

Construction Standards

Typical irrigation season is from mid-January to mid-October. Construction impacting the gravity irrigation system during this time is generally prohibited. Any construction allowed during irrigation season is at CMID's discretion.

Replacement easements must carry all prior rights and be recorded prior to any final approval of plans. A minimum of a 25' easement is required over all CMID infrastructures.

Engineering and construction of any project must ensure current and future access to all CMID property, easements, and infrastructure within or adjacent to the project.

Pressurized Irrigation:

For pressurized non-potable water, the standard material is AWWA C900 PVC pipe, minimum class 200 psi.

Pressure testing will be observed by the District and is done at 200 psi for a minimum of 2 hours.

Canal Lining/Repairing/Replacement:

Concrete canal lining shall be Class A (minimum F'c=3,000 psi) conforming to Sections 725 and 726 of the Maricopa Association of Governments Standard Specifications. Concrete mixture shall include fiber mesh with a dosage rate of 3 lbs per cubic yard. All concrete aggregate shall be no greater than $\frac{3}{4}$ " diameter. Dimensions should match the existing canal section. Removal of canal requires saw cutting at a joint outside of the damaged or work area.

Canal and Pipeline Structures:

Concrete for structures shall be Class AA (minimum F'c=4,000 psi) conforming to Sections 725 and 726 of the Maricopa Association of Governments Standard Specifications. Concrete mixture shall include fiber mesh with a dosage rate of 1.5 lbs per cubic yard, water reducing admixture, air entrainment, and fly-ash at 15% of cementitious content. Flyash factor shall be 1.2 lbs of flyash for every pound of cement deducted.

Undergrounding Irrigation (From Canal to Pipeline or Replacing/Relocating Pipeline):

Category V rubber gasketed reinforced concrete pipe is the standard material for gravity irrigation pipelines.

Contractor shall notify CMID in writing at least 72 hours in advance of any construction within CMID's easements. All construction work within CMID easements is subject to CMID's inspection and approval. Construction work completed without inspection by CMID shall be subject to exposure at contractor's expense.

Utility Crossing Standards

All proposed utilities crossing CMID easements and infrastructure will require an encroachment permit and use license, and inspection by CMID.

CMID must be added to the utility approval block.

Delineate and denote all CMID easements and facilities on the design plans.

General Notes

The following CMID general notes must be included in the design plans:

1. Contractor shall notify CMID in writing at least 72 hours in advance of any construction within CMID's easements.
2. All construction work within CMID easement is subject to CMID's inspection and approval. Construction work concealed without CMID inspection shall be subject to exposure at the contractor's expense.
3. As-built plans shall be provided immediately upon construction completion to CMID. As-built plans shall feature both horizontal and vertical as-built information. CMID does not require the as-built drawings to reflect the as-built invert of existing utilities that cross CMID's facilities, however, the minimum clearance separation between the existing utility and CMID's facility shall be as-built.

Installations must be straight across CMID's easement(s); the utility line(s) cannot angle within the CMID easement. CMID does not allow parallel installation within our easements.

All proposed utility crossings shall maintain a minimum 3' clearance to any CMID facilities, and a minimum 10' clearance from any CMID structures. The minimum clearance shall be maintained for the entire width of the easement crossing. No valves, fittings, junction boxes, or structures shall be located within CMID's easements.

Contractor shall verify the depth of existing CMID facilities by potholing prior to construction.

The preferred method of installation is bore and jack; where installation is performed using open cut, complete replacement of the ditch to District standards is required. Where new utilities cross under existing CMID irrigation pipes, and where mechanical compaction of the backfill is not achievable, one sack slurry backfill is required to the springline of the existing CMID pipe.

The District requires complete electronic copies in AutoCAD of any new utility installations crossing district easements or right-of ways.

