

From: Karl Rockwell (DOT) <Karl.Rockwell@Maricopa.Gov>
Sent: Monday, August 12, 2019 6:14 AM
To: Gordon Tyus
Subject: RE: SD-Minutes2019-08-07-Draft.docx

Gordon: I sent this email to Warren White in regards to Case 19-04. These standard utility depths were recently implemented in the the MCDOT Roadway Design Manual, and may be relevant to this case.

Warren – There was some lengthy discussion about utility depth and placement to avoid future utility conflicts at the meeting yesterday.

This is a chart we use for all utilities going into the MCDOT RW. It went into effect July 1st, 2019.

I thought it might be helpful.

| Table 4-1 – Minimum Cover Depth For Underground Utilities ^[1] | | | | |
|--|--------------------|------------------|----------------------|----------------------------|
| Description | Arterial Street | Collector Street | Local Street & Alley | Unpaved (No Curb & Gutter) |
| 4-POWER | | | | |
| 0-600 Volts | 36" | 36" | 24" | 48" |
| 601-7200 Volts | 42" | 42" | 42" | 54" |
| 12KV (local dist) | 42" | 42" | 42" | 54" |
| 12KV (30 feeder) | 48" | 48" | 48" | 60" |
| Street Light Circuit | 36" | 36" | 36" | 48" |
| GAS | | | | |
| Low Pressure Gas (60PSI and below) | 36" | 36" | 36" | 48" |
| High Pressure Gas (60PSI and above) | 48" | 48" | 48" | 60" |
| WATER / IRRIGATION / STORM DRAIN | | | | |
| Water Line > 12" diameter | 48" | 48" | 48" | 60" |
| Water Line < 12" diameter | 36" | 36" | 36" | 48" |
| Irrigation Lines | 36" | 36" | 36" | 48" |
| Storm Drain Lines | 18" | 18" | 18" | 30" |
| TELECOMMUNICATIONS | | | | |
| Fiber Optic | 48" ^[2] | 48" | 48" | 60" |
| Copper Cable | 36" ^[3] | 36" | 36" | 48" |
| Copper / Fiber Service Drops | 36" | 36" | 36" | 48" |
| CATV | | | | |
| Fiber Optic | 48" ¹ | 48" | 48" | 60" |
| Coaxial Cable | 36" ² | 36" | 36" | 48" |
| Coaxial Service Drops | 36" | 36" | 36" | 48" |

NOTE:

- MCDOT may approve deviations from these standards under unusual and compelling circumstances.
- All roadway crossings must be within conduit.
- All non-metallic facilities must be accompanied by a tracer wire.
- Cover is defined as the difference in elevation between the top of the line or pipe and the ultimate gutter grade of the roadway if paving will follow or to top of existing pavement.
- For facilities outside of the proposed or existing roadway limits cover is defined as the difference in elevation between the top of the line or pipe and the natural or regraded ground surface, whichever is less.

^[1] Minimum depths should comply with current regulatory standards if different than those show in Table 4-1.

^[2] With warning tape, 60" depth when crossing or within fifteen feet (15') of roadway.

^[3] If direct buried, must be fifteen feet (15') beyond the edge of roadway.

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