

Project Name:

Cost Item	Description	Subcategories	Hazards	Risk Level	Comment	Control Methods
					Creation Date: July 24th, 2013 Revision Date: December 24th, 2013	By: Tayo Tokode Site Supervisor:
3010	Support Services	Deliveries	Vehicle / Equipment Traffic  Falls from Truck Struck By Injuries	High  Low Medium	On Road vehicles carry high likelihood of incident causing injury. Off Road instances low.  Low frequency but potential fatal	Follow Safe Operating Procedures. Ensure adequate training Establish traffic Control Plans Review Signalling procedures PPE for all workers entering site Train for offloading procedures Train for offloading procedures
3060	Mobilize & Demob	Deliveries	Vehicle / Equipment Traffic	High	While frequency of incidents are low, occurrences can be fatal	Follow Safe Operating Procedures. Ensure adequate training Establish traffic Control Plans Review Signalling procedures
3070	Housekeeping and Clean-Up	Site Cleanliness	Slips Trips Fire Hazard	High Low	<b>Most frequent cause of injury at Reimar</b>	Ensure work area is tidy and free from debris Fire extinguishers placed on site as needed
3080	Flagman / Backing Trucks	Equipment and Deliveries	Vehicle / Equipment Traffic	High	While frequency of incidents are low, occurrences can be fatal	Follow Safe Operating Procedures. Ensure adequate training Establish traffic Control Plans Review Signalling procedures
3100	Layout		Access - Heights	Low - High	Hazard associated with work activity layout being performed for	Wear appropriate PPE/ Follow procedures for work activity - ie. Tie-off
3160	Concrete Pumping	Site Conditions Excavations	Noise Manual Handling Burns - Skin	Medium Medium Medium	Noise Induced Hearing Loss Increase likelihood of musculoskeletal injuries	Use appropriate PPE - Le ear plugs, rubber boots Ensure enough manpower to handle concrete hose
3170	Mobile Crane (Rental)	Equipment	Falling object while hoisting materials  Collision with cranes Braking system fail Collision with Power Cable Tumble of crane	High  High Medium High High	Can cause serious injury or death to workers and damage to properties While frequency of incidents are low, occurrences can be fatal	Safe Work procedure for lifting to be enforced  Ensure Watchman is deployed before lifting operations Regular Equipment Maintenance Review Signalling procedures Ensure adequate training / Certification
3180	Tower Crane	Equipment	Falling object while hoisting materials Collapse of tower crane	High High	Can cause serious injury or death to workers and damage to properties While frequency of incidents are low, occurrences can be fatal	Safe Work procedure for lifting to be enforced Professional Engineer design for foundation
3190	Tower Crane (Rental)	Equipment	Falling object while hoisting materials Collapse of tower crane	High High	Can cause serious injury or death to workers and damage to properties While frequency of incidents are low, occurrences can be fatal	Safe Work procedure for lifting to be enforced Professional Engineer design for foundation
3220	Mudslabs	Excavations Site Conditions	Soil Conditions Access Hit by pump hose Manual Handling Burns - Skin	Low High High Medium Medium	Cause of Multiple lost time injuries Increase likelihood of physical injuries Increase likelihood of musculoskeletal injuries	Excavations to be sloped in accordance with soil conditions Access to excavations should be adequately sloped for access, or appropriately sized access ladders used Follow Safe Operating Procedures. Ensure enough manpower to handle concrete hose Ensure adequate training / Certification
3240	Footings	Excavations	Soil Conditions Access Ergonomics	Low High High	Cause of Multiple lost time injuries LB injuries often result in Lost time	Excavations to be sloped in accordance with soil conditions Access to excavations should be adequately sloped for access, or appropriately sized access ladders used Workers must be frequently re-educated on lifting techniques and ergonomics
3250	Low walls and grade beams (>6')	Excavations  Hand-Set Forms  Work With Telescopic Forklifts	Soil Conditions Access Lower Back Strain Lower Back Strain Pinch Points Vehicle / Equipment Traffic	Low High High High Medium High	Cause of Multiple lost time injuries LB injuries often result in Lost time LB injuries often result in Lost time High frequency but low severity While frequency of incidents are low, occurrences can be fatal	Excavations to be sloped in accordance with soil conditions Access to excavations should be adequately sloped for access, or appropriately sized access ladders used Workers must be frequently re-educated on lifting techniques and ergonomics Workers must be frequently re-educated on lifting techniques and ergonomics Encourage glove use Follow Safe Operating Procedures. Ensure adequate training / Certification Establish traffic Control Plans Review Signalling procedures
3260	Walls	Work With Telescopic Forklifts  Gang Panel Forms  Crane Use	Vehicle / Equipment Traffic  Working at heights  Struck By Injuries Hoisting Activities	High  High  Medium Medium	While frequency of incidents are low, occurrences can be fatal  High likelihood of occurrence High risk of injury even with fall limiting High past history of lost time injury  Higher frequency though usually low severity While frequency of incidents are low, occurrences can be fatal	Follow Safe Operating Procedures. Ensure adequate training / Certification Establish traffic Control Plans Review Signalling procedures Training and use of fall prevention devices Training and use of fall limiting devices Ensuring ladders in good condition and used correctly Establish and train workers in Fall Rescue plan Ensure workers aware of hazards wearing PPE Ensure operators Trained and Certified Ensure riggers trained and certified Use tag lines to control loads Cease use in adverse weather conditions Ensure equipment inspected daily
3280	Columns	Concrete and Casting	Working at heights - fall  Lower Back Strain Pinch Points	High  High Medium	While frequency of incidents are low, occurrences can be fatal  LB injuries often result in Lost time High frequency but low severity	Follow Safe Operating Procedures. Ensure adequate training / Certification Workers must be frequently re-educated on lifting techniques and ergonomics Encourage glove use
3290	Slab on grade	Concrete and Casting  Gas / Air Powered Tools	Vehicle / Equipment Traffic  Fire Hazard Struck By Injuries	High  Low Medium	While frequency of incidents are low, occurrences can be fatal  Broad awareness limits risk factor	Follow Safe Operating Procedures. Ensure adequate training Establish traffic Control Plans Review Signalling procedures Fire extinguishers placed on site as needed Ensure workers aware of hazards wearing PPE
3300	Suspended Slab/Beams/Drops	Concrete and Casting	Falls from height Failure of joints due to materials and weak joint of steel member  Material failure	High Medium Medium	While frequency of incidents are low, occurrences can be fatal  Broad awareness limits risk factor	Follow Safe Operating Procedures. Ensure adequate training  Condone off work are

3310	Slab on Metal Deck Incl Shoring	Concrete and Casting	Falls from height Struck By Injuries	High Medium	While frequency of incidents are low, occurrences can be fatal	Follow Safe Operating Procedures. Ensure adequate training Ensure workers aware of hazards wearing PPE
3320	Stairs and Landing	Concrete and Casting  Hand-Set Forms	Falls from height Manual Handling of concrete pump hose Burns - Skin Lower Back Strain Pinch Points Formwork collapse	High Medium High Medium Medium	While frequency of incidents are low, occurrences can be fatal Increase likelihood of musculoskeletal injuries LB injuries often result in Lost time High frequency but low severity Material or Support failure	Follow Safe Operating Procedures. Ensure enough manpower to handle concrete hose Encourage the use of appropriate PPE Workers must be frequently re-educated on lifting techniques and ergonomics Encourage glove use Condone off work area
3350	Piers	Excavations  Hand-Set Forms  Work With Telescopic Forklifts	Soil Conditions Access Lower Back Strain Lower Back Strain Pinch Points Vehicle / Equipment Traffic	Low High High High Medium High	Cause of Multiple lost time injuries LB injuries often result in Lost time High frequency but low severity	Excavations to be sloped in accordance with soil conditions Access to excavations should be adequately sloped for access, or appropriately sized access ladders used Workers must be frequently re-educated on lifting techniques and ergonomics Workers must be frequently re-educated on lifting techniques and ergonomics Encourage glove use Follow Safe Operating Procedures. Ensure adequate training / Certification Establish traffic Control Plans Review Signalling procedures
3360	Curing	Concrete and Casting	Respiratory problems from curing compounds Caustic burn to eyes and skin Vibratory Compactor Wet Curing	Medium High High Medium	High risk of long term health effects	Follow Safe Operating Procedures. Ensure adequate training / Certification Encourage the use of appropriate PPE Worker education on hazards of curing compounds
3370	Rubs	Grinding and Sack Rubbing	dust containing Silica  Struck By Injuries	Low Medium	*While Silica is a designated substance, hazard controls effectively mitigate risk making the likelihood of incident low. High frequency but low severity	Worker education on hazards of concrete dust PPE - Including dust masks and/or respirators Dust containment systems to be used for indoor applications Ensure workers aware of hazards wearing PPE
3420	Anchor Bolts	Hand-Set Forms	Lower Back Strain Pinch Points	High Medium	LB injuries often result in Lost time High frequency but low severity	Workers must be frequently re-educated on lifting techniques and ergonomics Encourage glove use
3430	Grouting	Materials	Respiratory problems Skin Contact: Burns Eye Irritation Allergies/Dermatitis Airborne silica/ workign with grout pump	Medium High High Medium High	High risk of long term health effects  Ergonomic issue/musculoskeletal worries	Follow Safe Operating Procedures. Ensure adequate training / Certification Encourage the use of appropriate PPE Worker education on hazards of curing compounds
3450	Winter heat	Gas / Air Powered Tools Propane	Fire Hazard Compressed Gas	Low Medium	Broad awareness limits risk factor Broad awareness limits risk factor	Fire extinguishers placed on site as needed Propane Handling certification needed PPE
3460	Excavation	Excavations	High Noise Level  Exposure to carbon dioxide and carbon monoxide Soil collapse Excavator Swing onto workers Falling into excavated trench	Medium Medium Medium Low High	Regular maintenance of equipment and the use of only trained operators will minimize the risk Enforcing the use of PPE around the work zone will reduce the risk Broad awareness limits risk factor	Excavations to be sloped in accordance with soil conditions Access to excavations should be adequately sloped for access, or appropriately sized access ladders used Conduct safety tool box talk prior to work. Ensure no work within haulage radius Zone. Close supervision of the works
3470	Backfill and Compaction	Excavations	Exposure to carbon dioxide and carbon monoxide Soil collapse Excavator Swing onto workers Workers falling into gaps and openings Noise generate from roller compaction Crush by roller compactor Vibration	Low Medium High High Medium High Medium	Regular maintenance of equipment and the use of only trained operators will minimize the risk Broad awareness limits risk factor	Follow Safe Operating Procedures. Proper access must be provided
3480	Dewatering & Pumping	Site Conditions Excavations	Standing Water Soil Conditions Slope	Medium Low	Increases likelihood of Slips/Trips	All standing water to be pumped continuously, as req'd Excavations to be sloped in accordance with soil conditions
3490	Rebar	Materials	Sharp noise from cutting of reinforcement bars Cut from rusty reinforcement bars  Expose to cut/bend machine Hit by reinforcement bar during the bending process	Low Medium High Medium	Cuts and bruises may be frequent	Safe work procedure for cutting and bending Encourage the use of appropriate PPE Workers must be trained to do the job
3500	Access Scaffolding, Stairs, Hoarding	Access	Workers falling from height Falling materials Collapse of scaffold	High High High	This is a major concern	Safe Work Procedure for working at height Use of appropriate PPE - Fall arrest system Use appropriate material for scaffold construction