Dorn VA Medical Center
Construction/Renovation Risk Assessment Package

Instructions: Project Managers or VA Supervisors will collaborate with Infection Control, Safety Office, and VA Police to complete the risk assessment package as part of managing the safe design and construction/renovation of the medical center environment. COTRs shall collaborate with Infection Control, the Safety Office, and the VA Police as necessary in the completion of these assessments. COTRs, Infection Control Coordinator, Safety Office staff, and VA Police will ensure all identified actions and control measures are implemented in their respective area of responsibility as long as the potential hazard exists. The initial assessment should be completed in the design phase. Reassess as conditions change and prior to the beginning of each project phase. The assessments are conducted by the responsible program official using the attached risk assessment forms, and should be completed as follows:

1. **NEPA Assessment:**
   a. Using NEPA Interim Guidance for Projects PG 18-17 determine the level of Environmental Impact of the project.

2. **Vertical Environmental Impact Assessment:**
   a. Show the construction area and the functions/services located in adjacent areas, including floors above and below.

3. **Horizontal Environmental Impact Assessment:**
   a. Using a current drawing of the area, show the construction area and surrounding patient/staff areas as indicated on the example provided.

4. **Interim Life Safety Measures:**
   a. Evaluate each listed "Requirement or Deficiency" as related to the project's impact on Life Safety components of the facility.
   b. Provide a summary of required actions on the sheet provided.

5. **Hazard Assessment and Exposure Controls:**
   a. Evaluate the potential for hazards during construction that may impact patients and staff. Indicate the required control measure for each hazard.
   b. Provide a summary of the required control measures on the sheet provided.

6. **Ceiling Mounted Patient Lift**
   a. During 50% and 100% Design Reviews, the COTR will verify that the patient lift design is in compliance with the requirements of VHA Directive 2005-019 Seismic Safety of VHA Buildings and VA Master Design Specification 3.05.041 Seismic Restraint Requirements for Non-Structural Components. The COTR will also ensure the requirements on the "Design Checklist for Ceiling Mounted Patient Lifts" are met.
   b. Complete the "After Installation Checklist for Ceiling Mounted Patient Lifts" prior to permitting the equipment to be used for patient movement.

7. **Infection Control Risk Assessment:**
   a. Determine and record the Location Group(s) that will be affected.
   b. Determine and record the type of construction and magnitude of disruption.
   c. Review the Infection Control Matrix using the Location and Type of Construction Groups (determined in steps a. and b.) and record the Class of Precautions associated with the project.

d. Complete the Infection Control Measures List and assign responsibility for each measure.

8. **Approvals:**
   a. Upon completion of the risk assessment obtain approval signatures as applicable on the attached sheet. Ensure all signatures are complete prior to submitting to the Safety representative.

9. **Contract Documents:**
   a. Include applicable risk assessment action items in the contract documents.
   b. Provide the contractor's superintendant with copies of the completed risk assessment and action plans.
   c. File all risk assessment documents in the project file.

10. **Daily Inspections:**
    a. Ensure the contractor conducts and documents daily construction site inspections.

11. **Construction Site Inspection:**
    a. Each discipline (Infection Control, Safety Office, VA Police) shall inspect the construction site as applicable. All inspections will be documented.

12. **Post Project Review:**
    a. Upon completion of the project conduct a review of risk assessment process.
    b. Present the results to the Construction Safety Committee.

CONSTRUCTION RISK ASSESSMENTS AND HAZARD CONTROL APPROVALS

Project Title: Correct Police and Security Space Deficiencies	**Project Number:** 544 303
Estimated Start Date: September 1, 2017	**Estimated Duration:** One year

Obtain the following approvals, in the order listed, as applicable:

1. VA Supervisor responsible for area under construction	**Date**
Lucy H. Austman **2. Infection Control Coordinator**	**Date** 5/25/17
Michael Chavez **3. VA Police Representative**	**Date** 5/24/17
Robert P. Mick **4. Project Manager/COTR/Shop Supervisor**	**Date** 5/24/17
5. Maintenance Control Manager, Engineering Service	**Date** 5/25/17
6. Projects Section Chief, Engineering Service	**Date** 24 MAY 2017
Stan Doman for **7. Assistant Chief, Engineering Service**	**Date** 5-25-17
Stan Doman **8. Chief, Engineering Service**	**Date** 5-25-17
9. Safety and Emergency Management Service Representative	**Date** 5/25/17

Dorn VA Medical Center
Construction/Renovation Risk Assessment Package

Project Title: Correct Police and Security Space Deficiencies		**Project Number:** 544 303
Location: North side of campus along Garners Ferry Road		
Date: May 24, 2017	**Project Phase:** ☐ **Design** ☐ **Phase I** (25-50%) ■ **Final** ☐ **Pre-Con** ☐ **Other**	
Construction Start Date: September 1, 2017	Estimated Duration: One year	Completion Date: September 1, 2018

Scope of Work:

The scope of the work includes minor demolition of a small portion of an existing asphalt parking lot. Grading and site work will be required to accommodate the project. Utility construction including, electrical, water, sewer, communications, and other as shown on the construction documents will be required to complete the project. The exterior construction is brick veneer over concrete masonry units and interior construction is gypsum wallboard over steel stud framing. The roof is standing seam hip roof. The typical finish in the office and tasking areas is acoustical ceiling. The ceiling in restrooms and secure areas is a hard gypsum ceiling.

Note: The risk assessment process should begin in the design phase. Identified risk controls shall be incorporated into the technical plans and specifications as applicable. The risk assessment should be reviewed during all major phases of the project and risk controls updated as necessary.

■ **Prior to commencing work, the general contractor shall provide proof that an OSHA certified competent person (CP) [29 CFR 1926.32(f)] will maintain a presence at the worksite. An OSHA 30-hour training completion card is considered certification. Any other certification provided will be evaluated by the Project Manager and the Construction Safety Subcommittee in accordance with VA Directive 2011-036 to determine relevancy.**

COR Signature:_____

NEPA Risk Assessment to be completed utilizing NEPA Interim Guidance for Projects PG 18-17
http://www.cfm.va.gov/til/etc/NEPAGuidance.pdf

Project Title: Correct Police and Security Space Deficiencies		**Project Number:** 544 303
Location: North side of campus along Garners Ferry Road		
Date: May 24, 2017	**Type of Project:** ☐ **Operation and Maintenance** ☐ **Repairs/Renovation** ☐ **New Construction** ☐ **Lease** ☐ **Other**	
Construction Start Date: September 1, 2017	Estimated Duration: One year	Completion Date:

Project Description:

The scope of the work includes minor demolition of a small portion of an existing asphalt parking lot. Grading and site work will be required to accommodate the project. Utility construction including, electrical, water, sewer, communications, and other as shown on the construction documents will be required to complete the project. The exterior construction is brick veneer over concrete masonry units and interior construction is gypsum wallboard over steel stud framing. The roof is standing seam hip roof. The typical finish in the office and tasking areas is acoustical ceiling. The ceiling in restrooms and secure areas is a hard gypsum ceiling.

Level of NEPA Analysis:	**Other Environmental Permits/Analysis Needed:**
■ **Categorical Exclusion**	☐
☐ **Environmental Assessment (EA) Needed**	☐
☐ **Environmental Impact Statement (EIS) Needed**	☐

Project Impacts

Would the proposed activity involve or generate any of the following?

Source	Yes	No	Source	Yes	No	Source	Yes	No
Air Emissions including GHGs	☐	☐	Liquid Effluent	☐	☐	RCRA or CERCLA Sites	☐	☐
Asbestos	☐	☐	Petroleum Storage	☐	☐	Wetlands	☐	☐
Excess Noise	☐	☐	Solid Waste	☐	☐	Permit Modification	☐	☐
Utility Modification	☑	☐	Hazardous Waste	☐	☐	Chemical Use/Storage	☐	☐
Soil Disturbance	☑	☐	Biological Resources	☐	☐	Water/Well use	☐	☐
Water Treatment	☐	☐	Radioactive Waste	☐	☐	Other:	☐	☐
Water Flow Modification	☐	☐	Mixed Waste	☐	☐			

Determination

■ I find the proposed project qualifies as a **CATEGORICAL EXCLUSION** with no extraordinary circumstances. Specify which **CATEX**: New construction less than 75,000 gross square feet

☐ I find that the proposed project MAY have a significant effect on the environment; therefore, an **ENVIRONMENTAL ASSESSMENT (EA)** will be prepared.

☐ **ENVIRONMENTAL IMPACT STATEMENT (EIS)**

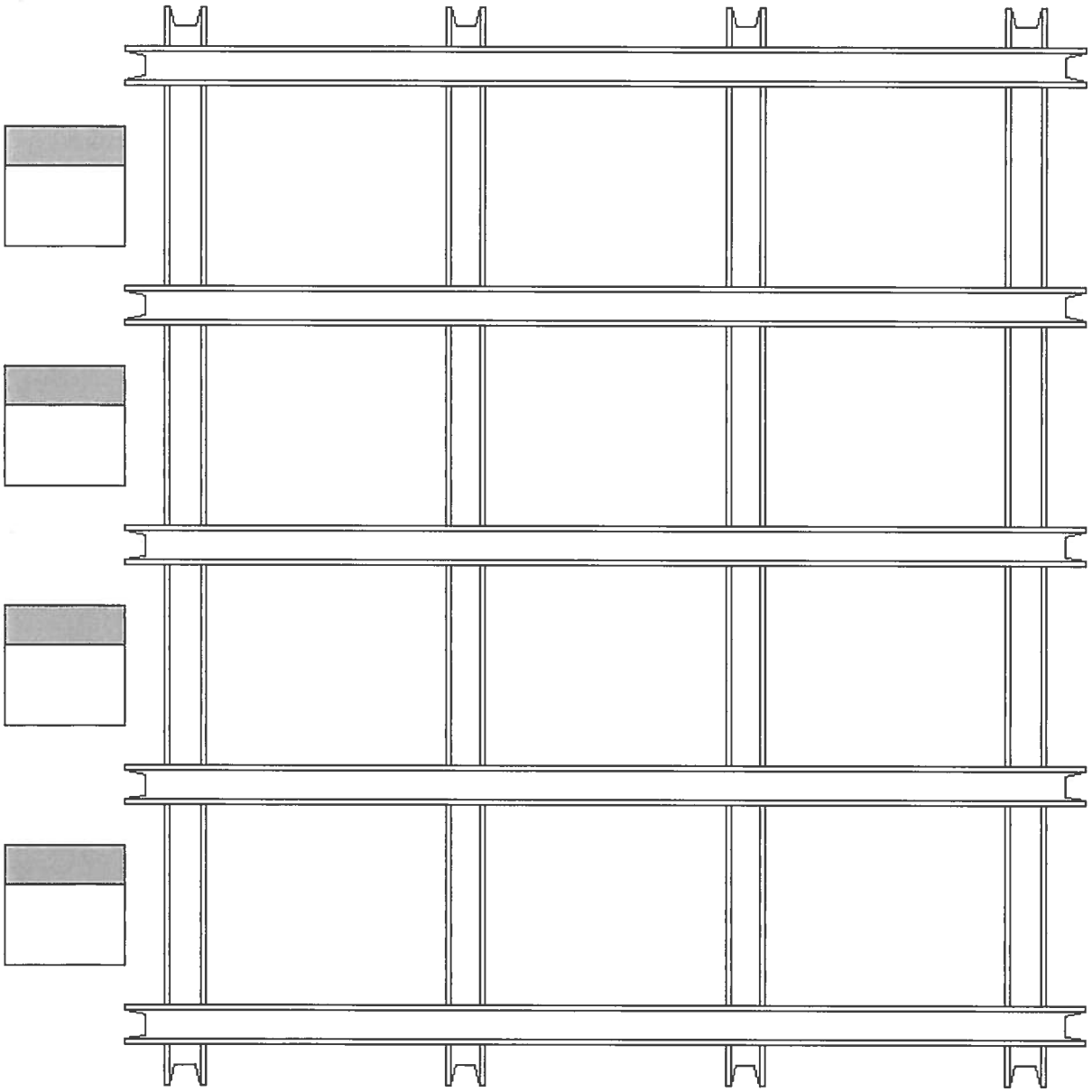
Project Manager: Robert B. Price Jr.

GEMS Coordinator:

Vertical Environmental Impact Building Assessment

Building: _____ Floor: _____ N/A: _____

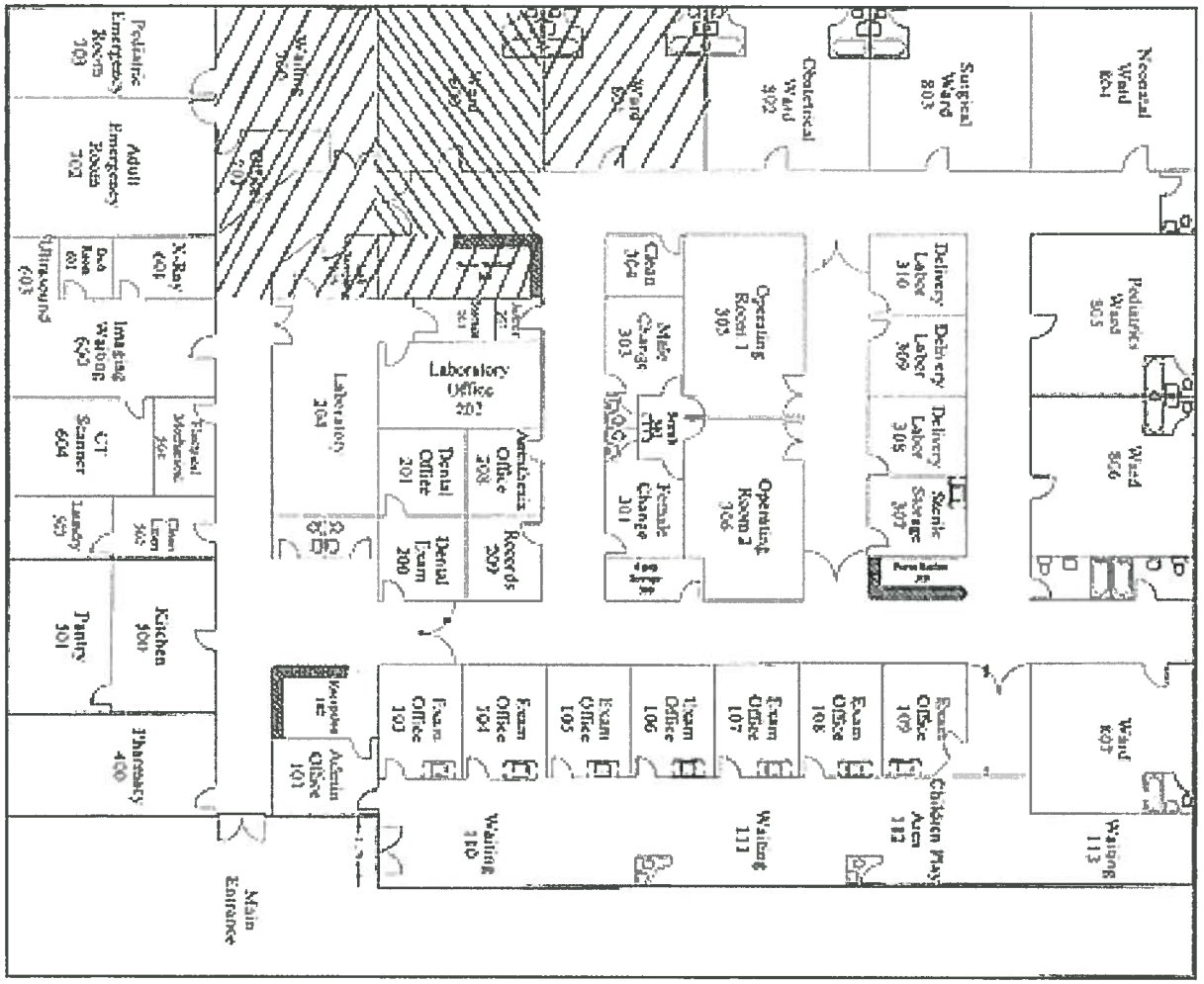
Phase I: _____ Phase II: _____ Phase III: _____ Phase IV: _____



Horizontal Environmental Impact Building Assessment

This is a sample. Insert CAD of appropriate area.

Phase I: _____ Phase II:_____ Phase III:_____ Phase IV:_____



Construction Patient/Staff Impact

CONTRACTOR CONSTRUCTION/RENOVATION AREA ILSM INSPECTION

Week Of: _____

Project Title/Number:_____**Location:**_____

1. Means of egress is clear in construction area:

☐ MON ☐ TUE ☐ WED ☐ THU ☐ FRI ☐ SAT ☐ SUN

2. Accesses for fire department and emergency services are clear:

☐ MON ☐ TUE ☐ WED ☐ THU ☐ FRI ☐ SAT ☐ SUN

3. Fire detection/Sprinkler systems operational:

☐ MON ☐ TUE ☐ WED ☐ THU ☐ FRI ☐ SAT ☐ SUN

Note: If system is impaired ensure a temporary, but equivalent, system is provided. Temporary systems to be tested monthly. Describe temporary system(s) provided:_____.

4. Construction partitions are being maintained as a 1 hour fire barrier, all penetrations firestopped at the end of each day:

☐ MON ☐ TUE ☐ WED ☐ THU ☐ FRI ☐ SAT ☐ SUN

5. Good housekeeping practices are being used in construction area. Flammables and combustible fire load is being kept to a minimum:

☐ MON ☐ TUE ☐ WED ☐ THU ☐ FRI ☐ SAT ☐ SUN

6. Buildings, grounds, and equipment are being maintained in a safe manner (pay special attention to excavations, construction areas, and construction storage):

☐ MON ☐ TUE ☐ WED ☐ THU ☐ FRI ☐ SAT ☐ SUN

7. The "No Smoking Policy" is being enforced throughout the project area:

☐ MON ☐ TUE ☐ WED ☐ THU ☐ FRI ☐ SAT ☐ SUN

8. Job site fire extinguishers and other additional fire fighting equipment (if necessary) in place and inspected:

☐ MON ☐ TUE ☐ WED ☐ THU ☐ FRI ☐ SAT ☐ SUN

9. Deficiencies and appropriation corrective actions to be listed here:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

10. Inspector's Initials: ☐ MON ☐ TUE ☐ WED ☐ THU ☐ FRI ☐ SAT ☐ SUN

Form Completed By:

Completed form will be filed in the project file.

Interim Life Safety Measure (ILSM) Evaluation for Construction/Renovation Projects

Project Name: Correct Police and Security Service Deficiencies	**Date:** May 24, 2017	**Project Manager (COTR):** Robert B. Price Jr. **Safety Staff Member:**

Instructions: Use this evaluation to identify and implement activities to protect occupants during construction and renovations and during periods when the building and/or construction area does not meet the applicable provisions of the Life Safety Code. This evaluation is to be updated throughout the project to identify code deficiencies that cannot be immediately corrected and the ensuing special measures to be taken to compensate for increased life safety risk. Check all conditions that apply and add any other identified deficiencies and additional special measures:

Evaluation Criteria:	**Deficiency Description and Location:**	**ILSM required to compensate for increased life safety risk:**		
Building/area egress routes blocked or altered. This applies to the construction area as well as surrounding areas. Egress routes for all personnel (including construction workers) must be maintained at all times.	List blocked egress route locations:	1. Provide alternate means of egress. Personnel in the area shall be given additional training when alternative egress routes are designated. Signage shall be posted identifying the location of the alternate means of egress or exit to everyone affected.	☐ Required	■ N/A
		2. Exits in affected area(s) shall be inspected daily.	☐ Required	■ N/A
		3. Conduct one additional fire drill per shift per quarter in the affected area.	☐ Required	■ N/A
Obstructed or altered access to emergency services and for fire, police, and other emergency forces.	List access routes blocked: East and West sides of Dorn Drive.	1. Provide and mark alternate access routes.	■ Required	☐ N/A
		2. Inspect routes daily.	■ Required	☐ N/A
Fire alarm, detection, and/or suppression systems out of service. Each outage will be assessed based on duration, location, building occupancy, existing fire barriers, and type of system out of service to determine necessary measures. Compliance with the applicable chapter of the LSC required.	List each system out of service: List each temporary system required:	1. Provide temporary, equivalent alarm and detection systems.	☐ Required	■ N/A
		2. Inspect and test temporary systems monthly. The completion date of the test shall be documented.	☐ Required	■ N/A
		3. Fire alarm, detection, and suppression system outages > 4 hours in a 24-hour period require a fire watch and fire dept. notification. Fire watch shall be documented.	☐ Required	■ N/A
		4. Conduct one additional fire drill per shift per quarter in the affected area.	☐ Required	■ N/A

Evaluation Criteria:	Deficiency Description and Location:	ILSM required to compensate for increased life safety risk:		
Temporary construction separation requirements (**see attached "Construction Partition Evaluation Criteria"**)	List project separation requirements and locations:	Inspect partitions daily. Ensure all smoke tight and fire barrier features are in place at the end of each workday.	☐Required	■N/A
Additional fire-fighting equipment: Minimum requirement for all projects = properly maintained fire extinguisher every 75 ft. Assess all construction work and require other equipment based on criteria contained in NFPA 241.	List all additional fire fighting equipment: 1. Fire Extinguisher(s)	1. Contractor to provide equipment and properly train all personnel in the use of all additional fire fighting equipment. Training shall be documented. Equipment shall be properly maintained.	☒Required	
		2. Provide additional fire fighting equipment and training to medical center staff.	☐Required	■N/A
Hot Work: evaluate all stages of construction to determine the type of hot work to be conducted.	List hot work tasks/locations: Welding - New building Cutting - New building Grinding - New building Brazing - New building Soldering - New building	1. Obtain Hot Work Permit in accordance with medical center procedure/project specifications.	■Required ☐Required	☐N/A ☐N/A
		2. Provide additional fire fighting equipment.	☐Required	■N/A
		3. Provide fire watch in accordance with NFPA 241. Documentation required.	■Required	☐N/A
		4. Additional requirements for hot work operations and fire prevention precautions, including permits and fire watches, shall be in accordance with NFPA 51 and 51B as applicable. List other requirements:	■Required	☐N/A

Evaluation Criteria:	Deficiency Description and Location:	ILSM required to compensate for increased life safety risk:		
Smoking prohibited in all buildings and in and near construction areas.	Applicable to all projects.	Strict enforcement of no smoking policy.	☒Required	
Storage, housekeeping, and debris removal practices will be conducted to ensure the building's flammable and combustible fire load is reduced to the lowest feasible level.	Applicable to all projects.	Accumulations of combustible waste material, dust, and debris shall be removed from the construction area and the immediate vicinity at the end of each work shift or more frequently as necessary for safe operations.	☒Required	
Fire/smoke barrier penetrations. Determine if construction will require the penetration of existing fire and/or smoke barriers.	List locations of project fire/smoke barriers required to be maintained for the duration of the project: 1. Floor and ceiling barriers.	All barrier penetrations shall be properly sealed at the end of each work shift. Sealing methods shall be in accordance with VA specifications.	☐Required	■N/A
Increased hazard surveillance is required when any Life Safety Code deficiency is identified during period of construction. Required for construction in occupied buildings.	List LSC deficiencies:	Increase surveillance of building(s), grounds, and equipment, giving special attention to construction areas and storage (lay down locations), excavation, and field offices as applicable.	☐Required	■N/A
Construction occurring adjacent to occupied areas of the building.	List ILSMs implemented for this project: Provide fire watches for hot work. No smoking on construction site. Maintain a tidy and clean site. Control dust by moistening earth.	Department specific education to promote awareness of building deficiencies, construction hazards, and temporary measures implemented to maintain fire safety. This is the responsibility of the area Supervisor with assistance from the COTR and Safety Office.	■Required	☐N/A

ILSM Implementation List

Project Name:	**Date:**	**Project Manager or VA Supervisor:**
Instructions: List all "required" actions from the above ILSM evaluation.		
1. Applicable to all projects: Contractor to provide and maintain fire extinguishers and other fire-fighting equipment, on-site.		
2. Applicable to all projects: Strict enforcement of no smoking policy.		
3. Applicable to all projects: Storage, housekeeping, and debris removal practices will be conducted to ensure the building's flammable and combustible fire load is reduced to the lowest feasible level.		
4. Provide hot work permits for all welding, cutting, grinding, brazing, and soldering. Provide fire watch as required and all equipment as specified in the hot work permit.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		

Hazard Assessment and Exposure Controls

Project Name: Correct Police and Security Service Deficiencies	**Date:** May 24, 2017	**Project Manager or VA Supervisor:** Robert B. Price Jr.
Instructions: Identify potential hazards and required control measures. See attached list for sample control measures.		

Hazard:	Concern?		Control Measure(s):	Remarks:
Asbestos Containing Material (ACM)	■ Yes	☐ No	Asbestos containing materials affected by work shall be properly abated per VA and state regulations.	
Dust	■ Yes	☐ No	The area of work is not a patient care area. The work will generate dust. Workers shall comply with OSHA standards for personal protection and that of the traveling public.	Also see Infection Control Risk Assessment
Moisture/Water Leaks	☐ Yes	■ No		
Vapors/Fumes	■ Yes	☐ No	Workers shall comply with OSHA regulations concerning the risks of working around fumes and smoke.	

Ceiling Mounted Patient Lifts **If not applicable check here: ☑**

Installation or Relocation Checklist for Ceiling Mounted Patient Lifts

The commissioning for a patient ceiling lift system(s) shall include, but not be limited to, the following points as components of the commissioning procedures.

NOTE: Ceiling mounted patient lifts are not to be installed in treatment units with actively suicidal patients.

Facility:	**Work Order:**	**Manufacturer:**	
Lift Location:		**Model:**	
VAMC Contact:		**Serial Number:**	**EE Number:**
VAMC Contact's Phone Number:		**Mfgr Contact:**	
Installer:		**Mfgr Contact's Phone Number:**	
Installer's Phone Number:		**Date:**	

	Pre-Installation	COMPLETE
1	Perform site survey of the pre-existing conditions and as-built drawings above and below finish ceiling at the installation location to confirm existing structural and ceiling conditions.	
2	Obtain structural and related engineering design drawings and calculations for the new lift installation. Design drawings shall be developed for specific lift installation under specific pre-existing conditions of the facility.	
3	If the facility is located in a seismic area, as identified in VA Handbook H-18-8 Seismic Design Requirements, verify that the ceiling mounted patient lift system installation is in compliance with the requirements of VA Directive 7512 Seismic Safety of VA Buildings and VA Master Design Specification 13.05.041 Seismic Restraint Requirements for Non-Structural Components.	
4	Verify that the lift is listed by the manufacturer to be installed and operated in the environment that the lift is operating under. (For example, water tight lifts shall be installed and operated in wet, damp or humid locations such as pools or bathrooms.)	
5	Verify NFPA 13 compliance for fire sprinkler system (including but not limited to fire sprinkler heads and piping).	
6	Verify NFPA 99 and NFPA 70 compliance for proper grounding and bonding.	
7	Verify NFPA 99 and NFPA 70 compliance for access to electrical and safety systems.	
8	Verify required access to mechanical, HVAC, and fire systems components within the lift installation area.	
9	Verifiy minimum clearances for operation are compliant with manufacturer recommendations. (Ensure room clearance and that the ceiling height is adequate for lift usage.)	
10	Perform pre-installation walkthrough to confirm full understanding and consensus of design drawing(s) and installation conditions.	

NOTES:

	Installation	COMPLETE
1	Verify proper connections of the lift's structural system to the building's structure (including seismic bracing if applicable).	
2	Verify proper interface at the ceiling (hard deck or soft tile) and proper installation of all protective features around the support rods and rails/tracks.	

3	Verify structural component sizing and physical installation to ensure that the correct structural system is in place and properly installed to support the lift.	
4	Verify proper installation of electric motor per manufacturer's instructions to ensure operational rigidity of motor mounting.	
5	Verify proper electrical connections per design drawings and manufacturer's instructions.	

NOTES:

	Post-Installation	COMPLETE
1	Perform walkthrough to ensure compliance of the installation per the design drawing(s) and manufacturer's instructions.	
2	Perform operational test to verify lift functionality.	

NOTES:

	Rails/Tracks and End Stops	PASS	FAIL
1	Verification that all fasteners and set screws are properly tightened on the trollies and rails/tracks.		
2	Ensure that the rail/track is free of gaps (unless required by design). If included in installation, verify rail turntable function, exchanger function, gate alignment, and safety block installation.		
3	Confirm track is clean and clear of all debris. (Use manufacturer's recommended cleaning materials to avoid damage to the motor case and other components.)		
4	Verification that all manufacturer specified end stops or docking gates are properly installed.		

NOTES:

	Lift Unit and Straps	PASS	FAIL
1	Inspection of lift unit casing for cracks and alignment.		
2	Verification that the lift unit charges properly.		
3	Inspection and activation of hand control for full operation (e.g., up, down, left, right) and "return to charge" function if applicable.		
4	Confirm any and all lift unit indicator lights are functioning. (e.g., red service warning light, charging state light)		
5	Inspection and verification of all emergency functions of the lift unit.		

6	Full extension and inspection of lift strap for loose threads or frays.		
7	Inspection of spreader bar and clips for cracks and for loose or missing rings or cotter pins.		

NOTES:

	Load Testing	PASS	FAIL
1	Verification of any "soft start" or "soft stop" features and that lifting speed does not exceed 2.5 inches per second with "zero" load.		
2	Verification of load testing and deflection testing at the manufacturer's specified maximum rated lift capacity.		
3	Verification of any "soft start" and "soft stop" features and that lifting speed does not exceed 1.5 inches per second under maximum rated lift capacity.		
4	Verification of function of emergency stop at maximum rated lift capacity.		
5	Verification of emergency lowering feature at maximum rated lift capacity.		

NOTES:

	Manuals	COMPLETE
1	Confirm that the manufacturer's operating and maintenance manuals for this lift have been received.	

NOTES:

	Training	COMPLETE
1	Verify that manufacturer or manufacturer's representative has provided training on the use of patient handling equipment to clinicians and other staff who move and handle patients.	
2	Verify that training and competency are documented prior to release for use with patients.	

NOTES:

Serial #: _____

Installing Contractor	COMPLETE
After the activities listed in the above checklist and in the manufacturer's installation/operations/owner's manual(s) have been completed, the installing contractor shall release the ceiling mounted lift installation to VA representative.	
SIGNATURE:	**DATE:**
TITLE:	

VA Representative	COMPLETE
After the activities listed in the above checklist and in the manufacturer's installation/operations/owner's manual(s) have been completed, the VA representative shall review those items with the installing contractor prior to releasing the ceiling mounted lift into service to ensure completion of all requirements.	
SIGNATURE:	**DATE:**
TITLE:	

Manager of the Service Using the Ceiling Mounted Lifts	COMPLETE
After the activities listed in the above checklist and in the manufacturer's installation/operations/owner's manual(s) have been completed, the manager of the service using the ceiling mounted lifts confirms that the current staff have received initial training on ceiling mounted lifts and that there is a process in place to provide ongoing training on the proper use of ceiling mounted lifts.	
SIGNATURE:	**DATE:**
TITLE:	

ADDITIONAL NOTES:

Hazard Control Measure List

Project Name: Correct Police and Security Service Deficiencies	**Date:** May 24, 2017	**Project Manager or VA Supervisor:** Robert B. Price Jr.
Instructions: List all identified hazard controls from the assessment above.		
1. Provide all necessary fire protection equipment for spark and flame producing work.		
2. Personal protective equipment to be used in accordance with OSHA regulations.		
3. Appropriate VA and State regulations regarding asbestos removal, control and clean up shall be followed.		
4. Abate all asbestos containing material (ACM) per VA and State regulations.		
5. Abate all lead based paint removal areas per VA and State regulations.		
6. Comply with OSHA standards for dust control.		
7. Comply with OSHA regulations concerning the risks working around fumes and smoke.		
8. Comply with OSHA regulations concerning hearing protection.		
9. Comply with OSHA regulations concerning vibrations.		
10. Provide traffic control during all stage construction and associated utility construction.		
11. Provide dust and fume control to the air intakes of buildings 100, 1, and 2.		
12. Coordinate any required utility outage with the COR.		
13. Contractor shall provide a seven foot fence with security fabric attached around all bounds of the project.		
14.		

SAMPLE Hazard Control Measures

(If used, modify as necessary for the specific hazard)

Asbestos:

a. Appropriate VA and state asbestos removal, control, monitoring, and clean-up incorporated into the project specifications.

b. VA to hire independent Industrial Hygienist to inspect and clear area for occupancy in accordance with VA standards.

c. Project area will be encased with spray-applied hard surface encasement material.

d. Provide mini containments under negative air in public areas.

e. Sealed gypsum board barrier will be constructed to isolate the construction area from the public.

f. Transite panels will be removed, which is considered Class B removal.

Dust:

a. Sealed gypsum board barrier will be constructed to isolate the construction area from the public.

b. Trash carts will be covered when transported through the building.

c. Provide negative air machine exhausted to outside.

d. Provide mini containments under negative air in public areas.

e. Provide negative air machine in space as air scrubber.

f. Provide walk off mats at entrances to work area.

g. Perimeter barrier will be constructed above the ceiling to isolate the construction area with other areas above the ceiling.

Moisture Water Leaks

a. Contain any water from core drilling activities.

b. Dike any floor penetrations to minimize risk of leaks from construction zone.

Vapors/Fumes:

a. Use of products with low Volatile Organic Compounds (VOCs).

b. Provide negative air in construction zone exhausted to outside, away from HVAC intakes.

c. Seal work area with airtight barrier.

d. Use of combustion engine and propane powered equipment prohibited in buildings. Ensure use outdoors is away from HVAC intakes.

e. Properly seal any floor penetrations in accordance with fire-stopping specifications to minimize risk of fumes from construction zone migrating to other areas of the building.

f. Shut down or modify operation of air handler to minimize infiltration of fumes from outside.

g. Use charcoal and/or HEPA filters on HVAC outside air intakes to protect interiors spaces from dust or fumes.

Noise:

a. Schedule demolition work after normal work hours, to extent possible.

b. Cut all metal outside the building.

Vibration:

a. Schedule demolition work after normal work hours, to extent possible.

b. Coordinate with occupants in surrounding areas to explain the work occurring.

Air Pressure Relationships:

a. Provide negative air during asbestos abatement.

b. Provide negative air during construction.

c. Seal off supply and exhaust Heating, Ventilation and Air-Conditioning (HVAC) registers.

d. Provide anti room under negative pressure at entrance to project zone.

Traffic Control:

a. Access construction area via exterior door.

b. Schedule delivery of large quantities of material and demolition haul out after hours.

Open Outside Walls:

Construct temporary outside wall to limit the infiltration of wind, air and temperature differences into the project site.

Impact to Levels Above and Below:

a. Coordinate with occupants in surrounding areas to explain the work occurring.

b. Follow asbestos protocol when doing under floor work.

c. Vacate areas when doing below floor work off of the catwalk.

Proximity of Air Intakes:

Shut down air handlers to reduce infiltration of fumes from exterior activities such as painting, gasoline powered engines, roofing operations, equipment, etc.

Lead Based Paint or Elemental Lead:

a. Appropriate VA, federal and state requirements for removal, control, monitoring, and clean-up incorporated into the project specifications.

INFECTION CONTROL RISK ASSESSMENT/IMPLEMENTATION

PROCEDURES:

A. Determine Location Group based upon work location:

LOCATION GROUP 1 LOWEST	LOCATION GROUP 2 MEDIUM	LOCATION GROUP 3 MEDIUM HIGH	LOCATION GROUP 4 HIGHEST
1) Office areas 2) Engineering 3) Environmental services	1) At patient care units (example: Cardiac, Rehab., ultrasound) 2) Outpatient areas	1) Emergency Room 2) Radiology/MRI 3) Post-anesthesia Care unit 4) Intensive Care Units 5) Nuclear Medicine 6) Admission/Discharge area 7) PT – tank areas 8) Cafeteria 9) Echocardiography 10) Laboratories 11) Dialysis 12) Central sterile supply 13) Oncology 14) Cardiology	1) Operating Rooms; Sterile Processing 2) Intensive Care units 3) Cardiac Catheterization 4) Anesthesia areas 5) All endoscopy areas 6) Pharmacy

B. Determine Work Type:

Work Type A: Inspections and Non-Invasive Activities. Includes, but is not limited to, removal of ceiling tiles for visual inspection limited to 1 tile per 50 square feet, painting (but not sanding) wall covering, electrical trim work, minor plumbing, and activities which do not generate dust or require cutting of walls or access to ceilings other than for visual inspection.

Work Type B: Small scale, short duration activities which create minimal dust. Includes, but is not limited to, installation of telephone and computer cabling, access to chase spaces, cutting of walls or ceiling where dust migration can be controlled.

Work Type C: Any work which generates a moderate to high level of dust or requires demolition or removal of any fixed building components or assemblies. Includes, but is not limited to, sanding of wall for painting or wall covering, removal of floor coverings, ceiling tiles and casework, new wall construction, minor ductwork or electrical work above ceilings, major cabling activities, and any activity which cannot be completed within a single work shift.

Work Type D: Major demolition and construction projects. Includes, but is not limited to, activities which require consecutive work shifts, require heavy demolition or removal of a complete ceiling system, and new construction.

C. Determine Interim Measure Class:

CONSTRUCTION ACTIVITY→ RISK LEVEL ↓	TYPE "A"	TYPE "B"	TYPE "C"	TYPE "D"
Group 1	I	II	II	III/IV
Group 2	I	II	III	IV
Group 3	I	III	III/IV	IV
Group 4	III	III/IV	III/IV	IV

Interim Measure Class I

1. Execute work by methods to minimize raising dust from construction operations.
2. Immediately replace any ceiling tile displaced for visual inspection.
3. Cleanup and disposal as appropriate.

Interim Measure Class II

1. Provide active means to prevent air-borne dust from dispersing into atmosphere, including water mist work surfaces to control dust while cutting.
2. Seal unused doors with masking tape.
3. Block off and seal air vents.
4. Cleanup and disposal as appropriate.

Interim Measure Class III

1. Isolate HVAC system in area where work is being done to prevent contamination of duct system.
2. Complete all critical barriers before construction begins or implement control cube method.
3. Maintain negative air pressure within work site utilizing HEPA equipped air filtration filter as required on a per project basis.
4. Contain construction waste and during transport in appropriate container.
5. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work areas.
6. Place dust mat at entrance and exit of work area.
7. Clean construction area before leaving work area daily.

Interim Measure Class IV

1. Isolate HVAC system in area where work is being done to prevent contamination of duct system.
2. Complete all critical barriers before construction begins per project basis.
3. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units as required on a per project basis.
4. Seal holes, pipes, conduits, and punctures appropriately.
5. Construct anteroom and require all personnel to pass through this room so they can be vacuumed using an HEPA vacuum cleaner before leaving work site or they can wear cloth or paper coveralls that are removed each time they leave the work site as required per project basis.
6. All personnel entering work site are required to wear appropriate protective clothing as required by the area.
7. Provide adhesive/carpet walk-off mats at entrance to work area within the anteroom. Replace used mats with new mats in accordance with manufacturer's recommendations and/or as needed.
8. Do not remove barriers from work area until completed project is inspected by the VAMC's Safety and Infection Control Departments, COTR, and thoroughly cleaned.
9. Provide appropriate clean up daily.

10. Wet mop area with disinfectant as required.
11. Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction.
12. Contain construction waste before and during transport in appropriate covered containers.

D. Document infection control measures to be implemented on attached form. List contractor, service line or individual responsible for implementation.

E. Obtain appropriate approvals.

F. Review and implement all required interim measures with the Contractor's Project Managers and personnel performing work.

G. Complete Infection Control Permit and ensure it is posted outside the work site entrance at all times.

INFECTION CONTROL MEASURES

Location Group: Group 1
Work Type: Type D
Interim Measure Class: Class III
Infection Control actions to be implemented:
1) Temporary infection and dust control barriers shall be placed while working in the basement of building 100.
2)
3)
4)
5)
6)
7)
8)
9)
10)

Responsibility for implementation:
1) Contractor.
2)
3)
4)
5)
6)
7)
8)
9)
10)

WJB Dorn VAMC Infection Control Construction Permit

Location of Construction: North side of campus along Garners Ferry Road and the basement of Building 100.	Project Start Date: September 1, 2017
Project Coordinator: Robert B. Price Jr.	Estimated Duration: One year
Contractor Performing Work:	Permit Expiration Date: when finished
Supervisor:	Constr.Supervisor phone:

YES	NO	CONSTRUCTION ACTIVITY TYPES	YES	NO	PATIENT RISK GROUP
☐	☐	TYPE A: Inspection, non-invasive activity	☑	☐	GROUP 1: Least Risk
☐	☐	TYPE B: Small scale, short duration, moderate to high levels	☐	☐	GROUP 2: Medium Risk
☐	☐	TYPE C: Activity generates moderate to high levels of dust, requires greater 1 work shift for completion	☐	☐	GROUP 3: Medium/High Risk
☑	☐	TYPE D: Major duration and construction activities Requiring consecutive work shifts	☐	☐	GROUP 4: Highest Risk

CLASS I ☐	1. Execute work by methods to minimize raising dust from construction operations. 2. Immediately replace any ceiling tile displaced for visual inspection.	3. Use control cube for ceiling access when >1 ceiling tile removed. 4. Clean work area immediately after task completion.
CLASS II ☐	1. Provide active means to prevent air-borne dust from dispersing into atmosphere 2. Water mist work surfaces to control dust while cutting. 3. Seal unused doors with duct tape. 4. Block off and seal all air vents. 5. Place dust mats at entrance and exits of work areas. 6. Wipe work surfaces with approved disinfectant.	7. Contain construction waste before transport in tightly covered containers. 8. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area. 9. Remove or isolate HVAC system in areas where work is being performed.
CLASS III ☑ 5/25/17 Date JWA Initial	1. Remove or Isolate HVAC system in area where work is being done to prevent contamination of the duct system. 2. Complete all critical barriers to seal area from non work area before construction begins. 3. Maintain negative air pressure within work site 24/7, utilizing HEPA equipped air filtration units; with filter changes as needed. 4. Do not remove barriers from work area until completed project is thoroughly cleaned with hospital-approved disinfectant by Housekeeping, and approved by Project Coordinator.	6. Vacuum work area with HEPA filtered vacuums. 7. Wet mop with disinfectant. 8. Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction. 9. Contain construction waste before transport in tightly-covered containers. 10. Cover transport receptacles or carts. Tape covering. Wipe off cart and wheels with approved disinfectant before transporting debris.
Class IV ☐ Date Initial	1. Isolate HVAC system in area where work is being done to prevent contamination of duct system. 2. Complete all critical barriers or implement control cube method before construction begins. 3. Maintain negative air pressure within work site 24/7, utilizing HEPA equipped air filtration units; with filter changes as needed. 4. Seal holes, pipes, conduits, and punctures appropriately. 5. Construct anteroom and require all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site or they can wear cloth or paper coveralls that are removed each time they leave the work site. 6. All personnel entering work site are required to wear shoe covers; changed each time exiting work area.	7. Do not remove barriers from work area until completed project is thoroughly cleaned with approved disinfectant by Housekeeping and approved by Project Coordinator. 8. Vacuum work area with HEPA filtered vacuums. 9. Wet mop with disinfectant. 10. Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction. 11. Contain construction waste before transport in tightly covered containers. 12. Cover transport receptacles or carts. Tape covering. 13. Remove or isolate HVAC system in areas where work is being done.

Additional Requirements: Adhesive walk-off mats required at entrance to and exit from work areas for Class III and Class IV projects.

☐**YES** ☑**NO** 2-step tuberculosis skin testing (TST) documentation is required for this project involving occupied rooms.

☐**YES** ☑**NO** N-95 respirator fit-testing documentation is required for projects involving occupied airborne isolation rooms.

TB risk assessment: Per CDC criteria Dorn VAMC is low risk and although not required (except as listed above), all construction workers are encouraged to have 2-step tuberculosis skin testing (TST).

Date Initials :	_____ Exceptions/Additions to this permit Date Initials are noted by attached memoranda
Permit Request By:	Permit Authorized By: Lucy G. Austin
Date:	Date: 5-25-17

POST-CONSTRUCTION ASSESSMENT

PROJECT: Correct Police and Security Service Deficiencies
LOCATION: North side of campus along Garners Ferry road
PROJECT TYPE: New Construction
PROJECT START(NTP) DATE:
PROJECT COMPLETION DATE:

Final Occupancy Review Checklist (engineering Share Point) has been completed and all required documentation submitted?

☐ Yes ☐ No ☐ NA (N/A for in-house projects)

Air quality:

Review comments:

Additional action taken:

Infection control:

Review comments:

Additional action taken:

Utility requirements:

Review comments:

Additional action taken:

POST-CONSTRUCTION ASSESSMENT

Noise and vibration:

Review comments:

Additional action taken:

Physical security:

Review comments:

Additional action taken:

Emergency procedures:

Review comments:

Additional action taken:

General comments:

POST-CONSTRUCTION ASSESSMENT

Submitted by:

1. Project Manager/COTR/Shop Supervisor	**Date**

Obtain the following approvals, in the order listed, as applicable:

1. Maintenance Control Manager, Engineering Service	**Date**
2. Project Section Chief, Engineering Service	**Date**
3. Assistant Chief, Engineering Service	**Date**
4. Infection Control Coordinator	**Date**
5. VA Police Representative	**Date**
6. Safety and Emergency Management Service Representative	**Date**
7. Chief, Engineering Service	**Date**