

SECTION 01 00 00
GENERAL REQUIREMENTS

1.1 SAFETY REQUIREMENTS

Refer to section 01 35 26, SAFETY REQUIREMENTS for safety and infection control requirements.

1.2 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 _____ as _____ required by drawings and specifications.
- B. Visits to the site by Bidders may be made only by appointment with the Medical Center Engineering Officer.
- C. Offices of _____, 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 retained by Department of Veterans Affairs, the Contractor shall notify the COR in sufficient time to enable testing laboratory personnel to be present at the site in time for proper taking and testing of specimens and field inspection. Such prior notice shall be not less than three work days unless otherwise designated by the COR.
- 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. Training:
 - 1. All employees of general Contractor or any subcontractor shall have the 10-hour OSHA certified Construction Safety course and/or other relevant competency training, as determined by VA CP with input from the ICRA team.

2. Submit training records of all such employees for approval before the start of work.

3. Contractor shall submit an initial list of names of Contractor and subcontractor employees who will be completing work on the site VA Lexington _____.

along with a copy of the card and/or training certificate issued following employees' completion of 10-hour OSHA certified Construction Safety course and/or other relevant competency training.

a. Subcontractor initial employee name list and corresponding completion card and/or certificate shall include employees at any and all levels of subcontract.

b. Contractor shall update this list when changes occur. Contractor is responsible for subcontractor updates. Contractor shall provide subsequent list(s) of names four (4) weeks in advance of additional employees reporting to the work site. Subsequent list(s) of names shall consist of contractor and/or subcontractor employee(s) names with a copy of the card and/or training certificate issued following employee's completion of 10-hour OSHA certified Construction Safety course and/or other relevant competency training.

4. A construction kick-off orientation meeting shall be coordinated with the Project Manager in advance of construction activities. This meeting shall contain, at a minimum, the following agenda items: Fire Safety orientation to the specific site, Infection control training per the specific project, and other site and/or project specific items. This meeting will be held on the LEXINGTON VA Property.

1.3 STATEMENT OF BID ITEM(S)

A. ITEM I, GENERAL CONSTRUCTION: _____: Work includes general construction, alterations, roads, walks, grading, drainage, _____ necessary removal of existing structures and construction and certain other items.

ITEM II, Electrical Work: _____: Work includes all labor, material, equipment and supervision to perform the required electrical construction work on this project including...., , _____.

ITEM III, Mechanical Work: _____: Work includes all labor, material, equipment and supervision to perform the required Mechanical construction work on this project including...., , _____.

B. ALTERNATE NO.1: _____

C. ALTERNATE NO. 2: _____

1.4 SPECIFICATIONS AND DRAWINGS FOR CONTRACTOR

A. Drawings and contract documents may be obtained from the website where the solicitation is posted. Additional copies will be at Contractor's expense.

1.5 CONSTRUCTION SECURITY REQUIREMENTS

A. Security:

1. Contractor's superintendent shall sign in daily at the start of work and/or at 8:00 am. Contractor's superintendent shall sign in to the Contractor log in the Engineering Office located in Building 2, 2nd floor at the reception area at Leestown Drive Division. Contractor shall sign out daily at the same location. Contractor work outside of administrative hours shall be as scheduled with the Project Manager. Contractor's superintendent sign-in/out shall represent all Contractor and/or subcontractor employees on site for work; all other Contractor and/or subcontractor employees are not required to sign in/out.

2. Contractor shall provide a daily log for each day work takes place on site. Daily log shall include name of Contractor's superintendent, name(s) of other Contractor employees, listing of subcontractor(s), names(s) of subcontractor employees, identification of the work performed, and any notes required to convey extent of activities. The log will be submitted to the COR daily electronically.

3. Contractor shall also submit an electronic weekly report of the construction activities that were completed for that week with a tabulation of the major subcontractors effort and personnel on site. A notation of any special conflicts or circumstances must be reported.

4. Weekly meetings with the VA COR will be required, unless the VA requests a different schedule. If schedule or technical issues arise, additional meetings may be required.

5. 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. Only employees of the Contractor or subcontractor(s) with a VA-provided identification (ID) badge shall work on the site.

6. In order to comply with VA Security Management Program, the following actions are required for all General Contractor and subcontractor employees:

a. Obtain a VA-provided ID badge. To obtain badge, an employee of the contractor or subcontractor shall:

- (1) Attend a Contractor Orientation Meeting held each Monday and Tuesday at 8:30 am at Leestown Division, Building 2, 2nd Floor, Engineering Offices, except for federal holidays.
- (2) Provide two forms of Government Issued ID (e.g. Driver's License, Personal Identification Card, Social Security Card, US Passport, Worker's Visa, etc.)- one of which has to be a picture ID - copies shall be made
- (3) Provide a 10-Hour OSHA card or certificate from a certified OSHA instructor identifying employee completing the training - copy shall be made - for each employee; provide a 30-Hour OSHA card or certificate from a certified OSHA instructor identifying employee completing the training - copy shall be made - for general contractor's Competent Person (CP); NOTE: CP providing 30-Hour training certificate does not also have to provide 10-Hour training certificate
- (4) Complete an Orientation Information Sheet
- (5) Complete the top portion of the Contractor Orientation Checklist form
- (6) Complete VA Form 0711 Request For One-VA Identification Card, Section I Part A

B. 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 subcontractors working on the project and their employees also comply with these regulations.

C. 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. Before starting work the General Contractor shall give one week's notice to the Contracting Officer so that security escort arrangements can be provided for the employees. This notice is separate from any 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 shut down 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.

D. Key Control:

1. Only the General Contractor will be issued keys for access to areas of the Medical Center in conjunction with construction work. The General Contractor is responsible for all keys issued to him, including any keys he distributes to subcontractors.
2. All keys issued to the General Contractor shall be returned and accounted for by the Contracting Officer prior to processing final payment. The General Contractor shall inform his personnel and subcontractors of the importance of accounting for all keys issued by this Medical Center.
3. The Contractor shall, at any time during the contract, be able to show all keys issued for the visual inspection and validation within two (2) business days of request.
4. Contractor is responsible for replacing all keys and cores affected because of the loss of keys by Contractor (or subcontractor) personnel prior to final inspection of the project and subsequent close-out of the contract. Replacement of all keys and cores affected shall be accomplished by separate contract between Contractor and Best Lock Co. and shall not be charged to VA.

5. The General Contractor shall provide duplicate keys and lock combinations to the COR for the purpose of security inspections of every area of project including tool boxes and parked machines. The General Contractor shall take any emergency action necessary including moving Contractor equipment if required to sustain Medical Center operations.

6. The General Contractor shall turn over all permanent lock cylinders to the VA locksmith for permanent installation.

E. Document Control:

1. Before starting any 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 any vehicle 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.
- 2. A limited number of two permits shall be issued for General Contractor and its employees for parking in designated areas only.
NOTE: ALL CONTRACTOR'S EMPLOYEES AND SUB-CONTRACTOR EMPLOYEES MUST PARK IN DESIGNATED PARKING SPACES THAT ARE NOT PATIENT PARKING OR ADA SPACES.

1.6 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.
- C. The Contractor shall, under regulations prescribed by the Contracting Officer, use only established roadways, or use temporary roadways

constructed by the Contractor when and as authorized by the Contracting Officer. 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 any Federal, State, or local law or regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

(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 COR.
- E. Workers are subject to rules of Medical Center applicable to their conduct.
- F. Execute work in such a manner as to interfere as little as possible with work being done by others. Keep roads clear of construction materials, debris, standing construction equipment and vehicles at all times.
- G. This Medical Center has adopted a policy for smoke-free environment. No smoking is permitted in any building by employees, house staff, students, visitors or contractors. No smoking is permitted within defined construction areas interior of any building or the roof of any building. No smoking is permitted on any open rooftop of any building.
- H. Execute work so as to interfere as little as possible with normal functioning of Medical Center as a whole, including operations of utility services, fire protection systems and any existing equipment, and with work being done by others. 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 COR 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 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.

I. 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 COR. All such actions shall be coordinated with the COR or 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.

J. Phasing:

The Medical Center must maintain its operation 24 hours a day 7 days a week. Therefore, any interruption in service must be scheduled and coordinated with the COR to ensure that no lapses in operation occur. It is the CONTRACTOR'S responsibility to develop a work plan and schedule detailing, at a minimum, the procedures to be employed, the equipment and materials to be used, the interim life safety measure to be used during the work, and a schedule defining the duration of the work with milestone subtasks. The work to be outlined shall include, but not be limited to:

To ensure such executions, Contractor shall furnish the COR with a schedule of approximate phasing dates on which the Contractor intends to accomplish work in each specific area of site, building or portion thereof. In addition, Contractor shall notify the COR two weeks in advance of the proposed date of starting work in each specific area of site, building or portion thereof. Arrange such phasing dates to ensure accomplishment of this work in successive phases mutually agreeable to Medical Center Director, COR and Contractor, as follows:

Phase I:**Phase II:**

K. Building (s) No. (s) Part of Bldg. _____ will be vacated by Government in accordance with above phasing beginning immediately after date of receipt of Notice to Proceed and turned over to Contractor.

K. Building(s) No.(s) _____ will be occupied during performance of work; but immediate areas of alterations will be vacated.

1. Certain areas of Building(s) No. (s) _____ will be occupied by Medical Center personnel for various periods as listed below:

AREA	PERIOD
(a)	
(b)	
(c)	
(d)	

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 Centers operations will not be hindered. 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. These routes whether access or egress shall be isolated from the construction area by temporary partitions and have walking surfaces, lighting etc to facilitate patient and staff access. Coordinate alteration work in areas occupied by Department of Veterans Affairs so that Medical Center operations will continue during the construction period.

2. Immediate areas of alterations not mentioned in preceding Subparagraph 1 will be temporarily vacated while alterations are performed.

- L. Construction Fence: Before construction operations begin, Contractor shall provide a chain link construction fence, eight feet minimum height, around the construction area either indicated on the drawings or in accordance with the COR. 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 375mm (15 inches). Bottom of fences shall extend to 25mm (one inch) above grade. Remove the fence when directed by COR.
- M. When a building and/or construction site is turned over to Contractor, Contractor shall accept entire responsibility including upkeep and maintenance 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.
- N. Utilities Services: Maintain existing utility services for 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 COR.
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 COR, Chief Engineer, and Chief of Facilities Management. Electrical work shall be accomplished with all affected circuits or equipment de-energized. When an electrical outage cannot be accomplished, work on any energized circuits or equipment shall not commence without a detailed work plan, the Medical Center Director's prior knowledge and written approval.

Refer to specification Sections 26 05 11, REQUIREMENTS FOR ELECTRICAL INSTALLATIONS, 27 05 11 REQUIREMENTS FOR COMMUNICATIONS INSTALLATIONS and 28 05 00, COMMON WORK RESULTS FOR ELECTRONIC SAFETY AND SECURITY for additional requirements.

2. Contractor shall submit a request to interrupt any such services to COR, in writing, **14 days in advance of proposed interruption.** Request shall state reason, date, exact time of, and approximate duration of such interruption. See Appendix A. for formal utility outage request for the Lexington VA Health Care System.
 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 Medical Center. Interruption time approved by Medical Center may occur at other than Contractor's normal working hours.
 4. Major interruptions of any system shall be requested, in writing, **at least 21 calendar days prior** to the desired time and shall be performed as directed by the COR.
 5. In case of a contract construction emergency, service will be interrupted on approval of COR. 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.
- O. Abandoned Lines: All service lines such as wires, cables, conduits, ducts, pipes and the like, and their hangers or supports, which are to be abandoned but are not required to be entirely removed, shall be sealed, capped or plugged at the main, branch or panel they originate from. The lines shall not be capped in finished areas, but shall be removed and sealed, capped or plugged in ceilings, within furred spaces, in unfinished areas, or within walls or partitions; so that they are completely behind the finished surfaces.
- P. 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 with approval.
2. Method and scheduling of required cutting, altering and removal of existing roads, walks and entrances must be approved by the COR.

Q. Coordinate the work for this contract with other construction operations as directed by COR. This includes the scheduling of traffic and the use of roadways, as specified in Article, USE OF ROADWAYS.

1.7 ALTERATIONS

A. Survey: Before any work is started, the Contractor shall make a thorough survey with the COR and a representative of VA Facilities, of buildings or areas of buildings 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 by rooms and spaces:

1. Existing condition and types of resilient flooring, doors, windows, walls and other surfaces not required to be altered throughout affected areas of building and/or buildings.
2. Existence and conditions of items such as plumbing fixtures and accessories, electrical fixtures, equipment, venetian blinds, shades, etc., required by drawings to be either reused or relocated, or both.
3. Shall note any discrepancies between drawings and existing conditions at site.
4. Shall designate areas for working space, materials storage and routes of access to areas within buildings where alterations occur and which have been agreed upon by Contractor and COR.

B. Any items required by drawings to be either reused or relocated or both, found during this survey to be nonexistent, or in opinion of COR and/or VA Facilities, to be in such condition that their use 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 days before expected partial or final inspection date, the Contractor, COR, and VA Facilities together shall make a thorough re-survey of the areas of buildings involved. They shall furnish a report on conditions then existing, of resilient flooring, doors, windows, walls and other surfaces as compared with conditions of same as noted in first condition survey report:

1. Re-survey report shall also list any damage caused by Contractor to such flooring and other surfaces, despite protection measures; and, will form basis for determining extent of repair work required of Contractor to restore damage caused by Contractor's workers in executing work of this contract.

D. Protection: Provide the following protective measures:

1. Wherever existing roof surfaces are disturbed they shall be protected against water infiltration. In case of leaks, they shall be repaired immediately upon discovery.
2. 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.
3. 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.

1.8 DISPOSAL AND RETENTION

A. Materials and equipment accruing from work removed and from demolition of buildings or 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 COR.
2. Items not reserved shall become property of the Contractor and be removed by Contractor from Medical Center.
3. Items of portable equipment and furnishings located in rooms and spaces in which work is to be done under this contract shall remain the property of the Government. When rooms and spaces are vacated by the Department of Veterans Affairs during the alteration period, such items which are NOT required by drawings and specifications to be either relocated or reused will be removed by the Government in advance of work to avoid interfering with Contractor's operation.
4. PCB Transformers and Capacitors: The Contractor shall be responsible for disposal of the Polychlorinated Biphenyl (PCB) transformers and capacitors. The transformers and capacitors shall be taken out of service and handled in accordance with the procedures of the Environmental Protection Agency (EPA) and the Department of Transportation (DOT) as outlined in Code of Federal Regulation (CFR), Titled 40 and 49 respectively. The EPA's Toxic Substance Control Act (TSCA) Compliance Program Policy Nos. 6-PCB-6 and 6-PCB-7 also apply. Upon removal of PCB transformers and capacitors for disposal, the "originator" copy of the Uniform Hazardous Waste Manifest (EPA Form 8700-22), along with the Uniform Hazardous Waste Manifest Continuation Sheet (EPA Form 8700-22A) shall be returned to the Contracting Officer who will annotate the contract file and transmit the Manifest to the Medical Center's Chief.
 - a. Copies of the following listed CFR titles may be obtained from the Government Printing Office:

40 CFR 261.....Identification and Listing of Hazardous Waste

40 CFR 262.....Standards Applicable to Generators of Hazardous Waste

40 CFR 263.....Standards Applicable to Transporters of
Hazardous Waste

40 CFR 761.....PCB Manufacturing, Processing, Distribution in
Commerce, and use Prohibitions

49 CFR 172.....Hazardous Material tables and Hazardous
Material Communications Regulations

49 CFR 173.....Shippers - General Requirements for Shipments
and Packaging

49 CFR 173.....Subpart A General

49 CFR 173.....Subpart B Preparation of Hazardous Material for
Transportation

49 CFR 173.....Subpart J Other Regulated Material; Definitions
and Preparation

TSCA.....Compliance Program Policy Nos. 6-PCB-6 and 6-
PCB-7

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

- A. The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which 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 any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workers, 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.
- 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 any damage 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.
- D. Refer to FAR clause 52.236-7, "Permits and Responsibilities," which is included in General Conditions. A National Pollutant Discharge Elimination System (NPDES) permit is required for this project. The Contractor is considered an "operator" under the permit and has extensive responsibility for compliance with permit requirements. VA will make the permit application available at the (appropriate medical center) office. The apparent low bidder, contractor and affected subcontractors shall furnish all information and certifications that are required to comply with the permit process and permit requirements. Many of the permit requirements will be satisfied by completing construction as shown and specified. Some requirements involve the Contractor's method of operations and operations planning and the Contractor is responsible for employing best management practices. The affected activities often include, but are not limited to the following:
- Designating areas for equipment maintenance and repair;
 - Providing waste receptacles at convenient locations and provide regular collection of wastes;
 - Locating equipment wash down areas on site, and provide appropriate control of wash-waters;
 - Providing protected storage areas for chemicals, paints, solvents, fertilizers, and other potentially toxic materials; and
 - Providing adequately maintained sanitary facilities.

1.10 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 any structural work, and do not disturb any ducts, plumbing, steam, gas, or electric work without approval of the COR. Existing work to be altered or extended and that is found to be defective in any way, shall be reported to the COR 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. 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 any damage caused by Contractor's workers to existing piping and conduits, wires, cables, etc., of utility services or of fire protection systems and communications systems (including telephone) 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).

1.11 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

(FAR 52.236-4)

- B. Subsurface conditions have been developed by core borings and test pits. Logs of subsurface exploration are shown diagrammatically on drawings.
- 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, _____ and shall be considered part of the contract documents.
- 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.

1.12 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.

1.13 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 center lines for each building and corner of column lines and/or addition to each existing building, lines for each gravesite control monument, and such other lines and grades that are reasonably necessary to properly assure that location, orientation, and elevations established for each such structure and/or addition, roads, parking lots, are 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, exterior walls, center lines of columns in both directions, major utilities and elevations of floor slabs:
 - 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 COR before any work (such as footings, floor slabs, columns, walls, utilities and other major controlling features) is placed.
- D. During progress of work, and particularly as work progresses from floor to floor, 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 COR before any major items of concrete work are placed. In addition, Contractor shall also furnish to the COR 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 building and/or addition.
 - 2. Elevations of bottoms of footings and tops of floors of each building and/or addition.

3. Lines and elevations of sewers and of all outside distribution systems.

4. Lines of elevations of all swales and interment areas.

5. Lines and elevations of roads, streets and parking lots.

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 COR.

F. Upon completion of the work, the Contractor shall furnish the COR one electronic copy and reproducible drawings at the scale of the contract drawings, showing the finished grade on the grid developed for constructing the work, including fifty foot stationing along new road centerlines. These drawings shall bear the seal of the registered land surveyor or registered civil 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".

1.14 AS-BUILT DRAWINGS

A. The contractor shall maintain two full size sets of as-built drawings which will be kept 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, as-built drawings shall be made available for the COR review, as often as requested.

C. Contractor shall deliver two approved completed sets of as-built drawings in the electronic version (scanned PDF) to the COR, Chief Engineer, Chief of Facilities Management within 15 calendar days after each completed phase and after the acceptance of the project by the COR.

D. Paragraphs A, B, & C shall also apply to all shop drawings.

1.15 WARRANTY MANAGEMENT

A. Warranty Management Plan: Develop a warranty management plan which contains information relevant to FAR 52.246-21 Warranty of Construction in at least 30 days before the planned pre-warranty conference, submit four sets of the warranty management plan. Include within the warranty management plan all required actions and documents to assure that the Government receives all warranties to which it is entitled. The plan must be in narrative form and contain sufficient detail to render it suitable for use by future maintenance and repair personnel, whether tradesman, or of engineering background, not necessarily familiar with this contract. The term "status" as indicated below must include due date and whether item has been submitted or was approved. Warranty information made available during the construction phase must be submitted to the Contracting Officer for approval prior to each monthly invoice for payment. Assemble approved information in a binder and turn over to the Government upon acceptance of the work. The construction warranty period will begin on the date of the project acceptance and continue for the product warranty period. A joint 4 month and 9 month warranty inspection will be conducted, measured from time of acceptance, by the Contactor and the Contracting Officer. Include in the warranty management plan, but not limited to, the following:

1. Roles and responsibilities of all personnel associated with the warranty process, including points of contact and telephone numbers within the company of the Contractor, subcontractors, manufacturers or suppliers involved.
2. Furnish with each warranty the name, address and telephone number of each of the guarantor's representatives nearest project location.
3. Listing and status of delivery of all Certificates of Warranty for extended warranty items, to include roofs, HVAC balancing, pumps, motors, transformers and for all commissioned systems such as fire protection and alarm systems, sprinkler systems and lightning protection systems, etc.
4. A list for each warranted equipment item, feature of construction or system indicating:
 - a. Name of item.

- b. Model and serial numbers.
 - c. Location where installed.
 - d. Name and phone numbers of manufacturers and suppliers.
 - e. Name and phone numbers of manufacturers or suppliers.
 - f. Names, addresses and phone numbers of sources of spare parts.
 - g. Warranties and terms of warranty. Include one-year overall warranty of construction, including the starting date of warranty of construction. Items which have extended warranties must be indicated with separate warranty expiration dates.
 - h. Starting point and duration of warranty period.
 - i. Summary of maintenance procedures required to continue the warranty in force.
 - j. Cross-reference to specific pertinent Operation and Maintenance manuals.
 - k. Organizations, names and phone numbers of persons to call for warranty service.
 - l. Typical response time and repair time expected for various warranted equipment.
- 5. The plans for attendance at the 4 and 9-month post construction warranty inspections conducted by the government.
 - 6. Procedure and status of tagging of all equipment covered by extended warranties.
 - 7. Copies of instructions to be posted near selected pieces of equipment where operation is critical for warranty and/or safety reasons.
- B. Performance Bond: The Performance Bond must remain effective throughout the construction period.
- 1. In the event the Contractor fails to commence and diligently pursue any construction warranty work required, the Contracting Officer will have the work performed by others, and after completion of the work, will charge the remaining construction warranty funds of

expenses incurred by the Government while performing the work, including, but not limited to administrative expenses.

2. In the event sufficient funds are not available to cover the construction warranty work performed by the Government at the contractor's expenses, the Contracting Officer will have the right to recoup expenses from the bonding company.
3. Following oral or written notification of required construction warranty repair work, the Contractor shall respond in a timely manner. Written verification will follow oral instructions. Failure to respond will be cause for the Contracting Officer to proceed against the Contractor.

C. Pre-Warranty Conference: Prior to contract completion, and at a time designated by the Contracting Officer, the Contractor shall meet with the Contracting Officer to develop a mutual understanding with respect to the requirements of this section. Communication procedures for Contractor notification of construction warranty defects, priorities with respect to the type of defect, reasonable time required for Contractor response, and other details deemed necessary by the Contracting Officer for the execution of the construction warranty will be established/ reviewed at this meeting. In connection with these requirements and at the time of the Contractor's quality control completion inspection, furnish the name, telephone number and address of a licensed and bonded company which is authorized to initiate and pursue construction warranty work action on behalf of the Contractor. This point of contact will be located within the local service area of the warranted construction, be continuously available and be responsive to Government inquiry on warranty work action and status. This requirement does not relieve the Contractor of any of its responsibilities in conjunction with other portions of this provision.

D. Contractor's Response to Construction Warranty Service Requirements:

Following oral or written notification by the Contracting Officer, the Contractor shall respond to construction warranty service requirements in accordance with the "Construction Warranty Service Priority List" and the three categories of priorities listed below. Submit a report on any warranty item that has been repaired during the warranty period. Include within the report the cause of the problem, date reported,

corrective action taken, and when the repair was completed. If the Contractor does not perform the construction warranty within the timeframe specified, the Government will perform the work and back charge the construction warranty payment item established.

1. First Priority Code 1. Perform onsite inspection to evaluate situation, and determine course of action within 4 hours, initiate work within 6 hours and work continuously to completion or relief.
2. Second Priority Code 2. Perform onsite inspection to evaluate situation, and determine course of action within 8 hours, initiate work within 24 hours and work continuously to completion or relief.
3. Third Priority Code 3. All other work to be initiated within 3 work days and work continuously to completion or relief.
4. The "Construction Warranty Service Priority List" is as follows:

Code 1-Life Safety Systems

- a. Fire suppression systems.
- b. Fire alarm system(s).

Code 1-Air Conditioning Systems

- a. Air conditioning leak in part of the building, if causing damage.
- b. Air conditioning system not cooling properly.

Code 1 Doors

- a. Overhead doors not operational, causing a security, fire or safety problem.
- b. Interior, exterior personnel doors or hardware, not functioning properly, causing security, fire or safety problem.

Code 3-Doors

- a. Overhead doors not operational.
- b. Interior/exterior personnel doors or hardware not functioning properly.

Code 1-Electrical

- a. Power failure (entire area or any building operational after 1600 hours).
- b. Security lights.
- c. Smoke detectors.

Code 2-Electrical

- a. Power failure (no power to a room or part of building).
- b. Receptacles and lights not operational (in a room or part of building).

Code 3-Electrical

- a. Exterior lights not operational.

Code 1-Gas

- a. Leaks and pipeline breaks.

Code 1-Heat

- a. Power failure affecting heat.

Code 1-Plumbing

- a. Hot water heater failure.
- b. Leaking water supply pipes.

Code 2-Plumbing

- a. Flush valves not operating properly
- b. Fixture drain, supply line or any water pipe leaking.
- c. Toilet leaking at base.

Code 3- Plumbing

- a. Leaky faucets.

Code 3-Interior

- a. Floors damaged.
- b. Paint chipping or peeling.

c. Casework damaged.

Code 1-Roof Leaks

a. Damage to property is occurring.

Code 2-Water (Exterior)

a. No water to facility.

Code 2-Water (Hot)

a. No hot water in portion of building listed.

Code 3

a. All work not listed above.

E. Warranty Tags: At the time of installation, tag each warranted item with a durable, oil and water-resistant tag approved by the Contracting Officer. Attach each tag with a copper wire and spray with a silicone waterproof coating. Also submit two record copies of the warranty tags showing the layout and design. The date of acceptance and the QC signature must remain blank until the project is accepted for beneficial occupancy. Show the following information on the tag.

Type of product/material	
Model number	
Serial number	
Contract number	
Warranty period from/to	
Inspector's signature	
Construction Contractor	
Address	
Telephone number	
Warranty contact	
Address	
Telephone number	
Warranty response time priority code	

1.16 USE OF ROADWAYS

- A. For hauling, use only established public roads and roads on Medical Center property and, when authorized by the COR, such temporary roads which are necessary in the performance of contract work. Temporary roads shall be constructed and restoration performed 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.
- C. When certain buildings (or parts of certain buildings) are required to be completed in advance of general date of completion, all roads leading thereto must be completed and available for use at time set for completion of such buildings or parts thereof.

1.17 RESIDENT ENGINEER'S FIELD OFFICE - NOT USED**1.18 TEMPORARY USE OF MECHANICAL AND ELECTRICAL EQUIPMENT**

- A. Use of new installed mechanical and electrical equipment to provide heat, ventilation, plumbing, light and power will be permitted subject to written approval and compliance with the following provisions:
1. Permission to use each unit or system must be given by COR in writing. If the equipment is not installed and maintained in accordance with the written agreement and following provisions, the COR will withdraw permission for use of the equipment.
 2. Electrical installations used by the equipment shall be completed in accordance with the drawings and specifications to prevent damage to the equipment and the electrical systems, i.e. transformers, relays, circuit breakers, fuses, conductors, motor controllers and their overload elements shall be properly sized, coordinated and adjusted. Installation of temporary electrical equipment or devices shall be in accordance with NFPA 70, National Electrical Code, (2014 Edition), Article 590, *Temporary Installations*. Voltage supplied to each item of equipment shall be verified to be correct and it shall be determined that motors are not overloaded. The electrical equipment shall be thoroughly cleaned before using it and again immediately before final inspection including vacuum cleaning and wiping clean interior and exterior surfaces.
 3. Units shall be properly lubricated, balanced, and aligned. Vibrations must be eliminated.
 4. Automatic temperature control systems for preheat coils shall function properly and all safety controls shall function to prevent coil freeze-up damage.
 5. The air filtering system utilized shall be that which is designed for the system when complete, and all filter elements shall be replaced at completion of construction and prior to testing and balancing of system.
 6. All components of heat production and distribution system, metering equipment, condensate returns, and other auxiliary facilities used in temporary service shall be cleaned prior to use; maintained to

- prevent corrosion internally and externally during use; and cleaned, maintained and inspected prior to acceptance by the Government. Boilers, pumps, feedwater heaters and auxiliary equipment must be operated as a complete system and be fully maintained by operating personnel. Boiler water must be given complete and continuous chemical treatment.
- B. Prior to final inspection, the equipment or parts used which show wear and tear beyond normal, shall be replaced with identical replacements, at no additional cost to the Government.
 - C. This paragraph shall not reduce the requirements of the mechanical and electrical specifications sections.
 - D. Any damage to the equipment or excessive wear due to prolonged use will be repaired replaced by the contractor at the contractor's expense.

1.19 TEMPORARY USE OF EXISTING ELEVATORS

- A. Use of existing elevators for handling building materials and Contractor's personnel will be permitted subject to following provisions:
 - 1. Contractor makes all arrangements with the COR for use of elevators. The COR will ascertain that elevators are in proper condition. Contractor may use elevators Nos. _____ in Building Nos. _____ for exclusive use for daily use between the hours of 5:00 PM to 6:00 AM and for special nonrecurring time intervals when permission is granted by the COR. Personnel for operating elevators will not be provided by the Department of Veterans Affairs.
 - 2. Contractor covers and provides maximum protection of following elevator components:
 - a. Entrance jambs, heads soffits and threshold plates.
 - b. Entrance columns, canopy, return panels and inside surfaces of car enclosure walls.
 - c. Finish flooring.
 - 3. Government will accept hoisting ropes of elevator and rope of each speed governor if they are worn under normal operation. However, if these ropes are damaged by action of foreign matter such as sand,

lime, grit, stones, etc., during temporary use, they shall be removed and replaced by new hoisting ropes at the contractors expense.

4. If brake lining of elevators are excessively worn or damaged during temporary use, they shall be removed and replaced by new brake lining at the contractors expense.
5. All parts of main controller, starter, relay panel, selector, etc., worn or damaged during temporary use shall be removed and replaced with new parts at the contractors expense, if recommended by elevator inspector after elevator is released by Contractor.
6. Place elevator in condition equal, less normal wear, to that existing at time it was placed in service of Contractor as approved by Contracting Officer.

1.20 TEMPORARY USE OF NEW ELEVATORS - NOT USED

1.21 TEMPORARY TOILETS

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

1.22 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 any utilities furnished without charge.
- B. The Contractor, at Contractor's expense and in a workmanlike manner, in compliance with code and as 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 and repair restore the infrastructure as required.

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. Heat: Furnish temporary heat necessary to prevent injury to work and materials through dampness and cold. Use of open salamanders or any temporary heating devices which may be fire hazards or may smoke and damage finished work, will not be permitted. Maintain minimum temperatures as specified for various materials:

1. Obtain heat by connecting to Medical Center heating distribution system.

E. 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.

F. 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 as per code. 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 (COR discretion) of use of water from Medical Center's system.

G. Fuel: Natural and LP gas and burner fuel oil required for boiler cleaning, normal initial boiler-burner setup and adjusting, and for performing the specified boiler tests will be furnished by the Government. Fuel required for prolonged boiler-burner setup, adjustments, or modifications due to improper design or operation of

boiler, burner, or control devices shall be furnished and paid by the Contractor at Contractor's expense.

1.23 NEW TELEPHONE EQUIPMENT

The contractor shall coordinate with the work of installation of telephone equipment by others. This work shall be completed before the building is turned over to VA.

1.24 TESTS

- A. As per specification section 23 05 93 the contractor shall provide a written testing and commissioning plan complete with component level, equipment level, sub-system level and system level breakdowns. The plan will provide a schedule and a written sequence of what will be tested, how and what the expected outcome will be. This document will be submitted for approval prior to commencing work. The contractor shall document the results of the approved plan and submit for approval with the as built documentation.
- B. Pre-test mechanical and 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.
- C. 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.
- D. Mechanical and electrical systems shall be balanced, controlled and coordinated. A system is defined as the entire system which must be coordinated to work together during normal operation to produce results for which the system is designed. For example, air conditioning supply air is only one part of entire system which provides comfort conditions for a building. Other related components are return air, exhaust air, steam, chilled water, refrigerant, hot water, controls and electricity, etc. Another example of a system which involves several components of different disciplines is a boiler installation. Efficient and acceptable boiler operation depends upon the coordination and proper operation of fuel, combustion air, controls, steam, feedwater, condensate and other related components.

- E. All related components as defined above shall be functioning when any system component is tested. Tests shall be completed within a reasonably period of time during which operating and environmental conditions remain reasonably constant and are typical of the design conditions.
- F. Individual test result of any component, where required, will only be accepted when submitted with the test results of related components and of the entire system.

1.25 INSTRUCTIONS

- A. Contractor shall furnish Maintenance and Operating manuals (hard copies and electronic) and verbal 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 COR 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 training 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 COR and shall be considered concluded only when the COR is satisfied in regard to complete and thorough coverage. The contractor shall submit a course outline with associated material to the COR for review and approval prior to scheduling training to ensure the subject matter covers the expectations of the VA and the contractual requirements. The Department of Veterans Affairs reserves the right to request the removal of, and substitution for, any instructor who, in the opinion of the COR, does not demonstrate sufficient qualifications in accordance with requirements for instructors above.

1.26 GOVERNMENT-FURNISHED PROPERTY

- A. The Government shall deliver to the Contractor, the Government-furnished property shown on the drawings.
 - B. Equipment furnished by Government to be installed by Contractor will be furnished to Contractor at the Medical Center.
 - C. Contractor shall be prepared to receive this equipment from Government and store or place such equipment not less than 90 days before Completion Date of project.
 - D. Notify Contracting Officer in writing, 60 days in advance, of date on which Contractor will be prepared to receive equipment furnished by Government. Arrangements will then be made by the Government for delivery of equipment.
1. Immediately upon delivery of equipment, Contractor shall arrange for a joint inspection thereof with a representative of the Government. At such time the Contractor shall acknowledge receipt of equipment described, make notations, and immediately furnish the Government representative with a written statement as to its condition or shortages.

2. Contractor thereafter is responsible for such equipment until such time as acceptance of contract work is made by the Government.
- E. Equipment furnished by the Government will be delivered in a partially assembled (knock down) condition in accordance with existing standard commercial practices, complete with all fittings, fastenings, and appliances necessary for connections to respective services installed under contract. All fittings and appliances (i.e., couplings, ells, tees, nipples, piping, conduits, cables, and the like) necessary to make the connection between the Government furnished equipment item and the utility stub-up shall be furnished and installed by the contractor at no additional cost to the Government.
- F. Completely assemble and install the Government furnished equipment in place ready for proper operation in accordance with specifications and drawings.
- G. Furnish supervision of installation of equipment at construction site by qualified factory trained technicians regularly employed by the equipment manufacturer.

1.27 RELOCATED EQUIPMENT 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 COR.
- C. Suitably cap existing service lines, such as steam, condensate return, water, drain, gas, air, vacuum and/or electrical, at the main 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 any 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 engineer, who is an authorized representative of the manufacturer of this equipment to

supervise assembly and installation of existing remote dictating machine, X-ray, dental and laundry 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 any existing equipment is disconnected. Make relocated existing equipment ready for operation or use immediately after reinstallation.

1.28 STORAGE SPACE FOR DEPARTMENT OF VETERANS AFFAIRS EQUIPMENT

- A. Contractor shall complete approximately _____ square meters _____ (square feet) of space in building accessible from ground level without use of elevators for storage of certain materials and equipment by Department of Veterans Affairs.

1. Provide such space with adequate light, ventilation and heat in season and lock for adequate security. Contractor shall also install and connect portion of nearest specified fire protection system including all apparatus for instant use to provide water for adequate fire protection of storage space.
2. Storage space shall be turned over to Contracting Officer ninety days prior to Completion Date of the buildings involved.
3. Forward two sets of drawings to Contracting Officer through the COR 120 days prior to Completion Date of building; drawings shall indicate those areas which will be made available to Department of Veterans Affairs for temporary storage.
4. All cost for utility services for such storage space shall be borne by Contractor until entire building is turned over for occupancy.

- B. "Completion Date" shall mean that date as established by Contracting Officer upon which Contractor will turn over entire project or portions thereof to the Government.

1.29 CONSTRUCTION SIGN - Not Used

1.30 SAFETY SIGN - Not Used

1.31 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 actual 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 building pad, adjacent streets, roadways, parkways, driveways, curbs, sidewalks, landscaping, adjacent utilities and adjacent structures surrounding the building pad and site shall be documented. Overlapping photographic techniques shall be used to ensure maximum coverage. Indexing and navigation accomplished through interactive architectural drawings. If site work or pad preparation 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"). Progression documentation shall track both the exterior and interior construction of the building. Exterior Progressions shall track 360 degrees around the site and each building. Interior Progressions shall track interior improvements beginning when stud work commences and continuing until Project completion.
6. As-built condition of pre-foundation utilities and site utilities shall be documented prior to pouring footers, placing concrete and/or backfilling. This process shall include all underground and in-slab utilities within the building(s) envelope(s) and utility runs in the immediate vicinity of the building(s) envelope(s). This may also include utilities enclosed in slab-on-deck in multi-story buildings. Overlapping photographic techniques shall be used to ensure maximum coverage. Indexing and navigation 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 accomplished through interactive architectural drawings.
8. As-built conditions of exterior skin and elevations shall be documented with an increased concentration of digital photographs as directed by the COR in order to capture pre-determined focal points, such as waterproofing, window flashing, radiused steel work, architectural or Exterior Insulation and Finish Systems (EIFS) detailing. Overlapping photographic techniques shall be used to ensure maximum coverage. Indexing and navigation accomplished through interactive elevations or elevation details.
9. As-built finished conditions of the interior of each building including floors, ceilings and walls shall be documented at

certificate of occupancy or equivalent, or just prior to occupancy, or both, as directed by the COR. Overlapping photographic techniques shall be used to ensure maximum coverage. Indexing and navigation accomplished through interactive architectural drawings.

10. 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.
11. Customizable project-specific digital photographic documentation of other details or milestones. Indexing and navigation accomplished through interactive architectural plans.
12. 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.
13. 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.
14. Regular (8 max) interior progressions of all walls of the entire project to begin at time of substantial framed or as directed by the COR through to completion.
15. Detailed Exact-Built of all Slabs for all project slab pours just prior to placing concrete or as directed by the COR.
16. Detailed Interior exact built overlapping photos of the entire building to include documentation of all mechanical, electrical and plumbing systems in every wall and ceiling, to be conducted after rough-ins are complete, just prior to insulation and or drywall, or as directed by COR.

17. Finished detailed Interior exact built overlapping photos of all walls, ceilings, and floors to be scheduled by COR prior to occupancy.
 18. In event a greater or lesser number of images than specified above are required by the COR, 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 COR. 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.

1.32 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 COR to select the image to be printed. All images are provided to the RE 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.

- C. Furnish six (6) 400 mm x 500 mm (16 by 20 inch) color prints of the following buildings constructed under this project (elevations as selected by the RE from the images taken above). Photographs shall be artistically composed showing full front elevations. All images shall become property of the Government. Each of the selected six prints shall be place in a frame with a minimum of 2 inches of appropriate matting as a border. Provide a selection of a minimum of 3 different frames from which the SRE will select one style to frame all six prints. Photographs with frames shall be delivered to the COR in boxes suitable for shipping.

1. Hospital Building No. ____.
2. Clinical Building No. ____.
3. Nursing Home Care Building No. ____.
4. Chapel Building No. ____.
5. Boiler Plant Building No. ____.

1.33 HISTORIC PRESERVATION

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

- - - E N D - - -

APPENDIX A

**UTILITY OUTAGES FOR CONSTRUCTION PROJECTS AND OPERATIONS/MAINTENANCE
WORK**

1. **PURPOSE:** This policy and procedure is established to provide guidelines and assign responsibility for arranging and executing major utility outages required for construction projects and operations/maintenance work to minimize the number of outages and length of disruption of utility services for the facility. The utility systems involved include, but are not limited to, electrical power, water, sewer, medical gases (air, vacuum, oxygen, nitrous oxide), fire protection (fire alarm/sprinkler), HVAC (fans, heating, cooling, fume hoods), control air, tube transport, and TV systems.

2. **POLICY:** Any contractor desiring an outage will complete the Utility Service Outage Form and send it to the COR. The appropriate COR will schedule and coordinate the outage. The appropriate manager will ensure that the modifications to the affected utility area are acceptable. When satisfied that the utility system has been restored to normal service, the COR will notify the appropriate people that the system is back in service.

3. **RESPONSIBILITY:** All outages for construction projects (coordinated by Projects and Construction Section) and all other work (coordinated by Operations / Facilities) must be cleared with Medical Center Facility Maintenance Operations in advance of the work which requires an outage. The Construction and Planning Section will ensure that the contractor adheres to approved contract schedule in accordance with FAR 52.236-15 "Schedules for Construction Contracts". The schedule shall be submitted by the Contractor after the NTP (within 5 days) for approval to include CPM /bar chart, start and completion dates of tasks, and ongoing progress charts.

a. **Projects and Construction:** The COR for Projects and Construction shall be responsible for the following as it pertains to Construction Projects.

(1). researching and recording all the pertinent information necessary to schedule the outage after receiving request from contractor NOTE: the COR will know within 5-10 days if the outage will be approved and shall let the contractor know at that time, if the outage is going to be approved the COR will proceed with responsibilities below.

(2). scheduling and coordinating any outages with facilities/operations supervisors and impacted service area(s) POC.

(3). completing the Utility Outage Form with facilities/operations supervisor(s) and impacted service areas input recorded in designated box on form for that service area along with their signature or initials for their service area

(4). provide completed coordinated Utility Form to Facilities Operations Manager and Engineering Chief for their signatures and copying Projects and Constructions Supervisor.

(5). Distribute a signed approved copy of the utility outage to the impacted Service areas and Public Affairs Officer by day 7 of this process. The Public Affairs Officer or representative will be sent out an alert to patients and facility personnel in a timely manner.

(6). file a copy of the signed approved copy of the utility outage to the Projects and Construction project file and copy to Operations for their files and to update Utility Outage log database.

(7). Notify impacted services when outage work has been completed and service has been restored by telephone call followed up with an email.

b. **Operations:** Facilities and Operations Supervisors shall be responsible for the following as it pertains to all other Outages.

(1). Coordinate with impacted Service areas at Troy Bowling Campus or Franklin R. Sousley Campus to schedule an outage that will affect their area(s) of utilities.

(2). Document the work necessary to schedule, noting any difficulties that cannot be solved.

(3). Operations COR will complete the Utility Outage Request form with input from affected Service Areas for Operations Manager and/or Chief of Engineering's approval signature.

(4). Operations Manager/Assistant Chief of Engineering and / or Engineering Chief review and approve or deny completed Utility Outage Request.

(5). Schedule the outage once the request is approved. If outage cannot be scheduled, notify appropriate parties by telephone followed up with an email.

(6). If approved the Operations COR will submit a Work Order to the Operations Work Order Clerk who will input the work order into the tracking database.

(7). Operations COR shall notify Work Order Clerk and Operations Manager when Outage is completed, and impacted Service Area utilities are restored.

(8). Operations office will maintain a copy of signed /approved Utility Outage form in their files and update the Outage data base on S:drive in a timely manner.

NO outage will be performed without the express approval and signatures of Assistant Chief - Operations Supervisor and/or Chief of Engineering.

1. PROCEDURE:

Projects & Construction

a. All Projects outages will require 14 days (10 working days) coordination. Breakdown is as follows:

(1). 7 days (5 working days) coordination and notification by COR from receipt of request to communicate back to contractor of approval or rejection.

(2). If request is approved allow 7 days (5 working days) advance notice to allow Public Affairs adequate time to send out notifications to patients and staff.

b. Based on timeframe in approved CPM Schedule the Contractor submits a letter/email to the Projects and Construction COR with type utility outage, date, time, location and description of work to be done.

c. Projects and Construction COR will contact the Operations Manager to receive the appropriate paperwork to prepare outage request for the project.

NOTE: Giving such notice does not guarantee the outage on the date requested.

(1). The Projects and Construction COR will coordinate process per section Responsibilities described in 3A above.

(2). Once approved schedule the outage with and notify the impacted Service Area POC. If outage cannot be scheduled, notify appropriate parties by telephone followed up with an email within the 7-day timeframe.

(3). Make all notifications to affected personnel and alert the proper staff and/or Services so necessary action can begin to provide special needs to affected areas.

(4). The COR will be present for all Utility Outages conducted after normal business hours of operation.

(5). When work has been completed, the appropriate COR will notify affected personnel that the system is back in service.

(6). Completed Utility Outage form and a copy of the Work Order will be filed with that Utility Service area by the Operations COR and an electronic copy with the Operations Manager.

Operations/Facilities

a. All Operations outages will require 14 days (10 working days) coordination breakdown is as follows:

(1). Seven days (Five working days) coordination and notification by Operations COR on approval or rejection. If approved a Work Order will be submitted.

(2). If approved allow seven days (five working days) advance notice to allow Public Affairs adequate time to send out notifications to patients and staff. NOTE: Clarify if all outages will be treated the same.

Operations COR shall:

b. Contact the appropriate Service Area Manager to coordinate outage.

c. Coordinate process per section Responsibilities described in 3B above.

d. Notify Facility Operation Maintenance staff, service departments, operations, etc. of the pending outage.

e. Make all notifications to affected personnel and will alert the proper staff and/or Services so necessary action can begin to provide special needs to affected areas.

f. The Operations COR will be present for all Utility Outages conducted after normal business hours of operation for their area(s).

g. When work has been completed, the Operations COR will notify affected personnel that the system is back in service.

h. Completed Utility Outage form and a copy of the Work Order will be filed with that Utility Service area by the Operations COR and an electronic copy with the Operations Manager who will update the Outage data base on S:drive in a timely manner.

5. REFERENCE: NONE.

6. RECISSION: This memorandum is scheduled for recertification on or before July 11, 2024.

Michael M. Young, P.E., CHFM

Chief, Engineering Service

LEXINGTON VA HEALTH CARE SYSTEM

LEXINGTON, KENTUCKY

JULY 10, 2019

DEPARTMENT OF VETERANS AFFAIRS Medical Center 1101 Veterans Drive Lexington, KY 40502-2236	Utility Systems Service/Outage Notification SOP 138-50	Type of Service: (circle) <u>Shutdown / Service Notice</u>
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To: _____ Date of Request: _____

From: _____ Project: _____

Contractor performing work: _____

VA COR: _____

System/Utility Involved _____

VAMC Division (circle) _____ **Leestown** or **Cooper** _____

Location of work & area/room(s) affected:

--

Contingency plan for utility failure:

--

Requested system service date(s): (10 Day Notice Required) Start: _____ Finish: _____	Approved service date(s): Start: _____ Finish: _____
Requested time of system work _____	Approved time of system work: _____
Requested time system back on line: _____	Approved time system back on line: _____

VAMC Projects Approval/COR: _____	Date: _____
VAMC Maint. Supervisor Approval: _____	Date: _____
VAMC WO # _____	
VAMC Contact During Work Activity: _____	Phone: _____
Contractor Contact –Onsite _____	Phone: _____

*Life safety system affected (circle one): yes no *If Life Safety System(s) affected, an ILSM assessment must be completed and attached (Outage approval required by Chief).

Supervisor, Planning & Construction Projects approval: _____
(If NRM, Minor, or Major construction project)

Asst Chief, Facility Manager of Operations approval: _____

Chief, Engineering Service approval: _____

JULY 10, 2019

ATTACHMENT A

PERMIT FOR CUTTING AND WELDING WITH PORTABLE GAS OR ARC EQUIPMENT

DATE: _____

BUILDING: Cooper Division, Building 1

DEPT.: Engineering

WORK TO BE DONE: Electric powered cutting tools, hand grinders, heating torches.

SPECIAL PRECAUTIONS: _____

IS FIRE WATCH REQUIRED? NO

LOCATION WHERE THIS WORK IS TO BE DONE HAS BEEN EXAMINED, NECESSARY PRECAUTIONS
TAKEN, AND PERMISSION IS GRANTED FOR THIS WORK (SEE REVERSE).

PERMIT EXPIRES: _____

SIGNED: _____

(Individual responsible for authorizing welding and cutting)

TIME STARTED: _____

FINAL CHECK-UP

Work areas and all adjacent areas to which sparks and heat might have spread (including floors above and below and on opposite walls) were inspected 30 minutes after the work was completed and were found fire safe.

SIGNED: _____

(Supervisor or Fire Watcher)

ATTENTION: BEFORE APPROVING ANY CUTTING AND WELDING PERMIT, THE SAFETY OFFICE SHALL INSPECT THE WORK AREA AND CONFIRM THAT PRECAUTIONS HAVE BEEN TAKEN TO PREVENT FIRE IN ACCORDANCE WITH NFPA 51 B.

PRECAUTIONS

Sprinklers in service

Cutting and welding equipment in good repair

WITHIN 35 FT. OF WORK

Floors swept clean of combustibles

Combustible floors wet-down, covered with damp sand, metal or other shields

No combustible material or flammable liquids

Combustibles and flammable liquids protected with covers, guards or metal shields

All wall and floor openings covered

Covers suspended beneath work to collect sparks

WORK ON WALLS OR CEILINGS

Construction noncombustible and without combustible covering

Combustibles moved away from opposite side of wall

WORK ON ENCLOSED EQUIPMENT

(Tanks, containers, ducts dust collectors, etc.)

Equipment cleaned of all combustibles

Containers purged of flammable vapors

FIRE WATCH

(To be provided during and 30 minutes after operation)

LEXINGTON VA HEALTH CARE SYSTEM
LEXINGTON, KENTUCKY

JULY 10, 2019

Supplied with extinguisher and small hose

Trained in use of equipment and in sounding fire alarm

FINAL CHECK-UP

(To be made 30 minutes after completion of any operation unless fire watch is provided)

SIGNED: _____

(Supervisor)