SEWER INTERCEPTOR PROJECT

Public Meeting

September 25, 2018

MOLZENCORBIN
ENGINEERS | ARCHITECTS | PLANNERS

HIGH WATER MARK

D.T. Collins & Associates, PC

Project Background

- 2008 Flood Resulting in Damage to Sewer Interceptor
- Previous planning and 30% design effort focused on relocation of the existing interceptor
- Project budget greater than available funding
- Significant constructability concerns
- This Project Team hired to re-evaluate the project - find an alternative that accomplished primary goals:
  - Fix damaged pipeline (reducing I&I)
  - Provide infrastructure that is resistant to future flood damage
  - Bring the project within remainder of available funds

Sanitary Sewer Repair-Rehabilitation Project

Restoration of Existing Sewer Lines and Manholes

- Trenchless Pipe Rehabilitation
- Insitu Manhole Repair

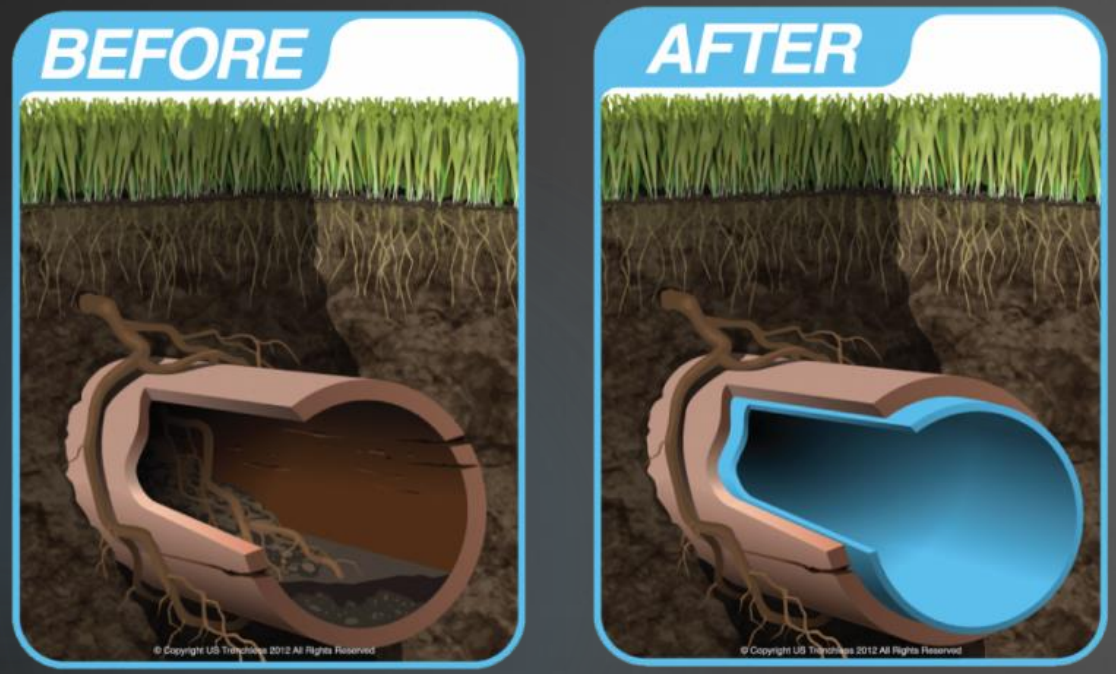
Lift Stations and Forcemains

- Abandonment of Damaged and Vulnerable Locations
- New Lift Stations and Forcemains to Convey Sewage

Hazard Mitigation and Stabilization for Sewer Lines

- Protect River Crossing Locations of Sewer Lines
- Protect Sewer Lines Parallel and Proximate to the River

Restoration of Existing Sewer Lines

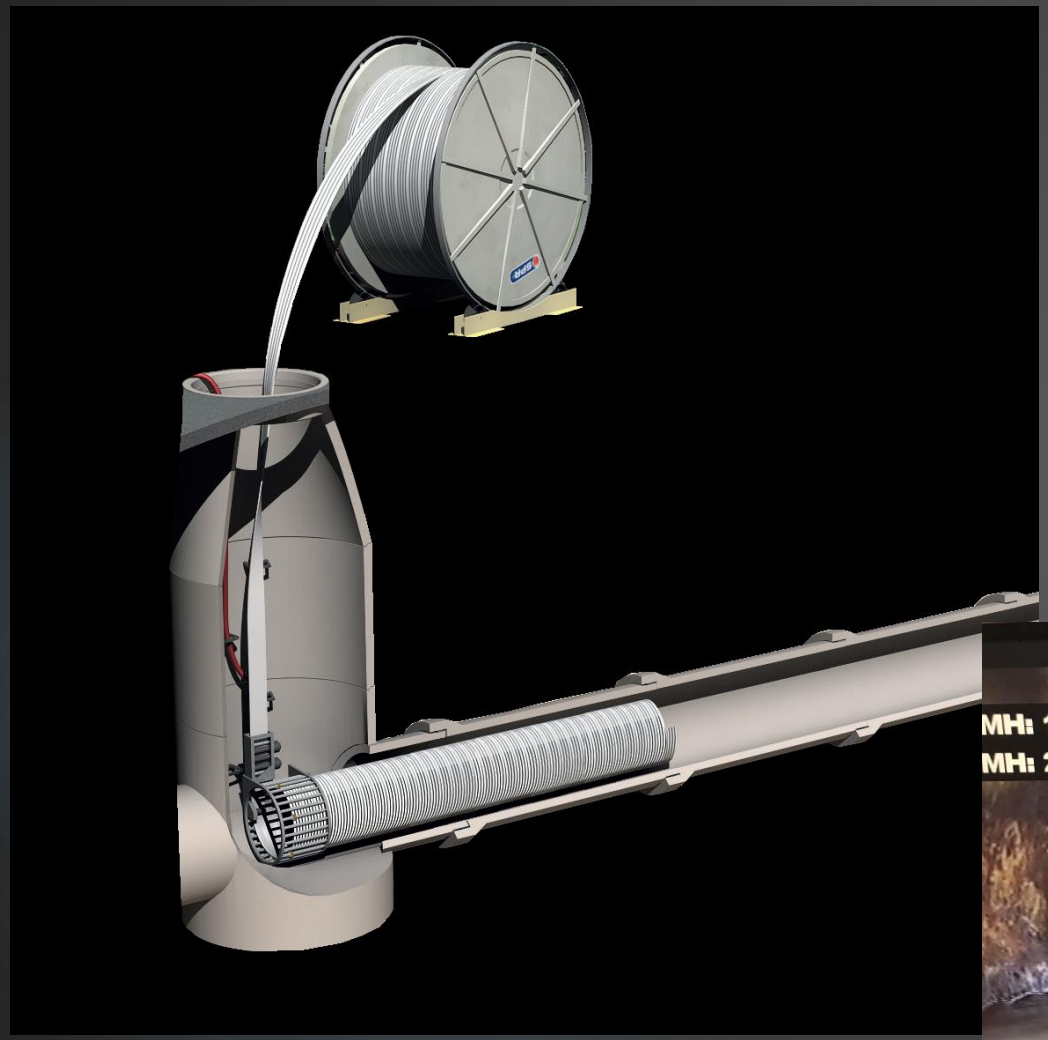


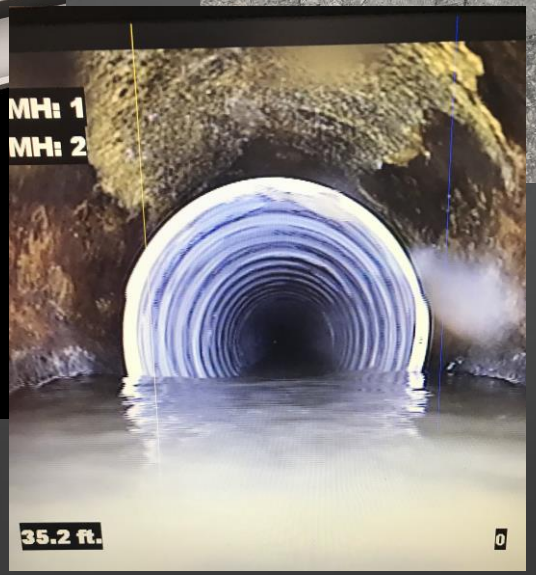
- Trenchless Rehabilitation Methods:
  - Cured-In-Place Pipe
  - Thermoformed PVC
  - Spiral Wound PVC

Cured-In-Place Pipe (CIPP)

Thermoformed PVC

Spiral Wound PVC

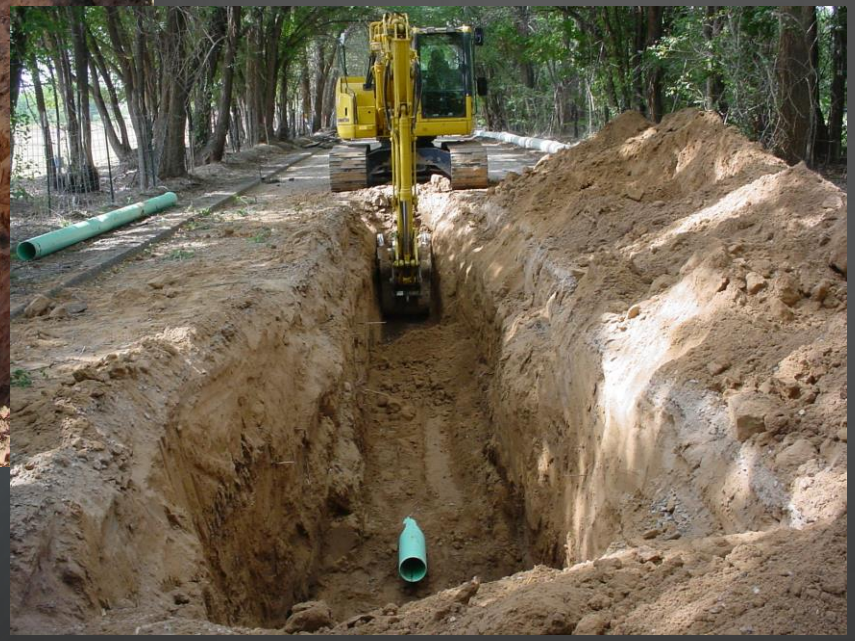




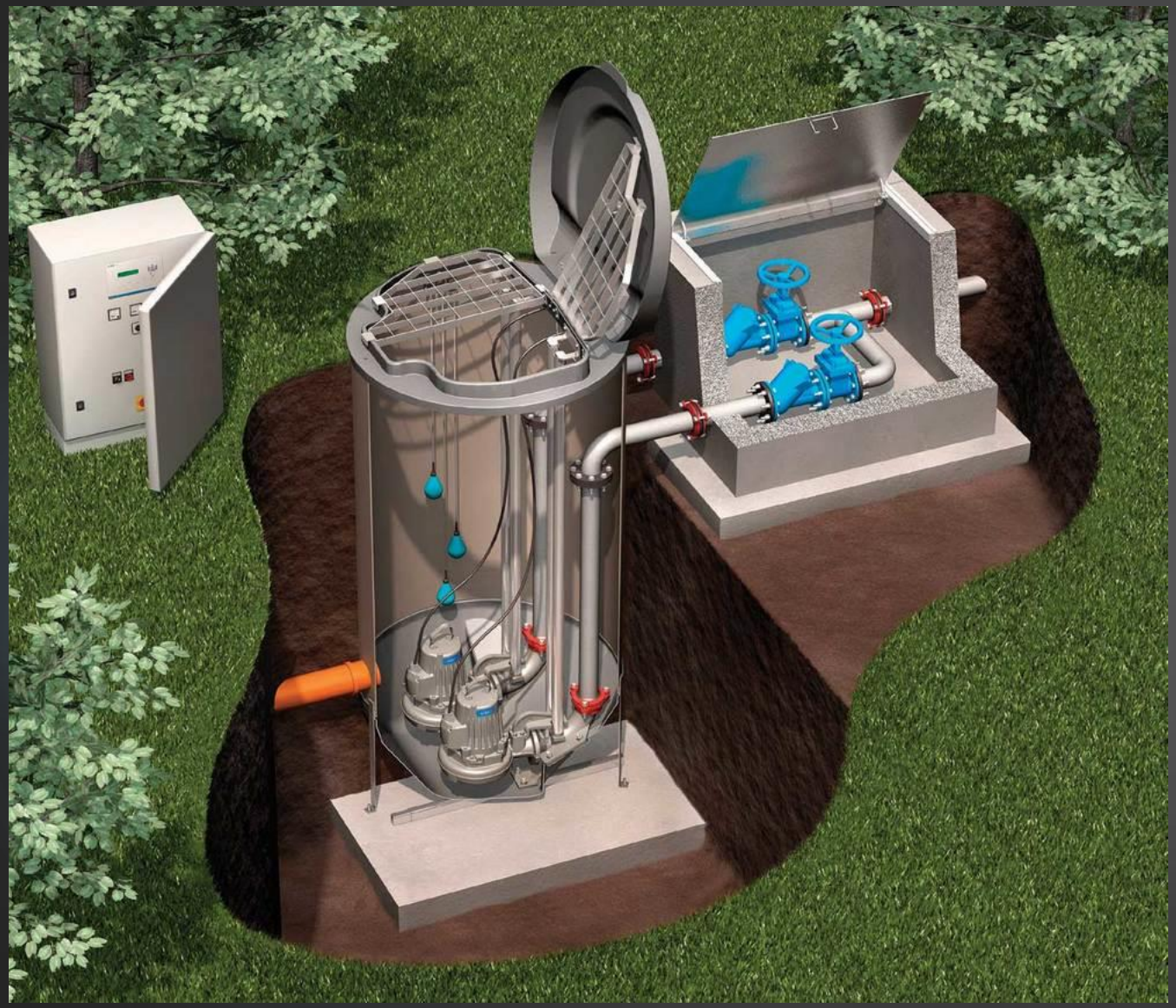
Manhole Restoration

- Minimize replacement of manholes (less excavation)
- Improve accessibility for maintenance
- Reinforce structural integrity
- Prevent infiltration and inflow

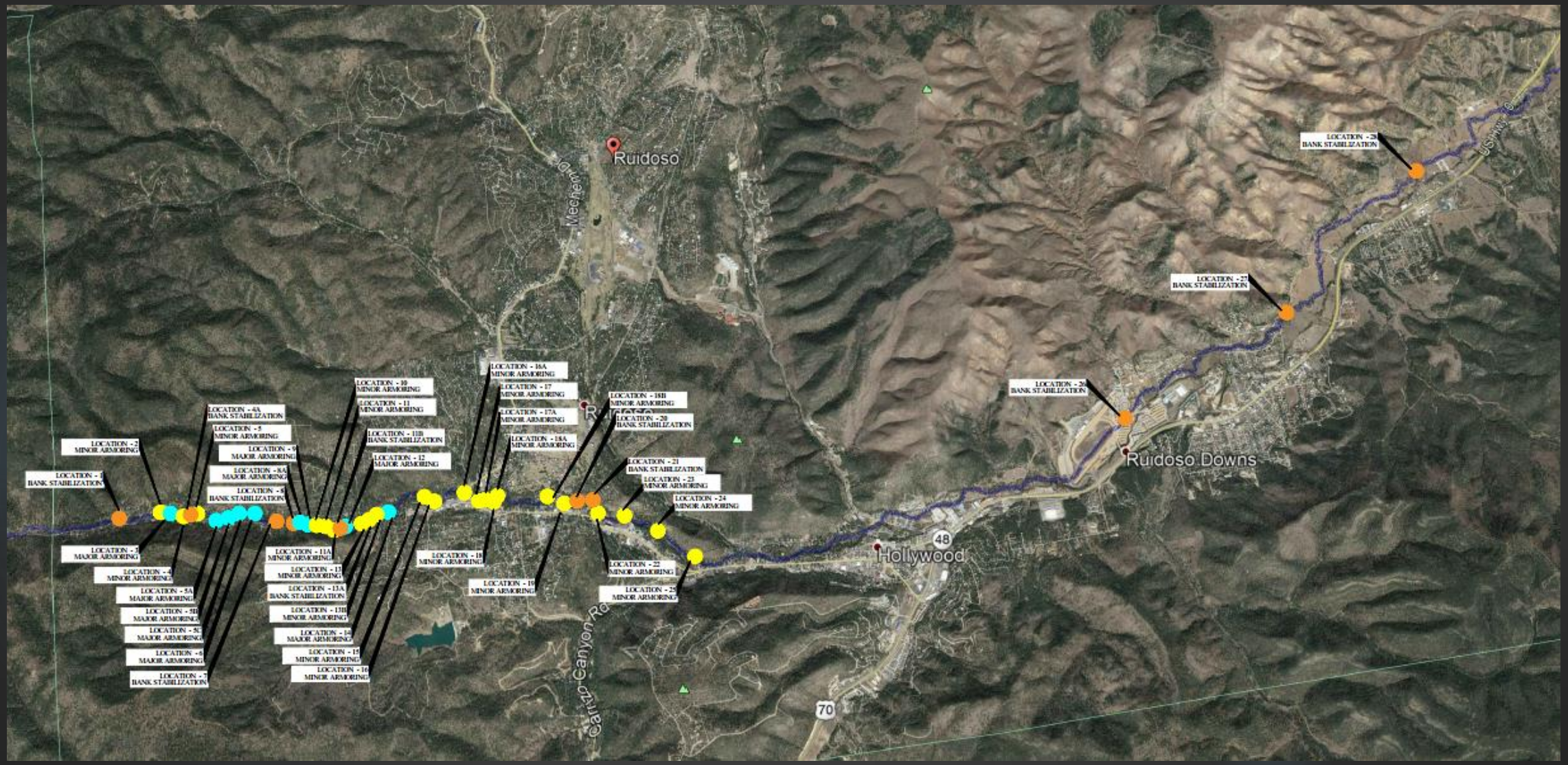
Sewer Line Relocations



Lift Stations and Forcemains



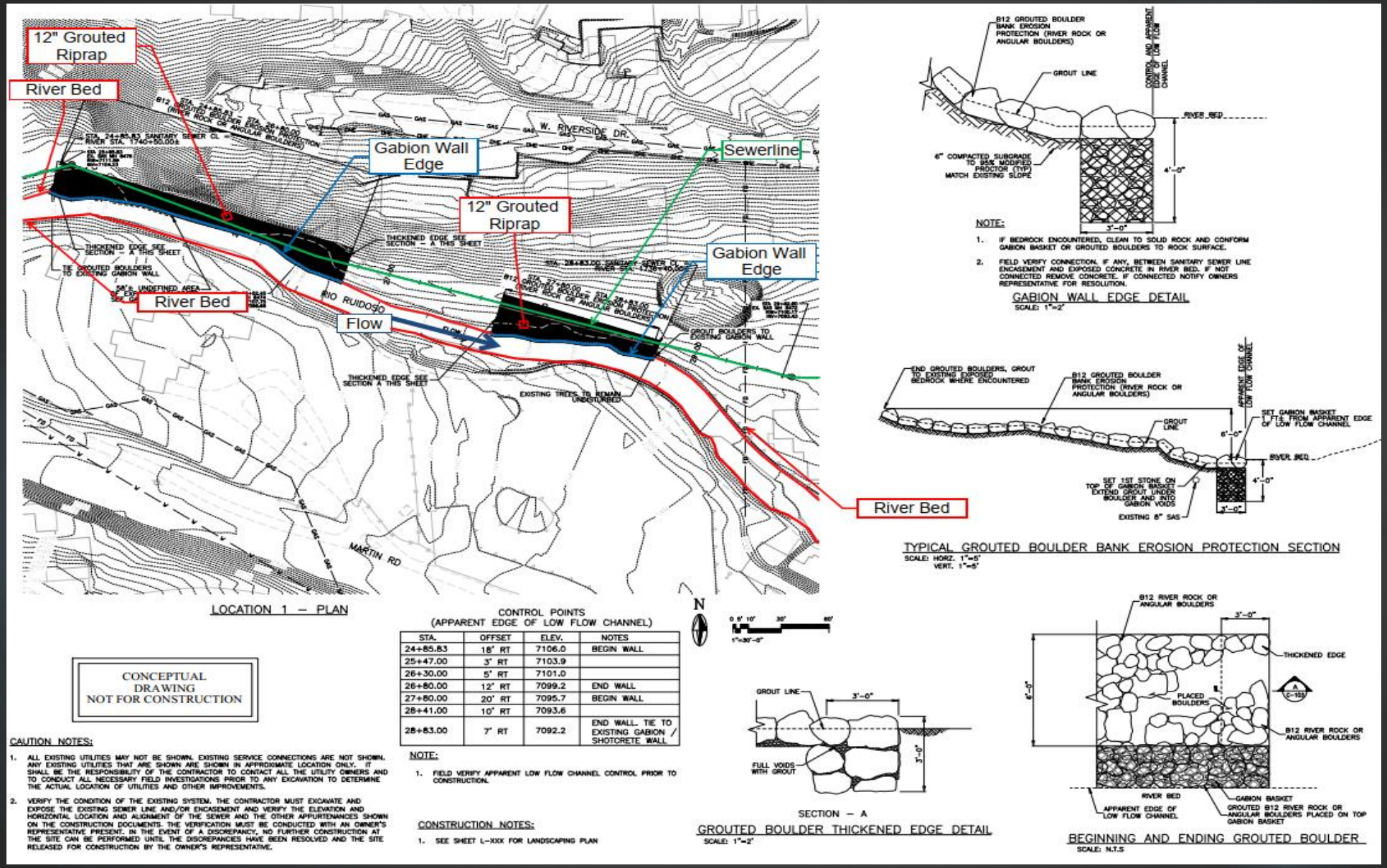
Hazard Mitigation and Stabilization for Sewer Lines



Location 1 - Before

Location 1 - After

Location 1 – Bank Stabilization

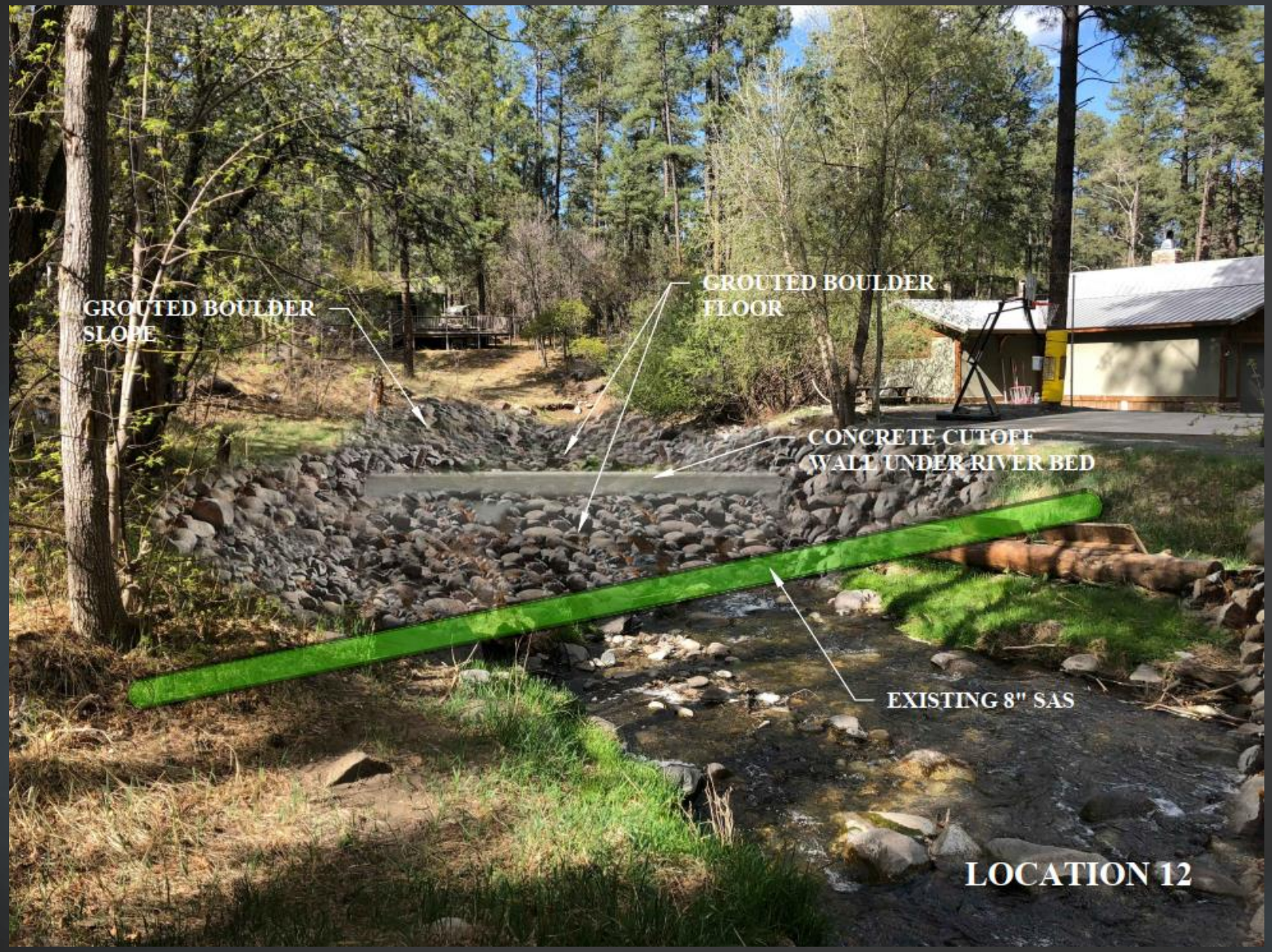


Location 1 - After

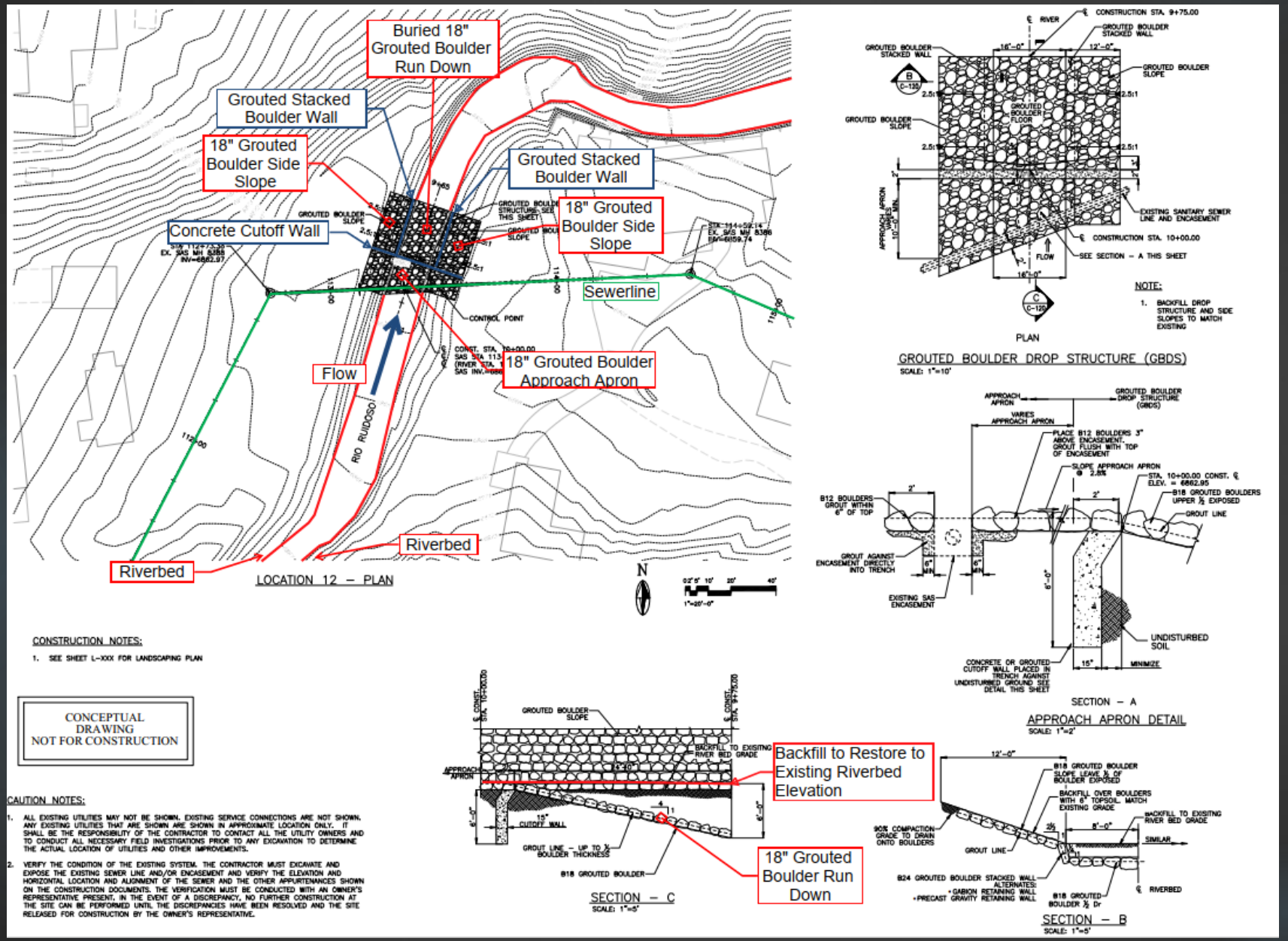
Location 1 – Post Construction

Location 12 - Before

Location 12 - After



Location 12 – Minor Armoring



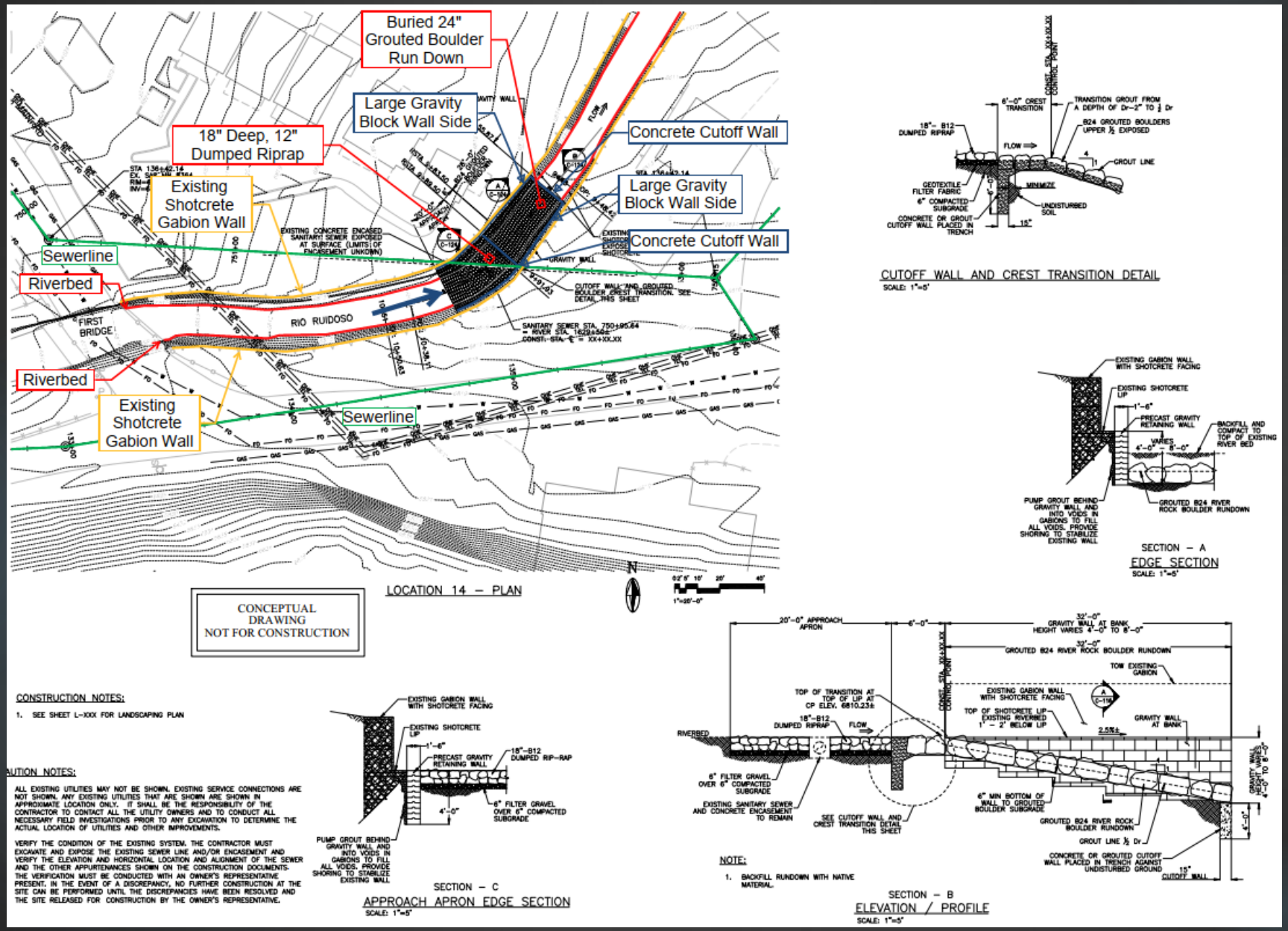
Location 12 - After

Location 12 – Post Construction

Location 14 - Before

Location 14 - After

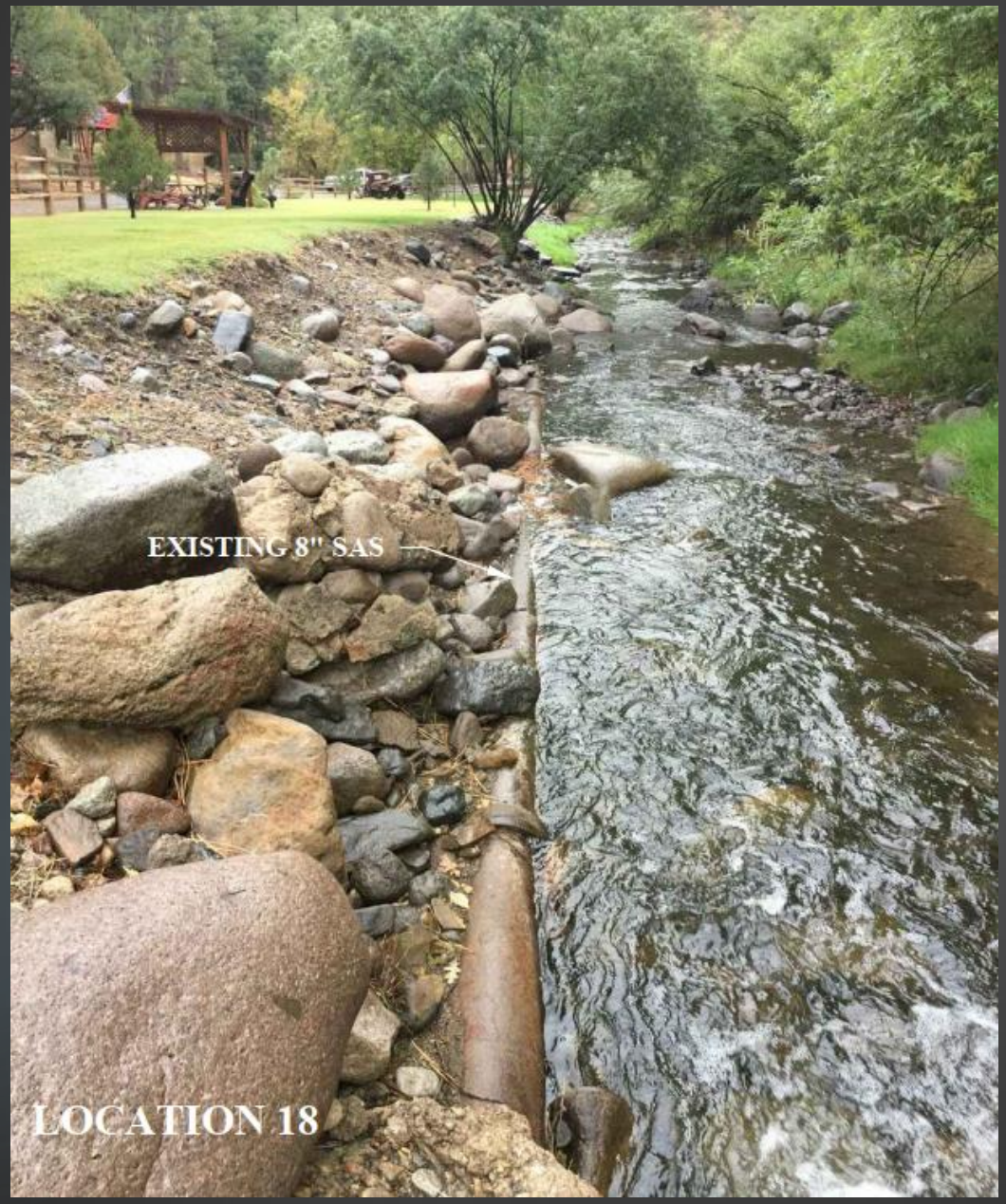
Location 14 – Major Armoring



Location 14 - After

Location 14 – Post Construction

Location 18 – Relocation



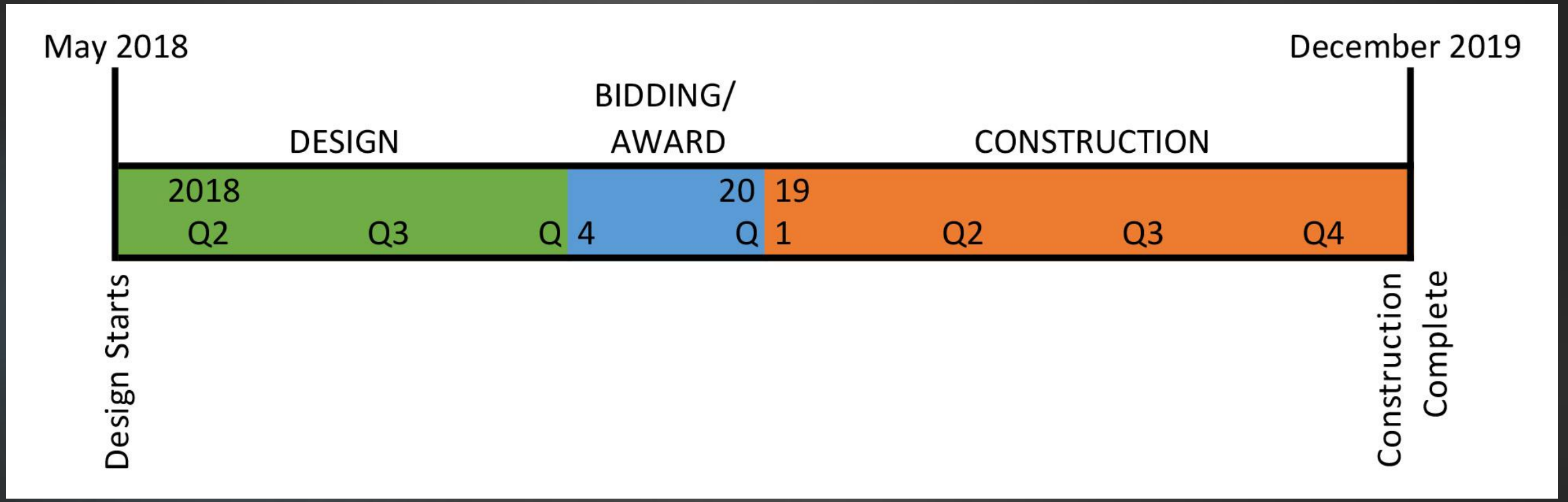
Construction

Construction

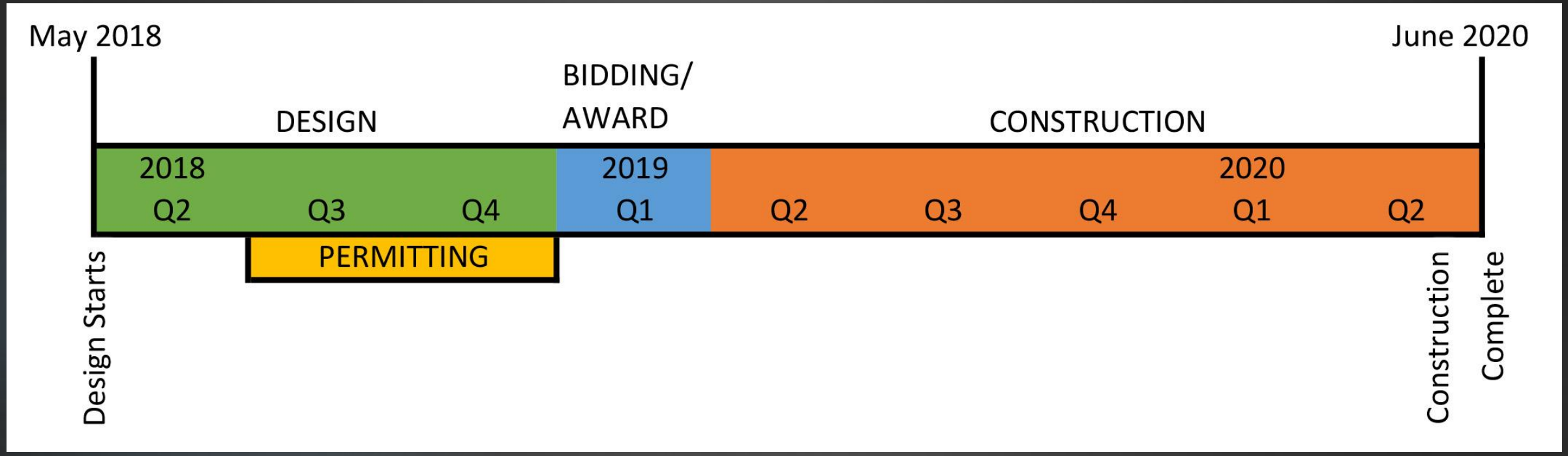
Construction

Post-Construction

Restoration of Existing Sewer Lines and Manholes



Hazard Mitigation and Stabilization for Sewer Lines



Lift Stations and Forcemains

Update on Stakeholder Agency Coordination and Reporting for the Project

HIGH WATER MARK

Detailed Project Timeline

Start Date	Task Name
07/01/08	**Start of Disaster 1783**
08/01/08	**End of Disaster 1783**
08/01/08	**Disaster 1783 Declared**
08/01/08	VOR begins emergency work on sewer line and project planning
01/01/09	Zia Engineering begins environmental consultation process.
02/01/09	VOR submits initial application into FEMA
03/01/09	Initial Grant Awarded
04/01/09	VOR continues with environmental and engineering
10/01/09	**Wilson Engineering Preliminary Engineering Report Finalized**
10/01/09	Zia completed a Biological Survey of Project Area
11/01/09	Zia completed a Cultural Survey
11/01/09	Zia and VOR submit additional environmental paperwork to FEMA, USACE, EPA
09/01/10	**Environmental Assessment (EA) Finalized for Project**
11/01/10	**Finding of No Significant Impact (FONSI) for the Project Approved**
04/01/11	Amendment Documentation submitted to FEMA to increase funding
04/01/11	VOR and Zia submit additional information to FEMA and NMDHSEM
04/01/12	Amendment Disapproved due to error
04/01/12	VOR addresses FEMA issues
09/01/13	CH2M begins and continues working on sewer line project
07/01/14	**30 Percent CH2M Drawings**

Start Date	Task Name
12/01/14	CH2M FEMA Project Estimates
12/01/14	Another FEMA review of Project Begins
01/01/15	Concern from FEMA on Scope of Work (SOW) in CH2M submittals
01/01/15	VOR works to Address FEMA concerns
01/01/16	High Water Mark joins Village of Ruidoso (VOR) on Project Team
01/01/16	Resolution of FEMA's SOW concern
01/01/16	**Project Letter of Understanding (LOU) is signed**
03/01/16	FEMA Request for Information for Environmental, Historic Preservation Review
06/01/16	FEMA concern on footprint of project
10/01/16	Resolve FEMA concern on area of disturbance and EA
02/01/17	FEMA reviews final Project SOW
04/01/17	Molzen Corbin joins the Project Team to develop 100% Design
04/21/17	Task Order #1 with Molzen Corbin and the Village of Ruidoso is Signed and Initiated
05/01/17	FEMA finalizes Project Review
05/31/17	DHS Embargo ends on New Project Obligations
06/01/17	**FEMA Amendment is approved for the Project**
07/01/17	Project Funding Obligated
10/01/17	Reviewing EA Constraints and Permitting as they meet with Technical constraints
11/08/17	Field Visit with NMED, Molzen Corbin, the Village of Ruidoso and High Water Mark.

Start Date	Task Name
11/20/17	Field Visit with USACE, Molzen Corbin, the Village of Ruidoso and High Water Mark.
11/30/17	Ruidoso Business After Hours - Public Outreach
02/16/18	Molzen Corbin submits Draft 30% Design Evaluation to the Village of Ruidoso, NMED, USACE and High Water Mark
02/28/18	Meeting with Molzen Corbin and High Water Mark to discuss comments and provide clarifications regarding the Draft 30% Design Evaluation
03/14/18	Meeting with the Village, Molzen Corbin, High Water Mark and NMED
03/27/18	Site Visit to review potential areas for armoring and bank stabilizations.
04/04/18	Task Order #2 with the Village of Ruidoso and Molzen Corbin has been signed and initiated.
04/18/18	Molzen Corbin responds to comments to High Water Mark, NMED, USACE and the Village regarding the draft 30% Design Evaluation.
04/19/18	High Water Mark's Site Visit regarding permitting.
04/24/18	Meeting with NMDHSEM regarding funding with the Village and High Water Mark
05/01/18	Meeting regarding the permitting for armoring and bank stabilizations with Molzen Corbin, High Water Mark and USACE.
05/02/18	Version #2 of Draft 30% Design Evaluation is submitted to review by Molzen Corbin to the Village and High Water Mark
05/07/18	High Water Mark and the Village sent back comments regarding the recent Draft 30% Design Evaluation
05/10/18	Progress meeting to discuss design and procurement with the Village, Molzen Corbin, High Water Mark, USACE, NMED. Molzen Corbin also submit final 30% Design to Village
05/24/18	Meeting regarding permitting with USACE, High Water Mark and Molzen Corbin
05/31/18	Progress Meeting with the Village, Molzen Corbin and High Water Mark. Public Meeting with the community of Ruidoso.

May 2018: Public meeting with the community of Ruidoso

June 2018: HWM prepares for site visit at the end of the month to begin the permitting process.

Agency Stakeholder Coordination

NMED

- Primarily concerned about future flood damage and sewer overflows into river
- Agreeable to rehabilitation for this FEMA funded project
- Responsible for Section 401 Water Quality Permitting

USACE

- Require LEDPA
- Recognize constructability issues and environmental impact of relocation
- Agreeable to rehabilitation for this FEMA funded project
- Will administer the Section 404 Permit for the Project

FEMA/NMDHSEM

- HWM has coordinated keeping these agencies abreast of project progress
- Rehabilitation more closely reflects restoring "form and function" of the damaged infrastructure

High Water Mark will be performing the necessary steps to obtain all permitting requirements with the help of Molzen Corbin and D.T. Collins

Keeping up with the project

Website Address:

- http://ruidososewerproject.com

Contact Information:

- Email info@RuidosoSewerProject.com
- Project hotline phone number: (844) 543-5729

Questions?

RUIDOSO NEW MEXICO

THE CITY OF RUIDOSO DOWNS INC. 1947

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