

Statement of Special Inspections

Project: *Windermere Elementary School*

Location: *47 Main Street – Ellington, CT 06029*

Owner: *Ellington Public Schools – 47 Main Street – Ellington, CT 06029*

Design Professional in Responsible Charge: *Szewczak, Kilty & Fluhr Structural Engineers, P.C.*

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

☒ Structural ☐ Mechanical/Electrical/Plumbing
☐ Architectural ☐ Other: _____

The Special Inspection Coordinator shall keep records of all inspections and shall furnish inspection reports to the Building Official and the Registered Design Professional in Responsible Charge. 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 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 Registered Design Professional in Responsible Charge.

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 prior to issuance of a Certificate of Use and Occupancy.

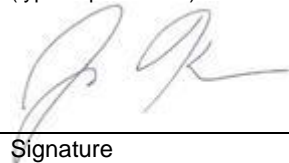
Job site safety and means and methods of construction are solely the responsibility of the Contractor.

Interim Report Frequency: *Report to be issued for each day of inspection.* or ☐ per attached schedule.

Prepared by:

Jason W. Kilty, P.E.

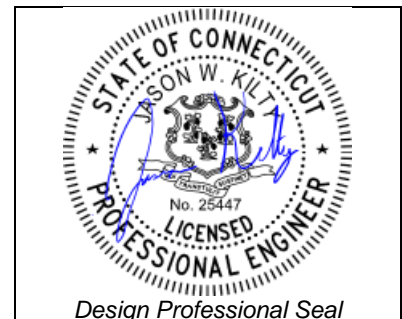
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Signature

4/24/2023

Date



Owner's Authorization:

Building Official's Acceptance:

Signature

Date

Signature

Date

Schedule of Inspection and Testing Agencies

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

- | | |
|---|--|
| <input checked="" type="checkbox"/> Soils and Foundations | <input type="checkbox"/> Spray Fire Resistant Material |
| <input checked="" type="checkbox"/> Cast-in-Place Concrete | <input type="checkbox"/> Wood Construction |
| <input type="checkbox"/> Precast Concrete | <input type="checkbox"/> Exterior Insulation and Finish System |
| <input checked="" type="checkbox"/> Masonry | <input type="checkbox"/> Mechanical & Electrical Systems |
| <input checked="" type="checkbox"/> Structural Steel | <input type="checkbox"/> Architectural Systems |
| <input checked="" type="checkbox"/> Cold-Formed Steel Framing | <input type="checkbox"/> Special Cases |

Special Inspection Agencies	Firm	Address, Telephone, e-mail
1. Special Inspection Coordinator	TBD	TBD
2. Testing Agency	TBD	TBD
3. Other Geotechnical Engineer	Clarence Welti Associates Inc.	227 Williams Street East Glastonbury, CT 06033 Phone: 860-633-4623
4. Other		
5. Other		
6. Other		

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.

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 if requested.

Key for Minimum Qualifications of Inspection Agents:

When the Registered Design Professional in Responsible Charge deems it appropriate that the individual performing a stipulated test or inspection have a specific certification or license as indicated below, such designation shall appear below the *Agency Number* on the Schedule.

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

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.
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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

Exterior Design Institute (EDI) Certification

EDI-EIFS	EIFS Third Party Inspector
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Other

Item	Agency # (Qualif.)	Scope
1. Shallow Foundations IBC 2015	2 2 2	Observe preparation of existing subgrade. Verify compliance with requirements of the Contract Documents. Inspect final footing subgrades and bearing surfaces to confirm adequate bearing capacity and compliance with the Contract Documents. Observe removal of unsuitable material and preparation of subgrade prior to placement of controlled fill.
2. Controlled Structural Fill IBC 2015 1705.6	2 2 2 2	Perform sieve tests (ASTM D422 & D1140) and modified proctor tests (ASTM D1557) of each source of fill material. Inspect placement, lift thickness and compaction of controlled fill. Test density of fill by nuclear methods (ASTM D2922). Verify extent and slope of fill placement.
3. Deep Foundations	-	(Not applicable)
4. Load Testing	-	(Not applicable)
5. Special Inspection Coordination	1 PE	Observe work and inspections. Verify that the assigned inspection agencies are conducting the inspections required. Verify inspection agent qualifications.

Item	Agency # (Qualif.)	Scope
1. Reinforcement Installation (Including rebar, tendons, and post-tensioning ducts) IBC 2015 Table 1705.3 Item 1	2 ACI-CCI 2 ACI-CCI 2 ACI-CCI 2 ACI-CCI	<i>Inspect size, spacing, cover, and positioning of reinforcing steel in accordance with the requirements of the Contract Documents and reviewed Shop Drawings.</i> <i>Verify that reinforcement is accurately placed and adequately supported before concrete is placed, and is secured against displacement within tolerances listed above. (ACI 318 Sect. 7.5.1)</i> <i>Verify that reinforcing bars are free from mud, oil, concrete from previous placements, or other deleterious materials. (ACI 318 Sect. 7.4.1 and 7.4.2)</i> <i>Verify that bar lap splice dimensions and mechanical splices have been provided in accordance with the requirements of the Contract Documents and reviewed Shop Drawings.</i>
2. Reinforcing Steel Welding IBC 2015 Table 1705.3 Item 2	-	<i>(Not applicable)</i>
3. Anchor Rods and Other Embedments IBC 2015 Table 1705.3 Item 3&4	2 ACI-CCI	<i>Inspect size, positioning, and quantity of embedments. Observe concrete placement and verify proper consolidation around embedments.</i>
4. Use of Approved Concrete Mix Design IBC 2015 Table 1705.3 Item 5	2 ACI-CCI	<i>Review concrete batch tickets and verify compliance with approved mix design.</i> 1. <i>Verify that water added at the site does not exceed that allowed by the approved mix design.</i> 2. <i>Review admixtures on concrete batch tickets and verify compliance with approved mix design. Verify that quantities added do not exceed that allowed by the approved mix design.</i>
5. Sampling and Testing of Concrete and Shotcrete IBC 2015 Table 1705.3 Item 6	2 ACI-CFTT 2 ACI-STT	<i>Samples for strength tests shall be taken in accordance with ASTM C172 (ACI 318 Sect. 5.6.3.1) at frequency noted in Project Specifications.</i> <i>Test concrete slump (ASTM C143), air-content (ASTM C231 or C173) and temperature (ASTM C1064) each time that concrete is sampled for strength tests.</i> <i>Test concrete compressive strength (ASTM C31 & C39).</i>

Item	Agency # (Qualif.)	Scope
6. Concrete and Shotcrete Placement IBC 2015 Table 1705.3 Item 7	2 ACI-CCI	<i>Verify that concrete is conveyed and deposited in accordance with ACI 318-11 Section 5.9, 5.10, and Project Specifications.</i>
7. Curing and Protection IBC 2015 Table 1705.3 Item 8	2 ACI-CCI	<i>Concrete: Verify that concrete is cured and temperature maintained in accordance with Project Specifications and ACI 318:5.11-5.13</i>
8. Prestressed Concrete IBC 2015 Table 1705.3 Item 9	-	<i>(Not applicable)</i>
9. Structural Precast Concrete IBC 2015 Table 1705.3 Item 10	-	<i>(Not applicable)</i>
10. In-situ Concrete Strength IBC 2015 Table 1705.3 Item 11	-	<i>(Not applicable.)</i>
11. Formwork Geometry IBC 2015 Table 1705.3 Item 12	2 ACI-CFTT	<i>Verify that forms conform to shapes, lines and dimensions of the members as required by the Contract Documents.</i>
12. Non-Shrink Grout	2 ACI-CFTT	<i>Tests: Test non-shrink grout specimens in accordance with the following:</i> <ol style="list-style-type: none">1. <i>ASTM C 1107-02 Article 12.1 Consistency</i>2. <i>ASTM C 1107-02 Article 12.5 Compressive Strength:</i> <ol style="list-style-type: none">a. <i>Test three cubes for compressive strength at each age (1, 3, 7 and 28 days).</i>
13. Special Inspection Coordination	1 PE	<i>Periodically observe work. Verify that the assigned inspection agencies are conducting the inspections required. Independently verify the items specified in this Statement of Special Inspections during site observations. Verify inspection agent qualifications.</i>

Item	Agency # (Qualif.)	Scope
1. Material Certification ACI 530-13 Table 3.1.2 Item 1	1 PE	Obtain material certificates for materials used in masonry construction, and verify compliance with the Contract Documents, AND APPROVED SUBMITTALS.
2. Mixing of Mortar and Grout ACI 530-13 Table 3.1.2 Item 2a and 3d	2 ACI-CCI	Inspect proportioning, mixing and retempering of site-prepared mortar and grout. Verify conformance with approved mix design.
3. Mortar Joints ACI 530-13 Table 3.1.2 Item 2b and 3e	2 ACI-CCI	Inspect construction of mortar joints including tooling and filling of head joints. Verify conformance with the Contract Documents.
4. Reinforcement Location ACI 530-13 Table 3.1.2 Item 2d, 3b and 3c	2 ACI-CCI	Inspect all placement, positioning, lapping, and securing of reinforcing steel, connectors and anchorages.
5. Prestressing Technique ACI 530-13 Table 3.1.2 Item 2e and 4e	-	(Not applicable)
6. Grade and Size of Prestressing Tendons and Anchorages ACI 530-13 Table 3.1.2 Item 2c	-	(Not applicable)
7. Installation of Masonry ACI 530-13 Table 3.1.2 Item 4a	2 ACI-CCI	Inspect size, layout, bonding and placement of masonry units.
8. Anchors and Ties ACI 530-13 Table 3.1.2 Item 4b	2 ACI-CCI	Inspect size, location, spacing and embedment of dowels, anchors and ties.
9. Reinforcement Size, Grade and Type ACI 530-13 Table 3.1.2 Item 3b	2 ACI-CCI	Verify that sizes, grades, and types of reinforcing comply with the requirements of the Contract Documents and reviewed Shop Drawings.
10. Welding of Reinforcing Bars ACI 530-13 Table 3.1.2 Item 4c	-	No welding.
11. Weather Protection ACI 530-13 Table 3.1.2 Item 4d	2 ACI-CCI	Inspect cold weather protection and hot weather protection procedures. Verify conformance with approved submittal. Verify that wall cavities are protected against precipitation.

Item	Agency # (Qualif.)	Scope
12. Grouting Operations ACI 530-13 Table 3.1.2 Item 3a and 4f	2 ACI-CCI	<i>Inspect grout space for cleanliness. Observe proportions of site-prepared grout, and verify compliance with Contract Documents. Inspect placement and consolidation of grout. Inspect masonry clean-outs for high-lift grouting.</i>
13. Evaluation of Masonry Strength ACI 530-13 Table 3.1.2 Item 5	1 2 ACI-CCI	<i>Review submittals and necessary masonry field strength tests for compliance.</i> <i>Test masonry strength using "Unit Strength Method" of ACI 530.1, Sec. 1.4.</i>
14. Special Inspection Coordination	1 PE	<i>Periodically observe work and inspections. Verify that the assigned inspection agencies are conducting the inspections required. Independently verify the items specified in this Statement of Special Inspections during site observations. Verify inspection agent qualifications.</i>

Item	Agency # (Qualif.)	Scope
1. Fabricator Certification/ Quality Control Procedures IBC 2015 1704.2.5.1	2 AWS-CWI	<p><i>Verify that the fabricator maintains detailed fabrication and quality control procedures that provide a basis for inspection control of the workmanship and the fabricator's ability to conform to approved construction documents and referenced standards. Review the procedures for completeness and adequacy relative to the code requirements for the fabricator's scope of work. (1704.2.5.1)</i></p> <p><i>Alternatively, for AISC Certified Fabricators, obtain current evidence that fabricator is exempt from Special Inspections as provided for in IBC 2015 Section 1704.2.5.2.</i></p>
2. Material Certification AISC 360-10 Table N5.2	1 1 2 AWS-CWI	<p><i>Review mill certificates for steel and ASTM certificates for bolts and weld material.</i></p> <p><i>Review material certifications for bolts, nuts and washers.</i></p> <p><i>Review material certificates for weld fill materials. Review material certificates for shear connectors.</i></p>
3. Open Web Steel Joists	1 PE 2 AWS-CWI	<i>Not applicable</i>
4. Bolting AISC 360-10 Tables N5.6-1, N5.6-2, and N5.6-3	2 2	<p><i>Review bolting operation and proper pretensioning of bolts utilized.</i></p> <p><i>Review fastener ASTM identification markings.</i></p>
5. Welding AISC 360-10 Tables N5.4-1, N5.4-2, and N5.4-3	2 AWS-CWI	<p><i>Review welder's certifications.</i></p> <p><i>Test critical welds with non-destructive methods for AWS compliance.</i></p>
6. Shear Connectors AISC 360-10 Table N6.1	2 AWS-CWI	<i>Field inspection of installed connectors.</i>

Item	Agency # (Qualif.)	Scope
7. Structural Details	1,2	<i>Review field installation of steel for conformance with Contract Documents.</i>
8. Metal Deck AISC 360-10 Table N6.1	2 AWS-CWI	<i>Field inspection of installed deck and connection to structure and side lap connections.</i>
9. Special Inspection Coordinator	1 PE	<i>Observe work prior to decking installation and when nearly complete for conformance to the Contract Documents. Independently verify the items specified in this Statement of Special Inspections during site observations.</i>

Item	Agency # (Qualif.)	Scope
1. Member Sizes	2	<i>Review material for conformance with requirements of Contract Documents and reviewed submittals.</i>
2. Material Thickness	2	<i>Review material for conformance for requirements of Contract Documents and reviewed submittals.</i>
3. Material Properties	2	<i>Review material certificates for framing members.</i>
4. Mechanical Connections	2	<i>Visually observe installed components and connections for conformance with requirements of Contract Documents and reviewed submittals.</i>
5. Welding	-	<i>(Not applicable.)</i>
6. Framing Details	1,2	<i>Visually observe installed components and connections for conformance with requirements of Contract Documents and reviewed submittals.</i>
7. Trusses	1	<i>Review the installation of the prefabricated cold-formed steel trusses for the requirements of the Contract Documents and reviewed submittals.</i>
8. Permanent Truss Bracing	1	<i>Review for compliance with the Contract Documents, approved submissions and field installation guide for cold-formed steel roof trusses published by Light Gauge Steel Engineers Association.</i>
9. Special Inspection Coordinator	1 PE	<i>Observe work and inspections. Verify that the assigned inspection agencies are conducting the inspections required. Verify inspection agent qualifications.</i>