Work scope details:

Title: BL14B Computer Rack Removal

Work Scope Summary: The task involves the removal of a computer rack from the BL14B location and its subsequent relocation to the southside laydown area of building 8700. This operation requires careful handling to ensure safety and compliance with established protocols.

Key Work Scope Components:

• Removal of the computer rack from BL14B.

• Transportation of the rack to the southside laydown area of 8700.

• Use of hoisting and rigging services for safe movement.

• Implementation of traffic control measures during the operation.

Relevant previous events and lessons learned:

Event Title	Event Summary	Lessons Learned	Reference Link
Equipment Failure During Lift	A computer server rack fell during a lift due to improper rigging, resulting in equipment damage and near-miss injuries.	Importance of engaging qualified rigging personnel and conducting thorough pre-lift checks.	OSHA Equipment Safety
Improper Manual Handling	An employee suffered a back injury while manually lifting a heavy server.	Emphasized the need for ergonomic assessments and the use of lifting aids for heavy loads.	NIOSH Manual Handling
Traffic Control Incident	A worker was struck by a vehicle while moving equipment in a congested area without proper traffic control measures.	Highlighted the necessity of establishing clear traffic control zones and using spotters during equipment movement.	Traffic Safety Guidelines
Confined Space Entry	A technician was injured while working in a poorly ventilated area during equipment removal.	Reinforced the need for ventilation assessments and monitoring air quality in confined spaces.	OSHA Confined Spaces
Inadequate Communication	A miscommunication led to two teams working simultaneously in the same area, resulting in a near miss.	Stressed the importance of clear communication protocols and pre-job briefings.	Effective Communication in Safety

Missing Hazards:

Hazard	Missing or Inadequate Mitigation in Current Work Control Document	Recommended Mitigation for Revision	Reference Link	SBMS Link
Hoisting and Rigging	Not addressed	Ensure qualified riggers are present and conduct a pre-lift meeting.	[N/A]	[N/A]

Hazard	Missing or Inadequate Mitigation in Current Work Control Document	Recommended Mitigation for Revision	Reference Link	SBMS Link
Manual Material Handling	Inadequate guidance on weight limits	Specify maximum weight limits for manual handling and promote the use of mechanical aids.	[N/A]	[N/A]
Traffic Control	Not addressed	Establish designated traffic control zones and assign personnel to manage traffic during the operation.	[N/A]	[N/A]
Ergonomic Risks	Not addressed	Conduct ergonomic assessments of lifting techniques and workstation setups.	[N/A]	[N/A]
Electrical Hazards	Not addressed	Ensure power sources are disconnected prior to equipment removal and verify with lockout/tagout procedures.	[N/A]	[N/A]
Environmental Conditions	Inadequate assessment of temperature extremes	Monitor temperature and provide appropriate PPE for heat or cold exposure.	[N/A]	[N/A]
Communication Failures	Vague guidance on communication protocols	Implement a structured communication plan including hand signals and radio use.	[N/A]	[N/A]
Overhead Work	Not addressed	Use barriers or warning signs to alert personnel of overhead work and potential falling objects.	[N/A]	[N/A]
Confined Space Risks	Not addressed	Assess the area for confined space hazards and ensure ventilation is adequate.	[N/A]	[N/A]
Tool Operation	Inadequate training on tool use	Provide specific training on the tools being used for the removal and relocation tasks.	[N/A]	[N/A]
High Workload	Not addressed	Schedule adequate time for the task to prevent rushing and ensure thoroughness.	[N/A]	[N/A]
First-Time Task	Not addressed	Pair inexperienced workers with experienced personnel for guidance during the operation.	[N/A]	[N/A]

Failure mode analysis:

Current Control	Failure Mode of the Control	Effect of Failure	Cause of Failure	Recommended Action
Hoisting and Rigging Services	Permit not obtained or expired	Potential for equipment drop or injury	Lack of oversight	Implement a checklist for permit verification before work starts.
Personal Protective Equipment (PPE)	PPE not used or inadequate	Increased risk of injury	Poor enforcement of PPE policies	Conduct regular PPE audits and training sessions.
Work Instructions	Instructions not followed	Increased likelihood of accidents	Lack of clarity in instructions	Revise work instructions to include step-by-step visuals and checklists.
Communication Protocols	Miscommunication during operations	Increased risk of accidents	Inadequate communication training	Establish mandatory communication training and drills.
Emergency Response Procedures	Emergency plan not followed	Delayed response in case of incidents	Lack of familiarity with the plan	Conduct regular emergency response drills and reviews of the plan.
Tool Availability	Tools not available or inadequate	Delays and increased risk of using improper tools	Poor inventory management	Implement a tool tracking system to ensure availability and condition.
Training and Competency Verification	Inadequate training for workers	Increased risk of accidents	Insufficient training programs	Develop comprehensive training programs with assessments for competency verification.

Current Control	Failure Mode of the Control	Effect of Failure	Cause of Failure	Recommended Action
Traffic Control Measures	Traffic control not established	Increased risk of vehicle accidents	Lack of awareness of traffic control needs	Assign dedicated personnel for traffic control and establish clear signage.
Lockout/Tagout Procedures	Procedures not followed	Risk of accidental energization	Lack of training on procedures	Conduct regular training and audits on lockout/tagout practices.
Ergonomic Assessments	Ergonomic risks not evaluated	Increased risk of musculoskeletal injuries	Lack of awareness of ergonomic practices	Implement regular ergonomic assessments and training for manual handling tasks.