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	Backfill and compaction	**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	Check services are inspected before backfilling	Hitting underground services Rules: 29 CFR 1926.651(b) and your state 811 law	**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]	**Medium Rare / Fatality**	Site supervisor
2	Place fill in layers with the machine, keeping a spotter	Being hit by heavy equipment Rules: 29 CFR 1926 Subpart O	**Critical Possible / Fatality**	2.1 Separate people and equipment with barriers, exclusion zones and marked walkways. [Engineering (guarding)] 2.2 Use equipment with working backup alarms, cameras and lights. [Engineering] 2.3 Have a site traffic plan showing equipment routes, loading areas and pedestrian paths. [Administrative] 2.4 Use a spotter when backing up or working near people. [Administrative] 2.5 Make eye contact with the operator before going near. Stay out of the swing radius. [Administrative] 2.6 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] 2.7 Do a pre-start check on each machine every day and record it. [Administrative] 2.8 Wear hi-vis clothing and a hard hat. [PPE]	**Medium Rare / Fatality**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
3	Compact each layer, rotating operators to limit vibration	Hand-arm and whole-body vibration Loud noise Rules: 29 CFR 1926.52	**High Likely / Recordable / lost time**	3.1 Use low-vibration tools and methods, such as a breaker on an excavator instead of a hand jackhammer. [Substitution] 3.2 Keep tools sharp and well maintained, and use anti-vibration handles and seats. [Engineering] 3.3 Limit trigger time on high-vibration tools and rotate workers. [Administrative] 3.4 Keep hands warm and dry, and take regular breaks. [Administrative] 3.5 Report tingling, numbness or white fingers early. [Administrative] 3.6 Wear gloves to keep hands warm and dry. [PPE] 3.7 Use quieter tools and methods, such as cut-to-size materials, low-noise machines and battery tools. [Substitution] 3.8 Keep noisy plant away from work areas, and use screens or distance between the noise and people. [Engineering (guarding)] 3.9 Keep tools maintained and use mufflers on compressors and generators. [Engineering] 3.10 Limit time on noisy tools and rotate workers. [Administrative] 3.11 If you have to shout to be heard at arm's length, wear hearing protection. [Administrative] 3.12 Wear earplugs or earmuffs rated for the noise. [PPE]	**Medium Unlikely / Recordable / lost time**	Site supervisor
4	Keep compactors away from trench edges	Trench or excavation collapse Rules: 29 CFR 1926 Subpart P	**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 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] 4.4 Protective systems for trenches over 20 feet deep are designed by a registered professional engineer (29 CFR 1926.652(b), (c)). [Engineering] 4.5 Keep spoil, materials and equipment at least 2 feet back from the edge. [Engineering] 4.6 Provide a ladder, stairway or ramp within 25 feet of workers in trenches 4 feet or deeper. [Engineering] 4.7 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] 4.8 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] 4.9 Nobody stands under a loaded bucket or near a truck	**Medium Rare / Fatality**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				being loaded (29 CFR 1926.651(e)). [Administrative] 4.10 Never work alone in a trench. Watch for water, cracks and bulging walls, and get out if you see them. [Administrative] 4.11 Wear a hard hat, hi-vis and safety boots. [PPE]		
5	Clean up and take compaction tests	Poor housekeeping and waste	**Medium Likely / Minor injury**	5.1 Order materials to size and send packaging back where you can. [Elimination] 5.2 Put dumpsters and waste chutes close to the work. [Engineering] 5.3 Clean as you go, and do a full clean up at the end of each day. [Administrative] 5.4 Keep exits, stairs and walkways clear at all times. [Administrative] 5.5 Stack materials neatly on level ground, away from edges. [Administrative] 5.6 Wear gloves when handling waste. [PPE]	**Low Unlikely / Minor injury**	Site supervisor

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) Hearing protection (earmuffs or plugs) Work gloves Hard hat (ANSI Z89.1)	811 locate ticket / excavation permit

4. PLANT AND EQUIPMENT

Plant / equipment	License or training needed	Inspection needed	Rego / ID	Last inspected	Certificate / report
Plate compactor					
Skid steer					
Excavator					

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)

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