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
Gray	Use gray to erase marks if needed

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 marks should include an indication of the owner of a facility indicated by initials or by name in letters, on flags or by painting.
3. *In areas where the owner/operator has abandoned facilities within the scope of ticket,* the size and type of the live (marked) facility should be indicated (see “common abbreviations” table for facility type)
4. “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.

5. "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 a line extending along its length will indicate the oversized utility marking.
6. When detail for facility owner, size and type are indicated, the detail should be marked at:
    a. the beginning and end of the locate. On long locates the detail should be indicated every 100 ft.
    b. the property line for laterals (such as individual service drops to buildings)
7. "Duct structures, whether a single duct or multiple ducts, will be indicated by duct symbol indicating the approximate width of the duct structure."
8. "Termination points, when known, such as: leads, dead ends and stub outs should be indicated."
9. "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 and lift stations)
JT	Joint Trench		
HP	High Pressure	T	Transmission Facility
Infrastructure Material			
ABS	Acrylonitrile-Butadiene-Styrene	HDPE	High Density Polyethylene
ACP	Asbestos Cement Pipe	MTD	Multiple Tile Duct
CI	Cast Iron	PLA or P	Plastic (conduit or pipe)
CMC	Cement Mortar Coated	PB	Lead
CML	Cement Mortar Lined	RCB	Reinforced Concrete Box

CPP	Corrugated Plastic Pipe	RCP	Reinforced Concrete Pipe
CMP	Corrugated Metal Pipe	RF	Reinforced Fiberglass
CU	Copper	SCCP	Steel Cylinder Concrete Pipe
CWD	Creosote Wood Duct	STL	Steel
		VCP	Vitrified Clay Pipe