OFFICE OF UNIVERSITY BUILDING OFFICIAL
George Mason University®

4400 University Drive, MS 1E4, Fairfax, Virginia 22030
Phone: 703-993-6070; Email: oubo@gmu.edu; Web: oubo.gmu.edu

Office of University Building Official

Uniform Statewide Building Code Special Inspection

Guidelines and Procedures

Table of Contents

1. Introduction

Purpose

The provisions for special inspections are intended to provide a higher degree of scrutiny for aspects of construction that, upon failure, would cause significant risk to life or other harm. These aspects of construction include soil suitability analysis, fabrication and installation of structural steel members, cold formed steel members and decking, certain concrete and masonry construction, fabrication and installation of wood structural elements, pile and pier foundations, sprayed fire-resistant materials, wall panels and veneer systems, EIFS, special cases and smoke control systems as detailed in the International Building Code (IBC).

The IBC as adopted by reference through the Virginia Uniform Statewide Building Code (USBC) intends that an experienced expert be in responsible charge of the inspection of these special types of construction. This document includes the standard for experience and qualifications necessary to adequately control the work being performed, duties of the special inspector, reporting requirements, as well as oversight by the University Building Official. It specifies the type and manner of work and how it is to be performed and the supervision required. It also clarifies the requirements for reporting the results and record keeping.

This procedure is intended to safeguard public safety and general welfare through structural strength of building materials by:

- Clearly defining the responsibility of all parties involved in the Special Inspection process;
- Standardizing the necessary qualifications required for Special Inspectors as well as material testing and Laboratories;
- Applying the special inspection provisions of the USBC in a consistent manner across George Mason University's campuses in a manner consistent with other jurisdictions across the Commonwealth.

2. Definitions & Abbreviations – *See Appendix A*

3. Responsibilities

The **University Building Official** is responsible for permit plan review, the issuance of the building permits, Code mandated inspections, and the Certificate of Occupancy. Prior to issuing the Building Permit, the University Building Official will review and approve the Construction Documents, the SSI, and the qualifications of the SI and the Agents. The University Building Official shall review field reports of special inspections as directed by these guidelines and procedures. The University Building Official has the authority to issue a stop work order if the approved special inspectors or laboratories are not being utilized to perform required special inspections. The Certificate of Occupancy or final inspection shall be issued only after the University Building Official has received and approved the Final Report of Special Inspections.

The **Project Manager** is the person who has the responsibility and authority to manage a project, regardless of the size. Typically, they will be University employees from the Facilities Departments. The PM applies for permit authorization of the project as well as manages the contracts and contractors.

The **Contractor,** either a General Contractor (GC), Design-Builder (DB) or Construction Manager (CM), is responsible for the construction of the project in accordance with the Construction Documents and the USBC; this would include the coordination and direction of all subcontractors, fabricators and material suppliers.

The **Owner** shall be responsible for the fees and costs related to the performance of special inspection services. The Owner or their authorized agent shall sign the SSI.

The **Primary Registered Design Professional of Record (PRDP)** shall be responsible for informing the Owner of the need to provide for special inspections and for assisting the Owner as may be needed to retain the services of an SI. An RDP shall complete an SSI that shall include the Special Inspectors (SI) and Agent(s). The RDP shall also review and act upon conditions noted in interim special inspection reports. The RDP shall also be responsible for supplying the SI with the necessary copies of current appropriate Construction Documents and approved submittals, fabrication, and erection documents, including those revisions and change orders affecting work to be inspected or tested. It shall be the responsibility of the RDP to review and act upon conditions note in the interim special inspection's reports.

Please note the following sub-classifications of an RDP that may or may not be an active part of any given project:

Structural Engineer of Record (SER) is the Registered Design Professional (RDP) in Responsible Charge of the structural system and shall be responsible for identifying in the Construction Documents the specific structural special inspections to be performed for the project in order to meet the requirements of the USBC and any other requirements specified by the SER. The SER is responsible for preparing the Statement of Special Inspections (SSI) for the structural elements subject to inspection and testing. The SER should review inspection and testing report pertaining to the structural system and take appropriate actions when deficiencies are identified.

Architect of Record (AR) is the Registered Design Professional (RDP) in Responsible Charge of the architectural building elements and is often the Prime Design Professional for "typical" building projects. The Architect is responsible for preparing a Statement of Special Inspections (SSI) for the architectural components such as EIFS systems or veneers. The architect, when serving as the Prime Design Professional, must inform the building owner of the Special Inspection requirements and assist the Owner in engaging one or more qualified Special Inspectors, inspectors and testing agencies. The Primary Registered Design Professional (PRDP) is responsible for confirming that each Registered Design Professional (RDP) prepares an SSI for their individual building systems.

Mechanical/Electrical/Plumbing Engineers of Record (MEPR) are the Registered Design Professionals (RDP) in Responsible Charge of the HVAC systems, electrical systems, fire protection systems and plumbing systems. The MEPs are responsible for preparing their own portions of the Statement of Special Inspections (SSI) for the MEP systems such as smoke control systems, emergency power systems or piping containing hazardous materials.

The **Special Inspector (SI)** is responsible for managing, coordinating, performing, documenting and reporting special inspections and the efforts of the various Inspection

Agents. Individual Agents may be retained by the Owner or by the SI, but they are responsible to the SI. The Agents who are responsible for conducting inspections or tests shall be identified in the SSI that is submitted to the University Building Official. The SI shall provide copies of inspection reports to the RDP of Record, Owner, Contractor and University Building Official. All discrepancies shall be brought to the attention of the Contractor for correction. The SI shall report deviations from the approved Construction Documents to the appropriate RDP of Record for their resolution and to the Building Official for record and follow up.

4. Special Cases

As per section 1705.1.1 of the VCC, Special Inspections shall be required for proposed work that is, in the opinion of the Building Official or the RDP, unusual in its nature, such as but not limited to, the following examples:

- Construction materials and systems that are alternatives to materials and systems prescribed by the building code according to Section 112.2 USBC.
- Unusual design applications of materials described in the building code.
- Materials and systems required to be installed in accordance with additional manufacturer's instructions that prescribe requirements not contained in the building code or in standards referenced by the building code.

5. Qualifications

In preparing the SSI, the RDP should specify the required credentials for the individuals performing specific inspections or tests. These requirements will vary depending on the complexity of the project.

In the Statement of Special Inspections (SSI), there are references to Agency/Personnel qualifications that are already listed; these are considered to be a minimum by the Building Official, unless otherwise specifically approved. A Registered Design Professional (RDP) is considered to meet any of the minimum credentials and certifications that should be considered
for the Special Inspector, Testing Agent and Fabricator. The agent shall have verifiable experience in the field which they are proposing to perform inspections. See VCC 1704.2.1 for additional information.

6. Special Inspector/Laboratory Qualifications

Special inspection laboratory shall be performed by individuals and Agents that are qualified in accordance with these procedures and are under the direct supervision of an RDP in responsible charge of special inspection activities. The RDP shall ensure that the individuals under their charge are performing only those special inspections that are consistent with their knowledge and training for the specified inspections in accordance with the edition of ASTM E329 and the USBC that is in force at the time of permit issuance.

The USBC requires that special inspections must be conducted under the supervision of a registered design professional. This places a requirement that the individual responsible for the coordination of special inspections (Agent 1) must be a Virginia licensed engineer or architect. Individuals or firms that conduct testing and/or special inspections (and the procedures they must follow) must comply with the requirements of ASTM E329. Firms

providing special inspection services (or qualifications for individual inspectors) may submit documentation demonstrating equivalency by another recognized standard to the minimum qualifications, certification, and experience requirements of ASTM E329. The University Building Official may approve the firm or individual after evaluating and determining that equivalency has been met.

Fabricator Shop Inspections

Where structural elements or assemblies are fabricated off site, such as structural steel, pre-engineered metal buildings, pre-cast concrete or prefabricated wood trusses, inspections are required to be performed in the fabricator's shop. The VCC requires that the Special Inspector review the fabricator's quality control procedures. The Code does not specifically state that inspections of the structural elements being fabricated is required, however this is generally understood as the intent. The emphasis of shop inspections should be on inspecting the quality of the fabricator's work rather than his means and methods of operation. See VCC Section 1704.2.5 for additional Information.

A fabricator is exempt from shop inspections when approved by the Building Official. Fabricators that are certified by industry organizations such as but not limited to, the American Institute of Steel Construction (AISC) or the Pre- cast Concrete Institute (PCI) are considered exempt. It is also permissible to be an exempt fabricator if ICC International Accreditation Services IAS has published an Evaluation Service Report on the fabricator in question. Fabricators that do not fall into one of these two broad categories can be reviewed on a case-by-case basis to determine whether the University Building Official determines the fabricator to be exempt from Special Inspector (SI) approval. When a fabricator has been approved, it is common practice for no inspections to be performed in the shop. Approved fabricators are required to submit a Fabricator's Certificate of Compliance at the completion of fabrication, per VCC section 1704.5.

7. Completing the Statement of Special Inspection (SSI)

A complete SSI shall be provided with the application for permit. A complete SSI will contain the following:

- The Statement of Special Inspections form shall be completed to include signatures by the parties identified on the SSI to include:

    a. A Registered Design Professional (RDP) is required to complete the statement and schedule. Although not required, typically this is accomplished by an RDP associated with the project design and understanding the critical elements. This can be the Structural Engineer of Record (SER), Special Inspector (SI) or any other RDP knowledgeable of the project that can execute the form. Their name is typed/printed on the line "Type or print name of the preparer of the Schedule." The Virginia RDP seal and signature of the preparer shall be located above the printed name where indicated.

    b. The applicant's signature is required if the person applying for the permit is different from the owner. This can be the owner's authorized representative, an RDP authorized by the Owner or the appropriately licensed Contractor that will be performing the work. The Applicant provides a signature on the "Permit Applicant's

Signature" line. If the Applicant and Owner are the same and the Owner has signed on the "Owner's Authorization" line, a separate signature is not required on this line.

c. The project Owner's authorization is required as they are responsible for the fees and costs of the Special Inspector. By signing this form, they acknowledge that special inspections are required for the project and agree to notify the University Building Official of any changes regarding the special inspection agents. The owner provides a signature on the "Owner's Authorization" line.

d. The Primary RDP of Record for the design provides a signature on the "Primary RDP of Record" line. The Primary RDP of Record is usually the person with the most direct contact with the owner. Typically, this would be the primary design professional that coordinated the completion of the plans. By signing, the Primary Record is not taking on a responsibility for the entire special inspection process nor approval of the special inspection team. The signature is an acknowledgement that special inspections are required on the job based on the design of his/her project, has advised the owner of their responsibility to provide and pay for special inspections, and has assured that special inspections are properly called for in the schedule for areas dictated by his/her design are incorporated.

e. The Structural Engineer of Record (if different from the Primary RDP of Record noted above) signs the SER line. The signature is an acknowledgement that the SER has reviewed the statement to ensure all required inspections dictated by his/her design are incorporated.

f. The company name of the Special Inspector (Agent 1) is to be typed or printed on "Special Inspector" line. The RDP overseeing the implementation of special inspections for the project of the above-named company will place his/her signature in the "Special Inspector (Signature)" line.

g. The University Building Official shall sign the form after all required signatures have been executed, he/she is satisfied that the area(s) of special inspections have been properly identified and called for, and he/she is satisfied that the special inspection agents and testing laboratories are properly qualified and certified. The signature of the University Building Official shall signify acceptance and approval of the Statement/Schedule of Special Inspections.

- The Schedule of Special Inspections shall be included with proper identification of elements requiring special inspections as follows:
  Yes - special inspection required; see HECO 6a6b document
  No - special inspection not required

- Note the associated Agent(s) responsible for inspection and/or testing (structural inspector, testing agent, smoke control agent, etc.)

- Agents for special inspections shall be identified to include address, phone number and responsible party. (Agent 1, Agent 2, Laboratory, etc.) Agent 1 shall always be the

primary Special Inspector responsible for the coordination of the entire special inspection process.

- Proper documentation as to appropriate qualifications and certifications as discussed in Section 6.

8. Reports of Special Inspections

The SI or agent shall provide a report for each inspection according to the standards of ASTM E-329. The SI shall provide copies of inspection reports to the PRDP, SER, Owner, Contractor, and University Building Official. **The SI shall report deviations from the approved Construction Documents to the appropriate RDP for their resolution before proceeding with the inspection of the deficient work.** All inspection and test reports shall be submitted within two (2) working days of the inspection or test performed. In no case shall inspections be performed by the University Building Official that would allow the concealment of work required to be inspected by the SI unless verification has been received that the special inspection has been successfully performed.

Special inspection and testing reports shall indicate what was inspected, what was observed, reference drawings or sketches and compliance or deviations including outstanding issues. Reports containing deficiencies or non-compliant work shall describe the nature and specific location of the discrepancies. A map or sketch of the area inspected and photos of the area and assemblies inspected shall be provided with the report. Reports shall indicate each specific item on the SSI for the type of work that was inspected.

At the completion of a project, all recorded non-compliant work shall be documented as having been corrected or approved by the RDP(s) of Record or other RDP(s) responsible for any review and approval of deviations or changes from the approved construction documents as appropriate.

Upon request of the University Building Official, the SI shall submit a letter indicating completion of a specific area or phase of special inspections and testing for a particular construction discipline.

9. Final Report of Special Inspections

Upon completion of all Special Inspections and testing specified on the SSI, the SI shall, after review and approval by the appropriate RDP(s), submit a Final Report of Special Inspections, which includes the completed Schedule of Special Inspections, and if applicable, a Fabricator's Certificate of Compliance as required by IBC 1704.2.5.1 to the Building Official for review and approval. The Building Official review and approval is required prior to final building inspection approval or issuance of a Certificate of Occupancy.

10. Changes in Design, Construction and Special Inspection Personnel

In the event that any member, of the Special Inspections Team or the organizations or individuals contracted as agents to the Special Inspectors are changed during the course of construction, the *Owner* shall provide a written notification for such change to the University Building Official. Such notice shall identify the replacement organization or replacement individual and shall furnish the documentation necessary; including resume and experience to illustrate such organization or individual is qualified for the work required. The University Building Official shall approve or deny such replacement. The *Owner* shall then provide a

revised Statement of Special Inspections signed by all parties. A new preconstruction meeting with the Design Team, Construction Team, Special Inspection Team, and the replacement organization or a replacement individual must be provided. The *Owner* shall ensure that there is a timely transfer of information and responsibility to the replacement party.

11. Referenced Documents

- 2018 Edition of the Virginia Construction Code that adopts by reference and amends the 2018 Edition of the IBC published by the International Code Council.
- ASTM E-329-21, Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection.
- AISC 360, Specification for Structural Steel Buildings.
- TMS 402/ACI 530/ASCE 5, Masonry Standards Joint Committee (MSJC) Code.

12. Appendices

Appendix A: Definitions & Abbreviations
Appendix B: HECO-6a6b Statement of Structural & Special Inspections
Appendix C: HECO-6c Statement of Contractor's Responsibility
Appendix D: HECO-13.1b Final Report of Structural and Special Inspections

Appendix A: Definitions & Abbreviations

Agents of Special Inspector (Agents). Qualified individuals or agencies working under the direction of the Special Inspectors who are providing the inspections and tests necessary to complete the special inspection process.

Approved*.* See VCC Chapter 2 as amended

Approved agency. See VCC Chapter 2 as amended

Approved documents*.* Includes building construction documents approved by the jurisdiction including all approved revisions; and also, fabrication and erection documents approved by jurisdiction including all approved revisions.

Approved fabricator*.* See VCC Chapter 2 as amended, 1704.2.5.2

Architect/Engineer (A & E). This is used to describe the design professionals who comprise the design team hired by the owner to prepare the design and construction documents and provide construction services to support the construction effort. The team is typically comprised of the Architect of Record, The Structural Engineer of Record, The Mechanical, Electrical and Plumbing Engineer or Engineers of Record and such other consultants as may be defined by the project or contract documents. Typically, one of the design professionals is the lead or primary design professional.

Architect of Record (AR). The registered design professional (RDP) retained by the Owner to design or specify architectural construction in accordance with the USBC and whose signature and seal appears on the approved architectural construction documents.

Building*.* See VCC Chapter 2 as amended

Building Official *(also referred to as the Office of University Building Official (OUBO) at George Mason University.* VCC Chapter 2 as amended

Certificate of Compliance*. See VCC Chapter 2 as amended, 1704.2.5.2*

Certificate of Occupancy, CO**.** This is an authorization for occupancy of a building upon the completion of the work based on the approved construction documents and successful acceptance after all fire code and building code related inspections are satisfied. This recognizes the building is considered in general compliance, although under the building code, there is an addition two-year period in which code violations can be identified and required to be resolved.

Construction documents. See VCC Chapter 2 as amended

Contractor: A General Contractor licensed in the Commonwealth of Virginia (See Commonwealth of Virginia, Title 54.1)

Discrepancy: A deviation from the approved plans and specifications and/or Virginia Uniform Statewide Building Code.

Fabricated item*.* See VCC Chapter 2 as amended

Fabrication and erection documents (placement drawings*).* All of the written, graphic, and pictorial documents prepared or assembled after issuance of a building permit and in addition to the university approved construction documents, describing the design, location, and physical characteristics of the building components or materials necessary for fabrication, assembly, or erection of the elements of the project. (Examples would include, but are not limited to, concrete reinforcing shop drawings, steel fabrication and erection shop drawings, and metal building fabrication and erection shop drawings.)

***Final Report of Special Inspections*.** A certification by the SI which shall indicate that all construction elements subject to Special Inspections as identified by the jurisdiction approved Statement and Schedule of Special Inspections (SSI) for all materials or phases of construction have been inspected prior to concealment, and in the SI's professional opinion and knowledge, the construction project complies with jurisdiction's approved Construction Documents.

Geotechnical Engineer of Record (GER). The Registered Design Professional retained by the Owner to design or specify earthwork and foundation support in accordance with the USBC, and whose seal and signature appear on the jurisdiction approved geotechnical report.

Inspection. The continuous or periodic observation of work and the performance of tests for certain building or structural components to establish conformance with jurisdiction approved documents as required by the USBC and the IBC.

Inspection Agents. The process of special inspection will typically require separate agents for specific areas. Inspections of geotechnical compliance shall be conducted by a geotechnical agent. An agent certified in materials testing is required. An agent familiar with the structural requirements shall be an agent. Based on experience and qualifications, an agent may be authorized to address more than one area of responsibility. The University Building Official may require verification of experience.

Inspection Certificate. See VCC Chapter 2, as amended.

Special Inspection and Material(s) Testing Company (SIMT)*.* An established and recognized agency or agencies, meeting the requirements of ASTM E 329 and accredited, retained by the Owner, independent of the Contractors performing the work subject to special inspections, to perform special inspections and materials testing required by the USBC and the IBC. See IBC-1703.1 Approved agency.

Main Wind Force-Resisting System: *An assemblage of structural elements assigned to provide support and stability for the overall structure. The system generally receives wind loading from more than one surface.*

Owner*.* See VCC Chapter 2, as amended.

Personnel. See VCC 1703.1.3 as amended

Pre-engineered structural elements. Structural elements specified by the SER but which may be designed by a specialty RDP. (Examples are items such as open web steel joists and joist girders; wood trusses; combination wood, metal and plywood joists; pre-cast concrete elements; prefabricated wood or metal buildings; tilt-up concrete panel reinforcement and lifting hardware.)

Primary Registered Design Professional of Record (PRDP). The leader of the design team charged with the preparation of construction documents, either an architect or professional engineer. The Primary Registered Design Professional of Record is responsible for determining and interpreting the needs of the client or for coordinating the work of the other members of the design team.

Primary structural system. The combination of elements which serve to laterally brace and support the weight of the building's structural shell, the applicable live loads based upon use and occupancy, wind, snow, ice, thermal and seismic environmental loads.

Registered Design Professional (RDP). See VCC-Chapter 2 as amended

Registered Design Professional in Responsible Charge. See VCC Chapter 2

Registered Design Professional Seal. A seal placed on documents prepared by or under the supervision of a registered design professional. The application of a professional seal indicates that the professional has exercised direct control and personal supervision over the work to which it has been affixed. An appropriately licensed or certified professional shall apply a seal to all final documents in which they have had direct control and personal supervision of.

Risk Category. See VCC Chapter 2 & 1604.5

Seismic Design Category. See VCC Chapter 2 as amended.

Seismic Force Resisting System. See VCC Chapter 2 as amended.

Shall. This term indicates mandatory requirements.

Shear Wall. See VCC Chapter 2 as amended.

Special Inspector (SI). Special Inspector (SI). See VCC Chapter 2. The SI is the Registered Design Professional in Responsible Charge who is directly responsible for Special Inspections, materials testing, and related services as described in the approved SSI. The SI shall be retained by the Owner, independent of the Contractors performing the work subject to special inspection. The SI must be approved by the Building Official. The SI shall be listed as Agent 1 on the SSI.

Statement of Special Inspections (SSI). See VCC 1704.2.3 as amended. The SSI is a statement prepared by an RDP and shall be approved by the appropriate RDP(s) of Record and submitted by the permit applicant. The SSI includes the scope (schedule) of the Special Inspection services applicable to a construction project, and the RDP's and inspection and testing agencies that will provide those services. The SSI is required as a condition for permit issuance in accordance with IBC as amended by USBC and must be approved by the Building Official.

Special Inspection, Continuous: See VCC Chapter 2. The full-time observation of work requiring

special inspection by an approved special inspector who is present in the area where the work is being performed. (Noted as “c” on the scope or schedule of inspections in the statement of special inspections.)

***Special Inspection, Periodic*:** See VCC Chapter 2. The part-time or intermittent observation of work requiring special inspection by an approved special inspector who is present in the area where the work has been, or is being performed, or at the completion of groups of tasks involved in completion of the work. One-hundred percent of the work required to be inspected shall be inspected. Under special circumstances, and after a substantiating data is reviewed, the Building Official may decrease the percentage of work that is required to be inspected.

Sprayed fire-resistant materials*.* See VCC Chapter 2-1702.1

Structure*. See* VCC-Chapter 2 as amended.

***Structural observation*.** See VCC-1702.1

***Submittal Review Stamp*.** A stamp applied to a submittal indicating that the registered design professional has reviewed the submittal, and that the submittal clearly and completely indicates in detail the product (s) that are proposed to be installed. In addition to the product, the RDP and/or UBO, may require the method(s) of installation to be completely and clearly defined. The intent of the shop drawing review process is to ensure that the RDP’s intended results coincide with the contractors’ proposed products and methods.

Statement of Special Inspections (SSI). The SSI is a statement prepared by an RDP and shall be approved by the appropriate RDP(s) of Record and submitted by the permit applicant. The SSI includes the scope (schedule) of the special inspection services applicable to a construction project, and the RDP's and inspection and testing agencies that will provide those services. The SSI is required as a condition for permit issuance in accordance with IBC as amended by USBC and must be approved by the University Building Official.

Structural Engineer of Record (SER). The Registered Design Professional retained by the Owner to design or specify structural documents in accordance with the USBC, and whose signature and seal appear on the jurisdiction approved structural construction documents.

***Structure*.** See VCC-Chapter 2 as amended

Temporary Certificate of Occupancy, TCO. This is an authorization for occupancy of a building for a specific time and for a specific set of limitations. While it is issued only where the minimum requirements for fire, and general safety as well as egress are meet for a specific set for situations, it is not indicative of a completed structure.

Virginia Uniform Statewide Building Code. The adopted statewide building code in Virginia and includes Parts I, II, and III.

Virginia Construction Code. Part I of the USBC which adopts and amends the IBC.

Appendix B: HECO-6a6b Statement of Structural & Special Inspections

Office of University Building Official
4400 University Drive, MS 1E4; Fairfax, VA 22030
Telephone: (703) 993-6070

INSTRUCTIONS

1) Complete Form HECO-6a, the "Statement of USBC Special Inspections."

2) Complete Form HECO-6b, "2018 USBC Special Inspections" list.

3) Print both forms.

4) Obtain the Structural Engineer of Record, A/E of Record, and Smoke Control RDP signatures for the HECO-6a form.

5) Submit both forms together to University Building Official. Include a hard copy with the project documents or e-mail a pdf document to oubo@gmu.edu. DO NOT send the Excel file as appropriate signatures must be provided on the HECO-6a cover page.

6) Include a copy of the completed CO-6b list of special inspections in the Project Manual. The CO-6a cover page may be omitted from the Project Manual.

7) Include a copy of each RDP of record Virginia license.

8) Include a copy of each Special Inspection's & Materials Test Lab's Certificates.

9) Include a copy of each Special Inspector's Certificate(s).

STATEMENT OF STRUCTURAL & SPECIAL INSPECTIONS

HECO-6a

DATE:

PROJECT TITLE:

PROJECT NUMBER:

A/E OF RECORD:

A/E FIRM OF RECORD:

A/E VA BUSINESS LIC. NO.

The following firms and/or individuals (with address and telephone number shown) are designated to perform the Structural & Special Inspections designated below. The firm/ individual has the experience, qualifications, certifications and/or licenses required to perform the functions indicated.

TESTING AND INSPECTION SERVICE

SPECIAL INSPECTION & MATERIAL TEST (SIMT) CO.		SIMT COMPANY A/E OF RECORD		SMOKE CONTROL TESTING & INSPECTION	
Company:		A/E Name:		Name:	
Address:		Title:		Address:	
City/St/Zip		email:		City/St/Zip	
Phone:		Phone:		Phone:	
Lic No.		Lic No.		Lic No.	

UNIVERSITY PROJECT STAFF

CONSTRUCTION FIELD REP.		PROJECT MANAGER	
Name:		Name:	
email:		email:	

Inspection and/or Testing responsibilities are indicated on the attached list Structural & Special Inspections Schedule, Form HECO-6b. Copies of all test data and reports shall be provided to the A/E of Record and to the University's Project Manager on a timely basis. The Contractor shall be notified of all deficiencies and discrepancies in a timely manner so that corrective action can be taken.

PROFESSIONAL OVERSIGHT AND CERTIFICATION

STRUCTURAL ENGINEER OF RECORD		A/E of RECORD		SMOKE CONTROL RDP	
Name:		Name:		Name:	
Address:		Address:		Address:	
City/St/Zip		City/St/Zip		City/St/Zip	
Phone:		Phone:		Phone:	
(Signature)	*(Date)*	*(Signature)*	*(Date)*	*(Signature)*	*(Date)*

CODE OFFICIAL'S ACCEPTANCE

Approved: This form is approved by the University Building Official upon acceptance and permitting of the project plans and specifications.

Comments:

Original to:

Copies to:

Attachment(s): HECO-6b List of Special Inspections
Certifications

Licenses

2018 USBC SPECIAL INSPECTIONS

HECO-6b

Project Title:	
Project Number:	

MATERIAL/ ACTIVITY	TYPE OF INSPECTION (A/E add lines as needed to identify other required items)	REQ'D THIS PROJ ?	REFERENCE	INSPECTION / TEST BY *				
				OWNER'S TEST LAB	A/E OF RECORD	SMOKE CONTROL	CFR/PM	CONTRACTOR / SUPPLIER
FOUNDATIONS								
Soil	Classify & Test Existing Soils & Fill Materials		Specs, 1705.6 Geotech Report	X (Periodic)				
Soil	Compaction Of Fill Materials		Specs, 1705.6, Geotech Report	X				
Soil	Bearing At Bottom Of Footing Excavations		Specs, 1705.6, Geotech Report	X (Periodic)				
Piles	Driving Records, Tip & Cutoff Elevations		1705.7, 1705.9, Geotech Report	X	4			
Piles	Load Test		1705.7, Geotech Report	X	4			
Caissons	Drilling, Size, Bearing Conditions, Materials		1705.8, 1705.3, Geotech Report	X				
CONCRETE CONSTRUCTION								
Concrete	Ready-Mix Plant Quality Control		Specs, 1704.2.5		2			X, 1
Concrete	Mix Design Tests And Certificates		Specs, 1705.3		X			X, 1
Reinf. Steel	Shop Drawings Of Reinforcing Steel		Specs		X			
Reinf. Steel	Placement Of Reinforcing Steel		1705.3	X (Periodic)	X (Periodic)		X	
Reinf. Steel	Welding		1705.2.2	X (Periodic)	2			X,1
Reinf. Steel	Special Construction		1704.5.7		2			
Formwork	Shape, Location, Dimensions		1705.3	X (Periodic)			X	X
Formwork	Removal and Reshoring		1705.3	X (Periodic)				
Concrete	Test Cylinders & Strength Test		1705.3, 1910.10	X	4			
Concrete	Mix Proportions & Mix On Delivery Tickets		1705.3				X (Periodic)	
Concrete	Slump Test		1705.3	X	4		X	
Concrete	Placement Procedures		1705.3	X	X (Periodic)		X (Periodic)	
Concrete	Curing Temperatures & Techniques		1705.3	X			X	
Prestressed	Prestressing Procedures & Forces		1705.3	X	2			X,1
Prestressed	Shop Drawings Of Prestressed Units		Specs		X			
Precast	Quality Control Of Manufacturer		1704.2.5		2			X, 1
Precast	Shop Drawings Of Precast		Specs		X			
Precast	Erection Of Precast		1705.3	X (Periodic)	X (Periodic)		X	X
Precast	Inspection Of Connections		1705.3	X (Periodic)				
Shotcrete	Reinforcing Steel-Test Panel		1908.5, 1705.3	X	4			
Anchors	Anchors Cast In Concrete		Specs, 1705.2.1, 1909	X (Periodic)				

2018 USBC SPECIAL INSPECTIONS

HECO-6b

Project Title:	
Project Number:	

MATERIAL/ ACTIVITY	TYPE OF INSPECTION (A/E add lines as needed to identify other required items)	REQ'D THIS PROJ ?	REFERENCE	INSPECTION / TEST BY *				
				OWNER'S TEST LAB	A/E OF RECORD	SMOKE CONTROL	CFR/PM	CONTRACTOR / SUPPLIER
MASONRY CONSTRUCTION								
Quality Assurance	Indicate Quality Assurance Level (A, B or C)		ACI 530, 1.19.1, 2, 3		X			
Clay Masonry	Certificates, Tests & Technical Data		ACI 530, Table 1.19.1	X (Periodic)	X			3
Concrete Masonry	Certificates, Tests & Technical Data		ACI 530, Table 1.19.1	X (Periodic)	X			3
Reinf. Steel	Shop Drawings		Specs		X			
Reinf. Steel	Size, Grade, Type, Location, Spacing Of Reinf Steel		ACI 530, Table 1.19.1	X (Periodic)				
Anchors	Manufacturer's Data		ACI 530, Table 1.19.1	X (Periodic)	X			3
Accessories	Manufacturer's Data		Specs		X			3
Mortar & Grout	Mix Design And Data		Specs		X			3
Mortar & Grout	Field Samples		ACI 530, Table 1.19.1	X (Periodic)	4			
Masonry Strength	Masonry Strength Verified		ACI 530.1	X	2, 4			
Masonry	Placement Of Units, Mortar & Accessories		ACI 530, Table 1.19.2	X (Periodic)				
Masonry	Protection Of Masonry Work		ACI 530, Table 1.19.2	X (Periodic)				
Anchorage	Placement Of Devices		ACI 530, Table 1.19.2	X (Periodic)				
Risk Cat. IV	A/E Shall edit list as required by ACI 530		Tables 1.19.2, 1.19.3		X			
STEEL CONSTRUCTION								
Fabricator	Quality Control Inspection Of Shop		1704.2.5		2			X, 1
Fasteners	Manufacturer's Certificate Of Compliance		AISC 360-10		2			3
Struct. Steel	Manufacturer's Certificate Of Compliance		AISC 360-10		2			3
Weld Matl's	Manufacturer's Certificate Of Compliance		AISC 360-10		2			3
Metal Decking	Welding to Supports		1705.2.2	X (Periodic)				
Metal Decking	Manufacturer's Certificate Of Compliance		1705.2.2		2			3
Joist	Manufacturer's Certificate Of Compliance		1704.5.5		2			3
Joist	Open Web Steel Joists-End Connections and Bridging		1705.2.3	X (Periodic)				
Details	Shop Drawings Review		Specs		X			
Erection	Installation Of High-Strength Bolts		AISC 360-10	X (Periodic)				
Erection	Welding		AISC 360-10	X (Periodic)				
Erection	Steel Framing And Connections		AISC 360-10	X (Periodic)	X (Periodic)		X	

2018 USBC SPECIAL INSPECTIONS

HECO-6b

Project Title:	
Project Number:	

MATERIAL/ ACTIVITY	TYPE OF INSPECTION (A/E add lines as needed to identify other required items)	REQ'D THIS PROJ ?	REFERENCE	INSPECTION / TEST BY *				
				OWNER'S TEST LAB	A/E OF RECORD	SMOKE CONTROL	CFR/PM	CONTRACTOR / SUPPLIER
SEISMIC FORCE RESISTANCE INSPECTIONS (as required by VUSBC 1705.11)								
	(Note: SDC refers to Seismic Design Category.)							
Structural Steel	Welding and Bolting		1705.12.1	X (Periodic)				
Wood	Field Glueing		1705.12.2	X				
Wood	Fastening Of Seismic Force Resistance System		1705.12.2	X (Periodic)			X	
Light Gage Steel	Fastening		1705.12.3	X (Periodic)			X	
Components	Mechanical & Electrical - Anchorage and Labeling (SDC = C)		1705.12.4, 1705.12.6	X (Periodic)				
Components	Architectural - Cladding, Veneer, Non-Bearing Walls (SDC = D)		1705.12.5	X (Periodic)				
Components	Access Floors (SDC = D)		1705.12.5.1	X (Periodic)				
Components	Storage Racks (SDC = D)		1705.12.7	X (Periodic)				
SEISMIC RESISTANCE TESTING (as required by VUSBC 1705.13)								
Structural Steel	Steel Systems and Elements		1705.13.1, AISC 341					
Non-Structural	Components-Mfr's Certificate of Compliance		1705.13.2		2			3
Non-Structural	Designated Systems-Certificate of Compliance		1705.13.3		2			3
Structural	Isolation Systems		1705.13.4	X				
WOOD & LIGHT GAGE STEEL CONSTRUCTION								
Fabrication	Quality Control Inspection Of Shop		1704.2.5		2			X, 1
Wood	Grade Stamp		Specs, 1703.5		X (Periodic)		X	
Wood/ Light Gage	Fastening Per Code And Drawings		1705.2.2, 1705.5.1		X (Periodic)		X	
Trusses	Shop Drawings		Specs		X			
Trusses	Truss Placement, Bracing and Fastening & Anchorage		Specs, 1705.2.4, 1705.5.2		X (Periodic)		X	
Laminates	Shop Drawings		Specs		X			
Laminates	Identification Per Shop Drawings		Specs		X (Periodic)		X	
Sheathing	Grade Stamp, Thickness & Fastening		Specs, 1705.5.1	X	X (Periodic)		X	

2018 USBC SPECIAL INSPECTIONS

HECO-6b

Project Title:	
Project Number:	

MATERIAL/ ACTIVITY	TYPE OF INSPECTION (A/E add lines as needed to identify other required items)	REQ'D THIS PROJ ?	REFERENCE	INSPECTION / TEST BY *				
				OWNER'S TEST LAB	A/E OF RECORD	SMOKE CONTROL	CFR/PM	CONTRACTOR / SUPPLIER
FIREPROOFING								
Spray-on	Manufacturer's Data		Specs		X			3
Spray-on	Surface Conditions		1705.14.2	X				
Spray-on	Application		1705.14.3	X				3
Spray-on	Thickness		1705.14.4	X				
Spray-on	Density		1705.14.5	X				
Spray-on	Bond Strength		1705.14.6	X				
Mastic/ Intumescent	Fire-Resistant Coatings - Materials, Application		1705.15	X	X (Periodic)		X	3
GWB Fireproof	Manufacturer's Data		Specs		X			3
GWB Fireproof	Placement Of Materials		Specs		X (Periodic)		X	
Fire Wall Assembly	Manufacturer's Data		Specs, 706.2		X			3
Fire Wall Assembly	Placement Of Materials		Specs, 706.2		X (Periodic)		X	
EXTERIOR INSULATION & FINISH SYSTEMS (EIFS)								
Materials	Manufacturer's Data		Specs		X			3
Preparation	Condition Of Substrate		Specs, 1705.16.1		X (Periodic)		X	
Application	Methods, Proportions & Thickness Of Installation		Specs, 1705.16.1	X (Periodic)	X (Periodic)		X	
SMOKE CONTROL (see note 5)								
Ducts	Device Location And Air Duct Leakage		1705.18.1			X		
System	Pressure Difference, Flow Measurements & Detection Testing		1705.18.1			X		
Controls	Activation Sequence		1705.18.1			X		
STRUCTURAL OBSERVATIONS (see note 7)								
Struct. Observations	As determined in written statement by structural observer		Specs, 1704.6	Structural observation does not include or waive the responsibilit\ lor the inspections in VCC Section 110 or the special inspections in Section 1705 listed above.				

2018 USBC SPECIAL INSPECTIONS

HECO-6b

Project Title:	
Project Number:	

NOTES:

1. Fabricator, supplier, ready-mixed plant or other production plant shall provide certificates from an approved independent inspection, testing or quality assurance agency attesting that the plant meets at least one of the following criteria:
   a. The plant is a certified production plant meeting the quality assurance standards of a recognized national standards organization for that product.
   b. The plant maintains an agreement with an independent inspection or quality assurance agency to conduct periodic in-plant quality assurance inspections. The frequency of these inspections shall not be less than one every six months.
   c. The plant has an in-shop quality assurance inspection program by an independent testing or quality assurance agency for the work/ product to be provided on this project.
2. A/E shall review fabricator/ supplier/ producer certificates for conformance with appropriate standards of practice and quality assurance.
3. Contractor/ supplier shall submit manufacturer's certificates of compliance for the materials/ products.
4. Reviews records and test results for conformance with requirements.
5. Special Inspection firm shall have expertise in fire protection engineering, mechanical engineering, and certification as an air balancer. The special inspector listed on the cover page and the Agency are responsible for verifying that the inspector(s) for smoke control is qualified as required by USBC 1705.18.2.
6. Unless noted otherwise, the reference numbers listed refer to the 2018 USBC.

7. The Owner's structural observer shall submit a written statement to OUBO identifying the frequency and extent of structural observations

Appendix C: HECO-6c Statement of Contractor's Responsibility

Office of University Building Official
4400 University Drive, MS 1E4; Fairfax, VA 22030
Telephone: (703) 993-6070

HECO-6c

Statement of Contractor's Responsibility

Project Number: _____
Project Title: _____
Building Number: _____

Contractor Name: _____
Contractor License Number: _____

Seismic – Special Inspections required by Section 1704.3.2 of the 2018 USBC

☐ Special Inspections for Seismic Resistance are not required for this Project.

☐ Special Inspections for Seismic Resistance are required. In accordance with USBC 1704.4, the Contractor is aware of the special requirements contained in the Statement of Special Inspections.

Submitted by:

_____ _____
Contractor Signature *Date*

_____
Printed Name / Title

Approved by:

_____ _____
A/E Signature *Date*

_____
Name / Title

_____
Firm Name

AFFIX SEAL, SIGNATURE, & DATE

(Send copy of approved document to the Office of University Building Official)

Appendix D: HECO-13.1b Final Report of Structural and Special Inspection

FINAL REPORT OF STRUCTURAL AND SPECIAL INSPECTIONS

HECO-13.1b

DATE: _____

PROJECT TITLE: _____

PROJECT NUMBER: _____

A/E OF RECORD: _____

A/E FIRM OF RECORD: _____

VA BUSINESS LICENSE: _____

To the best of my information, knowledge, and belief, the Structural & Special Inspections required for this project, and itemized on the Form HECO-6b, Special Inspections listing attached to the FORM HECO-6a, Statement of Structural and Special Inspections, submitted for permit, have been completed.

The discrepancies that remain outstanding since the last interim report, dated _____, have been corrected or resolved as noted in the attached pages.

Respectfully submitted,

STRUCTURAL ENGINEER OF RECORD	**A/E of RECORD**	**SMOKE CONTROL RDP**
Signature: _____	Signature: _____	Signature: _____
Date:	Date:	Date:
AFFIX SEAL, SIGNATURE, & DATE	AFFIX SEAL, SIGNATURE, & DATE	AFFIX SEAL, SIGNATURE, & DATE

CONSTRUCTION FIELD REPRESENTATIVE (CFR)	**UNIVERSITY PROJECT MANAGER**
Signature: _____	Signature: _____
Date: _____	Date: _____