SCHEDULE OF SPECIAL INSPECTIONS

Project Name: Portland Retirement Residence

Code Enforcement Project Number: 2-16-00320 Permit Number: _____

Project Address: 802 Ocean Ave. Portland, Maine 04103

Date: 3/23/16 Revised Date: 3/28/2016

Unless noted otherwise, all of the indicated Inspections below will be performed by the following Special Inspections Firm: TBD

Instructions for completing the Schedule of Special Inspections Form

1. Indicate the Inspection Type (IT-#) required for this project per IBC section 1704.
2. Indicate whether Special Inspections are Continuous (C), Periodic (P) or both by checking the appropriate box.
3. Insure the scope meets IBC section 1704 and other applicable standards for each Inspection Type.

Note: *This form and the Statement of Special Inspections* ***must be included on a plan sheet*** *as part of the plan submittal for this project.*

The following Special Inspections are required for this project: *(**C** = continuous, **P** = periodic)*

IT-1 VERIFICATION OF SOILS (Refer to IBC Table 1704.7)

Check if required	Inspection Task	C	P	Standard	Notes / Comments
☒	Verify materials below shallow foundation are adequate to achieve the design bearing capacity	☐	☒	Table 1704.7, #1.	
☒	Perform classification and testing of compacted fill materials	☐	☒	Table 1704.7, #3.	

IT-2 EXCAVATION AND FILL (Refer to IBC Table 1704.7)

Check if required	Inspection Task	C	P	Standard	Notes / Comments
☒	Verify excavations are extended to proper depth and have reached proper material	☐	☒	Table 1704.7, #2.	
☒	Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill	☐	☒	Table 1704.7, #4.	
☒	Prior to placement of compacted fill, observe sub-grade and verify that site has been prepared properly	☐	☒	Table 1704.7, #5.	

IT-3 PILINGS AND DRILLED PIERS (Refer to IBC Tables 1704.8; 1704.9 & Section 1704.10)

Check if required	Inspection Task	C	P	Standard	Notes / Comments
	Driven Deep Foundations				
☐	Verify element materials sizes and lengths comply with the requirements	☐	☐	Table 1704.8, #1.	
☐	Determine capacities of test elements and conduct additional load tests as required.	☐	☐	Table 1704.8, #2.	
☐	Observe driving operations and maintain complete and accurate records for each element	☐	☐	Table 1704.8, #3.	
☐	Verify placement locations and plumb, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any damage to foundation element	☐	☐	Table 1704.8, #4	
☐	For steel elements, perform additional inspections in accordance with Section 1704.3	☐	☐	Table 1704.8, #5	
☐	For concrete elements and concrete-filled elements, perform additional inspections in accordance with Section 1704.4	☐	☐	Table 1704.8, #6	
☐	For specialty elements, perform additional inspections as determined by the registered design professional in responsible charge	☐	☐	Table 1704.8, #7	
	Cast-in-place Deep Foundations				
☐	Observe drilling operations and maintain complete and accurate records for each element	☐	☐	Table 1704.9, #1	
☐	Verify placement locations and plumb, confirm element diameters (if applicable), lengths, embedment into bedrock (if applicable) and adequate end-bearing strata capacity. Record concrete or grout volumes	☐	☐	Table 1704.9, #2	
☐	For concrete elements, perform additional inspections in accordance with section 1704.4	☐	☐	Table 1704.9, #3	

IT-4 MODULAR RETAINING WALLS (Refer to IBC Sections 1610, 1704.15 & 1807.2)

Check if required	Inspection Task	C	P	Standard	Notes / Comments
☒	Modular retaining walls Verify materials below shallow foundation are adequate to achieve the design bearing capacity	☐	☒	Table 1704.7, #1.	

IT-5 REINFORCED CONCRETE (Refer to IBC Sections 1904, 1911, 1912 & 1913)

Check if required	Inspection Task	C	P	Standard	Notes / Comments
☐	Inspection of reinforcing steel, including pre-stressing tendons and placement	☐	☐	ACI 318: 3.5, 7.1-7.7; IBC 1913.4	
☐	Inspection of reinforcing steel welding in accordance with Table 1704.3, item 5b	☐	☐	AWS D1.4-98; ACI 318:3.5.2	
☐	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.	☐	☐	ACI 318: 8.1.3, 21.2.8; IBC 1911.5, 1912.1	
☐	Inspection of anchors installed in hardened concrete	☐	☐	ACI 318: 3.8.6, 8.1.3, 21.2.8, IBC 1912.1	
☐	Verifying use of required design mix	☐	☐	ACI 318: Ch. 4, 5.2 – 5.4; IBC 1904.3, 1913.2, 1913.3	
☐	At the time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete	☐	☐	ASTM C 172; ASTM C 31; ACI 318: 5.6, 5.8; IBC 1913.10	
☐	Inspection of concrete and shotcrete placement for proper application techniques	☐	☐	ACI 318: 5.9, 5.10; IBC 1913.6, 1913.7, 1913.8	
☐	Inspection for maintenance of specified curing temperature and techniques	☐	☐	AACI 318: 5.11 – 5.13; IBC 1913.9	
☐	Inspection of pre-stressed concrete: a. Application of pre-stressing forces b. Grouting of bonded pre-stressing tendons in the seismic-force-resisting system	☐ ☐	☐ ☐	ACI 318: 18.20 ACI 318: 18.18.4	
☐	Erection of precast concrete members	☐	☐	ACI 318: Ch. 16	
☐	Verification of in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs	☐	☐	ACI 318: 6.2	
☐	Inspect formwork for shape, location and dimensions of the concrete members being formed	☐	☐	ACI 318: 6.1.1	

IT-6 POST TENSION SLAB-ON-GROUND & POST TENSION CONCRETE

Check if required	Inspection Task	C	P	Standard	Notes / Comments
☐	All pre-stressed concrete design in construction to be in accordance with ACI 318-08	☐	☐	ACI 318: 6.2; IBC Table 1704.4 item #11	Also see IT-5 & IT-13

IT-7 PRECAST CONCRETE ERECTION

Check if required	Inspection Task	C	P	Standard	Notes / Comments
☐	Precast concrete erection	☐	☐	IBC Table 1704.4 item #10	
☐	Precast concrete fabricated in a certified plant	☐	☐	IBC Section 1704.2	Also see IT-9

IT-8 PRESTRESSED CONCRETE

Check if required	Inspection Task	C	P	Standard	Notes / Comments
☐	All pre-stressed concrete design and construction to be in accordance with ACI 318-08	☐	☐	ACI 318:6.2.	Also see IT-5 & IT-13

IT-9 INSPECTION OF PRECAST CONCRETE FABRICATORS

Check if required	Inspection Task	C	P	Standard	Notes / Comments
☐	Inspection of fabricators to be in accordance with the requirements set forth in IBC Section 1704.2	☐	☐	IBC 1704.2	

IT-10 INSPECTION OF STRUCTURAL STEEL FABRICATORS

Check if required	Inspection Task	C	P	Standard	Notes / Comments
☒	Welding inspections shall be in compliance with AWSD1.1. The base for welding qualifications shall be AWSD1.1	☐	☒	AWSD1.1-04 IBC 1704.2	

IT-11 STRUCTURAL MASONRY (Refer to IBC Tables 1704.5.1 & 1704.5.3)

Check if required	Inspection Task	C	P	Standard	Notes / Comments
	Level 1 (Table 1704.5.1)				
☐	Compliance with required inspection provisions of the construction documents and the approved submittals shall be verified	☐	☐	TMS 602/ACI 530.1/ASCE 6 Art. 1.5	

☐	Verification of f'_m and f'_{aac} prior to construction except where specifically exempted by this code	☐	☐	TMS 602/ACI 530.1/ASCE 6 Art. 1.4B	
☐	Verification of slump flow and VSI as delivered to the site for self-consolidating grout	☐	☐	TMS 602/ACI 530.1/ASCE 6 Art. 1.5B.1.b.3	
☐	As masonry construction begins, the following shall be verified to ensure compliance:			TMS 602/ACI 530.1/ASCE 6	
	a. Proportions of site-prepared mortar	☐	☐	Art. 2.6A	
	b. Construction of mortar joints	☐	☐	Art. 3.3B	
	c. Location of reinforcement, connectors, pre-stressing tendons and anchorage	☐	☐	Art. 3.4, 3.6A	
	d. Pre-stressing technique	☐	☐	Art. 3.6B	
	e. Grade and size of pre-stressing tendons and anchorage	☐	☐	Art. 2.4B, 2.4H	
☐	During construction the inspection program shall verify:				
	a. Size and location of structural elements	☐	☐	TMS 602/ACI 530.1/ASCE 6 Art. 3.3F	
	b. Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction	☐	☐	TMS 402/ACI 530/ASCE 5 Sec 1.2.2(e), 1.16.1	
	c. Specified size, grade and type of reinforcement, anchor bolts, pre-stressing tendons and anchorages	☐	☐	TMS 402/ACI 530/ASCE 5 Sec 1.5 & TMS 602/ACI 530.1/ASCE 6 Art. 2.4; 3.4	
	d. Welding of reinforcing bars	☐	☐	TMS 402/ACI 530/ASCE 5 Sec 1.5	
	e. Preparation, construction and protection of masonry during cold weather (temperature below 40°F) or hot weather (temp. above 90°F)	☐	☐	TMS 602/ACI 530.1/ASCE 6 Art. 1.8C, 1.8D & IBC 2104.3, 2104.4	
	f. Application and measurement of pre-stressing force	☐	☐	TMS 602/ACI 530.1/ASCE 6 Art. 3.6B	
☐	Prior to grouting, the following shall be verified to ensure compliance:				
	a. Grout space is clean	☐	☐	TMS 602/ACI 530.1/ASCE 6 Art. 3.2D	
	b. Placement of reinforcement and connectors, pre-stressing tendons and anchorage	☐	☐	TMS 602/ACI 530.1/ASCE 6 Art. 3.4 & TMS 402/ACI 530/ASCE 5 Sec 1.3	
	c. Proportions of site-prepared grout and pre-stressing grout for bonded tendons	☐	☐	TMS 602/ACI 530.1/ASCE 6 Art. 2.6B	
	d. Construction of mortar joints	☐	☐	Art. 3.3B	

☐	Grout placement shall be verified to ensure compliance: a. Grouting of pre-stressing bonded tendons	☐ ☐	☐ ☐	TMS 602/ACI 530.1/ASCE 6 Art. 3.5 TMS 602/ACI 530.1/ASCE 6 Art. 3.5	
☐	Preparation of any required grout specimens, mortar specimens and / or prisms shall be observed	☐	☐	TMS 602/ACI 530.1/ASCE 6 Art. 1.4 IBC 2105.2.2, 2105.3	
	Level 2 (Table 1704.5.3)				
☐	Compliance with required inspection provisions of the construction documents and the approved submittals	☐	☐	TMS 602/ACI 530.1/ASCE 6 Art. 1.5	
☐	Verification of f'_m and f'_{aac} prior to construction and for every 5,000 square feet during construction	☐	☐	TMS 602/ACI 530.1/ASCE 6 Art. 1.4B	
☐	Verification of proportions of materials in premixed or preblended mortar and grout as delivered to the site	☐	☐	TMS 602/ACI 530.1/ASCE 6 Art. 1.5B	
☐	Verification of slump flow and VSI as delivered to the site for self-consolidating grout	☐	☐	TMS 602/ACI 530.1/ASCE 6 Art. 1.5B.1.b.3	
☐	The following shall be verified to ensure compliance: a. Proportions of sire-prepared mortar, grout and pre-stressing grout for bonded tendons b. Placement of masonry units and construction of mortar joints c. Placement of reinforcement, connectors and pre-stressing tendons and anchorages d. Grout space prior to grout e. Placement of grout f. Placement of pre-stressing 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	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	TMS 602/ACI 530.1/ASCE 6 Art. 2.6A TMS 602/ACI 530.1/ASCE 6 Art. 3.3B TMS 602/ACI 530.1/ASCE 6 Art. 3.4, 3.6A TMS 402/ACI 530/ASCE 5 Sec 1.15 TMS 602/ACI 530.1/ASCE 6 Art. 3.2D TMS 602/ACI 530.1/ASCE 6 Art. 3.5 TMS 602/ACI 530.1/ASCE 6 Art. 3.6C TMS 602/ACI 530.1/ASCE 6 Art. 3.3F TMS 402/ACI 530/ASCE 5 Sec 1.2.2(e), 1.16.1	

	i. Specified size, grade and type of reinforcement, anchor bolts, pre-stressing tendons and anchorages	☐	☐	TMS 602/ACI 530.1/ASCE 6 Art. 2.4, 3.4 TMS 402/ACI 530/ASCE 5 Sec 1.15	
	j. Welding of reinforcing bars	☐	☐	TMS 402/ACI 530/ASCE 5 Sec 2.1.9.7.2, 3.3.4(b)	
	k. Preparation, construction and protection of masonry during cold weather (temperature below 40° F) or hot weather (temp above 90° F)	☐	☐	TMS 602/ACI 530.1/ASCE 6 Art. 1.8C, 1.8D IBC Sec 2104.3, 2104.4	
	l. Application and measurement of pre-stressing force	☐	☐	TMS 602/ACI 530.1/ASCE 6 Art. 3.6B	
☐	Preparation of any required grout specimens and / or prisms shall be observed	☐	☐	TMS 602/ACI 530.1/ASCE 6 Art. 1.4 IBC Sec 2105.2.2, 2105.3	

IT-12 WELDING

Check if required	Inspection Task	C	P	Standard	Notes / Comments
☒	Welding inspections shall be in compliance with AWSD1.1. The base for welding qualifications shall be AWSD1.1	☐	☒	AWSD1.1-04 IBC 1704.2	

IT-13 HIGH-STRENGTH BOLTING & STEEL FRAME INSPECTIONS (Refer to 1704.3)

Check if required	Inspection Task	C	P	Standard	Notes / Comments
☐	Material verification of high-strength bolts, nuts and washers must be inspected for: a. Identification markings to conform to ASTM standards specified in the approved construction documents	☐	☐	AISC 360, Section A3.3 & applicable ASTM material standards	
	b. Manufacturer's certificate of compliance required	☐	☐		
☐	Inspection of high-strength bolting: a. Snug-tight joints	☐	☐	AISC 360, Section M2.5 IBC 1704.3.3	
	b. Pre-tensioned and slip-critical joints using turn-of-nut with match-marking, twist-off bolt or direct tension indicator methods of installation	☐	☐	AISC 360, Section M2.5 IBC 1704.3.3	
	c. Pre-tensioned and slip-critical joint using turn-of-nut **without** match-marking or calibrated wrench methods of installation	☐	☐	AISC 360, Section M2.5 IBC 1704.3.3	

☐	Material verification of structural steel and cold-formed steel deck: • For structural steel, identification markings to conform to AISC 360 • For other steel, identification markings to conform to ASTM standards specified in the approved construction documents • Manufacturer's certified test reports	☐ ☐ ☐	☐ ☐ ☐	AISC 360, Section M5.5 Applicable ASTM material standards	
☐	Material verification of weld filler materials: • Inspection markings to conform to AWS specification in the approved construction documents • Manufacturer's certificate test reports	☐ ☐	☐ ☐	AISC 360, Section A3.5 and applicable AWS A5 documents	
☐	Inspection of welding: a. Structural steel and cold-formed steel deck: 1. Complete and partial joint penetration groove welds 2. Multipass fillet welds 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 structural walls of concrete and shear reinforcement	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	AWS D1.1, IBC 1704.3.1 AWS D1.1, IBC 1704.3.1 AWS D1.1, IBC 1704.3.1 AWS D1.1, IBC 1704.3.1 AWS D1.1, IBC 1704.3.1 AWS D1.3 AWS D1.4, ACI 318:Sec 3.5.2 AWS D1.4, ACI 318:Sec 3.5.2	

	3. Shear reinforcement	☐	☐	AWS D1.4, ACI 318:Sec 3.5.2	
	4. Other reinforcing steel	☐	☐	AWS D1.4, ACI 318:Sec 3.5.2	
☐	Inspection of steel frame joint details for compliance:				
	a. Details such as bracing and stiffening	☐	☐	IBC 1704.3.2	
	b. Member locations	☐	☐	IBC 1704.3.2	
	c. Application of joint details at each connection	☐	☐	IBC 1704.3.2	

IT-14 SPRAYED FIRE-RESISTANT MATERIALS

Check if required	Inspection Task	C	P	Standard	Notes / Comments
☒	Spray applied fire-resistant materials	☐	☒	IBC 1704.12	

IT-15 EXTERIOR INSULATION & FINISH SYSTEM (EIFS)

Check if required	Inspection Task	C	P	Standard	Notes / Comments
☐	EIFS	☐	☐	IBC 1704.14	

IT-16 SEISMIC RESISTANCE

Check if required	Inspection Task	C	P	Standard	Notes / Comments
☐	A quality assurance plan with seismic requirements shall be provided in accordance with section 1704	☐	☐	IBC 1704	

IT-17 SMOKE CONTROL

Check if required	Inspection Task	C	P	Standard	Notes / Comments
☒	Inspection of smoke control system	☐	☒	IBC 1704.16	

IT-18 WOOD

Check if required	Inspection Task	C	P	Standard	Notes / Comments
☐	Inspection of fabricators to be in accordance with the requirements set forth in IBC Section 1704.2	☐	☐	IBC 1704.2	
☐	Temp & permanent bracing on metal-plate-connected trusses spanning ≥60'	☐	☐	IBC 1704.6	

IT-19 SPECIAL CASES

Check if required	Inspection Task	C	P	Standard	Notes / Comments
☐	Racking	☐	☐	IBC 1707.5	
☒	Retaining Walls	☐	☒	IBC 1807.2	
☐	Special Events (as decided / required by Code Enforcement)	☐	☐		
☒	Epoxy Anchors	☐	☒		
☐		☐	☐		
☐		☐	☐		