AGENDA

Jim Miller, *Mayor*
Stephen Willden, *Mayor Pro Tem*
Shellie Baertsch, *Council Member*
Michael McOmber, *Council Member*
Bud Poduska, *Council Member*
Chris Porter, *Council Member*

CITY COUNCIL MEETING
Tuesday, November 1, 2016
7:00 P.M.
City of Saratoga Springs Council Chambers
1307 North Commerce Drive, Suite 200, Saratoga Springs, Utah 84045

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1. Call to Order.
2. Roll Call.
3. Invocation / Reverence.
4. Pledge of Allegiance.
5. Public Input – This time has been set aside for the public to express ideas, concerns, and comments.
6. Presentation: Swearing In of Youth Council Members

REPORTS:

1. Mayor.
2. City Council.
3. Administration Communication with Council.
4. Staff Updates: Inquiries, Applications, and Approvals.

PUBLIC HEARING:

1. Transportation Master Plan Update/General Plan Amendment; Ordinance 16-25 (11-1-16). (Public Hearing comment to be taken; formal action continued)

BUSINESS ITEMS:

1. Quarterly Financial Update.
2. Bid Award: Crack Seal Project; Resolution R16-60 (10-4-16):
3. Saratoga Springs 2 Church – Site Plan, 233 E. School House Road.
4. Western Hills Phases 2 & 3 – Final Plat, ~150 W. Aspen Hills Blvd.
5. Special Assessment Bonds, Series 2016 – Consideration of Adoption of Bond Resolution R16-61 (11-1-16), a Resolution of the City Council of the City of Saratoga Springs, Utah (the "Issuer"), Establishing the Terms and Conditions of the Issuance of the Issuer's Assessment Bonds, Series 2016 (Mt. Saratoga Assessment Area), in the Total Principal Amount Not To Exceed $8,400,000 (the "Series 2016 Bonds"), for the Purpose of Financing the Costs of the Acquisition, Construction, and Installation of Road, Storm Water, Sewer, Culinary Water, Secondary Water, and Miscellaneous Improvements; and Related Matters.

In compliance with the Americans with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during this meeting should notify the City Recorder at 766-9793 at least one day prior to the meeting.

APPROVAL OF MINUTES:

1. October 4, 2016.
2. October 18, 2016.

CLOSED SESSION:
Motion to enter into closed session for any of the following: purchase, exchange, or lease of real property; discussion regarding deployment of security personnel, devices, or systems; pending or reasonably imminent litigation; the character, professional competence, or the physical or mental health of an individual.

ADJOURNMENT

Decorum - *The Council requests that citizens help maintain the decorum of the meeting by turning off electronic devices, being respectful to the Council and others.*
Councilmembers may participate in this meeting electronically via video or telephonic conferencing.
The order of the agenda items is subject to change by order of the Mayor.
Final action may be taken concerning any topic listed on the agenda.

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City Council Staff Report

Author: Gordon Miner, City Engineer
Subject: November 2016 Update to the Transportation Master Plan
Date: November 1, 2016
Type of Item: Transportation Master Plan

CITY OF SARATOGA SPRINGS

A. Executive Summary: As an element of the General Plan, the Transportation Master Plan (TMP) is a guide to provide capacity in the City's transportation system to accommodate expected growth. This is an update to a previously-adopted TMP.

Recommendation: Staff recommends that the City Council conduct a public hearing, take public input, discuss the application, and then choose from the alternatives in Section E of this report.

B. Background: The TMP was originally adopted in 2012. Subsequently, it was amended in 2013. This update addresses: Travel Demand Modelling, Demographic data, Roadway Level of Service, and a planned 2040 roadway network, based on the regional network plans found in the Mountainland Association of Governments TransPlan40.

The Planning Commission held public hearing on this Update to the Transportation Master Plan on October 13, 2016, and forwarded a positive recommendation to the City Council.

C. Funding Source: Not applicable.

D. Review: This document was prepared by Horrocks Engineers, a transportation engineering consulting firm. It was subsequently reviewed by the City's Development Review Committee. This is an opportunity for the City Council to review it in light of public comment.

E. Recommendation and Alternatives: Staff recommends that the City Council conduct a public hearing, take public input, discuss the application, and choose from the following alternatives:

Alternative 1 – Continuance (This is the recommended alternative.)

"I move to **continue** the consideration of adoption of this Update to the Transportation Master Plan to the meeting of November 15, 2016, with direction to the applicant and Staff on information and/or changes needed to render a decision, as follows:

1. _____
2. _____

Alternative 2 - Adoption

"I move to adopt this November 2016 Update to the Transportation Master Plan".

Alternative 3 – Denial

"I move to **deny** the adoption of the 2016 Update to the Transportation Master Plan with the direction to the Staff on information and/or changes needed to render a future consideration, as follows:

1. _____
2. _____

J. Attachments:

1. Draft of the November 2016 Update to the Transportation Master Plan
2. Planning Commission Engineer's Report
3. Traffic Calming Program, Appendix

Planning Commission Staff Report
Staff Report

Author: Gordon Miner, City Engineer
Subject: Transportation Master Plan
Date: October 13, 2016
Type of Item: Legislative

Description:

A. Topic: Update to the Saratoga Springs Transportation Master Plan

B. Background:

Applicant:	*Gordon Miner, P.E., City Engineer*
Request:	*Positive Recommendation to the City Council*
Location:	*Citywide*

As an element of the General Plan, the Transportation Master Plan (TMP) is a guide to provide capacity in the City's transportation system to accommodate expected growth.

The TMP was originally adopted in 2012. Subsequently, it was amended in 2013. This update addresses: Travel Demand Modelling, Demographic data, Roadway Level of Service, and a planned 2040 roadway network, based on the regional network plans found in the Mountainland Association of Governments TransPlan40.

By way of information, this TMP also includes the City's Neighborhood Traffic Calming Program as an appendix. But, the Traffic Calming Program is not part of this recommendation by the Planning Commission.

C. Recommendation: Staff requests that a positive recommendation be forwarded to the City Council.

SARATOGA SPRINGS

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SARATOGA SPRINGS

TRANSPORTATION MASTER PLAN

HORROCKS ENGINEERS

Executive Summary

2016 Update

The Saratoga Springs Transportation Master Plan (TMP), adopted in 2012 and amended in 2013, was updated in 2016 include the following:

- **Travel Demand Modelling (TDM)**
- **Demographic data**
- **Roadway Level of Service (LOS)**
- **Proposed 2040 roadway network**

Introduction

Saratoga Springs is located in northwestern Utah County and is a rapidly growing community. According to the 2010 census, the City has been one of the fastest growing cities in Utah by percent growth over the past decade. This rapid growth is expected to continue into the future. With rapid growth comes increased traffic and the potential that the roadway network in the City will fail to meet the needs of the growing population. The purpose of this document is to provide a transportation plan that will meet the needs of the residents of Saratoga Springs through the year 2040.

Existing Conditions

The City has an estimated population of approximately 26,700 residents continues to be one of the fastest growing cities in Utah. Despite this rapid growth, there remain vast amounts of land that is undeveloped.

The roadways in the City have been classified as Principal Arterials, Major Arterials, Minor Arterials, Collector Streets, and Local roads. Each of these classifications serves a specific purpose in the roadway network and each is important to a complete system. The roadway network in Saratoga Springs is operating at acceptable levels under the existing conditions with all roadways and traffic signals performing at Level of Service (LOS) D or better as shown in **Section 3.0**.

Alternative modes of transportation are important to the City but are currently limited. There is a trails network in the City which provides pedestrian and bicycle facilities but has areas where the trails are not continuous. The transit system consists of one express bus route between Saratoga Springs Lehi (with peak traffic routes to UVU).

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Future Conditions

Saratoga Springs is expected to grow to a population of approximately 79,000 by the year 2040. This growth will put strain on the existing roadway network and if no improvements are made many of the roads in the City will reach LOS F. A recommended roadway network has been developed which will meet the travel demands of the future population and allow the roadways to perform at LOS D or better. This roadway network is compatible with the regional transportation planning efforts of Mountainland Association of Governments (MAG) discussed in **Section 4.0**. Roadway cross-sections are presented that will meet the needs of each of the roadway functional classification providing appropriate shoulder and lane widths as well as safe and attractive side treatments.

As part of the transportation network, the trails system proposed will provide greater access to the community via bicycle and pedestrian modes of transportation. Disconnected trails will need to be connected and more trails offered to provide for better service to non-motorized traffic. Each of the road cross-sections along trails routes provides bicycle lanes for commuter and recreational bicyclists.

A new transit network, which incorporates the long range planning of MAG, will include bus routes internal to the City, more express routes, Bus Rapid Transit (BRT), light rail, and as part of the MAG "Vision", commuter rail.

Alternatives Evaluation and Recommendations

In order to provide a comprehensive roadway network to accommodate future growth, the roadway classifications in the City had to be expanded. In addition to the existing functional classifications, two new roadway types were added, Freeway and Parkway. These two classifications will assist in moving traffic efficiently through the City relieving the pressure on the arterial and collector streets.

Access management is an important part of transportation planning as it aids in allowing each roadway classification in performing its proper function. Each roadway must find a balance between providing good mobility with reasonable access to adjacent land uses. The higher the roadway classification (Freeway being the highest), the less access and greater mobility. Local streets provide the best access and the least mobility.

Safety should be the number one priority when designing and constructing roads. Wherever possible offset intersections should be avoided and driveways should be constructed that avoid the need for drivers to back out into traffic. Intersections improvements should be considered where warranted. The Manual on Uniform Traffic Control Devices (MUTCD) provides warrants for both traffic signals and stop signs. Each intersection considered for improvement should be studied using these warrants before improvements are made. In some cases it may be advantageous to consider roundabouts as an alternative to stop signs or traffic signals, this is discussed in detail in **Section 4.4**. Each intersection should be considered and studied individually.

Traffic calming is a way to improve safety and livability on the local street network. Where applicable, traffic calming may be considered in response to resident requests. The City of Saratoga Springs

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Neighborhood Traffic Calming Program included in the appendix outlines the process to implement traffic calming measures (see **Section 4.5**).

Corridor preservation techniques, discussed in **Section 4.6**, should be employed to ensure that future development does not hinder the construction of a good transportation network. Some methods that may be employed to preserve right-of-way for future roads include developer incentives and agreements, exactions, fee simple acquisitions, transfer of development rights and density transfers, land use controls, and purchase of options and easements.

As the City grows and developments are planned it is important that the impacts of these developments be assessed and managed. The mechanism for ensuring such action is the Traffic Impact Study (TIS). A TIS should be required on most developments in the City prior to issuance of a building permit. A TIS will allow the City to determine site specific impacts including internal circulation, access issues, and adjacent roadway and intersection impacts. Traffic Impact Studies are discussed in detail in **Section 4.7**.

Special Considerations

Several of the proposed roadways in the City deserve special consideration and are discussed in **Section 4.10**. These include Mountain View Corridor Freeway, Foothill Parkway, Hidden Valley Freeway, and SR-73. Each of these roadways is unique and poses a specific set of challenges for design and construction. The Mountain View Corridor Freeway and Hidden Valley Freeway are proposed on the MAG long range transportation plan and should be the first of these major roads constructed. Foothill Parkway is a southern extension of the MAG project that will serve the residents on the south end of the City with an alternate corridor to Redwood Road for north-south traffic. SR-73 is proposed a six-lane freeway facility after the Hidden Valley Freeway is completed to allow for better east-west mobility. Each of these projects will require extensive coordination with UDOT and other agencies.

Potential Funding Sources

In order to keep up with the increasing transportation demand in the City, it is essential that Saratoga Springs explore and pursue multiple sources of transportation funding. The potential sources of funding available are federal funding in the form of the UDOT administered Statewide Transportation Improvement Program, state funding from fuel taxes, registration fees, driver's license fees etc., local funding from general fund revenues, and impact fees associated with development. See **Section 5.0** for more details.

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1.0 Introduction

1.1 2016 Update

The Saratoga Springs Transportation Master Plan (TMP), adopted in 2012 and amended in 2013, was updated in 2016. This TMP update is not intended as a full TMP update. The following items within the TMP were updated:

- **Travel Demand Modelling (TDM)**
- **Demographic data**
- **Roadway Level of Service (LOS)**
- **Proposed 2040 roadway network**

The purpose of this update is to align the TMP with the regional network plans found in the Mountainland Association of Governments (MAG) TransPlan40.

1.2 Background Information

The City of Saratoga Springs is a fast growing community located on the northwest shore of Utah Lake in the center of Utah's Wasatch Front Metropolitan Area (see **Figure 1-1**). The City was incorporated in December of 1997. From its very beginning, the City experienced rapid growth and continues to be one of the fastest growing communities in the state. According to the US census bureau, Saratoga Springs had grown in population from 1,003 in 2000 to 17,781 in 2010. This represents an average annual growth rate of 167 percent for the 2000 to 2010 decade. When compared to Utah County, which has an average annual growth rate of 4 percent over the same time period, it is clear that Saratoga Springs is one of the fastest growing cities in Utah County. The current population is 26,736.

The last update to The Saratoga Springs General Plan, including the Transportation Element, was in 2012. This update (as well as minor adjustments in 2013), included to enable development of the roadway portion of the Capital Facilities Plan (CFP) by providing a plan to provide capacity to accommodate the expected growth in the City's transportation system. This TMP acts as an update to incorporate the most recent population projections as well as any changes to the Capital Facilities Plan.

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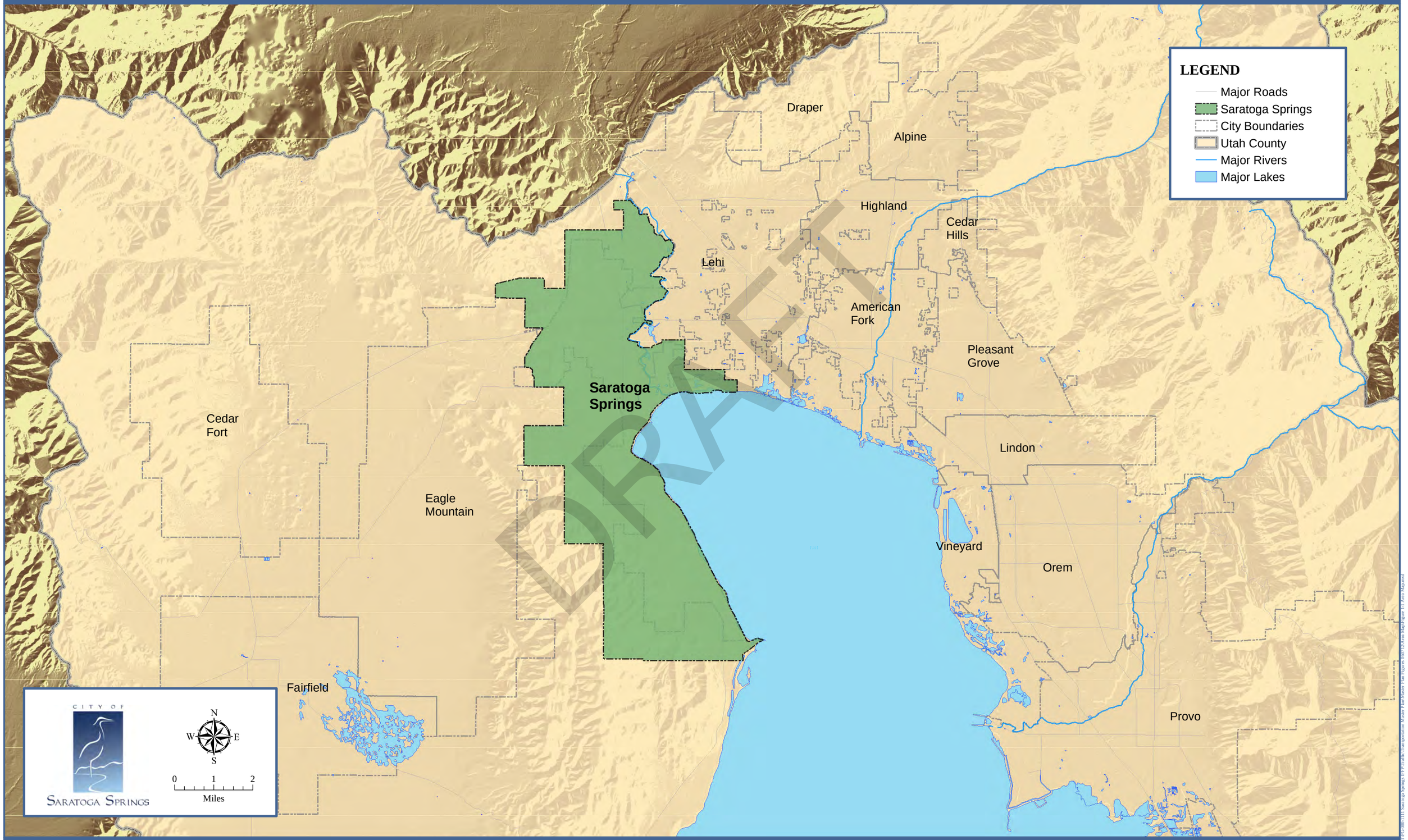
Figure 1-1 Area Map



12 July 2012

2.0 Existing Conditions

A thorough documentation of the City's existing conditions was performed in order to evaluate the City's transportation system and update the Transportation Element of the City's General Plan (TMP) to address the City's current and future needs. The data collected for this TMP update includes:

- **Key roadway traffic volumes**
- **Socioeconomic conditions**
- **Land use and zoning**
- **Signal locations and timings**
- **Roadway classifications/widths/cross sections**
- **Public transit routes**
- **Bicycle/pedestrian trails**

This data forms the basis for analyzing the existing transportation system as well as providing the foundation to project future traffic conditions.

2.1 Existing Socioeconomic Conditions

Socioeconomic data used in the transportation analysis was obtained from the City and Mountainland Association of Governments (MAG). The MAG travel demand model was modified to more accurately estimate the travel demand in the City. The MAG travel demand model consists of various Traffic Analysis Zones (TAZ). Each TAZ contains information on the number of households, employment opportunities, and average income levels within the TAZ. This data is used to generate trips originating in each TAZ and assigned to the roadway network where they will be attracted to a destination within another TAZ. The MAG travel demand model predicts regional travel patterns; however, the TAZ structure must be modified to more accurately reflect traffic on the local city level. The TAZ structure within the Saratoga Springs area was modified by splitting the existing large TAZ into smaller, more uniform TAZ and verifying the accuracy of the socioeconomic data contained within each TAZ.

The City's current population is estimated at around 26,700 residents[1]. The 2000 to 2010 decade saw considerable growth in Saratoga with an increase in residential housing units from 301 to 4,685 (1,456 percent). The City is issuing a number of permits for residential dwelling units monthly and is the single highest growth city by percentage of new housing units in Utah (see **Table 2-1**). **Figure 2-1** includes the active development in the city. As a region, the northern Utah County area has experienced rapid

[1] Based on Utah Governor's Office of Management & Budget (GOMB)

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development and growth in recent years and this trend is projected to continue into the foreseeable future.

Table 2-1 Top Ten Utah Cities by 10 Year Housing Unit Growth Rate Percentage

	Housing Unit Count		Comparison	
City Name	***2010***	***2000***	***10 Year Chg.***	***10 Yr. % Chg.***
Saratoga Springs	**4,685**	**301**	**4,384**	**1,456**
Herriman	6,022	459	5,563	1,212
Eagle Mountain	5,546	598	4,948	827
Cedar Hills	2,441	721	1,720	239
West Haven	3,324	1,220	2,104	172
Syracuse	6,534	2,601	3,933	151
Nibley	1,451	580	871	150
Lehi	13,064	5,280	7,784	147
Spanish Valley CDP	190	78	112	144
Washington	7,546	3,199	4,347	136

Source: 2010 State of Utah Official Census

2.2 Existing Land Use

Traffic patterns and demand are directly related to land use and development density. A small percent of the land area within the City has been developed or is under development. There are still several large parcels that remain, as well as numerous smaller tracts of land that will one day be developed. Several of the major owners of the undeveloped land in the annexation boundary of the City are:

- **Corporation of the Presiding Bishop of The Church of Jesus Christ of Latter-day Saints**
- **Waldo Co.**
- **Collins Brothers Oil Co.**
- **Ireco Incorporated**
- **DCP Saratoga LLC**
- **School and Institutional Trust Lands Administration (SITLA)**

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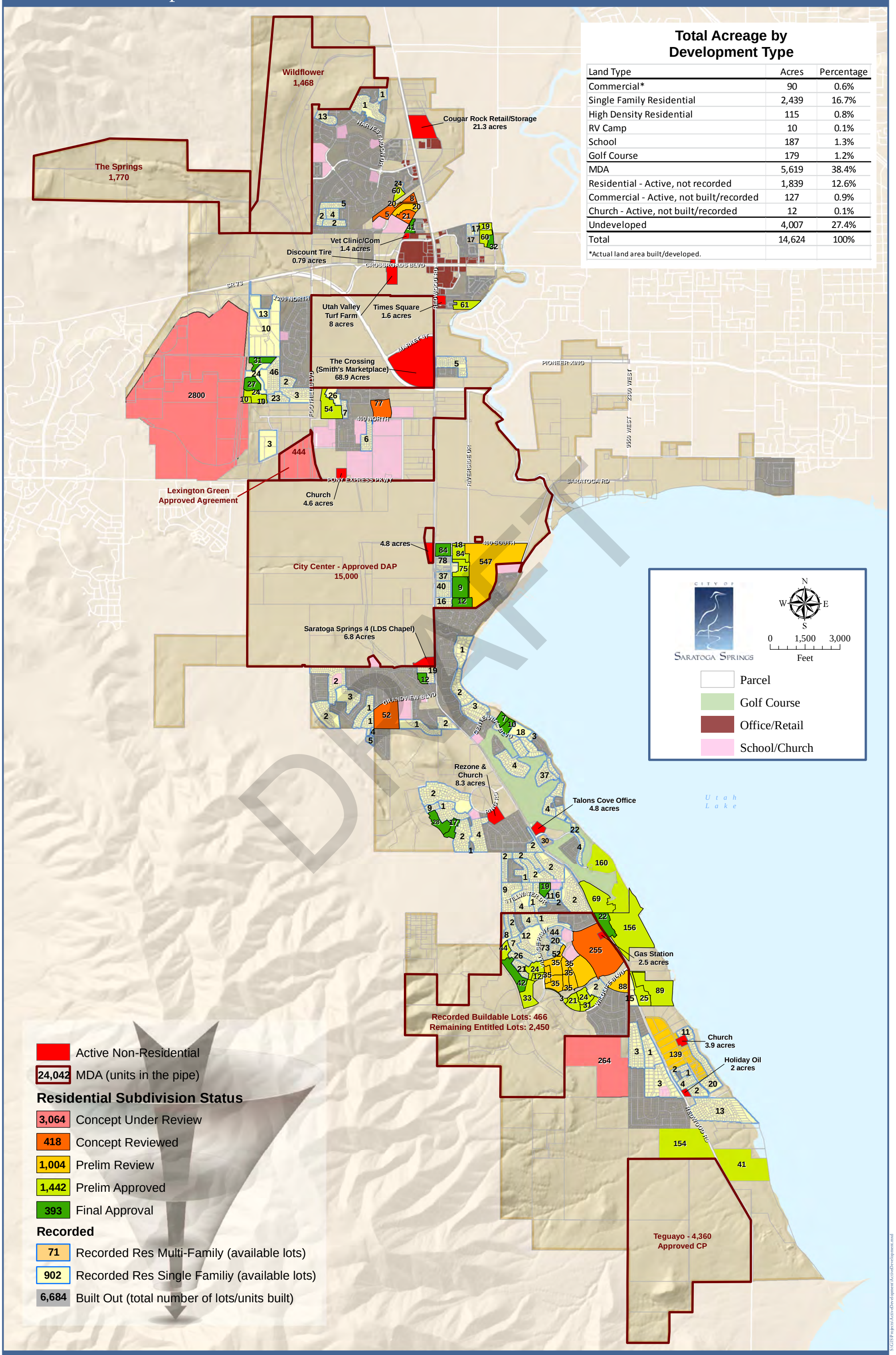
Active Development



Total Acreage by Development Type

Land Type	Acres	Percentage
Commercial*	90	0.6%
Single Family Residential	2,439	16.7%
High Density Residential	115	0.8%
RV Camp	10	0.1%
School	187	1.3%
Golf Course	179	1.2%
MDA	5,619	38.4%
Residential - Active, not recorded	1,839	12.6%
Commercial - Active, not built/recorded	127	0.9%
Church - Active, not built/recorded	12	0.1%
Undeveloped	4,007	27.4%
Total	14,624	100%

*Actual land area built/developed.

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2.3 Existing Roadway Functional Classification

The roadways in Saratoga Springs have been classified as Principal Arterials, Major Arterials, Minor Arterials, Collector, Minor Collector and Local streets. The existing roadway network consists of several major regional Utah Department of Transportation (UDOT) roadways including SR-73 running East-West through the City connecting Eagle Mountain and Lehi, SR-68 (Redwood Road) running North-South connecting the City with Salt Lake County on the North, and SR-145 (Pioneer Crossing) which connects I-15 at American Fork Main Street to Redwood Road in Saratoga Springs. In addition to the UDOT roads, Saratoga Springs owns and maintains a number of local and regional collector streets such as Pony Express Parkway (between Redwood Road and Eagle Mountain), 800 West, and 400 North. On November 20, 2011 SR-73 from Redwood Road to the west bank of the Jordan River underwent a jurisdictional transfer (located in the appendix) where the City has taken over ownership and maintenance responsibility for this portion of the roadway from the Utah Department of Transportation (UDOT). The traffic signal located at the intersection of SR-73 and SR-68 will remain under UDOT jurisdiction. Jurisdiction of the signal at SR-73 and East Commerce Drive was transferred from UDOT to the City on December 15, 2015. The existing roadway network including functional type is shown in **Figure 2-2**.

2.4 Existing Traffic Volumes and Level of Service

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 (HCM),* a document published by the Transportation Research Board (TRB), LOS serves as the traditional form of measurement of a roadway's functionality. The TRB identifies LOS by reviewing elements such as the number of lanes assigned to a roadway, the amount of traffic using the roadway, and the amount of delay per vehicle traveling on the roadway and at the intersections. Levels of service range from A (free flow) to F (complete congestion).

2.4.1 Roadway Level of Service

Roadway LOS is used as a planning tool to quantitatively represent the ability of a particular roadway to accommodate the travel demand. **Table 2-2** Through **Table 2-4** were used as a guide for quantifying LOS and subsequently the conditions of each of the major roadways in the City and are based on HCM principles and regional experience. LOS D is approximately 80 percent of a roadway's capacity and is a common goal for urban streets during peak hours. After discussions with city staff it was determined that adopting the industry standard of LOS D for urbanized areas was acceptable for future planning. Attaining LOS C would be potentially cost prohibitive and may present societal impacts such as additional lanes and wider street cross-sections. LOS D suggests that for most times of the day, the roadways will be operating at well below capacity. The peak times of day will likely experience moderate congestion characterized by a higher vehicle density and slower than free flow speeds. A four lane freeway facility can accommodate 70,000 vehicles per day at LOS D, adding two additional lanes will increase this threshold by 40,000 vehicles to 110,000 vehicles per day. Arterial streets can handle significantly less traffic at LOS D, a seven lane arterial (6 travel lanes and one center turn lane) can accommodate approximately 50 percent of the traffic of a freeway of similar lane configuration (55,000 versus 110,000). Similarly, much

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capacity is lost when reducing the number of arterial lanes by one in each direction, which will result in a 17,700 vehicle per day reduction in LOS D capacity. Collector streets are designed at lower speeds than arterials and are not as strictly access controlled. Again this results in a loss of capacity when compared to arterial streets. A 3 lane collector street will be able to move 1,700 less vehicles per day than a 3 lane arterial street. Removing the center turn lane on a collector will result in a loss of capacity of 1,300 vehicles per day.

Table 2-2 Freeway LOS Capacity Criteria in Vehicles per Day

Lanes	LOS C	LOS D	LOS E
4	60,000	70,000	80,000
6	95,000	110,000	140,000

Table 2-3 Arterial LOS Capacity Criteria in Vehicles per Day

Lanes	LOS C	LOS D	LOS E
3	12,400	15,100	17,700
5	28,500	32,800	40,300
7	43,000	50,500	63,400

Table 2-4 Collector LOS Capacity Criteria in Vehicles per Day

Lanes	LOS C	LOS D	LOS E
2	9,700	12,100	14,500
3	10,800	13,400	16,100

2.4.2 Intersection Level of Service

Whereas roadway LOS considers an overall picture of a roadway to estimate operating conditions, intersection LOS looks at each individual movement at an intersection and provides a much more precise method for quantifying operations. Since intersections tend to be a source of bottlenecks in the transportation network, a detailed look into the delay at each intersection should be performed on a regular basis. The methodology for calculating delay at an intersection is outlined in the *Highway Capacity Manual* and the resulting criteria for assigning LOS to signalized and un-signalized intersections are outlined in **Table 2-5** and **Table 2-6** respectively. As in the case with roadways, LOS D is considered the industry standard for intersections in an urbanized area. LOS D at an intersection corresponds to an average control delay of 35-55 seconds per vehicle for a signalized intersection and 25-35 seconds per vehicle for an un-signalized intersection.

At a signalized intersection, the average vehicle will be stopped for less than 55 seconds. This is considered an acceptable amount of delay to experience during the times of the day when roadways are most congested. As a general rule, traffic signal cycle lengths (the length of time it takes for a traffic signal to cycle through each movement in turn) are kept below 90 seconds. An average delay of less than 55

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seconds suggests that in most cases, no vehicles will have to wait more than one cycle before proceeding through an intersection.

Un-signalized intersections are generally stop controlled. Areas where there is a predominate major street may be two-way stop controlled, meaning only the minor street traffic must stop. In cases where traffic volumes are more even or where sight distances may be limited, four-way stop controlled intersections are common. LOS for an un-signalized intersection is assigned based on the average control at the worst approach (always a stopped approach) of the intersection. An un-signalized intersection operating at LOS D means that the average vehicle waiting at one of the stop controlled approaches will wait no longer than 35 seconds before proceeding through the intersection. This delay may be caused by large volumes of traffic on the major street resulting in fewer gaps in traffic for a vehicle to turn into, or from queued vehicles waiting at the stop sign.

Table 2-5 Signalized Intersection LOS Criteria

Level of Service	Average Control Delay (sec/veh)
A	≤ 10
B	> 10 - 20
C	> 20 - 35
D	> 35 - 55
E	> 55 - 80
F	> 80

Note: LOS for signalized intersections is the average of all approaches

Table 2-6 Un-signalized Intersection LOS Criteria

Level of Service	Average Control Delay (sec/veh)
A	≤ 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

Note: LOS for an un-signalized intersection is for the worst approach only

Each of the eight traffic signals in the City was analyzed. These signals are all on UDOT owned roadways with the exception of the signal at Commerce Drive and SR-73. Ownership of this signal was recently transferred from UDOT to the City. Once the current warranty period expires, the City will be responsible for the maintenance of this signal (the jurisdictional transfer agreement is shown in the appendix). The existing signal locations are shown in **Figure 2-2**.

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2.4.3 Existing Operating Conditions

As part of this TMP, 2016 traffic counts were collected from the Utah Department of Transportation (UDOT) which included average annual daily traffic (AADT) volumes defined in *Traffic on Utah Highways,* and manual traffic counts were also performed on many of the City owned roadways within Saratoga Springs in 2016. **Figure 2-3** illustrates Saratoga Springs' 2010-2012 traffic volumes on selected major streets and their corresponding LOS. Based on the analysis of these traffic count data, there are currently no major concerns with the Saratoga Springs roadway network or intersections because they are all operating at LOS D or better.

2.5 Alternative Transportation Modes

Alternative transportation modes to passenger vehicles are an important part of the overall transportation system. A complete transit system may include bus, bus rapid transit (BRT), light rail, commuter rail, and van share facilities. Non-Motorized traffic includes pedestrians, bicyclists, hikers, horse-back riders, and joggers/walkers. These modes of transport should be accommodated wherever feasible in a vibrant and sustainable transportation system.

2.5.1 Non-Motorized Traffic

Non-motorized traffic is also very important and Saratoga Springs is committed to providing a trails network for bicycle and pedestrian traffic for both recreational and other trips. Saratoga Springs is a recreational hotspot on the west side of Utah Lake due to its proximity to Utah Lake and many off-road biking and hiking trails in the western mountains.

Trails serve many purposes from recreational uses to commuting to and from work and home. They also serve a diverse group of users including children, bicyclists, walkers/joggers, and equestrian users. In November 2011, Saratoga Springs adopted their current Parks, Recreation, Trails, and Open Space Master Plan. The master plan sought to inventory the City's existing facilities as well as provide recommendations for future parks, trails, recreational programs, etc. Saratoga Springs recognized that trails are a vital portion of any good transportation network; therefore this TMP should be supplemented by the Trails portion of the Parks, Recreation, Trails, and Open Space Master Plan.

2.5.2 Transit

The Utah Transit Authority (UTA) is the provider of public transportation throughout the Wasatch Front. It operates fixed route buses, express buses, BRT lines, ski buses, light rail, and commuter rail. In this capacity, UTA is responsible for the operation of the transit network in Saratoga Springs. It is the responsibility of the City to promote transit operations and planning in order to provide public transportation options to its residents.

Saratoga Springs currently has a very limited transit system. Route 806 runs from Eagle Mountain, through Saratoga Springs, to the Lehi FrontRunner station. Maps for the existing route 806 can be found in the appendix of this report.

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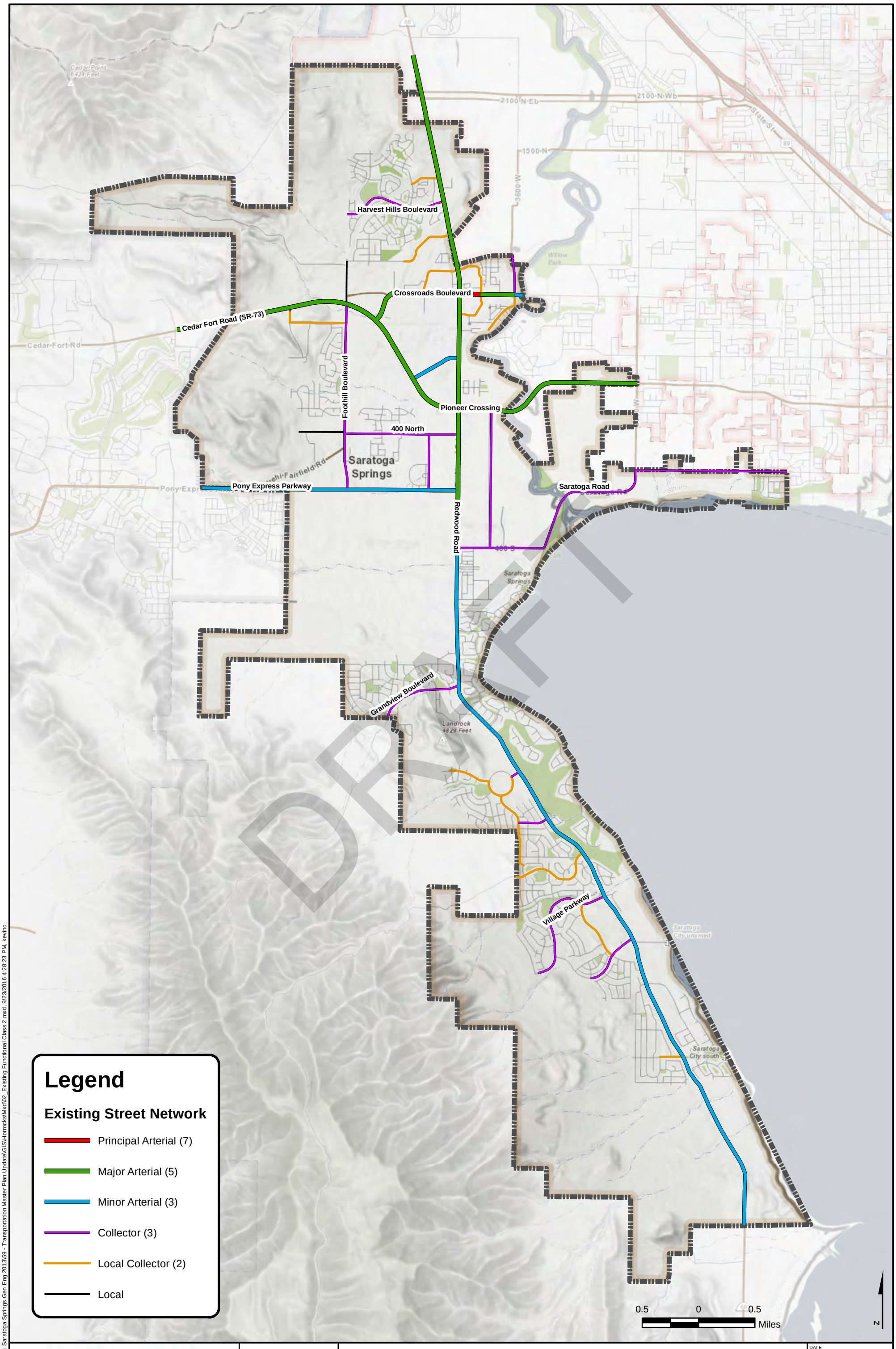

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2162 West Grove Parkway
Suite 400
Pleasant Grove, UT 84062
(801) 763-5100

Existing Roadway Network

Saratoga Springs Transportation Master Plan

DATE 9/23/2016

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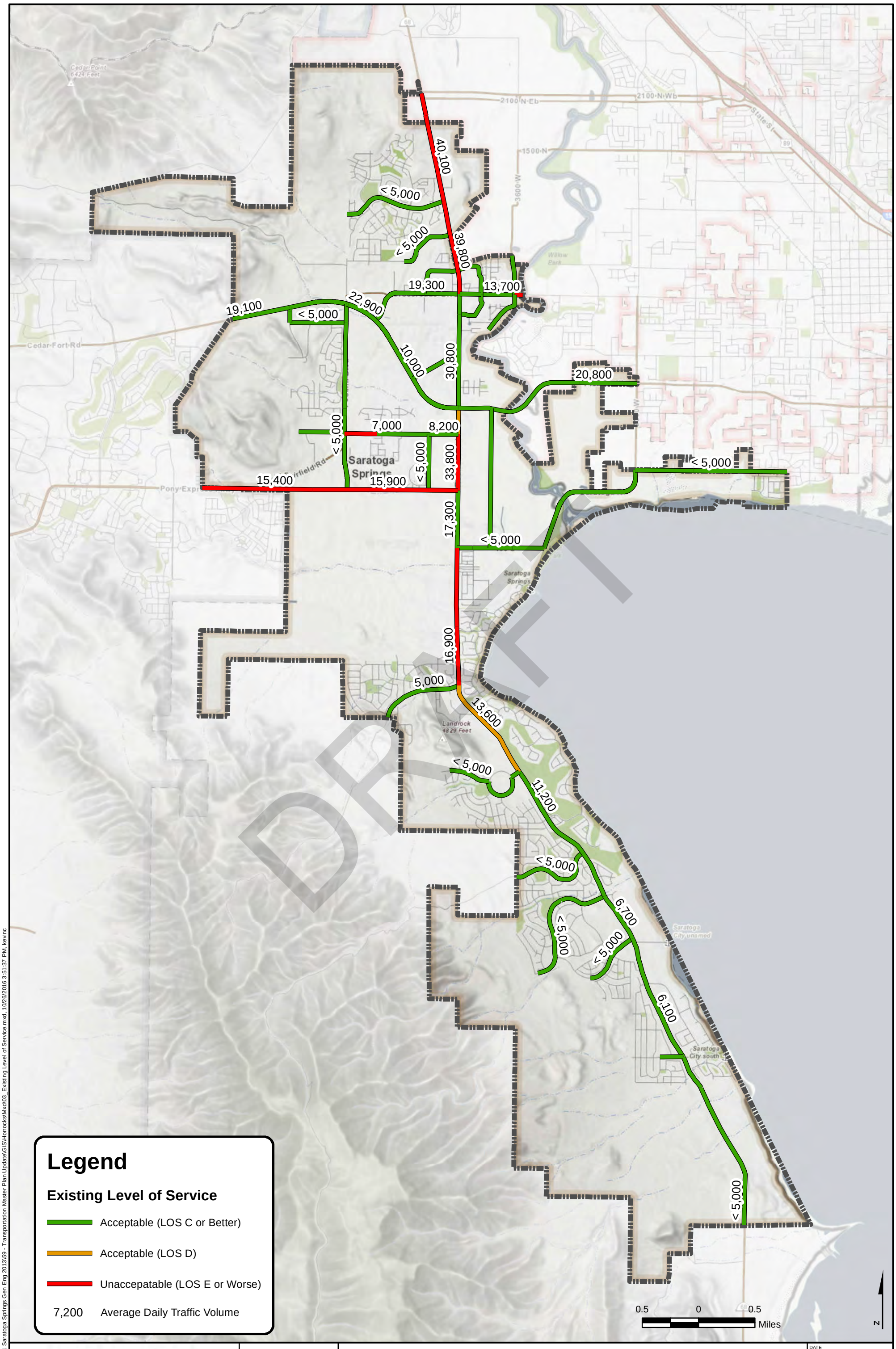
Figure 2-2



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Existing Level of Service

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DATE 10/26/2016

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Figure 2-3

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3.0 Future Conditions

Future traffic patterns and the resulting operating conditions of a roadway network are directly related to land use planning and socioeconomic conditions. As traffic is not restricted to the Saratoga Springs area, and many of the roadways within the City act as regional east-west roads linking Eagle Mountain and Lehi, the socioeconomic and land use data in the neighboring cities must also be considered when projecting future traffic conditions within the City. Thus, socioeconomic information was obtained from Mountainland Association of Governments (MAG).

3.1 Future Socioeconomic Conditions

The projected socioeconomic data used in this study comes mostly from the MAG travel demand model which is based upon the best available statewide data provided by the Governor's Office of Planning and Budget (GOPB). This data was supplemented and verified using the data provided by Zion's Bank as part of the IFFP and the City planning department in the form of the adopted General Plan Land Use map and Zoning map (see **Figure 3-1**). This information is considered the best available for predicting future travel demand; however, land use planning is a dynamic process and the assumptions made in this report should be used as a guide and should not supersede other planning efforts.

Based on the current land use, zoning, demographics, and growth patterns, Saratoga Springs is expected to grow to approximately 79,000 residents by the year 2040 (**Table 3-1**). This forecasted growth will place increased pressure on the City's infrastructure including its street system. Saratoga Springs is also committed to increasing its commercial, office, and retail base providing greater opportunity for its residents to live, work, and play in the City. This growth will have considerable impact on traffic volumes. The projected traffic volumes for the planning year 2040 show a corresponding increase with traffic growth of up to 550 percent on many of the City's arterial and collector roads.

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Table 3-1 Saratoga Springs City Projected Population Growth

Year	*Population*	*Population Change*	*Population Change %*
2000	1,003	-	-
2006	10,750	9,747	972%
2010	17,781	7,186	65%
2020	33,514	15,733	88%
2030	58,496	24,982	75%
2040	**78,987**	**20,491**	**35%**

Source: Governor's Office of Planning and Budget & Mountainland Association of Governments

Saratoga Springs aims to plan for and encourage responsible and sustainable growth in the City. Today's transportation system should not only accommodate existing travel demands, but should also have built-in capacity to account for the demand which will be placed on the system in the future. While considering the socioeconomic data used in this report and the anticipated growth in the City, some precautions should be considered. First, the TAZ specific socioeconomic data only approximates the boundary conditions of the City and is based on data provided by MAG and the City's planning documents. Second, actual values may vary somewhat as a result of the large study area of the regional travel demand model which includes the unincorporated areas around Saratoga Springs. Therefore the recommendations in this report represent a planning level analysis and should not be used for construction of any project without review and further analysis.

As the designated Metropolitan Planning Organization (MPO) for the Utah Valley area, MAG, organized in 1972, is largely responsible for regional transportation planning in the three county region of Summit, Wasatch and Utah counties. In this capacity, MAG produces a 30 year Long Range Transportation Plan (LRTP) and a 5 year Transportation Improvement Program (TIP). Both of these products are constrained by reasonably available revenue. As a result, the LRTP does not always include the regional facility improvements which are planned by local communities. This TMP makes great efforts to supplement the regional plans produced by MAG and to provide direction for future regional planning efforts that will include Saratoga Springs City.

3.2 Future Land Use

In its General Plan Land Use Map, the City has sites planned for low, medium, and high density residential, neighborhood and regional parks, schools, commercial and office uses as well as large research and development properties. There are also a number of planned communities in the General Plan Land Use Map which are currently in the planning phase. These areas were identified and reviewed individually in addition to the MAG land use assumptions.

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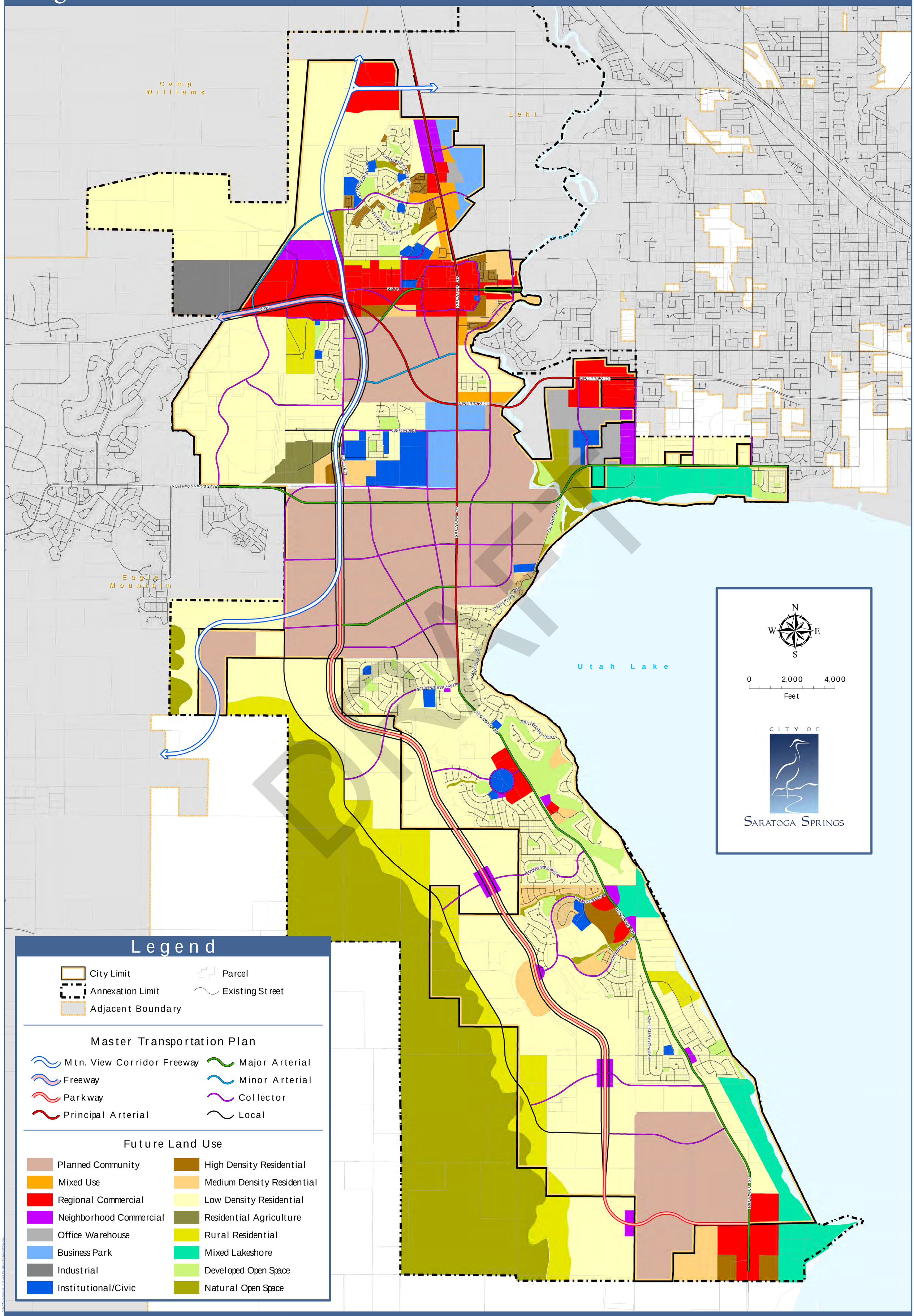
Figure 3-1 General Land Use Plan



Adopted by Ordinance on 17 April 2012. Map produced 20 June 2012

3.3 Travel Model Development

Projecting future travel demand is a function of projected land use and socioeconomic conditions. The MAG travel demand model was used to predict future traffic patterns and travel demand. The travel demand model was modified to reflect better accuracy through the Saratoga Springs area in by creating smaller TAZ and a more accurate and extensive roadway network. Existing conditions were simulated in the travel demand model and compared to the observed traffic count data to get a reasonable base line for future travel demand. Once this effort was completed, future land uses and socioeconomic data was input into the model to predict the roadway conditions for the design year 2040. 2040 was selected as the design year in order to be consistent with the MAG planning process. TransPlan40 (available at www.mountainland.org) was adopted by the Mountainland MPO Regional Planning Committee in 2015. The transportation plan is a guide to maintain and enhance the regional transportation system for urbanized Utah County.

3.4 Projected Traffic Volumes and Conditions

The resulting outputs of the travel demand model were made up of traffic volumes on all of the classified streets in the City and surrounding area. This data was used to identify the need for future roadway improvements to accommodate the projected growth in the City. The following three scenarios were analyzed in detail to assess the travel demand and resulting network performance in the City:

3.4.1 Existing Conditions

The 2016 existing conditions analysis relied heavily on new traffic count data on the major roadways in the City. This data included daily traffic volumes and peak hour traffic volumes. This analysis provided the opportunity to identify any existing deficiencies in the system and to provide a baseline for future demand. The existing roadway conditions have been previously identified in **Figure 2-3**.

3.4.2 No-Build Conditions

A no-build scenario is intended to show what the roadway network would be like in the future if no action is taken to improve the City roadway network. The travel demand model was again used to predict this condition by applying the future growth and travel demand to the existing roadway network. As shown in **Figure 3-2**, if no improvements are made to Saratoga Springs' transportation infrastructure, projected traffic volumes for the planning year 2040 will significantly lower the LOS of many of the major streets throughout the City. Improvements will need to be made as growth occurs in order to preserve the quality of life for Saratoga Springs' residents and to maintain an acceptable LOS on City streets and intersections. These improvements will also provide a sound street system that will support the City's growing economic base. LOS for signals is very difficult to predict so far out into the future. It is expected that the signals in the City will continue to operate at LOS D or better as traffic patterns change and new roadways are added to the network. It is recommended that the intersections in the City be regularly monitored and signal timings adjusted as needed to maintain acceptable operating conditions.

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3.4.3 Recommended 2040 Roadway Conditions

Areas of future concern in Saratoga Springs' street system were identified using traffic models of existing and projected traffic volumes to evaluate existing and projected level of service conditions. A recommended roadway network was created for the planning year 2040. This network was developed through a series of iterations with input from City staff, planning commission and city council. The final recommended roadway network seeks to balance accommodating demand through the year 2040 with fiscal responsibility while also considering the planning efforts of MAG and the neighboring cities. The culmination of this analysis as well as the efforts of the Planning Commission and City Council is shown as a recommended 2040 roadway network in **Figure 3-3**. It is expected that the roadway network recommended in this document will perform at an acceptable LOS through the planning year 2040. This will help in preserving the quality of life and economic vitality of the City. The specific details of the recommended roadway network are discussed more extensively in **Section 4.0**.

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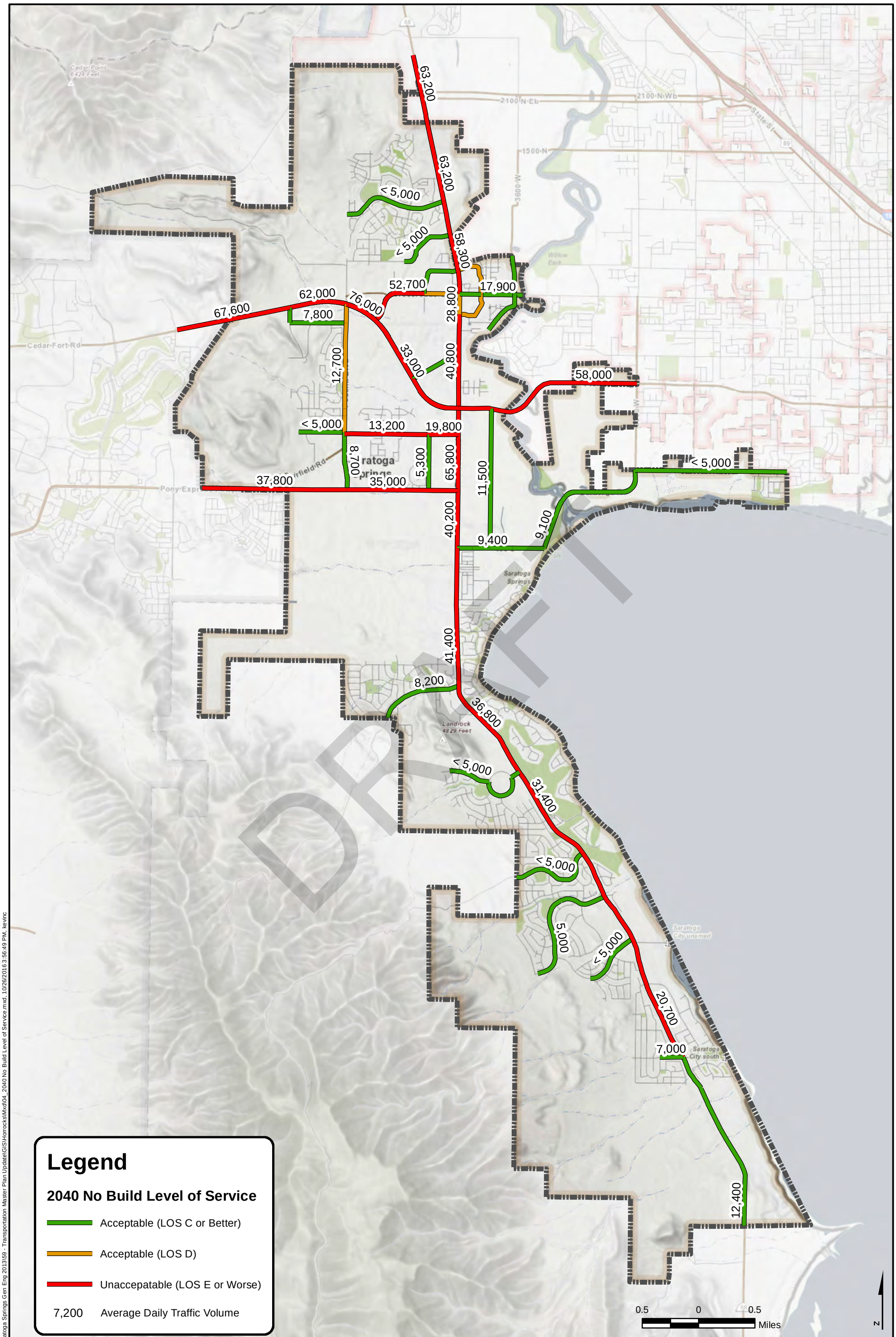

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Legend

2040 No Build Level of Service

- Acceptable (LOS C or Better)
- Acceptable (LOS D)
- Unaccepatable (LOS E or Worse)
- 7,200 Average Daily Traffic Volume

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2040 No Build Level of Service

Saratoga Springs Transportation Master Plan

DATE 10/26/2016
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Figure 3-2

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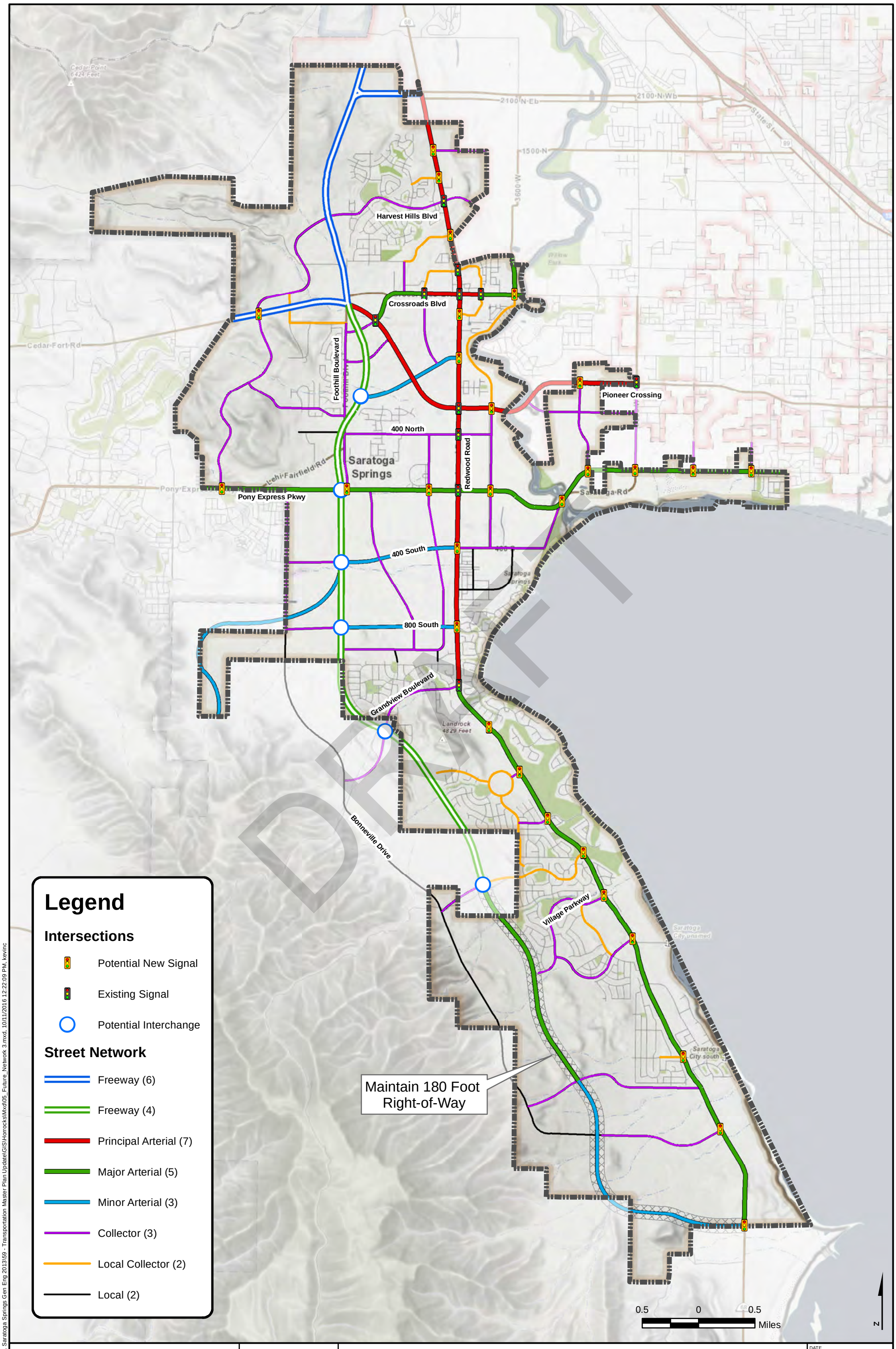

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2040 Proposed Network

Saratoga Springs Transportation Master Plan

DATE 10/11/2016

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Figure 3-3

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3.5 Alternative Transportation Modes

Accommodating alternative modes of transportation than the passenger vehicle is a vital consideration when planning a livable and sustainable community. As a vibrant and growing city it is important for Saratoga Springs to continue to plan for improved transit, trails, and pedestrian facilities. These facilities, whilst improving the overall quality of life in the City, will also aid in relieving congestion and increasing the lifespan of the City's roadway network.

3.5.1 Non-Motorized Traffic

Pedestrian safety is an important feature of the TMP. The recommended typical roadway sections include an 8 foot wide side-walk (5 foot on collector and local streets) with park strips varying from 9 to 16 feet. These figures are based on the classification of the roadway and serve to provide a buffer for pedestrians from vehicular traffic creating a more sustainable and walkable community.

The Parks, Recreation, Trails, and Open Space Master Plan should be used as a reference for the transportation planning efforts in terms of trails and pedestrian facilities in the future. The current version of this plan can be found on the city's website www.saratogaspringscity.com.

3.5.2 Transit

Saratoga Springs does not and is not likely to operate and maintain its own transit system. The combined efforts of UTA, MAG, and the City will largely dictate the nature of a future expanded transit system. The City should be actively involved in promoting transit as a viable and attractive alternative transportation mode in the City. These planning and lobbying efforts will assist in procuring the necessary funding and support to develop, implement, and maintain a sustainable transit system.

The existing UTA bus line Route 806, from Eagle Mountain/Saratoga Springs to the Lehi Frontrunner station, is unlikely to continue to meet the growing needs of the City in the future and may be supplemented by an additional express bus specifically between Saratoga Springs and Salt Lake City. Additional bus routes will likely be added by UTA as the city expands and should be restricted to collectors and arterial streets.

Due to the relatively large distances between the residential developments to the north and south and the commercial/retail center at Commerce Drive, a local bus system connecting these two areas may be beneficial as time progresses and population increases. This would allow those who prefer public transit to commute from the residential south to either work or shop in the commercial/retail district. As more commercial/retail zones develop in the City, further local bus routes should be considered linking these areas. A local bus system also allows more flexibility for captive riders (those with no other means of transportation) to live, play, and work/shop at a greater distance increasing their housing and employment options.

Light Rail (TRAX) has been operating in Salt Lake County for more than a decade. There are currently three lines in operation with two more under construction and are expected to open before 2015. There are no existing or under construction TRAX lines in Utah County. According to MAG TransPlan40, the first

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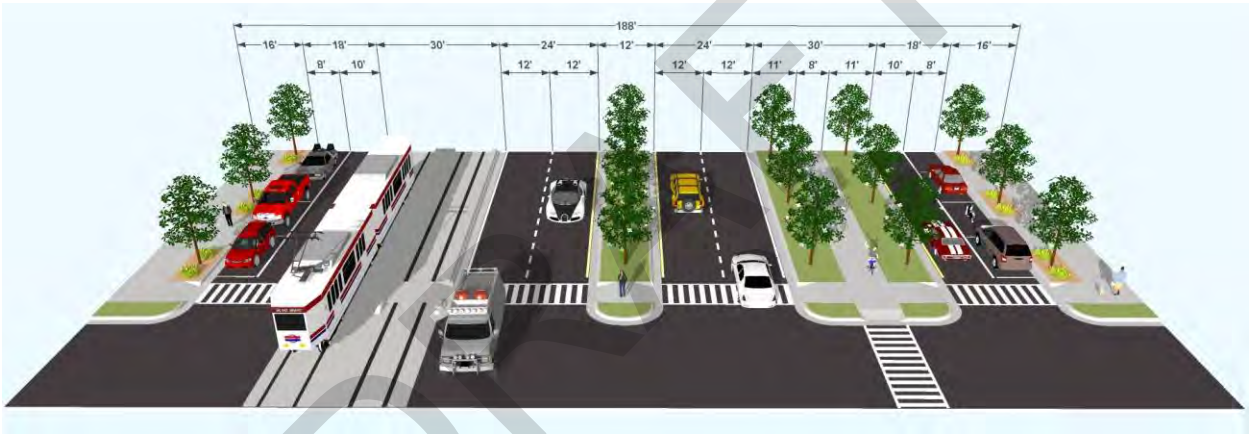
TRAX line in Utah County will be an extension of the planned Draper line and is not anticipated to come online before 2040. Due to the importance of a transit network to Saratoga Springs, and at the request of several major land holders in the City, a TRAX line is being proposed as part of the TMP. This line will connect the Draper line extension to Saratoga Springs. The City is committed to promoting this TRAX line and coordinating with landowners, UTA and MAG to implement this transit improvement. **Figure 3-4** shows a concept design for the Pioneer Crossing Extension including a TRAX line and frontage roads. The four lane mainline would consist of 12' travel lanes (2 in each direction) separated by a 12' landscaped median. To the left of the travel lanes, (in the case of the Pioneer Crossing extension the south side) is a 30' right-of-way reserved for light rail TRAX trains or commuter rail (FrontRunner). This would be room enough to provide one track in each direction. An 8' trail is provided on the north side of the road (right in the diagram) in another 30' right-of-way. On each side of the road is an 18' frontage road with on street parking what will provide access to adjacent properties.

Figure 3-4 Concept Pioneer Crossing Extension Cross-Section



The most recent addition to the Utah statewide transportation system is UTA's FrontRunner commuter rail line. The line connects Salt Lake, Davis, and Weber counties with stations in Salt Lake City, Woods Cross, Farmington, Layton, Clearfield, Roy, and Ogden. Each station has a connection to the TRAX and bus networks. FrontRunner is a push/pull locomotive system, which can travel up to 79 mile per hour. Construction has been completed on an extension to the line that expanded the service from Salt Lake City to Provo. Future planned expansions will add service to Brigham City in the north and Payson in the South.

An essential consideration of a good transportation system is the ability to seamlessly transfer from one transportation mode to the next. This could be from car to commuter rail, bike to bus, or foot to light rail. Each of these transfers must be accomplished efficiently in order for a transit system to be attractive to users. One way to accomplish exceptional connectivity is with an intermodal center. Intermodal centers are transit hubs where multiple modes of transportation converge and passengers enter using one form of transportation and leave by another. Transfers can occur between as many modes as the physical space can permit. As part of the TRAX line proposal, the City is also planning an intermodal hub close to

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the Pioneer Crossing Extension that may provide a connection to each of the transportation modes planned in the City.

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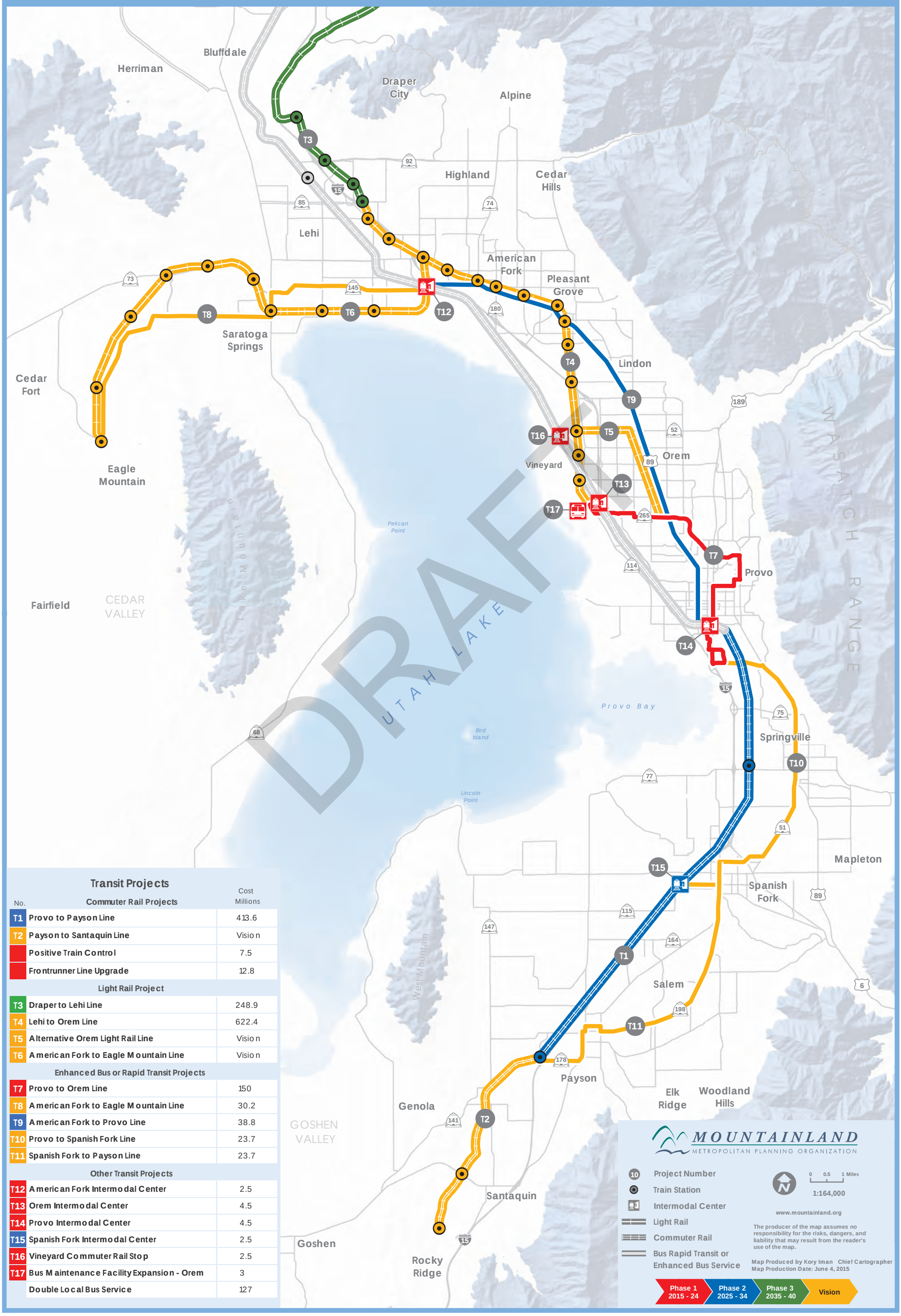
Transit

TransPlan40

Regional Transportation Plan
2015-2040 Plan for the Provo/Orem
Metropolitan Area



Transit Projects

No.	Commuter Rail Projects	Cost Millions
T1	Provo to Payson Line	413.6
T2	Payson to Santaquin Line	Vision
	Positive Train Control	7.5
	Frontrunner Line Upgrade	12.8
	Light Rail Project	
T3	Draper to Lehi Line	248.9
T4	Lehi to Orem Line	622.4
T5	Alternative Orem Light Rail Line	Vision
T6	American Fork to Eagle Mountain Line	Vision
	Enhanced Bus or Rapid Transit Projects	
T7	Provo to Orem Line	150
T8	American Fork to Eagle Mountain Line	30.2
T9	American Fork to Provo Line	38.8
T10	Provo to Spanish Fork Line	23.7
T11	Spanish Fork to Payson Line	23.7
	Other Transit Projects	
T12	American Fork Intermodal Center	2.5
T13	Orem Intermodal Center	4.5
T14	Provo Intermodal Center	4.5
T15	Spanish Fork Intermodal Center	2.5
T16	Vineyard Commuter Rail Stop	2.5
T17	Bus Maintenance Facility Expansion - Orem	3
	Double Local Bus Service	127

4.0 Alternatives Evaluation and Recommendations

After evaluating the existing and future conditions, several recommendations to meet future travel demand are outlined in this section.

4.1 Roadway Functional Classification

A major reason for transportation planning is to provide adequate transportation solutions for connectivity with the surrounding region while at the same time preserving the quality of life of the residents in the City. The key to maintaining this balance exists in the ability to adequately plan for major corridors that minimize through traffic in neighborhoods, while at the same time coordinating land use and transportation plans that capitalize on the efficient movements of people and goods. To accomplish this objective, this TMP defines a hierarchy of streets known as a Functional Classification of Streets. The following street classifications have been selected by Saratoga Springs for inclusion in the TMP:

- Freeway
- Parkway
- Principal Arterial
- Major Arterial
- Minor Arterial
- Collector
- Local Road

Each of these roadway classifications has a specific purpose and function. Access and mobility are competing functions. This recognition is fundamental to the design of roadway systems that preserve public investments, contribute to traffic safety, reduce fuel consumption and vehicle emissions, and do not become functionally obsolete. Suitable functional design of the roadway system also preserves the private investment in residential and commercial development.

A typical trip on an urban street system can be described as occurring in identifiable steps. These steps can be sorted into a definite hierarchy with respect to how the competing functions of mobility and access are satisfied. For example, the primary purpose of an arterial street is to move large volumes of traffic at higher speeds and provide access to collector roads and higher density retail and commercial land uses. Some key arterial streets that currently traverse the City of Saratoga Springs include Redwood Road, Pioneer Crossing, and SR-73. At the low end of the hierarchy are local streets that provide good access to abutting properties, but provide limited opportunity for through movement. Collector roads provide a transition between arterials and local roadways by providing both access and traffic moving capacity.

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Examples of existing collector roads within the City include Harvest Hills Blvd or Parkway Blvd. Collector type facilities serve moderate traffic volumes at moderate speeds. At the highest end of the hierarchy are freeway facilities that provide good mobility by limiting and controlling access to the roadway, thereby reducing conflicts that slow the flow of through traffic.

Roadway specialization simply means using each individual street facility to perform the desired mix of functions of access or movement. This is accomplished by classifying highways with respect to the amount of access or mobility they are to provide and then identifying and using the most effective facility to perform that function.

Many of the major streets in Saratoga Springs pass through residential areas with homes fronting the roadways. The typical street section (or street width) has been designed to lessen the impacts of needed roadway widening improvements to these homes. The typical cross-sections and configurations showing total right-of-way width, pavement width, number of travel lanes, and side treatments (such as sidewalk and park strip) are illustrated in **Figure 4-1**.

Impacts to adjacent properties can be limited by applying minimal typical sections to stretches of roadway between intersections. Typically, intersections are choke points in a traffic system. Capacity can be maximized by providing sufficient left and right turn pockets to accommodate at least the average expected peak hour queue as well as lane widths at intersections. Treatments at intersections are discussed further in the section below entitled Intersection Improvements. Pedestrian and bicycle traffic should also be considered in the design of major roadways as discussed below.

The major arterial roadways that service vehicles traveling to and from Eagle Mountain and east Utah County are heavily used by through travelling traffic that do not originate or terminate their trips in Saratoga Springs. These high traffic volumes will continue to strain Saratoga Springs' east-west traffic facilities, particularly as population continues to increase in Lehi and Eagle Mountain.

There are roadway segments along the Foothill Blvd. southern extension where larger than typical ROW is required. Although smaller roadway segments are planned, ROW for future development past 2040 may require 180 feet of ROW and are indicated in **Figure 3-3**.

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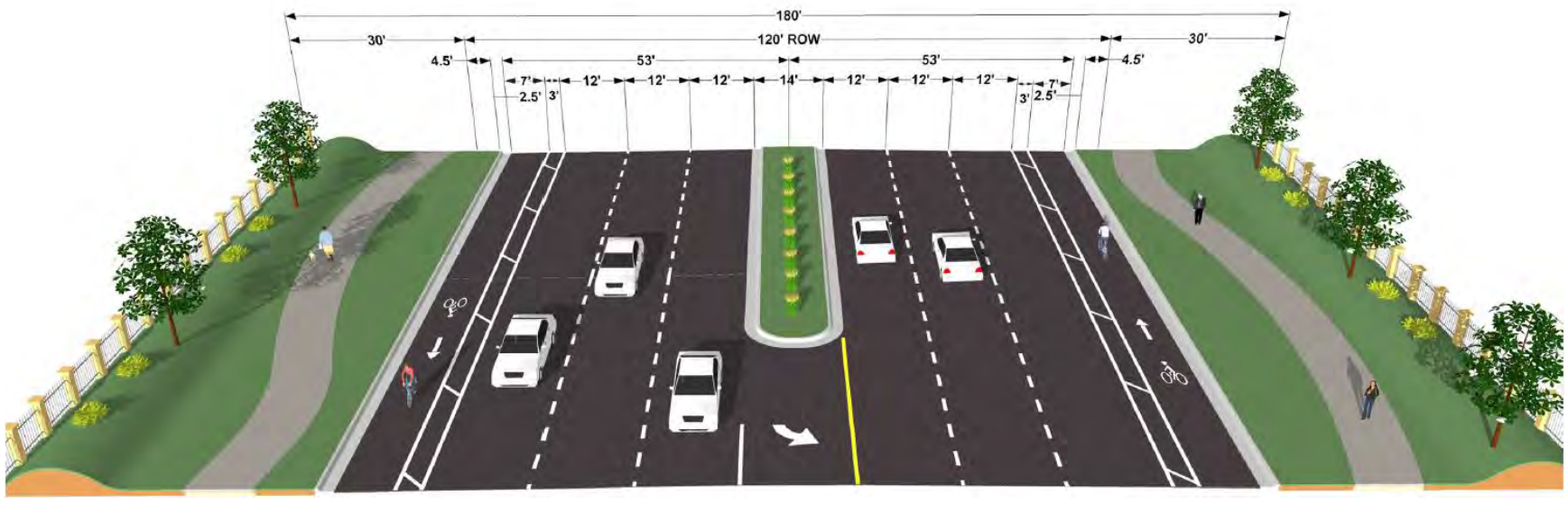
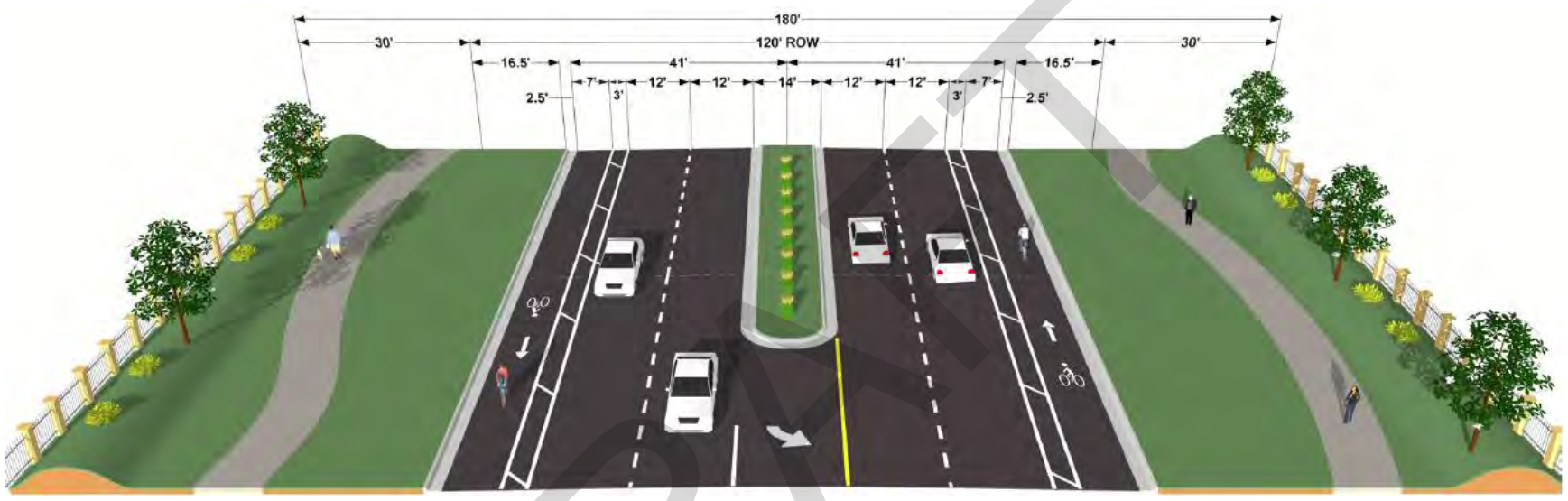
Figure 4-1 Roadway Typical Sections

7-Lane Principal Arterial



5-Lane Major Arterial



3-Lane Minor Arterial

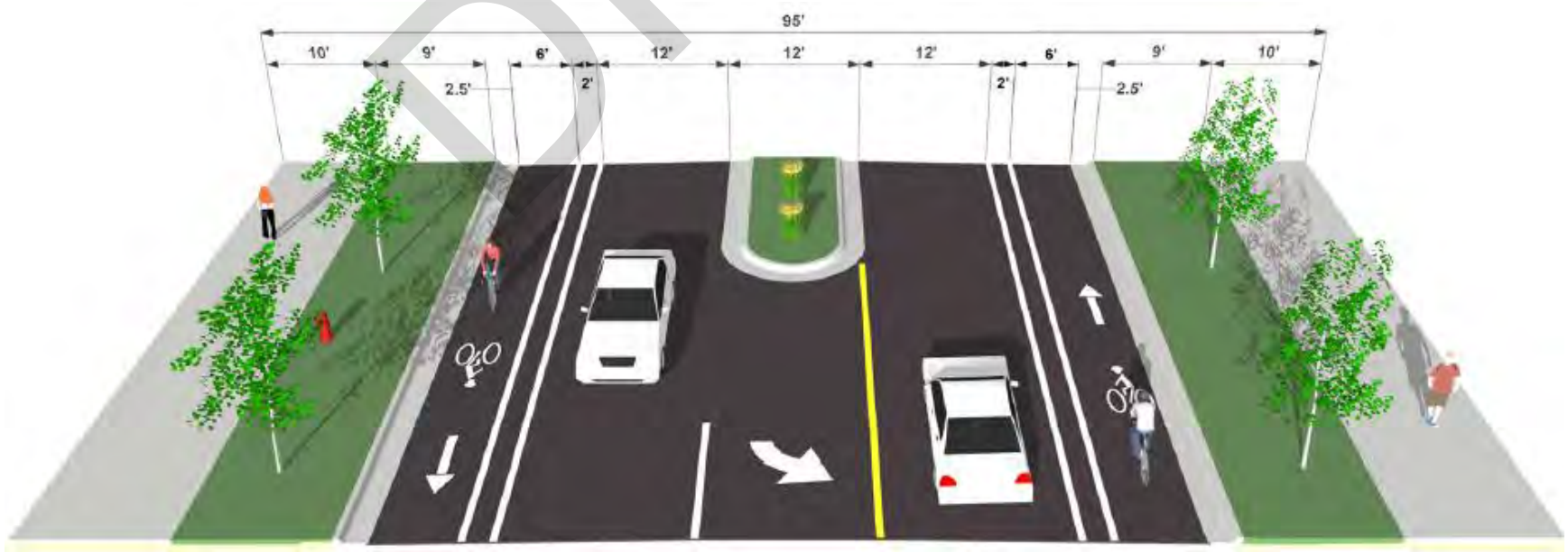


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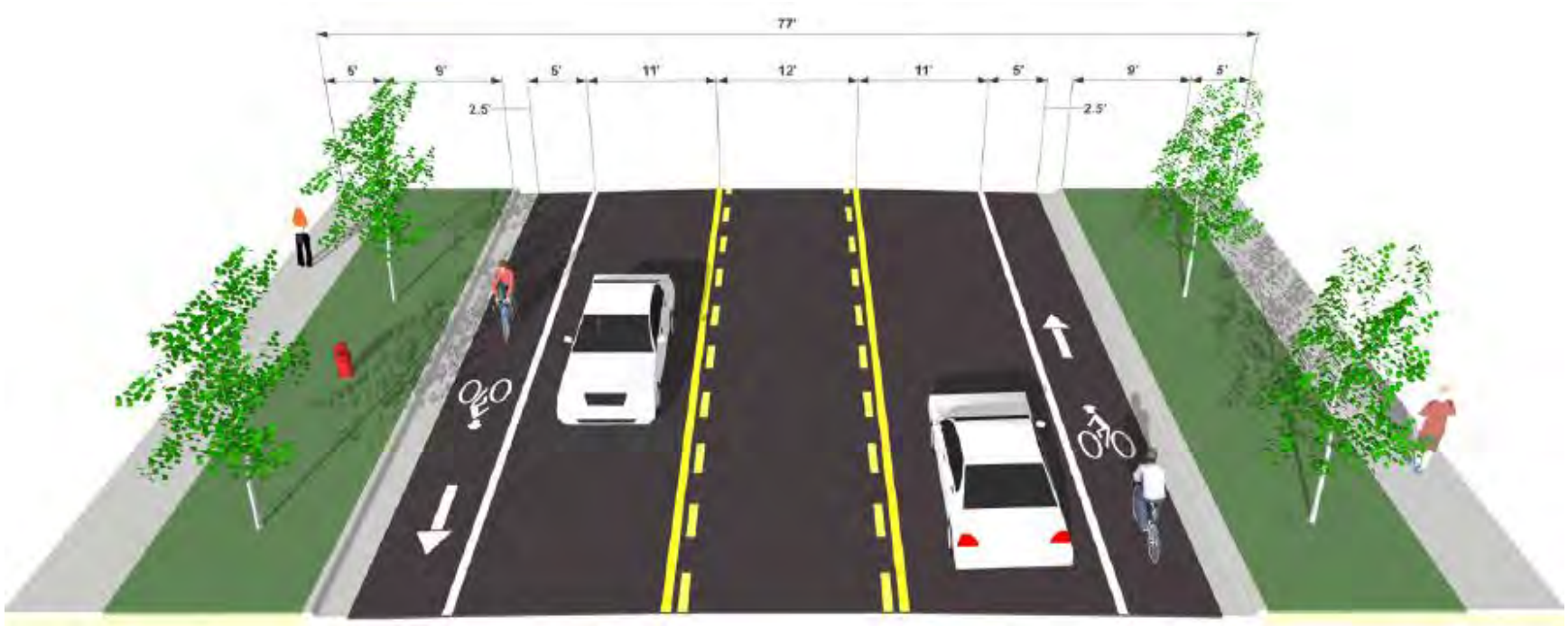
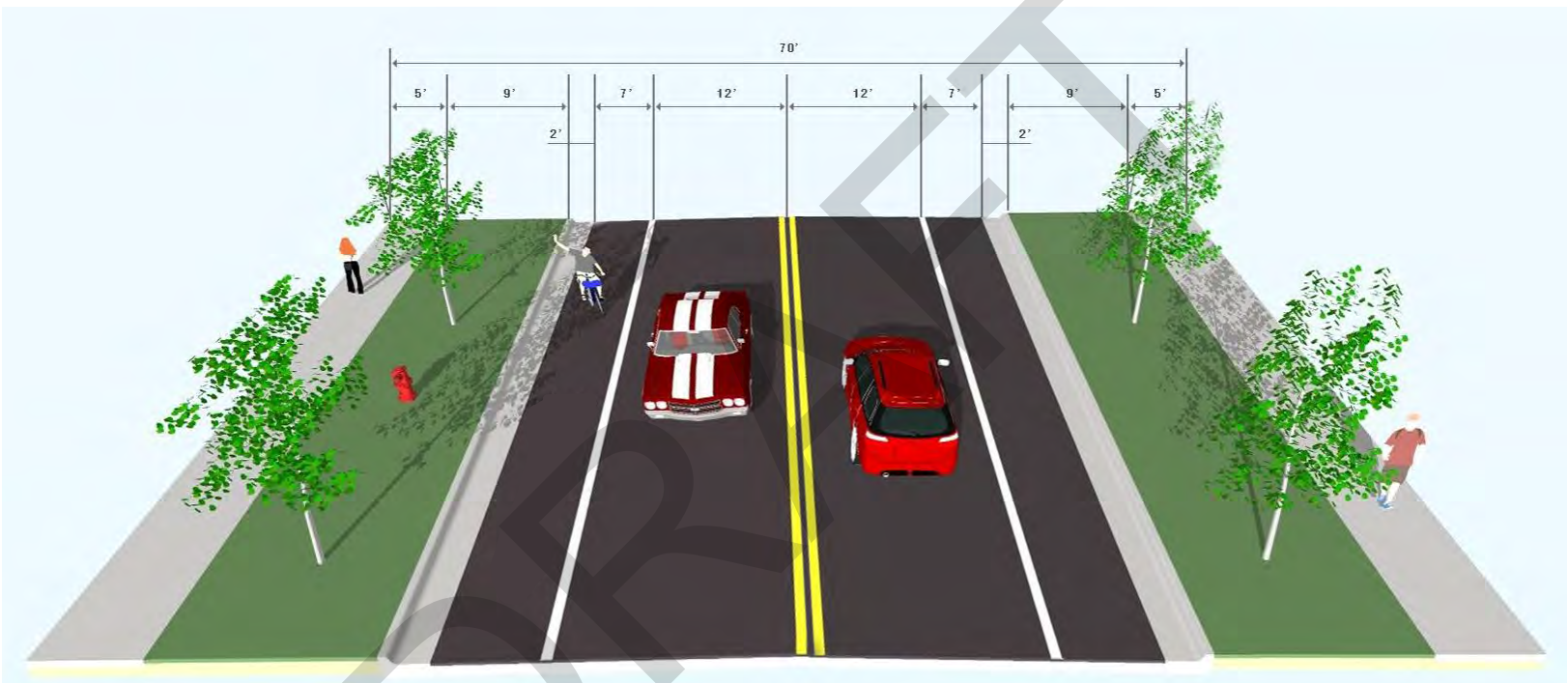
Figure 4-1 Continued

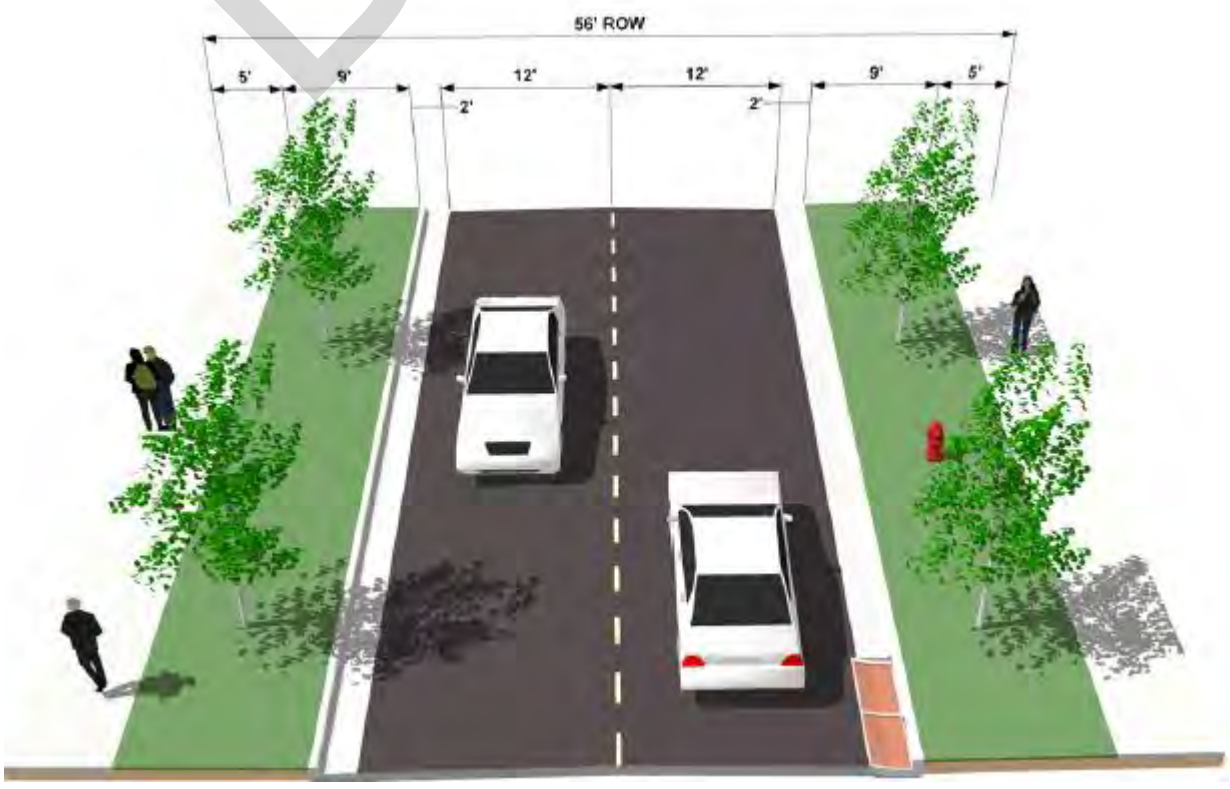
3-Lane Collector



2-Lane Local Collector



Local Street



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4.2 Access Management

Access management is the practice of coordinating the location, number, spacing, and design of access points to minimize site access conflicts and maximize the traffic capacity and safety of a roadway. Uncoordinated growth along major travel corridors often results in strip development and a proliferation of access points. In many of these instances, each individual development along the corridor has its own access driveway. Numerous access points along major travel corridors create unnecessary conflicts between turning and through traffic which causes delays and accidents. Numerous benefits are derived from controlling the location and number of access points to a roadway. Those benefits include:

- Improving overall roadway safety
- Reducing the total number of vehicle trips
- Decreasing interruptions in traffic flow
- Minimizing traffic delays and congestion
- Maintaining roadway capacity
- Extending the useful life of roads
- Avoiding costly highway projects
- Improving air quality
- Encouraging compact development patterns
- Improving access to adjacent land uses
- Enhancing pedestrian and bicycle facilities

All access management standards are included in this TMP as a reference. As guidelines and standards are updated frequently, the access management guidelines and standards used for development and construction are included in the Saratoga Springs Engineering Standards. Please contact the City for more information on how to access the Engineering Standards.

4.2.1 Principles of Access Management

Constantly growing traffic congestion, concerns over traffic safety, and the ever increasing cost of upgrading roads have generated interest in managing the access to not only the highway system, but to surface streets as well. Access management is the process that provides access to land development while simultaneously preserving the flow of traffic on the surrounding road system in terms of safety, capacity, and speed. Access management attempts to balance the need to provide good mobility for through traffic with the requirements for reasonable access to adjacent land uses.

Arguably the most important concept in understanding the need for access management is to insure the movement of traffic and access to property is not mutually exclusive. No facility can both move traffic efficiently and provide unlimited access at the same time. **Figure 4-2** shows the relationship between mobility, access, and the functional classification of streets. The extreme examples of this concept are freeways and cul-de-sacs. Freeways move traffic very well with few opportunities for access, while the

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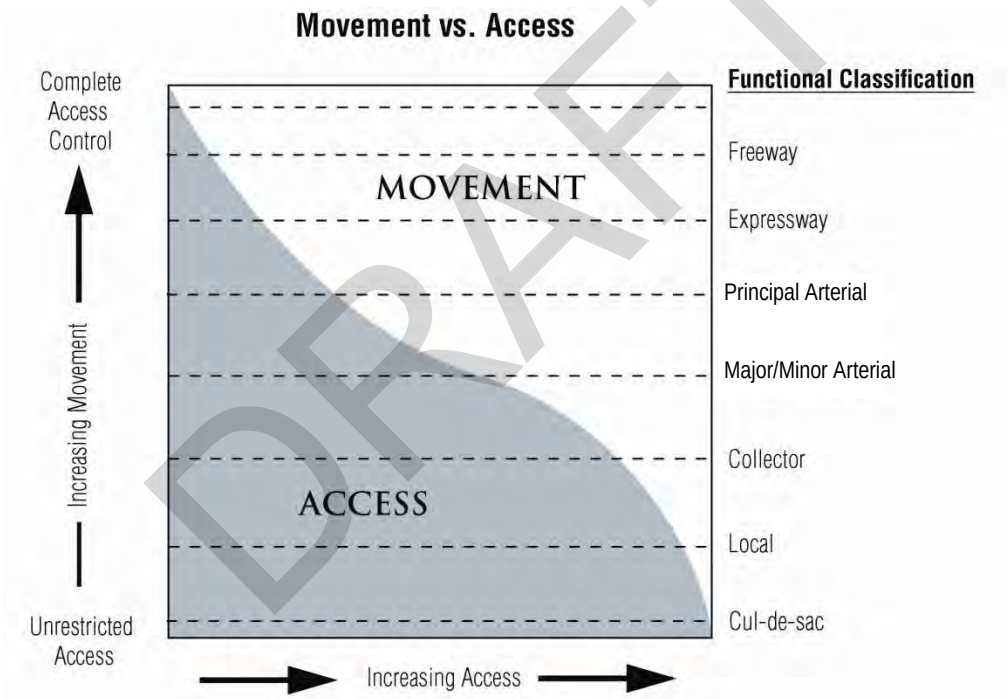
cul-de-sac has unlimited opportunities for access, but doesn't move traffic very well. In many cases, accidents and congestion are the result of streets trying to serve both mobility and access at the same time.

A good access management program will accomplish the following:

- Limit the number of conflict points at driveway locations
- Separate conflict areas
- Reduce the interference of through traffic
- Provide sufficient spacing for at-grade, signalized intersections
- Provide adequate on-site circulation and storage

Figure 4-2 Mobility vs. Access by Functional Classification



Access management attempts to put an end to the seemingly endless cycle of road improvements followed by increased access, increased congestion, and the need for more road improvements.

Poor planning and inadequate control of access can quickly lead to an unnecessarily high number of direct accesses along roadways. The movements that occur on and off roadways at driveway locations, when those driveways are too closely spaced, can make it very difficult for through traffic to flow smoothly at desired speeds and levels of safety. The American Association of State Highways and Transportation Officials (AASHTO) state that "the number of accidents is disproportionately higher at driveways than at other intersections…thus their design and location merits special consideration." Studies have shown that

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anywhere between 50 and 70 percent of all crashes that occur on the urban street system are access related.

Fewer direct accesses, greater separation of driveways, and better driveway design and location are the basic elements of access management. There is less occasion for through traffic to brake and change lanes in order to avoid turning traffic when these techniques are implemented uniformly and comprehensively.

Consequently, with good access management, the flow of traffic will be smoother and average travel speeds higher, with less potential for crashes. Before and after analyses by the Federal Highway Administration (FHWA), show that routes with well managed access can experience 50 percent fewer accidents than comparable facilities with no access controls.

Through the development review and approval process, the City will evaluate proposed access points using the principles described above.

4.2.2 Roadway Network and Access Management Standards

The access management concepts and standards presented below are consistent with guidelines established by the Federal Highway Administration (FHWA), the American Association of State Highway and Transportation Officials (AASHTO), the Transportation Research Board (TRB), and the Institute of Transportation Engineers (ITE).

There are a number of access management techniques that can be used to preserve or enhance the capacity of a roadway. Specific techniques for managing access are discussed in this section and illustrated with examples. Not all techniques will apply to every situation. Some of them are more appropriate to less developed rural areas of the City, whereas others are more appropriate in the urban areas. In the urban areas, the techniques can be applied when existing sites are redeveloped or when negotiations with landowners are successful. Therefore, it is up to the City to determine what will work best based in each situation.

4.2.2.1 Number of Access Points

Controlling the number of access points or driveways from a site to a roadway reduces potential conflicts between cars, pedestrians, and bicycles. Each parcel should normally be allowed one access point and commercial properties should be required to share access where possible. Provisions can be made in the local land use regulations to allow for more than one access point where special circumstances would require additional accesses.

4.2.2.2 Spacing of Access Points

Establishing a minimum distance between access points reduces the number of points a driver has to observe and reduces the opportunity for conflicts. Spacing requirements should be based on the classification and design speed of the road, the existing and projected volume of traffic as a result of the

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proposed development, and the physical conditions of the site. Minimum spacing standards should be applied to both residential and commercial/industrial developments.

To ensure efficient traffic flow, new signals should be limited to locations where the progressive movement of traffic will not be impeded significantly. Uniform, or near uniform, spacing of signals is essential for the progression of traffic. As a minimum, signals should be spaced no closer than one-quarter mile (1,320 feet) on any street. On principal arterial streets, signaled should be placed no closer than one-half mile (2,640 feet).

Un-signalized accesses are far more common than signalized accesses. They affect all kinds of activity, not merely large activity centers. Traffic operational factors lead towards wider spacing of driveways (especially medium- and higher-volume driveways) include weaving and merging distances, stopping sight distance, acceleration rates, and storage distance for back-to-back left turns. From a spacing perspective, these driveways should be treated the same as public streets. Sound traffic engineering criteria indicates that 500 feet or more should be provided between full-movement un-signalized accesses.

Restricted access movement (i.e., right-in/right-out access) can provide for additional access to promote economic development with minimum impact to the roadway facility. This type of access should be spaced to allow for a minimum of traffic conflicts and provide distance for deceleration and acceleration of traffic in and out of the access. Restricting access on roads may create double frontage lots. This can be mitigated through landscape buffering. The UDOT recommended access spacing requirements are based on the functional classification of the roadway facility and are shown in **Table 4-1**.

Table 4-1 Access Spacing Based on Functional Classification

Functional Classification	Minimum Signal Spacing (ft.)*	Minimum Un-signalized Full-Movement Access Spacing (ft.)*	Minimum Right-In/Right-Out Access Spacing (ft.)*	Residential Driveways Permitted
Principal Arterial	2,640	660	350	No
Major Arterial	2,640	660	330	No
Minor Arterial	1,320	500	250	No
Collector	1,320	500	250	Discouraged
Residential Local	NA	125	100	Yes

*Distances to be measured from center of driveway to center of driveway

4.3 Safety

One of the main goals of the TMP and long term transportation planning in general is to envision traffic growth and provide for adequate facilities as the need arises. Constructing these future facilities to make possible safe operations is of equal importance. As a result, all of these facilities should be constructed and maintained to applicable design and engineering standards such as those set forth in Saratoga Springs City ordinances, the American Association of State Highway Transportation Officials (AASHTO) "Policy on Geometric Design of Highways and Streets," and the Manual on Uniform Traffic

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Control Devices (MUTCD). This includes implementing applicable Americans with Disabilities Act (ADA) standards and school zone treatments.

4.3.1 Driveways

One safety item that deserves attention is the interaction of driveways on collector and arterial streets. Where accesses do exist on these roadways, sufficient space should be provided to allow vehicles to turn around on site so that they always exit the driveway facing the street. For example, private residences ought to have circular type driveways in order to safely enter and exit the driveway with ease. Backing maneuvers into busy streets can be very dangerous as this is not a typical action drivers expect. On-street parking on busy streets should be parallel to traffic where possible as opposed to perpendicular to traffic to avoid dangerous backing maneuvers into traffic.

4.3.2 Offset Intersections

Offset intersections often have negative impacts on traffic flow and can potentially create capacity problems at intersections where the left turn storage areas overlap, forcing queued vehicles into through traffic lanes. Aligning access on both sides of the street will minimize conflict points in the roadway and provided safer and more efficient traffic flow. Offset intersections should be avoided wherever possible.

4.4 Intersection Improvements

As traffic volumes increase throughout the community, intersection design will become more critical. Proper intersection design will typically facilitate larger traffic flows without widening existing roadway cross-sections. This can minimize impacts to adjacent properties. Therefore, emphasis was placed on identifying critical intersections during the traffic modeling process.

Intersections are a critical element to future functionality. Intersections should provide sufficient turn lanes and adequate queuing lengths. In the future, many intersections throughout the City may require signalization in order to maintain a desirable LOS (see **Figure 3-3**). Stop signs and traffic signals should not be used where not warranted. Studies have shown that in areas where there forms of control have been installed, and not warranted, that the motoring public will disregard the control measure and therefore the right-of-way assignments at that location. This disregard for traffic control devices causes hazardous locations and a general disregard for other traffic control measures in the area.

4.4.1 Stop Sign Warrants

The MUTCD should be used as the standard for determining how and when a stop sign is installed. As stated in the MUTCD, "Stop signs should be used if engineering judgment indicates that one or more of the following conditions exist:

- **Intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law;**
- **Street entering a through highway or street;**
- **Un-signalized intersection in a signalized area; and**
- **High speeds, restricted view, or crash records indicate a need for control by the stop sign.**

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The number of vehicles that are required to stop should be minimized if at all possible to preserve capacity and functionality of the roadway network; therefore, when deciding which road to stop, the street carrying the lowest volume of traffic should be chosen. Less restrictive traffic control such as a yield sign can be used as an alternative to stop signs if at all possible to minimize delays. Yield signs should also be installed per the MUTCD guidelines. Stop signs should not be used to control speed, but to designate right-of-way at intersecting roadways. Multi-way stop control may be used as a safety measure at intersections where the volume of traffic is approximately equal for all approaches and where safety is of concern, or as an interim measure where a traffic signal is justified and has yet to be installed. Engineering judgment and the guidelines outlined in the MUTCD should be used to determine the appropriate application of stop and yield signs.

4.4.2 Traffic Signal Warrants

Traffic signals should not be installed unless at least one or more of the eight traffic signal warrants (as outlined in the MUTCD) have been met. Even if warrants are met for a particular intersection, justification for should still be based on information obtained through engineering studies and comparisons with the requirements set forth in the MUTCD. As stated in the MUTCD, "the satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal." The eight warrants outlined in the MUTCD include the following:

- **Warrant 1: Eight-Hour Vehicular Volume**
- **Warrant 2: Four-Hour Vehicular Volume**
- **Warrant 3: Peak Hour**
- **Warrant 4: Pedestrian Volume**
- **Warrant 5: School Crossing**
- **Warrant 6: Coordinated Signal System**
- **Warrant 7: Crash Experience**
- **Warrant 8: Roadway Network**

4.4.3 Roundabout Intersections

Many communities in the United States are beginning to embrace the concept of roundabouts. A roundabout is an intersection control measure used successfully in Europe and Australia for many years. A roundabout is composed of a circular, raised, center island with deflecting islands on the intersecting streets to direct traffic movement around the circle. Traffic circulates in a counter-clockwise direction making right turns onto the intersecting streets. There are no traffic signals; rather, entering traffic yields to vehicles already in the roundabout.

Advantages of roundabouts include reduced traffic delays, increased safety and reduced right-of-way requirements. They can reduce delays compared to a signalized intersection due to the stop phase being eliminated. At the same time, roundabouts can improve safety because the number of potential impact points, and the number of conflict points the driver must monitor, are both substantially reduced over a conventional four-way intersection. Properly designed roundabouts can also accommodate emergency vehicles, trucks, and snow plowing equipment.

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Unlike the typical New England "traffic circle" or "rotary," design standards for roundabouts are very specific and the Federal Highway Administration (FHWA) has prepared a design guide for modern roundabouts in the United States. Development of a roundabout will only occur as a result of an intersection study performed by a qualified Traffic Engineer and when the minimum capacity and design criteria are met. The FHWA has determined that the maximum flow rate that a roundabout can accommodate depends on the geometric elements (circle diameter, number of lanes, etc.), the circulating flow (vehicles going around the circle), and entry flow (vehicles entering the circle). A single lane roundabout can accommodate up to 1,800 vehicles per hour and a double lane roundabout can accommodate up to 3,400 vehicles per hour. **Figure 4-3** shows an example of a typical single lane roundabout design.

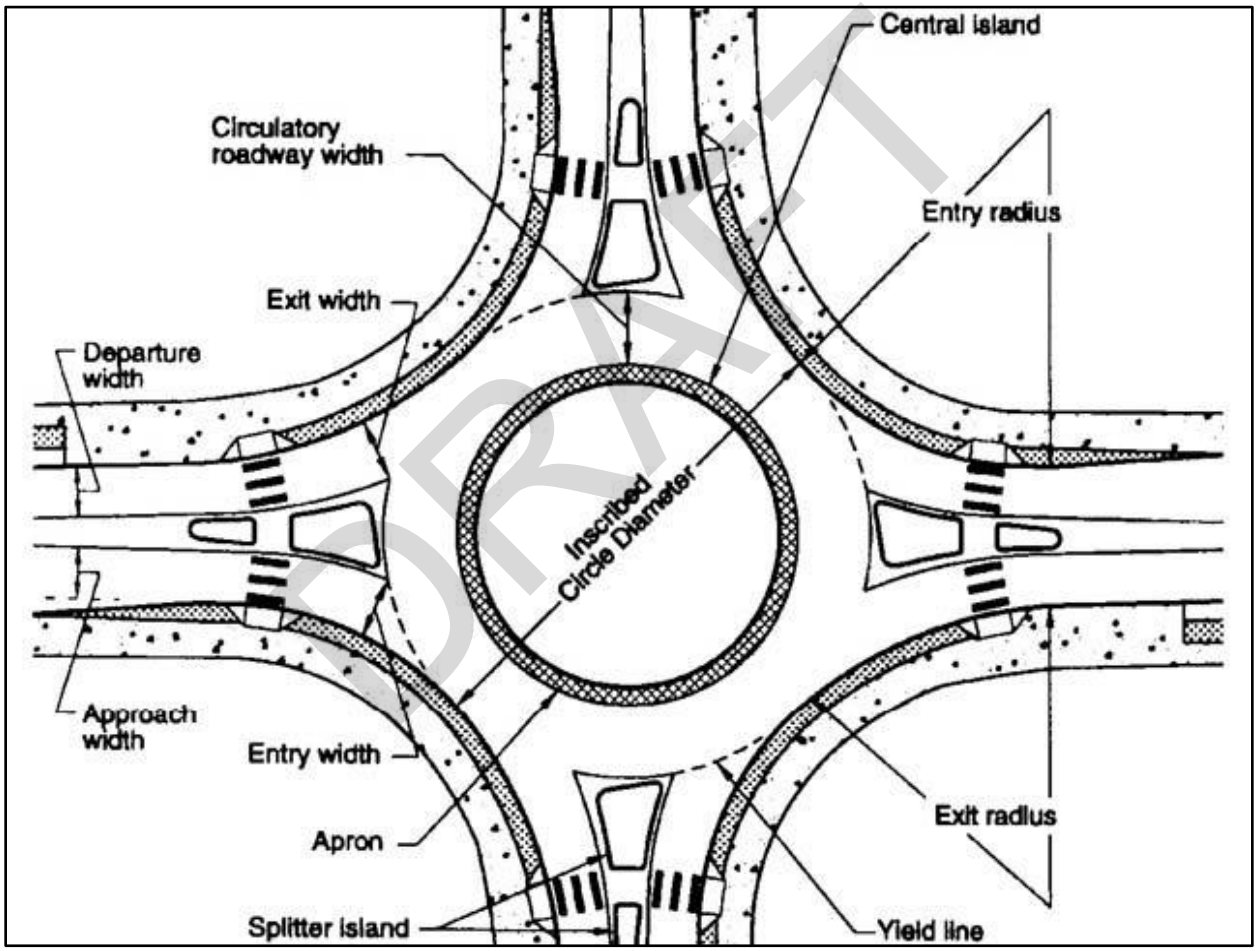

Figure 4-3 Typical Roundabout Design

The National Transportation Research Board examined traffic delays before and after roundabouts were installed at eight intersections in the United States. The study determined that delays (the time spent stopped and moving up to the intersection) decreased on average by 78 percent and 76 percent during the AM Peak Hour and PM Peak Hour, respectively. The results indicate that roundabouts can reduce congestion in certain circumstances. In addition, the FHWA studied safety characteristics of a sample of

eleven roundabouts in the United States. The agency determined that the number of personal injury accidents and property damage-only accidents decreased 51 percent and 29 percent, respectively, after roundabouts replaced conventional intersections. Roundabouts are an appropriate solution for certain problem intersections in the region.

There are numerous reasons for selecting a roundabout as a preferred alternative, with each reason carrying its own considerations and trade-offs. Below are some potential applications or roundabouts[2]:

- **New Residential Subdivisions**

  Developers have begun to use roundabouts in residential subdivisions with increasing frequency. Roundabouts provide a variety of operational and aesthetic benefits and create a sense of place that is attractive to developers and homeowners.

- **Urban Centers**

  Roundabouts may be considered an optimal choice in situations where existing or planned access-management strategies along a corridor facilitate U-turn movements at nearby intersections.

- **Suburban Municipalities and Small Towns**

  Smaller municipalities are often ideal locations to consider roundabouts. Right-of-way is often less constrained, traffic volumes are lower, and the aesthetic opportunities for landscaping and gateway treatments are enticing. Existing operational and/or safety deficiencies can also often be addressed.

- **Rural Settings and Small Communities**

  Safety may often be the driving factor over capacity in making a roundabout an appealing choice. Within small communities along an extended highway, a roundabout is ideal for supporting speed reductions.

- **Schools**

  Roundabouts may be an optimal choice for intersection control in the vicinity of schools. One primary benefit is the reduction of vehicle speeds in and around the roundabout. Roundabouts improve pedestrian crossing opportunities, providing mid-block refuge and the ability for pedestrians to focus on one direction of traffic at a time.

- **Interchanges**

  Situations where an intersection ramp terminal has the potential for a high proportion of left-turn flows from the off-ramps and to the on-ramps may be ideal candidate for a roundabout.

- **Commercial Developments**

[2] Source: NCHRP Report 672, Roundabouts: An Informational Guide Second Edition

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Roundabouts in commercial developments provide for a central focus point for a development and enhance aesthetic qualities. They are also capable of processing high volumes of traffic.

- **Unusual Geometry**

  Intersections with unusual geometric configurations, intersection angles, or more than four legs are often difficult to manage operationally. Roundabouts are a proven traffic control device in such situations, effectively managing traffic flows without the need for costly expenditures on unique signal controller equipment or unusual signal timing.

- **Closely Spaced Intersections**

  Roundabouts balance traffic flows and manage queue lengths between closely spaced intersections.

The City of Saratoga Springs will consider roundabouts as an intersection alternative at specific locations pending more detailed traffic analysis as needs arise through the development process.

4.5 Traffic Calming

Street patterns are typically developed in response to the desires of the community at the time of construction. In Utah, the history of using a grid system for planning and development purposes started long ago and has proven efficient for moving people and goods throughout a network of surface streets. However, the nature of a grid system with wide and often long, straight roads can result in excessive speeds. For that reason, traffic calming measures (TCMs) can be implemented to reduce speeds on residential roadways. Saratoga Springs is an exception to the Utah grid system and as such has fewer problems with long, wide, straight street sections that can contribute to high speeds and unsafe conditions. Traffic Calming is however still applicable to many neighborhood or local streets and should be at least given consideration on the City's local and residential streets on a case by case basis where applicable. Included in the Appendix is the City of Saratoga Springs Neighborhood Traffic Calming Program which outlines the process to implement traffic calming measures.

4.6 Corridor Preservation

Corridor preservation is an important transportation planning tool that agencies should use and apply to all future transportation corridors. There are several new transportation facilities that have been identified in the TMP. In planning for these future facilities, corridor preservation techniques should be employed. The main purposes of corridor preservation are to:

- **Preserve the viability of future options,**
- **Reduce the cost of these options, and**
- **Minimize environmental and socio-economic impacts of future implementation.**

Corridor preservation seeks to preserve the right-of-way needed for future transportation facilities and prevent development which might be incompatible with these facilities. This is primarily accomplished

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by the community's ability to apply land use controls such as zoning and approval of developments. Adoption of the TMP by Saratoga Springs City is a commitment to citizens and future leaders in the community that the identified future corridors will be the ultimate location for transportation 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 preserved. As the master 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.

4.6.1 Corridor Preservation Techniques

Some examples of specific corridor preservation techniques that may be most beneficial and easily implemented include the following:

- **Developer Incentives and Agreements:** Public agencies can offer incentives in the form of tax abatements, density credits, or timely site plan approvals to developers who maintain property within proposed transportation corridors in an undeveloped state.
- **Exactions:** As development proposals are submitted to the City for review, efforts should be made to exact land identified within the future corridors. Exactions are similar to impact fees, except they are paid with land rather than cash.
- **Fee Simple Acquisitions:** This will most likely consist of hardship purchases or possible city acquisition of property identified within the corridors. Parcels obtained in fee title can later be sold at market value to the owner of the transportation facility when construction begins.
- **Transfer of Development Rights and Density Transfers:** Government entities can provide incentives for developers and landowners to participate in corridor preservation programs using the transfer of development rights and density transfers. This is a powerful tool in that there seldom is any capital cost to local governments.
- **Land Use Controls:** This method allows government entities to use police power to regulate intensity and types of land use. Zoning ordinances are the primary controls over land use and the most important land use tools available for use in corridor preservation programs.
- **Purchase of Options and Easements:** Options and easements allow government agencies to purchase interests in property that lies within highway corridors without obtaining full title of the land. Usually, easements are far less expensive than fee title acquisitions.

4.7 Traffic Impact Studies

As growth occurs throughout the City, the City will evaluate the impacts of proposed developments on the surrounding transportation networks prior to giving approval to build. This will be accomplished by requiring that a Traffic Impact Study (TIS) be performed for any development in the City based on City staff recommendations. A TIS will allow the City to determine the site specific impacts of a development including internal site circulation, access issues, and adjacent roadway and intersection impacts. In addition, a TIS will assist in defining possible impacts to the overall transportation system in the vicinity of

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the development. The area and items to be evaluated in a TIS include key intersections and roads as determined by the City Engineer on a case by case basis. Other items that should be included in a TIS include:

- **A description of the project site and study area boundaries including a site plan and study area map showing the proposed project access locations and connections to the adjacent road network.**
- **A description of existing and proposed land uses within the study area including a discussion of the project land use.**
- **A description of existing and proposed key roadways and intersections in the study area including lane configurations and traffic controls.**
- **A discussion of trip generation, distribution, and assignment methodologies and assumptions.**
- **A level of service (LOS) and capacity analysis of existing traffic levels and conditions for key roadway segments and intersections.**
- **A LOS and capacity analysis of background traffic levels and conditions (existing traffic plus additional traffic projected from normal growth rates and from other known developments in the study area at the time of completion) for key roadway segments and intersections.**
- **A LOS and capacity analysis of background plus project traffic levels and conditions (background traffic plus projected traffic associated with the proposed project) for key roadway segments and intersections.**
- **A safety analysis for key roadways and intersections including applicable accident histories.**
- **Any applicable yield sign, stop sign, multi-way stop signs, and traffic signal warrant analyses.**
- **A determination of the street system's ability to accommodate projected traffic levels.**
- **An identification of impacts to the existing street system as a result of the project.**
- **A discussion of improvements to be implemented as part of the project to accommodate project traffic such as roadway and intersection widening to provide exclusive turn lanes or modifications to traffic controls.**
- **A discussion of mitigation measures to be implemented to restore or improve traffic operations to an acceptable LOS on any key roadway segments or at key intersections within the study area.**

Each TIS will be conducted by a qualified Traffic Engineer chosen by the City at the developer cost. The City Engineer will determine the scope of each TIS, based on the UDOT Traffic Impact Study Requirements found in the appendix of this report, and will review its contents once complete and provide comments. Upon receiving approval from the City Engineer, the TIS requirement related to the development will be satisfied. If a developer feels that his or her project does not meet the requirements to have a TIS completed, then the developer will need to provide documentation stating his or her case which will be reviewed by the City Engineer.

4.8 Agency Coordination

As many of the roads in Saratoga Springs City are either owned by or connect into roads that are owned by other agencies such as UDOT, neighboring cities, and Utah County, a close working relationship should be maintained between these different jurisdictions and the City to ensure that roadway projects are not only coordinated but consistent.

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4.9 Planned Roadway and Intersection Improvements

A number of roadway and intersection improvements have been recommended to occur between now and the year 2040. These recommendations are based on travel demand volume predictions and available capacity of each roadway. Each of these improvements should be implemented as a result of increasing traffic volumes due to future development. **Table 4-2** outlines these recommended improvements. This table will be regularly updated by the City as plans for development change and become adopted.

Table 4-2 Saratoga Springs City Recommended Transportation Improvements

Type of Improvement	Roadway or Location	Jurisdiction(s)
Widen Arterial (7 Lanes)	Redwood Road (SR-68): Northern Border to Grandview Blvd	UDOT
Widen Arterial (5 Lanes)	Redwood Road (SR-68): Grandview Blvd to Southern Border	UDOT
Widen Arterial (5 Lanes)	Pony Express: Redwood Road to Western Boarder	Saratoga Springs
Widen to 6 Lane Freeway	Cedar Fort Road (SR-73): Mountain View Corridor Frontage to Western Border	UDOT
New 6 Lane Freeway	Mountain View Corridor: Northern Border to SR-73	UDOT
New 6 Lane Freeway	2100 North Connection: Eastern Border to Mountain View Corridor	UDOT
New Collector	Exchange Place: Crossroads Blvd to Market Street	Saratoga Springs
New Collector	Riverside Drive Extension: End of Existing to Pioneer Crossing (SR-145)	Saratoga Springs
Widen Arterial (5 Lanes)	Crossroads Blvd: Commerce Drive to Eastern Border	Saratoga Springs
Widen Arterial (5 Lanes)	Pony Express Extension: Redwood Road (SR-68) to Riverside Drive	Saratoga Springs
New Collector (Widen Existing)	Talus Ridge Drive: Foothill Drive to Legacy Farms New Road	Saratoga Springs
New Collector	Mt. Saratoga Boulevard: Cedar Fort Road (SR-73) to Pony Express Parkway	Saratoga Springs
New Collector	600 West: Pony Express to 1000 South	Saratoga Springs
New Minor Arterial	400 South: Redwood Road (SR-68) to Mountain View Corridor	Saratoga Springs
New Minor Arterial	800 South: Redwood Road (SR-68) to Mountain View Corridor	Saratoga Springs
New Traffic Signal	Signal: Crossroads Blvd & Riverside Drive	Saratoga Springs
New Traffic Signal	Signal: Market Street & Redwood Road (SR-68)	UDOT

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Type of Improvement	Roadway or Location	Jurisdiction(s)
New Traffic Signal	Signal: Market Street & Pioneer Crossing (SR-145)	UDOT
New Traffic Signal	Signal: Riverside Drive & Pioneer Crossing (SR-145)	UDOT
New Traffic Signal	Signal: 800 South (Project 18) & Redwood Road (SR-68)	UDOT
New Minor Arterial	New Roadway: Redwood Road (SR-68) (approx.. 1800 North) to Harvest Hills	Saratoga Springs
New 4 Lane Freeway	Mountain View Corridor Extension: Cedar Fort Freeway (SR-73) to Stillwater Drive	UDOT
New Major Arterial	Mountain View Corridor Extension: Stillwater Drive to New Road South of Harbor Park Way	UDOT
New Minor Arterial	Mountain View Corridor Extension: New Road South of Harbor Park Way to Redwood Road (SR-68)	UDOT
New Collector	New Roadway South of Harbor Park Way: Redwood Road to Bonneville Drive	Saratoga Springs
New Collector	Bonneville Drive: Pony Express Pkwy to 800 South	Saratoga Springs
New Local Road	Bonneville Drive: 800 South to Mountain View Corridor Extension	Saratoga Springs
New Collector	Bonneville Drive: Mountain View Corridor to Redwood Road (SR-68)	Saratoga Springs
New Collector	400 South: Mountain View Corridor to Bonneville Drive	Saratoga Springs
New Collector	800 South: Mountain View Corridor to Bonneville Drive	Saratoga Springs
New Collector	200 West: Pony Express Pkwy to 1000 South	Saratoga Springs
New Collector	1000 South: 200 West to Mountain View Corridor	Saratoga Springs
New Collector (Realignment)	400 North Realignment West of Grand Sierra Way to Talus Ridge Drive	Saratoga Springs
New Minor Arterial	Market Street: Pioneer Crossing (SR-145) to Mountain View Corridor	Saratoga Springs
New Collector	Crossroads Blvd. Extension: Pioneer Crossing (SR-145) to Foothill Blvd.	Saratoga Springs
New Collector	Aspen Hills Blvd. to Crossroads Blvd.	Saratoga Springs
New Minor Arterial	Hidden Valley Highway: Mountain View Corridor to Western Border	UDOT
Widen Arterial (7 Lanes)	Pioneer Crossing (SR-145): Eastern Border to Cedar Fort Road (SR-73)	UDOT

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Type of Improvement	Roadway or Location	Jurisdiction(s)
New/Widen Arterial (5 Lanes)	Pony Express Extension: Riverside Drive to Eastern Border	Saratoga Springs
New Collector	900 East Extension: Pony Express Extension to Pioneer Crossing (SR-175)	Saratoga Springs
Widen Collector	Saratoga Road: Pony Express Extension to Pioneer Crossing (SR-175) (Saratoga Springs Portion)	Saratoga Springs
Widen Collector	7750 North: Saratoga Road to 1700 West	Saratoga Springs
Widen Arterial (3 Lanes)	Grandview Blvd: Redwood Road (SR-68) to Mountain View Corridor	Saratoga Springs
New Collector	Grandview Blvd: Mountain View Corridor to Bonneville Drive	Saratoga Springs
Collector Connection	Ring Road: Finish loop roadway	Saratoga Springs
Widen Arterial (3 Lanes)	Stillwater Drive: Redwood Road (SR-68) to Mountain View Corridor	Saratoga Springs
New Collector	Stillwater Drive: Mountain View Corridor to Bonneville Drive	Saratoga Springs
Collector Extension	Wildlife Blvd Extension to Village Parkway	Saratoga Springs
New Collector	400 North: Redwood Road (SR-68) to Riverside Drive	Saratoga Springs
New Traffic Signal	Traffic Signal: Pony Express Pkwy and Bonneville Drive	Saratoga Springs
New Traffic Signal	Traffic Signal: Pony Express Pkwy and Foothill Blvd.	Saratoga Springs
New Traffic Signal	Traffic Signal: Pony Express Pkwy and 200 West	Saratoga Springs
New Traffic Signal	Traffic Signal: Pony Express Pkwy and Riverside Drive	Saratoga Springs
New Traffic Signal	Traffic Signal: Pony Express Pkwy and 900 East	Saratoga Springs
New Traffic Signal	Traffic Signal: Pony Express Pkwy and Saratoga Road	Saratoga Springs
New Traffic Signal	Traffic Signal: Pony Express Pkwy and 1700 West	Saratoga Springs
New Traffic Signal	Traffic Signal: Pony Express Pkwy and 1100 West	Saratoga Springs
New Traffic Signal	Traffic Signal: Redwood Road (SR-68) and Ring Road	UDOT
New Traffic Signal	Traffic Signal: Redwood Road (SR-68) and Village Pkwy	UDOT

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Type of Improvement	Roadway or Location	Jurisdiction(s)
New Traffic Signal	Traffic Signal: Redwood Road (SR-68) and Bonneville Drive	UDOT
New Traffic Signal	Traffic Signal: Foothill Boulevard and Harvest Hills Boulevard	Saratoga Springs
New Traffic Signal	Traffic Signal: Aspen Hill Boulevard and Redwood Road (SR-68)	UDOT
New Traffic Signal	Traffic Signal: Dalmore Drive and Redwood Road (SR-68)	UDOT
New Traffic Signal	Traffic Signal: Pioneer Crossing (SR-145) and Saratoga Road	UDOT
New Traffic Signal	Traffic Signal: Mountain View Corridor and Redwood Road (SR-68)	UDOT
New Collector	1500 North Extension: 3600 West and Redwood Road (SR-68)	Saratoga Springs/ Lehi
Widen Collector	1200 North: Foothill Boulevard and Hillside Drive	Saratoga Springs
New Road	Harvest Hills Boulevard Extension: Redwood Road (SR-68) to Eastern Border	Saratoga Springs/ Lehi
New Traffic Signal	Traffic Signal: Pony Express Parkway & 800 West	Saratoga Sprngs

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4.10 Special Considerations

A few specific locations on Saratoga Springs City's street network may require some unique improvements to resolve traffic issues at these sites. These areas are identified below along with the unique characteristics of each location.

4.10.1 Mountain View Corridor (2100 North to 400 South)

Mountain View Corridor from 2100 North to 400 South runs through a substantial portion of property managed by Suburban Land Reserve, Inc. (SLR). SLR has in place a development agreement for their property in the City and has been involved in the transportation planning process as it pertains to their property. The Mountain View Corridor extension is proposed on the MAG 2020-2040 metropolitan transportation plan as part of phase 3 (2031-2040). The facility is expected to be a full freeway facility with appropriate design guidelines and interchange spacing as recommended by UDOTs access management standards. This project will need extensive environmental clearance and the City will need to coordinate with UDOT when it comes time to begin that process. It is likely that the Mountain View Corridor extension will include six, 12' wide travel lanes, three in each direction with appropriate shoulders and clearance zones. The facility will probably be posted at 65 mph consistent with other freeway facilities in the valley and the northern portion of Mountain View Corridor. It is expected that Mountain View Corridor will carry 38,000 vehicles per day in 2040. This roadway has been studied multiple times over the past few years by MAG. Three of these studies are listed below and can be accessed online at the following locations:

- **MAG West Lake Vision Study**
  http://mountainland.org/site/articles/view/1232
- **Lake Mountain Transportation Study**
  http://mountainland.org/site/articles/view/1220
- **Utah County East-West Study**
  http://mountainland.org/site/articles/view/1231

As an option, one-way frontage roads with slip ramps providing freeway access may be considered as an alternative to traditional diamond interchanges. This alternative will provide greater exposure to commercial development along the freeway corridor and allow for commercial strips along the length of the freeway rather than large commercial nodes at just the freeway interchanges. Another advantage of this concept has been exhibited on the Salt Lake County portion of Mountain View Corridor. This section has been phased to build the frontage road system (currently under construction) before the freeway portion is constructed. The frontage roads provide enough capacity for the immediate needs and allow for development adjacent to the corridor while also reserving enough right-of-way for the freeway section to be constructed when traffic volumes justify it in the future. **Figure 4-4** gives an example of Mountain View Corridor in Salt Lake Count and represents an idea of how the MVC extension may look in Saratoga Springs. It is anticipates that this cross-section can be constructed within a 300 foot right-of-way. The initial construction phase could include only the one-way frontage roads show in the initial construction picture. These frontage roads will accommodate near term growth and move traffic up and down the

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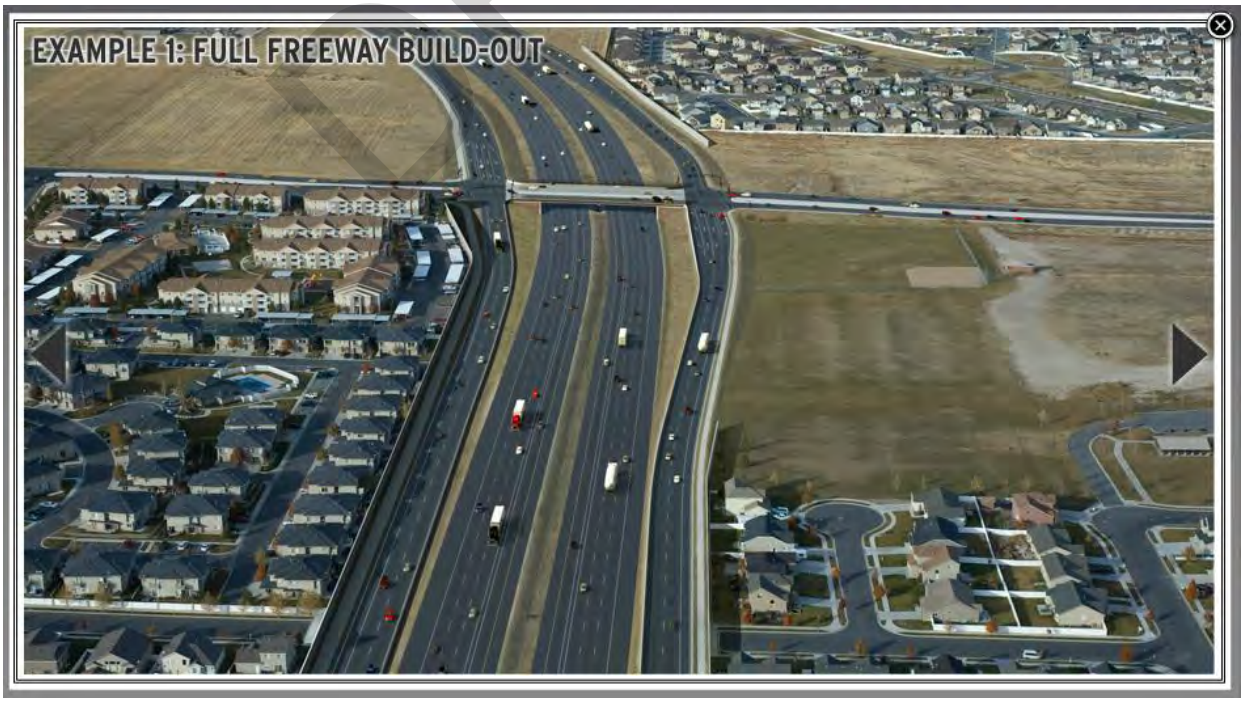
corridor for the short term. As development and population increases, the freeway section of the roadway could be completed in the preserved right-of-way between the frontage roads as shown in the full freeway build-out example. UDOT is investigating a study to evaluate the exact needs of this corridor.

Figure 4-4 Mountain View Corridor Extension Example

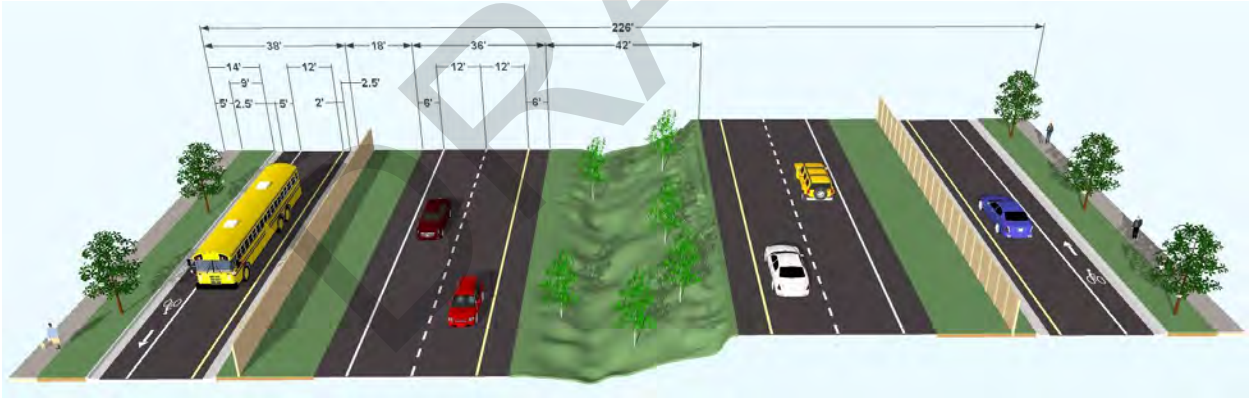


4.10.2 Foothill Parkway (400 South to Redwood Road)

Foothill Parkway from 400 South to Redwood Road will be part of the UDOT Mountain View Corridor expansion expected before 2040. The City has expressed a desire to build this facility as a 4 lane Parkway similar in design and functionality to Legacy Parkway in Davis County. The City is also planning a frontage road system that will parallel the parkway and will allow the MVC extension to be access controlled with interchanges rather than signals. Foothill Parkway will likely be posted at 55mph. It is expected that the Foothill Parkway will carry 35,000 vehicles per day in 2040.

An important feature of the Foothill Parkway is the frontage road system. As discussed previously a one-way frontage system would allow for a strip type commercial area along the corridor rather than a node at traffic signals. This allows for commercial rather than residential land uses to be zoned immediately adjacent to what will become a major traffic facility. Also, it provides the opportunity of constructing the frontage roads to address short term capacity needs before traffic volumes dictate that the Parkway section be constructed. **Figure 4-5** shows a conceptual cross-section for the Foothill Parkway. The conceptual cross-section shows the frontage road system, which provides a buffer between the Parkway and adjacent land uses. There is also a large landscaped median intended not only to separate opposing traffic but also to provide room for capacity improvements should they be needed beyond the design year of this document. The City is currently working on a concept design study for Foothill Parkway.

Figure 4-5 Foothill Parkway Cross-Section



4.10.3 Hidden Valley Highway

As population increases in Saratoga Springs and also in Eagle Mountain, the need for greater east-west mobility through the area will increase rapidly. Two major east-west facilities are planned in the TMP, the Hidden Valley Highway and the SR-73 freeway. The preferred order of construction for these two projects is that the Hidden Valley Highway will be constructed first as part of the Mountain View Corridor Extension. The SR-73 project will then follow as population and development dictates. It is expected that the Hidden Valley Highway will carry around 5,000 vehicles per day in 2040.

The Hidden Valley Highway is intended as a limited access highway facility connecting Eagle Mountain with Saratoga Springs. A system to system interchange will connect Hidden Valley Freeway with Mountain View Corridor at approximately 400 South. The Hidden Valley Highway will likely be posted at 55mph due

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to topographic restrictions but will be access controlled like other highway facilities in the county with appropriate interchange spacing in compliance with UDOT standards. **Figure 4-6** shows one alternative alignment and a cross section for the Hidden Valley Highway. This conceptual plan does not include Foothill Parkway extension although the Foothill Parkway facility would still be required as shown on the Transportation Master Plan map (**Figure 3-3**).

4.10.4 SR-73

SR-73 will eventually need to be converted to a six lane freeway facility. This improvement is a capacity improvement to east-west movement through the City. SR-73 is currently being widened from two lanes to four lanes in sections between Saratoga Springs and Eagle Mountain. Upgrading the section of roadway from the future Mountain View Corridor to approximately Ranches Parkway in Eagle Mountain is a long term planning project. Substantial environmental clearance will likely be required and it is recommended that this project be considered after the completion of the Hidden Valley Freeway. It is expected that SR-73 will carry 85,000 vehicles per day in 2040.

SR-73 has not been rigorously access controlled in the past as it was classified as a two lane rural highway. The rapid population growth in the area in recent years has necessitated and will continue to demand stricter access control. As such, many of the access points that currently exist may need to be cut off from the roadway. A potential mitigation to the removal of these access points would be to again construct a frontage road system or Collector-Distributor (C-D) road system paralleling the freeway. This would, as in the other cases previously discussed, provide greater access to properties adjacent to SR-73, provide a buffer between the freeway and adjacent land uses, and eliminate the need for large footprint interchanges by providing access via slip ramps.

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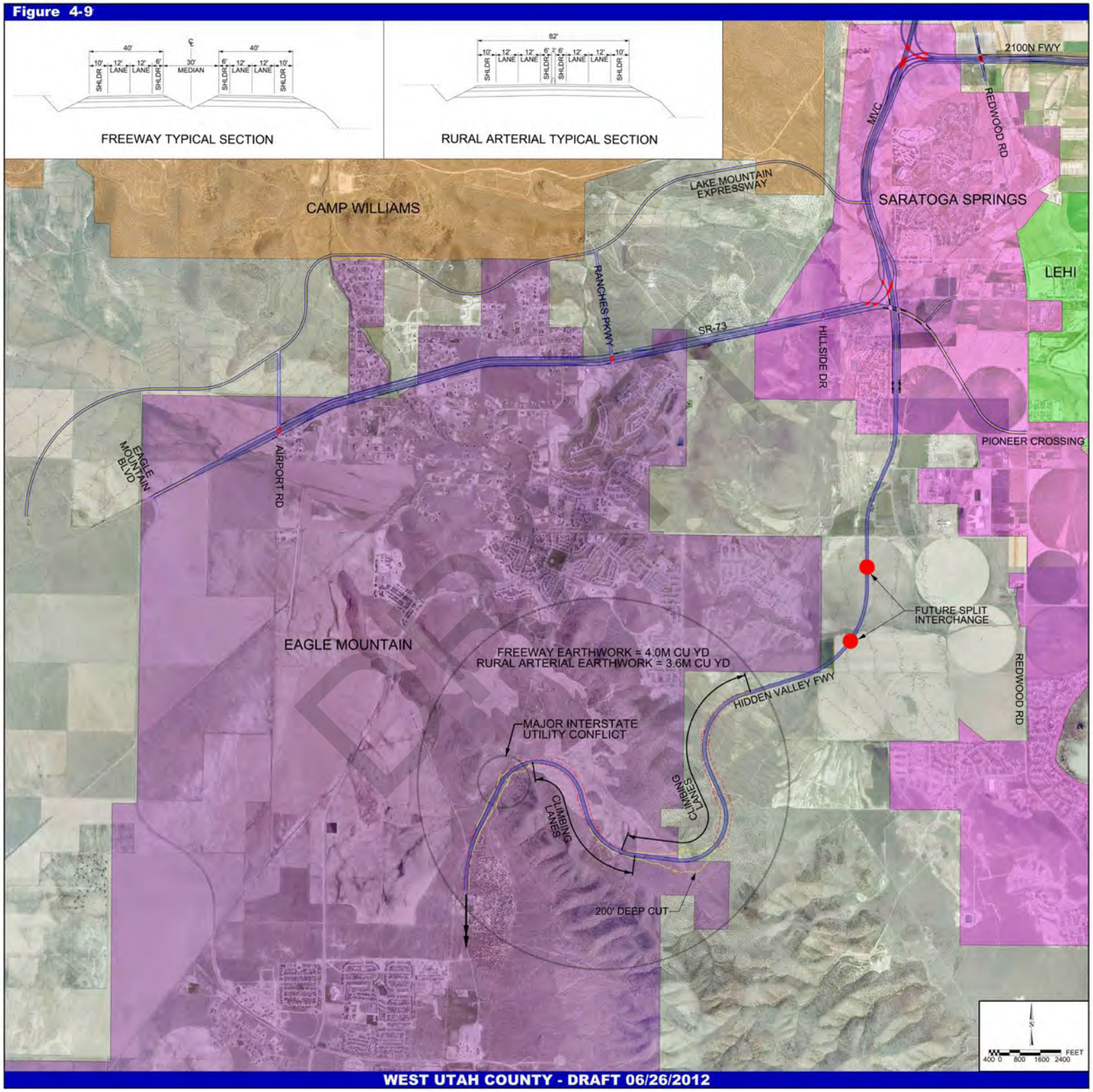
Figure 4-9



WEST UTAH COUNTY - DRAFT 06/26/2012

5.0 Potential Funding Sources

Funding sources for transportation are essential if Saratoga Springs City recommended improvements are to be built. Presently there are four main sources of revenue available to Saratoga Springs City: federal funding, state funding, local general funding, and impact fees. The following paragraphs further describe these various transportation funding sources available to the City.

5.1 Federal Funding

Federal monies are available to cities and counties through the federal-aid program. The funds are administered by the Utah Department of Transportation (UDOT). In order to be eligible, a project must be listed on the five-year Statewide Transportation Improvement Program (STIP).

The Surface Transportation Program (STP) funds projects for any roadway with a functional classification of a collector street or higher as established on the Utah State Functional Classification Map (**Figure 5-1**). STP funds can be used for both rehabilitation and new construction. The Joint Highway Committee programs a portion of the STP funds for projects around the State in urban areas. Another portion of the STP funds can be used for projects in any area of the State at the discretion of the State Transportation Commission. Transportation Enhancement funds are allocated based on a competitive application process. The Transportation Enhancement Committee reviews the applications and then a portion of those are passed to the State Transportation Commission. Transportation enhancements include 12 categories ranging from historic preservation, bicycle and pedestrian facilities, and water runoff mitigation. Other federal and state trails funds are available from the Utah State Parks and Recreation Program.

MAG accepts applications for federal funds through local and regional government jurisdictions. Transportation related projects are selected for funding every two years by the MAG Technical Advisory and Regional Planning committees. The selected projects form the Transportation Improvement Program (TIP). In order to receive funding, projects should include one or more of the following aspects:

Congestion Relief – spot improvement projects intended to improve Levels of Service and/or reduce average delay along those corridors identified in the Regional Transportation Plan as high congestion areas.

- **Mode Choice –** projects improving the diversity and/or usefulness of travel mode other than single occupant vehicles.
- **Air Quality Improvements –** projects showing demonstrable air quality benefits.
- **Safety –** improvements to vehicular, pedestrian, and bicyclist safety.

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Since the adoption of the TMP in 2013, the City has had great success in procuring federal funding through the TIP selection process. The following lists the projects selected in the TIP process for 2014 and 2017.

- **Pony Express Parkway Widening**
- **Redwood Road Trail**
- **Crossroads Boulevard Widening**
    - **New Bike and Pedestrian Bridge Access across the Jordan River**
- **Utah Lakeshore Trail: Saratoga Road to Loch Lohmond Subdivision**

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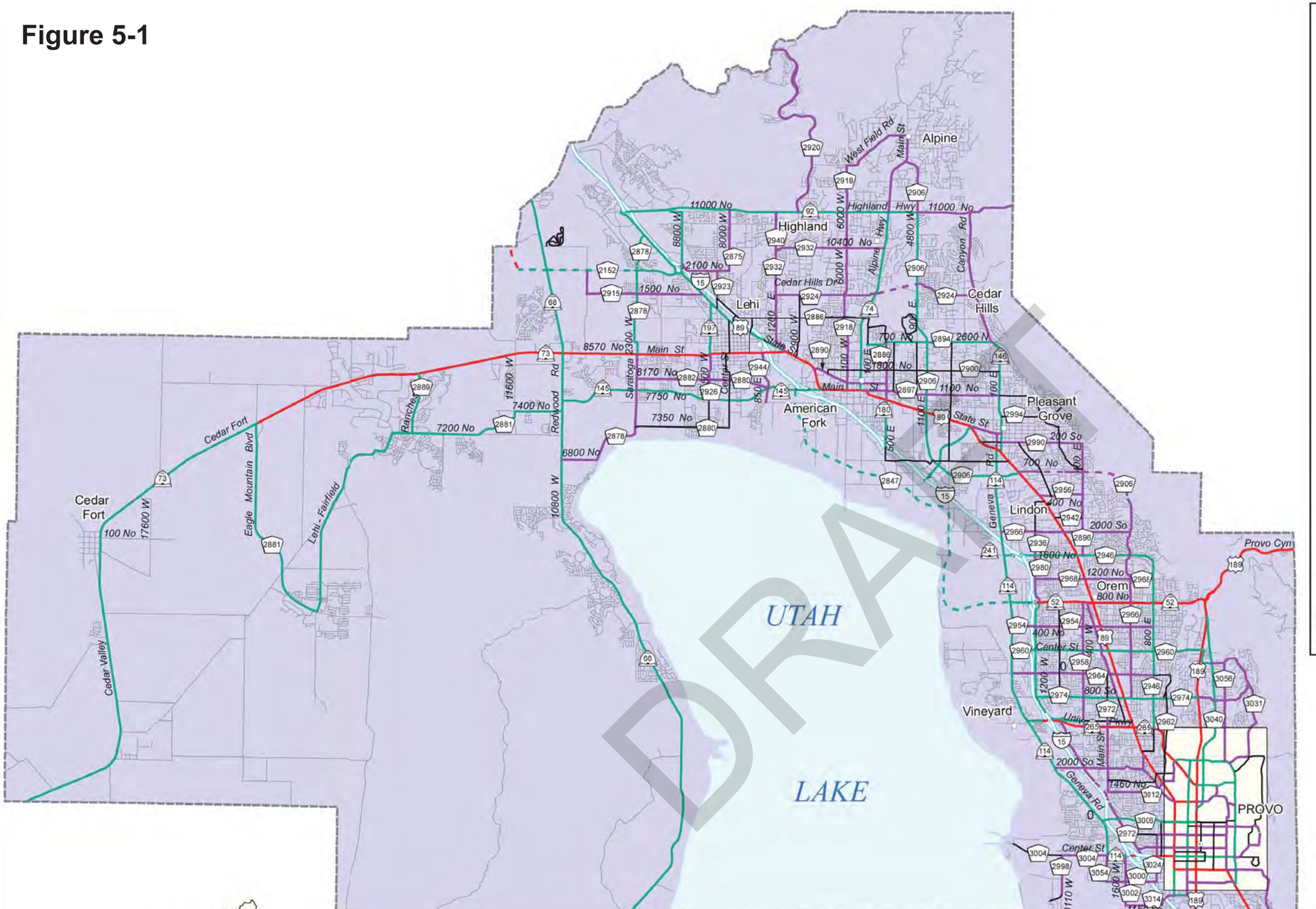
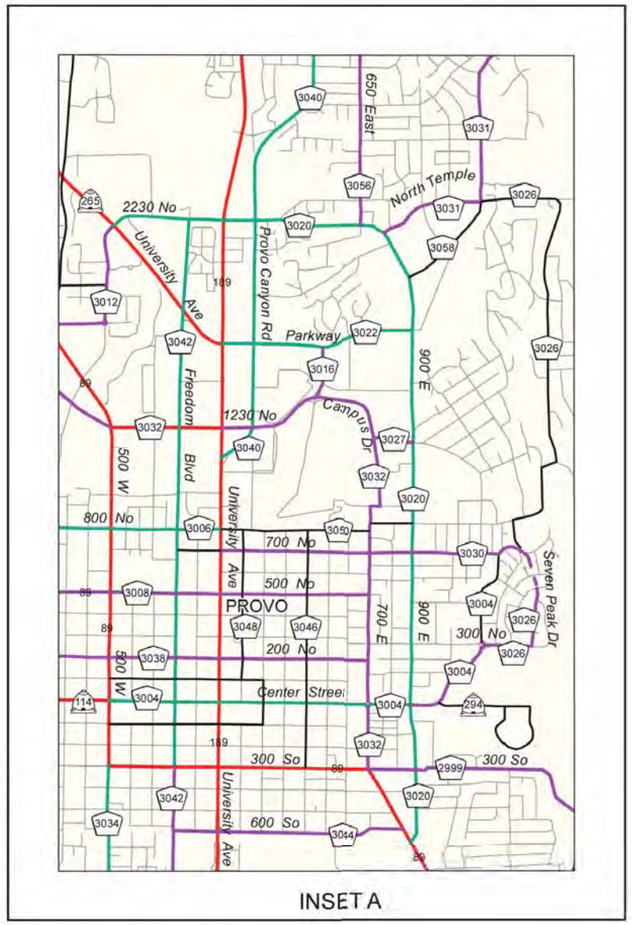
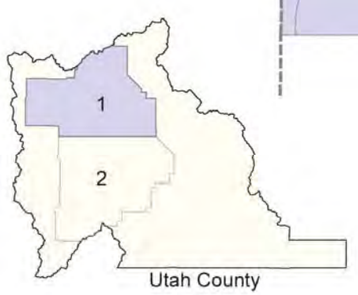
Figure 5-1







PROVO - OREM URBAN AREA FUNCTIONAL CLASS SYSTEM

Utah County, Utah

- Interstate
- Other Principal Arterial
- Minor Arterial
- Collector
- Local
- Federal Aid Urban Area Boundary

NOTE: Dashed lines indicate proposed routes

Scale

0 1 2 4 Miles

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UDOT Cartography Section

Approved 2005/ Technical Correction thru 3/1/11

5.2 State Funding

The distribution of State Class B and C Program monies is established by State Legislation and is administered by the State Department of Transportation. Revenues for the program are derived from State fuel taxes, registration fees, driver license fees, inspection fees, and transportation permits. Seventy-five percent of these funds are kept by UDOT for their construction and maintenance programs. The rest is made available to counties and cities. As many of the roads in Saratoga Springs, it is in the interests of the City that staff be aware of the procedures used by UDOT to allocate those funds and to be active in requesting the funds be made available for UDOT owned roadways in the City.

Class B and C funds are allocated to each city and county by a formula based on population, road mileage, and land area. Class B funds are given to counties, and Class C funds are given to cities and towns. Class B and C funds can be used for maintenance and construction projects; however, thirty percent of those funds must be used for construction or maintenance projects that exceed $40,000. The remainder of these funds can be used for matching federal funds or to pay the principal, interest, premiums, and reserves for issued bonds.

5.3 Local Funding

Most cities utilize general fund revenues for their transportation programs. Another option for transportation funding includes the creation of special improvement districts. These districts are organized for the purpose of funding a single specific project that benefits an identifiable group of properties. Another source of funding used by cities includes revenue bonding for projects felt to benefit the entire community.

Private interests often provide resources for transportation improvements. Developers construct the local streets within subdivisions and often dedicate right-of-way and participate in the construction of collector/arterial streets adjacent to their developments. Developers can also be considered a possible source of funds for projects through the use of impact fees. These fees are assessed as a result of the impacts a particular development will have on the surrounding roadway system, such as the need for traffic signals or street widening.

5.4 Impact Fees

Impact fees are a way for a community to obtain funds to assist in the construction of infrastructure improvements resulting from and needed to serve new growth. The premise behind impact fees is that if no new development occurred, the existing infrastructure would be adequate. Therefore, new developments should pay for the portion of required improvements that result from new growth. Impact fees are assessed for many types of infrastructure and facilities that are provided by a community, such as roadway facilities. According to state law, impact fees can only be used to fund growth related system improvements

To help fund needed roadway improvements, impact fees should be established. These fees are collected from new developments in the City to help pay for improvements that are needed to the roadway system

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due to growth. At the culmination of the Transportation Master Planning process, a citywide IFFP will be developed according to state law to determine the appropriate impact fee values for the City.

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6.0 Appendix

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City of Saratoga Springs

Neighborhood Traffic Calming Program

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October 2016

Neighborhood Traffic Calming Program

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"Traffic Calming is the combination of mainly physical measures that reduce the negative effects of motor vehicles, alter driver behavior and improve conditions for non-motorized street users."

BACKGROUND

The City of Saratoga Springs (City) is often approached by residents about traffic in their residential neighborhoods. Until now, there has not been a set of guidelines or criteria by which these concerns can be methodically addressed.

This Traffic Calming Program (Program) was developed with input from various City departments and reference to applicable professional standards. It represents the City's effort to produce an equitable policy for the residents of the City.

GENERAL PURPOSE

The purpose of this Program is to address potential problems in specific areas due to vehicle traffic, and improve where practical, the safety for users of City rights-of-way.

This Program is a process rather than an instantaneous solution. It facilitates the development of a plan to possibly improve the function of a particular street and thereby enhance the community. Cooperation between residents and City staff is needed for this Program to succeed.

In order to promote safety and address potential traffic problems, residents and City staff will cooperate to implement the three "Es" of transportation engineering.

- Education: Increase awareness of residents in neighborhoods where there are traffic-related concerns.
- Engineering: Evaluate the affected street for functional classification, geometry, signage, traffic speed, traffic volume, and accident history to determine if traffic-calming measures are warranted.
- Enforcement: Encourage compliance with existing speed limits. Use speed-control tactics, such as regular enforcement, reduced speed near schools and other traffic generators, and enlist the assistance of the Police Department.

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GENERAL POLICIES

Due to the high demand for traffic calming and the fact that limited resources are available, the following policies are required:

- The subject street must be either a local street or a collector street. Collector streets are not eligible for Phase 2 measures.
- Cul-de-sac streets or other dead end streets are not eligible.
- Traffic-calming measures will be implemented as deemed necessary by the City. Any changes, additions, or removal of traffic-calming measures may occur at any-time as deemed necessary by the City.
- Proposed traffic-calming measures must be compatible with the subject street and its need to serve the needs of all users of the right-of-way.

PROCESS

The following process is designed to provide equitable and effective consideration at minimal taxpayer expense for most situations. The process involves escalated phasing, depending on the nature and severity of the potential problem. Projects that are being considered for the Program must follow this process. A flowchart that summarizes this process is provided in Appendix A.

PHASE 1

The Program begins once a resident submits a completed Traffic Calming Application to the City. The Application is provided in Appendix B.

Upon receipt of the Application, City staff will evaluate the application to determine the applicability traffic-calming measures. The evaluation may include a site visit, installing temporary traffic counters, and collecting data such as speed, volume, and peak traffic times. The following table shows the criteria that will be evaluated by the City Engineer to determine whether traffic-calming measures are warranted, and if so, which one(s) should be implemented.

If City staff determines that a street has a traffic problem, then the project will be advanced to Phase 1 of the Program. City staff will identify feasible and appropriate measures to address the problem. Examples of traffic-calming measures for the Phase I stage are provided in Appendix C.

City Staff will then report to the Applicant the findings from the traffic study and the prescribed Phase I measures proposed by City staff.

The prescribed measures will then be implemented on a trial basis. Following a 90-180 day trial period, City staff will collect new data to determine the effectiveness of

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the trial measures that were implemented.

If the prescribed Phase 1 measures prove effective in addressing the traffic problem, the improvements will stay in place or permanent devices will be installed. If the actions are ineffective there may be a need to continue to the Phase II stage of the Traffic Calming Program.

PHASE 2

Phase 2 measures will only be considered if Phase 1 measures are not effective and the traffic problem is still significant.

All projects that reach this point will be prioritized by City staff, costs and available funds being primary criteria. City staff will thoroughly review the initial traffic study and trial period data. They will then prescribe the best Phase 2 measure(s) for the target area. A list of typical Phase 2 measures used is found in Appendix D.

Highest priority projects will be implemented first. A project may be implemented faster if the subject neighborhood elects to pay all or part of the implementation costs. Residents need to notify Engineering staff if they are willing to pay all or part of the implementation costs.

Installation of traffic-calming measures will be performed by City crews or by a contractor selected by the City.

Location:	
Criteria	
Speed	85th percentile speed from traffic study
Volume	Average daily traffic volume
Accidents	Number of reported Accidents in last 3 years
Fatalities	Number of reported fatalities in last 3 years
Sidewalks	Is there a sidewalk present?
Pedestrian Generators	Is there a park, school, bus stop, etc. within 500 feet?
Emergency Response Route	Is the street a major route for emergency vehicles?
Traffic Calming	Are there existing traffic calming measures in the area?
Funding	Will all or part of the funding come from the neighborhood residents?

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MODIFICATION OR REMOVAL

The City reserves the right to modify or remove any traffic-calming device for any reason. If a neighborhood would like a traffic-calming device altered or removed, they must conduct the same process prior to permanent installation. If the request for the removal or modification is granted, then the neighborhood will be responsible for the costs associated with the removal or modification. All other measures will remain in place until the City decides otherwise.

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Appendix A

Traffic Calming Program

Flow Chart

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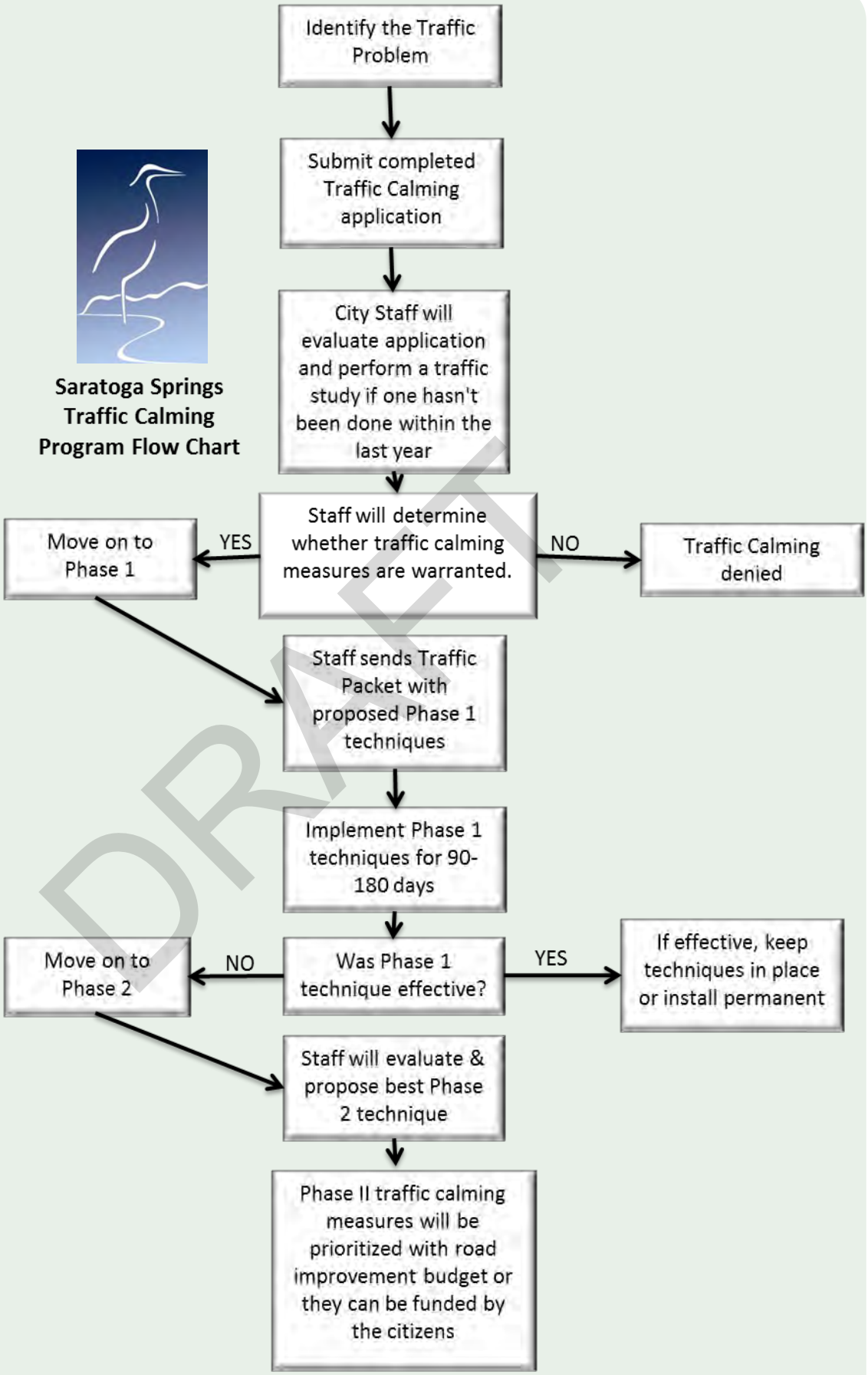
Saratoga Springs Traffic Calming Program Flow Chart



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Appendix B

Traffic Calming Program

Application

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Saratoga Springs City

1307 North Commerce Drive Suite 200

Saratoga Springs, UT 84045

(801) 766-9793x137

Fax: (801) 766-9794

Traffic Calming Application

Name: _____ Date: _____

Applicant Street Address:

_____

Phone: _____ Email: _____

Home Owners Association (if applicable):

_____

1. Please provide the approximate address to be considered. Indicate the name of the street to be considered and the boundaries of the street segment by identifying nearby intersecting streets (from and to). Attach a separate drawing if needed.

Requested Location:

_____

Street Name:

_____

From: _____ To: _____

2. Please provide responses to the following questions on behalf of residents of your neighborhood. Attach additional sheets if needed.

A. Of the items below, which best describes the traffic problem (circle all that apply)?

Speeding

High traffic volumes

Cut-through traffic

Traffic noise

Accidents

Pedestrian Safety (including bicyclists)

Parking

Other (please explain)

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B. Of the traffic problems identified in part A, how have these problems been observed?

Visual perception

Traffic Counter data obtained from City website

Radar gun

Counting cars

Other

C. How often has your neighborhood observed unsafe pedestrian or bicyclist conditions due to traffic?

1 to 3 per day

4 to 6 per day

7 to 9 per day

10 or more per day

D. What day(s) of the week and time(s) does the problem appear to be the worst?

E. How long has this traffic problem existed?

F. Has anything changed in the neighborhood recently(i.e. new schools, developments, ect)?

3. Have you contacted the City before about your concerns? If yes, please explain.

5. Is there any additional information that may be useful (photographs, statistics, etc.)?

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I understand that submitting this application does not guarantee approval for the Traffic Calming Program and ultimately it is the decision of the City of Saratoga Springs.

_____ _____

Applicant's Name Printed Date

_____

Applicant's Signature

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Appendix C

Traffic Calming Program

Phase 1 Techniques

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Phase 1 Traffic Calming Techniques

Level 1 measures are used to emphasize traffic safety to residents and give instructions for driving safely within the rules of the road. Some measures are used to slow and reduce traffic in an area.

- Signage

  This will include posting additional traffic control signs in the area. Signs may include speed limit, slow (children at play), parking, school zones, enforcement of laws, etc.

  Note: A common request to address traffic problems in a neighborhood is the installation of Stop signs. This may seem like a good solution; however, Stop signs used for traffic calming can actually make things worse. Stop signs used for traffic calming can result in drivers ignoring Stop signs, speeding up between signs, or diverting to a different street. Using Stop signs for traffic-calming purposes is contrary to the Manual on Uniform Traffic Control Devices, which is the guiding document for the use and placement of traffic control signage. For these reasons the City of Saratoga Springs does not use Stop signs for traffic calming purposes.

- Pavement Markings

  Narrower streets that have a more urban appearance can cause drivers to reduce their speeds. Striping can reduce the apparent width of existing lanes and create a more urban appearance. Pavement markings can include centerlines, fog lines, school crossings, speed limits, etc.

- Target Enforcement

  Information from the traffic study will allow the Saratoga Springs Police Department to patrol the area more effectively (at peak hours and problem times). Police enforcement is effective, but labor intensive.

- Radar Speed Trailer

  A portable trailer equipped with a radar unit detects the speed of passing vehicles and displays it on a digital reader. This device shows drivers their actual speed versus the posted speed limit. This information helps to promote compliance with the posted speed limit.

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Traffic Calming Program

Phase 2 Techniques

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Phase 2 Traffic-Calming Measures

The traffic-calming measures in this appendix include physical obstructions and vertical and horizontal deflections in the street. Examples of these measures include permanent raised intersections, curb extensions, and diverters. These measures used alone or in various combinations and implemented properly can be effective in reducing vehicle speeds, volume, and conflicts between motorists and pedestrians. These measures are intended to improve the community as a whole. The installation of any traffic-calming device is subject to the approval of Saratoga Springs City.

- Raised Intersections

  Raised intersections are flat raised areas covering an entire intersection, with ramps on all approaches and often with bricks or other textured materials on the flat sections. They usually rise to the level of the sidewalk. By modifying the level of the intersection, the crosswalks are more recognizable to motorists.

  Calming two streets at once is a major advantage of raised intersections. Improved safety for both pedestrians and motorists while slowing vehicle speeds is another advantage.

  Increased emergency response time and the expensive cost of materials and labor is a disadvantage for raised intersections. When considering raised intersections drainage and snow removal difficulties have to be considered along with the cost and maintenance of said intersections.

- Center Island Narrowing

  A center island is a raised island located along the centerline of the street that narrows the lanes at that location. The islands are usually landscaped to reduce the open feel of the street. Center island narrowing is very effective in reducing speeds around curves. It also provides stopping points for pedestrians as they cross streets, improving safety.

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Center islands have positive aesthetic value while also reducing speeds and increasing safety if the resultant lanes are narrow.

Disadvantages may include eliminating on street parking in that area, drainage impacts, as well as additional maintenance needs and costs if landscaped.

- Choker and Chicanes

Chokers are curb extensions at mid-block locations that narrow a street by widening the sidewalk or planting strip. If marked as crosswalks sometimes they are referred to as safe crosses.

Advantages of chokers include being easily navigable by large vehicles such as fire trucks, increased aesthetic value, and reducing speed and volumes.

Disadvantages include being a potential obstacle to careless drivers, less on street parking available, cost, maintenance, and drainage implications

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Traffic Calming Program

Frequently Asked Questions (FAQs)

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Frequently Asked Questions

Q: What is traffic calming?

A: Traffic calming is the use of roadway geometrics and other physical measures to reduce unwanted effects of vehicular traffic, including excessive speeds, volumes, and noise.

Q: How do I request traffic calming for my street?

A: A Traffic Calming Application must be submitted to the City. The appli cation may be printed from the City website or obtained from the City offices.

Q: Why is this such a long process? Can't the City just come and do some thing?

A: The City has an established Traffic Calming Program under which these requests can be evaluated. Each request is evaluated on a case-by-case basis and prioritized according to severity and available funding. A neighborhood can elect to pay for 100 percent of the cost to install a prescribed measure, if it has been warranted through the Traffic Calm ing Program.

Q: Do residents who do not live on a roadway in question, but who use that same street to get to and from their home, get a "say" in whether traffic-calming measures are implemented?

A: No. People who regularly use the street, but don't live on it, are far less likely to favor traffic-calming measures. On the other hand, people who live on the street in question have to live with the adverse effects of traffic problems

Q: Are certain traffic-calming measures better than others?

A: There isn't one best measure. Each has its pros and cons. Each situa tion will be evaluated and the best measure for the area, desired out come, and feasibility will be considered.

Q: What is the 85th percentile speed?

A: The 85th percentile speed is the most common measure of speed that engineers use when evaluating the speed of a group of vehicles. In stead of being the "average" speed of all the vehicles traveling in an area over a certain amount of time, it is the speed that 85 percent of the vehicles are traveling at or below.

DRAFT

Meeting Schedule

The Planning Commission and City Council held a series of Joint Work Session Meetings to discuss the General Plan, including the Land-Use Element, Land-Use Map, and Transportation Map. These meetings occurred on January 24th and 31st, 2012, February 16th and 21st, 2012, and March 1st, 8th and 14th, 2012. Each meeting agenda was published and posted, and property owners as well as residents were allowed to attend and provide input.

On March 29th, 2012 the Planning Commission held a public hearing on this item and forwarded a positive recommendation to the City Council. Council Adopted the TMP map on April 17th.

The work sessions for the Transportation element of the general plan were held on August 21st for City Council and August 23rd, for Planning Commission. PC will voted on August 23rd and sent a positive recommendation to City Council who adopted the transportation element of the general plan on September 4th.

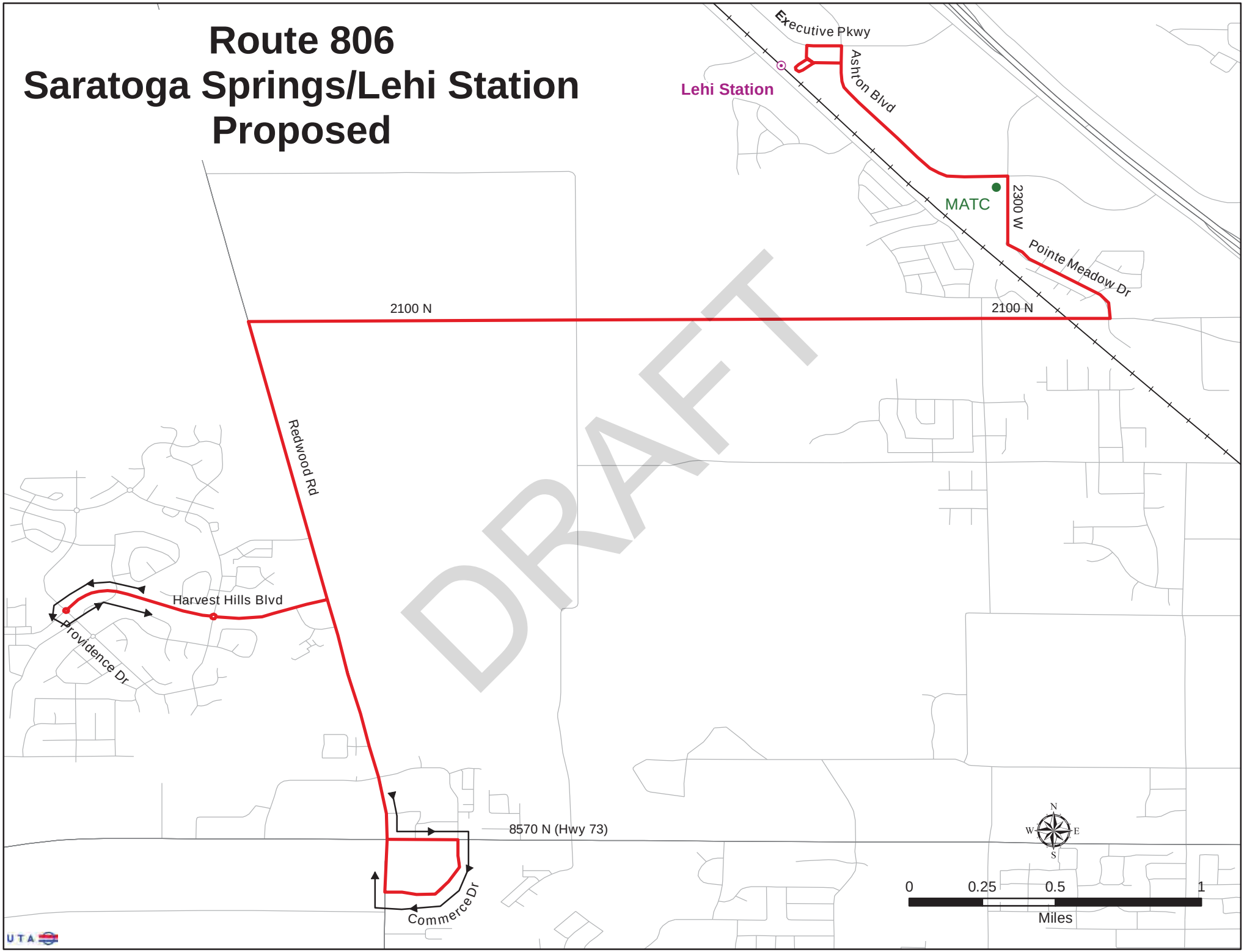
Meetings were held with land holders and adjacent municipalities to discuss the transportation element of the general plan and solicit feedback on the following days:

- Ray Whitchurch; IBI Group - April 3rd 2012
- Ron Phillips, Ari Bruening, Jesse Fairbanks, Robert Grow, Warren Peterson; FLR – March 23rd 2012
- Shane Marshall; UDOT Region 3 – March 23rd 2012
- Bart Cima, Scott Bolton; IBI Group – March 21st 2012
- Chris Trusty, Steve Mumford; Eagle Mountain City – March 22nd 2012
- Lorin Powell; Lehi City – March 21st 2012

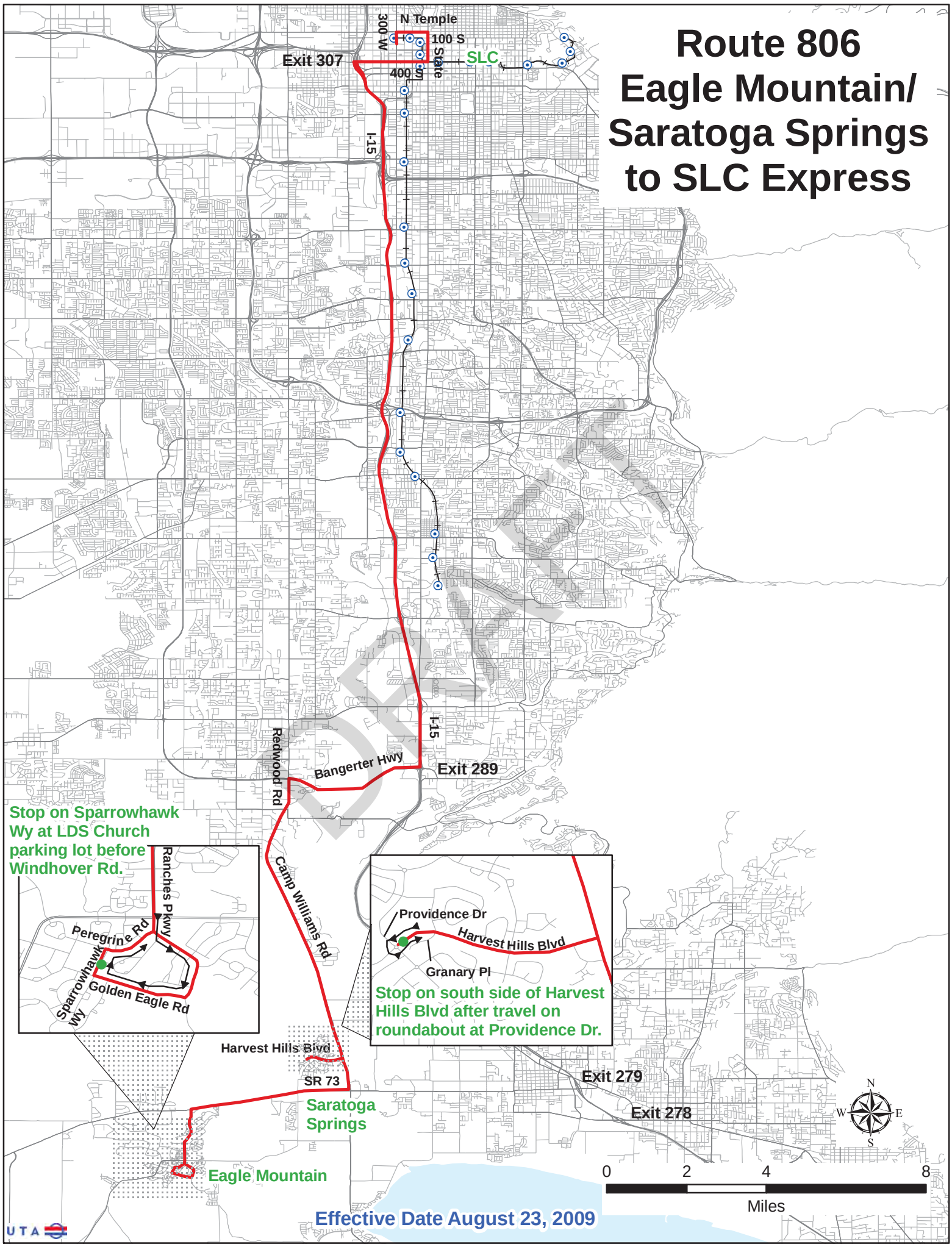
In addition, Horrocks Engineers met regularly with City Staff to discuss the transportation element of the general plan and address comments or concerns.

DRAFT

Route 806
Saratoga Springs/Lehi Station
Proposed



Route 806 Eagle Mountain/ Saratoga Springs to SLC Express



128514

COOPERATIVE AGREEMENT
Transfer of SR-73 to S-0073(24)36
Saratoga Springs City Jurisdiction
SARATOGA SPRINGS CITY
Federal ID No. 87-0575087 71387

15719

COOPERATIVE AGREEMENT

THIS COOPERATIVE AGREEMENT, made and entered into this 30 day of Nov, 2011 by and between the **UTAH DEPARTMENT OF TRANSPORTATION**, hereinafter referred to as **"UDOT,"** and **SARATOGA SPRINGS CITY**, a municipal corporation of the State of Utah created, hereinafter referred to as the **"CITY"**,

RECITALS

WHEREAS, UDOT desires to transfer ownership and full jurisdiction of a portion of SR-73 in Saratoga Springs to the **CITY**, beginning at SR-68 (Redwood Road) and ending at the West side of the Jordan River, the City of Saratoga Springs East City Limits a distance of 0.571 + miles; and

THIS COOPERATIVE AGREEMENT is written to set out the terms and conditions under which the jurisdictional transfer shall be performed.

NOW, THEREFORE, it is agreed by and between the parties hereto as follows:

1. **UDOT** agrees to release payment in the form of a **ONE TIME LUMP SUM AMOUNT OF $27,700.00** equal to the equivalent of one (1) year of **UDOT's** maintenance and pavement preservation budget. The noted funds will be forwarded to the **CITY** at the time of jurisdictional transfer to be used at the **CITY's** discretion.

TOTAL ESTIMATED COST TO UDOT $27,700.00

2. **UDOT** further agrees to provide snow removal for SR-73 through the winter season of 2011-2012. All snow removal services will cease upon the end of season 2012. Beginning 2012-2013, all snow removal services for SR-73 will become the sole responsibility of the **CITY.** All other operations and maintenance responsibilities, services, needs and costs become the sole responsibility of the **CITY** effective upon the execution of the jurisdictional transfer. **CITY** agrees to assume ownership and all maintenance responsibilities associated with the above noted route and to relieve **UDOT** from any and all maintenance responsibilities and liability associated with said maintenance.

3. **UDOT** further agrees to continue to maintain the traffic signal located at the intersection of SR-73 and SR-68. **UDOT** further agrees to maintain the existing traffic signal located at SR-73 and East Commerce Drive until Dec. 15, 2015. The street lighting at this location will continue to be owned and maintained by the **CITY** as those responsibilities are currently defined.

DRAFT

COOPERATIVE AGREEMENT
Transfer of SR-73 to
Saratoga Springs City Jurisdiction
SARATOGA SPRINGS CITY
Federal ID No. 87-0575087

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed by their duly authorized officers as of the day and year first above written.

SARATOGA SPRINGS CITY, STATE OF UTAH

Mayor,
Saratoga Springs City

Saratoga Springs City Clerk

Date: November 23, 2011

UTAH DEPARTMENT OF TRANSPORTATION

Executive Director
Utah Department of Transportation

UDOT Secretary

Date: _____

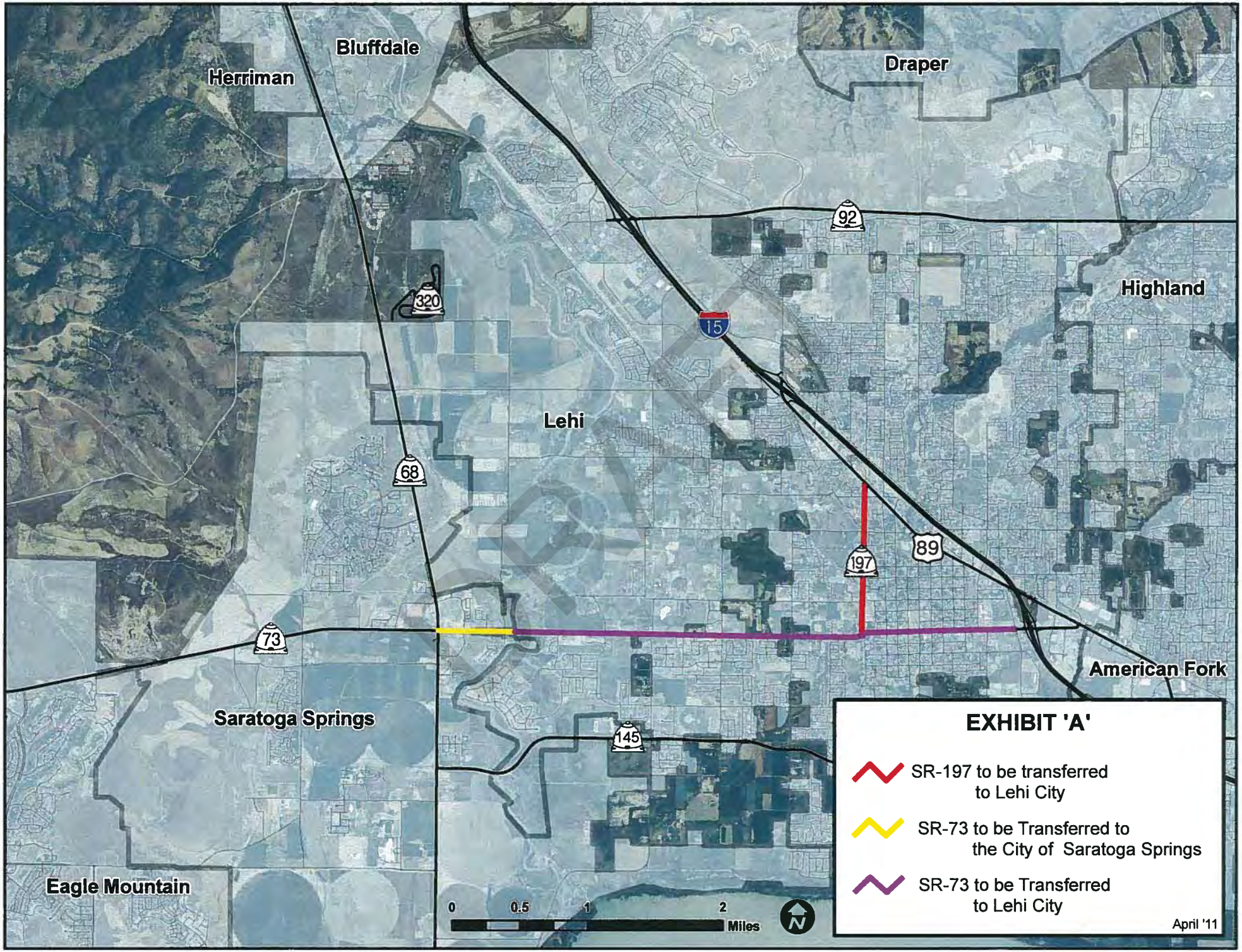
COMPTROLLER OFFICE

Contract Administrator

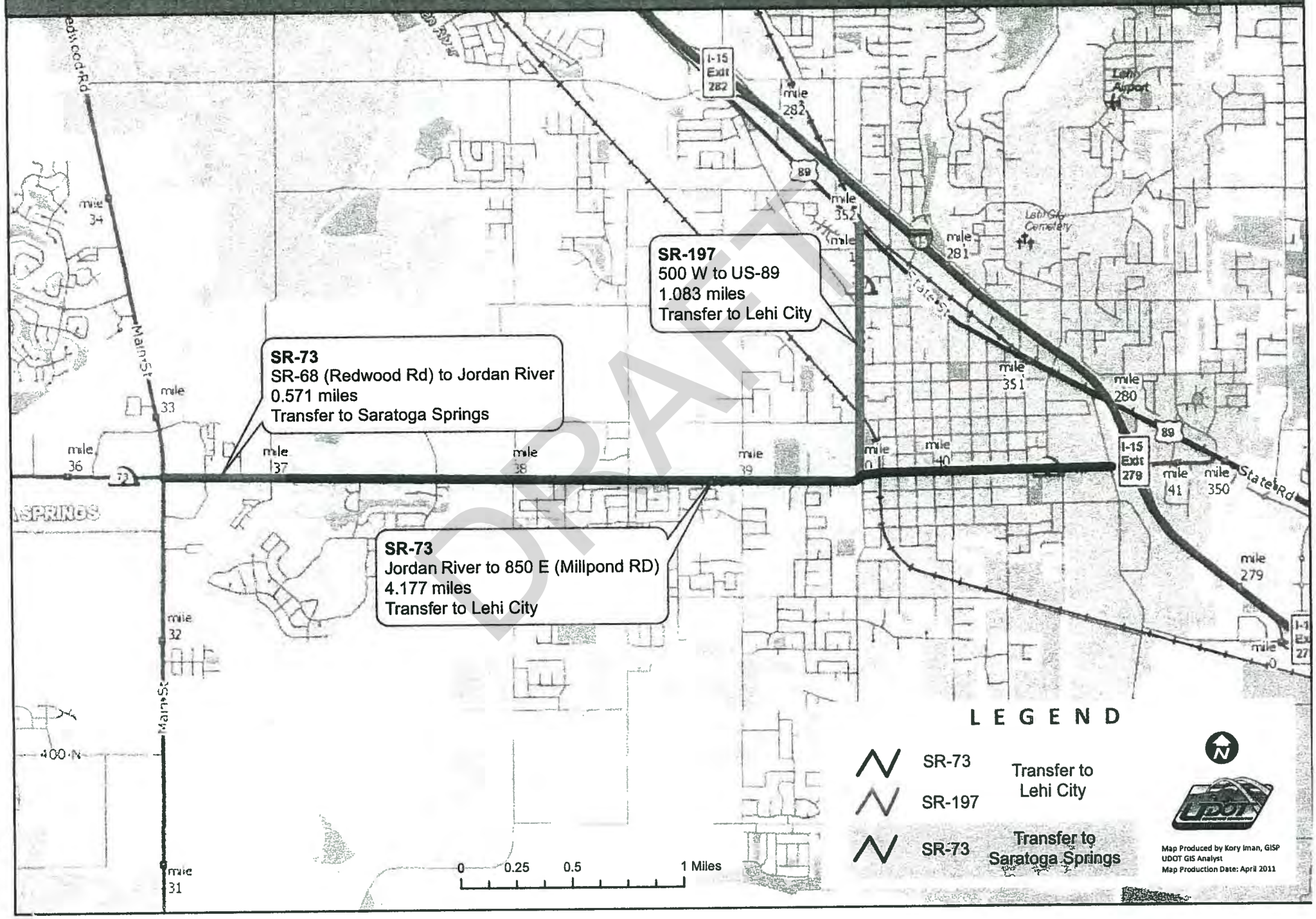
Date: 12-21-11

DRAFT

J11-048-SR-73 transfer Saratoga


Bluffdale
Herriman
Draper
Highland
Lehi
Saratoga Springs
Eagle Mountain
American Fork
92
320
15
68
197
89
73
145
0
0.5
1
2
Miles
EXHIBIT 'A'
SR-197 to be transferred to Lehi City
SR-73 to be Transferred to the City of Saratoga Springs
SR-73 to be Transferred to Lehi City
April '11

JURISDICTIONAL TRANSFER OF SR-73 & SR-197



2009-243

Corridor Preservation along Pioneer Crossing Road
from SR-68 to US-89
CITY OF SARATOGA SPRINGS
Federal ID No. 870575087
LEHI CITY
Federal ID No. 876000240
AMERICAN FORK CITY
Federal ID No. 876000209
UTAH COUNTY
Federal ID No. 876000312

098907

COOPERATIVE AGREEMENT

10610

THIS COOPERATIVE AGREEMENT, made and entered into this 12th day of May, 20 09, by and between the **UTAH DEPARTMENT OF TRANSPORTATION**, hereinafter referred to as **"UDOT"** and **CITY OF SARATOGA SPRINGS, LEHI CITY, AMERICAN FORK CITY**, and **UTAH COUNTY**, all of which are Municipal Corporations in the State of Utah, hereinafter referred to as the **"LOCAL AGENCY"**,

WITNESSETH:

WHEREAS, the parties hereto desire to establish and preserve a corridor along the proposed Pioneer Crossing Road alignment from SR-68 in Saratoga Springs to US-89 in American Fork City, Utah County, to facilitate traffic flow, to be in accordance with each **LOCAL AGENCY's** current Transportation Plan, and to be in accordance with **UDOT**'s Access Management Standards and practices. See attached map of Pioneer Crossing Road.

NOW THEREFORE, it is agreed by and between the parties hereto as follows:

1. The following intersections are identified as existing, proposed, or future traffic signal locations along Pioneer Crossing Road within the respective city limits or within Utah County:

- SR-68 (Saratoga Springs) (Proposed)
- 300 East approx. (Saratoga Springs)/ 10400 West approx. (County) (Proposed)
- 3400 West approx. (Lehi) (Proposed)
- 2300 West (Lehi)/9550 West (County) (Proposed)
- 1700 West (Lehi)/9150 West (County) (Proposed)
- 1100 West (Lehi)/8730 West (County) (Proposed)
- 500 West (Lehi)/8350 West (County) (Proposed)
- Center St. (Lehi)/8000 West (County) (Proposed)
- 300 East (Lehi) (Proposed)
- 600 East approx. (Lehi) (Future)
- 850 East/Mill Pond Road (Lehi) (Proposed)
- Vineyard Connector (American Fork) (Proposed)

DRAFT

- Interstate 15 SB ramps (American Fork) (Existing to be modified)
- Interstate 15 NB ramps (American Fork) (Existing to be modified)
- 600 West (American Fork) (Proposed)
- US-89 (American Fork) (Existing)

The intersections of SR-68, 1700 West, and 850 East have been identified in the Pioneer Crossing Traffic Study as locations where traffic signals will be built as part of the project, even though they have not been warranted by the normal warranting process.

The intersection of 300 East will be eliminated when the future 600 East (approx.) intersection is constructed. If there is a traffic signal at the 300 East intersection, it will be "relocated" to 600 East (approx.).

2. Proposed traffic signals listed in #1 above except for SR-68, 1700 West, and 850 East will not be installed until warranted by **UDOT**. No other access to Pioneer Crossing Road will be allowed except for the existing UTA Park and Ride facility in the northeast quadrant of the I-15/Pioneer Crossing Road interchange. This access will become a permanent right in/out only access during construction. It is understood that it may be necessary to restrict certain types of traffic movements at any intersection in order to maintain traffic flow and improve safety through the corridor as agreed upon by the parties hereto.

3. A **UDOT** Highway Access Management Standards Category 3 is established for this corridor with modifications as follows: Minimum traffic signal spacing is 2,640 feet except as noted in #1 above. All of the intersections listed above shall be prepared for signalization during construction of Pioneer Crossing Road, consisting of underground conduit and junction boxes, and may be opened to traffic without signalization.

4. Pioneer Crossing Road is hereby designated as a Limited Access facility.

5. The parties hereto shall consider the concepts contained herein during the development of any master plans in this area and work towards the common goal of this Agreement.

6. In the event there are changes in the concepts or provisions covered by this Agreement, a modification to this Agreement approved in writing by both parties hereto is required to place them in effect.

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Corridor Preservation along Pioneer Crossing Road
from SR-68 to US-89
CITY OF SARATOGA SPRINGS
Federal ID No. 870575087
LEHI CITY
Federal ID No. 876000240
AMERICAN FORK CITY
Federal ID No. 876000209
UTAH COUNTY
Federal ID No. 876000312

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed by their duly authorized officers as of the day and year first above written.

ATTEST:

By: Debi Mateu
Title: Recorder
Date: 12/30/08

(IMPRESS SEAL)

CITY OF SARATOGA SPRINGS, a Municipal Corporation in the State of Utah

By: Timothy L. Parker
Title: Mayor
Date: 12/30/08

ATTEST:

By: Carmen Rohlfing
Title: Recorder
Date: 1/20/09

(IMPRESS SEAL)

LEHI CITY, a Municipal Corporation in the State of Utah

By: Howard Johnson
Title: Mayor
Date: 1-20-09

ATTEST:

By: L. M. Ch
Title: CITY RECORDER
Date: 4/13/09

(IMPRESS SEAL)

AMERICAN FORK CITY, a Municipal Corporation in the State of Utah

By: Delbert M. Thompson
Title: Mayor
Date: 4/13/09

DRAFT

Corridor Preservation along Pioneer Crossing Road
from SR-68 to US-89
CITY OF SARATOGA SPRINGS
Federal ID No. 870575087
LEHI CITY
Federal ID No. 876000240
AMERICAN FORK CITY
Federal ID No. 876000209
UTAH COUNTY
Federal ID No. 876000312

ATTEST:

By: Linda Strickland
Title: Con Chair
Date: 5/12/09

(IMPRESS SEAL)

UTAH COUNTY, a
Municipal Corporation in the State of Utah

By: [signature]
Title: Utah County Commissioner
Date: May 12, 2009

****

RECOMMENDED FOR APPROVAL: UTAH DEPARTMENT OF TRANSPORTATION

By: [signature]
Utilities/Railroads Coordinator

Date: 5/26/09

By: [signature]
Region Director

Date: 5-26-09

APPROVED AS TO FORM:

This Form Agreement has been previously approved as to form by the office of Legal Counsel for the Utah Department of Transportation.

COMPTROLLER OFFICE

By [signature]
Contract Administrator

Date: 6/4/09

DRAFT

Corridor Preservation along SR-68 from
1800 North to 2600 North
LEHI CITY CORPORATION
Federal ID No. 876000240

9959

COOPERATIVE AGREEMENT

THIS AGREEMENT, made and entered into this 10th day of Feb, 2009, by and between the **UTAH DEPARTMENT OF TRANSPORTATION**, hereinafter referred to as **"UDOT"** and **LEHI CITY**, a Municipal Corporation in the State of Utah, hereinafter referred to as the **"CITY"**,

WITNESSETH:

WHEREAS, the parties hereto desire to establish and preserve a corridor along SR-68 from 1800 North to 2600 North in Lehi City, Utah County, to facilitate traffic flow, to be in accordance with the **CITY's** Master Transportation Plan approved June 10, 2008, and to be in accordance with **UDOT**'s Access Management Standards and practices.

NOW THEREFORE, it is agreed by and between the parties hereto as follows:

1. The following locations are identified as existing, warranted/under design, or proposed traffic signal installations along SR-68 within Lehi city limits and within Saratoga Springs city limits that pertain to this agreement:

• SR-73 (Saratoga Springs)	(Existing)
• North Commerce Dr. (Saratoga Springs)	(Proposed)
• Harvest Hills Blvd. (Saratoga Springs)	(Under design)
• 1500 North (Lehi address but in Saratoga Springs)	(Proposed)
• 1900 North, approx. (Lehi)	(Proposed)
• 2100 North (Lehi)	(Proposed)
• 2350 North, approx. (Lehi)	(Proposed)
• 2600 North (Lehi)	(Under design)

2. Except for the proposed traffic signal locations, there will be no access permitted between 1900 North and 2600 North. Proposed traffic signals will not be installed until warranted by **UDOT**.

3. It is understood that it may be necessary to restrict certain types of traffic movements at any intersection or access in order to maintain traffic flow and improve safety through the corridor as agreed upon by the parties hereto. Both parties agree to the prohibition of direct access to SR-68 within Lehi's city limits.

4. Segments of the highway which are currently designated as No Access, Limited Access, or Regular Right-of-Way are unchanged by this Agreement.

DRAFT

5. The parties hereto shall consider the concepts contained herein during the development of any master plans in this area and work towards the common goal of this Agreement.

6. In the event there are changes in the concepts or provisions covered by this Agreement, a modification to this Agreement approved in writing by both parties hereto is required to place them in effect.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed by their duly authorized officers as of the day and year first above written.

ATTEST:

By: Connie Ashton
Title: Recorder
Date: 1-27-09

(IMPRESS SEAL)

LEHI CITY CORPORATION, a Municipal Corporation in the State of Utah

By: Howard Johnson
Title: Mayor
Date: 1-27-09

DRAFT

****

RECOMMENDED FOR APPROVAL: UTAH DEPARTMENT OF TRANSPORTATION

By: _____
Utilities/Railroads Coordinator
Date: 2/9/09

By: _____
Region Director
Date: 2-10-09

APPROVED AS TO FORM:

This Form Agreement has been previously approved as to form by the office of Legal Counsel for the Utah Department of Transportation.

COMPTROLLER OFFICE

By Cherise Young
Contract Administrator
Date: 3/2/09

COOPERATIVE AGREEMENT

THIS COOPERATIVE AGREEMENT, made and entered into this 28th day of October, 20 09, by and between the **UTAH DEPARTMENT OF TRANSPORTATION**, hereinafter referred to as **"UDOT"** and **CITY OF SARATOGA SPRINGS**, a Municipal Corporation in the State of Utah, hereinafter referred to as the **"CITY"**,

WITNESSETH:

WHEREAS, the parties hereto desire to establish and preserve a corridor along SR-73 from 2000 West to the Jordan River in the City of Saratoga Springs, Utah County, to facilitate traffic flow, to be in accordance with the City's Transportation Master Plan adopted by ordinance 28 October 2008, and to be in accordance with UDOT's Access Management Standards and practices.

NOW THEREFORE, it is agreed by and between the parties hereto as follows:

1. The following locations are identified as existing, warranted, or proposed traffic signal installations along SR-73:

- Saratoga Parkway (1400 West) (Proposed)
- 800 West (Warranted)
- West Commerce Drive (Proposed)
- SR-68 (Existing)
- East Commerce Drive (Proposed)
- 400 East (Proposed)

The intersection of SR-73 at Foothill Blvd. is expected to be constructed as part of the Mountain View Corridor road connection with SR-73. At that time the traffic signal which will be existing at 800 West will be "relocated" to Foothill Blvd.

2. Proposed traffic signals listed in #1 above will not be installed until warranted by **UDOT**. Additional traffic signals along SR-73 are not anticipated at this time, but intersections other than those listed in #1 above may be considered on an individual basis and studied by **UDOT**. These intersections may include Hillside Drive (1200 West) and 400 West. Even if these intersections are studied and warranted in the future by **UDOT**, there is no guarantee they will be signalized. It is understood that it may be necessary to restrict certain types of traffic movements at any intersection or access in order to maintain traffic flow and improve safety through the corridor as agreed upon by the parties hereto.

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3. The current **UDOT** Highway Access Management Standards Category from the west city limit to a point about 1500 feet west of SR-68 is 2, meaning minimum traffic signal spacing is 5,280 feet, minimum street spacing is 1,000 feet, and minimum access spacing is 1,000 feet. From a point about 1500 feet west of SR-68 to a point about 475 feet west of 9248 West (Lehi), the Access Management Standards Category is 4, meaning minimum traffic signal spacing of 2,640 feet, minimum street spacing is 660 feet, and minimum access spacing is 500 feet. Both parties will strive to maintain traffic signal, street, and access spacing according to the current Access Management Standards. Reasonable exceptions may be reviewed by both agencies and variances may be granted if approved by both agencies.

4. Segments of the highway which are currently designated as No Access, Limited Access, or Regular Right-of-Way are unchanged by this Agreement.

5. The parties hereto shall consider the concepts contained herein during the development of any master plans in this area and work towards the common goal of this Agreement.

6. In the event there are changes in the concepts or provisions covered by this Agreement, a modification to this Agreement approved in writing by both parties hereto is required to place them in effect.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed by their duly authorized officers as of the day and year first above written.

ATTEST:

By: Dori Yates
Title: City Recorder
Date: 12/17/08

(IMPRESS SEAL)

CITY OF SARATOGA SPRINGS, a Municipal Corporation in the State of Utah

By: Timothy L. Parker
Title: Mayor
Date: 12/17/08

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****

RECOMMENDED FOR APPROVAL: UTAH DEPARTMENT OF TRANSPORTATION

By: _____
Utilities/Railroads Coordinator

Date: 12/23/08

By: _____
Region Director

Date: 12-29-08

APPROVED AS TO FORM:

This Form Agreement has been previously approved as to form by the office of Legal Counsel for the Utah Department of Transportation.

COMPTROLLER OFFICE

By _____
Contract Administrator

Date: 1/7/09

DRAFT

Corridor Preservation along SR-68 from
5200 South to 2600 North
9757 **CITY OF SARATOGA SPRINGS**
Federal ID No. 870575087

COOPERATIVE AGREEMENT

THIS COOPERATIVE AGREEMENT, made and entered into this 28th day of October, 20 08, by and between the **UTAH DEPARTMENT OF TRANSPORTATION**, hereinafter referred to as **"UDOT"** and **CITY OF SARATOGA SPRINGS**, a Municipal Corporation in the State of Utah, hereinafter referred to as the **"CITY"**,

WITNESSETH:

WHEREAS, the parties hereto desire to establish and preserve a corridor along SR-68 from 5200 South to 2600 North in the City of Saratoga Springs, Utah County, to facilitate traffic flow, to be in accordance with the City's Transportation Master Plan adopted by ordinance 28 October 2008, and to be in accordance with UDOT's Access Management Standards and practices.

NOW THEREFORE, it is agreed by and between the parties hereto as follows:

1. The following locations are identified as existing, warranted, or proposed traffic signal installations along SR-68:

• Foothill Blvd. (5200 South)	(Proposed)
• Bonneville Drive (4700 South)	(Proposed)
• Harbor Park Way (4000 South)	(Proposed)
• Village Parkway (2900 South)	(Proposed)
• Ring Road, a.k.a. Lariat Blvd. (2000 South)	(Proposed)
• Grandview Blvd. (1400 South)	(Proposed)
• 800 South	(Proposed)
• Center St.	(Proposed)
• Pioneer Crossing Blvd.	(Warranted via Pioneer Crossing Traffic Study)
• South Commerce Dr.	(Proposed)
• SR-73	(Existing)
• North Commerce Dr.	(Proposed)
• Harvest Hills Blvd.	(Warranted)

The intersection of SR-68 at the east-west segment of the Mountain View corridor (2800 North) is not currently within the Saratoga Springs city boundaries but may be in the future. It is a proposed traffic signal location and is included here for information only.

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2. Proposed traffic signals listed in #1 above will not be installed until warranted by **UDOT**. Additional traffic signals along SR-68 are not anticipated at this time, but intersections other than those listed in #1 above may be considered for signalization on an individual basis when studied by **UDOT**. Any intersections of this nature are not guaranteed to be signalized. It is understood that it may be necessary to restrict certain types of traffic movements at any intersection or access in order to maintain traffic flow and improve safety through the corridor as agreed upon by the parties hereto.

3. The current **UDOT** Highway Access Management Standards Category for the entire length of SR-68 within the **CITY** is 4, meaning minimum traffic signal spacing is 2,640 feet, minimum street spacing is 660 feet, minimum access spacing is 500 feet. Both parties will strive to maintain traffic signal, street, and access spacing according to the current Access Management Standards. Reasonable exceptions may be reviewed by both agencies and variances may be granted if approved by both agencies.

4. Segments of the highway which are currently designated as No Access, Limited Access, or Regular Right-of-Way are unchanged by this Agreement.

5. The parties hereto shall consider the concepts contained herein during the development of any master plans in this area and work towards the common goal of this Agreement.

6. In the event there are changes in the concepts or provisions covered by this Agreement, a modification to this Agreement approved in writing by both parties hereto is required to place them in effect.

DRAFT

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed by their duly authorized officers as of the day and year first above written.

ATTEST:

By: _____
Title: City Recorder
Date: 12/17/08

(IMPRESS SEAL)

CITY OF SARATOGA SPRINGS, a Municipal Corporation in the State of Utah

By: _____
Title: Mayor
Date: 12/17/08

****

RECOMMENDED FOR APPROVAL: UTAH DEPARTMENT OF TRANSPORTATION

By: _____
Utilities/Railroads Coordinator

Date: 12/23/08

By: _____
Region Director

Date: 12-29-08

APPROVED AS TO FORM:

This Form Agreement has been previously approved as to form by the office of Legal Counsel for the Utah Department of Transportation.

COMPTROLLER OFFICE

By _____
Contract Administrator

Date: 1/7/09

DRAFT

Utah Department of Transportation
Traffic Impact Study Requirements

This memo and preceding information is prepared to assist an access permit applicant fulfilling the requirement of performing a traffic impact study when requesting access to a state highway. Each permit application is unique. The agreed requirements of traffic study and assessment may vary accordingly as agreed to by the Department and the applicant and/or their representative who will perform the traffic study.

Please refer to the Department document, *Accommodation of Utilities and the Control and Protection of State Highway Rights of Way: Section 7, State Highway Access* for full information concerning the grant of access application requirements. A downloadable copy of the document is available on the Department website at http://www.udot.utah.gov.

The following are taken from the Utah state rule 930-6, Accommodation of Utilities and the Control and protection of State Highway Rights of Way. Statements for this guideline are also added which do not appear in the Rule.

7.2.5 Preparing The Access Application

Pre-Application/Concept Meeting

Prior to submitting a permit application, contact the appropriate Department Region or District office for information about the application process and the type of information required. The applicant is advised to consult with the Region Permit Officer during a pre-application meeting to determine the appropriate access category, permit application level, and traffic impact study requirements, and scope for the project.

Permit Level

The level of application required is based upon the size and magnitude of the proposed project applying for a permit. Threshold criteria for different levels of projects have been developed to avoid placing an undue burden on applicants with small projects, while ensuring that large projects with significant impacts are thoroughly evaluated.

Four application levels have been developed based on site-generated traffic of AADT and or peak hour volumes. Each level defines specific threshold elements related to required applicant site plan elements, permitting process, permitting schedule, applicant fees, traffic study requirements, and other permit related issues. The information and level of detail required to review an application will vary according to the type and usage of the access connection requested and will be determined based on the thresholds outlines in, Table 7.2-2: Guidelines for Access Permit Levels. The Region Permit Officer, Traffic Engineer and/or designee will determine the Permit Application Level based on preliminary data supplied by the applicant.

A Traffic Impact Study (TIS) is required of all access permit applications. The purpose of the TIS is to identify system and immediate area impacts associated with the proposed connection(s). Identification of impacts and appropriate mitigation measures allows the Department to assess the existing and future system safety, performance, maintenance, and capacity needs.

Determination of the extent of the TIS study area is at the determination of the attending Region Traffic Engineer and /or other Department employees. The study area, depending on the size and

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intensity of the development and surrounding development, may be identified by parcel boundary, area of immediate influence or reasonable travel time boundary. An acceptable traffic study boundary, based on travel time, may be identified as a ten or twenty minute travel time or even by market area influence.

The TIS shall, at a minimum, incorporate traffic engineering principles and the standards as presented in this Rule. Additional requirements and investigation may be imposed upon the applicant as necessary.

Likely information presented in the TIS may include, but is not limited to, site location and proposed access point(s), phased and/or full development trip generation, connection point design elements, adjacent and relevant development, existing and future traffic volumes, assessment of the system impacts, and mitigation measures as appropriate.

The applicant will be responsible for performance and delivery of an acceptable traffic impact study. The TIS should be performed by an individual or entity demonstrating capability to analyze and report mobility, traffic engineering elements, and design elements as necessary for the application study area and site design. The TIS should be prepared directly, or by direct supervision by a State of Utah Licensed Professional Engineer. The Region Traffic Engineer may waive the licensing requirement for Permit Level I and II, and may also waive the Utah Licensure requirement.

7.2.6 Application Review

For an access permit, submit one complete application with attachments to the Region Permits Officer at the appropriate Department Region Office. The Region Permits Officer is the primary contact for the applicant with the Department throughout the process. Direct inquires regarding a permit application or review, are directed to the Region Permit Officer.

7.2.11 Traffic Impact Studies

Need for Traffic Impact Study

A traffic study is necessary to identify, review, and make recommendations for mitigation of the potential impacts a development may have on the roadway system. Physical characteristics and operational characteristics of the roadway are typically identified. The Region Permits Officer and/or Region Traffic Engineer determine the need for a traffic impact study.

An applicant may be required to submit a traffic study for any proposed access or connection within an area identified by the Department. Area definition may be defined by, but not limited to, an identified safety problem, accident review, congested locations, or as a result of a change in land use and/or access in accordance with an access permit application. The study area may also be defined by a travel time boundary, area of influence, physical boundaries, or political boundaries.

Purpose of the Traffic Impact Study

TIS are intended to:

- Document whether or not the access request can meet the standards and requirements of this Rule and other applicable regulations.
- Analyze appropriate location, spacing, and design of the access connection(s) necessary to mitigate the traffic.

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- Analyze operational impacts on the highway and permissible under the highway's assigned access category and in accordance with applicable requirements and standards of this Rule.
- Recommend the need for any improvements to the adjacent and nearby roadway system to maintain a satisfactory level of service and safety and to protect the function of the highway system while providing appropriate and necessary access to the proposed development.
- Assure that the internal traffic circulation of the proposed development is designed to provide safe and efficient access to and from the adjacent and nearby roadway system consistent with the purpose of this Rule.
- Analyze and recommend the means for land uses to minimize their external transportation costs to the traveling public through traffic improvements necessitated by that development as well as making the fullest use of alternative travel modes.

Traffic Impact Study Requirements

When a Traffic Impact Study is required (See Table 7.2-2), prepare the study according to the Department Traffic Impact Study Requirements. The appropriate Region Traffic Engineer in consultation with the permit applicant will determine the traffic study area limits.

All existing and proposed access points, driveways and streets, shall be identified for each site, including access on the opposite side of the site and within the influence area of the proposed site access. The influence area will be defined by the Region Traffic Engineer and/or designee. Each access will be labeled for proposed accesses as P1, P2, P3… and existing accesses as E1, E2, E3,…

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Accommodation of Utilities and the Control and Protection of State Highway Rights of Way
Table 7.2-2

Guidelines for Access Permit Levels

Permit Type App. Level	Thresholds	Typical Land Use Intensity Thresholds (ITE Trip Generation)		Traffic Impact Study Required
I	Projected site traffic < 100 ADT **and** No proposed modifications to traffic signals or elements of the roadway	Single Family Apartment Lodging General Office Retail	< 10 units < 15 units < 11 occupied rooms < 9,000 square feet < 2,500 square feet	YES Conditions Apply
II	Projected site traffic between 100 and 3,000 ADT **or** Projected peak hour traffic < 500 **and** Minor modifications to traffic signals or elements of the roadway	Single Family Apartment Lodging General Office Retail Gas Station Fast Food Restaurant	10 to 315 units 15 to 450 units 11 to 330 occupied rooms 9,000 to 270,000 sq. ft. 2,500 to 70,000 sq. ft. 1 to 18 fueling positions 1,000 to 6, 000 sq. ft. 1,000 to 26,000 sq. ft.	YES
III	Projected site traffic between 3,000 and 10,000 ADT **or** Projected peak hour traffic between 500 and 1,200 **or** Proposed installation or modification to traffic signals or elements of the roadway, regardless of project size	Single Family Apartment Lodging General Office Retail Fast Food	315 to 1,000 units 450 to 1,500 units 330 to 1,100 occupied rooms 270,000 to 900,000 sq. ft. 70,000 to 230,000 sq. ft. 6,000 to 20, 000 sq. ft.	YES
IV	Projected site traffic > 10,000 ADT **or** Proposed installation /modification of two or more traffic signals, addition of travel lanes to State Highway or proposed modification of freeway interchange, regardless of project size	Single Family Apartment Lodging General Office Retail	> 1,000 units > 1,500 units > 1,100 occupied rooms > 900,000 square feet > 230,000 square feet	YES

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Permit Level / Traffic Study level I

Project ADT < 100 trips.
No proposed modifications to traffic signals or roadway elements or geometry.

The traffic study shall, at a minimum, incorporate traffic engineering principles and standards as presented in the State Highway Access Management Rule, Department standards, and national practices. Additional requirements and investigation may be imposed upon the applicant as necessary.

The Region Permits officer and/or the Region Traffic Engineer determine the need and requirements for a traffic impact study.

1. Study Area.
   Defined by Region Permits Officer and/or Region Traffic Engineer.
   The study area, depending on the size and intensity of the development and surrounding development, may be identified by parcel boundary, area of immediate influence or reasonable travel time boundary.

   Study area may be limited to or include property frontage and include neighboring and adjacent parcels. Identify site, cross, and next adjacent up and down stream access points within access category distance of property boundaries.

2. Design year.
   Opening day of project.
3. Analysis Conditions and Period
   Identify site traffic volumes and characteristics.
   Identify adjacent street(s) traffic volume and characteristics.
4. Identify right-of-way, geometric boundaries and physical conflicts.
   Investigate existence of federal or state, no access or limited access control line.
5. Generate access point capacity analysis as necessary.
   Analyze site and adjacent road traffic for the following time periods: weekday A.M. and P.M. peak hours including Saturday peak hours. Identify special event peak hour as necessary (per roadway peak and site peak).
6. Design and Mitigation.
   Identify operational concerns and mitigation measures to ensure safe and efficient operation pursuant to appropriate state highway access category.

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Permit Level / Traffic Study Level II

The traffic study shall, at a minimum, incorporate traffic engineering principles and standards as presented in the State Highway Access Management Rule, Department standards, and national practices. Additional requirements and investigation may be imposed upon the applicant as necessary.

The Region Permits officer and/or the Region Traffic Engineer determine the need and requirements for a traffic impact study.

Project ADT 100 to 500 trips.

1. Study Area.
   Defined by Region Permits Officer or Region Traffic Engineer.
   The study area, depending on the size and intensity of the development and surrounding development, may be identified by parcel boundary, area of immediate influence or reasonable travel time boundary.

   Intersection of site access drives with state highways and any signalized and unsignalized intersection within access category distance of property line. Include any identified queuing distance at site and study intersections

2. Design Year.
   Opening day of project.
3. Analysis Period.
   Identify site and adjacent road traffic for weekday A.M. and P.M. peak hours.
4. Data Collection
   Identify site and adjacent street roadway and intersection geometries.
   Identify adjacent street(s) traffic volume and characteristics.
5. Conflict / Capacity Analysis
   Diagram flow of traffic at access point(s) for site and adjacent development.
   Perform capacity analysis as determined by Region Traffic Engineer.
6. Right-of-Way Access
   Identify right-of-way, geometric boundaries and physical conflicts. Investigate existence of federal or state, no access or limited access control line.
7. Design and Mitigation
   Determine and document safe and efficient operational design needs based on site and study area data. Identify operational concerns and mitigation measures to ensure safe and efficient operation pursuant to appropriate state highway access category.

Project ADT 500 to 3,000 trips or peak hour < 500 trips.

Any proposed modification to traffic signals or roadway elements or geometry.

1. Study Area.
   Defined by Region Permits Officer or Region Traffic Engineer.
   The study area, depending on the size and intensity of the development and surrounding development, may be identified by parcel boundary, area of immediate influence or reasonable travel time boundary. An acceptable traffic study boundary, based on travel time, may be identified as a ten or twenty minute travel time or even by market area influence.

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Intersection of site access drives with state highways and any signalized and unsignalized intersection within access category distance of property line. Include any identified queuing distance at site and study intersections.

2. Design Year.
   Opening day of project and five year after project completion. Document and include all phases of development (includes out pad parcels).
3. Analysis Period.
   Analyze site and adjacent road traffic for weekday A.M. and P.M. peak hours including Saturday peak hours. Identify special event peak hour as necessary (adjacent roadway peak and site peak).
4. Data Collection
   a. Daily and Turning Movement counts.
   b. Identify site and adjacent street roadway and intersection geometries.
   c. Traffic control devices including traffic signals and regulatory signs.
   d. Traffic accident data
5. Trip Generation.
   Use equations or rates available in latest edition of ITE Trip Generation. Where developed equations are unavailable for intended land use, perform trip rate study and estimation following ITE procedures or develop justified trip rate agreed to by the Department.
6. Trip Distribution and Assignment
   Document distribution and assignment of existing, site, background, and future traffic volumes on surrounding network of study area.
7. Conflict / Capacity Analysis.
   Diagram flow of traffic at access point(s) for site and adjacent development.
   Perform capacity analysis for daily and peak hour volumes
8. Traffic Signal Impacts. For modified and proposed traffic signals:
   a. Traffic Signal Warrants as identified.
   b. Traffic Signal drawings as identified.
   c. Queuing Analysis
9. Right-of-Way Access
   Identify right-of-way, geometric boundaries and physical conflicts. Investigate existence of federal or state, no access or limited access control line.
10. Design and Mitigation.
    Determine and document safe and efficient operational design needs based on site and study area data. Identify operational concerns and mitigation measures to ensure safe and efficient operation pursuant to appropriate state highway access category.

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Permit Level / Traffic Study Level III

Project ADT 3,000 to10,000 trips or peak hour traffic 500 to 1,200 trips.
Proposed installation or modification to traffic signals or roadway elements or geometry, regardless of project size or trip generation.

The traffic study shall, at a minimum, incorporate traffic engineering principles and standards as presented in the State Highway Access Management Rule, Department standards, and national practices. Additional requirements and investigation may be imposed upon the applicant as necessary.

The Region Permits officer and/or the Region Traffic Engineer determine the need and requirements for a traffic impact study.

1. Study Area.
   Defined by Region Permits Officer or Region Traffic Engineer
   The study area, depending on the size and intensity of the development and surrounding development, may be identified by parcel boundary, area of immediate influence or reasonable travel time boundary. An acceptable traffic study boundary, based on travel time, may be identified as a ten or twenty minute travel time or even by market area influence.

   Intersection of site access drives with state highways and any intersection within 1/2 mile of property line on each side of project site.

2. Design Year.
   Opening day of project, five years and twenty years after opening. Document and include all phases of development (includes out pad parcels).
3. Analysis period.
   For each design year analyze site and adjacent road traffic for weekday A.M. and P.M. peak hours including Saturday peak hours. Identify special event peak hour as necessary (adjacent roadway peak and site peak).
4. Data Collection.
   a. Daily and Turning movement counts.
   b. Identify site and adjacent street roadway and intersection geometries.
   c. Traffic control devices including traffic signals and regulatory signs.
   d. Automatic continuous traffic counts for at least 48 hours.
   e. Traffic accident data.
5. Trip Generation.
   Use equations or rates available in latest edition of ITE Trip Generation. Where developed equations are unavailable for intended land use, perform trip rate study and estimation following ITE procedures or develop justified trip rate agreed to by the Department.
6. Trip Distributions and Assignment.
   Document distribution and assignment of existing, site, background, and future traffic volumes on surrounding network of study area.
7. Capacity Analysis.
   a. Level of Service (LOS) for all intersections.
   b. LOS for existing conditions, design year without project, design year with project.
8. Traffic Signal Impacts. For proposed Traffic Signals:
   a. Traffic Signal Warrants as identified.
   b. Traffic Signal drawings as identified.

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c. Queuing Analysis.
d. Traffic Systems Analysis. Includes acceleration, deceleration and weaving.
e. Traffic Coordination Analysis

9. Right-of-Way Access
   Identify right-of-way, geometric boundaries and physical conflicts. Investigate existence of federal or state, no access or limited access control line.
10. Accident and Traffic Safety Analysis. Existing vs. as proposed development.
11. Design and Mitigation.
    Determine and document safe and efficient operational design needs based on site and study area data. Identify operational concerns and mitigation measures to ensure safe and efficient operation pursuant to appropriate state highway access category.

Permit Level / Traffic Study Level IV

Project ADT greater than 10,000 trips or peak hour traffic > 1,200 vehicles per hour.
Proposed installation or modification of two or more traffic signals, addition of traffic lanes or modification of freeway interchange.

The traffic study shall, at a minimum, incorporate traffic engineering principles and standards as presented in the State Highway Access Management Rule, Department standards, and national practices. Additional requirements and investigation may be imposed upon the applicant as necessary.

The Region Permits officer and/or the Region Traffic Engineer determine the need and requirements for a traffic impact study.

1. Study Area.
   Defined by Region Permits Officer or Region Traffic Engineer
   The study area, depending on the size and intensity of the development and surrounding development, may be identified by parcel boundary, area of immediate influence or reasonable travel time boundary. An acceptable traffic study boundary, based on travel time, may be identified as a ten or twenty minute travel time or even by market area influence.

   Intersection of site access drives with state highways and any intersection within 1/2 mile of property line of each side of project site and any intersection or freeway interchange impacted by more than 500 peak hour trips.

2. Design Year.
   Opening day of project, five years and twenty years after opening. Document and include all phases of development (includes out pad parcels).
3. Analysis period.
   For each design year analyze site and adjacent road traffic for weekday A.M. and P.M. peak hours including Saturday peak hours. Identify special event peak hour as necessary (adjacent roadway peak and site peak).
4. Data Collection.
   a. Daily and Turning movement counts.
   b. Identify site and adjacent street roadway and intersection geometries.
   c. Traffic control devices including traffic signals and regulatory signs.

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d. Automatic continuous traffic counts for at least 48 hours.
e. Traffic accident data.

5. Trip Generation
   Use equations or rates available in latest edition of ITE Trip Generation. Where developed equations are unavailable for intended land use, perform trip rate study and estimation following ITE procedures or develop justified trip rate agreed to by the Department.

6. Trip Distributions and Assignment.
   Document distribution and assignment of existing, site, background, and future traffic volumes on surrounding network of study area.

7. Capacity Analysis.
   a. Level of Service (LOS) for all intersections.
   b. LOS for existing conditions, design year without project, design year with project.

8. Traffic Signal Impacts. For proposed traffic signals:
   a. Traffic Signal Warrants as identified.
   b. Traffic Signal drawings as identified.
   c. Queuing Analysis.
   d. Traffic Systems Analysis. Includes acceleration, deceleration and weaving.
   e. Traffic Coordination Analysis.

9. Right-of-Way Access
   Identify right-of-way, geometric boundaries and physical conflicts. Investigate existence of federal or state, no access or limited access control line.

10. Accident and Traffic Safety Analysis. Existing vs. as proposed develop.

11. Design and Mitigation.
    Determine and document safe and efficient operational design needs based on site and study area data. Identify operational concerns and mitigation measures to ensure safe and efficient operation pursuant to appropriate state highway access category.

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STUDY AND REPORT FORMAT

The Traffic impact study should follow the recommended format below. Traffic impact studies shall be presented by a firm or individual recognized by the Department of Transportation as capable of performing a traffic analysis and when necessary, include engineered drawings based on Department standards drawings and specifications.

(1) INTRODUCTION AND SUMMARY

(2) PROPOSED PROJECT

(3) STUDY AREA CONDITIONS

(4) ANALYSIS OF EXISTING CONDITIONS

(5) PROJECTED TRAFFIC

(6) TRAFFIC ANALYSIS

(7) CONCLUSIONS

(8) RECOMMENDATIONS

(9) APPENDICES

a) Traffic Counts
b) Traffic Capacity Analysis
c) Accident Summary
d) Request for change of access (if applicable)

(10) FIGURES AND TABLES

The following items shall be documented in the study:

a) Site location – showing area roadways
b) Site Plan
   Identify geometric / physical concerns relating to area, site and specific access points. Include adjacent street and access points.
c) Existing roadway and traffic control features (number of lanes, lane widths, alignment, location of traffic signals, signs) Include off-system features as related to site plan and access point(s).
d) Existing daily volumes (directional if possible) and peak hour turning volumes. Discuss traffic characteristics (vehicle mix, % make-up and any special vehicle requirements).
e) Collision diagram summary.
f) Site generated trip summary. Discuss trip/vehicle make-up and any special vehicle requirements. Discuss trip reduction strategies if applicable.
g) Directional distribution of site generated traffic.
h) Assignment of Non-site related traffic (existing, background and future). Document both existing and committed development, and when appropriate other background planned development traffic. Assignment of total future non-site traffic for design year.
i) Assignment of Site Traffic
j) Traffic Capacity Analysis
   Projected levels of service without the project – coincide with development phase years.
   Projected levels of service with the project (by development phase years)
   Recommended mitigation / improvement

(Scaled schematic drawings illustrating alignment, number of lanes, lane widths, signing, pavement markings. If traffic signal modifications are proposed, signal phasing, signal head locations, lane marking shall be shown.)

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09.18.2013

Memo

To
Jeremy Lapin, P.E.
City Engineer

From
Steven Lord
Project Manager

Re
Saratoga Springs Transportation Element of the General Plan Amendment

Purpose and Introduction:

The purpose of this memorandum is to amend the Saratoga Springs Transportation Element of the General Plan adopted in September of 2012. The reason for the amendment is the result of a traffic impact study (TIS) performed by Hales Engineering in conjunction with a development by DR Horton in the vicinity of 400 South and Old Saratoga Road east of Redwood Road. The developer wishes to downgrade two master planned roads from Collector streets to local streets in the development. Horrocks has reviewed the TIS performed and agrees that making the proposed changes should not greatly impact the overall road network in Saratoga Springs. Care must be taken during the approval process for the development to ensure that certain internal roads are calmed to discourage use by pass-through traffic. Details of the proposal and findings are found in the following paragraphs.

Proposed Development:

DR Horton proposes a residential development, which is currently under city review. The development is located on the east side of Redwood Road and South of 400 South. This development consists of a mix of single family and multi-family dwellings totaling approximately 993 units. The development proposes that the future 600 South and the future Riverside Drive (running north-south) be downgraded to local streets from Collector streets. It is presumed that this proposal is to allow homes to front these two streets as the City access management guidelines prohibit residential driveways on Collector streets.

Traffic Impact Study Review:

The results and recommendations shown in the traffic impact study appear to be derived using sound traffic engineering principles and give a good representation of the traffic conditions that can be expected as the area develops. Horrocks has made no attempt to recreate the results and recommendations found in the TIS. However, Horrocks has found no reason to question the results and recommendations based on the validity of the assumptions outlined in the TIS.

DRAFT

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HORROCKS ENGINEERS

The TIS indicates that each of the study intersections will operate at acceptable levels through the year 2040 provided the intersection at Redwood Road and 400 South is signalized. The transportation element of the general plan does not call for a signal at 400 South as there is currently no agreement between the City and the Utah Department of Transportation (UDOT) to install a traffic signal at this location. It appears that a traffic signal at this location will meet the access management standards established for UDOT owned roadways and would therefore likely be permitted provided the requisite signal warrants are met.

The projected traffic volumes provided by Hales Engineering in the TIS and in the TMP Amendment memo dated August 30, 2013 appear to be reasonable for the roads within the study area. Hales Engineering commissioned modifications to the travel demand model within the vicinity of the development to assess the impact of downgrading the roads from Collector streets to local streets. Again, Horrocks has made no attempt to recreate the results but from the assumptions discussed in the memo and TIS, has found no reason to question the validity of the recommendations. The memo indicates that by downgrading the roads from Collectors to local streets, traffic will be diverted to 400 South or Pony Express Parkway. This will increase the volume of traffic on 400 South, Pony Express Parkway and Redwood Road north of the development but is not likely to result in these roads reaching capacity by the year 2040.

Downgrading the future 600 south must be done with care as this is the most direct route for vehicles to travel from the west side of Redwood Road, connecting a future interchange on the proposed Foothill Boulevard with the east side of Utah County. In order to ensure that 600 South is only used by local traffic and not by regional pass-through traffic, 600 south should be considered for traffic calming. The City has recently undergone a review of its traffic calming procedures. These procedures should be followed when reviewing and approving the development.

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Conclusions:

Attached to this memo are updated figures and tables reflecting the changes to the Transportation Element of the General Plan as proposed with the DR Horton development. In this memorandum Horrocks Engineers is not providing a recommendation that these changes should or should not be made, only affirming that it is unlikely that these changes will significantly

impact the overall roadway network within the City. The attached figures, tables and pages are intended to replace the corresponding figures, tables and pages found within the Transportation Element of the General Plan adopted September 2012.

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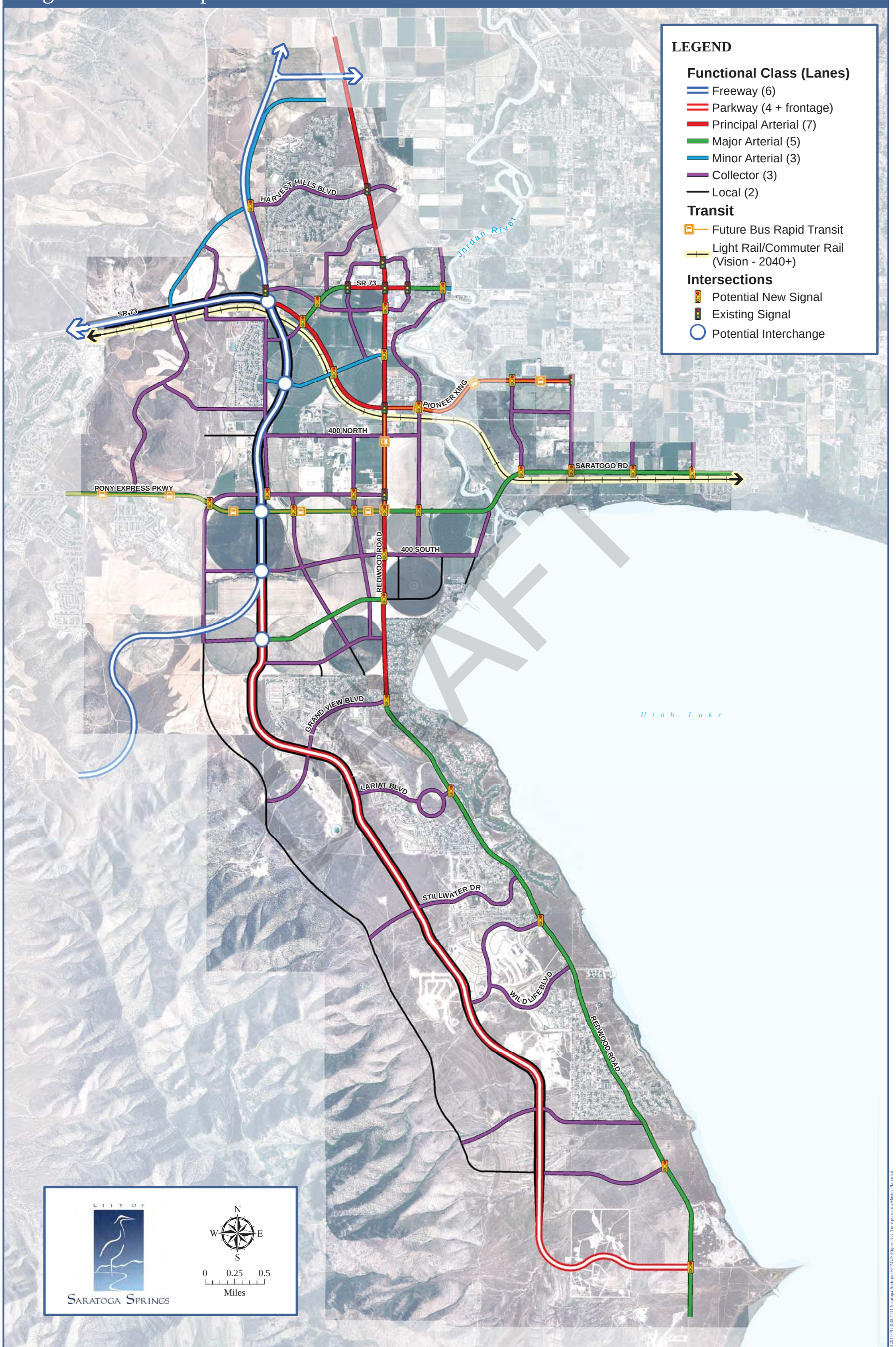
Figure 4-1 Transportation Master Plan



- A safety analysis for key roadways and intersections including applicable accident histories.
- Any applicable yield sign, stop sign, multi-way stop signs, and traffic signal warrant analyses.
- A determination of the street system's ability to accommodate projected traffic levels.
- An identification of impacts to the existing street system as a result of the project.
- A discussion of improvements to be implemented as part of the project to accommodate project traffic such as roadway and intersection widening to provide exclusive turn lanes or modifications to traffic controls.
- A discussion of mitigation measures to be implemented to restore or improve traffic operations to an acceptable LOS on any key roadway segments or at key intersections within the study area.

Each TIS will be conducted by a qualified Traffic Engineer chosen by the City at the developer cost. The City Engineer will determine the scope of each TIS, based on the UDOT Traffic Impact Study Requirements found in the appendix of this report, and will review its contents once complete and provide comments. Upon receiving approval from the City Engineer, the TIS requirement related to the development will be satisfied. If a developer feels that his or her project does not meet the requirements to have a TIS completed, then the developer will need to provide documentation stating his or her case which will be reviewed by the City Engineer.

4.8 Agency Coordination

As many of the roads in Saratoga Springs City are either owned by or connect into roads that are owned by other agencies such as UDOT, neighboring cities, and Utah County, a close working relationship should be maintained between these different jurisdictions and the City to ensure that roadway projects are not only coordinated but consistent.

4.9 Planned Roadway Improvements

A number of roadway improvements have been recommended to occur between now and the year 2040. These recommendations are based on travel demand volume predictions and available capacity of each roadway. Each of these improvements should be implemented as a result of increasing traffic volumes due to future development. **Table 4-2** outlines these recommended improvements. This table will be regularly updated by the City as plans for development change and become adopted.

Table 4-2 Saratoga Springs City Recommended Transportation Improvements

Type of Improvement[1]	Roadway or Location	From	To	Jurisdiction(s)
New Major Arterial	Pioneer Crossing Extension	Redwood Rd	800 West & SR-73	UDOT
New Major Arterial	SR-73 Realignment	Commerce Rd (West)	Pioneer Crossing Extension	UDOT
New Major Arterial	Saratoga Rd	Redwood Rd	2300 West	UDOT
New Major Arterial	New Pony Express Pkwy	Future Bonneville Collector (1200 West)	Redwood Rd	UDOT

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Type of Improvement[1]	Roadway or Location	From	To	Jurisdiction(s)
Widen to Major Arterial	Redwood Rd	Saratoga Rd	Stillwater Dr	UDOT
Widen to Major Arterial	Saratoga Rd (1900 S Lehi)	2300 West	East City-Limits	UDOT
Widen to Major Arterial	Pony Express Pkwy	West City-Limit	Future Bonneville Collector (1200 West)	UDOT
Add Center Turn Lane to Collector	Pony Express Pkwy	1200 West	Redwood Road	City
New Collector	SR-73 Realignment	800 West	Pioneer Crossing Extension	City
New Collector	Wildlife Blvd	Village Pkwy	Harrier Dr	City
New Traffic Signal	Redwood Rd & Lariat Blvd			UDOT
New Traffic Signal	New Pony Express Pkwy & Redwood Rd			UDOT
New Traffic Signal	SR-73 Realignment & Pioneer Crossing Extension			UDOT
New Traffic Signal	Redwood Rd & Commerce Dr (South)			UDOT
New Traffic Signal	New Pony Express Pkwy & Old Pony Express Pkwy			UDOT
New Traffic Signal	Grandview Boulevard & Redwood Road			UDOT
Future Freeway	MVC (2100 North)	MVC	East City-Limits	UDOT
Future Freeway	Mountain View Corridor (MVC)	North City- Limits	SR-73	UDOT
Future Freeway	SR-73	West City-Limits	MVC	UDOT
Future Freeway	Mountain View Corridor (MVC)	SR-73/Pioneer Extension	400 South	UDOT
Future Freeway	Hidden Valley Freeway	West City-Limits	MVC (400 South)	UDOT
Future System to System Interchange	MVC & 2100 North MVC Freeway			UDOT
Future System to System Interchange	MVC & SR-73/ Pioneer Extension			UDOT
Future System to System Interchange	Hidden Valley Freeway & Foothill Pkwy			UDOT
Future Interchange	MVC & 800 North			UDOT
Future Interchange	MVC & Pony Express			UDOT
Future Parkway	Foothill Parkway	400 South	Redwood Road (near Pelican Point)	UDOT
Future Interchange	MVC Parkway & 1000 South			UDOT
New Major Arterial	1000 South	Future Foothill Pkwy	Redwood Rd	City
New Minor Arterial	800 North	800 West	Redwood Rd	City
New Minor Arterial	2000 North	SR-73	East City-Limits	City

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Type of Improvement[1]	Roadway or Location	From	To	Jurisdiction(s)
Widen to Major Arterial	SR-73	Commerce Road (East)	West bank of Jordan River	City
Widen to Major Arterial	Redwood Rd	Stillwater Dr	South City-Limit	UDOT
Widen to Principle Arterial	Pioneer Crossing	Redwood Rd	East City-Limits	UDOT
Widen to Principle Arterial	Redwood Rd	North City- Limits	Grandview Blvd	UDOT
New Collector	Future Bonneville Collector	Foothill Parkway	Redwood Road	City
New Collector	South Collector	Bonneville Local	Redwood Road	City
New Collector	Stillwater Dr	Bonneville Local	Sunrise Cir	City
New Collector	Grandview Blvd	Bonneville Local	Foothill Parkway	City
New Collector	Parkway Blvd (1000 S)	Foothill Parkway	Redwood Road	City
New Collector	1000 South	1200 West	Foothill Parkway	City
New Collector	400 South	1200 West	400 East	City
New Collector	1200 West	1000 South	New Pony Express Pkwy	City
New Collector	600 West	1200 South	Old Pony Express Pkwy	City
New Collector	Thunder Blvd	1000 South	Old Pony Express Pkwy	City
New Collector	Riverside Drive	Saratoga Road	Jordan Ridge Blvd	City
New Collector	400 North	Redwood Road	Riverside Drive	City
New Collector	Silverlake Pkwy	Pony Express Pkwy	SR-73	City
New Collector	600 North	Silverlake Pkwy	800 West	City
New Collector	Harvest Hills Blvd	2000 North	Sunflower Way	City
New Collector	Harvest Hills Blvd	Redwood Road	East City-Limits	City
New Collector	800 West	Commerce Dr (South)	Harvest Hills Blvd	City
New Collector	Commerce Dr (South)	800 West	Redwood Road	City
New Collector	Commerce Dr (West)	800 North	SR-73	City
New Collector	2900 West (Lehi)	Saratoga Rd	Pioneer Crossing	City
New Collector	600 N (1300 South Lehi)	2900 West (Lehi)	2300 West (Lehi)	City
New Collector	Hillside Dr	SR-73	Mountain Arterial (2000 North)	City
Widen Collector	Thunder Blvd	Old Pony Express Pkwy	400 North	City
Widen Collector	Riverside Drive	SR-73	North City-Limits	City
Widen Collector	400 North	800 West	Redwood Road	City
Widen Collector	800 West	Old Pony Express Pkwy	1200 North	City
Widen Collector	1200 North	SR-73	800 West	City
Widen Collector	2300 West (Lehi)	Saratoga Rd	Pioneer Crossing	City
Widen Collector	1700 West (Lehi)	Saratoga Rd	North City-Limits	City
Widen Collector	1100 West (Lehi)	Saratoga Rd	North City-Limits	City
New Traffic Signal/ Roundabout	Old Pony Express Pkwy & 800 West			City

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Type of Improvement[1]	Roadway or Location	From	To	Jurisdiction(s)
New Traffic Signal	Redwood Rd & 400 South			UDOT
New Traffic Signal/ Roundabout	Old Pony Express Pkwy & 200 West			City
New Traffic Signal	Saratoga Rd & 1700 West Lehi			UDOT
New Traffic Signal	Saratoga Rd & 2300 West Lehi			UDOT
New Traffic Signal	Saratoga Rd & 2900 West Lehi			UDOT
New Traffic Signal	Redwood Rd & 800 North			UDOT
New Traffic Signal	Pioneer Crossing Extension & 800 North			UDOT
New Traffic Signal	SR-73 Realignment & 1200 North			UDOT
New Traffic Signal	Saratoga Rd & 400 East			UDOT
New Traffic Signal	Saratoga Rd & 1100 West Lehi			UDOT
New Traffic Signal	New Pony Express Pkwy & 200 West			UDOT
New Traffic Signal	Redwood Rd & Village Pkwy			UDOT
New Traffic Signal	Pioneer Crossing & Riverside Dr			UDOT
New Traffic Signal	Pioneer Crossing & 2900 West Lehi			UDOT
New Traffic Signal	New Pony Express Pkwy & 600 West			UDOT
New Traffic Signal	Harvest Hills & 2000 North			City
New Traffic Signal	Old SR-73 & Riverside Dr			City
New Traffic Signal	Redwood Rd & 600 South (1000 South)			UDOT
New Traffic Signal	Redwood Rd & Foothill Pkwy			UDOT
New Traffic Signal	Redwood Rd & Future Bonneville Collector			UDOT

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4.10 Special Considerations

A few specific locations on Saratoga Springs City's street network may require some unique improvements to resolve traffic issues at these sites. These areas are identified below along with the unique characteristics of each location.

City of Saratoga Springs

Neighborhood Traffic Calming Program

June 2016

Neighborhood Traffic Calming Program

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FAQ's

"Traffic Calming is the combination of mainly physical measures that reduce the negative effects of motor vehicles, alter driver behavior and improve conditions for non-motorized street users."

BACKGROUND

The City of Saratoga Springs (City) is often approached by residents about traffic in their residential neighborhoods. Until now, there has not been a set of guidelines or criteria by which these concerns can be methodically addressed.

This Traffic Calming Program (Program) was developed with input from various City departments and reference to applicable professional standards. It represents the City's effort to produce an equitable policy for the residents of the City.

GENERAL PURPOSE

The purpose of this Program is to address potential problems in specific areas due to vehicle traffic, and improve where practical, the safety for users of City rights-of-way.

This Program is a process rather than an instantaneous solution. It facilitates the development of a plan to possibly improve the function of a particular street and thereby enhance the community. Cooperation between residents and City staff is needed for this Program to succeed.

In order to promote safety and address potential traffic problems, residents and City staff will cooperate to implement the three "Es" of transportation engineering.

- Education: Increase awareness of residents in neighborhoods where there are traffic-related concerns.
- Engineering: Evaluate the affected street for functional classification, geometry, signage, traffic speed, traffic volume, and accident history to determine if traffic-calming measures are warranted.
- Enforcement: Encourage compliance with existing speed limits. Use speed-control tactics, such as regular enforcement, reduced speed near schools and other traffic generators, and enlist the assistance of the Police Department.

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GENERAL POLICIES

Due to the high demand for traffic calming and the fact that limited resources are available, the following policies are required:

- The subject street must be either a local street or a collector street.
- Cul-de-sac streets or other dead end streets are not eligible.
- Traffic-calming measures will be implemented as deemed necessary by the City. Any changes, additions, or removal of traffic-calming measures may occur at anytime as deemed necessary by the City.
- Proposed traffic-calming measures must be compatible with the subject street and its need to serve the needs of all users of the right-of-way.

PROCESS

The following process is designed to provide equitable and effective consideration at minimal taxpayer expense for most situations. The process involves escalated phasing, depending on the nature and severity of the potential problem. Projects that are being considered for the Program must follow this process. A flowchart that summarizes this process is provided in Appendix A.

PHASE 1

The Program begins once a resident submits a completed Traffic Calming Application to the City. The Application is provided in Appendix B.

Upon receipt of the Application, City staff will evaluate the application to determine the applicability traffic-calming measures. The evaluation may include a site visit, installing temporary traffic counters, and collecting data such as speed, volume, and peak traffic times. The following table shows the criteria that will be evaluated by the City Engineer to determine whether traffic-calming measures are warranted, and if so, which one(s) should be implemented.

If City staff determines that a street has a traffic problem, then the project will be advanced to Phase 1 of the Program. City staff will identify feasible and appropriate measures to address the problem. Examples of traffic-calming measures for the Phase I stage are provided in Appendix C.

City Staff will then report to the Applicant the findings from the traffic study and the prescribed Phase I measures proposed by City staff.

The prescribed measures will then be implemented on a trial basis. Following a 90-180 day trial period, City staff will collect new data to determine the effec-

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tiveness of the trial measures that were implemented.

If the prescribed Phase 1 measures prove effective in addressing the traffic problem, the improvements will stay in place or permanent devices will be installed. If the actions are ineffective there may be a need to continue to the Phase II stage of the Traffic Calming Program.

PHASE 2

Phase 2 measures will only be considered if Phase 1 measures are not effective and the traffic problem is still significant.

All projects that reach this point will be prioritized by City staff, costs and available funds being primary criteria. City staff will thoroughly review the initial traffic study and trial period data. They will then prescribe the best Phase 2 measure(s) for the target area. A list of typical Phase 2 measures used is found in Appendix D.

Highest priority projects will be implemented first. A project may be implemented faster if the subject neighborhood elects to pay all or part of the implementation costs. Residents need to notify Engineering staff if they are willing to pay all or part of the implementation costs.

Installation of traffic-calming measures will be performed by City crews or by a contractor selected by the City.

Location:	
Criteria	
Speed	85th percentile speed from traffic study
Volume	Average daily traffic volume
Accidents	Number of reported Accidents in last 3 years
Fatalities	Number of reported fatalities in last 3 years
Sidewalks	Is there a sidewalk present?
Pedestrian Generators	Is there a park, school, bus stop, etc. within 500 feet?
Emergency Response Route	Is the street a major route for emergency vehicles?
Traffic Calming	Are there existing traffic calming measures in the area?
Funding	Will all or part of the funding come from the neighborhood residents?

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MODIFICATION OR REMOVAL

The City reserves the right to modify or remove any traffic-calming device for any reason. If a neighborhood would like a traffic-calming device altered or removed, they must conduct the same process prior to permanent installation. If the request for the removal or modification is granted, then the neighborhood will be responsible for the costs associated with the removal or modification. All other measures will remain in place until the City decides otherwise.

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Appendix A

Traffic Calming Program

Flow Chart

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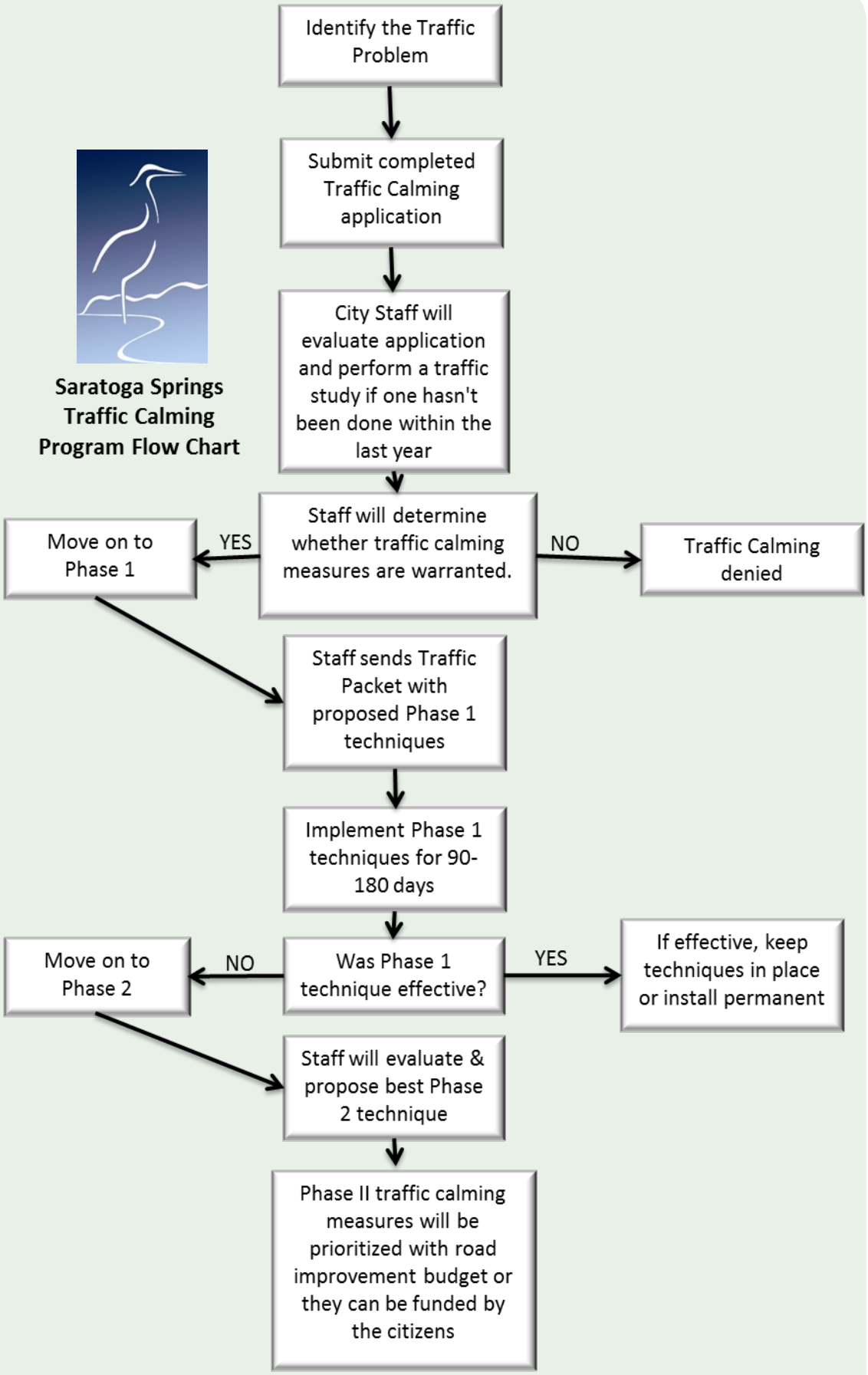
Saratoga Springs Traffic Calming Program Flow Chart



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Appendix B

Traffic Calming Program

Application

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Saratoga Springs City

1307 North Commerce Drive Suite 200

Saratoga Springs, UT 84045

(801) 766-9793x137

Fax: (801) 766-9794

Traffic Calming Application

Name: _____ Date: _____

Applicant Street Address:

_____

Phone: _____ Email: _____

Home Owners Association (if applicable):

_____

1. Please provide the approximate address to be considered. Indicate the name of the street to be considered and the boundaries of the street segment by identifying nearby intersecting streets (from and to). Attach a separate drawing if needed.

Requested Location:

_____

Street Name:

_____

From: _____ To: _____

2. Please provide responses to the following questions on behalf of residents of your neighborhood. Attach additional sheets if needed.

A. Of the items below, which best describes the traffic problem (circle all that apply)?

Speeding

High traffic volumes

Cut-through traffic

Traffic noise

Accidents

Pedestrian Safety (including bicyclists)

Parking

Other (please explain)

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B. Of the traffic problems identified in part A, how have these problems been observed?

Visual perception

Traffic Counter data obtained from City website

Radar gun

Counting cars

Other

C. How often has your neighborhood observed unsafe pedestrian or bicyclist conditions due to traffic?

1 to 3 per day

4 to 6 per day

7 to 9 per day

10 or more per day

D. What day(s) of the week and time(s) does the problem appear to be the worst?

E. How long has this traffic problem existed?

F. Has anything changed in the neighborhood recently(i.e. new schools, developments, ect)?

3. Have you contacted the City before about your concerns? If yes, please explain.

5. Is there any additional information that may be useful (photographs, statistics, etc.)?

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I understand that submitting this application does not guarantee approval for the Traffic Calming Program and ultimately it is the decision of the City of Saratoga Springs.

_____ _____

Applicant's Name Printed Date

_____

Applicant's Signature

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Appendix C

Traffic Calming Program

Phase 1 Techniques

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Saratoga Springs City

1307 North Commerce Drive Suite 200

Saratoga Springs, UT 84045

(801) 766-9793

Fax: (801) 766-9794

Phase 1 Traffic Calming Techniques

Level 1 measures are used to emphasize traffic safety to residents and give instructions for driving safely within the rules of the road. Some measures are used to slow and reduce traffic in an area.

- Signage

  This will include posting additional traffic control signs in the area. Signs may include speed limit, slow (children at play), parking, school zones, enforcement of laws, etc.

Note: A common request to address traffic problems in a neighborhood is the installation of Stop signs. This may seem like a good solution; however, Stop signs used for traffic calming can actually make things worse. Stop signs used for traffic calming can result in drivers ignoring Stop signs, speeding up between signs, or diverting to a different street. Using Stop signs for traffic-calming purposes is contrary to the Manual on Uniform Traffic Control Devices, which is the guiding document for the use and placement of traffic control signage. For these reasons the City of Saratoga Springs does not use Stop signs for traffic calming purposes.

- Pavement Markings

  Narrower streets that have a more urban appearance can cause drivers to reduce their speeds. Striping can reduce the apparent width of existing lanes and create a more urban appearance. Pavement markings can include centerlines, fog lines, school crossings, speed limits, etc.

- Target Enforcement

  Information from the traffic study will allow the Saratoga Springs Police Department to patrol the area more effectively (at peak hours and problem times). Police enforcement is effective, but labor intensive.

- Radar Speed Trailer

  A portable trailer equipped with a radar unit detects the speed of passing vehicles and displays it on a digital reader. This device shows drivers

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their actual speed versus the posted speed limit. This information helps to promote compliance with the posted speed limit.

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Traffic Calming Program

Phase 2 Techniques

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Phase 2 Traffic-Calming Measures

The traffic-calming measures in this appendix include physical obstructions and vertical and horizontal deflections in the street. Examples of these measures include permanent speed humps, curb extensions, and diverters. These measures used alone or in various combinations and implemented properly can be effective in reducing vehicle speeds, volume, and conflicts between motorists and pedestrians. These measures are intended to improve the community as a whole. The installation of any traffic-calming device is subject to the approval of Saratoga Springs City.

- Raised Intersections

  Raised intersections are flat raised areas covering an entire intersection, with ramps on all approaches and often with bricks or other textured materials on the flat sections. They usually rise to the level of the sidewalk. By modifying the level of the intersection, the crosswalks are more recognizable to motorists.

  Calming two streets at once is a major advantage of raised intersections. Improved safety for both pedestrians and motorists while slowing vehicle speeds is another advantage.

  Increased emergency response time and the expensive cost of materials and labor is a disadvantage for raised intersections. When considering raised intersections drainage and snow removal difficulties have to be considered along with the cost and maintenance of said intersections.

- Center Island Narrowing

  A center island is a raised island located along the centerline of the street that narrows the lanes at that location. The islands are usually landscaped to reduce the open feel of the street. Center island narrowing is very effective in reducing speeds around curves. It also provides stopping points for pedestrians as they cross streets, improving safety.

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Center islands have positive aesthetic value while also reducing speeds and increasing safety if the resultant lanes are narrow..

Disadvantages may include eliminating on street parking in that area, drainage impacts, as well as additional maintenance needs and costs if landscaped.

- Choker and Chicanes

Chokers are curb extensions at mid-block locations that narrow a street by widening the sidewalk or planting strip. If marked as crosswalks sometimes they are referred to as safe crosses.

Advantages of chokers include being easily navigable by large vehicles such as fire trucks, increased aesthetic value, and reducing speed and volumes.

Disadvantages include being a potential obstacle to careless drivers, less on street parking available, cost, maintenance, and drainage implications

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Traffic Calming Program

Frequently Asked Questions (FAQs)

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Frequently Asked Questions

Q: What is traffic calming?

A: Traffic calming is the use of roadway geometrics and other physical measures to reduce unwanted effects of vehicular traffic, including excessive speeds, volumes, and noise.

Q: How do I request traffic calming for my street?

A: A Traffic Calming Application must be submitted to the City. The application may be printed from the City website or obtained from the City offices.

Q: Why is this such a long process? Can't the City just come and do something?

A: The City has an established Traffic Calming Program under which these requests can be evaluated. Each request is evaluated on a case-by-case basis and prioritized according to severity and available funding. A neighborhood can elect to pay for 100 percent of the cost to install a prescribed measure, if it has been warranted through the Traffic Calming Program.

Q: Do residents who do not live on a roadway in question, but who use that same street to get to and from their home, get a "say" in whether traffic-calming measures are implemented?

A: No. People who regularly use the street, but don't live on it, are far less likely to favor traffic-calming measures. On the other hand, people who live on the street in question have to live with the adverse effects of traffic problems

Q: Are certain traffic-calming measures better than others?

A: There isn't one best measure. Each has its pros and cons. Each situation will be evaluated and the best measure for the area, desired outcome, and feasibility will be considered.

Q: What is the 85th percentile speed?

A: The 85th percentile speed is the most common measure of speed that engineers use when evaluating the speed of a group of vehicles. Instead of being the "average" speed of all the vehicles traveling in an area over a certain amount of time, it is the speed that 85 percent of the vehicles are traveling at or below.

City Council
Staff Report

Author: **Chelese Rawlings, Finance Manager**
Subject: **First Quarter FY 2017 Budget Financial Statements**
Date: **November 1, 2016**
Type of Item: **Informational**

Description

A. Topic

Attached are the first quarter budget financial statements for the fiscal year 2016-2017.

B. Background

The budget document was adopted by the Council on June 7, 2016. The attached reports show the actuals in comparison to the budget up to September 30, 2016.

C. Analysis/Overview of the General Fund

Revenues in comparison to last year first quarter:

- Property Tax revenue collected approximately the same as last fiscal year.
- Sales tax revenue collection is more by over $27,127.
- Franchise and energy taxes are more by $19,855.
- Licenses and Permits are higher by more than $182,084.
- Collected over $52,754 more in charges for services, a majority in preliminary and preliminary review fees, protective inspection fees, recreation revenue, and Wildland revenue.
- Collected approximately $123,995 more in other revenue, mainly due to interest revenue, sale of assets, and the increase in the Bluffdale contract.

Expenditures in comparison to last year first quarter:

- Total General Fund expenditures increased by $201,562. This is mainly due to increased personnel (mid-year last fiscal year 5+ FTE's were added to public safety that would not have been reflected in the first quarter of last year), membership dues, and the pay plan.

- Another reason for the increase is benefits that incrementally increase every year that are not controlled by council or staff, such benefits are: URS retirement, health benefits, dental benefits, etc.

D. Summary

The City of Saratoga Springs is under the 25 percent threshold of expenditures to date. The threshold is determined to be 25 percent because the first quarter reflects a quarter of our budget. In the General Fund we are currently at 22.5 percent of budgeted expenses.

The revenues are under the 25 percent threshold, mainly because the City has not yet received a majority of our property tax revenues budgeted and with the 2 month sales tax tax delay. These taxes are mostly collected in December. In the General Fund we are currently at 19.4 percent of budgeted revenues.

Due to the way our current general ledger structure is set up, the beginning fund balance is added as budgeted revenue to be included with the revenues currently received. These monies were collected in previous years and are being used in the current year to balance the budget for projects in which will now be using the funds. The following chart shows what the current revenue percentage is without the beginning fund balance.

Fund	Percent of Total Revenue Collected without Beginning Fund Balance included in Total Revenue
Street Ligting SID S. R. Fund	30.20%
SSD Street Light SID S. R. Fund	24.40%
Storm Drain - Capital Proj Fund	17.20%
Parks - Capital Projects Fund	67.30%
Roads - Capital Projects Fund	51.40%
Public Safety - Capital Projects Fund	58.40%
Capital Projects Fund	25.00%
Water Operations Fund	40.50%
Sewer Fund	35.90%
Waste Water	45.70%
Storm Drain Enterprise Fund	28.30%
Culinary Water Capital Project Fund	52.10%
2ndary Water Capital Project Fund	13.00%
Water Rights Fund	11.20%

CITY OF SARATOGA SPRINGS
FUND SUMMARY
FOR THE 3 MONTHS ENDING SEPTEMBER 30, 2016

GENERAL FUND

	YTD ACTUAL	BUDGET	VARIANCE	PCNT
REVENUE				
TAX REVENUE	565,852	6,776,769	6,210,917	8.4
LICENSES AND PERMITS	400,366	789,900	389,534	50.7
INTERGOVERNMENTAL REVENUE	11,751	785,589	773,838	1.5
CHARGES FOR SERVICES	748,913	1,923,073	1,174,160	38.9
OTHER REVENUE	536,544	1,485,900	949,356	36.1
ADMINISTRATIVE CHARGES	597,540	2,390,159	1,792,619	25.0
CONTRIBUTIONS & TRANSFERS	0	577,787	577,787	.0
	2,860,966	14,729,177	11,868,211	19.4
EXPENDITURES				
LEGISLATIVE DEPARTMENT	36,063	128,514	92,451	28.1
ADMINISTRATIVE DEPARTMENT	137,661	751,300	613,639	18.3
UTILITY BILLING DEPARTMENT	33,596	174,550	140,954	19.3
TREASURER DEPARTMENT	48,946	162,413	113,467	30.1
RECORDER DEPARTMENT	29,391	152,648	123,257	19.3
ATTORNEY DEPARTMENT	71,141	332,239	261,098	21.4
JUSTICE COURT DEPARTMENT	44,496	285,448	240,952	15.6
NON-DEPARTMENTAL	299,356	609,233	309,877	49.1
GENERAL GOV'T BLDGS & GROUNDS	37,569	191,164	153,595	19.7
PLANNING AND ZONING DEPARTMENT	84,097	536,614	452,517	15.7
COMMUNICATIONS DEPARTMENT	29,196	143,532	114,336	20.3
POLICE DEPARTMENT	812,595	3,084,214	2,271,619	26.4
POLICE DEPARTMENT - BLUFFDALE	133,983	916,674	782,691	14.6
FIRE DEPARTMENT	477,006	1,904,849	1,427,843	25.0
BUILDING INSPECTION	156,681	789,129	632,448	19.9
GRANT EXPENDITURES	0	71,250	71,250	.0
STREETS DEPARTMENT	122,920	730,923	608,004	16.8
PUBLIC WORKS DEPARTMENT	118,449	525,119	406,670	22.6
ENGINEERING DEPARTMENT	135,865	561,190	425,325	24.2
PUBLIC IMPROVEMENTS	94,882	474,912	380,030	20.0
PARKS & OPEN SPACES DEPT	190,996	978,422	787,426	19.5
RECREATION DEPARTMENT	43,715	312,951	269,236	14.0
CIVIC EVENTS	17,073	199,675	182,602	8.6
LIBRARY SERVICES	58,872	299,354	240,482	19.7
TRANSFERS	103,215	412,860	309,645	25.0
	3,317,763	14,729,177	11,411,414	22.5
	(456,797)	0	456,797	.0

CITY OF SARATOGA SPRINGS
FUND SUMMARY
FOR THE 3 MONTHS ENDING SEPTEMBER 30, 2016

STREET LIGHTING SID S.R. FUND

	YTD ACTUAL	BUDGET	VARIANCE	PCNT
REVENUE				
STREET LIGHTING SID REVENUE	45,244	150,000	104,756	30.2
INTEREST REVENUE	822	9,983	9,161	8.2
	46,066	159,983	113,917	28.8
EXPENDITURES				
STREET LIGHTING SID EXPENDITUR	40,680	159,983	119,303	25.4
	40,680	159,983	119,303	25.4
	5,386	0	(5,386)	.0

CITY OF SARATOGA SPRINGS
FUND SUMMARY
FOR THE 3 MONTHS ENDING SEPTEMBER 30, 2016

SSD STREET LIGHT SID S.R. FUND

	YTD ACTUAL	BUDGET	VARIANCE	PCNT
REVENUE				
SSD STREET LIGHT SID REVENUE	5,481	22,500	17,019	24.4
INTEREST REVENUE	69	9,492	9,423	.7
	5,551	31,992	26,441	17.4
EXPENDITURES				
SSD STREET LIGHT SID EXPENDIT	2,312	31,992	29,680	7.2
	2,312	31,992	29,680	7.2
	3,239	0	(3,239)	.0

CITY OF SARATOGA SPRINGS
FUND SUMMARY
FOR THE 3 MONTHS ENDING SEPTEMBER 30, 2016

ZONE 2 WATER IMPROVEMENT SID

	YTD ACTUAL	BUDGET	VARIANCE	PCNT
REVENUE				
WATER SID REVENUE	152,090	400,000	247,910	38.0
INTEREST REVENUE	506	0	(506)	.0
	152,596	400,000	247,404	38.2
EXPENDITURES				
WATER SID EXPENSES	0	267,396	267,396	.0
TRANSFERS AND OTHER USES	0	132,604	132,604	.0
	0	400,000	400,000	.0
	152,596	0	(152,596)	.0

CITY OF SARATOGA SPRINGS
FUND SUMMARY
FOR THE 3 MONTHS ENDING SEPTEMBER 30, 2016

STORM DRAIN-CAPITAL PROJ FUND

	YTD ACTUAL	BUDGET	VARIANCE	PCNT
REVENUE				
CONTRIBUTIONS & OTHER SOURCES	0	589,866	589,866	.0
IMPACT FEES REVENUE	43,772	255,000	211,228	17.2
	43,772	844,866	801,094	5.2
EXPENDITURES				
CAPITAL PROJECT EXPENDITURES	1,984	844,866	842,882	.2
	1,984	844,866	842,882	.2
	41,788	0	(41,788)	.0

CITY OF SARATOGA SPRINGS
FUND SUMMARY
FOR THE 3 MONTHS ENDING SEPTEMBER 30, 2016

PARKS - CAPITAL PROJECTS FUND

	YTD ACTUAL	BUDGET	VARIANCE	PCNT
REVENUE				
IMPACT FEES REVENUE	370,314	550,000	179,686	67.3
	370,314	550,000	179,686	67.3
EXPENDITURES				
CAPITAL PROJECT EXPENDITURES	48,373	509,447	461,074	9.5
TRANSFERS AND OTHER USES	0	40,553	40,553	.0
	48,373	550,000	501,627	8.8
	321,941	0	(321,941)	.0

CITY OF SARATOGA SPRINGS
FUND SUMMARY
FOR THE 3 MONTHS ENDING SEPTEMBER 30, 2016

ROADS - CAPITAL PROJECTS FUND

	YTD ACTUAL	BUDGET	VARIANCE	PCNT
REVENUE				
IMPACT FEES REVENUE	417,005	2,348,377	1,931,373	17.8
	417,005	2,348,377	1,931,373	17.8
EXPENDITURES				
CAPITAL PROJECT EXPENDITURES	94,028	2,348,377	2,254,349	4.0
	94,028	2,348,377	2,254,349	4.0
	322,976	0	(322,976)	.0

CITY OF SARATOGA SPRINGS
FUND SUMMARY
FOR THE 3 MONTHS ENDING SEPTEMBER 30, 2016

PUBLIC SAFE-CAPITAL PROJ FUND

	YTD ACTUAL	BUDGET	VARIANCE	PCNT
REVENUE				
IMPACT FEES REVENUE	179,856	3,024,652	2,844,796	6.0
	179,856	3,024,652	2,844,796	6.0
EXPENDITURES				
CAPITAL PROJECT EXPENDITURES	914	3,024,652	3,023,738	.0
	914	3,024,652	3,023,738	.0
	178,942	0	(178,942)	.0

CITY OF SARATOGA SPRINGS
FUND SUMMARY
FOR THE 3 MONTHS ENDING SEPTEMBER 30, 2016

CAPITAL PROJECTS FUND

	YTD ACTUAL	BUDGET	VARIANCE	PCNT
REVENUE				
GRANTS	0	270,000	270,000	.0
TRANSFERS AND OTHER SOURCES	93,010	2,372,046	2,279,036	3.9
CONTRIBUTIONS & OTHER REVENUE	16,973	4,958,340	4,941,367	.3
	109,983	7,600,386	7,490,403	1.5
EXPENDITURES				
CAPITAL PROJECT EXPENDITURES	158,315	7,600,386	7,442,071	2.1
	158,315	7,600,386	7,442,071	2.1
	(48,331)	0	48,331	.0

CITY OF SARATOGA SPRINGS
FUND SUMMARY
FOR THE 3 MONTHS ENDING SEPTEMBER 30, 2016

DEBT SERVICE FUND

	YTD ACTUAL	BUDGET	VARIANCE	PCNT
REVENUE				
ADMIN FEES	56,538	213,773	157,235	26.5
CONTRIBUTIONS AND TRANSFERS	19,551	78,027	58,476	25.1
BEGINNING BALANCE	0	1,700	1,700	.0
	76,089	293,500	217,411	25.9
EXPENDITURES				
DEBT SERVICE	0	293,500	293,500	.0
	0	293,500	293,500	.0
	76,089	0	(76,089)	.0

CITY OF SARATOGA SPRINGS
FUND SUMMARY
FOR THE 3 MONTHS ENDING SEPTEMBER 30, 2016

WATER FUND

	YTD ACTUAL	BUDGET	VARIANCE	PCNT
REVENUE				
UTILITY OPERATING REVENUE	1,602,043	3,958,000	2,355,957	40.5
SOURCE 39	0	1,423,225	1,423,225	.0
	1,602,043	5,381,225	3,779,182	29.8
EXPENDITURES				
WATER OPERATIONS	492,819	3,020,667	2,527,848	16.3
SECONDARY WATER OPERATIONS	478,022	1,499,449	1,021,427	31.9
DEPRECIATION	0	850,000	850,000	.0
FUND BALANCE TO APPROP	0	11,109	11,109	.0
	970,842	5,381,225	4,410,383	18.0
	631,201	0	(631,201)	.0

CITY OF SARATOGA SPRINGS
FUND SUMMARY
FOR THE 3 MONTHS ENDING SEPTEMBER 30, 2016

SEWER FUND

	YTD ACTUAL	BUDGET	VARIANCE	PCNT
REVENUE				
OPERATING & NON-OPERATING REV	946,354	2,636,500	1,690,146	35.9
CONTRIBUTIONS & TRANSFERS	0	843,007	843,007	.0
	946,354	3,479,507	2,533,153	27.2
EXPENDITURES				
SEWER OPERATIONS	513,538	2,869,507	2,355,970	17.9
DEPRECIATION	0	610,000	610,000	.0
	513,538	3,479,507	2,965,970	14.8
	432,816	0	(432,816)	.0

CITY OF SARATOGA SPRINGS
FUND SUMMARY
FOR THE 3 MONTHS ENDING SEPTEMBER 30, 2016

WASTEWATER CAPITAL PROJ FUND

	YTD ACTUAL	BUDGET	VARIANCE	PCNT
REVENUE				
IMPACT FEES REVENUE	173,274	796,131	622,857	21.8
	173,274	796,131	622,857	21.8
EXPENDITURES				
CAPITAL PROJECT EXPENDITURES	63,338	681,131	617,793	9.3
DEPRECIATION	0	115,000	115,000	.0
	63,338	796,131	732,793	8.0
	109,935	0	(109,935)	.0

CITY OF SARATOGA SPRINGS
FUND SUMMARY
FOR THE 3 MONTHS ENDING SEPTEMBER 30, 2016

STORM DRAIN ENTERPRISE FUND

	YTD ACTUAL	BUDGET	VARIANCE	PCNT
REVENUE				
OPERATING REVENUE	115,901	410,000	294,099	28.3
CONTRIBUTIONS & OTHER SOURCES	(29)	586,307	586,336	.0
	115,872	996,307	880,435	11.6
EXPENDITURES				
STORM DRAIN OPERATIONS	139,204	538,594	399,390	25.9
DEPRECIATION	0	410,000	410,000	.0
TRANSFERS AND OTHER USES	0	47,713	47,713	.0
	139,204	996,307	857,103	14.0
	(23,332)	0	23,332	.0

CITY OF SARATOGA SPRINGS
FUND SUMMARY
FOR THE 3 MONTHS ENDING SEPTEMBER 30, 2016

GARBAGE UTILITY FUND

	YTD ACTUAL	BUDGET	VARIANCE	PCNT
REVENUE				
OPERATING REVENUE	250,157	900,000	649,843	27.8
INTEREST REVENUE	536	0	(536)	.0
	250,692	900,000	649,308	27.9
EXPENDITURES				
GARBAGE OPERATIONS	179,168	828,240	649,072	21.6
TRANSFERS AND OTHER USES	0	71,760	71,760	.0
	179,168	900,000	720,832	19.9
	71,524	0	(71,524)	.0

CITY OF SARATOGA SPRINGS
FUND SUMMARY
FOR THE 3 MONTHS ENDING SEPTEMBER 30, 2016

CUL WATER CAPITAL PROJ FUND

	YTD ACTUAL	BUDGET	VARIANCE	PCNT
REVENUE				
CONNECTION FEES REVENUE	498,497	2,772,037	2,273,540	18.0
	498,497	2,772,037	2,273,540	18.0
EXPENDITURES				
CAPITAL PROJECT EXPENDITURES	89,441	1,341,402	1,251,961	6.7
TRANSFERS AND OTHER USES	0	380,635	380,635	.0
DEPRECIATION/AMORTIZATION	0	1,050,000	1,050,000	.0
	89,441	2,772,037	2,682,596	3.2
	409,056	0	(409,056)	.0

CITY OF SARATOGA SPRINGS
FUND SUMMARY
FOR THE 3 MONTHS ENDING SEPTEMBER 30, 2016

2NDARY WATER CAPITAL PROJ FUND

	YTD ACTUAL	BUDGET	VARIANCE	PCNT
REVENUE				
BOND REVENUE	0	10,000,000	10,000,000	.0
CONNECTION FEES REVENUE	133,770	9,278,205	9,144,435	1.4
	133,770	19,278,205	19,144,435	.7
EXPENDITURES				
CAPITAL PROJECT EXPENDITURES	267,829	18,980,205	18,712,376	1.4
TRANSFERS OUT	0	48,000	48,000	.0
DEPRECIATION	0	250,000	250,000	.0
	267,829	19,278,205	19,010,376	1.4
	(134,058)	0	134,058	.0

CITY OF SARATOGA SPRINGS
FUND SUMMARY
FOR THE 3 MONTHS ENDING SEPTEMBER 30, 2016

WATER RIGHTS FUND

	YTD ACTUAL	BUDGET	VARIANCE	PCNT
REVENUE				
WATER RIGHTS - DEVELOPER FEES	83,733	750,000	666,267	11.2
INTEREST REVENUE	8,076	650,000	641,924	1.2
	91,809	1,400,000	1,308,191	6.6
EXPENDITURES				
WATER RIGHTS EXPENSES	2,612	1,400,000	1,397,388	.2
	2,612	1,400,000	1,397,388	.2
	89,197	0	(89,197)	.0

1st Quarter FY2017 Budget Analysis - General Fund

General Fund				
Account	YTD Actual	YTD Budget	% Variance	$ Variance
Revenue				
TAX REVENUE	565,852	1,694,192	-66.6%	1,128,340
LICENSES AND PERMITS	400,366	197,475	102.7%	(202,891)
INTERGOVERNMENTAL REVENUE	11,751	196,397	-94.0%	184,646
CHARGES FOR SERVICES	748,913	480,768	55.8%	(268,145)
OTHER REVENUE	536,544	371,475	44.4%	(165,069)
ADMINISTRATIVE CHARGES	597,540	597,540	0.0%	(0)
CONTRIBUTIONS AND TRANSFERS	0	144,447	100.0%	144,447
TOTAL REVENUE	2,860,966	3,682,294	-22.3%	821,328
Expenditures				
LEGISLATIVE DEPARTMENT	36,063	32,129	12.2%	(3,935)
ADMINISTRATIVE DEPARTMENT	137,661	187,825	-26.7%	50,164
UTILITY BILLING DEPARTMENT	33,596	43,638	-23.0%	10,042
TREASURER DEPARTMENT	48,946	40,603	20.5%	(8,343)
RECORDER DEPARTMENT	29,391	38,162	-23.0%	8,771
ATTORNEY DEPARTMENT	71,141	83,060	-14.3%	11,919
JUSTICE COURT DEPARTMENT	44,496	71,362	-37.6%	26,866
NON-DEPARTMENTAL	299,356	152,308	96.5%	(147,048)
GENERAL GOV'T BLDGS & GROUNDS	37,569	47,791	-21.4%	10,222
PLANNING AND ZONING DEPARTMENT	84,097	134,154	-37.3%	50,057
COMMUNICATIONS DEPARTMENT	29,196	35,883	-18.6%	6,687
POLICE DEPARTMENT	812,595	771,054	5.4%	(41,542)
POLICE DEPARTMENT - BLUFFDALE	133,983	229,169	-41.5%	95,186
FIRE DEPARTMENT	477,006	476,212	0.2%	(794)
BUILDING INSPECTION	156,681	197,282	-20.6%	40,601
GRANT EXPENDITURES	0	17,813	-100.0%	17,813
STREETS DEPARTMENT	122,920	182,731	-32.7%	59,811
PUBLIC WORKS DEPARTMENT	118,449	131,280	-9.8%	12,831
ENGINEERING DEPARTMENT	135,865	140,298	-3.2%	4,433
PUBLIC IMPROVEMENTS	94,882	118,728	-20.1%	23,846
PARKS & OPEN SPACES DEPT	190,996	244,606	-21.9%	53,610
RECREATION DEPARTMENT	43,715	78,238	-44.1%	34,523
CIVIC EVENTS	17,073	49,919	-65.8%	32,846
LIBRARY SERVICES	58,872	74,839	-21.3%	15,967
TRANSFERS	103,215	103,215	0.0%	0
TOTAL EXPENSES	3,317,764	3,682,294	-9.9%	364,530
NET REVENUE OVER EXPENDITURES	(456,798)			456,798

Revenues

1) Tax Revenue - Majority of Property tax is collected in November and distributed to us in December
2) Intergovernmental Revenue - there is a two month lag on the Class C road funds from the state, combined with less budgeted grants received to date

Expenses

1) Legislative Department - memberships and association dues paid for at the beginning of the fiscal year.
2) Treasurer Department - Administration Bank Charges - more using credit cards for payments
3) Non-Departmental - majority of the general liability insurance is paid for at the beginning of the fiscal year.
4) Police - vehicle maintenance above normal for 1st quarter, software licenses and animal control contract paid for at beginning of FY.

1st Quarter FY2017 Budget Analysis - Other Funds

All Other Funds			
Fund	YTD Actual Revenue	YTD Actual Expenses	YTD Net Revenue/(Expense)
STREET LIGHTING SID S.R. FUND	46,066	40,680	5,386
SSD STREET LIGHT SID S.R. FUND	5,551	2,312	3,239
ZONE 2 WATER IMPROVEMENT SID	152,596	0	152,596
STORM DRAIN-CAPITAL PROJ FUND	43,772	1,984	41,788
PARKS - CAPITAL PROJECTS FUND	370,314	48,373	321,941
ROADS - CAPITAL PROJECTS FUND	417,005	94,028	322,977
PUBLIC SAFE-CAPITAL PROJ FUND	179,856	914	178,942
CAPITAL PROJECTS FUND	109,983	158,315	(48,332)
DEBT SERVICE FUND	76,089	0	76,089
WATER FUND	1,602,043	970,842	631,201
SEWER FUND	946,354	513,538	432,816
WASTEWATER CAPITAL PROJ FUND	173,274	63,338	109,936
STORM DRAIN ENTERPRISE FUND	115,872	139,204	(23,332)
GARBAGE UTILITY FUND	250,692	179,168	71,524
CUL WATER CAPITAL PROJ FUND	498,497	89,441	409,056
2NDARY WATER CAPITAL PROJ FUND	133,770	267,829	(134,059)
WATER RIGHTS FUND	91,809	2,612	89,197

1) Capital projects fund - fund balance from previous years being used for current projects
2) Storm Drain Enterprise Fund - Fees are being analyzed by Zions bank for coverage in fund
3) Secondary Water Capital Proj Fund - fund balance from previous years being used for current projects

City Council
Staff Report

Author: **Mark T. Edwards, Capital Facilities Manager**
Subject: **2016 Asphalt Preservation Project**
Date: **November 1, 2016**
Type of Item: **Award of Contract**

Description:

A. Topic:

This item is for the award of bids for the 2016 Phase 2 Asphalt Crack Seal Project

B. Background:

In 2015 Staff commissioned two City wide road evaluations. The first was done by Utah Local Technical Assistance Program (LTAP) Staff using Transportation Asset Management Software (TAMS) the other was a visual survey conducted by Gerhart Cole Geotechnical Engineers. Gerhart Cole was asked to provide a more detailed review of the road conditions which in most cases validated the TAMS report.

This project's goal is to extend the asphalt lifespan of our roads by sealing cracks If applied intermittently, this treatment will aide to maintain acceptable levels of service on City roads.

This project will be funded with B and C Road funds which are the City's share of the State Gas Tax.

C. Analysis:

The following are the bids received from contractors:

	Morgan Pavement	$86,504.45
	Superior Asphalt	$87.648.00
	Top Job Asphalt	$104,386.74
	Big Red Asphalt	$104,853.88
	Ridge Rock Inc.	$110,097.00
	CKC Field Services	$180,000.00

Recommendation:

Staff recommends the City Council award the bid to the lowest qualified bidder which is Morgan Pavement for the sum of $86,504.45

2162 West Grove Parkway Ste 400
Pleasant Grove, Utah 84062
www.horrocks.com

HORROCKS ENGINEERS

Tel: 801.763.5100
Salt Lake line: 801.532.1545
Fax: 801.763.5101
In state toll free: 800.662.1644

Mark Edwards
213 N 900 E
Saratoga Springs, UT 84045

October 24, 2016

Subject: 2016 Crack Seal Project Award Recommendation

Dear Mark:

We have received the bids for the 2016 Crack Seal Project. Upon review of the bids submitted by six contractors we recommend that the project be awarded to **Morgan Pavement** in the amount of **$86,504.45**.

The bid amounts shown above include the following:

1. Cleaning and preparing cracks in existing pavements and along the lip of gutters, as required; all mobilization and demobilization, (see below); complete cleaning of cracks (removal of all foreign matter from cracks), which may include the use of compressed air or other means of cleaning; supplying crack seal material to the site; placing crack seal material to the limits and thickness indicated, to complete the crack sealing as described herein.

2. All preparatory work and operations, including, but not limited to those necessary for movement of personnel, equipment, supplies and incidental items to the project site; for establishment of all other facilities necessary for work on the project; for furnishing, erecting and maintaining all necessary construction signs; and for all other work and operations which must be performed, or costs incurred, prior to beginning work on various items on the project sites.

3. Preparing traffic control plan; furnishing, erecting and maintaining traffic control signs and barricades; flaggers; and all appurtenant work required for traffic control.

4. Mobilization and demobilization are limited to the following items:
    a. All preparatory work and operations
    b. Moving the required equipment on and off the project site.
    c. Installing temporary construction power and wiring.
    d. Developing construction water supply.
    e. Providing on-site sanitary facilities and potable water facilities as specified.
    f. Arranging for and erection of Contractor's work and storage yard.
    g. Contractor and Subcontractor insurance and bonds.
    h. Obtaining all required permits, licenses, and fees.
    i. Developing construction schedule.
    j. Submitting a traffic control plan and acquiring permit.
    k. Dust and Mud Control including UPDES storm water permit and fugitive dust control plan, and acquiring the SWPPP, as needed.

l. Cleanup and demobilization as required
m. Contract Closeout

We have prepared and attached an official bid tabulation. Please let me know if you need any additional information. I can be reached at (801) 763-5278 or at stevenl@horrocks.com.

Sincerely,
HORROCKS ENGINEERS

Steven Lord, P.E.

Attachments: 1

cc: Jason Judd

Bid Tabulation
City of Saratoga Springs 2016 Crack Seal Project

PM: Steven Lord
PE: Jason Judd

Place: Saratoga Springs City Office
Date: October 12, 2016
Time: 2:00:00 PM

				Engineers Estimate		Bidder 1 Big Red		Bidder 2 CKC Field Services		Bidder 3 Morgan Pavement	
BID ITEM	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT
1-227	Crack Seal	2,621,347	SF	$ 0.04	$110,096.57	0.040	$104,606.82	0.069	$180,000.00	0.033	$86,504.45
			TOTAL		**$110,096.57**	*	**$104,606.82**		**$180,000.00**		**$86,504.45**

				Bidder 4 Ridge Rock Inc		Bidder 5 Superior Asphalt, LC		Bidder 6 Top Job Asphalt		Average Bid	
BID ITEM	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT
1-227	Crack Seal	2,621,347	SF	0.042	$110,113.00	0.033	$87,648.00	0.040	$104,386.74	0.043	$112,209.84
			TOTAL	*	**$110,113.00**		**$87,648.00**		**$104,386.74**		**$112,209.84**

*Denotes mathematical error

I hereby certify that this is a true and correct Bid Tabulation for the City of Saratoga Springs 2016 Crack Seal Project

PROFESSIONAL ENGINEER
10/18/16
No. 8303103
JASON E. JUDD
STATE OF UTAH

Jason E. Judd, P.E.

Bid Tabulation
City of Saratoga Springs 2016 Crack Seal Project

PM: Steven Lord
PE: Jason Judd

Place: Saratoga Springs City Office
Date: October 12, 2016
Time: 2:00:00 PM

				Engineers Estimate		Bidder 1 Big Red		Bidder 2 CKC Field Services		Bidder 3 Morgan Pavement	
BID ITEM	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT
1-227	Crack Seal	2,621,347	SF	$ 0.04	$110,096.57	0.040	$104,606.82	0.069	$180,000.00	0.033	$86,504.45
			TOTAL		**$110,096.57**	*	**$104,606.82**		**$180,000.00**		**$86,504.45**

				Bidder 4 Ridge Rock Inc		Bidder 5 Superior Asphalt, LC		Bidder 6 Top Job Asphalt		Average Bid	
BID ITEM	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT
1-227	Crack Seal	2,621,347	SF	0.042	$110,113.00	0.033	$87,648.00	0.040	$104,386.74	0.043	$112,209.84
			TOTAL	*	**$110,113.00**		**$87,648.00**		**$104,386.74**		**$112,209.84**

*Denotes mathematical error

I hereby certify that this is a true and correct Bid Tabulation for the City of Saratoga Springs 2016 Crack Seal Project

Jason E. Judd, P.E.

RESOLUTION NO. R16-60 (11-1-16)

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SARATOGA SPRINGS, UTAH AWARDING A BID TO MORGAN PAVEMENT FOR THE 2016 PHASE 2 CRACK SEAL PROJECT

WHEREAS, the City Council of the City of Saratoga Springs, Utah has found it necessary to further the public health, safety, and welfare of its residents to provide for road repair throughout the City in 2016;

WHEREAS, the City of Saratoga Springs has solicited bids through a Request for Proposal dated September 24, 2016 for the crack seal project, and five bids were received;

WHEREAS, a City committee reviewed the bids submitted for the 2016 Phase 2 Crack Seal Project and recommended that the City of Saratoga Springs award the bid and contract to Morgan Pavement, the lowest qualified bidder, whose bid price was $86,504.45;

WHEREAS, the City Council has determined that the proposed project is in the best interest of the public, will further the public health, safety, and welfare, and will assist in the efficient administration of City government and public services.

NOW THEREFORE, BE IT RESOLVED BY THE GOVERNING BODY OF THE CITY OF SARATOGA SPRINGS, UTAH, THAT:

1. The City of Saratoga Springs, Utah does hereby award the 2016 Phase 2 Crack Seal Project to Morgan Pavement, as the lowest responsible bidder, in the amount of $86,504.45.
2. The City Manager is authorized to sign the contract documents contained in the Request for Proposals dated September 24, 2016 which shall be binding on the contractor.
3. The contractor shall be required to comply with all requirements in the Request for Proposals including entering into all required agreements and contracts with the City.

BE IT FURTHER RESOLVED that this resolution shall take effect immediately upon passage.

APPROVED AND ADOPTED this 1st day of November, 2016.

_____

Mayor Jim Miller

ATTEST:

_____

Cindy LoPiccolo, City Recorder

City Council
Staff Report

Site Plan
Saratoga Springs 2 church
Tuesday, November 1, 2016
Public Meeting

Report Date:	Tuesday, October 25, 2016
Applicant:	Evans & Associates Architecture (Chad Spencer)
Owner:	Corp of the Pres Bishop Church of Jesus Christ of LDS
Location:	233 East School House Road
Major Street Access:	Redwood Road
Parcel Number(s) & Size:	45:581:0241; 3.25 acres
Parcel Zoning:	PC (Planned Community)
Adjacent Zoning:	PC, R-3 PUD
Current Use of Parcel:	Vacant, undeveloped
Adjacent Uses:	Single Family Residential, Institutional
Previous Meetings:	PC Public Hearing (10/13/2016)
Previous Approvals:	Annexation Agreement (2010) Rezone to PC zone (2010) City Center District Area Plan (2010) Community Plan and Village Plan 1 (PC 6/12/2014 and CC 7/1/2014) Village Plans 2, 3, 4, and 5 (PC 12/11/2401 and CC 1/6/2015) MDA (CC 1/6/2015) Village Plan 1 Plats 1A-1F (PC 3/12/2015 and CC 3/31/2015) Village Plan 2 Plats 2A-2B (PC 11/12/2015 and CC 12/1/2015) Village Plan 2 Plats 2C-2E (PC 11/12/2015 and CC 1/5/2016) Village Plan 3 Plats 3A-3E (PC 8/25/2016 and CC 9/6/2016)
Type of Action:	Administrative
Land Use Authority:	City Council
Future Routing:	N/A
Author:	Kara Knighton, Planner I

A. Executive Summary:

The applicant, on behalf of the property owner, is requesting approval of a site Plan for a 19,422 sq. ft. church on a 3.25 acre parcel at 233 East School House Road, in the Legacy Farms 2-B Plat. A concept plan for the proposed use was reviewed by Staff on March 29, 2016.

Recommendation:

Staff recommends that the City Council conduct a public meeting on the Saratoga Springs 2 Site Plan, review and discuss the proposal, and vote to approve the site plan as outlined in Section "I" of this report. Alternatives include continuation of the item, or denial.

B. Background:

The Legacy Farms Community Plan was approved in July, 2014, the Legacy Farms Village Plan 2 was approved in January, 2015, and the Legacy Farms Plat 2A and 2B were approved on December 1, 2015. Plat 2A contained a 3.25 acre lot intended for future development as a church. The Final Plat was approved on December 22, 2015 and was recorded with Utah County on January 15, 2016.

Urban Design and Architectural Review

The Development Review Committee (DRC) reviewed the site plan and elevations on August 1, 2016. Their comments are summarized below.

1. The dead space behind the dumpster is a safety concern.
2. Recommendation: It is recommended that a pathway, perhaps using the parking islands, be provided to allow a connection from the trail to the south.

A resubmittal was received on September 19, 2016 clarifying that the space behind the dumpster is wide enough for people to easily see behind the enclosure. The pathway is a recommendation and is not required by either City Code or the Community Plan. During the Community Plan, pedestrian linkages were identified and no linkage was identified connecting the church site to the trail to the south.

Public Hearing

The Planning Commission held a public hearing on October 13, 2016 and voted to forward a positive recommendation with conditions. Draft minutes from that meeting are attached, and the recommended conditions of approval for the Council reflect their recommendation.

C. Specific Request:

The Site Plan is for a 19,422 sq. ft. church in the PC zone on a 3.25 acre parcel, as shown in Exhibit 3. The proposal also contains a 190 sq. ft. storage building, 210 parking stalls including 7 ADA stalls, and 34,367 sq. ft. of landscaping.

D. Process:

The proposed project is part of the Legacy Farms development and therefore must comply with the District Area Plan (DAP), Community Plan (CP), and Village Plan 2 (VP2). Whenever the CP and

VP are silent the project must comply with the Saratoga Springs City Code which process is outlined below.

Section 19.13 summarizes the processes for site plans, and 19.14 outlines the requirements for site plans. The development review process for site plan approval involves a formal review of the request by the Planning Commission in a public hearing, with a recommendation forwarded to the City Council. The City Council is then the deciding body and formally approves or denies the site plan request in a public meeting.

E. **Community Review:** This item was noticed as a public hearing in the *Daily Herald*; and mailed notice sent to all property owners within 300 feet of the subject property prior to the October 13, 2016 Planning Commission meeting. No public input was received prior to or during the meeting.

F. **Review:**

Place Type

The CP designates the entire ~182 acre Legacy Farms development as Traditional Neighborhood, which is described in the DAP as follows:

TRADITIONAL NEIGHBORHOOD

Range of Average Dwelling Units/Acre	5–32 du/ac
Range of Average FAR	0.47–1.04
Range of Open Space	18 - 24%

Open Space Types:

- Plaza
- Entrance park
- Pocket park
- Neighborhood park
- Community park
- Regional park
- School park
- Sports complex
- Special use
- Community garden
- Parkway (Boulevard)
- Greenway

The "ingredients" that make up a Traditional Neighborhood:

Traditional neighborhoods in this district are medium-density residential areas typically comprised of many small lot single-family dwellings, some townhomes and small scale apartments. Houses in these neighborhoods are close enough to the street to encourage interaction among neighbors and create a "front porch" culture. Houses are closer together and on smaller lots than in a master planned subdivision. There are small neighborhood serving parks and connections to trails. Street connectivity is relatively favorable, allowing for a walkable environment and transit options. On-street parking slows traffic and creates a buffer between traffic and pedestrians on the sidewalks.

Density

The CP allocated a maximum of 41 Equivalent Residential Units (ERUs) to the school and church site from the 1,000 ERUs allocated to the CP by the DAP. The school site was approved on January 19, 2016 with 31 ERUs leaving a remainder of 10 ERUs for the proposed church site. As proposed, the current square footage of the church will equal 10 ERUs, which is within the allotment.

G. **General Plan:**

The General Plan Land Use map identifies this area as Planned Community, which states:

k. **Planned Community.** The Planned Community designation includes large-scale properties within the City which exceed 500 acres in size. This area is characterized by a mixture of land uses and housing types. It is subject to an overall Community Plan that contains a set of regulations and guidelines that apply to a defined geographic area. Required Village Plans contain regulations that apply to blocks of land and provide specific development standards, design guidelines, infrastructure plans and other elements as appropriate. Development in these areas shall contain landscaping and recreational features as per the City's Parks, Recreation, Trails, and Open Space Element of the General Plan.

The 2883 acre DAP was approved in 2010 in compliance with the General Plan and the intent of the Planned Community designation. Multi-family development was also approved as part of the DAP, and was therefore vested prior to Proposition 6, which limited some types of future multi-family housing.

The CP was approved in 2014 and VP2 was approved on January 6, 2015 and found to be in compliance with the DAP; the CP includes trail connections and parks in compliance with the related master plans. Both were found to be consistent with the General Plan.

H. Code Criteria: For full analysis please see the attached Planning Review Checklist, Exhibit "8".
The property is zoned PC, and is subject to the standards and requirements in Section 19.26 of the Code, and its several sub-sections. Whenever the CP and VP do not contain standards the project must comply with Title 19.

19.26.04- Uses Permitted within a Planned Community District

- The application is for a church lot which is a permitted use in the PC zone and is subject to the more specific criteria in the CP and VP 2.

CP and VP 2 Standards

The CP outlines high-level standards for the development; while VP 2 calls out more specific standards, the site plan is still subject to any specifics in the CP.

- Landscaping standards: **Complies**. All plants are listed in the CP, all deciduous trees meet the caliper requirement, and all evergreens meet the height requirement.
- Lighting standards: **Complies**. Only full cut-off fixtures are permitted and only full cut-off are proposed.
- Parking standards: **Complies**. The CP requires 17 trees in the parking lot and 33 are provided, and the 90 degree parking stalls are 9'x18'.
- Signage standards: **Complies**. The address sign meets all area, width, and height requirements.

Code Criteria

- 19.04, Land Use Zones: **Complies**
- 19.05, Supplemental Regulation: **Complies**
- 19.06, Landscaping and Fencing: **Can comply**

  - Tree Base Clearance: An area at the base of the tree a minimum of 3' in diameter shall be kept free of rock and turf. A note needs to be added to details A and B on sheet L103 specifying the requirement.
  - Clear Sight Triangle: Deciduous tree canopies may be located in the clear sight triangle of privately maintained intersections only if at maturity, as defined in Section 19.06.06, the distance between the ground and base of the canopy is maintained at no less than eight feet and any portion of the tree trunk at maturity that enters the clear site triangle is no greater than twelve inches. A notes needs to be added to the trees in the clear site triangle specifying the requirement.
- 19.09, Off Street Parking: **Can comply**
  - All double row parking islands shall measure 9'x36'. One of the southeast double row parking islands is only 8'6" and shall be increased to meet the 9' width requirement.
- 19.11, Lighting: **Complies**
- 19.13, process: **Complies**
- 19.14, Site Plans: **Complies**
- 19.18, Signs: **Complies**

I. Recommendation and Alternatives:

Staff recommends that the City Council discuss the application, and choose from the following options.

Recommended Motion- Approval with Conditions

"I move to **approve** the Saratoga Springs 2 Site Plan, located on parcel 45:581:0241 and as shown in exhibit 2, with the findings and Conditions in the Staff Report dated October 25, 2016. "

Findings

1. The application is consistent with the General Plan, as articulated in Section "G" of the staff report, which section is incorporated by reference herein.
2. With modifications as conditions of approval, the application is consistent with the guiding standards in the Legacy Farms Community Plan as outlined in Section "F" of this report, which section is hereby incorporated by reference.
3. With modifications as conditions of approval, the application is consistent with the specific standards in the Legacy Farms Village Plan 2 as outlined in Section "G" of this report, which section is hereby incorporated by reference.
4. With modifications as conditions of approval the application complies with the criteria in section 19 of the Development Code, as articulated in Section "H" of the staff report, which section is incorporated by reference herein.

Conditions:

1. All conditions of the City Engineer shall be met, including but not limited to those in the Staff report in Exhibit 1.

2. The Saratoga Springs 2 site plan is positive recommendation as shown in the attachment to the Staff report in Exhibit 3.
3. All lighting shall be full cut-off.
4. A note shall be placed on detail A and B on page L103 of the landscape plan stating that a "tree base clearance of 3' in diameter to be kept free of rock and turf."
5. A note shall be placed on the trees in the clear sight triangle stating that at maturity the canopies must be maintained at a height of 8'.
6. The semi-private fencing detail shall match the semi-private fencing in Legacy Farms.
7. The trespass lighting shall comply with Section 19.11.05.
8. Conditions or changes as recommended by the Planning Commission:
    a. The southeast parking island shall be increased from 8'6" to 9' as required in Section 19.09.
9. Any other conditions or changes as articulated by the City Council: _____.

Alternative 1 - Continuance

The City Council may also choose to continue the item. "I move to **continue** the Saratoga Springs 2 site plan to another meeting on [DATE], with direction to the applicant and Staff on information and / or changes needed to render a decision, as follows:

1. _____
2. _____

Alternative 2 – Denial

The City Council may also choose to deny the Saratoga Springs 2 site plan. "I move to **deny** the Saratoga Springs 2 site plan with the Findings below:

1. The Saratoga Springs 2 site plan does not comply with the Legacy Farms Community Plan, as articulated by the City Council: _____, and/or,
2. The Saratoga Springs 2 site plan does not comply with the Legacy Farms Village Plan, as articulated by the City Council: _____, and/or,
3. The Saratoga Springs 2 site plan is not consistent with Section [19.04, 19.05, 19.06, 19.09, 19.11, 19.13, 19.14, 19.18] of the Code, as articulated by the City Council: _____.

J. Attachments:

1. City Engineer's Report (page 7-8)
2. Location & Zone Map (page 9)
3. Site Plan (page 10)
4. Landscape Plan (page 11-12)
5. Elevations (page 13-14)
6. Signage (page 15)
7. Lighting (page 16-17)
8. Planning Review Checklist (page 18-23)
9. Draft PC Minutes 10/13/2016 (page 24)

Exhibit 1

Planning Commission/City Council Staff Report

Author: Gordon Miner, City Engineer
Subject: Saratoga 2 LDS Chapel– Site Plan
Date: 10/18/2016
Type of Item: Site Plan Approval

Description:

A. Topic: The Applicant has submitted a Site Plan application. Staff has reviewed the submittal and provides the following recommendations.

B. Background:

Applicant:	*Saratoga 2*
Request:	*Site Plan Approval*
Location:	*233 E. School House Rd.*
Acreage:	*3.25 Acres*

C. Recommendation: Staff recommends the approval of Site Plan subject to the following conditions:

D. Conditions:

A. All review comments and redlines provided by the City Engineer are to be complied with and implemented with the approved construction drawings.

B. Developer must secure water rights as required by the City Engineer, City Attorney, and development code.

C. Submit easements for all public utilities not located in the public right-of-way.

D. Developer is required to ensure that there are no adverse effects to adjacent properties due to the grading practices employed during construction of these plats.

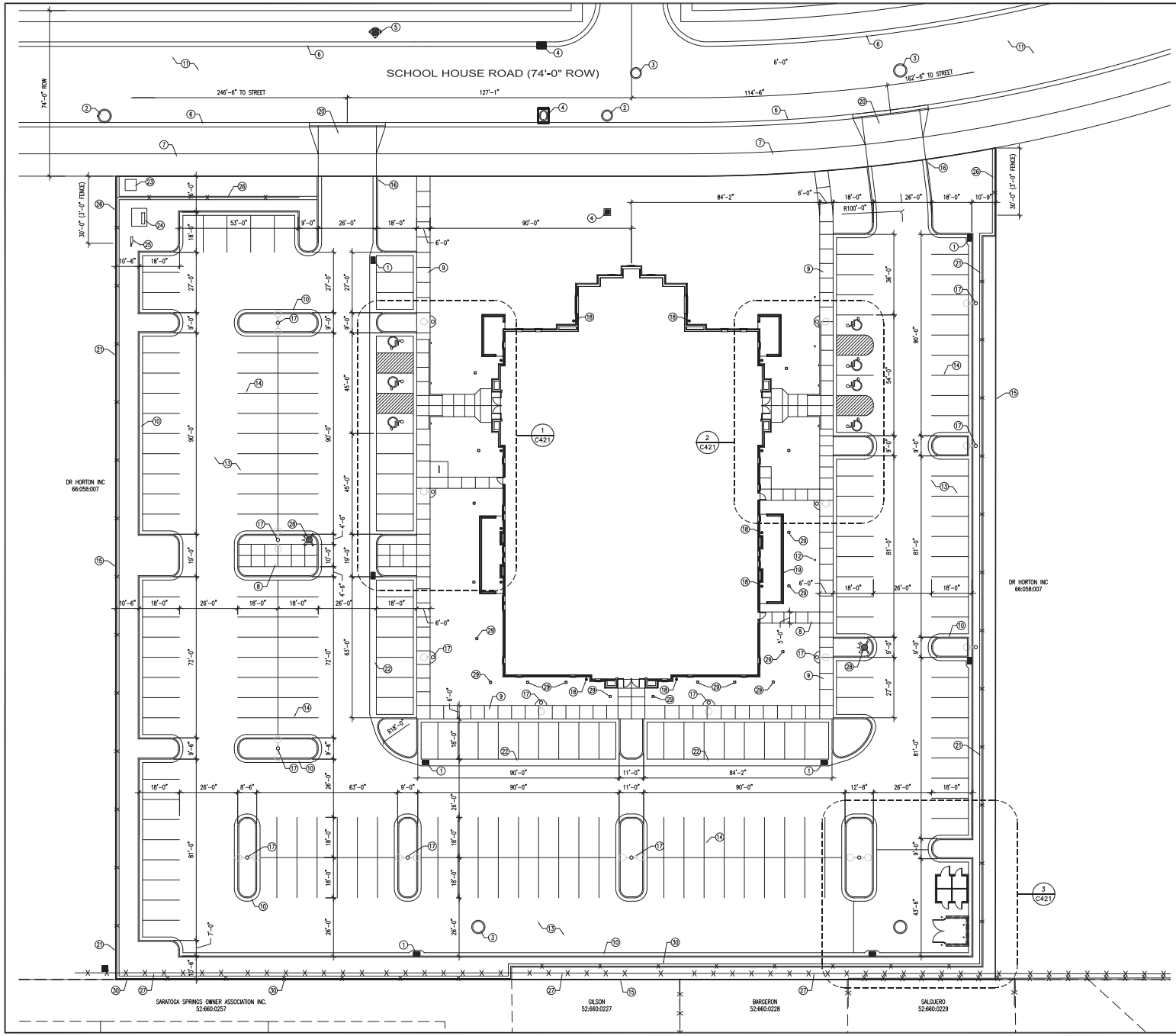
E. Final plans shall include an Erosion Control Plan that complies with all City and UPDES storm water pollution prevention requirements.

F. Developer may be required by the Saratoga Springs Fire Chief to perform fire flow tests prior to final plat approval and prior to the commencement of the warranty period.

G. Submittal of a Mylar and electronic version of the as-built drawings in AutoCAD format to the City Engineer is required prior acceptance of site improvements and the commencement of the warranty period.

Exhibit 2

A
A
400 SOUTH
ASHGROVE LN
HARMONY CT
VICTORIA LN
PC
JUBILEE DR
PEACHTREE LN
HIGHPOINT DR
CHURCH DR
694 S
RR
587 S
SARATOGA DR
BAYSIDE DR
SARATOGA DR
SCHOOL HOUSE RD
PARADISE CT
233 E
COVE RD
TEAL RD
TEAL CT
REDWOOD RD
PARKWAY BLVD



SITE PLAN

SCALE: 1" = 20'-0"

KEYED NOTES

1. CATCH BASIN – SEE SITE GRADING AND DRAINAGE PLAN AND C513
2. EXISTING STORM DRAIN MANHOLE TO REMAIN – PROTECT DURING CONSTRUCTION
3. EXISTING SANITARY SEWER MANHOLE TO REMAIN – PROTECT DURING CONSTRUCTION
4. EXISTING CATCH BASIN TO REMAIN – PROTECT DURING CONSTRUCTION
5. EXISTING FIRE HYDRANT TO REMAIN – PROTECT DURING CONSTRUCTION
6. EXISTING CONCRETE CURB AND GUTTER TO REMAIN – PROTECT DURING CONSTRUCTION
7. EXISTING WALK TO REMAIN – PROTECT DURING CONSTRUCTION
8. CONCRETE WALK – SEE D/C512
9. COMBINATION CONCRETE SIDEWALK–CURB AND GUTTER – SEE B/C511 AND C/C511
10. CONCRETE CURB AND GUTTER – SEE E/C511 AND F/C511
11. EXISTING ASPHALT ROAD TO REMAIN – PROTECT DURING CONSTRUCTION
12. CLEAN OUT TO GRADE – SEE E/C512 AND GRADING AND DRAINAGE PLAN
13. ASPHALT PAVEMENT – SEE C/C512
14. 4" WIDE PAINTED PARKING STRIPS – TYPICAL
15. PROPERTY LINE
16. TAPER CONCRETE CURB TO ASPHALT LEVEL AT DRIVE ENTRANCES – TYPICAL BOTH SIDES – SEE F/C513
17. LIGHT POLE – SEE ELECTRICAL
18. DOWNSPOUT CATCH BASIN – SEE K/C513 AND GRADING AND DRAINAGE PLAN
19. MECHANICAL ENCLOSURE – SEE B/C521
20. SAWCUT AND REMOVE EXISTING CONCRETE CURB AND GUTTER, SIDEWALK – INSTALL NEW CONCRETE DRIVE APPROACH – SEE ST–4/C611
21. 6'–0" TALL VINYL PRIVACY FENCE WITH CONCRETE MOW STRIP – SEE J/C512
22. CONCRETE WATERWAY – SEE H/C511 AND GRADING AND DRAINAGE PLAN
23. EXISTING ELECTRICAL EQUIPMENT TO REMAIN – PROTECT DURING CONSTRUCTION
24. TRANSFORMER – SEE ELECTRICAL
25. CT CABINET – SEE ELECTRICAL
26. 3'–0" TALL VINYL PRIVACY FENCE WITH CONCRETE MOW STRIP
27. REMOVE EXISTING FENCE
28. FIRE HYDRANT – SEE UTILITY PLAN
29. YARD DRAIN – SEE SITE GRADING AND DRAINAGE PLAN AND C513
30. 6'–0" TALL VINYL SEMI–PRIVACY FENCE WITH CONCRETE MOW STRIP – SEE J/C512 SIM

GENERAL NOTES

1. CONCRETE RADII ARE 4'–0" UNLESS NOTED OTHERWISE
2. COORDINATE ALL SITE WORK WITH ALL OTHER CONTRACT DOCUMENTS
3. ALL APPLICABLE ELEMENTS OF THE AMERICAN'S WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES WILL BE ADHERED TO
4. PARKING STALLS ARE 9'–0" X 18'–0" UNLESS NOTED OTHERWISE.
5. ALL NOTED ITEMS ARE NEW UNLESS NOTED OTHERWISE.

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Stamp

LICENSED ARCHITECT
PAUL ANTHONY EVANS
273770
STATE OF UTAH

A New Meetinghouse for:
Saratoga Springs 2
Saratoga Springs UT Stake
233 East School House Road
Saratoga Springs, Utah

Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Revisions		
Mark	Date	Description
	2/1/2016	Concept Plan Submittal
	7/5/2016	Site Plan Submittal
	9/12/2016	Site Plan Re-Submittal

Project Number
15-47

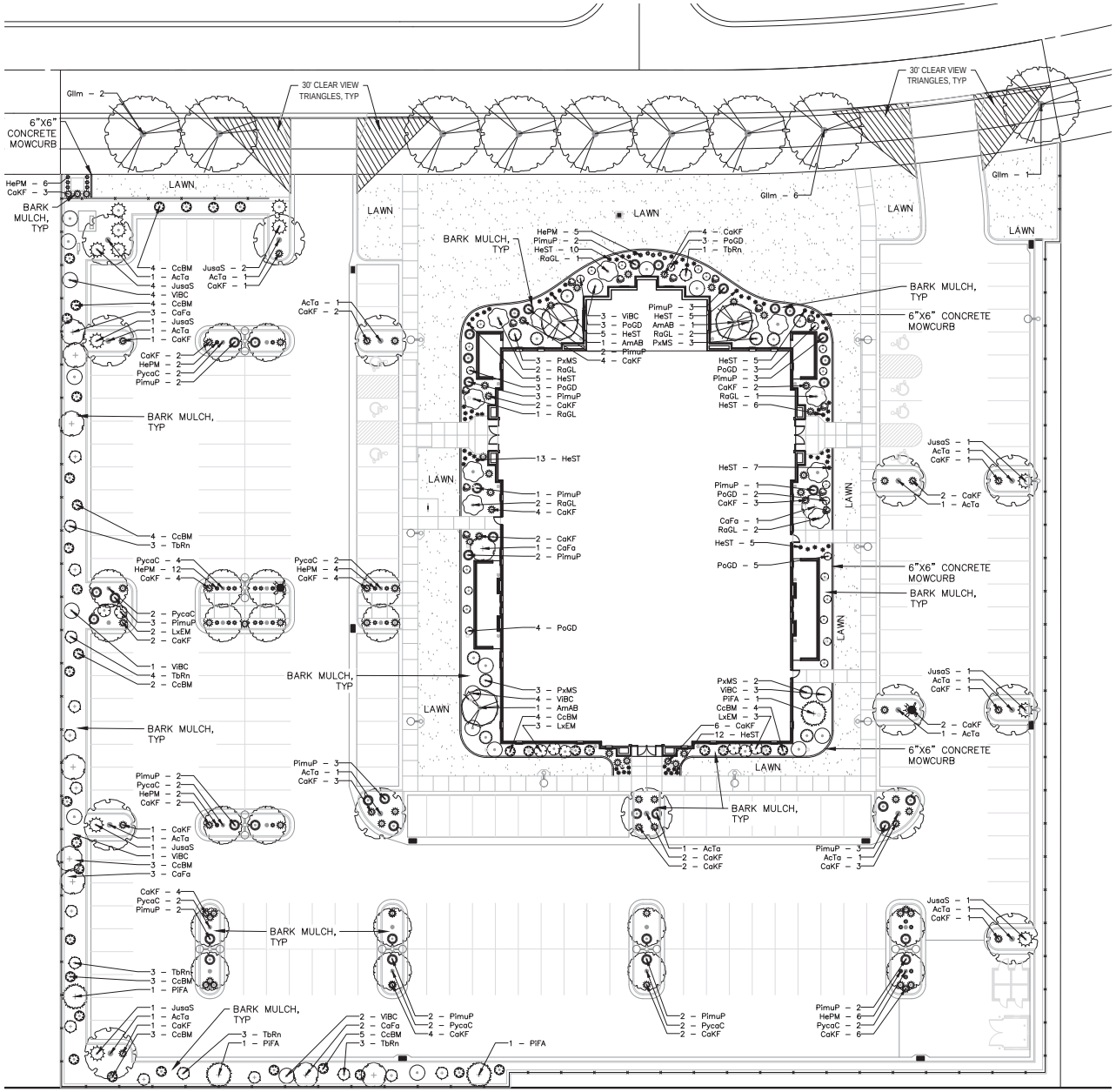
Plan Series
HET-MCS-09-06

Property Number
501-0711

Date
February 1, 2016

Sheet Title
ARCHITECTURAL SITE PLAN

Sheet
C411



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SCALE: 1"=20'-0"

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LICENSED LANDSCAPE ARCHITECT
7822519-5301
R. August Bateman
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Saratoga Springs UT Stake
Saratoga Springs, Utah

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Project Number
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Plan Series
-
Property Number
501-9711
Date
February 1, 2016

Sheet Title
LANDSCAPE PLAN

Sheet
L101

PLANT SCHEDULE

DECIDUOUS TREES	CODE	BOTANICAL NAME	COMMON NAME	CONT	QTY
	AcTa	Acer tataricum	Tatarian Maple*	2"–Cal	14
	AmAB	Amelanchier x grandiflora 'Autumn Brilliance'	'Autumn Brilliance' Serviceberry (clump)	Clump	3
	GIIm	Gleditsia triacanthos Inermis 'Imperial'	Imperial Honeylocust	2"–Cal	9
	PycaC	Pyrus calleryana 'Chanticleer'	Chanticleer Pear	2"–Cal	20
EVERGREEN TREES	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**QTY**
	CaFa	Cedrus atlantica 'Fastigiata'	Columnar Blue Atlas Cedar	6' Ht.	10
	PiFA	Picea pungens 'Fat Albert'	Colorado Spruce	6' Ht.	4
SHRUBS	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**QTY**
	CcBM	Caryopteris x clandonensis 'Blue Mist'	Blue Mist Shrub*	5 gal	36
	JusaS	Juniperus sabina 'Scandia'	Scandia Juniper*	5 gal	12
	LxEM	Lonicera xylosteum 'Emerald Mound'	Emerald Mound Honeysuckle	5 gal	8
	PxMS	Philadelphus x 'Miniature Snowflake'	Miniature Snowflake Mockorange	5 gal	11
	PimuP	Pinus mugo 'Pumilio'	Mugo Pine*	5 gal	40
	PoGD	Potentilla fruticosa 'Gold Drop'	Gold Drop Potentilla*	5 gal	24
	RaGL	Rhus aromatica 'Gro–Low'	Gro–Low Fragrant Sumac*	5 gal	11
	TbRn	Taxus baccata 'Repandens'	Spreading English Yew	5 gal	17
	ViBC	Viburnum trilobum 'Bailey Compact'	Bailey's Compact American Cranberry Bush	5 gal	18
GRASSES	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**QTY**
	CaKF	Calamagrostis x acutiflora 'Karl Foerster'	Karl Foerster Feather Reed Grass*	1 gal	85
PERENNIALS	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**QTY**
	HePM	Hemerocallis x 'Rosy Returns'	Rosy Returns Daylily*	1 gal	37
	HeST	Hemerocallis x 'Stella de Oro'	Stella de Oro Daylily*	1 gal	73

* Indicates drought tolerant plant

DESIGN CRITERIA

Climate	U.S. Hardiness Zone 5
Zoning Ordinance	City of Saratoga Springs
Water Availability	NA
Soil Type	See Soils Report
Solar Orientation	See North Arrow
Utilities	See Utility Plan
Slopes	See Grading Plan
Site Layout	Interior Lot
Wind	South Prevailing
Setbacks/Easements	NA
Microclimates	NA
Soil ph	See Soils Report
Lawn Area	48% of Total Landscape (16,586 sq. ft.)*

* Park Strip landscape of 3,977 sq. ft. NOT included in this total

CNA INFORMATION

Total Site Area	141,763 sq. ft. (3.25 acres)
Shrubs/Groundcover	17,781 sq. ft.
Total Landscape Area	34,367 sq. ft.
Trees On Site	60

* Park Strip landscape of 3,977 sq. ft. NOT included in this total

PLANT COVERAGE TABLE

	Shrub–Mature Coverage		Tree–Coverage Intent
Street Frontage	32%	(25%–50%)	Frame Building
Primary Entries	40%	(30%–50%)	Frame Entry
Building Perimeter	29%	(25%–45%)	Accent Building
Site Perimeter	6%	(5%–15%)	Screen Lot

CITY REQUIREMENTS

Landscape Element	Required	Per Plan
Deciduous Trees	16	46
Evergreen Trees	14	14
Shrubs (incl. Grasses & Perennials)	34	361
Drought Tolerant	50%	321 (76%)

NOTES:

1) Implement on–site stock–piled topsoil in the following manner:
   – 5 inches minimum in lawn area
   – All shrub beds between building and parking lot (including front of building) to have full bed filled with 12 inches minimum.
   – All shrub beds between parking lot and property perimeter to have topsoil implemented around individual plants in an area twice the size of the root ball and at the same depth as root ball.
2) Lawn to be a Kentucky Bluegrass Blend (min. 3 varieties) and be implemented as sod.
3) 6"x6" flat concrete curbing to be implemented between all shrub bed and lawn areas as shown on plan.
4) Shredded bark mulch to be a natural, non–dyed bark, 2"–3" average size. Implement Bark Mulch in planter beds at a 3" depth over weed barrier fabric.
5) Bark Mulch to be clean and free of dirt and debris, placed at uniform depth, and raked smooth.
6) DeWitt 4.1 oz Landscape Fabric to be implemented in all shrub beds and other indicated areas prior to bark mulch implementation. Follow manufacturers installation instructions.
7) Landscape Boulders to be 3'–4' size 'McGuire Boulders' from Staker Parsons in Willard, Utah. Bury boulders a minimum of 6" in ground. (13 Total)
8) No landscaping or other obstruction in excess of 3 feet above finished grade shall be implemented in clear view triangles.

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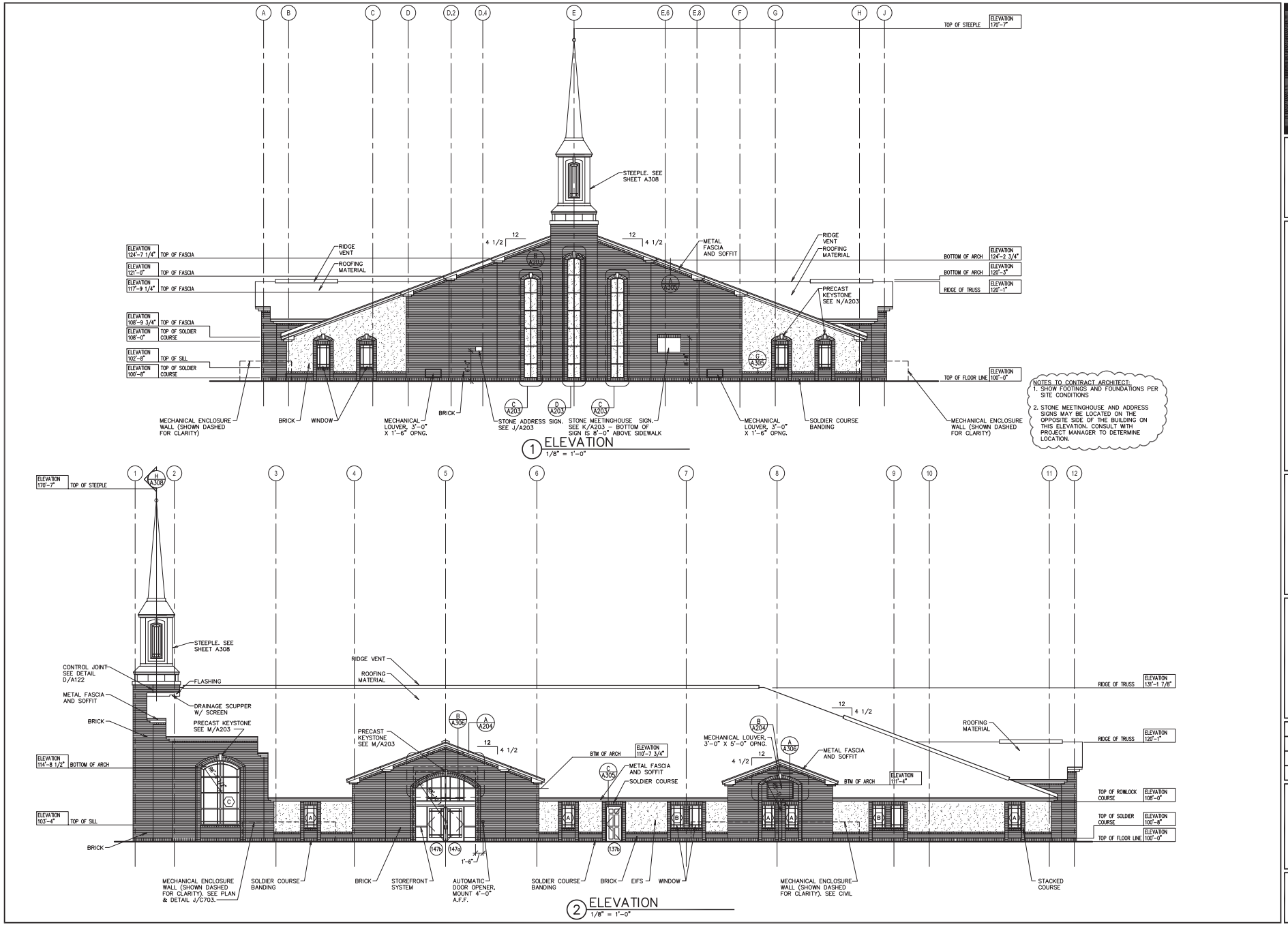
501-9711
Date
February 1, 2016

Sheet Title
LANDSCAPE PLAN

Sheet
L102



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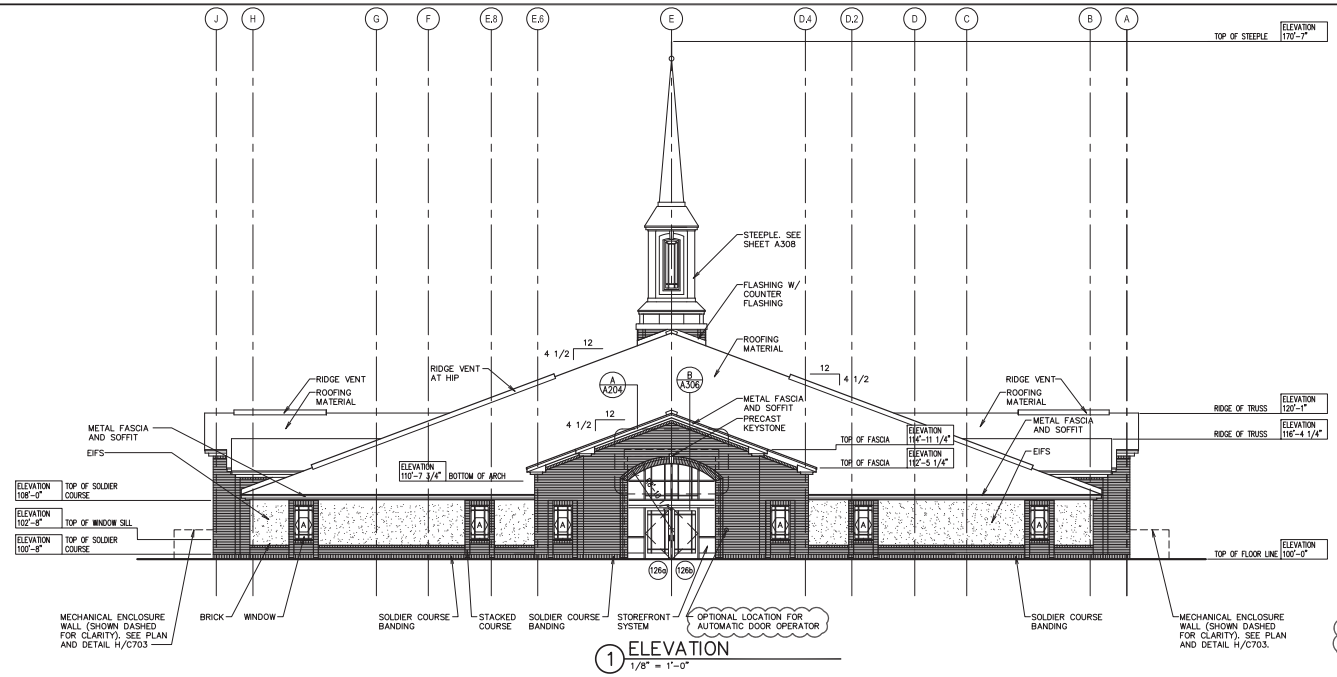
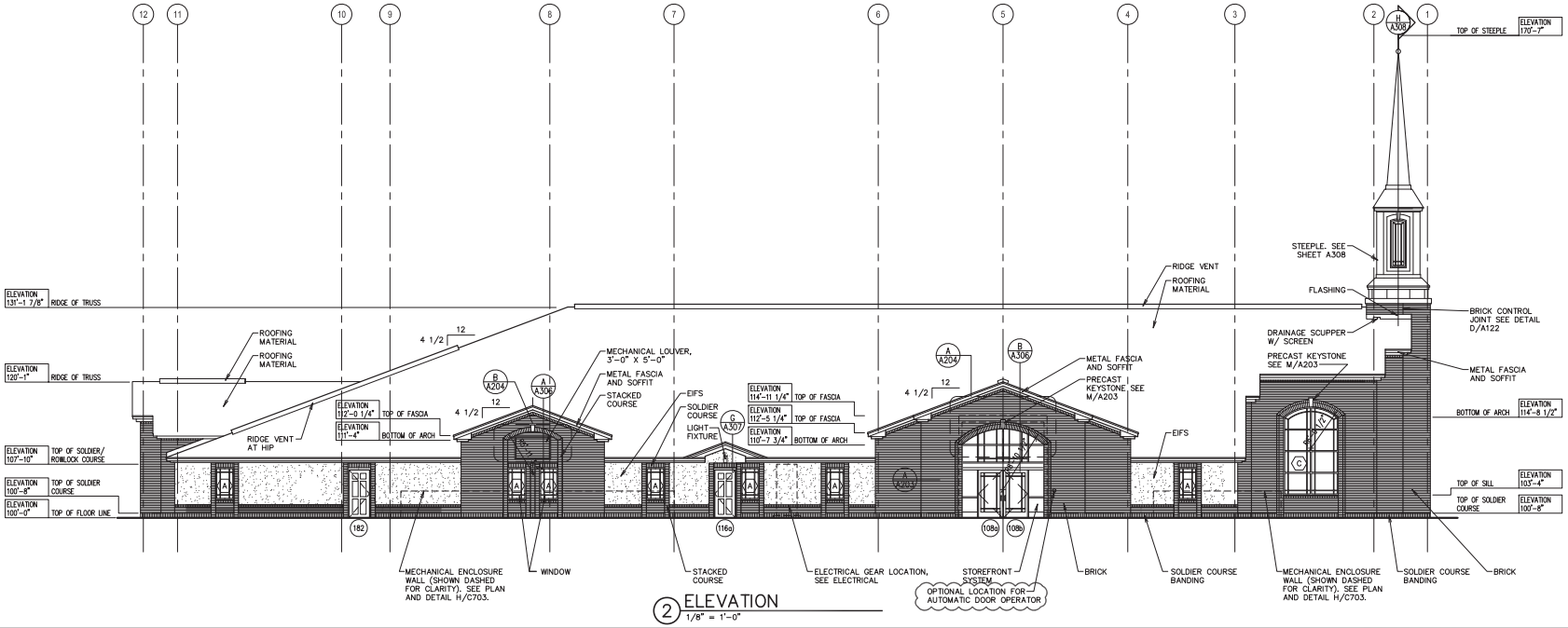
Sheet Title
BUILDING ELEVATIONS

Sheet
A201



NOTE TO CONTRACT ARCHITECT:
1. SHOW FOOTINGS AND FOUNDATIONS PER SITE CONDITIONS.

1 ELEVATION
1/8" = 1'-0"



2 ELEVATION
1/8" = 1'-0"

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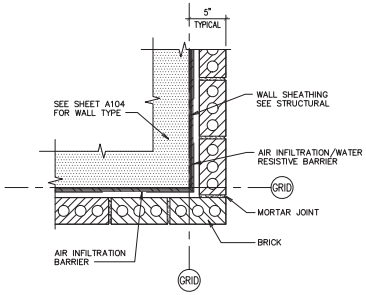
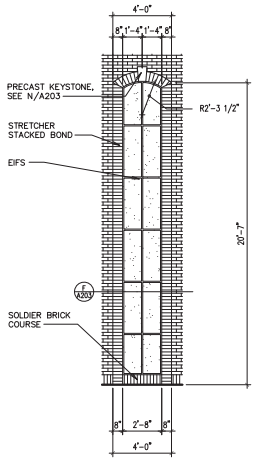
Sheet Title
BUILDING ELEVATIONS

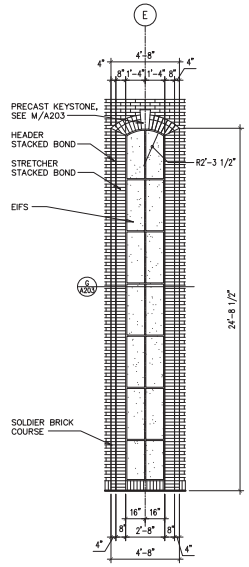
Sheet
A202



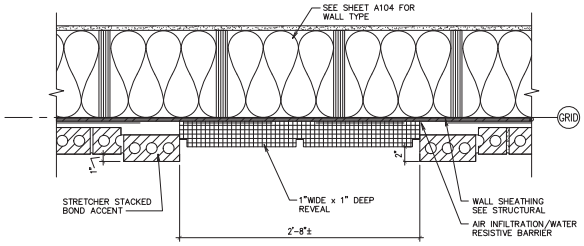
B BRICK CORNER
1 1/2" = 1'-0"



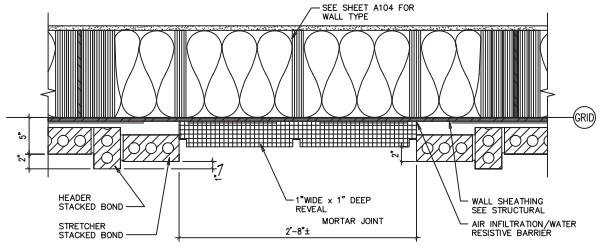
FRONT RECESSED SIDE BRICK PANEL
C 1/4" = 1'-0"



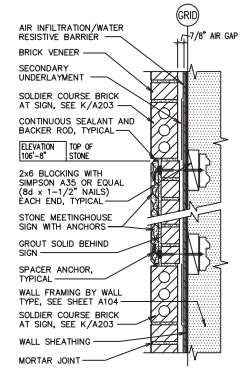
FRONT RECESSED CENTER BRICK PANEL
D 1/4" = 1'-0"



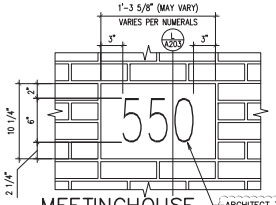
F FRONT RECESSED SIDE BRICK PANEL
1 1/2" = 1'-0"



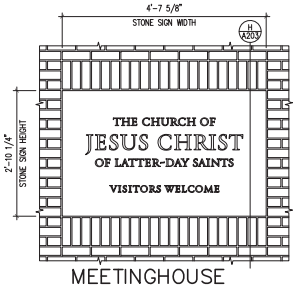
G FRONT RECESSED CENTER BRICK PANEL
1 1/2" = 1'-0"



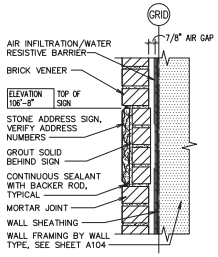
MEETINGHOUSE STONE SIGN
H 1 1/2" = 1'-0"



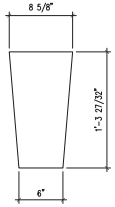
MEETINGHOUSE ADDRESS SIGN
J 1 1/2" = 1'-0"



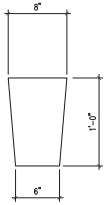
MEETINGHOUSE STONE SIGN
K 3/4" = 1'-0"



MEETINGHOUSE ADDRESS SIGN
L 1 1/2" = 1'-0"



PRECAST KEYSTONE
M 1 1/2" = 1'-0"



PRECAST KEYSTONE
N 1 1/2" = 1'-0"

evans + associates architecture
11576 south state street, suite 103b, draper, utah 84020
phone 801-531-8472 fax 801-531-8473

Stamp

LICENSED ARCHITECT PAUL ANTHONY EVANS 273770 STATE OF UTAH

A New Meetinghouse for:
Saratoga Springs 2
Saratoga Springs UT Stake
233 East School House Road
Saratoga Springs, Utah

Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Revisions

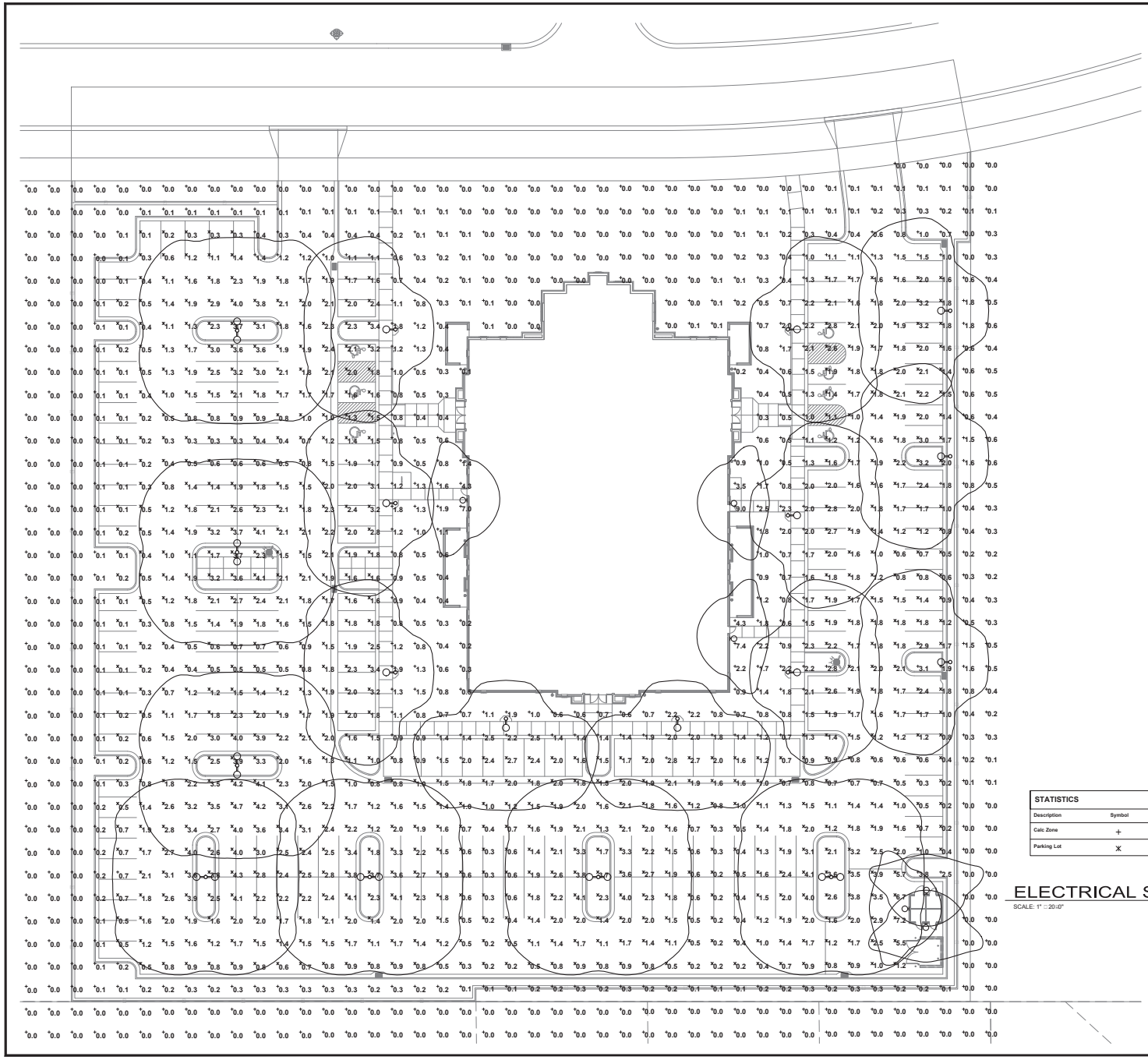
Mark	Date	Description
	2/1/2016	Concept Plan Submittal
	7/5/2016	Site Plan Submittal
	9/12/2016	Site Plan Re-Submittal

Project Number 15-47
Plan Series HET-MCS-09-06
Property Number 501-0711
Date February 1, 2016

Sheet Title
BUILDING ELEVATIONS DETAILS

Sheet
A203

Exhibit 7



STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone	+	1.1 fc	9.0 fc	0.0 fc	N / A	N / A
Parking Lot	×	1.6 fc	7.2 fc	0.1 fc	72.0:1	16.0:1

ELECTRICAL SITE ILLUMINATION PLAN

SCALE: 1" = 20'-0"

NORTH

ENVISION ENGINEERING

[redacted]

evans + associates architecture
11576 south state street, suite 150b, draper, utah 84020
phone 801.533.9273 fax 801.533.9273

Stamp

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Revisions

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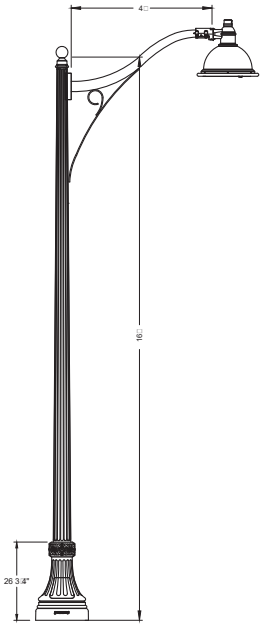
	2/1/2016	Concept Plan Submittal
	7/5/2016	Site Plan Submittal

Project Number
15-47
Plan Series
Property Number
501-9711
Date
February 1, 2016

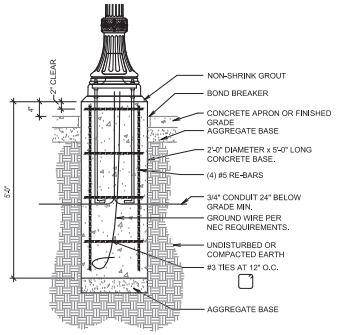
Sheet Title
ELECTRICAL SITE ILLUMINATION PLAN

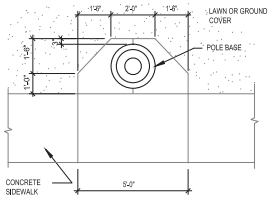
Sheet
C3.02



SINGLE ASSEMBLY
STERNBERG
POLE: 6216ETPP6 BCC4 CAS4 BK
FIXTURE: 1A 1521RLED SM FG 6ARC35T4 F MDL03 BK
ALLOWANCE: $4,200.00 EA. + FREIGHT

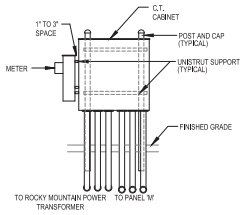
4 TYPICAL SINGLE HEAD SITE LIGHT FIXURE
SCALE: NONE



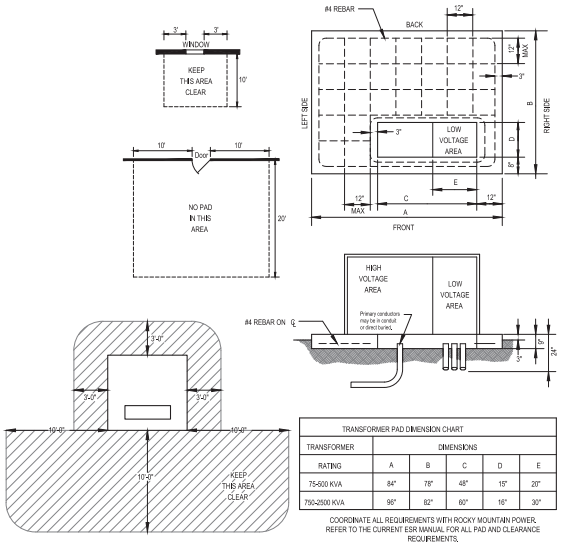


PLAN VIEW
REFER TO ARCHITECTURAL SITE PLAN FOR EXACT LOCATIONS

3 TYPICAL POLE BASE DETAIL
SCALE: NONE



2 CT CABINET/METER MOUNTING DETAIL
SCALE: none



TRANSFORMER PAD DIMENSION CHART					
TRANSFORMER	DIMENSIONS				
RATING	A	B	C	D	E
75-500 KVA	84"	78"	48"	15"	20"
750-2500 KVA	96"	82"	60"	16"	30"

COORDINATE ALL REQUIREMENTS WITH ROCKY MOUNTAIN POWER. REFER TO THE CURRENT ESR MANUAL FOR ALL PAD AND CLEARANCE REQUIREMENTS.

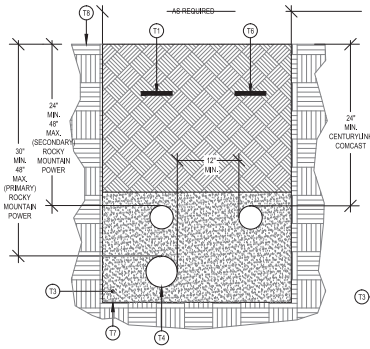
1 ROCKY MOUNTAIN POWER TRANSFORMER PAD DETAIL
SCALE: NONE

TRENCHING GENERAL NOTES:

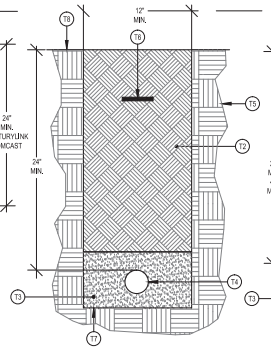
1. PROVIDE PULL 1/4" NYLON ROPES IN ALL CONDUITS.
2. HORIZONTAL AND VERTICAL SEPARATION BETWEEN CONDUIT SHALL BE MAINTAINED BY INSTALLING HIGH IMPACT SPACERS WITH HORIZONTAL INTERVALS OF EIGHT FEET.
3. ALL MARKER TAPE SHALL CONTAIN #10 TRACER WIRE.
4. REFER TO THE ROCKY MOUNTAIN POWER SIX STATE ESR FOR ADDITIONAL INFORMATION.
5. VERIFY ALL REQUIREMENTS WITH CENTURYLINK AND COMCAST PRIOR TO TRENCHING.

TRENCHING KEYED NOTES: (T9)

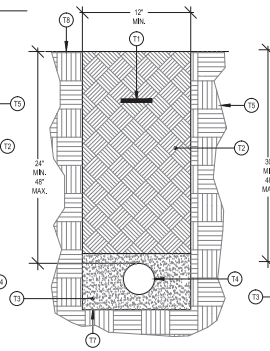
1. MARKER TAPE WITH TRACER WIRE LABELED. "CAUTION BURIED ELECTRIC CONDUITS BELOW" DIRECTLY OVER POWER CONDUITS 6" MINIMUM BELOW GRADE.
2. CLEAN BACKFILL CONTAINING NO ROCKS LARGER THAN 4" DIA.
3. BACKFILL MATERIAL WITHIN 4" TO 6" OF CONDUIT SHALL PASS THROUGH A 3/4" SIEVE FRAME OR SAND WITHOUT ANY SHARP OR FOREIGN OBJECTS.
4. ALL CONDUITS SHOWN SHALL BE SCHEDULE 40 PVC.
5. UNDISTURBED EARTH.
6. MARKER TAPE WITH TRACER WIRE LABELED. "CAUTION BURIED DATA/COMMUNICATION CONDUIT BELOW" DIRECTLY OVER DATA/COMM CONDUITS.
7. TRENCHES SHALL BE A UNIFORM DEPTH FOR ENTIRE LENGTH OF TRENCH SO CONDUITS CAN SIT FLAT (HORIZONTAL) WITH THE GROUND.
8. FINISHED GRADE.



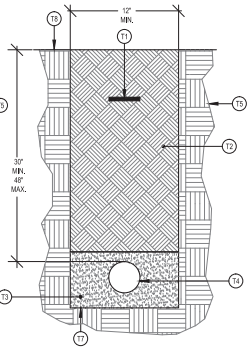
9 TRENCH DETAIL - JOINT USE
SCALE: NONE
ROCKY MOUNTAIN POWER / CENTURYLINK / COMCAST (JOINT USE)



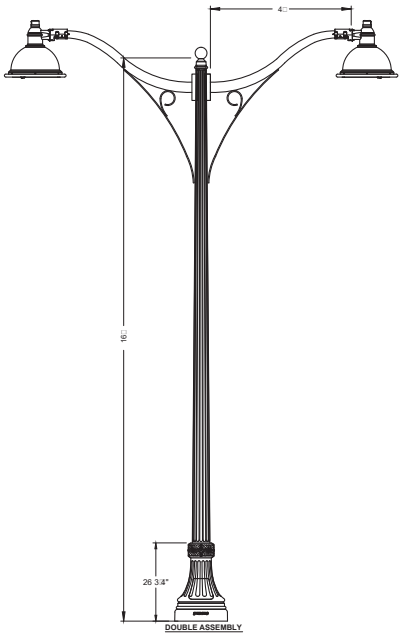
8 TRENCH DETAIL
SCALE: NONE
CENTURYLINK / COMCAST



7 TRENCH DETAIL
SCALE: NONE
ROCKY MOUNTAIN POWER (SECONDARY POWER)



6 TRENCH DETAIL
SCALE: NONE
ROCKY MOUNTAIN POWER (PRIMARY POWER)



DOUBLE ASSEMBLY
STERNBERG
POLE: 6216ETPP6 BCC4 CAS4 BK
FIXTURE: 2A 1521RLED SM FG 6ARC35T4 F MDL03 BK
ALLOWANCE: $6,400.00 EA. + FREIGHT

5 TYPICAL DOUBLE HEAD SITE LIGHT FIXURE
SCALE: NONE

ENVISION ENGINEERING

evans + associates architecture
1157W south state street, suite 150b, orem, utah 84058
phone 801.533.9273 fax 801.533.9273

Stamp

A New Meetinghouse for:
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Saratoga Springs UT Stake
233 East School House Road
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Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Revisions		
Mark	Date	Description
	2/1/2016	Concept Plan Submittal
	7/5/2016	Site Plan Submittal

Project Number
15-47
Plan Series
Property Number
501-9711
Date
February 1, 2016

Sheet Title
ELECTRICAL SITE PLAN DETAILS

Sheet
C3.03

APPLICATION REVIEW CHECKLIST

(8/20/2014 Format)

Application Information

Date Received:	7/28/2016
Date of Review:	8/10/2016
Project Name:	Saratoga Springs 2
Project Request / Type:	Site Plan
Meeting Type:	Public Hearing
Applicant:	Evans & Associates Architecture (Chad Spencer)
Owner (if different):	Corp of Pres. Bishop Church of Jesus Christ of LDS
Location:	233 E. School House Road
Major Street Access:	Redwood Road
Parcel Number(s) and size:	45:581:0241; 3.25 acres
General Plan Designation:	PC
Zone:	PC
Adjacent Zoning:	PC, R-3
Current Use:	Vacant, undeveloped
Adjacent Uses:	Residential, undeveloped
Previous Meetings:	N/A
Land Use Authority:	City Council
Type of Action:	Administrative
Future Routing:	City Council
Planner:	Kara Knighton, Planner I

Section 19.13 – Application Submittal

- Application Complete: yes
- Rezone Required: no
- General Plan Amendment required: no
- Additional Related Application(s) required: none

Section 19.13.04 – Process

- DRC: 8/1/2016
- UDC: 8/1/2016
- Neighborhood Meeting: if required dates/comments
- PC: 10/13/2016
- CC: 11/1/2016

Code Review

- 19.04, Land Use Zones: **Complies**.
  - Zone: PC
  - Use: **Complies**. The use is permitted in the CP and VP 2.
  - Setbacks: **Complies**. The CP/VP does not specify setbacks for the civic space block type. The setbacks exceed that the Institutional/Civic zone and all residential zones.
    - Front: 45’ provided
    - Side: East side provides 80’ and the west side provides 160’
    - Rear: 120’ provided.
  - Lot width, depth, size, and coverage: **Complies**. The lot including width, depth, and size was approved with VP 2 Plat 2A. Civic space block types do not have a maximum lot coverage; however, the lot coverage is 14% (overall site is 141,761 sq. ft. and the building is 19,422 sq. ft.) which complies with all block types that are specified in the VP and Section 19.04.
  - Dwelling/Building size: **Complies**. The CP and VP do not have any building size minimum; however, the proposed building exceeds that of most zones including residential zones.
  - Height: Complies. The CP states that the total height of a structure may not exceed 45 feet. The proposed building is 32’.
  - Open Space / Landscaping: **Complies**. The amount of open space in VP2 complies with the CP which complies with the DAP. The amount of open space in the project is consistent with VP2 and the CP. For reference the project proposes 24% landscaping which is compliant with zones such as the Institutional/Civic.
  - Sensitive Lands: Complies. There are no sensitive lands.
  - Trash: Complies. Shall comply with 19.04.

- 19.05, Supplemental Regulations: **Complies**.
  - Flood Plain: Complies. The lot is not in the flood plain.
  - Water & sewage: Complies. The proposed building will connect into the City’s water and sewer system.
  - Transportation Master Plan: Complies. The proposed building is not proposed on a proposed road, street, highway, or right-of-way.
  - Property access: Complies. The lot abuts a public road.
  - Structure located on PUE: Complies. No structure is proposed on a PUE.

- 19.06, Landscaping and Fencing: **Can comply**.
  - General Provisions: **Complies**.
    - Automatic irrigation required. Complies. The project proposes pressure regulating heads, and a rain sensor.
    - All refuse areas (including dumpsters) must be screened.
    - Tree replacement required if mature trees are removed.
  - Landscaping Plan: Complies. A landscaping plan was submitted.\
  - CP/VP compliance: **Complies**.
    - Plant type: Complies. All plants are listed in the CP.
  - Completion – Assurances: Bond required for public improvements prior to recordation.

- Planting Standards & Design: **Can comply**.
    - Required Trees: Can comply.
        - Deciduous: Complies. CP requires 1.5” caliper, 2” proposed.
        - Evergreen: Complies. CP requires 5’- 6’ height minimum, 6’ provided.
        - Tree Base clearance: Can comply. 3’ diameter shall be kept free of rock and turf. Note needed.
    - Shrubs: Complies. 25% shall be 5 gallon and the rest shall be 1 gallon; all proposed shrubs are 5 gallon.
    - Turf: Complies. 70% max. The project is providing 34,367 sq. ft. of landscape area and 16,586 sq. ft. of turf for a total of 48% turf.
    - Drought Tolerant Plants: Complies. 50% of all trees and shrubs shall be drought tolerant. More than half (76%) of all trees and shrubs are drought tolerant.
    - Rock: Complies. No rock mulch is proposed.
    - Planting and shrub beds: Complies. Edging, drip lines, and edging is provided.
    - Artificial turf: Complies. No artificial turf is proposed.
    - Evergreens: Complies. Evergreens are incorporated.
    - Softening of walls and fences: Complies. There are shrubs placed intermittently all around the building.
    - Energy conservation: Complies. Most of the evergreens are located on the southern end of the project for buffering. There are some evergreens on the west side of the building.
    - Tree preservation: Complies. No mature trees are present on the site.
    - Placement: Complies. Shrubs are provided around the building.
- Amount: Complies. The CP requires 16.2 sq. ft. of landscaping for every parking stall. 210 parking stalls x 16.2 = 3,402 sq. ft. of landscaping required. The project proposes 34,367 sq. ft.
- Additional Requirements: Complies. Trees and lawn are proposed in the park strips.
- Fencing & Screening: **Complies**. The CP (pg. 102 graphic) requires 6’ semi-private fencing along the rear property line as it abuts an existing trail. The project proposes 6’ semi-private fencing. The retaining wall will require a building permit as it taller than 4’. 19.06 requires all non-residential fencing and other screening materials to be approved by the CC. The fencing was approved during the VP 2 process.
- Clear Sight Triangle: **Can comply**. This is a public road, but the HOA is maintaining the park strips. A note specifying an 8’ clearance between the ground and canopy at maturity is required.

- 19.09, Off Street Parking: **Can comply.**
    - General Provisions: **Complies**. The parking lot is proposed as asphalt.
    - Parking Requirements / Design: **Complies**. No tandem spaces are proposed.
    - Dimensions: **Complies**. The CP requires 90 degree parking to be 9’x18’ with an aisle width of 24’. The proposed stalls measure 9’x18’ with an aisle width of 26’.
    - Accessible: **Complies**. Of the 210 parking stalls proposed 5 are accessible and 2 are van accessible for a total of 7 accessible stalls.
    - Landscaping: Complies.
        - Parking areas adjacent to public streets: Complies. 10’ landscaped area containing a berm or screen wall 3’ in height between parking area and public streets to minimize light intrusion is required. The project proposes a 10’ landscaped area with a 3’ vinyl fence

and several shrubs against the fence to minimize light intrusion. The 3' vinyl fence meets the intent of the code section and complies with the CP/VP. The public frontage complies with the CP/VP as the trees are spaced a little closer than 40 feet on center, ground cover (lawn) is proposed in the planter with large shade trees.

- Parking islands (including CP/VP requirements): Complies.
  - The CP requires one tree per 4,200 sq. ft. of parking lot area to be place within the parking lot. The parking lot is 72,855 sq. ft. which requires 17 trees within the parking lot. The project proposes 33 trees in the parking lot.
  - Double rows: Can comply. One 36x9 landscaped island on each end of the parking rows, plus one every 20 stalls is required. The project proposes one 36x9 landscaped island on each end of the parking rows, plus one every 20 stalls; however, one of the islands does not measure 36x9.
  - Single rows: Complies. On single rows of parking or where parking abuts a sidewalk, there shall be one 18x9 foot landscaped island a minimum of every 10 stalls. The project proposes one 18x9 foot landscaped island a minimum of every 10 stalls.
  - Ends: Complies. The ends are shaped to help direct traffic.
- Curbs: Complies. Curbs are proposed between parking areas and landscaping.
- Clear sight: See analysis above.
- Components: Complies. The landscaped parking area consists of trees, shrubs, and groundcover. An irrigation plan has been provide.

- Pedestrian Walkways & Accesses: **Complies**. The parking lot is 72,855 sq. ft. Staff has recommended a walkway on the southern end of the parking lot to provide a path from the trail to the south to the proposed church.
- Shared Parking: **Complies**. No shared parking is proposed.
- Minimum Requirements: **Complies**. 19.09 requires churches to provide 1 stall per 3 seats. There are 242 seats requiring 81 parking stalls. This parking requirement may be exceeded by more than 25%. The project proposes 210 seats.

- 19.11, Lighting: **Complies**.
  - CP/VP compliance: Only full cut-off fixtures are permitted. **Complies.** All proposed lighting fixtures are full cut-off.
  - General Standards: **Complies.**
    - Material: Complies. All lighting fixtures and assemblies shall be metal. The proposed lights are made of aluminum.
    - Base: Complies. A decorative base of 16" in height is required. A decorative pole base of 26" is provided.
    - Angle: Complies. All lighting fixtures shall be angled downwards. The lighting fixtures are angled downwards.
    - Lamp: Complies. The lamp shall not exceed 4000K in color temperature. The proposed lights are 3500K.
    - Drawings: Complies. The design and location of proposed fixtures are shown and labeled on the plans.
    - Flags: Complies. No flags are proposed.

- Non-residential lighting: **Complies**.
  - Wall mounted: Complies. 16’ mounting height max. The proposed mounting height is 7’.
  - Intermittent lighting: Complies. No intermittent lighting is proposed.
  - Trespass lighting: Complies. Trespass lighting into residential development shall not exceed 0.1 footcandles. The east side of the property is exceeding the 0.1 footcandles; however, the applicant is proposing shields on those eastern lights and the use of those shields cannot be reflected in the photometric.
  - All lighting fixtures shall be black: Complies. The proposed lighting fixtures are black.
  - Pole design shall include an arm and bell shade: Complies. The pole design boasts an arm and bell shade.
  - Parking lot poles: Complies. The poles shall not exceed 16’ as they are next to residential. The proposed poles are 16’ tall.
- Outdoor sign lighting: **Complies**. No signs propose illumination.
- Walkway lighting: **Complies**. No bollard lighting is proposed. All pathways will be illuminated by parking lighting.
- Lighting Plan: **Complies**.
  - Location and types of illumination: Complies. The plans indication the location and types of illumination.
  - Descriptions of the illuminating devices: Complies. The manufacturer spec. have been provided.
  - Photometric sheet: Complies. Provided.

- Section 19.13, Process: **Complies**.
  - General Plan: Complies. The project is part of a planned community. The CP/VP comply with the General Plan.
  - Notice / Land Use Authority: The City Council is the land use authority. Prior to City Council, the Planning Commission shall hold a public hearing and forward a recommendation onto the City Council.

- 19.14, Site Plans: **Complies**.
  - Development Standards: **Complies**.
    - Buffering and screening: Complies. The use is not commercial, but there is a 6’ vinyl privacy fence placed between the residential to the east and west. Semi-private is proposed to the south.
    - Access: Complies. The access spacing is consistent with the CP/VP.
    - Utilities: See Engineer’s report
    - Grading & drainage: See Engineer’s report
    - Water: See Engineer’s report
    - Irrigation ditches: See Engineer’s report
  - Architectural and Urban Design Requirements: Complies.
    - Process: Complies. The DRC reviewed the elevations and site plan prior to the Planning commission public hearing.
    - Mechanical equipment: Complies. The mechanical equipment is screened by a brick enclosure which matches the building.

        - Windows: Complies. Nonrectangular windows may be used as accents and trim. Untreated aluminum or metal window frames are prohibited. The majority of the windows are rectangular. A few nonrectangular windows are proposed as accents.
        - Building lighting: Complies. The proposed building lighting is shielded and directed downward.
        - Trash enclosure: Complies. A brick surround to match the building is proposed around the dumpster. A landscaping island is proposed between the parking and the dumpster location. A gravity latch and a 16 gauge sheet metal panel are proposed.
        - Exterior materials: Complies. A materials board was provided and the DRC reviewed the materials and elevations on August 1, 2016.
        - Landscape requirements: See analysis above.
        - Parking lot, building, and street lighting: See analysis above.
    - Special Provisions: uses within buildings, nuisances, residential conversions
        - Uses within buildings: Complies. All uses will occur within the building.
        - Nuisances: Complies. The proposed use does not create a hazard to the surrounding area.
    - Maps and Drawings Required: **Complies**. Provided.
    - Bond: A bond will be required

- 19.18, Signs: **Complies**
    - Permanent
    - Meetinghouse stone sign: **Complies**. The CP does not have specific standards for building signs so the following sign was reviewed under 19.18.09 Institutional/civic zone standards.
        - Primary building signs
            - Number: One sign per primary building. Complies. Only one sign is proposed.
            - Size: shall not exceed 8% of the façade or thirty square feet, whichever is larger. Complies. The proposed sign is 15 square feet.
            - Height: 8’ of clearance required. Complies. The proposed bottom of sign is 8’ above sidewalk.
    - Meetinghouse address sign: **Complies**. The CP has specific requirements outlined below.
        - Quantity: One per address. Complies. Only one sign is proposed.
        - Area: 2 sq. ft. max. Complies. The area is 1.11 sq. ft.
        - Width: 24” max. Complies. The sign is just over 15”.
        - Height: 12” max. Complies. The sign is just over 10”.
        - Depth/projection: 3” max. Complies. The sign is flush with the building façade.
        - Clearance: 4.5’ minimum. Complies. There is 6’ of clearance proposed.
        - Letter height: 6” max. Complies. The lettering is 6”.

- 19.27, Addressing: Complies.
    - 233 E School House Road

- Fiscal Impact: No costs.
    - Is there any City maintained open space? No.

Exhibit 9

don't have to take out houses. From a functional classification point you can use 2 lanes as part of the connectivity.

Commissioner Williamson asked about Bonneville drive. It seems like more of a collector rather than a local road. Planning Director Kimber Gabryszak said the idea for it is not a lot of high speed traffic up in the foothills. But when all the developments come through there will be connectivity, another emergency access route. City Manager Mark Christensen noted it used to be the Foothill alignment, but one reason they moved Foothill was to feed it from both sides.

Motion made by Commissioner Williamson to forward a positive recommendation for the Updates to the Transportation Master Plan, an element of the General Plan. Seconded by Commissioner Kilgore. Aye: Brandon MacKay, David Funk, Kirk Wilkins, Hayden Williamson, Troy Cunningham, Ken Kilgore. Motion passed 6 - 0.

A short break was taken at this time. Meeting resumed at 7:59 p.m.

4. **Public Hearing: Saratoga Springs 2 Church Site Plan located at 233 E. School House Rd. Evans & Associates Architecture applicant.**
City Planner Kara Knighton presented the plans for the church. The proposal also contains a 190 sq. ft. storage building, 210 parking stalls including 7 ADA stalls, and 34,367 sq. ft. of landscaping. Staff recommended an additional condition 1. The southeast double row parking lot island shall be increased to 9' in width.

Public Hearing Open by Chairman Kirk Wilkins
No public were present for comment on this item.
Public Hearing Closed by Chairman Kirk Wilkins

Commissioner Funk noted on pg. 21 19.09 a word change from seats to parking stalls.

Commissioner Cunningham noted a recommendation of a pathway connecting to a trail to south, where is the trail. City Planner Kara Knighton noted where the trail was and that staff originally recommended a connection. But there was not a feasible way to connect. There is a connection just to the west one lot over through a cul-de-sac.

Commissioner Wilkins asked about an issue with the garbage can area. City Planner Kara Knighton noted the applicant has addressed that issue.

Commissioner Kilgore noted under 19.14 there is a can comply with architectural designs. City Planner Kara Knighton replied that was a typo, it should be a does comply.

Motion made by Commissioner Williamson to forward a positive recommendation to the City Council for the Saratoga Springs 2 Site plan, located on parcel 45:581:0241 and as shown in exhibit 2, with the findings and Conditions in the Staff Report dated October 6, 2016. Seconded by Commissioner Funk.

City Planner Kara Knighton noted the additional condition

Commissioner Williamson added the additional condition to the motion. The southeast double row parking lot island shall be increased to 9' in width. Accepted by Commissioner Funk.
Aye: Brandon MacKay, David Funk, Kirk Wilkins, Hayden Williamson, Troy Cunningham, Ken Kilgore. Motion passed 6 - 0.

DRAFT

City Council
Staff Report

Final Plat
Western Hills Phases 2 & 3
Tuesday, November 1, 2016
Public Meeting

Report Date:	Tuesday, October 25, 2016
Applicant:	Ridgepoint Management Group LLC
Owner:	Western Hills 1 LLC
Location:	Approximately 150 W Aspen Hill Blvd
Major Street Access:	Aspen Hills Blvd
Parcel Number(s) & Size:	58:023:0028 – 14.3 acres 58:023:0229 – 14.94 acres Total – 29.24 acres
Parcel Zoning:	R-3
Adjacent Zoning:	A, R-3 PUD, R-14, MU
Current Use of Parcel:	Vacant
Adjacent Uses:	Vacant, Condominiums, Town Homes, Church, City Park, Single-Family Residential
Previous Meetings:	None for this application
Previous Approvals:	None for this application
Type of Action:	Administrative
Land Use Authority:	City Council
Future Routing:	None
Author:	Sarah Carroll

A. **Executive Summary:** This is a request for approval of the Western Hills Phases 2 & 3 Final Plat which consists of 16.025 acres in the R-3 zone and includes 39 lots. Based on conditions of the Preliminary Plat approval, the applicant is requesting lot size reductions with the final plat.

Recommendation:

Staff recommends that the City Council review and discuss the Western Hills Phases 2 & 3 Final Plat and choose from the options in Section "H" of this report. Options include approval with conditions, denial, or continuation.

Sarah Carroll, Senior Planner
scarroll@saratogaspringscity.com
1307 North Commerce Drive, Suite 200 • Saratoga Springs, Utah 84045
801-766-9793 x106 • 801-766-9794 fax

B. **Background:** On August 7, 2015, the City received a Preliminary Plat application for Western Hills Phases 2 & 3. On April 28, 2016 the Planning Commission held a public hearing and forwarded a positive recommendation for the application with the additional condition that the trail would extend behind lot 211 and connect to the sidewalk on Aspen Hills Blvd (see Exhibit 8).

On May 5, 2015, the City Council held a work session to discuss the open space of the project. The parcel contains a berm that is the remainder of a former rail road track. Due to the large amount of un-improved open space on the berm, the option for a financial contribution from the developer to the adjacent Shay Park was suggested in lieu of landscaping and amenities for the entire open space area (see Exhibit 6).

The option stated that the developer would be responsible for a financial contribution of $3.33 per square foot for the required 15% of open space. The costs of the trail and other open space improvements shown on the attached landscaping plans would then be deducted and the difference would be paid to the City to be used towards Shay Park.

The current application is for a portion of the entire property. Based on the fee-in-lieu option, the financial obligation for each phase is outlined below.

Phase	Area	Required Open Space (15%)	Financial Contributions $3.33 per sq. ft.
Phase 2	376,543 sq. ft.	56,482 sq. ft.	$188,085.06*
Phase 3	321,500 sq. ft.	48,225	$160,589.25*
Total	698,043 sq. ft.	104,707	$348,674.31*

**This amount will be reduced by actual improvement costs spent by the developer within these open space areas. Receipts and invoices shall be submitted to the City for verification of funds spent.*

On May 10, 2016, the City Council approved the preliminary plat for Western Hills Phases 2 and 3 with a condition that the applicant provide a stub to the east for future connection. City staff have worked with the applicant on possible locations and the attached drawing includes a stub to the east. This has resulted in five lots that are below 10,000 square feet, and the applicant is requesting a lot size reduction for those.

C. **Specific Request:** This is a request for Final Plat approval for Western Hills Phases 2 & 3; a 39 lot subdivision in the R-3 zone. The property is 16.025 acres, with a density of 2.57 units per acre. The applicant is requesting lot size reductions.

D. **Process:** Section 19.13.04 of the City Code states that Final Plats require approval by the City Council if they do not match the Preliminary plat. The Final plat includes a stub to the east that was not shown on the preliminary plat and includes a request for a lot size reduction. Thus, the City Council is the Land Use Authority.

E. **Community Review:** Per 19.13.04 of the City Code requires public noticing prior to the Public Hearing on the Preliminary Plat. The noticing requirements have been met and a public hearing was held by the Planning Commission when they reviewed the Preliminary Plat.

F. **General Plan:** The Future Land Use map designates the site as Low Density Residential. The General Plan states that areas designated as low Density Residential are "designed to provide areas for residential subdivisions with an overall density of 1 to 4 units per acre. This area is to be characterized by neighborhoods with streets designed to the City's urban standards, single-family detached dwellings and open spaces."

Staff conclusion: Consistent. *The proposed final plat consists of single-family lots at a density of 2.57 units per acre, which is consistent with the General Plan designation.*

G. **Code Criteria:**

- **19.04,** Land Use Zones – **Can Comply. Lot size reduction requested.**
  - Setbacks: **Can Comply**. *The setback detail shall be modified to either 10'/10' or 8'/20' for interior and knuckle lots.*
    - 25' front
    - 8' min/ 20' combined side yard
    - 20' Street side
    - 25' rear
  - Lot sizes:
    - All of the lots on the Preliminary plat were 10,000 square feet or larger.
    - The applicant has added a stub street to the east which has resulted in five lots below 10,000 square feet.
    - The City Council may grant a lot size reduction if a significant public purpose is met such as "any other public purpose that the City Council deems appropriate".
      - The proposed stub to the east is a significant public purpose as this will allow for cross connection between developments in the future.
      - The reduction does not result in increased density
      - The reduction is for 5 lots, which is less than 25% of the total lots in the subdivision (39 lots).
      - The reduction is not greater than 10% of the minimum lot size required by the R-3 zone (10,000 square feet).
- **19.06,** Landscaping – **Complies.**
  - The open space will be City owned and maintained after it is improved and dedicated to the City. The landscape plans have been reviewed by the Parks department.
  - The landscape plans shall met all conditions of the Parks department.
    - Ornamental grasses only in the shrub beds of the gazebo area.
    - No weed barrier
    - No drip lines
    - Meet the LS-7 City standard for irrigation of the shrub bed areas.

        - Amenities shall match those in Shay Park
        - Meet all City standards
- **19.12,** Subdivisions – **Complies.**
- **19.13,** Process – **Complies.**
- **19.27,** Addressing – **Can Comply.**
    - *Addressing shall be reviewed by GIS.*

H. Recommendation and Alternatives:

Staff recommends that the City Council discuss the application and choose from the following options.

Staff Recommended Option – Approval with Conditions

"I move to **approve** the Western Hills Phases 2 & 3 Final Plat, as attached, with the Findings and Conditions in the Staff Report dated November 1, 2016:"

Findings

1. The application is consistent with the General Plan, as articulated in Section "F" of the staff report, which section is incorporated by reference herein.
2. The application complies with the criteria in sections 19.04, 19.06, 19.12, 19.13, 19.27 of the Development Code, as articulated in Section "G" of the staff report, which section is incorporated by reference herein.

Conditions:

1. All conditions of the City Engineer shall be met, including but not limited to those in the Staff report in Exhibit 1.
2. The lot size reductions are approved for five lots based on the findings in Section G of this report.
3. All conditions of the parks department shall be met on all open space to be dedicated to the City.
4. The side setbacks shall be 8' min/ 20' combined on the Setback Detail or 10'/10'.
5. Open Space improvements for each phase shall be deducted from the financial contribution of each phase and the remainder shall be paid to the City prior to recordation of each phase.
6. The financial contribution for phase 2 shall be $188,085.06, minus any deductions from open space improvements in phase 2.
7. The financial contribution for phase 3 shall be $160,589.25, minus any deductions from open space improvements in phase 3.
8. The trail connect to the side walk on Aspen Hills Blvd behind lot 211.
9. Any other conditions or changes as articulated by the City Council: _____.

Alternative 1 - Continuance

The City Council may also choose to continue the item. "I move to **continue** the Western Hills Phases 2 & 3 Final Plat to another meeting on [DATE], with direction to the applicant and Staff on information and / or changes needed to render a decision, as follows:

1. _____
2. _____

Alternative 2 – Denial

The City Council may also choose to deny the application. "I move to **deny** the Western Hills Phases 2 & 3 Final Plat with the Findings below:

1. The Western Hills Phases 2 & 3 Final Plat is not consistent with the General Plan, as articulated by the City Council: _____, and/or,
2. The Western Hills Phases 2 & 3 Final Plat is not consistent with Section [19.04, 19.06, 19.12, 19.13] of the Code, as articulated by the City Council: _____.

J. Attachments:

1. City Engineer's Preliminary Plat Staff Report
2. Location & Zone Map
3. Final Plat

Planning Commission
Staff Report

Author: Gordon Miner, City Engineer
Subject: Western Hills Subdivision Phase 2 & 3
Date: April 28, 2015
Type of Item: Preliminary Plat Approval

Description:

A. Topic: The Applicant has submitted a preliminary plat application. Staff has reviewed the submittal and provides the following recommendations.

B. Background:

Applicant:	*Ridgepoint Management Group, LLC*
Request:	*Preliminary Plat Approval*
Location:	*350 W Aspen Hills Blvd*
Acreage:	*8.645 acres - 20 lots*

C. Recommendation: Staff recommends the approval of preliminary plat subject to the following conditions:

D. Conditions:

A. Meet all engineering conditions and requirements as well as all Land Development Code requirements in the preparation of the final plat and construction drawings. All application fees are to be paid according to current fee schedules.

B. All review comments and redlines provided by the City Engineer during the preliminary process are to be complied with and implemented into the final plat and construction plans.

C. Final plats and plans shall include an Erosion Control Plan that complies with all City, UPDES and NPDES storm water pollution prevention requirements. Project must meet the City Ordinance for Storm Water release (0.2 cfs/acre for all developed property) and shall identify an acceptable location for storm water detention. All storm water must be cleaned as per City standards to remove 80% of Total Suspended Solids and all hydrocarbons and floatables.

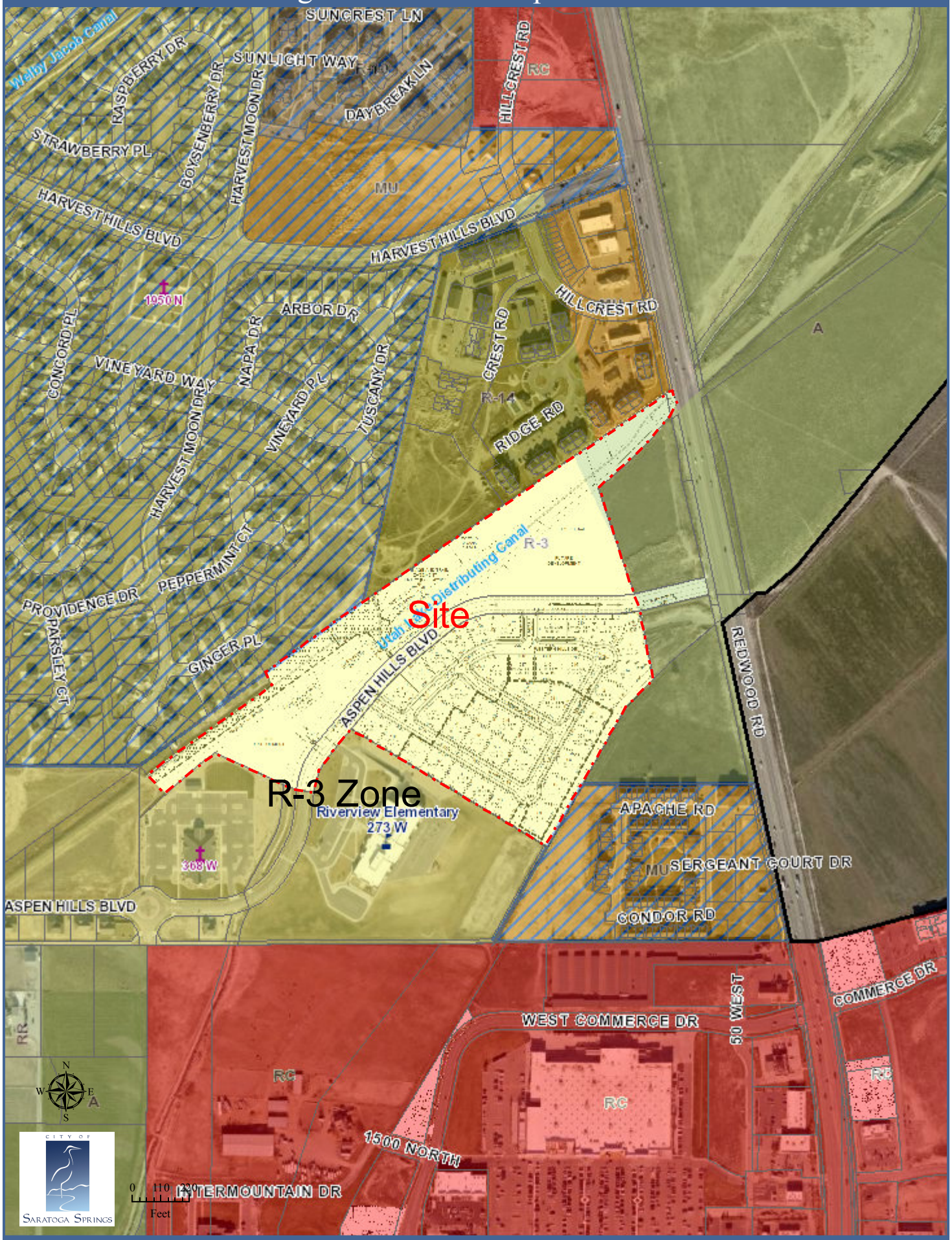
D. Project shall comply with all ADA standards and requirements.

E. Half width dimensions shall be shown for Redwood Road

F. Developer shall provide plans for and complete all improvements within pedestrian corridors.

G. Developer shall prepare and submit easements for all public facilities not located in the public right-of-way

Western Hills - Zoning and Location Map



21 April 2016

WESTERN HILLS SUBDIVISION - PHASE 2

LOCATED IN A PORTION OF THE SOUTHWEST QUARTER SECTION 11,
TOWNSHIP 5 SOUTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN
SARATOGA SPRINGS CITY, UTAH COUNTY, UTAH

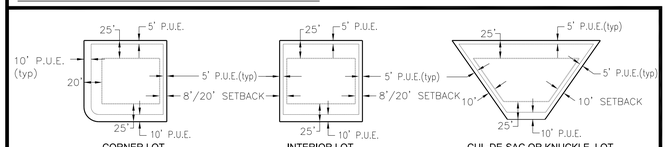
VICINITY MAP

SARATOGA SPRINGS

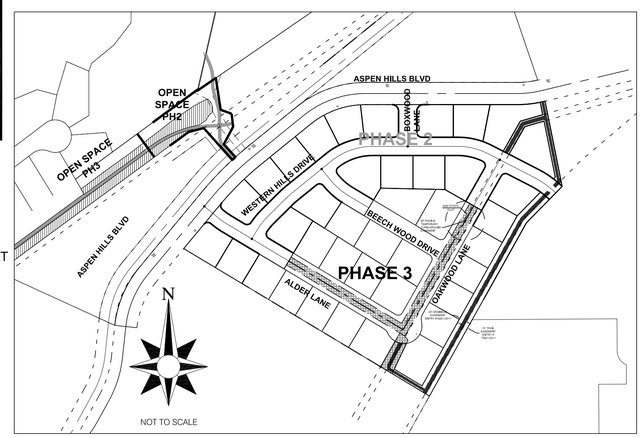
PLAT NOTES

1. PLAT MUST BE RECORDED WITHIN 24 MONTHS OF FINAL PLAT APPROVAL, OR FOR PHASED DEVELOPMENTS, WITHIN 24 MONTHS OF RECORDATION OF MOST RECENT PHASE. FINAL PLAT APPROVAL WAS GIVEN ON THE _____ DAY OF _____ 20_____.
2. THE INSTALLATION OF IMPROVEMENTS SHALL CONFORM TO ALL CITY STANDARDS, REGULATIONS, AND ORDINANCES.
3. PRIOR TO BUILDING PERMITS BEING ISSUED, SOIL TESTING STUDIES MAY BE REQUIRED ON EACH LOT AS DETERMINED BY THE CITY BUILDING OFFICIAL.
4. PLAT IS SUBJECT TO "INSTALLATION OF IMPROVEMENTS AND BOND AGREEMENT NO. _____." WHICH REQUIRES THE CONSTRUCTION AND WARRANTY OF IMPROVEMENTS IN THIS SUBDIVISION. THESE OBLIGATIONS RUN WITH THE LAND AND ARE BINDING ON SUCCESSORS, AGENTS, AND ASSIGNS OF DEVELOPER. THERE ARE NO THIRD-PARTY RIGHTS OR BENEFICIARIES UNDER THIS AGREEMENT.
5. BUILDING PERMITS WILL NOT BE ISSUED UNTIL ALL IMPROVEMENTS HAVE BEEN INSTALLED AND ACCEPTED BY THE CITY IN WRITING; ALL IMPROVEMENTS CURRENTLY MEET CITY STANDARDS; AND BONDS ARE POSTED BY THE CURRENT OWNER OF THE PROJECT PURSUANT TO CITY CODE.
6. NO BUILDING PERMITS SHALL BE ISSUED UNTIL ALL IMPACT AND CONNECTIONS FEES ARE PAID IN FULL PER CITY REGULATIONS IN EFFECT AT THE TIME OF BUILDING PERMIT ISSUANCE.
7. ALL OPEN SPACE AND TRAIL IMPROVEMENTS LOCATED HEREIN ARE TO BE INSTALLED BY OWNER AND MAINTAINED BY A HOMEOWNERS ASSOCIATION UNLESS SPECIFIED OTHERWISE ON EACH IMPROVEMENT.
8. REFERENCES HEREIN TO DEVELOPER OR OWNER SHALL APPLY TO BOTH, AND ANY SUCH REFERENCE SHALL ALSO APPLY TO SUCCESSORS, AGENTS, AND ASSIGNS.
9. NO CITY MAINTENANCE SHALL BE PROVIDED FOR STREETS DESIGNATED AS "PRIVATE" ON THIS PLAT.
10. A GEOTECHNICAL REPORT HAS BEEN COMPLETED BY EARTHTEC ENGINEERING, INC., WHICH ADDRESSES SOIL AND GROUNDWATER CONDITIONS, PROVIDES ENGINEERING DESIGN CRITERIA, AND RECOMMENDS MITIGATION MEASURES IF PROBLEMATIC CONDITIONS WERE ENCOUNTERED. THE REPORT IS ON FILE WITH DESERT PEAK MANAGEMENT AND THE CITY. THE CITY ASSUMES NO LIABILITY OR RESPONSIBILITY FOR ANY RELIANCE ON THE INFORMATION OR LACK THEREOF IN THE REPORT.
11. AGRICULTURAL USES, OPERATIONS, AND RIGHTS ARE ADJACENT TO OR NEAR THE PLAT AND LOTS. THE LOTS IN THIS PLAT ARE SUBJECT TO THE SIGHTS, SOUNDS, ODORS, NUISANCES,AND ASPECTS ASSOCIATED WITH AGRICULTURAL OPERATIONS, USES, AND RIGHTS. THESE USES AND OPERATIONS MAY OCCUR AT ALL TIMES OF THE DAY AND NIGHT INCLUDING WEEKENDS AND HOLIDAYS. THE CITY IS NOT RESPONSIBLE OR LIABLE FOR THESE USES AND WILL NOT RESTRICT ANY GRANDFATHERED AGRICULTURAL USE FROM CONTINUING TO OCCUR LAWFULLY.
12. DRAINAGE ACROSS PROPERTY LINES SHALL NOT EXCEED THAT WHICH EXISTED PRIOR TO GRADING. EXCESS OR CONCENTRATED DRAINAGE SHALL BE CONTAINED ON SITE OR DIRECTED TO AN APPROVED DRAINAGE FACILITY.

TYPICAL SETBACK & P.U.E. DETAILS



BY SIGNING THIS PLAT THE FOLLOWING UTILITY COMPANIES ARE APPROVING THE: (A) BOUNDARY, COURSE, DIMENSIONS, AND INTENDED USE OF THE RIGHT-OF-WAY AND EASEMENT GRANTS OF RECORD; (B) LOCATION OF EXISTING UNDERGROUND AND UTILITY FACILITIES; (C) CONDITIONS OR RESTRICTIONS GOVERNING THE LOCATION OF THE FACILITIES WITHIN THE RIGHT-OF-WAY, AND EASEMENT GRANTS OF RECORD, AND UTILITY FACILITES WITHIN THE SUBDIVISION. "APPROVING" SHALL HAVE THE MEANING IN UTAH CODE SECTION 10-9A-603(4)(c)(ii). THE FOLLOWING NOTES ARE NOT ENDORSED OR ADOPTED BY SARATOGA SPRINGS AND DO NOT SUPERSEDE CONFLICTING PLAT NOTES OR SARATOGA SPRINGS POLICIES.



BOUNDARY DESCRIPTIONS

Western Hills Residential Subdivision Phase 1
Lot Area

A parcel of land located in the Southwest Quarter of Section 11, Township 5 South, Range 1 West, Salt Lake Base and Meridian, in the City of Saratoga Springs, Utah County, Utah. Said parcel being more particularly described as follows:

Beginning at a point on the southerly right of way of Aspen Hills Blvd., located N89°39'03"E 782.25 feet along the section line and North 828.37 feet from the Southwest Corner of Section 11, Township 5 South, Range 1 West, Salt Lake Base and Meridian, and running thence N39°37'42"E 170.30 feet to the beginning of a curve to the right having a radius of 916.00 feet; thence along the arc of said curve 180.66 feet, passing through a central angle of 11°18'00", chord bears N45°16'42"E 180.36 feet; thence N50°55'42"E 196.51 feet to the beginning of a curve to the right having a radius of 266.00 feet; thence along the arc of said curve 181.39 feet, passing through a central angle of 39°04'18", chord bears N70°27'51"E 177.90 feet; thence East 466.84 feet to the beginning of a curve to the left having a radius of 334.00 feet; thence along the arc of said curve 77.77 feet, passing through a central angle of 13°20'27", chord bears N83°19'47"E 77.59 feet; thence N 76°39'33" E 6.70 feet; thence S11°20'43"E 266.63 feet to the southeasterly boundary of the Western Hills 1 LLC Property; thence S44°30'03"W 156.12 feet; thence S29°14'03"W 608.59 feet; thence N59°02'24"W 174.48 feet; thence N29°37'53"E 90.03 feet to the beginning of a curve to the left having a radius of 55 feet; thence along the arc of said curve 36.09 feet, passing through a central angle of 37°35'45", chord bears S79°16'08"E 35.45 feet; thence S25°27'49"W 87.66 feet; thence S59°02'24"E 99.44 feet; thence N29°14'03"E 503.65 feet; thence N60°22'07"W 103.83 feet; thence N29°37'53"E 54.34 feet; thence N60°24'58"W 129.28 feet; thence N88°45'16"W 197.05 feet; thence S30°57'36"W 98.56 feet; thence N59°02'24"W 72.27 feet to the beginning of a curve to the right having a radius of 238.00 feet; thence along the arc of said curve 8.54 feet, passing through a central angle of 2°03'18", chord bears N58°00'45"W 8.54 feet; thence S33°00'54"W 95.64 feet; thence N57°44'23"W 42.47 feet; thence S30°57'36"W 171.54 feet; thence N59°02'24"W 87.65 feet; thence S30°57'36"W 105.00 feet to the northerly boundary of the Alpine School District property; thence N59°02'24"W 207.94 feet to the point of beginning.

Containing 8.162 acres more or less and 20 building lots.

Western Hills Subdivision
Open Space Area (Phase 2)

A parcel of land located in the Southwest Quarter of Section 11 Township 5 South, Range 1 West, Salt Lake Base and Meridian, in the City of Saratoga Springs, Utah County, Utah. Said parcel being more particularly described as follows:

Beginning at a point which is located N89°39'03"E 692.29 feet and North 1109.40' feet from the Southwest Corner of Section 11, Township 5 South, Range 1 West, Salt Lake Base and Meridian, and running thence N36°14'55"W 88.54 feet; thence N53°44'56"E 229.03 feet; thence S12°38'05"W 3.54 feet; thence N55°25'00"E 68.85 feet; thence S08°46'35"E 98.80 feet; thence S70°33'43"E 35.29 feet; thence S06°52'47"E 39.90 feet; thence S27°50'52"W 60.88 feet; thence S41°47'34"E 53.05 feet to the beginning of a non-tangent curve to the right having a radius of 984.00 feet; thence along the arc of said curve 12.84 feet, passing through a central angle of 0°44'52", chord bears S47°50'00"W 12.84 feet; thence N41°51'39"W 131.02 feet; thence S75°30'48"W 48.12 feet; thence S53°40'30"W 130.02 feet to the point of beginning.

Containing 0.730 acres, more or less.

SURVEYOR'S CERTIFICATE

I, Victor E. Hansen, do hereby certify that I am a registered Land Surveyor and that I hold a license, Certificate No. 176695, in accordance with the Professional Engineers and Land Surveyors Licensing Act found in Title 58, Chapter 22 of the Utah Code. I further certify that by authority of the owners, I have made a survey of the tract of land shown on this plat and described below, have subdivided said tract of land into lots, streets, and easements, have completed a survey of the property described on this plat in accordance with Utah Code Section 17-23-17, have verified all measurements, and have placed monuments as represented on the plat. I further certify that every existing right-of-way and easement grant of record for underground facilities, as defined in Utah Code Section 54-8a-2, and for other utility facilities, is accurately described on this plat, and that this plat is true and correct to the best of my knowledge. I also certify that I have filed, or will file within 90 days of the recordation of this plat, a map of the survey I have completed with the Utah County Surveyor.

BOUNDARY DESCRIPTIONS

Open Space 3 containing 0.612 acres, more or less.

Lot Area Containing 8.033 acres (SEE LOT AREA DESCRIPTION TO THE LEFT)

Total Acres: 8.645 more or less. # of Lots: 20 unlts.

Date _____ Victor E. Hansen _____

OWNER'S DEDICATION

Know all men by these presents that _____, the _____ undersigned owner(s) of the above described tract of land having caused same to be subdivided into lots and streets to be hereafter known as

WESTERN HILLS SUBDIVISION - PHASE 2

do hereby dedicate for the perpetual use of the public and/or City all parcels of land, easements, right-of-way, and public amenities shown on this plat as intended for public and/or City use. The owner(s) voluntarily defend, indemnify, and save harmless the City against any easements or other encumbrance on a dedicated street which will interfere with the City's use, maintenance, and operation of the street. The owner(s) voluntarily defend, indemnify, and hold harmless the City from any damage claimed by persons within or without this subdivision to the extent to have been caused by the owner's alterations of the ground surface, vegetation, drainage, or surface or sub-surface water flows within this subdivision or by owner's establishment of construction of the roads within this subdivision.
In witness whereof ___ have hereunto set ___this _____ day of _____, A.D. 20_____.

WESTERN HILLS 1, LLC
BY: TRISTAR IRREVOCABLE TRUST
ITS: MANAGER

_____
BRAD A JENSEN, TRUSTEE

LLC ACKNOWLEDGEMENT

STATE OF UTAH
County of Utah

On the__day of____, A.D. 20__, personally appeared before me ____, who being by me duly sworn did say that he/she is the Manager of _____, a Utah limited liability company, and that the foregoing instrument was duly authorized by the Member/Managers of said limited liability company.

My commission expires: _____ Notary Public residing at _____

APPROVAL BY LEGISLATIVE BODY

The City Council of the City of Saratoga Springs, County of Utah, approves this subdivision subject to the conditions and restrictions stated hereon, and hereby accepts the Dedication of all streets, easements, and other parcels of land intended for the public purpose of the perpetual use of the public.
This _____, day of _____, A.D. 20__.

City Mayor _____ Attest _____ City Recorder (See Seal Below)

H&H ENGINEERING & SURVEYING, INC.

42 NORTH 200 EAST, SUITE 1
AMERICAN FORK, UTAH 84003
TEL: (801) 756-2488
FAX: (801) 756-3499

ROCKY MOUNTAIN POWER

1. PURSUANT TO UTAH CODE ANN. 54-3-27 THIS PLAT CONVEYS TO THE OWNER(S) OR OPERATORS OF UTILITY FACILITIES A PUBLIC UTILITY EASEMENT ALONG WITH ALL THE RIGHTS AND DUTIES DESCRIBED THEREIN.
2. PURSUANT TO UTAH CODE ANN. 17-27a-603(4)(c)(ii) ROCKY MOUNTAIN POWER ACCEPTS DELIVERY OF THE PUE AS DESCRIBED IN THIS PLAT AND APPROVES THIS PLAT SOLELY FOR THE PURPOSE OF CONFIRMING THAT THE PLAT CONTAINS PUBLIC UTILITY EASEMENTS AND APPROXIMATES THE LOCATION OF THE PUBLIC UTILITY EASEMENTS, BUT DOES NOT WARRANT THEIR PRECISE LOCATION. ROCKY MOUNTAIN POWER MAY REQUIRE OTHER EASEMENTS IN ORDER TO SERVE THIS DEVELOPMENT. THIS APPROVAL DOES NOT AFFECT ANY RIGHT THAT ROCKY MOUNTAIN POWER HAS UNDER:
a. A RECORDED EASEMENT OR RIGHT-OF-WAY.
b. THE LAW APPLICABLE TO PRESCRIPTIVE RIGHTS.
c. TITLE 54, CHAPTER 8A, DAMAGE TO UNDERGROUND UTILITY FACILITIES OR
d. ANY OTHER PROVISION OF LAW.

APPROVED THIS ___ DAY OF _____, A.D. 20____

ROCKY MOUNTAIN POWER

QUESTAR GAS COMPANY

QUESTAR APPROVES THIS PLAT SOLELY FOR THE PURPOSE OF CONFIRMING THAT THE PLAT CONTAINS PUBLIC UTILITY EASEMENTS. QUESTAR MAY REQUIRE OTHER EASEMENTS IN ORDER TO SERVE THIS DEVELOPMENT. THIS APPROVAL DOES NOT CONSTITUTE ABROGATION OR WAIVER OF ANY OTHER EXISTING RIGHTS, OBLIGATIONS OR LIABILITIES PROVIDED BY LAW OR EQUITY. THIS APPROVAL DOES NOT CONSTITUTE ACCEPTANCE, APPROVAL OR ACKNOWLEDGMENT OF ANY TERMS CONTAINED IN THE PLAT, INCLUDING THOSE SET FORTH IN THE OWNERS DEDICATION AND THE NOTES AND DOES NOT CONSTITUTE A GUARANTEE OF PARTICULAR TERMS OF NATURAL GAS SERVICE. FOR FUTURE INFORMATION PLEASE CONTACT QUESTAR'S RIGHT-OF-WAY DEPARTMENT AT 800-366-6532.

APPROVED THIS__DAY OF , 20___.

BY-_____.

TITLE-_____.

QUESTAR GAS COMPANY

CENTURY LINK

Approved this ___ day of _____, A.D. 20____

CENTURY LINK

PLANNING DIRECTOR APPROVAL

Reviewed by the Planning Director on this ___ day of _____, A.D. 20____

PLANNING DIRECTOR

LAND USE AUTHORITY

Approved by the Land Use Authority on this ___ day of _____, A.D. 20____

LAND USE AUTHORITY

SARATOGA SPRINGS ATTORNEY

Approved by Saratoga Springs Attorney on this ___ day of _____, A.D. 20____

SARATOGA SPRINGS ATTORNEY

COMCAST CABLE TELEVISION

Approved this ___ day of _____, A.D. 20____

COMCAST CABLE TELEVISION

SARATOGA SPRINGS ENGINEER APPROVAL

Approved by the City Engineer on this ___ day of _____, A.D. 20____

CITY ENGINEER

FIRE CHIEF APPROVAL

Approved by the Fire Chief on this ___ day of _____, A.D. 20____

CITY FIRE CHIEF

LEHI CITY POST OFFICE

Approved by Post Office Representative on this ___ day of _____, A.D. 20____

LEHI CITY POST OFFICE REPRESENTATIVE

WESTERN HILLS SUBDIVISION PHASE 2

LOCATED IN THE SOUTHWEST QUARTER SECTION 11,
TOWNSHIP 5 SOUTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN
SARATOGA SPRINGS CITY, UTAH COUNTY, UTAH

SURVEYORS SEAL	CITY ENGINEERS SEAL	CLERK-RECORDER SEAL

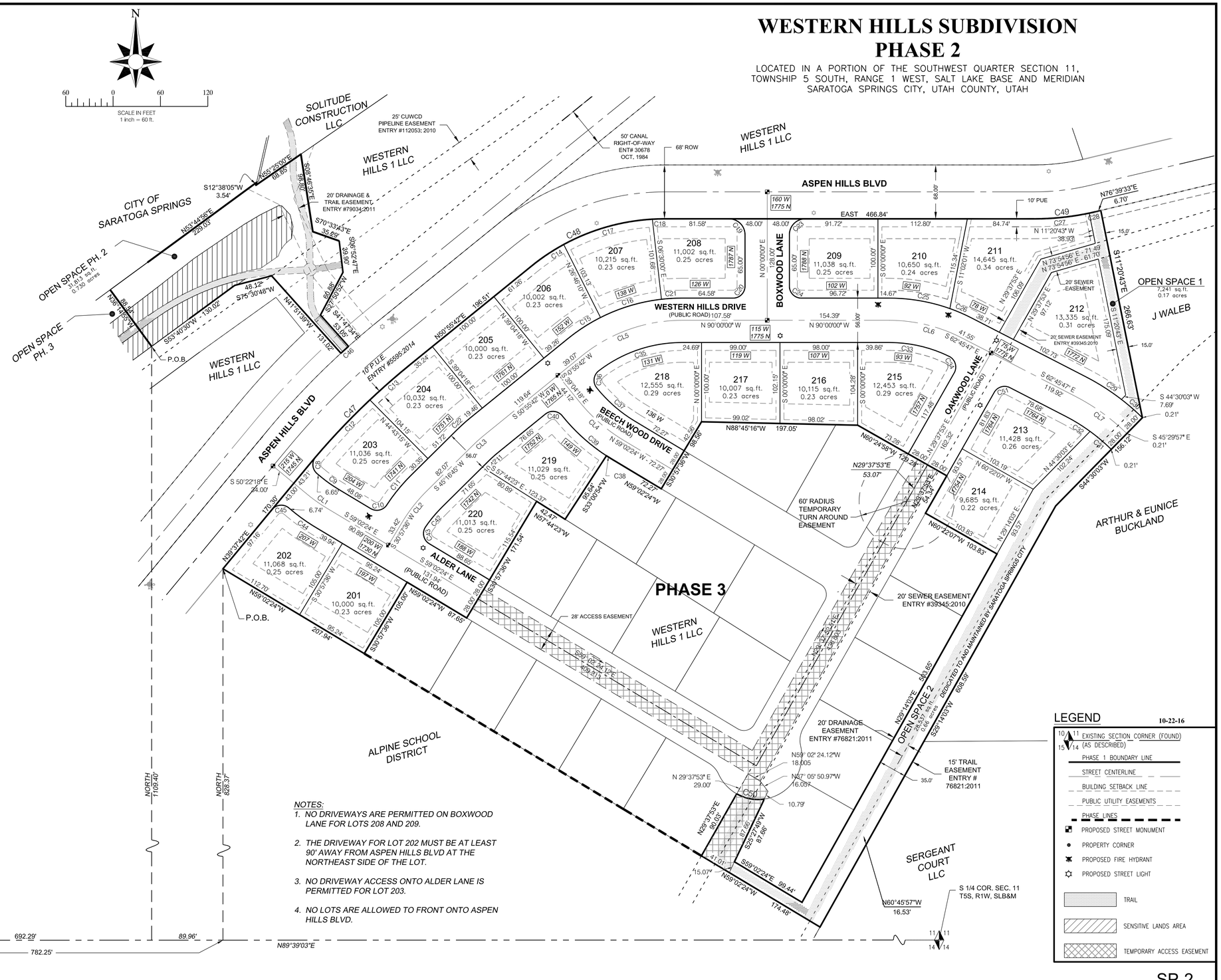
SP-1

WESTERN HILLS SUBDIVISION
PHASE 2

LOCATED IN A PORTION OF THE SOUTHWEST QUARTER SECTION 11,
TOWNSHIP 5 SOUTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN
SARATOGA SPRINGS CITY, UTAH COUNTY, UTAH

Curve Table

Curve #	Length	Tangent	Radius	Delta	Chord Direction	Chord Length
CL1	30.26'	15.16'	200.00'	8°40'06"	S54°42'21"E	30.23'
CL2	49.98'	25.12'	200.00'	14°19'09"	S38°07'10"W	49.85'
CL3	19.72'	9.87'	200.00'	5°38'57"	S48°06'14"W	19.71'
CL4	73.19'	36.97'	210.00'	19°58'06"	S49°03'21"E	72.82'
CL5	136.39'	70.96'	200.00'	39°04'18"	S70°27'51"W	133.76'
CL6	95.07'	48.45'	200.00'	27°14'13"	N76°22'54"W	94.18'
CL7	79.85'	40.23'	265.00'	17°15'50"	N54°07'52"W	79.55'
C8	23.78'	15.22'	15.00'	90°49'05"	S04°57'45"E	21.36'
C9	26.02'	13.04'	172.00'	8°40'06"	S54°42'21"E	26.00'
C10	22.97'	14.42'	15.00'	87°44'23"	N77°05'24"E	20.79'
C11	47.99'	24.08'	228.00'	12°03'32"	S39°14'59"W	47.90'
C12	99.14'	49.62'	916.00'	6°12'04"	S43°32'49"W	99.09'
C13	68.44'	34.24'	916.00'	4°16'51"	S48°47'17"W	68.42'
C14	48.83'	24.48'	266.00'	10°31'03"	S56°11'14"W	48.76'
C15	48.95'	24.57'	228.00'	12°18'08"	S57°04'46"W	48.86'
C16	80.66'	40.76'	228.00'	20°16'10"	S73°21'55"W	80.24'
C17	117.23'	59.58'	266.00'	25°15'07"	S74°04'19"W	116.29'
C18	15.33'	7.67'	266.00'	3°18'07"	S88°20'56"W	15.33'
C19	31.42'	20.00'	20.00'	90°00'00"	N44°59'59"W	28.28'
C20	23.56'	15.00'	15.00'	90°00'00"	N45°00'00"E	21.21'
C21	25.87'	12.95'	228.00'	6°30'00"	S86°45'00"W	25.85'
C22	22.48'	11.25'	228.00'	5°38'57"	S48°06'14"W	22.47'
C23	31.42'	20.00'	20.00'	90°00'00"	S45°00'00"W	28.28'
C24	23.56'	15.00'	15.00'	90°00'00"	S45°00'00"E	21.21'
C25	77.57'	39.17'	228.00'	19°29'39"	N80°15'10"W	77.20'
C26	30.40'	15.22'	228.00'	7°38'19"	N66°34'56"W	30.37'
C27	69.46'	34.86'	334.00'	11°54'57"	N84°02'31"E	69.34'
C28	8.31'	4.15'	334.00'	1°25'30"	N77°22'18"E	8.31'
C29	53.42'	26.78'	293.00'	10°26'44"	N57°32'25"W	53.34'
C30	34.87'	17.45'	293.00'	6°49'06"	N48°54'30"W	34.85'
C31	35.13'	17.60'	237.00'	8°29'31"	N49°41'35"W	35.09'
C32	36.50'	18.29'	237.00'	8°49'26"	N58°21'04"W	36.46'
C33	78.16'	39.77'	172.00'	26°02'09"	N76°58'56"W	77.49'
C34	24.50'	15.97'	15.00'	93°35'44"	N17°09'59"W	21.87'
C35	112.99'	58.62'	172.00'	37°38'15"	S71°10'52"W	110.97'
C36	23.84'	15.28'	15.00'	91°04'01"	S06°49'44"W	21.41'
C37	64.60'	32.64'	182.00'	20°20'07"	S48°52'20"E	64.26'
C38	8.54'	4.27'	238.00'	2°03'18"	N58°00'45"W	8.54'
C39	75.46'	38.05'	238.00'	18°10'01"	S47°54'06"E	75.15'
C40	23.63'	15.07'	15.00'	90°15'12"	N83°56'42"W	21.26'
C41	16.96'	8.49'	172.00'	5°38'57"	S48°06'14"W	16.95'
C42	32.48'	16.29'	172.00'	10°49'11"	S39°52'09"W	32.43'
C43	24.48'	15.95'	15.00'	93°29'58"	S12°17'25"E	21.85'
C44	34.49'	17.28'	228.00'	8°40'06"	S54°42'21"E	34.46'
C45	23.56'	15.00'	15.00'	90°00'00"	S84°37'42"W	21.21'
C46	12.84'	6.42'	984.00'	0°44'52"	S47°50'00"W	12.84'
C47	180.66'	90.62'	916.00'	11°18'00"	N45°16'42"E	180.36'
C48	181.39'	94.38'	266.00'	39°04'18"	N70°27'51"E	177.90'
C49	77.77'	39.06'	334.00'	13°20'27"	N83°19'47"E	77.59'
C50	36.09'	18.72'	55.00'	37°35'45"	S79°16'08"E	35.45'
C51	22.94'	14.39'	15.00'	87°36'20"	S73°26'03"W	20.77'



NOTES:

1. NO DRIVEWAYS ARE PERMITTED ON BOXWOOD LANE FOR LOTS 208 AND 209.
2. THE DRIVEWAY FOR LOT 202 MUST BE AT LEAST 90' AWAY FROM ASPEN HILLS BLVD AT THE NORTHEAST SIDE OF THE LOT.
3. NO DRIVEWAY ACCESS ONTO ALDER LANE IS PERMITTED FOR LOT 203.
4. NO LOTS ARE ALLOWED TO FRONT ONTO ASPEN HILLS BLVD.

LEGEND 10-22-16

- EXISTING SECTION CORNER (FOUND) (AS DESCRIBED)
- PHASE 1 BOUNDARY LINE
- STREET CENTERLINE
- BUILDING SETBACK LINE
- PUBLIC UTILITY EASEMENTS
- PHASE LINES
- PROPOSED STREET MONUMENT
- PROPERTY CORNER
- PROPOSED FIRE HYDRANT
- PROPOSED STREET LIGHT
- TRAIL
- SENSITIVE LANDS AREA
- TEMPORARY ACCESS EASEMENT

WESTERN HILLS SUBDIVISION - PHASE 3

LOCATED IN A PORTION OF THE SOUTHWEST QUARTER SECTION 11,
TOWNSHIP 5 SOUTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN
SARATOGA SPRINGS CITY, UTAH COUNTY, UTAH

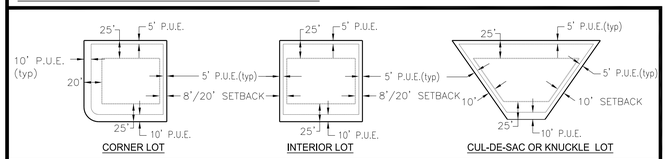
VICINITY MAP

SARATOGA SPRINGS

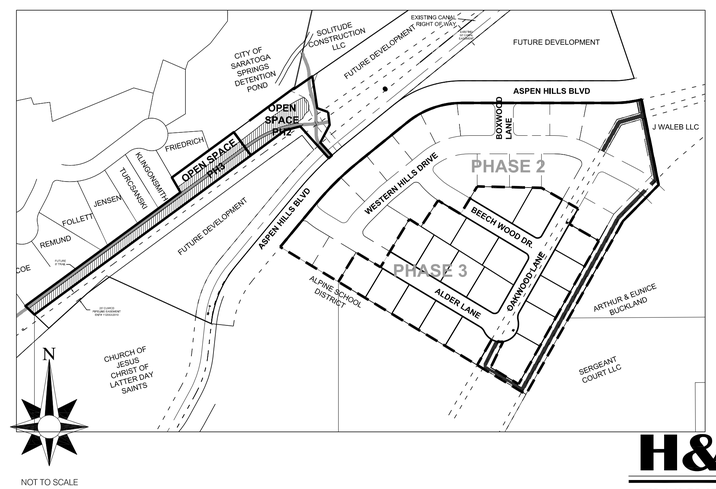
PLAT NOTES

1. PLAT MUST BE RECORDED WITHIN 24 MONTHS OF FINAL PLAT APPROVAL, OR FOR PHASED DEVELOPMENTS, WITHIN 24 MONTHS OF RECORDATION OF MOST RECENT PHASE. FINAL PLAT APPROVAL WAS GIVEN ON THE _____ DAY OF _____ 20_____.
2. THE INSTALLATION OF IMPROVEMENTS SHALL CONFORM TO ALL CITY STANDARDS, REGULATIONS, AND ORDINANCES.
3. PRIOR TO BUILDING PERMITS BEING ISSUED, SOIL TESTING STUDIES MAY BE REQUIRED ON EACH LOT AS DETERMINED BY THE CITY BUILDING OFFICIAL.
4. PLAT IS SUBJECT TO "INSTALLATION OF IMPROVEMENTS AND BOND AGREEMENT NO. _____." WHICH REQUIRES THE CONSTRUCTION AND WARRANTY OF IMPROVEMENTS IN THIS SUBDIVISION. THESE OBLIGATIONS RUN WITH THE LAND AND ARE BINDING ON SUCCESSORS, AGENTS, AND ASSIGNS OF DEVELOPER. THERE ARE NO THIRD-PARTY RIGHTS OR BENEFICIARIES UNDER THIS AGREEMENT.
5. BUILDING PERMITS WILL NOT BE ISSUED UNTIL ALL IMPROVEMENTS HAVE BEEN INSTALLED AND ACCEPTED BY THE CITY IN WRITING; ALL IMPROVEMENTS CURRENTLY MEET CITY STANDARDS; AND BONDS ARE POSTED BY THE CURRENT OWNER OF THE PROJECT PURSUANT TO CITY CODE.
6. NO BUILDING PERMITS SHALL BE ISSUED UNTIL ALL IMPACT AND CONNECTIONS FEES ARE PAID IN FULL PER CITY REGULATIONS IN EFFECT AT THE TIME OF BUILDING PERMIT ISSUANCE.
7. ALL OPEN SPACE AND TRAIL IMPROVEMENTS LOCATED HEREIN ARE TO BE INSTALLED BY OWNER AND MAINTAINED BY A HOMEOWNERS ASSOCIATION UNLESS SPECIFIED OTHERWISE ON EACH IMPROVEMENT.
8. REFERENCES HEREIN TO DEVELOPER OR OWNER SHALL APPLY TO BOTH, AND ANY SUCH REFERENCE SHALL ALSO APPLY TO SUCCESSORS, AGENTS, AND ASSIGNS.
9. NO CITY MAINTENANCE SHALL BE PROVIDED FOR STREETS DESIGNATED AS "PRIVATE" ON THIS PLAT.
10. A GEOTECHNICAL REPORT HAS BEEN COMPLETED BY EARTHTEC ENGINEERING, INC., WHICH ADDRESSES SOIL AND GROUNDWATER CONDITIONS, PROVIDES ENGINEERING DESIGN CRITERIA, AND RECOMMENDS MITIGATION MEASURES IF PROBLEMATIC CONDITIONS WERE ENCOUNTERED. THE REPORT IS ON FILE WITH DESERT PEAK MANAGEMENT AND THE CITY. THE CITY ASSUMES NO LIABILITY OR RESPONSIBILITY FOR ANY RELIANCE ON THE INFORMATION OR LACK THEREOF IN THE REPORT.
11. AGRICULTURAL USES, OPERATIONS, AND RIGHTS ARE ADJACENT TO OR NEAR THE PLAT AND LOTS. THE LOTS IN THIS PLAT ARE SUBJECT TO THE SIGHTS, SOUNDS, ODORS, NUISANCES,AND ASPECTS ASSOCIATED WITH AGRICULTURAL OPERATIONS, USES, AND RIGHTS. THESE USES AND OPERATIONS MAY OCCUR AT ALL TIMES OF THE DAY AND NIGHT INCLUDING WEEKENDS AND HOLIDAYS. THE CITY IS NOT RESPONSIBLE OR LIABLE FOR THESE USES AND WILL NOT RESTRICT ANY GRANDFATHERED AGRICULTURAL USE FROM CONTINUING TO OCCUR LAWFULLY.
12. DRAINAGE ACROSS PROPERTY LINES SHALL NOT EXCEED THAT WHICH EXISTED PRIOR TO GRADING. EXCESS OR CONCENTRATED DRAINAGE SHALL BE CONTAINED ON SITE OR DIRECTED TO AN APPROVED DRAINAGE FACILITY.

TYPICAL SETBACK & P.U.E. DETAILS



BY SIGNING THIS PLAT THE FOLLOWING UTILITY COMPANIES ARE APPROVING THE: (A) BOUNDARY, COURSE, DIMENSIONS, AND INTENDED USE OF THE RIGHT-OF-WAY AND EASEMENT GRANTS OF RECORD; (B) LOCATION OF EXISTING UNDERGROUND AND UTILITY FACILITIES; (C) CONDITIONS OR RESTRICTIONS GOVERNING THE LOCATION OF THE FACILITIES WITHIN THE RIGHT-OF-WAY, AND EASEMENT GRANTS OF RECORD, AND UTILITY FACILITES WITHIN THE SUBDIVISION. "APPROVING" SHALL HAVE THE MEANING IN UTAH CODE SECTION 10-9A-603(4)(c)(ii). THE FOLLOWING NOTES ARE NOT ENDORSED OR ADOPTED BY SARATOGA SPRINGS AND DO NOT SUPERSEDE CONFLICTING PLAT NOTES OR SARATOGA SPRINGS POLICIES.



NOT TO SCALE

H&H
ENGINEERING & SURVEYING, INC.
42 NORTH 200 EAST, SUITE 1
AMERICAN FORK, UTAH 84003
TEL: (801) 756-2488
FAX: (801) 756-3499

BOUNDARY DESCRIPTIONS

Western Hills Subdivision
Lot Area

A parcel of land located in the Southwest Quarter of Section 11, Township 5 South, Range 1 West, Salt Lake Base and Meridian, in the City of Saratoga Springs, Utah County, Utah. Said parcel being more particularly described as follows:

Beginning at a point located N89°39'03"E 960.57 feet along the section line and North 720.31 feet from the Southwest Corner of Section 11, Township 5 South, Range 1 West, Salt Lake Base and Meridian, and running thence S59°02'24"E 495.95 feet; thence N29°37'53"E 90.03 feet to the beginning of a non-tangent curve to the right, having a radius of 55.00 feet; thence along the arc of said curve a length of 36.09 feet, passing through a central angle of 37°35'45", chord bears S79°16'08"E 35.45 feet; thence S25°27'49"W 87.66 feet; thence S59°02'24"E 99.44 feet; thence N29°14'03"E 503.65 feet; thence N60°22'07"W 103.83 feet; thence N29°37'53"E 54.34 feet; thence N60°24'58"W 129.28 feet; thence N88°45'16"W 197.05 feet; thence S30°57'36"W 98.56 feet; thence N59°02'24"W 72.27 feet to the beginning of a curve to the right having a radius of 238.00 feet; thence along the arc of said curve 8.54 feet, passing through a central angle of 2°03'18", chord bears N58°00'45"W 8.54 feet; thence S33°00'54"W 95.64 feet; thence N57°44'23"W 42.47 feet; thence S30°57'36"W 171.54 feet; thence N59°02'24"W 87.65 feet; thence S30°57'36"W 105.00 feet to the point of beginning.

Containing 6.144 acres, more or less.

Western Hills Subdivision
Open Space Area (Phase 3)

A parcel of land located in the Southwest Quarter of Section 11 Township 5 South, Range 1 West, Salt Lake Base and Meridian, in the City of Saratoga Springs, Utah County, Utah. Said parcel being more particularly described as follows:

Beginning at a point which is located N89°39'03"E 28.82 feet and North 625.63 feet from the Southwest Corner of Section 11, Township 5 South, Range 1 West, Salt Lake Base and Meridian, and running thence N53°40'13"E 823.50 feet; thence N36°14'55"W 88.57 feet; thence S53°44'56"W 235.27 feet; thence S30°09'41"E 52.31 feet; thence S53°45'00"W 589.46 feet; thence S46°27'58"E 38.23 feet to the point of beginning.

Containing 0.988 acres, more or less.

SURVEYOR'S CERTIFICATE

I, Victor E. Hansen, do hereby certify that I am a registered Land Surveyor and that I hold a license, Certificate No. 176695, in accordance with the Professional Engineers and Land Surveyors Licensing Act found in Title 58, Chapter 22 of the Utah Code. I further certify that by authority of the owners, I have made a survey of the tract of land shown on this plat and described below, have subdivided said tract of land into lots, streets, and easements, have completed a survey of the property described on this plat in accordance with Utah Code Section 17-23-17, have verified all measurements, and have placed monuments as represented on the plat. I further certify that every existing right-of-way and easement grant of record for underground facilities, as defined in Utah Code Section 54-8a-2, and for other utility facilities, is accurately described on this plat, and that this plat is true and correct to the best of my knowledge. I also certify that I have filed, or will file within 90 days of the recordation of this plat, a map of the survey I have completed with the Utah County Surveyor.

BOUNDARY DESCRIPTIONS

Open Space 3 containing 0.988 acres, more or less.

Lot Area Containing 6.491 acres (SEE LOT AREA DESCRIPTION TO THE LEFT)

Total Acres: 7.479 more or less. # of Lots: 19 unlts.

Date _____ Victor E. Hansen _____

OWNER'S DEDICATION

Know all men by these presents that _____, the _____ undersigned owner(s) of the above described tract of land having caused same to be subdivided into lots and streets to be hereafter known as

WESTERN HILLS SUBDIVISION - PHASE 3

do hereby dedicate for the perpetual use of the public and/or City all parcels of land, easements, right-of-way, and public amenities shown on this plat as intended for public and/or City use. The owner(s) voluntarily defend, indemnify, and save harmless the City against any easements or other encumbrance on a dedicated street which will interfere with the City's use, maintenance, and operation of the street. The owner(s) voluntarily defend, indemnify, and hold harmless the City from any damage claimed by persons within or without this subdivision to the extent to have been caused by the owner's alterations of the ground surface, vegetation, drainage, or surface or sub-surface water flows within this subdivision or by owner's establishment of construction of the roads within this subdivision.
In witness whereof ___ have hereunto set ___this _____ day of _____, A.D. 20_____.

WESTERN HILLS 1, LLC
BY: TRISTAR IRREVOCABLE TRUST
ITS: MANAGER

_____
BRAD A JENSEN, TRUSTEE

LLC ACKNOWLEDGEMENT

STATE OF UTAH
County of Utah

On the__day of____, A.D. 20__, personally appeared before me ____, who being by me duly sworn did say that he/she is the Manager of _____, a Utah limited liability company, and that the foregoing instrument was duly authorized by the Member/Managers of said limited liability company.

My commission expires: _____ Notary Public residing at _____

APPROVAL BY LEGISLATIVE BODY

The City Council of the City of Saratoga Springs, County of Utah, approves this subdivision subject to the conditions and restrictions stated hereon, and hereby accepts the Dedication of all streets, easements, and other parcels of land intended for the public purpose of the perpetual use of the public.
This _____, day of _____, A.D. 20__.

City Mayor _____ Attest _____
City Recorder (See Seal Below)

ROCKY MOUNTAIN POWER

1. PURSUANT TO UTAH CODE ANN. 54-3-27 THIS PLAT CONVEYS TO THE OWNER(S) OR OPERATORS OF UTILITY FACILITIES A PUBLIC UTILITY EASEMENT ALONG WITH ALL THE RIGHTS AND DUTIES DESCRIBED THEREIN.
2. PURSUANT TO UTAH CODE ANN. 17-27a-603(4)(c)(ii) ROCKY MOUNTAIN POWER ACCEPTS DELIVERY OF THE PUE AS DESCRIBED IN THIS PLAT AND APPROVES THIS PLAT SOLELY FOR THE PURPOSE OF CONFIRMING THAT THE PLAT CONTAINS PUBLIC UTILITY EASEMENTS AND APPROXIMATES THE LOCATION OF THE PUBLIC UTILITY EASEMENTS, BUT DOES NOT WARRANT THEIR PRECISE LOCATION. ROCKY MOUNTAIN POWER MAY REQUIRE OTHER EASEMENTS IN ORDER TO SERVE THIS DEVELOPMENT. THIS APPROVAL DOES NOT AFFECT ANY RIGHT THAT ROCKY MOUNTAIN POWER HAS UNDER:
   a. A RECORDED EASEMENT OR RIGHT-OF-WAY.
   b. THE LAW APPLICABLE TO PRESCRIPTIVE RIGHTS.
   c. TITLE 54, CHAPTER 8A, DAMAGE TO UNDERGROUND UTILITY FACILITIES OR
   d. ANY OTHER PROVISION OF LAW.

APPROVED THIS ___ DAY OF _____, A.D. 20____

ROCKY MOUNTAIN POWER

QUESTAR GAS COMPANY

QUESTAR APPROVES THIS PLAT SOLELY FOR THE PURPOSE OF CONFIRMING THAT THE PLAT CONTAINS PUBLIC UTILITY EASEMENTS. QUESTAR MAY REQUIRE OTHER EASEMENTS IN ORDER TO SERVE THIS DEVELOPMENT. THIS APPROVAL DOES NOT CONSTITUTE ABROGATION OR WAIVER OF ANY OTHER EXISTING RIGHTS, OBLIGATIONS OR LIABILITIES PROVIDED BY LAW OR EQUITY. THIS APPROVAL DOES NOT CONSTITUTE ACCEPTANCE, APPROVAL OR ACKNOWLEDGMENT OF ANY TERMS CONTAINED IN THE PLAT, INCLUDING THOSE SET FORTH IN THE OWNERS DEDICATION AND THE NOTES AND DOES NOT CONSTITUTE A GUARANTEE OF PARTICULAR TERMS OF NATURAL GAS SERVICE. FOR FUTURE INFORMATION PLEASE CONTACT QUESTAR'S RIGHT-OF-WAY DEPARTMENT AT 800-366-6532.

APPROVED THIS__DAY OF_____, 20___.

BY-_____.

TITLE-_____.

QUESTAR GAS COMPANY

CENTURY LINK

Approved this ___ day of _____, A.D. 20____

CENTURY LINK

PLANNING DIRECTOR APPROVAL

Reviewed by the Planning Director on this ___ day of _____, A.D. 20____

PLANNING DIRECTOR

LAND USE AUTHORITY

Approved by the Land Use Authority on this ___ day of _____, A.D. 20____

LAND USE AUTHORITY

SARATOGA SPRINGS ATTORNEY

Approved by Saratoga Springs Attorney on this ___ day of _____, A.D. 20____

SARATOGA SPRINGS ATTORNEY

COMCAST CABLE TELEVISION

Approved this ___ day of _____, A.D. 20____

COMCAST CABLE TELEVISION

SARATOGA SPRINGS ENGINEER APPROVAL

Approved by the City Engineer on this ___ day of _____, A.D. 20____

CITY ENGINEER

FIRE CHIEF APPROVAL

Approved by the Fire Chief on this ___ day of _____, A.D. 20____

CITY FIRE CHIEF

LEHI CITY POST OFFICE

Approved by Post Office Representative on this ___ day of _____, A.D. 20____

LEHI CITY POST OFFICE REPRESENTATIVE

WESTERN HILLS SUBDIVISION PHASE 3

LOCATED IN THE SOUTHWEST QUARTER SECTION 11,
TOWNSHIP 5 SOUTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN
SARATOGA SPRINGS CITY, UTAH COUNTY, UTAH

SURVEYORS SEAL	CITY ENGINEERS SEAL	CLERK-RECORDER SEAL

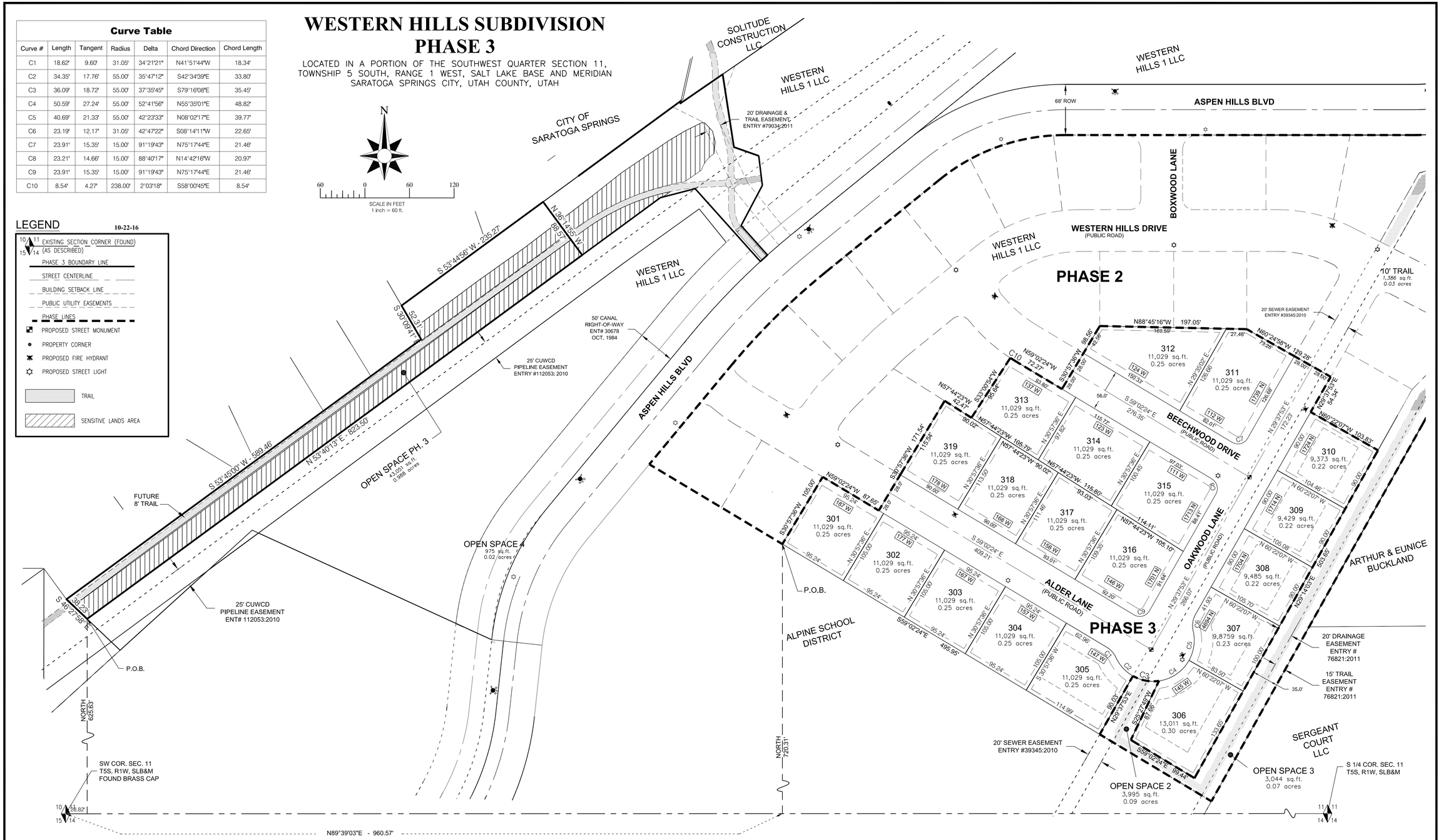
SP-1

WESTERN HILLS SUBDIVISION
PHASE 3

LOCATED IN A PORTION OF THE SOUTHWEST QUARTER SECTION 11, TOWNSHIP 5 SOUTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN
SARATOGA SPRINGS CITY, UTAH COUNTY, UTAH

Curve Table

Curve #	Length	Tangent	Radius	Delta	Chord Direction	Chord Length
C1	18.62'	9.60'	31.05'	34°21'21"	N41°51'44"W	18.34'
C2	34.35'	17.76'	55.00'	35°47'12"	S42°34'39"E	33.80'
C3	36.09'	18.72'	55.00'	37°35'45"	S79°16'08"E	35.45'
C4	50.59'	27.24'	55.00'	52°41'56"	N55°35'01"E	48.82'
C5	40.69'	21.33'	55.00'	42°23'33"	N08°02'17"E	39.77'
C6	23.19'	12.17'	31.05'	42°47'22"	S08°14'11"W	22.65'
C7	23.91'	15.35'	15.00'	91°19'43"	N75°17'44"E	21.46'
C8	23.21'	14.66'	15.00'	88°40'17"	N14°42'16"W	20.97'
C9	23.91'	15.35'	15.00'	91°19'43"	N75°17'44"E	21.46'
C10	8.54'	4.27'	238.00'	2°03'18"	S58°00'45"E	8.54'



SP-2

Saratoga Springs, Utah

November 1, 2016

The City Council (the "Council") of the City of Saratoga Springs, Utah (the "Issuer") met in regular session on Tuesday, November 1, 2016, at its regular meeting place in the City of Saratoga Springs, Utah, at 7:00 p.m. with the following members of the Council present:

Jim Miller	Mayor
Shellie Baertsch	Councilmember
Michael McOmber	Councilmember
Bud Poduska	Councilmember
Chris Porter	Councilmember
Stephen Willden	Councilmember

Also present:

Mark Christensen	City Manager
Cindy LoPiccolo	City Recorder

Absent:

After the meeting had been duly called to order and after other matters not pertinent to this Resolution had been discussed, the City Recorder presented to the Council a Certificate of Compliance with Open Meeting Law with respect to this November 1, 2016, meeting, a copy of which is attached hereto as Exhibit A.

Thereupon, the following Resolution was introduced in writing, read in full and pursuant to motion duly made by Councilmember _____ and seconded by Councilmember _____ adopted by the following vote:

AYE:

NAY:

The Resolution was later signed by the Mayor and recorded by the City Recorder in the official records of the City of Saratoga Springs, Utah. The Resolution is as follows:

RESOLUTION NO. 16-61 (11-15-16)

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SARATOGA SPRINGS, UTAH (THE "ISSUER"), ESTABLISHING THE TERMS AND CONDITIONS OF THE ISSUANCE OF THE ISSUER'S SPECIAL ASSESSMENT BONDS (MT. SARATOGA ASSESSMENT AREA), SERIES 2016 IN THE TOTAL PRINCIPAL AMOUNT OF NOT TO EXCEED $8,400,000 (THE "SERIES 2016 BONDS"), FOR THE PURPOSE OF (A) FINANCING THE COSTS OF THE ACQUISITION, CONSTRUCTION AND INSTALLATION OF ROAD, STORM WATER, SEWER, CULINARY AND SECONDARY WATER ACQUISITION, ALONG WITH OTHER NECESSARY MISCELLANEOUS IMPROVEMENTS, AND TO COMPLETE SAID IMPROVEMENTS IN A PROPER AND WORKMANLIKE MANNER (COLLECTIVELY, THE "IMPROVEMENTS") IN THE CITY OF SARATOGA SPRINGS, UTAH MT. SARATOGA ASSESSMENT AREA (THE "ASSESSMENT AREA"), (B) FUNDING A BOND FUNDED RESERVE FUND, AND (C) PAYING COSTS OF ISSUANCE OF SAID SERIES 2016 BONDS; AUTHORIZING THE EXECUTION BY THE ISSUER OF AN INDENTURE OF TRUST AND PLEDGE, A PURCHASE AGREEMENT, AND OTHER DOCUMENTS REQUIRED IN CONNECTION THEREWITH; AUTHORIZING THE TAKING OF ALL OTHER ACTIONS NECESSARY TO THE CONSUMMATION OF THE TRANSACTIONS CONTEMPLATED BY THIS RESOLUTION; PROVIDING A SEVERABILITY CLAUSE; PROVIDING AN EFFECTIVE DATE; AND RELATED MATTERS.

WHEREAS, on October 4, 2016, the City Council (the "Council") of the Saratoga Springs, Utah (the "Issuer"), adopted a resolution to designate an assessment area to be known as the "Mt. Saratoga Assessment Area" (the "Assessment Area") for the purpose of financing the costs of the acquisition, construction and installation of road, storm water, sewer, culinary and secondary water along with other necessary miscellaneous improvements, and to complete said improvements in a proper and workmanlike manner (collectively, the "Improvements"), including administrative and overhead costs, and the costs of funding a bond funded reserve fund pursuant to the Assessment Area Act, Title 11, Chapter 42, Utah Code Annotated 1953, as amended (the "Act"); and

WHEREAS, on October 4, 2016, the Council confirmed the list of properties to be assessed within the Assessment Area to finance the Improvements, and adopted an assessment ordinance (the "Assessment Ordinance") to levy assessments on benefited properties within the Assessment Area; and

WHEREAS, the Council desires to authorize the issuance and delivery of the Issuer's Special Assessment Bonds (Mt. Saratoga Assessment Area), Series 2016 in the total principal amount of not to exceed $8,400,000 (the "Series 2016 Bonds") for the purposes set forth in the first whereas clause above, which Series 2016 Bonds shall be issued pursuant to the Act, this Resolution, and an Indenture of Trust and Pledge (the "Indenture"), between the Issuer and a trustee in substantially the form presented to the meeting at which this Resolution was adopted and which is attached hereto as Exhibit B; and

WHEREAS, there has been presented to the City Council at this meeting a form of a bond purchase agreement (the "Bond Purchase Agreement") to be entered into between the Issuer and the purchaser selected by the Issuer for the Series 2016 Bonds (the "Purchaser"), in substantially the form attached hereto as Exhibit C; and

WHEREAS, the Series 2016 Bonds shall be payable from the assessments levied against certain benefited properties within the Assessment Area and other moneys pledged therefor in the Indenture, and shall not constitute or give rise to a general obligation or liability of the Issuer or constitute a charge against its general credit; and

WHEREAS, in order to allow the Issuer flexibility in setting the pricing date of the Series 2016 Bonds, the Council desires to grant to any one of the [Mayor, City Manager, or City Finance Director] (the "Designated Officers") of the Issuer the authority to approve the final interest rates, principal amounts, terms, maturities, redemption features, and purchase price at which the Series 2016 Bonds shall be sold, and any changes with respect thereto from those terms which were before the Council at the time of adoption of this Resolution, provided such terms do not exceed the parameters set forth for such terms in this Resolution (the "Parameters").

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Saratoga Springs, Utah, as follows:

Section 1. The terms defined or described in the recitals hereto shall have the same meanings when used in the body of this Resolution.

Section 2. All actions heretofore taken (not inconsistent with the provisions of this Resolution) by the Council and by the officers of the Issuer directed toward the issuance and delivery of the Series 2016 Bonds, are hereby ratified, approved, and confirmed.

Section 3. For purposes of (a) financing the costs of acquisition and construction of the Improvements, (b) funding the Bond Funded Reserve Account (as defined in the Indenture) and (c) paying costs of issuance of the Series 2016 Bonds, the Issuer hereby authorizes the issuance of the Series 2016 Bonds in the aggregate principal amount of not to exceed $8,400,000. The Series 2016 Bonds shall bear interest, shall be dated, shall be issued as fully registered bonds, and shall mature as provided in the Indenture. The Series 2016 Bonds shall mature in not more than eleven (11) years from their date or dates, shall be sold at a price not less than seven percent (7%) of the total principal amount thereof, shall bear interest at a rate or rates not to exceed ninety-eight percent (98%) per annum, as shall be approved by any two of the Designated Officers, all within the parameters set forth herein.

Section 4. The Indenture in substantially the form attached hereto as Exhibit B is in all respects hereby authorized and approved, and the Mayor and the City Recorder of the Issuer are hereby authorized and directed to execute and deliver the same on behalf of the Issuer.

Section 5. The Issuer hereby approves the sale of the Series 2016 Bonds to the Purchaser in accordance with the terms and conditions of the Purchase Agreement in substantially the form attached hereto as Exhibit C, with the terms established by the Designated Officers. The Mayor and City Recorder of the Issuer are hereby authorized and directed to execute the Purchase Agreement in substantially the form and with substantially the content as the form presented at

this meeting and attached hereto as Exhibit C, for and on behalf of the Issuer, with final terms as may be established by the Designated Officers, within the Parameters set forth herein, and with such alterations, changes or additions as may be necessary or as may be authorized by herein.

Section 6. The form, terms, and provisions of the Series 2016 Bonds and the provisions for the signatures, authentication, payment, registration, transfer, exchange, redemption, and number shall be as set forth in the Indenture. The Mayor and City Recorder of the Issuer are hereby authorized and directed to execute and seal the Series 2016 Bonds and to deliver said Series 2016 Bonds to the Trustee for authentication. The signatures of the Mayor and the City Recorder of the Issuer may be by facsimile or manual execution.

Section 7. The appropriate officials of the Issuer are hereby authorized and directed to execute and deliver to the Trustee the request and authorization of the Issuer for authentication and delivery of the Series 2016 Bonds in accordance with the provisions of the Indenture and Purchase Agreement.

Section 8. Upon their issuance, the Series 2016 Bonds will constitute special limited obligations of the Issuer payable solely from and to the extent of the sources set forth in the Series 2016 Bonds and the Indenture. No provision of this Resolution, the Indenture, the Series 2016 Bonds, or any other instrument, shall be construed as creating a general obligation of the Issuer, or of creating a general obligation of the State of Utah or any political subdivision thereof, or as incurring or creating a charge upon the general credit of the Issuer.

Section 9. The appropriate officials of the Issuer, and each of them, are hereby authorized and directed to execute and deliver for and on behalf of the Issuer any or all additional certificates, documents, and other papers and to perform all other acts they may deem necessary or appropriate in order to implement and carry out the matters authorized in this Resolution and the documents authorized and approved herein.

Section 10. After the Series 2016 Bonds are delivered to the Purchaser, and upon receipt of payment therefor, this Resolution shall be and remain irrepealable until the principal of, premium, if any, and interest on the Series 2016 Bonds are deemed to have been duly discharged in accordance with the terms and provisions of the Indenture and this Resolution.

Section 11. The form of the Indenture and the Purchase Agreement authorized and approved hereby are authorized and approved with such additions, modifications, deletions, and changes thereto as may be deemed necessary or appropriate to conform the same to the final terms of the Series 2016 Bonds (within the Parameters set by this Resolution), to correct errors or omissions therein, to complete the same, to remove ambiguities therefrom, or to conform the same to other provisions of said instruments, to the provisions of this Resolution or any resolution adopted by the Council or the provisions of the laws of the State of Utah or the United States, and execution thereof by the Mayor on behalf of the Issuer shall conclusively establish the necessity, appropriateness, and approval with respect to all additions, modifications, deletions, and changes incorporated therein.

Section 12. It is hereby declared that all parts of this Resolution are severable, and if any section, clause, or provision of this Resolution shall, for any reason, be held to be invalid or

unenforceable, the invalidity or unenforceability of any such section, clause, or provision shall not affect the remaining sections, clauses, or provisions of this Resolution.

Section 13. All resolutions, orders, and regulations or parts thereof heretofore adopted or passed which are in conflict herewith are, to the extent of such conflict, hereby repealed. This repealer shall not be construed so as to revive any resolution, order, regulation, or part thereof heretofore repealed.

Section 14. This Resolution shall take effect immediately upon its approval and adoption.

PASSED AND APPROVED this November 1, 2016.

CITY OF SARATOGA SPRINGS, UTAH

(SEAL)

By:_____
Jim, Miller, Mayor

ATTEST:

By:_____
Cindy LoPiccolo, City Recorder

(Here follows other business not pertinent to the above.)

Pursuant to motion duly made and seconded, the meeting of the City Council of the Saratoga Springs, Utah, adjourned.

(SEAL)

By:_____
Jim Miller, Mayor

ATTEST:

By:_____
Cindy LoPiccolo, City Recorder

STATE OF UTAH)
: ss.
COUNTY OF UTAH)

I, Cindy LoPiccolo, the undersigned duly appointed qualified and acting City Recorder of the City of Saratoga Springs, Utah (the "City"), do hereby certify:

The foregoing pages are a true, correct, and complete copy of the record of proceedings of the City Council (the "City Council"), had and taken at a lawful meeting of the City Council on November 1, 2016, commencing at the hour of 7:00 p.m., as recorded in the regular official book of the proceedings of the City Council kept in my office, and said proceedings were duly had and taken as therein shown, and the meeting therein shown was duly held, and the persons therein were present at said meeting as therein shown.

All members of the City Council were duly notified of said meeting, pursuant to law.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the City, this November 1, 2016.

(SEAL)

By:_____
Cindy LoPiccolo, City Recorder

EXHIBIT A

CERTIFICATE OF COMPLIANCE WITH OPEN MEETING LAW

I, Cindy LoPiccolo, the undersigned of the City of Saratoga Springs, Utah (the "Issuer"), do hereby certify that I gave written public notice of the agenda, date, time and place of the regular meeting held by the Issuer's City Council (the "Council") on November 1, 2016, not less than 24 hours in advance of the meeting. The public notice was given in compliance with the requirements of the Utah Open and Public Meetings Act, Section 52-4-202, Utah Code Annotated 1953, as amended, by:

(a) By causing a Notice, in the form attached hereto as Schedule 1, to be posted at the City's principal offices at least twenty-four (24) hours prior to the convening of the meeting, said Notice having continuously remained so posted and available for public inspection until the completion of the meeting;

(b) By causing a copy of such Notice, in the form attached hereto as Schedule 1, to be delivered to the Daily Herald at least twenty-four (24) hours prior to the convening of the meeting; and

(c) By causing a copy of such Notice, in the form attached hereto as Schedule 1, to be published on the Utah Public Notice Website (http://pmn.utah.gov) at least twenty-four (24) hours prior to the convening of the meeting.

In addition, the Notice of 2016 Annual Meeting Schedule for the Council of County Councilmembers (attached hereto as Schedule 2) was given specifying the date, time and place of the regular meetings of the City Council of the Issuer to be held during the year, by causing said Notice to be (i) posted on _____, at the principal office of the Issuer, (ii) provided to at least one newspaper of general circulation within the geographic jurisdiction of the Issuer on _____ and (iii) published on the Utah Public Notice Website (http://pmn.utah.gov) during the current calendar year.

IN WITNESS WHEREOF, I have hereunto subscribed my official signature this November 1, 2016.

(SEAL)

By:_____
Cindy LoPiccolo, City Recorder

SCHEDULE 1

NOTICE OF MEETING AND AGENDA

SCHEDULE 2

NOTICE OF ANNUAL MEETING SCHEDULE

EXHIBIT B

INDENTURE OF TRUST AND PLEDGE

EXHIBIT C

PURCHASE AGREEMENT

INDENTURE OF TRUST AND PLEDGE

Dated as of _____, 2016

between

CITY OF SARATOGA SPRINGS, UTAH,
as Issuer

and

_____,
as Trustee

Authorizing the issuance and sale of
$_____
Special Assessment Bonds
(Mt. Saratoga Assessment Area)
Series 2016

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THIS INDENTURE OF TRUST AND PLEDGE, dated as of _____, 2016 (the "Indenture"), by and between the City of Saratoga Springs, Utah, a body politic and corporate created and validly existing under the laws of the State of Utah (the "Issuer") and _____, a national banking association duly organized and existing under the laws of the United States of America, authorized by law to accept and execute trusts and having its principal office in Salt Lake City, Utah, as trustee (the "Trustee"),

W I T N E S S E T H:

WHEREAS, on October 4, 2016, the City Council of the City of Saratoga Springs, Utah (the "City Council"), adopted a resolution (the "Designation Resolution") designating an assessment area known as the Mt. Saratoga Assessment Area (the "Mt. Saratoga Assessment Area") for the purpose of financing costs of acquiring, constructing and installing water system improvements including culinary water distribution lines, a concrete storage tank, booster station, and secondary water lines; sanitary sewer collection lines; storm drain improvements; and road construction improvements along with other necessary miscellaneous improvements, and to complete said improvements in a proper and workmanlike manner (collectively, the "Improvements") ; and

WHEREAS, on October 4, 2016, the City Council adopted an Assessment Ordinance for the Mt. Saratoga Assessment Area confirming the assessment list for the Improvements and levying assessments against properties benefited by the Improvements (the "Assessment Ordinance"); and

WHEREAS, the Assessment Ordinance was published in accordance with the requirements of the laws of the State of Utah; and

WHEREAS, the Assessment Area Act, Title 11, Chapter 42, Utah Code Annotated 1953, as amended (the "Assessment Act"), provides that a local entity may issue assessment bonds to finance improvements within an assessment area; and

WHEREAS, the City Council now desires to finance the costs of the Improvements by issuing its Special Assessment Bonds (Mt. Saratoga Assessment Area) , Series 2016 in the total principal amount of $_____ (the "Bonds"); and

WHEREAS, the Bonds shall be payable solely from (a) cash received by the Issuer from the payment of Improvements, and (b) the levy of assessments against the properties benefited by the Improvements, and shall not constitute or give rise to a general obligation or general liability of the Issuer, or any other political subdivision of the State of Utah, or constitute a charge against the general credit or taxing powers of the Issuer; and

WHEREAS, the City Council hereby determines that it is reasonable, necessary, and prudent at this time to issue the Bonds as provided herein.

NOW, THEREFORE, THIS INDENTURE OF TRUST AND PLEDGE WITNESSETH:

For and in consideration of the premises, the mutual covenants of the Issuer and the Trustee, the purchase from time to time of the Bonds by the Registered Owners thereof, and the issuance by Reserve Instrument Providers (as defined herein) from time to time of Reserve Instruments, and in order to secure the payment of the principal of and premium, if any, and interest on the Bonds according to their tenor and effect, and of all Reserve Instrument Repayment Obligations (as herein defined) according to their tenor and effect and the performance and observance by the Issuer of all the covenants expressed or implied herein and in the Bonds, the Issuer does hereby convey, assign, and pledge unto the Trustee and unto its successors in trust forever all right, title, and interest of the Issuer in and to (a) the Assessments (herein defined), (b) all moneys in funds and accounts held by the Trustee hereunder, and (c) all other rights hereinafter granted for the further securing of the Bonds, subject only to the provisions of this Indenture permitting the application thereof for the purposes and on the terms and conditions set forth in this Indenture;

TO HAVE AND TO HOLD the same with all privileges and appurtenances hereby and hereafter conveyed and assigned, or agreed or intended so to be, to the Trustee and its respective successors and assigns in such trust forever;

IN TRUST NEVERTHELESS, upon the terms and trust set forth in this Indenture, FIRST for the equal and proportionate benefit, security, and protection of all Registered Owners of the Bonds issued pursuant to and secured by this Indenture without privilege, priority, or distinction as to the lien or otherwise of any Bond over any other Bond by reason of time of issuance, sale, or maturity thereof or otherwise for any cause whatsoever, except as expressly provided in or permitted by this Indenture; and SECOND, for the equal and proportionate benefit, security, and protection of all Reserve Instrument Providers, without privilege, priority, or distinction as to the lien or otherwise of any Reserve Instrument Repayment Obligation over any of the others by reason of time of issuance, delivery, or expiration thereof or otherwise for any cause whatsoever;

PROVIDED, HOWEVER, that if the Issuer, its successors or assigns, shall well and truly pay, or cause to be paid, the principal and premium, if any, on the Bonds and the interest due or to become due thereon, at the times and in the manner mentioned in the Bonds, according to the true intent and meaning thereof, or shall provide, as permitted by this Indenture, for the payment thereof as provided in Article X hereof, and shall pay or cause to be paid to the Trustee all sums of money due or to become due to it in accordance with the terms and provisions of this Indenture, then upon such final payments or provisions for such payments by the Issuer, this Indenture, and the rights hereby granted, shall terminate; otherwise this Indenture shall remain in full force and effect.

The terms and conditions upon which the Bonds are to be executed, authenticated, delivered, secured, and accepted by all persons who from time to time shall be or become Registered Owners thereof, and the trusts and conditions upon which the Assessments are

to be held and disposed, which said trusts and conditions the Trustee hereby accepts, are as follows:

ARTICLE I

DEFINITIONS; AUTHORITY

Section 1.1 Definitions. As used in this Indenture, unless the context shall otherwise require, the following terms shall have the following meanings:

"Act" means the Assessment Area Act, Title 11 Chapter 42, Utah Code Annotated 1953, as amended.

"Additional Bonds" means all bonds issued under this Indenture other than the Bonds.

"Administrative Costs Account" means the Administrative Costs Account established within the Bond Fund pursuant to Section 4.3 herein.

"Amendment to Assessment Ordinance" means any amendment to the Assessment Ordinance adopted by the Issuer.

"Assessment Fund" means the City of Saratoga Springs, Utah Mt. Saratoga Assessment Area Assessment Fund created in Section 4.1 hereof to be held and administered by the Issuer.

"Assessment Ordinance" means collectively the assessment ordinance adopted by the Issuer on October 4, 2016, levying assessments against benefited properties within the Mt. Saratoga Assessment Area.

"Assessments" means those assessments levied and received under the Assessment Ordinance against certain properties within the Mt. Saratoga Assessment Area benefited by the Improvements.

"Authorized Representative" means each of the Mayor and City Recorder or the City Manager or the Financial Director of the City of the Issuer or any other person duly authorized by the City Council to act as the Authorized Representative of the City hereunder.

"Bond Fund" means the City of Saratoga Springs, Utah Mt. Saratoga Assessment Area Bond Fund created in Section 4.3 hereof to be held by the Trustee and administered pursuant to Section 5.2 hereof.

"Bond Fund Year" means the 12-month period beginning July 1 of each year and ending the next succeeding June 30, except that the first Bond Fund Year shall begin on the date of delivery of the Bonds and shall end on the next succeeding June 30.

"Bondholder," "Bondowner," "Registered Owner," or "Owner" means the registered owner of any Bonds herein authorized.

"Bond Registrar" means the Trustee (or other party designated as Registrar by Supplemental Indenture) appointed as the initial registrar for the Bonds pursuant to Section 11.5 hereof, and any additional or successor registrar appointed pursuant hereto.

"Bonds" means the City of Saratoga Springs, Utah Special Assessment Bonds (Mt. Saratoga Assessment Area), Series 2016 authorized for issuance herein.

"Business Day" means any day except Saturday or Sunday on which banking business is transacted, but not including any day on which banks are authorized to be closed in the city in which the Trustee has its Principal Corporate Trust Office.

"Capitalized Interest Account" means the Capitalized Interest Account established within the Bond Fund pursuant to Section 4.3 herein.

"City Council" means the City Council of the City of Saratoga Springs, Utah.

"Code" means the Internal Revenue Code of 1986, as amended.

"Construction Fund" means the City of Saratoga Springs, Utah Mt. Saratoga Assessment Area Construction Fund created in Section 4.2 hereof to be held and administered by the Trustee pursuant to Section 5.3 hereof.

"Cost of Issuance Fund" means the City of Saratoga Springs, Utah Mt. Saratoga Assessment Area Cost of Issuance Fund created in Section 4.5 hereof to be held by the Trustee and administered pursuant to Section 5.5 hereof.

"Mt. Saratoga Assessment Area" means the City of Saratoga Springs, Utah Mt. Saratoga Assessment Area.

"Debt Service Reserve Requirement" means, with respect to the Bonds and any Additional Bonds, an amount equal to the least of (a) ten percent (10%) of the proceeds of the Bonds determined on the basis of its initial purchase price to the public, (b) the maximum aggregate annual debt service requirement during any Bond Fund Year for the Bonds and (c) 125% of the average aggregate annual debt service requirement for the Bonds. The Debt Service Reserve Requirement may be funded by a Reserve Instrument as herein provided or, with respect to any Additional Bonds, with the proceeds thereof as provided in the related Supplemental Indenture.

"Event of Default" means any occurrence or event specified in and defined as such by Section 8.1 hereof.

"Government Obligations" means solely one or more of the following:

(a) State and Local Government Series issued by the United States Treasury ("SLGS");

(b) United States Treasury bills, notes and bonds, as traded on the open market;

(c) Zero Coupon United States Treasury Bonds; and

(d) Any other direct obligations of or obligations fully and unconditionally guaranteed as to timely payment by the United States of America (including, without limitation, obligations commonly referred to as "REFCORP strips").

"Gross Proceeds" means the gross proceeds of the Bonds as defined in Section 148(f)(6)(B) of the Code and Section 1.148-1(b) of the Regulations.

"Improvements" means collectively, water system improvements including culinary water distribution lines, a concrete storage tank, booster station, and secondary water lines; sanitary sewer collection lines; storm drain improvements; and road construction improvements along with other necessary miscellaneous improvements, and to complete said improvements in a proper and workmanlike manner as described in the Designation Resolution.

"Indenture" means this Indenture of Trust and Pledge as from time to time amended or supplemented by Supplemental Indentures in accordance with the terms of this Indenture.

"Interest Payment Date" means each _____ and _____ beginning _____, 201_.

"Issuer" means the City of Saratoga Springs, Utah, and its successors.

"Mayor" means the Mayor of the City of Saratoga Springs, Utah.

"Original Issue Date" means the initial delivery date of the Bonds.

"Outstanding" or "Bonds Outstanding" means at any date all Bonds which have not been canceled which have been or are being authenticated and delivered by the Trustee under this Indenture, except:

(a) Any Bond or portion thereof which at the time has been paid or deemed paid pursuant to Article X of this Indenture; and

(b) Any Bond in lieu of or in substitution for which a new Bond shall have been authenticated and delivered hereunder, unless proof satisfactory to the Trustee is presented that such Bond is held by a bona fide holder in due course.

"Paying Agent" means each Person appointed by the Issuer as Paying Agent with respect to the Bonds. The initial Paying Agent is _____ or its successors or assigns.

"Person" means natural persons, firms, partnerships, associations, corporations, trusts, public bodies, and other entities.

"Principal Corporate Trust Office" means, with respect to the Trustee, the office of the Trustee at Corporate Trust Services, _____, Salt Lake City, Utah 84111.

"Purchase Agreement" means the Purchase Agreement dated April 26, 2016, wherein the Purchaser has agreed to purchase the Bonds from the Issuer and the Issuer has agreed to sell the Bonds to the Purchaser upon certain terms contained therein.

"Purchaser" means _____.

"Qualified Investments" means any investments authorized under the Utah State Money Management Act, Title 51 Chapter 7, Utah Code Annotated 1953, as amended and includes Government Obligations.

"Rebatable Arbitrage" means, with respect to the Bonds, the amount (determinable as of each Rebate Calculation Date) of rebatable arbitrage payable to the United States at the times and in the amounts specified in Section 148(f)(3) of the Code and Section 1.148-3 of the Regulations.

"Rebate Calculation Date" means, with respect to the Bonds, the Interest Payment Date next preceding the fifth (5th) anniversary of the issue date of such Bonds, each fifth (5th) anniversary of the initial rebate calculation date for such Bonds, and the date of retirement of the last Bond.

"Rebate Fund" means the City of Saratoga Springs, Utah Mt. Saratoga Assessment Area Rebate Fund created in Section 4.6 hereof to be held by the Trustee and administered pursuant to Section 5.6 hereof.

"Redemption Account" means the Redemption Account established within the Bond Fund pursuant to Section 4.3 herein.

"Register" means the record of ownership of the Bonds maintained by the Bond Registrar.

"Regular Record Date" means the fifteenth day immediately preceding each Interest Payment Date.

"Regulations" and all references thereto shall mean and include applicable final, proposed, and temporary United States Treasury Regulations promulgated with respect to Sections 103 and 141 through 150 of the Code, including all amendments thereto made thereafter.

"Required Rebate Deposit" means the amount due to the Internal Revenue Service no later than sixty (60) days after each Rebate Calculation Date pursuant to Section 148(f)(3) of the Code.

"Reserve Fund" means the City of Saratoga Springs, Utah Mt. Saratoga Assessment Area Reserve Fund created in Section 4.4 hereof to be held by the Trustee.

““Series 2016 Reserve Account” means the Series 2016 Reserve Account established within the Reserve Fund pursuant to Section 4.4 herein.

“State” means the State of Utah.

“Supplemental Indenture” means any supplemental indenture between the Issuer and the Trustee entered into pursuant to and in compliance with the provisions of Article IX hereof.

“Trustee” means _____, Corporate Trust Services, _____, or any successor corporation or association resulting from or surviving any consolidation or merger to which it or its successors may be a party and any successor trustee at any time serving as successor trustee hereunder.

Section 1.2 Indenture to Constitute Contract. In consideration of the purchase and acceptance from time to time of any and all of the Bonds authorized to be issued hereunder by the Registered Owners thereof and the issuance from time to time of any and all Reserve Instruments by Reserve Instrument Providers pursuant hereto, this Indenture shall be deemed to be and shall constitute a contract between the Issuer and the Owners from time to time of the Bonds and the Reserve Instrument Providers; and the pledge made in this Indenture and the covenants and agreements herein set forth to be performed by or on behalf of the Issuer shall be FIRST for the equal benefit, protection, and security of the Owners of the Bonds all of which, regardless of the time or times of their authentication and delivery or maturity, shall be of equal rank without preference, priority, or distinction of any of the Bonds over any other thereof, except as expressly provided in or permitted by this Indenture, and SECOND, for the equal benefit, protection, and security of the Reserve Instrument Providers of any and all of the Reserve Instruments which, regardless of the time or times of their issuance, delivery, or termination, shall be of equal rank without preference, priority, or distinction of any Reserve Instrument over any other thereof.

Section 1.3 Construction. This Indenture, except where the context by clear implication herein otherwise requires, shall be construed as follows:

(a) The terms “hereby,” “hereof,” “herein,” “hereto,” “hereunder,” and any similar terms used in this Indenture shall refer to this Indenture in its entirety unless the context clearly indicates otherwise.

(b) Words in the singular number include the plural, and words in the plural include the singular.

(c) Words in the masculine gender include the feminine and the neuter, and when the sense so indicates, words of the neuter gender refer to any gender.

(d) Articles, sections, subsections, paragraphs, and subparagraphs mentioned by number, letter, or otherwise, correspond to the respective articles,

sections, subsections, paragraphs, and subparagraphs hereof so numbered or otherwise so designated.

(e) The titles or lead lines applied to articles, sections, and subsections herein are inserted only as a matter of convenience and ease in reference and in no way define, limit or describe the scope or intent of any provisions of this Indenture.

ARTICLE II

AUTHORIZATION, TERMS, AND ISSUANCE OF BONDS

Section 2.1 Principal Amount, Designation, and Series. The Bonds are hereby authorized for issuance under the Indenture for the purpose of providing funds to (a) finance the Improvements, (b) [fund the Series 2016 Reserve Account and the Capitalized Interest Account,] and (c) pay the costs of issuance of the Bonds. The Bonds shall be limited to $_____ in aggregate principal amount, shall be issued in fully registered form, in denominations of $5,000 or any increment thereof shall be in substantially the form and contain substantially the terms contained in Exhibit A, attached hereto and shall bear interest at the rates and be payable as to principal or redemption price as specified herein. The Bonds shall be designated as, and shall be distinguished from all other Bonds of the Issuer by the title, "City of Saratoga Springs, Utah Special Assessment Bonds (Mt. Saratoga Assessment Area), Series 2016."

Section 2.2 Date, Maturities and Interest. The Bonds shall be dated as of their Original Issue Date, and shall mature on the dates in the years and in the amounts and shall bear interest from the Interest Payment Date next preceding their date of authentication thereof unless authenticated as of an Interest Payment Date, in which event such Bonds shall bear interest from such date, or unless such Bonds are authenticated prior to the first Interest Payment Date, in which event such Bonds shall bear interest from their Original Issue Date or unless, as shown by the records of the Trustee, interest on the Bonds shall be in default, in which event such Bonds shall bear interest from the date to which interest has been paid in full, or unless no interest shall have been paid on such Bonds, in which event such Bonds shall bear interest from their Original Issue Date, payable on each Interest Payment Date at the rates per annum as set forth below:

Maturity (_____)	Principal Amount	Interest Rate

_____

*Term Bond

Interest shall be calculated on the basis of a year of 360 days comprised of twelve 30-day months.

Section 2.3 Nature of Obligation. The Issuer hereby pledges all Assessments levied pursuant to the Assessment Ordinance to the payment of the Bonds.

The Bonds, together with interest thereon, shall be special limited obligations of the Issuer payable solely from a first lien pledge of the Assessments levied and collected under the Assessment Ordinance (except to the extent paid out of moneys attributable to

the Bond proceeds, moneys collected by the Issuer from the foreclosure of assessed properties or from other funds created hereunder or the income from the temporary investment thereof).

No provision of this Indenture, the Purchase Agreement, the Bonds, or any other instrument, shall be construed as creating a general obligation of the Issuer, or creating a general obligation of the State of Utah, the Issuer, or any political subdivision thereof, or as incurring or creating a charge upon the general credit of the Issuer, or its taxing powers.

Section 2.4 Payment of Principal and Interest. (a) Both the principal of and the interest on the Bonds shall be payable in lawful money of the United States of America. Payment of the interest on any Bond shall be made to the person appearing on the Register maintained by the Bond Registrar as the Registered Owner thereof by check or draft mailed on the Interest Payment Date to the Registered Owner at his address as it appears on such Register or to owners of $1,000,000 or more in aggregate principal amount of the Bonds (or owners of 100% of Bonds then Outstanding) by wire transfer to a bank account located in the United States designated by the Registered Owner in written instructions furnished to the Trustee no later than the Regular Record Date for such payment. The interest on the Bonds so payable and punctually paid and duly provided for on any Interest Payment Date will be paid to the person who is the Registered Owner thereof at the close of business on the Regular Record Date for such interest immediately preceding such Interest Payment Date. Any such interest not so punctually paid or duly provided for shall forthwith cease to be payable to the Registered Owner of any Bond on such Regular Record Date, and may be paid to the person who is the Registered Owner thereof at the close of business on a Special Record Date for the payment of such defaulted interest to be fixed by the Trustee, notice thereof to be given to such Registered Owner not less than ten (10) days prior to such Special Record Date. The principal of and premium, if any, on the Bonds are payable upon presentation and surrender thereof at the principal Corporate Trust Office of the Trustee as Paying Agent, except as otherwise provided by Supplemental Indenture. All such payments shall be valid and effectual to satisfy and discharge the liability upon such Bond to the extent of the sum or sums so paid.

(b) The Bonds may contain or have endorsed thereon such provisions, specifications, and descriptive words not inconsistent with the provisions hereof as may be necessary or desirable to comply with custom, the rules of any securities exchange or commission or brokerage board or otherwise.

Section 2.5 Redemption.

(a) *Optional Redemption*. The Bonds are not subject to optional redemption prior to _____, 20__. On and after _____, 20__, the Bonds shall be subject to redemption at the option of the Issuer, in whole or in part, on any day at a redemption price equal to one hundred percent (100%) of the principal amount of each Bond to be redeemed plus accrued interest to the date of redemption.

(b) *Extraordinary Mandatory Redemption*. The Bonds are subject to extraordinary mandatory redemption, in whole or in part, on any Business Day that the Issuer selects by notice to the Trustee that is given not more than forty-five (45) days after the Issuer's receipt of Assessments collected from the foreclosure sale of delinquent property or upon determination by the Issuer that Bond proceeds are not needed for Construction Costs, at a redemption price equal to one hundred percent (100%) of the principal amount of each Bond to be redeemed plus accrued interest to the date of redemption in the amount of Assessments (rounded down to the nearest $5,000 increment) the Issuer collects from the foreclosure sale of delinquent property (less amounts used for debt service on the Bonds, to replenish the accounts in the Reserve Fund or to reimburse the Issuer for amounts advanced for such purpose) or the amount of Bond proceeds not needed for construction. Whenever less than all of the Bonds are to be redeemed, the Trustee shall select the Bonds to be redeemed from all Bonds not previously called for redemption among maturities of the Bonds and on a *pro rata* basis as nearly as practicable.

(c) *Extraordinary Mandatory Prepayment Redemption*. The Bonds are subject to mandatory prepayment redemption, in whole or in part, on any Interest Payment Date from prepayments of Assessments received by the Issuer (and not needed to pay debt service) and in the amount of not less than $5,000 at a redemption price equal to one hundred percent (100%) of the principal amount of the Bonds to be redeemed, plus accrued interest to the date of redemption. Whenever less than all of the Bonds are to be redeemed, the Trustee shall select the Bonds to be redeemed from all Bonds not previously called for redemption among maturities of the Bonds and on a *pro rata* basis as nearly as practicable.

(d) *Mandatory Sinking Fund Redemption*. (i) The Bonds maturing on _____, 2032 are subject to mandatory sinking fund redemption at a redemption price equal to one hundred percent (100%) of the principal amount of Bonds to be redeemed plus accrued interest to the redemption date, as follows:

Mandatory Sinking Fund Redemption Date (_____)	Mandatory Sinking Fund Installment Amount

_____

* Final maturity

(ii) The Bonds maturing on _____, 20__ are subject to mandatory sinking fund redemption at a redemption price equal to one hundred percent (100%) of the principal amount of Bonds to be redeemed plus accrued interest to the redemption date, as follows:

Mandatory Sinking Fund Redemption Date (_____)	Mandatory Sinking Fund Installment Amount

_____

* Final maturity

Upon redemption of any Bonds maturing on _____, 20__ and _____, 20__ (other than by application of mandatory sinking fund redemption), an amount equal to the principal amount so redeemed shall be credited in increments of not less than $5,000, toward the mandatory sinking fund redemption amounts for the respective Bonds maturing on _____, 20__ and _____, 20__, at the discretion of the Issuer.

(e) *Selection of the Bonds for Redemption.* If fewer than all of the Bonds of any maturity are to be redeemed, the particular Bonds or portion thereof to be redeemed shall be selected prior to the redemption date by the Bond Registrar, by such method as the Bond Registrar shall deem fair and appropriate and which may provide for the selection for redemption of portions of the principal of Bonds in $5,000 increments.

(f) *Notice of Redemption*. Notice of redemption shall be given by the Bond Registrar by regular mail, not less than thirty (30) days prior to the redemption date, to the Holder, as of the record date established by the Bond Registrar for such redemption, of each Bond which is subject to redemption, at the address of such Holder as it appears on the registration books of the Issuer kept by the Bond Registrar, or at such other address as is furnished to the Bond Registrar in writing by such Holder on or prior to such record date. Each notice of redemption shall state the record date, the redemption date, the place of redemption, the principal amount and, if less than all, the distinctive numbers of the Bonds or portions of Bonds to be redeemed, and shall also state that the interest on the Bonds in such notice designated for redemption shall cease to accrue from and after such redemption date and that on said date there will become due and payable on each of said Bonds the principal of, interest accrued thereon to the redemption date, and premium, if any. Any notice mailed as provided in this paragraph shall be conclusively presumed to have been duly given, whether or not the Bondholder receives such notice. Failure to give such notice or any defect therein with respect to any Bond shall not affect the validity of the proceedings for redemption with respect to any other Bond.

If at the time of mailing of any notice of optional redemption there shall not be on deposit with the Trustee moneys sufficient to redeem all the Bonds called for redemption, such notice shall state that such redemption is subject to the deposit of the redemption moneys

with the Trustee not later than the opening of business on the redemption date and that such notice shall be of no effect unless such moneys are so deposited.

(g) *Redemption in Part*. In case any registered Bond shall be redeemed in part only, upon the presentation of such Bond for such partial redemption, the Issuer shall execute and the Trustee shall authenticate and shall deliver or cause to be delivered to or upon the written order of the Registered Owner thereof, at the expense of the Issuer, a Bond or Bonds of the same interest rate and maturity, in aggregate principal amount equal to the unredeemed portion of such registered Bond. A portion of any Bond of a denomination of more than $5,000 to be redeemed will be in the principal amount of $5,000 or an integral multiple thereof and in selecting portions of such Bonds for redemption, the Trustee will treat each such Bond as representing that number of Bonds of such $5,000 denomination which is obtained by dividing the principal amount of such Bonds by such $5,000 denomination.

Section 2.6 Delivery of Bonds. The Bonds shall be delivered to the Purchaser at such time and place as provided in the Purchase Agreement.

Prior to the authentication and delivery by the Trustee of the Bonds, there shall have been filed with the Trustee:

(a) A copy, duly certified by the City Recorder, of the resolution designating the Assessment Area, the Assessment Ordinance, and this Indenture.

(b) A copy, certified by the City Recorder, of the proceedings of the City Council approving the execution and delivery of the Indenture and the Bonds, together with a certificate, dated as of the date of authentication, of the City Recorder that such proceedings are still in force and effect without amendments except as shown in such proceedings.

(c) A request and authorization of the Issuer to the Trustee to authenticate the Bonds in the aggregate principal amount therein specified and deliver them to the Purchaser upon payment to the Trustee, for account of the Issuer, of the sum specified in the Purchase Agreement.

(d) The Series 2016 Reserve Instrument.

(e) An opinion of bond counsel dated the date of authentication of the Bonds substantially to the effect that (i) the Issuer has duly authorized the execution and delivery of this Indenture and the issuance and delivery of Bonds, and this Indenture has been duly executed and delivered by the Issuer and is a valid and binding agreement of the Issuer enforceable in accordance with its terms with standard limitations regarding bankruptcy, equitable remedies and judicial discretion; and (ii) the Bonds are valid and binding obligations of the Issuer, entitled to the benefits and security of this Indenture.

Section 2.7 Application of Moneys upon Issuance of Bonds. (a) The Issuer shall concurrently with the issuance of the Bonds, deposit with the Trustee the amount of $_____, being the par amount of the Bonds, as follows:

(i) $_____ into the Construction Fund to be used to pay the acquisition and construction costs of the Improvements;

(ii) $_____ into the Capitalized Interest Account to be used to pay interest on the Bonds during the acquisition and construction of the Improvements; and

(iii) $_____ into the Cost of Issuance Fund established herein and used to pay for costs with respect to the issuance of the Bonds.

Section 2.8 Further Authority. The Mayor and the City Recorder of the Issuer and other officers of the Issuer are, and each of them is, hereby authorized to do or perform all such acts and to execute all such certificates, documents, and other instruments as may be necessary or advisable to provide for the issuance, sale, registration, and delivery of the Bonds.

Section 2.9 Additional Bonds. No additional indebtedness, bonds, or notes of the Issuer secured by a pledge of the Assessments senior to the pledge of Assessments for the payment of the Bonds herein authorized shall be created or incurred without the prior written consent of the Owners of one hundred percent (100%) of the Outstanding Bonds. Additional Bonds may be issued by the Issuer and secured by a pledge of the Assessments on a parity with the pledge of the Assessments for the payment of the Bonds herein authorized if the following conditions have been met: (a) such Additional Bonds can be legally issued pursuant to the Act (including meeting the required appraised value therein), (b) the proceeds of the Additional Bonds are used to complete the Improvements (plus funding of an account within the Reserve Fund, paying any capitalized interest and paying related costs of issuance), and (c) an account within the Reserve Fund shall be funded with respect thereto in an amount equal to the Debt Service Reserve Requirement for such Additional Bonds and the Issuer shall agree to replenish the new account within the Reserve Fund in the same manner as the Series 2016 Reserve Account (with cash or a Reserve Instrument). Nothing in this section shall be interpreted to restrict the ability of the Issuer to issue assessment bonds payable from additional assessments against all or any portion of the Mt. Saratoga Assessment Area for different improvements in compliance with the Act.

ARTICLE III

EXECUTION, TRANSFER, AND EXCHANGE OF

BONDS; BOND REGISTRAR

Section 3.1 Execution of Bonds . The Bonds shall be executed on behalf of the Issuer by the Mayor and attested by the City Recorder of the Issuer (the signatures of said Mayor and City Recorder being either manual and/or by facsimile) and the corporate seal of the Issuer or a facsimile thereof shall be impressed or imprinted thereon. The use of such facsimile signatures of said Mayor and City Recorder and such facsimile of the seal of the Issuer on the Bonds are hereby authorized, approved, and adopted by the Issuer as the authorized and authentic execution, attestation, and sealing of the Bonds by said officials. The Bonds shall then be delivered to the Bond Registrar for manual authentication by it. The Certificate of Authentication shall be substantially in the form provided in Exhibit A hereof. Only such of the Bonds as shall bear thereon a Certificate of Authentication, manually executed by the Bond Registrar, shall be valid or obligatory for any purpose or entitled to the benefits of this Indenture, and such certificate of the Bond Registrar shall be conclusive evidence that the Bonds so certified have been duly registered and delivered under, and are entitled to the benefits of, this Indenture and that the Holder thereof is entitled to the benefits of this Indenture. The Certificate of Authentication of the Bond Registrar on any Bond shall be deemed to have been executed by it if (a) such Bonds is signed by an authorized officer of the Bond Registrar, but it shall not be necessary that the same officer sign the Certificate of Authentication on all of the Bonds issued hereunder or that all of the Bonds hereunder be certified as registered by the same Bond Registrar, and (b) the date of authentication of the Bond is inserted in the place provided therefor on the Certificate of Authentication.

In case any officer whose signature or a facsimile of whose signature shall appear on any Bond shall cease to be such officer before the issuance or delivery of such Bond, such signature or such facsimile shall nevertheless be valid and sufficient for all purposes, the same as if such officer had remained in office until such issuance or delivery, respectively.

Section 3.2 Transfer of Bonds.

(a) Any Bond may, in accordance with its terms, be transferred, upon the registration books kept by the Bond Registrar pursuant to Section 3.4 hereof, by the Person in whose name it is registered, in person or by his duly authorized attorney, upon surrender of such Bond for cancellation at the principal office of the Bond Registrar, accompanied by delivery of a written instrument of transfer in a form approved by the Bond Registrar, duly executed. No transfer shall be effective until entered on the registration books kept by the Bond Registrar. The Issuer, the Bond Registrar and the Paying Agent may treat and consider the Person in whose name each Bond is registered in the registration books kept by the Bond Registrar as the Holder and absolute Owner thereof for the purpose of

receiving payment of, or on account of, the principal or redemption price thereof and interest due thereon and for all other purposes whatsoever.

(b) Whenever any Bond or Bonds shall be surrendered for transfer, the Bond Registrar shall authenticate and deliver a new fully registered Bond or Bonds of the same series, designation, maturity date, and interest rate and of authorized denominations duly executed by the Issuer, for a like aggregate principal amount. The Bond Registrar shall require the payment by the Bondholder requesting such transfer of any tax or other governmental charge required to be paid with respect to such transfer. With respect to each Bond, no such transfer shall be required to be made after the Regular Record Date with respect to any Interest Payment Date to and including such Interest Payment Date.

Section 3.3 Exchange of Bonds. The Bonds may be exchanged at the Principal Corporate Trust Office of the Bond Registrar for a like aggregate principal amount of fully registered Bonds of the same series, designation, maturity date, and interest rate and other authorized denominations. The Bond Registrar shall require the payment by the Bondholder requesting such exchange of any tax or other governmental charge required to be paid with respect to such exchange. With respect to each Bond, no such exchange shall be required to be made with respect to any Interest Payment Date after the Regular Record Date to and including such Interest Payment Date.

Section 3.4 Bond Registration Books. This Indenture shall constitute a system of registration within the meaning and for all purposes of the Registered Public Obligations Act, Title 15, Chapter 7, Utah Code Annotated 1953. The Bond Registrar shall keep or cause to be kept, at its principal office, sufficient books for the registration and transfer of the Bonds, which shall at all times be open to inspection by the Issuer; and, upon presentation for such purpose, the Bond Registrar shall, under such reasonable regulations as it may prescribe, register, or transfer or cause to be registered or transferred on said books, the Bonds as herein provided.

Section 3.5 List of Bondholders. The Bond Registrar shall maintain a list of the names and addresses of the Holders of all Bonds and upon any transfer shall add the name and address of the new Bondholder and eliminate the name and address of the transferor Bondholders.

Section 3.6 Duties of Bond Registrar. If requested by the Bond Registrar, the Mayor and City Recorder are authorized to execute the Bond Registrar's standard form of agreement between the Issuer and the Bond Registrar with respect to the compensation, obligations, and duties of the Bond Registrar hereunder which may include the following:

(a) to act as Bond Registrar, authenticating agent, Paying Agent, and transfer agent as provided herein;

(b) to maintain a list of Bondholders as set forth herein and to furnish such list to the Issuer upon request, but otherwise to keep such list confidential;

(c) to cancel and/or destroy the Bonds which have been paid at maturity or upon earlier redemption or submitted for exchange or transfer;

(d) upon request, to furnish the Issuer at least annually a certificate with respect to the Bonds canceled and/or destroyed; and

(e) upon request, to furnish the Issuer at least annually an audit confirmation of the Bonds paid, the Bonds Outstanding, and payments made with respect to interest on the Bonds.

ARTICLE IV

CREATION OF FUNDS AND ACCOUNTS

Section 4.1 Creation of Assessment Fund. There is hereby created and ordered established in the custody of the Issuer a fund in the name of the Issuer referred to as the Assessment Fund. For accounting purposes, the Assessment Fund may be redesignated by different account names by the Issuer from time to time.

Section 4.2 Creation of Construction Fund. There is hereby created and ordered established in the custody of the Trustee a special trust fund in the name of the Issuer referred to as the Construction Fund.

Section 4.3 Creation of Bond Fund. There is hereby created and ordered established in the custody of the Trustee a special trust fund in the name of the Issuer referred to as the Bond Fund. Within the Bond Fund, there is hereby created and ordered established an Administrative Costs Account, a Redemption Account and a Capitalized Interest Account.

Section 4.4 Creation of Reserve Fund. Consistent with the terms of the Assessment Ordinance, there is hereby created and ordered established in the custody of the Trustee a special trust fund in the name of the Issuer referred to as the Reserve Fund. Within the Reserve Fund, there is hereby created and ordered established a Series 2016 Reserve Account for the Bonds which shall secure only the Bonds.

Section 4.5 Creation of Cost of Issuance Fund. There is hereby created and ordered established in the custody of the Trustee a special trust fund in the name of the Issuer referred to as the Cost of Issuance Fund.

Section 4.6 Creation of Rebate Fund. There is hereby created and ordered established in the custody of the Trustee a special trust fund in the name of the Issuer referred to as the Rebate Fund.

Section 4.7 Additional Funds and Accounts. Notwithstanding anything contained herein to the contrary, the Trustee need not create any of the funds or accounts referenced in this Article IV until such funds or accounts shall be utilized. The Issuer may authorize the creation of additional funds and additional accounts within any funds.

ARTICLE V

USE OF FUNDS

Section 5.1 Use of Assessment Fund. All payments of Assessments received and collected by the Issuer pursuant to the Assessment Ordinance, including Assessments received from the foreclosure sale of delinquent properties shall be deposited upon receipt in the Assessment Fund and shall be transferred to the Trustee within ten (10) days after receipt for deposit in the funds and accounts in the specified order of priority, each priority being fully paid before funds are used to pay any lower priority and no payment being made on any priority if funds have been exhausted in the payment of higher priorities, as follows:

(a) *First*, all regularly scheduled payments of Assessments (i) in the amount needed to pay the principal of and interest on the Bonds on each Interest Payment Date and at maturity or upon mandatory sinking fund redemption shall be deposited by the Trustee in the Bond Fund, with the Assessments due on any _____ intended to be used to make the payments on the Bonds on the following _____ and _____, and (ii) in the amount attributable to the Issuer's administration fee ($_____ per year plus any direct out of pocket costs) shall be deposited by the Trustee in the Administrative Costs Account in the Bond Fund and then remitted annually to the Issuer (and to the extent regularly scheduled payments of Assessments are not sufficient for (i) and (ii) in whole, such amount shall be distributed pro rata). The Issuer hereby covenants and agrees that the administration fee shall only be used for actual costs of administering the Mt. Saratoga Assessment Area and in the event that the Issuer does not have actual costs equal to the administration fee, it shall reduce the administration fee as needed in future Assessments;

(b) *Second*, all prepayments of Assessments, including prepayment premiums, if any, shall be deposited by the Trustee first in the Bond Fund to the extent needed to pay principal of and interest on the Bonds on the next succeeding Interest Payment Date and at maturity or upon mandatory sinking fund redemption and second, in the Redemption Account within the Bond Fund to redeem Bonds as provided in Section 2.5(c);

(c) *Third*, Assessments received from the foreclosure sale of delinquent property in an amount sufficient to replenish the Reserve Fund for draws made thereon to pay principal of or interest on Bonds when due, shall be deposited first, into the respective Accounts of the Reserve Fund, or second, equally and ratably to the Reserve Instrument Fund, with respect to all Reserve Instruments which are in effect such amounts as shall be necessary to pay all Reserve Instrument Repayment Obligations then due in order to cause the Reserve Instrument Coverage to equal the Reserve Instrument Limit under each Reserve Instrument then in effect, or third, to reimburse the Issuer for amounts advanced by it for such purpose in the respective Accounts of the Reserve Fund, including interest accrued on such advances; and

(d) *Fourth*, all remaining Assessments received from the foreclosure sale of delinquent property shall be deposited by the Trustee in the Redemption Account within the Bond Fund to redeem Bonds pursuant to Section 2.5(b) herein.

Section 5.2 Use of Bond Fund.

(a) The Trustee shall make deposits to the Bond Fund, as and when received, as follows:

(i) the amounts provided for in Section 5.1 herein;

(ii) moneys transferred from the Reserve Fund and amounts drawn on Reserve Instruments as provided in Section 5.4 herein; and

(iii) all other moneys received by the Trustee hereunder when accompanied by directions from the person depositing such moneys that such moneys are to be paid into the Bond Fund.

(b) Except as provided in this Section, moneys in the Bond Fund shall be expended solely for the payment of principal of and interest on the Bonds as the same become due on each Interest Payment Date and at maturity or upon earlier redemption.

The Issuer hereby authorizes and directs the Trustee to withdraw sufficient moneys from the Bond Fund to pay principal of and interest on the Bonds as the same become due and payable at maturity or upon earlier redemption and to make said moneys so withdrawn available to the Paying Agent for the purpose of paying said principal and interest.

Moneys on deposit in the Capitalized Interest Account shall be applied by the Trustee to pay interest falling due on the Bonds from their delivery date through _____, 20__, unless otherwise directed by the Issuer to be moved to the Construction Fund. Thereafter, the Capitalized Interest Account shall be terminated and any balance therein moved to the Bond Fund.

Section 5.3 Construction Fund. (a) So long as an Event of Default shall not have occurred and be continuing and except as otherwise provided by Supplemental Indenture, moneys deposited in the Construction Fund shall be disbursed by the Trustee to pay the costs of the Improvements, in each case within three (3) Business Days (or within such longer period as is reasonably required to liquidate investments in the Construction Fund if required to make such payment) after the receipt by the Trustee of a written requisition approved by an Authorized Representative of the Issuer in substantially the form as Exhibit D attached hereto, directing that the Trustee disburse sums in the manner specified by and at the direction of the Issuer to the person or entity designated in such written requisition, and that the amount set forth therein is due and owing and constitutes a cost of acquisition and/or construction of the Improvements based upon itemized claims substantiated in support thereof.

(b) Upon receipt of such requisition, the Trustee shall pay the obligation set forth in such requisition out of moneys in the Construction Fund. In making such payments the Trustee may rely upon the information submitted in such requisition. Such payments shall be presumed to be made properly and the Trustee shall not be required to verify the application of any payments from the Construction Fund or to inquire into the purposes for which disbursements are being made from the Construction Fund.

(c) The Issuer shall deliver to the Trustee within ninety (90) days after all moneys have been expended from the Construction Fund, a certificate executed by an Authorized Representative of the Issuer stating:

(i) that that portion of the Improvements to be financed with proceeds of the Bonds has been fully completed in accordance with the plans and specifications therefor, as amended from time to time; and

(ii) that said Improvements have been fully paid for and no claim or claims exist against the Issuer or against such Improvements out of which a lien based on furnishing labor or material exists or might ripen; provided, however, there may be excepted from the foregoing certification any claim or claims out of which a lien exists or might ripen in the event the Issuer intends to contest such claim or claims, in which event such claim or claims shall be described to the Trustee.

(d) In the event the certificate filed with the Trustee pursuant to Section 5.3(c) herein shall state that there is a claim or claims in controversy which create or might ripen into a lien, an Authorized Representative of the Issuer shall file a similar certificate with the Trustee when and as such claim or claims shall have been fully paid or otherwise discharged.

(e) The Trustee and the Issuer shall keep and maintain adequate records pertaining to each account within the Construction Fund and all disbursements therefrom.

(f) Upon completion of that portion of the Improvements to be financed with proceeds of the Bonds, and payment of all costs and expenses incident thereto and the filing with the Trustee of documents required by this Section 5.3, any balance remaining in the Construction Fund shall as directed by an Authorized Representative of the Issuer, be deposited in the Bond Fund, to be applied to pay interest next falling due with respect to the Bonds or to redeem Bonds with any remaining funds.

The Trustee shall, to the extent there are no other available funds held under the Indenture, use the remaining funds in the Construction Fund to pay principal and interest on the Bonds at any time in the event of a payment default hereunder.

Section 5.4 Use of Reserve Fund. The Series 2016 Reserve Account shall initially be funded with the Series 2016 Reserve Instrument. In calculating the amount on deposit in the Reserve Fund, the amount of any Reserve Instrument Coverage will be treated as an amount on deposit in such Account.

(a) Moneys on deposit in the Reserve Fund shall be used to make up any deficiencies in the Bond Fund for the payment of the Bonds when due, including by means of paying Assessments on property in the Assessment Area purchased by the Issuer or deemed purchased by the Issuer at foreclosure sale.

(b) Amounts recovered by exercise of any of the remedies provided in the Assessment Ordinance or otherwise from delinquent Assessments (and not needed to pay amounts coming due on the Bonds) shall be used to replenish (up to the respective requirement) amounts drawn from the Accounts within the Reserve Fund to pay the Bonds and any Additional Bonds.

(c) Except as otherwise provided in this Section, the Series 2016 Reserve Account shall at all times be maintained in an amount not less than the Debt Service Reserve Requirement. Moneys at any time on deposit in the Series 2016 Reserve Account in excess of the Debt Service Reserve Requirement shall on October 15 of each year be transferred to the Bond Fund to be used to pay principal and/or interest on the Bonds as the same come due. Payments of Assessments coming due on the next assessment payment date shall be reduced pro rata as a result of any such transfer from the Series 2016 Reserve Account. Upon the final payment of the Bonds, any moneys on deposit in the Series 2016 Reserve Account (but not the Series 2016 Reserve Instrument) shall be applied by the Trustee to said final payment, and any excess moneys on deposit thereafter shall at the written direction of the Issuer, be remitted to the owners of assessed property as an overpayment of Assessments.

If at any time the amount on deposit in the Bond Fund is not sufficient to pay the principal and interest coming due on the Bonds, and the moneys, if any, on deposit in Series 2016 Reserve Account are less than the deficiency in the Bond Fund with respect to the Bonds, and the Reserve Policy is in effect, the Trustee shall immediately make a demand for payment on such Reserve Policy, to the maximum extent authorized by such Reserve Policy, in the amount necessary to make up such deficiency, and immediately deposit such payment upon receipt thereof into the Bond Fund. Thereafter, the Issuer shall be obligated to reinstate the Reserve Policy as provided herein.

No Reserve Instrument shall be allowed to expire or terminate while the related Series of Bonds are Outstanding unless and until cash has been deposited into the related account of the Reserve Fund, or a new Reserve Instrument has been issued in place of the expiring or terminating Reserve Instrument, or any combination thereof in an amount or to provide coverage, as the case may be, at least equal to the amount required to be maintained in the Reserve Fund.

If at any time the amount on deposit in the Series 2016 Reserve Account, including Reserve Instrument Coverage then available under the Reserve Policy is less than the Debt Service Reserve Requirement with respect to the Bonds, the Trustee shall notify the Issuer of such deficiency and the Issuer shall replenish the Series 2016 Reserve Account from proceeds received from the sale of delinquent property as provided in the Act. If the Series 2016 Reserve Account is not fully replenished from proceeds received from the sale of delinquent property, the Issuer shall replenish the Series 2016 Reserve Account or from the Series 2016 Reserve Instrument on behalf of the Issuer to the Debt Service Reserve Requirement within 365 days from the initial date on which the Series 2016 Reserve Account had on deposit less than the Debt Service Reserve Requirement, from solely the following sources, to the extent legally permissible: (a) an appropriation from the general fund of the Issuer, (b) the issuance of general obligation bonds of the Issuer (however, the issuance of such bonds would require voter approval), (c) appropriation from such other sources as may be determined by the Issuer, or (d) the levy of a tax of not to exceed .0002 per dollar of taxable value of taxable property within the Issuer in any one year. Pursuant to Section 11-42-705 of the Assessment Act, the Issuer may deposit into the Series 2016 Reserve Account a warrant to satisfy its financial liabilities accruing against the Series 2016 Reserve Account as described herein. Any amounts advanced by the Issuer in either a draw on a Reserve Instrument or a deposit directly by the Issuer for the replenishment of the Series 2016 Reserve Account shall be reimbursed, with interest at a rate of 12% per annum, from moneys received from foreclosure or otherwise from delinquent properties. Such 12% per annum shall be in addition to interest amounts received under the Assessment Ordinance due to a default in payment thereunder.

Should the replenishment of the Series 2016 Reserve Account set forth in the prior paragraph require budgetary approval, the Issuer covenants and agrees (a) to include in its annual tentative budget prepared by the appropriate officials acting on behalf of the Issuer in accordance with applicable law or to include in an amendment to the Issuer's budget an item for expenditure of an amount necessary to replenish the Series 2016 Reserve Account as described in the preceding paragraph, and (b) to take such further action (or cause the same to be taken) as may be necessary or desirable to assure that the final budget or amendment to the budget submitted to the governing body of the Issuer for its consideration seeks an appropriation of moneys sufficient to replenish the Series 2016 Reserve Account.

To effect the covenants set forth in this Section 5.4, the Issuer hereby directs its "budget officer" or any other officer at the time charged with the responsibility of formulating budget proposals, to include in the tentative budget prepared annually by such budget officer or other officer and submitted to the governing body of the Issuer in any year, or in an amendment to the budget an item replenish the Series 2016 Reserve Account. It is hereby expressed as the intention of the Issuer that the decision regarding from what source the Series 2016 Reserve Account is to be replenished is to be made solely by the governing body of the Issuer at the time it considers for adoption the final budget or amendment to the budget and not by any official of the Issuer acting in his or her individual capacity as such. In this connection, the Issuer hereby covenants and agrees that such budget officer or other officer shall not amend, modify, or otherwise

change the appropriations made in any finally adopted budget or amendment to the budget to replenish the Series 2016 Reserve Account without the express prior approval of the governing body of the Issuer.

Section 5.5 Cost of Issuance Fund. Upon receipt from the Issuer of an executed Cost of Issuance Disbursement Request in substantially the form of Exhibit C attached hereto, the Trustee will disburse from the Cost of Issuance Account the amounts to the parties identified on the Cost of Issuance Disbursement Request. Amounts on deposit in the Cost of Issuance Fund which the Issuer determines are not needed for payment of costs of issuance shall be transferred by the Trustee, at the written direction of the Issuer, to the Construction Fund.

Section 5.6 Use of Rebate Fund.

(a) The Trustee shall establish and thereafter maintain, so long as the Bonds are Outstanding, a Rebate Fund, which shall be held separate and apart from all other funds and accounts established under this Indenture and from all other moneys of the Trustee.

(b) All amounts in the Rebate Fund, including income earned from investment of the fund, shall be held by the Trustee free and clear of the lien of the Indenture. In the event the amount on deposit in the Rebate Fund exceeds the aggregate amount of Rebatable Arbitrage for the Bonds, as verified in writing by an independent public accountant or other qualified professional at the time the Rebatable Arbitrage is determined, the excess amount remaining after payment of the Rebatable Arbitrage to the United States shall, upon the Issuer's written request accompanied by such accountant's or professional's determination report, be paid by the Trustee to the Issuer.

(c) The Issuer shall determine the amount of Rebatable Arbitrage and the corresponding Required Rebate Deposit with respect to the Bonds on each applicable Rebate Calculation Date and take all other actions necessary to comply with the rebate requirements of the Code and the Regulations. The Issuer shall deposit into the Rebate Fund the Required Rebate Deposit, if any, (or instruct the Trustee to transfer to the Rebate Fund moneys representing such Required Rebate Deposit from the Funds and Accounts held under the Indenture other than the Rebate Fund) or shall otherwise make payment of the rebate to be paid to the United States at the times required by the Code and the Regulations. If applicable, the Issuer shall instruct in writing the Trustee to withdraw from the Rebate Fund and pay any rebate over to the United States. The determination of Rebatable Arbitrage made with respect to each such payment date and with respect to any withdrawal and payment to the Issuer from the Rebate Fund pursuant to the Indenture must be verified in writing by an independent public accountant or other qualified professional. The Trustee may rely conclusively upon and shall be fully protected from all liability in relying upon the Issuer's determinations, calculations, and certifications required by this Section 5.6 and the Trustee shall have no responsibility to independently make any calculations or

determination or to review the Issuer's determinations, calculations, and certifications required by this Section 5.6.

(d) The Trustee shall, at least sixty (60) days prior to each Rebate Calculation Date, notify the Issuer of the requirements of this Section 5.6. By agreeing to give this notice, the Trustee assumes no responsibility whatsoever for compliance by the Issuer with the requirements of Section 148 of the Code or any successor. The Issuer expressly agrees that (notwithstanding any other provision of the Indenture) any failure of the Trustee to give any such notice, for any reason whatsoever, shall not cause the Trustee to be responsible for any failure of the Issuer to comply with the requirements of said Section 148 or any successor thereof.

(e) The provisions of this Section 5.6 may be amended or deleted without Bondholder consent or notice, upon receipt by the Issuer and the Trustee of an opinion of nationally recognized bond counsel that such amendment or deletion will not adversely affect the excludability from gross income for federal tax purposes of interest on the Bonds.

Section 5.7 Investment of Funds. All moneys in the Bond Fund, the Construction Fund, the Reserve Fund, the Cost of Issuance Fund, the Reserve Instrument Fund and the Rebate Fund, may, at the discretion and written authorization of the Issuer, be invested by the Trustee in Qualified Investments, including guaranteed investment contracts secured solely by Qualified Investments. All income derived from the investment of the Bond Fund, the Construction Fund, the Rebate Fund, the Reserve Fund, the Reserve Instrument Fund and Cost of Issuance Fund shall be maintained in said Funds and accounts respectively and shall be disbursed along with the other moneys on deposit therein as herein provided.

In the event the Issuer shall be advised by nationally recognized municipal bond counsel that it is necessary to restrict or limit the yield on the investment of any moneys paid to or held by the Trustee in order to avoid the Bonds being considered "arbitrage bonds" within the meaning of the Code or the Treasury Regulations proposed or promulgated thereunder, or to otherwise preserve the excludability of interest payable or paid on the Bonds from gross income for federal income tax purposes, the Issuer may require the Trustee to take such steps as it may be advised by such counsel are necessary so to restrict or limit the yield on such investment, irrespective of whether the Trustee shares such opinion, and the Trustee agrees that it will take all such steps as the Issuer may require.

The Issuer acknowledges that to the extent regulations of the Comptroller of the Currency or any other regulatory entity grant the Issuer the right to receive brokerage confirmations of the security transaction as they occur, the Issuer specifically waives receipt of such confirmations to the extent permitted by law. The Trustee will furnish the Issuer periodic cash transaction statements which include the detail for all investment transactions made by the Trustee hereunder.

Section 5.8 Trust Funds. All moneys received by the Trustee under the provisions of this Indenture shall be trust funds under the terms hereof and shall not be subject to lien or attachment of any creditor of the State or any political subdivision, body, agency, or instrumentality thereof or of the Issuer and shall not be subject to appropriation by any legislative body or otherwise. Such moneys shall be held in trust and applied in accordance with the provisions hereof. Unless and until disbursed pursuant to the terms hereof, all such moneys (and the income therefrom) shall be held by the Trustee as security for payment of the principal, premium, if any, and interest on the Bonds and the fees and expenses of the Issuer and Trustee payable hereunder.

Section 5.9 Method of Valuation and Frequency of Valuation. In computing the amount in any fund or account, Qualified Investments shall be valued at market. With respect to all funds and accounts, valuation shall occur annually, except in the event of a withdrawal from the Reserve Fund, whereupon the securities therein shall be valued immediately after such withdrawal.

Section 5.10 Perfection of Security Interest.

(a) The Indenture creates a valid and binding pledge and assignment of security interest in all of the Assessments pledged under this Indenture in favor of the Trustee as security for payment of the Bonds, enforceable by the Trustee in accordance with the terms thereof.

(b) Under the laws of the State, such pledge and assignment and security interest is automatically perfected by Section 11-14-501, Utah Code Annotated 1953, as amended, and is and shall have priority as against all parties having claims of any kind in tort, contract, or otherwise hereafter imposed on the Assessment.

ARTICLE VI

COVENANTS AND UNDERTAKINGS

Section 6.1 Covenants of Issuer. All covenants, statements, representations, and agreements contained in the Bonds, and all recitals and representations in this Indenture are hereby considered and understood as the covenants, statements, representations, and agreements of the Issuer.

Section 6.2 Levy and Collection of Assessments. The City Treasurer shall be and is hereby authorized and empowered, and it shall be his/her duty to receive and collect all Assessments levied to pay the cost of the Improvements of the Assessment Area, the installments thereon, the interest thereon, and the penalties accrued thereon, including without limiting the generality of the foregoing, the whole of the unpaid principal, interest and penalties accrued which become due and payable immediately because of the failure to pay any installment whether of principal or interest, when due, and to pay and disburse such payments to the Trustee as herein provided.

Section 6.3 Lien of Assessment. The Assessments, any interest accruing on the Assessments and the penalties and costs of collection of the Assessments shall continue to constitute and are hereby declared to be a lien against the properties upon which the Assessments are levied within the Assessment Area from and after the date on which the Assessment Ordinance became effective. Said lien shall be superior to the lien of any trust deed, mortgage, mechanic's or materialman's lien, or other encumbrance, and shall be equal to and on a parity with the lien for general property taxes. Said lien shall apply without interruption, change in priority, or alteration in any manner to any reduced obligations and shall continue until the Assessment and any interest, penalties, and costs thereon are paid in full, notwithstanding any sale of the property for or on account of a delinquent general property tax, special tax, other assessment or otherwise, or the issuance of a tax deed, an assignment of interest by the Issuer, or a sheriff's certificate of sale or deed.

Section 6.4 Default in Payment of Assessments. As further described in the Assessment Ordinance, in the event a default occurs in the payment of any installment of principal or interest of the Assessments levied pursuant to the Assessment Ordinance when due, the Issuer shall (a) either declare the unpaid amount delinquent and subject to collection or declare the whole of the unpaid Assessment immediately due and payable and subject to collection, (b) provide notice of such default, and (c) following the lapse of a 30-day period to remedy the default provided in the Notice, all as provided in the Assessment Ordinance, the Issuer may immediately initiate and diligently pursue to completion a summary sale pursuant to Section 11-42-502 and related pertinent provisions of the Act, of all delinquent property in the manner provided for actions to foreclose trust deeds. If at the sale, no person or entity shall bid and pay the Issuer the amount due on the Assessment plus interest, penalties and costs, plus attorneys' fees, if any, the property shall be deemed sold to the Issuer for these amounts. If the Issuer elects to retain ownership of the delinquent property, it shall pay all delinquent Assessment installments and all Assessment installments that become due, including the interest on

them and shall be entitled to direct the Trustee to use amounts on deposit in the various accounts of the Reserve Fund for such purpose.

The remedies provided in this Section for the collection of Assessments and the enforcement of liens shall be deemed and construed to be cumulative and the use of any one method or means of collection or enforcement shall not deprive the Issuer of the use of any other method or means.

Section 6.5 Limited Obligation of Issuer. Notwithstanding anything contained elsewhere herein to the contrary, the Bonds, or any other obligation hereunder, are not a general obligation of the Issuer but are payable exclusively out of the funds described herein. The Issuer shall not be liable for the payment of the Bonds, except to the extent of the funds created and received from (a) the Assessments, including Assessments collected through foreclosure sales resulting from unpaid Assessments (after payment of costs as described in Section 6.4 herein), and (b) moneys on deposit in the Reserve Fund, but the Issuer shall be held responsible for the lawful levy of all Assessments, for the creation and maintenance and replenishment of the Series 2016 Reserve Account as provided herein, and for the faithful accounting, collection, settlement, and payment of the Assessments.

Section 6.6 Bonds in Registered Form. The Issuer recognizes that Section 149 of the Code requires the Bonds to be issued and to remain in fully registered form in order that interest thereon is excludable from gross income for federal income tax purposes under laws in force at the time the Bonds are delivered. In this connection, the Issuer agrees that it will not take any action to permit the Bonds to be issued in, or converted into, bearer or coupon form.

Section 6.7 Tax Covenant. The Issuer covenants and agrees to and for the benefit of the Bondholders that the Issuer (a) will not take any action that would cause interest on the Bonds to be includable in gross income for federal income tax purposes, (b) will not omit to take or cause to be taken, in timely manner, any action, which omission would cause the interest on the Bonds to be includable in gross income for federal income tax purposes, and (c) will, to the extent possible, comply with any other requirements of federal tax law applicable to the Bonds in order to preserve the excludability from federal income taxation of interest on the Bonds. Pursuant to this covenant, the Issuer obligates itself to comply throughout the term of the Bonds with the requirements of Section 148 of the Code and the regulations promulgated thereunder, as the same presently exist, or may from time to time hereafter be amended, supplemented or revised.

Section 6.8 No Additional Security Interest. The Issuer covenants that so long as any Bonds remain Outstanding, it shall not pledge or grant any security interest in the Assessments or any investment proceeds thereof (except as expressly provided in this Indenture).

ARTICLE VII

TRUSTEE

Section 7.1 Acceptance of the Trusts. The Trustee accepts the trusts imposed upon it hereby, and agrees to perform said trusts as a corporate trustee ordinarily would perform said trusts under a corporate indenture, but no implied covenants or obligations shall be read into this Indenture against the Trustee.

(a) The Trustee may execute any of the trusts or powers thereof and perform any of its duties by or through attorneys, agents, receivers, or employees and the Trustee shall not be responsible for any misconduct or negligence on the part of any agent or attorney appointed with due care and shall be entitled to advice of counsel concerning all matters of trusts hereof and the duties hereunder, and may in all cases pay such reasonable compensation to all such attorneys, agents, receivers, and employees as may reasonably be employed in connection with the trusts hereof. The Trustee may act upon the opinion or advice of counsel. The Trustee shall not be responsible for any loss or damage resulting from any action or non-action in good faith in reliance upon such opinion or advice.

(b) The Trustee shall not be responsible for any recital herein, or in the Bonds (except in respect to the certificate of the Trustee endorsed on the Bonds) or collecting any insurance moneys, or for the validity of the execution by the Issuer of this Indenture or of any supplements thereto or instruments of further assurance, or for the sufficiency of the security for the Bonds issued hereunder or intended to be secured hereby; and the Trustee shall not be bound to ascertain or inquire as to the performance or observance of any covenants, conditions, or agreements on the part of the Issuer; but the Trustee may require of the Issuer full information and advice as to the performance of the covenants, conditions, and agreements aforesaid and as to the condition of the property herein conveyed. The Trustee shall not be responsible or liable for any loss suffered in connection with any investment of funds made by it in accordance with the provisions hereof. The Trustee shall have no responsibility with respect to any information, statement or recital in any offering memorandum or other disclosure material prepared or distributed with respect to the Bonds.

(c) The Trustee shall not be accountable for the use of any Bonds authenticated or delivered hereunder, except as specifically set forth herein. The Trustee may become the owner of Bonds secured hereby with the same rights which it would have if not Trustee.

(d) The Trustee shall be protected in acting upon any notice, request, consent, certificate, order, affidavit, letter, telegram, or other paper or document believed to be genuine and correct and to have been signed or sent by the proper person or persons. Any action taken by the Trustee pursuant hereto upon the request or authority or consent of any person who at the time of making such

request or giving such authority or consent is the Registered Owner of any Bond, shall be conclusive and binding upon all future Owners of the same Bond and upon Bonds issued in exchange therefor or in place thereof.

(e) As to the existence or nonexistence of any fact or as to the sufficiency or validity of any instrument, paper, or proceeding, the Trustee shall be entitled to rely upon a certificate signed on behalf of the Issuer by its Authorized Representatives as sufficient evidence of the facts therein contained and prior to the occurrence of an Event of Default as provided in Section 8.1(a) or 9.1(b) herein or an Event of Default which the Trustee has been notified or of which by Section 9.1 herein it is deemed to have notice, shall also be at liberty to accept a similar certificate to the effect that any particular dealing, transaction or action is necessary or expedient, but may at its discretion secure such further evidence deemed necessary or advisable, but shall in no case be bound to secure the same. The Trustee may accept a certificate of an Authorized Representative of the Issuer under its seal to the effect that a resolution in the form therein set forth has been adopted by the Issuer as conclusive evidence that such resolution has been duly adopted, and is in full force and effect.

(f) The permissive right of the Trustee to do things enumerated herein shall not be construed as a duty and the Trustee shall not be answerable for other than its gross negligence or willful misconduct.

(g) The Trustee shall not be required to take notice or be deemed to have notice of any Event of Default hereunder except an Event of Default that occurs under Sections 8.1(a) or 8.1(b) and a failure to fund or replenish the Series 2016 Reserve Account as provided herein, unless the Trustee shall be specifically notified in writing of such default by the Issuer or by the Registered Owners of at least 25% in the aggregate principal amount the Bonds then Outstanding and all notices or other instruments required hereby to be delivered to the Trustee must, in order to be effective, be delivered at the Principal Corporate Trust Office of the Trustee, and in the absence of such notice so delivered, the Trustee may conclusively assume there is no Event of Default except as aforesaid.

(h) At any and all reasonable times and upon reasonable prior written notice, the Trustee, and its duly authorized agents, attorneys, experts, engineers, accountants, and representatives shall have the right fully to inspect all books, papers, and records of the Issuer pertaining to the Bonds, and to take such memoranda from and in regard thereto as may be desired.

(i) The Trustee shall not be required to give any bond or surety in respect of the execution of the said trusts and powers identified herein or otherwise in respect of the premises.

(j) Notwithstanding anything elsewhere herein contained, the Trustee shall have the right, but shall not be required, to demand, in respect of the authentication of any Bonds, the withdrawal of any cash, the release of any

property, or any action whatsoever within the purview hereof, any showing, certificates, opinions, appraisals, or other information, or corporate action or evidence thereof, in addition to that by the terms hereof required as a condition of such action by the Trustee, deemed desirable for the authentication of any Bonds, the withdrawal of any cash, or the taking of any other action by the Trustee.

(k) All moneys received by the Trustee or the Paying Agent shall, until used or applied or invested as herein provided, be held in trust for the purposes for which they were received but need not be segregated from other funds except to the extent required by law. Neither the Trustee nor the Paying Agent shall be under any liability for interest on any moneys received hereunder except such as may be agreed upon.

(l) If any Event of Default hereunder shall have occurred and be continuing, the Trustee shall exercise such of the rights and powers vested in it hereby and shall use the same degree of care as a prudent man would exercise or use in the circumstances in the conduct of his own affairs.

(m) The Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request, order, or direction of any of the Bondholders or Reserve Instrument Providers, pursuant to the provisions of this Indenture, unless such Bondholders or Reserve Instrument Providers shall have offered to the Trustee security or indemnity acceptable to the Trustee against the costs, expenses, and liabilities which may be incurred therein or thereby.

Section 7.2 Fees, Charges, and Expenses of Trustee. The Trustee shall be entitled to payment and/or reimbursement for reasonable fees for its services rendered as Trustee hereunder and all advances, counsel fees, and other expenses reasonably and necessarily made or incurred by the Trustee in connection with such services. The Trustee shall be entitled to payment and reimbursement for the reasonable fees and charges of the Trustee as Paying Agent and Registrar for the Bonds as hereinabove provided. The Issuer shall pay and reimburse the Trustee for its fees and expenses as provided in this Section solely from amounts available to the Issuer as set forth in Section 5.1(a)(ii) and, if such amount is not sufficient, from the other sources available hereunder.

Section 7.3 Notice to Registered Owners if Event of Default Occurs. The Trustee shall give written notice of any Event of Default (as herein defined) relating to any Event of Default that occurs under Sections 8.1(a) or 8.1(b) by registered or certified mail to all Registered Owners of all Bonds then Outstanding shown on the registration books of the Bonds kept by the Trustee as Registrar for the Bonds.

Section 7.4 Intervention by Trustee. In any judicial proceeding to which the Issuer is a party and which in the opinion of the Trustee and its counsel has a substantial bearing on the interest of Registered Owners of the Bonds, the Trustee shall intervene on behalf of such Bondholders if requested in writing by the Registered Owners

of at least a majority in aggregate principal amount of the Bonds then Outstanding. The rights and obligations of the Trustee under this Section are subject to the approval of a court of competent jurisdiction.

Section 7.5 Successor Trustee. Any corporation or association into which the Trustee may be converted or merged, or with which it may be consolidated, or to which it may sell or transfer its corporate trust business and assets as a whole or substantially as a whole, or any corporation or association resulting from any such conversion, sale, merger, consolidation, or transfer to which it is a party, ipso facto, shall be and become successor Trustee hereunder and vested with all of the title to the whole property or trust estate and all the trusts, powers, discretions, immunities, privileges, and all other matters as was its predecessor, without the execution or filing of any instrument or any further act, deed of conveyance on the part of any of the parties hereto, anything herein to the contrary notwithstanding.

Section 7.6 Resignation by the Trustee. The Trustee and any successor Trustee may at any time resign from the trusts hereby created by giving written notice to the Issuer, served personally or by registered mail, and by registered or certified mail to each Registered Owner of Bonds then Outstanding, and such resignation shall take effect upon the appointment of a successor Trustee by the Registered Owners or by the Issuer as provided in Section 7.8 hereof; provided, however that if no successor Trustee has been appointed within sixty (60) days of the date of such notice of resignation, the resigning Trustee may petition any court of competent jurisdiction for the appointment of a successor Trustee, and such court may thereupon, after such notice, if any, as it deems proper and prescribes, appoint a successor Trustee.

Section 7.7 Removal of the Trustee. The Trustee may be removed at any time by an instrument or concurrent instruments in writing delivered to the Trustee, and signed by the Issuer (so long as the Issuer is not in default under any of its obligations hereunder) or signed by the Registered Owners of at least a majority in aggregate principal amount of Bonds then Outstanding, provided that such instrument or instruments concurrently appoint a successor Trustee meeting the qualifications set forth herein.

Section 7.8 Appointment of Successor Trustee; Temporary Trustee. In case the Trustee hereunder shall resign or be removed, or be dissolved, or shall be in course of dissolution or liquidation, or otherwise become incapable of acting hereunder, or in case it shall be taken under the control of any public officer or officers, or of a receiver appointed by a court, a successor may be appointed by the Issuer or by the Registered Owners of a majority in aggregate principal amount of Bonds then Outstanding, by an instrument or concurrent instruments in writing signed by such Bondholders, or by their attorneys in fact, duly authorized; provided, nevertheless, that in case of such vacancy the Issuer by an instrument executed by its Mayor and attested by its City Recorder under its seal, may appoint a temporary Trustee to fill such vacancy until a successor Trustee shall be appointed by the Registered Owners in the manner above provided; and any such temporary Trustee so appointed by the Issuer shall immediately and without further act be superseded by the Trustee so appointed by such

Registered Owners. Every successor Trustee (including any temporary Trustee) appointed pursuant to the provisions of this Section or otherwise shall be a trust company or bank in good standing having a reported capital and surplus of not less than $50,000,000.

Section 7.9 Concerning Any Successor Trustee. Every successor Trustee appointed hereunder shall execute, acknowledge, and deliver to its predecessor and also to the Issuer and all Bondholders an instrument in writing accepting such appointment hereunder, and thereupon such successor, without any further act, deed, or conveyance, shall become fully vested with all the estates, properties, rights, powers, trusts, duties, and obligations of its predecessor; but such predecessor shall, nevertheless, on the written request of the Issuer, or of the successor Trustee, execute and deliver an instrument transferring to such successor Trustee all the estates, properties, rights, powers, and trusts of such predecessor hereunder; and every predecessor Trustee shall deliver all Bonds and moneys held by it as Trustee hereunder to its successor. Should any instrument in writing from the Issuer be required by any successor Trustee for more fully and certainly vesting in such successor the estates, rights, powers, and duties hereby vested or intended to be vested in the predecessor, any and all such instruments in writing shall, on request, be executed, acknowledged, and delivered by the Issuer.

Section 7.10 Trustee Protected in Relying Indenture, Etc. This Indenture, opinions, certificates, and other instruments provided for herein may be accepted by the Trustee as conclusive evidence of the facts and conclusions stated therein and shall be full warrant and protection to the Trustee for the release of property and the withdrawal of cash hereunder.

Section 7.11 Successor Trustee; Paying Agent and Bond Registrar. In the event of a change in the office of Trustee, the predecessor Trustee which has resigned or been removed shall cease to be Trustee, Bond Registrar and Paying Agent hereunder, and the successor Trustee shall become such Trustee, Bond Registrar and Paying Agent for the Bonds.

Section 7.12 Trust Estate May Be Vested in Separate or Co-Trustee. It is the purpose of this Indenture that there shall be no violation of any law of any jurisdiction (including particularly the laws of the State) denying or restricting the right of banking corporations or associations to transact business as Trustee in such jurisdiction. It is recognized that in case of litigation hereunder, or in case the Trustee deems that by reason of any present or future law of any jurisdiction it may not exercise any of the powers, rights, or remedies herein granted to the Trustee or hold title to the trust estate, as herein granted, or take any other action which may be desirable or necessary in connection therewith, it may be necessary that the Trustee appoint an additional individual or institution as a separate or co-trustee.

In the event that the Trustee appoints an additional individual or institution as a separate or co-trustee, each and every remedy, power, right, claim, demand, cause of action, immunity, estate, title, interest, and lien expressed or intended hereby to be exercised by or vested in or conveyed to the Trustee with respect thereto shall be

exercisable by and vested in such separate or co-trustee, but only to the extent necessary to enable the separate or co-trustee to exercise such powers, rights, and remedies, and every covenant and obligation necessary to the exercise thereof by such separate or co-trustee shall run to and be enforceable by either of them.

Should any deed, conveyance, or instrument in writing from the Issuer be required by the separate trustee or co-trustee so appointed by the Trustee for more fully and certainly vesting in and confirming to it such properties, rights, powers, trusts, duties, and obligations, any and all such deeds, conveyances, and instruments in writing shall, on request of such trustee or co-trustee, be executed, acknowledged, and delivered by the Issuer. In case any separate trustee or co-trustee, or a successor to either, shall die, become incapable of acting, resign, or be removed, all the estates, properties, rights, powers, trusts, duties, and obligations of such separate trustee or co-trustee, so far as permitted by law, shall vest in and be exercised by the Trustee until the appointment of a new trustee or successor to such separate trustee or co-trustee.

Section 7.13 Accounting. The Trustee shall prepare a written monthly accounting for each calendar month by the end of the month following each such calendar month showing in reasonable detail all financial transactions relating to the funds and accounts held by the Trustee hereunder during the accounting period and the balance in any funds or accounts created hereby as of the beginning and close of such accounting period, and shall mail the same to the Issuer. On or before the end of the month following each calendar month, the Trustee shall, upon written request, provide to the Issuer and the Issuer's independent auditor, representations as to the accuracy of the facts contained in said financial report.

Section 7.14 Trustee's Right to Own and Deal in Bonds. The bank or trust company acting as Trustee under this Indenture, and its directors, officers, employees or agents, may in good faith buy, sell, own, hold, and deal in any of the Bonds issued hereunder and secured by this Indenture, and may join in any action which any Bondholder may be entitled to take with like effect as if such bank or trust company were not the Trustee under this Indenture.

ARTICLE VIII

EVENTS OF DEFAULT; REMEDIES

Section 8.1 Events of Default. Each of the following events is hereby declared an Event of Default:

(a) if payment of any installment of interest on any of the Bonds shall not be made by or on behalf of the Issuer when the same shall become due and payable, or

(b) if payment of the principal of or the redemption premium, if any, on any of the Bonds shall not be made by or on behalf of the Issuer when the same shall become due and payable, either at maturity, by mandatory sinking fund redemption or by proceedings for redemption in advance of maturity; or

(c) if an order or decree shall be entered, with the consent or acquiescence of the Issuer, appointing a receiver or custodian for any of the revenues of the Issuer, or approving a petition filed against the Issuer seeking reorganization of the Issuer under the federal bankruptcy laws or any other similar law or statute of the United States of America or any state thereof, or if any such order or decree, having been entered without the consent or acquiescence of the Issuer shall not be vacated or discharged or stayed on appeal within thirty (30) days after the entry thereof; or

(d) if any proceeding shall be instituted, with the consent or acquiescence of the Issuer, for the purpose of effecting a composition between the Issuer and its creditors or for the purpose of adjusting the claims of such creditors pursuant to any law or statute of the United States of America or any state thereof; or

(e) if (i) the Issuer is adjudged insolvent by a court of competent jurisdiction, or (ii) an order, judgment, or decree be entered by any court of competent jurisdiction appointing, without the consent of the Issuer, a receiver, trustee, or custodian of the Issuer or of the whole or any part of the Issuer's property and any of the aforesaid adjudications, orders, judgments, or decrees shall not be vacated or set aside or stayed within sixty (60) days from the date of entry thereof; or

(f) if the Issuer shall file a petition or answer seeking reorganization, relief, or any arrangement under the federal bankruptcy laws or any other applicable law or statute of the United States of America or any state thereof; or

(g) if the Issuer shall for any reason be rendered incapable of fulfilling its obligations hereunder; or

(h) if the Issuer defaults in the performance or observance of any covenant, agreement, or condition on the part of the Issuer hereunder or under the

Assessment Ordinance (other than defaults mentioned in (a) or (b) above) and fails to remedy the same for a period of thirty (30) days after notice of the default is given by the Trustee or Bondholders of at least a majority in aggregate principal amount of then Outstanding Bonds.

Section 8.2 Remedies; Rights of Bondholders. Upon the occurrence and continuance of any Event of Default, the Trustee may, upon request of the Bondholders of at least a majority in aggregate principal amount of the Bonds then Outstanding (subject to the indemnity provisions provided herein), pursue any available remedy by suit at law or in equity (including an action seeking the appointment of a receiver) to enforce payment on such Bonds or to enforce any obligation of the Issuer hereunder or under the Assessment Ordinance (including, without limitation, by writ of mandamus, action for specific performance, or otherwise). No remedy conferred upon or reserved to the Trustee (or to the Bondholders) is intended to be exclusive of any other remedy, but each remedy is cumulative and is in addition to every other remedy given hereunder and under the Assessment Ordinance or at law or otherwise to the Trustee or to the Bondholders.

The Bondholders of at least a majority in aggregate principal amount of Bonds then Outstanding shall have the right at any time to direct, by instruments delivered to the Trustee, the method and place of conducting all proceedings to be taken by the Trustee in connection with the enforcement of the terms and conditions of this Indenture and the Assessment Ordinance; provided, that such direction is in accordance with the provisions of law and of this Indenture and the Assessment Ordinance and the Trustee is indemnified to its satisfaction.

No delay or omission to exercise any right or power accruing upon any Event of Default shall impair any such right or power or shall be construed to be a waiver of any Event of Default or acquiescence therein; and every such right and power may be exercised from time to time and as often as may be deemed expedient.

No waiver of any Event of Default hereunder shall extend to or shall affect any subsequent Event of Default or shall impair any rights or remedies consequent thereon.

Section 8.3 Application of Moneys. All moneys received by the Trustee pursuant to any right given or action taken under the provisions of this Article shall, after payment of Trustee's fees and expenses (including Issuer's expenses) of the proceedings resulting in the collection of such moneys and of the expenses, liabilities and advances incurred or made by the Trustee, be deposited in the Bond Fund and all moneys so deposited in the Bond Fund (excluding moneys in the Redemption Account and Rebate Fund) together with any other money held in any fund established hereunder, shall be applied in the following order:

(a) To the payment of the principal of, premium, if any, and interest then due and payable on the Bonds as follows:

(i) Unless the principal of all of the Bonds shall have become due and payable, all such moneys shall be applied:

FIRST—To the payment to the Bondholders entitled thereto of all installments of interest then due on the Bonds in the order of the maturity of the installments of such interest and, if the amount available shall not be sufficient to pay in full any particular installment of interest, then to the payment pro rata, according to the amounts due on such installment, to the Bondholders entitled thereto, without any discrimination or privilege; and

SECOND—To the payment to the Bondholders entitled thereto of the unpaid Principal of and premium, if any, on the Bonds which shall have become due (other than Bonds called for redemption for the payment of which moneys are held pursuant to the provisions hereof), in the order of their due dates, and, if the amount available shall not be sufficient to pay in full all the Bonds due on any particular date, then to the payment ratably, according to the amount of Principal due on such date, to the persons entitled thereto without any discrimination or privilege.

(ii) If the principal of all the Bonds shall have become due and payable, all such moneys shall be applied to the payment of the principal, and interest then due and unpaid upon the Bonds, without preference or priority of principal over interest or of interest over principal, or of any installment of interest over any other installment of interest, or of any Bond over any other Bond, pro rata, according to the amounts due respectively for principal and interest, to the Bondholders entitled thereto without any discrimination or privilege.

(iii) To the payment of all obligations owed to all Reserve Instrument Providers, ratably, according to the amounts due without any discrimination or preference under any applicable agreement related to any Reserve Instrument Agreement.

Subject to compliance with Section 9.2 herein, whenever moneys are to be applied pursuant to the provisions of this Section, such moneys shall be applied at such times, and from time to time, as the Bondholders shall determine, having due regard to the amounts of such moneys available for such application and the likelihood of additional moneys becoming available for such application in the future. Whenever the Trustee shall apply such funds to be applied pursuant to this Section, it shall fix the date (which shall be an Interest Payment Date unless it shall deem another date more suitable) upon which such application is to be made and upon such date interest on the amounts of principal paid on such dates shall cease to accrue.

Section 8.4 Rights and Remedies of Bondholders. Except as provided in the last sentence of this Section, no Bondholder of any Bond shall have any right to

institute any suit, action, or proceeding in equity or at law for the enforcement hereof or for the execution of any trust thereof or for the appointment of a receiver or any other remedy hereunder. No one or more Bondholder of the Bonds shall have any right in any manner whatsoever to affect, disturb, or prejudice the lien hereof by its, his or their action or to enforce any right hereunder except in the manner herein provided, and that all proceedings at law or in equity shall be instituted, had and maintained in the manner herein provided and for the equal benefit of the Bondholders of all Bonds then Outstanding. Nothing herein contained shall, however, affect or impair the right of any Bondholder to enforce the covenants of the Issuer to pay the principal of, and premium, if any, and interest on, each of the Bonds issued hereunder held by such Bondholder at the time, place, from the source, and in the manner in said Bonds expressed.

Section 8.5 Termination of Proceedings. In case the Trustee or Bondholders shall have proceeded to enforce any right hereunder by the appointment of a receiver, or otherwise, and such proceedings shall have been discontinued or abandoned for any reason, or shall have been determined adversely to the Trustee or Bondholders, then and in every such case the Issuer, the Trustee and the Bondholder shall be restored to their former positions and rights hereunder, and all rights, remedies, and powers of the Trustee and Bondholders shall continue as if no such proceedings had been taken.

Section 8.6 Remedies Vested in Trustee. All rights of action (including the right to file proof of claims) hereunder or under any of the Bonds may be enforced by the Trustee without the possession of any of the Bonds or the production thereof in any trial or other proceedings related thereto and any such suit or proceedings instituted by the Trustee shall be brought in its name as Trustee without the necessity of joining as plaintiffs or defendants any Registered Owners of the Bonds, and any recovery of judgment shall be for the equal benefit of the Registered Owners of the Outstanding Bonds.

ARTICLE IX

SUPPLEMENTAL INDENTURES

Section 9.1 Supplemental Indentures and Ordinances Not Requiring Consent of Bondholders or Reserve Instrument Providers. The Issuer may, without the consent of, or notice to, any of the Bondholders or any Reserve Instrument Providers, enter into a Supplemental Indenture hereto, or adopt an ordinance or ordinances supplemental to the Assessment Ordinance as shall not be inconsistent with the terms and provisions hereof, for any one or more of the following purposes:

(a) To provide for the issuance of Additional Bonds in accordance with the provisions of Section 2.10 herein;

(b) To cure any inconsistency, ambiguity or defect or omission herein or in the Assessment Ordinance;

(c) To grant to or confer upon the Trustee for the benefit of the Bondholders any additional rights, remedies, powers or Issuer that may lawfully be granted to or conferred upon the Trustee or the Bondholders or any of them;

(d) To subject to this Indenture additional properties, collateral, or security; and

(e) To conform the Assessment Ordinance to any subdivision of the assessed property as described therein or to otherwise permit the adjustment of Assessments as deemed appropriate by the Issuer so long as the Issuer shall certify that the remaining balance of the Assessments being collected will be sufficient for payment of principal and interest on the Bonds.

Section 9.2 Supplemental Indentures and Ordinances Requiring Consent of Bondholders; Waivers and Consents by Bondholders. Exclusive of supplemental indentures and ordinances covered by Section 9.1 hereof and subject to the terms and provisions contained in this Section, and not otherwise, the Bondholders of at least a majority in aggregate principal amount of the Bonds then Outstanding, shall have the right, from time to time, anything contained herein to the contrary notwithstanding, to (a) consent to and approve the execution by the Issuer of such other supplemental indenture and ordinances supplemental to the Assessment Ordinance as shall be deemed necessary and desirable by the Issuer for the purpose of modifying, altering, amending, adding to, or rescinding any of the terms or provisions contained herein or in any supplemental indenture or in the Assessment Ordinance as supplemented, or (b) waive or consent to the taking by the Issuer of any action prohibited, or the omission by the Issuer of the taking of any action required, by any of the provisions hereof or of any supplemental indenture hereto or in the Assessment Ordinance as supplemented; provided, however, that nothing in this Section contained shall permit or be construed as permitting (i) an extension of the stated maturity or reduction in the principal amount of, or reduction in the rate of or extension of the time of paying of interest on, or reduction of any premium payable on

the redemption of, any Bond, without the consent of the Bondholder of such Bond, or (ii) except as provided in Section 9.1(e) a reduction in the amount or extension of the time of any Assessment or any other payment required hereunder or under the Assessment Ordinance to any fund established hereunder without the consent of the Bondholders of all the Bonds which would be affected by the action to be taken, or (iii) a reduction in the aforesaid aggregate principal amount of Bonds, the Bondholders of which are required to consent to any such waiver or supplemental indenture or ordinance, or (iv) affect the rights of the Bondholders of less than all Bonds then Outstanding, without the consent of the Bondholders of all the Bonds at the time Outstanding which would be affected by the action to be taken. Prior to any supplemental indenture or ordinance becoming effective under this Section, the Trustee shall have on file written consent to such supplemental indentures or ordinances executed by at least a majority in aggregate principal amount of all Bonds then Outstanding, and an opinion of bond counsel to the Issuer to the effect that the adoption of the supplemental indenture or ordinance will not adversely affect the excludability from gross income for federal income tax purposes of the interest payable on the Bonds.

If at any time the Issuer shall request the Trustee to enter into any such Supplemental Indenture for any of the purposes of this Section 10.2, the Trustee shall, upon being satisfactorily indemnified with respect to expenses, cause notice of the proposed execution of such Supplemental Indenture to be given by registered or certified mail to the Bondholder of each Bond shown by the list of Bondholders required to be kept at the office of the Trustee. Such notices shall briefly set forth the nature of the proposed Supplemental Indenture and shall state that copies thereof are on file at the principal office of the Trustee for inspection by all Bondholders. At the time such notices are mailed by the Trustee, the Issuer may, but is not required to, designate a reasonable time period for receipt of such consents and shall include such requirement in the notices sent to the Bondholders. If the Bondholders of not less than a majority in aggregate principal amount of the Bonds Outstanding at the time of the execution of any such Supplemental Indenture shall have consented to and approved the execution thereof as herein provided, no holder of any Bond shall have any right to object to any of the terms and provisions contained therein, or the operation thereof, or in any manner to question the propriety of the execution thereof, or to enjoin or restrain the Trustee or the Issuer from executing the same or from taking any action pursuant to the provisions thereof. Upon the execution of any such Supplemental Indenture as in this Article IX permitted and provided, the Indenture shall be and be deemed to be modified and amended in accordance therewith.

ARTICLE X

DISCHARGE OF INDENTURE

If the Issuer shall pay or cause to be paid, or there shall be otherwise paid or provision for payment made, to or for the Bondholders of the Bonds, the principal of and interest due or to become due thereon at the times and in the manner stipulated therein, and to pay all sums of money due or to become due according to the provisions of any Reserve Instrument Agreements, as applicable, and shall pay or cause to be paid to the Paying Agent all sums of moneys due or to become due according to the provisions hereof, then these presents and the estate and rights hereby granted shall cease, terminate, and be void, whereupon the Trustee at the request of the Issuer shall cancel and discharge the lien hereof, except moneys or Bonds held by the Trustee for the payment of the principal of and interest on the Bonds.

Any Bond shall be deemed to be paid within the meaning of this Article when payment of the principal of such Bond, plus premium, if any, and interest thereon to the due date thereof (whether such due date be by reason of maturity or upon redemption as provided herein, or otherwise), either (a) shall have been made or caused to have been made in accordance with the terms thereof or (b) shall have been provided by irrevocably depositing with the Trustee for the benefit of the Bondholders, in trust and irrevocably setting aside exclusively for such payment (i) moneys sufficient to make such payment or (ii) Government Obligations, maturing as to principal and interest in such amount and at such times as will insure the availability of sufficient moneys to make such payment, and all necessary and proper fees, compensation and expenses of the Trustee and any paying agent pertaining to the Bond with respect to which such deposit is made shall have been paid or the payment thereof provided for to the satisfaction of the Trustee. At such times as a Bond shall be deemed to be paid hereunder, as aforesaid, it shall no longer be secured by or entitled to the benefits hereof, except for the purposes of any such payment from such moneys or Government Obligations.

Notwithstanding the foregoing, in the case of Bonds, which by their terms may be redeemed prior to their stated maturity, no deposit under the immediately preceding paragraph shall be deemed a payment of such Bonds as aforesaid until the Issuer shall have given the Trustee, in form satisfactory to the Trustee, irrevocable instructions:

(a) stating the date when the principal of each such Bond is to be paid, whether at maturity or on a redemption date (which shall be any redemption date permitted hereby);

(b) directing the Trustee to call for redemption pursuant hereto any Bonds to be redeemed prior to maturity pursuant to the provisions of this Indenture; and

(c) instructed the Trustee to mail, as soon as practicable, in the manner prescribed by Article II hereof, a notice to the Bondholders of such Bonds which have been selected by the Trustee by lot that the deposit required by this Section

has been made with the Trustee and that such Bonds are deemed to have been paid in accordance with this Article and stating the maturity or redemption date upon which moneys are to be available for the payment of the principal or redemption price, if applicable, on said Bonds.

Any moneys so deposited with the Trustee as provided in this Article may at the direction of the Issuer also be invested and reinvested in Government Obligations, maturing in the amounts and times as hereinbefore set forth, and all income from all Government Obligations in the hands of the Trustee pursuant to this Article which is not required for the payment of the Bonds and interest thereon with respect to which such moneys shall have been so deposited, shall be deposited in the Bond Fund as and when realized and collected for use and application as are other moneys deposited in that fund; provided, however, that before any excess moneys shall be deposited in the Bond Fund, the Trustee shall first obtain a written verification from a firm of independent certified public accountants that the moneys remaining on deposit with the Trustee and invested in Government Obligations after such transfer to the Bond Fund shall be sufficient in amount to pay principal and interest on the Bonds when due and payable.

Notwithstanding any provision of any other Article hereof which may be contrary to the provisions of this Article, all moneys or Government Obligations set aside and held in trust pursuant to the provisions of this Article for the payment of Bonds (including interest thereon) shall be applied to and used solely for the payment of the particular Bonds (including interest thereon) with respect to which such moneys or Government Obligations have been so set aside in trust.

Anything herein to the contrary notwithstanding, if moneys or Government Obligations have been deposited or set aside with the Trustee pursuant to this Article for the payment of Bonds and such Bonds shall not have in fact been actually paid in full, no amendment to the provisions of this Article shall be made without the consent of the Bondholder of each Bond affected thereby.

ARTICLE XI

MISCELLANEOUS

Section 11.1 Consents, Etc., of Registered Owners. Any consent, request, direction, approval, objection, or other instrument required hereby to be executed by the Registered Owners or Reserve Instrument Providers may be in any number of concurrent writings of similar tenor and may be executed by such Registered Owners or Reserve Instrument Providers in person or by agent appointed in writing. Proof of the execution of any such consent, request, direction, approval, objection, or other instrument or of the writing appointing any such agent and of the ownership of Bonds, if made in the following manner, shall be sufficient for any of the purposes hereof, and shall be conclusive in favor of the Trustee with regard to any action taken under such request or other instrument, namely, the fact and date of the execution by any person of any such writing may be proved by the certificate of any officer in any jurisdiction who by law has power to take acknowledgments within such jurisdiction that the person signing such writing acknowledged before him the execution thereof, or by affidavit of any witness to such execution. The amount of Bonds held by any person executing such instrument as a Registered Owner of Bonds and the fact, amount and numbers of the Bonds held by such person and the date of his holding the same shall be proved by the registration books of the Trustee.

Section 11.2 Limitation of Rights. With the exception of rights herein expressly conferred, nothing expressed or mentioned in or to be implied from this Indenture or the Bonds is intended or shall be construed to give to any person other than the parties hereto, the Registered Owners of the Bonds and any Reserve Instrument Provider, any legal or equitable right, remedy, or claim under or in respect hereto or any covenants, conditions, and provisions herein contained, this Indenture and all of the covenants, conditions, and provisions hereof being intended to be and being for the sole and exclusive benefit of the parties hereto, the Registered Owners of the Bonds and any Reserve Instrument Provider as herein provided.

Section 11.3 Severability. If any provision hereof shall be held or deemed to be or shall, in fact, be inoperative or unenforceable as applied in any particular case in any jurisdiction or in all jurisdictions, or in all cases because it conflicts with any other provision or provisions hereof or any constitution or statute or rule of public policy, or for any other reason, such circumstances shall not have the effect of rendering the provision in question inoperative or unenforceable in any other case or circumstance, or of rendering any other provision or provisions herein contained invalid, inoperative, or unenforceable to any extent whatever.

The invalidity of any one or more phrases, sentences, clauses, or Sections herein contained, shall not affect the remaining portions hereof, or any part thereof.

Section 11.4 Notices. It shall be sufficient service of any notice, request, complaint, demand, or other paper on the Issuer or Bondholders and the Trustee if the

same shall be duly mailed by registered or certified mail addressed to it at the following addresses or to such address as the parties may from time to time file with the Trustee:

If to the Issuer:	City of Saratoga Springs, Utah 1307 North Commerce Drive, Suite 200 Saratoga Springs, Utah 84045 Attention: Mayor
If to the Trustee:	_____ Corporate Trust Services _____ Salt Lake City, Utah 84111

Section 11.5 Trustee as Paying Agent and Registrar. The Trustee is hereby designated and agrees to act as Paying Agent and Bond Registrar for and in respect to the Bonds.

Section 11.6 Counterparts. This Indenture may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

Section 11.7 Applicable Law. This Indenture shall be governed exclusively by the applicable laws of the State.

Section 11.8 Immunity of Officers and Directors. No recourse shall be had for the payment of the principal of or premium or interest on any of the Bonds or for any claim based thereon or upon any obligation, covenant, or agreement herein contained against any past, present, or future officer, or other public official, employee, or agent of the Issuer.

Section 11.9 Holidays. If any date for the payment of principal of or interest on the Bonds is not a Business Day, then such payment shall be due on the first Business Day thereafter and no interest shall accrue for the period between such date and such first Business Day thereafter.

Section 11.10 Effective Date. This Indenture shall become effective immediately.

Section 11.11 Compliance with Act. It is hereby declared that it is the intention of the Issuer by the execution of this Indenture to comply in all respects with the provisions of the Act.

IN WITNESS WHEREOF, the parties hereto have caused this Indenture to be executed as of the date first written above.

CITY OF SARATOGA SPRINGS, UTAH,
as Issuer

(SEAL)

By:_____
Mayor

ATTEST:

By:_____
City Recorder

_____, as Trustee

By: _____

Title:_____

EXHIBIT A

FORM OF BONDS

Each fully registered Bond shall be, respectively, in substantially the following form, with such insertions or variations as to any redemption or amortization provisions and such other insertions or omissions, endorsements, and variations as may be required:

Registered Registered

UNITED STATES OF AMERICA
STATE OF UTAH
CITY OF SARATOGA SPRINGS, UTAH
SPECIAL ASSESSMENT BONDS
(MT. SARATOGA ASSESSMENT AREA)
SERIES 2016

Number R - $_____

Interest Rate	Maturity Date	Original Issue Date
%		

Registered Owner: _____

Principal Amount:_____ AND NO/100 DOLLARS

The City of Saratoga Springs, Utah (the "Issuer"), a body politic and corporate duly organized and existing under the Constitution and laws of the State of Utah, acknowledges itself indebted and for value received hereby promises to pay to the Registered Owner named above, or registered assigns, on the Maturity Date identified above, upon presentation and surrender hereof, the Principal Amount identified above, and to pay the Registered Owner hereof interest on the balance of said Principal Amount from time to time remaining unpaid at the Interest Rate per annum (calculated on the basis of a year of 360 days and twelve 30-day months) identified above, payable annually on each _____ and _____, beginning _____, 2016, until payment in full of said Principal Amount, except as the provisions set forth in the hereinafter mentioned Indenture with respect to redemption prior to maturity may become applicable hereto. Interest on this Bond shall accrue from the Interest Payment Date next preceding the date on which it is authenticated, unless (a) it is authenticated before the first Interest Payment Date following the Original Issue Date identified above, in which case interest shall accrue from the Original Issue Date, or (b) if this Bond is authenticated on an Interest Payment Date, in which case interest shall accrue from such Interest Payment Date; provided that if at the time of authentication of this Bond, interest is in default, interest shall accrue from the date to which interest has been paid in full.

Principal of and premium, if any, on this Bond shall be payable upon surrender of this Bond at the principal corporate trust office of _____, Salt Lake City, Utah, as Paying Agent; and payment of the interest hereon shall be made to the Registered Owner hereof and shall be paid by check or draft mailed or to owners of $1,000,000 or more of Bonds (or 100% of the Bonds) by wire in immediately available funds to the person who is the Registered Owner of record as of the Bond Registrar's close of business on the fifteenth day immediately preceding each Interest Payment Date at the address of such Registered Owner as it appears on the registration books kept by the hereinafter defined Bond Registrar, or at such other address as is furnished in writing by such Registered Owner to the Bond Registrar as provided in the hereinafter defined Indenture. Principal of and interest on this Bond shall be payable in any coin or currency of the United States of America which at the time of payment is legal tender for the payment of public and private debts.

This Bond is one of the Special Assessment Bonds (Mt. Saratoga Assessment Area), Series 2016 of the Issuer (the "Bonds") limited to the aggregate principal amount of $_____ issued under and by virtue of the Assessment Area Act, Title 11, Chapter 42, Utah Code Annotated 1953, as amended (the "Act"), and under and pursuant to an Indenture of Trust and Pledge dated as of _____, 2016, by and between the Issuer and the Trustee (the "Indenture"), for the purpose of (a) acquiring, constructing and installing water system improvements including culinary water distribution lines, a concrete storage tank, booster station, and secondary water lines; sanitary sewer collection lines; storm drain improvements; and road construction improvements along with other necessary miscellaneous improvements, and to complete said improvements in a proper and workmanlike manner (collectively, the "Improvements"). (b) funding the Capitalized Interest Account, and (c) paying issuance expenses incurred in connection with the issuance of the Bonds, including the premium for the Reserve Policy deposited in the Series 2016 Reserve Account.

The Bonds are issuable solely in the form of registered bonds without coupons in the denomination of $5,000 thereof.

The Bonds are subject to redemption as provided in the Indenture.

_____ is the initial trustee, bond registrar, and paying agent with respect to the Bonds. Said trustee, bond registrar, and paying agent, together with any successor trustee, bond registrar, or paying agent, respectively, is referred to herein as the "Trustee," the "Bond Registrar," and the "Paying Agent."

Payment of this Bond and the interest thereon shall be made from, and as security for such payment there is pledged a first lien on the moneys on deposit in, the Bond Fund of the City of Saratoga Springs, Utah, containing the receipts derived by the Issuer from the Assessments levied upon the property included in the Assessment Area by the Assessment Ordinance adopted by the Issuer on October 4, 2016, as amended from time to time (the "Assessment Ordinance").

It is hereby certified that a Series 2016 Reserve Account has been created and the Issuer agrees that at all times during the life of this Bond and until payment thereof in full, said Fund shall be maintained as described in the Indenture. This Bond is not a general obligation of the Issuer, but is payable exclusively out of the funds described in the Indenture. The Issuer shall not be liable for the payment of the Bond, except to the extent of the funds created and received from (a) proceeds from the sale of the Bond, (b) the Assessments including Assessments collected through foreclosure sales resulting from unpaid Assessments, and (c) moneys on deposit in the Series 2016 Reserve Account, but the Issuer shall be held responsible for the lawful levy of all Assessments, for the creation and maintenance and replenishment of the Series 2016 Reserve Account as provided herein, and for the faithful accounting, collection, settlement, and payment of the Assessments. The Issuer may apply at its sole discretion any other legally available funds or revenues to the payment of the principal and interest on the Bond.

The Assessments made and levied pursuant to the Assessment Ordinance, with accruing interest thereon, and the cost of collection of the Assessments constitute a lien upon and against the property upon which such Assessments were made and levied from and after the date upon which the Assessment Ordinance, which lien is superior to the lien of any trust deed, mortgage, mechanic's or materialman's lien, or other encumbrance. Said lien is equal to and on a parity with the lien for general property taxes and shall continue until the Assessments and interest thereon are paid, notwithstanding any sale of the property for or on account of a delinquent general property tax, special tax, other assessment, or the issuance of a tax deed, an assignment of interest by the Issuer, or a sheriff's certificate of sale or deed.

This Bond is transferable, as provided in the Indenture, only upon the books of the Issuer kept for that purpose at the principal corporate trust office of the Bond Registrar, by the Registered Owner hereof in person or by his attorney duly authorized in writing, upon surrender hereof together with a written instrument of transfer satisfactory to the Bond Registrar, duly executed by the Registered Owner or such duly authorized attorney, and thereupon the Issuer shall issue in the name of the transferee a new registered Bond or Bonds of authorized denominations of the same aggregate principal amount, series, designation, maturity and interest rate as the surrendered Bond, all as provided in the Indenture and upon the payment of the charges therein prescribed. No transfer of this Bond shall be effective until entered on the registration books kept by the Bond Registrar. The Issuer, the Trustee, the Bond Registrar and the Paying Agent may treat and consider the person in whose name this Bond is registered on the registration books kept by the Bond Registrar as the holder and absolute owner hereof for the purpose of receiving payment of, or on account of, the principal or redemption price hereof and interest due hereon and for all other purposes whatsoever, and neither the Issuer, nor the Bond Registrar nor the Paying Agent shall be affected by any notice to the contrary.

Except as otherwise provided herein and unless the context clearly indicates otherwise, words and phrases used herein shall have the same meanings as such words and phrases in the Indenture.

This Bond and the issue of which it is a part are issued in conformity with and after full compliance with the Constitution of the State of Utah and pursuant to the provisions of the Act and all other laws applicable thereto. It is hereby certified and recited that all conditions, acts, and things required by the Constitution or statutes of the State of Utah and by the Act and the Indenture to exist, to have happened, or to have been performed precedent to or in connection with the issuance of this Bond exist, have happened, and have been performed and that the issue of Bonds, together with all other indebtedness of the Issuer, is within every debt and other limit prescribed by said Constitution and statutes, and that the aggregate amount of Bonds of the Issuer for the Assessment Area, including this Bond, does not exceed the amount authorized by law nor the special assessment levied to cover the cost of the Improvements in the Assessment Area, and that all said special Assessments have been lawfully levied.

This Bond shall not be valid until the Certificate of Authentication hereon shall have been manually signed by the Bond Registrar.

IN WITNESS WHEREOF, THE ISSUER has caused this Bond to be signed in its name and on its behalf by the Mayor Pro Tempore and attested by the City Recorder, acting as the officers of the Issuer, and has caused its seal to be printed hereon.

(SEAL)

By:_____(Do Not Sign)_____
Mayor Pro Tempore

ATTEST:

By:_____(Do Not Sign)_____
City Recorder

CERTIFICATE OF AUTHENTICATION

This Bond is one of the City of Saratoga Springs Utah, Special Assessment Bonds (Mt. Saratoga Assessment Area), Series 2016 described in the within mentioned Indenture.

_____

By:_____
Authorized Officer

Date of authentication: _____, 2016.

ABBREVIATIONS

The following abbreviations, when used in the inscription on the face of the within Bond, shall be construed as though they were written out in full according to applicable laws or regulations.

TEN COM	–	as tenants in common
TEN ENT	–	as tenants by the entireties
JT TEN	–	as joint tenants with right of survivorship and not as tenants in common

UNIF GIFT MIN ACT _____
(Cust.)

Custodian for_____
(Minor)

under Uniform Gifts to Minors Act of_____
(State)

Additional abbreviations may also be used though not in the above list.

ASSIGNMENT

FOR VALUE RECEIVED, _____, the undersigned sells, assigns, and transfers unto:

_____

(Social Security or Other Identifying Number of Assignee)

_____

(Please Print or Typewrite Name and Address of Assignee)

the within Bond and all rights thereunder, and hereby irrevocably constitutes and appoints _____ attorney for registration thereof, with full power of substitution in the premises.

DATED:_____

Signature:_____

NOTICE: The signature to this assignment must correspond with the name of the Registered Owner as it appears upon the face of the within Bond in every particular without alteration or enlargement or any change whatever.

Signature Guaranteed:

_____

NOTICE: The signature(s) should be guaranteed by an eligible guarantor institution (banks, stockbrokers, savings and loan associations and credit unions with membership in an approved signature guarantee medallion program), pursuant to S.E.C. Rule 17Ad-15.

EXHIBIT B

PURCHASE AGREEMENT

(See Transcript Document No. 9)

EXHIBIT C

COST OF ISSUANCE DISBURSEMENT REQUEST

_____

_____

Salt Lake City, Utah 84111

Pursuant to Section 5.5 of the Indenture of Trust and Pledge dated as of _____, 2016, you are hereby authorized to pay to the following costs of issuance from the Series 2016 Cost of Issuance Fund:

[See Attached Schedule]

CITY OF SARATOGA SPRINGS, UTAH

By:_____

Mayor

Costs of Issuance

Payee	Purpose	Amount

EXHIBIT D

FORM OF REQUISITION

Re: City of Saratoga Springs, Utah Special Assessment Bonds (Mt. Saratoga Assessment Area), Series 2016, in the sum of $_____

_____

_____

Salt Lake City, Utah 84111

You are hereby authorized to disburse from the Construction Fund with regard to the above-referenced bond issue the following:

REQUISITION NUMBER: _____

NAME AND ADDRESS OF PAYEE: _____

_____

_____

_____

AMOUNT: $_____

PURPOSE FOR WHICH EXPENSE HAS BEEN INCURRED: _____

_____

_____

Each obligation, item of cost, or expense mentioned herein has been properly incurred, is a proper charge against the Construction Fund based upon audited, itemized claims substantiated in support thereof (evidence of such support not herein required by the Trustee), and has not been the basis for a previous withdrawal.

DATED:_____

CITY OF SARATOGA SPRINGS, UTAH

By:_____

Its:_____

BOND PURCHASE AGREEMENT

$_____
CITY OF SARATOGA SPRINGS, UTAH

SPECIAL ASSESSMENT BONDS (MT. SARATOGA ASSESSMENT AREA), SERIES 2016

_____, 2016

City of Saratoga Springs
1307 North Commerce Drive, Suite 200
Saratoga Springs, Utah 84045

The undersigned, _____., its successors and assigns, (the "Purchaser"), offers to purchase from the City of Saratoga Springs, Utah (the "Issuer"), all (but not less than all) of the $_____ Special Assessment Bonds (Mt. Saratoga Assessment Area), Series 2016 (the "Series 2016 Bonds") of the Issuer for the par amount thereof, with delivery and payment at the offices of Ballard Spahr LLP in Salt Lake City, Utah, based upon the covenants, representations, and warranties set forth below. This offer is made subject to your acceptance of this Bond Purchase Agreement (the "Bond Purchase Agreement") on or before 11:59 p.m., Utah time, on the date hereof.

1. Upon the terms and conditions and upon the basis of the representations set forth herein, the Purchaser hereby agrees to purchase from the Issuer, and the Issuer hereby agrees to sell and deliver to the Purchaser, the Series 2016 Bonds. Exhibit A, which is hereby incorporated by reference into this Bond Purchase Agreement, contains a brief description of the Series 2016 Bonds, the manner of their issuance, the purchase price to be paid, and the expected date of delivery and payment therefor (the "Closing").

2. You represent and covenant to the Purchaser that (a) you have the power and authority to enter into and perform this Bond Purchase Agreement, to adopt the resolution dated November 1, 2016 (the "Resolution"), to adopt the Assessment Ordinance, dated October 4, 2016 (the "Assessment Ordinance"), to enter into, execute, and deliver the Indenture of Trust and Pledge (the "Indenture") dated as of November 1, 2016, between the Issuer and _____ (the "Trustee"), and to deliver and sell the Series 2016 Bonds to the Purchaser, (b) this Bond Purchase Agreement, the Indenture, and the Series 2016 Bonds do not and will not conflict with or create a breach or default under any existing law, regulation, order, or agreement to which the Issuer is subject, (c) no governmental approval or authorization other than the Resolution is required in connection with the sale of the Series 2016 Bonds to the Purchaser, (d) this Bond Purchase Agreement, the Resolution, the Indenture, Assessment Ordinance, and the Series 2016 Bonds are and shall be at the time of the Closing legal, valid, and binding obligations of the Issuer enforceable in accordance with their respective terms, subject only to applicable bankruptcy, insolvency, or other similar laws generally affecting creditors' rights, (e) the Issuer has the legal right, power, and authority to collect and pledge the Assessments (as defined in the Indenture), and (f) there is no action, suit,

proceeding, inquiry, or investigation, at law or in equity, before or by any court, public board, or body, pending or, to the knowledge of the Issuer, threatened against or affecting the Issuer or affecting the corporate existence of the Issuer or the titles of its officers to their respective offices or seeking to prohibit, restrain, or enjoin the sale, issuance, or delivery of the Series 2016 Bonds or in any way contesting or affecting the transactions contemplated hereby or the validity or enforceability of the Series 2016 Bonds, the Resolution, the Assessment Ordinance, the Indenture, or this Bond Purchase Agreement, or contesting the powers of the Issuer or any authority for the issuance, sale and delivery of the Series 2016 Bonds, the adoption of the Resolution, the Assessment Ordinance or the execution and delivery of this Bond Purchase Agreement and the Indenture, or contesting the Issuer's power to levy, collect, and pledge the Assessments levied pursuant to the Assessment Ordinance.

3. As conditions to the Purchaser's obligations hereunder:

(a) From the time of the execution and delivery of this Bond Purchase Agreement to the date of Closing, there shall not have been any (i) material adverse change in the financial condition or general affairs of the Issuer; (ii) event, court decision, proposed law, or rule which may have the effect of changing the federal income tax incidents of the Series 2016 Bonds or the interest thereon or the contemplated transaction; or (iii) international or national crisis, suspension of stock exchange trading, or banking moratorium materially affecting in an adverse way, in the Purchaser's opinion, the market price of the Series 2016 Bonds.

(b) At the Closing, the Issuer will deliver or make available to the Purchaser:

(i) The Series 2016 Bonds, in definitive form, duly executed;

(ii) The Resolution and the Assessment Ordinance in final form, duly executed and delivered;

(iii) Duly executed copies of the Indenture;

(iv) A certificate from authorized officers of the Issuer, in form and substance acceptable to the Purchaser, to the effect that the representations and information of the Issuer contained in this Bond Purchase Agreement and the Indenture are true and correct when made and as of the Closing as if made as of the time of the Closing;

(v) Acknowledgment of the costs of issuance budget with respect to the issuance of the Series 2016 Bonds (such costs to include Bond Counsel fees, counsel fees, Purchaser's counsel fees and Trustee fees);

(vi) The approving opinion of Ballard Spahr LLP, Bond Counsel to the Issuer, satisfactory to the Purchaser dated the date of

Closing, relating to the legality and validity of the Series 2016 Bonds and the excludability of interest on the Series 2016 Bonds from gross income of the holders thereof for federal income tax purposes; and

(vii) Such additional certificates, instruments, and other documents as the Purchaser may deem necessary with respect to the issuance and sale of the Series 2016 Bonds, all in form and substance satisfactory to the Purchaser.

(c) On the date of Closing, the Issuer shall receive payment of the purchase price to be paid for its Series 2016 Bonds to be issued in the total principal amount of $_____ from the Purchaser thereof.

4. The Issuer will pay the cost of the fees and disbursements of counsel to the Issuer, and of Bond Counsel, Trustee fees, Purchaser's counsel fees, Municipal Advisor's fees and the cost of preparing and printing the Series 2016 Bonds.

5. This Bond Purchase Agreement is intended to benefit only the parties hereto, and the Issuer's representations and warranties shall survive any investigation made by or for the Purchaser, delivery, and payment for the Series 2016 Bonds, and the termination of this Bond Purchase Agreement.

6. This Bond Purchase Agreement shall be governed by the laws of the State of Utah.

7. This Bond Purchase Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument. This Bond Purchase Agreement shall become effective upon the execution by the parties hereto.

_____

By:_____

Accepted on behalf of
CITY OF SARATOGA SPRINGS, UTAH

By:_____
Mayor

ATTEST AND COUNTERSIGN:

By:_____
City Recorder

(SEAL)

EXHIBIT A

DESCRIPTION OF SERIES 2016 BONDS

1.	Issue Size:	$
2.	Purchase Price:	$
3.	Purchaser's Fee:	$
4.	Purchaser's Counsel's Fee:	$
5.	Accrued Interest:	$0
6.	Principal Payment Dates:	See below
7.	Interest Payment Dates:	_____, beginning _____
8.	Interest Rate:	
9.	Final Maturity Date:	
10.	Dated Date:	Date of initial delivery
11.	Form:	Registered Bonds
12.	Closing Date:	_____ or as otherwise agreed upon
13.	Redemption:	[The Series 2016 Bonds are subject to optional, and extraordinary redemption as provided in the Indenture.]

14. [Mandatory Sinking Fund Redemption: The Bonds are subject to mandatory sinking fund redemption as follows:

Mandatory Sinking Fund Redemption Date (_____)	Amount

_____

*Final Maturity

CITY OF SARATOGA SPRINGS
CITY COUNCIL MEETING MINUTES
Tuesday, October 4, 2016
City of Saratoga Springs City Offices
1307 North Commerce Drive, Suite 200, Saratoga Springs, Utah 84045

City Council Work Session

Call to Order: 6:31 p.m. by Mayor Jim Miller
Present Council Members Chris Porter, Shellie Baertsch, Michael McOmber, and Bud Poduska.

Staff City Manager Mark Christensen, City Attorney Kevin Thurman, Assistant City Manager Spencer Kyle, Planning Director Kimber Gabryszak, City Engineer Gordon Miner, Public Relations Economic Development Manager Owen Jackson, Senior Planner Sarah Carroll, City Recorder Cindy LoPiccolo

Code Amendment, Section 19.05.16 – Accessory Dwelling Units (ADUs)

Planning Director Kimber Gabryszak opened work session for review of proposed code amendments concerning ADUs as response to numerous public inquiries if an addition of an ADU is allowed in the City, and in review of limitation of new multi-family dwellings to comply with State and Federal moderate income housing requirements. Director Gabryszak reviewed benefits, impacts, and options for specific restrictions and requirements.

City Manager Christensen explained the Good Landlord Program sponsored by the Utah Apartment Association provides seminars, training, legal documents to assist landlords and managers.

Council members Porter, Willden and Poduska commented in general acceptance with specific restrictions and requirements in regard to lot size, parking, ADU size, owner occupancy, building and design standards, unit and occupancy limitation, owner leave of absence may not lease to second party, and half acre lot requirement for detached unit; Council Member Porter noted lessees in military service have extraordinary protection. Council Members McOmber and Baertsch commented in opposition to a code amendment concerning ADUs noting formal request has not been submitted by residents, residents are clear they do not want additional multi-family, expressed concerns with enforcement, increase in occupancy counts, allowance and impacts of Air B&Bs; Council Member Baertsch noted if amendment were to pass she recommended, in addition to all other restrictions and conditions, a detached unit setback be the same as the house, an absent homeowner not be allowed longer than a year, and parking be covered as currently required.

City Council Policy Meeting

Call to Order: Mayor Jim Miller called the Policy Session to order at 7:05 p.m.

Roll Call:
Present Council Members Chris Porter, Stephen Willden, Michael McOmber, Bud Poduska, andShellie Baertsch.
Staff Present City Manager Mark Christensen, City Attorney Kevin Thurman, Assistant City Manager Spencer Kyle, Public Relations Economic Development Manager Owen Jackson, Police Chief Andrew Burton, Planning Director Kimber Gabryszak, Fire Chief Jess Anderson, City Engineer Gordon Miner, Senior Planner Sarah Carroll, City Recorder Cindy LoPiccolo

Invocation by Council Member McOmber.
Pledge of Allegiance led by Scout Connor Monson of Troop 1458.

Public Input:
Mayor Miller invited public input.

Scott Gill, Aspen Hills, noted other Aspen Hills residents in attendance at this meeting, their attendance at the UDOT open house, and advised the neighborhood consensus is that local roads should not be designed to connect into Mountain View Corridor.

Presentation:
Swearing in of Youth Council Members was continued to November 1, 2016.

Reports:

Council Member Willden reported he attended a portion of the Jordan River Commission Annual Strategic Planning Retreat on September 29, 2016, Planner Kara Knighton also attended on the City's behalf bringing up several good points, and noted many of the planned future projects will be of direct benefit to the City. Director Gabryszak advised a copy of the meeting summary will be provided to Council for their information.

Council Member McOmber reported he attended the Chamber of Commerce luncheon today noting the speaker's presentation was on business engagement, interaction and communication skills; recommended similar business communication training for front and customer service staff.

Council Member Baertsch advised she attended the Alpine School District bond meeting and reported the District is seeking a bond that would in part provide for an Eagle Mountain high school, a middle-school in Saratoga Springs, elementary schools and funding for Title 1 programs; a support sign up sheet and detailed information is available on the District web site.

Council Member Baertsch reported Cameron Martin of Utah Valley University (UVU) advised they will present their final Master Plan on Friday from noon to 1 pm, and extended an invitation to attend.

Council Member Baertsch presented a reminder that Friday is the Great Pumpkin Fall Festival at Shay Park, running from 5:30 pm to 8:30 pm with the train and activities; requested staff watch traffic and parking as this is the first festival being held at the park; Chief Burton noted an officer is specifically assigned to this event.

Council Member Willden reported he has received neutral public feedback concerning the City's use of recording of phone calls. City Manager Christensen advised staff has begun to record calls which were audited by Finance Manager Rawlings and customer service training will be initiated, noted long term issues were found concerning the cataloguing and management of recordings in a searchable capacity, the current retention of recordings is three years which can be amended and staff will bring the data management issue back to Council.

Director Gabryszak announced new Planner I Jeffrey W. Attermann was recently hired and has begun work in the Planning Department.

Police Chief Burton presented Aspen Hills Boulevard and Stillwater Drive traffic monitoring reports; Mayor and Council requested the City share information with concerned citizens and post on media. Council Member McOmber requested staff review the matter of buses from Eagle Mountain and possible Thunder Ridge taking a short cut to get back to the bus yard and they are going 30-35 mph through the Sunset Haven neighborhood to avoid 4th South and the Lake View Academy, most are empty; and review for addition of a no parking red curb on one side of Marine Way corner/dead end to defray congestion.

City Manager Christensen requested Council consider extension of the Market Street soil removal contract to December, 2017 to allow transfer of soils for use at the sports complex; Council concurred.

PUBLIC HEARING:

1. **HADCO – Rezone, Master Development Agreement (MDA); Ordinance 16-23 (10-4-16)**.

Director Gabryszak presented the staff report and recommendation concerning the HADCO application for Rezone (Agriculture to Industrial) and Master Development Agreement concerning approximately 40.99 acres located approximately 1800 N. 1000 West (west of Harvest Hills, south of The Springs); noted the Planning Commission held a public hearing on September 22, 2016 and voted to forward positive recommendations on both with slightly modified conditions and statement that all of the uses allowed within the Industrial zone be conditional as identified within the current code. Director Gabryszak noted the General Plan currently designates this property as Industrial, mining activity is being conducted, the accompanying MDA provides that the property will be subject to the City's Industrial zone regulations and any future permits and development will fall under City regulations. Director Gabryszak further noted the company conducts mining within the City of Eagle Mountain and Eagle Mountain has recently imposed a mining moratorium on future mining permits in their mining overlay in order to conduct studies; they have agreed to share this information with Saratoga Springs and Hadco has already complied with most of the expected conditions.

Brad Cahoon of Snell & Wilmer, Legal Counsel for the Applicant, commented in concurrence with the staff report and is available for questions.

Mayor Miller opened the hearing and invited public comment. There being none, closed the hearing.

In response to inquiry from Council Member Baertsch, City Attorney Thurman clarified in order to change the use from mining or add a facility the applicant must meet all City requirements including the dedication of water, and provision of source and distribution, noted the current non-conforming mining use is permitted subject to the original County requirements and the MDA states they are vested with the uses and zone.

Council Member Baertsch noted concern with the lack of rear setback required for a structure to abut to commercial industrial agricultural, and requested staff review and provision for code adjustment as some setback is necessary. John Hatfield, representing Hadco, responded the company conducts its mining activities up to the property lines, holds large mining permits and is heavily regulated by state and federal entities, including the Department Environmental Quality (DEQ); noted there is substantial protection and conduct of quarterly and bi-annual inspections. Council Member Baertsch noted City code does not provide for mining processes and requested staff provide reference to State code regulations in the code in regard to industrial use; Council Members McOmber and Porter concurred.

Council Member Poduska commented in support of the rezone. In response to Council Member Poduska's inquiry concerning road access, Mr. Calhoon advised Hadco and the City have spoken to the property owner and power company, the parties are in agreement and working through the issues.

<u>Motion by Council Member Baertsch to approve Ordinance 16-23 (10-4-16) approving the Rezone, and the Master Development Agreement, with all staff findings and conditions, was seconded by Council Member Porter</u>
<u>Roll Call Vote: Council Members Porter, Willden, McOmber, Poduska, and Baertsch - Aye.</u>
<u>Motion carried unanimously</u>.

BUSINESS ITEMS:

1. **Secondary and Culinary Water System Project Agreements with Hansen, Allen & Luce, Inc. (Engineers), for design services and contract management for the following projects; Resolution R16-53 (10-4-16)**.
Foohill North Pipeline, not to exceed $106,300
Foothill South Pipline and Pump Station, not to exceed $197,100
Zone 1 North Water Line Project, not to exceed $148,700
Zone 2 North Pond and Pump Station, not to exceed $315,000
Zone 2 South Pond and Transmission Line, not to exceed $271,300

City Manager Christensen presented the staff report and recommendation for service agreements for water projects related to the development of the systems to meet the City's needs, and noted a water project and fiscal impact summary is provided in the written report.

Motion by Council Member Porter to approve the secondary and culinary water system project agreements with Hansen, Allen & Luce, Inc. (Engineers), for design services and contract management as stated on the agenda, and Resolution R16-53 (10-4-16), was seconded by Council Member McOmber
Roll Call Vote: Council Members Baertsch, Poduska, McOmber, Willden, and Porter - Aye
Motion carried unanimously.

2. **Marina Pump Station – Site Plan and Conditional Use Permit (CUP)**.

Senior Planner Sarah Carroll presented the staff report and recommendation regarding the Marine Pump Station Site Plan and CUP applications for the construction of a secondary irrigation pump station at the Marina to collect water from Utah Lake for irrigation in the southern part of the City, and a review of the site, proposed structure design and landscaping.

In response to Mayor Miller, City Manager Christensen reported the City will be conducting substantial dredging of the lake at its current low level to create a channel to allow water flow, and staff is also working on acquiring additional water rights; he noted the City included a bid alternative to dredge the entire Marina, and staff will be asking Utah Lake Commission to amend the City's application to allow the dredging within the existing grant.

In response to discussion, Senior Planner Carroll commented she will check if the cupola included on the restroom structure has purpose.

Council Member Baertsch noted inclusion of sidewalk was beneficial and recommended the timing and decision for the landscape plan coincide with the other half of the marina project, do all at once.

Motion by Council Member Willden to approve the Marina Pump Station Site Plan and CUP, with all staff findings and conditions, was seconded by Council Member Poduska
Roll Call Vote: Council Members Poduska, Baertsch, McOmber, Willden, and Porter - Aye
Motion carried unanimously.

3. **Communities That Care – Interlocal Cooperation Agreement with Utah County for Substance Abuse Prevention Services and Communities That Care Prevention Model; Resolution R16-54 (10-4-16)**.

Public Relations Economic Development Manager Owen Jackson presented the staff report and recommendation for adoption of the standard, annual renewal of the Communities That Care agreement with Utah County. Council Members McOmber and Baertsch noted the purpose and services to the community.

Motion by Council Member McOmber to approve the Interlocal Cooperation Agreement with Utah County for substance abuse prevention services and Communities That Care Prevention Model, and Resolution R16-54 (10-4-16), was seconded by Council Member Baertsch
Roll Call Vote: Council Members Poduska, Baertsch, McOmber, Willden, and Porter - Aye
Motion carried unanimously.

4. **Special Assessment Bonds, Series 2016, Mt. Saratoga Assessment Area**.

A Resolution of the City Council of the City of Saratoga Springs, Utah (the "City"), Designating An Assessment Area for the Purpose of (i) Levying Assessments Against Properties Within the Assessment Area to Finance the Acquisition, Construction and Installation of Road, Storm Water, Sewer, Culinary and Secondary Water, and Related Improvements, (ii) Estimating the Amount of the Assessments To Be Levied and the Method or Methods of Assessments, and (iii) Generally Describing the Period Over Which the Assessments Are to be Paid and the

Manner in Which the City Intends to Finance Said Improvements; and Related Matters. Resolution No. R16-55 (10-4-16).

An Ordinance of the City of Saratoga Springs, Utah, Confirming the Assessment List and Levying An Assessment Against Certain Properties In the Mt. Saratoga Assessment Area (the "Assessment Area") to Finance the Costs of Acquiring, Constructing and Installing Road, Storm Water, Sewer, Culinary Water, and Related Improvements; and Related Matters. Ordinance No. 16-24 (10-4-16).

City Manager Christensen introduced the Resolution and Ordinance for the purpose of moving the bond series process forward.

Jonathan Ward, representing Zions Bank Financial, reported the Special Assessment Bonds will provide for $6.5 million of public infrastructure improvements within the 500 acres of the Mt. Saratoga Assessment Area which will include a major trunkline, water and sewer lines and some roads in order to further the development of the City. Mr. Ward noted the purpose of the proposed Resolution is to identify the Assessment Area, the Ordinance is a tool for lien of the property, and further legal documents will come before Council at a future meeting in order to authorize the issuance and sale of the bonds.

City Attorney Thurman reported a last minute amendment was prepared for the proposed Ordinance to provide the City additional protection in the event of default. City Manager Christensen advised the changes are relative to the 2016 legislation providing specifically for easement for access or clear ownership of infrastructure by the City in the event of default, which was a past circumstance and problem. Mr. Ward noted the Indenture of Trust agreement will further clarify this provision.

In response to Council Member Baertsch, staff and representatives discussed the intent of Section 8 of the Resolution with note that homeowners or builders will not be assessed or affected; City Attorney Thurman recommended review of that section with the Bond Counsel and there was agreement the reference should be made to ERUs in general, and not specific state single family ERUs, which was of concern to Council Member Baertsch.

Amended Motion by Council Member Baertsch to approve Special Assessment Bond Series 2016, Mt. Saratoga Assessment Area Resolution No. R16-55 (10-4-16) designating an Assessment Area, Ordinance No. 16-24 (10-4-16) Confirming the Assessment List and Levying An Assessment, directing staff to consult with Bond Counsel and change verbage in Section 8 as necessary, and incorporate the changes made today in the Ordinance, was seconded by Council Member McOmber
Roll Call Vote: Council Members Porter, Willden, McOmber, Poduska, and Baertsch - Aye
Motion carried unanimously.

APPROVAL OF MINUTES:

September 20, 2016.

Motion by Council Member Porter to approve the minutes of September 20, 2016, with changes as emailed and posted, was seconded by Council Member Willden
Roll Call Vote: Council Members Porter, Willden, McOmber, Poduska, and Baertsch - Aye
Motion carried unanimously.

CLOSED SESSION:

Motion by Council Member Willden to enter into closed session for the purchase, exchange, or lease of property, discussion regarding deployment of security personnel, devices, or systems; pending or reasonably imminent litigation, the character, professional competence, or physical or mental health of an individual, was seconded by Council Member Porter
All Council Members were In Favor.

Motion carried unanimously.

The meeting moved to closed session at 8:30 pm.

Present: Mayor Miller, Council Members Porter, Willden, McOmber, Baertsch, and City Manager Mark Christensen, City Attorney Kevin Thurman, Assistant City Manager Spencer Kyle, and City Recorder Cindy LoPiccolo.

Closed Session Adjourned at 8:47 p.m.

ADJOURNMENT:

There being no further business, Mayor Miller adjourned the meeting at 8:47 p.m.

_____
Jim Miller, Mayor

Attest:

_____
Cindy LoPiccolo, City Recorder

Approved:

CITY OF SARATOGA SPRINGS
CITY COUNCIL MEETING MINUTES
Tuesday, October 18, 2016
City of Saratoga Springs City Offices
1307 North Commerce Drive, Suite 200, Saratoga Springs, Utah 84045

City Council Work Session

Call to Order - 6:00 p.m.

Present: Council Members Shellie Baertsch, Chris Porter, Bud Poduska, Stephen Willden, and Mayor Jim Miller.
Council Member Michael McOmber attended the meeting via telephone.

Staff: City Manager Mark Christensen, Planning Director Kimber Gabryszak, Assistant City Manager Spencer Kyle, Public Relations Manager Owen Jackson, City Engineer Gordon Miner, Senior Planner Sarah Carroll, Finance Director Chelese Rawlings, Planner Kara Knighton, Deputy City Recorder Kayla Moss.

1. Code Amendments-Title 19 including Land Use Zones, Landscaping and Fencing, Parking, Open Space, Signs, Subdivisions, Buffer Overlay, Design Standards, 19.04 Overhaul/Setbacks.

Planning Director Gabryszak presented the Title 19 changes to the City Council. The changes will affect all of Title 19. When they decided to rework setbacks and zones in the code it ended up affecting almost every chapter. They are trying to remove redundancies in the code. They also addressed footprint development and added that into the code. The Mixed Waterfront zone has also been added to this update, along with a buffer overlay zone that goes along the river and lake. They are also considering removing the minimum turf requirement for the commercial and HOA development due to the water issues that have been encountered. There is a new section for Design Standards. These standards were taken from the Architectural Design Standards that have been adopted by the City and from throughout the current code. Open Space Standards were also updated. Edge Homes tested out these new standards and based on their experience the planning staff made some adjustments to make sure the standards would work for developers and the City. In the commercial standards of the code they are adding a Community Commercial zone. Setbacks for commercial development were also adjusted to try and encourage parking and loading activities in the back of buildings rather than the front. In the Mixed Use zone they are proposing to change the setback requirements based on how many stories their building will be. They have also added a table to determine what density you can have in your residential areas based on what percentage of commercial development is in the project.

Council Member McOmber suggested that in the mixed use table the density of residential development is based on a formula instead of having a big jump in residential density for just one percent of commercial density added.

Council Member Baertsch is concerned that removing the minimum turf requirement for commercial and HOA development would also eliminate greenery such as shrubs and trees. She suggested it could be reworded to make sure improvements are still made that include live vegetation. She would also like to see incentive to use bark over rock for mulch.

Council Member Poduska mentioned that bark tends to blow away. He prefers bark over rock but it has to be replenished more often.

Adjourn to Policy Session 7:11 p.m.

Policy Meeting

Call to Order: Mayor Jim Miller called the Policy Session to order at 7:01 p.m.

Roll Call:
Present: Council Members Shellie Baertsch, Chris Porter, Bud Poduska, Stephen Willden, and Mayor Jim Miller.
Councilmember Michael McOmber attended the meeting via telephone.

Staff: City Manager Mark Christensen, Planning Director Kimber Gabryszak, Assistant City Manager Spencer Kyle, Public Relations Manager Owen Jackson, City Engineer Gordon Miner, Finance Director Chelese Rawlings, Fire Chief Jess Campbell, Public Works Director Mark Edwards, Deputy City Recorder Kayla Moss

Invocation by Council Member Willden
Pledge of Allegiance led by Council Member Poduska

Public Input:

Tamara Peterson, 582 W Andrews Lane, is a resident of Aspen Hills. She gave City staff a list of signatures from the neighborhood that were all concerned about the road issue, along with a packet of information addressing their concerns. There were about 25 people in attendance for the issue they came to present. They do not think that local roads should connect to arterial roads and or highways. They think that this is a safety issue and urge the City to consider this. They do not believe Aspen Hills is a Boulevard, it is a 28 foot local road.

POLICY ITEMS:

Reports:

1. **Mayor:**
Mayor Miller advised that he has been working with Commissioner Lee in regards to a shooting range at the south end of the City. BLM would like to close down more land than previously asked for. He asked the Council if they gave their support for not closing down as much land as they are now requesting..

The Council Members were all supportive of not allowing the additional land closure and asked that a letter be drafted to give to the County.

2. **City Council:**
Council Member Baertsch attended a MAG meeting where they discussed Redwood Road and other road issues. They City's Gas Tax distribution was discussed at the League of Cities and Towns meeting. That number should be to the City shortly.

Council Member Poduska also went to the transportation meeting. He argued for on and off ramps on the freeway when it comes so that Saratoga Springs will also benefit from it. Currently it just goes to Eagle Mountain without access to Saratoga Springs.

Council Member Willden also went to the League of Cities and Towns meetings. There are a lot of land issues and other things the City needs to look out for in the future.

Council Member Porter attended the UVU Master Plan Presentation.

3. **Administration Communication with Council: None**

4. Staff Updates: Inquiries, Applications, and Approvals: None

PUBLIC HEARINGS:

1. Wildflower Village Plan Area 1, located West & North of Harvest Hills and North of SR 73. Nathan Shipp, DAI Utah applicant.

Planning Director Gabryszak presented the plan for this area to the Council. There is a total of 1,468 units in the development. There will be a church building in the development along with open space and a park. They will be matching density to what is currently surrounding their development. If the park is approved it would be a City maintained park which means they would be held to City standards for design. They are asking for a variance on the signage for their neighborhood.

Public Hearing was opened at 7:24 p.m. There was no input and the Public Hearing was closed.

Council Member McOmber likes the architectural design of the area. He has some concerns about the connectivity in the Sego Lilly area. He also mentioned the name in all of their documentation says Wildflower at Saratoga Springs. Since there is a development in the City called Saratoga Springs Development it causes confusion. He is in favor of maintaining the park as a City park. He is not in favor of a variance for the signs they are requesting.

Council Member Porter thinks that the development looks very nice. There are a lot of protections for the existing neighborhoods. He is okay with having the City maintain the park. He also thinks that the entrance into the Sego Lilly neighborhood needs to be looked at as well. There are about 219 homes with only two entrances.

Council Member Baertsch mentioned that there could be a four way stop by the Sego Lilly neighborhood so that traffic will slow down and have more access into the neighborhood. She is not in favor of allowing the sign deviations. She is also concerned about the number of signs the developer is wanting. Some of the neighborhood signs could be encroaching in the clear sight triangle causing safety issues. There are some issues with the UDOT roads that she asked the developer to try and help address. She also has concerns about the development being split in half. There might be connectivity issues with having it split. She asked for clarification on why the City has to provide canal piping. There are water pressure issues in Harvest Hills and she wondered if that was planned to fixed in this development. She also asked that "Saratoga Springs" be removed from the development name. She is okay with the City maintaining the park. The sidewalks need to be on both sides of the road in this development.

City Attorney Kevin Thurman advised that they have some information that they are getting ready to present to the Council in regards to the canal piping. The canal company requires the City to maintain their area if we have connectivity in the canal area.

City Engineer Gordon Miner advised that all of the water issues will be addressed.

Council Member Poduska appreciates the feathering of the lot sizes to match Harvest Hills. He does not approve the 30 foot signs at the entrances of the development. He thinks the neighborhood signs are good as long as they are just small monument signs. Being able to identify where you are can be helpful. He also asked that the developer talk to UDOT about the road connectivity in this area.

Council Member Willden is also not in favor of allowing a variance for the signage in the development. He is okay with maintaining the park as well. He would also like to have a four way stop on the road that has all of the driveways. He wondered how they are going to fulfill the 30% open space requirement. There is not enough

in this phase and it looked to him that the other side of the freeway would just be an open grass field. He would like to have a more solidified plan for the open space so that they can make sure it will all work together.

Planning Director Gabryszak advised that each time they bring a new phase they will assess how much open space is still needed. Part of the open space on the other side of the freeway will be undeveloped and left in its native state. The dedicated open space to the City will be platted as the phases develop.

City Manager Mark Christensen mentioned that if the City puts traffic measures where they are not warranted the City would assume liability for any accidents that happen there. He asked that they base their motion on making sure they do traffic studies to make sure the traffic measures are necessary.

Nathan Ship from DAI mentioned that they tried for over a year to get UDOT to keep their community together. They were not successful so they are doing their best to model their development around where the roads are going to be.

Motion made by Council Member Porter to approve the Wildflower Village Plan Area 1, located West & North of Harvest Hills and North of SR 73 and all other findings and conditions including the development name shall not include "at Saratoga Springs", the plats in Sego Lilly 3 shall include necessary traffic calming measures at the intersection nearest the Mountain View Corridor, if determined to be appropriate by the City Engineer, provide flexibility to allow other semi-private fencing along open spaces as permitted in the City Code, complete information on open spaces to be dedicated on the west side of the Mountain View Corridor shall be provided at the time of platting, was seconded by Council Member Poduska.
Roll Call Vote: Aye: Council Member Baertsch, Council Member Porter, Council Member Poduska, Council Member Willden, and Council Member McOmber.
Motion Passed 5-0.

BUSINESS ITEMS:

1. **Award of Bid-Marina Intake and Booster Station; Resolution R16-56 (10-18-16).**

Mark Edwards from Public Works presented the bid to the City Council. This will add about 4,000 gallons of water per minute to the system. COP Constructions bid was $5,130,991.02. There were three alternates for materials to be used. Ductal Iron was the cheapest option. They are asking the Council to consider alternate 2 so that they can dredge the entire marina. This provides navigational benefits because the marina will be as deep as the lake.

Council Member McOmber excused himself for the remainder of the meeting.

Motion made by Council Member Baertsch to approve the bid for Marina Intake and Booster Station to COP Construction in the amount of $5,130,991.02 and $187,500 for the dredging of the marina; Resolution R16-56 and seconded by Council Member Porter.
Roll Call Vote: Aye: Council Member Baertsch, Council Member Porter, Council Member Poduska, Council Member Willden.
Motion Passed 4-0, Council Members McOmber excused.

2. **Update to the Personnel Policies and Procedures Manual; Resolution R16-57 (10-18-16).**

Human Resources Specialist Holly Neibaur advised that there was a large update done in 2014. Since then there have been more state laws that needed to be added to the manual. URS also did an audit of the City and some additions were needed to be made based on their findings.

Council Member Baertsch wondered if classifying the Council Members as employees causes any issues with benefits.

City Manager Mark Christensen advised that URS just requires the City to be very clear on how the Council Members are classified and what that means for their benefits.

Motion made by Council Member Porter to approve the updated policies and procedures manual; R16-57, was seconded by Council Member Baertsch.
Roll Call Vote: Aye: Council Member Baertsch, Council Member Porter, Council Member Poduska, Council Member Willden.
Motion Passed 4-0, Council Member McOmber excused.

3. Redwood Road Widening and Pioneer Crossing Continuous Flow Interchange (CFI) Projects-Betterment Agreement; Resolution R16-58 (10-18-16).

City Manager Christensen advised that Redwood Road is going to be widened to two lanes in each direction to Stillwater. The City would like to participate in some improvements while this is being done. One improvement is to stub in some sewer lines. Undergrounding of the power lines is also something the City feels is an important betterment. It will save the City some money versus doing it at a later date. The Lakeview Terrace sewer crossing is another betterment the City is suggesting. They are only recommending placing pipe for the Grandview sewer crossing. Making the retention area at Lakeview into a detention basin makes sense to include as a betterment at this time as well. Funding sources have been found in the existing budget for all of the projects in this betterment agreement.

Mayor Miller asked the City Engineer to check on the slope of Grandview Boulevard because cars often slide into the intersection in the winter.

City Engineer Miner advised the Council that all of the cost estimates for these projects are conceptual and because of that the prices listed are probably very high.

Council Member Porter thanked City staff for including where the funding source for each project was coming from.

Motion by Council Member Poduska to approve the Redwood Road Widening and Pioneer Crossing Continuous Flow Interchange (CFI) Projects Betterment Agreement; Resolution R16-58, was seconded by Council Member Willden.
Roll Call Vote: Aye: Council Member Baertsch, Council Member Porter, Council Member Poduska, Council Member Willden.
Motion Passed 4-0, Council Member McOmber excused.

4. Assignment Agreement for Culinary Water Connections; Resolution R16-59 (10-18-16).

City Attorney Thurman advised the council that there are a total of 857 water credits. 200 of the credits were originally issued to Winsor Development. This agreement recognizes the credits and allows them to be assigned.

Motion made by Council Member Porter to approve the assignment agreement for culinary water connections; Resolution R16-59, was seconded by Council Member Baertsch.
Roll Call Vote: Aye: Council Member Baertsch, Council Member Porter, Council Member Poduska, Council Member Willden.
Motion Passed 4-0, Council Member McOmber excused.

4. Discussion and Status Update on Code Amendments – Title 19.18, Signs, Regarding Park Signs.

Planning Director Gabryszak advised that this was addressed at a public hearing at a previous meeting and it was continued to October. There have been some issues that have come up so it is still being worked on. She asked for input on Parks and Trail signs.

Council Member Baertsch advised that she thinks signs in parks should be treated as amenities so that there are not specific signage requirements.

ADJOURNMENT:

There being no further business, Mayor Miller adjourned the Policy Meeting at 9:01 p.m.

_____
Jim Miller, Mayor

Attest:

_____
Cindy LoPiccolo, City Recorder

Approved: November 1, 2016