5. PROJECT NUMBER (if applicable)

CODE

7. ADMINISTERED BY

2. AMENDMENT/MODIFICATION NUMBER

CODE

6. ISSUED BY

8. NAME AND ADDRESS OF CONTRACTOR

4. REQUISITION/PURCHASE REQ. NUMBER

3. EFFECTIVE DATE

9A. AMENDMENT OF SOLICITATION NUMBER

9B. DATED

PAGE OF PAGES

10A. MODIFICATION OF CONTRACT/ORDER NUMBER

10B. DATED

BPA NO.

1. CONTRACT ID CODE

FACILITY CODE

CODE

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers

**E. IMPORTANT:**

is extended,

(a) By completing Items 8 and 15, and returning \_\_\_\_\_\_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the

offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR

ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY

is not extended.

12. ACCOUNTING AND APPROPRIATION DATA

(REV. 11/2016)

is required to sign this document and return \_\_\_\_\_\_\_\_\_\_\_ copies to the issuing office.

is not,

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

15C. DATE SIGNED

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES

SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter

or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to

the opening hour and date specified.

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER

Contractor

16C. DATE SIGNED

14. DESCRIPTION OF AMENDMENT/MODIFICATION

16B. UNITED STATES OF AMERICA

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER

16A. NAME AND TITLE OF CONTRACTING OFFICER

15B. CONTRACTOR/OFFEROR

STANDARD FORM 30

PREVIOUS EDITION NOT USABLE

Prescribed by GSA - FAR (48 CFR) 53.243

(Type or print)

(Type or print)

(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

(Number, street, county, State and ZIP Code)

(If other than Item 6)

(Specify type of modification and authority)

(such as changes in paying office, appropriation date, etc.)

(If required)

(SEE ITEM 11)

(SEE ITEM 13)

(X)

CHECK

ONE

**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS,**

**IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

**AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT**

(Signature of person authorized to sign)

(Signature of Contracting Officer)

1

15

0002

613-23-115

Department of Veterans Affairs

Martinsburg, VA Medical Center

Contracting Office (90C)

510 Butler Avenue

Martinsburg WV 25401-5341

Department of Veterans Affairs

Martinsburg, VAMC

Contracting Office (90C)

510 Butler Avenue

Martinsburg WV 25401-5341

To all Offerors/Bidders

36C24523B0001

12-28-2023

X

x

X

1

x

1

Solicitation 36C24522B0001 - Renovate Building 405B at Martinsburg, WV

Additional descriptive drawings and specifications are enclosed, for a HOPTEL.

This Amendment includes the RFIs that were received and the VA's responses to those RFIs.

All other terms and conditions remain the same.

Laura Tawzer

Contracting Officer

See attached document: S02 405B Roof Flashing for Martinsburg HOPTEL.

405B Renovations

01/18/2023

Plan Notes

on Sheet S103

PLAN NOTES,

I. SEE ARCHITECTURAL DRAWINGS FOR EXISTING BUILDING DIMENSIONS AND ELEVATIONS NOT SHOWN.

2. SEE DETAIL 1/S502 FOR TYPICAL EXISTING ROOF TRUSS REPAIR DETAIL.

3. ALL DAMAGED AND/OR DETERIORATED EXISTING ROOF TRUSS MEMBERS SHALL BE REPLACED WITH 2x6 FRAMING. BASIS OF BID IS (6) BROKEN OR CRACKED 5/8” x 5” TRUSS WEB MEMBERS, ONE (1) CRACKED 2''x6" TRUSS WEB MEMBER, AND ONE (1) CRACKED TRUSS TOP CHORD MEMBER. CONNECTIONS FOR REPLACEMENT FRAMING SHALL BE PER THE CONNECTION DETAILS ON SHEET S502.

4. PROVIDE TWO (2) L 3-1/2 X 3 X 5/16 LLBB GALVANIZED LINTEL AT MECHANICAL OPENINGS FROM 9" TO 2'-6" WIDE TO SUPPORT EXISTING (E) TERRACOTTA AND FACE BRICK WALL. PROVIDE 4" MIN BEARING AT EACH END OF THE LINTEL. REBUILD MASONRY WALL ABOVE LINTEL. MATCH EXISTING MORTAR.

5. PROVIDE HEADERS IN LIGHT GAGE WALLS PER 9/S502 FOR MECHANICAL AND WINDOW OPENINGS FROM 1'-4" TO 2'-6" WIDE.

6. SEE ARCHITECTURAL DRAWINGS FOR TRUSS BEARING ELEVATION

7. PORCH ROOF SHEATHING SHALL BE 1/2" THICK PLYWOOD.

405B Hoptel RFIs

01/17/2023

1. During Pre-Bid meeting of 1/11/2023, It was stated by DVA representation that solar and radiant flooring had been deleted from the project but remains in the drawings. Please confirm these items have been deleted from the project. Yes, they were REMOVED.
2. Can DVA supply information on where the laydown/staging area and contractor parking will be located for the building 405B project. Half the yard between 405B and 403B and half the yard between 405B and 407B can be used for laydown, port-a-jon, and dumpster. They must be secured with locked fencing.
3. During the Pre-bid meeting on 1/11/2023, it was acknowledged that room 405B-2 of drawing AD100 has video and sound booth equipment existing not provided on demolition drawing AD100. Can you provide updated demolition drawings for this equipment room…. NO. The changes have been minor. The VA will remove all sound equipment in the audio room.
4. According to notes 1&2 of drawing G001, all drawings were for building codes in 2013. Will Department of Veterans Affairs be supplying updated drawings to meet code? ….NO. The contractors and subcontractors are responsible for construction to current codes at the date of bid solicitation.
5. I was thinking that the Site Visit for this Project was scheduled for Thursday. We are very interested in bidding work at the VA Martinsburg Facility. Is there any possible way I could get a quick look at the project area tomorrow morning? Site visits are completed.
6. I am contacting you about Project # 613-23-115 for the renovation of building 405B in Martinsburg Wv. The drawings available on the SAMS website for RFP do not include plumbing, mechanical or fire protection. Are these drawings available? Subsequently issued. Contractors should have all pertinent documents now.
7. After going through and reviewing the project we noticed there are no mechanical, fire protection and plumbing drawings posted on SAM. Please advise. See above item 6.
8. I was looking at the bid documents for Building 405B renovations and noticed that there were no plumbing or mechanical drawings in the downloaded files but they were listed on the cover page drawing. If you would please update the bid documents to include them. See above item 6.
9. The drawings are dated 5-31-2013 are they up to the most current Plumbing and HVAC codes since they are almost 10 years old? See above item 4.
10. Drawing MH-104 and MH-105 show Solar Panels, radiant flooring along with all the solar equipment and piping. During the pre-bid yesterday, it was stated that there were no solar or radiant systems on this project. Please clarify?... TRUE. Look at the changes made to the documents.
11. On Drawing MH-105 is also call out Deduct #3 and Deduct #4 in the details of the drawing but there is no detail or reference to those on the solicitation sheet. The solicitation sheet shows 3 deduct alternates and none of them state anything about solar panels or radiant flooring. Please Clarify? See item 1 above.
12. On PL-401 there is a Solar Domestic WH on the schedule. Is that needed? See item 1 above.
13. Spec Section 23 09 23 DDC Controls states that the building system just needs to tie-into the existing Johnson Control System, does the equipment in the building doesn’t have to be Johnson as long as it can integrate with the Johnson Control System? Please Clarify? Johnson Controls is required. JCI maintains the system.
14. Depending on the answers from the questions I have asked about the solar and radiant systems, I would also like to ask for a bid date extension. See item 1 above.
15. We don’t see where the limits of construction around the building has been determined that would help us determine the following See item 2 above.

a. Location of Dumpster

b. Location of port-a-john

c. Need for temporary fencing

d. Will GC be allowed to block-off parking in front of building NO. There is no reserved parking.

e. Will the VA be provide an Erosion Control Plan …NO. Contractor is responsible for construction erosion control and any needed permits.

1. Mechanical room 405B-3 indicates a 36”x36” access panel. Section 08 31 13 doesn’t provide a specification for this access panel. Can you provide a basis of design for this item? Equal to Bilco 36x36 J-4AL.
2. Section 10 14 00-2.1.A is noted to provide signs as shown on the construction documents. There is no sign schedule on the documents, please advise as to how to procced. Signs, like room numbers, etc. may not be included if they are not shown on the drawings. However, there are temporary signs needed for construction.
3. Section 10 14 00 also includes several different sign types that are not project specific and provide no location as to where these signs are to be installed and several signs provide no information as to the amount required for sign. Please provide direction as how we are proceeding. See number 17 above.
4. Detail 10/A600 is calling for a 36”x36” floor access panel rated at 330PSF. Section 08 31 13 does not provide a specification for this item. Can you please provided a basis of design for the access panel since we are finding panels rated to 300PSF not 330PSF as indicated on the drawings. See number 16 above. 300PSF will be acceptable.
5. Drawings indicate Shower Rod and Curtain the project spec has no requirement for Shower Curtains if shower curtains are required, please provide a spec. The contractor should provide and install the shower rods and the VA will provide and install the shower curtains.
6. The hardware sets 1,2,3,4,5,6,7,8,9 and 11 listed on sheet A600 or not listed in spec section 08 71 00. See attached 087100 - Door Hardware – 100 which has the hardware sets consistent with the drawing.
7. Section 07 21 13.1 is a submittal rather then a specification is the product considerd a sole source or are we allow to use the product that is specified in section 07 21 13 -2.2.B and 2.2.C and 2.4 07 21 13 – 2.4 should be followed. The submittal is for reference purposes only. Acceptable products should be equal to or better.
8. Sheet S101 is noting new shear wall as PT but note 4 on the same page states all new wood shall be FR. Please provide clarification as to what needs to be PT and what needs to be FR. Exterior Fire Retardant Treated Wood should be used in the crawl space. FR wood in all other interior locations.
9. Sheet S103 plan notes 1 – 5 are not on the drawing. See attached 405B Renovations Plan Notes S103 with the notes from that sheet with some clarifications by the VA.
10. Plumbing Drawings show the shower as P-601 and P-602. Section 22 40 00 indicates P-601 as a built in shower. Arch drawings the shower as a CT shower constructed in the field. Please what type of showers are correct. Architectural drawings show that the showers are built in.
11. Spec Section 22 40 00 does not have fixture P-602. Please provide Spec. A mistake is made on the plumbing drawing. The ADA shower in room 405B-4A is built-in. P-601 Shower Built-in is intended for all the showers. Use that fixture type for all the showers.
12. Detail 6/A100 provides a floor detail at carpet. Please provide a floor detail for all other floor finishes. Look at 3/A600, 4/A600, and 5/A600. The detail will be the same, just different finishes.
13. On sheet A150 there is note to new 5/8” roof sheathing. Please confirm this plywood will be an overlay of the existing roof sheathing. It will be an overlay of the existing roof sheathing.
14. Sheet AI100 indicated LVT but there is no specific for laminates vinyl tile. Please provide a spec for LVT. It is in the VA more recent specification for 09 65 19:

2.5 LUXURY VINYL TILE:

A. Basis of Design: Section 09 06 00, SCHEDULE FOR FINISHES.

B. ASTM F1700, Class III, Printed Film Vinyl Tile, Type B.

C. Thickness: 40 mil (1/8 inch).

D. Size: As indicated in Section 09 06 00, SCHEDULE FOR FINISHES

E. Provide products with recycled content with not less than 30 percent.

F. Chemical Resistance: ASTM F925; pass.

1. Sheet AI100 the Floor Finishes Legend and the Finish Legend has no specified carpet, but will the bedrooms are indicated as carpet on Finish Tag Legend. Please provide a carpet selection. Please look in section 09 06 00 Schedule for Finishes.
2. Sheet AI100 room 13 is indicating carpet on the Finish Tag but the marking is indicated LVT 3 please confirm the floor finish type. See 30 above.
3. Please provide the limits of the roof replacement. Line of west side of east corridor wall.
4. Please provide a detail between existing asphalt shingles and new roof. See attached sketch 405B Roof Flashing.
5. On Sheet A300 please provide clarification on Base Bid items 1,2 and 3 in regard to the required scope regarding the solar and radiant flooring items…. See 1 above.
6. Detail 3/s503 at the Stairs indicates a VOID underneath the steps and platform. Please confirm if it acceptable to fill this void with #57 Stone. …YES. Compacted stone.
7. On drawing ES001 under communication cable system design Note 5 states “All cables shall be home runs from each workstation area to the designated communications room” please provide location of the communication room as it is not indicated on the drawings. The nearest Network Closet to 405B would be the one in 403A. Allow approx. 100’ from 405B.
8. Please confirm that the fixture added by Alternate 3 is the H fixture and the drawings are only adding two fixtures. Solar Tubes, fixture H, are REMOVED by Alternate #3.
9. On drawing ES202 Fire Alarm Note 1 does not provide clear direction as to where the FA needs to tie-in to the existing system. Please provide direction as to what panel should be utilized or provided a distance that should be included in the bid. Panel 11 in the corridor south before bldg. 407. Approximately 150’ of run. The building is already tied in.
10. Mechanical room 405-3 on sheet ES202 does not indicate any power for DWH-1 which is indicated on the mechanical drawings MH102. Looks like there is power to the electric H.W. heater. May be DWH-1 is mislabeled EWH1.
11. On sheet MH101 Special note 2 calls for an existing radiator to be relocated per drawing MH102. Sheet MH102 provides no location of the relocated heater. Please provide a location. Remove all existing radiators.
12. Sheet PL401 calls for two DWH-1 Solar Domestic and Domestic water heater sheet PL102 only indicates one. Please clarify. Only one H.W. heater. Solar is removed from the project.
13. Sheet MH201 calls for two EWH-1 Solar Domestic and Domestic water heater sheet MH102 only indicates one. Please clarify. See 41 above.
14. On Drawing MH 301 Variable Refrigerant Fan Coil Unit Installation detail calls for an auxiliary drain pans under the fcu’s in the crawl space is that correct? Will there be a need for drain piping from them run to somewhere or will the condensate that may happen just evaporate? Drain pans are not needed in the crawl space.
15. The asbestos test report (PDF file page 7 of 18) shows the following note: “\*BEC advises that access to the roof was not available during the time of the inspection; therefore BEC was unable to sample any suspect material. As such, BEC advises this material shall be presumed asbestos containing until samples can be collected of the material.” Drawing A150 shows to demo the existing asphalt shingles and replace with a metal roof. Is the contractor expected to carry the cost of removing and disposing of the existing roof as an ACM product or provide testing on the suspected material and address a positive test result with a change order for removal and disposal of the ACM product? Disregard this note about assuming the existing roofing to containing ACM. We have not yet found any asphalt shingles or building paper to contain ACM. Sample can be taken by the VA to remove any doubt.
16. The ICRA document identifies this project as a type C, Group 1, Class 2. This class does not call out for construction barriers according to the documents. If construction barriers are required for this project, can a layout for the barriers be provided? Also, would plastic zip-wall barriers be acceptable? The Contractor can take up to half the corridor east side of 405B for a drywall and stud barrier wall. The door shall be a standard door with a hardware set compatible with our VA standard. See the Hardware specs. The VA locksmith will install the 7 pin core. Any laydown or work area outside the building will need to have a temporary chain link fence that is locked. See specification 01 00 00.
17. There is a specification for signage 10-14-00 (interior and exterior). Can a schedule be provided that identifies types and quantities for bidding purposes? See 17 above.
18. There is a specification for toilet accessories 10-28-00. Can a schedule be provided that identifies types (basis of design) and quantities for bidding purposes? NO. Do the best you can with the drawings and specs. We do not normally list manufacturers.
19. There is a specification for residential appliances 11-31-00. Can a schedule be provided that identifies types (basis of design specifically for oven range, refrigerator, and clothes washer and dryer) and quantities for bidding purposes? The VA will furnish and install all those items when the construction is complete.
20. There is a finish schedule provided on drawing AI100, however the drawings are dated from 2013 with no identification that this schedule was updated with the revision from the VA dated 2019. Can an updated finish schedule be provided to ensure product availability prior to bid? NO. Provide commercial products similar to those specified.
21. Drawing S101 calls for all wood to be fire rated, but the shear wall framing states to use 2 x 6 pressure treated wood 16” O.C. Is the shear wall framing wood to be pressure treated or fire rated as it cannot be both? See 23 above.
22. Drawing A100 Note 6 shows a floor detail @ carpet that looks to be building the floor up from existing subflooring with ¾ APA listed plywood underlayment with sanded face. Then 3/8” then a final layer of ½”. There is no carpet shown on the finish schedule. Is the contractor expected to build up the existing subfloor for other floor finishes on this project? If so, can a detail be provided for this? That detail contains mistakes. Overlay the existing floor sheathing with ¾” plywood. The original finish flooring is ¾’ T&G wood flooring. On the new plywood install ¼” underlayment, then the finish flooring. There should only be a minor transition from the new flooring with finish to the corridor on the west end of the building.
23. Drawing A300 shows an alternate #5, however there is no alternate #5 listed on the drawing. Can you please advise what the intent is on this description? There are only 3 alternates. See the notes on A300.
24. Drawing A600 has a window schedule that identifies the windows to be single hung. Can a basis of design be provided for these windows? Use the Aluminum Window spec.
25. Specification 01-00-00-1.6.I states “I. Construction Fence: 1. Before construction operations begin, Contractor shall provide a chain link construction fence, 2.1m (seven feet) minimum height, around the construction area indicated on the drawings. The drawings do not depict fencing. Is construction fencing required for this project? If so, can a layout be provided? See above references to laydown area and fencing.
26. The drawings only depict work on 405B. When painting on the exterior, does the whole building get painted or only on 405B? Just 405B. In the corridor, just the 405B side.
27. Specification section 01-00-00-1.9.D states “A National Pollutant Discharge Elimination System (NPDES) permit is required for this project. What scope of work on this project requires a NPDES permit as this normally is provided when larger site excavations are performed? Can a project allowance be provided for this item for bidding purposes? If so, what would that amount be for this permit? A storm water management plan and runoff controls will be required for disturbance around the building, but a permit will not be required.
28. The project work area was occupied during the pre-bid walk thru. Will the complete area of 405B be vacated during construction? All of 405B will be unoccupied, and any equipment the VA wishes to retain will be removed by the time the building is turned over to the Contractor.
29. Specification 01-00-00-1.15 states: “A joint 4 month and 9-month warranty inspection will be conducted, measured from time of acceptance, by the Contactor and the Contracting Officer.” Who will be required to participate in these inspections (i.e. subcontractors, vendors, etc.)? Just the Contractor representative(s), COR, CO, possibly a staff member representing the occupant, and any other interested VA staff member (shop, F.D., BioMed, etc.).
30. Specification 01-00-00-1.21 states: “Temporary toilets: Provide where directed, (for use of all Contractor's workmen). Are these required for this project? If so, where would they be placed? Provide temporary toilet(s). See above references to laydown area(s).
31. Specification section 01-00-00-38 states: “Contractor shall transmit each submittal to Architect using the submittal exchange website”. And also states “A particular service may be considered if submitted prior to bid date for pre-approval.” Is Procore an acceptable service platform in lieu of Submittal Exchange? Either one is acceptable.
32. Is it the intent of this project to include new fire protection in the crawl space area? YES. And, in the attic area, as well as below the first-floor finished ceiling. It is a dry system.
33. Drawing G002 Scope of work discusses the alternates as well as the base bid. However, there are 3 base bid items listed that are a little confusing as there are other notes in the structural and plumbing drawings.

1. BASE BID: Remove solar domestic water tank and piping connections. Replace with electric domestic hot water tank. Solar panels and storage tank shall remain for radiant floor heating.

2. BASE BID: Remove solar panels, solar storage tank, solar panels and all associated piping for solar connections to radiant floor. Radiant floor will be heated through electric hot water tank.

3. BASE BID: Remove all pex tubing, manifolds, electric storage tank and all associated equipment for radiant floor system. Replace sheathing and underlayment with plywood as required to maintain finish floor elevation.

Can clarification be provided as to what the base bid includes (i.e., no radiant floor (MH-103), no unsheathed stud wall (9-S101/S501), no solar panels (MH-104), no solar electric water heater (per schedule MH201), etc.? Solar collectors and radiant floors were removed from the design.

1. Note 1. On drawing G001 states ‘Designed in 2013 to codes in effect at that time. Any significant changes to a code should be brought to the attention of the COR and the CO.’ We will strive to discover significant changes to the work due to code changes since 2013, however we are not design professionals and cannot be held responsible to find all code changes that will significantly change the scope of work. Can you please advise on how to proceed? See item 4 above.
2. Drawing S101 shows a stem supporting wall in the crawlspace which is designed to carry the load of the radiant heat storage tank. It is our understanding that that storage tank is removed per Base bid note 3 on drawing G001. Can you please confirm if this understanding is correct? Solar and radiant floor removed. If the tank is removed, so is the support for it.
3. Drawing A300, note states to add standing seam roof over new 5/8” sheathing. Is there more detail to the 5/8” plywood? Is it CDX or Exterior grade. Is it 3 ply or 5 ply? What is commonly used in the industry for rood sheathing with some moisture resistance should be acceptable.
4. Drawing No. AD100 a. General Demotion Notes B & C. Seems as though the end of Note B and beginning of Note C run into each other. Could the VA clarify what both notes are intended to state?

IMMEDIATELY WITH SAME MATERIALS AS ADJACENT CONSTRUCTION. MAINTAIN

REQUIRED FIRE-RATING.

C. FURNISH AND INSTALL FULL HEIGHT TEMPORARY CONSTRUCTION BARRIERS

1. SHEET G001 NOTES: 1. Designed in 2013 to codes in effect at that time. Any significant changes to a code should be brought to the attention of the COR and the CO. The noted commented above eludes the VA has not reviewed all local, state and federal, other VA government codes, VA design documents nor every APPLICABLE PUBLICATIONS listed with-in the specification documentation since 2013. Question: Is it accurate to assume after this deign was vetted by the VA in 2013. See item 4 above.
2. Is Microsoft Project professional format an acceptable scheduling program for CPM schedules. YES.
3. Can the SSHO and the Superintendent be the same person? If they can meet the requirements and have a current OSHA 30-hour training card.
4. The exterior signs list the sign locations by number labels. (Location 1, 5, 7, etc). Is there a site map that lists these locations so that we can hopefully determine what surface the signs are being installed into (concrete base mount, in ground soil, etc)? See item 17 above.
5. Is there a sign schedule for the interior signs so that we know how many of each type of sign will be needed? See item 17 above.
6. SheetAD100 refers to all painted surfaces to be assumed to be lead paint. Drywall, metals and woods. Is this correct the entire demolition would be done under lead abatement procedures? A good idea, but it is up to the Contractor to make representations in their Safety Plan.
7. Can the Superintendent carry QC and SSHO responsibilities? See item 69 above.
8. Will there be a laydown or staging area provided for this project? See references to this above.
9. Will contractor be able to place a dumpster next to the building during construction? See references to this above.
10. Will facilities Industrial Hygienist handle air monitoring and clearing locations after abatement is completed or will contractor need to hire a 3rd party to do monitoring and post testing? The VA will be responsible for collecting any samples they think necessary during construction and the final air tests and inspection. The Contractor is responsible to see that the abatement contractor is complying with OSHA in collection of personal samples.
11. Is there a preferred manufacturer for the windows that are to be installed? NO. Just meet the specs.

SECTION 08 71 00
DOOR HARDWARE

PART 1 ‑ GENERAL

1.1 DESCRIPTION

A. Door hardware and related items necessary for complete installation and operation of doors.

1.2 RELATED WORK

A. Caulking: Section 07 92 00 JOINT SEALANTS.

B. Section 08 14 00, WOOD DOORS

C. Section 08 11 13, HOLLOW METAL DOORS AND FRAMES

D. Finishes: Section 09 06 00, SCHEDULE FOR FINISHES.

E. Painting: Section 09 91 00, PAINTING.

1.3 GENERAL

A. All hardware shall comply with UFAS, (Uniform Federal Accessible Standards) unless specified otherwise.

B. Provide rated door hardware assemblies where required by most current version of the International Building Code (IBC).

C. Hardware for Labeled Fire Doors and Exit Doors: Conform to requirements of NFPA 80 for labeled fire doors and to NFPA 101 for exit doors, as well as to other requirements specified. Provide hardware listed by UL, except where heavier materials, large size, or better grades are specified herein under paragraph HARDWARE SETS. In lieu of UL labeling and listing, test reports from a nationally recognized testing agency may be submitted showing that hardware has been tested in accordance with UL test methods and that it conforms to NFPA requirements.

D. Hardware for application on metal and wood doors and frames shall be made to standard templates. Furnish templates to the fabricator of these items in sufficient time so as not to delay the construction.

E. The following items shall be of the same manufacturer, except as otherwise specified:

1. Mortise locksets.

2. Hinges for hollow metal and wood doors.

3. Surface applied overhead door closers.

4. Exit devices.

F. Basis of design. Acceptable manufacturer is Corbin Russwin. Cylinders shall be removable 7 pin IC large format type.

1.4 WARRANTY

A. Subject to the terms of FAR Clause 52.246-21, except that the Warranty period shall be two years in lieu of one year for all items except as noted below:

1. Locks, latchsets, and panic hardware: 5 years.

2. Door closers and continuous hinges: 10 years.

1.5 MAINTENANCE MANUALS

A. In accordance with Section 01 00 00, GENERAL REQUIREMENTS Article titled "INSTRUCTIONS", furnish maintenance manuals and instructions on all door hardware.

1.6 SUBMITTALS

A. Submittals shall be in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES. Submit 6 copies of the schedule per Section 01 33 23. Submit 2 final copies of the final approved schedules to VAMC Locksmith as record copies.

B. Coordination of Submittals: Hardware submittals will be reviewed concurrently with hollow metal doors and frames and wood door submittals. Review will not begin until all submittals have been received and are determined to be complete.

C. Hardware Schedule: Prepare and submit hardware schedule in tabular form that includes the following information:

1. Hardware set number.

2. Doors to receive hardware set.

3. Swing, size, and fire rating of door.

4. Each item of hardware to be provided;

 a. Manufacturer’s name.

 b. Product name and model number.

 c. Finish (ANSI/BHMA designation).

 d. UL mark.

 e. Reference publication type number.

 c. Function (locks, closers, and other operating devices).

 d. Quantity of each item for each door opening.

5. Key control.

D. Samples and Manufacturers' Literature:

1. Samples: All hardware items (proposed for the project) that have not been previously approved by Builders Hardware Manufacturers Association shall be submitted for approval. Tag and mark all items with manufacturer's name, catalog number and project number.

2. Samples are not required for hardware listed in the specifications by manufacturer's catalog number, if the contractor proposes to use the manufacturer's product specified.

3. Submit manufacturer’s literature for each product to be used. Include full description of functional and operational characteristics, compliance with ANSI and BHMA standards, limitations on use, accessories and other pertinent information.

E. Certificate of Compliance and Test Reports: Submit certificates that hardware conforms to the requirements specified herein. Certificates shall be accompanied by copies of reports as referenced. The testing shall have been conducted either in the manufacturer's plant and certified by an independent testing laboratory or conducted in an independent laboratory, within four years of submittal of reports for approval.

1.7 DELIVERY AND MARKING

A. Deliver items of hardware to job site in their original containers, complete with necessary appurtenances including screws, keys, and instructions. Tag one of each different item of hardware and deliver to Contracting Officer for reference purposes. Tag shall identify items by Project Specification number and manufacturer's catalog number. These items shall remain on file in Contracting Officer's office until all other similar items have been installed in project, at which time the Contracting Officer will deliver items on file to Contractor for installation in predetermined locations on the project.

1.8 preinstallation meeting

A. Convene a preinstallation meeting not less than 30 days before start of installation of door hardware. Require attendance of parties directly affecting work of this section, including Contractor and Installer, Architect, VA Project Engineer and Locksmith, and Hardware Manufacturer’s Representative. Review the following:

1. Inspection of door hardware.

2. Job and surface readiness.

3. Coordination with other work.

4. Protection of hardware surfaces.

5. Substrate surface protection.

6. Installation.

7. Adjusting.

8. Repair.

9. Field quality control.

10. Cleaning.

1.9 INSTRUCTIONS

A. Hardware Set Symbols on Drawings: They refer to Hardware Sets in the Hardware Schedule at the end of this Section.

B. Keying: All cylinders shall be keyed into existing Master Key. Provide removable core cylinders that are removable only with a special key or tool without disassembly of knob or lockset. The cores shall be Corbin Russwin. Keying information shall be furnished at a later date by the COR. Cylinders shall be 7 pin IG large format type. Keying information and heirarchy shall be furnished at a later date by the Contracting Officer and the VA Locksmith.

1.10 APPLICABLE PUBLICATIONS

A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only. In text, hardware items are referred to by series, types, etc., listed in such specifications and standards, except as otherwise specified.

B. American National Standards Institute/Builders Hardware Manufacturers Association (ANSI/BHMA):

A156.1‑06 Butts and Hinges

A156.2‑03 Bored and Pre-assembled Locks and Latches

A156.3‑08 Exit Devices, Coordinators, and Auto Flush Bolts

A156.4‑08 Door Controls (Closers)

A156.5‑01 Auxiliary Locks and Associated Products

A156.8‑05 Door Controls‑Overhead Stops and Holders

A156.13-05 Mortise Locks and Latches Series 1000

A156.16‑08 Auxiliary Hardware

A156.18‑06 Materials and Finishes

A156.21-09 Thresholds

A156.22-05 Door Gasketing and Edge Seal Systems

A156.26-06 Continuous Hinges

C. National Fire Protection Association (NFPA):

80-10 Fire Doors and Fire Windows

101-09 Life Safety Code

D. Underwriters Laboratories, Inc. (UL):

 Building Materials Directory (2008)

PART 2 ‑ PRODUCTS

2.1 General

A. Manufacturers' Catalog Number References: Where manufacturers' products are specified herein, products of other manufacturers which are considered equivalent to those specified may be used. Manufacturers whose products are specified are identified by abbreviations as follows:

|  |  |  |
| --- | --- | --- |
| Adams‑Rite | Adams Rite Mfg. Co. | Pomona, CA |
| Best | Best Access Systems | Indianapolis, IN |
| Corbin Russwin | Corbin Russwin, Inc./Assa Abloy | Monroe, NC |
| Don-Jo | Don-Jo Manufacturing | Sterling, MA |
| G.E. Security | GE Security, Inc. | Bradentown, FL |
| Markar | Markar Architectural Products | Pomona, CA |
| Pemko | Pemko Manufacturing Co. | Ventura, CA |
| Rixson | Rixson | Franklin Park, IL |
| Rockwood | Rockwood Manufacturing Co. | Rockwood, PA |
| Securitron | Securitron Magnalock Corp. | Sparks, NV |
| Southern Folger | Southern Folger Detention Equipment Co. | San Antonio, TX |
| Stanley | The Stanley Works | New Britain, CT |
| Tice | Tice Industries | Portland, OR |
| Trimco | Triangle Brass Mfg. Co. | Los Angeles, CA  |
| Zero | Zero Weather Stripping Co. | New York, NY |

2.2 BUTT HINGES

A. ANSI A156.1. Provide only five-knuckle ball bearing type hinges with hospital tips. The following types of butt hinges shall be used for the types of doors listed, except where otherwise specified:

1. Exterior Doors: Type A5112 for doors 900 mm (3 feet) wide or less and Type A5111 for doors over 900 mm (3 feet) wide. Hinges for exterior outswing doors shall have non‑removable pins and shall be of stainless steel material.

2. Interior Doors: Type A8112/A5112 for doors 900 mm (3 feet) wide or less and Type A8111/A5111 for doors over 900 mm (3 feet) wide. Hinges for doors exposed to high humidity areas (bathrooms with showers, toilet rooms, janitor closets, etc. shall be of stainless steel material.

B. Provide quantity and size of hinges per door leaf as follows:

1. Doors up to 2260 mm (7 feet 5 inches) high: 3 hinges minimum.
2. Doors 900 mm (3 feet) wide or less, standard weight: 114 mm x 114 mm (4-1/2 inches x 4-1/2 inches) hinges.
3. Doors over 900 mm (3 feet) to 1065 mm (3 feet 6 inches) wide, standard weight: 127 mm x 114 mm (5 inches x 4-1/2 inches).
4. Doors over 1065 mm (3 feet 6 inches) to 1210 mm (4 feet), heavy weight: 127 mm x 114 mm (5 inches x 4-1/2 inches).
5. Provide heavy-weight hinges where specified.
6. At doors weighing 330 kg (150 lbs.) or more, furnish 127 mm (5 inch) high hinges.

2.3 CONTINUOUS HINGES

A. ANSI/BHMA A156.26, Grade 1-600.

1. Listed under Category N in BHMA's "Certified Product Directory."

B. General: Minimum 0.120-inch- (3.0-mm-) thick, hinge leaves with minimum overall width of 4 inches (102 mm); fabricated to full height of door and frame and to template screw locations; with components finished after milling and drilling are complete

C. Continuous, Barrel-Type Hinges: Hinge with knuckles formed around a Teflon-coated 6.35mm (0.25-inch) minimum diameter pin that extends entire length of hinge.

1. Base Metal for Exterior Hinges: Stainless steel.

2. Provide with non-removable pin (hospital tip option) at lockable outswing doors.

3. Where required to clear adjacent casing, trim, and wall conditions and allow full door swing, provide wide throw hinges of minimum width required.

4. Provide with manufacturer’s cut-outs for separate mortised power transfers and/or mortised automatic door bottoms where they occur.

5. Where thru-wire power transfers are integral to the hinge, provide hinge with easily removable portion to allow easy access to wiring connections.

6. Where models are specified that provide an integral wrap-around edge guard for the hinge edge of the door, provide manufacturer’s adjustable threaded stud and machine screw mechanism to allow the door to be adjusted within the wrap-around edge guard.

2.4 OVERHEAD CLOSERS

A. Conform to ANSI A156.4, Grade 1.

B. Closing devices shall be products of one manufacturer.

C. Closers shall conform to the following:

1. The closer shall have minimum 50 percent adjustable closing force over minimum value for that closer and have adjustable hydraulic back check effective between 60 degrees and 85 degrees of door opening.

2. Closer shall have hold-open feature except when installed in a fire rated opening.

3. Size Requirements: Provide multi-size closers, sizes 1 through 6, except where multi-size closer is not available for the required application.

4. Material of closer body shall be forged or cast.

5. Arm and brackets for closers shall be steel, malleable iron or high strength ductile cast iron.

6. Closers shall have full size metal cover; plastic covers will not be accepted.

7. Closers shall have adjustable hydraulic back‑check, separate valves for closing and latching speed, adjustable back-check positioning valve, and adjustable delayed action valve.

8. Provide closers with any accessories required for the mounting application, including (but not limited to) drop plates, special soffit plates, spacers for heavy-duty parallel arm fifth screws, bull-nose or other regular arm brackets, longer or shorter arm assemblies, and special factory templating. Provide special arms, drop plates, and templating as needed to allow mounting at doors with overhead stops and/or holders.

9. Closer arms or backcheck valve shall not be used to stop the door from overswing, except in applications where a separate wall, floor, or overhead stop cannot be used.

10. Provide parallel arm closers with heavy duty rigid arm.

11. Where closers are to be installed on the push side of the door, provide parallel arm type except where conditions require use of top jamb arm.

12. Provide all surface closers with the same body attachment screw pattern for ease of replacement and maintenance.

13. All closers shall have a 38 mm (1½”) minimum piston diameter.

2.5 DOOR STOPS

A. Conform to ANSI A156.16.

B. Provide door stops wherever an opened door or any item of hardware thereon would strike a wall, column, equipment or other parts of building construction.

C. Where cylindrical locks with turn pieces or pushbuttons occur, equip wall bumpers Type L02251 (rubber pads having concave face) to receive turn piece or button.

D. Provide floor stops (Type L02141 or L02161 in office areas; Type L02121 x 3 screws into floor elsewhere. Wall bumpers, where used, must be installed to impact the trim or the door within the leading half of its width. Floor stops, where used, must be installed within 4-inches of the wall face and impact the door within the leading half of its width.

E. Where drywall partitions occur, use floor stops or provide blocking behind wall stops and anchor with toggle bolts. Use Type L02141 or L02161 in office areas, Type L02121 elsewhere.

F. Provide stop Type L02011, as applicable for exterior doors. At outswing doors where stop can be installed in concrete, provide stop mated to concrete anchor set in 76mm (3-inch) core-drilled hole and filled with quick-setting cement.

G. Where the specified wall or floor stop cannot be used, provide concealed overhead stops (surface-mounted where concealed cannot be used).

2.6 LOCKS AND LATCHES

A. Conform to ANSI A156.2. Locks and latches for doors 45 mm (1‑3/4 inch) thick or over shall have beveled fronts. Lock cylinders shall have seven pins. Cylinders for all locksets shall be removable core type (basis of design: Corbin Russwin IC7). Cylinders shall be furnished with construction removable cores and construction master keys. Cylinder shall be removable by special key or tool. Construct all cores so that they will be interchangeable into the core housings of all mortise locks, rim locks, cylindrical locks, and any other type lock included in the Great Grand Master Key System. Keyway shall be 59A2, 0-bitted. Disassembly of lever or lockset shall not be required to remove core from lockset. All locksets or latches on double doors with fire label shall have latch bolt with 19 mm (3/4 inch) throw, unless shorter throw allowed by the door manufacturer’s fire label. Provide temporary keying device or construction core of allow opening and closing during construction and prior to the installation of final cores.

B. In addition to above requirements, locks and latches shall comply with following requirements:

1. Mortise Lock and Latch Sets: Conform to ANSI/BHMA A156.13. Mortise locksets shall be series 1000, minimum Grade 2. All locksets and latchsets Corbin Russwin ML2000 series with “Lustra” design handles fabricated with wrought lever with cast rose (Corbin Ruswin LWB). No substitute lever material shall be accepted. All locks and latchsets shall be furnished with 122.55 mm (4-7/8-inch) curved lip strike and wrought box. Where mortise locks are installed in high-humidity locations or where exposed to the exterior, provide non-ferrous mortise lock case.

2. Cylindrical Lock and Latch Sets: levers shall meet ADA (Americans with Disabilities Act) requirements. Cylindrical locksets shall be series 4000 Grade I. All locks and latchsets shall be furnished with 122.55 mm (4-7/8-inch) curved lip strike and wrought box. At outswing pairs with overlapping astragals, provide flat lip strip with 21mm (7/8-inch) lip-to-center dimension. Provide lever design to match mortise locks.

3. Auxiliary locks shall be as specified under hardware sets and conform to ANSI A156.5.

4. Privacy locks shall have an inside thumbturn for privacy and an outside thumbturn for emergency entrance.

2.7 KEYS

A. Stamp all keys with change number and key set symbol. Furnish five keys for each lock. Obtain instructions from the Contracting Officer and VA Locksmith regarding master keying.

2.8 FLUSH BOLTS (LEVER EXTENSION)

A. Conform to ANSI A156.16. Flush bolts shall be Type L24081 unless otherwise specified. Furnish proper dustproof strikes conforming to ANSI A156.16, for flush bolts required on lower part of doors.

B. Lever extension manual flush bolts shall only be used at non-fire-rated pairs for rooms only accessed by maintenance personnel.

C. Face plates for cylindrical strikes shall be rectangular and not less than 25 mm by 63 mm (1 inch by 2‑1/2 inches).

D. Friction‑fit cylindrical dustproof strikes with circular face plate may be used only where metal thresholds occur.

E. Provide extension rods for top bolt where door height exceeds 2184 mm (7 feet 2 inches).

2.9 THRESHOLDS

A. Conform to ANSI A156.21, mill finish extruded aluminum, except as otherwise specified. In existing construction, thresholds shall be installed in a bed of sealant with ¼-20 stainless steel machine screws and expansion shields. Furnish thresholds for the full width of the openings.

B. At exterior doors and any interior doors exposed to moisture, provide threshold with non-slip abrasive finish.

2.10 AUTOMATIC DOOR BOTTOM SEAL AND RUBBER GASKET FOR LIGHT PROOF OR SOUND CONTROL DOORS

A. Conform to ANSI A156.22. Provide mortise or under-door type, except where not practical. For mortise automatic door bottoms, provide type specific for door construction (wood or metal).

2.11 WEATHERSTRIPS (For Exterior Doors)

A. Conform to ANSI A156.22. Air leakage shall not to exceed 0.50 CFM per foot of crack length (0.000774m3/s/m).

2.12 MISCELLANEOUS HARDWARE

A. Access Doors (including Sheet Metal, Screen and Woven Wire Mesh Types): Except for fire‑rated doors and doors to Temperature Control Cabinets, equip each single or double metal access door with Lock Type E76213, conforming to ANSI A156.5. Key locks as directed. Ship lock prepaid to the door manufacturer. Hinges shall be provided by door manufacturer.

B. Mutes: Conform to ANSI A156.16. Provide door mutes or door silencers Type L03011 or L03021, depending on frame material, of white or light gray color, on each steel or wood door frame, except at fire-rated frames, lead‑lined frames and frames for sound‑resistant, lightproof and electromagnetically shielded doors. Furnish 3 mutes for single doors and 2 mutes for each pair of doors, except double‑acting doors. Provide 4 mutes or silencers for frames for each Dutch type door. Provide 2 mutes for each edge of sliding door which would contact door frame.

2.13 FINISHES

A. Exposed surfaces of hardware shall have ANSI A156.18, finishes as specified below. Finishes on all hinges, pivots, closers, thresholds, etc., shall be as specified below under "Miscellaneous Finishes." For field painting (final coat) of ferrous hardware, see Section 09 91 00, PAINTING.

B. 626 or 630: All surfaces on exterior and interior of buildings, except where other finishes are specified.

C. Miscellaneous Finishes:

1. Hinges --exterior doors: 630.

2. Hinges --interior doors: 626 or 630.

3. Locksets and latchsets -- exterior doors: 630.

4. Locksets and latchsets – interior doors: 626 or 630.

5. Door Closers: Factory applied paint finish. Dull or Satin Aluminum color.

6. Thresholds: Clear anodized aluminum or marble, as scheduled.

7. Other primed steel hardware: 600.

2.14 BASE METALS

A. Apply specified U.S. Standard finishes on different base metals as following:

|  |  |
| --- | --- |
| **Finish** | **Base Metal**  |
| 626 | Brass or bronze  |
| 630 | Stainless steel  |

PART 3 ‑ EXECUTION

3.1 HARDWARE HEIGHTS

A. Locate hardware on doors at heights to match existing hardware. The Contractor shall visit the site, verify location of existing hardware and submit locations to VA Contracting Officer for approval or, if acceptable to the Contracting Officer, mount hardware in accordance with the following (all dimensions shown as height above finish floor):

1. Exit devices centerline of strike (where applicable) 1024 mm (40‑5/16 inches).

2. Locksets and latch sets centerline of strike 1024 mm (40‑5/16 inches).

3. Deadlocks centerline of strike 1219 mm (48 inches).

4. Locate other hardware at standard commercial heights. Locate push and pull plates to prevent conflict with other hardware.

3.2 INSTALLATION

A. Closer devices, including those with hold‑open features, shall be equipped and mounted to provide maximum door opening permitted by building construction or equipment. Closers shall be mounted on side of door inside rooms and away from corridors. At exterior doors, closers shall be mounted on interior side. Where closers are mounted on doors they shall be mounted with sex nuts and bolts; foot shall be fastened to frame with machine screws.

B. Hinge Size Requirements:

|  |  |  |
| --- | --- | --- |
| **Door Thickness** | **Door Width** | **Hinge Height** |
| 45 mm (1-3/4 inch) | 900 mm (3 feet) and less | 113 mm (4-1/2 inches) |
| 45 mm (1-3/4 inch) | Over 900 mm (3 feet) butnot more than 1200 mm (4 feet) | 125 mm (5 inches) |

C. Hinge leaves shall be sufficiently wide to allow doors to swing clear of door frame trim and surrounding conditions.

D. Hinges Required Per Door:

|  |  |
| --- | --- |
| Doors over 1500 mm (5 ft) high and not over 2280 mm (7 ft 6 in) high | 3 butts |
| Doors over 2280 mm (7 feet 6 inches) high | 4 butts |

E. Fastenings: Suitable size and type and shall harmonize with hardware as to material and finish. Provide machine screws and lead expansion shields to secure hardware to ceramic or quarry floor tile, or solid masonry. Fiber or rawl plugs and adhesives are not permitted. All fastenings exposed to weather shall be of stainless steel.

G. After locks have been installed; show in presence of Contracting Officer that keys operate their respective locks in accordance with keying requirements. (All keys, Master Key level and above shall be sent Registered Mail to the Medical Center Director along with the bitting list. Also a copy of the invoice shall be sent to the Contracting Officer for his records.) Installation of locks which do not meet specified keying requirements shall be considered sufficient justification for rejection and replacement of all locks installed on project.

3.3 FINAL INSPECTION

A. Installer to provide letter to VA Contracting Officer that upon completion, installer has visited the Project and has accomplished the following:

1. Re-adjust hardware.

2. Evaluate maintenance procedures and recommend changes or additions, and instruct VA personnel.

3. Identify items that have deteriorated or failed.

4. Submit written report identifying problems.

3.4 DEMONSTRATION

A. Demonstrate efficacy of mechanical hardware and electrical, and electronic hardware systems, including adjustment and maintenance procedures, to satisfaction of Contracting Officer’s Technical Representative (COTR) and VA Locksmith.

3.5 HARDWARE SETS

A. Following sets of hardware correspond to hardware symbols shown on drawings.

**Hardware Set HW-1**

1½ pair butts 114 x 114 mm (4½” x 4½”)

1 mortise lockset Entrance/Office Function (F04)

1 closer

1 floor stop

3 silencers

**Hardware Set HW-2**

1½ pair butts 114 x 114 mm (4½” x 4½”)

1 mortise lockset Storage Function (F07)

1 closer

1 wall stop

3 silencers

**Hardware Set HW-3**

1½ pair butts 114 x 114 mm (4½” x 4½”)

1 mortise lockset Apartment Corridor Function (F20)

1 closer

1 floor stop

1 set weatherstripping Sound deadening gasket on head and jambs

1 automatic door bottom

**Hardware Set HW-4**

1½ pair butts 114 x 114 mm (4½” x 4½”)

1 cylinder lockset Privacy Function (F76)

1 floor stop

1 threshold Marble

3 Silencers

1 robe hook 2 prong

**Hardware Set HW-5**

3 pair butts 114 x 114 mm (4½” x 4½”)

1 mortise lockset Privacy Function (F02)

1 wall stop

1 threshold Marble

3 silencers

1 coat hook 2 prong

**Hardware Set HW-6**

1½ pair butts 114 x 114 mm (4½” x 4 ½”)

1 mortise latchset Passage Function (F01)

1 deadbolt Key outside, thumb turn inside (F17)

1 wall stop

 3 silencers

**Hardware Set HW-7**

1½ pair butts 114 x 114 mm (4½” x 4 ½”)

1 mortise lockset Entrance/Office Function (F04)

3 silencers

**Hardware Set HW-8**

3 pair butts 114 x 114 mm (4½” x 4 ½”)

1 mortise latchset Passage Function (F01)

1 deadbolt Key outside, thumb turn inside (F17)

1 set man. flush bolts Top and bottom with dustproof strikes

2 wall stops

2 silencers

**Hardware Set HW-9**

1 continuous hinge Stainless steel

1 mortise lockset Entrance/Office Function (F04) x st/st

1 closer

1 set weatherstripping Continuous neoprene bubble; head and jambs

1 door sweep

1 threshold Aluminum

**Hardware Set HW-10** (for fire rated access panel)

 1 lock Mortised cylinder with key from outside and thumb-turn on inside

**Hardware Set HW-11**

1½ pair butts 127 x 114 mm (5” x 4½”)

1 mortise lockset Storage Function (F07)

1 closer

1 floor stop

3 silencers

- ‑ ‑ E N D ‑ ‑ ‑

SECTION 09 65 19
RESILIENT TILE FLOORING

SPEC WRITER NOTES:

1. Delete between // // if not applicable to project. Also delete any other item or paragraph not applicable in the section and renumber the paragraphs.
2. Specify type, color, size, thickness, and finish of tile in Section 09 06 00, SCHEDULE FOR FINISHES.
3. Show floor patterns on drawings.

PART 1 - GENERAL

1.1 DESCRIPTION:

A. This section specifies the installation of // solid vinyl tile flooring, // // luxury vinyl tile, // // rubber tile,// // linoleum tile // and accessories required for a complete installation.

1.2 RELATED WORK:

//A. Sustainable Design Requirements: Section 01 81 13, SUSTAINABLE CONSTRUCTION REQUIREMENTS. //

B. Resilient Base: Section 09 65 13, RESILIENT BASE AND ACCESSORIES.

C. Subfloor Testing and Preparation: Section 09 05 16, SUBSURFACE PREPARATION FOR FLOOR FINISHES.

D. Removal of Existing Construction Containing Asbestos: Section 02 82 13.19, ASBESTOS FLOOR TILE AND MASTIC ABATEMENT.

E. Color, Pattern and Texture for Resilient Tile Flooring and Accessories: Section 09 06 00, SCHEDULE FOR FINISHES.

1.3 SUBMITTALS:

A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.

//B. Sustainable Design Submittals as described below: //

//1. Volatile organic compounds per volume as described in PART 2 ‑ PRODUCTS.//

//2. Postconsumer and preconsumer recycled content as described in PART 2 ‑ PRODUCTS.// //

C. Manufacturer's Literature and Data:

1. Description of each product.

2. Resilient material manufacturer’s recommendations for adhesives, underlayment, primers, and polish.

3. Application, installation and maintenance instructions.

D. Samples:

1. Tile: Each type, color, thickness and finish.

2. Edge Strips: Each type, color, thickness and finish.

3. Feature Strips: Each type, color, thickness and finish.

E. Shop Drawings:

1. Layout of patterns as shown on the construction documents.

2. Edge strip locations showing types and detail cross sections.

F. Test Reports:

1. Abrasion resistance: Depth of wear for each tile type and color and volume loss of tile, certified by independent laboratory. Tested per ASTM F510/F510M.

2. Moisture and pH test results as per Section 09 05 16, SUBSURFACE PREPARATION FOR FLOOR FINISHES.

1.4 DELIVERY:

A. Deliver materials to the site in original sealed packages or containers, clearly marked with the manufacturer's name or brand, type and color, production run number and date of manufacture.

B. Materials from containers which have been distorted, damaged or opened prior to installation are not acceptable.

1.5 STORAGE:

A. Store materials in a clean, dry, enclosed space off the ground, protected from harmful weather conditions and at temperature and humidity conditions recommended by the manufacturer. Protect adhesives from freezing. Store flooring, adhesives, and accessories in the spaces where they will be installed for at least 48 hours before beginning installation.

1.6 QUALITY ASSURANCE:

A. Installer Qualifications: A company specializing in installation with minimum three (3) years’ experience and employs experienced flooring installers who have retained, and currently hold, an INSTALL Certification, or a certification from a comparable certification program.

1. Installers to be certified by INSTALL or a comparable certification program with the following minimum criteria:

a. US Department of Labor approved four (4) year apprenticeship program, 160 hours a year.

b. Career long training.

c. Manufacturer endorsed training.

d. Fundamental journeyman skills certification.

SPEC WRITER NOTE: Mock-up must be approved by Contracting Officer Representative (COR) in the project’s design stage before including requirement in specification.

//B. Mockup: Build floor tile mockup to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

1. Size: 9.3 sq. m (100 sq. ft.) for each type, color, and pattern. Locations as indicated on construction documents.

2. Contracting Officer Representative (COR) approved mockup may become part of the completed Project if undisturbed at time of Substantial Completion. //

C. Furnish product type materials from the same production run.

1.7 warranty:

A. Construction Warranty: Comply with FAR clause 52.246-21, “Warranty of Construction”.

1.8 APPLICABLE PUBLICATIONS:

A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.

B. ASTM International (ASTM):

D2047-11 Test Method for Static Coefficient of Friction of Polish-Coated Flooring Surfaces as Measured by the James Machine

D2240-05(R2010) Test Method for Rubber Property—Durometer Hardness

D4078-02(R2008) Water Emulsion Floor Finish

E648-14c Critical Radiant Flux of Floor Covering Systems Using a Radiant Energy Source

E662-14 Specific Optical Density of Smoke Generated by Solid Materials

E1155/E1155M-14 Determining Floor Flatness and Floor Levelness Numbers

F510/F510M-14 Resistance to Abrasion of Resilient Floor Coverings Using an Abrader with a Grit Feed Method

F710-11 Preparing Concrete Floors to Receive Resilient Flooring

F925-13 Test Method for Resistance to Chemicals of Resilient Flooring

F1344-12(R2013) Rubber Floor Tile

F1700-13a Solid Vinyl Floor Tile

F1869-11 Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride

F2170-11 Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in Situ Probes

F2195-13 Linoleum Floor Tile

C. Code of Federal Regulation (CFR):

40 CFR 59 Determination of Volatile Matter Content, Water Content, Density Volume Solids, and Weight Solids of Surface Coating

D. International Standards and Training Alliance (INSTALL):

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS:

A. Provide adhesives, underlayment, primers, and polish recommended by resilient floor material manufacturer.

B. Critical Radiant Flux: 0.45 watts per sq. cm or more, Class I, per ASTM E648.

C. Smoke Density: Less than 450 per ASTM E662.

D. Slip Resistance – Not less than 0.5 when tested with ASTM D2047.

SPEC WRITER NOTES:

1. Solid color tiles are tiles with uniform color throughout. These are recommended for use as an accent only in small quantities and not as the floor field color. These tiles do not hide soiling well and show scratches easily.
2. Through pattern tiles are tiles with patterning distributed through the entire thickness.
3. Specify special slip resistant tile adjacent to wet areas such as Hydro Physical Therapy, scrub areas, and shower rooms. Slip resistant ceramic tile is required in wet areas.

2.2 RUBBER TILE:

A. Tile Standard: ASTM F1344, // Class I-A, homogeneous rubber tile, solid color // // Class I-B, homogeneous rubber tile, through mottled // // Class II-A, laminated rubber tile, solid-color wear layer // // Class II-B, laminated rubber tile, mottled water layer //.

B. Hardness: // Not less than 85 as required by ASTM F1344 // // Manufacturer’s standard hardness //, measured using Shore, Type A durometer per ASTM D2240.

C. Wearing Surface: // Smooth // // Textured // // Molded pattern //.

1. Molded-Pattern Figure: // Raised discs // // Raised squares // //   //.

D. Thickness: // 3.2 mm (0.125 inch) // // //.

E. Size: // 305 x 305 mm (12 x 12 inches) // // 610 x 610 mm (24 x 24 inches) // //   //.

2.3 linoleum tile:

A. ASTM F2195.

B. Tile to consist of a homogeneous layer of a mixture of linoleum cement (binder in linoleum consisting of a mixture of linseed oil, pine rosin, fossil, or other resins or rosins, or an equivalent oxidized oleoresinous binder), cork and/or wood flour, mineral fillers, and pigments bonded to a polyester backing.

2.4 SOLID VINYL-TILE:

A. Tile Standard: ASTM F1700.

1. Class: // Class I, monolithic vinyl tile // // Class II, surface‑decorated vinyl tile //.

2. Type: // A, smooth surface // // B, embossed surface //.

B. Thickness: // 2.0 mm (0.080 inch) // // 2.5 mm (0.100 inch) // // 3.0 mm (0.120 inch) // // 3.2 mm (0.125 inch) // //   //.

C. Size: // 305 x 305 mm (12 x 12 inches) // // 457 x 457 mm (18 x 18 inches) // // 610 x 610 mm (24 x 24 inches) // // 914 x 914 mm (36 x 36 inches) // // 76 x 914 mm (3 x 36 inches) // //   //.

2.5 Luxury Vinyl Tile:

A. ASTM F1700, Class III, Printed Film Vinyl Tile, Type // A // // B //.

B. Thickness: 12 mil (1/8 inch) // //.

C. Size: // //.

D. Provide products with recycled content with not less than // 30 // //    // percent.

//E. Chemical Resistance: ASTM F925; pass. //

2.6 ADHESIVES:

A. Provide water resistant type adhesive for flooring, base and accessories as recommended by the manufacturer to suit substrate conditions. // VOC content to be less than the 50 grams/L when calculated according to 40 CFR 59 (EPA Method 24). // Submit manufacturer’s descriptive data, documentation stating physical characteristics, and mildew and germicidal characteristics.

2.7 PRIMER FOR CONCRETE SUBFLOORS:

A. Provide in accordance with Section 09 05 16, SUBSURFACE PREPARATION FOR FLOOR FINISHES.

2.8 LEVELING COMPOUND For Concrete Floors:

A. Provide cementitious products with latex or polyvinyl acetate resins in the mix in accordance with Section 09 05 16, SUBSURFACE PREPARATION FOR FLOOR FINISHES.

SPEC WRITER NOTES:

1. The VA prefers no-wax maintenance.
2. Pre-waxed flooring and flooring that does not require wax need not be waxed after installation if properly protected.

2.9 POLISH AND CLEANERS:

A. Cleaners: As recommended in writing by floor tile manufacturer.

B. Polish: ASTM D4078.

SPEC WRITER NOTE: Verify that mouldings are shown on construction documents.

2.10 moulding:

A. Provide tapered mouldings of // vinyl // // rubber // // //-colored anodized aluminum // // clear anodized aluminum // and types as indicated on the construction documents for both edges and transitions of flooring materials specified. Provide vertical lip on moulding of maximum 6 mm (1/4 inch). Provide bevel change in level between 6 and 13 mm (1/4 and 1/2 inch) with a slope no greater than 1:2.

B. Fasteners for Aluminum Mouldings: Stainless steel of type required for substrate condition.

PART 3 - EXECUTION

3.1 environmental requirements:

A. Maintain flooring materials and areas to receive resilient flooring at a temperature above 20 degrees C (68 degrees F) for three (3) days before application, during application and two (2) days after application, unless otherwise directly by the flooring manufacturer for the flooring being installed. Maintain a minimum temperature of 13 degrees C (55 degrees F) thereafter. Provide adequate ventilation to remove moisture from area and to comply with regulations limiting concentrations of hazardous vapors.

B. Do not install flooring until building is permanently enclosed and wet construction in or near areas to receive tile materials is complete, dry and cured.

SPEC WRITERS NOTE:

1. Include Section 09 05 16, SUBSURFACE PREPARATION FOR FLOOR FINISHES in specifications manual for preparation and testing procedures of concrete and other subsurface conditions required before installation of flooring.

3.2 SUBFLOOR TESTING AND PREPARATION:

A. Prepare and test surfaces to receive resilient tile and adhesive as per Section 09 05 16, SUBSURFACE PREPARATION FOR FLOOR FINISHES.

//1. Remove existing resilient floor and existing adhesive. //

B. Prepare concrete substrates in accordance with ASTM F710.

//C. Perform work regarding removal of flooring and adhesive containing asbestos as specified in Section 02 82 13.19, ASBESTOS FLOOR TILE AND MASTIC ABATEMENT. //

3.3 INSTALLATION:

A. Install in accordance with manufacturer's instructions for application and installation unless specified otherwise.

B. Mix tile from at least two containers. An apparent line either of shades or pattern variance is not acceptable.

C. Tile Layout:

1. If layout is not shown on construction documents, lay tile symmetrically about center of room or space with joints aligned.

2. Vary edge width as necessary to maintain full size tiles in the field, no edge tile to be less than 1/2 the field tile size, except where irregular shaped rooms make it impossible.

3. Place tile pattern in the same direction; do not alternate tiles unless specifically indicated in the construction documents to the contrary. // Match tile installation to approved mockup. //

D. Application:

1. Adhere floor tile to flooring substrates using a full spread of adhesive applied to substrate to produce a completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.

2. Scribe, cut, and fit floor tiles to butt neatly and tightly to vertical surfaces and permanent fixtures including built-in furniture, cabinets, pipes, outlets, and door frames.

3. Extend floor tiles into toe spaces, door reveals, closets, and similar openings. Extend floor tiles to center of door openings.

4. Roll tile floor with a minimum 45 kg (100 pound) roller.

E. Seal joints at pipes with sealants in accordance with Section 07 92 00, JOINT SEALANTS.

F. Installation of Edge Strips:

1. Locate edge strips under center line of doors unless otherwise shown on construction documents.

2. Set resilient edge strips in adhesive. Anchor metal edge strips with anchors and screws.

3. Where tile edge is exposed, butt edge strip to touch along tile edge.

4. Where thin set ceramic tile abuts resilient tile, set edge strip against floor file and against the ceramic tile edge.

SPEC WRITER NOTES:

1. Coordinate any requirements for application of polish/floor finish with the COR.
2. Note that applied finish coatings may affect performance, slip resistant properties and may cause damage to the floor. Coordinate finish coatings with manufacturer.
3. Modify paragraph accordingly.

3.4 CLEANING AND PROTECTION:

A. Clean adhesive marks on exposed surfaces during the application of resilient materials before the adhesive sets. Exposed adhesive is not acceptable.

B. Keep traffic off resilient material for a minimum 72 hours after installation.

C. Clean flooring as recommended in accordance with manufacturer’s printed maintenance instructions and within the recommended time frame. As required by the manufacturer, apply the recommended number of coats and type of polish and/or finish in accordance with manufacturer’s written instructions.

D. When construction traffic occurs over tile, cover resilient materials with reinforced kraft paper properly secured and maintained until removal is directed by COR. At entrances and where wheeled vehicles or carts are used, cover tile with plywood, hardboard, or particle board over paper, secured and maintained until removal is directed by COR.

E. When protective materials are removed and immediately prior to acceptance, replace damaged tile and mouldings, re-clean resilient materials.

3.5 LOCATION:

A. Unless otherwise indicated in construction documents, install tile flooring, under areas where casework, laboratory and pharmacy furniture and other equipment occur.

B. Extend tile flooring for room into adjacent closets and alcoves.

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Amendment 0002 to 36C24523B0001

This Amendment includes RFIs (questions) and the VA responses to those RFIs and one additional \*.PDF file and three WORD (\*.docx) files of specifications.