

Piling and associated drilling - JSA - C

en-SG · Supervision, records, handover · v1.0 · 2026-10-14 · Sources: article section 9

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 Plan and locate							
HP-2 Release platform							
HP-3 Assemble and test							
HP-4 Park and hand over							

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. Method and services	1. Buried-service strike 2. Wrong piling branch 3. Public intrusion	1. Service map unverified 2. Method unclear 3. Interfaces unbriefed	1. Verify actual service location 2. Select reviewed method 3. Coordinate site boundaries	1. Owner and locating evidence 2. Drill grout or drive scope 3. Team and adjacent works				
2. Platform acceptance	1. Rig overturn 2. Track punch-through 3. Edge collapse	1. Subsurface void missed 2. Reactions outdated 3. Rain damage ignored	1. Review ground and load cases 2. Inspect travel and setup 3. Hold changed conditions	1. Ground and platform design 2. Actual rig configuration 3. Drainage repair and release				
3. Rig readiness	1. Mast collapse 2. Hammer descent 3. Uncontrolled slew	1. Pins incomplete 2. Brake defect ignored 3. Registration unchecked	1. Follow assembly sequence 2. Verify brakes and restraints 3. Match examination records	1. Pins and guard checks 2. Swing and hoist functions 3. Rig registration and AE record				
4. Method operation	1. Auger entanglement 2. Dropped pile 3. Hose whip	1. Rotation approached 2. Pile unsecured 3. Coupling opened under pressure	1. Exclude rotating components 2. Secure pile before release 3. Verify pressure-safe access	1. Applicable branch controls 2. Pile and lifting evidence 3. Line and blockage procedure				
5. Head and bore control	1. Falling cut-off 2. Dust exposure 3. Fall into bore	1. Cut section unsupported 2. Conflicting driving 3. Opening unguarded	1. Support before severing 2. Control dust and nearby work 3. Secure bore protection	1. Cut and lift sequence 2. Dust and access controls 3. Open-bore status				
6. Next move and handover	1. Rig overturn 2. Unattended operation 3. Unexpected restart	1. Old release reused 2. Operator leaves active rig 3. Defects not passed	1. Reassess route and setup 2. Apply attended safe shutdown 3. Transfer machine and ground holds	1. New route and reactions 2. Parking and swing-brake state 3. Receiving operator and defects				

P/S/R/A: Complete only after actual site assessment using the site risk method.

4. Pre-work checklist

☐ Owner and locating evidence	☐ Ground and platform design	☐ Pins and guard checks
☐ Applicable branch controls	☐ Cut and lift sequence	☐ New route and reactions
☐ Team and adjacent works	☐ Line and blockage procedure	☐ Receiving operator and defects