CAPITAL FACILITIES PLAN

INCLUDING IMPACT FEE FACILITIES PLAN
IMPACT FEE ANALYSIS
AUGUST 2015

HORROCKS
ENGINEERS

Impact Fee Facilities Plan Certification Page

I certify that the attached impact fee facilities plan:

1. Includes only the costs of public facilities that are:

    a. allowed under the Impact Fees Act; and

    b. actually incurred; or

    c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;

    d. existing deficiencies documented as such and not meant for inclusion in impact analysis.

2. Does not include:

    a. costs of operation and maintenance of public facilities;

    b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;

    c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and

3. Complies in each and every relevant respect with the Impact Fees Act

_____

Brent R. Ventura, P.E.

Impact Fee Analysis Certification Page

I certify that the attached impact fee analysis:

1. includes only the costs of public facilities that are:

   a. allowed under the Impact Fees Act; and

   b. actually incurred; or

   c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;

2. does not include:

   a. costs of operation and maintenance of public facilities;

   b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;

   c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement;

3. offsets costs with grants or other alternate sources of payment; and

4. complies in each and every relevant respect with the Impact Fees Act.

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Brent R. Ventura, P.E.

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Demographics

As demographics form the basis of all other projections in this report, the first study performed was a population study. Current population estimates are used to determine the Level of Service (LOS) for each of the following sub-facilities. Future population projections provide the basis for determining the future needs of the city based upon the current LOS. Currently, Bluffdale City has approximately 11,500 residents and is projected to grow to nearly 39,000 by the year 2045.

Water

This study identifies the City's existing water system and its current deficiencies. The culinary and secondary water systems have been modeled to project future needs to maintain Bluffdale's current LOS. Specific projects have been identified that will be required for the City to service future population growth. In total, $1.98 million and $8.32 million (2015 dollars) respectively of culinary and secondary system capital improvements are identified for future construction.

An important part of the Bluffdale City Water Conservation Plan is the construction and implementation of a pressurized secondary water system. Major portions of the system have now been constructed including a 2 MG tank and five miles of trunkline. This study identifies several sources of water that are currently planned to energize the system, including recycled water from the Utah Data Center, reuse water from the Jordan Basin Water Reclamation Facility and from a well on the east side.

Transportation

Population growth throughout Bluffdale will require roads to be upgraded to meet future needs. Part of the planning process includes corridor preservation. Corridor preservation allows a city to identify, and protect from development, land that will be needed for future roadway corridors. This will ultimately lower the cost of constructing future improvements.

The City currently provides a Level of Service "A"; however it will not be possible to maintain this LOS amid future growth. Therefore, transportation planning is critical to maintaining good circulation. Special attention has been given to Porter Rockwell Boulevard. The cost of future improvements that will be required throughout the City, identified in this study, is $92.94 million (2015 dollars).

Storm Water

Equivalent Residential Units (ERU's) for future storm water runoff are based on an average lot having 2,700 square feet of impervious surface. The current LOS is based on the City's current standards and ordinances. In order to meet the City's future needs, 22 projects have been identified that will be required to complete the master planned storm drain system. Three of the projects have been identified as needed to solve existing problems. Funding to complete the system is estimated at $11.16 million in 2015 dollars.

Public Safety

The City currently provides 1.18 square feet of emergency service facilities per resident. Bluffdale City has contracted with Saratoga Springs City to provide law enforcement. A conceptual plan for constructing new public safety facilities to maintain Bluffdale City's current level of service identifies $8.75 million (2015 dollars) of future projects.

Parks and Recreation

Bluffdale has previously provided $1,349,789.86 of parks and recreational facilities per 1,000 residents. In order to maintain this LOS, a conceptual plan for constructing future parks and recreation facilities for the City identifies $43.1 million (2015 dollars) of future projects including specific parks agreed upon in the Independence at the Point subdivision development agreement.

Public Facilities

City staff and officials anticipate expanding city services as the population grows. In order to do so, new facilities will need to be constructed to facilitate expanded administration and storage. Future public facilities, including a city hall, public works building and animal control facility are estimated at $12.08 million (2015 dollars).

Impact Fee Analysis

Impact fees have been calculated based on detailed analysis of each element. The water impact fee is based on a single service area including a looped culinary system and a secondary system that provides common delivery and storage systems for use throughout the City. The transportation impact fee is calculated based on one city-wide service area and an additional Porter Rockwell service area. For the most part, the road system is accessible to every resident for trips to any destination, but the Porter Rockwell area depends heavily on Porter Rockwell for project success. The storm drain impact fee is calculated using one service area but varies with unit size and impervious surface. Finally, the public safety and parks/recreation facilities are planned to service all residents. Therefore, impact fees are based upon one service area.

Although Bluffdale is not required to enact impact fees exactly as outlined in this study, it may not impose fees higher than what is recommended. The following are the fees recommended to finance the required future infrastructure.

		City Wide Impact Fee	PRB SA Impact Fee
Water	**Units**		
Single Family Residential	Dwelling Units	$1,133	$1,133
Commercial	Connection	$3,818	$3,818
Institutional	Connection	$9,019	$9,019
Transportation*			
Single Family Detached	Dwelling Units	$3,360	$3,685
Condominium/Townhome	Dwelling Units	$1,714	$1,879
Apartment	Dwelling Units	$2,050	$2,248
Office Building	1,000 sq. ft.	$5,208	$5,712
Medical Office Building	1,000 sq. ft.	$12,365	$13,561
Less Intensive Retail	1,000 sq. ft.	$363	$398
Intensive Retail	1,000 sq. ft.	$4,259	$4,671
Quality Restaurant	1,000 sq. ft.	$5,747	$6,303
Fast Food	1,000 sq. ft.	$18,144	$19,899
Convenience Market w/ Gas Pumps	Pump Stations	$2,458	$2,696
Bank	1,000 sq. ft.	$17,116	$18,771
Industrial	1,000 sq. ft.	$4,906	$5,380
Manufacturing	1,000 sq. ft.	$3,696	$4,054
Warehousing	1,000 sq. ft.	$2,352	$2,580
Elementary School	Students (Max. Capacity)	$941	$1,032
Middle/Junior School	Students (Max. Capacity)	$1,008	$1,106
High School	Students (Max. Capacity)	$941	$1,032
Private School (K-8)	Students (Max. Capacity)	$2,016	$2,211
Private School (K-12)	Students (Max. Capacity)	$1,814	$1,990
Day Care	1,000 sq. ft.	$8,770	$9,618
Library	1,000 sq. ft.	$11,794	$12,934
Church	1,000 sq. ft.	$2,184	$2,395
Hotel/Motel	Rooms	$1,848	$2,027
Storm Drain	Dwelling Unit or 2,700 sf of imperv. surface	$630	$630
Public Safety	Dwelling Unit or Connection	$1,200	$1,200
Parks and Recreation			
Single Family Dwelling	Dwelling Unit or Connection	$5,400	$5,400
Multi-Family	Dwelling Unit or Connection	$4,050	$4,050

*Definitions and explanations of development types can be found in the Appendix

Bluffdale City is a growing community located at the south end of Salt Lake County and lying at the base of the Oquirrih Mountains. It is bounded on the north and south by Riverton and Lehi, and on the east and west by Draper and Herriman, respectively. The Jordan River is a prominent feature cutting through the middle of the city. As established in 2012, Bluffdale had approximately 7,900 residents. As growth continues in the Salt Lake Valley, Bluffdale is projected to grow to approximately 40,000 by the year 2045 as discussed in the following chapter.

Because Bluffdale lies at the narrowest point between the Wasatch and Oquirrih mountain ranges, many utilities are located here, including the Union Pacific Railroad, seven canals and aqueducts, two major power corridors, two freeways and a major gas line corridor. Although these utilities create obstacles in Bluffdale's efforts to provide services to its residents, the Jordan River provides the greatest challenge.

This Capital Facilities Plan (CFP) analyzes Bluffdale's future growth patterns and its projected infrastructure needs as it grows. It contains separate chapters outlining the Impact Fee Facilities Plan (IFFP) and its analysis. Services addressed include culinary water, secondary water, transportation, storm drain, public safety, parks and recreation and administrative services. Further, it will provide a master plan for each utility. Each chapter includes a master plan that will lay the foundation for creating a Capital Facilities Plan, which in turn will provide the necessary data to create the Impact Fee Facilities Plan. These plans will provide a prioritized project schedule for construction, cost estimates (in planning year dollars) and recommended impact fee levels based upon the projects required to accommodate new growth in the next six years.

Proportionate Share

This document attempts to assign only a proportionate share of costs for future improvements due to growth from future developments. It is evident that the cost of much of the existing infrastructure in many of the elements cannot be assigned a legitimate dollar value per resident since very little information is available as to how existing infrastructure was financed, what share the City financed, what agency constructed the improvement, and how much the improvements actually cost. Therefore, in accordance with the Utah Impact Fees Act, Title 11, Chapter 36a, every effort has been made to evaluate impact fees considering only those costs that are attributable to future growth. As such, a current Level of Service (LOS) has been defined for each element and master planning performed to maintain the existing standards. Impact fees have been evaluated assigning the costs associated with maintaining these standards to future development as Bluffdale City grows.

Impact Fee Adjustments

Bluffdale City understands that future developments will each have individualized impacts on the City and therefore, in order to impose impact fees fairly, the City may adjust standard impact fees to meet unusual circumstances as allowed by State Code. Adjustments may be made for any of a number of reasons including studies or data submitted by the developer, land dedicated as a condition of development, and/or system improvements constructed by a new development.

The first step in updating any Capital Facilities Plan is to evaluate the City's current demographics and future population projections. The following section discusses Bluffdale City's population, growth trends, and projected build-out population. We have updated the population projections in this update since recent growth trends have far outpaced the 2012 projections.

2.1 Existing Conditions

Current Population

In April 2010, Bluffdale's population was estimated by the US Census Bureau to be 7,597 residents. We used actual residential building permits received since then to estimate the current population at 11,477. Detailed building permit information along with population calculations is available in Appendix "A".

Average Residents per Household

For purposes of this Capital Facilities Plan (CFP), the current average household density was estimated at 3.96 residents per household, per the 2010 Census.

Current Zoning and Land Use Plans

Bluffdale City's 2015 land use and zoning plans form the basis of evaluation for future facilities which will be built within City limits. They are illustrated in Figures 2-1 and 2-2.

2.2 Build-out Population

Total build-out for a city is reached when all vacant land within city boundaries has been developed to the current zoning and land use plans. Recently approximately 500 acres were added to the City near Camp Williams which added the Military Land Use Classification. Build-out population has been estimated at nearly 39,000 for Bluffdale City as illustrated below in Table 2-1.

Table 2-1: Bluffdale Build-out Projection

Bluffdale City Build-Out Population Projections					
Land Use Classification	**Area (Acre)**	**Density (units/acre)**	**Total Units**	**Residents* per Unit**	**Residents**
Business Park	472	0.00	0	0.00	0
Civic Institutional	82	0.00	0	0.00	0
Commercial	327	0.00	0	0.00	0
Light Industrial	215	0.00	0	0.00	0
Mixed Use	758	7.20	5,458	3.54	19,321
Neighborhood Commercial	48	0.00	0	0.00	0
Park & Recreation	445	0.00	0	0.00	0
Regional Commercial	115	0.00	0	0.00	0
Residential 1 acre Minimum	3,693	1.01	3,730	3.96	14,771
Residential 10,000 sq ft Minimum	157	4.40	691	3.96	2,736
Residential Multi-Family	44	16.40	722	2.90	2,094
Federal	698	0.00	0	0.00	0
				Projected Build-Out Population	**38,922**

*Varying densities used are based on dwelling unit types as discussed in Section 2.3

Figure 2-1

City of Bluffdale
General Plan Land Use Map

- VLDR - Very Low Density Residential
- LDR - Low Density Residential
- CR - Cluster Residential
- RMF - Residential Multi-family
- MU - Mixed Use
- NC - Neighborhood Commercial
- C - Commercial
- RC - Regional Commercial
- BP - Business Park
- LI - Light Industrial
- CI - Civic Institutional
- FS - Federal/State Government
- PROS - Parks, Recreation, & Open Space
- Cluster Subdivision Open Space

Prepared by City of Bluffdale Planning Division
Updated March 2014

0 0.25 0.5 1 Miles

NORTH

THE CITY OF BLUFFDALE

Figure 2-2

City of Bluffdale
Zoning Map

- A-5 - Agricultural
- R-1-87 - Residential (2-acre)
- R-1-43 - Residential (1-acre)
- R-1-43 (Cluster Residential Overlay)
- R-1-10 - Residential (10,000 ft²)
- I-O - Infill Overlay
- R-MF - Residential Multifamily
- MU - Mixed Use
- CI - Civic Institutional
- NC - Neighborhood Commercial
- GC-1 - General Commercial
- GW-R - Gateway Redwood
- RC - Regional Commercial
- HC - Heavy Commercial
- I-1 - Light Industrial
- SG-1 - Sand & Gravel

For regulations pertaining to each zoning district,
please call 801-254-2200 or visit www.planbluffdale.com

Prepared by City of Bluffdale Planning Division
Updated April 2015

0 0.25 0.5 1 Miles

NORTH

THE CITY OF BLUFFDALE

2.3 Current & Future Growth

Current Growth Trends

Forecasting the City's future needs relies heavily upon projecting future population trends and economic growth. We have used the following data sources to project the near future's growth rates for Bluffdale:

- Building Permits Issued
- 2010 Census Information
- Utah Governor's Office of Management and Budget (Demographic and Economic Analysis)

One of the most significant areas of development currently under construction in Bluffdale is the Independence area, which will contribute significant growth over the next decade in the mixed-use zone. As such, an effort was made to evaluate what type of units would be built in the new developments. It is estimated that at least 50% of the newest developments in the mixed-use zones, throughout Bluffdale, will not have solely traditional single family dwellings, but will consist of units similar to townhomes and condominiums. Therefore, it is anticipated that these units will have a lower occupancy rate (3.57) than Bluffdale's traditional rate (3.96) but higher than other multifamily units (2.90), like apartment complexes.

Future Growth Trends

In the past several years, the housing development market has far outpaced previous projections in Bluffdale City. As such, the population growth has arrived more quickly than anticipated in the previous impact fee study. Developments on the east side, such as Independence are responsible for the majority of Bluffdale's current growth. Figure 2-3 illustrates the estimated population growth projections.

Figure 2-3 Projected Population Growth

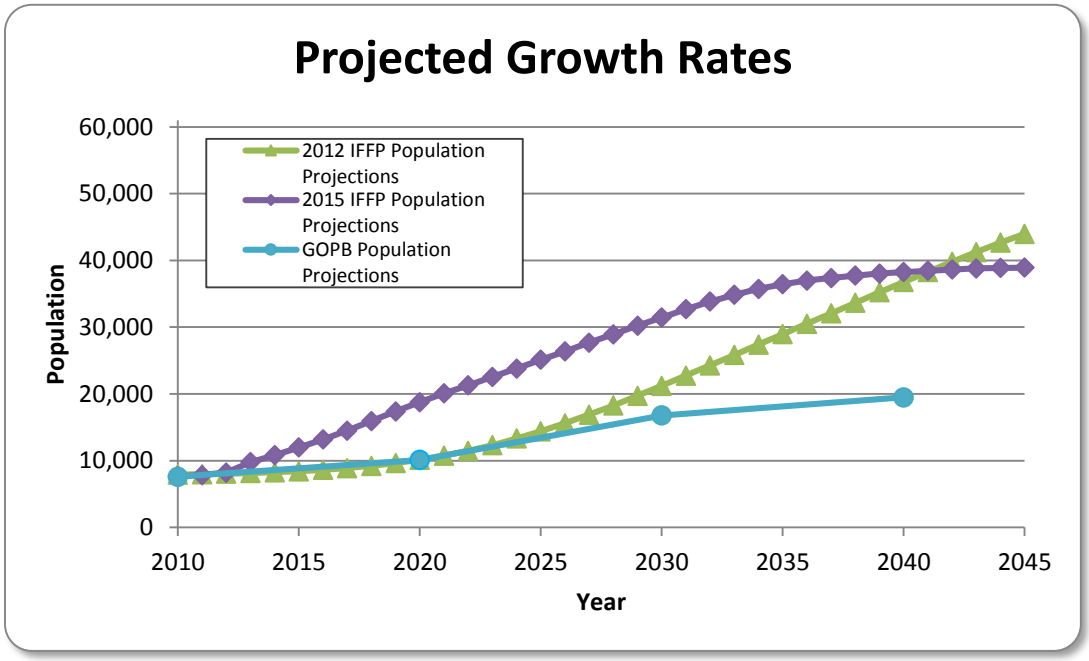


Table 2-2 gives the overall projected growth patterns as projected for this impact fee facilities plan compared to the previous projections and the Governor's Office projections.

Table 2-2: Growth Projections for Bluffdale City

Fiscal Year	2012 Population Projections		2015 Population Projections		GOPB Population Projections
2010	7,916	0.00%	7,684	0.00%	7,598
2011	7,987	0.90%	7,839	2.01%	
2012	8,063	0.95%	8,227	4.95%	
2013	8,141	0.97%	9,774	18.81%	
2014	8,264	1.50%	10,839	10.90%	
2015	8,421	1.90%	11,977	10.50%	
2016	8,631	2.50%	13,175	10.00%	
2017	8,899	3.10%	14,492	10.00%	
2018	9,228	3.70%	15,942	10.00%	
2019	9,634	4.40%	17,376	9.00%	
2020	10,144	5.30%	18,766	8.00%	10,099
2021	10,753	6.00%	20,080	7.00%	
2022	11,474	6.70%	21,285	6.00%	
2023	12,334	7.50%	22,562	6.00%	
2024	13,321	8.00%	23,803	5.50%	
2025	14,413	8.20%	25,112	5.50%	
2026	15,609	8.30%	26,368	5.00%	
2027	16,905	8.30%	27,686	5.00%	
2028	18,274	8.10%	28,932	4.50%	
2029	19,718	7.90%	30,234	4.50%	
2030	21,217	7.60%	31,443	4.00%	16,777
2031	22,744	7.20%	32,701	4.00%	
2032	24,291	6.80%	33,846	3.50%	
2033	25,845	6.40%	34,861	3.00%	
2034	27,396	6.00%	35,732	2.50%	
2035	28,958	5.70%	36,447	2.00%	
2036	30,521	5.40%	36,994	1.50%	
2037	32,078		37,364	1.00%	
2038	33,650		37,737	1.00%	
2039	35,231		38,039	0.80%	
2040	36,782		38,267	0.60%	19,499
2041	38,290		38,459	0.50%	
2042	39,783		38,651	0.50%	
2043	41,255		38,806	0.40%	
2044	42,658		38,883	0.20%	
2045	43,980		38,918	0.09%	

Bluffdale purchases water from the Jordan Valley Water Conservancy District to meet the culinary water needs of its customers which include a majority of the residents, 17 institutional connections, 66 commercial customers, and 15 city connections. A few of the residents have private wells for their water use. Bluffdale City also provides water for the Utah Data Center, located near Camp Williams at the south end of the City. As Bluffdale grows and new services are added that require water, water efficiency and cost effective implementation become increasingly important. Currently many water users have no separate irrigation system so they use culinary water for landscape and garden watering. This culinary water master plan takes into account that Bluffdale is planning to implement a secondary water system. The secondary water system will allow Bluffdale to utilize alternative water sources and will alleviate stress on the existing culinary system. If the secondary system as currently planned in this section is not constructed, the City's culinary water model will need to be updated, consequently increasing pipe sizes, reservoirs, and water source requirements.

3.1 Definitions

ERC	Equivalent Residential Connection
gpm	gallons per minute
gpd	gallons per day
IFC	International Fire Code

Equivalent Residential Connections (ERC)
For the purposes of this study, flows generated by water users, such as businesses, schools, churches, and residents have been converted to common units called ERCs. ERCs compare a water user's use rate to that of a single family dwelling. In this case, a comparison of total water use including both culinary and secondary use.

As an example, the peak water use for a residential connection in Bluffdale was approximately 0.356 gallons per minute (gpm) during the average day of the peak month. By contrast, an average commercial connection used approximately 1.201 gpm. Therefore, to equate a typical commercial connection to a residential connection 1.201/0.356 = 3.37 ERC's. Detailed information regarding ERC calculations can be found in Appendix "B". The following ERCs were calculated from this analysis.

Single Family Residential:	1.00 ERC
Commercial:	3.37 ERC
Institutional:	7.96 ERC

The Bluffdale's past water use data and ERC calculations can be found in the Appendix.

3.2 Level of Service (LOS)

The current level of service that Bluffdale City applies to its water systems is governed by the minimum requirements dictated by the State of Utah Division of Drinking Water as well as the International Fire Code. Some of the requirements are as follows.

Culinary water system requirements:

- Maintain 20 psi in all areas of the system during peak instantaneous usage.
- Maintain 20 psi in all areas of the water system during maximum day usage with imposed fire flows.
- New service areas added after January 1, 2007 are required to meet the following additional requirements:
    a) 30 psi during peak instantaneous demand;
    b) 40 psi during peak day demand.
- Maintain 1,000 gpm fire flows for all homes under 3,600 square feet.
- Maintain 1,750 gpm fire flows for all homes between 3,600 and 4,800 sq. ft.
- Maintain adequate fire flows for all other buildings according to IFC standards.
- Maintain adequate storage for fire flows according to IFC standards.
- Maintain 400 gallons of storage per indoor ERC serviced.
- Maintain 2,528 gallons of storage per irrigated acre if a drinking water system supplies outdoor use.
- Maintain 800 gpd of source capacity per indoor ERC serviced.
- Maintain 3.97 gpm of source capacity per irrigated acre if a drinking water system supplies outdoor use.
- Maintain 0.45 acre-ft of water right per ERC and 1.87 acre-ft per irrigated acre if a drinking water system supplies outdoor use.

Secondary water systems requirements:

- Maintain 40 psi in all areas of the water system during peak instantaneous usage.
- Maintain an average source capacity of 1.87 acre-feet per irrigated acre.
- Maintain a peak day source capacity of 3.96 gpm per irrigated acre.

In order to ensure that Bluffdale can maintain this same level of service in the future, the master plan has been based upon water models generated using these requirements.

3.3 Existing Culinary System

The existing culinary water system (see Figure 3-1) was analyzed based on existing development. The system complies with state standards, except at a few minor locations. Implementation of the recommended improvements outlined below will bring the city into compliance with state standards. These improvements may not be calculated into the impact fees or paid for by impact fees.

Improvements Required to Eliminate Existing Deficiencies

A. 1850 West Pipe Replacement – Replace approximately 1,150 feet of 2 inch water line with 8 inch to increase fire flows.
B. 2055 West Pipe Replacement – Replace approximately 350 feet of 2 inch waterline with 8 inch to increase fire flow.

C. Wood Hollow Trunkline Replacement – Replace approximately 3,000 feet of 6 inch waterline with 8 inch to increase fire flow.
D. 14850 South Pipe Replacement - Replace approximately 1,150 feet of 6 inch waterline with 8 inch to increase fire flow.
E. Silverpoint Way Pipeline – Install approximately 750 feet of 8 inch waterline from existing line on Silverpoint Way to the east end of 15250 South to increase fire flows.
F. 2200 West Pipeline Extension – Install approximately 100 feet of 8 inch waterline from existing line on Silverpoint Way to the 12 inch line in Camp Williams Road to increase fire flow.
G. 2700 West Pipeline - Install approximately 900 feet of 8 inch waterline from existing line in 14850 South to 15000 South to increase fire flows.

East Side Storage Tank

In order to facilitate future growth on the east side of Bluffdale, the City purchased 3 million gallons of storage, in 2006, in the POMA storage facility. The City paid $1.3 million for the storage facility. The outstanding balance has been included in the impact fee calculations.

3.4 Existing Secondary Facilities

Bluffdale City currently owns a limited secondary water system. However, approximately 30-40 small, privately owned systems exist throughout the city. More recently installed systems have been constructed to Bluffdale City standards per city ordinance.

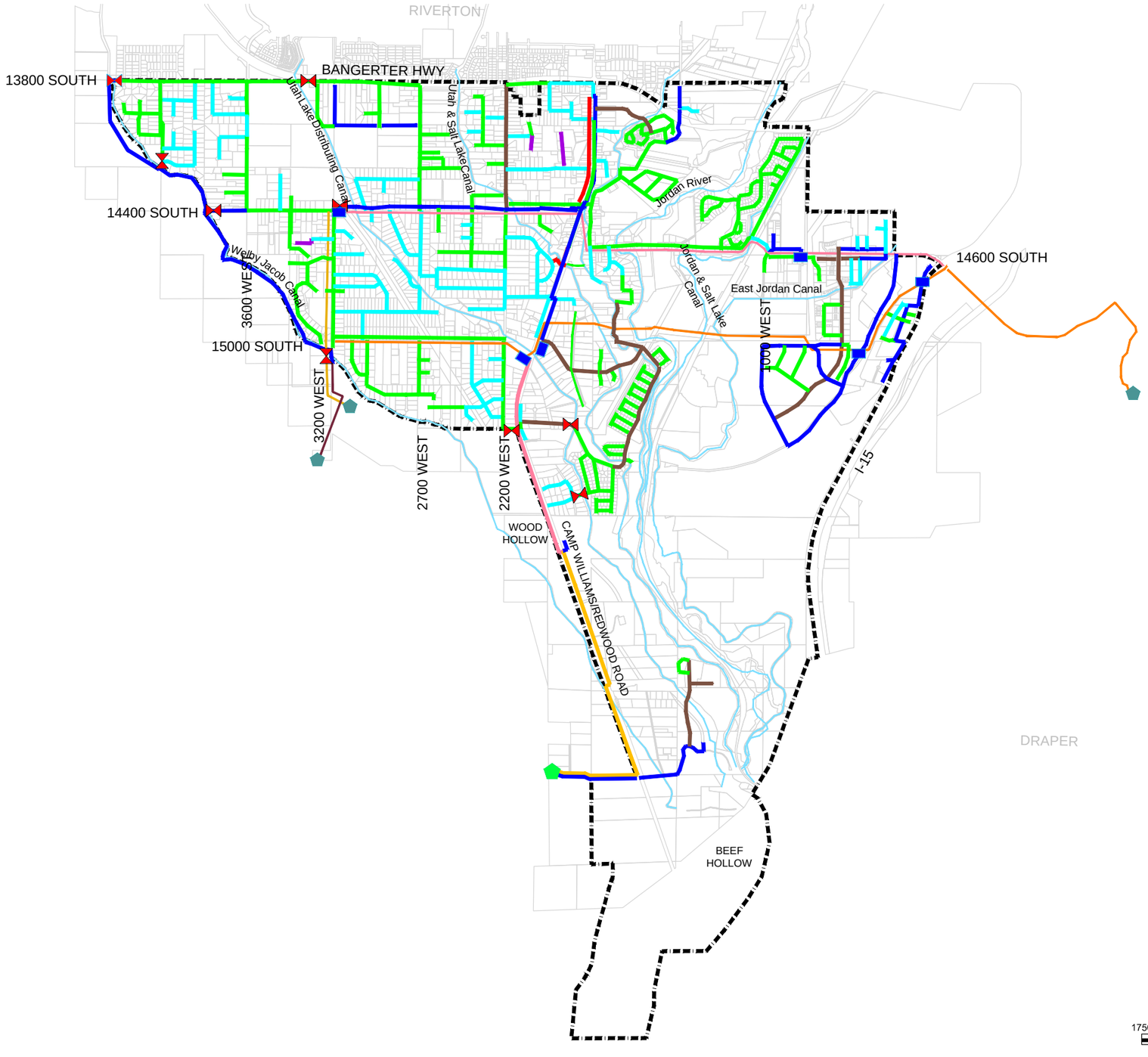
City-wide System

Bluffdale City intends to eventually install several secondary sources and to construct trunklines. The main purpose of the system will be to provide City facilities with inexpensive secondary water. As the system in constructed, the City may also be able to accommodate some existing systems and some future developments with connections to the system. Developments will need to be evaluated on a case by case basis to determine the feasibility of connecting to the system. Figure 3-2 illustrates many of the larger privately owned systems.

Figure 3-1

Legend

- 2" Diameter Pipe
- 4" Diameter Pipe
- 6" Diameter Pipe
- 8" Diameter Pipe
- 10" Diameter Pipe
- 12" Diameter Pipe
- 16" Diameter Pipe
- 18" Diameter Pipe
- 8" Diameter Pipe - Webb Well Users
- 14" Diameter Pipe - JVWCD
- 18" Diameter Pipe - JVWCD
- 48" Diameter Pipe - JVWCD
- 78" Diameter Pipe - JVWCD
- Existing PRV
- Existing Meter
- Shared Water Tank
- Bluffdale Water Tank - 3MG
- Bluffdale City Boundary



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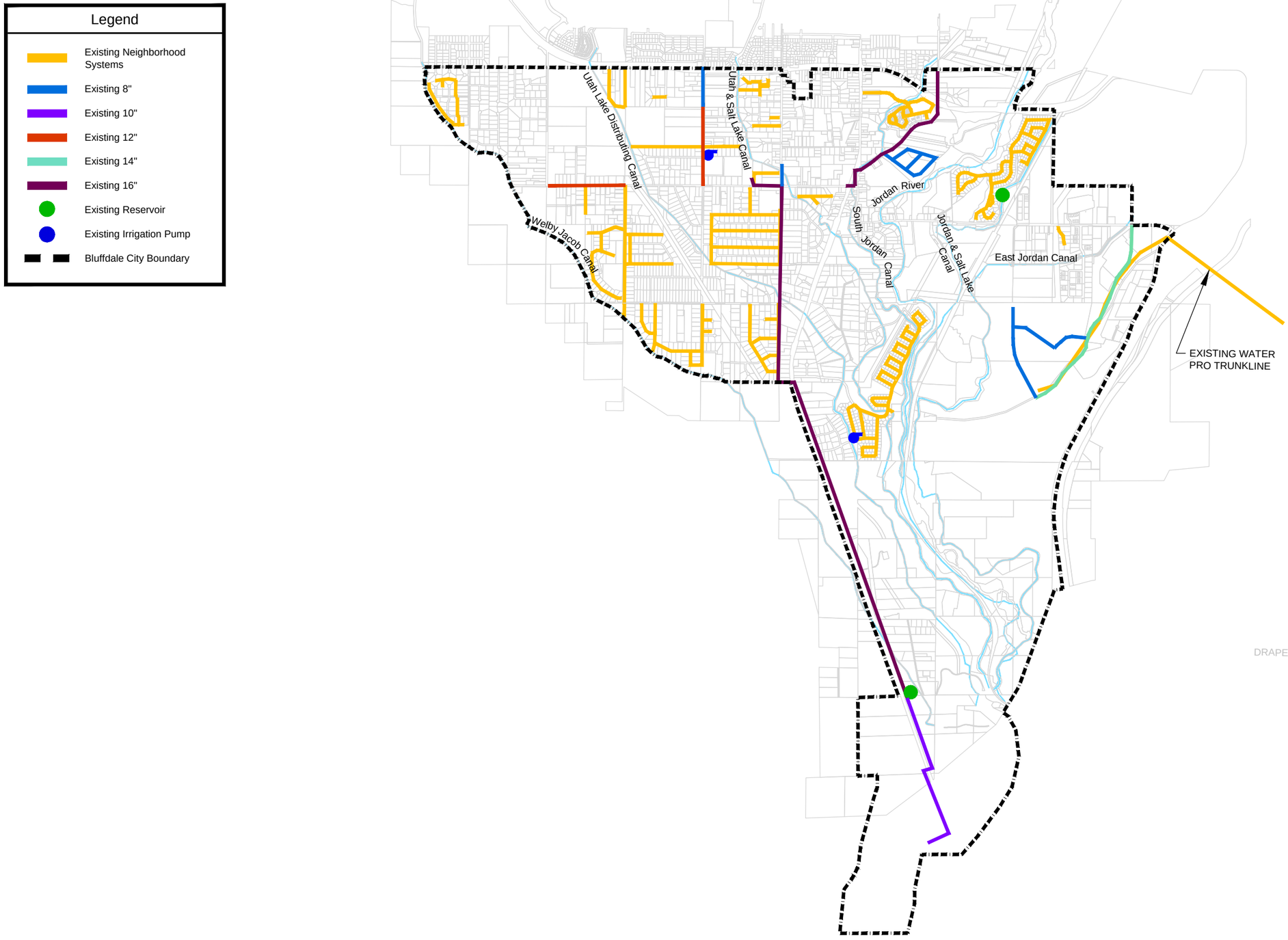
BLUFFDALE CITY

CAPITAL IMPROVEMENTS PLAN

Existing Culinary Water System

Figure 3-2



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BLUFFDALE CITY
CAPITAL IMPROVEMENTS PLAN

Existing Secondary Water System

3.5 Future Culinary Facilities

The Bluffdale water model has been updated to reflect current conditions. Analysis for this section was performed using the City's approved zoning and land use maps. The resulting infrastructure requirements to service the City during the study period are illustrated in the following master plan. See Figure 3-3.

Implementing the projects required to resolve existing deficiencies will not complete the improvements required to bring the system up to the proposed master plan. New development will burden the system beyond its current capacity. The projects identified below will add the additional capacity required to service new developments provided that a secondary water system is implemented. If the secondary water system is not implemented the improvements described in this study will not be sufficient to service Bluffdale City's water needs. Further, the culinary system facilities improvements, outlined in this chapter are primarily distribution system improvements. Future water sources and water right requirements were not analyzed for this study.

Improvements Needed for Future Growth

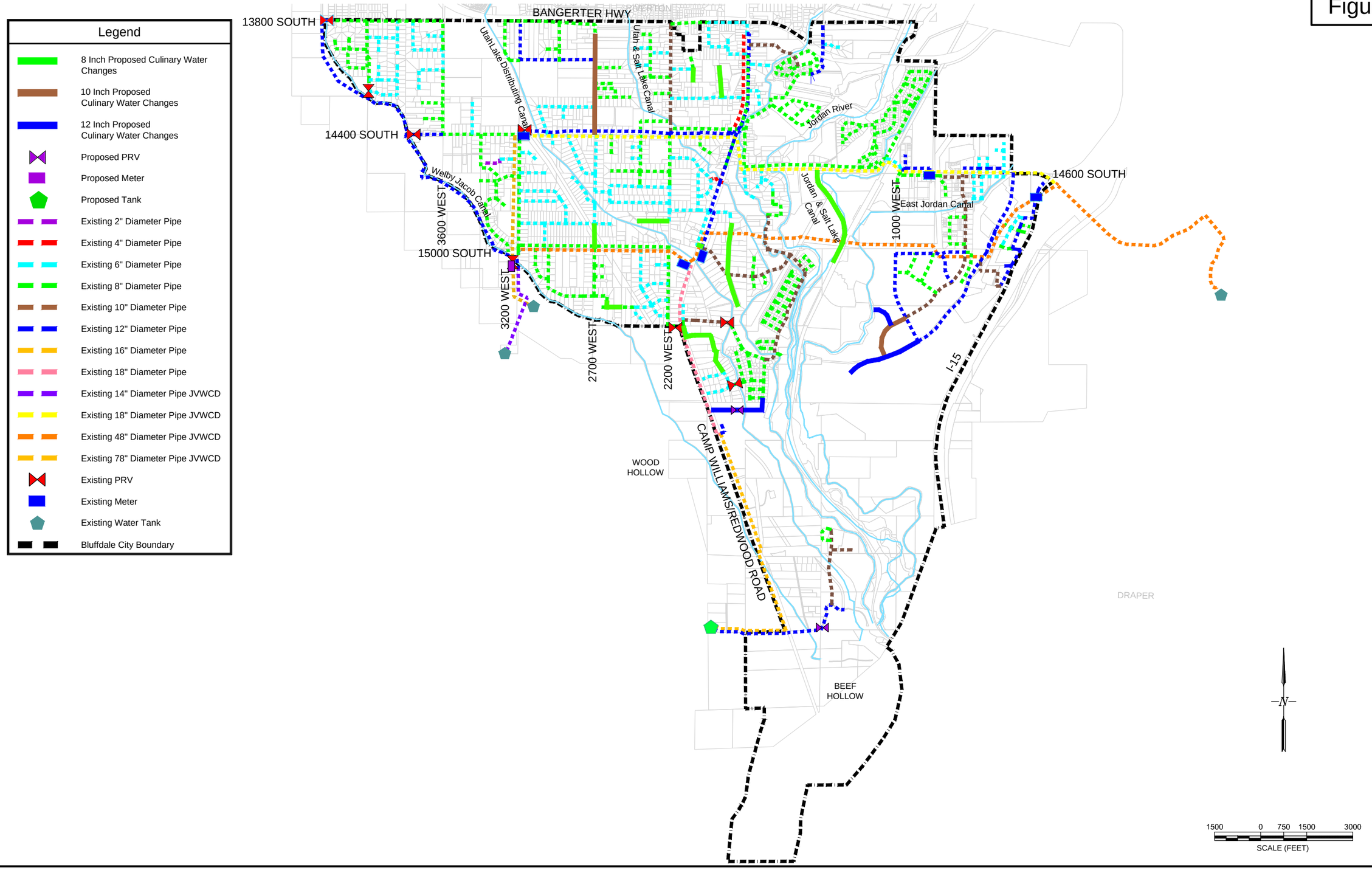
1. Independence East Trunkline Phase II – Install approximately 3,450 feet of 12 inch trunkline to service future development.
2. Porter Rockwell Corridor Trunkline – Install approximately 2,200 feet of 12 inch trunkline and a PRV in the future Porter Rockwell corridor.
3. 2700 West Pipe Replacement – Replace approximately 3,550 feet of 8 inch water line (from Bangerter to14400 South) with 10" as development occurs to meet new fire flow needs.
4. 1300 West Water Line – Install approximately 3,600 feet of new 8 inch water line along 1300 West from 14600 South to approximately 15100 South.
5. Webb Well Water Line – Install approximately 3,500 feet of new 8 inch water line to provide water to residents from the Webb Well.

3.6 Future Secondary Facilities

The South Valley Sewer District (SVSD) has recently completed construction of a new wastewater treatment facility north of Bluffdale City, between 1300 West and the Jordan River, which generates secondary water through its treatment process. Bluffdale City is planning on utilizing the treated water, that it has rights to, as a source of secondary water. The major service area planned for service from this system covers from approximately the Union Pacific Railroad to 2200 West and from Bangerter Highway to 14600 South.

Based on SVSD projections, Bluffdale currently provides approximately 635,000 gallons per day to the sewer district. Based on this study's demographics, Bluffdale is projected to provide approximately 3,050,000 gallons per day by the year 2025 based on the 2007 Feasibility Study performed by Epic Engineering. Bluffdale would have right to access at least this amount of effluent from the treatment plant through re-use application to the State.

Figure 3-3



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BLUFFDALE CITY

CAPITAL IMPROVEMENTS PLAN

Culinary Water Master Plan

The east side of the city is planned to be serviced by Draper Irrigation. At this time, Draper Irrigation is planning on mixing its current canal water with reuse water from the SVSD expansion plant.

The south end and west side of the city are currently anticipated to be serviced by a new pressurized source, namely the treatment and reuse of the Utah Data Center's recycled blowdown water. This source is anticipated to provide approximately 238 gpm continually at full development of the source. The city receives the water, treats it, stores it in a 2 million gallon tank, and distributes it through a piped system from the tank to the City Park adjacent to the fire station. In order to service the most westerly portions of the city, a booster pump will be required.

Bluffdale is continually seeking additional sources of both culinary and secondary water. Options include surface water from canals and new water wells. These options could include a tank located in Herriman to achieve the needed elevation for a gravity-fed system. Coordination with Herriman City would be mandatory to implement this option.

Figure 3-4 illustrates the master plan for the secondary system.

3.7 Impact Fee Structure

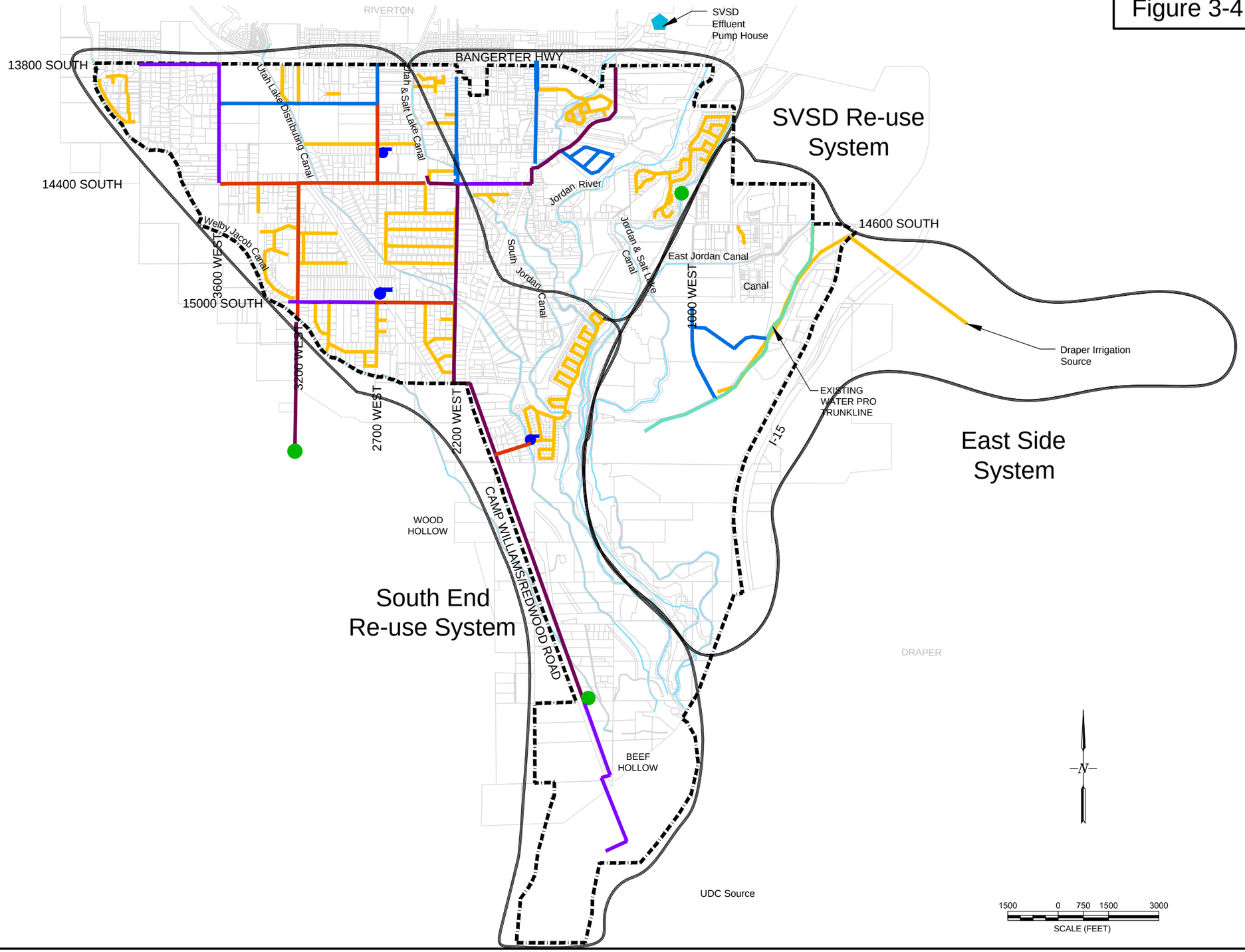
In order for Bluffdale City to supply its residents with sufficient water in the future, one of two approaches must be implemented. Either the existing culinary system must be upsized to meet all future demands or the existing system must be upsized to meet only future indoor demands, while a secondary system is implemented to supply outdoor demand. Both of these alternatives are feasible. Current economic analysis indicates that implementing a secondary system is a more cost effective alternative for the City. As the population along the Wasatch Front grows and drinking water regulations expand, culinary water will become more expensive.

The existing culinary system supplies both indoor and outdoor use for most of Bluffdale's residents. It provides the City with its current level of service. The City is currently planning on meeting the demands of future growth by implementing a secondary water system while upsizing the culinary system to meet the future demands of indoor water use. By implementing the secondary water system there will be less of a burden on the culinary system and, therefore, less need to improve and upsize the culinary system. Because the City's current indoor and outdoor needs are met, any future culinary or secondary addition to the water system is attributable to future growth and therefore should be funded by future growth.

Figure 3-4

Legend

- Existing Neighborhood Irrigation Systems
- 8" Proposed Irrigation
- 10" Proposed Irrigation
- 12" Proposed Irrigation
- 16" Proposed Irrigation
- 8" Existing Irrigation
- 10" Existing Irrigation
- 12" Existing Irrigation
- 14" Existing Irrigation
- 16" Existing Irrigation
- Pump
- Existing Tank/Reservoir
- Pump House
- Bluffdale City Boundary



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CAPITAL IMPROVEMENTS PLAN

Secondary Water Master Plan

3.8 Culinary Capital Facilities Plan

The culinary capital facilities plan (CFP) indicates which improvements will be needed in the future and provides a planning level cost estimate for each (see Appendix "B"). It provides important information relative to funding needed for future improvements and can be a valuable tool for the City in the budgeting and planning processes.

Recommended improvements to water facilities have been separated into short range (0-6 years), medium range (7-12 years) and long range (12+ years). Table 3-1 summarizes the anticipated projects, cost estimates and projected funding sources.

Cost estimates developed include acquiring sufficient right-of-way and installing new pipelines. Costs have also been included for design and construction engineering. Budgetary cost estimates for each improvement are shown in Figure 3-5 and Table 3-1.

Table 3-1: Culinary Water Capital Facilities Estimates (2015 Dollars)

Segment	Estimate (Millions)	Funding Source
1-6Year Improvements		
(A) 1850 West Pipe Replacement	$0.09	City
(B) 2055 West Pipe Replacement	$0.03	City
(C) Wood Hollow Trunk Line Replacement	$0.23	City
(D) 14850 South Pipe Replacement	$0.01	City
(E) Silverpoint Way Pipeline	$0.06	City
(F) 2200 West Pipeline Extension	$0.09	City
(G) 2700 West Pipeline	$0.07	City
(1) Independence East Trunk Line Phase II	$0.33	Development
(2) Porter Rockwell Corridor Trunk Line	$0.29	Impact Fees
Subtotal	**$1.20**	
7-12 Year Improvements		
(3) 2700 West Pipe Replacement	$0.31	Impact Fees
Subtotal	**$0.31**	
12+ Year Improvements		
(4) 1300 West Waterline	$0.22	Impact Fees
(5) Webb Well Waterline	$0.27	City
Subtotal	**$0.47**	
Total	**$1.98**	

3.9 Secondary Water Capital Facilities Plan

The secondary water CFP indicates which improvements will be needed in the future and also provides a planning level cost estimate referenced from Appendix "B". Recommended improvements to the secondary system have been separated into the following categories: short range (1-6 years) and medium range (7-12 years) and long range (12+ years)

Figure 3-6 illustrated the projects required to complete the secondary water system. Table 3-2 summarizes the recommended improvement projects, their projected funding sources and their anticipated costs.

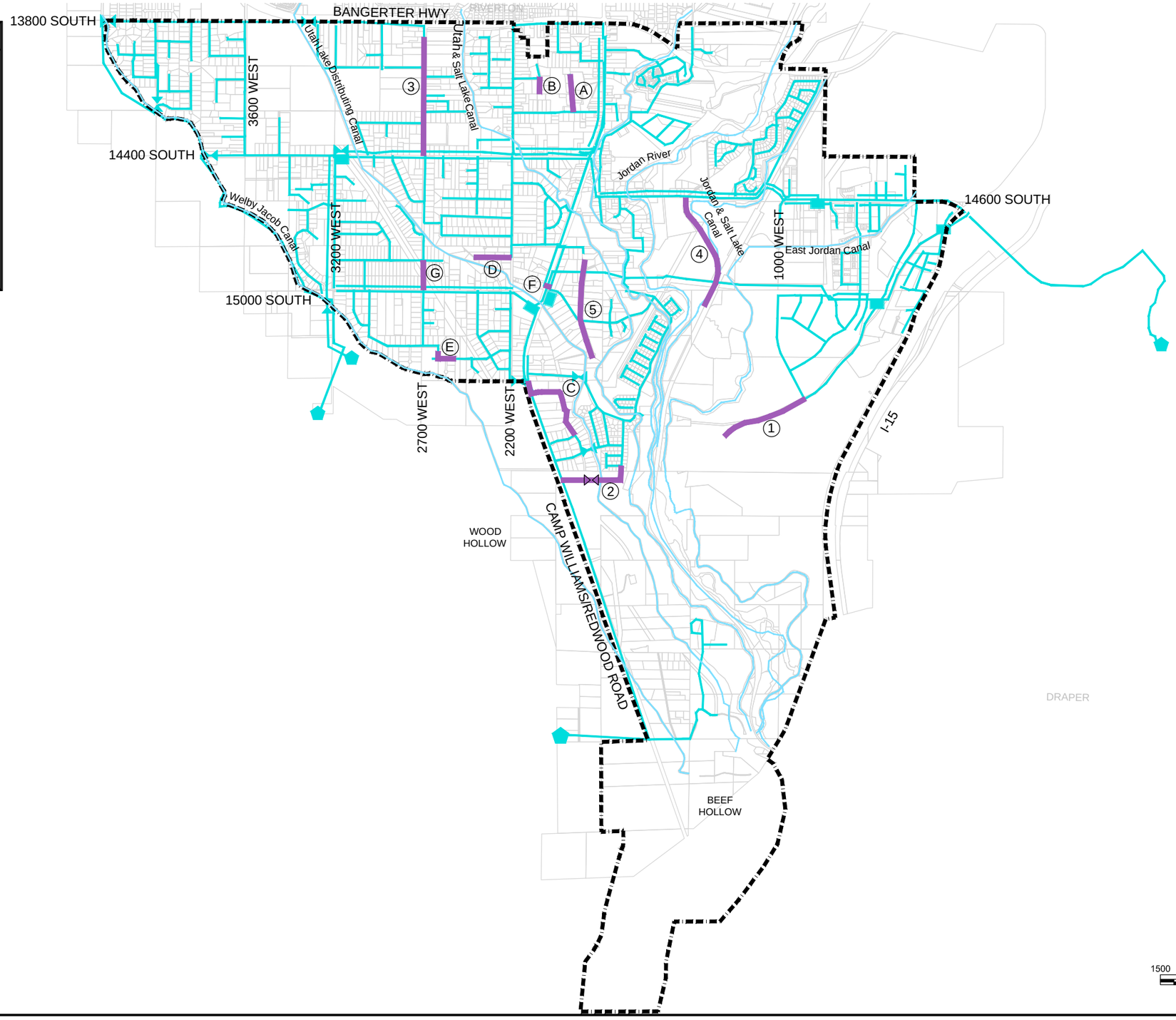
Table 3-2: Secondary Water Capital Facilities Estimates (2015 Dollars)

Segment	Estimate (Millions)	Funding Source
1-6 Year Improvements		
(1) New Well and Water Rights	$0.50	Impact Fees
(2) Independence System	$1.44	Development
(3) SVSD Reuse Project	$2.53	Impact Fees
Subtotal	**$4.47**	
7-12 Year Improvements		
(5) 2200 West Trunkline Extension	$0.27	City
(6) Redwood Road Trunkline	$0.28	City
(7) 14400 South Trunkline	$0.25	Impact Fees
(8) Secondary Water Storage Tank	$1.00	Impact Fees
(9) 15000 South Trunkline	$0.45	City
(10) 3600 West Trunkline	$0.19	Impact Fees
Subtotal	**$2.44**	
12+ Year Improvements		
(11) 13800 South Trunkline	$0.53	City
(12) 15500 South Booster Pump	$0.76	Impact Fees
Subtotal	**$1.29**	
Total	**$8.20**	

Figure 3-5

Legend

- Proposed Culinary Water Projects
- Proposed Tank
- Proposed PRV
- Proposed Meter
- Existing Meter
- Existing Culinary Water
- Existing PRV/FCV
- Existing Tank
- Bluffdale City Boundary



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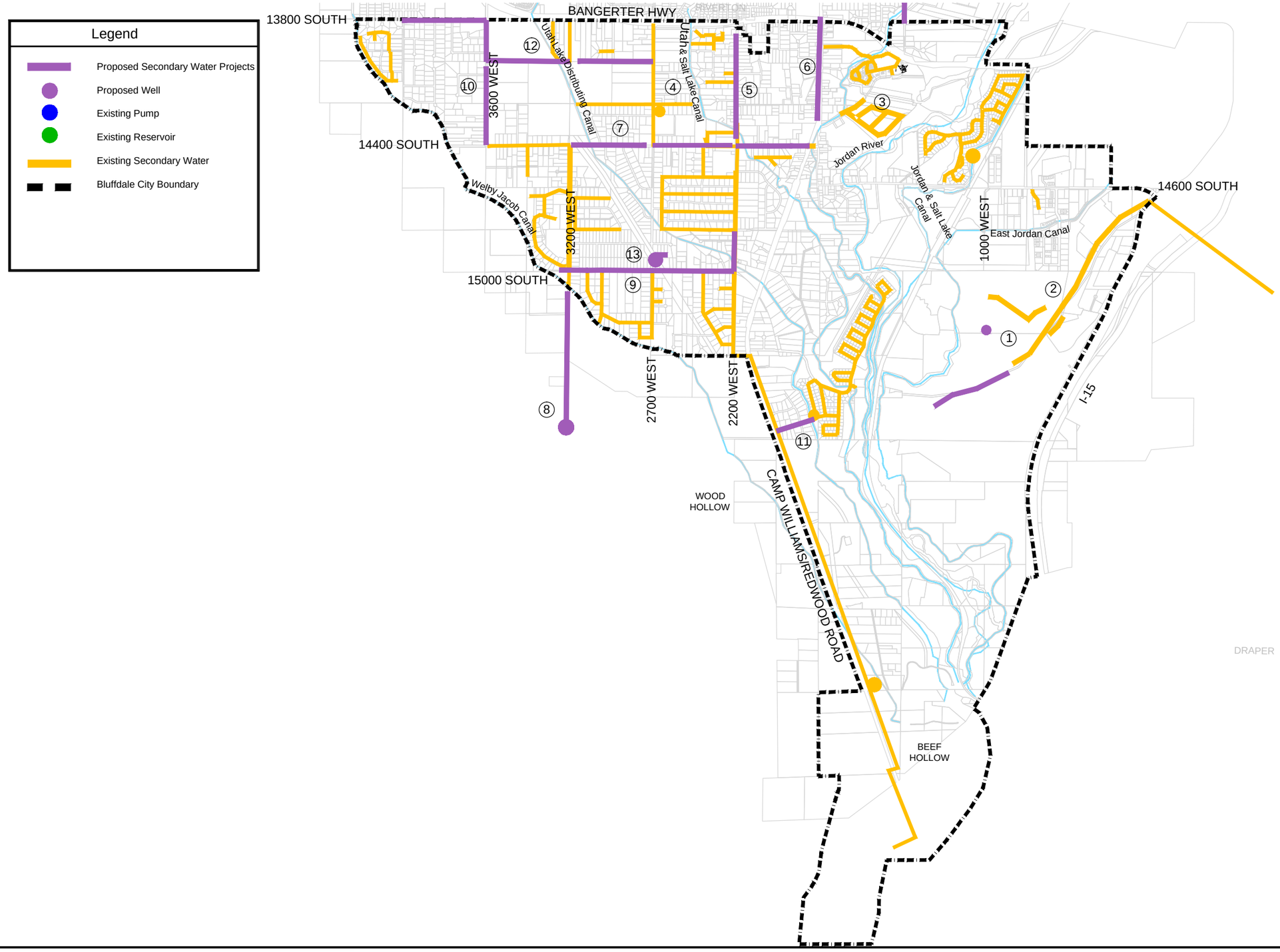
CAPITAL IMPROVEMENTS PLAN

Culinary Water Capital Facilities Plan

Figure 3-6



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CAPITAL IMPROVEMENTS PLAN

Secondary Water Capital Facilities Plan

The purpose of this section is to inventory the existing roadway facilities, identify possible future deficiencies and recommend a plan for installing scheduled improvements. Through modeling and review of existing and projected levels of service, areas of future concern in Bluffdale City's street system have been identified and planned for.

4.1 Level of Service (LOS)

Adequacy of an existing street system can be quantified by assigning Levels of Service (LOS) to major roadways and intersections. As defined in the *Highway Capacity Manual*, a special report published by the Transportation Research Board, LOS serves as the traditional measuring stick of a roadway's functionality. LOS is identified by reviewing elements such as the number of lanes assigned to a roadway, the amount of traffic using the roadway and amount of delay per vehicle at intersections. Levels of service range from A (free flow) to F (complete congestion).

4.2 Existing Facilities

Previous traffic counts were supplemented with the most recent modeling performed for the Porter Rockwell Blvd environmental study and UDOT's The Point Project. Figure 4-1 illustrates Bluffdale City's traffic volumes and levels of service. Figures 4-2 and 4-3 illustrate the projected traffic volumes for the study year 2040. Figure 4-2 projects future traffic volumes throughout Bluffdale if the Porter Rockwell Boulevard is not connected to Camp Williams Road by 2040, while Figure 4-3 illustrates future trips generated if it is connected.

As indicated in Figure 4-1, roads throughout Bluffdale currently have a level of service A. This is typical for a small community. However, as development occurs traffic loads will increase until levels of service become more typical for an urban setting (i.e. around LOS C). Figures 4-2 and 4-3 clearly illustrate how drastically traffic will increase throughout the city. In order to preserve the quality of life desired by the city's residents and to provide a sound street system that will support the City's growing population base, improvements will need to be made as growth occurs. A future LOS of C is recommendable.

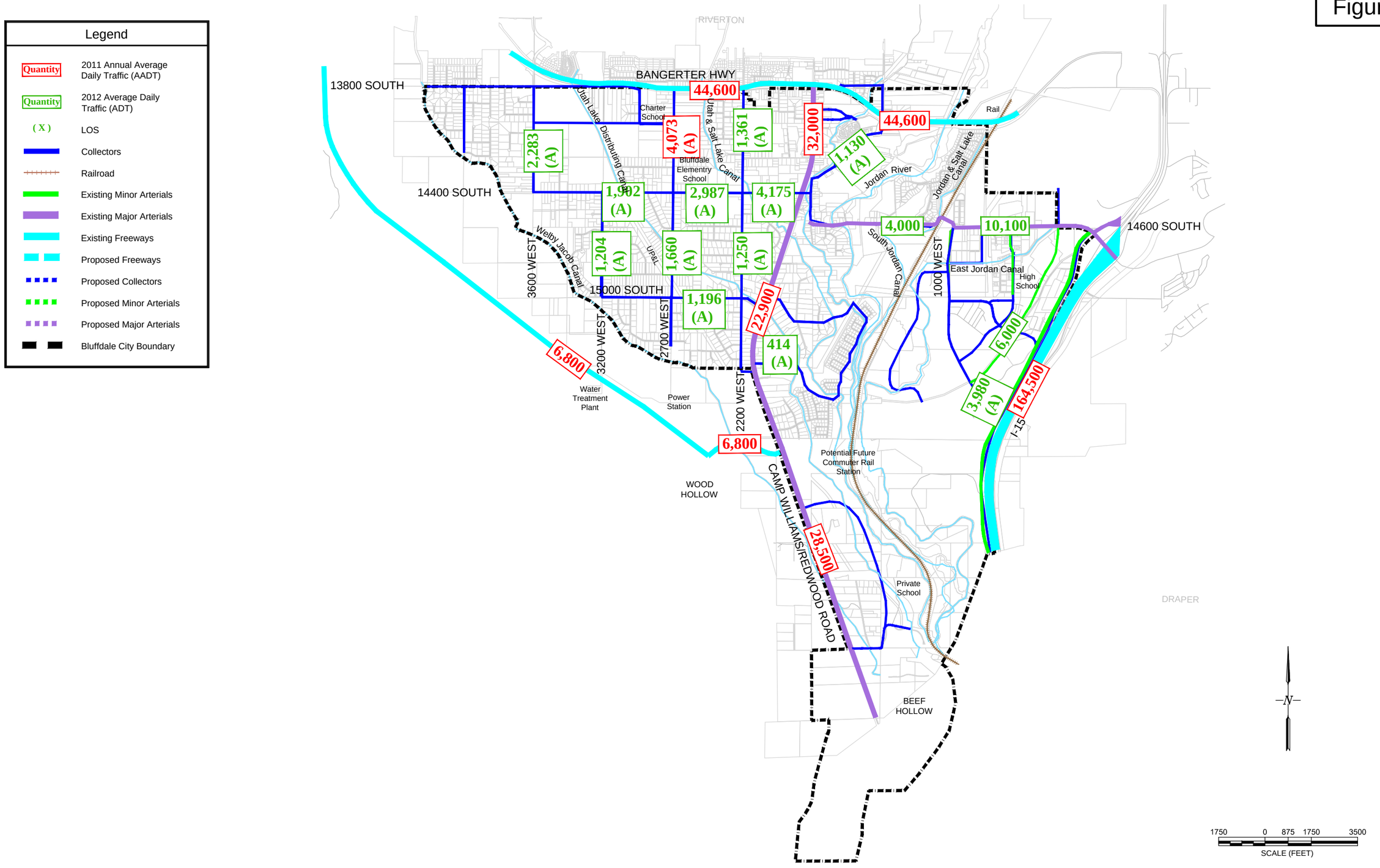
4.3 Future Facilities

Based on the current land use, zoning, demographics, and growth patterns, Bluffdale's projected growth will have impacts on traffic volumes and roadways throughout the city. Projections are based upon accepted traffic modeling using Institute of Transportation Engineers (ITE) trip generations. Trip generation was based on Single Family Equivalents SFE) figured using Bluffdale's land use plan. SFE data can be found in Appendix "C".

Roadway Design

The typical cross-sections and configurations for total right-of-way width, pavement width, number of traffic lanes, and side treatments such as sidewalk and park strip can be found in Figure 4-5.

Figure 4-1



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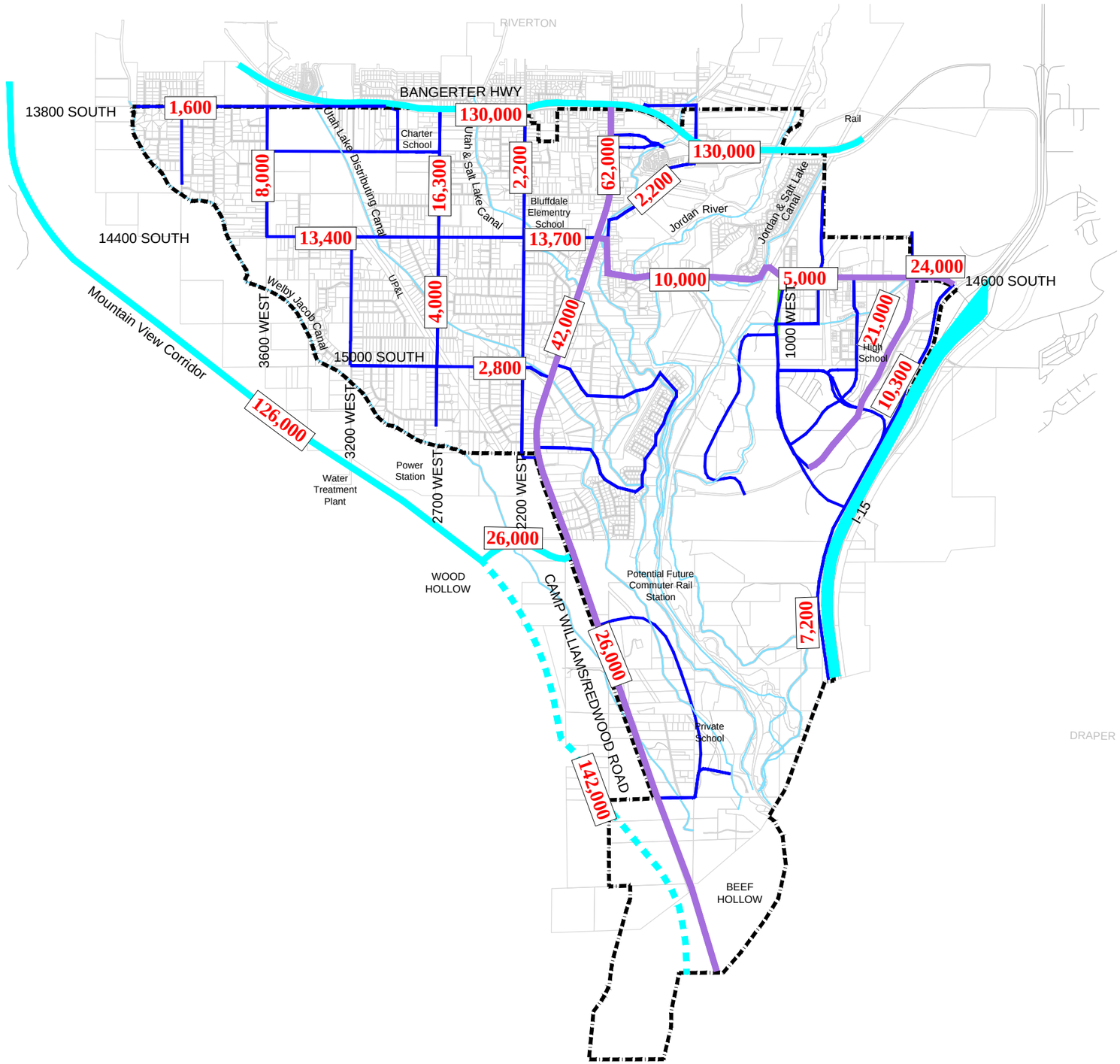
CAPITAL IMPROVEMENTS PLAN

UDOT Historical Volumes & Current Volumes

Figure 4-2

Legend

- Quantity — 2040 Average Weekday Daily Traffic (AWDT)
- Collectors
- Railroad
- Existing Minor Arterials
- Existing Major Arterials
- Existing Freeways
- Proposed Freeways
- Proposed Collectors
- Proposed Minor Arterials
- Proposed Major Arterials
- Bluffdale City Boundary



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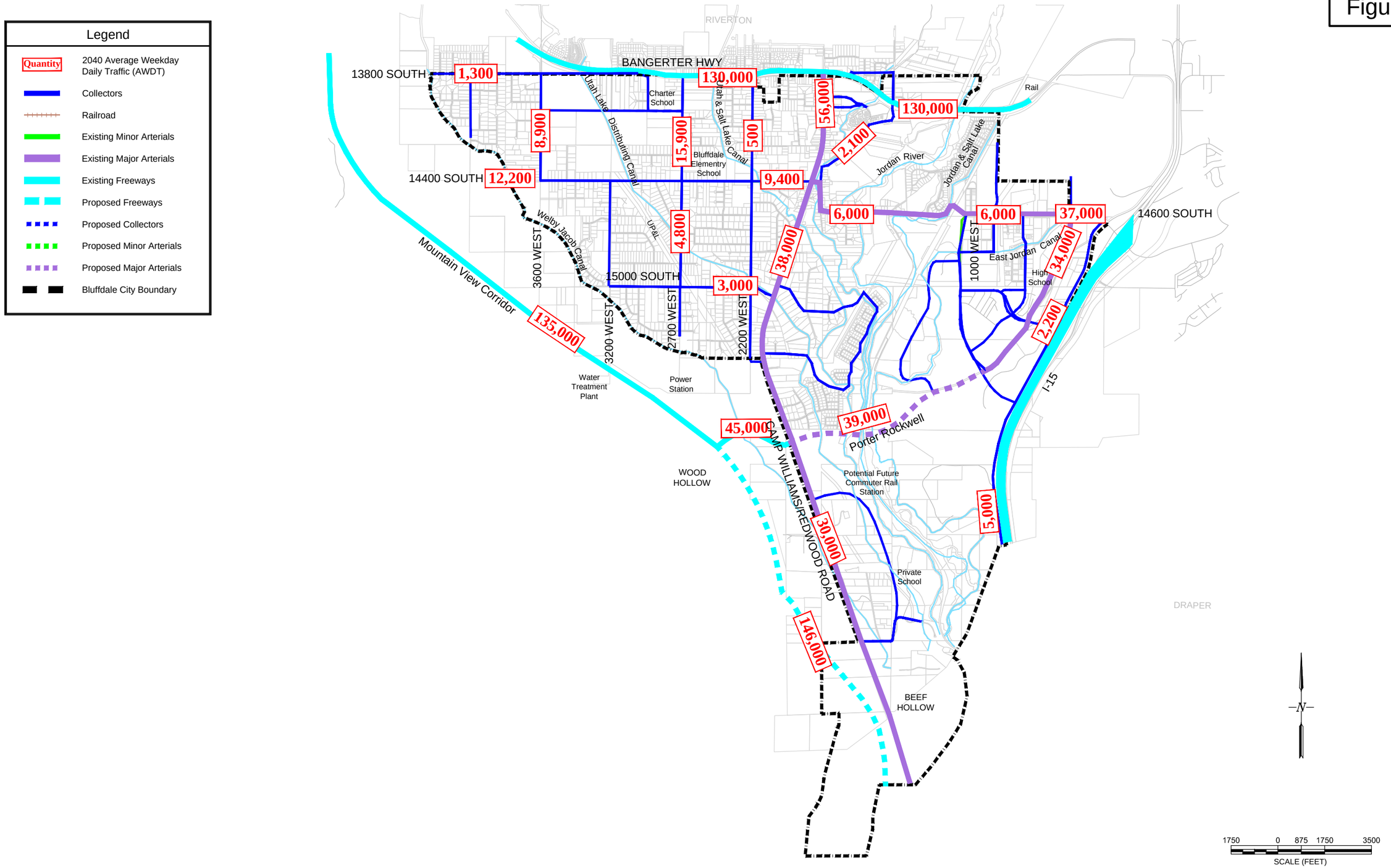
CAPITAL IMPROVEMENTS PLAN

WFRC 2040 Volumes W/out Porter Rockwell Connection

Figure 4-3



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BLUFFDALE CITY

CAPITAL IMPROVEMENTS PLAN

WFRC 2040 Volumes W/ Porter Rockwell Connection

Redwood Road/Camp Williams Road
It can be noted that SR-68 (Redwood Road/Camp Williams Road) was widened several years ago by the Utah Department of Transportation (UDOT). This roadway will continue to attract large volumes of traffic and it was designed to accommodate future growth. However, continued coordination with UDOT will help to ensure that future roadway improvements are constructed as needed.

Noell Nelson Drive (1000 West)
Noell Nelson Drive has become critical to the future development of Bluffdale City. It is planned as the only major north-south collector connecting 14600 South to the future Porter Rockwell Boulevard through Independence. As such, it is critical to the entire transportation system of Bluffdale and the north end of it, where it ties into 14600 South to the East Jordan Canal will be analyzed as a system improvement. The north end of the project constitutes 53% of its length (2,650 linear feet) and includes a box culvert ($210,000). In total, the costs eligible for impact fees are 58% of the estimated roadway costs. Estimates are detailed in the appendix and are discussed further in Chapter 9.

Porter Rockwell Boulevard (PRB)
Porter Rockwell Boulevard is a planned regional facility that will connect the future Mountain View Corridor to I-15 alleviating traffic through residential areas of Bluffdale City. It is currently planned in the location shown in Figure 4-3. PRB is a critical facility to the Independence subdivision and surrounding properties. Therefore, a special service area has been created to calculate impact fees for PRB. The service area is defined in Chapter 9 as a part of the impact fee calculations.

Freedom Point Way
Freedom Point Way is an internal collector to the Independence Subdivision. It provides internal circulation and routes for subdivision residents to access system roads. However, the city has recently identified a parcel for construction of a new fire station along Freedom Point Way. As such, the south end of Freedom Point Way has become critical to the City as a system improvement to provide public safety services to the entire east side of the City. Therefore, the southern portion (29%) of Freedom Point Way that will provide access to the new station is considered a system improvement and is impact fee eligible.

13970 South
13970 South has recently become a vital component of the Bluffdale transportation system. With the recently completed Redwood Rd/Bangerter Highway interchange project adding revitalization to the north end of Bluffdale, a commercial center is in the process of developing. 13970 South is the access road to Bluffdale's first major commercial center. As a result, it will generate an extraordinary amount of traffic from every area of the city. The cost estimate includes installation of a new signal at 13970 South and Redwood Road.

Sand and Gravel Pits
The sand and gravel pits located in the southeast corner of Bluffdale City are currently zoned for sand and gravel production. As discussed with City staff, the area will continue to operate as such into the foreseeable future. However, it is important to note that the area's current land use plan indicates business park and regional commercial (see Figure 2-1) and should be studied in future capital facilities plans for its impacts to each public utility as signs indicate that the areas land use may change.

Pedestrian Traffic
Pedestrian safety is an important feature of transportation planning. Bluffdale's current city standards include a four-foot wide sidewalk with a six-foot wide parkstrip to provide buffer for pedestrians from vehicular traffic.

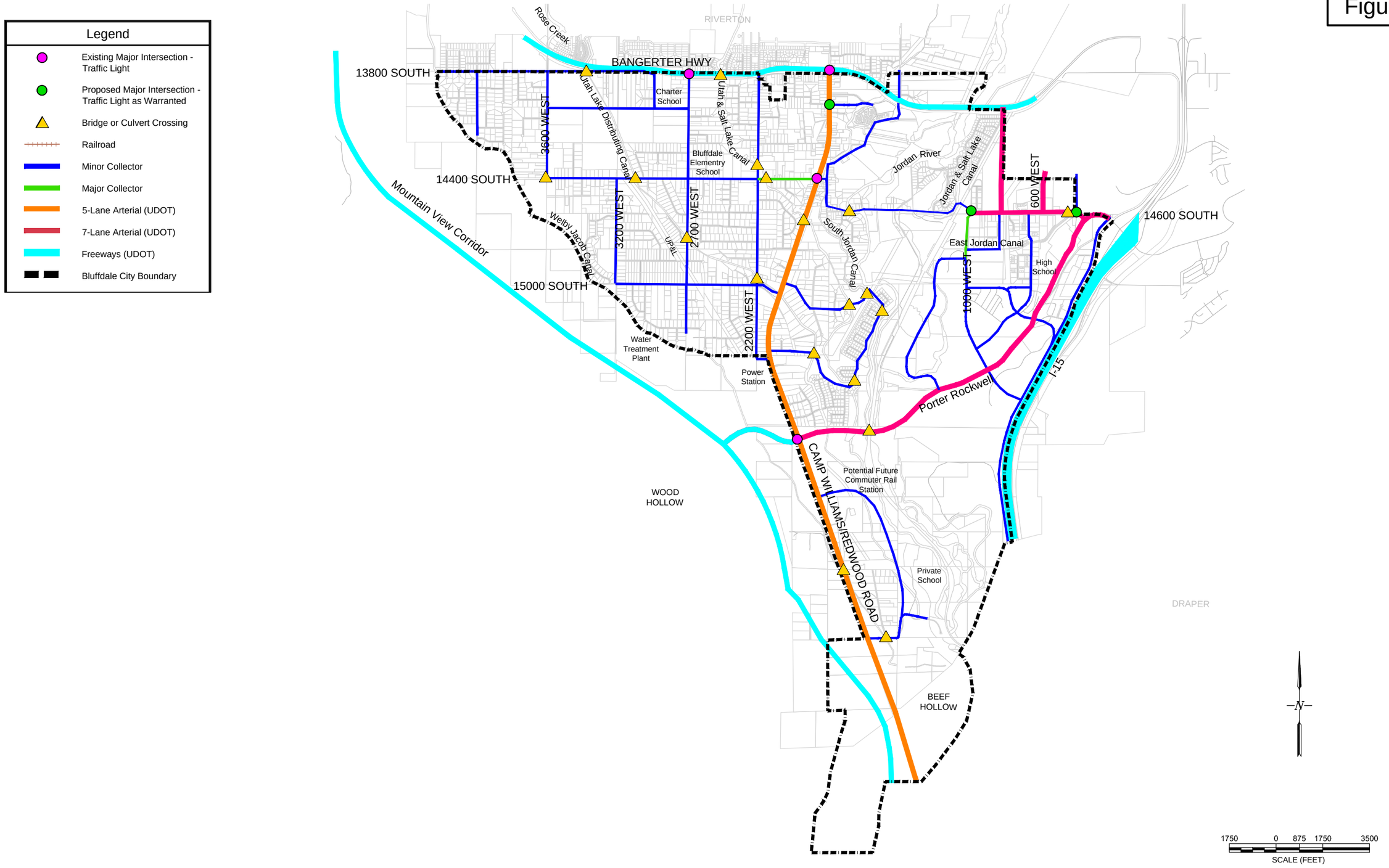
Corridor Preservation
There are several facilities identified in this plan that will require improvements to meet future demands. In planning for these future facilities, corridor preservation techniques should be employed. The main purposes of corridor preservation are to:

I. preserve the viability of future options
II. reduce the cost of these options
III. minimize environmental and socio-economic impacts of future implementation

Corridor preservation seeks to preserve the right-of-way needed for future roadway facilities and prevent development which might be incompatible with these facilities. This is primarily accomplished by the community's ability to apply land use controls such as zoning and approval of developments. Adoption of the CFP by Bluffdale City is a commitment to citizens and future leaders in the community that the identified future corridors will be the ultimate location for roadway facilities.

Perhaps, the most important elements of corridor preservation are ensuring that the corridors are preserved in the correct location and that they meet the applicable design and right-of-way standards for the type of facility being proposed. Major roadway corridors have been identified and classified in Figure 4-4. As this plan does not define the exact alignment of each future corridor, it becomes the responsibility of the City to make sure that the corridors are correctly preserved. This will have to be accomplished through the engineering and planning reviews done within the City as development and annexation requests are approved that involve properties within or adjacent to the future corridors.

Figure 4-4



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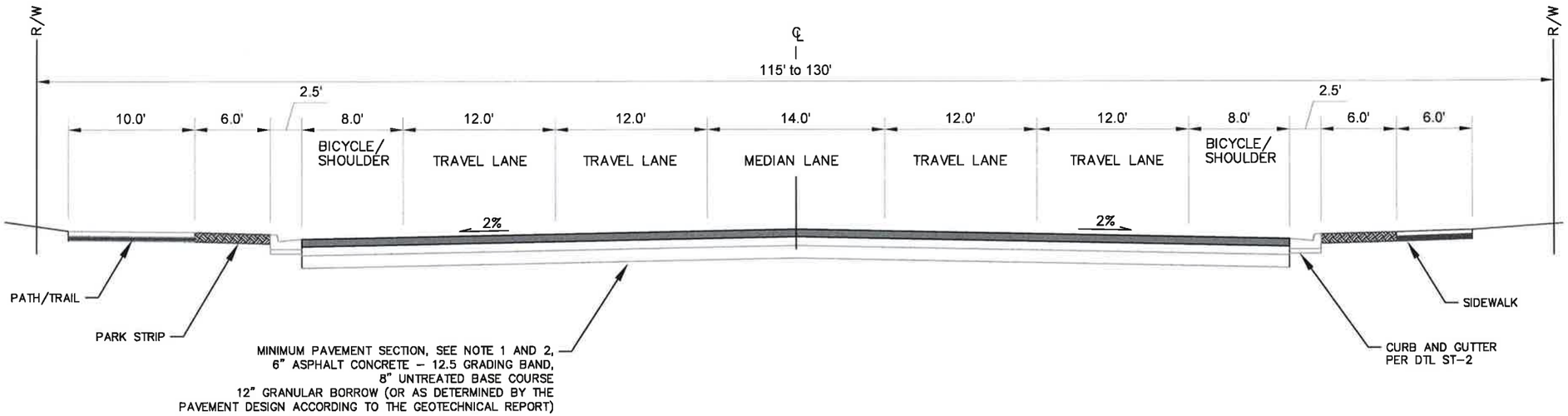
BLUFFDALE CITY

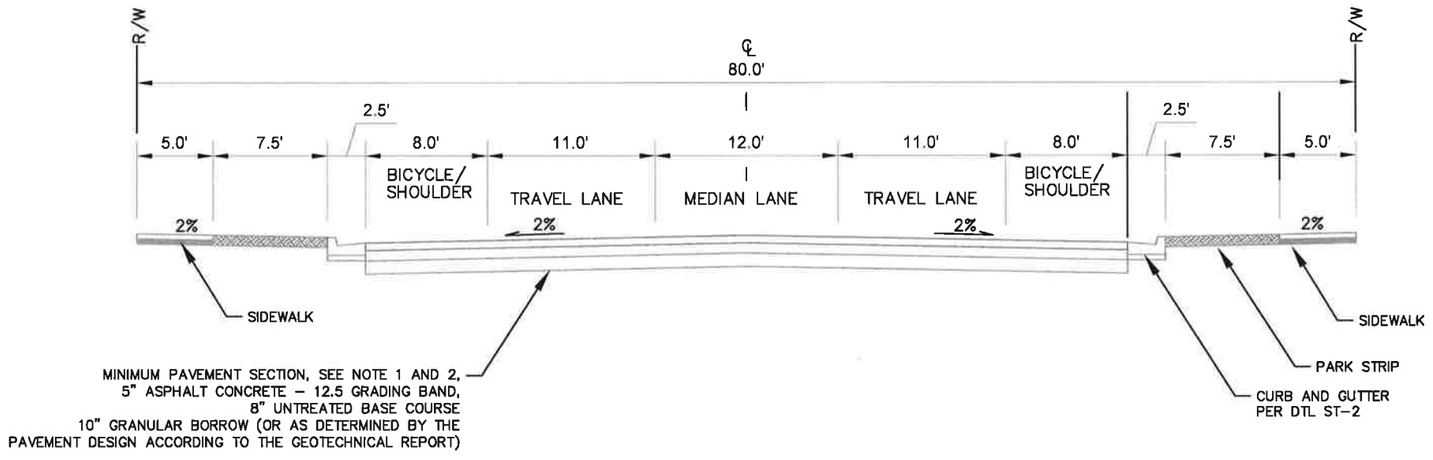
CAPITAL IMPROVEMENTS PLAN

Transportation Master Plan

Figure 4-5



MAJOR ARTERIAL



MAJOR COLLECTOR

NOTES:

1. ASPHALT CONCRETE: USE SUPERPAVE HMA IN ACCORDANCE WITH APWA 32 12 06 WITH THE FOLLOWING:
   A. USE PG64–28 BINDER
   B. DO NOT INCORPORATE MORE THAN 10% RAP
   C. USE 12.5mm GRADATION UNLESS OTHERWISE NOTED
   D. USE AIR VOID TARGET OF 3.5%
   E. USE N(DESIGN) = 75 GYRATION
   F. DO NOT HEAT MIX ABOVE 325 DEGREES FAHRENHEIT

2. INSTALL ASPHALT CONCRETE IN ACCORDANCE WITH APWA 32 12 16

3. PROVIDE THAT THE ROAD DRAINS PROPERLY AND IS FREE OF ANY STANDING WATER ON ANY PORTION OF THE PAVEMENT.

4. PROVIDE LANDSCAPING IN PARK STRIP IN ACCORDANCE WITH CITY ORDINANCES.

5. SEAL NEW PAVEMENT WITH A SAND SLURRY AFTER ONE YEAR OF PAVEMENT PLACEMENT.

6. THE CITY ENGINEER MAY APPROVE SPECIFIC DESIGNS WHEN VARIATIONS FROM THE STANDARDS ARE NEEDED DUE TO SITE CONDITIONS, UTILITY, OR TOPOGRAPHICAL CONSTRAINTS. ANY VARIANT OF THESE DETAILS MUST BE BASED UPON A DESIGN STAMPED BY A UTAH LICENSED PROFESSIONAL CIVIL ENGINEER.

BLUFFDALE

City of Bluffdale
Engineering Standards

Approved Michael Fazio City Engineer 6 JUNE 13 Date

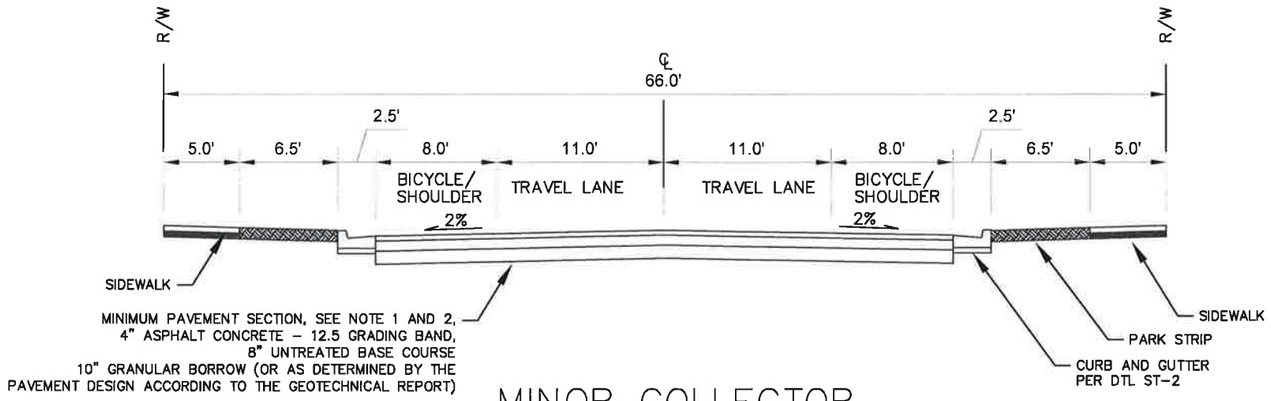
STANDARD DETAIL TITLE

TYPICAL STREET CROSS-SECTIONS Part 1

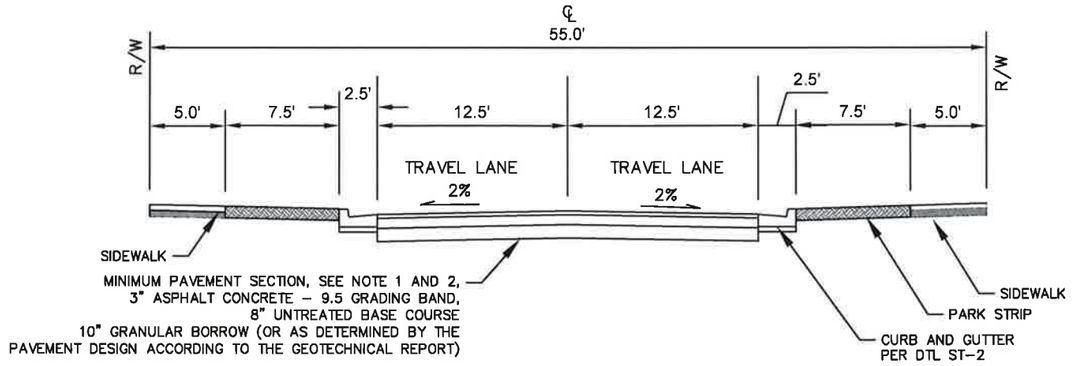
DETAIL SERIES: STREET

DETAIL NO: ST-7A

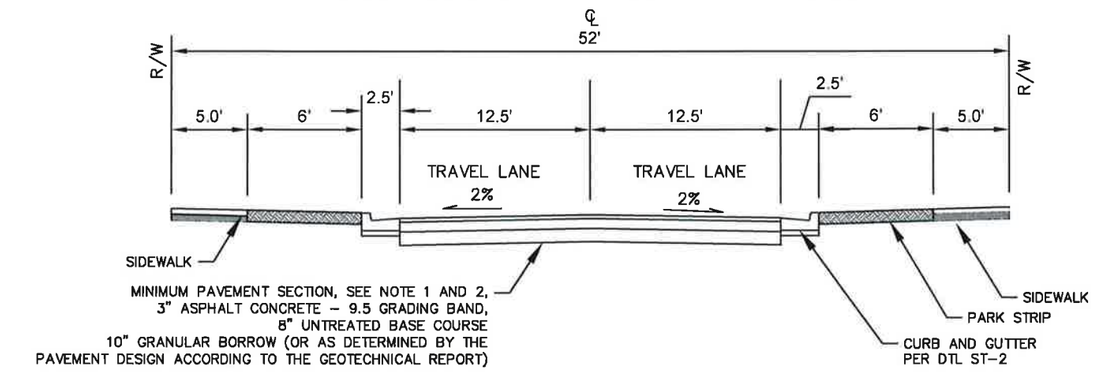
Figure 4-6



MINOR COLLECTOR



STANDARD RESIDENTIAL A



STANDARD RESIDENTIAL B–ONLY ALLOWED IN ZONE R–1–43

NOTES:

1. ASPHALT CONCRETE: USE SUPERPAVE HMA IN ACCORDANCE WITH APWA 32 12 06 WITH THE FOLLOWING:
   A. USE PG64–28 BINDER
   B. DO NOT INCORPORATE MORE THAN 10% RAP
   C. USE 12.5mm GRADATION UNLESS OTHERWISE NOTED
   D. USE AIR VOID TARGET OF 3.5%
   E. USE N(DESIGN) = 75 GYRATION
   F. DO NOT HEAT MIX ABOVE 325 DEGREES FAHRENHEIT

2. INSTALL ASPHALT CONCRETE IN ACCORDANCE WITH APWA 32 12 16

3. PROVIDE THAT THE ROAD DRAINS PROPERLY AND IS FREE OF ANY STANDING WATER ON ANY PORTION OF THE PAVEMENT.

4. PROVIDE LANDSCAPING IN PARK STRIP IN ACCORDANCE WITH CITY ORDINANCES.

5. SEAL NEW PAVEMENT WITH A SAND SLURRY AFTER ONE YEAR OF PAVEMENT PLACEMENT.

6. USE RESIDENTIAL ASPHALT CONCRETE CRITERIA (SEE CROSS–SECTION) FOR PATHWAYS, SIDEWALKS AND PARKING LOTS.

7. THE CITY ENGINEER MAY APPROVE SPECIFIC DESIGNS WHEN VARIATIONS FROM THE STANDARDS ARE NEEDED DUE TO SITE CONDITIONS, UTILITY, OR TOPOGRAPHICAL CONSTRAINTS. ANY VARIANT OF THESE DETAILS MUST BE BASED UPON A DESIGN STAMPED BY A UTAH LICENSED PROFESSIONAL CIVIL ENGINEER.

BLUFFDALE

City of Bluffdale
Engineering Standards

Approved Michael Fazio 6 JUNE 13
City Engineer Date

STANDARD DETAIL TITLE

TYPICAL STREET CROSS-SECTIONS Part 2

DETAIL SERIES: STREET

DETAIL NO. ST-7B

4.4 Transportation Capital Facilities Plan

The Transportation Capital Facilities Plan (CFP) indicates which improvements will be needed in the future and provides a planning level cost estimate for each improvement. It can provide important information relative to funding needed for future street improvements and can be a valuable tool for City officials in the budgeting and planning process.

Recommended improvements to roadway facilities have been separated into the following categories: short range (1-6 years); medium range (7-12 years); long range (12+ years). Figure 4-7 illustrates and Table 4-1 summarizes the recommended improvement projects, their projected funding sources and their anticipated costs.

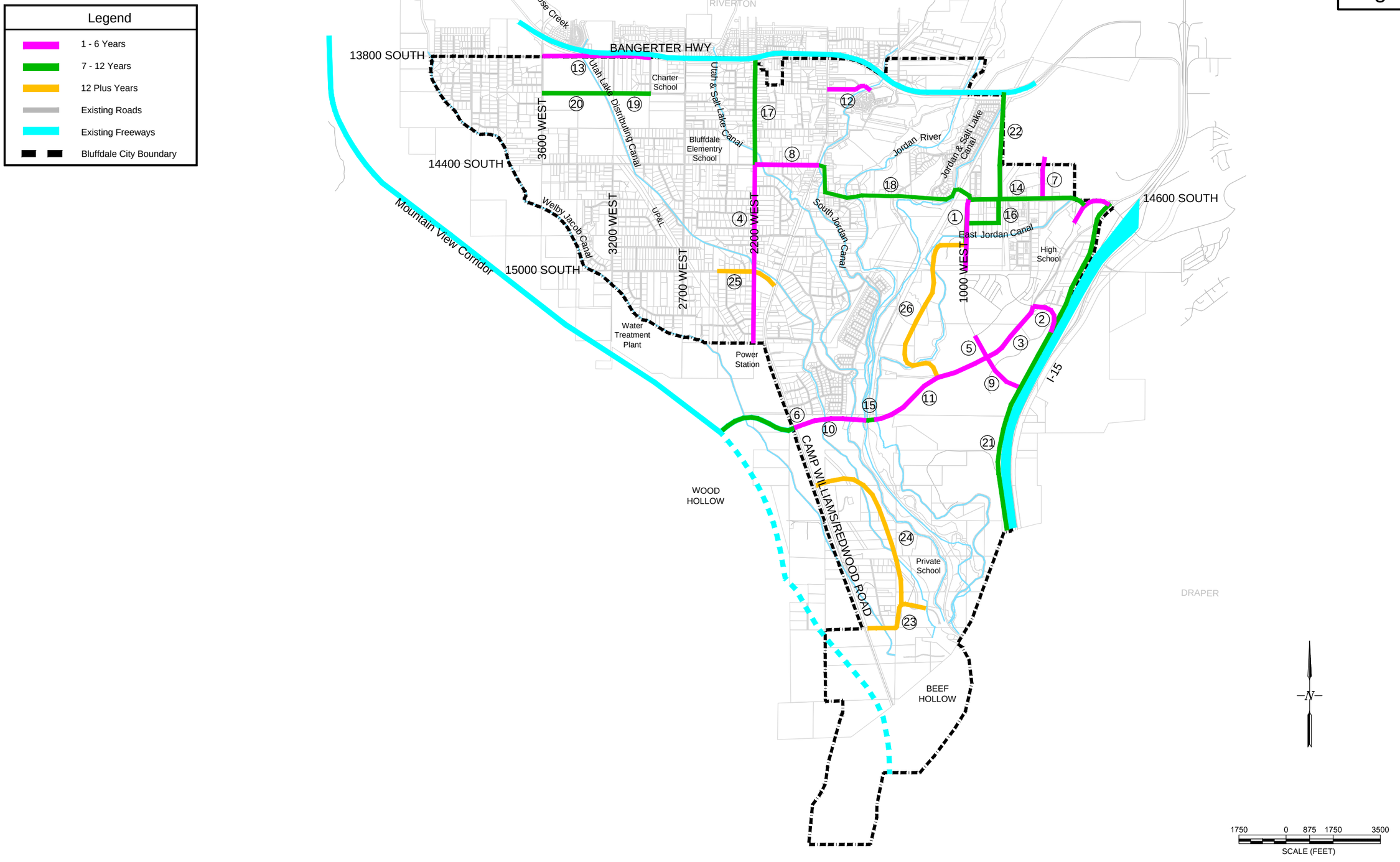
Cost estimates developed include acquiring sufficient right-of-way and installing new roadbase, asphalt, curb and gutter, park strip, and sidewalk. Costs have also been included for design engineering, construction engineering, and contingencies. The costs in this update have been updated to reflect 2015 dollars and have also been projected with inflation costs to the years for which implementation is estimated.

The Transportation CFP addresses improvements that are needed on the major streets. As this plan does not address individual local streets, improvements that may be required on these roads are not included in the CFP. Regular rehabilitation and maintenance costs are not included in the CFP. The CFP does make an attempt to address annual costs related to administration and implementation of items and programs such as coordination and oversight on UDOT projects and other programs.

As development continues throughout Bluffdale, this transportation plan should be consulted to identify improvements that may benefit from work or funds required of individual developers. This will ensure that the right-of-way is preserved, as well as identify projects that the developer should construct or contribute to as part of off-site improvements.

The CFP must be reviewed and updated regularly. The CFP should be modified to delete projects that have been completed or re-prioritized, add new projects that were not previously identified and adjust the costs of any projects that may have changed in scope or nature.

Figure 4-7



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BLUFFDALE CITY

CAPITAL IMPROVEMENTS PLAN

Transportation Capital Facilities Plan

Table 4-1: Transportation Capital Facilities Plan

Segment	Estimate (millions)	Funding Source	Comments
1-6 Year Improvements			
1. Noell Nelson Dr, 14600 S to Freedom Point Way	$2.18	Impact Fees (58%)/ Development	New Road
2. Freedom Point Way, Porter Rockwell to Pony Express	$0.71	Impact Fees	New Road
3. Porter Rockwell Segment 3, 15200 S to 15650 S	$2.95	Impact Fees	New Road
4. 2200 West, 15400 S to 14400 S	$2.05	City	Road Reconstruct
5. Noell Nelson Dr, Heritage Crest Way to PRB	$0.57	Development	New Road
6. Porter Rockwell Segment 5, Redwood Rd. Intersection	$0.20	Impact Fees	New Road
7. 600 W, 14400 S to 14600 S	$1.21	Development	New Road
8. 14400 South, 2200 W to Redwood Rd.	$0.86	Impact Fees	Road Widening
9. Noell Nelson Dr, Porter Rockwell to Pony Express	$1.07	Development	New Road
10. Porter Rockwell Segment 5, Bridge to Redwood Rd.	$2.38	5% Impact Fees	New Road
11. Porter Rockwell Segment 4, Segment 3 to Bridge	$3.24	6.77% Impact Fees	New Road
12. 13970 South	$1.97	Impact Fees	Road Reconstruct
13. 13800 South, 2950 W to 3600 W	$2.47	Impact Fees	Road Widening
Subtotal	**$21.86**		
7-12 Year Improvements			
14. 14600 South, I-15 to UPRR	$6.43	UDOT	Road Widening
15. Porter Rockwell Bridge Segment	$24.69	Various	New Road
16. 850 West, 14600 S to 1000 W	$1.22	Impact Fees	Road Widening
17. 2200 West, 14400 S to 13800 S	$1.20	City	Road Reconstruct
18. 14600 South, UPRR to Redwood Road	$10.47	UDOT	Road Widening
19. 14000 South, 2950 W to Utah Lake Distributing Canal	$0.90	Impact Fees	New Road
20. 14000 South, Canal to 3600 West	$1.97	Impact Fees	New Road
21. Pony Express Road, 14600 S to City Limits	$7.16	Development	Road Widening
22. 850 West, 14600 South to Bangerter Hwy	$2.54	Impact Fees	New Road
Subtotal	**$59.05**		
12+ Year Improvements			
23. Jordan Narrows Rd, Camp Williams to AUB	$2.25	Impact Fees	Road Widening
24. South Bluffdale Loop Road	$5.10	Impact Fees	New Road
25. 15000 South, 2200 W to Camp Williams	$1.60	City	Road Widening
26. PRB/Noell Nelson Drive Connector	$5.55	Impact Fees	New Road
Subtotal	**$14.50**		
Total	**$92.94**		

A city's storm drain system plays a vital role in protecting life and property. Planning for Bluffdale's storm drainage system must consider major flooding that could occur from canals, the Jordan River and mountain drainages that pass through the City, as well as localized flooding that occurs from storm water runoff generated within the City. As Bluffdale City continues to grow, the potential for localized flooding increases, requiring improvements to the storm drain system to accommodate new development. Bluffdale is currently in the process of updating its Storm Drain Master Plan. Updates to storm drain elements in this document will be updated again at a later date to reflect the latest master plan.

5.1 Definitions

ERU - Equivalent Residential Unit. Development contributes to storm water runoff based on the amount of impervious area it contains. For the purposes of this study, single family dwellings and multi-family residential units will each be considered one (1) ERU. ERU's for non-residential development including commercial, industrial, school and church buildings are based on their total impervious surface with one (1) ERU equalling 2,700 square feet of impervious surface area.

Single Family Units	*= 1 ERU/home unit*
Multi-Family Residential Units	*= 1 ERU/dwelling unit*
Non-Residential Units	*= 1 ERU/2,700 SF of impervious area*

cfs - Cubic feet per second (449 gallons per minute)

Ac-Ft - Acre foot (volume of water required to cover an acre of land to a depth of one foot)

Detention - Short term storage of runoff provided by a pond or similar facility. An outlet is provided that allows water to be released from the facility at a predetermined rate.

Retention - Long term storage of storm water provided by a pond or similar facility, but does not allow water to be discharged. Water will stay in a retention pond after a storm event until it either evaporates or soaks into the soil of the pond bottom.

5.2 Level of Service (LOS)

Level of service of Bluffdale's current storm drain system is defined by the current city ordinances and construction standards. The following criteria establish conditions for which storm drainage facilities are currently designed.

- Design storm drains to keep water from ponding in streets and intersections during a 10 year storm event.
- Evaluate how storm drains will function during a 100 year storm event to identify areas where major flooding may occur.
- Require detention of other improvements that will limit discharge from a 100 year storm event.

These same standards are applied to future conditions to create a master plan.

5.3 Existing Facilities

The existing storm drain system is shown in Figure 5-1. It consists of small collection systems that were installed to correct specific problems and/or with recent developments. Some additional facilities are required to correct existing deficiencies within Bluffdale City as described below and shown in Figure 5-2. Projects that address these deficiencies have not be included in impact fee calculations, but cost estimates have been prepared and are included.

Existing Deficiencies

A. 14600 South at Heritage Crest Way - there is flooding that occurs at this location due to insufficient detention facilities.

B. Silver Point Way at Green Subdivision - a temporary underground sump exists due to a lack of connection to an existing storm drain.

C. 1300 West 18" Transmission Line – currently storm drain water from the south side of Bangerter Highway is transmitted under the roadway and emptied into a small ditch on the north side. The ditch is not large enough to contain all of the water and much of the water reaches individual properties.

5.4 Future Facilities

Future growth in Bluffdale will require storm drain system improvements to be made in addition to those listed above. Proposed improvements to the system that will be required, due to future development, are described below and shown in Figure 5-2.

1. 14400 South Trunkline Extension and Pond – This line will collect water from several different areas on the west side of Bluffdale and deliver it to a proposed detention pond near the proposed Vista Meadows Subdivision.

2. *Vista Meadows Trunkline* – A detention pond will be constructed near the proposed Vista Meadows Subdivision to accommodate storm water from the east.

3. *Eastside Regional Detention Pond* – Storm water from the 14600 South Trunkline will deliver water to this regional detention facility (includes 1,250' of pipe). Peak flows will be alleviated and storm water will be outlet to the Jordan River in a controlled flow. Bluffdale is only anticipated to pay $100,000 of the cost due to co-sponsors.

4. *South Regional Detention Pond* – Storm water from the Jordan Narrows Trunkline will deliver water to this regional detention facility. Peak flows will be alleviated and storm water will be outlet to the Jordan River in a controlled flow.

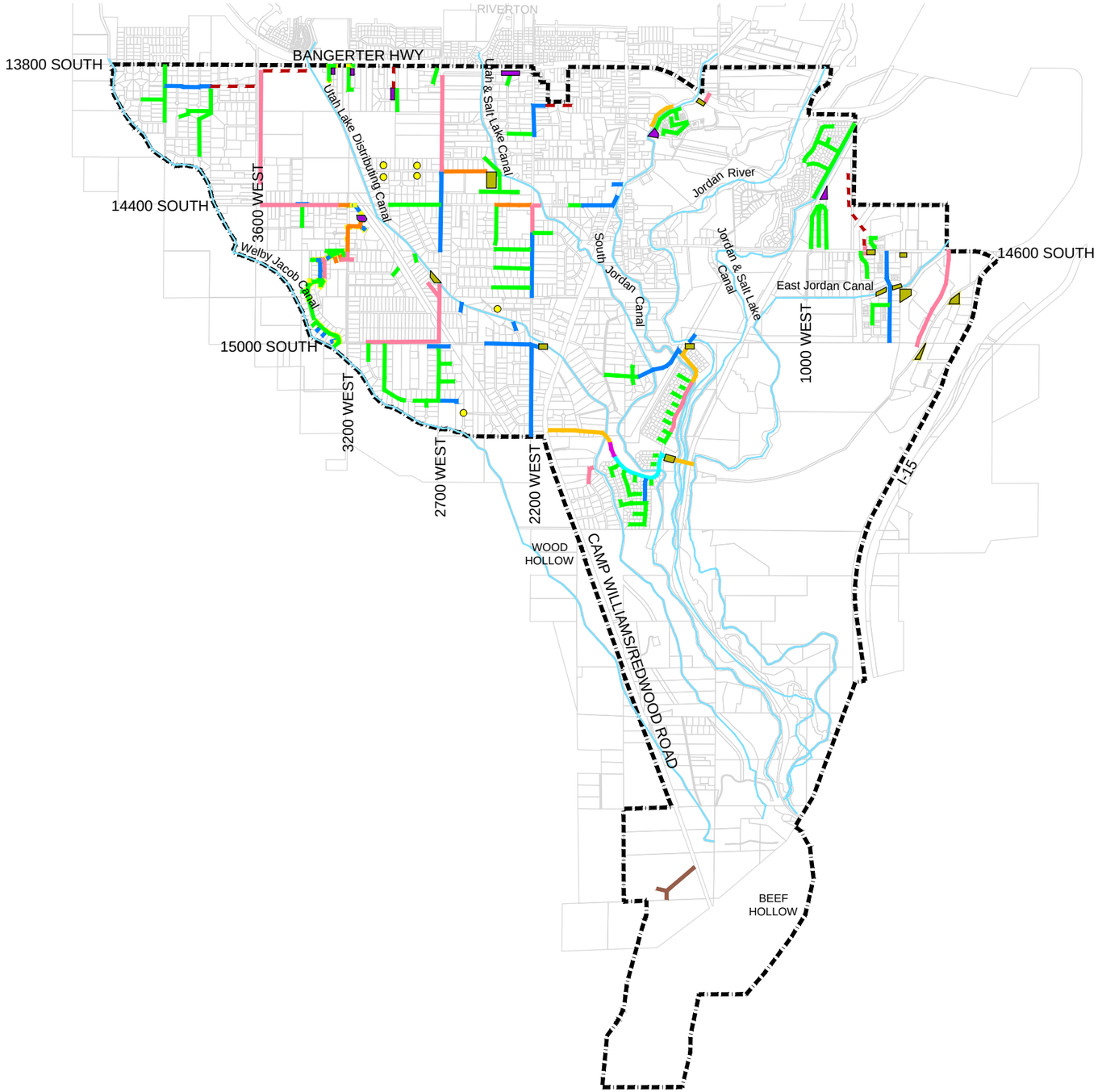
5. *Independence Trunkline Phase I* – Trunkline of varying size to service the northeast area of the Independence area based on the concept plan.

6. *Independence North Trunkline* - Trunkline of varying size to service the north area of the Independence area based on the concept plan.

Figure 5-1

Legend

- 15" Storm Drain Pipe
- 18" Storm Drain Pipe
- 24" Storm Drain Pipe
- 30" Storm Drain Pipe
- 36" Storm Drain Pipe
- 42" Storm Drain Pipe
- 48" Storm Drain Pipe
- 60" Storm Drain Pipe
- Retention Pond
- Detention Pond
- Sump
- Ditch
- Bluffdale City Boundary



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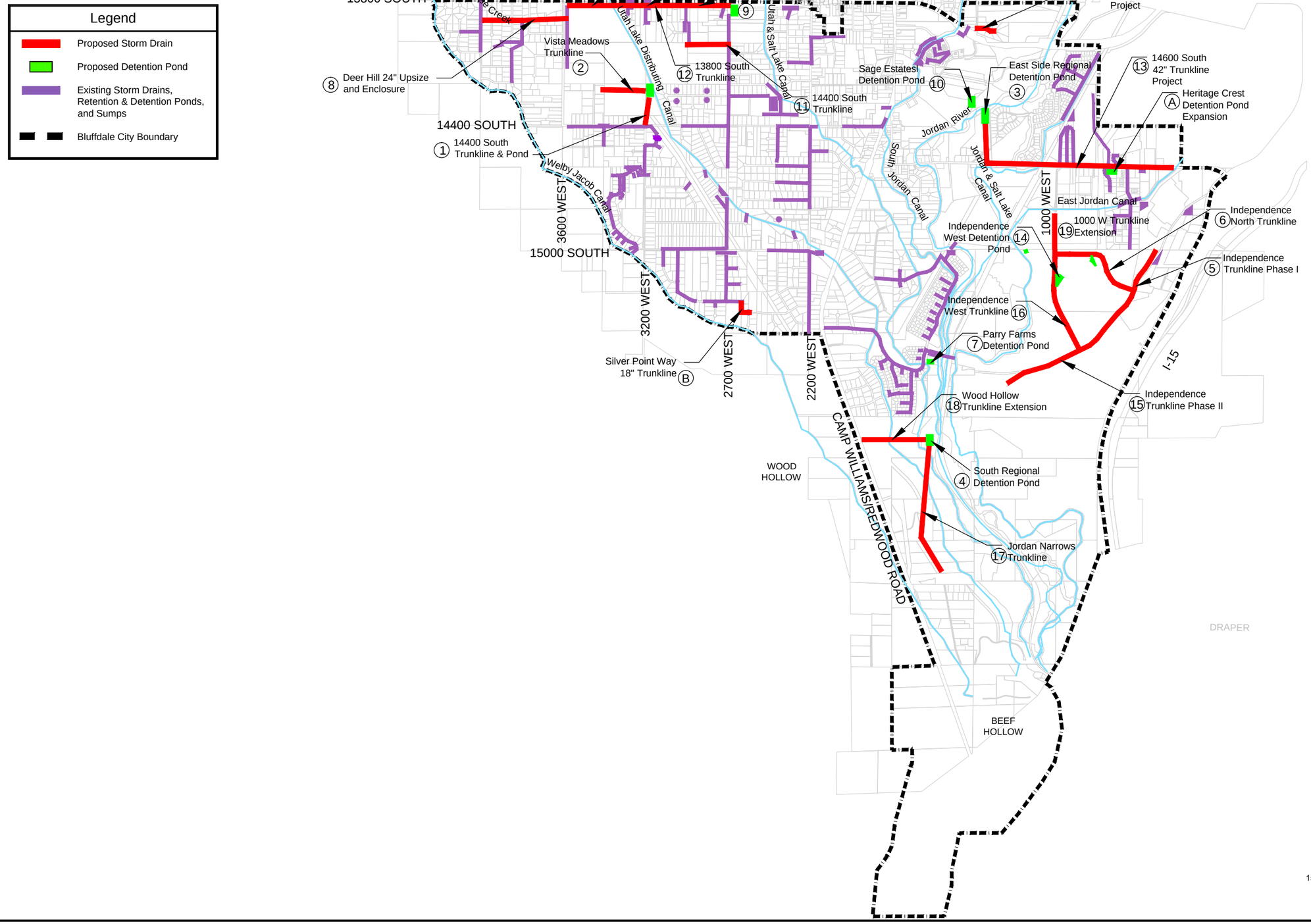
CAPITAL IMPROVEMENTS PLAN

Existing Storm Drain System

Figure 5-2



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CAPITAL IMPROVEMENTS PLAN

Storm Drain Capital Facilities Plan

7. *Parry Farms Detention Pond* – The pond in the Parry Farms Subdivision will be expanded to accommodate greater flows.

8. *Deer Hill 24" Upsize and Enclosure* – As development occurs, the existing 18" line and ditch will exceed their capacities. As such, the 18" storm drain line will be upsized to a 24" and the ditch will be enclosed with a 24" pipe that connects into the 3600 West trunkline.

9. *13800 South Detention Pond* – This pond will be necessary to mediate the peaks and clean the storm runoff from the northwest corner of Bluffdale.

10. *Sage Estates Detention Pond* - A detention pond will be constructed near the Sage Estates Subdivision to accommodate storm water from the west.

11. *14000 South Trunkline* – A new 24" trunkline will be installed to accommodate storm water from new development.

12. *13800 South 36"- 54" Trunkline* – This line will service the northwest corner of Bluffdale. Flows from the western city boundary will be collected in 3600 West and 13800 South and will culminate in a detention pond before outletting into Rose Creek.

13. *14600 South 42" Trunkline* – This 42" storm drain trunkline will service the area adjacent to 14600 South from I-15 to the Jordan River. It will also accept drainage water from the north end of Pony Express Road and its adjacent parcels.

14. *Independence West Detention Pond* – Storm water from the Independence subdivision will be collected in this pond before being outlet into the Jordan River.

15. *Independence Trunkline Phase II* - Trunkline of varying size to service the southeast area of the Independence area based on the concept plan.

16. *Independence West Trunkline* - Trunkline of varying size to service the west area of the Independence area based on the concept plan.

17. *Jordan Narrows Trunkline* - Trunkline of varying size to service the Jordan Narrows area of Bluffdale.

18. *Wood Hollow Extension Trunkline* – This line will collect water from several different areas on the west side of Camp Williams Road and Bluffdale and deliver it to the South Regional detention pond.

19. *Noell Nelson Dr Trunkline Extension* – This trunkline extension will serve to connect the north end of 1000 West and the industrial zone to the Independence trunkline.

5.5 Storm Drain Capital Facilities Plan

The CIP indicates which improvements will be needed in the future and provides a planning level cost estimate for each improvement (see Appendix "D"). Recommended improvements to the storm drain system have been separated into the following categories: short range (1-6 years) and medium range (7-12 years). Table 5-1 summarizes the improvement projects, anticipated costs and projected funding sources.

Table 5-1: Storm Drain Capital Facilities Estimates

Segment	Estimate (Millions)	Funding Source
1-6 Year Improvements		
(A) Heritage Crest Detention Pond Expansion	$0.07	City
(1) 14400 South Trunkline Extension & Pond	$0.46	Impact Fees
(2) Vista Meadows Trunkline	$0.11	Impact Fees
(3) Eastside Regional Detention Pond	$0.76	Impact Fees ($0.3)/NRCS
(B) Silver Point Way Storm Drain	$0.10	City
(C) 1300 West 18" Transmission Line	$0.09	City
(4) South Regional Detention Pond	$0.35	Impact Fees
(5) Independence Trunkline Phase I	$0.44	Development
(6) Independence North Trunkline	$0.13	Development
(7) Parry Farms Detention Pond	$0.19	City
(8) Deer Hill 24" Upsize and Enclosure	$0.35	Impact Fees
(9) 13800 South Detention Pond	$0.50	Impact Fees
(10) Sage Estates Detention Pond	$0.50	Impact Fees
(11) 14000 South Trunkline	$0.29	Impact Fees
Subtotal	**$4.34**	
7-12 Year Improvements		
(12) 13800 South 36" to 52" Trunkline	$1.44	Impact Fees
(13) 14600 South 42" Trunkline	$1.74	Impact Fees
(14) Independence West Detention Pond	$0.52	Impact Fees/Development
(15) Independence Trunkline Phase II	$0.51	Impact Fees
(16) Independence West Trunkline	$0.93	Development
(17) Jordan Narrows Trunkline	$1.01	Impact Fees
(18) Wood Hollow Extension Trunkline	$0.38	Impact Fees
(19) Noell Nelson Drive Trunkline Extension	$0.29	Development
Subtotal	**$6.82**	
Total	**$11.16**	

Data supporting budgetary storm drain cost estimates are included in the Appendix "D".

Bluffdale City has always provided a community of safety and security. In order to do so, it has contracted with the Saratoga Springs Police Department to provide 24-hour protection services for its citizens. Similarly fire, rescue, and emergency services are provided by the City Fire Department on a 24-hour basis. Continual accessibility to these necessities is vital to the quality of life, health, and safety of Bluffdale's citizens. The following planning recommendations assume that Bluffdale City safety facilities will be provided in the future at the same level of service as is currently provided.

6.1 Level of Service (LOS)

For the purposes of this plan, level of service for public safety facilities will be measured in units of square footage per 1,000 residents. The current LOS is defined below in Section 6.2 Existing Facilities.

6.2 Existing Facilities

Fire Protection

To determine a LOS for fire protection, the facilities presently provided by the Fire Department were used and are included in this study. In 2003, Bluffdale built a 12,900 square foot facility to house the Fire Department. A portion of this building was constructed for future expansion and is currently being used to house City Administrative Offices (about 3,435 square feet or 27%). The remaining 73% (9,465 square feet) of the building is being used by the Fire Department and defines the existing Level of Service.

Therefore, the current LOS (as previously calculated) is 9,465 s.f. for 7,990 residents or 1.18 square feet per resident.

Law Enforcement

Bluffdale City contracts with the Saratoga Springs Police Department for law enforcement officers. Required law enforcement forces are generally proportional to the population of a city, although many other factors, such as crime rate, determine the number of forces needed.

The Saratoga Springs Police Department works with the Bluffdale City to determine the level of service which at this time is 0.81 officers per 1,000 residents or 6.5 officers providing round the clock law enforcement protection. The City provides two office cubes at the city offices for the police officers to use. Other Law Enforcement Facilities are currently owned by Saratoga Springs; therefore these facilities were not used as a determination for the LOS.

6.3 Future Facilities

To assist Bluffdale in its future planning of emergency services, we recommend the guidelines in the National Fire Protection Association Standards (NFPA) 1720 for all-career fire departments for review and possible implementation.

According to NFPA 1710, the fire department's fire suppression resources shall be deployed to provide for the arrival of an engine company within a 4-minute response time and the initial full alarm assignment within an 8-minute response time to 90 percent of the incidents that require a full assignment of apparatus. In the future, and as Bluffdale grows, it will become important to perform an in-depth evaluation of response times to determine future facility locations.

With respect to emergency medical service calls (EMS), NFPA 1710 calls for the arrival of a first responder with an automatic external defibrillator (AED) to arrive on scene with a 4-minute response time to 90 percent of the incidents. Additionally, the fire department's EMS for providing advanced life support (ALS) shall be deployed to provide for the arrival of an ALS company within an 8-minute response time to 90 percent of the incidents.

As Bluffdale City's population reaches the estimated build-out population, an additional 37,700 square feet of new fire protection and emergency medical facilities will be required to maintain the current LOS. The required future total is approximately 47,200 square feet of facility or 1.18 sq ft per resident x 40,000 residents = 47,200 square feet.

Additionally, as the growth of the city reaches the extents of the city boundaries it will become necessary to locate fire and EMT services farther away from the city center. This is most apparent on the east side where the single lane railroad underpass inhibits travel between the east and west sides of the City. Two likely locations for new EMT and Fire Facilities are near the proposed Independence subdivision on the east and near Camp Williams on the south. Bluffdale may provide its own law enforcement facilities sometime in the future and has, therefore, substituted some police station square footage for fire station square footage in the capital facilities plan.

Finally, as the population grows, additional public safety equipment will be necessary. It is anticipated that an additional fire truck, ladder truck and ambulance will be required within the next 5-15 years.

6.4 Capital Facilities Plan

As identified in Section 6.2, the City currently o650wns 3,435 s.f. of additional building that will be converted to fire station in the future. However, Bluffdale does not own any other property for future facilities. Therefore, the following plan is conceptual in nature, recommending future facilities. As development continues, properties will need to be identified and acquired to preserve recommendable future locations. The conceptual plan for future growth is provided below in Table 6-1.

Table 6-1 Conceptual Public Safety Capital Facilities Estimates

Future Facility	Area (sf)	2013 Cost	Construction Year	Funding Source
New Fire/Police Station (East Side)	13,000	$2,600,000	2017	Impact Fees
New Ladder Truck	-	$1,000,000	2019	Impact Fees
Fire Station Expansion (West side)	3,450	$100,000	2020	Impact Fees
New Fire Truck	-	$650,000	2020	Impact Fees
New Fire Station (South Side)	11,700	$2,340,000	2024	Impact Fees
New Ambulance	-	$150,000	2025	City
New Fire Station (West Side)	9,550	$1,910,000	2030	Impact Fees
Total	**37,700**	**$8,750,000**		

Note: Estimates provided in 2015 dollars

Bluffdale City provides high quality of life and health to the community through their parks and recreation facilities. To maintain this quality of life the city must continue to provide new parks and recreation facilities as the population grows.

7.1 Previous Level of Service (LOS)

In August of 2002, Bluffdale City adopted the level of service policy of 7 acres of improved park facilities per 1,000 residents to offset the loss of undeveloped open space caused by new development. The National Parks and Recreation Association has suggested that a recommended minimum LOS should be between 5 and 10 acres per 1,000 residents. Bluffdale has been providing this recommended Level of Service.

As Bluffdale has grown, it has become apparent that the City will need to provide its citizens with recreation facilities that are not all measurable by acreage. Therefore, Bluffdale will define its level of service in terms of value. In the 2013 update, the previous level of service was equated to a dollar value of improvements. Therefore, future improvements may be installed and measured on their value and not simply acreage.

Currently, the City provides approximately 150 acres of open space throughout the city. Of that acreage, the City has developed 60.2 acres of recreational space including 11 city parks, a rodeo facility and 6.8 miles of developed trails. Therefore, Bluffdale provides:

$$60.2 \text{ acres} / 11{,}977 \text{ residents} = 5.0 \text{ acres of per 1000 residents.}$$

Since parks are constructed on a large scale basis and not per person, and new development has increased rapidly in the past couple of years, Bluffdale City has continued to construct recreational facilities. At each update of this document, the acreage per 1,000 residents that is currently available will depend on how recently a park was constructed, at times calculating to greater than seven and at other times less than seven. Currently, due to the large amounts of multifamily housing that has been constructed as well as the construction of different types of recreational facilities, the acreage per 1,000 residents is lower than in past years.

7.2 Current Level of Service (LOS)

The currently defined LOS is based on Bluffdale's historic expenditures on recreation facilities. As defined in the 2013 IFFP the value of the existing parks and recreation facilities, their land, facilities and amenities is documented in Appendix "F". Their values added up to $10,784,821. At that time, there were 7,990 residents in Bluffdale as a result, the historic LOS calculates to be:

$10,784,821.00 (facilities value)/ 7,990 (residents) = $1,349,789.86/1,000 residents

7.3 Existing Facilities

Table 7-1 shows a current inventory of trails in Bluffdale City and their present day value. Table 7-2 summarizes the current inventory of parks within the city as illustrated in Figure 7-1. Cost estimates include land, infrastructure and amenities, but no operation, personnel or maintenance costs.

Table 7-1: Existing Trails Inventory

Trails	Area (acres)	Value*
Bluffdale City Park Trail (included in park acreage)	1.3	$212,784
Spring View Farms Trail	2.3	$376,464
Parry Farms Trail	3.2	$523,776
TOTAL	**6.8**	**$1,113,024**

Table 7-2: Existing Parks Inventory

Parks	Area (acres)	Owner	Value*
Ponderosa Park	1.12	City	$191,414*
Parry Farms Park/Detention Pond	2.91	City	$456,602*
Parry Farms Baseball Fields	7.22	City	$1,827,422*
Bluffdale City Park/Rodeo Grounds	31.92	City	$6,125,618*
Phillip Gates Memorial Park	4.79	City	$996,899*
Ten Sleep Circle Park	0.44	City	$73,842*
Mount Jordan Park (A)	3.69	City	Not Yet Completed
North Pocket Parks & Trail	3.28	City	Not Yet Completed
Center Pocket Park & Trail	0.43	City	Not Yet Completed
West Pocket Park & Trail	2.71	City	Not Yet Completed
Trail Corridor	1.10	City	Not Yet Completed
TOTAL	**59.61**		**$9,671,797**

*Note: Values for these facilities are based on 2013 cost estimates to construct similar infrastructure. Cost estimates can be found in Appendix “F”. However, no finance charges were evaluated.

7.4 Future Facilities

This chapter analyzes the growth period of 2015 to 2045 when the projected population will be approximately 40,000. In order to maintain the existing LOS, Bluffdale will need to continue to provide recreational facilities valuing approximately $1,349,789.86 per 1,000 residents. In other words, to provide the necessary facilities, Bluffdale will need to construct facilities valuing approximately $43,206,773.49 (i.e. 32,010 x $1,349,789.86/1,000) to provide for the build-out population.

Bluffdale is aware that as the population grows, different types of facilities will be required to serve the community. In the future, Bluffdale will need more than just pocket and neighborhood parks. Therefore, as new development occurs and reimbursements are negotiated with individual developments, a minimum of 15% of all impact fees will be collected and spent on regional parks and recreational facilities. As such,

developers must recognize that not every impact fee dollar will be spent in their development. However, the City will make every effort to utilize impact fees to construct recreational facilities in residential areas such that all residents will have access to neighborhood and regional facilities in their general area.

The City has identified some of the future facilities that will need to be constructed to maintain its current LOS. They include both new acreage and additional infrastructure in existing facilities. They are as follows.

Independence
The Independence at the Point subdivision has adopted a development agreement with the City. Some of the parks and trails have been constructed as of summer 2015. The development agreement was recently updated to include the latest park plan. Those parks are referenced in Table 7-3, by name, including their estimated construction costs as provided by the developer. They can be reviewed in more detail in the Master Plan for Independence at the Point. The parks master plan and developer generated cost estimates have been provided in Appendix F.

City Park Improvements
Bluffdale's main city park is located on the northwest corner of the 14400 South/2200 West intersection. This facility is the location used for many City activities including Movie in the Park, car shows, portions of the annual city days, sports team practices, etc. As Bluffdale grows, addition and varied activities will be held at the park. As such, the City Park will require additional facilities from time to time. Some the currently planned additions to the park include a pavilion and additional parking stalls.

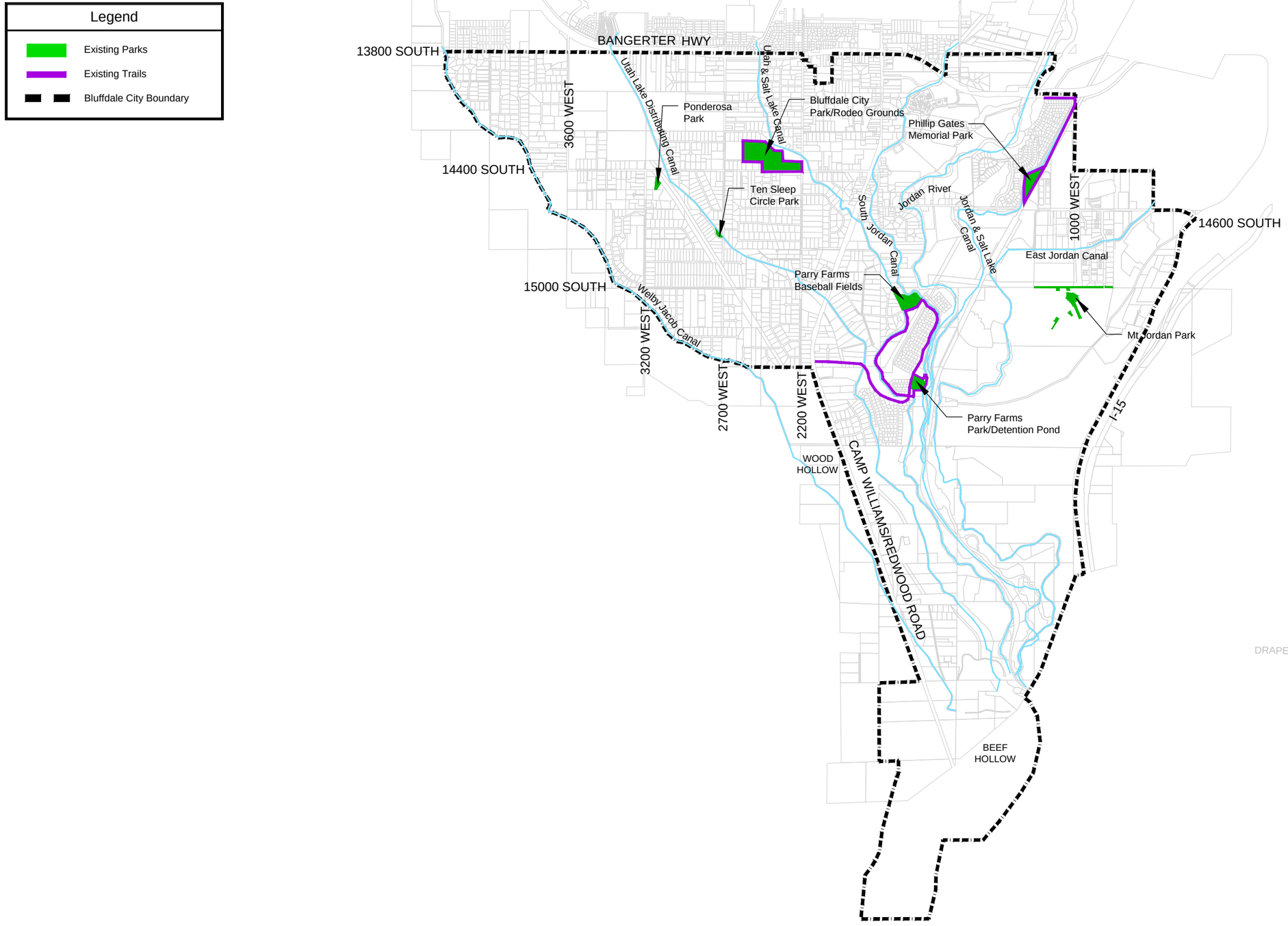
Rodeo Grounds Upgrades
In addition to park improvements, the City recognizes that the rodeo has drawn more attendance each year. Therefore, it plans to expand the rodeo grounds to facilitate continued growth. Some of the currently contemplated improvements include additional restrooms, a concession stand, additional bleachers and parking lot expansion.

Parry Farms Park Expansion
As new development occurs in the south part of Bluffdale, demand for parks in that area will increase. Bluffdale plans to expand the Parry Farms Park to accommodate more residents than just Parry Farms residents. The expansion will include grading, landscaping and an irrigation system.

Parry Farms Park Improvements
In addition to expanding the Parry Farms Park, addition features will be added such as athletic field including possibly soccer, tennis, and/or pickleball. Also, restrooms, a snack shack and other possible amenities will be constructed.

Vintage Park
The City owns 5 acres adjacent to Loumis Parkway just south of Vintage on the Bluffs. This area is scheduled to be graded and possibly landscaped in 2014 and improved several years later with amenities.

Figure 7-1



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BLUFFDALE CITY

CAPITAL IMPROVEMENTS PLAN

Existing Parks & Trails

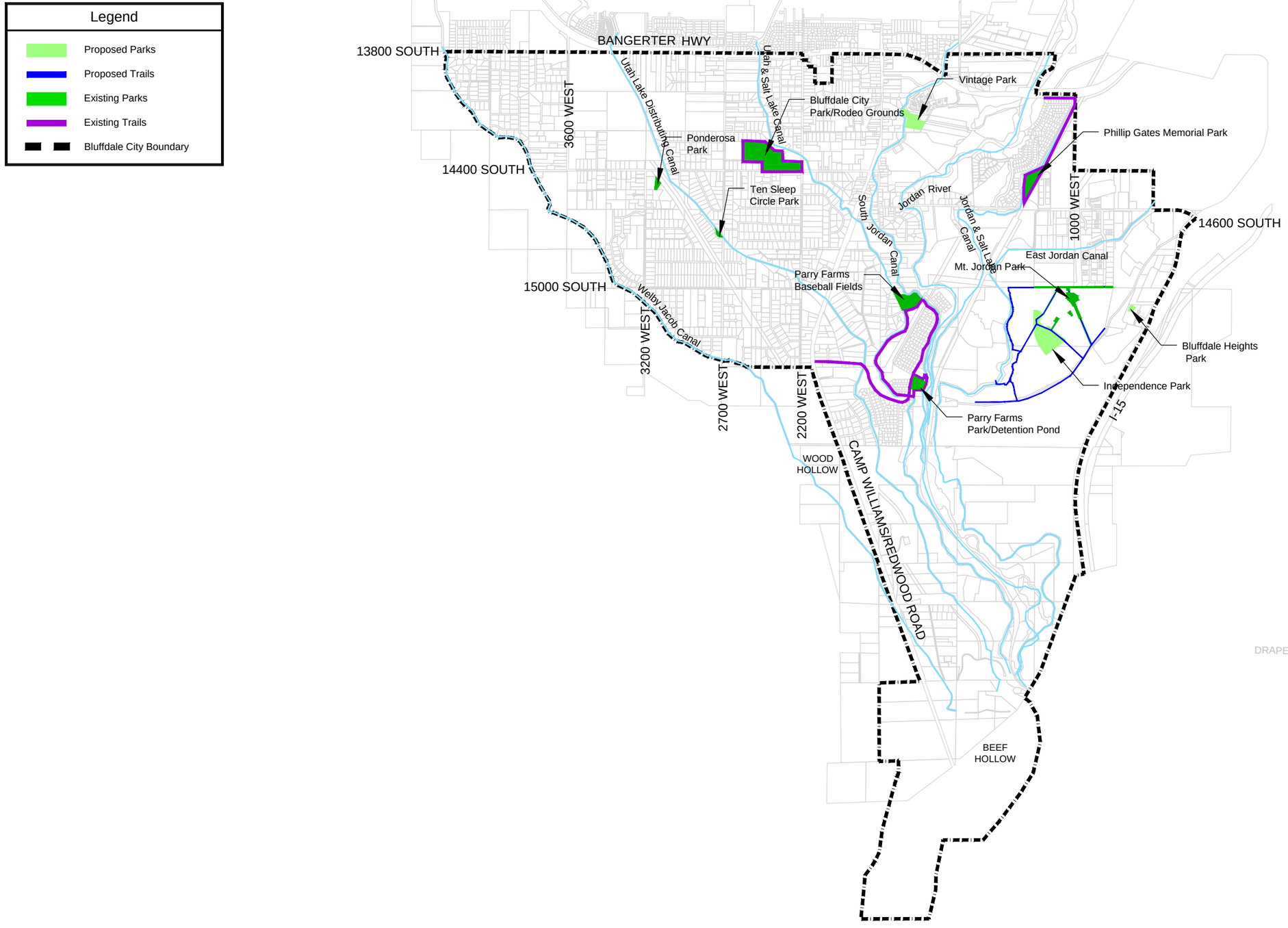
7.5 Capital Facilities Plan

The city already has plans to develop additional parks and trails to help maintain its unique position as a leader in recreational properties and activities. Salt Lake County currently owns land in Bluffdale and plans on building a regional park. As Bluffdale grows, it will need additional facilities like these to help meet the needs of a growing population. Figure 7-2 and Table 7.3 illustrate a conceptual plan for developing the required future parks to maintain its current LOS.

Table 7-3 – Conceptual Parks and Recreation Capital Facilities Estimates

Project	Area (acres)	Constr. Year	Cost (2015)	Source
Independence				
Trail Corridor (E2)	1.15	2018	$231,100	Impact Fees
Park (F)	4.02	2016	$688,140	Impact Fees
Porter Rockwell Trail (G)	2.11	2018	$0.00	w/ PRB
Park and Trail (N)	1.82	2017	$477,480	Impact Fees
Independence Park	5.75	2015-17	$3,108,890	Impact Fees
Trail Corridor (H)	6.80	2018	$1,025,200	Impact Fees
Trail Corridor (I)	3.37	2018	$514,180	Impact Fees
Trail Corridor (J)	2.89	2019	$419,460	Impact Fees
Trail Corridor (K)	10.59	2019	$1,457,260	Impact Fees
Subtotal	*38.50*		$7,921,710	
Other Planned Recreational Facilities				
City Park Improvements		2014	$224,000	Impact Fees
Rodeo Grounds Improvements		2014	$698,000	Impact Fees
Parry Farms Park Expansion	2.5	2014	$106,060	Impact Fees
Vintage Park Grading	5	2014	$100,000	Impact Fees
New 25 Acre Park	25	2016	$4,200,000	Impact Fees
Parry Farms Park Improvements		2017	$110,000	Impact Fees
Vintage Park Improvements		2020	$280,000	Impact Fees
Recreational Trail	4	2021	$655,000	Impact Fees
New 25 Acre Park	25	2021	$4,200,000	Impact Fees
Recreational Trail	4	2024	$655,000	Impact Fees
New 25 Acre Park	25	2024	$4,200,000	Impact Fees
Recreational Trail	2	2027	$328,000	Impact Fees
New 35 Acre Park	35	2028	$6,250,000	Impact Fees
Various small Parks	57	Ave 2028	$11,177,928	Impact Fees
Subtotal	*184.5*		*$35,183,988*	
Total	**222.28**		**$43,105,698**	

Figure 7-2



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BLUFFDALE CITY

CAPITAL IMPROVEMENTS PLAN

Proposed Parks & Trails

As Bluffdale City grows, it will become necessary to expand the offices and public facilities to include new administrative facilities. These facilities will not be eligible for impact fee funding.

8.1 Existing Facilities

Currently, the City operates out of two buildings, the old city hall on Redwood Road, which is used as the Public Works building and the new fire station on 2200 West, which operates as the new administration building. The Public Works building is currently lacking in office space and storage space. The fire station is nearly out of space for new administrative offices, while storage space is lacking in this building as well. In order to alleviate the shortage of office and storage space, the City should plan to construct new facilities in the future.

8.2 Future Facilities

As contemplated by City staff and administration, Blufffdale will need a Public Works building, a City Hall and an Animal Control facility. No locations have been selected for future construction, but a summary of the budgetary estimates for the new facilities are included in Table 8-1 below. Cost estimates can be found in Appendix "G".

Table 8-1 – Public Facilities Capital Facilities Estimates

Project	Area (s.f.)	Construction Year	Cost (2012)	Cost (Construction year)
City Hall	23,000	2015	$5,980,000	$5,980,000
Public Works Building	15,000	2018	$3,660,000	$4,631,100
Animal Control Facility	10,000	2022	$2,440,000	$3,611,800
		Total	$12,080,000	$14,222,800

Impact fees provide communities with a legal means to obtain funds from new developments to finance the construction of infrastructure improvements that are needed to serve new growth. State law requires that impact fees be used only for projects made necessary by new growth and not for existing deficiencies. Throughout this study, existing conditions have been analyzed as well as future needs due to development and growth. This section defines the financial impact that new development will have on Bluffdale City in the next six years and recommends impact fees for each element analyzed in this study. These fees will be needed to maintain the existing level of service throughout the City. It does not include existing deficiencies.

Impact fees charged for new development are based on the ERC, ERU, or trip generations of proposed developments. Calculations for the impact fees are included in this chapter for each section of the capital facilities plan. According to the current state law, impact fees must use a six year planning window to encumber the funds. Therefore, the calculations in this chapter consider only those projects that are planned to be constructed or encumbered within the next six years. Budgetary costs were evaluated in future dollars (proposed project planning year dollars), assuming an inflation rate of 6% per year. They consider and assume current and future projects can be financed by 10 year loans with a 4% interest rate.

Most of the infrastructure in Bluffdale City is interconnected and has been evaluated as a single service area. The transportation system provides the only exception. Porter Rockwell Boulevard is critical to the Independence Subdivision and surrounding area and portions of it are required to be constructed by the subdivision in accordance with the binding development agreement. Therefore, most impact fees have been calculated based on a single service area. However, a separate transportation impact fee has been calculated for the Porter Rockwell Service Area, to be charged in place of the city-wide transportation impact fee.

9.1 Water Impact Fees

The water system capital facilities plan indicates scheduled improvements that should be implemented to upgrade Bluffdale's culinary water system. Table 3-1 and 3-2 outline the proposed projects and their costs in 2015 dollars. Projects that are projected to be constructed within the next six years and are eligible to be funded by impact fees total $879,000 are detailed below and summarized in Table 9-1.

Eligible Projects

New Well and Water Rights – is project number 1 on the CFP list of necessary projects. Bluffdales secondary system is being constructed slowly and steady from the ground up. As development occurs, the City is constantly seeking new secondary water sources to develop in order to alleviate pressure on and create new capacity in the culinary water system. Currently, the most likely site for a new secondary well is in Independence, as illustrated in Figure 9-2.

Porter Rockwell Corridor Trunkline – is project number 4 on the culinary water CFP. This project is made necessary as new development begins in the previously

undeveloped south end of Bluffdale. Developers have begun approaching the City with development concepts for this area in the past year.

SVSD Reuse Project – is project number 3 on the secondary water CFP. This project is necessary to continue to create new capacity in the culinary system for new development.

Table 9-1: Water Impact Fee Facilities Estimates

Segment	2015 Estimate (Millions)	Projected Constr. Year	Constr. Year Estimate
New Well and Water Rights (secondary (1))	$0.50	2016	$530,000
SVSD Reuse Project	$1.98	2017	$2,222,000
Porter Rockwell Corridor Trunkline (culinary (2))	$0.32	2018	$349,000
Total	**$2.80**		**$3,101,000**

Figures 9-1 and 9-2 depict the water projects graphically.

3 Million Gallon Storage Debt
In addition, the City has an outstanding balance on 3 million gallons of storage in the POMA 25 MG tank in Draper, Utah. Bluffdale purchased the 3 MG of storage for future growth mainly on the east side of Bluffdale, but as a method of generally enabling future development in Bluffdale. The tank is intended to service an approximately 14,100 ERC's of new development of which 310 have already paid impact fees towards completion of the tank. Therefore, the remaining balance on the project $1,152,500 should be financed by the remaining 12,375 ERC's of excess capacity.

As a result, the 3 MG portion of the impact fee can be calculated as follows:

$1,152,500/ 12,375 ERC's = $93.13/ERC (Use $93)

This fee is calculated as a portion of the impact fee and will be added to the base impact fee calculated in the Table 9-2.

Table 9-2

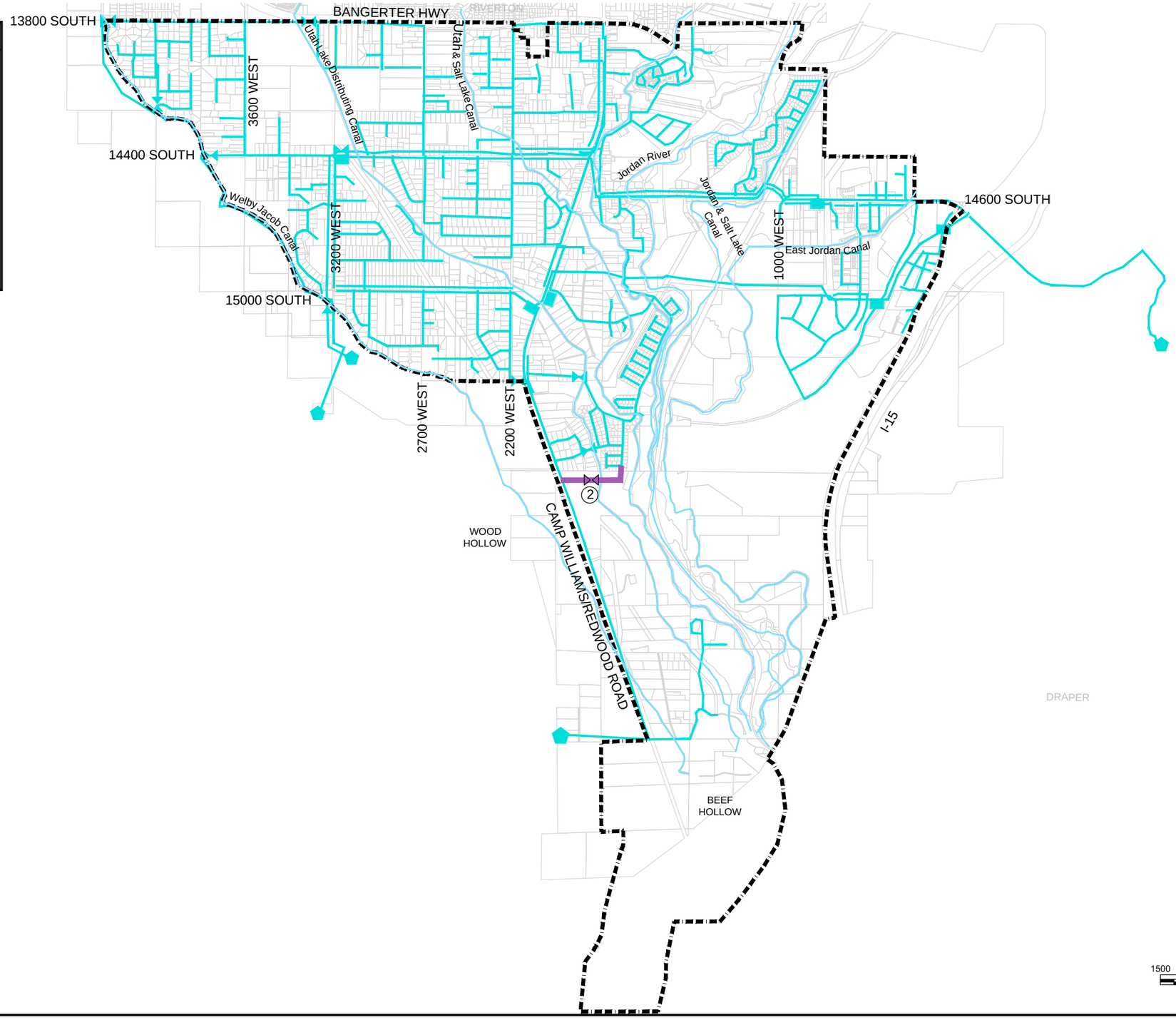
Base Water Impact Fee Analysis

Proposed Impact Fee =		$1,040.00					**Interest Rate**	4.00%
Fiscal Year Ending	**New ERC's***	**Impact Fee Revenue**	**Impact Fee Analysis**	**New Well & Rights (Financed for 10 Years)**	**SVSD Reuse Project (Financed for 10 Years)**	**Porter Rockwell Corridor Trunkline**	**Year End Net Income**	**Cumulative Balance**
			$30,000.00	**$530,000.00**	**$2,222,000.00**	**$349,000.00**		
								$520,910.00
2015	225	$234,000.00	-$5,000.00				$229,000.00	$749,910.00
2016	477	$496,080.00	-$5,000.00	-$65,344.20			$425,735.80	$1,175,645.80
2017	530	$551,200.00	-$5,000.00	-$65,344.20	-$273,952.48		$206,903.32	$1,382,549.12
2018	589	$612,560.00	-$5,000.00	-$65,344.20	-$273,952.48	-$43,028.54	$225,234.78	$1,607,783.90
2019	582	$605,280.00	-$5,000.00	-$65,344.20	-$273,952.48	-$43,028.54	$217,954.78	$1,825,738.68
2020	563	$585,520.00	-$5,000.00	-$65,344.20	-$273,952.48	-$43,028.54	$198,194.78	$2,023,933.47
2021	265	$275,600.00		-$65,344.20	-$273,952.48	-$43,028.54	-$106,725.22	$1,917,208.25
2022		$0.00		-$65,344.20	-$273,952.48	-$43,028.54	-$382,325.22	$1,534,883.03
2023		$0.00		-$65,344.20	-$273,952.48	-$43,028.54	-$382,325.22	$1,152,557.81
2024		$0.00		-$65,344.20	-$273,952.48	-$43,028.54	-$382,325.22	$770,232.59
2025		$0.00		-$65,344.20	-$273,952.48	-$43,028.54	-$382,325.22	$387,907.37
2026		$0.00			-$273,952.48	-$43,028.54	-$316,981.02	$70,926.36
2027		$0.00				-$43,028.54	-$43,028.54	$27,897.82
2028		$0.00					$0.00	$27,897.82
Totals	3231	$3,360,240.00	-$30,000.00	-$653,442.00	-$2,739,524.78	-$430,285.40		
	Portion of Impact Fee		$8.10	$176.37	$739.40	$116.13		
Total Revenue:		$3,360,240.00					**Total Finance Costs:**	$3,853,252.18
							Total Costs:	$3,131,000.00
*Notes:	1) Project costs are in future dollars (assuming 6% inflation)						**Total Interest:**	$722,252.18
	2) ERC's are projected for half of 2015 and half of 2021							

Figure 9-1

Legend

- Proposed Culinary Water Projects
- Proposed Tank
- Proposed PRV
- Proposed Meter
- Existing Meter
- Existing Culinary Water
- Existing PRV/FCV
- Existing Tank
- Bluffdale City Boundary



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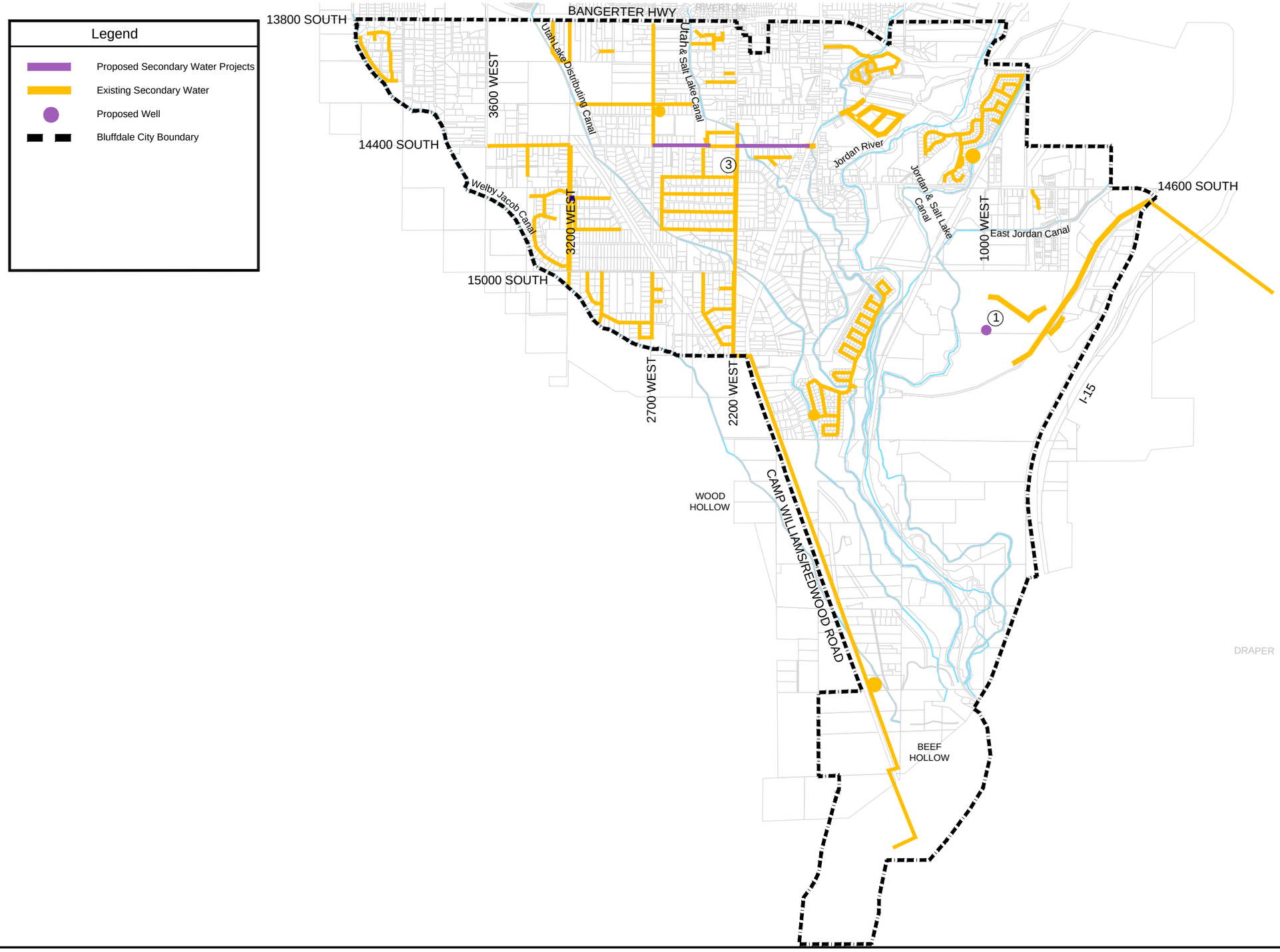
Water Impact Fee Facilities Plan (Culinary)

Figure 9-2



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Water Impact Fee Facilities Plan (Secondary)

Impact Fee Calculation

As illustrated in Table 9-2, the required financing for the three eligible projects is $3,853,252.18. With the current water impact fee balance of $520,910, these projects can be completed for $1,040 per ERC and will serve 3,231 ERC's. Therefore, the total water impact fee will be:

$1,040 + $93 = $1,133 per ERC

ERC

This study considers one ERC to be a culinary water connection. Every unit that is built in Bluffdale will have a culinary water connection and, therefore, the water impact fee will be charged per culinary water connection as indicated in the fee schedule.

Therefore, the following **water impact fees** are recommended:

Table 9-3: Recommended Water Impact Fee Schedule

	Units	Impact Fee
Single Family Residential (1.00)	Dwelling Unit	$1,133
Commercial (3.37 ERC's)	Connection	$3,818
Institutional (7.96 ERC's)	Connection	$9,019

9.2 Transportation Impact Fees

The transportation capital facilities plan indicates scheduled improvements that should be implemented to upgrade the transportation system. Table 4-1, Transportation Capital Facilities Plan outlines the proposed projects and their costs in 2015 dollars. It also identifies which projects are eligible for impact fees and which projects are projected to be completed in the next six years. A project description for each eligible project follows and is summarized in Table 9-4. More details on the specifics of each project can be found in the cost estimates in Appendix "C". Figure 9-3 illustrates the projects graphically. These project costs will be used to calculate fees for the Transportation Impact Fee Facilities Plan.

Eligible Projects

Porter Rockwell Segment 1 – has been completed and is eligible for reimbursement continuing from the previous IFFP. It included widening the existing roadway at the north end of Porter Rockwell Road. It was required to accommodate new traffic generated by the construction of Independence at the Point and other projects currently under design in the area.

Porter Rockwell Segment 2 – has been completed and is eligible for reimbursement continuing from the previous IFFP. It included new right of way and all new improvements. This project was also required to accommodate new traffic generated by the construction of Independence at the Point and other projects currently under design in the area.

Noell Nelson Drive, 14600 S to Freedom Point Way – is project number 1 on the transportation CFP. It includes new right of way and all new improvements. This project is required to accommodate new traffic generated by Independence and through traffic from 14600 South to Porter Rockwell Boulevard. The project is significant to the City's traffic circulation, particularly the intersection of 1000 West and 14600 South.

Freedom Point Way, Porter Rockwell to Pony Express – is project number 2 on the transportation CFP. It includes new right of way and all new improvements. This project include only the south end of Freedom Point Way where the City plans to construct a new fire station. The portion of this project (approximately 29%) that is impact fee eligible is the portion across the frontage of the new fire station and connecting to Porter Rockwell Blvd.

Porter Rockwell Segment 3 – is project number 3 on the transportation CFP. It includes new right of way and all new improvements. This project is required to accommodate new traffic generated by the construction of Independence at the Point and other projects currently under design in the area.

Porter Rockwell Segment 5 – is project numbers 6 and 10 on the transportation CFP. It includes new right of way and all new improvements. These projects are required to accommodate new traffic generated by the construction of new developments on the west side of the river and eventually pass through traffic continuing to I-15. The intersection improvements are scheduled to be completed first to enable development of the area directly adjacent to Redwood Road. The rest of the planned road is scheduled for WFRC funding in 2019 with a 5% ($350,000) match by Bluffdale City.

14400 South, 2200 West to Redwood Road - is project number 10 on the transportation CFP. It includes widening the road from intersection to intersection. The project is made necessary by new development. Increased traffic has created the need construct sidewalks for pedestrian safety, to lengthen left turn queuing and to provide a median turn lane to facilitate access to homes without blocking through traffic.

Porter Rockwell Segment 4 – is project number 13 on the transportation CFP. It includes new right of way and all new improvements. This project is required to accommodate new traffic generated by the construction of Independence at the Point and other projects currently under design in the area as well as eventual pass through traffic from I-15. The project is scheduled for WFRC funding in 2021 with a 6.77% ($440,000) match by Bluffdale City.

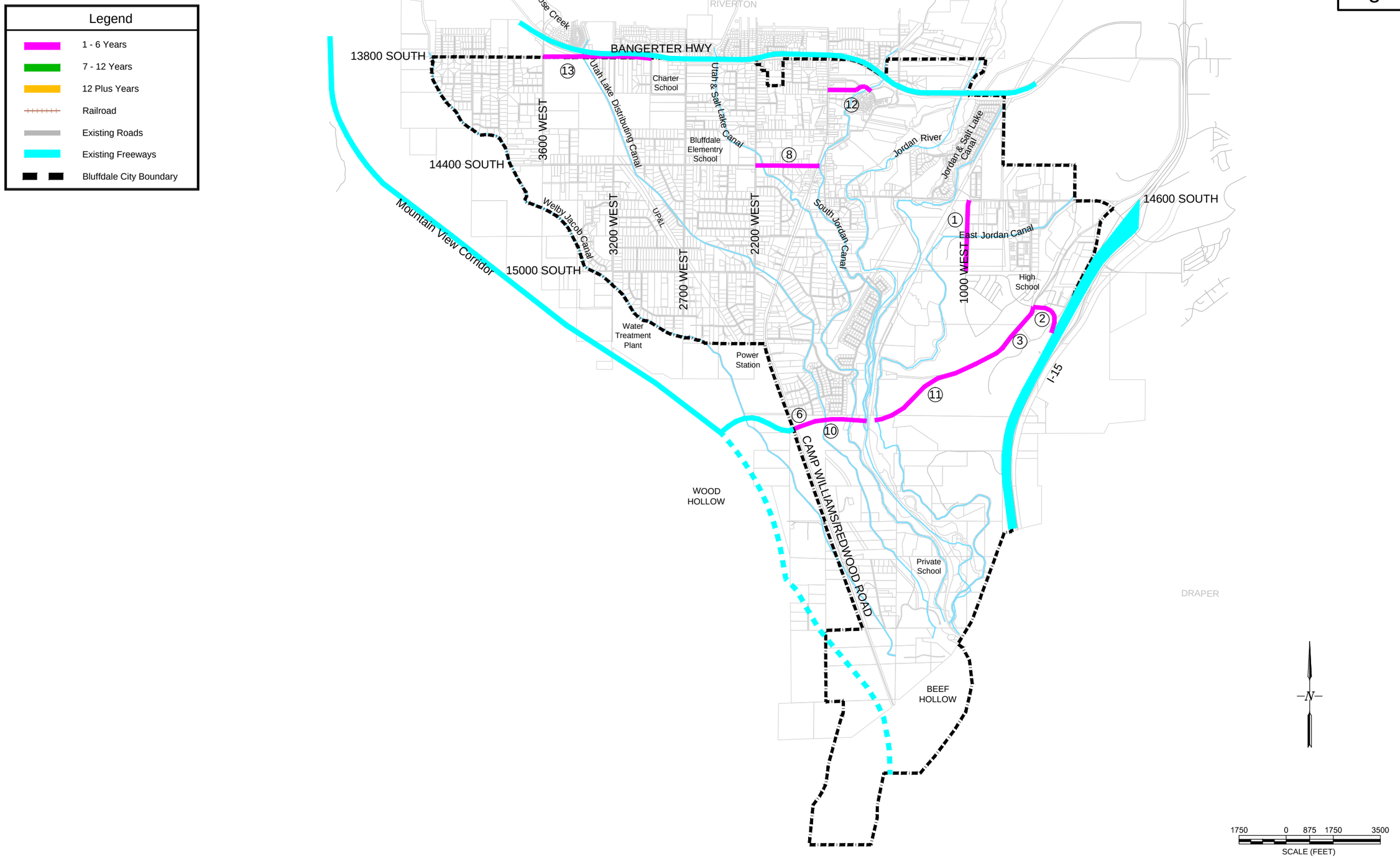
13970 South – is project number 12 on the transportation CFP. It includes demolition of the temporary infrastructure installed for the Bangerter Interchange project, construction of a new road and improvements on Redwood Road to facilitate the new storm water.

13800 South Street Widening, 2950 W to 3600 W – is project number 13 on the transportation CFP. It includes widening the road to include a median turn lane, concrete sidewalks and curb and gutter for storm drain collection.

Table 9-4: Transportation Impact Fee Facilities Estimates

Segment	2015 Estimate (Millions)	Projected Constr. Year	Constr. Year Estimate (Millions)
Porter Rockwell Segment 1	Completed (See reimburse calcs)		
Porter Rockwell Segment 2	Completed (See reimburse calcs)		
(1) Noell Nelson Dr, 14600 S to PRB (58%)	$1.26	2016	$1.34
(2) Freedom Point Way, PRB to Pony Express	$0.67	2016	$0.71
(3) Porter Rockwell Segment 3	$2.95	2016	$3.13
(6) Porter Rockwell Segment 5, Intersection	$0.20	2016	$0.21
(8) 14400 South, 2200 West to Redwood Rd	$0.86	2018	$1.02
(10) Porter Rockwell Segment 5, Bridge to Redwood	$0.35	2019	$0.35
(11) Porter Rockwell Segment 4, 15650 S to Bridge	$0.44	2021	$0.44
(12) 13970 South	$1.97	2016	$1.97
(13) 13800 South, 2950 W to 3600 W	$2.47	2020	$3.31
Total	**$11.17**		**$12.48**

Figure 9-3



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CAPITAL IMPROVEMENTS PLAN

Transportation Impact Fee Facilities Plan

Although the City's transportation system functions as essentially one service area, Porter Rockwell Boulevard is a critical transportation corridor for the Independence subdivision and other surrounding areas. Therefore, a city-wide impact fee will be calculated as well as a an additional Porter Rockwell Service Area Impact Fee to be charged in addition to the city-wide fee for new developments in the service area as defined in Figure 9-4. This impact fee will serve to finance the portion of Porter Rockwell Boulevard that new developments within the designated service area require for their developments.

Porter Rockwell Service Area

Porter Rockwell Boulevard is currently a Bluffdale City road. The City is working with UDOT to ensure that the road is built to State standards in an effort to encourage UDOT to eventually assist in construction, financing and future ownership of the road. As such, the transportation impact fee analysis considers three cost factors: cost of the road required by the PRB service area, cost of the built-out PRB and the cost of improving the road from PRB service area needs to build out.

In a traffic study performed by Hales Engineering and published in September 2012, traffic modeling was performed to define PRB service area trip generation as well as build-out trip generation. The study illustrated that PRB service area contributes 68% of the traffic that will utilize the Porter Rockwell Boulevard. Therefore, impact fees will be calculated for the PRB service area to pay for 70% of the costs to build PRB to Bluffdale City standards. All other costs will be distributed throughout the city-wide impact fee including 30% of the PRB costs and UDOT upgrades. Segments 1 & 2 have now been constructed and the estimated costs in the previous IFFP can be replaced with actual costs for reimbursement. Table 9-5 defines the actual costs by segment.

Table 9-5: PRB Cost Distribution by Segment

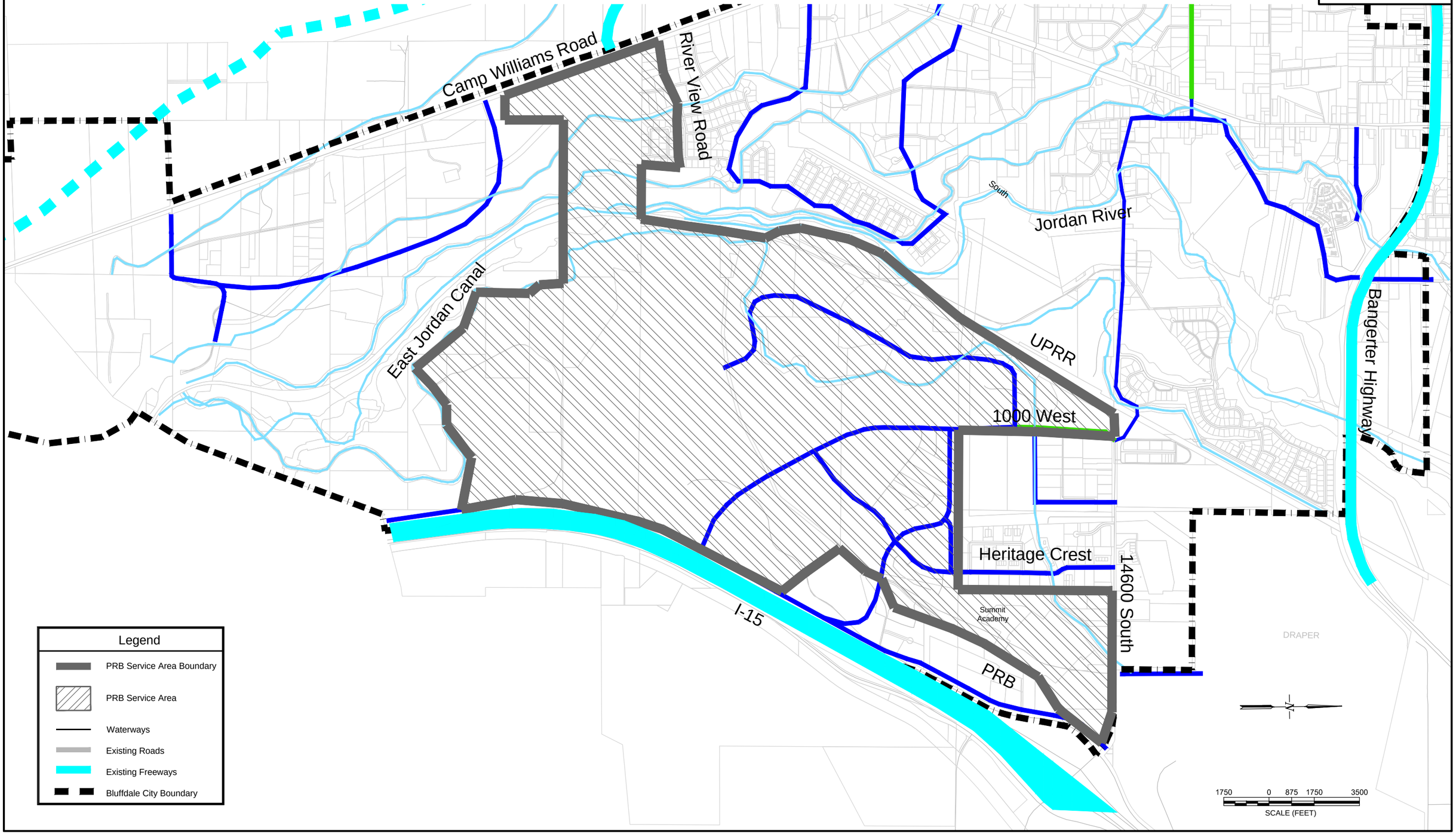
Segment	City Standard Estimate	PRB SA Portion (70%)	City-wide Portion	UDOT Standard Estimate	Upgrade to UDOT Standards
Porter Rockwell Segment 1	$0.97	***$0.68***	***$0.29***	$1.43	***$0.46***
Porter Rockwell Segment 2	$2.82	***$1.97***	***$0.85***	$3.63	***$0.81***
Total	**$3.79**	***$2.65***	***$1.14***	**$5.06**	***$1.27***

Note: Estimates are in millions.

The City's approved demographics project new build-out SFE's at 17,397 with 8,122 attributable to the PRB SA (SFE projections can be found in Appendix "C"). Therefore, the PRB impact fees (city-wide and SA) are calculated as follows:

PRB SA: $2,650,000/8,122 SFE = *$326.27/SFE*
City-wide: ($1,140,000+1,270,000)/17,397 SFE = *$138.53/SFE*

Figure 9-4



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Porter Rockwell Service Area

Table 9-7 illustrates the impact fee calculations for the city-wide transportation base impact fee without the city-wide fee for Porter Rockwell. Total recommended impact fees for a residence are therefore calculated as follows.

PRB SA: $326.27/SFE + $138.53/SFE+$3,220/SFE = *$3,684.80 (use $3,685)*
City-wide: $138.53/SFE + $3,220/SFE = *$3,358.53 (use $3,360)*

Since the City's projected new SFE's are expected to fall into a variety of categories, with varying amounts of impact to the transportation system, the following fees are recommended.

Table 9-6 – Recommended Transportation Impact Fee Schedule

Category	Land Use	Unit	Applicable ITE Code(s)	Demand Index (single family equivalent)	Pass-by Trip Reductions	Impact Fee Cost Per Unit	PRB SA Impact Fee Cost Per Unit
Residential	Single Family Detached	Dwelling Units	210	1	0%	$3,360	$3,685
	Condominium/Townhome	Dwelling Units	230	0.51	0%	$1,714	$1,879
	Apartment	Dwelling Units	220	0.61	0%	$2,050	$2,248
Office	Office Buiding	1,000 sq. ft.	710	1.55	0%	$5,208	$5,712
	Medical Office Building	1,000 sq. ft.	720	3.68	0%	$12,365	$13,561
Retail	Less Intensive Retail	1,000 sq. ft.	890	0.24	55%	$363	$398
	Intensive Retail	1,000 sq. ft.	820	1.95	35%	$4,259	$4,671
Services	High Turnover (sit down) Restaurant	1,000 sq. ft.	932	3.11	45%	$5,747	$6,303
	Fast Food	1,000 sq. ft.	934	10.80	50%	$18,144	$19,899
	Gas Station w/ Convience Market	Pump Stations	945	2.09	65%	$2,458	$2,696
	Bank	1,000 sq. ft.	912	11.32	55%	$17,116	$18,771
Industrial	Industrial	1,000 sq. ft.	110	1.46	0%	$4,906	$5,380
	Manufacturing	1,000 sq. ft.	140	1.10	0%	$3,696	$4,054
	Warehousing	1,000 sq. ft.	150	0.70	0%	$2,352	$2,580
Institutional	Elementary School	Students	520	0.28	0%	$941	$1,032
	Middle/Junior School	Students	522	0.30	0%	$1,008	$1,106
	High School	Students	530	0.28	0%	$941	$1,032
	Private School (K-8)	Students	534	0.60	0%	$2,016	$2,211
	Private School (K-12)	Students	536	0.54	0%	$1,814	$1,990
	Day Care	1,000 sq. ft.	565	2.61	0%	$8,770	$9,618
	Library	1,000 sq. ft.	590	3.51	0%	$11,794	$12,934
	Church	1,000 sq. ft.	560	0.65	0%	$2,184	$2,395
Ldg	Hotel/Motel	rooms	310/320	0.55	0%	$1,848	$2,027

Table 9-7

Transportation Base Impact Fee Analysis

Proposed Impa		$3,220.00											**Interest Rate**	4.00%
Fiscal Year Ending	**New SFE's***	**Impact Fee Revenue**	**Impact Fee Analysis**	**Noell Nelson Dr 14600 S to Freedom Point Way** (financed for 10 years)	**Freedom Point Way, PRB to Pony Express** (financed for 10 years)	**Porter Rockwell, Segment 3** (financed for 10 years)	**Porter Rockwell, Segment 5 Intersection** (financed for 10 years)	**13970 South** (financed for 10 years)	**14400 South, 2200 West to Redwood Rd** (financed for 10 years)	**Porter Rockwell, Segment 5, Redwood Rd to Bridge**	**13800 South, 2950 W to 3600 W** (financed for 10 years)	**Porter Rockwell, Segment 4, 15650 S to Bridge**	**Year End Net Income**	**Cumulative Balance***
			$30,000.00	**$1,337,587.88**	**$711,500.00**	**$3,126,461.00**	**$212,786.00**	**$1,968,217.17**	**$1,021,736.00**	**$350,000.00**	**$3,311,307.00**	**$440,000.00**		
													$0.00	$1,176,930.16
2015	248	$798,560.00	-$5,000.00										$793,560.00	$1,970,490.16
2016	631	$2,031,820.00	-$5,000.00	-$164,912.47	-$87,721.51	-$385,464.33	-$212,786.00						$1,175,935.69	$3,146,425.85
2017	701	$2,257,220.00	-$5,000.00	-$164,912.47	-$87,721.51	-$385,464.33		-$242,663.35					$1,371,458.34	$4,517,884.19
2018	779	$2,508,380.00	-$5,000.00	-$164,912.47	-$87,721.51	-$385,464.33		-$242,663.35	-$125,970.80				$1,496,647.54	$6,014,531.73
2019	770	$2,479,400.00	-$5,000.00	-$164,912.47	-$87,721.51	-$385,464.33		-$242,663.35	-$125,970.80	-$350,000.00			$1,117,667.54	$7,132,199.27
2020	744	$2,395,680.00	-$5,000.00	-$164,912.47	-$87,721.51	-$385,464.33		-$242,663.35	-$125,970.80		-$408,254.17		$975,693.37	$8,107,892.65
2021	350	$1,127,000.00		-$164,912.47	-$87,721.51	-$385,464.33		-$242,663.35	-$125,970.80		-$408,254.17	-$440,000.00	-$727,986.63	$7,379,906.02
2022		$0.00		-$164,912.47	-$87,721.51	-$385,464.33		-$242,663.35	-$125,970.80		-$408,254.17		-$1,414,986.63	$5,964,919.39
2023		$0.00		-$164,912.47	-$87,721.51	-$385,464.33		-$242,663.35	-$125,970.80		-$408,254.17		-$1,414,986.63	$4,549,932.77
2024		$0.00		-$164,912.47	-$87,721.51	-$385,464.33		-$242,663.35	-$125,970.80		-$408,254.17		-$1,414,986.63	$3,134,946.14
2025		$0.00		-$164,912.47	-$87,721.51	-$385,464.33		-$242,663.35	-$125,970.80		-$408,254.17		-$1,414,986.63	$1,719,959.52
2026		$0.00						-$242,663.35	-$125,970.80		-$408,254.17		-$776,888.32	$943,071.20
2027		$0.00							-$125,970.80		-$408,254.17		-$534,224.96	$408,846.24
2028		$0.00									-$408,254.17		-$408,254.17	$592.07
2029		$0.00									-$408,254.17		-$408,254.17	$592.07
Totals	4223	$13,598,060.00	$30,000.00	$1,649,124.73	$877,215.07	$3,854,643.29	$212,786.00	$2,426,633.54	$1,259,707.96	$350,000.00	$4,082,541.67	$440,000.00		
	Portion of Impact Fee		$6.36	$349.75	$186.04	$817.51	$45.13	$514.65	$267.16	$74.23	$865.84	$93.32		
Total Revenue:		$13,598,060.00											**Total Costs:**	**$15,182,652.26**
													Total Principal:	**$12,509,595.05**
													Total Interest:	**$2,673,057.21**

*Notes: 1) Project costs are in future dollars (assuming 6% inflation).

2) Initial balance is calculated using the actual balance minus the amount allocated for Loumis Parkway/2700 West/PRB that are currently under construction

3) SFE's include half of 2015 and half of 2021

9.3 Storm Drain Impact Fees

The storm drain capital facilities plan identifies $3.16 million (2013 dollars) of improvements that need to be made to the system in the next 6 years. However, several of the improvements are due to existing deficiencies as identified in Chapter 5. Storm drain impact fees can only supplement system improvements due to growth within the City. Therefore, this analysis has identified approximately $2,140,000 of improvements (2013 dollars) that can be classified as system improvements.

The projects eligible for impact fees and projected to be constructed in the next six years are outlined below and summarized in Table 9-8.

14400 South Trunkline Extension and Detention Pond – is project number one in the storm drain capital facilities plan. The project includes a detention pond and a collection pipe delivering water from 14400 South and surrounding subdivisions. Recent developments such as the Falls at Boulden Ridge and Ponderosa have increased demand not only on the storm drain system in this area but also on the roads. Therefore, as new homes are constructed, the increased impervious surface creates the need for larger collection facilities and a detention pond.

Vista Meadows Trunkline – is project number two in the storm drain capital facilities plan. It includes a collection line on the south side of the proposed 80 acre park. New construction of an 80 acre park and potential development of the property directly south of the park (formerly platted as Vista Meadows) creates the need for a storm drain collection line in this area. This line will convey flows to the proposed 14400 South Detention Pond.

East Side Regional Detention Pond – is project number three in the storm drain capital facilities plan. It includes a detention pond north of 14600 South near the Jordan River. There are many new developments in the planning process and beginning construction on the east side along 14600 South. Independence is the most prominent, but there are many smaller ones as well including the property east of Center Point and the northeast corner of the old Independence plan. Further, UDOT has awarded the design contract for The Point project which will reconstruct the 14600 S/I-15 interchange and increase growth in the area. This will be the first of several projects to provide storm drain facilities to the new developments.

Sage Estates Regional Detention Pond - is project number ten in the storm drain capital facilities plan. It includes a regional detention pond in the Sage Estates Subdivision. The project is made necessary by growth that continues on the west side of the Jordan River and east of Redwood Road.

South Regional Detention Pond – is project number four in the storm drain capital facilities plan. It includes a detention pond that will serve the south end of Bluffdale. Several properties have begun the planning process and have prepared concept plans for developing in this area. The construction of the UDC and Bluffdale's new water line in the area have increase the desire for many to develop in this area.

14000 South Trunkline – is project number eleven in the storm drain capital facilities plan. It includes installing a new 24" trunkline in 14000 South to accommodate new development in the area including Salt Lake County's new park.

13800 South Detention Pond - is project number nine in the storm drain capital facilities plan. It includes construction a new regional detention pond to detain storm water from new developments before they are outlet into Rose Creek.

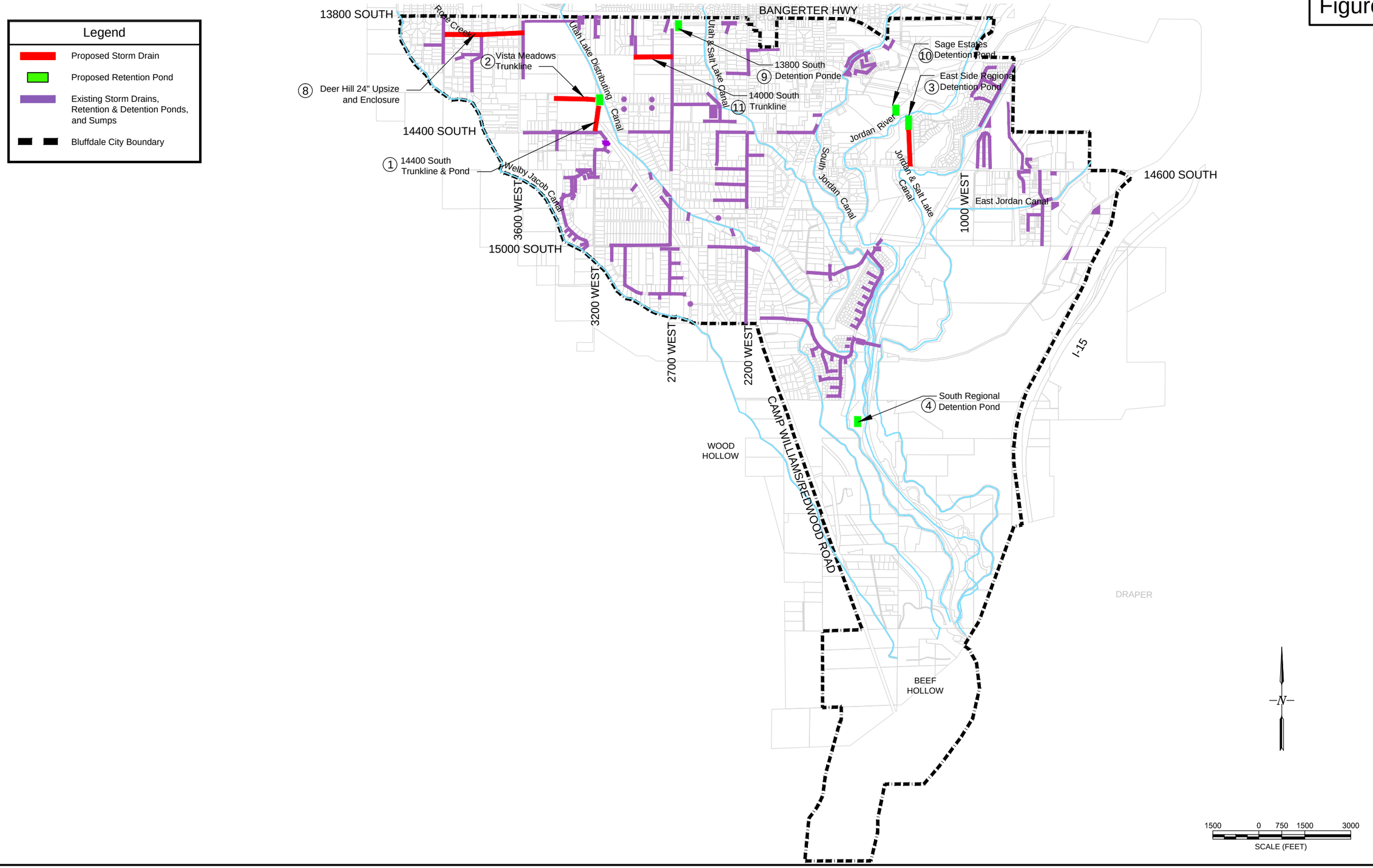
Table 9-8: Storm Drain Impact Fee Facilities Estimates

Segment	2013 Estimate (Millions)	Projected Constr. Year	Constr. Year Estimate (Millions)
(1) 14400 South Trunkline Extension and Pond	$0.46	2016	$0.48
(2) Vista Meadows Trunkline	$0.11	2016	$0.11
(3) East Side Regional Detention Pond	$0.30	2016	$0.30
(4) South Regional Detention Pond	$0.35	2014	$0.39
(8) Deer Hill Upsize and Enclosure	$0.35	2018	$0.42
(10) Sage Estates Detention Pond	$0.50	2016	$0.53
(11) 14000 South Trunkline	$0.29	2017	$0.32
(12) 13800 South Detention Pond	$0.50	2018	$0.59
Total	**$2.86**		**$3.14**

Table 9-9 illustrates how these improvements will be financed and paid for by the projected 5,695 new ERC's in the next 6 years. ERC's were projected using the demographic projections. Figure 9-5 illustrates the IFFP projects graphically.

As illustrated on the following pages, a **storm drain impact fee of $630** is recommended for each new residence or per 2,700 square feet of impervious surface.

Figure 9-5



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BLUFFDALE CITY

CAPITAL IMPROVEMENTS PLAN

Storm Drain Impact Fee Facilities Plan

Table 9-9

Storm Drain Impact Fee Analysis

Proposed Impact		$630.00										4.00%	
Fiscal Year Ending	**New ERU's**	**Impact Fee Revenue**	**14400 South Trunkline and Detention Pond** (financed for 10 years)	**Vista Meadows Trunkline** (financed for 10 years)	**Eastside Regional Detention Pond** (cash)	**Yearly Impact Fee Update** (cash)	**Sage Estates Detention Pond** (financed for 10 years)	**South Regional Detention Pond** (cash)	**14000 South Trunkline**	**Deer Hill 24" Upsize and Enclosure** (financed for 10 years)	**13800 So Detention Pond** (financed for 10 years)	**Year End Net Income**	**Cumulative Balance**
			$483,105.60	**$112,757.50**	**$300,000.00**	**$30,000.00**	**$525,108.10**	**$389,338.64**	**$320,495.66**	**$416,755.85**	**$593,630.66**		
													$157,207.41
2015	478	$301,140.00				-$5,000.00						$296,140.00	$453,347.41
2016	1012	$637,560.00	-$59,562.55	-$13,901.98	-$300,000.00	-$5,000.00	-$64,741.07					$194,354.40	$647,701.81
2017	1124	$708,120.00	-$59,562.55	-$13,901.98		-$5,000.00	-$64,741.07	-$389,338.64	-$39,514.21			$136,061.55	$783,763.37
2018	1249	$786,870.00	-$59,562.55	-$13,901.98		-$5,000.00	-$64,741.07		-$39,514.21	-$51,382.22	-$73,189.28	$479,578.68	$1,263,342.05
2019	1235	$778,050.00	-$59,562.55	-$13,901.98		-$5,000.00	-$64,741.07		-$39,514.21	-$51,382.22	-$73,189.28	$470,758.68	$1,734,100.73
2020	597	$376,110.00	-$59,562.55	-$13,901.98		-$5,000.00	-$64,741.07		-$39,514.21	-$51,382.22	-$73,189.28	$68,818.68	$1,802,919.41
2021		$0.00	-$59,562.55	-$13,901.98			-$64,741.07		-$39,514.21	-$51,382.22	-$73,189.28	-$302,291.32	$1,500,628.09
2022		$0.00	-$59,562.55	-$13,901.98			-$64,741.07		-$39,514.21	-$51,382.22	-$73,189.28	-$302,291.32	$1,198,336.77
2023		$0.00	-$59,562.55	-$13,901.98			-$64,741.07		-$39,514.21	-$51,382.22	-$73,189.28	-$302,291.32	$896,045.46
2024		$0.00	-$59,562.55	-$13,901.98			-$64,741.07		-$39,514.21	-$51,382.22	-$73,189.28	-$302,291.32	$593,754.14
2025		$0.00	-$59,562.55	-$13,901.98			-64,741.07		-$39,514.21	-$51,382.22	-$73,189.28	-$302,291.32	$291,462.82
2026		$0.00							-$39,514.21	-$51,382.22	-$73,189.28	-$164,085.72	$127,377.10
2027		$0.00								-$51,382.22	-$73,189.28	-$124,571.51	$2,805.59
	5695	$3,587,850.00	-$595,625.46	-$139,019.79	-$300,000.00	-$30,000.00	-$647,410.74	-$389,338.64	-$395,142.13	-$513,822.23	-$731,892.85		
	Portion of Impact Fee		$100.27	$23.40	$50.50	$5.05	$108.99	$65.54	$66.52	$86.50	$123.21		
Total Revenue:		$3,587,850.00										Total Financed Cost	**$3,742,251.82**
												Total Principle	**$3,171,192.01**
Note: Project costs are in future dollars (assuming 6% inflation).												Total Interest	**$571,059.81**

9.4 Public Safety Impact Fees

As with each previous section, a study of Bluffdale's public safety facilities indicates that improvements will be needed during the planning period in order to maintain the City's current level of service to its current and future residents. The conceptual plan provided in Chapter 6 – Public Safety Planning was used as the basis for analyzing impact fees required to finance future public safety projects.

Fire Station Expansion

An integral part of the concept plan is the expansion into the existing 27% (3,450 s.f.) of the fire station currently serving as City Hall. This portion of the building was built for future use and, therefore, qualifies for impact fee funding. In 2003, the fire station was constructed for $2,110,000. Therefore,

$2,110,000 x 0.27 = $569,700 (eligible for impact fees)

Furthermore, upon construction in 2003, the 9,465 s.f. was being utilized at half capacity. Therefore, half of the remaining cost for the building was impact fee eligible as well.

($2,110,000 - $569,700)/2 = $770,150 (eligible for impact fees)

The total impact fee eligible portion of the fire station is therefore:

$569,700 + $770,150 = $1,339,850

Of this amount, approximately $835,000 (39.6% of the total) remains to be reimbursed by impact fees and is shown in Table 9-11 in the existing balance.

The proportionate share of ERC's that will be serviced by the remaining $835,000 portion of the fire station can be calculated as follows:

West side build-out Emergency Services = 22,465 s.f. (i.e. 5,673 ERC's)
Existing Fire Station = 12,915 s.f. (or 57.5% of build-out needs)
Existing Fire Station serves: 0.575 x 5,673 ERC's = 3,262 ERC's
Proportion remaining to be reimbursed (39.6%) = 3,262 x 0.396 = 1,292 ERC's

Therefore, impact fee calculations in Table 9-11 include not only the ERC's for the illustrated projects (4,121 ERC's), but also the ERC's that will be serviced by fully utilizing the existing fire station (1,292 ERC's).

Conceptual Plan

As illustrated in Chapter 6, it is projected that in the next six years, Bluffdale will need to construct a fire station on the east side including a ladder truck for the new types of development anticipated in Independence. The station and truck will cost a projected $3.6 million (2015 dollars). They are intended to serve approximately one third of the

remaining build-out develop. Therefore, 4,121 new ERC's will serve to finance the new facilities and 1,292 new ERC's will serve to finance expansion of the existing facilities.

For this Impact Fee Facilities Plan, Table 9-10 lists the eligible infrastructure that will be needed in the next six years to provide the current level of service to new residents. The table also shows budgetary costs.

Table 9-10: Public Safety Impact Fee Facilities Estimates

Future Facility	2015 Estimate (Millions)	Projected Constr. Year	Constr. Year Estimate (Millions)
New Fire/Police Station (East Side)	$2.60	2017	$2.81
New Ladder Truck	$1.00	2019	$1.00
Fire Station Expansion	$0.10	2020	$0.10
New Fire Truck	$0.65	2020	$0.65
Total	**$4.35**		**$4.56**

Table 9-11 provides impact fee calculations for the required improvements.

Maintaining the current LOS will require a **public safety impact fee** of **$1,200** for each new unit.

Table 9-11

Bluffdale City Safety Impact Fee Analysis

Proposed Impact Fee		$1,200						**Interest Rate**	4.00%
Year	**New ERU's**	**Impact Fee Revenue**	**New Fire/Police Station** (financed for 10 years) **$2,704,000.00**	**New Ladder Truck** (financed for 5 years) **$1,000,000.00**	**Fire Station Expansion** (financed for 10 years **$100,000.00**	**New Fire Truck** (financed for 5 years) **$650,000.00**	**Impact Fee Analysis** (cash) **$30,000.00**	**Year End Net Income**	**Cumulative Balance**
2015		$0.00						$0.00	-$1,116,079.32
2016	29	$34,800.00					-$5,000.00	$29,800.00	-$1,086,279.32
2017	102	$122,400.00	-$333,378.71	-$224,627.11			-$5,000.00	-$440,605.83	-$1,526,885.15
2018	139	$166,800.00	-$333,378.71	-$224,627.11			-$5,000.00	-$396,205.83	-$1,923,090.97
2019	181	$217,200.00	-$333,378.71	-$224,627.11			-$5,000.00	-$345,805.83	-$2,268,896.80
2020	225	$270,000.00	-$333,378.71	-$224,627.11	-$12,329.09	-$146,007.62	-$5,000.00	-$451,342.55	-$2,720,239.35
2021	272	$326,400.00	-$333,378.71	-$224,627.11	-$12,329.09	-$146,007.62	-$5,000.00	-$394,942.55	-$3,115,181.89
2022	329	$394,800.00	-$333,378.71		-$12,329.09	-$146,007.62		-$96,915.43	-$3,212,097.32
2023	387	$464,400.00	-$333,378.71		-$12,329.09	-$146,007.62		-$27,315.43	-$3,239,412.75
2024	450	$540,000.00	-$333,378.71		-$12,329.09	-$146,007.62		$48,284.57	-$3,191,128.19
2025	502	$602,400.00	-$333,378.71		-$12,329.09			$256,692.19	-$2,934,435.99
2026	560	$672,000.00	-$333,378.71		-$12,329.09			$326,292.19	-$2,608,143.80
2027	604	$724,800.00			-$12,329.09			$712,470.91	-$1,895,672.90
2028	650	$780,000.00			-$12,329.09			$767,670.91	-$1,128,001.99
2029	698	$837,600.00			-$12,329.09			$825,270.91	-$302,731.09
2030	285	$342,000.00						$342,000.00	$39,268.91
2031		$0.00						$0.00	$39,268.91
2032		$0.00						$0.00	$39,268.91
	5,413	$6,495,600.00	-$3,333,787.13	-$1,123,135.57	-$123,290.94	-$730,038.12	-$30,000.00		
		Portion of Impact Fee	$749.13	$252.38	$27.70	$164.05	$6.74		
	Total Revenue:	$6,495,600.00						**Total Finance Costs:**	**$5,340,251.77**
								Total Costs:	**$4,484,000.00**
								Total Interest:	**$856,251.77**

Notes:
1. Project costs are in future dollars (assuming 6% inflation).
2. The initial balance is attributable to the impact fee eligible portion of the existing fire station.
3. This fire station and ladder truck are anticipated to serve 34% of new developments (4,121 ERU's).
4. The fire station expansion and new fire truck will serve 1,292 ERU's).

9.5 Parks and Recreation Impact Fees

Chapter 7 - Parks and Recreation Planning outlines the parks anticipated to be constructed in the Independence at the Point subdivision and conceptually throughout the rest of Bluffdale to maintain its current level of service for parks and recreational facilities.

As shown in Table 9-12, in the next six years, many parks will be constructed. The parks are illustrated in the Independence at the Point master plan. A recent illustration of the planned parks can be found in Appendix "F".

Table 9-12: Parks and Recreation Impact Fee Facilities Estimates

Future Facility	2013 Estimate (Millions)	Projected Constr. Year
Mount Jordan Park	$967,000	2013
Trail Way 1	$277,669	2014
Trail Way 2	$403,094	2014
City Park Improvements	$224,000	2014
Rodeo Grounds Improvements	$698,000	2014
Parry Farms Park Expansion	$106,060	2014
North Pocket Parks	$87,050	2015
Trail Way 3	$540,117	2016
Trail Way 4	$219,808	2016
New 25 Acre Park	$4,200,000	2016
West Pocket Park	$363,526	2017
East Pocket Park	$42,520	2017
Center Pocket Park	$96,612	2017
Parry Farms Park Improvements	$110,000	2017
Independence Park	$3,814,080	2019
Total	**$12,149,536**	

Ultimately, new development will require $43,206,773.49. As calculated in Chapter 7, LOS for parks and recreation facilities is $1,349.78986 of new recreation facilities per resident. Therefore, these planned facilities will serve 9,001 new residents (i.e. $12,149,536 **/** $1,349.78986).

Since the parks and recreation impact fees are calculated per resident and it is apparent that new types of development are coming to Bluffdale, the following schedule of impact fees is currently recommended based on typical occupancy rates of different types of housing.

Single Family (4 residents/unit) = 4 x $1,349.78986 = **$5,399.16 (use 5,400)**
Multi-Family (3 residents/unit) = 3 x $1, 349.78986 = **$4,049.37 (use 4,050)**

Since this impact fee is based upon the 2013 value of existing infrastructure, it is also recommended that the parks impact fee be adjusted on a yearly basis to reflect changes in the Construction Cost Index (CCI) published by the Engineering News-Record (ENR). The current CCR is 9551.58.

Appendix “A”

Demographics

Figure A.1

Bluffdale City
Residential Permits Issued Since April 2010

July 2015

	Units	Density	Residents	Cumulative Population
April 2010 Census Population				7,597.0
2010 (After April)				
Single Family	22	3.96	87.1	
Multi-family		3.57	0.0	7,684.1
2011				
Single Family	39	3.96	154.4	
Multi-family		3.57	0.0	7,838.6
2012				
Single Family	98	3.96	388.1	
Multi-family		3.57	0.0	8,226.6
2013				
Single Family	205	3.96	811.8	
Multi-family	206	3.57	735.4	9,773.9
2014				
Single Family	214	3.96	847.4	
Multi-family	61	3.57	217.8	10,839.1
2015 (Through July)				
Single Family	99	3.96	392.0	
Multi-family	69	3.57	246.3	11,477.4
Total Poluation Increase Since 2010 Census			*3,880.4*	
2015 Population Projection				***11,477.4***

Figure A.2

Bluffdale City Build-Out Population Projections

Land Use Classification	Area (acre)	Eastside Area (acre)	Westside Area (acre)	Residential Density (units/acre)	Eastside Units	Westside Units	Residents per Unit	Eastside Residents	Westside Residents	Total Residents (rounded)
Business Park	472	422	50	0.00	0	0	0.00	0	0	0
Civic Institutional	82	42	40	0.00	0	0	0.00	0	0	0
Commercial	327	270	57	0.00	0	0	0.00	0	0	0
Light Industrial	215	215	0	0.00	0	0	0.00	0	0	0
Mixed Use	758	738	20	7.20	5,314	144	3.54	18,810	510	19,320
Neighborhood Commercial	48	-12	60	0.00	0	0	0.00	0	0	0
Parks & Recreation	445	421	24	0.00	0	0	0.00	0	0	0
Regional Commercial	115	115	0	0.00	0	0	0.00	0	0	0
Residential 1 acre minimum	3,693	93	3,600	1.01	94	3,636	3.96	372	14,399	14,771
Residential 10,000 sq ft minimum	157	47	110	4.40	207	484	3.96	819	1,917	2,736
Residential Multi-Family	44	24	20	16.40	394	328	2.90	1,141	951	2,092
Federal	698	198	500	0.00	0	0	0.00	0	0	0
Total Acreage	**7,054**	**2,573**	**4,481**		**6,008**	**4,592**		**21,142**	**17,777**	**38,919**

Figure A.3

Projected New Units per Year per Element

August 2015

	Park		Safety		Storm Drain		Transportaion		Water	
Fiscal Year Ending	Homes	New Homes	ERU	New ERU	ERU	New ERU	SFE	New SFE	ERC	New ERC
2008	2,056		2,558		5,430		3,386		2,558	
2009	2,070	14	2,575	17	5,466	36	3,408	22	2,575	17
2010	2,079	9	2,587	12	5,490	24	3,423	15	2,587	12
2011	2,121	42	2,640	53	5,603	113	3,493	70	2,640	53
2012	2,226	105	2,778	138	5,895	292	3,675	182	2,778	138
2013	2,644	419	3,421	643	7,261	1,366	4,526	851	3,421	643
2014	2,933	288	3,840	419	8,149	888	5,080	554	3,840	419
2015	3,241	308	4,291	451	9,105	956	5,676	596	4,291	451
2016	3,565	324	4,768	477	10,117	1,012	6,307	631	4,768	477
2017	3,921	356	5,298	530	11,241	1,124	7,008	701	5,298	530
2018	4,313	392	5,887	589	12,490	1,249	7,787	779	5,887	589
2019	4,701	388	6,469	582	13,725	1,235	8,557	770	6,469	582
2020	5,078	376	7,032	563	14,919	1,194	9,301	744	7,032	563
2021	5,433	355	7,561	529	16,042	1,123	10,001	700	7,561	529
2022	5,759	326	8,044	483	17,066	1,024	10,639	638	8,044	483
2023	6,105	346	8,557	513	18,155	1,089	11,318	679	8,557	513
2024	6,440	336	9,055	498	19,212	1,057	11,977	659	9,055	498
2025	6,795	354	9,582	527	20,330	1,118	12,674	697	9,582	527
2026	7,134	340	10,086	504	21,400	1,070	13,341	667	10,086	504
2027	7,491	357	10,617	531	22,526	1,126	14,043	702	10,617	531
2028	7,828	337	11,117	500	23,587	1,061	14,705	662	11,117	500
2029	8,180	352	11,641	524	24,698	1,111	15,398	693	11,641	524
2030	8,508	327	12,126	485	25,727	1,029	16,040	642	12,126	485
2031	8,848	340	12,631	505	26,799	1,072	16,708	668	12,631	505
2032	9,157	310	13,089	458	27,771	972	17,314	606	13,089	458
2033	9,432	275	13,494	405	28,630	859	17,849	535	13,494	405
2034	9,668	236	13,840	346	29,364	734	18,307	458	13,840	346
2035	9,861	193	14,122	282	29,963	599	18,681	374	14,122	282
2036	10,009	148	14,337	215	30,419	456	18,965	284	14,337	215
2037	10,109	100	14,482	145	30,726	307	19,157	192	14,482	145
2038	10,210	101	14,628	146	31,036	310	19,351	194	14,628	146
2039	10,292	82	14,746	118	31,286	250	19,507	156	14,746	118
2040	10,354	62	14,835	89	31,475	189	19,625	118	14,835	89
2041	10,406	52	14,910	75	31,633	158	19,724	99	14,910	75
2042	10,458	52	14,985	75	31,792	159	19,823	99	14,985	75
2043	10,500	42	15,045	60	31,920	128	19,903	80	15,045	60
2044	10,521	21	15,075	30	31,984	64	19,943	40	15,075	30
2045	10,530	9	15,089	14	32,013	29	19,961	18	15,089	14

Appendix “B”

Water

Figure B.1

Bluffdale City Build-Out Water ERC Projections

Land Use Classification	Area (acre)	Units per Area	Total Units	ERC's per Unit*	Total ERC's (rounded)
Business Park	472	1.0	472	3.37	1,591
Civic Institutional	82	0.5	41	7.96	326
Commercial	327	1.0	327	3.37	1,102
Light Industrial	215	1.0	215	3.37	725
Mixed Use	758	7.2	5,458	1.20	6,549
Neighborhood Commercial	48	1.0	48	3.37	162
Parks & Recreation	445	1.0	445		0
Regional Commercial	115	1.0	115	3.37	388
Residential 1 acre minimum	3,693	1.0	3,693	1.00	3,693
Residential 10,000 sq ft minimum	157	4.0	628	1.00	628
Residential Multi-Family	44	16.4	722	0.22	159
Total Acreage	**6,356**		**12,163**		**15,323**

*Mixed Use ERC's per unit are calculated considering 10% of the use being commercial and 90% residential

Figure B.2

Annual Water Consumption (thousand gallons)					
Year	**Apartments**	**Churchs, Schools**	**City**	**Commercial**	**Residential**
2005	19777	16726	2865	43596	292593
2006	21781	22138	3752	65631	318834
2007	19915	28544	39237	62749	387915
2008	22876	25398	40364	55462	381516
2009	17831	21256	41980	47688	377754
2010	7490	35749	33219	57099	376164
2011	7636	25337	30041	55552	336200
	Number of Connections				
2011	399	17	15	88	1795
	Indoor and Outdoor Use (gallons per day per connection)				
2011	**115.1**	**4083.3**	**5486.9**	**1729.5**	**513.1**
(gpm)	**0.0799**	**2.8356**	**3.8104**	**1.2011**	**0.3564**
(peak)	*102*	*16221*	*16392*	*5006*	*1149*
	Indoor Use Only (gallons per day per connection)				
2011	**96**	**161**	**5**	**840**	**238**
(peak)					
	Outdoor Use Only (gallons per day per connection)				
2011	**19**	**3922**	**5482**	**889**	**275**
(peak)	*102*	*16221*	*16392*	*5006*	*1149*
ERC	0.22	7.96	10.69	3.37	1.00
ERC_{indoor}	0.40	0.68	0.02	3.53	1.00
$ERC_{outdoor}$	0.07	14.26	19.92	3.23	1.00

Figure B.3 (4 Pages)

Culinary Water Capital Facilities Projects
Cost Estimates

August 2015

(A) 1850 West pipe replacement

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$3,312	1	$3,312.00
Traffic Control (6%)	LS	$3,312	1	$3,312.00
8" PVC Installed	LF	$48	1150	$55,200.00
			Subtotal:	**$61,824.00**
			Contingency (25%)	$15,456.00
			Total Construction Cost	**$77,280.00**
			Land Acquisition	
			Design & Construction Engineering (15%)	$11,592.00
			Total Project Cost	**$88,872.00**
		2016	**Cost**	**$94,000.00**

(B) 2055 West pipe replacement

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$1,008	1	$1,008.00
Traffic Control (6%)	LS	$1,008	1	$1,008.00
8" PVC Installed	LF	$48	350	$16,800.00
			Subtotal:	**$18,816.00**
			Contingency (25%)	$4,704.00
			Total Construction Cost	**$23,520.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$3,528.00
			Total Project Cost	**$27,048.00**
		2016	**Cost**	**$29,000.00**

(C) Wood Hollow TrunkLine Replacement

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$8,640	1	$8,640.00
Traffic Control (6%)	LS	$8,640	1	$8,640.00
8" PVC Installed	LF	$48	3000	$144,000.00
			Subtotal:	**$161,280.00**
			Contingency (25%)	$40,320.00
			Total Construction Cost	**$201,600.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$30,240.00
			Total Project Cost	**$231,840.00**
		2016	**Cost**	**$246,000.00**

(D) 14850 South Pipe Replacement

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$288	1	$288.00
Traffic Control (6%)	LS	$288	1	$288.00
8" PVC Installed	LF	$48	100	$4,800.00
			Subtotal:	**$5,376.00**
			Contingency (25%)	$1,344.00
			Total Construction Cost	**$6,720.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$1,008.00
			Total Project Cost	**$7,728.00**
		2016	**Cost**	**$8,000.00**

(E) Silverpoint Way Pipeline

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$2,160	1	$2,160.00
Traffic Control (6%)	LS	$2,160	1	$2,160.00
8" PVC Installed	LF	$48	750	$36,000.00
			Subtotal:	**$40,320.00**
			Contingency (25%)	$10,080.00
			Total Construction Cost	**$50,400.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$7,560.00
			Total Project Cost	**$57,960.00**
		2016	**Cost**	**$61,000.00**

(F) 2200 West Pipeline Extension

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$3,312	1	$3,312.00
Traffic Control (6%)	LS	$3,312	1	$3,312.00
8" PVC Installed	LF	$48	1,150	$55,200.00
			Subtotal:	**$61,824.00**
			Contingency (25%)	$15,456.00
			Total Construction Cost	**$77,280.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$11,592.00
			Total Project Cost	**$88,872.00**
		2016	**Cost**	**$94,000.00**

(G) 2700 West Pipeline

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$2,592	1	$2,592.00
Traffic Control (6%)	LS	$2,592	1	$2,592.00
8" PVC Installed	LF	$48	900	$43,200.00
			Subtotal:	**$48,384.00**
			Contingency (25%)	$12,096.00
			Total Construction Cost	**$60,480.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$9,072.00
			Total Project Cost	**$69,552.00**
		2016	**Cost**	**$74,000.00**

(1) Independence East Trunkline Phase II

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$12,420	1	$12,420.00
Traffic Control (6%)	LS	$12,420	1	$12,420.00
12" PVC Installed	LF	$60	3450	$207,000.00
			Subtotal:	**$231,840.00**
			Contingency (25%)	$57,960.00
			Total Construction Cost	**$289,800.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$43,470.00
			Total Project Cost	**$333,270.00**
		2016	**Cost**	**$353,000.00**

(2) Porter Rockwell Corridor Trunkline

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$10,920	1	$10,920.00
Traffic Control (6%)	LS	$10,920	1	$10,920.00
12" PVC Installed	LF	$60	2200	$132,000.00
Pressure Reducing Valve	LF	$50,000	1	$50,000.00
			Subtotal:	**$203,840.00**
			Contingency (25%)	$50,960.00
			Total Construction Cost	**$254,800.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$38,220.00
			Total Project Cost	**$293,020.00**
		2018	**Cost**	**$349,000.00**

(3) 2700 West pipe replacement

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$11,715	1	$11,715.00
Traffic Control (6%)	LS	$11,715	1	$11,715.00
10" PVC Installed	LF	$55	3,550	$195,250.00
			Subtotal:	**$218,680.00**
			Contingency (25%)	$54,670.00
			Total Construction Cost	**$273,350.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$41,002.50
			Total Project Cost	**$314,352.50**
		2022	**Cost**	**$473,000.00**

(4) 1300 West Waterline

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$10,368	1	$10,368.00
Traffic Control (6%)	LS	$10,368	1	$10,368.00
8" PVC Installed	LF	$48	3600	$172,800.00
			Subtotal:	**$193,536.00**
			Total Construction Cost	**$193,536.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$29,030.40
			Total Project Cost	**$222,566.40**
		2017	**Cost**	**$250,000.00**

(5) Webb Well Waterline

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$10,080	1	$10,080.00
Traffic Control (6%)	LS	$10,080	1	$10,080.00
8" PVC Installed	LF	$48	3500	$168,000.00
			Subtotal:	**$188,160.00**
			Contingency (25%)	$47,040.00
			Total Construction Cost	**$235,200.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$35,280.00
			Total Project Cost	**$270,480.00**
		2030	**Cost**	**$648,000.00**

Improvements				
			Total (Planning Year)	**$2,005,560.90**
			Total (Construction Year)	**$2,679,000.00**

Figure B.4 (5 Pages)

Secondary Water Capital Facilities Projects
Cost Estimates

August 2015

(1) New Well and Water Rights

Description	Unit	Unit Price	Quantity	Total Cost
New Well Construction	LS	$350,000	1	$350,000.00
Water Rights	LS	$50,000	1	$50,000.00
			Subtotal:	**$400,000.00**
			Contingency (25%)	$100,000.00
			Total Construction Cost	**$500,000.00**
			Land Acquisition	$0.00
			Design & Construction Engineering (15%)	$0.00
			Total Project Cost	**$500,000.00**
		2016	**Cost**	**$530,000.00**

(2) Independence System

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$53,784	1	$53,784.00
Traffic Control (6%)	LS	$53,784	1	$53,784.00
10" PVC Installed	LF	$54	16,600	$896,400.00
			Subtotal:	**$1,003,968.00**
			Contingency (25%)	$250,992.00
			Total Construction Cost	**$1,254,960.00**
			Land Acquisition	$0.00
			Design & Construction Engineering (15%)	$188,244.00
			Total Project Cost	**$1,443,204.00**
		2017	**Cost**	**$1,622,000.00**

(3) SVSD Reuse project

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$73,710	1	$73,710.00
Traffic Control (6%)	LS	$73,710	1	$73,710.00
12" PVC Installed	LF	$60	1,700	$102,000.00
10" PVC Installed	LF	$55	2,300	$126,500.00
Pump Station	EA	$1.00	1,000,000	$1,000,000.00
			Subtotal:	**$1,375,920.00**
			Contingency (25%)	$343,980.00
			Total Construction Cost	**$1,719,900.00**
			Land Acquisition	
			Design & Construction Engineering (15%)	$257,985.00
			Total Project Cost	**$1,977,885.00**
		2017	**Cost**	**$2,222,000.00**

(5) 2200 West Trunkline Extension

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$10,080	1	$10,080.00
Traffic Control (6%)	LS	$10,080	1	$10,080.00
8" PVC Installed	LF	$48	3,500	$168,000.00
			Subtotal:	**$188,160.00**
			Contingency (25%)	$47,040.00
			Total Construction Cost	**$235,200.00**
			Land Acquisition	
			Design & Construction Engineering (15%)	$35,280.00
			Total Project Cost	**$270,480.00**
		2021	**Cost**	**$384,000.00**

(6) Redwood Road Trunkline

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$10,368	1	$10,368.00
Traffic Control (6%)	LS	$10,368	1	$10,368.00
8" PVC Installed	LF	$48	3,600	$172,800.00
			Subtotal:	**$193,536.00**
			Contingency (25%)	$48,384.00
			Total Construction Cost	**$241,920.00**
			Land Acquisition	
			Design & Construction Engineering (15%)	$36,288.00
			Total Project Cost	**$278,208.00**
		2022	**Cost**	**$418,000.00**

(7) 14400 South Trunkline

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$9,360	1	$9,360.00
Traffic Control (6%)	LS	$9,360	1	$9,360.00
12" PVC Installed	LF	$60	2,600	$156,000.00
			Subtotal:	**$174,720.00**
			Contingency (25%)	$43,680.00
			Total Construction Cost	**$218,400.00**
			Land Acquisition	
			Design & Construction Engineering (15%)	$32,760.00
			Total Project Cost	**$251,160.00**
		2023	**Cost**	**$400,000.00**

(8) Secondary Water Storage Tank

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$60,000	1	$60,000.00
Traffic Control (6%)	LS	$60,000	1	$60,000.00
2 MG Tank	LF	$1,000,000	1	$1,000,000.00
			Subtotal:	**$1,120,000.00**
			Contingency (25%)	$280,000.00
			Total Construction Cost	**$1,400,000.00**
			Land Acquisition	
			Design & Construction Engineering (15%)	$210,000.00
			Total Project Cost	**$1,610,000.00**
		2024	**Cost**	**$2,720,000.00**

(9) 15000 South Trunkline

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$9,180	1	$9,180.00
Traffic Control (6%)	LS	$9,180	1	$9,180.00
10" PVC Installed	LF	$55	2,630	$144,650.00
12" PVC Installed	LF	$60	2,550	$153,000.00
			Subtotal:	**$316,010.00**
			Contingency (25%)	$79,002.50
			Total Construction Cost	**$395,012.50**
			Land Acquisition	
			Design & Construction Engineering (15%)	$59,251.88
			Total Project Cost	**$454,264.38**
		2025	**Cost**	**$814,000.00**

(10) 3600 West Trunkline

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$7,142	1	$7,142.40
Traffic Control (6%)	LS	$7,142	1	$7,142.40
8" PVC Installed	LF	$48	2480	$119,040.00
			Subtotal:	**$133,324.80**
			Contingency (25%)	$33,331.20
			Total Construction Cost	**$166,656.00**
			Land Acquisition	
			Design & Construction Engineering (15%)	$24,998.40
			Total Project Cost	**$191,654.40**
		2026	**Cost**	**$364,000.00**

(11) River View trunkline

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$4,290	1	$4,290.00
Traffic Control (6%)	LS	$4,290	1	$4,290.00
10" PVC Installed	LF	$55	1,300	$71,500.00
			Subtotal:	**$80,080.00**
			Contingency (25%)	$20,020.00
			Total Construction Cost	**$100,100.00**
			Land Acquisition	
			Design & Construction Engineering (15%)	$15,015.00
			Total Project Cost	**$115,115.00**
		2027	**Cost**	**$232,000.00**

(12) 13800 South Trunkline

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$13,101	1	$13,101.00
Traffic Control (6%)	LS	$13,101	1	$13,101.00
8" PVC Installed	LF	$48	2,630	$126,240.00
10" PVC Installed	LF	$55	3,970	$218,350.00
			Subtotal:	**$370,792.00**
			Contingency (25%)	$92,698.00
			Total Construction Cost	**$463,490.00**
			Land Acquisition	
			Design & Construction Engineering (15%)	$69,523.50
			Total Project Cost	**$533,013.50**
		2027	**Cost**	**$1,073,000.00**

(13) 15500 South Booster Pump

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$28,500	1	$28,500.00
Traffic Control (6%)	LS	$28,500	1	$28,500.00
Booster Pump	Each	$475,000	1	$475,000.00
			Subtotal:	**$532,000.00**
			Contingency (25%)	$133,000.00
			Total Construction Cost	**$665,000.00**
			Land Acquisition	
			Design & Construction Engineering (15%)	$99,750.00
			Total Project Cost	**$764,750.00**
		2027	**Cost**	**$1,539,000.00**

Total Improvements				
			Total (Planning Year)	**$7,509,869.28**
			Total (Construction Year)	**$10,547,000.00**

Appendix “C”

Transportation

Figure C.1

Bluffdale City Build-Out Transportation SFE Projections

Land Use Classification	Area (acre)	PRB Service Area (acre)	Units per Area	PRB Service Area Units	Total Units (rounded)
Business Park	472	430	11.00	4,730	5,192
Civic Institutional	82	10	11.00	110	902
Commercial	327	48	11.00	528	3,597
Light Industrial	215	0	11.00	0	2,365
Mixed Use	758	660	6.70	4,422	5,079
Neighborhood Commercial	48	0	11.00	0	528
Parks & Recreation	445	0	0.00	0	0
Regional Commercial	115	0	11.00	0	1,265
Residential 1 acre minimum	3,693	0	1.00	0	3,693
Residential 10,000 sq ft minimum	157	0	4.40	0	691
Residential Multi-Family	44	0	16.40	0	722
Federal	698	0	1.00	0	698
Total Acreage	**7,054**	**1,148**		**9,790**	**24,732**

*Number of units is calculated as units/acre for residential zones and as 11,000 sf of business/acre

Figure C.2

Category	Land Use	Unit	Definition
Residential	Single Family Detached	Dwelling Units	All single-family detached home on individual lots
	Condominium/Townhome	Dwelling Units	Ownership units that have at least one other owned unit within the same building structure.
	Apartment	Dwelling Units	Units that are located within the same building with at least three other dwelling units, for example quadraplexes and all types of apartment buildings.
Office	Office Building	1,000 sq. ft.	Building houses multiple tenants; it is a location where affairs of businesses, commercial or industrial organizations, or professional person or firms are conducted
	Medical Office Building	1,000 sq. ft.	Building is a facility that provides diagnoses and outpatient car on a routine basis, but is unable to provide prolonged in-house medical and surgical care.
Retail	Less Intensive Retail	1,000 sq. ft.	Full service retail facility that specializes in a certain product. Generally large and may include storage areas.
	Intensive Retail	1,000 sq. ft.	Integrated group of commercial establishments that is planned, developed, owned and managed as a unit.
Services	High Turnover (sit down) Restaurant	1,000 sq. ft.	Sit-down, full-service eating establishment with turnover rates of approximately one hour or less.
	Fast Food	1,000 sq. ft.	This type of restaurant is characterized by a large carryout clientele; long hours of service and high turnover rates for eat-in customers.
	Gas Station w/ Convenience Market	Pump Stations	Stations with convenience markets where the primary business in the fueling of motor vehicles. These service station my also have ancillary facilities for servicing and repairing motor vehicles.
	Bank	1,000 sq. ft.	Free-standing building with their own parking lots and may or may not provide drive-in lanes.
Industrial	Industrial	1,000 sq. ft.	Contain a number of industrial or related facilities. They are characterized by a mix of manufacturing, service and warehouse facilities with a wide variation in the proportion of each type of use from one location to another.
	Manufacturing	1,000 sq. ft.	Areas where the primary activity is the conversion of raw materials or parts into finished products.
	Warehousing	1,000 sq. ft.	Primarily devoted to the storage of materials, but they may also include office and maintenance areas.
Institutional	Elementary School	Students	School typically serve students attending kindergarten through the fifth or sixth grade
	Middle/Junior School	Students	Schools serving student who have completed elementary school and have not yet entered high school.
	High School	Students	Schools serving students who have completed middle or junior high school
	Private School (K-8)	Students	Primarily serve students attending kindergarten through he eight grade, but may also include students beginning with pre-K classes
	Private School (K-12)	Students	Primarily serve students attending kindergarten through he 12th grade, but may also include those beginning with pre-K classes.
	Day Care	1,000 sq. ft.	Free-standing facility where care for pre-school aged children is provided, normally during the daytime hours.
	Library	1,000 sq. ft.	Can be either a public or private facility that consists of shelved books, reading rooms or areas, and sometimes meeting rooms.
	Church	1,000 sq. ft.	Building in which public worship services are held.
Ldg	Hotel/Motel	rooms	Places of lodging that provide sleeping accommodations and may or may not include supporting facilities.

Figure C.3

SFE CALCULATIONS

Land Use	Unit	Applicable ITE Code(s)	ITE Trip Ends per Unit (PM peak Hour)	Heavy Vehicle %	Heavy Vehicle Adjustment*	Primary Trip Adjustment	Effective Trip Ends per Unit	Effective Trips per Unit	Demand Index (single family equivalent)	Porter Rockwell Service Area # of Units	City-wide # of Units	Porter Rockwell Service Area # of SFE Units	City-wide # of SFE Units
Single Family Detached	Dwelling Units	210	1.01	0%	1	1.00	1.0100	0.5050	0.9902	1990	6998	1970	6929
Single Family Attached	Dwelling Units	220/230	0.57	0%	1	1.00	0.5700	0.2850	0.5588	1990	2378	1112	1329
Office	1,000 sq. ft.	710/720	0.76	0%	1	1.00	0.7600	0.3800	0.7451	4730	5280	3524	3934
Institutional	1,000 sq. ft.	520-590	2.08	0%	1	1.00	2.0800	1.0400	2.0392	110	440	224	897
Retail	1,000 sq. ft.	820/890	2.11	5%	1.05	0.50	1.1078	0.5539	1.0861	1190	5076	1292	5513
Industrial	Employees	110/140/150	0.42	50%	1.5	1.00	0.6300	0.3150	0.6176	0	2200	0	1359
											2040 SFE's	8122	19961
											2012 SFE's	0	2564
											New SFE's	8122	17397

Figure C.4

ITE RECOMMENDED IMPACT FEE UNIT EQUIVILANCIES

Category	Land Use	Unit	Applicable ITE Code(s)	Demand Index (single family equivalent)	Pass-by Trip Reductions	Impact Fee Cost Per Unit	PRB SA Impact Fee Cost Per Unit
Residential	Single Family Detached	Dwelling Units	210	1	0%	$3,360	$3,685
	Condominium/Townhome	Dwelling Units	230	0.51	0%	$1,714	$1,879
	Apartment	Dwelling Units	220	0.61	0%	$2,050	$2,248
Office	Office Buiding	1,000 sq. ft.	710	1.55	0%	$5,208	$5,712
	Medical Office Building	1,000 sq. ft.	720	3.68	0%	$12,365	$13,561
Retail	Less Intensive Retail	1,000 sq. ft.	890	0.24	55%	$363	$398
	Intensive Retail	1,000 sq. ft.	820	1.95	35%	$4,259	$4,671
Services	High Turnover (sit down) Restaurant	1,000 sq. ft.	932	3.11	45%	$5,747	$6,303
	Fast Food	1,000 sq. ft.	934	10.80	50%	$18,144	$19,899
	Gas Station w/ Convience Market	Pump Stations	945	2.09	65%	$2,458	$2,696
	Bank	1,000 sq. ft.	912	11.32	55%	$17,116	$18,771
Industrial	Industrial	1,000 sq. ft.	110	1.46	0%	$4,906	$5,380
	Manufacturing	1,000 sq. ft.	140	1.10	0%	$3,696	$4,054
	Warehousing	1,000 sq. ft.	150	0.70	0%	$2,352	$2,580
Institutional	Elementary School	Students	520	0.28	0%	$941	$1,032
	Middle/Junior School	Students	522	0.30	0%	$1,008	$1,106
	High School	Students	530	0.28	0%	$941	$1,032
	Private School (K-8)	Students	534	0.60	0%	$2,016	$2,211
	Private School (K-12)	Students	536	0.54	0%	$1,814	$1,990
	Day Care	1,000 sq. ft.	565	2.61	0%	$8,770	$9,618
	Library	1,000 sq. ft.	590	3.51	0%	$11,794	$12,934
	Church	1,000 sq. ft.	560	0.65	0%	$2,184	$2,395
Ldg	Hotel/Motel	rooms	310/320	0.55	0%	$1,848	$2,027

Bluffdale City - Transportation Capital Facilities Plan Cost Estimates

Unit Prices

Description	Unit	Unit Price		Unit	Unit Price
Roadway Excavation	CY	$10.00	*Assume 1ft for full ROW*	*SF*	*$0.37*
3" Asphalt	TON	$70.00	*Assume 155 lbs/ft^3*	*SF*	*$1.36*
8" UBC	CY	$25.00		*SF*	*$0.62*
Curb and Gutter (30")	LF	$15.00		*LF*	*$15.00*
Sidewalk (4')	SF	$6.50		*LF*	*$26.00*
ROW	SF	$4.00		*Acre*	*$174,240.68*
Storm Drain Pipe (18")	LF	$50.00		*LF*	*$50.00*
Catchbasin	Each	$3,500.00		*Each*	*$3,500.00*
Combo Box	Each	$4,500.00		*Each*	*$4,500.00*
Roadway Fill	CY	$16.00		*CY*	*$16.00*

Plan #	Project Description		Roadway Length (ft)	Asphalt Width	Existing Asphalt Width	Required ROW Width (ft)	Existing ROW Width (ft)	Mobilization (6%)	Construction Surveying (3%)	Roadway Excavation (SF)	Roadway Fill (CY)	3" Asphalt (SF)	8" UBC (SF)	30" Curb and Gutter (LF)	4" Sidewalk (LF)	Drainage (LF)	30" Curb and Gutter - Island (LF)	Structures	Traffic Control (%6)	Contingency (20%)	**Total Construction Cost**	ROW Acquisition (Acres)	Design Engineering (7%)	Construction Engineering (5%)	**Total Project Cost**	**Project Year**	**Cost**
1	Noell Nelson Dr, 14600 S to Freedom Point Way	*Quantity*	2,650	41	0	66	0	---------	---------	174,900		108,650	174,900	5,300	5,300	2,937	0	1	---------	---------	**---------**	4.02	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$60,500	$30,300	$64,778		$147,357	$107,963	$79,500	$137,800	$202,850	$0	$210,000	$57,100	$219,700	**$1,317,847**	$699,600	$92,300	$65,900	**$2,175,647**	2016	**$2,306,186**
2	Freedom Point Way, PRB to Pony Express	*Quantity*	1,550	41	0	66	66	---------	---------	$102,300		$63,550	$102,300	$3,100	$3,100	$1,714	$0		---------	---------	**---------**	$0	---------	---------	**---------**		
		Cost						$27,500	$13,800	$37,889		$86,190	$63,148	$46,500	$80,600	$117,700	$0		$26,000	$99,900	**$599,227**	$0	$42,000	$30,000	**$671,227**	2016	**$711,500**
3	Porter Rockwell Segment 3, 15200 to 15650 S	*Quantity*	4,600	75	0	120	120	---------	---------	552,000		345,000	552,000	9,200	9,200	5,500	9,200		---------	---------	**---------**	0.00	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$120,800	$60,400	$204,444		$467,906	$340,741	$138,000	$239,200	$371,000	$138,000		$114,000	$438,900	**$2,633,391**	$0	$184,400	$131,700	**$2,949,491**	2016	**$3,126,461**
4	2200 West, 15400 S to 14400 S	*Quantity*	6,650	41	34	66	66	---------	---------	$212,800		$46,550	$212,800	$13,300	$13,300	$7,347	$0		---------	---------	**---------**	0.00	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$84,100	$42,100	$78,815		$63,133	$131,358	$199,500	$345,800	$503,350	$0		$79,400	$305,600	**$1,833,156**	$0	$128,400	$91,700	**$2,053,256**	2016	**$2,176,452**
5	Noell Nelson Dr, Heritage Crest Way to PRB	*Quantity*	900	41	0	66	0	---------	---------	59,400		36,900	59,400	900	900	982	0		---------	---------	**---------**	1.36	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$13,500	$6,800	$22,000		$50,046	$36,667	$13,500	$23,400	$65,100	$0		$12,700	$48,800	**$292,512**	$237,600	$20,500	$14,700	**$565,312**	2016	**$599,231**
6	Porter Rockwell Segment 5, Redwood Rd. Intersection	*Quantity*	400	75	0	60	60	---------	---------	24,000		30,000	24,000	800	800	475	0		---------	---------	**---------**	0.00	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$8,300	$4,200	$8,889		$40,688	$14,815	$12,000	$20,800	$31,750	$0		$7,800	$29,900	**$179,141**	$0	$12,600	$9,000	**$200,741**	2016	**$212,786**
7	600 West, 14400 S to 14600 S	*Quantity*	1,200	75	0	100	0	---------	---------	120,000		90,000	120,000	2,400	2,400	1,425	2,400		---------	---------	**---------**	2.75	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$30,000	$15,000	$44,444		$122,063	$74,074	$36,000	$62,400	$95,250	$36,000		$28,300	$108,800	**$652,331**	$480,000	$45,700	$32,700	**$1,210,731**	2018	**$1,442,000**
8	14400 South, 2200 West to Redwood Rd	*Quantity*	2,370	41	25	66	66	---------	---------	97,170		37,920	97,170	2,370	2,370	2,616	0		---------	---------	**---------**	1.00	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$27,000	$13,500	$35,989		$51,429	$59,981	$35,550	$61,620	$178,800	$0		$25,500	$97,900	**$587,269**	$200,000	$41,200	$29,400	**$857,869**	2018	**$1,021,736**
9	Noell Nelson Dr, Porter Rockwell to Pony Express	*Quantity*	1,700	41	0	66	0	---------	---------	112,200		69,700	112,200	1,700	1,700	1,864	0		---------	---------	**---------**	2.58	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$25,500	$12,800	$41,556		$94,531	$69,259	$25,500	$44,200	$125,200	$0		$24,100	$92,600	**$555,245**	$448,800	$38,900	$27,800	**$1,070,745**	2018	**$1,275,275**
10	Porter Rockwell Segment 5, Bridge to Redwood Rd.	*Quantity*	2,400	75	0	120	100	---------	---------	288,000		180,000	288,000	4,800	4,800	2,850	4,800	2	---------	---------	**---------**	1.10	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$89,600	$44,800	$106,667		$244,125	$177,778	$72,000	$124,800	$190,500	$72,000	$420,000	$84,500	$325,400	**$1,952,169**	$192,000	$136,700	$97,700	**$2,378,569**	2019	**$3,002,889**
11	Porter Rockwell Segment 4, Segment 3 to the Bridge	*Quantity*	2,900	75	0	120	0	---------	---------	348,000		217,500	348,000	5,800	5,800	3,425	5,800		---------	---------	**---------**	7.99	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$75,800	$37,900	$128,889		$294,984	$214,815	$87,000	$150,800	$227,250	$87,000		$71,500	$275,200	**$1,651,138**	$1,392,000	$115,600	$82,600	**$3,241,338**	2020	**$4,337,641**
12	13970 South Estimate included separately)	*Quantity*																	---------								
		Cost																	$250,000		**$1,968,217**				**$2,218,217**	2016	**$2,351,310**
13	14600 South, I-15 to UPRR	*Quantity*	5,850	105	24	129	24	---------	---------	614,250		473,850	614,250	11,700	11,700	7,425	11,700	1	---------	---------	**---------**	14.10	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$642,659	$379,167	$175,500	$304,200	$491,250	$175,500	$160,000	$153,400	$590,700	**$3,543,776**	$2,457,000	$248,100	$177,200	**$6,426,075**	2021	**$9,115,511**
14	13800 South, 2950 W to 3600 W	*Quantity*	4,020	41	0	66	20	---------	---------	265,320		164,820	265,320	8,040	8,040	4,430	0		---------	---------	**---------**	4.25	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$71,100	$35,600	$98,267		$223,537	$163,778	$120,600	$209,040	$301,500	$0		$67,100	$258,200	**$1,548,722**	$739,680	$108,500	$77,500	**$2,474,401**	2022	**$3,720,585**
15	Porter Rockwell Bridge Segment	*Quantity*						---------	---------	0		0	0	0	0	0	0	1	---------	---------	**---------**	0.00	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$1,011,300	$505,700	$0		$0	$0	$0	$0	$0	$0	##########	$954,000	$3,674,200	**$22,045,200**	$0	$1,543,200	$1,102,300	**$24,690,700**	2022	**$37,125,684**
16	850 West, 14600 S to 1000 W	*Quantity*	2,200	41	18	66	20	---------	---------	105,600		50,600	105,600	4,400	4,400	2,446	0		---------	---------	**---------**	2.32	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$33,400	$16,700	$39,111		$68,626	$65,185	$66,000	$114,400	$170,300	$0		$31,500	$121,100	**$726,323**	$404,800	$50,900	$36,400	**$1,218,423**	2023	**$1,941,980**
17	2200 West, 14400 S to 13800 S	*Quantity*	3,900	41	34	66	66	---------	---------	124,800		27,300	124,800	7,800	7,800	4,310	0		---------	---------	**---------**	0.00	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$49,400	$24,700	$46,222		$37,026	$77,037	$117,000	$202,800	$295,500	$0		$46,600	$179,300	**$1,075,585**	$0	$75,300	$53,800	**$1,204,685**	2024	**$2,035,290**
18	14600 South, UPRR to Redwood Rd.	*Quantity*	5,830	75	24	100	24	---------	---------	443,080		297,330	443,080	11,660	11,660	6,955	11,660	2	---------	---------	**---------**	10.17	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$356,900	$178,500	$164,104		$403,254	$273,506	$174,900	$303,160	$467,750	$174,900	$3,650,000	$336,700	$1,296,800	**$7,780,474**	$1,772,320	$544,700	$389,100	**$10,486,594**	2024	**$17,716,879**
19	14000 South, 2950 W to ULD Canal	*Quantity*	1,300	41	0	66	0	---------	---------	85,800		53,300	85,800	2,600	2,600	1,423	0		---------	---------	**---------**	1.97	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$22,900	$11,500	$31,778		$72,288	$52,963	$39,000	$67,600	$95,150	$0		$21,600	$83,000	**$497,779**	$343,200	$34,900	$24,900	**$900,779**	2025	**$1,613,158**
20	14000 South, Canal to 3600 West	*Quantity*	2,600	41	0	66	0	---------	---------	171,600		106,600	171,600	5,200	5,200	2,887	0	1	---------	---------	**---------**	3.94	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$52,700	$26,400	$63,556		$144,576	$105,926	$78,000	$135,200	$200,350	$0	$100,000	$49,700	$191,300	**$1,147,708**	$686,400	$80,400	$57,400	**$1,971,908**	2025	**$3,531,386**
21	Pony Express Road, 14600 S to City Limits	*Quantity*	13,200	41	20	66	20	---------	---------	607,200		277,200	607,200	26,400	26,400	14,553	0		---------	---------	**---------**	13.94	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$194,000	$97,000	$224,889		$375,953	$374,815	$396,000	$686,400	$991,650	$0		$183,000	$704,800	**$4,228,506**	$2,428,800	$296,000	$211,500	**$7,164,806**	2026	**$13,600,941**
22	Jordan Narrows Rd, Camp Williams to AUB	*Quantity*	2,850	41	0	66	20	---------	---------	188,100		116,850	188,100	5,700	5,700	3,137	0	2	---------	---------	**---------**	3.01	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$70,700	$35,400	$69,667		$158,478	$116,111	$85,500	$148,200	$212,850	$0	$320,000	$66,700	$256,800	**$1,540,406**	$524,400	$107,900	$77,100	**$2,249,806**	2028	**$4,798,674**
23	South Bluffdale Loop Road	*Quantity*	6,600	41	0	66	0	---------	---------	435,600		270,600	435,600	13,200	13,200	7,297	0	2	---------	---------	**---------**	10.00	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$137,400	$68,700	$161,333		$367,001	$268,889	$198,000	$343,200	$500,850	$0	$320,000	$129,600	$499,000	**$2,993,973**	$1,742,400	$209,600	$149,700	**$5,095,673**	2028	**$10,868,706**
24	15000 South, 2200 W to Camp Williams	*Quantity*	2,300	41	0	66	0	---------	---------	151,800		94,300	151,800	4,600	4,600	2,546	0		---------	---------	**---------**	3.48	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$40,900	$20,500	$56,222		$127,894	$93,704	$69,000	$119,600	$175,300	$0		$38,600	$148,400	**$890,120**	$607,200	$62,400	$44,600	**$1,604,320**	2029	**$3,627,214**
25	PRB/Noell Nelson Drive Connector	*Quantity*	7,500	41	0	66	0	---------	---------	495,000		307,500	495,000	15,000	15,000	8,279	0	1	---------	---------	**---------**	11.36	---------	---------	---------		
		Cost	---------	---------	---------	---------	---------	$146,100	$73,100	$183,333		$417,047	$305,556	$225,000	$390,000	$565,950	$0	$210,000	$137,900	$530,800	**$3,184,786**	$1,980,000	$223,000	$159,300	**$5,547,086**	2029	**$12,541,428**

Appendix “D”

Storm Drain

Figure D.1

Bluffdale City Build-Out Storm Drain ERU Projections

Land Use Classification	Area (acre)	Units per Area	Total Units	ERU's per Unit or Acre*	Total ERU's (rounded)
Business Park	472	1.0	472	13.71	6,471
Civic Institutional	82	0.5	41	13.71	562
Commercial	327	1.0	327	13.71	4,483
Light Industrial	215	1.0	215	13.71	2,948
Mixed Use	758	7.2	5,458	1.00	5,458
Neighborhood Commercial	48	1.0	48	13.71	658
Parks & Recreation	445	1.0	445	0.00	0
Regional Commercial	115	1.0	115	13.70	1,576
Residential 1 acre minimum	3,693	1.0	3,693	1.00	3,693
Residential 10,000 sq ft minimum	157	4.0	628	1.00	628
Residential Multi-Family	44	16.4	722	1.00	722
Total Acreage	**6,356**		**12,163**		**27,199**

* ERU's per unit or acre are calculated as 1 ERU per residential home, or 13.71 ERU's per acre in non-residential. 13.71 ERU's is calculated at .85% impervious surface per acre. Therefore 43,560 sf x 0.85 = 37,026 sf of impervious surface. And 37,026 sf / 2,700 sf = 13.71 ERU's.

Figure D.2 (11 pages)

Storm Drain Capital Facilities Projects
Cost Estimates

August 2015

(A) Heritage Crest Detention Pond Expansion Project

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$2,664	1	$2,664.00
Traffic Control (6%)	LS	$2,664	1	$2,664.00
Inlet/Outlet Structures	Each	$5,000	2	$10,000.00
Pond Excavation	CY	$10	3440	$34,400.00
			Subtotal:	**$49,728.00**
			Contingency (25%)	$12,432.00
			Total Construction Cost	**$62,160.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$9,324.00
			Total Project Cost	**$71,484.00**
			2016 Cost	**$75,773.04**

(B) Silver Point Way 18" Storm Drain Project

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$3,780	1	$3,780.00
Traffic Control (6%)	LS	$3,780	1	$3,780.00
18" RCP Installed	LF	$52	750	$39,000.00
Catch Basin	Each	$2,500	6	$15,000.00
60" Storm Drain Manhole Assembly	Each	$3,000	3	$9,000.00
			Subtotal:	**$70,560.00**
			Contingency (25%)	$17,640.00
			Total Construction Cost	**$88,200.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$13,230.00
			Total Project Cost	**$101,430.00**
			2016 Cost	**$107,515.80**

(C) 1300 West 18" Transmission Line

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$3,456	1	$3,456.00
Traffic Control (6%)	LS	$3,456	1	$3,456.00
18" RCP Installed	LF	$52	800	$41,600.00
Catch Basin	Each	$2,500	4	$10,000.00
60" Storm Drain Manhole Assembly	Each	$3,000	2	$6,000.00
			Subtotal:	**$64,512.00**
			Contingency (25%)	$16,128.00
			Total Construction Cost	**$80,640.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$12,096.00
			Total Project Cost	**$92,736.00**
		2016	**Cost**	**$98,300.16**

(1) 14400 South Trunkline Extension & Dention Pond (2 Acre)

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$5,460	1	$5,460.00
Traffic Control (6%)	LS	$5,460	1	$5,460.00
Inlet/Outlet Structures	EA	$5,000	2	$10,000.00
30" RCP	LF	$90	800	$72,000.00
Soil Removal	CY	$10	6000	$60,000.00
Landscaping	LS	$25,000	1	$25,000.00
			Subtotal:	**$177,920.00**
			Contingency (25%)	$44,480.00
			Total Construction Cost	**$222,400.00**
			Land Acquisition	$200,000.00
			Design & Construction Engineering (15%)	$33,360.00
			Total Project Cost	**$455,760.00**
		2016	**Cost**	**$483,105.60**

Note: It is assumed that a 2 foot deep pond can be constructed on a 2.5 acre parcel.

(2)Vista Meadows Trunkline Project

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$4,440	0	$0.00
Traffic Control (6%)	LS	$4,440	0	$0.00
21" RCP Installed	LF	$57	1200	$68,400.00
60" Storm Drain Manhole Assembly	Each	$700	8	$5,600.00
			Subtotal:	**$74,000.00**
			Contingency (25%)	$18,500.00
			Total Construction Cost	**$92,500.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$13,875.00
			Total Project Cost	**$106,375.00**
		2016	**Cost**	**$112,757.50**

Note: This estimate is based upon Bluffdale participating in pipe upsizing through the Vista Meadows Subdivision and not upon construction of an entire storm drain project.

(3) Eastside Regional Detention Pond Project (10 Acre-Ft)

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$14,265	1	$14,265.00
Inlet/Outlet Structures	Each	$10,000	2	$20,000.00
42" RCP Installed	LF	$135	1250	$168,750.00
Pond Excavation	CY	$10	4900	$49,000.00
			Subtotal:	**$252,015.00**
			Contingency (25%)	$63,003.75
			Total Construction Cost	**$315,018.75**
			Land Acquisition	$400,000.00
			Design & Construction Engineering (15%)	$47,252.81
			Total Project Cost	**$762,271.56**
		2016	**Cost**	**$808,007.86**

Notes:

1) It is assumed that a 1' deep pond can be constructed on a 10 acre parcel due to high groundwater.
2) It is estimated that other agencies will participate in this project and that Bluffdale City will only contribute $300,000.

(4) South Regional Detention Pond (5 Acre)

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$5,460	1	$5,460.00
Traffic Control (6%)	LS	$5,460	1	$5,460.00
Inlet/Outlet Structures	EA	$5,000	2	$10,000.00
Soil Removal	CY	$10	8100	$81,000.00
			Subtotal:	**$101,920.00**
			Contingency (25%)	$25,480.00
			Total Construction Cost	**$127,400.00**
			Land Acquisition	$200,000.00
			Design & Construction Engineering (15%)	$19,110.00
			Total Project Cost	**$346,510.00**
		2017	**Cost**	**$389,338.64**

Note: It is assumed that a 2 foot deep pond can be constructed on a 2.5 acre parcel.

(5) Independence Trunkline Phase I

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$16,260	1	$16,260.00
Traffic Control (6%)	LS	$16,260	1	$16,260.00
24" RCP Installed	LS	$70	3400	$238,000.00
Catch Basin	Each	$2,500	6	$15,000.00
60" Storm Drain Manhole Assembly	Each	$3,000	6	$18,000.00
			Subtotal:	**$303,520.00**
			Contingency (25%)	$75,880.00
			Total Construction Cost	**$379,400.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$56,910.00
			Total Project Cost	**$436,310.00**
		2017	**Cost**	**$550,831.32**

(6) Independence North Trunkline

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$4,884	1	$4,884.00
Traffic Control (6%)	LS	$4,884	1	$4,884.00
36" RCP Installed	LF	$110	740	$81,400.00
42" RCP Installed	LF	$135	560	$75,600.00
48" RCP Installed	LF	$155	500	$77,500.00
54" RCP Installed	LF	$175	1440	$252,000.00
Catch Basin	Each	$2,500	14	$35,000.00
60" Storm Drain Manhole Assembly	Each	$3,000	14	$42,000.00
			Subtotal:	**$91,168.00**
			Contingency (25%)	$22,792.00
			Total Construction Cost	**$113,960.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$17,094.00
			Total Project Cost	**$131,054.00**
		2021	**Cost**	**$208,880.17**

(7) Parry Farms Detention Pond (3 Acre)

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$5,460	1	$5,460.00
Traffic Control (6%)	LS	$5,460	1	$5,460.00
Inlet/Outlet Structures	EA	$5,000	2	$10,000.00
Soil Removal	CY	$10	8100	$81,000.00
Landscaping	LS	$30,000	1	$30,000.00
			Subtotal:	**$131,920.00**
			Contingency (25%)	$32,980.00
			Total Construction Cost	**$164,900.00**
			Land Acquisition	$0.00
			Design & Construction Engineering (15%)	$24,735.00
			Total Project Cost	**$189,635.00**
		2017	**Cost**	**$213,073.89**

Note: It is assumed that a 2 foot deep pond can be constructed on a 2.5 acre parcel.

(8) Deer Hill Upsize and Enclosure

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$5,460	1	$5,460.00
Traffic Control (6%)	LS	$5,460	1	$5,460.00
24" Storm Drain	EA	$70	2750	$192,500.00
Catch Basin	CY	$2,500	10	$25,000.00
Storm Drain Manhole	LS	$3,000	5	$15,000.00
			Subtotal:	**$243,420.00**
			Contingency (25%)	$60,855.00
			Total Construction Cost	**$304,275.00**
			Land Acquisition	$0.00
			Design & Construction Engineering (15%)	$45,641.25
			Total Project Cost	**$349,916.25**
		2018	**Cost**	**$416,755.85**

(9) 13800 South Detention Pond (5 Acre-ft)

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$4,860	1	$4,860.00
Traffic Control (6%)	LS	$4,860	0	$0.00
Soil Removal	CY	$10	8100	$81,000.00
			Subtotal:	**$85,860.00**
			Contingency (25%)	$21,465.00
			Total Construction Cost	**$107,325.00**
			Land Acquisition	$375,000.00
			Design & Construction Engineering (15%)	$16,098.75
			Total Project Cost	**$498,423.75**
		2018	**Cost**	**$593,630.66**

Note: It is assumed that a 2 foot deep pond can be constructed on a 2.5 acre parcel.

(10) Sage Estates Detention Pond (3 Acre)

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$5,460	1	$5,460.00
Traffic Control (6%)	LS	$5,460	1	$5,460.00
Inlet/Outlet Structures	EA	$5,000	2	$10,000.00
Soil Removal	CY	$10	9000	$90,000.00
Landscaping	LS	$25,000	1	$25,000.00
			Subtotal:	**$135,920.00**
			Contingency (25%)	$33,980.00
			Total Construction Cost	**$169,900.00**
			Land Acquisition	$300,000.00
			Design & Construction Engineering (15%)	$25,485.00
			Total Project Cost	**$495,385.00**
		2016	**Cost**	**$525,108.10**

Note: It is assumed that a 2 foot deep pond can be constructed on a 2.5 acre parcel.

(11) 14000 South Trunkline

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$5,040	1	$5,040.00
Traffic Control (6%)	LS	$5,040	1	$5,040.00
24" RCP Installed	LS	$70	1200	$84,000.00
			Subtotal:	**$94,080.00**
			Contingency (25%)	$23,520.00
			Total Construction Cost	**$117,600.00**
			Land Acquisition	$150,000.00
			Design & Construction Engineering (15%)	$17,640.00
			Total Project Cost	**$285,240.00**
		2017	**Cost**	**$320,495.66**

(12) 13800 South 36" to 54" Trunkline Project

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$53,836	1	$53,835.60
Traffic Control (6%)	LS	$53,836	1	$53,835.60
36" RCP Installed	LS	$110	1480	$162,800.00
48" RCP Installed	LS	$155	1932	$299,460.00
54" RCP Installed	LF	$175	1800	$315,000.00
Catch Basin	Each	$2,500	30	$75,000.00
60" Storm Drain Manhole Assembly	Each	$3,000	15	$45,000.00
			Subtotal:	**$1,004,931.20**
			Contingency (25%)	$251,232.80
			Total Construction Cost	**$1,256,164.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$188,424.60
			Total Project Cost	**$1,444,588.60**
		2022	**Cost**	**$2,172,127.13**

(13) 14600 South 42" Trunkline Project

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$64,680	1	$64,680.00
Traffic Control (6%)	LS	$64,680	1	$64,680.00
42" RCP Installed	LF	$135	6800	$918,000.00
Catch Basin	Each	$2,500	40	$100,000.00
60" Storm Drain Manhole Assembly	Each	$3,000	20	$60,000.00
			Subtotal:	**$1,207,360.00**
			Contingency (25%)	$301,840.00
			Total Construction Cost	**$1,509,200.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$226,380.00
			Total Project Cost	**$1,735,580.00**
			2025 Cost	**$3,108,159.45**

(14) Independence West Detention Pond (5 Acre-ft)

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$5,460	1	$5,460.00
Traffic Control (6%)	LS	$5,460	1	$5,460.00
Inlet/Outlet Structures	EA	$5,000	2	$10,000.00
Soil Removal	CY	$10	8100	$81,000.00
			Subtotal:	**$101,920.00**
			Contingency (25%)	$25,480.00
			Total Construction Cost	**$127,400.00**
			Land Acquisition	$375,000.00
			Design & Construction Engineering (15%)	$19,110.00
			Total Project Cost	**$521,510.00**
			2021 Cost	**$739,771.90**

Note: It is assumed that a 2 foot deep pond can be constructed on a 2.5 acre parcel.

(15) Independence Trunkline Phase II

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$19,068	1	$19,068.00
Traffic Control (6%)	LS	$19,068	1	$19,068.00
24" RCP Installed	LS	$70	1640	$114,800.00
36" RCP Installed	LS	$110	1300	$143,000.00
Catch Basin	Each	$3,000	8	$24,000.00
60" Storm Drain Manhole Assembly	Each	$4,500	8	$36,000.00
			Subtotal:	**$355,936.00**
			Contingency (25%)	$88,984.00
			Total Construction Cost	**$444,920.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$66,738.00
			Total Project Cost	**$511,658.00**
		2021	**Cost**	**$725,796.65**

(16) Independence West Trunkline Project

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$34,680	1	$34,680.00
Traffic Control (6%)	LS	$34,680	1	$34,680.00
36" RCP Installed	LS	$110	1680	$184,800.00
48" RCP Installed	LS	$155	1040	$161,200.00
54" RCP Installed	LS	$175	980	$171,500.00
Catch Basin	Each	$2,500	11	$27,500.00
60" Storm Drain Manhole Assembly	Each	$3,000	11	$33,000.00
			Subtotal:	**$647,360.00**
			Contingency (25%)	$161,840.00
			Total Construction Cost	**$809,200.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$121,380.00
			Total Project Cost	**$930,580.00**
		2018	**Cost**	**$1,108,335.67**

(17) Jordan Narrows Trunkline Project

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$37,698	1	$37,698.00
Traffic Control (6%)	LS	$37,698	1	$37,698.00
30" RCP Installed	LS	$90	800	$72,000.00
36" RCP Installed	LS	$110	550	$60,500.00
42" RCP Installed	LS	$135	2340	$315,900.00
48" RCP Installed	LS	$155	780	$120,900.00
Catch Basin	Each	$2,500	8	$20,000.00
60" Storm Drain Manhole Assembly	Each	$3,000	13	$39,000.00
			Subtotal:	**$703,696.00**
			Contingency (25%)	$175,924.00
			Total Construction Cost	**$879,620.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$131,943.00
			Total Project Cost	**$1,011,563.00**
		2022	**Cost**	**$1,521,016.74**

(18) Wood Hollow Extension Trunkline

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$13,239	1	$13,239.00
Traffic Control (6%)	LS	$13,239	1	$13,239.00
18" RCP Installed	LS	$52	350	$18,200.00
24" RCP Installed	LS	$70	350	$24,500.00
30" RCP Installed	LS	$90	440	$31,500.00
36" RCP Installed	LS	$110	350	$48,400.00
42" RCP Installed	LS	$135	300	$47,250.00
48" RCP Installed	LS	$145	400	$43,500.00
Catch Basin	Each	$2,500	3	$7,500.00
60" Storm Drain Manhole Assembly	Each	$3,000	6	$18,000.00
			Subtotal:	**$265,328.00**
			Contingency (25%)	$66,332.00
			Total Construction Cost	**$331,660.00**
			Land Acquisition	$ -
			Design & Construction Engineering (15%)	$49,749.00
			Total Project Cost	**$381,409.00**
		2024	**Cost**	**$644,382.48**

(19) 1000 West Trunkline Extension

Description	Unit	Unit Price	Quantity	Total Cost
Mobilization (6%)	LS	$5,040	1	$5,040.00
Traffic Control (6%)	LS	$5,040	1	$5,040.00
24" RCP Installed	LS	$70	1200	$84,000.00
			Subtotal:	**$94,080.00**
			Contingency (25%)	$23,520.00
			Total Construction Cost	**$117,600.00**
			Land Acquisition	$150,000.00
			Design & Construction Engineering (15%)	$17,640.00
			Total Project Cost	**$285,240.00**
		2020	**Cost**	**$381,715.46**

	Planning Year Total	**$11,144,659.16**
2013	**Cost Total**	**$15,304,879.72**

Appendix “E”

Public Safety

Figure E.1

Bluffdale City LOS Analysis
Projected Public Safety Facilities Needs

August 2013

Current Population		7990	residents
2045 Population		40000	residents
Total Existing Facilities:	Fire/ambulance	9,465	sf
	LOS	1.18	sf per resident
Total Required 2045 Facilities:	Fire/Ambulance	47,200	sf
	LOS	1.18	sf per resident
New Facilities Required:	Buildings	**37,700**	**sf**

Conceptual Plan for Meeting Growth Demands

Project	Planning Year	Area (s.f.)	2013	Future Cost
New Fire/Police Station	2014	13,000	$2,600,000.00	$2,704,000.00
Fire Station Expansion	2020	3,450	$100,000.00	$100,000.00
New Fire Station and EMS	2024	11,700	$2,340,000.00	$3,602,000.00
New Fire Station and EMS	2030	9,550	$1,910,000.00	$3,720,000.00
Total		**37,700**	**$6,950,000.00**	**$10,126,000.00**

Cost for New Facility **$200.00** **per sq ft**

Notes:

1. Impact fees for Public Safety are calculated as a combined impact fee. However, determination of future facilities was based on maintaining the current combined LOS.
2. Level of Service was calculated in the 2013 IFFP. Although the population has increased since that time, no new facilities have been constructe. However, the planned facilities from 2013 are underway to be constructed in 2016. Therefore, the LOS has not changed.

Appendix “F”

Parks and Recreation

Figure F.1

Bluffdale Recreational Facilities Inventory

Parks	Size (acres)
Ponderosa Park	1.10
Bluffdale City Park/Rodeo Grounds	31.90
Parry Farms Baseball Fields	7.20
Parry Farms Park/Detention Pond	2.90
Phillip Gates Memorial Park	4.80
Ten Sleep Circle	1.10
Mount Jordan Park (A)	3.69
N Pocket Parks & Trail (B)	3.28
Center Pocket Park & Trail (C)	0.43
West Pocket Park & Trail (D)	2.71
Trail Corridor (E1)	1.10
Developed Parks Subtotal	*60.21*
Loumis Parkway Park (property purchased)	6.37
Undeveloped Parks Subtotal	*6.37*
Total Parks Acreage	***66.58***

Trails	Length (ft)	Corridor Width (ft)	Area (sf)	Area (acre)
Bluffdale City Park Trail	5,800	10	58,000	1.30
Spring View Farms Trail	6,680	15	100,200	2.30
Parry Farms Trail	14,020	10	140,200	3.20
			Trails Acreage	***6.80***

Figure F.2 **(4 pages)**

Parks and Recreation
Existing Facilities in 2013
Valuation Cost Estimates

Ponderosa Park				
Item	**Units**	**Quantity**	**Unit Price**	**Cost**
Land purchase	Acres	1.1	$120,000.00	$132,000
Excavation	CY	1,775	$6.00	$10,648
Landscaping	LS	0	$5,000.00	$0
Sod	SF	47,916	$0.40	$19,166
Sprinkler System	LS	1	$10,000.00	$10,000
Parking lot	SF	1,600	$6.00	$9,600
Playground	LS	0	$15,000.00	$0
Misc. Asphalt	Tons	0	$60.00	$0
Misc. Concrete	CY	0	$100.00	$0
Gazeebo	Each	1	$10,000.00	$10,000
Restrooms	LS	0	$80,000.00	$0
			Cost	**$191,414**

Parry Farms Park				
Item	**Units**	**Quantity**	**Unit Price**	**Cost**
Land purchase	Acres	2.9	$120,000.00	$348,000
Excavation	CY	4,679	$6.00	$28,072
Landscaping	LS	0	$5,000.00	$0
Sod	SF	126,324	$0.40	$50,530
Sprinkler System	LS	1	$30,000.00	$30,000
Parking lot	SF	0	$6.00	$0
Playground	LS	0	$12,000.00	$0
Misc. Asphalt	Tons	0	$60.00	$0
Misc. Concrete	CY	0	$100.00	$0
Gazeebo	Each	0	$10,000.00	$0
Restrooms	LS	0	$80,000.00	$0
			Cost	**$456,602**

Philip Gates Memorial Park				
Item	**Units**	**Quantity**	**Unit Price**	**Cost**
Land purchase	Acres	4.8	$120,000.00	$576,000
Excavation	CY	7,744	$6.00	$46,464
Landscaping	LS	1	$15,000.00	$15,000
Sod	SF	209,088	$0.40	$83,635
Sprinkler System	LS	1	$40,000.00	$40,000
Parking lot	SF	6,000	$6.00	$36,000
Playground	LS	1	$45,000.00	$45,000
Misc. Asphalt	Tons	80	$60.00	$4,800
Misc. Concrete	CY	100	$100.00	$10,000
Misc. Structures	Each	1	$60,000.00	$60,000
Restrooms	LS	1	$80,000.00	$80,000
			Cost	**$996,899**

Ten Sleep Park				
Item	**Units**	**Quantity**	**Unit Price**	**Cost**
Land purchase	Acres	0.4	$120,000.00	$48,000
Excavation	CY	645	$6.00	$3,872
Landscaping	LS	0	$5,000.00	$0
Sod	SF	17,424	$0.40	$6,970
Sprinkler System	LS	1	$15,000.00	$15,000
Parking lot	SF	0	$6.00	$0
Playground	LS	0	$15,000.00	$0
Misc. Asphalt	Tons	0	$60.00	$0
Misc. Concrete	CY	0	$100.00	$0
Gazeebo	Each	0	$10,000.00	$0
Restrooms	LS	0	$80,000.00	$0
			Cost	**$73,842**

Parry Farms Baseball Park				
Item	**Units**	**Quantity**	**Unit Price**	**Cost**
Land purchase	Acres	7.2	$120,000.00	$864,000
Excavation	CY	11,616	$6.00	$69,696
Landscaping	LS	1	$25,000.00	$25,000
Sod	SF	156,816	$0.40	$62,726
Sprinkler system	LS	1	$70,000.00	$70,000
Parking lot	SF	17,000	$6.00	$102,000
Bleachers	LS	4	$20,000.00	$80,000
Fence	LF	2,200	$20.00	$44,000
Misc. Concrete	CY	2,000	$100.00	$200,000
Backstop & Dugouts	Each	2	$40,000.00	$80,000
Snack Shack	Each	1	$150,000.00	$150,000
Restrooms	LS	1	$80,000.00	$80,000
			Cost	**$1,827,422**

Bluffdale City Park/Rodeo Grounds				
Item	**Units**	**Quantity**	**Unit Price**	**Cost**
Land purchase	Acres	31.9	$120,000.00	$3,828,000
Excavation	CY	51,465	$6.00	$308,792
Landscaping	LS	1	$60,000.00	$60,000
Sod	SF	1,389,564	$0.40	$555,826
Sprinkler system	LS	1	$180,000.00	$180,000
Parking lot	SF	45,000	$6.00	$270,000
Playground	LS	1	$80,000.00	$80,000
Gazebo	Each	1	$40,000.00	$40,000
Basketball Court	Each	1	$35,000.00	$35,000
Park Restrooms	Each	1	$80,000.00	$80,000
Misc. Asphalt	Tons	1,500	$60.00	$90,000
Rodeo Grounds	Each	1	$300,000.00	$300,000
Bleachers	Each	2	$100,000.00	$200,000
Rodeo Restrooms	LS	1	$98,000.00	$98,000
			Cost	**$6,125,618**

Trail Estimates
2013 Present Values

Item	Units	Quantity	Unit Price	Cost
Land purchase	Acres	1.0	$130,000.00	$130,000
Excavation	CY	1,613	$6.00	$9,680
Misc. Asphalt	Tons	350	$40.00	$14,000
Landscaping	LS	1	$10,000.00	$10,000
Misc. Concrete	CY	0	$100.00	$0
Misc. Structures	Each	0	$30,000.00	$0
Parking lot	SF	0	$3.50	$0
Restrooms	LS	0	$40,000.00	$0
			Cost	**$163,680**

Bluffdale City Park Trail	**1.3**	**Acres =**	**$212,784**
Spring View Farms Trail	**2.3**	**Acres =**	**$376,464**
Parry Farms Trail	**3.2**	**Acres =**	**$523,776**

Total Existing Trail Estimates	**$1,113,024**
Total Existing Park Estimates	**$9,671,797**
Total Existing Recreation Facilities Estimates	**$10,784,821**

Figure F.3 (2 pages)

Parks and Recreation Capital Facilities Projects
Generic Cost Estimates

August 2015

New Large Park (10-25 Acres) 2013 Cost Estimate				
Item	**Units**	**Quantity**	**Unit Price**	**Cost**
Land purchase	Acres	25	$120,000.00	$3,000,000
Excavation	CY	40,333	$6.00	$242,000
Landscaping	LS	1	$20,000.00	$20,000
Sod	SF	1,089,000	$0.40	$435,600
Sprinkler system	LS	1	$140,000.00	$140,000
Parking lot	SF	8,500	$3.50	$29,750
Playground	LS	1	$12,000.00	$12,000
Misc. Asphalt	Tons	1,500	$40.00	$60,000
Misc. Concrete	CY	900	$100.00	$90,000
Misc. Structures	Each	3	$30,000.00	$90,000
Restrooms	LS	1	$80,000.00	$80,000
			Cost	**$4,199,350**
			Cost per Acre	**$167,974**
		2,016	**Cost per Acre**	**$200,060**
		2,021	**Cost per Acre**	**$267,725**
		2,024	**Cost per Acre**	**$318,865**

New Regional Park (25+ Acres) 2013 Cost Estimate				
Item	**Units**	**Quantity**	**Unit Price**	**Cost**
Land purchase	Acres	35	$120,000.00	$4,200,000
Excavation	CY	56,467	$6.00	$338,800
Landscaping	LS	1	$40,000.00	$40,000
Sod	SF	1,524,600	$0.40	$609,840
Sprinkler System	LS	1	$250,000.00	$250,000
Parking lot	SF	20,000	$3.50	$70,000
Playground	LS	2	$20,000.00	$40,000
Misc. Asphalt	Tons	2,100	$40.00	$84,000
Misc. Concrete	CY	1,800	$100.00	$180,000
Misc. Structures	Each	5	$40,000.00	$200,000
Restrooms	LS	2	$120,000.00	$240,000
			Cost	**$6,252,640**
			Cost per Acre	**$178,647**
		2,028	**Cost per Acre**	**$428,138**

New Small Park (3-10 Acres)
2013 Cost Estimate

Item	Units	Quantity	Unit Price	Cost
Land purchase	Acres	5	$120,000.00	$600,000
Excavation	CY	8,067	$6.00	$48,400
Landscaping	LS	1	$10,000.00	$10,000
Sod	SF	217,800	$0.40	$87,120
Sprinkler System	LS	1	$50,000.00	$50,000
Parking lot	SF	6,000	$3.50	$21,000
Playground	LS	1	$12,000.00	$12,000
Misc. Asphalt	Tons	800	$40.00	$32,000
Misc. Concrete	CY	400	$100.00	$40,000
Misc. Structures	Each	0	$30,000.00	$0
Restrooms	LS	1	$80,000.00	$80,000
			Cost	**$980,520**
			Cost per Acre	**$196,104**
		2014	**Cost per Acre**	**$207,870**
		2020	**Cost per Acre**	**$294,868**
		2028	**Cost per Acre**	**$469,975**

New Pocket Park (Less than 3 Acres)
2013 Cost Estimate

Item	Units	Quantity	Unit Price	Cost
Land purchase	Acres	3	$120,000.00	$360,000
Excavation	CY	4,840	$6.00	$29,040
Landscaping	LS	1	$5,000.00	$5,000
Sod	SF	130,680	$0.40	$52,272
Sprinkler System	LS	1	$35,000.00	$35,000
Parking lot	SF	0	$3.50	$0
Playground	LS	0	$12,000.00	$0
Misc. Asphalt	Tons	250	$40.00	$10,000
Misc. Concrete	CY	100	$100.00	$10,000
Misc. Structures	Each	0	$30,000.00	$0
Restrooms	LS	0	$80,000.00	$0
			Cost	**$501,312**
			Cost per Acre	**$167,104**
		2015	**Cost per Acre**	**$187,758**
		2017	**Cost per Acre**	**$210,965**
		2025	**Cost per Acre**	**$336,246**

Figure F.4

Parks and Recreation Capital Facilities Projects
Generic Trail Cost Estimates

August 2015

Trails (Developer Donated/City Improved) 2013 Cost Estimate				
Item	**Units**	**Quantity**	**Unit Price**	**Cost**
Land purchase	Acres	2.0	$0.00	$0
Excavation	CY	3,227	$6.00	$19,360
Misc. Asphalt	Tons	2,105	$40.00	$84,216
Misc. Concrete	CY	0	$100.00	$0
Misc. Structures	Each	0	$30,000.00	$0
Parking lot	SF	0	$3.50	$0
Restrooms	LS	0	$40,000.00	$0
			Cost	**$103,576**

Trails (City Purchased/City Improved) 2013 Cost Estimate				
Item	**Units**	**Quantity**	**Unit Price**	**Cost**
Land purchase	Acres	1.0	$130,000.00	$130,000
Excavation	CY	1,613	$6.00	$9,680
Misc. Asphalt	Tons	350	$40.00	$14,000
Landscaping	LS	1	$10,000.00	$10,000
Misc. Concrete	CY	0	$100.00	$0
Misc. Structures	Each	0	$30,000.00	$0
Parking lot	SF	0	$3.50	$0
Restrooms	LS	0	$40,000.00	$0
			Cost	**$163,680**
			Cost per Acre	**$163,680**
		2,014	**Cost per Acre**	**$174,000**
		2,015	**Cost per Acre**	**$184,000**
		2,016	**Cost per Acre**	**$195,000**
		2,020	**Cost per Acre**	**$246,000**
		2,021	**Cost per Acre**	**$261,000**
		2,024	**Cost per Acre**	**$311,000**
		2,026	**Cost per Acre**	**$349,000**
		2,027	**Cost per Acre**	**$370,000**

Figure F.5

Bluffdale City's Total Open Space

	Recreational Feature	No.	Parcel ID	Location	Acres
	Parry Farms Pond Park	1	33154030030000	1530 W BLACK GOLD DR	2.91
	Parry Farms Baseball Fields	2	33152020020000	1552 W ROCK HOLLOW DR	7.22
	Ponderosa Park	3	33091510350000	3180 W BUEHLER CIR	1.12
	Phillip Gates Memorial Park	4	33111820030000	14359 S ROYAL COACHMAN DR	4.54
	Phillip Gates Memorial Park	5	33111820050000	14359 S ROYAL COACHMAN DR	0.25
	Bluffdale City Main Park	6	33092270090000	14350 S 2200 W	3.67
	Bluffdale City Main Park	7	33092270070000	14350 S 2200 W	6.02
	Bluffdale City Main Park	8	33092270060000	14350 S 2200 W	7.68
	Bluffdale City Main Park	9	33092010200000	14350 S 2200 W	9.55
	Bluffdale City Main Park	10	33092270080000	14350 S 2200 W	5.00
	Ten Sleep Circle Park	11	33093270090000	14725 S TEN SLEEP CIR	0.44
PARKS	Mount Jordan Park (A)	12	33142030200000	15090 S Freedom Point Way	3.69
		13	33131040010000		0.39
		14	33142280010000	15015 S Heritagecrest Way	0.23
	N Pocket Parks & Trail (B)	15	33142260020000		0.66
		16	33142260010000	860 W Freedom Point Way	0.79
		17	33142010060000	900 W Freedom Point Way	0.82
		18	33142010140000	990 W Freedom Point Way	0.39
	Center Pocket Park & Trail (C)	19	33142040130000	921 W Allegiance Dr	0.32
		20	Not Recorded	Not Yet Recorded	0.11
	West Pocket Park & Trail (D1)	21	33142050130000	911 W Freedom Point Way	0.80
	West Pocket Park & Trail (D2)	22	Not Recorded	Not Yet Recorded	1.91
	Trail Corridor (E1)	23	Not Recorded	Not Yet Recorded	1.10
				Total PARKS =	59.61
FUTURE	Loumis Parkway Park	11	33034520120000	14178 S 1300 W	5.61
PARKS	Loumis Parkway Park	12	33034520110000	14178 S 1300 W	0.76
				Total FUTURE PARKS =	6.37
	Parry Farm Trail	13	33154260030000	15422 S IRON HORSE BLVD	0.07
	Parry Farm Trail	14	33161770010000	2945 W 15250 S	0.03
TRAILS	Parry Farm Trail	15	33161010180000	2941 W 15250 S	0.03
	Spring View Farm Trail	16	33112040010000	14285 S ROYAL COACHMAN DR	0.82
	Spring View Farm Trail	17	33024510050000	14075 S STONE FLY DR	1.53
				Total TRAILS =	2.48
		18	33154560010000	15521 S IRON HORSE BLVD	0.36
		19	33153270040000	15450 S IRON HORSE BLVD	4.63
	Open Space w/ PF Trail	20	33153290010000	1702 W IRON HORSE BLVD	9.79
		21	33154010010000	1702 W IRON HORSE BLVD	8.00
		22	33151790010000	15370 S 1800 W	1.32
	Open Space w/ PF Trail	23	33152510010000	1702 W IRON HORSE BLVD	7.48
		24	33152000180000	15000 S 1300 W	12.29
	Open Space w/ PF Trail	25	33152780030000	1510 W ASPEN TRAIL DR	1.58
OPEN		26	33141000110000	15000 S 1300 W	11.34
SPACE		27	33152040100000	1702 W IRON HORSE BLVD	2.19

		28	33152010110000	1654 W ROCK HOLLOW DR	1.72
		29	33152520010000	1702 W IRON HORSE BLVD	2.14
	Open Space w/ PF Trail	30	33152050010000	1702 W IRON HORSE BLVD	5.46
	Open Space w/ PF Trail	31	33152280010000	1417 W IRON HORSE BLVD	0.67
		32	33152310010000	1490 W IRON HORSE BLVD	0.01
	Open Space w/ PF Trail	33	33152030020000	1490 W ROCK HOLLOW DR	2.33
		34	33152260120000	1410 W CALUMET WY	8.06
		35		Non-Paved Equine Trail	2.45

Total OPEN SPACE =	81.82
TOTAL ACREAGE =	**150.28**

Figure F.6

Proposed Independence at the Point Parks

July 2015

Park Name	Acreage	Cost (2015)	Construction Year	Cost (Construction Year)
Trail Corridor (E2)	1.15	$ 231,100	2018	$ 275,244
Park (F)	4.02	$ 688,140	2016	$ 729,428
Porter Rockwell Trail (G)	2.11	$ -	2020	$ -
Park and Trail (N)	1.82	$ 477,480	2017	$ 536,497
Independence Park	5.75	$ 3,108,890	2016	$ 3,295,423
Trail Corridor (H)	6.80	$ 1,025,200	2018	$ 1,221,030
Trail Corridor (I)	3.37	$ 514,180	2018	$ 612,397
Trail Corridor (J)	2.89	$ 419,460	2019	$ 529,559
Trail Corridor (K)	10.59	$ 1,457,260	2019	$ 1,839,757
	38.5	$7,921,710		$9,039,335

City Park Improvements

Item	Units	Quantity	Unit Price	Cost
Pavillion	Each	1	$80,000.00	$80,000
Parking Lot Expansion (20 stalls)	SF	8,000	$18.00	$144,000
			Cost	**$224,000**

Rodeo Grounds Improvements

Item	Units	Quantity	Unit Price	Cost
Parking Lot Expansion (30 stalls)	SF	11,000	$18.00	$198,000
Restrooms	Each	100,000	$1.00	$100,000
Bleacher Expansion	Each	1	$250,000.00	$250,000
Concession Stand	Each	1	$150,000.00	$150,000
			Cost	**$698,000**

Parry Farms Park Expansion

Item	Units	Quantity	Unit Price	Cost
Grading	acre	2.5	$5,000.00	$12,500
Sod	SF	108,900	$0.40	$43,560
Sprinkler System	LS	1	$30,000.00	$30,000
Landscaping	LS	1	$20,000.00	$20,000
			Cost	**$106,060**

Parry Farms Park Improvements

Item	Units	Quantity	Unit Price	Cost
Restrooms	LS	1.0	$80,000.00	$80,000
Sports fields	LS	1	$10,000.00	$10,000
Snack Shack	LS	1	$20,000.00	$20,000
			Cost	**$110,000**

PARKS COMPLETION SCHEDULE EXHIBIT C

OPEN SPACE PHASING FOR REIMBURSEMENT ANALYSIS

PUBLIC OPEN SPACE TABULATION

AREA	DESCRIPTION	TOTAL ACRES	LENGTH TRAILS	BUILDING PERMIT THRESHOLD
A	MOUNT JORDAN PARK (EXISTING)	3.68	588	
B	NORTH POCKET PARKS & TRAIL (EXISTING)	3.29	3461	
C	CENTER POCKET PARK & TRAIL (EXISTING)	0.43	308	
D1	WEST POCKET PARK & TRAIL (EXISTING)	0.80	761	
D2	WEST POCKET PARK & TRAIL (EXISTING)	1.91	254	
E1	TRAIL CORRIDOR (EXISTING)	1.10	664	
E2	TRAIL CORRIDOR	1.15	590	
F	PARK	4.02	870	
G	PORTER ROCKWELL TRAIL	2.11	6163	
N	PARK AND TRAIL	1.82	674	
	INDEPENDENCE PARK DEVELOPMENT	5.75	2972	PH 1: 250 UNITS
	EXTRA PARK AMENITIES			PH 1: 250 UNITS
	TOTAL ACRES	26.06		

PUBLIC NATIVE OPEN SPACE TABULATION

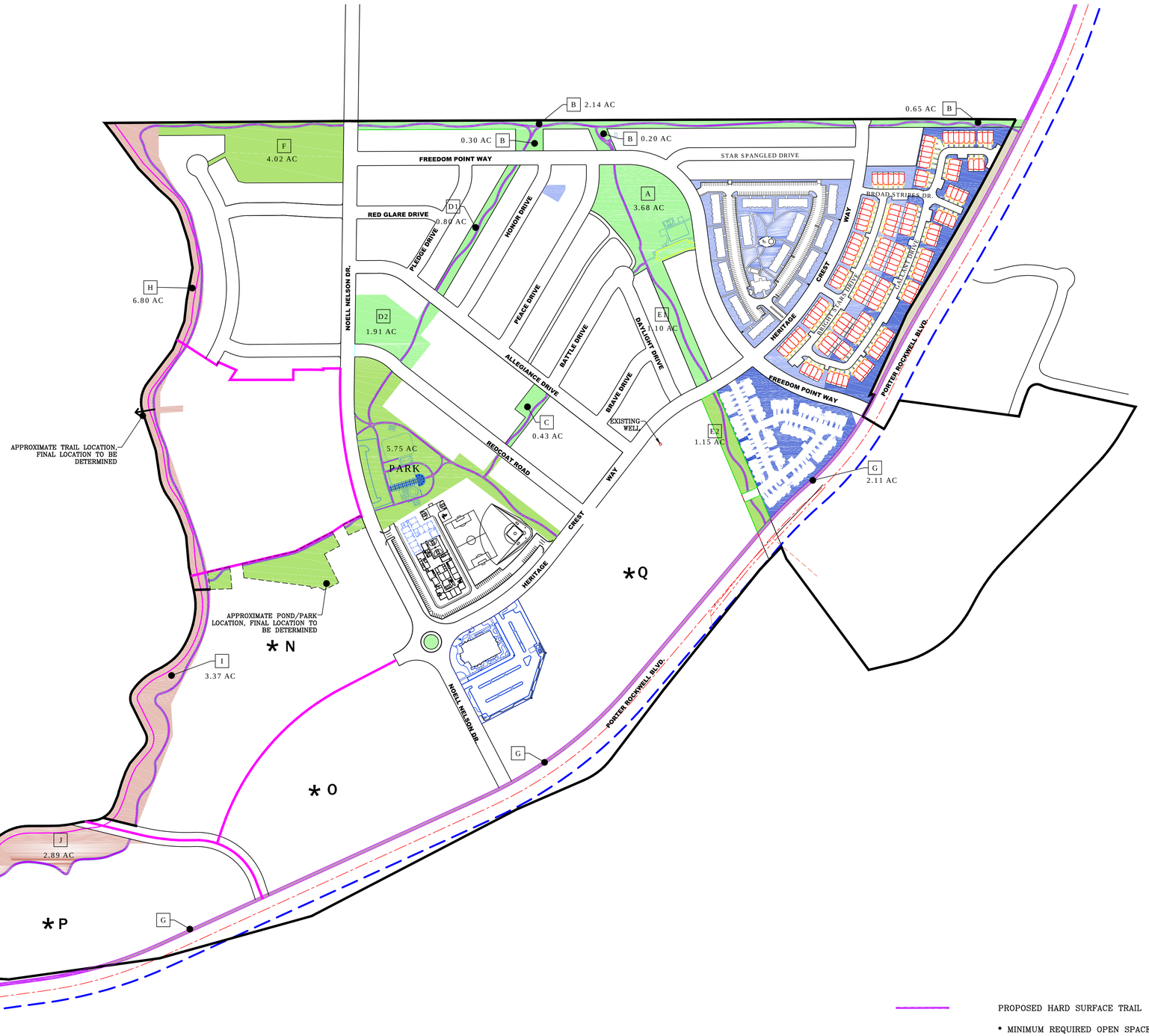
AREA	DESCRIPTION	TOTAL ACRES	LENGTH TRAILS	BUILDING PERMIT THRESHOLD
H	TRAIL CORRIDOR - NATIVE OPEN SPACE	6.80	3575	
I	TRAIL CORRIDOR - NATIVE OPEN SPACE	3.37	1626	
J	TRAIL CORRIDOR - NATIVE OPEN SPACE	2.89	1602	
K	TRAIL CORRIDOR - NATIVE OPEN SPACE	10.59	2039	
	TOTAL ACRES	23.65		

PRIVATE OPEN SPACE TABULATION

IMPROVED PARK	ACRES
PRIVATE (EXISTING)	5.13
PRIVATE	4.78
*O APPROX.	6.92
*P APPROX.	8.72
*Q APPROX.	8.66
TOTAL ACRES	34.21

OPEN SPACE PLAN & PRIMARY TRAILS

7-17-2015



INDEPENDENCE PUBLIC PARKS/OPEN SPACE/TRAIL BUDGET July 15, 2015

AREA	DESCRIPTION	TARGET YEAR OF COMPLETION	ACREAGE	PER ACRE LAND COST	TOTAL LAND COST	HARD COSTS	TOTAL COSTS	CURRENT CFP BUDGET
A	Parks built to date	2014-15	3.68	$ 107,000.00	$ 393,760.00	$ 965,000.00	$ 1,358,760.00	$724,000-$767,000
B	Parks built to date	2014-15	3.29	$ 107,000.00	$ 352,030.00		$ 352,030.00	$487,000-$609,000
E1	Parks built to date	2014-15	1.1	$ 107,000.00	$ 117,700.00		$ 117,700.00	$260,000-$293,000
C	Parks built to date	2015	0.43	$ 107,000.00	$ 46,010.00	$ 64,000.00	$ 110,010.00	$70,000-$94-000
D2	Parks built to date	2015	1.91	$ 107,000.00	$ 204,370.00	$ 83,000.00	$ 287,370.00	$319,000-$427,000
		SUBTOTAL	10.41		$ 1,113,870.00	$ 1,112,000.00	**$ 2,225,870.00**	**$1,471,000-$1,669,000**
F	Sod, Trees, Sprinklers, Basketball Court, Trail, Benches	2016	4.02	$ 107,000.00	$ 430,140.00	$ 258,000.00	$ 688,140.00	
D1	Sod, Sprinklers, Trail	2015	0.8	$ 107,000.00	$ 85,600.00	$ 61,000.00	$ 146,600.00	$139,000-$176,000
E2	Sod, Sprinklers, Trail	2018	1.15	$ 114,000.00	$ 131,100.00	$ 100,000.00	$ 231,100.00	
H	Trail, Canal Fence, Great Basin Seed Mix	2018	6.8	$ 114,000.00	$ 775,200.00	$ 250,000.00	$ 1,025,200.00	
I	Trail, Canal Fence, Great Basin Seed Mix	2018	3.37	$ 114,000.00	$ 384,180.00	$ 130,000.00	$ 514,180.00	
J	Trail, Canal Fence, Great Basin Seed Mix	2019	2.89	$ 114,000.00	$ 329,460.00	$ 90,000.00	$ 419,460.00	
K	Trail, Canal Fence, Great Basin Seed Mix	2019	10.59	$ 114,000.00	$ 1,207,260.00	$ 250,000.00	$ 1,457,260.00	
N		2017	1.82	$ 114,000.00	$ 207,480.00	$ 270,000.00	$ 477,480.00	
INDEPENDENCE PARK	Parking Lot, Sod, Sprinklers, Trees, Trails, Parking Lot	PHASE A 2015/16	5.75	$ 107,000.00	$ 615,250.00	$ 735,240.00	$ 1,350,490.00	$1,216,000-$1,828,000
	Pavillions, Restroom, Tot Lot, Climbing Net, Zip Line	PHASE B 2016/17			$ -	$ 1,078,400.00	$ 1,078,400.00	
	Splash Pad	PHASE C 2017			$ -	$ 680,000.00	$ 680,000.00	
	Future Parks labeled in current CFP. Four 1/2 acre parks						$ -	$334,000-$713,000
		SUBTOTAL	37.19		$ 4,165,670.00	$ 3,902,640.00	$ 8,068,310.00	**$3,760,000-$5,153,000**
		Parks Overall Total	**47.6**		**$ 5,279,540.00**	**$ 5,014,640.00**	**$ 10,294,180.00**	

Parks included in current CFP		Units	Fee	Total		
$ 5,481,360.00						
Park Impact Fees projected to be collected from Independence		**1969**	**$5,420**	**$ 10,671,980.00**		
					Extra Dollars	**$ 377,800.00**

Detention

Detention

1000 West

Heritage Crest

Shelter
12'x12' Fabric

Lawn Area

Benches

Net Climber

Pavilion
16'x20'

Lawn Area

Benches

Pavilion
with Restrooms
60'x36'

Shelter
12'x12' Fabric

Benches

Zip Lines

Play

Splash Pad

Pavilion
16'x20'

Benches

Shelter
12'x12' Fabric

87

Bench

Pavilion

Think
Architecture

April 10, 2015

0 25 50 100 150

Independence Park Concept Plan

Bluffdale, Utah

DATE: 07/14/15

MAIN PARK — BUDGET

	DESCRIPTION	QUANTITY	PRICE EACH	SUB TOTAL	CONTINGENCY	TOTAL
SITE WORK	ENGINEER			$ -	$ -	$ -
	DESIGN			$ -	$ -	$ -
	STAGING / SET UP			$ -	$ -	$ -
	DEMOLITION			$ -	$ -	$ -
	GRUBBING			$ -	$ -	$ -
	GRADING	250	$ 2000	$ 50,000.00	$ 3,500.00	$ 53,500.00
	POWER	2	$ 3,500.00	$ 7,000.00	$ 490.00	$ 7,490.00
	WATER	2	$ 4,500.00	$ 9,000.00	$ 630.00	$ 9,630.00
	PARKING LOT	1	$ 250,000.00	$ 250,000.00	$ 17,500.00	$ 267,500.00
	PERMITS			$ -	$ -	$ -
				$ -	$ -	$ -
					SUB TOTAL	$ 338,120.00
HARDSCAPE	SIGNAGE			$ -	$ -	$ -
	ENTRANCE FEATURE			$ -	$ -	$ -
	BBALL STANDARDS			$ -	$ -	$ -
	BIKE RACKS			$ -	$ -	$ -
	PAVILION & SHADE	8	$ 25,000.00	$ 200,000.00	$ 14,000.00	$ 214,000.00
	RESTROOM - DRINKING FOUNTAIN - SPLASH PAD E.Q HOUSING	1	$ 160,000.00	$ 160,000.00	$ 11,200.00	$ 171,200.00
	SPLASH PAD EQUIPMENT	1	$ 35,000.00	$ 35,000.00	$ 2,450.00	$ 37,450.00
	CONCRETE			$ -	$ -	$ -
	WALKS/PATHS			$ -	$ -	$ -
	PAVERS	14000	$ 12.00	$ 168,000.00	$ 11,760.00	$ 179,760.00
	RECREATIONAL PADS	2500	$ 5.00	$ 12,500.00	$ 875.00	$ 13,375.00
	PONY WALLS			$ -	$ -	$ -
	CURBING			$ -	$ -	$ -
	PAVING			$ -	$ -	$ -
	WALKS/PATHS	23000	$ 5.00	$ 115,000.00	$ 8,050.00	$ 123,050.00
	PATIOS/PAVILIONS			$ -	$ -	$ -
	RECREATIONAL PADS			$ -	$ -	$ -
				$ -	$ -	$ -
	PLAYGROUND POLY FILL - ALL PLAYGROUNDS	1	$ 150,000.00	$ 150,000.00	$ 10,500.00	$ 160,500.00
	TABLES	12	$ 800.00	$ 9,600.00	$ 672.00	$ 10,272.00
	BENCHES	15	$ 650.00	$ 9,750.00	$ 682.50	$ 10,432.50
	RETAINING WALLS	400	$ 12.00	$ 4,800.00	$ 336.00	$ 5,136.00
	SPLASH PAD	1	$ 600,000.00	$ 600,000.00	$ 42,000.00	$ 642,000.00
	PLAY SET	1	$ 178,000.00	$ 178,000.00	$ 12,460.00	$ 190,460.00
	CLIMBING NET & ZIP LINE	1	$ 120,000.00	$ 120,000.00	$ 8,400.00	$ 128,400.00
				$ -	$ -	$ -
					SUB TOTAL	$ 1,886,035.50
IRRIGATION	SPRINKLERS	238000	$ 0.35	$ 83,300.00	$ 5,831.00	$ 89,131.00
	POC/BACKFLOW			$ -	$ -	$ -
	VALVES			$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
	ROTORS			$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
	SPRAY HEADS			$ -	$ -	$ -
	DRIP/EMITTERS			$ -	$ -	$ -
	MAIN LINE			$ -	$ -	$ -
	WIRE			$ -	$ -	$ -
					SUB TOTAL	$ 89,131.00
LANDSCAPE	ROUGH GRADING	238000	$ 0.20	$ 47,600.00	$ 3,332.00	$ 50,932.00
	TOP SOIL			$ -	$ -	$ -
	FINISH GRADING			$ -	$ -	$ -
	DECIDUOUS TREES			$ -	$ -	$ -
	ORNAMENTAL TREES	120	$ 250.00	$ 30,000.00	$ 2,100.00	$ 32,100.00
	EVERGREEN TREES			$ -	$ -	$ -
	5 GALLON SHRUBS			$ -	$ -	$ -
	2 GALLON SHRUBS			$ -	$ -	$ -
	1 GALLON SHRUBS/PERENNIALS			$ -	$ -	$ -
	GROUND COVER			$ -	$ -	$ -
	ACCENT BOULDERS			$ -	$ -	$ -
	MULCH			$ -	$ -	$ -
	SOD	238000	$ 0.38	$ 90,440.00	$ 6,330.80	$ 96,770.80
	SEED			$ -	$ -	$ -
				$ -	$ -	$ -
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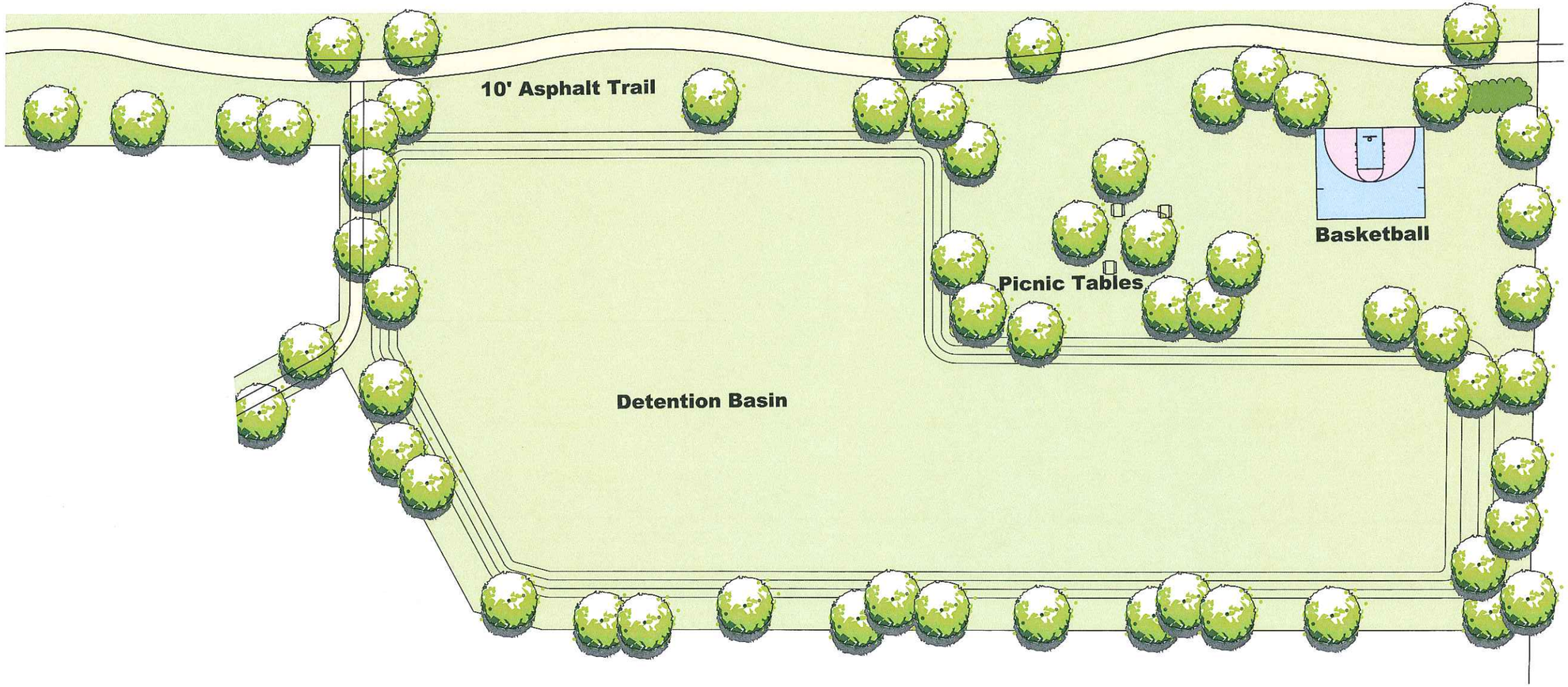
				$ -	$ -	$ -
				SUB TOTAL		$ 179,802.80
				TOTAL	$ 163,099.30	$ 2,493,089.30

Phase A	$ 735,239.80
Phase B	$ 1,078,399.50
Phase C	$ 679,450.00
Total	$ 2,493,089.30

Northwest Park



DAI
UTAH'S FOREMOST LAND DEVELOPER

DATE: 12/30/14

PLAT K @ INDEPENDENCE — BUDGET

	DESCRIPTION	QUANTITY	PRICE EACH	SUB TOTAL	CONTINGENCY	TOTAL
SITE WORK	ENGINEER			$ -	$ -	$ -
	DESIGN			$ -	$ -	$ -
	STAGING / SET UP			$ -	$ -	$ -
	DEMOLITION			$ -	$ -	$ -
	GRUBBING			$ -	$ -	$ -
	GRADING			$ -	$ -	$ -
	POWER	1	$ 3,500.00	$ 3,500.00	$ 245.00	$ 3,745.00
	WATER	1	$ 4,500.00	$ 4,500.00	$ 315.00	$ 4,815.00
	SURVEY			$ -	$ -	$ -
	PERMITS			$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	SUB TOTAL	$ 8,560.00
HARDSCAPE	SIGNAGE			$ -	$ -	$ -
	ENTRANCE FEATURE			$ -	$ -	$ -
	BBALL STANDARDS	1	$ 2,500.00	$ 2,500.00	$ 175.00	$ 2,675.00
	BIKE RACKS			$ -	$ -	$ -
	PAVILION			$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
	CONCRETE			$ -	$ -	$ -
	WALKS/PATHS			$ -	$ -	$ -
	PATIOS/PAVILIONS	2800	$ 4.50	$ 12,600.00	$ 882.00	$ 13,482.00
	RECREATIONAL PADS			$ -	$ -	$ -
	PONY WALLS			$ -	$ -	$ -
	CURBING			$ -	$ -	$ -
	PAVING			$ -	$ -	$ -
	WALKS/PATHS	17,25	$ 2.75	$ 47,437.50	$ 3,320.63	$ 50,758.13
	PATIOS/PAVILIONS			$ -	$ -	$ -
	RECREATIONAL PADS			$ -	$ -	$ -
	PLAYGROUND EQUIPMENT			$ -	$ -	$ -
	PLAYGROUND FILL			$ -	$ -	$ -
	TABLES	3	$ 800.00	$ 2,400.00	$ 168.00	$ 2,568.00
	BENCHES			$ -	$ -	$ -
	RETAINING WALLS			$ -	$ -	$ -
	LIGHTING			$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
					SUB TOTAL	$ 69,483.13
IRRIGATION	CONTROLLER	178000	$ 0.30	$ 53,400.00	$ 3,738.00	$ 57,138.00
	POC/BACKFLOW			$ -	$ -	$ -
	VALVES			$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
	ROTORS			$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
	SPRAY HEADS			$ -	$ -	$ -
	DRIP/EMITTERS			$ -	$ -	$ -
	MAIN LINE			$ -	$ -	$ -
	WIRE			$ -	$ -	$ -
					SUB TOTAL	$ 57,138.00
LANDSCAPE	ROUGH GRADING	218000	$ 0.10	$ 21,800.00	$ 1,526.00	$ 23,326.00
	TOP SOIL			$ -	$ -	$ -
	FINISH GRADING	218000	$ 0.10	$ 21,800.00	$ 1,526.00	$ 23,326.00
	DECIDUOUS TREES	48	$ 195.00	$ 9,360.00	$ 655.20	$ 10,015.20
	ORNAMENTAL TREES			$ -	$ -	$ -
	EVERGREEN TREES	21	$ 250.00	$ 5,250.00	$ 367.50	$ 5,617.50
	5 GALLON SHRUBS			$ -	$ -	$ -
	2 GALLON SHRUBS			$ -	$ -	$ -
	1 GALLON SHRUBS/PERENNIA			$ -	$ -	$ -
	GROUND COVER			$ -	$ -	$ -
	ACCENT BOULDERS			$ -	$ -	$ -
	MULCH			$ -	$ -	$ -
	SOD	178000	$ 0.30	$ 53,400.00	$ 3,738.00	$ 57,138.00
	SEED	40000	$ 0.08	$ 3,200.00	$ 224.00	$ 3,424.00
				$ -	$ -	$ -
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				$ -	$ -	$ -
				SUB TOTAL		$ 122,846.70
				TOTAL	$ 16,880.33	$ 258,027.83

LEGEND

	COMMON NAME	QTY
TREE, DECIDUOUS		
	CRABAPPLE, PURPLE PRINCE	9
	CRABAPPLE, SPRING SNOW	6
	HORNBEAM, EUROPEAN	4
	LOCUST, IMPERIAL	5
	MAPLE, NORWAY	4
	PLANETREE, LONDON, BLOODGOOD	9
TREE, EVERGREEN		
	PINE, AUSTRIAN	12

Landscape Design by:

Landscape Plan: INDEPENDENCE
South Detention Park

Scale: 1" = 50'

Revision #:
Date: 6/30/2015

DAI
UTAH'S FOREMOST LAND DEVELOPER

DATE:

INDEPENDENCE DETENTION BASIN	BUDGET

	DESCRIPTION	QUANTITY	PRICE EACH	SUB TOTAL	CONTINGENCY	TOTAL
	ENGINEER			$ -	$ -	$ -
	DESIGN			$ -	$ -	$ -
SITE WORK	STAGING / SET UP			$ -	$ -	$ -
	DEMOLITION			$ -	$ -	$ -
	GRUBBING			$ -	$ -	$ -
	GRADING			$ -	$ -	$ -
	POWER	1	$ 3,500.00	$ 3,500.00	$ 245.00	$ 3,745.00
	WATER	1	$ 4,500.00	$ 4,500.00	$ 315.00	$ 4,815.00
	SURVEY			$ -	$ -	$ -
	PERMITS			$ -	$ -	$ -
				$ -	$ -	$ -
					SUB TOTAL	$ 8,560.00
HARDSCAPE	SIGNAGE			$ -	$ -	$ -
	ENTRANCE FEATURE			$ -	$ -	$ -
	BBALL STANDARDS			$ -	$ -	$ -
	BIKE RACKS			$ -	$ -	$ -
	PAVILION			$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
	CONCRETE			$ -	$ -	$ -
	WALKS/PATHS			$ -	$ -	$ -
	PATIOS/PAVILIONS			$ -	$ -	$ -
	RECREATIONAL PADS			$ -	$ -	$ -
	PONY WALLS			$ -	$ -	$ -
	CURBING			$ -	$ -	$ -
	PAVING			$ -	$ -	$ -
	WALKS/PATHS	7500	$ 4.50	$ 33,750.00	$ 2,362.50	$ 36,112.50
	PATIOS/PAVILIONS			$ -	$ -	$ -
	RECREATIONAL PADS			$ -	$ -	$ -
	PLAYGROUND EQUIPMENT			$ -	$ -	$ -
	PLAYGROUND FILL			$ -	$ -	$ -
	TABLES			$ -	$ -	$ -
	BENCHES			$ -	$ -	$ -
	RETAINING WALLS			$ -	$ -	$ -
	LIGHTING			$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
					SUB TOTAL	$ 36,112.50
IRRIGATION	SPRINKLER SYSTEM	83600	$ 0.30	$ 25,080.00	$ 1,755.60	$ 26,835.60
	POC/BACKFLOW			$ -	$ -	$ -
	VALVES			$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
	ROTORS			$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
	SPRAY HEADS			$ -	$ -	$ -
	DRIP/EMITTERS			$ -	$ -	$ -
	MAIN LINE			$ -	$ -	$ -
	WIRE			$ -	$ -	$ -
					SUB TOTAL	$ 26,835.60
LANDSCAPE	ROUGH GRADING	83600	$ 0.10	$ 8,360.00	$ 585.20	$ 8,945.20
	TOP SOIL			$ -	$ -	$ -
	FINISH GRADING	83600	$ 0.10	$ 8,360.00	$ 585.20	$ 8,945.20
	DECIDUOUS TREES	49	$ 250.00	$ 12,250.00	$ 857.50	$ 13,107.50
	ORNAMENTAL TREES			$ -	$ -	$ -
	EVERGREEN TREES			$ -	$ -	$ -
	5 GALLON SHRUBS			$ -	$ -	$ -
	2 GALLON SHRUBS			$ -	$ -	$ -
	1 GALLON SHRUBS/PERENNIA			$ -	$ -	$ -
	GROUND COVER			$ -	$ -	$ -
	ACCENT BOULDERS			$ -	$ -	$ -
	MULCH			$ -	$ -	$ -
	SOD			$ -	$ -	$ -
	SEED	83600	$ 0.38	$ 31,768.00	$ 2,223.76	$ 33,991.76
				$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
				SUB TOTAL		$ 64,989.66
				TOTAL	$ 8,929.76	$ 136,497.76

Appendix “G”

Public Facilities

Figure G.1

Future Public Facilities Projects
Cost Estimates
August 2015

	Units	Quantity	Unit Price	Cost (2012)	Year	Cost (construction year)
City Hall	SF	23,000	260	$5,980,000	2015	$5,980,000
			City Hall Subtotal	*$5,980,000*		*$5,980,000*
Public Works Building	SF	15,000	220	$3,300,000	2019	$3,860,533
Land (2 acres/10,000 s.f.)	Acres	3	120,000	$360,000	2019	$421,149
			Public Works Building Subtotal	*$3,660,000*		*$4,281,682*
Animal Control Facility	SF	10,000	220	$2,200,000	2022	$2,895,050
Land (2 acres/10,000 s.f.)	Acres	2	120,000	$240,000	2022	$315,824
			Animal Control Facility Subtotal	*$2,440,000*		*$3,210,874*
			Total Cost	**$12,080,000**		**$13,472,556**

Appendix “H”

Applicable State Codes

11-36a-101. Title.

This chapter is known as the "Impact Fees Act."

Enacted by Chapter 47, 2011 General Session

11-36a-102. Definitions.

As used in this chapter:

(1) (a) "Affected entity" means each county, municipality, local district under Title 17B, Limited Purpose Local Government Entities - Local Districts, special service district under Title 17D, Chapter 1, Special Service District Act, school district, interlocal cooperation entity established under Chapter 13, Interlocal Cooperation Act, and specified public utility:

(i) whose services or facilities are likely to require expansion or significant modification because of the facilities proposed in the proposed impact fee facilities plan; or

(ii) that has filed with the local political subdivision or private entity a copy of the general or long-range plan of the county, municipality, local district, special service district, school district, interlocal cooperation entity, or specified public utility.

(b) "Affected entity" does not include the local political subdivision or private entity that is required under Section 11-36a-501 to provide notice.

(2) "Charter school" includes:

(a) an operating charter school;

(b) an applicant for a charter school whose application has been approved by a charter school authorizer as provided in Title 53A, Chapter 1a, Part 5, The Utah Charter Schools Act; and

(c) an entity that is working on behalf of a charter school or approved charter applicant to develop or construct a charter school building.

(3) "Development activity" means any construction or expansion of a building, structure, or use, any change in use of a building or structure, or any changes in the use of land that creates additional demand and need for public facilities.

(4) "Development approval" means:

(a) except as provided in Subsection (4)(b), any written authorization from a local political subdivision that authorizes the commencement of development activity;

(b) development activity, for a public entity that may develop without written authorization from a local political subdivision;

(c) a written authorization from a public water supplier, as defined in Section 73-1-4, or a private water company:

(i) to reserve or provide:

(A) a water right;

(B) a system capacity; or

(C) a distribution facility; or

(ii) to deliver for a development activity:

(A) culinary water; or

(B) irrigation water; or

(d) a written authorization from a sanitary sewer authority, as defined in Section 10-9a-103:

(i) to reserve or provide:

(A) sewer collection capacity; or

(B) treatment capacity; or

(ii) to provide sewer service for a development activity.

(5) "Enactment" means:

(a) a municipal ordinance, for a municipality;

(b) a county ordinance, for a county; and

(c) a governing board resolution, for a local district, special service district, or private entity.

(6) "Encumber" means:

(a) a pledge to retire a debt; or

(b) an allocation to a current purchase order or contract.

(7) "Hookup fee" means a fee for the installation and inspection of any pipe, line, meter, or appurtenance to connect to a gas, water, sewer, storm water, power, or other utility system of a municipality, county, local district, special service district, or private entity.

(8) (a) "Impact fee" means a payment of money imposed upon new development activity as a condition of development approval to mitigate the impact of the new development on public infrastructure.

(b) "Impact fee" does not mean a tax, a special assessment, a building permit fee, a hookup fee, a fee for project improvements, or other reasonable permit or application fee.

(9) "Impact fee analysis" means the written analysis of each impact fee required by Section 11-36a-303.

(10) "Impact fee facilities plan" means the plan required by Section 11-36a-301.

(11) "Level of service" means the defined performance standard or unit of demand for each capital component of a public facility within a service area.

(12) (a) "Local political subdivision" means a county, a municipality, a local district under Title 17B, Limited Purpose Local Government Entities - Local Districts, or a special service district under Title 17D, Chapter 1, Special Service District Act.

(b) "Local political subdivision" does not mean a school district, whose impact fee activity is governed by Section 53A-20-100.5.

(13) "Private entity" means an entity in private ownership with at least 100 individual shareholders, customers, or connections, that is located in a first, second, third, or fourth class county and provides water to an applicant for development approval who is required to obtain water from the private entity either as a:

(a) specific condition of development approval by a local political subdivision acting pursuant to a prior agreement, whether written or unwritten, with the private entity; or

(b) functional condition of development approval because the private entity:

(i) has no reasonably equivalent competition in the immediate market; and

(ii) is the only realistic source of water for the applicant's development.

(14) (a) "Project improvements" means site improvements and facilities that are:

(i) planned and designed to provide service for development resulting from a development activity;

(ii) necessary for the use and convenience of the occupants or users of

development resulting from a development activity; and

(iii) not identified or reimbursed as a system improvement.

(b) "Project improvements" does not mean system improvements.

(15) "Proportionate share" means the cost of public facility improvements that are roughly proportionate and reasonably related to the service demands and needs of any development activity.

(16) "Public facilities" means only the following impact fee facilities that have a life expectancy of 10 or more years and are owned or operated by or on behalf of a local political subdivision or private entity:

(a) water rights and water supply, treatment, storage, and distribution facilities;

(b) wastewater collection and treatment facilities;

(c) storm water, drainage, and flood control facilities;

(d) municipal power facilities;

(e) roadway facilities;

(f) parks, recreation facilities, open space, and trails;

(g) public safety facilities; or

(h) environmental mitigation as provided in Section 11-36a-205.

(17) (a) "Public safety facility" means:

(i) a building constructed or leased to house police, fire, or other public safety entities; or

(ii) a fire suppression vehicle costing in excess of $500,000.

(b) "Public safety facility" does not mean a jail, prison, or other place of involuntary incarceration.

(18) (a) "Roadway facilities" means a street or road that has been designated on an officially adopted subdivision plat, roadway plan, or general plan of a political subdivision, together with all necessary appurtenances.

(b) "Roadway facilities" includes associated improvements to a federal or state roadway only when the associated improvements:

(i) are necessitated by the new development; and

(ii) are not funded by the state or federal government.

(c) "Roadway facilities" does not mean federal or state roadways.

(19) (a) "Service area" means a geographic area designated by an entity that imposes an impact fee on the basis of sound planning or engineering principles in which a public facility, or a defined set of public facilities, provides service within the area.

(b) "Service area" may include the entire local political subdivision or an entire area served by a private entity.

(20) "Specified public agency" means:

(a) the state;

(b) a school district; or

(c) a charter school.

(21) (a) "System improvements" means:

(i) existing public facilities that are:

(A) identified in the impact fee analysis under Section 11-36a-304; and

(B) designed to provide services to service areas within the community at large; and

(ii) future public facilities identified in the impact fee analysis under Section 11-36a-304 that are intended to provide services to service areas within the community at large.

(b) "System improvements" does not mean project improvements.

Amended by Chapter 363, 2014 General Session

11-36a-201. Impact fees.

(1) A local political subdivision or private entity shall ensure that any imposed impact fees comply with the requirements of this chapter.

(2) A local political subdivision and private entity may establish impact fees only for those public facilities defined in Section 11-36a-102.

(3) Nothing in this chapter may be construed to repeal or otherwise eliminate an impact fee in effect on the effective date of this chapter that is pledged as a source of revenues to pay bonded indebtedness that was incurred before the effective date of this chapter.

Enacted by Chapter 47, 2011 General Session

11-36a-202. Prohibitions on impact fees.

(1) A local political subdivision or private entity may not:

(a) impose an impact fee to:

(i) cure deficiencies in a public facility serving existing development;

(ii) raise the established level of service of a public facility serving existing development;

(iii) recoup more than the local political subdivision's or private entity's costs actually incurred for excess capacity in an existing system improvement; or

(iv) include an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with:

(A) generally accepted cost accounting practices; and

(B) the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement;

(b) delay the construction of a school or charter school because of a dispute with the school or charter school over impact fees; or

(c) impose or charge any other fees as a condition of development approval unless those fees are a reasonable charge for the service provided.

(2) (a) Notwithstanding any other provision of this chapter, a political subdivision or private entity may not impose an impact fee:

(i) on residential components of development to pay for a public safety facility that is a fire suppression vehicle;

(ii) on a school district or charter school for a park, recreation facility, open space, or trail;

(iii) on a school district or charter school unless:

(A) the development resulting from the school district's or charter school's development activity directly results in a need for additional system improvements for which the impact fee is imposed; and

(B) the impact fee is calculated to cover only the school district's or charter school's proportionate share of the cost of those additional system improvements; or

(iv) to the extent that the impact fee includes a component for a law enforcement facility, on development activity for:

(A) the Utah National Guard;

(B) the Utah Highway Patrol; or

(C) a state institution of higher education that has its own police force.

(b) (i) Notwithstanding any other provision of this chapter, a political subdivision or private entity may not impose an impact fee on development activity that consists of the construction of a school, whether by a school district or a charter school, if:

(A) the school is intended to replace another school, whether on the same or a different parcel;

(B) the new school creates no greater demand or need for public facilities than the school or school facilities, including any portable or modular classrooms that are on the site of the replaced school at the time that the new school is proposed; and

(C) the new school and the school being replaced are both within the boundary of the local political subdivision or the jurisdiction of the private entity.

(ii) If the imposition of an impact fee on a new school is not prohibited under Subsection (2)(b)(i) because the new school creates a greater demand or need for public facilities than the school being replaced, the impact fee shall be based only on the demand or need that the new school creates for public facilities that exceeds the demand or need that the school being replaced creates for those public facilities.

(c) Notwithstanding any other provision of this chapter, a political subdivision or private entity may impose an impact fee for a road facility on the state only if and to the extent that:

(i) the state's development causes an impact on the road facility; and

(ii) the portion of the road facility related to an impact fee is not funded by the state or by the federal government.

(3) Notwithstanding any other provision of this chapter, a local political subdivision may impose and collect impact fees on behalf of a school district if authorized by Section 53A-20-100.5.

Enacted by Chapter 47, 2011 General Session

11-36a-203. Private entity assessment of impact fees -- Charges for water rights, physical infrastructure -- Notice -- Audit.

(1) A private entity:

(a) shall comply with the requirements of this chapter before imposing an impact fee; and

(b) except as otherwise specified in this chapter, is subject to the same requirements of this chapter as a local political subdivision.

(2) A private entity may only impose a charge for water rights or physical infrastructure necessary to provide water or sewer facilities by imposing an impact fee.

(3) Where notice and hearing requirements are specified, a private entity shall comply with the notice and hearing requirements for local districts.

(4) A private entity that assesses an impact fee under this chapter is subject to

the audit requirements of Title 51, Chapter 2a, Accounting Reports from Political Subdivisions, Interlocal Organizations, and Other Local Entities Act.

Enacted by Chapter 47, 2011 General Session

11-36a-204. Other names for impact fees.

(1) A fee that meets the definition of impact fee under Section 11-36a-102 is an impact fee subject to this chapter, regardless of what term the local political subdivision or private entity uses to refer to the fee.

(2) A local political subdivision or private entity may not avoid application of this chapter to a fee that meets the definition of an impact fee under Section 11-36a-102 by referring to the fee by another name.

Enacted by Chapter 47, 2011 General Session

11-36a-205. Environmental mitigation impact fees.

Notwithstanding the requirements and prohibitions of this chapter, a local political subdivision may impose and assess an impact fee for environmental mitigation when:

(1) the local political subdivision has formally agreed to fund a Habitat Conservation Plan to resolve conflicts with the Endangered Species Act of 1973, 16 U.S.C. Sec. 1531, et seq. or other state or federal environmental law or regulation;

(2) the impact fee bears a reasonable relationship to the environmental mitigation required by the Habitat Conservation Plan; and

(3) the legislative body of the local political subdivision adopts an ordinance or resolution:

(a) declaring that an impact fee is required to finance the Habitat Conservation Plan;

(b) establishing periodic sunset dates for the impact fee; and

(c) requiring the legislative body to:

(i) review the impact fee on those sunset dates;

(ii) determine whether or not the impact fee is still required to finance the Habitat Conservation Plan; and

(iii) affirmatively reauthorize the impact fee if the legislative body finds that the impact fee must remain in effect.

Enacted by Chapter 47, 2011 General Session

11-36a-301. Impact fee facilities plan.

(1) Before imposing an impact fee, each local political subdivision or private entity shall, except as provided in Subsection (3), prepare an impact fee facilities plan to determine the public facilities required to serve development resulting from new development activity.

(2) A municipality or county need not prepare a separate impact fee facilities plan if the general plan required by Section 10-9a-401 or 17-27a-401, respectively, contains the elements required by Section 11-36a-302.

(3) A local political subdivision or a private entity with a population, or serving a

population, of less than 5,000 as of the last federal census that charges impact fees of less than $250,000 annually need not comply with the impact fee facilities plan requirements of this part, but shall ensure that:

(a) the impact fees that the local political subdivision or private entity imposes are based upon a reasonable plan that otherwise complies with the common law and this chapter; and

(b) each applicable notice required by this chapter is given.

Amended by Chapter 200, 2013 General Session

11-36a-302. Impact fee facilities plan requirements -- Limitations -- School district or charter school.

(1) (a) An impact fee facilities plan shall:

(i) identify the existing level of service;

(ii) subject to Subsection (1)(c), establish a proposed level of service;

(iii) identify any excess capacity to accommodate future growth at the proposed level of service;

(iv) identify demands placed upon existing public facilities by new development activity at the proposed level of service; and

(v) identify the means by which the political subdivision or private entity will meet those growth demands.

(b) A proposed level of service may diminish or equal the existing level of service.

(c) A proposed level of service may:

(i) exceed the existing level of service if, independent of the use of impact fees, the political subdivision or private entity provides, implements, and maintains the means to increase the existing level of service for existing demand within six years of the date on which new growth is charged for the proposed level of service; or

(ii) establish a new public facility if, independent of the use of impact fees, the political subdivision or private entity provides, implements, and maintains the means to increase the existing level of service for existing demand within six years of the date on which new growth is charged for the proposed level of service.

(2) In preparing an impact fee facilities plan, each local political subdivision shall generally consider all revenue sources to finance the impacts on system improvements, including:

(a) grants;

(b) bonds;

(c) interfund loans;

(d) impact fees; and

(e) anticipated or accepted dedications of system improvements.

(3) A local political subdivision or private entity may only impose impact fees on development activities when the local political subdivision's or private entity's plan for financing system improvements establishes that impact fees are necessary to maintain a proposed level of service that complies with Subsection (1)(b) or (c).

(4) (a) Subject to Subsection (4)(c), the impact fee facilities plan shall include a public facility for which an impact fee may be charged or required for a school district or

charter school if the local political subdivision is aware of the planned location of the school district facility or charter school:

(i) through the planning process; or

(ii) after receiving a written request from a school district or charter school that the public facility be included in the impact fee facilities plan.

(b) If necessary, a local political subdivision or private entity shall amend the impact fee facilities plan to reflect a public facility described in Subsection (4)(a).

(c) (i) In accordance with Subsections 10-9a-305(3) and 17-27a-305(3), a local political subdivision may not require a school district or charter school to participate in the cost of any roadway or sidewalk.

(ii) Notwithstanding Subsection (4)(c)(i), if a school district or charter school agrees to build a roadway or sidewalk, the roadway or sidewalk shall be included in the impact fee facilities plan if the local jurisdiction has an impact fee facilities plan for roads and sidewalks.

Amended by Chapter 200, 2013 General Session

11-36a-303. Impact fee analysis.

(1) Subject to the notice requirements of Section 11-36a-504, each local political subdivision or private entity intending to impose an impact fee shall prepare a written analysis of each impact fee.

(2) Each local political subdivision or private entity that prepares an impact fee analysis under Subsection (1) shall also prepare a summary of the impact fee analysis designed to be understood by a lay person.

Enacted by Chapter 47, 2011 General Session

11-36a-304. Impact fee analysis requirements.

(1) An impact fee analysis shall:

(a) identify the anticipated impact on or consumption of any existing capacity of a public facility by the anticipated development activity;

(b) identify the anticipated impact on system improvements required by the anticipated development activity to maintain the established level of service for each public facility;

(c) subject to Subsection (2), demonstrate how the anticipated impacts described in Subsections (1)(a) and (b) are reasonably related to the anticipated development activity;

(d) estimate the proportionate share of:

(i) the costs for existing capacity that will be recouped; and

(ii) the costs of impacts on system improvements that are reasonably related to the new development activity; and

(e) based on the requirements of this chapter, identify how the impact fee was calculated.

(2) In analyzing whether or not the proportionate share of the costs of public facilities are reasonably related to the new development activity, the local political subdivision or private entity, as the case may be, shall identify, if applicable:

(a) the cost of each existing public facility that has excess capacity to serve the anticipated development resulting from the new development activity;

(b) the cost of system improvements for each public facility;

(c) other than impact fees, the manner of financing for each public facility, such as user charges, special assessments, bonded indebtedness, general taxes, or federal grants;

(d) the relative extent to which development activity will contribute to financing the excess capacity of and system improvements for each existing public facility, by such means as user charges, special assessments, or payment from the proceeds of general taxes;

(e) the relative extent to which development activity will contribute to the cost of existing public facilities and system improvements in the future;

(f) the extent to which the development activity is entitled to a credit against impact fees because the development activity will dedicate system improvements or public facilities that will offset the demand for system improvements, inside or outside the proposed development;

(g) extraordinary costs, if any, in servicing the newly developed properties; and

(h) the time-price differential inherent in fair comparisons of amounts paid at different times.

Enacted by Chapter 47, 2011 General Session

11-36a-305. Calculating impact fees.

(1) In calculating an impact fee, a local political subdivision or private entity may include:

(a) the construction contract price;

(b) the cost of acquiring land, improvements, materials, and fixtures;

(c) the cost for planning, surveying, and engineering fees for services provided for and directly related to the construction of the system improvements; and

(d) for a political subdivision, debt service charges, if the political subdivision might use impact fees as a revenue stream to pay the principal and interest on bonds, notes, or other obligations issued to finance the costs of the system improvements.

(2) In calculating an impact fee, each local political subdivision or private entity shall base amounts calculated under Subsection (1) on realistic estimates, and the assumptions underlying those estimates shall be disclosed in the impact fee analysis.

Enacted by Chapter 47, 2011 General Session

11-36a-306. Certification of impact fee analysis.

(1) An impact fee facilities plan shall include a written certification from the person or entity that prepares the impact fee facilities plan that states the following: "I certify that the attached impact fee facilities plan:

1. includes only the costs of public facilities that are:
   a. allowed under the Impact Fees Act; and
   b. actually incurred; or
   c. projected to be incurred or encumbered within six years after the day on

which each impact fee is paid;
2. does not include:
a. costs of operation and maintenance of public facilities;
b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents; or
c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and
3. complies in each and every relevant respect with the Impact Fees Act."

(2) An impact fee analysis shall include a written certification from the person or entity that prepares the impact fee analysis which states as follows:
"I certify that the attached impact fee analysis:
1. includes only the costs of public facilities that are:
a. allowed under the Impact Fees Act; and
b. actually incurred; or
c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. does not include:
a. costs of operation and maintenance of public facilities;
b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents; or
c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement;
3. offsets costs with grants or other alternate sources of payment; and
4. complies in each and every relevant respect with the Impact Fees Act."

Amended by Chapter 278, 2013 General Session

11-36a-401. Impact fee enactment.

(1) (a) A local political subdivision or private entity wishing to impose impact fees shall pass an impact fee enactment in accordance with Section 11-36a-402.

(b) An impact fee imposed by an impact fee enactment may not exceed the highest fee justified by the impact fee analysis.

(2) An impact fee enactment may not take effect until 90 days after the day on which the impact fee enactment is approved.

Enacted by Chapter 47, 2011 General Session

11-36a-402. Required provisions of impact fee enactment.

(1) A local political subdivision or private entity shall ensure, in addition to the requirements described in Subsections (2) and (3), that an impact fee enactment

contains:

(a) a provision establishing one or more service areas within which the local political subdivision or private entity calculates and imposes impact fees for various land use categories;

(b) (i) a schedule of impact fees for each type of development activity that specifies the amount of the impact fee to be imposed for each type of system improvement; or

(ii) the formula that the local political subdivision or private entity, as the case may be, will use to calculate each impact fee;

(c) a provision authorizing the local political subdivision or private entity, as the case may be, to adjust the standard impact fee at the time the fee is charged to:

(i) respond to:

(A) unusual circumstances in specific cases; or

(B) a request for a prompt and individualized impact fee review for the development activity of the state, a school district, or a charter school and an offset or credit for a public facility for which an impact fee has been or will be collected; and

(ii) ensure that the impact fees are imposed fairly; and

(d) a provision governing calculation of the amount of the impact fee to be imposed on a particular development that permits adjustment of the amount of the impact fee based upon studies and data submitted by the developer.

(2) A local political subdivision or private entity shall ensure that an impact fee enactment allows a developer, including a school district or a charter school, to receive a credit against or proportionate reimbursement of an impact fee if the developer:

(a) dedicates land for a system improvement;

(b) builds and dedicates some or all of a system improvement; or

(c) dedicates a public facility that the local political subdivision or private entity and the developer agree will reduce the need for a system improvement.

(3) A local political subdivision or private entity shall include a provision in an impact fee enactment that requires a credit against impact fees for any dedication of land for, improvement to, or new construction of, any system improvements provided by the developer if the facilities:

(a) are system improvements; or

(b) (i) are dedicated to the public; and

(ii) offset the need for an identified system improvement.

Enacted by Chapter 47, 2011 General Session

11-36a-403. Other provisions of impact fee enactment.

(1) A local political subdivision or private entity may include a provision in an impact fee enactment that:

(a) provides an impact fee exemption for:

(i) development activity attributable to:

(A) low income housing;

(B) the state;

(C) subject to Subsection (2), a school district; or

(D) subject to Subsection (2), a charter school; or

(ii) other development activity with a broad public purpose; and

(b) except for an exemption under Subsection (1)(a)(i)(A), establishes one or more sources of funds other than impact fees to pay for that development activity.

(2) An impact fee enactment that provides an impact fee exemption for development activity attributable to a school district or charter school shall allow either a school district or a charter school to qualify for the exemption on the same basis.

(3) An impact fee enactment that repeals or suspends the collection of impact fees is exempt from the notice requirements of Section 11-36a-504.

Enacted by Chapter 47, 2011 General Session

11-36a-501. Notice of intent to prepare an impact fee facilities plan.

(1) Before preparing or amending an impact fee facilities plan, a local political subdivision or private entity shall provide written notice of its intent to prepare or amend an impact fee facilities plan.

(2) A notice required under Subsection (1) shall:

(a) indicate that the local political subdivision or private entity intends to prepare or amend an impact fee facilities plan;

(b) describe or provide a map of the geographic area where the proposed impact fee facilities will be located; and

(c) subject to Subsection (3), be posted on the Utah Public Notice Website created under Section 63F-1-701.

(3) For a private entity required to post notice on the Utah Public Notice Website under Subsection (2)(c):

(a) the private entity shall give notice to the general purpose local government in which the private entity's private business office is located; and

(b) the general purpose local government described in Subsection (3)(a) shall post the notice on the Utah Public Notice Website.

Enacted by Chapter 47, 2011 General Session

11-36a-502. Notice to adopt or amend an impact fee facilities plan.

(1) If a local political subdivision chooses to prepare an independent impact fee facilities plan rather than include an impact fee facilities element in the general plan in accordance with Section 11-36a-301, the local political subdivision shall, before adopting or amending the impact fee facilities plan:

(a) give public notice, in accordance with Subsection (2), of the plan or amendment at least 10 days before the day on which the public hearing described in Subsection (1)(d) is scheduled;

(b) make a copy of the plan or amendment, together with a summary designed to be understood by a lay person, available to the public;

(c) place a copy of the plan or amendment and summary in each public library within the local political subdivision; and

(d) hold a public hearing to hear public comment on the plan or amendment.

(2) With respect to the public notice required under Subsection (1)(a):

(a) each municipality shall comply with the notice and hearing requirements of,

and, except as provided in Subsection 11-36a-701(3)(b)(ii), receive the protections of Sections 10-9a-205 and 10-9a-801 and Subsection 10-9a-502(2);

(b) each county shall comply with the notice and hearing requirements of, and, except as provided in Subsection 11-36a-701(3)(b)(ii), receive the protections of Sections 17-27a-205 and 17-27a-801 and Subsection 17-27a-502(2); and

(c) each local district, special service district, and private entity shall comply with the notice and hearing requirements of, and receive the protections of, Section 17B-1-111.

(3) Nothing contained in this section or Section 11-36a-503 may be construed to require involvement by a planning commission in the impact fee facilities planning process.

Enacted by Chapter 47, 2011 General Session

11-36a-503. Notice of preparation of an impact fee analysis.

(1) Before preparing or contracting to prepare an impact fee analysis, each local political subdivision or, subject to Subsection (2), private entity shall post a public notice on the Utah Public Notice Website created under Section 63F-1-701.

(2) For a private entity required to post notice on the Utah Public Notice Website under Subsection (1):

(a) the private entity shall give notice to the general purpose local government in which the private entity's primary business is located; and

(b) the general purpose local government described in Subsection (2)(a) shall post the notice on the Utah Public Notice Website.

Enacted by Chapter 47, 2011 General Session

11-36a-504. Notice of intent to adopt impact fee enactment -- Hearing -- Protections.

(1) Before adopting an impact fee enactment:

(a) a municipality legislative body shall:

(i) comply with the notice requirements of Section 10-9a-205 as if the impact fee enactment were a land use ordinance;

(ii) hold a hearing in accordance with Section 10-9a-502 as if the impact fee enactment were a land use ordinance; and

(iii) except as provided in Subsection 11-36a-701(3)(b)(ii), receive the protections of Section 10-9a-801 as if the impact fee were a land use ordinance;

(b) a county legislative body shall:

(i) comply with the notice requirements of Section 17-27a-205 as if the impact fee enactment were a land use ordinance;

(ii) hold a hearing in accordance with Section 17-27a-502 as if the impact fee enactment were a land use ordinance; and

(iii) except as provided in Subsection 11-36a-701(3)(b)(ii), receive the protections of Section 17-27a-801 as if the impact fee were a land use ordinance;

(c) a local district or special service district shall:

(i) comply with the notice and hearing requirements of Section 17B-1-111; and

(ii) receive the protections of Section 17B-1-111;

(d) a local political subdivision shall at least 10 days before the day on which a public hearing is scheduled in accordance with this section:

(i) make a copy of the impact fee enactment available to the public; and

(ii) post notice of the local political subdivision's intent to enact or modify the impact fee, specifying the type of impact fee being enacted or modified, on the Utah Public Notice Website created under Section 63F-1-701; and

(e) a local political subdivision shall submit a copy of the impact fee analysis and a copy of the summary of the impact fee analysis prepared in accordance with Section 11-36a-303 on its website or to each public library within the local political subdivision.

(2) Subsection (1)(a) or (b) may not be construed to require involvement by a planning commission in the impact fee enactment process.

Enacted by Chapter 47, 2011 General Session

11-36a-601. Accounting of impact fees.

A local political subdivision that collects an impact fee shall:

(1) establish a separate interest bearing ledger account for each type of public facility for which an impact fee is collected;

(2) deposit a receipt for an impact fee in the appropriate ledger account established under Subsection (1);

(3) retain the interest earned on each fund or ledger account in the fund or ledger account;

(4) at the end of each fiscal year, prepare a report on each fund or ledger account showing:

(a) the source and amount of all money collected, earned, and received by the fund or ledger account; and

(b) each expenditure from the fund or ledger account; and

(5) produce a report that:

(a) identifies impact fee funds by the year in which they were received, the project from which the funds were collected, the impact fee projects for which the funds were budgeted, and the projected schedule for expenditure;

(b) is in a format developed by the state auditor;

(c) is certified by the local political subdivision's chief financial officer; and

(d) is transmitted annually to the state auditor.

Enacted by Chapter 47, 2011 General Session

11-36a-602. Expenditure of impact fees.

(1) A local political subdivision may expend impact fees only for a system improvement:

(a) identified in the impact fee facilities plan; and

(b) for the specific public facility type for which the fee was collected.

(2) (a) Except as provided in Subsection (2)(b), a local political subdivision shall expend or encumber the impact fees for a permissible use within six years of their receipt.

(b) A local political subdivision may hold the fees for longer than six years if it identifies, in writing:

(i) an extraordinary and compelling reason why the fees should be held longer than six years; and

(ii) an absolute date by which the fees will be expended.

Enacted by Chapter 47, 2011 General Session

11-36a-603. Refunds.

A local political subdivision shall refund any impact fee paid by a developer, plus interest earned, when:

(1) the developer does not proceed with the development activity and has filed a written request for a refund;

(2) the fee has not been spent or encumbered; and

(3) no impact has resulted.

Enacted by Chapter 47, 2011 General Session

11-36a-701. Impact fee challenge.

(1) A person or an entity residing in or owning property within a service area, or an organization, association, or a corporation representing the interests of persons or entities owning property within a service area, has standing to file a declaratory judgment action challenging the validity of an impact fee.

(2) (a) A person or an entity required to pay an impact fee who believes the impact fee does not meet the requirements of law may file a written request for information with the local political subdivision who established the impact fee.

(b) Within two weeks after the receipt of the request for information under Subsection (2)(a), the local political subdivision shall provide the person or entity with the impact fee analysis, the impact fee facilities plan, and any other relevant information relating to the impact fee.

(3) (a) Subject to the time limitations described in Section 11-36a-702 and procedures set forth in Section 11-36a-703, a person or an entity that has paid an impact fee that was imposed by a local political subdivision may challenge:

(i) if the impact fee enactment was adopted on or after July 1, 2000:

(A) subject to Subsection (3)(b)(i) and except as provided in Subsection (3)(b)(ii), whether the local political subdivision complied with the notice requirements of this chapter with respect to the imposition of the impact fee; and

(B) whether the local political subdivision complied with other procedural requirements of this chapter for imposing the impact fee; and

(ii) except as limited by Subsection (3)(c), the impact fee.

(b) (i) The sole remedy for a challenge under Subsection (3)(a)(i)(A) is the equitable remedy of requiring the local political subdivision to correct the defective notice and repeat the process.

(ii) The protections given to a municipality under Section 10-9a-801 and to a county under Section 17-27a-801 do not apply in a challenge under Subsection (3)(a)(i)(A).

(c) The sole remedy for a challenge under Subsection (3)(a)(ii) is a refund of the difference between what the person or entity paid as an impact fee and the amount the impact fee should have been if it had been correctly calculated.

(4) (a) Subject to Subsection (4)(d), if an impact fee that is the subject of an advisory opinion under Section 13-43-205 is listed as a cause of action in litigation, and that cause of action is litigated on the same facts and circumstances and is resolved consistent with the advisory opinion:

(i) the substantially prevailing party on that cause of action:

(A) may collect reasonable attorney fees and court costs pertaining to the development of that cause of action from the date of the delivery of the advisory opinion to the date of the court's resolution; and

(B) shall be refunded an impact fee held to be in violation of this chapter, based on the difference between the impact fee paid and what the impact fee should have been if the government entity had correctly calculated the impact fee; and

(ii) in accordance with Section 13-43-206, a government entity shall refund an impact fee held to be in violation of this chapter to the person who was in record title of the property on the day on which the impact fee for the property was paid if:

(A) the impact fee was paid on or after the day on which the advisory opinion on the impact fee was issued but before the day on which the final court ruling on the impact fee is issued; and

(B) the person described in Subsection (3)(a)(ii) requests the impact fee refund from the government entity within 30 days after the day on which the court issued the final ruling on the impact fee.

(b) A government entity subject to Subsection (3)(a)(ii) shall refund the impact fee based on the difference between the impact fee paid and what the impact fee should have been if the government entity had correctly calculated the impact fee.

(c) Subsection (4) may not be construed to create a new cause of action under land use law.

(d) Subsection (3)(a) does not apply unless the resolution described in Subsection (3)(a) is final.

Enacted by Chapter 47, 2011 General Session

11-36a-702. Time limitations.

(1) A person or an entity that initiates a challenge under Subsection 11-36a-701(3)(a) may not initiate that challenge unless it is initiated within:

(a) for a challenge under Subsection 11-36a-701(3)(a)(i)(A), 30 days after the day on which the person or entity pays the impact fee;

(b) for a challenge under Subsection 11-36a-701(3)(a)(i)(B), 180 days after the day on which the person or entity pays the impact fee; or

(c) for a challenge under Subsection 11-36a-701(3)(a)(ii), one year after the day on which the person or entity pays the impact fee.

(2) The deadline to file an action in district court is tolled from the date that a challenge is filed using an administrative appeals procedure described in Section 11-36a-703 until 30 days after the day on which a final decision is rendered in the administrative appeals procedure.

Enacted by Chapter 47, 2011 General Session

11-36a-703. Procedures for challenging an impact fee.

(1) (a) A local political subdivision may establish, by ordinance or resolution, or a private entity may establish by prior written policy, an administrative appeals procedure to consider and decide a challenge to an impact fee.

(b) If the local political subdivision or private entity establishes an administrative appeals procedure, the local political subdivision shall ensure that the procedure includes a requirement that the local political subdivision make its decision no later than 30 days after the day on which the challenge to the impact fee is filed.

(2) A challenge under Subsection 11-36a-701(3)(a) is initiated by filing:

(a) if the local political subdivision or private entity has established an administrative appeals procedure under Subsection (1), the necessary document, under the administrative appeals procedure, for initiating the administrative appeal;

(b) a request for arbitration as provided in Section 11-36a-705; or

(c) an action in district court.

(3) The sole remedy for a successful challenge under Subsection 11-36a-701(1), which determines that an impact fee process was invalid, or an impact fee is in excess of the fee allowed under this act, is a declaration that, until the local political subdivision or private entity enacts a new impact fee study, from the date of the decision forward, the entity may charge an impact fee only as the court has determined would have been appropriate if it had been properly enacted.

(4) Subsections (2), (3), 11-36a-701(3), and 11-36a-702(1) may not be construed as requiring a person or an entity to exhaust administrative remedies with the local political subdivision before filing an action in district court under Subsections (2), (3), 11-36a-701(3), and 11-36a-702(1).

(5) The judge may award reasonable attorney fees and costs to the prevailing party in an action brought under this section.

(6) This chapter may not be construed as restricting or limiting any rights to challenge impact fees that were paid before the effective date of this chapter.

Amended by Chapter 200, 2013 General Session

11-36a-704. Mediation.

(1) In addition to the methods of challenging an impact fee under Section 11-36a-701, a specified public agency may require a local political subdivision or private entity to participate in mediation of any applicable impact fee.

(2) To require mediation, the specified public agency shall submit a written request for mediation to the local political subdivision or private entity.

(3) The specified public agency may submit a request for mediation under this section at any time, but no later than 30 days after the day on which an impact fee is paid.

(4) Upon the submission of a request for mediation under this section, the local political subdivision or private entity shall:

(a) cooperate with the specified public agency to select a mediator; and

(b) participate in the mediation process.

Enacted by Chapter 47, 2011 General Session

11-36a-705. Arbitration.

(1) A person or entity intending to challenge an impact fee under Section 11-36a-703 shall file a written request for arbitration with the local political subdivision within the time limitation described in Section 11-36a-702 for the applicable type of challenge.

(2) If a person or an entity files a written request for arbitration under Subsection (1), an arbitrator or arbitration panel shall be selected as follows:

(a) the local political subdivision and the person or entity filing the request may agree on a single arbitrator within 10 days after the day on which the request for arbitration is filed; or

(b) if a single arbitrator is not agreed to in accordance with Subsection (2)(a), an arbitration panel shall be created with the following members:

(i) each party shall select an arbitrator within 20 days after the date the request is filed; and

(ii) the arbitrators selected under Subsection (2)(b)(i) shall select a third arbitrator.

(3) The arbitration panel shall hold a hearing on the challenge no later than 30 days after the day on which:

(a) the single arbitrator is agreed on under Subsection (2)(a); or

(b) the two arbitrators are selected under Subsection (2)(b)(i).

(4) The arbitrator or arbitration panel shall issue a decision in writing no later than 10 days after the day on which the hearing described in Subsection (3) is completed.

(5) Except as provided in this section, each arbitration shall be governed by Title 78B, Chapter 11, Utah Uniform Arbitration Act.

(6) The parties may agree to:

(a) binding arbitration;

(b) formal, nonbinding arbitration; or

(c) informal, nonbinding arbitration.

(7) If the parties agree in writing to binding arbitration:

(a) the arbitration shall be binding;

(b) the decision of the arbitration panel shall be final;

(c) neither party may appeal the decision of the arbitration panel; and

(d) notwithstanding Subsection (10), the person or entity challenging the impact fee may not also challenge the impact fee under Subsection 11-36a-701(1) or Subsection 11-36a-703(2)(a) or (2)(c).

(8) (a) Except as provided in Subsection (8)(b), if the parties agree to formal, nonbinding arbitration, the arbitration shall be governed by the provisions of Title 63G, Chapter 4, Administrative Procedures Act.

(b) For purposes of applying Title 63G, Chapter 4, Administrative Procedures Act, to a formal, nonbinding arbitration under this section, notwithstanding Section 63G-4-502, "agency" means a local political subdivision.

(9) (a) An appeal from a decision in an informal, nonbinding arbitration may be filed with the district court in which the local political subdivision is located.

(b) An appeal under Subsection (9)(a) shall be filed within 30 days after the day on which the arbitration panel issues a decision under Subsection (4).

(c) The district court shall consider de novo each appeal filed under this Subsection (9).

(d) Notwithstanding Subsection (10), a person or entity that files an appeal under this Subsection (9) may not also challenge the impact fee under Subsection 11-36a-701(1) or Subsection 11-36a-703(2)(a) or (2)(c).

(10) (a) Except as provided in Subsections (7)(d) and (9)(d), this section may not be construed to prohibit a person or entity from challenging an impact fee as provided in Subsection 11-36a-701(1) or Subsection 11-36a-703(2)(a) or (2)(c).

(b) The filing of a written request for arbitration within the required time in accordance with Subsection (1) tolls all time limitations under Section 11-36a-702 until the day on which the arbitration panel issues a decision.

(11) The person or entity filing a request for arbitration and the local political subdivision shall equally share all costs of an arbitration proceeding under this section.

Enacted by Chapter 47, 2011 General Session