DEVELOPMENT REVIEW COORDINATOR
POST APPROVAL PROJECT CHECKLIST

Date: 3/28/14

Project Name: Seaport Lofts (Bay House Phase II)

Project Address: 101-121 Newbury Str.

Site Plan ID Number: 2013-179

Planning Board/Authority Approval Date: 10/22/13

Site Plan Approval Date: 10/23/13

Performance Guarantee Accepted: 11/26/14 Bank of New England LOC # 12605

Inspection Fee Paid: 11/19/14 ck # 1039 $ 9,456.12

Infrastructure Contributions Paid: 11/19/14 ck # 1040 $ 8,200.00

Amount of Disturbed Area in SF or Acres: 30,492 SF

MCGP/Chapter 500 Stormwater PBR: City Stormwater Permit / Maint. Agreement needed

Plans/CADD Drawings Submitted: ?

Pre-Construction Meeting: 11/18/14

Conditions of Approval Met: 10/20/16

As-Builts Submitted:

Public Services Sign Off: 10/20/16

Certificate of Occupancy Memo Processed: (Temporary or Permanent) 10/21/16

Performance Guarantee to Defect Guarantee: 10/21/16

Defect Guarantee Released:

CITY OF PORTLAND, MAINE

PLANNING BOARD

October 31, 2013

Demetri Dasco
Atlas Investment Group, LLC
35 Fay Street, 107B
Boston, MA 02118

Will Conway
Sebago Technics
75 John Roberts Road
South Portland, ME 04106

Project Name: Seaport Lofts (Bay House Phase II)
Address: 101-121 Newbury St./40 Hancock St.
Applicant: 113 Newbury Street, LLC

Project ID: 2013-179
CBLs: 20-D-13, 14, 15, 32
Planner: Nell Donaldson

Dear Mr. Dasco:

On October 22, 2013, the Planning Board considered your subdivision and Level III site plan application for the proposed Seaport Lofts development at 101-121 Newbury Street and 40 Hancock Street. The Planning Board reviewed the proposal for conformance with the subdivision and site plan standards of the city's land use code and voted to approve the application with the waivers and conditions presented below:

WAIVERS

The Planning Board voted (7-0) to grant the following waivers:

1. A waiver of the technical standard (*Section 1.7.2.7*) regarding the minimum separation between driveways to allow the driveway of Seaport Lofts within the 100-150 separation requirement of an adjacent driveway to the west, as shown on the final site plan.

2. A waiver of the technical standard *(Section 1.7.2.3)* regarding the minimum driveway width of 20 feet to allow a driveway of 19 feet as depicted on the final site plan.

3. A waiver of the technical standard represented in Figures I-27 to I-29 of the city's Technical Manual regarding the parking lot dimensional requirements to allow parking as designed on the final plans.

4. A waiver of the technical standard *(Section 1.14)* regarding the compact parking space limit to allow 12 compact parking spaces on site, comprising more than the standard 20% of total spaces.

ok
Paid
ck# 10440
11/19/14

5. A waiver of the site plan standard (Section 14-526(b)2.b(iii)) and Technical Manual *Section 4.6.1* regarding street trees due to site constraints. Technically, 39 street trees are required on site. Only 10 trees, a number proportionate with the site's frontage, are proposed. To compensate, the applicant shall contribute $5,800 (for 29 street trees) to Portland's tree fund.

SUBDIVISION

The Planning Board voted (7-0) that the proposed plans are in conformance with the subdivision standards of the city's land use code, subject to the following conditions of approval, which must be met prior to the release of a recording plat, unless otherwise stated:

done

1. The subdivision plat shall be finalized for review and approval by the Planning Authority, Department of Public Services, and Corporation Counsel;

done

2. The following shall be provided for review and approval by Corporation Counsel prior to the release of the building permit:
   a. Pedestrian access easement for the areas of the sidewalk that are not in the public right-of-way and
   b. License agreement for the building foundation and/or awnings;

3. The Condominium Association documents, including provisions for the allocation of at least one parking space per unit, shall be provided for review and approval by the Planning Authority, Department of Public Services and Corporation Counsel prior to the issuance of a Certificate of Occupancy.

SITE PLAN REVIEW

The Planning Board voted (7-0) that the plan is in conformance with the site plan standards of the land use code, subject to the following conditions of approval that must be met prior to the issuance of a building permit, unless otherwise stated:

1. The applicant shall provide application materials for proposed changes to the city's traffic schedule, for review and approval by the city's Department of Public Services prior to Certificate of Occupancy;

done

2. The applicant shall submit a revised construction management plan addressing the comments of Tom Errico and all phases of development for review and approval by the Planning Authority, the Department of Public Services, the city's Parking Manager, and the city's Fire Prevention Bureau prior to the issuance of any permit;

ok
Paid
ck# 10440
11/19/14

3. The applicant shall make financial contributions of $1,200 towards improvements at the India/Middle Street intersection and $1,200 towards the East End Traffic Monitoring Study, for review and approval by the city's Department of Public Services;

done 4. The applicant shall submit the HVAC system specifications meeting applicable standards for the Zoning Administrator's review and approval;

done 5. The applicant shall resolve addressing questions for fire and 911 purposes, for review and approval by the city's Fire Prevention Bureau;

done 7/8/14 6. The applicant shall provide revised elevations with emphasis on articulation of the rear elevations, overall building massing with emphasis on the rear of the building, renderings, details, and material samples addressing the recommendations of the Planning board and staff on outstanding design issues (including but not limited to the treatment of proposed awnings, the proposed soldier course, metal screens, exterior lighting, and color and materials) in compliance with the Design Standards for review and approval by the Planning Board;

done 8/12/14 7. The applicant shall provide a maintenance agreement for the subsurface stormwater detention system for review and approval by Corporation Counsel and the Department of Public Services; and

done 11/13/14 8. The applicant shall submit plans and supporting documentation which specify measures to be taken to protect abutting building foundations and retaining walls during construction, including actions outlined in the email from Sebago Technics dated October 21, 2013, for approval by the Planning Authority, Corporation Counsel, and the Department of Public Services prior to the issuance of any permit.

The approval is based on the submitted plans and findings related to subdivision and site plan review standards as contained in the Planning Board Report for application 2013-179, which is attached.

STANDARD CONDITIONS OF APPROVAL

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

1. **Subdivision Recording Plat** A revised recording plat listing all conditions of subdivision approval must be submitted for review and signature prior to the issuance of a performance guarantee. The performance guarantee must be issued prior to the release of the recording plat for recording at the Cumberland County Registry of Deeds.

2. **Subdivision Waivers** Pursuant to 30-A MRSA section 4406(B)(1), any waiver must be specified on the subdivision plan or outlined in a notice and the plan or notice must be recorded in the Cumberland County Registry of Deeds within 90 days of the final subdivision approval).

3. **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 the Planning Authority pursuant to the terms of Chapter 14, Land Use, of the Portland City Code.

4. **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.

5. **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.

6. **Subdivision Plan Expiration** The subdivision approval is valid for up to three years from the date of Planning Board approval.

7. **Performance Guarantee and Inspection Fees** A performance guarantee covering the site improvements, an inspection fee payment of 2.0% of the guarantee amount, and seven (7) final sets of plans plus one final digital copy must be submitted to and approved by the Planning Division and Public Services Department prior to the release of a subdivision plat for recording at the Cumberland County of Deeds, and 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.

8. **Defect Guarantee** A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.

9. **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.

10. **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.)

11. **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.

12. **Mylar Copies** Mylar copies of the as-built drawings for the public streets and other public infrastructure in the subdivision must be submitted to the Public Services Dept. prior to the issuance of a certificate of occupancy.

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,

Carol Morissette, Chair
Portland Planning Board

Attachments:
1. Planning Board Report
2. Sample stormwater maintenance agreement

Electronic Distribution:

cc: Jeff Levine, Director of Planning and Urban Development
Alexander Jaegerman, Planning Division Director
Barbara Barhydt, Development Review Services Manager
Philip 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-Pineo, Deputy City Engineer, Public Services
Doug Roncarati, Stormwater Coordinator, Public Services
Greg Vining, Associate Engineer, Public Services
Michelle Sweeney, Associate Engineer
John Low, Associate Engineer, Public Services
Matt Doughty, Field Inspection Coordinator, Public Services
Mike Farmer, Project Engineer, Public Services
Jane Ward, Administration, Public Services
Jeff Tarling, City Arborist, Public Services
Captain Chris Pirone, Fire Department
Thomas Errico, P.E., TY Lin Associates
David Senus, P.E., Woodard and Curran
Rick Blackburn, Assessor's Department
Approval Letter File

CITY OF PORTLAND, MAINE
PLANNING BOARD

July 10, 2014

Demetri Dasco
Atlas Investment Group, LLC
35 Fay Street, 107B
Boston, MA 02118

Will Conway
Sebago Technics
75 John Roberts Road
South Portland, ME 04106

Project Name: Seaport Lofts (Bay House Phase II)
Address: 101-121 Newbury St./40 Hancock St.
Applicant: 113 Newbury Street, LLC

Project ID: 2013-179
CBLs: 20-D-13, 14, 15, 32
Planner: Nell Donaldson

Dear Mr. Dasco:

On July 8, 2014 the Planning Board voted (6-0, Morrissette absent) that 113 Newbury Street, LLC has met the condition of approval from the approval letter dated October 31, 2013 requiring that revised elevations, renderings, details, and material samples for the Seaport Lofts project at 101-121 Newbury Street/40 Hancock Street address the recommendations of the Planning Board and staff on outstanding design issues (including but not limited to the treatment of proposed awnings, the proposed soldier course, metal screens, exterior lighting, and color and materials) in compliance with the design standards, with the further condition that the applicant provide a complete lighting package meeting the standards of the city's Technical Manual for review and approval by the city's Planning Authority.

Please note that the conditions of approval and requirements for your approved site plan, enumerated in your original approval letter dated October 31, 2013, still apply. This letter is attached for reference.

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

Sincerely,

Stuart O'Brien, Chair
Portland Planning Board

SUBDIVISION/SITE DEVELOPMENT

Cost Estimate of Improvements to be covered by Performance Guarantee

Date: 10-24-14

Name of Project: SEAPORT LOFTS

Address/Location: _____

Application ID #: _____

Developer: _____

Form of Performance Guarantee: _____

Type of Development: Subdivision _____ Site Plan (Level I, II or III) _____

TO BE FILLED OUT BY THE APPLICANT:

	PUBLIC			PRIVATE		
Item	Quantity	Unit Cost	Subtotal	Quantity	Unit Cost	Subtotal
1. STREET/SIDEWALK						
Road/Parking Areas	28 SY	42	1176	1714 SY	42	71988
Curbing	231 LF	33	7623 ?	304 LF	24	7296
Sidewalks	339 SY	95	32205 ?	181 SY	64	11584
Esplanades			-			-
Monuments			-			-
Street Lighting			-			-
Street Opening Repairs	544 SY	44	23,936			-
Other			-	1 LS	22000	22000
2. EARTH WORK						
Cut	200 CY	14	2800	2240 CY	14	31360
Fill			-	300 CY	16	4800
3. SANITARY SEWER						
Manholes			-			-
Piping	25 LF	110	2750	5 LF	110	550
Connections	1 EA	750	750			-
Main Line Piping			-			-
House Sewer Service Piping			-			-
Pump Stations			-			-
Other			-			-
4. WATER MAINS	1 LS	24500	24500			-
5. STORM DRAINAGE						
Manholes	3 EA	3,000	9,000			-
Catchbasins			-	4 EA	3700	14,800
Piping	590 LF	51	30090	635 LF	51	32,385
Detention Basin			-	1 LS	69200	69,200
Stormwater Quality Units			-			-
Other			-			-
			134,830			265,963

6.	SITE LIGHTING	1 LS	5200	5200	1 LS	1040	1040
7.	EROSION CONTROL						
	Silt Fence			-	400 LF	3	1200
	Check Dams			-			-
	Pipe Inlet/Outlet Protection			-			-
	Level Lip Spreader			-			-
	Slope Stabilization			-			-
	Geotextile			-	1 LS	500	500
	Hay Bale Barriers			-			-
	Catch Basin Inlet Protection	5 EA	100	500	4 EA	100	400
8.	RECREATION AND OPEN SPACE AMENITIES			-			-
** 9.	LANDSCAPING (Attach breakdown of plant materials,quantities, and unit costs)	1 LS	13000	13000	1 LS	2000	2000
10.	MISCELLANEOUS			-	1 LS	20250	20250
	TOTAL: 18700		153,530 ~~152,990~~			291,353	25,390
	GRAND TOTAL:						

INSPECTION FEE (to be filled out by the City)

		PUBLIC	PRIVATE	TOTAL
A:	2.0% of totals:			
	or			
B:	Alternative Assessment:			
	Assessed by:	(name)	(name)	

** 9 - Loam, Seed,

East Boston Savings Bank®

SITE PLAN/SUBDIVISION
LETTER OF CREDIT
ACCOUNT NUMBER: [redacted]

March 31, 2015

Jeffrey Levine
Director of Planning and Urban Development
City of Portland
389 Congress Street
Portland, Maine 04101

Re: **113 Newbury Street, Portland, ME 04101**
113 Newbury Street, LLC

East Boston Savings Bank ("Bank") hereby issues its Irrevocable Letter of Credit (this "Letter of Credit") for the account of **113 Newbury Street, LLC**, (hereinafter referred to as "Developer"), held for the exclusive benefit of the City of Portland, in the aggregate amount of **$472,268.00**. These funds represent the estimated cost of installing site improvements as depicted on the **subdivision and site plan**, approved on **October 22, 2013** and as required under Portland Code of Ordinances Chapter 14 §§499, 499.5, 525 and Chapter 25 §§46 through 65 (the "Required Improvements"), which Required Improvements, and the cost attributable to the same, are listed on **Exhibit A** attached to this Letter of Credit.

This Letter of Credit is required under Portland Code of Ordinances Chapter 14 §§499, 499.5, 525 and Chapter 25 §46 through 65 and is intended to satisfy the Developer's obligation, under Portland Code of Ordinances Chapter 14 §§501, 502 and 525, to post a performance guarantee for the above referenced development.

The City, through its Director of Planning and Urban Development and in his/her sole discretion, may draw on this Letter of Credit by presentation of a sight draft and this Letter of Credit and all amendments thereto, up to thirty (30) days before, but in no event later than, its expiration, stating any one of the following:

1. the Developer has failed to satisfactorily complete the Required Improvements; or

2. the Developer has failed to notify the City for inspections.

Ten Meridian Street • East Boston, MA 02128-1963 • 617-567-1500 • 800-657-EBSB • Member FDIC • Member DIF

2. the Developer has failed to notify the City for inspections.

In the event of the Bank's dishonor of the City of Portland's sight draft, the Bank shall inform the City of Portland in writing of the reason or reasons thereof within three (3) business days of the dishonor. The stated amount of this Letter of Credit shall automatically be reduced by the amount of any payments made by the Bank hereunder.

After all underground work has been completed and inspected to the satisfaction of the Departments of Public Services, and Planning and Urban Development, including but not limited to sanitary sewers, storm drains, catch basins, manholes, electrical conduits, and other required improvements constructed chiefly below grade, the City of Portland Director of Planning and Urban Development or its Director of Finance as provided in Chapter 14 §501 of the Portland Code of Ordinances, may authorize the **Bank**, by written certification, to reduce the stated amount of this Letter of Credit by the amount allocated to the completed work as set forth on **Exhibit A**; provided, however, that (a) no more than three (3) partial reductions shall be permitted in any single calendar year; (b) no partial reduction shall be less than $100,000; and (c) the stated amount of this Letter of Credit shall not be reduced to below 10% of its original stated amount, or $47,226.80.

This Letter of Credit will automatically expire on **March 31, 2016** ("Expiration Date"); provided, however, that it is a condition of this Letter of Credit that it is deemed to be automatically extended without amendment for period(s) of one year each from the current Expiration Date hereof, or any future Expiration Date, unless within thirty (30) days prior to any expiration, the Bank notifies the City by certified mail (attention: Brendan O'Connell, Director of Finance, City of Portland, 389 Congress Street, Portland, Maine 04101) that the Bank elects not to consider this Letter of Credit renewed for any such additional period.

In the event of such notice, the City, in its sole discretion, may draw hereunder by presentation of a sight draft drawn on the Bank, accompanied by this Letter of Credit and all amendments thereto, and a statement purportedly signed by the Director of Planning and Urban Development, at Bank's offices located at Ten Meridian Street, East Boston, MA 02128 stating that:

> this drawing results from notification that the Bank has elected not to renew its Letter of Credit Account No 550033164.

On its Expiration Date or on the date the City determines that all improvements guaranteed by this Letter of Credit are satisfactorily completed, this Letter of Credit shall be reduced by the City to ten (10) percent of its original amount and shall automatically convert to an irrevocable Defect Letter of Credit. Written notice of such reduction shall be forwarded by the City to the Bank. The Defect Letter of Credit shall ensure the workmanship and durability of all materials used in the construction of the **subdivision and site plan** approval, dated **October 22, 2013** as required by City Code §14-501, 525 and shall automatically expire one (1) year from the date of its creation ("Termination Date").

The City, through its Director of Planning and Urban Development and in his/her sole discretion, may draw on the Defect Letter of Credit by presentation of a sight draft and this Letter of Credit and all amendments thereto, at Bank's offices located at Ten Meridian Street, East Boston, MA 02128, prior to the Termination Date, stating any one of the following:

1. the Developer has failed to complete any unfinished improvements; or
2. the Developer has failed to correct any defects in workmanship; or
3. the Developer has failed to use durable materials in the construction and installation of improvements contained within the approved **subdivision and site plan**.

EAST BOSTON SAVINGS BANK

By: _____
Mary Ann Devlin
Vice President, Duly Authorized

DRC
6/18/15

Exhibit A

SUBDIVISION/SITE DEVELOPMENT
Cost Estimate of Improvements to be covered by Performance Guarantee

Date: 10-24-14

Name of Project: SEAPORT LOFTS

Address/Location: _____

Application ID #: _____

Developer: _____

Form of Performance Guarantee: _____

Type of Development: Subdivision _____ Site Plan (Level I, II or III) _____

TO BE FILLED OUT BY THE APPLICANT:

Item	PUBLIC Quantity	PUBLIC Unit Cost	PUBLIC Subtotal	PRIVATE Quantity	PRIVATE Unit Cost	PRIVATE Subtotal
1. STREET/SIDEWALK						
*** Road/Parking Areas	28 SY	42	1176	1714 SY	42	71988
Curbing	231 LF	33	7623	304 LF	24	7296
Sidewalks	337 SY	95	32,015	181 SY	64	11584
Esplanades			-			-
Monuments			-			-
Street Lighting	7	5,585	27,925			-
Street Opening Repairs	574 SY	44	23936			-
Other			-	1 LS	22000	22000
2. EARTH WORK						
Cut	2000 CY	14	28000	22400 CY	14	313600
Fill			-	300 CY	16	4800
3. SANITARY SEWER						
Manholes			-			-
Piping	25 LF	110	2750	5 LF	110	550
Connections	1 EA	750	750			-
Main Line Piping			-			-
House Sewer Service Piping			-			-
Pump Stations			-			-
Other			-			-
4. WATER MAINS	1 LS	24500	24500			-
5. STORM DRAINAGE						
Manholes	3 EA	3,000	9,000			-
Catchbasins			-	4 EA	3700	14800
Piping	590 LF	51	30090	635 LF	51	32385
Detention Basin			-	1 LS	69200	69,200
Stormwater Quality Units			-			-
Other			-			-

6.	SITE LIGHTING					
7.	EROSION CONTROL					
	Silt Fence					
	Check Dams					
	Pipe Inlet/Outlet Protection					
	Level Lip Spreader					
	Slope Stabilization					
	Geotextile					
	Hay Bale Barriers					
	Catch Basin Inlet Protection					
8.	RECREATION AND OPEN SPACE AMENITIES					
9.	LANDSCAPING (Attach breakdown of plant materials, quantities, and unit costs)					
10.	MISCELLANEOUS					
	TOTAL:	180,915			391,353	
	GRAND TOTAL:					

INSPECTION FEE (to be filled out by the City)

		PUBLIC	PRIVATE	TOTAL
A:	2.0% of totals:			
	or			
B:	Alternative Assessment:			
	Assessed by:	(name)	(name)	

Plantings per Sheet 7 of 12

*** 1 - Paving Overlay of Newbury per Shaw Brothers Quotation = $11,525 included within this line.

LANDRY/FRENCH
CONSTRUCTION COMPANY

July 31, 2014

Portland City Hall
Planning Devision
389 Congress Street
Portland, ME 04101

Re: 113 Newbury Street – Seaport Lofts
Construction Management Plan

To Whom It May Concern:

The Seaport Lofts project located at 113 Newbury Street is scheduled to undergo select foundation demolition, site work along with multi-story residential units with design build life safety and mechanical, electrical and plumbing work. The following and attached documentation outline out plan to achieve a safe site for both public as well as construction personnel during the construction. As a requirement of the planning division, we understand a pre-construction meeting is needed in order to approve the building permit for construction. We ask that the included information herein be reviewed and this meeting be set up as soon as possible.

Pursuant to the request from Tom Errico, we will address schedule, pedestrian/vehicular traffic, signage, contractor and construction vehicle parking.

Schedule (Attached): the scheduled start date is currently set for September 2, 2014. Construction completion is anticipated for July 2015. Please find the attached schedule for the project that separates building from site items.

Traffic Management: During all times of this project, we will have temporary signage and protection in place to route pedestrians and limit access to the construction areas to approved personnel only. During all times of utility work in city streets of Hancock, Newbury and Middle Streets, we will have temporary signs identifying road closures, detours, pedestrian routing and flaggers while working. All street opening permits and road closures will be planned and permitted. Temporary Fencing and signage will be put into place (see attached layout for fencing/gates as well as proposed crosswalks at Newbury and Hancock Streets).

Contractor Parking: No construction or employee vehicles allowed on street. Employee and contractor vehicle parking shall be within parking garage or city parking lot off of Thames Street.

Emergency Access: The project will have a knox pad lock on the site gate for emergency response vehicle use and access.

We anticipate your review of our Management plan will be sufficient to approve the permit for the building, however, if you require further explanation or additional information, please do not hesitate to contact the undersigned.

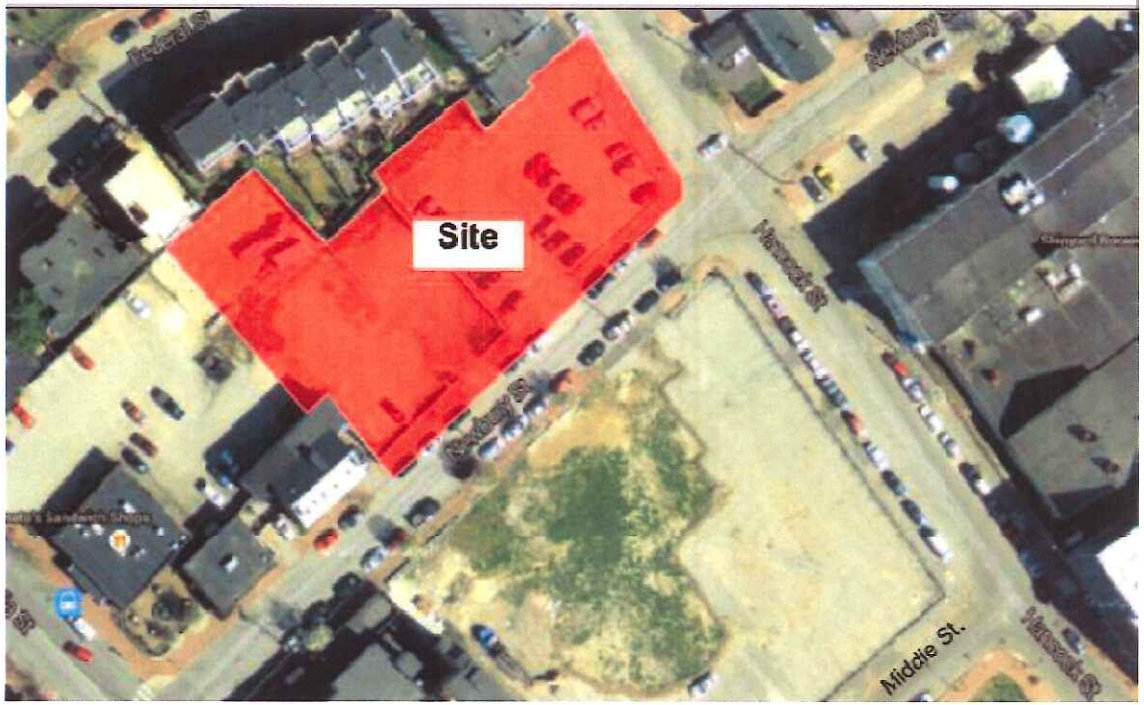
Sincerely,

Matthew Gagnon, Leed A.P.
Project Manager

Landry/French Construction Company

Cc: Denis Landry
Kevin French
Rick Cormier
Joe Dasco
Ali Monroe
Mark Mueller

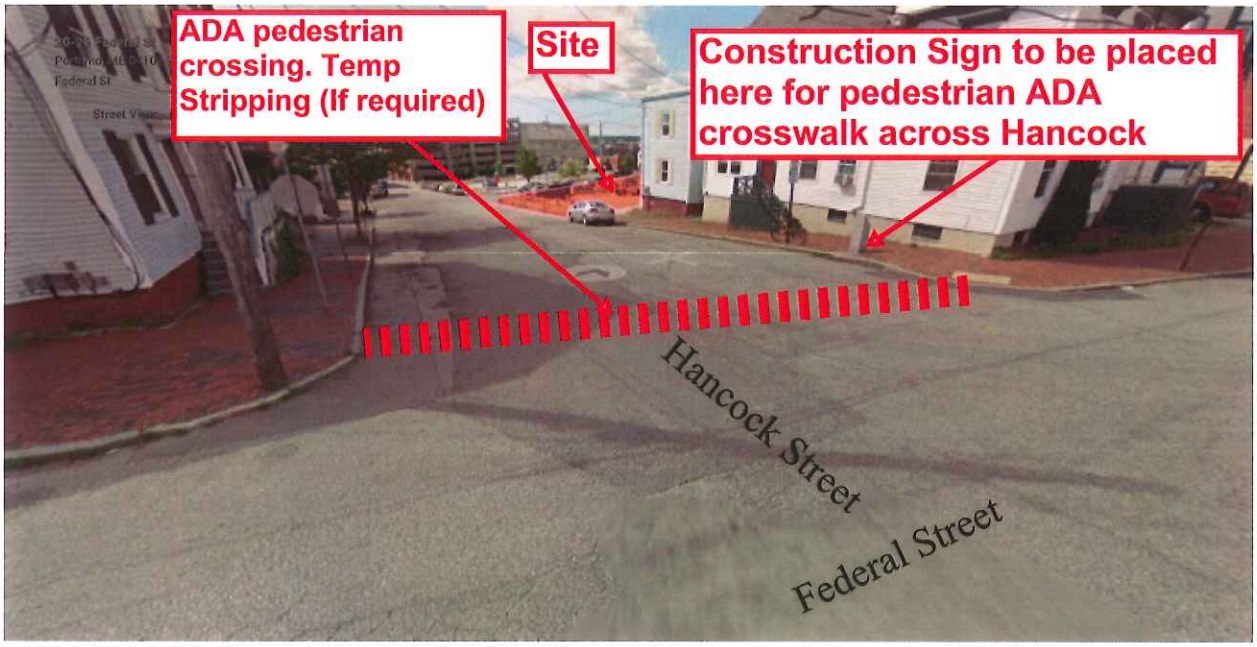
Construction Management Plan



Site Logistics

1. Schedule anticipated from 09/14 thru 07/15. Please find the attached schedule for the project identifying site related activities and work in Newbury/Hancock Streets.
2. Signage - temporary signs will identify the construction zone and will alert vehicles and pedestrians.
3. Temporary crosswalks (See attached) will be done to route pedestrian traffic accross Hancock and Newbury streets during construction
4. The site will be fenced in on (3) sides leaving the existing retaining walls/fencing adjacent to the residents in place
5. Utilities will take place the fall of 2014 and traffic will be detoured away as needed. Flaggers will be provided.
   a. Drainage work will impact Newbury street and the intersection of Hancock/Middle Streets
   b. Gas, Electrical and Tel/Data will impact Newbury and Hancock Streets
6. Construction vehicle parking within the confines of the construction site will be at the discretion of Landry/French Supervisor
7. Parking for construction employee vehicles is not allowed on site.
8. Road Closures will have a detailed "street closure plan" prepared and submitted for review and approval.

Hancock Street Pedestrian Plan



1. Access to be granted to residents. All other pedestrian traffic to be routed accross Hancock
2. Sign shall read "sidewalk closed ahead - cross here".

Newbury Street Pedestrian Plan

1. Access to be granted to residents. All other pedestrian traffic to be routed accross Newbury
2. Sign shall read "sidewalk closed ahead - cross here"

UNIT NO.	SIZE (SF)
UNIT 1	1687
UNIT 2	1571
UNIT 3	1713
UNIT 4	1681
UNIT 5	1590
UNIT 6	1670
UNIT 7	1607
UNIT 8	951
UNIT 9	916
UNIT 10	1215
UNIT 11	1155
UNIT 12	1217
UNIT 13	1195
UNIT 14	1505
UNIT 15	948
UNIT 16	1199
UNIT 17	960
UNIT 18	1639
UNIT 19	1632
UNIT 20	990
UNIT 21	937
UNIT 22	1215
UNIT 23	1155
UNIT 24	1216
UNIT 25	1195
UNIT 26	1505
UNIT 27	1384
UNIT 28	1199
UNIT 29	960
UNIT 30	1639
UNIT 31	1632
UNIT 32	990
UNIT 33	937
UNIT 34	1215
UNIT 35	1155
UNIT 36	1216
UNIT 37	1195
UNIT 38	1505
UNIT 39	1384

WAIVERS GRANTED

CONDITIONS OF APPROVAL

LIST OF ABUTTERS

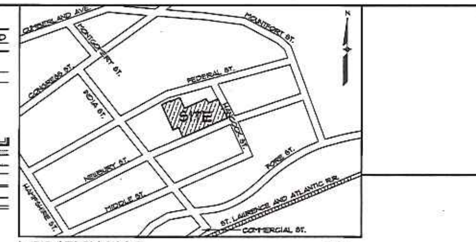
KEY	ABUTTER	BOOK/PAGE
A	ROLAND SMALLET, JR.	12574/217
B	TIM HARDY	1234/60
C	DAVID FILIPOS	15576/285
D	HUGH R. NAZOR & LINDA J. MURNIK	24922/233
	PAUL & MARIA DESJARDINS	28930/65
	JOHN & ZDENKA S. GRISWOLD	25389/17
	STEPHEN M. & WILMA ROSE	24737/258
	RICHARD H. & WENDY E. PENLEY	28857/308
	RICHARD B. & ELIZABETH M. CARSON	28071/288
	PETER & PATRICIA BAGG	24613/232
E	LIV R. CHASE & BRENT L. ADLER	27154/23
F	JUBILACION, LLC	29843/282
G	BETTY POMROY	6766/276
H	DASHA, LLC	27029/25
I	DOMINIC REALI REALTY, LLC	15588/307
J	DOMINIC REALI REALTY, LLC	14437/266
K	DOMINIC REALI REALTY, LLC	15588/304
L	DAVID & ALLISON BROWN	15768/32
M	ELIZABETH MONAGHAN & KURT NIELSEN	23346/36

LINE TABLE

LINE	BEARING	LENGTH
L1	S40°10'12"E	6.82'
L2	N41°39'51"W	4.44'
L3	N36°18'30"W	2.01'
L4	N48°06'32"E	7.43'
L5	S35°38'51"E	20.00'

LEGEND

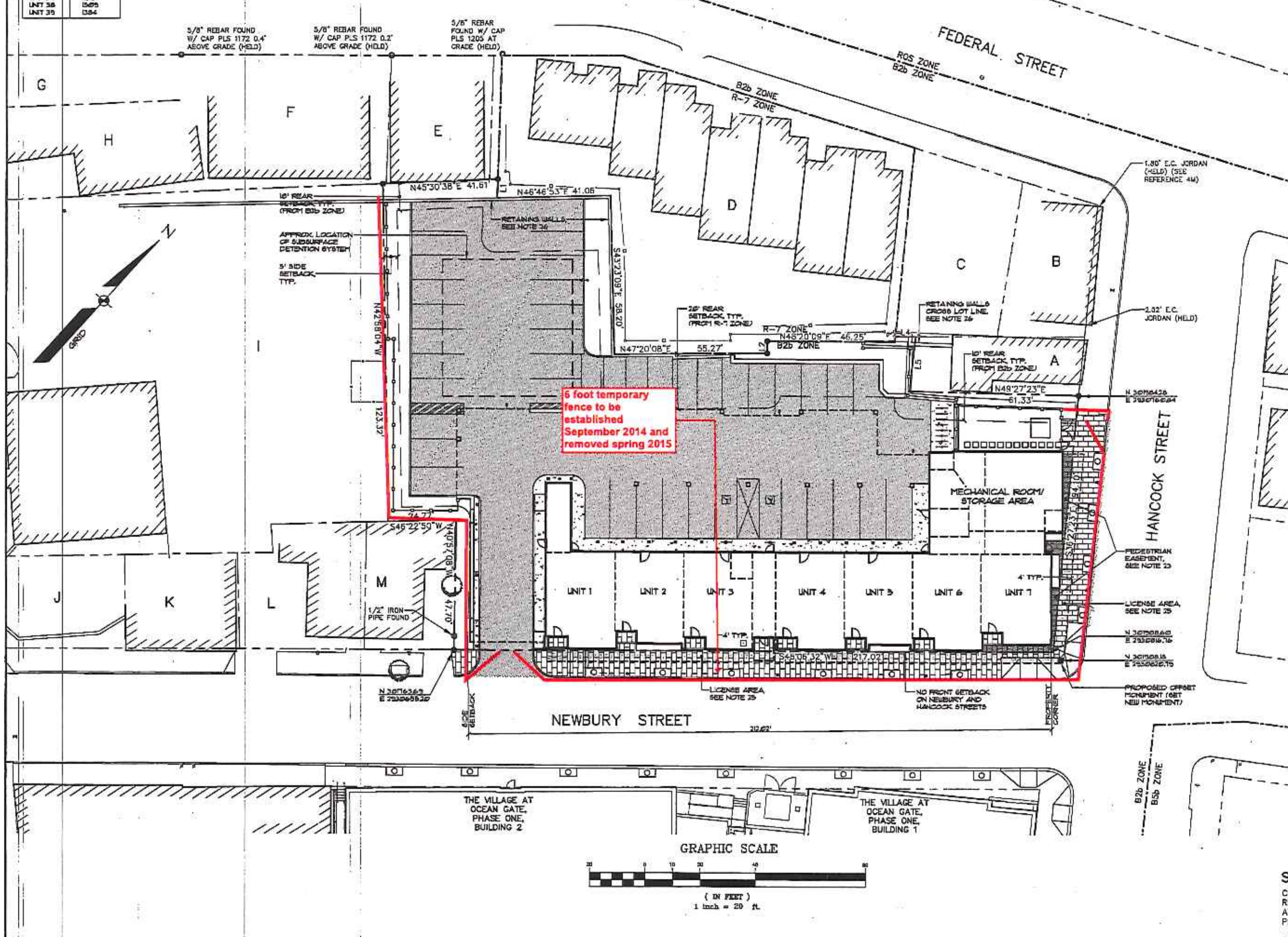
EXISTING	DESCRIPTION	PROPOSED
	BOUNDARY LINE/R.O.W.	
	ABUTTER LINE/R.O.W.	
	SETBACK	
	EASEMENT	
	MONUMENT	
	IRON PIPE/ROD	
C1/L1	CURVE/LINE NO.	
	ZONE LINE	
	BUILDING	
	EDGE PAVEMENT	
	EDGE CONCRETE	
	PAVEMENT PAINT	
	CURBLINE	
	STOCKADE FENCE	
	RETAINING WALL	



LOCATION MAP N.T.S.

GENERAL NOTES

1. THE RECORD OWNER OF THE PROPERTY IS THE VILLAGE CAFE AS DESCRIBED IN A DEED RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS (CCRD) IN BOOK 5591 PAGE 34, BOOK 4054 PAGE 272, AND BOOK 4357 PAGE 280.
2. THE PROPERTY IS DEPICTED ON THE CITY OF PORTLAND TAX MAP 20, BLOCK D, AS LOTS 013, 014, 015 & 032.
3. TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON A FIELD SURVEY BY SEBAGO TECHNICS PERFORMED IN 2005. BOUNDARY INFORMATION SHOWN HEREON IS BASED UPON A FIELD SURVEY BY SEBAGO TECHNICS PERFORMED IN 2005 WITH UPDATES PERFORMED THROUGH 2013. THE SITE IS CURRENTLY BEING USED AS A CONSTRUCTION YARD. CURRENT SITE CONDITIONS MAY HAVE CHANGED SINCE 2005 BUT HAVE NOT BEEN UPDATED DUE TO CONSTRUCTION EQUIPMENT. SEE THE BOUNDARY AND TOPOGRAPHIC SURVEY (SHEET 2 OF THIS SET) FOR ADDITIONAL BOUNDARY NOTES.
4. THE BEARINGS SHOWN HEREON ARE BASED UPON GRID NORTH NAD 1983 MAINE WEST ZONE. CONTOURS AND ELEVATION SHOWN HEREON ARE BASED UPON THE CITY OF PORTLAND VERTICAL DATUM. THE CITY DATUM WAS DETERMINED UTILIZING U.S. COAST AND GEODETIC SURVEY BENCHMARK, BEING A DRILL HOLE LOCATED IN THE GRANITE STEPS OF THE CUSTOM HOUSE ON COMMERCIAL STREET. THE CITY ELEVATION IS 14.072 THE NGVD 29 ELEVATION IS 14.042 AND NAVD88 IS 13.30'.
5. TOTAL AREA OF PARCEL IS 29,327 S.F. (0.67 ACRES).
6. ZONING DISTRICT: B-2b COMMUNITY BUSINESS ZONE.
7. SPACE AND BULK CRITERIA FOR B-2b ZONE:
   - (a) MIN. LOT SIZE: NONE
   - (b) MIN. STREET FRONTAGE: NONE
   - (c) MIN. FRONT YARD: NONE
   - (d) MIN. REAR YARD: 10 FT. (20 FT. ABUTTING R-7 ZONE)
   - (e) MIN. SIDE YARD: 5 FT.
   - (f) MAX. IMPERVIOUS RATIO: 90%
   - (g) MAX. RESIDENTIAL DENSITY: 435 S.F. PER DWELLING UNIT
   - (h) MAX. BUILDING HEIGHT: 45 FT.
8. DEVELOPMENT SUMMARY:
   - (a) PROPOSED USE: (39) RESIDENTIAL HOUSING UNITS
   - (b) ALLOWABLE DENSITY: 29,327 S.F. / 435 S.F./UNIT = 68 UNITS
   - (c) PROPOSED IMPERVIOUS RATIO: 26,332 S.F. / 29,327 S.F. = 89.79% OF LOT AREA
   - (d) PROPOSED BUILDING HEIGHT: 44 FT.
   - (e) REQUIRED PARKING: 39 SPACES (43 PROPOSED)
   - (f) ADA PARKING PROVIDED: 2 SPACES
   - (g) REQUIRED BICYCLE RACK SPACES: 16 (16 PROPOSED)
9. SEAPORT LOFTS IS A PRIVATE DEVELOPMENT. LIGHTING, TRASH REMOVAL AND SNOW REMOVAL SHALL BE THE RESPONSIBILITY OF THE COMMERCIAL MERCHANTS AND THE RESIDENTIAL CONDOMINIUM ASSOCIATION.
10. METHODS AND MATERIALS USED IN THE CONSTRUCTION OF THE IMPROVEMENTS WITHIN THE CITY RIGHT OF WAY SHALL CONFORM TO THE CURRENT CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS AND/OR CURRENT M.D.O.T. STANDARDS AND SPECIFICATIONS.
11. ALL ELECTRIC, TELEPHONE AND CABLE T.V. SERVICES SHALL BE UNDERGROUND AND IN CONFORMANCE WITH THE STANDARDS OF CENTRAL MAINE POWER CO., FAIRPOINT, TIME WARNER CABLE T.V. CO. OR OTHER UTILITIES PROVIDING SERVICE TO THE SITE.
12. ALL WATER MAINS, SERVICES AND ASSOCIATED APPURTENANCES SHALL BE IN CONFORMANCE WITH PORTLAND WATER DISTRICT STANDARDS.
13. ALL NATURAL GAS MAINS, SERVICES AND ASSOCIATED APPURTENANCES SHALL BE IN CONFORMANCE WITH UNITIL STANDARDS.
14. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" PUBLISHED BY THE CUMBERLAND COUNTY SOIL AND WATER DISTRICT AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 1991 OR LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSES A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.
15. THE FACILITY IS SERVICED BY CITY SEWER, WATER, GAS, UNDERGROUND ELECTRIC, STORM DRAINAGE, TELEPHONE AND CABLE.
16. A PERMIT MUST BE OBTAINED FROM THE CITY OF PORTLAND PUBLIC SERVICES DEPARTMENT AND DEPARTMENT PRIOR TO BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY. THE CONTRACTOR OR DEVELOPER IS REQUIRED TO NOTIFY THE CITY OF PORTLAND PARKS AND INSPECTION SERVICES DIVISION IN WRITING THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION (874-8300 EXT. 8838). SHOULD THE IMPROVEMENTS BE OF SIGNIFICANT CONCERN OR IN A SENSITIVE AREA, A PRE-CONSTRUCTION MEETING MAY BE REQUIRED AT THE DISCRETION OF THE AUTHORITY.
17. THE ENTIRE SITE SHALL BE DEVELOPED AND/OR MAINTAINED AS DEPICTED ON THE SITE PLAN. APPROVAL OF THE PLANNING AUTHORITY OR PLANNING BOARD SHALL BE REQUIRED FOR ANY ALTERATIONS TO OR DEVIATIONS FROM THE APPROVED SITE PLAN, INCLUDING, WITHOUT LIMITATION, TOPOGRAPHY, DRAINAGE, LANDSCAPING, RETENTION OF WOODED OR LAWN AREAS, ACCESS, SIZE, LOCATION AND SURFACING OF PARKING AREAS, AND LOCATION AND SIZE OF BUILDINGS.
18. PRIOR TO CONSTRUCTION, A PRECONSTRUCTION MEETING SHALL BE HELD AT THE PROJECT SITE WITH THE CONTRACTOR, DEVELOPMENT REVIEW COORDINATOR, REPRESENTATIVE AND OWNER TO REVIEW THE CONSTRUCTION SCHEDULE AND CRITICAL ASPECTS OF THE SITE WORK. AT THAT TIME, THE SITE/BUILDING CONTRACTOR SHALL PROVIDE THREE (3) COPIES OF A DETAILED CONSTRUCTION SCHEDULE AT ATTENDING CITY REPRESENTATIVE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE A MUTUALLY AGREEABLE TIME FOR THE PRECONSTRUCTION MEETING.
19. LANDSCAPING SHALL MEET THE "ARBORICULTURAL SPECIFICATION AND STANDARDS OF PRACTICE AND LANDSCAPE GUIDELINES" OF THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
20. NEWBURY STREET LIGHTING SHALL CONFORM TO THE CITY OF PORTLAND EASTERN WATERFRONT MEDIUM SCALE LIGHTING FIXTURES. HANCOCK STREET LIGHTING SHALL CONFORM TO THE CITY OF PORTLAND EASTERN WATERFRONT SMALL SCALE LIGHTING FIXTURES.
PAINT: POLYESTER POWDER COAT PAINT, BLACK.
SHOP DRAWINGS SHALL BE SUBMITTED TO CITY ENGINEER FOR REVIEW PRIOR TO INSTALLATION. CONTRACTOR TO PROVIDE A METER FOR ALL STREET LIGHTS FOR FUTURE CITY OWNERSHIP.
21. BIKE RACKS SHALL BE MODEL "BIKE HITCH" FROM DERO (www.dero.com), IN-GROUND MOUNT, COLOR BLACK.
22. SITE LIGHT FIXTURES SHALL BE HOLOPHANE LED FIXTURES (SEE LIGHTING PLAN).
23. PLAN DEPICTS A PEDESTRIAN EASEMENT TO BE CONVEYED TO THE CITY OF PORTLAND. APPLICANT SHALL RECORD THIS EASEMENT IN THE REGISTRY OF DEEDS AND PROVIDE A COPY TO THE CITY, INCLUDING PLAN BOOK AND PAGE NUMBERS, PRIOR TO THE RECEIPT OF A BUILDING PERMIT.
24. A COPY OF THE HOMEOWNERS ASSOCIATION DOCUMENTS SHALL BE PROVIDED TO THE CITY PRIOR TO THE RECEIPT OF A CERTIFICATE OF OCCUPANCY.
25. PLAN DEPICTS A PROPOSED LICENSE FROM THE CITY TO ALLOW THE CONSTRUCTION OF BUILDING FOUNDATIONS AND AWNINGS. APPLICANT SHALL PROVIDE A LEGAL DESCRIPTION OF THIS LICENSE AREA PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
26. RESPONSIBILITY OF MAINTENANCE OF EXISTING RETAINING WALLS HAS NOT BEEN DETERMINED.



APPROVAL- CITY OF PORTLAND PLANNING BOARD

DATE

CHAIRPERSON

STATE OF MAINE

CUMBERLAND COUNTY SS REGISTRY OF DEEDS
RECEIVED ________ 20___
AT ___h ___m ___M. AND RECORDED IN
PLAN BOOK ______ PAGE ______

ATTEST ______________ REGISTRAR

REV:	BY:	DATE:	STATUS:
F	WTC	01-07-13	CITY SUBMITTAL 7
E	WTC	10-15-13	CITY SUBMITTAL 6
D	WTC	10-03-13	CITY SUBMITTAL 5
C	WTC	09-17-13	CITY SUBMITTAL 4
B	WTC	09-03-13	CITY SUBMITTAL 3
A	WTC	07-29-13	SUBMIT SITE PLAN APPLICATION TO CITY

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.

MATTHEW W. EK, PLS 2117 — OWENS A. McCULLOUGH, PE 7122

STATE OF MAINE — MATTHEW W. EK — 2117 — PROFESSIONAL LAND SURVEYOR

SEBAGO TECHNICS
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. 207-783-5656

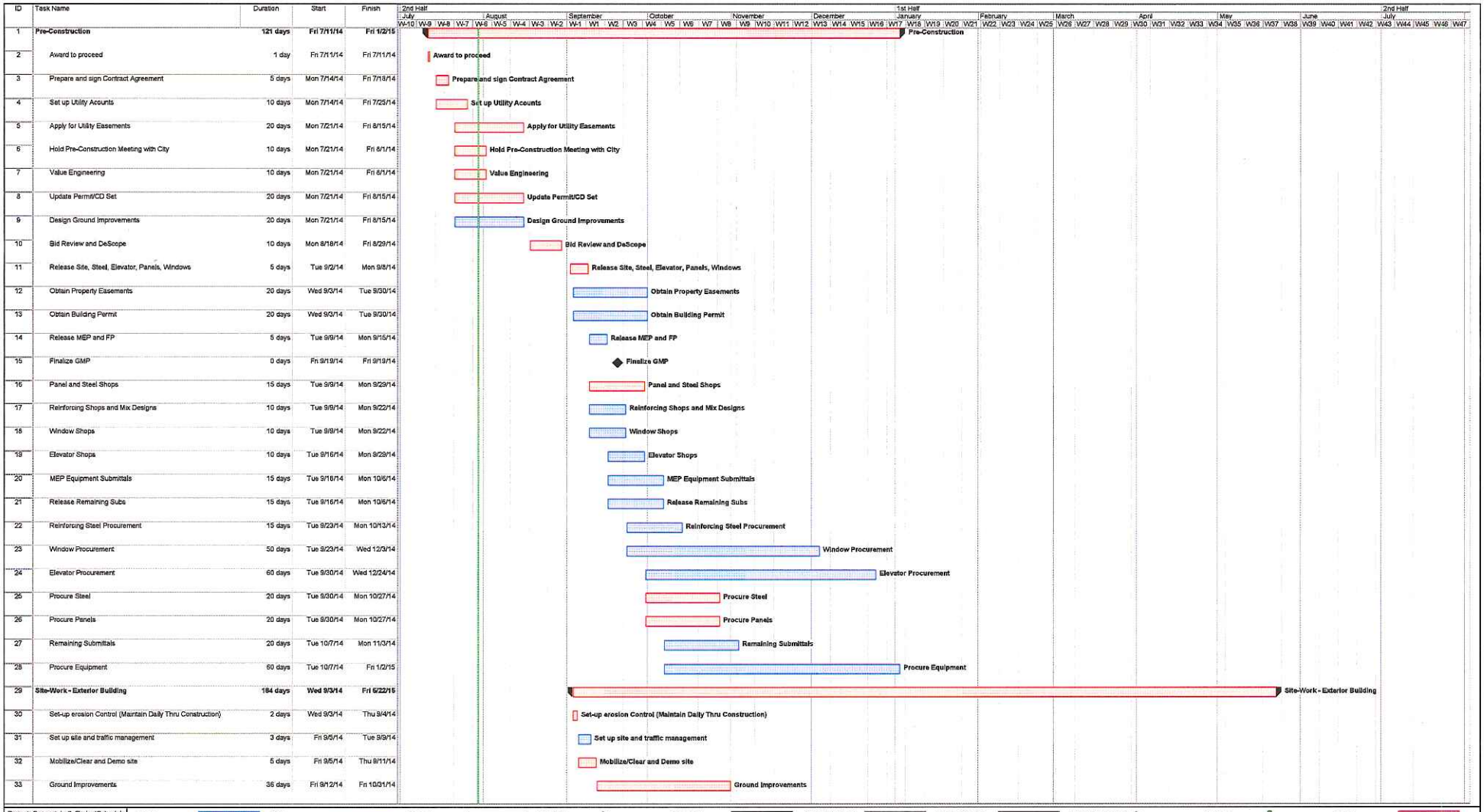
PROJECT NO.	FIELD BOOK	DESIGN	CHKD	DRAWN
13251	-	WTC	MWE	MAL

RECORD OWNER:
VILLAGE CAFE, INC.
61 DELWIN DRIVE
N. YARMOUTH, ME 04097

SUBDIVISION PLAT
OF:
SEAPORT LOFTS
NEWBURY / HANCOCK STREET
PORTLAND, MAINE
FOR:
113 NEWBURY STREET, LLC
35 FAY STREET, SUITE 107B
BOSTON, MA 02118-4320

DATE	SCALE
07-29-13	1" = 20'

13251SB.dwg, TAB:SB



ID	Task Name	Duration	Start	Finish
1	**Pre-Construction**	**121 days**	**Fri 7/11/14**	**Fri 1/2/15**
2	Award to proceed	1 day	Fri 7/11/14	Fri 7/11/14
3	Prepare and sign Contract Agreement	5 days	Mon 7/14/14	Fri 7/18/14
4	Set up Utility Acounts	10 days	Mon 7/14/14	Fri 7/25/14
5	Apply for Utility Easements	20 days	Mon 7/21/14	Fri 8/15/14
6	Hold Pre-Construction Meeting with City	10 days	Mon 7/21/14	Fri 8/1/14
7	Value Engineering	10 days	Mon 7/21/14	Fri 8/1/14
8	Update Permit/CD Set	20 days	Mon 7/21/14	Fri 8/15/14
9	Design Ground Improvements	20 days	Mon 7/21/14	Fri 8/15/14
10	Bid Review and DeScope	10 days	Mon 8/18/14	Fri 8/29/14
11	Release Site, Steel, Elevator, Panels, Windows	5 days	Tue 9/2/14	Mon 9/8/14
12	Obtain Property Easements	20 days	Wed 9/3/14	Tue 9/30/14
13	Obtain Building Permit	20 days	Wed 9/3/14	Tue 9/30/14
14	Release MEP and FP	5 days	Tue 9/9/14	Mon 9/15/14
15	Finalize GMP	0 days	Fri 9/19/14	Fri 9/19/14
16	Panel and Steel Shops	15 days	Tue 9/9/14	Mon 9/29/14
17	Reinforcing Shops and Mix Designs	10 days	Tue 9/9/14	Mon 9/22/14
18	Window Shops	10 days	Tue 9/9/14	Mon 9/22/14
19	Elevator Shops	10 days	Tue 9/16/14	Mon 9/29/14
20	MEP Equipment Submittals	15 days	Tue 9/16/14	Mon 10/6/14
21	Release Remaining Subs	15 days	Tue 9/16/14	Mon 10/6/14
22	Reinforcing Steel Procurement	15 days	Tue 9/23/14	Mon 10/13/14
23	Window Procurement	50 days	Tue 9/23/14	Wed 12/3/14
24	Elevator Procurement	60 days	Tue 9/30/14	Wed 12/24/14
25	Procure Steel	20 days	Tue 9/30/14	Mon 10/27/14
26	Procure Panels	20 days	Tue 9/30/14	Mon 10/27/14
27	Remaining Submittals	20 days	Tue 10/7/14	Mon 11/3/14
28	Procure Equipment	60 days	Tue 10/7/14	Fri 1/2/15
29	**Site-Work - Exterior Building**	**184 days**	**Wed 9/3/14**	**Fri 5/22/15**
30	Set-up erosion Control (Maintain Daily Thru Construction)	2 days	Wed 9/3/14	Thu 9/4/14
31	Set up site and traffic management	3 days	Fri 9/5/14	Tue 9/9/14
32	Mobilize/Clear and Demo site	5 days	Fri 9/5/14	Thu 9/11/14
33	Ground Improvements	36 days	Fri 9/12/14	Fri 10/31/14

LANDRY/FRENCH CONSTRUCTION COMPANY

Seaport Lofts
Portland, Maine
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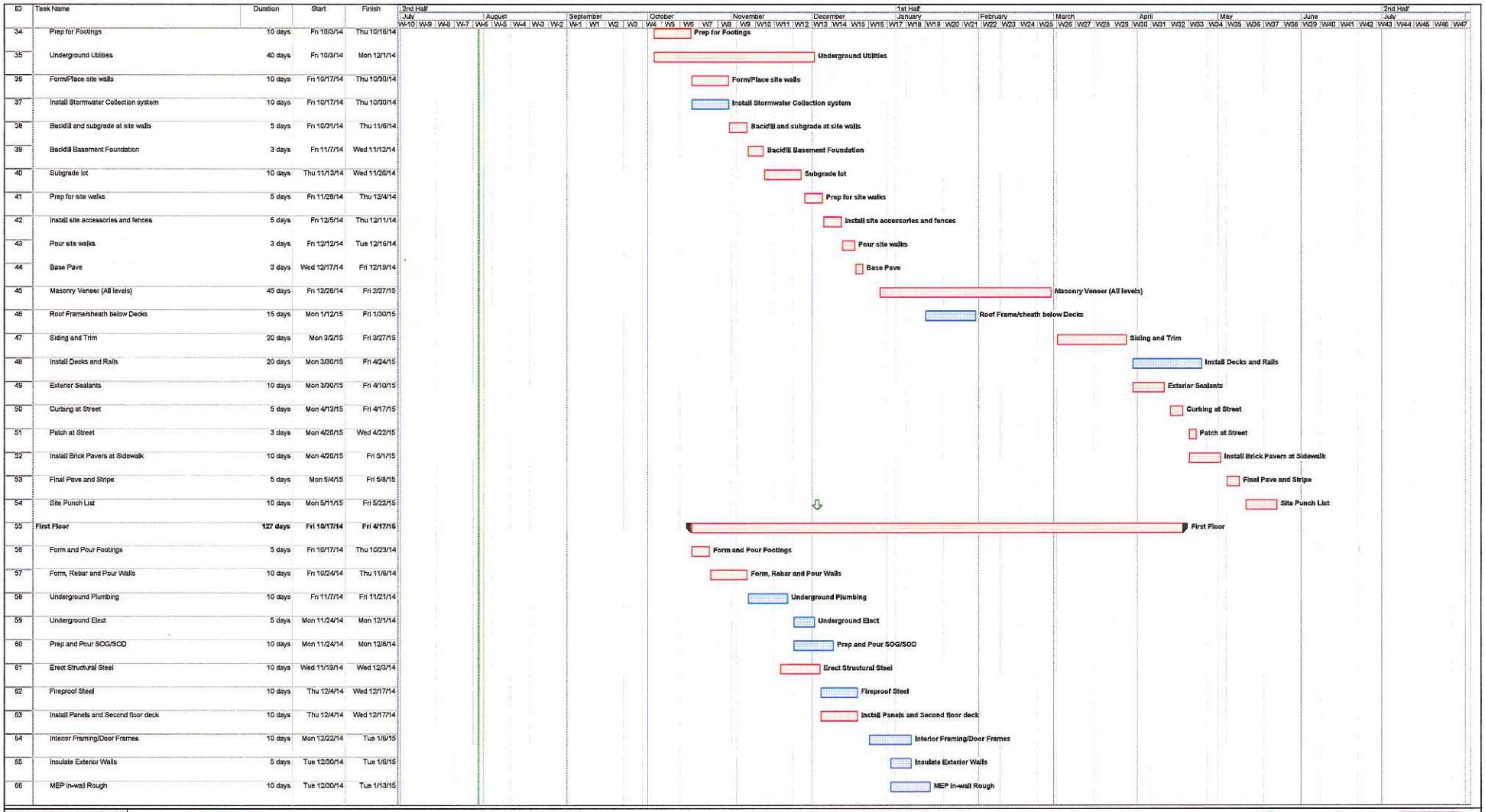
DRAFT CONSTRUCTION SCHEDULE



ID	Task Name	Duration	Start	Finish
34	Prep for Footings	10 days	Fri 10/3/14	Thu 10/16/14
35	Underground Utilities	40 days	Fri 10/3/14	Mon 12/1/14
36	Form/Place site walls	10 days	Fri 10/17/14	Thu 10/30/14
37	Install Stormwater Collection system	10 days	Fri 10/17/14	Thu 10/30/14
38	Backfill and subgrade at site walls	5 days	Fri 10/31/14	Thu 11/6/14
39	Backfill Basement Foundation	3 days	Fri 11/7/14	Wed 11/12/14
40	Subgrade lot	10 days	Thu 11/13/14	Wed 11/26/14
41	Prep for site walks	5 days	Fri 11/28/14	Thu 12/4/14
42	Install site accessories and fences	5 days	Fri 12/5/14	Thu 12/11/14
43	Pour site walks	3 days	Fri 12/12/14	Tue 12/16/14
44	Base Pave	3 days	Wed 12/17/14	Fri 12/19/14
45	Masonry Veneer (All levels)	45 days	Fri 12/26/14	Fri 2/27/15
46	Roof Frame/sheath below Decks	15 days	Mon 1/12/15	Fri 1/30/15
47	Siding and Trim	20 days	Mon 3/2/15	Fri 3/27/15
48	Install Decks and Rails	20 days	Mon 3/30/15	Fri 4/24/15
49	Exterior Sealants	10 days	Mon 3/30/15	Fri 4/10/15
50	Curbing at Street	5 days	Mon 4/13/15	Fri 4/17/15
51	Patch at Street	3 days	Mon 4/20/15	Wed 4/22/15
52	Install Brick Pavers at Sidewalk	10 days	Mon 4/20/15	Fri 5/1/15
53	Final Pave and Stripe	5 days	Mon 5/4/15	Fri 5/8/15
54	Site Punch List	10 days	Mon 5/11/15	Fri 5/22/15
55	**First Floor**	**127 days**	**Fri 10/17/14**	**Fri 4/17/15**
56	Form and Pour Footings	5 days	Fri 10/17/14	Thu 10/23/14
57	Form, Rebar and Pour Walls	10 days	Fri 10/24/14	Thu 11/6/14
58	Underground Plumbing	10 days	Fri 11/7/14	Fri 11/21/14
59	Underground Elect	5 days	Mon 11/24/14	Mon 12/1/14
60	Prep and Pour SOG/SOD	10 days	Mon 11/24/14	Mon 12/8/14
61	Erect Structural Steel	10 days	Wed 11/19/14	Wed 12/3/14
62	Fireproof Steel	10 days	Thu 12/4/14	Wed 12/17/14
63	Install Panels and Second floor deck	10 days	Thu 12/4/14	Wed 12/17/14
64	Interior Framing/Door Frames	10 days	Mon 12/22/14	Tue 1/6/15
65	Insulate Exterior Walls	5 days	Tue 12/30/14	Tue 1/6/15
66	MEP In-wall Rough	10 days	Tue 12/30/14	Tue 1/13/15

LANDRY/FRENCH CONSTRUCTION COMPANY

Seaport Lofts
Portland, Maine
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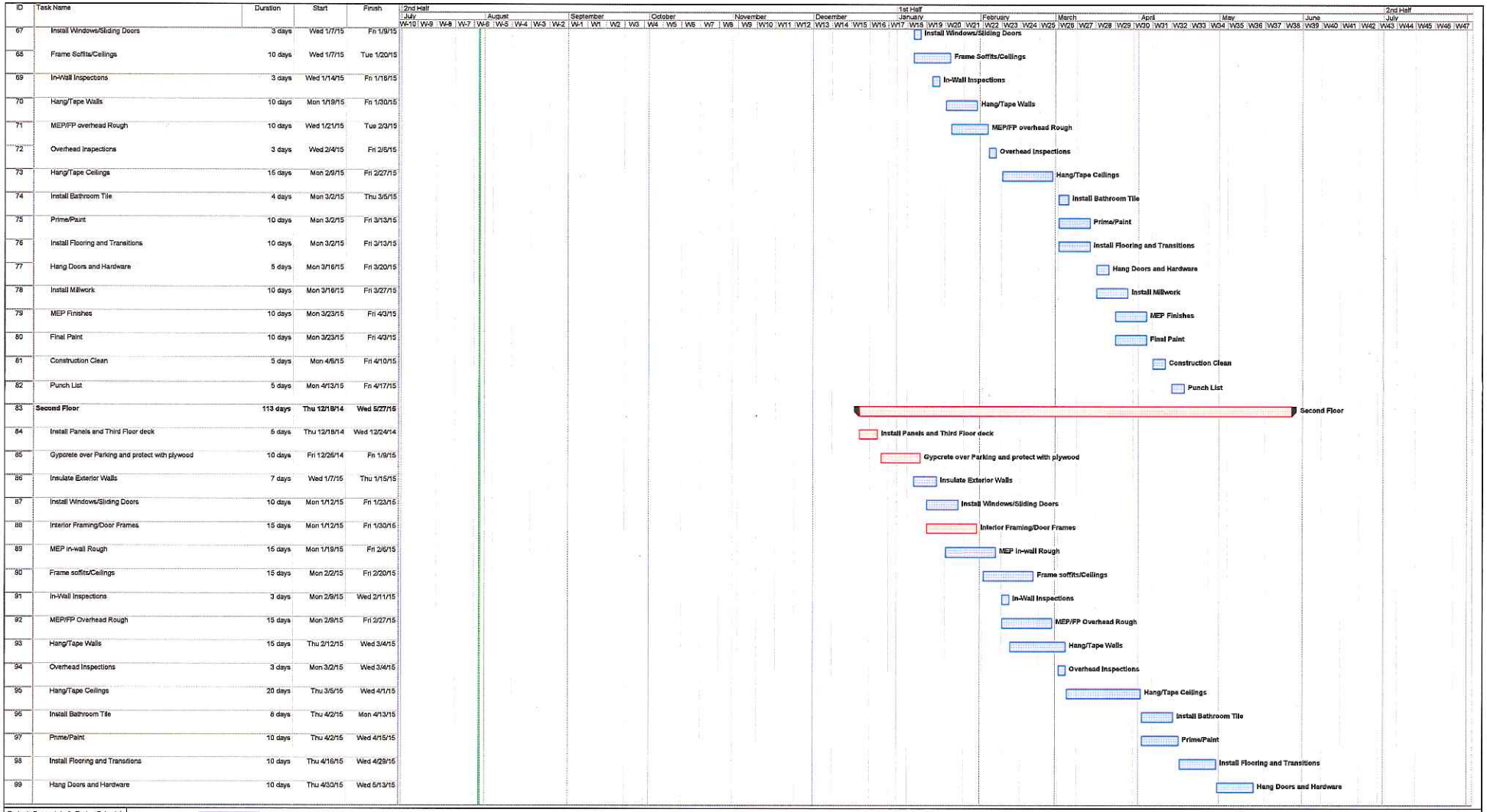
DRAFT CONSTRUCTION SCHEDULE



ID	Task Name	Duration	Start	Finish
67	Install Windows/Sliding Doors	3 days	Wed 1/7/15	Fri 1/9/15
68	Frame Soffits/Ceilings	10 days	Wed 1/7/15	Tue 1/20/15
69	In-Wall Inspections	3 days	Wed 1/14/15	Fri 1/16/15
70	Hang/Tape Walls	10 days	Mon 1/19/15	Fri 1/30/15
71	MEP/FP overhead Rough	10 days	Wed 1/21/15	Tue 2/3/15
72	Overhead Inspections	3 days	Wed 2/4/15	Fri 2/6/15
73	Hang/Tape Ceilings	15 days	Mon 2/9/15	Fri 2/27/15
74	Install Bathroom Tile	4 days	Mon 3/2/15	Thu 3/5/15
75	Prime/Paint	10 days	Mon 3/2/15	Fri 3/13/15
76	Install Flooring and Transitions	10 days	Mon 3/2/15	Fri 3/13/15
77	Hang Doors and Hardware	5 days	Mon 3/16/15	Fri 3/20/15
78	Install Millwork	10 days	Mon 3/16/15	Fri 3/27/15
79	MEP Finishes	10 days	Mon 3/23/15	Fri 4/3/15
80	Final Paint	10 days	Mon 3/23/15	Fri 4/3/15
81	Construction Clean	5 days	Mon 4/6/15	Fri 4/10/15
82	Punch List	5 days	Mon 4/13/15	Fri 4/17/15
83	**Second Floor**	**113 days**	**Thu 12/18/14**	**Wed 5/27/15**
84	Install Panels and Third Floor deck	5 days	Thu 12/18/14	Wed 12/24/14
85	Gypcrete over Parking and protect with plywood	10 days	Fri 12/26/14	Fri 1/9/15
86	Insulate Exterior Walls	7 days	Wed 1/7/15	Thu 1/15/15
87	Install Windows/Sliding Doors	10 days	Mon 1/12/15	Fri 1/23/15
88	Interior Framing/Door Frames	15 days	Mon 1/12/15	Fri 1/30/15
89	MEP in-wall Rough	15 days	Mon 1/19/15	Fri 2/6/15
90	Frame soffits/Ceilings	15 days	Mon 2/2/15	Fri 2/20/15
91	In-Wall Inspections	3 days	Mon 2/9/15	Wed 2/11/15
92	MEP/FP Overhead Rough	15 days	Mon 2/9/15	Fri 2/27/15
93	Hang/Tape Walls	15 days	Thu 2/12/15	Wed 3/4/15
94	Overhead Inspections	3 days	Mon 3/2/15	Wed 3/4/15
95	Hang/Tape Ceilings	20 days	Thu 3/5/15	Wed 4/1/15
96	Install Bathroom Tile	8 days	Thu 4/2/15	Mon 4/13/15
97	Prime/Paint	10 days	Thu 4/2/15	Wed 4/15/15
98	Install Flooring and Transitions	10 days	Thu 4/16/15	Wed 4/29/15
99	Hang Doors and Hardware	10 days	Thu 4/30/15	Wed 5/13/15

LANDRY/FRENCH CONSTRUCTION COMPANY

Seaport Lofts
Portland, Maine
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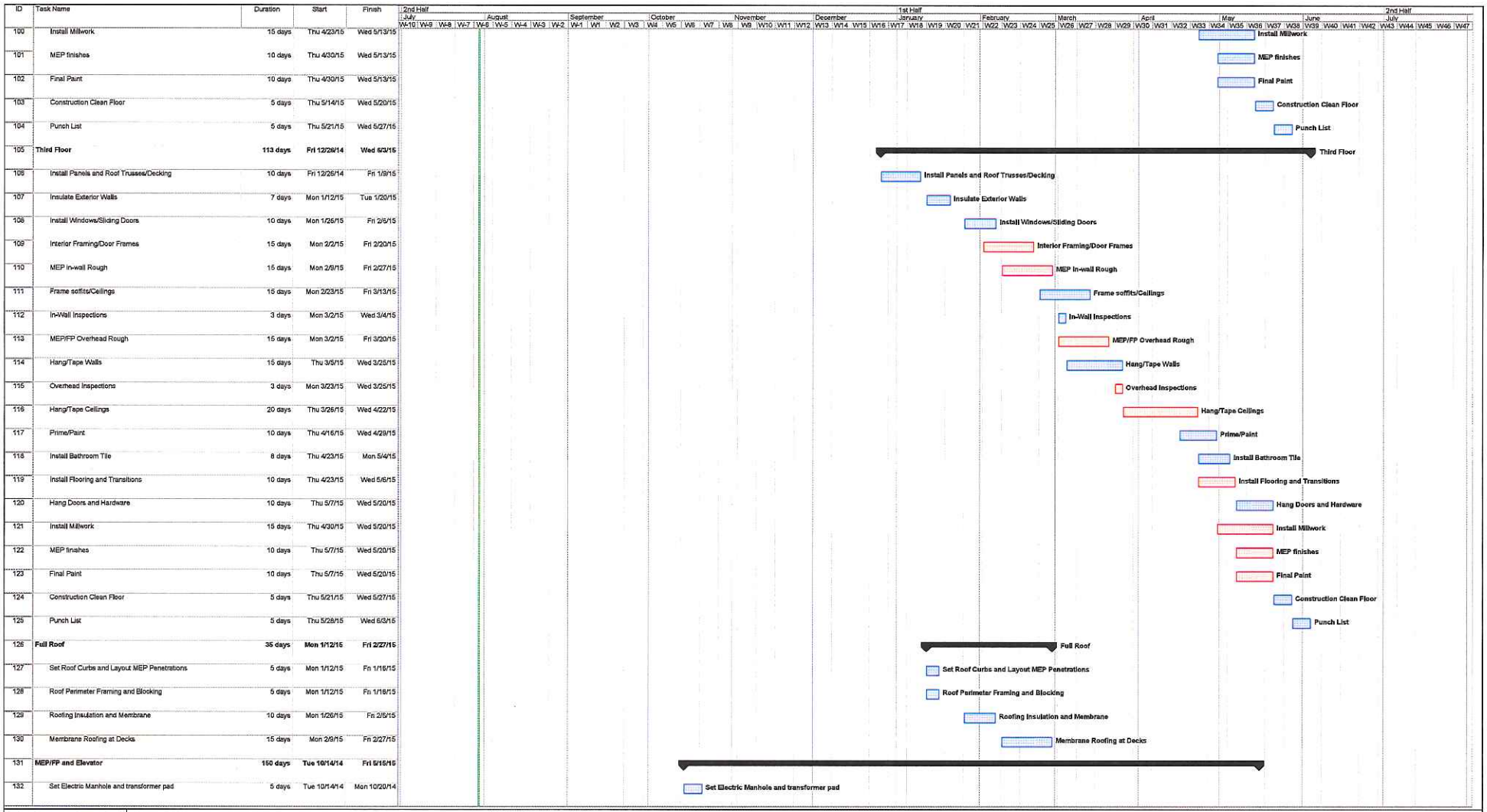
DRAFT CONSTRUCTION SCHEDULE



ID	Task Name	Duration	Start	Finish
100	Install Millwork	15 days	Thu 4/23/15	Wed 5/13/15
101	MEP finishes	10 days	Thu 4/30/15	Wed 5/13/15
102	Final Paint	10 days	Thu 4/30/15	Wed 5/13/15
103	Construction Clean Floor	5 days	Thu 5/14/15	Wed 5/20/15
104	Punch List	5 days	Thu 5/21/15	Wed 5/27/15
105	**Third Floor**	**113 days**	**Fri 12/26/14**	**Wed 6/3/15**
106	Install Panels and Roof Trusses/Decking	10 days	Fri 12/26/14	Fri 1/9/15
107	Insulate Exterior Walls	7 days	Mon 1/12/15	Tue 1/20/15
108	Install Windows/Sliding Doors	10 days	Mon 1/26/15	Fri 2/6/15
109	Interior Framing/Door Frames	15 days	Mon 2/2/15	Fri 2/20/15
110	MEP In-wall Rough	15 days	Mon 2/9/15	Fri 2/27/15
111	Frame soffits/Ceilings	15 days	Mon 2/23/15	Fri 3/13/15
112	In-Wall Inspections	3 days	Mon 3/2/15	Wed 3/4/15
113	MEP/FP Overhead Rough	15 days	Mon 3/2/15	Fri 3/20/15
114	Hang/Tape Walls	15 days	Thu 3/5/15	Wed 3/25/15
115	Overhead Inspections	3 days	Mon 3/23/15	Wed 3/25/15
116	Hang/Tape Ceilings	20 days	Thu 3/26/15	Wed 4/22/15
117	Prime/Paint	10 days	Thu 4/16/15	Wed 4/29/15
118	Install Bathroom Tile	8 days	Thu 4/23/15	Mon 5/4/15
119	Install Flooring and Transitions	10 days	Thu 4/23/15	Wed 5/6/15
120	Hang Doors and Hardware	10 days	Thu 5/7/15	Wed 5/20/15
121	Install Millwork	15 days	Thu 4/30/15	Wed 5/20/15
122	MEP finishes	10 days	Thu 5/7/15	Wed 5/20/15
123	Final Paint	10 days	Thu 5/7/15	Wed 5/20/15
124	Construction Clean Floor	5 days	Thu 5/21/15	Wed 5/27/15
125	Punch List	5 days	Thu 5/28/15	Wed 6/3/15
126	**Full Roof**	**35 days**	**Mon 1/12/15**	**Fri 2/27/15**
127	Set Roof Curbs and Layout MEP Penetrations	5 days	Mon 1/12/15	Fri 1/16/15
128	Roof Perimeter Framing and Blocking	5 days	Mon 1/12/15	Fri 1/16/15
129	Roofing Insulation and Membrane	10 days	Mon 1/26/15	Fri 2/6/15
130	Membrane Roofing at Decks	15 days	Mon 2/9/15	Fri 2/27/15
131	**MEP/FP and Elevator**	**150 days**	**Tue 10/14/14**	**Fri 5/15/15**
132	Set Electric Manhole and transformer pad	5 days	Tue 10/14/14	Mon 10/20/14

Project: Seaport_Loft_ProjectSchedule
Date: Wed 7/30/14

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline | Task

LANDRY/FRENCH CONSTRUCTION COMPANY

Seaport Lofts
Portland, Maine
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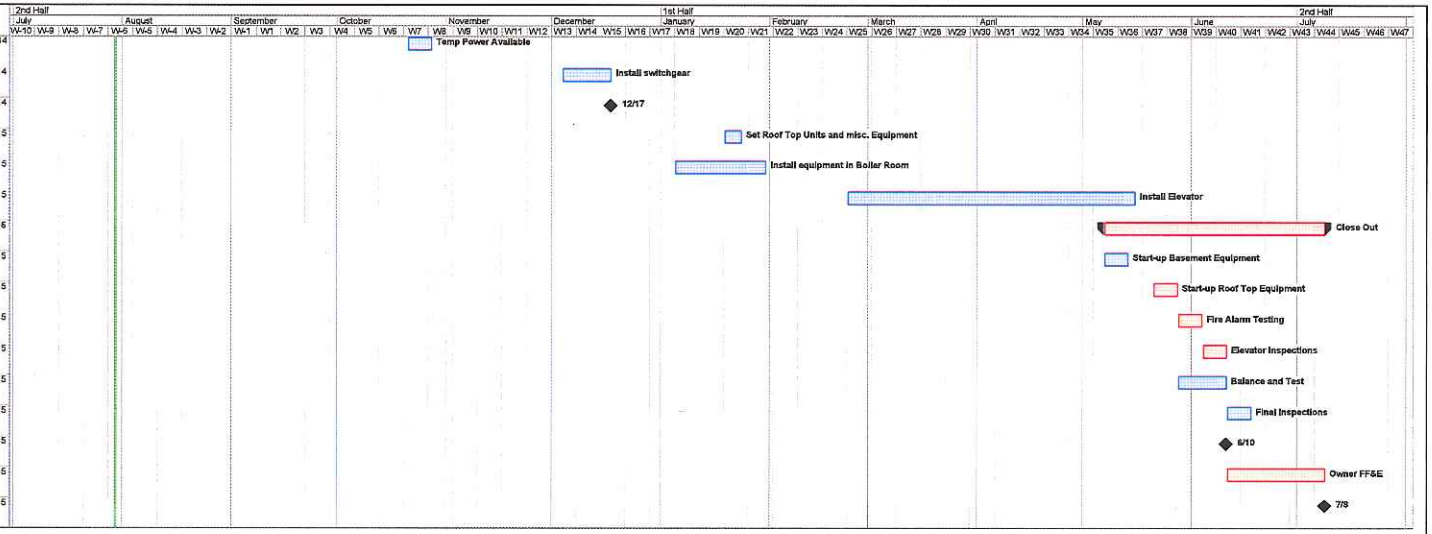
DRAFT CONSTRUCTION SCHEDULE

ID	Task Name	Duration	Start	Finish
133	Temp Power Available	5 days	Tue 10/21/14	Mon 10/27/14
134	Install switchgear	10 days	Thu 12/4/14	Wed 12/17/14
135	Permanent Power Available	0 days	Wed 12/17/14	Wed 12/17/14
136	Set Roof Top Units and misc. Equipment	5 days	Mon 1/19/15	Fri 1/23/15
137	Install equipment in Boiler Room	20 days	Mon 1/5/15	Fri 1/30/15
138	Install Elevator	60 days	Mon 2/23/15	Fri 5/15/15
139	**Close Out**	**45 days**	**Thu 5/7/15**	**Wed 7/8/15**
140	Start-up Basement Equipment	5 days	Thu 5/7/15	Wed 5/13/15
141	Start-up Roof Top Equipment	5 days	Thu 5/21/15	Wed 5/27/15
142	Fire Alarm Testing	5 days	Thu 5/28/15	Wed 6/3/15
143	Elevator Inspections	5 days	Thu 6/4/15	Wed 6/10/15
144	Balance and Test	10 days	Thu 5/28/15	Wed 6/10/15
145	Final Inspections	5 days	Thu 6/11/15	Wed 6/17/15
146	Substantial Completion	0 days	Wed 6/10/15	Wed 6/10/15
147	Owner FF&E	20 days	Thu 6/11/15	Wed 7/8/15
148	Certificate of Occupancy	0 days	Wed 7/8/15	Wed 7/8/15



Project: Seaport_Loft_ProjectSchedule
Date: Wed 7/30/14

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline | Task

LANDRY/FRENCH CONSTRUCTION COMPANY

Seaport Lofts
Portland, Maine
5 of 5

DRAFT CONSTRUCTION SCHEDULE

BANK OF NEW ENGLAND

2014 Letter of Credit

Member FDIC

SITE PLAN/SUBDIVISION
PERFORMANCE GUARANTEE
LETTER OF CREDIT [redacted]

November 20, 2014

Jeffrey Levine
Director of Planning and Urban Development
City of Portland
389 Congress Street
Portland, Maine 04101

Re: **Gordon Reger – 113 Newbury Street, LLC**
Level III Site Plan – Seaport Lofts, Bay House Phase II Project
101-121 Newbury Str./40 Hancock Str.

Bank of New England ("Bank") hereby issues its Irrevocable Letter of Credit [redacted] for the account of **Gordon Reger,113 Newbury Street LLC** (hereinafter referred to as "Developer"), held for the exclusive benefit of the City of Portland, in the aggregate amount of **$472,268.00 (Four Hundred Seventy Two Thousand Two Hundred Sixty Eight and 00/100 Dollars)**. These funds represent the estimated cost of installing site improvements as depicted on the **subdivision and site plan**, approved on **October 22, 2013** and as required under Portland Code of Ordinances Chapter 14 §§499, 499.5, 525 and Chapter 25 §§46 through 65.

This Letter of Credit is required under Portland Code of Ordinances Chapter 14 §§499, 499.5, 525 and Chapter 25 §46 through 65 and is intended to satisfy the Developer's obligation, under Portland Code of Ordinances Chapter 14 §§501, 502 and 525, to post a performance guarantee for the above referenced development.

The City, through its Director of Planning and Urban Development and in his/her sole discretion, may draw on this Letter of Credit by presentation of a sight draft and the Letter of Credit and all amendments thereto, up to thirty (30) days before or sixty (60) days after its expiration, stating any one of the following:

1. the Developer has failed to satisfactorily complete the work on the improvements contained within the **subdivision and site plan** approval, dated **October 22, 2013**; or

2. the Developer has failed to deliver to the City a deed containing the metes and bounds description of any streets, easements or other improvements required to be deeded to the City; or

3. the Developer has failed to notify the City for inspections.

In the event of the Bank's dishonor of the City of Portland's sight draft, the Bank shall inform the City of Portland in writing of the reason or reasons thereof within three (3) business days of the dishonor.

After all underground work has been completed and inspected to the satisfaction of the Departments of Public Services, and Planning and Urban Development, including but not limited to sanitary sewers, storm drains, catch basins, manholes, electrical conduits, and other required improvements constructed chiefly below grade, the City of Portland Director of Planning and Urban Development or its Director of Finance as provided in Chapter 14 §501 of the Portland Code of Ordinances, may authorize the **Bank**, by written certification, to reduce the available amount of the escrowed money by a specified amount.

This performance guarantee will automatically expire on **April 15, 2016** ("Expiration Date") or on the date when the City determines that all improvements guaranteed by this Letter of Credit are satisfactorily completed, whichever is later. It is a condition of this Letter of Credit that it is deemed to be automatically extended without amendment for period(s) of one year each from the current Expiration Date hereof, or any future Expiration Date, unless within thirty (30) days prior to any expiration, the Bank notifies the City by certified mail (restricted delivery to Suzanne Knight, Acting Director of Finance, City of Portland, 389 Congress Street, Portland, Maine 04101) that the Bank elects not to consider this Letter of Credit renewed for any such additional period.

In the event of such notice, the City, in its sole discretion, may draw hereunder by presentation of a sight draft drawn on the Bank, accompanied by this Letter of Credit and all amendments thereto, and a statement purportedly signed by the Director of Planning and Urban Development, at Bank's offices located at 31 Pelham Road, Salem, NH stating that:

this drawing results from notification that the Bank has elected not to renew its Letter of Credit No. [redacted]

On its Expiration Date or on the date the City determines that all improvements guaranteed by this Letter of Credit are satisfactorily completed, this Performance Guarantee Letter of Credit shall be reduced by the City to ten (10) percent of its original amount and shall automatically convert to an Irrevocable Defect Letter of Credit. Written notice of such reduction shall be forwarded by the City to the Bank. The Defect Letter of Credit shall ensure the workmanship and durability of all materials used in the construction of the **subdivision and site plan** approval, dated **October 22, 2013** as required by City Code §14-501, 525 and shall automatically expire one (1) year from the date of its creation ("Termination Date").

The City, through its Director of Planning and Urban Development and in his/her sole discretion, may draw on the Defect Letter of Credit by presentation of a sight draft and

Letter of Credit No. [redacted]

this Letter of Credit and all amendments thereto, at Bank's offices located at 21 Pelham Road, Salem, NH, prior to the Termination Date, stating any one of the following:

1. the Developer has failed to complete any individual improvements; or
2. the Developer has failed to correct any defects in workmanship; or
3. the Developer has failed to use durable materials in the construction and installation of improvements contained within the approved subdivision and site plan.

Date: 11/20/14

By: _____
Paul F. Surprenant
Executive Vice President
Its Duly Authorized Agent

I have read this Letter of Credit and agree to its terms.

Date: 11/21/14

By: _____
Godon Reger

From: Will Conway <wconway@sebagotechnics.com>
To: Helen Donaldson <HCD@portlandmaine.gov>
CC: Joe Dasco <joedasco@comcast.net>, Ali Malone <ali.malone@gmail.com>, Matthew Gagnon <mgagnon@landryfrenchconstruction.com>
Date: 11/6/2014 1:38 PM
Subject: Fwd: Seaport Lofts - Monitoring Information

Nell, See below from Landry French and please let me know if this satisfies the request for clarification of our monitoring plan.

To supplement our submittal on monitoring, we will set control points prior to construction on any existing structures behind the Retaining wall and at about every 25' along the Retaining wall itself. We will also set points along the North elevation wall of the house labeled M on Civil Sheet 1 of 12. We will check these points for movement both vertically and horizontally during excavation to verify that no movement has occurred. These checks will be done using a Total Station survey instrument. After the new wall and foundation is installed and after backfilling we will check them again. It should be noted that we were very conservative in our excavation support design with respect to the soil conditions because of these existing structures and sensitivity of the soil. The structure has 2 levels of bracing which will minimize any potential risk of movement.

Matthew Gagnon, Leed A.P.
Project Manager

Landry/French Construction Company
160 Pleasant Hill Road
Scarborough, ME 04074
P. 207-730-5566/F. 207-730-5567
Cell 207-219-0015
www.landryfrenchconstruction.com<http://www.landryfrenchconstruction.com/>
http://www.facebook.com/LandryFrenchConstruction

Brian Jacobs
Super - 212-46726

Geoff Mitchell
PM - 730-5566

113 Newbury Street, LLC

2730 Transit Rd
West Seneca, NY 14224

June 24, 2015

Mr. Jonathan Rioux
Deputy Director of Inspections
Portland City Hall
389 Congress Street
Portland, ME 04101

Dear Mr. Rioux,

In response to the Stop Work Order issued on May, 19 2015, we are submitting our engineering field reports conducted as a result of the soil settlement and damage sustained by the neighboring properties due to the construction activities at 113 Newbury Street. The initial field reports were prepared by our geotechnical engineer of record GSI, and our structural engineer of record JSN who designed the retaining wall. These reports, as well as additional information collected from the original plans and specifications, discussions with the general contractor, and extensive review of data collected, were independently peer reviewed by Haley and Aldrich who was hired by The Travelers Insurance Company. The primary goal of these investigations was to determine the cause of the ground settlement which resulted in damage to the Federal Street Town Houses Landscaping and structural damage to 48 Hancock Street. In addition to determining the cause, the engineers were tasked with how to proceed with construction activities in safe and effective manner.

The peer review that took place was extensive and included installation of additional instrumentation and monitoring points as well as input from several engineers. During this process we have met with the affected neighbors, who were kind enough to let us inspect their properties and we have been communicating with them on a regular basis. We are also issuing this report directly to the neighbors and have made, and will continue to make, ourselves available to answer questions or address concerns. We are hopeful that this request to lift the Stop Work Order meets with your approval so we can get this great project back on track.

Sincerely,

Joseph Dasco
113 Newbury Street, LLC

CC: Jeff Levine, Barbara Barhydt, Tammy Munson, Jennifer Thompson

Haley & Aldrich, Inc.
75 Washington Avenue
Suite 1A
Portland, ME 04101
207.482.4600

24 June 2015
File No. 42222-000

Travelers
44 Bedford Street
P.O. Box 1450
Middleboro, Massachusetts 02344

Attention: Suzan Lenling
Claim Professional, Construction Claims

Subject: Results of Independent Technical Evaluation, Retaining Wall Movement
Newbury Street/Seaport Lofts Development Project
Newbury Street, Portland, Maine

Ladies and Gentlemen:

This report presents the results of our independent technical evaluation of excessive retaining wall movements and damage to adjacent properties potentially associated with the construction of the Seaport Lofts development project located on Newbury Street in Portland, Maine. This work was undertaken at your request, in accordance with our proposal dated 13 May 2015, as authorized by Joseph Cahoon, Jr. (attorney with Richardson, Whitman, Large and Badger who was authorized by Travelers to execute the agreement) on 14 May 2015.

As outlined in our proposal scope we provided independent geotechnical consulting services related to reviewing readily available information, reports, and data associated with movements and associated damage to adjacent properties that occurred during the construction of a new earth retaining wall at the subject project. Our observations, conclusions and recommendations are summarized in the following sections of this report.

We have also reviewed the report prepared by Geotechnical Services Inc. (GSI; the geotechnical engineer-of-record for the subject project) dated 12 April 2015 summarizing the site visit they conducted on 11 April as well as their conclusions and recommendations relative to the excessive wall movements and damage to adjacent properties. Please note that we reviewed this report after completion of our independent evaluation.

Background

The Seaport Lofts development project consists of the construction of a new four-story residential building with on-site surficial parking. The site is located northwest of the intersection of Hancock and Newbury Streets in Portland, Maine (see Figure 1, Project Locus). The site is bounded to the east by

Hancock Street, to the south by Newbury Street, and to the north and west by existing multi-story residential structures.

Prior to development, the approximately 30,000 square foot site consisted of paved parking areas. The ground surface within the easterly half of the site was paved with bituminous concrete and sloped downward from approximately El. 48 along the northerly boundary to about El. 42 along Newbury Street. The ground surface within the westerly half of the site was paved with Portland cement concrete and was relatively flat, with site grades generally ranging between El. 40 to El. 42. An existing, approximately 6-ft high (maximum) reinforced concrete retaining wall facilitated the grade change between the eastern and western portions of the site.

The ground surface north of the subject site slopes gently upwards from approximately El. 48 at the northern site boundary to approximately El. 50 to El. 52 at the adjacent residential properties. There are a series of existing relatively low retaining walls along the northern portion of the site in the vicinity of 48 Hancock Street (blue building) that separate the site from the adjacent residential parcels. Also there was an approximately 10 to 15 ft high retaining wall along the northern property boundry that facilitated the grade change between the lower, western portion of the site and adjacent residential parcels north of the site.

The site improvements for the subject project included the construction of a new, reinforced, cast-in-place concrete, earth retaining wall along the northern boundary of the site. The wall was designed to facilitate an approximately 10 to 12-ft grade separation between the new surface parking area at the site and the adjacent residential parcels. The eastern half of the new retaining wall was designed to be supported on earth stabilized with a combination of ground improvement (GI) techniques described as vibro stone columns and grouted vibro stone columns. A layer of compacted granular fill/crushed stone was placed between the top of the stone columns and the bottom of the retaining wall footing and was part of the original design requirements. The existing retaining wall in the western portion of the site was retrofitted with steel H-piles and a new concrete façade was cast in front of and tied into the existing wall face to form the western half of the new site retaining wall. It is our understanding that the H-piles were driven to refusal on/in the underlying bedrock.

A temporary support of excavation (SOE) system was required to be installed to allow construction of the new retaining wall along the northeastern edge of the site. The SOE system consisted of two rows of interlocking steel piles (sheeting; one uphill of the new retaining wall and one downhill) with two levels of internal bracing (one near the top and one near the mid-height of the unsupported height of the sheeting.

During the final stages of the construction of the new retaining wall along the eastern half of the site, the new wall, the ground surface adjacent to the SOE system and some of the adjacent residential buildings experienced significant vibrations as well as ground surface and building/structure settlement.

Haley & Aldrich, Inc. (Haley Aldrich) was retained in mid-May to conduct an independent technical evaluation to assess the cause(s) of the excessive retaining wall movements and damage to adjacent structures and to determine possible measures to stabilize the site so that construction could continue.

On 19 May 2015 the City of Portland, Planning & Urban Development Department issued a Stop Work Order (SWO) to the development owner (113 Newbury Street, LLC). Since the day the SWO was issued there has been no construction at the site, except for the installation and monitoring of survey points to record vertical (settlement) and horizontal movements on and adjacent to the new retaining wall.

Available Information

The following information was provided by Richardson, Whitman, Large and Badger and 113 Newbury Street, LLC for our review and evaluation. This information along with our discussions with project team members (design and construction) team and information collected during site visits serves as the basis of our conclusions and recommendations. Please note that we did not conduct any supplemental field explorations (e.g., test borings, test pits) or additional laboratory testing on previously collected soil samples as part of our work.

- Report on Geotechnical Investigations for Federal Street Townhomes prepared by R.W. Gillespie & Associates Inc. (RWG) dated January 2005.
- Site Development Plans for 44 Federal Street Condominiums prepared by DeLuca-Hoffman Associates, Inc. dated March 2005.
- Structural plans for 44 Federal St Townhomes prepared by Becker Structural Engineers, Inc. (BSE) and dated 14 September 2005.
- Report on final Design Subsurface and Foundation Investigation – Proposed Village at Ocean Gate prepared by Sebago Technics, Inc. (STI) and dated 3 October 2007.
- Geotechnical report for Proposed Bay House II prepared by GSI dated 24 August 2013.
- Architectural plans prepared by Mark Muller Architects A.I.A dated 12 August 2014.
- Site/Civil plans prepared by STI and dated 26 July 2013 and last revised 31 December 2014.
- Structural plans prepared by JSN Associates (JSN) dated 17 December 2014.
- Draft report - Evaluation of Apparent Slope Movement, Seaport Lofts prepared by S.W.Cole Engineering Inc. (SWC) and dated 30 April 2015.
- Letter report – Retaining Wall Settlement Issues, Seaport Lofts prepared by GSI and dated 12 April 2015.
- Weekly Field Reports prepared by Landry/French Construction Company (L/F) for the period from 16 January to 5 April 2015.
- Daily Field Reports prepared by GSI during the period from 9 January to 26 March 2015.
- Survey monitoring results conducted by H.B. Fleming, Inc. (HBF) during the period from 17 December 2014 to 26 May 2015.
- Inclinometer data collected by SWC in borings B-201 and B-202 during the period from 27 April to 13 May 2015.
- Survey monitoring results conducted by Titcomb Surveying Inc. (Titcomb) for the period from 11 April through 10 June 2015.
- HBF submittals:
    - Retaining Wall, Cofferdam & Monitoring, dated 1 October 2014;
    - Pile Set Criteria, dated 13 January 2015.

- SCI submittals:
  - Vibro Stone Column Installation Beneath Pad Foundations, dated 19 September 2014;
  - Subsurface Column Install Procedure Change, dated 22 January 2015;
  - Ground Improvement – Modulus Testing, dated 19 February 2015.
- Site meetings/site walkthroughs at the adjacent residential properties to observe conditions: 48 Hancock Street (blue house; interior and exterior) on 4 June 2015; 44 Federal Street Townhouses (backyard/exterior only) on 11 June 2015; and 36 Federal Street (basement and exterior) on 15 June 2015.
- Other miscellaneous personal contacts, telephone conversations with individuals familiar with the site and events preceding and after the movements were documented.

Geotechnical Engineering Evaluations

After reviewing the information, reports and data that were provided and referenced herein, the following evaluations were undertaken:

- Developed a construction timeline showing the principal construction activities in the northeastern portion of the site specifically associated with the retaining wall construction including but not limited to: driving sheeting for SOE system, installation of vibro stone columns and grouted columns, excavation within the limits of the SOE system, construction of the cast-in-place retaining wall, backfilling within the SOE system limits and extraction of sheeting. A summary of the timeline is presented in Appendix A. Some of the more significant construction activities and dates are summarized in the table below (also provided on the plots of HBF survey data in Figures 1 through 3, Appendix B).

Event	Event Description and Associated Dates
1	Uphill sheet piles installed (1/5 to 1/9/2015)
2	Vibro stone columns & vibro grouted columns installed (1/9 to 1/30/2015)
3	Downhill sheet piles installed (2/2 to 2/9/2015)
4	Install upper level brace (2/10 to 2/13/2015)
5	Excavate to lower brace level (2/23 to 2/26/2015)
6	Install lower level brace (2/26 to 3/3/2015)
7	Excavate to and prepare subgrade, place fabric and stone (3/4 to 3/9/2015)
8	Pour footing retaining wall footing/strut concrete and remove lower brace (3/13 to 3/16/2015)
9	Backfill retaining wall within limits of SOE system (4/6 and 4/7/2015)
10	Remove upper brace level (4/8/2015)
11	Remove uphill sheet piles, westerly downhill sheet piles (4/9 to 4/10/2015)

- Plotted the vertical and horizontal survey data from HBF and Titcomb. Refer to Appendix B for plots of movement versus time for established monitoring points and a site plans showing the general location of the monitoring points. Please note that the Titcomb monitoring points were

established after the new retaining wall movement and movement of 48 Hancock Street (blue house) was observed.

- Evaluated the data from the two inclinometers installed in April by SWC on the downhill side of the new retaining wall. Refer to Appendix B for inclinometer data plots and plan showing location of inclinometers.
- Evaluated the vertical and horizontal survey data relative to the construction events outlined in the construction timeline.
- Conducted global stability calculations to assess the calculated factor of safety against a global shear failure of the soil beneath/behind the new retaining wall. Two subsurface profiles/models were developed perpendicular to the alignment of the new retaining wall/SOE system, one at 48 Hancock Street (blue house) and one at the Federal Street Townhouses. A parametric analysis was conducted for each profile/model in which the following parameters were varied: strength properties (i.e., shear strength profile with depth) of the in-situ soils (specifically the marine clay) and the GI zone, bottom of excavation within the SOE system (model construction sequencing), and surcharge loading effects from the adjacent residential properties. This parametric analysis allowed us to assess the sensitivity of the calculated global factor of safety to changes in the properties, excavation levels and surcharge loading effects. The location of the two subsurface profiles/models, shear strength profile information and tables summarizing the calculated global factors of safety for both profiles are presented in Appendix C.

Conclusions and Comments

Based on our review of the information provided to us, the compiled construction timeline, the results of our technical evaluations, and observations made and information collected from neighbors during the site/adjacent property walkthroughs, we offer the following conclusions/comments relative to our opinion of the likely cause of the excessive retaining wall movements and damage to adjacent structures.

- Movement of adjacent structures and the presence of the tension crack behind the Federal Street townhouses was caused by construction activities at the subject site.
- Installation of vibro stone columns resulted in disturbance of soft marine silt/clay soils. The noted Weekly Field Reports document construction issues that occurred during installation of the stone columns including frozen crushed stone blocking the feed tubes and requiring the probe to be removed and reinserted through the sensitive marine silt and clay soils.
- Installation of the SOE system sheeting resulted in noticeable vibrations but no evidence of ground surface settlement or damage to adjacent residential structures.
- Excavation to the lower brace level within the SOE system (event No. 5 above) and installation of the lower brace level (event No. 6) precipitated up to 1.5 to 2 in. of settlement of the existing retaining wall and ground surface immediately north of the SOE system (HBF points 105 through 109; see Figure 1, Appendix B). Excavation from the lowest brace level to finish subgrade level inside the SOE system (event No. 7) resulted in 0 to ¼ in. of additional settlement of these points. The settlement trend of these points following event No. 7 showed diminishing or no settlement (see Figure 1, Appendix B).

- There is little evidence of additional settlement of the existing retaining wall and ground surface immediately north of the SOE system (except HBF points 107 and 109) associated with forming/ pouring of the new retaining wall, backfilling and brace removals (events No. 9 through 11). Points 107 and 109 located on the existing retaining wall behind 48 Hancock Street (blue house) settled about 1 in. (see Figure 1, Appendix B) during construction of the wall itself (i.e., after reaching subgrade and prior to backfilling). It is possible that this additional settlement was precipitated by excavation for the installation of catch basin CB-4 and associated piping located 10 to 15 ft south of the existing wall. The bottom of the excavation for CB-4 is several feet lower than the excavation for the retaining wall footing.
- Extraction of sheeting on 9 and 10 April (event No. 11) precipitated approximately 2 in. of settlement of the new retaining wall (see Figure 3, Appendix B). Based on discussions with the adjacent property owners, it appears that extraction of the sheeting also precipitated the foundation settlement and cracking of the foundation walls and floor slab at 48 Hancock Street (blue building), settlement of the backyard patio at 36 Federal Street (white house) and the surficial tension crack that was observed at ground surface behind the 38, 40, 42 and 44 Federal Street townhouses. Please note that the owner of 40 Federal Street stated that the tension crack was not present in the back of the townhouses on the morning of 9 April but was present around noontime on 9 April after the start of sheeting extraction had begun.
- The location of the surficial tension crack observed behind 38, 40, 42 and 44 Federal Street townhouses coincides with the design locations of an existing underground gas line and an existing 6-in. diameter sanitary line. The utility locations shown on the "Site Development Plans" for 44 Federal Street Condominiums prepared by DeLuca-Hoffman Associates, Inc. dated March 2005 are located approximately 12 to 14 ft (in plan) from the location of the uphill row of sheets that were used to install the new site retaining wall. The invert elevations of these two lines are not known.
- It is our understanding that based on observed subgrade conditions at the bottom of excavation within the SOE system, it was decided to extend the plan limits of the concrete footing to span from sheet to sheet within the excavation. It is our understanding based on discussions with Landry-French that a bond breaker between the concrete and the sheets was not installed prior to pouring the concrete. In our opinion, placement of fill concrete up against the sheets with no bond breaker contributed to the excessive vibrations reported by the adjacent property owners and others present at the site during sheeting extraction on 9 and 10 April.
- The Titcomb survey data (see Appendix B), which started on 11/15 April (wall points/site points; sheeting pulled on 9 and 10 April and work stopped on 10 April) and was last collected on 10 June, is generally inconclusive regarding settlement of monitoring points installed at the ground surface on the site and on the deck footings of the Federal Street townhouses. The data for the monitoring points installed on 48 Hancock Street (blue building) suggest that the building has settled about ¾ in. since the initial reading but the trend suggests little/no settlement over the past 4 to 6 weeks. The data for the monitoring points installed on existing retaining wall adjacent to 48 Hancock Street suggest that the building has settled about ½ in. since the initial reading but the trend suggest little/no settlement over the past 4 to 6 weeks. The data for the monitoring points installed on 36 Federal Street (white building) suggest that the building has not settled since the initial reading. The data for the monitoring points installed on the new retaining wall suggest that the wall has settled about ½ to ¾ in. since the initial reading but the

trend suggest little/no settlement over the past 4 to 6 weeks. Please note that the initial reading was taken several days after the sheets were pulled.

- The north/south (generally perpendicular to the alignment of the SOE and new retaining wall) Titcomb survey data (see Appendix B) for the monitoring points installed on 48 Hancock Street, 36 Federal Street and the existing retaining wall adjacent to 48 Hancock Street suggest that structures have not moved laterally in a north-south direction since the initial survey. The survey data is generally inconclusive regarding lateral movement of the monitoring points installed on the deck footings of the Federal Street townhouses. Please note that the initial reading was taken several days after the sheets were pulled.
- The Titcomb survey data have been reported to have an accuracy of 0.12 to 0.36 in. We have no information on the accuracy of the HBF survey data. It is likely that some of the data scatter and apparent movement trends can be attributed to the accuracy of the survey. Future survey measurements should be made using equipment and techniques that provide a much higher level of accuracy.
- The new retaining wall appears to be essentially plumb as measured at several locations along the front face of the wall using a 4-ft long carpenter's level in late May.
- There are two visible cracks in the front face of the new retaining wall and one more significant crack in the top of the wall at the interface between the pile-supported and soil-supported portions of the wall. Based on our review of the report prepared by JSN Associates, Inc. (JSN; the structural engineer-of-record for the subject project) dated 3 June 2015, JSN has observed the cracks and has concluded that the cracks do not affect the structural integrity of the wall. We have included the JSN report for reference in Appendix D.
- Settlement of the new retaining wall supported on the vibro stone and grouted columns and crushed stone load transfer pad indicate the foundation system (transfer pad and vibro stone/grouted columns) did not perform as designed or as expected. The designer indicated post construction settlements of approximately 1 in. and ½ in. maximum of total and differential settlement, respectively. The HBF data suggest that the wall has settled a total of between 2 and 3 in. since the points were installed on 3 April, 6 days before the start of sheeting extraction. However, based on the HBF and Titcomb data it is our opinion that the trend suggests little/no settlement over the past 4 to 6 weeks trend since there has been no significant evidence of continued settlement of the new retaining wall.
- Global stability evaluations were not conducted by GSI or any other member of the design team during the design development phase of the project.
- Calculated global stability factors of safety for the Federal Street slope subsurface profile/model (Section A-A in Appendix C) range from 1.1 to 1.6 depending on which parameters are selected for clay shear strength, live load surcharge from the Federal Street townhouses and the presence/strength of the stone column zone of ground improvement below the wall footing. The factor of safety of 1.1 corresponds to the most "conservative" case corresponding to the lowest value of clay shear strength (i.e., 400 psf), highest building surcharge (i.e., 600 psf) and no strength in the ground improvement zone (i.e., friction angle of 0 degrees, which is intended to model a completely disturbed zone generally within the limits of the ground improvement area). It is our opinion that the combination of these conservative parameters is not realistic, and therefore the actual factor of safety is greater than 1.1. Using a more realistic shear strength profile (i.e., 450 to 700 psf; based on the range in actual in-situ vane shear

measurements; see Appendix C), the highest building surcharge (i.e., 600 psf) and assuming no ground improvement the resulting factor of safety increases to 1.5. It is our opinion that this is more realistic representation of the factor of safety based on the strength data that has been collected at the site. It is our opinion that a factor of safety equal to 1.5 is acceptable for this profile/model (i.e., a slope supporting a building/critical structure). This is the same factor of safety recommended by LRFD Code for the design of highway and bridge approach embankments. See Appendix C for a summary of calculated factors of safety for the Federal Street slope subsurface profile/model. Please note that all of our evaluations assumed finished grade on the low side of the wall.

- Calculated global stability factors of safety for the 48 Hancock Street subsurface profile/model (Section B-B in Appendix C) range from 1.9 to 2.5 depending on which parameters are selected for the presence/strength of the stone column zone of ground improvement below the wall footing. We used the low value of clay shear strength (i.e., 400 psf) for our initial evaluations. Since the calculated factors of safety for the low strength profile are well above the minimum desired factor of safety of 1.5 (slope supporting a building/critical structure), additional iterations were not conducted. See Appendix C for a summary of calculated factors of safety for the 48 Hancock Street subsurface profile/model. Please note that our evaluations assumed finished grade on the low side of the wall and didn't include the presence of the sheets in the ground.
- Data from the two inclinometers installed on the downhill (south) side of the new retaining wall show essentially no lateral movement between the period from 27 April to 13 May 2015.
- The tension crack behind the Federal Street townhouses is located approximately 12 and 14 ft from the uphill sheeting and 20 and 22 ft from the centerline of the wall. Our stability evaluations show that the distance from the centerline of the wall to the point where the calculated critical surface intersects the ground surface (behind the wall) ranges from 50 to 60 ft for the lower factor of safety models (e.g., 1.1 to 1.2) to 25 to 30 ft for the higher factor of safety models (e.g., 1.4 to 1.5). Since the actual tension crack is not located 50 to 60 from the wall, it is likely that the models that correspond to the lower factors of safety are not realistic.
- The gap between the top of the foundation wall and the bottom of the timber framing at the southwest corner of 48 Hancock Street (blue house) was shimmed using timber shims by Landry-French on or about 10 April 2015. We observed these shims during the building walkthrough on 4 June. At the time of the walkthrough approximately half of the shims were observed to still be "snug" between the foundation wall and framing. The other shims had a visible gap of no more than 1/16 in. between the top of the shim and bottom of the framing, indicating that minimal or no settlement of the building had occurred since the shims were installed.
- The site and new retaining wall appear to be stable.
- The tension crack behind (south of) the Federal Street townhouses did not result from a global slope instability but was caused by either the settlement of the retaining wall and the movement of the active wedge of soil that extends outward from the back of the retaining wall footing, dynamic impacts of the sheeting extraction, or a combination of both.
- Movement of the 48 Hancock Street building did not result from a global slope instability but was caused by either the settlement of the retaining wall and the movement of the active

wedge of soil that extends outward from the back of the retaining wall footing, dynamic impacts of the sheeting extraction, or a combination of both.

- The current site grade south of the downhill row of sheets is approximately 6 ft above design grade. Excavation of that soil will, in theory, have a destabilizing effect and could precipitate additional settlement/movement. Removal of the soil should be undertaken in a slow and methodical way with frequent survey monitoring and quick turnaround data evaluation (more details below).
- The major vibration inducing construction activities associated with the project (e.g., sheet pile and H-pile installation, vibro stone column construction) have been essentially completed.

Recommendations

Based on the conclusions and comments outlined above we offer the following recommendations relative to continuing the construction activities at the subject site:

- Construction activities should be allowed to proceed at the site.
- The sheetpiling that is present at the site (the SOE system for the retaining wall and the SOE adjacent to 48 Hancock Street) should not be removed and should be burned off 1 to 2 ft below finish grade once all major excavation activities have been completed.
- In order to mitigate risk associated with excavation and removal of the soil present on the southern side of the downhill row of sheets, we recommend that the soils be removed in a controlled, systematic fashion. Specifically no more than 1 ft (vertical) of soil should be removed from this area in a day.
- Prior to the resumption of construction at the site, the monitoring points that have been established by Titcomb and HBF should be surveyed (both elevation and coordinate location) by one survey firm using survey methods that produce an accuracy of no less than 1/16 in. (both vertical and horizontal). Each survey should be conducted by the same survey means/methods by the same survey crew. We also recommend that additional monitoring points be installed in the ground between the retaining wall and the northern property line (near former HBF monitoring points 105 and 106; see Appendix B for location plan).
- A survey of all the monitoring points should be conducted at the start of each day prior to the start of excavation activities to remove the soil present on the southern side of the downhill row of sheets. Survey readings should also be conducted within one hour after completion of excavation activities each day. The monitoring points should be surveyed again the next morning to determine if any movement occurred overnight. Both sets of data should be reduced, plotted and reviewed by the project team before any additional excavation activities are allowed. On days where excavation activities are not conducted, the monitoring points should be surveyed once per day and provided to the project team the same day. Also inclinometer data should be collected once per day during the excavation period. This data should be reviewed by the project team prior to the start of the next day's excavation activities. After removal of the excess soil to design subgrade level, the monitoring points should continue to be surveyed on a weekly basis for a minimum of four weeks.

- The frequency and survey requirements should be the same for the excavation activities associated with construction of the continuous wall footing in the northeast corner of the site (i.e., column lines C-20 to C-21; closest to 48 Hancock Street).
- The contractor should temporarily stockpile the excavated soil at an on-site location farther away from the retaining wall in the instance that the survey data show additional movement. In this instance in may be necessary to move the excavated soil back to the area south of the downhill sheets.
- Limiting values for any of the survey points should be ¼ in. of settlement and ¼ of lateral movement perpendicular to the retaining wall alignment. If the limiting value is exceeded at any monitoring point during construction the excavation activities should not be allowed to continue and a meeting should be convened immediately with the design team (including the geotechnical engineer-of-record) and the contractor to determine whether immediate remedial actions are warranted or whether the reading is anomalous. As discussed above the most expeditious remedial option would likely be to place the excavated soil back into the previously excavated area.
- The static setting on all compaction equipment should be used to proofroll soil subgrades, compact engineered lifts of fill and proofroll asphalt. Vibratory compaction equipment should not be used.
- As stated above, the location of the tension crack that is present behind the Federal Street townhouses is generally coincident with the design locations of the gas and sewer line service for that building. The actual location of these lines (as-built location) is not known. It is our opinion that the remaining construction activities should not affect these lines. However, if amenable to the owners of the townhouses, and as an extra precaution the top of the gas line could be exposed at a couple of locations so that it can be directly monitored for movement until construction of the new retaining wall and earthwork activities in the adjacent parking areas have been completed.
- The contractor and the engineer who designed the SOE system adjacent to 48 Hancock Street should review the existing SOE design to confirm that the system as designed is adequate to support the soil and building behind the SOE system during excavation and construction of the continuous wall footing in the northeast corner of the site (i.e., between column lines C-20 to C-21). The system should be stiff enough to limit additional movement of 48 Hancock Street to within the threshold and limiting values outlined above. If the contractor and their engineer determine that the SOE as designed is not stiff enough to limit additional movements to within the threshold and limiting values outlined herein, they should revise the design to meet these requirements. The contractor should provide written confirmation that either the existing SOE system is sufficient, or should provide a submittal outlining the revised SOE design, which documents construction sequencing and means/methods of installation of the additional SOE components. This written confirmation should be received and reviewed by the structural engineer-of-record for the project prior to the start of excavation activities in the northeast portion of the site.
- Repairs to the adjacent residential buildings and property should not be completed until work at the site is finished.
- The load bearing capabilities of the vibro stone/grouted columns supporting individual building columns and continuous wall footings should be confirmed with at least one load test conducted

at columns supported by: 1.) a grouted and 2.) an ungrouted vibro stone column (i.e., minimum of two load tests). GSI has developed proposed requirements associated with load testing the ground improvement in their draft letter report dated 21 June 2015 (see Appendix D). We have reviewed and are in general agreement with the load testing requirements proposed by GSI with the following exception. The test on a column supported by vibro stone columns (i.e., at column line A-16) should be performed using a plate or bearing member that will engage all four of the stone columns and the full width of the crushed stone load transfer platform. We do not recommend load testing of a single vibro stone column using a 30-in. diameter circular plate as we believe the test should measure the effectiveness of the entire footing, not just one stone column element. We also recommend that the load testing reaction force be developed using a dead weight reaction frame rather than a reaction frame consisting of driven steel H-piles in which the reaction force would be developed from tension/uplift capacity in the H-piles. This would eliminate the need to introduce additional vibration induced construction activities at the site (i.e., installation of H-piles).

- As stated above, we reviewed the report prepared by GSI, dated 12 April 2015 (see Appendix D) summarizing the site visit they conducted on 11 April as well as their conclusions and recommendations relative to the excessive wall movements and damage to adjacent structures. Please note that we reviewed this report after completion of our independent evaluation. We are in general agreement with the conclusions and recommendations outlined by GSI.

Closure

It is important to note that the conclusions and recommendations outlined herein are based on field records (e.g., test borings, in-situ vane shear testing), laboratory testing and survey data that have been conducted by others. We are relying on this information and have assumed that it has been collected using proper engineering methods and the information is accurate. Haley & Aldrich is not responsible for the validity of data collected by others.

We trust that this report meets your needs at this time. We appreciate the opportunity to provide engineering services on this project. Please do not hesitate to call if you have any questions or comments.

Sincerely yours,
HALEY & ALDRICH, INC.

James W. Weaver, P.E.
Senior Geotechnical Engineer

Wayne A. Chadbourne, P.E.
Lead Geotechnical Engineer/Vice President

STATE OF MAINE
WAYNE A. CHADBOURNE
No. 10620
LICENSED PROFESSIONAL ENGINEER

Enclosures:
Figure 1 – Project Locus
Appendix A – Timeline of Construction Activities
Appendix B – Survey Data and Inclinometer Data Plots
Appendix C – Results of Global Stability Evaluations
Appendix D – Reports by Others

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APPENDIX A

Timeline of Construction Activities

TIMELINE OF CONSTRUCTION ACTIVITIES
INSTALLATION OF SITE RETAINING WALL
SEAPORT LOFTS DEVELOPMENT PROJECT
PORTLAND, MAINE

1/9/15 GSI DFR	Subsurface Construction (SC) on site to start Vibro Stone Column (VSC) installation.
W/E 1/16/15 Landry French Newsletter	Completed upper row of sheet piles.
1/15/15 GSI DFR	Geotechnical Services, Inc. (GSI) reports problems with stone freezing and clogging Vibro Flot (VF). VF is removed when clog develops and is re-inserted to previous depth.
W/E 1/23/15 Landry French Newsletter	SC working on VSC installation at upper side of lot.
1/19/15 GSI DFR	VSC installation of two areas along subject retaining wall.
1/20/15 GSI DFR	SC used barrel heater to keep stone from freezing – better results with fewer freezing/clogging problems.
1/22/15 GSI DFR	More problems with freezing/clogging. SC decides to switch to Grouted Columns (GC).
1/23/15 GSI DFR	GSI reports volume of stone is 1.3 to 1.6 times calculated volume. Concluded.. "This means columns are being built to the minimum 30 in. diameter plus additional stone where soils are softer; as well as allowance for some compaction of stone."
W/E 1/30/15 Landry French Newsletter	Stone/grouted columns completed in cofferdam cores.
1/24/15 GSI DFR	Snow is adding to problems with clogging in feed hoppers. GSI noted "material heaves" around the installation area.
1/30/15 GSI DFR	Switched to GC. Plan shows both VSC and GC along subject retaining wall.
1/31/15 GSI DFR	SC monitoring grout take to "insure sufficient grout is pumped to meet minimum 20 in. dia. column." All columns along subject wall are completed.
2/1/15 Joe Dasco	Downhill sheets installed
2/18/15 GSI DFR	Performed modular tests – Col. 173 (GC installed 2/13/15) and Col. 113 (VSC installed 1/15/15).
2/19/15 GSI DFR	Installed last grouted column for project.
W/E 2/27/15 Landry French Newsletter	- Excavated between driven sheets to bottom of bracing. - Installed lower braces by 2/24/15.
W/E 3/6/15 Landry French Newsletter	- Finished lower steel bracing between sheets. - Excavated to subgrade. - Placed fabric and crushed stone.
3/4/15 GSI DFR	Shaw Brothers (SB) excavating to bottom grade (El. 35+/-) along subject wall.

W/E 3/13/15 Landry French Newsletter	New retaining wall footer was placed sheet to sheet inside cofferdam.
3/13/15 GSI DFR	Picture of concrete for footings being placed (bottom brace in place).
3/19/15 Landry French email and photo	CB-4 installed in northeast corner of the site adjacent to end of new retaining wall and near blue house
W/E 3/20/15 Landry French Newsletter	Lower brace removed from inside cofferdam (3/17/15).
W/E 3/27/15 Landry French Newsletter	Tying reinforcing and placed forms for retaining wall.
W/E 4/3/15 Landry French Newsletter	Poured retaining wall stem (poured 3/25/15, stripped 4/3/15).
4/3/15 (HBF)	H.B. Fleming, Inc. (HBF) establishes monitoring points 400-403 on top of subject retaining wall.
	Monitors horizontal and vertical movements of wall on 4/8/15, 4/10/15, 4/17/15, 4/27/15 and 5/6/15.
	Data indicates sheeting was pulled prior to 4/10/15.
	Prior to sheeting being removed, top of wall settled 0.00 to 0.36 in.
	After sheeting was removed, wall settlement ranged from 1.25 to 1.54 in.
	The week after the sheeting was removed, the wall settled an additional 0.12 to 0.58 in.
	Measured settlement for the next two readings ranged from 0.02 to 0.24 in.
	Total wall settlement monitored through 5/6/15 ranged from 1.87 to 2.56 in.
	Horizontal wall movement (total) reported to range from south (Point 400) 0.21 in. to north (Point 403) 1.10 in., and west (Point 402) 0.18 in. to east (Point 400) 1.12 in.
W/E 4/10/15 Landry French Newsletter	- Backfilling front and back of wall (started 4/6/15). - Extracted sheeting between 4/8 and 4/10/15.
4/11/15 to 5/13/15 (Titcomb)	Titcomb surveyed a number of monitoring points on the new all as well as other existing walls and subsurface points. Data not conclusive.

SUMMARY OF RELEVANT DATES	
1/9/15 through 1/29/15	• Installed Vibro Stone Columns. • Completed upper row of sheet piles (1/10/15).
1/30/15 through 2/19/15	• Installed Grouted Columns. • Installed downhill sheets (2/1/15)
2/20/15 through 2/27/15	• Excavation between driven sheets to bottom of bracing. •Installed lower braces by 2/24/15.
2/27/15 through 3/6/15	• Excavated to bottom grade along retaining wall (3/4/15). • Finished lower steel bracing between sheets. • Excavated to subgrade. • Placed fabric and crushed stone.

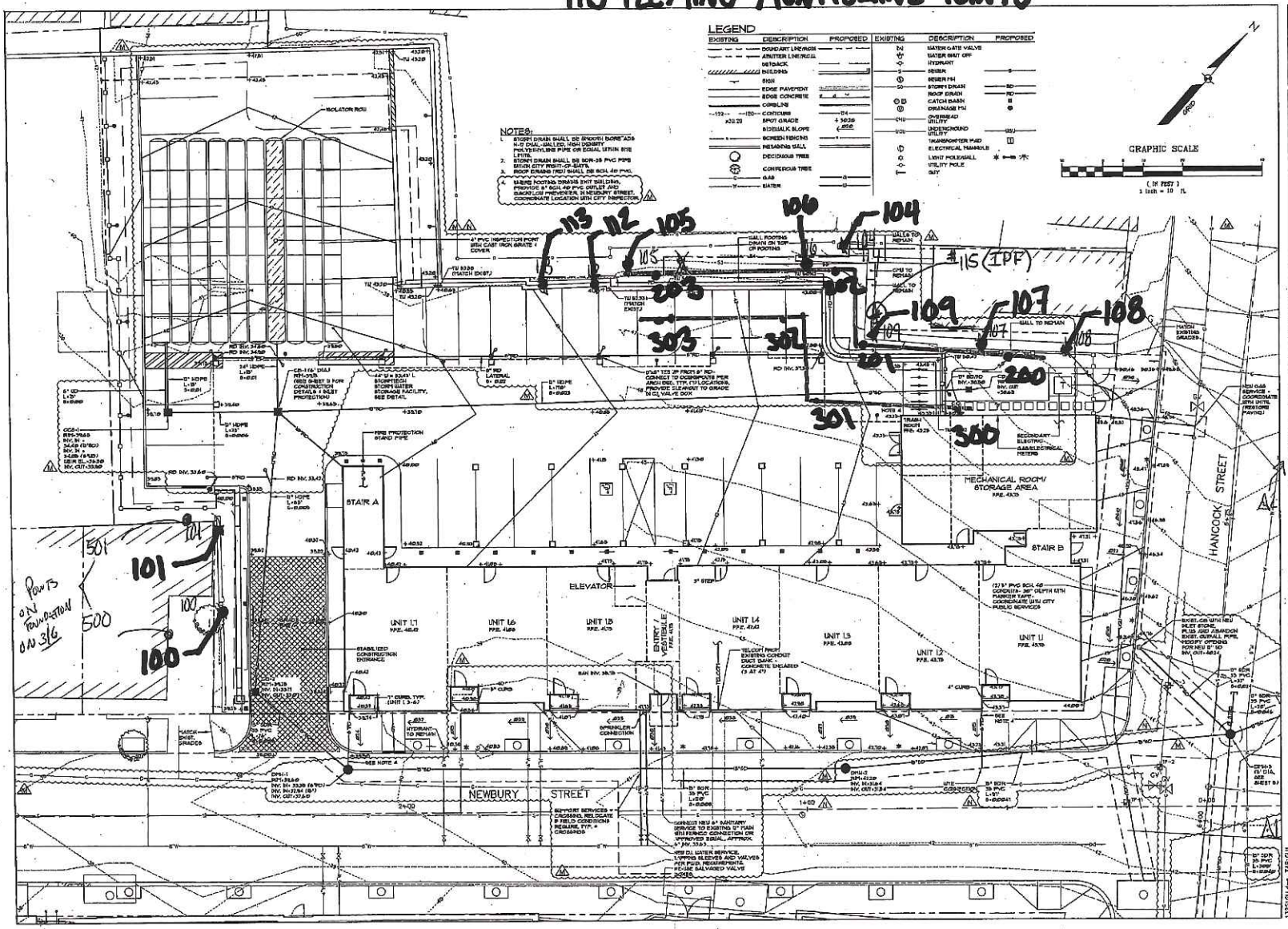
3/7/15 through 3/13/15	• Poured retaining wall footing and fill concrete to form strut between rows of sheeting (3/13/15) - Form and pour stem of retaining wall. - Commence HBF monitoring of wall.
3/14/15 through 3/20/15	Lower brace removed from inside cofferdam.
4/3/15 through 4/10/15	• Backfilling in front and behind retaining wall (4/6/15). • Extracted sheeting between 4/8 and 4/10/15. • Pulled sheeting (4/9/15). • Recorded 1.25 to 1.54 in. of wall settlement and 0.04 to 0.91 in. horizontal movement (4/10/15).

APPENDIX B

Survey Data and Inclinometer Data Plots

Plots of HB Fleming Survey Data
(vertical movements)

HB FLEMING MONITORING POINTS



SEBAGO TECHNICS

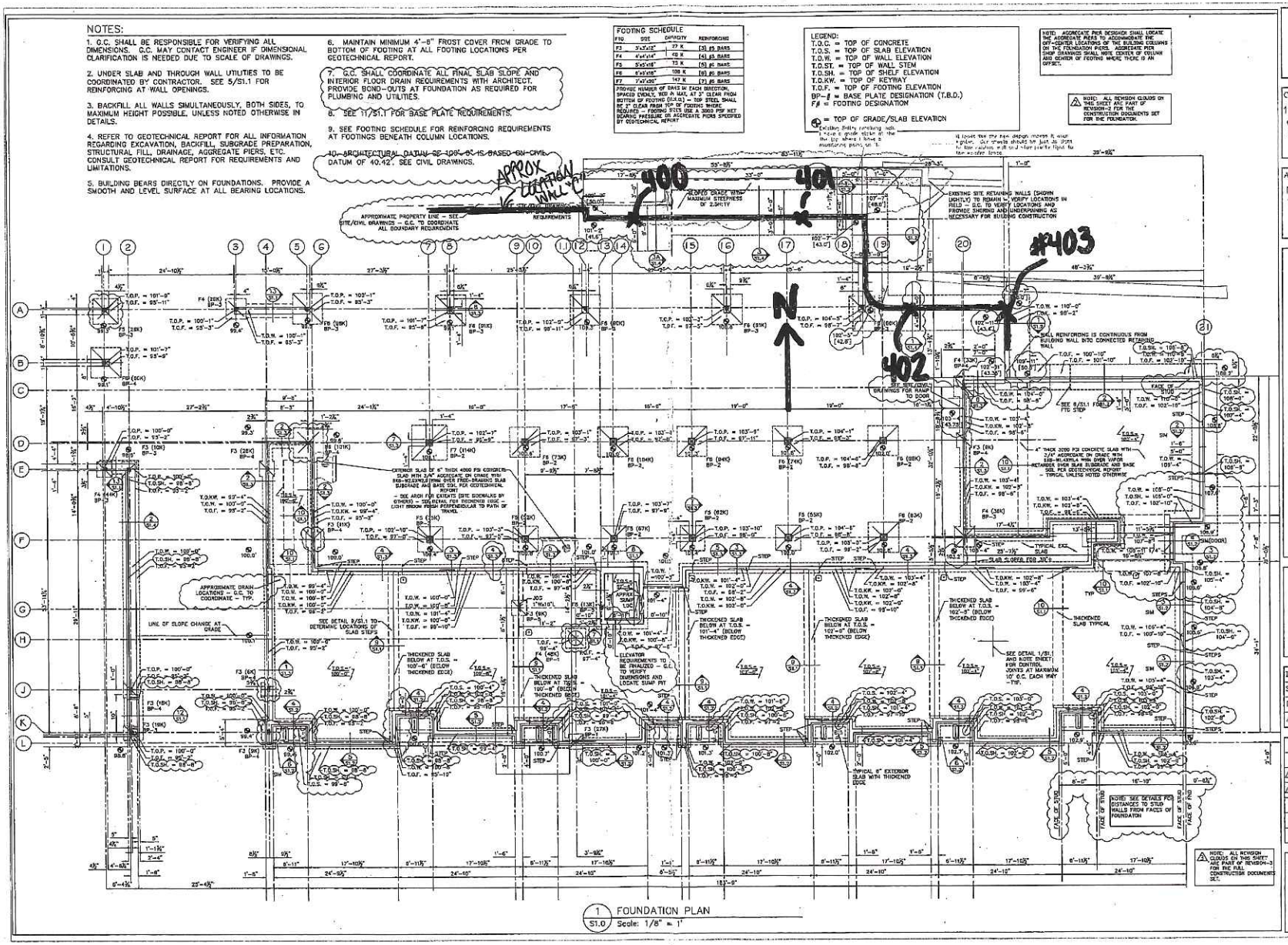
SEAPORT LOFTS
NEWBURY / HANCOCK STREET
PORTLAND, MAINE

113 NEWBURY STREET, LLC
30 FAY STREET, SUITE 1178
BOSTON, MA 021116389

GRADING AND UTILITY PLAN

DATE: 07-25-13
SCALE: 1" = 10'

SHEET 4 OF 12



1 / S1.0 FOUNDATION PLAN
Scale: 1/8" = 1'

Client:
113 Newbury Street, LLC
c/o Bluefin Investments
35 Fay St., Suite 1078
Boston, MA 02118

Architect:
Mark Mueller Architects
100 Commercial Street
Suite 205
Portland, Maine 04101

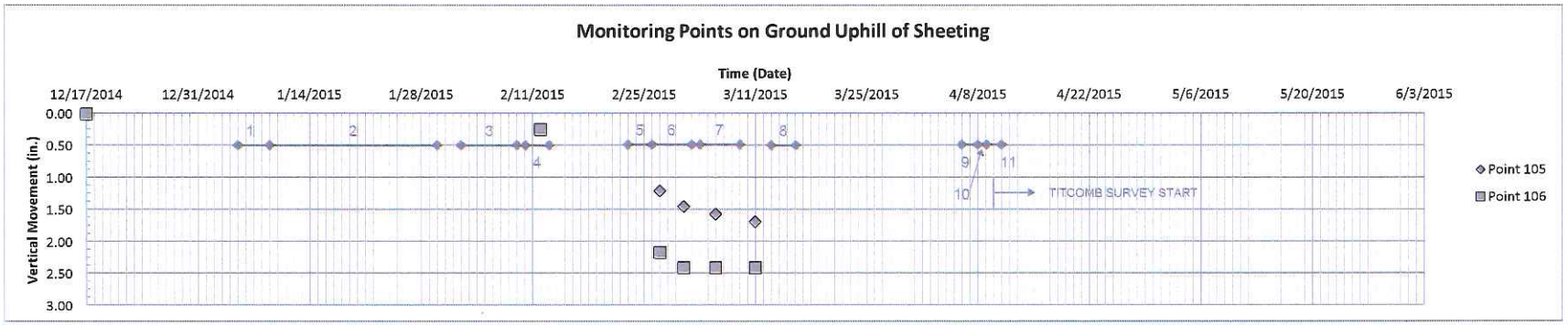
SEAPORT LOFTS
113 Newbury Street
Portland, Maine 04101

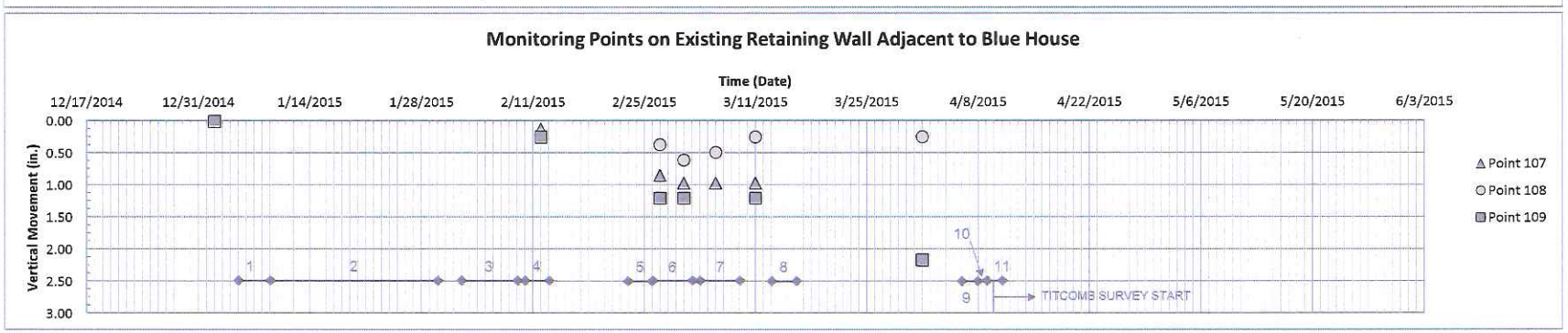
Date:	12/17/14
Scale:	As Noted
Design By:	MJA
Approved By:	JSN

Revisions
07/31/14 - Pricing Set
1 11/12/14 - PND CD Set
2 12/17/14 - CD Set

Foundation Plan

S1.0





Construction Sequencing:

Event	Description
1	Uphill sheet piles installed (1/5 to 1/9/2015)
2	VSC & grouted columns installed (1/9 to 1/30/2015)
3	Downhill sheet piles installed (2/2 to 2/9/2015)
4	Install upper brace (2/10 to 2/13/2015)
5	Excavate to lower brace level (2/23 to 2/26/2015)
6	Install lower brace (2/26 to 3/3/2015)
7	Excavate to and prepare subgrade, place fabric and stone (3/4 to 3/9/2015)
8	Pour footing retaining wall footing/strut concrete and remove lower brace (3/13 to 3/16/2015)
9	Backfill retaining wall (4/6 and 4/7/2015)
10	Remove upper brace (4/8/2015)
11	Remove uphill sheet piles, some downhill sheet piles (4/9 to 4/10/2015)

HALEY ALDRICH

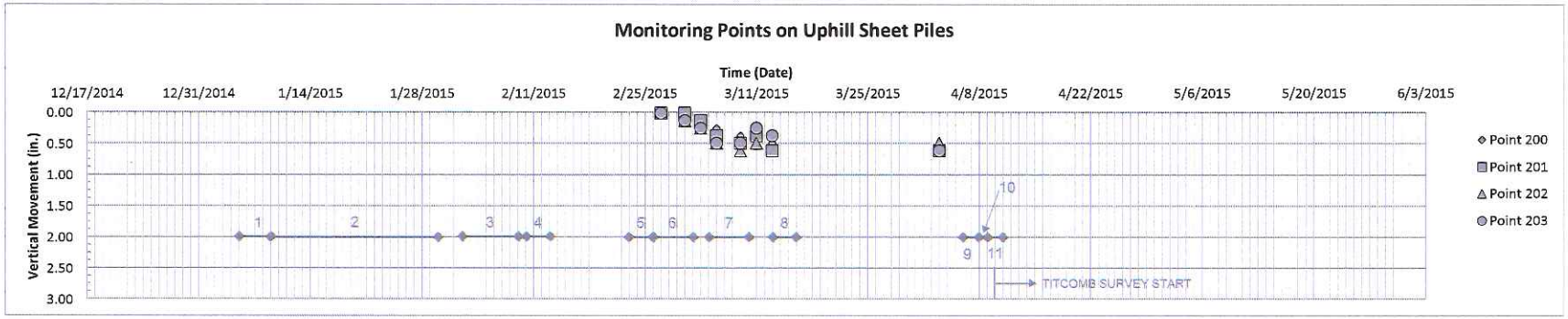
SEAPORT LOFTS
NEWBURY STREET
PORTLAND, MAINE

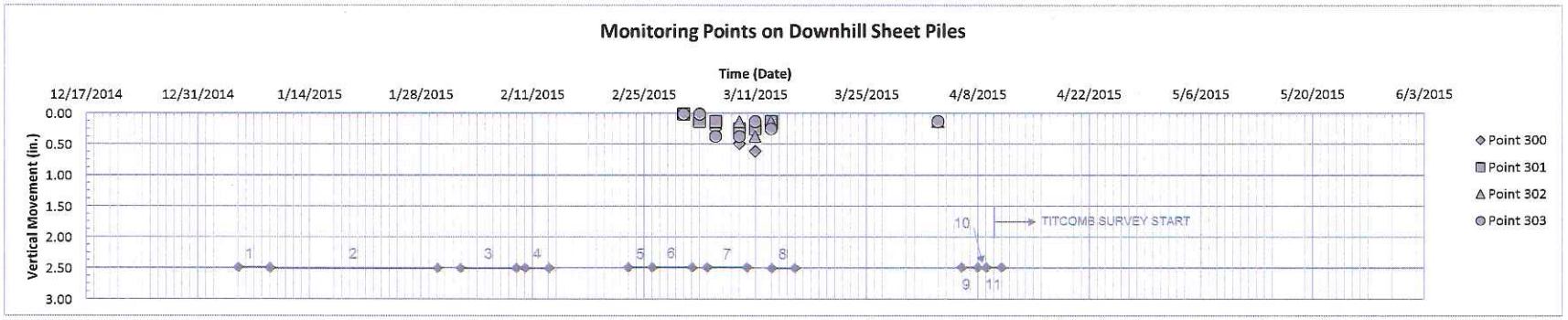
MOVEMENT MONITORING DATA
(1 OF 3)

SCALE: AS SHOWN
JUNE 2015

FIGURE 1

G:\PROJECTS\42222 - newbury st lofts\000\Settlement Data\2015_0604_HAI_Vertical Movement





Construction Sequencing:

Event	Description
1	Uphill sheet piles installed (1/5 to 1/9/2015)
2	VSC & grouted columns installed (1/9 to 1/30/2015)
3	Downhill sheet piles installed (2/2 to 2/9/2015)
4	Install upper brace (2/10 to 2/13/2015)
5	Excavate to lower brace level (2/23 to 2/26/2015)
6	Install lower brace (2/26 to 3/3/2015)
7	Excavate to and prepare subgrade, place fabric and stone (3/4 to 3/9/2015)
8	Pour footing retaining wall footing/strut concrete and remove lower brace (3/13 to 3/16/2015)
9	Backfill retaining wall (4/6 and 4/7/2015)
10	Remove upper brace (4/8/2015)
11	Remove uphill sheet piles, some downhill sheet piles (4/9 to 4/10/2015)

HALEY ALDRICH

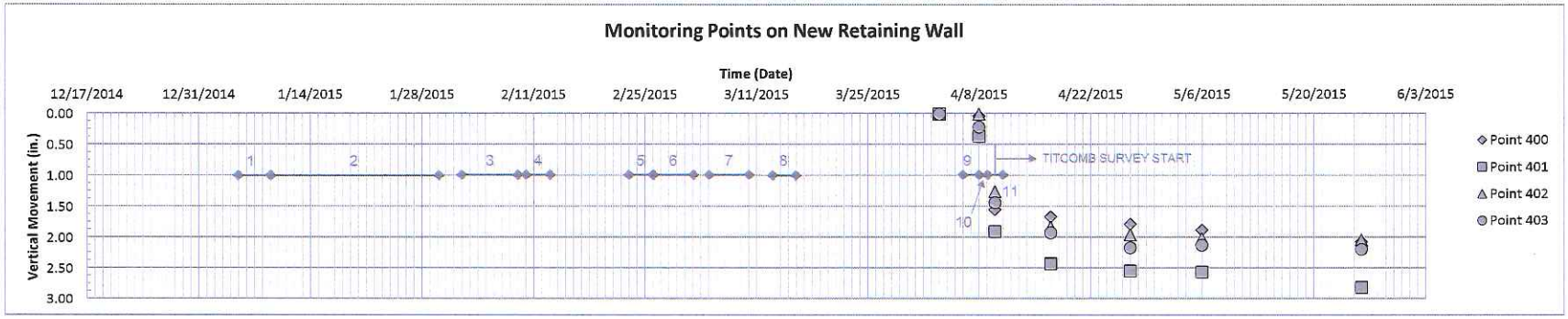
SEAPORT LOFTS
NEWBURY STREET
PORTLAND, MAINE

MOVEMENT MONITORING DATA
(2 OF 3)

SCALE: AS SHOWN
JUNE 2015

FIGURE 2

G:\PROJECTS\42222 - newbury st lofts\000\Settlement Data\2015_0604_HAI_Vertical Movement



Construction Sequencing:

Event	Description
1	Uphill sheet piles installed (1/5 to 1/9/2015)
2	VSC & grouted columns installed (1/9 to 1/30/2015)
3	Downhill sheet piles installed (2/2 to 2/9/2015)
4	Install upper brace (2/10 to 2/13/2015)
5	Excavate to lower brace level (2/23 to 2/26/2015)
6	Install lower brace (2/26 to 3/3/2015)
7	Excavate to and prepare subgrade, place fabric and stone (3/4 to 3/9/2015)
8	Pour footing retaining wall footing/strut concrete and remove lower brace (3/13 to 3/16/2015)
9	Backfill retaining wall (4/6 and 4/7/2015)
10	Remove upper brace (4/8/2015)
11	Remove uphill sheet piles, some downhill sheet piles (4/9 to 4/10/2015)

HALEY ALDRICH

SEAPORT LOFTS
NEWBURY STREET
PORTLAND, MAINE

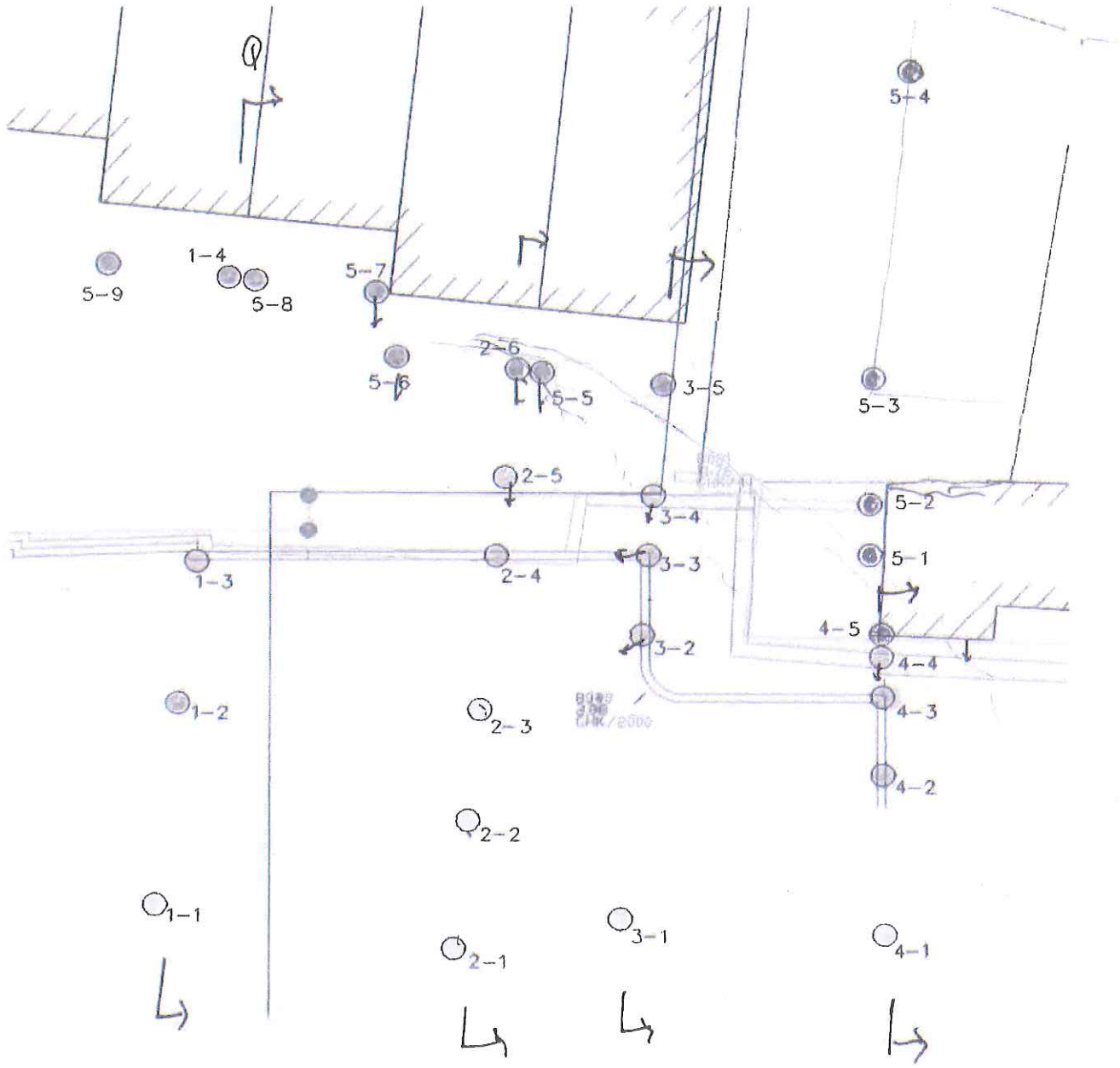
MOVEMENT MONITORING DATA
(3 OF 3)

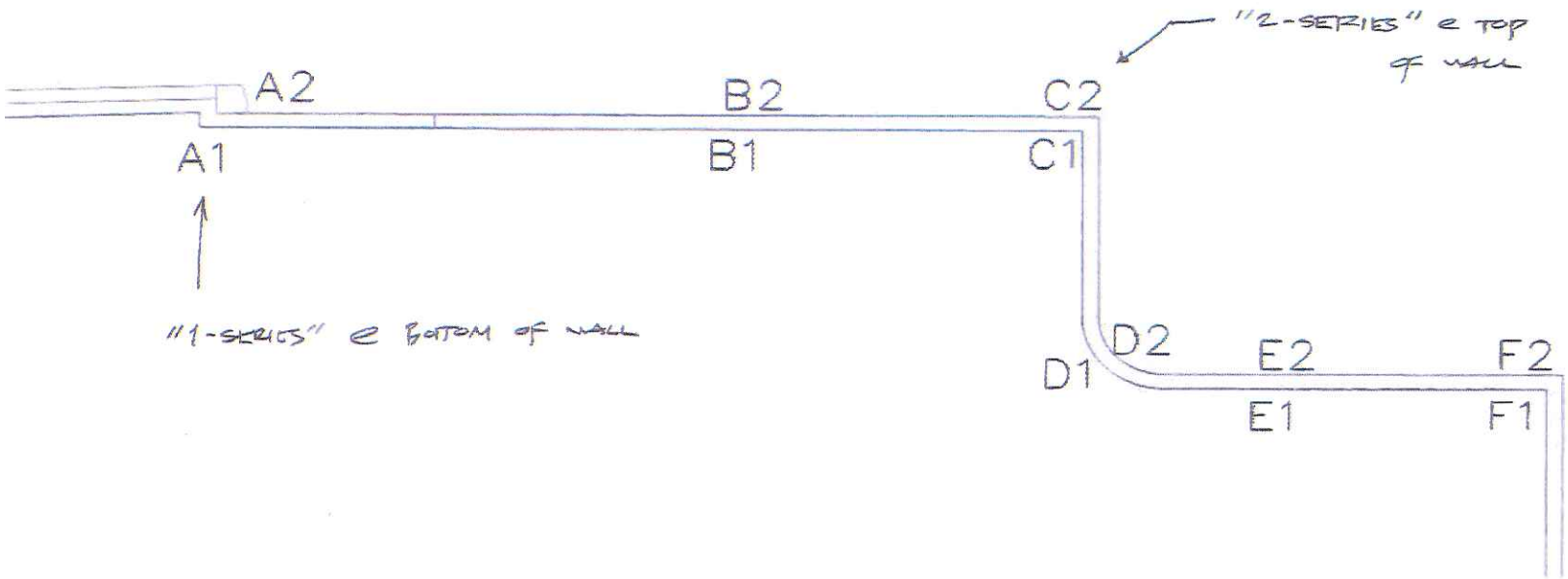
SCALE: AS SHOWN
JUNE 2015

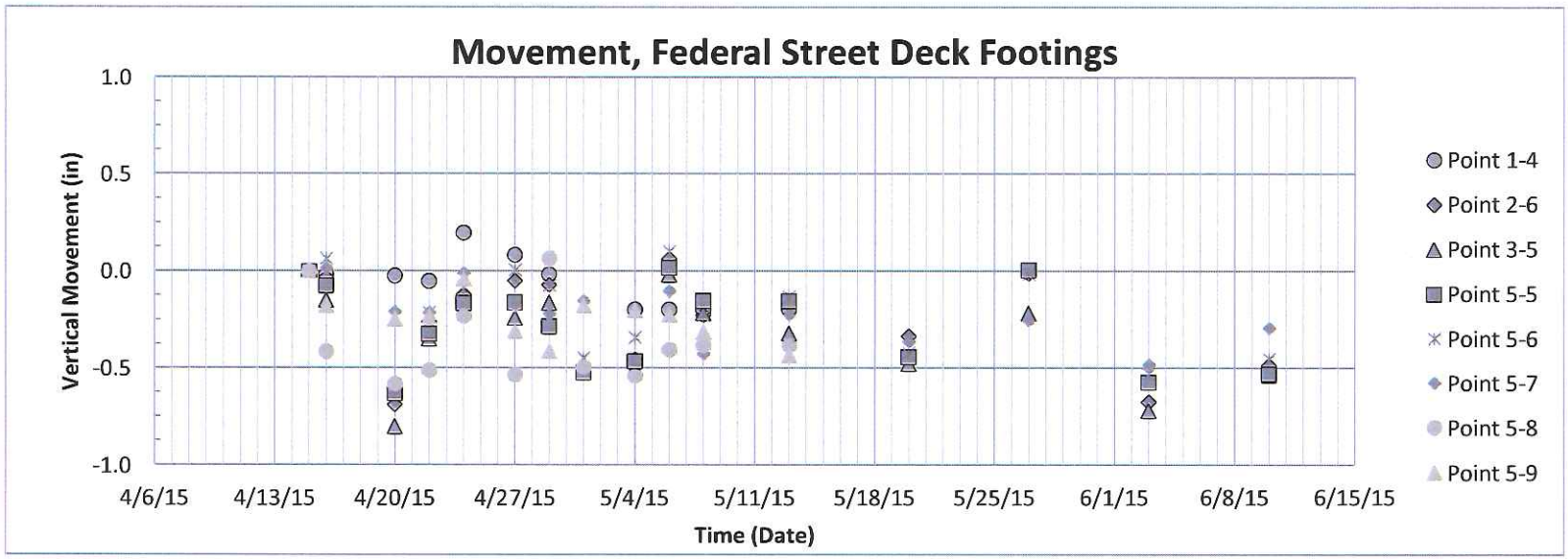
FIGURE 3

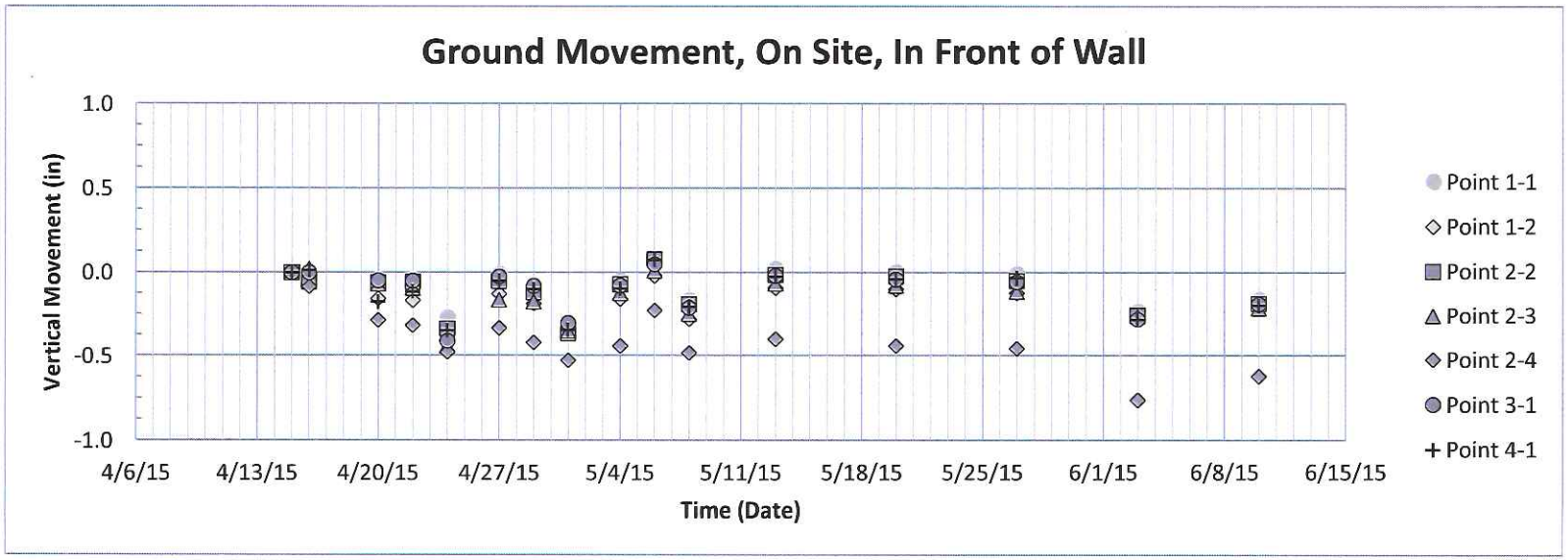
G:\PROJECTS\42222 - newbury st lofts\000\Settlement Data\2015_0604_HAI_Vertical Movement

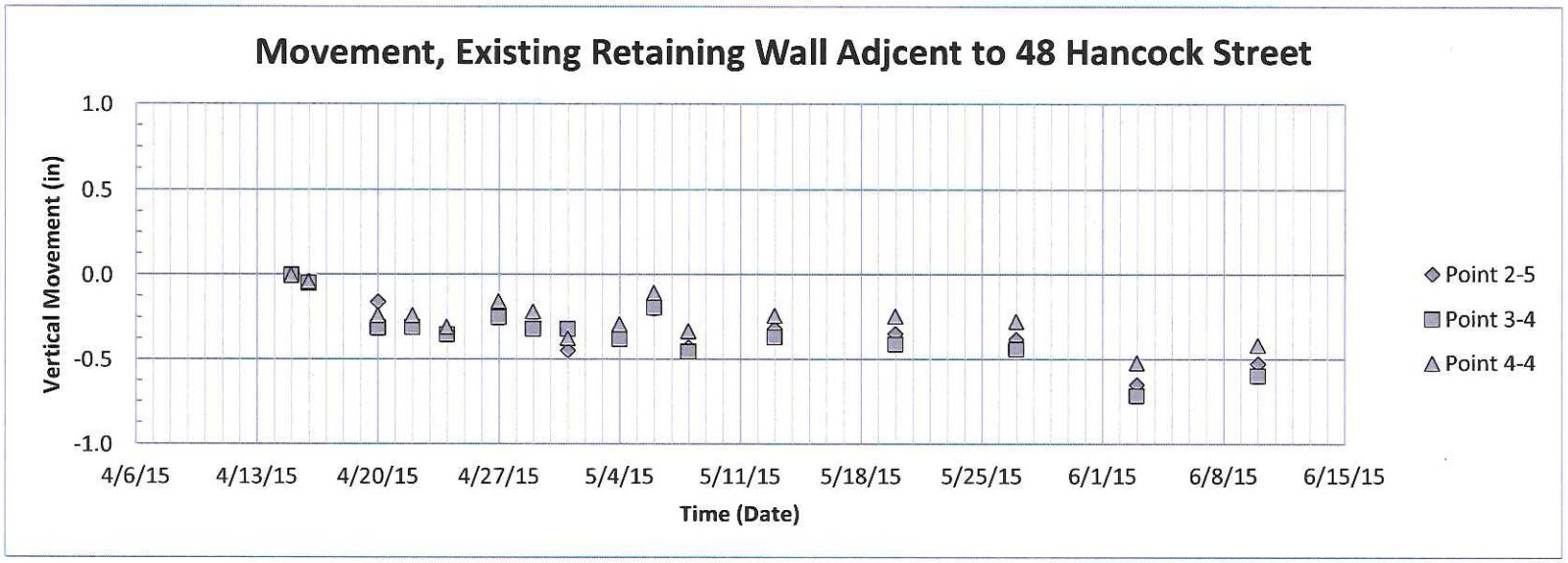
Plots of Titcomb Survey Data
(vertical movements)


5-4
1-4
5-9
5-8
5-7
2-6
5-6
5-5
3-5
5-3
2-5
3-4
5-2
1-3
2-4
3-3
5-1
4-5
3-2
4-4
1-2
2-3
4-3
4-2
2-2
1-1
2-1
3-1
4-1
10" SPIKES IN GROUND
ON MAIN BLDG FOOTING
NAILS IN NEW BET WALL
NAILS IN OLD BET WALL
NAILS ON VERT FND. WALLS
NAILS ON DECK SUPPORTING FNDS

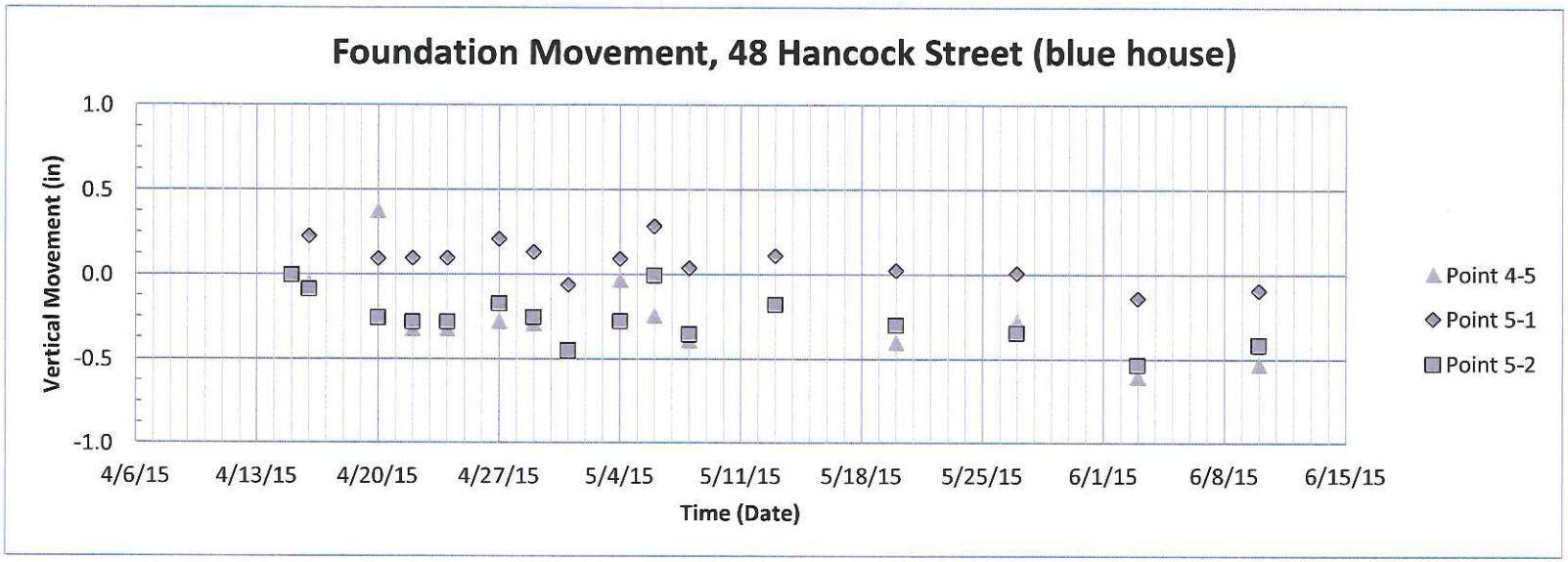

"2-SERIES" @ TOP OF WALL
A2
B2
C2
A1
B1
C1
"1-SERIES" @ BOTTOM OF WALL
D2
E2
F2
D1
E1
F1

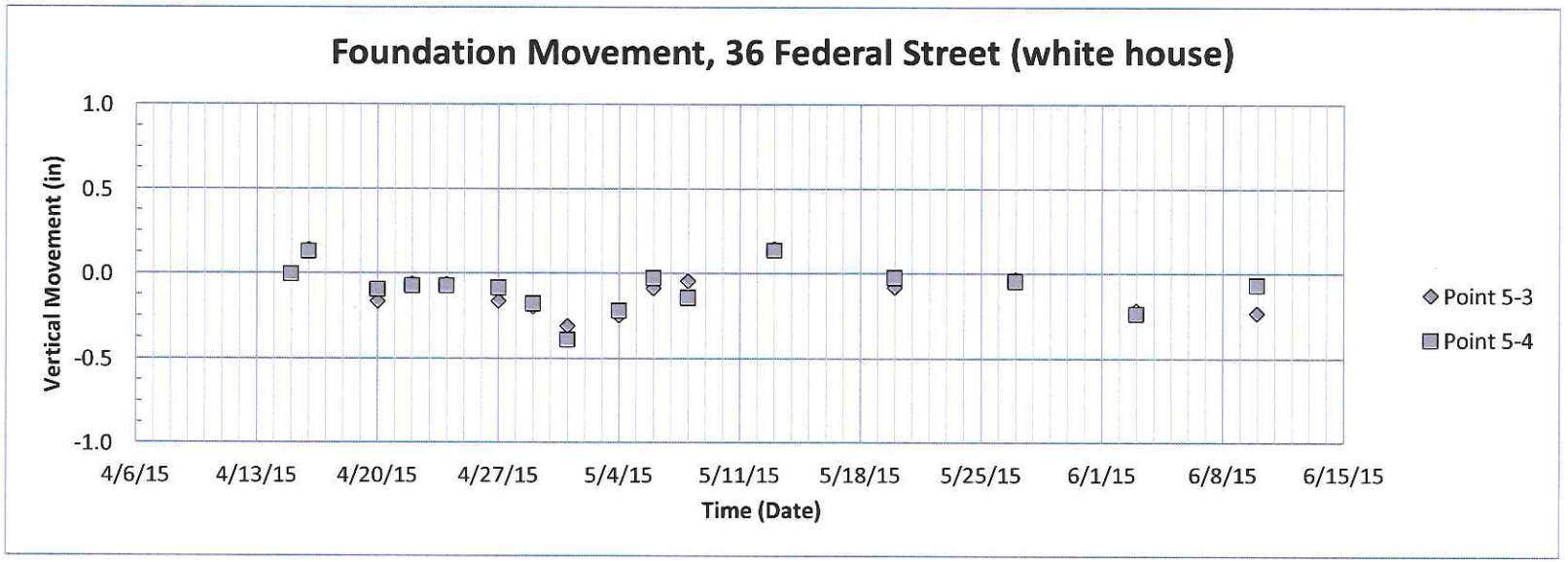

Movement, Federal Street Deck Footings
Vertical Movement (in)
1.0
0.5
0.0
-0.5
-1.0
4/6/15
4/13/15
4/20/15
4/27/15
5/4/15
5/11/15
5/18/15
5/25/15
6/1/15
6/8/15
6/15/15
Time (Date)
Point 1-4
Point 2-6
Point 3-5
Point 5-5
Point 5-6
Point 5-7
Point 5-8
Point 5-9

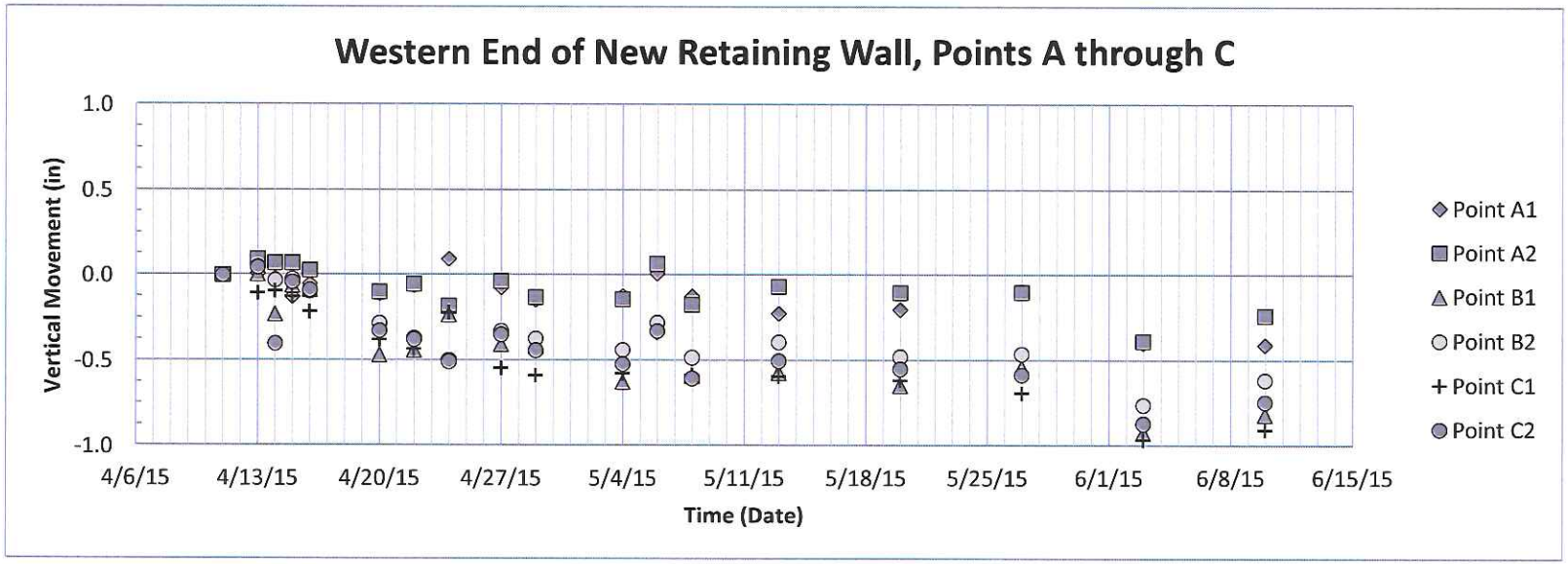

Ground Movement, On Site, In Front of Wall
Vertical Movement (in)
1.0
0.5
0.0
-0.5
-1.0
4/6/15
4/13/15
4/20/15
4/27/15
5/4/15
5/11/15
5/18/15
5/25/15
6/1/15
6/8/15
6/15/15
Time (Date)
Point 1-1
Point 1-2
Point 2-2
Point 2-3
Point 2-4
Point 3-1
Point 4-1

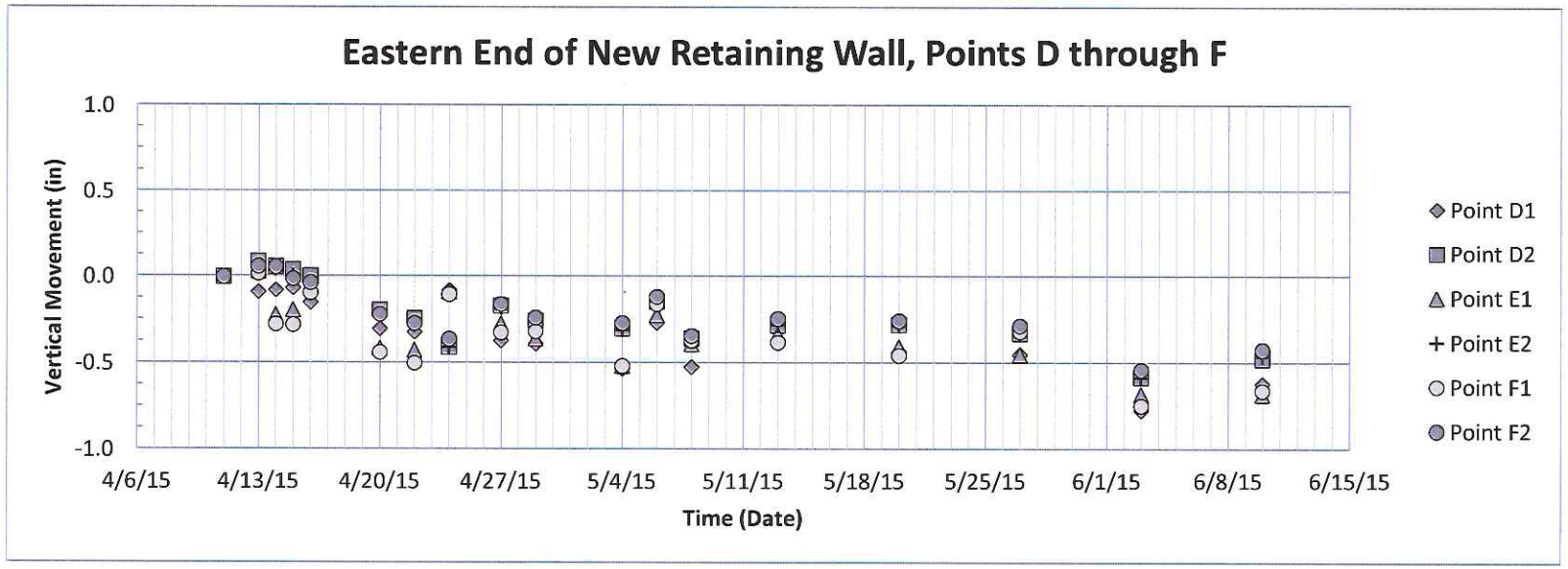

Movement, Existing Retaining Wall Adjcent to 48 Hancock Street
Vertical Movement (in)
1.0
0.5
0.0
-0.5
-1.0
4/6/15
4/13/15
4/20/15
4/27/15
5/4/15
5/11/15
5/18/15
5/25/15
6/1/15
6/8/15
6/15/15
Time (Date)
Point 2-5
Point 3-4
Point 4-4


Nails in Top of New Retaining Wall
Vertical Movement (in)
1.0
0.5
0.0
-0.5
-1.0
4/6/15
4/13/15
4/20/15
4/27/15
5/4/15
5/11/15
5/18/15
5/25/15
6/1/15
6/8/15
6/15/15
Time (Date)
Point 1-3
Point 2-4
Point 3-3
Point 3-2
Point 4-3
Point 4-2

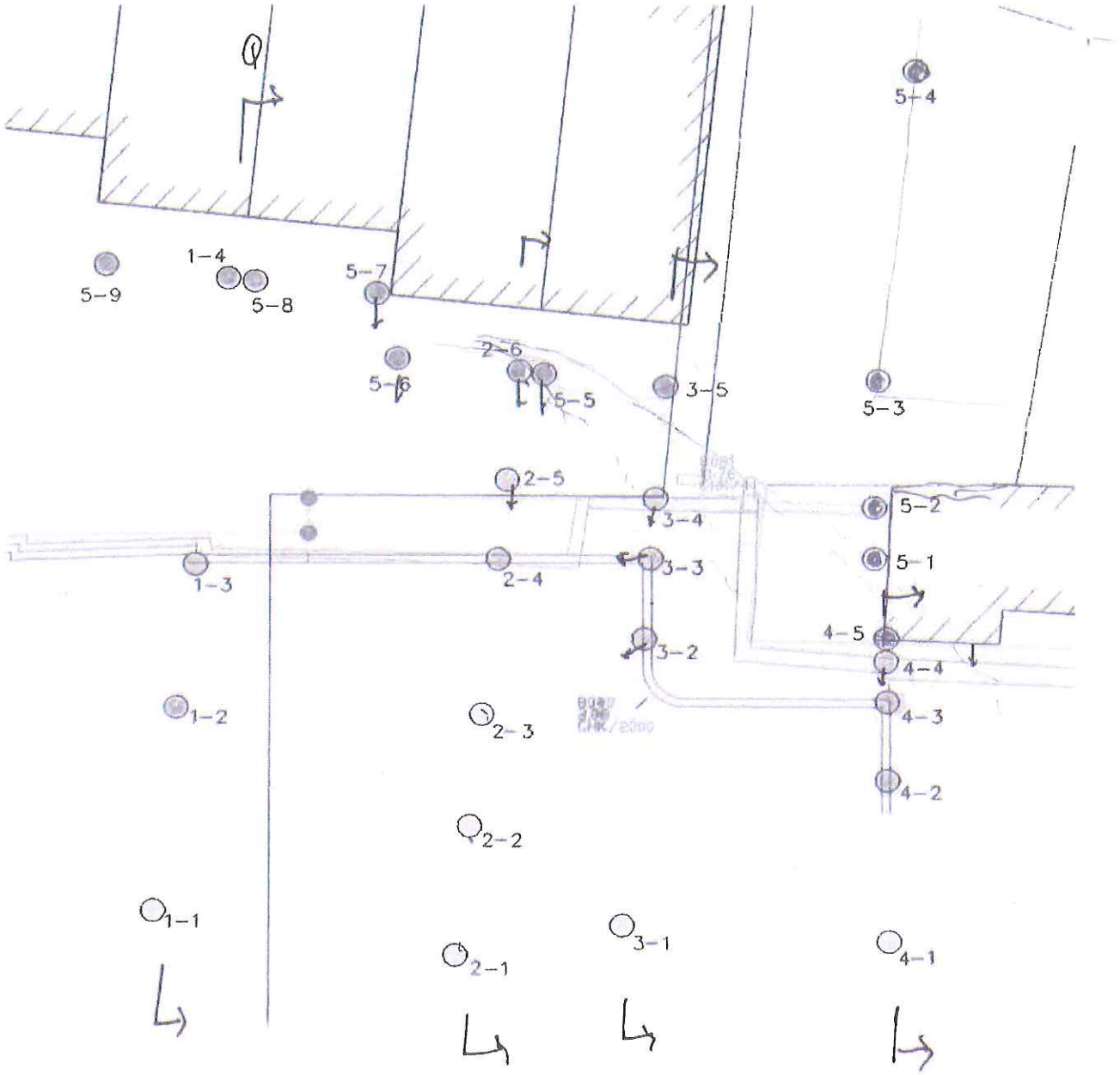

Foundation Movement, 48 Hancock Street (blue house)
Vertical Movement (in)
1.0
0.5
0.0
-0.5
-1.0
4/6/15
4/13/15
4/20/15
4/27/15
5/4/15
5/11/15
5/18/15
5/25/15
6/1/15
6/8/15
6/15/15
Time (Date)
Point 4-5
Point 5-1
Point 5-2


Foundation Movement, 36 Federal Street (white house)
Vertical Movement (in)
1.0
0.5
0.0
-0.5
-1.0
4/6/15
4/13/15
4/20/15
4/27/15
5/4/15
5/11/15
5/18/15
5/25/15
6/1/15
6/8/15
6/15/15
Time (Date)
Point 5-3
Point 5-4


Western End of New Retaining Wall, Points A through C
Vertical Movement (in)
1.0
0.5
0.0
-0.5
-1.0
4/6/15
4/13/15
4/20/15
4/27/15
5/4/15
5/11/15
5/18/15
5/25/15
6/1/15
6/8/15
6/15/15
Time (Date)
Point A1
Point A2
Point B1
Point B2
Point C1
Point C2


Eastern End of New Retaining Wall, Points D through F
Vertical Movement (in)
1.0
0.5
0.0
-0.5
-1.0
4/6/15
4/13/15
4/20/15
4/27/15
5/4/15
5/11/15
5/18/15
5/25/15
6/1/15
6/8/15
6/15/15
Time (Date)
Point D1
Point D2
Point E1
Point E2
Point F1
Point F2

Plots of Titcomb Survey Data
(north/south movements)



10" SPIKES IN GROUND

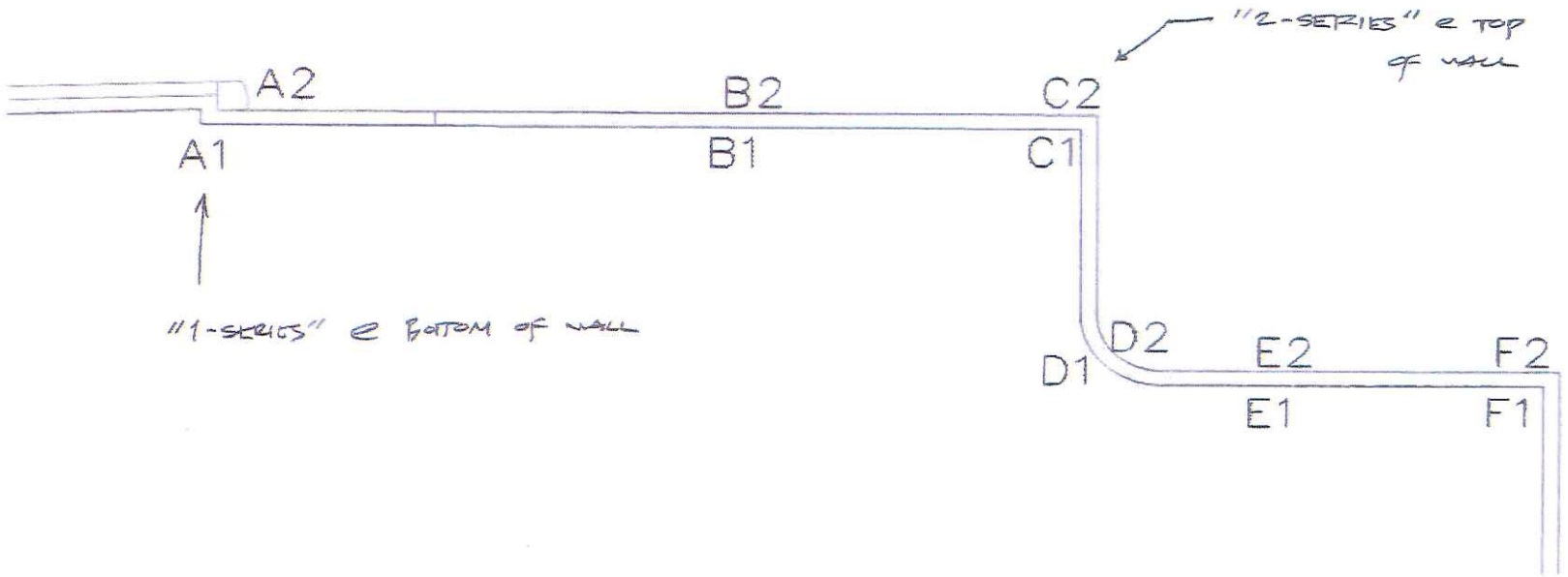
ON MAIN BLDG FOOTING

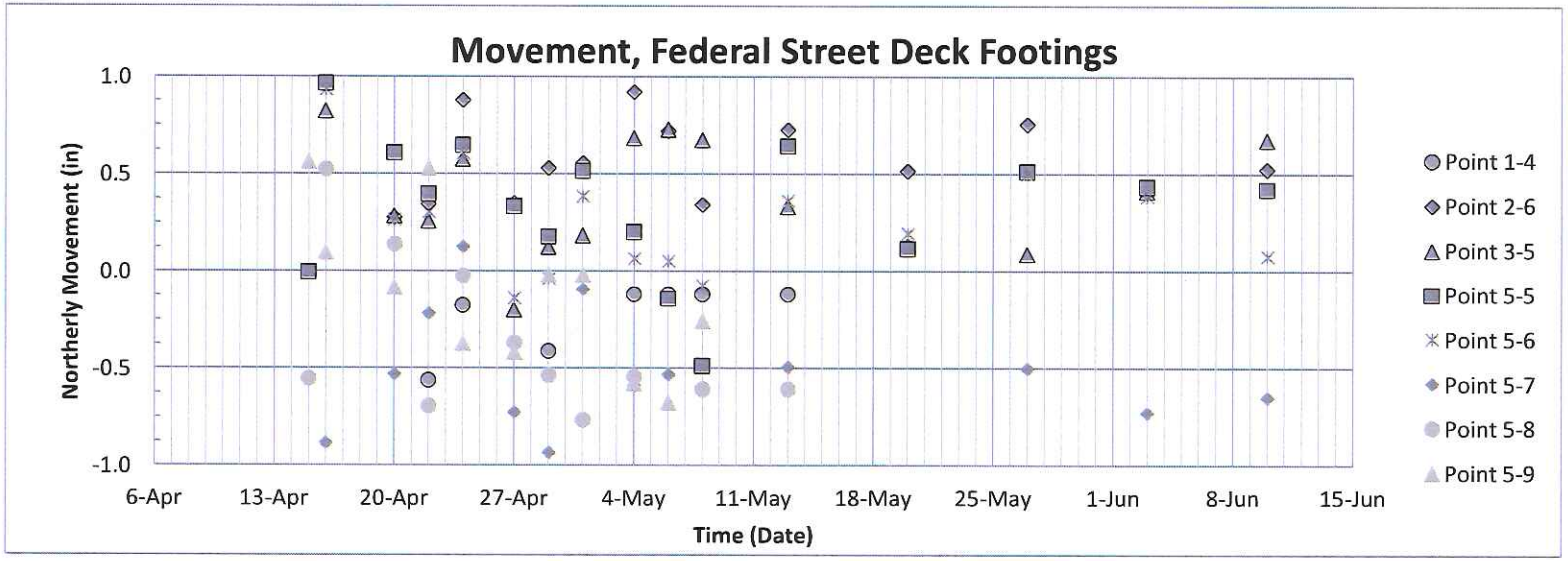
NAILS IN NEW BLT. WALL

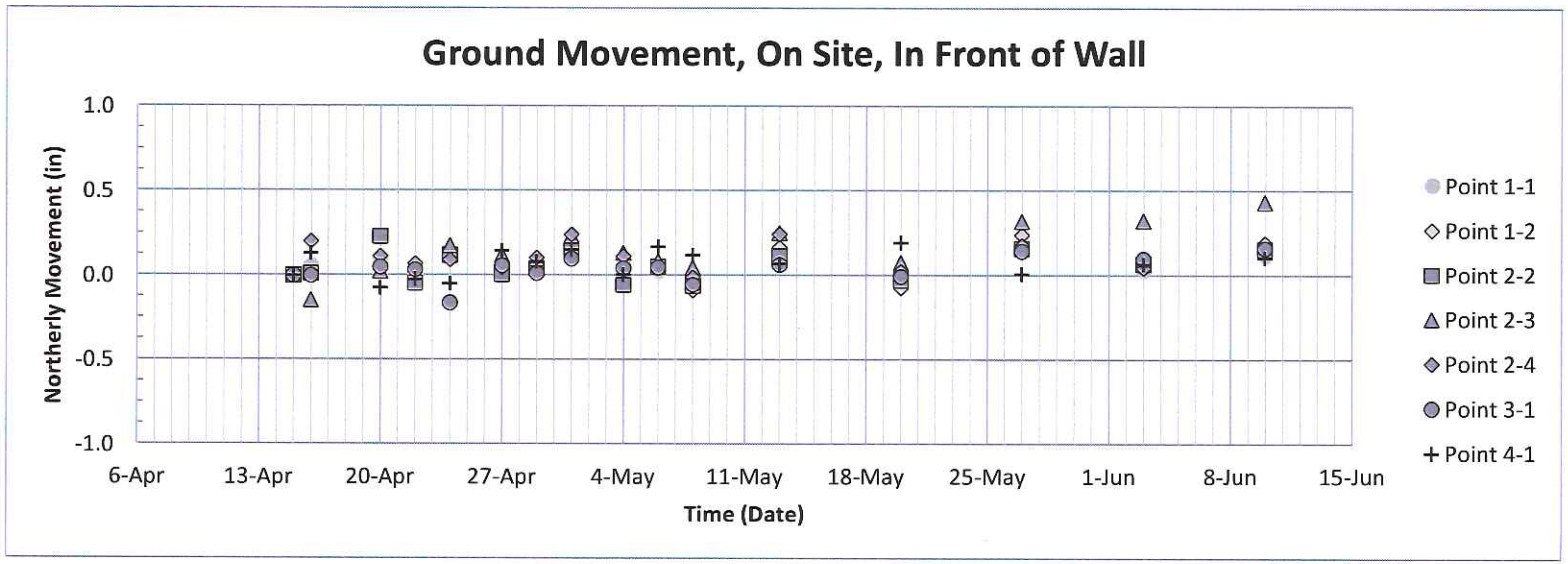
NAILS IN OLD BLT. WALL

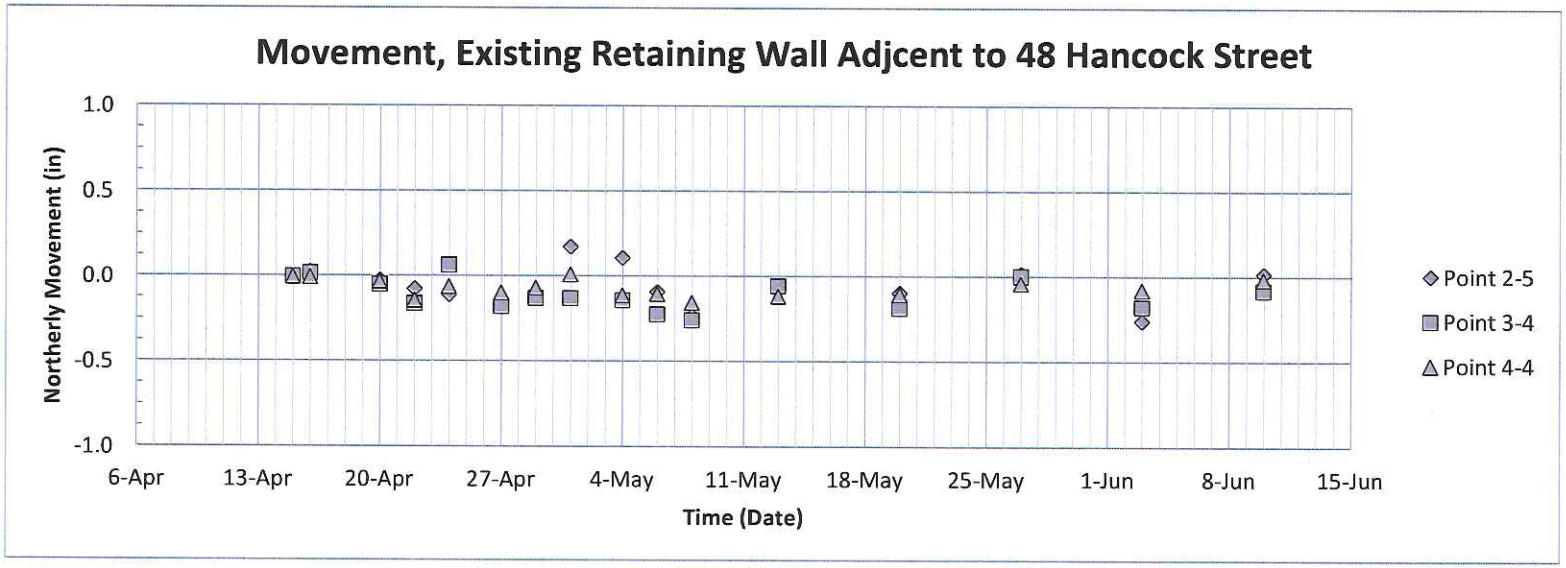
NAILS ON VERT FND. WALLS

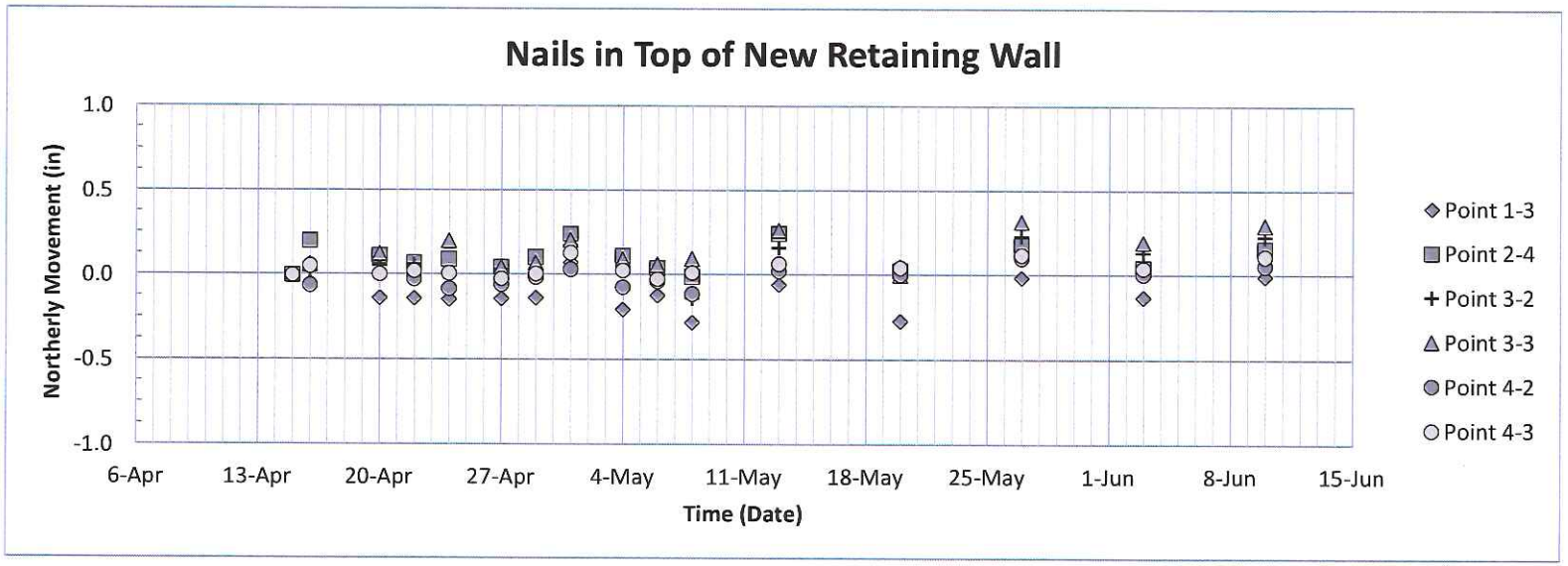
NAILS ON DECK SOUTH OF FNDS

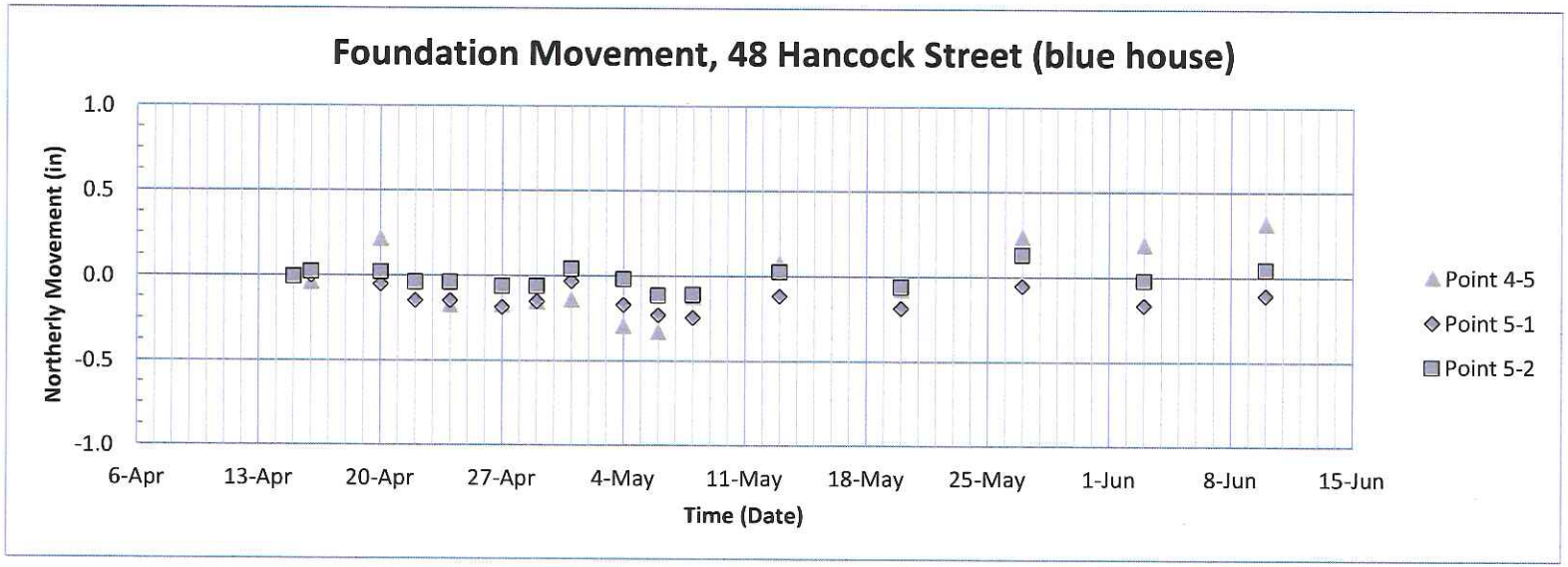

"2-SERIES" @ TOP OF WALL
A2
B2
C2
A1
B1
C1
"1-SERIES" @ BOTTOM OF WALL
D2
E2
F2
D1
E1
F1

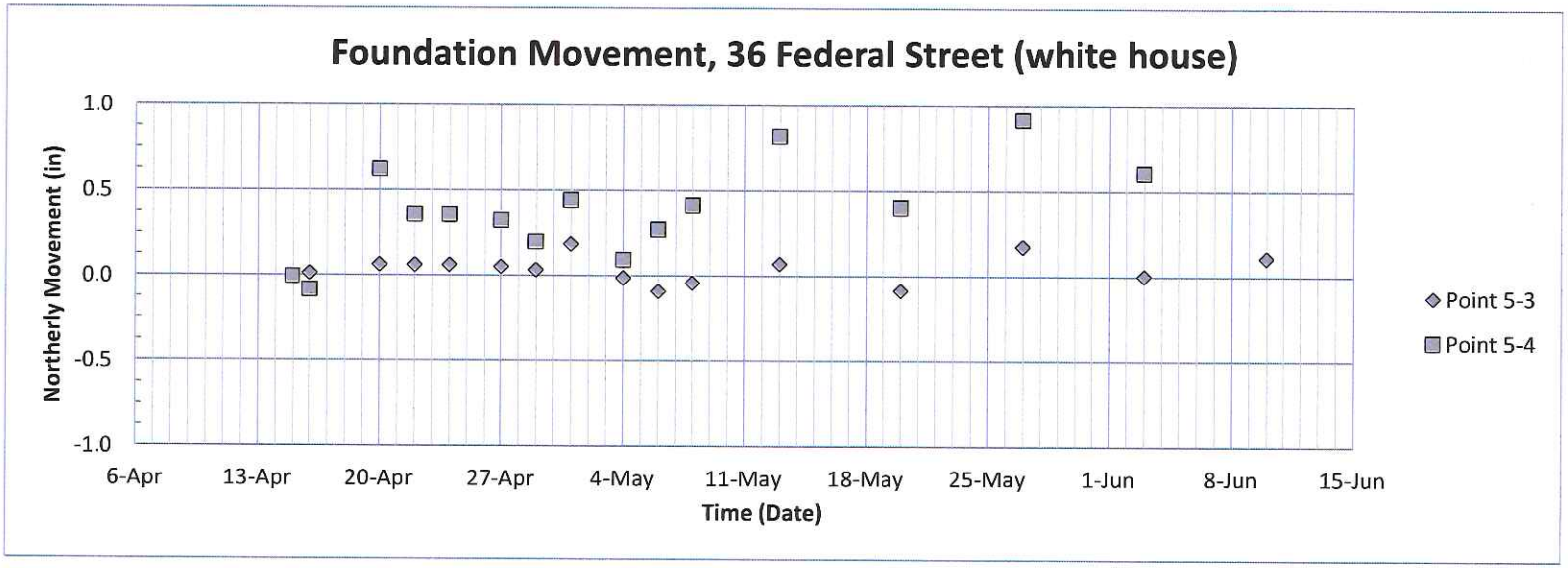

Movement, Federal Street Deck Footings
Northerly Movement (in)
1.0
0.5
0.0
-0.5
-1.0
6-Apr
13-Apr
20-Apr
27-Apr
4-May
11-May
18-May
25-May
1-Jun
8-Jun
15-Jun
Time (Date)
Point 1-4
Point 2-6
Point 3-5
Point 5-5
Point 5-6
Point 5-7
Point 5-8
Point 5-9

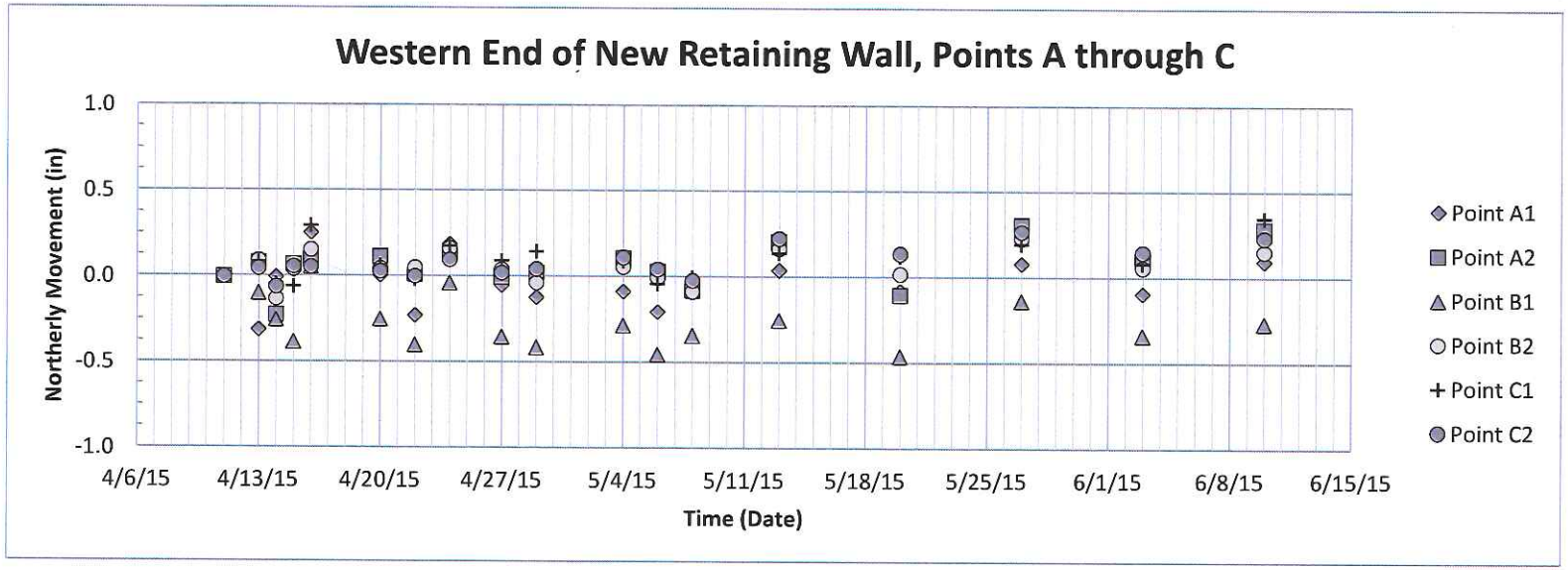

Ground Movement, On Site, In Front of Wall
Northerly Movement (in)
1.0
0.5
0.0
-0.5
-1.0
6-Apr
13-Apr
20-Apr
27-Apr
4-May
11-May
18-May
25-May
1-Jun
8-Jun
15-Jun
Time (Date)
Point 1-1
Point 1-2
Point 2-2
Point 2-3
Point 2-4
Point 3-1
Point 4-1

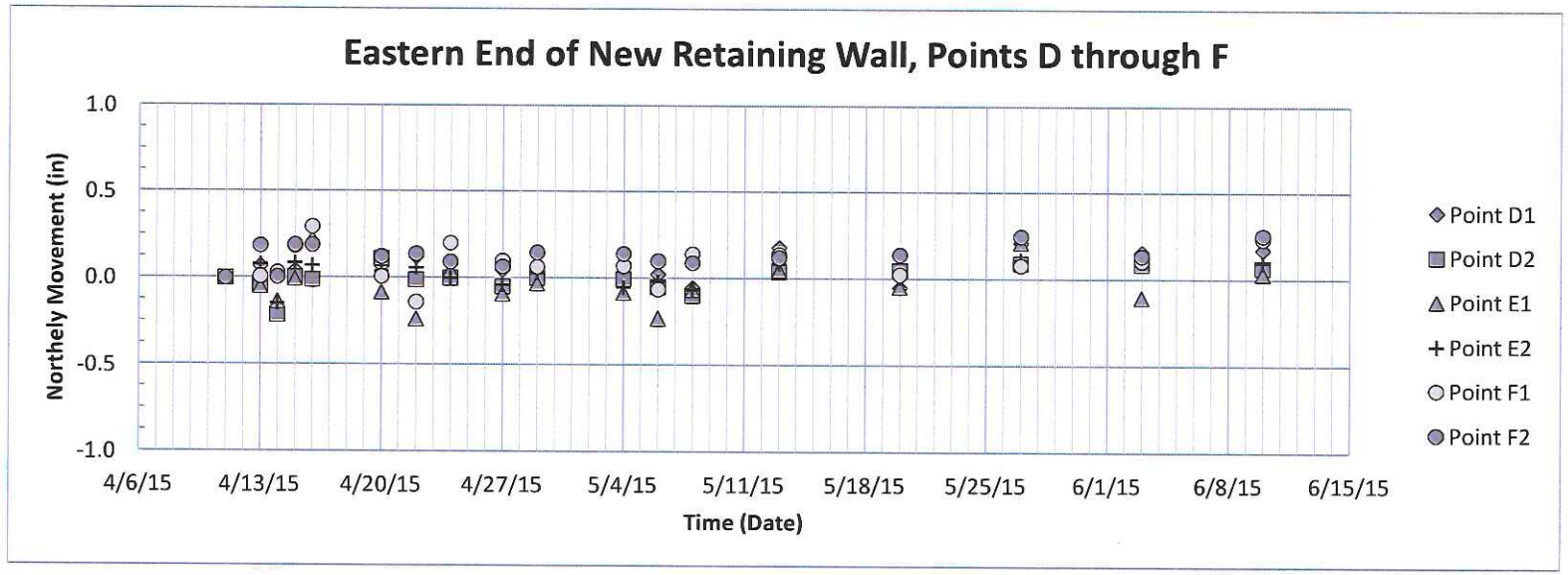

Movement, Existing Retaining Wall Adjcent to 48 Hancock Street
Northerly Movement (in)
1.0
0.5
0.0
-0.5
-1.0
6-Apr
13-Apr
20-Apr
27-Apr
4-May
11-May
18-May
25-May
1-Jun
8-Jun
15-Jun
Time (Date)
Point 2-5
Point 3-4
Point 4-4


Nails in Top of New Retaining Wall
Northerly Movement (in)
1.0
0.5
0.0
-0.5
-1.0
6-Apr
13-Apr
20-Apr
27-Apr
4-May
11-May
18-May
25-May
1-Jun
8-Jun
15-Jun
Time (Date)
Point 1-3
Point 2-4
Point 3-2
Point 3-3
Point 4-2
Point 4-3

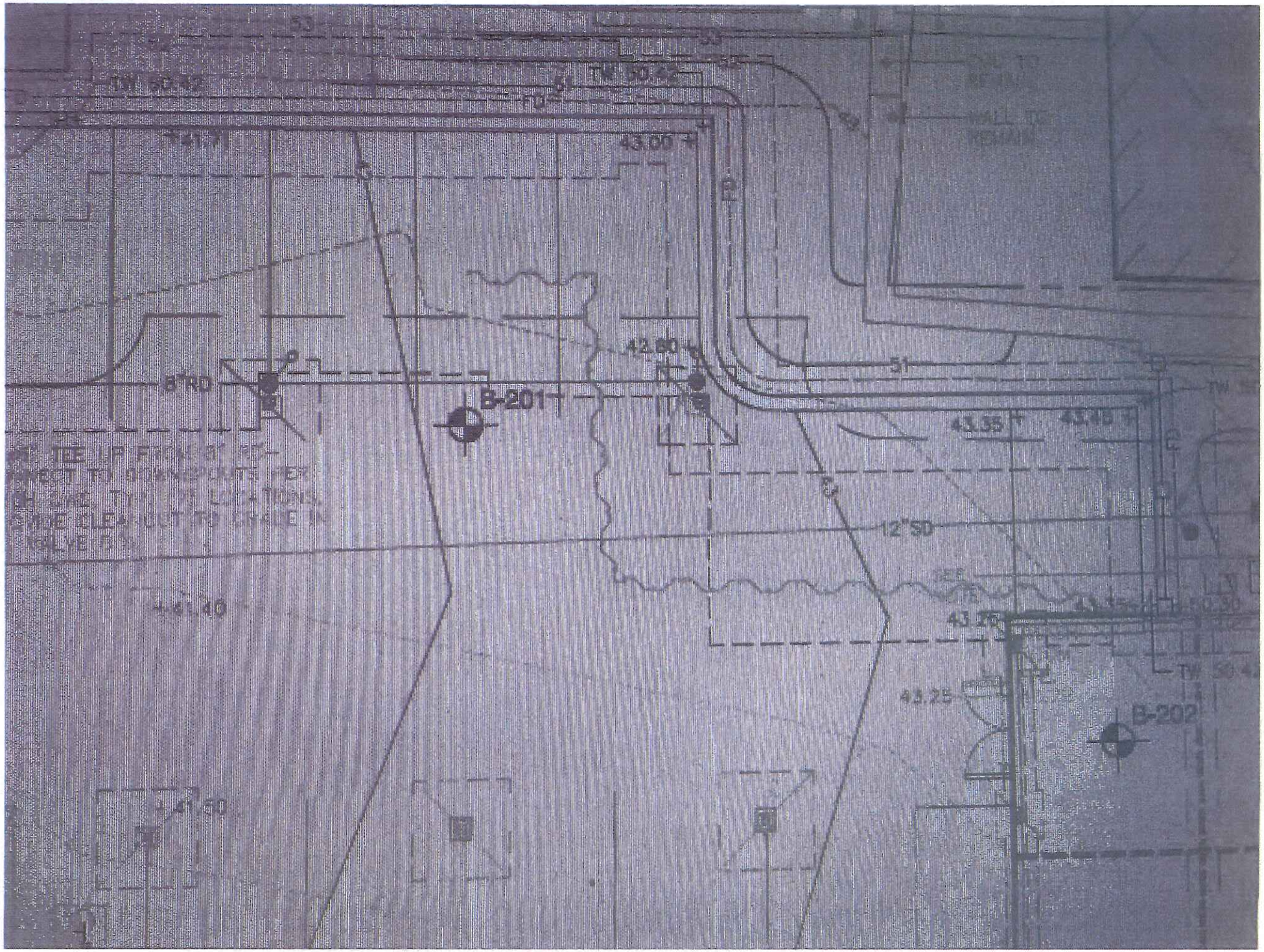

Foundation Movement, 48 Hancock Street (blue house)
Northerly Movement (in)
1.0
0.5
0.0
-0.5
-1.0
6-Apr
13-Apr
20-Apr
27-Apr
4-May
11-May
18-May
25-May
1-Jun
8-Jun
15-Jun
Time (Date)
Point 4-5
Point 5-1
Point 5-2


Foundation Movement, 36 Federal Street (white house)
Northerly Movement (in)
1.0
0.5
0.0
-0.5
-1.0
6-Apr
13-Apr
20-Apr
27-Apr
4-May
11-May
18-May
25-May
1-Jun
8-Jun
15-Jun
Time (Date)
Point 5-3
Point 5-4


Western End of New Retaining Wall, Points A through C
Northerly Movement (in)
1.0
0.5
0.0
-0.5
-1.0
4/6/15
4/13/15
4/20/15
4/27/15
5/4/15
5/11/15
5/18/15
5/25/15
6/1/15
6/8/15
6/15/15
Time (Date)
Point A1
Point A2
Point B1
Point B2
Point C1
Point C2

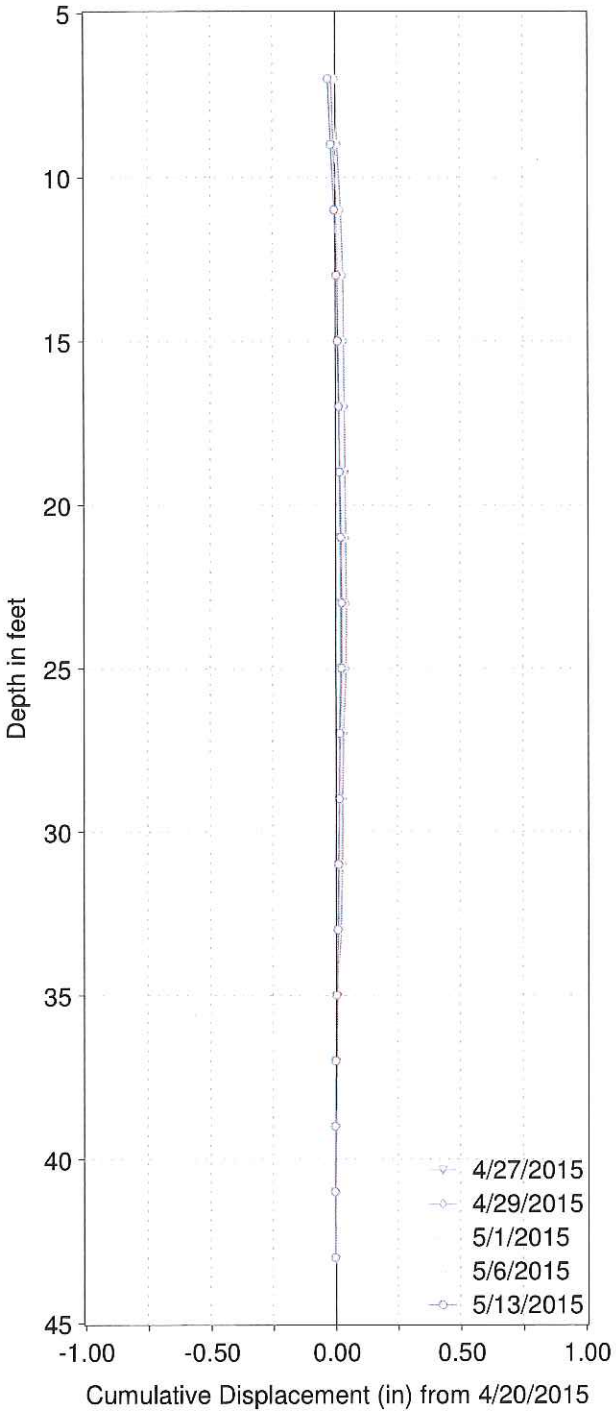

Eastern End of New Retaining Wall, Points D through F
Northely Movement (in)
1.0
0.5
0.0
-0.5
-1.0
4/6/15
4/13/15
4/20/15
4/27/15
5/4/15
5/11/15
5/18/15
5/25/15
6/1/15
6/8/15
6/15/15
Time (Date)
Point D1
Point D2
Point E1
Point E2
Point F1
Point F2

S.W. Cole Inclinometer Data Plots

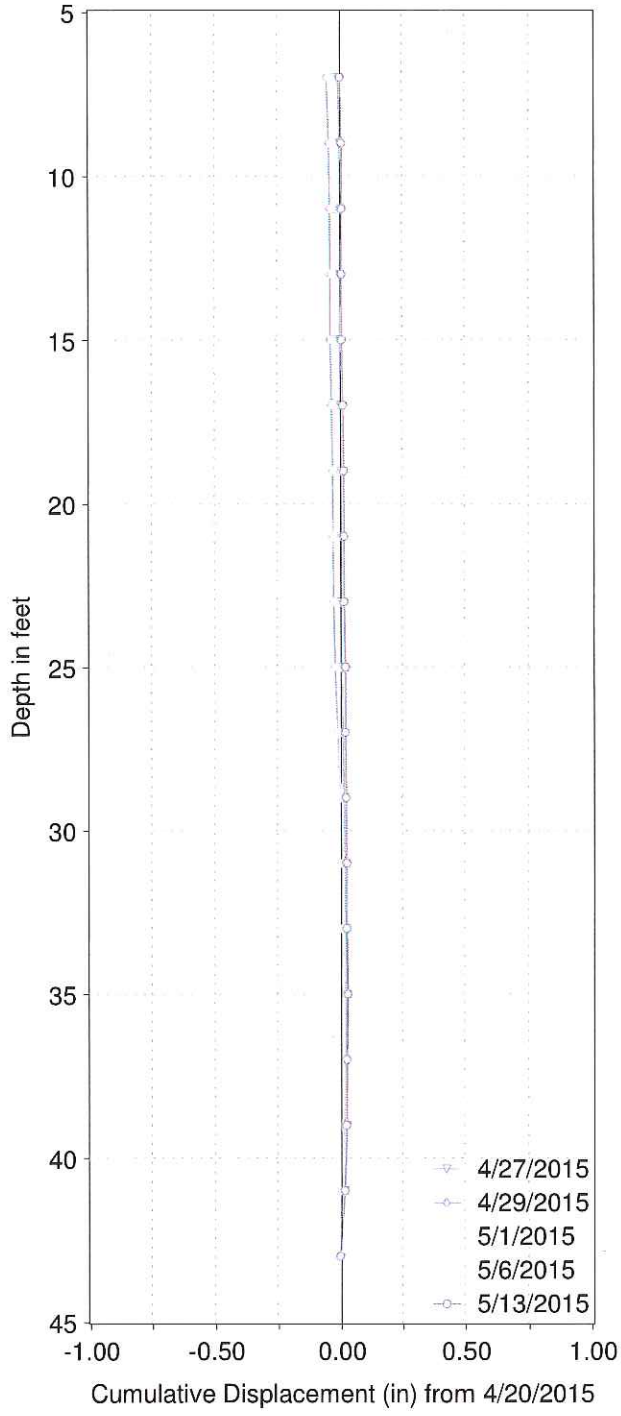

B-201
B-202
12"SD
8"WD
43.00
42.50
43.55
43.25

S.W.COLE ENGINEERING, INC.

LOFTS B-201, A-Axis

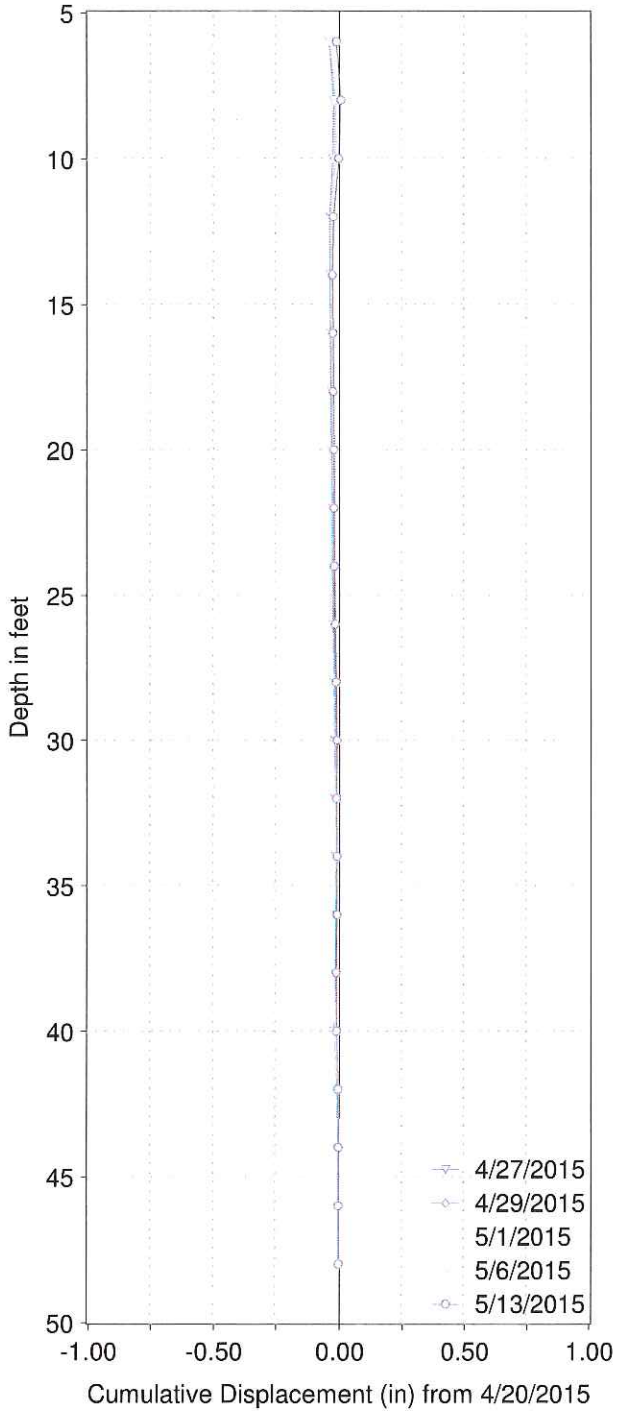


LOFTS B-201, B-Axis

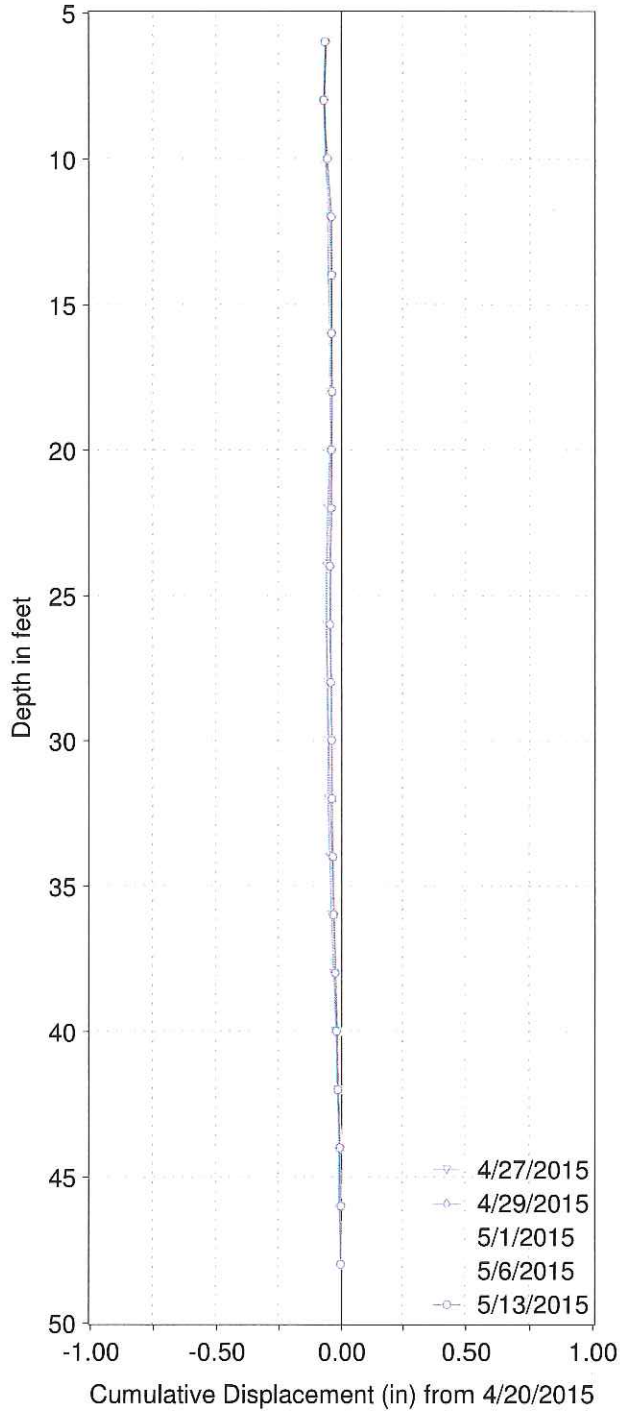


S.W.COLE ENGINEERING, INC.

LOFTS B-202, A-Axis



LOFTS B-202, B-Axis



APPENDIX C

Results of Global Stability Evaluations

TABLE I

NORTH RETAINING WALL ROTATIONAL STATIC STABILITY EVALUATIONS (SECTION A-A)
SEAPORT LOFTS
NEWBURY STREET, PORTLAND, MAINE

Marine Clay Undrained Shear Strength Profile	Ground Improvement (Y/N, Strength)	Calculated Factor of Safety			
		Surcharge Loading			
		0 psf	250 psf	500 psf	600 psf
Profile No. 1	N	1.5	--	1.5	1.5
Profile No. 2	N	1.4	--	1.4	1.4
Profile No. 3	N	1.4	--	1.3	1.2
	Y, 0°	--	--	--	1.1
	Y, 20°	--	--	--	1.3
	Y, 40°	--	--	--	1.6

Notes:

1. Approximate location of cross section used in rotational stability evaluations shown on the attached Figure 1.
2. Subsurface soil and groundwater conditions modeled based on conditions encountered in test borings completed on site by Geotechnical Services, Sebago Technics and SW Cole.
3. Refer to Figure 2 for marine clay undrained shear strength profile details. Undrained shear strength values shown taken from in-situ vane shear and laboratory unconfined compressive strength tests completed by Geotechnical Services, Sebago Technics and SW Cole within and from test borings drilled on site.
4. Range in surcharge loading and marine clay undrained shear strength were varied to evaluate overall sensitivity as it relates to the calculated factor of safety since actual values are unknown.
5. Rotational stability evaluations completed using Slide v. 6.035 computer program developed by Rocscience, Inc. using Simplified Bishop and Janbu methodology.

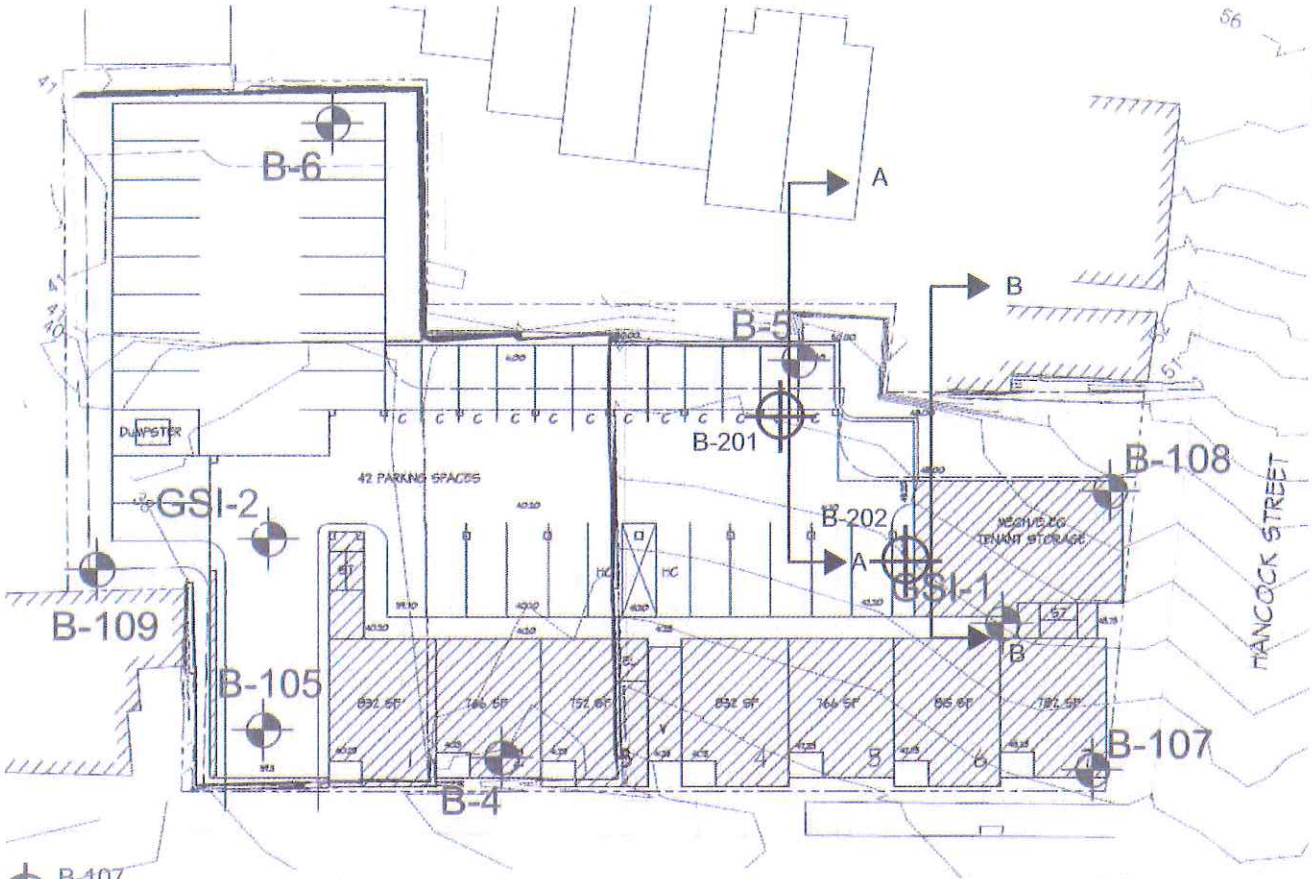
TABLE II

NORTH RETAINING WALL ROTATIONAL STATIC STABILITY EVALUATIONS (SECTION B-B)
SEAPORT LOFTS
NEWBURY STREET, PORTLAND, MAINE

Marine Clay Undrained Shear Strength Profile	Ground Improvement (Y/N, Strength)	Calculated Factor of Safety			
		Surcharge Loading			
		0 psf	250 psf	500 psf	600 psf
Profile 3	N	--	1.9	--	--
	Y, 0°	--	1.5	--	--
	Y, 20°	--	2.0	--	--
	Y, 40°	--	2.5	--	--

Notes:

1. Approximate location of cross section used in rotational stability evaluations shown on the attached Figure 1.
2. Subsurface soil and groundwater conditions modeled based on conditions encountered in test borings completed on site by Geotechnical Services, Sebago Technics and SW Cole.
3. Refer to Figure 2 for marine clay undrained shear strength profile details. Undrained shear strength values shown taken from in-situ vane shear and laboratory unconfined compressive strength tests completed by Geotechnical Services, Sebago Technics and SW Cole within and from test borings drilled on site.
4. Range in surcharge loading and marine clay undrained shear strength were varied to evaluate overall sensitivity as it relates to the calculated factor of safety since actual values are unknown.
5. Rotational stability evaluations completed using Slide v. 6.035 computer program developed by Rocscience, Inc. using Simplified Bishop and Janbu methodology.



B-107 APPROXIMATE LOCATION OF TEST BORING COMPLETED BY SEBAGO TECHNICS, INC. IN DECEMBER 2005

B-5 APPROXIMATE LOCATION OF TEST BORING COMPLETED BY SEBAGO TECHNICS, INC. IN JUNE 2005

B-201 APPROXIMATE LOCATION OF TEST BORING COMPLETED BY SW COLE IN APRIL 2015

B-1 Test Boring Location (Approximate) ACTUAL DESIGNATION GSI-1; COMPLETED BY GSI IN AUGUST 2013

BORING LOCATION PLAN

GEOTECHNICAL SERVICES INC.
55 NORTH STARK HIGHWAY, WEARE, NH 03281
TEL. (603) 529-7766 FAX. (603) 529-7780

The Bay House
Portland, Maine

DRAWN BY: KJM	DATE: August 2013
CHECKED BY: HKW	SCALE: NTS
FILE NAME: 212234 - Bay House.dwg	PROJECT NO.: 213193

FIGURE NO. 1

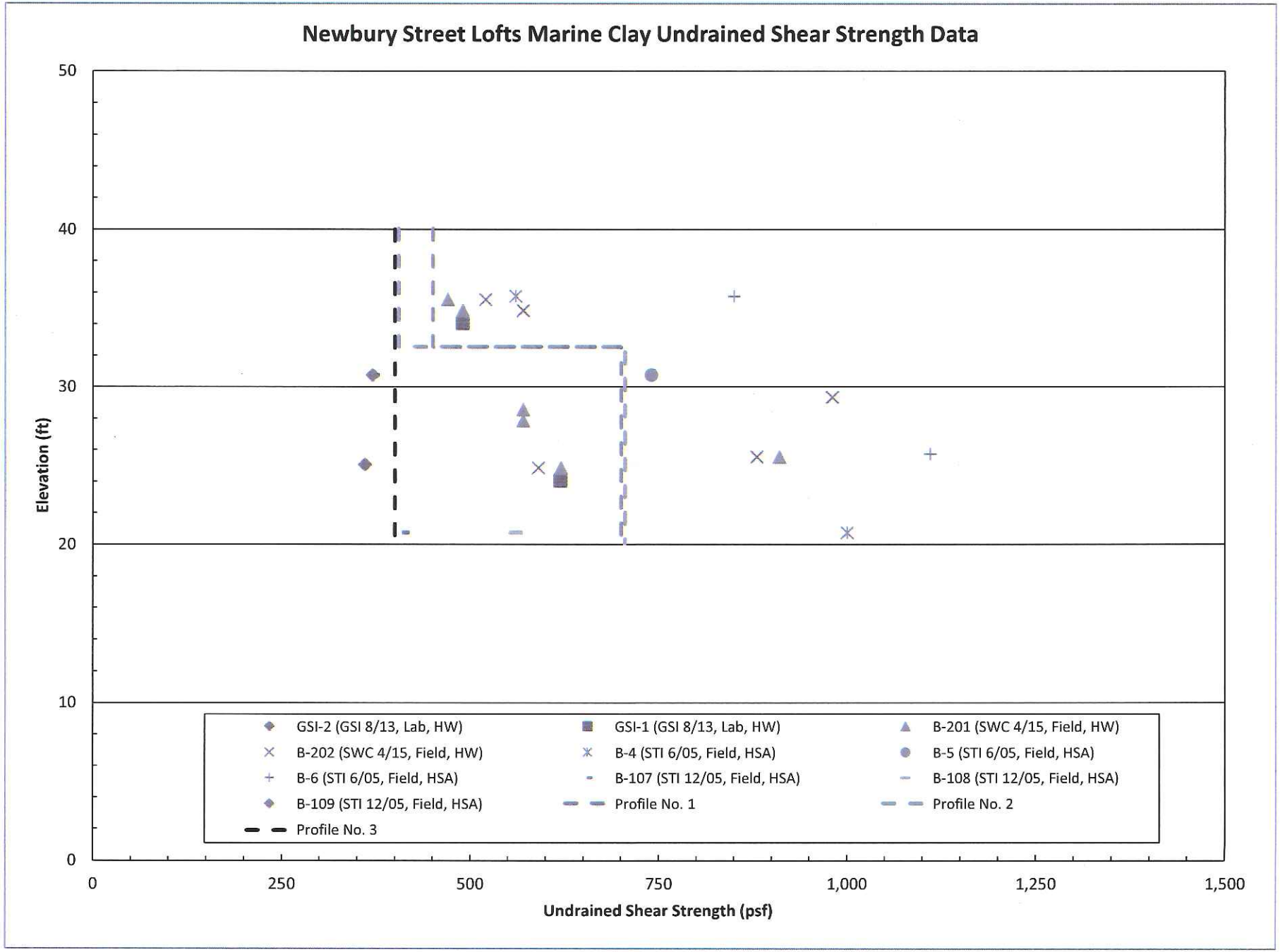

Newbury Street Lofts Marine Clay Undrained Shear Strength Data
Elevation (ft)
50
40
30
20
10
0
0
250
500
750
1,000
1,250
1,500
Undrained Shear Strength (psf)
GSI-2 (GSI 8/13, Lab, HW)
GSI-1 (GSI 8/13, Lab, HW)
B-201 (SWC 4/15, Field, HW)
B-202 (SWC 4/15, Field, HW)
B-4 (STI 6/05, Field, HSA)
B-5 (STI 6/05, Field, HSA)
B-6 (STI 6/05, Field, HSA)
B-107 (STI 12/05, Field, HSA)
B-108 (STI 12/05, Field, HSA)
B-109 (STI 12/05, Field, HSA)
Profile No. 1
Profile No. 2
Profile No. 3

FIGURE 2

APPENDIX D

Reports by Others

Letter Report entitled "Retaining Wall Settlement Issues, Seaport Lofts, Portland, ME," dated 12 April 2015, prepared by Geotechnical Services, Inc.

GSI GEOTECHNICAL SERVICES INC.

Geotechnical Engineering · Environmental Studies · Materials Testing · Construction Monitoring

April 12, 2015

Mr. Joe Dasco
Atlas Investment Group, LLC
35 Fay Street, Suite 107B
Boston, Massachusetts 02118

RE: Retaining Wall Settlement Issues
Seaport Lofts
Portland, ME **GSI Project No. 212234**

Dear Mr. Dasco:

This report follows our visit to the Seaport Lofts project on April 11, 2015 in connection with issues associated with earth shoring and retaining wall construction. The specific purpose of our visit was to offer assistance to the general contractor, Landry French (LF) and their subcontractor, HB Fleming (HBF) and to offer recommendations as to how the issues may be addressed.

RETAINING WALL

On April 10, 2015, it was reported to GSI that the concrete retaining wall at the north of the site had experienced settlement upwards of 2 inches. The settlement readings were determined by the shoring contractor, HB Fleming (see attached) and made by the establishment of monitoring points atop the wall. The monitoring points were made on 4/3/15 one day after the retaining wall was stripped of forms and prior to backfill. The wall was backfilled to grade on 4/8/15 with no significant settlement.

Subsequent to the backfill, bracing elements were removed form the earth support system and the steel sheet piles extracted with an MKT V-22 vibratory hammer. Survey readings thereafter indicate settlement from 1.3 to 1.9 inches. HB Fleming also took readings atop the wall which indicate planar displacement. We are unclear whether the HB Fleming measurements were made by a licensed surveyor.

During our visit it was reported that LF has retained the services of a licensed surveyor and readings taken on 4/10/15 and 4/11/15 indicate no discernable movement. It was recommended to Landry French that these readings continue and GSI be given daily reports of same. Also, GSI recommended that wall plumbness be checked on a daily basis with a bubble level at 10 foot intervals at the same locations in a repeatable manner with the same operator.

A visual inspection of the retaining wall did not reveal any structural cracking or signs of structural distress. Overall the structure appears to be in sound condition and has been fully backfilled with vibratory compaction equipment (according to Brian Jacobs, Site Superintendent for LF).

Our preliminary assessment of the new retaining wall is that it is dimensionally stable and capable of serving the intended purpose of permanent earth support. The soil improvement subcontractor, Subsurface Constructor's Inc. installed stone columns beneath the retaining wall footings to provide the design bearing capacity and GSI observed the installation. We request that LF provide us with copies of backfill soil reports, compaction lifts and results, any photographs in connection with the foundation drainage system, and subgrade reports that may have been prepared by others. Also, it is noted that the final acceptance of the retaining wall will be the responsibility of the designer, JSN Associates. We will assist JSN in any manner they deem necessary in their review and evaluation.

EARTH MOVEMENT AND FOUNDATION SETTLEMENT

The retaining wall construction required temporary support of excavation (SOE) along the rear of the site running towards Hancock Street. The SOE was required to shore the excavation and protect existing concrete retaining walls and residential foundations abutting the site. It is our understanding that the SOE was a "Delegate Design" effort in accordance with project specification 315000. The design and construction was performed by HBF and reviewed by JSN (Submittal #02 dated 10/1/14).

During and following and extraction of steel sheet piles, foundation settlement occurred at the corner of an adjacent structure on Hancock Street. This is depicted on Figure 1.

Figure 1

Figure 2 illustrates the proximity of the structure to the SOE system.

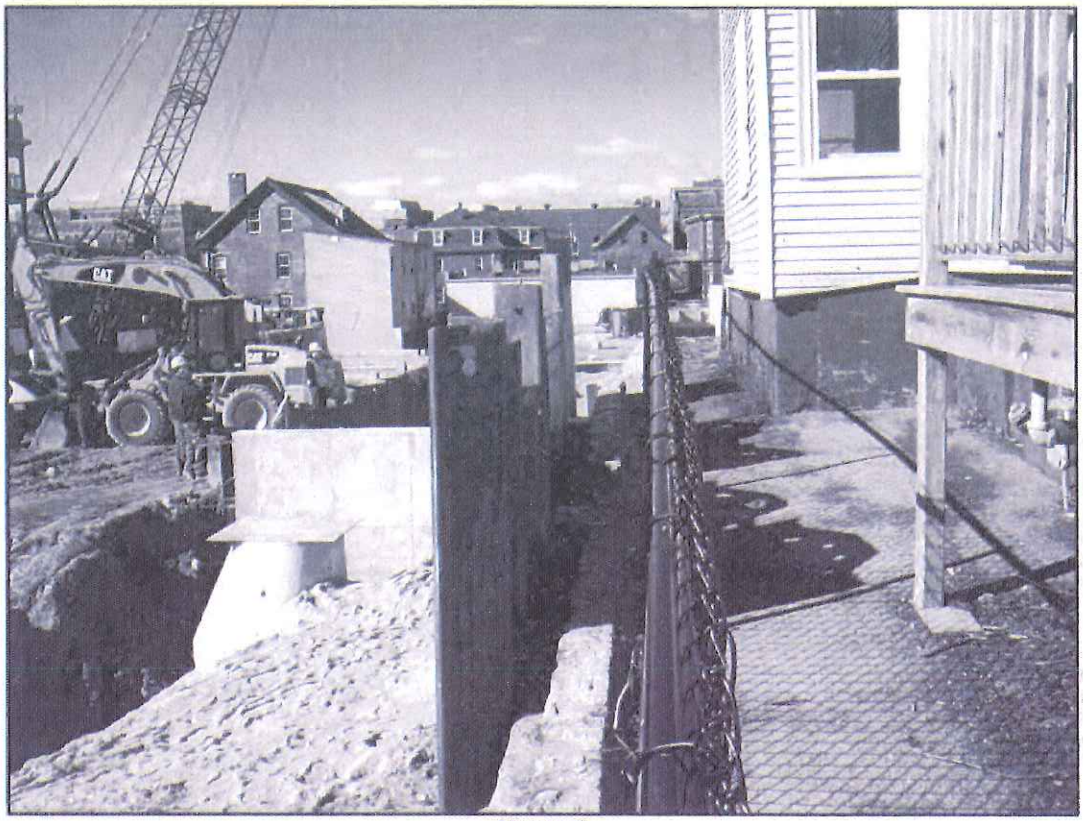


Figure 2

The foundation settlement is most apparent along the length of sheet pile removal. It is believed that the existing foundation occurs within the influence of the SOE. As such, the SOE design would have to be inherently stiff and the removal of SOE elements may pose risk of disturbance to existing structures.

We also viewed ground disturbance at 40 Federal Street with shifting of the ground resulting in displacement of landscape features and patio blocks. This also coincided with the removal of steel sheet piles. A crack has formed in the rear yard which runs parallel to the SOE system and is shown in Figure 3. It is believed that this crack relates to the active state boundary. LF has engaged their surveyor to make elevation readings and prepare a cross-section at this location so that we may further evaluate the geometry and its relation to the SOE. The crack is approximately 10 feet from the residence, and given the depth of its foundation (at least 4 feet below exterior grade), our preliminary evaluation is that the ground movement does not extend to the structure.

Our understanding is that LF has retained a structural engineer to also make a comprehensive evaluation of the damage and render an opinion as to whether the structure is jeopardized by the earth movement.

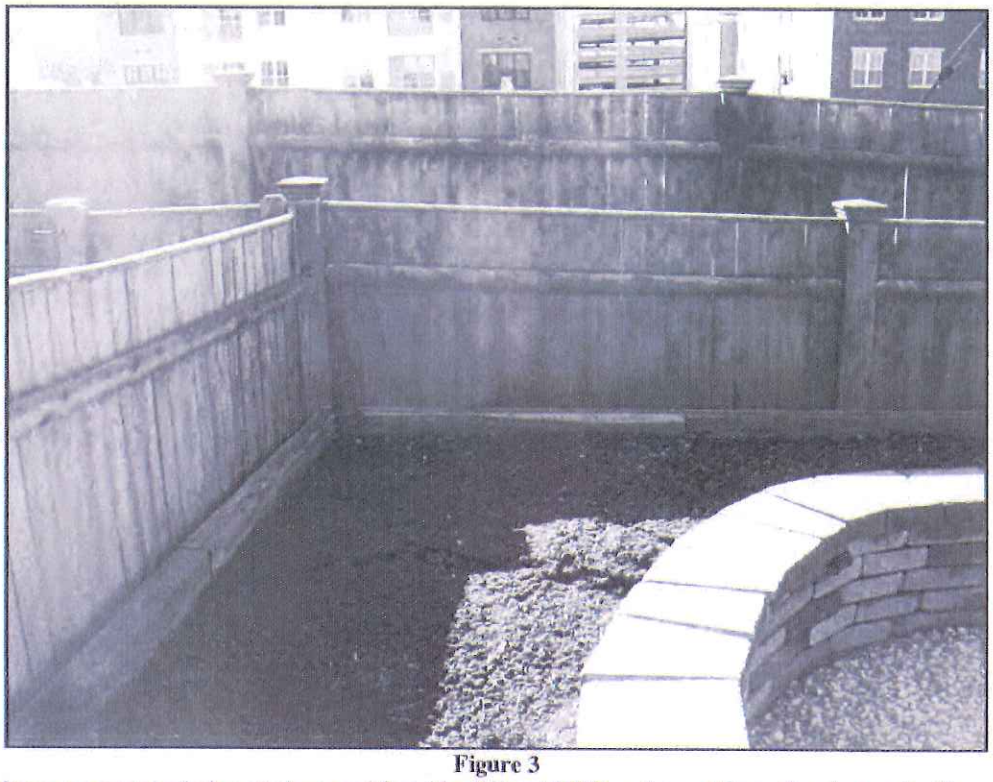


Figure 3

Preliminary recommendations to be considered by LF and HBF as they address the above cited issues are as follows:

- Cut remaining steel sheet piles below finish grade and leave in place;
- Install shims between foundation gap for the affected Hancock Street structure to re-establish load transfer, monitor structure daily as work continues, design and install permanent underpinning solution possibly with helical piles if structure is to remain;
- Continue to monitor the new retaining wall for plumbness and settlement; ensure adequate compaction of backfill between wall and excavation face, check the perimeter drain at the heel to ensure that it is functional;
- Continue to monitor ground movements along the SOE, evaluate with respect to the thresholds provided in the Sebago Technics geotechnical report and the project specifications;
- Landscaping features at 40 Federal Street and likely surrounding properties will require repair and adjustment of fence posts and patio blocks.

At your request we are available to assist the contractor(s) or design team as they work to continue construction and resolve the issues of property damage.

GEOTECHNICAL SERVICES, INC.

Harry K. Wetherbee, P.E.
Principal Engineer

Attachments: HB Fleming Settlement Readings

STATE OF MAINE
Harry K. Wetherbee III
6722
LICENSED PROFESSIONAL ENGINEER

H.B. FLEMING, INC MONITORING

4/10 SEAPORT LOFTS PERMANENT RETAINING WALL MONITORING

TIMELINE

SET POINTS 400-403 ON TOP OF WALL ON 4/3 1 DAY AFTER PLACEMENT BEFORE BACKFILL
* VERICAL DATUM IS ASSUMED *

400 = 104.468' N: 5151.92 E: 4837.82
401 = 102.232' N: 5151.72 E: 4855.55
402 = 102.233' N: 5133.55 E: 4886.97
403 = 102.290' N: 5133.20 E: 4903.17

4/8/15 (AFTER BACKFILL)

400 = 104.465 (-.003) N: 5151.94 E: 4837.84
401 = 102.207 (-.025) N: 5151.77 (.05 to North) E: 4855.56 (.01' to West)
402 = 102.232 (0) N: 5133.60 (.05 to North) E: 4886.96 (.01' to East)
403 = 102.300 (+.01) N: 5133.22 (.07 to North) E: 4903.12 (0)

4/10/15 (BRACING REMOVED, SHEETS PULLED/BRACING WAS HOLDING SLOPE SURCHARGE)

SETTLEMENT

.128' = 1.536" 400 = 104.340 (-0.128') N: 5151.92 (0) E: 4837.89 (.07 to East)
.161' = 1.932" 401 = 102.071 (-0.161') N: 5151.75 (.03 to North) E: 4855.59 (.04' to East)
.111' = 1.332" 402 = 102.122 (-0.111') N: 5133.62 (.07' to North) E: 4886.98 (.01' to East)
.119' = 1.428" 403 = 102.171 (-0.119') N: 5133.28 (.08 to North) E: 4903.15 (.03' to East)

* SURVEY PERFORMED USING A LEICA 1205+ ROBOTIC TOTAL STATION

Letter Report entitled "Retaining Wall Observations, Seaport Lofts,"
dated 3 June 2015, prepared by JSN Associates, Inc.

JSN
Associates, Inc.

One Autumn Street
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June 3, 2015

Matt Provencal, Associate AIA
Architectural Designer
Mark Mueller Architects
100 Commercial Street
Suite 205
Portland, Maine 04101
matt@muellerarchitects.com
(207) 774-9057

RE: **Retaining Wall Observation, Seaport Lofts**

Dear Matt,

At the request of Geoff Mitchell, Landry/French Construction Company, I visited the Seaport Lofts project to make observations of the site retaining wall designed by JSN Associates, Inc., and to meet with you and Brian Jacobs, Landry/French Construction Company. It was good to talk with you and Brian yesterday, while on site. As we discussed, I observed the current state of the retaining wall and do not have any structural concerns relating to the retaining wall at this time. It is my opinion that the survey data and plumbness data should continue to be collected.

I noted while on site that the top of the site retaining wall that I designed had been extended vertically (raised). Please see the attached image "Seaport_Lofts_ Wall Extension_060215_". It is acceptable to leave the extension, however the grade elevation behind the wall that I designed should be about 6"± below the top of the designed wall elevation, not the raised wall elevation. The three of us discussed this issue while on site and agreed that the grade would be adjusted to match the structural detail. Please note that the toe-side grade is about 9" lower than the designed finished grade due to construction phasing. We agreed that the toe-side grade would be brought up to match the structural detail in the finished condition.

The cracking at the joint between the "JSN designed site wall with extension by others" and the "site wall by others" is to be expected. The two walls will move differentially because of their different designs. Additionally, the way the joint was cast creates a condition where the walls are getting "hung-up" on each other. It is my opinion that the cracks at this location are an aesthetic concern. The JSN wall will function as designed beyond the joint location. Please see the attached image "Seaport_Lofts_Wall Joint_060515_".

Please keep me informed about the results/reports from the consulting geotechnical engineers and any changes from the City of Portland.

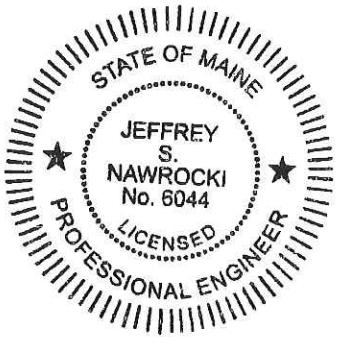
If you would like to discuss this letter, please call me at (603) 433-8639, extension 203. Thank you for the opportunity to provide you with structural review services.

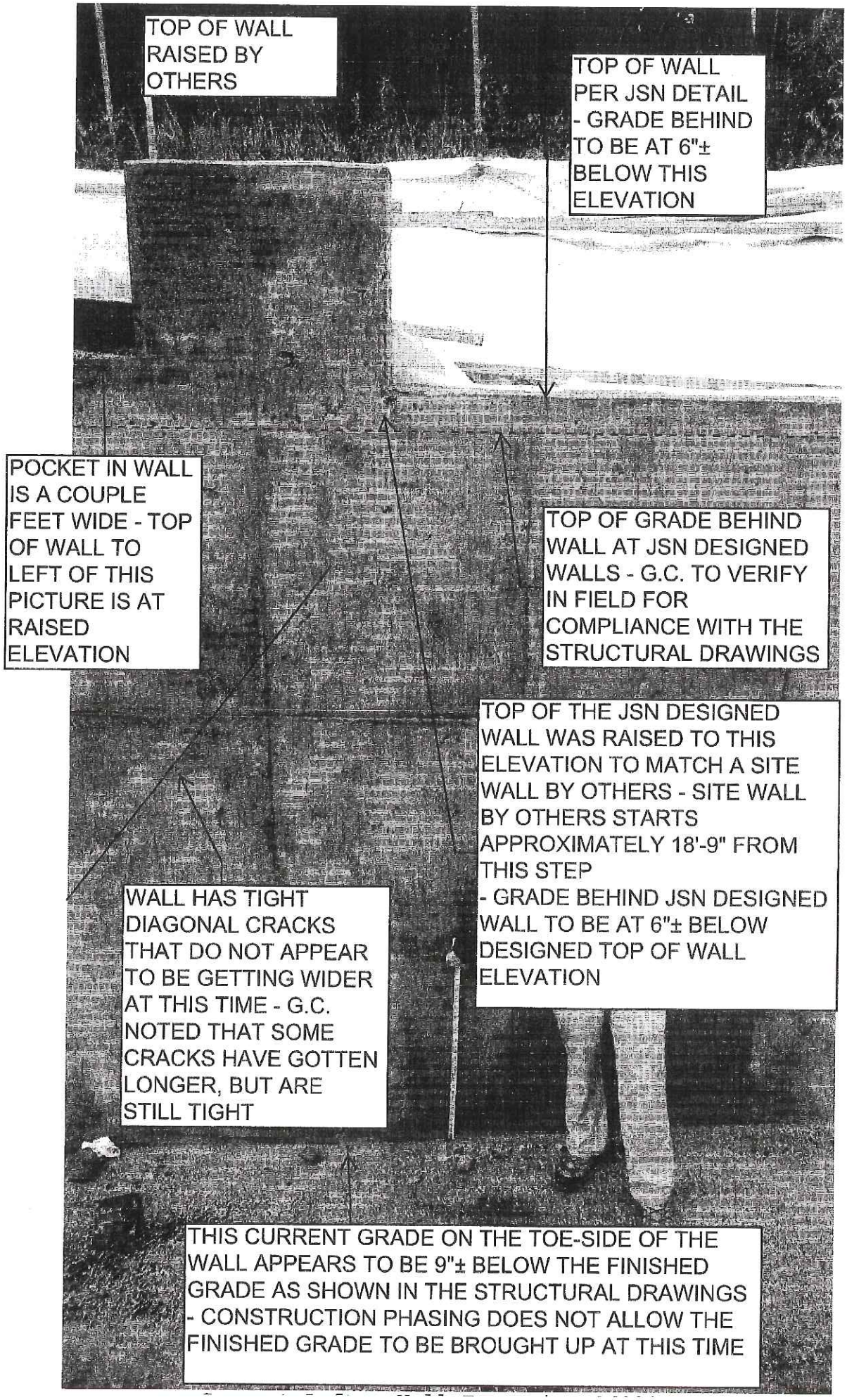
Sincerely,

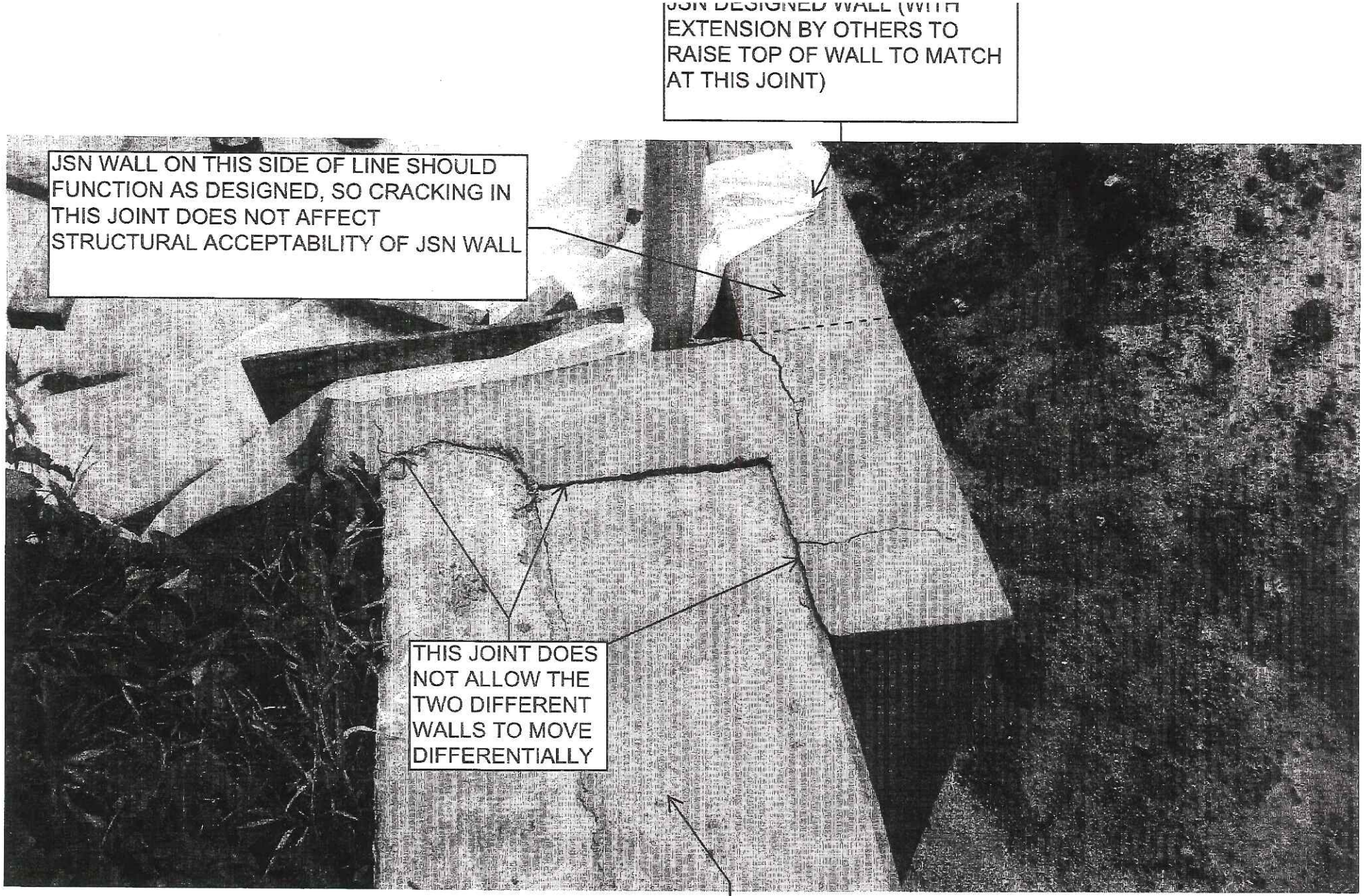
JSN Associates, Inc.

Matthew J. Allen, P.E.
Senior Structural Engineer

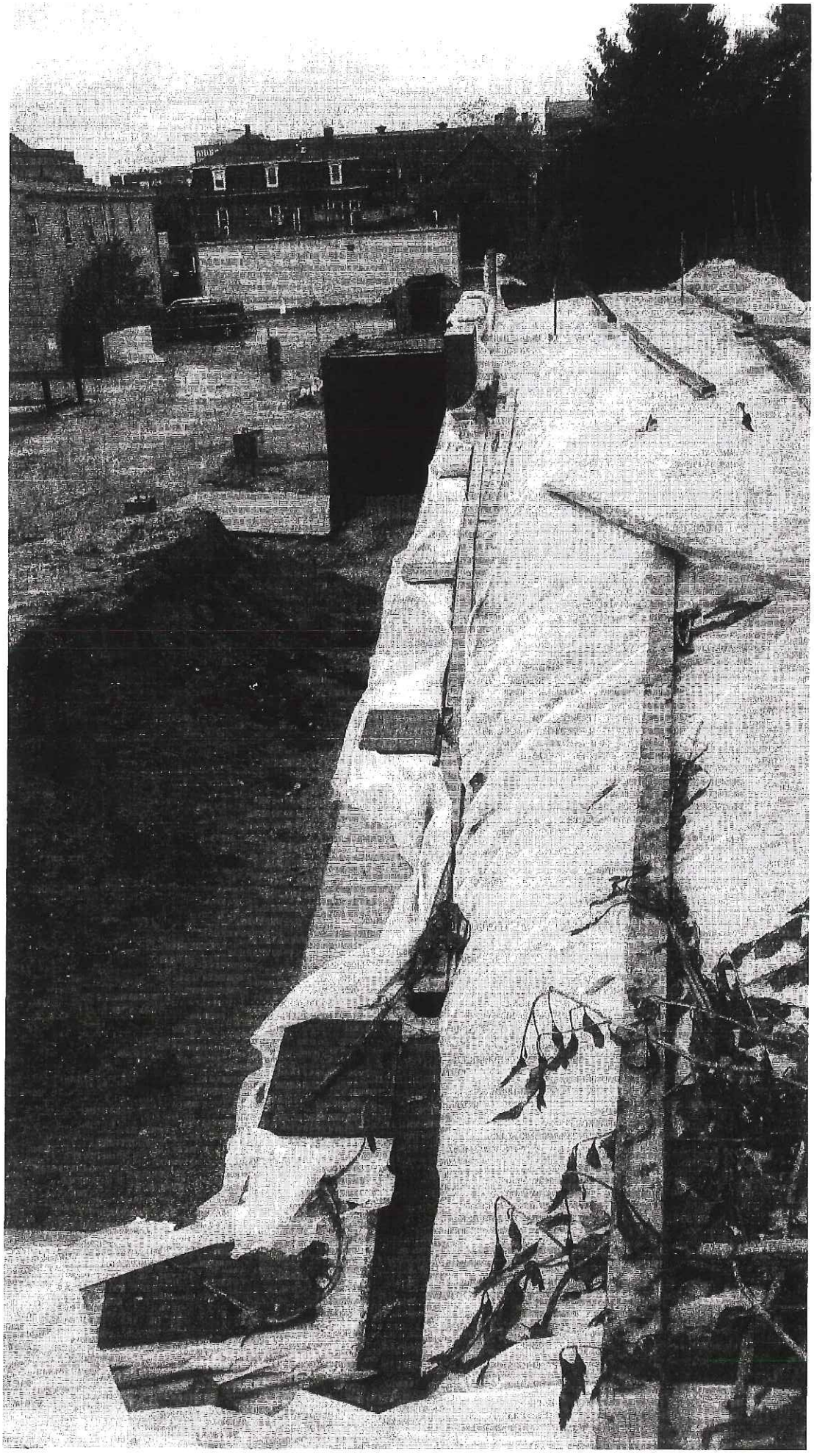
Jeffrey S. Nawrocki, P.E.
President




TOP OF WALL RAISED BY OTHERS
TOP OF WALL PER JSN DETAIL - GRADE BEHIND TO BE AT 6"± BELOW THIS ELEVATION
POCKET IN WALL IS A COUPLE FEET WIDE - TOP OF WALL TO LEFT OF THIS PICTURE IS AT RAISED ELEVATION
TOP OF GRADE BEHIND WALL AT JSN DESIGNED WALLS - G.C. TO VERIFY IN FIELD FOR COMPLIANCE WITH THE STRUCTURAL DRAWINGS
TOP OF THE JSN DESIGNED WALL WAS RAISED TO THIS ELEVATION TO MATCH A SITE WALL BY OTHERS - SITE WALL BY OTHERS STARTS APPROXIMATELY 18'-9" FROM THIS STEP
- GRADE BEHIND JSN DESIGNED WALL TO BE AT 6"± BELOW DESIGNED TOP OF WALL ELEVATION
WALL HAS TIGHT DIAGONAL CRACKS THAT DO NOT APPEAR TO BE GETTING WIDER AT THIS TIME - G.C. NOTED THAT SOME CRACKS HAVE GOTTEN LONGER, BUT ARE STILL TIGHT
THIS CURRENT GRADE ON THE TOE-SIDE OF THE WALL APPEARS TO BE 9"± BELOW THE FINISHED GRADE AS SHOWN IN THE STRUCTURAL DRAWINGS - CONSTRUCTION PHASING DOES NOT ALLOW THE FINISHED GRADE TO BE BROUGHT UP AT THIS TIME



Seaport_Lofts_Wall Joint_060515_



Draft Letter Report entitled "Load Test Specifications, Bayhouse II, Portland, ME," dated 21 June 2015, prepared by Geotechnical Services, Inc.

GEOTECHNICAL SERVICES INC.

Geotechnical Engineering · Environmental Studies · Materials Testing · Construction Monitoring

June 21, 2015

Mr. Joe Dasco
Atlas Investment Group, LLC
35 Fay Street, Suite 107B
Boston, Massachusetts 02118

RE: Load Test Specifications
Bayhouse II
Portland, ME **GSI Project No. 212234**

Dear Mr. Dasco:

To evaluate the effectiveness of soil improvement procedures implemented by Subsurface Constructors, Inc. (SCI), two load tests will be performed. The tests will be performed by SCI, designer and engineer for the ground improvement procedures. Geotechnical Services, Inc. (GSI) will observe the test procedures and evaluate the results to determine whether the ground improvement procedures have been effective.

SPECIFICATIONS

Ground Improvement requirements are outlined in Project Specification 310100 (attached), pertinent requirements are as follows:

B. The design shall meet the following criteria.

Maximum Allowable Bearing Pressure for Footings supported by aggregate pier Reinforced Soils	3,000 psf
Estimated Total Long-Term Settlement for Footings:	≤ 1-inch
Estimated Long-Term Differential Settlement of Adjacent Footings:	≤ ½-inch

C. The aggregate pier elements shall be designed using a aggregate pier stiffness modulus to be verified by the results of the modulus test described in Section 5.2 of these specifications.

DISCUSSION

Ground improvement procedures have been implemented at the site based on preliminary recommendations given in a report by Sebago Technics, Inc. (STI) dated October 3, 2007 for the Phase I development.

Supplemental studies specific to the Bayhouse II project were performed by GSI to evaluate the need for similar soil improvement procedures.

Vibro-Stone Column (VSC) improvement was recommended by GSI and implemented at the onset of the project. However, due to extreme cold weather, installation by the bottom-feed methods was hampered because of crushed stone clogging in the feed tube. As such, VSC techniques were abandoned and Vibro-Grout Columns (VGC) were recommended by SCI and recommended by GSI. It is noted that VGCs were successfully used in the Bayhouse I project in 2012.

Load testing of ground improvement elements contained in this document have been derived from technical procedures outlined in the following reference: *Analysis of Quick Load Tests on Stone Columns* by James D. Hussin and Juan I. Baez (1991).

Vibro Grout Columns at D-10 Footing

GSI recommends a full scale load test on the existing footing to measure settlement due to the imposition of axial load. Footing has been cast and concrete is expected to have matured to 100 percent of design strength. There are four vibro-grout columns (numbers 251 to 255) underlying the footing with a 2 foot transfer mat of 1-1/2 crushed stone. The design capacity of the footing is 73 kips. For this footing, a maximum load of 150% of design load will be imposed (110 kips).

The load test procedure shall be performed in general accordance with the procedures outlined in ASTM D1143. The axial load will be applied to the footing by means of a hydraulic jack and calibrated load cell. The reaction force resisting the jack pressure will be derived from an HP-14x102 or greater section spanning outside the zone of influence of the footing. Reaction may be with concrete ballast blocks or reaction piles to be at the option of SCI.

The loading sequence shall consist of applying an axial load in increments of 25% of design load, held for 15 minutes, up to 110 kips At 110 kips the load will be held for one hour or until the movement is less than 0.01 inches/hour. During the course of the static load test, settlements will be monitored and recorded by GSI. Settlement will be measured at the footing with three Ames dial gages, a thin steel wire affixed to an independent reference beam, and an optical survey level.

Vibro-Stone Columns at A-16

At this location the footing has not been cast. It will be necessary to excavate to the prescribed elevation and place the 2 foot layer of 1-1/2 crushed stone (load transfer platform) above the VSC butts (numbers 19-22). The design load for this footing location is 91 kips. This test will be performed in accordance with ASTM D 1194 to confirm bearing pressure of spread footing subgrade. The test will measure settlement versus pressure based on 3 ksf design load. A 30-inch diameter circular plate is required and the ultimate load will be 300% of design load (45 kips). Load sequence will be as outlined above for the footing at column D-10. However, it will be necessary to maintain the ultimate load for sufficient duration to ensure that the majority of primary consolidation has been reached. This is because stone column compression in cohesive soils results partially from lateral bulging, a time-dependent consolidation of the surrounding soil. To evaluate the test results GSI will compare the settlement versus square root of time plot with the results obtained on laboratory tests conducted for our supplemental report (August 23, 2013).

We have forwarded these recommendations to SCI and await your direction with respect to the execution of these tests procedures.

GEOTECHNICAL SERVICES, INC.

Harry K. Wetherbee, P.E.
Principal Engineer

Attachments: Ground Improvement Specifications
ASTM Specifications

SECTION 310100 – EARTHWORK – AGGREGATE PIERS

1.1 GENERAL REQUIREMENTS

A. Description

Work shall consist of designing, furnishing and installing aggregate pier ground support to the lines and grades designated on the project foundation plan and as specified herein. The aggregate piers shall be constructed by driving a hollow mandrel to the design depth, providing aggregate (compacted and grouted or un-grouted, as required) and withdrawing the mandrel to create the aggregate pier. The aggregate pier elements shall be in a columnar-type configuration and shall be used to produce an intermediate foundation system for support of foundation loads.

1.2 Work Included

A. Provision of all equipment, material, labor, and supervision to design and install aggregate pier elements. Design shall rely on subsurface information presented in the project geotechnical report. Layout of aggregate pier elements, spoil removal (as required), footing excavations, and subgrade preparation following aggregate pier installation is not included.

B. The aggregate pier design and installation shall adhere to all methods and standards described in this Specification.

C. Drawings and General Provisions of the Contract, including General and Supplemental Conditions, and Division 1 Specifications, apply to the work in this specification.

1.3 Approved Installers

A. The aggregate pier Installer (the Installer) shall be approved by the Owner's Engineer prior to bid opening.

B. Installers of aggregate pier foundation systems shall have a minimum of 5 years of experience with the installation of aggregate pier systems and shall have completed at least 50 projects.

1.4 Reference Standards

A. Design

1. "Control of Settlement and Uplift of Structures Using Short aggregate piers," by Evert C. Lawton (Assoc. Prof., Dept. of Civil Eng., Univ. of Utah), Nathaniel S. Fox (President, Geopier Foundation Co., Inc.), and Richard L. Handy (Distinguished Prof. Emeritus, Iowa State Univ., Dept. of Civil Eng.), reprinted from *IN-SITU DEEP SOIL IMPROVEMENT, Proceedings of sessions sponsored by the Geotechnical Engineering Division/ASCE in conjunction with the ASCE National Convention held October 9-13, 1994, Atlanta, Georgia.*

2. "Settlement of Structures Supported on Marginal or Inadequate Soils Stiffened with Short aggregate piers," by Evert C. Lawton and Nathaniel S. Fox. *Geotechnical Special Publication No. 40: Vertical and Horizontal Deformations of Foundations and Embankments,* ASCE, 2, 962-974.

B. Modulus Testing

1. ASTM D 1143 - Pile Load Test Procedures

2. ASTM D 1194 - Spread Footing Load Test

C. Materials and Inspection

1. ASTM D 1241 - Aggregate Quality
2. ASTM D 422 - Gradation of Soils

D. Where specifications and reference documents conflict, the aggregate pier Designer shall make the final determination of the applicable document.

1.5 Certifications and Submittals

A. Design Calculations - The Installer shall submit detailed design calculations and construction drawings prepared by the aggregate pier Designer (the Designer) for review and approval by the Owner or Owner's Engineer. All plans shall be sealed by a Professional Engineer in the State in which the project is constructed.

B. Professional Liability Insurance - The aggregate pier Designer shall have Errors and Omissions design insurance for the work. The insurance policy should provide a minimum coverage of $3 million per occurrence.

C. Modulus Test Reports – A modulus test(s) is performed on a non-production aggregate pier element as required by the aggregate pier Designer to verify the design assumptions. The Installer shall furnish the General Contractor a description of the installation equipment, installation records, complete test data, analysis of the test data and verification of the design parameter values based on the modulus test results. The report shall be prepared under direction of a Registered Professional Engineer.

D. Daily aggregate pier Progress Reports – The Installer shall furnish a complete and accurate record of aggregate pier installation to the General Contractor. The record shall indicate the pier location, length, volume of aggregate used or number of lifts, densification forces during installation, the volume of grout use (if required), and final elevations or depths of the base and top of piers. The record shall also indicate the type and size of the installation equipment used, and the type of aggregate used. The Installer shall immediately report any unusual conditions encountered during installation to the General Contractor, to the Designer and to the Testing Agency.

2.0 MATERIALS

2.1 Aggregate

A. Aggregate used by the aggregate pier Installer for pier construction shall be pre-approved by the Designer and shall demonstrate suitable performance during modulus testing. Typical aggregate consists of Type 1 Grade B in accordance with ASTM D-1241-68, No. 57 stone or other graded aggregate approved by the Designer.

B. Potable water or other suitable source shall be used to increase aggregate moisture content where required. The General Contractor shall provide such water to the Installer.

2.2 Cement

A. Cement shall be Type II Portland Cement.

3.0 DESIGN REQUIREMENTS

3.1 Aggregate Pier Design

A. The design of the aggregate pier system shall be based on the service load bearing pressure and the allowable total and differential settlement criteria of all footings indicated by the design team for support by the aggregate pier system. The aggregate pier system shall be designed in accordance with generally accepted engineering practice and the methods described in Section 1 of these Specifications. The design life of the structure shall be 50 years.

B. The design shall meet the following criteria.

Maximum Allowable Bearing Pressure for Footings supported by aggregate pier Reinforced Soils	3,000 psf
Estimated Total Long-Term Settlement for Footings:	≤ 1-inch
Estimated Long-Term Differential Settlement of Adjacent Footings:	≤ ½-inch

C. The aggregate pier elements shall be designed using a aggregate pier stiffness modulus to be verified by the results of the modulus test described in Section 5.2 of these specifications.

3.2 Design Submittal

The Installer shall submit detailed design calculations, construction drawings, and shop drawings, (the Design Submittal), for approval at least 3 week(s) prior to the beginning of construction. A detailed explanation of the design parameters for settlement calculations and a Finite Element Model demonstrating satisfactory support and anticipated uncracked performance of the slab-on-grade floor slab under service loading of shall be included in the Design Submittal. Additionally, the quality control test program for aggregate pier system, meeting these design requirements, shall be submitted. All computer-generated calculations and drawings shall be prepared and sealed by a Professional Engineer, licensed in the State or Province where the piers are to be built. Submittals will be submitted electronically only unless otherwise required by specific submittal instructions.

4.0 EXECUTION

4.1 Approved Installation Procedures

The installation procedures of the aggregate pier elements shall be submitted with the calculation submittal to provide general criteria for the construction. Unless otherwise approved by the Designer, the installation method used for aggregate pier construction shall be that as used in the construction of the successful modulus test.

4.2 Plan Location and Elevation of aggregate pier Elements

The as-built center of each pier shall be within 6 inches of the locations indicated on the plans. Piers installed outside of the above tolerances and deemed not acceptable shall be rebuilt at no additional expense to the Owner.

4.3 Rejected Aggregate Pier Elements

Aggregate pier elements installed beyond the maximum allowable tolerances shall be abandoned and replaced with new piers, unless the Designer approves the condition or provides other remedial measures.

All material and labor required to replace rejected piers shall be provided at no additional cost to the Owner, unless the cause of rejection is due to an obstruction or mislocation.

5.0 QUALITY CONTROL

5.1 Control Technician

The Installer shall have a full-time, on-site Control Technician to verify and report all installation procedures. The Installer shall immediately report any unusual conditions encountered during installation to the Aggregate Pier Designer, the General Contractor, and to the Testing Agency.

5.2 Aggregate Pier Modulus Test

As required by the Designer, an Aggregate Pier Modulus Test(s) will be performed at locations agreed upon by the Designer and the Testing Agency to verify or modify aggregate pier designs. Modulus Test Procedures shall utilize appropriate portions of ASTM D 1143 and ASTM D 1194, as outlined in the aggregate pier design submittal.

6.0 QUALITY ASSURANCE

6.1 Independent Engineering Testing Agency (Owner's Quality Assurance)

The Aggregate Pier Installer shall provide full-time Quality Control monitoring of aggregate pier construction activities. The Owner or General Contractor is responsible for retaining an independent engineering testing firm to provide Quality Assurance services.

6.2 Responsibilities of Independent Engineering Testing Agency

A. The Testing Agency shall monitor the modulus test pier installation and testing. The Installer shall provide and install all dial indicators and other measuring devices.

B. The Testing Agency shall monitor the installation of aggregate pier elements to verify that the production installation practices are similar to those used during the installation of the modulus test elements.

C. The Testing Agency shall report any discrepancies to the Installer and General Contractor immediately.

D. The Testing Agency shall observe the excavation, compaction and placement of the foundations as described in Section 7.5 and preparation and compaction of floor slab areas and placement of fill above constructed elements.

7.0 RESPONSIBILITIES OF THE GENERAL CONTRACTOR

7.1 Site Preparation and Protection

A. The General Contractor shall locate and protect underground and aboveground utilities and other structures from damage during installation of the aggregate pier elements.

B. Site grades for aggregate pier installation shall be within 1 foot of the top of footing elevation or finished grade elevation to minimize aggregate pier installation depths. Ground elevations and bottom of footing elevations shall be provided to the Aggregate Pier Installer in sufficient detail to estimate installation depth elevations to within 3 inches.

C. The General Contractor will provide site access to the Installer, after earthwork in the area has been completed. A working surface shall be established and maintained by the General Contractor to provide wet weather protection of the subgrade and to provide access for efficient operation of the aggregate pier installation.

D. Prior to, during and following aggregate pier installation, the General Contractor shall provide positive drainage to protect the site from wet weather and surface ponding of water.

7.2 Aggregate Pier Layout

The location of aggregate pier-supported foundations for this project, including layout of individual aggregate pier elements, shall be marked in the field using survey stakes or similar means at locations shown on the drawings.

7.3 Contractor's / Owner's Independent Testing Agency (Owner's Quality Assurance)

General Contractor is responsible for acquiring an Independent Testing Agency (Quality Assurance) as required. Testing Agency roles are as described in Part 6 of this specification. The aggregate pier Installer will provide Quality Control services as described in Part 5 of this specification.

7.4 Excavations of Obstructions

A. Should any obstruction be encountered during aggregate pier installation, the General Contractor shall be responsible for promptly removing such obstruction, or the pier shall be relocated or abandoned. Obstructions include, but are not limited to, boulders, timbers, concrete, bricks, utility lines, etc., which shall prevent placing the piers to the required depth, or shall cause the pier to drift from the required location.

B. Dense natural rock or weathered rock layers shall not be deemed obstructions, and piers may be terminated short of design lengths on such materials.

7.5 Utility Excavations

The General Contractor shall coordinate all excavations made subsequent to aggregate pier installations so that excavations do not encroach on the piers as shown in the aggregate pier construction drawings. Protection of completed aggregate pier elements is the responsibility of the General Contractor. In the event that utility excavations are required in close proximity to the installed aggregate pier elements, the General Contractor shall contact the Aggregate Pier Designer immediately to develop construction solutions to minimize impacts on the installed aggregate pier elements.

7.6 Footing Bottoms

A. Excavation and surface compaction of all footings shall be the responsibility of the General Contractor.

B. Foundation excavations to expose the tops of aggregate pier elements shall be made in a workman-like manner, and shall be protected until concrete placement, with procedures and equipment best suited to (1) avoid exposure to water, (2) prevent softening of the matrix soil between and around the aggregate pier elements before pouring structural concrete, and (3) achieve direct and firm contact between the dense, undisturbed aggregate pier elements and the concrete footing.

C. All excavations for footing bottoms supported by aggregate pier foundations shall be prepared in the following manner by the General Contractor. Recommended procedures for achieving these goals are to:

1. Limit over-excavation below the bottom of the footing to 3-inches (including disturbance from the teeth of the excavation equipment).

2. Compaction of surface soil and top of aggregate pier elements shall be prepared using a motorized impact compactor. Sled-type tamping devices shall only be used in granular soils and when approved by the designer. Loose or soft surficial soil over the entire footing bottom shall be recompacted or removed, respectively. The surface of the aggregate pier shall be recompacted prior to completing footing bottom preparation.

3. Place footing concrete immediately after footing excavation is made and approved, preferably the same day as the excavation. Footing concrete must be placed on the same day if the footing is bearing on moisture-sensitive soils. If same day placement of footing concrete is not possible, open excavations shall be protected from surface water accumulation. Methods must be pre-approved by the Designer.

D. The following criteria shall apply, and a written inspection report sealed by the project Testing Agency shall be furnished to the Installer to confirm:

1. That water (which may soften the unconfined matrix soil between and around the aggregate pier elements, and may have detrimental effects on the supporting capability of the aggregate pier reinforced subgrade) has not been allowed to pond in the footing excavation at any time.

2. That all aggregate pier elements designed for each footing have been exposed in the footing excavation.

3. That immediately before footing construction, the tops of aggregate pier elements exposed in each footing excavation have been inspected and recompacted as necessary with mechanical compaction equipment.

4. That no excavations or drilled shafts (elevator, etc) have been made after installation of aggregate pier elements within the excavation limits described in the aggregate pier construction drawings, without the written approval of the Installer or Designer.

E. Failure to provide the above inspection and certification by the Testing Agency, which is beyond the responsibility of the aggregate pier Installer, may void any written or implied warranty on the performance of the aggregate pier system.

END OF SECTION 310100

Designation: D 1194 – 72 (Reapproved 1987)$^{\epsilon 1}$

Standard Test Method for Bearing Capacity of Soil for Static Load and Spread Footings[1]

This standard is issued under the fixed designation D 1194; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the Department of Defense. Consult the DoD Index of Specifications and Standards for the specific year of issue which has been adopted by the Department of Defense.

$^{\epsilon 1}$ NOTE—Section 5 was added editorially in October 1987.

1. Scope

1.1 This test method covers estimation of the bearing capacity of soil in place by means of field loading tests. This test method is only a part of the necessary procedure for soil investigation for foundation design. It gives information on the soil only to a depth equal to about two diameters of the bearing plate, and takes into account only part of the effect of time.

1.2 The values stated in inch-pound units are to be regarded as the standard.

1.3 *This standard may involve hazardous materials, operations, and equipment. This standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Apparatus

2.1 *Loading Platforms or Bins* of sufficient size and strength to supply the estimated total load required or equivalent means of supplying the total load reaction anticipated.

2.2 *Hydraulic or Mechanical Jack Assembly* of sufficient capacity to provide and maintain the maximum estimated load for the specific soil conditions involved, but not less than 50 tons (440 kN) in any case, and at least one device, such as a pressure gage, electronic load cell, or proving ring, for measuring the force exerted by the jack. The force-measuring devices should be capable of recording the load with an error not exceeding ±2 % of the load increment used.

2.3 *Bearing Plates*—Three circular steel bearing plates, not less than 1 in. (25 mm) in thickness and varying in diameter from 12 to 30 in. (305 to 762 mm), including the minimum and maximum diameter specified or square steel bearing plates of equivalent area. As an alternative, three small concrete footings of the size mentioned or larger can be cast *in-situ*. Such footings must have a depth of not less than two thirds of their width.

2.4 *Settlement-Recording Devices*, such as dial gates, capable of measuring settlement of the test plates to an accuracy of at least 0.01 in. (0.25 mm).

2.5 *Miscellaneous Apparatus*, including loading columns, steel shims, and other construction tools and equipment required for preparation of the test pits and loading apparatus.

NOTE 1—Testing assemblies may vary widely, depending on job conditions, testing requirements, and equipment available. The testing assembly and program should be planned in advance and approved by the supervising engineer, and in general can permit considerable latitude in details within the specific requirements noted above and outlined in the following test procedure. A typical assembly for conducting load tests is illustrated in Fig. 1.

3. Procedure

3.1 *Selection of Test Areas*—Base the selection of representative test areas for bearing tests on the results of exploratory borings and on the design requirements of the structure. Unless otherwise specified, make the load test at the elevation of the proposed footings and under the same conditions to which the proposed footings will be subjected. At the selected elevation place the bearing plates at the same relative depths (depths expressed in plate diameters) as the actual footing.

NOTE 2—For footings placed under permanently excavated basements the depth of the actual footing is construed as the depth from the basement level or depth over which the surcharge is permanently acting, rather than the depth from the ground surface.

NOTE 3—If the mentioned condition of equal relative depth cannot be met for practical reasons, the test results must be interpreted by using an appropriate theory of bearing capacity. Also make corrections for the effects of the shape and size of the footing and the effects of the water table as appropriate.

3.2 *Test Pits*—At least three test locations are required, and the distance between test locations shall not be less than five times the diameter of the largest plate used in the tests. Carefully level and clean the areas to be loaded by the test plates or footings so that the loads are transmitted over the entire contact areas on undisturbed soil. Prior to loading, protect test pits and areas against moisture changes in the soil unless it is expected that wetting of the soil will occur at some future time, as in the case of hydraulic structures. In this case, prewet the soil in the area to the desired extent to a depth not less than twice the diameter of the largest bearing plate.

3.3 *Loading Platforms*—Support the loading platforms or bins by cribbing or other suitable means, at points as far

[1] This test method is under the jurisdiction of ASTM Committee D-18 on Soil and Rock and is the direct responsibility of Subcommittee D18.10 on Bearing Tests of Soils in Place.

Current edition approved March 13, 1972. Published May 1972. Originally published as D 1194 – 52 T. Last previous edition D 1194 – 57 (1966).

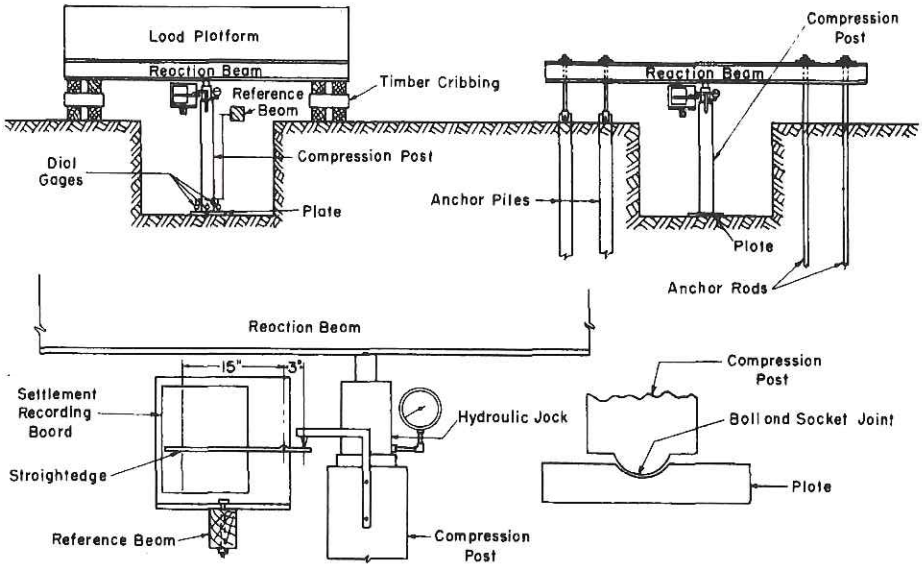


FIG. 1 Typical Setup for Conducting Static Load Tests

removed from the test area as practicable, and preferably not less than 8 ft (2.4 m). The total load required for the test shall be available at the site before the test is started.

3.4 *Dead Load*—Weigh and record as dead weight all equipment used, such as steel plates, loading column and jack, etc., that are to be placed on the test area prior to the application of the load increments.

3.5 *Reference Beam*—Independently support the beam supporting dial gages or other settlement-recording devices as far as practicable, but not less than 8 ft (2.4 m) from the center of the loaded area.

3.6 *Load Increments*—Apply the load to the soil in cumulative equal increments of not more than 1.0 ton/ft^2 (95 kPa), or of not more than one tenth of the estimated bearing capacity of the area being tested. Accurately measure each load, and apply it in such a manner that all of the load reaches the soil as a static load, without impact, fluctuation, or eccentricity.

3.7 *Time Interval of Loading*—After the application of each load increment, maintain the cumulative load for a selected time interval of not less than 15 min.

NOTE 4—Longer time intervals may be determined by maintaining the load until the settlement has ceased or the rate of settlement becomes uniform. However, maintain any type of time interval so selected for each load increment in all tests of any series.

3.8 *Measurement of Settlement*—Keep a continuous record of all settlements. Make settlement measurements as soon as possible before and after the application of each load increment, and at such equal time intervals, while the load is being held constant, as will provide not less than six settlement measurements between load applications.

3.9 *Termination of Tests*—Continue each test until a peak load is reached or until the ratio of load increment to settlement increment reaches a minimum, steady magnitude. If sufficient load is available, continue the test until the total settlement reaches at least 10 % of the plate diameter, unless a well-defined failure load is observed. After completion of observations for the last load increment, release this applied load in three approximately equal decrements. Continue recording rebound deflections until the deformation ceases or for a period not smaller than the time interval of loading.

NOTE 5—The following alternative loading procedure is also permissible: Apply the load to the soil in increments corresponding to settlement increments of approximately 0.5 % of the plate diameter. After the application of each settlement increment, measure the load at some fixed time intervals, for example, 30 s, 1 min, 2 min, 4 min, 8 min, and 15 min, after load application, until the variation of the load ceases or until the rate of variation of the load, on a load *versus* logarithm-of-time scale becomes linear. Continue loading in selected settlement increments. Termination of tests and unloading are made in the same manner as in 3.9.

4. Report

4.1 In addition to the continuous listing of all time, load, and settlement data for each test, as prescribed in Section 3, report all associated conditions and observations pertaining to the test, including the following:

4.1.1 Date,
4.1.2 List of personnel,
4.1.3 Weather conditions,
4.1.4 Air temperature at time of load increments, and
4.1.5 Irregularity in routine procedure.

5. Precision and Bias

5.1 The precision and bias of this test method for determining the bearing capacity of soil in place by means of a field loading test has not been determined. No available methods provide absolute values for the bearing capacity of soil in place against which this method can be compared. The variability of the soil and the resulting disturbance of the soil under the loading plate do not allow for the repetitive duplication of test results required to obtain a meaningful statistical evaluation. The subcommittee is seeking pertinent data from users of this method which may be used to develop meaningful statements of precision and bias.

Attachment U

13251 Seaport Lofts Average Grade Calculation

Perimeter Length	Elevations	Extension
30	39.50	1,185.00
8	39.74	317.92
17	40.07	681.19
10	40.40	404.00
17	40.73	692.41
10	41.07	410.70
17	41.35	702.95
8	41.69	333.52
8	41.74	333.92
17	42.07	715.19
10	42.40	424.00
17	42.73	726.41
10	43.07	430.70
17	43.19	734.23
10	43.32	433.20
17	43.66	742.22
33	45.43	1,499.19
14	46.86	656.04
29	48.13	1,395.77
40	49.70	1,988.00
27	42.35	1,143.45
17	42.15	716.55
120	41.05	4,926.00
10	39.73	397.30
28	39.45	1,104.60
27	39.62	1,069.74
39	39.62	1,545.18

87.25
42.35
44.90

87.75
42.75
45.00 ok

Total Perimeter (A) Length	**607**	1140.82 ÷ 27 = 42.25092	
		Elevation Subtotal (B)	**25,709.38** ÷ 607 =
Average Grade (B/A)	**42.35482702**		

Marge Schmuckal - RE: comments from zoning regarding height

From: "David White" <dmwarch@comcast.net>
To: "'Helen Donaldson'" <HCD@portlandmaine.gov>
Date: 10/8/2013 10:02 PM
Subject: RE: comments from zoning regarding height
CC: "'Will Conway'" <wconway@sebagotechnics.com>

Nell,

We measure the top of the roof to the top of the plywood on the roof trusses, so we are probably on the safe side. The roof slopes to drains, so the measurement would be to the highest location. The parapet that surrounds the roof are is to shield the roof ventilators, the plumbing stacks and the condenser units for each dwelling unit. Also on the roof is the make up air unit which serves the corridors. The elevator hoistway will extend above the roof deck, probably to or slightly above the roof deck. This is allowed by the zoning ordinance. Having the parapet does effectively shield these items from street level as well as any floor height6' lower than the roof level unless you happen to be on the top floor of the townhouses beyond as they are higher than the roof level. This parapet works the same way as the parapet on the adjoining Bay House project.

David

From: Helen Donaldson [mailto:HCD@portlandmaine.gov]
Sent: Tuesday, October 08, 2013 6:37 PM
To: dmwarch@comcast.net
Cc: Will Conway
Subject: comments from zoning regarding height

David and Will,

Marge's comments on the elevation calculations are as follows:

More plans have been submited showing the average grade and the roof elevation. I would want a little more clarity as to what is being considered as the "roof elevation". The definitions required the height of a building to be measure to the top of the roof beam. Is that where the 87.25 measurement is taken? Also what is above that area? The plans show a higher ekevation going around the building. I did not see any plans that explain that level. Is it for sheilding mechanical equipment? The dBA's can be assessed at the time of a building permit for the HVAC systems.

To follow up the 45' maximum height is being exactly met based upon the information received, if the upper roof shown on the plans is for mechanical systems.

Marge Schmuckal
Zoning Administrator
Can you provide me with a response for Marge? I'm still hoping we can get rid of this condition!

Thanks,
Nell