



## City of Medicine Lake

10609 South Shore Drive • Medicine Lake, Minnesota 55441 • (763)542-9701

# Capital Improvement Plan

Status Update – 1/4/2021

# Capital Improvement Planning – Key Items

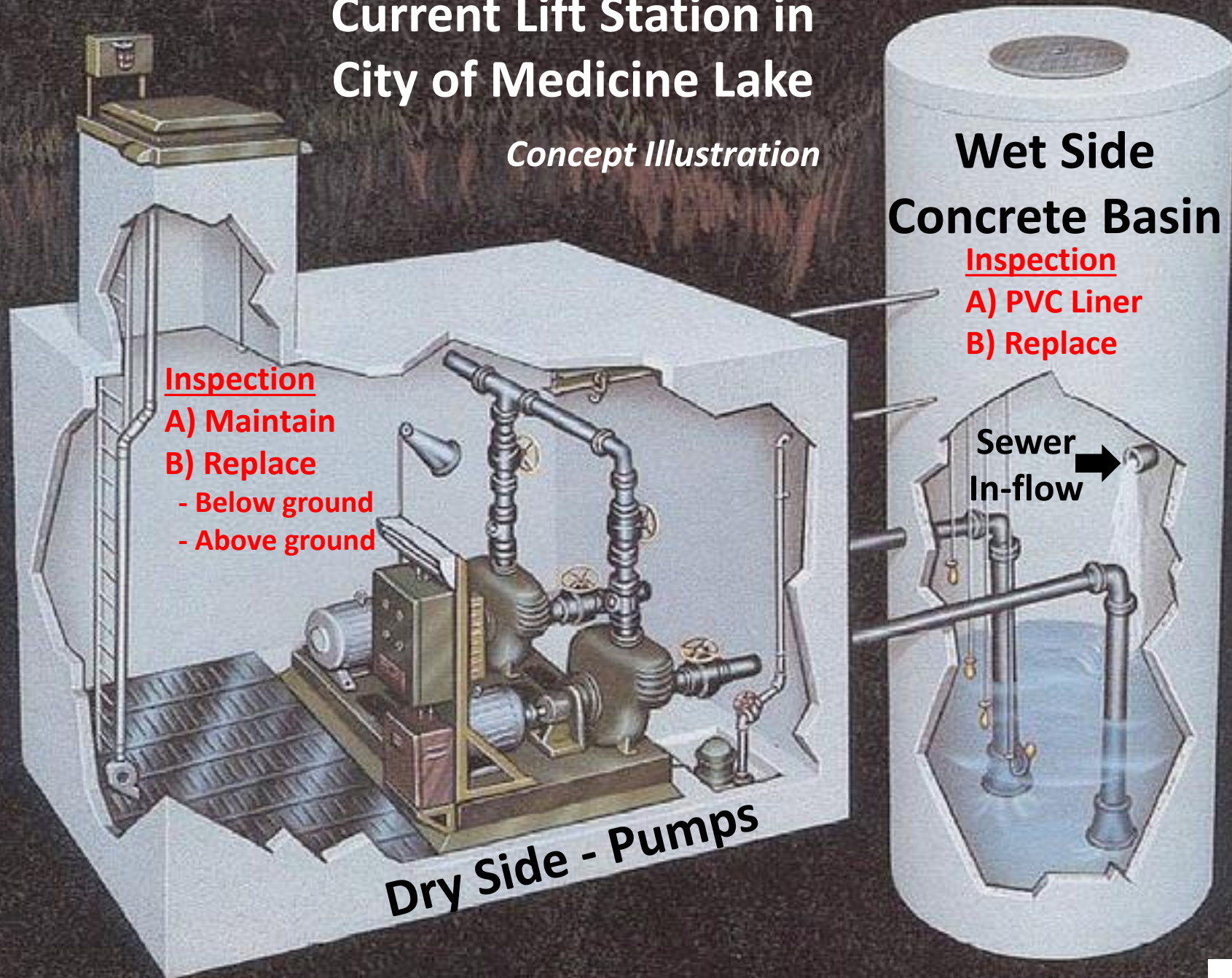
	<b>Infrastructure Item</b>	<b>Key Issue</b>	<b>Action Summary</b>
<b>1</b>	Sanitary Lift Station	50 Yrs – Past Useful Life	<ul style="list-style-type: none"> <li>- Inspection/Proposal in early 2021</li> <li>- Range of options from fix to replace</li> </ul>
<b>2</b>	Sewer Lateral PVC Liner	Inflow & Infiltration	<ul style="list-style-type: none"> <li>- Phase II of Main Sewer Relining Project</li> <li>- 133 Laterals &amp; 26 In-Yard Manholes</li> </ul>
<b>3</b>	Road Rehabilitation	Road Deteriorating	<ul style="list-style-type: none"> <li>- 2 Phase Replacement</li> <li>- (3a) Peninsula Rd (3b) Kaiser/Colonial</li> </ul>
	City Water System	Fire Safety & Future Planning	<ul style="list-style-type: none"> <li>- Key Long-Term Decision</li> <li>- Install w/ New Road For Best Pricing</li> </ul>
	Manholes PVC Liner	Inflow & Infiltration	<ul style="list-style-type: none"> <li>- 21 In-Street – Do w/ New Road</li> <li>- 26 In Yards – Do with Sewer Lateral</li> </ul>
	Buried Utilities	Remove Utility Poles	<ul style="list-style-type: none"> <li>- Cost per Household is a Challenge</li> <li>- Appears To Be Cost Prohibitive</li> </ul>

# Sanitary Lift Station

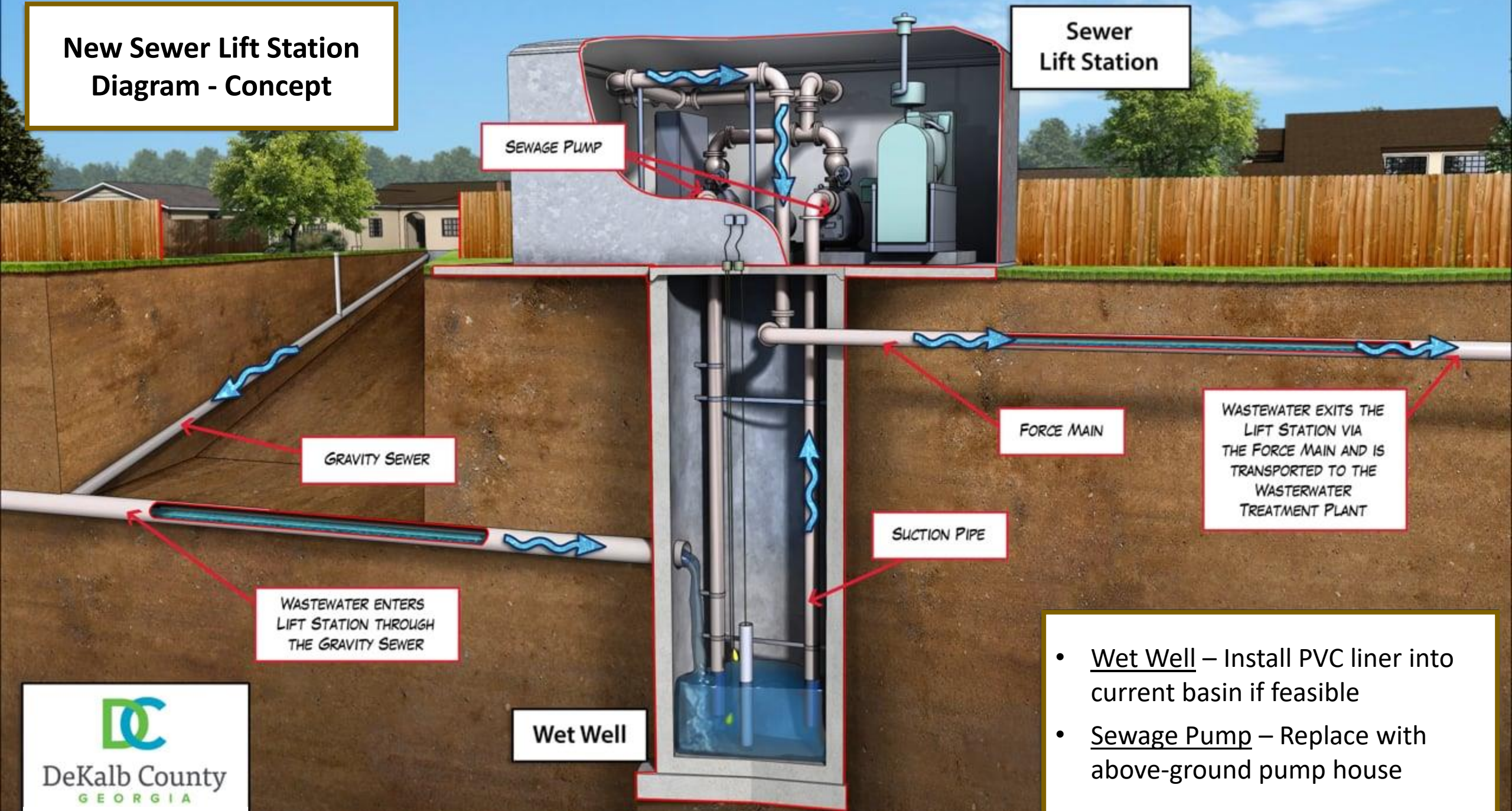
Rehabilitation Project Overview

# Current Lift Station in City of Medicine Lake

*Concept Illustration*



# New Sewer Lift Station Diagram - Concept

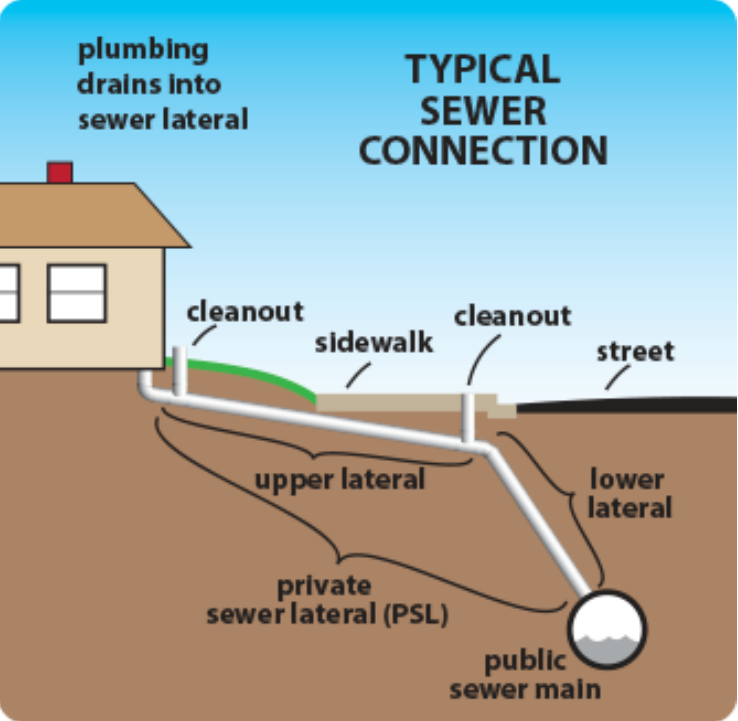


- Wet Well – Install PVC liner into current basin if feasible
- Sewage Pump – Replace with above-ground pump house

# Sewer Laterals

Relining Laterals Project Overview

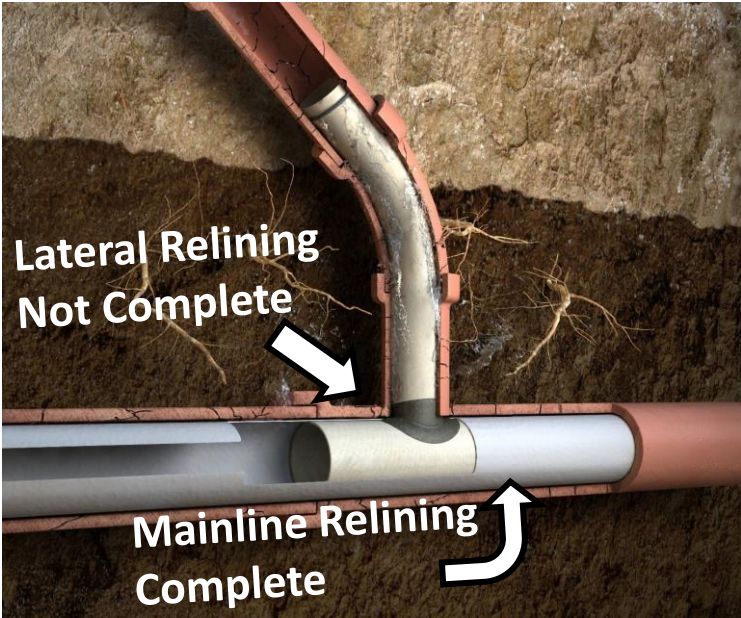
# Lateral Connections



# Inflow & Infiltration



# Sewer Relining







# Road Replacement

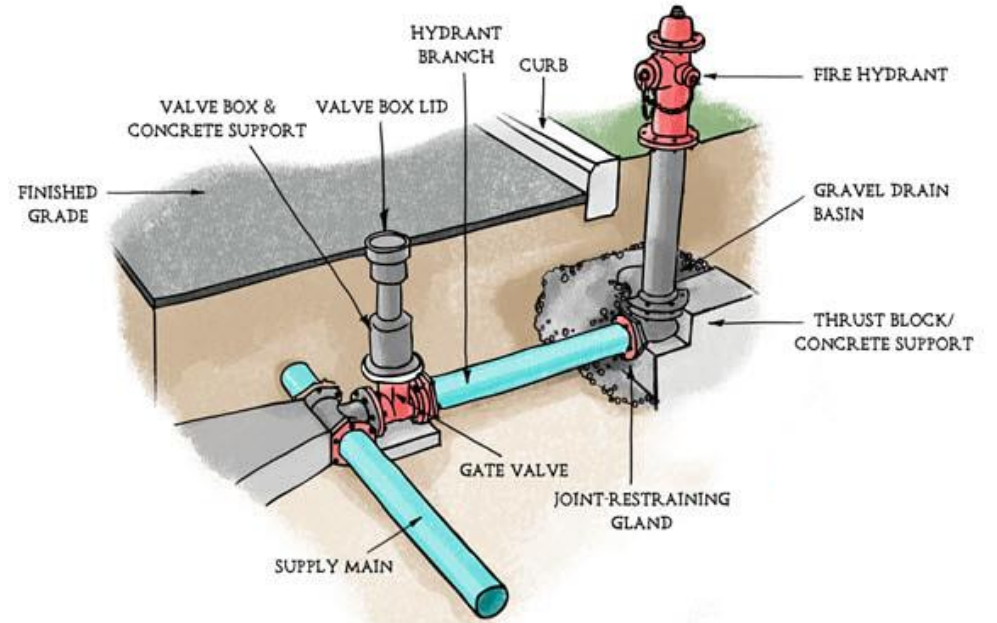
Rebuild Road & Install City Water Hydrants



# Dump Tank Water Supply



# Fire Hydrant Water Supply



# Next Steps

Project Scoping & Financial Planning

# Project Grouping Concept

	Infrastructure Item	Key Issue
<b>1</b>	Sanitary Lift Station	50 Yrs – Past Useful Life
<b>2</b>	Sewer Lateral PVC Liner	Inflow & Infiltration
<b>3</b>	Road Rehabilitation	Road Deteriorating
	City Water System	Fire Safety & Future Planning
	Manholes PVC Liner	Inflow & Infiltration
	Buried Utilities	Remove Utility Poles

## Project Groupings - Overview

### Sanitary Sewer Lift Station

Lift Station Rehabilitation

### Sewer Lateral Relining

Lateral Rehab (qty 133)

Manhole Rehab in Yards (qty 26)

### Peninsula Road - Phase 1

Street Rehabilitation

Manhole Rehab on Street (qty 14)

Storm Sewer Improvements

Watermain Installation

### Kaiser & Colonial - Phase 2

Street Rehabilitation

Manhole Rehab on Street (qty 7)

Storm Sewer Improvements

Watermain Installation

### Underground Utilities

*\$700K to bury the new lines throughout city*

*Plus \$2K per household for hookup*

### Watermain Installation

*If not done with the road, it could be installed later using directional boring.*

*Directional boring is about 70% more expensive.*

# Next Steps

- 1. Lift Station** – Determine next-steps repair/replace in the next few months
- 2. City Water Discussion** – Strategic long-range planning & public opinion
  - Present City Water & Fire Dept Considerations at Feb council meeting
  - Gather public opinion over coming months
- 3. Financial Planning** – SEH helping us identify financing options
  - Prepare a few go-forward scenarios
  - Explore eligibility (Grants, State-Bond, Muni-Bond, Cashflow, etc.)
- 4. CIP Final Proposal** – Present final plan for City Council vote by mid 2021
  - CIP Implementation Phases Defined
  - CIP Funding Scope Defined
  - CIP Proposed Timeline & Dependencies Defined