

Michigan Damage Prevention Board

Recommended Marking Guidelines for Underground Utilities

Uniform Color Code for APWA and CGA (ANSI Z535.1)

| | |
|--------|---|
| White |Proposed Excavation |
| Pink |Temporary Survey Markings |
| Red |Electric Power Lines, Cables, Conduit, and Lighting Cables |
| Yellow |Gas, Oil, Steam, Petroleum, or Gaseous Materials |
| Orange |Communication, Alarm or Signal Lines, Cables, or Conduit |
| Blue |Potable Water |
| Purple |Reclaimed Water, Irrigation, and Slurry Lines |
| Green |Sewers and Drain lines |

Guidelines for Owner/Operator Facility Field Delineation

Owner/Operator markings of facilities include the use of paint, flags, stakes, whiskers, or a combination to identify the facility(ies) at or near an excavation site.

1. Marks in the appropriate color are approximately 12"-18" long and 1" wide, spaced approximately 4 ft - 50 ft apart.
2. The owner of a facility should be indicated by initials or by name in letters, on flags or by painting, at the beginning and end of the locate. On long locates the facility owner/operation should be indicated every 100 ft.
3. "When known, the total number of lines within the ground will be indicated." The number of lines indicated should be based on the physical lines "that you could place your hands on." Multiple cables twisted together to form a single facility, as in the case of electric lines, would be considered one cable for locate purposes. "If a facility is known to be present but the total number of lines for a facility cannot be determined a corridor marker may be used. The corridor marker should indicate the approximate width of the facility." A marking resembling the letter "H" lying on its side will indicate the corridor marker.
4. "When known for facilities 12" and larger, the size of the line being located will be indicated. Line size will indicate the outside diameter of the pipe or structure. The oversized utility marking should indicate the approximate size of pipe or structure." A mark resembling the

letter “H” lying on its side, bisected by line extending along its length will indicate the oversized utility marking.

5. “Duct structures, whether a single duct or multiple ducts, will be indicated by duct symbol indicating the approximate width of the duct structure.”
6. “Termination points, when known, such as: leads, dead ends and stub outs should be indicated.”
7. “When there is a strong likelihood that marks may be destroyed offsets should be used.”

Common Abbreviations

If the facility owner/operator wants to use abbreviations, the following shall be used:

| Facility Identifier | | | |
|---------------------------------------|---------------------------------|------|---|
| CH | Chemical | SS | Storm Sewer |
| E | Electric | SL | Street Lighting |
| FO | Fiber Optic | STM | Steam |
| G | Gas | SP | Slurry System |
| LPG | Liquefied Petroleum Gas | TEL | Telephone |
| PP | Petroleum Products | TS | Traffic Signal |
| RR | Railroad Signal | TV | Television |
| S | Sewer | W | Water |
| SD | Storm Drain | W | Reclaimed Water “Purple” |
| Underground Construction Descriptions | | | |
| C | Conduit | HH | Hand Hole |
| CDR | Corridor | MH | Man Hole |
| D | Distribution Facility | PB | Pull Box |
| DB | Direct Buried | R | Radius |
| DE | Dead End | STR | Structure (vaults, junction boxes, inlets, lift stations) |
| JT | Joint Trench | T | Transmission Facility |
| HP | High Pressure | | |
| Infrastructure Material | | | |
| ABS | Acrylonitrile-Butadiene-Styrene | HDPE | High Density Polyethylene |
| ACP | Asbestos Cement Pipe | MTD | Multiple Tile Duct |
| CI | Cast Iron | PLA | Plastic (conduit or pipe) |
| CMC | Cement Mortar Coated | RCB | Reinforced Concrete Box |
| CML | Cement Mortar Lined | RCP | Reinforced Concrete Pipe |
| CPP | Corrugated Plastic Pipe | RF | Reinforced Fiberglass |
| CMP | Corrugated Metal Pipe | SCCP | Steel Cylinder Concrete Pipe |
| CU | Copper | STL | Steel |
| CWD | Creosote Wood Duct | VCP | Vitrified Clay Pipe |