

### STANDARD OPERATING POLICY AND PROCEDURE

Community and Economic Development

Number:

3-1

Subject: Underground Utility Identification

Approval Date:

December 2, 2005

Effective Date:

Approval: Chuck King, Building Official

December 2, 2005

# 1.0 PURPOSE

Describes requirements for underground utility identification by use of tracer wires.

#### 2.0 DISTRIBUTION

Public, Community and Economic Development (CED) Building Inspection Personnel

## 3.0 REVISION HISTORY

October 23, 2007 January, 2019 (code update)

# 4.0 CODE REFERENCE

Arizona Revised Statutes (ARS) 40-360 2017 National Electrical Code

### 5.0 POLICY

Per ARS, any underground facility installed after December 31, 2005 shall be locatable above ground, without potholing. Underground facility means any item on personal property that is buried or placed below ground for use in connection with the storage or conveyance of water, sewage, electronic, telephonic, or telegraphic communications, electric energy, oil, gas, or other substances, and shall include but not be limited to pipes, sewers, conduits, cables, valves, lines, wires, manholes, attachments and those portions of poles and their attachments below ground except cross culverts or similar roadway drainage facilities and landscape irrigation systems of two inches in diameter or less. The requirements below are in addition to the requirements within the jurisdiction's adopted codes.

- 1. All buried nonmetallic *communication cable* shall have an orange #18<sup>(1)</sup> tracer wire securely attached to it at eight (8) feet on-center (o.c.) and not less than twelve inches of wire shall extend above grade at the termination and be securely attached at that point.
- 2. All buried private *water lines* shall have a *blue* #18<sup>(1)</sup> tracer wire securely attached to it at eight (8) feet o.c. and not less than twelve inches of wire shall extend above grade at the termination and be securely attached at that point.
- 3. All buried private sewer lines shall have a green #18<sup>(1)</sup> tracer wire attached to it at eight (8) feet o.c. and not less than twelve inches of wire shall extend above grade at the termination and be securely attached at that point.
- 4. All buried nonmetallic private *gas lines* shall have a yellow #18<sup>(1)</sup> tracer wire attached to it at eight (8) feet o.c. and not less than twelve inches of wire shall extend above grade at the termination and be securely attached at that point.
- 5. All buried *landscape sprinkler lines greater than 2" in diameter* shall have a purple #18<sup>(1)</sup> tracer wire securely attached to it at eight (8) feet and not less than twelve inches of wire shall extend above grade at the termination and be securely attached at that point.
- 6. All *nonmetallic underground facilities* including but not limited to mechanical, oil, chilled water, refrigerants, steam, swimming pool piping or empty conduit shall have a white #18<sup>(1)</sup> tracer wire attached to it at eight (8) feet and not less than twelve inches of wire shall extend above grade at the termination and be securely attached at that point.

Notes: (1) Wire shall be type UF per Article 340 of the 2017 National Electrical Code.