Generated file by QChecklists
https://quollnet.com

Excavate Trenches with Shoring/Benching: Pro Checklist & QA

Excavate trenches with shoring/benching using an interactive checklist—commentable and export as PDF/Excel—to verify support class, access, water control, and backfill windows for safe, compliant excavation.

Project:
Date:
Filled by:

Pre-Excavation Planning	
1	Verify excavation permit, traffic management, and utility locates are current; capture permit numbers, validity dates, and mark-out photos before digging; acceptance: all approvals active on excavation day with visible markings.
2	Stake trench alignment and width using GNSS rover or tape; acceptance: centerline and width within ±50 mm of design; evidence: survey report, photos of stakes and measurements.
3	Confirm soil type from geotechnical report and field verification (hand auger/visual); acceptance: field conditions match report assumptions; evidence: referenced log page, dated photo of exposed soils, inspector initials.
4	Set exclusion zone and spoil stockpile offset using barriers; acceptance: spoil edge ≥0.6 m from trench lip; evidence: measured distances, photos of barricades and signage.

Shoring and Benching Setup	
5	Verify shoring support class (e.g., trench box/hydraulic shoring) suits soil and maximum depth; acceptance: system rating ≥ required capacity; evidence: manufacturer data, model/serial numbers, supervisor sign-off.
6	Inspect all shoring components for cracks, bends, worn pins, or leaks; acceptance: defective parts removed and tagged; evidence: inspection checklist, defect photos, replacement records.
7	Install shoring per manufacturer spacing and sequence; pressurize hydraulic struts gradually; acceptance: strut pressures within stated range; evidence: gauge readings (kPa), installation photos, installer initials.
8	If benching is used, measure bench angle and step dimensions with inclinometer and tape; acceptance: geometry within project specification ±2° angle and ±25 mm step; evidence: readings and photos along trench.

Access and Egress	
9	Install secured ladder with top extension per project safety plan; acceptance: ladder tied-off, non-slip feet, top extension recorded (mm); evidence: ladder ID tag photo and tie-off detail.
10	Provide egress points so travel distance to a ladder/platform meets the safety plan; acceptance: measured distance ≤ plan requirement; evidence: tape measurement, location photos, plan reference.
11	Set edge protection and trench barricades; acceptance: barrier height and continuity per plan; evidence: measured heights (mm), photos, daily inspection log.
12	Install access ramps or trench bridges with anti-slip surface; acceptance: width and slope per plan, load rating visible; evidence: measurements, rating plate photo, supervisor check.

Water Control and Stability	
13	Implement dewatering (sump, wellpoints) per approved plan; acceptance: pump capacity adequate with standby available; evidence: pump model/serial, test run results, flow estimate (L/min).
14	Maintain water level below trench formation as specified; acceptance: differential maintained and logged; evidence: staff gauge readings (mm) and hourly log with timestamps.
15	Filter discharge through sediment controls; acceptance: turbidity meets plan limit; evidence: turbidity meter reading (NTU), discharge point photo, silt control inspection.
16	Inspect trench base and walls for raveling, fissures, or boiling; acceptance: no instability observed; evidence: photo log each 10 m, supervisor sign-off; action: stop work if instability appears.

Excavation Operations	
17	Excavate to line and grade using excavator and laser level; acceptance: formation level within ±25 mm; evidence: survey spot checks, level photos, foreman initials.
18	Control bucket cuts to avoid undermining shoring/box ends; acceptance: end clearance per system manual; evidence: measured gap (mm) and photos at each move.
19	Maintain plant offset from trench edge to limit surcharge loading; acceptance: offset meets project plan; evidence: measured distances, spotter/banksman briefing record.
20	Conduct daily shoring checks after excavation cycles; acceptance: pins/clips present, strut pressure within range, panels plumb; evidence: checklist, pressure readings, photos.

Backfill Windows and Closeout	
21	Confirm prerequisites for backfill window: inspections complete, as-built checks done, approvals received; acceptance: time-stamped approvals on file; evidence: signed hold-point release, photos of installed works (no utility testing).
22	Start backfill within allowed window; place first lift per plan with appropriate moisture; acceptance: material meets specification; evidence: delivery tickets, moisture meter readings, lift thickness measurements.
23	Remove shoring or reduce bench height progressively while backfilling; acceptance: no voids behind supports; evidence: staged removal photos and foreman sign-off.
24	If trench remains open, install plates or reinforce barriers; acceptance: plate rating suits traffic load, stable bearing; evidence: plate thickness, rating plate photo, ramp/edge treatment photo.

Comments:

Filled by:

Signature:

Introduction	How to use this checklist
Excavate trenches with shoring/benching is a specialized excavation workflow focused on stable support systems, controlled access, reliable water management, and disciplined backfill windows. This checklist supports field engineers, supervisors, and inspectors executing trench shoring, benching, dewatering, and safe egress controls. It defines the limits: earthwork excavation only, including trench boxes, hydraulic shoring, or benched slopes; it excludes utility testing or commissioning. By verifying support class against soil conditions and depth, ensuring ladders or ramps are placed correctly, and maintaining groundwater and stormwater at safe levels, you prevent collapses, flooding, and delays. Acceptance cues, measurements, photos, and signatures provide defensible records per approved project specifications and authority requirements. You'll capture dimensions, bench angles, pump capacity, discharge clarity, survey grades, and time-stamped approvals before initiating backfill within the allowed window. Use this interactive checklist to tick items, add comments, attach photographs, and export a traceable PDF/Excel report secured by a QR code.	1. Preparation: gather approved drawings, geotechnical report, dewatering plan, manufacturer data for shoring, GNSS/laser level, inclinometer, turbidity meter, pumps, barriers, ladders, PPE, and a camera-enabled device. 2. Create a checklist instance: enter project, location, chainage, trench dimensions, soil type, intended support method (shoring or benching), and responsible supervisors/inspectors. 3. Start interactive mode on site: tick items as completed, attach photos of measurements and gauges, and record readings (mm, degrees, kPa, NTU) directly in each item. 4. Collaborate: tag team members in comments to resolve issues (e.g., pump sizing, bench geometry), log corrective actions, and re-verify with additional photos and signatures. 5. Export and distribute: generate a commentable PDF or Excel export, include embedded photos and readings, and share with stakeholders for daily review. 6. Sign-Off and archive: capture digital signatures from supervisor and inspector, lock the record, and store with QR authentication for audit retrieval.