City of Nashua

Department of Building Safety
Community Development Division
City Hall, 229 Main Street, PO Box 2019
Nashua, New Hampshire 03061-2019
Tel: 603.589.3080 ● Fax: 603.589.3119

Condition of Building Permit

Address_____P/Acct #_____
Permit/Project#_____ Submitted by_____Date_____

Architect/Engineer Responsibilities During Construction

When the laws of the State of New Hampshire require that construction documents be prepared by registered architects or engineers, the registered architects or engineers who have prepared plans, computations and specifications or the registered architects or registered engineers who have been retained to perform construction phase services, shall perform the following tasks for the portion of the work for which they are directly responsible:

1. Review, for conformance to the design concept, shop drawings, samples and other submittals, which are submitted by the contractor in accordance with the requirements of the construction documents.
2. Review and approval of the quality control procedures for all code-required controlled materials, structural tests and special inspections.
3. Be present at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the work and to determine, in general, if the work is being performed in a manner consistent with the construction documents and accepted engineering practice.
4. Such tasks are in addition to requirements for structural observation or other duties specified in Sections 1704 and 1710 or elsewhere in the adopted International Building Code.

Statement of Special Inspections

Special Inspections shall be performed as required by and in accordance with the adopted 2009 Edition of the International Building Code Chapter 17 “Structural Tests and Special Inspections” and all references there from. The professional engineer shall provide a written statement of Special Inspections or may complete and file the attached Schedule of Special Inspection Services along with any supplemental documentation as may be needed. Seismic Design Category based on short and on 1 second period response accelerations shall be indicated.

Final Report of Special Inspections

The professional engineer shall submit a Final Report of Special Inspections including a general statement that the work has been performed in a manner consistent with the construction documents and accepted engineering practice.

Statement of Special Inspections
City of Nashua, Building Department

Project:

Location:

Owner:

Owner's Address:

Architect of Record:

Structural Engineer of Record:

This Statement of Special Inspections is submitted as a condition for permit issuance in accordance with the Special Inspection requirements of the State of NH Building Code. It includes a Schedule of Special Inspection Services applicable to this project as well as the name of the Special Inspector and the identity of other approved agencies intended to be retained for conducting these inspections.

The Special Inspector shall keep records of all inspections and shall furnish inspection reports to the Building Official, Structural Engineer and Architect of Record. 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, Structural Engineer and Architect of Record. The Special Inspection program does not relieve the Contractor of his or her responsibilities.

Interim reports shall be submitted to the Building Official, Owner, Structural Engineer and Architect of Record.

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

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

Interim Report Frequency: or ☐ per attached schedule.

Prepared by:

(type or print name)

Signature Date

Design Professional Seal

Owner's Authorization:

Signature Date

Building Official's Acceptance:

Signature Date

Schedule of Special Inspection Services

The following sheets comprise the required schedule of special inspections for this project. The construction divisions which require special inspections for this project are as follows:

- ☐ Soils and Foundations
- ☐ Cast-in-Place Concrete
- ☐ Precast Concrete
- ☐ Masonry
- ☐ Structural Steel
- ☐ Cold-Formed Steel Framing
- ☐ Spray Fire Resistant Material
- ☐ Wood Construction
- ☐ Exterior Insulation and Finish System
- ☐ Special Cases

Inspection Agents	**Firm**	**Address**
1. Special Inspector		
2. Testing Laboratory		
3. Testing Laboratory		
4. Other		

Note: The qualifications of all personnel performing Special Inspection activities are subject to the approval of the Building Official.

The inspection and testing agent 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.

The credentials of all Inspectors and testing technicians shall be provided if requested.

It is recommended that the person administering the Special Inspections program be a Professional Engineer experienced in the design of buildings.

Key for Minimum Qualifications of Inspection Agents (where indicated on Schedules)	
PE	Professional Engineer
EIT	Engineering in Training
ACI	American Concrete Institute Certified Concrete Field Testing Technician
AWS	American Welding Society Certified Welding Inspector
ASNT	American Society of Non-Destructive Testing - Level II or III

Qualifications of inspection agents may be indicated on the Schedule in instances where the Structural Engineer deems such requirements are appropriate.

Steel Construction Table 1704.3

Item	Agent No.	Frequency/Scope
1. Material verification of high-strength bolts, nuts and washers: a. ID markings to conform to ASTM standards specified in the approved construction documents. b. Manufacture's certification of compliance required.		Periodic
2. Insp. of high-strength bolting. a. Snug-tight joints. b. Pretensioned and slip-critical joints using turn-of-nut with matchmaking, twist-off bolt or direct tension indicator methods of installation. c. Pretensioned and slip-critical joints using turn-of-nut without matchmaking or calibrated wrench methods of installation.		Periodic
3. Mat'l verification of structural steel and cold-formed steel deck. a. For structural steel ID markings to conform to AISC 360. b. For other steel ID markings to conform to ASTM standards specified in the approved construction documents. c. Manufacture's certified test reports.		Periodic
4. Mat'l verification of weld filler materials. a. ID markings to conform to AWS specification in the approved construction documents. b. Manufacture's certificate of compliance required.		Periodic Periodic
5. Inspection of welding a. Structural steel and cold-formed steel deck:		
1) Complete and partial joint penetration groove welds.		Continuous
2) Multi-pass fillet welds.		Continuous
3) Single-pass fillet welds > 5/16"		Continuous

Steel Construction Table 1704.3 (con't)

Item	Agent No.	Frequency/Scope
Inspection of Welding (con't) 4) Plug and slot welds.		Continuous
5) Single-pass fillet welds </=5/16"		Periodic
6) Floor and roof deck welds.		Periodic
b. Insp of welding - reinforcing steel:		
1) Verification of weldability of reinforcing steel other than ASTM A 706		Periodic
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.		Continuous
3) Shear reinforcement		Continuous
4) Other reinforcement		Periodic
6. Inspection of steel frame joint details for compliance:		Continuous
a) Detail such as bracing and stiffening		Periodic
b) Member locations		Periodic
c) Application of joint details at each connection		Periodic

Concrete Construction Table 1704.4

Item	Agent No.	Frequency/Scope
1. Inspection of reinforced steel, including pre-stressing tendons, and placement.		Periodic
2. Insp. of reinforcing steel, welding in accordance with Table 1704.3, Item 5b.		
3. Insp. of bolts to be installed in concrete prior to & during placement of concrete where allowable loads have been increased or where strength design is used.		Continuous
4. Insp. of anchors installed in hardened concrete.		Periodic
5. Verifying use of required design mix.		Periodic
6. At the time fresh concrete sampled to fabricate specimens for strength test, perform slump and air content tests, and determine the temperature of the concrete.		Continuous
7. Insp. of concrete and shotcrete placement for proper application techniques.		Continuous
8. Insp. for maintenance of specified curing temperature and techniques.		
9. Insp. of pre-stressed concrete: a) Application of pre-stressing forces. b) Grouting of bonded pre-stressing tendons in the seismic-force-resisting system.		Periodic
10. Erection of precast concrete members.		Periodic
11. Verification of in-situ concrete strength, prior to stressing of tendons in posttensioned concrete and prior to removal of shores and forms from beams and structural slabs.		Periodic
12. Inspect formwork for shape, location and dimensions of concrete members being formed.		Periodic

Level 1 Masonry Construction Table 1704.5.1

Item	Agent No.	Frequency/Scope
1. Compliance with required inspection provisions of the construction documents and the approved submittals.		Periodic
2. Verification of f_m and f_{aac} prior to construction except where specifically exempted by the code.		Periodic
3. Verification of slump flow and VSI as delivered to the site for self-consolidating grout.		Continuous
4. As masonry construction begins, the following shall be verified to ensure compliance:		Periodic
a. Proportions of site-prepared mortar.		Periodic
b. Construction of mortar joints.		Periodic
c. Location of reinforcement, connectors and pre-stressing tendons and anchorages.		Periodic
d. Pre-stressing technique		Periodic
e. Grade and size of pre-stressing tendons and anchorages.		Periodic
5. During construction the inspection program shall verify:		Periodic
a. Size and location of structural elements.		Periodic
b. Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction.		Periodic

Level 1 Masonry Construction Table 1704.5.1 (Cont.)

Item	Agent No.	Frequency/Scope
c. Specified size, grade and type of reinforcement, anchor bolts, pre-stressing tendons and anchorages.		Periodic
d. Welding of reinforcing bars.		Continuous
e. Preparation, construction and protection of masonry during cold weather below 40 degree F or hot weather above than 90 degrees F		Periodic
f. Application and measurement of pre-stressing force.		Continuous
6. Prior to grouting, the following shall be verified to ensure compliance:		Continuous
a. Grout space is clean.		Periodic
b. Placement of reinforcement and connectors, and pre-stressing tendons and anchorages.		Periodic
c. Proportions of site-prepared grout and pre-stressing grout for bonded tendons.		Periodic
d. Construction of mortar joints.		Periodic
7. Grout placement shall be verified to ensure compliance:		Continuous
a. Grouting of pre-stressing bonded tendons.		Continuous
8. Preparation of any required grout specimens, mortar specimens and/or prisms shall be observed.		Periodic

Level 2 Masonry Construction Table 1704.5.3

Item	Agent No.	Frequency/Scope
1. Compliance with required inspection provisions of the construction documents and the approved submittals.		Periodic
2. Verification of f'_m and f'_{aac} prior to construction and every 5,000 sf during construction.		Periodic
3. Verification of proportions of materials in premixed or pre-blended mortar and grout delivered to the site.		Periodic
4. Verification of slump flow and VSI as delivered to the site for self-consolidating grout.		Continuous
5.The following shall be verified to ensure compliance:		
a. Proportions of site-prepared mortar, grout and pre-stressing grout for bonded tendons.		Periodic
b. Placement of masonry units and construction of mortar joints.		Periodic
c. Placement of reinforcement, connectors and pre-stressing tendons and anchorages.		Periodic
d. Grout space prior to grout.		Continuous
e. Placement of grout.		Continuous
f. Placement of pre-stressing grout.		Continuous
g. Size and location of structural elements.		Periodic
h. Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction		Continuous

Level 2 Masonry Construction Table 1704.5.3 (Cont.)

Item	Agent No.	Frequency/Scope
i. Specified size, grade and type of reinforcement, anchor bolts, pre-stressing tendons and anchorages.		Periodic
j. Welding of reinforcing bars.		Continuous
k. Preparation, construction and protection of masonry during cold weather (less than 40 degree F) or hot weather more than 90 degrees F)		Periodic
l. Application and measurement of pre-stressing force.		Continuous
6. Preparation of any required grout specimens and/or prisms shall be observed.		Continuous

Wood Construction Section 1704.6

Item	Agent No.	Frequency/Scope
1704.6.1 High-load diaphragms including sheathing, framing, and fastening.		
1704.6.2 Wood truss temporary and permanent restraint and bracing.		

Verification and Inspection of Soils Table 1704.7

Item	Agent No.	Scope
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.		Periodic
2. Verify excavations are extended to proper depth and have reached proper material.		Periodic
3. Perform classification and testing of compacted fill materials.		Periodic
4. Verify use of proper materials, densities and lift thickness during placement and compaction of compacted fill.		Continuous
5. Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly.		Periodic

Foundations Tables 1704.8, 1704.9 and Section 1704.10

Item	Agent No.	Frequency/Scope
Driven Deep Foundation Elements Table 1704.8: 1. Verify element materials, sizes and lengths comply with the requirements.		Continuous
2. Determine capacities of test elements & conduct additional load tests, as required.		Continuous
3. Observe driving operations and maintain complete and accurate records of each element.		Continuous
4. Verify placement locations & plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any damage to foundation element		Continuous
Cast in Place Deep Foundations Table 1704.9: 1. Observe drilling operations and maintain complete and accurate records for each element.		Continuous
2. Verify placement, locations, and plumbness; confirm element diameters, bell diameters, lengths, embedment into bedrock and adequate end-bearing strata capacity. Record concrete or grout volumes		Continuous
Helical Foundations Section 1704.10: Information recorded shall include but not limited to the equipment used, pile dimensions, tip elevations, final depth and final installation torque		Continuous

Fire-resistant Materials and Smoke Control Systems Sections 1704.12, 1704.13, and 1704.16

Item	Agent No.	Scope
1704.12 Spray fire-resistant materials inspections: a) Condition of substrates b) Thickness of application c) Density in pounds per cubic foot d) Bond strength adhesion/cohesion e) Condition of finished application		
1704.13 Mastic & intumescent mat's: Inspections shall be in accordance with AWCI 12-B and the approved construction documents.		
1704.16 Smoke control systems test: Test Scope a) During the erection of ductwork and prior to concealment for the purposes of leakage testing and recording of device locations. b) Prior to occupancy and after sufficient completion for the purposes of pressure difference testing, flow measurements and detection and control verification.		

Seismic: Sections 1707 and 1708

Item	Agent No.	Frequency/Scope
1707 Insp. for seismic resistance.		
1707.2 Structural steel, with exceptions		Continuous
1707.3 Structural wood field gluing operations		Continuous
1707.4 Cold formed steel light frame construction, with exceptions.		Periodic
1707.7 Mechanical and electrical components. 1. Anchoring of emergency electrical equipment. 2. Installation of piping carrying hazardous contents and associated mechanical equipment. 3. Installation of HVAC ductwork carrying hazardous contents and associated mechanical equipment. 4. Insp. of vibration isolation systems.		Periodic
1708 Structural testing for seismic resistance (materials)		
1708.2 Concrete reinforcement		Continuous
1708.3 Structural steel, with exceptions.		Continuous for welds and periodic for bolting.
1708.4 Certification of nonstructural components.		
1708.5 seismically isolated structures as required by section 17.8 of ASCE 7.		

Project: _____	Proj #: _____
Location : _____	Prop Acct: _____

Permit Applicant: _____
Applicant's address: _____
_____
Architect of record: _____
Structural Engineer of Record: _____

FINAL REPORT OF SPECIAL INSPECTIONS

To the best of my information, knowledge, and belief, the special inspections required for this project have been satisfactorily completed, and I have been present at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the work and I have determined, in general, that the work was performed in a manner consistent with the construction documents and accepted engineering practice.

The following discrepancies that were outstanding since the last interim report dated have been corrected:

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_____

Building Official's Acceptance:

_____
Signature

_____
Date

Architect or Engineer's Seal

	Signature		*Date*
	Type or print name		*Date*

This report must be filed with the Nashua Building Official before a Certificate of Occupancy will be issued.