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15 August 2007 File No. 30322-030

Riverwalk, LLC 2 Market Street, Suite 500 Portland, Maine 04101

Attention:

Mr. Drew Swenson

Manager

Subject:

Summary of Pile Foundation Installation

Proposed Ocean Gateway Garage

Portland, Maine

Dear Mr. Swenson:

The purpose of this letter is to transmit the pile driving records for the above referenced project in accordance with Section 1808.2 of the International Building Code, 2003 edition (IBC Code).

General

165 steel HP12x53 and HP14x102 H-piles were driven to end bearing in the underlying glacial till and/or bedrock. The piles were fabricated from Grade 50 steel (yield strength of 50 ksi) and were advanced using a steel driving shoe. Design capacities (axial compression) of the piles are 180 and 340 kips for the HP12x53 and HP14x102 piles, respectively.

Indicator Pile Installation and Dynamic Pile Load Testing

Prior to the start of pile driving, the contractor's engineer submitted their WEAP analysis for review by Haley & Aldrich. This analysis concluded that the following driving criteria should be used to install the piles: 7 and 10 blows per inch (bpi) for the last 6 in. of driving for the HP12x53 and HP14x102, respectively using the pile-hammer system described below. The indicator piles were driven using this criteria. G. Donaldson Construction Co. (Donaldson) installed all of the indicator and production piles for this project.

A total of seven indicator piles were driven at the site on 6 and 7 June 2007 (Pile Nos. 20, 30, 36, 86, 92, 141A and 151). An eighth indicator was attempted at column line B-3 but the pile was not long enough to achieve end bearing without splicing. Donaldson and Haley & Aldrich agreed that this pile was not needed as an indicator pile but would later be spliced and used as a production pile. Both pile sizes were driven using the Junttan HHK-9A hydraulic hammer proposed by Donaldson (in their original WEAP submittal) to install the production piles. The HHK-9A hammer has a maximum rated energy of 78,000 ft-lbs with a ram weight of 19.8 kips and a maximum stroke of 3.94 ft. An 18-in. ram fall setting was used to install the HP12x53 piles and a 30-in. ram fall setting was used to install the HP14x102 piles,

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resulting in hammer energies of approximately 25,000 and 42,000 ft-lbs, respectively. Dynamic pile testing was performed by Geosciences Testing and Research, Inc. (GTR). GTR prepared a document entitled "Dynamic Pile Testing Report, Ocean Gateway Parking Garage – Eastern Waterfront Development, Portland, ME," dated 10 June 2007.

Results of Dynamic Pile Load Testing

We reviewed the above referenced report prepared by GTR. A summary of the dynamic testing results and the recommended driving criteria that were used to install the production piles are provided below.

- At the end of initial driving, the calculated total (ultimate) capacity of the piles tested were:
 - \circ 535 to 637 kips (FS = 3.0 to 3.5) for the HP 12x53 piles (2 piles tested)
 - \circ 828 to 1158 kips (FS = 2.4 to 3.4) for the HP 14x102 piles (5 piles tested)

In summary, the indicator piles were driven to the required ultimate capacity with a factor of safety (FS) greater than or equal to the minimum 2.25 (per IBC Code requirements). Accordingly, the piles are acceptable to support the design capacities of 180 and 340 kips (axial compression) for the HP12x53 and HP14x102 pile sections, respectively.

- Per the requirements of the project specifications, four of the indicator piles were selected for "restrike" 24 hours after the end of initial driving to assess false driving resistance (i.e., loss of capacity) and/or setup (i.e., gain in capacity) of the piles. Based on restrike results no appreciable loss or gain in capacity was measured between the end of initial driving and the beginning of redriving. However, two of the piles that were restruck drove at a reduced penetration resistance at the beginning of redriving as compared to the end of initial driving (e.g., 7 bpi at the end of initial driving vs. 4 bpi at beginning of redriving, and 8 bpi at end of initial driving criteria (originally submitted in the WEAP analysis) for production pile installation (see next bullet).
- Based on the PDA and restrike results, we recommended that the production piles be installed based on the following revised driving criteria:
 - o a minimum of 8 bpi for the last 6 in. of driving for HP12x53 piles (original WEAP criteria was 7 bpi)
 - o a minimum of 9 bpi for the last 6 in. of driving for HP14x102 piles (original WEAP criteria was 10 bpi)
 - o or 10 blows per less than ½ in. of pile penetration (refusal)

The production piles were installed using these revised criteria.

The measured hammer energy delivered to the indicator piles during installation ranged from 26,200 to 30,500 ft-lbs for the HP12x53 piles, and 36,800 to



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43,400 ft-lbs for the HP14x102 piles. These measurements confirmed the hammer energies for the ram fall settings used to install the piles.

The average compressive stress in the pile section was less than the 90 percent of the yield strength of the steel (45 ksi), per the requirements of the IBC Code. No signs of pile damage were noted in the dynamic records.

Monitoring of Pile Installation

Per the requirements of the IBC Code, a Haley & Aldrich field engineer provided full-time monitoring of pile installation, including all indicator and production piles. Haley & Aldrich was present to verify pile dimensions, to document installation settings of the pile driving equipment, to record pile resistance information during driving and to verify that the specified driving criteria were met for each installed pile (i.e., when to terminate driving of each pile). Based on our observations and measurements of pile resistance during driving, it is our opinion that none of the piles were structurally damaged during installation.

Per the project specifications all of the piles installed along 3.1-line (adjacent to Fore Street) were pre-augered down to El. 0 (approximately 15 ft below grade) in order to protect the adjacent 4-ft diameter brick sewer beneath in Fore Street (sewer invert at approximately El. 4). A 17-in. diameter, continuous flight auger was used to pre-auger at each pile location. Haley & Aldrich monitored the pre-augering activities.

As built plan location of piles and elevations of the pile cut-offs were determined using optical surveying methods by Ledgewood. This information was provided to Haley & Aldrich and Simon Design Engineering to check each pile for compliance with the plan tolerances outlined in the project specifications. No additional piles were driven to account for out of tolerance piles. Surveyed pile cut-off elevations were used to determine final pile quantities. The asbuilt surveyed information can be provided to you upon your request.

As documented in the enclosed Pile Installation Summary (Table I) and Daily Summary – End Bearing Pile Installation records (Appendix A), Haley & Aldrich observed the installation of 165 piles (41 HP12x53s and 124 HP14x102s) during the period from 6 to 27 June 2007. A total of 8,820.5 If of pile was installed based on the surveyed pile cut off elevations provided by Ledgewood (2,212.2 linear ft of HP12x53 and 6,608.3 If of HP14x102). A total of 37 piles required mechanical (Champion) splices and 0 piles required full-penetration weld splices (for piles along column line 1.9-2.1).

Conclusion and Closure

In our opinion, the pile installation work performed by Donaldson and monitored in the field by Haley & Aldrich was conducted in general accordance with the design intent of the project specifications, the project-specific pile driving criteria as outlined herein, and the requirements of the IBC Code.



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Please do not hesitate to contact us if you have any questions regarding the pile installation for the Ocean Gateway Garage or if you need any additional information.

Sincerely yours,

HALEY & ALDRICH, INC.

Bryan C. Steinert

Engineer

Wayne A. Chadbourne, P.E.

Vice President

Attachments:

Table I – Pile Installation Summary

Figure 1 - Foundation Plan

Appendix A - Daily Summary - End Bearing Pile Installation

c: Intercontinental Real Estate Co.; Attn.: Richard Libardoni Ledgewood Construction Co.; Attn.: Steve Pitts

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Table I - Pile Installation Summary Ocean Gateway Garage Portland, Maine

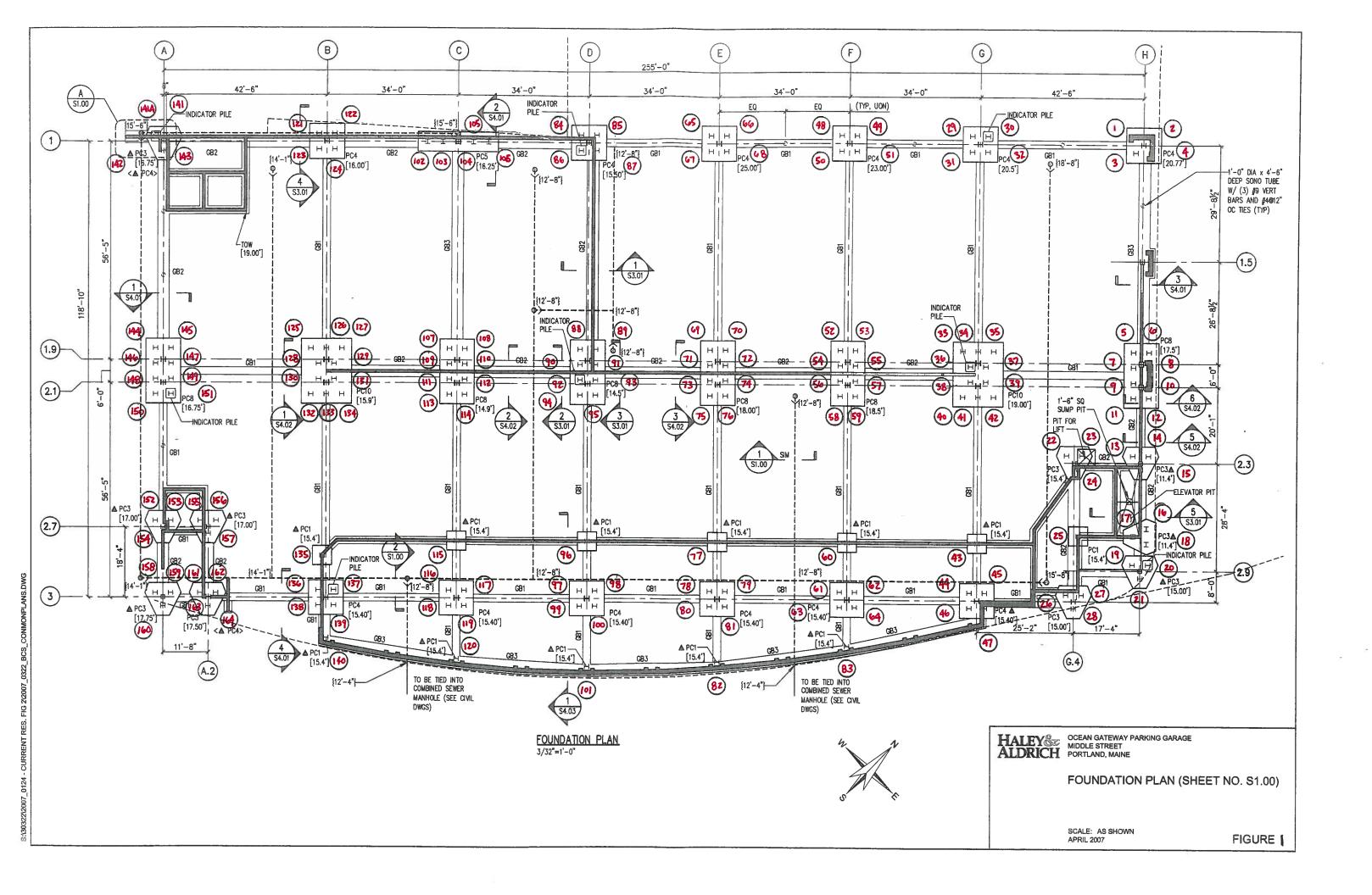
Sort	Pile	Pile	Date	Date	Date	Date	Pile Length		Elevation		Pay								I
7,	сар	Number	Bottom	Тор	if Pile	Pile	Installed	Top of Pile	Cut-off	Pile Tip	Length		В	lows Per	Inch Las	st 6 Inch	es		Comments
	location	w/in cap	Installed	Installed	Restike	Driven	(ft)	(ft)	(ft)	(ft)	(ft)			T 0		10	10	Avg	Defined
1 2	H-1 H-1	2	8-Jun-07 8-Jun-07	8-Jun-07 8-Jun-07	-	8-Jun-07 8-Jun-07	60.67 60.67	45.50 44.65	17.80 17.80	-15.2 -16.0	33.0 33.8	6 4	3	6 3	6 8	10	10		Refusal Refusal
3	H-1	3	8-Jun-07	8-Jun-07		8-Jun-07	60.67	38.85	17.80	-21.8	39.6	4	5	5	6	9	10		Refusal
4	H-1	4	8-Jun-07	8-Jun-07		8-Jun-07	60.58	48.80	17.80	-11.8	29.6	5	5	12	10	18	10	 	Refusal
5	H-1.9/2.1	5	7-Jun-07	7-Jun-07		7-Jun-07	60.63	33.65	15.00	-27.0	42.0	3	5	4	8	10	10		Refusal
6	H-1.9/2.1	6	7-Jun-07	7-Jun-07		7-Jun-07	60.63	34.33	15.00	-26.3	41.3	3	7	8	11	12	10		Refusal
7	H-1.9/2.1	7	7-Jun-07	7-Jun-07		7-Jun-07	60.63	33.27	15.00	-27.4	42.4	3	3	5	10	11	10		Refusal
8	H-1.9/2.1	8	7-Jun-07	7-Jun-07		7-Jun-07	60.63	34.51	15.00	-26.1	41.1	4	6	8	11	12	10		Refusal
9	H-1.9/2.1	9	7-Jun-07	7-Jun-07		7-Jun-07	60.63	32.14	15.00	-28.5	43.5	4	4	4	8	13	10		Refusal
10	H-1.9/2.1	10	7-Jun-07	7-Jun-07		7-Jun-07	60.63	32.02	15.00	-28.6	43.6	4	5	6	10	10	10		Refusal
11 12	H-1.9/2.1 H-1.9/2.1	11 12	7-Jun-07 7-Jun-07	7-Jun-07 7-Jun-07		7-Jun-07 7-Jun-07	60.63 60.63	28.80 29.92	15.00 15.00	-31.8 -30.7	46.8 45.7	5	<u>5</u> 7	9	10 9	15 12	10	<u> </u>	Refusal Refusal
13	H-2.3	13	7-Jun-07 7-Jun-07	7-Jun-07		7-Jun-07 7-Jun-07	60.50	26.59	7.92	-33.9	41.8	5	8	8	10	12	10		Refusal
14	H-2.3	14	7-Jun-07	7-Jun-07		7-Jun-07	60.63	27.87	7.87	-32.8	40.6	2	2	2	2	10	10	——	Refusal
15	H-2.3	15	7-Jun-07	7-Jun-07		7-Jun-07	60.50	25.63	7.92	-34.9	42.8	2	2	3	4	7	14		Refusal
16	H-2.8	16	7-Jun-07	7-Jun-07		7-Jun-07	60.58	20.63	7.92	-40.0	47.9	7	7	8	8	8	8	8	
17	H-2.8	17	7-Jun-07	7-Jun-07		7-Jun-07	60.58	20.37	7.91	-40.2	48.1	6	6	7	8	8	10		Refusal
18	H-2.8	18	7-Jun-07	7-Jun-07		7-Jun-07	60.63	21.29	7.91	-39.3	47.3	3	3	3	6	16	10		Refusal
19	H-2.9	19	7-Jun-07	7-Jun-07	<u> </u>	7-Jun-07	60.58	19.57	11.99	-41.0	53.0	6	6	8	8	8	10	<u> </u>	Refusal
20	H-2.9	20	6-Jun-07	6-Jun-07	7-Jun-07	6-Jun-07	65.50	24.08	11.92	-41.4	53.3	2	3	3	3	3	7	4	Indicator Pile, restruck on 6/7/07
21	H-2.9 G.4-2.3	21 22	7-Jun-07 13-Jun-07	7-Jun-07 13-Jun-07		7-Jun-07 13-Jun-07	60.54 60.79	19.59 24.02	12.01 12.44	-41.0 -36.8	53.0 49.2	9	<u>8</u> 10	11	10	11	10 10	 	Refusal Refusal
22 23	G.4-2.3	23	13-Jun-07	13-Jun-07		13-Jun-07	60.75	23.54	12.37	-37.2	49.6	5	5	9	15	10		-	Refusal
24	G.4-2.3	24	13-Jun-07	13-Jun-07		13-Jun-07	60.83	22.60	12.39	-38.2	50.6	13	14	13	16	10			Refusal
25	G.4-2.8	25	13-Jun-07	13-Jun-07		13-Jun-07	60.75	19.62	11.37	-41.1	52.5	10	10	10	<u> </u>				Refusal
26	G.4-3	26	8-Jun-07	8-Jun-07	i	8-Jun-07	60.67	17.55	11.97	-43.1	55.1	6	8	10	14	10	10		Refusal
27	G.4-3	27	8-Jun-07	8-Jun-07		8-Jun-07	60.75	17.60	12.02	-43.2	55.2	6	8	10	9	10	10	9	
28	G.4-3	28	8-Jun-07	12-Jun-07		8-Jun-07	60.67	16.29	11.96	-44.4	56.3	10	7	6	8	13	10		Refusal
29	G-1	29	8-Jun-07	8-Jun-07		8-Jun-07	60.63	27.08	17.50	-33.6	51.1	5	7	11	11	12	10		Refusal
30	G-1	30	6-Jun-07	6-Jun-07		6-Jun-07	60.50	30.61	17.50	-29.9	47.4	7	11 11	10	44	14	10		Indicator Pile, Refusal Refusal
31 32	G-1 G-1	31 32	8-Jun-07 8-Jun-07	8-Jun-07 8-Jun-07		8-Jun-07 8-Jun-07	60.60 60.60	27.75 28.75	17.50 17.50	-32.9 -31.9	50.4 49.4	8 5		5	11	13	12	 	Refusal
33	G-1.9/2.1	33	13-Jun-07	13-Jun-07		13-Jun-07	60.67	20.32	14.65	-40.4	55.0	9	10	11	11	12	12	11	Heritsar
34	G-1.9/2.1	34	13-Jun-07	13-Jun-07	-	13-Jun-07	60.71	19.12	14.65	-41.6	56.2	5	6	6	11	15	10	 	Refusal
35	G-1.9/2.1	35	13-Jun-07	13-Jun-07		13-Jun-07	60.75	22.96	14.66	-37.8	52.5	9	10	9	9	9	10		Refusal
36	G-1.9/2.1	36	6-Jun-07	6-Jun-07		6-Jun-07	60.00	19.10	14.66	-40.9	55.6	2	1	2	2	3	12		Indicator Pile, Refusal
37	G-1.9/2.1	37	13-Jun-07	13-Jun-07		13-Jun-07	61.17	20.69	14.64	-40.5	55.1	15	10					L	Refusal
38	G-1.9/2.1	38	13-Jun-07	13-Jun-07		13-Jun-07	60.67	19.36	14.65	-41.3	56.0	7	9	11	8	11	10		Refusal
39	G-1.9/2.1	39	13-Jun-07	13-Jun-07		13-Jun-07	60.79	19.98	14.65	-40.8	55.5	7	<u>3</u> 7	5 9	8	15	10		Refusal Refusal
40 41	G-1.9/2.1 G-1.9/2.1	40 41	13-Jun-07 13-Jun-07	13-Jun-07 13-Jun-07	-	13-Jun-07 13-Jun-07	60.79 60.67	21.34 21.35	14.66 14.67	-39.5 -39.3	54.1 54.0	10	11	13	11	18 15	10		Refusal
42	G-1.9/2.1	42	13-Jun-07	13-Jun-07		13-Jun-07	61.25	20.25	14.66	-41.0	55.7	10	10	9	10	11	11	10	Tiordodi
43	G-2.8	43	12-Jun-07	18-Jun-07		12-Jun-07	60.46	16.94	13.42	-43.5	56.9	12	10	<u></u>				<u> </u>	Refusal
44	G-3	44	8-Jun-07	8-Jun-07		8-Jun-07	60.50	17.28	12.40	-43.2	55.6	6	6	9	9	10	10		Refusal
45	G-3	45	8-Jun-07	12-Jun-07		8-Jun-07	60.50	16.67	12.40	-43.8	56.2	5	6	6	7	16	10		Refusal
46	G-3	46	8-Jun-07	8-Jun-07		8-Jun-07	60.50	17.22	12.38	-43.3	55.7	3	2	2	3	10	10		Refusal
47	G-3	47	8-Jun-07	8-Jun-07		8-Jun-07	65.54	22.34	12.39	-43.2	55.6	3	10	10	 _	12	1	<u> </u>	Refusal
48	F-1	48	8-Jun-07	8-Jun-07		8-Jun-07	60.54	23.35	20.00 20.00	-37.2 -37.3	57.2 57.3	3 7	10	10	9	13	10	9	Refusal
49 50	F-1	49 50	8-Jun-07 8-Jun-07	8-Jun-07 8-Jun-07		8-Jun-07 8-Jun-07	60.63 60.63	23.33	19.90	-37.3 -36.1	56.0	2	5	6	11	12	10	- 3	Refusal
50 51	F-1	50 51	8-Jun-07	8-Jun-07		8-Jun-07	61.17	23.95	20.00	-37.2	57.2	3	5	7	11	15	10		Refusal
52	F-1.9/2.1	52	14-Jun-07	15-Jun-07		14-Jun-07	60.79	17.43	14.76	-43.4	58.1	7	8	10	13	10			Refusal
53	F-1.9/2.1	53	14-Jun-07	15-Jun-07		14-Jun-07	61.17	17.65	14.82	-43.5	58.3	10	9	13	12	13	16	12	
54	F-1.9/2.1	54	14-Jun-07	15-Jun-07		14-Jun-07	60.75	17.01	14.68	-43.7	58.4	5	8	7	8	19	10		Refusal
55	F-1.9/2.1	55	14-Jun-07	15-Jun-07		14-Jun-07	60.79	17.81	14.89	-43.0	57.9	8	10	11	14	10	1.	<u> </u>	Refusal
56	F-1.9/2.1	56	14-Jun-07	15-Jun-07		14-Jun-07	60.75	16.97	14.72	-43.8	58.5	6	7	8	12	15	10	<u> </u>	Refusal
57 50	F-1.9/2.1 F-1.9/2.1	57 58	14-Jun-07	15-Jun-07		14-Jun-07	60.75 60.79	17.53 16.50	14.78 14.75	-43.2 -44.3	58.0 59.0	7 4	11 6	12	15 15	10 12	10	-	Refusal Refusal
58 59	F-1.9/2.1 F-1.9/2.1	59	14-Jun-07 14-Jun-07	15-Jun-07 15-Jun-07		14-Jun-07 14-Jun-07	60.75	16.92	14.75	-44.3 -43.8	58.6	4	6	7	12	17	10		Refusal
60	F-2.8	60	7-Jun-07	7-Jun-07		7-Jun-07	60.58	17.80	13.43	-42.8	56.2	11	12	13	14	' ''	- ``		Refusal
61	F-3	61	13-Jun-07	13-Jun-07		13-Jun-07	60.75	17.22	12.43	-43.5	56.0	9	11	15	13	15	10		Refusal
62	F-3	62	13-Jun-07	13-Jun-07		13-Jun-07	60.58	17.72	13.41	-42.9	56.3	3	3_	3	4	10	10		Refusal
63	F-3	63	13-Jun-07	13-Jun-07		13-Jun-07	60.67	18.57	12.42	-42.1	54.5	4	7	8	10	14	10		Refusal
64	F-3	64	12-Jun-07	12-Jun-07		12-Jun-07	60.50	14.47	12.36	-46.0	58.4	6	8	8	11	13	10		Refusal

Table I - Pile Installation Summary Ocean Gateway Garage Portland, Maine

Coape Number Coston File Pile Infallatic Top of Pile Cut-off Pile Decigin Coaper Decigin Coaper Decigin Coaper Decigin Coaper Decigin Deci	Sort Pile	Pile	Date	Date	Date	Date	Pile Length		Elevation	 	Pay								I
Nomino Nomino Installed Registed Presided Presided Registed Presided Registed R	No. Company	Number	Bottom	Тор	if Pile	Pile		Top of Pile	Cut-off	Pile Tip	•		В	lows Per	Inch Las	st 6 Inch	es		Comments
February February	location	w/in cap	Installed	installed	Restike	Driven	(ft)	•	(ft)	(ft)	(ft)							Avg	
Fig.	65 E-1	65	8-Jun-07	8-Jun-07		8-Jun-07	61.17	26.96	21.30	-34.2	55.5	5	7	9	14	_10			Refusal
E	66 E-1	66	8-Jun-07	8-Jun-07		8-Jun-07	61.13	26.90	21.30	-34.2	55.5	5	7	8	11	14	10		Refusal
Fig. 1 69 25-Jun 07 25	67 E-1	67	8-Jun-07	8-Jun-07		8-Jun-07	61.13	27.00	21.30	-34.1	55.4	15	15	14	15	10	l		Refusal
1	68 E-1	68	8-Jun-07	8-Jun-07		8-Jun-07	61.13	26.46	21.30	-34.7	56.0	6	8	8	8	12	10	9	
1 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 18-Jan 1	69 E-1.9/2.1	69	25-Jun-07	25-Jun-07		25-Jun-07	60.75	17.87	14.27	-42.9	57.2	8	10					<u> </u>	Refusal
Fig.	70 E-1.9/2.1	70	25-Jun-07	25-Jun-07		25-Jun-07	60.58		14.24									ļ	
13												+	15	<u> </u>			ļ	ļ	
Fig.													ļ	ļ					
Fig. 1				.						•		+					+		Refusal
February February		+										-		9	10	10	12	10	
77 E-2.8 77 12-Jun-07 28-Jun-07 12-Jun-07 80-32 34-99 13.38 45.3 59.7 13 8 9 13 10 Refusal 79 E-3 78 12-Jun-07 26-Jun-07 12-Jun-07 79-13 32.0 12.39 46.6 59.0 8 10 No. Refusal 79 E-3 79 12-Jun-07 79-11 32.08 12.39 46.1 55.5 9 20 10 Refusal 81 E-3 81 12-Jun-07 28-Jun-07 11-Jun-07 80.87 34.69 15.3 9 13 10 Refusal 81 1-Jun-07 28-Jun-07 11-Jun-07 80.87 34.69 12.44 46.9 58.6 7 15 10 11 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 12 10 <														L			 		
February February																	13		
February February												+		9	13	10			5
E-3 60 12-Jun-07 28-Jun-07 12-Jun-07 79-17 32.26 12.38 -46.9 59.3 9 13 10													_				 		`
61 E-3 81 12_bmr07 26_bmr07 12_bmr07 89.87 34.69 12_44 -46.2 58.8 7 15 10 Refusal 82 F-3.1 82 11_bmr07 26_bmr07 11_bmr07 80.65 28.75 12_44 -43.0 55.4 6 3 8 12_1 17 10 Refusal 85 F-3.1 83 12_bmr07 15_bmr07 60.58 26.37 12_51 -34.2 46.7 12_17 10 Refusal 85 D-1 85 15_bmr07 15_bmr07 60.50 18_bmr07 15_bmr07 10_bmr07 16_bmr07 16_bmr07 16_bmr07 16_bmr07 16_bmr07													-				ļ		
62 E-3.1 82 11-Jum/O7 28-Jum/O7 11-Jum/O7 80.65 28.75 12.49 45.19 64.4 7 10 12 10 11 10 10 84 5-1.1 83 12-Jum/O7 15-Jum/O7 15-Jum/O7 18-Jum/O7 18-Ju													-				 		
83 F-3.1 83 12-Jun-07 12-Jun-07 60.50 17.55 12.44 4.30 55.4 6 3 8 12 17 10 Refusal 84 D-1 84 15-Jun-07 15-Jun-07 60.58 28.637 12.51 .34.2 44.67 12 17 10 Land Refusal 85 D-1 85 15-Jun-07 15-Jun-07 60.50 19.80 12.56 -83.8 51.3 9 10 9 10 12 12 10 87 D-1 87 15-Jun-07 15-Jun-07 60.50 19.50 12.52 41.0 53.5 8 8 10 9 8 8 9 Indicator Pile 87 D-1 8.7 15-Jun-07 60.50 19.57 10.78 40.9 51.7 10 11 11 11 11 11 11 11 11 11 11 11 11 11												+			12	-	-	1.	Herusal
14																		10	D-6
Section Part Section Section												+			12	1/	10	 	
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D-1 B7 15-Jun-07 15-Jun-07 15-Jun-07 15-Jun-07 15-Jun-07 16-Jun-07 16-Ju																			Indianta Dila
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89 19-Jun-07 18-Jun-07												+						11	Detect
D-1.9/2.1 90 18-Jun-07 19-Jun-07 18-Jun-07 60.75 18.73 10.79 -42.0 52.8 5 11 17 22 20 10 Refusal										-									Refusai
191 D-1.9.2.1 91 18-Jun-07 18-Jun-07 60.75 19.43 10.76 41.3 52.1 9 9 9 10 14 13 17 12 12 12 19.2 19.2 19.2 19.2 19.2 19.2													_				+	10	Defined
22 D-1.9/2.1 92 6-Jun-07 6-Jun-07						-									_			10	Refusal
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D-3 97 12-Jun-07 25-Jun-07 12-Jun-07 78.48 26.23 12.37 -52.3 64.6 12 10															-	12	10	 	
D-3 98 12-Jun-07 26-Jun-07 12-Jun-07 80.83 29.19 12.51 -51.6 64.2 12 18 10		 										-	 	10			 		
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100 D-3 100 12-Jun-07 26-Jun-07 12-Jun-07 83.22 30.65 12.47 -52.6 65.0 12 10										-		+		+			 		
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102 C-1 102 14-Jun-07 14-Jun-07 14-Jun-07 14-Jun-07 60.75 25.96 11.77 -34.8 46.6 10 10 11 12 13 12 Refusal 103 C-1 103 14-Jun-07 14-Jun-07 14-Jun-07 60.75 24.97 11.77 -35.8 47.6 7 7 9 10 13 10 Refusal 104 C-1 104 14-Jun-07 14-Jun-07 14-Jun-07 14-Jun-07 60.75 24.91 11.77 -35.8 47.6 9 10 12 13 14 10 Refusal 105 C-1 105 14-Jun-07 14-Jun-07 14-Jun-07 60.75 24.91 11.77 -35.8 47.6 9 10 12 13 14 10 Refusal 105 C-1 105 14-Jun-07 14-Jun-07 14-Jun-07 60.75 24.97 11.73 -36.0 47.7 8 8 9 10 12 10 Refusal 106 C-1 106 14-Jun-07 14-Jun-07 14-Jun-07 60.58 24.79 11.72 -35.8 47.5 7 9 9 12 14 10 Refusal 107 C-1.9/2.1 107 18-Jun-07 18-Jun-07 60.50 27.76 11.14 -32.7 43.9 10 13 10 Refusal 108 C-1.9/2.1 109 18-Jun-07 18-Jun-07 60.50 25.90 11.15 -34.6 45.8 10 16 10 Refusal 110 C-1.9/2.1 110 18-Jun-07 18-Jun-07 60.50 25.72 11.14 -34.8 45.9 15														14	10		 		
103 C-1 103 14-Jun-07 14-Jun-07							; 								_	13	12	\vdash	
C-1 104 14-Jun-07 14-Jun-07 14-Jun-07 60.75 24.91 11.77 -35.8 47.6 9 10 12 13 14 10 Refusal												•		-			 		
C-1 105 14-Jun-07 14-Jun-07 14-Jun-07 60.75 24.77 11.73 -36.0 47.7 8 8 9 10 12 10 Refusal														-			+	 	
C-1 106 14-Jun-07 14-Jun-07 14-Jun-07 60.58 24.79 11.72 -35.8 47.5 7 9 9 12 14 10 Refusal												+			$\overline{}$		+		
107 C-1.9/2.1 107 18-Jun-07 18-Jun-07 60.50 27.76 11.14 -32.7 43.9 10 13 10 Refusal 108 C-1.9/2.1 108 18-Jun-07 18-Jun-07 60.50 26.57 11.17 -33.9 45.1 10 10 Refusal 109 C-1.9/2.1 109 18-Jun-07 18-Jun-07 60.50 25.90 11.15 -34.6 45.8 10 16 10 Refusal 110 C-1.9/2.1 110 18-Jun-07 18-Jun-07 60.50 25.72 11.14 -34.8 45.9 15 Image: control of the contro																-	+		
108 C-1.9/2.1 108 18-Jun-07 18-Jun-07 60.50 26.57 11.17 -33.9 45.1 10 10 Refusal 109 C-1.9/2.1 109 18-Jun-07 18-Jun-07 60.50 25.90 11.15 -34.6 45.8 10 16 10 Refusal 110 C-1.9/2.1 110 18-Jun-07 18-Jun-07 60.50 25.72 11.14 -34.8 45.9 15 Refusal 111 C-1.9/2.1 111 25-Jun-07 25-Jun-07 61.17 25.65 11.18 -35.5 46.7 7 11 12 17 18 Refusal 112 C-1.9/2.1 112 18-Jun-07 18-Jun-07 60.50 23.92 11.12 -36.6 47.7 6 5 8 10 15 10 Refusal 113 C-1.9/2.1 113 25-Jun-07 25-Jun-07 60.75 25.77 11.22 -35.0 46.2 10 9 8					-										_ _ _	- 	† 'Ŭ		44.00
109 C-1.9/2.1 109 18-Jun-07 18-Jun-07 60.50 25.90 11.15 -34.6 45.8 10 16 10 Refusal 110 C-1.9/2.1 110 18-Jun-07 18-Jun-07 60.50 25.72 11.14 -34.8 45.9 15 Refusal 111 C-1.9/2.1 111 25-Jun-07 25-Jun-07 61.17 25.65 11.18 -35.5 46.7 7 11 12 17 18 Refusal 112 C-1.9/2.1 112 18-Jun-07 18-Jun-07 60.50 23.92 11.12 -36.6 47.7 6 5 8 10 15 10 Refusal 113 C-1.9/2.1 113 25-Jun-07 25-Jun-07 60.75 25.77 11.22 -35.0 46.2 10 9 8 10 Refusal 114 C-1.9/2.1 114 18-Jun-07 18-Jun-07 60.75 24.13 11.16 -36.6 47.8 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td><u> </u></td> <td></td> <td></td> <td>t</td> <td></td> <td></td>										-				<u> </u>			t		
110 C-1.9/2.1 110 18-Jun-07 18-Jun-07 18-Jun-07 60.50 25.72 11.14 -34.8 45.9 15												-		10		T	i		
111 C-1.9/2.1 111 25-Jun-07 25-Jun-07 25-Jun-07 61.17 25.65 11.18 -35.5 46.7 7 11 12 17 18 Refusal 112 C-1.9/2.1 112 18-Jun-07 18-Jun-07 60.50 23.92 11.12 -36.6 47.7 6 5 8 10 15 10 Refusal 113 C-1.9/2.1 113 25-Jun-07 25-Jun-07 25-Jun-07 60.75 25.77 11.22 -35.0 46.2 10 9 8 10 Refusal 114 C-1.9/2.1 114 18-Jun-07 18-Jun-07 18-Jun-07 60.75 24.13 11.16 -36.6 47.8 10 12 10 Refusal 115 C-2.8 115 12-Jun-07 26-Jun-07 12-Jun-07 80.44 28.52 13.38 -51.9 65.3 7 8 8 10 13 10 Refusal												-	 	<u> </u>			1		
112 C-1.9/2.1 112 18-Jun-07 18-Jun-07 18-Jun-07 60.50 23.92 11.12 -36.6 47.7 6 5 8 10 15 10 Refusal 113 C-1.9/2.1 113 25-Jun-07 25-Jun-07 25-Jun-07 60.75 25.77 11.22 -35.0 46.2 10 9 8 10 Refusal 114 C-1.9/2.1 114 18-Jun-07 18-Jun-07 18-Jun-07 60.75 24.13 11.16 -36.6 47.8 10 12 10 Refusal 115 C-2.8 115 12-Jun-07 26-Jun-07 12-Jun-07 80.44 28.52 13.38 -51.9 65.3 7 8 8 10 13 10 Refusal												-	11	12	17	18			
113 C-1.9/2.1 113 25-Jun-07 25-Jun-07 25-Jun-07 60.75 25.77 11.22 -35.0 46.2 10 9 8 10 Refusal 114 C-1.9/2.1 114 18-Jun-07 18-Jun-07 18-Jun-07 60.75 24.13 11.16 -36.6 47.8 10 12 10 Refusal 115 C-2.8 115 12-Jun-07 26-Jun-07 12-Jun-07 80.44 28.52 13.38 -51.9 65.3 7 8 8 10 13 10 Refusal																-	10		
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115 C-2.8 115 12-Jun-07 26-Jun-07 12-Jun-07 80.44 28.52 13.38 -51.9 65.3 7 8 8 10 13 10 Refusal												+							
															10	13	10		
	116 C-3	116	12-Jun-07			12-Jun-07	79.65	24.61	12.43	-55.0	67.5	9	12						Refusal
117 C-3 117 12-Jun-07 26-Jun-07 12-Jun-07 78.65 30.20 12.44 -48.5 60.9 4 4 7 10 10 Refusal														4	7	10	10		
																			Indicator Pile, Refusal

Table I - Pile Installation Summary Ocean Gateway Garage Portland, Maine

Sort	Pile	Pile	Date	Date	Date	Date	Pile Length		Elevation		Pay						<u> </u>		
	cap	Number	Bottom	Тор	if Pile	Pile	Installed	Top of Pile	Cut-off	Pile Tip	Length		ВІ	ows Per	Inch Las	t 6 Inch	es		Comments
	location	w/in cap	Installed	Installed	Restike	Driven	(ft)	(ft)	(ft)	(ft)	(ft)							Avg	
119	C-3	119	12-Jun-07	26-Jun-07		12-Jun-07	77.44	26.67	12.44	-50.8	63.2	7	7	7	9	12	10		Refusal
120	C-3.1	120	11-Jun-07	26-Jun-07		11-Jun-07	80.50	27.63	12.32	-52.9	65.2	5	8	14	15	16	10		Refusal
121	B-1	121	14-Jun-07	14-Jun-07		14-Jun-07	60.58	29.92	12.97	-30.7	43.6	10	9	9	10	10	10	10	
122	B-1	122	14-Jun-07	14-Jun-07		14-Jun-07	60.63	30.05	13.00	-30.6	43.6	10	10	11	13	10			Refusal
123	B-1	123	14-Jun-07	14-Jun-07		14-Jun-07	60.63	29.82	12.97	-30.8	43.8	10							Refusal
124	B-1	124	14-Jun-07	14-Jun-07		14-Jun-07	60.63	30.14	13.00	-30.5	43.5	3	3	4	9	15	10	ļ	Refusal
125	B-1.9/2.1	125	25-Jun-07	25-Jun-07		25-Jun-07	60.75	24.35	11.14	-36.4	47.5	10	10	10					Refusal
126	B-1.9/2.1	126	25-Jun-07	25-Jun-07		25-Jun-07	60.75	22.57	11.10	-38.2	49.3	4	7	9	9	11	10		Refusal
127	B-1.9/2.1	127	25-Jun-07	25-Jun-07		25-Jun-07	60.58	23.38	11.20	-37.2	48.4	4	5	6	8	9	10	<u> </u>	Refusal
128	B-1.9/2.1	128	25-Jun-07	25-Jun-07		25-Jun-07	60.75	25.99	11.15	-34.8	45.9	5	5	8	10				Refusal
129	B-1.9/2.1	129	25-Jun-07	25-Jun-07		25-Jun-07	60.75	26.68	11.22	-34.1	45.3	9	11	11	11	12	10	<u> </u>	Refusal
130	B-1.9/2.1	130	25-Jun-07	25-Jun-07		25-Jun-07	60.75	26.17	11.14	-34.6	45.7	10	10				ļ		Refusal
131	B-1.9/2.1	131	25-Jun-07	25-Jun-07		25-Jun-07	60.75	26.84	11.21	-33.9	45.1	3	4	10	10				Refusal
132	B-1.9/2.1	132	25-Jun-07	25-Jun-07		25-Jun-07	60.75	25.25	11.16	-35.5	46.7	2	3	6	3	17	10	 	Refusal
133	B-1.9/2.1	133	25-Jun-07	25-Jun-07		25-Jun-07	60.83	25.79	11.21	-35.0	46.3	4	4	10					Refusal
134	B-1.9/2.1	134	25-Jun-07	25-Jun-07		25-Jun-07	60.58	26.53	11.21	-34.1	45.3	12	10				10		Refusal
135	B-2.8	135	26-Jun-07	27-Jun-07		26-Jun-07	80.58	32.66	13.39	-47.9	61.3	5	8	6	9	17	10	-	Refusal
136	B-3	136	26-Jun-07	27-Jun-07		26-Jun-07	91.50	40.21	12.87	-51.3	64.2	5	6	9	10	10	10	 	Refusal
137	B-3 B-3	137	6-Jun-07 26-Jun-07	27-Jun-07		6-Jun-07	80.83	29.10	12.36	-51.7 -52.6	64.1	10	10	_	10	10			Indicator Pile, Refusal
138	B-3	138 139		27-Jun-07		26-Jun-07	81.17	28.54	13.00		65.6	6	6	6	10	10	-		Refusal
139 140	B-3.1	140	26-Jun-07 13-Jun-07	27-Jun-07 27-Jun-07		26-Jun-07	88.20 80.29	36.11 26.21	12.76 12.96	-52.1 -54.1	64.9 67.0	15 4	10 3	4	4	8	10	-	Refusal Refusal
140	A-1	141	14-Jun-07	14-Jun-07		13-Jun-07 14-Jun-07	60.58	32.47	13.72	-54.1 -28.1	41.8	6	9	9	14	15	10	 	Refusal
142	A-1 A-1	141A	6-Jun-07	6-Jun-07	7-Jun-07	6-Jun-07	65.60	38.77	13.72	-26.8	40.6	12	12	12	 -	13	10		Indicator Pile, Refusal
143	A-1	142	14-Jun-07	14-Jun-07	/-Jun-0/	14-Jun-07	60.54	32.73	13.63	-20.8 -27.8	41.4	11	12	15	10			├ -	Refusal
144	A-1	143	14-Jun-07	14-Jun-07		14-Jun-07	60.58	33.87	13.78	-26.7	40.5	12	17	10	-'0				Refusal
145	A-1.9/2.1	144	27-Jun-07	27-Jun-07		27-Jun-07	61.17	22.73	13.10	-38.4	51.5	10	9	9	9	10	9	9	reidsai
146	A-1.9/2.1	145	27-Jun-07	27-Jun-07		27-Jun-07	60.83	24.74	13.15	-36.1	49.2	8	12	10	۳		Ť	۱Ť	Refusai
147	A-1.9/2.1	146	27-Jun-07	27-Jun-07		27-Jun-07	60.75	27.34	13.15	-33.4	46.6	5	8	11	18	10		 	Refusal
148	A-1.9/2.1	147	27-Jun-07	27-Jun-07		27-Jun-07	60.83	25.78	13.11	-35.1	48.2	5	5	7	7	11	10		Refusal
149	A-1.9/2.1	148	27-Jun-07	27-Jun-07		27-Jun-07	60.75	24.82	13.06	-35.9	49.0	5	5	5	5	12	10		Refusal
150	A-1.9/2.1	149	27-Jun-07	27-Jun-07		27-Jun-07	61.17	25.40	13.16	-35.8	48.9	5	10	13	10		<u> </u>		Refusal
151	A-1.9/2.1	150	27-Jun-07	27-Jun-07		27-Jun-07	60.75	24.24	13.04	-36.5	49.6	5	5	7	8	15	10	İ	Refusal
152	A-1.9/2.1	151	6-Jun-07	6-Jun-07	7-Jun-07	6-Jun-07	60.54	23.62	13.16	-36.9	50.1	2	2	5	10				Indicator Pile, Refusal
153	A-2.7	152	11-Jun-07	26-Jun-07		11-Jun-07	85.18	37.68	14.00	-47.5	61.5	12	10						Refusal
154	A-2.7	153	11-Jun-07	26-Jun-07		11-Jun-07	85.34	35.70	14.02	-49.6	63.7	13	12	13	12	10	10		Refusal
155	A-2.7	154	11-Jun-07	26-Jun-07		11-Jun-07	84.74	31.24	13.96	-53.5	67.5	5	7	8	12	11	10		Refusal
156	A.2-2.7	155	11-Jun-07	26-Jun-07		11-Jun-07	80.37	31.14	14.06	-49.2	63.3	8	6	8	9	11_	10		Refusal
157 [A.2-2.7	156	11-Jun-07	26-Jun-07		11-Jun-07	80.17	31.93	14.01	-48.2	62.3	6	8	8	12	10	10		Refusal
158	A.2-2.7	157	11-Jun-07	26-Jun-07		11-Jun-07	79.77	30.36	13.95	-49.4	63.4	5	6	9	9	13	10		Refusal
159	A-3	158	11-Jun-07	26-Jun-07		11-Jun-07	85.42	26.72	14.72	-58.7	73.4	9	10	15	10				Refusal
160	A-3	159	26-Jun-07	27-Jun-07		26-Jun-07	79.87	29.12	14.69	-50.8	65.4	6	5	10	10	15	10		Refusal
161	A-3	160	11-Jun-07	26-Jun-07		11-Jun-07	85.42	31.83	14.76	-53.6	68.4	8	12	9	8	10	12	10	
162	A.2-3	161	11-Jun-07	26-Jun-07		11-Jun-07	85.57	30.11	14.50	-55.5	70.0	8	8	8	14	17	10		Refusal
163	A.2-3	162	11-Jun-07	26-Jun-07		11-Jun-07	85.28	30.24	14.49	-55.0	69.5	12	10					<u> </u>	Refusal
164	A.2-3	163	11-Jun-07	26-Jun-07		11-Jun-07	85.35	30.25	14.54	-55.1	69.6	11	14	10			<u> </u>		Refusal
165	A.2-3	164	11-Jun-07	19-Jun-07		11-Jun-07	81.63	25.47	14.43	-56.2	70.6	11	11						Refusal



Appendix A

Daily Summary - End Bearing Pile Installation



Page	1	of	6

	ON	PORT RIVE	AN GATEW LAND, MA RWALK, L GEWOOD C DNALDSON	AINE LC. CONSTRU		ĴΕ				PR FII DA	ELD R	Г MGR EP	30322-030 W. CHADBOURNE B. STEINERT 6/6/2007 3
Siz	ре	-	PILE 12x53 90 tons		HAMMER: Type Cushion Rated Ene	M			000	ft-lbs		Blows pe Ram Wei Fall (in)	
Pile No.	Pile Length	Top	Elevation Cut-off	Tip	Pay Length (ft)			Blo Final	ows Pe	r Inch		Ave.*	Remarks
20	65.50	Top 24.08	11.92	-41.42	53.3	2	3	3	3	3	7	4	Indicator Pile, restruck on 6/7
141A	65.60	38.77	13.73	-26.83	40.6	12	12	12<0.5"	, 		,		Indicator Pile, refusal, restruck on 6/7
	•												
					1								
								 					
	Total Le	ngth of Pil	of Piles Driv les Driven P Piles Driver	reviously	93.90 0.00 93.90		Additi	ired Mi ional re	marks	:			Contractor's WEAP)
b. c. d.	rks: Rejected Added due to Added due to Added due to Deleted due to	broken pil design cha	e inge				of 4 bl	lows/in.	due to	miscon	nmunic	ation betv	netration resistance ween Field Rep. and ack on 6/7.
g.	Broken Test Pile									Tot	al Num	iber of Pil	es Driven Today:2
	Pay lengths in cut-off elevati Owen Haskell Elevations are	ions and as l, Inc.	-built eleva	tion data p	rovided by								Number of Piles: 0 of Piles To Date: 2
	Re	gistered Er	ngineer										



													Page 2 of 6
PROJEC					KING GARAC	GE						LE NO.	30322-030
LOCATI	ON		LAND, M									T MGR	W. CHADBOURNE
CLIENT			RWALK, I								ELD R	EP.	B. STEINERT
GEN. CC	NTRACTOR		EWOOD (DA	TE		6/6/2007
PILE CO	NTRACTOR	G. DC	NALDSO	N CONSTI	RUCTION					W)	FR NO) .	3
PILE:		STEEL H-	PILE		HAMMER: Type	Jur	nttan H	HK 9A				Blows pe	r min. 40-100
Siz			4x102	TO SECTION AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AND ADDRESS OF THE PERS	Cushion			MC 90)4P			Ram Wei	
De	sign Capacity		70 ton	S	Rated Ene	rgy		79,	801	ft-lbs		Fall (in)	30
	Pile		Elevation		Pay			Bl	ows Pe	r Inch			
Pile No.	Length	Тор	Cut-off	Tip	Length (ft)			Final	6 in.			Ave.*	Remarks
30	60.50	30.61	17.50	-29.89	47.4	7	11	10<0.5"					Indicator Pile, refusal
36	60.00	19.10	14.66	-40.90	55.6	2	1	2	2	3	12		Indicator Pile, refusal
86	60.50	19.50	12.52	-41.00	53.5	8	8	10	9	8	8	9	Indicator Pile, restruck on 6/7
92	60.50	20.42	10.85	-40.08	50.9	15<0.5*							Indicator Pile, refusal
137													see add. remarks, final driving on 6/27
151	60.54	23.62	13.16	-36.92	50.1	2	2	5	10<0.5"				Indicator Pile, refusal, restruck on 6/7, see add. Remarks
					4.								
		_	f Piles Drives es Driven l		257.5 93.9		*Requ	ired Mi	nimum	:	9	avg. (per	Contractor's WEAP)
			es Driveiri Piles Drive		351.4		Δdditi	onal re	marks:	•			
	10001	Longui or	i nes Dine	10 Duto	331.4						capac	ity at the e	nd of initial driving.
Rema	rks:												ired to continue
	Rejected						driving	3 .					
	Added due to						All pil	es drive	n with	steel d	riving s	hoe.	
	Added due to												
	Added due to Deleted due to									-			
	Broken	design of	ange										
	Test Pile												
Notes:										To	tal Nun	nber of Pil	es Driven Today:5
	Pay lengths in cut-off elevati					osed					Prev	vious total	Number of Piles: 2
	Owen Haskell		-Juint Cleva	inon uaia p	TOVIDED DY						Tota	ıl Number	of Piles To Date: 7
2.	Elevations are		reference	Portland C	ity Base datur	m.							
	~ <i>/</i>	12	=										
_		gietered E.	aineer		-								
	Ke	gistered Ei	igilieer										



Page	2		-
rage	3	of	6

DD O IEC	100	OCE	N CATE	UASZ DAD	VDIC CADA	OF.		-		TY (A TOTAL	ENO	20222 020
PROJEC					KING GARA	JE .				•		E NO.	30322-030
LOCATI			LAND, M							•		T MGR	W. CHADBOURNE
CLIENT			RWALK, I		ICTION						ELD R	ЕP	B. STEINERT
	ONTRACTOR ONTRACTOR		EWOOD (RUCTION					•	ATE FR NO		6/7/2007
PILE CO	MIKACION	<u> </u>	NALDSU	IN CONST	RUCTION			_		. **	rk NO	·-	
PILES	S:				HAMMER:								
Ту	pe	STEEL H-			Туре			HK 9A				Blows per	
Siz			12x53	_	Cushion		nocast	MC 90		G. 11		Ram Wei	
De	sign Capacity		00ton	S	Rated End	rgy			000	ft-lbs		Fall (in)	18
	Pile		Elevation		Pay				ows Pe	r Inch			
Pile No.	Length	Top	Cut-off	Tip	Length (ft)		_		6 in.	10	T	Ave.*	Remarks
13	60.50	26.59	7.92	-33.91	41.8 40.6	5	8 2	8	10	12 10	10<0.5"		refusal
14 15	60.63 60.50	27.87 25.63	7.87 7.92	-32.76 -34.87	42.8	2	2	3	4	7	10<0.5"		refusal refusal
16	60.58	20.63	7.92	-39.95	47.9	7	7	8	8	8	14/0"	8	rerusai
17	60.58	20.37	7.91	-40.21	48.1	6	6	7	8	8	10<0.5"		refusal
18	60.63	21.29	7.91	-39.34	47.3	3	3	3	6	16	10/0"		refusal
19	60.58	19.57	11.99	-41.01	53.0	6	6	8	8	8	10<0.5"		refusal
20	65.50	24.08	11.92	-41.42		6	7	8	8	15	10	9	Indic. pile, restrike; initial driving 6/6
21	60.54	19.59	12.01	-40.95	53.0	2	8	6	10	11	10<0.5"		refusal
141A		-				10/<0.5							Indic. pile, restrike; initial driving 6/6
												\$ 0	
											<u> </u>	-	
	Tota	I I anoth of	Files Driv	an Today	374.5		*Pegu	ired M		<u>. </u>	<u>i</u> 8	01/2 (per	Contractor's WEAP)
			es Driven P		351.4	ł	·· Kequ	inea ivi	ıınınun		<u> </u>	avg. (per	Contractor's WEAF)
		-	Piles Driver	- 1	725.9	1	Addit	ional r	emarks	s:			
				•		-	All pil	es driv	n with	steel d	riving s	hoe.	
Rema													
	Rejected Added due to	mislocated	l nile										
	Added due to												
	Added due to												
	Deleted due to	design ch	ange										
	Broken Test Pile												
g.	I est I ne									Tot	tal Nun	ber of Pile	es Driven Today: 8
Notes:													
	Pay lengths in					osed					Prev	ious total	Number of Piles: 7
	cut-off elevati		-built eleva	tion data p	rovided by						T-4	l Missast -	of Diles To Deter
	Owen Haskell Elevations are	•	i reference	Portland C	City Base datus	m.					1 Ota	i ivumber	of Piles To Date: 15
2.	LICIALOID ALC				, 2000 Guill								
	<u>~/,</u>												
	Re	gistered Er	ngineer										
													



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	والمراجعين	<u> </u>					-						Pa	ige 4	<u>of 6</u>
PROJEC	T.	OCEA	AN GATEV	VAY PAR	KING GARA	<u>GE</u>				. H	&A FIL	E NO.	30322-030		
LOCATI	ON	PORT	LAND, M	AINE						PR	OJEC'	T MGR	W. CHADB	OURNE	
CLIENT		RIVE	RWALK, I	.LC.						FI	ELD R	EP	B. STEINER	RT	
GEN. CO	ONTRACTOR	R LEDG	EWOOD (CONSTRU	JCTION					. DA	TE		6/7/2007		
PILE CO	ONTRACTOR	G. DC)NALDSO	N CONST	RUCTION					. W	FR NO	-	3		
PILES	S:	-			HAMMER:			•						•	
Ту	pe	STEEL H-	PILE		Туре	Ju	nttan H	HK 9A		_		Blows pe	r min.	40-100	<u></u>
Siz			4x102		Cushion		onocasi	MC 9		•		Ram Wei	ght (lbs)	19,800	_
De	sign Capacity	1	70ton	S	Rated Ene	яgy		<u>79,</u>	801	ft-lbs		Fall (in)	_	30	_
	Pile		Elevation		Pay					r Inch					
Pile No.	Length	Top	Cut-off	Tip	Length (ft)	<u> </u>		Fina	l 6 in.		ı	Ave.*	F	lemarks	
.5	60.63	33.65	15.00	-26.98	42.0	3	5	4	8	10	10<0.5"		refusal		
6	60.63	34.33	15.00	-26.30	41.3	3	7	8	11	12	10<0.5"		refusal		
7	60.63	33.27	15.00	-27.36	42.4	3	3	5	10	11	10<0.5"		refusal		
8	60.63	34.51	15.00	-26.12	41.1	4	6	8	11	12	10<0.5"		refusal		
9	60.63	32.14	15.00	-28.49	43.5	4	4	4	8	13	10<0.5"		refusal		
10	60.63	32.02	15.00	-28.61	43.6	4	5	6	10	10	10<0.5"		refusal		
11	60.63	28.80	15.00	-31.83	46.8	4	5	9	10	15	10<0.5"		refusal		
12	60.63	29.92	15.00	-30.71	45.7	5	7	8	9	22/1.5"			refusal		
86	60.50	19.50	12.52	-41.00		3	4	6	5	7	7	5	Indicator Pile, re		
118		 				<u> </u>							see add. remarks.		
151	60.54	23.62	13.00	-36.92		13/0"	<u> </u>						indicator pile, res	trike, refusa	al
			 										_		
			\vdash			⊢—				ļ				-	
			\vdash	ļ		<u> </u>	<u> </u>						_		
			 			<u> </u>	<u> </u>	1		ļ			-		
			 			_	_		_				 	_	
		-								-					
			 			-	 	1	-	1					
			 				 		-						
	Tota	l I enoth o	f Piles Driv	en Today	346.4		*Reau	ired M	<u>l</u> inimun	<u> </u>		avg (ner	L Contractor's W	EAP)	
		_	es Driven P	•		1	rcqu	inca ivi	IIIIIIIIIIII	· —		avg. (pci	Conductor's W	LAL)	
		_	Piles Driver	•			Addit	ional r	emark	s:					
						•							nd of initial dr		
Rema							•			he pile	or splici	ing is requ	ired in order to		
	Rejected Added due to	mislocater	ł nile					ue driv		steel d	riving s	hoe			
	Added due to		-										g restrike as co	mpared	
	Added due to											•	ured minimal l		
	Deleted due to	-					capaci	ity.							
	Broken														
g.	Test Pile									т.,	. 1 NT	.L C D:1	D.i T. 4.		0
Notes:	,									10	ai Num	ider of Pil	es Driven Toda	.y:	8
	Pay lengths in	idicated are	e prelimina	ry and are	based on prope	osed					Prev	ious total	Number of Pile	es:	15
	cut-off elevati	ions and as													
_	Owen Haskell	-									Tota	l Number	of Piles To Da	te:	23
2.	Elevations are	in feet an	a reference	⊮ortland (ity Base datur	m.									
	~/_	14			-										
	Re	gistered Er	ngineer		•										
	- 10(_												



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PROJEC	T .	OCEA	N GATEV	/AY PARI	KING GARAC	BE				•		E NO.	30322-030	
LOCATI	ON	PORT	LAND, M.	AINE						. PR	OJEC	T MGR	W. CHADBOUR	ENE
CLIENT		RIVE	RWALK, I	LC.						FI	ELD R	EP	B. STEINERT	
GEN. CO	NTRACTOR	LEDG	EWOOD (CONSTRU	CTION					DA	TE		6/8/2007	
PILE CO	NTRACTOR	G. DC	NALDSO	N CONST	RUCTION						FR NO	•	3	·
PILE		STEEL H-	PILE		HAMMER: Type	Jui	nttan H	HK 9A				Blows pe	r min. 40-1	00
Sia	•		12x53	E.L.E	Cushion			t MC 90)4P	•		Ram Wei		
De	sign Capacity		ton	S	Rated Ene	rgy		25,	000	ft-lbs		Fall (in)	18	
-	Pile		Elevation		Pay			Ble	ows Pe	r Inch				
Pile No.	Length	Тор	Cut-off	Tip	Length (ft)			Final	6 in.			Ave.*	Rema	rks
44	60.50	17.28	12.40	-43.22	55.6	6	6	9	9	10	10<0.5"		refusal	
45	-												see add. remarks, final	driving on 6/12
46	60.50	17.22	12.38	-43.28	55.7	3	2	2	3	10	10<0.5"		refusal	
47	65.54	22.34	12.39	-43.20	55.6	3	10	10<0.5"					refusal	
101													see add. remarks, final	friving on 6/26
														•
			l					 						· · · · · · · · · · · · · · · · · · ·
					<u> </u>									
													<u> </u>	
_													-	
	Tota	l Length o	f Piles Driv	en Todav	166.9		*Reau	ired Mi	nimum	: 1		avg. (per	.I)
			es Driven I							_	_	D - U		,
	Total	Length of	Piles Drive	n To Date:	1239.2		Additi	ional re	marks	:				
													at the end of initial	<u> </u>
Rema										around	the pile	es or splic	ing is required to	
	Rejected Added due to	mialocatad	l mila				contin	ue drivi	ng.					
	Added due to						All pil	es drive	n with	steel di	rivino s	hoe	· · · · · · · · · · · · · · · · · · ·	
	Added due to						p		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	00001 0.				
	Deleted due to													
	Broken													
g.	Test Pile									_				_
Notes										10	tal Nun	iber of Pil	es Driven Today: _	3
	Pay lengths in cut-off elevati					osed					Prev	ious total	Number of Piles: _	23
•	Owen Haskell	, Inc.		-	_						Tota	l Number	of Piles To Date:	26
2.	Elevations are	in feet and	reterence	Fortland C	ity Base datur	n.								
	Re	gistered Er	ngineer											



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PROJEC LOCATI CLIENT GEN. CC	ON	PORT	AN GATEW LAND, MA RWALK, L	AINE LC.	CTION	ЭE				PR FII	&A FIL OJEC ELD R	T MGR	30322-030 W. CHADBOURNE B. STEINERT 6/8/2007
	NTRACTOR		NALDSO							-	FR NO	•	3
Siz	ре		4x102 70 ton	S	HAMMER: Type Cushion Rated Ene	Mo	nttan H onocast	MC 90)4P 801	ft-lbs		Blows per Ram Wei Fall (in)	
	Pile		Elevation		Pay	<u> </u>				r Inch		.	<u>.</u>
Pile No.	Length	Top 45.50	Cut-off 17.80	Tip -15.17	Length (ft) 33.0	6	7	Final	6 in.	10	10<0.5"	Ave.*	Remarks
2	60.67	44.65	17.80	-16.02	33.8	4	3	3	8	10	10<0.5"		refusal
3	60.67	38.85	17.80	-21.82	39.6	4	5	5	6	9	10<0.5"		refusal
4	60.58	48.80	17.80	-11.78	29.6	5	5	12	10	18	10<0.5"		refusal
26	60.67	17.55	11.97	-43.12	55.1	6	8	10	14	10	10<0.5"		refusal
27	60.75	17.60	12.02	-43.15	55.2	6	8	10	9	10	10	9	1010381
28	00.75	17.00	12.02	-43.13	33.2	Ť		10		10	10		see add. Remarks; final driving on 6/12
29	60.63	27.08	17.50	-33.55	51.1	5	7	11	11	12	10<0.5"		refusal
31	60.60	27.75	17.50	-32.85	50.4	8	11	10	11	14	10<0.5"		refusal
32	60.60	28.75	17.50	-31.85	49.4	5	5	5	14	13	12<0.5"		refusal
48	60.54	23.35	20.00	-37.19	57.2	3	4	4	7	13	10<0.5"		refusal
49	60.63	23.33	20.00	-37.30	57.3	7	10	10	9	10	10	9	
50	60.63	24.55	19.90	-36.08	56.0	2	5	6	11	12	10<0.5"	-	refusal
51	61.17	23.95	20.00	-37.22	57.2	3	5	7	11	15	10<0.5"	····	refusal
65	61.17	26.96	21.30	-34.21	55.5	5	7	9	14	10<0.5"			refusal
66	61.13	26.90	21.30	-34.23	55.5	5	7	8	11	14	10<0.5"	-	refusal
67	61.13	27.00	21.30	-34.13	55.4	15	15	14	15	10<0.5"			refusal
68	61.13	26.46	21.30	-34.67	56.0	6	8	8	8	12	10	9	
	,												
		_	f Piles Driv	•	847.1		*Requ	ired Mi	nimum	ı:	9	avg. (per	Contractor's WEAP)
		•	es Driven I	•	1239.2	ĺ							
	Total	Length of	Piles Drive	n To Date;	2086.3	1		onal re		s: steel di	rivina c	hoe	
	Rejected					,	Pile No	o. 28 di	d not a	chieve (capacit	y at the en	d of initial driving.
	Added due to									ile and/	or spili	cing will t	pe required to
	Added due to Added due to	-					comple	ete driv	ıng.				
	Deleted due to	-	_										
	Broken												
g.	Test Pile												
Madaa										To	tal Nun	iber of Pil	es Driven Today: 17
Notes:	Pay lengths in cut-off elevati					osed					Prev	rious total	Number of Piles: 26
	Owen Haskell	, Inc.		-	-						Tota	l Number	of Piles To Date: 43
2.	Elevations are	in feet an	reference	Portland C	City Base datur	n.							
	~_												
	Re	gistered Er	ngineer										



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PROJEC	eT	OCEA	N GATEV	VAY PARI	KING GARAG	E			Н&А	FILE NO.	30322-030		
LOCATI	ON	PORT	LAND, M	AINE					PROJ	ECT MGR	W. CHADBOURNE	3	
CLIENT		RIVE	RWALK, L	LC.					FIELI	D REP	B. STEINERT		
GEN. CO	NTRACTOR	LEDO	EWOOD (CONSTRU	CTION				DATE	;	6/11/2007		
PILE CO	NTRACTOR	G. DC	NALDSO	CONST	RUCTION				WFR	NO.	4		
Siz	ре	***************************************	PILE 12x53 00 ton	S	HAMMER: Type Cushion Rated Ener	Monoc	HHK 9A ast MC 9		ft-lbs	Blows pe Ram Wei Fall (in)		_	
	Pile		Elevation		Pay		В	ows Pe	r Inch				
Pile No.	Length	Тор	Cut-off	Tip	Length (ft)			l 6 in.		Ave.*	Remarks	3	
82											see add. remarks, final drivi	ng on 6/26	
120											see add. remarks, final drivi	ng on 6/26	
152											see add. remarks, final drivi	ng on 6/26	
153										see add. remarks, final drivi	ng on 6/26		
154											see add. remarks, final drivi	ng on 6/26	
155											see add. remarks, final drivi	ng on 6/26	
156											see add. remarks, final drivi	ng on 6/26	
157											see add. remarks, final drivi	ng on 6/26	
158											see add. remarks, final drivi	ng on 6/26	
160											see add. remarks, final drivi	ng on 6/26	
161											see add. remarks, final drivi	ng on 6/26	
162											see add. remarks, final drivi	ng on 6/26	
163											see add. remarks, final drivi	ng on 6/26	
164											see add. remarks, final driving	ng on 6/19	
												·	
b. c. d. e. f.	Total Le Total rks: Rejected Added due to Added due to Added due to Deleted due to Broken Test Pile	ngth of Pil Length of mislocated broken pil design cha	e inge	Previously	0.0 2086.3 2086.3	Add Piles drivi	*Required Minimum: 8 avg. (per Contractor's WEAP) Additional remarks: Piles listed above did not achieve capacity at the end of initial driving. Excavation or pile splice is required to continue driving. All piles driven with steel driving shoe. Total Number of Piles Driven Today: 0						
	Pay lengths in				based on propo	sed			I	Previous total	Number of Piles:	43	
	cut-off elevati Owen Haskell		-built eleva	tion data p	rovided by				1	Cotal Number	of Piles To Date:	43	
	Elevations are		reference	Portland C	ity datum.				,	Can i tuilloci	office to Date.		
	ير												
_	Re	gistered Er	ngineer		-								



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Page	2	of	7

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PROJEC	T	OCEA	N GATEW	AY PARI	CING GARAG	E	H&A FILE NO.						30322-030	
LOCATI	ON	PORT	LAND, M	AINE						PR	OJEC	r MGR	W. CHADBOURNE	
CLIENT		RIVE	RWALK, L	.LC.						FI.	ELD R	EP	B. STEINERT	
GEN. CC	NTRACTOR	LEDG	EWOOD (CONSTRU	CTION					D.A	TE		6/12/2007	
PILE CO	NTRACTOR	G. DO	NALDSO	N CONSTI	RUCTION					. W .	FR NO.	•	4	
Siz	ре	***************************************	PILE 2x53 00 ton		HAMMER: Type Cushion Rated Ene	M	nttan H onocasi	MC 9	04P	ft-lbs		Blows pe Ram Wei Fall (in)		
	Pile		Elevation		Pay				ows Pe	r Inch				
Pile No.	Length	Тор	Cut-off	Tip	Length (ft)		ı	Fina I	l 6 in.			Ave.*	Remarks	
43		16.67	10.40	42.02	560		_	 	-	16			see add. remarks, final driving on 6/18	
45	60.50	16.67	12.40	-43.83	56.2	5	6	6	7	16	10<0.5"		refusal after excavation around pile	
77	(0.50	17.66	12.44	42.05	66.4	6	3	8	12	17	10.00.57		see add. remarks, final driving on 6/26	
83 96	60.50	17.55	12.44	-42.95	55.4	- 0	-3-	l °	12	17	10<0.5"		refusal see add. remarks, final driving on 6/26	
115								 					see add. remarks, final driving on 6/26	
113													see add. Ichiaixs, finai difving on 0/20	
							<u> </u>	<u> </u>						
<u>_</u> _														
														
54														
_														
	Total Le	ngth of Pil	f Piles Driv es Driven I Piles Drive	Previously	111.6 2086.3 2197.9		Additi	ional r	inimum emarks	:			Contractor's WEAP)	
_													the end of initial	
Rema	rks: Rejected						ariving	g. Exca	avanon	or pile	splice i	s required	to continue driving.	
	Added due to	mislocated	l pile				All pil	es driv	en with	steel d	riving s	hoe.		
	Added due to													
	Added due to													
	Deleted due to	design ch	ange										.	
	Broken Test Pile													
5.	10301110									To	tal Nun	ber of Pil	les Driven Today: 2	
Notes	:												·	
1.	Pay lengths in cut-off elevati		osed					Prev	ious total	Number of Piles: 43				
	Owen Haskel		Juni CICVA	vii uaia p	TOTIGOT DA						Tota	l Number	of Piles To Date: 45	
2.	Elevations are		d reference	Portland C	City datum.									
	~ <i>_</i>													
_														
	Re	gistered Er	igineer											



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PROJEC	T	OCEA	N GATEW	AY PARI	KING GARAC	3E				. Н	&A FIL	E NO.	30322-030	
LOCATI	ON	PORT	LAND, MA	AINE						PR	OJEC	T MGR	W. CHADBOURNE	
CLIENT		RIVE	RWALK, L	LC.						. FI	ELD R	EP	B. STEINER	<u>.T </u>
GEN. CC	NTRACTOR	LEDC	EWOOD (CONSTRU	CTION					DA	TE		6/12/2007	
PILE CO	NTRACTOR	G. DC	NALDSO	N CONSTI	RUCTION					. W]	FR NO	•	4	
PILE:		STEEL H-	PILE		HAMMER:			HK 9A				Blows per		40-100
Siz		***************************************	4x102		Cushion		onocasi	t MC 9				Ram Wei	ght (lbs)	19,800
De	sign Capacity		70 ton	S	Rated Ene	ergy		<u>79,</u>	801	ft-lbs		Fall (in)		30
	Pile		Elevation		Pay				ows Pe	r Inch			_	
Pile No.	Length	Top	Cut-off	Tip	Length (ft)	10	T -		l 6 in.	12		Ave.*	<u> </u>	emarks
28	60.67	16.29	11.96	-44.38	56.3	10	7	6	8	13	10<0.5"		refusal after excav	ation around pile
64	60.50	14.47	12.36	-46.03	58.4	6	8	8	11	13	10<0.5"		refusal	
78									 				i	final driving on 6/26
79						 	 	-						final driving on 6/26
80						 	 	 						final driving on 6/26
81			\vdash				_						i e	final driving on 6/26
97			\vdash										†	final driving on 6/26
98							-	-					1	final driving on 6/26
99													 	final driving on 6/26
100													1	final driving on 6/26
116							\vdash						i	final driving on 6/19
117													1	final driving on 6/26
119		·					-						see add. remarks,	final driving on 6/26
								-					<u> </u>	
							<u> </u>		-				 	
			-										-	-
													 	
														
	Tota	l I ength o	f Piles Driv	en Todayı	114.7		*Requ	ired M	l inimum	. (9	ava (ner	L Contractor's W	FAP)
	Total Le	ngth of Pil	les Driven F Piles Drive	reviously	2197.9 2312.7		Additi	ional re	emarks	. –	_	•	the end of initia	•
Remai	rks:												to continue dri	
	Rejected													
	Added due to						All pil	es driv	en with	steel di	riving s	hoe.		
	Added due to Added due to	_												
	Deleted due to													
	Broken	, acc. 8 v.												<u>*************************************</u>
g.	Test Pile													
										To	tal Nun	iber of Pil	es Driven Toda	y:2
	Pay lengths in					osed					Prev	rious total	Number of Pile	es:45
	cut-off elevati Owen Haskell		-built eleva	tion data p	rovided by						Tota	l Number	of Piles To Dat	e: 47
2.	Elevations are	in feet an	reference	Portland C	City datum.									
	~				-									
_	Re	gistered Er	ngineer											
	100													



Page 4 of 7

	ON NTRACTOR NTRACTOR	PORT RIVE LEDG	AN GATEW LAND, MA RWALK, L GEWOOD O	AINE LC. CONSTRU		SE				PR FI DA	&A FIL ROJEC ELD RI ATE FR NO	T MGR EP	30322-030 W. CHADI B. STEINE 6/13/2007 4	BOURNE	ot /
Tyj Siz De			PILE 12x53 90 ton	S	Type Cushion Rated Ene	Me		HK 9A t MC 90 25,	04P	ft-lbs		Blows pe Ram Wei Fall (in)			- -
	Pile		Elevation		Pay				ows Pe	r Inch					
Pile No.	Length	Top	Cut-off	Tip	Length (ft)	11	12	ľ	l 6 in.		_	Ave.*	+	Remarks	
60	60.58	17.80	13.43	-42.78	56.2	11	12	13	14<0.5"				refusal		
140	(0.50	22.47	12.72	20.11	41.0		<u> </u>		14	1.5			see add. remark	s, final driving	g on 6/27
141	60.58	32.47	13.72	-28.11	41.8	6	9	9	14	15	10<0,5"		refusal		
			 								_		+		
		<u> </u>											+		
			 					_					+		
		 	 					 			$\vdash \vdash \mid$		+		
							 	 					+		
			 				<u> </u>	 	_		-	· · · · · ·	 		
									\vdash				+		
													+	· · · · · · · · · · · · · · · · · · ·	
													 		
						-			\vdash				+		
									 				+		
													†		
													 		
	Total Le	ngth of Pil	f Piles Driv les Driven F Piles Drive	Previously	98.0 2312.7 2410.7		Additi	ional re	inimum emarks ove did	:			Contractor's \	·	
Remar							driving	g. Exca	vation	or pile	splice is	s required	to continue d	riving.	
	Rejected	:	4:1				A 11 21			-41-4		L			
	Added due to Added due to						An pu	es arive	en with	steel a	riving s	noe.			
	Added due to														
	Deleted due to	_	-												
	Broken														
g.	Test Pile										. 137	1 CD:			
Notes:										10	iai Num	ider of Pil	les Driven Too	лау:	2
1.	Pay lengths in cut-off elevati				based on propo	osed					Prev	ious total	Number of Pi	iles:	47
	Owen Haskell		Juin 01074	Jum þ							Tota	l Number	of Piles To D	ate:	49
	Elevations are		d reference	Portland C	City datum.								_		
		26													
	Da	gistered Er	ngineer												
	Ne	Protection El	PILICEI												



_	_	_	_
Page	5	of	-7

													1 5 -	- 01 ,
PROJEC	T	OCEA	N GATEV	VAY PARI	KING GARAC	3E				-		E NO.	30322-030	
LOCATI	ON	PORT	LAND, M	AINE						. PR	OJEC	T MGR	W. CHADBOUR	<u>1E</u>
CLIENT		RIVE	RWALK, L	LC.						. FI	ELD R	EP	B. STEINERT	
GEN. CC	NTRACTOR		EWOOD (. DA	TE		6/13/2007	
PILE CO	NTRACTOR	G. DC	NALDSO	N CONST	RUCTION					. W l	FR NO	•	4	
PILES	S:				HAMMER:									
Ty		STEEL H-	PILE		Туре	Ju	nttan H	HK 9A				Blows pe	r min. 40-10	0
Siz		***	4x102		Cushion	M	onocasi	MC 90)4P			Ram Wei		<u>o</u>
De	sign Capacity	1	70 ton	S	Rated Ene	rgy		79,	801	ft-lbs		Fall (in)	30	
	Pile		Elevation		Pay				ows Pe	r Inch				
Pile No.	Length	Тор	Cut-off	Tip	Length (ft)		1	Final				Ave.*	Remar	ks
22	60.79	24.02	12.44	-36.77	49.2	9	10	11	13	14	10<0.5"		refusal	
23	60.75	23.54	12.37	-37.21	49.6	5	5	9	15	10<0.5"			refusal	
24	60.83	22.60	12.39	-38.23	50.6	13	14	13	16	10<0.5"			refusal	
25	60.75	19.62	11.37	-41.13	52.5	10	10	10<0.5"					refusal	
33	60.67	20.32	14.65	-40.35	55.0	9	10	11	11	12	12	11		
34	60.71	19.12	14.65	-41.59	56.2	5	6	6	11	15	10<0.5"		refusal	
35	60.75	22.96	14.66	-37.79	52.5	9	10	9	9	9	10<0.5"		refusal	
37	61.17	20.69	14.64	-40.48	55.1	15	10<0.5"						refusal	
38	60.67	19.36	14.65	-41.31	56.0	7	9	11	8	11	10<0.5"		refusal	
39	60.79	19.98	14.65	-40.81	55.5	3	3	5	8	15	10<0.5"		refusal	
40	60.79	21.34	14.66	-39.45	54.1	7	7	9	11	18	10<0.5"		refusal	
41	60.67	21.35	14.67	-39.32	54.0	10	11	13	12	15	10<0.5"		refusal	
42	61.25	20.25	14.66	-41.00	55.7	10	10	9	10	11	11	10		
61	60.75	17.22	12.43	-43.53	56.0	9	11	15	13	15	10<0.5*		refusal	
62	60.58	17.72	13.41	-42.86	56.3	3	3	3	4	10	10<0.5"		refusal	-
63	60.67	18.57	12.42	-42.10	54.5	4	7	8	10	14	10<0.5"		refusal	•
													·	
													-	
	Total	17 1	CD'L - D '	T. 1.	0.00.7		* D	120					0 + + + 1700	
			f Piles Driv es Driven I		862.7 2410.7		*Kequ	ired Mi	nımum	·	<u> </u>	avg. (per	Contractor's WEAP)	
		_	Piles Drive	•	3273.3		Additi	onal re	marks	:				
							All pil	es drive	n with	steel dr	iving s	hoe.		
Remai	rks:												**	
	Rejected													
	Added due to Added due to													
	Added due to												W	
	Deleted due to													
f.	Broken		•											
g.	Test Pile									_				
Notes:										Tot	al Nun	iber of Pil	es Driven Today:	16
	Pay lengths in	dicated are	ry and are	based on prope	osed					Prev	ious total	Number of Piles:	49	
	cut-off elevati	ons and as											_	
	Owen Haskell	,	t reference	Portland C	'ity datum						1 ota	ı Number	of Piles To Date:	65
2. Elevations are in feet and reference Portland City datum.														
		4												
	Re	gistered Er	ngineer											



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PROJEC	:T	KING GARA	GE				. на	&A FIL	E NO.	30322-030			
LOCATI	ON	PORT	LAND, M	AINE						PF	ROJEC	T MGR	W. CHADBOURNE
CLIENT		RIVE	RWALK, I	.LC.						. FI	ELD R	EP	B. STEINERT
GEN. CC	NTRACTOR	LEDO	SEWOOD (CONSTRU	ICTION					D/	ATE		6/14/2007
PILE CO	NTRACTOR	G. DC	NALDSO	N CONST	RUCTION					_ w	FR NO	•	4
PILE: Ty Siz	ре	STEEL H-	PILE 4x102		HAMMER: Type Cushion			HK 9A t MC 90				Blows pe Ram Wei	
	sign Capacity		70 ton	S	Rated Ene		79,801 ft-lbs Fall (i						30
		······································	1444	THE RESERVE	,	T							
Pile No.	Pile Length	Тор	Elevation Cut-off	Tip	Pay Length (ft)				ows Pe l 6 in.	r Inch		Ave.*	Remarks
52	Dengin	100	Cut-on	110	Dengen (10)			Time	U III.	1		Ave	see add. remarks, final driving on 6/15
53			 										see add. remarks, final driving on 6/15
54													see add. remarks, final driving on 6/15
55												see add. remarks, final driving on 6/15	
56								-					
57								 					see add. remarks, final driving on 6/15
58								 					see add. remarks, final driving on 6/15
59													see add. remarks, final driving on 6/15
102	60.76	25.06	11.77	24.70	16.6	10	10	11	12	12			see add. remarks, final driving on 6/15
	60.75	25.96		-34.79	46.6	10 7	10	11	12	13	12<0.5"		refusal
103	60.75	24.97	11.77	-35.78	47.6		7	9	10	13	10<0.5"		refusal
104	60.75	24.91	11.77	-35.84	47.6	9	10	12	13	14	10<0.5"		refusal
105	60.75	24.77	11.73	-35.98	47.7	8	8	9	10	12	10<0.5"		refusal
106	60.58	24.79	11.72	-35.79	47.5	7	9	9	12	14	10<0.5*		refusal
121	60.58	29.92	12.97	-30.66	43.6	10	9	9	10	10	10	10	
122	60.63	30.05	13.00	-30.58	43.6	10	10	11	13	10<0.5*			refusal
123	60.63	29.82	12.97	-30.81	43.8	10<0.5"							refusal
124	60.63	30.14	13.00	-30.49	43.5	3	3	4	9	15	10<0.5"		refusal
142	60.54	32.73	13.63	-27.81	41.4	11	12	15	10<0.5*				refusal
143	60.58	33.87	13.78	-26.71	40.5	12	17	10<0.5"					refusal
	Tate	. 1 T malb. m	f Piles Driv	Т. А	402.4		*D				Щ		l WEAR
		_	es Driven I		493.4 3273.3		*Kequ	ired Mi	nımum	·)	avg. (per	Contractor's WEAP)
		•	Piles Drive	•			Additi	ional re	marks	:			
		3				1					hieve ca	apacity at	the end of initial
Remai													to continue driving.
	Rejected												
	Added due to						All pil	es drive	n with	steel di	iving s	noe.	
	Added due to Added due to												
	Deleted due to												
	Broken					•							
g.	Test Pile												
N-4										Tot	tal Num	ber of Pile	es Driven Today: 11
	Pay lengths in cut-off elevati					osed					Prev	ious total	Number of Piles: 65
	Owen Haskell	, Inc.		•							Total	Number	of Piles To Date: 76
2.	Elevations are	in feet and	l reference	Portland C	City datum.								
	_												
	P.	nintored E-											
	Ke	gistered Er	ignieer										



Page	7	of	7

PROJEC LOCATI CLIENT	ON	PORT	N GATEW LAND, MA RWALK, L	AINE	KING GARAC	ING GARAGE						E NO. T MGR EP	30322-030 W. CHADBOURNE B. STEINERT
	ONTRACTOR	LEDG	EWOOD (CONSTRU	CTION					DA	TE		6/15/2007
PILE CO	NTRACTOR	G. DC	NALDSO	N CONST	RUCTION					. W	FR NO	•	4
Siz	ре	***************************************	PILE 4x102 70 ton	S	HAMMER: Type Cushion Rated Ene	M		HK 9A t MC 90 79,	801	ft-lbs		Blows pe Ram Wei Fall (in)	
Dil. No.	Pile	T	Elevation	Tin	Pay					r Inch		Ave.*	Domanica
Pile No.	Length 60.79	Top 17.43	Cut-off 14.76	Tip -43.36	Length (ft) 58.1	7	8	Final	13	10<0.5"		Ave.	Remarks refusal
53	61.17	17.43	14.76	-43.52	58.3	10	9	13	12	13	16	12	rerusai
54	60.75	17.01	14.68	-43.74	58.4	5	8	7	8	19	10<0.5"	12	refusal after excavation around pile
55	60.79	17.81	14.89	-42.98	57.9	8	10	11	14	10<0.5"	10 40.5		refusal after excavation around pile
56	60.75	16.97	14.72	-43.78	58.5	6	7	8	12	15	10<0.5"		refusal after excavation around pile
57	60.75	17.53	14.78	-43.22	58.0	7	11	12	15	10<0.5"	10 40.5		refusal after excavation around pile
58	60.79	16.50	14.75	-44.29	59.0	4	6	11	15	12	10<0.5"		refusal after excavation around pile
59	60.75	16.92	14.75	-43.83	58.6	4	6	7	12	17	10<0.5"		refusal after excavation around pile
84	60.58	26.37	12.51	-34.21	46.7	12	17	10<0.5"					refusal after excavation around pile
85	60.75	21.98	12.56	-38.77	51.3	9	10	9	10	12	12	10	•
87	60.63	21.50	12.51	-39.13	51.6	10	12	13	11	11	11	11	
													0 = 1 ×
	Т-4-	1741	CDilaa Daia	т. т. 1	(16.6		*D	: 1 N f:				(Control of WEAD
	Total Le	ngth of Pil	f Piles Driv es Driven I Piles Drive	reviously	616.6 3766.7 4383.3		•	ired Mi ional re			<u> </u>	avg. (per	Contractor's WEAP)
		_					All pil	es drive	n with	steel dr	iving s	hoe.	
Rema													
	Rejected Added due to	miologatod	l mila										
	Added due to												
d.	Added due to	design cha	nge										
	Deleted due to	design ch	ange										
	Broken												
g.	Test Pile									Tot	al Num	abor of Dil	es Driven Today: 11
Notes:										100	ai i tuii		cs Driven Today.
	Pay lengths in cut-off elevati					osed					Prev	rious total	Number of Piles: 76
	Owen Haskell		_	_	•						Tota	l Number	of Piles To Date: 87
2.	Elevations are	in feet and	Lreference	Portland C	ity datum.								
	ب				_								
	Re	gistered Er	gineer		-								
		-	-										



PROJECT

DAILY SUMMARY

END BEARING PILE INST	CALLATION	Page 1 of 4	
AN GATEWAY PARKING GARAGE	H&A FILE NO.	30322-030	_
TLAND, MAINE	PROJECT MGR	W. CHADBOURNE	
ERWALK, LLC.	FIELD REP	W. ARMSTRONG	
GEWOOD CONSTRUCTION	DATE	6/18/2007	_
AND A COLUMN TO THE COLUMN TO			_

PROJEC	T	OCEA	N GATEV	VAY PARI	KING GARAC	ΞE				Н8	&A FILE NO.	30322-0	30	
LOCATI	ON	PORT	LAND, MA	AINE						- PR	OJECT MG	R W. CHA	ADBOURN	ΙE
CLIENT			RWALK, L							- FII	ELD REP	W. ARN	MSTRONG	
	NTRACTOR		EWOOD O		JCTION	•				- DA	TE	6/18/200	07	
	NTRACTOR		NALDSO							- wi	FR NO.	5		
						,				_		-		
PILES	š:				HAMMER:									
Ty		STEEL H-			Type		TTAN					per min.	40-100	
Siz		***************************************	2X53		Cushion		onocasi					Veight (lbs)	19,800	<u>'</u>
De	sign Capacity	3	on_ton	S	Rated Ene	rgy		25,	000	ft-lbs	Fall (i	n)	18	
	Pile		Elevation		Pay			Bl	ows Pe	r Inch				
Pile No.	Length	Тор	Cut-off	Tip	Length (ft)		,	Fina	l 6 in.		Ave	.*	Remark	KS .
43	60.46	16.94	13.42	-43.52	56.9	12	10<0.5"					refusal; red	rive, iniital driv	ing on 6/12
					1								22	
													1.11	
									<u> </u>					
									-	\vdash		_		
	Tota	l Length o	f Piles Driv	zen Today	56.9		*Requ	ired Mi	l inimun	1· 5	3 avg. (r	er Contracto	r's WFAP)	
			les Driven F				rcoqu	1100 111		•	<u>-</u> 4, 8, (I	or conducto	13 11 1211)	
		_	Piles Drive	•			Additi	onal re	marks	s:				
		_		'			All pil	es drive	en with	steel dr	riving shoe.			
Remai														
	Rejected													
	Added due to Added due to													
	Added due to													
	Deleted due to													
	Broken										·			
g.	Test Pile													
										Tot	tal Number of	Piles Driven	Today:	1
Notes:						_								
					based on propo	osed					Previous to	tal Number o	f Piles:	87
	cut-off elevation of the cut-off elevation of		-built eleva	tion data p	rovided by						Total Numi	on of Dilos T	o Doto:	88
			d.zeference	Portland (City Base datur	n					TOtal Nulli	per of Piles To	Date:	
2.	Dictations are				only Dabe data.									
	~													
	Reg	gistered En	ıgineer											



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													Page 2 of 4
PROJEC					KING GARA	GE					&A FIL		30322-030
LOCATI			LAND, M							PF	ROJEC'	T MGR	W. CHADBOURNE
CLIENT			RWALK, I	-						FI	ELD R	EP	W. ARMSTRONG
GEN. CO	ONTRACTOR	LEDG	EWOOD (CONSTRU	ICTION					DA	ATE		6/18/2007
PILE CO	NTRACTOR	G. DC	NALDSO	N CONST	RUCTION					W	FR NO	•	5
PILE	ç.				HAMMER:								
		STEEL H-	PILE		Туре	JUN	TTAN	ннк 9	Α			Blows pe	r min. 40-100
Si			4X102	(10)	Cushion			t MC 90				Ram Wei	
De	sign Capacity		70 ton	S	Rated Ene	ergy		79,	801	ft-lbs		Fall (in)	30
	Pile		Elevation		Pay			BI	ows Pe	r Inch	-		T -
Pile No.	Length	Тор	Cut-off	Tip	Length (ft)			Fina	6 in.			Ave.*	Remarks
71	60.50	17.87	14.28	-42.63	56.9	20	15<0.5"						refusal
72	60.50	17.86	14.23	-42.64	56.9	20<0.5"	ļ	ļ			ļ		refusal
73													see add. remarks, final driving on 6/19
74	60.50	21.42	14.26	-39.08	53.3	11	9	9	10	10	12	10	
75													see add. remarks, final driving on 6/19
76	60.50	19.53	14.26	-40.97	55.2	5	10	15	15	20	13<0.5"		refusal
88	60.75	20.39	10.82	-40.36	51.2	1	2	2	21	20	10<0.5"		refusal
89	60.50	19.57	10.78	-40.93	51.7	10	9	11	9	11	11	10	
90													see add. remarks, final driving on 6/19
91	60.75	19.43	10.76	-41.32	52.1	9	9	10	14	13	17	12	
93	60.75	20.05	10.75	-40.70	51.5	9	13	11	10<0.5"				refusal
94												see add. remarks, final driving on 6/19	
95	60.75	19.45	10.79	-41.30	52.1	5	6	6	6	12	10<0.5"		refusal
107	60.50	27.76	11.14	-32.74	43.9	10	13	10<0.5"					refusal
108	60.50	26.57	11.17	-33.93	45.1	10	10<0.5"						refusal
109	60.50	25.90	11.15	-34.60	45.8	10	16	10<0.5"					refusal
110	60.50	25.72	11.14	-34.78	45.9	15<0.5"							refusal
112	60.50	23.92	11.12	-36.58	47.7	6	5	8	10	15	10<0.5"		refusal
114	60.75	24.13	11.16	-36.62	47.8	10	12	10<0.5"					refusal
			f Piles Driv		757.0	1	*Requ	ired Mi	nimum	:'	9	avg. (per	Contractor's WEAP)
		-	es Driven F Piles Drive	•	4440.2 5197.2		4 44iti	ional re	marke				
	Total	Lengur or i	i iles Dilve	ii 10 Date	3197.2	l					hieve ca	anacity at	the end of initial
Rema	rks:												to continue driving.
	Rejected						_	***					
	Added due to						All pil	es drive	n with	steel d	riving sl	hoe.	
	Added due to	-											
	Added due to Deleted due to												
	Broken	design en	ange			,					****	-	
	Test Pile												
Notes										To	tal Num	ber of Pil	es Driven Today:15
	Pay lengths in cut-off elevation					osed					Prev	ious total	Number of Piles: 88
	Owen Haskell	, Inc.		•	•						Total	l Number	of Piles To Date:103
2.	Elevations are	in feet and	l reference	Portland C	City Base datur	m.							
	~	_											
-	Res	zistered En	gineer										



Page	3	of	4

	ON		GE				PR FII DA	¿A FILE NO. OJECT MGI ELD REP .TE FR NO.	-					
PILES Ty Siz De	pe e sign Capacity		12X53 90 ton		HAMMER: Type Cushion Rated Ene	M	TTAN	MC 9 25	04P ,000	ft-lbs		per min. Veight (lbs) u)	40-100 19,800 30	- -
Pile No.	Pile	Тор	Elevation Cut-off	Tip	Pay Length (ft)				lows Pe ıl 6 in.	r Inch	Ave.	*	Remarks	
164	Length 81.63	25.47	14.43	-56.16	70.6	11	11<0.5"	Filla	<u> </u>		Ave.			
104	81.03	23.47	14.43	30.10	70.0	- 11	1150.5					refusal; see add	I. Remarks, sp	olice added
							1		<u> </u>					
1														
									<u> </u>					
							ļ							
		<u> </u>					-		<u> </u>					
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									1	\vdash				
												+		
_									1				·	
	Total Le Total ·ks: Rejected	ength of Pil Length of	of Piles Drive les Driven I Piles Drive	reviously	5197.2		Additi Piles 1	onal r 64 red		ter splic	e added.	er Contractor's	WEAP)	
	Added due to Added due to						All pile	es ariv	en with	steel an	iving shoe.			
	Added due to	_												
	Deleted due to													
	Broken							· <u> </u>						
g.	Test Pile									Tat	al Numbar of	Dilas Deivan T-	dow	1
Notes:										100	ai Number of	Piles Driven To	иау:	
1.	Pay lengths in cut-off elevati				based on propo provided by	osed					Previous to	al Number of P	iles:	103
	Owen Haskell	l, Inc.		_	·						Total Numb	er of Piles To D	ate:	104
2.	Elevations are	in feet an	d reference	Portland (City Base datur	n.								
	٧	21												
_	Re	gistered Er	ngineer		_									
	10,	o Di	-0											



Page 4 of 4

PROJEC	ar.	OCEA	NGATEV	VAV DADI	KING GARAC	30				ш	&A FIL	E NO	30322-030
LOCAT			LAND, M.		MINO UNIA	JE				•		T MGR	W. CHADBOURNE
CLIENT			RWALK, I	-						•	ELD R		W. ARMSTRONG
1			EWOOD (ICTION					•	LLD K ATE	LI	6/19/2007
	ONTRACTOR ONTRACTOR		NALDSO							•	FR NO	_	5
		<u> </u>								• '''		<u> </u>	
PILE					HAMMER:								
		STEEL H-		1000	Type		TTAN			•		Blows pe	
Si	ze esign Capacity	***************************************	4X102 70 ton		Cushion Rated Ene		onocast		801	ft-lbs		Ram Wei Fall (in)	ight (lbs) 19,800 30
D.		Manager 1				rgy	,			·		T all (III)	
Dila Na	Pile	Ton	Elevation		Pay	<u> </u>			ows Pe	r Inch		A size #	
Pile No.	Length	Top	14.25	Tip -42.77	Length (ft) 57.0	6	8	12	1 6 in. 17	20	10-0-5"	Ave.*	Remarks
73	60.50	17.73	14.23	-42.77	57.2	15	+	12	1/	20	10<0.5"		refusal; see add. remarks
75 90	60.50	17.58 18.73	10.79	-42.92	52.8	5	10<0.5"	17	22	20	10 40 58		refusal; see add. remarks
90	60.75		10.79	-42.02 -41.57	52.4	3	4	3	8	20 18	10<0.5"		refusal; see add. remarks
	60.50	18.93	12.43			9	 	3	-	10	10<0.5"		refusal; see add. remarks
116	79.65	24.61	12.43	-55.04	67.5	9	12<0.5"						refusal; see add. Remarks, splice added
													_
													=
											L		
			f Piles Driv				*Requi	ired M	inimum	ı:	9	avg. (per	Contractor's WEAP)
			les Driven I Piles Drive				V 44:4:	anal m	emarks				
	TOTAL	Length of	riies Drive	n 10 Date:	333 4 ./						n after e	excavated	around pile.
Rema	rks:											ice added	
	Rejected												
	Added due to						All pile	es drive	en with	steel d	riving s	hoe.	
	Added due to Added due to												
	Deleted due to												
	Broken	, doorgin on											·
g.	Test Pile												
••										To	tal Nun	iber of Pil	es Driven Today:5
Notes:	Pay lengths in	dicated are	e prelimina	ry and are	based on prope	osed					Prev	ious total	Number of Piles: 104
	cut-off elevati	ons and as											
2	Owen Haskell Elevations are	•	d reference	Portland C	ity Base datur	m					Tota	l Number	of Piles To Date: 109
۷.	Licrations are	1001 and	7		ny Dase dalui								
	<u> </u>												
	Re	gistered Er	ngineer										



Page	1	of	5

	_				·							T NO	20222 020		
PROJEC					KING GARAC	jΕ						E NO.	30322-030		
LOCATI	ON		LAND, M									T MGR	W. CHADBOURNE		
CLIENT			RWALK, L								ELD R	EP	W. ARMSTRONG		
GEN. CO	NTRACTOR		EWOOD (ATE		6/25/2007		
PILE CO	NTRACTOR	G. DO	NALDSO	N CONSTI	RUCTION					W	FR NO	•	6		
PILES	:				HAMMER:										
Ty		STEEL H-	PILE		Туре	JUN	TTAN	ннк 9	Α			Blows per	r min. 40-100		
Siz			4X102		Cushion		onocasi					Ram Wei	· · · · · · · · · · · · · · · · · · ·		
De	sign Capacity		70 ton	S	Rated Ene	rgy		79,	801	ft-lbs		Fall (in)	30		
	Pile		Elevation		Pay			Bl	ows Pe	r Inch					
Pile No.	Length	Тор	Cut-off	Tip	Length (ft)		1	Fina	6 in.			Ave.*	Remarks		
69	60.75	17.87	14.27	-42.88	57.2	8	10<0.5"						refusal		
70	60.58	17.93	14.24	-42.65	56.9	12	10<0.5"						refusal		
111	61.17	25.65	11.18	-35.52	46.7	7	11	12	17	18	10<0.5"		refusal		
113	60.75	25.77	11.22	-34.98	46.2	10	9	8	10<0.5"				refusal		
125	60.75	24.35	11.14	-36.40	47.5	10	10	10<0.5"					refusal		
126	60.75	22.57	11.10	-38.18	49.3	4	7	9	9	11	10<0.5"		refusal		
127	60.58	23.38	11.20	-37.20	48.4	4	5	6	8	9	10<0.5"		refusal		
128	60.75	25.99	11.15	-34.76	45.9	5	5	8	10<0.5"				refusal		
129	60.75	26.68	11.22	-34.07	45.3	9	11	11	11	12	10<0.5"		refusal		
130	60.75	26.17	11.14	-34.58	45.7	10	10<0.5"						refusal		
131	60.75	26.84	11.21	-33.91	45.1	3	4	10	10<0.5"				refusal		
132	60.75	25.25	11.16	-35.50	46.7	2	3	6	3	17	10<0.5"		refusal		
133	60.83	25.79	11.21	-35.04	46.3	4	4	10<0.5"					refusal		
134	60.58	26.53	11.21	-34.05	45.3	12	10<0.5"						refusal		
(2)															
													.,		
		_	f Piles Driv		672.4		*Requ	ired Mi	nimum	:	9	avg. (per	Contractor's WEAP)		
		-	es Driven I		5554.7 6227.0		A 44:4:	aual u	aulra						
	TOTAL	Lengui of	Piles Drive	II TO Date	0227.0				marks		riving s	hoe			
Remar	·ks:						7 til pil	05 01170	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3001 0	IIVING 3	noc.			
a.	Rejected														
	Added due to														
	Added due to														
	Added due to														
	Deleted due to Broken	o design cn	ange												
	Test Pile														
ð.										To	tal Nun	ber of Pil	es Driven Today: 14		
Notes:															
					based on prop	osed					Prev	ious total	Number of Piles:109		
	cut-off elevati Owen Haskell		-duiit eleva	uon data p	rovided by						Tata	1 Number	of Piles To Data: 122		
			-reference	Portland C	ity Base datur	n.					1012	TAUITIOEL	of Piles To Date: 123		
2.					, 2000 aata										
	Re	gistered En	gineer												
					60°										



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PROJEC	T	OCEA	NCATEV	VAVDAD	KING GARAG	36				ш	R. A TOTT	E NO.	30322-030		
LOCATI			LAND, M		MUIO OMIAN	<u> تار</u>	-			•		T MGR			
CLIENT			RWALK, I							•	ELD R		W. CHADBOURNE W. ARMSTRONG		
					ICITIONI							LP			
	NTRACTOR		EWOOD (•	ATE		6/26/2007		
PILE CO	NTRACTOR	<u>G. DO</u>	NALDSO	N CONST	RUCTION					. W.	FR NO		6		
PILES	S:				HAMMER:										
Ту		STEEL H-	PILE		Туре	JUN	TTAN	ннк 9	Α			Blows per	r min. 40-100		
Siz		HP 1	2X53		Cushion		onocast			•		Ram Wei			
De	sign Capacity	9	ton	s	Rated Ene	rgy		25,	000	ft-lbs		Fall (in)	18		
	Pile		Elevation		Pay			Bl	ows Pe	r Inch			<u> </u>		
Pile No.	Length	Top	Cut-off	Tip	Length (ft)			Fina				Ave.*	Remarks		
77	80.32	34.99	13.36	-45.33	58.7	13	8	9	13	10<0.5		·	refusal; splice added		
82	80.65	28.75	12.45	-51.90	64.4	7	10	12	10	11	10	10	splice added		
101	85.34	34.94	12.45	-50.40	62.9	10	12	14	10<0.5"				refusal; splice added		
115	80.44	28.52	13.38	-51.92	65.3	7	8	8	10	13	10<0.5"		refusal; splice added		
135									Ì				see add. remarks, final driving on 6/27		
152	85.18	37.68	14.00	-47.50	61.5	12	10<0.5"						refusal; splice added		
153	85.34	35.70	14.02	-49.64	63.7	13	12	13	12	10	10<0.5"		refusal; splice added		
154	84.74	31.24	13.96	-53.50	67.5	5	7	8	12	11	10<0.5"		refusal; splice added		
155	80.37	31.14	14.06	-49.23	63.3	8	6	8	9	11	10<0.5"		refusal; splice added		
156	80.17	31.93	14.01	-48.24	62.3	6	8	8	12	10	10<0.5"		refusal; splice added		
157	79.77	30.36	13.95	-49.41	63.4	5	6	9	9	13	10<0.5"		refusal; splice added		
158	85.42	26.72	14.72	-58.70	73.4	9	10	15	10<0.5"				refusal; splice added		
159													see add. remarks, final driving on 6/27		
160	85.42	31.83	14.76	-53.59	68.4	8							splice added		
161	85.57	30.11	14.50	-55.46	70.0	8	8	8	14	17	10<0.5"		refusal; splice added		
162	85.28	30.24	14.49	-55.04	69.5	12	10<0.5"						refusal; splice added		
163	85.35	30.25	14.54	-55.10	69.6	11	14	10<0.5"					refusal; splice added		
96	80.25	31.31	13.45	-48.94	62.4	12	10	10<0.5"					refusal; splice added		
	Tota	l Length of	Piles Driv	en Today:	1046.0		*Requ	ired Mi	inimum	:	8	avg. (per	Contractor's WEAP)		
			es Driven P		6227.0										
	Total I	ength of F	Piles Driver	To Date:	7273.0			ional r							
D	J						All pil	es drive	en with	steel d	riving s	hoe.			
Remai	rks: Rejected						Piles li	isted ah	ove did	not ac	hieve c	anacity at	the end of initial		
	Added due to	mislocated	l pile										to continue driving.		
	Added due to												23		
	Added due to														
	Deleted due to	design ch	ange												
	Broken														
g.	Test Pile									To	tal Num	her of Pile	es Driven Today: 16		
Notes:										10		01 1 11	10		
1.	Pay lengths in					osed					Prev	rious total	Number of Piles: 123		
	cut-off elevati		-built eleva	tion data p	rovided by										
	Owen Haskell		1000000	n	v. v						Tota	l Number	of Piles To Date: 139		
2.	Elevations are	in feet and	reference	Sortland C	ity Base datur	n.									
	~														
	Re	gistered En	gineer												
		-	_												



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PROJEC	T	OCEA	N GATEV	VAY PARI	KING GARAC	ЗE				H	&A FIL	E NO.	30322-03	30		
LOCATI	ON	PORT	LAND, MA	AINE						PF	ROJEC	T MGR	W. CHA	DBOUR	NE	
CLIENT		RIVE	RWALK, L	LC.						FI	ELD R	EP	W. ARM	STRON	IG	
GEN. CC	NTRACTOR	LEDG	EWOOD (CONSTRU	ICTION					DA	ATE		6/26/200	7		
PILE CO	NTRACTOR	G. DO	NALDSO	N CONST	RUCTION					W	FR NO	•	6			
PILES					HAMMER:											
Ту		STEEL H-	PILE		Type	JUN	TTAN	ннк 9	Α			Blows per	r min.	40-1	00	
Siz	:e	HP 1	4X102		Cushion	M	onocast	MC 90)4P			Ram Wei	ght (lbs)	19,8	00	-
De	sign Capacity	1	70 ton	S	Rated Ene	rgy		79,	801	ft-lbs		Fall (in)		30		-
Dila Ma	Pile		Elevation		Pay				ows Pe	r Inch		A A]	D		
Pile No. 78	Length	Top	Cut-off	Tip	Length (ft)	8	10 40 511	rina	l 6 in.	<u> </u>		Ave.*		Rema	rks	
79	78.79 79.11	32.20 32.98	12.39 12.36	-46.59 -46.13	59.0 58.5	9	10<0.5"	10 -0 6"		-			refusal; splic			-
80	79.11	32.98	12.36	-46.13 -46.91	59.3	9	13	10<0.5"					refusal; splic			
81	80.87	34.69	12.36	-46.18	58.6	7	15	10<0.5" 10<0.5"					refusal; splic			
97	78.48	26.23	12.37	-52.25	64.6	12	10<0.5"	10<0.5					refusal; splic			
98	80.83	29.19	12.51	-51.64	64.2	12	18	10<0.5"					refusal; splic			
99	79.18	25.45	12.47	-53.73	66.2	8	10	10<0.5"					refusal; splic			
100	83.22	30.65	12.47	-52.57	65.0	12	10<0.5"	10 -0.5					refusal; splic			
117	78.65	30.20	12.44	-48.45	60.9	4	4	4	7	10	10<0.5"		refusal; splic			
118	79.73	24.75	12.37	-54.98	67.4	8	12	16	10<0.5"				refusal; splic			
119	77.44	26.67	12.44	-50.77	63.2	7	7	7	9	12	10<0.5"		refusal; splic			
120	80.50	27.63	12.32	-52.87	65.2	5	8	14	15	16	10<0.5"		refusal; splic			
136							i						see add. rem	arks, final c	friving	on 6/27
138													see add. rem	arks, final d	iriving	on 6/27
139													see add. rem	arks, final d	lriving	on 6/27
														-		
	i															
<u></u>																
		-	f Piles Driv		752.0		*Requ	ired Mi	nimum	:	9	avg. (per	Contractor'	s WEAP)	
		_	es Driven F Piles Drive		7273.0 8025.0		A dditi	onal re	marke							
	10	Doing in Or 7	inos Direc	" To Duito	0025.0	1					hieve c	apacity at	the end of	initial		
Remai	·ks:												to continue			
	Rejected															
	Added due to						All pile	es drive	n with	steel d	riving s	hoe.				
	Added due to Added due to	-														
	Deleted due to															
f.	Broken	_				,										
g.	Test Pile									_						
Notes:										То	tal Nurr	iber of Pile	es Driven T	oday: _	1	12
1.	Pay lengths in					osed					Prev	ious total	Number of	Piles: _	1:	39
	cut-off elevation of the cut-off elevation of		-built eleva	tion data p	rovided by						Tota	l Number	of Piles To	Date:	1:	51
2.	Elevations are	in feet and	Leference	Portland C	ity Base datur	n.								•••		
	~	//														
	Rei	gistered En	igineer		_											
	100	5 DI	·D													

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													Page	4 ot			
PROJEC	CT	OCEAN GATEWAY PARKING GARAGE									&A FIL	E NO.	30322-030				
LOCATI	ION	PORT	ORTLAND, MAINE								ROJEC	T MGR	W. CHADBOURNE				
CLIENT RIVERWALK, LLC.											ELD R	EP	W. ARMSTRONG				
GEN. CO	CTION	CTION					ATE		6/27/2007								
PILE CO	RUCTION						FR NO		6								
															_		
PILE	S:				HAMMER:												
		STEEL H-			Туре							Blows pe					
Siz		***	12X53			onocas	t MC 90				Ram Wei	- '	<u>) </u>				
D€	sign Capacity		90 ton	S	Rated Ene	rgy		25,	000	ft-lbs		Fall (in)	18_				
	Pile		Elevation	Pay			Bi	ows Pe	r Inch								
Pile No.	Length	Тор	Top Cut-off Tip		Length (ft)		Final 6 in.				,	Ave.*	Remar	ks			
135	80.58	32.66	13.39	-47.92	61.3	5	8	6	9	17	10<0.5"		refusal; splice added				
140	80.29	26.21	12.96	-54.08	67.0	4	3	4	4	8	10<0.5"		refusal; splice added				
159	79.87	29.12	14.69	-50.75	65.4	6	5	10	10	15	10<0.5"		refusal; splice added				
	_																
							L										
											Щ						
			ļ														
								ļ									
											igwdap		·				
							ļ						-				
							<u> </u>										
	Tata	l I amadh a	f Piles Driv	on Todou	193.8		*Deau	ired Mi			<u> </u>	(Contractor's WEAP)				
			les Driven I				Requ	iirea ivii	mmum	· —	<u>•</u>	avg. (per	Contractor's WEAP)				
		· ·	Piles Drive	•			Additional remarks:										
				,			All of	the abo	ve piles	were	redriver	ı after spli	ice were added.				
Rema															_		
a. Rejected b. Added due to mislocated pile								All piles driven with steel driving shoe.									
	Added due to														_		
	Added due to														_		
	Deleted due to														_		
f.	Broken		_												_		
g.	Test Pile																
B.7 4 -	_									To	tal Num	iber of Pil	es Driven Today:	3	_		
Notes:	: Pay lengths in	dicated on	e prelimina	rv and are	hased on prop	nsed					Pra	ione total	Number of Piles	151			
1.	cut-off elevati					Jacu	Previous total Number of Piles:151										
	Owen Haskell					vided by					Tota	l Number	of Piles To Date:	154			
2.	Elevations are		d reference	Portland (City Base datur	n.							_				
	~ _																
		gistered E	nainas-		=												
	Ke	gistered El	ngmeer														



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ستسنيا		1												Page	5	of		
PROJECT					KING GARAC	ЗE		H&A FILE NO.					30322-030					
LOCATI	ON		PORTLAND, MAINE									T MGR	W. CHADBOURNE					
CLIENT RIVERWALK, LLC.								-	ELD R	EP	W. ARMSTRONG							
GEN. CONTRACTOR LEDGEWOOD CONSTRU								-	ATE		6/27/2007							
PILE CONTRACTOR G. DONALDSON CONSTI				RUCTION					. W	FR NO	•	6						
PILES	2.	· <u> </u>			HAMMER:													
Type STEEL H-PILE			Туре	JUN	JUNTTAN HHK 9A Blows per min. 40-100							00						
Siz	ze	HP 14	4X102	Cushion					- ft-lbs		Ram Wei		19,8					
De	sign Capacity	I	170 ton:	Rated Ene	Rated Energy 79,801						Fall (in)		30	1	,			
	Pile		Elevation		Pay				ows Pe	r Inch]					
Pile No.	Length	Тор	Cut-off	Tip	Length (ft)	<u> </u>			l 6 in.			Ave.*		Rema	rks			
136	91.50	40.21	12.87	-51.29	64.2	5	6	9	10	10	10<0.5"		refusal; spli					
137	80.83	29.10	12.36	-51.73	64.1	10	10<0.5"		<u> </u>		\vdash		refusal; spli					
138	81.17	28.54	13.00	-52.63	65.6	6	6	6	10	10<0.5"			refusal; spli					
139	88.20	36.11	12.76	-52.09	64.9	15	10<0.5"	لبا	\vdash		\vdash		refusal; spli	e added				
144	61.17	22.73	13.10	-38.44	51.5	10	9	9	9	10	9	9	ļ .				—	
145	60.83	24.74	13.15	-36.09	49.2	8	12	10<0.5"	ـــا		—		refusal			—		
146	60.75	27.34	13.15	-33.41	46.6	5	8	11	18	10<0.5"	10.00		refusal			—		
147 148	60.83	25.78 24.82	13.11	-35.05	48.2	5	5	7	7	11	10<0.5"		refusal			—		
148	60.75 61.17	25.40	13.06 13.16	-35.93 -35.77	49.0 48.9	5	10	5	5	12	10<0.5"		refusal					
150	60.75	24.24	13.16	-35.77	48.9	5	5	13	10<0.5"	15	10-0 68		refusal			—		
130	00.73	24.24	13.04	-30.31	49.0	 		$\vdash \vdash \vdash$		15	10<0.5"		refusal			—	—	
		$\vdash \vdash \vdash$	 			 	┼─┤	$\vdash \vdash$	$\vdash \vdash \vdash$	$\vdash \vdash \vdash$	$\vdash \vdash \vdash$		l I					
			 		 	 	 	$\vdash \vdash \vdash$		 	$\vdash \vdash \vdash$					—		
		$\vdash \vdash \vdash$	 	-			 	$\vdash \vdash$	$\overline{}$	$\vdash \vdash \vdash$	\vdash		 					
						 	 	\vdash	$\overline{}$	$\vdash \vdash \vdash$	$\vdash \vdash \vdash$		 					
							 	\vdash	\Box	$\vdash \vdash \vdash$	\vdash							
					 	 		\Box	$\overline{}$				 					
									\Box				†					
									\Box								_	
-		-	of Piles Driv	- 1			*Requ	ired Mi	nimum	ı: <u>9</u>	9	avg. (per	Contractor	's WEAP))			
		-	les Driven P			1		_										
	Total I	Length of	Piles Driver	a To Date:	8820.5	i		ional re			··· - A.	12	الماداد					
Remar	rke:						Piles i	30 to 1.	39 Were	e reanv	en arter	r splices w	ere added.			—	_	
	Rejected						All pil	es drive	n with	steel dr	riving s	hoe.					_	
	Added due to																_	
	Added due to																_	
	Added due to Deleted due to	•	-														_	
	Broken) acsign on	ange													—	_	
	Test Pile																	
										Tot	tal Nun	ber of Pil	es Driven	Γoday: _	1	1	_	
Notes:		•• •• • •		•							_		,				_	
	Pay lengths incut-off elevation				based on propo	osed					Prev	ious total	Number of	Piles:	15	4	_	
	Owen Haskell		-Duill Eleva	non data p	πονιαέα σχ						Tota	1 Number	of Piles To	Date:	16	55		
			d reference	Portland C	City Base datur	m.					100	1114111001	01 1 1100 10	- Date: _			-	
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