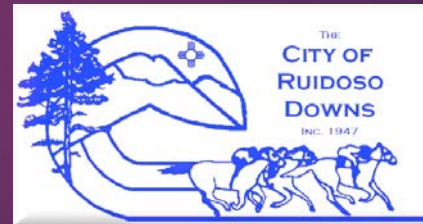


Sewer Interceptor Project

PROJECT
OVERVIEW

SEPTEMBER 19, 2018



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 exceeded available funding
- ❖ Significant constructability concerns
- ❖ This Project Team hired to re-evaluate the project – find an alternative that accomplished primary goals:
 - ❖ Fix damaged pipe (reducing I & I)
 - ❖ Mitigation against future flood damage
 - ❖ Bring the project within the remainder of available funds



Relocation Project Concerns

- ❖ Initial relocation design does not meet FEMA project requirements. Which are to:
 - ❖ Restore form and function of damaged infrastructure
 - ❖ Mitigate future hazards
- ❖ Funding Concerns
- ❖ Access (Main Road)
- ❖ Constructability
- ❖ Community Impact
 - ❖ Property and easement acquisitions
- ❖ Increased maintenance and upkeep for utilities (i.e. lift stations) and residents



Tasks Performed by Molzen Corbin (Engineering) and High Water Mark (FEMA and Environmental Compliance)

- ❖ Design performed by Molzen Corbin
- ❖ High Water Mark has been reviewing and making sure project and design complies with FEMA and the Environmental Assessment requirements.
- ❖ HWM is working with Molzen Corbin on the permitting aspect for the project.
- ❖ Reviewed existing documents
- ❖ Office and field based evaluation of project design.
- ❖ Conducted field visits to discuss the project with the Village Staff and stakeholder agencies
- ❖ Recommend design alternatives for rehabilitation and hazard mitigation to comply with environmental and FEMA requirements.



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

USACE



US Army Corps
of Engineers®

- ❖ 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



FEMA



- ❖ HWM has coordinated keeping these agencies abreast of project progress and reporting requirements for the grant.
- ❖ 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

Detailed Project Timeline

Start Date: Task Name

- ❖ July 2008: Start of Disaster 1783
- ❖ Aug 2008: End of Disaster 1783
- ❖ Aug 2008: VOR begins emergency work on sewer line and project planning
- ❖ Jan 2009: Zia Engineering begins environmental consultation process
- ❖ Feb 2009: VOR submits initial application into FEMA
- ❖ Mar 2009: Initial Grant Awarded
- ❖ Apr 2009: VOR continues with environmental and engineering
- ❖ Oct 2009: Preliminary Engineering Report Finalized
- ❖ Oct 2009: Zia completed a Biological Survey of Project Area
- ❖ Nov 2009: Zia completed a Cultural Survey
- ❖ Nov 2009: Zia and VOR submit additional environmental paperwork to FEMA, USACE, EPA
- ❖ Sept 2010: Environmental Assessment (EA) Finalized for Project
- ❖ Nov 2010: Finding of No Significant Impact (FONSI) for the Project Approved
- ❖ Apr 2011: Amendment Documentation submitted to FEMA to increase funding
- ❖ Apr 2011: VOR and Zia submit additional information to FEMA and NMDHSEM
- ❖ Apr 2012: Amendment Disapproved due to error
- ❖ Apr 2012: VOR Addresses FEMA issues
- ❖ Sept 2013: CH2M begins and continues working on sewer line project
- ❖ Aug 2014: 30% CH2M Drawings submitted

Start Date: Task Name

- ❖ Dec 2014: CH2M FEMA Project Estimates
- ❖ Dec 2014: Another FEMA review of Project Begins
- ❖ Jan 2015: Concerns from FEMA on Scope of Work (SOW) in CH2M Submittals
- ❖ Jan 2015: VOR works to Address FEMA concerns
- ❖ Jan 2016: High Water Mark joins VOR on Project Team
- ❖ Jan 2016: Resolution of FEMA's SOW concern
- ❖ Jan 2016: Project Letter of Understanding (LOU) is signed
- ❖ Mar 2016: FEMA request for information for Environmental, Historic Preservation Review
- ❖ June 2016: FEMA concern on footprint of project
- ❖ Oct 2016: Resolve FEMA concerns on area of disturbance and EA
- ❖ Feb 2017: FEMA reviews final Project SOW
- ❖ Apr 2017: Molzen Corbin joins the Project Team to develop 100% Design
- ❖ Apr 2017: Task Order #1 with Molzen Corbin and VOR is signed and initiated
- ❖ May 2017: FEMA finalizes Project Review
- ❖ May 2017: DHS Embargo ends on New Project Obligations
- ❖ June 2017: FEMA Amendment is approved for the Project
- ❖ July 2017: Project Funding Obligated
- ❖ Oct 2017: Reviewing EA Constraints and Permitting as they meet with Technical constraints
- ❖ Nov 2017: Field Visit with NMED, Molzen Corbin, VOR, and High Water Mark

Start Date: Task Name

- ❖ Nov 2017: Ruidoso Business After hours – Public Outreach
- ❖ Feb 2018: Molzen Corbin submits Draft 30% Design Evaluation to VOR, NMED, USACE, and HWM
- ❖ Feb 2018: Meeting with Molzen Corbin and HWM to discuss comments and provide clarifications regarding the draft 30% Design Evaluation
- ❖ Mar 2018: Meeting with VOR, Molzen Corbin, HWM and NMED
- ❖ Mar 2018: Site Visit to review potential areas for armoring and bank stabilizations
- ❖ Apr 2018: Task Order #2 with VOR and Molzen Corbin has been signed and initiated
- ❖ Apr 2018: Molzen Corbin responds to comments to HWM, NMED, USACE and VOR regarding the draft 30% Design Evaluation
- ❖ Apr 2018: HWM Site Visit regarding permitting
- ❖ Apr 2018: Meeting with NMDHSEM regarding funding with VOR and HWM
- ❖ May 2018: Meeting regarding the permitting for armoring and bank stabilization with Molzen Corbin, HWM and USACE
- ❖ May 2018: Version #2 of Draft 30% Design Evaluation is submitted to review by Molzen Corbin to VOR and HWM
- ❖ May 2018: High Water Mark and VOR sent back comments regarding the recent draft 30% Design Evaluation
- ❖ May 2018: Progress meeting to discuss design and procurement with VOR, Molzen Corbin, HWM, USACE, NMED
- ❖ May 2018: Molzen Corbin submits final 30% Design to VOR
- ❖ May 2018: Meeting regarding permitting with USACE, HWM and Molzen Corbin
- ❖ May 2018: Progress Meeting with VOR, Molzen Corbin and HWM
- ❖ 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.

Required Project Deadlines

	Q2-18	Q3-18	Q4-18	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20
Design									
60% Design Submittal		Aug-18							
Pre-Final Design Submittal			Oct-18						
Final Design Submittal			Dec-18						
Project Permitting									
Bidding/Award of Construction Contract									
Construction Period									Jun-20

We will need the entire community's support to make this project successful.

Project Timeline Since June 2018

July 2018

- ❖ HWM site visit with Molzen Corbin, D.T. Collins and USACE to continue making progress in permitting, design and surveying.
- ❖ Design Status Discussion with Village of Ruidoso, City of Ruidoso Downs, Molzen Corbin, High Water Mark, NMED, and USACE on the Sewer Interceptor Project.
- ❖ Meeting with Molzen Corbin, High Water Mark, USACE regarding the permitting aspect for the Sewer Interceptor Project.
- ❖ Ruidoso Site Visits and Public Meeting with the Village of Ruidoso, Molzen Corbin and High Water Mark

August 2018

- ❖ Meeting with Molzen Corbin and High Water Mark to continue working on the permitting and design aspect for Hazard Mitigation and Stabilization on the sewer line and to stay within the Environmental Assessment (EA) area.
- ❖ Molzen Corbin submits 60% Design.
- ❖ Meetings with Molzen Corbin and High Water Mark to continue working on the permitting and design aspect for Hazard Mitigation and Stabilization on the sewer line and EA area.
- ❖ High Water Mark Reviews and Submits 60% Documents, Request for Time Extensions and Quarterly Report to NMDHSEM and FEMA.
- ❖ Quarterly Conference Call with Village of Ruidoso, High Water Mark and NMDHSEM.
- ❖ Meeting with Molzen Corbin, Village of Ruidoso, City of Ruidoso, High Water Mark, USACE and NMED to discuss comments regarding the 60% Design.

September 2018

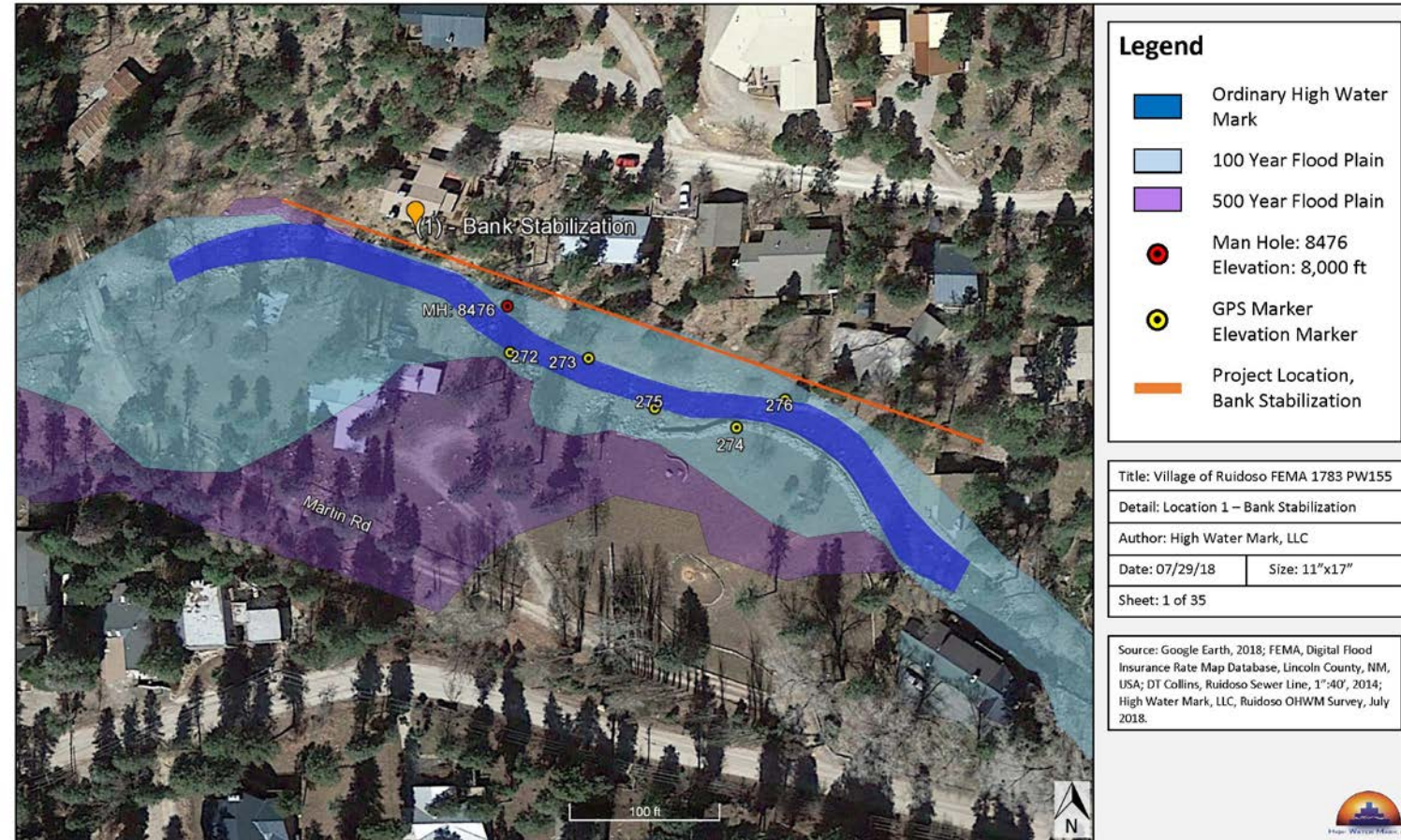
- ❖ Meeting with Molzen Corbin and High Water Mark to continue working on the permitting and design aspect for Hazard Mitigation and Stabilization on the sewer line.
- ❖ Meeting with Molzen Corbin, Village of Ruidoso, High Water Mark and DT Collins for the coordination on documentation of Easements.
- ❖ Presentation to Village of Ruidoso/City of Ruidoso Downs RWWTP - Joint Use Board.
- ❖ High Water Mark will be surveying for additional information on the ordinary high water mark for the 401 and 404 permitting process.
- ❖ Public Meeting and Coffee House Meet and Greet with the community members of Ruidoso, Village of Ruidoso, Molzen Corbin, High Water Mark and DT Collins.

Major Milestones Since Last Update in June 2018

- ❖ Molzen Corbin submitted the 60% Design for the Sewer Interceptor Project. This included the plan sets, bid documents and technical specifications for each broken down section of the project:
 - ❖ Restoration of Existing Sewer Lines and Manholes
 - ❖ Hazard Mitigation and Stabilization for Sewer Lines
 - ❖ Lift Stations and Force mains
- ❖ High Water Mark submitted the 60% Documents to FEMA and NMDHSEM as part of the Quarterly Report and Request for Time Extension. These documents show significant progress being made on the project and we are working to meet the June 2020 deadline.

Major Milestones Since Last Update in June 2018

- ❖ High Water Mark surveyed for the ordinary high water mark at the locations where Molzen Corbin plans on protecting the sewer line with bank stabilization and armoring.
- ❖ The delineation of the ordinary high water mark flood maps is an important piece of documentation for the 404 and 401 permitting process.
- ❖ It has been submitted as part of the 60% Design submittal package to FEMA and NMDHSEM to show progress is being made on the project.



Current Design Activities

Sanitary Sewer Rehabilitation

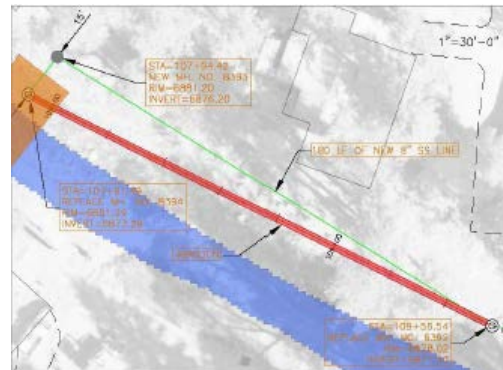
- ❖ Type of Work for Sewer Line:
 - ❖ Point Repairs: Remove and Replace sections at a time and install new line.
 - ❖ New Pipe Liners

Manhole Renewal

- ❖ Type of Work for Manholes:
 - ❖ Remove and Replace Manhole.
 - ❖ Rehabilitate both brick and concrete manholes.
 - ❖ Remove and Replace Manhole Top Concrete Collar
 - ❖ Rehabilitate Concrete Manhole with Protective Lining.

Sanitary Sewer Relocation

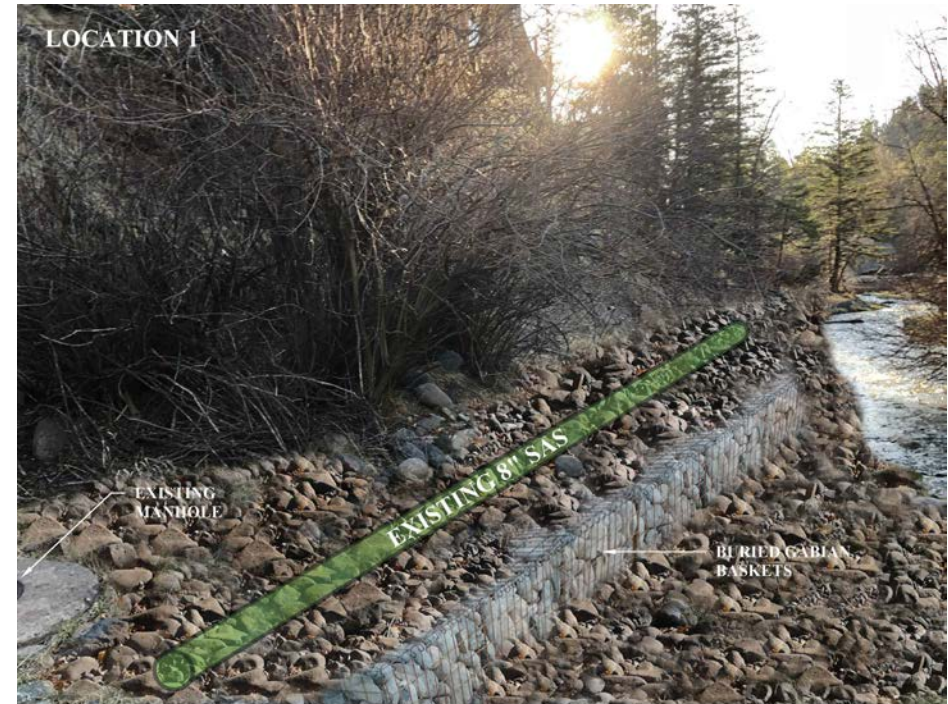
- ❖ Purpose of sewer relocation is to provide protection from future flood hazards by moving the sewer line away from river in select locations.



Stream Armoring and Bank Stabilization

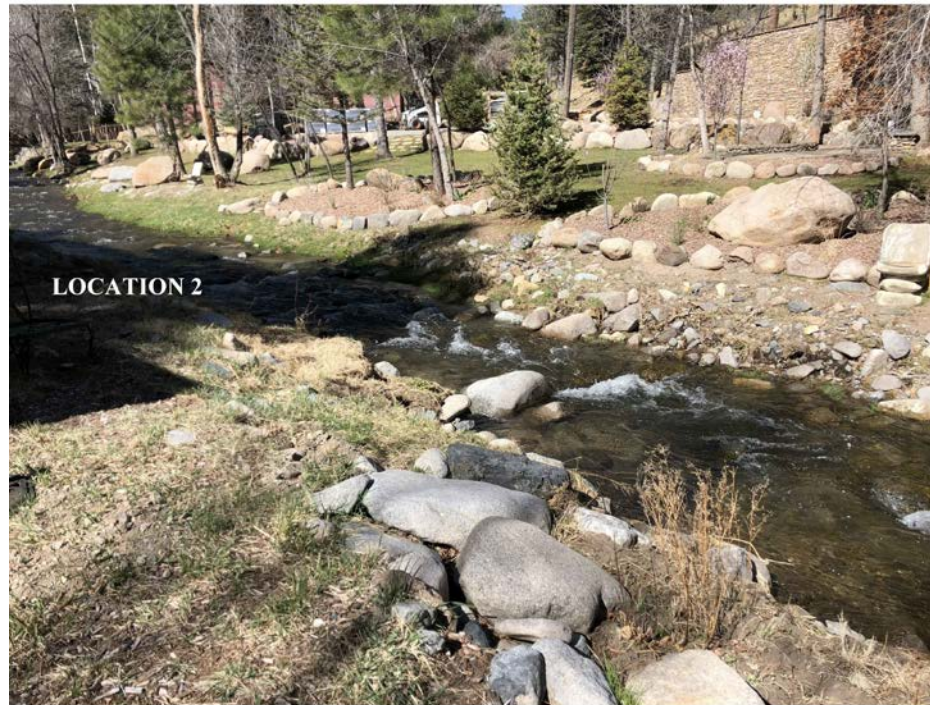
- ❖ Purpose for armoring and bank stabilizations is to keep raw sewage out of the river from potential future flooding.
- ❖ By installing some of the bank and stream stabilizations around the sewer line, this will improve fish habitat and the river ecosystem.
- ❖ Keep the natural look of the river as much as possible.

Bank Stabilization Example



Note: All Bank Stabilizations and Armoring will not be exposed.

Armoring Example



Note: All Bank Stabilizations and Armoring will not be exposed.

Additional Design and Service Activities

Many of these tasks have been already completed or will soon be completed:

❖ Drawings:

- ❖ Sewer rehabilitation plan and profile sheets.
- ❖ Lift Station design
- ❖ Stream crossing major and minor armoring
- ❖ Stream Bank Stabilization

❖ Specifications:

- ❖ Boilerplate front ends
- ❖ Technical Specifications

❖ Geotechnical:

- ❖ Field work completed
- ❖ Laboratory analysis

❖ CCTV of Sewer Lines:

- ❖ Field work underway
- ❖ Identify rehabilitation locations and technologies

❖ Survey/Easements:

- ❖ Supplemental topography
- ❖ Prescriptive easements
- ❖ New utility easements

❖ SUE (subsurface utility engineering):

- ❖ Identifying existing utilities
- ❖ Pothole Physical locations.

❖ Permitting:

- ❖ NMED
 - ❖ Section 401 Water Quality Permitting
- ❖ USACE
 - ❖ Section 404 – Individual Permit application, includes Public Hearings

Easement Definition

- ❖ D.T. Collins has been and will perform the necessary surveying.
 - ❖ Easements are needed for utility construction, maintenance and repairs.
 - ❖ Types of Easements:
 - ❖ Prescriptive Easements
 - ❖ Temporary Construction Easements
 - ❖ Permanent Utility Easements
 - ❖ A sample template of easement documentation is being developed and will be revised to fit the needs of the project.
 - ❖ Property Owners who are going to be impacted by this project have received notification and an Easement number.
- ❖ Sewer line Easement:
 - ❖ The sewer line easement for this project will be written so that the alignment is mathematically tied down to permanent monuments but is shown “generally” within each Tract that it crosses.
 - ❖ Good news: A survey of each Tract will probably not be needed.
 - ❖ Owner of Tract would acknowledge existence of the sewer line within their property and sign current documentation defining the easement
 - ❖ The easement would include the right of the the Village of Ruidoso and/or JUB to enter the property to repair, maintain or replace the sewer line and infrastructure within the easement.

Keeping up with the Project

- ❖ Website Address:

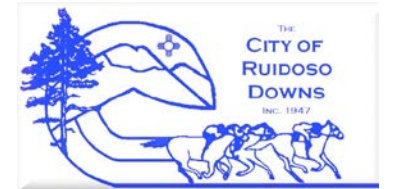
- ❖ <http://ruidoso sewerproject.com>

- ❖ Contact Information

- ❖ Email: info@RuidosoSewerProject.com

- ❖ Project Phone Number: (844)543-5729

Summary and Questions



D.T. Collins &
Associates, PC