BECKER
STRUCTURAL ENGINEERS

Final Report of Structural Special Inspections

Apartment and Retail Building
Mixed Use Development

85 York Street
Portland, Maine
November 9, 2017

Prepared by:

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

Owner
101 York Street LLC
P.O. Box 207
Portland, ME 04112

Architect of Record
Opechee Construction Corporation
11 Corporate Drive
Belmont, NH03220
603-527-9090

Contractor
Opechee Construction Corporation
11 Corporate Drive
Belmont, NH03220
603-527-9090

Project: Apartment and Retail Building Mixed Use Development
Date Prepared: March 25, 2016

Structural Statement of Special Inspections

Project: *Apartment and Retail Building Mixed Use Development*

Location: *York and High Street, Portland, Maine*

Owner: *101 York Street LLC*

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.

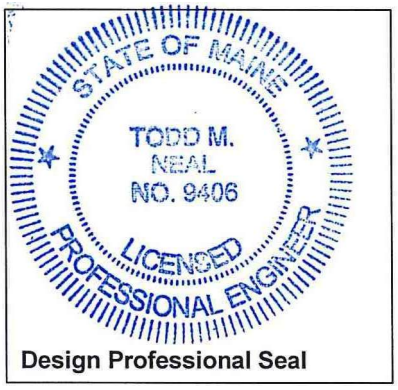
Prepared by:

Todd M. Neal, P.E.

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

3/21/16

Signature Date



Design Professional Seal

Owner's Authorization:

Signature Date

Building Code Official's Acceptance:

Signature Date

Structural Statement of Special Inspections (Continued)

List of Agents

Project: *Apartment and Retail Building Mixed Use Development*

Location: *York and High Street, Portland, Maine*

Owner: *101 York Street LLC*

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
- ☐ Structural Masonry Systems
- ☒ Structural Steel
- ☐ Wood Construction
- ☐ Special Cases

Special Inspection Agencies	Firm	Address, Telephone, e-mail
1. STRUCTURAL Special Inspections Coordinator (SSIC)	*Becker Structural Engineers, Inc.*	*75 York Street* *Portland, ME 04101* *207-879-1838*
2. Special Inspector (SI 1)	*Becker Structural Engineers, Inc.*	*75 York Street* *Portland, ME 04101* *207-879-1838*
3. Special Inspector (SI 2)	*S. W. Cole Engineering, Inc.*	*286 Portland Road* *Gray, ME 04039* *207-657-2866*
4. Testing Agency (TA 1)	*S. W. Cole Engineering, Inc.*	*286 Portland Road* *Gray, ME 04039* *207-657-2866*
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.

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: *Apartment and Retail Building Mixed Use Development*
Location: *York and High Street, Portland, Maine*
Owner: *101 York Street LLC*
Owner's Address:

Architect of Record: *Keith Kelley, AIA* (name) — *Opechee Construction Corporation* (firm)

Structural Registered Design Professional in Responsible Charge: *Todd M. Neal, P.E.* (name) — *Becker Structural Engineers, Inc.* (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
David A. Macolini, P.E.
(Type or print name)

Becker Structural Engineers, Inc.
(Firm Name)

David A. Macolini. 11-09-17
Signature Date

Licensed Professional Seal

Project: Apartment and Retail Building Mixed Use Development
Date Prepared: March 25, 2016

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

_____ _____

Structural Statement of Special Inspections (Continued) – Exhibit A

Special Inspector's/Agent's Final Report

Project: *85 York Street Apartment Building and Parking Garage, Portland, Maine*

Special Inspector or Agent: *S.W.COLE Engineering, Inc.*

Designation: *SI-2*

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.

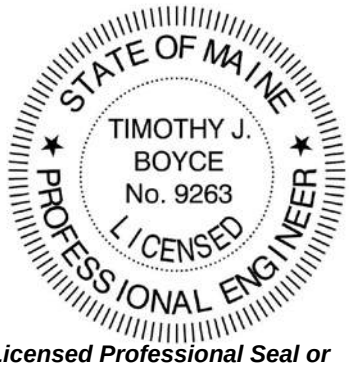
Interim reports submitted prior to this final report form a basis for and are to be considered an integral part of this final report.

Respectfully submitted,
Special Inspector or Agent:

Timothy J. Boyce, P.E.
(Type or print name)

Signature

11-8-2017
Date



Licensed Professional Seal or
Certification Number

Geopier Foundation Company
165 Taylor Road
Colchester, CT 06415

Tel: (860) 531-9137
Cell: (860) 373-3542
www.geopier.com

November 9, 2017

GNE-01207

Jason Blais
Opechee Construction Corporation
11 Corporate Drive
Belmont, NH 03220

Subject: Geopier Performance Verification Letter
Mixed Use Development, York & High Streets, Portland, ME

Dear Jason:

I have reviewed the Special Inspector's/Agents Final Reports from S.W. Cole, Inc. dated March 17 and 25, 2016, and the Structural Statement of Special Inspections dated November 8, 2017 in conjunction with the Geopier Quality Control (QC) Records provided to you on June 14, 2016.

Based on the confirmation provided in the S.W. Cole reports that indicates that the foundation excavation, subgrade preparation, backfill placement and Geopier construction has been performed in accordance with project drawings and specifications, that include our Geopier Design Submittal dated March 7, 2016, the Geopier Foundation Company accepts the responsibility for the ground improvement system to perform in accordance with the design criteria and intent represented in the Geopier Design Submittal.

If you any questions or need further clarifications. Thank you again for inviting us to work with you on the project.

Sincerely,
GEOPIER FOUNDATION COMPANY

Benjamin M. Cote, PE
Region Engineer

cc:
Derek Simpson (HDI) – via email
Tim Boyce (SW Cole) – via email
David Malconi (Becker Structural Engineers) – via email
Mike Pockoski (Geopier Foundation Co.) – via email

Structural Statement of Special Inspections (Continued)

Special Inspector's/Agent's Final Report (SI 2 & TA 1)

Project: *Apartment and Retail Building Mixed Use Development*

Special Inspector or Agent: *Roger Domingo* (name) *S. W. Cole Engineering Inc.* (firm)

Designation: Special Inspector 2 (SI2) & Testing Agency 1 (TA1)

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:

Roger E. Domingo
(Type or print name)

11/2/17
Signature Date

Licensed Professional Seal or
Certification Number

S.W.COLE ENGINEERING, INC.

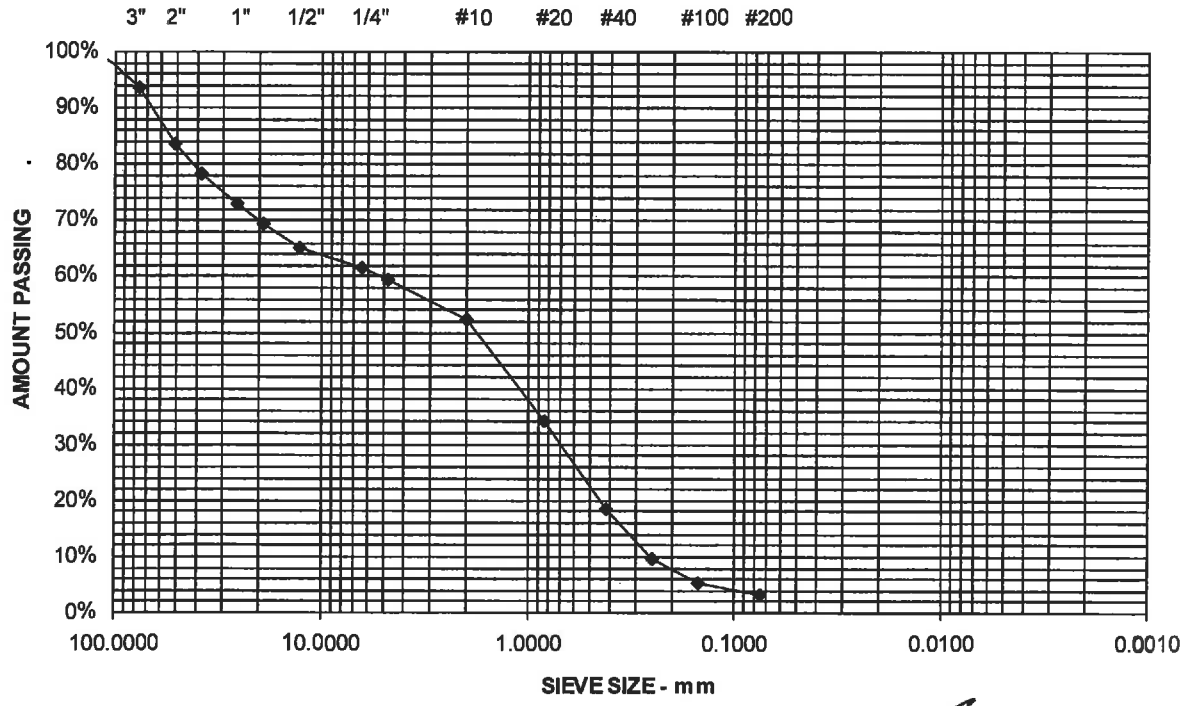
Report of Gradation

ASTM C-117 & C-136

Project Name	PORTLAND ME - YORK & HIGH STREETS MIXED DEVELOPMENT - CONSTRUCTION MATERIALS TESTING AND SPECIAL INSPECTION	Project Number	13-0545.3
Client	J.B. BROWN & SONS	Lab ID	20681G
Material Type	STRUCTURAL FILL	Date Received	4/15/2016
Material Source	GSG - COMMERCIAL STREET	Date Completed	4/18/2016
		Tested By	JUSTIN BISSON

STANDARD DESIGNATION (mm/µm)	SIEVE SIZE	AMOUNT PASSING (%)	SWCE STRUCTURAL FILL SPECIFICATIONS (%)	
150 mm	6"	100		
125 mm	5"	100		
100 mm	4"	98	100	†
75 mm	3"	93	90 - 100	
50 mm	2"	84		
38.1 mm	1-1/2"	78		
25.0 mm	1"	73		
19.0 mm	3/4"	69		
12.5 mm	1/2"	65		
6.3 mm	1/4"	61	25 - 90	
4.75 mm	No. 4	59		
2.00 mm	No. 10	52		
850 um	No. 20	34		
425 um	No. 40	18	0 - 30	
250 um	No. 60	10		
150 um	No. 100	5		
75 um	No. 200	3.2	0.0 - 5.0	

† SAMPLE DOES NOT MEET SPECIFICATION



Comments

Roger E. Domingo

286 Portland Road, Gray, ME 04039-9586 • Tel (207) 657-2866 • Fax (207) 657-2840 • www.swcole.com

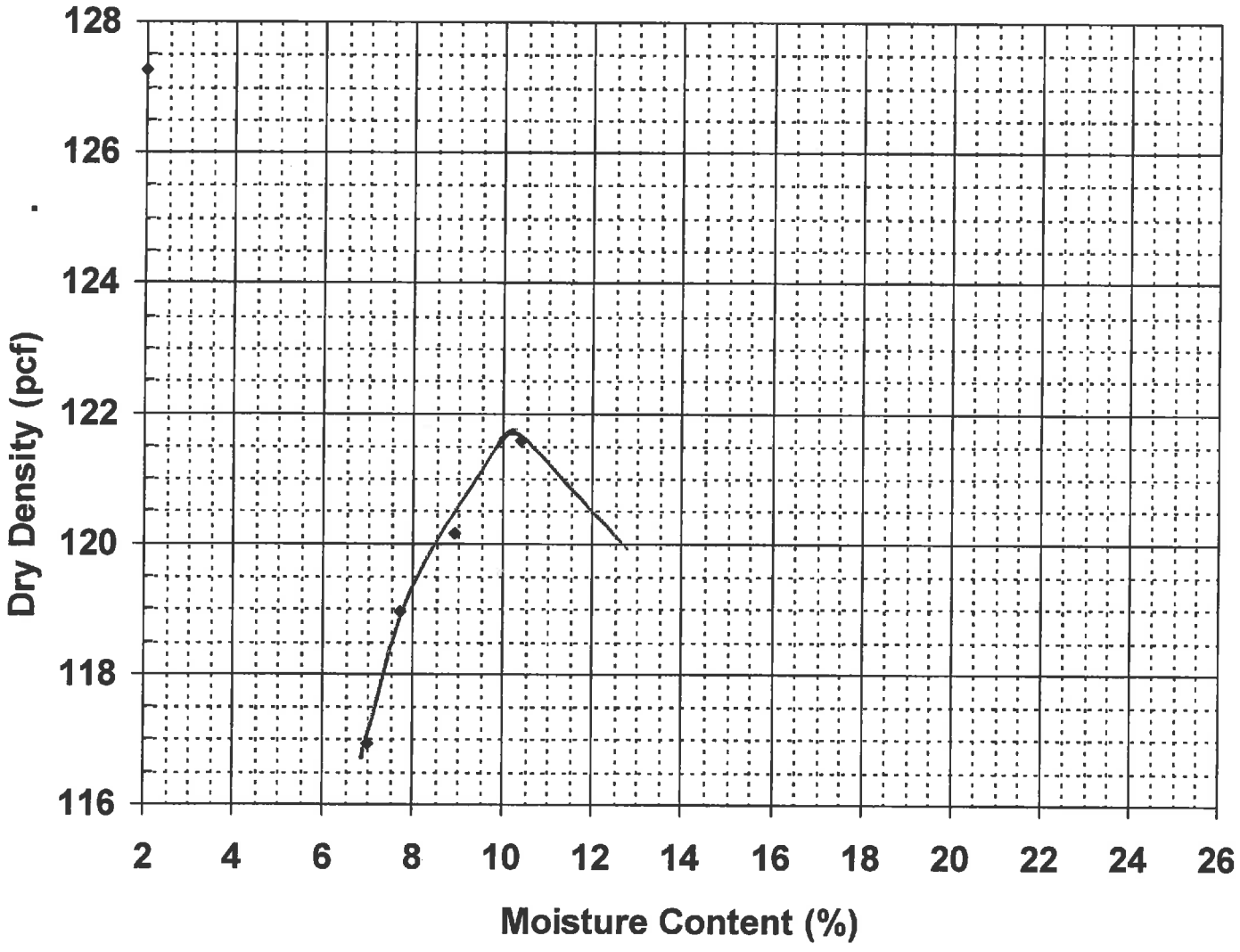
S.W.COLE ENGINEERING, INC.

Report of Moisture-Density

Method ASTM D-1557 MODIFIED Procedure C

Project Name	PORTLAND ME - YORK & HIGH STREETS MIXED DEVELOPMENT - CONSTRUCTION MATERIALS TESTING AND	Project Number	13-0545.3
Client	J.B. BROWN & SONS	Lab ID	20681G
Material Type	STRUCTURAL FILL	Date Received	4/15/2016
Material Source	GSG - COMMERCIAL STREET	Date Completed	4/20/2016
		Tested By	JOSHUA MOORE

Moisture-Density Relationship Curve



Maximum Dry Density (pcf)	121.8
Optimum Moisture Content (%)	10.1
Percent Oversized	30.0%

Corrected Dry Density (pcf)	**130.6**
Corrected Moisture Content (%)	**7.7**

Comments

Roger E. Domingo

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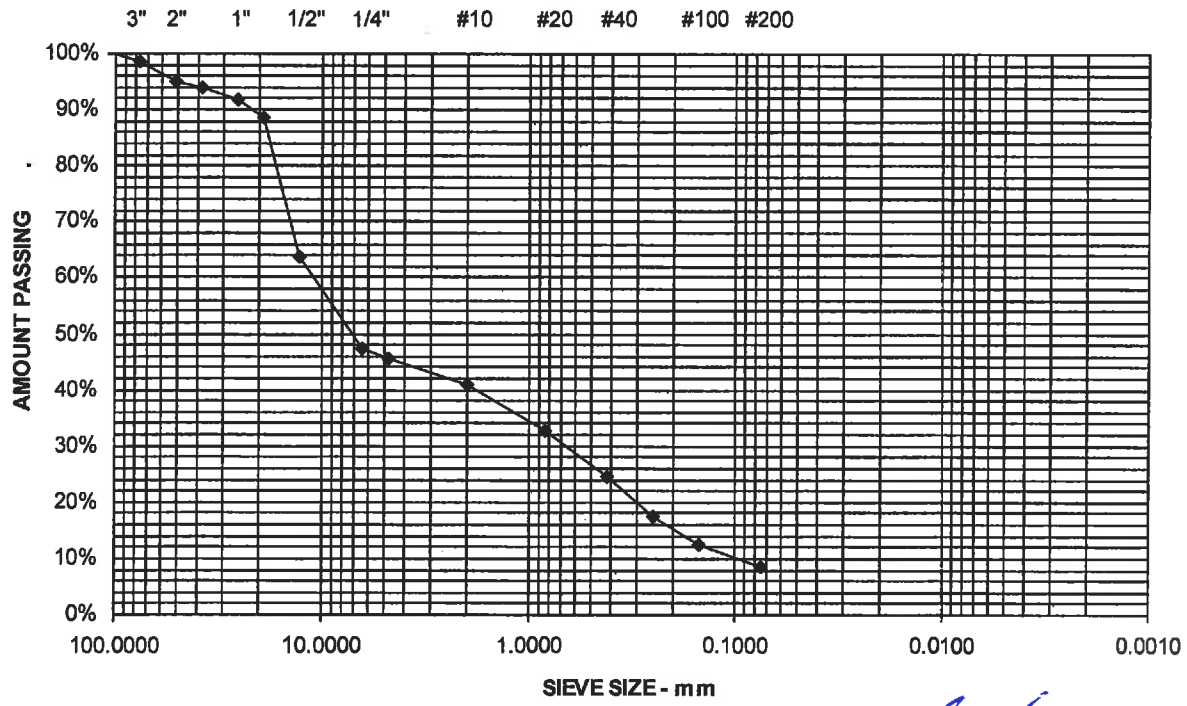
S.W.COLE ENGINEERING, INC.

Report of Gradation

ASTM C-117 & C-136

Project Name	PORTLAND ME - YORK & HIGH STREETS MIXED DEVELOPMENT - CONSTRUCTION MATERIALS TESTING AND SPECIAL INSPECTION	Project Number	13-0545.3
Client	J.B. BROWN & SONS	Lab ID	20729G
Material Type	IN PLACE BORROW	Date Received	4/29/2016
Material Source	IN PLACE - ON SITE	Date Completed	4/29/2016
		Tested By	JUSTIN BISSON

STANDARD DESIGNATION (mm/µm)	SIEVE SIZE	AMOUNT PASSING (%)	SPECIFICATIONS (%)
150 mm	6"	100	
125 mm	5"	100	
100 mm	4"	100	
75 mm	3"	99	
50 mm	2"	95	
38.1 mm	1-1/2"	94	
25.0 mm	1"	92	
19.0 mm	3/4"	89	
12.5 mm	1/2"	64	
6.3 mm	1/4"	47	
4.75 mm	No. 4	46	
2.00 mm	No. 10	41	
850 um	No. 20	33	
425 um	No. 40	24	
250 um	No. 60	17	
150 um	No. 100	13	
75 um	No. 200	8.4	



Comments

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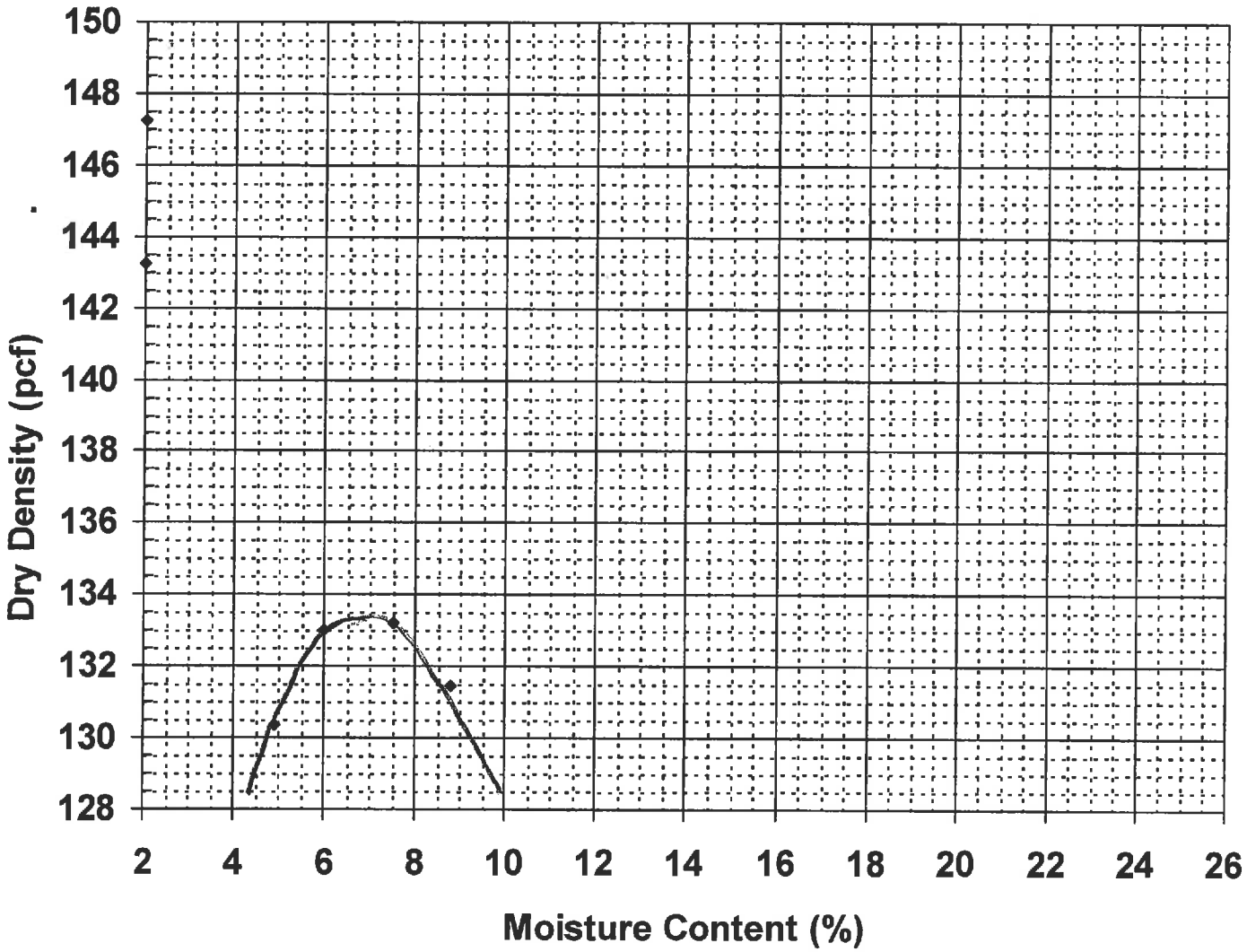
S.W.COLE ENGINEERING, INC.

Report of Moisture-Density

Method ASTM D-1557 MODIFIED Procedure C

Project Name	PORTLAND ME - YORK & HIGH STREETS MIXED DEVELOPMENT - CONSTRUCTION MATERIALS TESTING AND	Project Number	13-0545.3
Client	J.B. BROWN & SONS	Lab ID	20729G
Material Type	IN PLACE BORROW	Date Received	4/29/2016
Material Source	IN PLACE - ON SITE	Date Completed	4/29/2016
		Tested By	PAUL SHAFFER

Moisture-Density Relationship Curve



Maximum Dry Density (pcf)	133.6
Optimum Moisture Content (%)	6.7
Percent Oversized	11.4%

Corrected Dry Density (pcf)	**135.9**
Corrected Moisture Content (%)	**6.2**

Comments

Roger E. Domingo

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S.W.COLE ENGINEERING, INC.

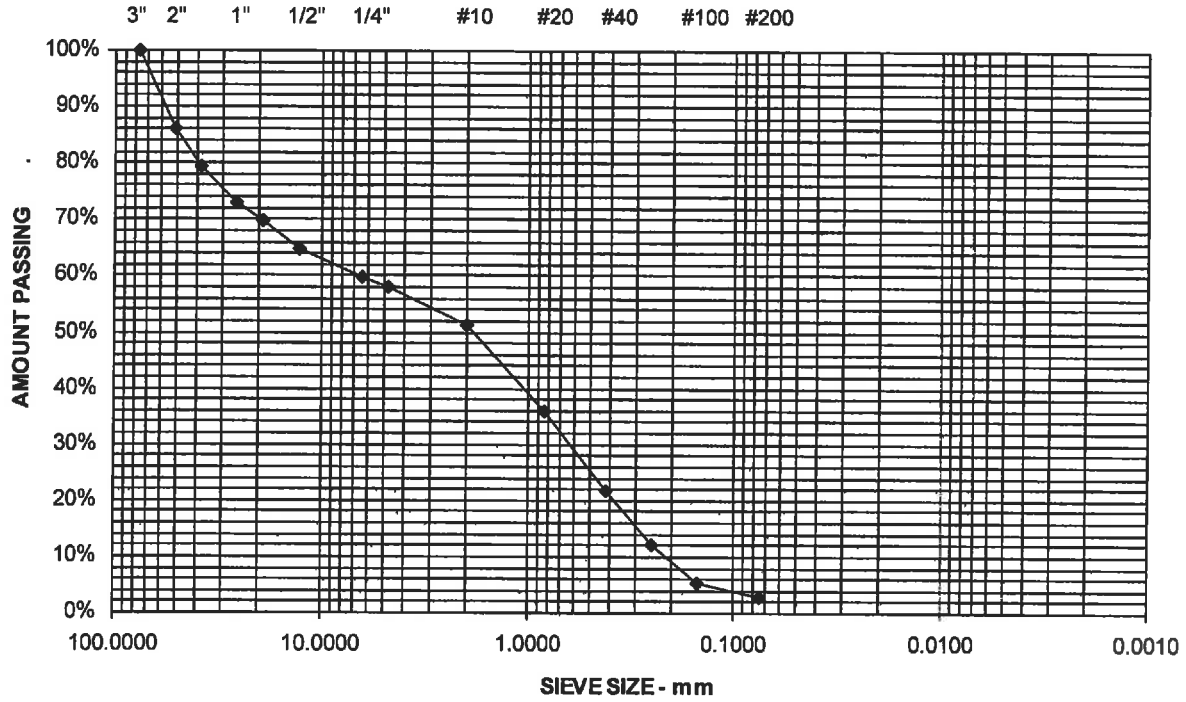
Report of Gradation

ASTM C-117 & C-136

Project Name	PORTLAND ME - YORK & HIGH STREETS MIXED DEVELOPMENT - CONSTRUCTION MATERIALS TESTING AND SPECIAL INSPECTION	Project Number	13-0545.3
Client	J.B. BROWN & SONS	Lab ID	20874G
Material Type	AGGREGATE SUBBASE	Date Received	5/24/2016
Material Source	PHINNEY PIT	Date Completed	5/28/2016
		Tested By	JUSTIN BISSON

STANDARD DESIGNATION (mm/µm)	SIEVE SIZE	AMOUNT PASSING (%)	MDOT 703.06 TYPE D SPECIFICATIONS (%)
150 mm	6"	100	100
125 mm	5"	100	
100 mm	4"	100	
75 mm	3"	100	
50 mm	2"	86	
38.1 mm	1-1/2"	79	
25.0 mm	1"	73	
19.0 mm	3/4"	70	
12.5 mm	1/2"	65	
6.3 mm	1/4"	60	25 - 70
4.75 mm	No. 4	58	
2.00 mm	No. 10	51	
850 um	No. 20	36	
425 um	No. 40	22	0 - 30
250 um	No. 60	12	
150 um	No. 100	5	
75 um	No. 200	3.0	0.0 - 7.0

SAMPLE MEETS SPECIFICATION



Comments

Roger E. Domingo

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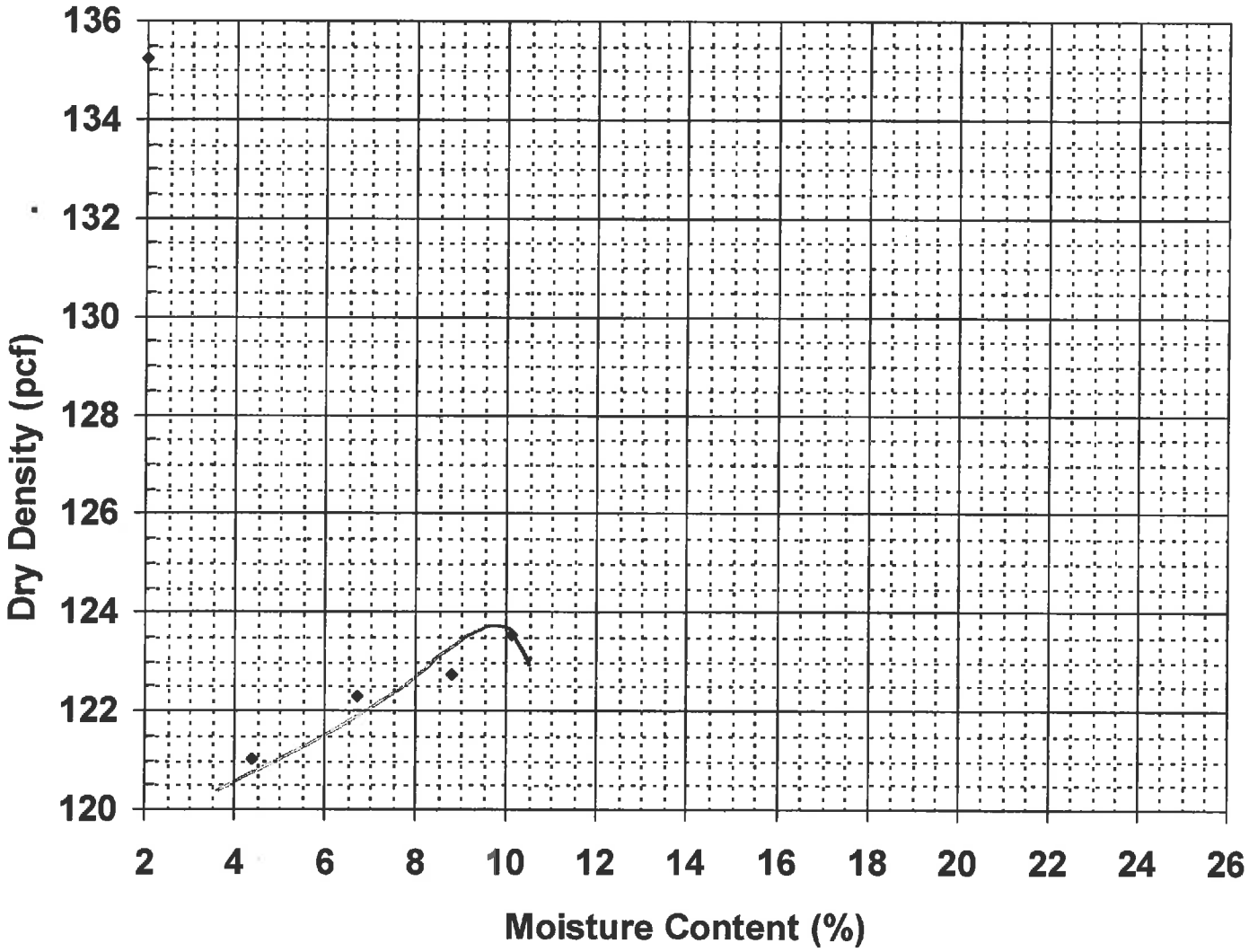
S.W.COLE ENGINEERING, INC.

Report of Moisture-Density

Method ASTM D-1557 MODIFIED Procedure C

Project Name	PORTLAND ME - YORK & HIGH STREETS MIXED DEVELOPMENT - CONSTRUCTION MATERIALS TESTING AND	Project Number	13-0545.3
Client	J.B. BROWN & SONS	Lab ID	20874G
Material Type	AGGREGATE SUBBASE	Date Received	5/24/2016
Material Source	PHINNEY PIT	Date Completed	6/3/2016
		Tested By	PAUL SHAFFER

Moisture-Density Relationship Curve



Maximum Dry Density (pcf)	123.7
Optimum Moisture Content (%)	9.7
Percent Oversized	29.1%

Corrected Dry Density (pcf)	**131.9**
Corrected Moisture Content (%)	**7.5**

Comments

Roger E. Domingo

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S.W.COLE ENGINEERING, INC.

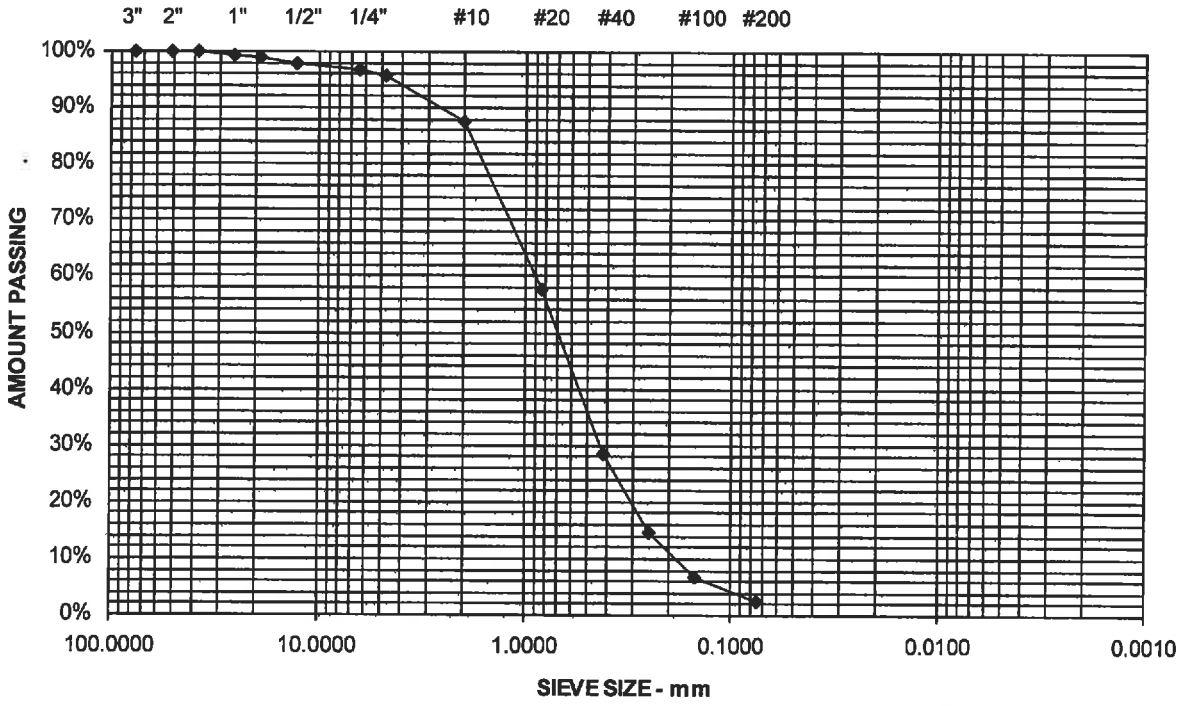
Report of Gradation

ASTM C-117 & C-136

Project Name	PORTLAND ME - YORK & HIGH STREETS MIXED DEVELOPMENT - CONSTRUCTION MATERIALS TESTING AND SPECIAL INSPECTION	Project Number	13-0545.3
Client	J.B. BROWN & SONS	Lab ID	20875G
Material Type	STRUCTURAL SAND	Date Received	5/24/2016
Material Source	MIGHTY STREET PIT	Date Completed	5/28/2016
		Tested By	JUSTIN BISSON

STANDARD DESIGNATION (mm/µm)	SIEVE SIZE	AMOUNT PASSING (%)	SWCE STRUCTURAL FILL SPECIFICATIONS (%)	
150 mm	6"	100		
125 mm	5"	100		
100 mm	4"	100	100	
75 mm	3"	100	90 - 100	
50 mm	2"	100		
38.1 mm	1-1/2"	100		
25.0 mm	1"	99		
19.0 mm	3/4"	99		
12.5 mm	1/2"	98		
6.3 mm	1/4"	97	25 - 90	†
4.75 mm	No. 4	96		
2.00 mm	No. 10	88		
850 um	No. 20	58		
425 um	No. 40	28	0 - 30	
250 um	No. 60	15		
150 um	No. 100	7		
75 um	No. 200	2.6	0.0 - 5.0	

† SAMPLE DOES NOT MEET SPECIFICATION



Comments

Roger E. Domingo

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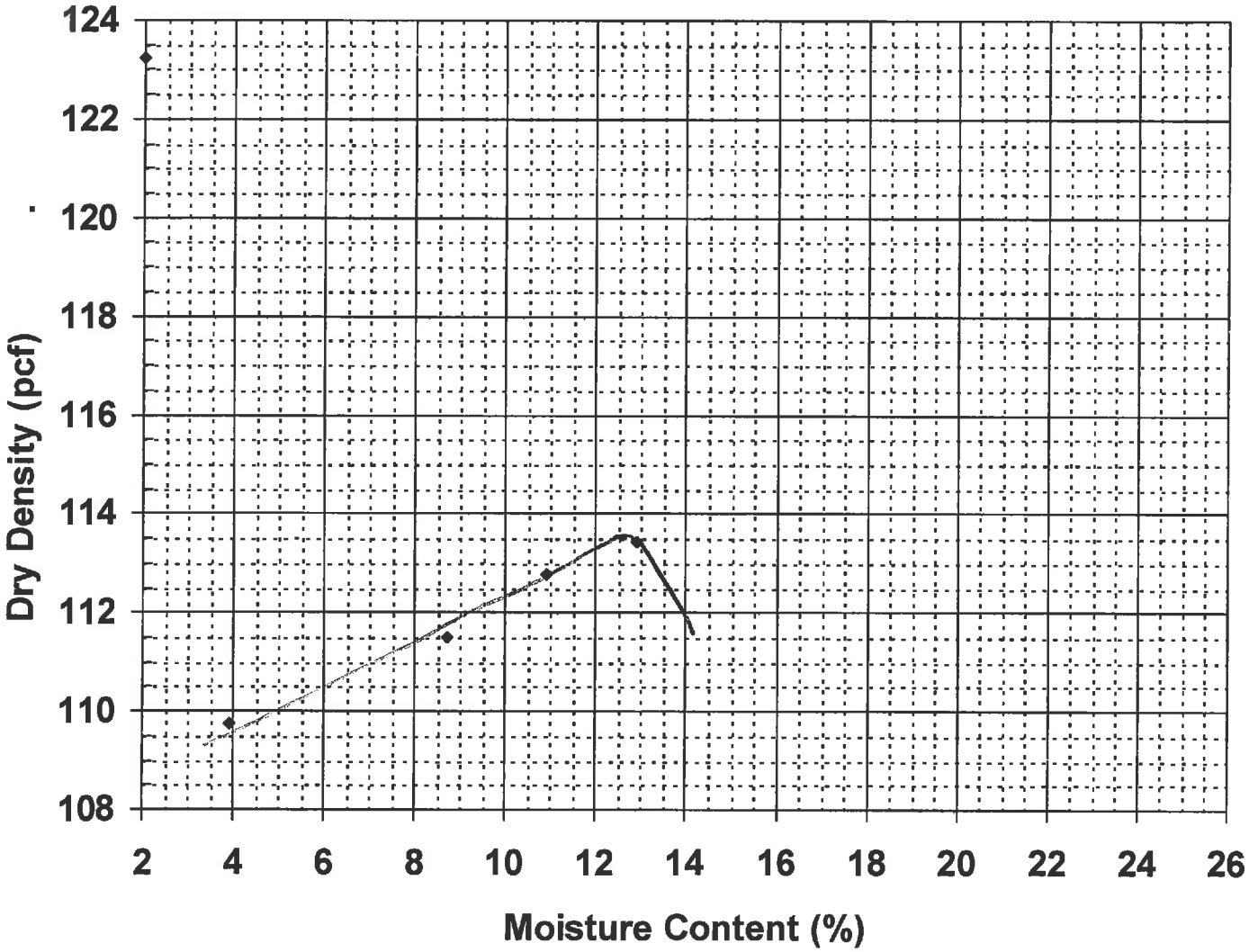
S.W.COLE ENGINEERING, INC.

Report of Moisture-Density

Method ASTM D-1557 MODIFIED Procedure A

Project Name	PORTLAND ME - YORK & HIGH STREETS MIXED DEVELOPMENT - CONSTRUCTION MATERIALS TESTING AND	Project Number	13-0545.3
Client	J.B. BROWN & SONS	Lab ID	20875G
Material Type	STRUCTURAL SAND	Date Received	5/24/2016
Material Source	MIGHTY STREET PIT	Date Completed	6/3/2016
		Tested By	AIDAN BOYCE

Moisture-Density Relationship Curve



Maximum Dry Density (pcf)	113.5
Optimum Moisture Content (%)	12.5
Percent Oversized	4.2%

Corrected Dry Density (pcf)	**114.8**
Corrected Moisture Content (%)	**12.1**

Comments

Roger E. Domingo

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S.W.COLE ENGINEERING, INC.

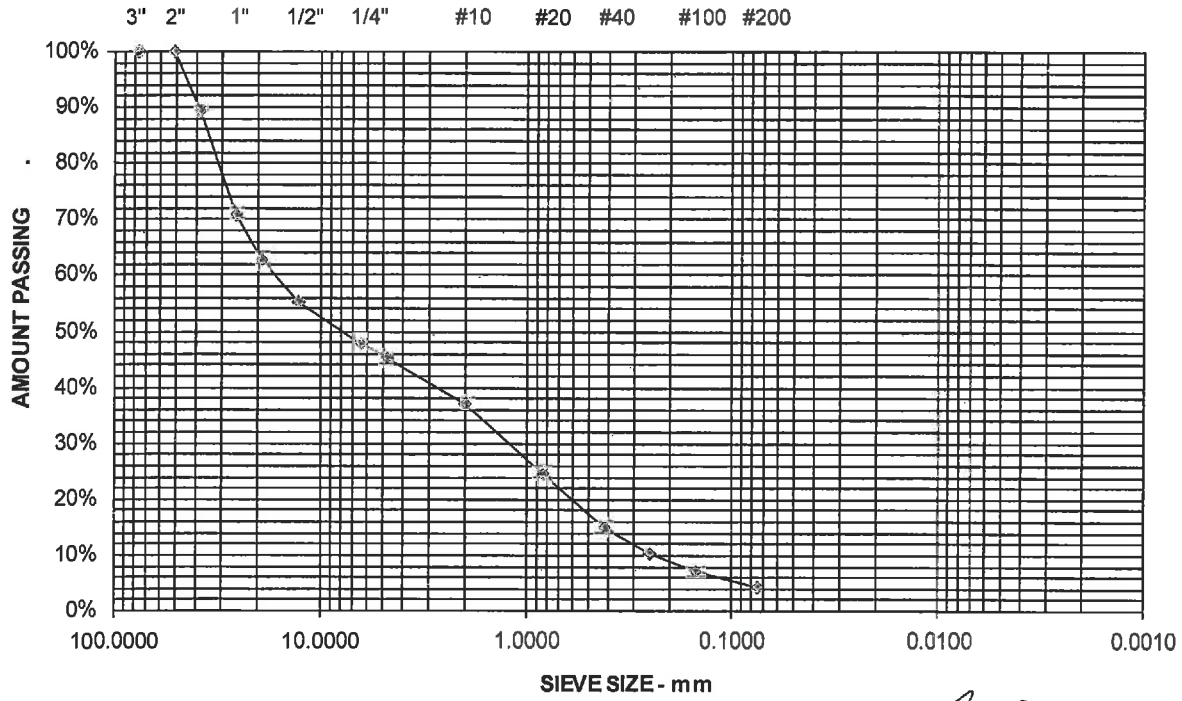
Report of Gradation

ASTM C-117 & C-136

Project Name	PORTLAND ME - YORK & HIGH STREETS MIXED DEVELOPMENT - CONSTRUCTION MATERIALS TESTING AND SPECIAL INSPECTION	Project Number	13-0545.3
Client	J.B. BROWN & SONS	Lab ID	21130G
Material Type	1 1/2" GRAVEL	Date Received	7/12/2016
Material Source	COMMERCIAL STREET	Date Completed	7/13/2016
		Tested By	PAUL SHAFFER

STANDARD DESIGNATION (mm/µm)	SIEVE SIZE	AMOUNT PASSING (%)	MDOT 703.06 TYPE A SPECIFICATIONS (%)
150 mm	6"	100	
125 mm	5"	100	
100 mm	4"	100	
75 mm	3"	100	
50 mm	2"	100	100
38.1 mm	1-1/2"	89	
25.0 mm	1"	71	
19.0 mm	3/4"	62	
12.5 mm	1/2"	55	45 - 70
6.3 mm	1/4"	48	30 - 55
4.75 mm	No. 4	45	
2.00 mm	No. 10	37	
850 um	No. 20	25	
425 um	No. 40	15	0 - 20
250 um	No. 60	10	
150 um	No. 100	7	
75 um	No. 200	4.4	0.0 - 5.0

SAMPLE MEETS SPECIFICATION



Comments

Roger E. Domingo

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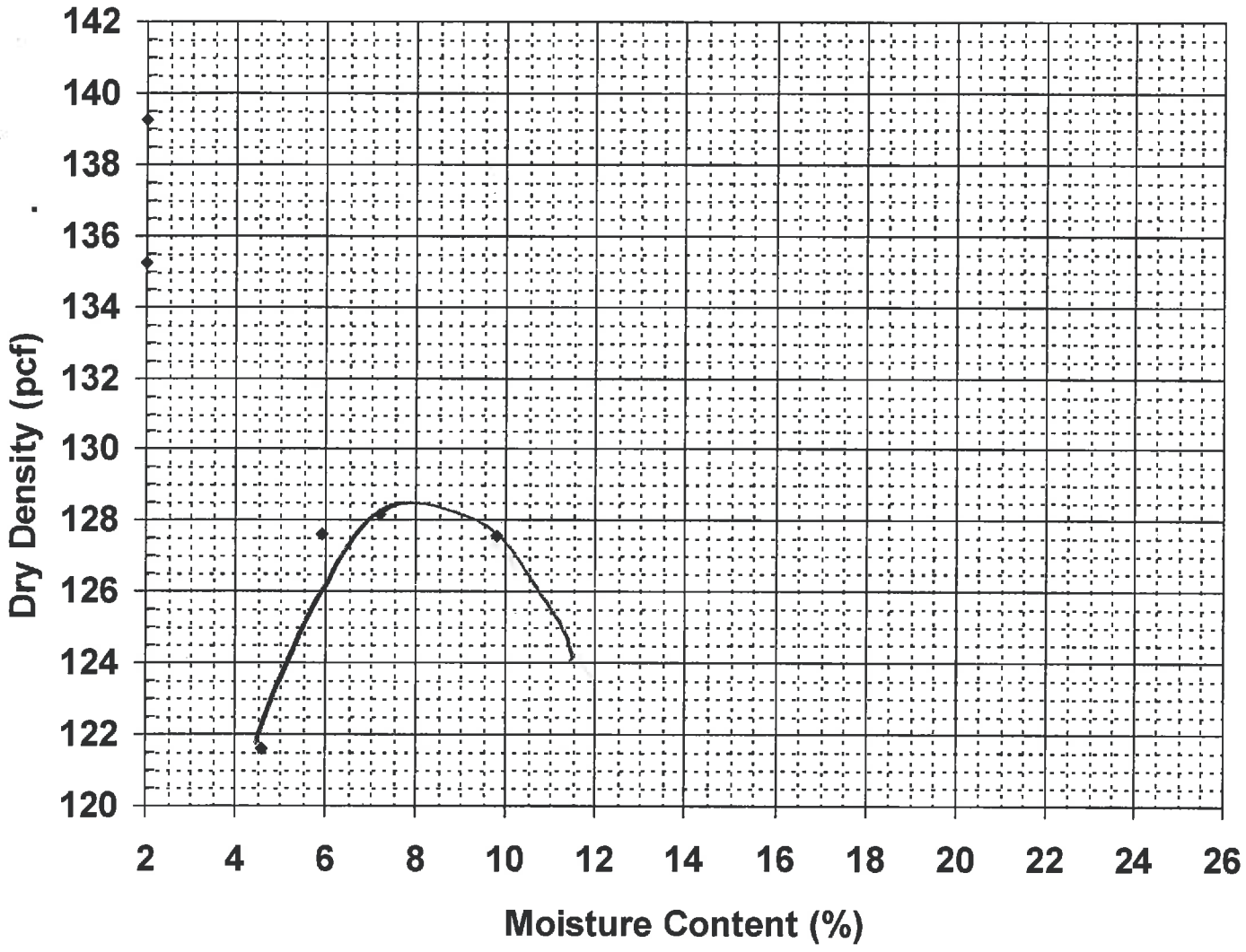
S.W.COLE ENGINEERING, INC.

Report of Moisture-Density

Method ASTM D-1557 MODIFIED Procedure C

Project Name	PORTLAND ME - YORK & HIGH STREETS MIXED DEVELOPMENT - CONSTRUCTION MATERIALS TESTING AND	Project Number	13-0545.3
Client	J.B. BROWN & SONS	Lab ID	21130G
Material Type	1 1/2" GRAVEL	Date Received	7/12/2016
Material Source	COMMERCIAL STREET	Date Completed	7/13/2016
		Tested By	PAUL SHAFFER

Moisture-Density Relationship Curve



Maximum Dry Density (pcf)	128.5	Corrected Dry Density (pcf)	**136**
Optimum Moisture Content (%)	8	Corrected Moisture Content (%)	**6.2**
Percent Oversized	30.0%		

Comments

Roger E. Domingo

286 Portland Road, Gray, ME 04039-9586 • Tel (207) 657-2866 • Fax (207) 657-2840 • www.swcole.com

S.W.COLE ENGINEERING, INC. • Geotechnical Engineering • Field & Lab Testing • Scientific & Environmental Consulting

CONSTRUCTION OBSERVATION REPORT

Project: Mixed Use Development, York & High Street, Portland, ME
Client: J.B. Brown & Sons, Inc.
Client's Rep.: Vin Veroneau
General Contractor/CM: Opechee Construction Corp. /Dave Trottier

S.W.COLE Project No.: 13-0545.3
Date: 7/12/16
Weather: Sunny, 80s

Work in Progress: Gorham Sand and Gravel, Inc. (GSG) were in progress of excavating strip footing between 1-line and 2-line on G-line.

General Observations and Discussions:
While on-site, Opechee requested we observe GSG preparing strap footing subgrades between 1-line and 2-line on G-line. Excavation was done with a smooth-edge bucket and was excavated down to bedrock per geotechnical report. The northern side of footing was excavated down approximately 4 feet to get to bedrock. This area was leveled out with rest of footing with ¾ -inch stone that was compacted in 1-foot lifts. Non-woven geotextile fabric was placed down over subgrades and at least 6-inches of ¾ -inch stone was compacted and wrapped in fabric.

Onsite: 8:30 – 11:30
Attachments: Photos
Sheet: 1 of 1

S.W.COLE Rep: C. Cromwell
Rev. RED

S.W.COLE ENGINEERING, INC. • Geotechnical Engineering • Field & Lab Testing • Scientific & Environmental Consulting

CONSTRUCTION OBSERVATION REPORT

Project: Mixed Use Development, York & High Street, Portland, ME
Client: J.B. Brown & Sons, Inc.
Client's Rep.: Vin Veroneau
General Contractor/CM: Opechee Construction Corp. /Dave Trottier

S.W.COLE Project No.: 13-0545.3
Date: 7/14/16
Weather: Sunny, 80s

Work in Progress: Gorham Sand and Gravel, Inc. (GSG) were in the process of excavating out for keyways on A-line from 9.4-line to 17-line and 17-line from A-line to D-line.

General Observations and Discussions:
While on-site, Opechee requested S.W.COLE observe GSG excavating out for keyways on A-line from 9.4-line to 17-line and 17-line from A-line to D-line. Subgrade was initially dug down to bottom of footing with a smooth-edged bucket and appeared to be relatively undisturbed; exposed subgrade soils consisted of brown silt and sand with some gravel. Keyway was being excavated between Rammed Aggregate Piers (RAPs) and appeared to be relatively dry and undisturbed.

Onsite: 9:00 – 10:30
Attachments: Photos
Sheet: 1 of 1

S.W.COLE Rep: C. Cromwell
Rev. RED

S.W.COLE ENGINEERING, INC. • Geotechnical Engineering • Field & Lab Testing • Scientific & Environmental Consulting

CONSTRUCTION OBSERVATION REPORT

Project: Mixed Use Development, York & High Street, Portland, ME
Client: J.B. Brown & Sons, Inc.
Client's Rep.: Vin Veroneau

S.W.COLE Project No.: 13-0545.3
Date: 8/24/16
Weather: Sunny, 80s

Work in Progress: Tristone: Installation of formwork and reinforcing steel along A-line of the mixed use building in preparation for tomorrow's concrete placement. Gorham Sand and Gravel, Inc. (GS&G): Excavation for interior spread footings associated with the mixed use building at B.3/15.5, B.3/15.9, C/15, C/15.5 including the elevator between 13 and 14-lines .

General Observations and Discussions: As scheduled by Opechee Construction (Dave), we made a site visit to observe subgrade conditions and preparations in the current work area. At the time of our site visit, GS&G had recently completed excavation for the above referenced foundation elements and was in the process of checking elevations with their GPS prior to completing the required preparations. The excavation had been made with a smooth-edged bucket to help minimize disturbance to the subgrade soils and extended approximately 6 inches below proposed bottom of footings to accommodate the compacted crushed stone layer specified in section 4.3 of the project geotechnical report dated August, 31, 2015. At exposed subgrade, the previously installed rammed aggregate piers were visible and the subgrade soils consisting of relic crushed stone and gray silty sand with gravel were observed to be dry and firm. Subgrade conditions and preparations observed during our visit appeared consistent with our understanding of the expectations and requirements contained in the project documents.

Onsite: 1:00 – 2:00
Attachments: Photo
Sheet: 1 of 1

S.W.COLE Rep: K. Gimpel
Rev.: RED

S.W.COLE ENGINEERING, INC.

Report of Field Density
ASTM D6938

Project: **PORTLAND ME - YORK & HIGH STREETS MIXED DEVELOPMENT - CONSTRUCTION MATERIALS TESTING AND SPECIAL INSPECTION SERVICES**

Project Number: **13-0545.3**

Client: **J.B. BROWN & SONS**

Field Density Test Results

Test #	Test Date	Tech	Test Location	Elev Feet	Test Depth	Lab ID	Dry Density	Moisture Content Percent	Compaction Percent	Required Compaction
8	7/11/2016	CLC	INTERIOR 8' OFF S SIDE WALL E LINE	TOSB	10	20681G	128.8	4.4	98.6	95
9	7/11/2016	CLC	INTERIOR 10' OFF S SIDE WALL C LINE	TOSB	10	20681G	126.9	3.8	97.2	95
10	7/11/2016	CLC	INTERIOR SW CORNER 20' OFF S SIDE 20' OFF W SIDE	TOSB	10	20681G	127.3	4.8	97.5	95
11	7/11/2016	CLC	INTERIOR ON A LINE 20' FROM CORNER OF STAIRS	TOSB	10	20681G	125.3	4.2	95.9	95
12	7/11/2016	CLC	NEXT TO PIER C/1	TOF	12	20875G	110.2	4.2	96.0	95
13	7/11/2016	CLC	NEXT TO PIER D/1	TOF	12	20875G	110.8	4.0	96.5	95
14	7/11/2016	CLC	NEXT TO PIER E/1	TOF	12	20875G	112.4	3.1	97.9	95
15	7/11/2016	CLC	NEXT TO PIER F/1	TOF	12	20875G	115.5	11.9	100.6	95
16	7/11/2016	CLC	NEXT TO PIER E/2	TOF	12	20875G	113.6	3.0	99.0	95
17	7/11/2016	CLC	NEXT TO PIER F/2	TOF	12	20875G	110.9	4.1	96.6	95
18	7/11/2016	CLC	E LINE 60' FROM S SIDE WALL	TOSB	10	20681G	128.7	4.9	98.5	95

Laboratory Compaction Test Reference

Lab ID	Date Received	Material Source	Material Type	Method	Max Dry Density PCF	Optimum Moisture Content (%)	Comments
20681G	4/15/2016	GSG - Commercial Street	Structural Fill	ASTM D-1557 Modified C	130.6	7.7	
20875G	5/24/2016	Mighty Street Pit	Structural Sand	ASTM D-1557 Modified A	114.8	12.1	

Elevation Notes:

TOSB - TOP OF SUBBASE
TOF - TOP OF FOOTING

Comments:

Reviewed By

S.W.COLE ENGINEERING, INC.

Report of Field Density
ASTM D6938

Project: **PORTLAND ME - YORK & HIGH STREETS MIXED DEVELOPMENT - CONSTRUCTION MATERIALS TESTING AND SPECIAL INSPECTION SERVICES**

Project Number: **13-0545.3**

Client: **J.B. BROWN & SONS**

Field Density Test Results

Test #	Test Date	Tech	Test Location	Elev Feet	Test Depth	Lab ID	Dry Density	Moisture Content Percent	Compaction Percent	Required Compaction
19	7/14/2016	CLC	NEXT TO STRAP FOOTING ON G LINE W SIDE	TOF	10	20875G	109.7	3.8	95.6	95
20	7/14/2016	CLC	NEXT TO STRAP FOOTING ON G LINE E SIDE	TOF	10	20875G	110.5	3.4	96.3	95
21	7/14/2016	CLC	ON G LINE 75' FROM S SIDE WALL	FGS	10	20681G	128.7	2.9	98.5	95

Laboratory Compaction Test Reference

Lab ID	Date Received	Material Source	Material Type	Method	Max Dry Density PCF	Optimum Moisture Content (%)	Comments
20681G	4/15/2016	GSG - Commercial Street	Structural Fill	ASTM D-1557 Modified C	130.6	7.7	
20875G	5/24/2016	Mighty Street Pit	Structural Sand	ASTM D-1557 Modified A	114.8	12.1	

Elevation Notes:

TOF - TOP OF FOOTING
FGS - FINISH GRADE SUBBASE

Comments:

Reviewed By

S.W.COLE ENGINEERING, INC.

Report of Field Density

ASTM D6938

Project: **PORTLAND ME - YORK & HIGH STREETS MIXED DEVELOPMENT - CONSTRUCTION MATERIALS TESTING AND SPECIAL INSPECTION SERVICES**

Project Number: **13-0545.3**

Client: **J.B. BROWN & SONS**

Field Density Test Results

Test #	Test Date	Tech	Test Location	Elev Feet	Test Depth	Lab ID	Dry Density	Moisture Content Percent	Compaction Percent	Required Compaction
22	7/18/2016	CLC	6 LINE 25' OFF S WALL 70' OFF E WALL	FGS	10	20681G	127.0	4.4	97.2	95
23	7/18/2016	CLC	60' OFF S WALL, 10' OFF E WALL	FGS	10	20681G	128.0	4.6	98.0	95
24	7/18/2016	CLC	MIDDLE OF PIER AT G/2 & F/2	FGS	10	20681G	128.3	3.9	98.2	95
25	7/18/2016	CLC	MIDDLE OF PIER AT D/2 & E/2	FGS	10	20681G	129.8	2.8	99.4	95
26	7/18/2016	CLC	BETWEEN PIER AT 3B/2 AND W SIDE WALL A LINE MIDDLE	FGS	10	20681G	130.2	2.8	99.7	95
27	7/18/2016	CLC	10' OFF W SIDE WALL A LINE 30' OFF S SIDE WALL	FGS	10	20681G	127.6	3.3	97.7	95
28	7/18/2016	CLC	C LINE 60' FROM, S SIDE WALL	FGS	10	20681G	129.6	3.4	99.2	95
29	7/18/2016	CLC	10' OFF W SIDE WALL ON A LINE	FGS	10	20681G	128.1	3.7	98.1	95
30	7/18/2016	CLC	B LINE 50' OFF W SIDE WALL 60' OFF N SIDE WALL	FGS	10	20681G	128.4	3.6	98.3	95
31	7/18/2016	CLC	D LINE 100' OFF W SIDE 50' OFF N	FGS	10	20681G	124.2	3.3	95.1	95
32	7/18/2016	CLC	F LINE 60' FROM E SIDE WALL 10' OFF N	FGS	10	20681G	130.4	2.5	99.8	95
33	7/18/2016	CLC	5' OFF H LINE 50' OFF N	FGS	10	20681G	124.2	3.8	95.1	95
34	7/18/2016	CLC	BETWEEN PIERS AT A/1 AND B/1 MIDDLE	FGS	10	20681G	128.1	3.7	98.1	95
35	7/18/2016	CLC	BETWEEN PIERS AT C/1 AND D/1	FGS	10	20681G	129.0	3.5	98.8	95
36	7/18/2016	CLC	BETWEEN PIERS AT E/1 AND F/1	FGS	10	20681G	127.0	4.2	97.2	95

Laboratory Compaction Test Reference

Lab ID	Date Received	Material Source	Material Type	Method	Max Dry Density PCF	Optimum Moisture Content (%)	Comments
20681G	4/15/2016	GSG - Commercial Street	Structural Fill	ASTM D-1557 Modified C	130.6	7.7	

Elevation Notes:

ALL ELEVATIONS ARE FINISH GRADE SUBBASE (FGS)

Comments:

Reviewed By

Project: Apartment and Retail Building Mixed Use Development
Date Prepared: March 25, 2016

Structural Schedule of Special Inspections

CONCRETE CONSTRUCTION

VERIFICATION AND INSPECTION IBC Section 1704.4	REQD Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
1. Inspection of reinforcing steel, including prestressing tendons, and placement	Y	P	ACI 318: 3.5, 7.1-7.7	SI1	PE/SE or EIT	July thru Sept, 2016
2. Inspection of reinforcing steel welding in accordance with Table 1704.3, Item 5B	N	-	Not applicable. Welding of Reinf Not Allowed	-	-	
3. Inspect bolts to be installed in concrete prior to and during placement of concrete where allowable loads have been increased or where strength design is used.	Y	C	IBC 1911.5	SI1	PE/SE or EIT	July thru Sept, 2016
4. Inspection of anchors installed in hardened concrete.	Y	P	IBC 1212.1	SI1	PE/SE or EIT	July thru Sept, 2016
5. Verifying use of required design mix	Y	P	ACI 318: Ch 4, 5.2-5.4	TA1	ACI-CFTT or ACI-STT	July thru Sept, 2016
6. At time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests and determine the temperature of the concrete.	Y	C	ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8	TA1	ACI-CFTT or ACI-STT	Yes
7. Inspection of concrete and shotcrete placement for proper application techniques	N	C	ACI 318: 5.9, 5.10	TA1	ACI-CFTT or ACI-STT	
8. Inspection for maintenance of specified curing temperature and techniques	Y	P	ACI 318: 5.11-5.13	SI1	PE/SE or EIT	July thru Sept, 2016
9. Inspection of Prestressed Concrete						
a. Application of prestressing force.	N		ACI 318: 18.20			
b. Grouting of bonded prestressing tendons in seismic force resisting system	N		ACI 318: 18.18.4			
10. Erection of precast concrete members.	N		ACI 318: Ch 16			
11. Verification of in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beans and structural slabs.	N		ACI 318: 6.2			
12. Inspect formwork for shape, location and dimensions of the concrete member being formed.	Y	P	Limitations apply. See below	SI1	PE/SE or EIT	July thru Sept, 2016

Limitations of item 12: Special inspection includes periodic review of formwork shape, general location, and formwork dimensions that can be readily measured with conventional tape measure. Verification of building layout, building location, foundation extents, column grids, and foundation elevations is excluded.

Note: Concrete cylinder test results are not included in this report due to the large number of test reports. A PDF copy is available upon request.

BECKER STRUCTURAL ENGINEERS

OBSERVATION REPORT

Cast in Place Concrete

Project:	85 York Street – Apt & Retail
Location:	Portland, ME
Becker Job No:	3623

Date:	7/7/16, 7/8/16, 7/11/16, 7/12/16
Time:	Morning
Temp:	60F-70F
Weather:	Sunny

Observation Location: Wall and pier reinforcing on Y1 from X4 to X1 (north end of the shared wall between the garage and the building.)

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	☒	☐	☐	☐	
Quantity	☒	☐	☐	☐	
Condition	☒	☐	☐	☐	
Placement	☒	☐	☐	☐	
Embed/Anchors	☒	☐	☐	☐	
Lap Splices	☒	☐	☐	☐	
Hot Weather	☐	☐	☐	☒	
Cold Weather	☐	☐	☐	☒	
Bond Beams	☐	☐	☐	☒	
Additional Items	☐	☐	☐	☐	

Notes:

1. Observed reinforcing appeared to be in general conformance with the structural drawings.

Signed: Ben Van Deventer, E.I.

85 York Street, Portland, ME
Observation Report
07/12/16

BECKER
STRUCTURAL ENGINEERS

OBSERVATION REPORT
Cast in Place Concrete

Project:	85 York Street – Apt & Retail
Location:	Portland, ME
Becker Job No:	3623

Date:	7/18/16
Time:	Afternoon
Temp:	85F
Weather:	Sunny

Observation Location: Foundation Wall Piers @ H/2 (Garage) & Y1/X4 (Building)

Photo 1) Pier @ H/2 (Garage)

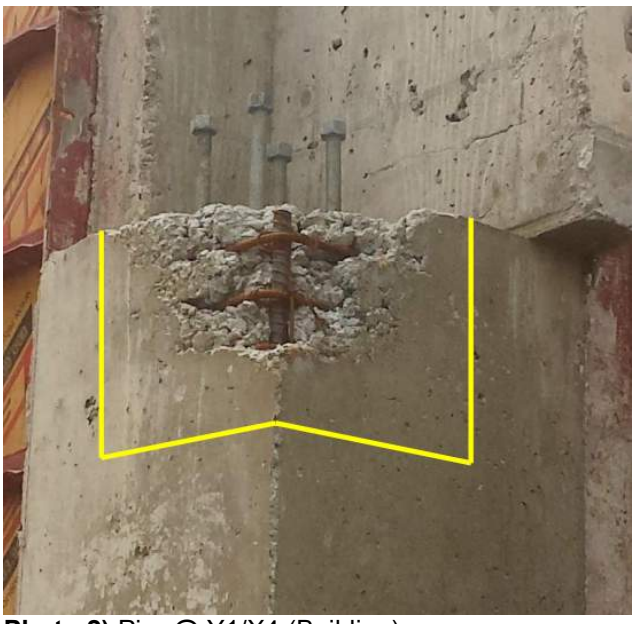


Photo 2) Pier @ Y1/X4 (Building)

Submit procedure and product data for repairs to concrete piers, removing and replacing the approximate area indicated, to a depth where both solid concrete and a minimum of 1" clearance around exist bar is established. Maintain a roughened surface for bonding. Recommend max of 15lb hand tool to avoid micro-cracking surrounding concrete.

Signed: Ben Van Deventer, E.I.

BECKER
STRUCTURAL ENGINEERS

OBSERVATION REPORT

Cast in Place Concrete

Project:	85 York Street – Apt & Retail
Location:	Portland, ME
Becker Job No:	3623

Date:	7/20/16, 7/22/16, 7/27/16, 7/28/16, 8/1/16, 8/216, 8/5/16
Time:	-
Temp:	75-85F
Weather:	Sunny

Observation Location: Foundation Footing from 10/A to 15/G

Observed vertical dowels for shear keys, transverse & longitudinal bars for footings, and vertical hooked bars for walls & piers.

Anchor bolts and shear lug bond-outs for ground floor brace connection at pier 15/A & pier 10/B were not provided. Anchor bolts will require drill & epoxy installation and the shear lug bond-out will be saw-cut.

Photo 1) Footing Reinforcement 15/A to 12/A

Photo 2) Footing, Pier & Wall Reinf. 17/C to 17/A

Photo 3) Footing & Wall Reinf. @ 10/A

Photo 4) Footing & Wall Reinf. @ 10/A

Photo 5) Footing Reinf. @ 15/G

Photo 6) Footing Placement @ 10/A

Photo 7) Footing Placement @ 17/G

Photo 8) Completed Footing @ 17/G

Photo 9) Completed Footing @ 13/A

Photo 10) Completed Footing @ 17/A

Signed: Ben Van Deventer, E.I.

BECKER
STRUCTURAL ENGINEERS

OBSERVATION REPORT
Cast in Place Concrete

Project:	85 York Street – Apt & Retail
Location:	Portland, ME
Becker Job No:	3623

Date:	8/5/16, 8/8/16, 8/9/16, 8/16/16, 8/22/16
Time:	-
Temp:	75-85F
Weather:	Sunny

Observation Location: Wall & Pier Reinforcement from 17/G to 10/B

Type EP-3 embed plate @ 15/A was not available for installation at time of concrete placement. Plate will be drilled & Epoxied into pier.

Photo 1) Wall & Pier Reinforcement 17/C to 17/A

Photo 2) Wall & Pier Reinforcement @ 17/A

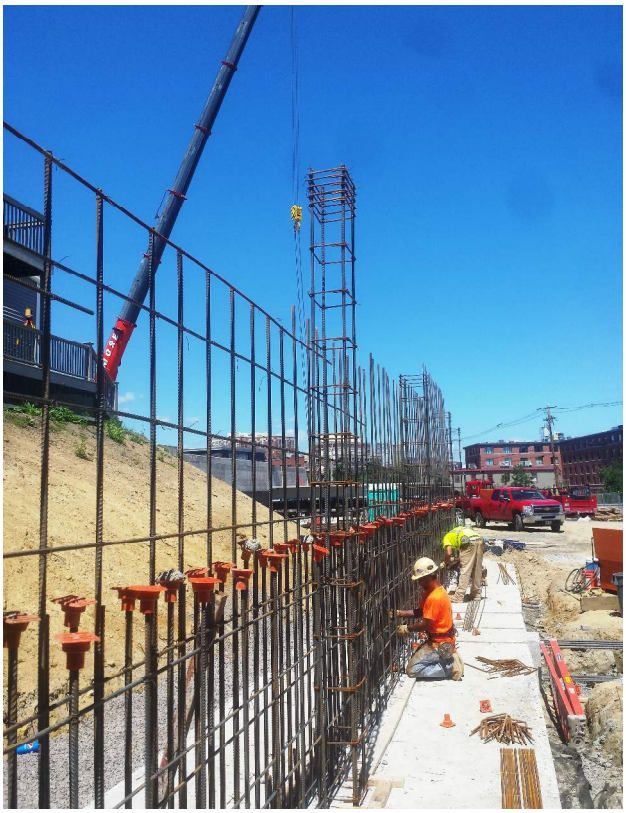


Photo 3) Wall & Pier Reinforcement 15/A to 12/A

Photo 4) Wall & Pier Reinforcement 11/A to 10/A

Photos 5 &6) Dropped Pier & Shear Key Boundout, w/ Type AB-2 Anchor Bolts @ A/17

Photo 7) Dropped Pier Bondouts w/ Type AB-1 Anchor Bolts for Piers on A-Line & 17-Line

Photo 8) Embed Plates w/ Headed Studs

Photo 9) Completed Wall E/13 to G/15

Photo 10) Completed Wall G/17 to D.2/17

Photo 11) Completed Wall A/17 to A/15

Photo 12) Completed Wall A/14 to A/11

Signed: Ben Van Deventer, E.I.

BECKER STRUCTURAL ENGINEERS

OBSERVATION REPORT

Cast in Place Concrete

Project:	85 York Street – Apt & Retail
Location:	Portland, ME
Becker Job No:	3623

Date:	8/29/16 & 8/30/16
Time:	-
Temp:	75-85F
Weather:	Sunny

Observation Location: Footing, Piers & Retaining Walls from 10/B to 4/B. Column footing @ B.9-C/15-15.4

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	☒	☐	☐	☐	
Quantity	☒	☐	☐	☐	
Condition	☒	☐	☐	☐	
Placement	☒	☐	☐	☐	
Embed/Anchors	☒	☐	☐	☐	
Lap Splices	☒	☐	☐	☐	
Hot Weather	☐	☐	☐	☒	
Cold Weather	☐	☐	☐	☒	
Bond Beams	☐	☐	☐	☒	
Additional Items	☐	☐	☐	☐	

Note: The foundation walls & footings for the garage and building intersect/overlap in the vicinity of grid 6.6/B. The garage foundation was built prior to the building foundation. Footing, pier & wall reinforcement for the building was drilled & epoxied into the garage foundation as required. See photos.

Photo 1) Garage footing protruding into form for building footing near 6.6/B.

Photo 2) Footing reinforcement, w/ longitudinals drilled & epoxied into garage footing near 6.6/B.

Photo 3) Footing reinforcement near 6.6/B.

Photo 4) Tie-beam reinforcement, shear lug bondout &anchor bolts @ 8/B.

Photo 5) Footing reinforcement from 5/B to 4/B.

Photo 6) Completed footing from 6/B to 4/B.

Photo 7) Shear lug bondout (foam), anchor bolts & pier reinforcement @ 6/B.

Photo 8) Completed footing near 6.6/B

Photo 9) Rebar @ pier & fdn wall intersection

Photo 10) Footing & anchor bolts @ B.9 & C/15-15.4

Signed: **David A. Macolini, PE**

BECKER STRUCTURAL ENGINEERS

03300 - Concrete

November 23, 2016

Project:	85 York Street – Apt & Retail Bldg.
Location:	85 York St., Portland, Maine
Becker Job No:	3814.90

OBSERVATION REPORT

Cast in Place Concrete

Date:	September 5 thru 23, 2016
Time:	
Temp:	warm
Weather:	

Observation Location:

Foundation retaining walls along building grid Line B.
Foundation frost walls along Lines F, 4, 3, stair and mechanical room.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Reinforcement Size	☒	☐	☐	☐	
Quantity	☒	☐	☐	☐	
Condition	☒	☐	☐	☐	
Placement	☒	☐	☐	☐	
Embed/Anchors	☒	☐	☐	☐	
Lap Splices	☒	☐	☐	☐	
Hot Weather	☐	☐	☐	☒	
Cold Weather	☐	☐	☐	☒	
Bond Beams	☐	☐	☐	☒	
Additional Items	☐	☐	☐	☐	
Additional Items	☐	☐	☐	☐	

Notes:

As of the end of September, foundations were substantially complete and structural steel columns were beginning to be erected. Refer to forthcoming reports.

Signed: David Macolini, P.E.

Photos

Retaining wall beyond, frostwall front

Frostwall @ intersection of lines F & 4

Typical column pier reinforcing

Column footing reinforcing @ lines F/Y3/1

Wall reinforcing @ line 2 (mech rm)

Forms stripped @ mech room area

S.W.COLE ENGINEERING, INC.

Concrete Construction Observation Report

Project Name/Location:	101 York street	**Project No:**	13-0545.3
Client/Client's Rep.:	J.B. Brown & Sons	**Date:**	7-13-16
Concrete Contractor:	Tri stone	**Sheet:**	1 of 1
Placement Location:	Footing: On G-line between 1 and 2-lines	**S.W.COLE Rep.:**	C. Cromwell
Weather:	Mid 80s sunny	**On Site:**	12:00-4:30

Pre Placement Observations	**In Compliance**		**N/O**	**Comments**
Bar size and location (diameter, length, bend and coverage)	Yes ☒	No ☐	☐	Per Plan
Splicing (type, overlap)	Yes ☒	No ☐	☐	Per Plan
Stability (wiring, chairs, and spacers)	Yes ☒	No ☐	☐	
Reinforcement conditions (cleanliness, temperature etc.)	Yes ☒	No ☐	☐	Clean/ambient
Embedments and anchor bolts installed	Yes ☒	No ☐	☐	
Soil subgrade prepared in accordance with project specifications	Yes ☒	No ☐	☐	

Referenced Drawings	**Date**	**Page(s)**	**Rev.**	**ASTM**	**GRADE**
Becker- Structural Notes	3-24-16	GS0.01		**A 615** ☒	**40** ☐ **50** ☐ **60** ☒
Becker- Foundation Plan	3-24-16	GS1.01		**A 616** ☐ **A 617** ☐	**75** ☐
Becker- Foundation Details	3-24-16	GS2.03		**A 706** ☐	**A 775 Epoxy** ☐

Concrete Placement Observations	**In Compliance**		**N/O**	**Comments**
Required mix used	Yes ☒	No ☐	☐	3,500psi w/air
Concrete properly conveyed to all areas of placement	Yes ☒	No ☐	☐	Pump
Internal vibration / consolidation of concrete	Yes ☒	No ☐	☐	Mechanical
Even layering around openings and embedments	Yes ☒	No ☐	☐	
Post placement observations (finishing, curing, etc.)	Yes ☐	No ☐	☒	

Field Testing of Concrete Performed	Yes ☒	No ☐	Loads:	4	Yards:	42
***Cylinder Set Number:**	791 – 27	←**refer to associated concrete test report*				
Non-Conformance Items Observed (person notified)	Yes ☐	No ☒				

Notes:

S.W.COLE was on site as scheduled by Opechee (Dave) to perform reinforcing observations and field testing of concrete. Reinforcing appeared to be consistent with above referenced plans. Concrete field testing indicated mix was within project specifications.

N/O=Not Observed

Attachments: Photos

Reviewed By:RED

S.W.COLE ENGINEERING, INC.

Concrete Construction Observation Report

Project Name/Location:	101 York street	**Project No:**	13-0545.3
Client/Client's Rep.:	J.B. Brown & Sons	**Date:**	7-14-16
Concrete Contractor:	Tri stone	**Sheet:**	1 of 1
Placement Location:	Wall: H-line fire wall shelf	**S.W.COLE Rep.:**	C. Cromwell
Weather:	80s sunny	**On Site:**	1:00-3:00

Pre Placement Observations	**In Compliance**		**N/O**	**Comments**
Bar size and location (diameter, length, bend and coverage)	Yes ☒	No ☐	☐	Per Plan
Splicing (type, overlap)	Yes ☒	No ☐	☐	Per Plan
Stability (wiring, chairs, and spacers)	Yes ☒	No ☐	☐	
Reinforcement conditions (cleanliness, temperature etc.)	Yes ☒	No ☐	☐	Clean/ambient
Embedments and anchor bolts installed	Yes ☒	No ☐	☐	
Soil subgrade prepared in accordance with project specifications	Yes ☒	No ☐	☐	

Referenced Drawings	**Date**	**Page(s)**	**Rev.**	**ASTM**	**GRADE**
Becker- Structural Notes	3-24-16	GS0.01		**A 615** ☒	**40** ☐ **50** ☐ **60** ☒
Becker- Foundation Plan	3-24-16	GS1.01		**A 616** ☐ **A 617** ☐	**75** ☐
Becker- Foundation Details	3-24-16	GS2.01		**A 706** ☐	**A 775 Epoxy** ☐

Concrete Placement Observations	**In Compliance**		**N/O**	**Comments**
Required mix used	Yes ☒	No ☐	☐	3,500psi w/air
Concrete properly conveyed to all areas of placement	Yes ☒	No ☐	☐	Pump
Internal vibration / consolidation of concrete	Yes ☒	No ☐	☐	Mechanical
Even layering around openings and embedments	Yes ☒	No ☐	☐	
Post placement observations (finishing, curing, etc.)	Yes ☐	No ☐	☒	

Field Testing of Concrete Performed	Yes ☒	No ☐	Loads:	1	Yards:	4.5
***Cylinder Set Number:** 791 – 28	←**refer to associated concrete test report*					
Non-Conformance Items Observed (person notified)	Yes ☐	No ☒				

Notes:

S.W.COLE was on site as scheduled by Opechee (Dave) to perform reinforcing observations and field testing of concrete. Reinforcing appeared to be consistent with above referenced plans. Concrete field testing indicated mix was within project specifications.

N/O=Not Observed

Attachments: Photos

Reviewed By:RED

S.W.COLE ENGINEERING, INC.

Concrete Construction Observation Report

Project Name/Location:	101 York street	**Project No:**	13-0545.3
Client/Client's Rep.:	J.B. Brown & Sons	**Date:**	7-15-16
Concrete Contractor:	Tri stone	**Sheet:**	1 of 1
Placement Location:	Keyway Footing on A-line from9.4-line to 17-line and 17-line from A-line to D-line	**S.W.COLE Rep.:**	C. Cromwell
Weather:	80s sunny	**On Site:**	11:30-3:30

Pre Placement Observations	**In Compliance**		**N/O**	**Comments**
Bar size and location (diameter, length, bend and coverage)	Yes ☒	No ☐	☐	#5's at 18" O.C
Splicing (type, overlap)	Yes ☐	No ☐	☒	N/A
Stability (wiring, chairs, and spacers)	Yes ☒	No ☐	☐	
Reinforcement conditions (cleanliness, temperature etc.)	Yes ☒	No ☐	☐	Clean/ambient
Embedments and anchor bolts installed	Yes ☐	No ☐	☒	N/A
Soil subgrade prepared in accordance with project specifications	Yes ☒	No ☐	☐	

Referenced Drawings	**Date**	**Page(s)**	**Rev.**	**ASTM**	**GRADE**
Becker- Structural Notes	3-17-16	S0.01		**A 615** ☒	**40** ☐ **50** ☐ **60** ☒
Becker- Foundation Plan	3-17-16	S1.01		**A 616** ☐ **A 617** ☐	**75** ☐
Becker- Foundation Details	3-17-16	S2.01		**A 706** ☐	**A 775 Epoxy** ☐
Becker- Foundation Details	3-17-16	S2.02			

Concrete Placement Observations	**In Compliance**		**N/O**	**Comments**
Required mix used	Yes ☒	No ☐	☐	3,500psi w/air
Concrete properly conveyed to all areas of placement	Yes ☒	No ☐	☐	Tailgate
Internal vibration / consolidation of concrete	Yes ☒	No ☐	☐	Mechanical
Even layering around openings and embedments	Yes ☒	No ☐	☐	
Post placement observations (finishing, curing, etc.)	Yes ☐	No ☐	☒	

Field Testing of Concrete Performed Yes ☒ No ☐ Loads: 4 Yards: 31

***Cylinder Set Number:** 791 – 29 ←**refer to associated concrete test report*

Non-Conformance Items Observed (person notified) Yes ☐ No ☒

Notes:

S.W.COLE was on site as scheduled by Opechee (Dave) to perform reinforcing observations and field testing of concrete. Reinforcing appeared to be consistent with above referenced plans. Concrete field testing indicated mix was within project specifications.

N/O=Not Observed

Attachments: Photos

Reviewed By:RED

S.W.COLE ENGINEERING, INC.

Concrete Construction Observation Report

Project Name/Location:	101 York street	**Project No:**	13-0545.3
Client/Client's Rep.:	J.B. Brown & Sons	**Date:**	7-25-16
Concrete Contractor:	Tri stone	**Sheet:**	1 of 1
Placement Location:	Footing: on A-line from 11-line to 17-line and 17-line from A-line to C-line	**S.W.COLE Rep.:**	C. Cromwell
Weather:	80s sunny	**On Site:**	7:00-11:30

Pre Placement Observations	**In Compliance**		**N/O**	**Comments**
Bar size and location (diameter, length, bend and coverage)	Yes ☒	No ☐	☐	Per plan
Splicing (type, overlap)	Yes ☒	No ☐	☐	S2.02
Stability (wiring, chairs, and spacers)	Yes ☒	No ☐	☐	Brick
Reinforcement conditions (cleanliness, temperature etc.)	Yes ☒	No ☐	☐	Clean/ambient
Embedments and anchor bolts installed	Yes ☐	No ☐	☒	N/A
Soil subgrade prepared in accordance with project specifications	Yes ☒	No ☐	☐	

Referenced Drawings	**Date**	**Page(s)**	**Rev.**	**ASTM**	**GRADE**
Becker- Structural Notes	3-17-16	S0.01		**A 615** ☒	**40** ☐ **50** ☐ **60** ☒
Becker- Foundation Plan	3-17-16	S1.01		**A 616** ☐ **A 617** ☐	**75** ☐
Becker- Foundation Details	3-17-16	S2.01		**A 706** ☐	**A 775 Epoxy** ☐
Becker- Foundation Details	3-17-16	S2.02			
Becker- Foundation Details	3-17-16	S2.03			

Concrete Placement Observations	**In Compliance**		**N/O**	**Comments**
Required mix used	Yes ☒	No ☐	☐	3,500psi w/air
Concrete properly conveyed to all areas of placement	Yes ☒	No ☐	☐	Tailgate
Internal vibration / consolidation of concrete	Yes ☒	No ☐	☐	Mechanical
Even layering around openings and embedments	Yes ☐	No ☐	☒	
Post placement observations (finishing, curing, etc.)	Yes ☐	No ☐	☒	

Field Testing of Concrete Performed Yes ☒ No ☐ Loads: 8 Yards: 76

***Cylinder Set Number:** 791 – 30,31 ←**refer to associated concrete test report*

Non-Conformance Items Observed (person notified) Yes ☐ No ☒

Notes:

S.W.COLE was on site as scheduled by Opechee (Dave) to perform reinforcing observations and field testing of concrete. Reinforcing appeared to be consistent with above referenced plans. Concrete field testing indicated mix was within project specifications.

N/O=Not Observed

Attachments: Photos

Reviewed By:RED

S.W.COLE ENGINEERING, INC.

Concrete Construction Observation Report

Project Name/Location:	101 York street	**Project No:**	13-0545.3
Client/Client's Rep.:	J.B. Brown & Sons	**Date:**	8-1-16
Concrete Contractor:	Tri stone	**Sheet:**	1 of 1
Placement Location:	Footing: D/17 to G/17 to G/15, A/14 to A/13	**S.W.COLE Rep.:**	A. Boyce
Weather:	70s sunny	**On Site:**	12:00-2:30

Pre Placement Observations	**In Compliance**		**N/O**	**Comments**
Bar size and location (diameter, length, bend and coverage)	Yes ☒	No ☐	☐	Per plan
Splicing (type, overlap)	Yes ☒	No ☐	☐	S2.02
Stability (wiring, chairs, and spacers)	Yes ☒	No ☐	☐	Brick
Reinforcement conditions (cleanliness, temperature etc.)	Yes ☒	No ☐	☐	Clean/ambient
Embedments and anchor bolts installed	Yes ☐	No ☐	☒	N/A
Soil subgrade prepared in accordance with project specifications	Yes ☒	No ☐	☐	

Referenced Drawings	**Date**	**Page(s)**	**Rev.**
Becker- Structural Notes	3-17-16	S0.01	
Becker- Foundation Plan	3-17-16	S1.01	
Becker- Foundation Details	3-17-16	S2.01	
Becker- Foundation Details	3-17-16	S2.02	
Becker- Foundation Details	3-17-16	S2.03	

ASTM: **A 615** ☒ **A 616** ☐ **A 617** ☐ **A 706** ☐

GRADE: **40** ☐ **50** ☐ **60** ☒ **75** ☐ **A 775 Epoxy** ☐

Concrete Placement Observations	**In Compliance**		**N/O**	**Comments**
Required mix used	Yes ☒	No ☐	☐	3,500psi w/air
Concrete properly conveyed to all areas of placement	Yes ☒	No ☐	☐	Tailgate
Internal vibration / consolidation of concrete	Yes ☒	No ☐	☐	Mechanical
Even layering around openings and embedments	Yes ☐	No ☐	☒	
Post placement observations (finishing, curing, etc.)	Yes ☐	No ☐	☒	

Field Testing of Concrete Performed Yes ☒ No ☐ Loads: 4 Yards: 40

***Cylinder Set Number:** 791 – 32 ←*refer to associated concrete test report*

Non-Conformance Items Observed (person notified) Yes ☐ No ☒

Notes:

S.W.COLE was on site as scheduled by Opechee (Dave) to perform reinforcing observations and field testing of concrete. Reinforcing appeared to be consistent with above referenced plans. Concrete field testing indicated mix was within project specifications.

Attachments: Photos

Reviewed By: Roger E Downey

S.W.COLE ENGINEERING, INC.

Concrete Construction Observation Report

Project Name/Location:	101 York street	**Project No:**	13-0545.3
Client/Client's Rep.:	J.B. Brown & Sons	**Date:**	8-17-16
Concrete Contractor:	Tri Stone	**Sheet:**	1 of 1
Placement Location:	Footing: H-line from 1.9 to 1-line and walls from A/13.4 to A/10 and C/17 to G/17 and G/17 to F/12 East side wall.	**S.W.COLE Rep.:**	A. Boyce
Weather:	80s sunny	**On Site:**	12:30-4:30

Pre Placement Observations	**In Compliance**		**N/O**	**Comments**
Bar size and location (diameter, length, bend and coverage)	Yes ☐	No ☐	☒	By C. Cromwell
Splicing (type, overlap)	Yes ☐	No ☐	☒	S.W.COLE Rep
Stability (wiring, chairs, and spacers)	Yes ☐	No ☐	☒	
Reinforcement conditions (cleanliness, temperature etc.)	Yes ☐	No ☐	☒	
Embedments and anchor bolts installed	Yes ☐	No ☐	☒	
Soil subgrade prepared in accordance with project specifications	Yes ☐	No ☐	☒	

Referenced Drawings	**Date**	**Page(s)**	**Rev.**	**ASTM**	**GRADE**
Becker- Structural Notes	3-17-16	S0.01		**A 615** ☒	**40** ☐ **50** ☐ **60** ☒
Becker- Foundation Plan	3-17-16	S1.01		**A 616** ☐ **A 617** ☐	**75** ☐
Becker- Foundation Details	3-17-16	S2.01		**A 706** ☐	**A 775 Epoxy** ☐
Becker- Foundation Details	3-17-16	S2.02			
Becker- Foundation Details	3-17-16	S2.03			
Becker- Foundation Details	3-24-16	GS1.01			
Becker- Foundation Details	3-24-16	GS2.01			

Concrete Placement Observations	**In Compliance**		**N/O**	**Comments**
Required mix used	Yes ☒	No ☐	☐	3500PSI W Air
Concrete properly conveyed to all areas of placement	Yes ☒	No ☐	☐	Pump
Internal vibration / consolidation of concrete	Yes ☒	No ☐	☐	Mechanical
Even layering around openings and embedments	Yes ☐	No ☐	☒	
Post placement observations (finishing, curing, etc.)	Yes ☐	No ☐	☒	

Field Testing of Concrete Performed Yes ☒ No ☐ Loads: 8 Yards: 80

***Cylinder Set Number:** 791 – 35 & 36 ←**refer to associated concrete test report*

Non-Conformance Items Observed (person notified) Yes ☐ No ☒

Notes:

S.W.COLE (CLC) was on site as scheduled by Opechee (Dave) to perform reinforcing observations (C. Cromwell). Aidan Boyce of S.W.COLE was onsite to perform concrete field testing. Two sets of test specimens were made before S.W.COLE's departure

Attachments: None

Reviewed By: RED

S.W.COLE ENGINEERING, INC.

Concrete Construction Observation Report

Project Name/Location:	101 York street	**Project No:**	13-0545.3
Client/Client's Rep.:	J.B. Brown & Sons	**Date:**	8-17-16
Concrete Contractor:	Tri Stone	**Sheet:**	1 of 1
Placement Location:	Footing: H-line from 1.9 to 1-line and walls from A/13.4 to A/10 and C/17 to G/17 and G/17 to F/12 East side wall.	**S.W.COLE Rep.:**	C. Cromwell
Weather:	80s sunny	**On Site:**	11:30-1:00

Pre Placement Observations	**In Compliance**		**N/O**	**Comments**
Bar size and location (diameter, length, bend and coverage)	Yes ☒	No ☐	☐	Per plan
Splicing (type, overlap)	Yes ☒	No ☐	☐	S2.02
Stability (wiring, chairs, and spacers)	Yes ☒	No ☐	☐	Brick/Spacers
Reinforcement conditions (cleanliness, temperature etc.)	Yes ☒	No ☐	☐	Clean/ambient
Embedments and anchor bolts installed	Yes ☒	No ☐	☐	Per Plan
Soil subgrade prepared in accordance with project specifications	Yes ☐	No ☐	☒	

Referenced Drawings	**Date**	**Page(s)**	**Rev.**	**ASTM**	**GRADE**
Becker- Structural Notes	3-17-16	S0.01		**A 615** ☒	**40** ☐ **50** ☐ **60** ☒
Becker- Foundation Plan	3-17-16	S1.01		**A 616** ☐ **A 617** ☐	**75** ☐
Becker- Foundation Details	3-17-16	S2.01		**A 706** ☐	**A 775 Epoxy** ☐
Becker- Foundation Details	3-17-16	S2.02			
Becker- Foundation Details	3-17-16	S2.03			
Becker- Foundation Details	3-24-16	GS1.01			
Becker- Foundation Details	3-24-16	GS2.01			

Concrete Placement Observations	**In Compliance**		**N/O**	**Comments**
Required mix used	Yes ☐	No ☐	☒	
Concrete properly conveyed to all areas of placement	Yes ☐	No ☐	☒	
Internal vibration / consolidation of concrete	Yes ☐	No ☐	☒	
Even layering around openings and embedments	Yes ☐	No ☐	☒	
Post placement observations (finishing, curing, etc.)	Yes ☐	No ☐	☒	

Field Testing of Concrete Performed	Yes ☐	No ☒	Loads: Yards:
***Cylinder Set Number:**	←**refer to associated concrete test report*		
Non-Conformance Items Observed (person notified)	Yes ☐	No ☒	

Notes:

S.W.COLE (CLC) was on site as scheduled by Opechee (Dave) to perform reinforcing observations. Reinforcing observed seemed consistent with above referenced documents. Aidan Boyce of S.W.COLE was onsite to perform concrete field testing.

Attachments: Photos

Reviewed By: RED

S.W.COLE ENGINEERING, INC.

Concrete Construction Observation Report

Project Name/Location:	101 York street	**Project No:**	13-0545.3
Client/Client's Rep.:	J.B. Brown & Sons	**Date:**	8-26-16
Concrete Contractor:	Tri stone	**Sheet:**	1 of 1
Placement Location:	Footing: A-line from 9.4 to 4-line Walls: H-line from 1 to 2-line and A-line from 13.4-line to 6-line	**S.W.COLE Rep.:**	C. Cromwell
Weather:	80s sunny	**On Site:**	10:30-3:30

Pre Placement Observations	**In Compliance**		**N/O**	**Comments**
Bar size and location (diameter, length, bend and coverage)	Yes ☒	No ☐	☐	Per plan
Splicing (type, overlap)	Yes ☒	No ☐	☐	S2.02
Stability (wiring, chairs, and spacers)	Yes ☒	No ☐	☐	Brick
Reinforcement conditions (cleanliness, temperature etc.)	Yes ☒	No ☐	☐	Clean/ambient
Embedments and anchor bolts installed	Yes ☒	No ☐	☐	Per plan
Soil subgrade prepared in accordance with project specifications	Yes ☒	No ☐	☐	

Referenced Drawings	**Date**	**Page(s)**	**Rev.**
Becker- Structural Notes	3-17-16	S0.01	
Becker- Foundation Plan	3-17-16	S1.01	
Becker- Foundation Details	3-17-16	S2.01	
Becker- Foundation Details	3-17-16	S2.02	
Becker- Foundation Details	3-17-16	S2.03	
Becker- Foundation Plan	3-24-16	GS1.01	
Becker- Foundation Details	3-24-16	GS2.02	
Becker- Foundation Details	3-24-16	GS2.02	

ASTM

A 615 ☒ **A 616** ☐ **A 617** ☐ **A 706** ☐

GRADE

40 ☐ **50** ☐ **60** ☒ **75** ☐ **A 775 Epoxy** ☐

Concrete Placement Observations	**In Compliance**		**N/O**	**Comments**
Required mix used	Yes ☒	No ☐	☐	3,500psi w/air
Concrete properly conveyed to all areas of placement	Yes ☒	No ☐	☐	Tailgate
Internal vibration / consolidation of concrete	Yes ☒	No ☐	☐	Mechanical
Even layering around openings and embedments	Yes ☒	No ☐	☐	
Post placement observations (finishing, curing, etc.)	Yes ☐	No ☐	☒	

Field Testing of Concrete Performed Yes ☒ No ☐ Loads: 13 Yards: 124

***Cylinder Set Number:** 791 – 38,39 & 40 ←**refer to associated concrete test report*

Non-Conformance Items Observed (person notified) Yes ☐ No ☒

Notes:

S.W.COLE was on site as scheduled by Opechee (Dave) to perform reinforcing observations and field testing of concrete. Reinforcing appeared to be consistent with above referenced plans. Concrete field testing indicated mix was within project specifications.

Attachments: Photos Reviewed By: RED

S.W.COLE ENGINEERING, INC.

Concrete Construction Observation Report

Project Name/Location:	101 York street	**Project No:**	13-0545.3
Client/Client's Rep.:	J.B. Brown & Sons	**Date:**	8-30-16
Concrete Contractor:	Tri stone	**Sheet:**	1 of 1
Placement Location:	Footing: Elevator	**S.W.COLE Rep.:**	C. Cromwell
Weather:	80s sunny	**On Site:**	12:30-3:30

Pre Placement Observations	**In Compliance**		**N/O**	**Comments**
Bar size and location (diameter, length, bend and coverage)	Yes ☒	No ☐	☐	Per plan
Splicing (type, overlap)	Yes ☒	No ☐	☐	S2.02
Stability (wiring, chairs, and spacers)	Yes ☒	No ☐	☐	Brick
Reinforcement conditions (cleanliness, temperature etc.)	Yes ☒	No ☐	☐	Clean/ambient
Embedments and anchor bolts installed	Yes ☒	No ☐	☐	Per plan
Soil subgrade prepared in accordance with project specifications	Yes ☒	No ☐	☐	

Referenced Drawings	**Date**	**Page(s)**	**Rev.**	**ASTM**	**GRADE**
Becker- Structural Notes	3-17-16	S0.01		**A 615** ☒	**40** ☐ **50** ☐ **60** ☒
Becker- Foundation Plan	3-17-16	S1.01		**A 616** ☐ **A 617** ☐	**75** ☐
Becker- Foundation Details	3-17-16	S2.01		**A 706** ☐	**A 775 Epoxy** ☐
Becker- Foundation Details	3-17-16	S2.02			
Becker- Foundation Details	3-17-16	S2.03			

Concrete Placement Observations	**In Compliance**		**N/O**	**Comments**
Required mix used	Yes ☒	No ☐	☐	3,500psi w/air
Concrete properly conveyed to all areas of placement	Yes ☒	No ☐	☐	Tailgate
Internal vibration / consolidation of concrete	Yes ☒	No ☐	☐	Mechanical
Even layering around openings and embedments	Yes ☒	No ☐	☐	
Post placement observations (finishing, curing, etc.)	Yes ☐	No ☐	☒	

Field Testing of Concrete Performed Yes ☒ No ☐ Loads: 2 Yards: 16

***Cylinder Set Number:** 791 – 41 ←**refer to associated concrete test report*

Non-Conformance Items Observed (person notified) Yes ☐ No ☒

Notes:

S.W.COLE was on site as scheduled by Opechee (Dave) to perform reinforcing observations and field testing of concrete. Reinforcing appeared to be consistent with above referenced plans. Concrete field testing indicated mix was within project specifications.

Attachments: None

Reviewed By: RED

S.W.COLE ENGINEERING, INC.

Concrete Construction Observation Report

Project Name/Location:	101 York street	**Project No:**	13-0545.3
Client/Client's Rep.:	J.B. Brown & Sons	**Date:**	9-2-16
Concrete Contractor:	Tri stone	**Sheet:**	1 of 1
Placement Location:	Footing: F-line from 4-line to 5-line, 4-line from C-line to F-line, C.1-line from 3-line to 4-line, 3-line from C.1-line to Garage	**S.W.COLE Rep.:**	C. Cromwell
Weather:	70s sunny	**On Site:**	11:00-3:00

Pre Placement Observations	**In Compliance**		**N/O**	**Comments**
Bar size and location (diameter, length, bend and coverage)	Yes ☒	No ☐	☐	Per plan
Splicing (type, overlap)	Yes ☒	No ☐	☐	S2.02
Stability (wiring, chairs, and spacers)	Yes ☒	No ☐	☐	Brick
Reinforcement conditions (cleanliness, temperature etc.)	Yes ☒	No ☐	☐	Clean/ambient
Embedments and anchor bolts installed	Yes ☒	No ☐	☐	Per plan
Soil subgrade prepared in accordance with project specifications	Yes ☒	No ☐	☐	

Referenced Drawings	**Date**	**Page(s)**	**Rev.**	**ASTM**	**GRADE**
Becker- Structural Notes	3-17-16	S0.01		**A 615** ☒	**40** ☐ **50** ☐ **60** ☒
Becker- Foundation Plan	3-17-16	S1.01		**A 616** ☐ **A 617** ☐	**75** ☐
Becker- Foundation Details	3-17-16	S2.01		**A 706** ☐	**A 775 Epoxy** ☐
Becker- Foundation Details	3-17-16	S2.02			
Becker- Foundation Details	3-17-16	S2.03			

Concrete Placement Observations	**In Compliance**		**N/O**	**Comments**
Required mix used	Yes ☒	No ☐	☐	3,500psi w/air
Concrete properly conveyed to all areas of placement	Yes ☒	No ☐	☐	Tailgate
Internal vibration / consolidation of concrete	Yes ☒	No ☐	☐	Mechanical
Even layering around openings and embedments	Yes ☒	No ☐	☐	
Post placement observations (finishing, curing, etc.)	Yes ☐	No ☐	☒	

Field Testing of Concrete Performed	Yes ☒	No ☐	Loads:	4	Yards:	37
***Cylinder Set Number:** 791 – 42	←**refer to associated concrete test report*					
Non-Conformance Items Observed (person notified)	Yes ☐	No ☒				

Notes:

S.W.COLE was on site as scheduled by Opechee (Dave) to perform reinforcing observations and field testing of concrete. Reinforcing appeared to be consistent with above referenced plans. Concrete field testing indicated mix was within project specifications.

Attachments: Photos

Reviewed By: RED

S.W.COLE ENGINEERING, INC.

Concrete Construction Observation Report

Project Name/Location:	101 York street	**Project No:**	13-0545.3
Client/Client's Rep.:	J.B. Brown & Sons	**Date:**	9-6-16
Concrete Contractor:	Tri stone	**Sheet:**	1 of 1
Placement Location:	Column Footings: at C/6,C/8, C/10, and C/12	**S.W.COLE Rep.:**	C. Cromwell
Weather:	70s sunny	**On Site:**	12:00-4:15

Pre Placement Observations	**In Compliance**		**N/O**	**Comments**
Bar size and location (diameter, length, bend and coverage)	Yes ☒	No ☐	☐	Per plan
Splicing (type, overlap)	Yes ☒	No ☐	☐	S2.02
Stability (wiring, chairs, and spacers)	Yes ☒	No ☐	☐	Brick
Reinforcement conditions (cleanliness, temperature etc.)	Yes ☒	No ☐	☐	Clean/ambient
Embedments and anchor bolts installed	Yes ☒	No ☐	☐	Per plan
Soil subgrade prepared in accordance with project specifications	Yes ☐	No ☐	☒	

Referenced Drawings	**Date**	**Page(s)**	**Rev.**
Becker- Structural Notes	3-17-16	S0.01	
Becker- Foundation Plan	3-17-16	S1.01	
Becker- Foundation Details	3-17-16	S2.01	
Becker- Foundation Details	3-17-16	S2.02	
Becker- Foundation Details	3-17-16	S2.03	

ASTM: **A 615** ☒ **A 616** ☐ **A 617** ☐ **A 706** ☐

GRADE: **40** ☐ **50** ☐ **60** ☒ **75** ☐ **A 775 Epoxy** ☐

Concrete Placement Observations	**In Compliance**		**N/O**	**Comments**
Required mix used	Yes ☒	No ☐	☐	3,500psi w/air
Concrete properly conveyed to all areas of placement	Yes ☒	No ☐	☐	Tailgate
Internal vibration / consolidation of concrete	Yes ☒	No ☐	☐	Mechanical
Even layering around openings and embedments	Yes ☒	No ☐	☐	
Post placement observations (finishing, curing, etc.)	Yes ☐	No ☐	☒	

Field Testing of Concrete Performed Yes ☒ No ☐ Loads: 4 Yards: 44

***Cylinder Set Number:** 791 – 44 ←*refer to associated concrete test report*

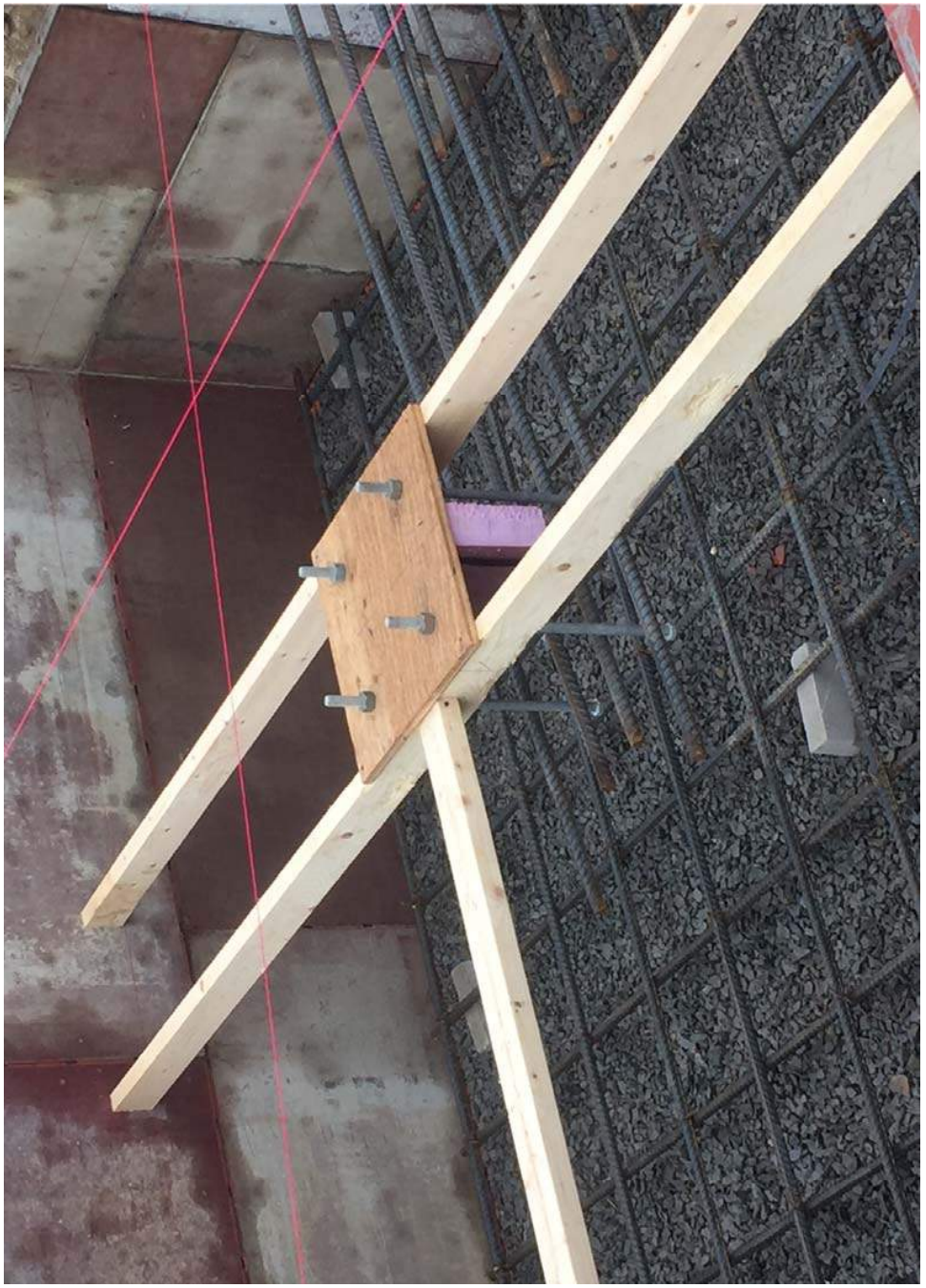
Non-Conformance Items Observed (person notified) Yes ☐ No ☒

Notes:

S.W.COLE was on site as scheduled by Opechee (Dave) to perform reinforcing observations and field testing of concrete. Reinforcing appeared to be consistent with above referenced plans. Concrete field testing indicated mix was within project specifications.

Attachments: photos

Reviewed By: Roger E Downey



S.W.COLE ENGINEERING, INC.

Concrete Construction Observation Report

Project Name/Location:	101 York street	**Project No:**	13-0545.3
Client/Client's Rep.:	J.B. Brown & Sons	**Date:**	9-7-16
Concrete Contractor:	Tri stone	**Sheet:**	1 of 1
Placement Location:	Column Footings: at D/15, D/13, D/12 and wall on A-line from 9.4-line to 4-line	**S.W.COLE Rep.:**	C. Cromwell
Weather:	70s sunny	**On Site:**	12:30-7:15

Pre Placement Observations	**In Compliance**		**N/O**	**Comments**
Bar size and location (diameter, length, bend and coverage)	Yes ☒	No ☐	☐	Per plan
Splicing (type, overlap)	Yes ☒	No ☐	☐	S2.02
Stability (wiring, chairs, and spacers)	Yes ☒	No ☐	☐	Brick
Reinforcement conditions (cleanliness, temperature etc.)	Yes ☒	No ☐	☐	Clean/ambient
Embedments and anchor bolts installed	Yes ☒	No ☐	☐	Per plan
Soil subgrade prepared in accordance with project specifications	Yes ☐	No ☐	☒	

Referenced Drawings	**Date**	**Page(s)**	**Rev.**	**ASTM**	**GRADE**
Becker- Structural Notes	3-17-16	S0.01		**A 615** ☒	**40** ☐ **50** ☐ **60** ☒
Becker- Foundation Plan	3-17-16	S1.01		**A 616** ☐ **A 617** ☐	**75** ☐
Becker- Foundation Details	3-17-16	S2.01		**A 706** ☐	**A 775 Epoxy** ☐
Becker- Foundation Details	3-17-16	S2.02			
Becker- Foundation Details	3-17-16	S2.03			

Concrete Placement Observations	**In Compliance**		**N/O**	**Comments**
Required mix used	Yes ☒	No ☐	☐	3,500psi w/air
Concrete properly conveyed to all areas of placement	Yes ☒	No ☐	☐	Tailgate
Internal vibration / consolidation of concrete	Yes ☒	No ☐	☐	Mechanical
Even layering around openings and embedments	Yes ☒	No ☐	☐	
Post placement observations (finishing, curing, etc.)	Yes ☐	No ☐	☒	

Field Testing of Concrete Performed Yes ☒ No ☐ Loads: 8 Yards: 79

***Cylinder Set Number:** 791 – 45,46 ←**refer to associated concrete test report*

Non-Conformance Items Observed (person notified) Yes ☐ No ☒

Notes:

S.W.COLE was on site as scheduled by Opechee (Dave) to perform reinforcing observations and field testing of concrete. Reinforcing appeared to be consistent with above referenced plans. Concrete field testing indicated mix was within project specifications.

Attachments: photos

Reviewed By: Roger E Downey

S.W.COLE ENGINEERING, INC.

Concrete Construction Observation Report

Project Name/Location:	101 York street	**Project No:**	13-0545.3
Client/Client's Rep.:	J.B. Brown & Sons	**Date:**	9-20-16
Concrete Contractor:	Tri stone	**Sheet:**	1 of 1
Placement Location:	Walls: Between Y.1 and Y.3-lines and 1 and 2-lines	**S.W.COLE Rep.:**	C. Cromwell
Weather:	75°F	**On Site:**	12:00-5:00

Pre Placement Observations	**In Compliance**		**N/O**	**Comments**
Bar size and location (diameter, length, bend and coverage)	Yes ☒	No ☐	☐	Per plan
Splicing (type, overlap)	Yes ☒	No ☐	☐	S2.02
Stability (wiring, chairs, and spacers)	Yes ☒	No ☐	☐	Wire
Reinforcement conditions (cleanliness, temperature etc.)	Yes ☒	No ☐	☐	Clean/ambient
Embedments and anchor bolts installed	Yes ☒	No ☐	☐	Per plan
Soil subgrade prepared in accordance with project specifications	Yes ☐	No ☐	☒	

Referenced Drawings	**Date**	**Page(s)**	**Rev.**
Becker- Structural Notes	3-17-16	S0.01	
Becker- Foundation Plan	3-17-16	S1.01	
Becker- Foundation Details	3-17-16	S2.01	
Becker- Foundation Details	3-17-16	S2.02	
Becker- Foundation Details	3-17-16	S2.03	

ASTM: **A 615** ☒ **A 616** ☐ **A 617** ☐ **A 706** ☐

GRADE: **40** ☐ **50** ☐ **60** ☒ **75** ☐ **A 775 Epoxy** ☐

Concrete Placement Observations	**In Compliance**		**N/O**	**Comments**
Required mix used	Yes ☒	No ☐	☐	3,500psi w/air
Concrete properly conveyed to all areas of placement	Yes ☒	No ☐	☐	Tailgate
Internal vibration / consolidation of concrete	Yes ☒	No ☐	☐	Mechanical
Even layering around openings and embedments	Yes ☒	No ☐	☐	
Post placement observations (finishing, curing, etc.)	Yes ☐	No ☐	☒	

Field Testing of Concrete Performed Yes ☒ No ☐ Loads: 2 Yards: 18

***Cylinder Set Number:** 791 – 48 ←*refer to associated concrete test report*

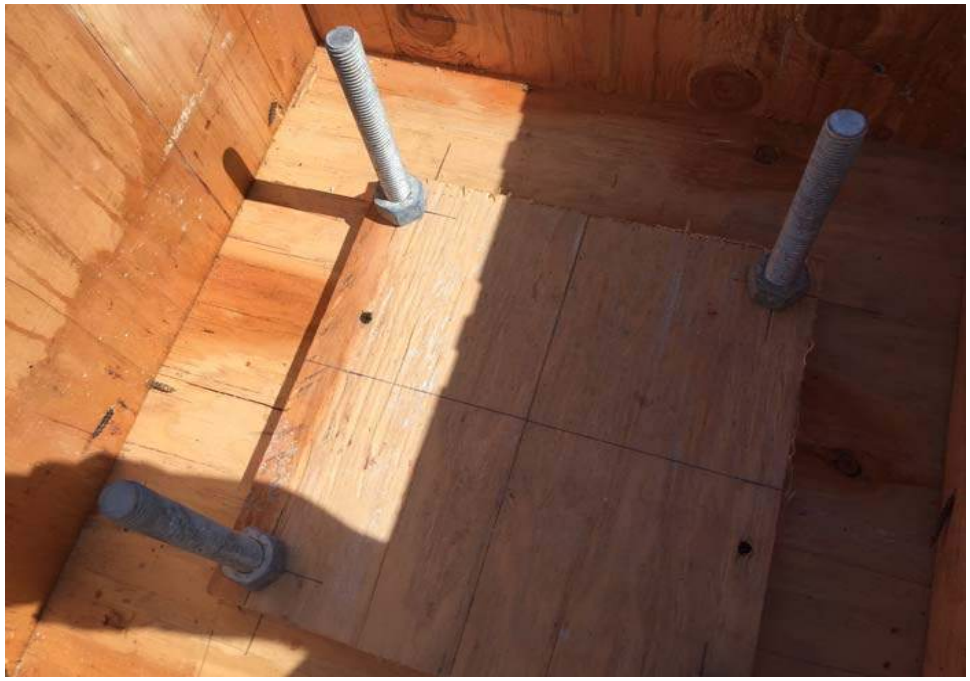
Non-Conformance Items Observed (person notified) Yes ☐ No ☒

Notes:

S.W.COLE was on site as scheduled by Opechee (Dave) to perform reinforcing observations and field testing of concrete. Reinforcing appeared to be consistent with above referenced plans. Concrete field testing indicated mix was within project specifications.

Attachments: photos

Reviewed By: Roger E Downey



S.W.COLE ENGINEERING, INC.

Concrete Construction Observation Report

Project Name/Location:	101 York street	**Project No:**	13-0545.3
Client/Client's Rep.:	J.B. Brown & Sons	**Date:**	11-2-16
Concrete Contractor:	Phinney Concrete	**Sheet:**	1 of 1
Placement Location:	Slab on Deck:: 2nd floor Between A-line and G-line and 12 and 17-line	**S.W.COLE Rep.:**	C. Cromwell
Weather:	50°F	**On Site:**	6:30-10:30

Pre Placement Observations	**In Compliance**		**N/O**	**Comments**
Bar size and location (diameter, length, bend and coverage)	Yes ☒	No ☐	☐	6X6-W2.1xW2.1 WWM
Splicing (type, overlap)	Yes ☒	No ☐	☐	
Stability (wiring, chairs, and spacers)	Yes ☒	No ☐	☐	Wire
Reinforcement conditions (cleanliness, temperature etc.)	Yes ☒	No ☐	☐	Clean/Ambient
Embedments and anchor bolts installed	Yes ☐	No ☐	☒	N/A
Soil subgrade prepared in accordance with project specifications	Yes ☐	No ☐	☒	N/A

Referenced Drawings	**Date**	**Page(s)**	**Rev.**	**ASTM**	**GRADE**
Becker- Structural Notes	3-17-16	S0.01		**A 615** ☒	**40** ☐ **50** ☐ **60** ☒
Becker- Foundation Plan	3-17-16	S1.01		**A 616** ☐ **A 617** ☐	**75** ☐
Becker- Second Floor Framing Plan	3-17-16	S3.01		**A 706** ☐	**A 775 Epoxy** ☐

Concrete Placement Observations	**In Compliance**		**N/O**	**Comments**
Required mix used	Yes ☒	No ☐	☐	3,500psi non air
Concrete properly conveyed to all areas of placement	Yes ☒	No ☐	☐	Tailgate
Internal vibration / consolidation of concrete	Yes ☐	No ☐	☒	N/A
Even layering around openings and embedments	Yes ☐	No ☐	☒	N/A
Post placement observations (finishing, curing, etc.)	Yes ☐	No ☐	☒	

Field Testing of Concrete Performed Yes ☒ No ☐ Loads: 7 Yards: 70

***Cylinder Set Number:** 791 – 49,50 ←**refer to associated concrete test report*

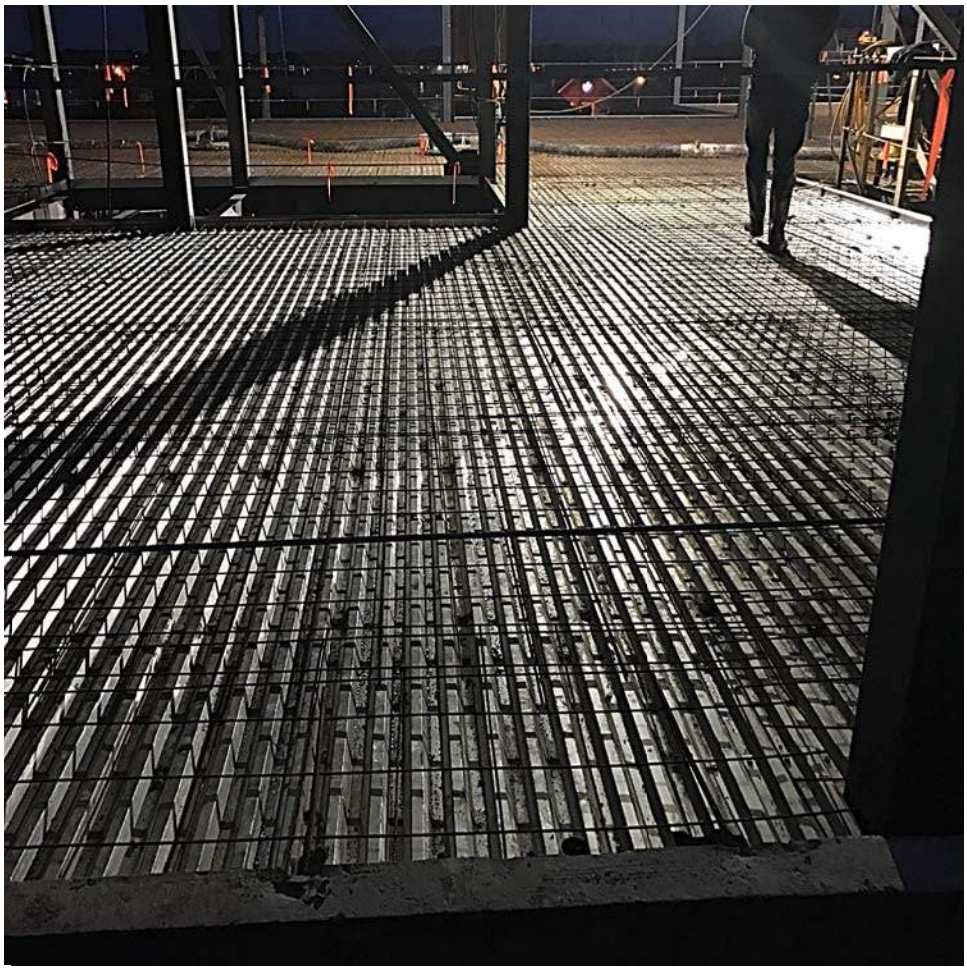
Non-Conformance Items Observed (person notified) Yes ☐ No ☒

Notes:

S.W.COLE was on site as scheduled by Opechee to perform reinforcing observations and field testing of concrete. Reinforcing appeared to be consistent with above referenced plans. Concrete field testing indicated mix was within project specifications. A 3500psi non air mix was delivered by Auburn Concrete which is more then the specified 3000psi.

Attachments: photos

Reviewed By: Roger E Downey



S.W.COLE ENGINEERING, INC.

Concrete Construction Observation Report

Project Name/Location:	101 York street	**Project No:**	13-0545.3
Client/Client's Rep.:	J.B. Brown & Sons	**Date:**	11-7-16
Concrete Contractor:	Phinney Concrete	**Sheet:**	1 of 1
Placement Location:	Slab on Deck:: 3rd floor Between A-line and G-line and 12 and 17-line	**S.W.COLE Rep.:**	C. Cromwell
Weather:	50°F	**On Site:**	6:30-10:00

Pre Placement Observations	**In Compliance**		**N/O**	**Comments**
Bar size and location (diameter, length, bend and coverage)	Yes ☒	No ☐	☐	6X6-W2.1xW2.1 WWM
Splicing (type, overlap)	Yes ☒	No ☐	☐	
Stability (wiring, chairs, and spacers)	Yes ☒	No ☐	☐	Wire
Reinforcement conditions (cleanliness, temperature etc.)	Yes ☒	No ☐	☐	Clean/Ambient
Embedments and anchor bolts installed	Yes ☐	No ☐	☒	N/A
Soil subgrade prepared in accordance with project specifications	Yes ☐	No ☐	☒	N/A

Referenced Drawings	**Date**	**Page(s)**	**Rev.**	**ASTM**	**GRADE**
Becker- Structural Notes	3-17-16	S0.01		**A 615** ☒	**40** ☐ **50** ☐ **60** ☒
Becker- Foundation Plan	3-17-16	S1.01		**A 616** ☐ **A 617** ☐	**75** ☐
Becker- Second Floor Framing Plan	3-17-16	S3.01		**A 706** ☐	**A 775 Epoxy** ☐

Concrete Placement Observations	**In Compliance**		**N/O**	**Comments**
Required mix used	Yes ☒	No ☐	☐	3,000psi non air
Concrete properly conveyed to all areas of placement	Yes ☒	No ☐	☐	Tailgate
Internal vibration / consolidation of concrete	Yes ☐	No ☐	☒	N/A
Even layering around openings and embedments	Yes ☐	No ☐	☒	N/A
Post placement observations (finishing, curing, etc.)	Yes ☐	No ☐	☒	

Field Testing of Concrete Performed Yes ☒ No ☐ Loads: 7 Yards: 70

***Cylinder Set Number:** 791 – 51,52 ←**refer to associated concrete test report*

Non-Conformance Items Observed (person notified) Yes ☐ No ☒

Notes:

S.W.COLE was on site as scheduled by Opechee to perform reinforcing observations and field testing of concrete. Reinforcing appeared to be consistent with above referenced plans. Concrete field testing indicated mix was within project specifications. A 3000psi non air mix was delivered by Hissong with midrange and Masterset.

Attachments: None

Reviewed By: KBG

S.W.COLE ENGINEERING, INC.

Concrete Construction Observation Report

Project Name/Location:	101 York street	**Project No:**	13-0545.3
Client/Client's Rep.:	J.B. Brown & Sons	**Date:**	11-18-16
Concrete Contractor:	Phinney Concrete	**Sheet:**	1 of 1
Placement Location:	Slab on Deck: fifth floor	**S.W.COLE Rep.:**	J. Moore
Weather:	50°F	**On Site:**	7am- 11:30am

Pre Placement Observations	**In Compliance**		**N/O**	**Comments**
Bar size and location (diameter, length, bend and coverage)	Yes ☒	No ☐	☐	Per Plan
Splicing (type, overlap)	Yes ☒	No ☐	☐	
Stability (wiring, chairs, and spacers)	Yes ☒	No ☐	☐	Wire
Reinforcement conditions (cleanliness, temperature etc.)	Yes ☒	No ☐	☐	Clean/Ambient
Embedments and anchor bolts installed	Yes ☐	No ☐	☒	N/A
Soil subgrade prepared in accordance with project specifications	Yes ☐	No ☐	☒	N/A

Referenced Drawings	**Date**	**Page(s)**	**Rev.**	**ASTM**	**GRADE**
Becker- Structural Notes	3-17-16	S0.01		**A 615** ☒	**40** ☐ **50** ☐ **60** ☒
Becker- Foundation Plan	3-17-16	S1.01		**A 616** ☐ **A 617** ☐	**75** ☐
Becker- Fifth floor framing plan	3-17-16	S3.04		**A 706** ☐	**A 775 Epoxy** ☐

Concrete Placement Observations	**In Compliance**		**N/O**	**Comments**
Required mix used	Yes ☒	No ☐	☐	3,000psi non air
Concrete properly conveyed to all areas of placement	Yes ☒	No ☐	☐	Tailgate
Internal vibration / consolidation of concrete	Yes ☐	No ☐	☒	N/A
Even layering around openings and embedments	Yes ☐	No ☐	☒	N/A
Post placement observations (finishing, curing, etc.)	Yes ☐	No ☐	☒	

Field Testing of Concrete Performed Yes ☒ No ☐ Loads: 7 Yards: 70

***Cylinder Set Number:** 791 – 51,52 ←*refer to associated concrete test report*

Non-Conformance Items Observed (person notified) Yes ☐ No ☒

Notes:

S.W.COLE was on site as scheduled by Opechee to perform reinforcing observations and field testing of concrete. Reinforcing appeared to be consistent with above referenced plans. Concrete field testing indicated mix was within project specifications. A 3000psi non air mix was delivered by Hissong with midrange and Masterset. All results were reported to the supervisor onsite from Opechee.

Attachments: None

Reviewed By: RED

S.W.COLE ENGINEERING, INC. • Geotechnical Engineering • Field & Lab Testing • Scientific & Environmental Consulting

CONSTRUCTION OBSERVATION REPORT

Project: Mixed Use Development, York & High Street, Portland, ME
Client: J.B. Brown & Sons, Inc.
Client's Rep.: Vin Veroneau
General Contractor/CM: Opechee Construction Corp. /Dave Trottier

S.W.COLE Project No.: 13-0545.3
Date: 6/14/16
Weather: Sunny, 60s

Work in Progress: Tristone: Concrete placement footing: Southside of building from Southeast corner to 2-line before spread footing at H/2. Gorham Sand and Gravel, Inc. (GSG) had excavated northeast side of building from northeast corner of parking garage to midway between 1-line and beginning to place ¾-inch stone on top of fabric.

General Observations and Discussions: As requested by Opechee Construction (Dave Trottier) we observed reinforcing steel installation at the current work area and to perform field testing of concrete at the south side of building.

While on-site, Opechee requested we observe GSG preparing footing subgrades at the northeast side of building. Preparations were ongoing and stone and fabric was installed over much of current work area before arrival. Where subgrade was still exposed, soils and conditions appeared consistent with geotechnical findings. Excavation appeared to have been performed with a smooth-edged bucket and relatively undisturbed; exposed subgrade soils consisted of brown silt and sand with some gravel. GSG was installing and compacting at least 6-inches of crushed stone wrapped in non-woven geotextile over the subgrades.

Onsite: 1:00 – 4:00
Attachments: Photos
Sheet: 1 of 1

S.W.COLE Rep: C. Cromwell
Rev. TJB

S.W.COLE ENGINEERING, INC. • Geotechnical Engineering • Field & Lab Testing • Scientific & Environmental Consulting

CONSTRUCTION OBSERVATION REPORT

Project: Mixed Use Development, York & High Street, Portland, ME
Client: J.B. Brown & Sons, Inc.
Client's Rep.: Vin Veroneau
General Contractor/CM: Opechee Construction Corp. /Dave Trottier

S.W.COLE Project No.: 13-0545.3
Date: 7/12/16
Weather: Sunny, 80s

Work in Progress: Gorham Sand and Gravel, Inc. (GSG) were in progress of excavating strip footing between 1-line and 2-line on G-line.

General Observations and Discussions:
While on-site, Opechee requested we observe GSG preparing strap footing subgrades between 1-line and 2-line on G-line. Excavation was done with a smooth-edge bucket and was excavated down to bedrock per geotechnical report. The northern side of footing was excavated down approximately 4 feet to get to bedrock. This area was leveled out with rest of footing with ¾ -inch stone that was compacted in 1-foot lifts. Non-woven geotextile fabric was placed down over subgrades and at least 6-inches of ¾ -inch stone was compacted and wrapped in fabric.

Onsite: 8:30 – 11:30
Attachments: Photos
Sheet: 1 of 1

S.W.COLE Rep: C. Cromwell
Rev. RED

S.W.COLE ENGINEERING, INC. • Geotechnical Engineering • Field & Lab Testing • Scientific & Environmental Consulting

CONSTRUCTION OBSERVATION REPORT

Project: Mixed Use Development, York & High Street, Portland, ME
Client: J.B. Brown & Sons, Inc.
Client's Rep.: Vin Veroneau
General Contractor/CM: Opechee Construction Corp. /Dave Trottier

S.W.COLE Project No.: 13-0545.3
Date: 7/14/16
Weather: Sunny, 80s

Work in Progress: Gorham Sand and Gravel, Inc. (GSG) were in the process of excavating out for keyways on A-line from 9.4-line to 17-line and 17-line from A-line to D-line.

General Observations and Discussions:
While on-site, Opechee requested S.W.COLE observe GSG excavating out for keyways on A-line from 9.4-line to 17-line and 17-line from A-line to D-line. Subgrade was initially dug down to bottom of footing with a smooth-edged bucket and appeared to be relatively undisturbed; exposed subgrade soils consisted of brown silt and sand with some gravel. Keyway was being excavated between Rammed Aggregate Piers (RAPs) and appeared to be relatively dry and undisturbed.

Onsite: 9:00 – 10:30
Attachments: Photos
Sheet: 1 of 1

S.W.COLE Rep: C. Cromwell
Rev. RED

S.W.COLE ENGINEERING, INC. • Geotechnical Engineering • Field & Lab Testing • Scientific & Environmental Consulting

CONSTRUCTION OBSERVATION REPORT

Project: Mixed Use Development, York & High Street, Portland, ME
Client: J.B. Brown & Sons, Inc.
Client's Rep.: Vin Veroneau

S.W.COLE Project No.: 13-0545.3
Date: 8/24/16
Weather: Sunny, 80s

Work in Progress: Tristone: Installation of formwork and reinforcing steel along A-line of the mixed use building in preparation for tomorrow's concrete placement. Gorham Sand and Gravel, Inc. (GS&G): Excavation for interior spread footings associated with the mixed use building at B.3/15.5, B.3/15.9, C/15, C/15.5 including the elevator between 13 and 14-lines .

General Observations and Discussions: As scheduled by Opechee Construction (Dave), we made a site visit to observe subgrade conditions and preparations in the current work area. At the time of our site visit, GS&G had recently completed excavation for the above referenced foundation elements and was in the process of checking elevations with their GPS prior to completing the required preparations. The excavation had been made with a smooth-edged bucket to help minimize disturbance to the subgrade soils and extended approximately 6 inches below proposed bottom of footings to accommodate the compacted crushed stone layer specified in section 4.3 of the project geotechnical report dated August, 31, 2015. At exposed subgrade, the previously installed rammed aggregate piers were visible and the subgrade soils consisting of relic crushed stone and gray silty sand with gravel were observed to be dry and firm. Subgrade conditions and preparations observed during our visit appeared consistent with our understanding of the expectations and requirements contained in the project documents.

Onsite: 1:00 – 2:00
Attachments: Photo
Sheet: 1 of 1

S.W.COLE Rep: K. Gimpel
Rev.: RED

S.W.COLE ENGINEERING, INC. • Geotechnical Engineering • Field & Lab Testing • Scientific & Environmental Consulting

CONSTRUCTION OBSERVATION REPORT

Project: Mixed Use Development, York & High Street, Portland, ME
Client: J.B. Brown & Sons, Inc.
Client's Rep.: Vin Veroneau

S.W.COLE Project No.: 13-0545.3
Date: 4/4/16 to 4/8/16
Weather: As noted below

Work in Progress: Helical Drilling, Inc. (HDI) performing rammed aggregate pier (RAP) modulus test and installing production RAPs. H. B. Fleming, Inc. (HBFI) installing soldier pile shoring wall along southwestern slope face.

Work Performed by S.W.COLE Rep.: Observation of RAP modulus test and installation of production RAPs. Observation of installation of soldier pile shoring wall.

General Observations and Discussions:

4/4/16, Clear, 30s, On-site 7:30 – 5:00: HDI performed modulus test on the sacrificial non-production RAP installed on 3/30/16. The modulus test followed the "Geopier Modulus Load Test Schedule" included in the Design Submittal dated March 7, 2016. HDI instrumented the pier with 3 top-of-pier dial gauges and 2 bottom-of-pier dial gauges attached to the tell-tales. An HDI quality control representative was on-site full-time to perform and record the test.

4/5/16, Clear, 30s, On-site 7:30 – 1:30: HDI attempted installation of production RAPs in the northwest portion of the site. Due to soft, yielding soils and scheduling conflicts with the site layout crew, installation of RAPs was postponed to the next day. HBFI began installation of soldier piles along the southwestern slope face.

4/6/16, Clear, 30s, On-site 7:00 – 3:00: HDI began installation of production RAPs, generally working in the northern and western portion of the site. 76 RAPs were installed on this date. RAPs 341 to 345 were attempted in the northern portion of the site encountering refusal at the ground surface. The RAP installation generally appeared consistent with the Design Submittal. RAPs 346 and 347 encountered refusal prior to reaching the minimal required depth of 6 feet as per the Design Submittal; RAPs were installed consistent with the Design Submittal and await decision from designer to remain installed or be removed. HDI installed a second sacrificial non-production RAP in the northwest corner of the site. Load test for this sacrificial RAP is scheduled for Monday 4/11/16. An HDI quality control representative was on-site full-time to record the RAP installation. HBFI completed installation of soldier piles along southwestern slope face and began installing wood lagging boards between soldier piles.

4/7/16, Overcast/Rain, 40s, On-site 7:00 – 3:00: HDI resumed installation of production RAPs, generally working in the eastern portion of the site. 136 RAPs were installed on this date. RAPs 127, 129, 139 through 143, 145, 356, 357, 360 through 362, and 365 encountered refusal prior to reaching the minimal required depth of 6 feet as per the Design Submittal; RAPs were installed consistent with the Design Submittal and await decision from designer to remain installed or be removed. An HDI quality control representative was on-site

full-time to record the RAP installation. HBFI completed installation of wood lagging boards and began installation of steel beam rakers.

4/8/16, Overcast, 50s, On-site 7:00 – 2:00: HDI prepared the second sacrificial test RAP for load testing scheduled for Monday 4/11/16. HDI resumed installation of production RAPs, generally working in the southern portion of the site. 43 RAPs were installed on this date. An HDI quality control representative was on-site full-time to record the RAP installation. HBFI completed installation of steel beam rakers. The wall was backfilled by Gorham Sand and Gravel.

Attachments: Photos
Sheet: 1 of 1

S.W.COLE Rep: T. Demers
Rev. by: TJB/EMW

Preparing Test RAP #2

Installing RAPs

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CONSTRUCTION OBSERVATION REPORT

Project: Mixed Use Development, York & High Street, Portland, ME
Client: J.B. Brown & Sons, Inc.
Client's Rep.: Vin Veroneau

S.W.COLE Project No.: 13-0545.3
Date: 4/11/16 to 4/14/16
Weather: As noted below

Work in Progress: Helical Drilling, Inc. (HDI) performing rammed aggregate pier (RAP) modulus test and installing production RAPs. Gorham Sand and Gravel, Inc. (GSG) excavating for footings and preparing foundation subgrades.

Work Performed by S.W.COLE Rep.: Observation of RAP modulus test, installation of production RAPs, and foundation subgrades.

General Observations and Discussions:

4/11/16, Overcast/Rain, 40's, On-site 7:30 – 3:00: HDI performed modulus test on the sacrificial non-production RAP installed on 4/6/16. The modulus test followed an accelerated modulus test schedule of load holds with a duration of 1 minute and creep test held at 133% design load for a minimum duration of 60 minutes. HDI instrumented the pier with 3 top-of-pier dial gauges. HDI continued installation of production RAPs, generally working in the southeast and western portions of the site. 49 RAPs were installed on this date. An HDI quality control representative was on-site full-time to perform and record the test, and record RAP installation. GSG excavated for footings along the northern garage perimeter wall, between RAPs 341 and 346. Excavation in this area encountered bedrock at the ground surface from RAPs 341 to 345, transitioning to overburden soils at RAP 346. We recommended that the Geopier designer review the RAP lengths in this transition area per the Geopier design submittal. GSG also performed footing excavations at columns on lines D, E, and F of Sheet GS1.01. Excavations in this area encountered shallow bedrock to depths of approximately 1 to 4 feet below existing ground surface.

4/12/16, Overcast/Rain, 40's, On-site 7:00 – 11:00: HDI continued installation of production RAPs, generally working in the southwestern portion of the site. 27 RAPs were installed on this date. An HDI quality control representative was on-site full-time to record RAP installation. HDI performed probe explorations to refusal at footing locations G/1, G/2, and 10 feet south of RAP 366 in the garage area. GSG performed test pit explorations to refusal at footing locations B/1, B/2, C/1, and C/2 in the garage area. The test pits and probes were performed to obtain information on the transition from RAP ground improvement to bedrock bearing conditions. A table of probe and test pit refusal depths is shown below. Due to portions of the site not yet excavated, scheduled RAPs in the southwestern and southeastern portions of the site were not installed during current mobilization. We understand uninstalled RAPs include numbers 93 to 126, 178, 179, and 274 to 283. We understand HDI will re-mobilize at a later date to install these RAPs.

Probe / Test Pit Location	Refusal Depth (ft)	Approximate Elev. (ft)	Approximate Refusal Elev. (ft)
B-1	2	37	35
B-2	0	36	36
C-1	2	37	35
C-2	0	36	36
G-1	6	29	23
G-2	3.5	29	25.5
10 ft South of RAP 366	3.5	29	25.5

4/14/16, Clear, 50's, On-site 10:00 – 11:45: As requested by Opechee, we made a site visit to observe on-going foundation subgrade preparation being performed by GSG in the garage area. While on-site, we met with Dave Wajda (Opechee superintendent) and Dustin (GSG foreman). Observations and discussions with Opechee and GSG included:

Observation of perimeter footing subgrade in the northeast corner of the garage where foundation soils had been improved by RAP installation. The exposed subgrade soils (soil matrix between RAPs) consisted of gray silty clay and clayey silt which appeared disturbed and yielding under foot. We recommended the disturbed soils be overexcavated by and replaced with compacted Structural Fill overlying non-woven geotextile prior to placing the planned 6-inches of geotextile wrapped crushed stone.

Observation of northerly perimeter foundation subgrade approximately between lines B and C where subgrades transition from bedrock to soils improved with RAPs. RAPs were not installed in this area, therefore we recommended that the loose overburden soils be removed down to bedrock and backfilled with compacted Structural Fill prior to placing the planned 6-inches of geotextile wrapped crushed stone.

Observation of southerly perimeter foundation subgrade approximately at line D. GSG had placed some fractured bedrock fill to shape subgrade for footing steps. We recommended this fractured bedrock fill be removed down to intact bedrock and replaced with properly compacted Structural Fill prior to placing the planned 6-inches of geotextile wrapped crushed stone.

Observation of bedrock subgrades for interior piers along lines 1 and 2. The subgrades had been hoe-rammed to depth and GSG had placed up to approximately 4 inches of crushed stone to provide a level working surface

on the bedrock. We recommended that GSG limit thickness of crushed stone over interior bedrock subgrades as much as practicable. Excavation for the interior footing at B/1 was being performed while we were onsite and encountered a bedrock surface sloping to the west. Based on measurements by GSG, we understand sound bedrock is about 1 to 1.5 feet below subgrade elevation in the approximate western 1/3 of the footing due to the sloping surface. We recommended that lean concrete with a compressive strength of 3,000 psi be used to backfill to subgrade elevation over the bedrock surface.

We discussed RAP installation and note that some areas of piers will have final lengths shorter than 6 feet. We recommended that the Geopier designers review the pier lengths.

Attachments: Photos
Sheet: 1 of 1

S.W.COLE Rep: T. Demers/E. Walker
Rev. by: EMW/RED

Excavation Along Northern Perimeter Foundation Between RAPs 341 and 346

Excavation of Footing D/1

Soldier Pile Wall Installed by HBFI

Backfill of Soldier Pile Wall

Disturbed Soils Along Garage Northern Perimeter Foundation Wall to be Overexcavated and Replaced

Fractured Rock Fill Placed Along Garage Southern Perimeter Wall Line to be Removed and Replaced

Project: Apartment and Retail Building Mixed Use Development
Date Prepared: March 25, 2016

Structural Schedule of Special Inspections - STEEL CONSTRUCTION

VERIFICATION AND INSPECTION IBC Section 1704.3	REQD Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
1. Material verification of high-strength bolts, nuts and washers:						
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	Y	P	Applicable ASTM material standards, AISC 360, A3.3	TA1	AWS/AISC-SSI	Yes
b. Manufacturer's certificate of compliance required.	Y	S		SI1	PE/SE or EIT	Yes
2. Inspection of high-strength bolting						
a. Snug-tight joints.	Y	P		TA1	AWS/AISC-SSI	Yes
b. Pretensioned and slip-critical joints using turn-of-nut with matchmaking, twist-off bolt or direct tension indicator methods of installation.	Y	P	AISC LRFD Section M2.5 IBC Sect 1704.3.3	TA1	AWS/AISC-SSI	Yes
c. Pretensioned and slip-critical joints using turn-of-nut without matchmaking or calibrated wrench methods of installation.	Y	C		TA1	AWS/AISC-SSI	Yes
3. Material verification of structural steel and cold-formed steel deck:						
a. For structural steel, identification markings to conform to AISC 360.	N					
b. For other steel, identification markings to conform to ASTM standards specified in the approved construction documents.	Y	P	Applicable ASTM material standards	SI1	PE/SE or EIT	Yes
c. Manufacturer's certified test reports.	Y	S		SI1	PE/SE or EIT	Yes
4. Material verification of weld filler materials:						
a. Identification markings to conform to AWS specification in the approved construction documents.	Y	P	AISC 360, M5.5	TA1	AWS/AISC-SSI	Yes
b. Manufacturer's certificate of compliance required.	Y	S		SI1	PE/SE or EIT	Yes
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	Yes
6. Inspection of welding (IBC 1704.3.1):						
a. Structural steel and cold-formed deck:						
1) Complete and partial joint penetration groove welds.	Y	C	AWS D1.1	TA1	AWS-CWI	Yes
2) Multipass fillet welds.	Y	C		TA1	AWS-CWI	Yes
3) Single-pass fillet welds> 5/16"	Y	C		TA1	AWS-CWI	Yes
4) Plug and slot welds	Y	C		TA1	AWS-CWI	Yes
5) Single-pass fillet welds≤ 5/16"	Y	P		TA1	AWS-CWI	Yes
6) Floor and deck welds.	Y	P	AWS D1.3	TA1	AWS-CWI	Yes
b. Reinforcing steel:						
1) Verification of weldability of reinforcing steel other than ASTM A706.	N	-	Not applicable.	-	-	
2) Reinforcing steel-resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special structural walls of concrete and shear reinforcement.	N					
3) Shear reinforcement.	N					
4) Other reinforcing steel.	N					
7. Inspection of steel frame joint details for compliance (IBC Sect 1704.3.2) with approved construction documents:						
a. Details such as bracing and stiffening.	Y	P	IBC 1704.3.2	SI1	PE/SE or EIT	Oct 2016
b. Member locations.	Y	P		SI1	PE/SE or EIT	thru
c. Application of joint details at each connection.	Y	P		SI1	PE/SE or EIT	Aug 2017

BECKER
STRUCTURAL ENGINEERS

OBSERVATION REPORT

Structural Steel

Date:	Jan 2 thru Aug 14, 2017 – 14 visits
Time:	
Temp:	
Weather:	

Project:	85 York Street - Apt & Retail Bldg.
Location:	85 York St., Portland, Maine
Becker Job No:	3623

Observation Location:
Throughout building from line 12 towards garage. Fourteen visits were made during the 8 month period to check structural steel work and confirm completion.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Bolt Condition	☒	☐	☐	☐	
Weld Condition	☒	☐	☐	☐	
Anchor Bolts, Nuts, & Washers	☒	☐	☐	☐	
Grout/Leveling Plates	☒	☐	☐	☐	
Fit Up/Plumbness	☒	☐	☐	☐	
Metal Deck Welds	☒	☐	☐	☐	
Pour Stops	☒	☐	☐	☐	
Bracing	☒	☐	☐	☐	
Additional Items	☐	☐	☐	☐	
Additional Items	☐	☐	☐	☐	

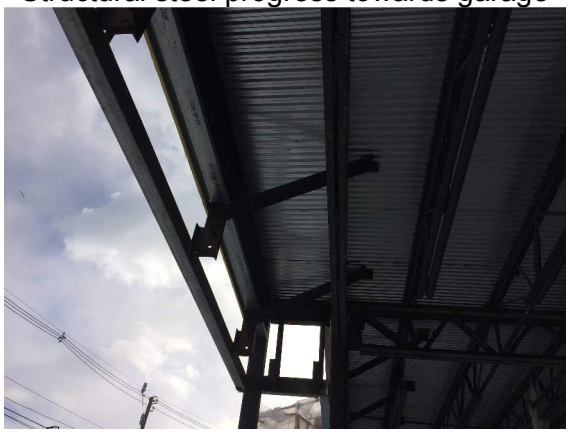
Notes:
Refer to White Engineering inspection reports 5 thru 18.
Structural steel construction substantially conforms to the structural drawings and related shop drawings.

Signed: David Macolini, P.E.

85 York Street Apartment & Retail Building

Structural steel progress towards garage

Exterior wall stud infill



Brick supports & braces @ storefronts

Roof deck & welds to framing

Typical floor deck & welds to framing

Entry canopy roof frame

BECKER STRUCTURAL ENGINEERS

OBSERVATION REPORT

Structural Steel

Date:	October 4 thru Nov 11, 2016
Time:	
Temp:	
Weather:	

Project:	85 York Street - Apt & Retail Bldg.
Location:	85 York St., Portland, Maine
Becker Job No:	3623

Observation Location:
West side along High Street (line 17) towards line 8

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Bolt Condition	☒	☐	☐	☐	
Weld Condition	☒	☐	☐	☐	
Anchor Bolts, Nuts, & Washers	☒	☐	☐	☐	
Grout/Leveling Plates	☒	☐	☐	☐	
Fit Up/Plumbness	☒	☐	☐	☐	
Metal Deck Welds	☒	☐	☐	☐	
Pour Stops	☒	☐	☐	☐	
Bracing	☒	☐	☐	☐	
Additional Items	☐	☐	☐	☐	
Additional Items	☐	☐	☐	☐	

Notes:

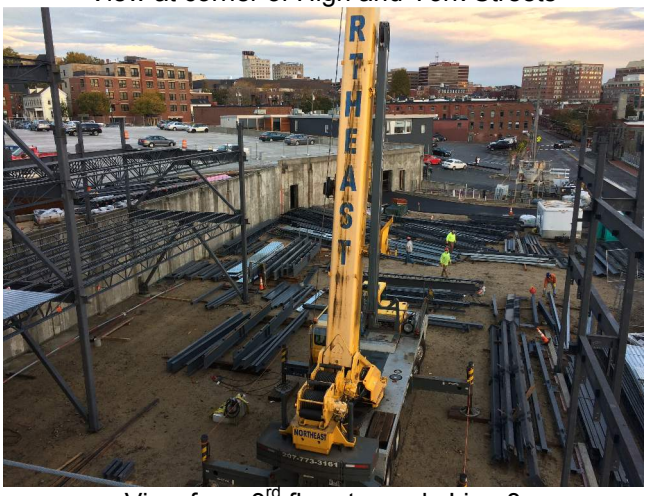
Signed: David Macolini, P.E.

Photos

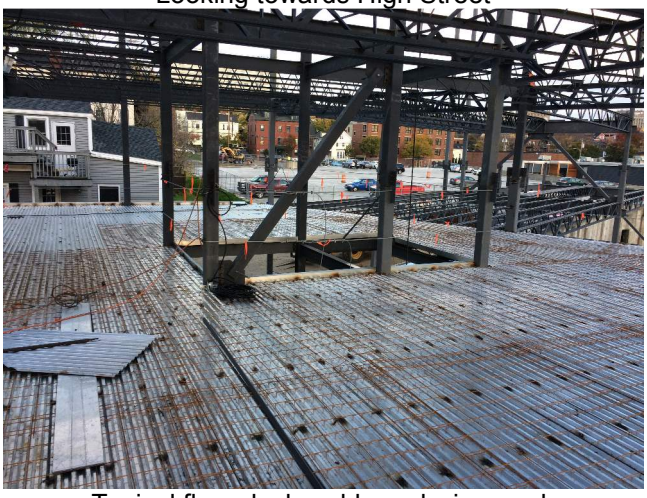
Typical grouted column leveling plate

View at corner of High and York Streets

Looking towards High Street



View from 3rd floor towards Line 8



Typical floor deck welds and wire mesh

View at basement stair

BECKER STRUCTURAL ENGINEERS

OBSERVATION REPORT

Structural Steel

Date:	Nov. 23, Dec. 8, 20, & 28, 2016
Time:	
Temp:	
Weather:	

Project:	85 York Street - Apt & Retail Bldg.
Location:	85 York St., Portland, MAine
Becker Job No:	3623

Observation Location: Area between line 12 towards line 1 & X4.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Bolt Condition	☒	☐	☐	☐	In progress
Weld Condition	☒	☐	☐	☐	In progress
Anchor Bolts, Nuts, & Washers	☒	☐	☐	☐	Handful remain to be completed and tightened.
Grout/Leveling Plates	☒	☐	☐	☐	Most complete. Some shear lugs remain to be grouted.
Fit Up/Plumbness	☒	☐	☐	☐	In progress
Metal Deck Welds	☒	☐	☐	☐	In progress
Pour Stops	☒	☐	☐	☐	In progress
Bracing	☒	☐	☐	☐	Most installed. Welds need to be made at several.
Additional Items	☐	☐	☐	☐	
Additional Items	☐	☐	☐	☐	

Notes:

Refer to photos on second page.

Refer to inspection reports by White Engineering, LLC

Signed: David Macolini, P.E.

Photos

Connection plates for canopy.

Progress view.

Brick relieving angle and bolts to be cast-in slab. Decking welds to joists underneath.

Second floor beam connection to column bearing on concrete pilaster.

Recently cast concrete slab on decking.

Floor beam @ column A/12 requires welding to connection plate instead of bolts.

BECKER
STRUCTURAL ENGINEERS

OBSERVATION REPORT

Open Web Steel Joists

Date:	Jan 2 thru March 13, 2017 - 4 visits
Time:	
Temp:	
Weather:	

Project:	85 York Street - Apt. & Retail Bldg.
Location:	85 York St., Portland, Maine
Becker Job No:	3623

Observation Location: Floors and roof from line 12 towards garage.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Seat Connection	☒	☐	☐	☐	
Bridging	☒	☐	☐	☐	
Bracing	☒	☐	☐	☐	
Tie joist Connection	☒	☐	☐	☐	
Additional Items	☐	☐	☐	☐	
Additional Items	☐	☐	☐	☐	

Notes:
Refer to White Engineering inspection reports 5 thru 18.
Roof and floor joist and girder construction substantially conforms to the structural drawings and related shop drawings.

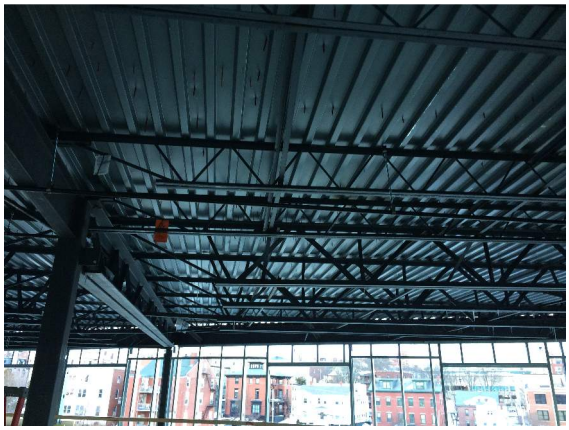
David A. Macolini

Signed: David Macolini, P.E.

85 York Street Apartment & Retail Building

Joist installation progress.

Typical joist girder, beam and joist framing connections.



Roof joists and girder

Floor slab finishing

BECKER STRUCTURAL ENGINEERS

OBSERVATION REPORT

Open Web Steel Joists

Date:	October 10 thru Nov 11, 2016
Time:	
Temp:	
Weather:	

Project:	85 York Street - Apt. & Retail Bldg.
Location:	85 York St., Portland, Maine
Becker Job No:	3623

Observation Location: West side along High Street towards Line 8.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Seat Connection	☒	☐	☐	☐	Work in progress
Bridging	☒	☐	☐	☐	In progress
Bracing	☒	☐	☐	☐	In progress
Tie joist Connection	☒	☐	☐	☐	In progress
Additional Items	☐	☐	☐	☐	
Additional Items	☐	☐	☐	☐	

Notes:

Bottom chords at a number of joist girders have one piece of the double angle removed to facilitate installation due to the stabilizer plate below the connection seat (see 4th photo on page 2). *We recommend welding the cut-off piece of angle back into position at roof joists because of wind uplift forces on the roof.*

Signed: David Macolini, P.E.

Photos

Typical 2nd & 3rd floor joists and girders.

Typical joist girder seat connection.

2nd & 3rd floor joists & girders progressed from Line 17 (High Street) to line 12.

Joist girder chord angle cut to allow installation. ***Piece to be welded back @ roof joist girders.***

View of progress

View looking out towards Line 8.

BECKER STRUCTURAL ENGINEERS

OBSERVATION REPORT

Open Web Steel Joists

Date:	Nov. 23, Dec. 8, 20, & 28, 2016
Time:	
Temp:	
Weather:	

Project:	85 York Street - Apt. & Retail Bldg.
Location:	85 York St., Portland, Maine
Becker Job No:	3623

Observation Location: Area between line 12 towards line 1 & X4.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Seat Connection	☒	☐	☐	☐	In progress
Bridging	☒	☐	☐	☐	In progress
Bracing	☒	☐	☐	☐	In progress
Tie joist Connection	☒	☐	☐	☐	In progress
Additional Items	☐	☐	☐	☐	
Additional Items	☐	☐	☐	☐	

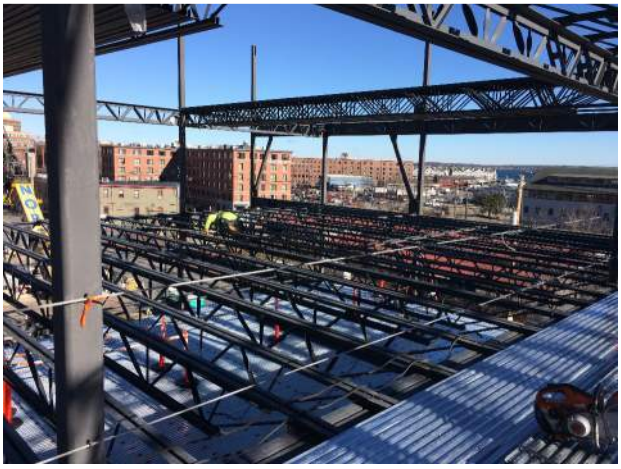
Notes:

Refer to photos on second page.

Refer to inspection reports by White Engineering, LLC.

Signed: David Macolini, P.E.

Photos



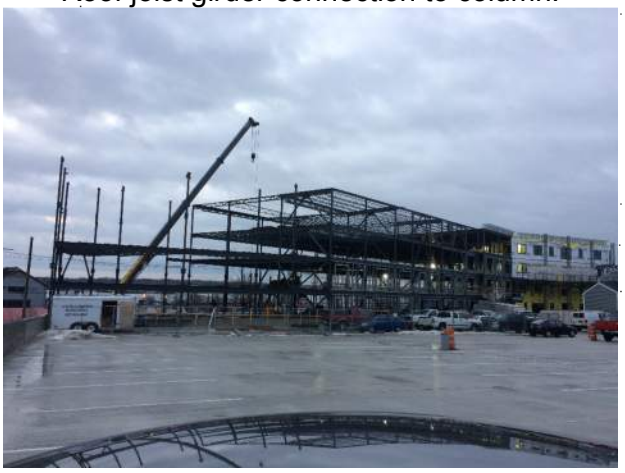
Joists and joist girders.

Joists bearing on and welded to girder.

Joist and decking.

Roof joist girder connection to column.

Fifth floor joist and roof joists above prior to placement.



View of progress.

WHITE ENGINEERING, LLC P.O. Box 878 Glen, N.H. 03838
nealjwhite@gmail.com Tel. 603-383-9347 Fax. 603-383-8262

Client: S.W. Cole Engineering, Inc. **Report:** 005
Project: Mixed Use Development
SWCE Project #: 13-05545.3
Date: October 5, 2016
Subject: Structural Steel Site Inspection

The contractor and erector were concerned regarding the quality of shop welds observed on members being received at the site. As requested, on this date we performed a visual inspection of shop welded connections on members presently on site.

Inspections were performed using Bonardi Steel, LLC shop drawings supplemented by structural design drawings as reference.

Numerous members were found to have unacceptable welds per AWS D1.1 visual acceptance criteria. Additionally, numerous welds were found to be missing. The attached inspection list notes members containing unacceptable welds and the discrepancies which were observed.

One discrepancy observed was incorrect welds used on shear lugs on the bottom of the column base plates at the brace frames. Per structural design drawing (S4.03) and shop detail drawings these shear lugs are to be welded using CJP welds. All columns with these lugs located at the site not yet erected, appear to have 3/8" PJP groove welds on two sides of the shear lug rather than the CJP weld required. Four of these columns have been erected and shear lugs are no longer accessible.

We marked all unacceptable and missing welds noted at this time and informed the project superintendent as well as the erector foreman of the discrepancies.

Inspector; Michael Bump
CWI#07091231

Project: Mixed Use Development Page: 1 of 1 **Report:** 005

Date: October 5, 2016

Location: York St. Portland, ME

Piece mark	Qty	NDT	Accept	Reject	Comments
B18	1			X	Missing welds
B114	1			X	Missing welds
B100	1			X	Undersized welds
B24	2			X	Missing welds
B40	1			X	Undercut
B76	1			X	Missing welds
B17	1			X	Porosity & Undercut
B???	1			X	Undercut
B110	1			X	Porosity, Undercut, Undersized welds
B58	1			X	HSS members @ top to be welded continuously
B124	1			X	HSS members @ top to be welded continuously
B125	1			X	HSS members @ top to be welded continuously
C26	1			X	Undercut
C16	1			X	Undersized welds
C25	1			X	Missing weld
C23	1			X	Undersized welds
C27	1			X	Undersized welds
C92	1			X	Missing weld & shear lug needs CJP
C73	1			X	Missing weld & shear lug needs CJP
C24	1			X	Undercut
B123	1			X	Missing weld

Remarks: Four columns are erected and have shear lugs requiring CJP welds. These columns are not listed above. See comments in narrative report.

Inspector; Michael Bump

WHITE ENGINEERING, LLC P.O. Box 878 Glen, N.H. 03838
nealjwhite@gmail.com Tel. 603-383-9347 Fax. 603-383-8262

Client: S.W. Cole Engineering, Inc. **Report:** 006
Project: Mixed Use Development
SWCE Project #: 13-0545.3
Date: October 11, 2016
Subject: Structural Steel Site Inspection

We visited the site on this date as requested to continue structural steel inspections on the Main Building of the Mixed Use Development project located at York St. and High St. in Portland, ME. Upon arrival we met with the project superintendent for Opechee Construction. Inspected at this time were lines 15 to 17. Our action and observations were as follows:

- Welder certifications were provided for personnel used on this project.
- Second and third floor framing was inspected for conformance to drawings and details.
- Welding of joists and joist bridging was inspected.
- Additional weld was added to the shear lug on the bottom of the gusset plate assembly at A/15. The weld was found to be of sufficient size (5/8 fillet weld) according to an E-mail provided by Becker Engineering. The weld quality was acceptable.

All inspections performed above appeared acceptable in accordance to AWS, AISC, RCSC, SJI and contract documents except the following work needs to be completed:

1. All kicker angles need to be added.
2. Joist termination angles need to be added at the foundation wall.
3. Column bracing to joists to be added as required per typical detail on S4.03.
4. "X" bridging was shown on structural drawings S3.01 to S3.05 however none are shown on Nucor joist drawings J1 to J10. The project superintendent will verify whether the bridging is required or not.

The project superintendent and erector foreman were notified of our findings.

Inspector; Michael Bump
CWI#07091231

WHITE ENGINEERING, LLC P.O. Box 878 Glen, N.H. 03838
nealjwhite@gmail.com Tel. 603-383-9347 Fax. 603-383-8262

Client: S.W. Cole Engineering, Inc. **Report:** 007
Project: Mixed Use Development
SWCE Project #: 13-0545.3
Date: October 24, 2016
Subject: Structural Steel Site Inspection

We visited the site on this date as requested to continue structural steel inspections on the Main Building of the Mixed Use Development project located at York St. and High St. in Portland, ME. Upon arrival we met with the project superintendent for Opechee Construction. Inspected at this time were lines 13 to 17. Our action and observations were as follows:

- Second and third floor framing were inspected for overall conformance to drawings and details.
- Welding of the joists and joist bridging at the 2nd and 3rd floor framing was inspected.
- Columns were inspected for plumb and properly tightened anchor rod nuts. Grout is still to be added where required.
- Final tightening of the 2nd and 3rd floor bolted connections was still in progress.
- Welding of lower ends of the HSS braces was partially complete from grade to the 3rd floor framing and visual inspections were performed. Locations inspected and found acceptable were marked with "wok"
- The 2nd floor form deck was approximately 70% welded at this time. We inspected areas completed and work appears to be acceptable. Side lap screws need to be added.
- The 3rd floor form deck was approximately 50% welded and screwed. We inspected the areas completed and work appears to be acceptable.
- We performed random visual inspections on fabricated steel stored at the site. One weld was found to have excessive porosity. HSS deck supports on brace beams were not welded the entire length as required and shear lugs on column base pates were not welded with CJP welds as shown on structural and shop drawings. No other discrepancies were noted.

With the exception of shop welds, all inspections performed above appeared acceptable in accordance to AWS, AISC, RCSC, SJI and contract documents except the following work needs to be completed:

1. All kicker angles need to be added.
2. One HSS member needs to be added between the 2nd and 3rd floor framing on line C between 15 and 15.4.
3. Column bracing to joists to be added as required per typical detail on S4.03.

The project superintendent and erector foreman were notified of our findings.

Inspector; Michael Bump
CWI#07091231

WHITE ENGINEERING, LLC P.O. Box 878 Glen, N.H. 03838
nealjwhite@gmail.com Tel. 603-383-9347 Fax. 603-383-8262

Client: S.W. Cole Engineering, Inc. **Report:** 008
Project: Mixed Use Development
SWCE Project #: 13-05545.3
Date: November 1, 2016
Subject: Structural Steel Site Inspection

We visited the site on this date as requested to continue structural steel inspections on the Main Building of the Mixed Use Development project located at York St. and High St. in Portland, ME. Upon arrival we met with the project superintendent for Opechee Construction. Inspected at this time were lines 12 to 17. Our action and observations were as follows:

- Layout welding and fastening of the 2nd floor form deck was complete and inspected.
- Welding of all HSS braces from grade to the 3rd floor framing was visually inspected. The missing member between the 2nd and 3rd floors on line C was added and welded.
- Columns were inspected for proper bearing and properly tightened anchor rod nuts. Grout still needs to be added under column base plates.

All inspections performed above appeared acceptable in accordance to AWS, AISC, RCSC and contract documents except the following work needs to be completed:

1. Anchor rod nuts need to be tightened at E/12.5 and E/13.

The project superintendent and erector foreman were notified of our findings.

Inspector; Michael Bump
CWI#07091231

WHITE ENGINEERING, LLC P.O. Box 878 Glen, N.H. 03838
nealjwhite@gmail.com Tel. 603-383-9347 Fax. 603-383-8262

Client: S.W. Cole Engineering, Inc. **Report:** 009
Project: Mixed Use Development
SWCE Project #: 13-05545.3
Date: November 3, 2016
Subject: Structural Steel Site Inspection

We visited the site on this date as requested to continue structural steel inspections on the Main Building of the Mixed Use Development project located at York St. and High St. in Portland, ME. Upon arrival we met with the project superintendent for Opechee Construction. Inspected at this time were lines 12 to 17. Our action and observations were as follows:

- Layout welding and fastening of the 3rd floor form deck were complete and inspected.
- Welding of lower ends of the HSS braces from level 3 to level 4 was visually inspected. Upper ends were not welded at this time.

All inspections performed above appeared acceptable in accordance to AWS, AISC and contract documents.

The project superintendent and erector foreman were notified of our findings.

Inspector; Michael Bump
CWI#07091231

WHITE ENGINEERING, LLC P.O. Box 878 Glen, N.H. 03838
nealjwhite@gmail.com Tel. 603-383-9347 Fax. 603-383-8262

Client: S.W. Cole Engineering, Inc. **Report:** 010
Project: Mixed Use Development
SWCE Project #: 13-0545.3
Date: November 15, 2016
Subject: Structural Steel Site Inspection

We visited the site on this date as requested to continue structural steel inspections on the Main Building of the Mixed Use Development project located at York St. and High St. in Portland, ME. Upon arrival we met with the project superintendent for Opechee Construction. Inspected at this time were lines 12 to 17. Our actions and observations were as follows:

- Welding of the joists and bridging at the 4th and 5th floor framing was inspected.
- Welding of the upper ends of the HSS bracing between the 3rd and 4th floors was visually inspected.
- Welding of the lower ends of the HSS bracing between the 4th floor and the roof was in progress. Completed members were inspected and marked "wok".
- Welding of the HSS column splices at the 3rd floor was visually inspected.
- Layout, welding and fastening of the 4th floor form deck was inspected.
- Layout and welding of the 5th floor form deck was approximately 75% complete and fastening of the deck was approximately 50% complete. Inspections were performed on areas completed.
- Bolted connections on the 4th and 5th floors need to be tightened.

All inspections performed above appeared acceptable in accordance to AWS, AISC, RCSC, SJI and contract documents.

The project superintendent and erector foreman were notified of our findings.

Inspector; Michael Bump
CWI#07091231

WHITE ENGINEERING, LLC P.O. Box 878 Glen, N.H. 03838
nealjwhite@gmail.com Tel. 603-383-9347 Fax. 603-383-8262

Client: S.W. Cole Engineering, Inc. **Report:** 011
Project: Mixed Use Development
SWCE Project #: 13-0545.3
Date: December 5, 2016
Subject: Structural Steel Site Inspection

We visited the site on this date as requested to continue structural steel inspections on the Main Building of the Mixed Use Development project located at York St. and High St. in Portland, ME. Upon arrival we met with the project superintendent for Opechee Construction. Inspected at this time were lines 12 to 17. Our action and observations were as follows:

- All bolted connections were inspected from the 2nd Floor to the Roof framing.
- Kicker angles for brick façade supports were installed and welded at the 3rd floor framing. The kicker angles need to be anchored to the slab above.
- Welding of the upper ends of the HSS bracing between the 3rd and 4th floor framing was visually inspected.
- HSS 2.5x2.5 deck support members only need to be welded with intermittent welds 12" on center not continuous as shown on design and detail drawings. The intermittent welds were approved by Becker Engineering.
- Welding of the 2nd Floor joist and joist bridging was inspected from lines 6 to 12.
- Layout welding and fastening of the 2nd Floor form deck were inspected from line 6 to 12.
- Welding of the lower ends of the HSS bracing at the 2nd Floor was in progress. Visual inspections were performed on completed welds.

All inspections performed above appeared to be acceptable in accordance to AWS, AISC, RCSC, SJI and contract documents except as noted below:

1. Several connections were found to have loose bolts on each level.
2. Installation of the kicker angles needs to be completed at the 2nd, 4th, and 5th floors.
3. Welding of the HSS bracing from the 4th floor to the Roof needs to be completed.
4. Anchor rod nuts are still loose at E/12.5.
5. Column lateral support bracing needs to be added as required.
6. Several puddle welds and side lap screws were found to be missing on the 2nd Floor deck.
7. Lower ends of the remainder of the HSS bracing needs to be welded at the 2nd floor between 6 and 12.
8. Bolts that will be poured in concrete need to be properly tightened on the gusset plates at the 2nd Floor framing from line 6 to 12.

The project superintendent and erector foreman were notified of our findings.

Inspector; Michael Bump
CWI#07091231

WHITE ENGINEERING, LLC P.O. Box 878 Glen, N.H. 03838
nealjwhite@gmail.com Tel. 603-383-9347 Fax. 603-383-8262

Client: S.W. Cole Engineering, Inc. **Report:** 012
Project: Mixed Use Development
SWCE Project #: 13-0545.3
Date: December 20, 2016
Subject: Structural Steel Site Inspection

We visited the site on this date as requested to continue structural steel inspections on the Main Building of the Mixed Use Development project located at York St. and High St. in Portland, ME. Upon arrival we met with the project superintendent for Opechee Construction. Our action and observations were as follows:

- Columns were inspected for plumb, proper bearing and properly tightened anchor rod nuts from lines 6 to 12.
- Welding of the lower ends of the HSS bracing at the 2nd and 3rd Floor framing was completed from lines 6 to 12. All welds not previously inspected were visually inspected.
- Bolted connections at the 3rd Floor framing were inspected from lines 6 to 12. Connections were not tightened at the 2nd Floor framing at this time.
- Welding of the joists and joist bridging at the 3rd Floor framing was inspected from lines 6 to 12.
- Layout, welding and fastening of the 3rd Floor form deck was inspected from lines 8 to 12.
- Welding of the column lateral support bracing was inspected at the 2nd and 3rd Floors from lines 6 to 12.
- Visual inspections were performed on column splices at the 3rd Floor from lines 8 to 12.
- Layout, welding and fastening of the roof deck was inspected from lines 11 to 17.
- Loose anchor rod nuts were tightened at E/12.5.

All inspections performed above appeared to be acceptable in accordance to AWS, AISC, RCSC, SJI and contract documents except as noted below:

1. Loose bolts were found at the 3rd Floor framing.
2. Some joists were found to have missing welds.
3. One bolted connection on the 3rd Floor at A/12 has misaligned bolt holes. A repair procedure will be required.
4. Some missing side lap screws were noted on the 3rd Floor form deck.
5. Some missing welds and side lap screws were noted on the roof deck.

The project superintendent and erector foreman were notified of our findings.

Inspector; Michael Bump
CWI#07091231

WHITE ENGINEERING, LLC P.O. Box 878 Glen, N.H. 03838
nealjwhite@gmail.com Tel. 603-383-9347 Fax. 603-383-8262

Client: S.W. Cole Engineering, Inc. **Report:** 013
Project: Mixed Use Development
SWCE Project #: 13-0545.3
Date: January 4, 2017
Subject: Structural Steel Site Inspection

We visited the site on this date as requested to continue structural steel inspections on the Main Building of the Mixed Use Development project located at York St. and High St. in Portland, ME. Upon arrival we met with the project superintendent for Opechee Construction. Our action and observations were as follows:

- Layout, welding and fastening of the roof deck were inspected from lines 6.6 to 11.
- All previously reported missing screws and welds on the roof deck between lines 11 and 17 were added.

All inspections performed above appeared acceptable in accordance to AWS and contract documents.

The project superintendent and erector foreman were notified of our findings.

Inspector; Michael Bump
CWI#07091231

WHITE ENGINEERING, LLC P.O. Box 878 Glen, N.H. 03838
nealjwhite@gmail.com Tel. 603-383-9347 Fax. 603-383-8262

Client: S.W. Cole Engineering, Inc. **Report:** 014
Project: Mixed Use Development
SWCE Project #: 13-0545.3
Date: January 18, 2017
Subject: Structural Steel Site Inspection

We visited the site on this date as requested to continue structural steel inspections on the Main Building of the Mixed Use Development project located at York St. and High St. in Portland, ME. Upon arrival we met with the project superintendent for Opechee Construction. Our actions and observations were as follows:

- Layout, welding and fastening of the roof deck were inspected from lines 4 to 6.6.
- While on site we performed a walk-through inspection between lines 12 and 17 with the EOR and erector foreman to discuss outstanding discrepancies as well as some required repairs.

All inspections performed above appeared acceptable in accordance to AWS and contract documents except as noted below:

1. Missing deck screws were noted adjacent to lines B and F.

The project superintendent and erector foreman were notified of our findings.

Inspector; Michael Bump
CWI#07091231

WHITE ENGINEERING, LLC P.O. Box 878 Glen, N.H. 03838
nealjwhite@gmail.com Tel. 603-383-9347 Fax. 603-383-8262

Client: S.W. Cole Engineering, Inc. **Report:** 015
Project: Mixed Use Development
SWCE Project #: 13-0545.3
Date: January 25, 2017
Subject: Structural Steel Site Inspection

We visited the site on this date as requested to continue structural steel inspections on the Main Building of the Mixed Use Development project located at York St. and High St. in Portland, ME. Upon arrival we met with the project superintendent for Opechee Construction. Our action and observations were as follows:

- Layout, welding and fastening of the form deck was inspected in the following areas:
  - 2nd Floor from line 6 to X4.
  - 3rd and 4th Floors from line 12 to X4.
  - 5th Floor from line 4 to 12.
- Bolted connections were inspected in the following areas:
  - 2nd and 3rd Floors from line 6 to X4.
  - 4th and 5th Floors from line 12 to X4.
  - Roof from line 4 to 12.
- Welding of joists and joist bridging was inspected in the following areas:
  - 2nd and 3rd Floors from line 6 to X4.
  - 4th and 5th Floors from line 12 to X4.
  - Roof framing from line 4 to 12.
- Welding of the HSS column splices at the 3rd Floor was inspected from line 6 to X4.
- Welding of HSS brace frames was in progress at all floors.
- Installation of façade kicker angles and column braces was in progress.
- All loose bolts previously reported between lines 17 and 12 have been tightened. The misaligned bolted connection on the 3rd Floor at A/12 still needs to be field welded.
- All previously reported missing welds on the HSS bracing between lines 12 and 17 were added and visually inspected.
- All missing deck screws previously reported at the Roof framing between lines 4 and 6.6 were added.
- Welded connections between the precast double tees and the concrete walls in the parking garage not previously inspected were visually inspected.

All inspections performed above appeared complete and acceptable in accordance to AWS, AISC, RCSC, SJI and contract documents with the following comments:

1. Bolted connections around the stair support framing still need to be tightened.
2. Welding of the joist girders to the columns was in progress.
3. Column splices at the stair support framing still need to be welded.

The project superintendent and erector foreman were notified of our findings.

Inspector; Michael Bump
CWI#07091231

WHITE ENGINEERING, LLC P.O. Box 878 Glen, N.H. 03838
nealjwhite@gmail.com Tel. 603-383-9347 Fax. 603-383-8262

Client: S.W. Cole Engineering, Inc. **Report:** 016
Project: Mixed Use Development
SWCE Project #: 13-0545.3
Date: February 15, 2017
Subject: Structural Steel Site Inspection

We visited the site on this date as requested to continue structural steel inspections on the Main Building of the Mixed Use Development project located at York St. and High St. in Portland, ME. Upon arrival we met with the project superintendent for Opechee Construction. Our action and observations were as follows:

- All joists on the 2nd and 3rd Floor framing previously reported as having missing welds were welded. Visual inspections were performed on the welds.
- Welding of the HSS brace frames between the 2nd and 3rd Floors was visually inspected.
- Welding of all joist girders to HSS columns was inspected.
- Welding of the joists on the Roof framing was inspected from line 4 to X4.
- Layout, welding and fastening of the Roof deck were inspected from line 6.6 to X4.
- Welding of brick façade support kicker angles was inspected from the 2nd and 5th Floors.

All inspections performed above appeared acceptable in accordance to AWS, AISC, RCSC, SJI and contract documents except as noted below:

1. Weld was found to be missing on the upper end of one HSS brace along line F between the 2nd and 3rd Floors.
2. Two kicker angles need to be added at the 3rd Floor along line F.
3. Several kicker angles need to be anchored to the form deck from the 3rd and 5th Floors.

The following items still need to be completed:

1. Welds were found to be missing at the upper ends of two HSS brace members between the 3rd and 4th Floors along line 10.
2. The moment connections on the 3rd Floor framing at A/14 and A/15.4 need to be welded.
3. The misaligned bolt holes on the 3rd Floor framing at A/12 still needs to be repaired.
4. Complete welding of HSS brace frames between the 3rd Floor and Roof framing.
5. Bolted connections around the stair support framing near line 4 still needs to be tightened.
6. Column splices at the stair support framing near line 4 still need to be welded.
7. Shear plates were found to be missing between the HSS column and the brace frame gusset plates at B/9.4 at the 4th and 5th Floors. See the picture below.
8. Finish joist bridging at the Roof framing from line 4 to X4.
9. Complete welding of HSS brace frames from grade to 2nd Floor.
10. Bolted moment connections on the 2nd Floor framing at E/12.5 and E/13 need to be welded in lieu of bolting.
11. Complete column braces as required.

The project superintendent was notified of our findings.

Missing Shear Connection

Inspector; Michael Bump
CWI#07091231

WHITE ENGINEERING, LLC P.O. Box 878 Glen, N.H. 03838
nealjwhite@gmail.com Tel. 603-383-9347 Fax. 603-383-8262

Client: S.W. Cole Engineering, Inc. **Report:** 017
Project: Mixed Use Development
SWCE Project #: 13-0545.3
Date: March 24, 2017
Subject: Structural Steel Site Inspection

Verified complete by BSE April, 2017 and/or WE,LLC (report 18)

We visited the site on this date as requested to continue structural steel inspections on the Main Building of the Mixed Use Development project located at York St. and High St. in Portland, ME. Upon arrival we met with the project superintendent for Opechee Construction. The focus of this inspection was to review outstanding discrepancies and work not completed as of 2/15/2017. Our action and observations were as follows:

1. Weld was found to be missing on the upper end of one HSS brace along line F between the 2nd and 3rd Floors. *Welds were added and visually inspected.*
2. Two kicker angles need to be added at the 3rd Floor along line F. ***Not yet complete.***
3. Several kicker angles need to be anchored to the form deck from the 3rd and 5th Floors. *Third and fifth floors complete.* ***4th Floor to be completed.***
4. Welds were found to be missing at the upper ends of two HSS brace members between the 3rd and 4th Floors along line 10. *Welds were added and visually inspected.*
5. The moment connections on the 3rd Floor framing at A/14 and A/15.4 need to be welded. ***Not yet complete.***
6. The misaligned bolt holes on the 3rd Floor framing at A/12 still needs to be repaired. *Connection was field welded as directed by Becker Engineering. Visual inspections were performed.*
7. Complete welding of HSS brace frames between the 3rd Floor and Roof framing. *All welds were completed and visually inspected.*
8. Bolted connections around the stair support framing near line 4 still needs to be tightened. *All bolted connections were properly tightened.*
9. Column splices at the stair support framing near line 4 still need to be welded. *Splices were welded and visually inspected.*
10. Shear plates were found to be missing between the HSS column and the brace frame gusset plates at B/9.4 at the 4th and 5th Floors. *Plate was added and inspected at the 4th Floor.* ***5th Floor not complete.***
11. Finish joist bridging at the Roof framing from line 4 to X4. *Bridging was completed.*
12. Complete welding of HSS brace frames from grade to 2nd Floor. *Bracing was welded. Angles were added in locations where the gusset plates along line A did not make contact to the embed plate as directed by Becker Engineering. Embed plates were extended as required in accordance to the Becker Engineering sketch dated 1/17/17.* ***The bracing at A/15 still needs to be welded.***
13. Bolted moment connections on the 2nd Floor framing at E/12.5 and E/13 need to be welded in lieu of bolting. *The connection was welded per Becker Engineering sketch dated 1/27/17. Visual inspections were performed on the welds.*
14. Complete column braces as required. ***Column braces need to be added from the 2nd Floor to the 5th Floor between lines 13 and 17.***

Items which were corrected or completed were found acceptable. Outstanding items will be re-inspected upon completion.

The project superintendent and erector foreman were notified of our findings.

Inspector; Michael Bump
CWI#07091231

WHITE ENGINEERING, LLC P.O. Box 878 Glen, N.H. 03838
nealjwhite@gmail.com Tel. 603-383-9347 Fax. 603-383-8262

Client: S.W. Cole Engineering, Inc. **Report:** 018
Project: Mixed Use Development
SWCE Project #: 13-05545.3
Date: April 24, 2017
Subject: Structural Steel Site Inspection

We visited the site on this date as requested to continue structural steel inspections on the Main Building of the Mixed Use Development project located at York St. and High St. in Portland, ME. Upon arrival we met with the project superintendent for Opechee Construction. The focus of this inspection was to review open discrepancies and work not completed as of our previous visit on 3/24/2017. Our action and observations were as follows:

- Kicker angles (items 2 and 3) were inspected at all floors in all locations that were accessible at this time. Except as noted below all angles appeared to have been installed and anchored. We were informed that all kicker angles not accessible at this time were inspected by the EOR during a previous site visit.
- The moment connections on the 3rd Floor framing at A/14 and A/15.4 (item 5) were welded. Visual inspections were performed on the welds.
- A shear plate was added to the HSS column and the brace frame gusset plates at B/9.4 at the 5th Floor (item 10). Visual inspections were performed on the welds.
- The HSS bracing at A/15 in the basement still needs to be welded. It was noted by the Engineer during a site visit that one weld was missing on the lower end of the HSS brace at X4/Y2 in the basement. The missing weld on the exterior side of the brace was no longer accessible. It was agreed upon by the engineer that the weld on the interior could be increased in size to replace the missing weld. The fillet weld on the interior was increased to a ½" weld and was found to be visually acceptable.
- All column braces (item 14) that were accessible at this time were added and inspected. The braces that were not accessible were inspected by the EOR during a previous site visit.

The following discrepancies were observed during this inspection:

1. Two kicker angles were found to be missing on the 5th Floor framing near the Stair #2 opening on line Y1 between X1 and X2.
2. Some kicker angles at the 2nd Floor framing still need to be anchored to the slab above.

The project superintendent was notified of our findings.

Verified complete by BSE April, 2017

Inspector; Michael Bump
CWI#07091231

David Macolini

To: davet@opechee.com; Jason Blais
Cc: Todd Neal
Subject: FW: 85 York St Apt & Retail - site visit summary 07-07-17

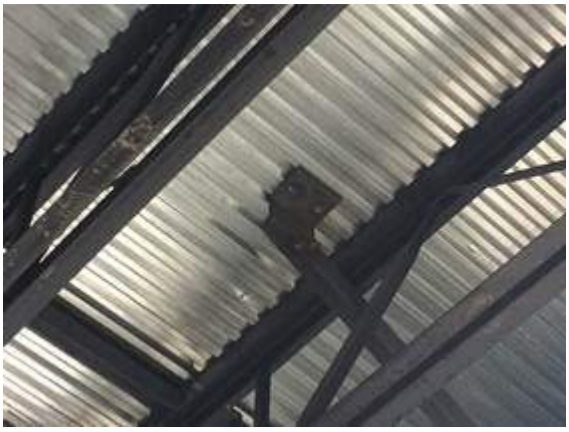
Hi Dave, a follow-up to our meeting last Friday.

David A. Macolini, P.E.
Senior Engineer
Becker Structural Engineers, Inc.
mobile 207.331.7656

From: David Macolini
Sent: Wednesday, June 21, 2017 2:08 PM
To: davet@opechee.com
Cc: Jason Blais; Todd Neal
Subject: 85 York St Apt & Retail - site visit summary

Hi Dave,
Good to see you today. Although we discussed the remaining steel work, I'm sending this anyway. The handful of remaining items that I am aware of are:

Missing column bracing @ (3) basement tube columns & (1)W18 column. **COMPLETED**



Missing anchors @ basement kicker. **COMPLETED**

Missing bolt at 5th floor joist splice. Bolt diameter and ASTM designation to match adjacent bolts. Refer to Vulcraft info. **COMPLETED**

Canopy roof. Let me know when steel is to be erected. **WAITING FOR STEEL DELIVERY**

Canopy steel installation completed 08-08-17 (see Struct Steel Report)

Four basement brace connections to foundation wall piers are completed (refer to detail dated 01-17-17). This e-mail is also attached as a PDF file.

David A. Macolini, P.E.
Senior Engineer
Becker Structural Engineers, Inc.
direct 207.879.1838 x117
mobile 207.331.7656

SUMMIT Metal FABRICATORS

Record of Welder Performance Qualification (WPQ), Refer to AWS D1.1 Structural code

Welder Name: Robert Wymann Stamp No. RW
WPS No.: SMF-P-02-11-AWS Revision: 0 Date: 4/05/2016
The above welder is qualified for the following ranges:

Variable	Used in Qualification	Qualification
PROCESS	SMAW	SMAW
PROCESS TYPE	Manual	Manual
BACKING (QW-403)	With	E7018 With/Without
MATERIAL SPECIFICATION (QW-403)	P1 TO P1	P1
THICKNESS		
GROOVE	1.0"	Min...125" max. Unlimited
FILLET	N/A	All
DIAMETER		
GROOVE	N/A	24.0" and greater
FILLET	N/A	N/A
FILLER METAL (QW-404)		
SPECIFICATION NO.	AWS A5.1	AWS A5.1
CLASSIFICATION	E7018	E60XX/E70XX
F-NUMBER	4 and lower	4 and lower
DEPOSITED WELD METAL THICKNESS		
GROOVE	.187"	.187"
POSITION (QW-405)	3G/4G	All
WELD PROGRESSION	Uphill	Uphill
GAS TYPE (QW-408)	N/A	N/A
BACKING GAS	N/A	N/A
ELECTRICAL CHARACTERISTICS (QW-408)		
CURRENT	DC	DC
POLARITY	Reverse	Reverse

GUIDED BEND RESULTS (QW-463.2(d), QW-462.3(a) note: 2

Positions tested	V.T Weld (4.8.1)	Bend type	Defects	Results
3G Vertical	Acceptable	Side Bend	None	Acceptable
		Side Bend	None	Acceptable
4G Overhead	Acceptable	Side Bend	None	Acceptable
		Side Bend	None	Acceptable

Tests conducted at: Summit Metal Fabricators
Mechanical Tests by: Ryan Surette CWI # 13090711, Test Date 4/05/2016

Ryan Surette
CWI 13090711
QC1 EXP. 9/1/2016

We 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 AWS D1.1 Structural code.

Organization: Summit Metal Fabricators

Signed: _____ Date: 5-1-16

WELDER OR WELDING OPERATOR QUALIFICATION TEST RECORD

Type of Welder _____

Name Robert Wyman Identification No. RW

Welding Procedure Specification No. SMF-P-02-88-B-U2a Rev _____ Date 8/4/16

Variables	Record Actual Values Used in Qualification	Qualification Range
Process/Type (4.8.1)		
Electrode (single or multiple)	Multiple	
Current/Polarity	DCEP	
Position (4.8.4 or 4.9.4)	ALL	
Weld Progression (4.8.6)	Up	
Backing (YES or NO) (4.8.7)	Yes	
Material/Spec.	to	
Base Metal	ASTM A167 304L Unlimited	
Thickness: (Plate)		
Groove		
Fillet		
Thickness: (Pipe/tube)		
Groove		
Fillet		
Diameter: (Pipe)		
Groove		
Fillet		
Filler Metal (4.8.2)	AWS 5.9	
Spec. No.		
Class	308L	
F-No.		
Gas/Flux Type (4.8.3)		
Other		

VISUAL INSPECTION (4.10.1.1)

Acceptable YES or NO YES

Guided Bend Test Results (4.10.2.3)

Type	Result	Type	Result
Side Bend Vertical - No Defects			
Side Bend Overhead - No Defects			

Fillet Test Results (4.10.5)

Appearance _____ Fillet Size _____

Fracture Test Root Penetration _____ Macroetch _____

(Describe the location, nature, and size of any crack or tearing of the specimen.)

Inspected by Ryan Surette Test Number _____

Organization Summit Metal Fabricators Date 8/4/16

RADIOGRAPHIC TEST RESULTS (4.10.3)

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 Clause 4 of AWS D1.6, (2007 (year)) *Structural Welding Code—Stainless Steel.*

Manufacturer or Contractor Summit Metal Fabricators Authorized By Ryan Surette

Form M-3 Date 8/4/16

WELDER OR WELDING OPERATOR QUALIFICATION TEST RECORD

Type of Welder _____

Name Robert Wyman Identification No. RW

Welding Procedure Specification No. SMF-P-02-88-B-U2a Rev _____ Date 8/4/16

Variables	Record Actual Values Used in Qualification	Qualification Range
Process/Type (4.8.1)	Multiple	
Electrode (single or multiple)	DCEP	
Current/Polarity	ALL	
Position (4.8.4 or 4.9.4)	Up	
Weld Progression (4.8.6)	Yes	
Backing (YES or NO) (4.8.7)	to	
Material/Spec.	ASTM A167 304L Unlimited	
Base Metal		
Thickness: (Plate)		
Groove		
Fillet		
Thickness: (Pipe/tube)		
Groove		
Fillet		
Diameter: (Pipe)		
Groove		
Fillet		
Filler Metal (4.8.2)	AWS 5.9	
Spec. No.	308L	
Class		
F-No.		
Gas/Flux Type (4.8.3)		
Other		

Ryan Surette CWI 13090711 QC1 EXP. 9/1/2016

VISUAL INSPECTION (4.10.1.1)

Acceptable YES or NO YES

Guided Bend Test Results (4.10.2.3)

Type	Result	Type	Result
Side Bend Vertical - No Defects			
Side Bend Overhead - No Defects			

Fillet Test Results (4.10.5)

Appearance _____ Fillet Size _____

Fracture Test Root Penetration _____ Macroetch _____

(Describe the location, nature, and size of any crack or tearing of the specimen.)

Inspected by Ryan Surette Test Number _____

Organization Summit Metal Fabricators Date 8/4/16

RADIOGRAPHIC TEST RESULTS (4.10.3)

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 Clause 4 of AWS D1.6, (2007 (year)) *Structural Welding Code—Stainless Steel.*

Manufacturer or Contractor Summit Metal Fabricators Authorized By Ryan Surette

Form M-3 Date 8/4/16

WELDER OR WELDING OPERATOR QUALIFICATION TEST RECORD

Type of Welder _____

Name Shayne LeBreton Identification No. SL

Welding Procedure Specification No. SMF-P-02-88-B-U2a Rev _____ Date 8/4/16

Variables	Record Actual Values Used in Qualification	Qualification Range
Process/Type (4.8.1)		
Electrode (single or multiple)	Multiple	
Current/Polarity	DCEP	
Position (4.8.4 or 4.9.4)	ALL	
Weld Progression (4.8.6)	Up	
Backing (YES or NO) (4.8.7)	Yes	
Material/Spec.	to	
Base Metal		
Thickness: (Plate)	ASTM A167 304L Unlimited	
Groove		
Fillet		
Thickness: (Pipe/tube)		
Groove		
Fillet		
Diameter: (Pipe)		
Groove		
Fillet		
Filler Metal (4.8.2)	AWS 5.9	
Spec. No.		
Class	308L	
F-No.		
Gas/Flux Type (4.8.3)		
Other		

Ryan Surette CWI 13050711 QC1 EXP. 9/1/2016

VISUAL INSPECTION (4.10.1.1)

Acceptable YES or NO YES

Guided Bend Test Results (4.10.2.3)

Type	Result	Type	Result
Side Bend Vertical - No Defects			
Side Bend Overhead - No Defects			

Fillet Test Results (4.10.5)

Appearance _____ Fillet Size _____

Fracture Test Root Penetration _____ Macroetch _____

(Describe the location, nature, and size of any crack or tearing of the specimen.)

Inspected by Ryan Surette Test Number _____

Organization Summit Metal Fabricators Date 8/4/16

RADIOGRAPHIC TEST RESULTS (4.10.3)

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 Clause 4 of AWS D1.6, (2007) *Structural Welding Code—Stainless Steel.*
(year)

Manufacturer or Contractor Summit Metal Fabricators Authorized By Ryan Surette

Form M-3 Date 8/4/16

CHARLES LEONARD STEEL SERVICES, LLC
183 Pembroke Road, Concord, NH 03301
Tel. (603) 225-0211 • fax (603) 225-0325

Type of Welder MANUAL
Name: Shayne Lebreton — Identification No. SL-001
Welding Procedure Specification No. WPS- 1- SMAW — Rev 0 — Date: 28-Aug-10

Variables	Record Actual Values Used in Qualification	Qualification Range
Process/Type [Table 4.11, Item (1)]	SMAW	
Electrode [single or multiple) [Table 4.11, Item (8)]	Single	Single
Current/Polarity	DCEP	
Position [Table 4.11, Item (4)]	3G VERTICAL	1F,2F,3F,1G,2G,3G
Weld Progression [Table 4.11, Item (6)]	UP	UP
Backing (YES or NO) [Table 4.11, Item (7)	Yes	With Backing or Back Gouging
Material/Spec.	A36	
Base Metal		
Thickness: (Plate)		
Groove	3/8"	1/8" to 3/4"
Fillet	Not Applicable	1/8" to Unlimited
Thickness: (Pipe/tube)		
Groove	Not Applicable	1/8" to 3/4"
Fillet	Not Applicable	1/8" to Unlimited
Diameter: (Pipe)		
Groove	Not Applicable	Greater Than 24 Inches
Fillet	Not Applicable	Greater Than 24 inches
Filler Metal [Table 4.11, Item (3)]		
Spec. No.	AWS 5.1	
Class	E7018	
F-No.[Table 4.11, Item (2)]	F4	F4
Gas/Flux type (Table 4.11, Item (3)]	NOT APPLICABLE	
Other	Not Applicable	Not Applicable

Visual Inspection(4.8.1)
Acceptable YES or NO

Guided Bend Test Results (4.30.5)

Type	Result	Type	Result
Face	Acceptable		
Root	Acceptable		

Fillet Test Results (4.30.2.3 and 4.30.4.1)

Appearance — Fillet Size
Fracture Test Root Penetration — Macroetch
(Describe the location, nature and size of any crack or tearing of the specimen)

TIMOTHY W. FARRES CWI 02110941 QC1 EXP. 11/06/11

Inspected By: Timothy Farres CWI 02110941 — Test Number SL-001
Organization CLSS — Date August, 28 2010

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 conformance with the requirements of Section 4 of AWS D1, 1/D1.1M 2008 (year) Structural Welding Code - Steel

Manufacturer or Contractor CLSS — Authorized By Timothy W. Farres
Date August, 28 2010

WELDER OR WELDING OPERATOR QUALIFICATION TEST RECORD

Type of Welder _____

Name Steve LeBreton Identification No. SL2

Welding Procedure Specification No. SMF-P-02-88-B-U2a Rev _____ Date 8/4/16

Variables	Record Actual Values Used in Qualification	Qualification Range
Process/Type (4.8.1)		
Electrode (single or multiple)	Multiple	
Current/Polarity	DCEP	
Position (4.8.4 or 4.9.4)	ALL	
Weld Progression (4.8.6)	Up	
Backing (YES or NO) (4.8.7)	Yes	
Material/Spec.	to	
Base Metal	ASTM A167 304L Unlimited	
Thickness: (Plate)		
Groove		
Fillet		
Thickness: (Pipe/tube)		
Groove		
Fillet		
Diameter: (Pipe)		
Groove		
Fillet		
Filler Metal (4.8.2)	AWS 5.9	
Spec. No.		
Class	308L	
F-No.		
Gas/Flux Type (4.8.3)		
Other		

VISUAL INSPECTION (4.10.1.1)

Acceptable YES or NO YES

Guided Bend Test Results (4.10.2.3)

Type	Result	Type	Result
Side Bend Vertical - No Defects			
Side Bend Overhead - No Defects			

Fillet Test Results (4.10.5)

Appearance _____ Fillet Size _____

Fracture Test Root Penetration _____ Macroetch _____

(Describe the location, nature, and size of any crack or tearing of the specimen.)

Inspected by Ryan Surette Test Number _____

Organization Summit Metal Fabricators Date 8/4/16

RADIOGRAPHIC TEST RESULTS (4.10.3)

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 Clause 4 of AWS D1.6, (2007) *Structural Welding Code—Stainless Steel.*
(year)

Manufacturer or Contractor Summit Metal Fabricators Authorized By Ryan Surette

Form M-3 Date 8/4/16

CHARLES LEONARD STEEL SERVICES, LLC
183 Pembroke Road, Concord, NH 03301
Tel. (603) 225-0211 • fax (603) 225-0325

Type of Welder MANUAL Identification No. STL-001
Name: Steve Lebreton
Welding Procedure Specification No. WPS- 1- SMAW Rev 0 Date: 28-Aug-10

Variables	Record Actual Values Used in Qualification	Qualification Range
Process/Type [Table 4.11, Item (1)]	SMAW	
Electrode [single or multiple) [Table 4.11, Item (8)]	Single	Single
Current/Polarity	DCEP	
Position [Table 4.11, Item (4)]	3G VERTICAL	1F,2F,3F,1G,2G,3G
Weld Progression [Table 4.11, Item (6)]	UP	UP
Backing (YES or NO) [Table 4.11, Item (7)	Yes	With Backing or Back Gouging
Material/Spec.	A36	
Base Metal		
Thickness: (Plate)	3/8"	1/8" to 3/4"
Groove	Not Applicable	1/8" to Unlimited
Fillet		
Thickness: (Pipe/tube)	Not Applicable	1/8" to 3/4"
Groove	Not Applicable	1/8" to Unlimited
Fillet		
Diameter: (Pipe)	Not Applicable	Greater Than 24 Inches
Groove	Not Applicable	Greater Than 24 inches
Fillet		
Filler Metal [Table 4.11, Item (3)]	AWS 5.1	
Spec. No.	E7018	
Class	F4	F4
F-No.[Table 4.11, Item (2)]	NOT APPLICABLE	
Gas/Flux type (Table 4.11, Item (3)]	Not Applicable	Not Applicable
Other		

Visual Inspection(4.8.1)
Acceptable YES or NO

Guided Bend Test Results (4.30.5)

Type	Result	Type	Result
Face	Acceptable		
Root	Acceptable		

Fillet Test Results (4.30.2.3 and 4.30.4.1)

Appearance Fillet Size
Fracture Test Root Penetration Macroetch
(Describe the location, nature and size of any crack or tearing of the specimen)

Inspected By: Timothy Farres CWI 02110941 Test Number STL-001
Organization CLSS Date August, 28 2010

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 conformance with the requirements of Section 4 of AWS D1, 1/D1.1M 2008 (year) Structural Welding Code - Steel

Manufacturer or Contractor CLSS Authorized By Timothy W. Farres
Date August, 28 2010

CHARLES LEONARD STEEL SERVICES, LLC
183 Pembroke Road, Concord, NH 03301
Tel. (603) 225-0211 • fax (603) 225-0325

Type of Welder MANUAL Identification No. STL-002
Name: Steve Lebreton
Welding Procedure Specification No. WPS-2-SMAW Rev 0 Date: 28-Aug-10

Variables	Record Actual Values Used in Qualification	Qualification Range
Process/Type [Table 4.11, Item (1)]	SMAW	
Electrode [single or multiple) [Table 4.11, Item (8)]	Single	Single
Current/Polarity	DCEP	
Position [Table 4.11, Item (4)]	4G Overhead	1F,2F,4F,1G,2G,4G
Weld Progression [Table 4.11, Item (6)]	NA	NA
Backing (YES or NO) [Table 4.11, Item (7)	Yes	With Backing or Back Gouging
Material/Spec.	A36	
Base Metal		
Thickness: (Plate)	3/8"	1/8" to 3/4"
Groove	Not Applicable	1/8" to Unlimited
Fillet		
Thickness: (Pipe/tube)	Not Applicable	1/8" to 3/4"
Groove	Not Applicable	1/8" to Unlimited
Fillet		
Diameter: (Pipe)	Not Applicable	Greater Than 24 Inches
Groove	Not Applicable	Greater Than 24 inches
Fillet		
Filler Metal [Table 4.11, Item (3)]		
Spec. No.	AWS 5.1	
Class	E7018	
F-No.[Table 4.11, Item (2)]	F4	F4
Gas/Flux type (Table 4.11, Item (3)]	NOT APPLICABLE	
Other	Not Applicable	Not Applicable

Visual Inspection(4.8.1)
Acceptable YES or NO

Guided Bend Test Results (4.30.5)

Type	Result	Type	Result
Face	Acceptable		
Root	Acceptable		

Fillet Test Results (4.30.2.3 and 4.30.4.1)

Appearance
Fracture Test Root Penetration
(Describe the location, nature and size of any crack or tearing of the specimen)
Fillet Size
Macroetch

TIMOTHY W. FARRES CWI 02110941 QC1 EXP. 11/01/11

Inspected By: Timothy Farres CWI 02110941 Test Number STL-002
Organization CLSS Date August, 28 2010

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 conformance with the requirements of Section 4 of AWS D1, 1/D1.1M 2008 (year) Structural Welding Code - Steel

Manufacturer or Contractor CLSS Authorized By Timothy W. Farres
Date August, 28 2010

BECKER
STRUCTURAL ENGINEERS

MILL CERTIFICATIONS

PROJECT **85 York Street Apartment & Retail Building**

STRUCTURAL STEEL	☒RECEIVED	DATE: 11-07-17	☐NOT RECEIVED
BOLTS	☒RECEIVED	DATE: 11-09-17	☐NOT RECEIVED
WELD FILLER	☒RECEIVED	DATE: 11-09-17	☐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: David A. Macolini, P.E. DATE: 11-09-17

Project: Apartment and Retail Building Mixed Use Development
Date Prepared: March 25, 2016

Structural Schedule of Special Inspection Services

FABRICATION AND IMPLEMENTATION PROCEDURES – STRUCTURAL STEEL

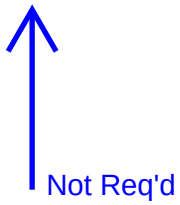
VERIFICATION AND INSPECTION IBC Section 1704.2	REQD Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
1. Fabrications Procedures: Review of fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by 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	SI1	PE/SE or EIT	Yes
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	SI1	PE/SE or EIT	Yes

Project: Apartment and Retail Building Mixed Use Development
Date Prepared: March 25, 2016

Structural Schedule of Special Inspections

SEISMIC RESISTANCE - STRUCTURAL

VERIFICATION AND INSPECTION IBC Section 1707	REQD Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
1. Special inspections for seismic resistance. Special inspection as specified in this section is required for the following:						
a. The seismic-force-resisting systems in structures assigned to Seismic Design Category C, D, E or F	N		IBC 1707.1			
b. Designated seismic systems in structures assigned to Seismic Design Category D, E, or F.	N		IBC 1707.1			
2. Structural steel: Continuous special inspection for structural welding in accordance with AISC 341.	N		IBC 1707.2			
3. Structural wood:						
a. Continuous special inspection during field gluing operations of elements of the seismic-force-resisting system.	N		IBC 1707.3			
b. Periodic special inspections for nailing, bolting, anchoring and other fastening of components within the seismic-force-resisting system (where spacing is 4"o.c., or less) including drag struts, braces and hold-downs	N		IBC 1707.3			
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 (where spacing is 4" o.c., or less), including struts, braces, and hold-downs	N	-	CFSF for this project not part of the primary seismic-force resisting system.	-	-	
5. 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	-	Seismic isolators not used.	-	-	



Project: Apartment and Retail Building Mixed Use Development
Date Prepared: March 25, 2016

SEISMIC RESISTANCE CHECK LIST [IBC 1705.3]

Seismic Design Category B

☐ **FOR SEISMIC DESIGN CATEGORY C OR HIGHER:**

Structural:

☒ The seismic-force-resisting systems — Not Req'd

- ☒ Steel Braced Frames and associated connections/anchorage (Not required for SDC C, R=3)
- ☒ Steel Moment Frames and associated connections (Not required for SDC C, R=3)
- ☐ Shear walls: ☐ CMU ☐ Wood ☐ Concrete ☒ Diaphragms: ☒ Floor ☒ Roof
- ☐ Other:

WIND RESISTANCE CHECK LIST [IBC 1705.4]

Wind Exposure Category C

REQUIRED	NOT REQUIRED	NOT APPLICABLE	WIND RESISTANCE REQUIREMENTS
☐	☒	☐	In wind exposure Category B, where the 3-second-gust basic wind speed is 120 miles per hour (mph) (52.8 *m/sec)* or greater.
☐	☒	☒	In wind exposure Categories C and D, where the 3-second-gust basic wind speed is 110 mph (49 *m/sec)* or greater.

Structural Steel Observation Report

Project Name:	Mixed-Use Development – York & High Streets, Portland ME	**Project Number**	13-0545.4
Client:	Bonardi Steel Fabricators, LLC	**Date:**	May 25, 2016, May 28, 2016
Client's Rep.:	Tom Bonardi	**Sheet:**	1 of 1
General Contractor:	Opechee Construction, Inc	**SWCE Rep.:**	Alan Brown CWI 95120811
		Arrived at Site:	10:00 am
		Left Site:	12:00 pm

Weather

☒ Clear ☐ Snow
☐ Overcast ☐ Fog
☐ Rain ☐ Cold

Site Conditions

☐ Warm ☐ Clear ☐ Dusty
☐ Hot ☐ Muddy
☐ Windy ☐ Frozen

Temperatures: 70

Construction Activities Observed:

Alan Brown (AB) performed a structural steel shop inspection for the above referenced project at the Bonardi Steel Fabrication facility (BSF) in Lebanon, New Hampshire on May 25 and May 28, 2016

A review of welder qualifications, material certifications (structural pieces and consumables) and quality control manual was made and found to be in order. Welding was performed by AWS D1.1 qualified welder, Chuck Taylor. Welding operations were observed and welding was performed inside in the flat position with GMAW welding process using 70 series wire.

BSF was in the process of assembling and welding columns and beams for the parking garage section of the above referenced project. The fabrication of some of the project had been complete with some of them in progress.

The welding for the columns and beams were was examined and found to be in conformance with BSF Shop Drawing Set and AWS D1.1 requirements. Member size and fabrication dimensions were randomly checked with no discrepancies found.

Discussions, Recommendations:

Items Observed Not in Conformance to Project Specifications:

No non-conforming items noted.

Attachments:

Reviewed By:

Fabricator's Certificate of Compliance - Structural Steel

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: Apartment and Retail Building Mixed Use Development, York and High Street, Portland, ME

Fabricator's Name: Bonardi Steel

Address: 20 Bonardi Drive, Enfield, New Hampshire

Certification or Approval Agency:

Certification Number:

Date of Last Audit or Approval:

Description of structural members and assemblies that have been fabricated:

I hereby certify that items described above were fabricated in strict accordance with the approved construction documents.

Signature

11/9/17
Date

OWNER
Title

Attach copies of fabricator's certification or building code evaluation service report and fabricator's quality control manual

End of Structural Statement of Special Inspections

Project: Apartment and Retail Building Mixed Use Development
Date Prepared: March 25, 2016

End of Structural Statement of Special Inspections