

Excavation near utilities - JSA - B

en-US · Technical failure review · v1.1 · 2026-10-08

Site: | Item ID: | Work area:

Approval	Work supervisor	Technical reviewer	Release / handover authority

1. Job details and team signatures

Date / time	Location / area		Assessor		Supervisor	
Team signatures						

2. Conditions and hold points

Stage	Time	Location / area	Environment / readings	Item / condition	Controls	Plant / tools	Approval / signature
HP-0 Start							
HP-1 Locate services							
HP-2 Expose services							
HP-3 Support and enter							
HP-4 Backfill and close							

Complete after actual checks. Recheck after changes, defects or shift handover.

3. JSA risk assessment

Job stage	Hazards and effects	Failure factors	Technical and procedural controls	Site verification	P	S	R	A
1. Prepare plant	1. Bucket drop 2. Rollover 3. Crushing	1. Coupler not locked 2. Weak working platform 3. Blind reversing	1. Test hitch per manual 2. Assess plant bearing area 3. Separate people and plant	1. Coupler test 2. Platform condition 3. Spotter signals				
2. Expose services	1. Pipe puncture 2. Pit collapse 3. Jet injury	1. Unknown line depth 2. Unsafe pit entry 3. Excess jet pressure	1. Use owner-approved method 2. Protect pit before entry 3. Expose route and branches	1. Actual line position 2. Tool and jet settings 3. Pit protection				
3. Excavate in bays	1. Surcharge collapse 2. Bucket impact 3. Falling spoil	1. Plant too near edge 2. Person in swing area 3. Cut exceeds design	1. Follow staged cut plan 2. Keep swing area clear 3. Set loads back by design	1. Bay and depth 2. Load setback 3. Service support				
4. Support and enter	1. Wall collapse 2. Falling shield 3. Blocked escape	1. Wrong support model 2. Entry before protection 3. Unsafe lifting points	1. Install from safe position 2. Check design and assembly 3. Provide protected access	1. Support inspection 2. Access route 3. Entry release				
5. Control water	1. Soil washout 2. Gas exposure 3. New ground cracks	1. Pump removes fines 2. Air risks ignored 3. Rain change unchecked	1. Follow dewatering design 2. Assess and test air risks 3. Evacuate on deterioration	1. Water and soil trend 2. Air assessment 3. Reinspection record				
6. Backfill and close	1. Unsupported service 2. Road plate movement 3. Public falls	1. Supports pulled early 2. Unknown cover strength 3. Open cut left unguarded	1. Coordinate support removal 2. Verify service bedding 3. Secure covers and barriers	1. Backfill sequence 2. Owner handback 3. End-of-shift security				

P/S/R/A: AI reference draft. No professional verification or approval. Professional review required before use.

4. Pre-work checklist

☐ Coupler test	☐ Actual line position	☐ Bay and depth
☐ Support inspection	☐ Water and soil trend	☐ Backfill sequence
☐ Spotter signals	☐ Entry release	☐ End-of-shift security