

**Project Name:** PORTLAND - MERCY MEDICAL OFFICE BUILDING - MATERIALS TESTING

**Project Number:** 06-0588.2

**Client:** LANDMARK HEALTHCARE FACILITIES LLC

**Client Contract Number:**
**General Contractor:**
**Concrete Supplier:** DRAGON PRODUCTS

**PLACEMENT INFORMATION**

**Date Cast:** 4/26/2007      **Time Cast:** 1:53      **Date Received:** 4/27/2007  
**Placement Location:** FOUNDATION WALL: 12' W OF H/3 TO 6'N OF G/1; GRADE BEAMS D.5/3 TO 4 AND C.5/2 TO 4  
**Placement Method:** PUMP TRUCK      **Placement Vol. (yd<sup>3</sup>):** 67  
**Cylinders Made By:** DAC      **Aggregate Size (in):** 3/4

**INITIAL CURING CONDITIONS**
**Temperatures**
**Minimum (°F)**      **Maximum (°F)**
**DELIVERY INFORMATION**
**Admixtures:** POLYHEED 997

**TEST RESULTS**

**Slump (in) (C-143):**      **Slump WR:** 6.0      **Load Number:** 4  
**Air Content (%) (C-231):**      **Air WR:** 7.2      **Mixer Number:** 195  
**Air Temp (°F):** 60      **Ticket Number:** 4526154  
**Conc. Temp (°F) (C-1064):** 63      **Cubic Yards:** 10  
**Design (psi):** 3500

Cylinder Designation	Cylinder Weight (lbs)	Cylinder Diameter (in)	Cross Sectional Area(In) <sup>2</sup>	Date Of Test	Cure Type	Age (days)	Fracture Type	Load (kips)	Strength (psi)
730-13A		6.00	28.27	5/3/2007	Lab	7	4	75.5	2670
730-13B		6.00	28.27	5/24/2007	Lab	28	4	119.5	4230
730-13C		6.00	28.27	5/24/2007	Lab	28	4	107.5	3800
730-13D				Hold	Lab				

**Fracture Types**


Cone



Cone and Split



Cone and Shear



Shear



Columnar

Remarks:

## Joe Bumps

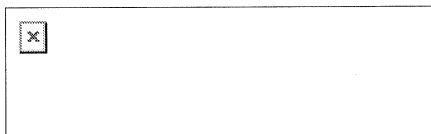
---

**From:** Roger Domingo [rdomingo@swcole.com]  
**Sent:** Friday, May 11, 2007 3:24 PM  
**To:** Joe Bumps; John Duncan; Kevin McCosh  
**Subject:** Reports

Roger E. Domingo  
Construction Services Manager

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
Cell: (207) 615-2762  
E-mail: [rdomingo@swcole.com](mailto:rdomingo@swcole.com)



[www.swcole.com](http://www.swcole.com)

**Notice:** The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.



**S.W. COLE**  
ENGINEERING, INC.

• Geotechnical Engineering • Field & Lab Testing • Scientific & Environmental Consulting

06-0588.2

May 16, 2007

Landmark Healthcare Facilities, LLC  
Attention: Mr. John Duncan  
839 North Jefferson  
Milwaukee, WI 53202

Subject: Pile Installation Summary  
Proposed Fore River Medical Pavilion  
Mercy Hospital Fore River Campus  
Portland, Maine

Dear John:

In accordance with our Agreement, we have observed the installation of HP 10 x 57 steel piles with cast driving tips at the above referenced project. The observations were conducted between March 1 and April 13, 2007.

A total of 153 piles were installed by H.B. Fleming, Inc. The H-piles were driven to practical refusal on bedrock using a MKT DE-42 single acting diesel pile hammer. A summary of driven pile installation data is attached.

We trust this letter meets your needs. Please call if you have any questions or require additional assistance.

Sincerely,

**S. W. COLE ENGINEERING, INC.**

Matthew P. Lilley, P.E.  
Geotechnical Engineer

P:\2006\06-0588.2 M - Landmark Healthcare Facilities - Portland, ME - Mercy MOB - RED\06-0588.2 Pile Installation Summary.doc



**SUMMARY REPORT OF PILE INSTALLATION**

Client	Landmark Healthcare Facilities LLC	Project: Fore River Med. Pavilion	
Report No.	#1	Project No.	06-0588.2
Pile Contractor	H.B. Fleming Engineering, Inc.	General Contractor	Ledgewood, Inc.
Pile Type	HP 10 x 57	Design Capacity	75-Tons
Hammer Type	MKT DE-42 Single Acting Diesel	Rated Energy	42,000 ft-lbs
Ram Weight	4,200 lbs	Fall	10' 6"
Blows Per Minute	N/A	Cushion Material	N/A

Pile Number	Elevation (feet)		Pay Length	Blows Per Inch						Remarks
	Cut Off	Tip		Last Six Inches						
1	13.5	-58.3	71.8	2	2	2	2	2	6 / 0	
2	13.5	-57.7	71.2	2	2	2	3	3	10 / ¾	PDA Test
3	13.5	-58.2	71.7	2	2	3	3	3	9 / ¾	
4	13.5	-57.8	71.3	2	2	2	3	7	5 / ¼	Re-strike 21 blows ¼
5	13.5	-57.8	71.3	2	3	3	7	7	3 / 0	
6	13.5	-55.8	69.3	3	4	4	4	4	8 / ½	
7	13.5	-56.4	69.9	2	2	2	2	2	8 / ¼	
8	13.5	-56.0	69.5	2	2	2	2	2	6 / 0	
9	13.5	-56.6	70.1	2	2	2	3	3	6 / 0	
10	13.5	-56.5	70.0	2	2	2	2	2	5 / 0	
11	13.5	-54.3	67.8	3	3	3	6	7	4 / ¼	
12	13.5	-54.4	67.9	2	2	2	2	8	3 / 0	
13	13.5	-55.2	68.7	2	3	3	3	3	5 / 0	
14	13.5	-53.8	67.3	2	2	2	2	2	5 / 0	
15	21.8	-57.9	79.7	1	2	2	2	8	6 / ¼	
16	21.8	-57.8	79.6	2	2	2	2	2	7 / ¼	

1137.1  
Length This Page

Length This Page	
Previous Total	
Total Length to Date	

	1137.1
+	0
	1137.1

Previous Piles Driven	0
Piles to Date	16
Design Total	153

SWCE REP.: PJO

REVIEWED BY: RED

Sheet  1  of  10



**SUMMARY REPORT OF PILE INSTALLATION**

Client	Landmark Healthcare Facilities LLC	Project: Fore River Med. Pavilion	
Report No.	#2	Project No.	06-0588.2
Pile Contractor	H.B. Fleming Engineering, Inc.	General Contractor	Ledgewood, Inc.
Pile Type	HP 10 x 57	Design Capacity	75-Tons
Hammer Type	MKT DE-42 Single Acting Diesel	Rated Energy	42,000 ft-lbs
Ram Weight	4,200 lbs	Fall	10' 6"
Blows Per Minute	N/A	Cushion Material	N/A

Pile Number	Elevation (feet)		Pay Length	Blows Per Inch						Remarks
	Cut Off	Tip		Last Six Inches						
17	21.8	-59.0	80.8	2	2	2	2	2	10 / ¾	
18	21.8	-56.8	78.6	3	3	3	3	6	4 / 0	
32	21.8	-57.2	79.0	1	1	2	2	2	6 / ¼	
33	21.8	-57.8	79.6	2	2	2	2	2	4 / ¼	
34	21.8	-56.9	78.7	1	2	2	2	7	5 / 0	
44	21.8	-55.1	76.9	4	5	6	6	7	11 / ¾	
45	21.8	-55.6	77.4	2	2	9	9	10	11	
46	21.8	-54.9	76.7	4	4	4	4	6	8 / ½	
57	21.8	-51.5	73.3	2	2	2	2	2	8 / ¼	
58	21.8	-51.7	73.5	1	1	2	2	2	8 / 0	
59	21.8	-52.0	73.8	2	2	3	3	3	9 / ¼	
76	21.8	-52.9	74.7	1	1	1	1	2	8 / ¼	
77	21.8	-52.5	74.3	1	1	1	1	1	8 / ¼	
78	21.8	-52.6	74.4	1	1	1	1	1	7 / 0	
62	27.3	-52.0	79.3	1	1	1	4	8	5 / ¼	
83	27.3	-55.1	82.4	1	1	1	1	5	6 / ¼	

1233.4  
Length This Page

Length This Page	1233.4
Previous Total	1137.1
Total Length to Date	2370.5

Previous Piles Driven	16
Piles to Date	32
Design Total	153

SWCE REP: PJO

REVIEWED BY: RED

Sheet 2 of 10



**SUMMARY REPORT OF DAILY PILE INSTALLATION**

Client	Landmark Healthcare Facilities LLC	Project: Fore River Med. Pavilion	
Report No.	#3	Project No.	06-0588.2
Pile Contractor	H.B. Fleming Engineering, Inc.	General Contractor	Ledgewood, Inc.
Pile Type	HP 10 x 57	Design Capacity	75-Tons
Hammer Type	MKT DE-42 Single Acting Diesel	Rated Energy	42,000 ft-lbs
Ram Weight	4,200 lbs	Fall	10' 6"
Blows Per Minute	N/A	Cushion Material	N/A

Pile Number	Elevation (feet)		Pay Length	Blows Per Inch						Remarks
	Cut Off	Tip		Last Six Inches						
143	21.8	-63.2	85.0	1	1	1	2	2	8 1/4	
142	21.8	-63.6	85.4	2	7	10	9	10	5 1/4	
141	21.8	-63.2	85.0	1	1	1	2	5	12 3/4	
140A	21.8	-64.6	86.4	1	1	1	2	2	9 1/4	
130	27.3	-61.9	89.2	1	2	2	3	4	8 / 0	Slice U.T. Tested
123	21.8	-63.1	84.9	2	2	2	2	2	6 / 0	Slice U.T. Tested
122	21.8	-63.1	84.9	2	2	2	2	2	5 / 0	
121	21.8	-63.6	85.4	2	2	3	3	3	5 / 0	
101	27.3	-62.4	89.7	1	2	2	2	5	6 / 0	
100	21.8	-59.3	81.1	1	1	1	1	2	9 1/4	
99	21.8	-59.7	81.5	1	1	1	1	1	7 / 0	
98	21.8	-59.3	81.1	1	2	2	2	4	8 3/4	
28	13.5	-58.6	72.1	2	2	2	2	3	10 1/4	
29	13.5	-57.9	71.4	2	2	2	2	3	10 1/2	
30	13.5	-58.5	72.0	2	2	2	2	2	11 3/4	
31	13.5	-58.2	71.7	2	2	2	2	2	10 1/2	
			1306.8							

Length This Page

Length This Page
Previous Total
Total Length to Date

1306.8
2370.5
3677.3

+

Previous Piles Driven	32
Piles to Date	48
Design Total	153

SWCE REP: PJO

REVIEWED BY: RED

Sheet 3 of 10



**SUMMARY REPORT OF DAILY PILE INSTALLATION**

Client	Landmark Healthcare Facilities LLC	Project: Fore River Med. Pavilion
Report No.	#4	Project No. 06-0588.2
Pile Contractor	H.B. Fleming Engineering, Inc.	General Contractor LedgeWood, Inc.
Pile Type	HP10 x 57	Design Capacity 75-Tons
Hammer Type	MKT DE-42 Single Acting Diesel	Rated Energy 42,000 ft-lbs
Ram Weight	4,200 lbs	Fall 10' 6"
Blows Per Minute	N/A	Cushion Material N/A

Pile Number	Elevation (feet)		Pay Length	Blows Per Inch						Remarks
	Cut Off	Tip		Last Six Inches						
19	13.5	-60.3	73.8	2	2	2	3	10	4 / 0	
20	13.5	-62.5	76.0	3	3	6	5	5	7 1/4	
21	13.5	-60.9	74.4	3	3	5	6	9	2 / 0	
22	13.5	-62.8	76.3	3	4	7	7	7	10	
23	13.5	-62.3	75.8	2	2	2	2	2	12 1/2	
24	13.5	-60.0	73.5	2	2	2	3	5	10 3/4	
25	13.5	-59.2	72.7	2	2	2	2	2	8 1/4	
26	13.5	-59.5	73.0	2	2	3	3	3	8 1/4	
27	13.5	-58.4	71.9	2	2	2	3	3	9 1/4	
35	21.8	-61.8	83.6	5	5	6	6	7	6 1/4	
36	21.8	-62.8	84.6	4	4	5	5	6	7 1/4	
37	21.8	-62.5	84.3	2	2	3	4	7	4/0	
48	21.8	-60.3	82.1	5	5	7	7	8	7 1/4	
49	21.8	-60.6	82.4	2	5	6	7	7	7 1/2	
38	26.3	-60.0	86.3	2	2	2	6	8	10 3/4	
39	26.3	-59.8	86.1	2	2	2	2	5	6 1/4	

1256.8  
Length This Page

Length This Page
Previous Total
Total Length to Date

1256.8
3677.3
4934.1

Previous Piles Driven	48
Piles to Date	64
Design Total	153

SWCE REPS: PJO/VT

REVIEWED BY: RED

Sheet 4 of 10



**SUMMARY REPORT OF DAILY PILE INSTALLATION**

Client	Landmark Healthcare Facilities LLC	Project: Fore River Med. Pavilion	
Report No.	#5	Project No.	06-0588.2
Pile Contractor	H.B. Fleming Engineering, Inc.	General Contractor	Ledgewood, Inc.
Pile Type	HP10 x 57	Design Capacity	75-Tons
Hammer Type	MKT DE-42 Single Acting Diesel	Rated Energy	42,000 ft-lbs
Ram Weight	4,200 lbs	Fall	10' 6"
Blows Per Minute	N/A	Cushion Material	N/A

Pile Number	Elevation (feet)		Pay Length	Blows Per Inch						Remarks
	Cut Off	Tip		Last Six Inches						
40	26.3	-60.1	86.4	2	2	2	4	4	8 3/4	
41	26.3	-56.9	83.2	2	2	3	6	9	3 1/4	
42	26.3	-57.1	83.4	2	2	2	3	6	10 3/4	
43	26.3	-57.3	83.6	2	2	6	6	10	6 1/4	
47	21.8	-59.5	81.3	1	2	2	4	4	7 3/4	
50	26.3	-58.4	84.7	2	3	5	5	6	8 3/4	
51	26.3	-58.0	84.3	2	4	4	6	6	8 3/4	
52	26.3	-58.5	84.8	2	5	5	5	5	8 3/4	
53	26.3	-54.0	80.3	2	2	2	4	4	8 3/4	
54	26.3	-53.8	80.1	2	2	5	5	8	9 1/2	
55	26.3	-53.4	79.7	2	2	2	4	4	6 1/4	
56	26.3	-54.8	81.1	2	2	4	7	7	9 3/4	
60	26.3	-53.0	79.3	1	1	1	1	1	5/0	
61A	27.3	-54.7	82.0	2	2	2	3	6	7 1/4	
61	27.3	-51.8	79.1	1	1	1	1	1	5/0	
63	21.8	-59.1	80.9	2	5	7	7	7	8 1/4	
			1314.2							

Length This Page

Length This Page
Previous Total
Total Length to Date

1314.2	
+	4934.1
6248.3	

Previous Piles Driven	64
Piles to Date	80
Design Total	153

SWCE REP: VLT

REVIEWED BY: RED

Sheet 5 of 10



### SUMMARY REPORT OF DAILY PILE INSTALLATION

Client	Landmark Healthcare Facilities LLC	Project: Fore River Med. Pavilion	
Report No.	#6	Project No.	06-0588.2
Pile Contractor	H.B. Fleming Engineering, Inc.	General Contractor	Ledgewood, Inc.
Pile Type	HP10 x 57	Design Capacity	75-Tons
Hammer Type	MKT DE-42 Single Acting Diesel	Rated Energy	42,000 ft-lbs
Ram Weight	4,200 lbs	Fall	10' 6"
Blows Per Minute	N/A	Cushion Material	N/A

Pile Number	Elevation (feet)		Pay Length	Blows Per Inch						Remarks
	Cut Off	Tip		Last Six Inches						
64	21.8	-58.0	79.8	5	5	6	6	7	8/0	
65	21.8	-59.9	81.7	6	7	7	8	10	6 ½	
70	23.2	-59.4	82.6	1	1	1	1	1	8/0	
71	22.2	-52.4	74.6	2	2	2	2	2	6 1/4	
72	22.2	-50.4	72.6	1	1	1	1	1	6/0	
73	22.2	-52.6	74.8	1	1	2	2	2	8/0	
74	22.2	-51.9	74.1	2	2	2	2	4	5 1/4	
75	27.3	-52.7	80.0	1	1	1	1	1	7/0	
81	27.3	-56.4	83.7	1	1	1	1	1	5/0	
82	27.3	-54.6	81.9	1	1	1	1	1	5 1/4	Splice U.T. Tested
84	21.8	-58.2	80.0	4	4	4	5	6	9 ¾	
85	21.8	-58.6	80.4	2	2	2	2	4	8/0	
86	21.8	-58.8	80.6	2	2	5	5	10	4/0	
107	27.3	-54.8	82.1	1	1	1	1	1	8 ¾	
108	21.8	-55.6	77.4	2	2	2	2	4	6 1/4	
109	21.8	-55.9	77.7	1	1	2	3	6	8/0	

1264

Length This Page

Length This Page
Previous Total
Total Length to Date

1264
6248.3
7512.3

+

Previous Piles Driven	80
Piles to Date	96
Design Total	153

SWCE REP: VLT

REVIEWED BY: RED

 Sheet 6 of 10



**SUMMARY REPORT OF DAILY PILE INSTALLATION**

Client	Landmark Healthcare Facilities LLC	Project: Fore River Med. Pavilion	
Report No.	#7	Project No.	06-0588.2
Pile Contractor	H.B. Fleming Engineering, Inc.	General Contractor	Ledgewood, Inc.
Pile Type	Hp10 x 57	Design Capacity	75-Tons
Hammer Type	MKT DE-42 Single Acting Diesel	Rated Energy	42,000 ft-lbs
Ram Weight	4,200 lbs	Fall	10' 6"
Blows Per Minute	N/A	Cushion Material	N/A

Pile Number	Elevation (feet)		Pay Length	Blows Per Inch						Remarks
	Cut Off	Tip		Last Six Inches						
110	21.8	-55.3	77.1	1	1	2	2	3	9/0	
124	27.3	-56.6	83.9	2	2	2	2	4	9 3/4	
131	21.8	-56.5	78.3	1	1	1	1	1	7 3/4	
132	21.8	-56.6	78.4	2	2	2	2	2	6/0	
133	21.8	-56	77.8	1	1	1	1	1	9/0	
134	21.8	-55.7	77.5	1	1	1	1	1	9/0	
66	22.2	-54.8	77.0	1	1	1	1	1	6/0	
68	22.2	-55.4	77.6	1	1	1	1	1	7/0	
67	22.2	-54.8	77.0	6	8	8	8	8	6 3/4	
69	22.2	-55	77.2	2	4	4	4	4	6 1/4	
79	27.3	-55.2	82.5	1	1	1	1	1	7/0	
80	27.3	-55.3	82.6	1	1	1	1	1	9 3/4	
87	27.3	-53.9	81.2	1	1	1	1	1	6/0	
88	26.2	-55.4	81.6	1	1	1	1	1	9 3/4	
89	26.2	-55.5	81.7	2	4	4	4	4	6 1/2	
90	26.2	-55	81.2	1	1	1	1	1	7 1/4	

1272.6

Length This Page

Length This Page
Previous Total
Total Length to Date

1272.6
7512.3
8784.9

+

Previous Piles Driven	96
Piles to Date	112
Design Total	153

SWCE REP: VLT

REVIEWED BY: RED



**SUMMARY REPORT OF DAILY PILE INSTALLATION**

Client	Landmark Healthcare Facilities LLC	Project: Fore River Med. Pavilion	
Report No.	#8	Project No.	06-0588.2
Pile Contractor	H.B. Fleming Engineering, Inc.	General Contractor	Ledgewood, Inc.
Pile Type	HP10 x 57	Design Capacity	75-Tons
Hammer Type	MKT DE-42 Single Acting Diesel	Rated Energy	42,000 ft-lbs
Ram Weight	4,200 lbs	Fall	10' 6"
Blows Per Minute	N/A	Cushion Material	N/A

Pile Number	Elevation (feet)		Pay Length	Blows Per Inch						Remarks
	Cut Off	Tip		Last Six Inches						
91	26.2	-53.3	79.5	1	1	1	1	1	6/0	
92	27.3	-57.2	84.5	1	1	1	1	1	7 ¼	
93	26.3	-59.0	85.3	2	2	2	2	2	10 ¾	
94	26.3	-57.5	83.8	1	1	1	1	1	4/0	
95	26.3	-58.5	84.8	1	1	1	1	1	5/0	
96	26.3	-57.8	84.1	1	1	1	1	1	5/0	
97	27.3	-58.8	86.1	1	1	2	2	2	6 ¾	
102	27.3	-57.0	84.3	1	2	4	4	5	10 ¾	
103	27.3	-55.4	82.7	1	1	1	1	1	6/0	
104	27.3	-58.0	85.3	1	1	1	1	4	9 ¾	
105	27.3	-58.9	86.2	1	1	1	1	1	9/0	
106	27.3	-61.6	88.9	1	1	1	1	1	7/0	
111	26.2	-58.7	84.9	1	2	2	4	4	7 ¾	
112	26.2	-55.9	82.1	2	2	4	4	6	10 ¼	
113	26.2	-55.9	82.1	1	2	2	4	4	6 ¼	
114	26.2	-55.4	81.6	1	1	1	1	6	5 ¼	Splice U.T. tested

1346.2  
Length This Page

Length This Page
Previous Total
Total Length to Date

1346.2
8784.9
10131.1

+

Previous Piles Driven	112
Piles to Date	128
Design Total	153

SWCE REP: VLT

REVIEWED BY: RED

Sheet 8 of 10



**SUMMARY REPORT OF DAILY PILE INSTALLATION**

Client	Landmark Healthcare Facilities LLC	Project: Fore River Med. Pavilion	
Report No.	#9	Project No.	06-0588.2
Pile Contractor	H.B. Fleming Engineering, Inc.	General Contractor	Ledgewood, Inc.
Pile Type	Hp10 x 57	Design Capacity	75-Tons
Hammer Type	MKT DE-42 Single Acting Diesel	Rated Energy	42,000 ft-lbs
Ram Weight	4,200 lbs	Fall	10' 6"
Blows Per Minute	N/A	Cushion Material	N/A

Pile Number	Elevation (feet)		Pay Length	Blows Per Inch						Remarks
	Cut Off	Tip		Last Six Inches						
115	27.3	-58.2	85.5	1	1	1	1	1	5/0	
120	27.3	-61.4	88.7	2	2	4	4	4	7 ¾	
125	27.3	-55.1	82.4	4	4	4	4	6	10 ½	
126	27.3	-52.7	80.0	1	1	1	1	7	5 ¼	
127	27.3	-57.8	85.1	1	1	1	1	1	6/0	
129	27.3	-60.5	87.8	2	2	2	2	2	7/0	
135	21.8	-54.6	76.4	1	1	1	1	4	5/0	
136	21.8	-54.8	76.6	1	1	1	1	1	7 ¼	
137	21.8	-54.4	76.2	1	1	1	1	1	7 ¼	
148	27.3	-54.2	81.5	1	1	1	1	1	10 ¾	
149	23.2	-60.9	84.1	1	1	1	1	1	10/0	
150	23.2	-59.9	83.1	2	2	2	4	7	5 ¼	
151	23.2	-56.4	79.6	2	2	2	2	2	6/0	
116	26.2	-60.1	86.3	1	2	4	4	4	6 ¼	
117	26.2	-60.4	86.6	1	2	2	2	4	4/0	
118	26.2	-60.0	86.2	1	3	3	3	3	6 ¼	
			1326.1							

Length This Page

Length This Page
Previous Total
Total Length to Date

1326.1
10131.1
11457.2

+

Previous Piles Driven	128
Piles to Date	144
Design Total	153

SWCE REP: VLT

REVIEWED BY: RED

Sheet 9 of 10



## Joe Bumps

---

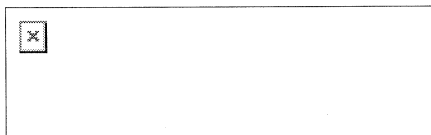
**From:** Peggy Brown [pbrown@swcole.com]  
**Sent:** Friday, May 11, 2007 2:35 PM  
**To:** 'Jim Duncan'; 'Joe Bumps '; 'Kevin McCosh'  
**Subject:** Mercy MOB

Attached is a Quality Assurance Lab report for your review.  
Thank you,

Peggy Brown  
Administrative Assistant

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
E-mail: [pbrown@swcole.com](mailto:pbrown@swcole.com)



[www.swcole.com](http://www.swcole.com)

Notice: The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.

## Joe Bumps

---

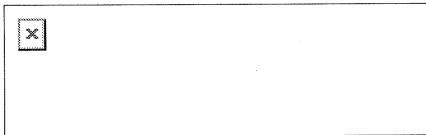
**From:** Peggy Brown [pbrown@swcole.com]  
**Sent:** Monday, June 11, 2007 4:25 PM  
**To:** 'Jim Duncan'; 'Joe Bumps '; 'Kevin McCosh'; 'Ted Staples of NewBanksBoston'  
**Subject:** Mercy MOB reports

Attached are concrete reports for your review.  
Thank you,

Peggy Brown  
Administrative Assistant

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
E-mail: [pbrown@swcole.com](mailto:pbrown@swcole.com)



[www.swcole.com](http://www.swcole.com)

Notice: The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.

## Joe Bumps

---

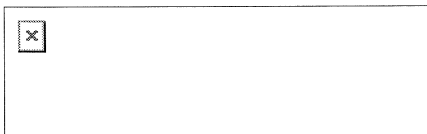
**From:** Peggy Brown [pbrown@swcole.com]  
**Sent:** Friday, May 11, 2007 2:13 PM  
**To:** 'Jim Duncan'; 'Joe Bumps '; 'Kevin McCosh'  
**Subject:** Mercy MOB concrete reports

Attached are reports for your review.  
Thank you,

Peggy Brown  
Administrative Assistant

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
E-mail: [pbrown@swcole.com](mailto:pbrown@swcole.com)



[www.swcole.com](http://www.swcole.com)

Notice: The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.



## Joe Bumps

---

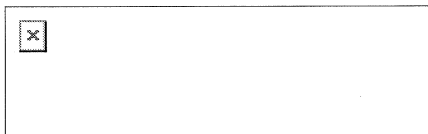
**From:** Peggy Brown [pbrown@swcole.com]  
**Sent:** Friday, May 04, 2007 2:06 PM  
**To:** 'Jim Duncan'; 'Joe Bumps '; 'Kevin McCosh'  
**Subject:** Mercy MOB report

Attached is a report for your review.  
Thank you,

Peggy Brown  
Administrative Assistant

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
E-mail: [pbrown@swcole.com](mailto:pbrown@swcole.com)



[www.swcole.com](http://www.swcole.com)

Notice: The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.



## Concrete Construction Observation Report

**Project Name:** Fore River Medical Pavilion/Mercy MOB      **Project No:** 06-0588.2  
**Client:** Landmark Healthcare      **Date:** 4/24/07  
**Placement Type:** Footing  Wall  Column  Slab  Other   
**Placement Location:** Tunnel Walls

<u>PRE PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Bar Size (diameter, length, bend and anchorage)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Location (# of bars, spacing, and cover)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Splicing (weld joint, overlap)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Tie wires used to create
Stability (wiring, chairs, and spacers)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	spacing
Reinforcement free from mud, oil, rust, or other nonmetallic coatings	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Minor rust
Reinforcement appears in conformance to specifications	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Soil subgrade prepared in accordance with project specifications	Yes <input type="checkbox"/>	No <input type="checkbox"/>	<input checked="" type="checkbox"/>	

<u>Referenced Drawings</u>	<u>Date</u>	<u>Page</u>	<u>Rev.</u>	<u>ASTM</u>	<u>GRADE</u>
Rebars and Mesh	2/14	R-6		A 615 <input checked="" type="checkbox"/>	40 <input type="checkbox"/> 50 <input type="checkbox"/> 60 <input checked="" type="checkbox"/>
Rebars and Mesh	2/14	R-4		A 616 <input type="checkbox"/>	75 <input type="checkbox"/>
				A 617 <input type="checkbox"/>	
				A 706 <input type="checkbox"/>	A 775 Epoxy <input type="checkbox"/>

<u>CONCRETE PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Required mix used	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3500 psi
Placement and consolidation of concrete observed	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Air entrained
Concrete properly conveyed to all areas of placement	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Polyheed 997
Depth of layer maximum limits not exceeded	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vibrated
Internal vibration (depth of insertion, spacing, time, vertical insertion, no conveyance of concrete by vibration)	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10' wall
Even layering around openings and embedments	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Removal of temporary ties and spacers	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**FIELD TESTING OF CONCRETE PERFORMED**      Yes       No   
**\*CYLINDER SET NO:**      730-12      ←\*refer to associated concrete test report

<u>POST PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Specified finish	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Protection of surfaces from cracking due to rapid drying	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Proper curing procedures implemented	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**NON-CONFORMANCE ITEMS OBSERVED**      Yes       No

Non-conformance item description:  
 Action taken by SWCE:

N/O = Not Observed  
 NOTES:

ATTACHMENTS Y  N

Polyheed 997 used as admixture. Slumps consistently around 5" +/- and air content 7% +/-

SWCE REPRESENTATIVE: VLT      REVIEWED BY: RED

# Quality Assurance Labs Inc.

NON-DESTRUCTIVE TESTING AND INSPECTION SERVICES  
 80 PLEASANT AVENUE • SOUTH PORTLAND, MAINE 04106 • TEL: (207) 799-8911 • FAX: (207) 799-7251

## ULTRASONIC INSPECTION REPORT

CUSTOMER: S.W. COLE		DATE OF INSPECTION	M	D	Y	
ATTENTION: CRAIG		REPORT No.	04	24	07	
PROJECT: MERCY HOSPITAL		PAGE	1	OF	1	
COMPONENT INSPECTED: COLUMN SPLICES		JOB No.				
AREA OF INTEREST: FULL PENETRATION SPLICES		P.O. No.				
COMPONENT LOCATION: 1ST FLOOR		<b>INSTRUMENT</b>				
CUSTOMER WORK ORDER No:	PART No.:	MAKE: PANAMETRICS				
MATERIAL: CARBON STEEL	HEAT No.:	MODEL: EPOCH IV				
COMPONENT SURFACE CONDITION: AS WELDED		EQUIPMENT No.:				
<b>EXAMINATION DATA</b>						
Project Code/Spec AWS D1.1		MATERIAL THICKNESS:				
U.T. Procedure No. QC-TOP-UT-2 (REV. 0)		SCREEN RANGE: 10"				
U.T. Technique No. UT-2		COUPLANT: ECHOGL				
RESULTS: AS NOTED	INDICATIONS: AS NOTED	<b>TRANSDUCERS</b>				
<b>REMARKS:</b> THE FOLLOWING CONNECTIONS WERE INSPECTED IAW AWS D1.1  COLUMN SPLICES REPAIRS: 4-C NORTH FLANGE, 4-F WEB, 2-C WEB, 2-D WEB, 2-E WEB  THE ABOVE LISTED CONNECTIONS WERE ACCEPTABLE ACCEPT: NO RELEVANT INDICATIONS NOTED.  ///LAST ITEM///		MAKE: HARISONIC				
		FREQ.: 2.25 MHz	ANGLE: 70°			
		SIZE: 19.05 mm (0.750 in.)				
		STYLE:	SHAPE: SQUARE			
		EQUIPMENT No.:				
		MAKE: HARISONIC				
		FREQ.: 5.00 MHz	ANGLE: 0°			
		SIZE: 12.7 mm (0.500 in.)				
		STYLE:	SHAPE: ROUND			
		EQUIPMENT No.:				
MAKE:						
FREQ.:	ANGLE:					
SIZE:						
STYLE:	SHAPE:					
EQUIPMENT No.:						
<b>REFERENCE BLOCKS</b>						
MAKE: IIW						
TYPE:						
MATERIAL: CARBON STEEL						
EQUIPMENT No.:						
SENSITIVITY: 48DB						
ADDITIONAL INFORMATION - SEE ATTACHED: <input type="checkbox"/> SKETCH(ES) <input type="checkbox"/> SUPPLEMENTARY SHEET(S) <input type="checkbox"/> VIDEO						
<b>SIGNATURES</b>		<b>CERTIFICATION</b>		<b>DATE</b>		
INSPECTOR JOHN BOWEN		ASNT	II	M	D Y	
SUPERVISOR						
AUTHORIZED INSPECTOR						
CUSTOMER REPRESENTATIVE						
		TRANSFER VALUE:				

## Joe Bumps

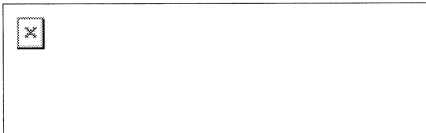
---

**From:** Peggy Brown [pbrown@swcole.com]  
**Sent:** Tuesday, May 01, 2007 10:03 AM  
**To:** 'Jim Duncan'; 'Joe Bumps '; 'Kevin McCosh'  
**Subject:** Mercy MOB concrete reports

Peggy Brown  
Administrative Assistant

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
E-mail: [pbrown@swcole.com](mailto:pbrown@swcole.com)



[www.swcole.com](http://www.swcole.com)

Notice: The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.



# Report of Concrete Compressive Strength

ASTM C-31 & C-39

**Project Name:** PORTLAND - MERCY MEDICAL OFFICE BUILDING - MATERIALS TESTING

**Project Number:** 06-0588.2

**Client:** LANDMARK HEALTHCARE FACILITIES LLC

**Client Contract Number:**

**General Contractor:**

**Concrete Supplier:** DRAGON PRODUCTS

## PLACEMENT INFORMATION

**Date Cast:** 4/6/2007      **Time Cast:** 1:25      **Date Received:** 4/7/2007

**Placement Location:** WALL LINE 4 D25 + 20'

**Placement Method:** TAILGATE

**Placement Vol. (yd³):** 21

**Cylinders Made By:** JCM

**Aggregate Size (in):** 3/4

## INITIAL CURING CONDITIONS

### Temperatures

**Minimum (°F)**      **Maximum (°F)**

## DELIVERY INFORMATION

**Admixtures:** POLYHEED 997

## TEST RESULTS

**Slump (in) (C-143):** 6.0  
**Air Content (%) (C-231):** 7.0  
**Air Temp (°F):** 41  
**Conc. Temp (°F) (C-1064):** 58

**Load Number:** 1  
**Mixer Number:** 190  
**Ticket Number:** 4525776  
**Cubic Yards:** 10.5  
**Design (psi):** 3500

Cylinder Designation	Cylinder Weight (lbs)	Cylinder Diameter (in)	Cross Sectional Area(In) <sup>2</sup>	Date Of Test	Cure Type	Age (days)	Fracture Type	Load (kips)	Strength (psi)
730-8A		6.00	28.27	4/13/2007	Lab	7	4	100.5	3560
730-8B		6.00	28.27	5/4/2007	Lab	28	4	119.5	4230
730-8C		6.00	28.27	5/4/2007	Lab	28	4	116.0	4100
730-8D				6/1/2007	Lab	56			

### Fracture Types



Cone



Cone and Split



Cone and Shear



Shear



Columnar

Remarks:

## Joe Bumps

---

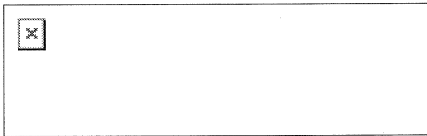
**From:** Roger Domingo [rdomingo@swcole.com]  
**Sent:** Thursday, April 19, 2007 9:26 PM  
**To:** Joe Bumps; John Duncan; Kevin McCosh  
**Subject:** Field reports and concrete observation reports

All,  
Attached are reports from the last few weeks.

Roger E. Domingo  
Construction Services Manager

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
Cell: (207) 615-2762  
E-mail: [rdomingo@swcole.com](mailto:rdomingo@swcole.com)



[www.swcole.com](http://www.swcole.com)

**Notice:** The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.

## Joe Bumps

---

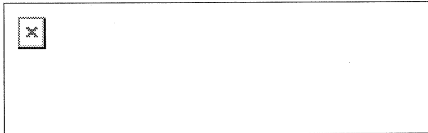
**From:** Peggy Brown [pbrown@swcole.com]  
**Sent:** Thursday, April 19, 2007 4:29 PM  
**To:** 'Jim Duncan'; 'Joe Bumps '; 'Kevin McCosh'  
**Subject:** Mercy Hospital MOB reports

Attached are reports for your review.  
Thank you,

Peggy Brown  
Administrative Assistant

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
E-mail: [pbrown@swcole.com](mailto:pbrown@swcole.com)



[www.swcole.com](http://www.swcole.com)

Notice: The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.



# Report of Concrete Compressive Strength

ASTM C-31 & C-39

**Project Name:** PORTLAND - MERCY MEDICAL OFFICE BUILDING - MATERIALS TESTING

**Project Number:** 06-0588.2

**Client:** LANDMARK HEALTHCARE FACILITIES LLC

**Client Contract Number:**

**General Contractor:**

**Concrete Supplier:** DRAGON PRODUCTS

## PLACEMENT INFORMATION

**Date Cast:** 3/28/2007      **Time Cast:** 9:40      **Date Received:** 3/29/2007  
**Placement Location:** UNDERGROUND BUILDING TUNNEL CONNECTOR FLOOR SLAB & H LINE PILE CAPS  
**Placement Method:** PUMP      **Placement Vol. (yd³):** 80  
**Cylinders Made By:** SEB      **Aggregate Size (in):** 3/4

## INITIAL CURING CONDITIONS

### Temperatures

**Minimum (°F)**      **Maximum (°F)**

## DELIVERY INFORMATION

**Admixtures:** MRWR / 2% POZZUTEC

## TEST RESULTS

<b>Slump (in) (C-143):</b>	<b>Slump WR:</b> 6.0	<b>Load Number:</b> 7
<b>Air Content (%) (C-231):</b>	<b>Air WR:</b> 2.2	<b>Mixer Number:</b> 191
<b>Air Temp (°F):</b> 42		<b>Ticket Number:</b> 3927260
<b>Conc. Temp (°F) (C-1064):</b> 59		<b>Cubic Yards:</b> 10
		<b>Design (psi):</b> 3500

Cylinder Designation	Cylinder Weight (lbs)	Cylinder Diameter (in)	Cross Sectional Area(In)²	Date Of Test	Cure Type	Age (days)	Fracture Type	Load (kips)	Strength (psi)
730-5A		6.00	28.27	4/4/2007	Lab	7	4	76.0	2690
730-5B		6.00	28.27	4/25/2007	Lab	28	4	169.5	6000
730-5C		6.00	28.27	4/25/2007	Lab	28	4	156.0	5520
730-5D				Hold	Lab				

### Fracture Types



Cone



Cone and Split



Cone and Shear



Shear



Columnar

Remarks:



**Project Name:** PORTLAND - MERCY MEDICAL OFFICE BUILDING - MATERIALS TESTING

**Project Number:** 06-0588.2

**Client:** LANDMARK HEALTHCARE FACILITIES LLC

**Client Contract Number:**

**General Contractor:**

**Concrete Supplier:** DRAGON PRODUCTS

### PLACEMENT INFORMATION

**Date Cast:** 4/10/2007      **Time Cast:** 2:00      **Date Received:** 4/11/2007

**Placement Location:** PILE CAPS LINE \_\_ A TO 3 CANOPY D & F

**Placement Method:** PUMP

**Placement Vol. (yd<sup>3</sup>):** 24

**Cylinders Made By:** JCM

**Aggregate Size (in):** 3/4

### INITIAL CURING CONDITIONS

#### Temperatures

**Minimum (°F)**                      **Maximum (°F)**

### DELIVERY INFORMATION

**Admixtures:** POLYHEED 997

### TEST RESULTS

**Slump (in) (C-143):**                      **Slump WR:** 4  
**Air Content (%) (C-231):**                      **Air WR:** 6.8  
**Air Temp (°F):** 40  
**Conc. Temp (°F) (C-1064):** 55

**Load Number:** 2  
**Mixer Number:** 170  
**Ticket Number:** 4525822  
**Cubic Yards:** 8  
**Design (psi):** 3500

Cylinder Designation	Cylinder Weight (lbs)	Cylinder Diameter (in)	Cross Sectional Area(In) <sup>2</sup>	Date Of Test	Cure Type	Age (days)	Fracture Type	Load (kips)	Strength (psi)
730-9A		6.00	28.27	4/17/2007	Lab	7	4	83.0	2940
730-9B		6.00	28.27	5/8/2007	Lab	28	4	100.5	3560
730-9C		6.00	28.27	5/8/2007	Lab	28	4	104.0	3680
730-9D				Hold	Lab				

#### Fracture Types



Cone



Cone and Split



Cone and Shear



Shear



Columnar

Remarks:

**Project Name:** PORTLAND - MERCY MEDICAL OFFICE BUILDING - MATERIALS TESTING

**Project Number:** 06-0588.2

**Client:** LANDMARK HEALTHCARE FACILITIES LLC

**Client Contract Number:**
**General Contractor:**
**Concrete Supplier:** DRAGON PRODUCTS

### PLACEMENT INFORMATION

**Date Cast:** 4/26/2007      **Time Cast:** 1:53      **Date Received:** 4/27/2007  
**Placement Location:** FOUNDATION WALL: 12' W OF H/3 TO 6'N OF G/1; GRADE BEAMS D.5/3 TO 4 AND C.5/2 TO 4  
**Placement Method:** PUMP TRUCK      **Placement Vol. (yd<sup>3</sup>):** 67  
**Cylinders Made By:** DAC      **Aggregate Size (in):** 3/4

### INITIAL CURING CONDITIONS

#### Temperatures

**Minimum (°F)**      **Maximum (°F)**

### TEST RESULTS

**Slump (in) (C-143):**      **Slump WR:** 6.0  
**Air Content (%) (C-231):**      **Air WR:** 7.2  
**Air Temp (°F):** 60  
**Conc. Temp (°F) (C-1064):** 63

### DELIVERY INFORMATION

**Admixtures:** POLYHEED 997

**Load Number:** 4  
**Mixer Number:** 195  
**Ticket Number:** 4526154  
**Cubic Yards:** 10  
**Design (psi):** 3500

Cylinder Designation	Cylinder Weight (lbs)	Cylinder Diameter (in)	Cross Sectional Area(In) <sup>2</sup>	Date Of Test	Cure Type	Age (days)	Fracture Type	Load (kips)	Strength (psi)
730-13A		6.00	28.27	5/3/2007	Lab	7	4	75.5	2670
730-13B				5/24/2007	Lab	28			
730-13C				5/24/2007	Lab	28			
730-13D				Hold	Lab				

#### Fracture Types



Cone



Cone and Split



Cone and Shear



Shear



Columnar

Remarks:

## Report of Concrete Compressive Strength

ASTM C-31 & C-39

**Project Name:** PORTLAND - MERCY MEDICAL OFFICE BUILDING - MATERIALS TESTING

**Project Number:** 06-0588.2

**Client:** LANDMARK HEALTHCARE FACILITIES LLC

**Client Contract Number:**

**General Contractor:**

**Concrete Supplier:** DRAGON PRODUCTS

### PLACEMENT INFORMATION

**Date Cast:** 3/30/2007      **Time Cast:** 1:12

**Date Received:** 3/31/2007

**Placement Location:** WALL LINE 4 E TO H

**Placement Method:** PUMP

**Placement Vol. (yd<sup>3</sup>):** 24

**Cylinders Made By:** DMR

**Aggregate Size (in):** 3/4

### INITIAL CURING CONDITIONS

**Temperatures**

**Minimum (°F)**                      **Maximum (°F)**

### DELIVERY INFORMATION

**Admixtures:** POLYHEED 997

### TEST RESULTS

**Slump (in) (C-143):** 5.5

**Load Number:** 2

**Air Content (%) (C-231):** 5.4

**Mixer Number:** 172

**Air Temp (°F):** 45

**Ticket Number:** 3927277

**Conc. Temp (°F) (C-1064):** 66

**Cubic Yards:** 10

**Design (psi):** 3500

Cylinder Designation	Cylinder Weight (lbs)	Cylinder Diameter (in)	Cross Sectional Area(In) <sup>2</sup>	Date Of Test	Cure Type	Age (days)	Fracture Type	Load (kips)	Strength (psi)
730-6A		6.00	28.27	4/6/2007	Lab	7	4	76.0	2690
730-6B		6.00	28.27	4/27/2007	Lab	28	5	138.5	4900
730-6C		6.00	28.27	4/27/2007	Lab	28	4	139.0	4920
730-6D				Hold	Lab				

Fracture Types



1  
Cone



2  
Cone and Split



3  
Cone and Shear



4  
Shear



5  
Columnar

Remarks:



# Report of Concrete Compressive Strength

ASTM C-31 & C-39

**Project Name:** PORTLAND - MERCY MEDICAL OFFICE BUILDING - MATERIALS TESTING

**Project Number:** 06-0588.2

**Client:** LANDMARK HEALTHCARE FACILITIES LLC

**Client Contract Number:**

**General Contractor:**

**Concrete Supplier:** DRAGON PRODUCTS

## PLACEMENT INFORMATION

**Date Cast:** 4/3/2007      **Time Cast:** 2:10

**Date Received:** 4/4/2007

**Placement Location:** PILE CAPS F-3, F-2, E-2, F-1

**Placement Method:** PUMP

**Placement Vol. (yd³):** 17

**Cylinders Made By:** DMR

**Aggregate Size (in):** 3/4

## INITIAL CURING CONDITIONS

### Temperatures

**Minimum (°F)**                      **Maximum (°F)**

## DELIVERY INFORMATION

**Admixtures:** POLYHEED 997

## TEST RESULTS

**Slump (in) (C-143):** 5

**Load Number:** 2

**Air Content (%) (C-231):** 5.2

**Mixer Number:** 184

**Air Temp (°F):** 38

**Ticket Number:** 4525749

**Conc. Temp (°F) (C-1064):** 62

**Cubic Yards:** 8

**Design (psi):** 3500

Cylinder Designation	Cylinder Weight (lbs)	Cylinder Diameter (in)	Cross Sectional Area(In) <sup>2</sup>	Date Of Test	Cure Type	Age (days)	Fracture Type	Load (kips)	Strength (psi)
730-7A		6.00	28.27	4/10/2007	Lab	7	4	102.5	3630
730-7B		6.00	28.27	5/1/2007	Lab	28	4	134.0	4740
730-7C		6.00	28.27	5/1/2007	Lab	28	4	142.5	5040
730-7D				Hold	Lab				

### Fracture Types



Cone



Cone and Split



Cone and Shear



Shear



Columnar

Remarks:

**Project Name:** PORTLAND - MERCY MEDICAL OFFICE BUILDING - MATERIALS TESTING

**Project Number:** 06-0588.2

**Client:** LANDMARK HEALTHCARE FACILITIES LLC

**Client Contract Number:**

**General Contractor:**

**Concrete Supplier:** DRAGON PRODUCTS

### PLACEMENT INFORMATION

**Date Cast:** 4/20/2007      **Time Cast:** 1:45      **Date Received:** 4/21/2007  
**Placement Location:** FOUNDATION WALL; I LINE / A TO E; GRADE BEAM: E LINE 3 TO 4 & PILE CAP E/4; FOUNDATION WALLS ELEVATOR #3; AND GRADE BERAMS FOR ELEVATORS 1 & 2; WALL  
**Placement Method:** PUMP TRUCK      **Placement Vol. (yd<sup>3</sup>):** 75  
**Cylinders Made By:** DAC      **Aggregate Size (in):** 3/4

### INITIAL CURING CONDITIONS

**Temperatures**

**Minimum (°F)**      **Maximum (°F)**

### DELIVERY INFORMATION

**Admixtures:** POLYHEED 997

### TEST RESULTS

<b>Slump (in) (C-143):</b>	<b>Slump WR:</b> 58.25	<b>Load Number:</b> 4
<b>Air Content (%) (C-231):</b>	<b>Air WR:</b> 7.0	<b>Mixer Number:</b> 181
<b>Air Temp (°F):</b> 62		<b>Ticket Number:</b> 4526003
<b>Conc. Temp (°F) (C-1064):</b> 65		<b>Cubic Yards:</b> 10
		<b>Design (psi):</b> 3500

Cylinder Designation	Cylinder Weight (lbs)	Cylinder Diameter (in)	Cross Sectional Area(In) <sup>2</sup>	Date Of Test	Cure Type	Age (days)	Fracture Type	Load (kips)	Strength (psi)
730-11A		6.00	28.27	4/27/2007	Lab	7	4	81.0	2870
730-11B				5/18/2007	Lab	28			
730-11C				5/18/2007	Lab	28			
730-11D				Hold	Lab				

Fracture Types



1  
Cone



2  
Cone and Split



3  
Cone and Shear



4  
Shear



5  
Columnar

Remarks:

## Report of Concrete Compressive Strength

ASTM C-31 & C-39

**Project Name:** PORTLAND - MERCY MEDICAL OFFICE BUILDING - MATERIALS TESTING

**Project Number:** 06-0588.2

**Client:** LANDMARK HEALTHCARE FACILITIES LLC

**Client Contract Number:**

**General Contractor:**

**Concrete Supplier:** DRAGON PRODUCTS

### PLACEMENT INFORMATION

**Date Cast:** 4/24/2007      **Time Cast:** 1:30      **Date Received:** 4/25/2007

**Placement Location:** TUNNEL WALLS

**Placement Method:** PUMP

**Placement Vol. (yd<sup>3</sup>):** 80

**Cylinders Made By:** VLT

**Aggregate Size (in):** 3/4

### INITIAL CURING CONDITIONS

**Temperatures**

**Minimum (°F)**                      **Maximum (°F)**

### DELIVERY INFORMATION

**Admixtures:** POLYHEED 997

### TEST RESULTS

<b>Slump (in) (C-143):</b>	<b>Slump WR:</b> 5.75	<b>Load Number:</b> 2
<b>Air Content (%) (C-231):</b>	<b>Air WR:</b> 7.3	<b>Mixer Number:</b> 183
<b>Air Temp (°F):</b> 71		<b>Ticket Number:</b> 4526083
<b>Conc. Temp (°F) (C-1064):</b> 63		<b>Cubic Yards:</b> 10
		<b>Design (psi):</b> 3500

Cylinder Designation	Cylinder Weight (lbs)	Cylinder Diameter (in)	Cross Sectional Area(In <sup>2</sup> )	Date Of Test	Cure Type	Age (days)	Fracture Type	Load (kips)	Strength (psi)
730-12A		6.00	28.27	5/1/2007	Lab	7	4	92.0	3250
730-12B				5/22/2007	Lab	28			
730-12C				5/22/2007	Lab	28			
730-12D				Hold	Lab				

Fracture Types



1  
Cone



2  
Cone and Split



3  
Cone and Shear



4  
Shear



5  
Columnar

Remarks:

## Report of Concrete Compressive Strength

ASTM C-31 &amp; C-39

**Project Name:** PORTLAND - MERCY MEDICAL OFFICE BUILDING - MATERIALS TESTING

**Project Number:** 06-0588.2

**Client:** LANDMARK HEALTHCARE FACILITIES LLC

**Client Contract Number:**
**General Contractor:**
**Concrete Supplier:** DRAGON PRODUCTS

### PLACEMENT INFORMATION

**Date Cast:** 3/28/2007      **Time Cast:** 9:10      **Date Received:** 3/29/2007  
**Placement Location:** UNDERGROUND BUILDING TUNNEL CONNTECTOR FLOOR SLAB & H LINE PILE CAPS

**Placement Method:** PUMP  
**Cylinders Made By:** SEB

**Placement Vol. (yd<sup>3</sup>):** 80  
**Aggregate Size (in):** 3/4

### INITIAL CURING CONDITIONS

#### Temperatures

**Minimum (°F)**                      **Maximum (°F)**

### TEST RESULTS

**Slump (in) (C-143):**                      **Slump WR:** 6.0  
**Air Content (%) (C-231):**                      **Air WR:** 2.4  
**Air Temp (°F):** 42  
**Conc. Temp (°F) (C-1064):** 62

### DELIVERY INFORMATION

**Admixtures:** MRWR / 2% POZZUTEC

**Load Number:** 4  
**Mixer Number:** 157  
**Ticket Number:** 3927256  
**Cubic Yards:** 10  
**Design (psi):** 3500

Cylinder Designation	Cylinder Weight (lbs)	Cylinder Diameter (in)	Cross Sectional Area(In) <sup>2</sup>	Date Of Test	Cure Type	Age (days)	Fracture Type	Load (kips)	Strength (psi)
730-4A		6.00	28.27	4/4/2007	Lab	7	4	90.0	3180
730-4B		6.00	28.27	4/25/2007	Lab	28	4	150.0	5310
730-4C		6.00	28.27	4/25/2007	Lab	28	4	153.0	5410
730-4D				Hold	Lab				

#### Fracture Types



Cone



Cone and Split



Cone and Shear



Shear



Columnar

Remarks:

## Joe Bumps

---

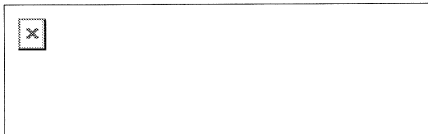
**From:** Peggy Brown [pbrown@swcole.com]  
**Sent:** Thursday, April 19, 2007 4:14 PM  
**To:** 'Jim Duncan'; 'Joe Bumps '; 'Kevin McCosh'  
**Subject:** Mercy Hospital MOB reports

Attached are reports for your review.  
Thank you,

Peggy Brown  
Administrative Assistant

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
E-mail: [pbrown@swcole.com](mailto:pbrown@swcole.com)



[www.swcole.com](http://www.swcole.com)

**Notice:** The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.



## Joe Bumps

---

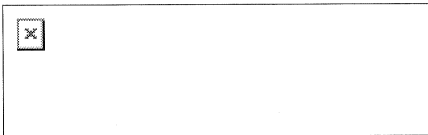
**From:** Peggy Brown [pbrown@swcole.com]  
**Sent:** Friday, April 13, 2007 4:25 PM  
**To:** 'Jim Duncan'; 'Joe Bumps '; 'Kevin McCosh'  
**Subject:** Mercy MOB concrete reports

Attached are concrete reports for your review.

Peggy Brown  
Administrative Assistant

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
E-mail: [pbrown@swcole.com](mailto:pbrown@swcole.com)



[www.swcole.com](http://www.swcole.com)

Notice: The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.

## Joe Bumps

---

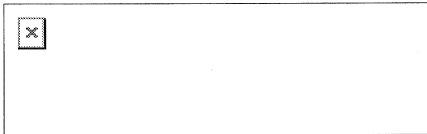
**From:** Peggy Brown [pbrown@swcole.com]  
**Sent:** Wednesday, April 11, 2007 8:59 AM  
**To:** 'Jim Duncan'; 'Joe Bumps '; 'Kevin McCosh'  
**Subject:** Mercy MOB reports

Attached are reports for your review.  
Thank you,

Peggy Brown  
Administrative Assistant

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
E-mail: [pbrown@swcole.com](mailto:pbrown@swcole.com)



[www.swcole.com](http://www.swcole.com)

---

Notice: The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.

## Joe Bumps

---

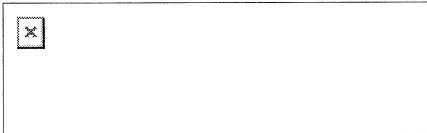
**From:** Peggy Brown [pbrown@swcole.com]  
**Sent:** Friday, May 04, 2007 5:03 PM  
**To:** 'Jim Duncan'; 'Joe Bumps '; 'Kevin McCosh'  
**Subject:** Mercy MOB concrete reports

Attached are reports for your review.  
Thank you,

Peggy Brown  
Administrative Assistant

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
E-mail: [pbrown@swcole.com](mailto:pbrown@swcole.com)



---

[www.swcole.com](http://www.swcole.com)

Notice: The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.



## Concrete Construction Observation Report

**Project Name:** Fore River Medical Pavilion/Mercy MOB **Project No:** 06-0588.2  
**Client:** Landmark Healthcare **Date:** 4/3/07  
**Placement Type:** Footing  Wall  Column  Slab  Other   
**Placement Location:** Pile Caps Line F 1-3 & E2

<u>PRE PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Bar Size (diameter, length, bend and anchorage)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Location (# of bars, spacing, and cover)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Splicing (weld joint, overlap)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	<input checked="" type="checkbox"/>	No splicing or overlaps
Stability (wiring, chairs, and spacers)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Used Concrete Brick
Reinforcement free from mud, oil, rust, or other nonmetallic coatings	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Reinforcement appears in conformance to specifications	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Soil subgrade prepared in accordance with project specifications	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	

<u>Referenced Drawings</u>	<u>Date</u>	<u>Page</u>	<u>Rev.</u>	<u>ASTM</u>	<u>GRADE</u>
Rebars and Mesh	2/14	R-5		A 615 <input checked="" type="checkbox"/> A 616 <input type="checkbox"/> A 617 <input type="checkbox"/> A 706 <input type="checkbox"/>	40 <input type="checkbox"/> 50 <input type="checkbox"/> 60 <input checked="" type="checkbox"/> 75 <input type="checkbox"/> A 775 Epoxy <input type="checkbox"/>

<u>CONCRETE PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Required mix used	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3500 psi
Placement and consolidation of concrete observed	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Air entrained
Concrete properly conveyed to all areas of placement	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Polyheed 997
Depth of layer maximum limits not exceeded	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Internal vibration (depth of insertion, spacing, time, vertical insertion, no conveyance of concrete by vibration)	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Even layering around openings and embedments	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
Removal of temporary ties and spacers	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None used

**FIELD TESTING OF CONCRETE PERFORMED** Yes  No   
 \*CYLINDER SET NO: 730-7 ← \*refer to associated concrete test report

<u>POST PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Specified finish	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Protection of surfaces from cracking due to rapid drying	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Proper curing procedures implemented	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**NON-CONFORMANCE ITEMS OBSERVED** Yes  No

Non-conformance item description:  
 Action taken by SWCE:  
 N/O = Not Observed  
 NOTES:

ATTACHMENTS Y  N

SWCE REPRESENTATIVE: Dale Richards

REVIEWED BY: RED

## Joe Bumps

---

**From:** Roger Domingo [rdomingo@swcole.com]  
**Sent:** Thursday, April 05, 2007 3:33 PM  
**To:** jbumps@ledgewoodconstruction.com  
**Cc:** 'Kevin McCosh'  
**Subject:** RE: Pile as-builts

Thanks Joe. We will include in tolerance issues in our pile summary.  
Roger

---

**From:** Joe Bumps [mailto:jbumps@ledgewoodconstruction.com]  
**Sent:** Thursday, April 05, 2007 2:13 PM  
**To:** rdomingo@swcole.com  
**Cc:** Kevin McCosh  
**Subject:** RE: Pile as-builts

Roger, sorry it took us 6 days to reply. Dave Bernier and myself are laying these piles out daily and keeping record of our layout notes. We review the driven position when we inspect form placement prior to casting any concrete, as do your onsite techs. We are 75% through the pile phase. At this time we have only 1 pile we will be checking real close it is at (D.5 - 3.5) we believe it to be well within the 6" tolerance limit. We plan to check it closer the next time our transit is set up. Van knows we are monitoring this pile and we will show him the results. When the pile driving is complete Ledgewood Construction will provide you with a final report, confirming that all piles are within the specifications tolerances.

-----Original Message-----

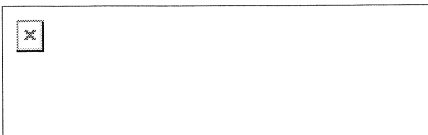
**From:** Roger Domingo [mailto:rdomingo@swcole.com]  
**Sent:** Thursday, March 29, 2007 5:24 PM  
**To:** jbumps@ledgewoodconstruction.com  
**Subject:** Pile as-builts

Joe,  
As part of the final report for special inspections we will need as-built locations for each pile. I assume Ledgewood will provide survey. Please let me know.

Roger E. Domingo  
Construction Services Manager

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
Cell: (207) 615-2762  
E-mail: [rdomingo@swcole.com](mailto:rdomingo@swcole.com)



[www.swcole.com](http://www.swcole.com)

**Notice:** The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.

3/4/2008

## Joe Bumps

---

**From:** Joe Bumps [jbumps@ledgewoodconstruction.com]  
**Sent:** Thursday, April 05, 2007 2:13 PM  
**To:** 'rdomingo@swcole.com'  
**Cc:** Kevin McCosh  
**Subject:** RE: Pile as-builts

Roger, sorry it took us 6 days to reply. Dave Bernier and myself are laying these piles out daily and keeping record of our layout notes. We review the driven position when we inspect form placement prior to casting any concrete, as do your onsite techs. We are 75% through the pile phase. At this time we have only 1 pile we will be checking real close it is at (D.5 - 3.5) we believe it to be well within the 6" tolerance limit. We plan to check it closer the next time our transit is set up. Van knows we are monitoring this pile and we will show him the results. When the pile driving is complete Ledgewood Construction will provide you with a final report, confirming that all piles are within the specifications tolerances.

-----Original Message-----

**From:** Roger Domingo [mailto:rdomingo@swcole.com]  
**Sent:** Thursday, March 29, 2007 5:24 PM  
**To:** jbumps@ledgewoodconstruction.com  
**Subject:** Pile as-builts

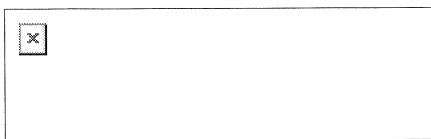
Joe,

As part of the final report for special inspections we will need as-built locations for each pile. I assume Ledgewood will provide survey. Please let me know.

Roger E. Domingo  
Construction Services Manager

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
Cell: (207) 615-2762  
E-mail: [rdomingo@swcole.com](mailto:rdomingo@swcole.com)



[www.swcole.com](http://www.swcole.com)

**Notice:** The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.



## Concrete Construction Observation Report

**Project Name:** Fore River Medical Pavilion/Mercy MOB **Project No:** 06-0588.2  
**Client:** Landmark Healthcare **Date:** 3/30/07  
**Placement Type:** Footing  Wall  Column  Slab  Other   
**Placement Location:** Line 4-e to h

<u>PRE PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Bar Size (diameter, length, bend and anchorage)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Location (# of bars, spacing, and cover)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Splicing (weld joint, overlap)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Stability (wiring, chairs, and spacers)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Spacers and wiring ok
Reinforcement free from mud, oil, rust, or other nonmetallic coatings	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Minor rust
Reinforcement appears in conformance to specifications	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Soil subgrade prepared in accordance with project specifications	Yes <input type="checkbox"/>	No <input type="checkbox"/>	<input checked="" type="checkbox"/>	

<u>Referenced Drawings</u>	<u>Date</u>	<u>Page</u>	<u>Rev.</u>	<u>ASTM</u>	<u>GRADE</u>
Rebars and Mesh	2/14	R-5		A 615 <input checked="" type="checkbox"/>	40 <input type="checkbox"/> 50 <input type="checkbox"/> 60 <input checked="" type="checkbox"/>
				A 616 <input type="checkbox"/>	75 <input type="checkbox"/>
				A 617 <input type="checkbox"/>	
				A 706 <input type="checkbox"/>	A 775 Epoxy <input type="checkbox"/>

<u>CONCRETE PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Required mix used	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3500 psi
Placement and consolidation of concrete observed	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Air entrained
Concrete properly conveyed to all areas of placement	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Polyheed 997
Depth of layer maximum limits not exceeded	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vibrated
Internal vibration (depth of insertion, spacing, time, vertical insertion, no conveyance of concrete by vibration)	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Even layering around openings and embedments	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Removal of temporary ties and spacers	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None used

**FIELD TESTING OF CONCRETE PERFORMED**

\*CYLINDER SET NO: 730-6 Yes  No   
 ←\*refer to associated concrete test report

<u>POST PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Specified finish	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Protection of surfaces from cracking due to rapid drying	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Proper curing procedures implemented	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**NON-CONFORMANCE ITEMS OBSERVED**

Yes  No   
 Non-conformance item description:  
 Action taken by SWCE:

N/O = Not Observed

NOTES:

ATTACHMENTS Y  N

SWCE REPRESENTATIVE: Dale Rickards

REVIEWED BY: RED



## Joe Bumps

---

**From:** Roger Domingo [rdomingo@swcole.com]

**Sent:** Thursday, March 29, 2007 5:24 PM

**To:** jbumps@ledgewoodconstruction.com

**Subject:** Pile as-builts

Joe,

As part of the final report for special inspections we will need as-built locations for each pile. I assume Ledgewood will provide survey. Please let me know.

Roger E. Domingo  
Construction Services Manager

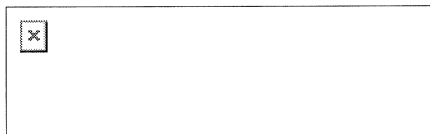
S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866

Fax: (207) 657-2840

Cell: (207) 615-2762

E-mail: [rdomingo@swcole.com](mailto:rdomingo@swcole.com)



[www.swcole.com](http://www.swcole.com)

**Notice:** The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.

## Joe Bumps

---

**From:** Roger Domingo [rdomingo@swcole.com]  
**Sent:** Sunday, March 18, 2007 10:18 PM  
**To:** Joe Bumps; John Duncan; Kevin McCosh  
**Subject:** Field report

All,

Attached is field report for 3/14/07 concrete placement. I will send along field reports as I receive them from our field personnel. We will notify Ledgewood Construction immediately of any non-conformance items in the field and issue a "highlighted" report as soon as possible to all. Please let me know if you have any comments regarding field reports.

Thank you,

Roger E. Domingo  
Construction Services Manager

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
Cell: (207) 615-2762  
E-mail: [rdomingo@swcole.com](mailto:rdomingo@swcole.com)



[www.swcole.com](http://www.swcole.com)

**Notice:** The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.

## Joe Bumps

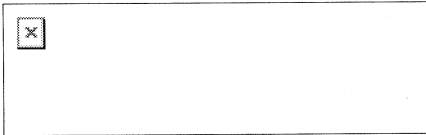
---

**From:** Peggy Brown [pbrown@swcole.com]  
**Sent:** Thursday, March 29, 2007 4:27 PM  
**To:** 'Jim Duncan'; 'Joe Bumps '; 'Kevin McCosh'  
**Subject:** Mercy MOB reports

Peggy Brown  
Administrative Assistant

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
E-mail: [pbrown@swcole.com](mailto:pbrown@swcole.com)



[www.swcole.com](http://www.swcole.com)

**Notice:** The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.

## Joe Bumps

---

**From:** Kevin McCosh [kmccosh@ledgewoodconstruction.com]  
**Sent:** Friday, March 16, 2007 9:44 AM  
**To:** Joe Bumps  
**Subject:** RE: City inspections and requirements.

Done.

**Kevin A. McCosh**  
Senior Project Manager

**Ledgewood Construction**  
27 Main Street  
South Portland, ME 04106  
207-767-1866  
fax 207-767-1869

[kmccosh@ledgewoodconstruction.com](mailto:kmccosh@ledgewoodconstruction.com)  
<http://www.ledgewoodconstruction.com>

---

**From:** Joe Bumps [mailto:jbumps@ledgewoodconstruction.com]  
**Sent:** Thursday, March 15, 2007 1:58 PM  
**To:** Kevin McCosh  
**Subject:** City inspections and requirements.

Kevin; We met with Chris Hanson, city inspector on Wednesday, they were here for there first inspection. They Expressed city requirements for reporting special inspections be sent to them each month P.D.F. and a hard copy of all inspections be sent to them at the end of the project. Chris Hanson's "e" mail is. [cs@portlandmaine.gov](mailto:cs@portlandmaine.gov)

**Joe Bumps**  
Project Superintendent

**Ledgewood Construction**  
PO Box 8107  
Portland, ME 04104  
207-767-1866  
fax 207-767-1869

[jbumps@ledgewoodconstruction.com](mailto:jbumps@ledgewoodconstruction.com)  
<http://www.ledgewoodconstruction.com>

## Joe Bumps

---

**From:** Gary Bucklin [gbucklin@swcole.com]  
**Sent:** Wednesday, March 07, 2007 12:04 PM  
**To:** jdunkan@lhf.biz  
**Cc:** kmccosh@ledgewoodconstruction.com; jbumps@ledgewoodconstruction.com  
**Subject:** Mercy Fore River Campus Vibration Monitoring

Hi John:

Attached are seismograph reports for the measurement of ground vibrations during pile driving on 3-5-2007 at the Mercy Fore River Campus Fore River Medical Pavilion Building in Portland. Please let me know if you have questions or need additional information.

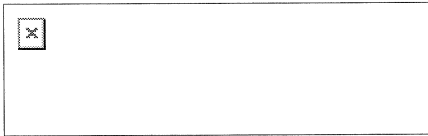
Thanks,

Gary

Gary W. Bucklin, C.G.  
Senior Geologist

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
Cell: (207) 615-2761  
E-mail: [gbucklin@swcole.com](mailto:gbucklin@swcole.com)



[www.swcole.com](http://www.swcole.com)

Notice: The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.

3/4/2008



## Concrete Construction Observation Report

**Project Name:** Mercy MOB **Project No:** 06-0588.2  
**Client:** Landmark Healthcare Facilities LLC **Date:** 3/14/07  
**Placement Type:** Footing  Wall  Column  Slab  Other   
**Placement Location:** Pile Caps on H & H.1 line between line 1 & 4

<u>PRE PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Bar Size (diameter, length, bend and anchorage)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Extra Vert in P4
Location (# of bars, spacing, and cover)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Inspected by PJO/VLT
Splicing (weld joint, overlap)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Stability (wiring, chairs, and spacers)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Reinforcement free from mud, oil, rust, or other nonmetallic coatings	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Mud in spots
Reinforcement appears in conformance to specifications	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Soil subgrade prepared in accordance with project specifications	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	

<u>Referenced Drawings</u>	<u>Date</u>	<u>Page</u>	<u>Rev.</u>	<u>ASTM</u>	<u>GRADE</u>
Rebars & Mesh FND Plan	2/14/07	R1, R4,R5		A 615 <input checked="" type="checkbox"/> A 616 <input type="checkbox"/> A 617 <input type="checkbox"/> A 706 <input type="checkbox"/>	40 <input type="checkbox"/> 50 <input type="checkbox"/> 60 <input checked="" type="checkbox"/> 75 <input type="checkbox"/> A 775 Epoxy <input type="checkbox"/>

<u>CONCRETE PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Required mix used	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3500 psi
Placement and consolidation of concrete observed	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Concrete properly conveyed to all areas of placement	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Depth of layer maximum limits not exceeded	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Internal vibration (depth of insertion, spacing, time, vertical insertion, no conveyance of concrete by vibration)	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Internal Vibrator used.
Even layering around openings and embedments	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Removal of temporary ties and spacers	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**FIELD TESTING OF CONCRETE PERFORMED** Yes  No   
**\*CYLINDER SET NO:** 728-1 ←\*refer to associated concrete test report

<u>POST PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Specified finish	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Protection of surfaces from cracking due to rapid drying	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Proper curing procedures implemented	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**NON-CONFORMANCE ITEMS OBSERVED** Yes  No

Non-conformance item description:  
 Action taken by SWCE:

N/O = Not Observed ATTACHMENTS Y  N   
 NOTES:

SWCE made Ledgewood aware of potential for mud getting on rebar . Advised Ledgewood of extra vertical bar in P4 column. Spec. book listed a 4" slump out of pump. Structural Engineer approved 6" slump with midrange per Dragon submittal. Confirmed slump spec with Ledgewood. Polyheed 997 used as admixture. Air entrained. Set of cylinders made from 2<sup>nd</sup> load.

SWCE REPRESENTATIVE: VLT REVIEWED BY: RED



## Concrete Construction Observation Report

**Project Name:** Mercy MOB  
**Client:** LedgeWood  
**Placement Type:** Footing  Wall  Column  Slab  Other   
**Placement Location:** Pile Caps Line C from A to E, Canopy Pier footings D & E

**Project No:** 06-0588.2  
**Date:** 4-10-07

<u>PRE PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Bar Size (diameter, length, bend and anchorage)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Per-Plans
Location (# of bars, spacing, and cover)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Appropriate
Splicing (weld joint, overlap)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Per-spec
Stability (wiring, chairs, and spacers)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Stable
Reinforcement free from mud, oil, rust, or other nonmetallic coatings	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Minor water: Note #1
Reinforcement appears in conformance to specifications	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	OK
Soil subgrade prepared in accordance with project specifications	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Ok

<u>Referenced Drawings</u>	<u>Date</u>	<u>Page</u>	<u>Rev.</u>	<u>ASTM</u>	<u>GRADE</u>
Footing Description	2-14-07	R-4	-	A 615 <input type="checkbox"/>	40 <input type="checkbox"/> 50 <input type="checkbox"/> 60 <input checked="" type="checkbox"/>
Pier Rebar Description	2-14-07	S3.1		A 616 <input type="checkbox"/>	75 <input type="checkbox"/>
				A 617 <input type="checkbox"/>	
				A 706 <input type="checkbox"/>	A 775 Epoxy <input type="checkbox"/>

<u>CONCRETE PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Required mix used	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3500psi 3/4" Max Agg. Polyheed 997
Placement and consolidation of concrete observed	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good
Concrete properly conveyed to all areas of placement	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pump truck
Depth of layer maximum limits not exceeded	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OK
Internal vibration (depth of insertion, spacing, time, vertical insertion, no conveyance of concrete by vibration)	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No Dragging
Even layering around openings and embedments	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Removal of temporary ties and spacers	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**FIELD TESTING OF CONCRETE PERFORMED** Yes  No   
**\*CYLINDER SET NO:** 730-9 ←\*refer to associated concrete test report

<u>POST PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Specified finish	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Trowel Finish
Protection of surfaces from cracking due to rapid drying	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Proper curing procedures implemented	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**NON-CONFORMANCE ITEMS OBSERVED** Yes  No

Non-conformance item description:  
 Action taken by SWCE:

N/O = Not Observed

ATTACHMENTS Y  N

**NOTES:**

Note #1: Water was observed around the Pile tops and their insertion points. It was limited to only around the piles and was not running throughout the forms, causing problems.

SWCE REPRESENTATIVE: JRM

REVIEWED BY: RED



**FIELD REPORT**

**Project Name:** Fore River Medical Pavilion -draft  
**Client:** Landmark Healthcare Facilities LLC  
**Client's Rep.:** John Duncan  
**Contractor:** Ledgewood Inc.

**Project No:** 06-0588.2  
**Date:** 3-19-07 to 3-23-07  
**Page:** 1 of 1  
**Arrived at Site:** 7:00  
**Left Site:** 3:45  
**Technician:** PJO

<u>Weather</u>			<u>Site Conditions</u>	
<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Snow	<input type="checkbox"/> Warm	<input type="checkbox"/> Clear	<input type="checkbox"/> Dusty
<input type="checkbox"/> Overcast	<input type="checkbox"/> Fog	<input type="checkbox"/> Hot	<input checked="" type="checkbox"/> Muddy	<input type="checkbox"/> _____
<input checked="" type="checkbox"/> Rain	<input checked="" type="checkbox"/> Cold	<input type="checkbox"/> Windy	<input checked="" type="checkbox"/> Frozen	Temperatures:15 to 55

<b>Worked performed by SWCE</b>		<input type="checkbox"/> Site Meeting	<input type="checkbox"/> Field Testing	<input checked="" type="checkbox"/> Observations
<input type="checkbox"/> Soil	<input type="checkbox"/> Concrete	<input type="checkbox"/> Masonry	<input type="checkbox"/> Asphalt	<input checked="" type="checkbox"/> Pile Driving

**Equipment Used**      -Core Drill   -Generator   -Windsor Probe   -Rebar Locator   -Digital Camera    GPS  
 \_\_\_\_\_       \_\_\_\_\_

**Construction Activities Observed:** Shaw Brothers continued excavation for pile caps working along G and F lines. The basement area was re-graded as saturated subgrade and snow were removed and replaced with geotextile fabric and crushed stone. A second lift of compacted crushed stone was also applied at the base of the connector tunnel. H.B. Fleming completed installation of piling along 1-line and will cut the remainder of driven piles to grade early next week. To date 66 piles have been fully driven. Lajoie Brothers placed concrete at all pile caps on 4-line and began installation of formwork for caps on G-line. Connector tunnel formwork was erected and reinforcement previously constructed was lifted in place after the waterproofing membrane was rolled on.

**Discussions, Recommendations:**

**ITEMS OBSERVED NOT IN CONFORMANCE TO PROJECT SPECIFICATIONS:** None observed

SWCE REPRESENTATIVE: PJO

REVIEWED BY: RED





## Concrete Construction Observation Report

**Project Name:** Mercy MOB **Project No:** 06-0588.2  
**Client:** Landmark Healthcare Facilities LLC **Date:** 3/20/07  
**Placement Type:** Footing  Wall  Column  Slab  Other   
**Placement Location:** Pile Caps on line 4 D, E, F, G

<u>PRE PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Bar Size (diameter, length, bend and anchorage)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Location (# of bars, spacing, and cover)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Splicing (weld joint, overlap)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Stability (wiring, chairs, and spacers)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Reinforcement free from mud, oil, rust, or other nonmetallic coatings	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Mud in spots, minor rust
Reinforcement appears in conformance to specifications	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Snow outside of forms
Soil subgrade prepared in accordance with project specifications	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	

<u>Referenced Drawings</u>	<u>Date</u>	<u>Page</u>	<u>Rev.</u>	<u>ASTM</u>	<u>GRADE</u>
Rebars & Mesh FND Plan	2/14/07	R1, R4,R5		A 615 <input checked="" type="checkbox"/> A 616 <input type="checkbox"/> A 617 <input type="checkbox"/> A 706 <input type="checkbox"/>	40 <input type="checkbox"/> 50 <input type="checkbox"/> 60 <input checked="" type="checkbox"/> 75 <input type="checkbox"/> A 775 Epoxy <input type="checkbox"/>

<u>CONCRETE PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Required mix used	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3500 psi
Placement and consolidation of concrete observed	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16.5 cubic yards placed
Concrete properly conveyed to all areas of placement	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Depth of layer maximum limits not exceeded	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Internal vibration (depth of insertion, spacing, time, vertical insertion, no conveyance of concrete by vibration)	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Internal Vibrator used.
Even layering around openings and embedments	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Removal of temporary ties and spacers	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**FIELD TESTING OF CONCRETE PERFORMED** Yes  No   
**\*CYLINDER SET NO:** 730-2 ←\*refer to associated concrete test report

<u>POST PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Specified finish	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Protection of surfaces from cracking due to rapid drying	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Proper curing procedures implemented	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Thermal blankets.

**NON-CONFORMANCE ITEMS OBSERVED** Yes  No

Non-conformance item description:  
 Action taken by SWCE:

N/O = Not Observed ATTACHMENTS Y  N   
 NOTES:

Advised Ledgewood of 2" of snow around 4-F and 4-G. Ledgewood decided not to melt or remove snow from around the outside of the forms because of the potential of excess water entering inside the form. Ledgewood stated they would drape thermal blankets over the top of the forms. Set of 4 cylinders made off 1<sup>st</sup> load.

SWCE REPRESENTATIVE: VLT

REVIEWED BY: RED



## Concrete Construction Observation Report

**Project Name:** Mercy MOB  
**Client:** Landmark Healthcare Facilities LLC  
**Placement Type:** Footing  Wall  Column  Slab  Other   
**Placement Location:** Pile Caps on line 4 A,B, & C

**Project No:** 06-0588.2  
**Date:** 3/22/07

<u>PRE PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Bar Size (diameter, length, bend and anchorage)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Location (# of bars, spacing, and cover)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Splicing (weld joint, overlap)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Stability (wiring, chairs, and spacers)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Reinforcement free from mud, oil, rust, or other nonmetallic coatings	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Water pumped by
Reinforcement appears in conformance to specifications	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Shaw Bros.
Soil subgrade prepared in accordance with project specifications	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	

<u>Referenced Drawings</u>	<u>Date</u>	<u>Page</u>	<u>Rev.</u>	<u>ASTM</u>	<u>GRADE</u>
Rebars & Mesh FND Plan	2/14/07	R1, R4,R5		A 615 <input checked="" type="checkbox"/> A 616 <input type="checkbox"/> A 617 <input type="checkbox"/> A 706 <input type="checkbox"/>	40 <input type="checkbox"/> 50 <input type="checkbox"/> 60 <input checked="" type="checkbox"/> 75 <input type="checkbox"/> A 775 Epoxy <input type="checkbox"/>

<u>CONCRETE PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Required mix used	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3500 psi
Placement and consolidation of concrete observed	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12 cubic yards placed
Concrete properly conveyed to all areas of placement	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Depth of layer maximum limits not exceeded	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Internal vibration (depth of insertion, spacing, time, vertical insertion, no conveyance of concrete by vibration)	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Internal Vibrator used.
Even layering around openings and embedments	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Removal of temporary ties and spacers	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**FIELD TESTING OF CONCRETE PERFORMED** Yes  No   
**\*CYLINDER SET NO:** 730-3 ←\*refer to associated concrete test report

<u>POST PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Specified finish	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Protection of surfaces from cracking due to rapid drying	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Proper curing procedures implemented	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Thermal blankets.

**NON-CONFORMANCE ITEMS OBSERVED** Yes  No

Non-conformance item description:  
 Action taken by SWCE:

N/O = Not Observed  
 NOTES:

ATTACHMENTS Y  N

No midrange-Polyheed 997 added to batch mix per Ledgewood. Hot water in Dragon Concretes trucks added to concrete, on site led to increase in temp of concrete. Concrete 73 degrees on 1<sup>st</sup> load. Spoke to Ledgewood about water in area of Line 4-A. Water was pumped out of formwork and surrounding area prior to placement by Shaw Bros.. Set of 4 cylinders made off 1<sup>st</sup> load.

SWCE REPRESENTATIVE: VLT REVIEWED BY: RED



**FIELD REPORT**

**Project Name:** Fore River Medical Pavilion -draft  
**Client:** Landmark Healthcare Facilities LLC  
**Client's Rep.:** John Duncan  
**Contractor:** Ledgewood Inc.

**Project No:** 06-0588.2  
**Date:** 3-12-07 to 3-16-07  
**Page:** 1 of 1  
**Arrived at Site:** 7:00  
**Left Site:** 3:45  
**Technician:** PJO

<u>Weather</u>			<u>Site Conditions</u>	
<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Snow	<input type="checkbox"/> Warm	<input type="checkbox"/> Clear	<input type="checkbox"/> Dusty
<input type="checkbox"/> Overcast	<input type="checkbox"/> Fog	<input type="checkbox"/> Hot	<input checked="" type="checkbox"/> Muddy	<input type="checkbox"/> _____
<input checked="" type="checkbox"/> Rain	<input checked="" type="checkbox"/> Cold	<input type="checkbox"/> Windy	<input checked="" type="checkbox"/> Frozen	Temperatures:15 to 55

<b>Worked performed by SWCE</b>		<input type="checkbox"/> Site Meeting	<input type="checkbox"/> Field Testing	<input checked="" type="checkbox"/> Observations
<input type="checkbox"/> Soil	<input type="checkbox"/> Concrete	<input type="checkbox"/> Masonry	<input type="checkbox"/> Asphalt	<input checked="" type="checkbox"/> Pile Driving

**Equipment Used**      -Core Drill   -Generator   -Windsor Probe   -Rebar Locator   -Digital Camera    GPS  
 \_\_\_\_\_       \_\_\_\_\_

**Construction Activities Observed:** Shaw Brothers continued excavation for pile caps along G and 1-line. Subgrade material found throughout the site consists of gray clay, a minimum of 12-inches of crushed stone has been placed at the base of pile caps. Pile caps have been accumulating some water after excavation but have been pumped "clean" during the fine grading process and remained relatively dry prior to placement of concrete. H.B. Fleming completed installation of piling along 4-line and will cut the remainder of driven piles to grade early next week. Pile tip elevations varied from -59 to -52-feet and pile lengths have been between 86-73-feet long. An ultrasonic weld inspection was performed by QAL on two piles along 4-line #123 and #130. Pile #130 failed the initial inspection was fixed and both piles passed full penetration butt weld requirement. Lajoie Brothers placed concrete at pile caps on H and H.1-line and began installation of reinforcement and formwork between G and D on 4-line.

**Discussions, Recommendations:** It was discussed with Ledgewood that as temperatures rise and site conditions become increasingly muddy that "rebar mats" constructed and stored on the ground be brushed clean prior to installation.

**ITEMS OBSERVED NOT IN CONFORMANCE TO PROJECT SPECIFICATIONS:** None observed

SWCE REPRESENTATIVE: PJO

REVIEWED BY: RED



**FIELD REPORT**

**Project Name:** Fore River Medical Pavilion -draft  
**Client:** Landmark Healthcare Facilities LLC  
**Client's Rep.:** John Duncan  
**Contractor:** Ledgewood Inc.

**Project No:** 06-0588.2  
**Date:** 3-5-07 to 3-9-07  
**Page:** 1 of 1  
**Arrived at Site:** 7:00  
**Left Site:** 3:45  
**Technician:** PJO

**Weather**                      **Site Conditions**

Clear     Snow     Warm     Clear     Dusty  
 Overcast     Fog     Hot     Muddy     \_\_\_\_\_  
 Rain     Cold     Windy     Frozen    Temperatures: 0 to 32

<b>Worked performed by SWCE</b>		<input type="checkbox"/> Site Meeting	<input type="checkbox"/> Field Testing	<input checked="" type="checkbox"/> Observations
<input type="checkbox"/> Soil	<input type="checkbox"/> Concrete	<input type="checkbox"/> Masonry	<input type="checkbox"/> Asphalt	<input checked="" type="checkbox"/> Pile Driving

**Equipment Used**             -Core Drill     -Generator     -Windsor Probe     -Rebar Locator     -Digital Camera     GPS  
 Seismograph Monitoring \_\_\_\_\_     Video Camera \_\_\_\_\_

**Construction Activities Observed:** Shaw Brothers excavated for pile caps along 1-line and placed geo-textile fabric and the first 12-inch lift of crushed stone in connector tunnel area. Excavation of pile caps was done with both smooth and toothed buckets due to frozen conditions. H.B. Fleming installed piles on H and H.1-line. Tip elevations ranged between -59 and -54-feet and pile lengths varied between 79 and 67-feet long. QAL preformed a visual weld inspection and will return next week for ultrasonic inspection of welds.

**Discussions, Recommendations:**

**ITEMS OBSERVED NOT IN CONFORMANCE TO PROJECT SPECIFICATIONS:** None observed

SWCE REPRESENTATIVE: PJO

REVIEWED BY: RED



ERROR: syntaxerror  
OFFENDING COMMAND: --nostringval--

STACK:

/ASR  
false

# Quality Assurance Labs Inc.

NON-DESTRUCTIVE TESTING AND INSPECTION SERVICES

80 PLEASANT AVENUE • SOUTH PORTLAND, MAINE 04106 • TEL: (207) 799-8911 • FAX: (207) 799-7251

## ULTRASONIC INSPECTION REPORT

CUSTOMER: S.W. COLE ENG.		DATE OF INSPECTION	M	D	Y
ATTENTION: CRAIG		REPORT No.	03	15	07
PROJECT: MERCY HOSPITAL MOB		PAGE	1	OF	1
COMPONENT INSPECTED: SPLICE CONNECTIONS		JOB No.	060588.		
AREA OF INTEREST:		P.O. No.	060588.2		
COMPONENT LOCATION: LINE 4		<b>INSTRUMENT</b>			
CUSTOMER WORK ORDER No: 060588.2	PART No.: #123 & #130	MAKE: PANAMETRICS			
MATERIAL: CARBON STEEL	HEAT No.:	MODEL: EPOCH III MDL 2300			
COMPONENT SURFACE CONDITION: AS WELDED		EQUIPMENT No.:			
<b>EXAMINATION DATA</b>		MATERIAL THICKNESS: VARIABLE			
Project Code/Spec AWS D1.1 SECTION 6		SCREEN RANGE: 10"			
U.T. Procedure No. QC-TOP-UT-1 (REV. 0)		U.T. Technique No.			
RESULTS: AS NOTED		INDICATIONS: AS NOTED			
<p><b>REMARKS:</b></p> <p>INSPECTED THE FOLLOWING CONNECTIONS IAW AWS D1.1:</p> <p>LINE # 4: CONNECTION # 130 REJECTED FOR LINEAR INDICATION REJECT: LINEAR INDICATION</p> <p>CONNECTION # 123 ACCEPTED: NO RELEVANT INDICATIONS NOTED. ACCEPT: NO CRACKS, CRACKLIKE OR RELEVANT INDICATIONS NOTED.</p> <p>CONNECTION # 130 REPAIR ACCEPTED: NO RELEVANT INDICATIONS NOTED. ACCEPT: NO CRACKS, CRACKLIKE OR RELEVANT INDICATIONS NOTED</p> <p>///LAST ITEM///</p> <p style="text-align: center;"><b>FAA REPAIR STATION NUMBER RX5R187N</b></p> <p style="text-align: center;">METHOD(S),PROCESS(ES),PROCEDURE(S) MERCURY FREE</p>		<b>TRANSDUCERS</b>			
		MAKE: HARISONIC			
		FREQ.: 2.25 MHz		ANGLE: 70°/45	
		SIZE: 19.05 mm (0.750 in.)			
		STYLE: DUAL		SHAPE: SQUARE	
		EQUIPMENT No.:			
		MAKE: HARISONIC			
		FREQ.: 2.25 MHz		ANGLE: 0°	
		SIZE: 25.4 mm (1.000 in.)			
		STYLE: DUAL		SHAPE: ROUND	
EQUIPMENT No.:					
MAKE:					
FREQ.:		ANGLE:			
SIZE:					
STYLE:		SHAPE:			
EQUIPMENT No.:					
<b>REFERENCE BLOCKS</b>					
MAKE: PANAMETRICS					
TYPE: IIV BLOCK					
MATERIAL: CARBON STEEL					
EQUIPMENT No.:					
SENSITIVITY: 62Db					
ADDITIONAL INFORMATION - SEE ATTACHED: <input type="checkbox"/> SKETCH(ES) <input type="checkbox"/> SUPPLEMENTARY SHEET(S) <input type="checkbox"/> VIDEO					
<b>SIGNATURES</b>		<b>CERTIFICATION</b>		<b>DATE</b>	
INSPECTOR JOHN BOWEN		ASNT	II	M	D Y
SUPERVISOR					
AUTHORIZED INSPECTOR					
CUSTOMER REPRESENTATIVE					
		TRANSFER VALUE:			



# Report of Concrete Compressive Strength

ASTM C-31 & C-39

**Project Name:** PORTLAND - MERCY MEDICAL OFFICE BUILDING - MATERIALS TESTING

**Project Number:** 06-0588.2

**Client:** LANDMARK HEALTHCARE FACILITIES LLC

**Client Contract Number:**

**General Contractor:**

**Concrete Supplier:** DRAGON PRODUCTS

## PLACEMENT INFORMATION

**Date Cast:** 3/14/2007      **Time Cast:** 1:15      **Date Received:** 3/15/2007

**Placement Location:** H & H.1 - PILECAPS BETWEEN LINE 1 & 4

**Placement Method:** PUMP

**Placement Vol. (yd<sup>3</sup>):** 19

**Cylinders Made By:** VLT

**Aggregate Size (in):** 3/4

## INITIAL CURING CONDITIONS

### Temperatures

**Minimum (°F)**                      **Maximum (°F)**

## DELIVERY INFORMATION

**Admixtures:** POLYHEED 997

## TEST RESULTS

**Slump (in) (C-143):**                      **Slump WR:** 5.25

**Load Number:** 2

**Air Content (%) (C-231):**                      **Air WR:** 7.0

**Mixer Number:** 183

**Air Temp (°F):**

**Ticket Number:** 4525455

**Conc. Temp (°F) (C-1064):** 67

**Cubic Yards:** 10

**Design (psi):** 3500

Cylinder Designation	Cylinder Weight (lbs)	Cylinder Diameter (in)	Cross Sectional Area(In) <sup>2</sup>	Date Of Test	Cure Type	Age (days)	Fracture Type	Load (kips)	Strength (psi)
730-1A		6.00	28.27	3/21/2007	Lab	7	4	94.0	3330
730-1B				4/11/2007	Lab	28			
730-1C				4/11/2007	Lab	28			
730-1D				Hold	Lab				

### Fracture Types



Cone



Cone and Split



Cone and Shear



Shear



Columnar

Remarks:



## Report of Concrete Compressive Strength

ASTM C-31 & C-39

**Project Name:** PORTLAND - MERCY MEDICAL OFFICE BUILDING - MATERIALS TESTING

**Project Number:** 06-0588.2

**Client:** LANDMARK HEALTHCARE FACILITIES LLC

**Client Contract Number:**

**General Contractor:**

**Concrete Supplier:** DRAGON PRODUCTS

### PLACEMENT INFORMATION

**Date Cast:** 3/20/2007      **Time Cast:** 12:30

**Date Received:** 3/21/2007

**Placement Location:** LINE 4 PILECAPS D, E, F, G

**Placement Method:** PUMP

**Placement Vol. (yd<sup>3</sup>):** 16.5

**Cylinders Made By:** VLT

**Aggregate Size (in):** 3/4

### INITIAL CURING CONDITIONS

#### Temperatures

**Minimum (°F)**                      **Maximum (°F)**

### TEST RESULTS

**Slump (in) (C-143):**                      **Slump WR:** 3.25  
**Air Content (%) (C-231):**                      **Air WR:** 6.6  
**Air Temp (°F):** 35  
**Conc. Temp (°F) (C-1064):** 61

### DELIVERY INFORMATION

**Admixtures:** POLYHEED 997

**Load Number:** 1  
**Mixer Number:** 173  
**Ticket Number:** 4525509  
**Cubic Yards:** 10  
**Design (psi):** 3500

Cylinder Designation	Cylinder Weight (lbs)	Cylinder Diameter (in)	Cross Sectional Area(In) <sup>2</sup>	Date Of Test	Cure Type	Age (days)	Fracture Type	Load (kips)	Strength (psi)
730-2A		6.00	28.27	3/27/2007	Lab	7	4	102.5	3630
730-2B				4/17/2007	Lab	28			
730-2C				4/17/2007	Lab	28			
730-2D				Hold	Lab				

#### Fracture Types



1  
Cone



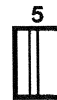
2  
Cone and Split



3  
Cone and Shear



4  
Shear



5  
Columnar

Remarks:



# Report of Concrete Compressive Strength

ASTM C-31 & C-39

**Project Name:** PORTLAND - MERCY MEDICAL OFFICE BUILDING - MATERIALS TESTING

**Project Number:** 06-0588.2

**Client:** LANDMARK HEALTHCARE FACILITIES LLC

**Client Contract Number:**

**General Contractor:**

**Concrete Supplier:** DRAGON PRODUCTS

## PLACEMENT INFORMATION

**Date Cast:** 3/22/2007      **Time Cast:** 1:30

**Date Received:** 3/23/2007

**Placement Location:** LINE 4 PILECAPS A, B & C

**Placement Method:** TAILGATE

**Placement Vol. (yd<sup>3</sup>):** 12

**Cylinders Made By:** VLT

**Aggregate Size (in):** 3/4

## INITIAL CURING CONDITIONS

### Temperatures

**Minimum (°F)**                      **Maximum (°F)**

## DELIVERY INFORMATION

**Admixtures:** N/A

## TEST RESULTS

**Slump (in) (C-143):**                      **Slump WR:** 4.5

**Load Number:** 1

**Air Content (%) (C-231):**                      **Air WR:** 5

**Mixer Number:** 181

**Air Temp (°F):** 50

**Ticket Number:** 4525565

**Conc. Temp (°F) (C-1064):** 73

**Cubic Yards:** 6

**Design (psi):** 3500

Cylinder Designation	Cylinder Weight (lbs)	Cylinder Diameter (in)	Cross Sectional Area(In) <sup>2</sup>	Date Of Test	Cure Type	Age (days)	Fracture Type	Load (kips)	Strength (psi)
730-3A		6.00	28.27	3/29/2007	Lab	7	4	77.0	2720
730-3B				4/19/2007	Lab	28			
730-3C				4/19/2007	Lab	28			
730-3D				Hold	Lab				

### Fracture Types



Cone



Cone and Split



Cone and Shear



Shear



Columnar

Remarks:



## Concrete Construction Observation Report

**Project Name:** Mercy MOB **Project No:** 06-0588.2  
**Client:** Landmark Healthcare Facilities LLC **Date:** 3/14/07  
**Placement Type:** Footing  Wall  Column  Slab  Other   
**Placement Location:** Pile Caps on H & H.1 line between line 1 & 4

<u>PRE PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Bar Size (diameter, length, bend and anchorage)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Extra Vert in P4
Location (# of bars, spacing, and cover)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Inspected by PJO/VLT
Splicing (weld joint, overlap)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Stability (wiring, chairs, and spacers)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Reinforcement free from mud, oil, rust, or other nonmetallic coatings	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	Mud in spots
Reinforcement appears in conformance to specifications	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	
Soil subgrade prepared in accordance with project specifications	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	

<u>Referenced Drawings</u>	<u>Date</u>	<u>Page</u>	<u>Rev.</u>	<u>ASTM</u>	<u>GRADE</u>
Rebars & Mesh FND Plan	2/14/07	R1, R4,R5		A 615 <input checked="" type="checkbox"/> A 616 <input type="checkbox"/> A 617 <input type="checkbox"/> A 706 <input type="checkbox"/>	40 <input type="checkbox"/> 50 <input type="checkbox"/> 60 <input checked="" type="checkbox"/> 75 <input type="checkbox"/> A 775 Epoxy <input type="checkbox"/>

<u>CONCRETE PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Required mix used	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3500 psi
Placement and consolidation of concrete observed	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Concrete properly conveyed to all areas of placement	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Depth of layer maximum limits not exceeded	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Internal vibration (depth of insertion, spacing, time, vertical insertion, no conveyance of concrete by vibration)	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Internal Vibrator used.
Even layering around openings and embedments	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Removal of temporary ties and spacers	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**FIELD TESTING OF CONCRETE PERFORMED** Yes  No   
 \*CYLINDER SET NO: 728-1 ←\*refer to associated concrete test report

<u>POST PLACEMENT OBSERVATIONS</u>	<u>In Compliance</u>		<u>N/O</u>	<u>Comments</u>
Specified finish	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Protection of surfaces from cracking due to rapid drying	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Proper curing procedures implemented	Yes <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**NON-CONFORMANCE ITEMS OBSERVED** Yes  No

Non-conformance item description:  
 Action taken by SWCE:

N/O = Not Observed ATTACHMENTS Y  N   
 NOTES:

SWCE made Ledgewood aware of potential for mud getting on rebar . Advised Ledgewood of extra vertical bar in P4 column. Spec. book listed a 4" slump out of pump. Structural Engineer approved 6" slump with midrange per Dragon submittal. Confirmed slump spec with Ledgewood. Polyheed 997 used as admixture. Air entrained. Set of cylinders made from 2<sup>nd</sup> load.

SWCE REPRESENTATIVE: VLT REVIEWED BY: RED



**Letter of Transmittal**

<b>To:</b> Landmark Healthcare Facilities, LLC Attention: Mr. John Duncan 839 North Jefferson Milwaukee, WI 53202	<b>Date:</b> March 7, 2007  <b>Project No:</b> 06-0588.2 M  <b>Subject:</b> Vibration Monitoring Pile Driving Fore River Medical Pavilion Portland, Maine
---	--

**We are sending you:**

<input type="checkbox"/> Investigation Report	<input checked="" type="checkbox"/> Attached	<input type="checkbox"/> Under Separate Cover
<input type="checkbox"/> Laboratory Test Report(s)	<input type="checkbox"/> Prints	<input type="checkbox"/> Samples
<input type="checkbox"/> Field Test Report(s)	<input type="checkbox"/> Copy of Letter(s)	<input type="checkbox"/> Invoice
	<input type="checkbox"/> Specifications	<input checked="" type="checkbox"/> Other

<b>Description:</b>	Seismograph Reports Fore River Short Stay Hospital Building Mercy Fore River Campus Portland, Maine
---------------------	--

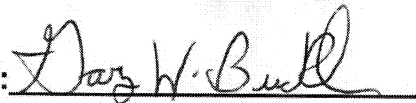
**These are transmitted as checked below:**

<input checked="" type="checkbox"/> For your information	<input checked="" type="checkbox"/> For your use
<input checked="" type="checkbox"/> As requested	<input type="checkbox"/> Returned

<p><b>Remarks:</b> John: Attached are two seismograph reports recorded on March 5, 2007 in the basement of the Fore River Short Stay Hospital building during pile driving activities for the adjacent Fore River Medical Pavilion building. The seismograph was set up to record approximately 75 feet from where the piles were being driven. The first seismograph report (PDA-1) indicates that the ground vibration level (resultant peak particle velocity) during pile driving was measured at 0.06 inches per second (IPS). The second seismograph report (PDA-2) shows that the seismograph failed to trigger when set at 0.05 IPS, which indicates the vibration levels during pile driving at the time of recording were less than 0.05 IPS. Please contact us if you have any questions.</p>
--

**Copy to:**  
Kevin McCosh (Ledgewood Construction)  
Joe Bumps (Ledgewood Construction)

**S. W. COLE ENGINEERING, INC.**

**BY:**   
Gary W. Bucklin, C.G.  
Senior Geologist

SCANNING

\*\* SAFEGUARD SEISMIC UNIT 1000-D \*\*  
INSTRUMENT # SSU 1045  
\*\* A/D CALIBRATED OK \*\*  
MAR 05/07 09:33:16  
DATE, TIME OK(Y/N)?Y  
CLIENT: GILBANE  
LEDGEWOOD  
OPERATION: MERCY HOSPITAL  
SSU LOCATION: NW CORNER  
DISTANCE TO BLAST (Ft): 75  
OPERATOR: MFB  
SEIS TRIG LVL (IPS): (.02-4.00).05  
SOUND TRIG LEVEL (dB): (110-140)140  
RECORD TIME (Sec): (5,10,15)5  
GRAPH(Y/N)? Y  
SSU SCANNING

PDA-1

06-0588.2

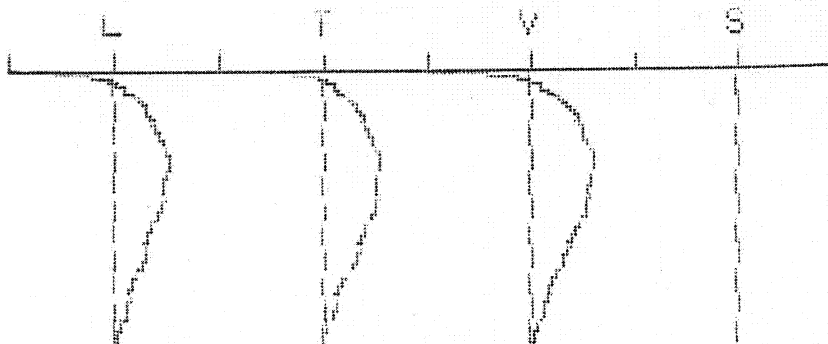
MAR 05/07 10:10:31

	L	T	V
PPV (in/s)	0.03	0.03	0.03
PPD (in)	0.00036	0.00009	0.00054
PPA (G)	0.17	0.08	0.17
F (Vel) Hz	56.9	85.3	85.3
RPPV (in/s)	0.05		
PEAK SOUND: < 110 dB, .000224 PSI			

\*\* A/D CALIBRATED OK \*\*

CALIBRATION GRAPH

TIME = .167 SEC/IN  
L,T,V = 1 IPS/DIV



SHAKETABLE CALIBRATED ON MAY 22/06  
BY: PHILIP R BERGER & ASSOCIATES, INC  
BOX 779, WARRENDALE, PA. 15095  
TEL: 412-776-3600

SSU SCANNING

\*\* SAFEGUARD SEISMIC UNIT 1000-D \*\*

INSTRUMENT # SSU 1045

\*\* H/D CALIBRATED OK \*\*

MAR 05/07 10:23:33

DATE, TIME OK(Y/N)?Y

CLIENT: LEDGEMOOD

OPERATION: MERCY HOSPITAL

SSU LOCATION: NW CORNER

DISTANCE TO BLAST (Ft): 75

OPERATOR: MFB

SEIS TRIG LVL (IPS): (.02-4.00).05

SOUND TRIG LEVEL (dB): (110-140)140

RECORD TIME (Sec): (5,10,15)5

GRAPH(Y/N)? Y

SSU SCANNING

PDA-2  
06 0588.2  
DID NOT TRIGGER  
AT .05 IPS TRIGGER  
LEVEL

## Joe Bumps

---

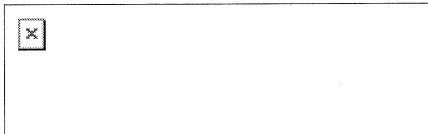
**From:** Roger Domingo [rdomingo@swcole.com]  
**Sent:** Wednesday, February 21, 2007 3:39 PM  
**To:** 'John Duncan'  
**Cc:** 'Kevin McCosh'; jbumps@ledgewoodconstruction.com  
**Subject:** Schedule of Special Inspections

John,  
Attached is Schedule of Special Inspections prepared by Robert Chester. I still owe you a final Agreement that adjusts our estimate for the additional scope items.

Roger E. Domingo  
Construction Services Manager

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
Cell: (207) 615-2762  
E-mail: [rdomingo@swcole.com](mailto:rdomingo@swcole.com)



[www.swcole.com](http://www.swcole.com)

**Notice:** The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.

## Joe Bumps

---

**From:** Roger Domingo [rdomingo@swcole.com]  
**Sent:** Wednesday, April 11, 2007 12:59 AM  
**To:** Joe Bumps; John Duncan; Kevin McCosh  
**Subject:** construction observation and concrete reports

All,  
Attached are construction and concrete observation report. I will attempt to update weekly.  
Please contact me with any questions

Roger E. Domingo  
Construction Services Manager

S. W. Cole Engineering, Inc.  
286 Portland Road  
Gray, ME 04039-9586

Phone: (207) 657-2866  
Fax: (207) 657-2840  
Cell: (207) 615-2762  
E-mail: [rdomingo@swcole.com](mailto:rdomingo@swcole.com)



[www.swcole.com](http://www.swcole.com)

**Notice:** The information contained in this communication and any files transmitted with it are confidential, may be privileged and are intended for the exclusive use of the above named addressee(s). If you are not the intended recipient(s) or the person responsible for delivering the e-mail to the intended recipient, be advised that you are expressly prohibited from printing, copying, distributing, disseminating, or in any other way using any of the information contained within this communication without the permission of the sender. Please delete the communication and notify the sender of the error.



# Statement of Special Inspections

Project: **Fore River Medical Pavilion**

Location: **Portland, Maine**

Owner: **Landmark Healthcare Facilities, Inc.**

Design Professional in Responsible Charge: **Robert E. Chester, P.E. (Structural)**

This *Statement of Special Inspections* is submitted as a condition for permit issuance in accordance with the Special Inspection and Structural Testing requirements of the Building Code. It includes a schedule of Special Inspection services applicable to this project as well as the name of the Special Inspection Coordinator and the identity of other approved agencies to be retained for conducting these inspections and tests. This *Statement of Special Inspections* encompass the following disciplines:

- Structural       Mechanical/Electrical/Plumbing  
 Architectural       Other: \_\_\_\_\_

The Special Inspection Coordinator shall keep records of all inspections and shall furnish inspection reports to the Building Official and the Registered Design Professional in Responsible Charge. Discovered discrepancies shall be brought to the immediate attention of the Contractor for correction. If such discrepancies are not corrected, the discrepancies shall be brought to the attention of the Building Official and the Registered Design Professional in Responsible Charge. The Special Inspection program does not relieve the Contractor of his or her responsibilities.

Interim reports shall be submitted to the Building Official and the Registered Design Professional in Responsible Charge.

A *Final Report of Special Inspections* documenting completion of all required Special Inspections, testing and correction of any discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Use and Occupancy.

Job site safety and means and methods of construction are solely the responsibility of the Contractor.

Interim Report Frequency:

or  per attached schedule.

Prepared by:

**Robert E. Chester, P.E.**

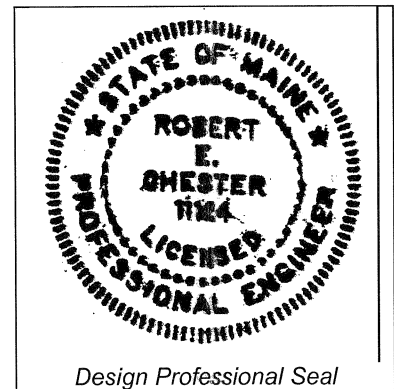
(type or print name)



Signature

**Jan. 30, 2007**

Date



Owner's Authorization:

Building Official's Acceptance:

Signature

Date

Signature

Date

# Schedule of Inspection and Testing Agencies

This Statement of Special Inspections / Quality Assurance Plan includes the following building systems:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Soils and Foundations  | <input checked="" type="checkbox"/> Spray Fire Resistant Material |
| <input checked="" type="checkbox"/> Cast-in-Place Concrete | <input type="checkbox"/> Wood Construction                        |
| <input type="checkbox"/> Precast Concrete                  | <input type="checkbox"/> Exterior Insulation and Finish System    |
| <input type="checkbox"/> Masonry                           | <input type="checkbox"/> Mechanical & Electrical Systems          |
| <input checked="" type="checkbox"/> Structural Steel       | <input type="checkbox"/> Architectural Systems                    |
| <input type="checkbox"/> Cold-Formed Steel Framing         | <input checked="" type="checkbox"/> Special Cases (SLRS)          |

Special Inspection Agencies	Firm	Address, Telephone, e-mail
1. <b>Special Inspection Coordinator (Structural)</b>	<i>Robert E Chester Associates</i>	<i>119 Coulter Avenue, Suite 175 Ardmore, PA 19003 Tel: 610-645-9570 Email: recaengineers@verizon.net</i>
2. <b>Site Field Inspector (Piles/ Foundations)</b>	<i>S.W. Cole Engineering, Inc.</i>	<i>296 Portland Road Gray, Maine 04039 Tel: 207-657-2866 Email: infogray@swcole.com</i>
3. <b>Special Inspector (Structural Steel, Special Cases)</b>	<i>S.W. Cole Engineering, Inc.</i>	<i>296 Portland Road Gray, Maine 04039 Tel: 207-657-2866 Email: infogray@swcole.com</i>
4. <b>Testing Agency</b>	<i>S.W. Cole Engineering, Inc.</i>	<i>296 Portland Road Gray, Maine 04039 Tel: 207-657-2866 Email: infogray@swcole.com</i>
5. <b>Testing Agency</b>		
6. <b>Other</b>		

Note: The inspectors and testing agencies shall be engaged by the Owner or the Owner's Agent, and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official, prior to commencing work.

# Quality Assurance Plan

---

## Quality Assurance for Seismic Resistance

Seismic Design Category "C"  
 Quality Assurance Plan Required (Y/N) (Y)

Description of seismic force resisting system and designated seismic systems:

- **SLRS: Structural steel braced frames with composite floor diaphragm (Steel systems not specifically detailed for seismic resistance, R = 3)**
- **Refer to Page 7 of 7, "Special Cases" for required inspections and testing of Seismic Load Resisting System (SLRS) (Refer to IBC Sections 1707.1 and 1707.2)**
- **Reference: IBC Sections 1705 and 1707, AISC 341-05, Section 18 and Appendix Q, Commentary and Appendix CQ.**
- **This QAP covers the SLRS, as detailed on Structural drawings S1.0 thru S4.2, prepared by Robert E. Chester Associates, Consulting Engineers. QAP and anchorage requirements for Architectural, HVAC, Electrical and Plumbing shall be established and prepared by the specific DPR for each discipline (Refer to IBC Section 1705.1).**

## Quality Assurance for Wind Requirements

Basic Wind Speed (3 second gust) 100 mph  
 Wind Exposure Category "C"  
 Quality Assurance Plan Required (Y/N) (N)

Description of wind force resisting system and designated wind resisting components:  
**Structural steel braced frames with composite floor diaphragm**

## Statement of Responsibility

Each contractor responsible for the construction or fabrication of a system or component designated above must submit a Statement of Responsibility.

# Qualifications of Inspectors and Testing Technicians

---

The qualifications of all personnel performing Special Inspection and testing activities are subject to the approval of the Building Official. The credentials of all Inspectors and testing technicians shall be provided if requested.

## Key for Minimum Qualifications of Inspection Agents:

When the Registered Design Professional in Responsible Charge deems it appropriate that the individual performing a stipulated test or inspection have a specific certification or license as indicated below, such designation shall appear below the *Agency Number* on the Schedule.

PE/SE	Structural Engineer – a licensed SE or PE specializing in the design of building structures
PE/GE	Geotechnical Engineer – a licensed PE specializing in soil mechanics and foundations
EIT	Engineer-In-Training – a graduate engineer who has passed the Fundamentals of Engineering examination

### American Concrete Institute (ACI) Certification

ACI-CFTT	Concrete Field Testing Technician – Grade 1
ACI-CCI	Concrete Construction Inspector
ACI-LTT	Laboratory Testing Technician – Grade 1&2
ACI-STT	Strength Testing Technician

### American Welding Society (AWS) Certification

AWS-CWI	Certified Welding Inspector
AWS/AISC-SSI	Certified Structural Steel Inspector

### American Society of Non-Destructive Testing (ASNT) Certification

ASNT	Non-Destructive Testing Technician – Level II or III.
------	---

### International Code Council (ICC) Certification

ICC-SMSI	Structural Masonry Special Inspector
ICC-SWSI	Structural Steel and Welding Special Inspector
ICC-SFSI	Spray-Applied Fireproofing Special Inspector
ICC-PCSI	Prestressed Concrete Special Inspector
ICC-RCSI	Reinforced Concrete Special Inspector

### National Institute for Certification in Engineering Technologies (NICET)

NICET-CT	Concrete Technician – Levels I, II, III & IV
NICET-ST	Soils Technician - Levels I, II, III & IV
NICET-GET	Geotechnical Engineering Technician - Levels I, II, III & IV

### Exterior Design Institute (EDI) Certification

EDI-EIFS	EIFS Third Party Inspector
----------	----------------------------

### Other

---

Item	Agency # (Qualif.)	Scope
1. Shallow Foundations	PE/GE	<p><i>Inspect soils below footings for adequate bearing capacity and consistency with geotechnical report.</i></p> <p><i>Inspect removal of unsuitable material and preparation of subgrade prior to placement of controlled fill</i></p>
2. Controlled Structural Fill	PE/GE	<p><i>Perform sieve tests (ASTM D422 &amp; D1140) and modified Proctor tests (ASTM D1557) of each source of fill material (ASTM C29 for crushed stone below tunnel and basement).</i></p> <p><i>Inspect placement, lift thickness and compaction of controlled fill.</i></p> <p><i>Test density of each lift of fill by nuclear methods (ASTM D2922) and/ or Sand Cone method (ASTM D1556) as approved by PE/GE</i></p> <p><i>Verify extent and slope of fill placement.</i></p>
3. Deep Foundations	PE/GE	<p><i>Inspect and log pile driving operations. Record pile driving resistance and verify compliance with driving criteria. Record sequence of placement.</i></p> <p><i>Inspect piles for damage from driving and plumbness.</i></p> <p><i>Verify pile size, length and accessories.</i></p>
4. Load Testing	PE/GE	<p><i>Coordinate and approve test pile locations</i></p> <p><i>Review Dynamic load testing method (ASTM D4945). Review Wave Equation Analysis and PDA results for acceptance or rejection of test piles</i></p> <p><i>(2) dynamic pile load tests are required, unless as directed by PE/GE for additional tests.</i></p>
4. Other: Sprayed-On Fireproofing	Certified/ Licensed Agency	<p><i>Thickness for Structural Framing Members per UL Design Assembly and ASTM E 84 &amp; ASTM E 119</i></p>

Item	Agency # (Qualif.)	Scope
1. Mix Design	ACI-CCI ICC-RCSI	<i>Review concrete batch tickets and verify compliance with approved mix design. Verify that water added at the site does not exceed that allowed by the mix design.</i>
2. Material Certification	ACI-CCI ICC-RCSI	<i>Review material certifications and verify compliance with approved mix design. Review mill certifications for reinforcing steel.</i>
3. Reinforcement Installation	ACI-CCI ICC-RCSI	<i>Inspect size, spacing, cover, positioning and grade of reinforcing steel. Verify that reinforcing bars are free of form oil or other deleterious materials. Inspect bar laps and mechanical splices. Verify that bars are adequately tied and supported on chairs or bolsters</i>
4. Post-Tensioning Operations		N/A
5. Welding of Reinforcing	AWS-CWI	<i>Visually inspect all reinforcing steel welds. Verify weldability of reinforcing steel. Inspect preheating of steel when required.</i>
6. Anchor Rods	ACI-CCI ICC-RCSI	<i>Inspect size, positioning and embedment of anchor rods. Inspect concrete placement and consolidation around anchors.</i>
7. Concrete Placement	ACI-CCI ICC-RCSI	<i>Inspect placement of concrete. Verify that concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated.</i>
8. Sampling and Testing of Concrete	ACI-CFTT ACI-STT	<i>Test concrete compressive strength (ASTM C31 &amp; C39), slump (ASTM C143), air-content (ASTM C231 or C173) and temperature (ASTM C1064).</i>
9. Curing and Protection	ACI-CCI ICC-RCSI	<i>Inspect curing, cold weather protection and hot weather protection procedures.</i>
10. Other:		<i>Refer to IBC Table 1704.4 for required frequency of Inspections (continuous vs. periodic) typical u.o.n.</i>

Item	Agency # (Qualif.)	Scope
1. Fabricator Certification/ Quality Control Procedures <input checked="" type="checkbox"/> Fabricator Exempt *	AWS/AISC- SSI ICC-SWSI	Review shop fabrication and quality control procedures.  *(Valid only if Fabricator has current AISC Certification STD – Steel Building Structures)
2. Material Certification	AWS/AISC- SSI ICC-SWSI	Review certified mill test reports and identification markings on wide-flange shapes, high-strength bolts, nuts and welding electrodes
3. Open Web Steel Joists	AWS/AISC- SSI ICC-SWSI	Inspect installation, field welding and bridging of joists.
4. Bolting	AWS/AISC- SSI ICC-SWSI	Inspect installation and tightening of high-strength bolts. Verify that splines have separated from tension control bolts. Verify proper tightening sequence.
5. Welding	AWS-CWI  ASNT	Visually inspect all welds. Test suspect welds using magnetic particle method. Inspect pre-heat, post-heat and surface preparation between passes. Verify size and length of fillet welds. Ultrasonic testing (ASTM E164) of all full-penetration welds, and partial penetration welds for column splices.
6. Shear Connectors	AWS/AISC- SSI ICC-SWSI	Inspect size, number, positioning and welding of shear connectors. Inspect studs for full 360 degree flash. Ring test all shear connectors with a 3 lb hammer. Bend test all questionable studs to 15 degrees.
7. Structural Details	AWS/AISC- SSI ICC-SWSI	Inspect steel frame for compliance with structural drawings, including bracing, member configuration and connection details.
8. Metal Deck	AWS-CWI	Inspect welding and side-lap fastening of metal roof and composite floor deck.
9. Other:		Refer to IBC Table 1704.3 for required frequency of Inspections (continuous vs. periodic) typical u.o.n.

Item	Agency # (Qualif.)	Scope
Seismic Load Resisting System (SLRS)	AWS/AISC-SSI ICC-SWSI	<p><i>Inspection of field fillet welds 5/16" or greater for HSS strut bracing connections, diaphragm angle to beam/ column connections, and column splices.</i></p> <p><i>Refer to AISC 341, Appendix Q5.1 for visual inspection tasks before, during and after welding (Duplication of QC inspection by QA not required, provided documentation is submitted as specified, and upon approval of the Building Official).</i></p> <p><i>Inspection of shop welding shall be made part of fabricator's QC system.</i></p> <p><i>Non-destructive testing of welds shall be performed as specified in Structural Steel - Item No. 5.</i></p> <p><i>Inspection of column base installation, sequence and tightening of bolts (Refer to Structural Steel – Item No. 7).</i></p> <p><i>Reports shall be prepared daily for completion of each day's inspections. Submission of reports to SI Coordinator, Owner and Building Official shall be on a weekly basis, unless otherwise directed and approved by SI Coordinator and Building Official).</i></p>