

# **Structural Special Inspections Report**

## **Florence House**

190 Valley Street

Portland, Maine

March 8, 2010

Report prepared by:

Structural Engineer of Record  
Becker Structural Engineers, Inc.

75 York Street  
Portland, Maine 04101

# **Florence House**

Portland, Maine

March 8, 2010

## **Table of Contents**

### **Exhibit A**

- 01000 Special Inspections - General
  - 01000.1 Structural Statement of Special Inspections
  - 01000.2 List of Agents
  - 01000.3 Final Report of Special Inspections
  - 01000.4 Special Inspector/Agent Report
  - 01000.5 Disclaimers and Qualifications

### **Exhibit B**

- 01000 Special Inspections – Qualifications of Inspectors and Technicians  
Schedule of Special Inspections
  
- 02300 Soil and Foundation Construction
  - 02300.1 Field Reports
  - 02300.2 Testing Agency Test Reports
  
- 03300 Concrete Construction
  - 03300.1 BSE Observation Reports
  - 03300.2 Mix Designs/Product Data/Material Certifications
  - 03300.3 Testing Agency Reports
  - 03300.4 Concrete Compressive Strength Test Results
  
- 04810 Masonry Construction
  - 04810-1 BSE Observation Reports
  - 04810-2 Mortar Compressive Strength Test Results
  - 04810-3 Grout Compressive Strength Test Results
  
- 05120 Steel Construction
  - 05120.1 BSE Observation Reports
  - 05120.2 Steel Fabricator and Welder Qualifications
  - 05120.3 Weld Inspection Reports
  
- 06100 Wood Construction
  - 06100-1 Fabricator Certifications
  - 06100-2 BSE Observation Reports

### **Exhibit C**

- 01000 Quality Assurance

### **Exhibit D**

- Statements of Responsibility
- Certificate of Compliance

# **EXHIBIT A**

## **01000 Special Inspections - General**

## **Statement of Special Inspections**

Florence House  
190 Valley Street  
Portland, Maine

Statement Prepared by  
Structural Engineer of Record:  
Becker Structural Engineers, Inc.  
75 York Street  
Portland, ME 04101  
207. 879. 1838

Owner:  
Avesta Florence House, LP  
307 Cumberland Ave  
Portland, ME 04101

Architect of Record:  
Gawron Turgeon Architects  
29 Black Point Road  
Scarborough, ME 04074  
207.863.6307

Contractor:  
Ganneston Construction  
3025 North Belfast Avenue  
Augusta, Maine 04332  
207.621.8505

**Project: Florence House**  
**Date Prepared: September 2, 2008**

## Structural Statement of Special Inspections

---

Project: *Florence House*  
Location: *190 Valley Street, Portland, Maine*  
Owner: *Avesta Florence House, LP*

---

This *Statement of Special Inspections* encompass the following discipline: **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 Structural Special Inspection Coordinator (SSIC) and the identity of other approved agencies to be retained for conducting these inspections and tests.

The Structural Special Inspection Coordinator shall keep records of all Structural inspections and shall furnish inspection reports to the Building Code Official (BCO) and the Structural Registered Design Professional in Responsible Charge (SRDP). 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 Structural 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 Structural Registered Design Professional in Responsible Charge at an interval determined by the SSIC and the BCO.

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 to the BCO 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:  *Upon request of Building Official* \_\_\_\_\_ or  per attached schedule.

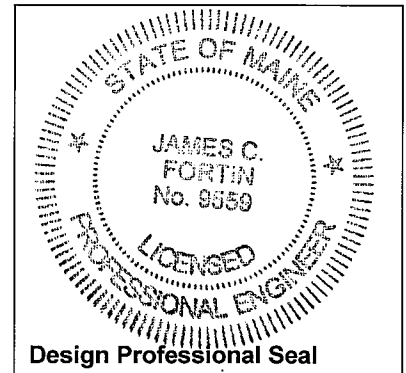
Prepared by:

*James Fortin, P.E.*

\_\_\_\_\_  
(type or print name of the Structural Registered Design Professional in Responsible Charge)

*James Fortin*  
Signature

*09/02/2008*  
Date



Owner's Authorization:

Building Code Official's Acceptance:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Project: Florence House  
 Date Prepared: September 2, 2008

## Structural Statement of Special Inspections (Continued)

### List of Agents

Project: Florence House

Location: 190 Valley Street, Portland, Maine

Owner: Avesta Florence House, LP

This Statement of Special Inspections encompass the following discipline: **Structural**

(Note: Statement of Special Inspections for other disciplines may be included under a separate cover)

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

- Soils and Foundations
- Cast-in-Place Concrete
- Precast Concrete System
- Masonry Systems
- Structural Steel
- Wood Construction
- Special Cases

Special Inspection Agencies	Firm	Address, Telephone, e-mail
1. STRUCTURAL Special Inspections Coordinator (SSIC)	James C. Fortin Becker Structural Engineers	75 York Street Portland, Maine 04101 (207) 879-1838 jim@beckerstructural.com
2. Special Inspector (SI 1)	James C. Fortin Becker Structural Engineers	75 York Street Portland, Maine 04101 (207) 879-1838 jim@beckerstructural.com
3. Special Inspector (SI 2)	Bill Peterlein, P.E. Summit Geoengineering Services	640 Main Street Lewiston, Maine 04240 (207) 795-6009 bpeterlein@summitenv.com
4. Testing Agency (TA 1)	Darrell Gilman Summit Environmental Consultants	640 Main Street Lewiston, Maine 04240 (207) 795-6009 dgilman@summitenv.com
5. Testing Agency (TA 2)		
6. Other (O1)		

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.

Project: Florence House  
Date Prepared: September 2, 2008

## Structural Statement of Special Inspections (Continued)

### Final Report of Special Inspections (SSIC/SI 1)

[To be completed by the Structural Special Inspections Coordinator (SSIC/SI 1). Note that all Agent's Final Reports must be received prior to issuance.]

Project: *Florence House*  
Location: *190 Valley Street, Portland, ME*  
Owner: *Avesta Florence House, LP*  
Owner's Address: *307 Cumberland Avenue  
Portland, ME 04101*

Architect of Record: *Rebecca Dillon* *Gawron Turgeon Architects*  
(name) (firm)

Structural Registered Design  
Professional in Responsible Charge: *Paul B Becker, P.E.* *Becker Structural Engineers, Inc*  
(name) (firm)

To the best of my information, knowledge and belief, the Special Inspections required for this project, and itemized in the *Statement of Special Inspections* submitted for permit, have been performed and all discovered discrepancies have been reported and resolved.

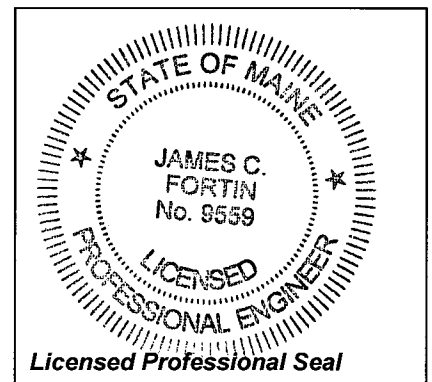
Interim reports submitted prior to this final report form a basis for and are to be considered an integral part of this final report.

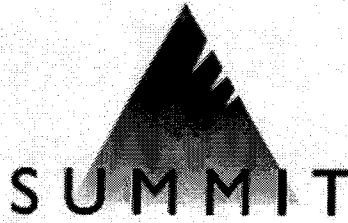
Respectfully submitted,  
Structural Special Inspection Coordinator

*JAMES FORTIN*  
(Type or print name)

*BECKER STRUCTURAL ENGINEERS, INC.*  
(Firm Name)

*James Fortin* *3/5/10*  
Signature Date





ENVIRONMENTAL CONSULTING • GEOTECHNICAL ENGINEERING • CONSTRUCTION MATERIALS TESTING

March 10, 2010  
Summit #14194

Becker Structural Engineers, Inc.  
75 York Street  
Portland, ME 04101  
Attn: Jim Fortin

Reference: Testing and Inspection Activity Certification  
Florence House Project

Dear Jim:

Summit Geoengineering Services (Summit) has provided materials testing and special inspection services to Avesta Florence House, LP and Florence House Housing Corporation during construction activities at the Florence House project located on Valley Street in Portland, Maine. Summit's responsibilities for these services were identified in the Statement of Statement of Special Inspections dated September 2, 2008 and prepared by Becker Structural Engineers, Inc.

Summit was present to observe construction activities assigned within the earthwork, cast-in-place concrete and masonry sections of the Statement of Structural Special Inspections during construction of the Florence House. Summit subcontracted Quality Assurance Laboratories to provide AWS certified inspection of structural steel welding activities, as required. Summit certifies that, based on on-site observations and related test results, inspection activities were completed in accordance with the supplied project design plans and specifications.

Attached please find a signed copy of the Special Inspector's/Agent's Final Report form for the project. In addition, Darrell Gilman of Summit will provide you with a summary of laboratory testing results and onsite inspection observations for your records.

Thank you for the opportunity to work with Becker Structural Engineers on this project. Please contact us if there are any questions regarding the information provided.

Sincerely yours,  
Summit Geoengineering Services

Michael J. Walsh, P.E.  
Senior Engineer

**Lewiston:**

400 Maple Street • Lewiston, ME 04240  
Tel: (207) 293-6200 • Fax: (207) 293-6228

**Bangor:**

61 Lakeside St., Suite 4A • Bangor, ME 04401  
Tel: (207) 262-9980 • Fax: (207) 262-9980

**Augusta:**

11 Cony Street • Augusta, ME 04303  
Tel: (207) 623-8814 • Fax: (207) 626-9004

**Portland:**

1 Industrial Way, Suite 7 • Portland, ME 04103  
Tel: (207) 227-4100 • Fax: (207) 227-6146



Project: Florence House  
Date Prepared: September 2, 2008

**Structural Statement of Special Inspections (Continued)**  
**Special Inspector's/Agent's Final Report**

Project: *Florence House*

Special Inspector or Agent:

*Michael J. Walsh* *Summit Geoenvironmental Services*  
(name) (firm)

Designation:

To the best of my information, knowledge and belief, the Special Inspections or testing required for this project, and designated for this Inspector/Agent in the *Statement of Special Inspections* submitted for permit, have been performed and all discovered discrepancies have been reported and resolved.

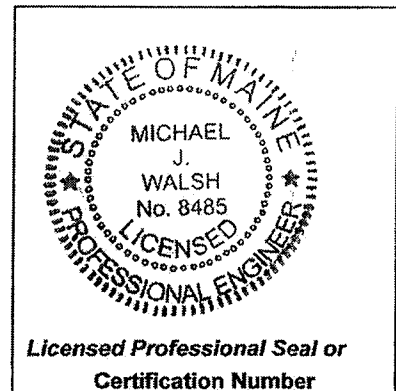
Interim reports submitted prior to this final report form a basis for and are to be considered an integral part of this final report.

Respectfully submitted,  
Special Inspector or Agent:

*Michael J. Walsh*  
(Type or print name)

*Michael J. Walsh*  
Signature

*3/10/10*  
Date



## 01000.5 Disclaimers and Qualifications

The program of Structural/Special Tests and Inspections does not relieve the Contractor or its Subcontractors of their responsibilities and obligations for quality control of the work, for any design work which is included in the scope of services, and for full compliance with the requirements of the Construction Documents. Furthermore, the detection of, or the failure to detect, deficiencies or defects in work during testing and inspection conducted pursuant to the Program does not relieve the Contractor or its subcontractors of their responsibility to correct all deficiencies or defects, whether detected or undetected, in all parts of work, and to otherwise comply with all requirements of the Construction Documents. No warrantee is expressed or implied by the issuance of this document. Additional disclaimers and/or qualifications may be included in the Owner-Special Inspection agreement.

## **EXHIBIT B**

### **01000 Qualifications of Inspectors and Testing Technicians Schedule of Structural Inspections**

## Structural Schedule of Special Inspections

---

### 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 to the Special Inspector for their records. *NOTE VERIFICATION THAT QUALIFIED INDIVIDUALS ARE AVAILABLE TO PERFORM STIPULATED TESTING AND/OR INSPECTION SHOULD BE PROVIDED PRIOR TO SUBMITTING STATEMENT. AGENT QUALIFICATIONS IN SCHEDULE ARE SUGGESTIONS ONLY; FINAL QUALIFICATIONS ARE SUBJECT TO THE DISCRETION OF THE REGISTERED DESIGN PROFESSIONAL PREPARING THE SCHEDULE.*

#### Key for Minimum Qualifications of Inspection Agents:

When the Registered Design Professional in Responsible Charge or Special Inspector of Record deems it appropriate that the individual performing a stipulated test or inspection have a specific certification, license or experience as indicated below, such requirement shall be listed below and shall be clearly identified within the schedule under the Agent Qualification Designation.

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

#### Experienced Testing Technician

ETT	Experienced Testing Technician – An Experienced Testing Technician with a minimum 5 years experience with the stipulated test or inspection
-----	---

#### 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

#### Other

---

## **EXHIBIT B**

**02300 Soil and Foundation Construction**

Project: Florence House

Date Prepared: September 2, 2008

**Structural Schedule of Special Inspections**  
**SOILS & FOUNDATION CONSTRUCTION**

VERIFICATION AND INSPECTION	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
<b>IBC Section 1704.7, 1704.8, 1704.9</b>						
1. Verify existing soil conditions, fill placement and load bearing requirements						
<i>mgw</i> a. Prior to placement of prepared fill, determine that the site has been prepared in accordance with the approved soils report.	Y	P	IBC 1704.7.1	SI2	PE/GE, EIT or ETT	
<i>mgw</i> b. During placement and compaction of fill material, verify material being used and maximum lift thickness comply with the approved soils report.	Y	P	IBC 1704.7.2	SI2	PE/GE, EIT or ETT	
<i>mgw</i> c. Test in-place dry density of compacted fill complies with the approved soils report.	Y	p	IBC 1704.7.2	TA1	PE/GE, EIT or ETT	
2. Pile foundations:						
a. Observe and record procedures for static load testing of piles.	N/A	C	IBC 1704.8		PE/GE, EIT or ETT	
b. Observe and record procedures for dynamic load testing of piles.	N/A	C			PE/GE, EIT or ETT	
c. Record installation of each pile and results of load test. Include cutoff and tip elevations of each pile relative to permanent reference.	N/A	C			PE/GE, EIT or ETT	
d. Test welded splices of steel piles	N/A	C	AWS D1.1		AWS-CWI	
3. Pier foundations: Verify installation of pier foundations for buildings assigned to Seismic Design Category C, D, E or F.	N/A	C	IBC 1704.9		PE/GE, EIT or ETT	
a. Verify pier diameter and length	N/A	C			PE/GE, EIT or ETT	
b. Verify pier embedment (socket) into bedrock	N/A	P			PE/GE, EIT or ETT	
c. Verify suitability of end bearing strata	N/A	P			PE/GE, EIT or ETT	

Project: Florence House

Date Prepared: September 2, 2008

**Structural Schedule of Special Inspections**  
**SOILS & FOUNDATION CONSTRUCTION**

VERIFICATION AND INSPECTION	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
<b>IBC Section 1704.7, 1704.8, 1704.9</b>						
1. Verify existing soil conditions, fill placement and load bearing requirements						
a. Prior to placement of prepared fill, determine that the site has been prepared in accordance with the approved soils report.	Y	P	IBC 1704.7.1	SI2	PE/GE, EIT or ETT	
b. During placement and compaction of fill material, verify material being used and maximum lift thickness comply with the approved soils report.	Y	P	IBC 1704.7.2	SI2	PE/GE, EIT or ETT	
c. Test in-place dry density of compacted fill complies with the approved soils report.	Y	p	IBC 1704.7.2	TA1	PE/GE, EIT or ETT	
2. Pile foundations:						
a. Observe and record procedures for static load testing of piles.	N/A	C	IBC 1704.8		PE/GE, EIT or ETT	
b. Observe and record procedures for dynamic load testing of piles.	N/A	C			PE/GE, EIT or ETT	
c. Record installation of each pile and results of load test. Include cutoff and tip elevations of each pile relative to permanent reference.	N/A	C			PE/GE, EIT or ETT	
d. Test welded splices of steel piles	N/A	C	AWS D1.1		AWS-CWI	
3. Pier foundations: Verify installation of pier foundations for buildings assigned to Seismic Design Category C, D, E or F.	N/A	C	IBC 1704.9		PE/GE, EIT or ETT	
a. Verify pier diameter and length	N/A	C			PE/GE, EIT or ETT	
b. Verify pier embedment (socket) into bedrock	N/A	P			PE/GE, EIT or ETT	
c. Verify suitability of end bearing strata	N/A	P			PE/GE, EIT or ETT	



**DAILY FIELD REPORT**

**Date:** 2/3/09  
**Project:** Avesta Florence House  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Preconstruction earthwork meeting.

**Work Activities:** Met onsite with Alan Nichols, Ganneston Construction, and RE Coleman Excavation personnel to discuss earthwork requirements related to the project Getechnical Report prepared by Summit. The major points to the discussion were as follows:

1. Ganneston proposes to stage the preload due to site constraints. Summit has no issue with this approach provided the required materials, placement techniques, and preload timelines are adhered to for both locations.
2. Underlying frost within the preload areas is to be removed and subgrade proof rolled prior to placement of the Structural Fill.
3. Proposed backfill materials should be submitted for laboratory analysis to confirm compliance with design requirements.
4. Summit requests notification to coordinate compaction testing of preload fill lifts to confirm required densities are achieved.
5. Summit recommends that settlement monitoring plates be installed in each of the preload areas, surveyed and elevations recorded daily through the preload periods to confirm the fill has adequately compressed underlying soils prior to building foundation construction.

**Test Results:** None.

**Remarks:** See above.

**Portal to Portal**

Leave:	<u>8:30am</u>	<b><u>Expenses</u></b>		<b>Signed:</b>	<u>Michael J. Walsh, P.E.</u>
Return:	<u>10:00am</u>	Mileage:	<u>11</u>	<b>cc:</b>	
TOTAL:	<u>1.5 hrs</u>	Density Gauge:	<u>          </u>		
		Other:	<u>          </u>		





**DAILY FIELD REPORT**

**Date:** 3/11/09

**Project:** Avesta Florence House

**Project #:** 14194

**Site Contacts:** Mike Adams, Ganneston Construction

**Purpose of Visit:** Soil sampling.

**Work Activities:** Obtained a sample of the existing onsite granular borrow for laboratory testing to meet the project specification for structural fill and/or surcharge fill.

**Test Results:**

**Remarks:**

**Portal to Portal**

Leave:

1:30

Return:

2:30

TOTAL:

1

**Expenses**

Mileage:

11

Density Gauge:

Other:

**Signed:**

Darrell A. Gilman

**cc:**

Reviewed:  
Sent:

Darrell A. Gilman, CMT Manager  
3/11/09



**DAILY FIELD REPORT**

**Date:** 3/30/09  
**Project:** Avesta Florence House  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Compaction report from onsite test performed on 3-27-09.

**Work Activities:** A crew from Coleman Excavation placed and compacted 4" minus material along N-line from line 8.2 to 16. The material was compacted with a vibratory plate compactor.  
Sample # 14194.1-S4 maximum density determined to be 136.5pcf at 6.0% moisture.

**Test Results:** Compaction range: 96.6% to 98.8%  
All tests performed on line "N" from 8.2 to 16 exceed the 95% compaction requirement.

**Remarks:**

**Portal to Portal**

Leave:	<u>12:30</u>	<b><u>Expenses</u></b>	
Return:	<u>12:46</u>	Mileage:	<u>          </u>
TOTAL:	<u>0.25</u>	Density Gauge:	<u>          </u>
		Other:	<u>          </u>

**Signed:** Darrell Gilman  
**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 3/31/09



## DAILY FIELD REPORT

**Date:** 4/10/09  
**Project:** Avesta Florence House  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Special Inspections - Soils.

**Work Activities:** Upon arrival at the job site, Mr. Dick Beaulieu informed me that the embankment had caved in on the area of footing subgrade that was to be inspected per IBC section 1704.1, 1704.8 and 1704.9 - 1 - A. A small area that had been excavated was visible, though not enough to make a determination on the entire area. Mr. Beaulieu said that he would call to reschedule.

**Test Results:** N/A

**Remarks:**

**Portal to Portal**

	<u>Expenses</u>	
Leave: <u>11:00am</u>	Mileage: <u>11</u>	
Return: <u>12:45pm</u>	Density Gauge: <u>          </u>	
TOTAL: <u>1.75</u>	Other: <u>1.75 tolls</u>	

**Signed:** Frank Clark  
**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 4/14/09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330

Phone: (207) 621-8334 Fax: 626-9094



**DAILY FIELD REPORT**

**Date:** 4/13/09

**Project:** Avesta Florence House

**Project #:** 14194

**Site Contacts:** Mike Adams, Ganneston Construction

**Purpose of Visit:** Soil Compaction Testing.

**Work Activities:** A crew from Coleman Excavation placed approximately a 12" lift and then compacted the 4" minus material along F-line from line 7 to 16 per special inspection, section 1704.7.2, 1-B. The material was compacted with a 5-ton vibratory roller. The area was tested for density per special inspection, section 1704.7.2, 1-C. All tests taken exceed the required 95 percent compaction. Prior to compaction the area was inspected and found to be suitable per special inspection, section 1704.7.1, 1-A.

**Test Results:** Percent compaction: 95.5 to 98  
 Dry density: 130.4 to 133.8 pcf  
 Wet density: 136.9 to 137.8 pcf  
 Percent moisture : 3.0 to 3.6%

**Remarks:**

**Portal to Portal**

Leave:		<b><u>Expenses</u></b>	<b>Signed:</b>	<u>Frank Clark</u>
Return:	11:45am	Mileage:	<b>cc:</b>	
TOTAL:	<u>2:30pm</u>	Density Gauge:		
	<u>2.75</u>	Other:		

Reviewed: Darrell A. Gilman, CMT Manager  
 Date: 4/17/09



## DAILY FIELD REPORT

**Date:** 4/20/09  
**Project:** Avesta Florence House  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Soil Compaction Testing.

**Work Activities:** A crew from Coleman Excavation placed approximately a 12" lift and then compacted the 4" minus material along A-line to line 7 per special inspection, section 1704.7.2, 1-B. The material was compacted with a 5-ton vibratory roller. The area was tested for density per special inspection, section 1704.7.2, 1-C. All tests taken exceed the required 95 percent compaction. Prior to compaction the area was inspected and found to be suitable per special inspection, section 1704.7.1, 1-A.  
Picked up two sets of four test cylinders for lab testing and controlled storage.

**Test Results:** Percent compaction: 97.6 to 97.7  
Dry density: 126.4 to 126.5 pcf  
Wet density: 130.1 to 130.5 pcf  
Percent moisture : 3.7 to 4.0%

**Remarks:**

### Portal to Portal

Leave:

Return:

TOTAL:

	<u>Expenses</u>	
9:00	Mileage:	11
10:00	Density Gauge:	1
1	Other:	

**Signed:**

Mike Sullivan

**cc:**

Reviewed:  
Date:

Darrell A. Gilman, CMT Manager  
4/21/09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330

Phone: (207) 621-8334 Fax: 626-9094



**DAILY FIELD REPORT**

**Date:** 4/28/09

**Project:** Avesta Florence House

**Project #:** 14194

**Site Contacts:** Mike Adams, Ganneston Construction

**Purpose of Visit:** Soil Compaction Testing.

**Work Activities:** A crew from Coleman Excavation placed approximately a 12" lift and then compacted the 4" minus material along G-1,L.8-1,N-1&N-5.2 footing per special inspection, section 1704.7.2, 1-B. The material was compacted with a 5-ton vibratory roller. The area was tested for density per special inspection, section 1704.7.2, 1-C. All tests taken exceed the required 95 percent compaction. Prior to compaction the area was inspected and found to be suitable per special inspection, section 1704.7.1, 1-A.

**Test Results:** Percent compaction: 95.0 to 98.7  
 Dry density: 123.0 to 127.9 pcf  
 Wet density: 128.4 to 131.7 pcf  
 Percent moisture : 3.0 to 4.6%

**Remarks:**

**Portal to Portal**

Leave:		<b><u>Expenses</u></b>		<b>Signed:</b>	Mike Sullivan
Return:	7:00	Mileage:	11	<b>cc:</b>	
TOTAL:	9:00	Density Gauge:	1		
	2	Other:			

Reviewed: Darrell A. Gilman, CMT Manager  
 Date: 4/30/09



**DAILY FIELD REPORT**

**Date:** 5/4/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Subgrade soil inspection.

**Work Activities:** A crew from Coleman Excavation has excavated for the interior column footings at L-9, L-11, L-12, L-13, L-14, J-14, J-13, and H-10. The subgrade soil was inspected per special inspection section 1704.7.1ab and was found acceptable with the following observations:  
-total material removed to bottom of footing ~6" to 8".  
-soil was consistent with the geotechnical report dated 8-9-2007.  
-a smooth edged bucket was used to excavate to final grade with no over excavation of subgrade soil.  
-the surface of the subgrade was compacted with a 500 lb. plate compactor with no soft or yielding of the footing area.

**Remarks:** In conversation with Everett Stewart of Ganneston, a RFI had been issued for interior column footings to bear on native subgrade soil unless the material had been disturbed.

**Portal to Portal**

Leave:	<u>10:00</u>	<b><u>Expenses</u></b>	
Return:	<u>11:00</u>	Mileage:	<u>13</u>
TOTAL:	<u>1</u>	Density Gauge:	<u>          </u>
		Other:	<u>          </u>

**Signed:** Darrell Gilman

**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 5/6/09



## DAILY FIELD REPORT

**Date:** 7/28/09  
**Project:** Avesta Florence House  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction

**Purpose of Visit:** Soil Compaction Testing.

**Work Activities:** A crew from Ganneston Construction placed approximately a 12" lift and then compacted the onsite structural fill material along line 15 from L-line to M-line. The material was compacted with a walk behind compactor. The crew then compacted a 1" to 2" lift of the onsite barrow material with 1 1/2" stone to make it easier to shim grade. All tests taken exceed the required 95 percent compaction.

**Test Results:** Percent compaction: 96.0 to 98.7  
Dry density: 125.8 to 127.8 pcf  
Wet density: 132.1 to 133.9 pcf  
Percent moisture : 4.7 to 5.0%

**Remarks:**

### Portal to Portal

Leave:

Return:

TOTAL:

	<u>Expenses</u>	
2:00pm	Mileage:	11
3:30pm	Density Gauge:	X
1.5	Other:	

**Signed:**

Justin Rouillard

**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Date: 7/30/09





**DAILY FIELD REPORT**

**Date:** 8/3/09  
**Project:** Avesta Florence House  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction

**Purpose of Visit:** Soil Compaction Testing.

**Work Activities:** A crew from Ganneston Construction placed approximately a 12" lift and then compacted the onsite structural fill material for the first floor. The material was compacted with a walk behind compactor. The crew then compacted a 1" to 2" lift of the onsite barrow material with 1 1/2" stone to make it easier to shim grade. All tests taken exceed the required 95 percent compaction.

**Test Results:** Percent compaction: 96.9 to 101.1  
Dry density: 125.4 to 130.9 pcf  
Wet density: 128.7 to 134.2 pcf  
Percent moisture : 2.5 to 3.8%

**Remarks:**

**Portal to Portal**

Leave:		<b><u>Expenses</u></b>	
Return:	8:00	Mileage:	11
TOTAL:	11:00	Density Gauge:	X
	3	Other:	

**Signed:** Justin Rouillard

**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Date: 8/10/09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330

Phone: (207) 621-8334 Fax: 626-9094



**DAILY FIELD REPORT**

**Date:** 8/27/09

**Project:** Avesta Florence House - Portland, Maine

**Project #:** 14194

**Site Contacts:** Mike Adams, Ganneston Construction

**Purpose of Visit:** Density Testing

**Work Activities:** Three compaction tests were taken on the outside of the foundation wall between line F and line J and between line 10 and line 16. A sample was retrieved and brought to the lab for testing. All three tests exceeded the 95% compaction requirement.

**Test Results:**

Percent compaction: 95.8% to 99.5%

Dry density: 122.6 to 127.4 pcf

Wet density: 130.2 to 134.1 pcf

Percent moisture : 5.3 to 6.6%

**Remarks:** Grout was being placed at the 3rd level of the stairwell.

**Portal to Portal**

Leave:	<u>8:45am</u>	<b><u>Expenses</u></b>	
Return:	<u>10:15am</u>	Mileage:	<u>11</u>
TOTAL:	<u>1.5</u>	Density Gauge:	<u>X</u>
		Other:	<u>                    </u>

**Signed:** Justin Rouillard

**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 9/8/09



**DAILY FIELD REPORT**

**Date:** 9/1/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Density Testing

**Work Activities:** Eight compaction tests were taken on the outside of the foundation wall along N line from 5 line to 14 line. Material was being placed via a conveyor truck and was being compacted with a walk behind wacker in 12" lifts. All tests exceeded 95% compaction.

**Test Results:**  
Percent compaction: 95.3% to 98.0%  
Dry density: 122.6 to 125.4 pcf  
Wet density: 129.4 to 134.0 pcf  
Percent moisture : 5.7 to 7.3%

**Remarks:** Grout was being placed at the 3rd level of the stairwell.

**Portal to Portal**

Leave:  
Return:  
TOTAL:

10:45am  
5:30am  
6.75

**Expenses**

Mileage:  
Density Gauge:  
Other:

22  
X

**Signed:**

Justin Rouillard

**cc:**

Reviewed:  
Sent:

Darrell A. Gilman, CMT Manager  
9/8/09



## DAILY FIELD REPORT

**Date:** 9/2/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Density Testing

**Work Activities:** Fifteen compaction tests were taken on the outside of the foundation wall along N line from 5 line to 14 line. Material was being placed via a conveyor truck and was being compacted with a walk behind wacker in 12" lifts. All tests exceeded 95% compaction.

**Test Results:**  
Percent compaction: 95.2% to 98.3%  
Dry density: 121.9 to 125.8 pcf  
Wet density: 128.3 to 132.7 pcf  
Percent moisture : 4.2 to 6.5%

### Remarks:

### Portal to Portal

Leave:

8:30am

Return:

6:30am

TOTAL:

.10

### Expenses

Mileage:

22

Density Gauge:

X

Other:

### **Signed:**

Justin Rouillard

**cc:**

Reviewed:  
Sent:

Darrell A. Gilman, CMT Manager  
9/8/09



## DAILY FIELD REPORT

**Date:** 9/4/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Density Testing

**Work Activities:** Six compaction tests were taken on the outside of the foundation wall along N line from 5 line to 12 line. Material was being placed via a conveyor truck and was being compacted with a walk behind wacker in 12" lifts. All tests exceeded 95% compaction.

**Test Results:**  
Percent compaction: 95.3% to 98.2%  
Dry density: 122.0 to 125.8 pcf  
Wet density: 133.3 to 128.2 pcf  
Percent moisture : 4.6 to 6.1%

### Remarks:

### Portal to Portal

Leave:

7:00am

Return:

6:45pm

TOTAL:

11.75

### Expenses

Mileage:

22

Density Gauge:

X

Other:

**Signed:**

Justin Rouillard

**cc:**

Reviewed:  
Sent:

Darrell A. Gilman, CMT Manager  
9/10/09



## DAILY FIELD REPORT

**Date:** 9/9/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Density Testing

**Work Activities:** Eight compaction tests were taken on the outside of the foundation wall along N line from 4 line to 7 line. Material was being placed via frontend loader and was being compacted with a walk behind wacker in 12" lifts. All tests exceeded 95% compaction.

**Test Results:**  
Percent compaction: 99.0% to 105.3%  
Dry density: 113.4 to 120.6 pcf  
Wet density: 116.8 to 123.7 pcf  
Percent moisture : 3.0 to 4.2%

### Remarks:

#### Portal to Portal

Leave:	<u>8:00am</u>	<u>Expenses</u>	
Return:	<u>4:30pm</u>	Mileage:	<u>22</u>
TOTAL:	<u>8.5</u>	Density Gauge:	<u>X</u>
		Other:	<u>                    </u>

**Signed:** Justin Rouillard

**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 9/10/09



**DAILY FIELD REPORT**

**Date:** 9/10/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Density Testing

**Work Activities:** One compaction test was taken on the outside of the foundation wall at the intersection of the M.5 line and the 4.5 line. Material was being placed via front end loader and was being compacted with a walk behind wacker in 12" lifts. All tests exceeded 95% compaction.

**Test Results:**  
Percent compaction: 103.5%  
Dry density: 118.6 pcf  
Wet density: 122.3 pcf  
Percent moisture : 3.1%

**Remarks:**

**Portal to Portal**

Leave:	<u>10:00am</u>	<b><u>Expenses</u></b>	
Return:	<u>2:30pm</u>	Mileage:	<u>22</u>
TOTAL:	<u>4.5</u>	Density Gauge:	<u>X</u>
		Other:	<u>                    </u>

**Signed:** Justin Rouillard

**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 9/14/09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330

Phone: (207) 621-8334 Fax: 626-9094



**DAILY FIELD REPORT**

**Date:** 10/20/09

**Project:** Avesta Florence House - Portland, Maine

**Project #:** 14194

**Site Contacts:** Mike Adams, Ganneston Construction

**Purpose of Visit:** Density Testing

**Work Activities:** Michael Walsh of Summit arrived onsite to provide compaction testing support during backfilling of the segmental block retaining wall. A crew from R.E. Coleman was placing the first course of block from approximately Station 0+92 to Station 1+12. Met with Everett Stewart of Ganneston and reviewed backfill requirements in project specifications and segmental wall plans by SRG Engineering, Inc. Justin Rouillard of Summit was onsite for testing at 11:15 am. However, lifts were not completed prior to leaving site at 2:00pm. Testing rescheduled for 10:00am tomorrow.

**Test Results:**

**Remarks:**

**Portal to Portal**

Leave:	<u>8:45am</u>	<b><u>Expenses</u></b>	
Return:	<u>2:00pm</u>	Mileage:	<u>11</u>
TOTAL:	<u>3</u>	Density Gauge:	<u>X</u>
		Other:	<u>                    </u>

**Signed:** M. Walsh/Justin Rouillard

**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 10/27/09



**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330

Phone: (207) 621-8334 Fax: 626-9094



**DAILY FIELD REPORT**

**Date:** 10/21/09

**Project:** Avesta Florence House - Portland, Maine

**Project #:** 14194

**Site Contacts:** Mike Adams, Ganneston Construction

**Purpose of Visit:** Soil Compaction Testing Services.

**Work Activities:** Performed soil compaction testing inside the retaining wall south side. A crew from R.E. Coleman placed and compacted retaining wall backfill material in approximately 8" lifts. The maximum dry density of the material being placed had changed since laboratory testing was conducted, therefore a new sample was obtained and compaction percentages had to be back figured using the new dry density value. The back figured values revealed that two of the four compaction tests taken today did not meet the 95% compaction requirement. All other compaction tests exceeded the 95% compaction requirement. Everett Stewart was made aware of the situation via telephone message.

**Test Results:** Percent compaction: 92.2% to 97.1  
 Dry density: 104.2 to 109.7 pc  
 Moisture %: 3.4 to 9.0%

**Remarks:**

**Portal to Portal**

		<b><u>Expenses</u></b>	
Leave:	<u>9:45am</u>	Mileage:	<u>11</u>
Return:	<u>1:15pm</u>	Density Gauge:	<u>X</u>
TOTAL:	<u>3.5</u>	Other:	<u>          </u>

**Signed:** Neil Davis

**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 10/26/09



## DAILY FIELD REPORT

**Date:** 10/29/09  
**Project:** Avesta Florence House  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Soil Compaction Testing.

**Work Activities:** Prior to my arrival, a crew from Coleman Excavation had placed and compacted the subbase fill for the upper and lower parking lots. We obtained a sample of the material for a grain size analysis and proctor. Compaction tests were taken and results will be back figured upon the completion of the proctor.

**Test Results:** Percent compaction:  
Dry density: 135.8 to 136.7 pcf  
Wet density: 139.1 to 141.7 pcf  
Percent moisture : 3.4 to 3.8 %

**Remarks:**

### Portal to Portal

Leave:

Return:

TOTAL:

	<u>Expenses</u>
3:15pm	Mileage: 11
4:45pm	Density Gauge: 1
1.5	Other: _____

**Signed:** \_\_\_\_\_ Frank Clark

**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Date: 10/30/09



**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
 Tel: (207) 621.8334 Fax: (207) 626.9094

**SUMMIT GEOENGINEERING FIELD DENSITY RESULTS SUMMARY**

**PROJECT NO:** 14194

**Proctor Information:**

**PROJECT NAME:** Avesta Florence House

**CLIENT:** Avesta Florence House, LP

Test Number	Date	Location:	Lift Elevation	Moisture Content %	In-place Density DD PCF	Maximum Density PCF	Percent Compaction	Required Compaction	Remarks
1	3/27/2009	N-line at 8.2-line	Bottom of Footing	4.1	131.8	136.5	96.6	95	Pass
2	3/27/2009	N-line at 12-line	Bottom of Footing	3.4	132.1	136.5	96.8	95	Pass
3	3/27/2009	N-line at 16-line	Bottom of Footing	2.9	134.8	136.5	98.8	95	Pass
1	20-Apr	E-7	Bottom of Footing	4	126.5	129.5	97.7	95	Pass
2	20-Apr	A-1	Bottom of Footing	3.7	126.4	129.5	97.6	95	Pass
1	28-Apr	N-5.2 footing	Bottom of Footing	3.4	123.5	129.5	95.4	95	Pass
2	28-Apr	N-1	Bottom of Footing	3	127.9	129.5	98.7	95	Pass
3	28-Apr	L.8-1	Bottom of Footing	3.6	126.6	129.5	97.8	95	Pass
4	28-Apr	G-1	Bottom of Footing	4.6	123	129.5	95	95	Pass
1	8/3/2009	H-5	finished grade	3.4	127.1	129.5	98.1	95	Pass
2	8/3/2009		finished grade	3.6	127.5	129.5	98.4	95	Pass
3	8/3/2009		finished grade	3.8	127.6	129.5	98.5	95	Pass
4	8/3/2009		finished grade	2.5	130.9	129.5	101.1	95	Pass
5	8/3/2009		finished grade	2.6	125.4	129.5	96.9	95	Pass
1	8/28/2009		3' BTW	6.6	123.6	128	96.6	95	Pass
2	8/28/2009		3' BTW	5.3	127.4	128	99.5	95	Pass
3	8/28/2009		3' BTW	6.2	122.6	128	95.8	95	Pass
1	9/1/2009	Outside N line at 5.8	18' BTW	5.7	122.5	128	95.7	95	Pass
2	9/1/2009	Outside N line at 7.1	16.5' BTW	6.9	125.4	128	97.9	95	Pass
3	9/1/2009	Outside N line at 11	16' BTW	6.2	123.3	128	96.3	95	Pass
4	9/1/2009	Outside N line at 13	15' BTW	6.4	122.4	128	95.6	95	Pass
5	9/1/2009	Outside N line at 12	14' BTW	7.3	122.8	128	95.9	95	Pass
6	9/1/2009	Outside N line at 5.8	15' BTW	6.2	123.8	128	96.7	95	Pass
7	9/1/2009	Outside N line at 11.5	13' BTW	5.9	125.4	128	98	95	Pass
8	9/1/2009	Outside N line at 6.5	14' BTW	6.2	122.6	128	95.3	95	Pass
1	9/2/2009	Outside N line at 10	12' BTW	6.5	122.5	128	95.7	95	Pass
2	9/2/2009	Outside N line at 6.5	13' BTW	5.3	122.4	128	95.6	95	Pass
3	9/2/2009	Outside N line at 11	11' BTW	6.1	123	128	96.1	95	Pass
4	9/2/2009	Outside N line at 7	11' BTW	6.2	122.5	128	95.7	95	Pass
5	9/2/2009	Outside N line at 14	10' BTW	5.6	121.9	128	95.2	95	Pass
6	9/2/2009	Outside N line at 8	10' BTW	4.2	123.3	123	96.3	95	Pass
7	9/2/2009	Outside N line at 9	9' BTW	4.8	122.4	128	95.6	95	Pass
8	9/2/2009	Outside N line at 7	10' BTW	5.5	123.6	128	96.6	95	Pass
9	9/2/2009	Outside N line at 5.5	9' BTW	6.1	123.1	128	96.2	95	Pass

10	9/2/2009	Outside N line at 16	6.2	122.1	128	95.4	95	Pass
11	9/2/2009	Outside N line at 16	5.8	123	128	96.1	95	Pass
12	9/2/2009	Outside N line at 5	6.2	122	128	95.3	95	Pass
13	9/2/2009	Outside N line at 6	5.3	126	128	98.4	95	Pass
14	9/2/2009	Outside N line at 7	6.1	123.1	128	96.4	95	Pass
15	9/2/2009	Outside N line at 8	4.6	125.8	128	98.3	95	Pass
1	9/9/2009	Outside N line at 5.5	3	113.4	114.5	99	95	Pass
2	9/9/2009	Outside N line at 5	2.6	120.6	114.5	105.3	95	Pass
3	9/9/2009	Outside N line at 4.8	2.4	114.1	114.5	99.7	95	Pass
4	9/9/2009	Outside N line at 6.2	4.1	117	114.5	102.2	95	Pass
5	9/9/2009	Outside N line at 5.3	3.4	116.3	114.5	101.6	95	Pass
6	9/9/2009	Outside N line at 4.5	4.5	16.1	114.5	101.4	95	Pass
7	9/9/2009	Outside N line at 6	4.1	118.3	114.5	103.3	95	Pass
8	9/9/2009	Outside N line at 6.3	4.2	115.2	114.5	100.5	95	Pass
9	9/10/2009	Outside M.5 line at 4.5	3.1	118.6	114.5	103.5	95	Pass
1	10/21/09	Inside Retaining Wall - South Quarter	4.9	105.8	113	93.6	95	Fail
2	10/21/09	Inside Retaining Wall - 2nd to S Quarter	3.4	104.2	113	92.2	95	Fail
3	10/21/09	Inside Retaining Wall - South Quarter	8.4	108.6	113	96.1	95	Pass
4	10/21/09	Inside Retaining Wall - 2nd to S Quarter	9	109.7	113	97.1	95	Pass

44.7  
44.7  
45.4  
45.4

# **EXHIBIT B**

**03300 Concrete Construction**

**Structural Schedule of Special Inspections**  
**CONCRETE CONSTRUCTION**

VERIFICATION AND INSPECTION	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
<b>IBC Section 1704.4</b>						
1. Inspection of reinforcing steel, including prestressing tendons, and placement	Y	P	ACI 318: 3.5, 7.1-7.7	SII	PE/SE or EIT	JRF
2. Inspection of reinforcing steel welding in accordance with Table 1704.3, Item 5B	N		Welding of Reinf Not Allowed	TA2	AWS-CWI	N/A
3. Inspect bolts to be installed in concrete prior to and during placement of concrete where allowable loads have been increased	Y	C	IBC 1912.5	SII	PE/SE or EIT	JRF
4. Verifying use of required design mix	Y	P	ACI 318: Ch 4, 5.2-5.4	SII	PE/SE or EIT	JRF
5. At time fresh concrete is sampled to fabricate specimens for strength test, perform slump and air content test and temperature	Y	C	ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8	TA1	ACI-CFTT or ACI-STT	See included
6. Inspection of concrete and shotcrete placement for proper application techniques	N/A	C	ACI 318: 5.9, 5.10		PE/SE or EIT	
7. Inspection for maintenance of specified curing temperature and techniques	Y	P	ACI 318: 5.11-5.13	SII	PE/SE or EIT	JRF
8. Inspection of Prestressed Concrete						
a. Application of prestressing force.	N/A	C	ACI 318: 18.20		PE/SE or EIT	
b. Grouting of bonded prestressing tendons in seismic force resisting system	N/A	C	ACI 318: 18.18.4		PE/SE or EIT	
9. Erection of precast concrete members	N/A	P	ACI 318: Ch.16		PE/SE or EIT	
10. Verification of in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms beans and structural slabs	N/A	P	ACI 318: 6.2		ACI-STT	

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	1858

## OBSERVATION REPORT

Cast in Place Concrete

<b>Date:</b>	04/01/09
<b>Time:</b>	10:00 to 10:30 AM
<b>Temp:</b>	Mid 40's
<b>Weather:</b>	Sunny

**Observation Location:** Footings Line N from 8.2 to 16

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Embed/Anchors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lap Splices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Notes:**

**Signed:** Matthew J. Miller, P.E.

# B E C K E R

structural engineers, inc.

03300

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	1858

## OBSERVATION REPORT

Cast in Place Concrete

<b>Date:</b>	Friday, 04/10/09
<b>Time:</b>	12:45PM
<b>Temp:</b>	Low 50's
<b>Weather:</b>	Sunny

**Observation Location:** Wall reinforcing and formwork (Valley Street side) along N line, 16 line to 8.2 line and 16 line, from the N corner to approximately 12 feet toward St. John's Street

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Embed/Anchors	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Lap Splices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Notes:**

I met with Dan Beaulieu and Everett Stewart of Ganneston, and Mike Tindle of Newman concrete. Newman Concrete was seeking clarification of the pier and brick shelf conditions of the wall that was in place. Newman's crews were packing up for the weekend and it was agreed that we would meet again on Monday morning. The reinforcing that was in place at the time appeared to conform with the project documents.

**Signed:** Ethan A. Rhile, P.E.



<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	1858

**OBSERVATION REPORT**  
Cast in Place Concrete

<b>Date:</b>	Monday, 04/13/09
<b>Time:</b>	7:55AM
<b>Temp:</b>	Low 30's
<b>Weather:</b>	Windy with sun, Chilly

**Observation Location:** Wall reinforcing and formwork (Valley Street side) along N line, 16 line to 8.2 line and 16 line, from the N corner to approximately 12 feet toward St. John's Street

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Embed/Anchors	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Lap Splices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Notes:**

At the time of my visit the project site was taking delivery of reinforcement. I met with Dan Beaulieu and Everett Stewart of Ganneston, and Mike Tindle of Newman concrete and presented draft sketches CSKS-01/02/03 to clarify the pier and brick shelf conditions. Field direction was given to: Raise 6 feet of brick shelf along N line from the corner up to 55'-3" to match the elevation along the 16 line, revise the location of the (5) number 8 reinforcing bars between 14 & 13 to be below the pier tops in these locations and to add (2)#5x6'-0" below the brick shelves where the pier bond outs extended above the shelf.

**Signed:** Ethan A. Rhile, P.E.

# B E C K E R

03300

structural engineers, inc.

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	1858

## OBSERVATION REPORT

Cast in Place Concrete

<b>Date:</b>	Monday, 04/13/09
<b>Time:</b>	2:30PM
<b>Temp:</b>	40's
<b>Weather:</b>	Windy with sun, Chilly

**Observation Location:** Wall reinforcing and formwork (Valley Street side) along N line, 16 line to 8.2 line and 16 line, from the N corner to approximately 12 feet toward St. John's Street

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Embed/Anchors	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Lap Splices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Notes:**

I returned to review the work discussed in the morning. A majority of the work discussed in the morning was completed. It was requested that Newman install (2) #6 in place of one of the #8 reinforcing bars between 13 & 14 that had been accidentally been cut to create the column bond outs.

**Signed:** Ethan A. Rhile, P.E.

# B E C K E R

structural engineers, inc.

03300

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI 2058

## OBSERVATION REPORT

Cast in Place Concrete

<b>Date:</b>	Wednesday, 04/22/09
<b>Time:</b>	3:30PM - 4:30 PM
<b>Temp:</b>	Low 40's
<b>Weather:</b>	Cloudy with Rain Showers

**Observation Location:** Strip footing along Line A and along Line 7 from Line A to west of Line F where the footing was already in place.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Embed/Anchors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lap Splices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Notes:**

Work was found to be in general conformance with the construction documents. Reinforcement was located adequately and footing forms appear to be located to properly size the footing. The concrete sub-contractor was still working along Line 7 during this visit, and not all reinforcement had been placed. The reinforcement needed in this area was discussed with the concrete superintendent, and this work will be completed tomorrow prior to the concrete placement.

Please contact me with any questions or comments. Thank you -

**Signed:** James Fortin, P.E.

# B E C K E R

03300

structural engineers, inc.

## OBSERVATION REPORT

Cast in Place Concrete

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI 2058

<b>Date:</b>	Friday, 05/01/09
<b>Time:</b>	7:30AM - 9:00 AM
<b>Temp:</b>	Low 40's
<b>Weather:</b>	Cloudy with Rain Showers

**Observation Location:** Foundation Wall along F-Line and remainder of 16-Line, elevator pit mat with adjacent F4 footings at Grid M/5 & M/5.8.

*Note: A preliminary review of the major foundation wall reinforcement was completed on Tuesday, April 28<sup>th</sup>, prior to standing the interior wall forms.*

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Comments
Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Embed/Anchors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lap Splices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Notes:**

Review of the areas referenced above found that rebar and embedments layout appeared in general conformance with the construction documents and supplemental sketches. Upon arrival, it was noted that the U-bars and slab dowels identified on sketch CSKS-5 were not in place. The concrete sub-contractor was aware of this, and had begun placing the u-bars prior to my departure. I discussed this with Everett, and he stated that he would confirm that the missing bars are in place prior to pouring the wall.

Please contact me with any questions or comments. Thank you -

**Signed:** James Fortin, P.E.

# B E C K E R

03300

structural engineers, inc.

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI 2058

## OBSERVATION REPORT

Cast in Place Concrete

<b>Date:</b>	Wednesday, 05/06/09
<b>Time:</b>	11:30AM - 1:00 PM
<b>Temp:</b>	Low 50's
<b>Weather:</b>	Cloudy

**Observation Location:** Foundation Walls along the remainder of 7-Line & A-Line, elevator pit walls, strip footing along Line 1 from Line L.8 to H, and site retaining wall footing off Line 1. Also spread footings at Grid J/14, L/14, J/13, L/13, L/12, L/11, J/10 & L/9 and CMU footings along Lines 13, 14, & L.

*Note: A preliminary review of the major foundation wall reinforcement was completed on Monday, May 4<sup>th</sup>, prior to standing the interior wall forms.*

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Embed/Anchors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Lap Splices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Notes:**

Review of the areas referenced above found that rebar and embedments layout appeared in general conformance with the construction documents and supplemental sketches. A majority of the wall rebar was in place and appeared adequate, but work was ongoing and the following items were noted that will need to be addressed prior to pouring. We understand that a concrete sub-contractor is likely aware of a majority of these items, but provide them for reference to ensure they are not missed:

1. Per CSKS10, it is specified to pour the (2) interior footings at Line 13 & 14 integrally. These footings are currently formed separately. Although preferable to place as one integral footing, it is adequate to fill space between footings with concrete as a separate placement.

2. Reinforcement in many of the interior footings needs to be straightened out and lifted off the ground to maintain rebar cover requirements.
3. Reinforcement in the CMU wall strip footings was in contact with the earth and needs to be placed on chairs to obtain proper rebar cover.
4. Z-bars specified on CSKS-10 are not yet in place.
5. Dowels for CMU walls shall be placed and secured prior to the concrete placement.
6. At footing F6A at Grid L/9, rebar grid is required at both top and bottom of footing ( see footing schedule)
7. At high wall along Line 7, joist seats are not yet in place, as well as U-bars, and dowels per CSKS-5.
8. The brick shelf transition along Line 7 does not appear to be in the proper location. This was confirmed with the GC, and the area will be corrected. The step in the stem wall is not at the same location as the step in the brick shelf.
9. Anchor bolts are not yet in place at column locations.
10. Along Line 1, between L.8 & H, a few vertical wall dowels are not yet in place per Section 1/S2.2.

The General Contractor was informed of these items prior to my departure. The General Contractor is requested to review these items with the concrete sub-contractor, and review completion of these items prior to the concrete placement.

Please contact me with any questions or comments. Thank you -

**Signed:** James Fortin, P.E.

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI 2058

**OBSERVATION REPORT**  
Cast in Place Concrete

<b>Date:</b>	Wednesday, 05/13/09
<b>Time:</b>	2:00PM - 3:00 PM
<b>Temp:</b>	Low 60's
<b>Weather:</b>	Sunny

**Observation Location:** Foundation footings along Line 1 from Line A to between Line C & E, including the footings for the entrance slab.

*Note: A pre-steel and pre-wood framing meeting was also conducted during this visit.*

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Embed/Anchors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lap Splices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Notes:**

Review of the areas referenced above found that rebar layout appeared in general conformance with the construction documents

Please contact me with any questions or comments. Thank you -

**Signed:** James Fortin, P.E.

# B E C K E R

03300

structural engineers, inc.

## OBSERVATION REPORT

Cast in Place Concrete

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI 2058

<b>Date:</b>	Tuesday, 05/15/09
<b>Time:</b>	11:00 AM - 12:00 PM
<b>Temp:</b>	Low 70's
<b>Weather:</b>	Sunny

**Observation Location:** Foundation Walls along Line 1 from Line A to between Lines C & E, including the entrance slabs walls.

*Note: A preliminary review of the major foundation wall reinforcement along Line N and 1 was also completed during this visit.*

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Embed/Anchors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lap Splices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Notes:**

Review of the areas referenced above found that rebar layout appeared in general conformance with the construction documents. There were no comments provided, and the area was determined ready for concrete placement.

Please contact me with any questions or comments. Thank you -

**Signed:** James Fortin, P.E.



<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI 2058

## OBSERVATION REPORT

Cast in Place Concrete

<b>Date:</b>	Tuesday, 05/19/09
<b>Time:</b>	3:00 PM - 4:00 PM
<b>Temp:</b>	60's
<b>Weather:</b>	Sunny

**Observation Location:** Foundation Walls along the remainder of N-Line & 1-Line to the intersection of the site retaining wall, and site retaining wall off Line 1.

*Note: A preliminary review of the major foundation wall reinforcement was completed on Friday, May 15<sup>th</sup>, prior to standing the interior wall forms.*

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Comments
Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Embed/Anchors	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Lap Splices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Notes:**

Review of the areas referenced above found that rebar layout appeared in general conformance with the construction documents and supplemental sketches. A majority of the wall rebar was in place and appeared adequate, but work was ongoing and the following items were noted that will need to be completed prior to pouring. We understand that a concrete sub-contractor is likely aware of a majority of these items, but provide them for reference to ensure they are not missed. The General Contractor has agreed to take pictures as necessary to confirm.

1. Per CSKS-5, U-bars are necessary between each joist pocket. This reinforcement was on site but had not yet been placed.
2. The bond-outs and joist angle seat embedments had not been placed within the forms.

3. Per CSKS-5, the #5 dowels extending from the top of the concrete wall into the elevated slab were not in place.

During the preliminary review on May 15<sup>th</sup>, it was noted that the additional #5 bars specified on Section 8/S2.3 were not in place. These bars were found to be in place during this visit.

The General Contractor was informed of these items prior to my departure. The General Contractor is requested to review these items with the concrete sub-contractor, and review completion of these items prior to the concrete placement.

Please contact me with any questions or comments. Thank you -

**Signed:** James Fortin, P.E.

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI 2058

**OBSERVATION REPORT**  
Cast in Place Concrete

<b>Date:</b>	Tuesday, 05/27/09
<b>Time:</b>	9:00 AM - 10:00 AM
<b>Temp:</b>	50's
<b>Weather:</b>	Rain Showers

**Observation Location:** Remainder of interior spread footings between Line 1 and Line 7 as well as foundation wall along Line 1, from approx. Line D to Line H. Note: The spread footing at Grid 1/N<sub>1</sub> was also placed, but the rebar at this area was not in place during this visit.

*Note: A preliminary review of this reinforcement was completed on Friday, May 22<sup>nd</sup>.*

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Embed/Anchors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lap Splices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Notes:**

Review of the areas referenced above found that rebar layout appeared in general conformance with the construction documents.

Please contact me with any questions or comments. Thank you -

**Signed:** James Fortin, P.E.

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI2058

**OBSERVATION REPORT**  
Cast in Place Concrete

<b>Date:</b>	07-06-09
<b>Time:</b>	7:30 am - 9:00 am
<b>Temp:</b>	60's
<b>Weather:</b>	Sunny

**Observation Location:** Slab Reinforcement at the First Floor.

*Note: An initial visit to review first floor slab reinforcement was completed on July 2<sup>nd</sup>. This is a follow-up visit to confirm that incomplete areas found on July 2<sup>nd</sup> had been completed and the area was ready for slab placement.*

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Embed/Anchors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lap Splices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Notes:**

This site observation was conducted to review reinforcement to be placed in the first floor concrete slab on metal deck. Reinforcement was in place and was in general conformance with the construction documents and supplemental sketches (CSKS's) provided.

**Signed:** James Fortin, P.E.

# B E C K E R

03300

structural engineers, inc.

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI 2058

## OBSERVATION REPORT

Cast in Place Concrete

<b>Date:</b>	Wednesday, 08/05/09
<b>Time:</b>	1:30PM - 2:30PM
<b>Temp:</b>	80's
<b>Weather:</b>	Sunny

**Observation Location:** Slab-on-grade reinforcement and sub-grade

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quantity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Embed/Anchors	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lap Splices	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

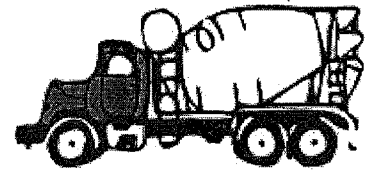
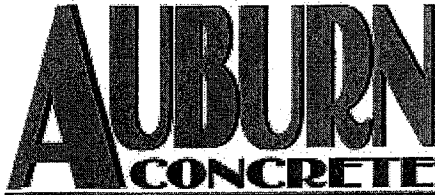
**Notes:**

This visit was completed to review the placement of reinforcement for the concrete slab-on-grade. Information provided on Drawing S1.1 and CSKS-10 was reviewed. The following items were noted that will require attention by the General Contractor prior to slab placement. The GC is requested to take photographs of these items when completed and forward to BSE for record.

1. The (3) #5 dowels shown in Section B to be drilled and grouted into the existing foundation strip footing have not yet been placed.
2. The #4 bars around the perimeter of the slab and along Line M shall be continuous. They are currently broken at each column slab bout-out. Pull the bars away from the wall to allow for continuous bar placement. Provide 2'-0" lap splices between bars.
3. The #4 slab bars shall be located at the center of the slab depth. Provide taller chairs for bar placement.

Please contact me with any questions or comments. Thank you -

**Signed:** James Fortin, P.E.



82 Goldthwaite Road • P.O. Box 1747 • Auburn, Maine 04210  
 93 Scott Drive • Westbrook, Maine 04092  
 50 Arthur Reno Road • West Bath, Maine 04530

Phone: (207) 777-7100 • Fax: (207) 777-7171  
 Phone: (207) 780-0523 • Fax: (207) 780-1521  
 Phone: (207) 386-5100 • Fax: (207) 386-5151

## GANNESTON CONSTRUCTION CORP.

**ATTN: MIKE ADAMS**  
**3025 NORTH BELFAST AVE.**  
**P.O. BOX 27**  
**AUGUSTA, ME 04332**  
**PH: (207) 621-8505**  
**FX: (207) 621-8508**

03300-1.05-11

GANNESTON CONSTRUCTION CORP. P.O. BOX 27 AUGUSTA, ME 04332		REVIEWED WITH NOTES RESUBMISSION REQUESTED	NOT ACCEPTABLE
REVIEWED	REVIEWED WITH NOTES NO RESUBMISSION	CHECK MARK INDICATES ACTION TAKEN	
CHECKED BY: <i>[Signature]</i>		DATE: 2/4/05	

#89-10-11

**Mix Design Submittals for:**

# FLORENCE HOUSE

**390 VALLEY ST. - PORTLAND, ME**

**GANNESTON CONSTRUCTION CORP - PROJECT # 677**

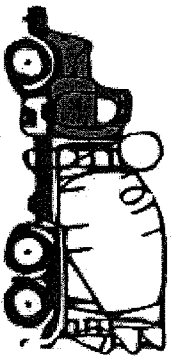
As prepared by:

### AUBURN CONCRETE

Remi Delcourt, Sales & Quality Control  
 P.O. Box 1747 - 82 Goldthwaite Road  
 Auburn, Maine 04210  
 Office: (207) 777-7100  
 Facsimile: (207) 777-7171  
 E-Mail: remi@auburnconcrete.com

# AUBURN CONCRETE

B2 Goldthwaite Road • P.O. Box 1747 • Auburn, Maine 04210  
93 Scotts Drive • Westbrook, Maine 04092  
50 Arthur Reno Road • West Bath, Maine 04530



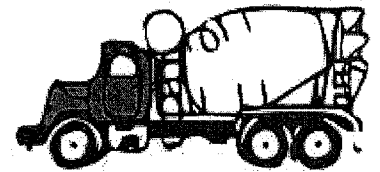
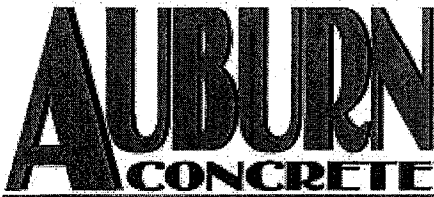
Phone: (207) 777-7100 • Fax: (207) 777-7171  
Phone: (207) 780-0523 • Fax: (207) 780-1521  
Phone: (207) 586-5100 • Fax: (207) 586-5151

- Reviewed       Furnish as Corrected  
 Rejected       Revise and Resubmit  
 Submit Specific Item:

This review is only for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance with the requirements of the plans and specifications. Approval of a specific item shall not include approval of an assembly of which the item is a component. Contractor is responsible for dimensions to be confirmed and correlated at the jobsite; information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of his or her Work with that of all other trades; and for performing all work in a safe and satisfactory manner.

Becker Structural Engineers, Inc.

Date 2-18-09 By MJM



82 Goldthwaite Road • P.O. Box 1747 • Auburn, Maine 04210  
 93 Scott Drive • Westbrook, Maine 04092  
 50 Arthur Reno Road • West Bath, Maine 04530

Phone: (207) 777-7100 • Fax: (207) 777-7171  
 Phone: (207) 780-0523 • Fax: (207) 780-1521  
 Phone: (207) 386-5100 • Fax: (207) 386-5151

# Ganneston Construction Corp.

FLORENCE HOUSE  
 390 VALLEY ST. - PORTLAND, ME

## 3000PSI - Air Entrained, 3/4" Crushed Stone Mix Design Submittal (Footings)

1/30/2009

3034SA

		<u>Weight-SSD (lbs)</u>	<u>Volume (Cu.Ft.)</u>	<u>Sources</u>
CEMENT, T I/II	ASTM C-150	517	2.63	DRAGON PRODUCTS COMPANY
COARSE AGG	ASTM C-33: #57/#67	1700	10.28	PIKE INDUSTRIES
FINE AGGREGATE	ASTM C-33	1330	8.17	PORTLAND SAND & GRAVEL
WATER U.S. GAL/CY:	33.0	275	4.41	CITY OF WESTBROOK
AIR CONTENT (%):	6.0 +/- 1.5%		1.63	
WATER/CEMENT RATIO:	0.53			
SLUMP (Inches):	4.00 ± 1.00"			4" Max Per SPEC. PRIOR TO WATER REDUCER
YIELD:	141.0 PCF		27.1 Cu.Ft.	
GLENIUM 7500	ASTM C494, TYPE A,F	3.00 oz/cwt	15.5 US oz/CY	BASF/MASTER BUILDERS
MICROAIR	ASTM C-260	0.15 oz/cwt	0.8 US oz/CY	BASF/MASTER BUILDERS
OPTIONAL:				
POZZOLITH 100XR	ASTM C-494, Type B,D	2.00 oz/cwt	10.3 US oz/CY	BASF/MASTER BUILDERS
POZZUTEC 20+	ASTM C-494, Type C,E	10.00 oz/cwt	51.7 US oz/CY	BASF/MASTER BUILDERS

\* GLENIUM 7500 dose is for MIDRANGE applications.

\* GLENIUM 7500 meets the requirements of ASTM C494 for Type A (water-reducing) and Type F (high-range water-reducing).  
 Plant of site addition of 2 - 3 fl.oz./cwt (10.3 - 15.5 fl.oz./cy) will be required to achieve end slump indicated.



MIX IDENTIFICATION #:  
DESIGN STRENGTH:

30345A  
3000 PSI @ 28 DAYS



PROJECT:  
CONTRACTOR:

W/C: 0.53  
MAX. C.A.: 3/4"

1/30/2009  
3:11 PM

DATE	PROJECT	ID#	SLUMP	% AIR	TEMPERATURE CONC	AIR	7 DAY	28 DAY	MOVING AVG. OF 3
1/10/2008	TURNER-LEEDS BRIDGES	14039-6					2050	3120	
1/12/2008	TURNER-LEEDS BRIDGES	14039-12	7.50	6.4	60		2765	3880	
3/6/2008	TURNER-LEEDS BRIDGES	14039-13	6.50	8.5	52		2595	3435	3512
3/6/2008	TURNER-LEEDS BRIDGES	14039-14	6.50	7.0	51		3010	3910	3775
4/5/2008	TURNER-LEEDS BRIDGES	14039-17		4.5	62		3410	4055	3800
4/5/2008	TURNER-LEEDS BRIDGES	14039-19		6.5	61		2620	3315	3760
4/5/2008	TURNER-LEEDS BRIDGES	14039-20		6.5	61		3380	4420	3930
4/5/2008	TURNER-LEEDS BRIDGES	14039-21		7.1	63		3580	4070	3935
4/9/2008	RESIDENCE INN-AUBURN	14064-1	3.50	5.3	63		2830	4150	4213
4/10/2008	RESIDENCE INN-AUBURN	14064-2	3.75	5.0	63		3380	4470	4230
4/11/2008	RESIDENCE INN-AUBURN	14064-3	4.00	5.4	63		3010	4470	4363
4/15/2008	RESIDENCE INN-AUBURN	14064-4	5.25	5.2	61		3140	3885	4275
4/17/2008	RESIDENCE INN-AUBURN	14064-5	5.00	5.8	65		3290	4090	4148
4/22/2008	RESIDENCE INN-AUBURN	14064-6	5.75	5.6	69		2710	3515	3830
4/25/2008	RESIDENCE INN-AUBURN	14064-7	5.00	6.5	65		2950	3770	3782
4/30/2008	RESIDENCE INN-AUBURN	14064-8	3.00	6.0	58		3350	4400	3895
5/5/2008	RESIDENCE INN-AUBURN	14064-9	5.50	4.5	64		3030	3540	3903
5/6/2008	RESIDENCE INN-AUBURN	14064-10	5.75	6.0	67		2960	3555	3832
5/13/2008	RESIDENCE INN-AUBURN	14064-11	3.50	6.8	64		3310	3970	3698
5/19/2008	RESIDENCE INN-AUBURN	14064-12	5.25	6.2	65		3230	3470	3665
5/29/2008	RESIDENCE INN-AUBURN	14064-13	4.25	5.5	68		3900	4550	3987
7/2/2008	TURNER-LEEDS BRIDGES	14039-33	6.00	6.0	77		2850	3540	3887
7/2/2008	TURNER-LEEDS BRIDGES	14039-34	6.50	6.1	81		3100	3950	4013
7/2/2008	TURNER-LEEDS BRIDGES	14039-35	6.50	8.0	81		2940	3640	3710
7/2/2008	TURNER-LEEDS BRIDGES	14039-36	6.00	8.2	84		2670	3355	2615
7/15/2008	GORHAM BY-PASS	889-10	6.00	6.6	81	83	2920	3200	3398
7/25/2008	SL MARYS ER ADDITION	14093-7	5.00	4.7	64		3080	3935	3487
7/29/2008	SL MARYS ER ADDITION	14093-8	4.00	5.4	67		3140	4095	3743
7/30/2008	SL MARYS ER ADDITION	14093-9	4.25	4.9	83		3390	4255	4095
8/1/2008	SL MARYS ER ADDITION	14093-10	5.00	5.5	82		3030	3735	4028
8/4/2008	SL MARYS ER ADDITION	14093-11	5.00	6.9	84		2810	3200	3730
8/7/2008	SL MARYS ER ADDITION	14093-12	5.50	5.9	71		3040	4195	3710
8/9/2008	SL MARYS ER ADDITION	14093-13	5.00	6.8	79		3270	3795	3730
8/15/2008	SL MARYS ER ADDITION	14093-14	4.00	6.9	86		2800	3190	3727
8/17/2008	ST. MARYS MOB	14131-1	4.50	5.8	81		4550	4915	3967
8/18/2008	ST. MARYS MOB	14131-2	7.25	6.0	76		3290	4110	4072
8/23/2008	ST. MARYS MOB	14131-3	3.75	7.3	70		3310	4090	4372
8/23/2008	ST. MARYS MOB	14131-4	5.00	6.9	78		3800	4115	4105
9/30/2008	ST. MARYS MOB	14131-5	5.50	6.6	74		2990	4055	4087
10/2/2008	ST. MARYS MOB	14131-6	5.50	7.2	70		2890	3935	4035
10/2/2008	BOWDOIN COL. FITNESS CTR	14138-1	5.50	8.0	72		2840	3990	3960
10/6/2008	ST. MARYS MOB	14131-7	5.50	6.8	63		3320	3825	3683
10/7/2008	ST. MARYS MOB	14131-8	4.50	7.3	61		3100	3920	3878
10/8/2008	ST. MARYS MOB	14131-9	5.50	5.0	71		3880	4140	3962
10/13/2008	ST. MARYS MOB	14131-10	5.25	5.9	73		3410	3910	3990
10/14/2008	BOWDOIN COL. FITNESS CTR	14138-2	5.50	5.6	70		3140	3905	3965
10/14/2008	BOWDOIN COL. FITNESS CTR	14138-3	5.50	6.5	68		3050	3775	3863
10/17/2008	ST. MARYS MOB	14131-11	6.00	7.0	68		2740	3555	3745
10/21/2008	BOWDOIN COL. FITNESS CTR	14138-4	8.00	5.8	62		3010	4005	3778
10/22/2008	SL MARYS ER ADDITION	14093-18	5.00	5.8	60		3290	4100	3887
10/24/2008	SL MARYS ER ADDITION	14093-19	6.25	6.0	67		1980	3270	3792
11/3/2008	BOWDOIN COL. FITNESS CTR	14138-5	8.00	7.8	51		2510	3155	3508
11/3/2008	BOWDOIN COL. FITNESS CTR	14138-6	8.50	7.4	53		2830	3620	3348
11/14/2008	BOWDOIN COL. FITNESS CTR	14138-7	8.00	7.2	67		3130	3915	3563
11/14/2008	BOWDOIN COL. FITNESS CTR	14138-8	8.00	5.8	67		2880	3485	3673
11/25/2008	BOWDOIN COL. FITNESS CTR	14138-9	7.00	6.8	63		3150	3790	3730

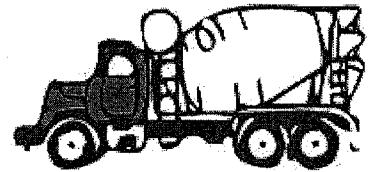
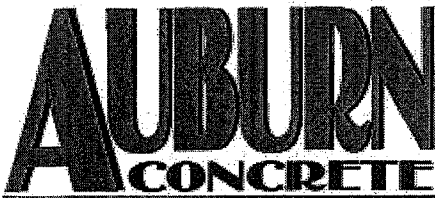
COUNT:	56	51	55	55	2	56	56	50
RANGE:	LOW	3.00	4.5	51	83	1980	3120	3388
	HIGH	8.50	8.5	87	83	4550	4915	4372
AVERAGE OF ALL:		5.50	6.3	69	83	3061	3852	3886
STANDARD DEVIATION:		1.2	0.9	9.4	0.0	405	384	213
COEFFICIENT OF VARIATION:		22.4	14.8	13.7	0.0	13.2	10.0	5.5

ACI 214 SUMMARY:

AVERAGE STRENGTH:	3852 PSI ✓
AVERAGE STRENGTH BASED ON:	56 TESTS
STANDARD DEVIATION:	384 PSI
OVERALL COEFFICIENT OF VARIATION:	10.0 %
WITHIN-TEST STANDARD DEVIATION:	114 PSI
WITHIN-TEST COEFFICIENT OF VARIATION:	3.0 %
BATCH-TO-BATCH STANDARD DEVIATION:	366 PSI
RECOMMENDED STRENGTH:	3514 PSI ✓

CONTROL IS EXCELLENT

CONTROL IS EXCELLENT



82 Goldthwaite Road • P.O. Box 1747 • Auburn, Maine 04210  
 93 Scott Drive • Westbrook, Maine 04092  
 50 Arthur Reno Road • West Bath, Maine 04530

Phone: (207) 777-7100 • Fax: (207) 777-7171  
 Phone: (207) 780-0523 • Fax: (207) 780-1521  
 Phone: (207) 386-5100 • Fax: (207) 386-5151

# Ganneston Construction Corp.

FLORENCE HOUSE  
 390 VALLEY ST. - PORTLAND, ME

## 3500PSI - Air Entrained, 3/4" Crushed Stone Mix Design Submittal (Foundation Walls)

1/30/2009

35345A

		Weight-SSD (lbs)	Volume (Cu.Ft.)	Sources
CEMENT, T I/II	ASTM C-150	564	2.87	DRAGON PRODUCTS COMPANY
COARSE AGG	ASTM C-33: #57/#67	1700	10.28	PIKE INDUSTRIES
FINE AGGREGATE	ASTM C-33	1270	7.80	PORTLAND SAND & GRAVEL
WATER U.S. GAL/CY:	33.6	280	4.49	CITY OF WESTBROOK
AIR CONTENT (%):	6.0 +/- 1.5%		1.63	
WATER/CEMENT RATIO:	0.50			
SLUMP (Inches):	4.00		± 1.00"	← 4" MAX PRIOR TO W.R. ADMIXTURE
YIELD:	140.9 PCF		27.1 Cu.Ft.	
GLENIUM 7500	ASTM C494, TYPE A,F	3.00 oz/cwt	16.9 US oz/CY	BASF/MASTER BUILDERS
MICROAIR	ASTM C-260	0.2 oz/cwt	1.1 US oz/CY	BASF/MASTER BUILDERS
OPTIONAL:				
POZZOLITH 100XR	ASTM C-494, Type B,D	2.00 oz/cwt	11.3 US oz/CY	BASF/MASTER BUILDERS
POZZUTEC 20+	ASTM C-494, Type C,E	10.00 oz/cwt	56.4 US oz/CY	BASF/MASTER BUILDERS

\* GLENIUM 7500 dose is for MIDRANGE applications.

\* GLENIUM 7500 meets the requirements of ASTM C494 for Type A (water-reducing) and Type F (high-range water-reducing).  
 Plant of site addition of 2 - 3 fl.oz./cwt (11.3 - 16.9 fl.oz./cy) will be required to achieve end slump indicated.

MIX IDENTIFICATION #:  
DESIGN STRENGTH:

3534SA

  
**3500 PSI @ 28 DAYS**


PROJECT:  
CONTRACTOR:

DATE	PROJECT	ID#	SLUMP	% AIR	TEMPERATURE		7 DAY	28 DAY	MOVING AVG. OF 3
					CONC	AIR			
9/28/2006	GASWORKS	687-1	6.50	6.1	71	65	3240	4545	
3/13/2007	Davis Island Townhouses	4896-2	5.50	5.2	70		3230	4530	
3/15/2007	Davis Island Townhouses	4896-3	7.75	5.8	61		4160	5005	4693
3/19/2007	Davis Island Townhouses	4896-4	8.00	6.5	68		3990	4750	4782
3/23/2007	Davis Island Townhouses	4896-6	4.00	5.6	66		3120	3850	4535
4/3/2007	Davis Island Townhouses	4896-12	4.00	4.7	58		2990	3700	4100
4/12/2007	Davis Island Townhouses	4896-15	5.50	5.2	60		3080	3990	3847
4/24/2007	Davis Island Townhouses	4896-19	4.75	5.9	70		2930	3660	3783
4/26/2007	Davis Island Townhouses	4896-20	5.75	4.7	59		2430	3420	3690
6/12/2007	Davis Island Townhouses	4896-25	5.25	5.4	78		3200	3980	3687
12/7/2008	Wal-Mart Scarborough	1788-13	6.50	5.0	61	20	3550	4690	4030
12/7/2008	Wal-Mart Scarborough	1788-14	4.00	5	65	28	3730	4685	4452
12/27/2008	Wal-Mart Scarborough	1788-25	5.50	6.6	60	31	3830	4540	4638
COUNT:		13	13	13	13	4	13	13	11
RANGE:		LOW	4.00	4.7	56	20	2430	3420	3687
		HIGH	8.00	6.6	78	65	4160	5005	4782
AVERAGE OF ALL:			5.62	5.5	65	36	3345	4257	4202
STANDARD DEVIATION:			1.3	0.6	6.0	17.2	465	488	403
COEFFICIENT OF VARIATION:			22.4	11.0	9.2	47.8	13.9	11.5	9.6

**ACI 214 SUMMARY:**

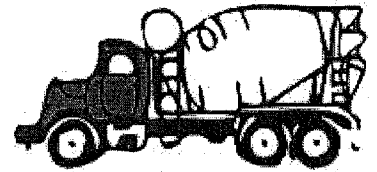
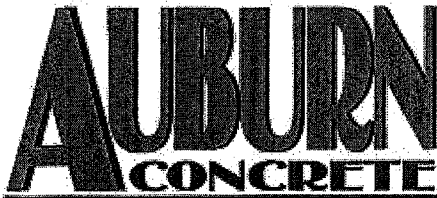
AVERAGE STRENGTH:	4257 PSI ✓	
AVERAGE STRENGTH BASED ON:	13 TESTS	
STANDARD DEVIATION:	488 PSI	CONTROL IS VERY GOOD
OVERALL COEFFICIENT OF VARIATION:	11.5 %	
WITHIN-TEST STANDARD DEVIATION:	51 PSI	
WITHIN-TEST COEFFICIENT OF VARIATION:	1.2 %	CONTROL IS EXCELLENT
BATCH-TO-BATCH STANDARD DEVIATION:	485 PSI	
RECOMMENDED STRENGTH:	Too few tests to determine recommended strength	

*BASED ON 13 TEST*

$$f'_{cr} = f'_c + 1200 = 3500 + 1200 = 4700$$

*HOWEVER BASED ON TEST OF 3<sup>rd</sup> CONCRETE*

$$SS = 384 \quad \therefore f'_{cr} = 3500 + 1.3 \sqrt{384} = 4014 \checkmark$$



82 Goldthwaite Road • P.O. Box 1747 • Auburn, Maine 04210  
 93 Scott Drive • Westbrook, Maine 04092  
 50 Arthur Reno Road • West Bath, Maine 04530

Phone: (207) 777-7100 • Fax: (207) 777-7171  
 Phone: (207) 780-0523 • Fax: (207) 780-1521  
 Phone: (207) 386-5100 • Fax: (207) 386-5151

# Ganneston Construction Corp.

FLORENCE HOUSE  
 390 VALLEY ST. - PORTLAND, ME

## 3000PSI - Non-Air Entrained, 3/4" Crushed Stone

Mix Design Submittal (Interior S-O-G, elevated slabs)

1/30/2009

3034SNA

			<u>Weight-SSD (lbs)</u>	<u>Volume (Cu.Ft.)</u>	<u>Sources</u>
CEMENT, T I/II	ASTM C-150		517	2.63	DRAGON PRODUCTS COMPANY
COARSE AGG	ASTM C-33: #57/#67		1750	10.58	PIKE INDUSTRIES
FINE AGGREGATE	ASTM C-33		1440	8.84	PORTLAND SAND & GRAVEL
WATER	U.S. GAL/CY:	33.6	280	4.49	CITY OF WESTBROOK
	AIR CONTENT (%):		2.0 +/- 1.5%	0.54	
	WATER/CEMENT RATIO:		0.54		
	SLUMP (Inches):		4.00	± 1.00"	7.00" ± 1.00" (After Superplasticizer**)
	YIELD:	147.2 PCF		27.1 Cu.Ft.	
GLENIUM 7500*	ASTM C494, TYPE A,F	3.50 oz/cwt		18.1 US oz/CY	BASF/MASTER BUILDERS
OPTIONAL:					
POLYMESH	ASTM C-1116 TYPE III	1.5 lbs/cy			O'DEA CONCRETE PRODUCTS
POZZUTEC 20+	ASTM C-494, Type C,E	10.00 oz/cwt		51.7 US oz/CY	BASF/MASTER BUILDERS

\* GLENIUM 7500 dose is for MIDRANGE applications.

\*\*GLENIUM 7500 meets the requirements of ASTM C494 for Type A (water-reducing) and Type F (high-range water-reducing).  
 Plant of site addition of 2 - 3 fl.oz./cwt (9.6 - 14.4 fl.oz./cy) will be required to achieve end slump indicated.

MIX IDENTIFICATION #:  
DESIGN STRENGTH:

3034SNA

  
**3000 PSI @ 28 DAYS**


PROJECT:  
CONTRACTOR:

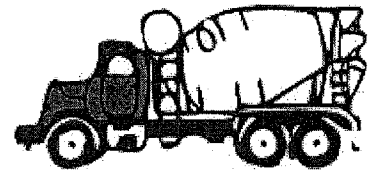
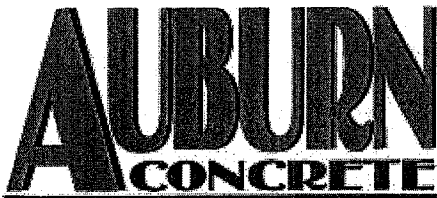
W/C: 0.54  
MAX. C.A.: 3/4"

DATE	PROJECT	ID#	SLUMP	% AIR	TEMPERATURE CONC	AIR	7 DAY	28 DAY	MOVING AVG. OF 3
1/24/08	84 MARGINAL WAY	785-65	5.50	2.6	68	25	3380	3855	
1/24/08	84 MARGINAL WAY	785-66	6.50		63	25	2740	3980	
1/24/08	84 MARGINAL WAY	785-67	6.50	2.1	60	25	3400	4360	4065
1/24/08	84 MARGINAL WAY	785-68	5.00	2.5	60	28	3520	4105	4148
1/24/08	84 MARGINAL WAY	785-69	6.75	3.3	50	29	3480	4105	4190
1/24/08	84 MARGINAL WAY	785-70	6.75	2.9	50	28	3450	4640	4283
1/31/08	84 MARGINAL WAY	785-71	6.25	2.0	77	20	3660	3810	4185
1/31/08	84 MARGINAL WAY	785-72	6.50	2.0	65	23	2830	3260	3903
1/31/08	84 MARGINAL WAY	785-73	6.75	2.6	61	25	3710	4000	3690
1/31/08	84 MARGINAL WAY	785-74	6.50	2.2	61	31	3290	3840	3700
1/31/08	84 MARGINAL WAY	785-75	6.75	2.2	55	33	3040	4000	3947
2/8/08	84 MARGINAL WAY	785-76	7.00	2.7	58	23	2920	3560	3800
2/8/08	84 MARGINAL WAY	785-77	7.00	2.5	52	20	2580	3495	3685
2/8/08	84 MARGINAL WAY	785-78	6.50	2.5	48	26	3360	3900	3652
2/8/08	84 MARGINAL WAY	785-79	7.00	2.5	47	22	2600	3505	3633
2/8/08	84 MARGINAL WAY	785-80	6.50	2.5	48	22	3470	4095	3833
2/29/08	84 MARGINAL WAY	785-84	6.00	2.5	72	4	3480	4095	3898
2/29/08	84 MARGINAL WAY	785-85	6.75	2.6	48	11	2900	3885	4025
2/29/08	84 MARGINAL WAY	785-86	5.00	2.4	52	25	3290	4165	4048
6/13/08	RESIDENCE INN-AUBURN	14064-17	6.50	3.8	72		2410	3395	3815
6/13/08	RESIDENCE INN-AUBURN	14064-18	6.00	3.9	71		2530	3035	3532
6/13/08	RESIDENCE INN-AUBURN	14064-19	5.75	4.1	73		2820	3385	3272
6/25/08	RESIDENCE INN-AUBURN	14064-23	5.00	4.5	78		3110	3980	3467
6/25/08	RESIDENCE INN-AUBURN	14064-24	5.00	4.8	78		2950	3425	3597
6/25/08	RESIDENCE INN-AUBURN	14064-25	6.00	4.5	75		2940	3830	3745
6/25/08	RESIDENCE INN-AUBURN	14064-26	5.50	4.9	75		3000	3635	3630
6/25/08	RESIDENCE INN-AUBURN	14064-27	5.75	3.9	77		2920	3700	3722
6/25/08	RESIDENCE INN-AUBURN	14064-28	5.50	4.0	75		2680	3495	3610
9/23/08	St. MARYS ER ADDITION	14093-15	5.25	1.9	68		3690	4160	3785
9/23/08	St. MARYS ER ADDITION	14093-16	6.00	1.8	67		3540	4180	3945
9/23/08	St. MARYS ER ADDITION	14093-17	5.25	1.8	69		3770	4445	4262
10/30/08	ST. MARY'S MOB	14131-13	5.25	2.2	61		2980	4065	4230
10/30/08	ST. MARY'S MOB	14131-14	5.00	2.4	57		3290	3935	4148
10/30/08	ST. MARY'S MOB	14131-15	6.00	2.0	55		3190	4480	4160
12/3/08	BOWDOIN COL FITNESS CTR	14138-10	5.50	3.2	67		3940	4700	4372
12/30/08	ST. MARY'S MOB	14131-16	6.00	2.4	63		3320		
12/30/08	ST. MARY'S MOB	14131-17	5.50	2.0	59		3190		

COUNT:	39	39	38	39	19	39	35	33
RANGE:	LOW	5.00	1.8	47	4	2410	3035	3272
	HIGH	7.00	4.9	78	33	3940	4700	4372
AVERAGE OF ALL:		6.04	2.9	63	23	3190	3900	3878
STANDARD DEVIATION:		0.6	0.9	9.7	6.5	377	382	266
COEFFICIENT OF VARIATION:		10.8	30.7	15.4	27.7	11.8	9.8	6.9

**ACI 214 SUMMARY:**

AVERAGE STRENGTH:	3900 PSI	
AVERAGE STRENGTH BASED ON:	35 TESTS	
STANDARD DEVIATION:	382 PSI	CONTROL IS EXCELLENT
OVERALL COEFFICIENT OF VARIATION:	9.8 %	
WITHIN-TEST STANDARD DEVIATION:	121 PSI	
WITHIN-TEST COEFFICIENT OF VARIATION:	3.1 %	CONTROL IS VERY GOOD
BATCH-TO-BATCH STANDARD DEVIATION:	362 PSI	
RECOMMENDED STRENGTH:	3512 PSI	



82 Goldthwaite Road • P.O. Box 1747 • Auburn, Maine 04210  
 93 Scott Drive • Westbrook, Maine 04092  
 50 Arthur Reno Road • West Bath, Maine 04530

Phone: (207) 777-7100 • Fax: (207) 777-7171  
 Phone: (207) 780-0523 • Fax: (207) 780-1521  
 Phone: (207) 386-5100 • Fax: (207) 386-5151

# Ganneston Construction Corp.

FLORENCE HOUSE  
 390 VALLEY ST. - PORTLAND, ME

## 4500PSI - Air Entrained, 3/4" Crushed Stone Mix Design Submittal (Exterior Slabs, exposed site concrete)

1/30/2009

4534SA

		Weight-SSD (lbs)	Volume (Cu.Ft.)	Sources
CEMENT, T I/II	ASTM C-150	658	3.35	DRAGON PRODUCTS COMPANY
COARSE AGG	ASTM C-33: #57/#67	1800	10.89	K & K EXCAVATION
FINE AGGREGATE	ASTM C-33	1100	6.75	PORTLAND SAND & GRAVEL
WATER U.S. GAL/CY:	33.6	280	4.49	CITY OF WESTBROOK
AIR CONTENT (%):	6.0 +/- 1.5%	1.63		
WATER/CEMENT RATIO:	0.43 ✓			
SLUMP (Inches):	3.00 ± 1.00" ✓			7.00" ± 1.00" (After Superplasticizer**)
YIELD:	141.6 PCF	27.1	Cu.Ft.	
GLENIUM 7500*	ASTM C494, TYPE A,F	3.00 oz/cwt	19.7 US oz/CY	BASF/MASTER BUILDERS
MICROAIR	ASTM C-260	0.35 oz/cwt	2.3 US oz/CY	BASF/MASTER BUILDERS
OPTIONAL:				
POZZOLITH 100XR	ASTM C-494, Type B,D	2.00 oz/cwt	13.2 US oz/CY	BASF/MASTER BUILDERS
POZZUTEC 20+	ASTM C-494, Type C,E	10.00 oz/cwt	65.8 US oz/CY	BASF/MASTER BUILDERS

\* GLENIUM 7500 dose is for MIDRANGE applications.

\* GLENIUM 7500 meets the requirements of ASTM C494 for Type A (water-reducing) and Type F (high-range water-reducing).  
 Plant of site addition of 2 - 3 fl.oz./cwt (13.2 - 19.7 fl.oz./cy) will be required to achieve end slump indicated.

www.auburnconcrete.com



P.O. Box 191, U.S. Route 1 • Thomaston, Maine 04861 • 207-594-5555

<b>MILL TEST RESULTS</b> Laboratory at Thomaston, Maine	Date: January, 2008 Cement Type: I/II
--	--

CHEMICAL DATA	Percent	PHYSICAL DATA	
Silicon Dioxide.....	20.0	Specific Surface.....	373
Aluminum Dioxide.....	4.2	Blaine (sq m /kg) <i>(Per ASTM C 204)</i>	
Ferric Oxide.....	3.0	Percent Passing 325 Mesh. <i>(Per ASTM C 430)</i>	97.3
Calcium Oxide.....	61.5	Compressive Strength (psi) <i>(Per ASTM C 109)</i>	
Magnesium Oxide.....	3.0	1 day.....	2300
Sulphur Trioxide.....	3.6	3 day.....	4040
Loss on Ignition.....	1.4	7 day.....	5030
Insoluble Residue.....	0.4	28 day.....	
Tricalcium Silicate.....	55	Vicat Setting Time <i>(Per ASTM C 191)</i>	
Dicalcium Silicate.....	15	Initial (min.).....	125
Tricalcium Aluminate.....	6	Final (min.).....	230
Sodium Oxide.....	0.5	Air Content (%)..... <i>(Per ASTM C 185)</i>	6.8
Potassium Oxide.....	1.1	Autoclave Expansion (%)... <i>(Per ASTM C 151)</i>	0.05
Equivalent Alkalies..... <i>(Chemical Analysis all per ASTM C 114)</i>	1.2	Expansion in water (%)..... <i>(Per ASTM C 1038)</i>	0.012
		Certified by:	
		Jennifer K. Colburn	

We hereby certify that this cement complies with current ASTM C 150, AASHTO M-85 and CSA-A3000 - 03 Type GU specifications.

Testing was completed by Brian Secord and/or Marie-Michele Bouchard.  
 This mill test report is generated for silos produced in the calendar month prior to the date upon this report.



**--- 2008 - 2009 GRADATION SUMMARY ---**

**3/4" Quarry Stone ( # 67)**

Source: K & K Excavation - Christian Hill Quarry, Auburn, Maine

		Specific Gravity: 2.67		Absorption: 0.40%			Tested by: Summit Labs 4/24/08			
		2"	1 1/2"	1"	3/4"	1/2"	3/4"	#4	#8	#200
4/1/2008	K&K	100	100	99	69	49	10	3	0.6	
4/4/2008	RD-CHQ	100	100	99	57	29	7	3	0.5	
4/9/2008	K&K	100	100	99	58	30	7	2	0.5	
4/11/2008	RD-A	100	100	98	62	31	8	4	0.5	
4/16/2008	K&K	100	100	98	60	33	9	3	0.5	
4/25/2008	K&K	100	100	98	53	29	9	3	0.5	
5/5/2008	RD-CHQ	100	100	97	53	27	8	4	0.5	
5/7/2008	K&K	100	100	97	51	27	7	3	0.5	
5/9/2008	K&K	100	100	94	50	24	6	3	0.5	
5/13/2008	K&K	100	100	96	50	24	8	3	0.4	
5/16/2008	RD-CHQ	100	100	95	52	22	4	3	0.8	
5/28/2008	K&K	100	100	97	51	25	6	2	0.5	
5/30/2008	K&K	100	100	94	48	20	5	2	0.4	
6/2/2008	K&K	100	100	95	55	27	7	3	0.5	
6/5/2008	RD-W	100	100	96	48	21	6	3	0.5	
6/16/2008	K&K	100	100	99	61	32	8	3	0.7	
6/18/2008	K&K	100	100	96	45	23	5	2	0.6	
6/19/2008	RD-A	100	100	97	55	27	6	3	0.5	
6/19/2008	RD-CHQ	100	100	98	58	32	9	4	0.9	
6/30/2008	K&K	100	100	99	53	27	9	3	0.5	
7/1/2008	RD-CHQ	100	100	95	43	20	5	2	0.7	
7/1/2008	K&K	100	100	99	54	24	7	3	0.4	
7/7/2008	K&K	100	100	97	60	28	7	3	0.7	
7/10/2008	RD-W	100	100	93	60	32	8	3	0.5	
7/16/2008	RD-CHQ	100	100	97	55	26	7	3	0.6	
7/21/2008	RD-A	100	100	98	59	31	9	4	0.9	
7/25/2008	K&K	100	100	98	59	27	6	2	0.4	
7/28/2008	K&K	100	100	97	50	21	5	3	0.5	
8/1/2008	RD-CHQ	100	100	99	46	29	8	4	0.8	
8/12/2008	K&K	100	100	97	46	22	6	3	0.6	
8/13/2008	RD-A	100	100	94	42	21	8	3	0.7	
8/19/2008	K&K	100	100	96	47	24	5	2	0.3	
8/20/2008	RD-WB	100	100	97	55	32	8	3	0.4	
8/22/2008	K&K	100	100	92	51	32	8	3	0.7	
8/25/2008	K&K	100	100	94	53	27	6	3	0.7	
9/3/2008	RD-W	100	100	94	54	31	9	4	0.7	
9/25/2008	RD-A	100	100	96	53	32	9	4	0.3	
9/26/2008	K&K	100	100	94	44	22	5	2	0.6	
9/29/2008	RD-A	100	100	93	44	23	8	4	0.6	
9/29/2008	K&K	100	100	98	48	27	6	2	0.4	
10/1/2008	K&K	100	100	94	57	29	8	3	0.5	
10/9/2008	RD-WB	100	100	91	42	22	6	3	0.6	
10/15/2008	K&K	100	100	92	48	22	4	2	0.4	
11/6/2008	K&K	100	100	91	52	31	8	3	0.6	
11/7/2008	RD-WB	100	100	90	45	24	6	3	1.0	
12/8/2008	RD-WB	100	100	90	49	30	10	5	0.4	
1/6/2009	RD-A	100	100	91	46	22	4	2	0.3	
<b>AVERAGE</b>		<b>100.0</b>	<b>100.0</b>	<b>95.7</b>	<b>52.1</b>	<b>27.0</b>	<b>7.0</b>	<b>3.0</b>	<b>0.6</b>	
<b>SPECIFICATION:</b>	<b>#57</b>	<b>100</b>	<b>95-100</b>	<b>---</b>	<b>25-60</b>	<b>---</b>	<b>0-10</b>	<b>0-5</b>	<b>&lt;1.5</b>	
<b>ASTM C33</b>	<b>#67</b>		<b>100</b>	<b>90-100</b>	<b>---</b>	<b>20-55</b>	<b>0-10</b>	<b>0-5</b>	<b>&lt;1.5</b>	





**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330

Phone: (207) 621-8334 Fax: 626-9094



**DAILY FIELD REPORT**

**Date:** 4/1/09

**Project:** Avesta Florence House

**Project #:** 14194

**Site Contacts:** Mike Adams, Ganneston Construction

**Purpose of Visit:** Concrete Testing Services

**Work Activities:** A crew from Newman Concrete placed a total of 16 cubic yards of 3/4" aggregate, 3000 psi concrete for footings on N-line from 16-line to 7.1-line. All concrete was supplied by Auburn Concrete, placed via truck chute, and contained Micro Air (Air entraining admixture) and Glenium 7500 (mid-range water reducer.) One set of four concrete test cylinders were cast and will be picked up at a later date for controlled storage and compressive strength testing.

**Test Results:** Slump: 4-3/4" to 5"  
 Air%: 7.0%  
 Concrete Temp: 61 to 62 deg.F  
 Air Temp: 42 deg.F

**Portal to Portal**

		<b><u>Expenses</u></b>		
Leave:	<u>11:15am</u>	Mileage:	<u>11</u>	
Return:	<u>1:45pm</u>	Density Gauge:	<u>          </u>	
TOTAL:	<u>2.5</u>	Other:	<u>          </u>	

**Signed:** Neil Davis

**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
 Sent: 4/1/09



## DAILY FIELD REPORT

**Date:** 4/16/09  
**Project:** Avesta Florence House  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Concrete Testing Services

**Work Activities:** A crew from Newman Concrete placed a total of 24 cubic yards for the footings on line 16 from F to M and line F from 7 to 16. All concrete was supplied by Auburn Concrete with a mix design of 3/4" aggregate and a design strength of 3000psi., with a mid-range water reducer ( Glenium 7500 ) added at the batch plant. One set ( # 2 ) of four concrete test cylinders was cast and will be retrieved at a later date for controlled storage and compressive strength testing.

**Test Results:** Slump: 5-1/4" to 5-3/4"  
Air%: 5.5 to 5.8%  
Concrete Temp: 47 to 49 deg.F  
Air Temp: 53 deg.F

### Portal to Portal

Leave:	<u>9:30am</u>	<u>Expenses</u>	
Return:	<u>12:15pm</u>	Mileage:	<u>11</u>
TOTAL:	<u>2.75</u>	Density Gauge:	
		Other:	<u>2.75 tolls</u>

**Signed:** Frank Clark  
**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 4/17/09



## DAILY FIELD REPORT

**Date:** 4/17/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction

**Purpose of Visit:** Concrete testing services.

**Work Activities:** A crew from Newman Concrete placed a total of 65cy of 3/4" aggregate, 3500 psi concrete for the foundation wall on line N from line 16 to 7.1, and line 16 from N to N-10'. A high range water reducer (HRWR) Glenium 7500 was added to the concrete at the batch plant (19.7oz/cy) for workability. The concrete was supplied by Auburn Concrete and placed via pump truck. Soil compaction tests were performed on the structural gravel below the foundation footing along line 7 at D-15'.

**Test Results:**  
Concrete:  
Slump range: 5 1/2" to 7 1/2"  
Air Content range: 5.4% to 5.7%  
Concrete Temp.: 56 to 58 deg. F  
Air Temp.: 68 deg. F  
W/C Ratios: 0.49 to 0.50  
Soil:  
% Compaction: 98.1%

**Remarks:** Two sets of four cylinders were cast for compressive strength testing.

### Portal to Portal

	<u>Expenses</u>	
Leave:	9:30	Mileage: 13
Return:	3:00	Density Gauge: 1
TOTAL:	5.5	Other:

**Signed:** Darrell Gilman  
**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 4/20/09



**DAILY FIELD REPORT**

**Date:** 4/23/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction

**Purpose of Visit:** Concrete Testing Services.

**Work Activities:** A crew from Newman Concrete placed a total of 13.5cy of 3/4" aggregate, 3000 psi concrete for the footing on line 7 from line D-A and line A from 1-7. The concrete was supplied by Auburn Concrete and placed via tailgate. One set of four test cylinders was cast and will be picked up at a later date.

**Test Results:**  
 Concrete:  
 Slump range: 4 1/2" to 5"  
 Air Content range: 6.2%  
 Concrete Temp.: 60 deg. F  
 Air Temp.: 45 deg. F  
 W/C Ratios: 0.49

**Remarks:**

**Portal to Portal**

Leave:	<u>9:30</u>	<b><u>Expenses</u></b>	
Return:	<u>11:30</u>	Mileage:	<u>13</u>
TOTAL:	<u>2</u>	Density Gauge:	<u>          </u>
		Other:	<u>          </u>

**Signed:** Mike Sullivan  
**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
 Sent: 4/23/09



## DAILY FIELD REPORT

**Date:** 5/1/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Concrete Testing Services.

**Work Activities:** A crew from Newman Concrete placed a total of 60cy of 3/4" aggregate, 3000 psi concrete for the walls on 16-line from A to F, and F-line from 16 to the south end. The concrete was supplied by Auburn Concrete and placed via pump truck. Two sets of four test cylinders were cast and will be picked up at a later date.

**Test Results:** Slump Range: 4 3/4" to 6"  
Air Content range: 6.2% to 6.3%  
Concrete Temp.: 64 to 67 deg. F  
Air Temp.: 70 to 71 deg. F

**Remarks:**

**Portal to Portal**

	<u>Expenses</u>	<u>Signed:</u>
Leave: 9:15am	Mileage: 13	Neil Davis
Return: 1:45pm	Density Gauge: _____	cc: _____
TOTAL: 4.5	Other: _____	

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 5/4/09



## DAILY FIELD REPORT

**Date:** 5/4/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Concrete Testing Services and Cylinder Pick Up.

**Work Activities:** A crew from Newman Concrete placed a total of 17cy of 3/4" aggregate, 3000 psi concrete for the footings on N-line from 8.2 to the elevator base slab to L8 on 1-line. The concrete was supplied by Auburn Concrete and placed via truck chute. One set of four test cylinders were cast and will be picked up at a later date. Also, retrieved two sets of four concrete test specimens for controlled storage and compressive strength testing.

**Test Results:** Slump Range: 4 1/2" to 5"  
Air Content: 6.2%  
Concrete Temp.: 66 to 67 deg. F  
Air Temp.: 60 deg. F

**Remarks:**

### Portal to Portal

	<u>Expenses</u>	
Leave: 12:15pm	Mileage: 13	
Return: 3:15pm	Density Gauge:	
TOTAL: 3	Other:	

**Signed:** \_\_\_\_\_ Neil Davis  
**cc:** \_\_\_\_\_

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 5/5/09



**DAILY FIELD REPORT**

**Date:** 5/8/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Concrete Testing Services.

**Work Activities:** A crew from Newman Concrete placed a total of 38cy of 3/4" aggregate, 3000 psi concrete for the following:  
 -footings on lines 13 and 14 from N to J  
 -column piers J13 and L13  
 -four pads south of 13-line  
 -retaining wall footing  
 -footings on 1-line from A.5 to D and south of 1-line from A.5 to D. Newman Concrete also placed a total of 33 cubic yards of 3/4" aggregate, 3500 psi concrete for elevator shaft walls on 5 and 5.8-line from M to N, M-line from 5 to 5.8, A-line from 1 to 7, and 7-line from A to F. The concrete was supplied by Auburn Concrete contained a mid-range water reducer (Glenium 7500), air-entraining admixture (Micro-Air), and was placed via pump truck.

**Test Results:**  
 Slump Range: 5-1/2" to 6"  
 Air Content range: 6.0% to 6.2%  
 Concrete Temp.: 64 to 66 deg. F  
 Air Temp.: 70 to 71 deg. F

**Remarks:** Two sets of four test specimen were cast for compressive strength testing.

**Portal to Portal**

Leave:	10:30am	<b><u>Expenses</u></b>	
Return:	3:30pm	Mileage:	13
TOTAL:	5	Density Gauge:	_____
		Other:	_____

**Signed:** \_\_\_\_\_  
 Neil Davis  
**cc:** \_\_\_\_\_

Reviewed: Darrell A. Gilman, CMT Manager  
 Sent: 5/11/09





**DAILY FIELD REPORT**

**Date:** 5/15/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Concrete Testing Services.

**Work Activities:** A crew from Newman Concrete placed a total of 7cy of 3/4" aggregate, 3500 psi concrete for the foundation wall at 1line A to D. The concrete was supplied by Auburn Concrete and contained a mid-range water reducer (Glenium 7500), and was placed via tail gate.

**Test Results:** Slump Range: 6 1/4" to 6 3/4"  
Air Content range: 7.0% to 7.2%  
Concrete Temp.: No thermometer was available  
Air Temp.: 70 deg. F

**Remarks:** One set of four test specimen was cast for compressive strength testing.

**Portal to Portal**

Leave:  
Return:  
TOTAL:

8:30 AM  
10:30 PM  
2

**Expenses**

Mileage:  
Density Gauge:  
Other:

15  
                      
                    

**Signed:**

Justin Rouillard

**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 5/21/09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330

Phone: (207) 621-8334 Fax: 626-9094



**DAILY FIELD REPORT**

**Date:** 5/20/09

**Project:** Avesta Florence House - Portland, Maine

**Project #:** 14194

**Site Contacts:** Mike Adams, Ganneston Construction

**Purpose of Visit:** Concrete Testing Services.

**Work Activities:** A crew from Newman Concrete placed a total of 54cy of 3/4" aggregate, 3500 psi concrete for the foundation wall at 1line H to M, along M to 1.75, 2 line M to N, and along N to 7.1. The concrete was supplied by Auburn Concrete and contained a mid-range water reducer (Glenium 7500), and was placed via pump truck.

**Test Results:** Slump Range: 6 1/4" to 6 3/4"  
 Air Content range: 7.0% to 7.2%  
 Concrete Temp.: No thermometer was available  
 Air Temp.: 70 deg. F

**Remarks:** Two sets of four test specimen were cast for compressive strength testing.

**Portal to Portal**

Leave:  
 Return:  
 TOTAL:

11:00 AM  
5:15 PM  
6.25

**Expenses**

Mileage: 115  
 Density Gauge: \_\_\_\_\_  
 Other: \_\_\_\_\_

**Signed:** Adam Lyons  
**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
 Sent: 5/21/09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330

Phone: (207) 621-8334 Fax: 626-9094



**DAILY FIELD REPORT**

**Date:** 5/22/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Concrete Testing Services.

**Work Activities:** A crew from Newman Concrete placed a total of 5cy of 3/4" aggregate, 3500 psi concrete for the foundation footing at 1line H to D.2. The concrete was supplied by Auburn Concrete and contained a mid-range water reducer (Glenium 7500), and was placed via tail gate.

**Test Results:** Slump Range: 3 1/2" to 4"  
Air Content range: 6.0% to 6.5%  
Concrete Temp.: 73 deg. F  
Air Temp.: 80 deg. F

**Remarks:** One set of four test specimen was cast for compressive strength testing.

**Portal to Portal**

Leave:	<u>12:00 AM</u>	<b><u>Expenses</u></b>	
Return:	<u>3:00 PM</u>	Mileage:	<u>25</u>
TOTAL:	<u>3</u>	Density Gauge:	<u>          </u>
		Other:	<u>          </u>

**Signed:** Justin Rouillard

**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 5/27/09



## DAILY FIELD REPORT

**Date:** 5/27/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Concrete Testing Services.

**Work Activities:** A crew from Newman Concrete placed a total of 80cy of 3/4" aggregate, 3000 psi concrete for stairwell 1 and 3 footings, and all interior footings between line 1 and 5.8. The crew also placed 11cy of 3/4" aggregate, 3500psi concrete for the foundation wall along line 1 from "D" to "H". The concrete was supplied by Auburn Concrete and contained a mid-range water reducer (Glenium 7500), Micro Air, and was placed via pump truck.

**Test Results:**  
Slump Range: 5 1/2" to 6 3/4"  
Air Content range: 7.0% to 7.6%  
Concrete Temp.: No thermometer was available  
Air Temp.: 53 deg. F

**Remarks:** Three sets of four test specimen were cast for compressive strength testing.  
(Sets 15, 16, and 17)

### Portal to Portal

Leave:  
Return:  
TOTAL:

11:30 AM  
5:45 PM  
6.25

### Expenses

Mileage:  
Density Gauge:  
Other:

113

### **Signed:**

Adam Lyons

**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 5/29/09



## DAILY FIELD REPORT

**Date:** 6/18/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Concrete testing services.

**Work Activities:** A crew from Newman Concrete placed a total of 18cy of 3/4" aggregate, 3,500psi concrete for the retaining wall. Concrete was supplied by Auburn Concrete and was placed via pump truck supplied bby Northeast Pumping Services.

**Test Results:**  
Slump range: 4 1/2" to 4 3/4"  
Air Content: 5.2%  
Concrete Temp.: 68 deg. F  
Air Temp.: ~65 deg. F  
One set of four cylinders was cast for compressive strength testing.

**Remarks:**

### Portal to Portal

Leave:	11:45	<u>Expenses</u>	
Return:	2:15	Mileage:	15
TOTAL:	2.5	Density Gauge:	
		Other:	

**Signed:** Darrell A. Gilman  
**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 6/19/09



**DAILY FIELD REPORT**

**Date:** 7/6/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Concrete testing services.

**Work Activities:** A crew from Pride Concrete placed a total of 80cy of 3/4" aggregate, 3,000psi, no air concrete for the first floor slab. Concrete was supplied by Auburn Concrete and was placed via pump truck supplied by Northeast Pumping Services.

**Test Results:**  
Slump range: 5-1/2 to 7-1/2"  
Air Content: 2.0 to 2.5%  
Concrete Temp.: 67 to 75 deg. F  
Air Temp.: 62 to 75 deg. F  
Two sets (#19,20) of four cylinders was cast for compressive strength testing.

**Remarks:** Mike Adams was notified of all testing results.

**Portal to Portal**

Leave:	<u>6:45</u>	<b><u>Expenses</u></b>	
Return:	<u>11:15</u>	Mileage:	<u>11</u>
TOTAL:	<u>4.5</u>	Density Gauge:	<u>          </u>
		Other:	<u>          </u>

**Signed:** Kris Bennett

**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 7/8/09



## DAILY FIELD REPORT

**Date:** 7/10/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction

**Purpose of Visit:** Concrete Testing Services.

**Work Activities:** A crew from Pride Concrete placed a total of 80cy of 3/4" aggregate, 3,000psi, no air concrete for the second floor slab. Concrete was supplied by Auburn Concrete and was placed via pump truck supplied by Northeast Pumping Services.

**Test Results:**  
Slump range: 5-1/2 to 7-1/2"  
Air Content: 2.0 to 2.4%  
Concrete Temp.: 69 to 75 deg. F  
Air Temp.: 56 to 72 deg. F  
Two sets (#21,22) of four cylinders was cast for compressive strength testing.

**Remarks:** Mike Adams was notified of all testing results.

**Portal to Portal**

Leave:	<u>6:30</u>	<b><u>Expenses</u></b>	
Return:	<u>11:45</u>	Mileage:	<u>11</u>
TOTAL:	<u>5.25</u>	Density Gauge:	<u>          </u>
		Other:	<u>          </u>

**Signed:** Kris Bennett  
**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 7/8/09



## DAILY FIELD REPORT

**Date:** 8/6/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Concrete Testing

**Work Activities:** A crew from pride floors place a total of 126cy of concrete for the first floor slab. The first 70cy of concrete was a 3000psi mix design with a mid range water reducer (glenium 7500) added during the batching process. The remaining 56cy of concrete was also a 3000psi mix design with a mid range water reducer but in addition reinforcing fiber mesh was added during the batching process as well. All was going well until the crew began to slow down because the slab on the south half of the building was only approximately 3" thick. This caused the 10th truck to exceed it 90 min time limit while it was unloading. I informed Everett and he said the he was going to keep the truck and let it finish unloading. However, he rejected the 11th truck because it had been batched for 120 mins. The wait for another truck to arrive caused a "cold joint" to occur.

**Test Results:** Slump Range: 5.5 to 6.5  
Air Content: 2.5 to 4.0  
Concrete Temp:  
Air Temp: 80degrees

**Remarks:**

**Portal to Portal**

Leave:	<u>6:00</u>	<b><u>Expenses</u></b>	
Return:	<u>3:00</u>	Mileage:	<u>11</u>
TOTAL:	<u>9</u>	Density Gauge:	<u>          </u>
		Other:	<u>          </u>

**Signed:** Justin Rouillard  
**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 8/10/09



**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
 Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C1  
 Placement Date: 1-Apr-09  
 Lab Rec'd Date: 2-Apr-09  
 Location: Footings on N-Line 16 to 12.5

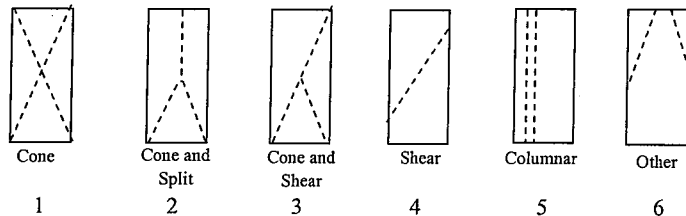
Technician: N. Davis  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3000psi

Slump (initial)                      in.  
 Slump (placed)                    5                      in.  
 Air Content                         7.0                    %  
 Conc Temp.                         62.0                  °F  
 Air Temp.                            42.0                  °F  
 Volume (yds)                    8.0                  of    16.0  
 Admixture:                         Micro Air, Glenium 7500 (Mid-Range Water)

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C1a	8-Apr-09	7	2	144.3	28.27	102.7	3630
C1b	29-Apr-09	28	3	144.3	28.27	124.1	4390
C1c	29-Apr-09	28	2	144.9	28.27	123.8	4380
C1d							

Average 28 Day (psi): 4385



Remarks:

---

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330

Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C2  
 Placement Date: 16-Apr-09  
 Lab Rec'd Date: 17-Apr-09  
 Location: Footing; Line F from 7 to 16, Line 16 from F to M

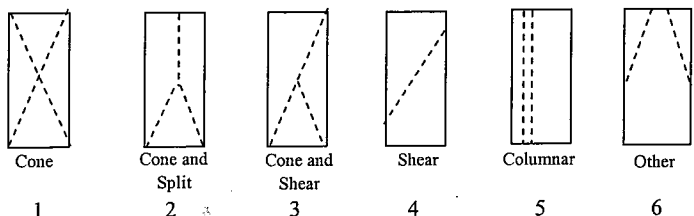
Technician: F. Clark  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3000psi

Slump (initial) in.  
 Slump (placed) 5 1/4 in.  
 Air Content 5.5 %  
 Conc Temp. 49.0 °F  
 Air Temp. 53.0 °F  
 Volume (yds) 16.0 of 24.5  
 Admixture: Glenium 7500 (Mid-Range Water Reducer)

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C2a	23-Apr-09	7	6	147.5	28.27	103.7	3670
C2b	14-May-09	28	3	149.1	28.27	127.4	4510
C2c	14-May-09	28	3	148.2	28.27	123.7	4370
C2d							

Average 28 Day (psi): 4440



Remarks:

---



---

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
 Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

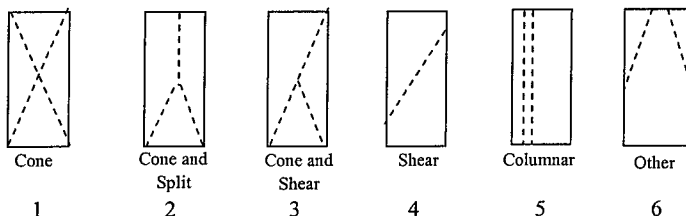
Set No.: C3  
 Placement Date: 17-Apr-09  
 Lab Rec'd Date: 18-Apr-09  
 Location: Foundation Wall Line N from 16 to 7.1  
 Wall Line 16 from N to N-10'  
 Technician: D. Gilman  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3500psi

Slump (initial) in.  
 Slump (placed) 7 1/2 in.  
 Air Content 5.4 %  
 Conc Temp. 57.0 °F  
 Air Temp. 68.0 °F  
 Volume (yds) 20.0 of 65.0  
 Admixture: Glenium 7500 (Mid-Range Water Reducer)

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C3a	24-Apr-09	7	2	146.0	28.27	91.5	3240
C3b	15-May-09	28	3	146.8	28.27	109.4	3870
C3c	15-May-09	28	3	147.1	28.32	114.9	4060
C3d							

Average 28 Day (psi): 3965



Remarks:

---



---

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330

Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

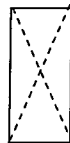
Set No.: C4  
 Placement Date: 17-Apr-09  
 Lab Rec'd Date: 18-Apr-09  
 Location: Foundation Wall Line N from 16 to 7.1  
 Line 16 from N to N-10'  
 Technician: D. Gilman  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3500psi

Slump (initial)                      in.  
 Slump (placed)    7 1/2            in.  
 Air Content                      5.7            %  
 Conc Temp.,                      58.0           °F  
 Air Temp.                        68.0           °F  
 Volume (yds)                    50.0           of 65.0  
 Admixture:                      Glenium 7500 (Mid-Range Water Reducer)

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C4a	24-Apr-09	7	2	144.5	28.27	92.9	3290
C4b	15-May-09	28	2	145.5	28.27	109.3	3870
C4c	15-May-09	28	2	145.9	28.27	107.1	3790
C4d							

Average 28 Day (psi): 3830



Cone

1



Cone and Split

2



Cone and Shear

3



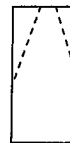
Shear

4



Columnar

5



Other

6

Remarks:

---

Reviewed: Darrell Gilman, CMT Manager

Sent: 5-14-09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330

Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C5  
 Placement Date: 23-Apr-09  
 Lab Rec'd Date: 24-Apr-09  
 Location: Line 7 From Line D to A, Line A From 1 to 7 Footing

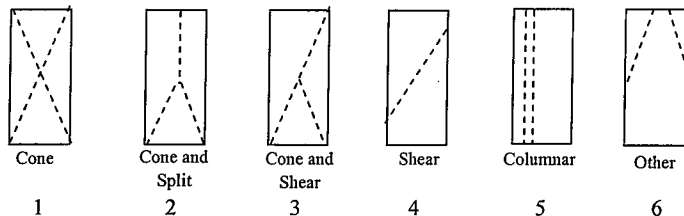
Technician: M. Sullivan  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3000psi

Slump (initial)                      in.  
 Slump (placed)      5              in.  
 Air Content              6.2              %  
 Conc Temp.              60.0              °F  
 Air Temp.              45.0              °F  
 Volume (yds)      13.5              of      13.5  
 Admixture:

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C5a	30-Apr-09	7	2	145.5	28.27	101.1	3570
C5b	21-May-09	28	6	147.5	27.91	126.0	4510
C5c	21-May-09	28	3	147.7	27.97	121.1	4330
C5d							

Average 28 Day (psi): 4420



Remarks:

---



---

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
Project: Avesta Florence House  
Client: Avesta Florence House, LP and Florence House  
307 Cumberland Avenue  
Portland, ME 04101

**Field Test Data**

Set No.: C6  
Placement Date: 1-May-09  
Lab Rec'd Date: 2-May-09  
Location: Walls on 16-Line from A to F (Lower Half)

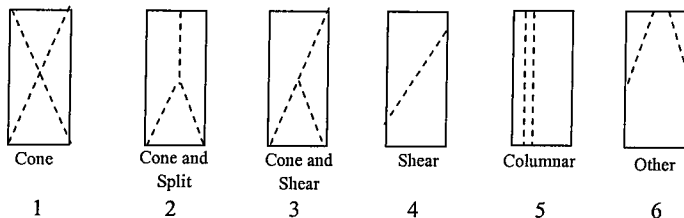
Technician: N. Davis  
Supplier: Auburn Concrete  
Mix Designation: 3/4" Aggregate  
Design Strength: 3500 psi

Slump (initial)                      in.  
Slump (placed)                    6                      in.  
Air Content                            6.2                    %  
Conc Temp.                            65.0                   °F  
Air Temp.                              71.0                   °F  
Volume (yds)                        30.0                   of    60.0  
Admixture:                            Micro Air, Glenium 7500 (Mid-Range Water Reducer)

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C6a	8-May-09	7	2	143.9	28.27	97.2	3440
C6b	29-May-09	28	6	145.3	28.18	120.9	4290
C6c	29-May-09	28	3	143.3	28.46	117.7	4140
C6d							

Average 28 Day (psi):                      4215



Remarks: \_\_\_\_\_

Reviewed: Darrell Gilman, CMT Manager  
Date: 5-29-09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
 Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C7  
 Placement Date: 1-May-09  
 Lab Rec'd Date: 2-May-09  
 Location: Walls on 16-Line from A to F (Upper Half)

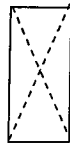
Technician: N. Davis  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3500 psi

Slump (initial) in.  
 Slump (placed) 5 1/2 in.  
 Air Content 6.3 %  
 Conc Temp. 64.0 °F  
 Air Temp. 70.0 °F  
 Volume (yds) 60.0 of 60.0  
 Admixture: Micro Air, Glenium 7500 (Mid-Range Water Reducer)

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C7a	8-May-09	7	2	143.8	28.27	91.1	3220
C7b	29-May-09	28	6	146.3	28.18	108.6	3850
C7c	29-May-09	28	1	144.5	28.46	111.2	3910
C7d							

Average 28 Day (psi): 3880



Cone

1



Cone and Split

2



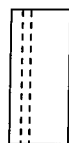
Cone and Shear

3



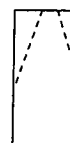
Shear

4



Columnar

5



Other

6

Remarks:

---

Reviewed: Darrell Gilman, CMT Manager

Date: 5-29-09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
 Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C8  
 Placement Date: 4-May-09  
 Lab Rec'd Date: 5-May-09  
 Location: Footings on N-Line from 8.2 to Elevator Base Slab

Technician: N. Davis  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3000psi

Slump (initial) in.  
 Slump (placed) 4 1/2 in.  
 Air Content 6.2 %  
 Conc Temp. 66.0 °F  
 Air Temp. 60.0 °F  
 Volume (yds) 8.5 of 17.0  
 Admixture: Micro Air, Glenium 7500 (Mid-Range Water Reducer)

**Laboratory Test Data**

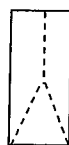
Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C8a	11-May-09	7	MS	147.1	28.27	103.0	3640
C8b	1-Jun-09	28	AL	147.6	28.27	130.6	4620
C8c	1-Jun-09	28	AL	146.9	28.27	122.2	4320
C8d							

Average 28 Day (psi): 4470



Cone

1



Cone and Split

2



Cone and Shear

3



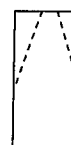
Shear

4



Columnar

5



Other

6

Remarks:

---

Reviewed: Darrell Gilman, CMT Manager

Date: 6-2-09



**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
 Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C9  
 Placement Date: 8-May-09  
 Lab Rec'd Date: 9-May-09  
 Location: Foundation Footings on 13-Line from N-Line to J-Line  
 Including Pads L13 and J13  
 Technician: N. Davis  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3000psi

Slump (initial) in.  
 Slump (placed) 5 1/4 in.  
 Air Content 6.0 %  
 Conc Temp. 64.0 °F  
 Air Temp. 70.0 °F  
 Volume (yds) 19.0 of 71.0  
 Admixture: Micro Air, Glenium 7500 (Mid-Range Water Reducer)

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C9a	15-May-09	7	2	146.2	28.27	101.1	3570
C9b	5-Jun-09	28	3	146.0	28.27	114.1	4040
C9c	5-Jun-09	28	3	146.9	28.27	114.5	4050
C9d							

Average 28 Day (psi): 4045



Cone

1



Cone and Split

2



Cone and Shear

3



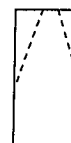
Shear

4



Columnar

5



Other

6

Remarks:

---

Reviewed: Darrell Gilman, CMT Manager

Date: 6-5-09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330

Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C10  
 Placement Date: 8-May-09  
 Lab Rec'd Date: 9-May-09  
 Location: Foundation Walls; Elevator Shaft Walls on 5 and 5.8 Lines  
 from N to M and M-Line from 5 to 5.8  
 Technician: N. Davis  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3500psi

Slump (initial) in.  
 Slump (placed) 5 3/4 in.  
 Air Content 6.1 %  
 Conc Temp. 65.0 °F  
 Air Temp. 70.0 °F  
 Volume (yds) of  
 Admixture: Micro Air, Glenium 7500 (Mid-Range Water Reducer)

**Laboratory Test Data**

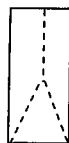
Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C10a	15-May-09	7	3	143.1	28.27	93.2	3300
C10b	5-Jun-09	28	2	143.6	28.27	109.1	3860
C10c	5-Jun-09	28	2	143.7	28.27	110.0	3890
C10d							

Average 28 Day (psi): 3875



Cone

1



Cone and Split

2



Cone and Shear

3



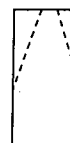
Shear

4



Columnar

5



Other

6

Remarks:

Reviewed: Darrell Gilman, CMT Manager

Sent:6-5-09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
 Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C11  
 Placement Date: 15-May-09  
 Lab Rec'd Date: 18-May-09  
 Location: Foundation Wall A1 - D1

Technician: J. Rouillard  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3500psi

Slump (initial) in.  
 Slump (placed) 3 1/2 in.  
 Air Content 7.0 %  
 Conc Temp. 72.5 °F  
 Air Temp. 68.0 °F  
 Volume (yds) 7.0 of 7.0  
 Admixture: Glenium 7500 (Mid-Range Water Reducer), Micro Air

**Laboratory Test Data**

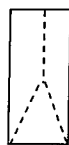
Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C11a	22-May-09	7	6	143.7	28.27	75.5	2670
C11b	12-Jun-09	28	6	144.2	28.27	127.8	4520
C11c	12-Jun-09	28	6	147.9	28.27	118.0	4170
C11d							

Average 28 Day (psi): 4345



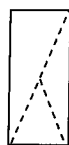
Cone

1



Cone and Split

2



Cone and Shear

3



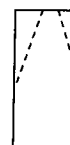
Shear

4



Columnar

5



Other

6

Remarks:

---

Reviewed: Darrell Gilman, CMT Manager  
 Date: 6-15-09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
 Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C12  
 Placement Date: 20-May-09  
 Lab Rec'd Date: 21-May-09  
 Location: Along M to 1.75 Footing

Technician: A. Lyons  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3500psi

Slump (initial) in.  
 Slump (placed) 6 1/4 in.  
 Air Content 7.0 %  
 Conc Temp. °F  
 Air Temp. 70.0 °F  
 Volume (yds) 11.0 of 54.0  
 Admixture: Mid-Range Water Reducer

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C12a	27-May-09	7	2	145.5	28.27	111.6	3950
C12b	17-Jun-09	28	3	144.3	28.27	122.5	4330
C12c	17-Jun-09	28	3	144.2	28.27	120.5	4260
C12d							

Average 28 Day (psi): 4295



Cone

1



Cone and Split

2



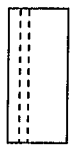
Cone and Shear

3



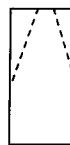
Shear

4



Columnar

5



Other

6

Remarks:

---

Reviewed: Darrell Gilman, CMT Manager

Date: 5-28-09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
 Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C13  
 Placement Date: 20-May-09  
 Lab Rec'd Date: 21-May-09  
 Location: Along N Line Approximately at 4 Footing

Technician: A. Lyons  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3500psi

Slump (initial) in.  
 Slump (placed) 6 3/4 in.  
 Air Content 7.2 %  
 Conc Temp. °F  
 Air Temp. 70.0 °F  
 Volume (yds) 33.0 of 54.0  
 Admixture: Mid-Range Water Reducer

**Laboratory Test Data**

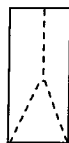
Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C13a	27-May-09	7	4	141.4	28.27	86.7	3070
C13b	17-Jun-09	28	6	141.8	28.27	108.1	3820
C13c	17-Jun-09	28	3	142.2	28.27	107.8	3810
C13d							

Average 28 Day (psi): 3815



Cone

1



Cone and Split

2



Cone and Shear

3



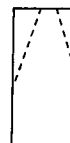
Shear

4



Columnar

5



Other

6

Remarks:

---

Reviewed: Darrell Gilman, CMT Manager

Date: 6-17-09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330

Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C14  
 Placement Date: 22-May-09  
 Lab Rec'd Date: 23-May-09  
 Location: Along Line 1 from H - D.2 Wall Footing

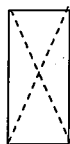
Technician: J. Rouillard  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3500psi

Slump (initial)                      in.  
 Slump (placed)    3 1/2            in.  
 Air Content                        6.0            %  
 Conc Temp.                        73.0           °F  
 Air Temp.                            80.0           °F  
 Volume (yds)                    5.0            of    5.0  
 Admixture:                        Glenium 7500 (Mid-Range Water Reducer)

**Laboratory Test Data**

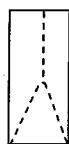
Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C14a	29-May-09	7	4	147.7	28.27	91.2	3230
C14b	19-Jun-09	28	4	146.9	28.27	117.4	4150
C14c	19-Jun-09	28	4	146.6	28.27	119.4	4220
C14d							

Average 28 Day (psi):                      4185



Cone

1



Cone and Split

2



Cone and Shear

3



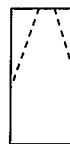
Shear

4



Columnar

5



Other

6

Remarks:

---

Reviewed: Darrell Gilman, CMT Manager  
 Date: 6-19-09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
 Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C15  
 Placement Date: 27-May-09  
 Lab Rec'd Date: 28-Feb-09  
 Location: Stair 1 Footings

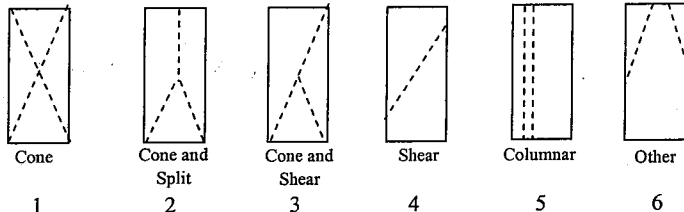
Technician: A. Lyons  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3000psi

Slump (initial) in.  
 Slump (placed) 6 in.  
 Air Content 7.6 %  
 Conc Temp. °F  
 Air Temp. 53.0 °F  
 Volume (yds) 10.0 of 91.0  
 Admixture: Glenium 7500 (Mid-Range Water Reducer), Micro Air

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C15a	3-Jun-09	7	3	143.1	28.27	100.4	3550
C15b	24-Jun-09	28	3	138.3	28.27	126.7	4480
C15c	24-Jun-09	28	3	143.7	28.27	124.8	4420
C15d							

Average 28 Day (psi): 4450



Remarks:

---



---

Reviewed: Darrell Gilman, CMT Manager  
 Date: 6-24-09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
 Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C16  
 Placement Date: 27-May-09  
 Lab Rec'd Date: 28-May-09  
 Location: Large Interior Footing  
 BJ5

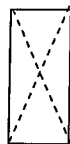
Technician: A. Lyons  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3000psi

Slump (initial)                      in.  
 Slump (placed)                    6                      in.  
 Air Content                         7.2                    %  
 Conc Temp.                         °F  
 Air Temp.                         53.0                  °F  
 Volume (yds)                    50.0                of 91.0  
 Admixture:                        Glenium 7500 (Mid-Range Water Reducer), Micro Air

**Laboratory Test Data**

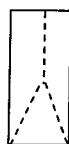
Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C16a	3-Jun-09	7	6	139.3	28.27	71.0	2510
C16b	24-Jun-09	28	4	139.2	28.27	96.6	3420
C16c	24-Jun-09	28	4	138.8	28.27	93.3	3300
C16d							

Average 28 Day (psi): 3360



Cone

1



Cone and Split

2



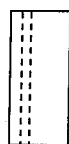
Cone and Shear

3



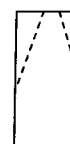
Shear

4



Columnar

5



Other

6

Remarks:

---



**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
 Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C17  
 Placement Date: 27-May-09  
 Lab Rec'd Date: 28-May-09  
 Location: Foundation Walls Line 1 "D" to "H"

Technician: A. Lyons  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3500psi

Slump (initial) in.  
 Slump (placed) 6 3/4 in.  
 Air Content 7.0 %  
 Conc Temp. °F  
 Air Temp. 53.0 °F  
 Volume (yds) 91.0 of 91.0  
 Admixture: Glenium 7500 (Mid-Range Water Reducer), Micro Air

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C17a	3-Jun-09	7	4	143.8	28.27	106.3	3760
C17b	24-Jun-09	28	4	144.4	28.27	142.5	5040
C17c	24-Jun-09	28	4	144.4	28.27	139.9	4950
C17d							

Average 28 Day (psi): 4995



Cone  
1



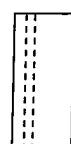
Cone and Split  
2



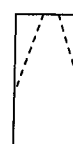
Cone and Shear  
3



Shear  
4



Columnar  
5



Other  
6

Remarks:

---

Reviewed: Darrell Gilman, CMT Manager  
 Date: 6-24-09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
Project: Avesta Florence House  
Client: Avesta Florence House, LP and Florence House  
307 Cumberland Avenue  
Portland, ME 04101

**Field Test Data**

Set No.: C18  
Placement Date: 18-Jun-09  
Lab Rec'd Date: 19-Jun-09  
Location: Retaining Wall

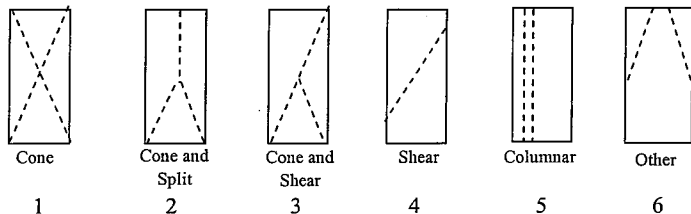
Technician: D. Gilman  
Supplier: Auburn Concrete  
Mix Designation: 3/4 Aggregate  
Design Strength: 3500psi

Slump (initial)                    in.  
Slump (placed)    4 3/4        in.  
Air Content            5.2        %  
Conc Temp.            68.0       °F  
Air Temp.              85.0       °F  
Volume (yds)        8.5        of    18.0  
Admixture:

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C18a	25-Jun-09	7	4	147.4	28.27	101.7	3600
C18b	16-Jul-09	28	6	146.9	28.27	116.2	4110
C18c	16-Jul-09	28	6	146.9	28.27	111.4	3940
C18d							

Average 28 Day (psi):                    4025



Remarks: \_\_\_\_\_

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
 Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C19  
 Placement Date: 6-Jul-09  
 Lab Rec'd Date: 7-Jul-09  
 Location: First Floor Slab

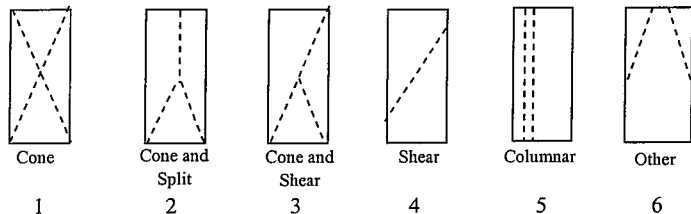
Technician: K. Bennett  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3000psi

Slump (initial) in.  
 Slump (placed) 7 1/2 in.  
 Air Content 2.5 %  
 Conc Temp. 71.0 °F  
 Air Temp. °F  
 Volume (yds) 25.0 of 80.0  
 Admixture: Glenium 7500 (Mid-Range Water Reducer)

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C19a	13-Jul-09	7	6	147.7	28.27	68.7	2430
C19b	3-Aug-09	28	6	148.3	28.27	90.9	3210
C19c	3-Aug-09	28	6	148.0	28.27	89.2	3150
C19d							

Average 28 Day (psi): 3180



Remarks:

---

Reviewed: Darrell Gilman, CMT Manager  
 Date: 8-04-09



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C20  
 Placement Date: 6-Jul-09  
 Lab Rec'd Date: 7-Jul-09  
 Location: Second Floor Slab

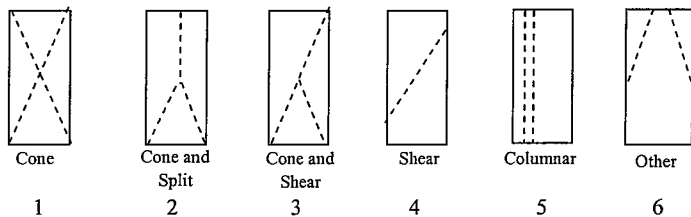
Technician: K. Bennett  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3000psi

Slump (initial)                      in.  
 Slump (placed)        7              in.  
 Air Content                    2.4              %  
 Conc Temp.                    73.0              °F  
 Air Temp.                      75.0              °F  
 Volume (yds)                65.0              of    80.0  
 Admixture:                    Glenium 7500 (Mid-Range Water Reducer)

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C20a	13-Jul-09	7	6	147.5	28.27	70.8	2510
C20b	3-Aug-09	28	6	149.3	28.27	90.0	3180
C20c	3-Aug-09	28	6	150.0	28.27	88.0	3110
C20d							

Average 28 Day (psi):                      3145



Remarks:

---



---

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
Project: Avesta Florence House  
Client: Avesta Florence House, LP and Florence House  
307 Cumberland Avenue  
Portland, ME 04101

**Field Test Data**

Set No.: C23  
Placement Date: 6-Aug-09  
Lab Rec'd Date: 7-Aug-09  
Location: First Floor Slab

Technician: J. Rouillard  
Supplier: Auburn Concrete  
Mix Designation: 3/4" Aggregate  
Design Strength: 3000psi

Slump (initial)                      in.  
Slump (placed)                    6 1/2            in.  
Air Content                         2.5             %  
Conc Temp.                         °F  
Air Temp.                         80.0           °F  
Volume (yds)                    10.0           of    126.0  
Admixture:                         Glenium 7500 (Mid Range Water Reducer)

**Laboratory Test Data**

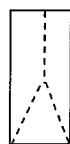
Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C23a	13-Aug-09	7	6	148.3	28.27	93.3	3300
C23b	3-Sep-09	28	6	149.2	28.27	104.9	3710
C23c	3-Sep-09	28	6	149.0	28.27	109.9	3890
C23d							

Average 28 Day (psi):                      3800



Cone

1



Cone and Split

2



Cone and Shear

3



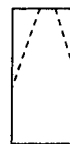
Shear

4



Columnar

5



Other

6

Remarks:

---

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
 Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C24  
 Placement Date: 6-Aug-09  
 Lab Rec'd Date: 7-Aug-09  
 Location: First Floor Slab

Technician: J. Rouillard  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3000psi

Slump (initial) in.  
 Slump (placed) 6 in.  
 Air Content 3.0 %  
 Conc Temp. °F  
 Air Temp. 80.0 °F  
 Volume (yds) 70.0 of 126.0  
 Admixture: Glemium 7500 (Mid-Range Water Reducer)

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C24a	13-Aug-09	7	6	149.5	28.27	88.9	3150
C24b	3-Sep-09	28	1	149.2	28.27	108.6	3840
C24c	3-Sep-09	28	3	149.0	28.27	106.6	3770
C24d							

Average 28 Day (psi): 3805



Cone

1



Cone and Split

2



Cone and Shear

3



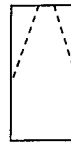
Shear

4



Columnar

5



Other

6

Remarks:

---

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
 Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C25  
 Placement Date: 6-Aug-09  
 Lab Rec'd Date: 7-Aug-09  
 Location: First Floor Slab

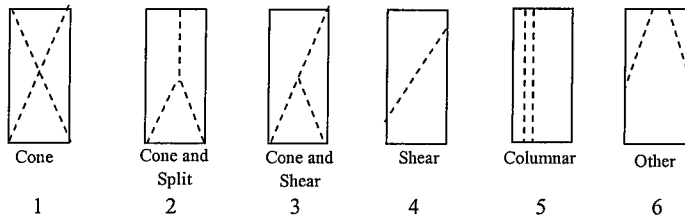
Technician: J. Rouillard  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4 Aggregate  
 Design Strength: 3000psi

Slump (initial) in.  
 Slump (placed) 5 1/2 in.  
 Air Content 4.0 %  
 Conc Temp. °F  
 Air Temp. 80.0 °F  
 Volume (yds) 120.0 of 126.0  
 Admixture: Glenium 7500 (Mid-Range Water Reducer)

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C25a	13-Aug-09	7	6	148.7	28.27	88.9	3140
C25b	3-Sep-09	28	6	146.4	28.27	101.5	3590
C25c	3-Sep-09	28	3	147.8	28.27	100.3	3550
C25d							

Average 28 Day (psi): 3570



Remarks:

---

Reviewed: Darrell Gilman, CMT Manager  
 Date: 9-8-09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
 Phone: (207) 621-8334 Fax: (207) 626-9094



**CONCRETE COMPRESSIVE STRENGTH TEST RESULTS - ASTM C39**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP and Florence House  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

Set No.: C26  
 Placement Date: 28-Aug-09  
 Lab Rec'd Date: 31-Aug-09  
 Location: Stairwell Slab 1 to 3 Basement Level

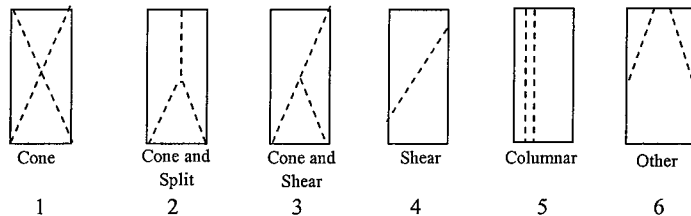
Technician: C. Young  
 Supplier: Auburn Concrete  
 Mix Designation: 3/4" Aggregate  
 Design Strength: 3000psi

Slump (initial) in.  
 Slump (placed) 5 in.  
 Air Content 3.0 %  
 Conc Temp. 72.0 °F  
 Air Temp. 54.0 °F  
 Volume (yds) 7.0 of 15.0  
 Admixture: Glenium 7500 (Mid-Range Water Reducer), 1%-Pozzutec 20%

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C26a	4-Sep-09	7	2	145.4	28.27	76.0	2690
C26b	25-Sep-09	28	4	146.5	28.27	95.5	3380
C26c	25-Sep-09	28	4	146.4	28.27	109.8	3880
C26d							

Average 28 Day (psi): 3630



Remarks:

---



## **EXHIBIT B**

**04200 CMU Construction**

**Structural Schedule of Special Inspections**  
**MASONRY CONSTRUCTION – LEVEL 1 (NON-ESSENTIAL FACILITY)**

VERIFICATION AND INSPECTION IBC Section 1704.5	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
1. As masonry construction begins, the following shall be verified to ensure compliance:						
a. Proportions of site-prepared mortar.	Y	P	ACI530.1, 2.6A	SII	PE/SE or EIT	TESTING KYLENY
b. Construction of mortar joints.	Y	P	ACI530.1, 3.3B	SII	PE/SE or EIT	JLF
c. Location of reinforcement and connectors.	Y	P	ACI530.1, 3.4, 3.6A	SII	PE/SE or EIT	JLF
d. Prestressing technique.	N/A	P	ACI530.1, 3.6B		PE/SE or EIT	
e. Grade and size of prestressing tendons and anchorages.	N/A	P	ACI530.1, 2.4B, 2.4H		PE/SE or EIT	
2. The inspection program shall verify:						
a. Size and location of structural elements.	Y	P	ACI530.1, 3.3G	SII	PE/SE or EIT	JLF
b. Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction.	Y	P	ACI530, 1.2.2(e), 2.1.4, 3.1.6	SII	PE/SE or EIT	JLF
c. Specified size, grade and type of reinforcement.	Y	P	ACI530, 1.12, ACI530.1, 2.4, 3.4	SII	PE/SE or EIT	JLF
d. Welding of reinforcing bars.	Y	C	AC530, 2.1.10.6.2, 3.2.4 (b)	TA2	AWS-CWI	-
e. Protection of masonry during cold weather (temperature below 40°F) or hot weather (temperature above 90°F).	Y	P	IBC 2104.3, 2104.4; ACI530.1, 1.8C, 1.8D	SII	PE/SE or EIT	-
f. Application and measurement of prestressing force.	N/A	P	ACI530.1, 3.6B		PE/SE or EIT	
3. Prior to grouting, the following shall be verified to ensure compliance:						
a. Grout space is clean.	Y	P	ACI530.1, 3.2D	SII/JM	PE/SE or EIT	JLF
b. Placement of reinforcement and connectors and prestressing tendons and anchorages.	Y	P	ACI530, 1.12, ACI530.1, 3.4	SII	PE/SE or EIT	JLF
c. Proportions of site-prepared grout and prestressing grout for bonded tendons.	Y	P	ACI530.1, 2.6B	SII	PE/SE or EIT	JLF
d. Construction of mortar joints.	Y	P	ACI530.1, 3.3B	SII	PE/SE or EIT	JLF
4. Grout placement shall be verified to ensure compliance with code and construction document provisions.	Y	C	ACI530.1, 3.5	SII	PE/SE or EIT	JLF
a. Grouting of prestressing bonded tendons.	N/A	C	ACI530.1, 3.6C		PE/SE or EIT	
5. Preparation of any required grout specimens, mortar specimens and/or prisms shall be observed.	Y	C	IBC 2105.2.2, 2105.3; ACI530.1, 1.4	SII	PE/SE or EIT	TESTING KYLENY
6. Compliance with required inspection provisions of the construction documents and the approved submittals shall be verified.	Y	P	ACI530.1, 1.5	SII	PE/SE or EIT	✓

# B E C K E R

04230

structural engineers, inc.

<b>OBSERVATION REPORT</b>
CMU

<b>Date:</b>	June 30, 2009
<b>Time:</b>	2:30pm - 3:30 pm
<b>Temp:</b>	60's
<b>Weather:</b>	Cloudy

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI 2058

**Observation Location:** CMU walls at Elevator and Stairs adjacent to Line N

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	
Reinforcement Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quantity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See note below
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Rebar positioners shall be used to ensure proper bar location,
Embed/Anchors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Lap Splices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Hot Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cold Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
CMU Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Layout/Fit-up/Plumbness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mortar/Grouting Procedure	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	At cells to receive grout, keep cavities free of mortar fins and droppings.
Lift Height	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Clean Outs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bond Beams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Notes:**

This visit was conducted to review the start of CMU construction at the areas noted above. Work appears to be progressing satisfactorily, and was found to be in general conformance with the contract documents. One item was noted that will require attention by the General Contractor and masonry sub-contractor.

1. Vertical bars are required at the ends of CMU walls terminating against the concrete foundation wall, as shown in CSKS-11 and Dwg. S2.1.

Thank you -

**Signed:** James Fortin, P.E.

# Transmittal

**To:** Jim Fortin  
Becker Structural Engineers, Inc  
75 York Street  
Portland, Me 04101

**From:** Wendi Holden

**cc:** file

**Date:** 7-14-09

**Re:** Florence House Submittals

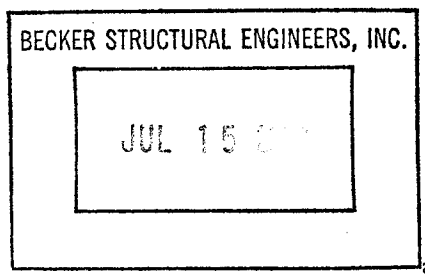
**Gawron Turgeon Architects is sending you:**

- |                                    |   |   |                                       |
|------------------------------------|---|---|---------------------------------------|
| <input type="checkbox"/> Prints    | <input type="checkbox"/> Copy of Letter | <input type="checkbox"/> Photography              | <input type="checkbox"/> Presentation |
| <input type="checkbox"/> Layouts   | <input type="checkbox"/> Specifications | <input type="checkbox"/> Samples                  | <input type="checkbox"/> Change Order |
| <input type="checkbox"/> Estimates | <input type="checkbox"/> Plans          | <input checked="" type="checkbox"/> Shop Drawings | <input type="checkbox"/> Other        |

Copies	Date	Description
8		Masonry reinforcing certification of Compliance

- |  |  |                                       |
|--|--|---------------------------------------|
| <input type="checkbox"/> Returned for corrections      | <input type="checkbox"/> Returned after loaned to us     | <input type="checkbox"/> As requested |
| <input type="checkbox"/> Approved & noted              | <input type="checkbox"/> Construction approval           | <input type="checkbox"/> For approval |
| <input type="checkbox"/> Return ____ corrected prints  | <input checked="" type="checkbox"/> For review & comment | <input type="checkbox"/> For bids due |
| <input type="checkbox"/> Submit ____ copies for ____   | <input type="checkbox"/> For your use                    |                                       |
| <input type="checkbox"/> Resubmit ____ copies for ____ |  |                                       |

Remarks:



architecture  
interior design  
master planning  
landscape architecture

Ganneston Construction Corp  
PO Box 27, North Belfast Avenue  
Augusta, ME 04332-0027

**LETTER OF TRANSMITTAL**

Tel: (207) 621-8505  
Fax: (207) 621-8508

GCC PROJECT NUMBER  
GCC-80677

To:

GAWRON TURGEON ARCHITECTS  
29 BLACK POINT ROAD  
SCARBOROUGH, MAINE 04074

Date: July 13, 2009  
Attention: WENDI  
RE: FLORENCE HOUSE PROJECT

WE ARE SENDING YOU  X  ATTACHED   UNDER SEPARATE COVER

COPIES	NO.	DESCRIPTION
8		MASONRY REINFORCING CERTIFICATE OF COMPLIANCE
		FOR APPROVAL
		PLEASE RETURN 3 SETS TO GCC

RECEIVED JUL 14 2009

REMARKS


Signed: Michael L. Adams  
Sr. Project Manager

Date: 13-Jul-09



**BARKER STEEL LLC**  
 a Harbortronics company

55 Sumner Street - Milford, MA 01757  
 TEL 508 473-8484 FAX 508 473-8512

**CERTIFICATE OF COMPLIANCE**

Barker Contract#: **10031509**  
 Project: Florence House Masonry - Portland

Sold To: **AUDETTE & SCE INC**  
 216 LEWISTON RD  
 GRAY, ME 04039

Ship To: **190 Valley St**  
 Portland, ME 04102

Shipped From: Deerfield  
 Shipped Date: 06/29/2009  
 Ship Via: Barker Trucking  
 BOL: 176398-DEE  
 Order: 0000113  
 Description: CMU Shafts  
 Weight: 22715 Lbs.

Size	Weight	Grade	Supplier	Heat#	Yield	Tensile	Elong% Bend	C	Mn	P	S	Coater	Batch	Cntr#
5	265	60	NucorSteel	AU0910107801	68100	106400	13.7	OK	.42	1.10	.018	.062		D9392
5	265	60	NucorSteel	AU0910107901	73700	114300	14.5	OK	.41	1.20	.043	.064		D9392
5	265	60	NucorSteel	AU0910108001	66500	104700	13.2	OK	.42	1.15	.031	.064		D9392
5	265	60	NucorSteel	AU0910108301	66900	104000	16.6	OK	.41	1.13	.021	.049		D9392
5	265	60	NucorSteel	AU0910108401	69900	109600	14.3	OK	.44	1.15	.022	.047		D9392
5	265	60	NucorSteel	AU0910108501	68100	107420	15.0	OK	.44	1.13	.026	.055		D9392
6	7041	60	NucorSteel	E4179	63800	100900	16.2	OK	.41	1.15	.026	.049		D9219
6	7041	60	NucorSteel	E4180	66800	104700	13.7	OK	.43	1.13	.029	.054		D9219
6	7041	60	NucorSteel	E4183	67400	106800	13.2	OK	.43	1.10	.030	.054		D9219

BARKER STEEL certifies that the above material conforms to all current job plans and specifications. We certify that all manufacturing processes for this steel have occurred in the United States.

BY: *M. J. ...*

**GANNESTON CONSTRUCTION CORP.**  
 P.O. BOX 27 AUGUSTA, ME 04332

<input checked="" type="checkbox"/>	REVIEWED	REVIEWED WITH NOTES
<input type="checkbox"/>	REVIEWED WITH NOTES	REVIEWED WITH NOTES
<input type="checkbox"/>	NO RESUBMISSION	RESUBMISSION REQUESTED
<input type="checkbox"/>	CHECK MARK INDICATES ACTION TAKEN	NOT ACCEPTABLE

CHECKED BY: *[Signature]* DATE: *7/13/09*



55 Summer Street - Milford, MA 01757  
 TEL 508 473-8484 FAX 508 473-8512

**CERTIFICATE OF COMPLIANCE**  
 Barker Contract#: **10031509**  
 Project: Florence House Masonry - Portland

Shipped From: Deerfield  
 Shipped Date: 06/29/2009  
 Ship Via: Barker Trucking

Sold To: AUDETTE & SCE INC  
 216 LEWISTON RD  
 GRAY, ME 04039

Order 000011F Description CMTU Shafts Weight 22715 Lbs.

Ship To: 190 Valley St  
 Portland, ME 04102

Size	Weight	Grade	Supplier	Heat#	Yield	Tensile	Elong%	Bend	C	Mn	P	S	Coater	Batch	Cntrl#
5	265	60	NucorSteel	AU0910107801	68100	106400	13.7	OK	.42	1.10	.018	.062			D9392
5	265	60	NucorSteel	AU0910107901	73700	114300	14.5	OK	.41	1.20	.043	.064			D9392
5	265	60	NucorSteel	AU0910108001	66500	104700	13.2	OK	.42	1.15	.031	.064			D9392
5	265	60	NucorSteel	AU0910108301	66900	104000	16.6	OK	.41	1.13	.021	.049			D9392
5	265	60	NucorSteel	AU0910108401	69900	109600	14.3	OK	.44	1.15	.022	.047			D9392
5	265	60	NucorSteel	AU0910108501	68100	107420	15.0	OK	.44	1.13	.026	.055			D9392
6	7041	60	NucorSteel	E4179	63800	100900	16.2	OK	.41	1.15	.026	.049			D9219
6	7041	60	NucorSteel	E4180	66800	104700	13.7	OK	.43	1.13	.029	.054			D9219
6	7041	60	NucorSteel	E4183	67400	106800	13.2	OK	.43	1.10	.030	.054			D9219

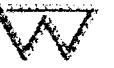
**GANNESTON CONSTRUCTION CORP.**  
 P. O. BOX 27 AUGUSTA, ME 04332

<input checked="" type="checkbox"/>	REVIEWED	<input type="checkbox"/>	REVIEWED WITH NOTES
<input checked="" type="checkbox"/>	REVIEWED WITH NOTES	<input type="checkbox"/>	RESUBMISSION REQUESTED
<input type="checkbox"/>	NO RESUBMISSION	<input type="checkbox"/>	NOT ACCEPTABLE

CHECK MARK INDICATES ACTION TAKEN  
 CHECKED BY: MPA DATE: 7/13/09

BARKER STEEL certifies that the above material conforms to all current job plans and specifications. We certify that all manufacturing processes for this steel have occurred in the United States.

BY: MPA 3 6/27/09



**BARKER STEEL LLC**  
 a Harbortruck company

55 Summer Street - Milford, MA 01757  
 TEL 508 473-8484 FAX 508 473-8512

Shipped From: Deerfield  
 Shipped Date: 06/29/2009

BOL: 176398-DEE  
 Ship Via: Barker Trucking

Order Description: CMU Shafts  
 Weight: 22715 Lbs.

**CERTIFICATE OF COMPLIANCE**

Barker Contract#: **10031509**

Project: Florence House Masonry - Portland

Sold To: AUDETTE & SCE INC  
 216 LEWISTON RD  
 GRAY, ME 04039

Ship To: 190 Valley St  
 Portland, ME 04102

Size	Weight	Grade	Supplier	Heat#	Yield	Tensile	Elong%	Bend	C	Min	P	S	Coater	Batch	Cntrl#
5	265	60	NucorSteel	AU0910107801	68100	106400	13.7	OK	.42	1.10	.018	.062			D9392
5	265	60	NucorSteel	AU0910107901	73700	114300	14.5	OK	.41	1.20	.043	.064			D9392
5	265	60	NucorSteel	AU0910108001	66500	104700	13.2	OK	.42	1.15	.031	.064			D9392
5	265	60	NucorSteel	AU0910108301	66900	104000	16.6	OK	.41	1.13	.021	.049			D9392
5	265	60	NucorSteel	AU0910108401	69900	109600	14.3	OK	.44	1.15	.022	.047			D9392
5	265	60	NucorSteel	AU0910108501	68100	107420	15.0	OK	.44	1.13	.026	.055			D9392
6	7041	60	NucorSteel	E4179	63800	100900	16.2	OK	.41	1.15	.026	.049			D9219
6	7041	60	NucorSteel	E4180	66800	104700	13.7	OK	.43	1.13	.029	.054			D9219
6	7041	60	NucorSteel	E4183	67400	106800	13.2	OK	.43	1.10	.030	.054			D9219

**GANNESTON CONSTRUCTION CORP.**  
 P.O. BOX 27 AUGUSTA, ME 04332

<input checked="" type="checkbox"/>	REVIEWED	REVIEWED WITH NOTES
<input type="checkbox"/>	REVIEWED WITH NOTES	RESUBMISSION REQUESTED
<input type="checkbox"/>	NO RESUBMISSION	NOT ACCEPTABLE

CHECK MARK INDICATES ACTION TAKEN  
 CHECKED BY: *MA* DATE: *7/13/09*

HARKER STEEL certifies that the above material conforms to all current job plans and specifications. We certify that all manufacturing processes for this steel have occurred in the United States.

BY: *Mark E. Wells*





**BARKER STEEL LLC**  
 a **Watts** company  
 55 Summer Street - Milford, MA 01757  
 TEL 508 473-8484 FAX 508 473-8512

Shipped From: Deerfield  
 Shipped Date: 06/29/2009  
 Ship Via: Barker Trucking  
 BOL: 176398-DEE

Order 00001F  
 Description CMU Shafts  
 Weight 22715 Lbs.

**CERTIFICATE OF COMPLIANCE**

Barker Contract#: **10031509**  
 Project: Florence House Masonry - Portland

Sold To: AUDETTE & SCE INC  
 216 LEWISTON RD  
 GRAY, ME 04039

Ship To: 190 Valley St  
 Portland, ME 04102

Size	Weight	Grade	Supplier	Heat#	Yield	Tensile	Elong%	Bend	C	Mn	P	S	Coater	Batch	Cntrl#
5	265	60	Nucor/Steel	AU0910107801	68100	106400	13.7	OK	.42	1.10	.018	.062			D9392
5	265	60	Nucor/Steel	AU0910107901	73700	114300	14.5	OK	.41	1.20	.043	.064			D9392
5	265	60	Nucor/Steel	AU0910108001	66500	104700	13.2	OK	.42	1.15	.031	.064			D9392
5	265	60	Nucor/Steel	AU0910108301	66900	104000	16.6	OK	.41	1.13	.021	.049			D9392
5	265	60	Nucor/Steel	AU0910108401	69900	109600	14.3	OK	.44	1.15	.022	.047			D9392
5	265	60	Nucor/Steel	AU0910108501	68100	107420	15.0	OK	.44	1.13	.026	.055			D9392
6	7041	60	Nucor/Steel	E4179	63800	100900	16.2	OK	.41	1.15	.026	.049			D9219
6	7041	60	Nucor/Steel	E4180	66800	104700	13.7	OK	.43	1.13	.029	.054			D9219
6	7041	60	Nucor/Steel	E4183	67400	106800	13.2	OK	.43	1.10	.030	.054			D9219

**GANNESTON CONSTRUCTION CORP.**  
 P.O. BOX 27 AUGUSTA, ME 04332

<input checked="" type="checkbox"/>	REVIEWED	<input type="checkbox"/>	REVIEWED WITH NOTES
<input type="checkbox"/>	REVIEWED WITH NOTES	<input type="checkbox"/>	RESUBMISSION REQUESTED
<input type="checkbox"/>	NO RESUBMISSION	<input type="checkbox"/>	NOT ACCEPTABLE
CHECK MARK INDICATES ACTION TAKEN			
CHECKED BY	<i>[Signature]</i>	DATE	7/13/09

BARKER STEEL certifies that the above material conforms to all current job plans and specifications. We certify that all manufacturing processes for this steel have occurred in the United States.

BY: *[Signature]*



**BARKER STEEL LLC**  
 a Barker company

55 Summer Street - Milford, MA 01757  
 TEL 508 473-8484 FAX 508 473-8512

Shipped From: Deerfield  
 Shipped Date: 06/29/2009

Ship Via: Barker Trucking

BOL: 176398-DEE

Order Description: CMU Shafts  
 Weight: 22715 Lbs.

**CERTIFICATE OF COMPLIANCE**

Barker Contract#: **10031509**

Project: Florence House Masonry - Portland

Sold To: AUDETTE & SCE INC

216 LEWISTON RD  
 GRAY, ME 04039

Ship To: 190 Valley St

Portland, ME 04102

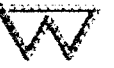
Size	Weight	Grade	Supplier	Heat#	Yield	Tensile	Elong%	Bend	C	Mn	P	S	Coater	Batch	Cntrl#
5	265	60	NucorSteel	AU0910107801	68100	106400	13.7	OK	.42	1.10	.018	.062			D9392
5	265	60	NucorSteel	AU0910107901	73700	114300	14.5	OK	.41	1.20	.043	.064			D9392
5	265	60	NucorSteel	AU0910108001	66500	104700	13.2	OK	.42	1.15	.031	.064			D9392
5	265	60	NucorSteel	AU0910108301	66900	104000	16.6	OK	.41	1.13	.021	.049			D9392
5	265	60	NucorSteel	AU0910108401	69900	109600	14.3	OK	.44	1.15	.022	.047			D9392
5	265	60	NucorSteel	AU0910108501	68100	107420	15.0	OK	.44	1.13	.026	.055			D9392
6	7041	60	NucorSteel	E4179	63800	100900	16.2	OK	.41	1.15	.026	.049			D9219
6	7041	60	NucorSteel	E4180	66800	104700	13.7	OK	.43	1.13	.029	.054			D9219
6	7041	60	NucorSteel	E4183	67400	106800	13.2	OK	.43	1.10	.030	.054			D9219

**GANNESTON CONSTRUCTION CORP.**  
 P.O. BOX 27 AUGUSTA, ME 04332

<input checked="" type="checkbox"/>	REVIEWED	<input type="checkbox"/>	REVIEWED WITH NOTES
<input type="checkbox"/>	REVIEWED WITH NOTES	<input type="checkbox"/>	REVIEWED WITH NOTES
<input type="checkbox"/>	NO RESUBMISSION	<input type="checkbox"/>	RESUBMISSION REQUESTED
<input type="checkbox"/>	CHECK MARK INDICATES ACTION TAKEN	<input type="checkbox"/>	NOT ACCEPTABLE
CHECKED BY	<i>[Signature]</i>	DATE	7/13/09

BARKER STEEL certifies that the above material conforms to all current job plans and specifications. We certify that all manufacturing processes for this steel have occurred in the United States.

BY *[Signature]*



**BARKER STEEL LLC**  
 a **Barker** company

55 Summer Street - Milford, MA 01757  
 TEL 508 473-8484 FAX 508 473-8512

Shipped From: Deerfield  
 Shipped Date: 06/29/2009

Ship Via: Barker Trucking

BOL: 176398-DEE

Order 000011F Description CMU Shafts Weight 22715 Lbs.

**CERTIFICATE OF COMPLIANCE**

Barker Contract#: **10031509**

Project: Florence House Masonry - Portland

Sold To: AUDETTE & SCE INC

216 LEWISTON RD  
 GRAY, ME 04039

Ship To: 190 Valley St  
 Portland, ME 04102

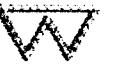
Size	Weight	Grade	Supplier	Heat#	Yield	Tensile	Elong%	Bend	C	Min	P	S	Coater	Batch	Cntrl#
5	265	60	NucorSteel	AU0910107801	68100	106400	13.7	OK	.42	1.10	.018	.062			D9392
5	265	60	NucorSteel	AU0910107901	73700	114300	14.5	OK	.41	1.20	.043	.064			D9392
5	265	60	NucorSteel	AU0910108001	66500	104700	13.2	OK	.42	1.15	.031	.064			D9392
5	265	60	NucorSteel	AU0910108301	66900	104000	16.6	OK	.41	1.13	.021	.049			D9392
5	265	60	NucorSteel	AU0910108401	69900	109600	14.3	OK	.44	1.15	.022	.047			D9392
5	265	60	NucorSteel	AU0910108501	68100	107420	15.0	OK	.44	1.13	.026	.055			D9392
6	7041	60	NucorSteel	E4179	63800	100900	16.2	OK	.41	1.15	.026	.049			D9219
6	7041	60	NucorSteel	E4180	66800	104700	13.7	OK	.43	1.13	.029	.054			D9219
6	7041	60	NucorSteel	E4183	67400	106800	13.2	OK	.43	1.10	.030	.054			D9219

**GANNESTON CONSTRUCTION CORP.**  
 P.O. BOX 27 AUGUSTA, ME 04332

<input checked="" type="checkbox"/>	REVIEWED	<input type="checkbox"/>	REVIEWED WITH NOTES
<input type="checkbox"/>	REVIEWED WITH NOTES	<input type="checkbox"/>	RESUBMISSION REQUESTED
<input type="checkbox"/>	NO RESUBMISSION	<input type="checkbox"/>	NOT ACCEPTABLE
CHECK MARK INDICATES ACTION TAKEN			
CHECKED BY	<i>MPA</i>	DATE	<i>7/13/09</i>

BARKER STEEL certifies that the above material conforms to all current job plans and specifications. We certify that all manufacturing processes for this steel have occurred in the United States.

By: *Michael S. Child*



**BARKER STEEL LLC**  
 a Harbortruck company  
 55 Summer Street - Milford, MA 01757  
 TEL 508 473-8484 FAX 508 473-8512

Shipped From: Deerfield  
 Shipped Date: 06/29/2009  
 Ship Via: Barker Trucking  
 BOL: 176398-DEE

Order 000011F  
 Description CMU Shafts  
 Weight 22715 Lbs.

**CERTIFICATE OF COMPLIANCE**

Barker Contract#: **10031509**  
 Project: Florence House Masonry - Portland

Sold To: AUDETTE & SCE INC  
 216 LEWISTON RD  
 GRAY, ME 04039

Ship To: 190 Valley St  
 Portland, ME 04102

Size	Weight	Grade	Supplier	Heat#	Yield	Tensile	Elong%	Bend	C	Mn	P	S	Coater	Batch	Cntrl#
5	265	60	NucorSteel	AU0910107801	68100	106400	13.7	OK	.42	1.10	.018	.062			D9392
5	265	60	NucorSteel	AU0910107901	73700	114300	14.5	OK	.41	1.20	.043	.064			D9392
5	265	60	NucorSteel	AU0910108001	66500	104700	13.2	OK	.42	1.15	.031	.064			D9392
5	265	60	NucorSteel	AU0910108301	66900	104000	16.6	OK	.41	1.13	.021	.049			D9392
5	265	60	NucorSteel	AU0910108401	69900	109600	14.3	OK	.44	1.15	.022	.047			D9392
5	265	60	NucorSteel	AU0910108501	68100	107420	15.0	OK	.44	1.13	.026	.055			D9392
6	7041	60	NucorSteel	E4179	63800	100900	16.2	OK	.41	1.15	.026	.049			D9219
6	7041	60	NucorSteel	E4180	66800	104700	13.7	OK	.43	1.13	.029	.054			D9219
6	7041	60	NucorSteel	E4183	67400	106800	13.2	OK	.43	1.10	.030	.054			D9219

**GANNESTON CONSTRUCTION CORP.**  
 P.O. BOX 27 AUGUSTA, ME 04332

<input checked="" type="checkbox"/>	REVIEWED	<input type="checkbox"/>	REVIEWED WITH NOTES
<input type="checkbox"/>	REVIEWED WITH NOTES	<input type="checkbox"/>	RESUBMISSION REQUESTED
<input type="checkbox"/>	NO RESUBMISSION	<input type="checkbox"/>	NOT ACCEPTABLE
CHECKED BY <i>[Signature]</i>		DATE <i>7/13/09</i>	

BARKER STEEL certifies that the above material conforms to all current job plans and specifications. We certify that all manufacturing processes for this steel have occurred in the United States.

BY *[Signature]*



**Audette &  
S.C.E., INC.**  
Since 1973  
216 Lewiston Road  
Gray, Maine 04039

# LETTER OF TRANSMITTAL

(207) 657-3313 Fax (207) 657-4113

TO Ganneston Construction Corp.  
PO Box 27 - North Belfast Avenue  
Augusta, ME 04332-0027

DATE	July 8 2009	JOB NO.	806??
ATTENTION	Mike Adams		
RE:	Florence House		
	Masonry Submittal Spec		
	Section 04810		

RECEIVED  
JUL 9 2009

WE ARE SENDING YOU  Attached  Under separate cover the following items:

- Shop drawings     Prints     Plans     Samples     Specifications  
 Copy of letter     Change order     certificate of Compliance

COPIES	DATE	NO.	DESCRIPTION
8	7-8-09	1	Reinforcing Bars - Certificate of Compliance - Spec Section 04810 - 1.04 - F.14.

THESE ARE TRANSMITTED as checked below:

- For approval     Approved as submitted     Resubmit \_\_\_\_\_ copies for approval  
 For your use     Approved as noted     Submit \_\_\_\_\_ copies for distribution  
 As requested     Returned for corrections     Return \_\_\_\_\_ corrected prints  
 For review and comment     \_\_\_\_\_  
 FOR BIDS DUE \_\_\_\_\_     PRINTS RETURNED AFTER LOAN TO US

REMARKS \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

COPY TO \_\_\_\_\_

SIGNED: Andy Trainor



**DAILY FIELD REPORT**

**Date:** 7/2/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Grout Testing  
**Work Activities:** A crew from Audette & S C E Inc. placed grout for the first five feet of stairwell one and two. One set (#1) of four grout cubes were cast and will be retrieved at a later date for controlled storage and compressive strength testing.

**Test Results:**  
Grout Test Results:  
Grout Temperature: 65 deg. F  
Air Temperature: 60 deg F  
Slump: 10"

**Remarks:**

**Portal to Portal**

Leave:	<u>9:45 AM</u>	<b><u>Expenses</u></b>	
Return:	<u>10:45 AM</u>	Mileage:	<u>15</u>
TOTAL:	<u>1</u>	Density Gauge:	<u>          </u>
		Other:	<u>          </u>

**Signed:** Kris Bennett

**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 7/9/09



**DAILY FIELD REPORT**

**Date:** 7/20/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Mortar & Grout testing

**Work Activities:** When I arrived I asked the mason if they were mixing mortar and he replied they were done with mortar and were now mixing grout. I talked with Mike Adams about what he would like me to do and he asked if I would put together a grout box and take a sample of the grout. I cast one set of 4 grout cubes to be picked up later for compressive strength testing.

**Test Results:**

**Remarks:**

**Portal to Portal**

Leave:	<u>10:00 AM</u>	<b><u>Expenses</u></b>	
Return:	<u>11:00 AM</u>	Mileage:	<u>11</u>
TOTAL:	<u>1</u>	Density Gauge:	<u>          </u>
		Other:	<u>          </u>

**Signed:** Justin Rouillard

**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 7/21/09



**DAILY FIELD REPORT**

**Date:** 7/21/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Mortar Testing

**Work Activities:** Retrieved one grout box and brought it back for laboratory testing. Also cast one set of 3 mortar cubes for compressive strength testing. Sample was taken directly out of the mixer and at the time the sample was taken the mason's were working on the interior stairwell.

**Test Results:**

**Remarks:**

**Portal to Portal**

Leave:	<u>10:00 AM</u>	<b><u>Expenses</u></b>	
Return:	<u>11:30 AM</u>	Mileage:	<u>11</u>
TOTAL:	<u>1.5</u>	Density Gauge:	<u>          </u>
		Other:	<u>          </u>

**Signed:** Justin Rouillard

**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 7/24/09





**DAILY FIELD REPORT**

**Date:** 8/20/09  
**Project:** Avesta Florence House - Portland, Maine  
**Project #:** 14194  
**Site Contacts:** Mike Adams, Ganneston Construction  
**Purpose of Visit:** Grout testing

**Work Activities:** When I arrived the contractor was mixing up a batch of grout, when the batch was thoroughly mixed I cast one set of 4 grout cubes to be picked up later for compressive strength testing.

**Test Results:**

**Remarks:** Grout was being placed at the 3rd level of the stairwell.

**Portal to Portal**

	<u>Expenses</u>
Leave: 9:00am	Mileage: 11
Return: 10:15am	Density Gauge:
TOTAL: 1.25	Other: 2.00 tolls

**Signed:** Frank Clark

**cc:**

Reviewed: Darrell A. Gilman, CMT Manager  
Sent: 8/21/09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
Phone: (207) 621.8334 Fax: (207) 626.9094



**GROUT COMPRESSIVE STRENGTH TEST RESULTS - ASTM C1019**

Project No: 14194  
Project: Avesta Florence House  
Client: Avesta Florence House, LP and Florence House  
307 Cumberland Avenue  
Portland, ME 04101

**Field Test Data**

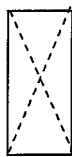
Set No.: G1  
Placement Date: 2-Jul-09  
Lab Rec'd Date: 3-Jul-09  
Location: Stair Well 1 & 2, 5'  
Technician: K. Bennett  
Supplier: Audette & SCE  
Mix Designation: CMU Block Grout  
Design Strength: 3000psi

Slump (inches) 10  
Grout Temp. (°F) 65.0  
Air Temp. (°F) 62.0

**Laboratory Test Data**

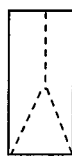
Sample No.	Test Date	Age	Type	Wt. (lb.)	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
C1a	9-Jul-09	7	3	4.78	120.6	11.17	31.3	2800
C1b	30-Jul-09	28	3	4.88	119.1	11.29	44.1	3910
C1c	30-Jul-09	28	3	4.82	125.4	11.22	46.5	4150
C1d								

Average 28 Day (psi):



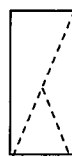
Cone

1



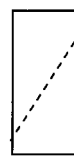
Cone and Split

2



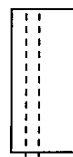
Cone and Shear

3



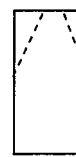
Shear

4



Columnar

5



Other

6

Remarks:

---

Reviewed: Darrell Gilman, CMT Manager  
Date: 7-31-09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
Phone: (207) 621.8334 Fax: (207) 626.9094



**GROUT COMPRESSIVE STRENGTH TEST RESULTS - ASTM C1019**

Project No: 14194  
Project: Avesta Florence House  
Client: Avesta Florence House, LP and Florence House  
307 Cumberland Avenue  
Portland, ME 04101

**Field Test Data**

Set No.: G2  
Placement Date: 20-Jul-09  
Lab Rec'd Date: 22-Jul-09  
Location: Block Wall at the Intersection of Line M and Line 16  
Technician: J. Rouillard  
Supplier: Audette & SCE  
Mix Designation: CMU Grout  
Design Strength: 3000psi

Slump (inches) 11  
Grout Temp. (°F) 62.0  
Air Temp. (°F) 75.0

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Wt. (lb.)	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
G2a	27-Jul-09	7	3	4.86	123.0	11.27	19.7	1740
G2b	17-Aug-09	28	6	4.62	124.6	10.83	25.5	2350
G2c	17-Aug-09	28	3	4.80	123.6	10.96	27.6	2510
G2d	14-Sep-09	56	6	4.70	124.5	11.01	28.2	2560

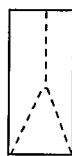
Average 28 Day (psi):

2430



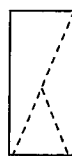
Cone

1



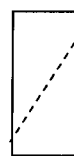
Cone and Split

2



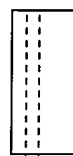
Cone and Shear

3



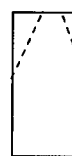
Shear

4



Columnar

5



Other

6

Remarks:

---

Reviewed: Darrell Gilman, CMT Manager  
Date: 9-14-09

**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
Phone: (207) 621.8334 Fax: (207) 626.9094



**GROUT COMPRESSIVE STRENGTH TEST RESULTS - ASTM C1019**

Project No: 14194  
Project: Avesta Florence House  
Client: Avesta Florence House, LP and Florence House  
307 Cumberland Avenue  
Portland, ME 04101

**Field Test Data**

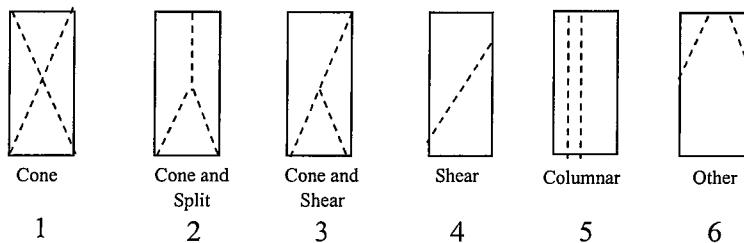
Set No.: G3  
Placement Date: 20-Aug-09  
Lab Rec'd Date: 21-Aug-09  
Location: Third Floor Level Stairwell  
Technician: F. Clark  
Supplier: Audette & SCE  
Mix Designation: CMU Block Grout  
Design Strength: 3000psi

Slump (inches) 11  
Grout Temp. (°F) 64.0  
Air Temp. (°F) 87.0

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Wt. (lb.)	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
G3a	27-Aug-09	7	6	4.84	116.2	12.07	25.0	2070
G3b	17-Sep-09	28	6	4.58	115.7	11.59	24.5	2110
G3c	17-Sep-09	28	6	4.62	114.6	11.73	29.5	2510
G3d	15-Oct-09	56	3	4.73	113.9	12.04	35.5	2950

Average 28 Day (psi): 2310



Remarks:

---



---

Reviewed: Darrell Gilman, CMT Manager  
Date: 10-15-09



**SUMMIT GEOENGINEERING SERVICES**

434 Cony Road, Augusta, Maine 04330  
 Phone: (207) 621.8334 Fax: (207) 626.9094

**MORTAR COMPRESSIVE STRENGTH TEST RESULTS**

Project No: 14194  
 Project: Avesta Florence House  
 Client: Avesta Florence House, LP  
 307 Cumberland Avenue  
 Portland, ME 04101

**Field Test Data**

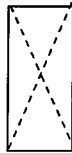
Set No.: M1  
 Placement Date: 21-Jul-09  
 Lab Rec'd Date: 23-Jul-09  
 Location: Stairwell Wall  
 Technician: J. Rouillard  
 Supplier: Audette SCE  
 Mix Designation: Type "S"  
 Design Strength: 1800psi

**Laboratory Test Data**

Sample No.	Test Date	Age	Type	Wt. (lb.)	Unit Wt.	Area (in <sup>2</sup> )	Load (K)	Strength (psi)
M1a	28-Jul-09	7	1	0.60	127.8	4.03	12.1	3000
M1b	18-Aug-09	28	1	0.60	125.4	4.03	14.4	3560
M1c	18-Aug-09	28	6	0.62	132.1	4.04	10.6	2620

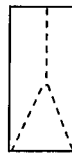
Average 28 Day (psi):

3090



Cone

1



Cone and Split

2



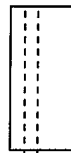
Cone and Shear

3



Shear

4



Columnar

5



Other

6

Remarks:

---

Reviewed: Darrell Gilman, CMT Manager

Date: 8-18-09

**EXHIBIT B**

**05120 Steel Construction**

Project: Florence House  
 Date Prepared: September 2, 2008

### Structural Schedule of Special Inspections - STEEL CONSTRUCTION

VERIFICATION AND INSPECTION	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
<b>IBC Section 1704.3</b>						
<b>1. Material verification of high-strength bolts, nuts and washers:</b>						
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	Y	S	Applicable ASTM material specifications; AISC 335, Section A3.4; AISC LRFD, Section A3.3	SI1	PE/SE or EIT	JLF
b. Manufacturer's certificate of compliance required.	Y	S		SI1	PE/SE or EIT	JLF
<b>2. Inspection of high-strength bolting</b>						
a. Bearing-type connections.	Y	P	AISC LRFD Section M2.5	TA2	AWS/AISC-SSI	SEE ATTACHED
b. Slip-critical connections.	Y	C or P (method dependent)	IBC Sect 1704.3.3	TA2	AWS/AISC-SSI	SEE ATTACHED
<b>3. Material verification of structural steel (IBC Sect 1708.4):</b>						
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	Y	S	ASTM A 6 or ASTM A 568 IBC Sect 1708.4	SI1	PE/SE or EIT	JLF
b. Manufacturers' certified mill test reports.	Y	S	ASTM A 6 or ASTM A 568 IBC Sect 1708.4	SI1	PE/SE or EIT	SUBMITTED
<b>4. Material verification of weld filler materials:</b>						
a. Identification markings to conform to AWS specification in the approved construction documents.	Y	S	AISC, ASD, Section A3.6; AISC LRFD, Section A3.5	SI1	PE/SE or EIT	JLF
b. Manufacturer's certificate of compliance required.	Y	S		SI1	PE/SE or EIT	X
5. Submit current AWS D1.1 welder certificate for all field welders who will be welding on this project.	Y	S	AWS D1.1	SI1	PE/SE or EIT	SEE ATTACHED
<b>6. Inspection of welding (IBC 1704.3.1):</b>						
<b>a. Structural steel:</b>						
1) Complete and partial penetration groove welds.	Y	C	AWS D1.1	TA2	AWS-CWI	JLF
2) Multipass fillet welds.	Y	C		TA2	AWS-CWI	N/A
3) Single-pass fillet welds > 5/16"	Y	C		TA2	AWS-CWI	N/A
4) Single-pass fillet welds < 5/16"	Y	P		TA2	AWS-CWI	JLF
5) Floor and deck welds.	Y	P		AWS D1.3	TA2	AWS-CWI
<b>b. Reinforcing steel (IBC Sect 1903.5.2):</b>						
1) Verification of weldability of reinforcing steel other than ASTM A706.	N/A	C	NOT PERMITTED			
2) Reinforcing steel-resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special reinforced concrete shear walls and shear reinforcement.	N/A	C	AWS D1.4 ACI 318: 3.5.2		AWS-CWI	
3) Shear reinforcement.	N/A	C			AWS-CWI	
4) Other reinforcing steel.	Y	P		TA2	AWS-CWI	N/A
<b>7. Inspection of steel frame joint details for compliance (IBC Sect 1704.3.2) with approved construction documents:</b>						
a. Details such as bracing and stiffening.	Y	P		SI1	PE/SE or EIT	JLF
b. Member locations.	Y	P		SI1	PE/SE or EIT	JLF
c. Application of joint details at each connection.	Y	P		SI1	PE/SE or EIT	JLF

**Structural Schedule of Special Inspection Services**  
**FABRICATION AND IMPLEMENTATION PROCEDURES – STRUCTURAL STEEL**

VERIFICATION AND INSPECTION  IBC Section 1704.2	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
1. Fabrications Procedures: Review of fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by an approved special inspection agency. At the completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building code official stating that the work was performed in accordance with the approved construction documents. -OR- 2. AISC Certification	Y	S	Fabricator shall submit one of the two qualifications	SII	PE/SE or EIT	<u>JW</u> AISC CERTIFICATION
3. At completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building code official stating that the work was performed in accordance with the approved construction documents.	Y	S	IBC 1704.2.2	SII	PE/SE or EIT	OK



*American Institute of Steel Construction*

*is proud to recognize*

# Precision Welding & Fabrication, Inc.

Westbrook, ME

*for successfully meeting the quality certification requirements for*

## Standard for Steel Building Structures

187-174.2

CHECKED BY <i>MM</i> DATE <i>2/23/09</i>	
CHECK MARK INDICATES ACTION TAKEN	
REVIEWED WITH NOTES	NO RESUBMISSION
REVIEWED WITH NOTES	NOT ACCEPTABLE
RESUBMISSION REQUESTED	RESUBMISSION REQUESTED
REVIEWED	REVIEWED WITH NOTES

GANNESTON CONSTRUCTION CORP.  
P.O. BOX 27 AUGUSTA, ME 04332

RECEIVED  
R 10 00 7009

GANNESTON CONSTRUCTION CORP.

- Reviewed
- Rejected
- Submit Specific Item:
- Furnish as Corrected
- Revise and Resubmit

This review is only for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance with the requirements of the plans and specifications. Approval of a specific item shall not include approval of an assembly of which the item is a component. Contractor is responsible for: dimensions to be confirmed and correlated at the jobsite; information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of his or her Work with that of all other trades; and for performing all work in a safe and satisfactory manner.

Becker Structural Engineers, Inc.

Date 3-3-09 By MM



*Certification valid through October 2009*

*Roger E. Ferch*

Roger E. Ferch

SECTION 05200 - PART 1, 1.04, H, 2.3.

P.O.#16166  
#80677-5100

Vulcraft Sales Corporation

FLORENCE HOWE

March 3, 2009

Larry Cunha  
Larene Steel  
5 Mills Point  
Middleton, MA 01949-2506  
Fax: 978-646-0090

Vulcraft File #: 032-08-6527

Vulcraft of New York, Inc inspects joists according to the SJI specifications 5.12, 104.13 and 1004.10 as stated in the Code of Standard Practice, section 4. In order to maintain SJI plant certification, inspection must be performed at the plant. The SJI compliance letter should cover any inspection requirements, if there is something more specific they need addressed please contact me.

Sincerely,

Jason M. Thornton  
District Sales Manager  
Vulcraft Sales Corporation  
Salem NH Office

32

GANNESTON CONSTRUCTION CORP.	
P.O. BOX 27 AUGUSTA, ME 04332	
<input checked="" type="checkbox"/> REVIEWED	REVIEWED WITH NOTES RESUBMISSION REQUESTED
REVIEWED WITH NOTES NO RESUBMISSION	NOT ACCEPTABLE
CHECK MARK INDICATES ACTION TAKEN	
CHECKED BY: <i>JTH</i>	DATE: <i>3/6/09</i>



**Vulcraft Sales Corporation**

March 3, 2009

23

Larry Cunha  
Larene Steel  
5 Mills Point  
Middleton, MA 01949-2506  
Fax: 978-646-0090

GANNESTON CONSTRUCTION CORP. P.O. BOX 27 AUGUSTA, ME 04332	
<input checked="" type="checkbox"/> REVIEWED	<input type="checkbox"/> REVIEWED WITH NOTES RESUBMISSION REQUIRED
<input type="checkbox"/> REVIEWED WITH NOTES NO RESUBMISSION	<input type="checkbox"/> NOT ACCEPTABLE

Vulcraft File #: 032-08-6527

*me* 3/6/09

Vulcraft performs visual inspection of all joist and joist girder products during their production. We do not generate inspection reports for individual projects. All products are deemed acceptable for shipment unless they are set off by our inspectors. Any corrective action is also inspected prior to the product being released for shipment.

In lieu of inspection reports, you may choose either in-house inspection performed by an inspection agency of your choosing, or we can perform a full-scale load test. For in-house inspection by an outside agency, we will provide the day and time of production to you. The chosen agency should be at our facility at that time in order to witness the fabrication process.

For a full scale load test, the member to be tested can be chosen in-house by our QA Supervisor, or by the Engineer-of-Record. Full scale load test includes verifying the member load capacity and deflection using a series of concentrated loads that simulate the loading from the SJI Load Table. The tested member must safely support 1.65 x theoretical design capacity of critical components. The member tested will not be utilized within the project. Cost for a full-scale test is \$750 per joist. If the member to be tested is chosen by the Engineer-of-Record, please indicate on your approved bill of materials the joist to be tested.

Sincerely,

Jason M. Thornton  
District Sales Manager  
Vulcraft Sales Corporation  
Salem NH Office

- Reviewed
- Rejected
- Submit Specific Item:
- Furnish as Corrected
- Revise and Resubmit

This review is only for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance with the requirements of the plans and specifications. Approval of a specific item shall not include approval of an assembly of which the item is a component. Contractor is responsible for: dimensions to be confirmed and correlated at the jobsite; information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of his or her Work with that of all other trades; and for performing all work in a safe and satisfactory manner.

Becker Structural Engineers, Inc.

Vulcraft Sales Corporation | 5 Manor Parkway, Suite B Salem NH 03079 P: 603 894 1146 F: 603 894 1149

Date 3-16-09 By MM

SECTION 05200 - PART 1, 1.04, G

P.O.# 16166  
# 80677-510

**NUCOR**  
**VULCRAFT GROUP**

VULCRAFT SALES CORPORATION

- Reviewed
- Rejected
- Submit Specific Item:
- Furnish as Corrected
- Revise and Resubmit

February 26, 2009

Contact **LARRY CUNHA**  
 Company Name: **LARENE STEEL PRODUCTS**  
 Address **5 MILLS POINT**  
 City: **MIDDLETOWN** ST: **MA** Zip Code **01949**

Reference: **FLORENCE HOUSE / PORTLAND, ME**  
 Purchase Order Number: **810-25**  
 Vulcraft Number: **032-08-6527**

This review is only for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance with the requirements of the plans and specifications. Approval of a specific item shall not include approval of an assembly of which the item is a component. Contractor is responsible for: dimensions to be confirmed and correlated at the jobsite; information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of his or her Work with that of all other trades; and for performing all work in a safe and satisfactory manner.

Becker Structural Engineers, Inc.

Date 3-16-09 By MJM

Gentlemen:

Vulcraft Division, Nucor Corporation, hereby certifies that we are a member of the Steel Joist Institute. Vulcraft open web steel joists are designed and manufactured in accordance with the standard joist specifications of the Steel Joist Institute.

These joists will safely support a uniformly distributed load as designated in the applicable Steel Joist Institute load table, for the particular type and span, when field applications are in accordance with these specifications.

Cordially,

*Linda R Chappell*

Linda R Chappell  
DISTRICT SALES CLERK

#28

GANNESTON CONSTRUCTION CORP. P.O. BOX 27 AUGUSTA, ME 04332	
<input checked="" type="checkbox"/> REVIEWED	<input type="checkbox"/> REVIEWED WITH NOTES RESUBMISSION REQUESTED
<input type="checkbox"/> REVIEWED WITH NOTES NO RESUBMISSION	<input type="checkbox"/> NOT ACCEPTABLE
CHECK MARKS INDICATES ACTION TAKEN	
CHECKED BY: <u>MJM</u> DATE: <u>3/16/09</u>	



**Solomon R. Gay**

Cert # 0702070W

SSN # XXX-XX-9877



**1-800-443-9353**  
Information relating to identification and certification of the  
bearer of this card may be verified by calling or writing  
CERTIFICATION DEPARTMENT OF THE AMERICAN WELDING SOCIETY  
380 N.W. LeJeune Road, Miami, FL 33126

# AMERICAN WELDING SOCIETY

**VALID ONLY IF ACCOMPANIED BY PHOTO ID**

This Card is the property of AWS and shall be returned on demand.

- Reviewed
- Rejected
- Submit Specific Item:
- Furnish as Corrected
- Revise and Resubmit

This review is only for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance with the requirements of the plans and specifications. Approval of a specific item shall not include approval of an assembly of which the item is a component. Contractor is responsible for: dimensions to be confirmed and correlated at the jobsite; information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of his or her Work with that of all other trades; and for performing all work in a safe and satisfactory manner.

Becker Structural Engineers, Inc.

Date \_\_\_\_\_ By \_\_\_\_\_

RECEIVED  
10:00 2009

GANNESTON  
CONSTRUCTION CORP.

05729-105

GANNESTON CONSTRUCTION CORP.  
P.O. BOX 27 AUGUSTA, ME 04332

<input checked="" type="checkbox"/> REVIEWED	<input type="checkbox"/> REVIEWED WITH NOTES RESUBMISSION REQUESTED
<input type="checkbox"/> REVIEWED WITH NOTES NO RESUBMISSION	<input type="checkbox"/> NOT ACCEPTABLE
CHECK MARK INDICATES ACTION TAKEN	
CHECKED BY <i>MA</i>	DATE <i>2/23/09</i>

**Solomon R. Gay**

#	Test Date	Sup Code	Process	Gas	Filler	Metal	Base Metal	Position	Thickness	Expires
1	08/02/96	G	DI.1	SMAW	N/A	F4	P	A	L	07/11/09

**AWS Certified Welder**  
Welder ID: 0801130W

**Ronald H. Moody**  
Cert # 0801130W      SSN # XXX-XX-7265



**1-800-443-9353**  
Information relating to certification and certification of the  
bearer of this card may be verified by calling or writing:  
CERTIFICATION DEPARTMENT OF THE AMERICAN WELDING SOCIETY  
6500 N.W. Redpine Road, Miami, FL 33126

**AMERICAN WELDING SOCIETY**

**VALID ONLY IF ACCOMPANIED BY PHOTO ID**

This Card is the property of AWS and shall be returned on demand.

**Ronald H. Moody**

#	Test Date	Sup Code	Process	Gas	Filler	Metal	Base Metal	Position	Thickness	Expires
1	06/10/96	G D1.1	SMAW	N/A	F4		P	A	L	06/25/09

Edward P Nadeau  
Cert # 0009030W

SSN # XXX-XX-2162



# AMERICAN WELDING SOCIETY

VALID ONLY IF ACCOMPANIED BY PHOTO ID

This Card is the property of AWS and shall be returned on demand.

Edward P Nadeau

#	Test Date	Sup Code	Process	Gas	Filler	Metal	Base Metal	Position	Thickness	Expires
1	08/01/00	G D1.1	SMAW	--	F4		P1	A		01/20/00

VERIFY CERTIFICATE  
HAS BEEN  
UPDATED.

**AWS Certified Welder**

Welder's Name and Credentials

**Scott J Flaherty**

Cert # 0510038W

SSN # XXX-XX-5584



1-800-443-9353

Information relating to identification and certification of the  
bearer of this card may be verified by calling or writing  
CERTIFICATION DEPARTMENT OF THE AMERICAN WELDING SOCIETY  
6555 N. Walbridge Road, Miami, FL 33126

**AMERICAN WELDING SOCIETY**

**VALID ONLY IF ACCOMPANIED BY PHOTO ID**

This Card is the property of AWS and shall be returned on demand.

**Scott J Flaherty**

#	Test Date	Sup	Code	Process	Gas	Filler	Metal	Base Metal	Position	Thickness	Expires
1	10/13/05	G	D1.1	SMAW	N/A	E7018		SA 36	ALL	UNLIMITED	03/09/09
2	10/13/05	G	D1.5	FCAW	75/25	E71T-1		SA 36	ALL	LIMITED	03/09/09



AWS QC-3

PERFORMANCE QUALIFICATION TEST RECORD

Eye correction required Yes  No

Type of Eye Correction:

- Eye glasses
- Contact lenses
- Magnifiers

Name MOODY, RONALD H.

Social Security # ████████-7285

Welder  Operator

Qualified with AWS WPS No. 1-QC-W2 Supplement No. G Test No. D1-SM-F4-P-A-1

Process(es) SMAW Manual  Semi-Automatic  Automatic  Machine

Test base metal specification SA 36 To SA 38

Material number (M or P Number) P1 To P1

Shielding Gas NA Flow Rate NA F no 4 Size 2/32" & 1/8"

AWS Filler metal classification E7018 Consumable Insert Yes  No

Backing Yes  No  Short Circuiting arc (GMAW) Yes  No

Double Welded  or Single Welded  Back Purging Yes  No

Current AC  DC

Test results

Visual test results Pass  Fail   
Bend test results NA  Pass  Fail

Radiographic test results NA  Pass  Fail

PROCESS(es) QUALIFIED FOR SMAW

POSITION(S) QUALIFIED FOR:

Groove:

Pipe 1G  2G  5G  6G  6GR  (T)Min 1/8" Max 3/4" Diameter 24" Range 24" and greater

Plate 1G  2G  3G  4G  (T)Min 1/8" Max 3/4"

Consumable Insert  Backing type

Filler:

Pipe 1F  2F  4F  5F  (T)Min 1/8" Max Unlimited

Plate 1F  2F  3F  4F  (T)Min 1/8" Max Unlimited

Vertical Up  Down  Weld Deposit Min 1/8" Max 3/4"

Single Side  Double Side

The above named person qualified for the welding process(es) used in this test within the limits of essential variables shown above, including materials and filler metal variables of the AWS Standard for welder certification and ANSI/AWS D1.1 Code or Standard. I hereby certify that I was not involved in the training of the above named individual as a welder:

Date Tested 6/10/95

Signed by Thomas E. Giles  
Test Supervisor

Signed by Thomas E. Giles AWS CWI No. 88070281  
Coordinator-WELDING CENTER, Eastern Maine Technical College  
Corporate Representative Title

PERFORMANCE QUALIFICATION TEST RECORD

Eye correction required Yes  No

Type of Eye Correction: Eye glasses   
Contact lenses   
Magnifiers

Name GAY, SOLOMON R.

Social Security # 0000-9877

Welder  Operator

Qualified with AWS WPS No. 1-QC-W2 Supplement No. G Test No. D1-SM-F4-P-A-L

Process(es) SMAW Manual  Semi-Automatic  Automatic  Machine

Test base metal specification SA 38 To SA 38

Material number (M or P Number) P1 To P1

Shielding Gas NA Flow Rate NA

AWS Filler metal classification E7018 F no 4 Size 2/32" & 1/8"

Backing Yes  No  Consumable insert Yes  No

Double Welded  or Single Welded  Short Circuiting arc (GMAW) Yes  No

Current AC  DC  Back Purging Yes  No

Test results Radiographic test results NA  Pass  Fail

Visual test results Pass  Fail   
Bend test results NA  Pass  Fail

PROCESS(es) QUALIFIED FOR SMAW

POSITION(s) QUALIFIED FOR:

Groove: Pipe 1G  2G  5G  6G  6GR  (T)Min 1/8" Max 3/4" Diameter 24" Range 24" and greater

Plate 1G  2G  3G  4G  (T)Min 1/8" Max 3/4"

Consumable Insert  Backing type

Filet: Pipe 1F  2F  4F  5F  (T)Min 1/8" Max Unlimited

Plate 1F  2F  3F  4F  (T)Min 1/8" Max Unlimited

Vertical Up  Down  Weld Deposit Min 1/8" Max 3/4"

Single Side  Double Side

The above named person qualified for the welding process(es) used in this test within the limits of essential-variables shown above, including materials and filler metal variables of the AWS Standard for welder certification and

ANSI/AWS D1.1 Code or Standard. I hereby certify that I was not involved in the training of the above named individual as a welder:

Date Tested 8/2/96

Signed by Thomas E. Gies Test Supervisor

Signed by Thomas E. Gies AWS CQM No. 98070281

Coordinator WELDING CENTER, Eastern Maine Technical College  
Corporate Representative Title

WELDING TEST CENTER / Eastern Maine Community College

354 Hogan Road, Bangor, ME 04401  
(207) 974-4662, FAX (207) 974-4608  
tgiles@emcc.edu

FAX TRANSMITTAL

For Immediate Delivery To:

Name: Sol  
Organization: Precision Welding and Fabrication, Inc.  
FAX Number: (207) 854-9694  
Total number of pages, including this page: 4

From:

Name: Thomas Giles  
Office: Welding Test Center  
Date: 01/29/08

Message:

Attached please find the supporting WPS for the welder certifications you mentioned. This procedure is from the AWS QC 3-89 "Standard for AWS Certified Welders" WPS# 1-QC-W2 and is pre-qualified per AWS D1.1 Structural Welding Code - Steel.

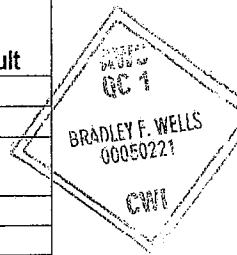
If problems in transmission are encountered, please contact the sender at:  
(207)974-4662 or FAX (207)974-4608.

**WELDER, WELDING OPERATOR, OR TACK WELDER QUALIFICATION TEST RECORD**

Name of Welder Jason Joiner  
 Name Precision Welding Identification No. 6847  
 Welding Procedure Specification No. 1 Rev. N/A Date Aug. 20, 2008

Variables	Record Actual Values		Qualification Range
	Used in Qualification		
Process/Type [Table 4.10, Item (1)]	<b>SMAW</b>		
Electrode (single or multiple) [Table 4.10, Item (2)]	1/8 E7018		ALL
Current Polarity	115 A DC+		
Position [Table 4.10, Item (6)]	2F - Tack test		1F, 2F
Weld Progression [Table 4.10, Item (6)]	N/A		N/A
Backing (YES or NO) [Table 4.10 Item (7)]	NO		NO
Material/Spec.	Group 1 to Group 1		
Base Metal			
Thickness: (Plate)			
Groove	N/A		N/A
Fillet	1/2 inch		UNLIMITED
Thickness: (Pipe/Tube)			
Groove	N/A		N/A
Fillet	N/A		UNLIMITED
Diameter :(Pipe)PJP			
Groove	N/A		N/A
Fillet	N/A		N/A
Filler Metal [Table 4.10, Item (3)]			
Spec. No.	A5.1		
Class	E7018		
F-No. [Table 4.10, Item (2)]	F 4		F4, F3, F2, F1
Gas/Flux Type [Table 4.10item (3)]	N/A		
Other	N/A		N/A

VISUAL INSPECTION (4.8.1)			
Acceptable		YES or NO	
		YES	
Type	Result	Type	Result
<b>Guided Bend Test Results (4.30.5)</b>			
<b>Fillet Test Results (4.30.2.3 and 4.30.4.1)</b>			
Appearance	Acceptable	Fillet Size	0.1875
Fracture Test Root Penetration	Acceptable	Macroetch	N/A
(Describe the location, nature, and size of any crack or tearing of the specimen.)			



Inspected by Brad Wells CWI # 00050221 Test Number N/A  
 Organization Maine Oxy Date Aug 20, 2008

RADIOGRAPHIC TEST RESULTS (4.30.3.1)					
Film Identification Number	Results	Remarks	Film Identification Number	Results	Remarks

Interpreted by \_\_\_\_\_ Test Number \_\_\_\_\_  
 Organization \_\_\_\_\_ Date \_\_\_\_\_

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of section 4 of AWS D1.1, ( ) Structural Welding Code --- Steel.

Manufacturer or Contractor \_\_\_\_\_ Authorized By \_\_\_\_\_  
 Date \_\_\_\_\_

**Keywords**— AWS Certified Welders  
Welders  
Welder Certification  
Welder Qualification

**AWS QC 3-89**

## Standard for AWS Certified Welders

Prepared by  
AWS Qualification and Certification Committee

Under the Direction of  
AWS Education and Certification Council

Approved by  
AWS Board of Directors  
October 31, 1989

### Abstract

This Standard describes a program administered by the American Welding Society (AWS) for the certification of welders. The AWS Certified Welder Program allows for the transference of welder qualification from employer to employer without retesting. The standard establishes the minimum requirements for welder participation in the program and the methods to be used by employers for adopting the program.



**American Welding Society**

550 N.W. LeJeune Road, Miami, Florida 33126

QC 3 PERFORMANCE WELDING  
PROCEDURE SPECIFICATION

Material specification ASTM A-36  
 Welding process Shielded Metal Arc (SMAW)  
 Manual or machine Manual  
 Position of welding Vertical and Overhead  
 Filler metal specification AWS A5.1  
 Filler metal classification E7018  
 Flux N/A  
 Shielding gas N/A Flow rate N/A  
 Single or multiple pass Multiple pass  
 Single or multiple arc Single arc  
 Welding current Direct current  
 Polarity Electrode positive  
 Welding progression Vert - up weave, OH - stringer beads  
 Root treatment None  
 Preheat and interpass temperature 70° F min. - 500° max.  
 Postheat treatment None

WELDING PROCEDURE

Pass no.	Electrode size	Welding current		Travel speed	Joint detail
		Amperes *	Volts		
All	5/32" or 1/8"	75 - 120	19 - 23	Manual	
		110 - 180	19 - 23	Manual	
*Consult Manufacturers recommendations for specific ranges.					

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in 4B, C, or D and 5.1.2 of AWS D1.1, (1986) Structural Welding Code.  
year

Procedure no. 1 - QC - W2  
 Revision no. 0

Manufacturer or contractor American Welding Society  
 Authorized by RE. B. Smith  
 Date May 16, 1989

S1-6

## SUPPLEMENT 1

## PERFORMANCE TEST DESCRIPTION

Test Number: D1-8M-F4-P-A-L

**Welding Process:** Shielded Metal Arc Welding (SMAW)  
**Base Material:** ANSI/ASTM A-36, 3/8" thickness (rolling direction perpendicular to bevelled edge)  
**Material Form:** Plate  
**Filler Metal:** ANSI/AWS A5.1, Class E-7018 (Group: F4)  
**Weld Joint Detail:** ANSI/AWS D1.1, Para. 5.19  
**Backing:** Prequalified steel plate from ANSI/AWS D1.1  
**Welding Position:** 3G & 4G (See ANSI/AWS A3.0-89 Figure 14)  
**Weld Progression (Vert):** up  
**WPS No.:** 1-QC-W2  
**Test Required:** Visual plus one root bend and one face bend. Radiography may be used in lieu of bend tests.

## LIMITS OF WELDER QUALIFICATION

**Code:** ANSI/AWS D1.1  
**Weld Process:** SMAW  
**Base Material:** Prequalified steels from ANSI/AWS D1.1  
**Filler Metal:** Group F4 and lower  
**Thickness:** Groove: 1/8" thru 3/4"  
**Fillet Weld Size:** All  
**Positions:** All  
**Weld Progression:** Vertical, up  
**Backing:** Required for full penetration, single groove welds  
**Pipe/ tubing Dia.:** Over 24"  
**Material Form:** Plate, pipe, shapes, strip, tubing as listed in ANSI/AWS D1.1

SI-5

WELDER, WELDING OPERATOR, OR TACK WELDER QUALIFICATION TEST RECORD

Name of Welder: Ben Berry  
 Name: Precision Welding Identification No. 8281  
 Welding Procedure Specification No. 2 Rev. N/A Date Nov. 7, 07

Variables	Record Actual Values Used in Qualification	Qualification Range
Process/Type [Table 4.10, Item (1)]	<u>SMAW</u>	<u>ALL</u>
Electrode (single or multiple) [Table 4.10, Item (1)]	<u>1/8 E7018</u>	
Current Polarity	<u>110 A DC+</u>	
Position [Table 4.10, Item (6)]	<u>3G</u>	<u>1G, 2G, 3G</u>
Weld Progression [Table 4.10, Item (6)]	<u>UP</u>	<u>UP</u>
Backing (YES or NO) [Table 4.10 Item (7)]	<u>YES</u>	<u>YES</u>
Material/Spec. Base Metal	<u>Group 1 to Group 1</u>	
Thickness: (Plate)		
Groove	<u>3/8 inch</u>	<u>1/8" to 3/4"</u>
Fillet	<u>N/A</u>	<u>UNLIMITED</u>
Thickness: (Pipe/Tube)		
Groove	<u>N/A</u>	<u>1/8" to 3/4"</u>
Fillet	<u>N/A</u>	<u>UNLIMITED</u>
Diameter: (Pipe) PJP		
Groove	<u>N/A</u>	<u>1/8" to 3/4 OVER 24" DIA.</u>
Fillet	<u>N/A</u>	<u>OVER 24" DIA.</u>
Filler Metal [Table 4.10, Item (3)]		
Spec. No.	<u>A5.1</u>	
Class	<u>E7018</u>	
F-No. [Table 4.10, Item (2)]	<u>F 4</u>	<u>F4, F3, F2, F1</u>
Gas/Flux Type [Table 4.10 item (3)]	<u>N/A</u>	
Other	<u>N/A</u>	<u>N/A</u>

VISUAL INSPECTION (4.8.1)			
Acceptable		YES or NO	
Type	Result	Type	Result
Guided Bend Test Results (4.30.5)			
Fillet Test Results (4.30.2.3 and 4.30.4.1)			
Appearance	<u>N/A</u>	Fillet Size	<u>N/A</u>
Fracture Test Root Penetration	<u>N/A</u>	Macroetch	<u>N/A</u>
(Describe the location, nature, and size of any crack or tearing of the specimen.)			

Inspected by Brad Wells CWI # 00050221 Test Number N/A  
 Organization Maine Oxy Date Nov. 7, 2007

RADIOGRAPHIC TEST RESULTS (4.30.3.1)					
Film Identification Number	Results	Remarks	Film Identification Number	Results	Remarks
<u>0-1</u>	<u>Accept</u>	<u>Por, slag</u>			

Interpreted by Adam Miller Test Number \_\_\_\_\_  
 Organization OAL Date 11/8/07

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of section 4 of AWS D1.1, ( ) Structural Welding Code — Steel.

Manufacturer or Contractor \_\_\_\_\_ Authorized By \_\_\_\_\_  
 Date \_\_\_\_\_



ANNEX E

WELDER, WELDING OPERATOR, OR TACK WELDER QUALIFICATION TEST RECORD

Type of Welder Position in Welding & Fabrication  
 Name Edward E. Adams Identification No. 0102021128  
 Welding Procedure Specification No. 1 Rev. N/A Date 9-13-04

Variables	Record Actual Values Used in Qualification	Qualification Range
Process/Type [Table 4.10, Item (1)]	<u>FCM2</u>	<u>All</u>
Electrode (single or multiple) [Table 4.10, Item (8)]	<u>OM- E71T-1</u>	
Current/Polarity	<u>DC</u>	
Position [Table 4.10, Item (4)]	<u>2G</u>	<u>1G, 2G</u>
Weld Progression [Table 4.10, Item (6)]		
Backing (YES or NO) [Table 4.10, Item (7)]	<u>Yes</u>	<u>Yes</u>
Material/Spec.		
Base Metal		
Thickness: (Plate)		
Groove	<u>1"</u>	<u>unlimited</u>
Fillet	<u>N/A</u>	<u>unlimited</u>
Thickness: (Pipe/tube)		
Groove	<u>N/A</u>	<u>unlimited</u>
Fillet	<u>N/A</u>	<u>unlimited</u>
Diameter: (Pipe)		
Groove	<u>N/A</u>	
Fillet	<u>N/A</u>	
Filler Metal [Table 4.10, Item (3)]		
Spec. No.	<u>AS 20</u>	
Class	<u>E71T-1</u>	<u>FC</u>
F.No. [Table 4.10, Item (2)]	<u>FC2</u>	
Gas/Flux Type [Table 4.10, Item (3)]	<u>2% Argon 98% CO<sub>2</sub></u>	<u>N/A</u>
Other	<u>N/A</u>	

VISUAL INSPECTION (4.8.1)			
Acceptable YES or NO _____			
Guided Bend Test Results (4.30.5)			
Type	Result	Type	Result

Fillet Test Results (4.30.2.3 and 4.30.4.1)			
Appearance	Fracture Test Root Penetration	Fillet Size	Macroetch

(Describe the location, nature, and size of any crack or tearing of the specimen.)

Inspected by \_\_\_\_\_ Test Number \_\_\_\_\_  
 Organization \_\_\_\_\_ Date \_\_\_\_\_

RADIOGRAPHIC TEST RESULTS (4.30.3.1)					
Film Identification Number	Results	Remarks	Film Identification Number	Results	Remarks
<u>Edward</u>	<u>Acceptable</u>				

Interpreted by David [Signature] Test Number \_\_\_\_\_  
 Organization DAL Date 5/5/04

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of section 4 of AWS D1.1, (\_\_\_\_\_) Structural Welding Code—Steel.

Manufacturer or Contractor \_\_\_\_\_ Authorized By \_\_\_\_\_  
 Form E-4 Date \_\_\_\_\_

AWS D1.1:2000

WELDING PROCEDURE SPECIFICATION (WPS) Yes   
 PREQUALIFIED  QUALIFIED BY TESTING  
 OF PROCEDURE QUALIFICATION RECORDS (PQR) Yes

Edward P. Nadeau  
 Company Name Precision Fabrication  
 Welding Process(es) FCAW  
 Supporting PQR No.(s) 176-0101 Rev 1

Identification # 1  
 Revision NA Date 4-13-04  
 Authorized by [Signature]  
 Type - Manual  Machine   
 Semi-Automatic  Automatic

JOINT DESIGN USED  
 Type:  Single  Double Weld   
 Backing: Yes  No   
 Backing Material: ASTM A300  
 Root Opening: 1/4" Root Face Dimension -  
 Groove Angle: 45° Radius (J-U) -  
 Back Gouging: Yes  No  Method -

POSITION  
 Position of Groove: 02G Fillet: -  
 Vertical Progression: Up  Down

BASE METALS  
 Material Spec. ASTM A300  
 Type or Grade -  
 Thickness: Groove 1/4" Fillet -  
 Diameter (Pipe) -

ELECTRICAL CHARACTERISTICS  
 Transfer Mode (GMAW) Short-Circuiting   
 Globular  Spray   
 Current: AC  DCEP  DCEN  Pulsed   
 Other -  
 Tungsten Electrode (GTAW)  
 Size: -  
 Type: -

FILLER METALS  
 AWS Specification AWS 5.70  
 AWS Classification E71T-1

TECHNIQUE  
 Stringer or Weave Bead: Stringer / Weave Root  
 Multi-pass or Single Pass (per side) Multi Pass  
 Number of Electrodes One  
 Electrode Spacing Longitudinal -  
 Lateral -  
 Angle -

SHIELDING  
 Flux - Gas Argon / CO2  
 Composition 75% - 25%  
 Electrode-Flux (Class) - Flow Rate 35-100 CFM  
 Gas Cup Size 1/8"

Contact Tube to Work Distance 3/4"  
 Peening None  
 Interpass Cleaning: None with a brush  
Check for Hammer, Cracks or Spatter  
 POSTWELD HEAT TREATMENT

PREHEAT  
 Preheat Temp., Min PER AWS TABLE 3.2 (D1.1)  
 Interpass Temp., Min - Max -

WELDING PROCEDURE								
Pass or Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed	Joint Details
		Class	Diam.	Type & Polarity	Amps or Wire Feed Speed			
1-13	FCAW	E71T-1	0.045	Vertical DCEP	Variable 200 AMP	26.5		

Form E-1 (Front)

# 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

## INSPECTION REPORT

PAGE 1 OF 1

CUSTOMER'S NAME: **PRECISION WELDING & FABRICATION**

P.O. NO.:

RADIOGRAPHY REPORT NO.: **QAL-04-280**

PROCEDURE NO.: **0913**

QUANTITY: **1**

PART NO.: **1" WELDER TEST PLATE**

JOB NO.:

SOURCE: TYPE: **Iridium 192** SIZE: **.118 X .132**

CURIES: **24.9** KVI: MA: **SPD: 18"**

FILM: TYPE **II** SPEED: **100**

SINGLE  FRONT   
 DOUBLE  BACK

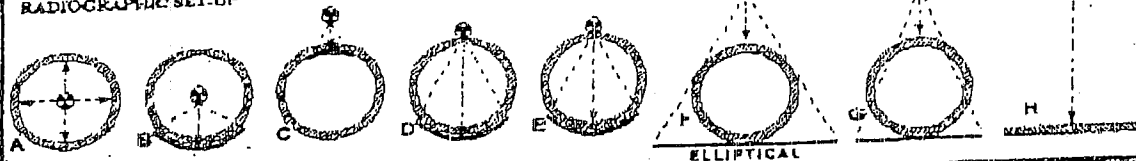
WIRE: SIZE **ASTM "B" WIRE** GROUP: **I**

SENSITIVITY: **.025** SHD: **N/A** SOURCE SIDE

MATERIAL TYPE **C/S** THICKNESS: **1"**

ACCEPTANCE STANDARD: **AWS D1.1**

RADIOGRAPHIC SET-UP



SERIAL NUMBER	VIEW NUMBER	CONTRAST OF FOOT	EXPOSURE	REMARKS	EXPOSURE NUMBER	EXPOSURE TIME	EXPOSURE LOCATION	EXPOSURE DATE	EXPOSURE TIME
EDWARD	0-1	9	✓						

**REMARKS**

METHOD(S), PROCESS(ES), PROCEDURE(S) MERCURY FREE

- |   |
|---|
| <b>DEFINITIONS:</b><br>1. Crack<br>2. Porosity<br>3. Incomplete Fusion<br>4. Incomplete penetration<br>5. Slag<br>6. Inclusion<br>7. Gas Hole<br>8. Shrink<br>9. No Apparent Defect<br>10. Film Artifact<br>11. RFLs<br>12. Blurred<br>13. Undercut<br>14. Void<br>15. Internal discontinuity |
|---|

SIGNATURE: **D. Pratt #2568772**   
 DATE: **05/05/2004** LEVEL: **II**

Name of Welder Josh Bragdon  
 Name Precision Welding Identification No. 0000-2257  
 Welding Procedure Specification No. 1 Rev. N/A Date Nov. 07, 2007

Variables	Record Actual Values Used in Qualification	Qualification Range
Process/Type [Table 4.10, Item (1)]	<u>FGAW</u>	
Electrode (single or multiple) [Table 4.10, Item (5)]	<u>.045 E71T1-M-H8</u>	<u>ALL</u>
Current Polarity	<u>215 A DC positive</u>	
Position [Table 4.10, Item (6)]	<u>1G</u>	<u>1G</u>
Weld Progression [Table 4.10, Item (6)]		<u>F</u>
Backing (YES or NO) [Table 4.10 Item (7)]	<u>YES</u>	<u>YES</u>
Material/Spec.	<u>Group 1 to Group 1</u>	
Base Metal		
Thickness: (Plate)	<u>1"</u>	<u>UNLIMITED</u>
Groove	<u>N/A</u>	<u>UNLIMITED</u>
Fillet		
Thickness: (Pipe/Tube)	<u>N/A</u>	<u>UNLIMITED</u>
Groove	<u>N/A</u>	<u>UNLIMITED</u>
Fillet		
Diameter: (Pipe)	<u>N/A</u>	<u>OVER 24" DIA.</u>
Groove	<u>N/A</u>	<u>OVER 24" DIA.</u>
Fillet		
Filler Metal [Table 4.10, Item (3)]		
Spec. No.	<u>A5.20</u>	
Class	<u>E71T1-1M-H8</u>	
F-No. [Table 4.10, Item (2)]	<u>F6</u>	<u>F6</u>
Gas/Flux Type [Table 4.10 item (3)]	<u>N/A</u>	
Other	<u>N/A</u>	<u>N/A</u>

VISUAL INSPECTION (4.8.1)			
Acceptable YES or NO		<u>YES</u>	
Guided Bend Test Results (4.30.5)			
Type	Result	Type	Result
	<u>N/A</u>		<u>N/A</u>
Fillet Test Results (4.30.2.3 and 4.30.4.1)			
Appearance	<u>N/A</u>	Fillet Size	<u>N/A</u>
Fracture Test Root Penetration	<u>N/A</u>	Macroetch	<u>N/A</u>
(Describe the location, nature, and size of any crack or tearing of the specimen.)			

Inspected by Brad Wells CWI # 00050221 Test Number N/A  
 Organization Maine Oxy Date November 7, 2007

RADIOGRAPHIC TEST RESULTS (4.30.3.1)					
Film Identification Number	Results	Remarks	Film Identification Number	Results	Remarks
<u>0-1</u>	<u>Accept</u>	<u>Slag</u>			

Interpreted by Aaron Miller Test Number \_\_\_\_\_  
 Organization QAL Date 11/8/07

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of section 4 of AWS D1.1, ( ) Structural Welding Code --- Steel.

Manufacturer or Contractor \_\_\_\_\_ Authorized By \_\_\_\_\_  
 Date \_\_\_\_\_

### INSPECTION REPORT

CUSTOMER'S NAME: **PRECISION WELDING** P.O. NO.: \_\_\_\_\_ PAGE **2** OF **2**

RADIOGRAPHY REPORT NO.: **QAL-07-2139** PROCEDURE NO.: **1** QUANTITY: **3**

PART NO.: \_\_\_\_\_ JOB NO.: \_\_\_\_\_

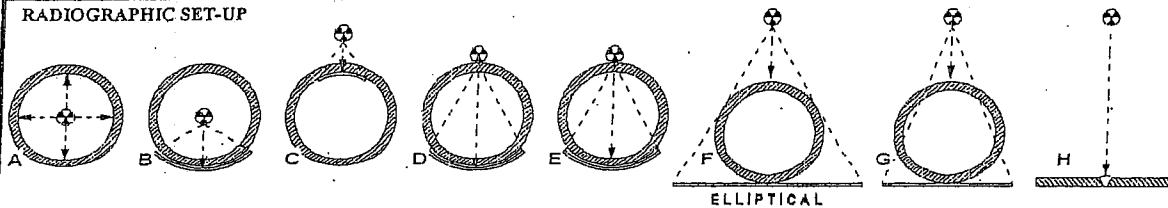
SOURCE: TYPE **IR-192** SIZE: **.118"** CURIES: **14.1** KV: \_\_\_\_\_ MA: \_\_\_\_\_ SFD: **16"**

FILM: TYPE **II** SPEED: **100** SINGLE  FRONT   
 DOUBLE  SIZE: **4 1/2 X 10** SCREENS: **.010"** BACK

IQI: SIZE **B WIRE** GROUP: **1** SENSITIVITY: **.010"** SHIM: \_\_\_\_\_ FILM SIDE   
 SOURCE SIDE

MATERIAL: TYPE **CS/SS** THICKNESS: **1.250"-3/8"** ACCEPTANCE STANDARD: **AWSD1.1**

**RADIOGRAPHIC SET-UP**



OTHER

SERIAL NUMBER	VIEW NUMBER	CONDITION OF PART <small>(See Definitions)</small>	ACCEPT	REJECT	SERIAL NUMBER	VIEW NUMBER	CONDITION OF PART <small>(See Definitions)</small>	ACCEPT	REJECT
J. Lunt									
1" IG	0-1	5		✓					
Bragdon	0-1	5	✓						
1"									
3G									
Berry	0-1	2,5	✓						
3/8"									
3G									

**REMARKS**

**DEFINITIONS:**

- |                           |                        |                        |
|---------------------------|------------------------|------------------------|
| 1. Crack                  | 6. Inclusions          | 11. Hi/Lo              |
| 2. Porosity               | 7. Gas Holes           | 12. Surface            |
| 3. Incomplete Fusion      | 8. Shrink              | 13. Undercut           |
| 4. Incomplete penetration | 9. No Apparent Defects | 14. Void               |
| 5. Slag                   | 10. Film Artifacts     | 15. Internal concavity |

SIGNATURE: **Aaron Miller**

DATE: **11/08/2007**

LEVEL: **II**

WELDING PROCEDURE SPECIFICATION (WPS) Yes   
 PREQUALIFIED  QUALIFIED BY TESTING  
 or PROCEDURE QUALIFICATION RECORDS (PQR) Yes

Ben.B

Company Name Precision Welding + Fabrication Identification # 1  
 Revision N/A Date \_\_\_\_\_ By M. Schroeder  
 Welding Process(es) FCAW Authorized by \_\_\_\_\_ Date \_\_\_\_\_  
 Supporting PQR No.(s) PREQUALIFIED Type—Manual  Semi-Automatic   
 Machine  Automatic

JOINT DESIGN USED  
 Type:  
 Single  Double Weld   
 Backing: Yes  No   
 Backing Material: ASTM A36  
 Root Opening 1/4" Root Face Dimension \_\_\_\_\_  
 Groove Angle: 45° Radius (J-U) \_\_\_\_\_  
 Back Gouging: Yes  No  Method \_\_\_\_\_

POSITION  
 Position of Groove: 2G Fillet: \_\_\_\_\_  
 Vertical Progression: Up  Down

BASE METALS  
 Material Spec. ASTM A36  
 Type or Grade \_\_\_\_\_  
 Thickness: Groove 1" Fillet \_\_\_\_\_  
 Diameter (Pipe) \_\_\_\_\_

ELECTRICAL CHARACTERISTICS  
 Transfer Mode (GMAW) Short-Circuiting   
 Globular  Spray   
 Current: AC  DCEP  DCEN  Pulsed   
 Other \_\_\_\_\_  
 Tungsten Electrode (GTAW)  
 Size: \_\_\_\_\_  
 Type: \_\_\_\_\_

FILLER METALS  
 AWS Specification AWS 5.20  
 AWS Classification E71T-1

TECHNIQUE  
 Stringer or Weave Bead: STRINGER / WEAVE  
 Multi-pass or Single Pass (per side) MULTIPASS  
 Number of Electrodes ONE  
 Electrode Spacing Longitudinal \_\_\_\_\_  
 Lateral \_\_\_\_\_  
 Angle \_\_\_\_\_

SHIELDING  
 Flux \_\_\_\_\_ Gas Argon / CO2  
 Composition 75% - 25%  
 Electrode-Flux (Class) \_\_\_\_\_ Flow Rate 35-40 CFH  
 Gas Cup Size 5/8"

Contact Tube to Work Distance 3/4"  
 Peening NONE  
 Interpass Cleaning: hard wire brush, chipping hammer, grinder on spatter  
 POSTWELD HEAT TREATMENT

PREHEAT  
 Preheat Temp., Min PER AWS TABLE 32 (D1.1)  
 Interpass Temp., Min \_\_\_\_\_ Max \_\_\_\_\_

WELDING PROCEDURE								
Pass or Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed	Joint Details
		Class	Diam.	Type & Polarity	Amps or Wire Feed Speed			
1-13	FCAW	E71T-1	.045	Verti Core DC+	200 AMPS.	26.5		

Form E-1 (Front)

# Quality Assurance Labs Inc.

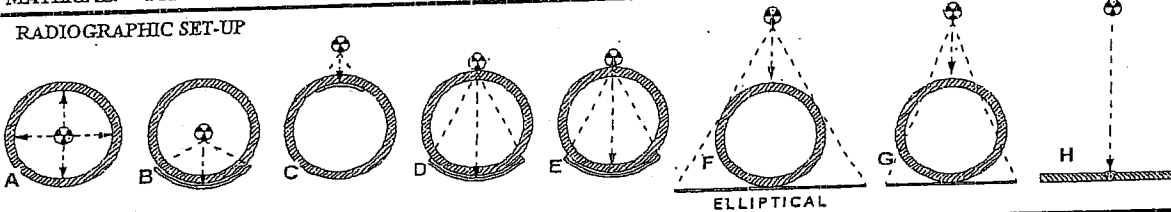
NON-DESTRUCTIVE TESTING AND INSPECTION SERVICES

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

## INSPECTION REPORT

CUSTOMER'S NAME: <b>PRECISION WELDING</b>		P.O. NO.: <b>N/A</b>	PAGE <b>1</b> OF <b>1</b>	
RADIOGRAPHY REPORT NO.: <b>QAL-02-843</b>		PROCEDURE NO.: <b>0913</b>	QUANTITY: <b>1</b>	
PART NO.: <b>TEST COUPON</b>		JOB NO.: <b>N/A</b>		
SOURCE: TYPE <b>Iridium 192</b>	SIZE: <b>.107 X .118</b>	CURIES: <b>30</b>	KV: <b>N/A</b>	MA: <b>N/A</b> SFD: <b>20"</b>
FILM: TYPE <b>II</b>	SPEED: <b>100</b>	SINGLE <input checked="" type="checkbox"/>	DOUBLE <input type="checkbox"/>	SIZE: <b>4 1/2 x 10</b> SCREENS: <b>0.010"</b>
IQL: SIZE <b>ASTM "B" WIRE</b>		GROUP: <b>I</b>	SENSITIVITY: <b>.020</b>	SHIM: <b>N/A</b>
MATERIAL: TYPE <b>C/S</b>		THICKNESS: <b>1"</b>	ACCEPTANCE STANDARD: <b>ASME SECTION IX</b>	

**RADIOGRAPHIC SET-UP**



OTHER

SERIAL NUMBER	VIEW NUMBER	CONDITION OF PAIR (See Definitions)	ACCEPT	REJECT	SERIAL NUMBER	VIEW NUMBER	CONDITION OF PAIR (See Definitions)	ACCEPT	REJECT
BEN B.	0-1	2,5	✓						
FCAW									

**REMARKS**

**DEFINITIONS:**

- |                           |                        |                        |
|---------------------------|------------------------|------------------------|
| 1. Crack                  | 6. Inclusions          | 11. HI/Lo              |
| 2. Porosity               | 7. Gas Holes           | 12. Surface            |
| 3. Incomplete Fusion      | 8. Shrink              | 13. Undercut           |
| 4. Incomplete penetration | 9. No Apparent Defects | 14. Void               |
| 5. Slag                   | 10. Film Artifacts     | 15. Internal concavity |

SIGNATURE: **R. Russell #2687716** *Ryan Russell*

DATE: **12/09/2002**    M / D / Y    LEVEL: **II**

Name of Welder Jeff Lunt  
 Name Precision Welding Identification No. 2258  
 Welding Procedure Specification No. 1 Rev. N/A Date Jan 15, 2008

Variables	Record Actual Values Used in Qualification	Qualification Range
Process/Type [Table 4.10; Item (1)]	<u>FCAW</u>	<u>ALL</u>
Electrode (single or multiple) [Table 4.10, Item (2)]	<u>E 045 E71T1-M-H8</u>	
Current Polarity	<u>215 A DC Pos</u>	
Position [Table 4.10, Item (6)]	<u>3G</u>	<u>1G, 2G, 3G</u>
Weld Progression [Table 4.10, Item (6)]	<u>V-up</u>	<u>V-up</u>
Backing (YES or NO) [Table 4.10 Item (7)]	<u>YES</u>	<u>YES</u>
Material/Spec.	<u>Group 1 to Group 1</u>	
Base Metal		
Thickness: (Plate)		
Groove	<u>1 inch</u>	<u>UNLIMITED</u>
Fillet	<u>N/A</u>	<u>UNLIMITED</u>
Thickness: (Pipe/Tube)		
Groove	<u>N/A</u>	<u>UNLIMITED</u>
Fillet	<u>N/A</u>	<u>UNLIMITED</u>
Diameter :(Pipe)PJP		
Groove	<u>N/A</u>	<u>OVER 24" DIA.</u>
Fillet	<u>N/A</u>	<u>OVER 24" DIA.</u>
Filler Metal [Table 4.10, Item (3)]		
Spec. No.	<u>A5.18</u>	
Class	<u>E71T1-M-H8</u>	
F-No. [Table 4.10, Item (2)]	<u>F6</u>	<u>F6</u>
Gas/Flux Type [Table 4.10 item (3)]	<u>C-25</u>	
Other	<u>N/A</u>	<u>N/A</u>

VISUAL INSPECTION (4.8.1)			
Acceptable YES or NO		YES	
Guided Bend Test Results (4.30.5)			
Type	Result	Type	Result
Fillet Test Results (4.30.2.3 and 4.30.4.1)			
Appearance	<u>N/A</u>	Fillet Size	<u>N/A</u>
Fracture Test Root Penetration	<u>N/A</u>	Macroetch	<u>N/A</u>
(Describe the location, nature, and size of any crack or tearing of the specimen.)			

Inspected by Brad Wells CWI # 00050221 Test Number N/A  
 Organization Maine Oxy Date Jan 15, 2008

RADIOGRAPHIC TEST RESULTS (4.30.3.1)					
Film Identification Number	Results	Remarks	Film Identification Number	Results	Remarks
<u>0-1</u>	<u>N.A.B</u>	<u>ACCEPT</u>			

Interpreted by John Weese Test Number 08-0082  
 Organization Q.A.L Date 1-16-08

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of section 4 of AWS D1.1, ( ) Structural Welding Code — Steel.

Manufacturer or Contractor \_\_\_\_\_ Authorized By \_\_\_\_\_  
 Date \_\_\_\_\_



Name of Welder Solomon Gay  
 Name Precision Welding Identification No. 9877  
 Welding Procedure Specification No. 1 Rev. N/A Date Jan 15, 2008

Variables	Record Actual Values		Qualification Range
	Used in Qualification		
Process/Type [Table 4.10, Item (1)]	FCAW		
Electrode (single or multiple) [Table 4.10, Item (5)]	E045.E71T1-M-H8		ALL
Current Polarity	215 A DC Pos		
Position [Table 4.10, Item (6)]	3G		1G, 2G, 3G
Weld Progression [Table 4.10, Item (6)]	V-up		V-up
Backing (YES or NO) [Table 4.10 Item (7)]	YES		YES
Material/Spec.	Group 1 to Group 1		
Base Metal			
Thickness: (Plate)			
Groove	1 inch		UNLIMITED
Fillet	N/A		UNLIMITED
Thickness: (Pipe/Tube)			
Groove	N/A		UNLIMITED
Fillet	N/A		UNLIMITED
Diameter:(Pipe)PJP			
Groove	N/A		OVER 24" DIA.
Fillet	N/A		OVER 24" DIA.
Filler Metal [Table 4.10, Item (3)]			
Spec. No.	A5.18		
Class	E71T1-M-H8		
F-No. [Table 4.10, Item (2)]	F6		F6
Gas/Flux Type [Table 4.10 item (3)]	C-25		
Other	N/A		N/A

VISUAL INSPECTION (4.8.1)			
Acceptable YES or NO		YES	
Guided Bend Test Results (4.30.5)			
Type	Result	Type	Result
Fillet Test Results (4.30.2.3 and 4.30.4.1)			
Appearance	N/A	Fillet Size	N/A
Fracture Test Root Penetration	N/A	Macroetch	N/A
(Describe the location, nature, and size of any crack or tearing of the specimen.)			



Inspected by Brad Wells CWI # 00050221 Test Number N/A  
 Organization Maine Oxy Date Jan 15, 2008

RADIOGRAPHIC TEST RESULTS (4.30.3.1)					
Film Identification Number	Results	Remarks	Film Identification Number	Results	Remarks
<u>0-1</u>	<u>N.A.D</u>	<u>Accept</u>			

Interpreted by John Weese Test Number 08-0082  
 Organization O.A.L Date 1-16-08

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of section 4 of AWS D1.1, ( ) Structural Welding Code --- Steel.

Manufacturer or Contractor \_\_\_\_\_ Authorized By \_\_\_\_\_  
 Date \_\_\_\_\_

# Quality Assurance Labs Inc.

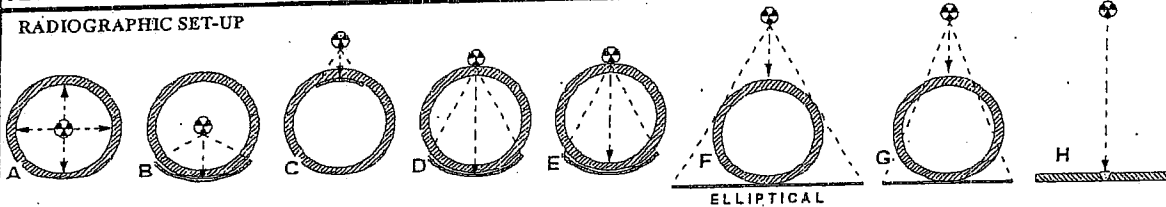
NON-DESTRUCTIVE TESTING AND INSPECTION SERVICES

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

## INSPECTION REPORT

CUSTOMER'S NAME: PRECISION WELDING	P.O. NO.:	PAGE 1 OF 1
RADIOGRAPHY REPORT NO.: QAL-08-0082	PROCEDURE NO.: AWS D1.1	QUANTITY: 2
PART NO.: SEE BELOW	JOB NO.: 2258/ 9877	
SOURCE: TYPE Iridium 192      SIZE: .118	CURIES: 75      KV:      MA:      SFD: 12"	
FILM: TYPE II      SPEED: 100	SINGLE <input checked="" type="checkbox"/> DOUBLE <input type="checkbox"/>	FRONT <input checked="" type="checkbox"/> BACK <input checked="" type="checkbox"/>
	SIZE: 4 1/2 x 10      SCREENS: 0.005"	FILM SIDE <input type="checkbox"/> SOURCE SIDE <input checked="" type="checkbox"/>
IQI: SIZE B      GROUP: 1	SENSITIVITY: .025	SHIM:      SOURCE SIDE <input checked="" type="checkbox"/>
MATERIAL: TYPE CS/SS      THICKNESS: 1" +1/4" BB	ACCEPTANCE STANDARD: AWS D1.1	

**RADIOGRAPHIC SET-UP**



OTHER

SERIAL NUMBER	VIEW NUMBER	CONDITION OF PART (See Definitions)	ACCEPT	REJECT	SERIAL NUMBER	VIEW NUMBER	CONDITION OF PART (See Definitions)	ACCEPT	REJECT
JEFF					soloman				
LUNT	0-1	9	✓		gay	0-1	9	✓	
2258					9877				

**REMARKS**

DEFINITIONS:

1. Crack	6. Inclusions	11. Hi/Lo
2. Porosity	7. Gas Holes	12. Surface
3. Incomplete Fusion	8. Shrink	13. Undercut
4. Incomplete penetration	9. No Apparent Defects	14. Void
5. Slag	10. Film Artifacts	15. Internal concavity

SIGNATURE: John Weese *John Weese*  
DATE: 01/16/2008      M / D / Y      LEVEL: II

72

**WELDING PROCEDURE SPECIFICATION (WPS) Yes**   
**PREQUALIFIED  QUALIFIED BY TESTING**  
**or PROCEDURE QUALIFICATION RECORDS (PQR) Yes**

Company Name Precision Welding & Fabrication Inc.  
 Welding Process(es) FCAW  
 Supporting PQR No.(s) Prequalified

Identification # 1  
 Revision 1/A Date \_\_\_\_\_ By S. Goff  
 Authorized by \_\_\_\_\_ Date \_\_\_\_\_  
 Type—Manual  Semi-Automatic   
 Machine  Automatic

**JOINT DESIGN USED**

Type:  
 Single  Double Weld   
 Backing: Yes  No   
 Backing Material: \_\_\_\_\_  
 Root Opening 1/4" Root Face Dimension \_\_\_\_\_  
 Groove Angle: 45° Radius (J-U) \_\_\_\_\_  
 Back Gouging: Yes  No  Method \_\_\_\_\_

**POSITION**  
 Position of Groove: FG-2G-3G Fillet: \_\_\_\_\_  
 Vertical Progression: Up  Down

**ELECTRICAL CHARACTERISTICS**

Transfer Mode (GMAW) Short-Circuiting   
 Globular  Spray   
 Current: AC  DCEP  DCEN  Pulsed   
 Other \_\_\_\_\_  
 Tungsten Electrode (GTAW)  
 Size: \_\_\_\_\_  
 Type: \_\_\_\_\_

**BASE METALS**

Material Spec. ASTM A36  
 Type or Grade \_\_\_\_\_  
 Thickness: Groove 1" Fillet \_\_\_\_\_  
 Diameter (Pipe) \_\_\_\_\_

**TECHNIQUE**

Stringer or Weave Bead: Stringer / Weave Root  
 Multi-pass or Single Pass (per side) MULTI PASS  
 Number of Electrodes one  
 Electrode Spacing Longitudinal \_\_\_\_\_  
 Lateral \_\_\_\_\_  
 Angle \_\_\_\_\_

**FILLER METALS**

AWS Specification AWS E60  
 AWS Classification E71T-1

**SHIELDING**

Flux \_\_\_\_\_ Gas Argon / CO2  
 Composition 75% - 25%  
 Electrode-Flux (Class) \_\_\_\_\_ Flow Rate 35-40 CFH  
 Gas Cup Size 5/8"

Contact Tube to Work Distance 3/4"  
 Peening None  
 Interpass Cleaning: hand wire brush  
chipping hammer, removal of spatter

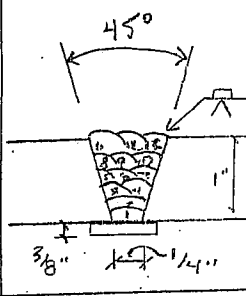
**PREHEAT**

Preheat Temp., Min per AWS TABLE 3.2 (D1.1)  
 Interpass Temp., Min \_\_\_\_\_ Max \_\_\_\_\_

**POSTWELD HEAT TREATMENT**

Temp. \_\_\_\_\_  
 Time \_\_\_\_\_

**WELDING PROCEDURE**

Pass or Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed	Joint Details
		Class	Diam.	Type & Polarity	Amps or Wire Feed Speed			
1-13	FCAW	E71T-1	.045	Vertical DCEP	200amps	26.5		

**WELDING PROCEDURE SPECIFICATION (WPS) Yes**   
**PREQUALIFIED  QUALIFIED BY TESTING \_\_\_\_\_**  
**or PROCEDURE QUALIFICATION RECORDS (PQR) Yes**

Company Name Precision Welding & Fabrication, Inc.  
 Welding Process(es) SMAW  
 Supporting PQR No.(s) Prequalified

Identification # 2  
 Revision N/A Date \_\_\_\_\_ By S. GAY  
 Authorized by \_\_\_\_\_ Date \_\_\_\_\_  
 Type—Manual  Semi-Automatic   
 Machine  Automatic

**JOINT DESIGN USED**

Type:  
 Single  Double Weld   
 Backing: Yes  No

Backling Material:  
 Root Opening 1/4" Root Face Dimension \_\_\_\_\_  
 Groove Angle: 45° Radius (J-U) \_\_\_\_\_  
 Back Gouging: Yes  No  Method \_\_\_\_\_

**BASE METALS**

Material Spec. ASTM A36  
 Type or Grade \_\_\_\_\_  
 Thickness: Groove 3/8" Fillet \_\_\_\_\_  
 Diameter (Pipe) \_\_\_\_\_

**FILLER METALS**

AWS Specification AWS A5.1  
 AWS Classification E7018

**SHIELDING**

Flux \_\_\_\_\_ Gas \_\_\_\_\_  
 Composition \_\_\_\_\_  
 Electrode-Flux (Class) \_\_\_\_\_ Flow Rate \_\_\_\_\_  
 Gas Cup Size \_\_\_\_\_

**PREHEAT**

Preheat Temp., Min PER AWS TABLE 3.2 (D1.1)  
 Interpass Temp., Min \_\_\_\_\_ Max \_\_\_\_\_

**POSITION**

Position of Groove: 3G Fillet: \_\_\_\_\_  
 Vertical Progression: Up  Down

**ELECTRICAL CHARACTERISTICS**

Transfer Mode (GMAW) Short-Circuiting   
 Globular  Spray   
 Current: AC  DCEP  DCEN  Pulsed   
 Other \_\_\_\_\_  
 Tungsten Electrode (GTAW)  
 Size: \_\_\_\_\_  
 Type: \_\_\_\_\_

**TECHNIQUE**

Stringer or Weave Bead: Stringer  
 Multi-pass or Single Pass (per side) MULTI PASS  
 Number of Electrodes \_\_\_\_\_  
 Electrode Spacing Longitudinal \_\_\_\_\_  
 Lateral \_\_\_\_\_  
 Angle \_\_\_\_\_

Contact Tube to Work Distance \_\_\_\_\_  
 Peening \_\_\_\_\_  
 Interpass Cleaning: \_\_\_\_\_

**POSTWELD HEAT TREATMENT**

Temp. \_\_\_\_\_  
 Time \_\_\_\_\_

**WELDING PROCEDURE**

Pass or Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed	Joint Details
		Class	Diam.	Type & Polarity	Amps or Wire Feed Speed			
all			3/32"		75-120		manual	
			or 1/8"		110-180		manual	

WELDING PROCEDURE SPECIFICATION (WPS) Yes   
 PREQUALIFIED  QUALIFIED BY TESTING \_\_\_\_\_  
 or PROCEDURE QUALIFICATION RECORDS (PQR) Yes

Company Name PRECISION WELDING  
 Welding Process(es) FCAW  
 Supporting PQR No.(s) BTC-P4-6F

Identification # Precision 702  
 Revision 1 Date 12/5/07 By BWells  
 Authorized by \_\_\_\_\_ Date \_\_\_\_\_  
 Type—Manual  Semi-Automatic   
 Machine  Automatic

Prequalified

JOINT DESIGN USED  
 Type: 6 GROOVES: PARTIAL  
 Single  Double Weld   
 Backing: Yes  No   
 Backing Material: \_\_\_\_\_  
 Root Opening 0 Root Face Dimension 1/8 min  
 Groove Angle: 45° Radius (J-U) \_\_\_\_\_  
 Back Gouging: Yes  No  Method \_\_\_\_\_

POSITION  
 Position of Groove: 1G Fillet: \_\_\_\_\_  
 Vertical Progression: Up  Down

BASE METALS  
 Material Spec.: GROUP I to GROUP II  
 Type or Grade A36 to A992  
 Thickness: Groove 3/16 Fillet \_\_\_\_\_  
 Diameter (Pipe) \_\_\_\_\_

ELECTRICAL CHARACTERISTICS  
 Transfer Mode (GMAW) \_\_\_\_\_ Short-Circuiting   
 Globular  Spray   
 Current: AC  DCEP  DCEN  Pulsed   
 Other \_\_\_\_\_  
 Tungsten Electrode (GTAW)  
 Size: \_\_\_\_\_  
 Type: \_\_\_\_\_

FILLER METALS  
 AWS Specification: A5.18  
 AWS Classification E71T-1C, 1M, 9C, 9M

TECHNIQUE  
 Stringer or Weave Bead: STRINGER  
 Multi-pass or Single Pass (per side) SINGLE  
 Number of Electrodes ONE  
 Electrode Spacing Longitudinal \_\_\_\_\_  
 Lateral \_\_\_\_\_  
 Angle \_\_\_\_\_

SHIELDING  
 Flux \_\_\_\_\_ Gas ARGON CO2  
 Composition 75%-25%  
 Electrode-Flux (Class) \_\_\_\_\_ Flow Rate 40 cfm  
 Gas Cup Size 3/8

Contact Tube to Work Distance 3/4"  
 Peening NONE  
 Interpass Cleaning: slag hammer / wire brush

PREHEAT  
 Preheat Temp., Min TABLE 3.2-D1.1 PER AWS  
 Interpass Temp., Min SAME Max \_\_\_\_\_

POSTWELD HEAT TREATMENT  
 Temp. \_\_\_\_\_  
 Time \_\_\_\_\_

WELDING PROCEDURE

Pass or Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed	Joint Details
		Class	Diam.	Type & Polarity	Amps or Wire Feed Speed			
1	FCAW	E71T-1C 1M, 9C 9M	.045	DC+	550 IPM ± 10% (495-605)	29 ± 7% (27-31)	10 IPM ± 25% (7.5-13.5)	

**WELDING PROCEDURE SPECIFICATION (WPS) Yes**   
**PREQUALIFIED  QUALIFIED BY TESTING \_\_\_\_\_**  
**or PROCEDURE QUALIFICATION RECORDS (PQR) Yes**

Company Name PRECISION WELDING  
 Welding Process(es) FCAW  
 Supporting PQR No.(s) Prequalified - Fillet

Identification # 703  
 Revision 1 Date 12/5/07 By BWells  
 Authorized by \_\_\_\_\_ Date \_\_\_\_\_  
 Type—Manual  Semi-Automatic   
 Machine  Automatic

**JOINT DESIGN USED**

Type: Fillet - Skewed  
 Single  Double Weld   
 Backing: Yes  No   
 Backing Material: \_\_\_\_\_  
 Root Opening \_\_\_\_\_ Root Face Dimension \_\_\_\_\_  
 Groove Angle: \_\_\_\_\_ Radius (J-U) \_\_\_\_\_  
 Back Gouging: Yes  No  Method \_\_\_\_\_

**POSITION**

Position of Groove: \_\_\_\_\_ Fillet: IF  
 Vertical Progression: Up  Down

**BASE METALS**

Material Spec. Group I to Group II  
 Type or Grade A36 to A992  
 Thickness: Groove \_\_\_\_\_ Fillet 5/16 - 9/16  
 Diameter (Pipe) \_\_\_\_\_

**ELECTRICAL CHARACTERISTICS**

Transfer Mode (GMAW) Short-Circuiting   
 Globular  Spray   
 Current: AC  DCEP  DCEN  Pulsed   
 Other \_\_\_\_\_  
 Tungsten Electrode (GTAW)  
 Size: \_\_\_\_\_  
 Type: \_\_\_\_\_

**FILLER METALS**

AWS Specification A5.18  
 AWS Classification E71T-1C, 1M, 9C, 9M

**TECHNIQUE**

Stringer or Weave Bead: Stringer  
 Multi-pass or Single Pass (per side) Stipple / Multi  
 Number of Electrodes One  
 Electrode Spacing Longitudinal \_\_\_\_\_  
 Lateral \_\_\_\_\_  
 Angle \_\_\_\_\_

**SHIELDING**

Flux \_\_\_\_\_ Gas Argon-CO<sub>2</sub>  
 Composition 75%-25%  
 Electrode-Flux (Class) \_\_\_\_\_ Flow Rate 40 cph  
 Gas Cup Size 5/8

Contact Tube to Work Distance 3/4 - 1"  
 Peening None  
 Interpass Cleaning: chipping hammer - wire brush

**PREHEAT**

Preheat Temp., Min Per Detl. Table 3.2 - AWS  
 Interpass Temp., Min 9 AME Max \_\_\_\_\_

**POSTWELD HEAT TREATMENT**

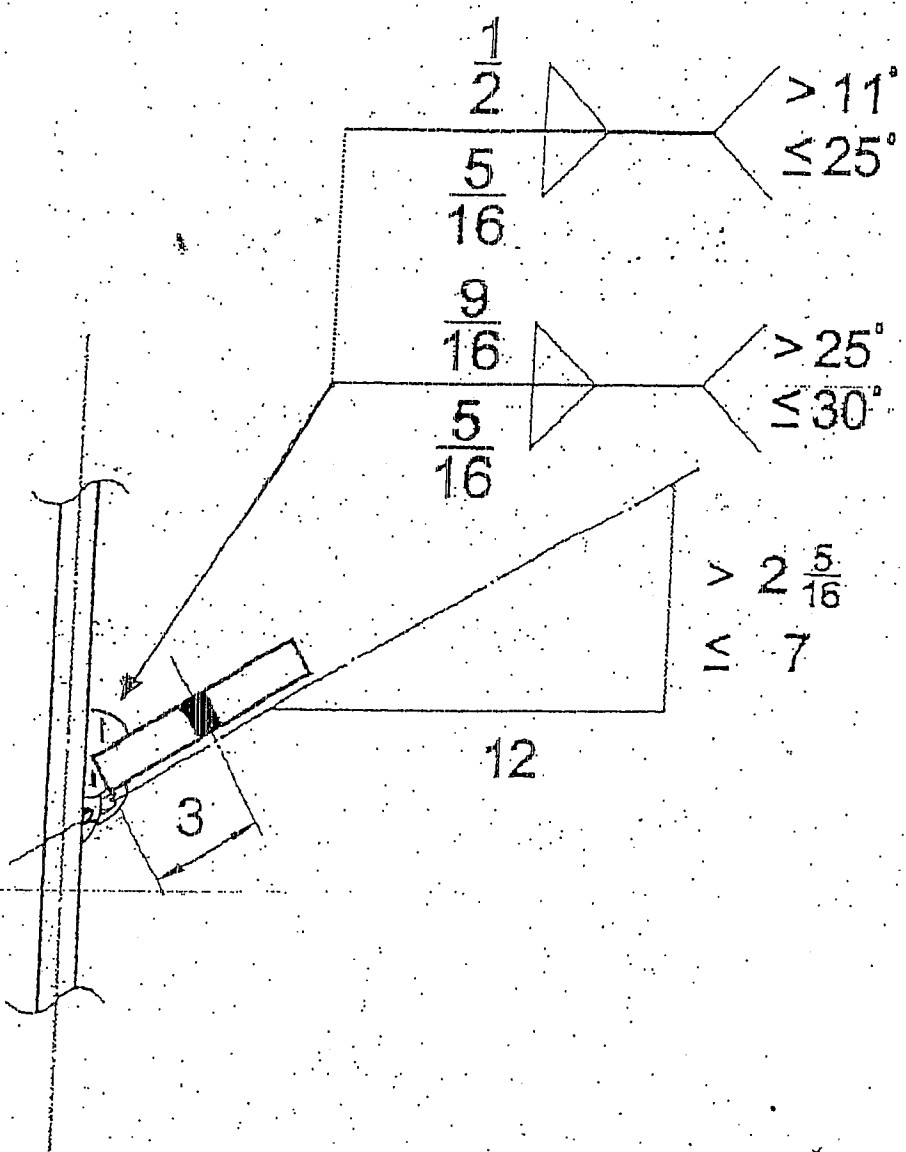
Temp. \_\_\_\_\_  
 Time \_\_\_\_\_

**WELDING PROCEDURE**

Pass or Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed	Joint Details
		Class	Diam.	Type & Polarity	Amps or Wire Feed Speed			
1-3	FCAW	E71T-1C 1M, 9C 9M	.045	DCEP	550 IPM ± 10% (495-605)	29 ± 7% (27-31)	10 IPM ± 25% (7.5-13.5)	SEE ATTACHED SHEET

1/FC

$$\leq 2 \frac{5}{16}$$



(b)

perpendicular

For  $\theta = 45^\circ$  from Perpendicular

**WELDING PROCEDURE SPECIFICATION (WPS) Yes**   
**PREQUALIFIED  QUALIFIED BY TESTING**  
**or PROCEDURE QUALIFICATION RECORDS (PQR) Yes**

Company Name PRECISION WELDING  
 Welding Process(es) FCAW  
 Supporting PQR No.(s) PREQUALIFIED

Identification # 704  
 Revision 1 Date 12/5/07 By B. Della  
 Authorized by \_\_\_\_\_ Date: \_\_\_\_\_  
 Type—Manual  Semi-Automatic   
 Machine  Automatic

**JOINT DESIGN USED**

Type: Fillet  
 Single  Double Weld   
 Backing: Yes  No   
 Backing Material: \_\_\_\_\_  
 Root Opening \_\_\_\_\_ Root Face Dimension \_\_\_\_\_  
 Groove Angle: \_\_\_\_\_ Radius (J-U) \_\_\_\_\_  
 Back Gouging: Yes  No  Method \_\_\_\_\_

**POSITION**

Position of Groove: \_\_\_\_\_ Fillet: 2F  
 Vertical Progression: Up  Down

**ELECTRICAL CHARACTERISTICS**

Transfer Mode (GMAW) Short-Circuiting   
 Globular  Spray   
 Current: AC  DCEP  DCEN  Pulsed   
 Other \_\_\_\_\_  
 Tungsten Electrode (GTAW)  
 Size: \_\_\_\_\_  
 Type: \_\_\_\_\_

**BASE METALS**

Material Spec. ASTM A36  
 Type or Grade \_\_\_\_\_  
 Thickness: Groove \_\_\_\_\_ Fillet ± 1/8  
 Diameter (Pipe) \_\_\_\_\_

**TECHNIQUE**

Stringer or Weave Bead: STRINGER  
 Multi-pass or Single Pass (per side) SINGLE  
 Number of Electrodes ONE  
 Electrode Spacing Longitudinal \_\_\_\_\_  
 Lateral \_\_\_\_\_  
 Angle \_\_\_\_\_

**FILLER METALS**

AWS Specification A5.18  
 AWS Classification E71T1C, 1m, 9C, 9m

Contact Tube to Work Distance 3/4" - 1"  
 Peening NONE  
 Interpass Cleaning: chipping hammer - wire brush

**SHIELDING**

Flux \_\_\_\_\_ Gas Argon/CO<sub>2</sub>  
 Composition 75% 25%  
 Electrode-Flux (Class) \_\_\_\_\_ Flow Rate 40 cph  
 Gas Cup Size 5/8

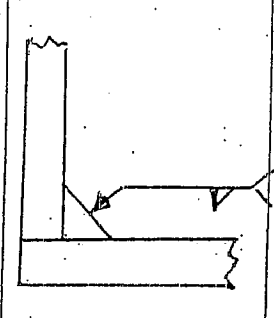
**POSTWELD HEAT TREATMENT**

Temp. \_\_\_\_\_  
 Time \_\_\_\_\_

**PREHEAT**

Preheat Temp., Min Per Table 3.2 of D1.1 - AWS  
 Interpass Temp., Min same Max \_\_\_\_\_

**WELDING PROCEDURE**

Pass or Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed	Joint Details
		Class	Diam.	Type & Polarity	Amps or Wire Feed Speed			
1	FCAW	E71T1C 1m, 9C 9m	.045	DC+	300 IPM ± 10% (270-330)	26 ± 7% (24.5-28)	8 IPM ± 25% (6-10)	



**WELDING PROCEDURE SPECIFICATION (WPS) Yes**   
**PREQUALIFIED  QUALIFIED BY TESTING \_\_\_\_\_**  
**or PROCEDURE QUALIFICATION RECORDS (PQR) Yes**

Company Name PRECISION WELDING  
 Welding Process(es) FCAW  
 Supporting PQR No.(s) PREQUALIFIED

Identification # Precision 705  
 Revision 1 Date 12/5/07 By BL/LLS  
 Authorized by \_\_\_\_\_ Date \_\_\_\_\_  
 Type—Manual  Semi-Automatic   
 Machine  Automatic

**JOINT DESIGN USED**  
 Type: FILLET  
 Single  Double Weld   
 Backing: Yes  No   
 Backing Material: \_\_\_\_\_  
 Root Opening \_\_\_\_\_ Root Face Dimension \_\_\_\_\_  
 Groove Angle: \_\_\_\_\_ Radius (J-U) \_\_\_\_\_  
 Back Gouging: Yes  No  Method \_\_\_\_\_

**POSITION**  
 Position of Groove: \_\_\_\_\_ Fillet: 2F  
 Vertical Progression: Up  Down

**BASE METALS**  
 Material Spec. ASTM A36  
 Type or Grade \_\_\_\_\_  
 Thickness: Groove \_\_\_\_\_ Fillet ≤ 1/8  
 Diameter (Pipe) \_\_\_\_\_

**ELECTRICAL CHARACTERISTICS**  
 Transfer Mode (GMAW) Short-Circuiting   
 Globular  Spray   
 Current: AC  DCEP  DCEN  Pulsed   
 Other \_\_\_\_\_  
 Tungsten Electrode (GTAW)  
 Size: \_\_\_\_\_  
 Type: \_\_\_\_\_

**FILLER METALS**  
 AWS Specification A5.18  
 AWS Classification E71T1C, 1M, 9C, 9M

**TECHNIQUE**  
 Stringer or Weave Bead: STRINGER  
 Multi-pass or Single Pass (per side) SINGLE  
 Number of Electrodes ONE  
 Electrode Spacing Longitudinal \_\_\_\_\_  
 Lateral \_\_\_\_\_  
 Angle \_\_\_\_\_

**SHIELDING**  
 Flux \_\_\_\_\_ Gas ARLOW / CO<sub>2</sub>  
 Composition 75% - 25%  
 Electrode-Flux (Class) \_\_\_\_\_ Flow Rate 40 cfm  
 Gas Cup Size 3/8

Contact Tube to Work Distance 3/4 - 1"  
 Peening NONE  
 Interpass Cleaning: chipping hammer / wirebrush

**PREHEAT**  
 Preheat Temp., Min Per Table 3.2 of D1.1-AWS  
 Interpass Temp., Min SAME Max \_\_\_\_\_

**POSTWELD HEAT TREATMENT**  
 Temp. \_\_\_\_\_  
 Time \_\_\_\_\_

**WELDING PROCEDURE**

Pass or Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed	Joint Details
		Class	Diam.	Type & Polarity	Amps or Wire Feed Speed			
1	FCAW	E71T1C 1M, 9C 9M	.045	DCEP	550 Ipm ± 10% (495-605)	29 ± 7% (27-31)	10 Ipm ± 25% (7.5-13.5)	

**WELDING PROCEDURE SPECIFICATION (WPS) Yes**   
**PREQUALIFIED  QUALIFIED BY TESTING**  
**or PROCEDURE QUALIFICATION RECORDS (PQR) Yes**

Company Name PRECISION WELDING  
 Welding Process(es) SMW  
 Supporting PQR No.(s) PREQUALIFIED

Identification # SP030  
 Revision 1 Date 12-5-07 By Blues  
 Authorized by \_\_\_\_\_ Date \_\_\_\_\_  
 Type—Manual  Semi-Automatic   
 Machine  Automatic

**JOINT DESIGN USED**

Type: Fillet  
 Single  Double Weld   
 Backing: Yes  No   
 Backing Material: \_\_\_\_\_  
 Root Opening \_\_\_\_\_ Root Face Dimension \_\_\_\_\_  
 Groove Angle: \_\_\_\_\_ Radius (J-U) \_\_\_\_\_  
 Back Gouging: Yes  No  Method \_\_\_\_\_

**POSITION:**

Position of Groove: \_\_\_\_\_ Fillet: 2F  
 Vertical Progression: Up  Down

**BASE METALS**

Material Spec. ASTM A36  
 Type or Grade \_\_\_\_\_  
 Thickness: Groove \_\_\_\_\_ Fillet 1/8  
 Diameter (Pipe) \_\_\_\_\_

**ELECTRICAL CHARACTERISTICS**

Transfer Mode (GMAW) Short-Circuiting   
 Globular  Spray   
 Current: AC  DCEP  DCEN  Pulsed   
 Other \_\_\_\_\_  
 Tungsten Electrode (GTAW)  
 Size: \_\_\_\_\_  
 Type: \_\_\_\_\_

**FILLER METALS**

AWS Specification A5.18  
 AWS Classification E7018

**TECHNIQUE**

Stringer or Weave Bead: Stringer  
 Multi-pass or Single Pass (per side) Single  
 Number of Electrodes ONE  
 Electrode Spacing Longitudinal \_\_\_\_\_  
 Lateral \_\_\_\_\_  
 Angle \_\_\_\_\_

**SHIELDING**

Flux \_\_\_\_\_ Gas \_\_\_\_\_  
 Composition \_\_\_\_\_  
 Electrode-Flux (Class) \_\_\_\_\_ Flow Rate \_\_\_\_\_  
 Gas Cup Size \_\_\_\_\_

Contact Tube to Work Distance \_\_\_\_\_  
 Peening NONE  
 Interpass Cleaning: WIRE BRUSH, CHIPPING, HAMMER

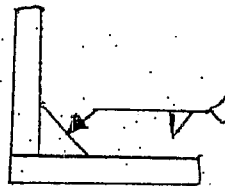
**PREHEAT**

Preheat Temp., Min Per Table 3.2 of D1.1-AWS  
 Interpass Temp., Min 300 Max \_\_\_\_\_

**POSTWELD HEAT TREATMENT**

Temp. \_\_\_\_\_  
 Time \_\_\_\_\_

**WELDING PROCEDURE**

Pass or Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed	Joint Details
		Class	Diam.	Type & Polarity	Amps or Wire Feed Speed			
1	SMW	E7018	1/8	DC+	115A		4 ipm	

Form E-1 (Front)

# PRECISION WELDING AND FABRICATION, INC.

Structural Steel - Miscellaneous Metals

(207) 854-9330 Telephone  
(207) 854-9694 Fax  
(207) 854-1167 Accounting



690A Stroudwater  
P.O. Box 8  
Westbrook, Maine 04098-08

## COPY

TO: QUALITY ASSURANCE LABS INC.  
ATTN: ART GALLANT  
FROM: SOL GAY  
1-29-08

REF: CONTINUITY LOG FOR AWS CARDS ATTACHED SMAW

- EDWARD NADEAU
- RONALD MOODY
- GARY ZARATE
- SOLOMON GAY

ALL WELDERS LISTED ABOVE HAVE CURRENT CERTIFICATIONS & HAVE HELD THESE CONTINUOUS SINCE DATE OF TESTING DATED ON CARDS. (AWS REQUIRES THESE CARD CERTIFICATIONS TO BE MAINTAINED WITH THEM EVERY SIX MONTHS.)

THANK YOU,

  
SOLOMON R. GAY

**SAMPLE FORM FOR WELDING PROCEDURE SPECIFICATION (WPS)**

Company Name PRECISION WELDING By B WELLS  
 Welding Procedure Specification No. D1.3 001 Rev 001 Date 4-16-08  
 Supporting Procedure Qualification Test Record(s) No. PREQUALIFIED  
 Welding Process(es) GMAW Type MANUAL  
 (Automatic, manual, etc.)

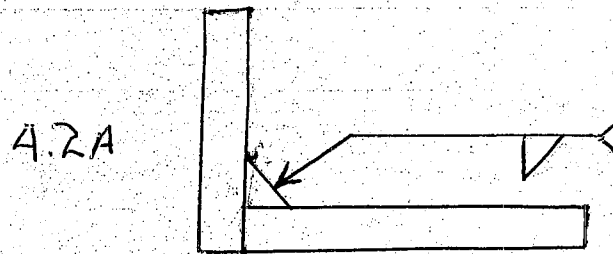
Mode of Transfer for GMAW SHORT-CIRCUITING  
 (Short circuiting, spray, etc.)

**JOINTS (Table 4.1)** Type of Welded Joint(s) 4.1, 4.2A **COATING(S)** Type N/A  
 Thickness \_\_\_\_\_

Backing Yes  No   
 Backing Material Type \_\_\_\_\_  
 Groove Welded From:  
 one side  both sides \_\_\_\_\_

Sketch of Joint Details

**BASE METAL (1.2)**  
 Material specification type and grade:  
 Sheet steel A36 to A36  
 Support steel \_\_\_\_\_  
 Thickness Range:  
 Sheet Steel 1/8 - 3/16  
 Support Steel 1/8 - 3/16  
 Thickness 10 gauge  
 Base Metal Preparation \_\_\_\_\_



**FILLER METAL (Table 1.1)**  
 Specification A 5.18  
 Classification E70S-6

**POSITIONS (Table 1.2)**  
 Position of Groove 3G  
 Position of Fillet 2F  
 Progression \_\_\_\_\_

**PREHEAT (1.1.1 AND 5.1)**  
 Preheat Temperature Min \_\_\_\_\_  
 Preheat Temperature Max \_\_\_\_\_

**GAS (1.4.6.2)**  
 Shielding Gas Argon / CO<sub>2</sub>  
 Percent Mixture 75% - 25%

Flow Rate 25 CFH

**FLUX (1.4.5.2)** \_\_\_\_\_

**TECHNIQUE**

Pass No.	Electrode Size	Welding Current		Travel Speed (or Weld Time for Arc Spot Welds)	Melting Rate	Wire Feed Speed
		Amperes	Volts			
1	.035	150 A	17.5 V	8 IPM	4.25	250 (approx)

This procedure may vary due to fabrication sequence, fit-up, pass size, etc. within the limitation of variables given in ANSI/AWS D1.3 (98), Structural Welding Code—Sheet Steel.  
 (year)

Authorized by \_\_\_\_\_ Date \_\_\_\_\_

**SAMPLE FORM FOR WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD**

Welder or Welding Operator's Name CHAD ANDERSON  
 Identification No. 0267 Qualification Date 4-15-08  
 Welder's Social Security No. \_\_\_\_\_

In Accordance with WPS No. D1.3-001 Revision 001  
 Welding Process(es) GMAW Type MANUAL  
 (Automatic, manual, etc.)

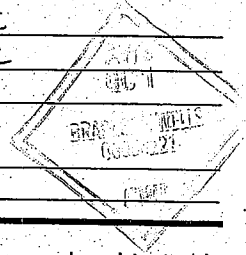
Mode of Transfer for GMAW SHEET CIRCUITING  
 (Short circuiting, spray, globular)

VARIABLE	ACTUAL VARIABLE USED IN QUAL.	QUALIFICATION RANGE
<b>JOINT</b>		
Joint Type	<u>4.2A</u>	<u>4.2 A</u>
Backing Material Type		
Groove Welded From: one side or both sides		
<b>BASE METAL (4.7.1.1)</b>		
Material Specification		
Sheet Steel	<u>A36 to A36</u>	<u>SEE AWS to 1.2.1</u>
Supporting Steel		
Sheet Thickness (4.7.2.1)		
Groove		
Fillet	<u>10 GAUGE</u>	<u>16 gauge → 3/16"</u>
Arc Plug		
Arc Spot		
Arc Seam		
<b>COATING(S)</b>		
Type	<u>NONE</u>	<u>NONE</u>
Thickness		
<b>POSITION (4.7.1.5 and 4.7.1.6)</b>		
Groove		
Fillet	<u>2F</u>	<u>1F, 2F</u>
Arc Plug		
Arc Spot		
Arc Seam		
Progression		
<b>GAS (4.7.1.4)</b>	<u>75% AR - 25% CO<sub>2</sub></u>	<u>75% AR - 25% CO<sub>2</sub></u>
<b>ELECTRODE (4.7.1.3 and 4.7.1.4)</b>		
Size	<u>.035</u>	<u>.035</u>
Group Designation	<u>E705-6</u>	<u>E705-X</u>

**VISUAL EXAMINATION RESULTS (4.6)**

Specimen 1: ACCEPTABLE Specimen 2: ACCEPTABLE  
 Appearance: ACCEPTABLE Cracks: NONE Undercut: NONE  
 Reinforcement: ACCEPTABLE Diam of Arc Spot Nugget: \_\_\_\_\_

Test Conducted By: BRAO WELLS Per: AWS D1.3-98  
 Laboratory Test No. \_\_\_\_\_ Date of Test: 4-15-08



The undersigned certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of 4.6 of ANSI/AWS D1.3 ( 98 ), Structural Welding Code—Sheet Steel.  
 (year)

Company \_\_\_\_\_ Authorized By \_\_\_\_\_

J

### SAMPLE FORM FOR WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

Welder or Welding Operator's Name Solomon GAY  
 Identification No. 9877 Qualification Date 4-15-08  
 Welder's Social Security No. \_\_\_\_\_

In Accordance with WPS No. D1.3-001 Revision 001  
 Welding Process(es) GMAW Type MANUAL  
 (Automatic, manual, etc.)

Mode of Transfer for GMAW SHORT CIRCUITING  
 (Short circuiting, spray, globular)

VARIABLE	ACTUAL VARIABLE USED IN QUAL.	QUALIFICATION RANGE
<b>JOINT</b>		
Joint Type	<u>4.2A</u>	<u>4.2A</u>
Backing Material Type		
Groove Welded From: one side or both sides		
<b>BASE METAL (4.7.1.1)</b>		
Material Specification		
Sheet Steel	<u>A36 to A36</u>	<u>SEE AWS to 1.2.1</u>
Supporting Steel		
<b>Sheet Thickness (4.7.2.1)</b>		
Groove		
Fillet	<u>10 GAUGE</u>	<u>16 gauge - 3/16"</u>
Arc Plug		
Arc Spot		
Arc Seam		
<b>COATING(S)</b>		
Type	<u>NONE</u>	<u>NONE</u>
Thickness		
<b>POSITION (4.7.1.5 and 4.7.1.6)</b>		
Groove		
Fillet	<u>2F</u>	<u>1F, 2F</u>
Arc Plug		
Arc Spot		
Arc Seam		
Progression		
<b>GAS (4.7.1.4)</b>	<u>75% AR - 25% CO<sub>2</sub></u>	<u>75% AR - 25% CO<sub>2</sub></u>
<b>ELECTRODE (4.7.1.3 and 4.7.1.4)</b>		
Size	<u>.035</u>	<u>.035</u>
Group Designation	<u>E70S-6</u>	<u>E70S-X</u>

#### VISUAL EXAMINATION RESULTS (4.6)

Specimen 1 ACCEPTABLE Specimen 2 ACCEPTABLE  
 Appearance ACCEPTABLE Cracks NONE Undercut NONE  
 Reinforcement ACCEPTABLE Diam of Arc Spot Nugget \_\_\_\_\_

Test Conducted By BRAO WELLS Per AWS D1.3-98  
 Laboratory Test No. \_\_\_\_\_ Date of Test 4-15-08

The undersigned certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of 4.6 of ANSI/AWS D1.3 ( 98 ), Structural Welding Code—Sheet Steel.  
 (year)

Company \_\_\_\_\_ Authorized By \_\_\_\_\_

**SAMPLE FORM FOR WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD**

Welder or Welding Operator's Name Ben Berry  
 Identification No. 8281 Qualification Date 4-15-08  
 Welder's Social Security No. \_\_\_\_\_

In Accordance with WPS No. D1.3-001 Revision 001  
 Welding Process(es) GMAW Type MANUAL  
 (Automatic, manual, etc.)

Mode of Transfer for GMAW SHORT CIRCUITING  
 (Short circuiting, spray, globular)

VARIABLE	ACTUAL VARIABLE USED IN QUAL.	QUALIFICATION RANGE
<b>JOINT</b>		
Joint Type	<u>4.2A</u>	<u>4.2A</u>
Backing Material Type		
Groove Welded From: one side or both sides		
<b>BASE METAL (4.7.1.1)</b>		
Material Specification		
Sheet Steel	<u>A36 to A36</u>	<u>SEE AWS to 1.2.1</u>
Supporting Steel		
Sheet Thickness (4.7.2.1)		
Groove		
Fillet	<u>10 GAUGE</u>	<u>16 gauge - 3/16"</u>
Arc Plug		
Arc Spot		
Arc Seam		
<b>COATING(S)</b>		
Type	<u>NONE</u>	<u>NONE</u>
Thickness		
<b>POSITION (4.7.1.5 and 4.7.1.6)</b>		
Groove		
Fillet	<u>2F</u>	<u>1F, 2F</u>
Arc Plug		
Arc Spot		
Arc Seam		
Progression		
<b>GAS (4.7.1.4)</b>	<u>75% AR - 25% CO2</u>	<u>75% AR - 25% CO2</u>
<b>ELECTRODE (4.7.1.3 and 4.7.1.4)</b>		
Size	<u>.035</u>	<u>.035</u>
Group Designation	<u>E705-6</u>	<u>E705-X</u>

**VISUAL EXAMINATION RESULTS (4.6)**

Specimen 1 ACCEPTABLE Specimen 2 ACCEPTABLE  
 Appearance ACCEPTABLE Cracks NONE Undercut NONE  
 Reinforcement ACCEPTABLE Diam of Arc Spot Nugget \_\_\_\_\_

Test Conducted By BRAD WELLS Per AWS D1.3-98  
 Laboratory Test No. \_\_\_\_\_ Date of Test 4-15-08

The undersigned certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of 4.6 of ANSI/AWS D1.3 ( 98 ), Structural Welding Code—Sheet Steel.  
 (year)

Company \_\_\_\_\_ Authorized By \_\_\_\_\_

## SAMPLE FORM FOR WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

Welder or Welding Operator's Name JEFF LUNT  
 Identification No. 2258 Qualification Date 4-15-08  
 Welder's Social Security No. \_\_\_\_\_

In Accordance with WPS No. D1.3-001 Revision 001  
 Welding Process(es) GMAW Type MANUAL  
 (Automatic, manual, etc.)  
 Mode of Transfer for GMAW SHORT CIRCUITING  
 (Short circuiting, spray, globular)

VARIABLE	ACTUAL VARIABLE USED IN QUAL.	QUALIFICATION RANGE
<b>JOINT</b>		
Joint Type	<u>4.2A</u>	<u>4.2A</u>
Backing Material Type		
Groove Welded From: one side or both sides		
<b>BASE METAL (4.7.1.1)</b>		
Material Specification		
Sheet Steel	<u>A36 to A36</u>	<u>SEE AWS to 1.2.1</u>
Supporting Steel		
<b>Sheet Thickness (4.7.2.1)</b>		
Groove		
Fillet	<u>10 GAUGE</u>	<u>16 gauge - 3/16"</u>
Arc Plug		
Arc Spot		
Arc Seam		
<b>COATING(S)</b>		
Type	<u>NONE</u>	<u>NONE</u>
Thickness		
<b>POSITION (4.7.1.5 and 4.7.1.6)</b>		
Groove		
Fillet	<u>2F</u>	<u>1F, 2F</u>
Arc Plug		
Arc Spot		
Arc Seam		
Progression		
<b>GAS (4.7.1.4)</b>	<u>75% AR - 25% CO<sub>2</sub></u>	<u>75% AR - 25% CO<sub>2</sub></u>
<b>ELECTRODE (4.7.1.3 and 4.7.1.4)</b>		
Size	<u>.035</u>	<u>.035</u>
Group Designation	<u>E70S-6</u>	<u>E70S-X</u>

## VISUAL EXAMINATION RESULTS (4.6)

Specimen 1 ACCEPTABLE Specimen 2 ACCEPTABLE  
 Appearance ACCEPTABLE Cracks NONE Undercut NONE  
 Reinforcement ACCEPTABLE Diam of Arc Spot Nugget \_\_\_\_\_

Test Conducted By BRAO WELDS Per AWS D1.3-98  
 Laboratory Test No. \_\_\_\_\_ Date of Test 4-15-08

The undersigned certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of 4.6 of ANSI/AWS D1.3 ( 98 ), Structural Welding Code—Sheet Steel.  
 (year)

Company \_\_\_\_\_ Authorized By \_\_\_\_\_



**SAMPLE FORM FOR WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD**

Welder or Welding Operator's Name Solomon Gay  
 Identification No. 9877 Qualification Date 4-15-08  
 Welder's Social Security No. \_\_\_\_\_

In Accordance with WPS No. D13-001 Revision 1  
 Welding Process(es) GMAW-S Type MANUAL  
 (Automatic, manual, etc.)

Mode of Transfer for GMAW SHORT CIRCUITING  
 (Short circuiting, spray, globular)

VARIABLE	ACTUAL VARIABLE USED IN QUAL.	QUALIFICATION RANGE
<b>JOINT</b>		
Joint Type	<u>3G-4.1</u>	<u>4.1</u>
Backing Material Type	<u>-</u>	<u>-</u>
Groove Welded From: one side or both sides	<u>ONE SIDE</u>	<u>EITHER</u>
<b>BASE METAL (4.7.1.1)</b>		
Material Specification	<u>A36 to A36</u>	<u>SEE AWS 1.2.1</u>
Sheet Steel		
Supporting Steel		
Sheet Thickness (4.7.2.1)	<u>10 GAUGE</u>	<u>16 G → 3/16"</u>
Groove		
Fillet		
Arc Plug		
Arc Spot		
Arc Seam		
<b>COATING(S)</b>		
Type	<u>NONE</u>	<u>NONE</u>
Thickness		
<b>POSITION (4.7.1.5 and 4.7.1.6)</b>		
Groove	<u>3G</u>	<u>1G, 2G, 3G</u>
Fillet		
Arc Plug		
Arc Spot		
Arc Seam		
Progression		
<b>GAS (4.7.1.4)</b>		
	<u>75% ARCON - 25% CO<sub>2</sub></u>	<u>75% AR - 25% CO<sub>2</sub></u>
<b>ELECTRODE (4.7.1.3 and 4.7.1.4)</b>		
Size	<u>.035</u>	<u>.035</u>
Group Designation	<u>E70S-6</u>	<u>E70S-X</u>

**VISUAL EXAMINATION RESULTS (4.6)**  
 Specimen 1 ACCEPTABLE Specimen 2 ACCEPTABLE  
 Appearance ACCEPTABLE Cracks NONE Undercut NONE  
 Reinforcement ACCEPTABLE Diam of Arc Spot Nugget \_\_\_\_\_

Test Conducted By BRAD WELLS Per AWS D1.3-98  
 Laboratory Test No. \_\_\_\_\_ Date of Test 4-15-08

The undersigned certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of 4.6 of ANSI/AWS D1.3 (98), Structural Welding Code—Sheet Steel.  
 (year)

Company \_\_\_\_\_ Authorized By \_\_\_\_\_

### SAMPLE FORM FOR WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

Welder or Welding Operator's Name JZEP LUNT  
 Identification No. 2258 Qualification Date 4-15-08  
 Welder's Social Security No. \_\_\_\_\_

In Accordance with WPS No. D1.3-001 Revision 1  
 Welding Process(es) GMAW Type MANUAL  
 (Automatic, manual, etc.)

Mode of Transfer for GMAW SHORT CIRCUITING  
 (Short circuiting, spray, globular)

VARIABLE	ACTUAL VARIABLE USED IN QUAL	QUALIFICATION RANGE
<b>JOINT</b>		
Joint Type	<u>3G-4.1</u>	<u>4.1</u>
Backing Material Type		
Groove Welded From: one side or both sides	<u>ONE SIDE</u>	<u>EITHER</u>
<b>BASE METAL (4.7.1.1)</b>		
Material Specification		
Sheet Steel	<u>A36 to A36</u>	<u>SEE AWS to 1.2.1</u>
Supporting Steel		
Sheet Thickness (4.7.2.1)		
Groove	<u>10 GUAGE</u>	<u>16 guage -&gt; 3/16"</u>
Fillet		
Arc Plug		
Arc Spot		
Arc Seam		
<b>COATING(S)</b>		
Type	<u>NONE</u>	<u>NONE</u>
Thickness		
<b>POSITION (4.7.1.5 and 4.7.1.6)</b>		
Groove	<u>3G</u>	<u>1G, 2G, 3G</u>
Fillet		
Arc Plug		
Arc Spot		
Arc Seam		
Progression		
<b>GAS (4.7.1.4)</b>	<u>75% ARLOW / 25% CO2</u>	<u>75% Ar - 25% CO2</u>
<b>ELECTRODE (4.7.1.3 and 4.7.1.4)</b>		
Size	<u>.035</u>	<u>.035</u>
Group Designation	<u>E70S-6</u>	<u>E70S-X</u>

**VISUAL EXAMINATION RESULTS (4.6)**

Specimen 1 ACCEPTABLE Specimen 2 ACCEPTABLE  
 Appearance ACCEPTABLE Cracks NONE Undercut NONE  
 Reinforcement ACCEPTABLE Diam of Arc Spot Nugget \_\_\_\_\_

Test Conducted By BRAD WELLS Per AWS D1.3-98  
 Laboratory Test No. \_\_\_\_\_ Date of Test 4-15-08

The undersigned certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of 4.6 of ANSI/AWS D1.3 ( 98 ), Structural Welding Code—Sheet Steel.  
 (year)

Company \_\_\_\_\_ Authorized By \_\_\_\_\_

### SAMPLE FORM FOR WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

Welder or Welding Operator's Name BEN BERRY  
 Identification No. 8281 Qualification Date 4-15-08  
 Welder's Social Security No. \_\_\_\_\_

In Accordance with WPS No. D1.3-001 Revision 1  
 Welding Process(es) GMAW Type MANUAL  
 (Automatic, manual, etc.)  
 Mode of Transfer for GMAW SHORT CIRCUITING  
 (Short circuiting, spray, globular)

VARIABLE	ACTUAL VARIABLE USED IN QUAL	QUALIFICATION RANGE
<b>JOINT</b>		
Joint Type	<u>3G-4.1</u>	<u>4.1</u>
Backing Material Type		
Groove Welded From: one side or both sides	<u>ONE SIDE</u>	<u>EITHER</u>
<b>BASE METAL (4.7.1.1)</b>		
Material Specification		
Sheet Steel	<u>A36 to A36</u>	<u>SEE AWS to 1.2.1</u>
Supporting Steel		
Sheet Thickness (4.7.2.1)		
Groove	<u>10 GUAGE</u>	<u>16 gauge → 3/16"</u>
Fillet		
Arc Plug		
Arc Spot		
Arc Seam		
<b>COATING(S)</b>		
Type	<u>NONE</u>	<u>NONE</u>
Thickness		
<b>POSITION (4.7.1.5 and 4.7.1.6)</b>		
Groove	<u>3G</u>	<u>1G, 2G, 3G</u>
Fillet		
Arc Plug		
Arc Spot		
Arc Seam		
Progression		
<b>GAS (4.7.1.4)</b>	<u>75% AR60N / 25% CO2</u>	<u>75% AR-25% CO2</u>
<b>ELECTRODE (4.7.1.3 and 4.7.1.4)</b>		
Size	<u>.035</u>	<u>.035</u>
Group Designation	<u>E705-6</u>	<u>E705-X</u>

#### VISUAL EXAMINATION RESULTS (4.6)

Specimen 1 ACCEPTABLE Specimen 2 ACCEPTABLE  
 Appearance ACCEPTABLE Cracks NONE Undercut NONE  
 Reinforcement ACCEPTABLE Diam of Arc Spot Nugget \_\_\_\_\_

Test Conducted By BRAO WELLS Per AWS D1.3-98  
 Laboratory Test No. \_\_\_\_\_ Date of Test 4-15-08

The undersigned certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of 4.6 of ANSI/AWS D1.3 ( 98 ), Structural Welding Code—Sheet Steel.  
 (year)

Company \_\_\_\_\_ Authorized By \_\_\_\_\_

# B E C K E R

structural engineers, inc.

05120

<b>OBSERVATION REPORT</b>
Structural Steel

<b>Date:</b>	July 6, 2009
<b>Time:</b>	7:30am – 9:00 am
<b>Temp:</b>	60's
<b>Weather:</b>	Sunny

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI 2058

**Observation Location:**  
 Holddown anchor supports and deck edge configuration at the second floor slab. This review was completed in preparation of the slab placement later this week.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	
Bolt Condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Weld Condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Anchor Bolts, Nuts, & Washers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See notes below
Grout/Leveling Plates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Fit Up/Plumbness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Metal Deck Welds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Pour Stops	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See notes below
Bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Notes:**

This visit was conducted to review holddown supports and deck edge details prior to the second floor placement. Holddown support locations were not measured, but were found in the general area expected. It was noted that Section 1/S3.2 was not completed at all necessary areas. At all perimeter locations where steel joists bear on steel beams, Section 1/S3.2 shall be followed. Specifically, a continuous steel angle shall be placed along with HSS 2 1/2 sections between joists. Anchor rods shall be welded to this

angle as specified. This item was discussed with the General Contractor, and areas requiring attention were identified.

Also, at locations where the steel joists span parallel with the steel perimeter beams, a continuous pour stop can be used in lieu of the steel angle, and the anchor rods shall be welded to the top flange of the beam as specified in Section 2/S3.2.

Please contact me with any questions.

Thank you -

**Signed:** James Fortin, P.E.

# B E C K E R

05120

structural engineers, inc.

<b>OBSERVATION REPORT</b>
Structural Steel

<b>Date:</b>	July 27, 2009
<b>Time:</b>	8:30am - 11:00 am
<b>Temp:</b>	70's - 80's
<b>Weather:</b>	Clouds, Sun, Humid

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI2058

**Observation Location:**  
Structural Steel Framing at First Floor and Second Floor

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	
Bolt Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weld Condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See Notes Below
Anchor Bolts, Nuts, & Washers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Notes Below for areas requiring attention
Grout/Leveling Plates	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fit Up/Plumbness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Metal Deck Welds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Pour Stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bracing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Notes Below for areas requiring attention
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Notes:**

A final review of the structural steel framing was completed to ensure that framing configurations, connection, and details have been incorporated as shown on the contract documents. Framing appears to be in general conformance with the contract drawings except as noted below. These items will require additional attention by the General Contractor to meet the drawing requirements. Contractor shall contact engineer to schedule follow-up visit once items have been addressed.

1. Diagonal struts at brace frame diagonal connections are missing or incorrectly installed. The angle shall extend from the base of the brace gusset plate to the underside of the deck, as shown on Section D/S1.7
2. At locations where joist bridging terminates at the concrete wall, the clip angle currently in place shall be bolted to the wall.
3. CMU walls at the stairs and elevators shall be attached to all steel beams located directly adjacent to the walls as shown on Section 5/S3.2. (all locations)
4. Column/brace anchor bolt attachments have been reviewed at all visible locations. At Grids 9/N & 11/N, nuts were found missing.
5. All perimeter floor beams shall have bottom flange angle braces at 5'-0" on center maximum as identified in Sections 1 & 2 on S3.2.
6. GC is requested to submit final reports for field weld inspections.
7. At vertical HSS hangers that will support canopy framing, a diagonal angle brace shall be placed at each hanger per SSK-2 and Section 2/S3.1. *Note: Canopy framing is not in place and will be reviewed at a future visit.*
8. Anchor bolts not in place at first floor slab along Line Line A & Line 7 per Sections 1 & 2 on Dwg. S3.2. GC shall forward proposed repair to address this item to Engineer for review,
9. At second floor framing, W14x22 between Lines 1 & 3 east of Line E, double angle connection to W16 support beam has 3 rows of bolt holes. Bottom row of holes in angles do not have corresponding holes in W16 web. Holes shall be drilled in web for bolt installation.
10. At second floor, W16x31 along Line 3 from Line D.2 to E.8, the web stiffener at the gusset plate centerline is not in place. The connection of the W12/W10 beams interfere with installation of a full depth stiffener. Instead, a stiffener shall be placed at each side of the beam web from the beam bottom flange to the underside of the angle connection.

Please contact me with any questions regarding the information provided above.

Thank you -

Signed: James Fortin, P.E.

# B E C K E R

05120

structural engineers, inc.

<b>OBSERVATION REPORT</b>
---------------------------

Structural Steel
------------------

<b>Date:</b>	August 13, 2009
<b>Time:</b>	8:00am - 11:00 am
<b>Temp:</b>	80's
<b>Weather:</b>	Sunny, Humid

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI2058

**Observation Location:**

Structural Steel Framing at First Floor and Second Floor (follow-up visit to review completion of previously documented items)

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable		
Bolt Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Comments	
Weld Condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Anchor Bolts, Nuts, & Washers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Grout/Leveling Plates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Fit Up/Plumbness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Metal Deck Welds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Pour Stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Bracing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Additional Items	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		See Notes Below
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

**Notes:**

A follow-up review of the structural steel framing was completed to review completion of previously documented items. The following list was submitted following the initial steel inspection on July 27, 2009. Updates to the items are provided in bold.

1. Diagonal struts at brace frame diagonal connections are missing or incorrectly installed. The angle shall extend from the base of the brace gusset plate to the underside of the deck, as shown on Section D/S1.7

**08/13/09: Areas have been reviewed and new angle braced have been installed that extend to the base of the brace frame gusset plate. This item is CLOSED.**



2. At locations where joist bridging terminates at the concrete wall, the clip angle currently in place shall be bolted to the wall.

**08/13/09: Clip angles have been bolted to the wall. This item is CLOSED.**

3. CMU walls at the stairs and elevators shall be attached to all steel beams located directly adjacent to the walls as shown on Section 5/S3.2. (all locations)

**08/13/09: Some areas were found to be complete. Item is on-going.**

4. Column/brace anchor bolt attachments have been reviewed at all visible locations. At Grids 9/N & 11/N, nuts were found missing.

**08/13/09: Placement of nuts was reviewed prior to concrete slab placement. Nuts were installed. This item is CLOSED.**

5. All perimeter floor beams shall have bottom flange angle braces at 5'-0" on center maximum as identified in Sections 1 & 2 on S3.2.

**08/13/09: Beam bottom flange braces appear to have been installed. This item is CLOSED.**

6. GC is requested to submit final reports for field weld inspections.

**08/13/09: Reports have not been submitted.**

7. At vertical HSS hangers that will support canopy framing, a diagonal angle brace shall be placed at each hanger per SSK-2 and Section 2/S3.1. *Note: Canopy framing is not in place and will be reviewed at a future visit.*

**08/13/09: Canopy framing has not been installed.**

8. Anchor bolts not in place at first floor slab along Line Line A & Line 7 per Sections 1 & 2 on Dwg. S3.2. GC shall forward proposed repair to address this item to Engineer for review.

**08/13/09: Simpson Titen HD anchors have been installed. This item is CLOSED.**

9. At second floor framing, W14x22 between Lines 1 & 3 east of Line E, double angle connection to W16 support beam has 3 rows of bolt holes. Bottom row of holes in angles do not have corresponding holes in W16 web. Holes shall be drilled in web for bolt installation.

**08/13/09: Bolts have been added. This item is CLOSED.**

10. At the first and second floor, W16 beam along Line 3 from Line D.2 to E.8, the web stiffener at the gusset plate centerline is not in place. The connection of the W12/W10 beams interfere with installation of a full depth stiffener. Instead, a stiffener shall be placed at each side of the beam web from the beam bottom flange to the underside of the angle connection.

**08/13/09: This item is not complete. Note that this occurs at both the first and second floor level.**

Please contact me with any questions regarding the information provided above.

Thank you -

Signed: James Fortin, P.E.

# B E C K E R

05120

structural engineers, inc.

<b>OBSERVATION REPORT</b>
Structural Steel

<b>Date:</b>	December 11, 2009
<b>Time:</b>	1:00pm – 2:30 pm
<b>Temp:</b>	20's
<b>Weather:</b>	Sunny

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI 2058

**Observation Location: Exterior Canopy Framing (4 locations)**

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable		
Bolt Condition	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Comments	
Weld Condition	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Anchor Bolts, Nuts, & Washers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Grout/Leveling Plates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Fit Up/Plumbness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Metal Deck Welds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Pour Stops	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Additional Items	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Only as Noted Below
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

**Notes:**

This visit was limited to review of the four exterior steel framed canopies. Overall, the framing appears to be installed in general conformance with drawing requirements. The following items were noted:

All Canopies:

1. Perimeter channel flanges do not align at the mitered corners
2. Welds at the mitered corners are not complete. Welds should also be ground smooth for uniform appearance.
3. All field weld shall be inspected by an AWS Certified Weld Inspector with a report submitted to Becker Structural Engineers for record.

Canopy along Line N - North:

4. The revised connection at Grid 13/N does not appear to have been completed as directed (instructions provided in November 19 report). The fillet weld at the south side of the plate is not complete, and the full penetration bevel weld at the top of the plate does not appear to have been placed. This welding is necessary for adequate attachment.

*From the November 19 report: At the Valley Street canopy, the MC 18 connection to the Second Floor Beam connection plate at Line 13 is not fitting up correctly. The connection plate appears rotated slightly such that the bolt holes do not line up. The item was discussed with the steel erector, and in lieu of fully bolting the connection, three bolt holes will be elongated slightly such that a minimum of (1) bolt in each row will be placed. Then the south side and the top of the MC18 connection plate will be welded to the W14 connection plate. Use a 1/4" fillet weld along the south side, and a full penetration beveled weld along the top. These field welds require visual inspection from an AWS Certified Weld Inspector, with a report submitted to Becker Structural Engineers for Record.*

Canopy along Line N & Line 1:

5. Bolts are missing at five locations connecting the C15 channels located against the exterior brick veneer. In lieu of bolting, the channel has been welded to the tab connection plate. These field welds shall be inspected by an AWS Certified Weld Inspector to ensure adequacy.

Canopy along Line 1 - West:

6. The bolts through the CMU wall are not adequately installed for connection of the tension rod to the CMU. Two bolts have missing nuts, and these bolts were spot welded to the steel plate at the inside face of the wall. This was discussed with Everett Stewart of Ganneston Construction, and will be repaired as follows: Shore the canopy, grind out out plug welds, and remove the nuts and plate at the interior side of the CMU wall. Cut away a minimal section of the wall as necessary to expose the bolts, and install coupler nuts to extend a threaded rod for proper attachment of the plate. Grout around the coupler nuts flush with the inside face of the wall, and replace the plate.

Please contact me with any questions.

Thank you -

**Signed:** James Fortin, P.E.

# B E C K E R

05120

structural engineers, inc.

<b>OBSERVATION REPORT</b>
Structural Steel

<b>Date:</b>	January 13, 2010
<b>Time:</b>	N/A
<b>Temp:</b>	N/A
<b>Weather:</b>	N/A

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI 2058

**Observation Location: Exterior Canopy Framing – THIS REPORT ISSUED TO PROVIDE UPDATED INFORMATION ON THE PREVIOUSLY LISTED ISSUES.**

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable		
Bolt Condition	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Comments	
Weld Condition	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Anchor Bolts, Nuts, & Washers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Grout/Leveling Plates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Fit Up/Plumbness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Metal Deck Welds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Pour Stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Additional Items	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Only as Noted Below
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

**Notes:**

This report is issued to provide updated information. A follow-up visit was not completed. Updated information is provided in bold.

All Canopies:

1. Perimeter channel flanges do not align at the mitered corners.
2. Welds at the mitered corners are not complete. Welds should also be ground smooth for uniform appearance. **01/13/10: It is necessary that these welds are repaired or replaced to provide a continuous weld between the two channel sections. Following placement, the welds shall be ground for a smooth uniform appearance.**

3. All field weld shall be inspected by an AWS Certified Weld Inspector with a report submitted to Becker Structural Engineers for record.

Canopy along Line N - North:

4. The revised connection at Grid 13/N does not appear to have been completed as directed (instructions provided in November 19 report). The fillet weld at the south side of the plate is not complete, and the full penetration bevel weld at the top of the plate does not appear to have been placed. This welding is necessary for adequate attachment. **01/13/10: 1) Improved access shall be provided to allow for inspection of the full penetration bevel weld along the top of the plate. This weld is required as specified below. In accordance with project specifications (Section 05120-3.02C.4.b), this weld shall be inspected by non-destructive testing (RT or UT inspection). 2) The skew between the two connection plates does not allow for completion of the 1/4" vertical fillet weld. GC shall document the length of the fillet weld placed, and forward to BSE. 3) Upon further review of the photos taken during the December 11 visit, it was discovered that the metal roof deck is not properly supported adjacent to the MC18 at Line 13. An L2x2x3/16 x 8" long shall be welded to the MC18 at Line 13 to support the deck. Attach per Section 4/S3.1.**

*From the November 19 report: At the Valley Street canopy, the MC 18 connection to the Second Floor Beam connection plate at Line 13 is not fitting up correctly. The connection plate appears rotated slightly such that the bolt holes do not line up. The item was discussed with the steel erector, and in lieu of fully bolting the connection, three bolt holes will be elongated slightly such that a minimum of (1) bolt in each row will be placed. Then the south side and the top of the MC18 connection plate will be welded to the W14 connection plate. Use a 1/4" fillet weld along the south side, and a full penetration beveled weld along the top. These field welds require visual inspection from an AWS Certified Weld Inspector, with a report submitted to Becker Structural Engineers for Record.*

Canopy along Line N & Line 1:

5. Bolts are missing at five locations connecting the C15 channels located against the exterior brick veneer. In lieu of bolting, the channel has been welded to the tab connection plate. These field welds shall be inspected by an AWS Certified Weld Inspector to ensure adequacy. **01/13/10: At all locations, (1) bolt has been installed. A minimum of a 1/4" fillet weld x 3" long is required between the channel leg and the connection tab plate.**

Canopy along Line 1 - West:

6. The bolts through the CMU wall are not adequately installed for connection of the tension rod to the CMU. Two bolts have missing nuts, and these bolts were spot welded to the steel plate at the inside face of the wall. This was discussed with Everett Stewart of Ganneston Construction, and will be repaired as follows: Shore the canopy, grind out out plug welds, and remove the nuts and plate at the interior side of the CMU wall. Cut away a minimal section of the wall as necessary to expose the bolts, and install coupler nuts to extend a threaded rod for proper attachment of the plate. Grout around the coupler nuts flush with the inside face of the wall, and replace the plate. **01/13/10: Per subsequent conversation for Everett Stewart, an alternate repair was completed. A written explanation of the repairs completed shall be submitted to BSE for review and record. A follow-up inspection can be conducted following receipt of the repair documentation.**

Please contact me with any questions.

Thank you -

**Signed:** James Fortin, P.E.

<b>OBSERVATION REPORT</b>
Structural Steel

<b>Date:</b>	February 3, 2010
<b>Time:</b>	9:30 AM – 10:00 AM
<b>Temp:</b>	20's
<b>Weather:</b>	Snow Showers

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI 2058

<b>Observation Location:</b> Exterior Canopy Framing – FOLLOW-UP VISIT
--

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Bolt Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weld Condition	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Anchor Bolts, Nuts, & Washers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Grout/Leveling Plates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Fit Up/Plumbness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Metal Deck Welds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Pour Stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Notes:**

This report is issued to provide updated information following a return visit to review the exterior canopy construction. Updated information is provided in **bold**.

All Canopies:

1. Perimeter channel flanges do not align at the mitered corners.
2. Welds at the mitered corners are not complete. Welds should also be ground smooth for uniform appearance. 01/13/10: It is necessary that these welds are repaired or replaced to provide a continuous weld between the two channel sections. Following placement, the welds shall be ground for a smooth uniform appearance. **02/04/10: The latest weld inspection report from QAL, dated 1/19/10, stated that "material other than weld material" was used to fill mitered corners. The corners of the canopy need to be fully welded with**

weld material. An inspection report is necessary certifying that foreign materials have been removed and the welds are satisfactory.

3. All field weld shall be inspected by an AWS Certified Weld Inspector with a report submitted to Becker Structural Engineers for record.

Canopy along Line N - North:

4. The revised connection at Grid 13/N has been bolted with (5) or the (6) detailed bolts. At the missing bolt, the two plates have been fillet welded with a minimum 6" of 1/4" fillet weld. This condition is adequate as constructed.

It is necessary that the metal roof deck is supported adjacent to the MC18 at Line 13 using an L2x2x3/16 x 8" long welded to the MC18 at Line 13 to support the deck. Attach per Section 4/S3.1.

The welded connection at the mitered joint between the cantilevered channel at Line 13 & the main MC18 canopy channel spanning parallel with the building shall be re-inspected to ensure the weld is complete and acceptable (see Item 2 above). GC shall ensure that weld has been repaired prior to re-inspection. This connection supports the main channel. In lieu of repairing and re-inspecting this weld, an L2x2x1/4" x 8" long can be placed at the inside of the corner and welded to each channel with 3/16" fillet welds. This welding would require inspection by QAL.

Canopy along Line N & Line 1:

5. Bolts are missing at five locations connecting the C15 channels located against the exterior brick veneer. In lieu of bolting, the channel has been welded to the tab connection plate. These field welds shall be inspected by an AWS Certified Weld Inspector to ensure adequacy. 01/13/10: At all locations, (1) bolt has been installed. A minimum of a 1/4" fillet weld x 3" long is required between the channel leg and the connection tab plate. 02/04/10: **QAL inspection report has been provided accepting the weld as identified above. This item is CLOSED.**

Canopy along Line 1 - West:

6. The bolts through the CMU wall are not adequately installed for connection of the tension rod to the CMU. Two bolts have missing nuts, and these bolts were spot welded to the steel plate at the inside face of the wall. This was discussed with Everett Stewart of Ganneston Construction, and will be repaired as follows: Shore the canopy, grind out out plug welds, and remove the nuts and plate at the interior side of the CMU wall. Cut away a minimal section of the wall as



# B E C K E R

structural engineers, inc.

05120

necessary to expose the bolts, and install coupler nuts to extend a threaded rod for proper attachment of the plate. Grout around the coupler nuts flush with the inside face of the wall, and replace the plate. 01/13/10: Per subsequent conversation for Everett Stewart, an alternate repair was completed. A written explanation of the repairs completed shall be submitted to BSE for review and record. A follow-up inspection can be conducted following receipt of the repair documentation. **02/04/10: This item has not been reviewed after completion of above instructions.**

Please contact me with any questions.

Thank you -

**Signed:** James Fortin, P.E.

# B E C K E R

structural engineers, inc.

05120

<b>OBSERVATION REPORT</b>
Structural Steel

<b>Date:</b>	March 4, 2010
<b>Time:</b>	NA
<b>Temp:</b>	NA
<b>Weather:</b>	NA

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI 2058

<b>Observation Location:</b> Exterior Canopy Framing – Final Report
---

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	
Bolt Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Comments
Weld Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Anchor Bolts, Nuts, & Washers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Grout/Leveling Plates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Fit Up/Plumbness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Metal Deck Welds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Pour Stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Notes:**

This report is issued to provide updated information following a return visit to review the exterior canopy construction. Updated information is provided in **bold**.

All Canopies:

1. Perimeter channel flanges do not align at the mitered corners.
2. Welds at the mitered corners are not complete. Welds should also be ground smooth for uniform appearance. 01/13/10: It is necessary that these welds are repaired or replaced to provide a continuous weld between the two channel sections. Following placement, the welds shall be ground for a smooth uniform appearance. 02/04/10: The latest weld inspection report from QAL, dated 1/19/10, stated that "material other than weld material" was used to fill mitered corners. The corners of the canopy need to be fully welded with weld material.

An inspection report is necessary certifying that foreign materials have been removed and the welds are satisfactory. **03/04/10: Repair work has been completed, and inspection report submitted. Item is CLOSED.**

3. All field weld shall be inspected by an AWS Certified Weld Inspector with a report submitted to Becker Structural Engineers for record.

#### Canopy along Line N - North:

4. The revised connection at Grid 13/N has been bolted with (5) or the (6) detailed bolts. At the missing bolt, the two plates have been fillet welded with a minimum 6" of 1/4" fillet weld. This condition is adequate as constructed.

It is necessary that the metal roof deck is supported adjacent to the MC18 at Line 13 using an L2x2x3/16 x 8" long welded to the MC18 at Line 13 to support the deck. Attach per Section 4/S3.1.

The welded connection at the mitered joint between the cantilevered channel at Line 13 & the main MC18 canopy channel spanning parallel with the building shall be re-inspected to ensure the weld is complete and acceptable (see Item 2 above). GC shall ensure that weld has been repaired prior to re-inspection. This connection supports the main channel. In lieu of repairing and re-inspecting this weld, an L2x2x1/4" x 8" long can be placed at the inside of the corner and welded to each channel with 3/16" fillet welds. This welding would require inspection by QAL. **03/04/10: Inspection report has been submitted. Item is CLOSED.**

#### Canopy along Line N & Line 1:

5. Bolts are missing at five locations connecting the C15 channels located against the exterior brick veneer. In lieu of bolting, the channel has been welded to the tab connection plate. These field welds shall be inspected by an AWS Certified Weld Inspector to ensure adequacy. 01/13/10: At all locations, (1) bolt has been installed. A minimum of a 1/4" fillet weld x 3" long is required between the channel leg and the connection tab plate. 02/04/10: QAL inspection report has been provided accepting the weld as identified above. This item is CLOSED.

#### Canopy along Line 1 - West:

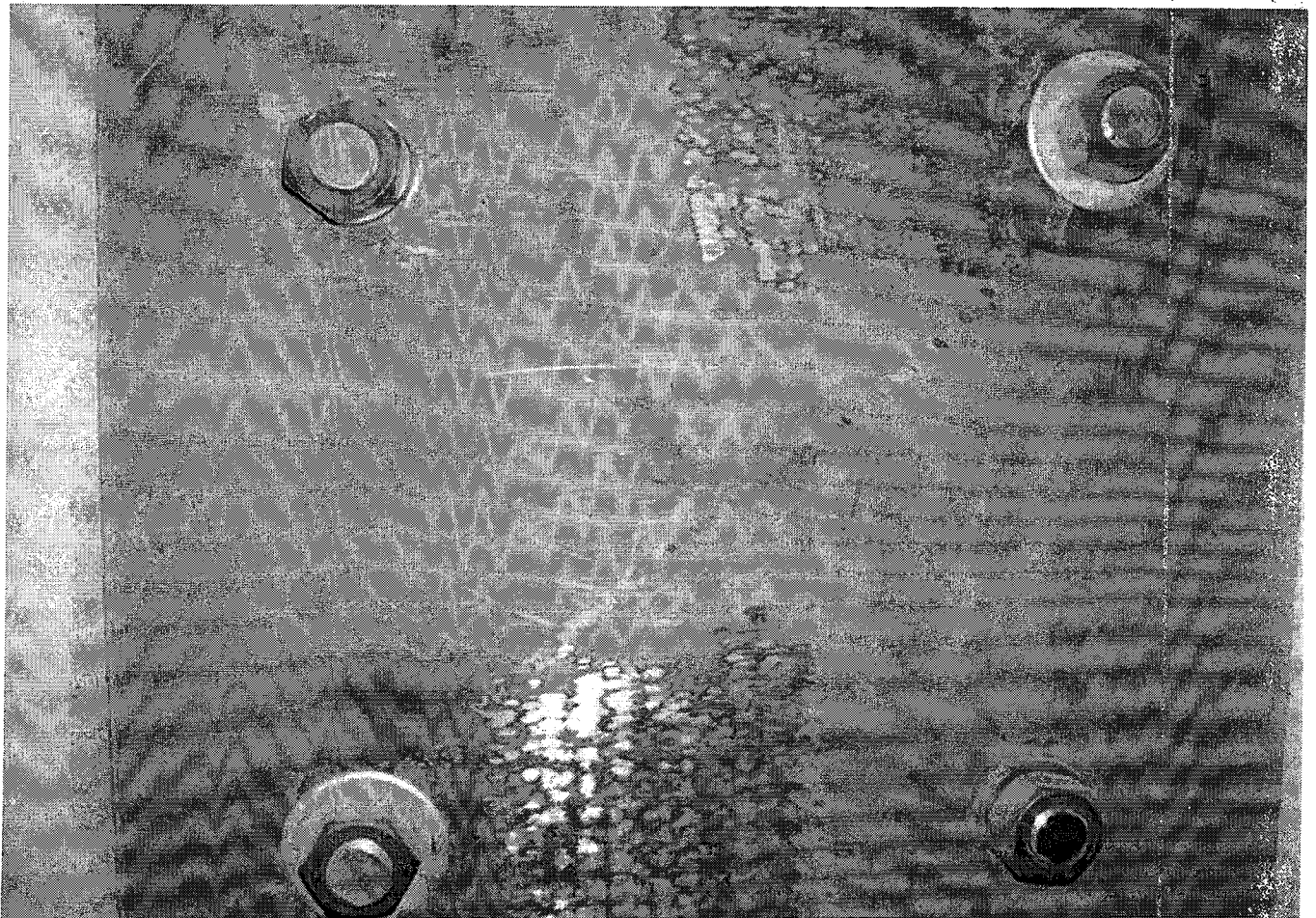
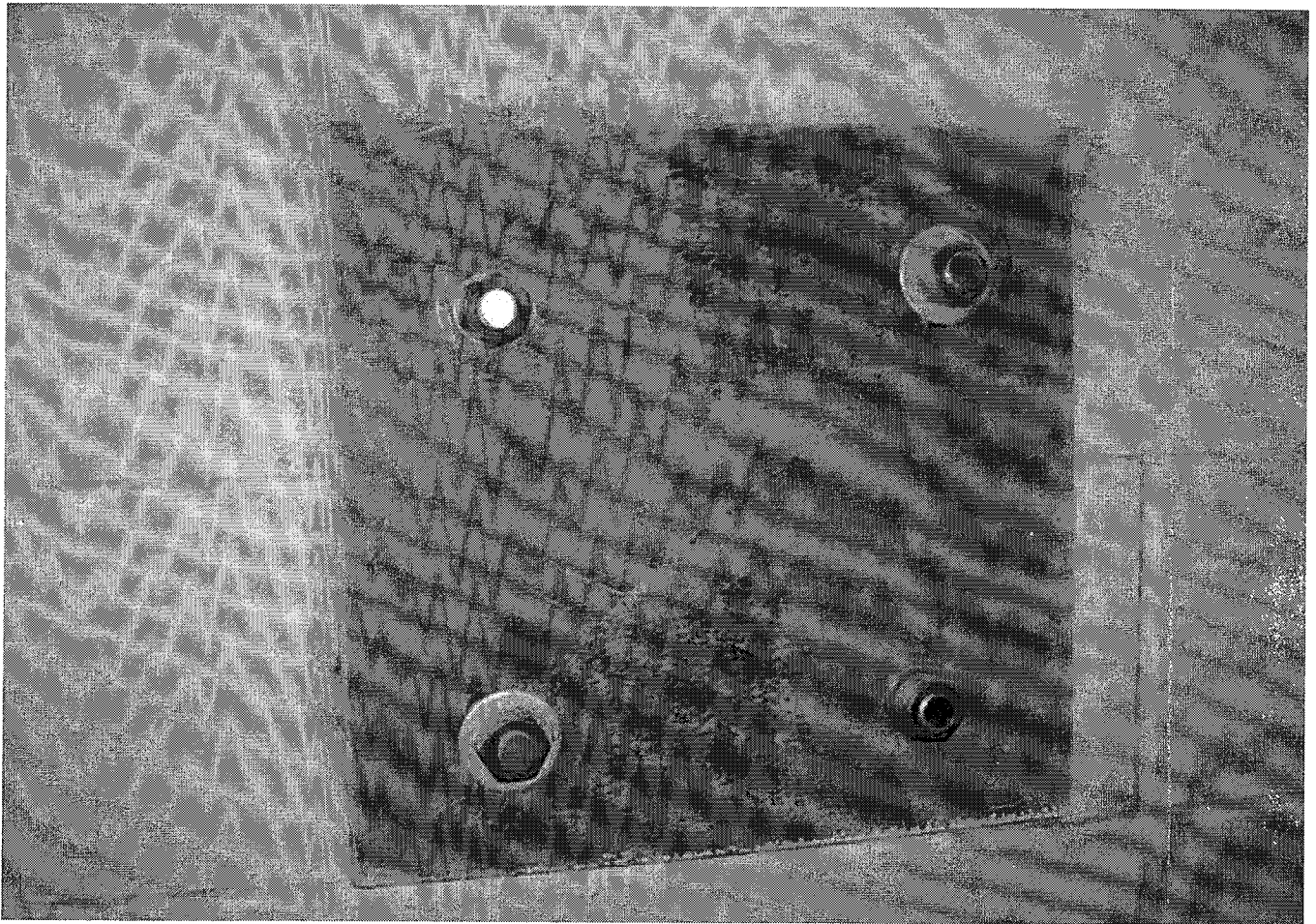
6. The bolts through the CMU wall are not adequately installed for connection of the tension rod to the CMU. Two bolts have missing nuts, and these bolts were spot welded to the steel plate at the inside face of the wall. This was discussed with Everett Stewart of Ganneston Construction, and will be repaired as follows: Shore the canopy, grind out out plug welds, and remove the nuts and plate at the interior side of the CMU wall. Cut away a minimal section of the wall as

necessary to expose the bolts, and install coupler nuts to extend a threaded rod for proper attachment of the plate. Grout around the coupler nuts flush with the inside face of the wall, and replace the plate. 01/13/10: Per subsequent conversation for Everett Stewart, an alternate repair was completed. A written explanation of the repairs completed shall be submitted to BSE for review and record. A follow-up inspection can be conducted following receipt of the repair documentation. 02/04/10: This item has not been reviewed after completion of above instructions. **03/04/10: Documentation provided by General Contractor along with supporting photographs. Item is CLOSED.**

Please contact me with any questions.

Thank you -

**Signed:** James Fortin, P.E.



Ganneston Construction Corp  
PO Box 27, North Belfast Avenue  
Augusta, ME 04332-0027

**LETTER OF TRANSMITTAL**

Tel: (207) 621-8505  
Fax: (207) 621-8508

GCC PROJECT NUMBER  
GCC-80677

To:

GAWRON TURGEON ARCHITECTS  
29 BLACK POINT ROAD  
SCARBOROUGH, MAINE 04074

MONDAY 8:05 AM

Date: February 22, 2010  
Attention: WENDI  
RE: FLORENCE HOUSE PROJECT

WE ARE SENDING YOU   X   ATTACHED            UNDER SEPARATE COVER

COPIES	NO.	DESCRIPTION
3		COPY OF ENGINEERS REPORT - FLAT PLATE TRUSS REPAIR

REMARKS


Signed: Michael L. Adams  
Sr. Project Manager

Date: 22-Feb-10

**R E C E I V E D**  
FEB 22 2010



**CARPENTER ASSOCIATES**

**CONSULTING ENGINEERS**

February 8, 2010

RECEIVED  
FEB - 9 2010  
GANNESTON  
CONSTRUCTION CORP.

Mr. Mike Adams  
Ganneston Construction Corp.  
3025 N. Belfast Avenue  
P.O. Box 27  
Augusta, ME 04332

**Re: Bar Joist Damage**

Dear Mike:

Based on the information reviewed, the bar joist repair in question appears to be as designed. The flat plate welded in place should replace the lost strength due to the damage.

Sincerely,

Randy Bragg, P.E

209142

687 STILLWATER AVENUE • OLD TOWN, MAINE 04468 • 207-827-8001 • FAX 207-827-8234

Jenner J Helstrom

#	Test Date	Sup	Code	Process	Gas	Filler	Metal	Base Metal	Position	Thickness	Expires
1	02/05/02	G	D1.1	SMAW	N/A	F4		P1	A	U	06/15/09
2	11/29/06	G	B2.1	SMAW	N/A	E316-16		M8	ALL	LIMITED	06/15/09

**AWS Certified Welder**  
Welders, Brazers and Operators

**Jenner J Helstrom**  
Cert # 0203015W  
SSN # XXX-XX-3667



**1-800-443-9353**  
Information relating to identification and certification of the bearer of this card may be verified by calling or writing:  
CERTIFICATION DEPARTMENT OF THE AMERICAN WELDING SOCIETY  
550 N.W. LeJeune Road, Miami, FL 33126

**AMERICAN WELDING SOCIETY**

VALID ONLY IF ACCOMPANIED BY PHOTO ID  
This Card is the property of AWS and shall be returned on demand.

**IRONWORKER WELDER CERTIFICATION PROGRAM OF NORTH AMERICA**

**CERTIFIED WELDER**

Jenner Helstrom  
Membership #: 1368868  
EFFECTIVE DATE      EXPIRATION DATE  
3/22/2009              3/22/2010  
Process: FCAW-S - B1a



**GANNESTON CONSTRUCTION CORP.**  
P.O. BOX 27 AUGUSTA, ME 04332

<input checked="" type="checkbox"/> REVIEWED	REVIEWED WITH NOTES RESUBMISSION REQUESTED
REVIEWED WITH NOTES NO RESUBMISSION	NOT ACCEPTABLE
CHECK MARK INDICATES ACTION TAKEN	
CHECKED BY <i>MM</i>	DATE <i>6/10/09</i>





IRONWORKER WELDER CERTIFICATION  
PROGRAM OF NORTH AMERICA



# CERTIFIED WELDER

Nobert D Page

Membership #: 1256614

EFFECTIVE DATE      EXPIRATION DATE

2/1/2009              2/1/2010

Process: SMAW - A7r



IRONWORKER WELDER CERTIFICATION  
PROGRAM OF NORTH AMERICA



# CERTIFIED WELDER

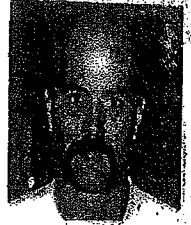
Nobert D Page

Membership #: 1256614

EFFECTIVE DATE      EXPIRATION DATE

6/23/2008            6/23/2009

Process: SMAW - A1



IRONWORKER WELDER CERTIFICATION  
PROGRAM OF NORTH AMERICA



# CERTIFIED WELDER

Nobert D Page

Membership #: 1256614

EFFECTIVE DATE      EXPIRATION DATE

4/5/2009              4/5/2010

Process: FCAW-S - B1a



IRONWORKER WELDER CERTIFICATION  
PROGRAM OF NORTH AMERICA



# CERTIFIED WELDER

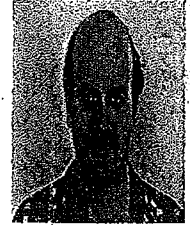
Nobert D Page

Membership #: 1256614

EFFECTIVE DATE      EXPIRATION DATE

2/1/2009              2/1/2010

Process: SMAW - A7



IRONWORKER WELDER CERTIFICATION  
PROGRAM OF NORTH AMERICA



# CERTIFIED WELDER

Nobert D Page

Membership #: 1256614

EFFECTIVE DATE      EXPIRATION DATE

2/1/2009              2/1/2010

Process: SMAW - A7a



**James C Fortin**

---

**From:** Paul Becker  
**Sent:** Thursday, June 18, 2009 12:25 PM  
**To:** James C Fortin  
**Subject:** Fwd: Florence House 6-16-09

Sent from my iPhone

Begin forwarded message:

**From:** Darrell Gilman <[dgilman@summitenv.com](mailto:dgilman@summitenv.com)>  
**Date:** June 18, 2009 7:55:57 AM EDT  
**To:** Paul Becker <[paul@beckerstructural.com](mailto:paul@beckerstructural.com)>  
**Subject:** Florence House 6-16-09

June 17, 2009

Summit Geo. Tech.

640 Main Street

Lewiston, Maine 04240

Ref: The Florence House - Project 14194

QAL-09-1011

Attn: Darrel Gilman

Dear Sir,

On 6/17/09, a site visit was made to the Florence House project in Portland. The following items were inspected:

1<sup>st</sup> Floor Framing – Lines 1-16, A-N

Bolts – In progress

Bracing connections – In progress

Joist connections – In progress

Bridging connections – In progress

Decking welds and fasteners – In progress

Embed connections – In progress

Note: Beams to embed connections on 1<sup>st</sup> floor framing at line N, 1.5-5 are at wrong elevation. Need RFI for relocation.

All welding which was in progress was IAW AWS D1.1 and applicable site DWGS.

Best Regards,

Arthur Gallant

CWI# 90100091

# 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

## INSPECTION REPORT

CUSTOMER: SUMMIT GEO TECH ENG.		PAGE 1 OF 1
ADDRESS: AUGUSTA, ME.		
ATTENTION: DARREL GILMAN		
COPIES:		
PROJECT: FLORENCE HOUSE - PORTLAND, ME.		
OWNER:		
CONTRACTOR: GANNESTON CONSTRUCTION CORP.		
JOB No.: 14194	REPORT No.: QAL-09-1166	DATES INSPECTED: 07-06-09

### REMARKS

>>>> SITE VISIT TO PERFORM VISUAL INSPECTION OF STRUCTURAL STEEL CONNECTIONS: GRID LINES 1-7, A-N ALL ELEVATIONS.

> REF. PREVIOUS FIELD REPORT DATED 06-29-09.

A) ALL DECKING ATTACHMENTS NOW COMPLETE.

B) SECOND LEVEL JOIST AND BRIDGING CONNECTIONS NOW COMPLETE.

C) FIRST LEVEL PLAN SHOWS (1) LOWER HSS WIND BRACE WELD MISSING AT LOCATION 1-G AS MARKED WITH SOAP STONE. ALL REMAINING WIND BRACE CONNECTIONS COMPLETED FOR ALL LEVELS.

> LOCATION 13-N (2ND) LEVEL FRAMING PLAN SHOWS COLUMN TO W16X26 SHEAR TAB TO BEAM BOTTOM FLANGE WITH (2) MISSING BOLTS. ALL BEAM WEB BOLTS COMPLETE.

> SEVERAL COLUMN BASE ANCHOR BOLTS REQUIRE FINAL TORQUE.

> CANOPYS IN PROGRESS.

COMPLETED ITEMS COMPLY WITH SITE DOCUMENTS AND AWS D1.1, D1.3 REQUIREMENTS FOR VISUAL ACCEPTANCE.

END ITEMS ////



FAA REPAIR STATION NUMBER RX5R187N  
 METHOD(S), PROCESS(ES), PROCEDURE(S) MERCURY FREE

MICHAEL W. DREW  
 CWI # 99050211  
 QCI EXP. 06/01/11

ADDITIONAL INFORMATION - SEE ATTACHED:		<input type="checkbox"/> SKETCH(ES)	<input type="checkbox"/> SUPPLEMENTARY SHEET(S)	<input type="checkbox"/> NDT REPORTS	<input type="checkbox"/> VIDEO
SIGNATURES				CERTIFICATION	DATE
INSPECTOR	M. Drew	CWI # 99050211		LEVEL	M D Y
				ASNT	II 07   07   09
SUPERVISOR					

# 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

## INSPECTION REPORT

CUSTOMER: Summit Environmental Eng.	PAGE 1 OF 1
ADDRESS: Augusta, ME	
ATTENTION: Darrel Gilman	
COPIES: file	
PROJECT: Florence House - Portland, ME.	
OWNER:	
CONTRACTOR: Ganneston Construction Corp.	
JOB No.: 14194	REPORT No.: QAL-09-2174
P. O. NUMBER:	DATES INSPECTED: 12/16/2009

### REMARKS

Performed Visual Inspection at two (2) locations.

At Canopy along Line N:

The MC18 connection plate had 12" of fillet weld varying in size from 1/4" to 0" along vertical side. The weld at top of plate could not be verified as to effective throat nor quality.

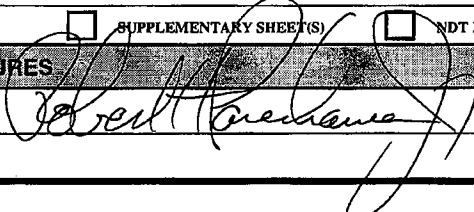
At Canopy along Line N & Line 1:

C15 connections were missing bolts. In lieu of bolts, the shear tab was welded to channel.

Acceptability can not be determined without the corrective actions being approved by EOR.

**FAA REPAIR STATION NUMBER RX5R187N**  
METHOD(S),PROCESS(ES),PROCEDURE(S) MERCURY FREE

ADDITIONAL INFORMATION - SEE ATTACHED:  SKETCH(ES)  SUPPLEMENTARY SHEET(S)  NDT REPORTS  VIDEO

SIGNATURES		CERTIFICATION		DATE		
INSPECTOR	R. H. Parechian, Jr. CWI# 90100111 	ASNT	II	M	D	Y
SUPERVISOR						

# Quality Assurance Labs Inc.

NON-DESTRUCTIVE TESTING AND INSPECTION SERVICES  
 80 PLEASANT AVENUE • SOUTH PORTLAND, MAINE 04108 • TEL: (207) 799-8911 • FAX: (207) 799-7251

## INSPECTION REPORT

CUSTOMER: <u>Summit Environmental Eng.</u>		PAGE <u>1</u> OF <u>1</u>
ADDRESS: <u>Augusta, ME</u>		
ATTENTION: <u>Darrel Gilman</u>		
COPIES: <u>file</u>		
PROJECT: <u>Florence House - Portland, ME</u>		
OWNER:		
CONTRACTOR: <u>Ganneston Construction Corp.</u>		
JOB No.: <u>14194</u>	REPORT No.: <u>QAL-10-01(X)</u>	P. O. NUMBER: _____
		DATE INSPECTED: <u>01/19/2010</u>

**REMARKS**

Performed Visual Inspection in accordance with AWS D1.1 2008 and AISC 360-05.

Canopy along Line N & Line I: Welds were found to be acceptable.


Canopy along Line N - North: The required full penetration bevel weld at the top where the two plates come together is not possible to perform because of configuration.

As reported on QAL-09-2174, the fillet weld along skewed connection plate is 12" long and varies in size from 1/4" to 0". These conditions do not meet the requirements of Becker Structural Engineers, Inc. letter dated January 13, 2010.

Welds at mitered corners: Mitered corners were not ground to a smooth uniform appearance. Material other than weld metal was used to fill mitered corners and ground. Unable to determine how much weld is at each corner.

Damaged Joist: Damaged joist were inspected and found to be acceptable per sketch provided by Ganneston.

**FAA REPAIR STATION NUMBER RX5R187N**  
 METHOD(S),PROCESS(ES),PROCEDURE(S) MERCURY FREE

ADDITIONAL INFORMATION - SPE ATTACHED: <input type="checkbox"/> SKETCHES) <input type="checkbox"/> SUPPLEMENTARY REPORT(S) <input type="checkbox"/> NDT REPORTS <input type="checkbox"/> VIDEO	
<b>SIGNATURES</b>	<b>CERTIFICATION</b>
INSPECTOR <u>R. H. Paruchanian, Jr. CWI# 9010011</u> 	ASNT II 01   26   10
SUPERVISOR _____	

# 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

## INSPECTION REPORT

CUSTOMER: Summit Environmental Eng.		PAGE 1 OF 1	
ADDRESS: Augusta, ME			
ATTENTION: Darrell Gilman			
COPIES: file			
PROJECT: Florence House - Portland, ME			
OWNER:			
CONTRACTOR: Ganneston Construction Corp.			
JOB No.: 14194	REPORT No.: QAL-10-0264	P. O. NUMBER:	DATES INSPECTED: 02/17/2010

### REMARKS

Performed Visual Inspection in accordance with AWS D1.1 2008 and AISC 360-05.  
Spoke with James Fortin, Becker Eng. before performing inspection to determine scope of inspection.

**Canopy along Valley Street:**

At this canopy there are three (3) issues.

First issue is the installation of an angle to support the roof decking at the inside corner. The angle was installed with a fillet weld along the toe of the angle and a fillet weld along the vertical leg.

The welds on the vertical are rejected for poor quality.

The weld along the toe has 4" of 3/16" fillet weld which is acceptable. The balance of weld, approximately 4", is rejectable for poor quality.

Second issue is the installation of an angle at the outside corner. The welding and installation are acceptable.

Third issue was to determine the amount of weld at the mitered corners of channels. The only method to determine this was to remove some of the "liquid weld" until weld metal was found. The first flange inspected revealed there was no weld metal at this joint for at least 3". The other flanges revealed similar conditions.

The "liquid metal" was removed at the mitered outside corner of the channel web. It appears a sealing weld was installed and the balance was filled with the "liquid metal".

**Canopy along the main entrance:**

The one issue on this canopy was to determine the amount of weld at the mitered corners of channels. The inspection revealed that there was little to no weld metal for most of the joint and was similar to the Valley Street canopy.

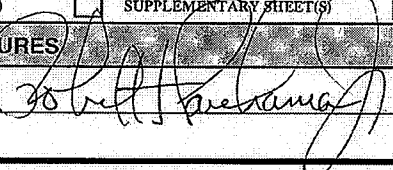
Both canopies exhibited cracks forming in the "liquid metal" which could be seen from ground level.

A verbal report was given to James Fortin by phone. It was determined at this time that the 4" of weld on the deck angle support was adequate structurally and would be acceptable.

It was also determined that the mitered flanges would require repair.

**FAA REPAIR STATION NUMBER RX5R187N**  
METHOD(S), PROCESS(ES), PROCEDURE(S) MERCURY FREE

ADDITIONAL INFORMATION - SEE ATTACHED:  SKETCH(ES)  SUPPLEMENTARY SHEET(S)  NDT REPORTS  VIDEO

SIGNATURES		CERTIFICATION		DATE		
INSPECTOR	LEVEL	M	D	Y		
R. H. Parechianian, Jr. CWI# 90100111 	ASNT	II	02	19	10	
SUPERVISOR						

# 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

## INSPECTION REPORT

CUSTOMER: Summit Environmental Eng.		PAGE 1 OF 1
ADDRESS: Augusta, ME		
ATTENTION: Darrel Gilman		
COPIES: file		
PROJECT: Florence House - Portland, ME		
OWNER:		
CONTRACTOR: Ganneston Construction Corp.		
JOB No.: 14194	REPORT No.: QAL-10-0345	DATE INSPECTED: 03/03/2010

### REMARKS

Performed Visual Inspection in accordance with AWS D1.1 2008 and AISC 360-05.

Inspection was performed on a total of four (4) canopies.  
 All four canopies now have angles welded to channel webs at the inside corners. Angles are welded at toes of angles for a length of approximately 6". Welds are a minimum 3/16" fillet weld with acceptable quality.

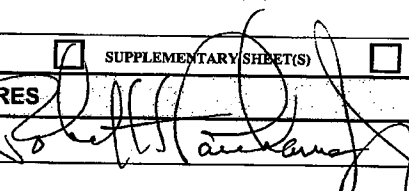
All mitered flanges have been cleaned and welded. Welds have been ground reasonably smooth. Welds are of acceptable quality.

All mitered webs have been cleaned and additional weld metal deposited on the outside. Welds have been ground reasonably smooth. Welds are of acceptable quality.

At both flange and web miters, filler has been used to fill minor irregularities. Filler was ground to a smooth uniform appearance.

**FAA REPAIR STATION NUMBER RX5R187N**  
 METHOD(S), PROCESS(ES), PROCEDURE(S) MERCURY FREE

ADDITIONAL INFORMATION - SEE ATTACHED:  SKETCH(ES)  SUPPLEMENTARY SHEET(S)  NDT REPORTS  VIDEO

SIGNATURES		CERTIFICATION		DATE		
INSPECTOR R. H. Parechian, Jr. CWI# 90100111		ASNT	II	M	D	Y
SUPERVISOR						



# **B E C K E R**

structural engineers, inc.

## **MILL CERTIFICATIONS**

**PROJECT FLORENCE HOUSE**

**STRUCTURAL STEEL**      RECEIVED    DATE: 7-13-09    NOT RECEIVED

**BOLTS**                      RECEIVED    DATE: 7-13-09    NOT RECEIVED

**WELD FILLER**              RECEIVED    DATE:    NOT RECEIVED

ITEMS ABOVE MARKED "RECEIVED" HAVE NOT BEEN INCLUDED IN THIS REPORT DUE TO THE LARGE VOLUME. HARD COPIES ARE AVAILABLE UPON REQUEST.

SPECIAL INSPECTOR: James Fortin, P.E.

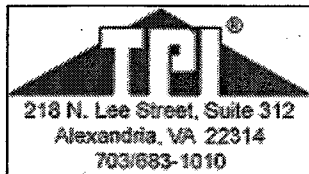
DATE: 3-04-10

# **EXHIBIT B**

**06100 Wood Construction**

**Structural Schedule of Special Inspection Services**  
**FABRICATION AND IMPLEMENTATION PROCEDURES – WOOD TRUSSES**

VERIFICATION AND INSPECTION  IBC Section 1704.2	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
<p>1. Fabrications Procedures: Review of fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by an approved special inspection agency. At the completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building code official stating that the work was performed in accordance with the approved construction documents.            -OR-</p> <p>2. TPI Inspection Program: Fabricator shall participate in the TPI Quality Assurance Inspection Program, and maintain a copy of the Quality Assurance Procedures Manual, QAP-90. Submit copy of certificate. All trusses shall bear the TPI Registered Mark.</p>	Y	S	Fabricator shall submit one of the two qualifications	SII	PE/SE or EIT	<i>SEE CERT. INCLUDED</i>
<p>3. At completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building code official stating that the work was performed in accordance with the approved construction documents</p>	Y	S	IBC 1704.2.2	SII	PE/SE or EIT	<i>SEE CERT. INCLUDED</i>

**TPI's Mission:**

To maintain the truss industry on a sound engineering basis.



## Quality Assurance Inspection Program: Wood Truss Licensees

Select a state

### CANADA

Adam Lumber, Inc.  
TPI Plant No. 793  
Waterloo, QC  
(450) 539-1858

Clyvanor LTEE  
TPI Plant No. 410  
St. Goeges, Beauce, QC  
(418) 228-7690

Maple Ridge Truss  
TPI Plant No. 653  
Pitt Meadows, BC  
(604) 465-9176

Pyramid Truss  
TPI Plant No. 475  
Abbotsford, BC  
(604) 854-6626

Solutions Prefab American  
Structures, Inc.  
TPI Plant No. 774  
Thetford Mines, QC  
(418) 423-3377

Structure DLD, LTEE  
TPI Plant No. 633  
LaGuadeloupe Beauce, QC  
(418) 459-6001

Structures RBRs  
TPI Plant No. 930  
Saints-Anges, QC  
(418) 253-5454

Structures St. Joseph LTD  
TPI Plant No. 590  
St-Joseph De Beauce, QC  
(418) 397-5712  
WWW.STRUCTURESST-  
JOSEPH.COM

Viceroy Homes Limited  
TPI Plant No. 616  
Richmond, BC  
(604) 274-8700

Timberfield Roof tryss  
TPI Plant No. 903  
London, ON  
(519) 659-2711





MiTek Canada, Inc.  
100 Industrial Road  
Bradford, ON, Canada L3Z 3G7  
Phone 905/952-2900  
Toll Free 800/268-3434  
Fax 905/952-2901

January 13, 2010

James Fortin, P.E.

Ref #: **B36792**

75 York Street  
Portland, ME 04101

Dear James,

RE: Florence House

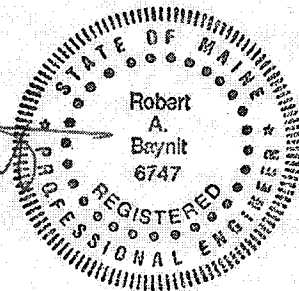
I am writing in regard to the above building to comment on the capacities of the trusses as per your email of Jan 4, 2010:

1. The roof trusses on the entire roof truss system were inspected by Stéphane Blanchette, P.Eng, and reported to MiTek Canada Inc for analysis and repair.
2. All trusses found to be damaged; including the 22 trusses marked with orange spray paint by Ganneston's subcontractor, were reviewed and evaluated.
3. The evaluation resulted in the need to reinforce 14 trusses with a scab truss nailed to the existing truss. The repair instructions were prepared and sealed by Ross Lee, PE on behalf of MiTek Canada Inc.
4. The level of damage of the remaining trusses was acceptable because the remaining bearing length with flush plate alone has sufficient bearing capacity. Therefore, these trusses have sufficient capacity to support the design loads.
5. Assuming all other roof parameters including and not limited to walls, foundation and roof bracing system are properly designed and installed, the entire as-built roof truss system is adequate to support the design loads.

I trust the above is as per your request but if you should have any questions please do not hesitate to contact me.

Yours truly,  
MiTek Canada Inc.

Robert Baynit, P.Eng., PE  
Director of Engineering.



**Structural Schedule of Special Inspections**  
**WOOD CONSTRUCTION**

VERIFICATION AND INSPECTION IBC Section 1704.6	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
1. Fabrication of high-load diaphragms						
a. Verify wood structural panel sheathing for grade and thickness	Y	P	IBC 1704.6	SII	PE/SE or EIT	JLF
b. Verify the nominal size of framing members at adjoining panel edges	Y	P	IBC 1704.6	SII	PE/SE or EIT	JLF
b. Verify the nail or staple diameter and length	Y	P	IBC 1704.6	SII	PE/SE or EIT	JLF
b. Verify the number of fastener lines	Y	P	IBC 1704.6	SII	PE/SE or EIT	JLF
b. Verify the spacing between fasteners in each line and at edge margins	Y	P	IBC 1704.6	SII	PE/SE or EIT	JLF
2. Load Tests for Joist Hangers: Provide evidence of manufacturer's load test in accordance with ASTM D1761 including the vertical load bearing capacity, torsional moment capacity, and deflection characteristics when there is no calculated procedure recognized by the code.	Y	S	IBC 1715 [submit ICBO reports]	SII	PE/SE or EIT	N/A

# B E C K E R

structural engineers, inc.

## FLORENCE HOUSE FINAL REPORT – March 24, 2010

1	1 <sup>st</sup> floor wall framing	07/27/09	For the in-fill wall panels at the first floor level along Line 1, from Grid C to the site retaining wall, it is acceptable to replace the LVL wall studs with (2) 2x6 at 24" o.c. since these walls do not serve as a backing for brick veneer at these locations. 08/13/09: Wall studs have been constructed.	CLOSED
2	2 <sup>nd</sup> floor wall framing	07/27/09	Due to inconsistencies in the levelness of the 2 <sup>nd</sup> floor concrete slab on deck, gaps exist between the bottom plate of the wall panel and the PT sill plate bolted to the slab. At all locations where gaps exist, place full width by full depth hardwood shims below all vertical studs. Contractor has stated that shims will be cut to fit the various gap widths. Apply construction adhesive to each side of each shim prior to placing to provide positive connection between the plates. 08/24/09: It appears that shims have been installed as necessary, and joints have been sealed.	CLOSED
3	2 <sup>nd</sup> & 3 <sup>rd</sup> floor wall framing	07/27/09	At the 5 1/4" x 7" LVL supporting the 3H1 headers (see S1.4, 2 locations), it is acceptable to bear the LVL on (2) PT SYP #2 sill plates fastened to the concrete slab with (2) 5/8" diameter x 2 3/4" concrete embed Simpson Titen HD screws (countersink screws into top-most plate). 08/13/09: Plate and bolts have been placed, but LVL is not in place. 08/24/09: LVL & wood stud posts have been installed.	CLOSED
4	1 <sup>st</sup> floor wall framing	07/31/09	At the first floor window openings along Line A,N,7 & 16, the top of the R.O. is at 11'-11" above the first floor slab. With a floor-to-floor height of 14'-1", a clear distance of between 1/2" to 8 1/2" remains between the bottom of the steel beam and the top of the window header. At these locations, it is not necessary to install cripple studs above the header, but the header shall be attached to the jambs using the Simpson clips at the top and bottom of the header (as specified). If the header is at least 1" into the light-gauge track, the top Simpson angles can be omitted. If top angles cannot be installed due to interference with the metal track, a 4" long max section of the inside flange of the top track can be cut to fit a palm nailer for fastening the hanger to the jamb. At cut locations, fasten a 16" long Simpson CMST-12 ga strap (or equivalent) centered across the cut and screwed to the track flange. Note: When installing plywood, ensure that joints do not occur at the metal track. Sheathing fastener spacing shall follow drawing requirements. 08/13/09: Headers and clips have been installed without needing to cut the metal track.	CLOSED
5	1 <sup>st</sup> floor wall framing	07/31/09	Along Line F, the jamb at Door 126 interferes with the HSS hangers for the canopy. At this location, increase the jamb at adjacent Window F to (6) 1 3/4" x 5 1/2" LVL's, and extend the door header to this jamb. Install (2) LVL's for the door jamb extending from the slab to the underside of the header. Attach with Simpson LS50 angles, each side of jamb. 08/13/09: Item has been completed as described above.	CLOSED
6	2 <sup>nd</sup> & 3 <sup>rd</sup> floor wall framing	07/31/09	At all shear wall locations, attach the sheathing to the PT bottom plates with galvanized fasteners. 08/24/09: Fastening not complete at all areas. Confirmation is necessary that fasteners used are galvanized. Review of exterior wall sheathing attachments not yet completed. 09/25/09: Item was reviewed with LocBid during inspection of exterior shear wall plywood fastening.	CLOSED

# B E C K E R

structural engineers, inc.

7	2 <sup>nd</sup> & 3 <sup>rd</sup> floor framing	07/31/09	For floor truss strong-back attachment at wood stud walls, it is acceptable to replace the Simpson A34 angles specified on Section 2/S1.4 with a vertical 2x6 stud placed against the strong-back. Fasten all members together. 8/24/09: Strong-backs are being installed as specified above.	CLOSED
8	2 <sup>nd</sup> floor wall framing	07/31/09	At SW-5 locations, the Titen HD anchors are not installed to attach the wall panel to the concrete slab. 08/24/09: Titen HD anchors have been installed.	CLOSED
9	2 <sup>nd</sup> floor wall framing	07/31/09	At SW-4 locations, the 5/8" through bolts are not installed to attach the wall panel to the steel framing. 08/24/09: Correct fastening was not completed as these shear walls. Titen HD anchors were placed in lieu of through bolts. Areas shall be corrected to meet drawing requirements. 09/25/09: Work is not complete. One area could not be reviewed from below due to sheetrock installation. 10/19/09: It appears that through bolts have been placed as specified. Bolts were noted in all areas reviewed.	CLOSED
10	3 <sup>rd</sup> floor framing	07/31/09	At LVL attachment between third floor trusses (along Line 10), the Simpson hanger flange nailing is incomplete. 08/24/09: Top flange hanger used, and fastening appears complete.	CLOSED
11	2 <sup>nd</sup> & 3 <sup>rd</sup> floor wall framing	07/31/09	At various locations, floor trusses do not line up with wall studs. Additional studs will be added as necessary. 09/02/09: Item occurs at areas of the third floor also. 09/25/09: Studs were added where necessary at all areas observed.	CLOSED
12	2 <sup>nd</sup> & 3 <sup>rd</sup> floor wall framing	07/31/09	At joints between panels, vertical studs shall be in contact and shall be attached together with (2) 10d nails at 6" o.c. 09/25/09: Fasteners were found at areas observed.	CLOSED
13	3 <sup>rd</sup> floor framing	07/31/09	Between Lines G & H, drawing S1.4 specifies floor trusses to be aligned at edges of floor opening. GC shall confirm truss layout is adequate to suit floor opening location. 09/25/09: GC shall coordinate as necessary.	CLOSED
14	2 <sup>nd</sup> floor wall framing	07/31/09	At numerous locations, the shear wall holdown bolt (per Detail B/S4.3) does not extend above the wall bottom plates. GC shall confirm locations, and submit recommendation for repair. 09/25/09: Threaded rods have been extended using coupler nuts, and holdowns are installed.	CLOSED
15	3 <sup>rd</sup> floor	07/31/09	The CMU wall construction at the third floor cantilever bond beam (Section 9/S3.2) has un-mortared joints. 09/25/09: Work is on-going but not yet completed. 10/19/09: Joints have been filled in.	CLOSED
16	1 <sup>st</sup> floor wall framing	08/13/09	At the first floor in-fill wall framing along Line F, the jamb attachment at Door 126 is missing a Simpson angle at the base of the jamb.	CLOSED



# B E C K E R

structural engineers, inc.

17	3 <sup>rd</sup> floor & Roof Framing	08/24/09	<p>PT ledgers against CMU walls that support floor and roof framing are not bolted to CMU wall as specified (see section 9/S4.2 &amp; 4/S4&amp; 4/S4.1).</p> <p>09/25/09: Ledgers were found not bolted to the CMU walls as specified. ALL areas shall be reviewed when completed and prior to sheetrock installation.</p> <p>10/19/09: PT ledgers were not visible for review during this visit due to installation of sheetrock. GC has stated that ledgers were bolted as specified.</p> <p>3/24/10: Sheetrock was removed at one location at each level to confirm installation of anchors. Simpson Titen HD anchors were visible and located at spacing specified.</p>	CLOSED
18	Roof Truss System	08/24/09	<p>Configuration of Roof Trusses at Exterior Wall bearing end do not accommodate the 2x ribbon per Section 5/S4.1. An alternate detail to provide adequate stability of the truss shall be provided by the truss manufacturer. Also, Section 5/S4.1 will be revised to show alternate sheathing framing configuration and sheathing fastening.</p> <p>09/25/09: Detail was observed from the third floor level (looking up).</p> <p><u>** All fastening identified in CSKS-18 could not be reviewed due to roofing installation.</u></p>	CLOSED
19	3 <sup>rd</sup> floor framing	08/24/09	<p>The 3B2 &amp; 3H1 headers are pocketed into the CMU stair walls. At 3B2, the CMU wall does not line up with the header, and (1) LVL is not properly bearing on the wall. Contractor shall review area to ensure proper layout, and header bearing will need to be improved. Additional instruction shall be provided by Engineer to address this issue.</p> <p>09/25/09: Fasten a 2x8 x 8" long PT ledger into solid grouted CMU located directly below the unsupported section of the header (ensure contact between ledger and header). Fasten the ledge to the CMU wall with (2) 5/8" x 6 5/8" embed adhesive anchors, centrally located on the plate.</p> <p>10/19/09: Work was completed as instructed.</p>	CLOSED
20	3 <sup>rd</sup> floor framing	08/24/09	<p>At North side of Stair 1, the PT ledger against the CMU wall is not in place for floor sheathing support.</p> <p>10/19/09: Work is not yet completed. Same condition exists at south side of Stair 2.</p> <p>03/24/10: Areas were not specifically reviewed, but adjacent areas were reviewed and noted to be constructed per drawing requirements.</p>	CLOSED
21	3 <sup>rd</sup> floor framing	08/24/09	<p>Truss strong-backs are not attached at ends against CMU walls.</p> <p>09/25/09: Areas were observed where strong-backs need to extend to the CMU wall for attachment. Strong-backs shall be positively attached to structure (ie. walls) at all ends.</p> <p>10/19/09: Strong-backs have been attached as specified.</p>	CLOSED
22	3 <sup>rd</sup> floor framing	08/24/09	<p>Truss strong-back missing at north side of stair 1</p> <p>09/25/09: Strong-backs are in place as specified</p>	CLOSED
23	2 <sup>nd</sup> floor wall framing	08/24/09	<p>Titen HD anchors are not installed at "recessed" wall locations per Section 7/S3.2.</p> <p>09/25/09: Titen anchors were observed where specified.</p>	CLOSED
24	2 <sup>nd</sup> floor wall framing	08/24/09	<p>At exterior wall locations, sill anchors are required at 4'-0" on center. Contractor shall review areas, and add anchors as necessary. At missing locations, install Simpson Titen HD anchors.</p> <p>09/25/09: Anchors were found as specified at all areas observed.</p>	CLOSED

# B E C K E R

structural engineers, inc.

25	2 <sup>nd</sup> & 3 <sup>rd</sup> floor wall framing	08/24/09	<p>At the exterior face of the CMU walls, it has been determined by the General Contractor that sufficient space exists to replace the wood strapping with 2x4 studs. The framing shall be located against the CMU wall and shall create a flush sheathing condition with the wood stud walls on either side. Attach 2x4 studs to the 2x6 bearing wall studs on either side of the CMU wall using 10d nails at 6" on center. Additional instruction on constructing the 2x4 walls and attaching to the CMU wall will be provided by the Engineer shortly.</p> <p>09/25/09: Work not completed along the Valley St. side of Stair 2 per CSKS-17</p> <p>10/19/09: 2x4 wall has been constructed in front of CMU wall. Most of the wall is not accessible, but at one side, the attachment of this wall to the 2x6 bearing wall was observed, and follows CSKS-17.</p>	CLOSED
26	Shear wall holdowns	09/02/09	<p>The shear wall holdowns between the 2<sup>nd</sup> and 3<sup>rd</sup> floor wall panels are not in place per Det. C/S4.3.</p> <p>09/25/09: Holdowns were found installed at all accessible locations. Photos were provided by the GC to confirm areas not accessible during the visit, as the top of the second floor wall panels was sheetrocked at all holdown locations, and installation of the holdown could not be verified</p>	CLOSED
27	3 <sup>rd</sup> floor header post	09/02/09	<p>The (5) 2x8 wood post that supports the 3H1 corridor header at the south side of the building is not in place.</p> <p>09/25/09: Post is in place as specified</p>	CLOSED
28	2 <sup>nd</sup> & 3 <sup>rd</sup> floor wall framing	09/02/09	<p>Built-up wood posts shall be fastened with (2) 10d nails at 6" o.c. as specified on Dwg. S1.0</p> <p>09/25/09: Fastening of field-constructed built-up posts was found adequate at all locations reviewed.</p>	CLOSED
29	Roof Framing	09/02/09	<p>The RB1 header is pocketed into the CMU at Stair 1. The header does not line up adequately with the CMU wall to provide proper bearing. Contractor shall review area to ensure proper layout, and header bearing will need to be improved. Additional instruction shall be provided by Engineer to address this issue.</p> <p>09/25/09: Fasten a 2x8 x 8" long PT ledger into solid grouted CMU located directly below the unsupported section of the header (ensure contact between ledger and header). Fasten the ledge to the CMU wall with (2) 5/8" x 6 5/8" embed adhesive anchors, centrally located on the plate.</p> <p>10/19/09: Work was completed as instructed.</p>	CLOSED
30	3 <sup>rd</sup> floor - Shear Wall Plate Attachment	09/02/09	<p>Additional fastening is necessary for the shear wall bottom plate attachments as specified in the Shear Wall Schedule on Dwg. S4.3</p> <p>09/15/09: Fastening appears to be in general conformance with drawing requirements.</p>	CLOSED
31	Roof Framing - Strong-backs	09/02/09	<p>Truss bracing strong-backs have not yet been installed at 10'-0" on center as required.</p> <p>09/25/09: Strong-backs appear to have been installed as necessary.</p>	CLOSED

# B E C K E R

structural engineers, inc.

32	Stair 2 – CMU wall bracing	09/02/09	A wood stud wall is constructed above the top of the CMU wall at Stair 2 as shown in Section 10/S4.2. A roof joist has been located within 6" of the CMU wall, creating an interference with placement of the 2x4 brace diagonal. Instead, place 2x6 x 24" long blocking tight between the wall studs and the top & bottom of the truss, and install both the diagonal and horizontal brace in the next truss space away from the wall. Ensure roof sheathing is attached to the horizontal brace as specified. 09/25/09: Work has been completed as specified.	CLOSED
33	Roof Trusses	09/02/09	Numerous locations exist where the bearing seat at the corridor end of the truss is cracked and split. At some locations, the seat has completely failed, with a section of the bearing seat missing. GC has contacted the truss manufacturer's engineer to review the in-place trusses, and submit engineered repairs for all damaged trusses. All repairs shall be sealed by a Professional Engineer licensed in the State of Maine. Following completion of all repairs, truss manufacturer's engineer shall review all work, and submit a letter to the Owner and Engineer of Record certifying that the roof truss system is acceptable and in accordance with all project requirements. 09/25/09: Repair documentation is required for review. 10/19/09: PE stamped certification has not yet been received. 01/13/10: Certification letter provided.	CLOSED
34	Roof Framing	09/08/09	At locations where roof joists span parallel with exterior walls, and the roof joist slopes while the wall is kept level, a 2x6 ledger has been used to support the edge of the roof plywood. This ledger has not been detailed on the structural drawings (Section 6/S4.1 was specified in these areas, which considers a sloping wall top plate). Ledger shall be attached to each vertical wall stud with (4) 10d nails. Also, full-depth 2x6 blocking shall be placed between studs behind the ledger. Fasten blocking to the vertical studs, and fasten the ledger and the wall sheathing to the blocking with 10d nails at 4" o.c. 09/25/09: Work has not been completed. 10/19/09: GC has stated that the blocking and attachment details specified above have been completed, but the blocking cannot be reviewed due to sheetrock installation. GC stated that photos are available to certify the work was completed. It is requested that these photos are submitted for review. 3/24/10: Sheetrock and insulation was removed to expose two vertical studs. Ledger attachment to vertical studs was not found to be as specified. The as-built configuration was reviewed, taking into account the proximity of additional shear walls, and it was determined that the as-built capacity of the connection is acceptable.	CLOSED
35	Roof Sheathing Attachment	09/08/09	At all interior shear wall locations, roof plywood sheathing shall be fastened to wall top plates with 8d nails at 4" o.c. per Section 9/S4.1 09/25/09: GC has stated that this item was completed. ** Item cannot be reviewed due to roofing installation.	CLOSED
36	Corridor Bearing Walls	09/08/09	At corridor bearing walls, area between truss seats shall be blocked per Section 3/S4.1. At roof trusses, it is acceptable to install (1) 2x10. At floor level, add (2) 2x10. Attach blocking to LVL rim, and attach wall plates/sheathing to blocking. 09/25/09: Blocking was observed at all areas reviewed.	CLOSED

# B E C K E R

structural engineers, inc.

37	Roof Screen Post Attachment	09/08/09	<p>At roof screen post attachments along the north and south sides, the roof trusses are to be restrained at the posts per Section 13/S4.2. The framing specified in Section 13 is installed, but when the post locations were determined, it was necessary to move the posts slightly to either align with the east &amp; west walls, or to have adequate room to install the bolts. It appears that the maximum clear distance between the post and the truss bracing wall is under 2" (GC shall confirm, and notify engineer if distance is greater than this). To provide adequate restraint at the post, it is necessary to add (4) 2x6 blocking between roof trusses at the top and bottom of the truss. Ensure a tight fit between the blocking and the truss chords, and attach the blocking to the 2x4's in the bracing wall with 3/8" x 8" long RSS Structural Screws (pre-drill holes in 2x4 members). Place (3) RSS Screws at each vertical 2x4 located against the roof trusses, and at 8" o.c. +/- along the top and bottom horizontal 2x4 members.</p> <p>09/25/09: Work is not complete. 10/19/09: Work has been completed.</p>	CLOSED
38	Wood Wall Studs Near Holdowns	09/25/09	<p>Wall studs have been cut for installation and fastening of shear wall holdowns. At non-load bearing walls, replace the cut section and scab a new 4'-0" long 2x6 section to the side of the full height stud, fastening with (2) 10d nails at 6" o.c. At load-bearing walls, add a new full height stud. Fasten all new sections to the plywood sheathing per drawing requirements.</p> <p>10/19/09: Wall studs were found to be repaired as specified at locations observed.</p>	CLOSED
39	Post Cap Attachment at Roof Beam	09/25/09	<p>At the RH1 header adjacent to Stair 2, the Simpson post cap is not attached to the jamb post.</p> <p>10/19/09: Post cap has been attached to jamb post as necessary.</p>	CLOSED
40	Valley Street Canopy – North End	10/19/09	<p>At the Valley Street canopy, the MC 18 connection to the Second Floor Beam connection plate at Line 13 is not fitting up correctly. The connection plate appears rotated slightly such that the bolt holes do not line up. The item was discussed with the steel erector, and in lieu of fully bolting the connection, three bolt holes will be elongated slightly such that a minimum of (1) bolt in each row will be placed. Then the south side and the top of the MC18 connection plate will be welded to the W14 connection plate. Use a 1/4" fillet weld along the south side, and a full penetration beveled weld along the top. These field welds require visual inspection from an AWS Certified Weld Inspector, with a report submitted to Becker Structural Engineers for Record.</p> <p>03/04/10: Item was tracked under separate report specific to the canopy. Final inspection report from AWS Certified Weld Inspector was submitted.</p>	CLOSED

PHOTOS FOR SITING 26

Ganneston Construction Corp  
PO Box 27, North Belfast Avenue  
Augusta, ME 04332-0027

**LETTER OF TRANSMITTAL**

Tel: (207) 621-8505  
Fax: (207) 621-8508

GCC PROJECT NUMBER  
GCC-80677

To:

TUESDAY 3:10pm

GAWRON TURGEON ARCHITECTS  
29 BLACK POINT ROAD  
SCARBOROUGH, MAINE 04074

Date: February 16, 2010  
Attention: WENDI  
RE: FLORENCE HOUSE PROJECT

WE ARE SENDING YOU  X  ATTACHED   UNDER SEPARATE COVER

COPIES	NO.	DESCRIPTION
2		CLIPS PICTURES AS REQUESTED BY JIM FORTIN

REMARKS

HIS E MAIL KICKED IT BACK THUS WE ARE SENDING THESE FOR RECORD

Signed: Michael L. Adams  
Sr. Project Manager

Date:

16-Feb-10  
**BECKER STRUCTURAL ENGINEERS, INC.**

RECEIVED FEB 18 '10

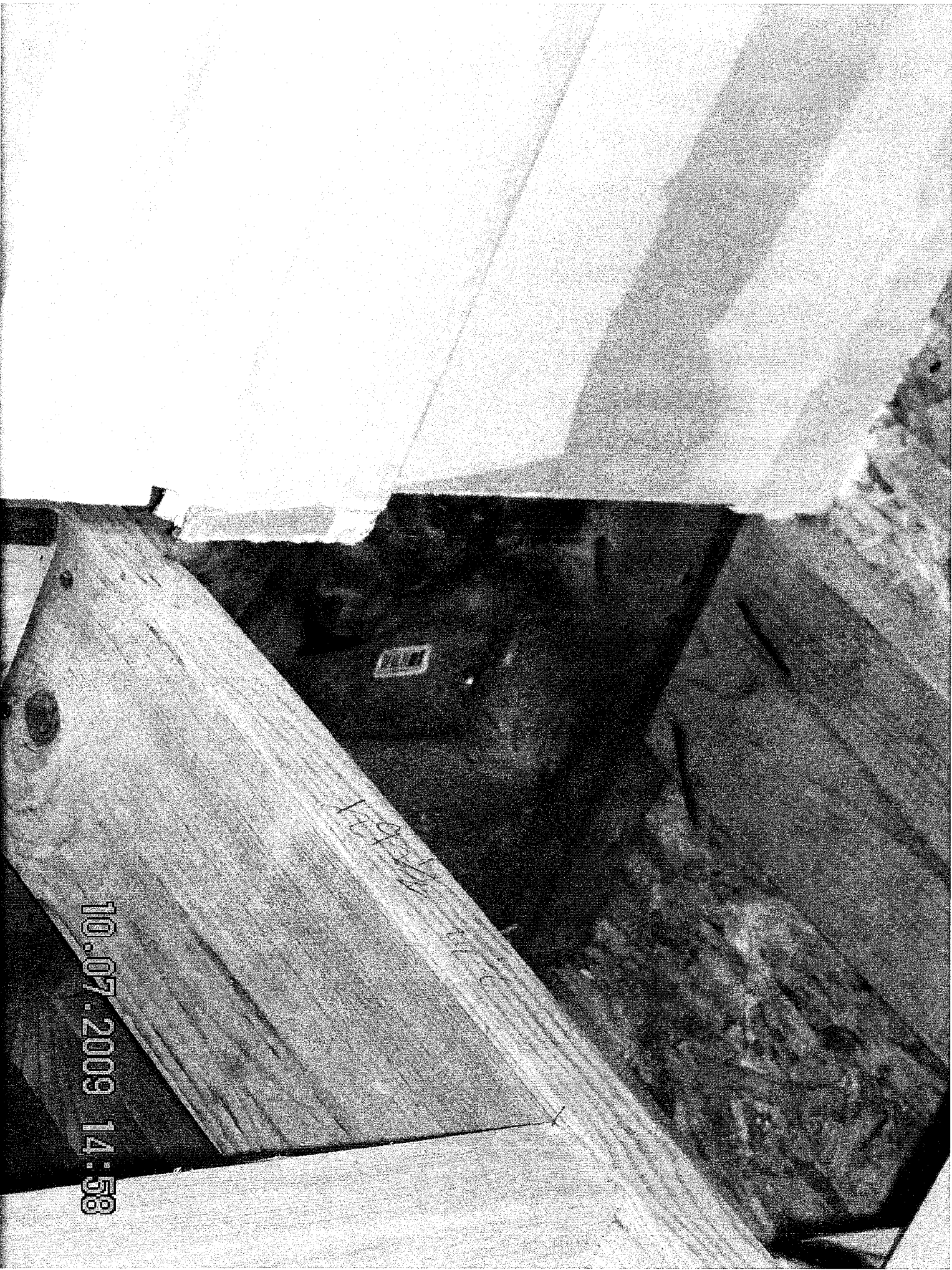
FEB 22 2010  
RECEIVED

105  
0601

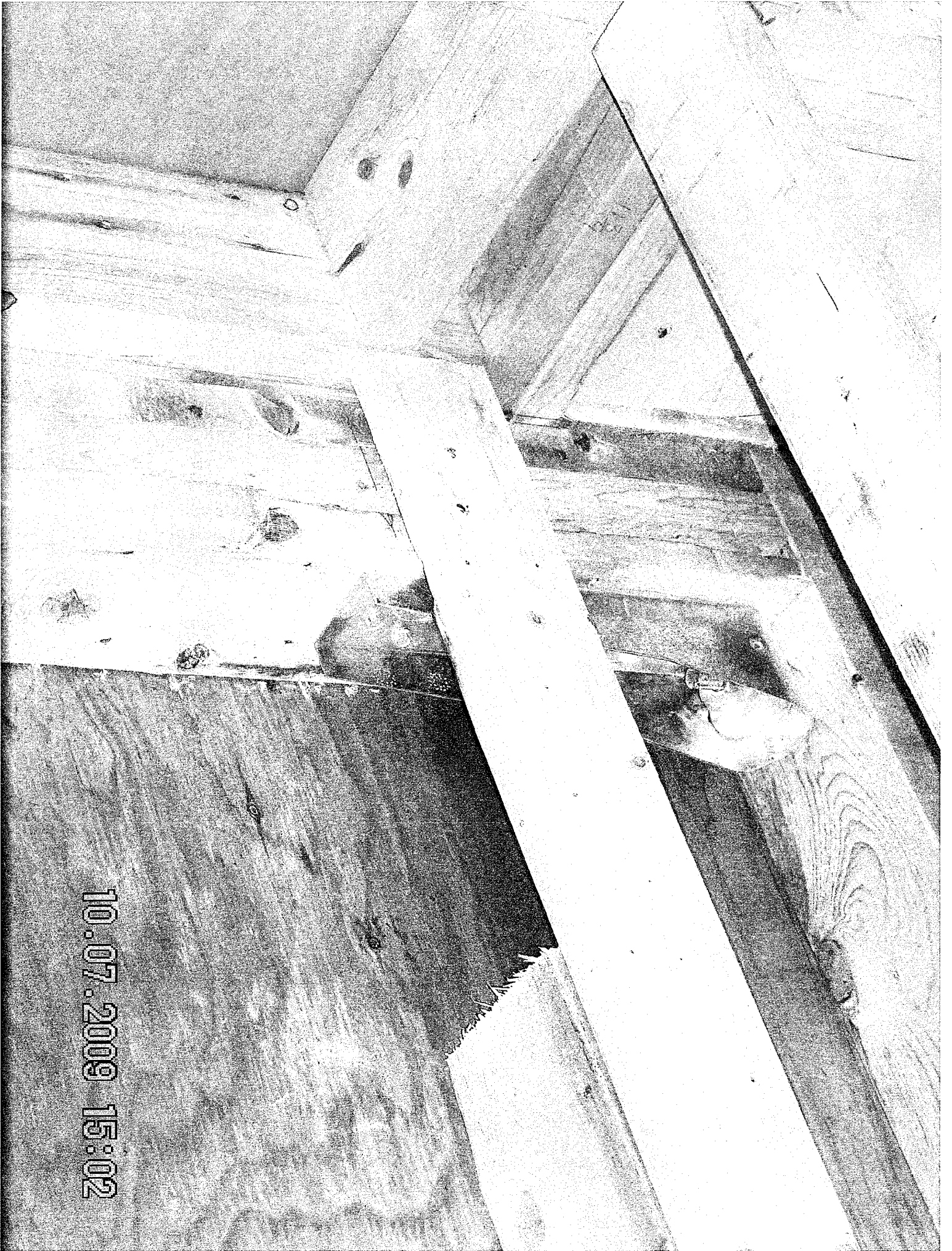
20-304 2x10 S.P.

SPACE 1/8" W/4" BY  
EQUARE EDGED  
SELF SPACING ON  
BEED FOR E.P.  
THIS SIDE  
ESTE LADO  
MILL  
ESTOS  
VICO  
TESTED  
D.S. 2-04  
EXPOSURE 1  
FLOOR SPAN  
23' 32"

10.07.2009 14:57

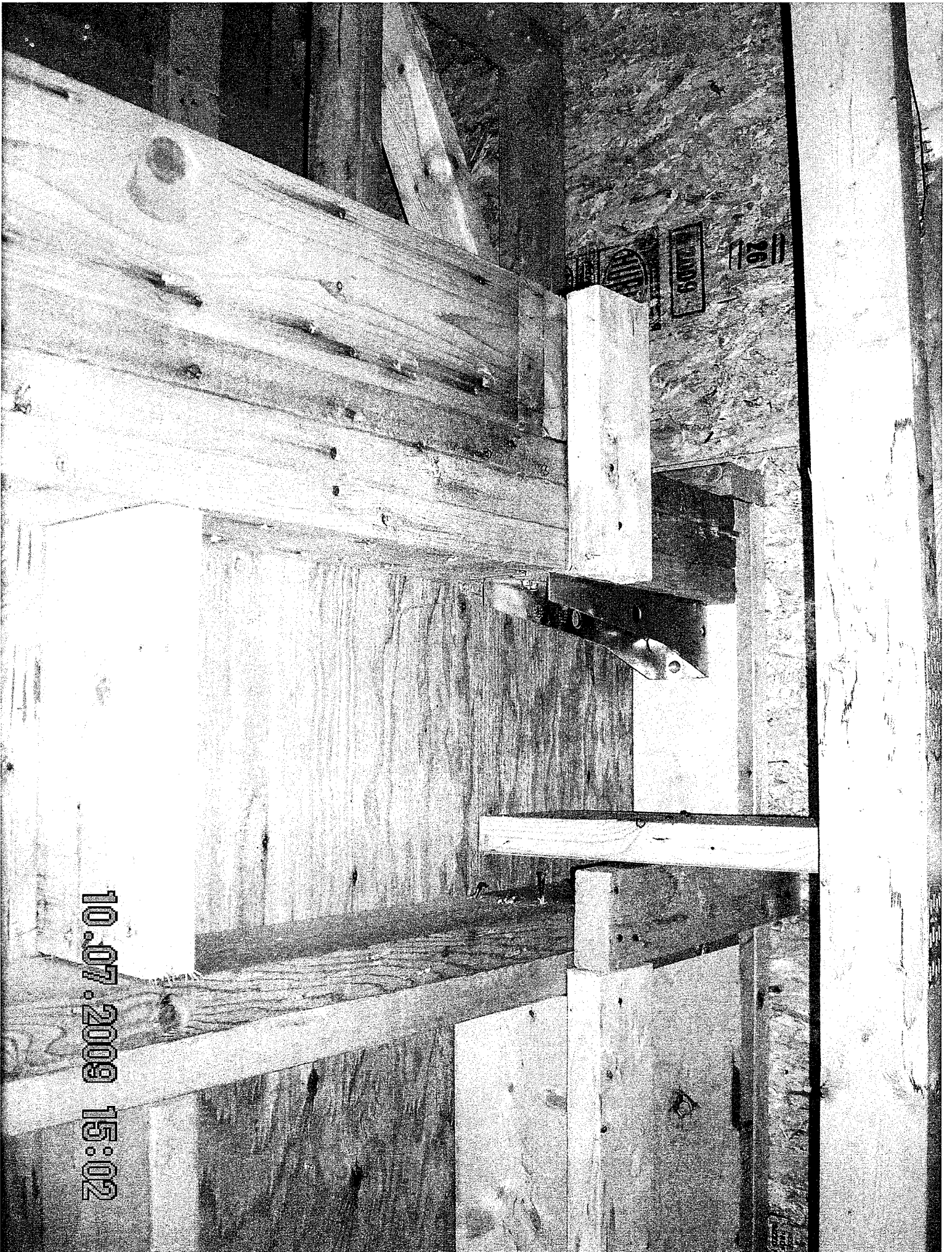


10.07.2009 14:58

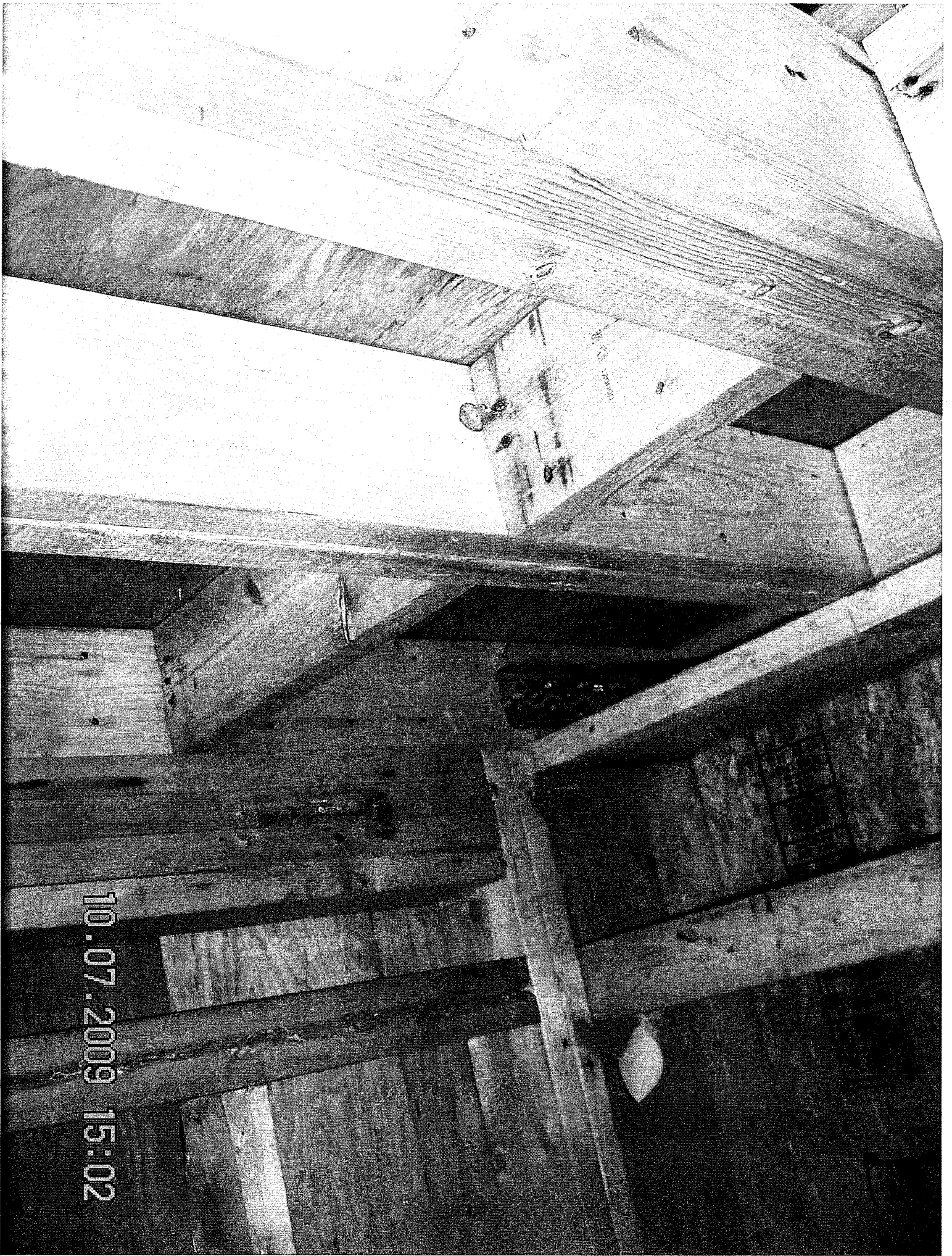


10.07.2009 15:02

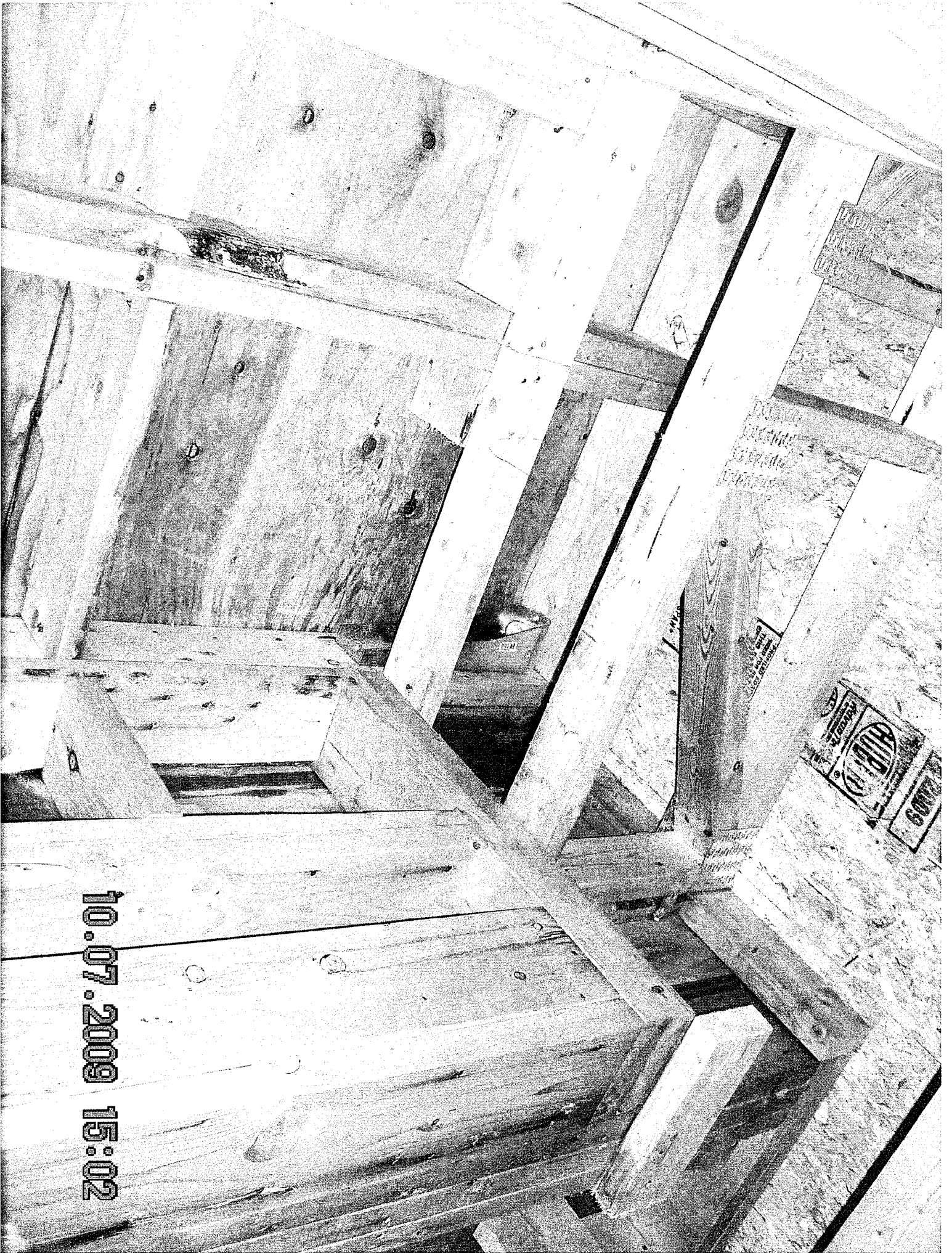




10.07.2009 15:02

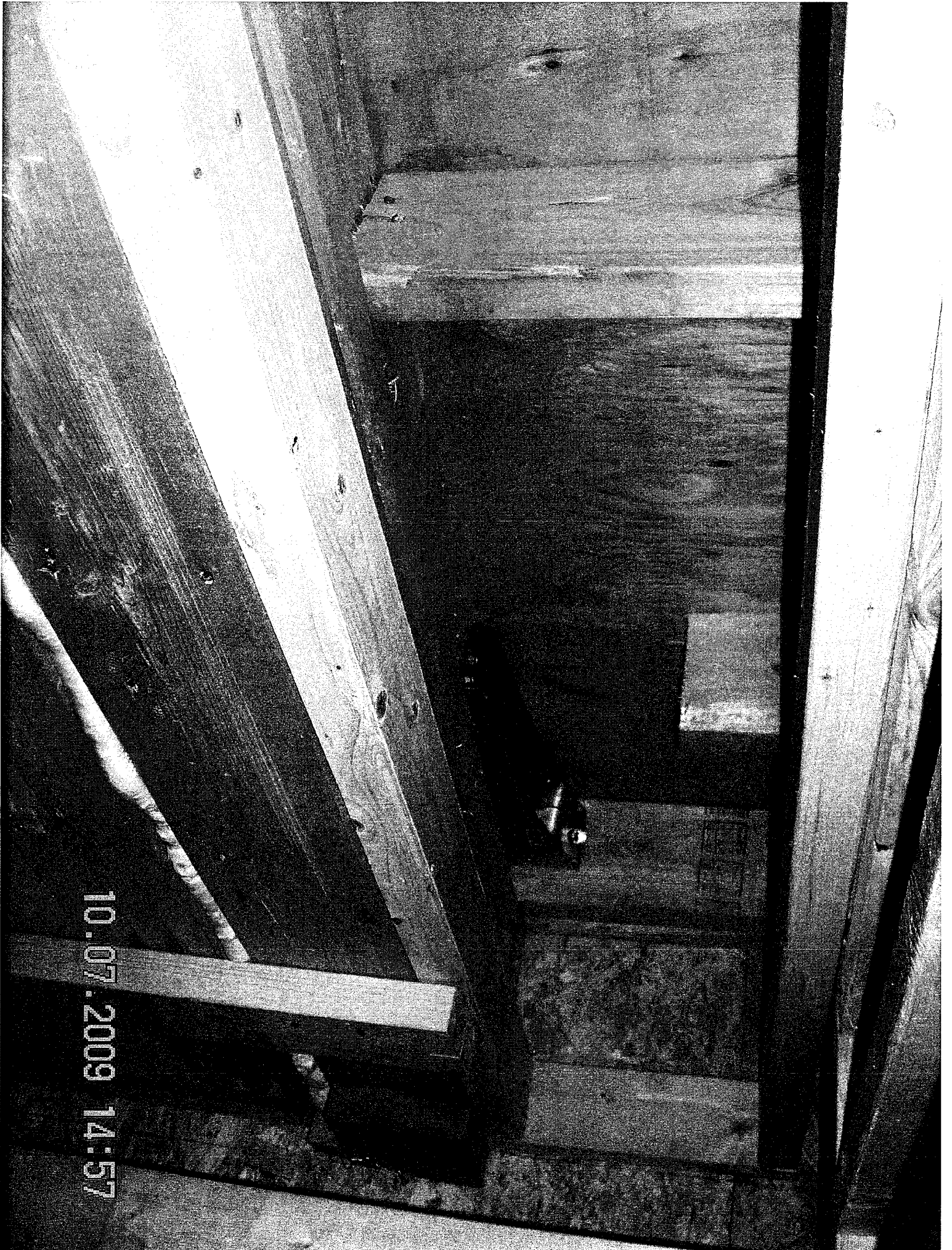


10.07.2009 15:02



10.07.2009 15:02

10.07.2009 14:49



10.07.2009 14:57

<b>OBSERVATION REPORT</b>
Rough Carpentry

<b>Date:</b>	June 18, 2009
<b>Time:</b>	1:30 pm-2:30 pm
<b>Temp:</b>	60's
<b>Weather:</b>	Cloudy / Rain Showers

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI2058

**Observation Location:** Review of panelized wood wall sections at the Hancock Lumber fabrication facility in Windham, Maine.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	
Member Sizes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Comments
Material Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bearing Condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Connections	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Nailing Pattern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bridging/Bracing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Notes:**

This report shall document review of pre-fabricated wood wall panels for the Florence House project. A review the panels was completed at the Hancock Lumber fabrication facility in Windham, Maine prior to shipment to the site. The sections of wall panels accessible for review were found to be in general conformance with the contract documents.

**Signed:** James Fortin, P.E.

# B E C K E R

06100

structural engineers, inc.

<b>OBSERVATION REPORT</b>
Rough Carpentry

<b>Date:</b>	July 27, 2009
<b>Time:</b>	8:30 am – 11:00 am
<b>Temp:</b>	70 – 80
<b>Weather:</b>	Clouds, Sun, Humid

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI2058

**Observation Location:** Review of wood construction completed to date.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	
Member Sizes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Comments
Material Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bearing Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Connections	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Nailing Pattern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Bridging/Bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

A preliminary review of the 2<sup>nd</sup> floor wood wall panels and third floor trusses was completed. The intent was to observe the framing and identify areas that were not in general conformance with the contract documents. At this time, all areas were in progress but appeared to be following the intent of the drawings. A few items were discussed with the General Contractor and framing sub-contractor. These items are provided below.

1. For the in-fill wall panels at the first floor level along Line 1, from Grid C to the site retaining wall, it is acceptable to replace the LVL wall studs with (2) 2x6 at 24" o.c. since these walls do not serve as a backing for brick veneer at these locations.

2. Due to inconsistencies in the levelness of the 2<sup>nd</sup> floor concrete slab on deck, gaps exist between the bottom plate of the wall panel and the PT sill plate bolted to the slab. At all locations where gaps exist, place full width by full depth hardwood shims below all vertical studs. Contractor has stated that shims will be cut to fit the various gap widths. Apply construction adhesive to each side of each shim prior to placing to provide positive connection between the plates.
3. At the 5 1/4" x 7" LVL supporting the 3H1 headers (see S1.4, 2 locations), it is acceptable to bear the LVL on (2) PT SYP #2 sill plates fastened to the concrete slab with (2) 5/8" diameter x 2 3/4" concrete embed Simpson Titen HD screws (countersink screws into top-most plate).

Please call with any questions.

**Signed:** James Fortin, P.E.



# B E C K E R

06100

structural engineers, inc.

<b>OBSERVATION REPORT</b>
Rough Carpentry

<b>Date:</b>	July 31, 2009
<b>Time:</b>	8:30 am-10:30 am
<b>Temp:</b>	70's
<b>Weather:</b>	Sun and Clouds

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI2058

**Observation Location:** Review of first and second floor wood construction completed to date.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	
Member Sizes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Comments
Material Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bearing Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Connections	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Nailing Pattern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bridging/Bracing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

This site visit was completed to review wood construction completed to date. Review included the 1<sup>st</sup> & 2<sup>nd</sup> floor exterior wall framing, and the third floor trusses. A few items were discussed with the General Contractor and framing sub-contractor. These items are provided below.

A. At the first floor window openings along Line A,N,7 & 16, the top of the R.O. is at 11'-11" above the first floor slab. With a floor-to-floor height of 14'-1", a clear distance of between 1/2" to 8 1/2" remains between the bottom of the steel beam and the top of the window header. At these locations, it is not necessary to install cripple studs above the header, but the header shall be attached to the jambs using the Simpson clips at the top and bottom of the header (as specified). If the header is at least 1" into the light-gauge

track, the top Simpson angles can be omitted. If top angles cannot be installed due to interference with the metal track, a 4" long max section of the inside flange of the top track can be cut to fit a palm nailer for fastening the hanger to the jamb. At cut locations, fasten a 16" long Simpson CMST-12 ga strap (or equivalent) centered across the cut and screwed to the track flange. Note: When installing plywood, ensure that joints do not occur at the metal track. Sheathing fastener spacing shall follow drawing requirements.

B. Along Line F, the jamb Door 126 interferes with the HSS hangers for the canopy. At this location, increase the jamb at adjacent Window F to (6) 1 3/4" x 5 1/2" LVL's, and extend the door header to this jamb. Install (2) LVL's for the door jamb extending from the slab to the underside of the header. Attach with Simpson LS50 angles, each side of jamb.

C. For floor truss strong-back attachment at wood stud walls, it is acceptable to replace the Simpson A34 angles specified on Section 2/S1.4 with a vertical 2x6 stud placed against the strong-back. Fasten all members together.

The following items were noted during a walk-through of the second floor. These items were not discussed with the framing sub-contractor or general contractor prior to my departure.

1. At interior shear wall locations, attach the sheathing to the PT bottom plates with galvanized fasteners.
2. At SW-5 locations, the Titen HD anchors are not installed to attach the wall panel to the concrete slab.
3. At SW-4 locations, the 5/8" through bolts are not installed to attach the wall panel to the steel framing.
4. At LVL attachment between third floor trusses (along Line 10), the Simpson hanger flange nailing is incomplete.
5. At various locations, floor trusses do not line up with wall studs. Additional studs will be added as necessary.
6. At joints between panels, vertical studs shall be in contact and shall be attached together with (2) 10d nails at 6" o.c.
7. At third floor, between Lines G & H, drawing S1.4 specifies floor trusses to be aligned at edges of floor opening. GC shall confirm truss layout is adequate to suit floor opening location.
8. At numerous locations, the shear wall holdown bolt (per Detail B/S4.3) does not extend above the wall bottom plates. GC shall confirm locations, and submit recommendation for repair.
9. The CMU wall construction at the third floor cantilever bond beam (Section 9/S3.2) has un-mortared joints.

10. At locations where the radon pipe runs through the concrete floor haunches shown in CSKS-10, remove the crushed stone, wrap, and pour the concrete haunch around the pipe.

Please call with any questions.

**Signed:** James Fortin, P.E.

# BECKER

06100

structural engineers, inc.

**OBSERVATION REPORT**

Rough Carpentry

**Date:** August 13, 2009**Time:** 8:00 am-10:30 am**Temp:** 80's**Weather:** Sunny & Humid**Project:** Florence House**Location:** Portland, Maine**Becker Job No:** SI2058**Observation Location:** Review of complete wall and floor wood construction completed to date.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Member Sizes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Material Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bearing Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Connections	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Nailing Pattern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bridging/Bracing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See notes (attached)
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

This site visit was completed to review wood construction completed to date. Review included the exterior wall and interior bearing wall framing and floor trusses. A meeting was also conducted to review the roof trusses that were exhibiting cracks and excessive curling at the bearing ends. This issue will be tracked independent of this report.

Items noted during this visit are provided below, along with previously documented items. New information, as well as updates to previously documented items, are provided in bold.

If there are any questions with the information provided, please contact our office.

Thank you -

**Signed:** James Fortin, P.E.

# B E C K E R

06100

structural engineers, inc.

<b>OBSERVATION REPORT</b>
Rough Carpentry

<b>Date:</b>	August 24, 2009
<b>Time:</b>	10:00 am-12:00 pm
<b>Temp:</b>	80's
<b>Weather:</b>	Sunny & Humid

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI2058

**Observation Location:** Review of second floor wall framing and third floor wood construction. (including preliminary review of third floor wall framing and roof truss system)

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	
Member Sizes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Material Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bearing Condition	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	As noted
Connections	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	As noted
Nailing Pattern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bridging/Bracing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	As noted
Other:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See notes (attached)
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

This site visit was completed to review wood construction completed to date. Review included the exterior wall and interior bearing wall framing at the second floor as well as the third floor trusses. A preliminary review of the third floor wall framing and roof trusses was completed, but additional review is necessary.

Items noted during this visit are provided below, along with previously documented items. New information, as well as updates to previously documented items, is provided in bold.

If there are any questions with the information provided, please contact our office.

Thank you -

**Signed:** James Fortin, P.E.

# B E C K E R

06100

structural engineers, inc.

<b>OBSERVATION REPORT</b>
Rough Carpentry

<b>Date:</b>	September 2, 2009
<b>Time:</b>	1:00 pm-3:00 pm
<b>Temp:</b>	80's
<b>Weather:</b>	Sunny

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI2058

**Observation Location:** Review of third floor wall framing and roof truss installation.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	
Member Sizes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Material Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bearing Condition	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See notes (attached)
Connections	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See notes (attached)
Nailing Pattern	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See notes (attached)
Bridging/Bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See notes (attached)
Other:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See notes (attached)
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

This site visit was completed to review third floor wall construction and roof truss installation completed to date. Construction appears to be progressing well. Items noted have been included in the following table. New information, as well as updates to previously documented items, is provided in bold.

The following items have not yet been reviewed. These items will be reviewed once the General Contractor states that all work is completed and ready for review. These items include:

1. Roof Plywood Attachment
2. Exterior Wall Sheathing Attachment and Plywood Fastening between wall panels
3. Shear wall nailing at bottom plates
4. Specific fastening details specified in the construction documents (Section 1/S4.1, for example)
5. Canopies (not yet installed)
6. Simpson H-clips at ends of all roof trusses.
7. Roof Screen Attachments to roof trusses, and associated details

If there are any questions with the information provided, please contact our office.

**Signed:** James Fortin, P.E.

<b>OBSERVATION REPORT</b>
Rough Carpentry

<b>Date:</b>	September 8, 2009
<b>Time:</b>	1:30 pm-3:30 pm
<b>Temp:</b>	80's
<b>Weather:</b>	Sunny

<b>Project:</b>	Florence House
<b>Location:</b>	Portland, Maine
<b>Becker Job No:</b>	SI2058

**Observation Location:** Review of roof sheathing attachments, and roof truss system.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	
Member Sizes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Material Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bearing Condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Connections	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See notes (attached)
Nailing Pattern	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Only as noted below
Bridging/Bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See notes (attached)
Other:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See notes (attached)
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

This site visit was completed to review the attachments of the plywood roof sheathing to the roof joists, as well as review roof framing details with Dick Beaulieu and Derik Ouellette. All plywood roof sheathing was in place during this visit, and attachments appeared satisfactory where reviewed, except for a few minor areas that were spray-painted for identification. As a result of this visit, a few additional items were noted that have been included in the attached table. These items require additional attention to meet the drawing requirements.

The following list of items is provided to identify major structural areas that have not yet been reviewed. These items will be reviewed once the General Contractor states that all work is completed and ready for review. These items include:

1. Exterior Wall Sheathing Attachment and Plywood Fastening between wall panels  
Note: This inspection needs to occur prior to placement of any building wrap (ie. tyvek)
2. Shear wall nailing at bottom plates
3. Specific fastening details specified in the construction documents (Section 1/S4.1, for example)
4. Canopies (not yet installed)
5. Simpson H-clips at ends of all roof trusses.
6. Roof Screen Attachments to roof trusses, and associated details

Also, CSKS-18 has been completed in a majority of areas, but it is not possible to review all fastening as the area has been covered with additional blocking and plywood to construct the eave.

If there are any questions with the information provided, please contact our office.

**Signed:** James Fortin, P.E.

**OBSERVATION REPORT**

Rough Carpentry

**Date:** September 25, 2009**Time:** 1:30 pm-3:30 pm**Temp:** 80's**Weather:** Sunny**Project:** Florence House**Location:** Portland, Maine**Becker Job No:** SI2058**Observation Location:** Review of entire structure. Review completion of previously documented items.

At the request of the General Contractor, a site visit was completed to review construction and completion of previously documented items. There was concern that areas requiring re-inspection were being covered up due to sheetrock installation. The attached table has been updated based on today's review.

At this point, the following items remain that need to be reviewed when completed, and prior to installation of finishes. These items will be reviewed once the General Contractor states that all work is completed and ready for review. These items include:

1. Roof Screen Post Attachment to the Roof Trusses, and completion of associated details
2. Roof Truss Repairs at Damaged Areas
  - a. In order to review this item, it is necessary that documentation is submitted from the truss manufacturer (Clyvanor). Documentation shall identify the trusses that require repair, the engineered design of the repair, and the criteria used to accept damaged trusses that were identified by the design team.
3. Repair of Damaged Steel Joists (2 locations)
4. Canopies (not yet installed)

If there are any questions with the information provided, please contact our office.

Signed: James Fortin, P.E.



**OBSERVATION REPORT**

Rough Carpentry

**Date:** October 19, 2009**Time:** 10:30 am-12:30 pm**Temp:** 60's**Weather:** Sunny**Project:** Florence House**Location:** Portland, Maine**Becker Job No:** SI2058**Observation Location:** Review completion of previously documented items.

Following notification by the General Contractor, a site visit was completed to review previously documented items that had been addressed. A majority of open items were addressed by the General Contractor, and these items have been updated in the attached table. A few items remain that require attention by the General Contractor. Once these items are completed, a return visit can be scheduled. These items need to be reviewed prior to installation of finishes that will block access.

Also, the following items need to be reviewed when the General Contractor states that all work is complete, and prior to installation of finishes.

These items include:

1. Repair of Damaged Steel Joists (2 locations) (includes PE stamped design submittal)
2. Canopies ( installation not complete)

Please note that I will be on vacation from October 23<sup>rd</sup> to November 3<sup>rd</sup>, and will not have access to e-mail. A return site visit can be scheduled once I return.

Thank you –

**Signed:** James Fortin, P.E.

# **EXHIBIT C**

## **01000 Quality Assurance**

**Quality Assurance Plan – Seismic and Wind**

**QUALITY ASSURANCE FOR SEISMIC RESISTANCE CHECK LIST [IBC 1705]**

**Seismic Design Category C**

**FOR SEISMIC DESIGN CATEGORY C OR HIGHER:**

**Structural:**

The seismic-force-resisting systems

Steel Braced Frames and associated connections/anchorage

Steel Moment Frames and associated connections

Shear walls:  CMU  Wood  Concrete

Other:

Diaphragms:  Floor  Roof

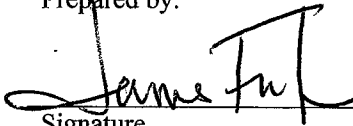
**QUALITY ASSURANCE FOR WIND RESISTANCE CHECK LIST [IBC 1706]**

**Wind Exposure Category C**

**Basic Wind Speed 100 mph**

REQUIRED	NOT REQUIRED	NOT APPLICABLE	
			<b>QUALITY ASSURANCE PLAN REQUIREMENTS</b> (A Quality Assurance Plan is required where indicated below)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	In wind exposure Categories A and B, where the 3-second-gust basic wind speed is 120 miles per hour (mph) (52.8 m/sec) or greater.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	In wind exposure Categories C and D, where the 3-second-gust basic wind speed is 110 mph (49 m/sec) or greater.

Prepared by:

  
 Signature \_\_\_\_\_ Date 3/9/10

Building Code Official's Acceptance:

Signature \_\_\_\_\_ Date \_\_\_\_\_

**Structural Schedule of Special Inspections**  
**SEISMIC RESISTANCE - STRUCTURAL**

VERIFICATION AND INSPECTION	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETE D
IBC Section 1707						
1. Special inspections for seismic resistance. Special inspection as specified in this section is required for the following:			Seismic Design Category: C			
a. The seismic-force-resisting systems in structures assigned to Seismic Design Category C, D, E or F	Y	P	IBC 1707.1	SII	PE/SE or EIT	JCF
2. Structural steel: Continuous special inspection for structural welding in accordance with AISC 341.	Y	P	IBC 1707.2	TA2	AWS-CWI	N/A
3. Structural wood:						
a. Continuous special inspection during field gluing operations of elements of the seismic-force-resisting system.	Y	C	IBC 1707.3	SII	PE/SE or EIT	N/A
b. Periodic special inspections for nailing, bolting, anchoring and other fastening of components within the seismic-force-resisting system, including drag struts, braces and hold-downs	Y	P	IBC 1707.3	SII	PE/SE or EIT	JCF
4. Cold-formed steel framing: Periodic special inspections during welding operations of elements of the seismic-force-resisting system. Periodic special inspections for screw attachment, bolting, anchoring and other fastening of components within the seismic-force-resisting system, including struts, braces, and hold-downs	N/A	N				
4. Seismic isolation system. Provide periodic special inspection during the fabrication and installation of isolator units and energy dissipation devices if used as part of the seismic isolation system	N/A	N	IBC 1707.8			

# **EXHIBIT D**

## **Statements of Responsibility**

Project: Florence House  
Date Prepared: September 2, 2008

## Contractor's Statement of Responsibility

---

Each contractor responsible for the construction or fabrication of a system or component designated in the Quality Assurance Plan must submit a Statement of Responsibility. The Statement of Responsibility is required for Seismic Design Category C or higher. Make additional copies of this form as required.

Project: Florence House

Contractor's Name: Ganneston Construction Corp

Address: P.O. Box 27, Augusta, Maine 04332

License No.:

Description of designated building systems and components included in the Statement of Responsibility:

Building Structural Systems

### Contractor's Acknowledgment of Special Requirements

I hereby acknowledge that I have received, read, and understand the Quality Assurance Plan and Special Inspection program.

I hereby acknowledge that control will be exercised to obtain conformance with the construction documents approved by the Building Official.

[Signature]  
Signature

9/15/10  
Date

### Contractor's Provisions for Quality Control

Procedures for exercising control within the contractor's organization, the method and frequency of reporting and the distribution of reports is attached to this Statement.

Identification and qualifications of the person(s) exercising such control and their position(s) in the organization are attached to this Statement.

Project: Florence House  
Date Prepared: September 2, 2008

## Contractor's Statement of Responsibility

---

Each contractor responsible for the construction or fabrication of a system or component designated in the Quality Assurance Plan must submit a Statement of Responsibility. The Statement of Responsibility is required for Seismic Design Category C or higher. Make additional copies of this form as required.

Project: Florence House

Contractor's Name: LOCBID Construction, Inc.

Address: P.O. Box 607 Sabattus, ME

License No.:


Description of designated building systems and components included in the Statement of Responsibility:

wood shear walls & floor/roof plywood diaphragms

### Contractor's Acknowledgment of Special Requirements

I hereby acknowledge that I have received, read, and understand the Quality Assurance Plan and Special Inspection program.

I hereby acknowledge that control will be exercised to obtain conformance with the construction documents approved by the Building Official.

  
Signature \_\_\_\_\_ Date 3/1/2010

### Contractor's Provisions for Quality Control

Procedures for exercising control within the contractor's organization, the method and frequency of reporting and the distribution of reports is attached to this Statement.

Identification and qualifications of the person(s) exercising such control and their position(s) in the organization are attached to this Statement.

Project: Florence House  
Date Prepared: September 2, 2008

## Contractor's Statement of Responsibility

---

Each contractor responsible for the construction or fabrication of a system or component designated in the Quality Assurance Plan must submit a Statement of Responsibility. The Statement of Responsibility is required for Seismic Design Category C or higher. Make additional copies of this form as required.

Project: Florence House

Contractor's Name: Precision Welding & Fabrication

Address: 690 Stoddard St. Westbrook, ME 04092

License No.:

Description of designated building systems and components included in the Statement of Responsibility:

Structural & misc steel

### Contractor's Acknowledgment of Special Requirements

I hereby acknowledge that I have received, read, and understand the Quality Assurance Plan and Special Inspection program.

I hereby acknowledge that control will be exercised to obtain conformance with the construction documents approved by the Building Official.

  
Signature

3-3-10  
Date

### Contractor's Provisions for Quality Control

Procedures for exercising control within the contractor's organization, the method and frequency of reporting and the distribution of reports is attached to this Statement.

Identification and qualifications of the person(s) exercising such control and their position(s) in the organization are attached to this Statement.



**Project: Florence House**  
**Date Prepared: September 2, 2008**

## Fabricator's Certificate of Compliance

---

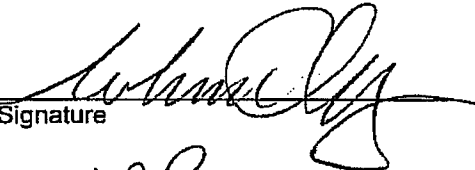
Each approved fabricator that is exempt from Special Inspection of shop fabrication and implementation procedures per section 1704.2 of the International Building Code must submit a *Fabricator's Certificate of Compliance* at the completion of fabrication.

Project: Florence House - Portland, ME.  
Fabricator's Name: Precision Welding & Fabrication Inc.  
Address: 690A STRADWATER ST. WESTBROOK, ME. 04092  
Certification or Approval Agency: AISC - STANDARD FOR STEEL BUILDING STRUCTURES  
Certification Number:  
Date of Last Audit or Approval: OCTOBER 2009

Description of structural members and assemblies that have been fabricated:

Div. # 05120 "STRUCTURAL STEEL"  
Div. # 05500 "METAL FABRICATIONS"

I hereby certify that items described above were fabricated in strict accordance with the approved construction documents.

  
Signature \_\_\_\_\_ Date 3-8-10

V.P.  
Title \_\_\_\_\_

Attach copies of fabricator's certification or building code evaluation service report and fabricator's quality control manual

*American Institute of Steel Construction*

*is proud to recognize*

**Precision Welding & Fabrication, Inc.**

Westbrook, ME

*for successfully meeting the quality certification requirements for*

**Standard for Steel Building Structures**



*Roger E. Ferch*

Roger E. Ferch

*Certification valid through October 2010*

**End of Special Inspections Report**