

SECTION 01 00 00
GENERAL REQUIREMENTS

CORRECT FAÇADE DEFICIENCIES, PHASE 2

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SECTION 01 00 00
GENERAL REQUIREMENTS

1.1 GENERAL INTENTION

- A. Contractor shall furnish labor and materials and perform work to repair façade including rusted lintels and sealant around windows, doors, and vertical vent openings; repairing and replacing loose and cracked bricks, loose and cracked building stones, loose and cracked mortar joints, failed joint sealant, cracked and spalled window sills. Repairs will be made using methods such as epoxy repair, caulking, tuck pointing, acid washing, painting or other standard industry or VA accepted practice as required by specifications.
- B. Visits to the site by Bidders may be made only by appointment with the Contracting Officer's Representative (COR).
- C. 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.
- D. Prior to commencing work, general contractor shall provide proof that a OSHA certified "competent person" (CP) (29 CFR 1926.20(b)(2)) will maintain a presence at the work site whenever the general or subcontractors are present.
- E. Training:
 - 1. All employees of general contractor or subcontractors shall have the 10-hour OSHA certified Construction Safety course and other relevant competency training, as determined by VA Facility Manager with input from the PRAT team.
 - 2. Submit training records of all such employees for approval before the start of work.
- F. VHA Directive 2011-36, Safety and Health during Construction, dated 9/22/2011 in its entirety is made a part of this section.

1.2 STATEMENT OF BID ITEM(S)

- A. ITEM I, GENERAL CONSTRUCTION: Work includes repair of rusted lintels and sealant around windows, doors, and vertical vent openings; repairing and replacing broken, cracked, or loose brick and cast stone; replacing failed joint and parapet stone sealant; cleaning and sealing heavily stained brick and cast stone; repairing underlying structure at some

locations which requires removal and replacement of brick veneer. Work is associated with buildings 1, 3 & 4, 5, and 6. Repairs will be made using methods such as epoxy repair, caulking, tuck pointing, brick-laying, acid washing, surface preparation, and painting or other standard industry or VA accepted practice as outlined in table below:

TABLE 1. Scope of Work Building 1

Deficiency	Approx. Qty	Suggested Corrective Action
Rusty Lintels	6038 LF	Wire brush and/or sand blast clean, coat with epoxy paint.
Cracked Window/Door/Vent Sealants	21589 LF	Remove and replace failing sealant around windows, vertical vent openings, and doors.
Loose or Broken Brick	26 SF	Remove, replace, reset as needed.
Loose or Cracked Cast Stone	333 SF	Replace or cast-in-place as conditions warrant.
Open Mortar Joints	991 LF	Route and repoint. Remove old caulk, clean, and repoint where appropriate.
Failed Joint Sealant	2008 LF	Remove and replace sealant.
Parapet Cap Joints	184 LF	Remove and replace sealant.
Vertical or diagonal Brick Cracks	118 LF	Route and point cracks.
Salt Damaged Cast Stone	200 SF	Replace broken, smooth other, and seal against salt.
Shelf Angle Repair	100 LF	In addition to collapsing corners, straight runs at a few locations show evidence of shelf angle corrosion. Remove brick, repair, and replace brick including installing weeps.
Collapsing Parapet Corners	4	Corners likely damaged by corroding shelf angle beneath. Restore parapet corner including correcting underlying issues.
Elevation 17 Wood Window	1	Install new aluminum window.

Wash and Seal	Building	Wash surface and seal surface.
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1. Including items listed in table (1), a few significant issues are outlined below:

Figure 1.1 Building 1 Elevation 14 at ED Entrance Cast Stone Facade



Cause appears to be corrosion of underlying structure. Spalling occurs in a 5-point pattern at multiple locations along elevation 14. Replace surface. This may require repair of the underlying structure.

Figure 1.2 Building 1 Elevation 14 Column at ED Entrance



At two locations, the cast stone facing is breaking apart. Repair and replace to restore integrity of system.

Figure 1.3 Building 1 Elevation 30 Northeast Corner



Likely Shelf Angle corrosion underneath is causing brickwork to push outward. Bricks will need to be removed, the shelf angle cleaned up and repaired if needed, and then the bricks replaced with proper wicks. Work is best performed from suspended platform that wraps the corner. Note: this is in vicinity of cellular phone antennae. Bricks in this area appear loose and could fall to the ground. Sealant has failed across this entire elevation.

Figure 1.4 Building 1 Elevation 32 Loading Dock Cast Stone



Cast stone at loading dock by the compactor has fractured and is spalling at multiple points. Repair and replace cast stone. Seal surface to prevent further water damage.

Figure 1.5 Building 1 Elevation 34 Chimney



Likely Shelf Angle corrosion underneath is causing brickwork to push outward. Bricks will need to be removed, the shelf angle cleaned up and repaired if needed, then the bricks replaced with proper weeps. Several locations need re-pointing and failed sealant replaced. Old caulked mortar joints will need caulk removed and be properly pointed. Work will be performed around sign. Roof above also contains cellular antennae.

Figure 1.6 Building 1 Elevation 36 Northwest Corner



Likely Shelf Angle corrosion underneath is causing brickwork to push outward. Bricks will need to be removed, the shelf angle cleaned up and repaired if needed, then the bricks replaced. Work is best performed from suspended platform that wraps the corner. Note: this is in vicinity of cellular phone antennae.

Figure 1.7 Building 1 Elevation 37 Northwest Corner Closeup



Likely Shelf Angle corrosion underneath is causing brickwork to push outward. Bricks will need to be removed, the shelf angle cleaned up and repaired if needed, then the bricks replaced. Work is best performed from suspended platform that wraps the corner.

Figure 1.8 Building 1 Elevation 37 Northeast Corner



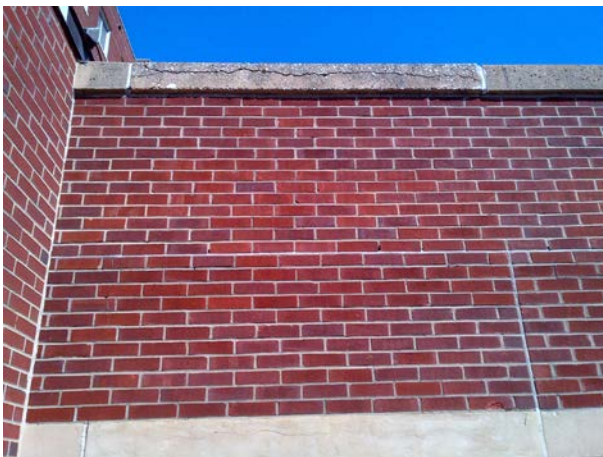
Extensive tuck pointing, sealant replacement, and crack repair is required on elevation 37. Also visible is the chimney which requires similar work on elevation 34.

Figure 1.9 Building 1 Elevation 43 Northeast Corner



Elevation 43 possesses a vertical crack in the northeast corner. Previous repair is requires removal and new repair to be performed.

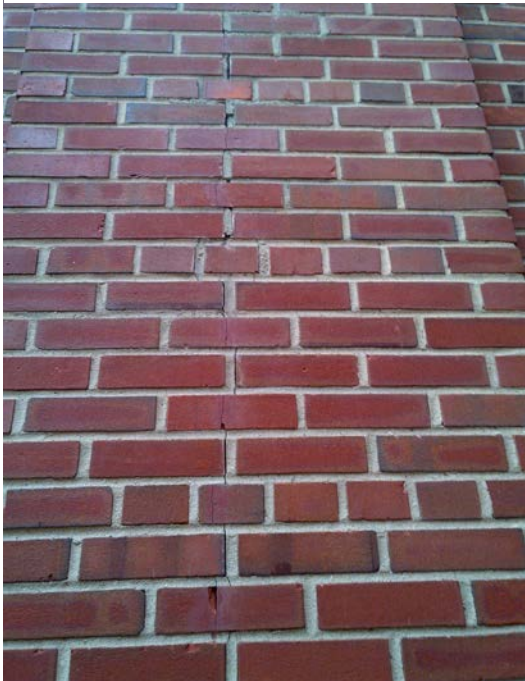
Figure 1.10 Building 1 Elevation 50 West



Elevation 50 possesses a short wall with extensive cast stone damage including parapet stone, cracked brickwork, and failed sealant. Water has infiltrated the interstitial space through cracks in the cast stone and failed mortar and may have caused further damage within the wall. Much of the cast stone that possesses cracks is due to corroding rebar within the casting.



Figure 1.11 Building 1 Column Elevation 45 Outside Maintenance Office



South exterior wall of gym corridor has vertical crack running up along 2 columns. Likely damaged caused by interior mortar collapse or column corrosion. Remove brick, repair column surface as needed, replace brick dovetailing into existing.



Building 1 southeast column - previous column repair initial condition with bricks removed.

Figure 1.12 Building 1 Elevation 49 Cast Stone Façade Salt Damage



Salt damage to lower courses of cast stone exists on elevation 49, 51, and 14. Multiple blocks are cracked and the mortar joints have failed. Salt damage alone constitutes approximately 200 SF.

B. ITEM II, GENERAL CONSTRUCTION: Work includes repair of rusted lintels and sealant around windows, doors, and vertical vent openings; repairing and replacing broken, cracked, or loose brick and cast stone; replacing failed joint and parapet stone sealant; cleaning and sealing heavily stained brick and cast stone; repairing underlying structure at some locations which requires removal and replacement of brick veneer. Work is associated with building 3 and 4. Repairs will be made using methods such as epoxy repair, caulking, tuck pointing, brick-laying, acid

washing, surface preparation, and painting or other standard industry or VA accepted practice as outlined in table below:

TABLE 2. Scope of Work Buildings 3 and 4

Deficiency	Approx. Qty	Suggested Corrective Action
Fenestration: Lintels	315 LF	Remove rust, paint, caulk joints.
Fenestration: Seals	1256 LF	Replace.
Loose / broken Brick	5 SF	Remove and reset or replace.
Loose/cracked stone	4 SF	Remove and replace cracked stone sill with new cast stone. (south lower window)
Open mortar joints	10 LF	Route and repoint.
Failed joint sealant	892 LF	Remove old caulk or mortar and replace with caulk.
Parapet coping cap joints	382 LF	Remove and replace sealant.
Vertical & diagonal brick cracks	25 LF	Route and repoint cracks. Remove white caulked joints and re-point with mortar.
Wash and Seal	Building	Wash surface and seal surface.
Corner Repair	1 corner	Southwest corner bldg-4: remove brick and old caulk filler, repair shelf angle as needed, replace brick and mortar with new weeps, caulk along shelf angle.

Note 2.1. Building 3 & 4 were joined later by a mid-section. This new section does not have parapet stone and has been fabricated correctly with weep ports. Old building 3 to the north and old building 4 to the south were fabricated with two-course trim bricks set on the shelf angle with mortar to stabilize and seal the joint. These old sections have been caulked at multiple locations where mortar has failed. Refer to drawings of details.

Significant areas of concern include: cracked southwest lower corner on building 4, cracks at building 4 lower east corner, cracks on new section on the southeast side, and cracked brickwork northwest corner building 3.

- D. ITEM III, GENERAL CONSTRUCTION: Work includes repair of rusted lintels and sealant around windows, doors, and vertical vent openings; repairing and replacing broken, cracked, or loose brick and cast stone; replacing failed joint and parapet stone sealant; cleaning and sealing heavily

stained brick and cast stone; repairing underlying structure at some locations which requires removal and replacement of brick veneer. Work is associated with building 5. Repairs will be made using methods such as epoxy repair, caulking, tuck pointing, brick-laying, acid washing, surface preparation, and painting or other standard industry or VA accepted practice as outlined in table below:

TABLE 3. Scope of Work Building 5

Deficiency	Approx. Qty	Suggested Corrective Action
Fenestration: Lintels	82 LF	Remove rust, paint, caulk joints.
Fenestration: Seals	292 LF	Replace
Loose Brick	6 SF	Remove and reset
Open mortar joints	500 LF	Route and repoint (Note 5.1)
Failed joint sealant	230 LF	Remove and replace sealant (Note 5.1)
Parapet coping cap joints	76 LF	Remove and replace sealant
Vertical & diagonal brick cracks	27 LF	Route and repoint cracks, excludes corner repair.
Wash and Seal	Building	Wash surface and seal surface.
Corner Repair	1 corner	Refer to figure (3.2): remove brick, repair shelf angle, install new weeps, replace brick.

Note 3.1. Building 5 was constructed prior to weep ports being integrated into brick fascia and relied on mortar set the trim and to seal the joint along the shelf angle. This has resulted in fractures running the perimeter along the shelf angle and at the mortar joint of the trim bricks on the first two courses of brick on the shelf. Trim bricks are to be routed and repointed above and mid-course. Below to be routed, mortar removed, and caulked.

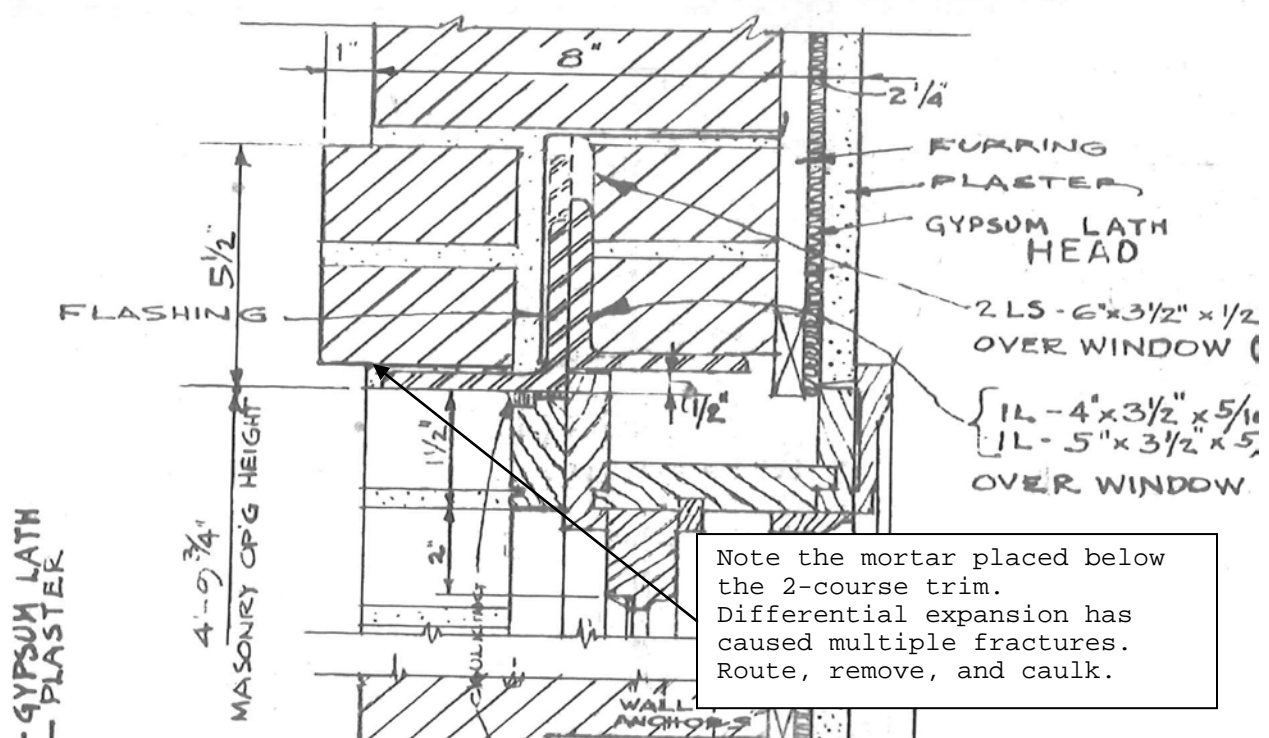
Figure 3.1 Building 5 Northwest Window



Note the trim (two courses of brick) over the windows. This perimeter trim wraps the building. Sections have been repaired with caulk which needs to be removed and the mortar repointed. Other areas of loose mortar need to be routed and repointed. Mortar below needs to be removed and caulked to permit differential expansion.

Other areas of concern include vertical and diagonal cracks at other corners.

Figure 3.2 Building 5 Window Detail



E. ITEM IV, GENERAL CONSTRUCTION: Work includes repair of rusted lintels and sealant around windows, doors, and vertical vent openings; repairing and replacing broken, cracked, or loose brick and cast stone; replacing failed joint and parapet stone sealant; cleaning and sealing heavily stained brick and cast stone; repairing underlying structure at some locations which requires removal and replacement of brick veneer. Work is associated with buildings 6. Repairs will be made using methods such as epoxy repair, caulking, tuck pointing, brick-laying, acid washing, surface preparation, and painting or other standard industry or VA accepted practice as outlined in table below:

TABLE 4. Scope of Work Building 6

Deficiency	Approx. Qty	Suggested Corrective Action
Rusty Lintels	130 LF	Wire brush and/or sand blast clean, coat with epoxy paint.
Cracked Window/Door/Vent Sealants	228 LF	Remove and replace failing sealant around windows, vertical vent openings, and doors.
Loose or broken Brick	15 SF	Remove and reset or replace
Open mortar joints	10 LF	Route and repoint
Failed joint sealant	314 LF	Remove mortar and/or sealant and replace sealant along shelf angle. (Note 4.1)
Parapet coping cap joints	82 LF	Remove and replace sealant
Vertical & diagonal brick cracks	20 LF	Route and repoint cracks, excludes corner repair.
Wash and Seal	Building	Wash surface and seal surface.
Corner Repair	4 corners	Refer to pictures: remove brick, repair shelf angle, install new weeps, replace brick.

Note 4.1. Building 6 was constructed prior to weep ports being integrated into brick fascia and relied on mortar to seal the joint along the shelf angle. Remove mortar or caulk along shelf angle and caulk joint. Install tube weep ports every 18".

Building 6, all four corners are damaged above shelf angle, likely cause is corroded shelf angle. Remove corners, clean and repair damaged shelf angle, replace brickwork with new weeps and dovetail into existing. Shelf angle is anchored to substructure, refer to drawing.

Additional key areas of concern for BLDG-6 include: East wall caulked mortar joint on high section, Broken and damaged bricks by the shop entry door and by an exterior electrical J-Box, broken and cracked bricks on east wall by 3 windows, and vertical and diagonal cracks on the east wall. While not encompassing a large area, this will require the bricks to be removed and replaced. Replacement bricks to be dovetailed into existing.

Figure 4.1 BLDG-6 Existing Shelf Angle Drawing

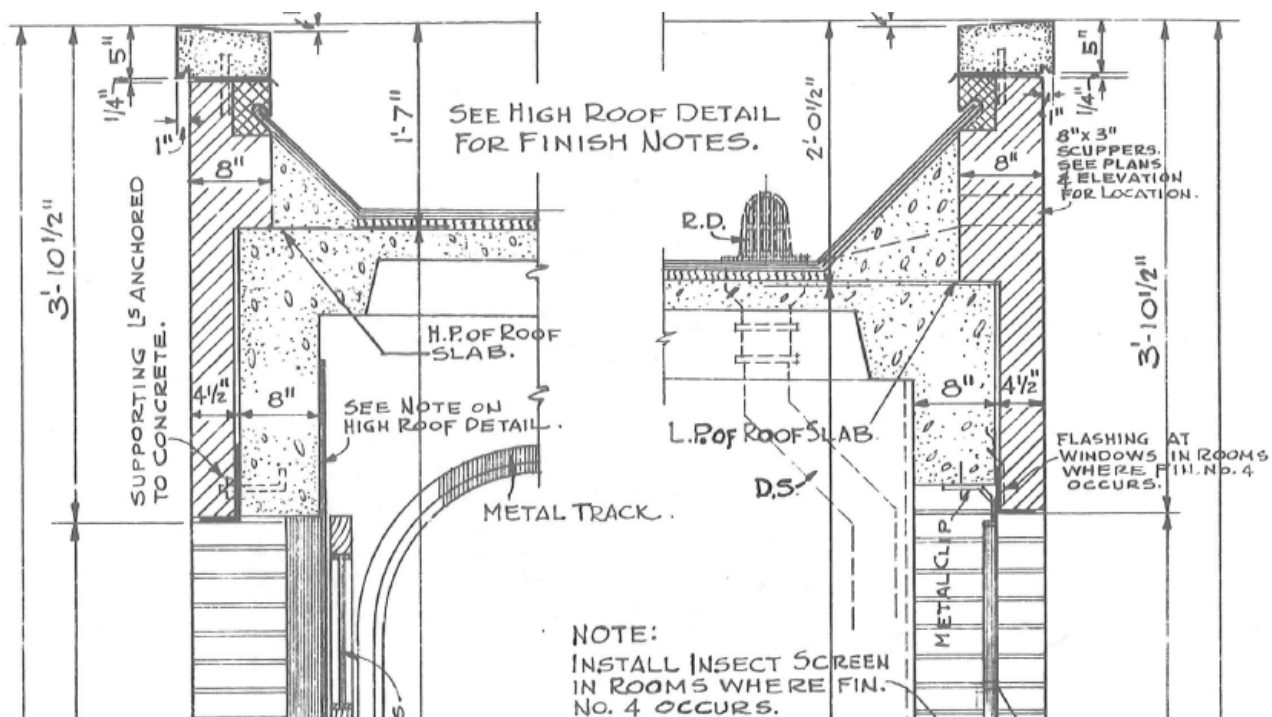


Figure 4.2 BLDG-6 Corners

BLDG-6 Northeast Corner

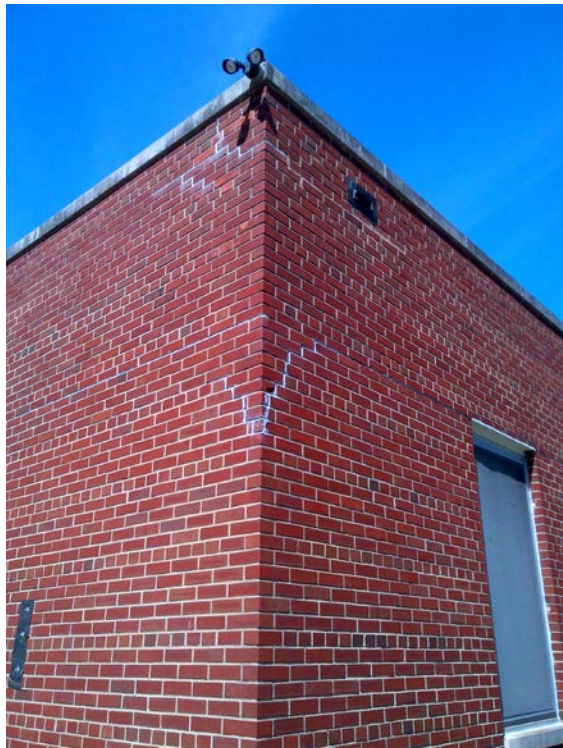


Corners breaking away from structure likely caused by corroded shelf angle. Remove brick, repair, replace brick.

BLDG-6 Northwest Corner



BLDG-6 Southeast Corner



BLDG-6 Southwest Corner



F. Instruction to Bidders.

1. Each alternate deduction of work provides for the subtraction of direct labor and material costs as well as any indirect costs associated with the alternate deduction of work estimate. The IGCE includes all direct costs associated with this project to include mobilization, equipment usage, construction management services and other related general conditions which are to be in accordance with all appropriate State and Local regulations. Offer Items are as follows:
 - a. Base Offer: The contractor shall furnish all equipment, materials, labor, supervision, and quality control to perform all work listed as Items I through IV for VA Project #603-15-102 "Correct Façade Deficiencies, Phase 2" at the Robley Rex VA Medical Center, Louisville, KY, in accordance with the information as described in the Statement of Work, attached specifications, and PDF drawings. Work includes, but is not limited to, repair of rusted lintels and sealant around windows, doors, and vertical vent openings; repairing and replacing broken, cracked, or loose brick and cast stones including some parapet stones; replacing failed joint and parapet stone sealant; cleaning and sealing heavily stained brick and cast stone; repairing underlying structure at some locations which requires removal and replacement of brick veneer. Repairs will be made using methods such as epoxy repair, caulking, tuck pointing, brick-laying, acid washing, surface preparation, and painting or other standard industry or VA accepted practice. The construction time allocated for completion of the work is 400 calendar days. Work on all buildings is assumed to be performed on each one concurrent with up to three drops proceeding at the same time.
 - b. ALTERNATE #1: Work for Alternate #1 is the same as the Base Offer, except for Deducts specified as Alternate #1, which includes: Remove all associated with washing and sealing the building façade for each building contained in items I through IV. The construction time allocated for completion of the work is 380 Calendar Days.
 - c. ALTERNATE #2: Work for Alternate #2 is the same as the Base Offer and includes Alternate #1, except for Deducts specified as Alternate #2, which Includes: Omit all work associated with

Buildings 3 & 4, listed as Item II. The construction time allocated for completion of the work remains 380 Calendar Days as this item is assumed to be concurrent with the work associated with Item I.

2. Quoted price shall be broken down by Item Number (Building).

1.3 SPECIFICATIONS AND DRAWINGS FOR CONTRACTOR

- A. 01 33 23: SHOP DRAWINGS, PRODUCT DATA, and SAMPLES. This work will require written submittals to be approved prior to use. AutoCAD Drawings are not part of this, however, shop drawings or marked up scans are to be handled as drawings, maintained, and submitted to the COR at completion of the project.
- B. 01 74 19: CONSTRUCTION WASTE MANAGEMENT. Refer to spec for details. Brick shall be reused when possible. Records of waste disposal, salvaged, and recycled will be submitted to the COR upon completion of the project.
- C. 04 01 40: RESTORATION IN HISTORIC STRUCTURES. While none of the buildings are listed on a historical register, they are to be maintained as such. Refer to specification for details.
- D. 04 05 13: MASONRY MORTARING. Mortar used shall match existing color. Refer to specification for details.
- E. 04 05 16: MASONRY GROUTING. Refer to specification for details.
- F. 04 05 31: MASONRY TUCKPOINTING. In addition to typical cracked or open mortar joints, multiple locations have sanded caulk substituted for grout. These joints are to be dug out and the joints properly pointed in accordance with the specification.
- G. 04 20 00: UNIT MASONRY. No new construction is being performed, thus standard demonstration panel is not required. All other submittals are to comply with the specification.
- H. 04 72 00: CAST STONE MASONRY. Cast stones used throughout the project vary in dimensions. Each will require field measurements prior to fabrication.
- I. 07 92 00: JOINT SEALANTS. Refer to specification for details.
- J. 09 91 00: PAINTING. Refer to specification for details. Painting is required for multiple surface types: wood, steel, corroded galvanized

steel. Do not paint anodized aluminum surfaces or galvanized surfaces that have not corroded.

1.4 CONSTRUCTION SECURITY REQUIREMENTS

A. Security Plan:

1. The security plan defines both physical and administrative security procedures that will remain effective for the entire duration of the project.
2. The General Contractor is responsible for assuring that all sub-contractors working on the project and their employees also comply with these regulations.

B. Security Procedures:

1. General Contractor's employees shall not enter the project site without appropriate badge. They may also be subject to inspection of their personal effects when entering or leaving the project site.
2. For working outside the "regular hours" as defined in the contract, The General Contractor shall give 3 days notice to the COR so that security 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 other than as defined in this spec.
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.

C. Key Control:

1. 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 and take any emergency action.

D. 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.
 - c. This project is not expected to have sensitive information.

F. Motor Vehicle Restrictions

1. Vehicles shall be parked in the back of Lot 6 except for loading and unloading. Carpooling from the Mellwood Parking Lot is strongly encouraged to minimize impact on patients.
2. Access to the loading dock shall be restricted to picking up and dropping off materials and supplies and must be coordinated with the Warehouse Supervisor.

1.5 FIRE SAFETY

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

1. American Society for Testing and Materials (ASTM):
 - E84-2009.....Surface Burning Characteristics of Building Materials
2. National Fire Protection Association (NFPA):
 - 10-2010.....Standard for Portable Fire Extinguishers
 - 30-2008.....Flammable and Combustible Liquids Code
 - 51B-2009.....Standard for Fire Prevention During Welding, Cutting and Other Hot Work

70-2011.....National Electrical Code

241-2009.....Standard for Safeguarding Construction,
Alteration, and Demolition Operations

3. Occupational Safety and Health Administration (OSHA):

29 CFR 1926.....Safety and Health Regulations for Construction

- B. Fire Safety Plan: Establish and maintain a fire protection program in accordance with 29 CFR 1926. Prior to start of work, prepare a plan detailing project-specific fire safety measures, including periodic status reports, and submit to COR and Facility Safety Manager for review for compliance with contract requirements in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES Prior to any worker for the contractor or subcontractors beginning work, they shall undergo a safety briefing provided by the general contractor's competent person per OSHA requirements. This briefing shall include information on the construction limits, VAMC safety guidelines, means of egress, break areas, work hours, locations of restrooms, use of VAMC equipment, etc. Documentation shall be provided to the COR that individuals have undergone contractor's safety briefing.
- C. Site and Building Access: Maintain free and unobstructed access to facility emergency services and for fire, police and other emergency response forces in accordance with NFPA 241.
- D. Separate temporary facilities, such as trailers, storage sheds, and dumpsters, from existing buildings and new construction by distances in accordance with NFPA 241. For small facilities with less than 6 m (20 feet) exposing overall length, separate by 3m (10 feet).
- E. Temporary Heating and Electrical: Install, use and maintain installations in accordance with 29 CFR 1926, NFPA 241 and NFPA 70.
- F. Means of Egress: Do not block exiting for occupied buildings, including paths from exits to roads. Minimize disruptions and coordinate with COR and facility Safety Manager.
- G. Egress Routes for Construction Workers: Maintain free and unobstructed egress. Inspect daily. Report findings and corrective actions weekly to COR and facility Safety Manager.
- H. Fire Extinguishers: Provide and maintain extinguishers in construction areas and temporary storage areas in accordance with 29 CFR 1926, NFPA 241 and NFPA 10.
- I. Flammable and Combustible Liquids: Store, dispense and use liquids in accordance with 29 CFR 1926, NFPA 241 and NFPA 30.
- J. Existing Fire Protection: Do not impair automatic sprinklers, smoke and heat detection, and fire alarm systems, except for portions immediately under construction, and temporarily for connections. Provide fire watch

for impairments more than 4 hours in a 24-hour period. Request interruptions in accordance with Article, OPERATIONS AND STORAGE AREAS, and coordinate with COR and facility Safety Manager.

- K. Hot Work: Perform and safeguard hot work operations in accordance with NFPA 241 and NFPA 51B. Coordinate with COR. Obtain permits from facility Safety Manager at least 24 hours in advance.
- L. Fire Hazard Prevention and Safety Inspections: Inspect entire construction areas weekly. Coordinate with, and report findings and corrective actions weekly to COR and facility Safety Manager.
- M. Smoking: Smoking is prohibited except in designated smoking rest areas.
- N. Dispose of waste and debris in accordance with NFPA 241. Remove from buildings daily.
- O. Perform other construction, alteration and demolition operations in accordance with 29 CFR 1926.
- P. If required, submit documentation to the Contracting Officer's Representative that personnel have been trained in the fire safety aspects of working in areas with impaired structural or compartmentalization features.

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.

- D. Working space and space available for storing materials shall be as determined by the COR.
- E. Workmen are subject to rules of Medical Center applicable to their conduct. 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.
- F. 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. Dust producing evolutions shall be limited and dust contained when possible. HVAC inlets shall be covered with additional filter media when producing dust in vicinity of an intake.
- G. Phasing: To insure such executions, Contractor shall furnish the COR with a schedule of approximate 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 dates to insure accomplishment of this work in successive phases mutually agreeable to COR and Contractor.
- H. 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. Coordinate

alteration work in areas occupied by Department of Veterans Affairs so that Medical Center operations will continue during the construction period. This is of particular importance when working over the Emergency Department access.

- I. 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.
 - 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.
 - 2. Contractor shall submit a request to interrupt any such services to COR, in writing, 48 hours in advance of proposed interruption. Request shall state reason, date, exact time of, and approximate duration of such interruption.
 - 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 must be requested, in writing, at least 15 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.
- J. 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.
- K. 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 Contracting Officer's Representative.
- B. Any items required to be either reused or relocated or both, found during this survey to be nonexistent, or in opinion of Contracting Officer's Representative 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.

1.8 INFECTION PREVENTION MEASURES

- A. Implement the requirements of VAMC's Infection Control Risk Assessment (ICRA) team. ICRA Group may monitor dust in the vicinity of the construction work and require the Contractor to take corrective action immediately if the safe levels are exceeded.
- B. Establish and maintain a dust control program as part of the contractor's infection preventive measures in accordance with the guidelines provided by ICRA Group. Prior to start of work, prepare a plan detailing project-specific dust protection measures, including periodic status reports, and submit to COR and Facility ICRA team for review for compliance with contract requirements in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.
 - 1. All personnel involved in the construction or renovation activity shall be educated and trained in infection prevention measures established by the medical center.
- C. Medical center Infection Control personnel shall monitor for airborne disease (e.g. aspergillosis) as appropriate during construction. A baseline of conditions may be established by the medical center prior to the start of work and periodically during the construction stage to determine impact of construction activities on indoor air quality. In addition:
 - 1. The COR and VAMC Infection Control personnel shall review pressure differential monitoring documentation to verify that pressure differentials in the construction zone and in the patient-care rooms are appropriate for their settings. The requirement for negative air pressure in the construction zone shall depend on the location and type of activity. Upon notification, the contractor shall implement corrective measures to restore proper pressure differentials as needed.
 - 2. In case of any problem, the medical center, along with assistance from the contractor, shall conduct an environmental assessment to find and eliminate the source.
- D. In general, following preventive measures shall be adopted during construction to keep down dust and prevent mold.
 - 1. Dampen debris to keep down dust and provide temporary construction partitions in existing structures where directed by COR. Blank off

ducts and diffusers to prevent circulation of dust into occupied areas during construction.

2. Do not perform dust producing tasks within occupied areas without the approval of the COR.

E. Final Cleanup:

1. Upon completion of project, or as work progresses, remove all construction debris.

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 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.

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 workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.
- 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.

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

1.11 AS-BUILT DRAWINGS

- A. The contractor shall maintain an inventory of production per building and per drop on site to record progress.
- B. Shop drawings created during the project shall be maintained and submitted to the COR at completion of the project.

1.12 USE OF ROADWAYS

- A. For hauling, use only established public roads and roads on Medical Center property. When necessary to cross curbing, sidewalks, or similar construction, they must be protected by well-constructed bridges.

1.13 TEMPORARY USE OF EXISTING ELEVATORS

- A. Use of existing elevator 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. S-6 in Building No. 1. 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.

1.14 TEMPORARY TOILETS

- A. Provide where directed, (for use of all Contractor's workmen) ample temporary sanitary toilet accommodations with suitable dry closets. 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.
- B. Contractor personnel may use station public restrooms. However, any abuse will result in the loss of this privilege.

1.15 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 satisfactory to the Contracting Officer, shall install and maintain all necessary temporary connections and distribution lines, and all meters required to measure the amount of electricity used for the purpose of determining charges. Before final acceptance of the work by the Government, the Contractor shall remove all the temporary connections, distribution lines, meters, and associated paraphernalia.
- C. 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.
- D. Water (for Construction and Testing): Furnish temporary water service.
 - 1. Obtain water by connecting to the Medical Center water distribution system. Provide reduced pressure backflow preventer at each connection. Water is available at no cost to the Contractor.
 - 2. Maintain connections, pipe, fittings and fixtures and conserve water-use so none is wasted. Failure to stop leakage or other wastes will be cause for revocation (at COR's discretion) of use of water from Medical Center's system.

1.16 GOVERNMENT-FURNISHED PROPERTY

A. The Government will not be furnishing equipment for this project.

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