

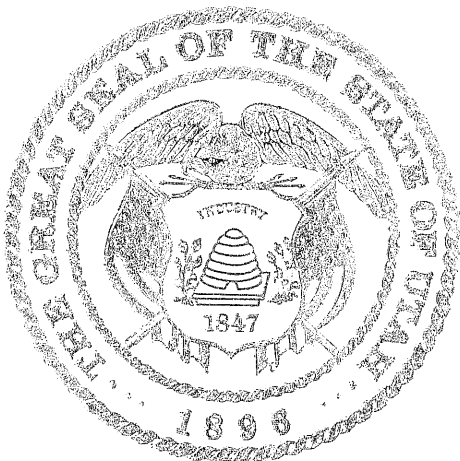
STATE OF UTAH



OFFICE OF THE LIEUTENANT GOVERNOR  
CERTIFICATE OF ANNEXATION

I, GREG BELL, LIEUTENANT GOVERNOR OF THE STATE OF UTAH,  
HEREBY CERTIFY THAT there has been filed in my office a notice of annexation from  
the CITY OF SARATOGA SPRINGS, dated August 31<sup>st</sup>, 2010, complying with Section  
10-2-425, Utah Code Annotated, 1953, as amended.

NOW, THEREFORE, notice is hereby given to all whom it may concern that the  
attached is a true and correct copy of the notice of annexation, referred to above, on file  
with the Office of the Lieutenant Governor pertaining to the CITY OF SARATOGA  
SPRINGS, located in Utah County, State of Utah.



IN TESTIMONY WHEREOF, I have  
hereunto set my hand, and affixed the Great  
Seal of the State of Utah this 16<sup>th</sup> day of  
November, 2010 at Salt Lake City, Utah.

---

GREG BELL  
Lieutenant Governor

ORDINANCE NO. 10-12 (8-31-10)

AN ORDINANCE ADOPTED PURSUANT TO SECTION 10-2-407(3)(b) OF THE UTAH CODE, APPROVING AN ANNEXATION APPLICATION RELATING TO APPROXIMATELY 1,803 ACRES OF LAND; ANNEXING SUCH LAND INTO THE CITY; AND RELATED MATTERS.

WHEREAS, Corporation of the Presiding Bishop of The Church of Jesus Christ of Latter-Day Saints, a Utah corporation sole ("CPB"), owns approximately 1,601 acres of undeveloped land situated outside of the current boundaries of the City of Saratoga Springs, Utah (the "City") within portions of unincorporated Utah County, which property is contiguous to the boundaries of the City, and which is more particularly described on Exhibit A attached hereto (the "Unincorporated CPB Property"); and

WHEREAS, in satisfaction of the terms and conditions of that certain Water Credit Agreement, dated as of November 25, 2009, by and among the City, CPB and Property Reserve Inc., a Utah non-profit corporation, and at the requirement of the City, CPB has submitted to the City Recorder an Annexation Application (such Annexation Application, together with all attached and related materials, being referred to herein as the "Petition"), requesting that the City annex the Unincorporated CPB Property into the City; and

WHEREAS, such request was necessarily initiated, and such Petition was filed, by CPB because the City lacks the statutory authority to initiate the annexation process; and

WHEREAS, to satisfy the requirements of applicable law, and at the request and requirement of the City, CPB included in the Petition certain additional parcels of property not owned by CPB, and also situated outside of the current boundaries of the City within portions of unincorporated Utah County, which additional parcels are contiguous to the boundaries of the City, and which are more particularly described on Exhibit B attached hereto (the "Non-CPB Property"); and

WHEREAS, the Unincorporated CPB Property and the Non-CPB Property is situated within the portion of unincorporated Utah County included in the Annexation Policy Plan Map adopted by the City Council of the City on January 14, 2003, as part of Ordinance No. 03-2 (1-14-03)(the "City Annexation Ordinance"); and

WHEREAS, on July 27, 2010, the City Council adopted Resolution No. R10-30 (7-27-10), accepting the Petition for further consideration; and

WHEREAS, on July 29, 2010, which date is less than thirty (30) days after the date of adoption of Resolution No. R10-30 (7-27-10) accepting the Petition, the City Recorder (i) certified the Petition, and (ii) mailed or delivered written notification of such certification to the City Council, CPB and the Utah County Commission, in satisfaction of Section 10-2-405(2)(c) of the Utah Code, a copy of which certification and notification is attached hereto as Exhibit C; and

NOV 16 2010

Greg Bell  
Lieutenant Governor

4813-0819-5590.7

WHEREAS, following receipt of notice of such certification from the City Recorder on July 29, 2010, the City Council caused a copy of the Petition to be delivered to the City's Development Review Committee, together with a request that the Development Review Committee determine the feasibility of expanding the City's boundaries, and prepare an impact report (the "Report") on the proposed annexation; and

WHEREAS, following receipt of notice of such certification from the City Recorder on July 29, 2010, the City Council caused a notice of the proposed annexation to be published (a) on August 2, 2010, August 9, 2010 and August 16, 2010, in the Daily Herald, a newspaper of general circulation within (i) the area circumscribed by the Unincorporated CPB Property and the Non-CPB Property, and (ii) the unincorporated area within ½ mile of the Unincorporated CPB Property and the Non-CPB Property, and (b) for three weeks, beginning on August 2, 2010, on the website established pursuant to Section 45-1-101 of the Utah Code, which notices, together with affidavits of publication thereof, are attached hereto as Exhibit D; and

WHEREAS, following receipt of notice of such certification from the City Recorder on July 29, 2010, the City Council caused a notice thereof to be mailed on July 29, 2010, to:

- (a) Utah County;
- (b) Eagle Mountain City;
- (c) Alpine School District;
- (d) Utah Transit Authority;
- (e) Central Utah Water Conservancy District;
- (f) Timpanogos Special Service District; and
- (g) Such other public and private entities as determined appropriate by the City Recorder,

copies of which notices are attached hereto as Exhibit E; and

WHEREAS, the notices attached as Exhibits D and E identified the deadline of August 29, 2010 (the "Protest Deadline"), for the filing of protests under Section 10-2-407 of the Utah Code; and

WHEREAS, within sixty (60) days after receipt from the City Council of a copy of the Petition and a request to prepare the Report, the Development Review Committee completed the Report, a copy of which is attached hereto as Exhibit F, and forwarded the Report to the City's Planning Commission; and

WHEREAS, on August 17, 2010, the Planning Commission met to review the Report and provide a recommendation to the City Council; and

WHEREAS, on August 2, 2010, there was published in the Daily Herald a Notice of Public Hearing relating to the proposed annexation, in satisfaction of the requirements of Section 10-2-407(3)(b)(ii)(A) of the Utah Code, a copy of which Notice, together with an affidavit of the publication thereof, are attached as Exhibit G hereto; and

WHEREAS, on August 24, 2010, not less than seven (7) days after publication of the notice identified in Exhibit G, the City Council held a public hearing relating to the proposed annexation, at which public hearing all individuals desiring to express their views relating to the proposed annexation were given the opportunity to be heard on the matter; and

WHEREAS, the City Council has given careful consideration to the views expressed by the public during the public hearing; and

WHEREAS, the City Council has carefully reviewed the Report prepared by the Development Review Committee, and has carefully considered the recommendation of the Planning Commission relating to the proposed annexation; and

WHEREAS, the City Council has carefully reviewed and considered the Petition and all materials submitted by CPB in connection therewith and in support thereof, including materials required to be submitted pursuant to the City's Annexation Policy Plan Statement and Annexation Petition Requirements and Procedures; and

WHEREAS, in connection with the proposed annexation, and as a condition of consideration of the same by the City Council pursuant to the terms of the Petition, the City Council has considered:

- (i) An amendment to the Transportation Element of the City General Plan, relating to the adoption of, among other things, a recommended alignment for a proposed freeway to serve the City and the area proposed for annexation;
- (ii) An amendment to the Land Use Map of the City General Plan, to accommodate the application of the City's Planned Community Zone to the Unincorporated CPB Property and certain other property owned by CPB within the City;
- (iii) An amendment to Title 19, Chapter 26 of the City Code, relating to large-scale developments within a Planned Community Zone; and
- (iv) A proposed District Area Plan, prepared by CPB in collaboration with the City under the provisions of the proposed amendments to the Planned Community Zone; and

WHEREAS; in light of the foregoing, and after due deliberation, the City Council desires to approve the Petition and proceed with the proposed annexation and other related matters,

NOW THEREFORE, be it and it is hereby ordained by the City Council of the City of Saratoga Springs, Utah, as follows:

SECTION 1. Findings. The City Council does hereby find and determine that the annexation of the Unincorporated CPB Property and the Non-CPB Property as proposed in the Petition is in the best interests of the City and its residents.

SECTION 2. Approval of Annexation; Effective Date. The City Council approves the Petition, approves the annexation of the Unincorporated CPB Property and the Non-CPB Property as described in the Petition, and does hereby annex the Unincorporated CPB Property and the Non-CPB Property into the City. The effective date of such annexation shall be the date of issuance by the Utah Lieutenant Governor of the Certificate of Annexation, under Section 10-2-425 of the Utah Code.

SECTION 3. Zoning. The Unincorporated CPB Property and the Non-CPB Property shall be subject to such zoning designations as shall be established by separate ordinance adopted by the City Council.

SECTION 4. Vesting of Development Rights. CPB shall be entitled to such vested development rights as are described in a separate ordinance adopted contemporaneously with this Ordinance.

SECTION 5. Authorized Actions. The Mayor, the City Recorder, the City Manager, and all other officers and employees of the City are hereby authorized and directed to take, in a timely manner, any and all actions required or advisable to be taken to give effect to the annexation hereby approved; including, without limitation, the giving of all notices and the filing of all items required pursuant to Sections 10-2-408 and 10-2-425 of the Utah Code.

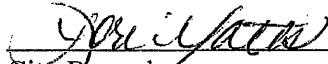
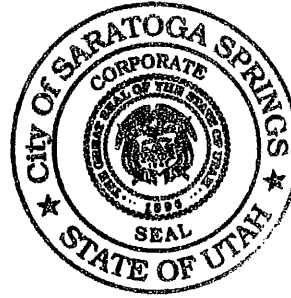
SECTION 6. Effective Date. In the interest of public welfare, and for the preservation of property values and rights, this Ordinance shall become effective upon publication or posting, whichever occurs first.

IN WITNESS WHEREOF, the Mayor and City Recorder have subscribed their respective signatures hereto this 31st day of August, 2010.



\_\_\_\_\_  
Mayor

ATTEST:

  
\_\_\_\_\_  
City Recorder

CPB Property in the Saratoga Annex (yellow area)

All of Section 27 and a portion of Sections 21, 22, 26, 33, 34 and 35, Township 5 South, Range 1 West, Salt Lake Base and Meridian, located Utah County, Utah, more particularly described as follows:

Beginning at the North 1/4 Corner of Section 26, Township 5 South, Range 1 West, Salt Lake Base and Meridian, said point also being on the existing corporate limits of Saratoga Springs City according to THE TOWN OF SARATOGA SPRINGS INCORPORATION PLAT, recorded in Entry No. 103823:1997, Map No. 7374 in the office of the Utah County Recorder; thence along said Saratoga Springs City boundary the following twenty (20) courses: S0°30'21"W along the Quarter Section line 1,452.41 feet; thence N89°25'24"W 703.07 feet; thence S0°04'27"E 585.07 feet; thence N89°55'35"E 337.43 feet; thence S7°37'23"W 56.91 feet; thence S9°49'19"W 269.07 feet; thence S5°01'37"W 112.79 feet; thence S6°02'54"E 204.16 feet; thence S10°58'08"E 860.03 feet; thence S89°29'39"E 224.85 feet to the intersection with the Quarter Section line; thence S0°30'21"W along said Quarter Section line 1,823.67 feet to the South 1/4 Corner of said Section 26; thence S2°05'25"E along the Quarter Section line in Section 35, T5S, R1W, SLB&M 2,643.20 feet; thence N89°36'11"W along the Quarter Section line of said Section 35, 1,352.48 feet; thence S89°20'32"W 118.07 feet; thence S77°52'11"W 175.55 feet; thence N50°23'56"W 1,225.92 feet; thence N39°09'56"W 166.00 feet; thence S89°16'04"W 24.11 feet to the West line of said Section 35; thence S0°44'04"E along said West line 897.81 feet to the West 1/4 Corner of said Section 35; thence N89°47'59"W along the Quarter Section line of Section 34, T5S, R1W, SLB&M, 2,702.95 feet to the center of said Section 34; thence N89°47'59"W along the Quarter Section line 2,702.72 feet to the West 1/4 Corner of said Section 34; thence N0°28'11"E along the West line of said Section 34, 2,663.16 feet to the Northwest Corner of said Section said point also being on the East line of the corporate limits of Eagle Mountain City as shown on the EVANS RANCH ANNEXION PLAT, recorded in Entry No. 142608:2002, Map No. 9802 in the office of the Utah County Recorder; thence along said Eagle Mountain City boundary the following three (3) courses: N0°36'03"E along the West line of Section 27, T5S, R1W, Salt Lake Base and Meridian, 2,659.06 feet to the West 1/4 Corner of said Section; thence N0°08'18"E along the West line of said Section 2,647.75 feet to the Northwest Corner of said Section; thence N89°33'20"E along the North line of said Section 2,668.50 feet to the North Quarter Corner of said Section; thence S89°42'00"E along the north line of said Section 2,666.93 feet to the Northeast Corner of said Section; thence S89°59'27"E along the north line of Section 26, T5S, R1W, SLB&M, 2,669.07 feet to the point of beginning. Also

beginning at a point 1326.37 feet N89°19'18"W along the Quarter Section line from the East ¼

Corner of Section 33, T5S, R1W, SLB&M; thence N89°19'18"W 1326.37 feet to the center of said Section; thence S0°28'16"W along the Quarter Section line of said Section, 2,679.39 feet to the South 1/4 Corner of said Section; thence N89°36'03"W along the south line of said Section, 1,330.31 feet to the Southwest Corner of the East Half of the Southwest Quarter of said Section; thence N0°24'29"E along the West line of said East Half, 2,685.88 feet to the Northwest Corner of said East Half; thence N0°39'30"E along the West line of the Southeast Quarter of the Northwest Quarter of said Section 33, 1,331.72 feet to the Northwest Corner of said Southeast Quarter; thence S89°17'58"E along the North line of said Southeast Quarter 1,328.91 feet to the Northeast Corner of said Southeast Quarter; thence S89°19'47"E along the North line of the South Half of the Northeast Quarter of said Section 33, 1326.35 feet; thence S0°28'10"W 1331.40 feet to the point of beginning.

Contains:1600.81 Acres



Other Property Owners Saratoga Annex (orange color)

All of Section 27 and a portion of Sections 21, 22, 26, 33, 34 and 35, Township 5 South, Range 1 West, Salt Lake Base and Meridian, located Utah County, Utah, more particularly described as follows:

Beginning at the Northeast Corner of Section 28, Township 5 South, Range 1 West, Salt Lake Base and Meridian, said point said point also being on the East line of the corporate limits of Eagle Mountain City as shown on the EVANS RANCH ANNEXTION PLAT, recorded in Entry No. 142608:2002, Map No. 9802 in the office of the Utah County Recorder; thence N89°50'55"W along the North line of Section 28, T5S, R1W, Salt Lake Base and Meridian, 1,377.92 feet to the intersection with the existing corporate limits of Saratoga Springs City according to the MT. SARATOGA ANNEXATION PLAT, recorded in Entry No. 17527:2004 Map No. 10346 in the office of the Utah County Recorder; thence along said Saratoga Springs City boundary the following seven (7) courses: N52°37'59"E 1,068.92 feet; thence N81°35'15"E 60.89 feet; thence N0°44'33"W 309.40 feet; thence N57°12'37"E 170.67 feet; thence N38°52'35"E 335.86 feet; thence S89°31'14"E 126.82 feet to the West line of Section 22, T5S, R1W, Salt Lake Base and Meridian; thence N0°23'14"E along the west line of said Section 782.68 feet to the intersection with the southerly corporate limits of Saratoga Springs City according to the SARATOGA MEADOWS ANNEXATION PLAT recorded in Entry No. 31355:2007 Map No. 12148 in the office of the Utah County Recorder; thence along said Saratoga City boundary the following four (4) courses: N89°52'13"E 284.95 feet; thence N89°54'51"E 170.09 feet; thence N1°06'45"E 69.13 feet; thence N89°53'12"E 610.76 feet; thence N0°06'48"W 56.00 feet to the north side of 12000 West Street according to Plat "D", WEST LAKE ESTATES subdivision recorded in Entry No. 35823:1997 Map No. 7049 in the office of the Utah County Recorder; thence N89°53'12"E along the north line of 12000 West Street 216.84 feet; thence S0°11'49"W along the east line of 12000 West Street 124.88 feet; thence N89°53'12"E 1,371.37 feet; thence N0°29'54"E 180.11 feet; thence S89°30'06"E 5.51 feet to the westerly line of the corporate limits of Saratoga Springs City according to the SARATOGA SPRINGS MIDDLE SCHOOL ANNEXATION PLAT recorded in Entry No. 72511:2009 Map No. 13051 in the office of the Utah County Recorder, thence along said Saratoga City boundary the following seven (7) courses: S33°01'06"E 249.31 feet; thence S1°17'44"W 399.53 feet; thence S7°48'12"E 960.72 feet; thence S20°27'06"E 592.08 feet; thence S30°33'06"E 184.54 feet to the intersection with the north line of Section 27, T5S, R1W, SLB&M; thence N89°42'00"W along the north line of said Section 565.64 feet to the North 1/4 Corner of said Section; thence S89°33'20"W along the north line of said Section 2,668.50 feet to the point of

beginning. Also beginning at a the East  $\frac{1}{4}$  Corner of Section 33, T5S, R1W, SLB&M; thence N89°19'18"W 1326.37 feet; thence N0°28'10"E 1331.40 feet; thence S89°19'47" E 1326.38 feet; thence S0°28'11"W 1331.58 to the point of beginning.

Contains:202.91 Acres

## NOTICE OF PROPOSED ANNEXATION

NOTICE IS HEREBY GIVEN THAT, on July 27, 2010, the Corporation of the Presiding Bishop of The Church of Jesus Christ of Latter-day Saints filed an Annexation Application (the "Petition") with the City Recorder (the "City Recorder") of the City of Saratoga Springs, Utah (the "City") proposing the annexation of approximately 1,803 acres of land (the "Property") into the City. Notice is further given as follows:

1. On July 27, 2010, the City Council of the City adopted Resolution No. R10-30, accepting the Petition for further consideration.
2. On July 29, 2010, the City Council received from the City Recorder a notice of certification of the Petition, in satisfaction of Section 10-2-405(2)(c)(i) of the Utah Code.
3. The Property proposed for annexation consists of multiple parcels of property owned by several different owners, and is generally bounded on the north by 300 north , on the south by 1200 south, on the east by Redwood Road, and on the west by 1600 west.
4. A complete copy of the Petition, including an accurate map of the area proposed for annexation, is available for inspection and copying at the office of the City Recorder at 1307 North Commerce Drive, Suite 200, Saratoga Springs, Utah, during regular business hours between 8:00 a.m. and 5:00 p.m., Monday through Friday.
5. **The City Council may grant the Petition and annex the Property unless, on or before August 29, 2010, one or more protests are filed with the Utah County Boundary Commission c/o Bryan Thompson, Utah County Clerk, 100 East Center Street, Suite 3600, Provo, Utah 84606, with a copy to the City Recorder at 1307 North Commerce Drive, Suite 200, Saratoga Springs, Utah.**

DATED this 29th day of July, 2010.

/s/ City Council, City of Saratoga Springs, Utah

# PROOF OF PUBLICATION

from

## The Daily Herald

STATE OF UTAH } SS.  
Utah County }

I, Morgan Bassett, being first duly sworn depose and say that I am the Legal Billing Clerk of the Daily Herald, a newspaper of general circulation, published seven times each week at Provo, Utah, County of Utah; that the notice attached hereto, 362131-NOTICE OF PROPOSED ANNE, and which is a copy, was published in said newspaper, the first publication having been made on the 9th day of August, 2010, and the last on the 16th day of August, 2010; that said notice was published in the regular and entire issue of every number of the paper during the period and times of publication, and the same was published in the newspaper proper and not in the supplement.

Same was also published online at utahlegals.com, according to Section 45-1-101, Utah Code Annotated beginning on the first date of publication and for 30 days thereafter.

*Morgan Bassett*

Subscribed and sworn before me this 16th day of August, 2010.

*Debbie L. Gardner*

Notary Public

Residence: Spanish Fork, Utah

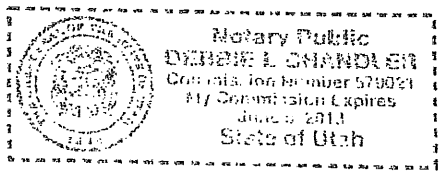
My commission expires 06/05/2013

**LEGAL NOTICES**

**NOTICE OF PROPOSED ANNEXATION**  
NOTICE IS HEREBY GIVEN THAT on July 27, 2010, the Corporation of the Presiding Bishop of The Church of Jesus Christ of Latter-day Saints filed an Annexation Application (the "Petition") with the City Recorder (the "City Recorder") of the City of Saratoga Springs, Utah (the "City") proposing the annexation of approximately 1,803 acres of land (the "Property") into the City. Notice is further given as follows:

1. On July 27, 2010, the City Council of the City adopted Resolution No. R10-30, accepting the Petition for further consideration.
2. On July 29, 2010, the City Council received from the City Recorder a notice of certification of the Petition, in satisfaction of Section 10-2-405(2)(c)(i) of the Utah Code.
3. The Property proposed for annexation consists of multiple parcels of property owned by several different owners, and is generally bounded on the north by 300 north, on the south by 1200 south, on the east by Redwood Road, and on the west by 1600 west.
4. A complete copy of the Petition, including an accurate map of the area proposed for annexation, is available for inspection and copying at the office of the City Recorder, at 1307 North Commerce Drive, Suite 200, Saratoga Springs, Utah, during regular business hours between 8:00 a.m. and 5:00 p.m., Monday through Friday.
5. The City Council may grant the Petition and annex the Property unless, on or before August 29, 2010, one or more protests are filed with the Utah County Boundary Commission, c/o Bryan Thompson, Utah County Clerk, 100 East Center Street, Suite 3600, Provo, Utah 84606, with a copy to the City Recorder at 1307 North Commerce Drive, Suite 200, Saratoga Springs, Utah.

DATED this 29th day of July, 2010.  
\_\_\_\_\_  
/s/ City Council  
City of Saratoga Springs, Utah  
Legal Notice 362131 Published in The Daily Herald August 9, 16, 2010.



## NOTICE OF PROPOSED ANNEXATION

NOTICE IS HEREBY GIVEN THAT, on July 27, 2010, the Corporation of the Presiding Bishop of The Church of Jesus Christ of Latter-day Saints filed an Annexation Application (the "Petition") with the City Recorder (the "City Recorder") of the City of Saratoga Springs, Utah (the "City") proposing the annexation of approximately 1,803 acres of land (the "Property") into the City. Notice is further given as follows:

1. On July 27, 2010, the City Council of the City adopted Resolution No. R10-30, accepting the Petition for further consideration.

2. On July 29, 2010, the City Council received from the City Recorder a notice of certification of the Petition, in satisfaction of Section 10-2-405(2)(c)(i) of the Utah Code.

3. The Property proposed for annexation consists of multiple parcels of property owned by several different owners, and is generally bounded on the north by 300 north , on the south by 1200 south, on the east by Redwood Road, and on the west by 1600 west.

4. A complete copy of the Petition, including an accurate map of the area proposed for annexation, is available for inspection and copying at the office of the City Recorder at 1307 North Commerce Drive, Suite 200, Saratoga Springs, Utah, during regular business hours between 8:00 a.m. and 5:00 p.m., Monday through Friday.

**5. The City Council may grant the Petition and annex the Property unless, on or before August 29, 2010, one or more protests are filed with the Utah County Boundary Commission c/o Bryan Thompson, Utah County Clerk, 100 East Center Street, Suite 3600, Provo, Utah 84606, with a copy to the City Recorder at 1307 North Commerce Drive, Suite 200, Saratoga Springs, Utah.**

DATED this 29th day of July, 2010.

/s/ City Council, City of Saratoga Springs, Utah

## List of Entities-General Plan Amendment

Timpanogos Special Service District  
PO Box 363  
American Fork, Utah 84003  
801-756-5231  
801-756-1472-Fax

Alpine School District  
575 North 100 East  
American Fork, Utah 84003  
801-610-8400  
801-610-8501-Fax

Questar Corporation  
180 East 100 South  
PO Box 45433  
Salt Lake City, Utah 84145  
801-324-5000  
801-3243803-Fax

Rocky Mountain Power  
201 South Main Street, Suite 2300  
Salt Lake City, Utah 84111  
1-888-221-7070  
1-877809-3193-Fax

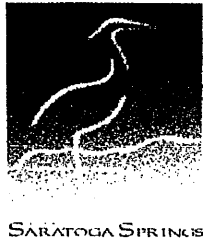
Qwest Communications  
Email notification to [sea.amc@qwest.com](mailto:sea.amc@qwest.com)  
Kraig Kaizumi-Draig@skysat1.com

Comcast  
9602 South 300 West  
Sandy, Utah 84070  
1-800-266-2278

Utah Department of Transportation  
4501 South 2700 West  
P.O. Box 141265  
Salt Lake City, Utah 84114  
801-965-4000  
801-965-3822-Fax

Utah County EMS-Dispatch  
3075 North Main  
Spanish Fork, Utah 84660  
801-851-4100  
801-851-4119-Fax

\* All bordering entities will be determined on a case by case basis.



# Saratoga Springs PRI Annexation

---

August 2010



**GILSON ENGINEERING**  
Consulting Engineers and Surveyors

---

## Utility Impact Report



**GILSON ENGINEERING**  
Consulting Engineers and Surveyors

Page 1



---

# Table of Contents

<i>Section 1 - Executive Summary.....</i>	3
<i>Section 2 – ERU Analysis.....</i>	4
<i>Section 3 – Culinary Water.....</i>	6
<i>Section 4 – Secondary Water.....</i>	9
<i>Section 5 – Sanitary Sewer.....</i>	12
<i>Section 6 – Storm Drain.....</i>	14



# Section 1 – Executive Summary

---

*The purpose of this report is to analyze future infrastructure needs for the PRI annexation area and to evaluate and identify the utility capital improvements necessary to service the annexation area.*

---

On June 24, 2010, the Corporation of the Presiding Bishop of The Church of Jesus Christ of Latter-day Saints (“CPB”) filed an application with Saratoga Springs, Utah petitioning for the annexation of approximately 1,726 acres of land into the City. This petition was withdrawn on July 27, 2010 and a new application submitted increasing the area requested for annexation to 1,802.56 acres. Pursuant to chapter 19.22.050(7) of the City’s Land Development Code, the following impact report has been prepared by Gilson Engineering, Inc. to review the potential demands of the proposed annexation on the City’s municipal utility services.

The requested annexation area is located in the center of the existing City limits. With the potential for nearly 13,000 equivalent residential units (“ERU’s”) the annexation will have significant impacts on the existing infrastructure and utility systems the City currently operates. This report will describe the impacts to the existing system and identify the necessary infrastructure required to provide services to the area.

As will be noted in this report, much of the City’s current utility infrastructure is insufficient to service the proposed annexation area. Current City Master Plans do not contemplate how this area will be serviced and upgrades to those Master Plans will be necessary to provide guidance to developers in these areas. It is anticipated that developers of the proposed annexation area will be responsible for the expansion or development of on and off-site infrastructure and utility systems.

Finally, it is important to note that this analysis only applies to properties that are currently proposed for annexation. This report has not been prepared as an analysis of the utility needs of the proposed District Area Plan. Further study and detailed amendments to the City’s utility Master Plans must be completed before final decisions can be made regarding the required utility capital infrastructure for the entire District Area Plan.



## Section 2 – ERU Analysis

---

*Determining the total number of ERU's within the annexation area is necessary to describe the impacts to the existing system and identify the necessary infrastructure required to provide services to the area*

---

The annexation application submitted by PRI on July 27, 2010 included a comprehensive District Area Plan (“DAP”) identifying 2,833 acres of CPB property area and contemplating a long range plan for development of this area. This 30-year plan establishes the overall amount of development anticipated on the CPB property and quantifies the number of housing units and square footage of commercial development proposed. This information is summarized in the Land Use table below.

<i>Type of Land Use</i>	<i>Quantity</i>
Residential Housing	16,000
Non-Residential Area	10 Million sq. ft.
Equivalent Residential Units	20,620
Open Space	425

These land use quantities from the DAP are for all of CPB’s property including 1,175.49 acres already within the City’s boundaries. Not included in the DAP is 151.25 acres that is part of the annexation area but is not owned by CPB. As the scope of this report is to analyze the impacts of the annexation area, it is necessary to make some assumptions to define the ERU’s contained within the annexation area only.

The first assumption made was that all of the area in the DAP averages the same density of ERU’s per acre. This assumption allows the determination of ERU’s within the 1,641.31 acres of CPB property proposed for annexation. Dividing the total number of proposed ERU’s in the DAP (20,620 ERU’s) by the total area (2,833 acres) provides an average density of 7.28 ERU’s/Acre. Multiplying the calculated density of 7.28 ERU’s/Acre by the area of CPB land within the Annexation area, (1,641.31 acres) results in an estimated total of 11,946.3 ERU’s.

The second assumption necessary was to estimate the density of development on areas that are within the annexation area but are not part of the DAP. This density was assumed



to be 4.5 ERU's/Acre based upon Saratoga Springs' average densities on planned unit developments throughout the City. Multiplying this density by the annexation area not part of the DAP (161.25 acres) results in an estimated total of 725.63 ERU's. The results of the ERU analysis for the annexation area are summarized in the table below.

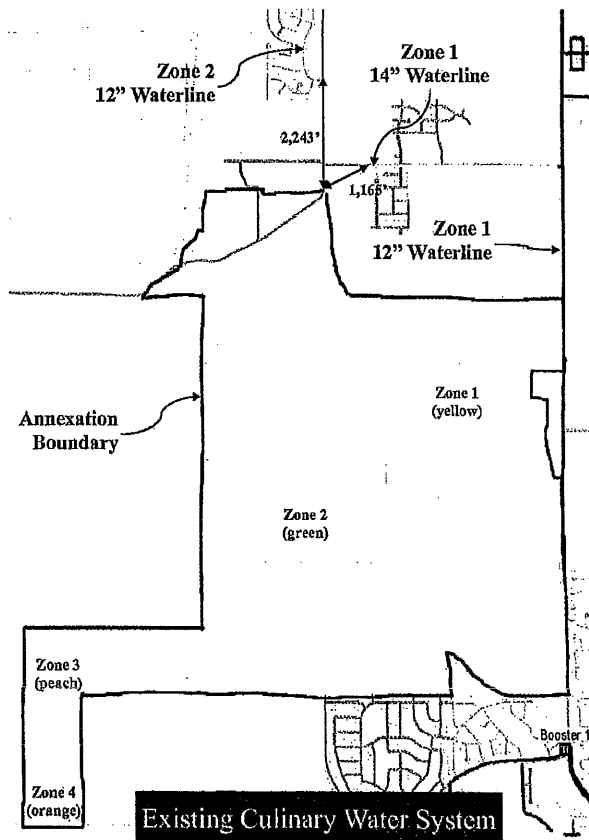
<i>Ownership</i>	<i>Area</i>	<i>Density</i>	<i>ERU's</i>
CPB Property	1,641.31 acres	7.28 ERU's/Acre	11,946.3
Non-CPB Property	161.25 acres	4.5 ERU's/Acre	725.63
<b>Total</b>	<b>1802.56 acres</b>		<b>12,672</b>

The District area plan presented by PRI is defined by the following map.



# Section 3 – Culinary Water

*The proposed annexation area sits mostly in Zones 1 and 2 of the City's culinary water system. A small portion of the annexation area is in water Zones 3 and 4. The following describes the general improvements necessary to service the area at build-out. Further study and amendments to the City's Culinary Water Master Plan will be necessary to define the specific improvements necessary for adequate service.*



The PRI annexation area sits almost entirely in Zones 1 and 2 of the City's culinary water system. It is anticipated that the sections of the annexation area in these lower zones will be developed first as they will provide the most developable area when the necessary improvements are completed. The small areas in Zones 3 and 4 are difficult service areas and will likely not be developed until there are adjacent properties that can share in and benefit from the expensive infrastructure that will be required.

Although the annexation area is adjacent to exiting Zone 1 and 2 culinary water lines, there is not sufficient capacity in the exiting culinary water system to provide service to this area. The City's culinary water system will need improvements within and outside of the annexation boundaries to

service the entire annexation area including tanks, booster pump stations, distribution lines, and transmission lines. Source improvements will not be needed for the CPB owned portions of the annexation area as per the November 25, 2009 Water Credit Agreement. Non-CPB owned portions of the annexation area may be responsible for contributing to the improvements of the City's culinary water source infrastructure when developed.



The requirements for culinary water storage are defined by the City's existing Culinary Water Master Plan. These storage facilities will provide water for fire suppression, equalization and emergencies. Storage facilities are sized by first defining the number of ERU's in the service area at build-out and applying the required equalization storage per ERU.

$$\text{Equalization Storage} = 400 \text{ gal per ERU} = 400 \times 12,672 = 5,068,800 \text{ gallons}$$

The total volume of storage required for the annexation area will depend on the total number of tanks constructed keeping in mind that separate tanks will be required for each service zone. The total volume of storage that will need to be constructed in the culinary water system will need to include the 5+ MG for equalization as well as volumes for fire suppression (4000 gpm for 4 hours = 960,000 gallons) and emergency storage (roughly 150,000 gallons per tank). Total storage volumes can only be determined after a detailed culinary water model has been completed identifying the number and location of all culinary tanks that will be constructed for the annexation area. The Culinary Water Master Plan specifies that culinary water tank locations should occur as close to secondary storage reservoirs wherever possible. This will allow overflow from the culinary system to be captured by the secondary ponds thereby conserving water although this may not be feasible at all locations.

Peak instantaneous demand (PID) is used for distribution system sizing as per the City's Culinary Water Master Plan. Peak Day Demand (PDD) is the day of highest water consumption and is defined in the Culinary Water Master plan as an indoor usage of 800 gpd/ERU (0.55 gpm/ERU). PID is defined as 250% of the average PDD

$$\text{PDD} = 0.55 \text{ gpm} \times 12,672 \text{ ERU's} = 6,970 \text{ gpm}$$

$$\text{PID} = \text{PDD} \times 2.5 = 6,970 \text{ gpm} \times 2.5 = 17,425 \text{ gpm}$$

The PID flow rate calculated is for the entire distribution system that will need to be designed for the annexation area. Final distribution sizing can only be determined after a detailed culinary water model has been completed identifying the location of water mains that will be constructed for the annexation area. This distribution system must be capable of delivering the required PID while maintaining a minimum of 40 psi at any point in the system when either required fire flows are added to the PDD or for peak instantaneous demand (PID), whichever is larger.

Culinary water source flows for the annexation area are to be sized based on the City's Culinary Water Master Plan and in accordance to the Utah State Administrative Rule R309-510-7. These guidelines stipulate that sources for a culinary water system must meet the anticipated PDD. PDD has previously been determined to be **6,970 gpm**. It is anticipated that CPB owned portions of the annexation area will meet this requirement by acquiring water from the Central Utah Water Conservancy District while non-CPB areas may need to either contribute to the construction of new wells or enter into an agreement with the City to acquire CUWCD water. It should be noted that PID will not be drawn from the CUWCD system but will be supplied from the City's culinary storage tanks.



The development of new culinary water facilities should be completed in a manner consistent with the Culinary Water Master plan in place at the time of development. The culinary water needs for the proposed annexation area are summarized in the following table.

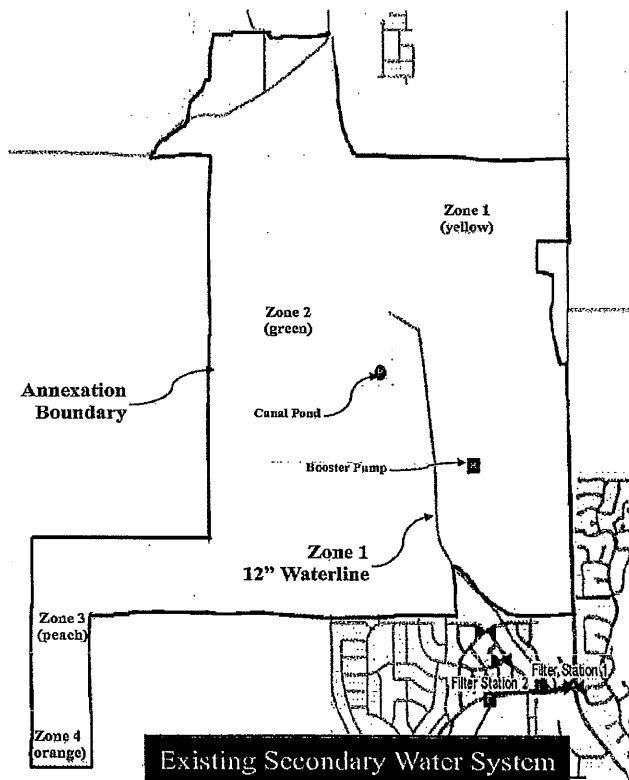
<i>System</i>	<i>ERU's</i>	<i>Requirement per ERU</i>	<i>Total</i>
<b>Storage</b>	12,672	400 gallons	<b>5,068,800 gallons*</b>
<b>Distribution</b>	12,672	1.375 gpm	<b>17,425 gpm</b>
<b>Source - CPB</b>	11,946.3	0.55 gpm	<b>6,570 gpm</b>
<b>Source - Non-CPB</b>	725.63	0.55 gpm	<b>399 gpm</b>

\*The total volume of storage that will need to be constructed in the culinary water system will need to include the 5+ MG for equalization as well as volumes for fire suppression and emergency storage.



# Section 4 – Secondary Water

*The proposed annexation area sits mostly in Zones 1 and 2 of the City's secondary water system. A small portion of the annexation area is in water Zones 3 and 4. The following describes the general improvements necessary to service the area at build-out. Further study and amendments to the City's Secondary Water Master Plan will be necessary to define the specific improvements necessary for adequate service.*



The PRI annexation area sits almost entirely in Zones 1 and 2 of the City's secondary water system. It is anticipated that the sections of the annexation area in these lower zones will be developed first as they will provide the most developable area when the necessary improvements are completed. The small areas in Zones 3 and 4 will likely be developed at a later date. These small areas are difficult service areas and will likely not be developed until there are adjacent properties that can share in and benefit from the expensive infrastructure that will be required.

Although the annexation area is adjacent to existing Zone 1 secondary water lines, there is not sufficient capacity in the existing secondary water system to provide service to this area. The City's secondary water system will need improvements beyond the annexation boundaries to service the entire annexation area. These upgrades will need to provide additional capacity to the source, storage and distribution portions of the secondary water system.

The requirements for secondary water source, storage, and distribution are defined by the City's existing Secondary Water Master Plan. These requirements are determined by estimating the Irrigable Acreage (IA) within the annexation area at build-out. The





submitted District Area Plan specifies that up to 425 acres of open space will be provided which is by definition 100% irrigable. If approximately 63% of the DAP is in the annexation area (1,802.56 acres/2,833 acres), then it can be assumed that the annexation area will contain about 270 acres of the proposed open space. Deducting this from the total annexation area leaves 1,532 acres of developable property. Residential portions of this property will contain about 85% irrigable acreage (as defined by the City's secondary water Impact Fee Ordinance) while the commercial areas will be about 20% irrigable. For the purposes of this analysis it will be assumed that the overall remaining property can expect to be about 65% irrigable. Applying the assumed 65% irrigable area to the remaining 1,532 acres creates about 996 irrigable acres. This analysis is summarized in the following table.

<i>Use</i>	<i>Area</i>	<i>Percent Irrigable</i>	<i>Irrigable Acres</i>
Open Space	270 acres	100%	270
Residential/Commercial	1,532	65%	996
<b>Total</b>	<b>1802</b>		<b>1,266</b>

Once irrigable acreage has been estimated for the annexation area, the requirement for source can be calculated by applying the stipulated 3.96 gpm/irrigable acre defined in the Secondary Water Master Plan as the average PDD.

$$\text{Average Peak Day Demand (PDD)} = 3.96 \text{ gpm/irrigated acre}$$

$$\text{Secondary Source} = 3.96 \text{ gpm per IA} = 3.96 \times 1,266 = 5,013 \text{ gpm}$$

The total number of new secondary sources required for the annexation area will depend on many variables including the capacity of the existing city wells in operation at the time of development, the quality and quantity of water produced from each new source, booster pump locations and sizes, and the final design of the secondary water system in and around the annexation area. Use of canal water and the possibility of shallow well development near the Jordan River should be considered in addition to deep well development. Secondary source development locations should occur as close to storage reservoirs as possible. This will reduce distribution pipe size requirements and the need for additional booster pump stations. It is also anticipated that a water treatment or re-use facility will be constructed. The development of new secondary water sources should be completed in a manner consistent with the Secondary Water Master plan in place at the time of development.

The total volume of secondary water storage required for the annexation area is determined by the maximum observed average peak day demand (MPDD) which is specified as 6.4 gpm per irrigated acre in the City's Secondary Water Master Plan. In the Master Plan it stipulates that secondary water storage ponds are to be sized to supply the MPDD for a 24 hour period.

$$\text{Storage Sizing} = \text{MPDD} \times 24 \text{ hours}$$



$$\text{Storage} = 6.4\text{gpm/IA} \times 1,266 \text{ acres} \times 24\text{hr} \times 60 \text{ min/hr} = 11,667,456 \text{ gal} = 35.81 \text{ acre-ft}$$

The total number of secondary water storage reservoirs will depend on the final secondary water system design for the annexation area keeping in mind that separate reservoirs will be required for each service Zone. A detailed secondary water model will need to be completed identifying the size and location of all secondary water storage facilities that will be constructed for the annexation area. The Secondary Water Master Plan specifies that secondary water storage locations should occur as close to culinary storage tanks wherever possible. This will allow overflow from the culinary system to be captured by the secondary ponds conserving water although this may not be feasible at all locations.

Peak instantaneous demand (PID) is used for distribution system sizing as per the City's Secondary Water Master Plan. PID for the secondary water system is defined as 200% of the average PDD. Peak Day Demand (PDD) for the secondary water system within the annexation area has previously been determined to be 5,013 gpm.

$$\text{PDD} = 3.96 \text{ gpm per IA} = 3.96 \times 1,266 = 5,013 \text{ gpm}$$

$$\text{PID} = \text{PDD} \times 2 = 5,013 \text{ gpm} \times 2 = 10,026 \text{ gpm}$$

The PID flow rate calculated is for the entire secondary water distribution system that will need to be designed for the annexation area. Final distribution sizing can only be determined after a detailed secondary water model has been completed identifying the location of water mains that will be constructed for the annexation area. This distribution system must be capable of delivering the required PID. In order to minimize the risk of contamination from unauthorized cross connections to the culinary water system the secondary distribution system pressures should be set lower than the culinary system. This is done by appropriately sizing pipe and locating reservoirs at appropriate elevations as defined in the Secondary Water Master Plan.

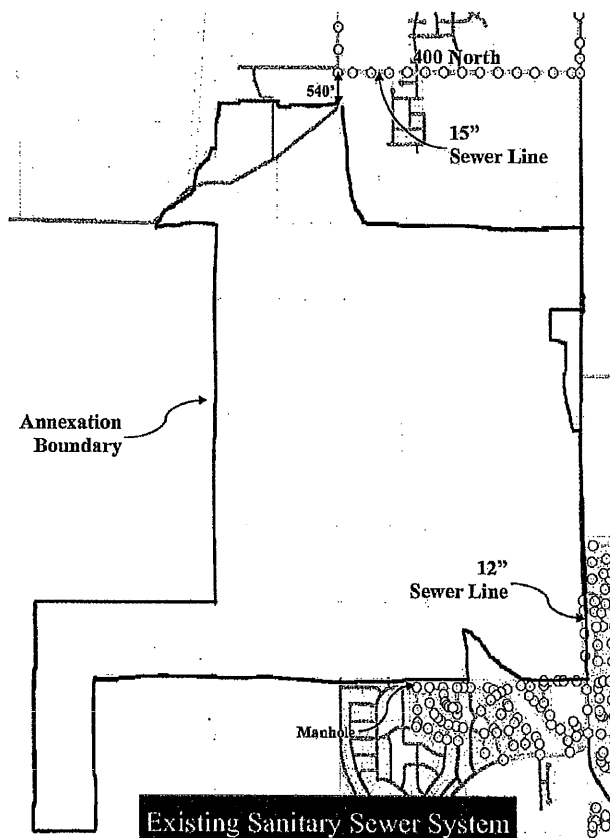
The secondary water needs for the proposed annexation area are summarized in the following table.

<i>System</i>	<i>Unavailable Acres</i>	<i>Requirement per IA</i>	<i>Total</i>
<b>Source</b>	1,266	3.96 gpm	<b>5,013 gpm</b>
<b>Storage</b>	1,266	6.4gpm x 24 hrs	<b>35.81 acres-ft</b>
<b>Distribution</b>	1,266	3.96 gpm x 2	<b>10,026 gpm</b>



# Section 5 – Sanitary Sewer

*The proposed annexation area sits in center of the existing City limits. The following describes the general improvements necessary to provide sewer service for the area at build-out. Further study and amendments to the City's Sewer Master Plan will be necessary to define the specific improvements necessary for adequate service.*



Although the annexation area is adjacent to existing sanitary sewer lines, there is not sufficient capacity in the City's existing sanitary sewer system to provide service to this area. Significant off-site improvements will need to be made to service the annexation area at build out.

It is anticipated that the on-site sanitary sewer system will collect sewage from the project and gravity flow it to the east, towards Redwood Road. There are several options for conveying the sewage from Redwood Road to the Timpanogos Special Service District (TSSD) that currently treats all of the City's wastewater.

One option would be to use a gravity system with a siphon under the Jordan River to convey the sewage to TSSD's 54-inch trunk line in 7350 North. This option eliminates the need for a costly and maintenance intensive lift station and is highly recommended. Sizing of the outfall line and design of the siphon would need to be part of a final sanitary sewer design. Several variables would affect this design and the final alignment of the outfall including pipe slopes, water table elevations, and easement acquisition.

Another option would be to gravity flow the sewage to a common collection point and pump it through a force main to TSSD's 54-inch trunk line in 7350 North. This option would require either significant upgrades to one of the City's existing lift stations or the



construction of a new lift station. The long term maintenance costs associated with a lift station make this option less desirable to the City than the use of a gravity only system.

To estimate the volume of sewage that will be generated in the annexation area, a flow assessment is necessary. As per the Sanitary Sewer Master Plan, it is assumed that 250 gallons of wastewater per person per day will be generated. As described in Section 2 ERU's were estimated for the build-out condition. In order to associate expected sanitary sewer flows with ERU's, the ERU's for the annexation area must be converted to an estimated population. Population estimates in the Sanitary Sewer Master Plan are based on the Utah County average of 3.71 residents per household. This population is representative of the number of people generating sewer flows in the annexation area in a typical day even if they do not actually live within the annexation boundaries.

**Average Population = 12,672 ERU's \* 3.71 = 47,013 people**

**Expected Sewer Flow = Population \* 250 gal/person/day**  
**= 47,013 people \* 250 gal/person/day = 11,753,250 gallons/day**

**Expected flow = 11,753,250 gallons/day = 11.75 MGD (million gallons per day)**

Final designs for the on and off-site sanitary sewer system will need be based on a detailed hydraulic model that takes into consideration expected flow locations, daily and seasonal peaking, and long term growth within the area. The final design must also consider industry and Master Plan recommendations of maintaining cleaning velocities of 2 ft/s during all phases of development. The sanitary sewer collection system must be capable of serving the needs of the entire annexation area while minimizing maintenance and operation costs.

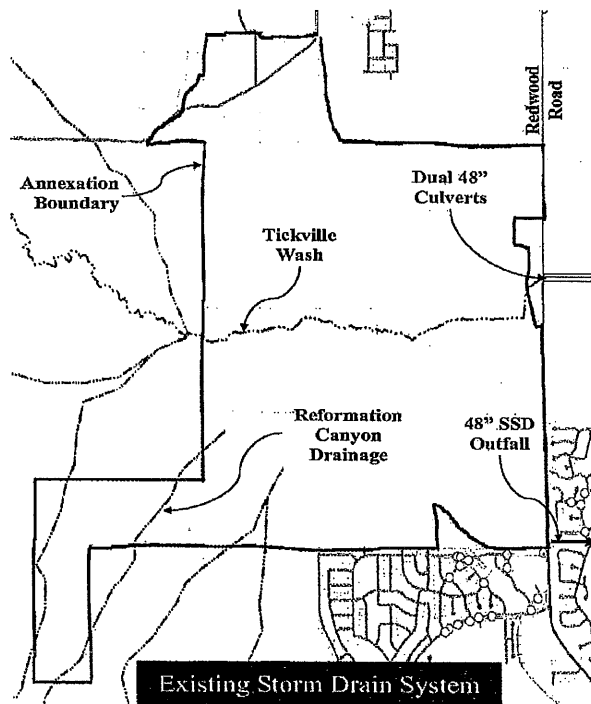
The sanitary sewer needs for the proposed annexation area are summarized in the following table.

<i>ERU's</i>	<i>People per ERU</i>	<i>Population</i>	<i>Flow per Person</i>	<i>Total Sewer Flows</i>
12,672	3.71	47,013	250 gpm/day	11,753,250 gal/day = 11.75 MGD



# Section 6 – Storm Drain

*The development of the proposed annexation area will need to include the proper management of storm water runoff. The goals of this management should include public safety, prevention of property damage, management of nuisance water, and protection of downstream waters from adverse quality and quantity impacts. Further study and amendments to the City's Storm Drain Master Plan will be necessary to define the specific improvements necessary for adequate storm water management.*

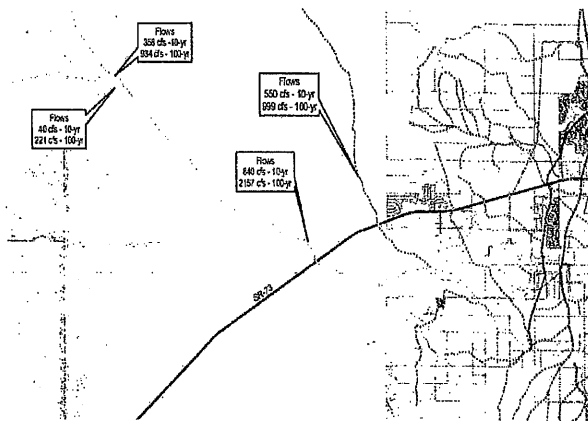


The proposed annexation area has several contributing drainage basins that discharge onto the property that will need to be managed and mitigated to allow development to occur. Proposed development plans will need to incorporate buffer areas around these drainages as part of a comprehensive storm water management plan. On-site storm water discharges will need to be cleaned and conveyed in a manner that complies with National Pollutant Discharge Elimination System (NPDES), Utah Pollutant Discharge Elimination System (UPDES), and Saratoga Springs requirements for water quality. Treatment methods could include one or more of the following: oil/water separators,

bio-swales, detention ponds, and debris basins. The sizing and location of these facilities will need to be determined as part of a comprehensive hydraulic and hydrologic model provided by the developer.

Hydrologic modeling will be required to quantify off-site flows and to determine the best method for mitigating and routing these flows through the annexation area along historical drainage paths. Debris basins for offsite drainages are recommended upstream of development to capture debris before it enters developed areas minimizing the chances of plugged culverts and potential property damage. The most prominent drainage within the proposed annexation area is the Tickville Wash. This drainage has a history of severe flooding and is an area of concern to the City. Historical runoffs within the wash have





been so severe that periodic flooding has occurred where the drainage crosses Redwood Road. According to the City's Storm Drain Master Plan a 100-year 24-hour storm event in the area can produce up to 3,600 cfs, and the 10-year up to 1,565 cfs. Currently, two 48-inch culverts convey the water beneath Redwood Road and into two concrete ditches that run along either side of 400 South. The capacity of these culverts

may need to be increased as part of the overall storm drain management plan for the annexation area.

The other off-site drainages of concern to the annexation area are the drainage basins in and around Reformation Canyon. Drainage from these canyons flow northeast and then sheet flow east across the annexation area towards Redwood Road. During large storm events this water has historically overtopped Redwood Road causing erosion and extensive property damage to homes adjacent to the lake in the northern part of the Saratoga Springs Development (SSD). The historical flow path of this storm water across the annexation area has been highly variable and is dependent upon the current conditions of the land. Estimated flows from these drainages have been determined to be up to 71.3 cfs during a ten-year storm event and 298.1 cfs during a 100-year storm event. The City has recently constructed a 48" outfall from Redwood Road to Utah Lake and a portion of the capacity in this pipe was established specifically to convey flows from these drainages. A future storm water management plan for the annexation area will need to contemplate how to mitigate and route flows from these drainages to the 48" outfall constructed by the City.



On-site storm water flows generated within the annexation area are anticipated to be captured and conveyed by a system of gutters, inlet boxes, and pipes. This water must be detained as per city standards in a manner that limits the overall discharge from developed areas to 0.2 cfs/acre. Detention ponds will need to be constructed throughout the development and sized so as to keep discharge flows from the annexation area at historical levels. These basins should not be located in natural drainage channels but could, if approved by the City, release treated storm water back into the historical drainage paths. Ultimately storm water will need to be conveyed either to Utah Lake or the Jordan River. Sizing of storm drain outfall lines would need to be part of a final Storm Drain design submitted by the developer. Several variables would affect the design and final alignment of storm drain outfalls including pipe slopes, road designs, and easement acquisition.



# PROOF OF PUBLICATION

from

## The Daily Herald

STATE OF UTAH } SS.  
Utah County }

I, Morgan Bassett, being first duly sworn depose and say that I am the Legal Billing Clerk of the Daily Herald, a newspaper of general circulation, published seven times each week at Provo, Utah, County of Utah; that the notice attached hereto, 362131-NOTICE OF PROPOSED ANNE, and which is a copy, was published in said newspaper, the first publication having been made on the 9th day of August, 2010, and the last on the 16th day of August, 2010; that said notice was published in the regular and entire issue of every number of the paper during the period and times of publication, and the same was published in the newspaper proper and not in the supplement.

Same was also published online at utahlegals.com, according to Section 45-1-101, Utah Code Annotated beginning on the first date of publication and for 30 days thereafter.

*Morgan Bassett*

Subscribed and sworn before me this 16th day of August, 2010.

*Debbie L. Chandler*

Notary Public

Residence: Spanish Fork, Utah

My commission expires 06/05/2013

**LEGAL NOTICES**

**NOTICE OF PROPOSED ANNEXATION**  
NOTICE IS HEREBY GIVEN THAT, on July 27, 2010, the Corporation of the Presiding Bishop of The Church of Jesus Christ of Latter-day Saints filed an Annexation Application (the "Petition") with the City Recorder (the "City Recorder") of the City of Saratoga Springs, Utah (the "City") proposing the annexation of approximately 1,803 acres of land (the "Property") into the City. Notice is further given as follows:

1. On July 27, 2010, the City Council of the City adopted Resolution No. R10-30, accepting the Petition for further consideration.
2. On July 29, 2010, the City Council received from the City Recorder a notice of certification of the Petition, in satisfaction of Section 10-2-405(2)(c)(i) of the Utah Code.
3. The Property proposed for annexation consists of multiple parcels of property owned by several different owners, and is generally bounded on the north by 300 north, on the south by 1200 south, on the east by Redwood Road, and on the west by 1600 west.
4. A complete copy of the Petition, including an accurate map of the area proposed for annexation, is available for inspection and copying at the office of the City Recorder at 1307 North Commerce Drive, Suite 200, Saratoga Springs, Utah, during regular business hours between 8:00 a.m. and 5:00 p.m., Monday through Friday.
5. The City Council may grant the Petition and annex the Property unless, on or before August 29, 2010, one or more protests are filed with the Utah County Boundary Commission c/o Bryan Thompson, Utah County Clerk, 100 East Center Street, Suite 3600, Provo, Utah 84606, with a copy to the City Recorder at 1307 North Commerce Drive, Suite 200, Saratoga Springs, Utah.

DATED this 29th day of July, 2010,  
\_\_\_\_\_/s/ City Council  
City of Saratoga Springs, Utah  
Legal Notice 362131, Published in The Daily Herald August 9, 16, 2010.

