JOB SAFETY ANALYSIS (JSA) FORM

Rev 1 Feb 24

Unit/Area:	Specific Location:	Work Authorizer (if applicable):	Supervisor / Work Lead:	Date:

Job Description for Tasks with High Potential Consequence (i.e., life-altering injuries or Consequence Level 1 process safety events including HC 1&2 events) (include Equipment Numbers as Practical):

Check LSRA(s) that apply and review Start Work Check(s). Complete Page 2 with any additional task steps with high potential consequence or if there is no applicable LSRA.

Confined Space Entry ☐

Obtain authorization before entering a confined space

1. I confirm energy sources are isolated
2. I confirm the atmosphere has been tested and is monitored
3. I check and use my breathing apparatus when required
4. I confirm there is an attendant standing by
5. I confirm a rescue plan is in place
6. I obtain authorization to enter

Bypassing Safety Controls ☐

Obtain authorization before overriding or disabling safety controls

1. I understand and use safety-critical equipment and procedures which apply to my task
2. I obtain authorization before:
   - Disabling or overriding safety equipment
   - Deviating from procedures
   - Crossing a barrier

Energy Isolation ☐

Verify isolation and zero energy before work begins

1. I have identified all energy sources
2. I confirm that hazardous energy sources have been isolated, locked, and tagged
3. I have checked there is zero energy and tested for residual or stored energy
4. I never remove or tamper with energy control devices without authorization
5. I confirm equipment is back to safe operating condition prior to re-energizing

Excavation ☐

Obtain authorization before digging or entering excavations

1. I obtain authorization prior to performing excavation / trenching / ground disturbance activities
2. I confirm underground utilities and structures are located, de-energized or protected
3. I confirm hazard controls and confined space entry as required
4. I monitor for changing conditions and exit as appropriate

Safe Mechanical Lifting ☐

Plan lifting operations and control the area

1. I confirm that the equipment and load have been inspected and are fit for purpose
2. I only operate equipment that I am qualified to use
3. I establish and obey barriers and exclusions zones
4. I never walk under a suspended load
5. I understand the lift plan prior to starting work and keep hands off load unless authorized
6. I establish and maintain communication with lifting and rigging personnel

Hot Work ☐

Control flammables and ignition sources

1. I identify and control ignition sources
2. Before starting any hot work:
   - I confirm flammable material has been removed or isolated
   - I obtain authorization
3. Before starting hot work in a hazardous area, I confirm:
   - A gas test has been completed
   - Gas will be monitored continually

Working Around Mobile Equipment ☐

See and be seen; maintain a safe distance

1. I plan work to separate workers and mobile equipment
2. I only operate mobile equipment if qualified and use spotters where required
3. I verify safety devices are functional on mobile equipment
4. I establish clear means of communication with equipment operator
5. I stay out of the equipment's exclusion zone while in operation
6. I confirm controls are in place to prevent unintentional movement of mobile equipment and/or loads

Working at Height ☐

Protect yourself against a fall when working at height

1. I inspect my fall protection equipment before use
2. I secure tools and work materials to prevent dropped objects
3. I tie-off 100% to approved anchor points while outside protected area
4. I have validated prompt rescue capability when wearing fall protection
5. I will follow safe work practices when climbing, descending or working from ladders

BreakingContainment/OPE ☐

Manage ignition sources and exposure to energy & hazardous substances

1. I verify opening/break location(s)
2. I confirm energy isolation is complete
3. I manage ignition sources and confirm gas testing is completed when required
4. I use appropriate PPE and defensive behaviors when opening process equipment

Driving ☐

Follow safe driving rules

1. I always wear a seatbelt
2. I do not exceed the speed limit, and reduce my speed for road conditions
3. I do not use phones or operate devices while driving
4. I am fit, rested and fully alert while driving
5. I follow journey management requirements

Work Authorization ☐

Work with a valid permit when required

1. I have confirmed if a permit is required
2. I am authorized to perform the work
3. I understand the permit
4. I have confirmed that hazards are controlled, and it is safe to start
5. I stop and reassess if conditions change

Line of Fire ☐

Keep yourself and others out of the line of fire

1. I position myself to avoid:
   - Moving objects
   - Vehicles
   - Pressure releases
   - Dropped objects
2. I establish and obey barriers and exclusion zones
3. I take action to secure loose objects and report potential dropped objects

Confirm these safeguards are in place and effective prior to starting work using the applicable SWC(s).
During the task, if safeguards are no longer in place or effective, STOP Work.

Are there any <u>additional</u> high potential consequence hazards present?

Electrical Energy	Moving Objects	Lighting & Visibility	Simultaneous Operations (SIMOPS) or Stacked Work
Stored Energy	Hazardous Substances	Noise & Vibration	
Thermal Energy	Radiation		

High Potential Consequence Task Steps (Description)	Check off to indicate Hold Point	POTENTIAL HAZARDS & CONSEQUENCES Include applicable Error Prone Situations and Triggers	SAFEGUARDS (Actions & Physical Safeguards) Eliminate or Mitigate the hazards
	Hold Point ☐		
	Hold Point ☐		
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	Hold Point ☐		
	Hold Point ☐		

Confirm these safeguards are in place and effective prior to starting work using this JSA.
During the task, if safeguards are no longer in place or effective, STOP Work.

Lessons Learned (as needed): What improvements should be made for future work? Discussion leader to provide feedback to update planning package.

LAI HAZARD ANALYSIS											
Project Number:		**Project Task: Forms and Concrete Work**					**Location:**				
Prepared By:			**Date:**				**Reviewed By:**			**Date:**	
Ref. Number	**High Potential Consequence Task Steps**	**POTENTIAL HAZARDS & CONSEQUENCES Include applicable Error Prone Situations and Triggers**	**Target** Check off to indicate Hold Point	**Preliminary Risk Assessment**			**Control Type**	**SAFEGUARDS (Actions & Physical Safeguards) Eliminate or Mitigate the hazards**	**Final Risk Assessment**		
				H	**M**	**L**			**H**	**M**	**L**
1	Excavation and Earthworks Work Activities within and around the GOLD project	Personnel exposure to: unstable soil associated with excavation work resulting in cave-in or collapse and personnel injury. Fall hazards. Inadequate access/egress. Mobile equipment and traffic.	P ☐		X		D/E/S/W/A A A	Prior to starting a task, Evaluate the Lifesaving Rules and actions (LSRA) start work Checks (SWC) that may apply to that task review START/STOP work expectations and implement, Verify & Validate (V&V) the appropriate behaviors and or control Safeguards per the ExxonMobil PSMS and site HSE Procedures during the pre-task brief Ensure JHA for specific LAI tasks address proper hazard control methods Complete a Last Minute Risk Assessment (LMRA) prior to beginning each task			X

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				H	**M**	**L**			**H**	**M**	**L**
							A	Utilize work permit system to control excavation work.			
							A	Perform analysis of soil to determine required actions.			
							A	Designate a competent person to perform daily inspections of excavations and protective systems.			
							E	Use appropriate protective systems (shoring, shields, and/or trench boxes).			
							E	Ensure spoil pile and heavy equipment is kept away from the edge of the excavation if workers are required to be in the excavation.			

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				H	**M**	**L**			**H**	**M**	**L**
							E A D/S /A	Excavation shall be sloped and benched appropriately according to the type of soil present. Adequate means for access to and egress from the excavation shall be provided (access ladders required every 25 feet of lateral travel) For excavations deeper than 4 ft, follow Working at Height requirements. Ensure hard barricades are installed if left unattended and personal fall protection equipment is utilized if within 6 ft. of excavation edge.			

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				H	**M**	**L**			**H**	**M**	**L**
							D/S /A D/A	Ensure excavations are barricaded and guarded from vehicle and mobile equipment traffic. No mobile equipment shall be within 2 ft. of unprotected excavation edges. Ensure all personnel are out of excavation while digging (or lowering in materials / equipment)			
2	Excavation and Earthworks Work Activities within and around the GOLD project	Personnel exposure to a hazardous atmosphere while working in an excavation resulting personnel injury. (Oxygen deficient, toxic, or flammable atmospheres)	P ☐		X		A A	Utilize work permit system to control excavation work. Designate a competent person to perform daily inspections of excavations and protective systems.			X

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				H	**M**	**L**			**H**	**M**	**L**
							A	Evaluate potential sources of hazardous gases including nearby storage tanks, pipelines, unloading stations, vehicle traffic, internal combustion engine driven equipment, etc.)			
							W/ S	Utilize a gas monitor to verify the atmosphere in the excavation prior to personnel entering the area.			
							A	Coordinate with ExxonMobil site Environmental dept. to verify and conduct soil testing (VOC's) as required.			
							A	Adequate means for access to and egress from the excavation shall be provided.			

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				H	**M**	**L**			**H**	**M**	**L**
3	Excavation and Earthworks Work Activities within and around the GOLD project	Damage to underground utilities resulting in damage to or temporary shutdown of the facility.	P ☐		X		A A A	Utilize work permit system to control excavation work. Survey of excavation area to determine location of underground utilities. i.e. probing, GPRS Review of underground utility drawings by a competent person.			X
4	Operation of heavy equipment, and mobile equipment within and around the GOLD project	Working in close proximity to large mobile equipment. Large equipment working in close proximity to live process systems.	P/F ☐	X			A/S /D A/ W	Barricade or cone working area of heavy equipment. Area shall be barricaded whenever possible to restrict access to personnel. Personnel shall wear high visibility vest or reflective arm bands around mobile equipment and at night.		X	

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				H	**M**	**L**			**H**	**M**	**L**
							A/ W W/ A A W/ A/S	Have spotter located to direct foot or vehicle traffic around equipment. Designated Flaggers/Spotters shall wear high visibility vest day and night. When working in close proximity to live systems, use a spotter when moving, mobilizing, or positioning mobile equipment into place. Barricade off area where equipment will be swung over. Utilize whistles and horns.			

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				H	**M**	**L**			**H**	**M**	**L**
5	General work activities (housekeeping) within and around the GOLD project	Slips, trips, and falls due to poor housekeeping resulting in personnel injury	P ☐		X		D/E /S/ W/A A A/D	Prior to starting a task, Evaluate the Lifesaving Rules and actions (LSRA) start work Checks (SWC) that may apply to that task review START/STOP work expectations and implement, Verify & Validate (V&V) the appropriate behaviors and or control Safeguards per the ExxonMobil PSMS and site HSE Procedures during the pre-task brief Ensure JSA for specific LAI tasks address proper hazard control methods. Shop work areas shall be set up and organized to minimize the buildup of materials and eliminate slip/trip hazards.			X

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				H	**M**	**L**			**H**	**M**	**L**
							D	Use pre-job stretching and flexing exercises.			
							A/E	Proper waste management receptacles shall be utilized to control trash, debris, and scrap material.			
							A/D	Access/ egress points and walkways shall be kept clear at all times.			
							A/D /E	Extension cords, welding leads, and other cables shall be routed overhead, when possible, in a manner that does not create a slip/trip hazard.			
							A	Regular supervisor walkthroughs should identify and eliminate housekeeping			

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				H	**M**	**L**			**H**	**M**	**L**
							E/W A A/W /E A/D	hazards and ensure proper housekeeping methods are being implemented throughout the work shift. All employees are to correct (or notify their supervisor) if they observe uneven walking/working surfaces. Care should be exercised, when surveying overhead areas. All holes/floor opening eliminated or protected with hard barricades Complete a Last Minute Risk Assessment (LMRA) prior to beginning each task			

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6	Use of electrical tools and hand tools	Exposure to electrical shock Exposure to flying particles from material being worked or from equipment. Injuries from use hand tools.	P ☐		X		D/E /S/ W/A A S/A A	Prior to starting a task, Evaluate the Lifesaving Rules and actions (LSRA) start work Checks (SWC) that may apply to that task review START/STOP work expectations and implement, Verify & Validate (V&V) the appropriate behaviors and or control Safeguards per the ExxonMobil PSMS and site HSE Procedures during the pre-task brief Ensure JSA for specific LAI tasks address proper hazard control methods. Implementation of GFCI requirements and Assured Grounding Program. Pre-use Inspection. Prompt removal from service of damaged equipment. A			X

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				H	**M**	**L**			**H**	**M**	**L**
								documented inspection will be performed, at least monthly, by a designated competent person.			
							E/A	Use tools according manufacturer's instructions.			
							A	Proper use of safe work practices including barriers, distance and required PPE.			
							E/S	Use appropriate work area barrier screens and PPE. Eye /Face protection Must be z87.1+ rated for high impact flying particles. Ensure all guards are in place. Do not use damaged equipment.			
							S	Use secondary support handle if equipped.			

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				H	**M**	**L**			**H**	**M**	**L**
							A	Complete a Last Minute Risk Assessment (LMRA) prior to beginning each task			
7	Material handling (manual) within and around the GOLD project	Improper lifting resulting in personnel injury (strains and sprains)	P ☐	X			A A A/D /S A/D A	Complete a Last Minute Risk Assessment (LMRA) prior to beginning each task and address proper lifting and material handling methods. One person will not lift over a maximum of 50 pounds or lift awkward loads without assistance. Two persons will not lift over a maximum of 100 pounds or lift awkward loads without mechanical assistance. All employees must be trained in proper lifting techniques and how to avoid awkward body positioning.		X	

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				H	**M**	**L**			**H**	**M**	**L**	
							A/D A A/D /S	Utilize mechanical lifting equipment when possible. Supervisor walkthroughs should identify potential repetitive motion activities for further analysis. Shop work areas shall be set up and organized to minimize the necessity to move materials around. Ensure JSA address proper hazard control methods and use of mechanical means when the maximum amount of weight that can be lifted, is to be lifted above a height of 4ft, lifted and carried more than 4ft, or lift to an elevated platform/ above head, up/down stairways etc.			

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				H	**M**	**L**			**H**	**M**	**L**
8	Material handling (manual) within and around the GOLD project	Improper lifting and/or material handling resulting in personnel injury (pinch and crush points)	P ☐	X			D/E /S/ W/A A A/S S	Prior to starting a task, Evaluate the Lifesaving Rules and actions (LSRA) start work Checks (SWC) that may apply to that task review START/STOP work expectations and implement, Verify & Validate (V&V) the appropriate behaviors and or control Safeguards per the ExxonMobil PSMS and site HSE Procedures during the pre-task brief Ensure JSA for specific LAI tasks address proper hazard control methods Personnel shall wear proper gloves when handling materials. Tag lines and no touch tools shall be used when handling materials via crane.		X	

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				H	**M**	**L**			**H**	**M**	**L**
							S S A	Push blocks or other means shall be used when placing or adjusting cribbing under a load. Temporary supports shall be designed to take into consideration uneven weight distribution to eliminate the possibility of shifting, rotating, swinging, etc. Complete a Last Minute Risk Assessment (LMRA) prior to beginning each task			

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9	Cut lumber for forms	Electric shock, Flying debris, Loud noise, Rotating blade, Fire, Back / Muscle strain	P ☐		X		A/D A/D A S A/D A A/D	Properly ground generator Protect ground rod. if used Test and use GFCI. Elevate cords and tools out of mud and water. Inspect cords and tools prior to use. Wear face shield along with safety glasses within 10 feet of anyone using circular saw. Cut on upwind side of horses. Jewelry should be secured prior to using circular saw. Keep hands away from rotating blade. Always use sawhorses, Secure (jig) material to be cut. Keep horse area clean and free of debris.			X

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				H	**M**	**L**			**H**	**M**	**L**
10	Assemble / Set forms	Pinch points for lumber / forms Struck by hammers / maul. Back / Muscle strain Scrapes and scratches. Tripping hazards from cords, lumber, debris, etc. Scrapes and scratches. Muddy conditions	P ☐		X		S/A A A A/D A/D A	Gloves will be worn while handling material. Keep hands and fingers out of in-between situations. Use good communication with coworkers when setting forms down. Be aware when slamming forms together – Keep body parts clear. Set nail, move hand, then drive nail. Never hold stake with hand when someone is driving – Use tool to hold stake. Clear walk path before carrying load. Be aware of pumps being stuck in the mud and dragging hoses around – get help if needed.			X

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				H	**M**	**L**			**H**	**M**	**L**
							A/D A/D S	Pull all nails – Never leave nail sticking out of the backside of forms. Make sure hand or body part will not be stuck by nail when it comes through the backside. Rubber boots will be worn in muddy/wet conditions			
11	Layout Set line for edge of form Set line for Center lines Layout for anchor bolts Set forms online Brace forms	Trip Hazards Slips, trips, and falls Impalement hazards Struck by hammer Forms sticking to concrete	P ☐		X		A S/ W A/D A/D	Beware of footing and surrounds. Cap all rebar with an OSHA approved method. Remove all trip hazards before working. Spray "Form Release" Watch your body positioning use face shield as needed.			X

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				H	**M**	**L**			**H**	**M**	**L**
12	Set forms, form hardware, and drive stakes using a sledgehammer or hammer.	Muscle pull / strain while swinging sledgehammer. Struck-by sledgehammer or hammer while driving stakes or hardware	P ☐		X		A A A	Have a firm grasp on sledgehammer with both hands and a use a controlled moderate speed while swinging hammer. Hold stake or hardware with free hand and tap it to get it started. Remove free hand and feet from the swing path before driving the stake or hardware in fully. Ensure that no workers are immediately nearby before swinging any hammers.			X

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				H	**M**	**L**			**H**	**M**	**L**
13	Strip forms Remove forms after appropriate cure time Remove forms from foundations using pry-bar, burke bar, hammer	Pinch points for lumber/ forms, Struck by hammers / maul Smashed hands Repetitive strain injuries Debris in eyes from splintered wood and concrete Back strain/ muscle pulls from pulling or lifting materials Silica exposure Pry-bar slipping, worker falling Punctures from rebar ends, tie-wire, nine-wire, and pencil rod Exposing others to tripping hazards	P ☐		X		A/D /S A/D /S A/D A/D A/D	Same as setting forms above; Use wet method and follow 1926.1153 Table 1 for silica exposure and dust control. Do not push pry-bar against body or forward, pry from the side and make sure other workers out of the way. Have a firm 2-hand grasp on the pry-bar. Use a wooden wedge between forms and foundation. Do not place hands or fingers in between forms and foundation. Remove all nails, pencil rod, and tire wire. Have rebar caps on all exposed rebar ends.			X

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				H	**M**	**L**			**H**	**M**	**L**
							A/D A/D	Keep free hand 10” away from wood wedges, belt, wall, or clamps when using a hammer to strike loose. Designate an area out of any walk paths to stack and store forms and lumber. Always use a bucket to store all hardware			
14	Set pour and place anchor bolts. Set anchor bolts according to layout. Set anchor bolts to correct Projection. Use templates	Struck by chute, Concrete burns, soft tissue damage Repetitive motion	P ☐		X		S A S A	Use chemical resistant gloves. Have 360-degree awareness and good communication. Use knee pads/mat. Take regular breaks from repetitive tasks and stretch those muscle groups multiple times a day			X

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				H	**M**	**L**			**H**	**M**	**L**
15	Receive trucks, Setup concrete pump truck, Pour concrete from truck	Escorting through refinery Blind spots, Ground failure, Utilities / Machinery Pinch points, struck by chute / moving equipment. Splashing concrete	P/E/F ☐		X		A/D A A/D A A S A D	Plan route – Including plan to get truck in and out, as well as where to wash out. Have all permits and pre-task in place and reviewed. Have flaggers in place to assist truck in backing up. Flagger to always maintain visual contact with driver. Never walk directly behind truck Driver needs appropriate PPE for the task. Ensure ground is stable during pre-planning stages.			X

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				H	**M**	**L**			**H**	**M**	**L**
							D/S	Out-riggers will be fully extended and on pads.			
							A	Be aware of process equipment.			
							A	Survey area for overhead obstructions			
							A	Never cross under the booms.			
							A/D	Use equipment to assist in moving material, never carry material overhead			
							D	Allow driver to attached chutes if possible. Watch fingers and hands when attaching.			
							A/D	Do not climb on truck. Be aware of swing radius of chute.			

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				H	**M**	**L**			**H**	**M**	**L**
							A A A A	Ensure that chute lock works properly. Designate one person to man the chute. Clear travel paths prior to transporting Be aware of chute overflowing			
16	Place, finish, and cure Concrete Tail gate/ Pump concrete into forms Finish concrete to correct grade and finish type.	Struck by chute/ hose. Concrete burns from splashing Back strains or muscle pulls from pulling/spreading. Struck by rotating equipment. Splash concrete curing compound/ retarder in eyes, concrete Burns	P/E/F ☐		X		A/S S A/D	Have 360-degree awareness. Use chemical resistant gloves, face shield and rubber boots Taped up while working with concrete. Wear face shield around placing and vibrating concrete. Clean concrete off skin immediately, have sleeves always rolled down.			X

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				H	**M**	**L**			**H**	**M**	**L**
	Finish using trowel machine. Apply concrete cure and concrete retarder	Electric Shock from concrete vibrator or cords					A/S	Know locations of nearest eye wash station and safety shower.			
							A	Use good communication with co-workers, rotate.			
							A/D	Drink plenty of water take breaks as needed.			
							A	Step gently when walking in concrete. Secure step before placing weight on lead foot.			
							A	Stage tools where they won't be in the way. Keep area surrounding pour clear of all obstructions.			
							A	Clean feet before exiting pour. Keep cream off existing slab			
							A	Use good communication when operating trowel machine.			

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				H	**M**	**L**			**H**	**M**	**L**
							S A/D	Use face shield as needed. Inspect cords thoroughly that do not get returned to the tool-room and check frequently throughout the day for abrasions or cuts to the cords. Use a GFCI at the power source. Unplug tools when not in use and keep any cords elevated out of standing water.			
17	Use pump truck to assist in the above task	Strike hazard/overhead load from pump truck hose Striking potential from discharge hose on pump truck	P ☐		X		A/D A	Do not walk under hose while it is in motion, if control of hose is necessary a tagline will be used to control it. If further control is necessary, a 2nd tagline will be used. Do not place hands, arms, or body near the discharge hose on the pump truck.			X

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				H	**M**	**L**			**H**	**M**	**L**
18	Plane/Bush/ Chipping Concrete	Silica exposure Debris in eye from concrete Pinch points when bushing near rebar Back strain from long-term bending down Flying Debris Impalement from rebar Fatigue High Noise Slips from wet concrete	P/E ☐		X		S A A/D /S A A	Goggles, and face shield, must be worn within 10’ of work being performed. Employees will make every effort possible to chip from the upside of wind. Use wet method or proper dust mask for silica exposure and dust control In situations where dust is a problem, employees will wear the appropriate respiratory protection. Do not place hands in a position to where it could potentially be pinched Use help as needed take breaks as needed			X

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				H	**M**	**L**			**H**	**M**	**L**
							A/S	Monitor body position and hand placement, metatarsal guards to be worn as necessary.			
							A	Trash and cut off material will be removed from work areas and disposed of properly.			
							D	Whip checks will be placed at all airline connections.			
							D	Whip check shall be secured on the hose and not the metal fitting.			
							A	Inspect all connections and make sure keeper pins are in place.			
							D	Rebar ends must be protected by rebar caps or lumber to prevent impalement hazards.			

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				H	**M**	**L**			**H**	**M**	**L**
							A S A	Employees should be monitored for fatigue when using equipment that produces vibration Proper hearing protection must be worn by any in the immediate work area. Keep area clean of mud and materials, use designated walk paths			
19	Install Post Anchor Bolts Verify location with equipment manufacture's drawing. Correct projection Correct length and diameter	Electrical hazards from corded core drill. Sprains/breaks from twisted power tool. Silica exposure from drilling activities	P ☐		X		A A/D	Inspect tools before use always use a GFCI on power tools. Always use handles on power tools never remove handles. Wet methods will be used to eliminate silica exposure			X

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				H	**M**	**L**			**H**	**M**	**L**
20	Saw Cut Concrete Transport saw Set up saw Pop line for area to be cut Connect water hoses Cut the area with saw	Saw not secure on the equipment Back strain from moving saw before started, manually Slips on concrete from slab being wet or having mud on your boots Struck by/slips Cuts from rotating blade, muscle strains Not suppressing dust or barricading area	P ☐				D/S A A A A/D/S/W	Be sure to secure saw and be sure that it is transported correctly to avoid damaging the saw. If needed, be sure to get help moving saw in the area, choose a clear walk path Use caution when walking on wet concrete, always clean mud off boots before walking on fresh concrete When cutting area be sure area is clear of any obstacles that could cause a hazard during cutting operations Barricade area to protect personnel, be sure to suppress access dust and wear respiratory and face shield			

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				H	**M**	**L**			**H**	**M**	**L**
							S A/D	Utilize metatarsal guards with shin/leg protection while using saw. Clean up any debris left behind, pick up and put away all tools, properly store the saw			
21	Demo Concrete (Breaking concrete using heavy equipment and chipping guns. Cutting any excess rebar with bandsaw Equipment hauling debris out area Housekeeping/ Manually	Equipment failures/malfunction Equipment hauling in/out and set up Fire hazard, caught by Cuts/lacerations Falls from equipment. Hand/power tool use Material handling/storage	P/F/E ☐		X		A A A/D /S	Equipment will be inspected before use Flying debris, be sure all personnel is clear of area when breaking concrete with heavy equipment Fuel powered tools/equipment must have fire extinguisher available within 20 feet. GFCI'S will be used with all electrical tools.			X

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	cleaning up debris)	Pinch points/swing radius Slip, Trips and Falls, Dust control Strike underground piping/utility lines Release of hydraulic fluid from equipment to environment					A/D /S A A A	Fuelling procedures for fuel powered tools/equipment must be followed with fire extinguisher present. Use caution as sparks possibly contacting clothing, let equipment cool before refuelling. Be sure all underground and overhead utilities are recognized in order to protect personnel from electrocution, explosion etc. Watch footing when climbing on equipment. Inspect all equipment before use. Clean up any debris left behind, pick up and put away all tools, properly store the saw.			

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							A	When passing around equipment, confirming eye contact with operators Keep cabs of equipment clean along with the work areas.			
							A/D	Secure all loads, when loads are long enough to where others cannot pass an escort must be present			
							A/D	Employees will have underground drawings and a One Call will be made. All proper documentation from one call will be on site. Area will also be probed/GPRS			
							A/D	Inspect equipment prior to use. Promptly report all damage for maintenance needs. Use oil absorbent pads in provided spill kit to contain			

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				H	**M**	**L**			**H**	**M**	**L**
							S	the fluid and contact First Line to report the spill. Utilize metatarsal guards with shin/leg protection while using jack hammers. Keep both hands on hand-held concrete breaking equipment (chipping guns) at all times for control.			

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