

VHA Pre-Construction Risk Assessment (PCRA)

Pre-Construction Risk Assessment (PCRA) Permit

This page must be posted at the entrance to the project area, or other designated area

Unique permit number: 621-24-701 EHRM Infrastructure Upgrades – Tier 2			
Location and brief description of construction/renovation/maintenance	The project will facilitate an upgrade to the facility's main computer room that is compliant with VA standards for a Tier 3 data center as called out in VA design requirements. The project shall include upgrades within the main computer room and other spaces deemed necessary to ensure a complete project. This includes redundant power distribution, upgrades to computer room cooling and distribution, replacement of aged equipment, grounding and bonding, cable management, fiber and copper within the data center, and removal of raised floor system.		
Project manager	Billy McKinney	Project start date	March 2026
Contact phone number	7728	Project Duration	365 days

Activity Type <i>Inspection/Upkeep, Small-scale, or Large-scale</i>	Large Scale
--	-------------

Activity Type	Control measures to be in place for the duration of the activity <i>(Check the box for the Activity Type to indicate the Control Measures)</i>
Inspection/Upkeep <input type="checkbox"/>	1. Immediately replace any ceiling tile, close access panels, etc., upon completion of work. 2. Site visits of construction area are required weekly by member of multi-disciplinary team. Site visits will be documented on standard checklist. 3. Site specific safety plan, task hazard analysis, and hazard communication required to be provided by the contractor and approved. 4. Must address identified hazards and controls that will be implemented to ensure minimal impact patients, employees, contractors and facility. 5. Communication and coordination plan for all affected areas
Small-scale <input type="checkbox"/>	All control measures in the row above and the following: 1. Hazard communication chemical inventory required to be provided by the contractor and approved. 2. ILSMs in place and staff trained on situation 3. Hot Work or burn permits in place and staff trained 4. LOTO procedures in place and staff trained on their use 5. Site visits will be reviewed using the criteria in standardized guide. 6. Daily inspections of the site are to be conducted by the General Contractor and documented on their daily log.
Large-scale <input checked="" type="checkbox"/>	All control measures in both rows above and the following Activity Hazard Analyses and Control Plans as applicable (check all that apply): 1. Excavation safety plan in place <input type="checkbox"/> 2. Dust control plan in place <input checked="" type="checkbox"/> 3. Pollution prevention plan in place <input type="checkbox"/> 4. Dig safe paperwork in place <input type="checkbox"/> 5. Crane lift plan in place <input checked="" type="checkbox"/> a. Crane placement b. Crane swing c. Crane load evaluation 6. Fall protection plan in place and staff trained <input checked="" type="checkbox"/> 7. Confined entry plan in place and staff trained <input type="checkbox"/>

Additional requirements: Concrete cutting/pouring operations may be needed for flooring modifications; Lift plan shall be needed for AHU installation; Fall protection for roof work when within six feet of edge; Asbestos and lead-based paint remediation will be necessary.

Is an Infection Control Risk Assessment (ICRA) required for the Activity? Yes ☒ No ☐

Infection Prevention and Control signature:
Date:

VHA Pre-Construction Risk Assessment (PCRA)

Engineer/COR signature		Date	
Safety Officer signature		Date	
Chair, Construction Safety Committee signature		Date	

*The location of all Activity Hazard Analyses and Control Plans (excavation, dust, pollution, etc.) as applicable shall be identified on this permit and shall be made available to all workers on the job.

PCRA Introductory Information and Instructions

Use this template as a baseline for performing facility Pre-Construction Risk Assessments (PCRA) for Construction, Renovation, and Maintenance work (referred to as the “activity” in this document). The template provides minimum requirements for categorizing activity type(s) and safety risk to determine the level of precautions needed to prevent impact related to Construction, Renovation and Maintenance on patients, employees, and contractors.

Ensure that the activity statement of work and any drawings available are used for the PCRA assessment and included in the project file with the completed PCRA.

Communication and coordination of all types of activity with affected areas are to be included among the control measures. The development of communication and coordination plans must begin during the activity planning phase.

Facilities may customize this template to incorporate site-specific information and requirements.

NOTE: *This VHA PCRA template pertains specifically to non-infection-related safety for Construction, Renovation, and Maintenance activities. It must be used in conjunction with the VHA Infection Control Risk Assessment (ICRA) for the activity, if required, which specifically addresses infection risks outside the scope of this PCRA.*

PERMIT: See the last page of this document for a fillable permit form to be used for posting at the activity site.

Activity Location:

Bldg. 77 – IRM Server Room 3A109; Admin Support 3A216 and 3A113

Activity Name, Number, and/or Brief Description:

621-24-701 EHRM Infrastructure Upgrades – Tier 2
The project will facilitate an upgrade to the facility’s main computer room that is compliant with VA standards for a Tier 3 data center as called out in VA design requirements.

Table 1 - Construction, Renovation, and/or Maintenance Activity Type and Control Measures

NOTE: *If any of the bulleted criteria in a higher activity type pertains to the work that will be done (even if the other criteria are in a lower type), use the higher activity type for the VHA PCRA.*

Controls defined in Table 1 for the activity must be in place before the activity begins and maintained until work is completed and the area is activated. Control measures for each activity must also include the control measures in the preceding row(s).

As the activity progresses, a full re-evaluation of remaining activity type and risk is required prior to changing the level of control measures.

Activity Type determined from Table 1:

Large Scale

VHA Pre-Construction Risk Assessment (PCRA)

Activity Type and Description	Control Measures
<p><u>Inspection/upkeep</u> generally defined as follows:</p> <ul style="list-style-type: none"> • Work can be completed in a single shift, not to exceed 10 hours. • Patients, employees and/or visitors may be in the area depending on the activity. • Work that does not create dust or debris. • Work that does not create vapors or fumes. • Removal of ceiling tile or access to mechanical or electrical chase for visual inspection that will not impair fire safety systems and are limited to 1 tile per 50 square feet with limited exposure time (not to exceed an hour for each tile) within the shift. • Minor interior updates (e.g., replacing floor or ceiling tiles, carpentry work to include hanging signage, and painting with hand tools) that do not create vibration or noise. • Limited building system maintenance that does not require Lock Out Tag Out (LOTO) such as plumbing on potable systems limited to faucet replacement, steam trap replacement etc. and electrical work such as replacement of bulbs, receptacles, or switches. 	<ol style="list-style-type: none"> 1. Immediately replace any ceiling tile, close access panels, etc., upon completion of work. 2. Site visits of construction area are required periodically by member of multi-disciplinary team. Site visits will be documented on standard checklist. 3. Site specific safety plan, task hazard analysis, and hazard communication required to be provided by the contractor and approved where a contact is in place. For internal work the shop involved must work with Safety to ensure proper precautions are in place. 4. Must address identified hazards and controls that will be implemented to ensure minimal impact to patients, employees, contractors and facility. 5. Communication and coordination plan for all affected areas
<p><u>Small scale Construction, Renovation and general maintenance/repair work</u>, generally defined as follows:</p> <ul style="list-style-type: none"> • Prolonged work that may take longer than a single shift but not exceeding six months. • Patients and employees are not to be in the area until activity is completed. • Work that creates some noise and vibration due to power tool use. • Selective demolition/removal of preexisting floor covering, casework, lay-in ceiling, or other architectural elements that may <ul style="list-style-type: none"> ○ disturb asbestos, lead or silica ○ create the potential for falling objects ○ create vibration and/or noise in excess of 80 dB(A) in surrounding areas. ○ cause penetrations in fire or smoke barrier • Plumbing work such as the installation of new sinks, showers and toilets and associated plumbing that requires utility outages or work on the steam system that may require: <ul style="list-style-type: none"> ○ LOTO ○ The use of compressed gas cylinders • Electrical work such as installation of conduit and wire for lighting, receptacles and switches for an area, the installation of conduit and wire for new devices such as terminal units, fans etc. Electrical work such as installation of cabling/wiring/conduit for a single device, installation of new device such as a light fixture that require LOTO. • Air Handler and/or fan shutdown/startup and HVAC work such as replacement of a single diffuser, single terminal unit, a single device and the installation of ductwork, diffusers, and terminal units for an area that may require: <ul style="list-style-type: none"> ○ Work on ladders ○ Rigging, hoisting or lifting of equipment or materials overhead 	<p><u>All control measures in the row above and the following:</u></p> <ol style="list-style-type: none"> 1. Hazard communication chemical inventory required to be provided by the contractor and approved. 2. Where construction, Renovation and maintenance are done in an accredited facility, and ILSM assessment is required to be done and ILSMs put into place in accordance with TJC LS.01.02.01 and the local facility policy including Fire watch if necessary. Staff is trained and the ILSM is verified regularly 3. Hot Work or burn permits in place and staff trained 4. LOTO procedures in place and staff trained on their use 5. Site visits will be reviewed using the criteria in standardized guide. 6. Daily inspections of the site are to be conducted by the General Contractor or shop supervisor and documented on their daily log.

VHA Pre-Construction Risk Assessment (PCRA)

<ul style="list-style-type: none"> • Modification of existing fire alarm and suppression systems requiring system outages and ILSMs or obstruction of exits and or impact on corridors. • Architectural, structural, or any other work that may cause vapors or fumes such as: <ul style="list-style-type: none"> ○ Roofing work ○ Flooring work ○ Painting or other large-scale use of such substances. 	
<p><u>Large-scale construction, renovation, or maintenance generally defined as follows:</u></p> <ul style="list-style-type: none"> • Work exceeding 6 months in duration. • Patients and employees are not to be in the area until activity is completed. • Excavation or heavy equipment use taking place <ul style="list-style-type: none"> ○ Dig safe required utility location ○ Trench safety ○ Dust control plan ○ Equipment exhaust, Noise, Vibration • Confined space entry required (permit required or not) • Requires crane work <ul style="list-style-type: none"> ○ General crane work ○ Lift over buildings • Includes elevated work <ul style="list-style-type: none"> ○ Roof work, fall protection ○ Window work, scaffolding and fall protection ○ Odor control • Welding, cutting or use of torches requiring burn permits • Demolition of building components and infrastructure including removal of multiple doors, walls, framing, ceilings, flooring, piping, electrical and HVAC that may <ul style="list-style-type: none"> ○ require asbestos, lead or silica abatement ○ create the potential for falling objects ○ create vibration and/or noise in excess of 90 dB(A) in surrounding areas. ○ cause breaches to fire or smoke barrier • The installation building components such as new walls, ceilings and doors including framing, drywall and associated plaster work that requires transport of significant materials through building and up elevators i.e., weight limits of floors and elevators • Plumbing work requiring LOTO and system shutdown and startup such as the installation of: <ul style="list-style-type: none"> ○ new medical gas systems, ○ steam/heating hot water, condensate systems, ○ Potable water and sanitary drainage, multiple sinks, showers and toilets including associated plumbing. • Electrical work such as installation of electrical feeders, distribution panels, conduit and wire for lighting, receptacles and switches for an area, the installation of conduit and wire for new devices such as terminal units, fans etc. requiring LOTO and system isolation. • Installation of fire alarm and suppression systems requiring outages of those systems and ILSMs or closure of exits/corridors 	<p><u>All control measures in the two rows above and the following Activity Hazard Analyses and Control Plans (check all that apply):</u></p> <ol style="list-style-type: none"> 1. Excavation safety plan in place <input type="checkbox"/> 2. Dust control plan in place <input checked="" type="checkbox"/> 3. Pollution prevention plan in place <input type="checkbox"/> 4. Dig safe paper work in place <input type="checkbox"/> 5. Crane lift plan in place <input checked="" type="checkbox"/> <ol style="list-style-type: none"> a. Crane placement b. Crane swing c. Crane load evaluation 6. Fall protection plan in place and staff trained <input checked="" type="checkbox"/> 7. Confined entry plan in place and staff trained <input type="checkbox"/>

VHA Pre-Construction Risk Assessment (PCRA)

- Mechanical work such as the installation of air handling equipment, associated ductwork, diffusers, heat exchangers, terminal units and controls requiring lifting and support of equipment and systems.

Table 2. Affected Adjacent Area Assessment

In addition to the minimum precautions noted above for the Activity Type, it is critical that the activity be coordinated with the areas adjacent to the activity to ensure operations in those areas are not disrupted or impacted. List the adjacent areas in Table 2 below and develop activity-specific coordination plans and associated communication plans with each area to address activity work that could impact or disrupt the operation of the areas, in general as follows:

- If adjacent area is **vacant** (e.g., work outside, construction of new building, etc.):
 - Coordination is typically not necessary other than potentially traffic flow and pedestrian access.
- If adjacent area is **non-continuously occupied** (e.g., areas where outpatient care is provided, employee health, etc.):
 - Develop a list of activities that will potentially impact or disrupt the operation of the area (e.g., work involving noise, vibration or exit obstruction) and meet with POC to coordinate execution of work in a way that mitigates the impact (e.g., conduct work after hours).
- If adjacent area is **occupied continuously** (e.g., areas where inpatient care is provided, residential areas such as Community Living Centers, etc.):
 - Develop a list of activities that will potentially impact or disrupt the operation of the area (e.g., work involving noise, vibration or exit obstruction) and meet with POC to coordinate execution of work in a way that mitigates the impact (e.g., move affected party temporarily).

Area	Service(s)/Type(s) of Area(s) (e.g., OR, Unit/Ward, Sterile Processing, Administrative, etc)*	Point of Contact (POC)	POC Contact Information	Construction plan communicated to POC?
Activity Area**	Bldg. 77 – IRM Server Room and Adjacent Admin Space	Billy McKinney	7728	Yes
Area Above	N/A	N/A	N/A	N/A
Area Below	Laboratory and Pathology	Deanna Gray	x3557	Yes
Adjacent Area 1	IRM Help Desk	Doug Coleman/Mike Conway	(423)741-9152/(423)979-1402	Yes
Adjacent Area 2				
Adjacent Area 3				
Adjacent Area 4				

* There may be more than one Service/type of area for each row. List all. The information entered on this table must be used in the ICRA if required.

** List the area(s) in which the construction/renovation/maintenance activity will occur.

Infection Control Risk Assessment (ICRA)

VHA Pre-Construction Risk Assessment (PCRA)



Consult with Infection Prevention and Control regarding the assessment of potential infection risks associated with the activity and the need for control measures. See VHA Directive 7715 and the VHA ICRA Template for more information.

Is an ICRA required for the Activity? Yes ☒ No ☐

CONSTRUCTION PROJECT SAFETY and ENVIRONMENTAL RISK ASSESSMENT			
ITEM	Yes/No	Party Responsible for Mitigation	Mitigation Strategy
RECORDKEEPING	Y	Safety/Contractor(s)	OSHA 30-Hour Construction Training for Superintendent; OSHA 10-Hour Construction Training for Employees; VA Safety and Infection Control Orientation Training; Documentation; Badging
MEDICAL SERVICES & FIRST AID	Y	Contractor(s)	VAMC Emergency Department – x2911 or x7197 from VA land-line; Washington County EMS or Johnson City Fire Department – 911.
PERSONAL PROTECTIVE EQUIPMENT	Y	Contractor(s)	Gloves, Eye protection, Hearing protection, Masks, Safety Shoes, Hard Hats, Appropriate clothing for welding operations; Appropriate clothing for electrical work.
GENERAL WORK ENVIRONMENT	Y	Contractor(s)	General Housekeeping, site will be cleaned daily; Tacky Mats; Mops; Pre-filter on air scrubber changed prior to construction activities; Means of egress shall be continuously monitored and kept clear for emergency purposes.
SIGNAGE	Y	Contractor(s)	Appropriate construction signage will be necessary (CONSTRUCTION AREA-DO NOT ENTER); Marked Hard Hat area if ceiling grid is removed; Project board will be displayed on job site at all times; All assessments (ICRA, SRA, ILSM), permits, and OSHA information shall be displayed on project board at all times; All containers will be labeled.
WALKWAYS	Y	Contractor(s)	Keep means of egress clear and unobstructed
FLOOR AND WALL OPENINGS	Y	Contractor(s)	Standard demolition precautions; All floor openings shall be covered and marked;

			Openings between floors shall be sealed as best as possible to prevent travel of smoke between floors (smoke compartmentation must be maintained).
STAIRS AND STAIRWAYS	N		
EXCAVATION/TRENCHING	N		
ELEVATED WORK SURFACES	N		
PORTABLE LADDERS	Y	Contractor(s)	Inspection and proper use of ladders; Fiberglass ladders only (No metal or wood) of Type I or Type II designation; Ensure all labels are visible at all times.
HAND AND POWER TOOLS	Y	Contractor(s)	Inspection and proper use of tools; proper PPE
POWDER-ACTUATED TOOLS	Y	Contractor(s)	Use of powder-actuated tools by trained personnel only.
MACHINE GUARDING	Y	Contractor(s)	Ensure all power-tools and equipment with potentially exposed moving parts have proper machine guarding features in place.
LOCKOUT/TAGOUT	Y	Contractor(s)	Proper lock-out/tag-out on de-energized circuits and/or steam lines; Testing of de-energized equipment must be performed before any work can commence to ensure safe working environment
WELDING, CUTTING, BRAZING	Y	Contractor(s)	Follow proper VA hot work procedures (Permits and Inspections); Hot work may be necessary for cutting and brazing of copper pipes for plumbing modifications (fire suppression system included).
COMPRESSED GAS CYLINDERS	Y	Contractor(s)	Proper storage and transportation of compressed gas cylinders; Limited to one-day gas supply
MATERIAL HANDLING	Y	Contractor(s)	Correct lifting techniques; Proper inspection and use of material handling equipment (hand trucks, carts, etc.);
SPRAYING OPERATIONS	Y	Contractor(s)	Proper PPE and environmental controls (containment and filtering) must be used if spraying operations will be utilized for paint and/or other material applications.
CONFINED SPACES	N		

ENVIRONMENTAL CONTROLS	Y	Contractor(s)	Dust barrier (existing and temporary dry-wall; Pre-fab barrier; and/or plastic) around construction area; Temporary dry-wall partition will have fire-rated door with frame and door closer to protect opening. Negative air; Ensure return vents are sealed
FLAMMABLE AND COMBUSTIBLE MATERIALS	Y	Contractor(s)	Proper storage and handling; No gasoline allowed to be stored within building; All flammables and combustibles will be stored in cabinet once inside structure; One day supply only allowed inside structure; All flammables and combustibles must be in labeled containers appropriate for that use; SDS sheets available at all times.
HAZARDOUS CHEMICAL EXPOSURE	N		
HAZCOM	Y	Contractor(s)	Contractor must have current SDS sheets available on site or equivalent; Make updated SDS sheets available to employees
ELECTRICAL	Y	Contractor(s)	Electrical work by trained/qualified employees; LO/TO; All extension cords will be inspected daily, frayed cords will be replaced (no electrical tape); Plugs may be repaired by qualified electrician only.
NOISE/VIBRATION	Y	Contractor(s)	Keep noise in construction area to minimum (when possible), hearing protection when necessary (when decibels are at or exceed 85). All core-drills (vibration) should be coordinated with surrounding services to accommodate sensitive patient populations.
VENTILATION	Y	Contractor(s)	Existing dry-wall, temporary dry-wall, pre-fab barriers, and/or fire rated plastic will be used as dust barriers. Air scrubber will be used inside barrier for negative air requirements. Ensure return HVAC vents are sealed prior to dust generating activities.
UTILITY INTERRUPTION	Y	Contractor(s)	HVAC, Water Supply, Normal power, and Emergency power will all have interruptions during the project with limited patient

			inconvenience. The AHU will be replaced with dedicated system. Before any planned outages, the COR will coordinate between staff and the contractor and will inform the staff via banners and direct communication.
<p>OTHER ITEMS: The project will facilitate an upgrade to the facility’s main computer room that is compliant with VA standards for a Tier 3 data center as called out in VA design requirements. The project shall include upgrades within the main computer room and other spaces deemed necessary to ensure a complete project. This includes redundant power distribution, upgrades to computer room cooling and distribution, replacement of aged equipment, grounding and bonding, cable management, fiber and copper within the data center, and removal of raised floor system</p> <div><div><p>04 - AE Design SOW - 621-24-701 EI</p></div><div><p>AD101.pdf</p></div></div>			

ENVIRONMENTAL RISK ASSESSMENT						
ITEM	Local (Yes/No)	State (Yes/No)	Federal (Yes/No)	Strategy Needed (Yes/No)	Party Responsible for Mitigation	Mitigation Strategy
Air	Y	Y	Y	Y	Contractor(s)	Negative pressure used in construction area supplied via air scrubber with HEPA filtration; Ensure return vents are sealed
Water	N	N	N	N		
Soil	N	N	N	N		
Solid Waste	Y	Y	Y	Y	Contractor(s)	Proper disposal of construction-related wastes
Hazardous Waste	N	N	N	N		
Asbestos	Y	Y	Y	Y	Contractor(s)	Asbestos containing material (ACM) is present in room 3A112 (black mastic associated with 12” vinyl floor tile); Recent survey identified ACM in the mastic associated with the corridor floor tile. Abatement in this area has been performed with previous projects. Surveyor suspects it to be residual from previous remediation.
Lead	Y	Y	Y	Y	Contractor(s)	Lead-base paint (LBP) is present in Room 3A112D on tan or white ceramic wall tiles. LBP is also present in the corridors and affected areas within the IRM Helpdesk area. LBP is present on dark beige, dark tan, lime green, or brown gypsum board walls.
USTs	N	N	N	N		
Stormwater	N	N	N	N		
Spill Prevention/Protection	N	N	N	N		
CFCs	N	N	N	N		
PCBs	N	N	N	N		
VOCs	N	N	N	N		
Mold	N	N	N	N		
OTHER ENVIRONMENTAL ITEMS:						

--