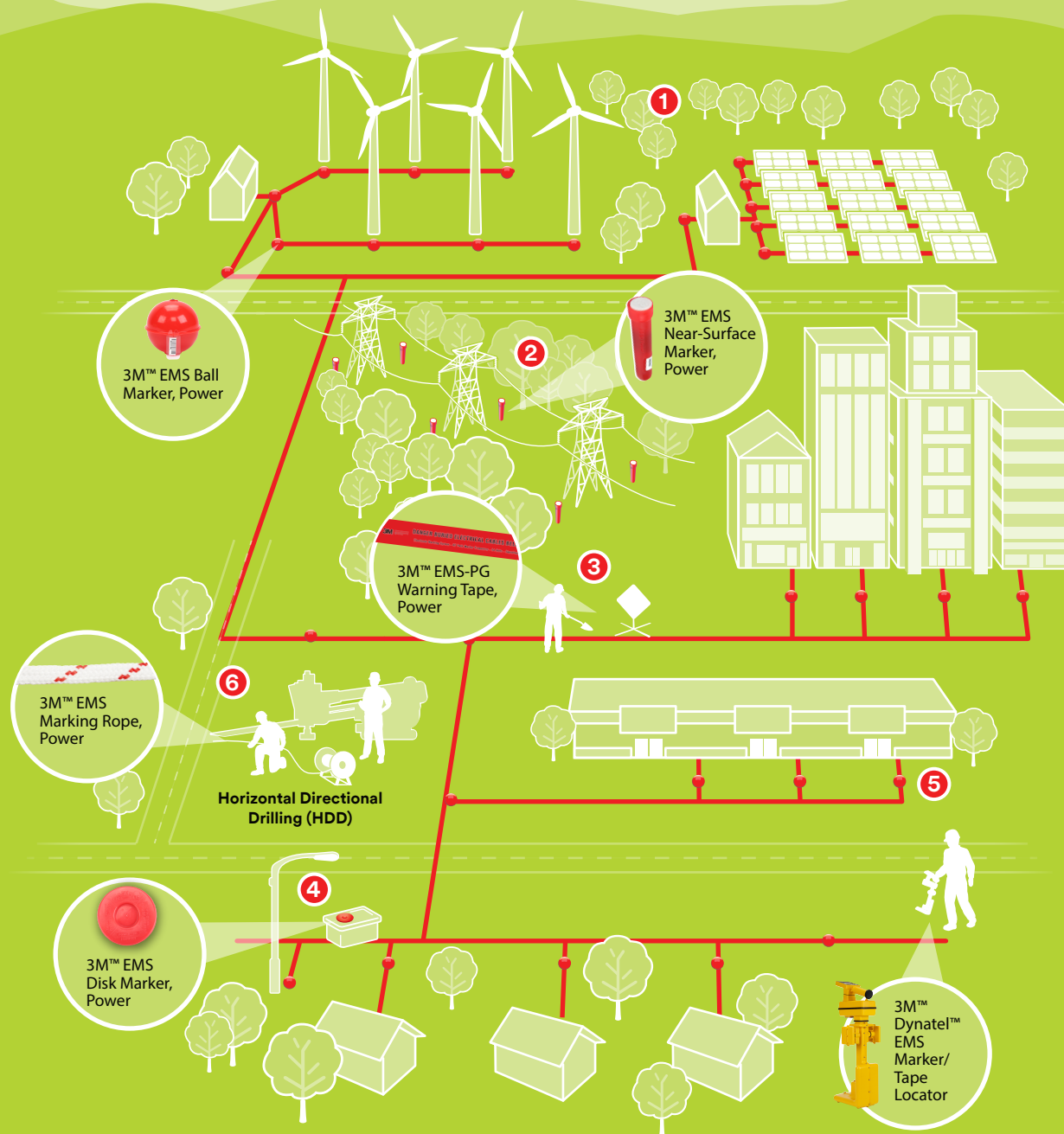


Locating and Marking Application Guide for Power Utilities



1 Wind and Solar Sites

- Marker identifies the location of splices that connect the power generation units to the main hub
- High value assets are critical to pinpoint connections for maintenance and to expand site
- Markers provide improved reliability compared to tracer wire

2 Vegetation Management

- The right-of-way (ROW) is important to maintain to ensure public safety and reduce environmental concerns.
- Markers are used along the ROW to mark boundaries between power lines and vegetation, herbicide use, aerial trimming, and permitted encroachment.
- Underground markers have a longer lifespan than above ground markers, like route markers, due to exposure.
- RFID markers can store data critical for utilities and property owners.

3 Open Trench Construction

- Utilities maintain locations of underground power lines in cities and neighborhoods.
- Marking open trench conduits/assets allows utilities to accurately and efficiently locate buried lines during or after construction is completed.
- Marker installations are more reliable than existing tracer wire solutions.

4

Handhole

- Markers installed inside handholes are used to locate splices and terminations along cable runs.
- Environmental effects may cover handholes overtime and become difficult to locate. Markers can be found under vegetation, dirt, snow, etc.

5

Ball and Near Surface Markers

- Depth of cover confirmation, location of conduit, location accuracy for future road work
- Deep dive markings on each side of road to confirm utility location after bore, find buried or sawed-off conduits
- Identify facility in high congestion, high traffic area
- Identify facility in area of future construction

6

Path Marking

- 3M EMS Caution Tape and Rope
- For use in open trench and HDD (Horizontal Directional Drilling) applications
- A maintenance free solution for marking and locating the path of underground plastic pipes and casing.

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