



**SECTION 01 00 00
GENERAL REQUIREMENTS**

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**SECTION 01 00 00
GENERAL REQUIREMENTS**

1.1 GENERAL INTENTION

- A. Contractor shall completely prepare site for building operations, including demolition and removal of existing structures, and furnish labor and materials and perform work for construction of the floodwall system, seepage control system, utility modifications, pump stations, paving, landscaping, and other associated work (e.g. electrical and plumbing components) as required by drawings and specifications.
- B. Visits to the site by Bidders may be made only by appointment with the VA Contracting Officer.
- C. Offices of Henningson, Durham & Richardson Architecture and Engineering, P.C., as Architect-Engineers, will render certain technical services during construction. Such services shall be considered as advisory to the Government and shall not be construed as expressing or implying a contractual act of the Government without affirmations by Contracting Officer or his duly authorized representative.
- D. ~~Before placement and installation of work subject to tests by testing laboratory, the Contractor shall notify the Resident Engineer in sufficient time to enable personnel to be present at the site in time for proper field inspection. Such prior notice shall be not less than five (5) work days unless otherwise designated by the Resident Engineer.~~
- E. All employees of general contractor and subcontractors shall comply with VA security management program and obtain permission of the VA police, be identified by project and employer, and restricted from unauthorized access.
- F. Prior to commencing work, general contractor shall provide proof that a OSHA certified "competent person" (CP) (29 CFR 1926.20(b)(2) will maintain a presence at the work site whenever the general or subcontractors are present.
- G. Training:
 - 1. All supervisory and forepersons for the general contractor and subcontractors that are working on site shall have the 30-hour OSHA certified Construction Safety course and other relevant competency



- training, as determined by RE/COR acting as the Construction Safety Officer with input from the facility Construction Safety Committee.
2. All other employees of the general contractor and subcontractors of non-supervisory employment that are working on site shall have 10-hour OSHA certified Construction Safety course training.
 3. Submit training records of all such employees for approval before the start of work.
- H. VHA Directive 2011-36, Safety and Health during Construction, dated 9/22/2011 in its entirety is made a part of this section.
- I. Comply with requirements of FAR 25.5 Buy American Act - Construction Materials.

1.2 STATEMENT OF OFFER ITEM(S)

- A. ITEM I, GENERAL CONSTRUCTION: Work for the Flood Preparedness and Protection Project includes construction of the floodwall system, seepage control system, utility modifications, pump stations, paving, landscaping, and associated work; and necessary removal of existing construction and certain other items.
1. Demolition: Work includes clearing and grubbing, and removal of site fencing, paving, sidewalks, City utilities, site utility service connections, electric lines (Con Edison of New York), landscaping walls, and other designated site features, and filing and obtaining necessary permits for work performed off-site.
 2. Floodwall: Work includes excavation and construction of auger cast piles, rock anchors, formwork, reinforced concrete work, brick and mortar work, installation of flood gates, and general grading.
 3. Seepage Control: Work includes construction of a secant cutoff wall system along the floodwall alignment and installation of new utilities.
 4. Pump Stations and Interior Drainage: Work includes excavation and construction of pump stations, sanitary and storm water piping, installation of valves and backflow prevention measures, tie-in pump station controls and alarms to existing building management system and service connections to New York City utilities.
 5. Electrical Power Utilities and Distribution: Install new concrete ductbank and 5KV feeder from existing pad mount transformer. Demolish existing 5KV ductbank and cables. Work includes new precast manholes. Install power distribution equipment to serve new



- pump stations, vehicle wedge barriers and gates including new 480/277V power panel, 208/120V branch circuit panel and transformer.
6. Security Access Control and CCTV Surveillance: Contact Ralph Ovale of Vantage Burglar Alarm Corp., authorized representative of Hirsch Identive, 54-40 Little Neck Parkway, Little Neck, NY 11362, Tel. (718)423-2555, to obtain pricing for equipment, engineering, shop drawings, product literature, installation support, system testing, and warranty service pertaining to the Electronic Security System. Work includes addition of new vehicle wedge barriers and electrically operated parking control gates with remote manual control at existing Post 7 Guard Desk inside building. Extension of existing security access control system for card reader controlled pedestrian gates, parking control gates, and interface to vehicle wedge barriers. Extension of existing CCTV surveillance and recording system to new pole-mounted and wall-mounted CCTV cameras. Work includes security call stations tied into existing facility telephone system with interface for CCTV camera call up.
7. Site Lighting: Work includes relocation of existing lighting fixtures and control circuits, and providing new light fixtures.

~~B. Alternates:~~

- ~~8. ADD ALTERNATE NO. 1:~~** Specified in Section 03 30 00, CAST-IN-PLACE CONCRETE. Concrete brick pattern liner on Memorial Garden Wall at 23rd Street. Refer to Drawings for designated locations, designs and materials.
- ~~9. ADD ALTERNATE NO. 2:~~** Specified in Section 03 30 00, CAST-IN-PLACE CONCRETE. Custom image form liner on Memorial Garden Wall at 23rd Street. Refer to Drawings for designated locations, designs and materials.
- ~~3. ADD ALTERNATE NO. 3: Cost to provide, for the duration of construction, off site parking for parking space displaced during construction.~~**
- ~~a. Indicate cost per parking space.~~**
- ~~b. Indicate cost for 100 parking spaces.~~**

~~C. Unit Prices: Section 01 20 00, UNIT PRICES: Offerors must submit at the Time of Bid (TOB). Unit pricing for each item indicated:~~

- ~~1. UNIT PRICE NO. 1: Section 31 50 00, SECANT PILE WALL: Removal of obstructions encountered during secant pile installation.~~**



~~Quantities shall be determined by the COTR at the time of construction.~~

~~a. Unit of Measurement: Hours as measured in the field during construction. Contractor shall include at the TOB a unit cost (\$___ per hour) for the removal of obstructing materials in excess of one (1) hour.~~

~~2. UNIT PRICE NO. 2: Section 31 63 16, AUGER CAST PILES: Removal of obstructions encountered during auger cast pile installation.~~

~~Quantities shall be determined by the COTR at the time of construction.~~

~~a. Unit of Measurement: Hours as measured in the field during construction. Contractor shall include at the TOB a unit cost (\$___ per hour) for the removal of obstructing materials in excess of one (1) hour.~~

1.3 SPECIFICATIONS AND DRAWINGS FOR CONTRACTOR

- A. AFTER AWARD OF CONTRACT, electronic copies of specifications and drawings will be furnished.
- B. Hardcopy sets of drawings may be made by the Contractor, at Contractor's expense.

1.4 RELATED WORK - MINIMUM WORK PERFORMANCE REQUIREMENTS

- A. Provide and coordinate all necessary work and products meeting the requirements associated with all applicable specification sections and drawings to produce a system complete, functional and ready for the purpose intended. No statements herein shall relieve the Contractor of responsibilities described elsewhere in the contract documents.
- B. General Contractor shall assure that all trades are aware of their respective full scope of work. Contractor shall procure all necessary permits and inspections. Refer to all contract drawings, specifications and notes for additional responsibilities, details and scope of work. All work shall be performed by personnel properly skilled in the task they are performing and aware of their project responsibilities. Workmanship shall be the best of their respective kind using the most modern approved methods and materials. General Contractor shall directly supervise all phases of construction. Daily work logs shall be issued to the VA Resident Engineer describing in detail the manpower, man-hours, work performed by each trade.



1. Contractor shall procure a New York City Department of Parks & Recreation Permit; See Attachments.

1.5 COORDINATION

- A. Coordinate work and products meeting the requirements associated with all applicable specification sections and drawings to produce a system complete, functional and ready for the purpose intended.
- B. Pre-worksite Re-visit Requirements: Before starting work in a particular area, visit the worksite and carefully examine the areas to verify complexity, existing conditions and difficulties that will affect work including all work done under various specification sections and the VA.
 1. Attached **FOR INFORMATION ONLY**, a reference "AS BUILT" drawing of existing generator pad prepared by Bullard Lindsay Contracting Co., Inc., dated March 20, 2012; See Attachments.
- C. Commencement of work shall be construed as acceptance of the existing conditions and difficulties. No change to the contract price or schedule shall be allowed for work caused by unfamiliarity with the site conditions that are visible or readily construed by an experienced observer.

1.6 CONSTRUCTION QUALITY ASSURANCE/QUALITY CONTROL

- A. Contractor shall provide full time Quality Assurance/Quality Control inspector on construction site for daily monitoring of quality of work.
 1. Submit Daily Construction Quality Control Report fully describing preparatory inspection, initial inspection, and follow-up inspection.
 2. Contractor shall obtain the services of a third part to provide independent tests required by the Contract Documents.

1.7 HEALTH AND SAFETY ~~CONSTRUCTION SAFETY PROGRAM~~

- A. Applicable Publications: Latest publications listed below form part of this Article to extent referenced. Publications are referenced in text by basic designations only.

1. American Society of Safety Engineers (ASSE):

A10.1.....Pre-Project & Pre-Task Safety and Health Planning

A10.34.....Protection of the Public on or Adjacent to Construction Sites



- A10.38.....Basic Elements of an Employer's Program to
Provide a Safe and Healthful Work Environment
American National Standard Construction and
Demolition Operations
2. American Society for Testing and Materials (ASTM):
E84.....Surface Burning Characteristics of Building
Materials
3. The Facilities Guidelines Institute (FGI):
FGI Guidelines.....Guidelines for Design and Construction of
Healthcare Facilities
4. National Fire Protection Association (NFPA):
10.....Standard for Portable Fire Extinguishers
30.....Flammable and Combustible Liquids Code
51B.....Standard for Fire Prevention During Welding,
Cutting and Other Hot Work
70.....National Electrical Code
70EStandard for Electrical Safety in the Workplace
241.....Standard for Safeguarding Construction,
Alteration, and Demolition Operations
5. The Joint Commission (TJC):
TJC ManualComprehensive Accreditation and Certification
Manual
6. U. S. Nuclear Regulatory Commission:
10 CFR 20Standards for Protection Against Radiation
7. U. S. Occupational Safety and Health Administration (OSHA):
29 CFR 1904Reporting and Recording Injuries & Illnesses
29 CFR 1910Safety and Health Regulations for General
Industry
29 CFR 1926Safety and Health Regulations for Construction
Industry
CPL 2-0.124.....Multi-Employer Citation Policy
- B. Definitions:
1. OSHA "Competent Person" (CP): One who is capable of identifying
existing and predictable hazards in the surroundings and working
conditions which are unsanitary, hazardous or dangerous to employees,
and who has the authorization to take prompt corrective measures to
eliminate them (see 29 CFR 1926.32(f)).



2. "Qualified" means one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work, or the project.
3. High Visibility Accident: Any mishap which may generate publicity or high visibility.
4. Medical Treatment: Treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even through provided by a physician or registered personnel.
5. Recordable Injuries or Illnesses. Any work-related injury or illness that results in:
 - a. Death, regardless of the time between the injury and death, or the length of the illness;
 - b. Days away from work (any time lost after day of injury/illness onset);
 - c. Restricted work;
 - d. Transfer to another job;
 - e. Medical treatment beyond first aid;
 - f. Loss of consciousness; or
 - g. A significant injury or illness diagnosed by a physician or other licensed health care professional, even if it did not result in (a) through (f) above.

C. Regulatory Requirements:

1. In addition to the detailed requirements included in the provisions of this contract, comply with 29 CFR 1926, comply with 29 CFR 1910 as incorporated by reference within 29 CFR 1926, comply with ASSE A10.34, and all applicable federal, state, and local laws, ordinances, criteria, rules and regulations. Submit matters of interpretation of standards to the VA Office of Construction and Facilities Management (OCFM) and the VHA Office of Occupational Safety and Health (10NA8) for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements shall govern except with specific approval and acceptance by the Resident Engineer.



D. Accident Prevention Plan (APP):

1. The APP (aka Construction Safety & Health Plan) shall interface with the Contractor's overall safety and health program. Include any portions of the Contractor's overall safety and health program referenced in the APP in the applicable APP element and ensure it is site-specific. The Government considers the Prime Contractor to be the "controlling authority" for all worksite safety and health of each subcontractor(s). The Contractor is responsible for informing their subcontractors of the safety provisions under the terms of the contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out.
2. The APP shall be prepared as follows:
 - a. Written in English by a qualified person who is employed by the Prime Contractor articulating the specific work and hazards pertaining to the contract (model language can be found in ASSE A10.33). Specifically articulating the safety requirements found within these VA contract safety specifications.
 - b. Address both the Prime Contractor's and the subcontractors' work operations.
 - c. State measures to be taken to control hazards associated with materials, services, or equipment provided by suppliers.
 - d. Address all the elements/sub-elements and in order as follows:
 - 1) SIGNATURE SHEET. Title, signature, and phone number of the following:
 - a) Plan preparer (Qualified Person such as corporate safety staff person or contracted Certified Safety Professional with construction safety experience);
 - b) Plan approver (company/corporate officers authorized to obligate the company);
 - c) Plan concurrence (e.g. Chief of Operations, Corporate Chief of Safety, Corporate Industrial Hygienist, project manager or superintendent, project safety professional). Provide concurrence of other applicable corporate and project personnel (Contractor).



- 2) BACKGROUND INFORMATION. List the following:
 - a) Contractor;
 - b) Contract number;
 - c) Project name;
 - d) Brief project description, description of work to be performed, and location; phases of work anticipated (these will require an AHA).
- 3) STATEMENT OF SAFETY AND HEALTH POLICY. Provide a copy of current corporate/company Safety and Health Policy Statement, detailing commitment to providing a safe and healthful workplace for all employees. The Contractor's written safety program goals, objectives, and accident experience goals for this contract should be provided.
- 4) RESPONSIBILITIES AND LINES OF AUTHORITIES. Provide the following:
 - a) A statement of the employer's ultimate responsibility for the implementation of his SOH program.
 - b) Identification and accountability of personnel responsible for safety at both corporate and project level. Contracts specifically requiring safety or industrial hygiene personnel shall include a copy of their resumes.
 - c) The names of Competent and/or Qualified Person(s) and proof of competency/qualification to meet specific OSHA Competent/Qualified Person(s) requirements must be attached.
 - d) Requirements that no work shall be performed unless a designated competent person is present on the job site.
 - e) Requirements for pre-task Activity Hazard Analysis (AHAs).
 - f) Lines of authority.
 - g) Policies and procedures regarding noncompliance with safety requirements (to include disciplinary actions for violation of safety requirements) should be identified.
- 5) SUBCONTRACTORS AND SUPPLIERS. If applicable, provide procedures for coordinating SOH activities with other employers on the job site:
 - a) Identification of subcontractors and suppliers (if known).
 - b) Safety responsibilities of subcontractors and suppliers.



6) TRAINING:

- a) Requirements for site-specific SOH orientation training at the time of initial hire or assignment to the project for every employee.
- b) Requirements for mandatory training and certifications that are applicable to this project (e.g. explosive actuated tools, crane operator, rigger, crane signal person, fall protection, electrical lockout/NFPA 70E, machine/equipment lockout, confined space, etc.) and any requirements for periodic retraining/recertification.
- c) Procedures for periodic safety and health training for supervisors and employees.
- d) Requirements for OSHA 10-hour training for all workers on site and the OSHA 30-hour training for Trade Competent Persons (CPs).

7) SAFETY AND HEALTH INSPECTIONS:

- a) Specific assignment of responsibilities for a minimum daily job site safety and health inspection during periods of work activity: Who will conduct (e.g. "Site Safety and Health CP"), proof of inspector's training/qualifications, when inspections will be conducted, procedures for documentation, deficiency tracking system, and follow-up procedures.
- b) Any external inspections/certifications that may be required (e.g. contracted CSP or CSHT).

8) ACCIDENT INVESTIGATION AND REPORTING. The Contractor shall conduct mishap investigations of all OSHA Recordable Incidents. The App shall include accident/incident investigation procedure and identify person(s) responsible to provide the following to the RE Office:

- a) Exposure data (man-hours worked).
- b) Accident investigations, reports, and logs.

9) PLANS (PROGRAMS, PROCEDURES) REQUIRED. Based on a risk assessment of contracted activities and on mandatory OSHA compliance programs, the Contractor shall address all applicable occupational risks in site-specific compliance and accident prevention plans. These Plans shall include but are



not be limited to procedures for addressing the risks associates with the following:

- a) Emergency response.
- b) Contingency for severe weather.
- c) Fire Prevention.
- d) Medical Support.
- e) Posting of emergency telephone numbers.
- f) Prevention of alcohol and drug abuse.
- g) Site sanitation (housekeeping, drinking water, toilets).
- h) Night operations and lighting.
- i) Hazard communication program.
- j) Welding/Cutting "Hot" work.
- k) Electrical Safe Work Practices (Electrical LOTO/NFPA 70E).
- l) General Electrical Safety.
- m) Hazardous energy control (Machine LOTO).
- n) Site-Specific Fall Protection and Prevention.
- o) Excavation/trenching.
- p) Asbestos abatement.
- q) Lead abatement.
- r) Crane Critical lift.
- s) Respiratory protection.
- t) Health hazard control program.
- u) Radiation Safety Program.
- v) Abrasive blasting.
- w) Heat/Cold Stress Monitoring.
- x) Crystalline Silica Monitoring (Assessment).
- y) Demolition plan (to include engineering survey).
- z) Formwork and shoring erection and removal.
- aa) Precast Concrete.

3. Submit the APP to the Resident Engineer for review for compliance with contract requirements in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES ten (10) calendar days after the date of the contract award. Work cannot proceed without an accepted APP.
4. Once accepted by the Resident Engineer, the APP and attachments will be enforced as part of the contract. Disregarding the provisions of this contract or the accepted APP will be cause for stopping of



- work, at the discretion of the Contracting Officer, until the matter has been rectified.
5. Once work begins, changes to the accepted APP shall be made with the knowledge and concurrence of the Resident Engineer. Should any severe hazard exposure (i.e. imminent danger) become evident, stop work in the area, secure the area, and develop a plan to remove the exposure and control the hazard. Notify the Contracting Officer within 24 hours of discovery. Eliminate/remove the hazard. In the interim, take all necessary action to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public (as defined by ASSE/SAFE A10.34) and the environment.

E. Activity Hazard Analyses (AHAs):

1. AHAs are also known as Job Hazard Analyses, Job Safety Analyses, and Activity Safety Analyses. Before beginning each work activity involving a type of work presenting hazards not experienced in previous project operations or where a new work crew or sub-contractor is to perform the work, the Contractor(s) performing that work activity shall prepare an AHA (Example electronic AHA forms can be found on the US Army Corps of Engineers web site).
2. AHAs shall define the activities being performed and identify the work sequences, the specific anticipated hazards, site conditions, equipment, materials, and the control measures to be implemented to eliminate or reduce each hazard to an acceptable level of risk.
3. Work shall not begin until the AHA for the work activity has been accepted by the Resident Engineer and discussed with all engaged in the activity, including the Contractor, subcontractor(s), and Government on-site representatives at preparatory and initial control phase meetings.
 - a. The names of the Competent/Qualified Person(s) required for a particular activity (for example, excavations, scaffolding, fall protection, other activities as specified by OSHA and/or other State and Local agencies) shall be identified and included in the AHA. Certification of their competency/qualification shall be submitted to the Government Designated Authority (GDA) for acceptance prior to the start of that work activity.



- b. The AHA shall be reviewed and modified as necessary to address changing site conditions, operations, or change of competent/qualified person(s).
 - 1) If more than one Competent/Qualified Person is used on the AHA activity, a list of names shall be submitted as an attachment to the AHA. Those listed must be Competent/Qualified for the type of work involved in the AHA and familiar with current site safety issues.
 - 2) If a new Competent/Qualified Person (not on the original list) is added, the list shall be updated (an administrative action not requiring an updated AHA). The new person shall acknowledge in writing that he or she has reviewed the AHA and is familiar with current site safety issues.
 - c. Submit AHAs to the Resident Engineer for review for compliance with contract requirements in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES for review prior to the start of each phase. Subsequent AHAs as shall be formatted as amendments to the APP. The analysis should be used during daily inspections to ensure the implementation and effectiveness of the activity's safety and health controls.
 - d. The AHA list will be reviewed periodically (at least monthly) at the Contractor supervisory safety meeting and updated as necessary when procedures, scheduling, or hazards change.
 - e. Develop the activity hazard analyses using the project schedule as the basis for the activities performed. All activities listed on the project schedule will require an AHA. The AHAs will be developed by the contractor, supplier, or subcontractor and provided to the prime contractor for review and approval and then submitted to the Resident Engineer.
- F. Preconstruction Conference:
- 1. Contractor representatives who have a responsibility or significant role in implementation of the accident prevention program, as required by 29 CFR 1926.20(b)(1), on the project shall attend the preconstruction conference to gain a mutual understanding of its implementation. This includes the project superintendent, subcontractor superintendents, and any other assigned safety and health professionals.



2. Discuss the details of the submitted APP to include incorporated plans, programs, procedures and a listing of anticipated AHAs that will be developed and implemented during the performance of the contract. This list of proposed AHAs will be reviewed at the conference and an agreement will be reached between the Contractor and the Contracting Officer's representative as to which phases will require an analysis. In addition, establish a schedule for the preparation, submittal, review, and acceptance of AHAs to preclude project delays.

3. Deficiencies in the submitted APP will be brought to the attention of the Contractor within five (5) days of submittal, and the Contractor shall revise the plan to correct deficiencies and re-submit it for acceptance. Do not begin work until there is an accepted APP.

G. Site "Safety and Health Officers" (SSHO) and "COMPETENT PERSONS" (CPs):

1. The Prime Contractor shall designate a minimum of one SSHO at each project site that will be identified as the "Site Safety and Health Officer" (SSHO) to administer the Contractor's safety program and government-accepted Accident Prevention Plan. Each subcontractor shall designate a minimum of one "Competent Person" (CP) in compliance with 29 CFR 1926.20 (b)(2) that will be identified as a "Trade CP" to administer their individual safety programs.

2. Further, all specialized "Competent Persons" (additional "Trade Safety and Health CPs" as necessary) for the work crews will be supplied by the respective contractor as required by 29 CFR 1926 (i.e. Asbestos, Electrical, Cranes, Derricks, Demolition, Fall Protection, Fire Safety/Life Safety, Ladder, Rigging, Scaffolds, and Trenches/Excavations).

3. These "Competent Persons" can have collateral duties as the subcontractor's superintendent and/or work crew lead persons as well as fill more than one specialized CP role (i.e. Asbestos, Electrical, Cranes, Derricks, Demolition, Fall Protection, Fire Safety/Life Safety, Ladder, Rigging, Scaffolds, and Trenches/Excavations).

4. The "Site Safety and Health Officer" or an equally-qualified Designated Representative/alternate will maintain a presence on the site during construction operations in accordance with FAR Clause



52.236-6: Superintendence by the Contractor. "Trade Safety and Health CPs" will maintain presence during their construction activities in accordance with above mentioned clause. A listing of the designated Site Safety and Health CP and Trade Safety and Health CPs shall be submitted prior to the start of work as part of the APP with the training documentation and/or AHA as listed in Section 1.8 below.

5. The repeated presence of uncontrolled hazards during a contractor's work operations will result in the designated CP as being deemed incompetent and result in the required removal of the employee in accordance with FAR Clause 52.236-5: Material and Workmanship, Paragraph (c).

H. Training:

1. The designated Prime Contractor "Site Safety and Health Officer" must meet the requirements of all applicable OSHA standards and be capable (through training, experience, and qualifications) of ensuring that the requirements of 29 CFR 1926.16 and other appropriate Federal, State and local requirements are met for the project. At a minimum the SSHO must have completed the OSHA 30-hour Construction Safety class and have five (5) years of construction industry safety experience or three (3) years if he/she possesses a Certified Safety Professional (CSP) or certified Construction Safety and Health Technician (CSHT) certification or have a safety and health degree from an accredited university or college.
2. All designated "Trade Safety and Health CPs" shall have completed the OSHA 30-hour Construction Safety course within the past three (3) years.
3. In addition to the OSHA 30-hour Construction Safety Course, all "Trade Safety and Health CPs" with high hazard work operations such as operations involving asbestos, electrical, cranes, demolition, work at heights/fall protection, fire safety/life safety, ladder, rigging, scaffolds, and trenches/excavations shall have a specialized formal course in the hazard recognition & control associated with those high hazard work operations. Documented "repeat" deficiencies in the execution of safety requirements will require retaking the requisite formal course.



4. All other construction workers shall have the OSHA 10-hour Construction Safety Outreach course and any necessary safety training to be able to identify hazards within their work environment.
5. Submit training records associated with the above training requirements to the Resident Engineer for review for compliance with contract requirements in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES prior to the date of the preconstruction conference for acceptance.
6. Prior to any worker for the contractor or subcontractors beginning work, they shall undergo a safety briefing provided by the "Site Safety and Health Officer" or his/her designated representative. At a minimum, this briefing shall include information on the site-specific hazards, construction limits, VAMC safety guidelines, means of egress, break areas, work hours, locations of restrooms, use of VAMC equipment, emergency procedures, accident reporting, etc. Documentation shall be provided to the Resident Engineer that individuals have undergone contractor's safety briefing.
7. Ongoing safety training will be accomplished in the form of weekly documented safety meeting.

I. Inspections:

1. The "Site Safety and Health Officer" shall conduct frequent and regular safety inspections (daily) of the site and each of the subcontractors "Trade Safety and Health CPs" shall conduct frequent and regular safety inspections (daily) of the their work operations as required by 29 CFR 1926.20(b)(2). Each week, the "Site Safety and Health Officer" shall conduct a formal documented inspection of the entire construction areas with the subcontractors' "Trade Safety and Health CPs" present in their work areas. Coordinate with, and report findings and corrective actions weekly to Resident Engineer.
2. A Certified Safety Professional (CSP) with specialized knowledge in construction safety or a certified Construction Safety and Health Technician (CSHT) shall randomly conduct a monthly site safety inspection. The CSP or CSHT can be a corporate safety professional or independently contracted. The CSP or CSHT will provide their certificate number on the required report for verification as necessary.



- a. Results of the inspection will be documented with tracking of the identified hazards to abatement.
 - b. The Resident Engineer shall be notified immediately prior to start of the inspection and invited to accompany the inspection.
 - c. Identified hazard and controls will be discussed to come to a mutual understanding to ensure abatement and prevent future reoccurrence.
 - d. A report of the inspection findings with status of abatement will be provided to the Resident Engineer within one (1) week of the onsite inspection.
- J. Accident, OSHA 300 Logs, and Man-Hours:
1. Notify the Resident Engineer as soon as practical, but no more than four (4) hours after any accident meeting the definition of OSHA Recordable Injuries or Illnesses or High Visibility Accidents, property damage equal to or greater than \$5,000, or any weight handling equipment accident. Within notification include contractor name; contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident (to include type of construction equipment used, PPE used, etc.). Preserve the conditions and evidence on the accident site until the Resident Engineer can determine whether a government investigation will be conducted.
 2. Conduct an accident investigation for recordable injuries and illnesses, for Medical Treatment defined in paragraph DEFINITIONS, and property damage accidents resulting in at least \$20,000 in damages, to establish the root cause(s) of the accident. Complete the VA Form 2162, and provide the report to the Resident Engineer within five (5) calendar days of the accident. The Resident Engineer will provide copies of any required or special forms.
 3. A summation of all man-hours worked by the contractor and associated sub-contractors for each month will be reported to the Resident Engineer on a monthly basis.
 4. A summation of all OSHA recordable accidents experienced on site by the contractor and associated sub-contractors for each month will be provided to the Resident Engineer on a monthly basis. The



contractor and associated sub-contractors' OSHA 300 logs will be made available to the Resident Engineer as requested.

K. Personal Protective Equipment (PPE):

1. PPE is governed in all areas by the nature of the work the employee is performing.

2. Mandatory PPE includes:

a. Hard Hats - unless written authorization is given by the Resident in circumstances of work operations that have limited potential for falling object hazards such as during finishing work or minor remodeling. However even with authorization to relax the requirement of hard hats, if a worker becomes exposed to an overhead falling object hazard, then hard hats would be required in accordance with the OSHA regulations.

b. Safety glasses - unless written authorization is given by the Resident Engineer safety glasses meeting the ANSI Z87.1 standard must be worn by each person on site.

c. Appropriate Safety Shoes - based on the hazards present, safety shoes meeting the requirements of ASTM F2413-11 shall be worn by each person on site unless written authorization is given by the Resident Engineer. Hearing protection - Use personal hearing protection at all times in designated noise hazardous areas or when performing noise hazardous tasks.

L. Electrical:

1. All electrical work shall comply with NFPA 70 (NEC), NFPA 70B, NFPA 70E, OSHA Part 1910 subpart J - General Environmental Controls, and OSHA Part 1910 subpart S - Electrical, in addition to other references required by contract.

2. All qualified persons performing electrical work under this contract shall be licensed journeyman or master electricians in the state where the project is located. All apprentice electricians performing under this contract shall be deemed unqualified persons unless they are working under the immediate supervision of a licensed electrician or master electrician.

3. All electrical work will be accomplished de-energized and in the Electrically Safe Work Condition (i.e. anything beyond simple testing and troubleshooting with a multimeter). Any Contractor, subcontractor or temporary worker who fails to fully comply with



- this requirement is subject to immediate termination in accordance with FAR clause 52.236-5(c). Only in rare circumstance where achieving an electrically safe work condition prior to beginning work would increase or cause additional hazards, or is infeasible due to equipment design or operational limitations is energized work permitted. The Resident Engineer with approval of the Medical Center Director will make the determination if the circumstances would meet the exception outlined above. An AHA specific to energized work activities will be developed, reviewed, and accepted prior to the start of that work.
- a. Development of a Hazardous Electrical Energy Control Procedure is required prior to de-energization. A single Simple Lockout/Tagout Procedure for multiple work operations can only be used for work involving qualified person(s) de-energizing one set of conductors or circuit part source. Task specific Complex Lockout/Tagout Procedures are required at all other times.
 - b. Verification of the absence of voltage after de-energization and lockout/tagout is considered "energized electrical work" (live work) under NFPA 70 70E, and shall only be performed by qualified persons wearing appropriate shock protective (voltage rated) gloves and arc rate personal protective clothing and equipment, using Underwriters Laboratories (UL) tested and appropriately rated contact electrical testing instruments or equipment appropriate for the environment in which they will be used.
 - c. Personal Protective Equipment (PPE) and electrical testing instruments will be readily available for inspection by the Resident Engineer.
4. Before beginning any electrical work, an AHA will be conducted to include Shock Hazard and Arc Flash Hazard analyses (NFPA Tables can be used only as a last alternative and it is strongly suggested a full Shock and Arc Flash Hazard Analyses be conducted). Work shall not begin until the AHA for the work activity has been accepted by the Resident Engineer and discussed with all engaged in the activity, including the Contractor, subcontractor(s), and Government on-site representatives at preparatory and initial control phase meetings.



5. Ground-fault circuit interrupters. All 120-volt, single-phase 15- and 20-ampere receptacle outlets on construction sites, which are not a part of the permanent wiring of the building or structure and which are in use by employees, shall have approved ground-fault circuit interrupters for personnel protection. "Assured Equipment Grounding Conductor Program" only is not allowed.

M. Fall Protection:

1. The fall protection (FP) threshold height requirement is 1.8 m (6 feet) for ALL WORK, unless specified differently or the OSHA 29 CFR 1926 requirements are more stringent, to include steel erection activities, systems-engineered activities (prefabricated) metal buildings, residential (wood) construction and scaffolding work.
 - a. The use of a Safety Monitoring System (SMS) as a fall protection method is prohibited.
 - b. The use of Controlled Access Zone (CAZ) as a fall protection method is prohibited.
 - c. A Warning Line System (WLS) may ONLY be used on floors or flat or low-sloped roofs (between 0 - 18.4 degrees or 4:12 slope) and shall be erected around all sides of the work area (See 29 CFR 1926.502(f) for construction of WLS requirements). Working within the WLS does not require FP. No worker shall be allowed in the area between the roof or floor edge and the WLS without FP. Fall Protection is required when working outside the WLS.
 - d. Fall protection while using a ladder will be governed by the OSHA requirements.

N. Scaffolds and Other Work Platforms:

1. All scaffolds and other work platforms construction activities shall comply with 29 CFR 1926 Subpart L and in accordance with the specifications included within this section.
2. The fall protection (FP) threshold height requirement is 1.8 m (6 feet) as stated in Paragraph M. above.
3. The following hierarchy and prohibitions shall be followed in selecting appropriate work platforms.
 - a. Scaffolds, platforms, or temporary floors shall be provided for all work except that can be performed safely from the ground or similar footing.



- b. Ladders less than 20 feet may be used as work platforms only when use of small hand tools or handling of light material is involved.
 - c. Ladder jacks, lean-to, and prop-scaffolds are prohibited.
 - d. Emergency descent devices shall not be used as working platforms.
 - 4. Contractors shall use a scaffold tagging system in which all scaffolds are tagged by the Competent Person. Tags shall be color-coded: green indicates the scaffold has been inspected and is safe to use; red indicates the scaffold is unsafe to use. Tags shall be readily visible, made of materials that will withstand the environment in which they are used, be legible and shall include:
 - a. The Competent Person's name and signature.
 - b. Dates of initial and last inspections.
 - 5. Mast Climbing work platforms: When access ladders, including masts designed as ladders, exceed 6 m (20 feet) in height, positive fall protection shall be used.
- O. Excavation and Trenches:
- 1. All excavation and trenching work shall comply with 29 CFR 1926 Subpart P and in accordance with the specifications included within this section.
 - 2. All excavations and trenches 1.5 m (5 feet) in depth or greater shall require a written trenching and excavation permit (NOTE - some States and other local jurisdictions require separate state/jurisdiction-issued excavation permits). The permit shall be completed and provided to the Resident Engineer prior to commencing work for the day. At the end of the day, the permit shall be closed out and provided to the Resident Engineer. The permit shall be maintained onsite and include the following:
 - a. Determination of soil classification.
 - b. Indication that utilities have been located and identified. If utilities could not be located after all reasonable attempt, then excavating operations will proceed cautiously.
 - c. Indication of selected excavation protective system.
 - d. Indication that the spoil pile will be stored at least 0.6 m (2 feet) from the edge of the excavation and safe access provided within 7.6 m (25 feet) of the workers.



e. Indication of assessment for a potential toxic, explosive, or oxygen deficient atmosphere.

3. If not using an engineered protective system such as a trench box, shielding, shoring, or other Professional Engineer designed system and using a sloping or benching system, soil classification cannot be Solid Rock or Type A. All soil will be classified as Type B or Type C and sloped or benched in accordance with Appendix B of 29 CFR 1926.

P. Cranes:

1. All crane work shall comply with 29 CFR 1926 Subpart CC and in accordance with the specifications included within this section.
2. Prior to operating a crane, the operator must be licensed, qualified or certified to operate the crane. Thus, all the provisions contained with Subpart CC are effective and there is no "Phase In" date of November 10, 2014.
3. Crane operators shall not carry loads:
- a. over the general public or VAMC personnel;
 - b. over any occupied building unless:
 - 1) the top two floors are vacated; or
 - 2) overhead protection with a design live load of 300 psf is provided.

Q. Control of Hazardous Energy (LockOut/TagOut):

1. All maintenance and servicing of equipment or machinery shall comply with 29 CFR 1910.147 except for specifically referenced operations in 29 CFR 1926 such as concrete and masonry equipment [1926.702(j)], heavy machinery and equipment [1926.600(a)(3)(i)], and process safety management of highly hazardous chemicals (1926.64). Control of hazardous electrical energy during the installation, maintenance, or servicing of electrical equipment shall comply with Paragraph M. above to include NFPA 70E and other VA specific requirements discussed in the section.

R. Confined Space Entry:

1. All maintenance and servicing of equipment or machinery shall comply with 29 CFR 1910.146 except for specifically referenced operations in 29 CFR 1926 such as excavations/trenches [1926.651(g)].



2. A site-specific Confined Space Entry Plan (including permitting process) shall be developed and submitted to the Resident Engineer and coordinated with the Facility Safety.

1.8 PARKING

- A. Contractor shall notify the VA Resident Engineer in writing two (2) weeks in advance of decommissioning any VAMC parking spaces due to construction.
- B. Contractor shall provide VA Resident Engineer a list of all affected parking spaces; no parking space shall be decommissioned without prior written approval from the COTR of record.
- C. Contractor shall procure secure offsite parking for vehicles which have been affected as a result of any phase, activity, specification, or component of this project. Secure offsite parking shall be within 1/4 mile of the VAMC, shall be accessible 24 hours a day 7 days per week for the duration of the project. Contractor shall be responsible for all associated parking fees until completion of project or related phase, as mutually agreed to, in advance by Contractor and the Contracting Officer. Parking fees are payable in advance and Contractor is responsible for the coordination of activity. In no instance shall the Contractor be relieved of these responsibilities. Quantity of spaces and acceptance of proposed offsite parking is subject to the approval of the Contracting Officer.

1.9 CONSTRUCTION SECURITY REQUIREMENTS

- A. Security Plan:
 - 1. The security plan defines both physical and administrative security procedures that will remain effective for the entire duration of the project.
 - 2. The General Contractor is responsible for assuring that all sub-contractors working on the project and their employees also comply with these regulations.
- B. Security Procedures:
 - 1. General Contractor's employees shall not enter the project site without appropriate badge. They may also be subject to inspection of their personal effects when entering or leaving the project site.
 - 2. For working outside the "regular hours" as defined in the contract, the General Contractor shall give five (5) days' notice to the Contracting Officer so that security arrangements can be provided



for the employees. This notice is separate from notices required for utility shutdown described later in this section.

3. No photography of VA premises is allowed without written permission of the Contracting Officer.
4. VA reserves the right to close down or shutdown the project site and order General Contractor's employees off the premises in the event of a national emergency. The General Contractor may return to the site only with the written approval of the Contracting Officer.

C. Secure Project Site:

1. The General Contractor shall provide unarmed guards at the project site after construction hours; duties to include monitoring safety and security fencing, monitoring fire and life safety concerns, ensuring project doors are closed and locked, and ensuring hazardous materials and equipment are stored and/or secured in a manner acceptable to VA Resident Engineer.
2. The guard shall have communication devices to report events as directed by VA police.

D. Key Control:

1. The General Contractor shall provide duplicate keys and lock combinations to the Resident Engineer for the purpose of security inspections of every area of project including tool boxes and parked machines and take emergency action.
2. The General Contractor shall turn over all permanent lock cylinders to the VA locksmith for permanent installation. Refer to Section 08 71 00, DOOR HARDWARE and coordinate.

E. Document Control:

1. Before starting work, the General Contractor/Sub Contractors shall submit an electronic security memorandum describing the approach to following goals and maintaining confidentiality of "sensitive information".
2. The General Contractor is responsible for safekeeping of all drawings, project manual and other project information. This information shall be shared only with those with a specific need to accomplish the project.
3. Certain documents, sketches, videos or photographs and drawings may be marked "Law Enforcement Sensitive" or "Sensitive Unclassified". Secure such information in separate containers and limit the access



to only those who will need it for the project. Return the information to the Contracting Officer upon request.

4. These security documents shall not be removed or transmitted from the project site without the written approval of Contracting Officer.
5. All paper waste or electronic media such as CD's and diskettes shall be shredded and destroyed in a manner acceptable to the VA.
6. Notify Contracting Officer and Site Security Officer immediately when there is a loss or compromise of "sensitive information".
7. All electronic information shall be stored in specified location following VA standards and procedures using an Engineering Document Management Software (EDMS).
 - a.....Security, access and maintenance of all project drawings, both scanned and electronic shall be performed and tracked through the EDMS system.
 - b....."Sensitive information" including drawings and other documents may be attached to e-mail provided all VA encryption procedures are followed.

F. Motor Vehicle Restrictions:

1. Vehicle authorization request shall be required for vehicles entering the site and such request shall be submitted 24 hours before the date and time of access. Access shall be restricted to picking up and dropping off materials and supplies to before 7:00 a.m. and after 4:00 p.m.
2. Separate permits shall be issued for General Contractor and its employees for parking in designated areas only.

1.10 FIRE SAFETY

- A. Fire Safety Plan: Establish and maintain a site-specific fire protection program in accordance with 29 CFR 1926. Prior to start of work, prepare a plan detailing project-specific fire safety measures, including periodic status reports, and submit to Resident Engineer for review for compliance with contract requirements in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES. This plan may be an element of the Accident Prevention Plan (described in Article 1.7, HEALTH AND SAFETY).**



- B. Site and Building Access: Maintain free and unobstructed access to facility emergency services and for fire, police and other emergency response forces in accordance with NFPA 241.
- C. Separate temporary facilities, such as trailers, storage sheds, and dumpsters, from existing buildings and new construction by distances in accordance with NFPA 241. For small facilities with less than 6 m (20 feet) exposing overall length, separate by 3 m (10 feet).
- D. Temporary Construction Partitions:
1. Install and maintain temporary construction partitions to provide smoke-tight separations between construction areas and the areas that are described in phasing requirements and adjoining areas. Construct partitions of gypsum board or treated plywood (flame spread rating of 25 or less in accordance with ASTM E84) on both sides of fire retardant treated wood or metal steel studs. Extend the partitions through suspended ceilings to floor slab deck or roof. Seal joints and penetrations. At door openings, install Class C, 3/4-hour fire/smoke rated doors with self-closing devices.
 2. Install two-hour fire-rated temporary construction partitions as shown on drawings to maintain integrity of existing exit stair enclosures, exit passageways, fire-rated enclosures of hazardous areas, horizontal exits, smoke barriers, vertical shafts and openings enclosures.
 3. Close openings in smoke barriers and fire-rated construction to maintain fire ratings. Seal penetrations with listed through-penetration firestop materials in accordance with Section 07 84 00, FIRESTOPPING.
- E. Temporary Heating and Electrical: Install, use and maintain installations in accordance with 29 CFR 1926, NFPA 241 and NFPA 70.
- F. Means of Egress: Do not block exiting for occupied buildings, including paths from exits to roads. Minimize disruptions and coordinate with the Resident Engineer.
- G. Egress Routes for Construction Workers: Maintain free and unobstructed egress. Inspect daily. Report findings and corrective actions weekly to the Resident Engineer.
- H. Fire Extinguishers: Provide and maintain extinguishers in construction areas and temporary storage areas in accordance with 29 CFR 1926, NFPA 241 and NFPA 10.



- I. Flammable and Combustible Liquids: Store, dispense and use liquids in accordance with 29 CFR 1926, NFPA 241 and NFPA 30.
- J. Existing Fire Protection: Do not impair automatic sprinklers, smoke and heat detection, and fire alarm systems, except for portions immediately under construction, and temporarily for connections. Provide fire watch for impairments more than 4 hours in a 24-hour period. Request interruptions in accordance with Article, OPERATIONS AND STORAGE AREAS, and coordinate with Resident Engineer. All existing or temporary fire protection systems (fire alarms, sprinklers) located in construction areas shall be tested as coordinated with the medical center. Parameters for the testing and results of any tests performed shall be recorded by the medical center and copies provided to the Resident Engineer.
- K. Smoke Detectors: Prevent accidental operation. Remove temporary covers at end of work operations each day. Coordinate with Resident Engineer.
- L. Hot Work: Perform and safeguard hot work operations in accordance with NFPA 241 and NFPA 51B. Coordinate with Resident Engineer. Obtain permits from Resident Engineer at least 72 hours in advance. Designate contractor's responsible project-site fire prevention program manager to permit hot work.
- M. Fire Hazard Prevention and Safety Inspections: Inspect entire construction areas weekly. Coordinate with, and report findings and corrective actions weekly to Resident Engineer.
- N. Smoking: Smoking is prohibited in and adjacent to construction areas inside existing buildings and additions under construction. In separate and detached buildings under construction, smoking is prohibited except in designated smoking rest areas.
- O. Dispose of waste and debris in accordance with NFPA 241. Remove from buildings daily.
- P. If required, submit documentation to the Resident Engineer that personnel have been trained in the fire safety aspects of working in areas with impaired structural or compartmentalization features.

1.11 OPERATIONS AND STORAGE AREAS

- A. The Contractor shall confine all operations (including storage of materials) on Government premises to areas authorized or approved by the Contracting Officer. The Contractor shall hold and save the



Government, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance.

- B. Temporary buildings (e.g. storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the Contracting Officer and shall be built with labor and materials furnished by the Contractor without expense to the Government. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work. With the written consent of the Contracting Officer, the buildings and utilities may be abandoned and need not be removed.
1. Exception: Remove temporary utilities beneath and through the floodwall and secant wall systems.
- C. The Contractor shall, under regulations prescribed by the Contracting Officer, use only established roadways. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by Federal, State, or local law or regulation. When it is necessary to cross curbs, sidewalks, or other paved surfaces, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of damaged curbs, sidewalks, or other paved surfaces.
- (FAR 52.236-10)**
- D. Working space and space available for storing materials shall be as shown on the drawings and as determined by the Resident Engineer.
- E. Workmen are subject to rules of the Medical Center applicable to their conduct.
- F. Execute work so as to interfere as little as possible with normal functioning of the Medical Center as a whole, including operations of utility services, fire protection systems and existing equipment, and with work being done by others. Work shall be accomplished during normal work hours, Monday through Friday, 7:00 a.m. to 3:30 p.m. (unless approved by the VA) excluding Federal holidays, as to cause the least interferences possible with the normal activities of the facility and the surrounding areas. Use of equipment and tools that transmit vibrations and noises through the building structure, are not permitted in buildings that are occupied, during construction, jointly by



patients or medical personnel, and Contractor's personnel, except as permitted by Resident Engineer where required by limited working space.

1. Do not store materials and equipment in other than assigned areas.
2. Schedule delivery of materials and equipment to immediate construction working areas within buildings in use by Department of Veterans Affairs in quantities sufficient for not more than two work days. Provide unobstructed access to the Medical Center areas required to remain in operation.
3. Where access by Medical Center personnel to vacated portions of buildings is not required, storage of Contractor's materials and equipment will be permitted subject to fire and safety requirements.

G. Utilities Services: Where necessary to cut existing pipes, electrical wires, conduits, cables, etc., of utility services, or of fire protection systems or communications systems (except telephone), they shall be cut and capped at suitable places where shown; or, in absence of such indication, where directed by Resident Engineer. All such actions shall be coordinated with the Utility Company involved:

1. Whenever it is required that a connection fee be paid to a public utility provider for new permanent service to the construction project, for such items as water, sewer, electricity, gas or steam, payment of such fee shall be the responsibility of the Government and not the Contractor.

H. Phasing: To ensure such executions, Contractor shall furnish the Resident Engineer with a schedule of approximate phasing and dates on which the Contractor intends to accomplish work in each specific area of site. In addition, Contractor shall notify the Resident Engineer two (2) weeks in advance of the proposed date of starting work in each specific area of site. Arrange such phasing and dates to ensure accomplishment of this work in successive phases mutually agreeable to the Medical Center Director, Resident Engineer, and Contractor, as follows (phasing order is subject to acceptance by VA Resident Engineer and NYC Parks Department):

Phase I: Utility Construction along Asser Levy Place.

Work at or above existing grade along Asser Levy Place shall consist of demolition, grading, and utility modifications.

Phase II: Construction along East 25th Street.



Work at or above existing grade along East 25th Street on the VAMC site associated with the flood preparedness and protection project, including pumping stations and associated civil piping and electrical work, and the relocation, storage and/or maintenance of the temporary floodwall for the duration of construction of the permanent floodwall and the dismantling, storage and reinstallation of the existing automobile lifts. The Phasing of Construction along East 25th Street will allow the VA continued site access from East 23rd Street.

Phase III: Construction along East 23rd Street.

Work at or above existing grade along East 23rd Street on the VAMC site associated with the flood preparedness and protection project, including pumping stations and associated civil piping and electrical work, and the relocation and maintenance of the temporary floodwall. The Phasing of Construction along East 23rd Street will allow the VA temporary site access from East 25th Street.

Phase IV: Construction along Asser Levy Place.

Work shall consist of demolition, grading, ~~utility modifications~~, secant wall construction, auger cast piles, floodwall footing, pumping stations, and other work at or below the existing grade within 10 feet (3 m) of the property line (in both directions) adjacent to Asser Levy Place. Construction along Asser Levy may be further Phased into North and South. Phasing needs to accommodate the Opening of Asser Levy Park by October 2014. Subsequent Closing of the Park and reconstruction of the Park will need to be coordinated with NYC Parks and Recreation.

I. Building will be occupied during performance of work.

1. Certain areas of the Building will be occupied by Medical Center personnel for various periods as listed below:

AREA	PERIOD
All Levels	Continuous

Contractor shall take all measures and provide all material necessary for protecting existing equipment and property in affected areas of construction against dust and debris, so that equipment and affected areas to be used in the Medical Center's operations will not be hindered, including, but not limited to, watering dry soil to



- prevent dust and protecting intake louvers. Contractor shall permit access to Department of Veterans Affairs personnel and patients through other construction areas which serve as routes of access to such affected areas and equipment. Coordinate alteration work in areas occupied by Department of Veterans Affairs so that Medical Center operations will continue during the construction period.
- J. Construction Fence: Before construction operations begin, Contractor shall submit a fencing plan for approval by the Resident Engineer. After plan is approved, Contractor shall provide a chain link construction fence, 2.4 M (8 feet) minimum height, around the construction area (both on the VA property side to protect staff and on the public side to protect and secure the site), as indicated on the drawings. Provide gates as required for access with necessary hardware, including hasps and padlocks. Fasten fence fabric to terminal posts with tension bands and to line posts and top and bottom rails with tie wires spaced at maximum 375 mm (15 inches). Bottom of fences shall extend to 25 mm (one inch) above grade. Remove the fence when directed by Resident Engineer.
- K. When a building is turned over to Contractor, Contractor shall accept entire responsibility therefore.
1. Contractor shall maintain a minimum temperature of 4 degrees C (40 degrees F) at all times, except as otherwise specified.
 2. Contractor shall maintain in operating condition existing fire protection and alarm equipment. In connection with fire alarm equipment, Contractor shall make arrangements for pre-inspection of site with Fire Department or Company (Department of Veterans Affairs or municipal) whichever will be required to respond to an alarm from Contractor's employee or watchman.
- L. Utilities Services: Maintain existing utility services for the Medical Center at all times. Provide temporary facilities, labor, materials, equipment, connections, and utilities to assure uninterrupted services. Where necessary to cut existing water, steam, gases, sewer or air pipes, or conduits, wires, cables, etc., of utility services or of fire protection systems and communications systems (including telephone), they shall be cut and capped at suitable places where shown; or, in absence of such indication, where directed by Resident Engineer.



1. No utility service such as water, gas, steam, sewers or electricity, or fire protection systems and communications systems may be interrupted without prior approval of Resident Engineer. Electrical work shall be accomplished with all affected circuits or equipment de-energized. When an electrical outage cannot be accomplished, work on energized circuits or equipment shall not commence without the Medical Center Director's prior knowledge and written approval. Refer to specification Sections 26 05 11, REQUIREMENTS FOR ELECTRICAL INSTALLATIONS and 27 05 11, REQUIREMENTS FOR COMMUNICATIONS INSTALLATIONS for additional requirements.
 2. Contractor shall submit a request to interrupt such services to Resident Engineer, in writing, ten (10) ~~five (5)~~ working days in advance of proposed interruption. Request shall state reason, date, exact time of, and approximate duration of such interruption, and a sketch and narrative of areas to be affected. Minor interruption being two (2) hours of a limited area.
 3. Contractor will be advised (in writing) of approval of request, or of which other date and/or time such interruption will cause least inconvenience to operations of the Medical Center. Interruption time approved by the Medical Center may occur at other than Contractor's normal working hours.
 4. Major interruptions of systems must be requested, in writing, at least 15 calendar days prior to the desired time and shall be performed as directed by the Resident Engineer. Major interruptions being more than five (5) hours and/or affecting other areas of the VAMC beyond the project area.
 5. In case of a contract construction emergency, service will be interrupted on approval of Resident Engineer. Such approval will be confirmed in writing as soon as practical.
 6. Whenever it is required that a connection fee be paid to a public utility provider for new permanent service to the construction project, for such items as water, sewer, electricity, gas or steam, payment of such fee shall be the responsibility of the Government and not the Contractor.
- M. Abandoned Lines: All service lines such as wires, cables, conduits, ducts, pipes and the like, and their hangers or supports, which are abandoned or are expected to be abandoned shall be removed, unless



otherwise indicated on the Drawings, except where said obstruction interferes with or crosses the floodwall.

- N. To minimize interference of construction activities with flow of Medical Center traffic, comply with the following:
1. Keep roads, walks and entrances to grounds, to parking and to occupied areas of buildings clear of construction materials, debris and standing construction equipment and vehicles. Wherever excavation for new utility lines cross existing roads, at least one lane must be open to traffic at all times.
 2. Method and scheduling of required cutting, altering and removal of existing roads, walks and entrances must be approved by the Resident Engineer.
- O. Coordinate the work for this contract with other construction operations and the Medical Center's existing use of site as directed by Resident Engineer. This includes attending weekly project coordination meetings with the other on-site contractors, the scheduling of traffic and the use of roadways, as specified in Article, USE OF ROADWAYS.
- Other Station construction operations include but are not limited to:
1. Proposed MRI Relocation.
 2. Proposed Shops, Chapel, Morgue and Security Post 7 Renovations.
 3. Proposed Central Sterile Processing Renovation.
 4. Proposed Clinic Renovations.
 5. Proposed Patient Room Renovations.
 6. Proposed Electrical Equipment Relocation.
 7. Proposed Warehouse Renovations.
 8. On-going Roofing Replacement.
 9. Parking Lifts and Asser Levy Access Parking.

1.12 ALTERATIONS

- A. Survey: Before work is started, the Contractor shall make a thorough survey with the Resident Engineer and a representative of VA Supply Service of the site and areas in which alterations occur and areas which are anticipated routes of access, and furnish a report, signed by all three, to the Contracting Officer. This report shall list:
1. Existing condition and types of paving, landscaping features, and other surfaces to be altered.
 2. Note discrepancies between drawings and existing conditions at site.



3. Designate areas for working space, materials storage and routes of access to areas within site where alterations occur and which have been agreed upon by Contractor and Resident Engineer.
- B. Items required by Contract Documents to be either reused or relocated or both, found during this survey to be nonexistent, or in opinion of Resident Engineer and/or Supply Representative, to be in such condition that their reuse is impossible or impractical, shall be furnished and/or replaced by Contractor with new items in accordance with specifications which will be furnished by Government. Provided the contract work is changed by reason of this subparagraph B, the contract will be modified accordingly, under provisions of clause entitled "DIFFERING SITE CONDITIONS" (FAR 52.236-2) and "CHANGES" (FAR 52.243-4 and VAAR 852.236-88).
- C. Re-Survey: Thirty (30) days before expected partial or final inspection date, the Contractor and Resident Engineer together shall make a thorough re-survey of the areas of the site involved. They shall furnish a report on conditions then existing, of paving, landscaping features, and other surfaces as compared with conditions of same as noted in first condition survey report:
 1. Re-survey report shall also list damages caused by Contractor, despite protection measures; and, will form basis for determining extent of repair work required of Contractor to restore damage caused by Contractor's workmen in executing work of this contract.
- D. Protection: Provide the following protective measures:
 1. Temporary protection against damage for portions of existing structures and grounds where work is to be done, materials handled and equipment moved and/or relocated.
 2. Protection of interior of existing structures at all times, from damage, dust and weather inclemency. Wherever work is performed, floor surfaces that are to remain in place shall be adequately protected prior to starting work, and this protection shall be maintained intact until all work in the area is completed.

1.13 INFECTION CONTROL ~~PREVENTION MEASURES~~

- A. Infection Control is critical in all medical center facilities.**
Interior construction activities causing disturbance of existing dust, or creating new dust, must be conducted within ventilation-controlled areas that minimize the flow of airborne particles into patient areas.



Exterior construction activities causing disturbance of soil or creates dust in some other manner must be controlled.

B. An AHA associated with infection control will be performed by VA personnel in accordance with FGI Guidelines (i.e. Infection Control Risk Assessment (ICRA)). The ICRA procedure found on the American Society for Healthcare Engineering (ASHE) website will be utilized. Risk classifications of Class II or lower will require approval by the Resident Engineer before beginning any construction work. Risk classifications of Class III or higher will require a permit before beginning any construction work. Infection Control permits will be issued by the Resident Engineer and Infection Control Manager. The Infection Control Permits will be posted outside the appropriate construction area. More than one permit may be issued for a construction project if the work is located in separate areas requiring separate classes. The primary project scope area for this project is: Class II, however, work outside the primary project scope area may vary. The required infection control precautions with each class are as follows.

1. Class I Requirements:

a. During Construction Work:

- 1) Notify the Resident Engineer.
- 2) Execute work by methods to minimize raising dust from construction operations.
- 3) Ceiling tiles: Immediately replace a ceiling tiles displaced for visual inspection.

b. Upon Completion:

- 1) Clean work area upon completion of task.
- 2) Notify the Resident Engineer.

2. Class II Requirements:

a. During Construction Work:

- 1) Notify the Resident Engineer.
- 2) Provide active means to prevent airborne dust from dispersing into atmosphere.
- 3) Water mist work surfaces to control dust while cutting.
- 4) Seal unused doors with duct tape.
- 5) Block off and seal air vents.



6) Remove or isolate HVAC system in areas where work is being performed.

b. Upon Completion:

- 1) Wipe work surfaces with cleaner/disinfectant.
- 2) Contain construction waste before transport in tightly covered containers.
- 3) Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area.
- 4) Upon completion, restore HVAC system where work was performed.
- 5) Notify the Resident Engineer.

3. Class III Requirements:

a. During Construction Work:

- 1) Obtain permit from the Resident Engineer and Infection Control Manager.
- 2) Remove or Isolate HVAC system in area where work is being done to prevent contamination of duct system.
- 3) 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. Install construction barriers and ceiling protection carefully, outside of normal work hours.
- 4) Maintain negative air pressure within work site utilizing HEPA equipped air filtration units and monitored with an alarm device, which must be maintained and monitored by the contractor.
- 5) Contain construction waste before transport in tightly covered containers.
- 6) Cover transport receptacles or carts. Tape covering unless a solid lid is used.

b. Upon Completion:

- 1) Do not remove barriers from work area until completed project is inspected by the Resident Engineer and Infection Control Manager and thoroughly cleaned.
- 2) Remove construction barriers and ceiling protection carefully to minimize spreading of dirt and debris associated with construction, outside of normal work hours.



- 3) Vacuum work area with HEPA filtered vacuums.
- 4) Wet mop area with cleaner/disinfectant.
- 5) Upon completion, restore HVAC system where work was performed.
- 6) Return permit to the Resident Engineer.

4. Class IV Requirements:

a. During Construction Work:

- 1) Obtain permit from the Resident Engineer and Infection Control Manager.
- 2) Isolate HVAC system in area where work is being done to prevent contamination of duct system.
- 3) 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. Install construction barriers and ceiling protection carefully, outside of normal work hours.
- 4) Maintain negative air pressure within work site utilizing HEPA equipped air filtration units.
- 5) Seal holes, pipes, conduits, and punctures.
- 6) Construct anteroom and require all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site or they can wear cloth or paper coveralls that are removed each time they leave work site.
- 7) All personnel entering work site are required to wear shoe covers. Shoe covers must be changed each time the worker exits the work area.

b. Upon Completion:

- 1) Do not remove barriers from work area until completed project is inspected by the Resident Engineer and Infection Control Manager and thoroughly cleaned.
- 2) Remove construction barriers and ceiling protection carefully to minimize spreading of dirt and debris associated with construction, outside of normal work hours.
- 3) Contain construction waste before transport in tightly covered containers.
- 4) Cover transport receptacles or carts. Tape covering unless a solid lid is used.



- 5) Vacuum work area with HEPA filtered vacuums.
- 6) Wet mop area with cleaner/disinfectant.
- 7) Upon completion, restore HVAC system where work was performed.
- 8) Return permit to the Resident Engineer.

C. Barriers shall be erected as required based upon classification (Class III and IV requires barriers) and shall be constructed as follows:

1. Class III and IV - closed door with masking tape applied over the frame and door is acceptable for projects that can be contained in a single room.
2. Construction, demolition or reconstruction not capable of containment within a single room must have the following barriers erected and made presentable on hospital occupied side:
 - a. Class III and IV - Airtight plastic barrier that extends from the floor to ceiling. Seams must be sealed with duct tape to prevent dust and debris from escaping.
 - b. Class III and IV - Drywall barrier erected with joints covered or sealed to prevent dust and debris from escaping.
 - c. Class III and IV - Seal all penetrations in existing barrier airtight.
 - d. Class III and IV - Barriers at penetration of ceiling envelopes, chases and ceiling spaces to stop movement air and debris.
 - e. Class IV only - Anteroom or double entrance openings that allow workers to remove protective clothing or vacuum off existing clothing.
 - f. Class III and IV - At elevators shafts or stairways within the field of construction, overlapping flap minimum of 0.6 m (2 feet) wide of polyethylene enclosures for personnel access.

D. Products and Materials:

1. Sheet Plastic: Fire retardant polystyrene, 6-mil thickness meeting local fire codes.
2. Barrier Doors: Self Closing Two-hour fire-rated solid core wood in steel frame, painted.
3. Dust proof two-hour fire-rated drywall.
4. High Efficiency Particulate Air-Equipped filtration machine rated at 95% capture of 0.3 microns including pollen, mold spores and dust particles. HEPA filters should have ASHRAE 85 or other prefilter to extend the useful life of the HEPA. Provide both primary and



- secondary filtrations units. Maintenance of equipment and replacement of the HEPA filters and other filters will be in accordance with manufacturer's instructions.
5. Exhaust Hoses: Heavy duty, flexible steel reinforced; Ventilation Blower Hose.
6. Adhesive Walk-off Mats: Provide minimum size mats of 609 mm x 914 mm (24 inches x 36 inches).
7. Disinfectant: Hospital-approved disinfectant or equivalent product.
8. Portable Ceiling Access Module.
- E. Before any construction on site begins, all contractor personnel involved in the construction or renovation activity shall be educated and trained in infection prevention measures established by the medical center.
- F. A dust control program will be establish and maintained as part of the contractor's infection preventive measures in accordance with the FGI Guidelines for Design and Construction of Healthcare Facilities. Prior to start of work, prepare a plan detailing project-specific dust protection measures with associated product data, including periodic status reports, and submit to Resident Engineer for review for compliance with contract requirements in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.
- G. Medical center Infection Control personnel will monitor for airborne disease (e.g. aspergillosis) during construction. A baseline of conditions will be established by the Medical Center prior to the start of work and periodically during the construction stage to determine impact of construction activities on indoor air quality with safe thresholds established.
- H. In general, the following preventive measures shall be adopted during construction to keep down dust and prevent mold.
1. Contractor shall verify that construction exhaust to exterior is not reintroduced to the medical center through intake vents, or building openings. HEPA filtration is required where the exhaust dust may reenter the medical center.
2. Exhaust hoses shall be exhausted so that dust is not reintroduced to the medical center.
3. Adhesive Walk-off/Carpet Walk-off Mats shall be used at all interior transitions from the construction area to occupied medical center



- area. These mats shall be changed as often as required to maintain clean work areas directly outside construction area at all times.
4. Vacuum and wet mop all transition areas from construction to the occupied medical center at the end of each workday. Vacuum shall utilize HEPA filtration. Maintain surrounding area frequently. Remove debris as it is created. Transport these outside the construction area in containers with tightly fitting lids.
 5. The contractor shall not haul debris through patient-care areas without prior approval of the Resident Engineer and the Medical Center. When, approved, debris shall be hauled in enclosed dust proof containers or wrapped in plastic and sealed with duct tape. No sharp objects should be allowed to cut through the plastic. Wipe down the exterior of the containers with a damp rag to remove dust. All equipment, tools, material, etc., transported through occupied areas shall be made free from dust and moisture by vacuuming and wipe down.
 6. There shall be no standing water during construction. This includes water in equipment drip pans and open containers within the construction areas. All accidental spills must be cleaned up and dried within 12 hours. Remove and dispose of porous materials that remain damp for more than 72 hours.
 7. At completion, remove construction barriers and ceiling protection carefully, outside of normal work hours. Vacuum and clean all surfaces free of dust after the removal.

I. Final Cleanup:

1. Upon completion of project, or as work progresses, remove all construction debris from above ceiling, vertical shafts and utility chases that have been part of the construction.
2. Perform HEPA vacuum cleaning of all surfaces in the construction area. This includes walls, ceilings, cabinets, furniture (built-in or free standing), partitions, flooring, etc.
3. All new air ducts shall be cleaned prior to final inspection.

J. Exterior Construction:

1. Contractor shall verify that dust will not be introduced into the Medical Center through intake vents, or building openings. HEPA filtration on intake vents is required where dust may be introduced.



2. Dust created from disturbance of soil such as from vehicle movement will be wetted with use of a water truck as necessary.
3. All cutting, drilling, grinding, sanding, or disturbance of materials shall be accomplished with tools equipped with either local exhaust ventilation (i.e. vacuum systems) or wet suppression controls.

1.14 DISPOSAL AND RETENTION

A. Materials and equipment accruing from work removed and from demolition of building structures, or parts thereof, shall be disposed of as follows:

1. Reserved items which are to remain property of the Government are identified by attached tags or noted on drawings or in specifications as items to be stored. Items that remain property of the Government shall be removed or dislodged from present locations in such a manner as to prevent damage which would be detrimental to re-installation and reuse. Store such items where directed by Resident Engineer.
2. Items not reserved shall become property of the Contractor and be removed by Contractor from the Medical Center.
3. The Contractor is prohibited from using VA dumpsters. The Contractor shall furnish and pay for all dumpsters required to legally remove construction debris from the VA Medical Center.

1.15 PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS

A. The Contractor shall preserve and protect all existing structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site that are not to be removed and which do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer, at no additional cost.

1. Protect existing automobile lifts during disassembly, storage, and reassembly periods.



2. Protect existing temporary floodwall during relocation, during construction of the permanent floodwall, and until acceptance by the COTR.

- B. The Contractor shall protect from damage all existing improvements and utilities at or near the work site and on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair damages to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

(FAR 52.236-9)

- C. Refer to Section 01 57 19, TEMPORARY ENVIRONMENTAL CONTROLS, for additional requirements on protecting vegetation, soils and the environment. Refer to Articles, "Alterations", "Restoration", and "Operations and Storage Areas" for additional instructions concerning repair of damage to structures and site improvements.

1.16 RESTORATION

- A. Remove, cut, alter, replace, patch and repair existing work as necessary to install new work. Except as otherwise shown or specified, do not cut, alter or remove structural work, and do not disturb ducts, plumbing, steam, gas, or electric work without approval of the Resident Engineer. Existing work to be altered or extended and that is found to be defective, shall be reported to the Resident Engineer before it is disturbed. Materials and workmanship used in restoring work, shall conform in type and quality to that of original existing construction, except as otherwise shown or specified.
- B. Upon completion of contract, deliver work complete and undamaged, in condition acceptable to the Government. Existing work (walls, ceilings, partitions, floors, mechanical and electrical work, lawns, paving, roads, walks, etc.) disturbed or removed as a result of performing required new work, shall be patched, repaired, reinstalled, or replaced with new work, and refinished and left in as good condition as existed before commencing work.



- C. At Contractor's own expense, Contractor shall immediately restore to service and repair damage caused by Contractor to existing piping and conduits, wires, cables, etc., of utility services or of fire protection systems and communications systems (including telephone) which are indicated on drawings and which are not scheduled for discontinuance or abandonment.
- D. Expense of repairs to such utilities and systems not shown on drawings or locations of which are unknown will be covered by adjustment to contract time and price in accordance with clause entitled "CHANGES" (FAR 52.243-4 and VAAR 852.236-88) and "DIFFERING SITE CONDITIONS" (FAR 52.236-2).

1.17 PHYSICAL DATA

- A. Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.
 - 1. The indications of physical conditions on the drawings and in the specifications are the result of site investigations by Henningson, Durham & Richardson Architecture and Engineering, P.C.
(FAR 52.236-4)
- B. Subsurface conditions have been developed by core borings and test pits. Logs of subsurface exploration are shown in the geotechnical report.
- C. A copy of the soil report will be made available for inspection by bidders upon request to the Engineering Officer at the VA Medical Center, 423 East 23rd Street, New York, NY 10010, and shall be considered part of the Contract Documents.
 - 1. Department of Veterans Affairs, Manhattan Campus of the VA NY Harbor Healthcare System, New York City, NY, Floodwall Project, "Report of Geotechnical Evaluation for Proposed Floodwall Project - Revision 2", IDIQ Contract Number: VA101CFM-P-0150, December 2013; prepared by HDR Engineering, Inc.
- D. Government does not guarantee that other materials will not be encountered nor that proportions, conditions or character of several materials will not vary from those indicated by explorations. Bidders are expected to examine site of work and logs of borings; and, after investigation, decide for themselves character of materials and make



their bids accordingly. Upon proper application to Department of Veterans Affairs, bidders will be permitted to make subsurface explorations of their own at site.

1.18 PROFESSIONAL SURVEYING SERVICES

A registered professional land surveyor or registered civil engineer whose services are retained and paid for by the Contractor shall perform services specified herein and in other specification sections. The Contractor shall certify that the land surveyor or civil engineer is not one who is a regular employee of the Contractor, and that the land surveyor or civil engineer has no financial interest in this contract.

1.19 LAYOUT OF WORK

- A. The Contractor shall lay out the work from Government established base lines and bench marks, indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at Contractor's own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Contractor shall be responsible for executing the work to the lines and grades that may be established or indicated by the Contracting Officer. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through Contractor's negligence before their removal is authorized, the Contracting Officer may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.

(FAR 52.236-17)

- B. Establish and plainly mark lines and grades that are reasonably necessary to properly assure that location, orientation, and elevations established for project work in accordance with lines and elevations shown on contract drawings.
- C. Following completion of general mass excavation and before any other permanent work is performed, establish and plainly mark (through use of appropriate batter boards or other means) sufficient additional survey control points or system of points as may be necessary to assure proper alignment, orientation, and grade of all major features of work.



Survey shall include, but not be limited to, location of lines and grades of footings, walls, utilities, and paving elevations:

1. Such additional survey control points or system of points thus established shall be checked and certified by a registered land surveyor or registered civil engineer. Furnish such certification to the Resident Engineer before any work (such as footings, floor slabs, columns, walls, utilities and other major controlling features) is placed.
- D. During progress of work, Contractor shall have line grades and plumbness of all major form work checked and certified by a registered land surveyor or registered civil engineer as meeting requirements of contract drawings. Furnish such certification to the Resident Engineer before any major items of concrete work are placed. In addition, Contractor shall also furnish to the Resident Engineer certificates from a registered land surveyor or registered civil engineer that the following work is complete in every respect as required by contract drawings.
1. Lines of each structure.
 2. Top of floodwall elevation (top of reinforced concrete and top of stone cap).
 3. Elevations of bottoms and tops of floodwall footings.
 4. Elevations of bottom of auger cast piles and secant wall.
 5. Elevations of tops of manholes.
 6. Elevations of bottom of footing, flow inverts, and top of slab elevation for pump stations.
 7. Lines and elevations of paving, curb, sidewalk, and fencing.
 8. Lines and elevations of relocated utilities and of outside distribution systems that are encountered.
- E. Whenever changes from contract drawings are made in line or grading requiring certificates, record such changes on a reproducible drawing bearing the registered land surveyor or registered civil engineer seal, and forward these drawings upon completion of work to Resident Engineer.
- F. The Contractor shall perform the surveying and layout work of this and other articles and specifications in accordance with the provisions of Article "Professional Surveying Services".

**1.20 PROJECT RECORD DRAWINGS**

- A. The Contractor shall maintain two (2) full size sets of project record drawings which he shall keep current during construction of the project, to include all contract changes, modifications and clarifications.
- B. All variations shall be shown in the same general detail as used in the contract drawings. To ensure compliance, project record drawings shall be made available for the Resident Engineer's review, as often as requested.
- C. Contractor shall deliver two (2) approved completed sets of project record drawings to the Resident Engineer within 15 calendar days after the acceptance of the project by the Resident Engineer.
- D. Paragraphs A, B, and C shall also apply to all shop drawings.

1.21 USE OF ROADWAYS

- A. For hauling, use only established public roads and roads on the Medical Center property and, when authorized by the Resident Engineer, such temporary roads which are necessary in the performance of contract work. Temporary roads shall be constructed by the Contractor at Contractor's expense. When necessary to cross curbing, sidewalks, or similar construction, they must be protected by well-constructed bridges.
- B. When new permanent roads are to be a part of this contract, Contractor may construct them immediately for use to facilitate building operations. These roads may be used by all who have business thereon within zone of building operations.

1.22 RESIDENT ENGINEER'S FIELD OFFICE

Not Applicable.

1.23 TEMPORARY USE OF MECHANICAL AND ELECTRICAL EQUIPMENT

Not Applicable.

1.24 TEMPORARY USE OF EXISTING ELEVATORS

Not Applicable.

1.25 TEMPORARY USE OF NEW ELEVATORS

Not Applicable.

1.26 TEMPORARY TOILETS

- A. Provide where directed, (for use of all Contractor's workmen) ample temporary sanitary toilet accommodations with suitable sewer and water connections; or, when approved by Resident Engineer, provide suitable



dry closets where directed. Keep such places clean and free from flies, and all connections and appliances connected therewith are to be removed prior to completion of contract, and premises left perfectly clean.

1. Portable toilets shall be provided by the Contractor at their expense. There is no access to toilets within the construction zone and no permitted access to toilets within other areas of the facility.

1.27 AVAILABILITY AND USE OF UTILITY SERVICES

- A. The Government shall make all reasonably required amounts of utilities available to the Contractor from existing outlets and supplies, as specified in the contract. ~~The amount to be paid by the Contractor for chargeable electrical services shall be the prevailing rates charged to the Government.~~ The Contractor shall carefully conserve utilities furnished without charge.
- B. The Contractor, at Contractor's expense and in a workmanlike manner satisfactory to the Contracting Officer, shall install and maintain all necessary temporary connections and distribution lines, and all meters required to measure the amount of electricity used for the purpose of determining charges. Before final acceptance of the work by the Government, the Contractor shall remove all the temporary connections, distribution lines, meters, and associated paraphernalia.
- C. Contractor shall install meters at Contractor's expense and furnish the Medical Center a monthly record of the Contractor's usage of electricity as hereinafter specified.
- D. Electricity (for Construction and Testing): Furnish all temporary electric services.
 1. Obtain electricity by connecting to the Medical Center electrical distribution system. The Contractor shall meter and pay for electricity required for electric cranes and hoisting devices, electrical welding devices and any electrical heating devices providing temporary heat. Electricity for all other uses is available at no cost to the Contractor.
- E. Water (for Construction and Testing): Furnish temporary water service.
 1. Obtain water by connecting to the Medical Center water distribution system. Provide reduced pressure backflow preventer at each connection. Water is available at no cost to the Contractor.



2. Maintain connections, pipe, fittings and fixtures and conserve water-use so none is wasted. Failure to stop leakage or other wastes will be cause for revocation (at Resident Engineer's discretion) of use of water from the Medical Center's system.

1.28 NEW TELEPHONE EQUIPMENT

Not Applicable.

1.29 TESTS

- A. Pre-test electrical equipment and systems and make corrections required for proper operation of such systems before requesting final tests. Final test will not be conducted unless pre-tested.
- B. Conduct final tests required in various sections of specifications in presence of an authorized representative of the Contracting Officer. Contractor shall furnish all labor, materials, equipment, instruments, and forms, to conduct and record such tests.
- C. All related components shall be functioning when system component is tested. Tests shall be completed within a reasonably short period of time during which operating and environmental conditions remain reasonably constant.
- D. Individual test result of component, where required, will only be accepted when submitted with the test results of related components and of the entire system.

1.30 INSTRUCTIONS

- A. Contractor shall furnish Maintenance and Operating manuals (hard copies and electronic) and written instructions when required by the various sections of the specifications and as hereinafter specified.
- B. Manuals: Maintenance and operating manuals and one compact disc (four hard copies and one electronic copy each) for each separate piece of equipment shall be delivered to the Resident Engineer coincidental with the delivery of the equipment to the job site. Manuals shall be complete, detailed guides for the maintenance and operation of equipment. They shall include complete information necessary for starting, adjusting, maintaining in continuous operation for long periods of time and dismantling and reassembling of the complete units and sub-assembly components. Manuals shall include an index covering all component parts clearly cross-referenced to diagrams and illustrations. Illustrations shall include "exploded" views showing and identifying each separate item. Emphasis shall be placed on the



use of special tools and instruments. The function of each piece of equipment, component, accessory and control shall be clearly and thoroughly explained. All necessary precautions for the operation of the equipment and the reason for each precaution shall be clearly set forth. Manuals must reference the exact model, style and size of the piece of equipment and system being furnished. Manuals referencing equipment similar to but of a different model, style, and size than that furnished will not be accepted.

- C. Instructions: Contractor shall provide qualified, factory-trained manufacturers' representatives to give detailed written instructions to assigned Department of Veterans Affairs personnel in the operation and complete maintenance for each piece of equipment. All such training will be at the job site. These requirements are more specifically detailed in the various technical sections. Instructions for different items of equipment that are component parts of a complete system, shall be given in an integrated, progressive manner. All instructors for every piece of component equipment in a system shall be available until instructions for all items included in the system have been completed. This is to assure proper instruction in the operation of inter-related systems. All instruction periods shall be at such times as scheduled by the Resident Engineer and shall be considered concluded only when the Resident Engineer is satisfied in regard to complete and thorough coverage. The Department of Veterans Affairs reserves the right to request the removal of, and substitution for, instructor who, in the opinion of the Resident Engineer, does not demonstrate sufficient qualifications in accordance with requirements for instructors above.

1.31 GOVERNMENT-FURNISHED EQUIPMENT

Not Applicable.

1.32 RELOCATED EQUIPMENT AND ITEMS

- A. Contractor shall disconnect, dismantle as necessary, remove and reinstall in new location, all existing equipment and items indicated by symbol "R" or otherwise shown to be relocated by the Contractor.
- B. Perform relocation of such equipment or items at such times and in such a manner as directed by the Resident Engineer.
- C. Suitably cap existing service lines, such as steam, condensate return, water, drain, gas, air, vacuum and/or electrical, whenever such lines are disconnected from equipment to be relocated. Remove abandoned



lines in finished areas and cap as specified herein before under paragraph "Abandoned Lines".

- D. Provide all mechanical and electrical service connections, fittings, fastenings and other materials necessary for assembly and installation of relocated equipment; and leave such equipment in proper operating condition.
- E. Contractor shall employ services of an installation specialist or engineer, who is an authorized representative of the manufacturer of this equipment to supervise assembly and installation of equipment required to be relocated.
- F. All service lines such as noted above for relocated equipment shall be in place at point of relocation ready for use before existing equipment is disconnected. Make relocated existing equipment ready for operation or use immediately after reinstallation.

1.33 STORAGE SPACE FOR DEPARTMENT OF VETERANS AFFAIRS EQUIPMENT

Not Applicable.

1.34 CONSTRUCTION SIGN

- A. Provide a Construction Sign where directed by the Resident Engineer.
All wood members shall be of framing lumber. Cover sign frame with 0.7 mm (24 gage) galvanized sheet steel nailed securely around edges and on all bearings. Provide three 100 by 100 mm (4 inch by 4 inch) posts (or equivalent round posts) set 1200 mm (4 feet) into ground. Set bottom of sign level at 900 mm (3 feet) above ground and secure to posts with through bolts. Make posts full height of sign. Brace posts with 50 x 100 mm (2 by 4 inch) material as directed.
- B. Paint all surfaces of sign and posts two coats of white gloss paint. Border and letters shall be of black gloss paint, except project title which shall be blue gloss paint.
- C. Maintain sign and remove it when directed by the Resident Engineer.
- D. Detailed Drawing of construction sign showing required legend and other characteristics of sign is shown on the drawings.

1.35 SAFETY SIGN

- A. Provide a Safety Sign where directed by Resident Engineer. Face of sign shall be 19 mm (3/4 inch) thick exterior grade plywood. Provide two 100 mm by 100 mm (4 by 4 inch) posts extending full height of sign and 900 mm (3 feet) into ground. Set bottom of sign level at 1200 mm (4 feet) above ground.



- B. Paint all surfaces of Safety Sign and posts with one prime coat and two coats of white gloss paint. Letters and design shall be painted with gloss paint of colors noted.
- C. Maintain sign and remove it when directed by Resident Engineer.
- D. Standard Detail Drawing Number SD10000-02 (Found on VA TIL) of safety sign showing required legend and other characteristics of sign is shown on the drawings.
- E. Post the number of accident free days on a daily basis.

1.36 PHOTOGRAPHIC DOCUMENTATION

- A. During the construction period through completion, provide photographic documentation of construction progress and at selected milestones including electronic indexing, navigation, storage and remote access to the documentation, as per these specifications. The commercial photographer or the subcontractor used for this work shall meet the following qualifications:
 - 1. Demonstrable minimum experience of three (3) years in operation providing documentation and advanced indexing/navigation systems including a representative portfolio of construction projects of similar type, size, duration and complexity as the Project.
 - 2. Demonstrable ability to service projects throughout North America, which shall be demonstrated by a representative portfolio of active projects of similar type, size, duration and complexity as the Project.
- B. Photographic Documentation Elements:
 - 1. Each digital image shall be taken with a professional grade camera with minimum size of 6 megapixels (MP) capable of producing 200x250mm (8 x 10 inch) prints with a minimum of 2272 x 1704 pixels and 400x500mm (16 x 20 inch) prints with a minimum 2592 x 1944 pixels.
 - 2. Indexing and navigation system shall utilize AUTOCAD construction drawings, making such drawings interactive on an on-line interface. For all documentation referenced herein, indexing and navigation must be organized by both time (date-stamped) and location throughout the project.
 - 3. Documentation shall combine indexing and navigation system with inspection-grade digital photography designed to capture actual conditions throughout construction and at critical milestones.



Documentation shall be accessible on-line through use of an internet connection. Documentation shall allow for secure multiple-user access, simultaneously, on-line.

4. Before construction, the floodwall alignment, adjacent streets, roadways, parkways, driveways, curbs, sidewalks, landscaping, adjacent utilities and adjacent structures surrounding the floodwall shall be documented. Overlapping photographic techniques shall be used to ensure maximum coverage. Indexing and navigation accomplished through interactive architectural drawings. If site work is extensive, this documentation may be required immediately before construction and at several pre-determined intervals before building work commences.
5. Construction progress for all trades shall be tracked at pre-determined intervals, but not less than once every thirty (30) calendar days ("Progressions"). Progressions shall track 360 degrees around the site and each project element.
6. Project Record condition of site utilities shall be documented as utility modifications occur. This process shall include all underground utilities from the building perimeter to the limits of construction. Overlapping photographic techniques shall be used to ensure maximum coverage. Indexing and navigation shall be accomplished through interactive site utility plans.
7. As-built conditions of mechanical, electrical, plumbing and all other systems shall be documented post-inspection and pre-insulation, sheet rock or dry wall installation. This process shall include all finished systems located in the walls and ceilings of all buildings at the Project. Overlapping photographic techniques shall be used to ensure maximum coverage. Indexing and navigation shall be accomplished through interactive architectural drawings.
8. Miscellaneous events that occur during any Contractor site visit, or events captured by the Department of Veterans Affairs independently, shall be dated, labeled and inserted into a Section in the navigation structure entitled "Slideshows," allowing this information to be stored in the same "place" as the formal scope.
9. Customizable project-specific digital photographic documentation of other details or milestones. Indexing and navigation accomplished through interactive architectural plans.



10. Monthly (29 max) exterior progressions (360 degrees around the project) and slideshows (all elevations and building envelope). The slideshows allow for the inclusion of Department of Veterans Affairs pictures, aerial photographs, and timely images which do not fit into any regular monthly photopath.
 11. Weekly (21 Max) Site Progressions - Photographic documentation capturing the project at different stages of construction. These progressions shall capture underground utilities, excavation, grading, backfill, landscaping and road construction throughout the duration of the project.
 12. In event a greater or lesser number of images than specified above are required by the Resident Engineer, adjustment in contract price will be made in accordance with clause entitled "CHANGES" (FAR 52.243-4 and VAAR 852.236-88).
- C. Images shall be taken by a commercial photographer and must show distinctly, at as large a scale as possible, all parts of work embraced in the picture.
 - D. Coordination of photo shoots is accomplished through Resident Engineer. Contractor shall also attend construction team meetings as necessary. Contractor's operations team shall provide regular updates regarding the status of the documentation, including photo shoots concluded, the availability of new Progressions or Exact-Built viewable on-line and anticipated future shoot dates.
 - E. Contractor shall provide all on-line domain/web hosting, security measures, and redundant server back-up of the documentation.
 - F. Contractor shall provide technical support related to using the system or service.
 - G. Upon completion of the project, final copies of the documentation (the "Permanent Record") with the indexing and navigation system embedded (and active) shall be provided in an electronic media format, typically a DVD or external hard-drive. Permanent Record shall have Building Information Modeling (BIM) interface capabilities. On-line access terminates upon delivery of the Permanent Record.

1.37 FINAL ELEVATION DIGITAL IMAGES

- A. A minimum of four (4) images of each elevation shall be taken with a minimum 6 MP camera, by a professional photographer with different



settings to allow the Resident Engineer to select the image to be printed. Provide images to the Resident Engineer on a CD.

- B. Photographs shall be taken upon completion, including landscaping. They shall be taken on a clear sunny day to obtain sufficient detail to show depth and to provide clear, sharp pictures. Pictures shall be 400 mm x 500 mm (16 by 20 inches), printed on regular weight paper, matte finish archival grade photographic paper and produced by a RA4 process from the digital image with a minimum 300 PPI. Identifying data shall be carried on label affixed to back of photograph without damage to photograph and shall be similar to that provided for final construction photographs.

1.38 HISTORIC PRESERVATION

Where the Contractor or the Contractor's employees, prior to, or during the construction work, are advised of or discover possible archeological, historical and/or cultural resources, the Contractor shall immediately notify the Resident Engineer verbally, and then with a written follow up.

1.39 VA TRIRIGA CPMS

VA contractors, selected by award to perform work, are required to get access to the VA TRIRIGA CPMS. The TRIRIGA CPMS is the management and collaborative environment that the VA uses for all Major, Minor and Non-Recurring Maintenance (NRM) projects within the Office of Construction & Facilities Management (CFM), Veterans Health Administration (VHA), National Cemetery Administration (NCA), and the Veterans Benefits Administration (VBA).

The contractor is solely responsible for acquiring access to the VA TRIRIGA CPMS.

To gain access to the VA TRIRIGA CPMS the contractor is encouraged to follow the licensing process outline as specified below:

- A. Requirement: TRIRIGA is the management and collaborative environment that VA uses for all construction projects. VA requires its contractors to procure TRIRIGA access as part of the cost of performance for a VA construction related contract.
- B. Access Request and Payment can be made through the following URL
<https://valicensing.oncfi.com/>.

Inquiries or to request additional services, contact the following:
Craig Alsheimer, Federal Account Manager



Computerized Facility Integrations, LLC

18000 West Nine Mile Road, Suite 700

Southfield, MI 48075

Email: calsheimer@gocfi.com

Phone: 248-557-4234 Extension 6010; 410-292-7006

C. Process:

1. Once the contractor has been notified by VA of the award and a unique contract number, the contractor can enter a request for access to TRIRIGA at URL <https://valicensing.oncfi.com/>.
2. CFI will process the request for access and payment. CFI will create the USER ID and a password. Security provisions required to align the contractor to the Contract Number will be entered and an email will be generated and submitted to the requestor.
3. CFI will also provide standard terms and conditions related to the transaction and use agreement.

1.40 ATTACHMENTS

The following attachments form a part of and are inserted at the end of the Section. Contractor shall fill out required forms and submit them to the VA COTR.

1. ATTACHMENT 'A': Federal Register/Vol. 76, No. 106/Thursday, June 2, 2011/Notices, page 31998: Office of Personnel Management, Cancellation of an Optional Form by the Office of Personnel Management (1 page).
2. ATTACHMENT 'B', Revision 1: "New York Harbor ID Requirements as per Conference Call with Harbor Management" (1 page).
3. ATTACHMENT 'C': VHA Procurement and Logistics, Standard Operating Procedure, February 25, 2011 (19 pages) - Acquisition Security Requirements:
 - PART I: Implementing VA Handbook 6500.6, Contract Security;
 - PART II: Contractor Personnel Security and Suitability;
 - PART III: Personal Identity Verification (PIV) of Contractors; and
 - PART IV: Business Associate Agreements (BAA) for Contracts.
4. ATTACHMENT 'D', Revision 1: VHA Directive 2011-036, September 22, 2011 (11 pages) - Safety and Health During Construction. Directive expires September 30, 2016.
5. ATTACHMENT 'E': Contractor Security Check Form (1 page).
6. ATTACHMENT 'F': Fingerprint Record Prep Sheet (1 page).



HDR

VA NY Harbor Healthcare System - Manhattan Campus
423 East 23rd Street, New York, NY 10010
Perimeter Floodwall, T.O. VA101F-13-J-0159
Issue For Construction Submission, Revision 1

7. ATTACHMENT 'G': HIPDB/NPDB (Health Integrity & Protection Data Bank/National Practitioner Data Bank) (1 page).
8. OBTAIN FROM VA - ATTACHMENT 'H': USCIS Form I-9, OMB No. 1615-0047, Expires 03/31/2016 (9 pages) - Instructions for Employment Eligibility Verification, Department of Homeland Security, U.S. Citizenship and Immigration Services.
9. OBTAIN FROM VA - ATTACHMENT 'I': Optional Form 306, Revised October 2011 (3 pages) - Declaration for Federal Employment* (*This form may also be used to assess fitness for federal contract employment); Form Approved: OMB No. 3206-0182.
10. OBTAIN FROM VA - ATTACHMENT 'J': VA Form 0711, Oct 2006 (RS) (3 pages) - Request for Personal Identity Verification Card; Form Approved: OMB No. 2900-0673.
11. ATTACHMENT 'K': 138-13, Interim Life Safety Measures (ILSM) Determination, February 2003 (revised 04/14/09).
12. ATTACHMENT 'L': 138-27, Construction & Infection Control Risk Assessment (ICRA) Determination, April 2009.
13. ATTACHMENT 'M': Coordination Drawing Checklist.
14. ATTACHMENT 'N': Daily Log - Construction.
15. ATTACHMENT 'O': Electric Panel Schedule.
16. ATTACHMENT 'P': Hot Work Permit - For Cutting, Welding, Soldering, Brazing With Portable Gas Or Arc Equipment.
17. ATTACHMENT 'Q': RFI - Request for Information
18. ATTACHMENT 'R': Construction Submittal - Status Log
19. ATTACHMENT 'S': Plumbing System Valve Chart.
20. ATTACHMENT 'T': New York City Department of Parks & Recreation, "Request for Permit to Perform Work on Park Property" memorandum.
21. ATTACHMENT 'U': **For Information Only** - Reference drawing of existing generator pad; "AS BUILT", March 20, 2012, prepared by BLC Bullard Lindsay Contracting Co., Inc., 525 East 72nd St., Suite 3H, New York, NY 10021.

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