MONTGOMERY COUNTY, MARYLAND

Department of Permitting Services
Division of Commercial Building Construction

2425 Reedie Drive, Wheaton, Maryland 20902

SPECIAL INSPECTIONS PROGRAM

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CHAPTER 1
ADMINISTRATION

1.1 INTRODUCTION

The purpose of this document is to define the Montgomery County's Special Inspection Program (SIP) procedures as required by, and in accordance with, the Montgomery County Code and the 2021 International Building Code (IBC).

1.2 STRUCTURES AND BUILDING ELEMENTS SUBJECT TO SPECIAL INSPECTIONS

The SIP shall apply to newly constructed building elements and modifications to existing building elements, newly constructed and modifications to foundation elements, and element fabrication procedures that are subject to special inspections as required by the IBC and the County requirements. Special inspections are required for:

- Structural steel construction in accordance with IBC 1705.2.1, the quality assurance inspection requirements of AISC 360 and this manual.
- Cold-formed steel deck in accordance with IBC 1705.2.2
- Open-web steel joists and joist girders in accordance with IBC 1705.2.3.
- Cold-formed steel trusses spanning 60 feet or greater in accordance with IBC 1705.2.4.
- Concrete construction in accordance with IBC 1705.3 and this manual.
- Precast concrete construction in accordance with IBC 1705.3 and this manual.
- Masonry construction in accordance with IBC 1705.4, the quality assurance program requirements of TMS 402 and TMS 602 and this manual.
- Wood construction in accordance with IBC 1705.5 and this manual.
- Mass timber construction per IBC 1705.5.3.
- Soils inspection and testing services in accordance with IBC 1705.6 and this manual.
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- Testing for smoke control in accordance with IBC 1705.19 and this manual.
- Sealing of mass timber in accordance with IBC 1705.20.

Montgomery County also requires special inspections for:

- sheeting and shoring,
- underpinning,
- curtain wall installation,
- façade installation or repair,
- parking structures repairs,
- ground/soil improvements,
- Cold-formed steel framing supporting gravity, wind and lateral loads,
- earth retaining structures (retaining walls over 7’ in retained height or of unusual design),
- soil nailing, drilled piers, or other permanent slope stabilization means, etc.

Special inspections and tests in accordance with IBC 1705.1.1 shall also be required for proposed work that is, in the opinion of the building official, 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 this code.
- Unusual design applications of materials described in the code.
- Materials and systems required to be installed in accordance with additional manufacturer's instructions that prescribe requirements not contained in this code or in standards referenced by this code.

Exceptions:

1. Special inspections and tests are not required for construction of a minor nature or as warranted by conditions in the jurisdiction as approved by the building official.
2. Special inspections and tests are not required for portions of structures designed and constructed in accordance with the cold-formed steel light-frame construction provisions of IBC Section 2211.1 or the conventional light-frame construction provisions of IBC Section 2308.
3. Unless otherwise required by the building official, special inspections are not required for Group U occupancies that are accessory to a residential occupancy including, but not limited to, those listed in IBC section 312.1.
4. Unless otherwise determined by the building official, special inspections are not required for building of Type V construction except as indicated in this Manual.

1.3 OTHER INSPECTIONS

For projects that are subject to **Special Inspections, Risk Category III Buildings** with an occupant load greater than 300 and **All Risk Category IV Buildings**, the following additional inspections shall be conducted by approved third party registered design professionals.

- Architectural inspections – See Section 1.7.6 of this Manual.
- Mechanical inspections – See Section 1.7.5a of this Manual.
- Green Building and Energy Inspections – See Section 1.7.5a(n) of this Manual. (For general submittal and inspection requirements see Chapter 6.)
- Solar Panel Inspections – Third party inspection of solar panel attachment to the structure

Exception: Unless otherwise determined in this manual or by the building official, these additional inspections are not required for buildings of **Type III, IV and V** construction except:

1. Multifamily and other structures of types III, IV and V construction (except townhomes) over three stories above podium level or grade plane.
2. Risk Category III buildings and other structures of types III, IV and V construction whose primary occupancy is public assembly with an occupant load greater than 300.
3. All Risk Category IV Buildings.

1.4 PERMIT REQUIREMENTS

A valid commercial building permit shall be obtained prior to start of the work.
See Chapter 4 for additional permit requirements and guidelines.

1.5 STATEMENT OF SPECIAL INSPECTION

Owners of buildings and structures subject to special inspections shall submit, as part of the permit application, a Statement of Special Inspections (SSI). The SSI shall identify the name(s) of the Special Inspector (SI) and the inspection and testing agency retained by the owner to provide special inspection and testing services. This statement shall include a complete list of materials and work requiring special inspections and the inspections to be performed as per IBC Section 1704.3.1.

1.6 FEES AND COSTS

Fees and costs associated with the performance of special inspections shall be borne by the owner. Contractors are not permitted to hire engineers, architects and laboratories associated with special inspections as per IBC Section 1703.1.1.

1.7 PRIMARY RESPONSIBILITIES

The following are general responsibilities of the principal parties to the construction project that are affected by special inspections. This list is not intended to be all-inclusive. Additional responsibilities may be assigned by the owner or the County to the parties identified below and others.

1.7.1 Owner (Owners' Representatives)

- Shall submit permit applications that include a complete Statement of Special Inspections (SSI).
- Shall retain all professionals involved in the process of special inspection including the Inspecting Architect and the Special Inspector (SI).
- Shall retain the services of a qualified professional to monitor all adjacent structures and public ways, for horizontal and vertical movement caused by excavation due to new construction.
- Shall retain the services of a registered design professional to perform Structural Observations (the visual observation of representative locations of the structural systems, details and load paths by a registered design professional for general conformance to the approved construction documents), when one or more of the conditions of IBC Section 1704.6.1 exist:
    1. The structure is classified as Risk Category III or IV.
    2. The structure is a high-rise building.
    3. The structure is assigned to Seismic Design Category E, and is greater than two stories above the grade plane.
    4. Such observation is required by the registered design professional responsible for the structural design.
    5. Such observation is specifically required by the County.
    Note: Structural Observation does not include or waive the responsibility for the inspections in IBC Section 110 or the special inspections in IBC Section 1705 or other sections of IBC and this Manual. (Ref. IBC Section 1704.6).
- Shall submit time schedules, upon request.
- Shall schedule a pre-construction meeting with the county prior to permit issuance.
- Shall notify the County when project begins.
- Shall oversee the design and construction and permitting for the project to ensure that the project is in compliance with approved construction documents.
- Shall notify the County if there is a change in the design team and reasons for the change.
- Shall assure prompt distribution of inspection activity reports.
- Shall submit all proposed field changes of Structural, Architectural, Electrical & Mechanical systems to the respective project professional of record for review and approval, prior to commencement of the work. A copy of the professional's approved or prepared revisions must also be submitted to the

SI and the County. A formal revision shall be filed with the County for significant changes or when required by the County prior to commencement of the work.

- Shall submit Reports and Certificates to the County for each of the following, as applicable: (Reference IBC Section 1704.5):
  1. Certificates of Compliance for the fabrication of structural, load-bearing or lateral load-resisting members or assemblies on the premises of a registered and approved fabricator as per IBC Section 1704.2.5.1.
  2. Certificates of Compliance for the seismic qualification of nonstructural components, supports and attachments in accordance with IBC Section 1705.14.2.
  3. Certificates of Compliance for designated seismic systems in accordance with IBC Section 1705.14.3
  4. Certificates of Compliance for open web steel joists and joist girders in accordance with IBC Section 2207.5.
  5. Reports of preconstruction tests for shotcrete in accordance with ACI 318.
  6. Reports of material properties (carbon equivalence) verifying compliance with the requirements of AWS D1.4 for weldability as specified in Section 26.6.4 of ACI 318 for reinforcing bars in concrete complying with a standard other than ASTM A 706 that are to be welded.
  7. Reports of mill tests in accordance with Section 20.2.2.5 of ACI 318 for reinforcing bars complying with ASTM A 615 and used to resist earthquake-induced flexural or axial forces in the special moment frames, special structural walls or coupling beams connecting special structural walls of seismic force-resisting systems in structures assigned to Seismic Design Category B, C, D, E, or F.

1.7.2 Special Inspector (SI) (also applies to Testing Agent, TA)

- Shall be retained by the Owner.
- Shall be a qualified person who shall demonstrate competence, to the satisfaction of County officials, for the inspection of the particular type of construction or operation requiring special inspection. The Special Inspector shall provide written documentation to the County officials demonstrating his or her competence and relevant experience or training. Experience or training shall be considered relevant where the documented experience or training is related in complexity to the same type of special inspection or testing activities for projects of similar complexity and material qualities.
- Shall provide construction inspection and testing services of required scope and frequency to offer a professional opinion that the constructed project was built in accordance with the County-approved construction documents, and that construction has been tested and inspected in accordance with the SSI and applicable codes and standards.
- Shall work with the owner and in concert with other members of the design team to develop the statement of special inspections.
- Shall verify that all fabricators of structural elements comply with applicable quality assurance programs. (SI only.)

The SI shall provide special inspections as indicated below:

A. Sheeting and Shoring (a.k.a. Support of Excavation, SOE)

All sheeting and shoring shall be designed by a structural engineer licensed in the State of Maryland. Designs shall be submitted to the Structural Engineer of Record (SER) for review and approval for conformance to the building design. The registered design professional shall develop a comprehensive inspection list based on the specific needs of the project design, subject to approval by the SER and include it in the SSI. Any changes in design or inspection procedure shall be submitted to the County prior to commencement of construction.

Inspection tasks for Sheeting and Shoring components include but are not limited to:

I. **Pile/Soldier Beam Installation**
   a. Inspect all types of sheeting and shoring installation.
   b. Inspect the drilling and backfilling.
   c. Inspect the pile size and location as well as plumbness.
   d. Inspect and record pile tip elevation.

II. **Lagging**
   a. Inspect lagging for size, location, and condition.

III. **Tieback / Soil Nail Installation**
   a. Inspect tieback / soil nail installation to verify size, anchor length, number of strands, nail size and coating, elevation, and angle of installation as applicable.
   b. Inspect grouting of tiebacks / soil nails and take samples as needed.
   c. Inspect the length of bonded zone.

IV. **Rock Bolts**
   a. Inspect location, size, and bonded length.

V. **Tieback / Soil Nail Testing**
   a. Ensure that all hydraulic jacks are used to perform anchor tensioning have current calibration and that the gauge is calibrated to appropriate increments.
   b. Periodically inspect the contractor's proof test or performance test tieback / soil nail.
   c. Periodically verify that the lock off loads are consistent with approved plans and specifications.
   d. Review all contractor's data with regard to installation and testing of the tieback anchors / soil nails.

VI. **Monitoring.**
   a. Monitoring of the system and adjacent structures for horizontal and vertical movement (see IBC Section 3307.2.2 and SOE design general notes).

B. Underpinning

All underpinning shall be designed by a structural engineer licensed in the State of Maryland. Designs shall be submitted to the SER for review and approval for conformance to the building design prior to submitting for underpinning permit. The registered design professional shall develop a comprehensive inspection list based on the specific needs of the project design, subject to approval by the SER. The inspection procedure shall be included in the SSI and any changes in design or inspection procedure shall be submitted to the County prior to the commencement of construction.

C. Soils and Foundation System Inspection and Testing Services

I. **Soils** (Also see SSI**)**
   a. Inspect proof-rolling and delineate unsuitable materials within areas proposed for support of structural fill, ground slabs and pavement areas.
   b. Conduct laboratory tests on samples of proposed fill materials.
   c. Inspect placement of engineered fill and backfill materials.
   d. Conduct field density tests on placed compacted fill.
   e. State that fill placement was performed in accordance with approved construction documents.
   f. At least one soil technician shall be present full-time during compaction of structural fill material.

g. At least one soil technician shall be present full-time during the application of soil strengthening methods such as Dynamic Compaction, Rammed Aggregate Piers etc. (See Ground Improvements Section)

II. **Foundations – Footings, Foundation Walls and Mat Foundations** (Also see SSI)

a. Conduct foundation excavation inspection and testing to determine adequate bearing.
b. Conduct inspection and testing to determine adequate reinforcement (see Concrete section).
c. State that in his/her professional opinion the footings are bearing on subgrades capable of supporting the design loads.
d. Conduct inspection of below-grade foundation walls and retaining walls for conformance to the County approved construction documents.
e. Conduct Inspections of waterproofing per IBC Section 1805.

III. **Driven Deep Foundation Elements** (Also see SSI & Chapter 3 of this manual)

a. Inspect test pile driving and record data. The data is to include type and size of hammer, the rate of penetration, and the type and dimensions of casings.
b. Inspect load tests on test piles and record data to determine if tests were performed in accordance with project specifications.
c. Analyze load test data and provide driving criteria, including revised estimated pile tip elevations at test boring locations.
d. Inspect pile driving and keep a record of each pile driven containing specifications of pile hammer used, pile dimensions, tip and cut-off elevation of piles, blow count for pile as specified, plumbness of pile, and as-built location obtained from contractor's survey, and other pertinent information pertaining to the pile and it's driving.
e. Ascertain that piles do not exceed driving tolerances as to location, plumbness, and batter angle.
f. State that in his/her professional opinion all piles were driven and developed bearing capacity in accordance with specifications.

IV. **Cast-In-Place Deep Foundations** (Also see SSI)

a. Inspect the drilling of the caissons to assure sufficient penetration of transition material to develop design side wall skin friction and/or end bearing as required.
b. Ascertain that caissons are not placed beyond established tolerances for plumbness.
c. Inspect and approve caissons prior to placement of concrete only after the approved criteria have been met.
d. Inspect rebar and concrete placement.
e. State that the caissons have been placed in accordance with plans and specifications.

V. **Ground Improvements (Aggregate Piers (AP), Rigid Inclusions (RI), Dynamic Compaction, etc.)**

Ground Improvement Structural Engineer of Record (GI-SER) to develop a comprehensive inspection list based on the specific needs of the project design, subject to approval of the SER/GER to include, but not limited to the following inspections as applicable to the ground improvement type:

1. Continuous inspection of Element Verification/ Modulus test(s) prior to production elements to confirm the design and set forth the installation criteria.

2. Continuous inspection of production elements to verify compliance with the ground improvement design including but not limited to:
   a. inspection of subsurface materials (drill logs) and ground water conditions
   b. inspection of element materials compliance, top and invert elevations, diameters, horizontal location, and conformance to installation procedures as appropriate to the design and submittals.
   c. inspection and recordation of production element depths. May include use, but not sole reliance on Measurement-While-Drilling/ Installing (MWDI) technology to or other reliable method(s) to measure and record installation depths.
3. Perform postproduction element inspections as appropriate including but not limited to:
   a. damage during footing excavations,
   b. compaction of top of element and subgrades,
   c. verification of "No Dig Zone" or Limits of disturbance compliance,
   d. ponding water conditions, etc.

VI. **Other Inspections.**

The building official is authorized to require **other inspections** of any construction work to ascertain compliance with the provisions of this code and other laws that are enforced by the County This includes inspections specified in IBC Sections110.3.1 through 110.3.9 (when not designated to be performed by the County Building Inspector). The designer(s) of record shall specify OTHER inspections to be performed by special inspectors that are not captured elsewhere on the Statement of Special Inspections.

VII. **Records and Certification**

Upon completion of the geotechnical engineering services provide a certified document stating that to the best of his/her knowledge and in his/her opinion the construction of soils and foundations has been completed in accordance with the requirements of the project plans and specifications and the Montgomery County Building Code.

D. Structural Inspection and Testing Services

I. **Structural Steel Structures**

(Special inspections for structural steel shall be in accordance with the quality assurance inspection requirements of AISC 360, Chapter N and this manual. See SSI)

a. Check setting of anchor bolts and base plates.
b. Determine that members are properly placed and that member sizes and locations are in accordance with approved plans.
c. Check field welder's qualifications by examining their certificates.
d. Inspect erected members for proper workmanship and to determine that members are plumb and level.
e. Inspect shop and field connections for proper workmanship.
f. Inspect and test welds and connectors as required by project specifications.
g. Test any shop weld that appears questionable.
h. Inspect connections to frame (such as welded connections, mechanical connections, etc.)
i. Inspect sprayed-on fireproofing.
j. Inspect shear studs.
k. Inspect steel deck to ensure that it is properly placed, connected and that it is sized and located in accordance with approved plans.

l. Inspect steel joist and joist girders to ensure that they are properly placed and that they are sized and located in accordance with approved plans.
m. Inspect end anchorage, bridging connection. Make sure bridging is installed at appropriate time in erection sequence.

II. **Concrete Structures**

(Also see SSI for required inspections and tests of concrete construction)

a. Formwork and Reinforcing
   1. Inspect formwork, shoring, and reinforcing prior to placing concrete.
   2. Authorize in writing the stripping of formwork and re-shoring prior to removal of these materials only after the criteria approved by SER have been met.
b. Batching – Ready Mix
   1. Inspect batching tickets and delivery operations for compliance with the project specifications.
c. Compression Tests
   1. Label each compression cylinder, and record the date, concrete source (the ready-mix truck load of concrete/or specified bag mix) from which sample was taken, design strength, and note the exact location in construction where deposited.
   2. Take samples for strength tests in accordance with ASTM C172. Mold and standard and field-cured cylinders for strength tests in accordance with ASTM C31 and test cylinders in accordance with ASTM C39. (Per ACI 318, section 26.12.1.1, strength tests shall be the average of the strengths of at least two 6 by 12-inch cylinders or at least three 4 by 8-inch cylinders made from the same sample of concrete tested at 28 days or at test age designated for determination of the compressive strength.)
   3. Field-cured cylinders shall be used to evaluate strengths of concrete prior to removal of concrete formwork and shoring/reshoring, prior to stressing post-tensioning tendons, and to determine adequacy of curing and protection of concrete during cold weather. Field-cured cylinders must be stored as closely as possible to the location of placement of the concrete pour they represent and be exposed as nearly as possible to the same temperature and moisture environment, in accordance with ASTM C 31.
d. Cold/Hot Weather Considerations:
   1. Inspect and document compliance with ACI 306-R10, Cold Weather Concreting
   2. Inspect and document compliance with ACI 305R-20, Guide to Hot Weather Concreting
   3. The special inspector shall record ambient air temperature at regular time intervals during cold weather and hot weather periods. Temperature readings shall be taken using tamper-resistant devices. Periodic readings of temperatures are required to verify adequacy of protection methods.
e. Connections
   1. Inspect all connections between precast concrete and cast-in-place concrete.
   2. Inspect anchor bolts, plates, etc. installed in the concrete.

III. **Concrete Repair & Restoration**

a. Refer to Concrete Section above for general requirements.
b. Batching – Bag Mix
   1. Confirm design mix and verify specified water volume addition and mixing per manufacturer's written instructions.
   2. Perform concrete sampling for strength tests at frequency specified by the SER.
   3. Weather-exposed balcony and walking surface waterproofing per IBC Section 110.3.7.

IV. **Post-Tension Concrete Structures**

a. Inspect formwork, tendons and reinforcing prior to placing of concrete.
b. Inspect all placing of concrete.
c. Inspect all tensioning and keep elongation records.
d. Grant permission to contractor prior to all burning, cutting or capping of prestressing anchorage only after the criteria approved by SER have been met.
e. Perform testing of concrete as for cast-in-place concrete except as modified in the specifications for post-tensioning structure.

IV. **Precast Concrete Structures**

a. Shall provide inspection of fabrication process. The requirements of IBC Section 1704.2.5.1 may apply subject to County approval. See section 3.1.4 of this manual.
b. Shall provide full-time construction inspection of the erection process in accordance with the erection plans and the construction sequence.
c. Shall notify appropriate design professionals of record and the County if inspection and/or test results do not meet the requirements of the County-approved construction documents.
d. Shall ensure that all required approvals are obtained prior to inspection, approval and continuation of construction.
e. Shall submit a final report of special inspections.
f. See Chapter 3 of this manual for additional requirements.

V. **Structural Masonry Structures**

(Special Inspections and tests for masonry construction shall be performed in accordance with TMS 402 and TMS 602 quality assurance program requirements and this manual. See SSI)

a. Inspect placing of masonry units.
b. Inspect placement of reinforcing.
c. Inspect placement of grout/mortar.
d. Conduct prism tests per contract documents

VI. **Wood Structures**

a. Inspect high-load diaphragms as per IBC Section 1705.5.1.
b. Inspect metal-plate-connected trusses as per IBC Section 1705.5.2.
c. Inspect mass-timber elements as per IBC Table 1705.5.3.
d. Inspect load bearing walls as per SSI.
e. Inspect wood columns as per SSI.
f. Inspect balcony framing as per SSI.
g. Inspect shear wall systems as per SSI.
h. Inspect roof framing as per SSI.
i. Inspect steel framing as per SSI.
j. Inspect floor trusses as per SSI.
k. Sealing of mass timber per IBC 1705.20.

VII. **Retaining Walls**

Special Inspections and tests for retaining wall construction shall be performed at minimum for the following activities as applicable to the project scope:

a. Inspect soils and compaction at base of wall and behind wall.
b. Inspect placement of base course/foundation
c. Inspect placement of reinforcement media (i.e. steel reinforcement, geogrid, etc.).
d. Inspect placement of drainage system.
e. Inspect placement of Modular Units.
f. Inspect placement of guard/fence foundations/anchors.
g. Inspect guard architectural requirements per IBC Section 1015.2.
h. Conduct concrete sampling and strength tests per contract documents.
i. Other inspections as required by the SER.

VIII. **Cold-Formed Steel Light-Frame Construction.**

Framing inspections of gravity and lateral load resisting light gage framing per IBC 2211.1 and AISI S240-20 Chapter D, as amended by the county.

a. Primary Structural Framing
    1. Floor and roof systems
    2. Structural walls
    3. Shear walls, strap-braced walls and diaphragms that resist in-place lateral loads
    4. Trusses
b. Secondary Framing used to laterally support the façade and for the floor layout.
    1. Member sizes, spacing, and connections to main structure.
    2. Member grade.
    3. Blocking/bracing.
    4. Fasteners type and fastening patterns.
    5. Specialized connections: bolted or welded.
    6. Sheathing type and fastening.

E. Records and Final Reports

I. Shall submit signed and sealed inspection reports to the County within **five** working days after the completion of the inspection.

II. Upon completion of the entire project or phase of the building/structure, the inspection/testing agency shall provide a Final Report of Special Inspections/Testing. See SI/TA Final Report(s) of Special Inspection/Testing templates.

1.7.3 Structural Engineer of Record (SER)

- Shall be retained by the Owner.
- Shall have the ultimate responsibility for **all** structural elements of the building.
- Shall review and approve structural shop drawings including all connections.
- Shall review and approve structural members and connections designed and/or fabricated by the steel fabricator.
- Shall review and approve concrete, mortar and grout mix designs.
- Shall review and approve formwork design and criteria for removal of the formwork.
- Shall review and approve the sheeting and shoring drawings, prior to County review, for general conformance and compatibility to the design of the structure.

- Shall review and approve all deferred submittals for general conformance and compatibility to the design of the structure.
- Shall review construction inspection and testing reports/records provided by the Special Inspector (SI) for conformance with the approved structural documents and the County Code and shall take appropriate action(s) as required.
- Shall review and confirm temporary and final vertical loads from the precast design calculations and erection drawings.
- Shall provide temporary and final support for gravity and lateral loads derived from the precast design at the base of the precast columns/walls.
- Shall provide temporary and final support of eccentric loads per the precast design.
- Shall review and approve precast erection drawings, including erection sequencing, bracing and grouting plans.
- Upon completion of the foundation/foundation-to-grade phase (if applicable) and/or superstructure phase, the SER shall provide a certificate of completion. See SER Certificate of Completion template.

1.7.3a Structural Observer (SO)

- Shall be retained by the Owner when one or more of the conditions of IBC Section 1704.6.1 exist:
  1. The structure is classified as Risk **Category III or IV**.
  2. The structure is a high-rise building.
  3. The structure is assigned to Seismic Design Category E, and is greater than two stories above the grade plane.
  4. Such observation is required by the registered design professional responsible for the structural design.
  5. Such observation is specifically required by the County.
- The Structural Observer (SO), if other than the Structural Engineer of Record (SER), shall be a registered design professional in Maryland, capable to perform the visual observation of the structural system for general conformance to the approved construction documents.
- Shall demonstrate competence to the satisfaction of County officials. Shall provide written documentation to the County demonstrating his/her experience and training. Experience shall be considered relevant where the documented experience is related in complexity to the same type of projects of similar complexity and material qualities.
- The Structural Observer shall include in the SSI the type, frequency and extent of structural observations.
- Submit reports to the GC, SI for corrections and inspections.

At the conclusion of the work included in the permit**,** the Structural Observer shall submit to the County a written statement that the site Structural Observations have been made and identify any reported deficiencies that, to the best of the Structural Observer's knowledge, have been resolved (IBC Section 1704.6).

1.7.4 Geotechnical Engineer of Record (GER)

- Shall be retained by the Owner.
- Shall prepare and issue geotechnical report of subsoil evaluation.
- Shall prepare design criteria for foundations and foundation systems.
- Shall review sheeting and shoring drawings and ground improvement design drawings prior to County review and shall submit a signed and sealed letter to the County verifying the soil properties by the engineer responsible for the designs of the support of excavation and ground improvements.
- Shall revise geotechnical recommendations and submit to the County if site soil or groundwater conditions differ materially from conditions indicated on the approved geotechnical report and

coordinate changes with the design professionals of record responsible for the structural design of foundations, deep foundations, or other types of foundation systems as well as for sheeting and shoring and ground improvements(Note: A formal revision for changes shall be filed for DPS review and approval.)

- Shall review and approve deep foundation and ground improvement Element Verification/ Modulus Load test(s) procedures and test results.
- **Upon completion of the geotechnical phase of the building/structure, the GER shall provide a certificate of completion.** See GER Certificate of Completion template.

1.7.4a Geotechnical Inspector of Record (GI)

- Shall be retained by the Owner.
- The Geotechnical Inspector (GI), if other than the Geotechnical Engineer of Record (GER), shall be a Professional Engineer registered in Maryland and shall demonstrate competence to the satisfaction of County officials. Shall provide written documentation to the County demonstrating his/ her experience and training. Experience shall be considered relevant where the documented experience is related in complexity to the same projects of similar complexity and material qualities.
- Shall perform and document all soils, foundation system, and ground improvement inspections and testing for conformance to the installation procedures as appropriate to the design.
- Upon completion of the geotechnical phase of the building/structure, the GI shall provide a Final Report of Geotechnical Inspections. See GI Final Report template.

1.7.5 Mechanical Engineer of Record (MER)

- Shall be retained by the Owner.
- Shall have the ultimate responsibility for **all** Mechanical elements and systems of the building.
- Shall review and approve Mechanical shop drawings.
- Shall review Mechanical inspection and testing reports/records provided by the Mechanical Inspector (MI) and by the commissioning agent(s) for conformance with the approved Mechanical and proposed Green and Energy Code Compliance documents and the County Code and shall take appropriate action(s) as required.

Upon completion of the mechanical inspections scope for the entire project or by phase, the MER shall provide a Certificate of Completion. See MER Certificate of Completion template.

1.7.5a Mechanical Inspector of Record (MI)

- Shall be retained by the Owner.
- The Mechanical Inspector (MI), if other than the Mechanical Engineer of Record (MER), shall *be a Mechanical Engineer* registered in Maryland and shall demonstrate competence to the satisfaction of County officials. Shall provide written documentation to the County demonstrating his/ her experience and training. Experience shall be considered relevant where the documented experience is related in complexity to the same projects of similar complexity and material qualities.
- Shall provide periodic inspections for compliance with the International Mechanical Code with local amendments, applicable NFPA standards and conformity with the County approved construction documents before the concealment of any mechanical components as described, but not limited to:
    a. Light testing, insulation, support and clean out location for grease duct systems
    b. Pressure testing of ductwork and various piping systems
    c. Piping and duct supports and insulation
    d. Fuel tank and piping pressure testing and verification of proper UL listing
    e. Inspection and testing for seismic resistance as per IBC sections 1705.13 and 1705.14

f. Appliance location, protection, anchorage and supports
g. Proper protection of penetrations of fire rated building components. Appropriate protection of fire rated shaft penetrations
h. Commercial and domestic dryer exhaust ducts and makeup air for dryer systems consistent with the manufacturers' installation instructions and the IMC
i. Emergency Standby Generators shall be installed and inspected per the IBC, IMC and NFPA 110
j. Hazardous exhaust systems shall be installed and inspected per the IMC and NFPA 45
k. Refrigeration systems and machinery rooms shall be installed and inspected in accordance with IBC and IMC
l. Boilers and pressure vessels with a combined BTU rating of 350 mbh or more shall be state inspected and certified
m. General conformance to the County approved construction documents
n. Compliance with the Montgomery County Energy Code regarding mechanical systems efficiencies, insulation, economizers and controls
o. Shall witness and approve the stair pressurization tests and other smoke management systems

Upon completion of the mechanical work for the entire project or by phase, the Mechanical Inspector shall provide a Final Report. See MI Final Report Certificate template.

1.7.6 Architectural Inspector (AI)

- Shall be retained by the Owner.
- The Architectural Inspector, if other than the Architect of Record, shall be a registered architect in Maryland and shall demonstrate competence to the satisfaction of County officials.
- Shall provide written documentation to the County demonstrating his/her experience and training. Experience shall be considered relevant where the documented experience is related in complexity to the same projects of similar complexity and material qualities.
- Shall provide inspections as needed to ensure compliance with applicable code requirements such as:
    a. Means of egress.
    b. Construction type and fire-resistance rated construction.
    c. Architectural close-in inspections and authorization of work to proceed.
    d. Interior environments and energy code.
    e. Interior finish.
    f. Accessibility (COMAR 09.12.53). https://www.dllr.state.md.us/labor/build/buildaccess.shtml
    g. Sound transmission control.
    h. Building envelope as it relates to the thermal, water resistive barrier, air barrier, air leakage and fenestration provisions of the Montgomery County Energy Code.
    i. Other provisions of the building code applicable to the design and construction of the building that could deem the building in compliance with the County Building Code.
    j. Waterproofing and water resistive systems applications (IBC Section 110.3.7) as applicable.
    k. Exterior Insulation and Finish Systems (EIFS) in accordance with IBC Section 1705.17.
    l. Fire-resistant penetration firestop systems and fire-resistant joint systems in accordance with IBC Section 1705.18.

- Upon completion of the Architectural Inspections for the entire project or by phase, the Architectural Inspector shall provide a Final Report. See AI Final Report template.

1.7.7 General Contractor (GC)

- Shall have the ultimate responsibility for the construction.
- Shall provide the means, methods and materials and temporary shoring and support of construction.
- Shall coordinate construction and verify, as necessary, so that the building is capable of carrying construction loads.
- Shall take necessary action to assure a safe job site and meet OSHA, MOSHA, and other job site safety responsibilities.
- Shall submit construction documents to the County as identified at the preconstruction meeting.
- Shall notify the County and appropriate design professionals of record of construction schedules as identified at the preconstruction meeting.
- Shall schedule and coordinate that the required inspections are conducted and approved prior to proceeding with the work.
- Shall not conceal any work without prior approval of the inspecting professional.
- Shall ensure that all required approvals are obtained prior to continuation of construction.
- Shall provide temporary shoring and bracing as required to maintain stable structure during all stages of construction.
- Shall submit to the County the method of EIFS construction, if applicable, and the method of containing loose particles as a result of rasping.
- Shall submit all proposed field changes of Structural, Architectural, Electrical & Mechanical systems to the respective project professional of record for review and approval, prior to commencement of the work.
- Upon completion of the construction and inspections for the entire project or by phase, the General Contractor shall provide a Certificate of Completion. See GC Certificate of Completion template.

1.8 PRECONSTRUCTION MEETING

A pre-construction meeting is required for every project that is assigned a Complex Structures Review and whose elements are subject to special inspections approval as a condition of permit issuance. The meeting shall take place after plans have been reviewed by the County but prior to the issuance of the building permit. The meeting is held virtually with the required participants.

The scope and qualifications of the Special Inspectors and Testing Agency are revisited by the County building official(s) at the preconstruction meeting, and subsequently approved for issuance of the permit.

1.8.1 Participants

The following members of the construction team or their duly authorized representative shall participate in pre-reconstruction meetings, as required by project scope:

- Owner (IBC Section 202).
- Structural Engineer of Record (SER).
- Sheeting and Shoring Engineer of Record (SOEER), as required.
- Mechanical Engineer of Record (MER), as required.
- Special Inspector of Record (SI)
- Testing Agent of Record (TA), if other than SI, as required.
- General Contractor (GC).
- County Building Official(s).
- Geotechnical Inspector of Record (GI) as required.
- Architectural Inspector of Record (AI), as required.
- Structural Observer (SO), as required.

- Mechanical Inspector of Record (MI), as required.
- Other Professionals in charge of design of specialty structural elements, as required.
- Other Professionals in charge of fabricated building elements, as required.
- Other Professionals in charge of specialized inspections/testing services, as required.

1.8.2 Purpose

The purpose of the preconstruction meeting is to review the special inspection requirements of the project and establish communications among the project team members. Prior to the pre-construction meeting the Owner shall submit a Statement of Special Inspections (SSI), special inspection service contracts, and qualifications of Inspectors of Record and assigned project staff. The respective parties to the SSI shall agree on the scope of inspection in order to obtain the County's approval. .

At a minimum, the following shall be discussed at the pre-construction meeting:

a. **Project Construction Requirements:** Project construction requirements of the Montgomery County Special Inspections Program (SIP), including construction methods, site safety and fire hazard prevention during the construction process.

b. **Statement of Special Inspections (SSI):** The scope of special inspections for the project.

c. **Qualifications**: Qualifications of proposed inspection professionals and testing agencies, including evidence of laboratory accreditation and technician certification from recognized authorities subject to the approval of the County.

d. **Responsibilities:** The roles and responsibilities of each party.

e. **Communication:** Communication channels between the County and owner's representatives and members of the design and construction teams.

f. **Phased Construction:** Requirements for phasing of permits, certificates of completion and occupancy requirements.

g. **Revision:** Requirements for submissions to the county of revisions to construction documents. **See Section 1.15.**

h. **Site Logistics:** Requirements for tower crane erection and overhead protection of pedestrians, and temporary office trailers.

1.9 REPORTS AND COMMUNICATION FLOW

The project inspectors of record shall keep records of inspections. The inspectors shall furnish inspection reports as required by the SSI and this manual to the building official, to the owner or owner's designee and to the registered design professionals as appropriate. Discrepancies shall be brought to the immediate attention of the contractor for correction. If the discrepancies are not corrected, the discrepancies shall be brought to the attention of the building official and to the registered design professional of record, prior to the completion of that phase of the work. A final report of inspections documenting required special inspections and correction of any discrepancies noted in the inspections shall be submitted.

Any deviation from the approved construction documents must be brought to the immediate attention of the registered design professional of record and to the County. See Section 1.15.

The project inspectors of record shall provide reports of special inspections signed and sealed by the Professional in Charge as identified in the SSI and this Special Inspections document within **5** business days. Generated Deficiency Reports shall also be submitted within five business days. All reports shall be transmitted via email or other approved method to the assigned County Building Official.

1.10 DEFICIENCY REPORTS

Deficiency (non-compliance) reports shall describe the nature and specific location of the deficiency and include a description of the action recommended by the appropriate professional in charge. Each deficiency item, by discipline, shall be sequentially numbered and tracked until it is resolved.
See Chapter 5 for "Partial Final" Inspection approvals when phased occupancy is intended but there remain non-life safety deficiencies in construction.

1.11 FINAL INSPECTION REPORTS

Upon completion of the specified inspections and testing, the SI, GI, AI, MI, TA, and other design professional(s) of record providing special inspections and testing services shall submit a final report of special inspections (or certificate of completion respectively) to the County, owner and others designated by the owner. Reports shall indicate that work inspected was done in conformance to approved construction documents.
Submit Final Reports / Certificates of Completion as outlined in respective templates in Chapter 5 of this manual.

1.12 PERSONNEL QUALIFICATIONS

In accordance with the provisions of the IBC, except for registered design professionals, field personnel shall be certified by examination through ICC, ACI, AWS, ASNT, NICET, WACEL or other organizations whose programs are recognized by the County. Inspection and Testing Agency personnel shall perform only those services in which they have demonstrated competency through such a recognized certification or registration program. See Chapter 6 for qualifications checklist of project designated field personnel.

1.12.1 Unusual Functions

In the event there is no certification program applicable to a specific function, the SI shall submit, to County, a signed statement attesting to the competency of personnel and identifying the basis upon which such statement is made.

1.12.2 Laboratory Qualifications

Laboratory facilities must be accredited by an agency such as A2LA, NVLAP, WACEL or other organizations whose programs are recognized by the County. All laboratory facilities must meet the requirements of ASTM E329, ASTM D3740, and ASTM C1077 as applicable. The SI shall accredit on-site laboratory facilities in accordance with ASTM E329.

1.12.3 Resumes

The special inspectors shall submit resumes and documentation, for approval by the county, of inspection and testing personnel and laboratories prior to the pre-construction meeting.

1.12.4 Fabricator Approval

Special Inspections of structural, load-bearing or lateral load-resisting members or assemblies being conducted on the premises of a fabricator's shop shall be performed in accordance with IBC Section 1704.2.5 and 1704.2.5.1 (as amended by the County). Special inspections during fabrication are not required

where the work is done on the premises of a fabricator approved to perform such work without special inspection. Approval shall be based on review of the fabricator's written fabrication procedures and quality control manuals that provide a basis for control of materials and workmanship, with periodic auditing of fabrication and quality control practices by an approved agency or the building official. Submit fabricator accreditations and procedures and quality control documentation to the County upon request for review and approval prior to commencement of fabrication.

At completion of fabrication, the approved fab-ricator shall submit a certificate of compliance to the owner or the owner's authorized agent for submittal to the building official as specified in Section 1704.5 stating that the work was performed in accordance with the approved construction documents. See Approved Fabricator Certificate of Compliance template.

When no fabricator accreditation documentation is available or it is required by the County, the Special Inspector shall be engaged to perform inspections at the fabricator's shop in conformance with applicable codes and standards. □
Upon completion of the fabrication process the special inspector (SI) shall provide a certified document stating that to the best of his/her knowledge and in his/her opinion the fabrication of the structural load-bearing or lateral load-resisting members or assemblies being conducted on the premises of the fabricator's shop have been completed in accordance with the requirements of the project plans and specifications and the Montgomery County building code.

1.13 CHANGES IN SPECIAL INSPECTIONS TEAM

In the event that the design professionals or inspection and testing agencies of record need to be changed during the course of the project, the owner shall notify the County. The County shall approve or deny such replacement. The owner shall provide to the County a written explanation as to the reason for such change; shall identify the replacement organization or individual with whom he has contracted; shall furnish the documentation necessary to show such organization or individual is qualified for the work as required herein, and shall provide a revised inspection agreement signed by the new party. The County shall stop work if, in the County's opinion, work otherwise would proceed without adequate inspection, and shall authorize a recommencement of work only at such time as it is satisfied that the integrity of the inspection can be assured.

1.14 OBLIGATIONS OF PARTIES TO THE CONSTRUCTION

The organizations and individuals performing inspections are responsible for the adequacy of their work. In addition, any conditions which they believe are **not justifiable or outside the scope of this program or SSI agreement** shall be reported to the owner, general contractor, and the code official.

1.15 MODIFICATION TO APPROVED DRAWINGS

All individuals involved with this program in a construction inspection capacity or in the design of the project are charged with the responsibility to report to the County representative any error, omission, inconsistency or ambiguity in the approved plans. Appropriate revisions shall be developed. When the changes are in the opinion of the appropriate County representative, substantial enough to so warrant, such revisions shall be submitted to the County for review and approval. Otherwise, a statement of revision shall be submitted to the County by the architect or engineer of record prior to commencement of work.

1.16 DETECTION OF CRITICAL PROBLEMS

Any individual involved in the inspection function who detects a condition which in his or her opinion justifies a stop-work proceeding or other remedial measure, shall so notify the supervisor of the function in question. If the supervisor is not present, or if the supervisor is unable or unwilling to take what is deemed to be appropriate corrective measures, the person detecting the condition in question shall directly contact the County Building Official.

1.17 STATEMENT OF SPECIAL INSPECTIONS (SSI)

For projects that are subject to the **Special Inspections** Program, the Permit applicant shall submit a Statement of Special Inspections prepared by the qualified design professional in responsible charge review and approval prior to permit issuance. This statement shall include a complete list of materials requiring special inspections, the inspections to be performed and a list of the individuals, approved agencies and firms intended to be retained for conducting such inspections.

The model statement can be used "as is," but is designed with the flexibility to be modified to meet the unique requirements of a specific project.

The completed Statement of Special Inspections shall be submitted with plans and specifications (when required) as part of the permit application process, or upon request.

The Schedule of Special Inspections identifies the scope of inspection and testing services, following IBC Section 1705 requirements. Where special inspection or structural testing is required for seismic resistance as per IBC sections 1705.13 and 1705.14 respectively, the Statement of Special Inspections shall identify the designated seismic systems and seismic-force resisting systems that are subject to special inspections. Each contractor responsible for the construction of a seismic-force-resisting system, designated seismic system or a seismic force-resisting component listed in the statement of special inspections shall submit a written statement of responsibility to the County and the owner prior to the commencement of work on the system or component. The contractor's statement of responsibility shall contain acknowledgement of awareness of the special requirements contained in the Statement of Special Inspection, as per IBC Section 1704.4.

The qualifications of the Special Inspections Professional of Record and/or the Inspections and Testing Agency Engineer of Record will be reviewed and approved by the County as part of the permitting process.

1.18 FINAL REPORTS AND CERTIFICATES OF COMPLETION/COMPLIANCE

The Final Reports of Special Inspections, Architectural Inspections, Mechanical Inspections, etc. and the Certificates of Completion and Compliance shall be completed and submitted to the County after the special inspections/testing specified for the project have been completed for the entire project or by phase. Additional guidance and Templates of Final Inspection Reports, Certificates of Completion and Certificates of Compliance are found in Chapter 5.

CHAPTER 2
DEFINITIONS

The following words and terms shall, for the purposes of this manual and the County's Special Inspections Program have the meaning delineated below.

Architect of Record (AR): The Registered Design Professional retained by the owner to design and specify architectural construction and whose signature and seal appears on the County-approved architectural construction documents.

Certification: A statement of professional opinion by a registered design professional that indicates that the item(s) under consideration meet the requirement of the County-approved construction documents and this manual. Certifications shall bear the original seal and signature of the design professional making the statement.

Certificate of Compliance: A certificate stating that materials and products meet specified standards or that work was done in compliance with approved construction documents.

Certificate of Completion: A certification stating that the construction elements specified for special or other inspections have been completed and inspected and conform to the County-approved plans, specifications and this manual.

Construction Documents: Plans and specifications and other documents prepared for the purposes of obtaining a building permit.

County-Approved Documents: Construction documents approved by Montgomery County Building Official.

Fabrication and Erection Documents: Written, graphic and pictorial documents prepared or assembled after issuance of a building permit describing the design, location and physical characteristics of building components or materials necessary for fabrication, assembly or erection of project elements.

Final Report of Special Inspections: A certification by the inspector of record (i.e. SI, AI, MI & GI) indicating that specified inspections are completed and meet the requirements of the County-approved construction documents, project SSI, project specifications and this manual.

Inspection: The continuous or periodic (intermittent) inspection of executed work and the performance of tests for certain building or structural components to establish conformance with county-approved construction documents, project specifications, the building code, as outlined in the approved Statement of Special Inspections.

Inspection and Testing Agency: Agency or agencies retained by the Owner and approved by the County to perform special inspections and materials testing as required by IBC and the County. Contractors are barred from retaining the services of inspection and testing agencies for Special Inspections.

Mechanical Engineer of Record (MER): The registered mechanical engineer retained by the owner to have ultimate responsibility to design or specify mechanical systems and specifications.

Mechanical Inspector (MI): The registered mechanical engineer retained by the owner to provide inspection and testing of mechanical equipment and components during construction.

Non-Structural Elements: Elements of a building that are not primary or secondary structural elements such as exterior curtain walls and cladding, non-load-bearing partitions, stair railings, etc.

Owner: Owner or owners of the freehold premises or lesser estate therein, a mortgagee or vendee in possession, assignee of rents, receiver, executor, trustee, or lessee in control of a building/structure to be constructed/altered or the owner's duly authorized representative.

Special Inspector (SI): The registered design professional retained by the owner to provide special inspections and material testing services as specified by appropriate design professionals of record and approved by the County. The SI maybe an agent of - or independent of - the Inspection and Testing agency, the project's SER, or the Mechanical Engineer of Record.

Statement of Special Inspections (SSI): A statement prepared by the appropriate registered design professionals in responsible charge and submitted by the permit applicant for review and approval by the County. The SSI indicates the scope of special inspections applicable to a construction project and identifies the names and qualifications of the design professionals and inspection and testing agencies that will provide those services.

Structural Engineer of Record (SER): The registered structural engineer retained by the owner to have ultimate responsibility to design or specify structural documents and specifications.

Structural Observer (SO): The registered design professional retained by the owner to perform visual observation of the structural system for general conformance to the approved construction documents.

CHAPTER 3
ADDITIONAL REQUIREMENTS

3.1 PRECAST CONCRETE

This section delineates the responsibility of individuals in charge of design, fabrication, erection, structural support, and handling of precast concrete building elements and its associated material testing and handling.

3.1.1 Project A/E Team

Project A/E team shall issue specific precast specifications including, but not limited to, erection methods, tolerances and final tolerances and appropriate safety regulations.

3.1.2 Precast Erector

The precast erector shall perform or obtain a pre-erection survey of all bearing surfaces and embedded hardware in the cast-in-place concrete construction intended for the support or connection of the precast concrete. Any deviation from the precast drawings shall be coordinated with both the precast engineer and the structural engineer of record.

3.1.3 Precast Engineer

The Precast Engineer is the registered design professional in charge of precast design and fabrication and shall be responsible for and shall provide the following services:

- Prior to erection of any precast pieces, precast engineer must arrange a preconstruction meeting with owner, SER, GC, precast supplier, inspectors, and erector's foreman. The topics of this meeting are to include on the safety, alignment issues, crane operation, and any other item that SER requires to be discussed. Minutes of this meeting including a signature sheet of attendees with the date and location of the meeting must be recorded and submitted to the County prior to start of erection of precast elements. The preconstruction meeting requirements apply to both Structural and Architectural precast.

- Submit to the Structural Engineer of Record (SER) for review and approval the following:
  - Detailed signed and sealed erection and temporary bracing/shoring plan that indicates overall sequence and specific localized erection procedures. It must indicate when and at what stages temporary bracing is to be installed. It must indicate precisely what connections are required and when, what length and size of weld, etc.
  - Detailed piece drawings of every fabricated piece.
  - Provide specifications indicating erection and fabrication tolerances. Specify in advance of the erection what is "in tolerance" and what would be "out of tolerance". Specification must also indicate what is acceptable and what is not.
  - Complete design calculations - all elevations.
  - Confirm detailing and manufacturing of elements per design calculations.
  - Signed and sealed drawings showing **erection sequence**, **bracing and grouting sequence and timing plan** for the precast elements of the entire building.
  - Provide all connection details with a numbered sequence and indicate the required percentage of completion of each connection at any stage of the erection.
  - Prepare signed and sealed sketches and obtain approval from the SER, for all field modifications prior to field installation.

- Upon completion of the work, the Precast Engineer of Record shall provide a professional opinion that to the best of his/her knowledge, information and belief, the work has been constructed in accordance with approved plans, specifications and the Building Code of Montgomery County and the SSI. See PC-SER certificate of completion template.

3.1.4 Structural Precast Inspections (See SSI)

The erection process must be conducted under the full-time observation of the Special Inspector. Daily reports must be furnished by the Special Inspector. The inspection and inspection reports must address the items identified in the ***erection, bracing and grouting sequence and timing plan*** and the following:

Columns – erection and final
- Plumbness
- Grout under and above base plates in daps
- Grout at column splices
- Bolts, dowels, grout and installation

Light walls – erection and final
- Plumbness
- Grout

Spandrel Connections – erection and final
- Bolts
- Grout

Inverted tee beams – erection and final
- Lengths
- Connections
- Grout

Tees – Welds – erection and final
- To tees
- To walls

3.1.5 Fabricator Approval

- The fabricator shall submit the dates and the number of pours to the inspection agency prior to fabrication of the precast elements.
- A minimum of 20% of each type of fabricated pieces shall be inspected by the inspection agency.
- The special inspector (SI) shall be present at the first cast of each type of fabricated piece to check mold dimensions, plate locations, reinforcing etc. prior to pouring concrete.
- Other inspection tasks shall include checking concrete mix, placement procedures, molding concrete cylinders for testing, stressing operations, record keeping and inspection of finishes.
- Periodic unannounced inspections are also required.
- Upon completion of the fabrication process the special inspector (SI) shall provide a certified document stating that to the best of his/her knowledge and in his/her opinion the fabrication of the precast elements has been completed in accordance with the requirements of the project plans and specifications and the Montgomery County building code.

3.1.6 Requirements for Architectural Precast (See SSI)

- Fabricator qualifications shall be submitted to the County for Approval (see Section 1.12.4).
- The precast engineer of record shall submit the erection sequence to the SER for approval.
- Architectural Precast Inspections
  - Survey and inspection of the locations and hardware of all bearing and lateral connections.
  - Inspection of all bolted and welded connections.
  - Inspection for damages to precast elements prior to installation.
  - Inspection of erection of all precast elements per the approved precast plans and erection sequence.
  - Final inspection of all installed precast elements.

3.1.7 Operational Maintenance

- The owner shall engage a structural engineering firm to develop a maintenance schedule, inspect the parking garage bi-annually and recommend structural repairs, as required. The structural engineer's reports shall be kept at the property manager's office always and shall be submitted to the County upon request.

3.2 DRIVEN PILES

This section delineates the responsibility of individuals in charge of design and installation of driven piles and for monitoring of generated excessive sound and vibrations.

3.2.1 Owner Responsibilities

Shall obtain outside agency approvals including:

- Obtain Department of Environment (DEP) noise waiver [note: pile driving operations to be limited from 8am to 5pm].
- Obtain Washington Gas & WSSC pre-approval letter for vibrations effects on infrastructures within proximity of SOE.
- Contract with noise and vibration monitoring agencies for respective services
- Letter by the Geotechnical Engineer of Record indicating the safe distance of vibratory equipment from existing structures based on tests performed at the site to determine the peak soil particle velocity and tolerable vibration limits for the adjacent structures.

3.2.2 Contractor/Owner - Joint Responsibilities

- Demonstrate Compliance with Sections 404 of MDOT SSCM for vibrations monitoring of existing structures including submittal of:
  - Perform Pre-construction Survey
  - Plan for Construction Vibration Surveillance.
  - Provide Qualifications of the project "Seismologist"-an approved, experienced professional specializing in monitoring and registering of vibrations in adjacent and nearby structures due to any damaging effects of any construction activity operations.
  - Provide Qualifications of the project "Building Inspector" -an approved professional engineer registered in Maryland who is experienced in the field of building inspection surveys.
- Include the following in the SSI:
  - List Vibration Surveillance scope items, frequency and responsible agent in the "Other" section.
  - Identify the "Building Inspector" in the Other Inspectors Section(s).

3.2.3 "Seismologist" and "Building Inspector"

- Shall demonstrate competence to the satisfaction of County officials. Shall provide written documentation to the County demonstrating his/ her experience and training. Experience shall be considered relevant where the documented experience is related in complexity to the same projects of similar complexity and material qualities.
- Perform routine monitoring for vibrations at designated locations as per the Plan for Construction Vibration Surveillance and SSI.
- Submit Inspections/Monitoring reports at the frequency specified in the SSI.

CHAPTER 4
PERMITTING REQUIREMENTS

4.0 PERMITS

It is unlawful to construct, enlarge, alter, remove or to demolish/relocate a building or structure or to change the use thereof without first filing an application with the department in writing and obtaining the required permit therefor; except, that ordinary repairs as defined in Section 8-3 of the Montgomery County Code.

A. A separate permit is required for each legal address. And a separate permit is required for each separate building at a legal address.
B. A separate building permit is required for the following independent or delegated designs:
   a. Support of Excavation systems, Underpinning, Deep Foundations (micro piles, helical pile, etc.); Retaining Walls; Soil Improvements (dynamic compaction, aggregate piers etc.); and other proposed structural system installation as specifically determined by the County for the project.
C. Construction Cost Document:
   a. For any permit where the permit fee is based on the cost of construction, applicants are required to provide documentation evidencing the cost of construction i.e. a cost document. Cost of construction includes all trade work, labor, materials, and equipment associated with the project. Approval of the cost document and collection of fees is a prerequisite of permit issuance.
   b. A final cost document shall be submitted by the owner/applicant for all "Complex Structures" projects subject to repair and rehabilitation. The final cost document will be compared with the pre-permit issuance cost document, and any fees due based on project overage shall be collected prior to permit close out.
   https://www.montgomerycountymd.gov/DPS/Resources/Files/COMBUILD/COMBUILDBIDDOC.pdf

4.1 STRUCTURAL ENGINEER OF RECORD (SER)

Montgomery County accepts only one professional in responsible charge per discipline per permit. All related structural drawings and analysis shall be signed and sealed by the permit's designated Structural Engineer of Record (SER). Drawings of building components, not designed by the SER, shall be reviewed and approved by the SER (via shop drawing approval stamp) for conformance to the design of the building prior to submittal to the County for permit, review or record. (IBC Section 107.3.4.1.)

4.2 DESIGN PARAMETERS

COMMERCIAL CONSTRUCTION DESIGN PARAMETERS IBC 2021 (as amended by the County)							
Ground Snow Load (psf)	Risk Category	Basic Design Wind Speed (mph)	Allowable Stress Design Wind Speed (mph)	Mapped Spectral Response Accelerations Expressed as a Percentage of Gravity		Weathering	Frost Depth (in)
				Ss	S1		
30	I	105	82	15	4.3	Severe	30
	II	115	89				
	III	120	93				
	IV	125	97				

4.3 TOWER CRANES

A Commercial Building Permit for the Tower Crane installation is required when the tower crane foundation is placed outside of the property boundaries. Otherwise, the Tower Crane submittal can be filed under the buildings Commercial Building Permit at permit application or after permit issuance. Any proposed alterations/combinations of the building foundation and/or alterations to elevated structural elements to support or accommodate the tower crane will require a formal revision to the respective Building Permit.

Refer to the Tower Crane Requirements and Tower Crane Safety Agreement for complete submittal and inspection requirements.

4.4 CERTIFICATES OF OCCUPANCY

For new buildings and additions, it is unlawful for any person to use or occupy a building erected in whole or in part until the associated certificate of use and occupancy (U&O) is issued. Upon completion of the work, obtaining final inspection approvals, submission of required certificates of completion and payment of associated fees and taxes the County may issue the use & occupancy certificate for a building or structure or part thereof (i.e. phased occupancy) before the entire work covered by the permit is completed if that such portion or portions may be occupied safely before full completion of the building without endangering life or property.

4.4.1 PHASED OCCUPANCY

Phased occupancy is available for new construction and addition projects when the following requirements are met:

1. There is a Core & Shell U&O application for the entire IBC designated building and there are additional U&O's applications per area of desired phased occupancy.
2. The building permit(s) includes an approved phasing plan(s) for the building, life safety, and fire-protection systems or approval is sought after permit issuance via filing of a formal Revision. The phasing plan is to be coordinated with each U&O permit application and account for:
   a. compliant means of egress; and
   b. proper separations between construction and occupied areas.
3. Phased Occupancy area approvals are contingent on Core &Shell U&O approval. This means that the entire building shall have:
   a. Installed, operational & approved fire protection and fire alarm systems (i.e. they call out to central station).
   b. Approved building elements for fire safety and means of egress including corridor, stairwells, elevators, exit signage, door hardware, etc. and phased occupancy construction barriers.
   c. Compliance with Maryland accessibility requirements for the public and occupants.
   d. Approved electrical, green/energy, and project site inspections.
4. There is a buffer floor beneath and above any proposed occupied floor.
5. The project team coordinates with the County Building Official to perform a "final walk" to verify compliance for phased or final occupancy and approve the U&O(s).

4.4.2 CORE and SHELL

A core and shell occupancy permit is required when phased occupancy is intended. It captures the entire building's square footage on the application. Core & Shell functions as noted in 4.4.1.(3) shall be complete and approved, and the required "partial final" inspection reports and certificates of completion shall be submitted with the "core & shell" qualifier and respective U&O permit number listed.

4.5 WALKWAYS AND COVERED WALWAYS

Pedestrians shall be protected during excavation, construction, façade repair/remodeling, and demolition activities as required by Chapter 33 of the IBC. A walkway shall be provided for pedestrian travel that leads from a building entrance or exit of an occupied structure to a public way. A walkway shall be provided for pedestrian travel in front of every construction and demolition site unless Montgomery County Right of Way (ROW) authorizes the sidewalk to be fenced or closed. A combination of approved public way closures, directional barricades, dedicated walkways, construction railings, barriers and covered walkways shall be installed and maintained in place and kept in good order for the entire length of time pedestrians are subject to endangerment. Where safety or other conditions require overhead protection in the form of a covered walkway, the covered walkway must meet the general requirements for walkway width, floor and ADA accessibility set forth in COMCOR 49.11.01. The term covered walkway means a wood or metal scaffolding-type structure constructed to protect pedestrians and bicyclists adjacent to a construction work zone that involves overhead work.

Any construction in the right-of-way requires a Right-of-Way permit. When the building abutting the right-of- way is more than two stories tall and construction activities pose overhead hazards, a Building Permit is required for any proposed covered walkway that is an alternate design from the DPS Right of Way details (1 & 2). An Electrical Permit is required for installation of light fixtures when no existing compliant lighting source is present. The permitee is responsible for obtaining permits and scheduling inspections as required prior to use of the covered walkway, and after removal of the covered walkway. Permits are valid for one (1) year, after permit issuance. Reinspection of facilities may be required to approve permit extension requests.

4.6 WALL CHECK (MC Chapter 8-26(h) Compliance with location certificate.)

Before any above grade construction of a building, building addition or structure the owner of such building or structure shall provide the zoning division a location* plat, certified by a land surveyor entitled by law to practice property line surveying in the state; except, that a professional engineer entitled by law to practice in this state may provide such certification only where property lines and corners are already existing and determined on the ground. This plat shall be drawn accurately to an appropriate scale and shall show the actual location* of the building or structure walls with respect to property lines and existing buildings or structures on the same lot, parcel or tract. Inspection type 074 approval in the county's permit system shall constitute compliance with this requirement. See Chapter 6 for submittal contacts.

A wall check is also required for any miscellaneous structure, such as retaining walls, in proximity to a property line.

*When there is a certified site plan for the project, compliance with height requirements is also required. The submittal to the zoning division shall include the required height certification. Inspection type 032 approval in the county's permit system shall constitute compliance with this requirement.

4.7 CONSTRUCTION OFFICE TRAILERS

No commercial building permits are needed for industrialized buildings (trailers) 8 feet or less in width and 40 feet or less in length that is: 1) used for business purposes, mobile offices, or storage; and 2) not open to the general public. Only a Construction Trailer U&O Permit is needed and Electrical permit for electric service wiring and connections.

A commercial building permit is needed or any office trailer units greater than 8' x 40', ganged or stacked units, or units open to the general public. Site specific plans for on-site construction such as exterior stairs, ramps, decks, foundations and anchorage is required. Refer to Industrialized Modular Building Permit Requirements link and this QR code.

CHAPTER 5
PERMIT CLOSE-OUT CHECKLIST
&
FINAL INSPECTION REPORTS, CERTIFICATES of COMPLETION and CERTIFICATES OF COMPLIANCE

5.0 PERMIT CLOSE-OUT CHECKLIST

At substantial completion of the entire project or a phase of the building/structure the project lead shall prepare for "finalizing" (close-out) the project permit(s) or phase. This section summarizes requirements for successful final/phase close-out.

5.1 GENERAL CLOSE-OUT REQUIREMENTS

- ☐ Resolve any "Open" DPS trade permits.
- ☐ Apply for Use & Occupancy permit(s), number dependent on proposed uses and phasing. For Phased Occupancy of newly constructed buildings apply for Core & Shell U&O first and meet the requirements of Phased Occupancy in Chapter 4.
- ☐ Obtain all DPS trade permit final/phase inspection approvals as applicable (Electrical, Fire Alarm, Fire Protection, & Site).
- ☐ Obtain AI and MI final/phase inspection approvals (as applicable).
- ☐ Obtain WSSC permit final/phase inspection approval for gas, water and sewer (as applicable).
- ☐ Obtain MD State Elevator final/phase approvals (as applicable).
- ☐ Obtain Green Building/Energy final/phase inspection & commissioning approvals (as applicable to the project Mechanical scope).
- ☐ Obtain completed project specific certificates of completion and final reports, compile them in a single file and submit to the County for review and approval (see sample checklist below). Refer to the approved SSI and Pre-construction meeting notes for full list of required certificates.
- ☐ Schedule a Building final walk through with the County Building Official (the assigned complex structures specialist).

5.2 SAMPLE DOCUMENTATION CHECKLIST BY PROJECT TYPE

A. Retaining Walls

- ☐ Structural Engineer of Record (SER)
- ☐ Special Inspector (SI)
- ☐ Architectural Inspector (AI) – if separate from SI for inspection of architectural features.
- ☐ Geotechnical Inspector (GI)
- ☐ Testing Agency Engineer of Record (TA)
- ☐ General Contractor (GC)
- ☐ Wall Check (formal location survey, necessary if the said wall is in near a property line).

B Sheeting & Shoring / Support of Excavation (SOE)

- ☐ Structural Engineer of Record (SER) for the Support of Excavation (SOE)
- ☐ Special Inspector (SI)
- ☐ Geotechnical Inspector (GI)
- ☐ Testing Agency Engineer of Record (TA)
- ☐ General Contractor (GC)

.

C. Restoration/Repair of Concrete, Masonry or Steel Buildings/Structures

- ☐ Structural Engineer of Record (SER)
- ☐ Special Inspector (SI)
- ☐ Testing Agency Engineer of Record (TA)
- ☐ General Contractor (GC)
- ☐ Final project cost document (see General Contractor (GC)

D. New Building – Foundation-to-Grade (FTG) / Podium

- ☐ Architectural Inspector (AI) - for inspections listed in the SSI
- ☐ Structural Engineer of Record (SER)
- ☐ Special Inspector (SI)
- ☐ Geotechnical Inspector (GI)
- ☐ Testing Agency Engineer of Record (TA)
- ☐ Structural Observer (SO) – when required per Section 1.7.3a.
- ☐ General Contractor (GC) - SSI signatory or authorized representative
- ☐ Wall Check – to be completed and submitted for approval by the completion of the Ground Floor.

E. Construct New Building/Superstructure

- ☐ Architectural Inspector (AI) - for inspections listed in the SSI
- ☐ Architectural Inspector (AI) – Building Envelope - for inspections listed in the SSI
- ☐ Structural Observer (SO) - for observations listed in the SSI
- ☐ Structural Engineer of Record (SER)
- ☐ Mechanical Engineer of Record (MER)
- ☐ Mechanical Inspector (MI)
- ☐ Special Inspector (SI)
- ☐ Testing Agency Engineer of Record (TA)
- ☐ General Contractor (GC) – SSI signatory or authorized representative.
  Zoning/Site Approvals (as applicable)
- ☐ Wall Check – formal location survey to be completed and submit to Zoning for approval by the completion of the Ground Floor.
- ☐ Height Check – formal height survey to be completed and submit to Zoning for approval prior to “Final” inspection.
- ☐ Washington Suburban Sanitary Commission (WSSC) Final Approval
- ☐ State Elevator Inspection Certificate/s (minimal one elevator for public access)

5.3 FINAL INSPECTION REPORTS, CERTIFICATES of COMPLETION and CERTIFICATES OF COMPLIANCE

Upon completion of the entire project or phase of the building/structure, final reports documenting required special inspections and tests, and correction of any discrepancies noted in the inspections or tests, shall be submitted to the County. Required certificates of completion and compliance shall also be submitted as applicable to the permit scope.

A "Final" or "Partial Final" inspection approval in the County's permit system is required for the issuance of any Use and Occupancy certificate. See Chapter 4 for Use and Occupancy permit information.

- "**Partial Final**" Inspection Reports by the SI, TA, AI, MI and GC are allowed for the purpose of phased occupancy, when the requirements for phase occupancy are met (see Section 4.4.1) but there remain non-life safety deficiencies (non-compliance items) in construction. A separate deficiency list shall be submitted for each U&O approval. Non-compliance items shall be resolved in a timely manner. Non-resolved compliance list may result in revocation of the issued Use and Occupancy permit(s).

  Timeframe for resolution of the deficiency list.
  - Core & Shell U&O – 90 days or as directed by the building official.
  - Phased Occupancy Area U&O – 30 days or as direct by the building official.

- "**Final**" Inspection Reports shall be submitted to close out the permit(s) and issue use and occupancy permits upon completion of all non-compliant items in the deficiency list.

5.3.1 CERTIFICATE TEMPLATES

The following Final Inspection Reports, Certificates of Completion and Certificates of Compliance as applicable to the project scope shall be completed and submitted to the County Official as a compiled document for review and approval.

FINAL REPORT OF SPECIAL INSPECTIONS

Project Name: _____

Project Address: _____

Permit Number(s): _____

SPECIAL INSPECTOR (SI): _____

Company Name: _____

Company Address: _____

☐ FINAL REPORT

All deficiency items reported in the last interim report have been completed. To the best of my information, knowledge and belief, the special inspections specified for this project, itemized in the Statement of Special Inspections submitted for permit, have been completed.

☐ PARTIAL FINAL REPORT

All deficiency items reported in the last interim report have been completed. To the best of my information, knowledge and belief, the special inspections specified for this project, itemized in the Statement of Special Inspections submitted for permit, have been completed **with the exception of the items described in the attached non-compliance list. Upon completion of the non-compliance items on the list the Final Report shall be submitted.**

CERTIFICATION STATEMENT

In my professional opinion, building elements subject to special inspections have been found to comply with County-approved construction documents and project specifications.

Sincerely,

_____

Signature of Special Inspector of Record Date

_____

Seal

TESTING AGENCY FINAL REPORT

Project Name: _____

Project Address: _____

Permit Number(s): _____

TESTING AGENT (TA): _____

Company Name: _____

Company Address: _____

☐ FINAL REPORT

All deficiency items reported in the last interim report have been completed. To the best of my information, knowledge and belief, the special inspections and testing specified for this project, itemized in the Statement of Special Inspections submitted for permit, have been completed.

☐ PARTIAL FINAL REPORT

All deficiency items reported in the last interim report have been completed. To the best of my information, knowledge and belief, the special inspections and testing specified for this project, itemized in the Statement of Special Inspections submitted for permit, have been completed **with the exception of the items described in the attached non-compliance list. Upon completion of the non-compliance items on the list the Final Report shall be submitted.**

CERTIFICATION STATEMENT

In my professional opinion, building elements subject to special inspections have been found to comply with County-approved construction documents and project specifications.

Sincerely,

_____

Signature of Testing Agency Engineer of Record Date

_____

Seal

FINAL REPORT OF ARCHITECTURAL INSPECTIONS

Project Name: _____

Project Address: _____

Permit Number(s): _____

ARCHITECTURAL INSPECTOR OF RECORD (AI): _____

Company Name: _____

Company Address: _____

Architectural inspections as needed to ensure compliance with applicable code requirements such as:

a. Means of egress
b. Construction type & fire-rated construction
c. Architectural close-in inspections
d. Interior environments and energy code
e. Interior finish
f. Accessibility (COMAR 09.12.53)
g. Sound transmission control
h. Building envelope.
i. Other provisions of the code that will deem the building in conformance with the Building Code
j. Waterproofing and water resistive systems.
k. Exterior Insulation and Finish Systems (EIFS).
l. Fire-resistant penetration firestop systems and fire-resistant joint systems.

☐ FINAL REPORT

All deficiency items reported in the last interim report have been completed. To the best of my information, knowledge and belief, the architectural inspections required for the project have been completed.

☐ PARTIAL FINAL REPORT

All deficiency items reported in the last interim report have been completed. To the best of my information, knowledge and belief, the architectural inspections required for the project have been completed **with the exception of the items described in the attached non-compliance list. Upon completion of the non-compliance items on the list the Final Report shall be submitted.**

CERTIFICATION STATEMENT

In my professional opinion, building elements subject to architectural inspections have been found to be in compliance with County-approved construction documents and project specifications.

Sincerely,

_____

Signature of Architectural Inspector of Record Date

_____

Seal

CERTIFICATE OF COMPLETION
MECHANICAL ENGINEER OF RECORD

Project Name: _____

Project Address: _____

Permit Number(s): _____

Mechanical Permit Number(s) _____

MECHANICAL ENGINEER OF RECORD (MER): _____

Company Name: _____

Company Address: _____

CERTIFICATION STATEMENT

All deficiency items reported in the inspection reports have been corrected. To the best of my information, knowledge and belief, the mechanical inspections specified for this project have been completed. In my professional opinion, the mechanical systems for this structure is constructed in accordance with the approved construction documents and project specifications and is in compliance with County building codes and regulations.

Sincerely,

_____

Signature Date

_____

Seal

FINAL REPORT OF MECHANICAL INSPECTIONS

Project Name: _____

Project Address: _____

Permit Number(s): _____

Mechanical Permit Number(s) _____

MECHANICAL INSPECTOR OF RECORD (MI): _____

Company Name: _____

Company Address: _____

☐ FINAL REPORT

All deficiency items reported in the last interim report have been completed. To the best of my information, knowledge and belief, the mechanical inspections specified for this project, itemized in the Statement of Special Inspections submitted for permit, have been completed.

☐ PARTIAL FINAL REPORT

All deficiency items reported in the last interim report have been completed. To the best of my information, knowledge and belief, the mechanical inspections specified for this project, itemized in the Statement of Special Inspections submitted for permit, have been completed **with the exception of the items described in the attached non-compliance list. Upon completion of the non-compliance items on the list the Final Report shall be submitted.**

CERTIFICATION STATEMENT

In my professional opinion, building elements subject to mechanical inspections have been found to comply with County-approved construction documents and project specifications.

Sincerely,

_____

Signature of Mechanical Inspector of Record Date

_____

Seal

CERTIFICATE OF COMPLETION
STRUCTURAL ENGINEER OF RECORD

Project Name: _____

Project Address: _____

Permit Number(s): _____

STRUCTURAL ENGINEER OF RECORD (SER): _____

Company Name: _____

Company Address: _____

CERTIFICATION STATEMENT

All deficiency items reported in the inspection reports have been corrected. To the best of my information, knowledge and belief, the special inspections specified for this project have been completed. In my professional opinion, the structure is constructed in accordance with the approved construction documents and project specifications and is in compliance with County building codes and regulations.

Sincerely,

_____

Signature Date

_____

Seal

CERTIFICATE OF STRUCTURAL OBSERVATIONS

Project Name: _____

Project Address: _____

Permit Number(s): _____

STRUCTURAL OBSERVER (SO): _____

Company Name: _____

Company Address: _____

CERTIFICATION STATEMENT

The frequency and extent of structural observations at the project site, identified in my written statement submitted to the County prior to commencement of construction, have been made. To the best of my information, knowledge and belief, all deficiency items reported in my structural observation reports, have been corrected.

Sincerely,

_____

Signature Date

_____

Seal

FINAL REPORT OF SPECIAL INSPECTIONS FOR PRECAST FABRICATED ELEMENTS AT THE MANUFACTURER'S PLANT

Project Name: _____

Project Address: _____

Permit Number: _____

SPECIAL INSPECTOR (SI): _____

Company Name: _____

Company Address: _____

CERTIFICATION STATEMENT

All deficiency items reported in the last interim report(s) have been completed. To the best of my information, knowledge and belief, the special inspections required for this project at the manufacturer's plant, have been completed. In my professional opinion, the fabrication of precast elements has been completed in accordance with the requirements of the County approved construction documents and project specifications, the Montgomery County Special Inspections Program Manual and the Montgomery County Code.

Sincerely,

_____

Signature of Special Inspector Date

_____

Seal

CERTIFICATE OF COMPLIANCE
PRECAST MANUFACTURER

Project Name: _____

Project Address: _____

Permit Number: _____

PRECAST MANUFACTURER (Agent): _____

Company Name: _____

Company Address: _____

CERTIFICATION STATEMENT

All deficiency items reported in the inspection reports have been corrected. To the best of my information, knowledge and belief, the special inspections specified for this project have been completed and all precast elements have been manufactured in accordance with the approved construction documents and project specifications and are in compliance with County building codes and regulations.

Sincerely,

_____

Signature Date

CERTIFICATE OF COMPLETION
PRECAST ENGINEER OF RECORD

Project Name: _____

Project Address: _____

Permit Number: _____

PRECAST ENGINEER OF RECORD (PER): _____

Company Name: _____

Company Address: _____

CERTIFICATION STATEMENT

All deficiency items reported in the inspection reports have been corrected. In my professional opinion, the structure has been designed and constructed in accordance with the approved construction documents and project specifications and is in compliance with County building codes and regulations.

Sincerely,

_____

Signature Date

_____

Seal

CERTIFICATE OF COMPLETION
SUPPORT OF EXCAVATION ENGINEER OF RECORD

Project Name: _____

Project Address: _____

Permit Number: _____

SUPPORT OF EXCAVATION ENGINEER OF RECORD (SOER):_____

Company Name: _____

Company Address: _____

CERTIFICATION STATEMENT

All deficiency items reported in the inspection reports have been corrected. To the best of my information, knowledge and belief, the special inspections specified for this project have been completed. In my professional opinion, the sheeting and shoring is constructed in accordance with the approved construction documents and project specifications and is in compliance with County building codes and regulations.

Sincerely,

_____

Signature Date

_____

Seal

CERTIFICATE OF COMPLETION
GROUND IMPROVEMENT ENGINEER OF RECORD

Project Name: _____

Project Address: _____

Permit Number: _____

GROUND IMPROVEMENT ENGINEER OF RECORD: _____

Company Name: _____

Company Address: _____

CERTIFICATION STATEMENT

All deficiency items reported in the inspection reports have been corrected. To the best of my information, knowledge and belief, the geotechnical inspections specified for this project have been completed. In my professional opinion, the ground improvements were installed in accordance with the approved construction documents and project specifications and in compliance with County building codes and regulations.

Sincerely,

_____

Signature Date

_____

Seal

CERTIFICATE OF COMPLETION
GEOTECHNICAL ENGINEER OF RECORD

Project Name: _____

Project Address: _____

Permit Number(s): _____

GEOTECHNICAL ENGINEER OF RECORD (GER): _____

Company Name: _____

Company Address: _____

CERTIFICATION STATEMENT

All deficiency items reported in the inspection reports have been corrected. To the best of my information, knowledge and belief, the geotechnical inspections specified for this project have been completed. In my professional opinion, the soil and/or foundation system for this structure is constructed in accordance with the approved construction documents and project specifications and is in compliance with County building codes and regulations.

Sincerely,

_____

Signature Date

_____

Seal

FINAL REPORT OF GEOTECHNICAL INSPECTIONS

Project Name: _____

Project Address: _____

Permit Number: _____

GEOTECHNICAL INSPECTOR OF RECORD (GI): _____

Company Name: _____

Company Address: _____

CERTIFICATION STATEMENT

All deficiency items reported in the last interim report have been completed. To the best of my information, knowledge and belief, the special inspections specified for this project, itemized in the Statement of Special Inspections submitted for permit, have been completed. In my professional opinion, geotechnical systems subject to special inspections have been found to comply with County-approved construction documents and project specifications.

Sincerely,

_____

Signature Date

_____

Seal

CERTIFICATE OF COMPLIANCE
APPROVED FABRICATOR

Project Name: _____

Project Address: _____

Permit Number(s): _____

Load-bearing or lateral load-resisting members or assemblies:

_____

APPROVED FABRICATOR: _____

Company Name: _____

Company Address: _____

CERTIFICATION STATEMENT

To the best of my information, knowledge and belief, fabrication of the structural load-bearing or lateral load-resisting members or assemblies being conducted on the premises of this fabricator's shop have been completed in accordance with the approved construction documents, the project specifications, and the Montgomery County building code.

Sincerely,

_____

Signature Date

CERTIFICATE OF COMPLIANCE
STEEL FABRICATOR

Project Name: _____

Project Address: _____

Permit Number(s): _____

APPROVED STRUCTURAL STEEL FABRICATOR: _____

Company Name: _____

Company Address: _____

CERTIFICATION STATEMENT

To the best of my information, knowledge and belief, the fabrication of the structural steel members or assemblies specified for this project was performed in accordance with the approved construction documents, the project specifications, and the Montgomery County building code.

Sincerely,

_____

Signature Date

CERTIFICATE OF COMPLIANCE
STEEL ERECTOR

Project Name: _____

Project Address: _____

Permit Number(s): _____

STRUCTURAL STEEL ERECTOR: _____

Company Name: _____

Company Address: _____

CERTIFICATION STATEMENT

To the best of my information, knowledge and belief, the materials supplied, and work performed by this steel erector are in accordance with the approved construction documents, the project specifications, and the Montgomery County building code.

Sincerely,

_____

Signature Date

CERTIFICATE OF COMPLIANCE
STEEL JOIST/GIRDER MANUFACTURER

Project Name: _____

Project Address: _____

Permit Number(s): _____

OPEN WEB STEEL JOISTS/JOIST GIRDER MANUFACTURER: _____

Company Name: _____

Company Address: _____

CERTIFICATION STATEMENT

To the best of my information, knowledge and belief, the fabrication of open web steel joists / girders specified for this project was performed in accordance with the approved construction documents, the project specifications and the Steel Joist Institute (SJI) specifications and is in compliance with Montgomery County building code.

Sincerely,

_____

Signature Date

CERTIFICATE OF COMPLIANCE
FOR SEISMIC QUALIFICATION OF NONSTRUCTURAL COMPONENTS, SUPPORTS AND ATTACHMENTS

Project Name: _____

Project Address: _____

Permit Number(s): _____

REGISTERED DESIGN PROFESSIONAL: _____

Company Name: _____

Company Address: _____

CERTIFICATION STATEMENT

To the best of my information, knowledge and belief, the requirements of ASCE 7, Section 13.2.1 for Seismic Qualification of nonstructural components, supports or attachments specified on the approved construction documents, are met.

Sincerely,

_____

Signature Date

_____

Seal

CERTIFICATE OF COMPLIANCE
FOR DESIGNATED SEISMIC SYSTEMS

Project Name: _____

Project Address: _____

Permit Number(s): _____

REGISTERED DESIGN PROFESSIONAL: _____

Company Name: _____

Company Address: _____

CERTIFICATION STATEMENT

To the best of my information, knowledge and belief, the requirements of ASCE 7, Section 13.2.2 for Designated Seismic Systems specified on the approved construction documents, are met.

Sincerely,

_____

Signature Date

_____

Seal

CERTIFICATE OF COMPLETION
GENERAL CONTRACTOR

Project Name: _____

Project Address: _____

Permit Number(s): _____

GENERAL CONTRACTOR AGENT (GC): _____

Company Name: _____

Company Address: _____

☐ FINAL REPORT

All deficiency items reported in the last interim report have been completed. To the best of my information, knowledge and belief, the special and other inspections required for the project have been completed.

☐ PARTIAL FINAL REPORT

All deficiency items reported in the last interim report have been completed. To the best of my information, knowledge and belief, the special and other inspections required for the project have been completed **with the exception of the items described in the attached non-compliance list. Upon completion of the non-compliance items on the list the Final Report shall be submitted.**

CERTIFICATION STATEMENT

To the best of my information, knowledge and belief, the special and other inspections specified for this project have been completed. In my professional opinion, the structure is constructed in accordance with the approved construction documents and project specifications

Sincerely,

_____

Signature Date

CHAPTER 6
CONTACTS & RESOURCES

6.0 CONTACTS

- Complex Structures and Structural Plan Review – Manager - Alex Bernal alex.bernal@montgomerycountymd.gov
- Architectural Plan Review – Manager – Crystal Maddox – crystal.maddox@montgomerycountymd.gov
- Electrical Plan Review - Manager - Anthony Toussaint anthony.toussaint@montgomerycountymd.gov
- Electrical, Fire Alarm & Fire Suppression - Inspections Supervisor -Timothy Pittman- timothy.pittman@montgomerycountymd.gov
- Site compliance review - Manager - Greg Nichols 240-678-1787- greg.nichols@montgomerycountymd.gov or Field Supervisor - Brian Keeler 240-581-4485- brian.keeler@montgomerycountymd.gov
- Zoning compliance review – Manager - Patricia Wolford - patricia.wolford@montgomerycountymd.gov
- Wall Check and Height Check compliance review - Sergio Hurtado and Matt Makowski - Sergio.hurtado@montgomerycountymd.gov and Matthew.Makowski@montgomerycountymd.gov
- Green-Energy-Sustainability compliance review - Manager - Bryan Bomer bryan.bomer@montgomerycountymd.gov
- Reviewers - mark.nauman@montgomerycountymd.gov; ye.jiang@montgomerycountymd.gov, anne.hawley@montgomerycountymd.gov
- WSSC Inspections – Manager – Ben Benson - Benjamin.Benson@wsscwater.com

6.1 RESOURCES

Statement of Special Inspections

Permit Submittal Guidelines

Montgomery County Executive Regulation 13-24

Modular Buildings (for Construction Office Trailers)