SAFE JOB PROCEDURE **SJP-44**

May 2026 **Installing Grounding Rods**

PURPOSE/APPLICATION

This SJP focuses on the use of manual post-pounders to install Ground Rods and Grid cable.

PPE

- Strike Minimum PPE

TRAINING

- Strike and Client Orientation
- Ground Disturbance Training (as required)

HAZARD SOURCES

PRIOR ACTIVITIES

1. Ensure all excavations are completed in accordance with Strike COP 07 Ground Disturbance and SWPs (e.g., Ground Disturbance Permits and Checklists, line locate reports, daylight, etc.).
2. Inspect all tools and equipment prior to use.
3. Obtain all required Safe Work Permit and/or Agreement.

Ground Rod Installation at Ground Level with ground rod attachment tool

Following are sample options for ground rod attachment tools to be used for installing at grade level.

iToolco Ground Rod Dawg – GRD01

Safely drive 3/8" 1/2", 5/8" and 3/4" rods from the ground in under a minute with iTOOLco's Ground Rod Dawg™. This ground rod driver eliminates the need for a ladder. Once the rod is driven down far enough, the tool will hammer from top to finish driving rod under grade.

Hilti TE PD Ground rod driver

Safer and easier assembly of the Hilti power ground rod driving system.

Compatible with a broad range of power rod diameters.

Easier handling thanks to adaptive attachment mechanism.

#	Job Steps	Hazards	Control Measures
1	Locate/Identify work area	❖ Incorrect work area/location	▪ Confirm work area via client-provided DWGs and in accordance with Strike COP 07 Ground Disturbance and SWPs (e.g., Ground Disturbance Permits and Checklists, Site Location Plan) ▪ Equipment Location Plan, Ground Grid Layout (daylight, etc.)

#	Job Steps	Hazards	Control Measures
2	Access work area	❖ Walking or Falls to grade from uneven and inadequate working surface ❖ Falls from a ladder while accessing excavation ❖ Gravity - Heavy lifting, awkward body position, walking on uneven ground, ❖ Mounting and dismounting the vehicle	▪ Stick to designated access areas or pathways ▪ Maintain 3 points of contact while accessing excavation via ladder. Clean steps and boots to avoid slippage ▪ Document fall hazards on HIAC and controls being employed ▪ Avoid twisting and turning when carrying materials ▪ Review SWP 18 Tools Equipment Machinery & SWP 42 Mechanical Vibration Equipment Tools
3	Receive & stage materials	❖ Damage to material while handling and staging ❖ Strain to self from heavy and awkward lifting tool ❖ Defective tools or equipment	▪ Reference product information sheet prior to handling of material ▪ Utilize mechanical means of lifting for weights exceeding 80lbs, or less in two-person manual lifting ▪ Utilize two-person/coworker for weights 50lbs or under as required. ▪ Inspect all tools prior to use. Ensure the rod pounder is in good condition, including the electrical cord. Ensure the proper sized attachment is being used for the rod diameter
4	Layout ground grid location	❖ Motion - Falls from grade uneven or slippery working surfaces	▪ Ensure proper footing while inside of excavation ▪ Watch for uneven or slippery ground; choose a smooth and clean path when unloading and moving materials ▪ Wear traction aids on slippery surfaces
5	Installation of ground rods	❖ Contact with underground facilities ❖ Pinch points between post/ Hilti ground rod pounder and rod ❖ Struck by tools/flying debris, Overextension or slipping backward ❖ Post pounder/power actuated ground rod tool coming off rod.	▪ Ensure the ground disturbance permit is in place and present at the work location ▪ Complete ground disturbance checklist prior to ground rod installation (CF-S-15) ▪ Review of FIWP (Field Installation Work Package) prior to ground rod install ▪ Verify depths if any underground facilities are present

#	Job Steps	Hazards	Control Measures
		❖ Impalement from accidental fall onto ground rod ❖ Inexperienced workers using power-actuated ground rod tool. ❖ Vibration and noise from Hilti during install	▪ Install protective caps over the ground rod after installation ▪ Be aware of your body/hand position ▪ Coach/mentor worker with clear communication between workers as a key part to completing the tasks safely ▪ Ensure proper PPE is worn including gloves and hearing protection ▪ Use a proper post-pounder/power actuated ground rod tool designed specifically for the task ▪ Keep hands off of the top of rods/posts when pounding posts ▪ Add caps to the ends of rods where they pose a hazard to workers in the area or as per site requirement
6	Installation of grounding cable (4/0AWG Bare)	❖ Sprains to the wrist from bending large cable ❖ Pinch point between GAR clamps	▪ Always maintain control of conductors when penciling insulation ▪ Wear cut 5 puncture-resistant gloves ▪ Keep hands free from cable end burs or GAR clamps when tightening.
7	Stripping and installation of ground cable (4/0AWG insulated cable)	❖ Incorrect tool selection for task ❖ Lacerations to hands or self from improper tool use ❖ Inexperienced workers using the tool ❖ Lacerations to other workers in proximity of knife use ❖ Pinch point between C-Tap	▪ Confirm tool selection is in accordance with Strike's SJP-EI-10 and client specifications ▪ Ensure proper hand placement to keep hands out of the line of fire. Including always cutting away from yourself. ▪ Only Strike and/or site approved knives are to be used for stripping cable. Always cut away from your body using a firm grip. Ensure no body parts are in the cutting path ▪ Inspect knife and blade before using ▪ Coach/mentor worker ▪ Maintain a safe working distance so as not to endanger others when stripping cable
8	Clean up work area	❖ Poor housekeeping – garbage/tools left on ground, tripping hazards.	▪ Return all excess materials or garbage to tool crib laydown and place in appropriate bins ▪ Reinspect / clean tools to be ready for next worker or use

#	Job Steps	Hazards	Control Measures
		❖ Work area or excavation unsecured	▪ Resecure snow fence or temp construction fence to secure area for other workers or prevention of wildlife entering

Ground Rod Installation at Elevation to Ground Level

#	Job Steps	Hazards	Control Measures
1	Locate/Identify work area	❖ Incorrect work area/location	▪ Confirm work area via client-provided DWGs and in accordance with Strike COP 07 Ground Disturbance and SWPs (e.g., Ground Disturbance Permits and Checklists, Site Location Plan) ▪ Equipment Location Plan, Ground Grid Layout (daylight, etc.)
2	Access work area	❖ Walking or Falls to grade from uneven and inadequate working surface ❖ Falls from a ladder while accessing excavation ❖ Gravity - Heavy lifting, awkward body position, walking on uneven ground, ❖ Mounting and dismounting the vehicle	▪ Stick to designated access areas or pathways ▪ Maintain 3 points of contact while accessing excavation via ladder. Clean steps and boots to avoid slippage ▪ Document fall hazards on HIAC and controls being employed ▪ Avoid twisting and turning when carrying materials ▪ Review SWP 25 Ladders
3	Receive & stage materials	❖ Damage to material while handling and staging ❖ Dropped materials from elevation while offloading ❖ Strain to self from heavy and awkward lifting ❖ Defective tools or equipment	▪ Reference product information sheet prior to handling of material ▪ Secure materials prior to handling via pallets, chalks, straps, and rope. ▪ Utilize mechanical means for weights exceeding 80lbs ▪ Utilize a coworker for weights over 50lbs ▪ Inspect all tools prior to use. Ensure the rod pounder is in good condition, including the electrical cord. Ensure the proper-sized attachment is being used for the rod diameter ▪ Inspect ladder

#	Job Steps	Hazards	Control Measures
			▪ Add caps to the ends of rod where they pose a hazard to workers in the area or as per site requirement
4	Layout ground grid location	❖ Motion - Falls from grade uneven or slippery working surfaces	▪ Ensure proper footing while inside of excavation ▪ Watch for uneven, or slippery ground, choose a smooth and clean path when unloading and moving materials ▪ Wear traction aids on slippery surfaces
5	Installation of ground rods	❖ Contact with underground facilities ❖ Pinch points between post/ Hilti ground rod pounder and rod ❖ Struck by tools/flying debris, Overextension or slipping backward ❖ Post/ Hilti ground rod pounder coming off the end of rod ❖ Impalement from accidental fall onto ground rod ❖ Inexperienced workers using Hilti ground rod pounder ❖ Fall from a ladder while using Hilti ground rod pounder ❖ Vibration and noise from Hilti during install	▪ Ensure the ground disturbance permit is in place and present at the work location ▪ Complete ground disturbance checklist prior to ground rod installation (CF-S-15) ▪ Review of FIWP (Field Installation Work Package) prior to ground rod install ▪ Verify depths if any underground facilities are present ▪ Install protective caps over the ground rod after installation ▪ Be aware of your body/hand position ▪ Coach/mentor worker ▪ Communication between workers is key to completing the tasks safely ▪ Maintain 3 points of contact while working on the ladder ▪ Ensure the ladder is well positioned for the task and on even ground; do a dry run testing the ladder placement and body positioning prior to grabbing the Hilti tool ▪ Secure ladder prior use, have co-worker hold/stabilize the ladder ▪ Do not climb the ladder with the rod pounder; have a co-worker pass up the tool once you are in position ▪ Ensure proper PPE is worn including gloves and hearing protection ▪ Use a proper post-pounder designed specifically for the task

#	Job Steps	Hazards	Control Measures
			▪ Keep hands off of the top of rods/posts when pounding posts
6	Installation of grounding cable (4/0AWG Bare)	❖ Sprains to the wrist from bending large cable ❖ Pinch point between GAR clamps	▪ Always maintain control of conductors when penciling insulation ▪ Wear cut 5 puncture-resistant gloves ▪ Keep hands free from cable end burs or GAR clamps when tightening.
7	Stripping and installation of ground cable (4/0AWG insulated cable)	❖ Incorrect tool selection for task ❖ Lacerations to hands or self from improper tool use ❖ Inexperienced workers using the tool ❖ Lacerations to other workers in proximity of knife use ❖ Pinch point between C-Tap	▪ Confirm tool selection is in accordance with Strike's SJP-EI-10 and client specifications ▪ Ensure proper hand placement. Keep hands out of the line of fire ▪ Only Strike and/or site approved knives are to be used for stripping cable. Always cut away from your body using a firm grip. Ensure no body parts are in the cutting path ▪ Inspect knife and blade before using ▪ Coach/mentor worker ▪ Maintain a safe working distance so as not to endanger others when stripping cable ▪ Ensure proper hand placement. Keep hands out of the line of fire; always cut away from yourself
8	Clean up work area	❖ Poor housekeeping – garbage/tools left on ground, tripping hazards. ❖ Work area or excavation unsecured	▪ Return all excess materials or garbage to tool crib laydown and place in appropriate bins ▪ Reinspect / clean tools to be ready for next worker or use ▪ Resecure snow fence or temp construction fence to secure area for other workers or prevention of wildlife entering

REFERENCE / ADDITIONAL INFORMATION

Strike Safe Work Manual

- Strike COP 07 - Ground Disturbance
- Strike SWP 18 - Tools/Equipment/Machinery
- Strike SWP 42 - Mechanical Vibration Equipment Tools
- Strike SWP-EI-10 - Stripping and Cutting Teck Cable

Regulations:

Albert OHS Code

- Part 32 Excavating and Tunnelling

British Columbian OHS Regulation

- Part 20 Construction, Excavation and Demolition

Manitoba Workplace Safety and Health Act and Regulation

- Part 26 Excavations and Tunnels

Saskatchewan Occupational Health and Safety Regulations

- Part 17 Excavations, Trenches, Tunnels and Excavated Shafts

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