER OR LESS.

14.4 IMPLEMENTATION SCHEDULE

THE FOLLOWING GENERAL CONSTRUCTION SEQUENCE SHALL BE REQUIRED FOR EACH PHASE OF CONSTRUCTION TO INSURE THE EFFECTIVENESS OF THE EROSION AND SEDIMENTATION CONTROL MEASURES ARE OPTIMIZED (CERTAIN ITEMS IN THE SEQUENCE SUCH AS CURBING, ETC. MAY NOT BE INCLUDED IN EACH PHASE, AND THEREFORE WOULD NOT APPLY AS THE CASE MAY BE).

NOTE: FOR ALL GRADING ACTIVITIES, THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION NOT TO OVEREXPOSE THE SITE, THIS SHALL BE ACCOMPLISHED BY LIMITING THE DISTURBED AREA.

- 1. INSTALL PERIMETER SILT FENCE AND/OR WOOD WASTE BERMS PRIOR TO GRUBBING RESPECTIVE AREAS.
2. CLEAR AND GRUB SITE. INSTALL STONE CHECK DAMS AT ANY EVIDENT CONCENTRATED FLOW DISCHARGE POINTS.
3. COMMENCE INSTALLATION OF DRAINAGE APPURTENANCES AND UTILITY SERVICES.
4. COMMENCE EARTHWORK AND GRADING TO SUBGRADE.
5. COMPLETE REMAINING EARTHWORK OPERATIONS.
6. COMPLETE INSTALLATION OF DRAINAGE SYSTEM AND APPURTENANCES.
7. INSTALL SUB-BASE AND BASE GRAVEL.
8. INSTALL BASE COURSE PAVING.
9. LOAM, LIME, FERTILIZE, SEED AND MULCH DISTURBED AREAS AND COMPLETE ALL LANDSCAPING.
10. INSTALL SURFACE COURSE PAVING.
11. ONCE THE SITE IS STABILIZED AND A 90% CATCH OF VEGETATION HAS BEEN OBTAINED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.
12. TOUCH UP LOAM AND SEED.

NOTE: ALL DENuded AREAS NOT SUBJECT TO FINAL PAVING, RIPRAP, OR GRAVEL SHALL BE REVEGETATED.

PRIOR TO CONSTRUCTION OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT TO THE OWNER A SCHEDULE FOR THE COMPLETION OF THE WORK, WHICH WILL SATISFY THE FOLLOWING CRITERIA:

- 1. THE ABOVE CONSTRUCTION SEQUENCE SHOULD GENERALLY BE COMPLETED IN THE SPECIFIED ORDER; HOWEVER, SEVERAL SEPARATE ITEMS MAY BE CONSTRUCTED SIMULTANEOUSLY. WORK MUST ALSO BE SCHEDULED OR PHASSED TO REDUCE THE EXTENT OF THE EXPOSED AREAS AS SPECIFIED BELOW. THE INTENT OF THIS SEQUENCE IS TO PROVIDE COVER FOR EROSION CONTROL AND TO HAVE STRUCTURAL MEASURES SUCH AS SILT FENCE AND CONSTRUCTION ENTRANCES IN PLACE BEFORE LARGE AREAS OF LAND ARE DENuded.

2. THE WORK SHALL BE CONDUCTED IN SECTIONS WHICH SHALL:

- a) LIMIT THE AMOUNT OF EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDERTAKEN DURING THE PROCEEDING 30 DAYS.
b) REVEGETATE DISTURBED AREAS AS RAPIDLY AS POSSIBLE. ALL AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF FINAL GRADING OR BEFORE A STORM EVENT, OR TEMPORARILY STABILIZED WITHIN 48 HOURS OF INITIAL DISTURBANCE OF SOIL FOR AREAS WITHIN 100 FEET OF AN UNDISTURBED WETLAND AND 7 DAYS FOR ALL OTHER AREAS.
c) INCORPORATE PLANNED INLETS AND DRAINAGE SYSTEM AS EARLY AS POSSIBLE INTO THE CONSTRUCTION PHASE. THE DITCHES SHALL BE IMMEDIATELY LINED OR REVEGETATED AS SOON AS THEIR INSTALLATION IS COMPLETE.

14.5 EROSION, SEDIMENTATION AND STABILIZATION CONTROL PLAN

THE EROSION CONTROL PLAN IS INCLUDED IN THE PLAN SET.

14.6 DETAILS AND SPECIFICATIONS

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

14.7 WINTER STABILIZATION PLAN

THE WINTER CONSTRUCTION PERIOD IS FROM NOVEMBER 1 THROUGH APRIL 15. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 75% MATURE VEGETATION COVER OR RIPRAP BY NOVEMBER 15 THEN THE SITE NEEDS TO BE PROTECTED WITH OVER-WINTER STABILIZATION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD.

WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT ANY AREA LEFT EXPOSED CAN BE CONTROLLED BY THE CONTRACTOR. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDER TAKEN DURING THE PROCEEDING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.

ALL AREAS SHALL BE CONSIDERED TO BE DENuded UNTIL THE SUBBASE GRAVEL IS INSTALLED IN ROADWAY/PARKING AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH RATE SHALL BE A MINIMUM OF 150 LBS./1,000 S.F. (3 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED.

THE CONTRACTOR SHALL INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

1. SOIL STOCKPILES

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR AT 150 LBS./1,000 S.F. (3 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOODWASTE EROSION CONTROL MIX. THIS SHALL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. ANY SOIL STOCKPILE SHALL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES.

2. NATURAL RESOURCE PROTECTION

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH EROSION CONTROL MATS. DURING WINTER CONSTRUCTION, A DOUBLE LINE OF SEDIMENT BARRIERS (SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.

3. SEDIMENT BARRIERS

DURING FROZEN CONDITIONS, SEDIMENT BARRIERS SHALL CONSIST OF WOODWASTE FILTER BERMS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES AND SEDIMENT SILT FENCES.

4. MULCHING

AN AREA SHALL BE CONSIDERED DENuded UNTIL AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, 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 SF. OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. 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 WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1,000 SQUARE FEET (3 TONS/ACRE) AND ADEQUATELY ANCHORED THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH.

BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY PEG LINE, MULCH NETTING, ASPHALT EMULSION CHEMICAL, OR WOOD CELLULOSE FIBER. WHEN GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH THEN COVER IS SUFFICIENT. AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL BARE SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORKDAY.

5. MULCHING ON SLOPES AND DITCHES

SLOPES SHALL NOT BE LEFT EXPOSED FOR ANY EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY MULCHED AND ANCHORED WITH PEG AND NETTING OR WITH EROSION CONTROL BLANKETS. MULCHING SHALL BE APPLIED AT A RATE OF 230 LBS./1,000 S.F. ON ALL SLOPES GREATER THAN 6%.

MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 6%. EROSION CONTROL BLANKETS SHALL BE USED IN LIEU OF MULCH IN ALL DRAINAGE WAYS WITH SLOPES 6% OR GREATER. EROSION CONTROL MIX CAN BE USED TO SUBSTITUTE EROSION CONTROL BLANKETS ON ALL SLOPES EXCEPT DITCHES.

6. SEEDING

BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL 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 THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. DORMANT SEEDING MAY BE SELECTED TO BE PLACED PRIOR TO THE PLACEMENT OF MULCH AND FABRIC NETTING ANCHORED WITH STAPLES. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED AT AN APPLICATION RATE OF 6 LBS./1,000 S.F. ALL AREAS SEEDING 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.

STANDARDS FOR TIMELY STABILIZATION OF CONSTRUCTION SITES DURING WINTER

1. STANDARD FOR THE TIMELY STABILIZATION OF DITCHES AND CHANNELS --- THE APPLICANT SHALL CONSTRUCT AND STABILIZE ALL STONE-LINED DITCHES AND CHANNELS ON THE SITE BY NOVEMBER 15. THE APPLICANT SHALL CONSTRUCT AND STABILIZE ALL GRASS-LINED DITCHES AND CHANNELS ON THE SITE BY SEPTEMBER 1. IF THE APPLICANT FAILS TO STABILIZE A DITCH OR CHANNEL TO BE GRASS-LINED BY SEPTEMBER 1, THEN THE APPLICANT WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE DITCH FOR LATE FALL AND WINTER.

INSTALL A SOIL LINING IN THE DITCH --- THE APPLICANT SHALL LINE THE DITCH WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL, AND ANCHORING THE SOD WITH JUTE OR PLASTIC MESH TO PREVENT THE SOD STRIPS FROM SLOUGHING DURING FLOW CONDITIONS.

INSTALL A STONE LINING IN THE DITCH --- THE APPLICANT SHALL LINE THE DITCH WITH STONE RIPRAP BY NOVEMBER 15. THE APPLICANT SHALL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE AND LINING THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH. IF NECESSARY, THE APPLICANT SHALL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINING SO TO PREVENT THE STONE LINING FROM REDUCING THE DITCH'S CROSS-SECTIONAL AREA.

2. STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES --- THE APPLICANT SHALL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 15. THE APPLICANT SHALL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 1. THE DEPARTMENT SHALL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% TO BE A SLOPE. IF THE APPLICANT FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 1, THEN THE APPLICANT SHALL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS --- BY SEPTEMBER 1 THE APPLICANT SHALL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE APPLICANT SHALL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST 3 INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BEFORE NOVEMBER 1, THEN THE APPLICANT SHALL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED BELOW.

STABILIZE THE SLOPE WITH SOD --- THE APPLICANT SHALL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY SEPTEMBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT 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. THE APPLICANT SHALL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V).

STABILIZE THE SLOPE WITH WOODWASTE COMPOST --- THE APPLICANT SHALL PLACE A SIX-INCH LAYER OF WOODWASTE COMPOST ON THE SLOPE BY NOVEMBER 15. PRIOR TO PLACING THE WOODWASTE COMPOST, THE APPLICANT SHALL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE APPLICANT SHALL NOT USE WOODWASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

STABILIZE THE SLOPE WITH STONE RIPRAP --- THE APPLICANT SHALL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE APPLICANT SHALL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

3. STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SOILS --- BY SEPTEMBER 15 THE APPLICANT SHALL SEED AND MULCH ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15%. IF THE APPLICANT FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE APPLICANT SHALL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.

STABILIZE THE SOIL WITH TEMPORARY VEGETATION --- BY SEPTEMBER 1 THE APPLICANT SHALL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET. LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1,000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE APPLICANT SHALL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST 3 INCHES OR COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1, THEN THE APPLICANT SHALL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED BELOW.

STABILIZE THE SOIL WITH SOD --- THE APPLICANT SHALL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY SEPTEMBER 15. PROPER INSTALLATION INCLUDES THE APPLICANT 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 THE APPLICANT SHALL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1,000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE APPLICANT SHALL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE APPLICANT WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

14.8 MAINTENANCE OF FACILITIES

THE STORMWATER FACILITIES WILL BE MAINTAINED BY THE CITY OF PORTLAND OR THEIR ASSIGNED HEIRS. THE CONTRACT DOCUMENTS WILL REQUIRE THE CONTRACTOR TO DESIGNATE A PERSON RESPONSIBLE FOR MAINTENANCE OF THE SEDIMENTATION CONTROL FEATURES DURING CONSTRUCTION AS REQUIRED BY THE EROSION CONTROL REPORT. LONG-TERM OPERATION/MAINTENANCE RECOMMENDED FOR THE STORMWATER FACILITIES IS PRESENTED BELOW.

THE RESPONSIBLE PARTY MAY CONTRACT WITH SUCH PROFESSIONALS, AS MAY BE NECESSARY IN ORDER TO COMPLY WITH THIS PROVISION AND MAY RELY ON THE ADVICE OF SUCH PROFESSIONALS IN CARRYING OUT ITS DUTY HEREUNDER, PROVIDED, THAT THE FOLLOWING OPERATION AND MAINTENANCE PROCEDURES ARE HEREBY ESTABLISHED AS A MINIMUM FOR COMPLIANCE WITH THIS SECTION. A MAINTENANCE LOG OF THE INSPECTIONS SHALL BE KEPT BY THE RESPONSIBLE PARTY.

INSPECTION AND MAINTENANCE FREQUENCY AND CORRECTIVE MEASURES:

THE FOLLOWING AREAS, FACILITIES, AND MEASURES WILL BE INSPECTED AND THE IDENTIFIED DEFICIENCIES WILL BE CORRECTED. CLEAN-OUT MUST INCLUDE THE REMOVAL AND LEGAL DISPOSAL OF ANY ACCUMULATED SEDIMENTS AND DEBRIS.

VEGETATED AREAS:

INSPECT SLOPES AND EMBANKMENTS EARLY IN THE GROWING SEASON TO IDENTIFY ACTIVE OR POTENTIAL EROSION PROBLEMS. REPLANT BARE AREAS OR AREAS WITH SPARSE GROWTH. WHERE RILL EROSION IS EVIDENT, ARMOR THE AREA WITH AN APPROPRIATE LINING OR DIVERT THE EROSION FLOWS TO ON-SITE AREAS ABLE TO WITHSTAND THE CONCENTRATED FLOWS. THE FACILITIES WILL BE INSPECTED AFTER MAJOR STORMS AND ANY IDENTIFIED DEFICIENCIES WILL BE CORRECTED.

DITCHES, SWALES AND OTHER OPEN STORMWATER CHANNELS:

INSPECT 2 TIMES PER YEAR (PREFERABLY IN SPRING AND FALL) TO ENSURE THEY ARE WORKING IN THEIR INTENDED FASHION AND THAT THEY ARE FREE OF SEDIMENT AND DEBRIS. REMOVE ANY OBSTRUCTIONS TO FLOW, INCLUDING ACCUMULATED SEDIMENTS AND DEBRIS AND VEGETATED GROWTH. REPAIR ANY EROSION OF THE DITCH LINING. VEGETATED DITCHES WILL BE MOWED AT LEAST ANNUALLY OR OTHERWISE MAINTAINED TO CONTROL THE GROWTH OF WOODY VEGETATION AND MAINTAIN FLOW CAPACITY. ANY WOODY VEGETATION GROWING THROUGH RIPRAP LININGS MUST ALSO BE REMOVED. REPAIR ANY SLUMPING SIDE SLOPES AS SOON AS PRACTICABLE. IF THE DITCH HAS A RIPRAP LINING, REPLACE RIPRAP ON AREAS WHERE ANY UNDERLYING FILTER FABRIC OR UNDERDRAIN GRAVEL IS SHOWING THROUGH THE STONE OR WHERE STONES HAVE DISLOADED. CORRECT ANY EROSION OF THE CHANNEL'S BOTTOM OR SIDESLOPES. THE FACILITIES SHALL BE INSPECTED AFTER MAJOR STORMS AND ANY IDENTIFIED DEFICIENCIES SHALL BE CORRECTED.

ROADWAYS AND PARKING SURFACES: CLEAR ACCUMULATIONS OF WINTER SAND IN PARKING LOTS AND ALONG ROADWAYS AT LEAST ONCE A YEAR. PREFERABLY IN THE SPRING. ACCUMULATIONS ON PAVEMENT MAY BE REMOVED BY PAVEMENT SWEEPING. ACCUMULATIONS OF SAND ALONG ROAD SHOULDERS MAY BE REMOVED BY GRADING EXCESS SAND TO THE PAVEMENT EDGE AND REMOVING IT MANUALLY OR BY A FRONT-END LOADER. REPAIR POTHOLES AND OTHER ROADWAY OBSTRUCTIONS AND HAZARDS. PLOWING AND SANDING OF PAVED AREAS SHALL BE PERFORMED AS NECESSARY TO MAINTAIN VEHICULAR TRAFFIC SAFETY.

HOUSEKEEPING

AS PART OF THE BASIC STANDARDS, THE APPLICANT IS REQUIRED TO MEET THE STANDARDS IN APPENDIX C OF THE CHAPTER 500 RULES. THE FOLLOWING PROCEDURES ARE HEREBY ESTABLISHED AS A MINIMUM FOR COMPLIANCE WITH THIS SECTION. FOR FURTHER INFORMATION ON THE PROCEDURES LISTED BELOW, REFER TO CHAPTER 500 RULES - APPENDIX C.

SPILL PREVENTION

APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING/IMPLEMENTATION SHALL BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON SITE.

GROUNDWATER PROTECTION:

DURING CONSTRUCTION, HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER SHALL NOT BE STORED OR HANDLED IN AREAS OF THE SITE WHICH DRAIN TO AN INFILTRATION AREA.

FUGITIVE SEDIMENT AND DUST:

APPROPRIATE MEASURES SHALL BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF THE SOILS AND WATER AND/OR CALCIUM CHLORIDE SHALL BE USED TO ENSURE THAT ACTIVITIES DO NOT RESULT IN FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION.

DEBRIS AND OTHER MATERIALS:

LITTER, CONSTRUCTION DEBRIS, AND CHEMICALS EXPOSED TO STORMWATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

TRENCH OR FOUNDATION DE-WATERING:

WATER COLLECTED THROUGH THE PROCESS OF TRENCHING AND/OR DE-WATERING MUST BE REMOVED FROM THE PONDED AREA, AND MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR OTHER AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE.

NON-STORMWATER DISCHARGES:

IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES.

Project: Hillcrest Avenue

Site Location: Portland, ME

Permanent Seeding Temporary Seeding

- 1. Instruction on preparation of soil: Prepare a good seed bed for planting method used.
2. Apply lime as follows: # / acres, OR 180 # / M Sq. Ft.
3. Fertilize with # pounds of # N-P-K/ac. OR 14 pounds of 10-10-10 N-P-K/M Sq. Ft.
4. Method of applying lime and fertilizer: Spread and work into the soil before seeding.
5. Seed with the following mixture:
60% Annual Rye
60% Winter Rye

Table with 3 columns: Item, Amount, Unit # Tons, Etc.
7. TOTAL LIME 130 #/1000 sq. ft.
8. TOTAL FERTILIZER 14 #/1000 sq. ft.
9. TOTAL SEED 2 #/1000 sq. ft.
10. TOTAL MULCH 75 #/1000 sq. ft.
11. TOTAL other materials, seeds, etc.
12. REMARKS

Project: Hillcrest Avenue

Site Location: Portland, ME

Permanent Seeding Temporary Seeding

- 1. Instruction on preparation of soil: Prepare a good seed bed for planting method used.
2. Apply lime as follows: # / acres, OR 180 # / M Sq. Ft.
3. Fertilize with # pounds of # N-P-K/ac. OR 14 pounds of 10-10-10 N-P-K/M Sq. Ft.
4. Method of applying lime and fertilizer: Spread and work into the soil before seeding.
5. Seed with the following mixture:
57% Red Fescue
28% Kentucky Bluegrass
9% Redtop
6% White Dutch Clover

Table with 3 columns: Item, Amount, Unit # Tons, Etc.
7. TOTAL LIME 130 #/1000 sq. ft.
8. TOTAL FERTILIZER 14 #/1000 sq. ft.
9. TOTAL SEED 2 #/1000 sq. ft.
10. TOTAL MULCH 75 #/1000 sq. ft.
11. TOTAL other materials, seeds, etc.
12. REMARKS

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



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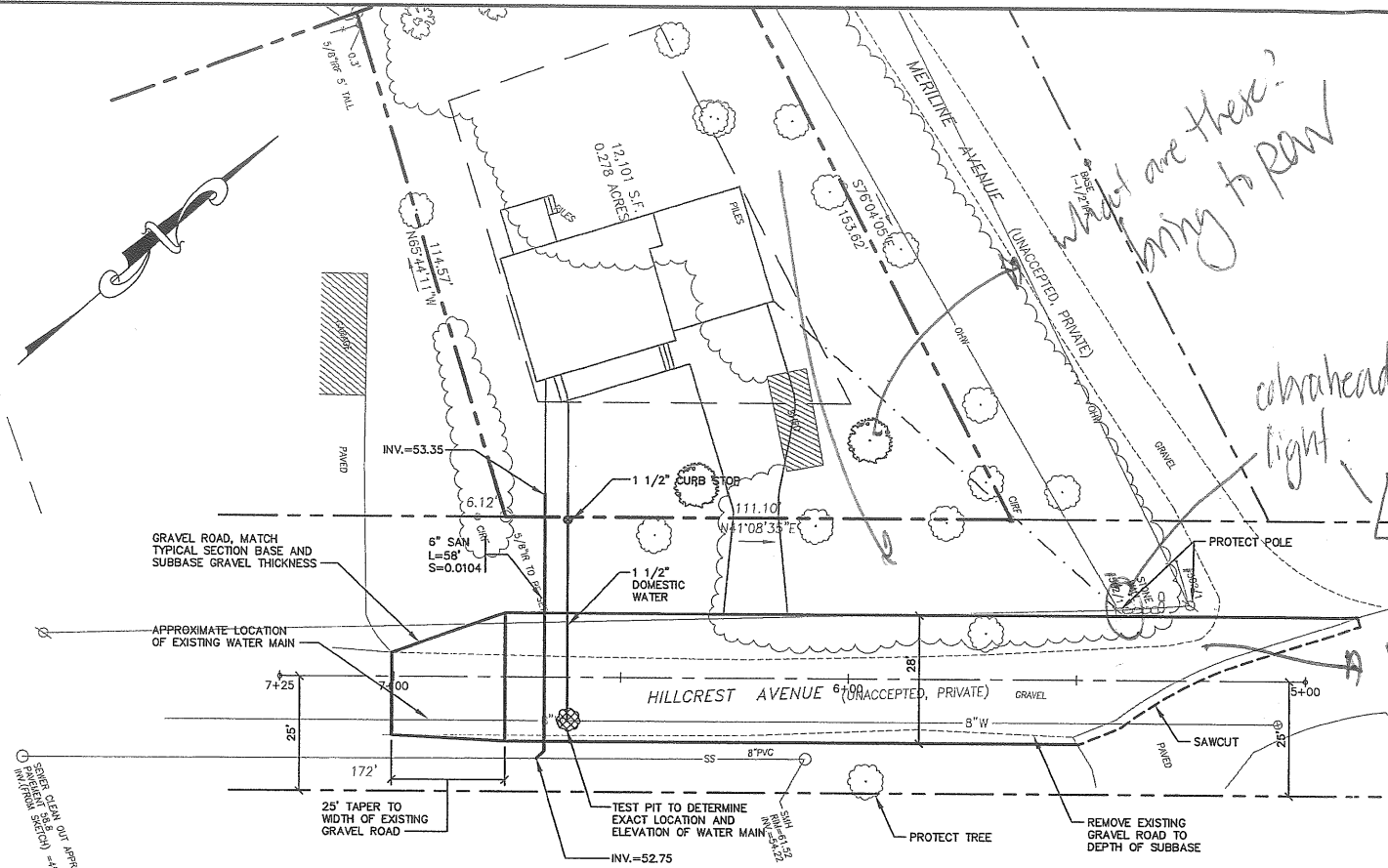
Table with 3 columns: Rev., Date, Revision

Table with 4 columns: MUNICIPAL REVIEW, Issued For, Date, By

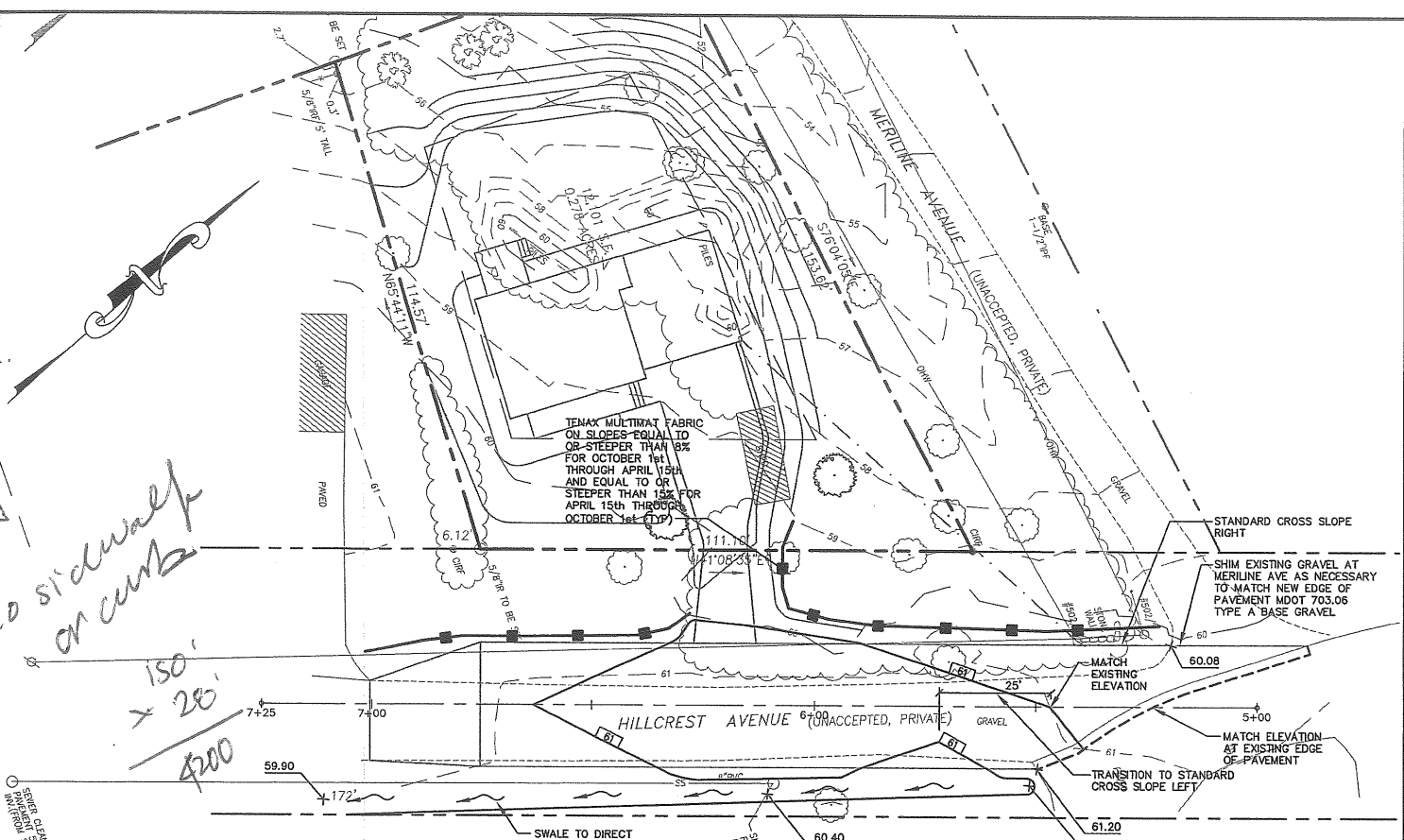
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Gorrill-Palmer Consulting Engineers, Inc. Engineering Excellence Since 1998. PO Box 1237, 15 Shaker Road, Gray, ME 04039. 207-657-6910, 207-657-6912, E-Mail: mailbox@gorrillpalmer.com

Erosion Control Notes. Hillcrest Avenue, Portland, Maine. Timothy Higgins, 83 Bay Street, Portland Maine 04104.



HILLCREST AVENUE SITE AND UTILITY PLAN
1"=20'



HILLCREST AVENUE GRADING AND DRAINAGE PLAN
1"=20'

GENERAL NOTES

1. TOPOGRAPHIC DATA AND EXISTING CONDITIONS ARE BASED UPON A ROUND SURVEY CONDUCTED BY OWEN HASKELL ON MAY 24, 2013.

2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE LANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AND DIG AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

3. MAINTENANCE OF EROSION CONTROL MEASURES IS OF PARAMOUNT IMPORTANCE TO THE OWNER AND THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE LANS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED DEEMED NECESSARY BY ON-SITE INSPECTIONS OF THE OWNER OR THEIR REPRESENTATIVES AT NO ADDITIONAL COST TO THE OWNER.

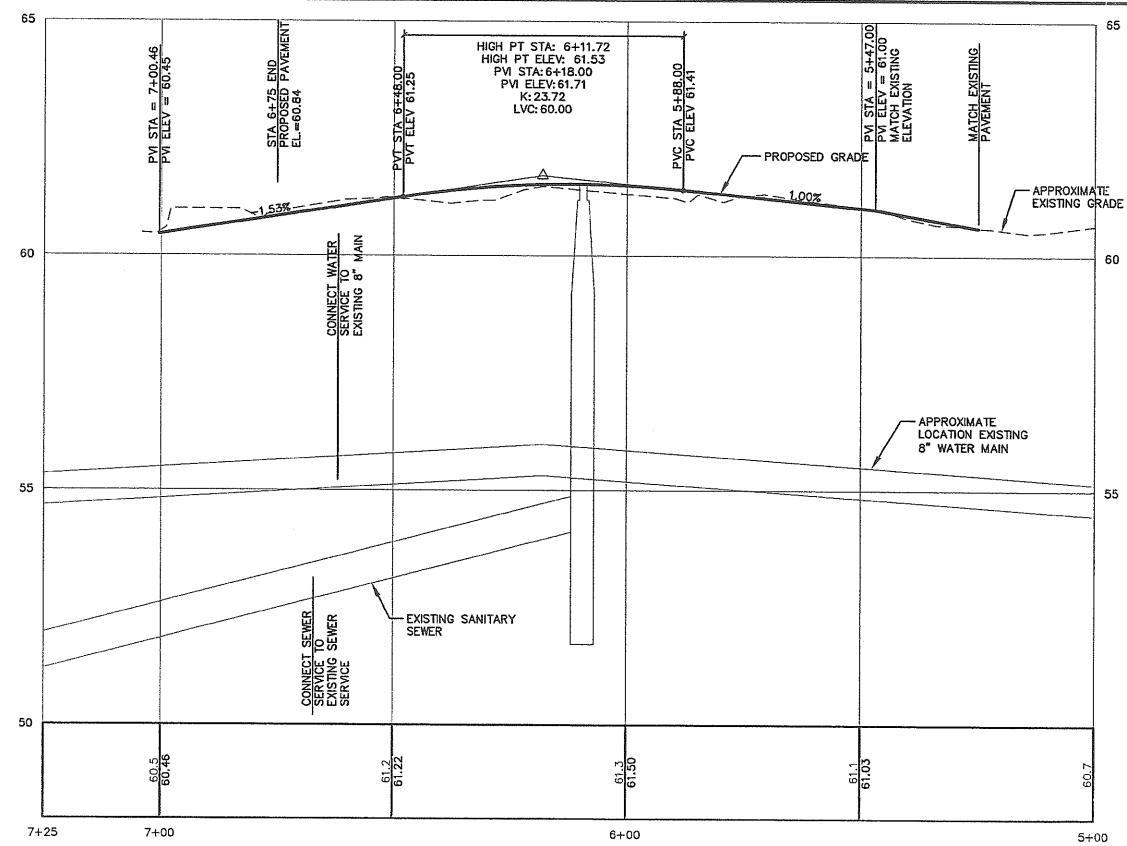
4. ALL WATER UTILITY MATERIALS AND INSTALLATION METHODS SHALL CONFORM TO PORTLAND WATER DISTRICT STANDARDS. DISINFECTION OF WATER LINES SHALL CONFORM TO AWWA STANDARD C651, LATEST EDITION.

5. ALL SEWER MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.

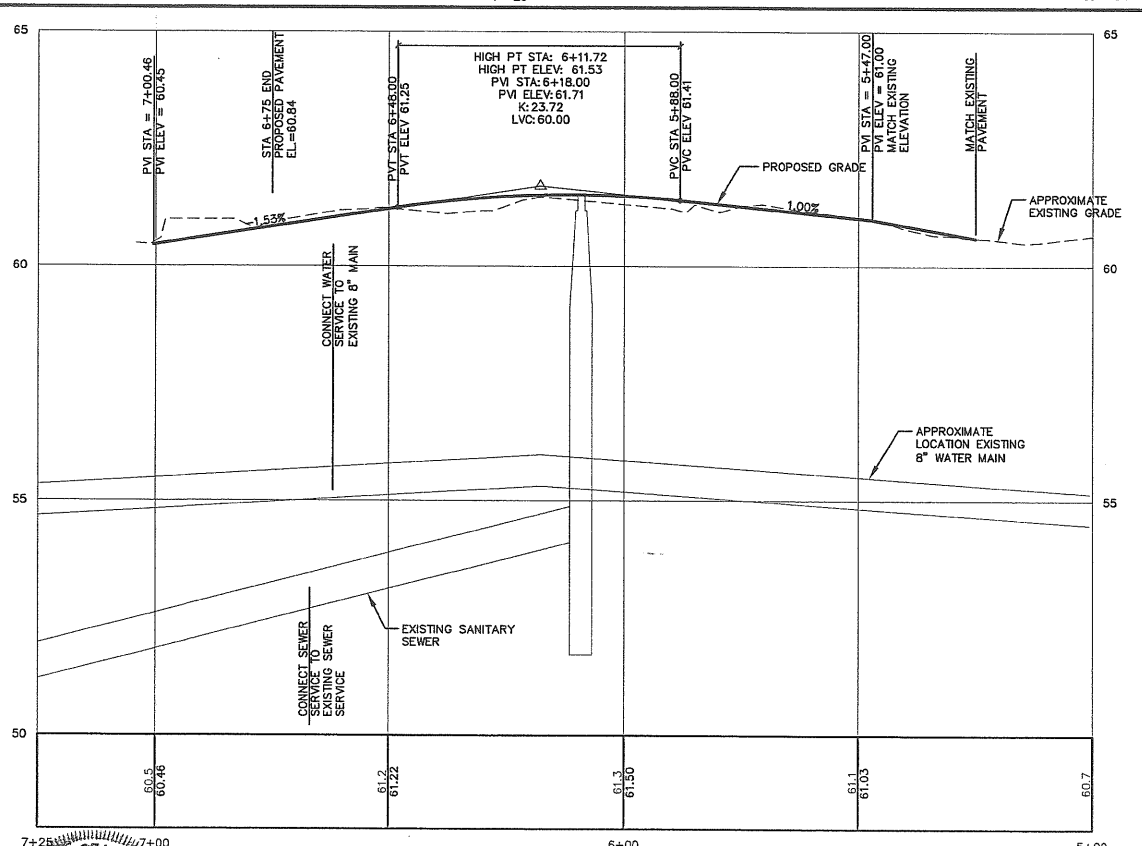
6. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO AINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, AND CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.

7. SEWER AND WATER SERVICES SHALL BE INSTALLED BY THE DEVELOPER INTO THE PROPERTY. CONNECTION TO THE HOUSE WILL BE THE RESPONSIBILITY OF THE LOT OWNER.

8. ANY CURBING REMOVED WITHIN THE RIGHT-OF-WAY IS THE PROPERTY OF THE CITY OF PORTLAND AND SHALL BE DELIVERED TO THE PUBLIC WORKS FACILITY ON OUTER CONGRESS STREET.



HILLCREST AVENUE SITE AND UTILITY PROFILE
1"=20' HORIZ.
1"=2' VERT.



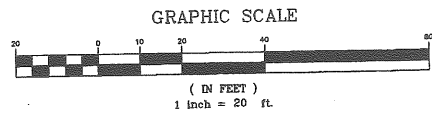
HILLCREST AVENUE GRADING AND DRAINAGE PROFILE
1"=20' HORIZ.
1"=2' VERT.

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.

Alton Palmer
Digitally signed by Alton Palmer
DN: cn=Alton Palmer, o=Gorill-Palmer Consulting Engineers, Inc., ou, email=apalmer@gorillpalmer.com, c=US
Date: 2013.07.08 06:22:18 -0400

LEGEND

- Utility Pole
- Rebar or pipe
- Subdivision lot number
- Present boundary lines
- Boundary lines of locus
- Original subdivision lot lines
- Former lot lines
- Sidelines of streets



CERTIFICATION

I certify that this plot is based on, and is the result of, an on the ground field survey, and that it conforms to the Board of Licensure for Professional Land Surveyors Standards for a Category I Condition I survey with the following exceptions:

- No Survey Report written.
- No legal description prepared.

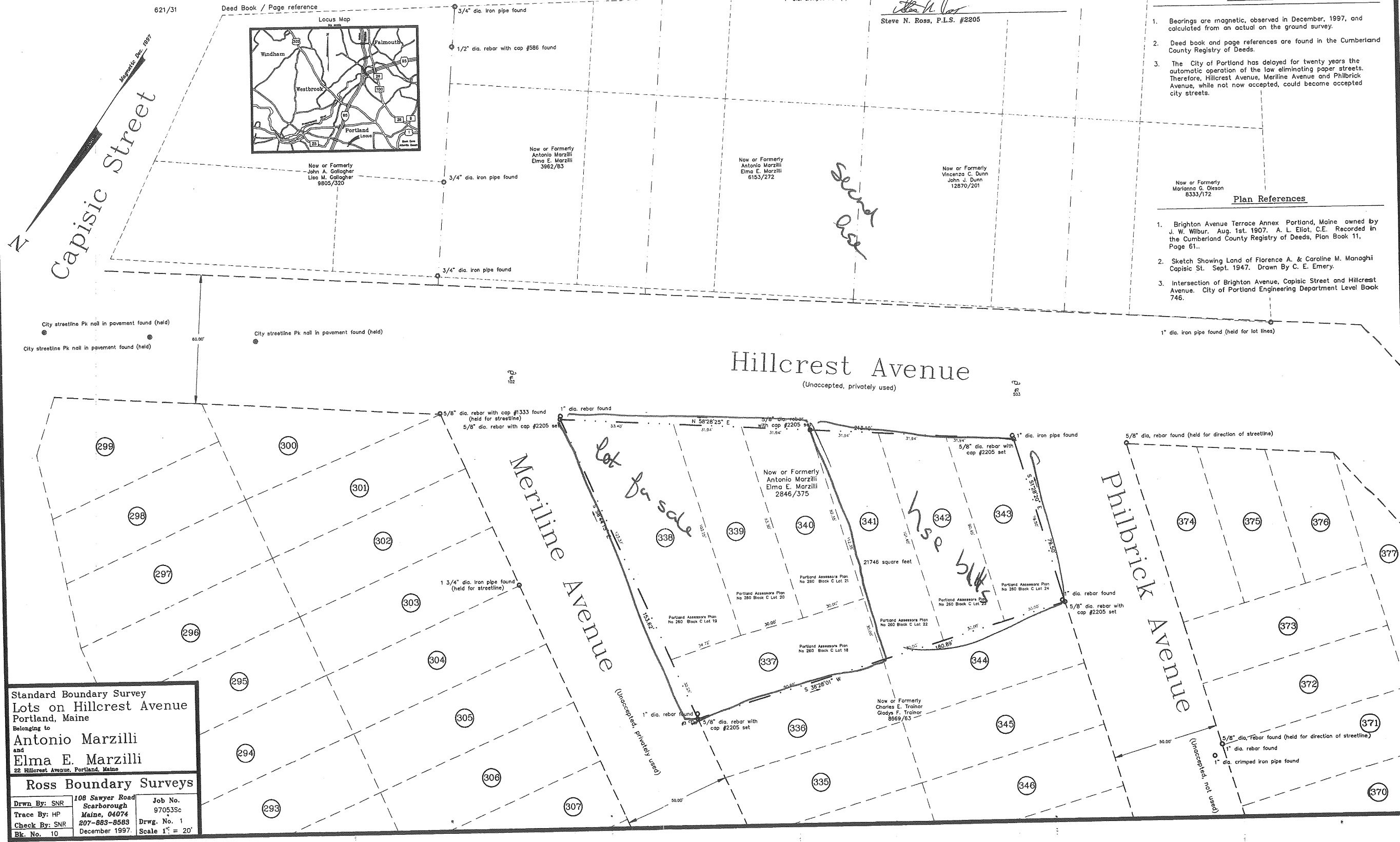
Steve N. Ross
Steve N. Ross, P.L.S. #2205

Notes

- Bearings are magnetic, observed in December, 1997, and calculated from an actual on the ground survey.
- Deed book and page references are found in the Cumberland County Registry of Deeds.
- The City of Portland has delayed for twenty years the automatic operation of the law eliminating paper streets. Therefore, Hillcrest Avenue, Merline Avenue and Philbrick Avenue, while not now accepted, could become accepted city streets.

Plan References

- Brighton Avenue Terrace Annex Portland, Maine, owned by J. W. Wilbur, Aug. 1st, 1907. A. L. Elliot, C.E. Recorded in the Cumberland County Registry of Deeds, Plan Book 11, Page 61.
- Sketch Showing Land of Florence A. & Caroline M. Managhi Capisic St. Sept. 1947. Drawn By C. E. Emery.
- Intersection of Brighton Avenue, Capisic Street and Hillcrest Avenue. City of Portland Engineering Department Level Book 746.



Standard Boundary Survey
Lots on Hillcrest Avenue
Portland, Maine
Belonging to
Antonio Marzilli
and
Elma E. Marzilli
22 Hillcrest Avenue, Portland, Maine

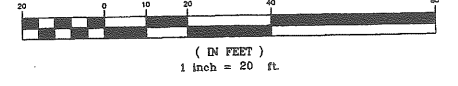
Ross Boundary Surveys

Drawn By: SNR	108 Sawyer Road Scarborough Maine, 04074	Job No. 97053Sc
Trace By: HP	207-889-8583	Drwg. No. 1
Check By: SNR	December 1997	Scale 1" = 20'
Blk. No. 10		

LEGEND

- Utility Pole
- Rebar or pipe
- ③③③ Subdivision lot number
- Present boundary lines
- Boundary lines of locus
- - - Original subdivision lot lines
- - - Former lot lines
- - - Sidelines of streets

GRAPHIC SCALE



CERTIFICATION

I certify that this plot is based on, and is the result of, an on the ground field survey, and that it conforms to the Board of Licensure for Professional Land Surveyors Standards for a Category I Condition I survey with the following exceptions:

1. No Survey Report written.
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Steve N. Ross
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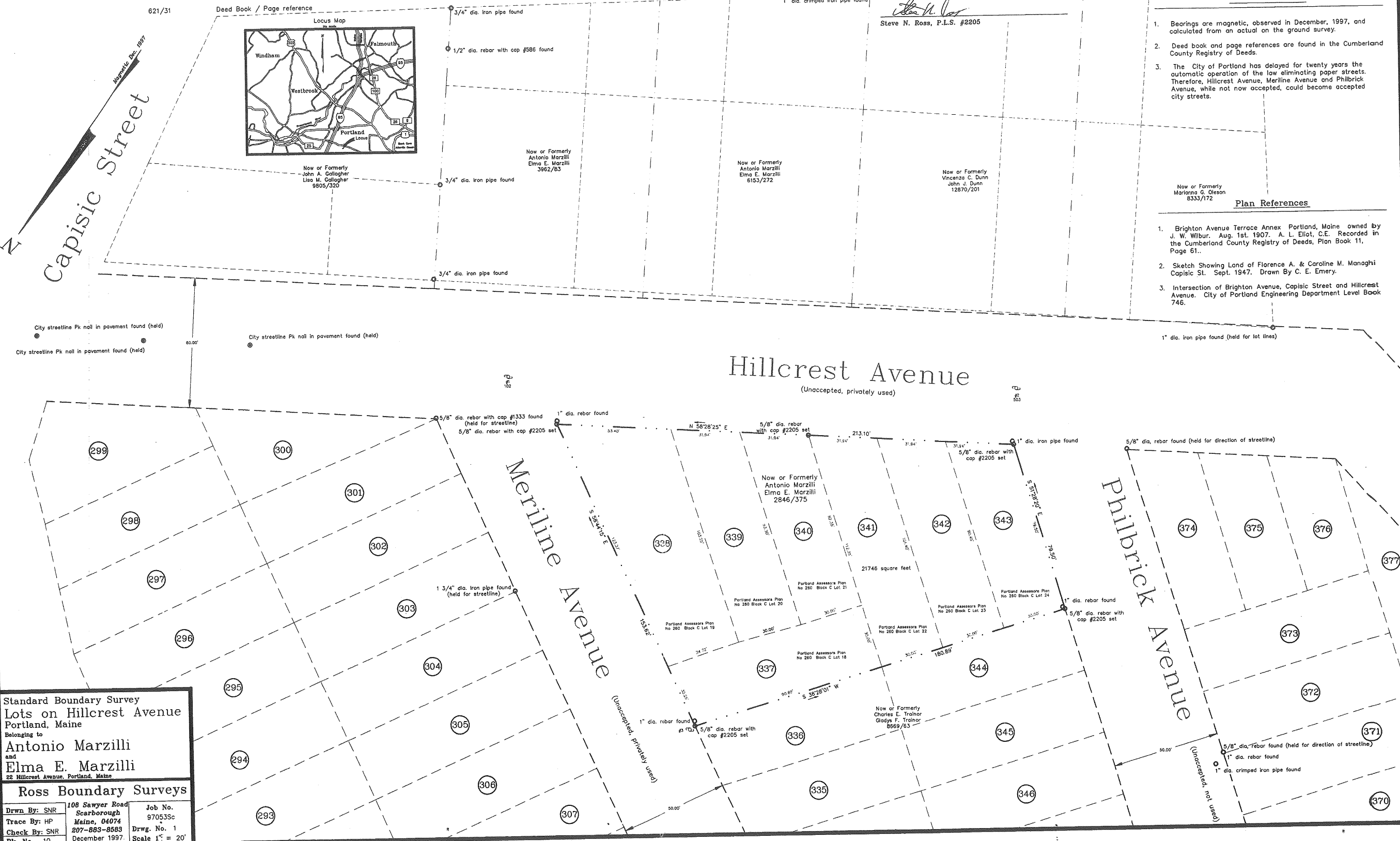
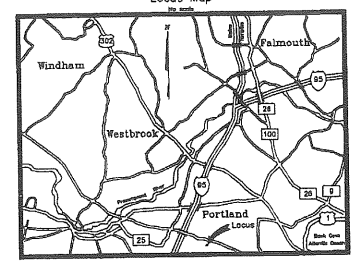
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1. Bearings are magnetic, observed in December, 1997, and calculated from an actual on the ground survey.
2. Deed book and page references are found in the Cumberland County Registry of Deeds.
3. The City of Portland has delayed for twenty years the automatic operation of the law eliminating paper streets. Therefore, Hillcrest Avenue, Meriline Avenue and Philbrick Avenue, while not now accepted, could become accepted city streets.

Plan References

1. Brighton Avenue Terrace Annex Portland, Maine owned by J. W. Wilbur. Aug. 1st. 1907. A. L. Elliot, C.E. Recorded in the Cumberland County Registry of Deeds, Plan Book 11, Page 61..
2. Sketch Showing Land of Florence A. & Caroline M. Managhi Capisic St. Sept. 1947. Drawn By C. E. Emery.
3. Intersection of Brighton Avenue, Capisic Street and Hillcrest Avenue. City of Portland Engineering Department Level Book 746.

Capisic Street
Magnetic Dec. 1897



Standard Boundary Survey
Lots on Hillcrest Avenue
Portland, Maine
Belonging to
Antonio Marzilli
and
Elma E. Marzilli
22 Hillcrest Avenue, Portland, Maine

Ross Boundary Surveys

Drwn By: SNR	108 Sawyer Road Scarborough Maine, 04074	Job No. 970535c
Trace By: HP	207-863-8589	Drwg. No. 1
Check By: SNR	December 1997	Scale 1" = 20'
Bk. No. 10		