EXCAVATION CHECKLIST (*To be completed by a Competent Person*)

COMPETENT PERSON (print):		SIGNATURE:
SITE LOCATION/CROSS STREETS:		
DATE:	TIME:	WEATHER:
EXCAVATION DEPTH:		EXCAVATION WIDTH:

SOIL CLASSIFICATION: ☐ B ☐ C *If no manual/visual test performed, slope/shore for Type "C"*

Visual Analysis

Estimate Range of Particle
- ☐ Fine grained = Cohesive
- ☐ Coarse grained = Granular

Observe Open Excavation
- ☐ Layered soils
- ☐ Layers sloped toward excavation
- ☐ Fissures/cracks – excavation sides
- ☐ Fissures/cracks – top of excavation

Previously Disturbed
Existing utilities/underground structures adjacent to or in excavation?
☐ Yes ☐ No

Observe Soil as Excavated
- ☐ Clumps=Cohesive
- ☐ Breaks up easily=Granular

Water Condition
Is there water in the excavation?
- ☐ Yes
- ☐ No

Vibration Present
Equipment / vehicles?
- ☐ Yes
- ☐ No

Manual Analysis

☐ **Thumb Penetration Test**
- ☐ Barely able to penetrate w/thumb pressure
- ☐ Penetrate to back of thumb nail
- ☐ Easily penetrate and mold w/light pressure

☐ **Pocket Penetrometer**
- ☐ 1.5 tsf or greater
- ☐ greater than 0.5 but less than 1.5 tsf
- ☐ 0.5 tsf or less

TYPE OF PROTECTIVE SYSTEM USED:
☐ Sloping ☐ Benching ☐ Trench Shield/Box ☐ Shoring ☐ Other _____

Excavations, adjacent areas, and protective systems shall be inspected by a Competent Person daily prior to the start of work, as needed throughout the shift, and after every rainstorm or other hazard increasing occurrence.
The Competent Person has the authority to remove workers from an excavation immediately.

1. GENERAL INSPECTION OF THE JOB SITE	YES	NO	N/A
A. Surface encumbrances (trees, sidewalks, foundations, etc.) removed or supported?			
B. Employees protected from loose rock or soil that could pose a hazard by falling or rolling into the excavation?			
C. Hard hats are worn by all employees?			
D. Spoils, materials, and equipment set at least 2 feet from the edge of the excavation?			
E. Barriers provided at all remotely located excavations, wells, pits, shafts, etc.?			
F. Walkways and bridges over excavations 4 feet or more in depth are equipped with standard guardrails and toe-boards?			
G. Class II high-visibility reflective warning vest or clothing worn by all employees exposed to public vehicular traffic and other operating equipment?			
H. Employees are required to stand away from vehicles being loaded or unloaded?			
I. Warning systems established and utilized when mobile equipment is operating near the edge of the excavation?			
J. Employees are prohibited from going under suspended loads?			
K. Employees are prohibited from working on the faces of sloped or benched excavations above other employees?			
2. UTILITIES			
A. Utility companies contacted and/or approximate location of utilities marked?			
B. Overhead lines located/noted/reviewed, and precautions taken to ensure contact does not occur?			
C. Underground installations protected, supported, or removed when excavation is open?			

3. MEANS OF ACCESS AND EGRESS	YES	NO	N/A
A. Lateral travel to means of egress no greater than 25 ft (excavations 4 ft or more in depth)?			
B. Employees protected from cave-in when entering or exiting the excavation?			
C. Ladders used in excavations secured and extended 3 feet above the edge of the trench?			
D. Structural ramps used by employees designed by a Competent Person?			
E. Ramps constructed of materials of uniform thickness, cleated together on the bottom, equipped with non-slip surface?			
F. Structural ramps used for equipment designed by a registered professional engineer?			
4. WET CONDITIONS			
A. Precautions taken to protect employees from the accumulation of water?			
B. Water removal equipment monitored by a Competent Person?			
C. Surface water or runoff controlled or diverted away from the excavation?			
D. Inspections made after every rainstorm or other hazard-increasing occurrence?			
5. HAZARDOUS ATMOSPHERE			
A. Atmospheric testing required? **If YES, refer to Confined Space Entry policy.** (Testing required where there is a reasonable possibility of an oxygen deficiency, combustible or other contaminant exposing employees to a hazard)			
B. Adequate precautions taken to protect employees from exposures to an atmosphere containing less than 19.5% oxygen and/or to other hazardous atmospheres?			
C. Ventilation provided to prevent employees' exposure to an atmosphere containing flammable gas in excess of 10% of the lower explosive limit of the gas?			
D. Testing conducted often to ensure that the atmosphere remains safe?			
E. Emergency equipment, such as breathing apparatus, safety harness and lifeline, readily available where hazardous atmospheres could or do exist?			
F. Employees trained to use personal protective and other rescue equipment?			
G. Full body harness and lifeline used and individually attended when entering bell bottom or other deep and confined footing excavations?			
6. PROTECTIVE AND SUPPORT SYSTEMS			
A. Protective systems installed without exposing employees to the hazard of cave-ins, collapses, or threats of being struck by materials or equipment?			
B. Support systems provided to ensure stability of adjacent structures, buildings, roadways, sidewalks, walls, etc.			
If sloping and/or benching are the only protective systems selected, check here ☐ and skip C thru J below.			
C. Materials and/or equipment for selected support systems based on soil analysis, trench depth, expected loads, and trench parameters?			
D. Materials and equipment used for protective systems inspected?			
E. Materials and equipment not in good condition have been removed from service?			
F. Damaged materials/equipment inspected by a registered professional engineer after repairs and before being placed back into service?			
G. Members of support system securely fastened to prevent failure?			
H. Members of protective systems extend at least 18 inches above the surrounding area?			
I. Material excavated to a level no greater than 2 feet below the bottom of the protective support system, and only if the system is designed to support the calculated loads?			
J. Employee(s) prohibited from remaining in a trench box when moved vertically?			

Excavations that are sloped and/or benched shall be at an angle not steeper than "maximum allowable slope" for the classified soil type:

Benching cannot be done in Type C soil.

Soil Type	Maximum Allowable Slopes (H:V) For Excavations Less Than 20 Feet Deep
TYPE B	1:1 (45 degrees)
TYPE C	1 ½ :1 (34 degrees)

Excavations greater than 20 ft deep shall be designed by a Registered Professional Engineer.

NOTES: _____

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