GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation

TABLE OF CONTENTS
SECTION 011200 – CONTRACT SUMMARY OF WORK
SECTION 012100 – ALLOWANCES (NOT USED)
SECTION 012900 – PAYMENT PROCEDURES
SECTION 013100 – PROJECT MANAGEMENT AND COORDINATION
SECTION 013200 – CONSTRUCTION PROGRESS DOCUMENTATION
SECTION 013300 – SUBMITTAL PROCEDURE
SECTION 013526.23 – CONFINED SPACE ENTRY PLAN
SECTION 014000 – QUALITY AND CODE REQUIREMENTS
SECTION 015000 – TEMPORARY FACILITIES AND CONTROLS
SECTION 016000 – PRODUCT REQUIREMENTS
SECTION 017329 – CUTTING AND PATCHING
SECTION 017700 – CONTRACT CLOSEOUT REQUIREMENTS
SECTION 017823 – OPERATION AND MAINTENANCE MANUALS
SECTION 017839 – AS BUILT DOCUMENTS
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

SECTION 011200 - CONTRACT SUMMARY OF WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The Contract Documents, including but not limited to, the Drawings and Individual Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes a summary of the Contract for the Project, including responsibilities for coordination and temporary facilities and controls.

B. Specific requirements for the work of the Contract are also indicated in individual Specification Sections and on Drawings.

C. Related Sections:

1. Section 013100 - Project Management and Coordination.
2. Section 013200 - Construction Progress Documentation.
3. Section 015000 - Temporary Facilities and Controls.

1.3 DEFINITIONS

A. Permanent Enclosure: As determined by the Owner, the condition at which roofing is insulated and weather tight; exterior walls are insulated and weather tight; and all openings are closed with permanent construction or substantial temporary closures equivalent in weather protection to permanent construction.

1.4 CONTRACTOR’S PROJECT MANAGER

A. The Contractor and Sub-Contractor(s) shall identify a Project Manager who shall be responsible for coordination between the contractor and subcontractors related to the Work of the Project and the CM/Owner. The Contractor’s Project Manager shall be on site on a full time basis and be empowered to make all necessary decisions and be responsible for all contractual requirements. The Contractor shall submit a resume for their proposed Project Manager to the Owner and the Owners Representative for review and approval.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation

TABLE OF CONTENTS
SECTION 011200 – CONTRACT SUMMARY OF WORK
SECTION 012100 – ALLOWANCES (NOT USED)
SECTION 012900 – PAYMENT PROCEDURES
SECTION 013100 – PROJECT MANAGEMENT AND COORDINATION
SECTION 013200 – CONSTRUCTION PROGRESS DOCUMENTATION
SECTION 013300 – SUBMITTAL PROCEDURE
SECTION 013526.23 – CONFINED SPACE ENTRY PLAN
SECTION 014000 – QUALITY AND CODE REQUIREMENTS
SECTION 015000 – TEMPORARY FACILITIES AND CONTROLS
SECTION 016000 – PRODUCT REQUIREMENTS
SECTION 017329 – CUTTING AND PATCHING
SECTION 017700 – CONTRACT CLOSEOUT REQUIREMENTS
SECTION 017823 – OPERATION AND MAINTENANCE MANUALS
SECTION 017839 – AS BUILT DOCUMENTS

TABLE OF CONTENTS
Bellevue Hospital - Issued for Bid
B. Scheduling Consultant: The Contractor shall retain a scheduling consultant to coordinate the scheduling activities of the Contract, to prepare an overall CPM schedule, and to monitor and update the CPM schedule periodically.

1.5 COORDINATION ACTIVITIES

A. Coordination activities of Contractor’s Project Manager include, but are not limited to, the following:

1. Provide overall coordination of the Work.
2. Coordinate use of access shared with other contractors to workspaces, and workspaces shared with other contractors.
3. Coordinate product selections for compatibility with other products selected under this Contract. Identify to Owner and Design Professional incompatibilities between products selected under this Contract.
4. Provide overall coordination of temporary facilities and controls. (See also, Bellevue Hospital Center - Rules & Regulations)
5. Coordinate, schedule, and approve interruptions of permanent and temporary utilities, including those necessary to make connections for temporary services. All such interruptions and/or shutdowns of existing utilities and/or fire protection/fire alarm/smoke alarm systems shall require the written approval of the Construction Manager. Such written approval shall be sought by the Contractor at least 15 working days (unless more notice is required and identified in other sections of the bid documents) in advance of when the Contractor requires the actual shutdown. No work, which relies on the shutdown of such utilities and/or systems, shall be scheduled until after the Contractor receives the Construction Manager’s written approval for such shutdown. At least 6 crews, 3 in H Bldg, 1 in A Bldg, 1 in C Bldg, 1 in D Bldg must me employed simultaneously to process work in accordance with the construction schedule included in this bid package.
6. Coordinate construction and operations of the Work and the Owner's construction forces.
7. Prepare Coordinated Composite Drawings, in collaboration with each subcontractor for the Project, to coordinate the Project Work, limiting working at the same area on multiple occasions. The Contractor is to fully investigate the work tasks for the Project to minimize any work which overlap – any work in the same area must be coordinated and occur only once.
8. Coordinate sequencing and scheduling of the Work. Include the following:
   a) Initial Coordination Meeting: At earliest possible date, after the Notice to Proceed, the Owner’s Representative shall schedule an initial Project Coordination Meeting with the Contractor, the Contractor’s Sub-Contractors to establish protocols for the sequencing of the Work.
9. Provide quality assurance and quality control services specified in Section 014000 – Quality and Code Requirements.
10. Coordinate sequence of activities to accommodate tests and inspections, and coordinate schedule of tests and inspections. Requests for Owner furnished testing and inspection services shall be made in writing to the Owners Representative 72 hours in advance.

11. Provide information necessary to adjust, move, or relocate existing utility structures affected by construction.

12. Provide progress cleaning of all Contract work areas. All areas of the Work shall be cleaned on a daily basis.

13. Coordinate cutting and patching.


15. Coordinate fire-stopping.

16. Coordinate completion of punch list items.

17. Coordinate preparation of As-built drawings and specifications.

18. Print and submit all required project turnover documents.

19. Coordinate preparation of operation and maintenance manuals.

20. All existing services to be identified in conjunction with the Construction Manager and Bellevue Hospital Facility management prior to demolition including but not limited to: Emergency Power, Normal Power, IT, Phone, Nurses Call, Fire Alarm and BMS.

B. Responsibilities of Project Manager for construction contract includes coordination for temporary facilities and controls, including, but not limited to, the following:

1. Provide and maintain common-use field office for use by all personnel engaged in construction activities. Any construction field office utilized by the Contractor MUST be within the Construction Work Areas shown on the Logistics Plans included in the Bid Documents. No space, other than in the Construction Work Areas, will be provided for the Contractor’s field office.

2. Provide and maintain temporary telephone service for common-use facilities.

3. Provide and maintain hook-ups for temporary water, sewer and power as noted in Section 01500.

4. Provide and maintain temporary toilet facilities for the work force throughout the Construction Phase and until directed otherwise by the Owner or the Owners’ Representative. The location of temporary toilet facilities shall be approved in writing by the Owners’ Representative prior to mobilizing such temporary toilets.

5. Coordinate the removal of temporary facilities when directed by the Owner or the Owners’ Representative.

6. Provide and maintain email access for common-use facilities with on-site scanning and printing capability.

7. Provide air-tight temporary partitions. When activities creating dust, hot work fumes or any odors, the partition must be temporary exhausted to the exterior. All partitions must be removed at the end of shift and reinstalled at the beginning of the next work shift, so the Hospital function is unimpeded.
1.6 GENERAL REQUIREMENTS OF CONTRACTS

A. Extent of Contract: Requirements indicated on drawings and in specification sections determine the specific element of the Work of the Contract.

1. The work described in this section shall be complete systems and assemblies, including products, components, accessories, and installation required by the Contract Documents.
2. Blocking, backing panels, sleeves, and metal fabrication supports for the Work of the Project shall be provided and installed under the Scope of the Work of this Contract.
3. Furnishing of access panels for the work of this contract shall be provided and installed under the Scope of the Work of this Contract. Installation of access panels located in the substrate of ceilings, walls and floors shall be provided and installed under the Scope of the Work of this Contract.
4. Equipment pads for the work of this Contract shall be provided and installed under the Scope of the Work of this Contract.
5. Roof-mounted equipment curbs for the work of this Contract shall be provided and installed under the Scope of the Work of this Contract.
6. Painting for the work of this Contract shall be the performed under the Scope of the Work of this Contract.
7. Cutting and Patching: The Contractor and/or its’ Subcontractors shall perform all required/necessary cutting and patching under the Scope of the Work of this Contract, including restoration to original finish conditions.
8. Fire-stopping for the work of this Contract shall be provided and installed under the Scope of the Work of this Contract.
9. Contractors’ Preliminary CPM Schedule: Within seven (7) working days after Contract Award and/or Notice to Proceed (whichever comes first), the Contractor is to provide their preliminary CPM schedule submittal to the Owners’ Representative. Scheduling shall be performed utilizing Primavera P6.
10. Contractors Monthly Schedule Update: Utilizing the software required by the Contract, the Contractor is to prepare, maintain and revise the schedule on a monthly basis.
11. Contractors Recovery Schedules: Utilizing the software required by the Contract, the Contractor shall prepare any schedules necessitated by short comings in performance or other issues to define the planned Recovery approach. A Recovery schedule must be logically tied to the project schedule. The requirement for a Recovery schedule will be as directed by the Owners’ Representative.

B. Substitutions: The Contractor’s Project Manager shall cooperate with their sub-contractor’s project managers involved to coordinate approved substitutions with remainder of the Work of the Project.
C. Temporary Facilities and Controls: In addition to specific responsibilities for temporary facilities and controls indicated in this Section and in Section 015000 - Temporary Facilities and Controls, Contractor is responsible for the following:

1. Installation, operation, maintenance, and removal of each temporary facility necessary for its own normal construction activity, and costs and use charges associated with each facility, except as otherwise provided for in this Section 011200.
2. Temporary power outlets, supplementary plug-in task lighting, and special lighting necessary for the Work of this Contract.
3. Plug-in electric power cords and extension cords, supplementary plug-in task lighting, and special lighting necessary exclusively for its own activities.
4. Its own field office complete with necessary furniture, utilities, and telephone service.
5. Its own storage and fabrication sheds.
6. Temporary enclosures for its own construction activities.
7. Staging and scaffolding for its own construction activities.
8. General hoisting facilities for its own construction activities.
9. Waste disposal facilities, including collection and legal disposal of its own hazardous, dangerous, unsanitary, or other harmful waste materials.
10. Progress cleaning of work areas affected by the Contractor's operations as well as the Contractor's Subcontractors, on a daily basis.
11. Secure lockup of its own tools, materials, and equipment.
12. Construction aids and miscellaneous services and facilities necessary, exclusively for its own construction activities.
13. Temporary enclosures and protection as required for the building exterior during the construction phase to maintain the Project Schedule.
14. Dewatering facilities and drains as required.
15. Excavation support and protection of the Work of the Contract.
16. All required safety signage.
17. Pest Control.
18. All provisions for building access including but not limited to temporary stair towers, hoists and scaffolding.
19. Maintain existing fire alarm system and smoke alarm systems.
20. Traffic Control, barricades and safety lighting.
21. Covered walkways as required by code, sidewalk bridging,
23. Temporary Heating, Cooling and Climate Control as indicated in Section.

1.7 Scope of Work

A 3.1 H Bldg Flood Slats and Elevator Pit Protection and A3.2 Vertical Elevator Mitigation:

1. The following scope of work under this Contract is for general purposes only, to assist the bidder in an initial identification and evaluation of the major
items of work required. The work items listed do not represent a comprehensive or complete listing of work required under this Contract. The work listed does not preempt or supersede the scope defined by the Contract Documents. The bidder is required to provide work required to provide the finished Work as designed, detailed and specified in the Contract Documents.

2. Provide labor, materials, plant services, equipment and incidental items, required necessary and proper to perform the Work in accordance with the applicable requirements of the various portions of the Contract Documents.

3. Work, materials or other items furnished or provided by the Owner or by others are so indicated. Other work, services, or items necessary to complete this Contract shall be provided (i.e., furnished & installed) by the Contractor.

4. The work is provided under a Single Prime Construction Contract. References to work required by and of "this Contractor", "the General Contractor", “the HVAC Contractor”, “the Plumbing / Sprinkler Contractor”, “the Electrical Contractor”, “this Trade", etc. do not intend to divide the work or assign portions of the work to individual trades or contractors. The entirety of the work shall be provided by the Contractor supervising and directing the work of his subcontractors.

B. General Construction

1. General: The Contractor, in accordance with the Contract Documents, shall perform the following Work outlined herein. Furnish and Install (i.e., "Provide") the following components to include, but not be limited to, the following Paragraphs.

2. Demolition as shown/called for within the Contract Documents including, but not limited to:
   a) Abatement and legal disposal of asbestos containing materials, including but not limited to, doors at elevators S1, S2, Q1, Q2, elevator control panels at 23rd floor mezzanine. Any ACM abatement work is to be performed off hours.
   b) Protection of adjacent structural elements, as required.
   c) Removal (and, in certain instances, salvage for re-installation) of existing acoustical tile ceilings and support system.
   d) Removal of existing suspended plaster ceilings.
   e) Removal of existing light gauge metal framed gypsum board partitions.
   f) Removal of CMU partitions.
   g) Protection of active utilities and capping of active and inactive utilities encountered at the site.
   h) Carting and legal disposal of removed MEP items.
   i) All debris removal will be by mini-containers retained in the work areas until arrival of a packer truck for carting. Arrival time of packer/carting truck will be coordinated with Owner/ CM. For bid purposes 6:00 am - 7:30 am should be figured.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

j) Routing for debris removal must be in accordance with Site Logistic Plans

A3.1 SCOPE

1. DEMOLITION
   a) Chop and excavate for T1-T2 sump pit per detail and notes on drawing S-003.00.
   b) Remove and legally dispose existing wall mounted ladder at CW-1.
   c) Remove hatch assembly at room CW-1 and legally dispose.
   d) Remove and replace ceiling tile in cellar at piping runs per A.003.00.
   e) All removals and restorations necessary to install water repellant on outer walls of elevator shafts.

2. Cast-in Place Concrete, including but not limited to:
   a) Furnish and install cementitious grout to create drainage channels at elevator pits “H” Bldg.
   b) Concrete work at new sump pit T1-T2.
   c) 100 lf crack repair is included in base bid.

3. Masonry work, including but not limited to:
   a) Patch/replace any existing masonry disturbed by the performance of this scope

4. Structural Steel and Miscellaneous Metal Work, including but not limited to:
   a) Furnish and install all slat flood barriers as indicated.
   b) Furnish and install new ladders and railing with gate at sewer ejector pit CW-1.
   c) Provide grating frame and/or support at elevator sump and ejector pits per P-001.00, P-004.00 and S-007.00.
   d) Provide all miscellaneous support steel to anchor the Carbodur Strips panels on interior side of elevator shaft.
   e) Provide all miscellaneous steel supports to anchor the flood slat system.
   f) Provide all drainage channel grates per detail on drawing S-007.00.
   g) Bollard protection for flood slat supports at cellar elevator lobby.

5. Rough Carpentry Work, including but not limited to:
   a) Furnish and install new hollow metal frame, doors, and hardware as indicated.
   b) All miscellaneous framing and blocking.
   c) Fastening devices and other installation accessories.
3.1 H Bldg Flood Slats and Elevator Flood Protection

3.2 Vertical Elevator Mitigation

Issued for Bid
August 30, 2017

d) Restoration in kind of any existing walls, ceilings, floorings, finishes etc. disturbed by the installation of any work in this scope.

e) Restoration of ceiling along piping and conduits routes.

6. Waterproofing Work, including but not limited to:

a) Crystalline waterproofing and prep work at the elevator pits.

b) Water repellant work at outside walls of elevator shaft at cellar, including all preparation, finishes and restoration.

c) Water tight patching of any pipe or conduit penetrations.

7. Provide UL design and MEA approved Fireproofing, Fire-stopping assemblies and Firesafing assemblies at areas including but not limited to:

a) Termination of Fire and Smoke rated tops of partitions and walls to underside of slab and structure above.

b) All penetrations of fire rated assemblies.

c) Termination of Fire and Smoke rated partitions to exterior walls.

d) Provide P.E. signed and sealed engineering judgments for Fire-stopping and Firesafing applications and openings containing multiple penetrants not covered by UL and MEA for review by Architect.

e) Patching, in kind, of any existing Cementitious Fireproofing Systems disturbed by the performance of this scope, including primers, topcoats, and additives.

8. Hung ceilings. Restore all ceilings as opened in piping routes and any other work to complete this scope.

a) Black iron grid and hangers, brackets, supports, suspension grid

b) Bridging of black iron required to accommodate components in the ceiling cavity including but not limited to light fixtures, speakers, and diffusers

c) Cutting of tiles for sprinkler heads, smoke detectors, light sensors, light fixtures, speakers, and other devices / installed under this contract.

9. Provide framed Gypsum wall board assembly and new hollow metal doors and frames as indicated.

10. Portland Cement Plaster Systems/Gypsum Plaster Systems, including but not limited to:

a) Patching of plaster finishes on elevator shaft walls or as indicated.

11. Flooring, including but not limited to:

a) Flooring and base removal to complete this scope and flooring damaged during construction.

12. Painting, including but not limited to:

a) Field applied zinc coating patch at galvanized Structural Steel and miscellaneous metals work.

b) Gypsum wallboard & Plaster surfaces (walls, ceilings, soffits, fasciae, etc.) disturbed in the performance of this scope.

c) Other finish items as noted, specified, and/or scheduled.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887

3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation

Issued for Bid
August 30, 2017

13. Selective Demolition/Cutting/Patching/Alteration Work, including but not limited to:
   a) Provide Temporary Protection including but not limited to platforms, walls, dust barriers, weather barriers, fire protection, etc., and subsequent removals of temporary Work. Selective interior demolition/removals as required to accommodate the proposed construction/renovation work, as indicated. Ventilation of work areas per Bellevue Hospital Center-Rules and Regulations.
   b) Legal disposal of demolished materials.
   c) Cutting, patching, repairing, and replacing elements of exterior wall as required to maintain the water-tight, air-tight, thermal envelope of the building at new piping or conduit penetrations.

14. Supporting and Administrative Documentation associated with each Technical Specification Section, including but not limited to:
   a) Certifications, Warranties, Guarantees, Surety Bonds, etc.
   b) Pre-installation Certification & Testing,
   c) Compatibility Testing,
   d) Quality Control/Quality Assurance Plans,
   e) Operating & Maintenance Manuals,
   f) System Testing,
   g) Manufacturer's Certifications, including acceptance of site conditions and substrates,
   h) Signed/Sealed Calculations and Drawings (by a Professional Engineer Registered in the State of New York) for systems and installations where Performance Criteria is specified
   i) Commissioning of any equipment and/or systems installed under this scope.

C. Electrical: Including but not limited to:

1. Furnish and install all power and control wiring with associated conduits, panels, switches, transformers, etc. for new supply T1-T2 elevator sump pumps (SSP1 and 2), and sub-cellar sump pumps SC-SSP1 and SC-SSP2.

2. Provide all power and control conduits, wiring, switches, panels, controllers and equipment required to perform elevator mitigation work.

3. Provide all lighting as indicated.

4. Paying fees, performing testing and adjusting, and furnishing Underwriters Laboratories certificates, and/or any other required certificates of approval.
5. Furnish access doors required for equipment, appurtenances and devices provided under this contract.
6. Provide foundations, vibration isolation and supports, including seismic design for equipment, piping, etc.
7. Core drilling and cutting of holes in walls and slabs required for sleeves and supports. Provide sleeves and supports.
8. Full commissioning of equipment and systems provided under this contract, as well as furnishing six (6) maintenance manuals.
9. Provide electrical hook ups and connections to equipment furnished by other trades.
10. Provide temporary light and power and supplement existing temporary light and power, maintain during construction, removal of all temporary light fixtures and all temporary wiring after no longer needed. Particular attention should be paid to the abandoned linen shaft/chute, to allow sufficient light and power for work to be performed in the shaft.
11. Disconnect and remove existing lighting, receptacles, electrical equipment, transformers, disconnect switches, panels, conduits, wiring, etc. from area of work as indicated on drawings.

D. Plumbing: Including but not limited to:
   1. Provide submersible pumps at cellar (T1-T2) and sub-cellar sump pumps.
   2. Provide all piping, valves, fittings, etc. to install pump discharge.

A3.2 SCOPE

1. DEMOLITION
   a) Remove and legally dispose supply ductwork to Engineer Office on 13th floor.
   b) Remove existing elevator entrances at S1, S2, Q1, Q2 per A-002.00. Hard dust partition to be used for demolition and installation of new CMU infill.
   c) Remove existing doors and frames at 23rd floor and 22nd mezzanine.
   d) 13th floor mezzanine
      i. Removal of motor generator sets and associated conduits and wiring.
      ii. Removal of elevator control panel and associated conduits and wiring.
   e) 22nd floor mezzanine and 23rd floor
      i. Removal of north generator sets S1 thru S4, P1 thru P5 and Q1 thru Q5. 2. Remove associated wiring and conduits.
      ii. Removal of existing elevator control panels and associated wiring and conduits.
iii. 4. Removal of conduits and wiring between 22nd and 23rd floor per notes.

f) EMR 23rd floor mezzanine
   i. Removal of hoist machines and motor F1 and K1, and associated conduits and wiring.
   ii. Remove elevator control panels F1 and K1, including associated conduits and wiring.

g) Lighting – 13th mezzanine, 22nd mezzanine, 23rd mezzanine and 23rd floors
   i. Removal of all lighting, including all associated conduits and wiring.

h) Pits: Removal of all lights, switches and receptacles as indicated at the elevator pits.

2. Elevator Work

   a) Elevators 13th mezzanine
      i. Install all new controllers, transformers, disconnects and associated wiring and conduits for elevators R1 and R2 at 13th floor mezzanine.
      ii. Provide transformers and associated conduits and wiring at 22nd floor mezzanine.
      iii. Provide new controllers with SCR drives and associated wiring, conduits and disconnects for S1 thru S4, Q1 thru Q5 and P1 thru P5, at 23rd floor - 23rd mezzanine
      iv. Provide new controllers with SCR drives for F1 and K1 with associated conduits and wiring.
      v. Provide control work as indicated for ACB elevators 1-6, Administration Building A elevators A3 and A4, B5 and B6; C & D Building elevators C11 and C12, D9 and D10.

3. Cast-in Place Concrete, including but not limited to:
   a) Concrete pads as indicated at pit ladders.

4. Masonry work, including but not limited to:
   a) Reinforced CMU infill of S1, S2, Q1 and Q2 elevator entrances.
   b) Patch/replace any existing masonry disturbed by the performance of this scope.
   c) Grout fill CMU cores as indicated.

5. Structural Steel and Miscellaneous Metal Work, including but not limited to:
   a) Provide new counterweight and buffer platforms as indicated.
   b) Provide new ladders at elevator pits S1, S2, Q1, Q2.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

6. Rough Carpentry Work, including but not limited to:
   a) Furnish and install new hollow metal frame, doors, and hardware as indicated.
   b) All miscellaneous framing and blocking.
   c) Fastening devices and other installation accessories.
   d) Restoration in kind of any existing walls, ceilings, floorings, finishes etc. disturbed by the installation of any work in this scope.
   e) Restoration of ceiling along piping and conduits routes.

7. Provide UL design and MEA approved Fireproofing, Fire-stopping assemblies and Firesafing assemblies at areas including but not limited to:
   a) Termination of Fire and Smoke rated tops of partitions and walls to underside of slab and structure above.
   b) All penetrations of fire rated assemblies.
   c) Termination of Fire and Smoke rated partitions to exterior walls.
   d) Provide P.E. signed and sealed engineering judgments for Fire-stopping and Firesafing applications and openings containing multiple penetrants not covered by UL and MEA for review by Architect.
   e) Patching, in kind, of any existing Cementitious Fireproofing Systems disturbed by the performance of this scope, including primers, topcoats, and additives.

8. Hung ceilings. Restore all ceilings as opened in piping routes and any other work to complete this scope.
   a) Black iron grid and hangers, brackets, supports, suspension grid
   b) Bridging of black iron required to accommodate components in the ceiling cavity including but not limited to light fixtures, speakers, and diffusers
   c) Cutting of tiles for sprinkler heads, smoke detectors, light sensors, light fixtures, speakers, and other devices / installed under this contract.

9. Provide framed Gypsum wall board assembly and new hollow metal doors and frames as indicated.

10. Portland Cement Plaster Systems/Gypsum Plaster Systems, including but not limited to:
    a) Patching of plaster finishes on elevator shaft walls or as indicated.

11. Flooring, including but not limited to:
    a) Flooring and base removal to complete this scope and flooring damaged during construction.
12. Painting, including but not limited to:
   a) Field applied zinc coating patch at galvanized Structural Steel and miscellaneous metals work.
   b) Gypsum wallboard & Plaster surfaces (walls, ceilings, soffits, fasciae, etc.) disturbed in the performance of this scope.
   c) Other finish items as noted, specified, and/or scheduled.
   d) Elevator machine room floors are to be painted gray.

13. Selective Demolition/Cutting/Patching/Alteration Work, including but not limited to:
   a) Provide removable temporary partitions at cellar elevator lobby for elevator door demolition of CMU infill at elevators S1, S2, Q1, Q2. All ACM abatement work as indicated on abatement drawings to be performed on off hours.

14. Supporting and Administrative Documentation associated with each Technical Specification Section, including but not limited to:
   a) Certifications, Warranties, Guarantees, Surety Bonds, etc.
   b) Pre-installation Certification & Testing,
   c) Compatibility Testing,
   d) Quality Control/Quality Assurance Plans,
   e) Operating & Maintenance Manuals,
   f) System Testing,
   g) Manufacturer’s Certifications, including acceptance of site conditions and substrates,
   h) Signed/Sealed Calculations and Drawings (by a Professional Engineer Registered in the State of New York) for systems and installations where Performance Criteria is specified
   i) Commissioning of any equipment and/or systems installed under this scope.

E. HVAC work: Including but not limited to:
   1. Provide AHU 13-S-28 at 13th floor Control Room and Engineers Office.
   2. Provide outside air dampers and new fire dampers as indicated.
   3. Provide coils and associated piping at new supply fan.
   4. Air balancing.
   5. Testing.
   6. Sleeves, pipe inserts and anchor bolts, escutcheons, etc
   7. Identification, name plates, tags and charts.
   8. Labor for equipment startup provided under this contract.
   9. All standby labor for assisting third party entities in the operation, observation, testing, verification and commissioning of the work installed under this Contract
   10. Coordination of work with other related trades.
   11. Fire-stopping of the penetration of fire rated construction by HVAC work
12. Coordination and furnishing of access doors in the finished construction as required for the equipment and devices installed under this contract and to piping, valves, specialties including control valves, steam traps, etc.

13. Provide miscellaneous iron and steel as required for the proper installation of the HVAC work.


15. Work included and identified in the General Requirements sections.

E. Electrical: Including but not limited to:

1. Furnish and install all power and control wiring with associated conduits, panels, switches, transformers, etc. for new supply fan at 13th floor

2. Provide all power and control conduits, wiring, switches, panels, controllers and equipment required to perform elevator mitigation work.

3. Provide all elevator pit lights, receptacles, switches and associated conduits and wiring.

4. Provide all lighting as indicated.

5. Paying fees, performing testing and adjusting, and furnishing Underwriters Laboratories certificates, and/or any other required certificates of approval.

6. Furnish access doors required for equipment, appurtenances and devices provided under this contract.

7. Provide foundations, vibration isolation and supports, including seismic design for equipment, piping, etc.

8. Core drilling and cutting of holes in walls and slabs required for sleeves and supports. Provide sleeves and supports.

9. Full commissioning of equipment and systems provided under this contract, as well as furnishing six (6) maintenance manuals.

10. Provide electrical hook ups and connections to equipment furnished by other trades.

11. Provide temporary light and power and supplement existing temporary light and power, maintain during construction, removal of all temporary light fixtures and all temporary wiring after no longer needed.

12. Disconnect and remove existing lighting, receptacles, electrical equipment, transformers, disconnect switches, panels, conduits, wiring, etc. from area of work as indicated on drawings.

13. Furnish and install all smoke detectors in elevator lobby as indicated. VanWell is the existing in-house FA contractor for all connections to FA system.

F. Elevator: Including but not limited to:
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

1. Provide all demolition, equipment, conduits, wiring, panels, controllers to perform elevator mitigation as indicated on all drawings and specifications.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1. CONTRACTOR USE OF PREMISES (See Also, Bellevue Hospital Center-Rules and Regulations)

A. The use of the premises for the performance of the Contractor’s work will be under the direction and control of the Owner’s Representative. The Owner intends to use a Construction Manager as its representative.

B. It is the essence of this Contract that the Contractor conform and commit his manner of work to the specific requirements, restraints, controls and restrictions imposed by the Construction Manager and as required by regulatory agencies having jurisdiction over the performance of his Work. The Contractor shall comply with work and restrictions shown on Logistics Plans and agency requirements. The Contractor will be responsible to pay the cost of any violations that the Construction Manager or the Owner receives due the Contractor’s employee violations.

C. The Contractor shall not encumber the site with materials and equipment that would disrupt or prevent other contractors from performing their work. All deliveries shall be sequenced and coordinated so as not to affect the operation of the Hospital and other trades.

   1. Each Contractor shall familiarize himself with the areas of the project site required by the other contractors and shall plan and conduct his operations so as not to interfere with the other work or hospital operations. All staging and material laydown, storage will be confined to the work area of the contract.

D. The Contractor shall assume full responsibility for protection and safe-keeping of products, materials and equipment stored on premises and move any stored products, materials and equipment which interfere with operations of the Hospital or other contractors. In storing materials within a temporary space (if permitted by the Owner) or when using a temporary structure as a shop (if permitted by the Hospital), the Contractor shall obtain prior written approval from the Construction Manager and shall restrict his storage or shop operations to spaces designated for such purposes. The Contractor will be held responsible for repairs, patching and cleaning arising from such use.

E. Temporary structures (if permitted by the Owner) shall be of substantial construction, neat in appearance, painted a uniform color, and shall meet all New York City Building code requirements.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

F. In the utilization of the Hospital grounds, the Contractor shall protect pavements, curbs, walks, structures, and other permanent improvements and shall maintain such protection. Upon completion of temporary structures, return spaces back to original condition.

G. The Contractor and their material suppliers and fabricators shall provide any free access for the Construction Manager, the Architect and all designated representatives of the Owner to inspect job materials, equipment, fabrication facilities and storage locations, both at and away from the job site.

H. Contractor’s personnel shall enter and exit the Work areas at locations approved with the Construction Manager.

I. Site adjacent to the project will be used by the Hospital staff, patients, vendors and the public during the entire construction period. The Contractor and his employees shall cooperate with the Owner’s required use of surrounding site during construction operations, to minimize conflicts and facilitate Hospital usage without hardship and interruption of all required services. Workmen are prohibited from entering the existing Hospital Buildings without proper authorization and shall abide by all no entry signs.

J. Under new legislation effective July 18, 2008, on all public work projects of at least $250,000.00, all laborers, workers and mechanics working on the site, shall be certified as having successfully completed the OSHA 10-hour construction safety and health course. Any laborers, workers or mechanics that cannot demonstrate that he or she have completed this 10-hour course will not be permitted to work on this project. The contractor will remove this person from the site immediately.

3.2 HOURS OF WORK

A. The normal hours of work for this project shall be 8:00 am to 5:30 pm, Monday through Friday inclusive. Refer to drawings for specific hours of work. Any work performed on the weekend shall not begin before 8:30 am. Exceptions for utility tie-ins will be approved on a case-by-case basis, subject to the written approval of the Owner and Construction Manager. No additional reimbursement will be entertained for any coordination, shift differential and overtime costs. Each contractor shall provide notification to the Department of Labor prior to working overtime. Such notification shall be in accordance with all DOL requirements. Generally, work hours to be as follows:

A3.1 Elevator Pit Flood Protection:

1. All carbidor work in elevator pits and shaft is to be performed after hours or weekends, while the elevator has been taken out of service to perform elevator mitigation work. Elevator shafts are not to be removed from service second time until the final water proofing and grouting of the shaft is installed after all mitigation work is complete in a bank of elevators as indicated in bid schedule.

2. All laminate, miscellaneous steel and finishes at Cellar passenger elevator lobby and Cellar service elevator lobby will be performed after regular work hours.
3. Installation of flood barriers including all finish work at corridors, elevator lobbies and Environmental Office will be performed after regular work hours.

4. Installation of flood barriers and all finish work at workshops, storage, toilets, Janitor closets, can be performed during regular work hours.

5. All ACM abatement work will be performed after regular work hours.

A3.2 Elevator Mitigation hours:

1. Demolition of existing elevator opening and infill of elevators S1, S2, Q1, Q2 at the Cellar will be performed after regular working hours.

2. All other elevator mitigation work shall be performed according to the time frames identified on the drawings.

3. All ACM abatement work will be performed after regular work hours.

B. The Contractor is advised that Bellevue Hospital may be scheduled for a Joint Commission (JCAHO) inspection subsequent to the award of the Contract. Should such JCAHO inspection take place, the exact date of inspection is not known at this time, nor will it be known until the inspection team actually arrives on site. It is anticipated, and should be assumed by the Contractor, that the inspection will occur prior to completion of the Contract. It is further anticipated that the JCAHO survey will be performed during the normal work week over the course of five (5) consecutive days. During this time frame no construction work will be allowed to be performed on site. Access to the site will not be permitted unless specifically approved, in writing, by the Owners’ Representative. The Contractor will be formally notified by the Construction Manager immediately upon arrival of the JCAHO inspection team to cease all construction related activities. Upon completion of the inspection, the Contractor will be formally notified by the Construction Manager to resume work.

C. The Contractor shall include in their bid price all costs associated with this work stoppage. No Claims or any other requests for additional payment or additional time will be entertained by the Owner due to the Site not being available for construction during this timeframe.”

D. Work in occupied spaces outside of the work areas must be coordinated and scheduled with the Hospital Staff/CM.

3.3 EXISTING CONDITIONS

A. The Contractor shall take every precaution to guard against any movement or settlement of existing or new construction in performing their Work. The Contractor shall provide bracing, shoring, underpinning or other retaining structures necessary in connection therewith. The Contractor shall assume responsibility for the design, safety and support of such construction and for any movement, settlement, damage or injury thereto.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

B. Prior to undertaking any work; the Contractor shall verify existing conditions as indicated in bid documents and notify Construction Manager of any variances prior to undertaking work. The Contractor assumes all responsibility for properly identifying, locating and protecting existing utilities where ever located and shall bear the cost for proper protection and/or repairs resulting from his work operations. The contractor will be responsible to protect all existing utilities in the performance of its work. Particular attention should be paid at those areas where location of a crane for structural steel loading and the generator lift is contemplated.

C. The Contractor is advised that asbestos containing materials may be encountered during the work. If ACM is encountered, the Contractor shall immediately stop work near the area and notify the Construction Manager. The ACM shall not be disturbed.

D. Contractor is responsible for material delivery to the work area without disturbing any Hospital function and/or activity. All deliveries to the hospital Loading Dock area must be pre-coordinated and approved by the Hospital/CM. All deliveries will be made 6:00 – 7:30 am. There is no storage in the basement loading dock area. Conveyance of materials and personnel is by the F-1 elevator only. Material delivery and trash removal will be by the paths indicated per the site logistics plans.

3.4 SPECIFICATION FORMAT

A. The Specifications are organized into Divisions and Sections using the 48-division format and CSI/CSC's "Master Format" 2014 Edition numbering system.
   1. Section Identification: The Specifications use Section numbers and titles to help cross-referencing in the Contract Documents. Sections in the Project Manual are in numeric sequence; however, the sequence is incomplete because all available Section numbers are not used. Consult the table of contents at the beginning of the Project Manual to determine numbers and names of Sections in the Contract Documents.

B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
   1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.
   2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

3. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

END OF SECTION 011200
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

SECTION 012900 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. The Contract Documents, including but not limited to, the Drawings and Individual Specification Sections, Schedule of Values, Contractor Pencil Copy and Application for Payment, apply to this Section.

1.2 SUMMARY
A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.

B. Related Sections:
1. General Terms and Conditions, Article 3 - Compensation, for requirements governing provisions for payment.
2. General Terms and Conditions, Article 10 – M/WBE Requirements, for requirements governing minority participation.
3. General Terms and Conditions, Article 11 – HIRENYC – Construction, for requirements governing hiring of individuals from New York City
4. Section 012100 – Allowances, for procedural requirements governing the handling and processing of allowances, if applicable.
5. Section 017700 – Contract Closeout Requirements, for administrative contract closeout requirements.

1.3 DEFINITIONS
A. Schedule of Values: A form in the Contract Documents, which establishes minimum level of payment detail to formulate an initial Application for Payment.

B. Contractor’s Pencil Copy: A form provided by the Owner and/or the Owners Representative, which estimates a billing request from the Contractor. When approved by the Owner and/or the Owners Representative, formulates the Application for Payment.

C. Application for Payment: A form provided by the Owner, which provides certification by the Contractor for payment.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

1.4 SCHEDULE OF VALUES

A. Coordination: Coordinate preparation of the Schedule of Values with the Owner.

B. The Contractor shall allocate portions of the Contract Sum to labor, material and major
equipment costs to various portions of the Work as indicated on the form.

1. Submit the Schedule of Values to the Owner and/or the Owners Representative, for
approval at earliest possible date after award of the Contract.
2. The Owner shall not approve any billing request until the Schedule of Values is
approved.
3. A breakdown for each of the A3.1 and A3.2 scope must be provided.

C. Format and Content: Use model form provided in Contract Documents as a guide to establish
line items for the Schedule of Values.

1. Arrange the Schedule of Values with separate columns to indicate the following for each
item listed:
   a. Dollar value of the following, as a percentage of the Contract Sum to nearest one-
hundredth percent, adjusted to total 100 percent.
      1) Labor.
      2) Materials.
      3) Major Equipment.

2. Provide a breakdown of Contract Sum in enough detail to facilitate continued evaluation
of Applications for Payment and progress reports. Provide multiple line items for
principal subcontract amounts in excess of five percent of Contract Sum.
   a. Include separate line items under Contractor and principal subcontracts for As-
Built Documents and other project closeout requirements in an amount totaling
five percent of the Contract Sum and subcontract amount.

3. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
4. Allowances, if applicable: Provide a separate line item in the schedule of values for each
Allowance.
5. Each item in the Schedule of Values and Applications for Payment shall be complete.
Include total cost and proportionate share of general overhead and profit for each item,
except Lump Sum and Quantity of Work Allowances.
6. Schedule of Values Updating: The Owner and/or the Owners Representative may require
the Contractor to revise its Schedule of Values. Further, the Owner and/or the Owners
Representative reserves the right to accept only those cost distributions which, in the
Owner's and/or the Owners Representative opinion, are reasonable, equitably balanced
and correspond to estimated quantities in Contract Documents.
7. Breakdowns will be further classified as
   a. Flood mitigation
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

b. Code upgrade
c. Replacement in kind

1.5 MONTHLY APPLICATIONS FOR PAYMENT

A. Each Application for Payment shall be consistent with previous applications and payments as approved by the Owner and paid for by the Owner.

1. Initial Application for Payment, the Owner and/or the Owners Representative shall not approve any billing request until the Schedule of Values and Construction Schedule is approved.
2. Payment for Allowance items and stored materials involve additional requirements.
3. Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.

B. Payment Application Times: Billing request may be submitted to the Owner and/or the Owners Representative once each month.

1. Submit Contractor’s Pencil Copy billing request seven (7) business days (10 continuous calendar days) prior to due date for review by the Owner and/or the Owners Representative.

C. Payment Forms: All forms and documents required for payment shall be provided by the Owner and/or the Owners Representative.

D. Preliminary Procedure: The Contractor may request from the Owner a Contractor’s Pencil Copy form. Where indicated on the form, the Contractor shall enter a billing request, either dollar amount or percentage complete for each item number requesting payment.

1. If applicable, the Contractor shall obtain from the Owner and/or the Owners Representative, an Allowance Notice to Proceed for Allowance items and an Agreement for Materials Stored Off-Site prior to billing.
2. Submit Contractor’s Pencil Copy billing request to the Owner and/or the Owners Representative for approval.
3. The Contractor shall provide updated documentation to the Owner and/or the Owners Representative in accordance with General Terms and Conditions, Article 10 – M/WBE Requirements and Article 11 – HIRENYC - Construction.

E. Procedure: Upon the Owner’s and/or the Owners Representative approval of the Contractor’s Pencil Copy billing request, payment documents will be provided to the Contractor. The Contractor shall complete each document and submit two copies of all documents with original signature & notary where indicated on forms, the following:

1. Application for Payment.
3. Contractor and Subcontractor Certifications Form
4. Contractor’s and Sub-Contractor’s Certified Payroll Form.
5. Allowance Allocation Form, if applicable
6. EEO forms 5.0 and 6.0

F. Payroll Forms: The Contractor and all Sub-contractors to the Contractor shall submit three original copies of the Contractor and Subcontractor Certifications Form and Contractor’s Certified Payroll Form.

G. Transmittal: Sign and notarize where indicated on each document, submit two original copies to Owner.

1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about payment.

H. Stored Materials: The Owner Representative will provide an Agreement for Materials Stored Off-Site and specific forms that the Contractor must complete and submit to the Owner and/or the Owners Representative, including but not limited to;

1. Include in the Contractor’s Pencil Copy billing request amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed.
2. Differentiate between items stored on-site and items stored off-site.
3. Provide certificate of insurance, evidence of transfer of title to the Owner and/or the Owners Representative, and consent of surety to payment, for stored materials.
4. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
5. Provide summary documentation for stored materials indicating the following:

   a. Materials previously stored and included in previous Applications for Payment.
   b. Work completed for this Application utilizing previously stored materials.
   c. Additional materials stored with this Application.
   d. Total materials remaining stored, including materials with this Application.

I. Payment: Timely payment by the Owner to the Contractor is governed by Section 2880 of the Public Authorities Law.

J. Liens: Upon receipt of a lien, the Owner shall deduct a sum of one and one-half (1 ½) times the amount stated to be due in the notice of lien from the application for payment. Upon official receipt of discharge of lien, the Owner shall provide payment as stated above.

1.6 APPLICATION FOR PAYMENT AT SUBSTANTIAL COMPLETION

A. Preliminary Procedure: After issuance of the executed Notice of Substantial Completion, submit a Contractor’s Pencil Copy billing request showing 100 percent completion for portion of the Work claimed as complete at Substantial Completion.
PAYMENT PROCEDURES
Bellevue Hospital - Issued for Bid

1. Submit Contractor’s Pencil Copy billing request to the Owner and/or the Owners Representative for approval.

2. The Contractor shall provide final documentation to the Owner and/or the Owners Representative in accordance with General Terms and Conditions, Article 10 – M/WBE Requirements and Article 11 – HIRENYC - Construction.

B. Reduction of Retainage: The Contractor may request a reduction of retainage upon Substantial Completion of the Work.

1. The Contractor submits to the Owner and/or the Owners Representative a written request to have retainage reduced and provides a cost estimate and schedule to complete all remaining Work items indicated on the executed Notice of Substantial Completion.

2. The Owner and/or the Owners Representative shall deduct from the sum two times the value of remaining items of Work to be completed or corrected.

3. The Owner and/or the Owners Representative will provide the Contractor with General Release and Consent of Surety forms based on the amount of reduction. The Contractor shall complete each document and submit three copies of each document with original signature & notary where indicated on forms.

4. The Owner and/or the Owners Representative shall hold payment until receipt of completed General Release and Consent of Surety forms.

C. Procedures: Upon the Owner’s Representative and Owner approval of Contractor’s Pencil Copy billing request, payment documents will be provided to the Contractor. The Contractor shall complete each document and submit two copies of all documents with original signature & notary where indicated on forms, the following:

1. Application for Payment.


3. Contractor and Subcontractor Certifications Form

4. Contractor’s and Sub-Contractor’s Certified Payroll Form.

5. EEO Forms 5.0 and 6.0

D. Payroll Forms: The Contractor and all Sub-contractors to the Contractor shall submit original copies of the Contractor and Subcontractor Certifications Form and Contractor’s Certified Payroll Form.

E. Transmittal: Sign and notarize where indicated on each document, submit two original copies to Owner and/or the Owners Representative.

F. Payment: Timely payment by the Owner to the Contractor is governed by Section 2880 of the Public Authorities Law.

G. Liens: Upon receipt of a lien, the Owner shall deduct a sum of one and one-half (1 ½) times the amount stated to be due in the notice of lien from the application for payment. Upon official receipt of discharge of lien, the Owner shall provide payment as stated above.
1.7 FINAL APPLICATION FOR PAYMENT

A. Contract Compliance: The Contractor shall comply with the Requirements of the General Terms and Conditions, Article 3 - Compensation.

B. Preliminary Procedure: All Work and Extra Work of the Contract and all requirements of Section 017700 – Contract Closeout Requirements must be complete and approved prior to commencement of final Application for Payment.

1. The Contractor shall request and submit to the Owner a final Contractor’s Pencil Copy that will formulate the final Application for Payment.
2. The Contractor shall provide outstanding documentation to the Owner and/or the Owners Representative in accordance with General Conditions, Article 10 – M/WBE Requirements and Article 11 – HIRENYC - Construction.

C. Procedures: Upon the Owner’s or Owners Representative’s approval of Contractor’s Pencil Copy billing request, final Application for Payment and Contract closeout documents will be provided to the Contractor. The Contractor shall complete each document and submit two copies of all documents with original signature & notary, where indicated on the forms, the following:

1. Final Application for Payment including remaining Retainage.
3. Contractor and Subcontractor Certifications Form
4. Contractors and Sub-Contractors Certified Payroll Form.
5. Release Form -- Final Payment to Contractor.
6. Consent of Surety -- Final Payment to Contractor, with power of attorney.
7. EEO forms 5.0 and 6.0

D. Payroll Forms: The Contractor and all Sub-contractors to the Contractor shall submit three original copies of the Contractor and Subcontractor Certifications Form and Contractor’s Certified Payroll Form.

E. Transmittal: Sign and notarize where indicated on each document, submit three (3) original copies to the Owner.

F. Final Payment: Timely payment by the Owner to the Contractor is governed by Section 2880 of the Public Authorities Law.

G. Liens: Upon receipt of a lien, the Owner shall deduct a sum of one and one-half (1 ½) times the amount stated to be due in the notice of lien from the final application for payment. Upon official receipt of discharge of lien, the Owner shall provide final payment as stated above.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

PART 2 - PRODUCTS (Not Used)
PART 3 - EXECUTION (Not Used)

END OF SECTION 012900
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The Contract Documents, including but not limited to, the Drawings and individual Specification Sections and Contract Manager, apply to this Section.

1.2 SUMMARY

A. Section includes administrative provisions for coordinating construction operations on the Project including, but not limited to, the following:

1. General project coordination procedures.
2. Administrative and supervisory personnel.
3. Coordination drawings.
4. Requests for Information (RFIs).
5. Contract Manager software site.
6. Project meetings.

B. The Contractor shall participate in coordination requirements.

C. Related Sections:

1. Section 011200 - Contract Summary of Work.
2. Section 013200 - Construction Progress Documentation, for preparing and submitting Contractor's construction schedule.
3. Section 017700 – Contract Closeout Requirements, for coordinating closeout of the Contract.

1.3 DEFINITIONS

A. RFI: Request from the Owner and/or the Owners Representative’s, Design Professional, or Contractor seeking information from each other during construction. RFI’s should be limited to questions seeking clarification of the Contract Documents and/or Design intent. All other matters or issues shall be communicated via written correspondence.
1.4 COORDINATION

A. Coordination for Single Contract Project: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations included in different Sections that depend on each other for proper installation, connection, and operation.

1. The Contractor shall utilize the bid milestone schedule included in the Contract Documents to prepare a CPM schedule in accordance with Section 013200 – Construction Progress Documentation. The Contractor shall submit the proposed CPM schedule to the Owner within 7 business days (10 continuous calendar days) of the Contract Award and/or Notice to Proceed.
2. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
3. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
4. Make adequate provisions to accommodate items scheduled for later installation.

B. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

1. Coordination of the Owner's and/or the Owners Representative’s P6 Project Management CPM schedule.
2. Coordination of the commissioning process and activities.
3. Preparation of the schedule of values.
4. Entering dates each required submission item listed on the Contractor’s Submission Schedule will be submitted, coordinated with the CPM Schedule.
5. Installation and removal of temporary facilities and controls.
6. Review, processing and delivery of submittals.
7. Preparation and submittal of RFI’s.
8. Attendance/participation at Progress meetings.
9. Attendance/participation at Pre-Installation conferences.
10. Attendance/participation at Pre-Submittal Conferences.
11. Project closeout activities.
12. Startup and adjustment of systems.

C. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.
1.5 COORDINATED COMPOSITE DRAWINGS

A. Coordinated Composite Drawings, General: Prepare coordinated composite drawings in accordance with requirements in individual Sections, where installation is not completely shown on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity.

1. Content: Project-specific information, drawn accurately to a scale large enough to indicate and resolve conflicts. Do not base coordinated composite drawings on standard printed data. Include the following information, as applicable:

   a. Use applicable Drawings as a basis for preparation of coordinated composite drawings. Prepare sections, elevations, and details as needed to describe relationship of various systems and components.
   b. Coordinate the addition of trade-specific information composite drawings by multiple contractors in a sequence that best provides for coordination of the information and resolution of conflicts between installed components before submitting for review.
   c. Indicate functional and spatial relationships of components of architectural, structural (including applied fireproofing), civil, mechanical, plumbing, fire protection, fire alarm and electrical systems.
   d. Indicate space requirements for routine maintenance and for anticipated replacement of components during the life of the installation.
   e. Show location and size of access doors required for access to concealed dampers, valves and other controls, including space required for opening of the access door.
   f. Indicate required installation sequences.
   g. Indicate dimensions shown on the Drawings. Specifically note dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to the Design Professional indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.

B. Coordinated Composite Drawing Organization: Organize drawings as follows:

1. Floor Plans and Reflected Ceiling Plans: Show architectural and structural elements, and mechanical, plumbing, fire protection, fire alarm, and electrical Work. Show locations of visible ceiling-mounted devices relative to acoustical ceiling grid. Supplement plan drawings with section drawings where required to adequately represent the Work.
2. Plenum Space: Indicate sub-framing for support of ceiling and wall systems, mechanical and electrical equipment, and related Work. Locate components within ceiling plenum to accommodate layout of light fixtures indicated on the Drawings. Indicate areas of conflict between light fixtures and other components.
3. Mechanical Rooms: Provide coordinated composite drawings for mechanical rooms showing plans and elevations of mechanical, plumbing, fire protection, fire alarm, and electrical equipment.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

4. Structural Penetrations: Indicate penetrations and openings required for all disciplines.
5. Slab Edge and Embedded Items: Indicate slab edge locations and sizes and locations of embedded items for metal fabrications, sleeves, anchor bolts, bearing plates, angles, recessed floor mounted door closers, slab depressions for floor finishes, curbs and housekeeping pads, and similar items.
6. Mechanical and Plumbing Work: Show the following:
   a. Sizes and bottom elevations of ductwork, piping, and conduit runs, including insulation, bracing, flanges, and support systems.
   b. Dimensions of major components, such as dampers, valves, diffusers, access doors, cleanouts and electrical distribution equipment.
   c. Fire-rated enclosures around ductwork.
7. Electrical Work: Show the following:
   a. Runs of vertical and horizontal conduit 1-1/4 inch diameter and larger.
   b. Light fixture, exit light, emergency battery pack, smoke detector, and other fire alarm locations.
   c. Panel board, switchboard, switchgear, transformer, busway, generator, and motor control center locations.
   d. Location of pull boxes and junction boxes dimensioned from column centerlines.
8. Fire Protection System: Show the following:
   a. Locations of standpipes, mains piping, branch lines, pipe drops, and sprinkler heads.
9. Review: The Design Professional will review coordinated composite drawings to confirm that the Work is being coordinated, but not for the details of the coordination, which are the Contractor's responsibility. If the Design Professional determines that the coordinated composite drawings are not being prepared in sufficient scope or detail, or are otherwise deficient, the Design Professional will so inform the Contractor, who shall make changes as directed and resubmit.
10. The Contractor shall prepare composite shop drawings and field installation layouts for his work as directed by the Construction Manager to coordinate with other trades and to solve tight field conditions. Such drawings shall consist of dimensioned plans and elevations, and shall give complete information, particularly to size and location of sleeves, access doors, attachments, openings, conduits, ducts, boxes and structural interferences.
11. The sheet metal contractor will provide key plan layout drawings within 7 working days of the Award of the Contract and/or Notice To Proceed. All trades shall be provided with the key plans and will use the same key plan and numbering system. All trades shall be assigned with a color to use for coordinated drawings.
12. These composite shop drawings and field installation layouts shall be coordinated in the field among the Sub-Contractors to verify the proper relationship to the work of other Sub-Contractors based on field conditions, and shall be checked for accuracy and approved by the Contractor and reviewed by the Construction Manager before submission to the Architect for his final approval.

13. Ductwork, HVAC, Plumbing, Electrical, Fire Protection and General Construction work shall be coordinated as indicated by the following procedure. The Contractor shall sign each coordination drawing after all work has been laid out and conflicts resolved. The preparation of coordination drawings and layout work on the coordination drawings shall be performed at the site by each Contractor.

14. The sheet metal contractor shall prepare a mylar transparency of each area, at a scale of 3/8 inch equals 1’ – 0”, showing ductwork in plan and elevation. The sheet metal contractor shall also layout and show structural components, reflected ceiling and light fixtures on the mylars.

15. The transparency referred to in B.14 above shall then be forwarded to the next succeeding subcontractor for layout of their work in the field in the following order: a) Plumbing Contractor; b) Sprinkler and standpipe work c) HVAC piping work; d) Pneumatic tube work under the HVAC contractor) Electrical Contractor; and f) General Construction Contractor. Each Sub-Contractor shall keep each transparency not more than three (3) business days.

16. By use of color-coding, each succeeding Contractor shall show his work on the referenced transparency and shall sign same to indicate his satisfaction that there is no interference between his work and that other Contractors. The Construction Manager will assign colors.

17. When all work has been shown and signed off, the sheet metal Contractor shall forward each transparency to the Construction Manager for review and approval by the Architect.

18. The color coded transparency shall be kept at the Construction Manager’s field office for future reference in the event of conflict between the trades. At the completion of the Project, all color transparencies shall be delivered to the Owner for his records.

19. Coordination meetings to resolve interferences in the Work shall be held at the site. The Contractor shall provide the necessary manpower and/or overtime to ensure that the coordination process described herein does not delay the Project Schedule. Each contractor shall include in their bid the cost to supply experienced coordination personnel.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

to attend each coordination meeting. Additional costs for attending coordination meetings will not be entertained by the Owner, regardless of the number of meetings it takes to complete the coordination process. Each subcontractor shall anticipate meeting a minimum of three times a week for the duration of the coordination process.

20. At the discretion of the Construction Manager Coordinated Drawings may be done on Auto-CADD (version determined by the Construction Manager)

A. The sheet metal contractor will provide all drawing files including background/wall layouts/wall ratings/light fixtures and reflected ceiling plan within 3 business days of the Engineers review of the sheet metal shop drawing.
B. All review comments to be incorporated in that 3 day period.
C. Contractors will be required to be coordinating multiple drawings simultaneously.
D. The HVAC contractor will have a total of 9 business days per drawing to add the HVAC piping, sprinkler piping, and pneumatic messenger tubing.
E. The electrical contractor will have 3 business days to add electrical work.
F. The plumbing contractor will have 3 business days to add plumbing work.
G. The general construction contractor will have 3 business days to add general construction work.
H. All AutoCAD files will be E-mailed directly to the subsequent contractor with an electronic “cc” including the file to the CM. A plotted version of each transmitted drawing will be provided to the CM by the prime contractor.
I. The sheet metal contractor will review & confirm that all trade layouts are on a combined file. All “hits” are to be clearly identified by each trade. Each draftsman must attempt to clear “hits” during drafting. All work is to be blocked.
J. The sheet metal contractor will plot each coordinated drawing in color and bring the plotted drawing to each coordination meeting, along with a laptop computer with appropriate AutoCad software, projector & screen.
K. The sheet metal contractor will be responsible to incorporate the changes made during coordination on every coordination-drawing file. This will take place at the jobsite coordination meetings.
L. All contractors will have sufficient manpower/computers & resources to meet the contract requirements while working on multiple drawings at once.
M. All prime contractors will submit-for approval the name and qualifications of their responsible lead drafts-person for this project. The lead draftsman shall be experience with AutoCAD, and will attend every coordination meeting. Every coordination meeting will take place at the jobsite.

C. Coordination Digital Data Files: Prepare coordination digital data files in accordance with the following requirements:

1. File Preparation Format: The Contractor shall coordinate with the Design Professional and use the same digital data software program, version, and operating system as the original Drawings.
1.6 KEY PERSONNEL

A. Key Personnel Names: Within 15 continuous calendar days after receipt of the Notice to Proceed, submit a list of key personnel assignments with resume and job qualifications, including project manager, project scheduler, superintendent and other personnel in attendance at the Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home, office, and cellular telephone numbers, and email addresses. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to the Project.

1.7 REQUESTS FOR INFORMATION (RFIs)

A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, the Contractor shall prepare and submit an RFI in the form specified.

1. Coordinate and submit RFIs in a prompt manner so as to avoid delays in the Contractor's work or work of subcontractors.

B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:

1. Project name.
2. Project number.
3. Date.
4. Name of Contractor.
5. Name of Design Professional.
6. RFI number, numbered sequentially.
7. RFI subject.
8. Specification Section number and title and related paragraphs, as appropriate.
9. Drawing number and detail references, as appropriate.
10. Field dimensions and conditions, as appropriate.
11. Contractor's suggested resolution. If Contractor's solution(s) impacts the date of Substantial Completion or the Contract Sum, Contractor shall state impact in the RFI.
12. Contractor's signature.
13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
   a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.

C. RFI Forms: The Owner’s and/or the Owners Representative’s Contract Manager-generated form with substantially the same content as indicated above.
D. Design Professional’s Action: The Design Professional will review each RFI, determine action required, and respond. Design Professional’s response for each RFI will be provided within 10 business days except in the event of a major design issue in which case the Design Professional will inform the Owner and/or the Owners Representative for coordination with the Contractor. RFIs received by the Design Professional after 1:00 p.m. will be considered as received the following business day.

1. The following RFIs will be returned without action:
   
a. Requests for approval of submittals.
b. Requests for approval of substitutions.
c. Requests for coordination information already indicated in the Contract Documents.
d. Requests for adjustments in the date for Substantial Completion or the Contract Sum.
e. Requests for information related to the Contractor’s Means and Methods.
f. Requests for interpretation of the Design Professional’s actions on submittals.
g. Incomplete RFIs or inaccurately prepared RFIs.
h. RFIs from the Contractor’s Sub-Contractors or suppliers that have not been reviewed by the Contractor.

2. The Design Professional’s action may include a request for additional information, in which case the Design Professional’s time for response will date from time of receipt of additional information.
   
a. If the Contractor believes the RFI response warrants change in the date of Substantial Completion or the Contract Sum, notify the Owner in writing within ten (10) continuous calendar days of receipt of the RFI response.

E. On receipt of the Design Professional’s action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify the Owner and/or the Owners Representative and Design Professional within five (5) business days if the Contractor disagrees with response.

F. RFI Log: Coordinate and cooperate with the Owner and/or the Owners Representative to prepare, update and maintain the Owner’s use of Contract Manager software log. The software log will include not less than the following:

1. Project name.
2. Name and address of Contractor.
3. Name and address of Design Professional.
4. RFI number including RFIs that were dropped and not submitted.
5. RFI description.
6. Date the RFI was submitted.
7. Date Design Professional’s response was received.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.

1.8 CONTRACT MANAGER SOFTWARE SITE

A. Coordinate and cooperate with the Owner and/or the Owners Representative for managing project communication and documentation until Contract Closeout. The Contract Manager software site may include, but is not limited to, the following functions:

1. Project directory.
2. Project correspondence.
3. Meeting minutes.
5. RFI forms and logs.
6. Task and issue management.
7. Submittals forms and logs.
8. Payment application forms.
10. Reminder and tracking functions.
11. Archiving functions.

1.9 PROJECT MEETINGS

A. General: The Owner and/or the Owners Representative and/or Design Professional will schedule and conduct meetings at the Project site, unless otherwise indicated.

1. Attendees: The Owner and/or the Owners Representative and/or Design Professional will inform participants and others involved, and individuals whose presence is required, of date and time of each meeting.
2. Agenda: The Owner and/or the Owners Representative and/or Design Professional will prepare the meeting agenda through the use of the Owner’s Contract Manager software and distribute the agenda to all invited attendees.
3. Minutes: The Owner and/or the Owners Representative and/or Design Professional will record significant discussions and agreements reached in Contract Manager and distribute the meeting minutes to everyone concerned.

B. Construction Kick-off Meeting: The Owner and/or the Owners Representative will schedule and conduct a construction kick-off meeting before starting construction, at a time convenient to the Owner and/or the Owners Representative and Design Professional, upon issuance of the Notice to Proceed.

1. The meeting shall review responsibilities and personnel assignments.
2. Attendees: The Owner, and/or the Owners Representative, Owner's Commissioning Authority, Design Professional, and their consultants; the Contractor and its superintendent; major subcontractors; suppliers; all other project contractors and other concerned parties shall attend the conference. Participants at the meeting shall be familiar with the Project and authorized to make binding decisions on matters relating to the Work.

3. Agenda: The meeting agenda will include items of significance that could affect progress, including the following:

   a. Tentative construction schedule.
   b. Phasing.
   c. Critical work sequencing and long-lead items.
   d. Designation of key personnel and their duties.
   e. Lines of communications.
   f. Procedures for processing field decisions and Change Orders.
   g. Procedures for RFI.
   h. Procedures for testing and inspecting.
   i. Procedures for processing Applications for Payment.
   j. Distribution of the Contract Documents.
   k. Submittal procedures.
   l. Sustainable design requirements.
   m. Preparation of As-builts and turnover documents.
   n. Use of the premises.
   o. Work restrictions.
   p. Working hours.
   q. Owner's and/or the Owners Representative’s occupancy requirements.
   r. Responsibility for temporary facilities and controls.
   s. Procedures for moisture and mold control.
   t. Procedures for disruptions and shutdowns.
   u. Construction waste management and recycling.
   v. Parking availability.
   w. Office, work, and storage areas.
   x. Equipment deliveries and priorities.
   y. First aid.
   z. Security.
   aa. Progress cleaning.
   bb. Safety.

4. Minutes: The Owner and/or the Owners Representative’s and/or Design Professional will use Contract Manager to record and distribute meeting minutes.

C. Progress Meetings: The Owner and/or the Owners Representative’s will conduct progress meetings on a Bi-Weekly basis or as otherwise directed by the Owners Representative.

1. Coordinate dates of meetings with preparation of payment requests.
2. Attendees: The Owner, the Owners Representative, The Owner’s Commissioning Authority, and Design Professional, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with the Project and authorized to make binding decisions on matters relating to the Work.

3. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of the Project.

   a. The P6 Project Management Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to the Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

      1) Review schedule for next scheduled progress meeting period.

   b. Review present and future needs of each entity present, including the following:

      1) Interface requirements.
      2) Sequence of operations.
      3) Status of submittals.
      4) Deliveries.
      5) Off-site fabrication.
      6) Access.
      7) Site utilization.
      8) Temporary facilities and controls.
      9) Progress cleaning.
     10) Quality and work standards.
     11) Status of correction of deficient items.
     12) Field observations.
     13) Status of RFI's.
     14) Status of proposal requests.
     15) Pending changes.
     16) Status of Change Orders.
     17) Pending claims and disputes.
     18) Documentation of information for payment requests.

4. Minutes: The Owner and/or the Owners Representative and/or Design Professional entity responsible for conducting the meeting will use Contract Manager to record and distribute the meeting minutes to each party present and to parties requiring information.

   a. Schedule Updating: Coordinate with the Owner or the Owners Representative to revise the P6 Project Manager Schedule after each progress meeting where
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

revisions to the schedule have been made or recognized. The Owners Representative will issue revised schedule concurrently with the report of each meeting.

b. Contractor will submit (6) week look ahead schedule bi-weekly.

D. Pre-Installation Meetings: The Owner and/or Owners Representative may conduct Pre-Installation meetings at the Project site before each construction activity that requires coordination with other construction and major assemblies of the Work requiring tight control and coordination.

1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow shall attend the meeting. The Owner and/or Owners Representative to advise the Owner, Contractor, Design Professional and Owner's Commissioning Authority of scheduled meeting dates.

2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:

   b. Options.
   c. Related RFIs.
   d. Related Change Orders.
   e. Purchases.
   f. Deliveries.
   g. Storage.
   h. Submittals.
   i. Review of mockups.
   j. Possible conflicts.
   k. Compatibility problems.
   l. Time schedules.
   m. Weather limitations/acclimatization.
   n. Manufacturer's written recommendations.
   o. Warranty requirements.
   q. Acceptability of substrates.
   r. Temporary facilities and controls.
   s. Space and access limitations.
   t. Regulations of authorities having jurisdiction.
   u. Testing and inspecting requirements.
   v. Installation procedures.
   w. Coordination with other work.
   x. Required performance results.
   y. Protection of adjacent work.
   z. Protection of construction and personnel.
3. The Owner and/or the Owners Representative and/or Design Professional will use Contract Manager to record significant meeting discussions, agreements, and disagreements, including required corrective measures and actions.

4. Reporting: The Owner and/or the Owners Representative and/or Design Professional will distribute minutes of the meeting to each party present and to other parties requiring information.

5. Do not proceed with installation if the meeting cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the meeting at earliest feasible date.

E. Project Closeout Conference: The Owner may schedule and conduct a Project closeout conference, at a time convenient to the Owner and Design Professional, but no later than sixty (60) continuous calendar days prior to the scheduled inspection date for Substantial Completion.

1. The Owner will conduct the conference to review requirements and responsibilities related to the Project closeout.

2. Attendees: The Owner, Owner's Commissioning Authority, Design Professional, and their consultants; the Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with the Project and authorized to make binding decisions on matters relating to the Work.

3. Agenda: Discuss items of significance that could affect or delay the Project closeout, including the following:

   a. Submission of turnover documents.
   b. Procedures required prior to inspection for Substantial Completion and for final inspection for acceptance.
   c. Requirements for demonstration and training.
   d. Preparation of Contractor's punch list.
   e. Procedures for processing Applications for Payment at Substantial Completion and for final payment.
   f. Coordination of separate contracts.
   g. Owner's partial occupancy requirements.
   h. Installation of Owner's furniture, fixtures, and equipment.
   i. Responsibility for removing temporary facilities and controls.

4. Minutes: The Owner and/or Design Professional conducting meeting will use Contract Manager to record and distribute meeting minutes.

F. Owner's Interim Life Safety Measures (ILSM), Safety Meeting, and Infection Control Risk Assessment (ICRA).

1. A representative from Contractor shall attend the Owner’s ILSM weekly Safety meeting. At this meeting the Contractor shall submit in writing a one-week look ahead schedule to discuss the following week’s anticipated scope of work as it relates to the safety and impact of the Hospital’s operations.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

2. Contractor will meet with CM and the Hospital three days prior to the start of work in any area. ILSM and ICRA will be established at the meeting.

PART 2 - PRODUCTS (Not Used)
PART 3 - EXECUTION (Not Used)

END OF SECTION 013100
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The Contract Documents, including but not limited to, the Drawings and individual Specification Sections and Bid Milestone Schedule, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements to plan, schedule and document the progress of construction during the performance of the Work, including the following:

1. Critical Path Method (CPM) schedule and reports.
2. Material location reports.
3. Field condition reports.
4. Special reports.

B. Related Sections:

1. Section 011200 – Contract Summary of Work, for preparing a combined CPM Schedule.
2. Section 013300 – Submittal Procedure, for submitting schedules and reports.
3. Section 014000 – Quality and Code Requirements, for submitting a schedule of tests and inspections.

1.3 DEFINITIONS

A. Project: Work at the Site carried out pursuant to one or more Contracts.

B. Activity: A discrete part of the Contract that can be identified for planning, scheduling, monitoring, and controlling the Project. Activities included in a CPM schedule consume time and resources.

1. Critical Activity: An activity on the critical path that has no total float.
2. Predecessor Activity: An activity that precedes another activity in the network.
3. Successor Activity: An activity that follows another activity in the network.

C. Bid Milestone Schedule: Interim milestones, included in the Contract Documents, which the Contractor utilizes to formulate the Baseline Schedule.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

D. Baseline Schedule: Initial schedule, prepared by the Contractor, to complete the Work of the Contract in accordance with the Contract duration and starting point to which schedule updates are compared.

E. CPM: Critical path method is a scheduling method used to plan and schedule construction projects where activities are arranged based on activity relationships creating a time scaled network diagram.

F. PDM: Precedence diagram method follows the standard CPM calculations and allows for special logic relationships creating an interdependent relationship throughout the network.

G. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no total float.

H. Data Date: The date when the status of the CPM schedule is determined, showing the calendar start date for the update period.

I. Float: The measure of leeway in starting and completing an activity.

1. Float time is not for the exclusive use or benefit of either the Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Substantial Completion date.
2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Substantial Completion date.

1.4 INFORMATIONAL SUBMITTALS

A. Format for Submittals: Submit required submittals in both electronic (PDF) file format and as electronic backup file in native software format.

B. CPM Schedule: Schedule, of size required to display entire schedule for entire construction period.

1. Submit a working electronic copy of schedule, using software indicated, and labeled to comply with requirements for submittals. Include type of schedule (baseline or updated) and date on label.

C. CPM Reports: Concurrent with CPM schedule, submit each of the following reports. Format for each activity in reports shall contain; activity ID number, activity description, original duration, remaining duration, actual duration, early and late start and finish dates and total float in calendar days.

1. Activity Report: List of all activities sorted by early or actual start date in each phase, area and level following the physical divisions of the Work.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

2. Short Term Activity Report: Lists all activities occurring from the update data date in a two month forward and one month back window.
3. Logic Report: List of preceding and succeeding activities for all activities, sorted in ascending order by early or actual start date. Include activity ID number and float path(s).
4. Total Float Report: Provide a cumulative list of total float from each update period with comments associated to any and all variances.
5. Procurement Report: List all procurement activities sorted in order of the item being procured.
6. Narrative Report: The project scheduler shall describe the nature of the submission, interpretation of calculations, issues affecting progress and a milestone analysis comparing progress against the baseline and update schedules.

D. Material Location Reports: Submit at monthly intervals.
E. Field Condition Reports: Submit at time of discovery of differing conditions.
F. Special Reports: Submit at time of unusual event.
G. Qualification Data: For project scheduler.

1.5 QUALITY ASSURANCE
A. Project Scheduler Qualifications: An experienced specialist in CPM scheduling and reporting, with capability of producing CPM reports and diagrams within timeframes requested by the Owner. The project scheduler shall have or be able to obtain certification as a Planning and Scheduling Professional (PSP) or have a minimum of five years of demonstrated experience scheduling large capital projects.
B. Prescheduling Conference: The Owner and/or the Owners Representative may conduct a Pre-Scheduling conference at the Project site to comply with requirements in Section 013100 - Project Management and Coordination. Review methods and procedures related to the Baseline Schedule and the CPM schedule, including, but not limited to, the following:

1. Review software limitations and content and format for reports.
2. Verify availability of qualified personnel needed to develop and update schedule.
3. Discuss coordination, including phasing, work stages, area separations, interim milestones and Beneficial Occupancy.
4. Review delivery dates for Owner-furnished products.
5. Review schedule for work of Owner's separate contracts.
6. Review time required for review of submittals and resubmittals.
7. Review requirements for tests and inspections by independent testing and inspecting agencies.
8. Review time required for completion and startup procedures.
9. Review and finalize list of construction activities to be included in schedule.
10. Review submittal requirements and procedures.
11. Review procedures for updating schedule.

1.6 COORDINATION

A. Coordinate preparation and processing of CPM schedules and reports with the performance of the Work and with CPM scheduling and reporting of separate Contractors.

1. Coordinate new Baseline Schedules and CPM schedule updates with separate Contractor’s when additional Contracts are executed during the entire duration of the Project.

B. Coordinate CPM schedule with the Contractor’s Submission Schedule, progress reports, and other required schedules and reports.

1. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

2. Secure time commitments for performing critical elements of the Work from all parties.

PART 2 - PRODUCTS

2.1 CRITICAL PATH METHOD SCHEDULE, GENERAL

A. Bid Milestone Schedule: The Owner shall provide a Bid Milestone Schedule as a template for the Baseline Schedule. Nothing in the Bid Milestone Schedule, Baseline Schedule or CPM schedule shall preclude the Contractor from advancing the Work of the Contract.

1. Include milestones indicated in the Contract Documents in Baseline Schedule, including, but not limited to, the Notice to Proceed, interim milestones, Substantial Completion, and Contract close-out.

2. Substantial Completion date shall not be changed by submission of a schedule that shows an early completion date, unless approved by the Owner.

3. No time for weather will be apportioned for foreseeable occurrences in a specific regional area. The Contractor shall be responsible to determine reasonable averages based on National Oceanographic and Atmospheric Administration (NOAA) statistics for the region and make allowances in the performance of the Work.

B. Activities: Treat each numbered activity as a consumable resource for each principal element of the Work. Comply with the following:

1. Activity Duration: Define activities so no activity is longer than 15 continuous calendar days, unless specifically allowed by the Owner.

2. Procurement Activities: Include procurement process activities for long lead items and major items, requiring a cycle of more than 60 continuous calendar days, as separate
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.

3. Submittal Review Time: Include review and resubmittal times indicated in Section 013300 - Submittal Procedures in schedule. Coordinate submittal review times in the CPM schedule with dates entered in the Contractor’s Submission Schedule.

4. Startup and Testing Time: Include not less than 15 continuous calendar days for startup and testing.

5. Substantial Completion: Indicate completion on the date established for Substantial Completion, and allow time for the Owner’s administrative procedures necessary to execute the Notice of Substantial Completion (NOSC).

6. Incomplete Work items and Contract Closeout: Include not more than 30 continuous calendar days for incomplete Work items and Contract Closeout Requirements.

C. Constraints: Include constraints and work restrictions indicated in the Contract Documents, or approved by the Owner prior to use and show how date constraints affect the sequence of the Work.

1. Construction Areas: Identify each major area of construction for each major portion of the Work. Indicate where each construction activity within a major area must be sequenced or integrated with other construction activities.

D. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:

1. Unresolved issues.
2. Unanswered RFIs.
3. Rejected or unreturned submittals.
4. Notations on returned submittals.

E. Recovery CPM Schedule: When periodic update indicates the Work is 15 or more continuous calendar days behind the current approved CPM schedule, submit a separate recovery CPM schedule indicating means by which the Contractor intends to regain compliance with the CPM schedule. Indicate changes to working hours, working days, crew sizes, and equipment required achieving compliance, and dating by which recovery will be accomplished, subject to Owner’s approval. Submit such Recovery CPM Schedule within 7 business days of request from Owner or Owners Representative.

F. Computer Scheduling Software: Prepare CPM schedules using current version of a program that has been developed specifically to manage CPM schedules and interface with the Owner’s electronic file of the Bid Milestone Schedule.

1. Utilize Primavera P6 Primavera Project Planner operating system.

G. Milestone Dates: Milestone dates, as shown on the Construction Schedule provided as a part of the Bid Documents, shall be met. Milestone dates not met by the Contractor will subject the Contractor to the assessment of Liquidated Damages.
A pre-bid meeting may be held approximately two (2) weeks prior to the bid due date. The Owner or the Owner’s Representative will conduct the pre-bid meeting to explain and answer questions about the development, implementation and updating of the Project CPM Schedule and delineate the participation that shall be required of the successful bidder. It is strongly recommended that all prospective bidders attend.

I. Preliminary Requirements

A. Within one (1) calendar weeks after bids are opened, and before the Contract is executed, the apparent low bidder must submit to the Owner, in writing, a list of durations for all activities which appear on the Precedence Diagram. Failure to comply with this requirement may be cause for rejection of the bid.

B. The Contractor’s proposed work force and other resource loading for each activity of the Precedence Diagram, broken down by trades, must also be provided.

C. The Contractor shall submit to the Owner or Owner’s Representative, in writing, within ten (10) continuous calendar days after receipt by the Contractor of the Award of the Contract and/or the Notice to Proceed, the following information:

1. Shop drawing and material sample schedules keyed to the Precedence Diagram.

2. Schedules for the award of subcontractor and equipment contracts keyed to the Precedence Diagram.

3. The name of the person who, as Scheduling Coordinator for the Contractor, is authorized to act on behalf of the Contractor on all matters of scheduling included in Section 01 32 00. Once nominated, the Scheduling Coordinator may only be replaced after written notice is given to the Owner. The Contractor agrees, upon the request of the Owner or the Owner's Representative, to replace the Scheduling Coordinator.

2.2 CRITICAL PATH METHOD SCHEDULE (CPM SCHEDULE)

A. Baseline Schedule: Prepare schedule using a time-scaled PDM network diagram representing the Work of the Contract. Total float time shall be equal to or greater than zero in the Baseline Schedule.

1. Submit Baseline Schedule within 15 continuous calendar days of the date established for the Notice to Proceed. Outline significant construction activities for the first 30 continuous calendar days of construction. Include skeleton diagram for the remainder of the Work based on indicated activities.
a. Failure to include any work item required for the performance of the Work shall not excuse the Contractor from completing the Work of the Contract within applicable completion dates, regardless of the Owner’s approval of the schedule.

B. CPM Schedule: Prepare contemporaneous schedules using a time-scaled PDM network for sequencing the Work and showing the progress of the Work.

1. Establish procedures for monitoring and updating the CPM schedule and for reporting progress. Coordinate procedures with the progress meeting and payment request date.
2. Conduct educational workshops to train and inform the Contractor’s key Project personnel, including subcontractors' personnel, in proper methods of providing data and using CPM schedule information.
3. Use "one workday” as the unit of time for individual activities. Indicate nonworking days and holidays incorporated into the schedule in order to correlate with Contract durations.

C. CPM Schedule Preparation: Prepare a list of all activities required to complete the Work of the Contract. At minimum, each individual specification section, including General Requirement sections, as indicated in the Project Manual, shall be listed as an activity.

1. Activities ID: Provide a unique identifier to each activity. No activity ID shall be recycled or reused.
2. Activities: Indicate the estimated time duration, sequence requirements, and relationship of each activity in relation to other activities. Include estimated time frames for the following activities:
   a. Preparation and processing of submittals.
   b. Mobilization and demobilization.
   c. Purchase of materials.
   d. Fabrication.
   e. Delivery.
   f. Acclimatization.
   g. Utility interruptions.
   h. Installation.
   i. Work by Owner that may affect or be affected by the Contractor's activities.
   j. Testing and commissioning.
   k. Incomplete Work items and Contract closeout.
   l. Building Demolition

3. Actual Activity Dates: Once an activity has been assigned an actual date of occurrence, the status of that activity shall not change. Any change to actual dates must be accompanied with supporting data and approved by the Owner. No actual start date shall occur ahead of the data date.
4. Critical Path Activities: Identify critical path activities, including those for interim completion dates. Scheduled start and completion dates shall be consistent with the Bid Milestone Schedule dates.
5. Processing: Process data to produce output data status on a computer-drawn, PDM network. Revise data, reorganize activity sequences, and reproduce as often as necessary to produce the CPM schedule within the limitations of the Contract duration.

6. Calculations: The schedule network shall be calculated allowing activities to retain their original logic. Progress override shall not be used when calculating the network status.

7. Logic: Leads and lags will not be used when the creation of an activity will perform the same function. Lag durations contained in the schedule shall not have negative value. Lead and lag durations shall not exceed the durations of the activity they are assigned.

   a. There shall be only two open ended activities; (1) Notice to Proceed, with no predecessor logic, and (2) Final Payment, with no successor logic. All intermediate activity logic shall be connected.

   b. Out of sequence activities that have progressed before all preceding logic will be allowed only on a case by case basis, as approved by the Owner. The Contractor shall propose logic corrections to eliminate all out of sequence progress and correct out of sequence progress that continues for more than two update cycles by logic revisions, as approved by the Owner.

8. Float: The Owner shall reject the schedule and schedule updates for the use of float suppression techniques such as preferential sequencing, special lead lags logic constraints, zero total or zero free float constraints, extended activity times, or imposing constraint dates other than what is required by the Contract.

   a. The use of resource leveling used for the purpose of artificially adjusting activity durations to consume float and influence the critical path is prohibited.

   b. A schedule showing work completing in less time than the Contract duration and accepted by the Owner, will be considered to have float.

   c. Any float generated during the performance of the Work, due to efficiencies of the Owner or any Contractor is not for sole use of the party generating the float.

   d. Negative float will not be a basis for requesting time extensions and will not be construed as a means of acceleration or schedule extension.

9. Format: Follow the applicable individual specification sections of the Work as the bases for the content of the CPM schedule. Organize the CPM schedule to provide the necessary detail for each area, level, quadrant and section as needed in the performance of the Work.

D. Changes in the Work: For each proposed change and concurrent with its submission, prepare a time-impact analysis using a network fragment to demonstrate the effect of the proposed change on the overall CPM schedule.

E. Schedule Updating: Concurrent with making revisions to schedule, prepare tabulated reports showing the following:

   1. Identification of activities that have changed, including the reason each adjustment was necessary.

   2. Changes in early and late finish dates.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

4. Changes in the critical path.
5. Changes in total float or slack time.
6. Changes in the duration for Substantial Completion.

F. Project Control and Progress Meetings
1. The Contractor shall review, regularly, the reports generated by the Project CPM Schedule and use such reports as working tools to meet the Contractor’s obligations under the Contract.

2. The Contractor shall attend all scheduling meetings as directed by the Owner or Owner’s representative.

3. In addition to the Owner or the Owner’s Representative and the Contractor’s Superintendent and Scheduling Coordinator, such meetings shall also be attended by representatives of subcontractors as the Contractor, the Owner or Owner’s Representative may deem advisable. The agenda for such meetings shall include the project CPM schedule reports, the progress and current status of the Work in order to meet the Contractor’s objectives and his obligations under the Contract. Consideration shall be given to establishing actual start dates, actual completion dates, planned starts and finishes, quantities installed, man hours worked, as well as other data relevant to the performance of the Contract.

4. At least one week before each meeting described in subsection 2.2 F.2 of this Section 01 32 00, the Contractor shall furnish to, and in the form required by the Owner or the Owner’s Representative progress data for:

   4.1. The status of all activities as of date determined by the Owner or Owner’s Representative.

   4.2. A list of actual start and completion dates for all activities.

   4.3. Projected durations for completion of those activities in progress.

   4.4. Relevant data for Submittals in progress including equipment releases and equipment in fabrication.

   4.5. All other information which in the discretion of the Owner or its Representative, may be required to complete the Project Schedule Update. Baseline schedule must be updated at least once per month.

G. Payment
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

1. Pursuant to the General Terms and Conditions of the Contract, the Contractor shall delineate separate items for the monitoring of payment of the following:

1.1. Submission of the list of durations for all activities.

1.2. Submission of the schedules required by the Contract Documents.

1.3. Attendance by Contractor’s Superintendent and Scheduling Coordinator at each of the meetings called for in the Contract Documents.

1.4. Furnishing, on time and in advance of each meeting required by the Contract Documents, all progress date required in the detail and in the form required by the Owner or the Owner’s representative.

2. Payment for each of these separate payment items shall be subject to the Contractor’s compliance with the General Terms and Conditions of the Contract. If the Contractor fails to comply with the requirements of the General Terms and Conditions of the Contract, no payment for these items shall be due the Contractor, and the Owner shall promptly execute a credit change order reducing the dollar amount of the Contract by the dollar amount of these items.

3. The Contractor’s Payments Breakdown and the Monthly Requisition as called for by the General Terms and Conditions of the Contract shall be the basis by which the Contractor is to be paid.

4. Formal acceptance by the contractor of the Project CPM Schedule shall be a condition precedent to processing the contractor’s first pay request. Only bonds will be paid prior to acceptance of the Project CPM Schedule. In addition, a statement attesting to the contractor’s formal acceptance of each Project CPM Schedule Update shall accompany each subsequent contractor pay request.

H. Breach of Contract

The Contractor’s failure to comply with any requirement shall constitute a material breach of the Contract and the Owner shall have the right to and may terminate the Contract provided, however, the failure of the Owner to so terminate shall not relieve the Contractor from future compliance.
I. Time of Completion

It is the sole responsibility for the Contractor to complete the Work through the implementation of the project CPM schedule within the time required by the Contract.

2.3 REPORTS

(a) Material Location Reports: At monthly intervals, prepare and submit a comprehensive list of materials delivered to and stored at Project site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site. Provide, if requested by the Owner and/or the Owners Representative, copies of all material manifests or shipping papers.

(b) Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

2.4 SPECIAL REPORTS

(a) General: Submit special reports directly to Owner within one day of an occurrence. Distribute copies of report to parties affected by the occurrence.

(b) Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, and response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise the Owner in advance when these events are known or predictable.

PART 3 - EXECUTION

3.1 CPM SCHEDULE

A. Project Scheduler: Engage a consultant or person skilled in construction planning and scheduling to provide planning, scheduling, evaluation, and reporting services using CPM scheduling.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

(i) In-House Option: The Owner may waive the requirement to retain a consultant if Contractor employs skilled personnel with experience in CPM scheduling and reporting techniques. Submit qualifications.

(ii) Meetings: Project scheduler shall attend all meetings related to the Project progress, alleged delays, and time impact.

B. CPM Schedule and CPM Reports Updating: Prior to each scheduled progress meeting, update schedule to reflect actual construction progress and activities. Issue schedule and reports one week before each regularly scheduled progress meeting.

1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the CPM reports of each such meeting. As a minimum, schedule update submissions shall occur monthly and within 30 days of the schedule Data Date.

2. Include CPM reports with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.

3. As the Work progresses, indicate final remaining duration for each activity.

C. Distribution: Submit one electronic copy, in format specified and one small format (letter size) color hardcopy to the Owner and/or the Owners Representative.

1. Provide with each update and one large format copy to be posted in Project meeting rooms or temporary field offices.

2. When revisions are made, distribute updated schedules and reports to the same parties and post in the same locations.

END OF SECTION 013200
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The Contract Documents, including but not limited to, the Drawings and individual Specification Sections and Contractor’s Submission Schedule, apply to this Section.

1.2 SUMMARY

A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

B. Related Sections:

   1. Section 013200 – Construction Progress Documentation, for submitting schedules and reports, includes Contractor's construction schedule.
   2. Section 017700 – Contract Closeout Requirements, for documents required to closeout contract.
   3. Section 017823 – Operation and Maintenance Manuals, for submitting operation and maintenance manuals.
   4. 

1.3 DEFINITIONS

A. Action Submittals: Written and graphic information and physical samples that require the Design Professional’s responsive action. Action submittals are those submittals indicated in individual specification sections as action submittals.

B. Informational Submittals: Written and graphic information and physical samples that do not require the Design Professional’s responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual specification sections as informational submittals.


D. Required Submittal List Utility application: Interacts with and to be used with the Owner’s e-Build system. The Design Professional uses the utility to itemize the list of submission items needed to be submitted by the Contractor in order to insure the design intent will be satisfied and inclusive of all Project turnover documents and/or Contract Closeout Requirements.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

E. Contractor’s Submission Schedule: The itemized list of project submission requirements printed as a report from Contract Manager. The Contractor enters the date each item needs to be submitted in order to meet the CPM schedule and returns this document to the Owner.

1.4 ACTION SUBMITTALS

A. Submittal Schedule: The Design Professional specifies that submittal items that are required to be reviewed to confirm that the design intent will be met, and the close-out items (record drawings, special warranties, etc.) required for the project. These requirements are indicated on the Contractors Submission Schedule (spreadsheet from Contract Manager). Within two (2) weeks of Contract Award and/or Notice to Proceed, the Contractor is responsible for providing the dates their initial submissions will be made for the Owner and Owners Representative and Architect/Engineer’s acceptance. No later than Four (4) weeks after Contract Award and/or Notice to Proceed the Contractor is to provide a schedule for all required submissions. Contractor is to stagger submissions so as not to deliver all submissions for review at the same time as this will delay the review of submittals. Such a delay will not be the basis for any Contract duration adjustment.

1. Coordinate the Contractor’s Submission Schedule with list of subcontracts, the schedule of values, and coordinated CPM schedule.

2. Format for Submittals: Submit required submittals in electronic (PDF) file format. The Owner’s CM will enter in e-Builder.

B. Secondary Submittals: Submit in accordance with the approved CPM schedule all items remaining excluding those associated with the Initial Submittals or Final Submittals within the first 60 continuous calendar days after Contract award.

C. Final Submittal: Submit concurrently in accordance with the complete CPM schedule. Final submittals are items such as but not limited to: closeout documents, training manuals, training syllabuses and Operation and Maintenance manuals.

D. Format for Submittals: Submit required submittals in electronic (PDF) format.

1.5 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

A. Design Professional’s Digital Data Files: Electronic copies of CAD Drawings of the Contract Drawings will not be provided by the Design Professional for the Contractor's use in preparing submittals.

Coordination: Coordinate preparation and processing of submittals with the performance of the Work.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other
   submittals, and related activities that require sequential activity.
2. Commissioning Authority will review submittals applicable to systems being
   commissioned for compliance with commissioning needs, concurrent with the Design
   Professional review and approval.
3. Submit all submittal items required for each Specification Section concurrently unless
   partial submittals for portions of the Work are indicated on approved submittal schedule.
4. Submit action submittals and informational submittals required by the same Specification
   Section as separate packages under separate transmittals.
5. Coordinate transmittal of different types of submittals for related parts of the Work so
   processing will not be delayed because of need to review submittals concurrently for
   coordination.
   a. Submit Operation and Maintenance Manuals concurrent with action submittal.
   b. The Owner and/or the Owners Representative or Design Professional reserves the
      right to withhold action on a submittal requiring coordination with other submittals
      until related submittals are received.

B. Processing Time: Allow time for submittal review, including time for re-submittals, as follows.
   Time for review shall commence following receipt by the Owners Representative of a
   Contractor reviewed and signed submission from the Contractor which is reviewed for
   conformance by the Owners Representative and sent on to the Design Professional. No
   extension of the Contract Time will be authorized because of failure to transmit submittals
   enough in advance of the Work to permit processing, including re-submittals.

   1. Initial Review: Allow 15 continuous calendar days for initial review of each submittal.
      Allow additional time if coordination with subsequent submittals is required. The Design
      Professional will advise the Owners Representative when a submittal being processed
      must be delayed for coordination.
   2. Intermediate Review: If intermediate submittal is necessary, process it in same manner
      as initial submittal.
   3. Re-submittal Review: Allow 15 continuous calendar days for review of each re-
      submittal.
   4. Sequential Review: Where sequential review of submittals by the Design Professional’s
      consultants, the Owner, or other parties is indicated, allow 21 continuous calendar days
      for initial review of each submittal.

C. Identification and Information: Place a permanent label or title block on each paper copy
   submittal item for identification.

   1. Indicate name of firm or entity that prepared each submittal on label or title block.
   2. Provide a space approximately 6 by 8 inches on label or beside title block to record
      Contractor's review and approval markings and action taken by the Design Professional.
   3. Include the following information for processing and recording action taken:
      a. Project name.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

b. Date.
c. Name of Design Professional.
d. Name of Construction Manager (if applicable).
e. Name of Contractor.
f. Name of subcontractor.
g. Name of supplier.
h. Name of manufacturer.
i. Submittal number including revision identifier.

1) Submittal number shall be the submittal item number and Submittal Package number designated in the Contractor’s Submission Schedule.

j. Drawing number and detail references, as appropriate.
k. Location(s) where product is to be installed, as appropriate.
l. Other necessary identification.

D. Identification and Information: Identify and incorporate information in each electronic submittal file as follows:

1. Assemble complete submittal package into a single indexed file with links enabling navigation to each item.
2. Name file with submittal number or other unique identifier, including revision identifier.
3. Provide means for insertion to permanently record the Contractor’s review and approval markings and action taken by the Design Professional.
4. Include the following information on an inserted cover sheet:

   a. Project name.
b. Date.
c. Name and address of Design Professional.
d. Name of Construction Manager (if applicable).
e. Name of Contractor.
f. Name of supplier.
g. Name of manufacturer.
h. Submittal number including revision identifier.

   1) Submittal number shall be the submittal item number and Submittal Package number designated in the Contractors Submission Schedule

   i. Drawing number and detail references, as appropriate.
j. Location(s) where product is to be installed, as appropriate.
k. Other necessary identification.

5. Include the following information as keywords in the electronic file metadata:

   a. Project name.
b. Number and title of appropriate Specification Section.
c. Manufacturer name.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

   d. Product name.

E. Options: Identify options requiring selection by the Design Professional.

F. Deviations: Identify deviations from the Contract Documents on submittals.

G. Additional Copies: Unless the Design Professional observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.

H. Transmittal: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. The Owner and/or the Owners Representative will return submittals, without review, received from sources other than the Contractor and the Design Professional will return submittals, without review, received from sources other than the Owner and/or the Owners Representative

1. Transmittal Form: Use the Contractor’s office form.
2. Transmittal Form: Provide locations on form for the following information:

   a. Project name.
   b. Date.
   c. Destination (To:).
   d. Source (From:).
   e. Names of subcontractor, manufacturer, and supplier.
   f. Category and type of submittal.
   g. Submittal purpose and description.
   h. Specification Section number and title.
   i. Indication of full or partial submittal.
   j. Drawing number and detail references, as appropriate.
   k. Transmittal numbered consecutively.
   l. Submittal and transmittal distribution record.
   m. Remarks.
   n. Signature of transmitter.

3. On an attached separate sheet, prepared on the Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by the Design Professional on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal. Failure to provide this information negates the approval for that submission.

I. Re-submittals: Make re-submittals in same form and format.

1. Note date and content of previous submittal.
2. Note date and content of revision in label or title block and clearly indicate extent of revision.
3. Resubmit submittals until they are marked with approval notation from the Design Professional’s action stamp.

J. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, and installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.

K. Use for Construction: Use only final submittals that are marked with approval notation from the Design Professional’s action stamp.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.

1. Submit electronic submittals via email as electronic (PDF) files, to the Owners Representative’s Project Wise electronic file transfer site. If applicable, the Owners Representative will forward submittals to the Commissioning Authority for systems being commissioned. The Owner Representative may request paper copies of certain submittals for onsite coordination.

   a. The Design Professional, through the Owner Representative, will return annotated file. Annotate and retain one copy of file as an electronic Project turnover document file.

   b. The Commissioning Authority through the Owners Representative will return annotated file.

2. Operation and Maintenance Manual Submittals: Submit concurrent with the Action Submittal, as related in individual Specification Sections.

3. Closeout Submittals: Comply with requirements specified in Section 017700 – Contract Closeout Requirements and as listed in the Contractor’s Submission Schedule.

4. Permits, Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Permits, Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.

B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.

   1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.

   2. Mark each copy of each submittal to show which products and options are applicable.
3. Include the following information, as applicable:
   a. Submittal Package number and Submittal Item number.
   b. Manufacturer's catalog cuts.
   c. Manufacturer's product specifications.
   d. Standard color charts.
   e. Statement of compliance with specified referenced standards.
   f. Testing by recognized testing agency.
   g. Application of testing agency labels and seals.
   h. Notation of coordination requirements.
   i. Availability and delivery time information.

4. For equipment, include the following in addition to the above, as applicable:
   a. Wiring diagrams showing factory-installed wiring.
   b. Printed performance curves.
   c. Operational range diagrams.
   d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.

5. Submit Product Data concurrent with Samples.
6. Submit Product Data in electronic (PDF) file format.

C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.

1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
   a. Submittal Package number and Submittal Item number.
   b. Identification of products.
   c. Schedules.
   d. Compliance with specified standards.
   e. Notation of coordination requirements.
   f. Notation of dimensions established by field measurement.
   g. Relationship and attachment to adjoining construction clearly indicated.
   h. Seal and signature of professional engineer if specified.

2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 30 by 42 inches.

D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.

2. Identification: Attach label on unexposed side of Samples that includes the following:
   a. Submittal Package number and Submittal Item number.
   b. Generic description of Sample.
   c. Product name and name of manufacturer.
   d. Sample source.
   e. Number and title of applicable Specification Section.

3. Disposition: The Owners Representative shall maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
   a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
   b. Samples not incorporated into the Work, or otherwise designated as the Owner's property, are the property of the Contractor.

4. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
   a. Number of Samples: For turnover purpose, submit six full sets of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. The Design Professional, through the Owner, will return submittal with options selected.

5. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
   a. Number of Samples: Submit eight sets of Samples. The Design Professional, through the Owner, will retain two Sample sets; and the Owners Representative will retain two sample sets remainder will be returned. Mark up and retain one returned Sample set as a turnover sample.
      1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least six sets of paired units that show approximate limits of variations.

E. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:

1. Name, address, and telephone number of entity performing subcontract or supplying products.
2. Number and title of related Specification Section(s) covered by subcontract.
3. Drawing number and detail references, as appropriate, covered by subcontract.
4. Submit subcontract list in PDF electronic file, to the Owner.

F. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.


H. OSHA Certificates: Upon the Owner’s or Owners Representatives’ request, submit certificates of the OSHA 10-hour Construction Safety and Health Course – S1537-A, for all laborers, workers and mechanics working on site.

I. Installer Certificates: Upon the Owner’s request, submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.

J. Manufacturer Certificates: Upon the Owner’s request, submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.

K. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.

L. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.

M. Field Test Reports: Submit reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

N. Comparable Products

1. Conditions: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
   a. Evidence that the proposed product does not require extensive revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
   b. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
   c. Evidence that proposed product provides specified warranty.
   d. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
   e. Samples, if requested.

O. Commencement of Work: No portion of the work shall be commenced until required Shop Drawings or samples are approved by the Architect unless directed otherwise by the Owner or Construction Manager

2.2 DELEGATED DESIGN

A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of the Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to the Owners Representative for submission to the Architect.

B. Delegated-Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit three copies of a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.

C. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.
PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to the Design Professional.

B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of the Contractor’s approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 DESIGN PROFESSIONAL’S ACTION

A. General: The Design Professional will not review submittals that do not bear the Contractor's approval stamp and will return them without action.

B. Action Submittals: The Design Professional will review each submittal, make marks to indicate corrections or revisions required, and return it through the Owner's Representative. The Design Professional will insert an action stamp on each submittal, marked appropriately to indicate required action, as follows:

1. APPROVED: Submittal has been reviewed for the limited purpose of checking for conformance with information given and design concept expressed in the Contract Documents and no exceptions are taken; Contractor may proceed with work represented in submittal. Architect’s review is not conducted for the purpose of determining the accuracy or completeness of other details, such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment and systems, all of which remain the responsibility of the Contractor.

2. APPROVE AS NOTED: Submittal has been reviewed as stated in Subparagraph 1. above, but certain exceptions are noted. Contractor may proceed with work represented in submittal, provided Contractor agrees to incorporate exceptions noted by Architect and Construction Manager.

3. REVISE AS NOTED AND RESUBMIT: Submittal has been reviewed as stated in Subparagraph 1. above, but certain exceptions are noted. Contractor may not proceed with work represented in submittal. Revise submittal incorporating noted exceptions and resubmit to Architect until "APPROVED” or “APPROVED AS NOTED” status is given.

4. REJECTED, RESUBMIT AS SPECIFIED: Submittal has been reviewed as stated in Subparagraph 1. above and is not acceptable. Contractor may not proceed with work represented for one or more of the following reasons:
   a. Since work represented in submittal is not acceptable; submit specified item.
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

b. Submittal has not been made in accordance with procedures specified.
c. Insufficient information is provided to make a determination.
d. Submittal contains too many errors or omissions to make a determination.
e. Information provided does not conform to information included in the Contract Documents.
f. Submittal contains excessive extraneous materials making a final determination impossible.

5. NO ACTION REQUIRED: Submittal has not been reviewed for one or more of the following reasons:
a. Submittal is not required by the Contract Documents.
b. Submittal includes manufacturer’s instructions to the Contractor relative to Contractor’s responsibility for means, methods, procedures, and safety precautions.

6. REVIEWED: Submittal has been reviewed without comment for the following reason:
a. Submittal is for information or administration purposes only and does not require Architect’s action.

C. Informational Submittals: The Design Professional will review each submittal and will return it if it does not comply with requirements.

D. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from the Design Professional.

E. Incomplete submittals are not acceptable, will be considered nonresponsive, and will be returned without review.

F. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

G. The Commissioning Authority will receive copies of the submittals through the Owners Representative and will provide comments on the submittals via the Design Professional.

3.3 CONTRACTOR’S SUBMITTAL SCHEDULE
A. The Contractor’s Submission Schedule is to be as defined above. The Contractor is to coordinate and cooperate with the Owner, the Owners Representative and the Design Professional to complete scheduling in accordance with the approved CPM schedule.

END OF SECTION 013300
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

SECTION 01 35 26.23

CONFINED SPACE ENTRY PLAN
ELEVATOR PIT

PART 1 – GENERAL

1.1 DESCRIPTION

A. Scope:
   1. OWNER has determined that portions of the Site may constitute confined spaces or permit-required confined spaces, as defined in this Section.
   2. CONTRACTOR shall provide appropriate measures, including labor, supervision, equipment, protective devices, and incidentals, to protect the health and safety of personnel at the Site relative to confined spaces, and who may be affected by the Work in confined spaces including, without limitation: employees and agents of CONTRACTOR, Subcontractors, Suppliers, OWNER, ENGINEER, and ENGINEER’s consultants, while engaged in performance of their respective duties at Site.
   3. Comply with requirements of OWNER’s confined space entry program, if any.

1.2 TERMINOLOGY

A. The following words or terms are not defined but, when used in this Section, have the following meaning:
   1. “Confined spaces” are areas on or about the Site as defined in 29 CFR 1910.146(b) and 29 CFR 1926.21(b)(6). Confined spaces include, but are not limited to: storage tanks, process vessels, bins, boilers and similar spaces; ventilation or exhaust ducts and stacks; manholes, underground utility vaults and chambers, sewers, pipelines, tunnels; and open-topped spaces greater than four feet deep, such as pits, tubs, vaults, and vessels.
   2. “Entry permit” means the written or printed document provided by the employer of personnel entering permit-required confined space, to allow and control entry into permit-required confined space and that contains the information specified in 29 CFR 1926.146(f).
   3. “Permit-required confined space” means confined space as defined in 29 CFR 1926.146(b) and that has one or more of the following characteristics:
      a. Contains or has potential to contain a hazardous atmosphere.
      b. Contains material that has potential for engulfing an entrant.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid August 30, 2017

3.1 H Bldg Flood Slats and Elevator Flood Protection

c. Has internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or floors, or by floor that slopes downward and tapers to a smaller cross-section.

d. Contains other recognized serious safety or health hazard.

4. “Hot work permit” means the written authorization of employer of personnel entering a confined space to perform operations, such as riveting, welding, cutting, burning, and heating, capable of providing a source of ignition.

1.3 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with Laws and Regulations related to protecting personnel working in or entering confined spaces, including:


2. CFR, Title 29, Part 1926, Safety and Health Regulations for Construction.

1.4 SUBMITTALS

A. Informational Submittals: If acceptable, written response for Informational Submittals required in this Section will not be returned to CONTRACTOR. Submit the following to OWNER; if submittals under this Section are furnished to ENGINEER, ENGINEER will forward all submittals under this Section to OWNER without review.

1. Procedures: Site-specific confined space entry plan, submitted upon request of OWNER.

2. Permits and Reports: For each time personnel enter a confined space, copies of completed permits required for confined space entry, and completed confined space data sheets, submitted upon request of OWNER.

1.5 CONFINED SPACE ENTRY PLAN

A. Prepare Site-specific confined space entry plan which shall be incorporated into CONTRACTOR’s Site-specific health and safety plan. Maintain copy of the confined space entry plan at the Site for access by employees, OWNER and authorities having jurisdiction. Confined space entry plan shall include:

1. Results of CONTRACTOR’s Site-specific hazard assessment to identify confined spaces that are permit-required confined spaces, including list of all such spaces that will be accessed for the Work. Update the list as required throughout the Project.

2. Requirements for safeguarding access to, and restricting non-permitted personnel from access to, permit-required confined spaces during the Work.
3. Project-specific procedures to be followed when entering or accessing permit-required confined spaces.
4. Documentation of training provided to each person that will enter, or work in conjunction with entry to, permit-required confined spaces
5. Update the plan by adding copies of permits issued and records of entry to permit-required confined spaces, as required in Article 1.6 of this Section.

1.6 CONFINED SPACE SAFETY

A. Personnel entering confined space shall be trained in accordance with 29 CFR 1926.21 (b)(6) and 29 CFR 1910.146(g).

B. Comply with 29 CFR 1910.146 and requirements of authorities having jurisdiction.

C. Recordkeeping: Using the example forms attached to this Section, or other forms required by CONTRACTOR, OWNER, or authority having jurisdiction, issue for each instance of access to permit-required confined space, completed permit(s) and complete associated data sheet. File completed permits and data sheets in the Site-specific confined space entry plan, and submit in accordance with Article 1.4 of this Section.
   1. Permit for entry to permit-required confined space(s).
   2. Permit for hot work in permit-required confined space(s).
   3. Complete confined space data sheet.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 SUPPLEMENTS

A. The example forms listed below, following the “End of Section” designation, are part of this Specification Section:
   1. “Confined Space Data Sheet” (one page).
   2. “Confined Space Entry Permit (three pages).
   3. “Confined Space Hot Work Permit” (one page).

END OF SECTION 013526.23
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017
CONFINED SPACE DATA SHEET

Name of Confined Space: ____________________________________________________________

Location of Confined Space: _______________________________________________________

Contractor/Subcontractor Accessing Confined Space: __________________________________

PRE-ENTRY SYSTEM CONTROL

Mechanical: Isolate, lockout and de-energize to zero potential energy. □

Engulfment: Blank/block/cap/bleed off lines. Lock out gates, valves, pumps. □

Electrical: Lockout/Tag-out □

Inerting: Flush/Purge/Vent □

Special Precautions: ________________________________________________________________

ATMOSPHERE

Date of Last-measured Values: ______________________________________________________________________

<table>
<thead>
<tr>
<th></th>
<th>Oxygen</th>
<th>Explosive</th>
<th>H₂S/Toxic</th>
<th>CO</th>
<th>Date/Time Completed</th>
<th>Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissible Range</td>
<td>19.5%-23.5%</td>
<td>&lt; 10% LFL</td>
<td>&lt; 10 ppm H₂S</td>
<td>&lt; 35 ppm</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Last Measured</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Values This Entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SITE AND PERSONAL SAFETY (check if required, list type where applicable)

Personal Protective Equipment:
Foot □. Respiratory □ (type) __________________________. Clothing □ (type) ________________
Other: □ __________________________________________

Rescue and Emergency Equipment:
Retrieval Equipment □. Fire Extinguishers □. Radios/Telephone □. Ladder □. Other □ _______________________
Equipment on Standby for Rescue Personnel □

Site Safety:
Explosion-Proof Lighting □. Barriers/Shield/Barricades □ (type) ______________________. Postings/Flagging □.
Other □ __________________________________________________

List specific equipment isolated, de-energized, and locked out.
CONFINED SPACE ENTRY PERMIT

ENTRY TEAM
Contractor/Subcontractor Accessing Confined Space: ________________________________________________
Facility: ___________________________________________________________________________________
Specific Confined Space Being Entered: ________________________________________________________________________________________________________
Purpose of Entry (describe the work to be done): _______________________________________________________________________________________________________

Date: _________ Time: _________ Expected Job Duration (days/hours): _________
Entry Supervisor: ___________________ Designated Attendant: ___________________
Authorized/Qualified Entrants: ___________________________________________________________________________________________________________________

Entry Team Rotation:
Date: _________ Time: _________
Entry Supervisor: ___________________ Designated Attendant: ___________________
Authorized/Qualified Entrants: ___________________________________________________________________________________________________________________

Communication Procedures:
Entry Team: ________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
Standby/Rescue Personnel: ________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

Sign Offs:
Person Authorizing This Entry: ________________________________________________
Entry Supervisor: ________________________________________________
Person Terminating Permit: ________________________________________________ Date: _________ Time: _______
Distribution to: ________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

Attach to this permit a list of rescue and emergency services that can be summoned and the means (such as the equipment to use and the numbers to call) for summoning those services.
CONFINED SPACE ENTRY PERMIT

PRE-ENTRY SYSTEM CONTROL

Date/Initials

Mechanical:
☐ ______

Isolate, lockout and de-energize to zero potential energy.
Completed

Engulfment:
☐ ______

Blank/block/cap/bleed off lines. Lock out gates, valves, pumps.
Completed

Electrical:
☐ ______

Lockout/Tag-out
Completed

Inerting:
☐ ______

Flush/Purge/Vent
Completed

Special Precautions: __________________________________________

________________________________________

ATMOSPHERE - Tested by portable atmospheric monitor with audible and visual alarms. No one will enter a space with an unsafe atmosphere without approval from the Division Superintendent/Assistant Superintendent.

<table>
<thead>
<tr>
<th></th>
<th>Oxygen</th>
<th>Explosive</th>
<th>H₂S/Toxic</th>
<th>CO</th>
<th>Date/Time</th>
<th>Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissible</td>
<td>19.5%-</td>
<td>&lt; 10% LFL</td>
<td>&lt; 10 ppm</td>
<td>&lt; 35 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>23.5%</td>
<td>H₂S</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Ventilation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ventilation Used (circle one): Mechanical ☐ Natural ☐

Special Precautions: (See Confined Space Data Sheet) __________________________________________

SITE AND PERSONAL SAFETY (check if required, list type where applicable)

Personal Protective Equipment:
Foot ☐. Respiratory ☐ (type) __________________________. Clothing ☐ (type) __________________________.
Other: □ ____________________________________________________________

____________________

Rescue and Emergency Equipment:
Retrieval Equipment □. Fire Extinguishers □. Radios/Telephone □. Other □ __________

____________________

Equipment on Standby for Rescue Personnel □ ________________________________

____________________

Site Safety:
Explosion-Proof Lighting □. Barriers/Shield/Barricades □ (type) ____________________.
Postings/Flagging □.
Other □ ____________________________________________________________

____________________

List specific equipment isolated, de-energized, and locked out.

____________________
CONFINED SPACE HOT WORK PERMIT

Contractor/Subcontractor Accessing Confined Space for Hot Work: ________________________________

Facility: ____________________________________________

Specific Confined Space Being Entered: ______________________________________________________

Date: ____________________ Time: ______________________

Expected Job Duration (days/hours): __________________________

Purpose of Entry (describe the work to be done): ______________________________________________

_____________________________________________________________________________________

Explain Why Work Cannot be Done Outside of the Confined Space: ______________________________

_____________________________________________________________________________________

Safety Equipment Required:

Fire Extinguishers: Yes ________ No ________ Number ______

Type: _________________________________________________________________________________

Respirators: Yes ________ No ________ Number ______

Type: _________________________________________________________________________________

Other Equipment: _______________________________________________________________________

_____________________________________________________________________________________

Authorizing Supervisor:

Print Name: _____________________________________________

Signature: ____________________________________________

Date Signed: _________________________________________
SECTION 014000 - QUALITY AND CODE REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The Contract Documents, including but not limited to, the Drawings and Individual Specification Sections and New York State (NYS) or New York City (NYC) Statement of Special Inspections and Tests, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for quality assurance and quality control.

B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve the Contractor of responsibility for compliance with the Contract Document requirements.

1. Specific quality assurance and quality control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.

2. Specified tests, inspections, and related actions do not limit the Contractor’s other quality assurance and quality control procedures that facilitate compliance with the Contract Document requirements.

3. Requirements for the Contractor to provide quality assurance and quality control services required by the Owner or authorities having jurisdiction are not limited by provisions of this Section.

C. Related Sections:

1. Section 012100 - Allowances,
2. Section 013200 - Construction Progress Documentation, for developing a schedule of required tests and inspections.
3. Individual Specification Sections, for specific inspections and tests requirements.
4. Section 013300-Submittal Procedures for preparing and handling submittals

1.3 DEFINITIONS

A. Quality Assurance Services: Activities, actions, and procedures performed during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887

3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

B. Quality Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements.

C. Mockups: Full size physical assemblies that are constructed on-site. Mockups are constructed to verify selections made under sample submittals; to demonstrate aesthetic effects and, where indicated, qualities of materials and execution; to review coordination, testing, or operation; to show interface between dissimilar materials; and to demonstrate compliance with specified installation tolerances. Mockups are not Samples. Approved mockups establish the standard by which the Work will be judged.

D. Product Testing: Tests and inspections that are performed by a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.

E. Field Quality Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.

F. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency. The Owner will engage the testing agency for special inspections.

G. Installer/Applicator/Erector: The Contractor or another entity engaged by the Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations having been appropriately certified, authorized and/or licensed and having complied with requirements of authorities having jurisdiction.

H. Experienced: When used with an entity or individual, “experienced” means having successfully completed a minimum of five previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; appropriately certified, authorized and/or licensed and having complied with requirements of authorities having jurisdiction.

1.4 ACTION SUBMITTALS

A. Shop Drawings: For mockups, provide plans, sections, and elevations, indicating materials and size of mockup construction.

1. Indicate manufacturer and model number of individual components.
2. Provide axonometric drawings for conditions difficult to illustrate in two dimensions.
1.5  INFORMATIONAL SUBMITTALS

A. Contractor's Quality Control Plan: For quality assurance and quality control activities and responsibilities.

B. Contractor's Quality Control Manager Qualifications: For supervisory personnel.

C. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.

D. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
   (1) Specification Section number and title.
   (2) Entity responsible for performing tests and inspections.
   (3) Description of test and inspection.
   (4) Identification of applicable standards.
   (5) Identification of test and inspection methods.
   (6) Number of tests and inspections required.
   (7) Time schedule or time span for tests and inspections.
   (8) Requirements for obtaining samples.
   (9) Unique characteristics of each quality control service.

1.6  CONTRACTOR’S QUALITY CONTROL PLAN

A. Quality Control Plan, General: Submit quality control plan within business 10 days of Notice to Proceed, and not less than five days prior to preconstruction conference. Submit in format acceptable to the Owner and/or the Owners Representative. Identify personnel, procedures, controls, instructions, tests, records, and forms to be used to carry out Contractor's quality assurance and quality control responsibilities. Coordinate with Contractor's construction schedule.

B. Quality Control Personnel Qualifications: Engage qualified full-time personnel trained and experienced in managing and executing quality assurance and quality control procedures similar in nature and extent to those required for Project.

   (1) Project quality control manager may also serve as Project superintendent provided that all required qualifications have been satisfied.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

C. Submittal Procedure: Describe procedures for ensuring compliance with requirements through review and management of submittal process. Indicate qualifications of personnel responsible for submittal review.

D. Testing and Inspection: Include in Quality Control Plan a comprehensive schedule of the Work requiring tests or inspections, including the following:

(1) The Contractor-performed tests and inspections including subcontractor-performed tests and inspections. Include required tests and inspections and the Contractor-elected tests and inspections.

(2) Special inspections required by authorities having jurisdiction and indicated on the “NYS or NYC Statement of Special Inspections and Tests.”

E. Continuous Inspection of Workmanship: Describe process for continuous inspection during construction to identify and correct deficiencies in workmanship in addition to testing and inspection specified. Indicate types of corrective actions to be required to bring work into compliance with standards of workmanship established by Contract requirements and approved mockups.

F. Monitoring and Documentation: Maintain testing and inspection reports including log of approved and rejected results. Include work the Owner has indicated as nonconforming or defective. Indicate corrective actions taken to bring nonconforming work into compliance with requirements. Comply with requirements of authorities having jurisdiction.

1.7 REPORTS AND DOCUMENTS

A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:

(1) Date of issue.
(2) Project title and number.
(3) Name, address, and telephone number of testing agency.
(4) Dates and locations of samples and tests or inspections.
(5) Names of individuals making tests and inspections.
(6) Description of the Work and test and inspection method.
(7) Identification of product and Specification Section.
(8) Complete test or inspection data.
(9) Test and inspection results and an interpretation of test results.
(10) Record of temperature and weather conditions at time of sample taking and testing and inspecting.
(11) Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
(12) Name and signature of laboratory inspector.
(13) Recommendations on retesting and reinspecting.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:

(1) Name, address, and telephone number of technical representative making report.
(2) Statement on condition of substrates and their acceptability for installation of product.
(3) Statement that products at Project site comply with requirements.
(4) Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
(5) Results of operational and other tests and a statement of whether observed performance complies with requirements.
(6) Statement whether conditions, products, and installation will affect warranty.
(7) Other required items indicated in individual Specification Sections.

C. Factory-Authorized Service Representative's Reports: Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections. Include the following:

(1) Name, address, and telephone number of factory-authorized service representative making report.
(2) Statement that equipment complies with requirements.
(3) Results of operational and other tests and a statement of whether observed performance complies with requirements.
(4) Statement whether conditions, products, and installation will affect warranty.
(5) Other required items indicated in individual Specification Sections.

1.8 PERMITS, LICENSES, AND CERTIFICATES:

A. The Contractor shall obtain, maintain and pay for all applications, permits, filings, and licenses necessary for the execution of the Work and for the use of such Work when completed as required by any and all authorities having jurisdiction. The Contractor shall comply with and give notices required by laws, ordinances, rules, regulations and lawful orders of authorities having jurisdiction bearing on performance of the Work. The permits required to be obtained by the contractor shall include all “After Hour Work” Variance Permits required for all work to be performed during nights and weekends. Copies of all permits obtained by the Contractor, including “After Hour Work” permits shall be forwarded to the Construction Manager. The Contractor shall also pay all fees, which the City agencies charge for connections, taps, water use, crane permits, inspections, etc.

1. The waiver of permit costs does not apply to fees which the City agencies charge for connections, taps, water use, etc. The Contractor shall pay these fees to the applicable city agencies.
2. Prior to final payment the Contractor shall deliver to the Owner's representative all permits and certificates of approval issued by any agency having jurisdiction.
3. The elevator mitigation (A3.2) and the pit hardening and flood protection have been filed separately. Building permits must be procured
for each. All applicable permits from NYCDOB elevator division must be procured.

B. The Contractor shall promptly assist the Owner and/or the Owners Representative in securing all approvals from authorities having jurisdiction. Without limitation, the Contractor shall assist the Owner and/or the Owners Representative in making application for Project approval, variances or other approvals, Letters of Completion, Temporary Certificates of Occupancy, and Certificates of Occupancy, including completion of all necessary applications and supporting documentation.

C. The Contractor shall comply with all regulations governing conduct, access to the premises, and operation of equipment and systems while in or near the premises, and shall perform the Work in such a manner as not to unreasonably interrupt or interfere with the conduct of business of the Hospital.

D. For the Owner’s records, submit copies of permits, licenses, certifications, inspection reports, material certificates/affidavits, approvals, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

E. Each Electrical Contractor shall, at no additional costs to the Owner, provide for inspection of all electrical Work of the Contract and provide a certificate of compliance from an independent electrical inspection agency acceptable to the Owner. Each contractor will be responsible to pay the cost of any violations that the Construction Manager or the Owner receives due to Contractors’ employee or work operation violations.

F. New York City Permits: The Contractor shall secure and pay for all work permits, applications, filings, and approvals that are associated with the Work of the Contract and pay all other permits, fees, licenses and inspections necessary for the proper execution and completion of the Contract as required by applicable New York City agencies and departments (i.e. Department of Buildings, Bureau of Electrical Control, Fire Department, Department of Environmental Protection, etc.).

(1) The Contractor shall secure required work permits and approvals prior to commencement of the Work, provide a copy to the Owner and post a copy of the permit at the Project site.

(2) The Contractor shall be responsible to maintain updated work permits and approvals.

(3) Upon Substantial Completion of the Work of the Contract, the Contractor shall secure all required approvals from applicable New York City agencies and departments. The Contractor shall provide a copy to the Owner.

G. Municipal Permits: The Contractor shall secure and pay for a building permit and all work permits, applications, filings, and approvals that are associated with the Work of the Contract and pay all other permits, fees, licenses and inspections necessary for the proper execution and completion of the Contract as required by applicable authorities having jurisdiction.
(1) The Contractor shall secure required building permit or work permits and approvals prior to commencement of the Work, provide a copy to the Owner and post a copy of the permit at the Project site.

(2) The Contractor shall be responsible to maintain updated permits and approvals.

(3) Upon Substantial Completion of the Work of the Contract, the Contractor shall secure all required approvals from applicable authorities having jurisdiction. The Contractor shall provide a copy to the Owner.

H. OSHA HEALTH AND SAFETY PLAN

1. Each Contractor shall submit within 14 continuous calendar days after Notice to Proceed, a comprehensive Health and Safety Plan to be followed during Contract duration for Owner’s approval. The plan shall be kept on site at all times.

2. Each Contractor’s safety plan shall include, but not limited to the following:

   1. Strict utilization of safety clothing, shoes, eye protection, gloves, hardhats, etc., including fire protection extinguishers and related devices (sand buckets and water).
   2. Provisions of overhead protection in designated areas including guardrails.
   3. Wearing by all construction and supervisory personnel of security I.D. badges on outer clothing indicating complete information about wearer.
   4. Maintenance of proper slopes, guard rails, shoring and protection during and around all construction areas as well as around/atop all openings in floors/walls.
   5. Provision and maintenance of first aid boxes and supplies at designated areas.
   6. A listing of Material Safety Data Sheets (M.S.D.S.) for all products/chemicals, which are being used as part of construction and which, could pose a threat to health if improperly handled. The data sheets will explain proper handling and emergency responses.
   7. Designation of a site safety manager experienced/certified in safety and accident/injury prevention who must report all incidents to Owner’s representative for action and records, and attend all job safety and tool box meetings.
   8. A complete listing of all relevant company phone numbers and addresses that are involved with this project to include but not be limited to: all field staff, central and branch offices and the company officers responsible, all subcontractors and their responsible staff, facsimile phone numbers of all companies involved. In case of emergency prompt communication is essential.
   9. Phone numbers for all local emergency services to include hospital, police and fire departments.
   10. Map of this facility showing emergency exit routes from within the facility to the Emergency Room in the building.
   11. The Owner’s/Facility Safety manual shall be incorporated with the Contractors’ manual.
   12. Listing of all equipment being used on the job and their operating instructions and safety concerns.
   13. The plan must indicate all potential hazardous movements, operations and construction activities, to inform each Contractor employees of the work to be executed.

3. Contractor shall post at strategic locations:
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

1. Emergency phone numbers for Fire, Police and Hospital
2. 24-hour phone number of Project Superintendent and the Responsible Person for Site Safety.
3. Responsible Person for Site Safety need not be dedicated solely to safety, and may also act in another shared capacity
4. The Contractor shall ensure that weekly tool box safety meetings are held at site with all subcontractors, superintendents, foremen and personnel with weekly records kept and submitted to Owner’s representative. The Contractor shall ensure that all the Contractors’ employees and all the Contractors’ Subcontractors’ employees will be made aware of the Contractor’s Health and Safety Plan and aspects of the plan will consistently be reviewed with all workers to assure safe working standards are being upheld.
5. Proper identification, removal and disposal of asbestos and/or other hazards as well as protection of construction personnel, existing users and the general public, shall be carried out throughout the project duration. As part of this contract, the Contractor must notify Owner’s representative when such materials are detected. All abatement of ACM materials shall be performed after regular working hours.
6. Contractor shall include within their specific site safety plan the provisions and requirements as stated in Section 1.06 – Hospital Facility/site Security and 1.07 – Interim life Safety Measures and Infection Control Risk Assessment. The contractor will adhere to all Bellevue Rules and Regulations.
7. In accordance with Section 1404.1 of the new Fire Code (FC1404.1), and section 3301.1.2 and 3303.7 of the NYC D.O.B code, smoking on any construction site is strictly prohibited. “Construction site”, as defined by FC1402.1, includes any building under construction, alteration or demolition. All violators will be subject to FDNY fines and prosecution, and will be removed from the construction site. Each worker on the construction site will be required to sign the following form acknowledging that they have read and understand the no smoking policy.

**************************
Bellevue Hospital

No Smoking Policy

SMOKING ON THE CONSTRUCTION SITE IS PROHIBITED.

ENFORCEMENT OF SMOKING PROHIBITION
AT CONSTRUCTION SITES.
(NEW YORK CITY FIRE CODE SECTION 1404.1)

In accordance with Section 1404.1 of the new Fire Code (FC1404.1), and section 3301.1.2 and 3303.7 of the NYC D.O.B code, smoking on any construction site is strictly prohibited. “Construction site”, as defined by FC1402.1, includes any building under construction, alteration or demolition. All violators will be subject to FDNY fines and prosecution, and will be removed from the construction site.

I__________________________________ on this ______day of ____________20___ have read and understood the terms and conditions as set above.

Signature ______________________________

Employed by: ____________________________

**************************
GENERAL REQUIREMENTS

H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

I. HOSPITAL FACILITY/SITE SECURITY

1. General

A. Comply with and adhere to the Hospital’s security regulations

B. Contractors and subcontractor employees shall be subject to review and approval.

C. Work hours and times when Contractor and subcontractor employees, including messengers, delivery persons, etc., may enter and leave the hospital shall be as established by the Hospital authorities. All deliveries will be made to the loading dock between 6:00 am and 7:30 am. Gates close at 4:00 pm. Deliveries for night work should be made during the day.

D. No alcoholic beverages, or persons under the influence of same, will be allowed on Hospital premises, outdoors or indoors.

E. No firearms, ammunition, or other weapons will be allowed on the Hospital premises, outdoors or indoors.

F. Contractors are responsible for the storage of their tools. Store in authorized approved, locked tool boxes when not in use.

G. Explosives, powder actuated tools and tungsten carbide hacksaws are prohibited.

H. All existing, in place items such as windows, doors, screens, alarm system components, glazing, hardware, etc. which require removal, replacement, or adjustment to carry out the Work, shall be restored to a secure and functional condition before leaving the site at the end of each work day.

2. Facility Security Requirements

A. The following are specific requirements for work associated with Bellevue Hospital. These requirements are in addition to requirements specified in these Specifications.

1. All Contractor employees, vehicles, packages and materials will be subject to inspection or review by Hospital security personnel prior to being permitted on the job site.

2. Identification Cards
   a. All Contractors, trades people, and construction workers working at Bellevue Hospital will be required to be photographed and issued ID cards, which will be supplied by the Hospital or the Owner’s CM, to be worn while working on Hospital grounds. Upon request, the ID card must be produced and/or displayed to Hospital security personnel and other facility personnel. Identification cards must be carried at all times.
   b. Any person without the issued ID card will not be permitted to work.
   c. ID cards lost or unaccounted for must be reported to the Hospital security department and owner’s representative immediately.

QUALITY AND CODE REQUIREMENTS
Bellevue Hospital - Issued for Bid
3. Each Contractor shall be responsible to make certain that every employee has the proper ID card.

4. In addition to the Hospital’s identification cards, the CM will also be issuing an identification card to all Contractors, trades people, and construction workers working at Bellevue Hospital. There will be a designated entrance into and out of the project. Any personnel without an identification card will not be allowed to enter into the project unless they are properly recorded or logged in. Due to the possible congestion of personnel at the entrance, each Contractor shall include in their base bid an anticipated waiting time every time they are entering the project. The Owner and Construction Manager will not provide compensation, nor entertain any claim whatsoever, for any loss productivity due to any delays in getting the Contractors’ personnel into the project.

5. All workmen will enter and leave the facility through areas designated by the Hospital and the Construction Manager. Entry will be through the loading dock area. The F-1 elevator is the only elevator to be used by construction personnel.

6. The Hospital reserves the right to stop contract work for given periods of time at any time work may interfere with the welfare or the operation and security of patients and Hospital personnel.

7. Proper sanitary conditions are to be maintained throughout the project area at all times.

8. Any hazardous materials, liquid or otherwise, will not be allowed on facility grounds until an M.S.D.S. form is submitted 48 hours prior of its use, to the owner. All volatile materials, such as gas, oil or other fuels will be stored in a safe manner as prescribed by OSHA.

9. No firearms, ammunition, or other weapons will be allowed on the premises at any time.

10. Alcoholic beverages or illegal drugs are strictly forbidden on facility grounds and any person found with either or under the influence of either will be immediately removed from the job site and in the case of illegal drugs, immediately prosecuted.

11. The Contractor will be responsible for a complete tool inventory of all his tools and accountability of his tools at all times. The loss of any tool or clothing will be reported to the Hospital security department and Owner’s representative immediately. Also note, that ropes and ladders are also considered tools.

12. Open fires at the construction site will not be permitted. Surplus dirt, rubbish and waste material, particularly combustible materials such as paper, cardboard or scrap lumber will be removed from the premises each night or more often as directed by the Owner’s representative. Work areas are to be left clear of debris at the conclusion of each workday.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

13. Proper safeguards as may be required by OSHA, contract or facility safety regulations will be enforced.

14. No work may be performed after normal hours without the prior approval of the Owner’s representative.

15. Job stewards are to discuss labor relations outside of the institution and away from the premises. Representatives of labor organizations will not be permitted to enter the construction areas unless accompanied by EDC.

16. Fire Drills: Contractors are required to participate in facility fire drills. There are no exceptions.

17. Smoking is prohibited in all construction areas or areas adjacent to construction areas. Workers found to be in violation of this requirement will be subject to removal from the site.

18. Camouflage clothing or glass of any type are prohibited.

19. Obscene language, derogatory comments or harassment of any type to employees, patients or visitors is prohibited.

20. Radios, CD’s and any other audio equipment are strictly prohibited.

21. Interim Life Safety Measures (ILSM) will be monitored and enforced by the Hospital safety department and Owner’s representatives and must be strictly adhered to. A representative from the Contractor shall accompany the Owner and Construction Manager during the weekly inspection walkthroughs. Deficiencies will be brought to the attention of the Contractor for immediate correction. Infection Control Risk Assessment (ICRA) – requirements will be similarly monitored and enforced.

22. All radios and communication equipment will require prior approval by the facility in order to coordinate frequency accommodations.

23. Each contractor shall provide and use smoke control equipment, such as smoke eaters, to prevent the transmission of fumes and odors when performing its work, including grinding and welding.

J – INTERIM LIFE SAFETY MEASURES – FACILITY REQUIREMENTS

ILSM Requirements

A. Contractor shall visit the site and the building and verify all existing conditions and dimensions.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

B. Areas of access to work areas within the building, which are damaged or defaced in any manner shall be cleaned, repaired or replaced as directed by the Architect or Construction Manager.

C. Contractor shall follow the Interim Life Safety Measures (ILSM) and Infection Control Risk Assessment (ICRA) Requirements of the section as developed by the New York Health and Hospitals Corporation.

1. Procedures: When construction is being done at an institution or when deficiencies in fire protection have been identified which pose a hazard to patients, staff and the public, the JCAHO requires that Interim Life Safety Measures must be implemented. Notification to the Hospital must be 3 days in advance of work.

   a) Interim Life Safety Measures

   1) Ensure that exits provide free and unobstructed egress. Personnel shall receive training if alternate exits must be designated. Buildings or areas under construction must maintain escape facilities for construction workers at all times. Means of egress in construction areas must be inspected daily.

   2) Ensure free and unobstructed access to emergency department/services and for emergency forces.

   3) Ensure that fire alarm, detection and suppression systems are not impaired. A temporary, but equivalent system shall be provided when any fire system is impaired. Temporary systems must be inspected and tested monthly.

   4) Ensure that temporary construction partitions are smoke-tight and built of non-combustible or limited combustible materials that will not contribute to the development or spread of fire.

   5) Provide additional fire-fighting equipment and use training for personnel.

   6) Smoking is prohibited in or adjacent to all construction areas.

   7) Develop and enforce storage, housekeeping and debris-removal practices that reduce the flammable and combustible fire-load of the building to the lower level necessary for daily operations.

   8) Conduct a minimum of two fire drills per shift per quarter.

   9) Increase hazard surveillance of buildings, grounds and equipment with special attention to excavations, construction areas, construction storage and field offices.
10) Train personnel when structural compartmentalization features of fire safety are compromised.

11) Conduct organization-wide safety education programs.

b) Implementation: The contractor bears responsibility for maintaining a level of safety equivalent to the level established in the Life Safety Code (ILSM) for the duration of the project in the following ways:

1) Performance Criteria

(a) No dust generated within the construction area shall be permitted to escape into occupied areas. Dam pened carpet-type floor mats with integral rubber padding shall be located at the access points to the construction area to prevent tracking dirt into other areas.

(b) All active diffusers and registers shall be removed, volume dampers closed and the open duct sealed with sheet steel screwed to the sheet metal of the duct. Ventilation of construction areas shall be by windows within the construction area or small ventilating units with separate ducts (flexible duct is acceptable through a nearby window.)

(c) All doors shall be kept shut and latched at all times except for access/egress and for material delivery and waste removal.

(d) If required, temporary exhaust to outside and/or smoke eaters will be employed.

2) Flammable Liquids

(a) All flammable liquids to be used in this project shall be stored in an approved storage cabinet designed for this purpose.

(b) Each trade may have one storage cabinet in their starting location.

(c) The location of these flammable liquid storage containers and a listing of all flammable and quantities shall be submitted to the construction manager for approval prior to delivery to the site. No oxidizing materials or flammable liquids are allowed.

(d) Flammable liquids include paints, aerosols sprays with flammable propellants and other products that may pose a fire hazard.

(e) Areas in which flammable liquids storage containers are located shall be provided with fully charged 20-pound A-B-C dry chemical fire extinguishers, which shall be checked at least monthly for charge.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

3) Welding

(a) Welding within hospital buildings shall be strictly controlled.

(b) No more than one cylinder of acetylene and oxygen may be within the construction area at any time and only when welding is being done. At the end of the workday and when welding operations will not be taking place, gas cylinders shall be stored in a secured area designated by the hospital’s Fire Safety Officer, outside the buildings.

(c) Areas where welding is occurring shall not contain other flammable materials or liquids, whether or not stored in approved containers. Also, there shall be no combustible materials within 35 feet of the welding operation.

(d) A fully charged, 20-pound, A-B-C dry chemical fire extinguisher shall be kept within easy reach during the welding operation.

(f) Only certified welders shall be employed by the Contractor for welding. A copy of the welder’s certificate shall be submitted at the first project meeting but not later than one week prior to the start of welding.

(g) Welding equipment shall be carefully examined for any faults before using. Do not operate defective welding equipment.

(h) The Contractor shall notify the hospital’s Fire Safety Officer at least one week prior to the start of welding. Any special instructions given to the Contractor by the Fire Safety Officer shall be strictly followed.

(i) All contractors will provide adequate fire watch during and ½ hour past any burning, welding, brazing and demolition operation. The contractor will also provide adequate fire watch when the existing building fire alarm or fire sprinkler/standpipe system is interrupted or disconnected from operation in order to complete the new work. The contractor will provide the fire watch until such systems have been restored to acceptable operational levels.

(j) During any burning welding or brazing the contractor will use “Smoke Eaters” and exhaust to the outside of the building. The contractors will provide fire watch at the immediate floor below and at the bottom of each shaft when performing any type of burning, welding or brazing operation. No exceptions will be permitted.
4) Protection of Hospital Emergency Movement Routes

(a) Any construction materials, tools or debris shall not obstruct emergency Movement Routes outside the construction area.

(e) Emergency Movement Routes shall include stairs, corridors leading to stairs and the staircase going to the public way (sidewalk).

(e) Existing exit sign shall not be blocked from view. Should this be unavoidable due to the configuration of the construction area, additional exit signs shall be installed so that at any point within the construction site two exit signs leading to two different exits shall be visible.

(d) Additional exit signs shall be phosphorescent with 6-inch high red letters on a white background.

(e) Cross-corridor doors to dead-end construction areas shall be identified as “Not An Exit” with signs of similar design above.

2. Responsibilities

The Construction manager will enforce ILSM standards on the construction site and the hospital grounds to the extent of the contractor’s activities.

The Institution will provide the necessary fire drills, hazard surveillance and training of contractor’s personnel.

The Contractor will be responsible for the implementation of the Infection Control Risk Assessment – Matrix of Precautions for Construction and Renovation Projects, see below:

**Infection Control Risk Assessment**

**Matrix of Precautions for Construction & Renovation**

**STEP ONE:**

*Using the following table, identify the TYPE of Construction Project Activity (Type A-D)*

<table>
<thead>
<tr>
<th>TYPE A</th>
<th>Inspection and Non-Invasive Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Includes, but not limited to:</td>
</tr>
<tr>
<td></td>
<td>• Removal of ceiling tiles for visual inspection limited to 1 tile per 50 square feet</td>
</tr>
<tr>
<td></td>
<td>• Painting (but not sanding)</td>
</tr>
<tr>
<td></td>
<td>• Wall covering, electrical trim work, minor plumbing, and activities which do not generate dust or require cutting of walls or access to ceiling other than for visual inspection.</td>
</tr>
</tbody>
</table>

QUALITY AND CODE REQUIREMENTS

Bellevue Hospital - Issued for Bid
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

QUALITY AND CODE REQUIREMENTS
Bellevue Hospital - Issued for Bid
014000 - 17
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

IC Matrix-Class of Precautions: Construction Project by Patient Risk

<table>
<thead>
<tr>
<th>Patient Risk Group</th>
<th>TYPE A</th>
<th>TYPE B</th>
<th>TYPE C</th>
<th>TYPE D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Risk Group</td>
<td>I</td>
<td>II</td>
<td>II</td>
<td>III/IV</td>
</tr>
<tr>
<td>Medium Risk Group</td>
<td>I</td>
<td>II</td>
<td>III</td>
<td>IV</td>
</tr>
<tr>
<td>High Risk Group</td>
<td>I</td>
<td>II</td>
<td>III/IV</td>
<td>IV</td>
</tr>
<tr>
<td>Critical Risk Group</td>
<td>II</td>
<td>III/IV</td>
<td>III/IV</td>
<td>IV</td>
</tr>
</tbody>
</table>

Note: Infection control approval will be required when the Construction Activity and Risk Level indicate that Class III or Class IV control procedures are necessary.

STEP FOUR:
Identify the areas surrounding the project area, assessing potential impact and assign risk group (as defined in step two)

<table>
<thead>
<tr>
<th>Unit Below</th>
<th>Unit Above</th>
<th>Lateral</th>
<th>Lateral</th>
<th>Behind</th>
<th>Front</th>
</tr>
</thead>
</table>

STEP FIVE:
Incorporate appropriate precautions into construction documents/work plan

Description of Required Infection Control Precautions by Class

<table>
<thead>
<tr>
<th>Class</th>
<th>During Construction Project</th>
<th>Upon Completion of Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I</td>
<td>• Execute work by methods to minimize raising dust from construction operations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Immediately replace a ceiling tile displaced for visual inspection.</td>
<td></td>
</tr>
<tr>
<td>Class II</td>
<td>In Addition to the above:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Provide active means to prevent airborne dust from dispersing into atmosphere.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Water mist work surfaces to control dust while cutting.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Seal unused doors with duct tape.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Block off seal air vents.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Place duct mat at entrance and exit of work area.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Remove or isolate HVAC system in areas where work is being performed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Wipe work surfaces with disinfectant.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Contain construction waste before transport in tightly covered containers.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Remove isolation of HVAC system in areas where work is being performed.</td>
<td></td>
</tr>
<tr>
<td>Class III</td>
<td>In Addition to the above:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Remove or isolate HVAC system in area where work is being done to prevent contamination of duct system.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Complete all critical barriers i.e., sheetrock, plywood, plastic to seal area from non-work area or implement control cube method (cart with plastic covering and sealed connection to work site with HEPA vacuum for vacuuming prior to exit) before transport in tightly covered containers.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Contain construction waste before transport in tightly covered containers.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Cover transport receptacles or carts. Tape covering unless solid lid.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Do not remove barriers from work area until complete project is inspected by the owner’s Safety Department and Infection Control Department and thoroughly cleaned by the owner’s Environmental Services Department.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Remove barrier material carefully to minimize spreading of dirt and dirt and debris associated with construction.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Vacuum work area with HEPA filtered vacuums.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Wet mop area with disinfectant.</td>
<td></td>
</tr>
</tbody>
</table>
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

<table>
<thead>
<tr>
<th>Class IV</th>
<th>In Addition to the above:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Isolate HVAC system in area where work is being done to prevent contamination of duct system.</td>
</tr>
<tr>
<td></td>
<td>- Complete all critical barriers i.e., sheetrock, plywood, plastic to seal area from non-work area or implement control cube method (cart with plastic covering and sealed connection to work site with HEPA vacuum for vacuuming prior to exit) before construction begins.</td>
</tr>
<tr>
<td></td>
<td>- Seal holes, pipes, conduits, and punctures appropriately.</td>
</tr>
<tr>
<td></td>
<td>- All personnel entering work site are required to wear shoe overs. Shoe covers must be changed each time the worker exits the work area.</td>
</tr>
<tr>
<td></td>
<td>- Do not remove barriers from work area until completed project is inspected by the owner’s safety Department and Infection Control Department and thoroughly cleaned by the owner’s Environmental Services Department.</td>
</tr>
<tr>
<td></td>
<td>- Remove barrier material carefully to minimize spreading of dirt and debris associated with construction.</td>
</tr>
<tr>
<td></td>
<td>- Contain construction waste before transport in tightly covered containers.</td>
</tr>
<tr>
<td></td>
<td>- Cover transport receptacles or carts. Tape covering unless solid lid.</td>
</tr>
<tr>
<td></td>
<td>- Vacuum work area with HEPA filtered vacuums.</td>
</tr>
<tr>
<td></td>
<td>- Wet mop area with disinfectant.</td>
</tr>
</tbody>
</table>

Note: When working in Class III and IV, special consideration should be taken to

a) Maintain negative air pressure within work site utilizing HEPA equipped air filtration units; and
b) Construct anteroom and require all personnel to pass through this room so they can be vacuumed using HEPA vacuum cleaner before leaving work site or they can wear cloth or paper coveralls that are removed each time they leave the work site.

ISSUES TO BE CONSIDERED

1. Identify specific site of activity and occupants lateral, above and below.

2. Identify issues related to, ventilation, plumbing, electrical in terms of the occurrence of probably outages.

3. Consider potential risk of water damage. Is there a risk due to compromised structural integrity? (E.g. wall, ceiling, roof).

4. Work hours: Can or will the work be done during non-patient care hours?

5. Do plans allow for adequate number of isolation/negative airflow rooms? (Verify with AIA Guidelines)

6. Do plans allow for the required number of isolation/negative airflow rooms? (Verify with AIA Guidelines)

7. Does the infection control staff agree with the minimum number of sinks for the project? (Verify with AIA Guidelines)

8. Does the infection control stage agree with the plans relative to clean and soiled utility rooms?

9. Plan to discuss the following containment issues with the project team. (E.g. traffic flow, housekeeping, and debris removal how and when)

10. Identify and communicate the responsibility for project monitoring which include infection control concerns and risks. The project team throughout the project may modify the Infection Control Risk Assessment (ICRA) Matrix.
1.9 QUALITY ASSURANCE

(a) General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.

(b) Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

(c) Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

(d) Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

(e) Specialists: Certain Specification Sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.

(f) Testing Agency Qualifications: An independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 329, and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.

(g) Manufacturer's Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

(h) Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

(i) Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:

   (1) Build mockups in location and of size indicated or, if not indicated, as directed by the Owner and/or the Owners Representative.
   (2) Provide shop drawings
   (3) Notify the Owner Representative seven days in advance of dates and times when mockups will be constructed.
   (4) Employ supervisory personnel who will oversee mockup construction. Employ workers that will be employed during the construction at the Project.
   (5) Demonstrate the proposed range of aesthetic effects and workmanship.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

(6) Obtain the Owner’s approval of mockups before starting work, fabrication, or construction.

(a) Allow seven days for initial review and each re-review of each mockup.

(7) Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work. The Contractor will be required to build additional mockups, at no additional cost to the Owner, as necessary to achieve a final mockup which meets all of the requirements of the Contract and is found to be acceptable by the Owner, the Design Professional and the Owners Representative. The Contractor will be responsible to make any and all corrections to rejected mockup’s that are a permanent part of the building exterior or interior prior to Substantial Completion to meet the Contract requirements.

(8) Demolish and remove mockups when directed by the Owner and/or the Owners Representative.

(9) Mockup Schedule: The Contractor shall include all required Mockup’s in their CPM Schedule as unique activity items. The Contractor shall update the CPM Schedule as Mockup Work progresses.

1.10 QUALITY CONTROL

A Owner Responsibilities: Where quality control services are indicated as the Owner’s responsibility, the Owner will engage a qualified testing agency to perform these services. The testing agency for special inspections will be provided by the Owner.

1. The Owner will furnish the Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.

2. Contractor will advise Owner/CM 3 days in advance of the need for special inspection.

B Contractor Responsibilities: Tests and inspections not explicitly assigned to the Owner are the Contractor's responsibility. Perform additional quality control activities required to verify that the Work complies with requirements, whether specified or not.

(1) Unless otherwise indicated, provide quality control services specified and those required by authorities having jurisdiction. Perform quality control services required of the Contractor by authorities having jurisdiction, whether specified or not.

(2) Where services are indicated as the Contractor's responsibility, engage a qualified testing agency to perform these quality control services.

a. Contractor shall not employ same entity engaged by the Owner, unless agreed to in writing by the Owner.

(3) Notify testing agencies at least 72 hours in advance of time (excluding weekends and holidays) when Work that requires testing or inspecting will be performed.
(4) Where quality control services are indicated as the Contractor's responsibility, submit a written report, in duplicate, of each quality control service.  
(5) Testing and inspecting requested by the Contractor and not required by the Contract Documents are the Contractor's responsibility.  
(6) Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.  
(7) The Owners Representative reserves the right to be present to witness all testing whether requested by the Contractor and/or required by the Contract.

C Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Section 013300 - Submittal Procedures.

D. Manufacturer's Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in pre-installation conferences, examination of substrates and conditions, verification of materials, observation of Installer activities, inspection of completed portions of the Work, and submittal of written reports.

E. Retesting/Reinspecting:

1. Regardless of whether original tests or inspections were the Contractor's responsibility, provide quality control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
2. Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents, or costs attributable to the Contractor’s lack of coordination in properly scheduling the Work requiring testing and inspection will be charged to Contractor and the Contract Sum will be adjusted by Change Order.

F. Testing Agency Responsibilities: Cooperate with the Owner and the Owners Representative and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.

1. Notify the Owner and the Owners Representative and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.  
2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.  
3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.  
4. Submit a written report, in duplicate, of each test, inspection, and similar quality control service through Contractor.  
5. Does not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.  
6. Do not perform any duties of the Contractor.

G. Associated Services: The Contractor shall cooperate with agencies performing required tests, inspections, and similar quality control services, and provide reasonable auxiliary services as
requested. Notify agency via the Owners Representative sufficiently in advance of operations to permit assignment of personnel. The Contractor shall provide the following:

1. Access to the Work, including equipment required to access the Work.
2. Incidental labor and facilities necessary to facilitate tests and inspections.
3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
4. Facilities for storage and field curing of test samples.
5. Delivery of samples to testing agencies.
6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
7. Security and protection for samples and for testing and inspecting equipment at Project site.

H. Coordination: Coordinate sequence of activities to accommodate required quality assurance and quality control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.

1. Schedule times for tests, inspections, obtaining samples, and similar activities.

I. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality control services required by the Contract Documents. Coordinate and submit concurrently with Contractor's construction schedule. Update as the Work progresses.

1. Distribution: Distribute schedule to the Owner, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

1.11 NYS or NYC SPECIAL INSPECTIONS AND TESTS

A Special Inspections and Tests: The Owner will engage a qualified testing agency to conduct special inspections and tests required by authorities having jurisdiction as the responsibility of the Owner, as indicated in the NYS or NYC Statement of Special Inspections and Tests, attached to this Section, and as follows:

(1) Notifying Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
(2) Submitting a written report of each test, inspection, and similar quality control service to the Owner with copy to the Contractor and to authorities having jurisdiction. Frequency of reporting shall be determined in consultation with the Owner.
(3) Submitting a final report of special tests and inspections at Substantial Completion, this includes a list of unresolved deficiencies.
(4) Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents or code requirements.
(5) Retesting and re-inspecting corrected work.
B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve a Contractor of responsibility for compliance with the Contract Document requirements.

1. Specified tests, inspections, and related actions do not limit Contractor's quality control procedures that facilitate compliance with the Contract Document requirements.  
2. Inspections and tests performed by the testing agency shall in no way relieve the Contractor of the responsibility to construct in accordance with the Contract Documents.  
3. Table of special inspections

<table>
<thead>
<tr>
<th>INSPECTIONS and TESTS</th>
<th>CODE/SECTION</th>
<th>JOB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural stability</td>
<td>BC 1704.20.1</td>
<td>A3.1</td>
</tr>
<tr>
<td>Structural steel details</td>
<td>BC 1704.3.2</td>
<td>A3.1</td>
</tr>
<tr>
<td>Structural steel welding</td>
<td>BC 1704.3.2</td>
<td>A3.1</td>
</tr>
<tr>
<td>Structural Steel-High Strength Bolts</td>
<td>BC 1704.3.3</td>
<td>A3.2</td>
</tr>
<tr>
<td>Masonry</td>
<td>BC1704.5</td>
<td>A3.2</td>
</tr>
<tr>
<td>Mechanical Systems</td>
<td>BC 1704.16</td>
<td>A3.2</td>
</tr>
<tr>
<td>Fire Resistant Penetrations &amp; Joints</td>
<td>BC1704.27</td>
<td>A3.2, A3.1</td>
</tr>
<tr>
<td>Post Installed Anchors</td>
<td>BC1704.32</td>
<td>A3.2, A3.1</td>
</tr>
<tr>
<td>Energy Code Compliance</td>
<td>BC 110.3.5</td>
<td>A3.2, A3.1</td>
</tr>
<tr>
<td>Fire Rated Construction</td>
<td>BC110.3.4</td>
<td>A3.2, A3.1</td>
</tr>
<tr>
<td>Final</td>
<td>28.116. 2.4.2, BC110.5</td>
<td>A3.2, A3.1</td>
</tr>
</tbody>
</table>

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 TEST AND INSPECTION LOG

A. Prepare a record of tests and inspections. Include the following:

1. Date test or inspection was conducted.  
2. Description of the Work tested or inspected.  
3. Date test or inspection results were transmitted to the Design Professional.  
4. Identification of testing agency or special inspector conducting test or inspection.

B. Maintain log at Project site. Post changes and modifications as they occur. Provide access to test and inspection log for the Owner’s reference during normal working hours.
3.2 REPAIR AND PROTECTION

A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.

B. Protect construction exposed by or for quality control service activities.

C. Repair and protection are the Contractor's responsibility, regardless of the assignment of responsibility for quality control services.

D. The Owner, the Owners Representative and the Design Professional will perform periodic inspections as to the progress of the Work, including, but not limited to Code Compliance inspections, Quality Assurance inspections, Safety inspections and other Quality Control inspections. The Owner and/or the Owners Representative may issue the results of these inspections to the Contractor. Within three (3) days of receipt of the inspection report, unless noted otherwise in the report, the Contractor shall correct non-conforming work or issue a written response to the items noted with a plan of action. Failure to provide the plan of correction and/or failure to provide correction may result in the withholding of payment for all affected work.
SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. The Contract Documents, including but not limited to, the Drawings and Individual Specification Sections, apply to this Section.

1.2 SUMMARY
A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
B. Related Sections:
   1. Section 011200 – Contract Summary of Work, for work restrictions and limitations on utility interruptions.

1.3 USE CHARGES
A. General: Installation, removal, and use charges for temporary facilities shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, the Owner and/or the Owners Representative, the Design Professionals, occupants of the Project, testing agencies, and authorities having jurisdiction.
B. Sewer Service: The Owner and or the Owners Representative will pay sewer service use charges for sewer usage by all entities for construction operations. However, no payment will be made to the Contractor for temporary chemical toilets that the Contractor may have to bring to the Project Site for use by the Contractors’ forces (no toilet rooms within the existing facility will be permitted to be used by the Contractors’ forces).
C. Water Service: The Owner and/or the Owners Representative shall pay for all water usage if connections are made to the existing water system on campus. Water from the Owners and/or the Owners Representative’s existing water system is available for use without metering and without payment of use charges. Provide all connections and extensions of services as required for construction operations including but not limited to backflow preventers and isolation valves. In the event of campus water system interruption after the Contractor has made connection(s) to the campus system, the Contractor shall remain responsible for providing the water as necessary to allow for continuation of all construction activities. The Contractor shall not hold the Owner and/or the Owners Representative responsible for any delays or costs associated with any interruptions.
D. Temporary Electric Power Service: Power for Temporary Power Service shall be made available from existing power sources from within the building. For the duration of their Contract and as directed by the Owner and/or the Owners Representative, the Contractor shall provide, maintain and remove all temporary power and temporary lighting as required in connection with the Contractor’s operations as well as for all Contractors performing Work. The Contractor shall make all arrangements for such electricity with the agency having jurisdiction. The Owner and/or the Owners Representative shall pay for all electrical usage if connections are made to the existing electrical system on campus. The Contractor shall provide connections and extensions of services as required for all construction operations including but not limited to utility poles, temporary electric panels, wiring, conduit, transformers and disconnects. All such extensions and connections, if run through public spaces, shall be installed in such a manner as to be vandal and/or tamper proof. In the event of campus electric system interruption and after the Contractor has made connection to the campus system, the Contractor shall remain responsible for providing the electricity as required to allow for continuation of all construction activities for the Contractor’s work forces and all other Contractors. The Contractor shall not hold the Owner and/or the Owners Representative responsible for any delays or costs associated with interruptions. The Contractor shall submit a Temporary Electric Power Service Plan within fifteen (15) days of the NTP. This plan is to detail all elements of Temporary Electric Power Service including but not limited to temporary power connection location, temporary panel(s) location, plan for the protection of panels during construction, power cable distribution. The Contractor is fully responsible to energize and shut-off the temporary power service at the conclusion of each business day or as otherwise directed by the Owner and/or the Owners Representative. The temporary electric service will be coordinated with Hospital/CM.

1. When the use of such temporary lighting and power is no longer required, the Contractor shall remove all temporary wiring and all related equipment. The Contractor shall be required to restore any and all finished surfaces including but not limited to floors, walls and ceilings that have been affected by temporary power wiring and equipment. The Contractor shall repair or replace firestopping as required at all temporary power wall, floor and ceiling penetrations. The Contractor shall provide, install, repair or replace all firestopping and smoke seal materials (Section 07270) as required at all temporary power connections, clamps or penetrations of walls ceilings or floors.

2. The Contractor shall install temporary electric meters for recording purposes only should they connect to the campus system, if desired by the Owner.

3. The Contractor shall be fully responsible to inspect the building during construction activities on a daily basis and immediately replace any and all temporary electrical services and equipment as required to maintain a safe workplace and the Contract schedule.

4. Temporary power and lighting shall comply with NEC, NFPA, NECA (NEIS 200) and OSHA. Work shall be installed and maintained by qualified persons who apply safe work practices compliant with the standard previously noted.

5. Temporary power wiring, fixtures or receptacles shall not be supported from sprinkler system per NFPA 25.

6. Temporary lighting shall have illumination levels per NECA codes and standards:
   a. Compliance to foot candles shall be secured at the floor level.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

b. Supplemen tal task lighting shall be provided to illuminate areas of construction concealed or shadowed structure, equipment, partitions, etc.

c. Changes/modifications to temporary power and lighting necessary by construction progress shall be made by the Contractor at no additional cost to the Owner.

d. Not less than one (1) 150 watt incandescent lamp or 24 watt compact florescent lamp shall be present in a designated area/room.

E. All equipment wiring, fixtures, lamps, etc., is to be New, OR LIKE NEW. Used and/or rebuilt equipment is CONDITIONALLY acceptable provided it is state-of-the-art and does not experience excessive breakdowns, (an outage of more than two times in one month on the same piece of equipment is considered excessive). The Contractor shall maintain or replace failed or malfunctioning equipment within 48 hours as directed. The Owner and/or the Owners Representative reserve the right to lease/purchase replacement equipment at the Contractors expense due to the Contractors failure to perform

1.4 INFORMATIONAL SUBMITTALS

A. Site Plan: Show temporary facilities, utility hookups, etc. No staging areas will be permitted inside or outside the facility except in Construction Work Areas.

B. Erosion and Sedimentation Control Plan: Show compliance with requirements of New York State Department of Environmental Conservation Storm water General Permit or authorities having jurisdiction, whichever is more stringent, if applicable.

C. Moisture-Protection Plan: Describe procedures and controls for protecting materials and construction from water absorption and damage; including delivery, handling, and storage provisions for materials subject to water absorption or water damage, discarding water-damaged materials, protocols for mitigating water intrusion into completed Work, and replacing water damaged Work.

1. Indicate sequencing of work that requires water, such as sprayed fire-resistive materials, plastering, and terrazzo grinding, and describe plans for dealing with water from these operations. Show procedures for verifying that wet construction has dried sufficiently to permit installation of finish materials.

D. Dust-Control and HVAC-Control Plan: Submit coordination drawing and narrative prior to the start of HVAC Work that indicates the dust-control and HVAC-control measures proposed for use, proposed locations, and proposed time frame for their operation. Identify further options if proposed measures are later determined to be inadequate. Include the following:

1. Locations of dust-control partitions at each phase of the work.

2. HVAC system isolation schematic drawing.

3. Location of proposed air filtration system discharge.

4. Other dust-control measures.

5. Waste management plan.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887

3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

E. All informational submittals shall indicate phases of work and shall be updated as required due to site conditions, changes in plans or at the request of the Owner and/or the Owners Representative

1.5 QUALITY ASSURANCE

A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations and requirements of authority having jurisdiction for temporary electric service. Install service to comply with NFPA 70.

B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

C. Accessible Temporary Egress: Comply with applicable provisions in ADA-ABA Accessibility Guidelines and ANSI A117.1.

1.6 PROJECT CONDITIONS

A. Temporary Use of Permanent Facilities: Engage installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before the Owner's and/or the Owners Representative’s acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Chain-Link Fencing: Minimum 0.148-inch thick, galvanized steel, chain-link fabric fencing; minimum 8 feet high with galvanized steel pipe posts; minimum 2-3/8-inch OD line posts and 2-7/8-inch OD corner and pull posts, with 1-5/8-inch OD top rails, with galvanized barbed-wire top strand.

B. Wood Enclosure Fence: Plywood, 8 feet high, framed with four 2-by-4-inch rails, with preservative-treated wood posts spaced not more than 8 feet apart.

C. Polyethylene Sheet: Reinforced, fire-resistive sheet, 10 mils minimum thickness, with flame- spread rating of 15 or less per ASTM E 84.

D. Dust Control Adhesive-Surface Walk-off Mats: Provide mats minimum 36 by 60 inches.

E. Insulation: Unfaced mineral-fiber blanket, manufactured from glass, slag wool, or rock wool; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

2.2 TEMPORARY FACILITIES
   A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.
   B. Owner’s-Use Field Office: Not used
   C. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.
      1. Store combustible materials apart from building.

2.3 EQUIPMENT
   A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL
   A. Locate facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work. The location of facilities must be approved, in writing, prior to locating any such facilities.
   B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION
   A. General: Install temporary service or connect to existing service.
      1. Arrange with utility company, the Owner and/or the Owners Representative, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services. Such arrangement must be made at least 5 business days in advance of requiring any service interruption.
   B. Water Service: Install water service and distribution piping in sizes and pressures adequate for construction. Obtain all required permits.
   C. Water Service: Connect to the Owner's and or the Owners Representative existing water service facilities. Clean and maintain water service facilities in a condition acceptable to the Owner and or the Owners Representative. At Substantial Completion, restore these facilities to condition existing before initial use.
D. Sanitary Facilities: The Contractor shall provide, install and maintain toilet accommodations, wash facilities and drinking water for all persons employed or engaged in the Work. Such facilities shall meet any and all requirements of law, rule and regulation and shall comply with the requirements of authorities having jurisdiction for type, number, location, operation and maintenance of fixtures and facilities. The Contractor shall remove such facilities at the completion of the Work or at a time as directed by the Owner and/or the Owners Representative. Such facilities shall be of a chemical type, at locations approved by the Owner and/or the Owners Representative and shall be maintained in a sanitary condition at all times.

1. The Contractor may request that an existing toilet room in the building be used as a temporary toilet facility. If approved by the Owner and/or the Owners Representative, the Contractor shall maintain such temporary toilet facility in a sanitary condition. In all permanent toilet rooms, all plumbing fixture and room finishes shall remain free of any damage, defacement or any other defects. The costs of any necessary repairs or replacements shall be borne by the Contractor.

E. Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Only electrically operated temporary heaters will be permitted to be used. No combustion type temporary heaters will be permitted to be used.

F. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes, and odors from entering occupied areas.

1. Prior to commencing work, isolate the HVAC system in area where work is to be performed in accordance with approved coordination drawings.
   a. Disconnect supply and return ductwork in work area from HVAC systems servicing occupied areas.
   b. Maintain negative air pressure within work area using HEPA-equipped air filtration units, starting with commencement of temporary partition construction, and continuing until removal of temporary partitions is complete.

2. Maintain dust partitions during the Work. Use vacuum collection attachments on dust-producing equipment. Isolate limited work within occupied areas using portable dust containment devices.

3. Perform daily construction cleanup and final cleanup using approved, HEPA-filter-equipped vacuum equipment.

G. REMOVAL OF RUBBISH AND SURPLUS MATERIALS

1. Contractor shall be responsible for the removal and disposal off site of all demolition materials, excess concrete and formwork and all other similar materials resulting from the performance of the Contractor’s Work.

2. For all other rubbish and debris, it shall be Contractor’s responsibility to clean his work area(s) on a daily basis and deposit his trash/rubbish neatly in piles in designated areas. Contractor will collect and dispose of the trash/rubbish off-site. Contractor is responsible to cut down the size
of their discarded material so that it can fit into a mini-container. In addition, Contractor shall sweep up all miscellaneous debris on a daily basis whether it was or was not generated by the Contractor.

3. Contractor shall be responsible for the removal of all rubbish, debris and etc., from the site of the project. All combustible debris shall be removed from the Project on a daily basis.

4. At the conclusion of the work, all erection equipment, plants, tools, temporary structures and materials belonging to the contractors shall be promptly taken away by the contractor.

5. Demolition and construction debris shall be removed by mini containers or barrels to a dumpster provided by the Contractor the designated route shown on the Site Logistics Plan issued with the Bid Documents. Such mini-containers and/or barrels or other containers used to transport debris to the dumpster shall be covered to prevent dust and debris from escaping. All ductwork shall be capped by the Contractor. All dumpsters shall be emptied not later than one (1) day after becoming full. Contractor shall provide HEPA filters as necessary, and shall create a vestibule into the construction area. All sheetrock barriers shall terminate at top of slab. Every effort shall be made to minimize noise and vibration that could disrupt the operations of the Hospital, including scoring concrete where required to be chopped, and working off hours as necessary. Deliveries shall be scheduled between the hours of 6:00 a.m. to 7:30 p.m. and shall be coordinated with the Hospital’s operations a minimum of 24 hours in advance of the delivery. The coordination of deliveries shall be exclusively through the Construction Manager and not Hospital staff.

H. CLEANING

1. Contractor shall remove all tools, appliances, project signs, materials and equipment from the premises immediately upon completion of the Work.

2. The Work is to be turned over to the Owner in new condition, in proper repair and in perfect adjustment.

3. Final cleaning shall be the responsibility of the Contractor and all costs for final cleaning shall be included in their base bid. This work includes but not limited to wet mopping of all floors, dusting, wiping, sweeping and etc. of all walls, ceilings, glazing and equipment.

I. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.

1. Provide dehumidification systems to maintain the facilities when required to reduce substrate moisture levels to level required to allow installation or application of finishes. Relative humidity should be maintained between the ranges recommended by Manufacturer.

J. Electric Power Service: Provide electric power service and distribution system of sufficient size, number of phases, capacity, and power characteristics required for construction operations and testing of all installed equipment. Obtain required permits

1. Connect temporary service to the Owner's existing power source, as directed by the Owner.
K. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.

1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.

L. Telephone Service: Telephone connections for Contractors are available on-site. The Contractor is responsible for making connection arrangements and for paying all associated costs. The Contractor is required to have a dedicated land line located in their on-site field office as well as cellular phones for key on-site staff members. At each land line, the Contractor shall post the following list of important telephone numbers:

1. Police and Fire Departments
2. Ambulance Service
3. Contractor's Home Office
4. Design Professional’s Office
5. Owners and/or the Owners Representative’s Office
6. Owner’s Office
7. Principal Sub-Contractor’s field and home offices
8. The Contractor shall provide the Owner and/or the Owners Representative with a telephone listing including emergency contact numbers of the Contractor’s key employees including their sub-contractors
9. Provide additional telephone lines for the following:
   a. Provide a dedicated telephone line for each facsimile machine in each field office.
   b. Internet Services: Provide high speed internet service for access to email, and electronic submissions.
   c. Computer Hardware and Software: Provide all computers, switches, routers, scanners, printers, servers, storage devices, back-up devices, wiring, termination etc., required to maintain a functional, electronically connected on-site field office. System must be able to support the following during the entire duration of the project:
      i. Internet Connectivity
      ii. Email access
      iii. Electronic preparation and distribution of all submittals, RFI’s, Change Proposals, Correspondences and Requests for Survey and Inspections.

3.3 SUPPORT FACILITIES INSTALLATION

A. General: Comply with the following:
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

1. Provide construction for temporary offices, shops, and sheds located within construction area that is noncombustible according to ASTM E 136. Comply with NFPA 241.

2. Maintain support facilities throughout the Contact duration or as directed by the Owner and/or the Owners Representative. The Contractor shall be responsible to remove and/or relocate support facilities within the contract limit line in order to complete the Work of the Contract. The Contractor will not be permitted to use permanent facilities for temporary offices unless otherwise directed by the Owner and/or the Owners Representative.

B. Traffic Controls: Comply with requirements of authorities having jurisdiction.
1. Protect existing site improvements to remain including curbs, pavement, and utilities.
2. Maintain access for fire-fighting equipment and access to fire hydrants.

C. Parking: There is no on-site parking for construction personnel’s personal vehicles or company vehicles. Company vehicles will be permitted on-site for the purposes of delivery of materials, equipment or personnel, however, after off-loading such items, such company vehicles will be required to leave the Hospital campus.

D. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain the Project site, excavations, and construction free of water.
1. Dispose of rainwater in a lawful manner that will not result in flooding the Project or adjoining properties nor endanger permanent Work or temporary facilities.
2. Remove snow and ice as required to minimize accumulations.

E. Project Signs: Provide Project signs as indicated. Unauthorized signs are not permitted.
1. Identification Signs: Provide Project identification signs as specified in the Contract Documents.
2. Temporary Signs: Provide other signs as required to inform public and individuals seeking entrance to the Project.
   a. Provide temporary, directional signs for construction personnel and visitors.
3. Maintain and touchup signs so they are legible at all times.
4. Contractor’s Advertisement signs are not permitted.

1. Containers within the construction area are to be regularly maintained such that there is never any spillage of waste. Interior containers are to include lids.
2. Waste pick-up and disposal within the Project Limit Lines are the responsibility of the Contractor. Grounds are to be kept free and clear of any debris.
3. Emptying of any dumpsters and/or mini-containers that the Contractor places outside the Project Limit Lines is the responsibility of the Contractor.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

G. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
   1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.
   2. The Contractor shall submit a plan detailing how they intend to load materials and equipment to the building during construction. Should the Contractor propose to utilize material and labor hoists and/or lifts, the Contractor shall be required to submit information regarding the hoists for approval including but not limited to:
      a. Hoist/Lift Product Data & Manufacturer
      b. Plan showing hoist/lift location
      c. Plan showing hoist/lift building connection and support
      d. Plan showing temporary building openings for material off-loading

H. Service Elevator Use: Use of service elevators is permitted.
   1. Existing Service Elevators will be made available for hoisting or lowering materials. The elevators shall be available for the contractor’s use from 6:00 AM to 7:30 AM. If the contractor elects to use the existing service elevators, the Contractor Shall:
      a. Use only the elevators so designated for use by the owner’s representative and Bellevue Hospital, Freight Elevator F1
      b. Schedule use of the elevators with the owner’s representative at least forty eight (72) hours in advance of use.
      c. Provide adequate protection for elevator equipment.
      d. Operate elevator equipment so as not to exceed capacity of elevator allowed by law, rule or regulations.
      e. Provide maintenance of elevator equipment as deemed necessary by owner or owner’s representative.
      f. Leave elevator equipment in same condition as it was prior to use.
      g. The elevator shall be returned and made ready for use by the hospital at the end of each day’s use by the Contractor.
      h. Be advised that elevator cab hatch door will not be permitted to be opened and used for lifting or lowering materials.
      i. Freight Elevator F1, dimensions are as follows(LxWxH): 7’-10”x9’-01/2”x8’-2”. There is a double door opening 6’-0”x 7’-0”. A surface mounted light fixture 6” deep, 2’-1” wide is centered on the doors and runs the full 9’-01/2” width of the cab.

I. Existing Stair Usage: Use of the Owner's existing stairs will be permitted, provided stairs are cleaned and maintained in a condition acceptable to the Owner. At Substantial Completion, restore stairs to condition existing before initial use.
   1. Temporary Use of Permanent Stairs: Use of existing stairs for construction personnel will be permitted, provided no materials, tools and/or equipment are brought into the existing stairs by such personnel (the existing stairs are used by the public and Hospital Staff and are NOT for the exclusive use of construction personnel). Any damage to existing stairs, including the deposit
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

of dirt, dust, etc. by construction personnel, will be repaired/cleaned by the Contractor on a daily basis.

2. The Contractor shall provide a Designated Break Area for employee’s use for breaks and for lunch consumption within the Project Limit Lines. This area shall be appropriately sheltered and conditioned for year round use. Provide waste receptacles sufficient to handle current employee loads on site. All employees electing to remain on site during breaks and lunch must consume meals in the designated area or face mandatory expulsion from the site. Designated break area must be maintained from 15 days of mobilization to the date of Substantial Completion and can be reconfigured or relocated as the progress of construction dictates.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

1. Develop a noise mitigation plan for construction prior to the start of work. Post a copy of the plan at the construction site.
2. Noise mitigation plan shall identify how the contractor shall prevent noises from exceeding ambient sound levels by more than 10 decibels as measured from inside any property or on a public street at least 15 feet from the source.
3. Impulsive sounds which occur abruptly for a short duration are also restricted by code.
4. Noise Control: Perform operations to minimize noise. Perform noise-causing work in less sensitive hours of the day or week as directed by the Owner.
5. Repetitive, high-level impact noise will be permitted only between the hours of 8:00 am and 6:00 pm. Do not exceed the following dBA limitations:

<table>
<thead>
<tr>
<th>Sound Level in dBA</th>
<th>Time Duration of Impact Noise</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>More than 12 minutes in any hour.</td>
</tr>
<tr>
<td>80</td>
<td>More than 3 minutes in any hour.</td>
</tr>
</tbody>
</table>

6. Provide equipment, sound-deadening devices, and take noise abatement measures that are necessary for compliance.
7. Maximum permissible construction equipment noise levels at 50 feet (dBA):

<table>
<thead>
<tr>
<th>EARTHMOVING</th>
<th>dBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Loaders</td>
<td>75</td>
</tr>
<tr>
<td>Backhoes</td>
<td>75</td>
</tr>
</tbody>
</table>
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

Dozers 75
Tractors 75
Scrapers 80
Graders 75
Trucks 75
Pavers, Stationary 80
Pumps 75
Generators 75
Compressors 75

MATERIALS HANDLING dBa
Concrete Mixers 75
Concrete Pumps 75
Cranes 75
Derricks Impact 75
Pile Drivers 95
Jack Hammers 75
Rock Drills 80
Pneumatic Tools 80
Saws 75
Vibrators 75

C. Air Quality Control:
1. Construction crews shall take appropriate action to minimize the amount of air pollution created by their construction operations. All work shall be performed in accordance with all Local, State, and Federal laws, Rules, and Regulations. All operations must be conducted in a manner that avoids creating a nuisance and prevents damage to existing properties, plantings, and public, etc. Exhaust fumes from equipment utilized during the construction operations shall be directed away from and not enter any air intake vents located in the Hospital and/or neighboring buildings.

D. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to undisturbed areas and to adjacent properties and walkways, according to authorities having jurisdiction.

1. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross tree- or plant- protection zones.
2. Inspect, repair, and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established.
3. Clean, repair, and restore adjoining properties and roads affected by erosion and sedimentation from the project site during the course of the project.
4. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.
E. Storm water Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of storm water from heavy rains.

F. Tree and Plant Protection: Install temporary fencing outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.

G. Site Enclosure Fence: Before construction operations begin furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.
   1. Extent of Fence: As required to enclose entire Project site or portion determined sufficient to accommodate construction operations and/or staging areas.
   2. Maintain security by limiting number of keys and restricting distribution to authorized personnel. Furnish one set of keys to the Owner.

H. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each work day. Provide keys for all gates and enclosures to the Owners Representative.

I. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.

J. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.

K. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
   1. Where heating or cooling is needed and permanent enclosure is not complete, insulate temporary enclosures.

L. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust, odor and dirt migration and to separate areas occupied by the Owner from fumes and noise. Partitions will be installed in front of elevator and removed at the end of shift, so elevator lobby is unimpeded during the daytime hours.
   1. Construct dustproof partitions with fire rated gypsum wallboard with joints taped on occupied side, and fire-retardant plywood on construction operations side.
   2. Where fire-resistance-rated temporary partitions are required by authorities having jurisdiction, construct partitions according to the rated assemblies.
   3. Insulate partitions to control noise transmission to occupied areas.
   4. Seal joints and perimeter. Equip partitions with gasketed dustproof doors and security locks where openings are required. In all temporary partitions that are required to be fire rated, equip
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

partitions with gasketed, dustproof fire rated doors of the rating required for the temporary partition.
5. Protect air-handling equipment.
6. Provide walk-off mats at each entrance through temporary partition.

M. Fire Safety During Construction: Comply with all requirements identified herein as well as the more stringent requirements of the applicable codes (New York State Building and Fire Codes or New York City Building and Fire Codes).
1. No smoking: Smoking shall be prohibited throughout the project/construction site. “No Smoking” signs shall be conspicuously posted at all entrances and throughout the site. Smoking in prohibited areas shall be grounds for immediate expulsion from the project.
2. The Contractor shall designate a Fire Prevention Program Superintendent/ Fire Safety Manager who shall be responsible for all fire safety efforts until completion and acceptance of the Work described in the Contract Documents that include but are not limited to the following:
3. Pre-fire Plans. Develop in cooperation with the local Fire Chief and Fire Code Official. Any changes affecting the utilization of information contained in the plan shall result in notification to the local Fire Chief and Fire Code Official.
4. Training. Job site personnel shall be trained in fire safety practices and procedures and the proper use of fire protection equipment, including hand-held fire extinguishers, hose lines, fire alarm and sprinkler systems.
5. Fire Protection Devices. Fire protection and detection equipment shall be maintained and serviced.
6. Hot Work Operations. Welding, cutting, open torches, torch-applied roof system activities, and other hot work operations shall be conducted under a permit system. A fire watch and fire extinguishers shall be provided.
7. Impairment of Fire Protection Systems. Coordinate planned, emergency or accidental impairments of fire protection systems (sprinkler systems, fire alarm systems, smoke alarm systems) to include tagging of impaired systems and notification of Fire Department, Alarm Company, Building Owner/Operator, and Contractors.
8. Temporary Covering of Fire Protection Devices. Coverings placed on or over fire protection devices for protection from damage shall be immediately removed upon the completion of the Work in the room or area in which the devices are installed.
   a. Provide readily accessible telephone service for fire calls at a location or locations approved by the Owner.
      1) The Contractor shall pay all costs thereof until completion and acceptance of the Work or as otherwise directed by the Owner.
      2) Provide/post the street address of the construction site and the emergency telephone number of the Fire Department adjacent to the telephone.
9. Maintain an operational sprinkler system within the areas of construction at all times.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

10. Maintain an operational fire alarm and smoke alarm system within the areas of construction at all times.

3.5 MOISTURE AND MOLD CONTROL


B. Exposed Construction Phase: Before installation of weather barriers, when materials are subject to wetting and exposure and to airborne mold spores, protect as follows:
   1. Protect porous materials from water damage.
   2. Protect stored and installed material from flowing or standing water.
   3. Keep porous and organic materials from coming into prolonged contact with concrete.
   4. Remove standing water from decks.
   5. Keep deck openings covered or dammed.

C. Partially Enclosed Construction Phase: After installation of weather barriers but before full enclosure and conditioning of building, when installed materials are still subject to infiltration of moisture and ambient mold spores, protect as follows:
   1. Do not load or install drywall or other porous materials or components, or items with high organic content, into partially enclosed building.
   2. Keep interior spaces reasonably clean and protected from water damage.
   3. Periodically collect and remove waste containing cellulose or other organic matter.
   4. Discard or replace water-damaged material.
   5. Do not install material that is wet.
   6. Discard, replace or clean stored or installed material that begins to grow mold.
   7. Perform work in a sequence that allows any wet materials adequate time to dry before enclosing the material in drywall or other interior finishes.

D. Controlled Construction Phase of Construction: After completing and sealing of the building enclosure but prior to the full operation of permanent HVAC systems, maintain as follows:
   1. Control moisture and humidity inside building by maintaining effective dry-in conditions.
   2. Use permanent HVAC system to control humidity.
   3. Comply with manufacturer's written instructions for temperature, relative humidity, and exposure to water limits.
      a. Hygroscopic materials that may support mold growth, including wood and gypsum-based products, that become wet during the course of construction and remain wet for 48 hours are considered defective.
b. Measure moisture content of materials that have been exposed to moisture during construction operations or after installation. Record daily readings over a forty-eight hour period. Identify materials containing moisture levels higher than allowed. Report findings in writing to the Design Professional.

c. Remove materials that cannot be completely restored to their manufactured moisture level within 48 hours.

d. Remove any materials that show signs of mold growth, permanent discoloration or deterioration in performance as determined by the Owner and/or the Owners Representative.

3.6 OPERATION, TERMINATION, AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.

B. Maintenance: Maintain facilities in good operating condition until removal.

1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.

C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion and/or as directed by the Owner and/or the Owners Representative.

D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

1. Materials and facilities that constitute temporary facilities are property of the Contractor. The Owner and/or the Owners Representative reserves right to take possession of the Project identification signs.

2. Remove temporary roads and paved areas not intended for or acceptable for integration into permanent construction. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.

3. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 017700 – Contract Closeout Requirements.

END OF SECTION 015000
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The Contract Documents, including but not limited to, the Drawings and Individual
   Specification Sections and Contractor’s Submittal Schedule, apply to this section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for selection of products for use in
   the Project; product delivery, storage, and handling; manufacturers’ standard warranties on
   products; special warranties; and comparable products.

B. Related Sections:

   1. Section 012100 – Allowances, for products selected under an allowance.
   2. Section 013300 – Submittal Procedure, for product submittals.

1.3 DEFINITIONS

A. Products: Items obtained for incorporating into the Work of the Contract and purchased new
   for the Project. The term "product" includes the terms "material," "equipment," and "system."

   1. Named Products: Items identified by manufacturer's product name, including make or
      model number or other designation shown or listed in manufacturer's published product
      literature that is current as of date of the Contract Documents.
   2. New Products: Items that have not previously been incorporated into another project or
      facility. Products salvaged or recycled from other projects are not considered new
      products.
   3. Comparable Product: Product that is demonstrated and approved, through the submittal
      process, to have the indicated qualities related to type, function, dimension, in-service
      performance, physical properties, appearance, and other characteristics that equal or
      exceed those of specified product.

B. Procurement Exemption Approval Product Specification: A specification in which a specific
   manufacturer's product is named including make or model number or other designation, to
   establish the significant qualities related to type, function, dimension, in-service performance,
   physical properties, appearance, and other characteristics for purposes as a single source or sole
   source provider.
1.4 ACTION SUBMITTALS

A. Comparable Product Requests: Submit request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1. Include data to indicate compliance with the requirements specified in "Comparable Products" Article.
2. Design Professional’s Action: If necessary, the Design Professional will request additional information or documentation for evaluation within one week of receipt of a comparable product request. The Design Professional will notify the Contractor through the Owner of approval or rejection of proposed comparable product request within 15 continuous calendar days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
   a. Form of Approval: As specified in Section 013300 - Submittal Procedure.
   b. Use product specified if the Design Professional does not issue a decision on use of a comparable product request within time allocated.

B. Procurement Exemption Approval Product Specification Submittal: Comply with requirements in Section 013300 - Submittal Procedure. Show compliance with requirements.

1.5 QUALITY ASSURANCE

A. Compatibility of Options: If the Contractor is given option of selecting between two or more products for use on the Project, select product compatible with products previously selected, even if previously selected products were also options.

1. Each contractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
2. If a dispute arises between contractors over concurrently selectable but incompatible products, the Design Professional will determine which products shall be used.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.

B. Delivery and Handling:

1. Schedule delivery to minimize long-term storage at the Project site and to prevent overcrowding of construction spaces.
2. Coordinate delivery with installation time to ensure minimal holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other
losses. Products/items required to become acclimatized to the atmosphere shall be brought to the Project in a time frame to assure such acclimatization prior to incorporation in the work.
3. Deliver products to the Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.

C. Storage:

1. Store products to allow for inspection and measurement of quantity or counting of units.
2. Store materials in a manner that will not endanger the Project structure.
3. Store products that are subject to damage by the elements under cover in a weather tight enclosure above ground, with ventilation adequate to prevent condensation.
4. Store foam and/or plastic such that it is protected from exposure to sunlight, except to the extent necessary for period of installation and concealment.
5. Comply with product manufacturers’ written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
6. Protect stored products from damage and liquids from freezing.

1.7 PRODUCT WARRANTIES

A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of obligations under requirements of the Contract Documents.

1. Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to the Owner.
2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for the Owner.

B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.

1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
2. Refer to individual specification sections for specific content requirements and particular requirements for submitting special warranties.

C. Submittal Time: Comply with requirements in Section 013300 – Submittal Procedure.
PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and new at time of installation.

1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
3. The Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
4. Where products are accompanied by the term "as selected," the Design Professional will make selection.
6. Or Equal: For products specified by name and accompanied by the term "or equal," or "or approved equal," or "or approved," comply with requirements in "Comparable Products" Article to obtain approval for use of an unnamed product.
7. Provide products that do not contain asbestos.

B. Product Selection Procedures:

1. Product: Where Specifications include a procurement exemption approval and name a single source, sole source, manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for the Contractor's convenience will not be considered.
2. Manufacturer/Source: Where Specifications include a procurement exemption approval and name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for the Contractor's convenience will not be considered.
3. Products: Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product.
4. Manufacturers: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed, or a product by an unnamed manufacturer, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed manufacturer's product.

C. Visual Matching Specification: Where Specifications require "match sample", provide a product that complies with requirements and matches sample. The Owner's decision will be final on whether a proposed product matches.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

1. If no product available within specified category matches and complies with other specified requirements, comply with requirements in " Comparable Products" Article for consideration of an unnamed manufacturer's product.

D. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's full range", select a product that complies with requirements. The Design Professional will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 COMPARABLE PRODUCTS

A. Conditions for Consideration: The Design Professional will consider the Contractor's request for comparable products when the following conditions are satisfied. If the following conditions are not satisfied, the Design Professional may return requests without action, except to record noncompliance with these requirements:

1. Action Submittal shall be provided in accordance with Submittal Procedures within 30 continuous calendar days after Notice to Proceed.
2. Evidence that the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
3. Detailed comparison of qualities of proposed product with those named in the Specifications, including attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
4. Evidence that proposed product provides specified warranty.
5. List of similar installations for completed projects with project names and addresses and names and addresses of design professionals and owners, if requested.
6. Samples, if requested.

B. Comparable Products Costs: Any costs savings to an approved Comparable Product realized by the Contractor or identified by the Owner or Design Professional shall be shared equal between the Owner (50%) and Contractor (50%).

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

SECTION 017329 - CUTTING AND PATCHING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The Contract Documents, including but not limited to, the Drawings and Individual Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes procedural requirements for cutting and patching.

B. Responsibility: The Contractor is responsible for the cutting and patching as required including but not limited to work performed by the Contractors own work forces including sub-contractors.

C. Related Sections include the following:

1. Individual Specification Sections.

1.3 DEFINITIONS

A. Cutting: Removal of in-place construction necessary to permit installation or performance of Work of the contract.

B. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of Work of the contract.

1.4 SUBMITTALS

A. Cutting and Patching Proposal: Submit a proposal describing procedures at least 10 business days before the time cutting and patching will be performed, requesting approval to proceed. Include the following information:

1. Extent: At each occurrence, describe cutting and patching, show how they will be performed, and indicate why they cannot be avoided.
2. Changes to In-Place Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building's appearance and other significant visual elements.
3. Products: List products to be used and firms or entities that will perform the Work.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

4. Dates: Indicate when cutting and patching will be performed.
5. Utility Services and Mechanical/Electrical Systems: List services/systems that cutting and patching procedures will disturb or affect. List services/systems that will be relocated and those that will be temporarily out of service. Indicate how long services/systems will be disrupted.
6. Structural Elements: Where cutting and patching involve adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with original structure.
7. Design Professional’s Approval: Obtain approval of cutting and patching proposal before cutting and patching. Approval does not waive right to later require removal and replacement of unsatisfactory work.

1.5 QUALITY ASSURANCE

A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio. No structural elements are to be cut except following a request for review as noted above and receipt of written approval from the Owners’ Representative.

B. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that result in increased maintenance or decreased operational life or safety. No operating elements are to be cut except following a request for review as noted above and receipt of written approval from the Owners’ Representative.

C. Fire Rated Elements: Do not cut and patch fire rated elements (i.e. floors, walls, roofs, shafts, etc.) in a manner that results in reducing their capacity to perform as intended or that results in decreased fire rating. No fire rated elements are to be cut except following a request for review as noted above and receipt of written approval from the Owners’ Representative.

D. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, which results in reducing their capacity to perform as intended, or that result in increased maintenance or decreased operational life or safety.

E. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Design Professional’s opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

F. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including other trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.
1.6 WARRANTY

A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties.

B. Prior to proceeding with cutting and patching operations for any items that may be under warranty at the time of the Work of this Contract, secure from the items’ manufacturer a written statement advising what, if any, affect the cutting and patching will have on the item. Provide such written statement to the Construction Manager and await direction from the Owners’ Representative and/or the Architect before proceeding with such cutting and patching.

PART 2 - PRODUCTS

2.1 MATERIALS

A. General: Comply with requirements specified in other Sections.

B. In-Place Materials: Use materials identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.

1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of in-place materials, unless specified otherwise in other Sections.

C. Fire Rated Elements: Provide fire stopping products/systems specified in system design listings by approved testing agencies that conform to the construction type, penetrating item, annular space requirements and fire rating involved in each separate assembly. Refer to applicable Individual Specification Sections.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.

1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with in-place finishes or primers.

2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

3. Contractor is required to provide for magnetic testing of concrete to identify imbedded items prior to cutting slab or walls. A pachometer is most commonly applied to detect and identify (i.e. size and location):
   - Steel reinforcing steel bars
   - Pre-stressed or post-tensioned tendons
   - Wire mesh
   - Steel pipes
   - Steel conduit, and
   - Steel embedments

3.2 PREPARATION

A. Temporary Support: Provide temporary support of Work to be cut. If the Work to be cut is part of the structural system of the building, retain a Professional Engineer licensed in the State of New York to design such temporary support. Provide calculations stamped and sealed by the licensed Professional Engineer.

B. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.

C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

D. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting or patching to minimize interruption to occupied areas.

3.3 PERFORMANCE

A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.

1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.

B. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction.

1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
3. Concrete or Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
4. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
5. Proceed with patching after construction operations requiring cutting are complete.

C. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.

1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
   a. Clean piping, conduit, and similar features before applying paint or other finishing materials.
   b. Restore damaged pipe covering to its original condition.
3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
   a. Where patching occurs in a painted surface, apply primer and intermediate paint coats over the patch and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.
4. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weather tight condition.
6. Fire Rated Elements: Install fire stopping systems to comply with applicable Individual Specification Sections and fire stopping manufacturer’s written installation instructions and published drawings for products and applications.
7. Roofing: Where existing roofing must be penetrated to allow for pipes, vents and other penetrants, carefully cut and peel back existing roofing system tight to new construction, patch repair and replace as required to maintain existing roofing warranty. Obtain
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

approval of all penetrations, cutting and patching details from original roofing manufacturer. Maintain the thermal, air and weather envelope of the building intact.

8. Sprayed-On Fireproofing: In work performed above the ceiling and outside of the primary scope of work as defined by the Contract Drawings, damaged spray fireproofing, shall be patched and repaired using materials and manufacturers matching original, as required to maintain the fire rating of spray fireproofed construction.

D. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.

END OF SECTION 017329
SECTION 017700 – CONTRACT CLOSEOUT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The Contract Documents, including but not limited to, the Drawings and Individual Specification Sections and Notice of Substantial Completion (NOSC) Form, apply to this section.

1.2 SUMMARY

A. Section includes administrative requirements for preparation and submission of final Contract Closeout Documents, including, but not limited to, the following:

1. Contract Closeout Conference
2. Notice of Substantial Completion (NOSC) Requirements
   a. List of Incomplete Work Items
   b. Contract Turnover Documents
      1) As-built Drawings
      2) As-built Specifications
      3) As-built Schedule
      4) Permits, Licenses and Certificates
      5) Hazardous Wastes Documents
   c. General Guarantee
   d. Operation and Maintenance Manuals
3. Contract Closeout
4. Final Cleaning

B. Related Sections:

1. General Terms and Conditions, Article 3 – Compensation
2. General Terms and Conditions, Article 15 – Miscellaneous
3. Section 014000 – Quality and Code Requirements
4. Section 017823 – Operation and Maintenance Manuals
5. Section 017839 – As-built Documents

1.3 CONTRACT CLOSEOUT CONFERENCE

A. Contract Closeout Conference: The Owner will schedule and conduct a Contract closeout conference, at a time convenient to the Owner and Design Professional, but no later than (60) continuous calendar days prior to the scheduled inspection date for Substantial Completion.
1. The Owner and/or the Owners Representative will conduct the conference to review requirements and responsibilities related to Contract closeout.

2. Attendees: Representatives of the Owner, testing agency, commissioning authority (if applicable), Design Professional, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with Project and authorized to make binding decisions on matters relating to the Work.

3. Agenda: Discuss items of significance that could affect or delay Contract closeout, including the following:
   b. Procedures required prior to inspection for Substantial Completion and for final inspection for acceptance.
   c. Requirements for preparing sustainable documentation.
   d. Requirements for submitting final operation and maintenance manual.
   e. Requirements for Permits, Licenses and Certificates.
   f. Preparation of Contractor's list of incomplete Work items.
   g. Procedures for processing Application for Payment at Substantial Completion and final payment.
   h. Submittal procedure.
   i. Installation of the Owner's furniture, fixtures, and equipment as provided by the Owner during the course of the Construction Contract.
   j. Responsibility for removing temporary facilities and controls.
   k. Preparation of consolidated Punch-List

4. Minutes: The Owner, the Owners’ Representative or Design Professional will record and distribute meeting minutes.

1.4 NOTICE OF SUBSTANTIAL COMPLETION (NOSC)

A. Substantial Completion: After the Work of the Contract is determined by the Owner and/or the Owners Representative to be at Substantial Completion, the Contractor shall submit a written request to the Owner for a date of inspection. The date of Substantial Completion establishes the start of the guarantee period.

B. Documentation: The Notice of Substantial Completion (NOSC) form shall be executed at the end of inspection documenting incomplete Work items and submission of documents in accordance with this section that includes but is not limited to:
   a. Preparation of a list of Work (Contractors List) to be completed and corrected, the value of Work items on the list, and completion date of each Work item.
   b. Submittal of contract turnover documents. See Part 1.5 A for further details on this list.
   c. Submittal of operation and maintenance manuals, testing, adjustment and balance records.
d. Delivery of tools, spare parts, extra materials, and similar items to location designated by the Owner and/or the Owners Representative. Label with manufacturer's name and model number where applicable.

e. Make final changeover of permanent locks and deliver keys to the Owner and/or the Owners Representative. Advise the Owner and/or the Owners Representative of changeover.

f. Termination and removal of temporary facilities from Project site, along with mockups, construction tools, and similar elements.

g. Completion of final cleaning requirements.

1.5 LIST OF INCOMPLETE ITEMS

A. Organization of List: Submit list of incomplete items in EXCEL spreadsheet electronic format. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

1. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.

2. Include the following information at the top of each page:

   a. Project name & number.
   b. Date.
   c. Name of Contractor & Contract number.
   d. Page number.

B. Re-inspection: Submit a written request for re-inspection. On receipt of request, the Owner and/or the Owners Representative will either proceed with inspection or notify the Contractor of unfulfilled requirements. After inspection, the Owner and/or the Owners Representative will notify the Contractor of items, either on the Contractor's list or additional items identified, that must be completed or corrected.

1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.

2. Results of completed inspection will form the basis to proceed with commencement of Contract Closeout Documents.

1.6 CONTRACT TURNOVER DOCUMENTS

A. Procedure: Contract turnover documents shall be transmitted to the Owner or, if stated, to the Design Professional, 15 continuous calendar days prior to requesting inspection date for Substantial Completion.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

B. As-built Drawings: Transmit one paper copy set of marked-up As-built Drawings to the Design Professional, with copy of transmittal to Owner. Print each Drawing, whether or not changes and additional information were recorded.

C. As-built Specifications: Transmit one paper copy set of marked-up as-built specifications, including addenda and contract modifications to the Design Professional, with copy of transmittal to Owner.

D. As-built Schedule: Submit one electronic (PDF) copy, certified by the Contractor, of the schedule that reflects the exact manner in which the project was actually constructed, to the Owner.

E. Permits, Licenses and Certificates Documents: Submit one copy of original permits, licenses, certifications, inspection reports, material certificates/affidavits, approvals, and related documents required by authorities having jurisdiction to obtain Letter of Completion, Certificate of Occupancy, or Code Compliance Certificate. Coordinate and respond to requirements from the Owner, NYC Department of Buildings, or Municipality and all other authorities having jurisdiction for issuance of approval/documents required for the Owners’ use and occupancy.

1. Cooperate and help coordinate with agency testing of materials as specified in Section 014000 – Quality and Code Requirements. Testing Agency is required to submit final report of special inspections.

2. The Contractor to provide one copy of original certification from agency or firm certifying the following and as required by Individual Specification Sections:

   a. Sprinkler System – NFPA Forms for;
      1) Contractor’s Material and Test Certificate for Underground Piping
      2) Contractor’s Material and Test Certificate for Aboveground Piping

   b. Fire Alarm System – NFPA 72 Form for;
      1) Record of Completion

   c. Elevator – Certification Form from;
      1) Qualified Elevator Inspector (QEI)

   d. Electrical – Certification Form from;
      1) Authority having jurisdiction
      2) Independent electrical inspection agency acceptable to the Owner

F. Hazardous Waste Documents: Submit four (4) paper copies of documents to the Owner 30 continuous calendar days prior to requesting inspection date for Substantial Completion. Refer to Individual Specification Sections for all requirements.

G. Miscellaneous Record Submittals: Refer to Individual Specification Sections for miscellaneous record-keeping requirements and submittals in connection with various construction activities. Submit one electronic (PDF) copy of each submittal.

H. Reports: Submit written report indicating items incorporated in Contract Documents concurrent with progress of the Work, including modifications, concealed conditions, field changes, product selections, and other notations incorporated.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

I. In addition to the above, all approved record documents shall be submitted to the CM in electronic format acceptable to the Owner.

1.7 GUARANTEE
A. General Guarantee: Comply with General Terms and Conditions, Article 8 – Representations, Warranties and Guarantees and Article 15– Miscellaneous. The date established on the Notice of Substantial Completion form constitutes commencement of the Guarantee period.

1.8 OPERATION AND MAINTENANCE MANUALS
A. Final Manuals Submittal: Submit Operation and Maintenance Manuals in final form as indicated in Section 017823 – Operation and Maintenance Manuals, to the Owner and/or the Owners Representative 15 continuous calendar days prior to requesting date of inspection for Substantial Completion.

1.9 CONTRACT CLOSEOUT (same as final application for payment)
A. Contract Compliance: The Contractor shall comply with the requirements of General Conditions, Section 10.08 – Limitations on Actions.

B. Preliminary Procedure: All Work and Extra Work of the Contract and requirements of this section must be complete and approved prior to commencement of Contract closeout.

1. The Contractor shall request and submit to the Owner and/or the Owners Representative a final Contractor’s Pencil Copy billing request that will formulate the final Application for Payment.
2. The Contractor shall provide outstanding documentation to the Owner and/or the Owners Representative in accordance with General Terms and Conditions, Article 10 – M/WBE Requirements and Article 11 – HIRENYC – Construction.

C. Procedures: Upon the Owner’s and/or the Owners Representative approval of the Contractor’s Pencil Copy billing request, Contract closeout documents will be provided to the Contractor. The Contractor shall complete each document and submit all documents with original signature & notary as indicated on forms, the following:

1. Final Application for Payment that includes remaining Retainage.
3. Contractor and Subcontractor Certifications Form.
4. Contractor’s and Contractor’s Subcontractors’ Certified Payroll Form.
5. Release Form -- Final Payment to Contractor.
6. Consent of Surety -- Final Payment to Contractor, with power of attorney.

CONTRACT CLOSEOUT REQUIREMENTS
017700 - 5
Bellevue Hospital - Issued for Bid
D. Payroll Forms: The Contractor and all Sub-contractors to the Contractor shall submit original copies of the Contractor and Subcontractor Certifications Form and Contractor’s Certified Payroll Form.

PART 2 - PRODUCTS

2.1 CLEANING MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

1. Use cleaning products that meet Green Seal GS-37, or if GS-37 is not applicable, use products that comply with allowable VOC levels.

PART 3 - EXECUTION

3.1 DEMOBILIZATION

A. Deliver tools, spare parts, extra materials, and similar items to location designated by the Owner and/or the Owners Representative. Label with manufacturer's name and model number where applicable.

B. Make final changeover of permanent locks and deliver keys to the Owner and/or the Owners Representative. Advise the Owner's and/or the Owners Representative personnel of changeover.

C. Terminate and remove temporary facilities from the Project site, along with mockups, construction tools, and similar elements.

3.2 RECORDING AND MAINTENANCE

A. Recording: Maintain one copy of each submittal during the construction period for contract turnover document purposes. Post changes and modifications to contract turnover documents as they occur; do not wait until the end of the Project.

B. Maintenance of Turnover Documents and Samples: Store turnover documents and Samples in the field office apart from the Contract Documents used for construction. Contract turnover documents shall not be used for construction purposes. Maintain turnover documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to contract turnover documents for the Owner’s and/or the Owners Representative reference during normal working hours during performance of Contract.
3.3 FINAL CLEANING

A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations to the Owners and/or the Owners Representative’s satisfaction. The Contractor shall repeat final cleaning at any and all deficient areas as designated by the Owner and/or the Owners Representative until such areas are accepted by the Owner and/or the Owners Representative at no additional cost to the Owner.

B. Cleaning: Employ professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

1. Complete the following cleaning operations as applies to Work of the contract.
   a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
   b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
   c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
   d. Remove tools, construction equipment, machinery, and surplus material from Project site.
   e. Remove snow and ice to provide safe access to building.
   f. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
   g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
   h. Sweep concrete floors broom clean in unoccupied spaces.
   i. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain. Replace if soil or stains remain after shampooing.
   j. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscurring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
   k. Remove labels that are not permanent.
   l. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.

1) Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates.
m. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.

n. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.

o. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.

p. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.

q. Leave Project clean and ready for occupancy.

C. Construction Waste Disposal: Comply with waste disposal requirements in all other applicable sections.

END OF SECTION 017700
SECTON 017823 - OPERATION AND MAINTENANCE MANUALS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
   A. The Contract Documents, including but not limited to, the Drawings and Individual Specification Sections and Contractor’s Submission Schedule, apply to this Section.

1.2 SUMMARY
   A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
      1. Operation and maintenance manual for systems, subsystems, and equipment.
      2. Product maintenance data.
      3. Systems and equipment maintenance data.
   B. Related Sections:
      1. Section 017800 – Contract Closeout Requirements

1.3 DEFINITIONS
   A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
   B. Subsystem: A portion of a system with characteristics similar to a system.

1.4 CLOSEOUT SUBMITTALS
   A. Required Manuals: Section 017800 – Contract Closeout Requirements describes number and type of copies required for contract closeout requirements.

PART 2 - PRODUCTS

2.1 REQUIREMENTS FOR OPERATION, AND MAINTENANCE MANUALS
   A. Organization: Organize the manual into separate sections by CSI number based on the table of contents of the project manual, for each system and subsystem, and a separate section for each
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

piece of equipment not part of a system. The manual shall contain the following materials, in
the order listed:

1. Title page.
2. Table of contents.
3. Manual contents:
   a. Operation data.
   b. Product maintenance data.
   c. Systems and equipment data

B. Title Page: Include the following information:

1. Subject matter included in manual.
2. Name and address of Project.
3. Name and address of Owner.
4. Date of submittal.
5. Name and contact information for Contractor.
6. Name and contact information for Construction Manager.
7. Name and contact information for Design Professional.
8. Name and contact information for Commissioning Agent.
9. Names and contact information for major consultants to the Design Professional that
designed the systems contained in the manuals.
10. Cross-reference to related systems in other operation and maintenance manuals.

C. Table of Contents: List each product included in manual, identified by product name, indexed
to the content of the volume, and cross-referenced to Specification Section number in Project
Manual.

1. If operation or maintenance documentation requires more than one volume to
accommodate data, include comprehensive table of contents for all volumes in each
volume of the set.

D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by
system, subsystem, and equipment. If possible, assemble instructions for subsystems,
equipment, and components of one system into a single binder.

E. Manuals, Electronic Copy: Submit electronic (PDF) copy of the manual, to the Design
Professional, concurrent with Action Submittal.

2.2 OPERATION DATA

A. Content: In addition to requirements in this Section, include operation data required in
individual Specification Section and the following information:
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

2. Operating standards.
3. Operating procedures.
4. Operating logs.
5. Wiring diagrams.
6. Control diagrams.
7. Piped system diagrams.
8. Precautions against improper use.
9. License requirements including inspection and renewal dates.

B. Descriptions: Include the following:

1. Product name and model number. Use designations for products indicated on Contract Documents.
2. Manufacturer's name.
3. Equipment identification with serial number of each component.
4. Equipment function.
5. Operating characteristics.
6. Limiting conditions.
7. Performance curves.
8. Engineering data and tests.
9. Complete nomenclature and number of replacement parts.

C. Operating Procedures: Include the following, as applicable:

1. Startup procedures.
2. Equipment or system break-in procedures.
3. Routine and normal operating instructions.
4. Regulation and control procedures.
5. Instructions on stopping.
7. Seasonal and weekend operating instructions.
8. Required sequences for electric or electronic systems.
9. Special operating instructions and procedures.

D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.

E. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

2.3 PRODUCT MAINTENANCE DATA

A. Content: Organize data into a separate section, within the O & M Manual, for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.

B. Source Information: List each product included in section identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.

C. Product Information: Include the following, as applicable:

1. Product name and model number.
2. Manufacturer's name.
3. Color, pattern, and texture.
5. Reordering information for specially manufactured products.

D. Maintenance Procedures: Include manufacturer's written recommendations and the following:

1. Inspection procedures.
2. Types of cleaning agents to be used and methods of cleaning.
3. List of cleaning agents and methods of cleaning detrimental to product.
4. Schedule for routine cleaning and maintenance.
5. Repair instructions.

E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.

F. Warranties and Guarantees: Include copies of warranties and guarantees lists of circumstances and conditions that would affect validity of warranties.

1. Include procedures to follow and required notifications for warranty claims.

2.4 SYSTEMS AND EQUIPMENT MAINTENANCE DATA

A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.

B. Source Information: List each system, subsystem, and piece of equipment included in a separate section within the O & M Manual identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of
Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.

C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:

1. Standard maintenance instructions and bulletins.
2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
3. Identification and nomenclature of parts and components.
4. List of items recommended to be stocked as spare parts.

D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:

1. Test and inspection instructions.
2. Troubleshooting guide.
3. Precautions against improper maintenance.
4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
5. Aligning, adjusting, and checking instructions.
6. Demonstration and training video recording, if available.

E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.

1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.

F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.

G. Warranties: Include copies of warranties and lists of circumstances and conditions that would affect validity of warranties.

1. Include procedures to follow and required notifications for warranty claims.
PART 3 - EXECUTION

3.1 MANUAL PREPARATION

A. Operation and Maintenance Documentation shall be provided for review, concurrent, with Action Submittal specified in Individual Specification Section.

1. Correct or modify the manual to comply with the Design Professional’s and Commissioning Authority’s comments. Submit copies of each corrected manual within 15 continuous calendar days of receipt of Design Professionals’ and Commissioning Authority’s comments and prior to commencing demonstration and training.

B. Product Maintenance Data: Assemble a complete set of maintenance data, in a separate section, within the O & M Manual, indicating care and maintenance of each product, material, and finish incorporated into the Work.

C. Operation and Maintenance Data: Assemble a complete set of operation and maintenance data, in a separate section, within the O & M Manual, indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.

1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.

2. Prepare a separate section within the O & M Manual, for each system and subsystem, in the form of an instructional manual for use by operating personnel.

D. Manufacturers' Data: Where manual contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.

1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.

E. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in As-built Drawings to ensure correct illustration of completed installation.

1. Do not use original project record documents as part of operation and maintenance manuals.

END OF SECTION 017823
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

SECTION 017839 – AS BUILT DOCUMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The Contract Documents, including but not limited to, the Drawings and Individual Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for As-built documents, including the following:

1. As-built Drawings
2. As-built Specifications
3. As-built Schedule
4. Record Product Data
5. Miscellaneous record submittals

B. Related Sections:

1. Section 013200 – Construction Progress Documentation
2. Section 013300 – Submittal Procedure; Required Submittal List
3. Section 017700 – Contract Closeout Requirements
4. Section 017823 – Operation and Maintenance Manuals

C. Administrative and procedural requirements for contract turnover documents, including, but not limited to the following, as provided in Individual Specifications Sections.

1. Hazardous Waste Documents

1.3 CLOSEOUT SUBMITTALS

A. Required Documents: Section 017700 – Contract Closeout Requirements, describes administrative requirements for submission, number and type of copies required for contract closeout requirements.
PART 2 - PRODUCTS

2.1 AS-BUILT DRAWINGS

A. As-built Drawings: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings onsite. Review As-built Drawings and shop drawings monthly with the Owner, for approval.

1. Preparation: Daily mark As-built Drawings to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether the individual or entity is Installer, Subcontractor, or similar entity, to provide information for preparation of corresponding marked-up As-built Drawings.

a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
b. Accurately record information in an acceptable drawing technique.
c. Record data as soon as possible after obtaining it.
d. Record and check the markup before enclosing concealed installations.

2. Content: Types of items requiring marking include, but are not limited to, the following:

a. Dimensional changes to Drawings.
b. Revisions to details shown on Drawings.
c. Depths of foundations below first floor.
d. Locations and depths of underground utilities.
e. Revisions to routing of piping and conduits.
f. Revisions to electrical circuitry.
g. Actual equipment locations.
h. Duct size and routing.
i. Locations of concealed internal utilities.
j. Changes made by Change Order or Change Directive.
k. Changes made following the Owner’s written orders.
l. Details not on the original Contract Drawings.
m. Field records for variable and concealed conditions.
n. Record information on the Work that is shown only schematically.

3. Mark the Contract Drawings and Shop Drawings completely and accurately. Utilize personnel proficient at recording graphic information in production of marked-up as-built prints.

4. Mark as-built sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.

5. Mark important additional information that was either shown schematically or omitted from original Drawings.

6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
2.2 AS-BUILT SPECIFICATIONS

A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.

1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
4. For each principal product, indicate whether record Product Data has been submitted in operation and maintenance manuals instead of submitted as record Product Data.
5. Note related Change Orders, record Product Data, and turnover Drawings where applicable.

2.3 AS-BUILT SCHEDULE

A. Final Schedule: Submit to the Owner a final schedule update. The As-built Schedule shall reflect the exact manner in which the project was actually constructed including actual start and finish dates, activities, sequences and logic.

1. The Contractor shall certify the final schedule update as being a true reflection of the way the project was actually constructed.

2.4 RECORD PRODUCT DATA

A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.

1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
2. Include significant changes in the product delivered to the Project site and changes in manufacturer's written instructions for installation.
3. Note related Change Orders, As-built Specifications, and As-built Drawings where applicable.

2.5 MISCELLANEOUS RECORD SUBMITTALS

A. Assemble miscellaneous records required by Individual Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

B. Format: Submit miscellaneous record submittals.
GENERAL REQUIREMENTS
H+H Bellevue Hospital, FEMA PW Number: FEMA-4085-DR-NY-03887
3.1 H Bldg Flood Slats and Elevator Flood Protection
3.2 Vertical Elevator Mitigation
Issued for Bid
August 30, 2017

1. Include miscellaneous record submittals directory organized by specification section number and title, electronically linked to each item of miscellaneous record submittals.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

A. Maintain Change Log: Maintain and submit written change log to the Owner and/or the Owners Representative, monthly for review indicating items incorporated in contract turnover documents concurrent with progress of the Work, including modifications, concealed conditions, field changes, product selections, and other notations incorporated.

B. Recording: Maintain one copy of each submittal during the construction period for contract turnover document purposes. Post changes and modifications to contract turnover documents as they occur; do not wait until the end of the Project.

C. Maintenance of Turnover Documents and Samples: Store turnover documents and Samples in the field office apart from the Contract Documents used for construction. Contract turnover documents are not to be used for construction purposes. Maintain turnover documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to contract turnover documents for the Owner’s reference during normal working hours during performance of Contract.

END OF SECTION 017839