

Rotary Piling Rig Safety Inspection Checklist

Site / Project	_____	Address	_____
Inspector name	_____	Company	_____
Date	_____	Time	_____

Documentation aid only. Adapt this resource to the site, manufacturer instructions, and applicable local requirements. It does not replace a competent person, professional judgment, legal advice, or a required statutory form.

Inspection checklist

Working Platform & Ground Stability

☐	Has a geotechnical engineer certified the working platform's ground bearing pressure is adequate for the rig's maximum operating weight (including Kelly bar, auger, and spoil)?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is a daily visual inspection of the working platform performed to check for settlement, cracks, or water accumulation? Documented in daily log?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the working platform adequately sloped to ensure proper drainage and prevent water pooling near the rig's tracks or outriggers?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are outriggers (if used) fully extended and placed on stable, load-distributing pads of sufficient size to prevent sinking or movement?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is there a system in place to monitor groundwater levels and their potential impact on platform stability? Are dewatering measures in place if needed?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are slopes surrounding the working platform stable and protected from erosion or collapse that could undermine the platform?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is vibration monitoring being conducted to assess the impact of rig operations on nearby structures or utilities?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are access and egress routes to the working platform clear, stable, and free from obstructions?	☐ Pass	☐ Fail	☐ N/A	Notes: _____

☐	Is the working platform constructed with properly compacted materials to achieve the required ground bearing pressure?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Has the working platform stability been reassessed following significant rainfall or other adverse weather conditions?	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Wire Rope & Lifting Equipment

☐	Are wire ropes inspected daily for wear, corrosion, kinks, and broken wires, with results documented in a logbook?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are wire ropes replaced when they exhibit excessive wear, corrosion, or the number of broken wires exceeds the manufacturer's recommendations?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are sheaves and drums inspected for wear, cracks, and proper lubrication to prevent damage to wire ropes?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are all lifting gear (slings, shackles, hooks) certified and inspected regularly, with valid documentation available on site?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are hook safety latches functioning correctly and in place on all lifting hooks?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is there a documented lubrication program for wire ropes and lifting equipment, using the manufacturer's recommended lubricants?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the wire rope reeving system properly installed and maintained according to the rig manufacturer's specifications?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Has the lifting equipment been load-tested within the past year, and is documentation available?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are emergency stop buttons for the hoisting system readily accessible and functioning correctly?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are tag lines used to control the load during lifting operations, preventing uncontrolled swinging?	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Underground Utilities & Excavation Safety

☐	Has a comprehensive utility locate request been submitted and reviewed prior to any excavation or drilling?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are all identified underground utilities clearly marked with paint, flags, or other visible means?	☐ Pass	☐ Fail	☐ N/A	Notes: _____

☐	Are safe digging practices (e.g., hand digging, vacuum excavation) employed when working near marked utilities?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is there a sufficient clearance distance maintained between the drilling operation and any identified underground utilities?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is emergency contact information for utility companies readily available on site?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is a dedicated spotter present during drilling operations near underground utilities to monitor for potential hazards?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are excavations properly shored or sloped to prevent collapse, especially in unstable soil conditions?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are confined space entry procedures followed if personnel are required to enter excavations?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is atmospheric monitoring conducted in excavations to check for hazardous gases or oxygen deficiency?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are trench boxes or shoring systems inspected daily for damage or defects?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is a competent person (as defined by OSHA) on site to inspect excavations and shoring systems?	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Rig Operation & Maintenance

☐	Is a daily pre-start inspection of the rotary piling rig performed, including checks of fluid levels, hoses, and structural components?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are maintenance records up-to-date and readily available for review?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the Kelly bar inspected for wear, cracks, and proper alignment before each shift?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the auger inspected for damaged or missing teeth, and is it appropriate for the soil conditions?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are hydraulic hoses and fittings inspected for leaks and damage?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are emergency shutdown procedures clearly posted and understood by all operators?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are all rig operators properly trained and certified to operate the specific type of rotary piling rig being used?	☐ Pass	☐ Fail	☐ N/A	Notes: _____

☐	Are load charts readily available and understood by the operator?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the rig equipped with a functioning level indicator to ensure it is operating within safe limits?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are noise levels monitored, and are hearing protection measures in place if noise levels exceed permissible limits?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are exhaust emissions properly controlled to prevent exposure to hazardous fumes?	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Personal Protective Equipment (PPE)

☐	Are hard hats worn by all personnel within the work zone?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are safety glasses or face shields worn to protect against flying debris?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are all personnel wearing high-visibility clothing (e.g., vests, jackets)?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are steel-toe boots worn to protect against foot injuries?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is hearing protection available and used in areas with high noise levels?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are appropriate gloves worn to protect against hand injuries?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is respiratory protection required and used if there is a risk of exposure to dust or fumes?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is PPE inspected regularly for damage or defects?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Have all personnel been trained on the proper use and maintenance of PPE?	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Findings

#	Item	Location	Severity	Action required
1				
2				
3				
4				
5				
6				
7				
8				

Signature

Inspector signature _____

Name _____

Date _____