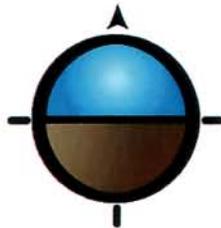




**WASTEWATER MASTER PLAN  
ADDENDUM 1  
REPORTS AND EXHIBITS**

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## **1.0 OVERVIEW OF THE EXISTING MASTER PLAN**

Completed in December 2000, the Taney County Regional Sewer District's Wastewater Master Plan presented an evaluation of the wastewater collection, conveyance, and treatment needs for unincorporated Taney County, Missouri. The Master Plan addressed the existing and projected wastewater treatment needs and identified 25 proposed wastewater projects. The Master Plan used a priority matrix to establish the priority of these projects.

The plan provided wastewater development guidance to Taney County for the preceding twenty years with recommendations to be periodically confirmed and updated. This addendum serves as the first update to the original Taney County Wastewater Master Plan.

## **2.0 PURPOSE AND SCOPE OF 1ST ADDENDUM TO MASTER PLAN**

The purpose of this addendum is to update the Taney County Regional Sewer District Wastewater Master Plan in accordance with recent population growth and recently completed sewer collection and/or treatment projects. This addendum is not a stand alone Wastewater Master Plan, and it is not meant to replace the original document.

The original document examined demographics, physical characteristics, existing wastewater treatment facilities, near-term alternatives, and long-term considerations for each watershed within Taney County. Please refer to the original Master Plan for detailed characteristics of each project contained in the Priority Matrix.

### **3.0 PUBLIC HEARINGS**

After the draft of the Wastewater Master Plan Addendum 1 was completed, two public hearings were held to seek public input regarding the addendum. The first meeting was held on November 15, 2005 at 1:30 PM in the Hollister Town Hall located at 312 Esplanade in Hollister, Missouri. The second meeting was held on November 15, 2005 at 6:00 PM in the Taney County Court House located at 139 Dade Street in Forsyth, Missouri.

## 4.0 CONDITIONS AND CRITERIA UPDATES

**4.1 Residential Population.** At the time the Master Plan was created, the 2000 Census Population data was not available. This 1<sup>st</sup> addendum to the plan includes the 2000 census population data.

Taney County's population increased from 25,561 in 1990 to 39,703 in 2000 a 55.3% increase in ten years. The U.S. Census Bureau estimated Taney County's 2005 population at 42,985. Historical and projected residential populations for Taney County are shown by township and incorporated area in tables 1.1 and 1.2.

In 2000, 65% of the population lived in unincorporated areas. Two settlement areas have incorporated since the 2000 Census – Bradleyville and Kirbyville.

The projected population was calculated using the same technique used in the original Master Plan. An average of differences based on historical differences was used to calculate the 2010 projected population. Applying half of the average difference to the 2010 value was used to obtain the 2015 population value. Therefore, the projections for 2010 should generally be more accurate than those for 2015.

**Table 1.1 Historical and Projected Residential Populations by Township**

Township	Historical Population				Projected Population	
	1970	1980	1990	2000	2010*	2015*
Beaver	690	803	758	954	1,042	1,082
Big Creek	388	382	375	438	455	464
Branson	3,678	5,926	7,658	12,320	15,201	16,642
Cedar Creek	230	377	407	504	595	641
Jasper	816	1,833	2,076	3,773	4,759	5,252
Oliver	3,990	6,131	6,324	9,380	11,277	12,226
Scott	81	123	1,794	3,835	5,086	5,712
Swan	3,150	4,892	6,169	8,658	10,494	11,412
<b>Total</b>	<b>13,023</b>	<b>20,467</b>	<b>25,561</b>	<b>39,862</b>	<b>48,909</b>	<b>53,431</b>

\* Projected population based on the 2000 Census Population data.  
Source: U.S. Census Bureau

**Table 1.2 Historical and Projected Residential Populations by Incorporated Area**

Incorporated Area	Historical Population				Projected Population	
	1970	1980	1990	2000	2010*	2015*
Branson	2,175	2,529	3,706	6,050	7,342	7,988
Forsyth	803	1,010	1,161	1,686	1,980	1,833
Hollister	906	1,439	2,628	3,867	4,855	5,349
Merriam Woods <sup>1</sup>	Not Inc.	Not Inc.	646	1,142	1,638	1,886
Rockaway Beach	195	303	270	577	959	1,150
Taneyville	157	253	253	359	426	460
Bull Creek Village <sup>2</sup>	Not Inc.	Not Inc.	156	225	294	329
Bradleyville <sup>3</sup>	Not Inc.	Not Inc.	Not Inc.	115		

\* Projected population based on the 2000 Census Population data.

<sup>1</sup>Area incorporated in 1993.

<sup>2</sup>Area incorporated in 1994.

<sup>3</sup>Area incorporated in 2004.

Source: U.S. Census Bureau

The projections are purely statistical and based on historical data provided by the U.S. Census Bureau. The projections do not account for items that may cause an abnormal growth in population, such as the Branson Landing project or large scale highway improvements.

**4.2 Tourist Population.** According to the Department of Tourism, within the Branson Lakes Area there were 7.35 million tourists in 2004 with the average length of stay of 3.72 nights. Once the Branson Landing Project is complete in 2007, the Department of Tourism projects an increase to 8.0 million tourists per year.

**4.3 Existing Wastewater Treatment Facilities.** According to the Missouri Department of Natural Resource's website, they currently regulate 69 open discharge wastewater treatment systems in Taney County. These include seven municipal facilities in Branson (two facilities: Cooper Creek and Roark Creek), Forsyth, Hollister, Rockaway Beach, Merriam Woods, and Taneyville. The Rockaway Beach Regional Treatment facility also serves Bull Creek Village, Merriam Woods, and is scheduled to serve Venice on the Lake. Appendix A presents a list of the 69 facilities along with their

MoDNR ID number, permit issuance date, permit ending date, the receiving tributary, the facility treatment type, the design flow, and the use category.

The scope of this addendum does not include an analysis on each facility. For more information on each wastewater treatment facility, refer to Appendix E of the original Master Plan document.

## 5.0 PROJECTS REMOVED FROM THE PRIORITY MATRIX

Following is a list of projects that have been removed from the Priority Matrix along with the reason for their removal.

**Bee Creek Watershed.** This project was ranked #1 on the priority matrix in the District's 2000 Master Plan. The project is currently under construction.

**Venice on the Lake.** This project was ranked #2 on the priority matrix in the District's 2000 Master Plan. The District is moving forward with facility planning with this project.

**Ozark Beach Watershed.** This project was ranked #3 on the priority matrix in the District's 2000 Master Plan. The District is moving forward with design on this project.

**Bull Creek Watershed.** Bull Creek Village has completed their sewer project since the publication of the 2000 Master Plan.

**Table Rock Acres Subdivision.** This project has been constructed since the District's 2000 Master Plan.

**Rainbow Shoals Subdivision.** This project has been constructed since the District's 2000 Master Plan.

**Cooper Creek Development.** This project has been constructed since the District's 2000 Master Plan.

**Stewarts's White River Subdivision.** This project has been constructed since the District's 2000 Master Plan.

**Bradleyville.** Bradleyville has incorporated since the District's 2000 Master Plan, and is therefore not included in the addendum.

**Froeschle's Lazy Acres Subdivision.** This project only served one connection at a cost of over \$320,000. Due to the cost for a single connection, it was eliminated from the priority matrix at this time.

**Spring Creek (Northern Portion).** Construction on the northern portion of the Spring Creek project is complete. This portion of the project is only to bypass the lagoon by connecting to the City of Branson's sewer system. The property owner's association is responsible for lagoon removal and for the existing collection lines.

**Roark Creek.** The Roark Creek Interceptor project has been designed and construction is scheduled for 2007.

**Green Acres and Crabwell Corner Subdivisions.** This project is no longer considered a stand alone project. It has been combined with the Shady Ridge/Center Ridge/Scott Ives project and presented as the Emory Creek Subdivisions project.

**Shady Ridge, Center Ridge, and Scott Ives Subdivisions.** This project is no longer considered a stand alone project. It has been combined with the Green Acres/Crabwell Corner project and presented as the Emory Creek Subdivisions project.

## 6.0 NEWLY IDENTIFIED PROJECTS

This 1<sup>st</sup> Addendum to the Master Plan identifies seven new projects which have been added to the priority matrix.

**6.1 Fine Subdivision.** The Fine Subdivision is located in the Bull Shoals Watershed on A B Fine Rd 1.0 mile south of Hwy OO. The subdivision resides on the north side of Bull Shoals Lake 1.5 miles south of Hwy M and Hwy OO intersection. A concept plan and preliminary cost estimate have been prepared and are presented in Appendix B.

The area currently has 74 address locations registered in the Taney County 911 address database. This system includes a new WWTF. The preliminary cost estimate was figured for 81 connections based on house counts with a Cost per Initial Connection being \$20,816.

The estimated cost for the Fine Subdivision collection system and treatment are as follows:

Construction.....	\$1,168,880
Land and Easements.....	\$116,888
Legal/Administration.....	\$70,133
Engineering Planning and Design .....	\$118,436
Engineering During Construction / Inspection.....	\$58,444
Contingencies.....	\$153,278
<b>TOTAL.....</b>	<b>\$1,686,058</b>

**6.2 Long Beach.** The Long Beach area is located in the Long Beach Watershed at the end of Hwy T on the west side of Lake Taneycomo, just west of US-160. A concept plan and preliminary cost estimate have been prepared and are presented in Appendix B.

The area currently has 64 address locations registered in the Taney County 911 address database. This system includes a new WWTF. The preliminary cost estimate was figured for 66 connections based on house counts with a Cost per Initial Connection being \$30,513. The estimated cost for the Long Beach area collection systems and treatment are as follows:

Construction.....	\$1,394,325
Land and Easements.....	\$139,433
Legal/Administration.....	\$83,660
Engineering Planning and Design .....	\$137,699
Engineering During Construction / Inspection.....	\$69,716
Contingencies.....	\$182,483
<b>TOTAL.....</b>	<b>\$2,013,880</b>

**6.3 Lookout Acres Subdivision.** The Lookout Acres Subdivision is located in the Swan Creek Watershed along US-160 just east of Lake Taneycomo. A concept plan and preliminary cost estimate have been prepared and are presented in Appendix B.

The area currently has 253 address locations registered in the Taney County 911 address database. This system uses four pump stations to transfer effluent to two existing system manholes. The preliminary cost estimate was figured for 253 connections with a Cost per Initial Connection being \$23,864.

The estimated cost for the Lookout Acres Subdivision collection system and treatment are as follows:

Construction.....	\$4,241,757
Land and Easements.....	\$424,176
Legal/Administration.....	\$254,505
Engineering Planning and Design.....	\$356,296
Engineering During Const./Const. Inspection.....	\$212,088
Contingencies.....	\$548,882
<b>TOTAL.....</b>	<b>\$6,037,704</b>

**6.4 Mildred.** The Mildred area is located in the Bull Shoals Watershed along US-76 just east of Hwy VV. A concept plan and preliminary cost estimate have been prepared and are presented in Appendix B.

The area currently has 198 address locations registered in the Taney County 911 address database. Four existing WWTF's would be replaced by an equal number of pump stations and an additional area is served with a fifth pump station. The effluent is treated by an expansion of the current Smoke Tree Hills WWTF. The preliminary cost estimate was figured for 258 connections based on house counts with a Cost per Initial Connection being \$12,690.

The estimated cost for the Mildred area collection system and treatment are as follows:

Construction.....	\$3,089,545
Land and Easements.....	\$308,955
Legal/Administration.....	\$185,373
Engineering Planning and Design .....	\$271,761
Engineering During Construction / Inspection.....	\$154,477
Contingencies.....	\$401,011
<b>TOTAL.....</b>	<b>\$4,411,122</b>

**6.5 Moore's Bend.** The Moore's Bend area is located in the Bull Shoals Watershed along Moore's Bend Rd just east of Bull Shoals Lake. A concept plan and preliminary cost estimate have been prepared and are presented in Appendix B.

The area currently has 112 address locations registered in the Taney County 911 address database. This system includes a new WWTF. The preliminary cost estimate was figured for 98 connections with a Cost per Initial Connection being \$20,232.

The estimated cost for the Moore's Bend area collection system and treatment are as follows:

Construction.....	\$1,857,130
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Land and Easements.....	\$185,713
Legal/Administration.....	\$111,428
Engineering Planning and Design .....	\$175,913
Engineering During Construction / Inspection.....	\$92,857
Contingencies.....	\$242,304
<b>TOTAL.....</b>	<b>\$2,665,345</b>

**6.6 Horizon Hills.** The Horizon Hills Subdivision is located in the Roark Creek Watershed just southwest of the intersection of State Highway 465 and State Highway 248 and just northeast of Roark Creek. A concept plan and preliminary cost estimate have been prepared and are presented in Appendix B.

The area currently has 212 address locations registered in the Taney County 911 address database. There is currently a WWTF serving the Horizon Hills Subdivision that will be taken offline. The preliminary cost estimate was figured for 212 connections with a Cost per Initial Connection being \$1,069.

The estimated cost for the Horizon Hills Subdivision collection system is as follows:

Construction.....	\$252,250
Land and Easements.....	\$25,225
Legal/Administration.....	\$15,135
Engineering Planning and Design .....	\$31,948
Engineering During Construction / Inspection.....	\$12,613
Contingencies.....	\$33,717
<b>TOTAL.....</b>	<b>\$370,888</b>

**6.7 Emory Creek Subdivisions.** The Emory Creek Subdivisions project is located in the Emory Creek Watershed just northwest of the intersection of State Highway 465 and US Highway 65. A concept plan and preliminary cost estimate have been prepared and are presented in Appendix B.

The area currently has 293 address locations registered in the Taney County 911 address database. The preliminary cost estimate was figured for 50 connections with a Cost per Initial Connection being \$172,516.

The estimated cost for the Emory Creek Subdivisions collection system is as follows:

Construction.....	\$6,080,150
Land and Easements.....	\$608,015
Legal/Administration.....	\$364,809
Engineering Planning and Design .....	\$484,649
Engineering During Construction / Inspection.....	\$304,008
Contingencies.....	\$784,163
<b>TOTAL.....</b>	<b>\$8,625,794</b>

## 7.0 PRIORITIZATION OF PROJECTS

The original priority matrix scoring system was based on seven (7) TCRSD board approved project characteristics: Population Equivalent of Service Area, Environmental Impacts, Package Plant Removal, Proximity to Lakes, Total Improvements Cost, Operation and Maintenance Cost, and Cost per Single Family Connection. The maximum amount of points that a project could obtain was 143.

In June 2005, the TCRSD board approved a new priority matrix. The new priority matrix has seven project evaluation areas that can total to a maximum of 100 points. These evaluation areas are as follows:

**Population Equivalent of Service Area.** All projects were awarded 1 point for every 100 people with a maximum of 15 points within the identified areas. The number of people was based on the number of connections. The calculation used was 2.75 people per connection.

**Environmental Impact.** Points were awarded based on 1 point per 10 septic tanks with a maximum of 30 points.

**Package Plant Removal.** Points were awarded according to the total design flow of all WWTF for a maximum of 15 points.

- 5 points < 5,000 Gallons
- 6 points 5,000 – 10,000 Gallons
- 9 points 10,000 – 15,000 Gallons
- 12 points 15,000 – 20,000 Gallons
- 15 points > 20,000 Gallons

**Proximity to Lakes.** Points were awarded according to the closest point of the project to the closest portion of the lake for a maximum of 10 points.

There were 3 lakes used: Taneycomo, Table Rock, and Bull Shoals.

- 10 points < 1 mile
- 6 points 1 – 2 miles
- 3 points 2 – 5 miles
- 0 points > 5 miles

**Potable Water System Source.** Points were awarded based on 1 point per 20 private wells with a maximum of 5 points.

**Total Costs.** Points were based on the total project costs for a maximum of 10 points.

- 10 points Up to 1 Million
- 8 points 1 – 3 Million
- 6 points 3 – 6 Million
- 4 points 6 – 9 Million
- 2 points > 9 Million

**Cost Per Single Family Connection.** Points were awarded based on the initial cost per single-family connection for a maximum of 15 points.

- 15 points < \$8,000
- 12 points \$8,000 - \$12,000
- 9 points \$12,000 - \$16,000
- 6 points \$16,000 - \$20,000
- 3 points > \$20,000

The District also agreed to break up the priority matrix into two lists, one for large projects and one for smaller projects. Priority Matrix 1 is for the large projects and

Priority Matrix 2 is for the smaller projects. Projects which cost more than one million dollars will be considered large and projects which cost less than one million will be considered small.

## 8.0 PRIORITY MATRICES

**PRIORITY MATRIX 1: PROJECTS GREATER THAN \$1 MILLION**

Priority	Watershed Project	Watershed	Connections	Population Equivalent of Service Area	Environmental Impact	Package Plant Removal	Proximity to Lakes	Potable Water System Source	Total Costs	Costs per Single Family Connection	Total Points
				0 - 15 Points	0 - 30 Points	0 - 15 Points	0 - 10 Points	0 - 5 Points	0 - 10 Points	0 - 15 Points	0 - 100 Points
				2.75 People Per Connection	Number of Septic Tanks	Total Design Flow of All (in Gallons)	Taneycomo, Table Rock, Bull Shoals (From closest point of project)	Private wells	Cost of Project	Costs Include Construction and Engineering	
				1 Pt./100 People	1 Pt./10 Septic Tanks	< 5,000 5 Pts. 5,000 - 10,000 6 Pts. 10,000-15,000 9 Pts. 15,000-20,000 12 Pts. > 20,000 15 Pts.	0 - 1 Mile 10 Pts. 1 - 2 Miles 6 Pts. 2 - 5 Miles 3 Pts. > 5 Miles 0 Pt.	1 Pt./20 Wells	Up to 1 Mil. 10 Pts. 1 - 3 Million 8 Pts. 3 - 6 Million 6 Pts. 6 - 9 Million 4 Pts. > 9 Million 2 Pts.	< \$8,000 15 Pts. 8 - \$12,000 12 Pts. Pts. Pts. > \$20,000 3 Pts.	
1	Lookout Acres	Swan Creek	253	6.96	25.0	15	10	5.00	4	3	68.66
2	Kissee Mills	Bull Shoals	300	8.25	25.0	12	10	5.00	2	3	65.25
3	*Powersite North (Silver Creek)	Powersite	314	8.64	23.0	6	10	2.00	2	3	54.64
4	*Table Rock Lake (West)	Table Rock Lake	175	4.81	16.5	5	10	1.55	6	3	46.96
5	*Turkey Creek	Turkey Creek	200	5.50	2.0	15	10	0.90	6	6	45.10
6	Mildred	Bull Shoals	258	7.10	3.5	15	6	0.00	6	6	43.60
7	**Fine	Bull Shoals	81	2.23	8.1	0	10	3.70	8	3	35.03
8	Moore's Bend	Bull Shoals	98	2.70	9.8	0	10	0.10	8	3	33.60
9	Long Beach	Long Beach	66	1.82	6.6	0	10	3.30	8	3	22.72
10	*Oak Grove	Oak Grove	48	1.32	2.5	6	10	0.20	8	3	31.02
11	**Skyline and Haik	Hatchery	78	2.15	7.8	0	10	0.00	8	3	30.95
12	**Friendly/Hum. Hills	Hatchery	22	0.61	2.2	12	4	0.50	8	3	30.31
13	**Pine Ridge P./Fox Run	Emory Creek	11	0.30	1.1	0	10	0.90	8	3	23.30
14	Emory Creek Subdivisions	Emory Creek	50	1.38	6.0	0	3	1.60	4	3	17.98

\* Watershed project  
 \*\* Subdivision project

**PRIORITY MATRIX 2: PROJECTS LESS THAN \$1 MILLION**

Priority	Watershed Project	Watershed	Connections	Population Equivalent of Service Area	Environmental Impact	Package Plant Removal	Proximity to Lakes	Potable Water System Source	Total Costs	Costs per Single Family Connection	Total Points
				0 - 15 Points	0 - 30 Points	0 - 15 Points	0 - 10 Points	0 - 5 Points	0 - 10 Points	0 - 15 Points	0 - 100 Points
				2.75 People Per Connection	Number of Septic Tanks	Total Design Flow of All (in Gallons)	Taneycomo, Table Rock, Bull Shoals (From closest point of)	Private wells	Cost of Project	Costs Include Construction and Engineering	
				1 Pt./100 People	1 Pt./10 Septic Tanks	< 5,000 5 Pts. 5,000 - 10,000 6 Pts. 10,000-15,000 8 Pts. 15,000-20,000 12 Pts. > 20,000 15 Pts.	0 - 1 Mile 10 Pts. 1 - 2 Miles 5 Pts. 2 - 5 Miles 3 Pts. > 5 Miles 0 Pts.	1 Pt./20 Wells	Up to 1 Mil. 10 Pts. 1 - 3 Million 8 Pts. 3 - 6 Million 6 Pts. 6 - 9 Million 4 Pts. > 9 Million 2 Pts.	< \$8,000 15 Pts. 8 - \$12,500 12 Pts. 12 - \$16,000 9 Pts. 16 - \$20,000 6 Pts. > \$20,000 3 Pts.	
1	**Horizon Hills	Roark Creek	212	5.83	0.0	15	3	0.05	10	15	48.8
2	**Damsite	Hatchery	28	0.77	1.5	5	10	0.00	10	3	30.2
3	**Spring Creek South	Cooper Creek	16	0.44	1.6	0	10	0.05	10	6	28.0
4	**River Bluff	Cooper Creek	21	0.58	2.1	0	10	0.00	10	3	25.6
5	**Fall Ck./West Gate Hts	Cooper Creek	18	0.50	1.8	0	10	0.00	10	3	25.3

\* Watershed project  
 \*\* Subdivision project

## 9.0 CONCLUSION AND RECOMMENDATIONS

The purpose of this addendum is to update the Taney County Regional Sewer District Wastewater Master Plan in accordance with recent population growth and recently completed sewer collection and/or treatment projects. This addendum serves as the first update to the original Taney County Wastewater Master Plan.

Since the original Wastewater Master Plan's completion in 2000, fourteen projects have been removed from the priority matrix. Eleven of these projects were removed because they are either in the facility planning stage, in the design phase, currently under construction, or completed. The Froeschle's Lazy Acres Subdivision project only served one connection. Due to the cost for a single connection, it was eliminated from the priority matrix. The Shady Ridge, Center Ridge, and Scott Ives Subdivisions project and the Green Acres and Crabwell Subdivisions project are no longer considered stand alone project and have been combined to form the new Emory Creek Subdivisions project.

This addendum to the Wastewater Master Plan identifies seven new projects that have been added to the priority matrix. These projects include Fine Subdivision, Long Beach, Lookout Acres, Mildred, Moore's Bend, Horizon Hills and Emory Creek Subdivisions. A preliminary cost estimate and layout for each project can be found in Appendix B.

A new priority matrix has been adopted since the matrix outlined in the original Master Plan. The new priority matrix has seven project evaluation areas that can total to a maximum of 100 points. The priority matrix has been divided into two lists, one for large projects and one for smaller projects. The priority matrix has been updated to account for removed projects, added projects, updated layouts, and revised unit prices. The results of the priority matrix are as follows:

*Projects Over 1 Million (ranked from highest priority to lowest):*

1. Lookout Acres
2. Kissee Mills

3. Powersite North
4. Table Rock Lake (West)
5. Turkey Creek
6. Mildred
7. Fine Subdivision
8. Moore's Bend
9. Long Beach
10. Oak Grove
11. Skyline and Haik
12. Friendly Hills and Hummingbird Hills
13. Pine Ridge Place and Fox Run
14. Emory Creek Subdivisions

*Projects Under 1 Million:*

1. Horizon Hills
2. Damsite
3. Spring Creek South
4. River Bluff
5. Fall Creek and West Gate Heights

The Taney County Wastewater Master Plan represents projects over the unincorporated areas of Taney County. The Master Plan is intended to be a living document and should be updated frequently.

## Appendix A

### Appendix A: Wastewater Treatment Facilities by Name

NAME	ID NUMBER	PERMIT BEG	PERMIT END	TRIB	FACILITY TYPE	FLOW	CATEGORY
AMERICA'S BEST CAMPGROUND	MO0115959	12/17/1999	12/16/2004	SWR TRIB ROARK CR	EXAIR BRANSON	0.016	CAMP
BIG BEAR RESORT #2 WWTF	MO0113247	07/14/2005	07/13/2010	SWR TABLE ROCK LAK	EXAIR HOLLISTER	0.019	RESOR
BIG BEAR RESORT & MARINA	MO0102121	7/14/2005	07/13/2010	SWR TRIB TABLE ROC	EXAIR HOLLISTER	0.003	RESOR
BIG CEDAR LODGE WWTF	MO0039578	2/3/2005	02/02/2010	SWR TABLE ROCK LAK	EXAIR RIDGEDALE	0.387	RESOR
BRADLEYVILLE R-1 SCHOOL	MO0109576	4/20/2005	4/19/2010	SWR BEAVER CR	EXAIR BRADLEYVIL	0.004	SKL
BRANSON COMPTON DR WWTP	MO0025241	12/13/2002	12/12/2007	SWR LAKE TANEYCOMO	OXI D BRANSON	5.3	POTW
BRANSON COOPER CR WWTF	MO0116599	04/19/2002	04/18/2007	SWR LAKE TANEYCOMO	EXAIR BRANSON	3.4	POTW
BRANSON CREEK WWTF	MO0123781	08/05/2005	08/04/2010	SWR TRIB HAPPY HOL	EXAIR HOLLISTER	0.05	SUBD
BRANSON EAST APTS WWTF	MO0114294	6/19/2003	06/18/2008	SWR BOOKOUT CR	SEP T KIRBYVILLE	0.00778	SUBD
BRANSON ESTATES APTS WWTF	MO0115312	1/28/2003	1/27/2008	SWR TRIB BEE CREEK	PHOSR BRANSON	0.0041	SUBD
BRANSON VIEW CAMPGRD WWTF	MO0111767	05/07/2003	05/06/2008	SWR FALL CREEK	EXAIR BRANSON	0.00445	CAMP
BRANSON VIEW ESTATES MHP	MO0115550	08/10/2005	08/09/2010	SWR UN TRIB BULL C	EXAIR BRANSON	0.043	MHP
CEDAR CLIFF APARTMENTS	MO0107662	08/09/2002	08/08/2007	SWR TRIB TO BEE CR	EXAIR BRANSON	0.008	SUBD
COUNTRY FARM ESTATES	MO0116297	08/11/2000	8/10/2005	SWR UN TRIB TURKEY	EXAIR HOLLISTER	0.024	SUBD
COZY COVE CONDO COMMUNITY	MO0113093	09/06/2002	09/05/2007	SWR BEE CR	ACT S BRANSON	0.01875	SUBD
DAMSITE SUBDIVISION	MO0096784	5/17/1996	5/16/2001	SWR TRIB LAKE TANE	EXAIR BRANSON	0.0035	SUBD
DEER RUN APARTMENTS WWTP	MO0103497	07/27/2001	07/26/2006	SWR TRIB BROOKOUT	EXAIR KIRBYVILLE	0.005	APTS
EAST TABLE ROCK LODGE/MAR	MO0122165	12/04/2003	12/3/2008	SWR TRIB TABLE ROC	SEP T RIDGEDALE	0.00618	MOTEL
EDGEWATER BEACH RESORT WW	MO0103381	12/19/2003	12/18/2008	SWR LAKE TANEYCOMO	EXAIR FORSYTH	0.015	MHP
EMERALD POINTE WWTF	MO0116394	12/1/2000	11/30/2005	SWR TABLE ROCK LAK	EXAIR BRANSON	0.078	SUBD
FOREST PARK ESTATES	MO0114341	02/22/2002	02/21/2007	SWR TRIB ROARK CRE	SEP T BRANSON	0.009	CAMP
FORSYTH RES. CARE CENTER	MO0082228	2/14/1997	02/13/2002	SWR LAKE TANEYCOMO	SEP T FORSYTH	0.003	HEAL
FORSYTH WWTF	MO0113034	4/5/2002	04/04/2007	SWR BULL SHOAL'S L	OXI D FORSYTH	0.3	POTW
GERTH CAMPER PARK	MO0125466	08/25/2000	08/24/2005	SWR TRIB LAKE TANE	EXAIR BRANSON	0.005	CAMP
HIDDEN RIDGE ESTATES	MO0118630	10/5/2001	10/4/2006	SWR TRIB E FK ROAR	SEP T BRANSON	0.022	MHP
HIGHLANDS WWTF	MO0115037	6/15/2001	06/14/2006	SWR TRIB LAKE TANE	EXAIR BRANSON	0.058	SUBD
HILLBILLY COUNTRY MOTEL	MO0099414	4/22/2005	04/21/2010	SWR TRIB LAKE TANE	EXAIR BRANSON	0.002	MOTEL
HOLLISTER WWTF	MO0116041	01/11/2002	01/10/2007	SWR TURKEY CR	ACT S HOLLISTER	3.2	POTW
JUNCTION LAUNDRY	MO0033812	10/4/1991	10/03/1996	SWR TR BULL SHOALS	SEP T FORSYTH	0.006	SHOP
LANDMARC ESTATES WWTF	MO0118796	9/6/2002	09/05/2007	SWR TRIB TABLE ROC	SEP T RIDGEDALE	0.0015	SUBD
LIFE ENHANCEMENT-BRANSON	MO0125741	10/18/2002	10/17/2007	SWR TRIB GOODNIGHT	SAN F WALNUT SHA	0.002	HOME
MDNR- TABLE ROCK LK ST PK	MO0034878	11/26/2003	11/25/2008	SWR TRIB TO LAKE T	3C LA BRANSON	0.01274	PARK
MEADOW RIDGE SUBD	MO0114286	6/18/1999	06/17/2004	SWR TRIB ROARK CRE	EXAIR BRANSON	0.09	SUBD
OAK GROVE TRAILER PARK	MO0096857	03/22/2002	03/21/2007	SWR LAKE TANEYCOMO	EXAIR FORSYTH	0.0075	MHP
OAK HILLS CAMPGROUND	MO0115754	06/23/1995	06/22/2000	SWR S EMORY CR	EXAIR BRANSON	0.011	CAMP
OAK KNOLL APARTMENTS	MO0103471	03/08/2002	03/07/2007	SWR TRIB BEE CREEK	EXAIR BRANSON	0.003	APTS
OLD SHEPHERD'S CAMPGROUND	MO0095630	01/14/2000	1/13/2005	SWR TRIB FALL CR	EXAIR BRANSON	0.02	CAMP
OREMUS OZARK VENTURS WWTF	MO0120235	05/07/2003	05/06/2008	SWR TRIB BULL SHOAL	EXAIR FORSYTH	0.06682	SUBD
OZARK'S PRIME RESORT	MO0102849	01/10/2003	01/09/2008	SWR TRIB LAKE TANE	EXAIR BRANSON	0.02064	RESOR
PARADISE POINT RESORT	MO0115941	06/08/2005	6/7/2010	SWR TRIB TABLE ROC	EXAIR HOLLISTER	0.032	SUBD
PARADISE POINTE WWTF	MO0124176	01/26/2001	01/25/2006	SWR TABLE ROCK LAK	SAN F RIDGEDALE	0.002	SUBD

## Appendix A: Wastewater Treatment Facilities by Name

PINE VALLEY RESORT WWTF	MO0112895	09/06/2002	09/05/2007	SWR BEE CREEK	ACT S BRANSON	0.00516	RESOR
REDBUD APARTMENTS WWTF	MO0115053	12/31/2003	12/30/2008	SWR TRIB BOOKOUT B	SEP T KIRBYVILLE	0.0075	SUBD
ROCKAWAY BEACH WWTF	MO0108162	12/15/2000	12/14/2005	SWR LAKE TANEYCOMO	OXI D ROCKAWAY B	0.6	POTW
ROLLING MEADOWS MHP	MO0108685	06/14/2002	06/13/2007	SWR TRIB SWAN CREE	SEP T FORSYTH	0.024	MHP
RUSTIC ACRES RESORT WWTF	MO0108154	07/16/2004	07/15/2009	SWR LAKE TANEYCOMO	EXAIR KIRBYVILLE	0.007	RESOR
SAVANNAH HEIGHTS IND WWTF	MO0116564	01/20/2005	01/19/2010	SWR TRIB LAKE TANE	EXAIR BRANSON	0.053	SUBD
SHEPHERD OF THE HILLS FRM	MO0097373	12/27/2002	12/26/2007	SWR TRIB ROARK CR	EXAIR BRANSON	0.01718	PARK
SKYVIEW HEIGHTS SUBDIVISI	MO0114308	09/03/2003	09/02/2008	SWR BOOKOUT BR	SEP T KIRBYVILLE	0.0075	SUBD
SMOKE TREE HILLS SUBDIVIS	MO0114758	08/10/2005	8/9/2010	SWR UN TRIB BOOKOU	SEP T KIRBYVILLE	0.02711	SUBD
SPRING CREEK MHP	MO0083712	10/05/2001	10/4/2006	SWR TRIB COOPER CR	SEP T BRANSON	0.003	SUBD
STONEBRIDGE VILLAGE WWTF	MO0115151	8/10/2005	08/09/2010	SWR W FORK ROARK C	ACT S BRANSON	0.1	SUBD
STONECROFT MINISTRIES CON	MO0099686	1/15/2004	01/14/2009	SWR TRIB TABLE ROC	EXAIR HOLLISTER	0.022	CAMP
SUMMIT RIDGE MHP WWTF	MO0105775	09/16/2003	09/15/2008	SWR TRIB SILVER CR	SEP T FORSYTH	0.00975	MHP
SUNFLOWER ESTATES MHP	MO0117315	12/29/2000	12/28/2005	SWR TRIB BEAVER CR	SEP T KISSEE MIL	0.009	SUBD
TANEYCOMO HIGHLNDS RV VIL	MO0117811	02/22/2002	02/21/2007	SWR LAKE TANEYCOMO	SEP T BRANSON	0.005	CAMP
TANEYVILLE WWTP	MO0124702	1/26/2001	01/25/2006	SWR TRIB SWAN CR Y	OXI D TANEYVILLE	0.086	POTW
THE LEDGES/ZART WWTF	MO0116173	07/28/2005	07/27/2010	SWR TRIB BEAR CR	EXAIR WALNUT SHA	0.022	SUBD
TOP OF THE ROCK GOLF COUR	MO0117536	10/05/2001	10/04/2006	SWR TRIB CLEVINGER	EXAIR RIDGEDALE	0.004	CLUB
TRI-LAKES SIGMA HOUSE	MO0113182	9/8/2000	09/07/2005	SWR TRIB LAKE TAME	EXAIR BRANSON	0.003	HOME
TWIN ISLAND RESORT WWTF	MO0116238	03/12/2004	03/11/2009	SWR TRIB LONG CR A	SAN F RIDGEDALE	0.00312	RESOR
USCOE- LONG CREEK PARK	MO0097896	09/07/2001	09/06/2006	SWR TABLE ROCK LAK	SEP T BRANSON	0.003	PARK
USCOE- TABLE ROCK DAM AND	MO0030112	05/21/2003	5/20/2008	SWR LAKE TANEYCOMO	ACT S BRANSON	0.002	PARK
VILLAGE OF LAKEWAY	MO0109479	03/22/2002	03/21/2007	SWR TR BULL SHOALS	SEP T ROCKAWAY B	0.014	SUBD
VILLAS AT LONGCREEK	MO0127191	04/19/2002	4/18/2007	SWR TRIB TABLE ROC	SEP T RIDGEDALE	0.00194	SUBD
WATERSCAPE WWTF	MO0128147	6/10/2004	6/9/2009	SWR TABLE ROCK LAK	SAN F RIDGEDALE	0.00365	SUBD
WEST TABLE ROCK LODGE AND	MO0121819	12/04/2003	12/3/2008	SWR TRIB TABLE ROC	SEP T RIDGEDALE	0.00385	RESOR
WHITETAIL CROSS SUBD 2ND	MO0124923	03/09/2001	03/08/2006	SWR TRIB BEAR CR	SAN F WALNUT SHA	0.013	SUBD
WILLIAMS LANDING SUBDIVIS	MO0114006	7/27/2001	07/26/2006	SWR TABLE ROCK LAK	EXAIR BLUE EYE	0.009	SUBD

### FACILITY TYPE:

ACT S = Activated Sludge

EXAIR = Extended Aeration

FILTR = Filtration

OXI D = Oxidation Ditch

PHOSR = Phosphorus

SAN F = Sand Filter

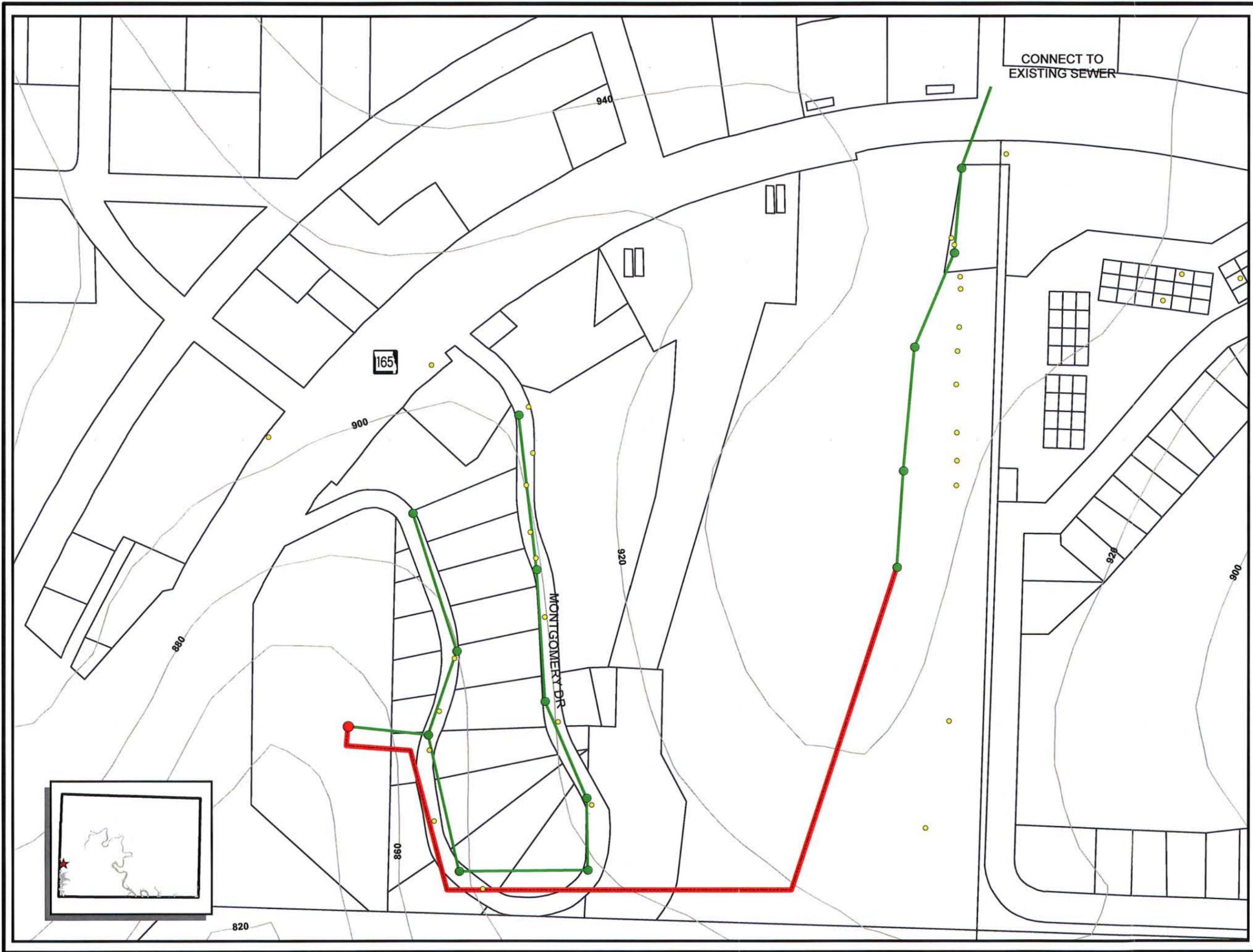
SEP T = Septic Tank

STO R = Stormwater Runoff

## Appendix B

**DAMSITE SUBDIVISION**  
**PRELIMINARY COST ESTIMATE**

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	4" Gravity PVC Service Lines	LF	700	\$ 50.00	\$ 35,000.00
2	8" Gravity PVC Sewer	LF	2,560	\$ 85.00	\$ 217,600.00
3	Manholes	EA	16	\$ 2,050.00	\$ 32,800.00
4	Wyes and Risers	EA	28	\$ 150.00	\$ 4,200.00
5	4" PVC Force Main	LF	1,515	\$ 57.00	\$ 86,355.00
7	Air Release Assembly	EA	1	\$ 4,500.00	\$ 4,500.00
8	Highway Bore	LF	110	\$ 250.00	\$ 27,500.00
9	Road Restoration	SY	1,185	\$ 9.00	\$ 10,665.00
10	Pump Station No. 1	LS	1	\$ 90,000.00	\$ 90,000.00
	<b>SUBTOTAL</b>				<b>\$ 508,620.00</b>
	Land and Easements			10.00%	\$ 50,862.00
	Legal/Administration			6.00%	\$ 30,517.20
	Engineering Design			11.44%	\$ 58,168.22
	Engineering During Const./Insp.			5.00%	\$ 25,431.00
	<b>SUBTOTAL</b>				<b>\$ 673,598.42</b>
	Contingency (10%)				\$ 67,359.84
	<b>TOTAL</b>				<b>\$ 740,958.26</b>
	<b>Cost per Initial Connection</b>	<b>28</b>	<b>Connections</b>		<b>\$ 26,462.80</b>

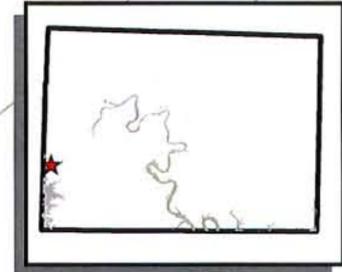


# DAMSITE SUBDIVISION

-  PROPOSED FORCE MAIN
-  PROPOSED GRAVITY LINE
-  CONTOUR LINE
-  PARCEL BOUNDARY
-  PROPOSED MANHOLE
-  PROPOSED PUMP STATION
-  911 ADDRESS
-  PROPOSED WASTEWATER TREATMENT PLANT

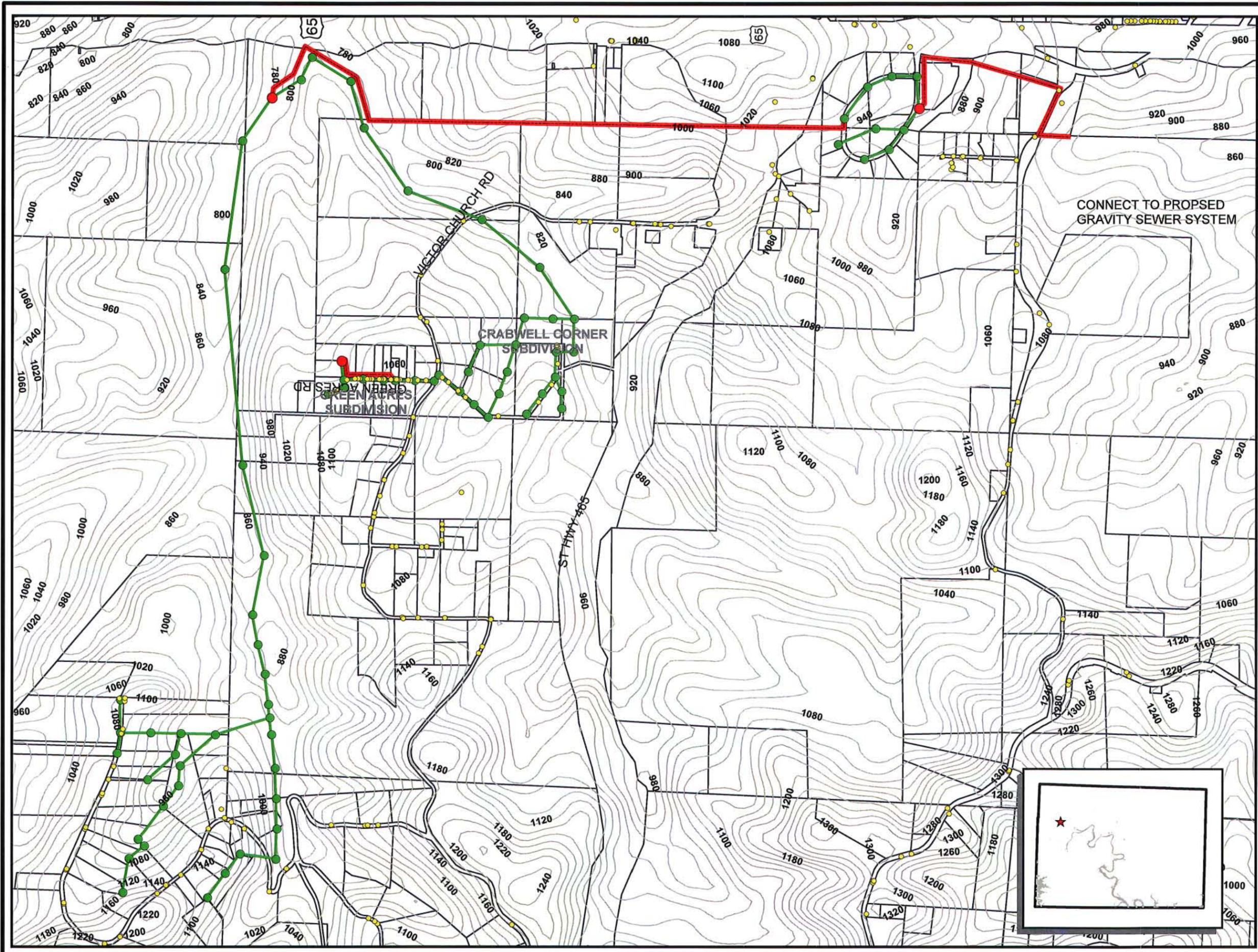


1 inch equals 150 feet



**EMORY CREEK SUBDIVISIONS**  
**PRELIMINARY COST ESTIMATE**

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	4" Gravity PVC Service Lines	LF	1,250	\$ 50.00	\$ 62,500.00
2	8" Gravity PVC Sewer	LF	16,400	\$ 85.00	\$ 1,394,000.00
3	12" Gravity PVC Sewer	LF	5,900	\$ 100.00	\$ 590,000.00
4	18" Gravity PVC Sewer	LF	12,250	\$ 125.00	\$ 1,531,250.00
5	Manholes	EA	155	\$ 2,050.00	\$ 317,750.00
6	Wyes and Risers	EA	50	\$ 150.00	\$ 7,500.00
7	4" PVC Force Main	LF	950	\$ 57.00	\$ 54,150.00
8	10" PVC Force Main	LF	12,400	\$ 75.00	\$ 930,000.00
9	Air Release Assembly	EA	7	\$ 4,500.00	\$ 31,500.00
10	Concrete Encasement	LF	1,400	\$ 100.00	\$ 140,000.00
11	Highway Bore	LF	1,100	\$ 250.00	\$ 275,000.00
12	Road Restoration	SY	8,500	\$ 9.00	\$ 76,500.00
13	Pump Station No. 1	EA	1	\$ 300,000.00	\$ 300,000.00
14	Pump Station No. 2	EA	1	\$ 300,000.00	\$ 300,000.00
15	Pump Station No. 3	EA	1	\$ 70,000.00	\$ 70,000.00
<b>SUBTOTAL</b>					<b>\$ 6,080,150.00</b>
	Land and Easements			10.00%	\$ 608,015.00
	Legal/Administration			6.00%	\$ 364,809.00
	Engineering Design			7.97%	\$ 484,649.04
	Engineering During Const./Insp.			5.00%	\$ 304,007.50
<b>SUBTOTAL</b>					<b>\$ 7,841,630.54</b>
	Contingency (10%)				\$ 784,163.05
<b>TOTAL</b>					<b>\$ 8,625,793.60</b>
<b>Cost per Initial Connection</b>		<b>50</b>	<b>Connections</b>		<b>\$ 172,515.87</b>

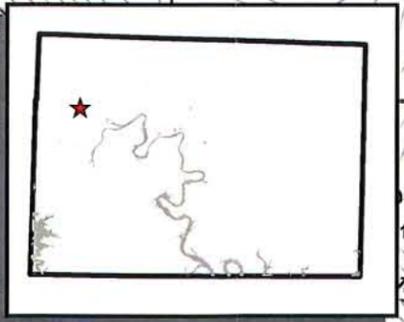


# EMORY CREEK SUBDIVISIONS

-  PROPOSED FORCE MAIN
-  PROPOSED GRAVITY LINE
-  CONTOUR LINE
-  PARCEL BOUNDARY
-  PROPOSED MANHOLE
-  PROPOSED PUMP STATION
-  911 ADDRESS
-  PROPOSED WASTEWATER TREATMENT PLANT



1 inch equals 1,200 feet

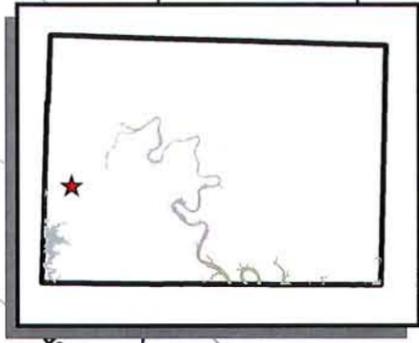
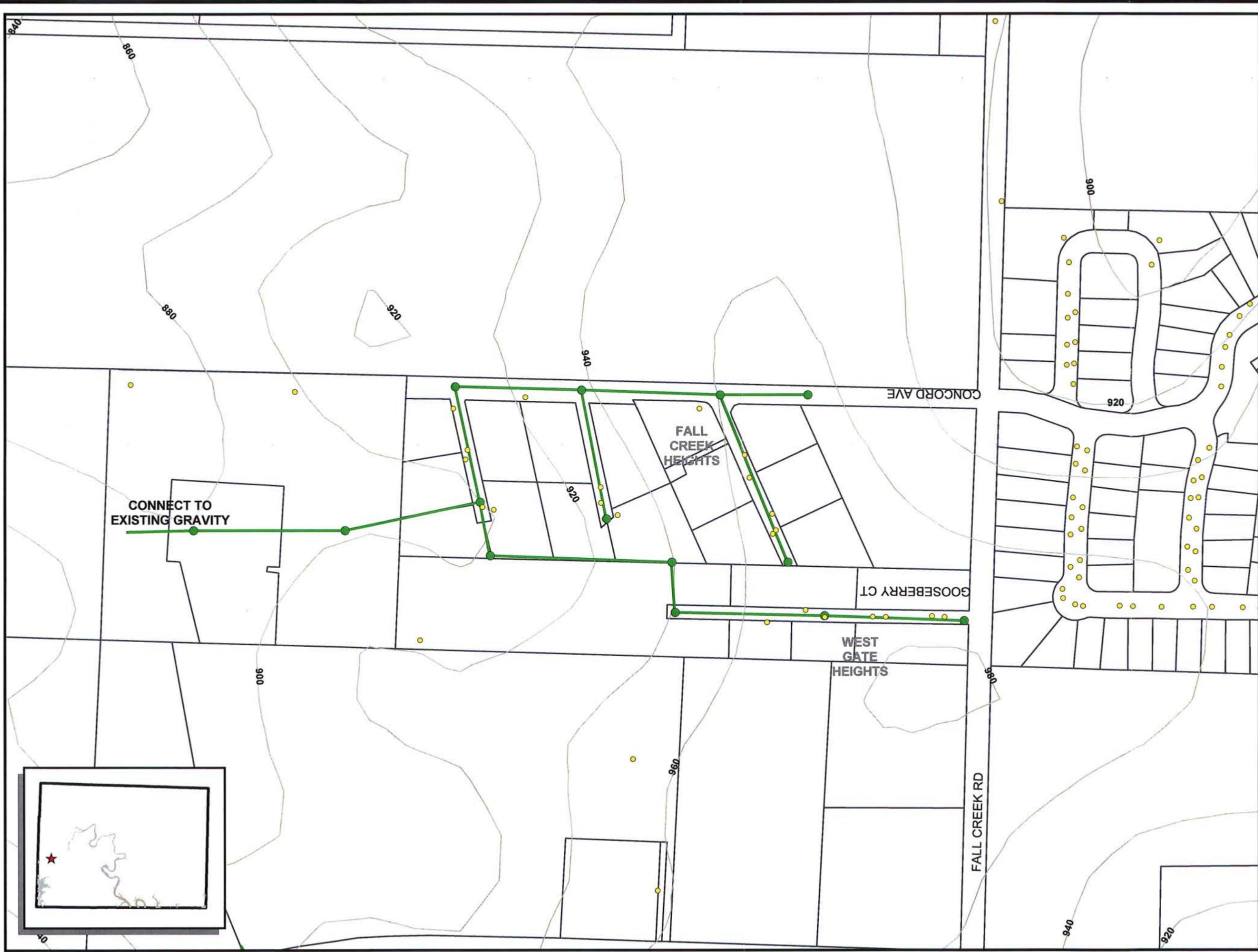


# FALL CREEK/ WEST GATE HEIGHTS

-  PROPOSED FORCE MAIN
-  PROPOSED GRAVITY LINE
-  CONTOUR LINE
-  PARCEL BOUNDARY
-  PROPOSED MANHOLE
-  PROPOSED PUMP STATION
-  911 ADDRESS
-  PROPOSED WASTEWATER TREATMENT PLANT



1 inch equals 200 feet



# FINE SUBDIVISION

- PROPOSED FORCE MAIN
- PROPOSED GRAVITY LINE
- CONTOUR LINE
- PARCEL BOUNDARY
- PROPOSED MANHOLE
- PROPOSED PUMP STATION
- 911 ADDRESS
- PROPOSED WASTEWATER TREATMENT PLANT



1 inch equals 300 feet

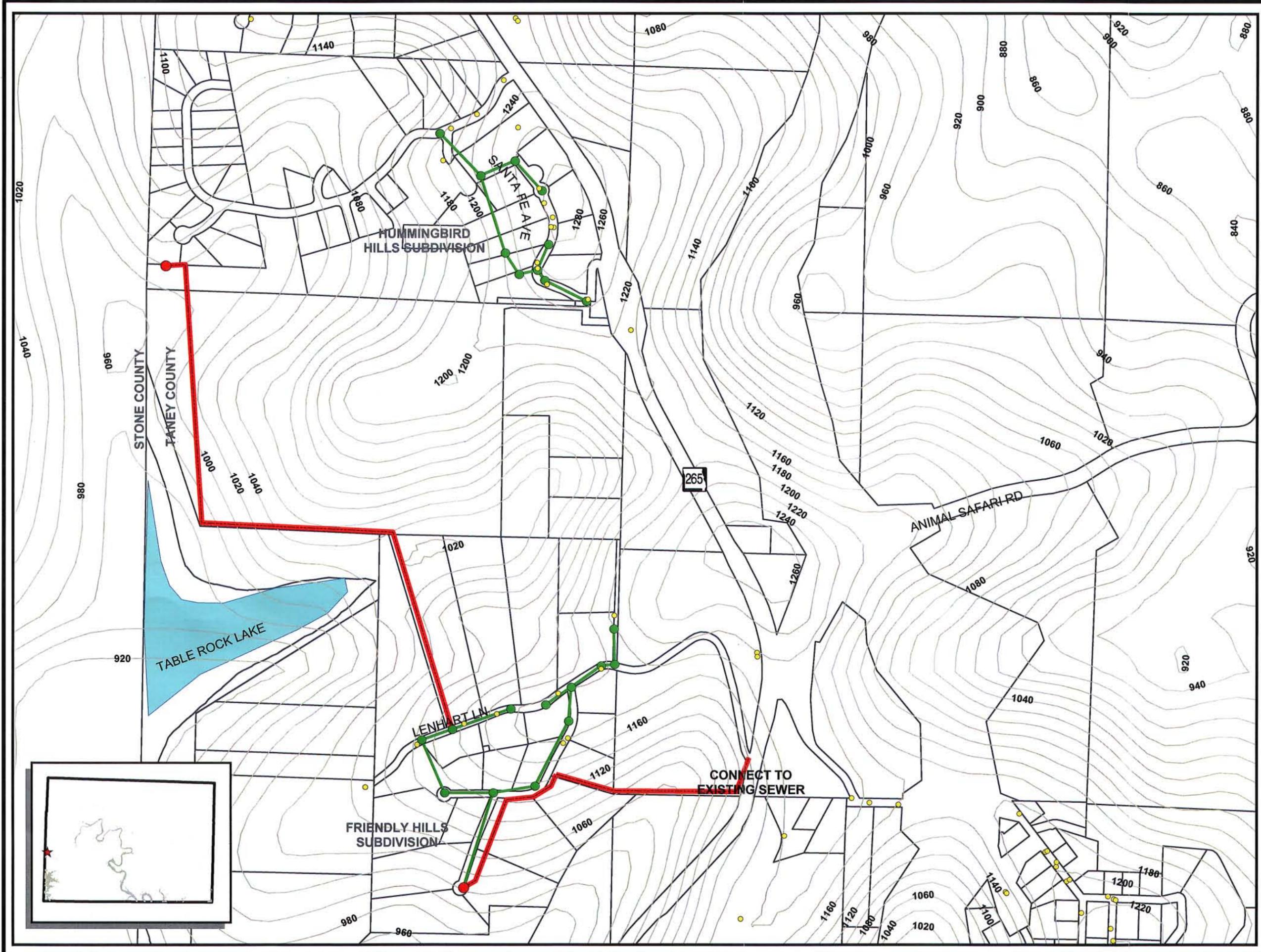


# FRIENDLY & HUMMINGBIRD HILLS

-  PROPOSED FORCE MAIN
-  PROPOSED GRAVITY LINE
-  CONTOUR LINE
-  PARCEL BOUNDARY
-  PROPOSED MANHOLE
-  PROPOSED PUMP STATION
-  911 ADDRESS
-  PROPOSED WASTEWATER TREATMENT PLANT



1 inch equals 500 feet



**HORIZON HILLS SUBDIVISION**  
**PRELIMINARY COST ESTIMATE**

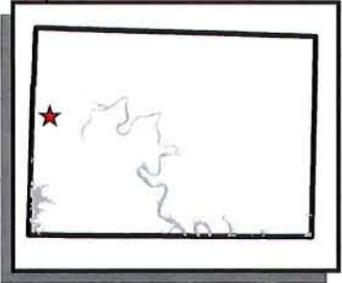
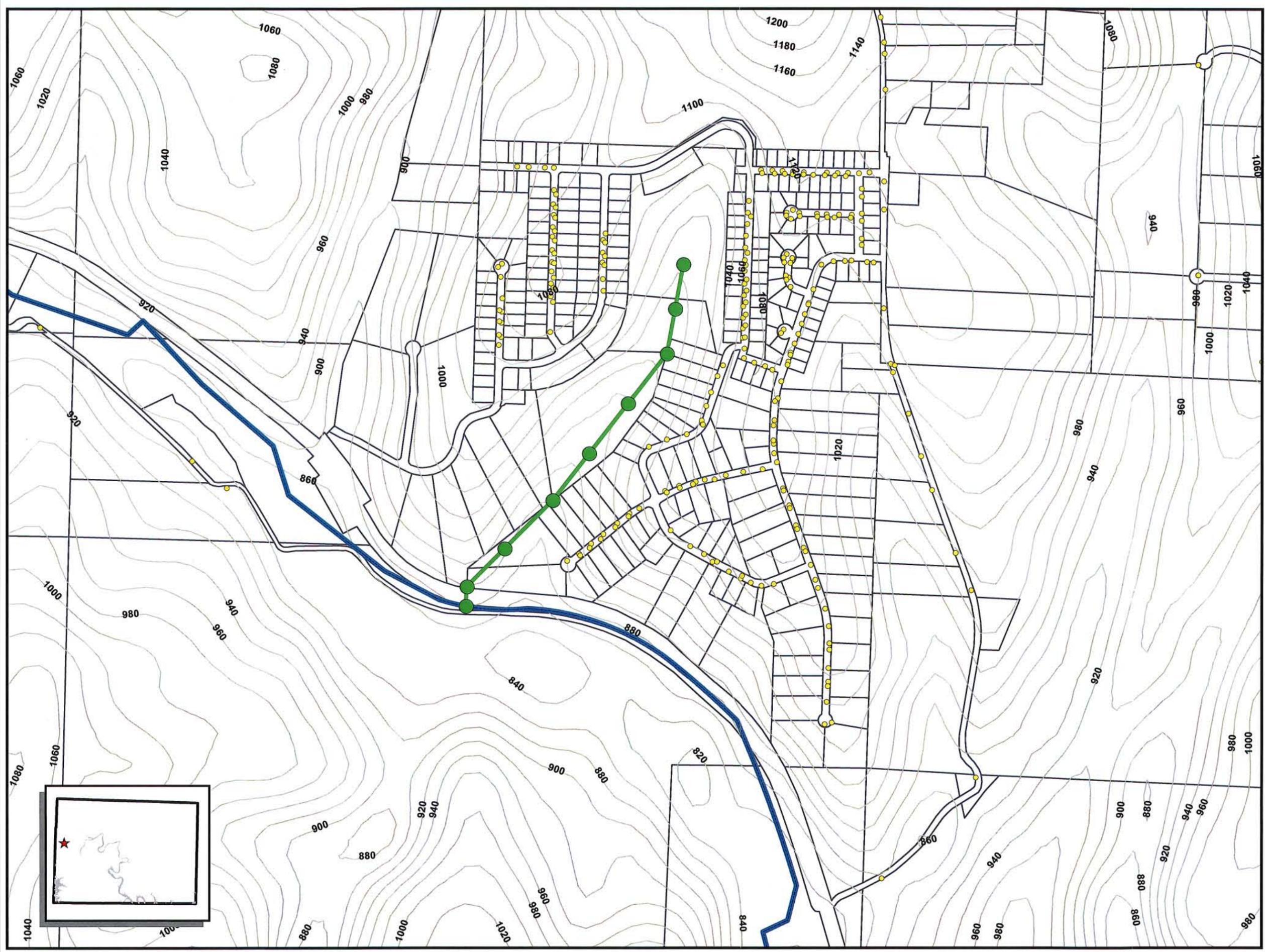
NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	8" Gravity PVC Sewer	LF	2,740	\$ 85.00	\$ 232,900.00
2	Manholes	EA	9	\$ 2,050.00	\$ 18,450.00
3	Road Restoration	SY	100	\$ 9.00	\$ 900.00
4	Railroad Bore	LF	70	\$ 250.00	\$ 17,500.00
5	Concrete Encasement	LF	70	\$ 100.00	\$ 7,000.00
<b>SUBTOTAL</b>					<b>\$ 252,250.00</b>
	Land and Easements			10.00%	\$ 25,225.00
	Legal/Administration			6.00%	\$ 15,135.00
	Engineering Design			12.67%	\$ 31,947.53
	Engineering During Const./Insp.			5.00%	\$ 12,612.50
<b>SUBTOTAL</b>					<b>\$ 337,170.03</b>
	Contingency (10%)				\$ 33,717.00
<b>TOTAL</b>					<b>\$ 370,887.04</b>
<b>Cost per Initial Connection</b>		<b>212</b>	<b>Connections</b>		<b>\$ 1,749.47</b>

# HORIZON HILLS SUBDIVISION

-  ROARK CREEK GRAVITY TRUNK LINE
-  PROPOSED GRAVITY LINE
-  CONTOUR LINE
-  PARCEL BOUNDARY
-  PROPOSED MANHOLE
-  911 ADDRESS



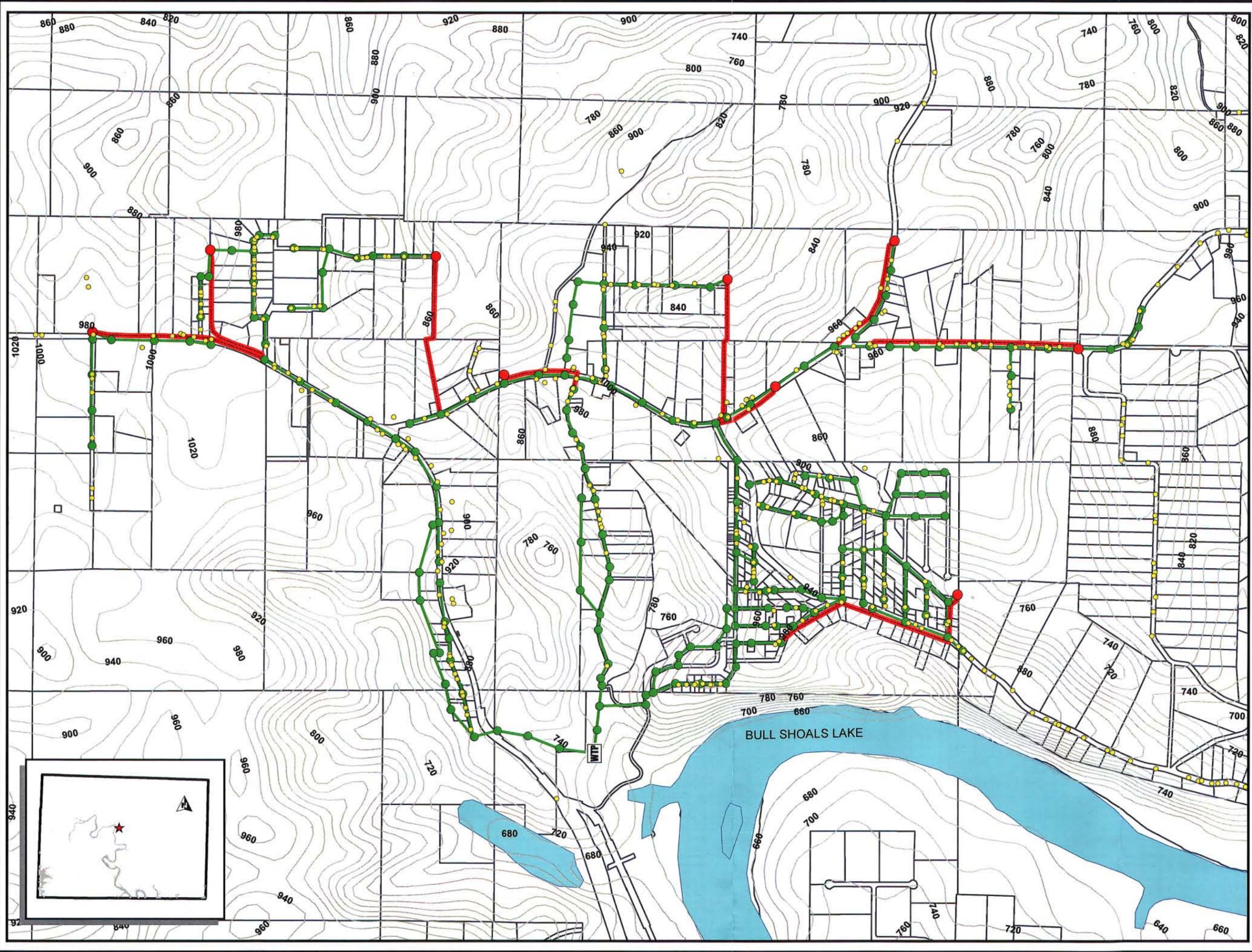
1 inch equals 600 feet



**KISSEE MILLS**  
**PRELIMINARY COST ESTIMATE**

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	4" Gravity PVC Service Lines	LF	8,400	\$ 50.00	\$ 420,000.00
2	8" Gravity PVC Sewer	LF	60,000	\$ 85.00	\$ 5,100,000.00
3	Manholes	EA	205	\$ 2,050.00	\$ 420,250.00
4	Wyes and Risers	EA	280	\$ 150.00	\$ 42,000.00
5	1-1/2" PVC Forcemain	LF	2,700	\$ 40.00	\$ 108,000.00
6	2" PVC Forcemain	LF	4,900	\$ 45.00	\$ 220,500.00
7	3" PVC Forcemain	LF	3,900	\$ 53.00	\$ 206,700.00
8	4" PVC Forcemain	LF	4,300	\$ 57.00	\$ 245,100.00
9	Highway Bore	LF	300	\$ 250.00	\$ 75,000.00
10	Road Restoration	SY	40,000	\$ 9.00	\$ 360,000.00
11	Pump Station No. 1	LS	1	\$ 60,000.00	\$ 60,000.00
12	Pump Station No. 2	LS	1	\$ 75,000.00	\$ 75,000.00
13	Pump Station No. 3	LS	1	\$ 110,000.00	\$ 110,000.00
14	Pump Station No. 4	LS	1	\$ 95,000.00	\$ 95,000.00
15	Pump Station No. 5	LS	1	\$ 120,000.00	\$ 120,000.00
16	Pump Station No. 6	LS	1	\$ 100,000.00	\$ 100,000.00
17	Pump Station No. 7	LS	1	\$ 80,000.00	\$ 80,000.00
18	Pump Station No. 8	LS	1	\$ 80,000.00	\$ 80,000.00
19	Pump Station No. 9	LS	1	\$ 125,000.00	\$ 125,000.00
20	WWTF	GPD	120,000	\$ 20.00	\$ 2,400,000.00
<b>SUBTOTAL</b>					<b>\$ 10,442,550.00</b>
	Land and Easements			10.00%	\$ 1,044,255.00
	Legal/Administration			6.00%	\$ 626,553.00
	Engineering Design			7.37%	\$ 769,383.39
	Engineering During Const./Insp.			5.00%	\$ 522,127.50
<b>SUBTOTAL</b>					<b>\$ 13,404,868.89</b>
	Contingency (10%)				\$ 1,340,486.89
<b>TOTAL</b>					<b>\$ 14,745,355.78</b>
<b>Cost per Initial Connection</b>		<b>300</b>	<b>Connections</b>		<b>\$ 49,151.19</b>

# KISSEE MILLS



-  PROPOSED FORCE MAIN
-  PROPOSED GRAVITY LINE
-  CONTOUR LINE
-  PARCEL BOUNDARY
-  PROPOSED MANHOLE
-  PROPOSED PUMP STATION
-  911 ADDRESS
-  PROPOSED WASTEWATER TREATMENT PLANT



1 inch equals 1,000 feet



**LONG BEACH**  
**PRELIMINARY COST ESTIMATE**

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	4" Gravity PVC Service Lines	LF	1,650	\$ 50.00	\$ 82,500.00
2	8" Gravity PVC Sewer	LF	10,255	\$ 85.00	\$ 871,675.00
3	Manholes	EA	40	\$ 2,050.00	\$ 82,000.00
4	Wyes and Risers	EA	66	\$ 150.00	\$ 9,900.00
5	Road Restoration	SY	6,500	\$ 9.00	\$ 58,500.00
6	WWTF	GPD	14,718	\$ 20.00	\$ 294,360.00
	<b>SUBTOTAL</b>				<b>\$ 1,398,935.00</b>
	Land and Easements			10.00%	\$ 139,893.50
	Legal/Administration			6.00%	\$ 83,936.10
	Engineering Design			9.87%	\$ 138,088.21
	Engineering During Const./Insp.			5.00%	\$ 69,946.75
	<b>SUBTOTAL</b>				<b>\$ 1,830,799.56</b>
	Contingency (10%)				\$ 183,079.96
	<b>TOTAL</b>				<b>\$ 2,013,879.51</b>
	<b>Cost per Initial Connection</b>	<b>66</b>	<b>Connections</b>		<b>\$ 30,513.33</b>

# LONG BEACH



-  PROPOSED FORCE MAIN
-  PROPOSED GRAVITY LINE
-  CONTOUR LINE
-  PARCEL BOUNDARY
-  PROPOSED MANHOLE
-  PROPOSED PUMP STATION
-  911 ADDRESS
-  PROPOSED WASTEWATER TREATMENT PLANT

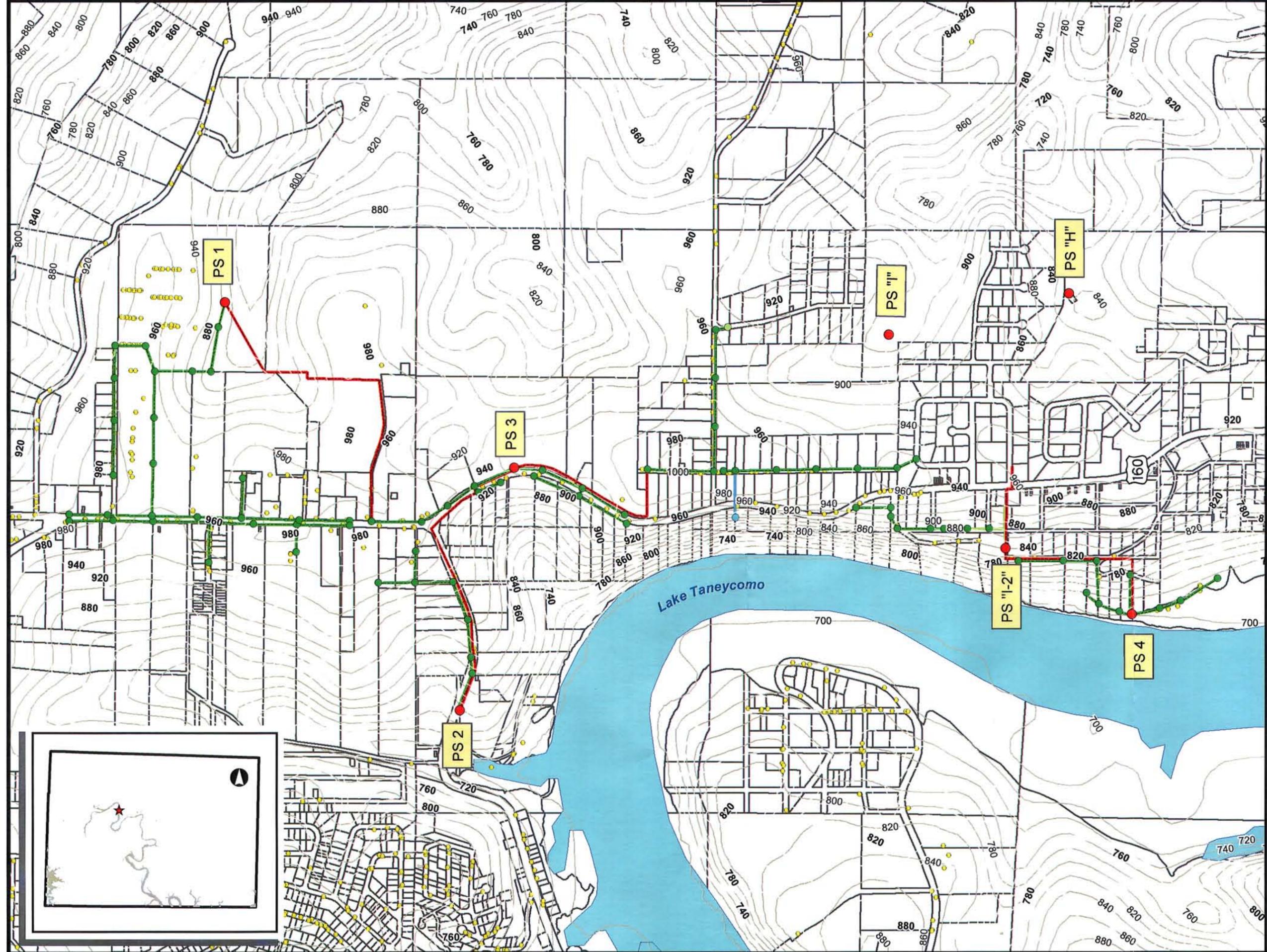


1 inch equals 500 feet



**LOOKOUT ACRES**  
**PRELIMINARY COST ESTIMATE**

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	4" Gravity PVC Service Lines	LF	8,575	\$ 50.00	\$ 428,750.00
2	8" Gravity PVC Sewer	LF	23,200	\$ 85.00	\$ 1,972,000.00
3	Manholes	EA	84	\$ 2,050.00	\$ 172,200.00
4	Wyes and Risers	EA	233	\$ 150.00	\$ 34,950.00
5	1-1/4" PVC Force main/Low Pressure Line	LF	400	\$ 40.00	\$ 16,000.00
6	2.0" PVC Force Main	LF	3,040	\$ 45.00	\$ 136,800.00
7	3.0" PVC Force Main	LF	2,400	\$ 53.00	\$ 127,200.00
8	4.0" PVC Force Main	LF	701	\$ 57.00	\$ 39,957.00
9	6.0" PVC Force Main	LF	4,700	\$ 62.00	\$ 291,400.00
10	Air Release Assembly	EA	4	\$ 4,500.00	\$ 18,000.00
11	Highway Bore	LF	210	\$ 250.00	\$ 52,500.00
12	Road Restoration	SY	20,000	\$ 9.00	\$ 180,000.00
13	Pump Station #1	EA	1	\$ 144,000.00	\$ 144,000.00
14	Pump Station #2	EA	1	\$ 115,000.00	\$ 115,000.00
15	Pump Station #3	EA	1	\$ 126,500.00	\$ 126,500.00
16	Pump Station #4	EA	1	\$ 115,000.00	\$ 115,000.00
17	Pump Station "I" Upgrade	LS	1	\$ 102,000.00	\$ 102,000.00
18	Pump Station "I-2" Upgrade	LS	1	\$ 70,000.00	\$ 70,000.00
19	Pump Station "H" Upgrade	LS	1	\$ 99,500.00	\$ 99,500.00
	<b>SUBTOTAL</b>				<b>\$ 4,241,757.00</b>
	Land and Easements	10.00%			\$ 424,175.70
	Legal/Administration	6.00%			\$ 254,505.42
	Engineering Design	8.40%			\$ 356,295.61
	Engineering During Const./Insp.	5.00%			\$ 212,087.85
	<b>SUBTOTAL</b>				<b>\$ 5,488,821.58</b>
	Contingency (10%)				\$ 548,882.16
	<b>TOTAL</b>				<b>\$ 6,037,703.74</b>
	<b>Cost per Initial Connection</b>	<b>253</b>	<b>Connections</b>		<b>\$ 23,864.44</b>



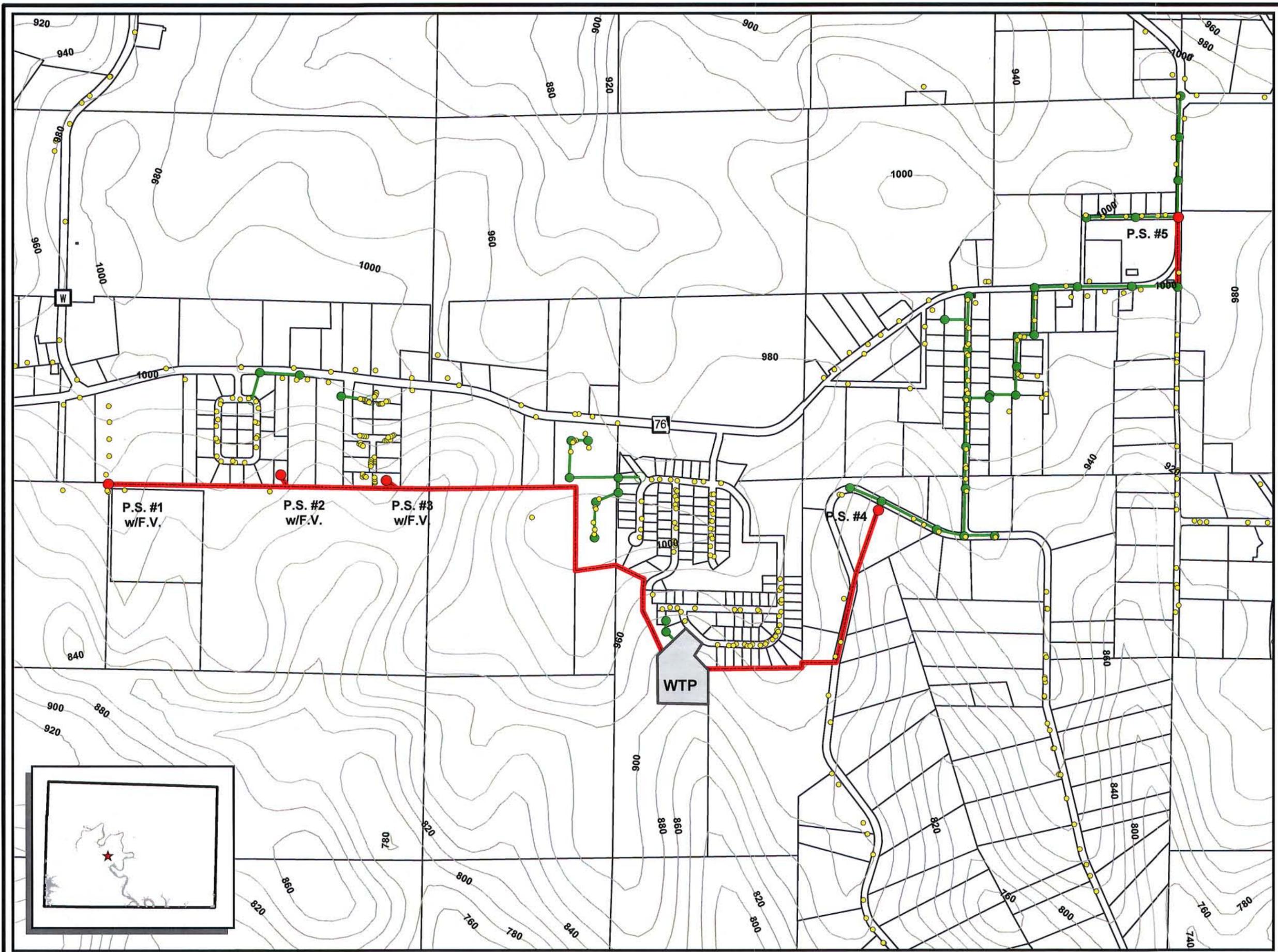
**LOOKOUT ACRES  
COLLECTION  
SYSTEM**

- FORCE MAIN
- GRAVITY LINE
- EXISTING GRAVITY LINE
- LOW PRESSURE LINE
- PARCEL BOUNDARY
- CONTOUR LINE
- PUMP STATION
- GRINDER PUMP
- MANHOLE
- EXISTING MANHOLE
- 911 ADDRESS



1 inch equals 800 feet





# MILDRED

-  PROPOSED FORCE MAIN
-  PROPOSED GRAVITY LINE
-  CONTOUR LINE
-  PARCEL BOUNDARY
-  PROPOSED MANHOLE
-  PROPOSED PUMP STATION
-  911 ADDRESS
-  PROPOSED WASTEWATER TREATMENT PLANT

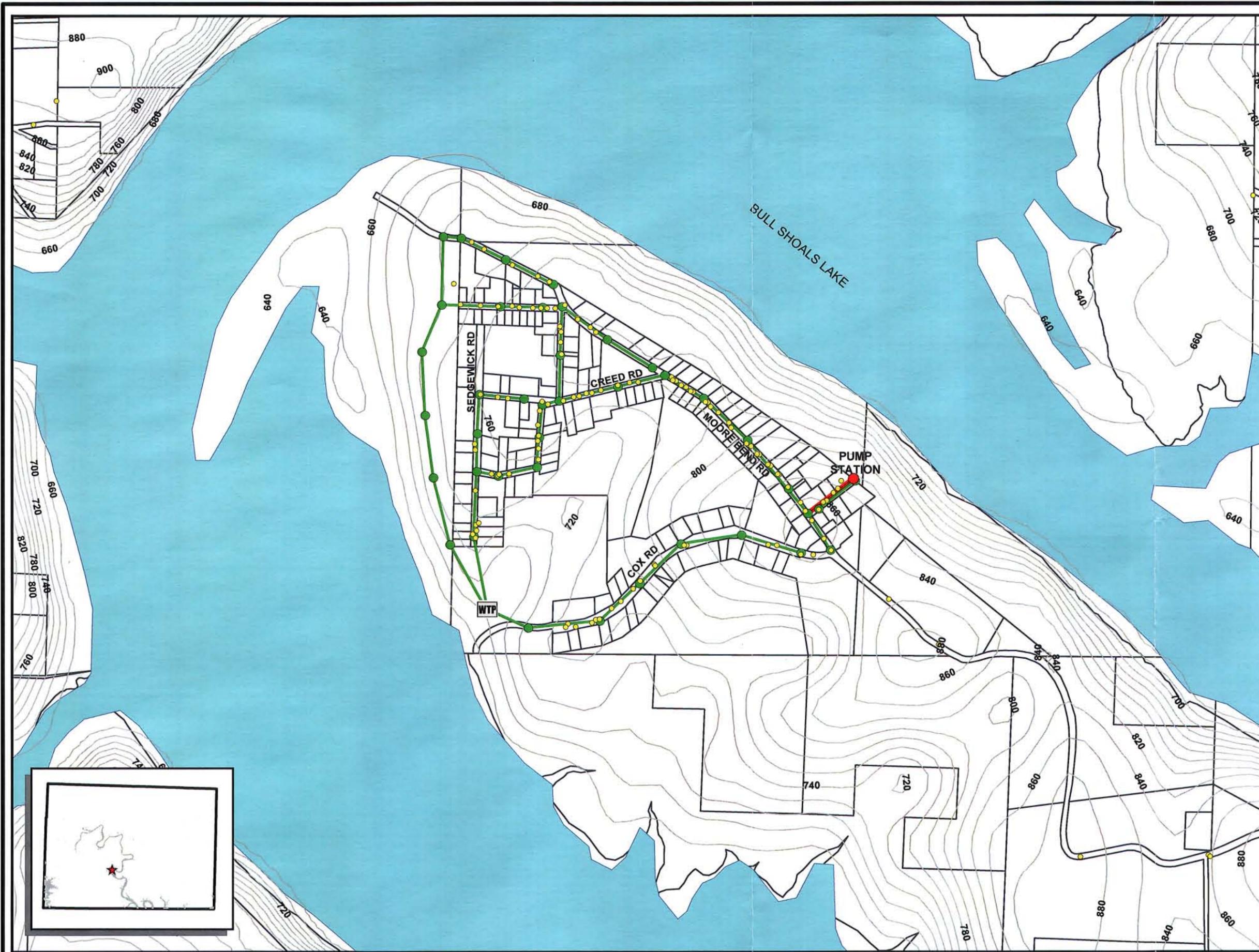


1 inch equals 654 feet



**MOORE'S BEND**  
**PRELIMINARY COST ESTIMATE**

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	4" Gravity PVC Service Lines	LF	2,450	\$ 50.00	\$ 122,500.00
2	8" Gravity PVC Sewer	LF	12,610	\$ 85.00	\$ 1,071,850.00
3	Manholes	EA	40	\$ 2,050.00	\$ 82,000.00
4	Wyes and Risers	EA	98	\$ 150.00	\$ 14,700.00
5	1 1/2" PVC Forcemain	LF	400	\$ 42.50	\$ 17,000.00
6	Road Restoration	SY	8,000	\$ 9.00	\$ 72,000.00
7	Pump Station No. 1	LS	1	\$ 40,000.00	\$ 40,000.00
8	WWTF	GPD	21,854	\$ 20.00	\$ 437,080.00
<b>SUBTOTAL</b>					<b>\$ 1,857,130.00</b>
	Land and Easements			10.00%	\$ 185,713.00
	Legal/Administration			6.00%	\$ 111,427.80
	Engineering Design			9.47%	\$ 175,913.17
	Engineering During Const./Insp.			5.00%	\$ 92,856.50
<b>SUBTOTAL</b>					<b>\$ 2,423,040.47</b>
	Contingency (10%)				\$ 242,304.05
<b>TOTAL</b>					<b>\$ 2,665,344.51</b>
	<b>Cost per Initial Connection</b>	<b>98</b>	<b>Connections</b>		<b>\$ 27,197.39</b>



# MOORE'S BEND

-  PROPOSED FORCE MAIN
-  PROPOSED GRAVITY LINE
-  CONTOUR LINE
-  PARCEL BOUNDARY
-  PROPOSED MANHOLE
-  PROPOSED PUMP STATION
-  911 ADDRESS
-  PROPOSED WASTEWATER TREATMENT PLANT



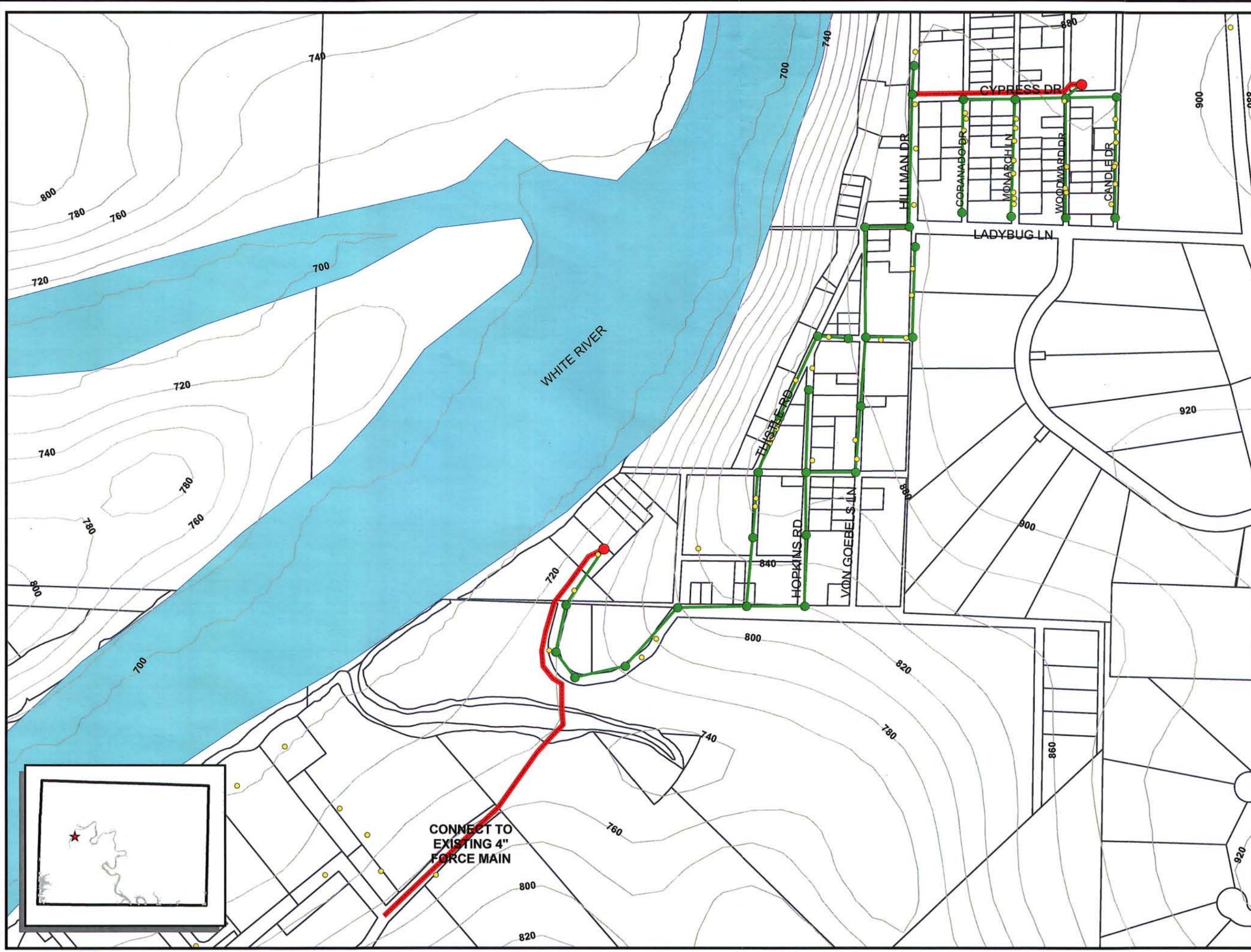
1 inch equals 600 feet



**OAK GROVE**  
**PRELIMINARY COST ESTIMATE**

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	4" Gravity PVC Service Lines	LF	1,200	\$ 50.00	\$ 60,000.00
2	8" Gravity PVC Sewer	LF	7,500	\$ 85.00	\$ 637,500.00
3	Manholes	EA	40	\$ 2,050.00	\$ 82,000.00
4	Wyes and Risers	EA	48	\$ 150.00	\$ 7,200.00
5	4" PVC Forcemain	LF	600	\$ 53.00	\$ 31,800.00
6	4" PVC Forcemain	LF	1,600	\$ 57.00	\$ 91,200.00
7	Air Release Assembly	EA	1	\$ 4,500.00	\$ 4,500.00
8	Road Restoration	SY	7,000	\$ 9.00	\$ 63,000.00
9	Pump Station No. 1	LS	1	\$ 75,000.00	\$ 75,000.00
10	Pump Station No. 2	LS	1	\$ 90,000.00	\$ 90,000.00
<b>SUBTOTAL</b>					<b>\$ 1,052,200.00</b>
	Land and Easements			10.00%	\$ 105,220.00
	Legal/Administration			6.00%	\$ 63,132.00
	Engineering Design			10.29%	\$ 108,256.90
	Engineering During Const./Insp.			5.00%	\$ 52,610.00
<b>SUBTOTAL</b>					<b>\$ 1,381,418.90</b>
	Contingency (10%)				\$ 138,141.89
<b>TOTAL</b>					<b>\$ 1,519,560.79</b>
	Cost per Initial Connection	48	Connections		\$ 31,657.52

# OAK GROVE



-  PROPOSED FORCE MAIN
-  PROPOSED GRAVITY LINE
-  CONTOUR LINE
-  PARCEL BOUNDARY
-  PROPOSED MANHOLE
-  PROPOSED PUMP STATION
-  911 ADDRESS
-  PROPOSED WASTEWATER TREATMENT PLANT



1 inch equals 300 feet



CONNECT TO EXISTING 4" FORCE MAIN

**PINE RIDGE PLACE AND FOX RUN SUBDIVISIONS**  
**PRELIMINARY COST ESTIMATE**

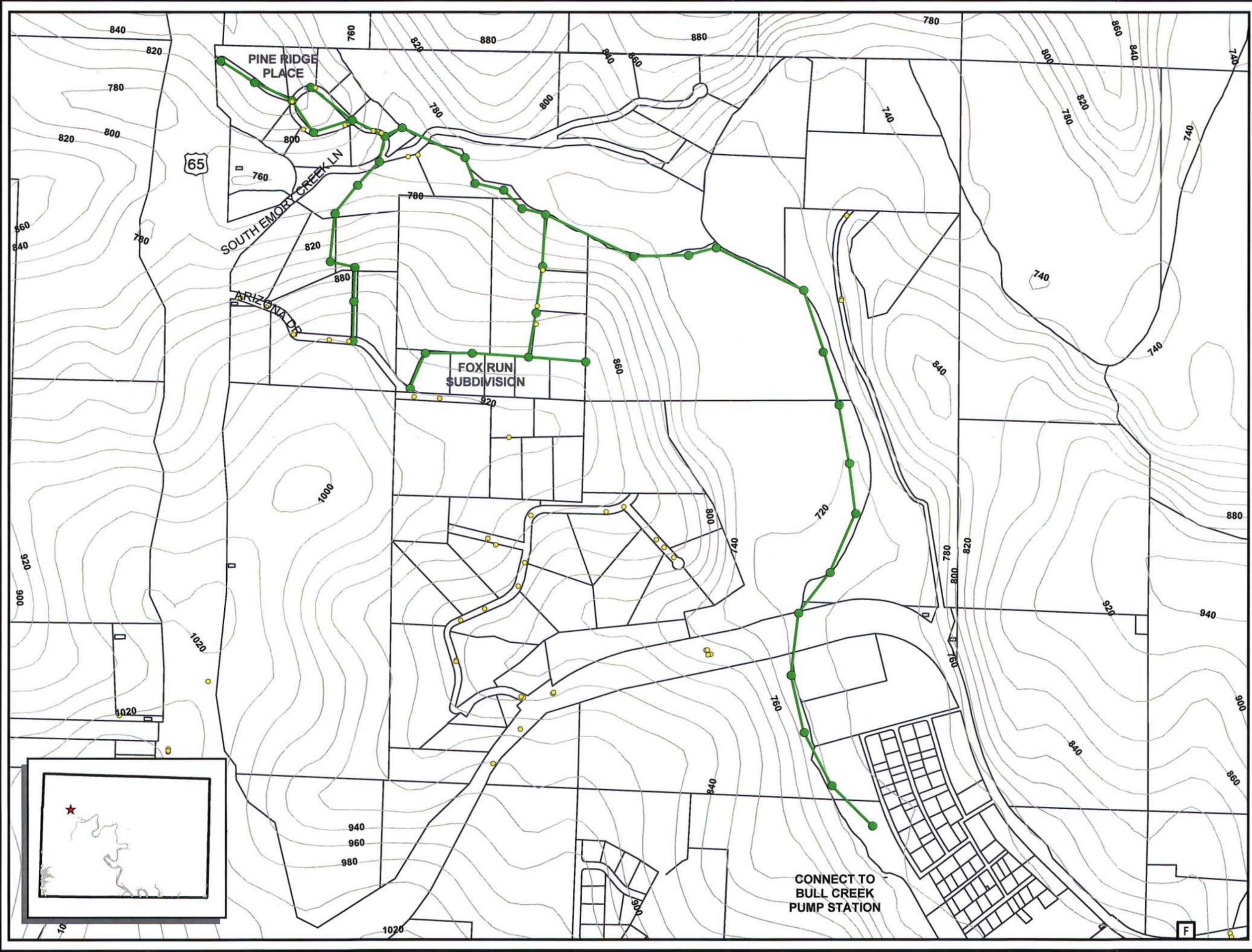
NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	4" Gravity PVC Service Lines	LF	330	\$ 50.00	\$ 16,500.00
2	8" Gravity PVC Sewer	LF	6,060	\$ 85.00	\$ 515,100.00
3	12" Gravity PVC Sewer	LF	7,100	\$ 100.00	\$ 710,000.00
4	Manholes	EA	70	\$ 2,050.00	\$ 143,500.00
5	Wyes and Risers	EA	11	\$ 150.00	\$ 1,650.00
6	Concrete Encasement	LF	800	\$ 100.00	\$ 80,000.00
7	Highway Bore	LF	400	\$ 250.00	\$ 100,000.00
8	Road Restoration	SY	3,065	\$ 9.00	\$ 27,585.00
<b>SUBTOTAL</b>					<b>\$ 1,594,335.00</b>
	Land and Easements			10.00%	\$ 159,433.50
	Legal/Administration			6.00%	\$ 95,660.10
	Engineering Design			9.68%	\$ 154,410.51
	Engineering During Const./Insp.			5.00%	\$ 79,716.75
<b>SUBTOTAL</b>					<b>\$ 2,083,555.86</b>
	Contingency (10%)				\$ 208,355.59
<b>TOTAL</b>					<b>\$ 2,291,911.44</b>
	<b>Cost per Initial Connection</b>	<b>11 Connections</b>			<b>\$ 208,355.59</b>

# PINE RIDGE PLACE / FOX RUN

-  PROPOSED FORCE MAIN
-  PROPOSED GRAVITY LINE
-  CONTOUR LINE
-  PARCEL BOUNDARY
-  PROPOSED MANHOLE
-  PROPOSED PUMP STATION
-  911 ADDRESS
-  PROPOSED WASTEWATER TREATMENT PLANT



1 inch equals 600 feet



CONNECT TO  
BULL CREEK  
PUMP STATION

65

PINE RIDGE PLACE

SOUTH EMORY CREEK LN

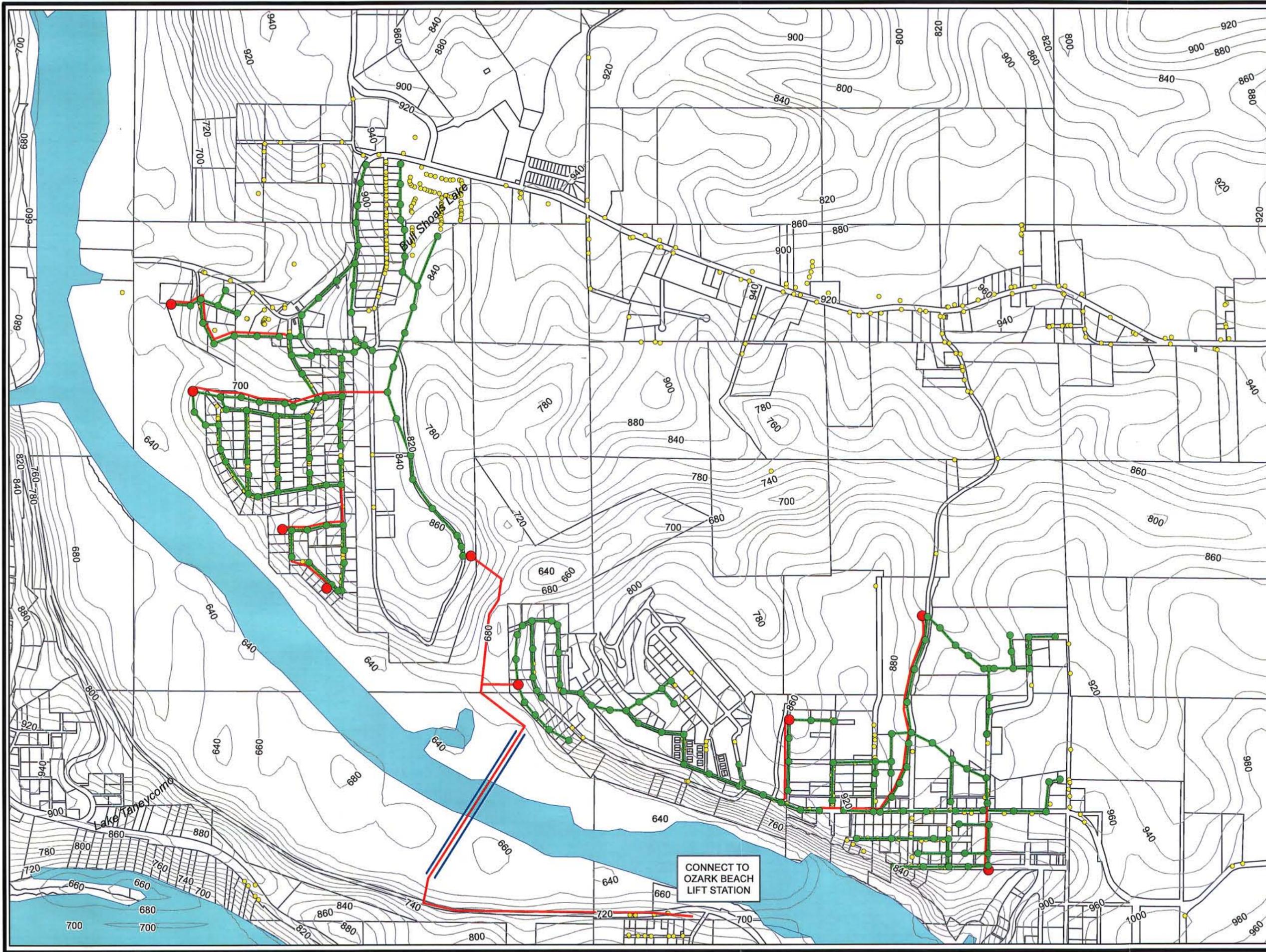
ARIZONA DR

FOX RUN SUBDIVISION

F

**NORTH POWERSITE  
PRELIMINARY COST ESTIMATE**

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	4" Gravity PVC Service Lines	LF	7,850	\$ 50.00	\$ 392,500.00
2	8" Gravity PVC Sewer	LF	44,000	\$ 85.00	\$ 3,740,000.00
3	10" Gravity PVC Sewer	LF	4,700	\$ 100.00	\$ 470,000.00
4	Manholes	EA	210	\$ 2,050.00	\$ 430,500.00
5	Wyes and Risers	EA	314	\$ 150.00	\$ 47,100.00
6	1-1/2" PVC Forcemain	LF	1,100	\$ 40.00	\$ 44,000.00
7	2" PVC Forcemain	LF	700	\$ 45.00	\$ 31,500.00
8	3" PVC Forcemain	LF	3,200	\$ 53.00	\$ 169,600.00
9	4" PVC Forcemain	LF	2,100	\$ 57.00	\$ 119,700.00
10	6" PVC Forcemain	LF	3,100	\$ 62.00	\$ 192,200.00
11	8" PVC Forcemain	LF	500	\$ 67.00	\$ 33,500.00
12	12" PVC Forcemain	LF	7,550	\$ 72.00	\$ 543,600.00
13	Air Release Assembly	EA	8	\$ 4,500.00	\$ 36,000.00
14	Road Restoration	SY	21,000	\$ 9.00	\$ 189,000.00
15	Pump Station No. 1	LS	1	\$ 75,000.00	\$ 75,000.00
16	Pump Station No. 2	LS	1	\$ 85,000.00	\$ 85,000.00
17	Pump Station No. 3	LS	1	\$ 95,000.00	\$ 95,000.00
18	Pump Station No. 4	LS	1	\$ 90,000.00	\$ 90,000.00
19	Pump Station No. 5	LS	1	\$ 70,000.00	\$ 70,000.00
20	Pump Station No. 6	LS	1	\$ 125,000.00	\$ 125,000.00
21	Pump Station No. 7	LS	1	\$ 75,000.00	\$ 75,000.00
22	Pump Station No. 8	LS	1	\$ 190,000.00	\$ 190,000.00
23	Pump Station No. 9	LS	1	\$ 225,000.00	\$ 225,000.00
<b>SUBTOTAL</b>					<b>\$ 7,469,200.00</b>
	Land and Easements			10.00%	\$ 746,920.00
	Legal/Administration			6.00%	\$ 448,152.00
	Engineering Design			7.74%	\$ 577,810.33
	Engineering During Const./Insp.			5.00%	\$ 373,460.00
<b>SUBTOTAL</b>					<b>\$ 9,615,542.33</b>
	Contingency (10%)				\$ 961,554.23
<b>TOTAL</b>					<b>\$ 10,577,096.57</b>
	<b>Cost per Initial Connection</b>	<b>314</b>	<b>Connections</b>		<b>\$ 33,685.02</b>



# NORTH POWERSITE

- PARCEL BOUNDARY
- CONTOUR LINE
- FORCE MAIN
- GRAVITY LINE
- PROPOSED LAKE BORE
- PUMP STATION
- MANHOLE
- 911 ADDRESS



1 inch equals 1,000 feet



Source: Shoals Bend & Powersite Areas "Oremus" Wastewater Treatment Plant Evaluation and Study Performed by: Archer, Sept. 2004

CONNECT TO OZARK BEACH LIFT STATION

**RIVER BLUFF SUBDIVISION**  
**PRELIMINARY COST ESTIMATE**

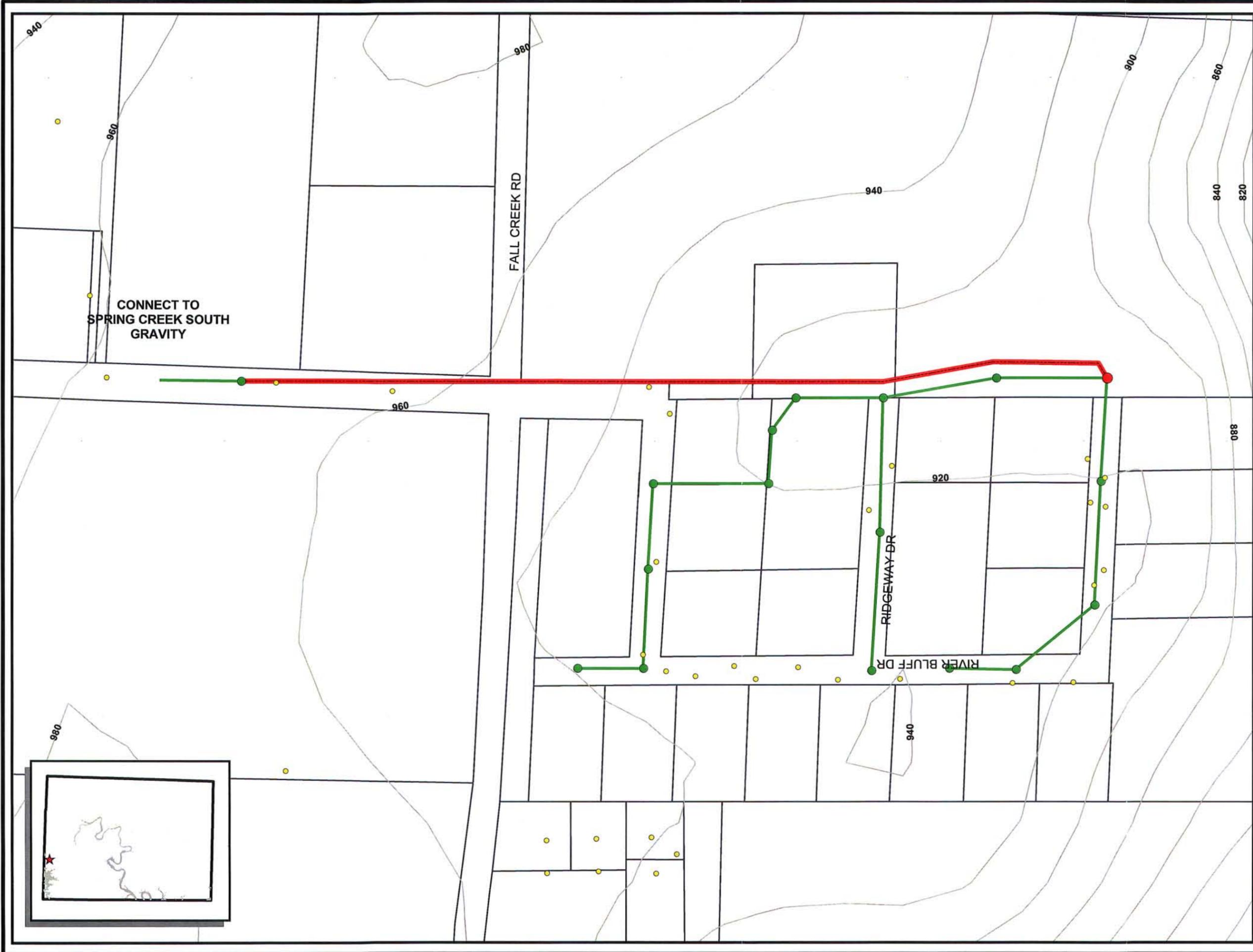
NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	4" Gravity PVC Service Lines	LF	525	\$ 50.00	\$ 26,250.00
2	8" Gravity PVC Sewer	LF	2,400	\$ 85.00	\$ 204,000.00
3	Manholes	EA	16	\$ 2,050.00	\$ 32,800.00
4	Wyes and Risers	EA	21	\$ 150.00	\$ 3,150.00
5	4" PVC Forcemain	LF	1,600	\$ 57.00	\$ 91,200.00
6	Road Restoration	SY	2,100	\$ 9.00	\$ 18,900.00
7	Pump Station	EA	1	\$ 105,000.00	\$ 105,000.00
<b>SUBTOTAL</b>					<b>\$ 481,300.00</b>
	Land and Easements			10.00%	\$ 48,130.00
	Legal/Administration			6.00%	\$ 28,878.00
	Engineering Design			11.53%	\$ 55,487.73
	Engineering During Const./Insp.			5.00%	\$ 24,065.00
<b>SUBTOTAL</b>					<b>\$ 637,860.73</b>
	Contingency (10%)				\$ 63,786.07
<b>TOTAL</b>					<b>\$ 701,646.80</b>
	<b>Cost per Initial Connection</b>	<b>21</b>	<b>Connections</b>		<b>\$ 33,411.75</b>

# RIVER BLUFF

-  PROPOSED FORCE MAIN
-  PROPOSED GRAVITY LINE
-  CONTOUR LINE
-  PARCEL BOUNDARY
-  PROPOSED MANHOLE
-  PROPOSED PUMP STATION
-  911 ADDRESS
-  PROPOSED WASTEWATER TREATMENT PLANT



1 inch equals 150 feet



CONNECT TO  
SPRING CREEK SOUTH  
GRAVITY

FALL CREEK RD

RIDGEWAY DR

RIVER BLUFF DR

940

960

980

940

900

860

840

820

960

088

920

980

940

**SKYLINE/HAIK SUBDIVISION**  
**PRELIMINARY COST ESTIMATE**

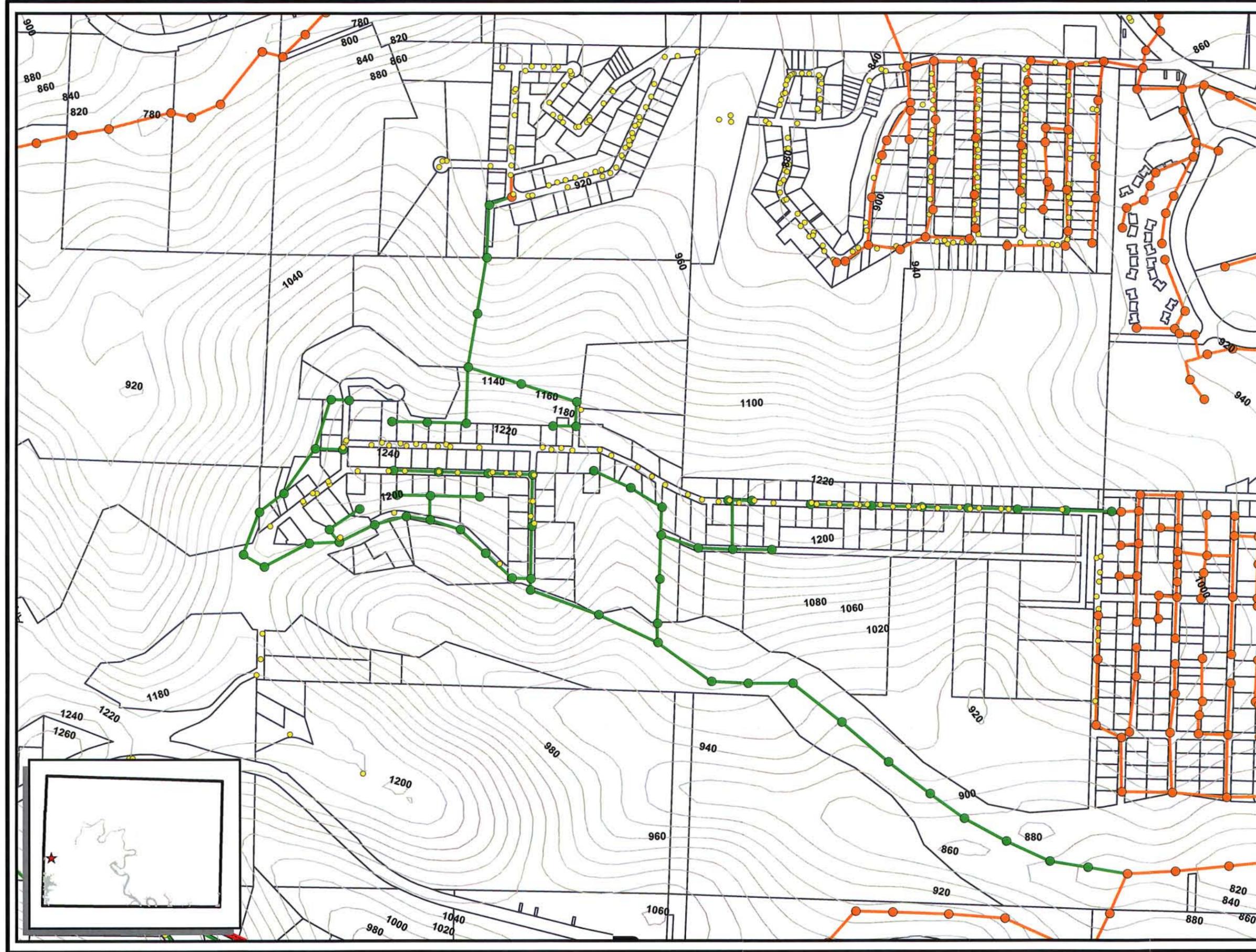
NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	4" Gravity PVC Service Lines	LF	2,340	\$ 50.00	\$ 117,000.00
2	8" Gravity PVC Sewer	LF	17,800	\$ 85.00	\$ 1,513,000.00
3	Manholes	EA	69	\$ 2,050.00	\$ 141,450.00
4	Wyes and Risers	EA	78	\$ 150.00	\$ 11,700.00
5	Road Restoration	SY	5,500	\$ 9.00	\$ 49,500.00
	<b>SUBTOTAL</b>				<b>\$ 1,715,650.00</b>
	Land and Easements			10.00%	\$ 171,565.00
	Legal/Administration			6.00%	\$ 102,939.00
	Engineering Design			9.58%	\$ 164,396.25
	Engineering During Const./Insp.			5.00%	\$ 85,782.50
	<b>SUBTOTAL</b>				<b>\$ 2,240,332.75</b>
	Contingency (10%)				\$ 224,033.28
	<b>TOTAL</b>				<b>\$ 2,464,366.03</b>
	<b>Cost per Initial Connection</b>	<b>78</b>	<b>Connections</b>		<b>\$ 31,594.44</b>

# SKYLINE/HAIK SUBDIVISION

-  PROPOSED GRAVITY LINE
-  EXISTING GRAVITY LINE
-  CONTOUR LINE
-  PARCEL BOUNDARY
-  PROPOSED MANHOLE
-  EXISTING MANHOLE
-  911 ADDRESS
-  PROPOSED WASTEWATER TREATMENT PLANT



1 inch equals 600 feet



# SPRING CREEK SOUTH

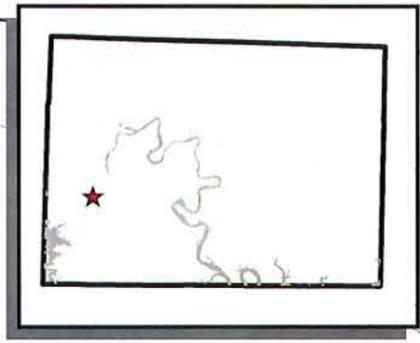


CONNECT TO EXISTING GRAVITY

-  PROPOSED FORCE MAIN
-  PROPOSED GRAVITY LINE
-  CONTOUR LINE
-  PARCEL BOUNDARY
-  PROPOSED MANHOLE
-  PROPOSED PUMP STATION
-  911 ADDRESS
-  PROPOSED WASTEWATER TREATMENT PLANT



1 inch equals 100 feet



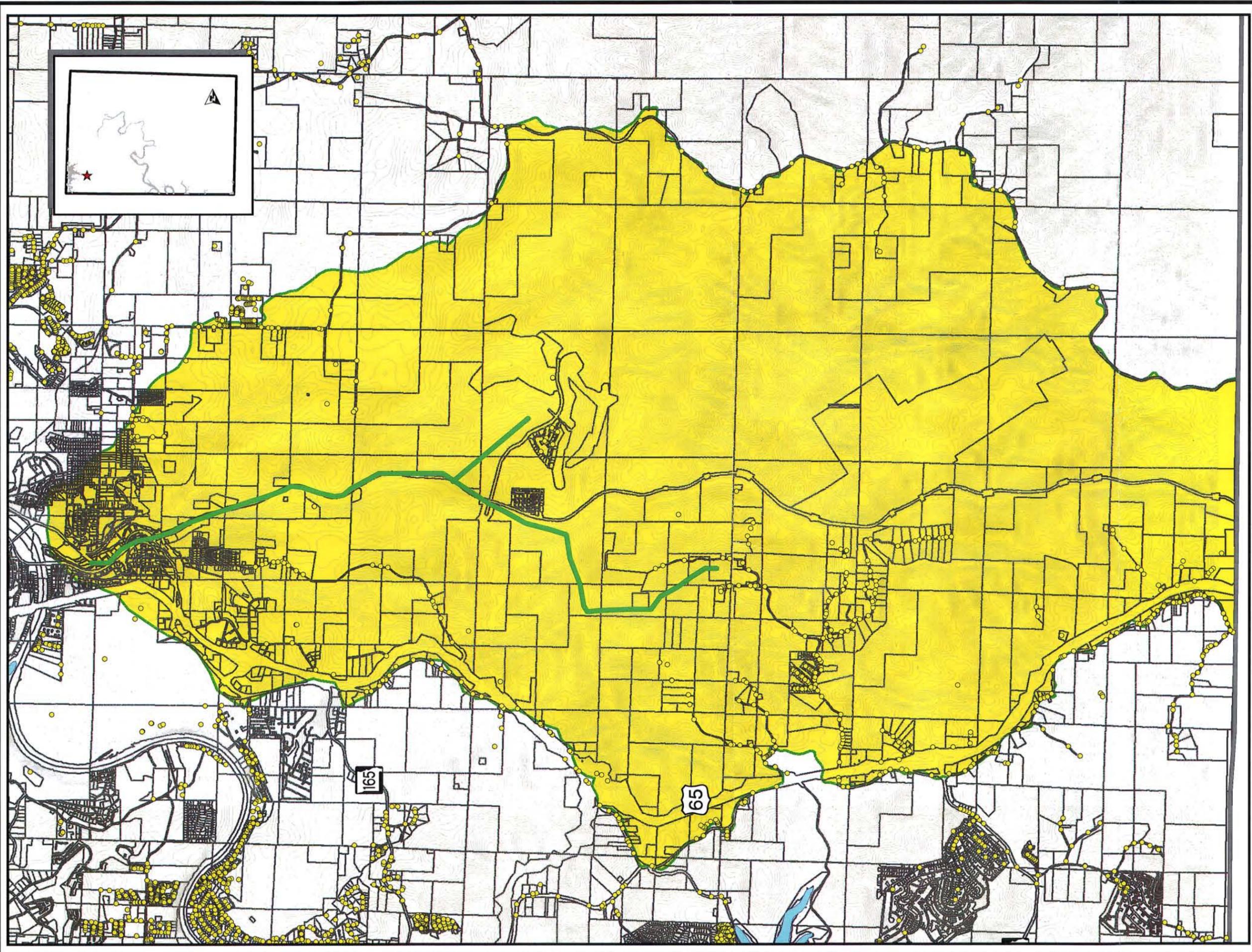
**TABLE ROCK LAKE (WEST)**  
**PRELIMINARY COST ESTIMATE**

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	4" Gravity PVC Service Lines	LF	3,550	\$ 50.00	\$ 177,500.00
2	8" Gravity PVC Sewer	LF	22,100	\$ 85.00	\$ 1,878,500.00
3	Manholes	EA	110	\$ 2,050.00	\$ 225,500.00
4	Wyes and Risers	EA	145	\$ 150.00	\$ 21,750.00
5	2" PVC Forcemain	LF	650	\$ 45.00	\$ 29,250.00
6	3" PVC Forcemain	LF	1,950	\$ 53.00	\$ 103,350.00
7	4" PVC Forcemain	LF	2,100	\$ 57.00	\$ 119,700.00
8	Road Restoration	SY	18,000	\$ 9.00	\$ 162,000.00
9	Air Release Assembly	EA	1	\$ 4,500.00	\$ 4,500.00
10	Pump Station No. 1	LS	1	\$ 70,000.00	\$ 70,000.00
11	Pump Station No. 2	LS	1	\$ 120,000.00	\$ 120,000.00
12	Pump Station No. 3	LS	1	\$ 125,000.00	\$ 125,000.00
13	Pump Station No. 4	LS	1	\$ 85,000.00	\$ 85,000.00
14	Pump Station No. 5	LS	1	\$ 105,000.00	\$ 105,000.00
15	WWTF	GPD	40,000	\$ 20.00	\$ 800,000.00
	<b>SUBTOTAL</b>				<b>\$ 4,027,050.00</b>
	Land and Easements			10.00%	\$ 402,705.00
	Legal/Administration			6.00%	\$ 241,623.00
	Engineering Design			8.46%	\$ 340,827.01
	Engineering During Const./Insp.			5.00%	\$ 201,352.50
	<b>SUBTOTAL</b>				<b>\$ 5,213,557.51</b>
	Contingency (10%)				\$ 521,355.75
	<b>TOTAL</b>				<b>\$ 5,734,913.26</b>
	<b>Cost per Initial Connection</b>	<b>175</b>	<b>Connections</b>		<b>\$ 32,770.93</b>

**TURKEY CREEK WATERSHED**  
**PRELIMINARY COST ESTIMATE**

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	21" Gravity PVC Sewer	LF	18,500	\$ 125.00	\$ 2,312,500.00
2	Manholes	EA	47	\$ 2,050.00	\$ 96,350.00
3	Wyes and Risers	EA	200	\$ 150.00	\$ 30,000.00
4	Highway Bore	LF	60	\$ 250.00	\$ 15,000.00
5	Road Restoration	SY	27	\$ 9.00	\$ 243.00
6	Concrete Encasement	LF	1,120	\$ 100.00	\$ 112,000.00
7	Pump Station No. 1	EA	1	\$ 200,000.00	\$ 200,000.00
<b>SUBTOTAL</b>					<b>\$ 2,766,093.00</b>
	Land and Easements			10.00%	\$ 276,609.30
	Legal/Administration			6.00%	\$ 165,965.58
	Engineering Design			8.94%	\$ 247,256.52
	Engineering During Const./Insp.			5.00%	\$ 138,304.65
<b>SUBTOTAL</b>					<b>\$ 3,594,229.05</b>
	Contingency (10%)				\$ 359,422.91
<b>TOTAL</b>					<b>\$ 3,953,651.96</b>
<b>Cost per Initial Connection</b>		<b>200</b>	<b>Connections</b>		<b>\$ 19,768.26</b>

# TURKEY CREEK WATERSHED



-  PROPOSED FORCE MAIN
-  PROPOSED GRAVITY LINE
-  CONTOUR LINE
-  PARCEL BOUNDARY
-  PROPOSED MANHOLE
-  PROPOSED PUMP STATION
-  911 ADDRESS
-  PROPOSED WASTEWATER TREATMENT PLANT



**SPRING CREEK SOUTH  
PRELIMINARY COST ESTIMATE**

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	4" Gravity PVC Service Lines	LF	480	\$ 50.00	\$ 24,000.00
2	8" Gravity PVC Sewer	LF	1,900	\$ 85.00	\$ 161,500.00
3	Manholes	EA	9	\$ 2,050.00	\$ 18,450.00
4	Wyes and Risers	EA	16	\$ 150.00	\$ 2,400.00
5	Road Restoration	SY	1,750	\$ 9.00	\$ 15,750.00
6	Concrete Encasement	LF	50	\$ 100.00	\$ 5,000.00
	<b>SUBTOTAL</b>				<b>\$ 227,100.00</b>
	Land and Easements			10.00%	\$ 22,710.00
	Legal/Administration			6.00%	\$ 13,626.00
	Engineering Design			12.86%	\$ 29,205.20
	Engineering During Const./Insp.			5.00%	\$ 11,355.00
	<b>SUBTOTAL</b>				<b>\$ 303,996.20</b>
	Contingency (10%)				\$ 30,399.62
	<b>TOTAL</b>				<b>\$ 334,395.82</b>
	<b>Cost per Initial Connection</b>	<b>17</b>	<b>Connections</b>		<b>\$ 19,670.34</b>

**FALL CREEK AND WEST GATE HEIGHTS SUBDIVISIONS**  
**PRELIMINARY COST ESTIMATE**

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	4" Gravity PVC Service Lines	LF	450	\$ 50.00	\$ 22,500.00
2	8" Gravity PVC Sewer	LF	3,720	\$ 85.00	\$ 316,200.00
3	Manholes	EA	20	\$ 2,050.00	\$ 41,000.00
4	Wyes and Risers	EA	18	\$ 150.00	\$ 2,700.00
5	Road Restoration	SY	2,150	\$ 9.00	\$ 19,350.00
	<b>SUBTOTAL</b>				<b>\$ 401,750.00</b>
	Land and Easements			10.00%	\$ 40,175.00
	Legal/Administration			6.00%	\$ 24,105.00
	Engineering Design			11.84%	\$ 47,550.26
	Engineering During Const./Insp.			5.00%	\$ 20,087.50
	<b>SUBTOTAL</b>				<b>\$ 533,667.76</b>
	Contingency (10%)				\$ 53,366.78
	<b>TOTAL</b>				<b>\$ 587,034.54</b>
	<b>Cost per Initial Connection</b>	<b>18</b>	<b>Connections</b>		<b>\$ 32,613.03</b>

**FINE AREA**  
**PRELIMINARY COST ESTIMATE**

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	4" Gravity PVC Sewer	LF	2,050	\$ 50.00	\$ 102,500.00
2	8" Gravity PVC Sewer	LF	6,152	\$ 85.00	\$ 522,920.00
3	Manholes	EA	28	\$ 2,050.00	\$ 57,400.00
4	Wyes and Risers	EA	81	\$ 150.00	\$ 12,150.00
5	3" Force Main	LF	300	\$ 53.00	\$ 15,900.00
6	Road Restoration	SY	5,750	\$ 9.00	\$ 51,750.00
7	Pump Station	EA	1	\$ 45,000.00	\$ 45,000.00
8	WWTF	GPD	18,063	\$ 20.00	\$ 361,260.00
<b>SUBTOTAL</b>					<b>\$ 1,168,880.00</b>
	Land and Easements			10.00%	\$ 116,888.00
	Legal/Administration			6.00%	\$ 70,132.80
	Engineering Design			10.13%	\$ 118,435.53
	Engineering During Const./Insp.			5.00%	\$ 58,444.00
<b>SUBTOTAL</b>					<b>\$ 1,532,780.33</b>
	Contingency (10%)				\$ 153,278.03
<b>TOTAL</b>					<b>\$ 1,686,058.36</b>
	<b>Cost per Initial Connection</b>	<b>81</b>	<b>Connections</b>		<b>\$ 20,815.54</b>

**FRIENDLY HILLS AND HUMMINGBIRD HILLS SUBDIVISIONS**  
**PRELIMINARY COST ESTIMATE**

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	4" Gravity PVC Service Lines	LF	550	\$ 50.00	\$ 27,500.00
2	8" Gravity PVC Sewer	LF	5,000	\$ 85.00	\$ 425,000.00
3	Manholes	EA	22	\$ 2,050.00	\$ 45,100.00
4	Wyes and Risers	EA	22	\$ 150.00	\$ 3,300.00
5	3" Force Main	LF	3,650	\$ 45.00	\$ 164,250.00
6	4" Force Main	LF	2,000	\$ 57.00	\$ 114,000.00
7	Highway Bore	LF	280	\$ 250.00	\$ 70,000.00
8	Road Restoration	SY	2,900	\$ 9.00	\$ 26,100.00
9	Air Release Assembly	EA	3	\$ 4,500.00	\$ 13,500.00
10	Pump Station No. 1	LS	1	\$ 105,000.00	\$ 105,000.00
11	Pump Station No. 2	LS	1	\$ 120,000.00	\$ 120,000.00
<b>SUBTOTAL</b>					<b>\$ 993,750.00</b>
	Land and Easements			10.00%	\$ 99,375.00
	Legal/Administration			6.00%	\$ 59,625.00
	Engineering Design			10.37%	\$ 103,096.97
	Engineering During Const./Insp.			5.00%	\$ 49,687.50
<b>SUBTOTAL</b>					<b>\$ 1,305,534.47</b>
	Contingency (10%)				\$ 130,553.45
<b>TOTAL</b>					<b>\$ 1,436,087.92</b>
	<b>Cost per Initial Connection</b>	<b>22</b>	<b>Connections</b>		<b>\$ 65,276.72</b>

**MILDRED AREA**  
**PRELIMINARY COST ESTIMATE**

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	4" Gravity PVC Service Lines	LF	3,255	\$ 50.00	\$ 162,750.00
2	8" Gravity PVC Sewer	LF	9,485	\$ 85.00	\$ 806,225.00
3	Manholes	EA	38	\$ 2,050.00	\$ 77,900.00
4	Wyes and Risers	EA	93	\$ 150.00	\$ 13,950.00
5	2" PVC Forcemain	LF	1,750	\$ 45.00	\$ 78,750.00
6	3" PVC Forcemain	LF	3,150	\$ 53.00	\$ 166,950.00
7	4" PVC Forcemain	LF	3,320	\$ 57.00	\$ 189,240.00
8	Road Restoration	SY	5,900	\$ 9.00	\$ 53,100.00
9	Pump Station No. 1	LS	1	\$ 75,000.00	\$ 75,000.00
10	Pump Station No. 2	LS	1	\$ 85,000.00	\$ 85,000.00
11	Pump Station No. 3	LS	1	\$ 95,000.00	\$ 95,000.00
12	Pump Station No. 4	LS	1	\$ 80,000.00	\$ 80,000.00
13	Pump Station No. 5	LS	1	\$ 55,000.00	\$ 55,000.00
14	WWTF	GPD	57,534	\$ 20.00	\$ 1,150,680.00
	<b>SUBTOTAL</b>				<b>\$ 3,089,545.00</b>
	Land and Easements			10.00%	\$ 308,954.50
	Legal/Administration			6.00%	\$ 185,372.70
	Engineering Design			8.80%	\$ 271,761.21
	Engineering During Const./Insp.			5.00%	\$ 154,477.25
	<b>SUBTOTAL</b>				<b>\$ 4,010,110.66</b>
	Contingency (10%)				\$ 401,011.07
	<b>TOTAL</b>				<b>\$ 4,411,121.73</b>
	Cost per Initial Connection	258	Connections		\$ 17,097.37

TABLE ROCK LAKE

# TABLE ROCK LAKE WEST

-  PROPOSED FORCE MAIN
-  PROPOSED GRAVITY LINE
-  CONTOUR LINE
-  PARCEL BOUNDARY
-  PROPOSED MANHOLE
-  PROPOSED PUMP STATION
-  911 ADDRESS
-  PROPOSED WASTEWATER TREATMENT PLANT



1 inch equals 500 feet

