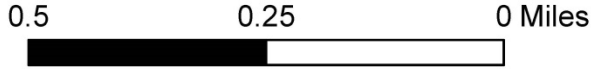


Gravity Trunk Main Project

Doug Valby, P.E.

GRAVITY TRUNK MAIN VALVE REPLACEMENT PROJECT

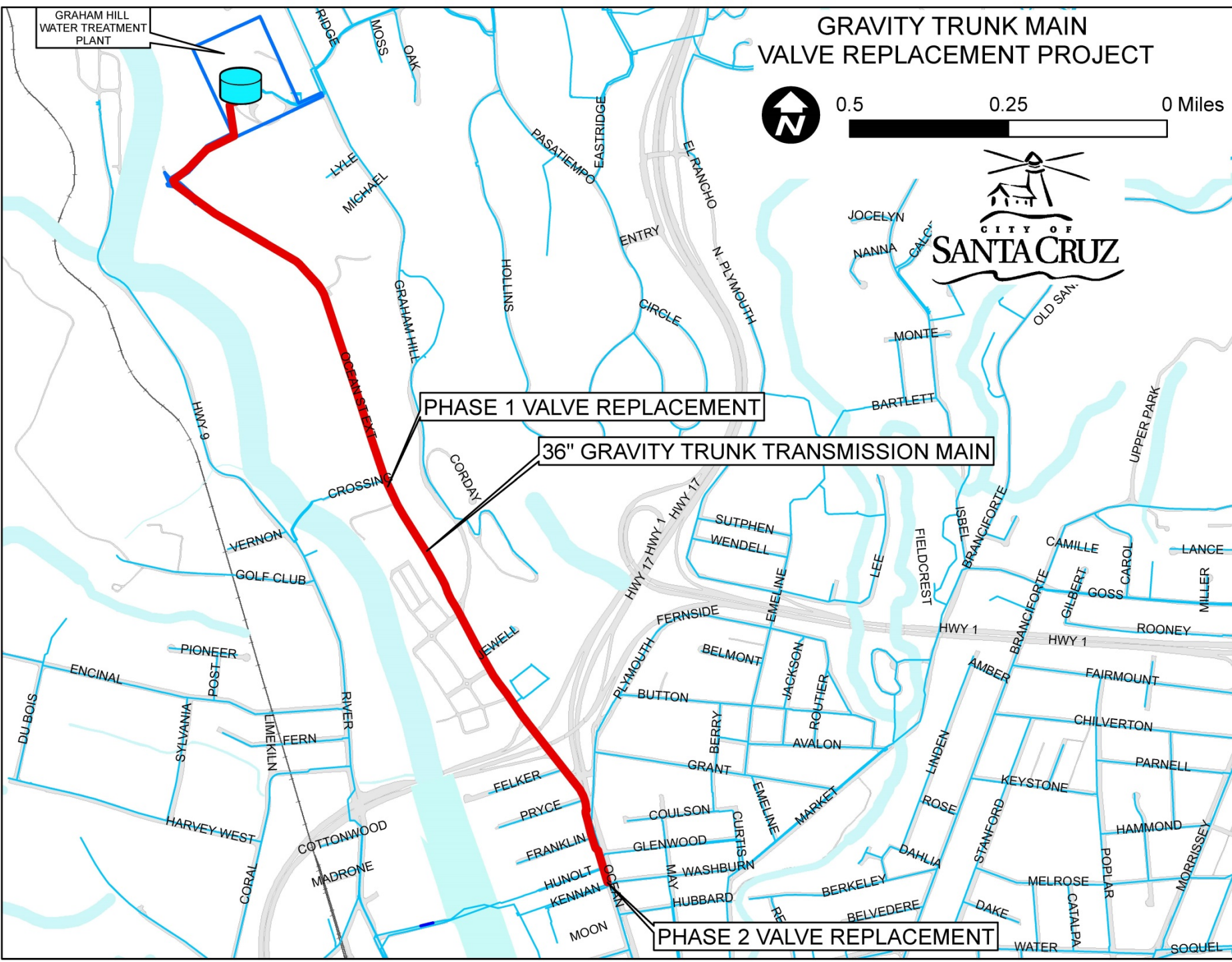


GRAHAM HILL WATER TREATMENT PLANT

PHASE 1 VALVE REPLACEMENT

36" GRAVITY TRUNK TRANSMISSION MAIN

PHASE 2 VALVE REPLACEMENT



Gravity Trunk Main Project

PROJECT PURPOSE:

- ✓ Part of our on-going efforts to maintain and rehabilitate aging infrastructure where possible.
- ✓ Re-establish ability to isolate critical sections of the trunk transmission main system
- ✓ Inspect, assess, and proactively repair any deteriorated segments of the transmission main
- Estimate the remaining useful life so we can plan for rehabilitation or replacement.

Out with the old...



And in with the new



Old valve...

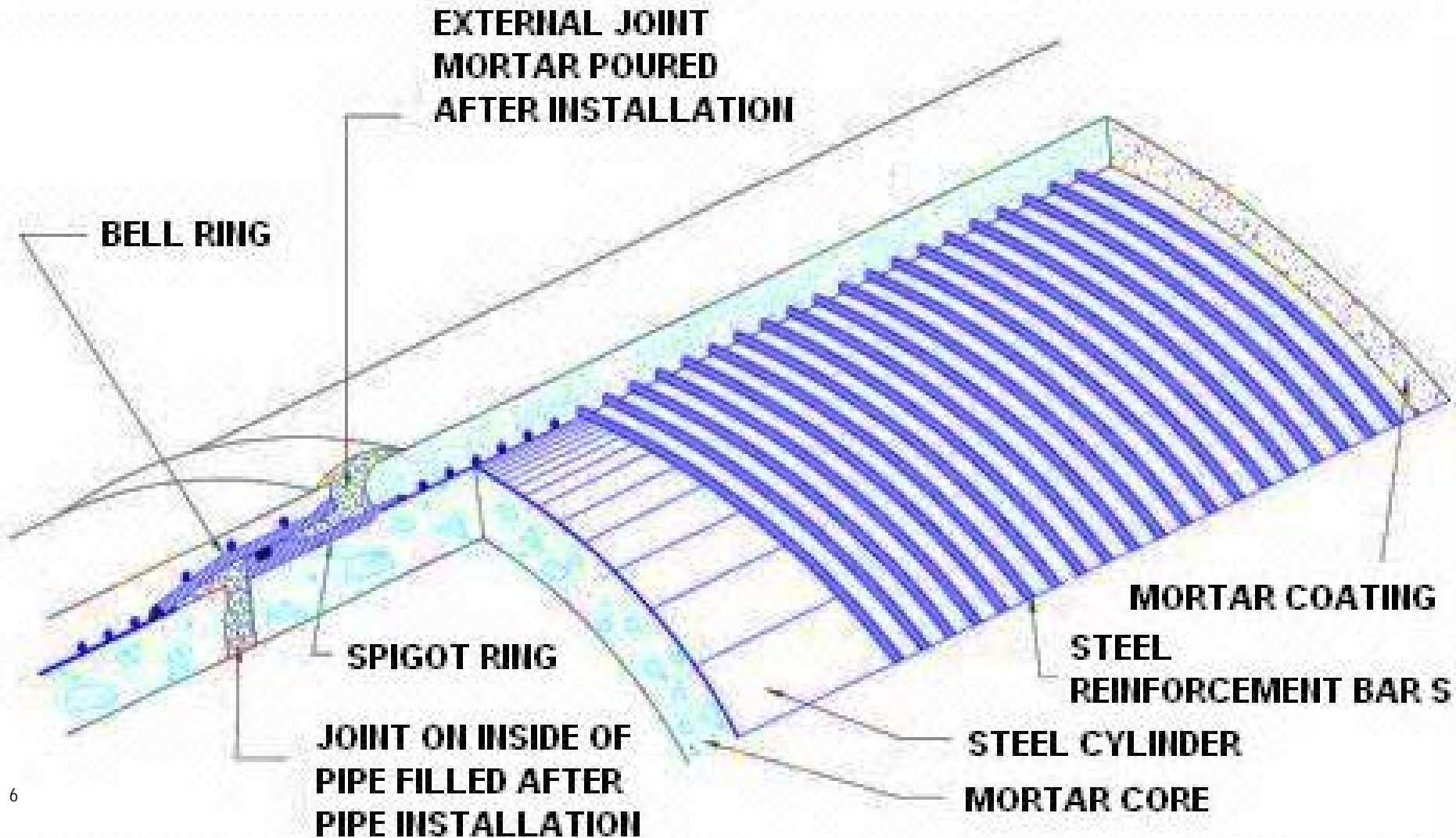


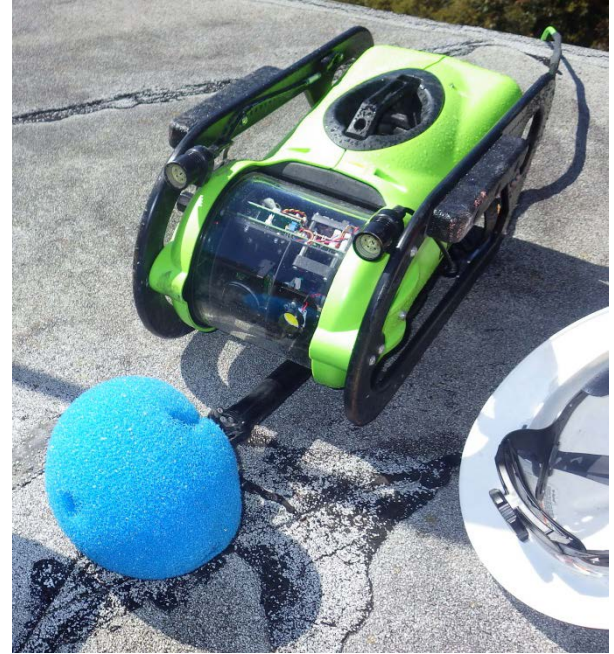
New Station



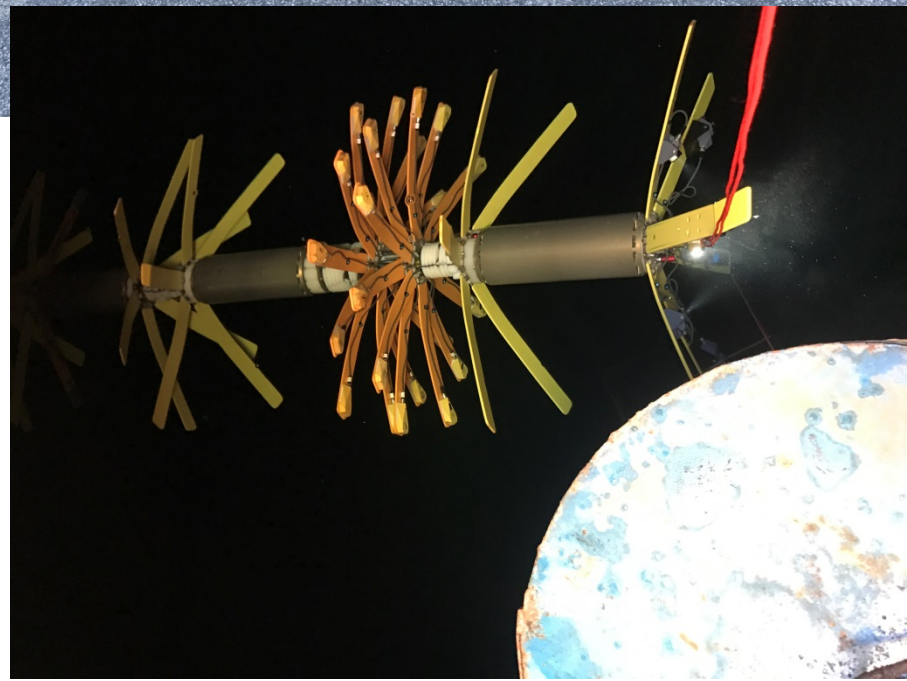
November 18th & 19th, 2015

Bar Wrapped Concrete Cylinder Pipe





7
Inspection Day 1 – “SmartBall”
(acoustic listening device)
Monday, March 13th 2017



Days 2-4 - "PipeDiver"
(electromagnetic inspection
device)

Monitoring & Retrieval





Broken Wire Wraps

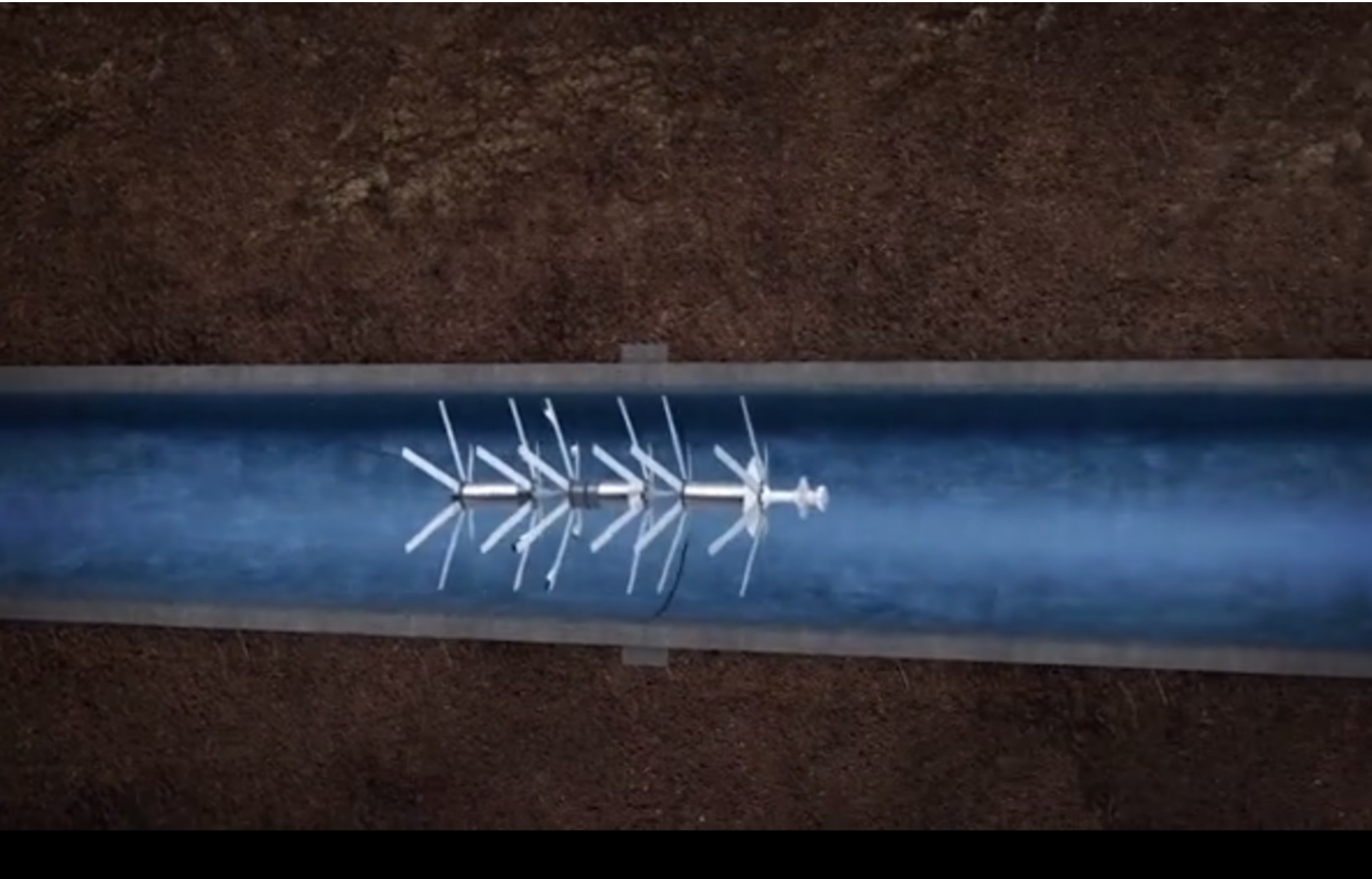
NOT our Pipe!

Questions?

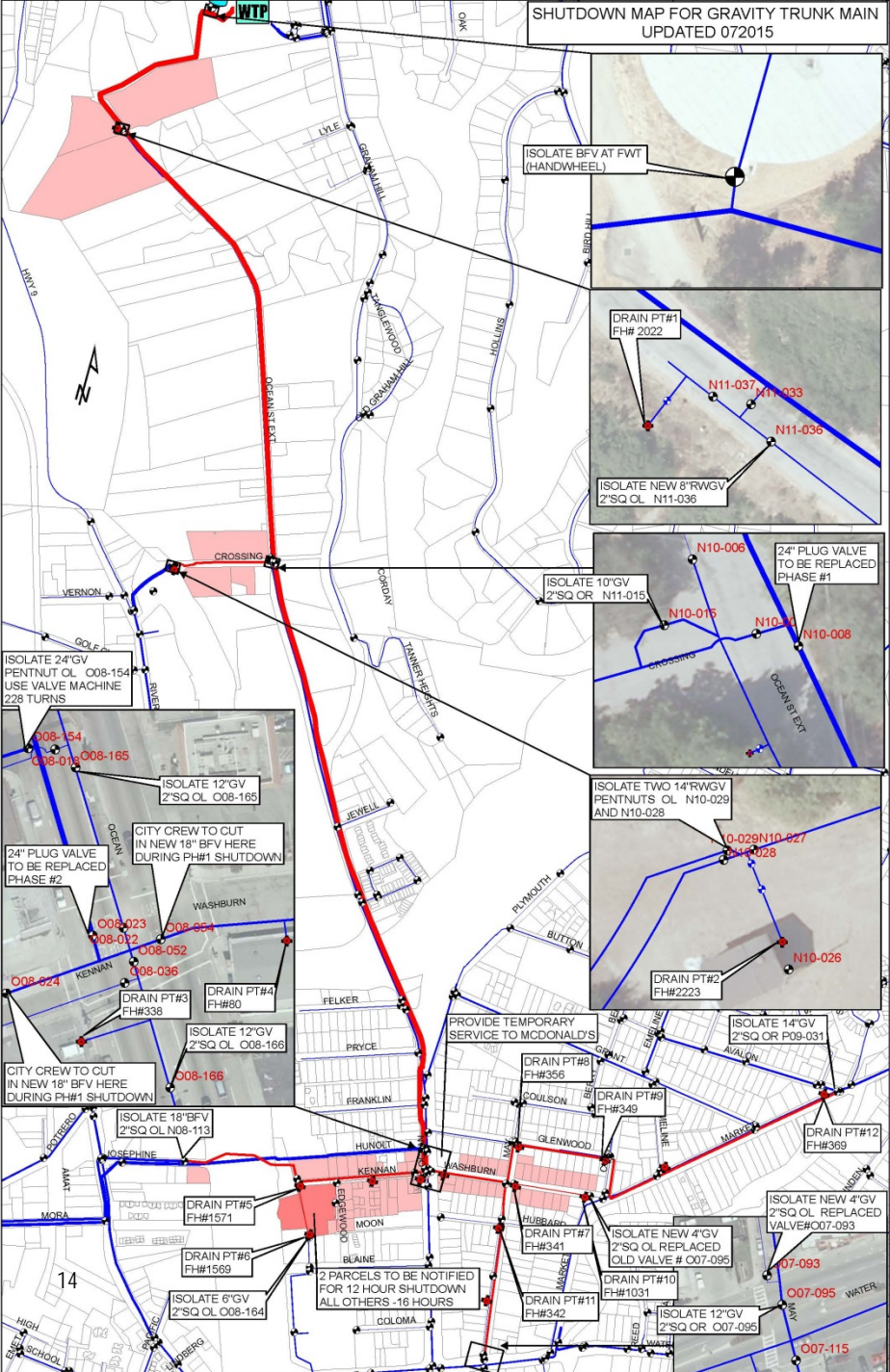
PROJECT PHASE OVERVIEW

Phase 1	Replace existing, inoperable valve at Intx. Ocean St. Ext. and Crossing St. And two 18" valves at Ocean, Kennan, and Washburn intersection	\$103,000 Parts and Labor	Sept 2015
Phase 2	Replace existing, inoperable valve at Intx. Ocean St. and Kennan St.	\$155,000 Parts and Labor	Nov 2015
Phase 3	Inspect trunk main and assess condition	\$253,000	Spring 2017

Total = \$511,000



**SHUTDOWN MAP FOR GRAVITY TRUNK MAIN
UPDATED 072015**



ISOLATE BVF AT FWT (HANDWHEEL)

DRAIN PT#1 FH# 2022

N11-037, N11-033, N11-036

ISOLATE NEW 8" RWGV 2" SQ OL N11-036

ISOLATE 10"GV 2" SQ OR N11-015

N10-006, N10-015, N10-014, N10-008

24" PLUG VALVE TO BE REPLACED PHASE #1

ISOLATE TWO 14" RWGV PENTNUTS OL N10-029 AND N10-028

N10-029, N10-027, N10-028, N10-026

DRAIN PT#2 FH#2223

ISOLATE 24"GV PENTNUT OL 008-154 USE VALVE MACHINE 228 TURNS

008-154, 008-019, 008-165

ISOLATE 12"GV 2" SQ OL 008-165

24" PLUG VALVE TO BE REPLACED PHASE #2

CITY CREW TO CUT IN NEW 18" BVF HERE DURING PH#1 SHUTDOWN

008-023, 008-054, 008-052, 008-036, 008-024

DRAIN PT#3 FH#338, DRAIN PT#4 FH#80

ISOLATE 12"GV 2" SQ OL 008-166

008-188

CITY CREW TO CUT IN NEW 18" BVF HERE DURING PH#1 SHUTDOWN

PROVIDE TEMPORARY SERVICE TO MCDONALD'S

ISOLATE 14"GV 2" SQ OR P09-031

DRAIN PT#8 FH#356, DRAIN PT#9 FH#349, DRAIN PT#12 FH#369

ISOLATE NEW 4"GV 2" SQ OL REPLACED OLD VALVE # 007-095

DRAIN PT#10 FH#1031, DRAIN PT#11 FH#342

ISOLATE 12"GV 2" SQ OR 007-095

ISOLATE NEW 4"GV 2" SQ OL REPLACED VALVE#007-093

007-093, 007-095, 007-115

2 PARCELS TO BE NOTIFIED FOR 12 HOUR SHUTDOWN ALL OTHERS -16 HOURS

ISOLATE 18" BVF 2" SQ OL N08-113

ISOLATE 6"GV 2" SQ OL 008-164

DRAIN PT#5 FH#1571, DRAIN PT#6 FH#1569

CROSSING ST
OCEAN BL





SPA

Santa Cruz

MIDWAY

McDonald's logo