Date Prepared: December 29, 2014 (AEI14005) - Rev 2/2/15

Structural Statement of Special Inspections

Project: BP#2014-02504 - 2014 Interior Renovations

Location: 2211 Congress St., Portland, ME

Owner: UNUM

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: MINIMINION OF THE PARTY OF THE OF MAINE William P. Faucher, P.E., SECD, LEEDAP, RRC (type or print name of the Structural Registered Design Professional in Responsible Charge) December 29, 2014 Rev: 2/2/15 Signature Date **Design Professional Seal** Owner's Authorization: Building Code Official's Acceptance: Signature Date Signature Date

Date Prepared: December 29, 2014 (AEI14005) – Rev 2/2/15

Structural Statement of Special Inspections (Continued)

| List of Ag | ents | | |
|---------------------|--|-------|---|
| Project: | BP#2014-02504 - 2014 Interior Renovatio | กร | |
| Location: Owner: | 2211 Congress St., Portland, ME UNUM | | |
| This Statement | of Special Inspections encompass the following discipl | line: | Structural |
| (Note: Stateme | nt of Special Inspections for other disciplines may b | e in | cluded under a separate cover) |
| This Statement | of Special Inspections / Quality Assurance Plan includ | le th | e following building systems: |
| | Soils and Foundations Wood Construction Masonry Systems Sprayed Fire-Resistant Materials | | Structural Steel Precast Concrete System Cast-in-Place Concrete Special Cases |

| Special Inspection Agencies | Firm | Address, Telephone, e-mail |
|---|-----------------------------|---|
| Engineer of Record (EOR) | Allied Engineering, Inc. | 160 Veranda St. Portland, ME 04103 T – 207.221.2260 x107 F – 207.221.2266 wfaucher@allied-eng.com |
| STRUCTURAL Special Inspections Coordinator (SSIC) | Allied Engineering, Inc. | 160 Veranda St. Portland, ME 04103 T - 207.221.2260 x107 F - 207.221.2266 wfaucher@allied-eng.com |
| 2. Special Inspector (SI 1) | S.W. Cole Engineering, Inc. | 286 Portland Road Gray Maine 04039 207.657.2866 infogray@swcole.com |
| 3. Special Inspector (SI 2) | | |
| 4. Testing Agency (TA 1) | S.W. Cole Engineering, Inc. | 286 Portland Road Gray Maine 04039 207.657.2866 infogray@swcole.com |
| 5. Testing Agency (TA 2) | | |

Note: The inspectors and testing agencies shall be engaged by the Owner or the Owner's Agent, and <u>not</u> 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.

Date Prepared: December 29, 2014 (AEI14005) - Rev 2/2/15

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: BP#2014-02504 - 2014 Interior Renovations

Location: 2211 Congress St., Portland, ME

Owner: UNUM

| Architect of Record: | Brian Curley, RA | PDT Architects |
|--|--|--------------------------|
| | (name) | (firm) |
| Structural Registered Design Professional in Responsible | William P. Faucher, P.E., SECB, LEED AP, RRC | Allied Engineering, Inc. |
| Charge: | (name) | (firm) |

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

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

| Respectfully submitted, Structural Special Inspection Coordinator | | |
|--|------|----------------------------|
| (Type or print name) | - | |
| (Firm Name) | - | |
| | | |
| Signature | Date | Licensed Professional Seal |

Date Prepared: December 29, 2014 (AEI14005) - Rev 2/2/15

Structural Statement of Special Inspections (Continued)

Special Inspector's/Agent's Final Report Project: BP#2014-02504 - 2014 Interior Renovations 2211 Congress St., Portland, ME UNUM Owner: Special Inspector or Agent: (firm) (name) Designation: To the best of my information, knowledge and belief, the Special Inspections or testing required for this project, and designated for this Inspector/Agent in the Statement of Special Inspections submitted for permit, have been performed and all discovered discrepancies have been reported and resolved. Interim reports submitted prior to this final report form a basis for and are to be considered an integral part of this final report. Respectfully submitted, Special Inspector or Agent: (Type or print name) Signature Date Licensed Professional Seal or **Certification Number**

Date Prepared: December 29, 2014 (AEI14005) - Rev 2/2/15

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

100 01401

Structural Schedule of Special Inspections SOILS & FOUNDATION CONSTRUCTION NOT APPLICABLE

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

Structural Schedule of Special Inspections CONCRETE CONSTRUCTION NOT APPLICABLE

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

Structural Schedule of Special Inspections

MASONRY CONSTRUCTION – LEVEL 1 (NON-ESSENTIAL FACILITY) NOT APPLICABLE

| VERIFICATION AND INSPECTION | Y/N | EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE | COMMENTS | AGENT | AGENT QUALIFICATION | TASK COMPLETED |
|---|-----|--|---|-------|------------------------|-------------------|
| As masonry construction begins, the following shall be verified to ensure compliance: | N | | | | | |
| a. Proportions of site-prepared mortar. | N | P | ACI530.1, 2.6A | | PE/SE or EIT | |
| b. Construction of mortar joints. | N | P | ACI530.1, 3.3B | | PE/SE or EIT | |
| c. Location of reinforcement and connectors. | N | P | ACI530.1, 3.4, 3.6A | | PE/SE or EIT | |
| d. Prestressing technique. | N | P | ACI530.1, 3.6B | | PE/SE or EIT | |
| e. Grade and size of prestressing tendons and anchorages. | N | P | ACI530.1, 2.4B, 2.4H | | PE/SE or EIT | |
| 2. The inspection program shall verify: | N | | | | | |
| a. Size and location of structural elements. | N | P | ACI530.1, 3.3G | | PE/SE or EIT | |
| b. Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction. | N | P | ACI530, 1.2.2(e), 2.1.4, 3.1.6 | | PE/SE or EIT | |
| c. Specified size, grade and type of reinforcement. | N | P | ACI530, 1.12, ACI530.1, 2.4, 3.4 | | PE/SE or EIT | |
| d. Welding of reinforcing bars. | N | NOT ALLOWED | AC530, 2.1.10.6.2, 3.24 (b) | | AWS-CWI | |
| e. Protection of masonry during cold weather (temperature below 40°F) or hot weather (temperature above 90°F). | N | Р | IBC 2104.3, 2104.4; ACI530.1, 1.8C, 1.8D | | PE/SE or EIT | |
| f. Application and measurement of prestressing force. | N | P | ACI530.1, 3.6B | | PE/SE or EIT | |
| Prior to grouting, the following shall be verified to ensure compliance: | N | | | | | |
| a. Grout space is clean. | N | P | ACI530.1, 3.2D | | PE/SE or EIT | |
| b. Placement of reinforcement and connectors and prestressing tendons and anchorages. | N | P | ACI530, 1.12, ACI530.1, 3.4 | | PE/SE or EIT | |
| c. Proportions of site-prepared grout and prestressing grout for bonded tendons. | N | P | ACI530.1, 2.6B | | PE/SE or EIT | |
| d. Construction of mortar joints. | N | P | ACI530.1, 3.3B | | PE/SE or EIT | |
| Grout placement shall be verified to ensure compliance with code and construction document provisions. | N | С | ACI530.1, 3.5 | | PE/SE or EIT | |
| a. Grouting of prestressing bonded tendons. | N | С | ACI530.1, 3.6C | | PE/SE or EIT | |
| Preparation of any required grout specimens, mortar specimens and/or prisms shall be observed. | N | С | IBC 2105.2.2, 2105.3; ACI530.1, 1.4 | | PE/SE or EIT | |
| Compliance with required inspection provisions of the construction documents and the approved submittals shall be verified. | N | P | ACI530.1, 1.5 | | PE/SE or EIT | |

Structural Schedule of Special Inspections
MASONRY CONSTRUCTION – LEVEL 2 (ESSENTIAL FACILITY) – NOT APPLICABLE

| VERIFICATION AND INSPECTION | Y/N | EXTENT: CONTINUOU S, PERIODIC, SUBMITTAL, OR NONE | COMMENTS | AGENT | AGENT QUALIFICATION | TASK COMPLETED |
|---|-----|---|--|-------|------------------------|-------------------|
| 1. From the beginning of masonry construction, the following shall be verified to ensure compliance: | N | | | | | |
| a. Proportions of site-mixed mortar, grout and prestressing grout for bonded tendons. | | P | ACI530.1, 2.6A | | PE/SE or EIT | |
| b. Placement of masonry units and construction of mortar joints. | | P | ACI530.1, 3.3B | | PE/SE or EIT | |
| c. Placement of reinforcement, connectors and prestressing tendons and anchorges. | | P | ACI530, 1.12; ACI530.1, 3.4, 3.6 A | | PE/SE or EIT | |
| d. Grout space prior to grouting. | | С | ACI530.1, 3.2D | | PE/SE or EIT | |
| e. Placement of grout. | | С | ACI530.1, 3.5 | | PE/SE or EIT | |
| f. Placement of prestressing grout. | | С | ACI530.1, 3.6C | | PE/SE or EIT | |
| 2. The inspection program shall verify: | N | | | | | |
| a. Size and location of structural elements. | | P | ACI530.1, 3.3G | | PE/SE or EIT | |
| b. Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction. | | С | ACI530, 1.2.2(e), 2.1.4, 3.1.6 | | PE/SE or EIT | |
| c. Specified size, grade and type of reinforcement. | | P | ACI530, 1.12; ACI530.1, 2.4, 3.4 | | PE/SE or EIT | |
| d. Welding of reinforcement. | | С | ACI530, 2.1.10.6.2, 3.2.3.4(b); | | PE/SE or EIT | |
| e. Protection of masonry during cold weather and (temperature below 40°F) or hot weather (temperature above 90°F). | | P | IBC 2104.3, 2104.4; ACI530.1, 1.8C, 1.8D | | PE/SE or EIT | |
| f. Application and measurement of prestressing force. | | С | ACI530.1, 3.6B | | PE/SE or EIT | |
| 3. Preparation of any required grout specimens, mortar specimens and/or prisms shall be observed. | N | С | IBC 2105.2.2, 2105.3; ACI 530.1, 1.4 | | PE/SE or EIT | |
| Compliance with required inspection provisions of the construction documents and the approved submittals shall be verified. | N | Р | ACI530.1, 1.5 | | PE/SE or EIT | |

Structural Schedule of Special Inspections - STEEL CONSTRUCTION

| CONTINUOL | | EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE | COMMENTS | AGENT | AGENT QUALS | TASK COMPLETE |
|--|---|--|---|-------|--------------|------------------|
| Material verification of high-strength bolts, nuts and washers: | Y | | | | | |
| a. Identification markings to conform to ASTM standards specified in the approved construction documents. | Y | S | Applicable ASTM material specifications; AISC 335, Section A3.4; AISC LRFD, Section A3.3 | | PE/SE or EIT | |
| Manufacturer's certificate of compliance required. | Y | S | | | PE/SE or EIT | |
| 2. Inspection of high-strength bolting | Y | | | | | |
| a. Bearing-type connections. | Y | Р | AISC LRFD Section | | AWS/AISC-SSI | |
| b. Slip-critical connections. | Y | C or P (method dependent) | M2.5 IBC Sect 1704.3.3 | | AWS/AISC-SSI | |
| 3. Material verification of structural steel (IBC Sect 1708.4): | Y | | | | | |
| a. Identification markings to conform to ASTM standards specified in the approved construction documents. | Y | S | ASTM A 6 or ASTM A 568 IBC Sect 1708.4 | | PE/SE or EIT | |
| b. Manufacturers' certified mill test reports. | Y | S | ASTM A 6 or ASTM A 568 IBC Sect 1708.4 | | PE/SE or EIT | |
| 4. Material verification of weld filler materials: | Y | | | | | |
| a. Identification markings to conform to AWS specification in the approved construction documents. | Y | S | AISC, ASD, Section A3.6; AISC LRFD, Section A3.5 | | PE/SE or EIT | |
| b. Manufacturer's certificate of compliance required. | Y | S | | | PE/SE or EIT | |
| 5. Submit current AWS D1.1 welder certificate for all field welders who will be welding on this project. | Y | S | AWS D1.1 | | PE/SE or EIT | |
| 6. Inspection of welding (IBC 1704.3.1): a. Structural steel: | Y | | | | | |
| 1) Complete and partial penetration groove welds. | Y | С | | | AWS-CWI | |
| 2) Multipass fillet welds. | Y | С | | | AWS-CWI | |
| 3) Single-pass fillet welds> 5/16" | Y | С | AWS D1.1 | | AWS-CWI | |
| 4) Single-pass fillet welds< 5/16" | Y | P | | | AWS-CWI | |
| 5) Floor and deck welds. | Y | P | AWS D1.3 | | AWS-CWI | |
| b. Reinforcing steel (IBC Sect 1903.5.2): | | | | | | |
| Verification of weldability of reinforcing steel other than ASTM A706. | Y | C | | | | |
| Reinforcing steel-resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special reinforced concrete shear walls and shear reinforcement. | Y | С | AWS D1.4 | | AWS-CWI | |
| 3) Shear reinforcement. | Y | С | ACI 318: 3.5.2 | | AWS-CWI | |
| 4) Other reinforcing steel. | Y | P | | | AWS-CWI | |
| 7. Inspection of steel frame joint details for compliance (IBC Sect 1704.3.2) with approved construction documents: | Y | | | | | |
| a. Details such as bracing and stiffening. | Y | P | | | PE/SE or EIT | |
| b. Member locations. | Y | P | 1 | | PE/SE or EIT | |
| c. Application of joint details at each connection. | Y | P | 1 | | PE/SE or EIT | |

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

| VERIFICATION AND INSPECTION | 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 documentsOR- 2. AISC Certification | Y | S | Fabricator shall submit one of the two qualifications | | PE/SE or EIT | |
| 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. | v | S | IBC 1704.2.2 | | PE/SE or EIT | |

Structural Schedule of Special Inspection Services FABRICATION AND IMPLEMENTATION PROCEDURES – WOOD TRUSSES NOT APPLICABLE

| VERIFICATION AND INSPECTION | 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 documentsOR- 2. TPI Inspection Program: Fabricator shall participate in the TPI Quality Assurance Inspection Program, and maintain a copy of the Quality Assurance Procedures Manual, QAP-90. Submit copy of certificate. All trusses shall bear the TPI Registered Mark. | N | S | Fabricator shall submit one of the two qualifications | | PE/SE or EIT | |
| 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 | N | S | IBC 1704.2.2 | | PE/SE or EIT | |

Structural Schedule of Special Inspections NOT APPLICABLE WOOD CONSTRUCTION

| VERIFICATION AND INSPECTION | Y/N | EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE | COMMENTS | AGENT | AGENT QUALIFICATION | TASK COMPLETED |
|--|-----|--|--------------------------------------|-------|------------------------|-------------------|
| 1. Fabrication of high-load diaphragms | N | | | | | |
| a. Verify wood structural panel sheathing for grade and thickness | | P | IBC 1704.6 | | PE/SE or EIT | |
| b. Verify the nominal size of framing members at adjoining panel edges | | P | IBC 1704.6 | | PE/SE or EIT | |
| b. Verify the nail or staple diameter and length | | P | IBC 1704.6 | | PE/SE or EIT | |
| b. Verify the number of fastener lines | | P | IBC 1704.6 | | PE/SE or EIT | |
| b. Verify the spacing between fasteners in each line and at edge margins | | P | IBC 1704.6 | | PE/SE or EIT | |
| Load Tests for Joist Hangers: Provide evidence of manufacturer's load test in accordance with ASTM D1761 including the vertical load bearing capacity, torsional moment capacity, and deflection characteristics when there is no calculated procedure recognized by the code. | | S | IBC 1715 [submit ICBO reports] | | PE/SE or EIT | |

Structural Schedule of Special Inspections seismic resistance - structural

| VERIFICATION AND INSPECTION | 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: | N | | Seismic Design Category: B | | | |
| a. The seismic-force-resisting systems in structures assigned to Seismic Design Category C, D, E or F | N | Р | IBC 1707.1 | | PE/SE or EIT | |
| 2. Structural steel: Continuous special inspection for structural welding in accordance with AISC 341. | N | P | IBC 1702.2 | | AWS-CWI | |
| 3. Structural wood: | N | | | | | |
| a. Continuous special inspection during field gluing operations of elements of the seismic- force-resisting system. | | С | IBC 1702.3 | | PE/SE or EIT | |
| b. Periodic special inspections for nailing, bolting, anchoring and other fastening of components within the seismic-force-resisting system, including drag struts, braces and hold- downs | | Р | IBC 1702.3 | | PE/SE or EIT | |
| Cold-formed steel framing: Periodic special inspections during welding operations of elements of the seismic-forceresisting system. | N | P | | | | |
| Periodic special inspections for screw attachment, bolting, anchoring and other fastening of components within the seismic- force-resisting system, including struts, braces, and hold-downs. | Y | P | | | D. G. D. | |
| Periodic special inspections for screw attachment, bolting, anchoring, weld plate connection and other fastening of components within the load bearing wall system, including connections to floor systems above and below framing load bearing wall elements. Periodic special inspection for non-load bearing partitions with wall system cumulative weights > 15psf. | | Р | IBC 1707.4 | | PE/SE or EIT, AWS-CWI or ICC-SWSI | |
| | Y | Р | | | | |
| 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 | N | IBC 1707.8 | | | |

Schedule of Special Inspections — Architectural SPRAYED FIRE-RESISTANT MATERIALS

| VERIFICATION AND INSPECTION | Y/N | EXTENT: | COMMENTS | AGENT | AGENT | TASK |
|--|-----|---|--------------------------------|-------|---------------|-----------|
| IBC Section 1704.12 | | CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE | | | QUALIFICATION | COMPLETED |
| Surface Conditions: Verify surfaces are prepared in accordance with the approved fire-resistance design and the approved manufacturer's written instructions prior to application of the sprayed fir-resistant material | Y | Р | IBC 1704.12.2 | | ICC-SFSI | |
| 2. Application: Verify the substrate shall have a minimum ambient temperature before and after application as specified in the approved manufacturer's written instruction. The area for application shall be ventilated during and after application as required by the approved manufacturer's written instructions. | Y | Р | IBC 1704.12.3 | | ICC-SFSI | |
| Thickness: Verify average thickness of the sprayed fire-resistant materials applied to structural elements shall not be less than the thickness required by the approved fire-resistance design. | Y | Р | IBC 1704.12.4 | | ICC-SFSI | |
| a. Floor, Roofs & Walls: The thickness of the sprayed fire-resistant material applied to floor, roof and wall assemblies, taking the average of not less than four measurements for each 1,000 square feet (93 m²) of the sprayed area on each story or portion thereof. | Y | Р | IBC1704.12.4.2 ASTM E605 | | ICC-SFSI | |
| b. Structural Framing: The thickness of the sprayed fire-resistant material applied to structural members shall be determined in accordance with ASTM E 605. Thickness testing shall be performed on not less than 25 % of the structural members on each floor. | Y | Р | IBC1704.12.4.3; ASTM E605 | | ICC-SFSI | |
| 4. Density: Verify density of the sprayed fire-resistant material not be less than the density specified in the approved fire-resistant design. a. Floor, Roofs & Walls: Not less than one sample for every 2,500 SF or portion thereof per story. b. Structural Framing: not less than one sample for each type of structural member for each 2,500 SF of floor area or portion thereof per story | Y | Р | IBC1704.12.5; ASTM E605 | | ICC-SFSI | |
| 5. Bond: Verify the cohesive/adhesive bond strength of the cured sprayed fire-resistant material applied to structural elements shall not be less than 150 pounds per square foot (psf) (7.18 kN/m2). The cohesive/adhesive bond strength shall be determined in accordance with the field test specified in ASTM E 736 by testing in-place samples. | Y | Р | IBC 1704.12.6 ASTM E 736 | | ICC-SFSI | |
| a. The test samples for determining the cohesive/adhesive bond strength of the sprayed fire-resistant materials shall be selected from each floor, roof and wall assembly at the rate of not less than one sample for every 2,500 SF or part thereof of the sprayed area in each story. | Y | Р | IBC 1704.12.6.1; ASTM E 736 | | ICC-SFSI | |
| b. The test samples for determining the cohesive/adhesive bond strength of the sprayed fire-resistant materials shall be selected from beams, girders, joists, trusses and columns at the rate of not less than one sample for each type of structural framing member for each 2,500 square feet of floor area or part thereof in each story. | Y | P | IBC 1704.12.6.2; ASTM E 736 | | ICC-SFSI | |
| | | | | | | |

Quality Assurance Plan – Seismic and Wind

| QUALITY ASSURANCE | FOR SEISMIC RESI | STANCE CHECK LIST [IBC 1705 | 5] | | | |
|--|---|---|--------------|--|--|--|
| Seismic Design Category | C | | | | | |
| | | | | | | |
| ☐ FOR SEISMIC DESIGN CATEGOR Structural: | RY C OR HIGHER: | | | | | |
| ☐ The seismic-force-resisting systems | | | | | | |
| ☐ Steel Braced Frames and associat | ed connections/anchorage | | | | | |
| ☐ Steel Moment Frames and associa | | | | | | |
| ☐ Shear walls: ☐ CMU ☐ Wood | ☐ Concrete ☐ □ | Diaphragms: Floor Roof | | | | |
| Other: | | | | | | |
| | | | | | | |
| OUALITY ASSURANCE | FOR WIND RESIST. | ANCE CHECK LIST [IBC 1706] | | | | |
| Wind Exposure Category | | | | | | |
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| REQUIRED NOT NOT APPLICABI | OTIA I INTEL A COLU | DANCE DI AN DECLUDENTENTE | | | | |
| REQUIRED NOT NOT APPLICABI | | RANCE PLAN REQUIREMENTS Plan is required where indicated below) | | | | |
| | (A Quanty Assurance | Pian is required where indicated below) | | | | |
| REQUIRED NOT NOT APPLICABLE | | | | | | |
| In wind owner | sure Categories A and B, wl | here the 3-second-gust basic wind speed is 12 | 20 miles per | | | |
| | 2.8 <i>m/sec</i>) or greater. | | | | | |
| | In wind exposure Categories C and D, where the 3-second-gust basic wind speed is 110 mph (49 <i>m/sec</i>) or greater. | | | | | |
| (49 m/sec) 01 | greater. | | _ | | | |
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| D 11 | | | | | | |
| Prepared by: | | Building Code Official's Acceptance: | | | | |
| | | | | | | |
| William P. Faucher, P.E., SECB, LEED ^{AF} | | | | | | |
| | Rev: 2/2/15 | | | | | |
| Signature | Date | Signature | Date | | | |

Date Prepared: December 29, 2014 (AEI14005) - Rev 2/2/15

Contractor's Statement of Responsibility

Each contractor responsible for the construction or fabrication of a system or component designated in the Quality Assurance Plan must submit a Statement of Responsibility. The Statement of Responsibility is required for Seismic Design Category C or higher. Make additional copies of this form as required.

Project:

BP#2014-02504 - 2014 Interior Renovations
UNUM - 2211 Congress St., Portland, ME

Contractor's Name:

Address:

License No.:

Description of designated building systems and components included in the Statement of Responsibility:

Contractor's Acknowledgment of Special Requirements

I hereby acknowledge that I have received, read, and understand the Quality Assurance Plan and Special Inspection program.

I hereby acknowledge that control will be exercised to obtain conformance with the construction documents approved by the Building Official.

Contractor's Provisions for Quality Control

Signature

Procedures for exercising control within the contractor's organization, the method and frequency of reporting and the distribution of reports is attached to this Statement.

Identification and qualifications of the person(s) exercising such control and their position(s) in the organization are attached to this Statement.

Date