IN THE MATTER OF ADVICE NO. 961 - GAS OF PUBLIC SERVICE COMPANY OF COLORADO TO REVISE ITS COLORADO P.U.C. NO. 6 - GAS TARIFF TO INCREASE JURISDICTIONAL BASE RATE REVENUES, IMPLEMENT NEW BASE RATES FOR ALL GAS RATE SCHEDULES AND MAKE OTHER PROPOSED TARIFF CHANGES EFFECTIVE MARCH 5, 2020

Hearing Exhibit 102

Direct Testimony of Luke A. Litteken

Proceeding No. 20AL-XXXG

Attachment LAL-7

February 5, 2020

TABLE OF CONTENTS

North Metro Reinforcement
Denver, Colorado

Project Overview

Scope: Install 5 miles of 24 inch high pressure pipeline to connect the termination point of the Cherokee Pipeline at the Cherokee Generation Station to the Downtown Denver Intermediate Pressure system at approximately W 43rd Ave and Fox St via a new regulator station.

Pressure System: High pressure pipeline (1,000 psig), Regulator station (1,000 psig to 150 psig)

Project Status

Estimate: Complete
Design: Complete
Construction: Complete
In Service Date: May 2019
Project Close Out: December 2020

Project Details

Project Need: This project serves the Denver metro area, providing gas for the Cherokee Generation Station as well as the gas customers attached to the Cherokee Intermediate Pressure System.

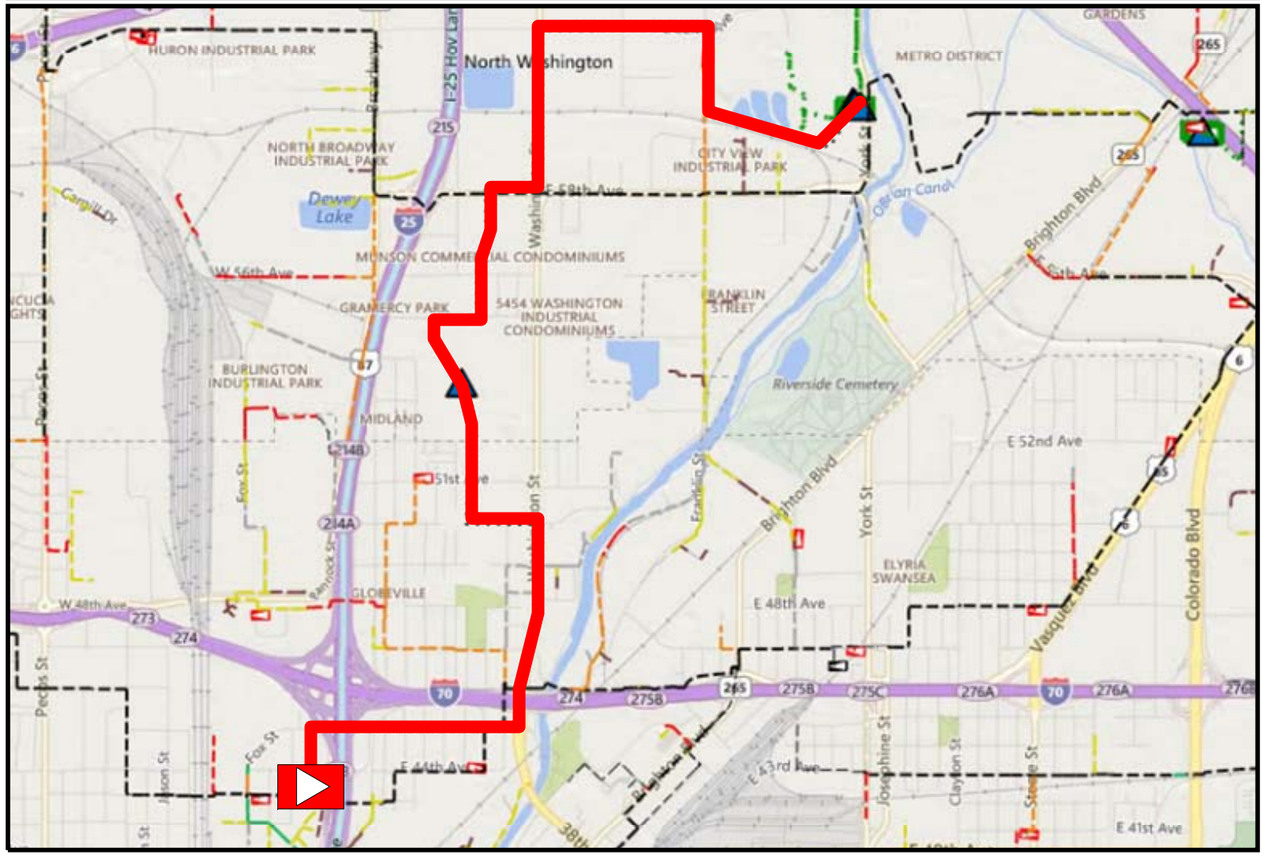
Cost

Project Capital Expenditure Cost: $51.7 Million

Project Capital Expenditure Estimate: Capacity Projects are estimated by either a project manager or a project engineer. The estimate takes into account route, materials, and known utilities. Capacity projects are either bid outright for a lump sum contract or utilize unit pricing that was bid under a master service level agreement. The method used depends on the scale of the project.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



Lancaster to Fort Lupton
Fort Lupton, Colorado

Project Overview

Scope: Install 4.1 miles of 24 inch high pressure pipeline to connect the Lancaster Gas Residue Plant to the Cherokee Pipeline

Pressure System: High pressure pipeline (1,000 psig)

Project Status

Estimate: Complete
Design: Complete
Construction: Complete
In Service Date: April 2018
Project Close Out: January 2019

Project Details

Project Need: This project serves the Denver metro area, providing gas for the Cherokee Generation Station as well as the gas customers attached to the Cherokee Intermediate Pressure System.

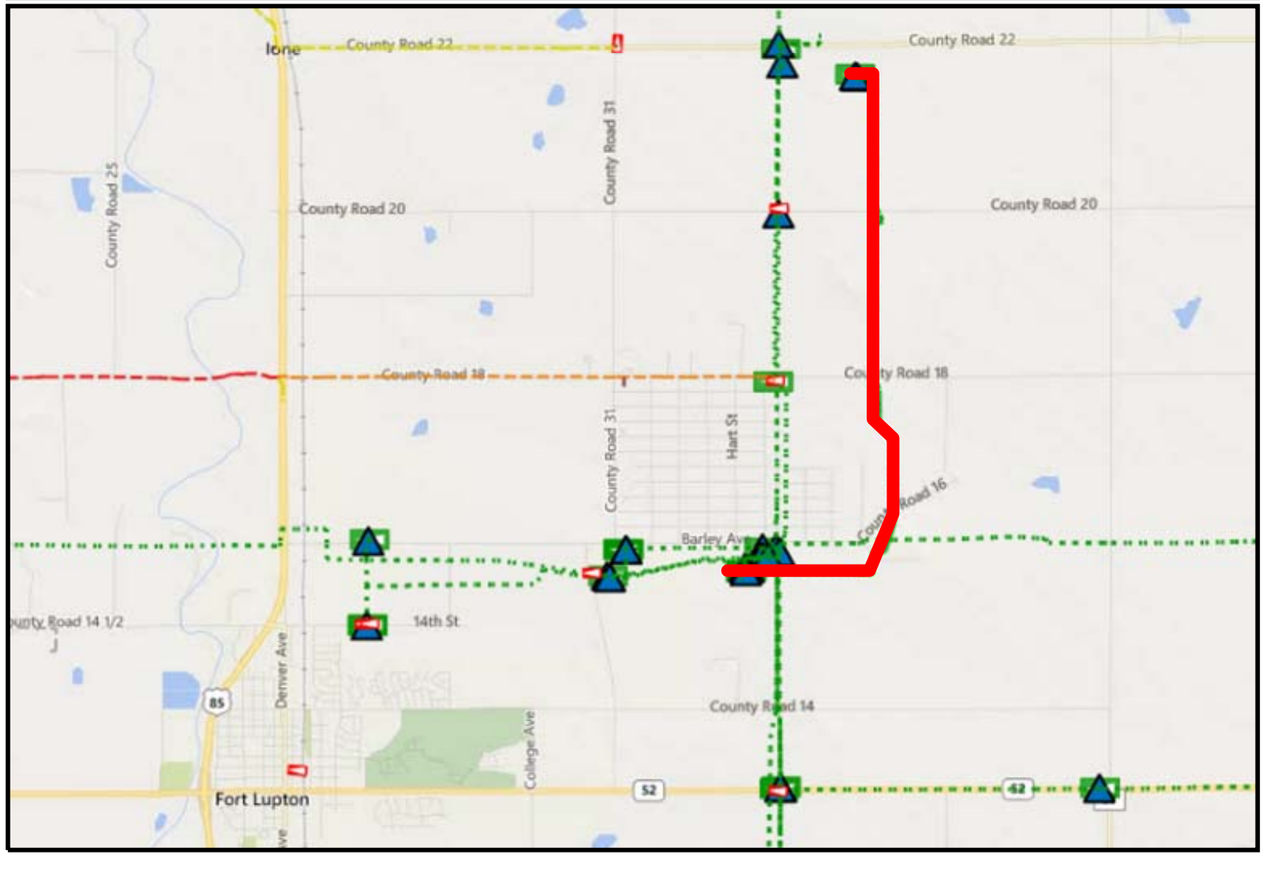
Cost

Project Capital Expenditure Cost: $14.7 Million

Project Capital Expenditure Estimate: Capacity Projects are estimated by either a project manager or a project engineer. The estimate takes into account route, materials, and known utilities. Capacity projects are either bid outright for a lump sum contract or utilize unit pricing that was bid under a master service level agreement. The method used depends on the scale of the project.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



Stapleton Phase 3
Denver, Colorado

Project Overview

Scope: Install approximately 10,000 feet of 16" high pressure steel main mostly following Smith Road From Peoria St to Ulster St. Additionally install a new high pressure to intermediate pressure regulator station to supply gas into the IP system.

Pressure System: Pipeline High Pressure (285 psig), Regulator Station Intermediate Pressure (150 psig)

Project Status

Estimate: Complete
Design: Complete
Construction: Complete
In Service Date: June 2017

Project Details

Project Needs: The Downtown Denver intermediate pressure system is at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

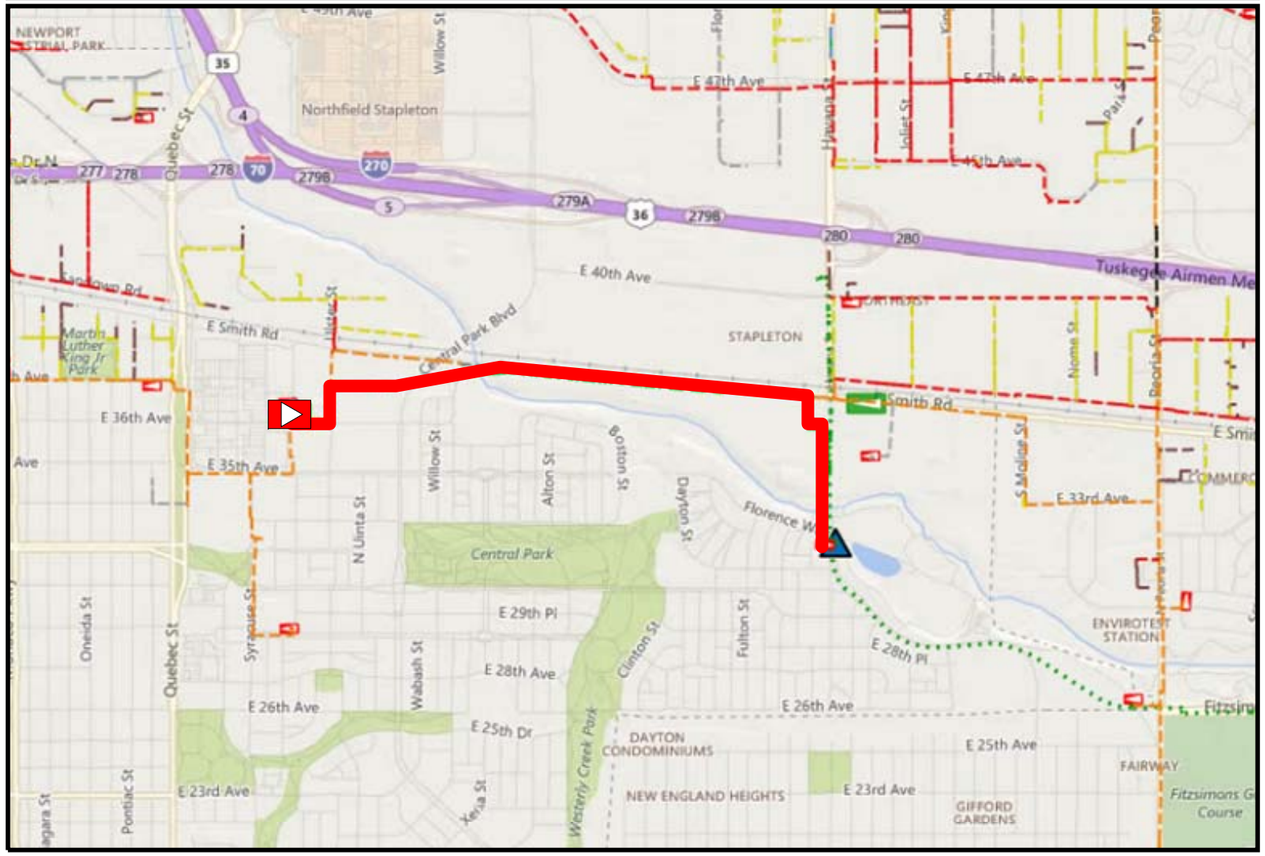
Cost

Project Capital Expenditure Cost: $11.3 Million

Project Capital Expenditure Estimate: Capacity Projects are estimated by either a project manager or a project engineer. The estimate takes into account route, materials, and known utilities. Capacity projects are either bid outright for a lump sum contract or utilize unit pricing that was bid under a master service level agreement. The method used depends on the scale of the project.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



Tungsten to Blackhawk
Black Hawk, Colorado

Project Overview

Scope: The project includes 13 miles of 8” steel high pressure gas pipeline with a 1020 psig MAOP, 2 miles of 6” steel high pressure gas pipeline with a 305 psig MAOP, 1 regulator station rebuild, 1 take off valve set and 1 isolation valve set

Pressure System: High Pressure(1,000 psig)

Project Details

Project Needs: The Front Range high pressure system is at capacity affecting the communities of Black Hawk, Central City, Idaho Springs, Empire, and Georgetown. Without reinforcement outages are expected.

Total Customers: There are approximately 3,600 customers attached to stations P-16, P-17, P-226, P-47, and P 209

Cost

Project Capital Expenditure Budget: $8.2 Million Currently in Service - $55.7 million in construction

Project Capital Expenditure Estimate ($ in millions):

	Actuals to Date	2020	Total Project Estimate to Complete
- Internal Labor	$ 0.1	$ 0.4	$ 0.5
- Engineering	$ 2.9	$ 0.5	$ 3.4
- ROW / Permits	$ 1.0	$ 0.4	$ 1.4
- Materials	$ 2.5	$ 3.0	$ 5.5
- Construction Contractors	$ 22.2	$ 26.0	$ 48.3
- Overheads / Misc	$ 1.7	$1.7	$ 3.4
- Total:	**$30.4**	**$32.0**	**$62.5**

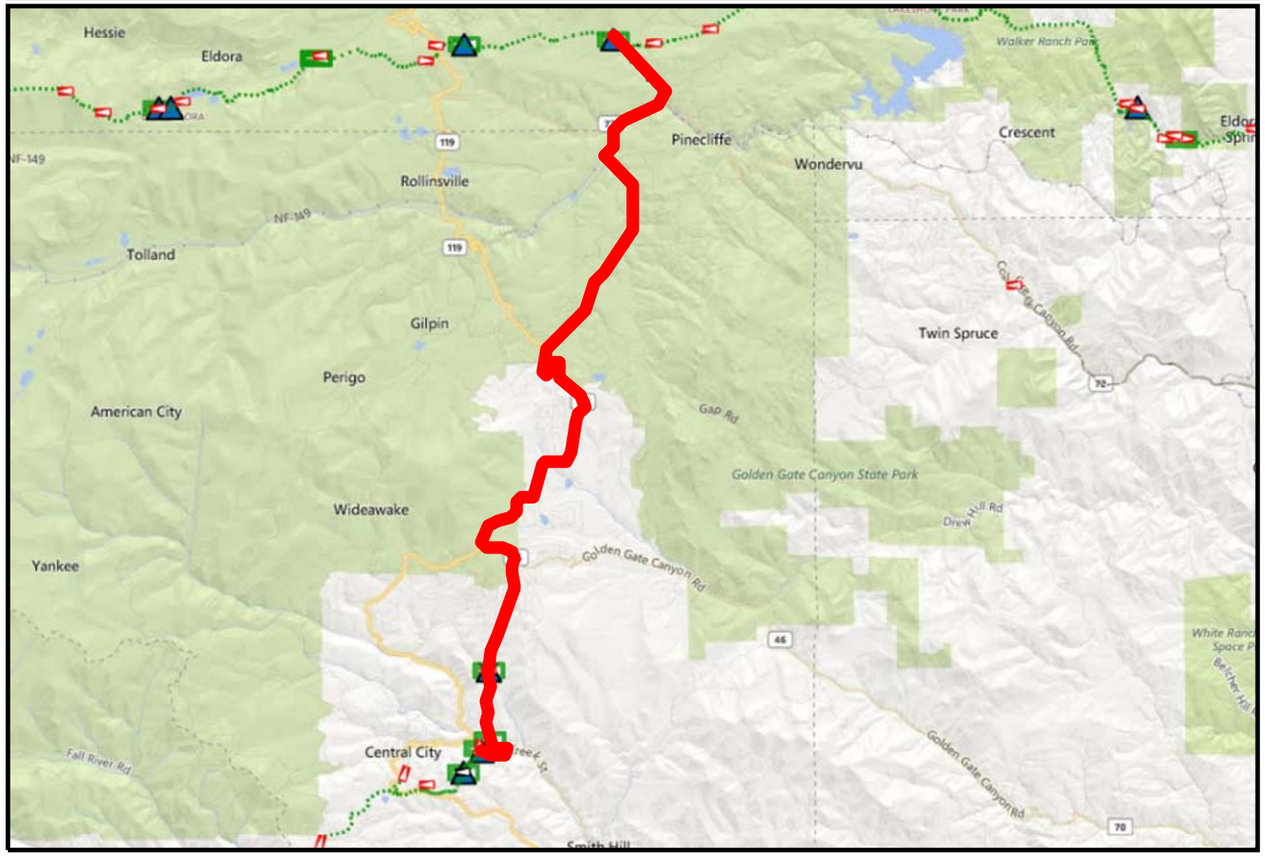
* Difference in sums due to rounding.
**Any variances between the project budget and estimate are due to budget cycle.

Review Process: This project was reviewed by the designer’s local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Status

Estimate: Complete
Design: Complete
Construction: In Construction
In Service Date: September 2020

Project Location



CO\PBLO\Reinforce pipe\X-59
Pueblo, Colorado

Project Overview

Scope: The project installs 1.2 miles of 6 inch high pressure gas pipeline (285 psig) into the regulator station X-59.

Pressure System: High Pressure(285 psig)

Project Status

Estimate: Complete
Design: Complete
Construction: Complete
In Service Date: June 2018

Project Details

Project Needs: The X-59 system in south east Pueblo is at capacity due to natural growth. The growth is mostly due to residential growth. Without reinforcement outages are expected.

Total Customers: There are approximately 6,600 customers attached to station X-59.

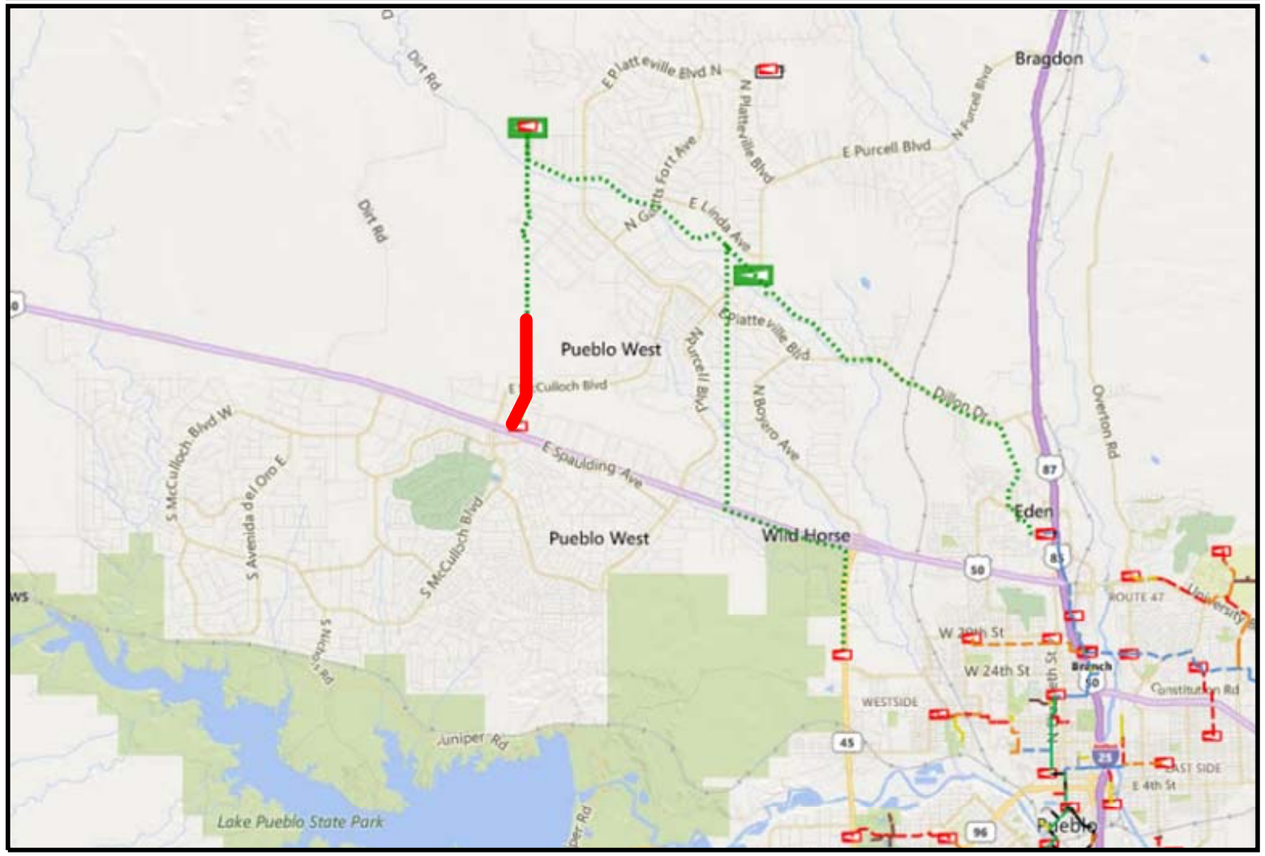
Cost

Project Capital Expenditure Cost: $3.4 million

Project Capital Expenditure Estimate: Capacity Projects are estimated by either a project manager or a project engineer. The estimate takes into account route, materials, and known utilities. Capacity projects are either bid outright for a lump sum contract or utilize unit pricing that was bid under a master service level agreement. The method used depends on the scale of the project.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



Stroh Road HP Reinforcement
Parker, Colorado

Project Overview

Scope: install 3,400 feet of 6 inch high pressure (285 psig) pipeline along Stroh Road between Motsenbocker Road and Stroh Ranch Road

Pressure System: High Pressure (285 psig)

Project Status

Estimate: Complete
Design: Complete
Construction: Complete
In Service Date: February 2019
Project Close Out: December 2019

Project Details

Project Needs: The high pressure system feeding the F-887 is at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: There are approximately 1,000 customers attached to this distribution system

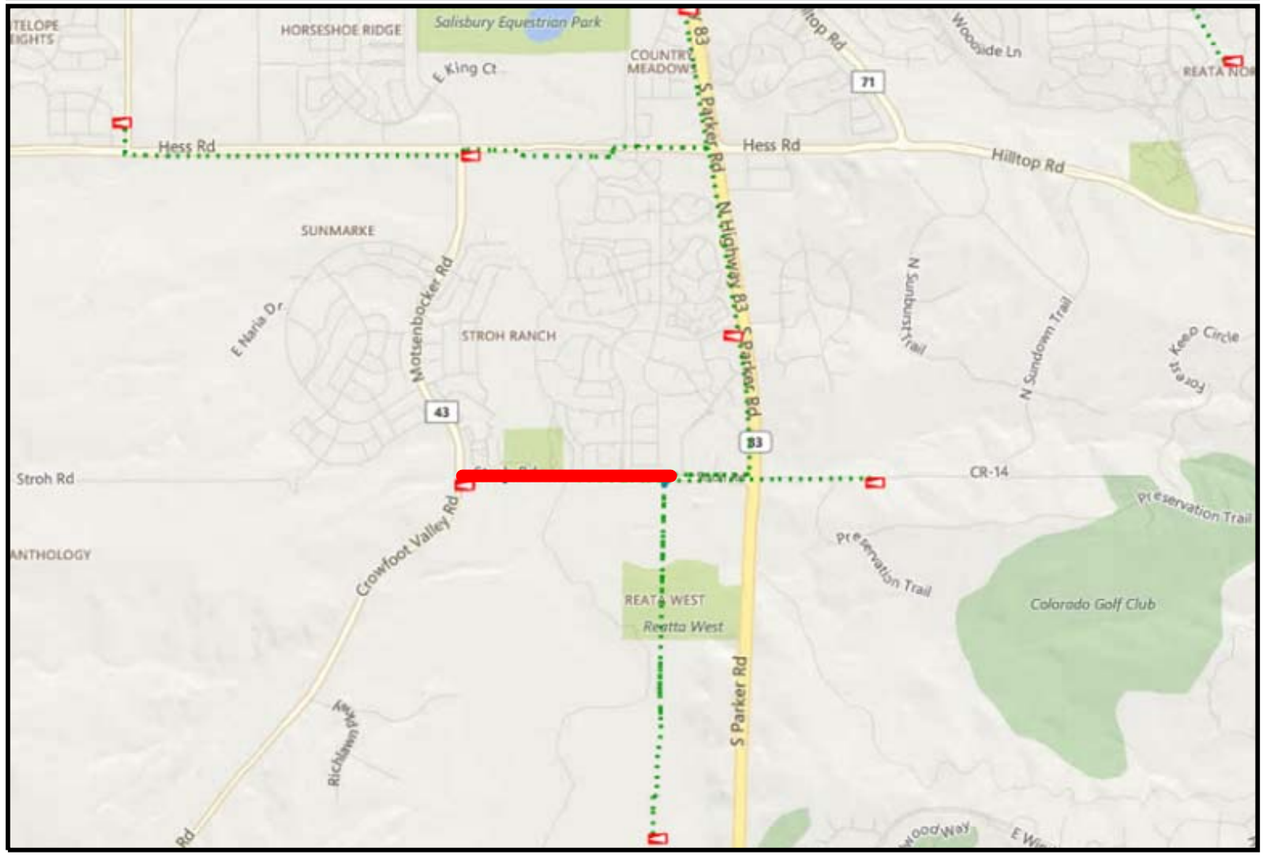
Cost

Project Capital Expenditure Cost: $2.7 Million

Project Capital Expenditure Estimate: Capacity Projects are estimated by either a project manager or a project engineer. The estimate takes into account route, materials, and known utilities. Capacity projects are either bid outright for a lump sum contract or utilize unit pricing that was bid under a master service level agreement. The method used depends on the scale of the project.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



CO/NMR/F555/IP
Arvada, Colorado

Project Overview

Scope: Install 100 feet of 4 inch intermediate pressure pipeline into Station F-555 and 3,800 feet of 8 inch intermediate pressure pipeline along w 64th Ave

Pressure System: intermediate pressure pipeline (150 psig)

Project Status

Estimate: Complete
Design: Complete
Construction: Complete
In Service Date: September 2019
Project Close Out: October 2019

Project Details

Project Needs: The intermediate pressure (150 psig) system that feedsF-555 is at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: There are approximately 1,400 customers attached to F-555.

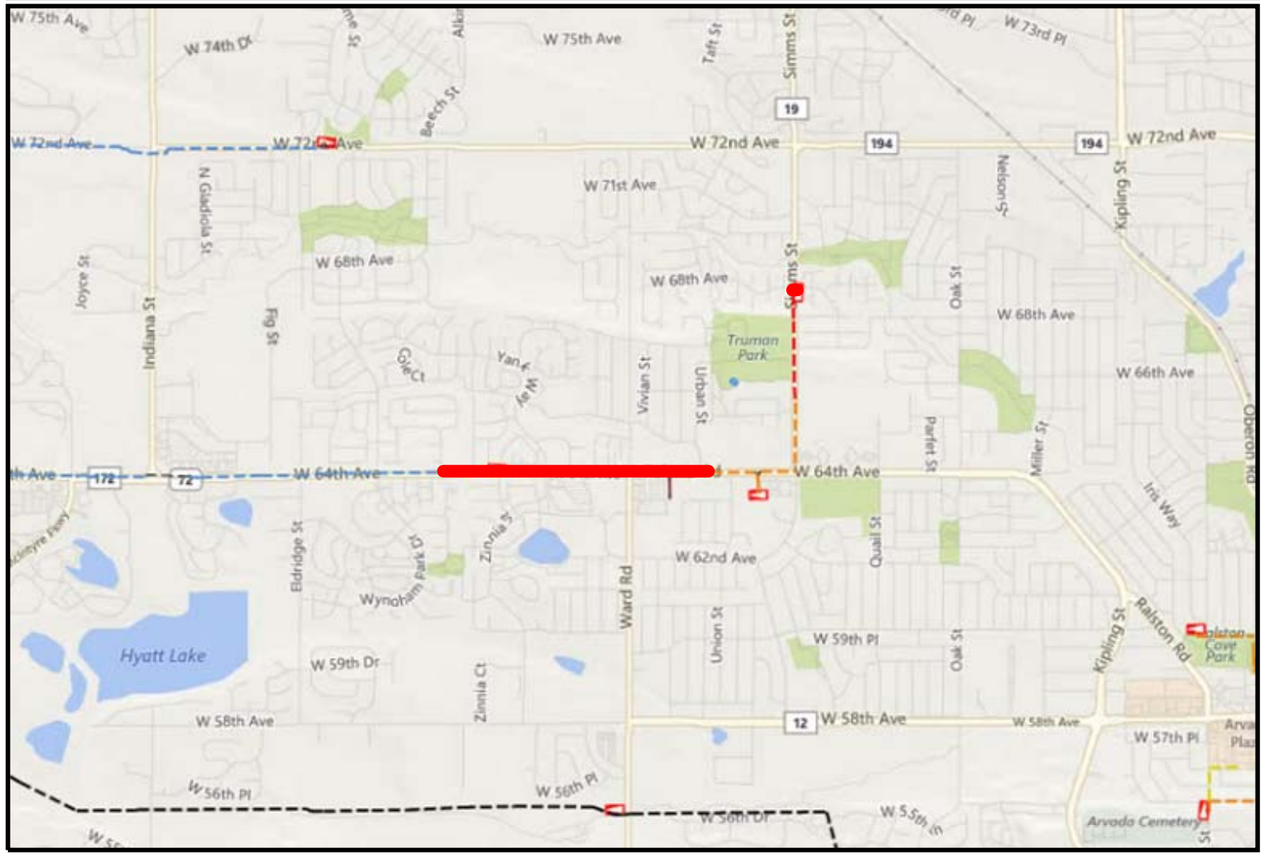
Cost

Project Capital Expenditure Cost: $2.6 Million

Project Capital Expenditure Estimate: Capacity Projects are estimated by either a project manager or a project engineer. The estimate takes into account route, materials, and known utilities. Capacity projects are either bid outright for a lump sum contract or utilize unit pricing that was bid under a master service level agreement. The method used depends on the scale of the project.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



CO-Outage risk for Pueblo - Pueblo County Reinforcement
Pueblo, Colorado

Project Overview

Scope: Install 8,000 feet of 4 inch polyethylene in County Farm Road from 25th lane to 29th lane.

Pressure System: Pounds medium pipeline (60 psig)

Project Status

Estimate: Complete
Design: Complete
Construction: Complete
In Service Date: March 2019

Project Details

Project Needs: The area along County Farm Road is at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: There are approximately 1,411 customers attached to this distribution system

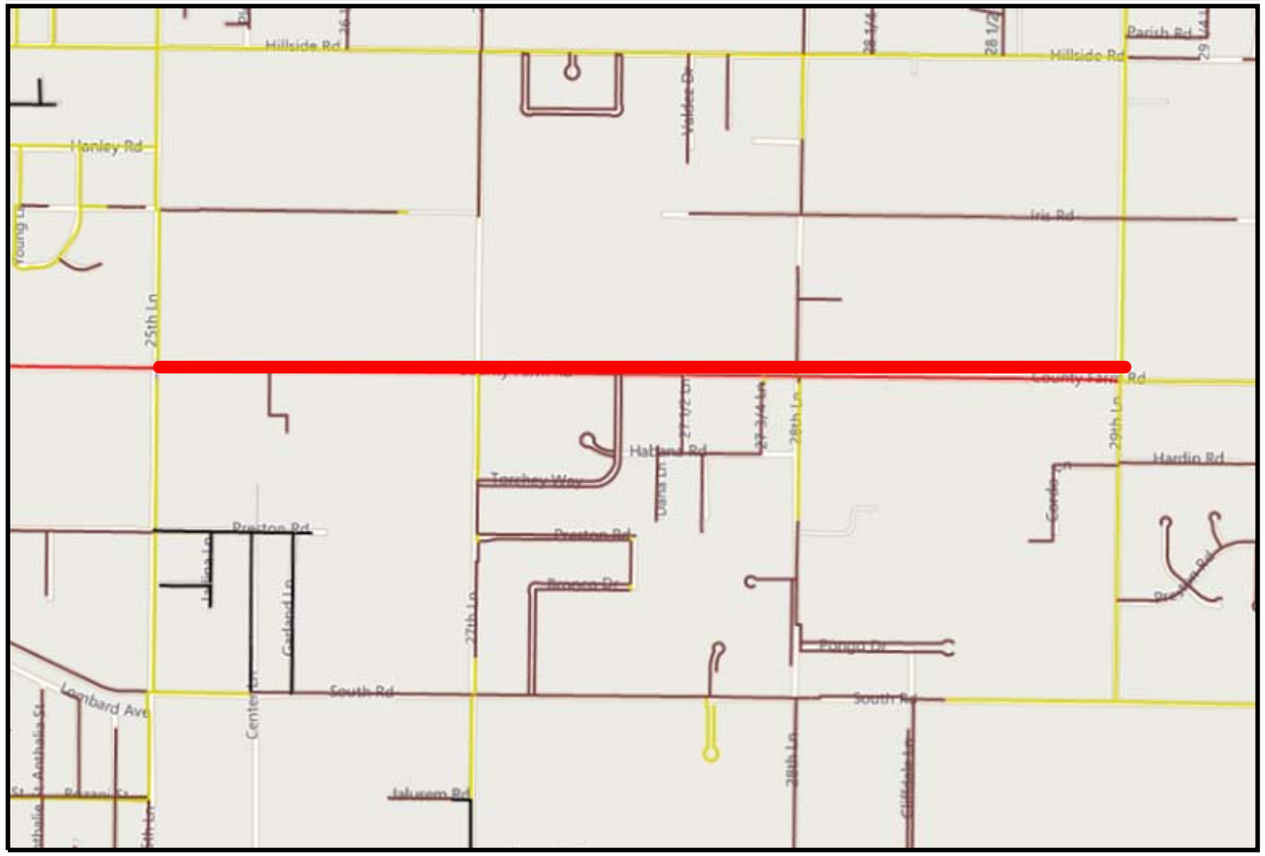
Cost

Project Capital Expenditure Cost: $1.9 Million

Project Capital Expenditure Estimate: Capacity Projects are estimated by either a project manager or a project engineer. The estimate takes into account route, materials, and known utilities. Capacity projects are either bid outright for a lump sum contract or utilize unit pricing that was bid under a master service level agreement. The method used depends on the scale of the project.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



CO/Pueblo West/Dist Reinforcement
Pueblo, Colorado

Project Overview

Scope: In Spaulding Ave install 2,755 feet of 4 inch polyethylene and 1,000 feet of 6 inch polyethylene. In Industrial Blvd install approximately 1,600 feet of 4 inch polyethylene pipe. In Purcell Blvd install 1,300 feet of 4" polyethylene.

Pressure System: Pounds medium pipeline (60 psig)

Project Status

Estimate: Complete
Design: Complete
Construction: Complete
In Service Date: December 2018
Project Close Out: December 2019

Project Details

Project Needs: The areas along W Spaulding Ave, Industrial Ave, and Purcell Blvd are at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: There are approximately 5,445 customers attached to this distribution system

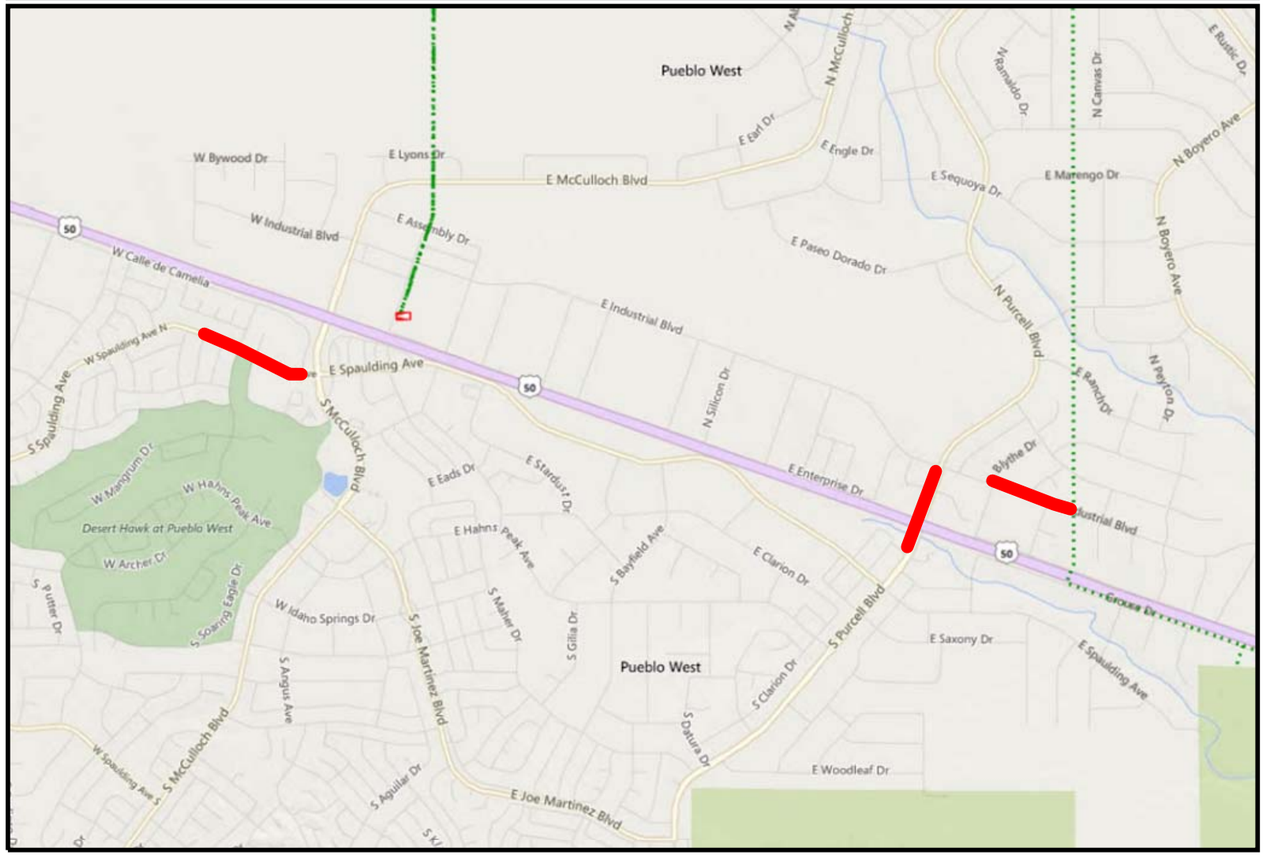
Cost

Project Capital Expenditure Cost: $1.1 Million

Project Capital Expenditure Estimate: Capacity Projects are estimated by either a project manager or a project engineer. The estimate takes into account route, materials, and known utilities. Capacity projects are either bid outright for a lump sum contract or utilize unit pricing that was bid under a master service level agreement. The method used depends on the scale of the project.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



Ski Hill
Breckenridge, Colorado

Project Overview

Scope: Install approximately 5,500 feet of 6 inch polyethylene pipeline will be installed from 2065 Ski Hill Rd to 3334 Ski Hill Rd. Additionally the existing station RB-12 was rebuilt to be able to supply the greater amounts of gas.

Pressure System: Pounds Medium (60 psig)

Project Status

Estimate: Complete
Design: Complete
Construction: Complete
In Service Date: December 2018

Project Details

Project Needs: The distribution pipe on the RB-12 is at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: There are approximately 575 customers attached to this distribution system

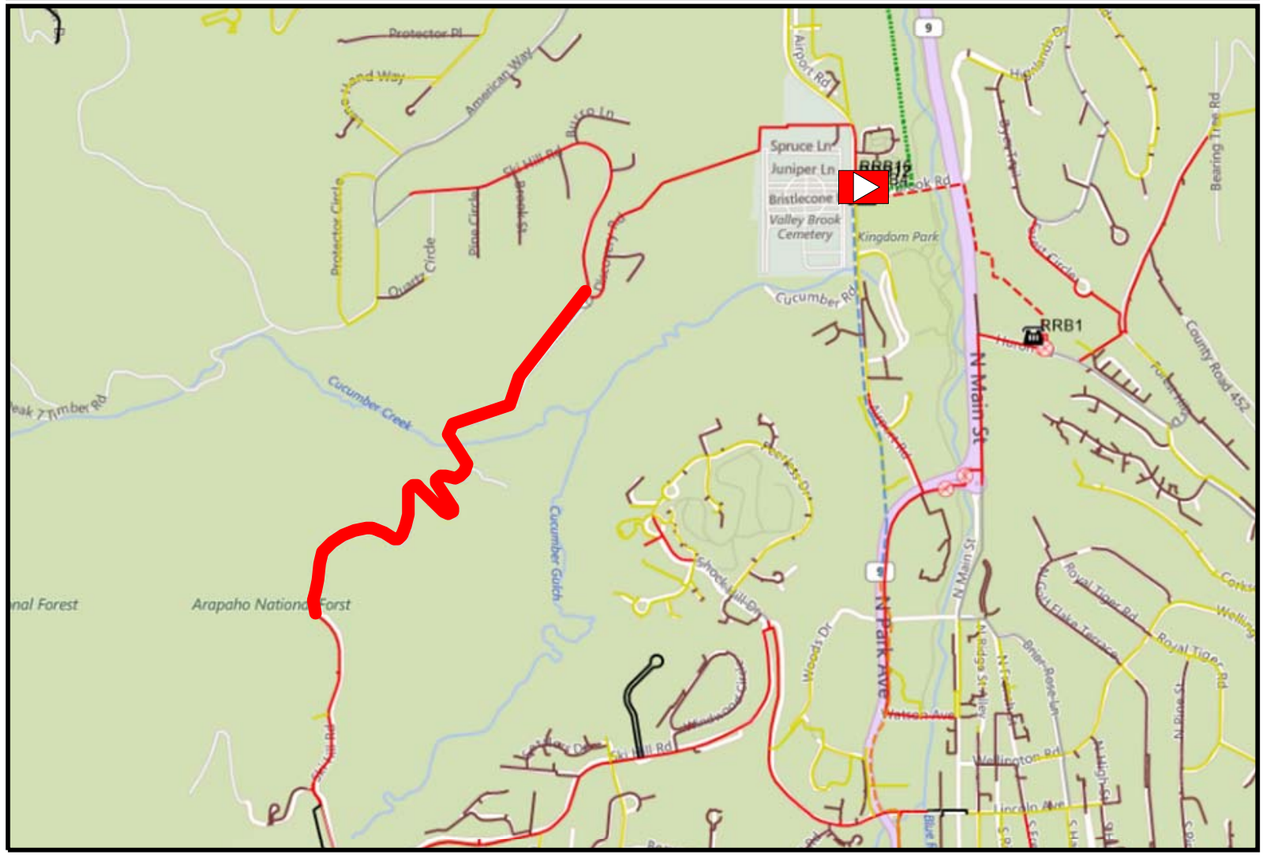
Cost

Project Capital Expenditure Cost: $1.2 Million

Project Capital Expenditure Estimate: Capacity Projects are estimated by either a project manager or a project engineer. The estimate takes into account route, materials, and known utilities. Capacity projects are either bid outright for a lump sum contract or utilize unit pricing that was bid under a master service level agreement. The method used depends on the scale of the project.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



Granby T-O to YMCA VS Project
Granby, Colorado

Project Overview

Scope: Install approximately 4.8 miles of 6 inch high pressure pipeline (1,000 psig) between Frasier and Tabernash Co. The project also includes the rebuild of two distribution regulator stations

Pressure System: High pressure pipeline (1,000 psig)

Project Status

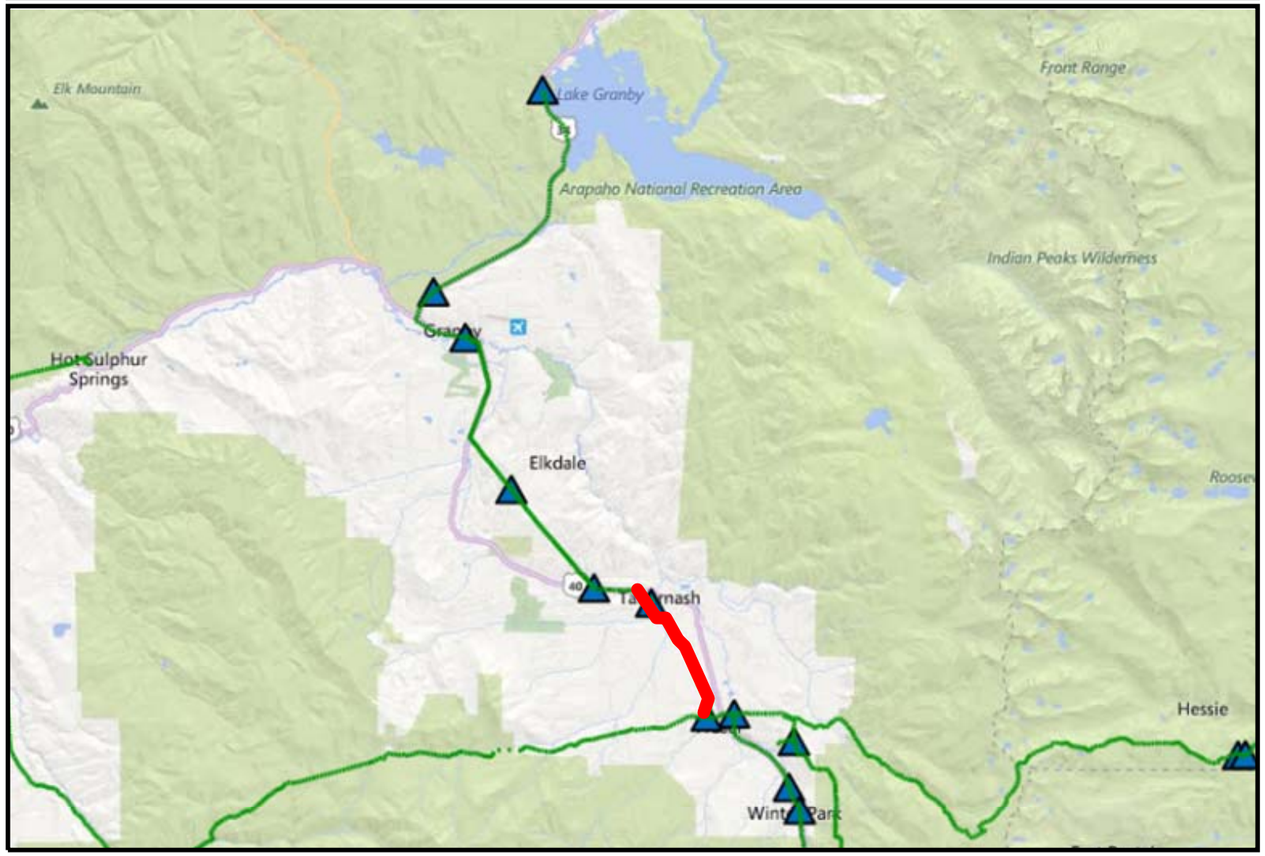
Estimate: Complete
Design: In progress
Construction: Awaiting design
In Service Date: September 2020

Project Details

Project Needs: The high pressure (1,000 psig) pipeline that feeds Granby and Grand lake are at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: There are approximately 1,100 customers attached to station RG-6.

Project Location



Cost

Project Capital Expenditure Budget: $14.6 Million

Project Capital Expenditure Estimate:
- Internal Labor: $16 thousand
- Materials: $1 million
- Consultants: $2.6 million
- Contractors: $11.6 million
- Removal: $15 thousand
- Overheads: $2 million

*Any variances between the budget and the current project estimate are due to budgeting cycle.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Upsize pipe for Boulder 285# (EB-20)
Broomfield, Colorado

Project Overview

Scope: Install approximately 11,400 feet of 12 in high pressure steel main to connect two isolated systems. The project increases pressure and capacity into the EB-20 in Broomfield.

Pressure System: High Pressure (285 psig)

Project Status

Estimate: Complete
Design: In progress
Construction: Awaiting Design
In Service Date: August 2020

Project Details

Project Needs: The existing 6 inch high pressure pipeline currently serving the EB-20 system is at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: Station EB-20 is integrated with two other intermediate pressure stations and serves approximately 7,500 customers.

Cost

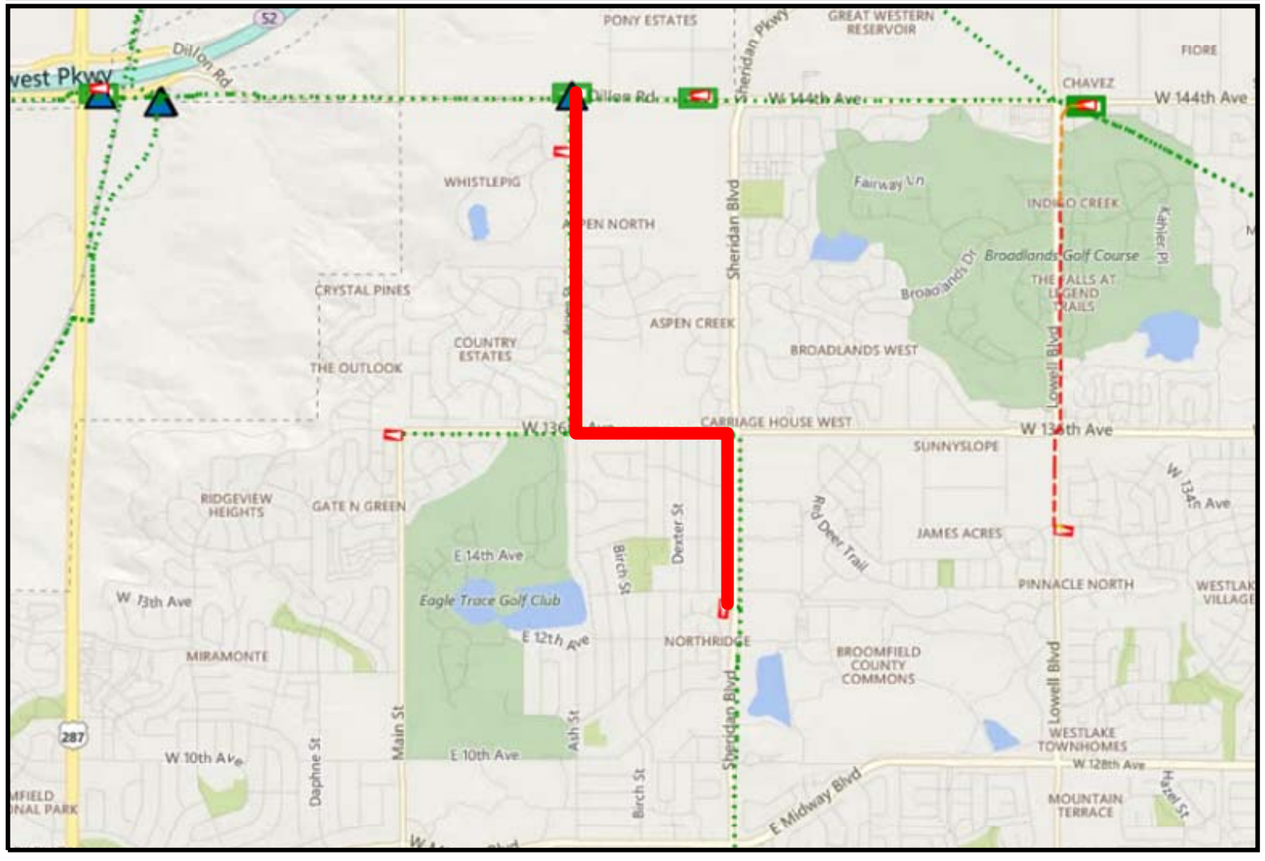
Project Capital Expenditure Budget: $9.4 million

Project Capital Expenditure Estimate:
- Internal labor: $107 thousand
- Materials: $1.1 million
- Consultants: $1.1 million
- Contractors:$4 million
- Overheads:$800 thousand

* Any variance between project budget and estimate is due to budgeting cycle.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



CO/GJ/River Road, W-55-A Reinforcement TME
Grand Junction, Colorado

Project Overview

Scope: Install approximately 2.15 miles of 8" steel main along River Rd between 23 ¼ Rd and 24½ Rd in Grand Junction, CO.

Pressure System: High Pressure (HP)

Project Status

Estimate: Complete
Design: Complete
Construction: Complete
In Service Date: October 2019
Project Close Out: December 2020

Project Details

Project Needs: The inlet pipeline into W-55 is at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: There are approximately 3,400 customers attached to this distribution system

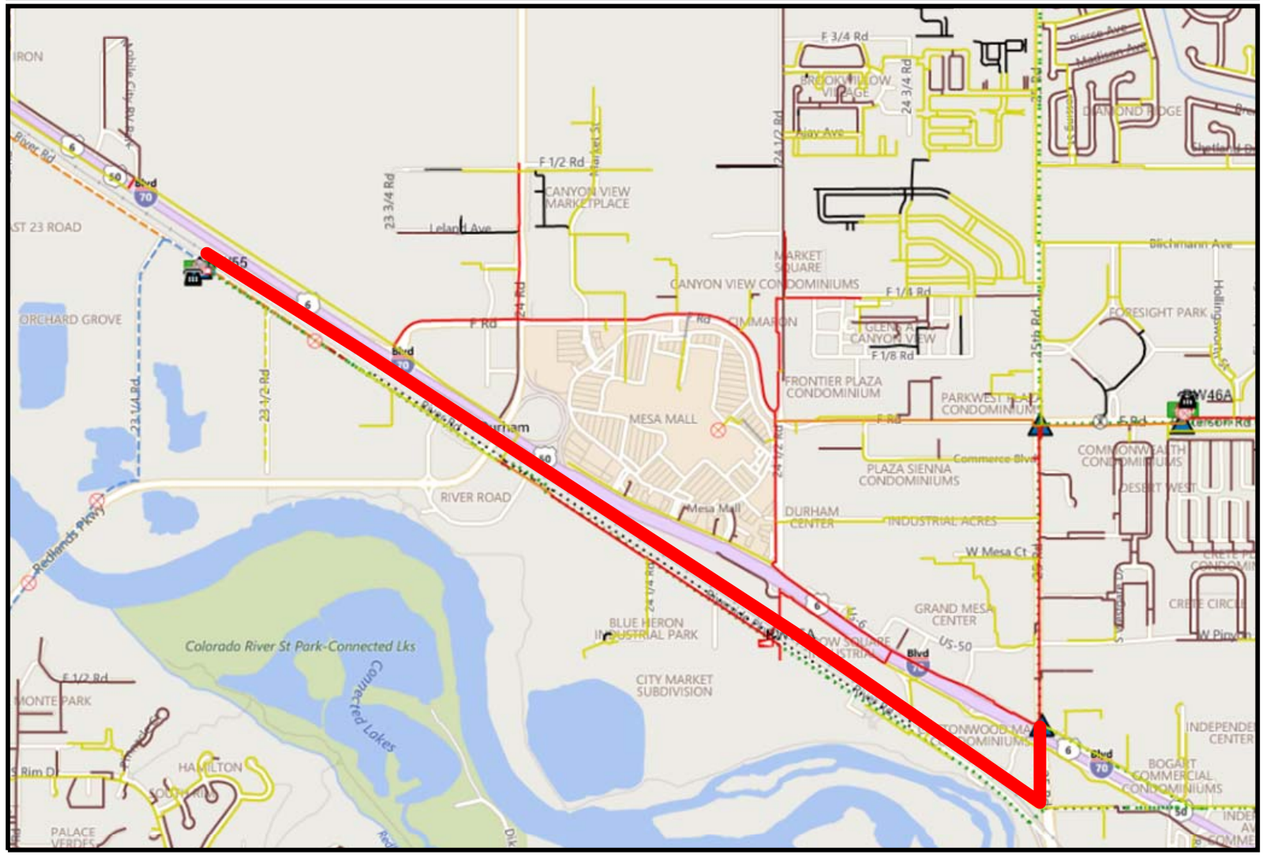
Cost

Project Capital Expenditure Cost: $8.6 Million

Project Capital Expenditure Estimate: Capacity Projects are estimated by either a project manager or a project engineer. The estimate takes into account route, materials, and known utilities. Capacity projects are either bid outright for a lump sum contract or utilize unit pricing that was bid under a master service level agreement. The method used depends on the scale of the project.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



CO/Ft Lupton/Ione NF-18 Reinforcement
Fort Lupton / Ione, Colorado

Project Overview

Scope: Install approximately 10,600 feet of 4 inch intermediate pressure pipeline.

Pressure System: intermediate pressure (150 psig)

Project Status

Estimate: Complete
Design: In progress
Construction: Awaiting design
In Service Date: September 2020

Project Details

Project Needs: The intermediate pressure (150 psig) pipeline that feeds stations NF-16, NF-18 and NF-24 are at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: There are approximately 860 customers attached to stations NF-16, NF-18 and NF-24

Cost

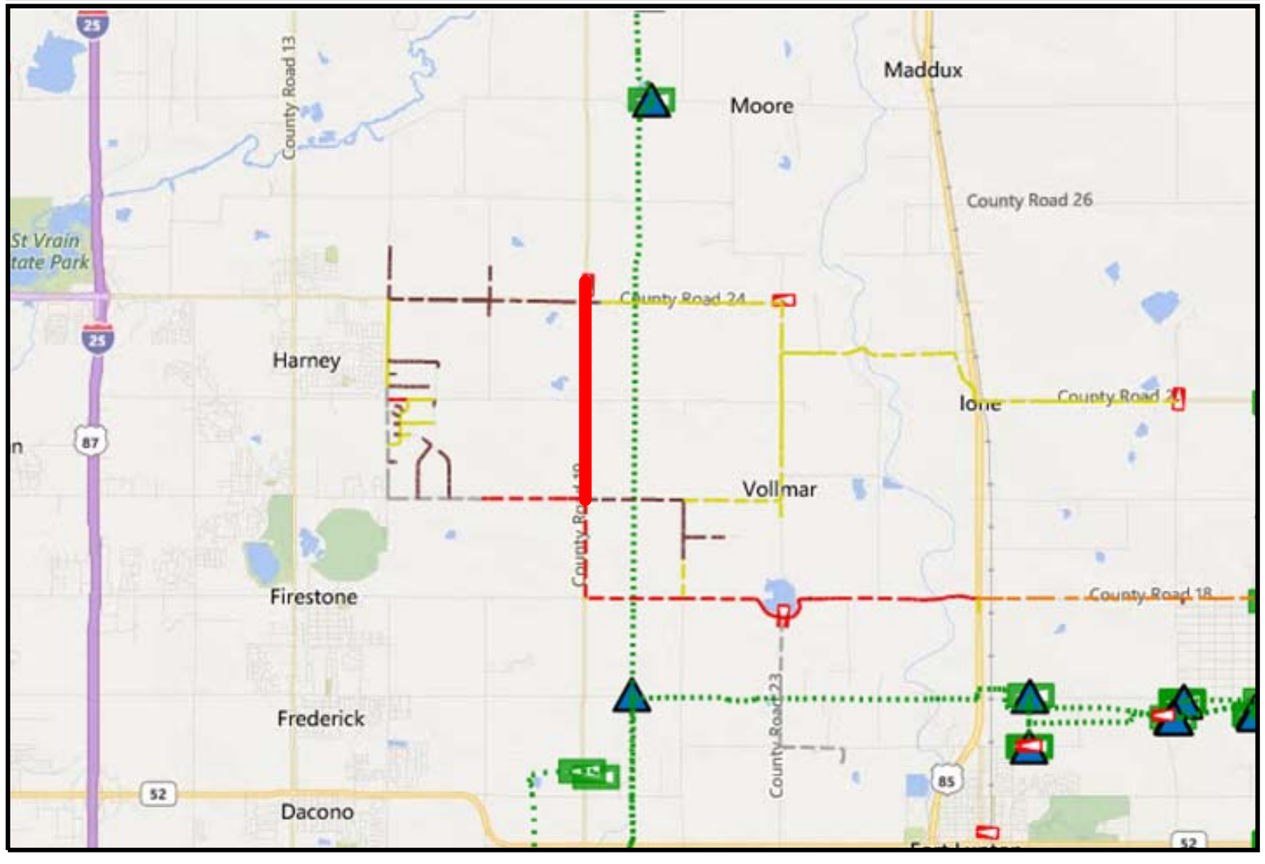
Project Capital Expenditure Budget: $7.5 Million

Project Capital Expenditure Estimate:
- Internal Labor: $7 thousand
- Materials: $257 thousand
- Consultants: $585 thousand
- Contractors: $3.7 million
- Overheads: $766 thousand

* Any variance between the project budget and the project estimate is due to budget cycle.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



F-400 Install new IP Main
Morrison, Colorado

Project Overview

Scope: Install approximately 11,000 feet of 6 inch steel main and a new station to reinforce the gas system in South Morrison

Pressure System: Pipeline Intermediate Pressure (150 psig), Station (150 psig cut to 60 psig)

Project Status

Estimate: Complete
Design: Complete
Construction: Complete
In Service Date: November 2019
Close Out Date: December 2019

Project Details

Project Needs: The pounds medium distribution system is at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: There are approximately 1,000 customers in the local distribution area.

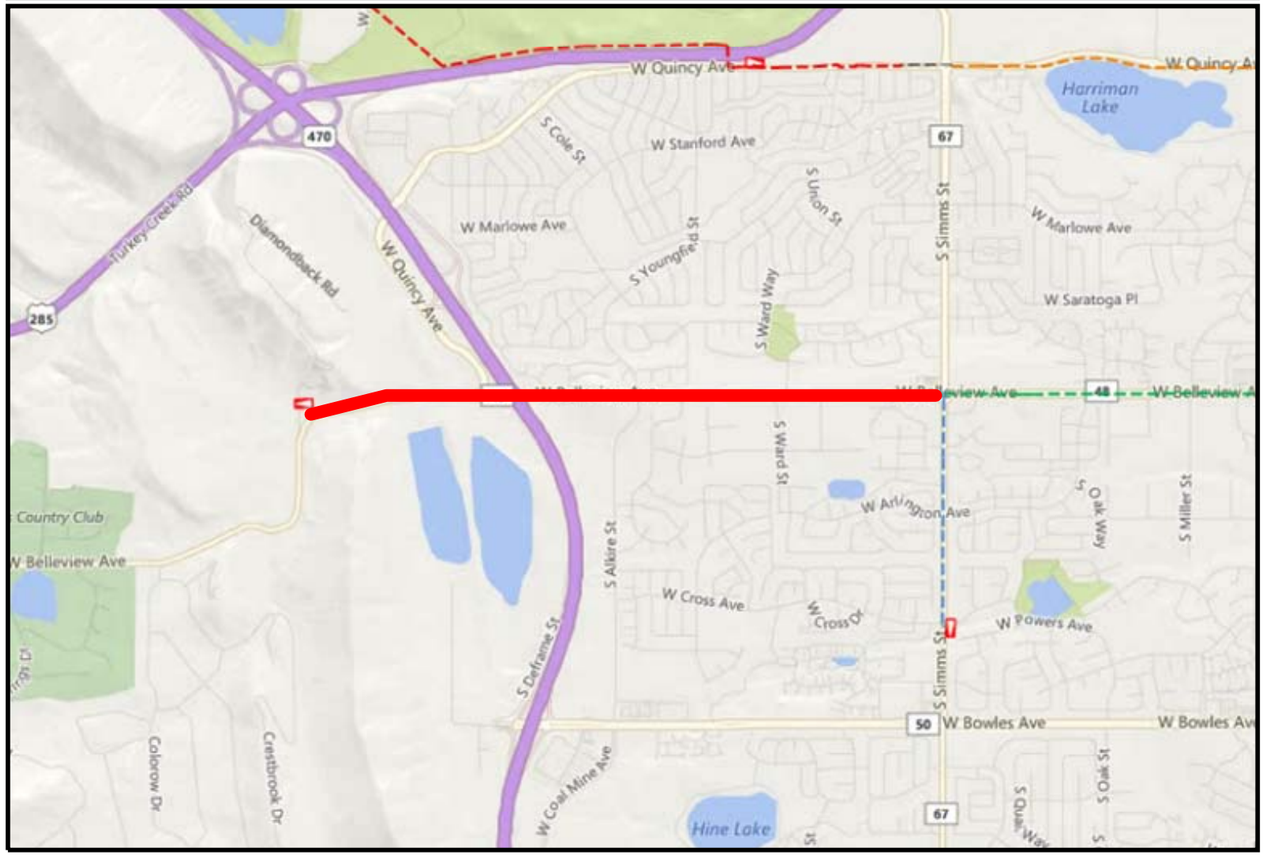
Cost

Project Capital Expenditure Cost: $6.7 Million

Project Capital Expenditure Estimate: Capacity Projects are estimated by either a project manager or a project engineer. The estimate takes into account route, materials, and known utilities. Capacity projects are either bid outright for a lump sum contract or utilize unit pricing that was bid under a master service level agreement. The method used depends on the scale of the project.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



F-481 & F-872
Aurora, Colorado

Project Overview

Scope: Install a new 285 psig to 15 psig regulator station at approximately E Arapahoe Rd andS Buckley Rd

Pressure System: High pressure (285 psig) to intermediate pressure station (150 psig)

Project Status

Estimate: Complete
Design: Complete
Construction: Complete
In Service Date: December 2019
Project Close Out: September 2020

Project Details

Project Needs: The intermediate pressure system that feeds F-481 & F-872 is at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: There are approximately 1,000 customers attached to these two stations.

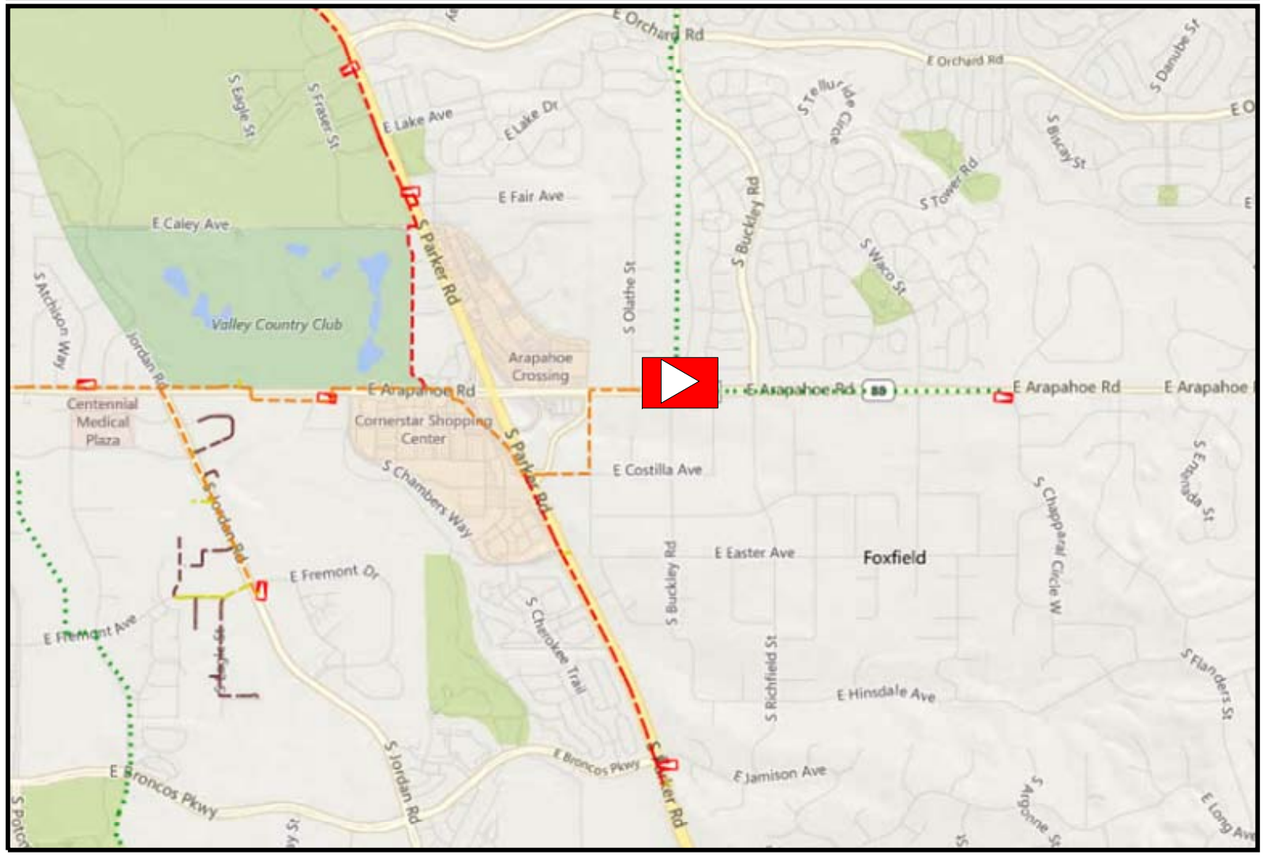
Cost

Project Capital Expenditure Cost: $2.7 Million

Project Capital Expenditure Estimate: Capacity Projects are estimated by either a project manager or a project engineer. The estimate takes into account route, materials, and known utilities. Capacity projects are either bid outright for a lump sum contract or utilize unit pricing that was bid under a master service level agreement. The method used depends on the scale of the project.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



CO/MNTN/Breckenridge Reinforcement
Breckenridge, Colorado

Project Overview

Scope: Install several sections of new polyethylene main in Breckenridge
- 270 feet of 4 inch at Tiger Road & Revette Drive
- 2,300 feet of 6 inch at American Way and Thunderhead
- 960 feet of 4 inch at Wellington Road and Corckscrew Drive
- 1120 feet of 2 inch at 198 Timber Trail Drive
- 380 feet of 4 inch at Ski Hill Rd and Main St
- 900 feet of 6 inch on the outlet of RB-6
- 560 feet of 4 inch at Baldy Road and Fuller Placer Road

Pressure System: Pounds Medium (60 psig)

Project Status

Estimate: Complete
Design: In Progress
Construction: Awaiting Design
In Service Date: August 2020

Project Details

Project Needs: The distribution pipe on the RB-12 is at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: There are approximately 1,800 customers attached to this distribution system

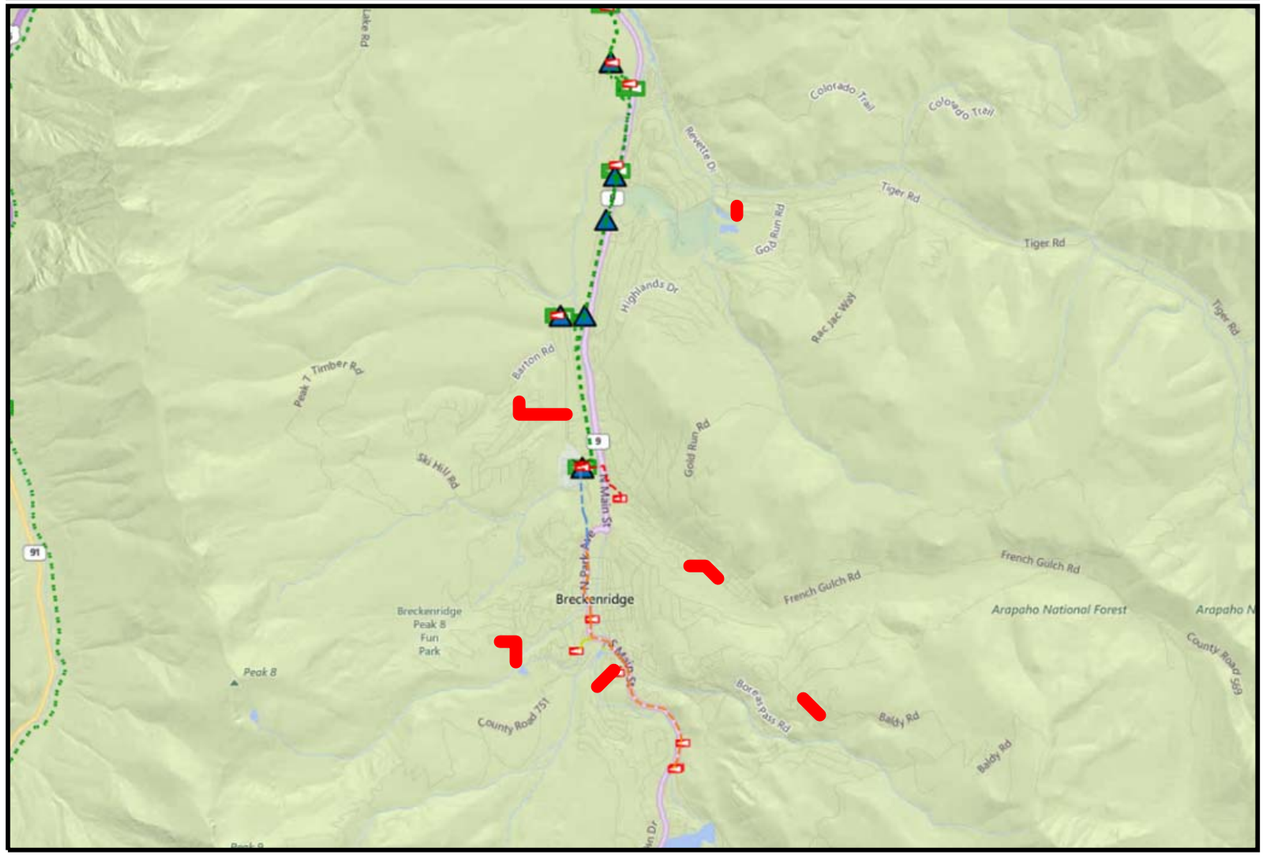
Cost

Project Capital Expenditures Budget: $2.2 Million

Project Capital Expenditures Estimate: Distribution projects are estimated on a cost per foot basis, which is based on historic installation costs for that diameter of pipe.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



CO/PBLO/Reinforce pipe feeding X-31
Pueblo, Colorado

Project Overview

Scope: The project installs 1,600 feet of 4” intermediate pressure gas pipeline (150 psig) into the regulator station X-31.

Pressure System: Intermediate Pressure(150psig)

Project Status

Estimate: Complete
Design: Complete
Construction: Complete
In Service Date: November 2019

Project Details

Project Needs: The X-31 system in south east Pueblo is at capacity due to natural growth. The growth is mostly due to residential growth. Without reinforcement outages are expected.

Total Customers: There are approximately 1,600 customers attached to station X-31.

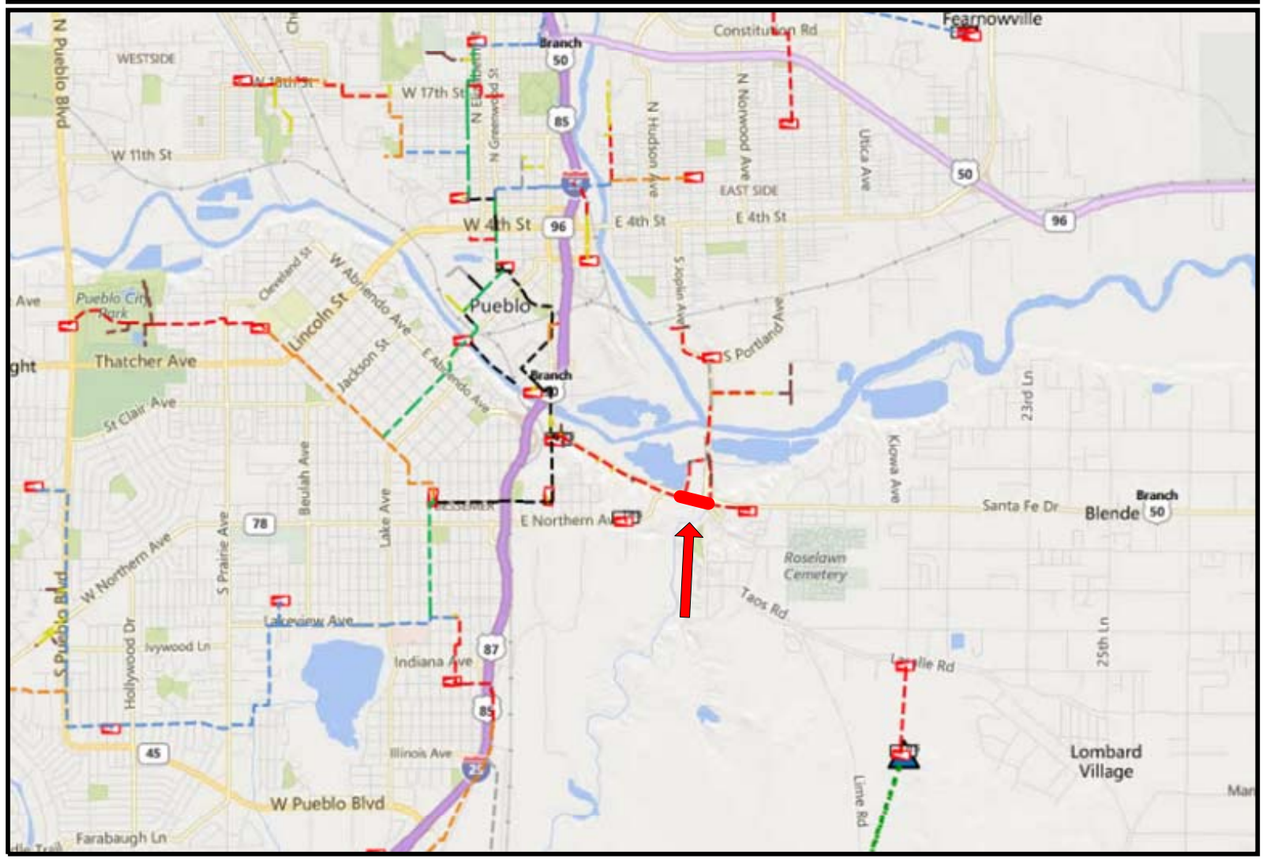
Cost

Project Capital Expenditure Cost: $1.5 million

Project Capital Expenditure Estimate: Capacity Projects are estimated by either a project manager or a project engineer. The estimate takes into account route, materials, and known utilities. Capacity projects are either bid outright for a lump sum contract or utilize unit pricing that was bid under a master service level agreement. The method used depends on the scale of the project.

Review Process: This project was reviewed by the designer’s local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



CO/Bldr/E-119 Reinforcement
Boulder, Colorado

Project Overview

Scope: Install approximately 2,200 ft of 6 in steel main to connect two isolated systems. The project increases pressure and capacity into the E-119 Station in Boulder.

Pressure System: Intermediate Pressure (150 psig)

Project Status

Estimate: Complete
Design: Complete
Construction: Complete
In Service Date: December 2019

Project Details

Project Needs: The existing 4" intermediate pressure pipeline currently serving the Niwot system is at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: Distribution stations E-119, E-91, EN-15 and EN-7 are integrated and serve approximately 2,400 customers

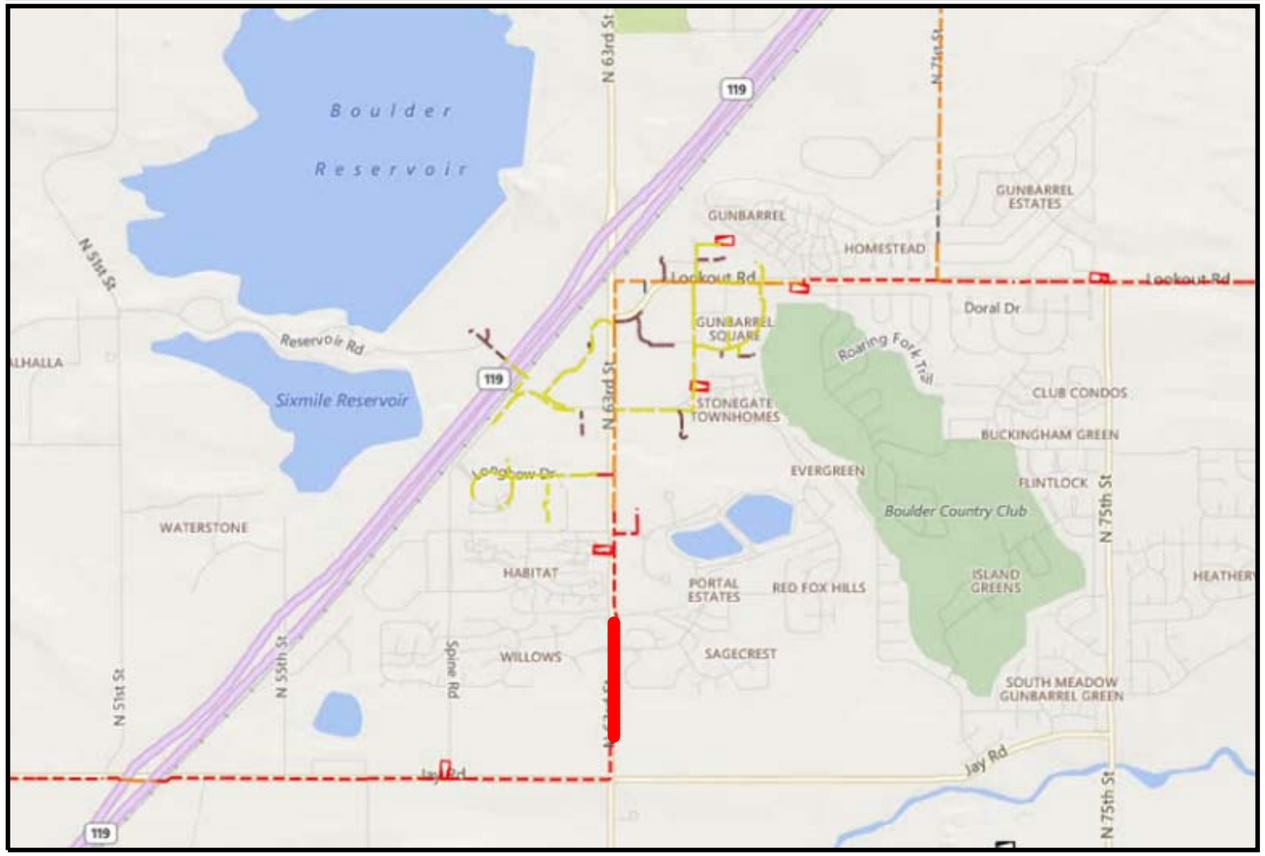
Cost

Project Capital Expenditure Cost: The project estimate is $1.2 million

Project Capital Expenditure Estimate: Capacity Projects are estimated by either a project manager or a project engineer. The estimate takes into account route, materials, and known utilities. Capacity projects are either bid outright for a lump sum contract or utilize unit pricing that was bid under a master service level agreement. The method used depends on the scale of the project.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



CO/Reinforce Rifle 4" PE and 2 Rifle, Colorado

Project Overview

Scope: In Railroad Ave install approximately 2,050 feet of 4 inch polyethylene main. In North Graham (16th St) install 5,700 feet of 4 inch polyethylene main. Install 450 feet of 4 inch polyethylene in Mill Pond Road. Install 800 feet of 4 inch polyethylene main in County Road 319.

Pressure System: Pounds medium pipeline (60 psig)

Project Status

Estimate: Complete
Design: Complete
Construction: In Construction
In Service Date: December 2019, Moved to February 2020

Project Details

Project Needs: The area along Graham Avenue and further east along County Road 210 is at capacity due to natural growth of the area. Additionally, the area along County Road 319 near the airport is also at capacity due to natural growth. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: There are approximately 4,160 customers attached to this distribution system

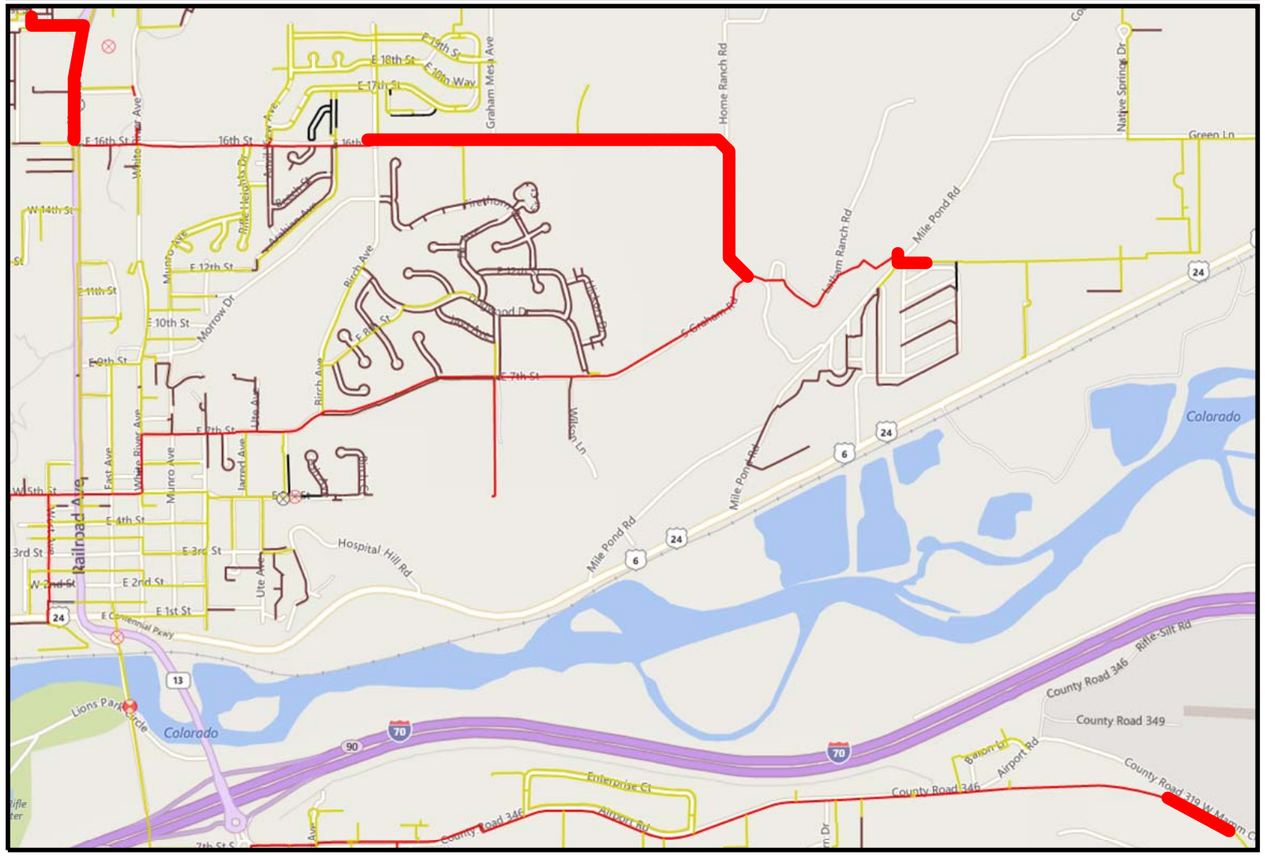
Cost

Project Capital Expenditure Budget: $1.3 Million

Project Capital Expenditure Estimate: Distribution projects are estimated on a cost per foot basis, which is based on historic installation costs for that diameter of pipe.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



CO/SEMR/F715/Inlet Reinforcement
Centennial, Colorado

Project Overview

Scope: Install 1,100 feet of 4 inch high pressure (285 psig) pipeline in S Peoria St to feed regulator station F-715

Pressure System: High pressure pipeline (285 psig)

Project Status

Estimate: Complete
Design: In progress
Construction: Awaiting design
In Service Date: August 2020

Project Details

Project Needs: The high pressure (285 psig) system that feeds F-715 is at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: There are approximately 150 customers attached to F-715.

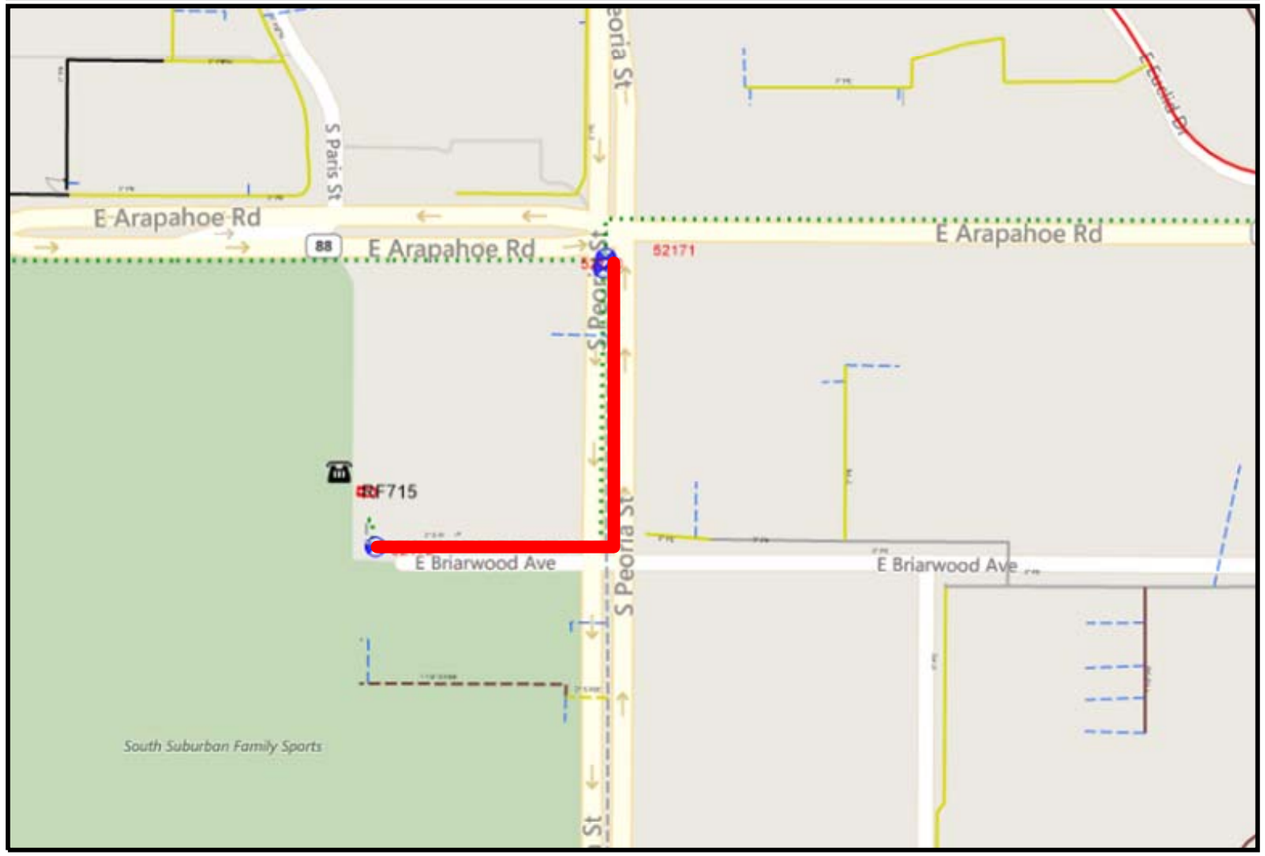
Cost

Project Capital Expenditures Budget: $1.3 Million

Project Capital Expenditures Estimate:
Internal Labor: $8 thousand
Materials: $70 thousand
Consultants: $862 thousand
Contractors: $1.7 million
Overheads: $434 thousand

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



CO/SEMR/F352/Inlet Reinforcement
Greenwood Village, Colorado

Project Overview

Scope: Install approximately 1,400 ft of 4 in steel main reinforce the lateral that feeds the station F-352 along Quebec St in Greenwood.

Pressure System: Intermediate Pressure (150 psig)

Project Status

Estimate: Complete
Design: In progress
Construction: Awaiting Design
In Service Date: August 2020

Project Details

Project Needs: The existing 2 inch intermediate pressure pipeline currently serving the F-352 system is at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: Distribution station F-352 is well integrated with stations F-687,F-388, F-527, and F-642 with Station F-352 serving approximately 580 customers

Cost

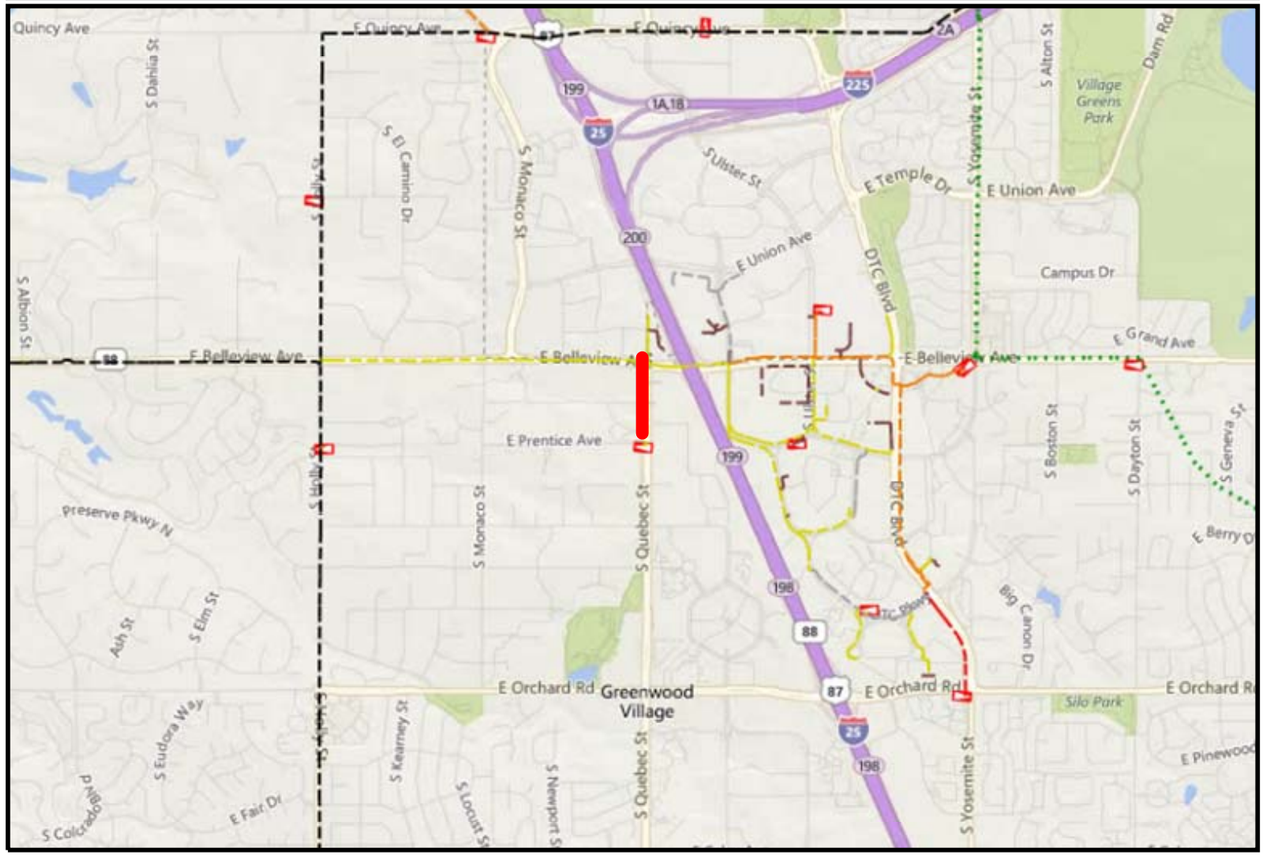
Project Capital Expenditures Budget: $1.2 Million

Project Capital Expenditure Estimate:
- Internal Labor: $8 thousand
- Materials: $134 thousand
- Consultants: $507 thousand
- Contractors: $1.4 million
- Overheads: $350 thousand

* Any variances between the budget and the estimate is due to the budgeting cycle.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



CO/DMO/Stn 165/Rebuild/Mains
Denver, Colorado

Project Overview

Scope: Rebuild Station 165 located at approximately Yosemite St and E Lowry Boulevard to increase the system's capacity.

Pressure System: Pounds Medium (60 psig)

Project Status

Estimate: Complete
Design: In Progress
Construction: Awaiting Design
In Service Date: December 2019 moved to ZZZ 2020 *Being verified

Project Details

Project Needs: The distribution system feeding the Lowry area is at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: There are approximately 2,700 customers attached to this distribution system

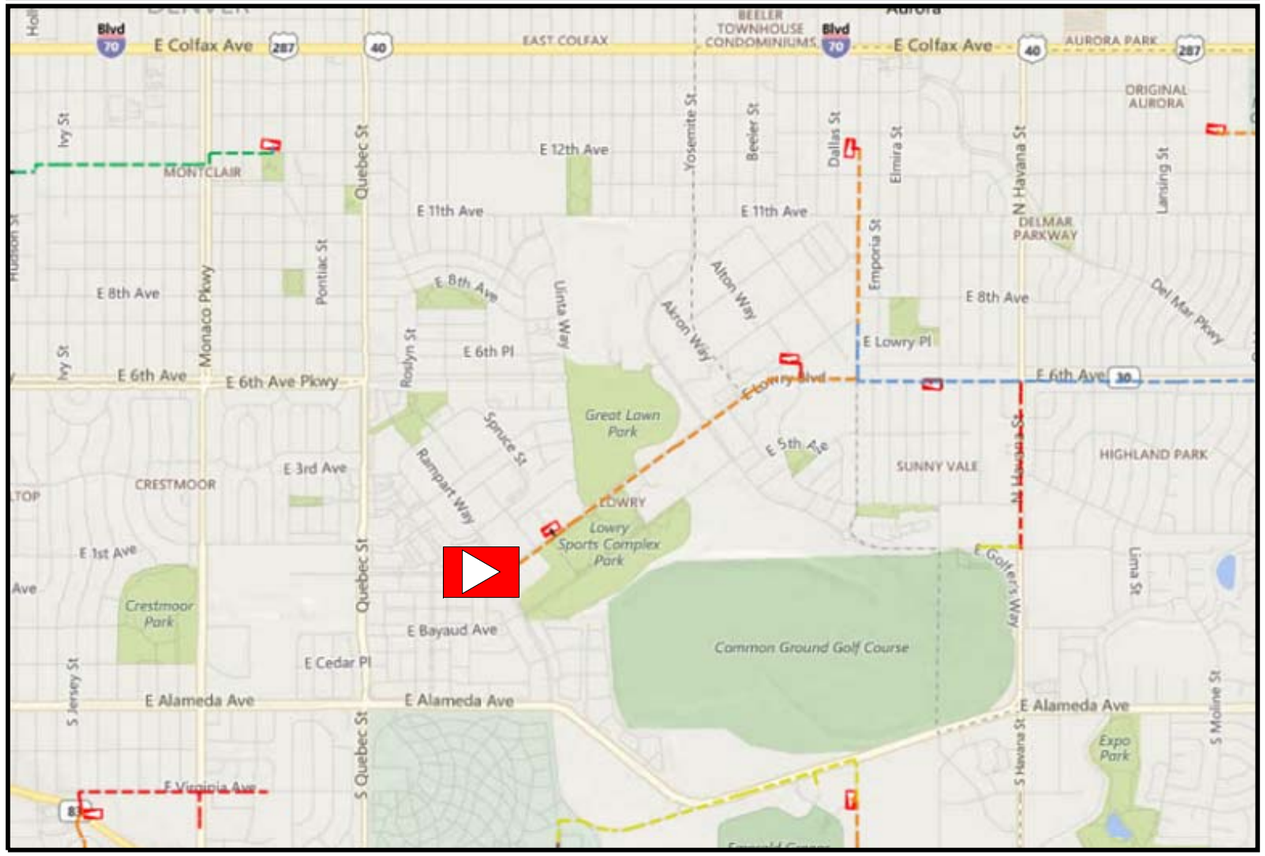
Cost

Project Capital Expenditure Budget: $1.2 Million

Project Capital Expenditure Estimate: Distribution projects are estimated on a cost per foot basis or for regulator stations on historic installation costs.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



CO/BLDR/EN – 8 IP Reinforcement
Boulder, Colorado

Project Overview

Scope: Install approximately 2,000 ft of 4 in steel main reinforce the lateral that feeds the station EN-8 along Monarch Rd in Niwot.

Pressure System: Intermediate Pressure (150 psig)

Project Status

Estimate: Complete
Design: Complete
Construction: Complete
In Service Date: January 2019

Project Details

Project Needs: The existing 2 inch intermediate pressure pipeline currently serving the EN-8 system is at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: Distribution station EN-8 is integrated with stations EL-96-A, EL-106, an EL-66 with Station EN-8 serving approximately 525 customers

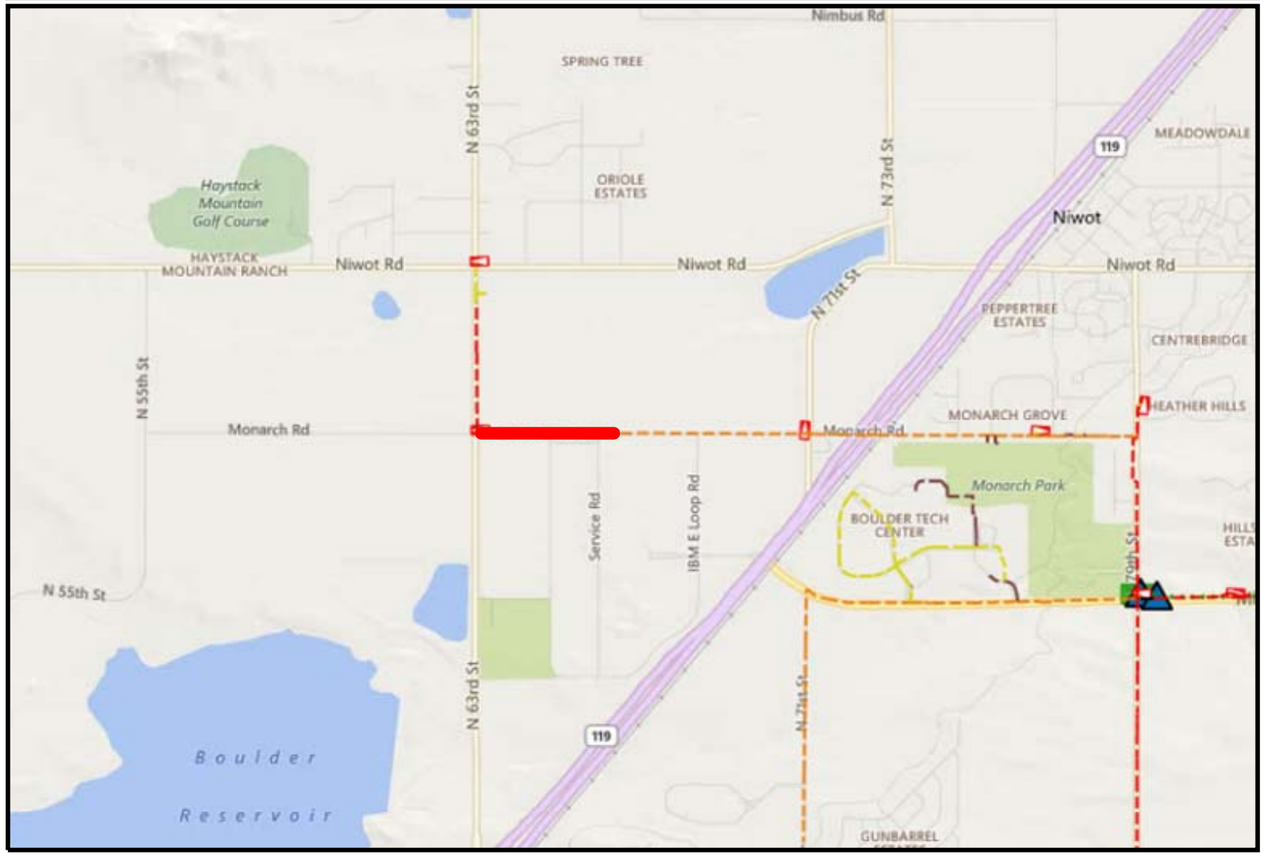
Cost

Project Capital Expenditure Cost: $1 Million

Project Capital Expenditure Estimate: Distribution projects are estimated on a cost per foot basis, which is based on historic installation costs for that diameter of pipe.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location



F-723
Centennial, Colorado

Project Overview

Scope: Install 3,800 feet of 6 inch intermediate pressure (150 psig) pipeline in S Jordan Rd between E Arapahoe Ave and E Fremont Ave to feed regulator station F-723

Pressure System: Intermediate pressure pipeline (150 psig)

Project Status

Estimate: Complete
Design: Complete
Construction: Complete
In Service Date: February 2017

Project Details

Project Needs: The intermediate pressure (150 psig) pipeline that feeds F-723 is at capacity due to natural growth of the area. Natural growth is considered to be load increase from new homes and small developments. Without the additional capacity customer outages are expected.

Total Customers: There are approximately 860 customers attached to F-715.

Cost

Project Capital Expenditure Cost: $1.7 Million

Project Capital Expenditure Estimate: Capacity Projects are estimated by either a project manager or a project engineer. The estimate takes into account route, materials, and known utilities. Capacity projects are either bid outright for a lump sum contract or utilize unit pricing that was bid under a master service level agreement. The method used depends on the scale of the project.

Review Process: This project was reviewed by the designer's local management to verify that the route, materials, and scope match with the needs of the system and that best engineering practices were followed.

Project Location