



Level II – Site Plan Application
to
City of Portland Planning Board

Solid Waste Transfer Station
Great Diamond Island, Maine

on behalf of

City of Portland
Department of Public Services
55 Portland Street
Portland, ME 04101

and

Diamond Cove Homeowners Association
8 McKinley Ct.
Great Diamond Island, ME 04109

October 2014



August 25, 2014
09405

Ms. Barbara Barhydt
Development Review Services Manager
City of Portland
389 Congress Street
Portland, ME 04101

**Level II – Final Site Plan application for a Solid Waste Transfer Station:
Great Diamond Island Transfer Station, Portland, ME**

Dear Ms. Barhydt:

On behalf of the City of Portland, we are pleased to submit a Level II – Final Site Plan application for a new solid waste transfer station to be located on Great Diamond Island in Portland, ME. The City of Portland does not have a formal solid waste transfer facility on Great Diamond Island. Solid waste and recycled material is currently collected and stored using packer trucks before it is transported off the island by transport barge. This process has created challenges both operationally and logistically to collect, store and transport solid waste and recycled material. A lease agreement from the Diamond Cove Homeowners Association (DCHA) to the City of Portland was initiated for the subject lease area, which was identified by both parties as a suitable location for this type of project.

The site is located within the Diamond Cove Homeowners Association area of the Island near the former “laundry facility.” This location is accessed from an existing gravel road and is currently used for storing miscellaneous landscaping materials. The existing site contains approximately 8,924 square feet of disturbed surface area, including existing dirt/gravel drives, and material storage piles. Proposed work will include construction of a paved access drive around the facility, concrete dumpster pads, a compacter installation, and stormwater management BMP’s. With the site developed as proposed, approximately 28,516 sf of developed area will be created, which includes 9,876 of new impervious surface area. Maine DEP Chapter 500 stormwater standards and Site Location of Development do not apply to this project because the amount of impervious and developed area are below the associated regulatory thresholds. A Solid Waste Transfer Station Program application and Minor Revision application were submitted to the Maine DEP on September 5th, 2014 for their review.

Less than 4,300 square feet of wetland disturbance is anticipated for the proposed improvements so a Maine DEP NRPA permit application is not required. DCHA membership discussed the project at their annual meeting on July 26, 2014. We believe that we have prepared a complete permit application that appropriately addresses the Level II – Site Plan application submitted requirements. Upon your review of the application, please call me with any questions or if you require additional information.

Sincerely,

SEBAGO TECHNICS, INC.

A handwritten signature in black ink that reads "Craig Burgess".

Craig Burgess, P.E.
Project Engineer

CAB: llg

Table of Contents

Exhibit 1 Application & Agent Authorization

Exhibit 2 USGS Location Map

Exhibit 3 City Assessor's Map

Exhibit 4 Photographs of Project Site

Exhibit 5 Right, Title or Interest

Exhibit 6 Lighting Specifications

Exhibit 1

Application & Agent Authorization



Jeff Levine, AICP, Director
Planning & Urban Development Department

Electronic Signature and Fee Payment Confirmation

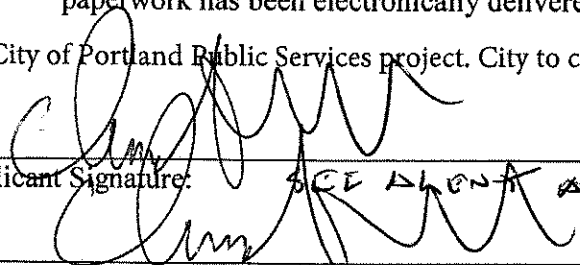
Notice: Your electronic signature is considered a legal signature per state law.

By digitally signing the attached document(s), you are signifying your understanding this is a legal document and your electronic signature is considered a *legal signature* per Maine state law. You are also signifying your intent on paying your fees by the opportunities below.

I, the undersigned, intend and acknowledge that no Site Plan or Historic Preservation Applications can be reviewed until payment of appropriate application fees are *paid in full* to the Inspections Office, City of Portland Maine by method noted below:

- Within 24-48 hours, once my complete application and corresponding paperwork has been electronically delivered, I intend to **call the Inspections Office** at 207-874-8703 and speak to an administrative representative and provide a credit/debit card over the phone.
- Within 24-48 hours, once my application and corresponding paperwork has been electronically delivered, I intend to **call the Inspections Office** at 207-874-8703 and speak to an administrative representative and provide a credit/debit card over the phone.
- I intend to deliver a payment method through the U.S. Postal Service mail once my application paperwork has been electronically delivered.

*City of Portland Public Services project. City to coordinate any fee transfers.

Applicant Signature:  Date: 10/29/19

I have provided digital copies and sent them on: SEE ABOVE APPLICATIONS Date: 10/29/19

NOTE: All electronic paperwork must be delivered to buildinginspections@portlandmaine.gov or by physical means i.e. a thumb drive or CD to the Inspections Office, City Hall, 3rd Floor, Room 315.



Level II – Preliminary and Final Site Plans 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 II: Preliminary or Final Site Plan. Please note that Portland has delegated review from the State of Maine for reviews under the Site Location of Development Act, Chapter 500 Stormwater Permits, and Traffic Movement Permits.

Level II: Site Plan Development includes:

- New construction of structures with a total floor area of less than 10,000 sq. ft. in all zones, except in Industrial Zones.
- New construction of structures with a total floor area of less than 20,000 sq. ft. in Industrial Zones.
- Any new temporary or permanent parking area, paving of an existing unpaved surface parking area in excess of 7,500 sq. ft. and serving less than 75 vehicles, or creation of other impervious surface area greater than 7,500 sq. ft.
- Building addition(s) with a total floor area of less than 10,000 sq. ft. (cumulatively within a 3 year period) in any zone, except in Industrial Zones.
- Building addition(s) with a total floor area of less than 20,000 sq. ft. in Industrial Zones.
- Park improvements: New structures or buildings with a total floor area of less than 10,000 sq. ft., facilities encompassing an area of greater than 7,500 sq. ft. and less than 20,000 sq. ft. (excludes rehabilitation or replacement of existing facilities).
- New construction of piers, docks, wharves, bridges, retaining walls, and other structures within the Shoreland Zone.
- Land disturbance between 1 and 3 acres that are stripped, graded, grubbed, filled or excavated.
- A change in the use of a total floor area between 10,000 and 20,000 sq. ft. in any existing building (cumulatively within a 3 year period).
- Lodging house, bed and breakfast facility, emergency shelter or special needs independent living unit.
- Signage subject to approval pursuant to Section 14-526 (d) 8.a. of the Land Use Code.
- Any new major or minor auto service station with less than 10,000 sq. ft. of building area in any permitted zone other than the B-2 or B-5 zones.
- The creation of day care or home babysitting facilities to serve more than 12 children in a residential zone (not permitted as a home occupation under section 14-410) in any principal structure that has not been used as a residence within the 5 years preceding the application.
- Any drive-through facility that is not otherwise reviewed as a conditional use under Article III.

Portland's development review process and requirements are outlined in the Land Use Code (Chapter 14) which is available on our website:

Land Use Code: <http://me-portland.civicplus.com/DocumentCenter/Home/View/1080>

Design Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2355>

Technical Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2356>

Planning Division

Fourth Floor, City Hall
389 Congress Street
(207) 874-8719

Office Hours

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

PROJECT NAME: Great Diamond Island Transfer Station

PROPOSED DEVELOPMENT ADDRESS:

Great Diamond Island, Portland, ME

PROJECT DESCRIPTION:

Construction of a solid waste transfer and recycling facility.

CHART/BLOCK/LOT: 83B-M001

PRELIMINARY PLAN _____ (date)

FINAL PLAN 8-21-14 (date)

CONTACT INFORMATION:

Applicant – must be owner, Lessee or Buyer Name: City of Portland, attn: Troy Moon Business Name, if applicable: Address: 55 Portland Street City/State : Portland Zip Code: 04101	Applicant Contact Information E-mail: thm@portlandmaine.gov Home #: N/A Work #: (207) 874-8467 Cell #: N/A Fax#: (207) 874-8816
Owner – (if different from Applicant) Name: Address: City/State : Zip Code:	Owner Contact Information E-mail: Home #: Work #: Cell #: Fax#:
Agent/ Representative Name: Sebago Technics, attn: Owens McCullough, PE Address: 75 John Roberts Road, Suite 1A City/State : South Portland Zip Code: 04106	Agent/Representative Contact information E-mail: omccullough@sebagotechnics.com Home #: N/A Work #: (207) 200-2073 Cell #: N/A Fax#: (207) 856-2206
Billing Information N/A Name: Address: City/State : Zip Code:	Billing Information N/A E-mail: Home #: Work #: Cell #: Fax#:

Engineer Name: Sebago Technics, attn: Owens McCullough, PE Address: 75 John Roberts Road, Suite 1A City/State : South Portland Zip Code: 04106	Engineer Contact Information E-mail: omccullough@sebagotechnics.com Home #: N/A Work #: (207) 200-2071 Cell #: N/A Fax#: (207) 856-2206
Surveyor Name: City of Portland Address: 55 Portland Street City/State : Portland Zip Code: 04101	Surveyor Contact Information N/A E-mail: Home #: Work #: Cell #: Fax#:
Architect N/A Name: Address: City/State : Zip Code:	Architect Contact Information N/A E-mail: Home #: Work #: Cell #: Fax#:
Attorney N/A Name: Address: City/State : Zip Code:	Attorney Contact Information N/A E-mail: Home #: Work #: Cell #: Fax#:

APPLICATION FEES:

Check all reviews that apply. (Payment may be made by Credit Card, Cash or Check payable to the City of Portland.)

Level II Development (check applicable reviews) <p style="text-align: right;">N/A - City Project</p> <input type="checkbox"/> Less than 10,000 sq. ft. (\$400) <input type="checkbox"/> After-the-fact Review (\$1,000 plus applicable application fee) <hr/> The City invoices separately for the following: <ul style="list-style-type: none"> • Notices (\$.75 each) • Legal Ad (% of total Ad) • Planning Review (\$40.00 hour) • Legal Review (\$75.00 hour) Third party review fees are assessed separately. Any outside reviews or analysis requested from the Applicant as part of the development review, are the responsibility of the Applicant and are separate from any application or invoice fees.	Other Reviews (check applicable reviews) N/A - City Project <input type="checkbox"/> Traffic Movement (\$1,000) <input type="checkbox"/> Stormwater Quality (\$250) <input type="checkbox"/> Site Location (\$3,000, except for residential projects which shall be \$200/lot) # of Lots ___ x \$200/lot = _____ <input type="checkbox"/> Other _____ <input type="checkbox"/> Change of Use <input type="checkbox"/> Flood Plain <input type="checkbox"/> Shoreland <input checked="" type="checkbox"/> Design Review <input type="checkbox"/> Housing Replacement <input type="checkbox"/> Historic Preservation
---	--

APPLICATION SUBMISSION:

1. All site plans and written application materials must be submitted electronically on a CD or thumb drive with each plan submitted as separate files, with individual file which can be found on the **Electronic Plan and Document Submittal** page of the City's website at <http://me-portland.civicplus.com/764/Electronic-Plan-and-Document-Submittal>
2. In addition, one (1) paper set of the plans (full size), one (1) paper set of plans (11 x 17), paper copy of written materials, and the application fee must be submitted to the Building Inspections Office to start the review process.

The application must be complete, including but not limited to the contact information, project data, application checklists, wastewater capacity, plan for fire department review, and applicant signature. The submissions shall include one (1) paper packet with folded plans containing the following materials:

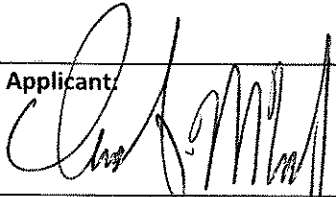
1. One (1) full size site plans that must be folded.
2. One (1) copy of all written materials or as follows, unless otherwise noted:
 - a. Application form that is completed and signed.
 - b. Cover letter stating the nature of the project.
 - c. All Written Submittals (Sec. 14-527 (c), including evidence of right, title and interest.
3. A stamped standard boundary survey prepared by a registered land surveyor at a scale not less than one inch to 50 feet.
4. Plans and maps based upon the boundary survey and containing the information found in the attached sample plan checklist.
5. One (1) set of plans reduced to 11 x 17.

Please refer to the application checklist (attached) for a detailed list of submission requirements.

APPLICANT 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 Level II Site Plan review. It is not a permit to begin construction. An approved site plan, a Performance Guarantee, Inspection Fee, Building Permit, and associated fees will be required prior to construction. Other Federal, State or local permits may be required prior to construction, which are the responsibility of the applicant to obtain.

Signature of Applicant: 	Date: 10-22-19
---	----------------

see agent authorization

PROJECT DATA

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

Total Area of Site Total area of lease=	55,050	sq. ft.
Proposed Total Disturbed Area of the Site	28,156	sq. ft.
If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with DEP and a Stormwater Management Permit, Chapter 500, with the City of Portland		
Impervious Surface Area		
Impervious Area (Total Existing)	8,924	sq. ft.
Impervious Area (Total Proposed)	9,876	sq. ft.
Building Ground Floor Area and Total Floor Area		
Building Footprint (Total Existing)	N/A	sq. ft.
Building Footprint (Total Proposed)	N/A	sq. ft.
Building Floor Area (Total Existing)	N/A	sq. ft.
Building Floor Area (Total Proposed)	N/A	sq. ft.
Zoning		
Existing	IR-3	
Proposed, if applicable		
Land Use		
Existing	Former Retail Business/Laundry Facility	
Proposed	Municipal Use-Transfer Station	
Residential, If applicable		
# of Residential Units (Total Existing)	N/A	
# of Residential Units (Total Proposed)	N/A	
# of Lots (Total Proposed)	N/A	
# of Affordable Housing Units (Total Proposed)		
Proposed Bedroom Mix		
# of Efficiency Units (Total Proposed)	N/A	
# of One-Bedroom Units (Total Proposed)	N/A	
# of Two-Bedroom Units (Total Proposed)	N/A	
# of Three-Bedroom Units (Total Proposed)		
Parking Spaces		
# of Parking Spaces (Total Existing)	N/A	
# of Parking Spaces (Total Proposed)	N/A	
# of Handicapped Spaces (Total Proposed)	N/A	
Bicycle Parking Spaces		
# of Bicycle Spaces (Total Existing)	0	
# of Bicycle Spaces (Total Proposed)	0	
Estimated Cost of Project		

PRELIMINARY PLAN (Optional) - Level II Site Plan

Applicant Checklist	Planner Checklist	# of Copies	GENERAL WRITTEN SUBMISSIONS CHECKLIST
		1	Completed Application form
		1	Application fees
		1	Written description of project
		1	Evidence of right, title and interest
		1	Evidence of state and/or federal approvals, if applicable
		1	Written assessment of proposed project's compliance with applicable zoning requirements
		1	Summary of existing and/or proposed easement, covenants, public or private rights-of-way, or other burdens on the site
		1	Written requests for waivers from site plan or technical standards, if applicable.
		1	Evidence of financial and technical capacity
		1	Traffic Analysis (may be preliminary, in nature, during the preliminary plan phase)
Applicant Checklist	Planner Checklist	# of Copies	SITE PLAN SUBMISSIONS CHECKLIST
		1	Boundary Survey meeting the requirements of Section 13 of the City of Portland's Technical Manual
		1	Preliminary Site Plan including the following: (information provided may be preliminary in nature during preliminary plan phase)
			Proposed grading and contours;
			Existing structures with distances from property line;
			Proposed site layout and dimensions for all proposed structures (including piers, docks or wharves in Shoreland Zone), paved areas, and pedestrian and vehicle access ways;
			Preliminary design of proposed stormwater management system in accordance with Section 5 of the Technical Manual (note that Portland has a separate applicability section);
			Preliminary infrastructure improvements;
			Preliminary Landscape Plan in accordance with Section 4 of the Technical Manual;
			Location of significant natural features (including wetlands, ponds, watercourses, floodplains, significant wildlife habitats and fisheries or other important natural features) located on the site as defined in Section 14-526 (b) (1);
			Proposed buffers and preservation measures for significant natural features, as defined in Section 14-526 (b) (1);
			Location , dimensions and ownership of easements, public or private rights of way, both existing and proposed;
			Exterior building elevations.

FINAL PLAN - Level II Site Plan			
Applicant Checklist	Planner Checklist	# of Copies	GENERAL WRITTEN SUBMISSIONS CHECKLIST (* If applicant chooses to submit a Preliminary Plan, then the * items were submitted for that phase and only updates are required)
X		1	* Completed Application form
X		1	* Application fees
X		1	* Written description of project
X		1	* Evidence of right, title and interest
X		1	* Evidence of state and/or federal permits
X		1	* Written assessment of proposed project's specific compliance with applicable Zoning requirements
X		1	* Summary of existing and/or proposed easements, covenants, public or private rights-of-way, or other burdens on the site
X		1	* Evidence of financial and technical capacity
N/A		1	Construction Management Plan
N/A		1	A traffic study and other applicable transportation plans in accordance with Section 1 of the technical Manual, where applicable.
X		1	Written summary of significant natural features located on the site (Section 14-526 (b) (a))
X		1	Stormwater management plan and stormwater calculations, including description of project, hydrology and impervious area.
N/A		1	Written summary of project's consistency with related city master plans
N/A		1	Evidence of utility capacity to serve
N/A		1	Written summary of solid waste generation and proposed management of solid waste
N/A		1	A code summary referencing NFPA 1 and all Fire Department technical standards
N/A		1	Where applicable, an assessment of the development's consistency with any applicable design standards contained in Section 14-526 and in City of Portland Design Manual
N/A		1	Manufacturer's verification that all proposed HVAC and manufacturing equipment meets applicable state and federal emissions requirements.

Applicant Checklist	Planner Checklist	# of Copies	SITE PLAN SUBMISSIONS CHECKLIST (* If applicant chooses to submit a Preliminary Plan, then the * items were submitted for that phase and only updates are required)
X		1	* Boundary Survey meeting the requirements of Section 13 of the City of Portland's Technical Manual
X		1	Final Site Plans including the following:
X			Existing and proposed structures, as applicable, and distance from property line (including location of proposed piers, docks or wharves if in Shoreland Zone);
X			Existing and proposed structures on parcels abutting site;
X			All streets and intersections adjacent to the site and any proposed geometric modifications to those streets or intersections;
X			Location, dimensions and materials of all existing and proposed driveways, vehicle and pedestrian access ways, and bicycle access ways, with corresponding curb lines;
X			Engineered construction specifications and cross-sectional drawings for all proposed driveways, paved areas, sidewalks;
N/A			Location and dimensions of all proposed loading areas including turning templates for applicable design delivery vehicles;
N/A			Existing and proposed public transit infrastructure with applicable dimensions and engineering specifications;
N/A			Location of existing and proposed vehicle and bicycle parking spaces with applicable dimensional and engineering information;
X			Location of all snow storage areas and/or a snow removal plan;
N/A			A traffic control plan as detailed in Section 1 of the Technical Manual;
X			Proposed buffers and preservation measures for significant natural features, where applicable, as defined in Section 14-526(b)(1);
X			Location and proposed alteration to any watercourse;
X			A delineation of wetlands boundaries prepared by a qualified professional as detailed in Section 8 of the Technical Manual;
X			Proposed buffers and preservation measures for wetlands;
X			Existing soil conditions and location of test pits and test borings;
X			Existing vegetation to be preserved, proposed site landscaping, screening and proposed street trees, as applicable;
X			A stormwater management and drainage plan, in accordance with Section 5 of the Technical Manual;
X			Grading plan;
N/A			Ground water protection measures;
X			Existing and proposed sewer mains and connections;
N/A			Location of all existing and proposed fire hydrants and a life safety plan in accordance with Section 3 of the Technical Manual;
N/A			Location, sizing, and directional flows of all existing and proposed utilities within the project site and on all abutting streets;

- Continued on next page -

X		Location and dimensions of off-premises public or publicly accessible infrastructure immediately adjacent to the site;
N/A		Location and size of all on site solid waste receptacles, including on site storage containers for recyclable materials for any commercial or industrial property;
N/A		Plans showing the location, ground floor area, floor plans and grade elevations for all buildings;
N/A		A shadow analysis as described in Section 11 of the Technical Manual, if applicable;
N/A		A note on the plan identifying the Historic Preservation designation and a copy of the Application for Certificate of Appropriateness, if applicable, as specified in Section Article IX, the Historic Preservation Ordinance;
N/A		Location and dimensions of all existing and proposed HVAC and mechanical equipment and all proposed screening, where applicable;
N/A		An exterior lighting plan in accordance with Section 12 of the Technical Manual;
N/A		A signage plan showing the location, dimensions, height and setback of all existing and proposed signs;
X		Location, dimensions and ownership of easements, public or private rights of way, both existing and proposed.



PORTLAND FIRE DEPARTMENT SITE REVIEW FIRE DEPARTMENT CHECKLIST



A separate drawing[s] shall be provided as part of the site plan application for the Portland Fire Department's review.

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 Qty Code. (NFPA 101 2009 ed.)
7. Hydrant locations
8. Water main[s] size and location
9. Access to all structures [min. 2 sides]
10. A code summary shall be included referencing NFPA 1 and all fire department. Technical standards.

Some structures may require Fire flows using annex H of NFPA 1

CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

Department of Public Services,
55 Portland Street,
Portland, Maine 04101-2991



Mr. Frank J. Brancely,
Senior Engineering Technician,
Phone #: (207) 874-8832,
Fax #: (207) 874-8852,
E-mail: fjb@portlandmaine.gov

Date: _____

1. Please, Submit Utility, Site, and Locus Plans.

Site Address: _____ Chart Block Lot Number: _____

Proposed Use: _____

Previous Use: _____

Existing Sanitary Flows: _____ GPD

Existing Process Flows: _____ GPD

Description and location of City sewer that is to receive
the proposed building sewer lateral.

Site Category	Commercial (see part 4 below)	<input type="checkbox"/>
	Industrial (complete part 5 below)	<input type="checkbox"/>
	Governmental	<input type="checkbox"/>
	Residential	<input type="checkbox"/>
	Other (specify)	<input type="checkbox"/>

(Clearly, indicate the proposed connections, on the submitted plans)

2. Please, Submit Contact Information.

City Planner's Name: _____ Phone: _____

Owner/Developer Name: _____

Owner/Developer Address: _____

Phone: _____ Fax: _____ E-mail: _____

Engineering Consultant Name: _____

Engineering Consultant Address: _____

Phone: _____ Fax: _____ E-mail: _____

(Note: Consultants and Developers should allow +/- 15 days, for capacity status,
prior to Planning Board Review)

3. Please, Submit Domestic Wastewater Design Flow Calculations.

Estimated Domestic Wastewater Flow Generated: _____ GPD

Peaking Factor/ Peak Times: _____

Specify the source of design guidelines: (i.e., "Handbook of Subsurface Wastewater Disposal in Maine,"
__ "Plumbers and Pipe Fitters Calculation Manual," __ Portland Water District Records, __ Other (specify)

(Note: Please submit calculations showing the derivation of your design flows,
either on the following page, in the space provided, or attached, as a separate sheet)

4. Please, Submit External Grease Interceptor Calculations.

Total Drainage Fixture Unit (DFU) Values: _____
Size of External Grease Interceptor: _____
Retention Time: _____
Peaking Factor/ Peak Times: _____

(Note: In determining your restaurant process water flows, and the size of your external grease interceptor, please use The Uniform Plumbing Code. Note: In determining the retention time, sixty (60) minutes is the minimum retention time. Note: Please submit detailed calculations showing the derivation of your restaurant process water design flows, and please submit detailed calculations showing the derivation of the size of your external grease interceptor, either in the space provided below, or attached, as a separate sheet)

5. Please, Submit Industrial Process Wastewater Flow Calculations

Estimated Industrial Process Wastewater Flows Generated: _____ GPD
Do you currently hold Federal or State discharge permits? Yes _____ No _____
Is the process wastewater termed categorical under CFR 40? Yes _____ No _____
OSHA Standard Industrial Code (SIC): <http://www.osha.gov/oshstats/sicser.html>
Peaking Factor/Peak Process Times: _____

(Note: On the submitted plans, please show where the building's domestic sanitary sewer laterals, as well as the building's industrial-commercial process wastewater sewer laterals exits the facility. Also, show where these building sewer laterals enter the city's sewer. Finally, show the location of the wet wells, control manholes, or other access points; and, the locations of filters, strainers, or grease traps)

(Note: Please submit detailed calculations showing the derivation of your design flows, either in the space provided below, or attached, as a separate sheet)

Notes, Comments or Calculation

Portland, Maine



Yes. Life's good here.

Michael J. Bobinsky
Director of Public Services

September 4, 2014
09405

Maine Department of Environmental Protection
312 Canco Road
Portland, ME 04103

Letter of Agent Authorization – MDEP Permit Applications, Great Diamond Island

Sebago Technics, Inc. has been retained by the City of Portland to assemble permit applications and represent the City during the Maine Department of Environmental Protection permitting process for several related permit applications to include:

1. Permit application for a new solid waste transfer facility;
2. Minor amendment permit application; and
3. Permit-by-Rule application for improvements to an existing marine ramp.

These permit applications are associated with infrastructure improvements on Great Diamond island. We look forward to working with the Maine Department Environmental on these important community projects. If you have any questions please feel free to contact me.

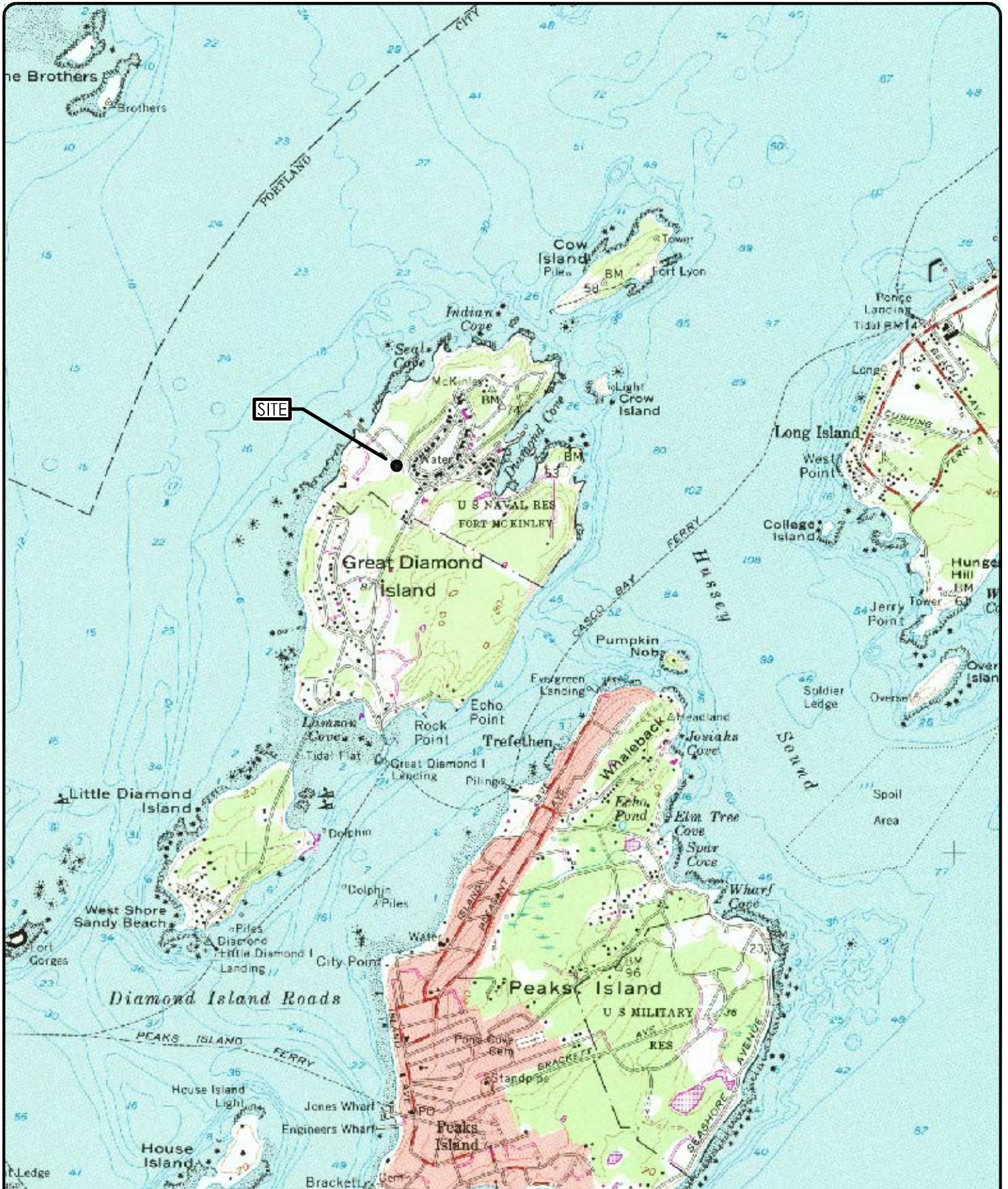
Sincerely

A handwritten signature in black ink, appearing to read "Troy Moon", written over a horizontal line.

City of Portland
Troy Moon
Environmental Programs and Open Space Manager

Exhibit 2

USGS Location Map



SITE



75 John Roberts Rd. - Suite 1A
South Portland, ME 04106
Tel. 207-200-2100

250 Goddard Rd. - Suite 8
Lewiston, ME 04240
Tel. 207-783-5656

SITE LOCATION MAP
OF GREAT DIAMOND ISLAND MARINE RAMP

LOCATION:
WEST SHORE DRIVE
PORTLAND, MAINE

FOR:
CITY OF PORTLAND MAINE

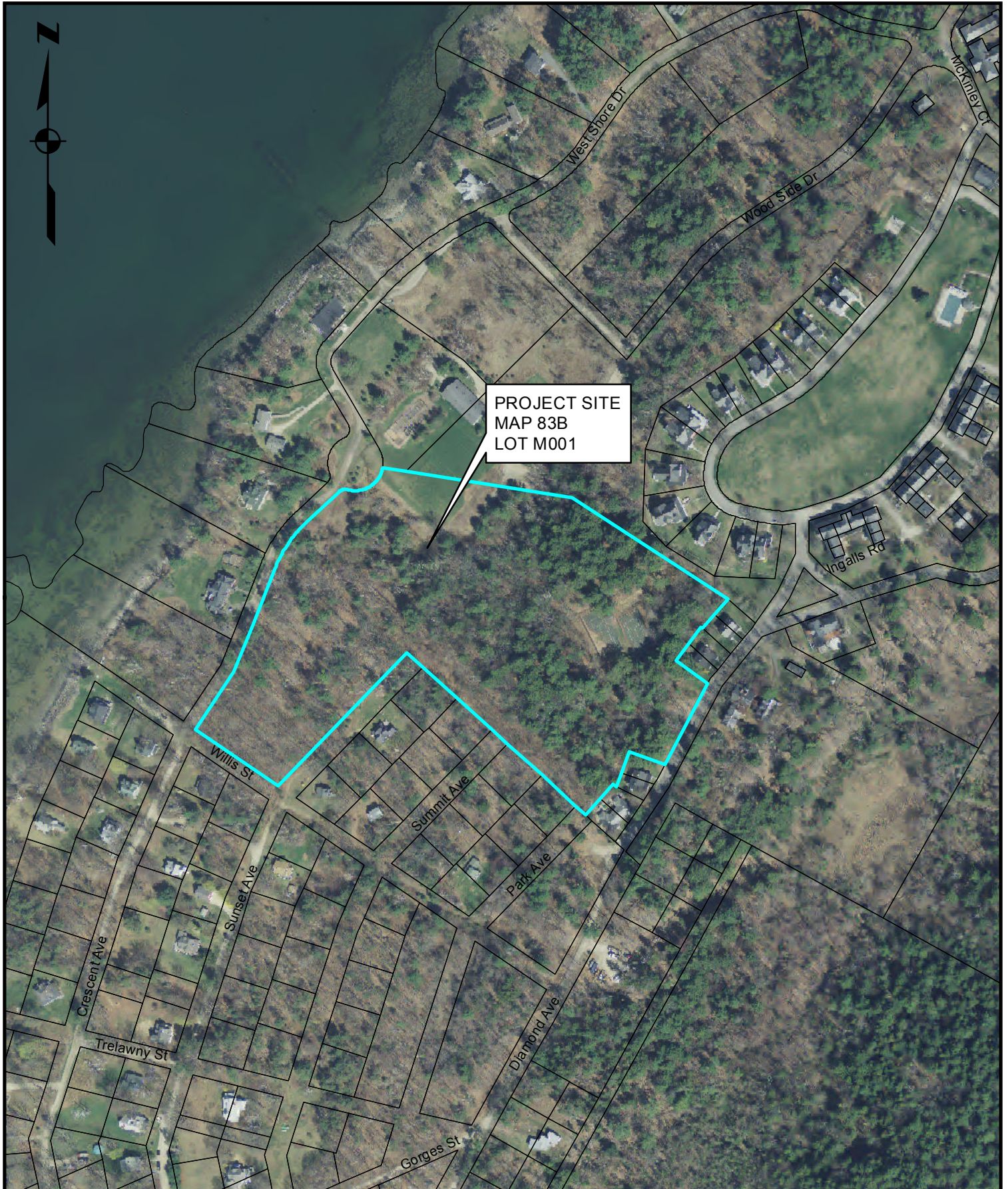
SCALE: 1" = 2000'

DATE: 8/14/14

SHEET:
1 OF 1

Exhibit 3

City Assessor's Map



PROJECT SITE
 MAP 83B
 LOT M001



CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE
 WWW.SEBAGOTECHNICS.COM

75 John Roberts Rd. - Suite 1A
 South Portland, ME 04106
 Tel. 207-200-2100

250 Goddard Rd. - Suite B
 Lewiston, ME 04240
 Tel. 207-783-5555

TAX MAP SKETCH
 OF PROPOSED SOLID WASTE TRANSFER STATION

LOCATION:
 WEST SHORE DRIVE
 GREAT DIAMOND ISLAND

INFORMATION:
 IMAGERY SPRING 2009
 DATA SOURCE: MAINE GIS

SCALE: 1" = 300'
 DATE: 05/30/14

Abutters List

Current Owner/Mailing Address	MAP	LOT
Diamond Cove Homeowners Association C/O Phoenix Management PO Box 759 Saco, ME 04072	N/A	N/A

Exhibit 4

Photographs of Project Site





Exhibit 5

Right, Title or Interest

**LEASE AGREEMENT
FOR TRANSFER STATION
BY AND BETWEEN
CITY OF PORTLAND AND
DIAMOND COVE HOMEOWNERS ASSOCIATION**

THIS LEASE AGREEMENT (hereinafter this "Agreement") is made as of this 17th day of ~~February~~ ^{April}, 2014, by and between the **CITY OF PORTLAND**, a municipal corporation located in Cumberland County, State of Maine (hereinafter the "CITY") and **DIAMOND COVE HOMEOWNERS ASSOCIATION**, a Maine not-for-profit corporation doing business on Great Diamond Island, Maine (hereinafter "LESSOR").

W I T N E S S E T H:

That **LESSOR**, for and in consideration of the rent hereinafter to be paid by **CITY**, and other consideration, and the covenants and agreements hereinafter contained, to be kept and performed by **CITY**, does hereby demise, lease and let unto **CITY**, the property located at or near the 'laundry building' on Great Diamond Island in Portland, Maine and more particularly described in Exhibit A (hereinafter the "**PREMISES**"), to have and to hold unto said **CITY** on the following terms and conditions:

1. Term and Renewal; Commencement Date

A. The initial term of this Agreement shall begin on the Commencement Date (as hereinafter defined), and shall continue until midnight on the last day of the calendar month containing the twentieth (20th) anniversary of the Commencement Date, unless sooner terminated by either party as provided herein. This Agreement shall renew automatically for four (4) additional 20-year terms, unless either party gives the other notice of non-renewal at least 30 days before such end of the 20-year term. The grounds for non-renewal shall be the same as the grounds for termination, set out in Section 18 of this Agreement; but in addition, however, if the **CITY** fails to substantially complete the construction of a transfer station facility on the **PREMISES** in accordance with the Final Site Plan and the Final Construction Plans, each as hereinafter defined, by *February 28, 2015*, or said transfer station facility is not operational by

May 30, 2015, this Agreement shall then be automatically and immediately terminated as of that date.

B. As used herein, the “**Commencement Date**” shall mean the date on which the last of the following events shall have occurred: (i) the date on which **CITY** shall obtain site plan approval by the Portland Planning Board of the Final Site Plan (the “**Planning Board Approval**”); (ii) the date on which **CITY** shall obtain an a Portland City Council order amending the 1985 Amendment Re: Conditional Rezoning of Ft. McKinley, to allow for the proposed transfer station facility as depicted on the Final Site Plan (the “**City Council Order**”); and (iii) the date on which **CITY** shall obtain the 2014 DEP Site Location Order, as hereinafter defined in Section 7(A) below. In the event the Commencement Date shall not occur by *October 1, 2014*, this Agreement shall then be automatically and immediately terminated as of that date.

2. Rent

From and after the Commencement Date, **CITY** agrees to pay to **LESSOR** as rent for such use and occupancy of the **PREMISES** the sum of One Dollar (\$1.00) per year, payable in advance. This is a ‘net lease’, that is, the costs of constructing and operating the transfer station facility shall be borne solely by **CITY**. **CITY** will pay any fees related to the improvements which are the transfer station facility, including but not limited to permit fees, and all costs of utility services necessary for the operation of the transfer station facility. **CITY** will not pay any real estate taxes on the **PREMISES**, but shall be responsible for any taxes or assessments on the building or improvements constructed by **CITY** at the **PREMISES**.

3. Purposes

(A) **CITY** shall use the **PREMISES** solely for the development, construction (including landscaping) and maintenance of a transfer station facility to provide trash compaction, recycling services, and short term storage of trash and materials to be recycled, within the screened improvements to be built on the **PREMISES**. Only trash and materials to be recycled that have been generated on Great Diamond Island or Little Diamond Island will be so processed at said transfer station facility. **CITY** will not knowingly or intentionally store or process hazardous waste on the **PREMISES**. **CITY** will not be permitted to build any improvements on the **PREMISES** other than those shown on the Final Site Plan and Final Construction Plans for this transfer station facility .

(B) There shall be no parking on the **PREMISES** unless related or incident to the trash processing and recycling, and then not overnight. There shall be no staging or storage of equipment on the **PREMISES** unless related or incident to the trash processing and recycling, and then only very short term.

(C) Subject to (i) the construction of the transfer station facility in accordance with the Final Site Plan and the Final Construction Plans and the conduct of the operation of said transfer station facility in accordance with this Agreement, and (ii) **CITY**’s obtaining the 2014 DEP Site Location Order, **LESSOR** represents to **CITY** that such purposes are permitted under the private regulation of the **PREMISES** set forth in the Amended and Restated General

Declaration of Covenants and Restrictions dated December 17, 1993 and recorded at the Cumberland County Registry of Deeds in Book 11277, Page 322; as modified and amended (hereinafter the “**DCHA Declaration**”).

4. Access

Appurtenant to the **CITY**'s leasehold of the **PREMISES**, **CITY** shall have a nonexclusive right to access the **PREMISES** from the “Lower Gate” and from the existing Diamond Cove Barge Landing, over the most direct, existing roadways, subject to the rules attached hereto as Exhibit C. **CITY** will repair any damage it causes to such defined access ways; and in addition, will provide limited annual general maintenance to such ways, such by as spreading several loads of gravel on said (gravel) ways, annually.

5. Site Plan and Facility Operation

CITY covenants and agrees:

A. that a plan of the Premises, as well as a preliminary site plan of the transfer station facility, not-yet approved by the Portland Planning Board or Planning Board staff, are attached to this Agreement as Exhibit B (hereinafter collectively, the “**Preliminary Site Plan**”);

B. that the transfer station facility will be constructed in accord with the Final Site Plan and the Final Construction Plans, including, but not limited to, the landscaping elements of such Plans, and the visual screening and any fencing elements of said Plans;

C. that in the event the **CITY** proposes to revise the Preliminary Site Plan, the **CITY** will provide **LESSOR** with a preliminary draft of the proposed revision; and in the event the proposed revision is material (as determined by City Corporation Counsel in its reasonable discretion), the **CITY** will incorporate any suggestions received by the **CITY** from **LESSOR** that are determined by **LESSOR** to be necessary for its representation in Section 3.C above and are received by **CITY** within 30 days of mailing such revision to **LESSOR**, provided that in the event such suggested changes cannot be made by the **CITY** reasonably cost effectively, or are in conflict with any requirements for the Planning Board Approval, the City Council Order, the 2014 DEP Site Location Order, or other required approvals for the transfer station facility, the parties will work in good faith to revise the Preliminary Site Plan to meet both of their respective needs; the Preliminary Site Plan (with any modifications not deemed material as determined by City Corporation Counsel in its reasonable discretion) or a revised version of it that is approved by the parties pursuant to this Section shall constitute the “**Final Site Plan**”, and the Final Site Plan is hereby incorporated by reference herein and Exhibit B shall be deemed revised accordingly;

D. that **CITY** will prepare and submit to **LESSOR** proposed construction plans for the transfer station facility and **CITY** will incorporate any suggestions made by **LESSOR** that are determined by **LESSOR** to be necessary for its representation in Section 3.C above and are received by **CITY** within 30 days of mailing of said proposed construction plans to **LESSOR**, provided that in the event such suggested changes cannot be made by **CITY** reasonably cost effectively, or are in conflict with any requirements for the Planning Board Approval, the City

Council Order, the 2014 DEP Site Location Order, or other required approvals for the transfer station facility, the parties will work in good faith to revise such proposed construction plans to meet both of their respective needs; the proposed construction plans or a revised version of them that are approved by the parties pursuant to this Section shall constitute the “**Final Construction Plans**”; and the Final Construction Plans are hereby incorporated by reference herein.

E. that the transfer station facility will be operated in accord with any operational elements of the Final Site Plan;

F. that the **CITY** will operate the transfer station facility in accord with any conditions required by the DCHA Declaration (including, without limitation, DCHA Declaration Section 4.18), the Planning Board Approval, the City Council Order, the 2014 DEP Site Location Order, and any other required approvals for the transfer station facility;

G. that under the normal course of operation, there will be no more than four to six (4-6) deliveries of waste/recycling per week by the **CITY** to the transfer station facility and, during summer months, at least one transfer of waste/recycling per week from the two transfer station hopper/compactor units off the island, and the two separate transfer station roll-off containers will be removed when full and then emptied and returned, all by appropriately sized vehicles; and

H. to operate the transfer station facility in a responsible, clean and orderly manner, and in addition to the regular removal of waste/recycling described above, to make reasonable best efforts to minimize odors emitted from the **PREMISES**.

6. Costs of Development and Maintenance of the Premises

The **CITY** shall provide all clearing, grading and construction of the transfer station facility and other development set forth in the Final Site Plan and Final Construction Plans, and otherwise all as deemed necessary by the **CITY** for its proposed use. **LESSOR** hereby consents to the crossing of the other portions of **LESSOR**'s real property as reasonably necessary for such purposes. The **CITY** shall provide all services deemed necessary to maintain the **PREMISES** in a safe condition all as deemed necessary by **CITY**.

7. Location of Structures and Use; 2013 Forest Management Plan/Manual

A All structures, site improvements and/or changes in the **PREMISES** shall be located or done in accordance with the laws, rules and regulations of all applicable federal, state and local jurisdictions. The parties acknowledge the following:

- (i) the **PREMISES** are located in the vicinity of “Compartment B” as defined in (i) a report dated March 31, 1989 and titled “Forest Management Plan for the Old Growth Softwood Stand on Diamond Cove Associates Property on Great Diamond Island, Casco Bay, City of Portland, Maine” prepared by Eco-Analysts, Inc. (the “**1989 Forest Management Plan**”) and (ii) a report dated January 19, 1989 and titled “Operations Manual for Activities Adjacent To and Within The Old Growth Stand of Trees Within The Diamond Cove Development On Great

Diamond Island” prepared by Eco-Analysts, Inc. (the “**1989 Stand Operations Manual**”);

- (ii) by Maine Department of Environmental Protection (“**DEP**”) Condition Compliance Order dated July 5, 1989 and recorded at the Cumberland County Registry of Deeds in Book 8833, Page 12 and re-recorded in Book 8902, Page 118 (the “**1989 DEP Site Location Order**”), the DEP expressly referenced both the 1989 Forest Management Plan and the 1989 Stand Operations Manual in connection with its approval of Diamond Cove Phase I; and
- (iii) for several reasons, including an infestation of hemlock woolly adelgid and concerns about dangerous fire conditions identified by Maine Licensed Foresters, **LESSOR** has engaged a Maine Licensed Forester to update and amend the 1989 Forest Management Plan and the 1989 Stand Operations Manual, and the updated and amended forest management plan and stand operations manual is attached hereto as Exhibit D (collectively, the “**2013 Forest Management Plan/Manual**”).

CITY agrees to submit such 2013 Forest Management Plan/Manual to the DEP, in connection with **CITY**’s application for approval by the DEP of the transfer station facility. This Agreement is subject to **CITY**’s obtaining a DEP Site Location modification order satisfactory to **LESSOR** (the “**2014 DEP Site Location Order**”) that (a) modifies the 1989 DEP Site Location Order by expressly replacing references to the 1989 Forest Management Plan and the 1989 Stand Operations Manual with the 2013 Forest Management Plan/Manual, and (b) confirms that the transfer station facility at the **PREMISES**, as approved by the DEP, is permitted by such 2013 Forest Management Plan/Manual. In the event the DEP shall propose revisions to the 2013 Forest Management Plan/Manual before issuing such a 2014 DEP Site Location Order, the parties will work in good faith to revise the 2013 Forest Management Plan/Manual to meet both of their respective needs and the requirements of the DEP; provided, however, that if the parties shall fail to agree on a final 2013 Forest Management Plan/Manual that is expressly incorporated into a 2014 DEP Site Location Order by *October 1, 2014*, this Agreement shall then be automatically and immediately terminated as of that date.

B. Work done on the **PREMISES** will either be conducted by a Contractor or by the **CITY**’s Department of Public Services. If the work is performed by a Contractor, the Contractor shall provide a performance bond for work performed on the **PREMISES**. **LESSOR** shall be named as co-obligee on the bond. The Contractor performing the work for **CITY** shall also procure general liability insurance in the minimum amounts of \$1,000,000 for each occurrence, and \$2,000,000 in the ‘general aggregate’ for bodily injury, death and property damage, naming **CITY** and **LESSOR** as additional insureds thereon.

C. The general public shall not be allowed by the **CITY** to have access to the transfer station facility to be built on the **PREMISES**; however, the **LESSOR** and its property management company, or the person or entity with property management responsibilities or trash pick-up responsibilities as agent for the **LESSOR**, shall be allowed access to the **PREMISES**, including the transfer station facility, for the disposal of trash and recyclables, provided that all such trash (except large items) shall be bagged as required from time to time by the **CITY**, such

as, inside the colored trash bags sold in support of its waste disposal system; and all such recyclables shall also be bagged or packaged as required by the CITY, from time to time.

8. Maintenance and Repairs, and Surrender Upon Termination

CITY represents that it has inspected and examined the PREMISES and accepts them in their present condition, and agrees that LESSOR shall not be required to make any improvements or repairs or provide any services whatsoever in or upon the PREMISES or any part thereof; CITY agrees to keep said PREMISES and the transfer station facility safe and in good order and condition at all times during the term hereof, and upon expiration of this Agreement or any sooner termination thereof, the CITY will quit and surrender the possession of the PREMISES quietly and peaceably and leave it in as good order and condition as they were at the commencement hereof. Upon such surrender of possession, the CITY may leave the screened improvements on the PREMISES provided that they then are in good order and condition (with CITY having performed required maintenance to date), reasonable wear and tear excepted, and shall remove any equipment and any fixtures (except as otherwise agreed by LESSOR), and will offer for sale to the LESSOR the trash compactors located within said screened improvements, at their then fair market value, given their age and condition, as determined by agreement of the parties, and if no such agreement is reached within 45 days, as determined by a valuation made by an independent third party chosen by the CITY and LESSOR. The obligations of CITY pursuant to this Section shall survive the expiration or termination of this Agreement.

9. Various City Commitments

A. CITY covenants and agrees, subject to the availability of funds, any required City Council approval, and any other required governmental approvals:

(i) When a term lease between the LESSOR and the CITY has been executed for the existing Diamond Cove Barge Landing, to make repairs to that facility or re-build that facility (in addition to the 'stop-gap' repairs already made by CITY prior to the date hereof), as soon as required by that facility;

(ii) to monitor animal or 'varmint' access to the waste stored on the PREMISES, and respond to any such access accordingly; and

B. CITY covenants and agrees to observe the conditions imposed by its proposed settlement in the litigation involving LESSOR and the Diamond Cove Barge Landing, including the conditions listed on the attached Exhibit C; in addition, CITY covenants and agrees not to park any vehicles overnight on the Diamond Cove ('Fort') one-half of Great Diamond Island, except in emergency circumstances. CITY further covenants and agrees to observe any conditions imposed by the DEP with respect to use of the Diamond Cove Barge Landing and adjacent roadways.

10. Liability

LESSOR shall not be liable for damage to or loss of property of any kind which may be lost or stolen, damaged or destroyed by fire, water or otherwise, while on the **PREMISES**. Up to the limits of, and subject to the terms and provisions of the Maine Tort Claims Act, **CITY** agrees to indemnify and save **LESSOR** harmless from all liability, loss or damage arising from any nuisance made or suffered on the **PREMISES** by **CITY**, the **CITY**'s guests, invitees, agents or servants due to any carelessness, neglect or improper conduct of any such persons; however, and by way of limitation of this indemnity and holding harmless, nothing herein is intended to, nor shall it be deemed to, waive, amend or otherwise modify any claim of immunity, any defense or any limitation of liability available to **CITY** under the Maine Tort Claims Act, 14 M.R.S.A. § 8101 et seq.

11. Default

In the event that **CITY** shall be in default in the performance of any of the terms, covenants, agreements or conditions herein agreed to be kept and performed by **CITY**, then in that event, **LESSOR** may terminate this Agreement as provided in Section 18 of this Agreement.

12. Hold Over

In the event that **CITY** shall hold over and remain in possession of the **PREMISES** with the consent of **LESSOR**, such holding over shall be deemed to be from month to month only, and upon all the same rents, terms, covenants and conditions as contained herein.

13. Notices

Any notices which are required hereunder, or which either **CITY** or **LESSOR** may desire to serve upon the other shall be in writing and shall be deemed served when delivered personally, or when deposited in the United States mail, postage pre-paid, return receipt requested, addressed to **LESSOR**, Diamond Cove Homeowners Association, c/o Phoenix Management, P.O. Box 759, Saco, ME 04072 and **LESSOR**, Diamond Cove Homeowners Association Board, Great Diamond Island, Portland, ME; or addressed to **CITY**, Mark H. Rees, City Manager, 389 Congress Street, Portland, ME 04101.

14. Subletting or Assignment

The **CITY** shall not sublet the **PREMISES** or assign its rights hereunder without the express written consent of **LESSOR**.

15. Inspections and Access

The **CITY** shall allow **LESSOR** to inspect the **PREMISES**, including the transfer station facility, at all reasonable times to insure compliance with the terms and conditions herein, including but not limited to compatible uses, maintenance, safety of operations and access on common rights of way.

16. Sale of the Premises

LESSOR agrees that if, during the term of this Agreement and extension, it sells the **PREMISES**, it shall assign its obligations under this Agreement to the buyer of the **PREMISES**.

17. Recordation in Registry of Deeds

The parties agree to execute and record in the Cumberland County Registry of Deeds a Memorandum of Lease outlining the principal terms of this Agreement.

18. Termination

A. **CITY** may terminate this Agreement upon one (1) year written notice to **LESSOR**.

B. **LESSOR** may terminate this Agreement upon a one (1) year written notice for failure of the **CITY** to observe and perform any of its terms, covenants, agreements or conditions hereunder, and such failure shall not have been cured within any time period specified herein or within 90 days of written notice to do so.

19. Waiver

Waiver by either party of any default in performance by the other of any of the terms, covenants, agreements or conditions contained herein, shall not be deemed a continuing waiver of the same or any subsequent default herein.

IN WITNESS WHEREOF, the said CITY OF PORTLAND has caused this Lease Agreement to be signed in its corporate name and sealed with its corporate seal by Mark H. Rees, its City Manager, thereunto duly authorized, and DIAMOND COVE HOMEOWNERS ASSOCIATION has caused this Lease Agreement to be signed by Matthew Hoffner, its Director and Operations Officer thereunto duly authorized, as of the day and date first set forth above.

WITNESS:

Sonia Bean

CITY OF PORTLAND

By:

Mark H. Rees
Mark H. Rees
Its City Manager

STATE OF MAINE
CUMBERLAND, ss.

March
February 19, 2014

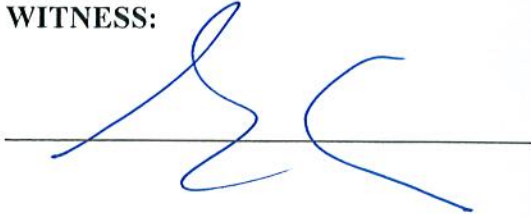
Personally appeared before me the above-named Mark H. Rees, City Manager of the City of Portland, and acknowledged the foregoing instrument to be his free act and deed in his said capacity, and the free act and deed of the City of Portland.

Before me,

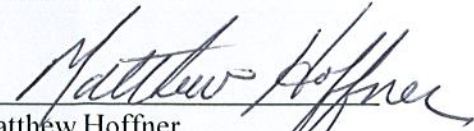
Sonia T. Bean
Notary Public/~~Attorney-at-Law~~

SONIA T. BEAN
Notary Public, Maine
My Commission Expires January 10, 2017

WITNESS:



**DIAMOND COVE HOMEOWNERS
ASSOCIATION**

By: 
Matthew Hoffner
Its Director and Operations Officer

STATE OF MAINE
CUMBERLAND, ss.

February 14, 2014

Personally appeared before me the above-named Matthew Hoffner, Director and Operations Officer of Diamond Cove Homeowners Association, and made oath that the foregoing is his free act and deed and the free act and deed of Diamond Cove Homeowners Association.

Before me,


Notary Public/Attorney-at-Law

JUDE A. CLUFF
NOTARY PUBLIC, MAINE
MY COMMISSION EXPIRES OCTOBER 27, 2020

Exhibit A

Leased Land for Proposed Transfer Station on Land
of Diamond Cove Homeowners Association

A certain lot or parcel of land located on Great Diamond Island, City of Portland, Cumberland County, State of Maine, being more particularly described as follows:

Commencing at the southeasterly corner of land now or formerly of Jesse S. and Evelyn C. K. Harriott (Book 25439 Page 248; City of Portland Tax Map Lot 83E-B-7).

Thence N 45° 05' 04" E two hundred seventy-two and ninety-nine hundredths feet (272.99') along the southeasterly boundary line of said land of Harriott to the northeasterly corner of said Harriott land and the southwesterly street line of Wood Side Drive.

Thence S 44° 54' 56" E one hundred seventy-nine and twenty-seven hundredths feet (179.27') along said southwesterly street line of Wood Side Drive to an angle point in said street line.

Thence S 40° 52' 40" W two hundred nineteen and forty-nine hundredths feet (219.49') through land now or formerly of Diamond Cove Homeowners Association (Book 24560 Page 106; City of Portland Tax Map Lot 83E-B-1) to a point in a gravel driveway or roadway and the **Point of Beginning**. Said Point of Beginning also being located S 60° 23' 34" E two hundred two and seventy-three hundredths feet (202.73') from said southeasterly corner of said land now or formerly of Harriott.

Thence continuing through said land now or formerly of said Diamond Cove Homeowners Association by the following courses and distances:

S 6° 20' 18" E two hundred twenty-nine and zero hundredths feet (229.00') to a point;

S 43° 24' 45" W one hundred eight and zero hundredths feet (108.00') to a point;

S 84° 09' 35" W one hundred sixty-six and zero hundredths feet (166.00') to a point;

N 4° 24' 42" W one hundred sixty-one and fifty hundredths feet (161.50') to a point;

N 30° 03' 59" E one hundred forty and fifty hundredths feet (140.50') to a point in a gravel driveway or roadway, said point being located S 8° 09' 38" E one hundred forty-one and ninety-two hundredths feet (141.92') from said southeasterly corner of said land now or formerly of Harriott;

S 31° 26' 26" E forty-six and fifty hundredths feet (46.50') to a point in a gravel driveway or roadway;

S 74° 03' 49" E thirty-two and zero hundredths feet (32.00') to a point in a gravel driveway or roadway;

N 81° 25' 21" E thirty-two and zero hundredths feet (32.00') to a point in a gravel driveway or roadway;

N 39° 34' 33" E one hundred nine and zero hundredths feet (109.00') to the Point of Beginning.

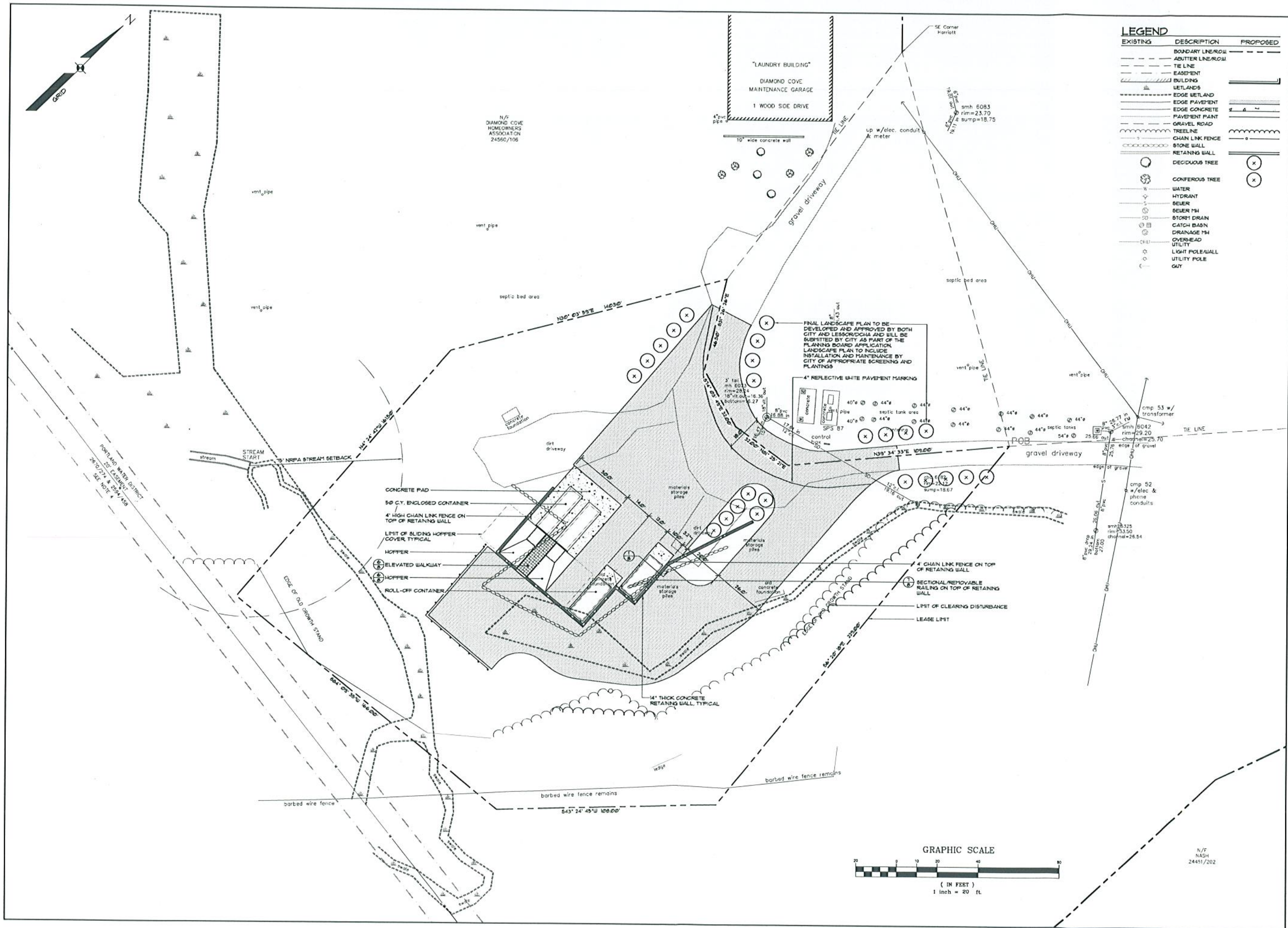
Said lot of land containing 55,050 square feet (1.3 acres), more or less.

Bearings herein are referenced to Grid North. All deed book numbers refer to the Cumberland County Registry of Deeds.

Reference is made to a plan entitled "Proposed Transfer Station Site – Lease Limit Boundary Plan, Woodside Drive, Diamond Cove, Great Diamond Island, Portland, Maine", dated September 4, 2013, on file in the City Engineer's Archives, Department of Public Services, 55 Portland Street, Portland, Maine.

(Description by City of Portland, William G. Scott, P.L.S. 2239, September 4, 2013)

Exhibit B, page 1 of 2



LEGEND

EXISTING	DESCRIPTION	PROPOSED
---	BOUNDARY LINE/ROW	---
---	ADJUTER LINE/ROW	---
---	TIE LINE	---
---	EASEMENT	---
---	BUILDING	---
---	EDGE WETLAND	---
---	EDGE PAVEMENT	---
---	EDGE CONCRETE PAVEMENT PAINT	---
---	GRAVEL ROAD	---
---	TREELINE	---
---	CHAIN LINK FENCE	---
---	STONE WALL	---
---	RETAINING WALL	---
○	DECIDUOUS TREE	○
○	CONIFEROUS TREE	○
○	WATER HYDRANT	○
○	SEWER	○
○	SEWER MH	○
○	STORM DRAIN	○
○	CATCH BASIN	○
○	DRAINAGE MH	○
○	OVERHEAD UTILITY	○
○	LIGHT POLE/WALL	○
○	UTILITY POLE	○
○	GUY	○

NOT FOR CONSTRUCTION

PROGRESS PRINT

REV.	BY:	DATE:	ISSUED FOR CLIENT REVIEW
A	OAM	02-05-14	STATUS:

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

SEBAGO TECHNICS
 WWW.SEAGOTECHNICS.COM
 75 John Roberts Rd., Suite 1A
 Portland, ME 04106
 TEL: 207-763-5000
 FAX: 207-763-5008

PROJECT NO. | FIELD BOOK | DESIGN | CHNG | OAM | JUN

SITE PLAN
 OF:
GREAT DIAMOND ISLAND TRANSFER AND RECYCLING FACILITY
 GREAT DIAMOND ISLAND
 PORTLAND, MAINE
 FOR:
CITY OF PORTLAND
 50 PORTLAND STREET
 PORTLAND, MAINE 04101

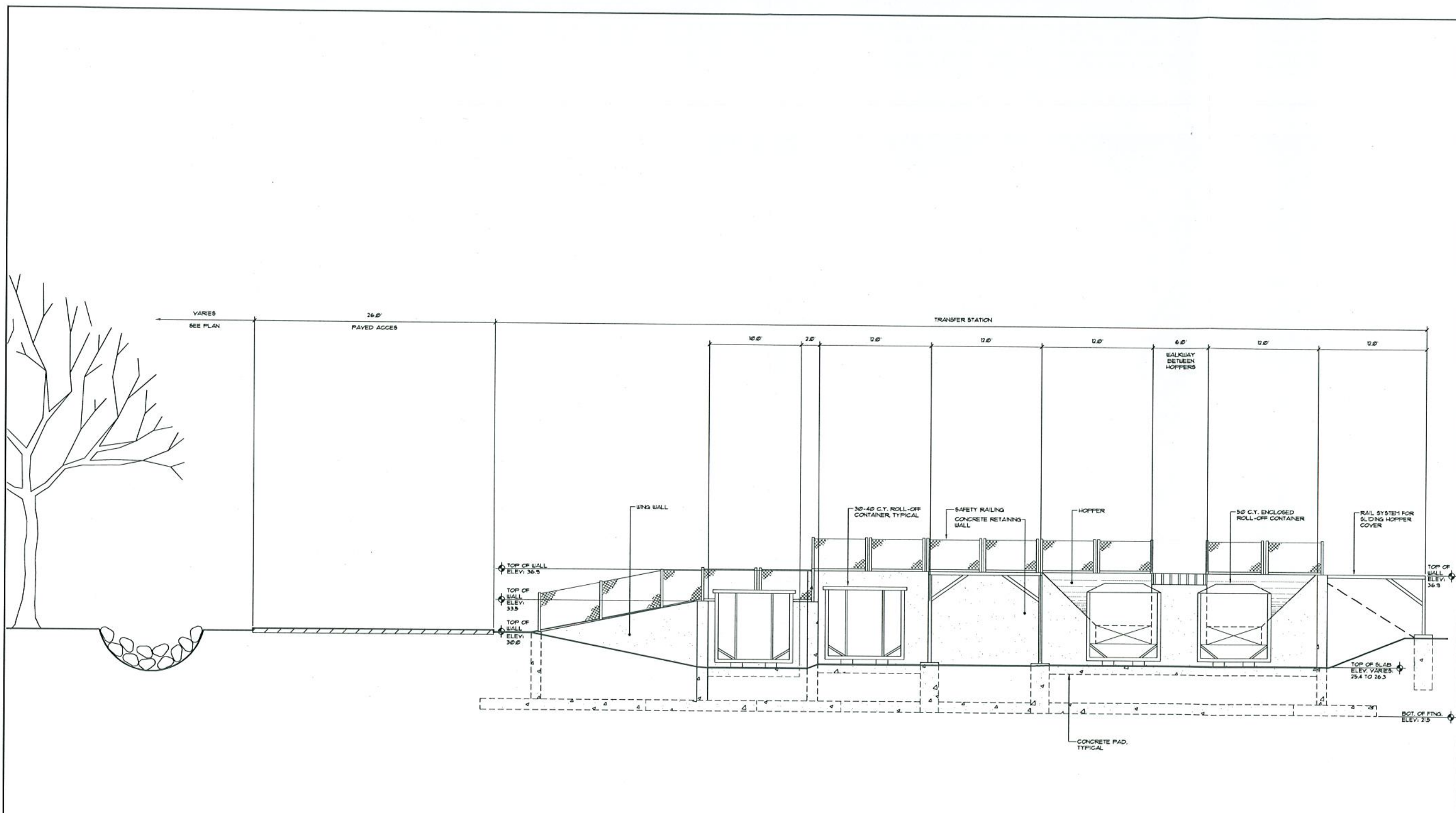
DATE	SCALE
01-29-14	NTS

SHEET 3 OF 8

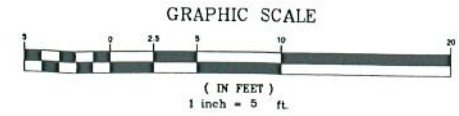
09405s.dwg, TAB: Lyou11

NOT FOR CONSTRUCTION

PROGRESS PRINT



ELEVATION
 SCALE: HORIZ. 1"=5'
 VERT. 1"=5'



REV.	BY	DATE	ISSUED FOR	STATUS
A	OAM	02-05-14	ISSUED FOR CLIENT REVIEW	

THIS DRAWING IS NOT VALID WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICAL, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICAL, INC.

PROJECT NO.	09405
FIELD BOOK	
DESIGN	CHKD
DRAWN	OAM
JAR	OAM

SEBAGO
 INCORPORATED
 75 John Robinson Rd., Suite 1A
 South Portland, ME 04106
 Tel: 207-266-2100

FRONT ELEVATION
 OF
 GREAT DIAMOND ISLAND TRANSFER AND
 GREAT DIAMOND ISLAND
 PORTLAND, MAINE
 FOR:
 CITY OF PORTLAND
 55 PORTLAND STREET
 PORTLAND, MAINE 04101

DATE	SCALE
01-29-14	1" = 5'

09405se.dwg, TAB1.dwg

Exhibit C

SPECIAL RULES REGARDING PARKING AND ANTI-IDLING POLICIES FOR USE OF THE BARGE LANDING OWNED BY DIAMOND COVE HOMEOWNERS ASSOCIATION

Note: Exceptions to the following rules will be made for emergency vehicles and/or emergency situations. These rules do not supersede other DCHA policies pertaining to the barge landing that are now in effect or that may be implemented in the future by the DCHA.

Parking and Loading/Off-loading of Vehicles:

Vehicles may be parked temporarily only in the following permitted parking area prior to and following a scheduled barge delivery:

On the cement pad located to the east of the barge landing on Wood Side Drive, between the hours of **9:00 a.m. to 5:00 p.m. only.**

All vehicle operators shall comply with the vehicle anti-idling policy that is used by the City of Portland for its own vehicles.

Days/Hours of Operation:

- Days of operation for City vehicles will be **Monday through Saturday** only.
- Days of operation for other non-DCHA vehicles (i.e., vehicles servicing the public side of the Island) will be **Monday through Friday** only.
- Hours of operation for City vehicles and other non-DCHA vehicles will be from **7:00 a.m. to 8:00 p.m. Monday-Friday and 7:00 a.m. to 6:00 p.m. on Saturday.**
- DCHA vehicles (i.e., vehicles servicing DCHA property or property of DCHA members) are not subject to these hours and days of operations restrictions.

Reports of Non-Compliance:

Any reports of non-compliance of these rules shall be reported to the City of Portland's Island and Neighborhood Liaison, who shall provide notice of any or all said reports to the DCHA.

The DCHA reserves the right to revoke permission to use the barge landing from non-DCHA vehicles or any operator thereof deemed to be in violation of any of these rules.

Exhibit D

[2013 Forest Management Plan/Manual]



SOUTHERN MAINE FORESTRY SERVICES, INC.

P.O. Box 910 • North Windham, Maine 04062

Addendum to Forest Management Plan

for

Old Growth Stand

Diamond Cove Home Owners Association

Great Diamond Island

Portland, Maine

Prepared by:

A handwritten signature in black ink, appearing to read "Rene D. Noel, Jr." The signature is fluid and cursive.

Rene D. Noel, Jr. ACF

Maine Licensed Forester

December 12, 2013

Purpose

I have been engaged to:

1. More accurately locate the bounds of the old growth stand and mark edge of this stand.
2. Assess the impact of the hemlock woolly adelgid (*Adelges tsugae*) on the Hemlocks with the stand.
3. Identify those trees which pose potential hazards to life or property should they fail.
4. Identify those hemlocks in suitable condition so that treatment with an insecticide will extend their lives.
5. Estimate scope of work needed to mitigate fire danger and aesthetic impact of the loss of hemlock from the stands.
6. Address the proposed trash transfer station impact on the old growth stand.

Field Work

Using a handheld GPS receiver (Delorme Earthmate PN-60) data was collected to map the edge of the old growth stand. To do this the stand was perambulated and pink plastic ribbon was hung to mark the edge of the stand. I recommend that boundary be marked permanently. Painting boundary trees, signs or posts and signs are various options. Also gathered was GPS locations of trees that were judged to be potential hazards. These were marked with orange plastic flagging should last a couple of years but they should be marked with paint if they are not to be felled soon. Finally hemlocks that were in locations that were significant to the aesthetics of the area and judged to be in suitable condition that insecticide treatment would allow them to retain vigor were identified. Separate individual stems were located by GPS and marked with blue flagging. Small groves of trees around the tennis courts and along Diamond Avenue are identified solely on the included map.

Report

The forest management plan prepared in 1989 gives an excellent description of the stand, soils, terrain, and other physical features. That work has not been recreated in this report. There has been little change in the forest other than a small amount of wind damage and other natural mortality. The hemlock woolly adelgid infestation and its effect is the primary change in forest conditions.



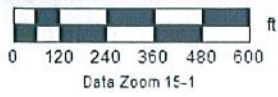
Diamond Cove Home Owner Assoc.
Common Area Shown in Red
Portland Parcel Map Shown in Purple

Proposed Transfer Station

drawn by:
Rene D. Noel, Jr. ACF
M/A/ta Licensed Forester # 325
November 20, 2013
Not a legal survey

Data use subject to license.
© DeLorme, XMap® 7.
www.delorme.com

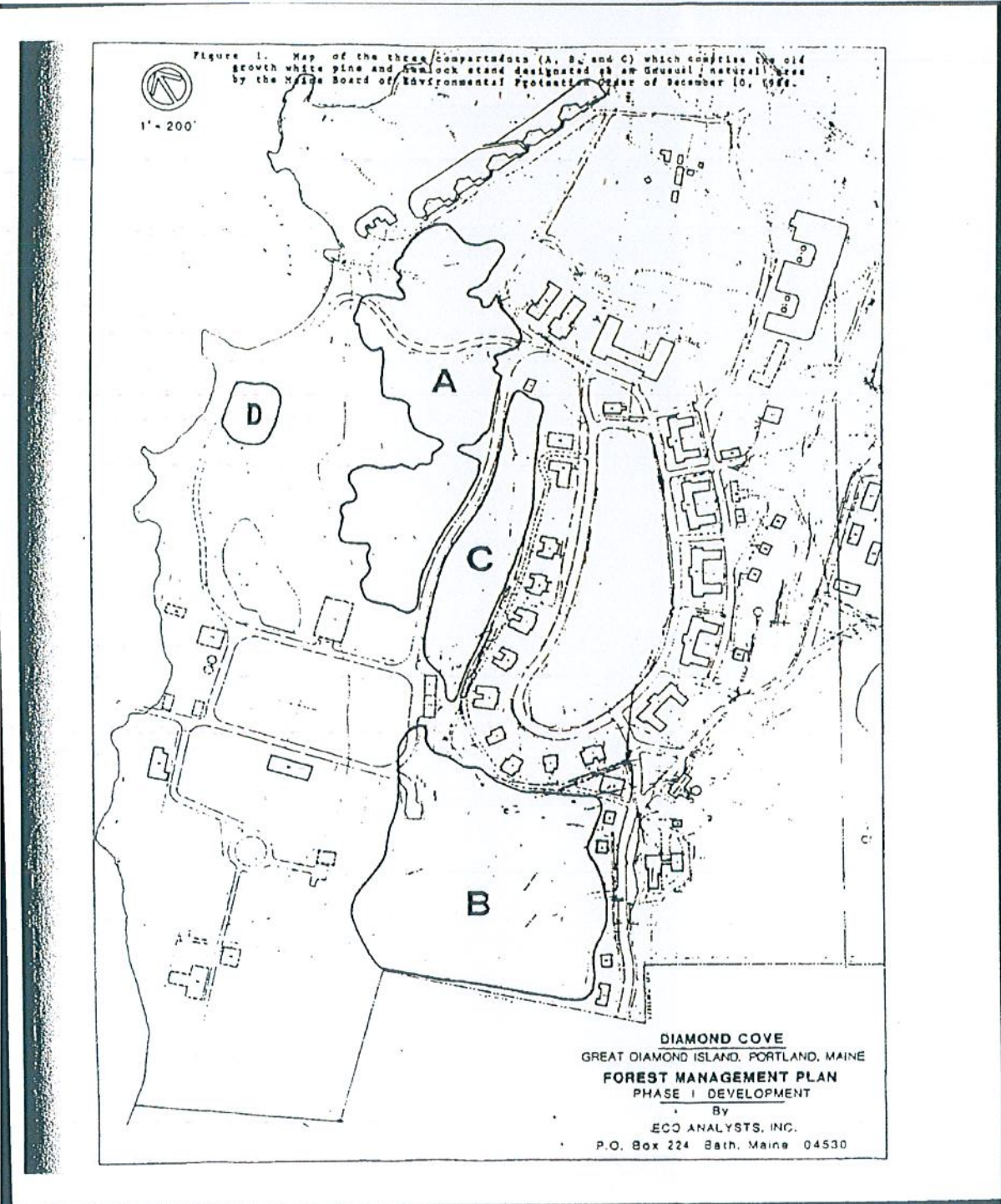
MN (15.5' W)





This area totals 15.58 acres and is a mapping of my judgement of the old growth stands boundary to the drip edge of the crowns of the trees identifying the edge of the stand. This is the accepted definition of a stand boundary. The old growth was determined by me based on size, branching, stem and bark characteristics which indicate old age for the various species. It contains some area in gravel roads which is consistent with the 1989 map. The acreage stated in 1989 was 17.43 acres and this includes a 35 foot buffer where the old growth is bordered by younger forest.

Compartment Map from 1989 Plan





Data use subject to license.
© DeLorme, XMap® 7.
www.delorme.com

MN (15.5° W)

0 100 200 300 400 500 ft
Data Zoom 16.0

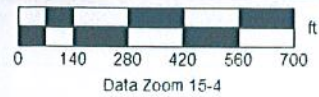


Data use subject to license.

© DeLorme XMap® 7

www.delorme.com


 MN (15 5° W)



Damage by Hemlock Woolly Adelgid

All of the hemlock are showing signs of damage from adelgid feeding. I would estimate that on the average, the hemlock have about 50% of normal foliage density. Hemlock is a significant component of Compartment A, (39.9%), Compartment B, (75.3%) and Compartment C, (23.4%) Compartment D (0%). There are also some understory sapling and small pole size hemlock that were not inventoried and are not included in these numbers.

With out insecticide treatment it can be anticipated that mortality of the hemlock will approach 100%. Based on 1989 inventory and my observations there would be about 300 tons of biomass contained in these trees. That would be about 10 tractor trailer loads of material. About a third or 100 tons would be in fine to medium size fuel which is of concern in a wildfire situation.

There is the option of harvesting all the hemlock and removing them from the island.

Hemlock is not particularly valuable as timber. Considering the cost of utilizing this material by shipping it to the mainland and the impact of heavy equipment needed to remove it I do not recommend this option.

The second option is to fell the stems as they die and treat the fine and medium size fuel to make it less flammable. Within 100 feet of any structure I recommend chipping branches and tops with a portable chipper. In areas over 100 feet from buildings branches and tops should be cut up so they lie within a foot or two of the ground. This treatment will hasten their decay and the close proximaty to the ground will keep the moisture content up in the fuel making it less flammable.

Current Hazards

Fourteen stems, 3 hardwoods and 13 hemlock were judge as currently being hazardous and located where they could damage people or property should they fail. They are marked with orange flagging. I did not get an estimate from arborists on the cost of dropping and treating these stems.

The three hardwoods are the most difficult to remove. A white birch, a red maple and a large sugar maple located at the eastern edge of Compartment C are all fairly close to residential buildings and are not easy to remove. The large sugar maple is located between two buildings and contains a considerable amount of rot. It will be somewhat of a challenge to remove. The weight of the large limbs indicate they are likely to fall towards the building to the trees north.

The hemlocks are located that they can likely be felled away from improvements.

I did not get estimates from arborists on the cost of removing these stems but I would estimate a mainland cost in the \$5,000 to \$10,000 range. My experience with transporting men and equipment is it adds significantly to the cost.

Future Mortality

Based on the inventory in the 1989 plan it appears there are 250 large hemlock in the three compartments. I have identified approximately 99 that can be treated and their lives extended for as long as the association is willing to continue treatment. These were either marked with blue flagging (individual stems) or are located in small groves shown on included map. That leaves approximately 150 trees that are likely to die in the next 5 to 10 years if adelgid feeding damage remains at current levels. Or in other words there will be about 20 trees per year that will need to be dropped, limbed and limbs cut up or chipped.

Trees that are not near buildings or other improvements can be dropped by a professional logger limbed and slash treated less expensively than by a licensed arborist. I would estimate the cost for this sort of work to be about \$100 per tree plus transport cost.

Trees near buildings and improvements should be taken down by a licensed arborist who is skilled and insured for in this work. A two man arborist crew with truck and chipper is being billed in the \$300 per hour range. I would estimate they can fell and chip branches from two to four trees per day.

I recommend the Association budget an amount annually to do a certain amount of this work. Arborists' slow season is usually winter and this is the most suitable time to do this sort of work in this community. It may be possible to negotiate some discount from regular fees with a long term contract.

Replanting

Where the hemlock is in decline more light is reaching the forest floor. Seedlings and saplings are already responding to this increase light. In many areas this natural reseedling will replace the forest. In those areas that this does not occur or where it is destroyed during felling and fuel reduction activities of dying hemlock I recommend planting white pine and red oak. Both are native to the island, grow well in that environment and are trees that are well rooted and wind firm in windy conditions. There are numerous young stems, seedlings and saplings already established. Where and how many replacement trees will be needed will depend on how many are destroyed in the felling process. Where sizable areas (600 sq. ft or more of open ground is my recommendation) of regeneration are destroyed I recommend planting at the spacing described. There is no ratio between trees cut and trees planted.

I recommend seedlings be planted spaced about twelve feet apart. The oak should be protected with a five or six foot tree shelter to assure they grow above a height that will be browsed by deer. Large seedlings or transplants are recommended as these will more quickly grow out of reach of deer. Four or five year old pine transplants and oak seedlings a minimum of 24" tall are recommended. Depending on quantity, this size stock is available for \$3.00 to \$10.00 per seedling.

Invasive Plants

The plant community on the island includes a large number of invasive species. Honeysuckle, bittersweet, barberry and Japanese knotweed are those noted which are likely invade disturbed forested areas. These species are very aggressive and have the potential to dominate a site preventing native vegetation from reestablishing itself. Controlling these species is difficult. It is possible to control small infestations by uprooting the plants. However, such mechanical control is labor intensive and needs to be repeated annually to remove sprouts from broken roots and new seedlings. Herbicides are much more efficient. Glyphosate the active chemical in Roundup brand yard products will control all of these. The woody species can be controlled with either a foliar application later in the growing season or by treating the surface of cut stumps within a day or two of the stems being cut. Japanese knotweed is easiest to treat with a foliar application. Ideally this should be done at the time of flowering. Stems are hollow and stems can be cut and treated by pouring herbicide into the hollow stem but this is very time consuming on all but smallest infestations.

Managing Fire Risk

Risk of wild fire is best controlled by controlling fuel. To begin any flammable materials that collect around buildings should be removed. Porches, decks and other attached objects as well as gutters, roof valleys and other places where debris collects should have leaves and other fine fuels removed. Ideally the areas where this material collects should be screened to prevent these build ups.

Away from the building concentric rings of treatment should be applied. Nearest the building should have plant material and landscaping which is fire resistant such as green lawn, gravel or pavement. Shrubs should not be planted so they contact the building and species which are less likely to burn (hardwoods species in general) should be considered. Continuous stands of vegetation that could carry a fire should be avoided. This ring is typically the area immediately around the house lawn and other landscaped features. The next ring is more natural vegetation but in which fine fuel is not allowed to accumulate. Nor should dense stands of young stems be allowed to grow. Park like comes to mind with well spaced trees and understory plants and little brush or other fine flammable fuels. Typically 75 feet is recommended for this ring. The outer ring is the natural forest. Large trees do not easily burn. It takes a ladder of fuel from the ground to the crowns of large trees to ignite them. Controlling fire danger means controlling this fuel. The litter and duff layer of organic material is flammable but being on the ground maintains a fairly high moisture content and slower burning. Dead limbs and branches and small seedlings and saplings particularly softwoods are the most common fast fuels in a forest. Chipping or lopping dead material so it lays within a foot or so of the ground will hasten its decay and place it so it maintains a high moisture content. Seedlings and saplings should be spaced so there is not a continuous stand. Individual stems and small groups separated from each other are ideal. As these grow lower limbs can be pruned until the stem is free of limbs for 6 or 8 feet.

My fire training occurred in a much drier climate than Maine but I believe the guidelines would be applicable to an island situation. In that climate it was recommended that a fire resistant forest be maintain out at least two tree lengths out from any structures or improvements. In this case that means about 150 feet back from anything that should be protected from fire.

Following these recommendations does not remove all fire danger. It should, however, slow the advance of a wildfire giving time for the arrival of men and equipment that will suppress the fire.

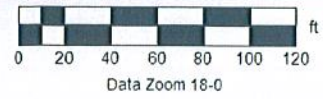
Diamond Cove Homeowners Assoc.
Location of Hazardous Trees
Map 1



drawn by:
 Rene D. Noel, Jr. ACF
 Maine Licensed Forester # 325
 November 20, 2013
 Not a legal survey

Data use subject to license.
 © DeLorme. XMap® 7.
 www.delorme.com

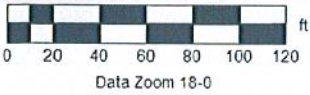
MN (15.5° W)





Data use subject to license.
© DeLorme XMap® 7.
www.delorme.com

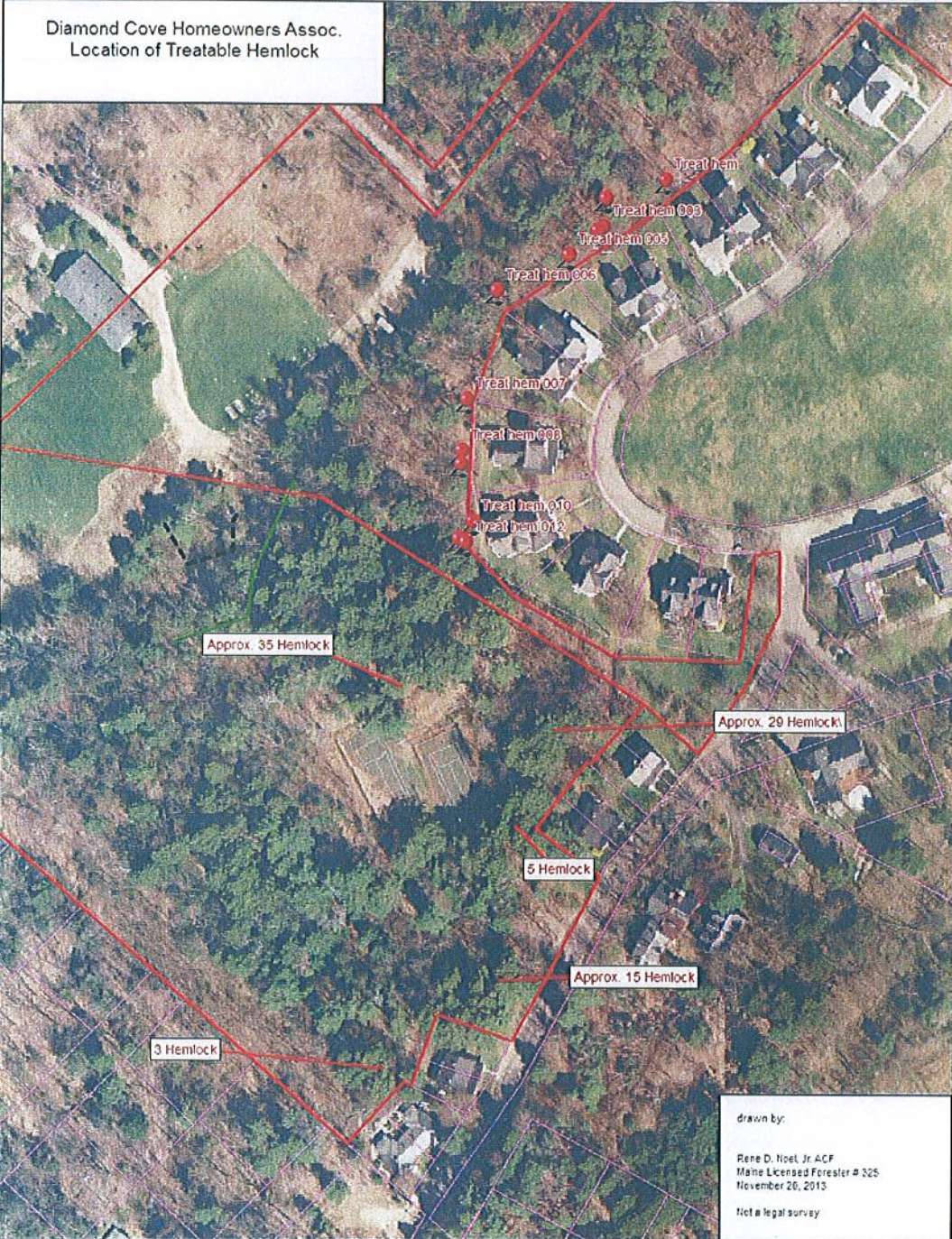
MN (15.5° W)



Insecticide Treatment

The forest between McKinley Court and West Side Drive and west of Diamond Avenue and around the tennis court have 99 hemlocks that contribute greatly to the forest of that residential area. Systemic insecticides containing the active ingredient imidacloprid are effective in controlling the insect for a number of years following application. Some research has shown treatments every three or four years may be effective. Other products are in development/label phases and current product recommendations should be checked when treatments are planned.

This sort of treatment is fairly low tech. Backpack sprayers are used to either apply the chemicals to the ground or stem or granules are spread on the ground. It is necessary for the tree to absorb the chemical and translocate it to the needles. I estimate it would take a two man crew a full day to do the treatment. Depending on the cost of chemical at the time I estimate the cost of treatment to be in the \$2,000 range.



Data use subject to license
 © DeLorme, XMap® 7.
 www.delorme.com

MN (15 5' W)

0 40 80 120 160 200 240 280 ft
 Data Zoom 16-7

Trash Transfer Station

Most of the proposed site is in an area which appears to have not been forested 24-27 years ago when the original work for the forest management plan was undertaken. However, one corner will encroach on the old growth stand and will require the removal of one large hemlock tree. This tree is not in good condition because of adelgid feeding. As I envision the propose construction work less than 500 square feet within the old growth stand will need to be disturbed. The effect on the stand will not be noticeable. I suggest as a mitigation that buffer area to the west be expanded by a similar area. There are some large hardwood stems in this area that are 40 or 50 years younger than the oldest trees. With the anticipated loss of the hemlock due to adelgid damage these will be a natural expansion of a stand with old growth characteristics.

Summary of Recommendations/Findings:

- Use of new technology (GPS mapping) has enabled a more precise delineation of the Old Growth Forests first identified in 1989 plan (page 2)
- trees identified and marked- establish tree drip line as the exact edge on all Old Growth trees along the border of each compartment (page 4)
- Woolly adelgid damage to Old Growth hemlocks evaluated
 - Certain trees that pose a hazard to life or property marked for removal (page 8)
 - Certain trees with enough vitality remaining to benefit from insecticide application marked (page 14)
- Recommendation for DCHA to create an ongoing yearly budget to deal with the eventual death and removal of infected hemlocks (page 9)
- Replanting recommendations made for certain areas of the Old Growth stand using native species (page 9)
- Recommendations made for the proper cutting/removal/chipping of damaged/dead trees within the stand to mitigate forest fire risk (pages 8-9)
- Recommendation on limb trimming and removal of small saplings as part of good management practices (page 10)
- Recommendations on insecticide application to save viable hemlocks (page 14)
- Minimal impact to Old Growth Stand (Compartment B) due to proposed construction of trash transfer station
 - 1 infested hemlock should be removed (page 16)
 - Add 500 square feet of area to the west of Compartment B to offset any disturbance and harmonize existing Old Growth area with large hardwoods within this new area (page 16)



Exhibit 6

Lighting Specifications

MAGNULITER® LED SERIES

LED FLOODLIGHTS

Cat.#

Job

Type



HUBBELL
Outdoor Lighting

Approvals

SPECIFICATIONS

Intended Use:

The MLED family is a large area floodlight designed to provide multiple NEMA distributions to allow the best beam utilization on your application. Typical uses are area lighting for safety and security, build façade illumination, flag lighting, large sign or statuary accent.

Construction:

Housing and doors are die-cast aluminum with dark bronze powder paint for durable life and lasting appearance. The back housing has two compartments which allows isolation of the driver from the LED light engine. This separation protects the driver from the light engine heat and also allows the LEDs to run at peak performance.

The lens door is sealed with four stainless steel screws and features a convex molded glass protective lens sealed with silicone gaskets. The lens provides maximum light output and reduces the effective projected area of the fixture to a maximum 2.0 sq. ft. EPA.

A separate driver access door allows entry for wiring. There is no need to open the optical door. A compression cord grip and 3ft of 16/3 SO cord is provided on all units.

A heavy gauge steel full yoke with zinc oxide coating is standard on all units. Yoke has aiming angle increments provided along with locking washers and stars. Yoke bolts are stainless steel and provide a secure hold when properly tightened.

Optics:

The family is made up of two LED assemblies, an 80LED engine that produces a nominal 11,000 lumens and a 40LED engine with 5,500 lumens. Each engine is featured with three NEMA beam spreads (3x3, 5x5, 7x7) to allow the best utilization of the lumens and reduce spill light. The light engine is protected from the elements by the tempered molded glass outer lens. CRI - 70, CCT 4800K nominal.

Electrical:

- Drivers are universal voltage 120 through 277V, 50/60Hz operation
- 80LED fixtures consume a nominal 179 input watts and draw 1.96A-120V / .85A-277V
- 40LED fixtures consume a nominal 107 input watts and draw .95A-120V / .40A -277V
- Drivers have greater than .90 power factor and less than 20% Total Harmonic Distortion

Installation:

Steel yoke mount/mounting adapters available

Listings:

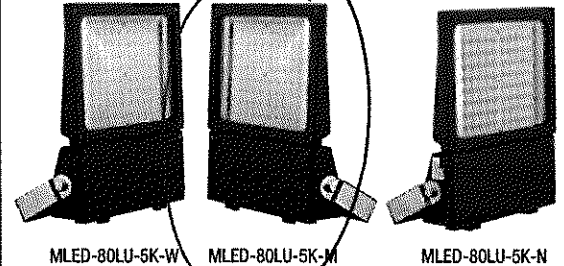
Listed to UL1598 for use in wet locations, IP65 rated; Some models meet DesignLights Consortium (DLC) qualifications, consult DLC website for more details:

<http://www.designlights.org/QPL>

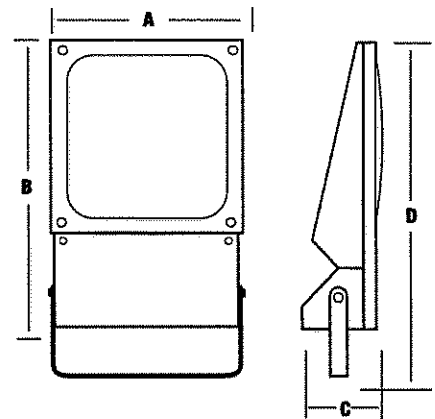
Warranty:

Five year limited warranty (for more information visit: <http://www.hubbelloutdoor.com/resources/warranty/>)

PRODUCT IMAGE(S)



DIMENSIONS



A	B	C	D	EPA	Weight
16"	18.75"	4.25"	21"	2.0 ft ²	25 lbs.
406 mm	476 mm	108 mm	534 mm	0.06 m ²	9.09 kg

CERTIFICATIONS/LISTINGS

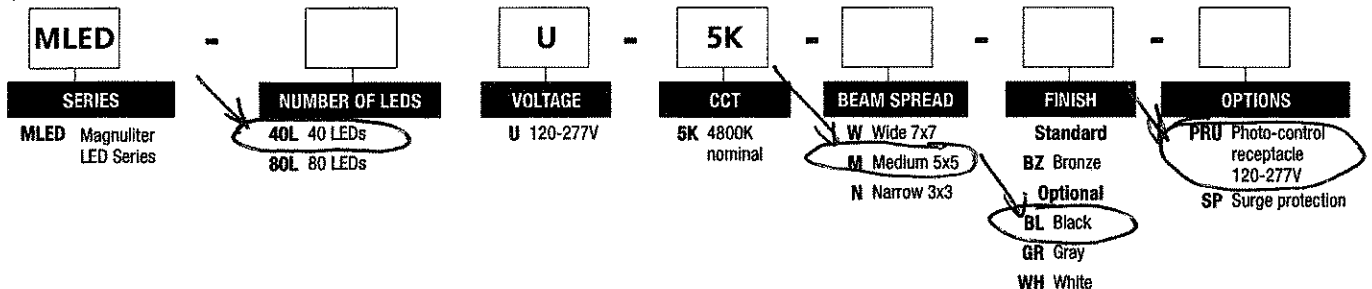


IP65



ORDERING INFORMATION

ORDERING EXAMPLE: MLED-80LU-5K-W-BZ-SP



Catalog Number	Wattage	Voltage	Lumens	Drive Current	CRI	LPW	DesignLights Consortium
MLED-80L-U-5K-N	187	120-277V	13880	525mA	80	74	

ACCESSORIES - Order Separately, Field Installed

Catalog Number	Description
4024C	2 3/8" O.D. slipfitter for yoke units - Bronze
4090	Heavy-duty cast iron crossarm fitting for horizontal trunnion, Bronze Lektrocote®



HUBBELL
Outdoor Lighting

Hubbell Outdoor Lighting • 701 Millennium Boulevard • Greenville, SC 29607 • Phone: 864-678-1000

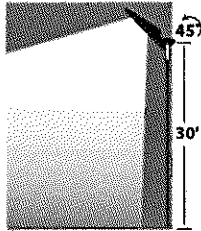
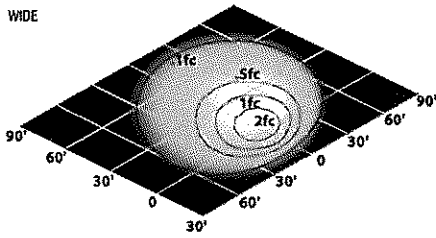
Due to our continued efforts to improve our products, product specifications are subject to change without notice.

© 2013 HUBBELL OUTDOOR LIGHTING. All Rights Reserved • For more information visit our website: www.hubbelloutdoor.com • Printed in USA

M-LED-SPEC 7/14

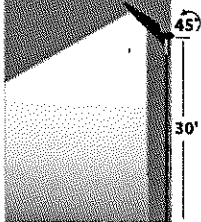
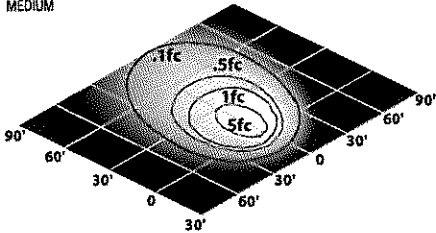
PHOTOMETRICS

WIDE



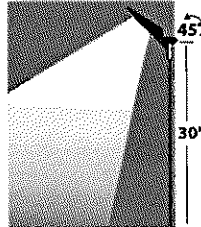
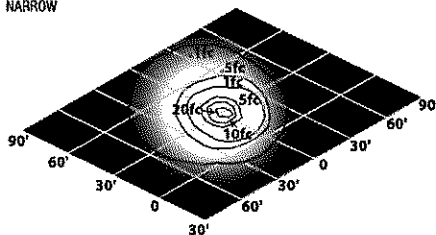
MLED-60L-U-5K-W.IES

MEDIUM



MLED-80L-U-5K-M.IES

NARROW



MLED-80L-U-5K-N.IES

PHOTOMETRIC REPORTS

Catalog Number	IES Report
MLED-80LU-5K-W 7x7	MLED80LU5KW.IES
MLED-80LU-5K-M 5x5	MLED80LU5KM.IES
MLED-80LU-5K-N 3x3	MLED80LU5KN.IES
MLED-40LU-5K-W 7x7	MLED40LU5KW.IES
MLED-40LU-5K-M 5x5	MLED40LU5KM.IES
MLED-40LU-5K-N 3x3	MLED40LU5KN.IES

PERFORMANCE DATA

# OF LEADS	DRIVE CURRENT (MILLIAMPS)	SYSTEM WATTS	DISTRIBUTION TYPE	NEMA	FIELD ANGLE H° X V°	(4800K NOMINAL, 70 CRI)		
						LUMENS	LPW	MAX BEAM CANDLEPOWER
40	700mA	107W	N	3 x 3	37 x 36	6,372	60	36,306
			M	5 x 5	78 x 76	6,272	59	9,531
			W	7 x 7	158 x 158	5,326	50	1,938
80		179W	N	3 x 3	38 x 38	11,362	63	61,540
			M	5 x 5	77 x 75	11,121	62	17,648
			W	7 x 7	158 x 157	9,874	55	3,585

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment, application and inherent performance tolerances of the electrical components.

LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

AMBIENT TEMPERATURE	LUMEN MULTIPLIER
0°C	1.02
10°C	1.01
20°C	1.00
25°C	1.00
30°C	1.00
40°C	0.99
50°C	0.98

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

PROJECTED LUMEN MAINTENANCE

AMBIENT TEMP.	0	25,000	50,000	100,000	150,000	200,000	Calculated L70 (HOURS)
25°C	1.00	0.94	0.90	0.88	0.82	0.75	>201,000
40°C	0.99	0.91	0.86	0.83	0.75	0.75	>125,000

1 Cree XP-E, 700mA, 10,000hrs

ELECTRICAL DATA

# OF LEADS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	CURRENT (Amps)	SYSTEM POWER (W)
40	STD. (625mA)	120	0.881	104
		277	0.486	107
80	STD. (525mA)	120	1.466	179
		277	0.676	166



Hubbell Outdoor Lighting • 701 Millennium Boulevard • Greenville, SC 29607 • Phone: 864-678-1000
 Due to our continued efforts to improve our products, product specifications are subject to change without notice.

© 2013 HUBBELL OUTDOOR LIGHTING. All Rights Reserved • For more information visit our website: www.hubbelloutdoor.com • Printed in USA

M-LED-SPEC 7/14

LIGHTING FACTS

LED lighting facts
A HUBBELL OUTDOOR LIGHTING PRODUCT

Light Output (Lumens)	11362
Watts	178.7
Lumens per Watt (Efficiency)	63

Color Accuracy
CRI (Color Rendering Index)

76

Light Color
(Measured at 2m)

4793 (Daylight)

Warm White | High White | Neutral | Cool White

Warranty**

Yes

Hubbell Outdoor Lighting is a registered trademark of Hubbell Outdoor Lighting. All other trademarks are the property of their respective owners. © 2013 Hubbell Outdoor Lighting. Hubbell Outdoor Lighting is a registered trademark of Hubbell Outdoor Lighting.

** See www.lightingfacts.com/products for details.

Hubbell Outdoor Lighting is a registered trademark of Hubbell Outdoor Lighting. All other trademarks are the property of their respective owners. © 2013 Hubbell Outdoor Lighting. Hubbell Outdoor Lighting is a registered trademark of Hubbell Outdoor Lighting.

LED lighting facts
A HUBBELL OUTDOOR LIGHTING PRODUCT

Light Output (Lumens)	5326
Watts	106
Lumens per Watt (Efficiency)	50

Color Accuracy
CRI (Color Rendering Index)

77

Light Color
(Measured at 2m)

4869 (Daylight)

Warm White | High White | Neutral | Cool White

Warranty**

Yes

Hubbell Outdoor Lighting is a registered trademark of Hubbell Outdoor Lighting. All other trademarks are the property of their respective owners. © 2013 Hubbell Outdoor Lighting. Hubbell Outdoor Lighting is a registered trademark of Hubbell Outdoor Lighting.

** See www.lightingfacts.com/products for details.

Hubbell Outdoor Lighting is a registered trademark of Hubbell Outdoor Lighting. All other trademarks are the property of their respective owners. © 2013 Hubbell Outdoor Lighting. Hubbell Outdoor Lighting is a registered trademark of Hubbell Outdoor Lighting.

LED lighting facts
A HUBBELL OUTDOOR LIGHTING PRODUCT

Light Output (Lumens)	11121
Watts	175.1
Lumens per Watt (Efficiency)	62

Color Accuracy
CRI (Color Rendering Index)

76

Light Color
(Measured at 2m)

4811 (Daylight)

Warm White | High White | Neutral | Cool White

Warranty**

Yes

Hubbell Outdoor Lighting is a registered trademark of Hubbell Outdoor Lighting. All other trademarks are the property of their respective owners. © 2013 Hubbell Outdoor Lighting. Hubbell Outdoor Lighting is a registered trademark of Hubbell Outdoor Lighting.

** See www.lightingfacts.com/products for details.

Hubbell Outdoor Lighting is a registered trademark of Hubbell Outdoor Lighting. All other trademarks are the property of their respective owners. © 2013 Hubbell Outdoor Lighting. Hubbell Outdoor Lighting is a registered trademark of Hubbell Outdoor Lighting.