JOB HAZARD ANALYSIS (JHA)

Business name

Document: JHA-001 Rev 1
Prepared: Nov 9, 2026
Review by: Dec 9, 2026
Highest risk after controls: Medium

1. BUSINESS AND JOB DETAILS

Job	Pool excavation	**Start date**	Nov 9, 2026
Working hours	7:00 am to 3:30 pm	**Trade**	Excavation and earthworks

2. JOB STEPS, HAZARDS AND CONTROLS

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
1	Get 811 locates, check overhead power lines and access, and set out the pool	Hitting underground services Contact with overhead power lines Rules: 29 CFR 1926.651(b) and your state 811 law; 29 CFR 1926.1408 and 1926.416	**Critical Possible / Fatality**	1.1 Keep machine buckets well clear of marked services and use a spotter. [Engineering (guarding)] 1.2 Scan the area with a cable locator before digging and mark services on the ground. [Engineering] 1.3 Hand dig or vacuum excavate to expose services before using a machine near them. [Engineering] 1.4 Call 811 before you dig and wait until all utilities have marked their lines. [Administrative] 1.5 Keep plans or locate tickets on site and check them again if the work area grows. [Administrative] 1.6 Support or protect exposed utilities so they cannot sag or break while the excavation is open (29 CFR 1926.651(b)(4)). [Administrative] 1.7 If you hit a service, stop, get everyone clear, and call the owner and emergency services. [Administrative] 1.8 Wear safety boots, gloves and hi-vis when digging. [PPE] 1.9 Ask the utility to de-energize, move or insulate the lines before work starts. [Elimination] 1.10 Use non-conductive (fiberglass) ladders near any power lines. [Substitution] 1.11 Mark the safe distance with flags, tape or warning lines and keep all equipment and people outside it. [Engineering (guarding)] 1.12 Keep equipment at least 10 feet from lines up to 50 kV once the utility confirms the voltage, more for higher voltages, and 20 feet when the voltage is unknown (29 CFR 1926.1408). [Administrative] 1.13 Use a dedicated spotter whenever equipment moves or raises anything near lines. [Administrative] 1.14 Treat all lines as energized. If equipment touches a line, the operator stays in the cab and everyone else keeps well away. [Administrative]	**Medium Rare / Fatality**	Site supervisor
2	Plan truck routes and protect neighbouring fences and	Road traffic Structural collapse during	**Critical Possible /**	2.1 Do the work at low-traffic times, or close the road or lane with approval. [Elimination]	**Medium Rare / Fatality**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
	footings	alterations Rules: MUTCD Part 6 and 29 CFR 1926 Subpart G	**Fatality**	2.2 Put solid barriers between the work and traffic where speeds are high, not just cones. [Engineering (guarding)] 2.3 Use a truck-mounted attenuator or buffer vehicle on high speed roads. [Engineering] 2.4 Set up work zone signs and cones to MUTCD Part 6, with trained flaggers. [Administrative] 2.5 Get any permit needed from the city, county or state DOT before you start. [Administrative] 2.6 Park work vehicles to shield the work zone, with beacons on. [Administrative] 2.7 Wear ANSI/ISEA 107 Class 2 or 3 high-visibility clothing. [PPE] 2.8 Get an engineer to check before removing any wall, beam, post or bracing that may be load-bearing. [Elimination] 2.9 Keep everyone clear of the area under and next to the work. [Engineering (guarding)] 2.10 Install temporary props, needles or shoring as designed before removing any support. [Engineering] 2.11 Follow the engineer's sequence. Do not change it without approval. [Administrative] 2.12 Check props daily. Do not remove them until the permanent support is in and approved. [Administrative] 2.13 Wear a hard hat and safety boots. [PPE]		
3	Set up an exclusion zone and spotter around the excavator	Being hit by heavy equipment Rules: 29 CFR 1926 Subpart O	**Critical Possible / Fatality**	3.1 Separate people and equipment with barriers, exclusion zones and marked walkways. [Engineering (guarding)] 3.2 Use equipment with working backup alarms, cameras and lights. [Engineering] 3.3 Have a site traffic plan showing equipment routes, loading areas and pedestrian paths. [Administrative] 3.4 Use a spotter when backing up or working near people. [Administrative] 3.5 Make eye contact with the operator before going near. Stay out of the swing radius. [Administrative] 3.6 Operators are trained and authorized for each machine. Forklift and telehandler operators are trained, evaluated and certified by the employer (29 CFR 1910.178(l), via 1926.602(d)). [Administrative] 3.7 Do a pre-start check on each machine every day and record it. [Administrative] 3.8 Wear hi-vis clothing and a hard hat. [PPE]	**Medium Rare / Fatality**	Site supervisor
4	Dig in stages, keeping spoil away from the edge	Trench or excavation collapse Being hit by heavy equipment Rules: 29 CFR 1926 Subpart P; 29 CFR 1926 Subpart O	**Critical Possible / Fatality**	4.1 Use methods that keep people out of the trench, such as directional boring or working from the surface. [Elimination] 4.2 Barricade or cover the excavation so people and equipment cannot fall in. Use guardrails on walkways that cross it (29 CFR 1926.651(l)). [Engineering (guarding)] 4.3 Trench or excavation collapse: see step 5 for the full controls [Administrative] 4.4 Being hit by heavy equipment: see step 3 for the full	**Medium Rare / Fatality**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				controls [Administrative]		
5	Batter or shore the walls and keep people out of the hole unless it is safe	Trench or excavation collapse Falling through a floor opening or void Rules: 29 CFR 1926 Subpart P; 29 CFR 1926 Subpart M	**Critical Possible / Fatality**	5.1 Use methods that keep people out of the trench, such as directional boring or working from the surface. [Elimination] 5.2 Barricade or cover the excavation so people and equipment cannot fall in. Use guardrails on walkways that cross it (29 CFR 1926.651(l)). [Engineering (guarding)] 5.3 Use a protective system (sloping, shoring or a trench box) in any trench 5 feet or deeper, or shallower if the competent person sees signs of a possible cave-in (29 CFR 1926.652). [Engineering] 5.4 Protective systems for trenches over 20 feet deep are designed by a registered professional engineer (29 CFR 1926.652(b), (c)). [Engineering] 5.5 Keep spoil, materials and equipment at least 2 feet back from the edge. [Engineering] 5.6 Provide a ladder, stairway or ramp within 25 feet of workers in trenches 4 feet or deeper. [Engineering] 5.7 Competent person inspects the trench daily, after rain and as conditions change, and tests the air before entry in trenches over 4 feet deep where a hazardous atmosphere could exist (29 CFR 1926.651(g), (k)). [Administrative] 5.8 Nobody works in a trench where water is collecting unless the competent person has controls in place, such as pumping or special support (29 CFR 1926.651(h)). [Administrative] 5.9 Nobody stands under a loaded bucket or near a truck being loaded (29 CFR 1926.651(e)). [Administrative] 5.10 Never work alone in a trench. Watch for water, cracks and bulging walls, and get out if you see them. [Administrative] 5.11 Wear a hard hat, hi-vis and safety boots. [PPE] 5.12 Cover every hole with a secured cover marked "HOLE" or "COVER" that can hold twice the weight it may carry. [Engineering (guarding)] 5.13 Put guardrails with toe boards around stairwells, elevator shafts, floor holes and open edges. [Engineering (guarding)] 5.14 Install stairs early and fit temporary handrails as soon as they go in. [Engineering] 5.15 Never remove a cover or guardrail without approval. Put it back straight away. [Administrative] 5.16 Inspect covers and barriers daily and after other trades have been through. [Administrative] 5.17 Keep lighting good enough to see openings, especially on lower floors and in the evening. [Administrative] 5.18 Use a harness clipped to a rated anchor when working right next to an open void. [PPE]	**Medium Rare / Fatality**	Site supervisor
6	Watch for groundwater and	Drowning	**High**	6.1 Work from the bank or a platform instead of in or over the	**Medium**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
	pump out, keeping pump leads dry	Electric shock from cords and power tools Rules: 29 CFR 1926.106; 29 CFR 1926 Subpart K	**Possible / Serious injury**	water where you can. [Elimination] 6.2 Put up barriers or guardrails along water edges. [Engineering (guarding)] 6.3 Pump out flooded pits and excavations before work. [Engineering] 6.4 Never work near deep water alone. Keep a rescue person with a throw line or life ring ready. [Administrative] 6.5 Check water levels and the weather, and stop work in floods or fast-flowing water. [Administrative] 6.6 Wear a US Coast Guard-approved life jacket when working over or next to water deep enough to drown in. [PPE] 6.7 Use battery-powered tools where you can. [Substitution] 6.8 Use GFCIs on all 120-volt, 15, 20 and 30 amp temporary receptacles, or a written assured equipment grounding conductor program run by a competent person with recorded tests (29 CFR 1926.404(b)(1)). [Engineering] 6.9 Keep cords off the ground and out of water, using stands or hooks. [Engineering] 6.10 Check cords, plugs and tools before every use. Tag out and remove anything damaged. [Administrative] 6.11 Do not use tools in rain or wet areas unless they are rated for it. [Administrative] 6.12 Wear safety boots and dry gloves. [PPE]	**Rare / Fatality**	
7	Load and cart spoil, cleaning the road	Road traffic Poor housekeeping and waste Rules: MUTCD Part 6 and 29 CFR 1926 Subpart G	**Critical Possible / Fatality**	7.1 Road traffic: see step 2 for the full controls [Administrative] 7.2 Order materials to size and send packaging back where you can. [Elimination] 7.3 Put dumpsters and waste chutes close to the work. [Engineering] 7.4 Clean as you go, and do a full clean up at the end of each day. [Administrative] 7.5 Keep exits, stairs and walkways clear at all times. [Administrative] 7.6 Stack materials neatly on level ground, away from edges. [Administrative] 7.7 Wear gloves when handling waste. [PPE]	**Medium Rare / Fatality**	Site supervisor
8	Fence the hole at the end of every day	Public entering the work area Falling through a floor opening or void Drowning Rules: 29 CFR 1926 Subpart M; 29 CFR 1926.106	**Critical Possible / Fatality**	8.1 Fence off the site with secure temporary fencing and lock the gates when you leave. [Engineering (guarding)] 8.2 Give pedestrians a safe, marked path around the work, with ramps for strollers and wheelchairs. [Engineering (guarding)] 8.3 Use hoarding, covered walkways or catch fans where work is above public areas. [Engineering] 8.4 Put signs at each entry: site name, contact number and "No unauthorized entry". [Administrative] 8.5 Make the site safe at the end of each day: cover holes, lower plant, remove ladders and lock tools away. [Administrative]	**Medium Rare / Fatality**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				8.6 Falling through a floor opening or void: see step 5 for the full controls [Administrative] 8.7 Drowning: see step 6 for the full controls [Administrative]		

Risk key: risk = likelihood x consequence on a 5 x 5 matrix. Low, Medium, High, Critical. Work must not start while the risk after controls is high or above. Controls are listed in order of the hierarchy of controls: Elimination, Substitution, Engineering (guarding), Engineering, Administrative, PPE.

3. PPE AND PERMITS

Required PPE	Permits and plans
Safety-toe boots (ASTM F2413) High-visibility safety apparel, ANSI/ISEA 107 Class 2 or 3 (Type R near roadways) Hard hat (ANSI Z89.1) Hearing protection (earmuffs or plugs) Work gloves	811 locate ticket / excavation permit

4. PLANT AND EQUIPMENT

Plant / equipment	License or training needed	Inspection needed	Rego / ID	Last inspected	Certificate / report
Excavator					
Dump truck	CDL if the truck's GVWR, or the combination's GCWR, is 26,001 lb or more (49 CFR 383.5), or if it carries placarded hazmat	Brakes, lights, horn, steering, tires and other parts checked at the beginning of each shift (29 CFR 1926.601(b)(14))			
Skid steer					
Hand tools					

5. TRAINING REQUIRED FOR THIS WORK

- Equipment operator training (29 CFR 1926.20(b)(4)); forklift and telehandler operators trained, evaluated and certified, re-evaluated every 3 years (29 CFR 1910.178(l))
- Competent person for excavations, trained in soil classification and protective systems (29 CFR 1926.651(k), 1926.652)
- Fall protection training by a competent person, with a written certification record (29 CFR 1926.503)

6. CREW TRAINING AND CERTIFICATIONS

Crew listed at sign-on below, with ticket and licence numbers.

7. EMERGENCY ARRANGEMENTS

Emergency number	911	**First aid kit**	In the work vehicle
Fire extinguisher	In the work vehicle	**Alarm and evacuation**	Shout for help and stop work. Make the area safe and go to the assembly point. Call the emergency number and send someone to meet the ambulance.

Reporting incidents	Report a fatality to OSHA within 8 hours, and an in-patient hospitalization, amputation or eye loss within 24 hours.		

8. MONITORING, REVIEW AND LEGAL BASIS

A competent person inspects the job site, materials and equipment before work each day and as conditions change (29 CFR 1926.20(b)(2)). Any time this JHA is revised, the affected crew is re-briefed and signs again.

Legal basis: OSH Act Section 5(a)(1) and 29 CFR 1926, Safety and Health Regulations for Construction (incl. 1926.20 and 1926.21). OSHA requires employers to find and fix hazards and to train workers on them. A JHA breaks the job into steps, lists the hazards in each step and the controls that protect the crew. General contractors often require one before you start.

Keep this JHA on site during the job, and keep it with the training and inspection records for at least 1 year after the job (longer if your state plan or general contractor requires it). OSHA does not set a retention period for JHAs themselves.

9. REVISION HISTORY

Rev	Date	By	What changed
1	Nov 9, 2026		First issue

10. SIGN-OFF

	Name	Signature	Date	
Prepared by				
Supervisor				
General contractor review				Accepted for use: Yes / No

By signing below, each crew member confirms they were trained on the hazards and controls in this JHA before work started, and will follow it. Stop work and tell the supervisor if conditions change.

Name	Role / company	Tickets / licences	Signature	Date

Name	Role / company	Tickets / licences	Signature	Date