ACTIVITY HAZARD ANALYSIS (AHA)

Activity/Work Task: **Concrete Slab Casting (First Floor)**	Overall Risk Assessment Code (RAC) (Use highest code) **M**
Project Location: **DHA Phase 2, Lahore, Pakistan**	**RISK ASSESSMENT CODE (RAC) MATRIX**
Contract Number: **UBC-CP-2026-042**	
Date Prepared: **04/14/26**	
Prepared by (Name/Title): **Engr Afaq Ahmad**	
Reviewed by (Name/Title): **Hassan Mehmood (HSE Officer)**	

Severity	PROBABILITY				
	Freq.	Likely	Occas.	Seldom	Unlikely
CATASTROPHIC	E	E	H	H	M
CRITICAL	E	H	H	M	L
MARGINAL	H	M	M	L	L
NEGLIGIBLE	M	L	L	L	L

Notes: (Field Notes, Review Comments, etc.) : —

Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above)

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible on AHA.

Annotate the overall highest RAC at the top of AHA on AHA.

RAC CHART
E = Extremely High
H = High Risk
M = Moderate Risk
L = Low Risk

JOB STEPS	HAZARDS	RISK CONTROLS	RAC
1. Formwork Inspection	1. Falling from height due to improper formwork setup (potential for serious injury or fatality) 2. Tripping hazards due to uneven surfaces or debris on formwork platform 3. Struck-by hazards from falling objects or tools during inspection	1. Ensure formwork is designed, erected, and inspected by a competent person according to OSHA 1926.703; WorkSafe New Zealand, specifically the Approved Code of Practice for Construction; ANSI A10.8 (Safety Requirements for Scaffolding) 2. Clear all debris and tripping hazards before beginning inspection – OSHA 1926.25(a); WorkSafe New Zealand regulation 2.3 3. Use fall protection (harness, lifeline) when working at heights exceeding 6 feet (1.8 meters) – OSHA 1926.501; WorkSafe New Zealand, Health and Safety at Work (General Risk and Workplace Management) Regulations 2016 4. Conduct pre-task safety briefing with all workers 5. Provide required PPE - Hard Hat, Safety Glasses, Safety Shoes, High-Vis Vest	**L**
2. Reinforcement Check	1. Puncture wounds or lacerations from handling rebar 2. Struck-by hazards from dropped rebar or tools 3. Musculoskeletal injuries from manual handling of rebar 4. Pinch points/caught-in hazards during rebar placement	1. Workers handling rebar to wear cut-resistant gloves – OSHA 1926.602(a); WorkSafe New Zealand regulation 2.3 2. Ensure rebar is stored and handled in a safe manner, using proper lifting techniques. OSHA 1926.25(a) & 1926.602(a); 3. Implement a lifting plan and provide mechanical aids for handling heavy rebar. WorkSafe New Zealand Health and Safety at Work Act 2015, section 36 4. Use appropriate tools for cutting and bending rebar; ensure workers are trained on tool usage 5. Provide required PPE - Hard Hat, Safety Glasses, Safety Shoes, Cut-Resistant Gloves	**M**

3. Concrete Pouring Using Concrete Pump	1. Contact with wet concrete (chemical burns, dermatitis)	1. Provide appropriate PPE, including chemical-resistant gloves and eye protection – OSHA 1926.62(d)(2); WorkSafe New Zealand, Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, regulation 13; ANSI Z87.1	**M**
	2. Struck-by hazard from concrete hose whipping or bursting (high force potential)	2. Secure and inspect the concrete hose and connections before use; consider a hose whip restraint system. OSHA 1926.700(a); WorkSafe New Zealand, Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, regulation 17	
	3. Slips and falls on wet/uneven surfaces	3. Ensure a clean and level working surface; provide walkways and prevent concrete from pooling. OSHA 1926.25(a); WorkSafe New Zealand, Health and Safety at Work at Heights 2017	
	4. Exposure to noise from the concrete pump	4. Provide hearing protection for workers exposed to noise levels exceeding 85 dBA – OSHA 1926.52; WorkSafe New Zealand Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, regulation 40	
	5. Tip-over of concrete pump on unstable ground	5. Ensure ground is level and compacted. Use outriggers. Ensure regular maintenance of the equipment including pre-operational safety checks. See equipment section	
		6. Provide required PPE - Hard Hat, Safety Glasses, Chemical Resistant Gloves, Steel Toed Boots, and Hearing Protection	
4. Concrete Pouring Using Transit Mixer	1. Contact with wet concrete (chemical burns, dermatitis)	1. Provide appropriate PPE, including chemical-resistant gloves and eye protection – OSHA 1926.62(d)(2); WorkSafe New Zealand, Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, regulation 13; ANSI Z87.1	**M**
	2. Struck-by hazard from concrete pouring or splashing	2. Maintain safe distance from discharge points. Use spotters to direct the transit mixer; ensure clear lines of communication. OSHA 1926.600(a) and (b)	

	3. Slips and falls on wet/uneven surfaces	3. Ensure a clean and level working surface; provide walkways and prevent concrete from pooling. OSHA 1926.25(a); WorkSafe New Zealand, Health and Safety at Work at Heights 2017	
	4. Exposure to noise from the transit mixer	4. Provide hearing protection for workers exposed to noise levels exceeding 85 dBA – OSHA 1926.52; WorkSafe New Zealand Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, regulation 40	
	5. Crushing hazard from the transit mixer operating on site	5. Provide required PPE - Hard Hat, Safety Glasses, Chemical Resistant Gloves, Steel Toed Boots, Hearing Protection and reflective vest	
5. Concrete Vibration	1. Hand-arm vibration syndrome (HAVS) from prolonged use of needle vibrator	1. Provide vibration-reducing gloves and limit the duration of vibrator use; Implement rest breaks. Control exposure to meet the requirements of Singapore Workplace Safety and Health (Risk Management) Regulations; WorkSafe New Zealand, Health and Safety at Work Act 2015, section 36	**L**
	2. Electric shock from faulty equipment or contact with energized parts	2. Ensure electrical equipment is properly grounded and maintained; Use GFCI protection. OSHA 1926.404(b)(1); WorkSafe New Zealand Electrical Regulations, regulations 26	
	3. Eye injury from concrete splashback	3. Provide eye protection. OSHA 1926 Subpart E	
	4. Struck-by from falling debris	4. Provide for regular maintenance and inspection of the equipment. Review the manufacture's specifications	
		5. Provide required PPE - Hard Hat, Safety Glasses , Vibration-reducing gloves, and Steel Toed Boots	
6. Leveling and Finishing	1. Slips and falls on a wet, uneven surface	1. Maintain a clean and level work surface; provide proper footwear with good traction. OSHA 1926.300	**M**

	2. Musculoskeletal injuries from repetitive motions and awkward postures	2. Encourage proper lifting techniques and provide tools with ergonomic design. WorkSafe New Zealand, Health and Safety at Work Act 2015, section 36	
	3. Eye injury from concrete splashback	3. Provide eye protection. OSHA 1926 Subpart E	
	4. Skin irritation from contact with wet concrete	4. Provide appropriate PPE, including chemical-resistant gloves and coveralls. OSHA 1926.62(d)(2); WorkSafe New Zealand, Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, regulation 13; ANSI Z87.1	
		5. Provide required PPE - Hard Hat, Safety Glasses, Chemical Resistant Gloves, Steel Toed Boots	
		6. Consider use of extended handles on tools to minimize bending and reaching	
7. Curing Preparation	1. Slips and falls on a wet, uneven surface	1. Minimize water accumulation. OSHA 1926.300	**L**
	2. Heat stress if using water for curing	2. Provide shelter and breaks from the heat. OSHA 1926.21(b)(2); WorkSafe New Zealand regulation 2.3	
	3. Eye injury	3. Provide appropriate eye protection	
	4. Exposure to chemicals of curing compounds	4. Follow manufacturer instructions and provided PPE guidance	
		5. Provide required PPE - Hard Hat, Safety Glasses, Chemical Resistant Gloves	

HAZARDS CHECKLIST		
☑ **Can someone be struck or contacted by anything while doing this job?** ☑ **Can someone strike against or make contact with any physical hazards?** ☑ **Can someone be exposed to any hazardous conditions?**	☑ **Can someone slip, trip or fall?** ☑ **Can someone strain or overexert?** ☑ **Can someone be caught in anything?**	☐ Can someone fall into anything? ☑ **Can damage to equipment occur?** ☑ **Can someone injure someone else?**
Approvals (Sign/Date)	**Approvals (Sign/Date)**	**Approvals (Sign/Date)**
Approvals (Sign/Date)	**Approvals (Sign/Date)**	**Approvals (Sign/Date)**