

SEWER INTERCEPTOR PROJECT

Coffee Shop
Meet and Greet

July 31, 2018

RUIDOSO
NEW MEXICO



MOLZENCORBIN
ENGINEERS | ARCHITECTS | PLANNERS



D.T. Collins &
Associates, PC

Project Overview

Location

- ▶ Approximately 12 miles along the Rio Ruidoso from the Village of Ruidoso-Mescalero boundary in the west to the Regional Wastewater Treatment Plant to the east of the City of Ruidoso Downs.

Type of Project

- ▶ Sanitary Sewer Rehabilitation and Flood Hazard Mitigation

Project Cost Sharing

- ▶ 75% FEMA Grant Assistance
- ▶ 18% New Mexico Homeland Security and Emergency Management
- ▶ 7% Local Funds

Project Background

- ▶ In 2008, Hurricane Dolly caused the Rio Ruidoso to flood, resulting in damage to the main sewer collection service from the Upper Canyon area to the Wastewater Treatment Plant in Ruidoso Downs







Sanitary Sewer System Repair-Rehabilitation Project

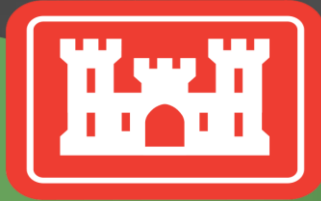
- ▶ Previous planning and design of the project recommended relocating the sewer out of the river, but this would have resulted in a significant disturbance to Village residents, particularly in the Upper Canyon.
- ▶ Relocation was also cost prohibitive and not fully eligible for FEMA funding.
- ▶ The Village's current engineering team is working on a solution that will rehabilitate and protect the sewer in its existing location.

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

FEMA/NMDHSEM

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

Sewer line west of Country Club to be relocated out of the River



Sewer Line near Main Road and Slay Road to be rehabilitated and armored



**Concrete encased sewer
line in Upper Canyon to be
rehabilitated and armored**



**Sewer line west of Eagle Drive Bridge to be
relocated out of the River**



Project Phasing

Restoration of
Existing Sewer Lines
and Manholes

Trenchless Pipe
Rehabilitation

Insitu Manhole
Repair

Hazard Mitigation
and Stabilization for
Sewer Lines

Protect River
Crossing Locations
of
Sewer Lines

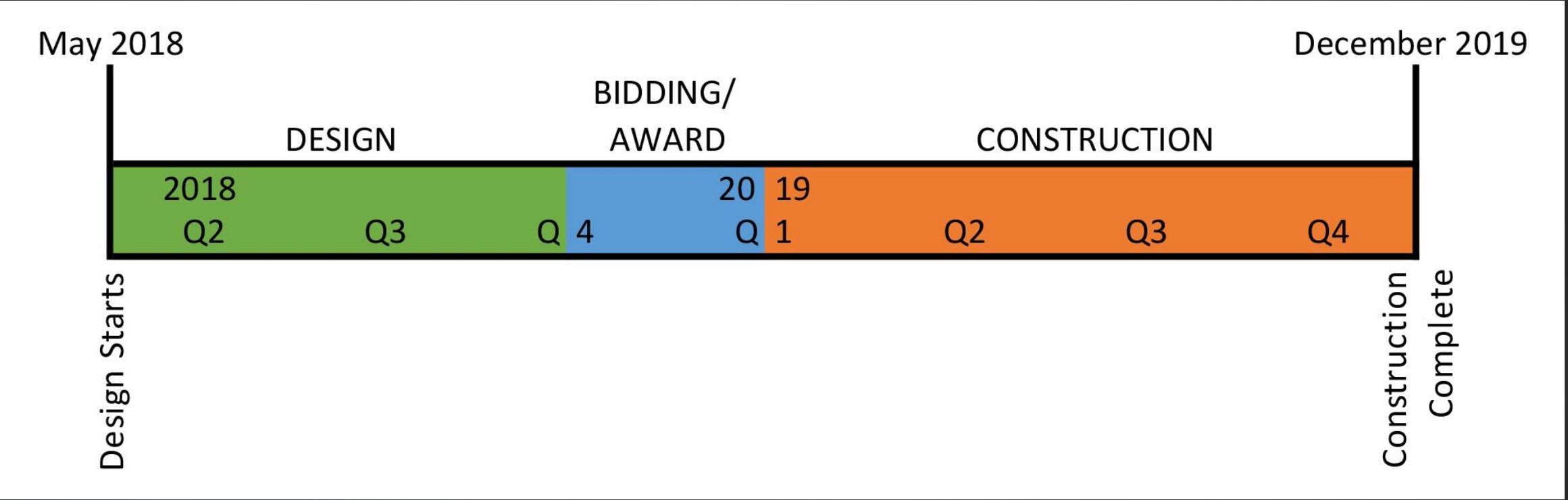
Protect Sewer Lines
Parallel and
Proximate to the
River

Lift Stations and
Forcemains

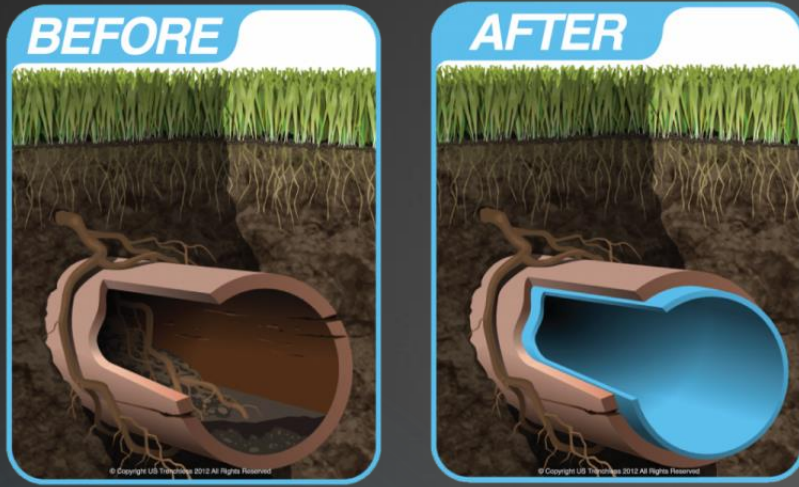
Abandonment of
Damaged and
Vulnerable
Locations

New Lift Stations
and Forcemains to
Convey Sewage

Restoration of Existing Sewer Lines and Manholes



Sanitary Sewer Rehabilitation



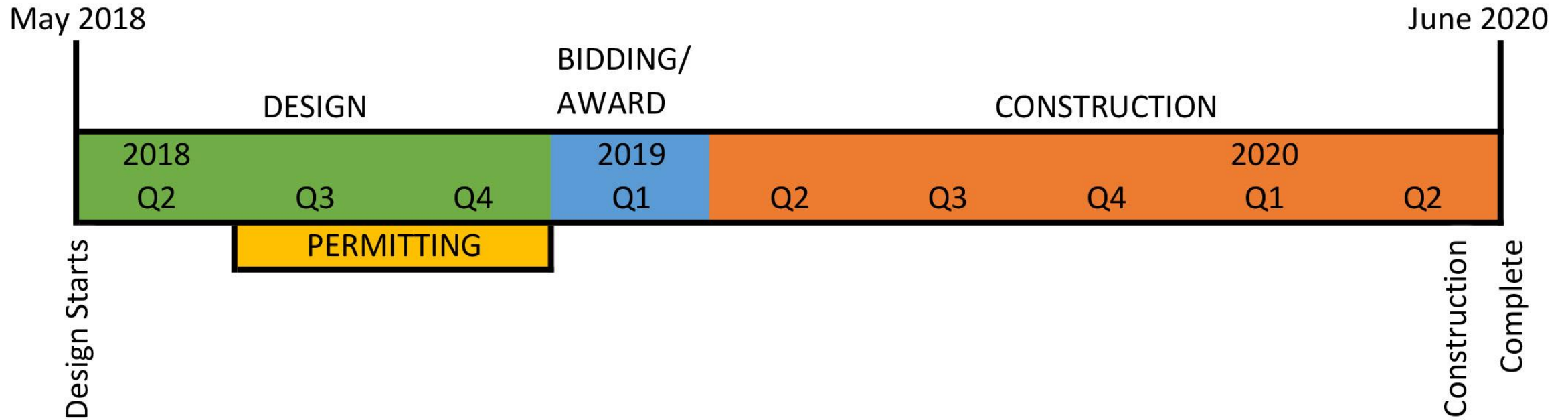
- ▶ Trenchless Rehabilitation Methods:
 - ▶ Sliplining
 - ▶ Cured-In-Place Pipe
 - ▶ Thermoformed PVC
 - ▶ Spiral Wound PVC
 - ▶ Pipe Bursting

Manhole Renewal

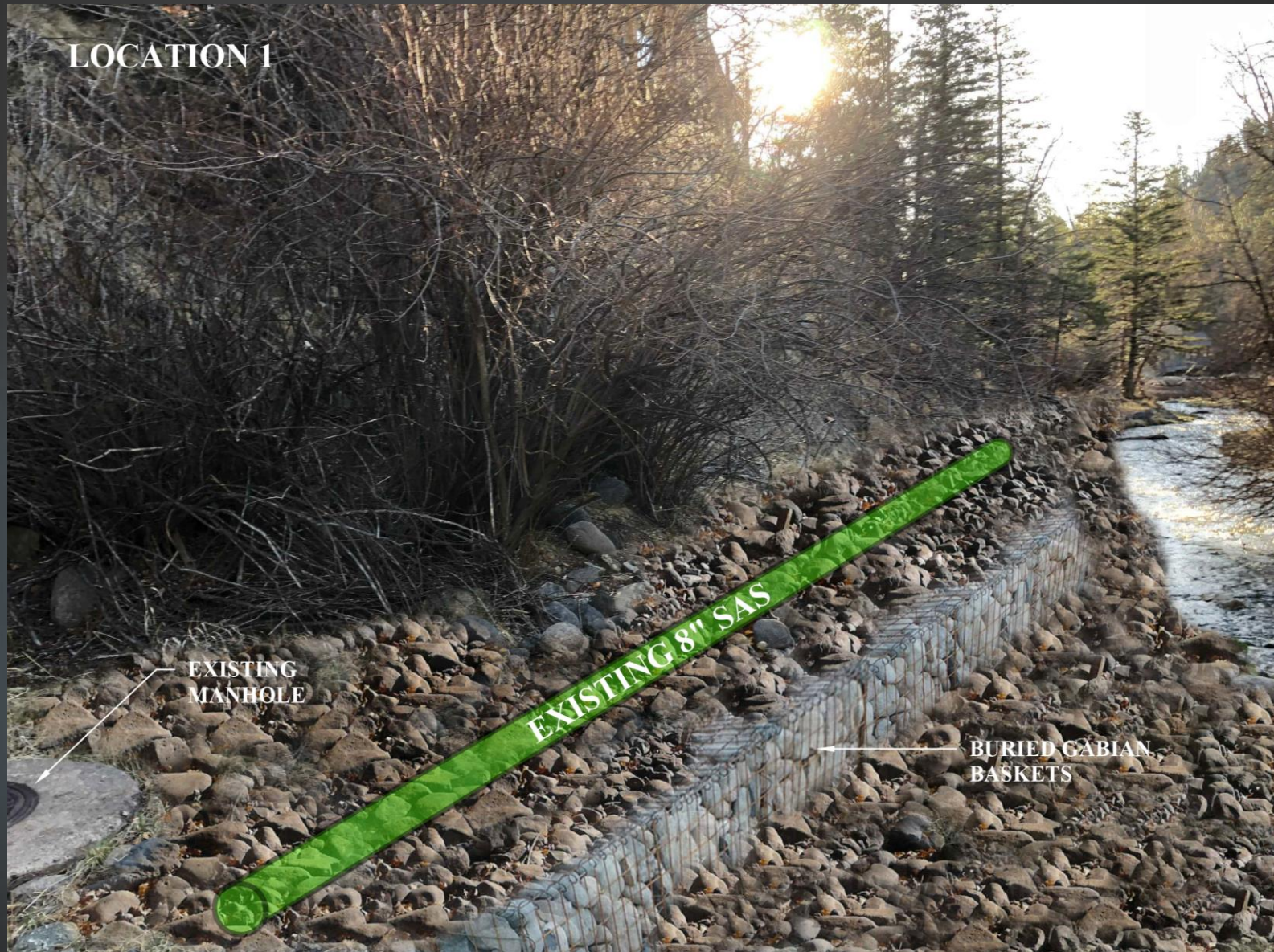


- ▶ Minimize replacement of manholes (less excavation)
- ▶ Improve accessibility for maintenance
- ▶ Reinforce structural integrity
- ▶ Prevent infiltration and inflow

Hazard Mitigation and Stabilization for Sewer Lines



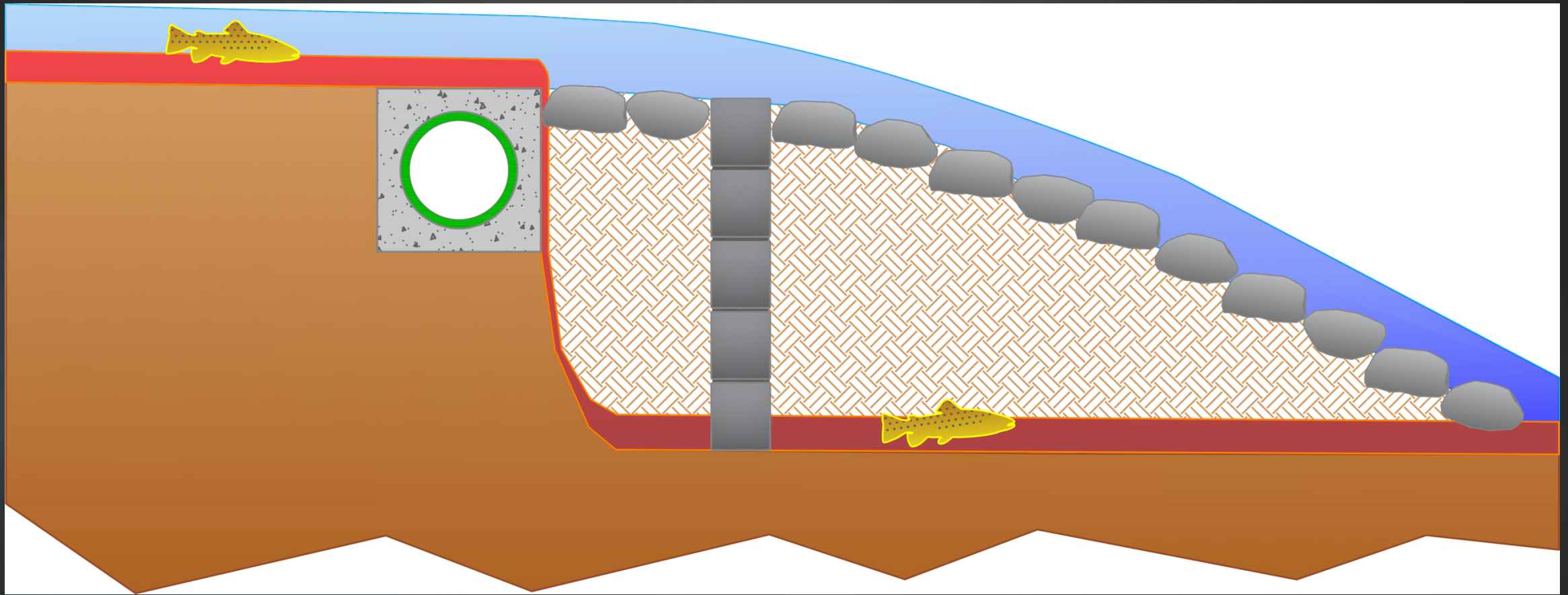
Example of Changes



Example of Changes



Example of Fish Habitat



Lift Stations and Forcemains

May 2018

December 2019

DESIGN

BIDDING/
AWARD

CONSTRUCTION

2018
Q2 Q3 Q4

2019
Q1

Q2

Q3

Q4

Design Starts

Construction

Complete

Lift Stations and Forcemains



- ▶ Lift Stations are wastewater pumping facilities
- ▶ Two new lift stations: Sleepy Hollow, near Main Rd Traffic Circle
- ▶ Example of existing lift station on Cree Meadows near Village Hall



Keeping up with the project

Website Address:

- ▶ <http://ruidoso sewerproject.com>

Contact Information:

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