

Simulating the Installation of a Telecom Grounding System Using Exothermic Welding Training

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Session 2: *Grounding for GPR and
Lightning Remediation*
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Learning Objectives

Learning objectives for this training:

- Understand how to make common exothermic connections at telecommunications sites
- Appreciation of field installations of ground electrode systems using exothermic connections

Exothermic Field Application

In this application the field installation technician is creating two exothermic connections

- 1) Connection 1 is a theft deterrent wire to the Post or VS connection
- 2) Connection 2 is a PTC Connection between the wire and underground #2AWG



Exothermic Field Application

In this application you can see PT Connections about to be buried



Exothermic Field Connections

In this application a full ground electrode system has been installed

- 1) Connection 1 is a Tee connection between 2 wires (Similar size to #2AWG solid)
- 2) Connection 2 is a PTC Connection between the ground wire and a tail #2AWG
- 3) Connection 3 is a GT Connection between ground wire and ground rod



Exothermic Field Application

Better detail of connections

- 1) Connection 2 is a PTC Connection between the ground wire and a tail #2AWG
- 2) Connection 3 is a GT Connection between ground wire and ground rod
- 3) Notice the ground rod is held in place by a vice grip. It is a predrilled 60ft deep hole that the ground electrode will drop into



Field Application of Exothermic

In this application a full ground electrode system has been installed

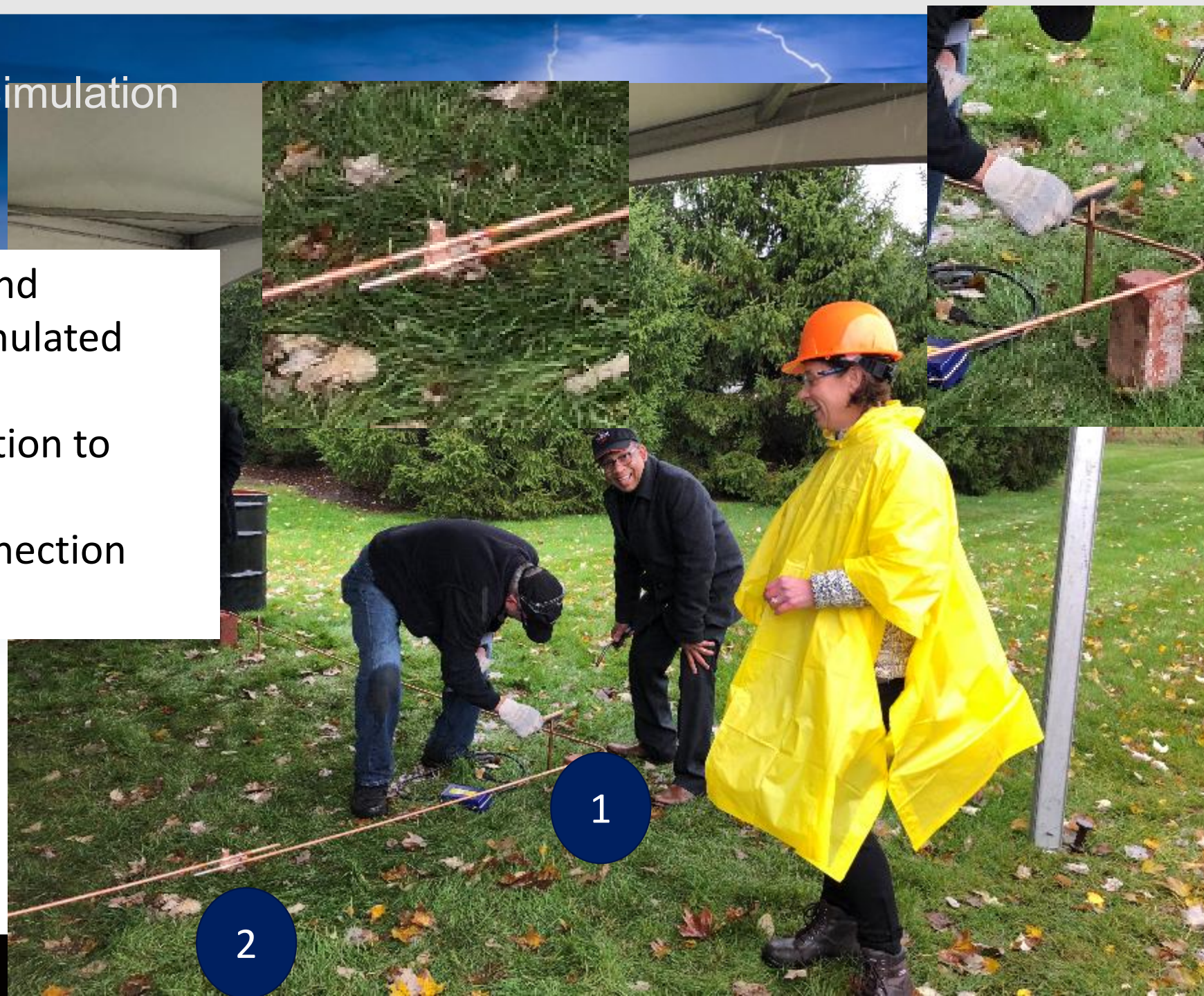
- 1) Connection 1 Exothermic to a lug connection to a ground bar on a monopole
- 2) Connection 2 is a VS Connection between the ground wire and monopole base



Ground Ring Installation Simulation

In this application a full ground electrode system is being simulated

- 1) Connection 1 GT Connection to Ground Rod
- 2) Connection 2 is a PT Connection between 2 ground wires





THANK YOU