CITY OF PALMDALE

BUILDING AND SAFETY DEPARTMENT

Statement of Special Inspections, 2010 CBC

PROJECT ADDRESS _____

PERMIT NUMBER # _____

Description of Work: _____

This Statement of Special Inspections is submitted in fulfillment of the requirements of CBC Sections 1704 and 1705. Included are:

- Schedule of Special Inspections and tests applicable to this project:
  - ☐ Special Inspections per Sections 1704 and 1705
  - ☐ Special inspections for Seismic Resistance
  - ☐ Special inspections for Wind Resistance
- List of the Testing Agencies and other special inspectors that will be retained to conduct the tests and inspections.

Special Inspections and Testing will be performed in accordance with the approved plans and specifications, this statement and CBC sections 1704, 1705, 1707, and 1708.

The Schedule of Special Inspections summarizes the Special Inspections and tests required. Special Inspectors will refer to the approved plans and specifications for detailed special inspection requirements. Any additional tests and inspections required by the approved plans and specifications will also be performed.

Interim reports will be submitted to the Building Official and the Registered Design Professional in Responsible Charge in accordance with CBC Section 1704.1.2

A Final Report of Special Inspections documenting required Special Inspections, testing and correction of any discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Use and Occupancy (Section 1704.1.2). The Final Report will document:

- Required special inspections.
- Correction of discrepancies noted in inspections.

The Owner recognizes his or her obligation to ensure that the construction complies with the approved permit documents and to implement this program of special inspections. In partial fulfillment of these obligations, the Owner will retain and directly pay for the Special Inspections as required in CBC Section 1704.1.

This plan has been developed with the understanding that the Chief Building Official will:

- Review and approve the qualifications of the Special Inspectors who will perform the inspections.
- Monitor special inspection activities on the job site to assure that the Special Inspectors are qualified and are performing their duties as called for in this Statement of Special Inspection.
- Review submitted inspection reports.
- Perform inspections as required by the local building code.

Prepared by:

_____

Registered Design Professional in Responsible Charge

_____

Signature Date

_____

Owner's Authorization:

Owner

Phone Number

Signature Date

Owner, Registered Design Professional or Agency who is hiring the Special Inspector or Special Inspection Agency

Name Phone Number

Signature Date

CONTRACTORS RESPONSIBILITIES (Section 1709.1): Each contractor responsible for the construction of a wind-or seismic-force-resisting system, designated seismic system or wind-or seismic-resisting component listed in the statement of special inspections acknowledges:

1) Awareness of the special requirements contained in the statement of special inspections;
2) Control will be exercised to obtain conformance with the construction documents approved by the Chief Building Official;
3) Procedures for exercising control within the contractor's organization, the method and frequency of reporting and the distribution of the reports.

Contractor's Acknowledgment of Responsibilities:

Contractor

Phone Number

Signature Date

Responsible Person within Organization

Phone Number

Signature Date

Contractor for Designated Seismic System

Phone Number

Signature Date

Responsible Person within Organization

Phone Number

Signature Date

Contractor for Wind-or Seismic-Force-Resisting Component	Responsible Person within Organization
Phone Number	Phone Number
Signature Date	Signature Date

Schedule of Inspection, Testing Agencies, and Inspectors

The following are the testing agencies and special inspectors that will be retained to conduct tests and inspection on this project.

Responsibility	Firm	Address, Telephone, e-mail
1. Special Inspection (except for geotechnical)		
2. Material Testing		
3. Geotechnical Inspections		
4.		

Seismic Requirements (Section 1705.3.1)

Description of seismic-force-resisting system and designated seismic systems subject to special inspections as per Section 1705.3:

The extent of the seismic-force-resisting system is defined in more detail in the construction documents.

Wind Requirements (Section 1705.4.1)

Description of wind-force-resisting system and designated wind resisting components subject to special inspections in accordance with Section 1705.4.2:
The extent of the main wind-force-resisting system and wind resisting is defined in more detail in the construction documents.

Chapter 17**; Structural Tests and Special Inspections** of the Palmdale Building Code as adopted by incorporation of the California Building Code is hereby modified as follows:

Subsection 1704.4 is amended to read as follows:

1704.4 Concrete Construction. The special inspections and verifications for concrete construction shall be as required by this section and Table 1704.4.

EXCEPTIONS: Special inspection shall not be required for:

1. Isolated spread concrete footings of buildings three stories or less in height that are fully supported on earth or rock, where the structural design of the footing is based on a specified compressive strength, f'c, no greater than 2,500 pounds per square inch (psi) (17.2 Mpa).
2. Continuous concrete footings supporting walls of buildings three stories or less in height that are fully supported on earth or rock where:
   - 2.1. The footings support walls of light-frame construction;
   - 2.2. The footings are designed in accordance with Table 1805.4.2; or
   - 2.3. The structural design of the footing is based on a specified compressive strength, f'c, no greater than 2,500 pounds per square inch (psi) (17.2 Mpa), regardless of the compressive strength specified in the construction documents or used in the footing construction.
3. Nonstructural concrete slabs supported directly on the ground, including prestressed slabs on grade, where the effective prestress in the concrete is less than 150 psi (1.03 Mpa).
4. Concrete patios, driveways and sidewalks, on grade.

Table 1704.4 is amended by adding the following:

Verification and Inspections	Continuous	Periodic	Referenced Standard	IBC Reference
13. Grade Beam Connection to Pile Foundations	-	X	ACE 318: Ch. 21	-

Schedule of Special Inspection

Notation Used in Table:

Column headers:

- C — Indicates continuous inspection is required.
- P — Indicates periodic inspections are required. The notes and or contract documents should clarify.

Box entries:

- X — Is placed in the appropriate column to denote either “C” continuous or “P” periodic inspections.
- NA — Not Applicable

Additional detail regarding inspections and tests are provided in the project specifications or notes on the drawings.

Verification and Inspection	C	P	Notes
1704.2.1 - Inspect fabricator’s fabrication and quality control procedures.			
Table 1704.3 – Steel			
1. Material verification of high-strength bolts, nuts, and washers.			
a. Identification markings to conform to ASTM standards specified in the approved construction documents.			
b. Manufacturer’s certificate of compliance required.			
2. Inspection of high-strength bolting:			
a. Snug-tight joints.			
b. Pretensioned and slip-critical joints using turn-of-nut with matchmarking twist-off bolt or direct tension indicator methods of installation.			
c. Pretensioned and slip-critical joints using turn-of-nut without matchmarking or calibrated wrench methods of installation.			
3. Material verification of structural steel:			
a. For structural steel, identification markings to conform to AISC 360			
b. For other steel, identification markings to conform to ASTM standards specified in the approved construction documents.			
c. Manufacturer’s certified test reports			
4. Material verification of weld filler materials:			
a. Identification markings to conform to AWS specification in the approved construction documents.			
b. Manufacturer’s certificate of compliance required.			
5. Inspection of welding: a. Structural steel and cold-formed steel deck:			
1) Complete and partial penetration groove welds.			
2) Multi-pass fillet welds.			

Verification and Inspection	C	P	Notes
3) Single-pass fillet welds > 5/16".			
4) Plug and slot welds.			
5) Single-pass fillet welds ≤ 5/16"			
6) Floor and roof deck welds.			
b. Reinforcing steel			
1) Verification of weldability of reinforcing steel other than ASTM A 706.			
2) Reinforcing steel-resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special reinforced concrete shear walls, and shear reinforcement.			
3) Shear reinforcement.			
4) Other reinforcing steel			
6. Inspection of steel frame joint details for compliance with approved construction documents:			
a. Details such as bracing and stiffening.			
b. Member locations.			
c. Application of joint details at each connection.			
1704.3 - Welded studs when used for structural diaphragms.			
1704.3 - Welding of cold-formed sheet steel framing members.			
1704.3 - Welding of stairs and railing systems.			
Table 1704.4 – Concrete			
1. Inspection of reinforcing steel, including prestressing tendons and placement.			
2. Inspection of reinforcing steel welding in accordance with Table 1704.3 Item 5b.			
3. Inspection of bolts to be installed in concrete prior to and during placement of concrete where allowable loads have been increased or where strength design is used.			
4. Inspection of anchors installed in hardened concrete.			
5. Verifying use of required design mix.			
6. At time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests and determine the temperature of the concrete.			
7. Inspection of concrete and shotcrete placement for proper application techniques.			
8. Inspection for maintenance of specified curing temperature and techniques.			
9. Inspection of prestressed concrete.			
a. Application of prestressing forces.			
b. Grouting of bonded prestressing tendons in the seismic force-resisting system.			

Verification and Inspection	C	P	Notes
10. Erection of precast concrete members.			
11. Verification of in-situ concrete strength, prior to stressing of tendons in postensioned concrete and prior to removal of shores and forms from beams and structural slabs.			
12. Inspect formwork for shape, location, and dimensions of the concrete member being formed.			
Table 1704.5.1 - Level 1 Masonry Inspections.			
1. Compliance with required inspection provisions of the construction documents and the approved submittals shall be verified.			
2. Verification of f'_m and f'_{AAC} prior to construction except where specifically exempted by this code.			
3. Verification of slump flow and VSI as delivered to the site for self-consolidating grout.			
4. As masonry construction begins, the following shall be verified to ensure compliance:			
a. Proportions of site-prepared mortor.			
b. Construction of mortor joints.			
c. Location of reinforcement, connectors, prestressing tendons, and anchorages.			
d. Prestressing technique.			
e. Grade and size of prestressing tendons and anchorages.			
5. During construction the inspection program shall verify:			
a. Size and location of structural elements.			
b. Type, size, and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction.			
c. Specified size, grade, and type of reinforcement, anchor bolts, prestressing tendons and anchorages.			
d. Welding of reinforcing bars.			
e. Preparation, construction and protection of masonry during cold weather (temperature below 40 degrees F) or hot weather (temperature above 90 degrees F)			
f. Application and measurement of prestressing force.			
6. Prior to grouting verify the following shall be verified to ensure compliance:			
a. Grout space is clean.			
b. Placement of reinforcement and connectors and prestressing tendons and anchorages.			
c. Proportions of site-prepared grout and prestressing grout for bonded tendons.			
d. Construction of mortar joints.			

Verification and Inspection	C	P	Notes
7. Grout placement shall be verified to ensure compliance:			
a. Grouting of prestressing bonded tendons.			
8. Preparation of any required grout specimens, mortar specimens, and/or prisms shall be observed.			
Table 1704.5.3 - Level 2 Masonry Inspections			
1. Compliance with required inspection provisions of the construction documents and the approved submittals.			
2 Verification of f'_m and f'_{AAC} prior to construction and for every 5,000 square feet during construction.			
3. Verification of proportions of materials in premixed or preblended mortor and grout as delivered to the site.			
4. Verification of slump flow and VSI as delivered to the site for self-consolidating grout.			
5. The following shall be verified to ensure compliance:			
a. Proportions of site-prepared mortar, grout and prestressing grout for bonded tendons.			
b. Placement of masonry units and construction of mortar joints.			
c. Placement of reinforcement, connectors and prestressing tendons and anchorages.			
d. Grout space prior to grout.			
e. Placement of grout.			
f. Placement of prestressing grout			
g. Size and location of structural elements.			
h. Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction.			
i. Specified size, grade and type of reinforcement, anchor bolts, prestressing tendons and anchorages.			
j. Welding of reinforcing bars.			
k. Preparation, construction and protection of masonry during cold weather (temperature below 40 degrees F) or hot weather (temperature above 90 degrees F).			
l. Application and measurement of prestressing force.			
6. Preparation of any required grout specimens, mortar specimens, and/or prisms shall be observed.			

Verification and Inspection	C	P	Notes
1704.6 - Inspect prefabricated wood structural elements and assemblies in accordance with Section 1704.2			
1704.6 - Inspect site built assemblies.			
1704.6.1 – Inspect high-load diaphragms:			
1. Verify grade and thickness of sheathing.			
2. Verify nominal size of framing members at adjoining panel edges.			
3. Verify: a. Nail or staple diameter and length, b. Number of fastener lines, c. Spacing between fasteners in each line and at edge margins.			
Table 1704.7 - Inspection of Soils			
1. Verify materials below shallow foundations are adequate to achieve the desired bearing capacity.			
2. Verify excavations are extended to proper depth and have reached proper material.			
3. Perform classification and testing of compacted fill materials.			
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.			
5. Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly.			
Table 1704.8 – Driven Deep Foundation Elements			
1. Verify pile materials, sizes and lengths comply with the requirements.			
2. Determine capacities of test elements and conduct additional load tests, as required.			
3. Observe driving operations and maintain complete and accurate records for each element.			
4. Verify placement locations and plumbness. a. Confirm type and size of hammer. b. Record number of blows per foot of penetration. c. Determine required penetrations to achieve design capacity. d. Record tip and butt elevations and document any damage to foundation element.			
5. For steel elements, perform additional inspections in accordance with Section 1704.3.			
6. For concrete elements and concrete-filled elements, perform additional inspections in accordance with Section 1704.4.			

Verification and Inspection	C	P	Notes
7. For specialty elements, perform additional inspections as determined by the registered design professional in responsible charge.			
Table 1704.9 – Cast-in-place Deep Foundation Elements.			
1. Observe drilling operations and maintain complete and accurate records for each element.			
2. Verify placement locations and plumbness. Confirm: a. Element diameters b. Bell diameters (if applicable) c. Lengths, embedment into bedrock (if applicable) d. Adequate end-bearing strata capacity. e. Record concrete or grout volumes.			
3. For concrete elements, perform additional inspections in accordance with Section 1704.4.			
1704.10 – Helical pile foundations.			
1. The information recorded shall include: a. Installation equipment used. b. Pile dimensions. c. Tip elevations. d. Final depth. e. Final installation torque f. Other pertinent installation data required.			
1704.11 – Vertical masonry foundation elements			
1. Shall be performed in accordance with Section 1704.5			
1704.12 - Sprayed Fire-Resistant Materials			
1. Inspect surface for accordance with the approved fire-resistance design and the approved manufacturer's written instructions.			
2. Verify minimum ambient temperature before and after application.			
3. Verify ventilation of area during and after application.			
4. Measure average thickness per ASTM E 605 and Section 1704.12.4.2 and 1704.12.4.3.			
5. Verify density of material for conformance with the approved fire-resistant design and ASTM E 605.			
6. Test cohesive/adhesive bond strength per Section 1704.12.6.1 through 1704.12.6.3			
1704.13 - Mastic and Intumescent Fire-Resistant Coating			

Verification and Inspection	C	P	Notes
1704.14 - Exterior Insulation and Finish Systems (EIFS)			
1704.15 - Alternate Materials and Systems			
1704.16 – Smoke Control System			
1705.3 - Seismic Resistance: Shall include seismic requirements for cases covered in Sections 1705.1 through 1705.3.5.			
1. Systems required for Seismic Design Category C.			
2. Exterior wall panels and their anchorage.			
3. Suspended ceiling systems 40'-0" or more in any direction or 1000 square feet or larger and their anchorage.			
4. Access floors and their anchorage.			
5. Steel storage racks and their anchorage, where importance factor is equal to 1.5 in accordance with Section 15.5.3 or ASCE 7.			
1705.4 Wind Resistance			
1705.4.2 1. Roof cladding and roof framing connections.			
2. Wall connections to roof and floor diaphragms and framing.			
3. Roof and floor diaphragm systems, including collectors, drag struts and boundary elements			
4. Vertical wind-force-resisting systems, including braced frames, moment frames, and shear walls.			
5. Wind-force-resisting system connections to the foundation.			
6. Fabrication and installation of systems or components required to meet the impact resistance requirements of Section 1609.1.2.			
1707 - Special Inspections for Seismic Resistance			
1707.2 - Special inspection for welding in accordance with AISC 341.			
1707.3 - Structural Wood			
1. Inspect field gluing operations of elements of the seismic-force-resisting system.			
2. Inspect nailing, bolting, anchoring, and other fastening of components within the seismic-force-resisting system, including: a. Wood shear walls, b. Wood diaphragms, c. Drag struts, braces, d. Shear panels, e. Hold-downs.			
1707.4 - Cold-Formed Steel Framing			

Verification and Inspection	C	P	Notes
1. Welding of elements of the seismic-force-resisting system.			
2. Inspection of screw attachments, bolting, anchoring, and other fastening of components within the seismic-force-resisting system including struts, braces, and hold-downs.			
1707.5 - Anchorage of access floors and storage racks 8 feet or greater in height.			
1707.6 - Architectural Components			
1. Inspect for exterior cladding, interior and exterior nonbearing walls and interior and exterior veneer more than 30 feet in height above grade or walking surface.			
2. Inspect erection and fastening of exterior cladding and interior and exterior veneer weighing more than 5 psf.			
3. Inspect erection and fastening of interior and exterior non-bearing walls weighing more than 15 psf.			
1707.7 - Mechanical and Electrical Components			
1. Inspect anchorage of electrical equipment for emergency or stand-by power systems.			
2. Inspect anchorage of non-emergency electrical equipment.			
3. Inspect installation of piping systems and associated mechanical units carrying flammable, combustible, or highly toxic contents.			
4. Inspect installation of HVAC ductwork that contains hazardous materials.			
5. Inspect installation of vibration isolation systems where the construction documents require a nominal clearance of ¼ inch or less between the equipment support frame and restraint.			
1707.8 - Verify that the equipment label and anchorage or mounting conforms to the certificate of compliance when mechanical and electrical equipment must be seismically qualified.			
1707.9 - Seismic isolation system: Inspection of isolation system per ASCE 7 – Section 17.2.4.8			
1708.1 – Testing and qualification for Seismic Resistance			
1708.2 – Concrete reinforcement.			
1708.3 – Structural steel: Testing for structural steel shall be in accordance with the quality assurance plan requirements of AISC 341			

Verification and Inspection	C	P	Notes
1708.4 – Seismic certification of nonstructural components.			
1708.5 – Seismic isolated structures: For required system test, see Section 17.8 of ASCE 7			
1710.1 – General Structural Observation			
1710.2 – Structural Observation for Seismic			
1710.3 – Structural Observation for Wind Requirements			
1713/1714/1715 – Safe/In-Situ/Preconstruction Load Tests			