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t 565-00 l Report: 001

Client: R. W. Gillespie & Associates, Inc. **Project:** 667 Congress St. Apartments

Date: June 3, 2016

Subject: Site Inspection of Structural Steel

We visited the site on this date as requested to initiate structural steel inspections on the 667 Congress St. Apartments project located in Portland, ME. Upon arrival we met with Chris Rodenhizer of PC Construction who provided us with structural and approved shop drawings which were used to perform our inspections. Inspected at this time was the Level 1 framing from line H to T. Our actions and observations were as follows:

- Welder certifications and welding procedures were reviewed for all welding personnel to be used on the project. Personnel were properly certified for the processes and positions being used at this time. Welding procedures appeared acceptable for this project.
- Framing was inspected for overall conformance to drawings and details.
- Bolted connections were inspected.
- Welding of new beams to the concrete foundation was inspected.
- Welding of the HSS braces from grade to Level 1 was visually inspected.
- Anchor rod nuts still needed to be tightened.

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

- 1. Bolted connections at the thermal break near line M.9 still need to be tightened.
- 2. The slots in the clips at the ends of all beams at the east elevation from line H to M.9 were fabricated with ¾" slots when 1" bolts are required. The erector will ream the slots to accommodate the correct diameter bolts.
- 3. One weld was found to be missing on the HSS brace frame at N/4.0.
- 4. Deck support angles will need to be added at the east elevation as needed.

Chris Rodenheizer as well as the erector foreman was notified of our findings.

Item:
1. Complete See Inspection Report # 3
2. Complete See Inspection Report # 2
3. Complete See Inspection Report # 2
4. Complete See Inspection Report # 2

Inspector; Michael Bump CWI #07091231

MPa

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> 1565-00 (**Report:** 001

Client: R. W. Gillespie & Associates, Inc. **Project:** 667 Congress St. Apartments

Date: June 3, 2016

Subject: Site Inspection of Structural Steel

We visited the site on this date as requested to initiate structural steel inspections on the 667 Congress St. Apartments project located in Portland, ME. Upon arrival we met with Chris Rodenhizer of PC Construction who provided us with structural and approved shop drawings which were used to perform our inspections. Inspected at this time was the Level 1 framing from line H to T. Our actions and observations were as follows:

- Welder certifications and welding procedures were reviewed for all welding personnel to be used on the project. Personnel were properly certified for the processes and positions being used at this time. Welding procedures appeared acceptable for this project.
- Framing was inspected for overall conformance to drawings and details.
- Bolted connections were inspected.
- Welding of new beams to the concrete foundation was inspected.
- Welding of the HSS braces from grade to Level 1 was visually inspected.
- Anchor rod nuts still needed to be tightened.

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

- 1. Bolted connections at the thermal break near line M.9 still need to be tightened.
- 2. The slots in the clips at the ends of all beams at the east elevation from line H to M.9 were fabricated with ¾" slots when 1" bolts are required. The erector will ream the slots to accommodate the correct diameter bolts.
- 3. One weld was found to be missing on the HSS brace frame at N/4.0.
- 4. Deck support angles will need to be added at the east elevation as needed.

Chris Rodenheizer as well as the erector foreman was notified of our findings.

Inspector; Michael Bump CWI #07091231

MB

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1565-001 Report: 002

Client: R. W. Gillespie & Associates, Inc. **Project:** 667 Congress St. Apartments

Date: June 14, 2016

Subject: Site Inspection of Structural Steel

We visited the site on this date as requested to continue structural steel inspections on the 667 Congress St. Apartments project located in Portland, ME. Upon arrival we met with William Lawrence of PC Construction. Structural and approved shop drawings were used to perform our inspections. Discrepancies noted 6/3 were re-inspected along with inspection of recently completed work. Our actions and observations were as follows:

- The slots in the clips at the east end of the beams at the Level 1 framing had the holes reamed and 1" TC bolts were added as required. The TC bolts were found to be properly tightened. (Item 2 6/3)
- The missing weld on the HSS brace between grade and Level 1 at N/4.0 was added and found to be acceptable. (Item 3 6/3)
- Deck support angles were added at the east elevation and appeared to be properly fastened to the foundation. (Item 4 6/3)
- Columns were inspected for plumb, proper bearing and properly tightened anchor rod nuts at the Level 1 framing. Anchor rod nuts at grade still need to be tightened.
- Bolted connections at Level 1 from A to H as well as all of Level 2 were inspected.
- Welding of the HSS braces from grade to Level 1 from line A to H as well as between Levels 1 and 2 was visually inspected.
- Layout, welding and fastening of the Level 1 composite deck were inspected from line D to T. Deck was not complete between lines A and D.
- Layout and welding of the Level 1 shear studs were inspected from line D to T. Shear studs were not complete between lines A and D.

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

- 1. Several loose bolted connections were found at the Level 1 framing.
- 2. Some locations of the Level 1 composite deck were found to have missing puddle welds and/or side lap screws.
- 3. Random shear studs were found to have deficient welds.
- 4. One weld was found to be missing on the HSS brace at P/6 between Levels 1 and 2.

William Lawrence as well as the erector foreman was notified of our findings.

Inspector; Michael Bump CWI #07091231

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1565-001 Report: 002

Client: R. W. Gillespie & Associates, Inc. **Project:** 667 Congress St. Apartments

Date: June 14, 2016

Subject: Site Inspection of Structural Steel

We visited the site on this date as requested to continue structural steel inspections on the 667 Congress St. Apartments project located in Portland, ME. Upon arrival we met with William Lawrence of PC Construction. Structural and approved shop drawings were used to perform our inspections. Discrepancies noted 6/3 were re-inspected along with inspection of recently completed work. Our actions and observations were as follows:

- The slots in the clips at the east end of the beams at the Level 1 framing had the holes reamed and 1" TC bolts were added as required. The TC bolts were found to be properly tightened. (Item 2 6/3)
- The missing weld on the HSS brace between grade and Level 1 at N/4.0 was added and found to be acceptable. (Item 3 6/3)
- Deck support angles were added at the east elevation and appeared to be properly fastened to the foundation. (Item 4 6/3)
- Columns were inspected for plumb, proper bearing and properly tightened anchor rod nuts at the Level 1 framing. Anchor rod nuts at grade still need to be tightened.
- Bolted connections at Level 1 from A to H as well as all of Level 2 were inspected.
- Welding of the HSS braces from grade to Level 1 from line A to H as well as between Levels 1 and 2 was visually inspected.
- Layout, welding and fastening of the Level 1 composite deck were inspected from line D to T. Deck was not complete between lines A and D.
- Layout and welding of the Level 1 shear studs were inspected from line D to T. Shear studs were not complete between lines A and D.

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

- 1. Several loose bolted connections were found at the Level 1 framing.
- 2. Some locations of the Level 1 composite deck were found to have missing puddle welds and/or side lap screws.
- 3. Random shear studs were found to have deficient welds.
- 4. One weld was found to be missing on the HSS brace at P/6 between Levels 1 and 2.

William Lawrence as well as the erector foreman was notified of our findings.

Item: 1. Complete See Inspection Report # 3 2. Complete See Inspection Report # 3 3. Complete See Inspection Report # 3 4. Complete See Inspection Report # 3

Inspector; Michael Bump CWI #07091231

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1565-001 Report: 003

Client: R. W. Gillespie & Associates, Inc. **Project:** 667 Congress St. Apartments

Date: June 23, 2016

Subject: Site Inspection of Structural Steel

We visited the site on this date as requested to continue structural steel inspections on the 667 Congress St. Apartments project located in Portland, ME. Upon arrival we met with William Lawrence of PC Construction. Structural and approved shop drawings were used to perform our inspections. Our actions and observations were as follows:

- All previously reported loose bolts on the Level 1 framing including the thermal break near line M.9 have been properly tightened. (Item 1 6/3 and item 1 6/14)
- All missing puddle welds and side lap screws on the Level 1 composite deck have been added. (Item 2 6/14)
- All shear studs with deficient welds on the Level 1 framing were repaired and now appear acceptable. (Item 3 6/14)
- The missing weld on the HSS brace at P/6 between Levels 1 and 2 was added. A visual inspection of the weld was performed. (Item 4 6/14)
- All anchor rod nuts in the basement were properly tightened and column base plates were found to have proper bearing.
- Layout, welding and fastening of the Level 1 composite deck were inspected from lines A to D.
- Layout and welding of the Level 1 shear studs were inspected from line A to D
- Visual inspection and ultrasonic testing were performed on the CJP column splices that were welded to date between Levels 2 and 3. See the attached report for locations tested.
- Although shear studs were not completely installed at Level 2 we performed inspections on studs that were installed at the time of this inspection between lines H and M. All studs were found to be acceptable.

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

William Lawrence as well as the erector foreman was notified of our findings.

Inspector; Michael Bump CWI #07091231

MRG

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ULTRASONIC TEST REPORT

1565-001

Date: June 27, 2016 Report: 003

Client: R.W. Gillespie & Associates Transducer: 70 degree 2.25 mhz

Project: 667 Congress St. Apartments Ultrasonic Unit: Olympus Epoch 600

Address: **Portland, ME** Test Method Standard: **AWS D1.1**

Welding contractor: Arc Erectors, Inc. Acceptance Standard: AWS D1.1 table 6.2

Description of Joint: Butt Material: ASTM A992

		and the first of t	le								Defe	ct	Dista	ance
Weld Identification:	Acceptable	Rejectable	Transducer Angle	From Face	Leg 1-2-3	Indication Level	a Reference Level	A Attenuation Level	d Indication	Length	Angular Distance (sound path)	Depth from "A" surface	"X"	"Y"
Level 2 Column Splices														
P/3.5	X		70	A	1-3		62							
P/5.3	X													
P/5.6	X								L.					
P/6	X													
N/5.6	X													
N/6	X													
									etakui (Antirot) vuure turkinti					
	A desirable desi													
WHAT														

Remarks: Both flanges and web were tested on each connection listed above.

Technician: Michael Bump Level: II

MC

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ULTRASONIC TEST REPORT

1565-001

Date: June 27, 2016 Report: 003

Client: R.W. Gillespie & Associates Transducer: 70 degree 2.25 mhz

Project: 667 Congress St. Apartments Ultrasonic Unit: Olympus Epoch 600

Address: **Portland, ME** Test Method Standard: **AWS D1.1**

Welding contractor: Arc Erectors, Inc. Acceptance Standard: AWS D1.1 table 6.2

Description of Joint: Butt Material: ASTM A992

		and the first of t	le								Defe	ct	Dista	ance
Weld Identification:	Acceptable	Rejectable	Transducer Angle	From Face	Leg 1-2-3	Indication Level	a Reference Level	A Attenuation Level	d Indication	Length	Angular Distance (sound path)	Depth from "A" surface	"X"	"Y"
Level 2 Column Splices														
P/3.5	X		70	A	1-3		62							
P/5.3	X													
P/5.6	X								L.					
P/6	X													
N/5.6	X													
N/6	X													
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	A desired and the second and the sec													
WHAT														

Remarks: Both flanges and web were tested on each connection listed above.

Technician: Michael Bump Level: II

MC

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1565-00 (Report: 004

Client: R. W. Gillespie & Associates, Inc. **Project:** 667 Congress St. Apartments

Date: July 6, 2016

Subject: Site Inspection of Structural Steel

We visited the site on this date as requested to continue structural steel inspections on the 667 Congress St. Apartments project located in Portland, ME. Upon arrival we met with William Lawrence of PC Construction. Structural and approved shop drawings were used to perform our inspections. Our actions and observations were as follows:

- Layout, welding and fastening of the Level 2 composite deck were inspected.
- Layout and welding of the Level 2 shear studs were inspected.
- Welding of the HSS brace frames from Level 2 to Level 3 was visually inspected.
- Visual inspection and ultrasonic testing were performed on the CJP column splices that were welded between Levels 2 and 3. Testing was performed in accordance to Clause 6 of the AWS D1.1 Welding Code. See the attached report for locations tested.

All inspections performed above appeared acceptable in accordance to AWS, AISC and contract documents. The following discrepancy was noted:

1. Bolt holes were found to be fouled and/or the wrong size at the column bases to the Level 2 framing at F/2 and F/3.

William Lawrence as well as the erector foreman was notified of our findings.

Inspector; Michael Bump CWI #07091231

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1565-00 (Report: 004

Client: R. W. Gillespie & Associates, Inc. **Project:** 667 Congress St. Apartments

Date: July 6, 2016

Subject: Site Inspection of Structural Steel

We visited the site on this date as requested to continue structural steel inspections on the 667 Congress St. Apartments project located in Portland, ME. Upon arrival we met with William Lawrence of PC Construction. Structural and approved shop drawings were used to perform our inspections. Our actions and observations were as follows:

- Layout, welding and fastening of the Level 2 composite deck were inspected.
- Layout and welding of the Level 2 shear studs were inspected.
- Welding of the HSS brace frames from Level 2 to Level 3 was visually inspected.
- Visual inspection and ultrasonic testing were performed on the CJP column splices that were welded between Levels 2 and 3. Testing was performed in accordance to Clause 6 of the AWS D1.1 Welding Code. See the attached report for locations tested.

All inspections performed above appeared acceptable in accordance to AWS, AISC and contract documents. The following discrepancy was noted:

1. Bolt holes were found to be fouled and/or the wrong size at the column bases to the Level 2 framing at F/2 and F/3.

William Lawrence as well as the erector foreman was notified of our findings.

Inspector; Michael Bump CWI #07091231

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ULTRASONIC TEST REPORT

1565-001

Date: July 6, 2016 Report: 004

Client: R.W. Gillespie & Associates, Inc.

Transducer: 70 degree 2.25 mhz

Project: 667 Congress St. Apartments Ultrasonic Unit: Olympus Epoch 600

Address: **Portland, ME** Test Method Standard: **AWS D1.1**

Welding contractor: Arc Erectors, Inc. Acceptance Standard: AWS D1.1 table 6.2

Description of Joint: **Butt** Material: **ASTM A992**

			e								Defe	ct	Dista	ance
Weld Identification:	Acceptable	Rejectable	Transducer Angle	From Face	Leg 1-2-3	Indication Level	R Reference Level	A Attenuation Level	d Indication	Length	Angular Distance (sound path)	Depth from "A" surface	"X"	"Y"
Level 2 Column Splices														
F.5/2	X		70	A	1-3		62							
F.5/2.6	X													
F.5/3	X													***************************************
G.1/2	X													
G.1/2.4	X													
					**************************************	-								

Remarks: Both flanges and web were tested on each connection listed above.

Technician: Michael Bump Level: II

MIZ

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nealjwhite@gmail.com

1565-001 Report: 005

Client: R. W. Gillespie & Associates, Inc. **Project:** 667 Congress St. Apartments

Date: July 14, 2016

Subject: Site Inspection of Structural Steel

We visited the site on this date as requested to continue structural steel inspections on the 667 Congress St. Apartments project located in Portland, ME. Upon arrival we met with William Lawrence of PC Construction. Our actions and observations were as follows:

- Layout, welding and fastening of the Level 3 composite deck were inspected.
- Layout and welding of the Level 3 shear studs were inspected.
- Welding of the HSS brace frames from Level 3 to Level 4 was visually inspected.
- Bolted connections on the Level 3 and 4 framing were inspected.
- Framing of Level 3 and 4 was inspected for conformance to drawings and details.

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

- 1. Three connections on the Level 4 framing were found to have one bolt hole misaligned.
- 2. One weld was found to be missing on the HSS brace at P/5.6.
- 3. Decking and studs were left out on Level 3 between H/4 and H/5 for ladder access to Level 3.

All discrepancies noted above were marked with flagging tape.

William Lawrence as well as the erector foreman was notified of our findings.

Inspector; Michael Bump CWI #07091231

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1565-001 Report: 005

Client: R. W. Gillespie & Associates, Inc. **Project:** 667 Congress St. Apartments

Date: July 14, 2016

Subject: Site Inspection of Structural Steel

We visited the site on this date as requested to continue structural steel inspections on the 667 Congress St. Apartments project located in Portland, ME. Upon arrival we met with William Lawrence of PC Construction. Our actions and observations were as follows:

- Layout, welding and fastening of the Level 3 composite deck were inspected.
- Layout and welding of the Level 3 shear studs were inspected.
- Welding of the HSS brace frames from Level 3 to Level 4 was visually inspected.
- Bolted connections on the Level 3 and 4 framing were inspected.
- Framing of Level 3 and 4 was inspected for conformance to drawings and details.

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

- 1. Three connections on the Level 4 framing were found to have one bolt hole misaligned.
- 2. One weld was found to be missing on the HSS brace at P/5.6.
- 3. Decking and studs were left out on Level 3 between H/4 and H/5 for ladder access to Level 3.

All discrepancies noted above were marked with flagging tape.

William Lawrence as well as the erector foreman was notified of our findings.

Inspector; Michael Bump CWI #07091231

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1565-00(**Report:** 006

Client: R. W. Gillespie & Associates, Inc. **Project:** 667 Congress St. Apartments

Date: July 21, 2016

Subject: Site Inspection of Structural Steel

We visited the site on this date as requested to continue structural steel inspections on the 667 Congress St. Apartments project located in Portland, ME. Upon arrival we met with Ed Hume of PC Construction. Our actions and observations were as follows:

- Layout, welding and fastening of the Level 4 composite deck were inspected from line D to N. Decking from line N to T needed to be completed around the perimeter of the building as well as around the elevator opening.
- Layout and welding of the Level 4 shear studs were inspected from line D to N. Studs from line N to T needed to be added around the perimeter as well as around the elevator opening.
- Welding of the HSS brace frames from Level 4 to Level 5 was visually inspected.
- Bolted connections on the Level 5 framing were inspected.
- Framing of Level 5 was inspected for conformance to drawings and details.
- The missing weld on the HSS brace at P/5.6 noted in our 7/14 report was added.
- The composite deck and shear studs at Level 3 left out between H/4 and H/5 noted in our 7/14 report were added.

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

Ed Hume as well as the erector foreman was notified of our findings.

Inspector; Michael Bump CWI #07091231

MIG

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1565-001 **Report:** 007

Client: R. W. Gillespie & Associates, Inc. **Project:** 667 Congress St. Apartments

Date: July 28, 2016

Subject: Site Inspection of Structural Steel

We visited the site on this date as requested to continue structural steel inspections on the 667 Congress St. Apartments project located in Portland, ME. Upon arrival we met with Ed Hume of PC Construction. Our actions and observations were as follows:

- Layout, welding and fastening of the Level 5 composite deck were inspected from line D to N. Decking from line N to T needed to be completed around the perimeter of the building as well as around the elevator opening.
- Layout and welding of the Level 5 shear studs were inspected from line D to N. Studs from line N to T needed to be added around the perimeter as well as around the elevator opening.
- Layout, welding and fastening of the Level 4 composite deck were inspected from line N to T.
- Layout and welding of the Level 4 shear studs were inspected from line N to T.
- The misaligned bolt holes on the Level 4 framing noted in our 7/14 report were reamed and bolts were installed.

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

1. Additional deck screws need to be added on Level 5. The locations of the missing screws were marked with orange paint.

Ed Hume as well as the erector foreman was notified of our findings.

Inspector; Michael Bump CWI #07091231

WTO

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> 1565-60 | **Report:** 008

Client: R. W. Gillespie & Associates, Inc. **Project:** 667 Congress St. Apartments

Date: August 8, 2016

Subject: Site Inspection of Structural Steel

We visited the site on this date as requested to continue structural steel inspections on the 667 Congress St. Apartments project located in Portland, ME. Upon arrival we met with the project superintendent for PC Construction. Our actions and observations were as follows:

- Layout, welding and fastening of the Level 5 composite deck were inspected from line N to T. All deck screws previously noted as missing between lines D and N were added.
- Layout and welding of the Level 5 shear studs were inspected from line N to T.
- Layout and welding of the Level 6 shear studs were approximately 50% complete at the time of this inspection. We inspected the studs that were in place and marked any unacceptable studs with orange paint.
- Bolting of the Level 6 framing was inspected.
- Welding of the HSS brace frames was inspected from the Level 5 framing to the Level 6 framing.
- Visual inspection and ultrasonic testing were performed on the column splices at Level 5. One connection at F/2 still needed to be welded. See the attached report for locations tested.

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

1. Welds still needed to be added to the upper end of the HSS brace at F/2.

The project superintendent as well as the erector foreman was notified of our findings.

Inspector; Michael Bump CWI #07091231

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ULTRASONIC TEST REPORT

1565-01

Date: August 8, 2016 Report: 008

Client: R.W. Gillespie & Associates Transducer: 70 degree 2.25 mhz

Project: 667 Congress St. Apartments Ultrasonic Unit: Olympus Epoch 600

Address: Portland, ME Test Method Standard: AWS D1.1

Welding contractor: Arc Erectors, Inc. Acceptance Standard: AWS D1.1 table 6.2

Description of Joint: Butt Material: ASTM A992

			<u>ə</u>		Leg 1-2-3					Defect			Distance		
Weld Identification:	Acceptable	Rejectable	Fransducer Angle	From Face		Indication Level	R Reference Level	A Attenuation Level	d Indication	Length	Angular Distance (sound path)	Depth from "A" surface	"X"	" Y "	
Level 5 Column															
Splices															
F.5/2	X		70	A	1-3		62								
F.5/2.6	X														
F.5/3	X														
G/2	X														
G/2.4	X														
F/2.9	X														
N/3.5	X														
N/5.6	X														
N/6	X														
P/3.5	X														
P/5.3	X														
P/5.6	X														
P/6	X														

Remarks: Both flanges and web were tested on each connection listed above.

Technician: Michael Bump Level: II

MIE

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1565-001 Report: 009

Client: R. W. Gillespie & Associates, Inc. **Project:** 667 Congress St. Apartments

Date: August 22, 2016

Subject: Site Inspection of Structural Steel

We visited the site on this date as requested to continue structural steel inspections on the 667 Congress St. Apartments project located in Portland, ME. Upon arrival we met with the project superintendent for PC Construction. Our actions and observations were as follows:

- Layout, welding and fastening of the Level 6 composite deck were inspected.
- Layout and welding of the remainder of the Level 6 shear studs were inspected. Any deficient studs at this level previously noted were repaired.
- Bolting of the Level 7 framing was inspected.
- Welding of the HSS brace frames from the Level 6 framing to the Level 7 framing was in progress. We inspected all braces that were complete at this time and marked them with "WOK".
- The brace frame between Levels 5 and 6 at F/2 that was not welded at the time of our last site visit was welded. Visual inspection of the welds was performed.
- Visual inspection and ultrasonic testing were performed on the column splice at Level 5 location F/2 in accordance to AWS D1.1. See the attached test report.
- Connections on Levels 6 and 7 at D/2, D/6, E/2 and E/6 were field welded in lieu of bolting in accordance to FCR#23. Visual inspections of the welds were performed.
- Misaligned bolt holes at the column base plate at Level 2 F/2 were field welded in accordance to FCR#16. Visual inspections were performed on the welds.
- The missing bolt at the column base plate at Level 2 F/2.9 was added after the stair support angle was relocated.

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

1. Loose/missing bolts were observed on the Level 7 framing.

The project superintendent as well as the erector foreman was notified of our findings.

Inspector; Michael Bump CWI #07091231

MR

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ULTRASONIC TEST REPORT

1565-001

Date: August 22, 2016

Report: 009

Client: R.W. Gillespie & Associates, Inc.

Transducer: 70 degree 2.25 mhz

Project: 667 Congress St. Apartments

Ultrasonic Unit: Olympus Epoch 600

Address: Portland, ME

Test Method Standard: AWS D1.1

Welding contractor: Arc Erectors, Inc.

Acceptance Standard: AWS D1.1 table 6.2

Description of Joint: Butt Material: ASTM A992

			<u>e</u>								Defe	ct	Dista	ınce
Weld Identification:	Acceptable	Rejectable	Transducer Angle	From Face	Leg 1-2-3	H Indication Level	Reference Level	A Attenuation Level	D Indication	Length	Angular Distance (sound path)	Depth from "A" surface	"X"	"Y"
Level 5 Column														
Splice														
F/2	X		70	A	1-3		62							
														THE

													na Airmana Airman	

Remarks: Both flanges and web were tested on connection listed above.

Technician: Michael Bump Level: II

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nealjwhite@gmail.com

P.O. Box 878 Glen, N.H. 03838 Tel. 603-383-9347 Fax. 603-383-8262

1565-001 Report: 010

Client: R. W. Gillespie & Associates, Inc. **Project:** 667 Congress St. Apartments

Date: August 29, 2016

Subject: Site Inspection of Structural Steel

We visited the site on this date as requested to continue structural steel inspections on the 667 Congress St. Apartments project located in Portland, ME. Upon arrival we met with the project superintendent for PC Construction. Our actions and observations were as follows:

- Layout, welding and fastening of the Level 7 composite deck were inspected.
- Layout and welding of the Level 7 shear studs were inspected.
- Bolting of the Level 8 framing was inspected.
- Welding of the remainder of the HSS brace frames from the Level 6 framing to the Level 7 framing was inspected
- Connections on Level 8 at D/2, D/6, E/2 and E/6 were field welded in lieu of bolting in accordance with FCR#23. Visual inspections of the welds were performed.
- Connections on the Level 7 framing that were reported as having loose/missing bolts from our 8/22 report were properly tightened with the exception of the connection at N/3.5. This connection will need to be field welded once a sketch is provided.

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

The project superintendent as well as the erector foreman was notified of our findings.

Inspector; Michael Bump CWI #07091231

WHITE ENGINEERING, LLC P.O. Box 878 Glen, N.H. 03838

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1565~601 Report: 011

Client: R. W. Gillespie & Associates, Inc. **Project:** 667 Congress St. Apartments

Date: September 6, 2016

Subject: Site Inspection of Structural Steel

We visited the site on this date as requested to continue structural steel inspections on the 667 Congress St. Apartments project located in Portland, ME. Upon arrival we met with the project superintendent for PC Construction. Our actions and observations were as follows:

- Layout, welding and fastening of the Level 8 composite deck were inspected.
- Layout and welding of the Level 8 shear studs were inspected.
- Bolting of the Level 9 framing was inspected (except for the sun shades).
- Welding of the HSS brace frames from the Level 7 framing to the Level 8 framing was inspected from line N to P. Bracing between lines F and G.1 was not completely welded at this time. All completed members were inspected and marked "WOK"
- Welding of the joists and bridging was inspected at the Level 9 Framing. Kicker angles need to be added as required.
- Visual inspection and ultrasonic testing were performed on all completed CJP column splices at the Level 7 framing in accordance to Clause 6 of the AWS D1.1 Welding Code. See the attached report for locations tested.

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

1. One connection at the Level 9 framing was found to have loose bolts.

The project superintendent as well as the erector foreman was notified of our findings.

Inspector; Michael Bump

CWI #07091231

MC

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ULTRASONIC TEST REPORT

1565-001

Date: September 6, 2016 Report: 011

Client: R.W. Gillespie & Associates Transducer: 70 degree 2.25 mhz

Project: 667 Congress St. Apartments Ultrasonic Unit: Olympus Epoch 600

Address: Portland, ME Test Method Standard: AWS D1.1

Welding contractor: Arc Erectors, Inc. Acceptance Standard: AWS D1.1 table 6.2

Description of Joint: Butt Material: ASTM A992

			le	From Face	Leg 1-2-3		•				Defe	ct	Distance	
Weld Identification:	Acceptable	Rejectable	Transducer Angle			Indication Level	Reference Level	A Attenuation Level	d Indication	Length	Angular Distance (sound path)	Depth from "A" surface	"X"	"Y"
Level 7 Column														
Splices														
F.5/2	X		70	A	1-3		62							
F.5/2.9	X													
F.5/2.6	X										the contract of the contract o			
G/2	X													
G/2.4	X													•••••••
N/3.5	X										A CONTRACTOR OF THE CONTRACTOR			
N/5.6	X										-			
N/6	X													
P/3.5	X													
P/5.6	X													
P/6	X					Acceptance of the Control of the Con								***************************************

Remarks: Both flanges and web were tested on each connection listed above.

Technician: Michael Bump Level: II

MR

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1565-001 Report: 012

Client: R. W. Gillespie & Associates, Inc. **Project:** 667 Congress St. Apartments

Date: September 15, 2016

Subject: Site Inspection of Structural Steel

We visited the site on this date as requested to continue structural steel inspections on the 667 Congress St. Apartments project located in Portland, ME. Upon arrival we met with the project superintendent for PC Construction. Our actions and observations were as follows:

- The loose connection at the Level 9 framing noted in our 9/6 report was properly tightened.
- Visual inspections were performed on the welding of the HSS braces between Level 7 and Level 8 that were not previously inspected. Visual inspections were also performed on all HSS braces between Level 8 and the Penthouse Roof.
- Layout, welding and fastening of the Level 9/Main Roof and the Penthouse Roof deck were inspected.
- Welding of the joist kicker angles at Level 9 was inspected.
- Visual inspection and ultrasonic testing were performed on all completed CJP column splices at the Level 7 framing in accordance to Clause 6 of the AWS D1.1 Welding Code. See the attached report for locations tested.
- Framing, column anchor rod nuts and bolted connections were inspected on the Low Roof area at Level 2 between lines 6 and 8x from line M.8 to north of line L.

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

1. Weld was found to be missing on one HSS brace between Levels 8 and 9 at F.5/2.

The project superintendent as well as the erector foreman was notified of our findings.

Inspector; Michael Bump CWI #07091231

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ULTRASONIC TEST REPORT

1565-001

Date: September 15, 2016 Report: 012

Client: R.W. Gillespie & Associates Transducer: 70 degree 2.25 mhz

Project: 667 Congress St. Apartments Ultrasonic Unit: Olympus Epoch 600

Address: **Portland, ME** Test Method Standard: **AWS D1.1**

Welding contractor: Arc Erectors, Inc. Acceptance Standard: AWS D1.1 table 6.2

Description of Joint: Butt Material: ASTM A992

			le le								Defe	ct	Dista	ance
Weld Identification:	Acceptable	Rejectable	Fransducer Angle	From Face	Leg 1-2-3	Indication Level	Reference Level	A Attenuation Level	D Indication	Length	Angular Distance (sound path)	Depth from "A" surface	"X"	"ү"
Level 7 Column	The state of the s													
Splices F/2	X		70	A	1-3		62							
F/2.9	X													and the state of t

											TO STATE OF THE ST			

Remarks: Both flanges and web were tested on each connection listed above.

Technician: Michael Bump Level: II

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