Install 300 LF of 8" DIP from N1042X to N1727
Replace 3,500 LF of 8" CIP with 8" DIP from N17908 to N1042X
Exist 1,300 LF of 8" PVC from N1025X to N17908 to remain
Replace 300 LF of 8" CIP with 8" DIP from N1023X to N1025X
Exist 800 LF of 18" PVC from N17909 to N1912X to remain
Replace 100 LF of 8" AC with 8" DIP from N1745 to N1007X
Exist 1,700 LF of 8" DIP from N1007X to N17909 to remain
EL CAMINO REAL IMPROVEMENTS

PROJECT BACKGROUND
El Camino Real is located in the western portion of Zone 1 and spans the entire length of the Zone for approximately 8,400 LF. The existing water mains along the road consist of 100 LF of 8" asbestos cement (AC), 1,700 LF of 8" ductile iron pipe (DIP), 3,800 LF of cast iron pipe (CIP), and 1,300 LF of polyvinylchloride (PVC) for a total of 6,900 LF as shown in the map to the left. The District has reported several leaks along the alignment primarily along the CIPs which were installed in 1950 compared to all other pipe on the road installed in the 1980's. This project replaces the 3,800 LF of 8" CIP with 8" DIP, in addition to the installation of 300 LF of new 8" DIP. There are also 8 fire hydrants, 4 fire services, and 23 service connections that will be replaced. Hydraulic analysis indicates an 8" water main along El Camino Real is sufficient to provide fire flows well above the minimum 1,500 gpm at 20 psi. Distribution System Analysis No. 061

PROPOSED IMPROVEMENTS
Replace 3,800 LF of 8" CIP with 8" DIP
Install 300 LF of new 8" DIP
Replace 8 fire hydrant assemblies
Replace 23 service connections
Replace 4 fire service connections

PROJECT BENEFITS
The El Camino Real Improvements replaces old and aging water main, reduces maintenance, and improves fire flows at various locations along Old County Road to as much as 2,500 gpm.

EXPERIMENT SCHEDULE (2015 DOLLARS)

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CAPITAL IMPROVEMENT PROGRAM - 2015 UPDATE
EL CAMINO REAL IMPROVEMENTS
PROJECT 15-76
MALCOM AVENUE AREA IMPROVEMENTS

PROJECT BACKGROUND
The neighborhood along Malcolm Avenue, Anita Avenue, Julia Court, and Belmont Avenue is currently served by Zone 2 and consists of 55 residences and 5 fire hydrants. Streets to the immediate north of Malcolm Avenue and those on Ruth Avenue and North Road are all served by Zone 1. The zones are connected at the North Road Regulating Station in addition to four other connections via closed valves creating 5 dead ends within the area. This project eliminates all the dead ends except the one associated with the North Road Regulator by installing a new parallel 550 LF ductile iron pipe (DIP) water main along the existing Zone 2 water main on Malcolm Avenue. The existing Zone 2 water main would become part of Zone 1 and the new water main would become part of Zone 2. Hydraulic analysis indicates a static pressure loss of approximately 40 psi to an average 98 psi with the Zone 2 to Zone 1 switch. Fire flows are minimally affected with differences around 100 gpm on average however the majority of the flows are above 2,000 gpm.

Distribution System Analysis No. 079

PROPOSED IMPROVEMENTS
Install 550 LF of 8" DIP along Malcolm Avenue
Reconfigure Zone 1 and 2 boundaries
Replace 2 service connections

PROJECT BENEFITS
The Malcolm Avenue Area Improvements include reduced static pressures, elimination of 4 dead ends, creating a completely looped system in both Zones 1 and 2, increased fire protection for a few select nodes.