



## CITY COUNCIL AGENDA

PUBLIC NOTICE is hereby given that the City Council of Spanish Fork, Utah, will hold a regular public meeting in the Council Chambers in the City Office Building, **40 South Main Street**, Spanish Fork, Utah, commencing at **6:00 p.m. on August 20, 2013**.

### AGENDA ITEMS:

#### 1. CALL TO ORDER, PLEDGE, OPENING CEREMONY, RECOGNITIONS:

- a. Pledge, led by invitation

#### 2. PUBLIC COMMENTS:

Please note: In order to be considerate of everyone attending the meeting and to more closely follow the published agenda times, public comment will be limited to three minutes per person. A spokesperson who has been asked by a group to summarize their concerns will be allowed five minutes to speak. Comments which cannot be made within these limits should be submitted in writing. The Mayor or Council may restrict the comments beyond these guidelines.

- a. \* [Agenda Request-LeGrand Adams](#)

#### 3. COUNCIL COMMENTS:

#### 4. SPANISH FORK 101: Review of FY2013 Golf Course Financials – Dale Robinson & Ryan Rhees

#### 5. CONSENT ITEMS:

These items are considered by the City Council to be routine and will be enacted by a single motion. If discussion is desired on any particular consent item, that item may be removed from the consent agenda and considered separately.

- a. \* [Minutes of Spanish Fork City Council Meeting – August 6, 2013](#)
- b. \* [River Trail Debris & Tree Removal Project, Change Order 4 to Remove Spring Run-Off & Wind Storm Debris](#)
- c. \* [Smith Auto Company Public Utility Easement Agreement for 200 East 46kv Electric Line](#)
- d. \* [Property Exchange Agreement-Schwartz for Right of Way for Canyon Creek Parkway and 1100 East from 2150 North to 2700 North Staff](#)
- e. \* [Master Agreement for Professional Services-Stantec Inc.](#)
- f. \* [WebQA Mobile Application Addendum Request for Additional Services](#)
- g. \* [Calpac Road Curb & Gutter 2013-Change Order 1](#)

#### 6. PUBLIC HEARING:

- a. \* [Ordinance #12-13 Vacating Expressway Plaza, A Commercial Development, Plats A, B, & C](#)
- b. \* [Ordinance #13-13 Vacating 1200 North Street](#)

#### 7. NEW BUSINESS:

- a. \* [Woodhouse Substation Transformer Contract Award](#)
- b. \* [Resolution #13-07 Approving the Municipal Wastewater Planning Program](#)
- c. \* [Resolution #13-08 Approving an Interlocal Agreement with Utah County to Provide Flood Control Along the Spanish Fork River and Authorizing the Mayor to Execute the Agreement](#)
- d. [Tenedor Development Agreement –Canyon Creek Development](#)

### ADJOURN:

\* Supporting documentation is available on the City's website [www.spanishfork.org](http://www.spanishfork.org)

Notice is hereby given that:

- In the event of an absence of a quorum, agenda items will be continued to the next regularly scheduled meeting.
- By motion of the Spanish Fork City Council, pursuant to Title 52, Chapter 4 of the Utah Code, the City Council may vote to hold a closed meeting for any of the purposes identified in that Chapter.
- This agenda is also available on the City's webpage at [www.spanishfork.org](http://www.spanishfork.org)

SPANISH FORK CITY does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in the employment or the provision of services. The public is invited to participate in all Spanish Fork City Council Meetings located at 40 South Main St. If you need special accommodation to participate in the meeting, please contact the City Manager's Office at 804-4530.



## AGENDA REQUEST FORM

Date of Meeting Requested to Attend: Aug 20, 2013

All forms must be completed and returned by NOON the Tuesday before the Council Meeting requested. Thank you.

Name: LeGrand Adams

Address: 1925 E Powerhouse Rd Spanish Fork UT

Phone Number: 208-290-6588

Please list the subject and detailed information regarding your request:

Requesting a Water Service Agreement for the North East vacant property lot. I currently have a Conditional Zone Clearance with the County to build based upon acquiring a Water Connection agreement with Spanish Fork City. In Accordance with Resolution NO 93-02 #4 I would like to receive a water commitment from the city.

LeGrand Adams  
Signature

Aug 15, 2013  
Date

ROLL CALL

VOTING YES NO

MAYOR MARIE W. HUFF

(votes in case of tie)

CLYDE A. SWENSON

City Councilmember ✓

SHELDON GORDON

City Councilmember

*not present  
for vote*

REX WOODHOUSE

City Councilmember ✓

JERALD CHAPPLE

City Councilmember ✓

KIM H. PETERSON

City Councilmember ✓

I move that this resolution be adopted.

*Kim H. Peterson*

City Councilmember

I second the foregoing motion.

*Jerald M. Chapple*

City Councilmember

**RESOLUTION NO. 93-02**

RESOLUTION AMENDING THE CITY POLICY CONCERNING WATER CONNECTIONS

WHEREAS, Spanish Fork city has a policy, in order to maintain control over its water supply, that no water connections outside the city limits shall be allowed; and

WHEREAS, it has come to the attention of the city that there are some residents outside the limits of the city who are without water through no fault of their own; and

WHEREAS, residents referred to have petitioned for annexation into the city, which has been denied; and

WHEREAS, the city recognizes a humanitarian responsibility to provide water in emergency situations to non-residents of the city;

NOW THEREFORE, be it resolved by the Spanish Fork City council as follows:

1. Commencing on the date hereof, the city will not allow water connections to its public water system to residents, businesses, buildings, or other uses outside the city limits except for the limited exceptions set forth herein.

2. Non-residents of the city living in close proximity to the city may be allowed a water hook-up on an emergency basis if the following conditions are met:

- a. There is verified documentation produced to the city establishing that such residents' source of water, such as the drying up of wells, has taken place and that such resident has no other source of potable water other than by trucking the same in containers;
- b. That such residents will pay the entire cost of extending city water mains, including all city fees, in order to access city water;
- c. That the size of line, distance to be extended, and all specifications concerning the construction shall be set at the sole discretion of the city engineer.

3. The city council shall have absolute discretion to determine whether an emergency exists and if any resident suffering any emergency are in close enough proximity to the city to qualify to receive water connections under the terms of this resolution, which decision shall be final and non-appealable.

4. Any vacant property having frontage along a water line extended pursuant to the emergency provisions of this resolution shall be entitled to a water connection without necessarily establishing its own emergency, subject to any connector's agreement in favor of property owners who have paid the expenses of extending such line and payment of proper fees to the city.

5. Those water users currently outside the city limits who are receiving water from the Spanish Fork City public water system may continue to receive water through their existing

connections.

6. All non-residents of the city receiving water through the Spanish Fork City public water system shall pay such rates as may be set from time to time by the city council, which rates may be included in the city's annual budget.

This resolution adopted this 7th day of April 1993 by the City Council of Spanish Fork City, Utah.

Marie W. Huff  
Marie W. Huff, Mayor

ATTEST:

Kent R. Clark  
Kent R. Clark, City Recorder



STATE OF UTAH            )  
                                      : ss.  
COUNTY OF UTAH        )

Kent R. Clark, being first duly sworn, deposes and says that he is the duly appointed and qualified recorder of Spanish Fork City, County of Utah, State of Utah; that as part of his duties to keep the minutes and ordinances of Spanish Fork City, that the attached resolution is the same as the resolution passed on the 7th day of April 1993, by the Spanish Fork City Council.

Kent R. Clark  
Kent R. Clark

Subscribed and sworn to before me this 8th day of April, 1993.

Mary-Clare Maslyn Tuten  
NOTARY PUBLIC

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Resolution 93-02, Passed April 7, 1993

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**Tentative Minutes**  
**Spanish Fork City Council Meeting**  
**August 6, 2013**

Elected Officials Present: Mayor G. Wayne Andersen, Councilmembers Steve Leifson, Rod Dart, Keir A. Scoubes, Richard Davis, Brandon Gordon.

Staff Present: David Oyler, City Manager; Junior Baker, City Attorney; Seth Perrins, Assistant City Manager; Dave Anderson; Community Development Director; Chris Thompson, Public Works Director; Kent Clark City Recorder/Finance Director; Steve Adams, Public Safety Director; Angie Warner, Deputy Recorder.

Citizens Present: Michelle Wright, Austin Barber, Melinda Barber, Jeff Wright, Paul Barber, Lori Barber, Chad Argyle, Sam Fjerstad, Richard A. Evans, Cary Hanks, Brad Mitchell, Courtney Jones, Carl Johnston, Jared Warner, Jill Thorpe, Heather Frost, Jose Aguilera, Joe Rich, Dan Schmidt, Richard Mendenhall.

**CALL TO ORDER, PLEDGE, RECOGNITION:**

Mayor Andersen called the meeting to order at 6:00 p.m.

Councilman Gordon led in the pledge of allegiance.

**Employee of the Quarter**

Chief Adams introduced Officer Michelle Wright as the employee of the quarter. Chief Adams highlighted a few great things Officer Wright has done.

Mayor Andersen thanked Officer Wright.

**Proclamation National Public Lands Day**

Mayor Andersen read a proclamation for National Public Lands Day that will be September 28, 2013.

**PUBLIC COMMENTS:**

Cary Hanks, Director of the Spanish Fork Salem Area Chamber of Commerce invited the public to the "Meet the Candidates Night" that will be held at the Senior Citizens Center August 7<sup>th</sup> at 7:00pm. This event will be live on SFCN Channel 17. This Primary Election will be for the City Council positions only, the Mayor position will be in the General Election. The public can come and get to know the candidates to help determine who they will vote for. Ms. Hanks reminded the public that Early Voting is still going on at the City Office until August 9<sup>th</sup> from 1:00pm-5:00pm.

**COUNCIL COMMENTS:**

Councilman Scoubes thanked all those involved in helping with the Fiesta Days Celebration.

Councilman Dart agreed with Councilman Scoubes. Councilman Dart thanked the City Staff for their great work especially the streets department for resolving a street issue in his neighborhood.

49 Councilman Leifson agreed with the Fiesta Days comments. Councilman Leifson gave an update  
50 from the APPA meetings he attended in Washington DC.

51  
52 Councilman Davis expressed how wonderful Fiesta Days was. Councilman Davis thanked all of  
53 the staff, committees & volunteers. Fiesta Days would not happen without all of the great  
54 volunteers.

55  
56 Councilman Gordon thanked the businesses for the donations to support Fiesta Days celebration.  
57 Councilman Gordon reminded the public that the Youth City Council will meet this Thursday 4:00.  
58 Also, the farmer's market is going great.

59  
60 Mayor Andersen expressed that this year's was a perfect Fiesta Days celebration. Mayor  
61 Andersen thanked the Diamond Fork Riding Club for all their work to run the rodeo. Mayor  
62 Andersen also reminded the public to purchase their tickets for The Challenge of Champions  
63 Rodeo that will be in May 2014.

64  
65 **SPANISH FORK 101: 2013 Water Conservation Program –Chris Thompson**

66  
67 **CONSENT ITEMS:**

- 68 a. Minutes of Spanish Fork City Council Meeting – July 16, 2013  
69 b. Addendum to Wasatch Pallet Site Plan Phasing Agreement  
70 c. AHB, LLC Public Utility Easement Agreement for 200 East 46kv Electric Line  
71 d. Canyon Creek Parkway Real Estate Purchase Agreement with UDAK Properties LLC for  
72 the Right of Way on Chappel Drive from US 6 to Kirby Lane  
73 e. Master Services Agreement for Hales Engineering  
74 f. Williams & Hanson Purchase Agreements for Property needed for the Airport Runway  
75 Expansion  
76 g. Bureau of Reclamation Weeping Rock Trail License Agreement  
77 h. Agreement with Spanish Fork South East Irrigation Company to take Strawberry Water at  
78 the Powerhouse Road Diversion  
79 i. Purchase Agreement – Schwartz for Right of Way for Canyon Creek Parkway & 1100 East  
80 from 2150 North to 2700 North  
81 j. Agreement with Spanish Fork West Field Irrigation Company to take Strawberry Water at  
82 the Powerhouse Road Diversion  
83 k. UDOT Cooperative Agreement to Maintain Culvert at 3400 East US 6  
84 l. Agreement with Spanish Fork South Irrigation Company to take Strawberry Water at the  
85 Powerhouse Road Diversion  
86 m. Master Services Agreement for Aqua Engineering

87  
88 Councilman Leifson made a **Motion** to **approve** the consent items.

89 Councilman Gordon **Seconded** and the motion **Passed** all in favor.

90  
91 **PUBLIC HEARING:**

92 **Property Tax Increase – Truth in Taxation Hearing**

93 Kent Clark reviewed the process for the truth in taxation and said the needs in the general fund  
94 expenses are greater than the general fund revenues. Mr. Clark said that the two options are to  
95 raise property tax or cut more expenses. Mr. Clark highlighted the cost changes in several  
96 general fund departments and showed the comparison of property tax rates in surrounding cities

97 with Spanish Fork at the lowest. Mr. Clark explained how the certified tax rate is figured and  
98 said this is the public hearing for a proposed property tax increase from 12.04 mils to 12.21 mils.  
99  
100 Councilman Davis made a **Motion** to move into Public Hearing.  
101 Councilman Scoubes **Seconded** and the motion **Passed** all in favor at 7:06 p.m.  
102  
103 Mayor Andersen welcomed public comment.  
104 There was none.  
105  
106 Councilman Dart made a **Motion** to move out of Public Hearing.  
107 Councilman Leifson **Seconded** and the motion **Passed** all in favor at 7:07 p.m.  
108  
109 Councilman Scoubes asked if there are only the two options-raise revenue or cut expenses.  
110  
111 Mr. Clark reviewed that for approximately 3 years there have been no salary increases and  
112 benefit packages have been reviewed and adjusted to save in that area. Mr. Clark believes that  
113 the city is always looking for ways to cut expenses and with this proposed increase it will not  
114 cover the increased expenses, it will only help. Mr. Clark said that raising the property tax a little  
115 at a time is better than waiting and having a large increase.  
116  
117 Dave Oyler reviewed that each department needs additional man power to get projects done.  
118 But we have not allowed departments to add more employees to save money. The ambulance  
119 division went up \$80,000-\$90,000 because of federal regulations. Most of the budget is labor  
120 costs and all cities are facing the challenge of maintaining costs.  
121  
122 Mayor Andersen commented that staff takes the budget very seriously and have been asked  
123 many times in all the departments where they can cut costs.  
124  
125 Discussion took place regarding the certified tax rate.  
126  
127 Councilman Dart made a **Motion** to **approve** the Property Tax Increase.  
128 Councilman Gordon **Seconded** and the motion **Passed** all in favor with a roll call vote.  
129  
130 **NEW BUSINESS:**  
131 **Board Appointments**  
132 Mayor Andersen recommended that the City Council approve the re-appointment of Brad  
133 Gonzales and the new appointment of Treaci Tagg to the Planning Commission Board.  
134  
135 Councilman Leifson made a **Motion** to **approve** the Mayors re-appointment of Brad Gonzales and  
136 the new appointment of Treaci Tagg to the Planning Commission Board  
137 Councilman Davis **Seconded** and the motion **Passed** all in favor.  
138  
139 **Project Signage Plan Approval Request for the Canyon Creek Shopping Center**  
140 Dave Anderson said that the Planning Commission & City Council held a joint work session last  
141 week to review this item. Mr. Anderson gave a background of this item and read from Title 5  
142 regarding signage and commented on the main points of the ordinance. Mr. Anderson addressed  
143 some concerns: the brightness and rotation regulations of the electronic signs and the inclusion of  
144 off-premise signs that direct traffic to the center. Planning Commission recommended approval  
145 of the proposed Project Signage Plan.

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Councilman Davis asked who will get a project signs and who would get the monument signs.

Richard Mendenhall pointed out on the map that signs will be identified in each development phase.

Councilman Davis asked if on the signs the base could be more than just concrete, maybe a brick, rock or some design.

Richard Mendenhall said yes, it can be changed.

Councilman Davis made a **Motion** to **approve** the Canyon Creek Shopping Center Project Signage Plan based on the following findings and subject to the following condition:

**Findings:**

- 1.) That the proposed 100-foot tall Pylon Signs are necessary to make signage visible from Interstate 15.
- 2.) That the proposed 65-foot tall Pylon Signs are necessary to make signage visible from SR 51 and US 6.
- 3.) That the proposed Project and Monument Signs are needed to provide adequate copy area for the numerous tenants that will locate in the development.
- 4.) That the proposed signage will enhance the viability of the development and increase commerce in Spanish Fork City.
- 5.) That, as proposed, the signage will help create an aesthetically pleasing environment.
- 6.) That the proposed signage will not have a detrimental impact on any surrounding properties or land uses.

**Conditions:**

- 1.) That any proposed off-premise signs will only be permitted if it is found that they conform to government regulations.

Councilman Dart **Seconded** and the motion **Passed** all in favor.

**Approval of FY 2014 Budget**

Kent Clark presented the FY 2014 Budget. The \$62,146,209 million budget has not changed since the public hearing in June. Mr. Clark noted that the general fund increased because the golf and the swimming pool have been put into the general fund from the enterprise fund.

Councilman Scoubes commented that the City Staff works on this budget year round and this is to approve the budget, not the expenditures.

Councilman Leifson made a **Motion** to **adopt** the FY 2014 Budget.

Councilman Davis **Seconded** and the motion **Passed** all in favor.

**ADJOURN:**

Councilman Dart made a **Motion** to **adjourn** to Closed Session to discuss Real Estate

194 Transactions.  
195 Councilman Leifson **Seconded** and the motion **Passed** all in favor at 8:00 p.m.  
196  
197 ADOPTED:  
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199

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Angie Warner, Deputy Recorder

*DRIFTH*



# Memo

To: Mayor and City Council  
From: Chris Thompson, Public Works Director/City Engineer  
Date: August 6, 2013  
Re: River Trail Debris and Tree Removal Project, Change Order 4 to Remove Spring Run-Off and Wind Storm Debris

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## Staff Report

The city has contracted with Barney Inc. to remove debris and invasive trees along the Spanish Fork River. This project is funded with an NRCS grant that requires a 25% city match. The bid to perform this work came in well under budget so this is to request a change order to remove some additional debris that was brought down the river during the spring run-off. It is also to remove some additional trees that fell into the river during a wind storm earlier this year.

We approached both contractors working on the river for pricing on this change order and Blake Barney was the lowest cost by almost half and there is still budget available in the grant to do the work. 53% of the work would be done in the county. Utah County has agreed to pay the match for this portion of the change order. We therefore recommend that the City Council approve Change Order 4 to Barney Inc, for the amount of \$11,700.

Attached: change order



# Spanish Fork City

## Contract Change Order

Change Order Number: **4**

|              |                   |      |           |
|--------------|-------------------|------|-----------|
| Contract for | Barney, Inc.      | Date | 7/30/2013 |
| Owner        | Spanish Fork City |      |           |
| To           | GL# 81815362      |      |           |

You are hereby requested to comply with the following changes from the contract plans and specifications:

| Description of Changes<br>(Supplemental Plans and Specifications Attached) | Decrease<br>in Contract Price | Increase<br>in Contract Price |
|--|-------------------------------|-------------------------------|
| Extra debris removal for Spring run off and wind storms                    |                               | \$11,700.00                   |
| TOTALS :   | \$0.00                        | \$11,700.00                   |
| NET CHANGE IN CONTRACT PRICE :   | \$0.00                        | \$11,700.00                   |

**JUSTIFICATION:**

Spring run off brought additional debris down the river and some wind storms have caused some trees to fall into the river.

The amount of the contract will be increased by the sum of : Eleven Thousand Seven Hundred and 00/100 Dollars  
\$11,700.00

The contract total including this and previous change orders will be : Two Hundred Forty Two Thousand Three Hundred Eight  
and 12/100 Dollars \$242,308.12

This document will become a supplement to the contract and all provisions will apply herein.

Recommended: \_\_\_\_\_ Date: \_\_\_\_\_  
Engineering Division Manager

Approved: \_\_\_\_\_ Date: \_\_\_\_\_  
Public Works Director

Approved: \_\_\_\_\_ Date: \_\_\_\_\_  
Mayor

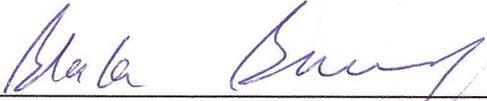
Accepted: \_\_\_\_\_ Date: \_\_\_\_\_  
Contractor

# Barney Inc.

## Extra for Removal of Deadfall

Clean River Channel of Deadfall.....\$ 11,700.00

(New fallen tree debris from spring run off and wind storms.)

  
\_\_\_\_\_  
Blake Barney

Barney Inc.  
1292 West 900 South  
Spanish Fork, Utah 84660  
801-372-0907  
E-mail: [bandbrental@yahoo.com](mailto:bandbrental@yahoo.com)



# Memo

To: Mayor and City Council  
From: Jered Johnson, Engineering Division Manager  
Date: August 15, 2013  
Re: Smith Auto Company Public Utility Easement Agreement for 200 East 46kV  
Electric Line

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## Staff Report

The city needs an easement at 2500 North 200 East to make upgrades to the electric system. These upgrades will increase the efficiency and safety of the system. The upgrades are necessary for the surrounding property to develop and will therefore be reimbursable to the city when development occurs.

We recommend that the city council approve this easement agreement for the amount of \$5,897.00.

Attached: agreement



## **200 EAST 46KV ELECTRICAL LINE EASEMENT AGREEMENT**

This agreement is entered between SMITH AUTO COMPANY (Owner) and SPANISH FORK CITY (City) for the purpose of constructing a new electrical line along 200 East through the property owned by Owner.

WHEREAS, Owner is the owner of real property in Spanish Fork, Utah, Parcel Serial# 26:049:0043; and

WHEREAS, City is desirous of obtaining an easement along 200 East through property owned by Owner for the purpose of constructing and maintaining Public Utilities.

THEREFORE, the parties mutually agree to the following terms and conditions:

1. The easement is described as follows:

BEGINNING AT A POINT LOCATED N89°00'27"E ALONG THE SECTION LINE 1471.97 FEET AND SOUTH 901.82 FEET FROM THE NORTHWEST CORNER OF SECTION 7, TOWNSHIP 8 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDAIN; THENCE N88°53'38"E 15.01 FEET; THENCE S01°43'30"W 214.91 FEET; THENCE S88°53'38"W 15.02 FEET; THENCE N01°43'32"E 214.91 TO THE POINT OF BEGINNING.

CONTAINING: 0.074 ACRES

2. When the City installs utilities through the easement granted herein, the contractor doing the installation shall be required to haul away and dispose of any debris which is removed during excavation. City shall cause the excavated site to be restored to the same or similar condition which existed prior to excavation.
3. City shall repair and replace all grass, flowers, shrubs, trees, fences, sprinkler systems, parking areas, walkways, asphalt concrete and any other improvements located on the easement property or adjacent property of Owner that may be damaged in the prosecution of any work City, its agents, servants, employees, or contractors, and shall otherwise restore the surface condition to the same or substantially the same condition that it was in prior to such work by City and leave the easement and adjacent property of Owner in a clean condition free of litter and debris.
4. City shall be responsible for all improvements and costs associated with this agreement.
5. Owner agrees that this is a Public Utility Easement in perpetuity for the installation, maintenance, repair and replacement of public utilities, sidewalks, and appurtenant parts thereof and the right to reasonable access to Owners property for the above described

purposes. The easement shall run with the real property and shall be binding upon the Owner and the owner's successors, heirs and assigns.

6. City agrees to pay Owner \$5,897.00 for this easement.
7. City shall pay Owner within 30 days of recording said easement.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 2013

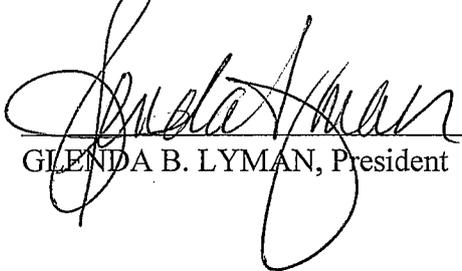
SPANISH FORK CITY By:

\_\_\_\_\_  
G. WAYNE ANDERSEN, Mayor

ATTEST:

\_\_\_\_\_  
KENT R. CLARK, Recorder

SMITH AUTO COMPANY By:

  
\_\_\_\_\_  
GLENDA B. LYMAN, President



# Memo

To: Mayor and City Council  
From: Chris Thompson P.E., Public Works Director/City Engineer  
Date: August 13, 2013  
Re: Property Exchange Agreement-Schwartz for Right of Way for Canyon Creek Parkway and 1100 East from 2150 North to 2700 North

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## Staff Report

Spanish Fork City has committed to obtain right of way from US 6 to 2700 North to support the Canyon Creek commercial area. This agreement is to acquire the portion of right of way from approximately 2150 North to 2700 North from the Schwartz family. Because of some permitting issues with the Army Corp of Engineers the alignment of this road has been adjusted. We recommend that the City Council approve this agreement.

Attached: agreement



**CANYON CREEK PARKWAY R-O-W  
PROPERTY EXCHANGE AGREEMENT**

This agreement is entered between SCHWARTZ INVESTMENTS, LLC (Schwartz) and SPANISH FORK CITY (City) for the purpose of exchanging property between both parties for improving a public right-of-way.

WHEREAS, City is owner of a strip of land through Schwartz property acquired for a future public right-of-way, described as follows:

A PORTION OF THAT REAL PROPERTY DESCRIBED IN DEED ENTRY NO. 134911:2008 IN THE OFFICIAL RECORDS OF UTAH COUNTY, LOCATED IN THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 8 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT WHICH IS LOCATED ON THE SOUTH LINE OF SAID REAL PROPERTY LOCATED N00°17'38"W ALONG THE SECTION LINE 141.17 FEET AND WEST 289.45 FEET FROM THE EAST QUARTER CORNER OF SECTION 7, TOWNSHIP 8 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN (BASIS OF BEARING: S00°18'06"E ALONG SECTION LINE FROM THE NORTHEAST CORNER TO THE EAST QUARTER CORNER OF SECTION 18, TOWNSHIP 8 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN); THENCE N87°30'00"W 44.08 FEET; THENCE N01°00'00"W 32.57 FEET; THENCE ALONG THE ARC OF A 1488.00 FOOT RADIUS CURVE TO THE RIGHT 285.53 FEET THROUGH A CENTRAL ANGLE OF 10°59'40" (CHORD BEARS: N04°29'50"E 285.09 FEET); THENCE ALONG THE ARC OF A 800.00 FOOT RADIUS CURVE TO THE LEFT 154.96 FEET THROUGH A CENTRAL ANGLE OF 11°05'55" (CHORD BEARS: N04°26'42"E 154.72 FEET); THENCE N01°06'15"W 141.13 FEET; THENCE ALONG THE ARC OF A 353.00 FOOT RADIUS CURVE TO THE LEFT 273.25 FEET THROUGH A CENTRAL ANGLE OF 44°21'05" (CHORD BEARS: N23°16'47"W 266.48 FEET); THENCE N45°27'20"W 59.21 FEET TO THE SOUTHERLY RIGHT-OF-WAY LINE OF THE RAILROAD; THENCE N44°32'40"E ALONG SAID RIGHT-OF-WAY LINE 44.00 FEET; THENCE S45°27'20"E 59.21 FEET; THENCE ALONG THE ARC OF A 397.00 FOOT RADIUS CURVE TO THE RIGHT 307.31 FEET THROUGH A CENTRAL ANGLE OF 44°21'05" (CHORD BEARS: S23°16'47"E 299.69 FEET); THENCE S01°06'15"E 141.13 FEET; THENCE ALONG THE ARC OF A 844.00 FOOT RADIUS CURVE TO THE RIGHT 163.49 FEET THROUGH A CENTRAL ANGLE OF 11°05'55" (CHORD BEARS: S04°26'42"W 163.23 FEET); THENCE ALONG THE ARC OF A 1444.00 FOOT RADIUS CURVE TO THE LEFT 277.09 FEET THROUGH A CENTRAL ANGLE OF 10°59'40" (CHORD BEARS: S04°29'50"W 276.66 FEET); THENCE S01°00'00"E 35.26 FEET TO THE POINT OF BEGINNING.

CONTAINING: 0.97 ACRES

ALSO INCLUDING THE FOLLOWING:

BEGINNING AT A POINT ON THE NORTH RIGHT-OF-WAY LINE OF RAILROAD, LOCATED N07°17'38"W ALONG THE SECTION LINE 1119.24 FEET AND WEST 461.11 FEET FROM THE EAST QUARTER CORNER OF SECTION 7, TOWNSHIP 8 SOUTH,

RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN (BASIS OF BEARING: S00°18'06"E ALONG THE SECTION LINE FROM THE NORTHEAST CORNER TO THE EAST QUARTER CORNER OF SECTION 18, TOWNSHIP 8 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN); THENCE S44°32'40"W ALONG SAID RIGHT-OF-WAY 44.00 FEET; THENCE N45°27'20"W 30.02 FEET; THENCE ALONG THE ARC OF A 422.00 FOOT RADIUS CURVE TO THE RIGHT 840.18 FEET THROUGH A CENTRAL ANGLE OF 114°04'24" (CHORD BEARS: N11°34'52"E 708.13 FEET); THENCE ALONG THE ARC OF A 460.00 FOOT RADIUS CURVE TO THE LEFT 550.90 FEET THROUGH A CENTRAL ANGLE OF 68°37'04" (CHORD BEARS: N34°18'32"E 518.56 FEET); THENCE NORTH 433.19 FEET TO THE SOUTH LINE OF 1600 SOUTH STREET; THENCE EAST ALONG SAID SOUTH LINE 44.00 FEET; THENCE SOUTH 433.19 FEET; THENCE ALONG THE ARC OF A 504.00 FOOT RADIUS CURVE TO THE RIGHT 603.59 FEET THROUGH A CENTRAL ANGLE OF 68°37'04" (CHORD BEARS: S34°18'32"W 568.16 FEET); THENCE ALONG THE ARC OF A 378.00 FOOT RADIUS CURVE TO THE LEFT 752.58 FEET THROUGH A CENTRAL ANGLE OF 114°04'24" (CHORD BEARS: S11°34'52"W 634.30 FEET); THENCE S45°27'20"E 30.02 FEET TO THE POINT OF BEGINNING.

CONTAINING: 1.86 ACRES

EXHIBIT "A"

HEREIN AFTER: (PARCELS 1)

WHEREAS, do to some unforeseen situations that have occurred with the location of said public right-of-way, City is desirous of exchanging said public right-of-way for a new proposed location, described as follows:

A PORTION OF THAT REAL PROPERTY DESCRIBED IN DEED ENTRY NO. 134911:2008 IN THE OFFICIAL RECORDS OF UTAH COUNTY, LOCATED IN THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 8 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTH LINE OF SAID REAL PROPERTY LOCATED N0°17'38"W ALONG THE SECTION LINE 130.69 FEET AND WEST 49.11 FEET FROM THE EAST QUARTER CORNER OF SECTION 7, TOWNSHIP 8 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN (BASIS OF BEARING: S0°18'06"E ALONG THE SECTION LINE FROM THE NORTHEAST CORNER TO THE EAST QUARTER CORNER OF SECTION 18, TOWNSHIP 8 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN; THENCE N87°30'00"W 45.02 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF A 1422.00 FOOT RADIUS NON-TANGENT CURVE TO THE RIGHT (RADIUS BEARS: N80°29'19"E) 385.77 FEET THROUGH A CENTRAL ANGLE OF 15°32'37" (CHORD BEARS: N01°44'23"W 384.59 FEET); THENCE ALONG THE ARC OF A 400.00 FOOT RADIUS CURVE TO THE LEFT 442.18 FEET THROUGH A CENTRAL ANGLE OF 63°20'14" (CHORD BEARS: N25°38'12"W 420.00 FEET); THENCE ALONG THE ARC OF A 472.00 FOOT RADIUS CURVE TO THE RIGHT 97.62 FEET THROUGH A CENTRAL ANGLE OF 11°50'59" (CHORD BEARS: N51°22'49"W 97.44 FEET); THENCE N45°27'20"W 121.21 FEET TO THE SOUTHERLY RIGHT-OF-WAY LINE OF THE RAILROAD; THENCE N44°32'40"E ALONG

SAID RIGHT-OF-WAY LINE 44.00 FEET; THENCE S45°27'20"E 121.21 FEET; THENCE ALONG THE ARC OF A 428.00 FOOT RADIUS CURVE TO THE LEFT 88.52 FEET THROUGH A CENTRAL ANGLE OF 11°50'59" (CHORD BEARS: S51°22'49"E 88.36 FEET); THENCE ALONG THE ARC OF A 444.00 FOOT RADIUS CURVE TO THE RIGHT 490.82 FEET THROUGH A CENTRAL ANGLE OF 63°20'14" (CHORD BEARS: S25°38'12"E 466.21 FEET); THENCE ALONG THE ARC OF A 1378.00 FOOT RADIUS CURVE TO THE LEFT 383.20 FEET THROUGH A CENTRAL ANGLE OF 15°55'59" (CHORD BEARS: S01°56'04"E 381.97 FEET) TO THE POINT OF BEGINNING.

CONTAINING: 1.08 ACRES

ALSO INCLUDING THE FOLLOWING:

BEGINNING AT A POINT ON THE NORTH RIGHT-OF-WAY LINE OF THE RAILROAD, LOCATED N0°17'38"W ALONG THE SECTION LINE 1,119.24 FEET AND WEST 461.11 FEET FROM THE EAST QUARTER CORNER OF SECTION 7, TOWNSHIP 8 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN (BASIS OF BEARING: S0°18'06"E ALONG THE SECTION LINE FROM THE NORTHEAST CORNER TO THE EAST QUARTER CORNER OF SECTION 18, TOWNSHIP 8 SOUTH, RANGE 3 EAST, SALT BASE AND MERIDIAN; THENCE S44°32'40"W ALONG SAID RIGHT-OF-WAY 44.00 FEET; THENCE N45°27'20"W 30.02 FEET; THENCE ALONG THE ARC OF A 422.00 FOOT RADIUS CURVE TO THE RIGHT 839.46 FEET THROUGH A CENTRAL ANGLE OF 113°58'30" (CHORD BEARS: N11°31'55"E 707.74 FEET); THENCE ALONG THE ARC OF A 478.00 FOOT RADIUS CURVE TO THE LEFT 391.06 FEET THROUGH A CENTRAL ANGLE OF 46°52'28" (CHORD BEARS: N45°04'56"E 380.24 FEET); THENCE ALONG THE ARC OF A 400.00 FOOT RADIUS CURVE TO THE LEFT 151.11 FEET THROUGH A CENTRAL ANGLE OF 21°38'42" (CHORD BEARS: N10°49'21"E 150.21 FEET); THENCE NORTH 409.77 FEET; THENCE WEST 36.00 FEET; THENCE NORTH 36.00 FEET TO THE SOUTH LINE OF 1600 SOUTH STREET; THENCE EAST ALONG SAID SOUTH LINE 80.00 FEET; THENCE SOUTH 445.77 FEET; THENCE ALONG THE ARC OF A 444.00 FOOT RADIUS CURVE TO THE RIGHT 167.73 FEET THROUGH A CENTRAL ANGLE OF 21°38'42" (CHORD BEARS: S10°49'21"W 166.74 FEET); THENCE ALONG THE ARC OF A 522.00 FOOT RADIUS CURVE TO THE RIGHT 427.06 FEET THROUGH A CENTRAL ANGLE OF 46°52'28" (CHORD BEARS: S45°04'56"W 415.25 FEET); THENCE ALONG THE ARC OF A 378.00 FOOT RADIUS CURVE TO THE LEFT 751.93 FEET THROUGH A CENTRAL ANGLE OF 113°58'30" (CHORD BEARS: S11°31'55"W 633.95 FEET); THENCE S45°27'20"E 30.02 FEET TO THE POINT OF BEGINNING.

CONTAINING: 1.89 ACRES

EXHIBIT "B"

HEREIN AFTER: (PARCELS 2)

THEREFORE, the parties mutually agree to the following terms and conditions:

1. The City will deed existing PARCELS 1 back to Schwartz, Exhibit "A".
2. Schwartz will then deed to City PARCELS 2, Exhibit "B".
3. City will pay the sum of \$9,100.00 for the additional 0.14 acres of property needed for new street alignment, due at closing. Each party shall be responsible for their own closing costs, except the parties will evenly split the cost of the roll back taxes.
4. City will also meet the following obligations:
  - A. Make sure all fields adjacent to the road are irrigable when the construction is completed.
  - B. Ensure that construction does not interrupt irrigating.
  - C. Fence the entire right-of-way to ensure livestock cannot escape.
  - D. Fencing shall be done prior to the commencement of construction.
  - E. No part of the existing structures or cement corral will be demolished or damaged.
  - F. Any excess fill from the excavation of the street will be placed on adjacent property owned by Schwartz, as designated by Schwartz.
5. The title to the property being conveyed shall be pursuant to a warranty deed and shall be vested in the name of Spanish Fork City for Parcels 2 and vested in the name of Schwartz Investments, LLC for Parcels 1.
6. The parties agree to use Wasatch Land and Title Insurance Company to provide a commitment for standard coverage title insurance in the amount of the purchase price. The policy shall insure that the City shall be the fee simple owner of good and marketable title free and clear of all liens and encumbrances and subject to the standard exceptions as shown on the title policy. Each party shall have three (3) days after receipt of the commitment of title insurance and all relevant documents to notify

the other in writing of any objections to the title. If no objection is made, all items shall be deemed permitted. If any exceptions to title are made, the other party shall have until closing to cure such exception. If exceptions are unable to be cured, the party so excepting may choose to void this agreement or to proceed with the exceptions. If voided, all obligations of the parties shall cease and this agreement shall be void without further recourse to the parties hereto.

7. City has heretofore investigated the property and determined that it is suitable for its purposes. City therefore accepts the property "as is."

8. Schwartz warrants and represents as follows:

- A. That no person or entity claiming under, by, or through Schwartz has any option or contract to purchase any or all of the property to be sold or any interest therein.
- B. The property will be free and clear of any mechanics liens resulting from work performed on or with respect to the property prior to such conveyance.
- C. Schwartz has not received written notice from any governmental body claiming any current violations of any hazardous material law, or requiring compliance with hazardous material law, or demanding payment or contribution for environmental damage or injury to natural resources. For this purpose, hazardous material law means any State or Federal statute applicable to the property relating to the installation, use, storage, release, generation, discharge, disposal, treatment, handling, or transportation of hazardous materials.
- D. Schwartz, nor to its knowledge any previous owner, tenant, or occupant of the property, has engaged in or permitted operations or activities upon or allowed any use or occupancy of the property for the purpose or in any way involving the handling, manufacturing, treatment, storage, use, generation, release, discharge, refining, dumping, or disposal of any hazardous materials, except for agricultural fertilization.

- E. In the event, at any time prior to closing, that any party learns that any of the aforesaid representations and warrants are no longer valid, such party shall immediately notify the other in writing. The party so notified shall have the option to proceed with this agreement subject to the changed conditions, or to void this agreement and have no further obligation to the other party.
9. In the event construction on the anticipated street is not commenced by the end of 2014, Schwartz has the option to purchase the property at the same price set forth herein.
10. This document represents the entire agreement between the parties. All prior negotiations, representations, commitments, or understandings are merged herein and super ceded hereby. This agreement may only be amended by written agreement entered into between the parties.
11. Time is of the essence of this agreement. In case either party fails to perform the requirements of this agreement, at the time performance is required, the other party may, at its lection, terminate the agreement.
12. The obligations of the parties to this agreement shall survive the closing and shall not merged into or become a part of any of the documents executed and delivered at closing.
13. If any action, suit, or proceeding is brought by a party with the respect to a matter governed by this agreement, all costs and expenses of the prevailing party in such action, suit, or proceeding, including reasonable attorney fees, shall be paid by the non-prevailing party.
14. All risk of loss or damage to the property shall be borne by seller until possession exchanges.

DATED this \_\_\_\_\_ day of August, 2013

SPANISH FORK CITY By:

\_\_\_\_\_  
G. WAYNE ANDERSEN, Mayor

Attest:

\_\_\_\_\_  
Kent R. Clark, City Recorder

---

SCHWARTZ INVESTMENTS, LLC By:

\_\_\_\_\_  
LOA JEAN SCHWARTZ, Manager

# Exhibit A

## Canyon Creek Parkway Extension Through Schwartz



1" = 400 Ft

### Legend

-  Real Estate PA Schwartz SF 2012
- Roads
  -  Other Roads
  -  Not Paved
  -  Paved
  -  Railroad
-  County SF Parcels
-  Rivers
-  Spanish Fork Boundary

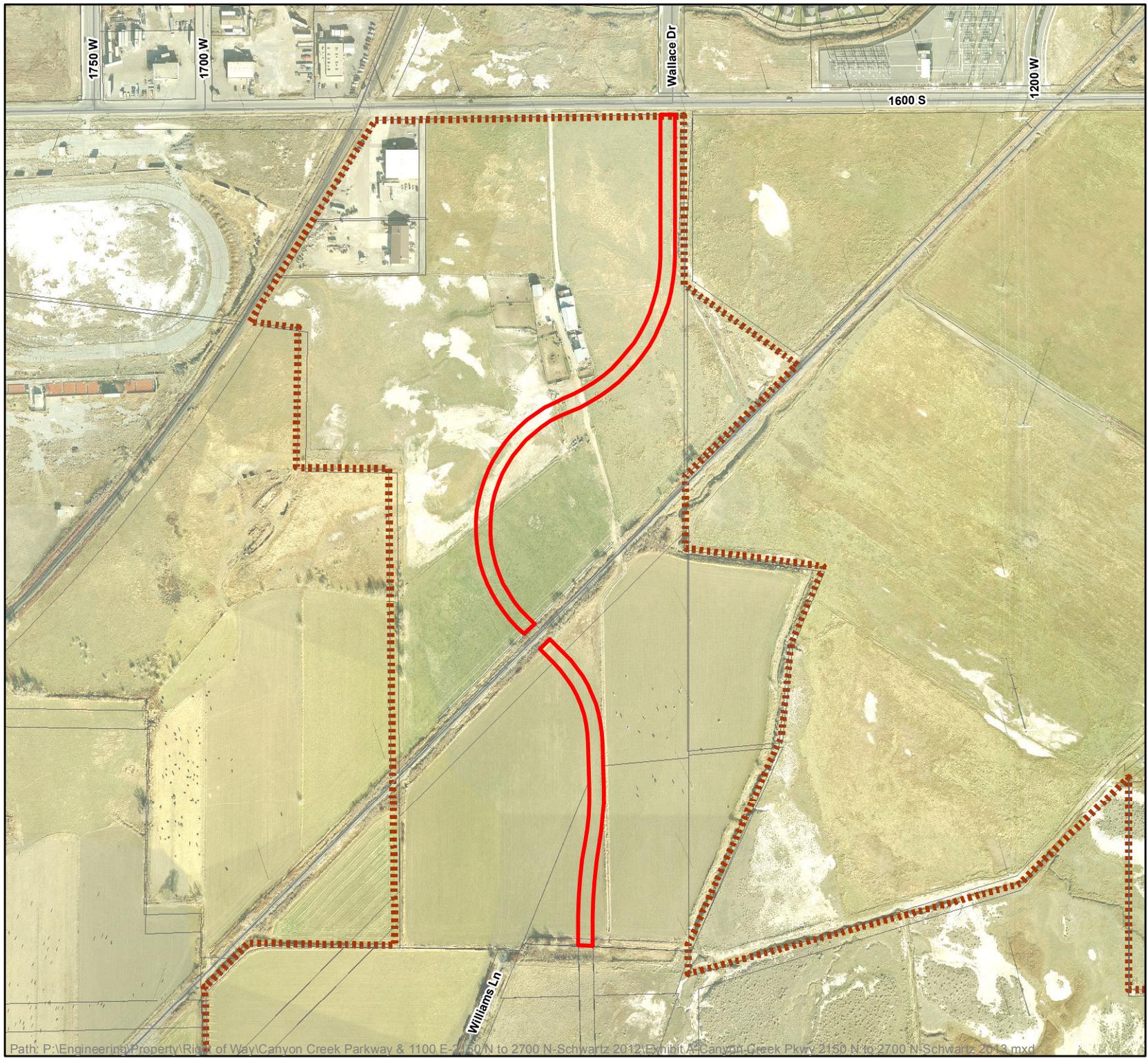
Print Date: 8/7/2013



GEOGRAPHIC INFORMATION SYSTEMS

Spanish Fork City GIS  
 40 South Main St  
 Spanish Fork, UT 84660  
 GIS Phone Numbers;  
 (801) 804-4571 (Administrator)  
 (801) 804-4570 (Interns)

Disclaimer: Spanish Fork City makes no warranty with respect to the accuracy, completeness, or usefulness of these maps. Spanish Fork City assumes no liability for direct, indirect, special, or consequential damages resulting from the use or misuse of these maps or any of the information contained herein. Portions may be copied for incidental uses, but may not be resold.



# Exhibit B

## Canyon Creek Parkway Extension Through Schwartz



1" = 400 Ft

### Legend

- 1100 E Ext Through The Schwartz Investments LLC Parcel 2013
- Roads
  - Not Paved
  - Paved
  - Railroad
- County SF Parcels
- Spanish Fork Boundary

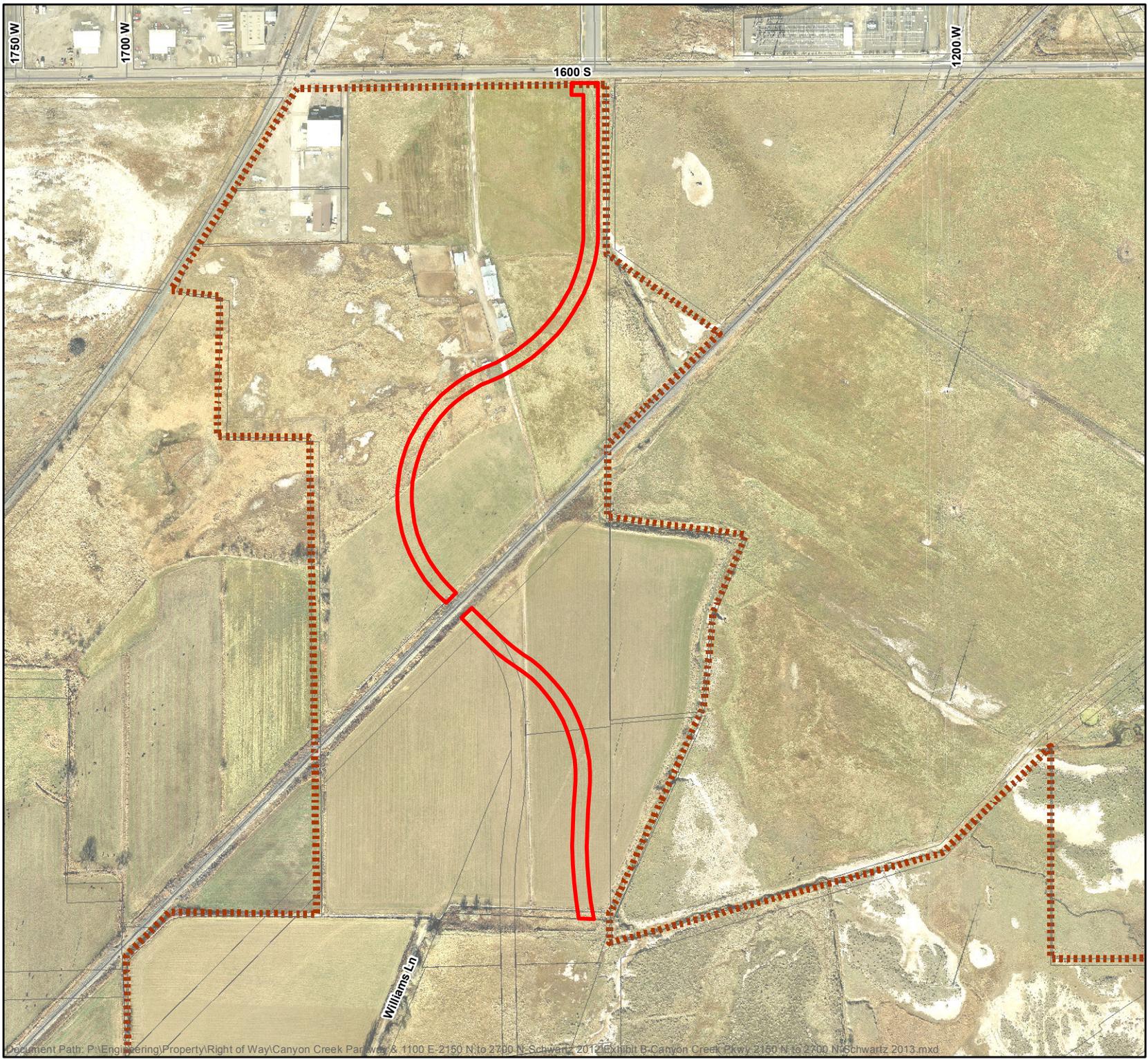
Print Date: 7/26/2013



### GEOGRAPHIC INFORMATION SYSTEMS

Spanish Fork City GIS  
40 South Main St  
Spanish Fork, UT 84660  
GIS Phone Numbers;  
(801) 804-4571 (Administrator)  
(801) 804-4570 (Intern)  
(801) 804-4572 (Intern)

Disclaimer: Spanish Fork City makes no warranty with respect to the accuracy, completeness, or usefulness of these maps. Spanish Fork City assumes no liability for direct, indirect, special, or consequential damages resulting from the use or misuse of these maps or any of the information contained herein. Portions may be copied for incidental uses, but may not be resold.





# Memo

To: Mayor and City Council  
From: Chris Thompson P.E., Public Works Director/City Engineer  
Date: August 9, 2013  
Re: Master Agreement for Professional Services-Stantec Inc.

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## Staff Report

We are preparing to bid out the front collection system for Cold Springs. This project includes removing an existing pond and constructing a new one off of Main Street south of the Spanish Fork River. We intend to use Stantec Inc. to do the environmental work for this project. This master services agreement is our standard form for contracting professional services. We recommend that the City Council approve this agreement.

Attached: agreement



**MASTER AGREEMENT FOR PROFESSIONAL SERVICES  
STANTEC INC.**

This AGREEMENT, dated August 20, 2013, is made and entered into between Spanish Fork City (herein called OWNER) and Stantec, Inc. (herein called ENGINEER). From time to time OWNER may request that ENGINEER provide professional services for Specific Projects. Each work engagement will be documented by an individual Task Order. This AGREEMENT sets forth the general terms and conditions that will apply to all Task Orders duly executed under this AGREEMENT.

In consideration of the mutual promises herein contained, ENGINEER and OWNER agree as follows:

**1. TERM AND AUTHORIZATION TO PROCEED**

- A. This Agreement shall be effective and applicable to Task Orders issued hereunder for 8 years from the Effective Date of the AGREEMENT.
- B. This AGREEMENT may be extended or renewed by the Parties, with or without changes, by written instrument.
- C. Execution of individual Task Orders by OWNER will be authorization for the ENGINEER to proceed with the authorized work associated with the Specific Projects (PROJECT), pursuant to the terms and conditions of this AGREEMENT.

**2. ENGINEER'S SERVICES**

- A. The ENGINEER agrees to provide engineering services to the OWNER on an as needed basis. The scope of services, period of performance, and basis of ENGINEER's compensation are to be defined in individual Task Orders. Each duly executed Task Order shall be subject to the terms and conditions of this AGREEMENT. A standard task order form is included as Attachment A. The ENGINEER will perform the defined services in a professional manner using the degree of care and skill that is normally employed by professional engineers or consultants on similar projects of equal complexity.
- B. The relationship of the ENGINEER to the OWNER is that of an independent contractor and nothing in this AGREEMENT or the attachments hereto, creates any other relationship. As an independent contractor, the ENGINEER shall have the sole responsibility for paying taxes, workers compensation, employee benefits (if any), and all similar obligations.

- C. This AGREEMENT is not a commitment by Owner to Engineer to issue any Task Orders.

**3. COMPENSATION AND PAYMENT**

- A. OWNER and ENGINEER shall agree on the basis of compensation for each Task Order. If hourly rates are to be used as the basis of compensation, those rates will be defined in each Task Order. Hourly rates are updated on January 1 of each calendar year by the ENGINEER. Updated hourly rates will be used for all task orders. Additionally, ENGINEER will be reimbursed for actual costs and expenses incurred in performance of the PROJECT.
- B. Invoicing will occur following the last Friday of each month. Payments shall be due within 30 days of receipt of the invoice.
- C. A service charge of 10 percent will be applied to expenses incurred in performance of the PROJECT. All sales, use, value added, business transfer, gross receipts, or other similar taxes will be reimbursed to ENGINEER.
- D. An interest rate of 1.5% per month will be applied to all invoices that are not paid in full after 30 days following the invoice date. Payments will be applied to the outstanding interest first and then to the principal.
- E. The ENGINEER may discontinue work on the PROJECT by issuing the OWNER a written seven-day notice if full payment for an invoice is not received within 60 days of the date of the invoice. Suspension of work will continue until full payment is made for all outstanding invoices including interest. The ENGINEER accepts no liability for damages or delays that result from its suspension of work. The OWNER may not use information or work product provided by the ENGINEER until full payment is made including applicable interest.

**4. INSURANCE**

- A. The ENGINEER will maintain insurance coverage throughout the term of the AGREEMENT. Insurance coverage will include:
  - 1) Worker's Compensation
    - State Statutory
    - Employer's Liability \$100,000
  - 2) Comprehensive General Liability
    - Bodily Injury and Property Damage \$1,000,000
    - Combined Single Limit \$1,000,000

|  |              |
|--|--------------|
| 3) Automobile Liability<br>Combined Single Limit | \$1,000,000  |
| 4) Professional Liability                        | \$1,000,000. |

**5. LIMITATION OF LIABILITY**

- A. The ENGINEER shall not be liable for damages or delays resulting from actions or inaction of a third party that is not under the direct control of the ENGINEER, such as government agencies that have review and permit authority.
- B. The OWNER shall defend, indemnify and hold harmless the ENGINEER, its subcontractors, agents and employees for all liability, other than that caused by the negligent acts, errors, or omissions of the ENGINEER.
- C. The OWNER shall defend, indemnify and hold harmless the ENGINEER, its subcontractors, agents and employees for all liability resulting from construction of the PROJECT, if the ENGINEER is not retained to perform construction phase services on the PROJECT.
- D. To the fullest extent permitted by law, and notwithstanding any other provision of this AGREEMENT, the total liability, in the aggregate, of the ENGINEER and the ENGINEER's officers, directors, partners, employees and subconsultants, and any of them, to OWNER, for any and all claims, losses, costs, or damages, including attorneys' fees and costs and expert-witness fees and costs of any nature whatsoever or claims expenses resulting from or in any way related to a Specific Project or Task Order, or this AGREEMENT, from any cause or causes shall not exceed the total compensation received by the ENGINEER under this AGREEMENT, or the total amount of \$1,000,000, whichever is greater. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law.
- E. The ENGINEER is not responsible for delays or damages caused by acts of God such as floods or earthquakes, or other circumstances beyond control of ENGINEER.
- F. The ENGINEER, its subcontractors, agents and employees shall not be liable for consequential damages or indirect liability from a third party. The OWNER will defend, indemnify and hold harmless the ENGINEER, its subcontractors and agents from such an occurrence.

## **6. TERMINATION**

- A. This AGREEMENT may be terminated by either party in the event that the other party has not performed any material covenant or has otherwise breached any material term of this AGREEMENT (i) upon receipt of written notice thereof if the nonperformance or breach is incapable of cure, or (ii) upon the expiration of ten (10) calendar days (or such additional cure period as the non-defaulting party may authorize) after receipt of written notice thereof if the nonperformance or breach is capable of cure and has not been cured.
- B. Upon termination, ENGINEER is entitled to full compensation as computed under this AGREEMENT for the work completed
- C. Either party may terminate this AGREEMENT without cause at any time upon thirty (30) days prior written notice to the other party.

## **7. ASSIGNMENT**

This AGREEMENT shall be binding on the heirs, successors and assignees of the parties. This AGREEMENT may not be assigned, transferred, conveyed, or encumbered, whether voluntarily or by operation of law, by either party without the prior written consent of the other party. Unauthorized assignment is void and nonbinding.

## **8. OPINION OF PROBABLE CONSTRUCTION COST**

Opinions of probable construction cost prepared by the ENGINEER are based on its experience with past projects of similar construction. It is understood that the ENGINEER has no control over economical factors or unknown conditions that may have a significant impact on actual PROJECT cost. The ENGINEER does not guarantee its cost estimates and accepts no liability for problems created by the difference in actual costs and opinions of probable construction cost.

## **9. DOCUMENTS**

Contract documents, calculations, electronic information and survey information created by the ENGINEER as “instruments of service” are the property of the ENGINEER. OWNER’s use of the documents and other “instruments of service” on any other project is prohibited and the ENGINEER accepts no liability for such action.

## **10. CONSTRUCTION PHASE SERVICES**

- A. The ENGINEER has based its cost to provide construction phase services, on the ENGINEER, its employees, subcontractors and agents being named

as additional insured under any construction contractor(s) (herein CONTRACTOR) General Liability and Builder's All Risk Insurance. The OWNER shall include in any contract with the CONTRACTOR a statement to defend, indemnify and hold harmless the ENGINEER; its employees, subcontractors and agents for any and all action resulting from construction activity.

- B. Observations performed by the ENGINEER or its agents are intended to assist the OWNER to obtain the best project possible and not to assume the CONTRACTOR's responsibility to comply with the requirements of any contract documents. The parties to this AGREEMENT recognize that the CONTRACTOR has sole responsibility to ensure that any contract requirements are met. The CONTRACTOR is responsible for all methods used to complete the PROJECT and is responsible to follow all applicable safety procedures.
- C. "Record" documents prepared by the ENGINEER are based on information supplied by the CONTRACTOR and its agents and are only as accurate as the information provided by the CONTRACTOR. The ENGINEER does not assume responsibility for the accuracy of the "record" documents.

## **11. ADHERENCE TO APPLICABLE LAWS**

- A. The laws of the State of Utah shall govern all aspects of this AGREEMENT.
- B. The ENGINEER shall comply with the applicable requirements of the Equal Employment Opportunity Laws, Title VI of the Civil Rights Act of 1964, as amended, and with the provisions contained in 49 CFR 21 through Appendix C and 23 CFR 710.450(b), and the Fair Labor Standards Act.

## **12. HAZARDOUS WASTE**

OWNER will indemnify ENGINEER from all claims, damages, losses, and costs, including attorney's fees, arising out of or relating to the presence, discharge, release, or escape of hazardous substances or contaminants from the PROJECT. OWNER recognizes that ENGINEER assumes no risk and/or liability for waste or the waste site.

## **13. ATTORNEY'S FEES**

In the event any action or proceeding is brought by any party against any other party under this AGREEMENT, the prevailing party shall be entitled to recover attorney's fees and costs in such amount as the court may adjudge reasonable.

**14. SEVERABILITY**

The provisions of this AGREEMENT are severable, and should any provision hereof be void, overly broad or unenforceable, such void, overly broad or unenforceable provision shall not affect any other portion or provision of this AGREEMENT.

**15. WAIVER**

Any waiver by any party hereto of any breach of any kind or character whatsoever by any other party, whether such waiver be direct or implied, shall not be construed as a continuing waiver of or consent to any subsequent breach of this AGREEMENT on the part of the other party.

**16. NOTICES**

All notices, demands, and requests required or permitted to be given hereunder shall be in writing and shall be deemed duly given if delivered or if mailed by registered or certified mail, postage prepaid, addressed to the following:

ENGINEER: J. Randall Walsh, M.Sc.  
Stantec Inc.  
2950 East Harmony Road, Suite 290  
Fort Collins, Colorado 80528

OWNER: Chris Thompson, P.E.  
Public Works Director/City Engineer  
Spanish Fork City  
40 South Main Street  
Spanish Fork, Utah 84660

Either party shall have the right to specify in writing another address to which subsequent notices to such party shall be given. Any notice given hereunder shall be deemed to have been given as of the date delivered or mailed to the other party.

**17. ATTACHMENTS**

The following attachments are included as part of the AGREEMENT:

Attachment A – Standard Task Order Form  
Task Orders, as awarded.

This AGREEMENT constitutes the entire understanding and AGREEMENT between the parties and supersedes all prior AGREEMENTS and understandings, whether written or oral, and may only be changed by written amendment executed by both parties.

Approved for Spanish Fork City

Accepted for Stantec Inc.

By \_\_\_\_\_  
Title \_\_\_\_\_  
Date \_\_\_\_\_

By \_\_\_\_\_  
Title \_\_\_\_\_  
Date \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
KENT R. CLARK, Recorder

**SPANISH FORK CITY  
STAFF REPORT TO CITY COUNCIL**



|                 |  |
|-----------------|--|
| Agenda Date:    | August 20, 2013  |
| Staff Contacts: | Seth Perrins, Assistant City Manager                                 |
| Reviewed By:    | Junior Baker, City Attorney<br>Dave Oyler, City Manager              |
| Subject:        | Support Center Mobile Application for smart phones and other devices |

**Background**

The city has had an online request tracking solution for about 8 years. This tool has been used by residents and employees to report and track requests throughout the city. A few years ago, the City switched to a company called WebQA to provide a better solution. At the time we contracted with WebQA, we were told that a mobile app would be available someday. That day has arrived.

WebQA has announced the addition of their mobile app for the iPhone, Android and Windows phones. This app will be personalized to look like a Spanish Fork City app and will directly connect with the Support Center program that many residents already use.

Staff has looked at a few mobile applications that can integrate with our current Support Center Provider. While these different applications have been excellent, they all added additional costs. We were hopeful that this free application would eventually be available. Our patience proved correct.

I received this contract just after our last city council meeting, and to expedite the development of this free app, Mayor Andersen has already signed the contract.

**Budget**

The nicest thing about this additional service is that all fees and monthly service charges are waived or are free. Therefore, we will spend no additional funds to have this mobile app available for our residents to use!

**Recommendation**

Ratify the Mayor's signature, authorizing the city enter into the additional contract for the GovQA Mobile Applications.

**Attachments:**

I have attached draft contract for your review.

# SCHEDULE B – Extension/Request for Additional Services For GovQA Mobile Applications

**A. Relationship to Original Contract and Purpose:**

This is a schedule to the WebQA Services Agreement executed between WEBQA, Inc. ("WEBQA") and the City of Spanish Fork, UT ("Customer") signed 8/1/2011 ("Original Contract") with its current term date starting 8/1/2011 and ending 07/31/2014 ("Original Contract Period"). The purpose of this Schedule is to add Service(s) and define the new services selected below.

**B. Service(s) Descriptions:**

The GovQA service(s) provided by WebQA are Mobile applications that allow customer groups to directly access and deliver content on the customer mobile application in a centrally controlled manner. Mobile applications include here are branded to the Customer, are configurable and changeable and available on iPhone, Android and Windows and include:

- City-Wide Mobile     Citizen CRM Mobile     Staff CRM Mobile     GoLocal Mobile
- Other Mobile \_\_\_\_\_

**C. WebQA Agrees To The Following Functionality:**

- (a) All Mobiles are configurable and changeable:
- Customer receives 1 change per year per mobile after initial setup.
  - Other changes at \$95/hr and usually take only 1-3 hours
- (b) All Mobiles run on iPhone, Android and Windows operating systems
- (c) Mobile Implementation Descriptions are as follows
- Citywide: CRM, GoLocal and links to city community and business sites.
  - Citizen CRM: View FAQ's, create/view requests and link to other sites
  - Staff CRM: CRM for city staff to perform BASIC request handling/processing functions including: (a) creation, (b) editing (c) reassignment (d) note and picture creation (e) message response and (f) change status.
  - GoLocal: For public to access Business Micro-Websites and other inks
- (d) Special Implementation Action (Advertising modules, etc.): \_\_\_\_\_

**D. Customer Agrees To:**

- (a) Hold an implementation kickoff meeting with WebQA 15 days after contract signing.
- (b) Build and execute Project Plan to be fully implemented within 120 days of contract signing
- (c) Allow WebQA to place advertising links on application with Customer's approval.

**E. Training and Ongoing Support:**

- (a) One Online Administrator training
- (b) Two Online training session for all users
- (c) Ongoing support through system videos and knowledgebase
- (d) Periodic webinars to train and update customers on new features
- (e) Optional \_\_\_ additional hours of online end-user training at \$125/hr
- (f) Optional \_\_\_ days of On-Site Training (\$1,800 per day plus expenses)
- (g) **NOTE:** Customer will log ALL ISSUES, including high-priority, into WEBQA SUPPORT PORTAL at [www.supportqa.com](http://www.supportqa.com) to receive service.

**F. Fees:** Modules above include all service upgrades at a subscription cost of \$100 per month for term of: \$ Waived.  
 Implementation and Training At a one-time cost of: \$ Waived.  
 Data: Customer data is owned by customer. 10 GB storage free; additional 10GB is \$20/mo

**G. Terms:** **Sync to Original Services:** the **Billable Term** start date will be 08/01/2013 and go to a SYNC DATE of 7/31/2014 at which point the term for these Additional Services will sync to the term of the Original Contract and all subsequent renewals.

**H. Billing:** All fees are exclusive of taxes, billed on an annual basis at time of contract signing, and due upon receipt of invoice. This secures site, servers and resources necessary to begin project. If payment is not received by start of the **Annual Billable Term**, WebQA has the right to suspend all services. Furthermore, invoices accrue 1% per month past due and customer is responsible for all costs, including attorney fees, for the collections of invoices.

**I. Remittance:** All payments should be made directly to WebQA. WebQA mailing address for all payments is:  
 WebQA Accounts Receivable Department, 900 S. Frontage Road Suite 110, Woodridge, IL 60517

**BY SIGNING BELOW, CUSTOMER AGREES TO THE TERMS AND CONDITIONS OF THIS ADDENDUM.**

Customer

By: G. WAYNE ANDERSEN  
 Signature: [Signature]  
 Title: MAYOR  
 Date: 8-12-2013

WebQA, Inc.

By: John Dilenschneider  
 Signature: [Signature]  
 Title: CEO  
 Date: 8/13/13



# Memo

To: Mayor and City Council  
From: Jered Johnson, Engineering Division Manager  
Date: August 15, 2013  
Re: Calpac Road Curb & Gutter 2013-Change Order 1

---

## Staff Report

The city has an agreement with Fritzi Realty to improve Calpac Road along their respective frontage as outlined in the Site Plan Phasing Agreement approved April 2, 2013. Improvements with the original bid for Calpac Road included curb, gutter and storm inlets. The city needs to extend this curb & gutter approximately 200 feet past the Fritzi to the south matching up with the existing curb & gutter. City will be reimbursed for these improvement via connector's agreement. We have also discovered an existing storm drain manhole in the curb alignment. This manhole will need to be rebuilt into a storm inlet box. These improvements will allow for better drainage along Calpac Road and a more sooth asphalt overlay. We have also reached Phase 2 of the agreement which requires the city to construct sidewalk along Calpac Road. The city would like to add the sidewalk to this project. It will be significantly cheaper and easier to place the sidewalk now while the area is being excavated. Fritzi Realty has paid to the City \$50,000.00 for these improvements as outline in the agreement.

We recommend that the city council approve this change order with Hall Engineering for the amount of \$31,402.00.

Attached: Change Order





# Hall Engineering and Construction

482 West Riverside Lane  
Spanish Fork, Utah 84660  
(801)798-2919 – Cell(801)372-2685

August 9, 2013

Attention: Lou Saluone  
Spanish Fork City  
40 South Main  
Spanish Fork, Utah 84660

RE: New Sidewalk Installation  
Cal-Pac Road in Spanish Fork City

The following job quote is to provide the labor and materials needed to create a new sidewalk along Cal-Pac Road in Spanish Fork City.

|                             |                               |             |
|-----------------------------|-------------------------------|-------------|
| Sidewalk Preparation:       | \$2.00/sq.ft. @ 5104 sq.ft. = | \$10,208.00 |
| Concrete Sidewalk:          | \$3.00/sq.ft. @ 5104 sq.ft. = | \$15,312.00 |
| Drive Approach Preparation: | \$2.00/sq.ft.                 |             |
| Concrete Drive Approach:    | \$3.25/sq.ft.                 |             |

Should you have any questions regarding this job quote, please call.

Sincerely,



Bruce B. Hall P.E.  
Hall Engineering and Construction

# Hall Engineering and Construction

482 West Riverside Lane  
Spanish Fork, Utah 84660  
(801)798-2919 – Cell(801)372-2685

August 9, 2013

Attention: Lou Saluone  
Spanish Fork City  
40 South Main  
Spanish Fork, Utah 84660

RE: Fence Removal – Manhole Repair  
Cal-Pac Road in Spanish Fork City

The following job quote is to provide the labor and materials needed to remove the fence and repair the manhole along Cal-Pac Road in Spanish Fork City.

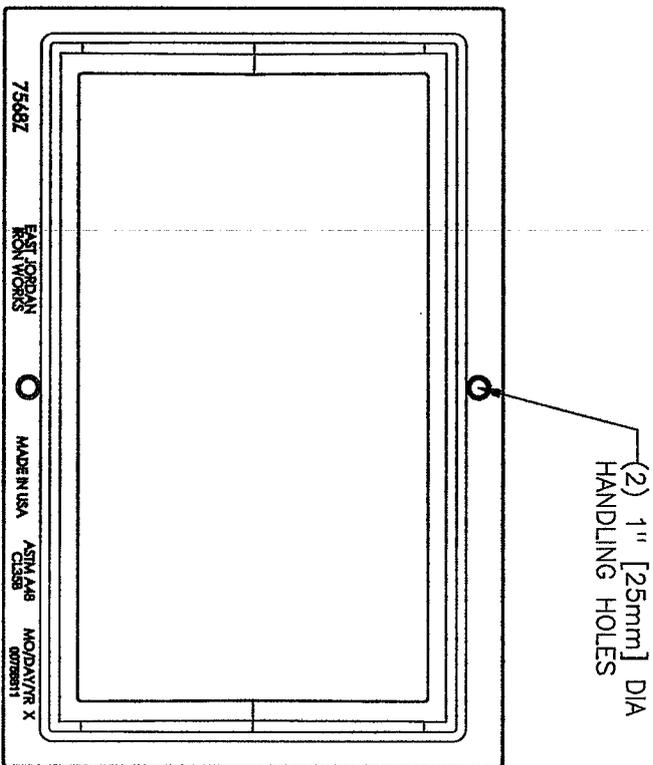
|                 |                            |            |            |
|-----------------|----------------------------|------------|------------|
| Fence Removal:  | 355 l.f. @ $\$2.00$ l.f. = | \$887.50   | $\$710.00$ |
| Repair Manhole: |                            | \$2,400.00 |            |

Should you have any questions regarding this job quote, please call.

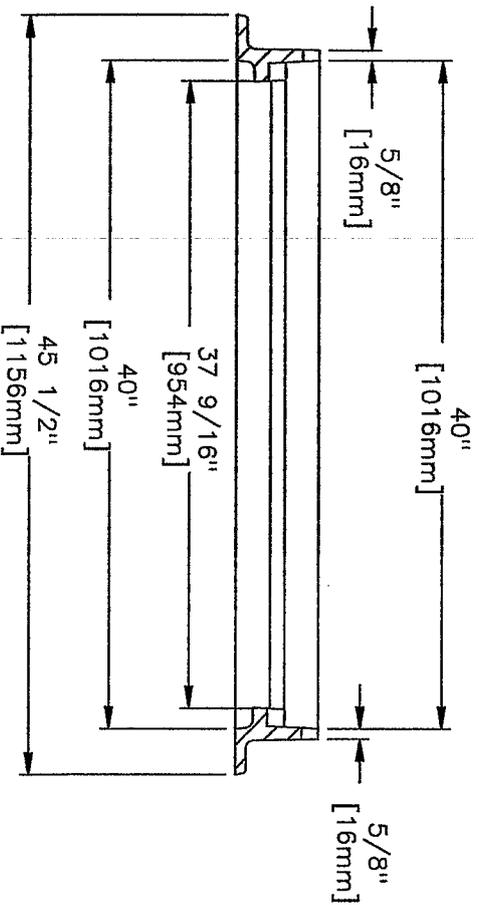
Sincerely,



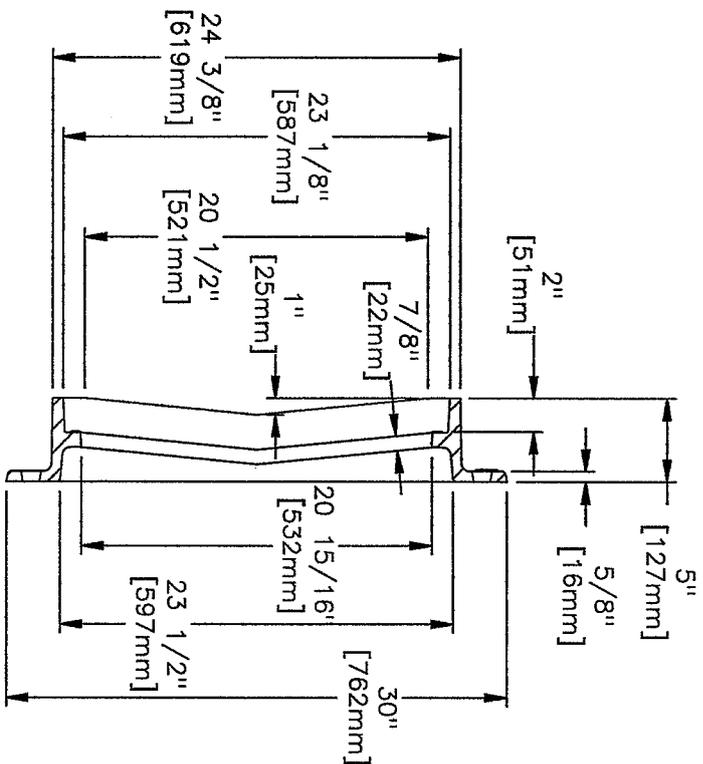
Bruce B. Hall P.E.  
Hall Engineering and Construction



FRAME TOP VIEW



FRAME SECTION



FRAME SECTION

EAST JORDAN  
IRON WORKS, INC.  
P.O. BOX 439  
EAST JORDAN, MI. 49727  
1-800-874-4100  
FAX 231-536-4458

DRAWN DATE  
DEW 12/14/05

APPROVED DATE

CATCH BASIN  
FRAME

PRODUCT NO.  
**00756811**  
UNDIPPED

CATALOG NO.

**7568Z**

REF. PRODUCT DRAWING

00756811

EST. WT.

FRAME: 200 LBS 91kg

OPEN AREA

N/A

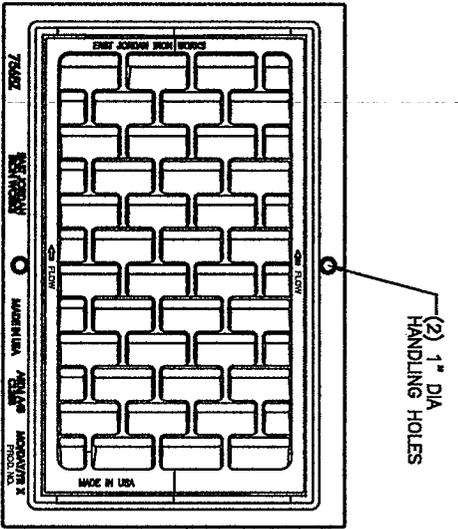
MAT'L SPEC.

FRAME - GRAY IRON  
ASTM A48 CL35B

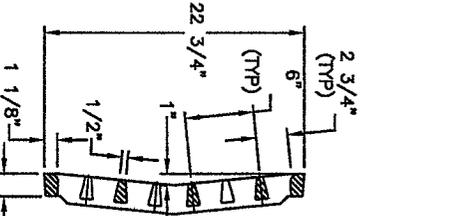
LOAD RATING

HEAVY DUTY

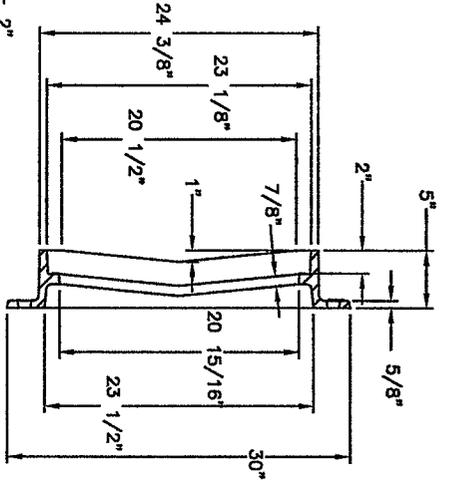
# 7567M 7568Z ASSEMBLY



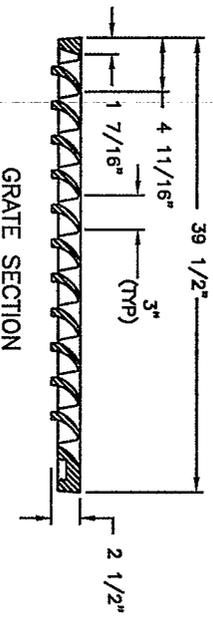
FRAME TOP VIEW



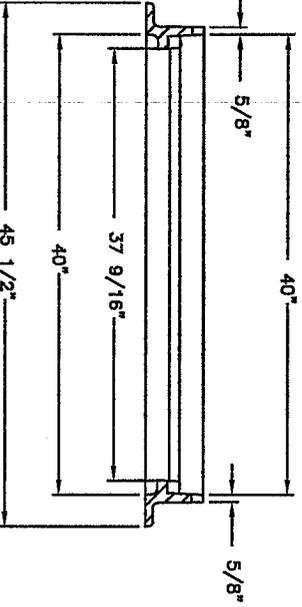
GRATE SECTION



FRAME SECTION



GRATE SECTION



FRAME SECTION

**PRODUCT NUMBER**  
00756731A01

**DESIGN FEATURES**

**MATERIALS**  
GRATE-GRAY IRON  
ASTM A48 CL35B

**DESIGN LOAD**  
HEAVY DUTY  
**COATING**  
UNDIPPED

✓ **DESIGNATES MACHINED SURFACE**

**SPECIAL FEATURES**

**ALTERNATE OPTIONS**

**REFERENCE INFORMATION**

00756811  
00756731

**DRAWING DETAILS**

**ORIGINAL DRAWING:** GAD 02/19/08  
**REVISED BY:** SBB 09/26/11

Corporate  
Headquarters  
301 Spring Street  
PO Box 439  
East Jordan, MI  
49727-0439  
800.874.4100  
**EJ GROUP**®

Call Today for  
More Information

800.626.4653

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\*We reserve the right to modify specifications without prior notice.  
\*Uncontrolled distribution.

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# ORDINANCE NO. 12-13

## ROLL CALL

| VOTING   | YES | NO |
|--|-----|----|
| <b>G. WAYNE ANDERSEN</b><br><i>Mayor (votes only in case of tie)</i> |     |    |
| <b>ROD DART</b><br><i>Council member</i>                             |     |    |
| <b>RICHARD M. DAVIS</b><br><i>Council member</i>                     |     |    |
| <b>BRANDON B. GORDON</b><br><i>Council member</i>                    |     |    |
| <b>STEVE LEIFSON</b><br><i>Council member</i>                        |     |    |
| <b>KEIR A. SCUBES</b><br><i>Council member</i>                       |     |    |

I MOVE this ordinance be adopted:

I SECOND the foregoing motion:

## ORDINANCE No. 12-13

### AN ORDINANCE VACATING EXPRESSWAY PLAZA, A COMMERCIAL DEVELOPMENT, PLATS A, B, AND C

WHEREAS, a commercial subdivision known as Expressway Plaza, a Commercial Development, Plats A, B, and C was approved by Spanish Fork City and recorded with the Utah County Recorder in 2003; and

WHEREAS, due to the downturn in the national and local economy, the lots within the plats were never built upon and remain vacant; and

WHEREAS, the project has been sold to a different developer, who desires to vacate the subdivision and develop it in a different manner, including within the

development some adjacent parcels; and

WHEREAS, notice of the intent to vacate the subdivision was posted on the property, advertised in the Provo Daily Herald, a paper of general circulation in Spanish Fork City, on the State of Utah Notice Website, and on the Spanish Fork City website; and

WHEREAS, a public hearing was held before the City Council on Tuesday, the 20<sup>th</sup> day of August, 2013, where public comment was received; and

WHEREAS, the council finds that it is in the best interest of the public to vacate Expressway Plaza, a Commercial Development, Plats A, B, and C so that more productive commercial development can take place;

NOW THEREFORE, be it ordained and enacted by the Spanish Fork City Council as follows:

I.

The property dedicated as Expressway Plaza, a Commercial Development, Plat A, as recorded in the office of the Utah County Recorder on the 27<sup>th</sup> day of January, 2003 as entry number 12675:2003, Map Filing #9870, is hereby vacated.

II.

The property dedicated as Expressway Plaza, a Commercial Development, Plat B as recorded in the office of the Utah County Recorder on the 27<sup>th</sup> day of January, 2003 as entry number 12676:2003, Map Filing #9871, is hereby vacated.

III.

The property dedicated as Expressway Plaza, a Commercial Development, Plat C as

recorded in the office of the Utah County Recorder on the 27<sup>th</sup> day of January, 2003 as entry number 12677:2003, Map Filing #9872, is hereby vacated.

IV.

This ordinance is effective upon recordation with the Utah County Recorder.

ORDERED PUBLISHED BY THE CITY COUNCIL OF SPANISH FORK, UTAH, this 20th day of August, 2013.

---

G. WAYNE ANDERSEN, Mayor

Attest:

---

KENT R. CLARK, City Recorder

# ORDINANCE NO. 13-13

## ROLL CALL

| VOTING   | YES | NO |
|--|-----|----|
| <b>G. WAYNE ANDERSEN</b><br><i>Mayor (votes only in case of tie)</i> |     |    |
| <b>ROD DART</b><br><i>Council member</i>                             |     |    |
| <b>RICHARD M. DAVIS</b><br><i>Council member</i>                     |     |    |
| <b>BRANDON B. GORDON</b><br><i>Council member</i>                    |     |    |
| <b>STEVE LEIFSON</b><br><i>Council member</i>                        |     |    |
| <b>KEIR A. SCOUBES</b><br><i>Council member</i>                      |     |    |

I MOVE this ordinance be adopted:

I SECOND the foregoing motion:

## ORDINANCE No. 13-13

### AN ORDINANCE VACATING 1200 NORTH STREET

WHEREAS, 1200 North Street runs east and west for approximately half a block commencing at Chappel Drive and proceeding east; and

WHEREAS, no development has ever taken place adjacent to 1200 North Street and it has remained a dead end street; and

WHEREAS, 1200 North Street does not provide ingress or egress to any properties and is an unused street; and

WHEREAS, the Canyon Creek development currently underway in the City has no need for 1200 North Street, and, in fact, can be better utilized and the property made more productive if 1200 North Street is vacated; and

WHEREAS, IHC Health Services, Inc., the adjacent property owner, has requested a vacation of

1200 North Street; and

WHEREAS, a public hearing to vacate a street was held on Tuesday, the 20<sup>th</sup> day of August, 2013, with notice given in accordance with Utah Code Annotated §10-9a-208; and

WHEREAS, the Council finds it is in the best interest of the City and its residents to vacate 1200 North Street;

NOW THEREFORE, be it ordained and enacted by the Spanish Fork City Council as follows:

I.

1200 North Street , as shown on the attached Exhibit A, and more particularly described as follows:

BEGINNING AT A POINT LOCATED N00°17'53"W ALONG THE SECTION LINE 949.26 FEET AND WEST 1207.94 FEET FROM THE EAST CORNER OF SECTION 18, TOWNSHIP 8 SOUTH , RANGE 3 EAST, SALT LAKE BASE AND MERIDAIN; THENCE N88°34'34"W 251.82 FEET; THENCE ALONG THE ARC OF A 20.01 FOOT RADUIS CURVE TO THE LEFT 24.37 FEET (CHORD BEARS: S56°32'40"W 22.89 FEET); THENCE ALONG THE ARC OF A 541.50 FOOT RADIUS CURVE TO THE LEFT 58.72 FEET (CHORD BEARS: N18°31'51"E 58.69 FEET); THENCE S88°34'34"E 253.34 FEET; THENCE S01°25'26"W 43.00 FEET TO THE POINT OF BEGINNING.

is hereby vacated, including any public utility easements contained within the street right-of-way.

II.

IHC Health Services, Inc., being the adjacent property owner, shall own the vacated street and the mayor is authorized to deed the property to IHC Health Services, Inc.

III.

This ordinance is effective immediately upon passage.

DATED this 20th day of August, 2013.

G. WAYNE ANDERSEN, Mayor

Attest:

KENT R. CLARK, City Recorder

# Exhibit A 1200 N Road Vacation



1" = 100 Ft

## Legend

-  1200 N Vacation
- Roads
-  Paved
-  County SF Parcels
-  Spanish Fork Boundary

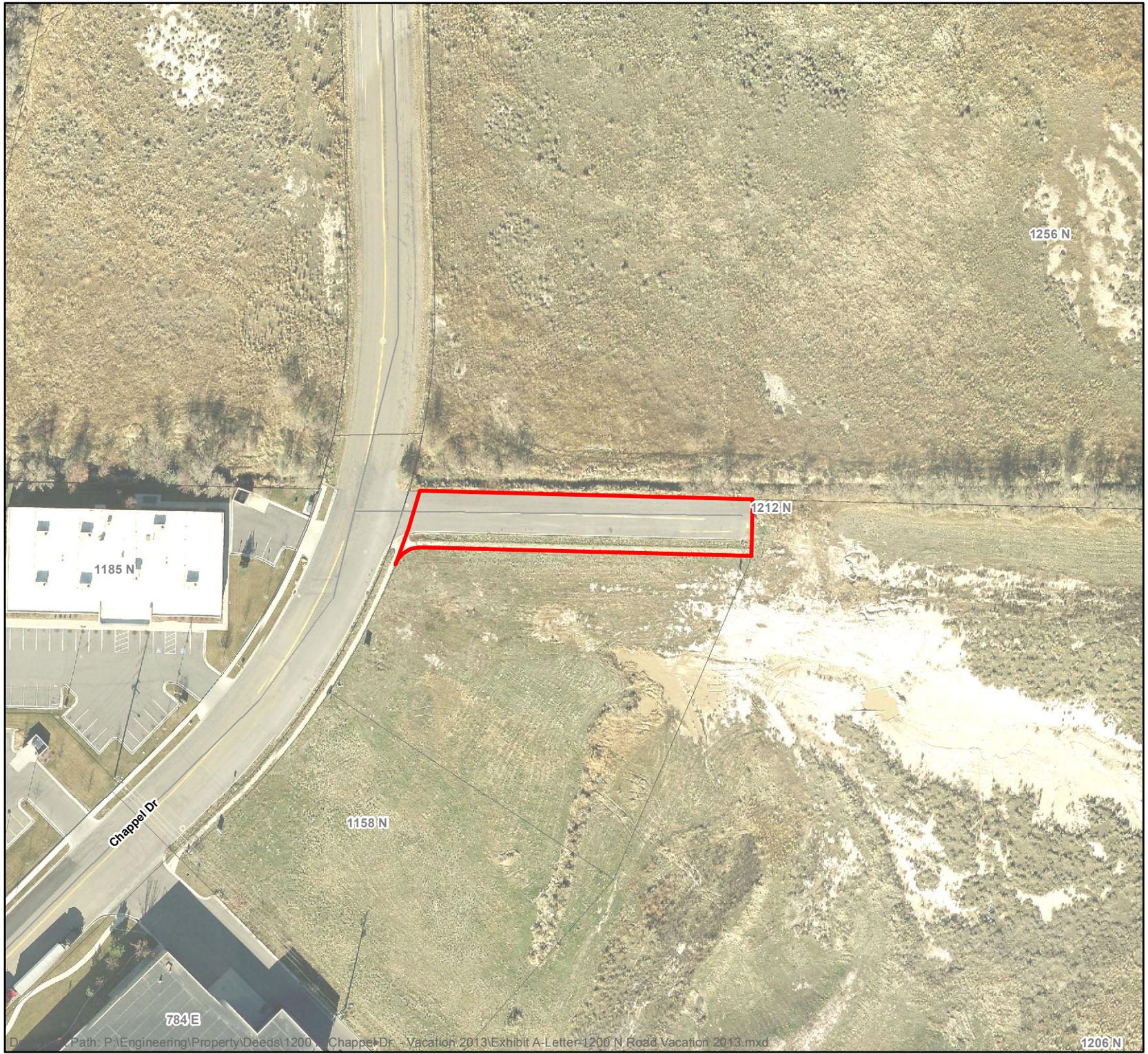
Print Date: 8/5/2013



GEOGRAPHIC INFORMATION SYSTEMS

Spanish Fork City GIS  
40 South Main St  
Spanish Fork, UT 84660  
GIS Phone Numbers;  
(801) 804-4571 (Administrator)  
(801) 804-4570 (Intern)  
(801) 804-4572 (Intern)

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# Memo

To: Mayor and City Council  
From: Chris Thompson P.E., Public Works Director/City Engineer  
Date: August 14, 2013  
Re: Woodhouse Substation 2<sup>nd</sup> Transformer Bid Award

---

## Staff Report

With the improvements and industry that is forecasted to happen within the next few months in the Canyon Creek development area. It is imperative that we add capacity to the existing Woodhouse Substation. The existing bay currently runs 3 circuits and has been running at or near available capacity for several years and with no development in the area it has not been a concern to us. With the Canyon Creek development and the probability of a hospital in the area it is important to add capacity at the substation.

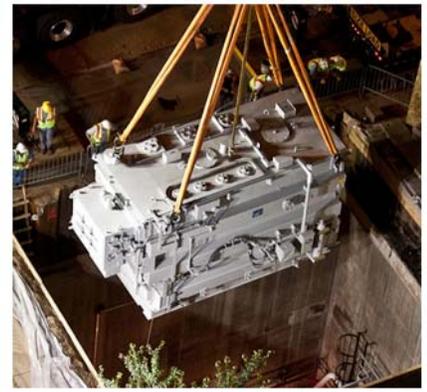
We have put an RFP out for engineering of the site to add the second bay. We are estimating that these costs will be around \$50,000.00.

Attached is a quote for the substation needed to do the expansion. This transformer was quoted under the alliance agreement that we entered into with SUVPS in 2009. The cost for the needed transformer is \$614,820.00. We were asked if we would be willing to take a 2013 production slot with this quote it would save us approximately 3% of the overall cost. This is a larger transformer than we have purchased in the past \$63,563.00 lower in cost then the last unit we purchased. The last one we purchased was for the Maple Mountain substation at a cost of \$678,383.00. The lead time for the quoted transformer is 22 weeks.

The capital project budget for system improvements in FY2014 is budgeted at \$550,590.00. With the amount allocated we have an estimated short fall of funds of \$144,230.00 but this larger transformer will have a significant amount of additional capacity. We would adjust the budget in the next revision. We recommend that the city council approve this bid to Waukesha for the Woodhouse transformer for the amount of \$614,820.00.

Attached: report





**SPX**®

**WAUKESHA**®



# SPANISH FORK CITY ELECTRIC DIVISION

SPX Waukesha Quotation # 70003557

8/9/2013

# SPX Waukesha Quotation

8/9/2013

Mr. Tom Cooper and Mr. Kelly Peterson

Spanish Fork City Electric Division  
2160 North 175 East  
Spanish Fork, UT 84660

|                                  |  |
|----------------------------------|--|
| <b>Inquiry</b>                   | Woodhouse Substation   |
| <b>Quote Number</b>              | 70003557   |
| <b>Specification Document(s)</b> | Woodhouse Substation Spec for 46-12.47/7.2 Power Transformer |



## CONTACT INFORMATION .....

**Channel Partner**

Gary Poh  
Rogers-Strong Associates  
TEL 801-486-4778  
FAX 801-467-3907  
[gary.poh@rogers-strong.com](mailto:gary.poh@rogers-strong.com)

**Application Engineer**

Ana Martinez  
SPX Transformer Solutions, Inc.  
TEL 262-521-0181  
FAX 262-521-0198  
[ana.martinez@spx.com](mailto:ana.martinez@spx.com)

**Territory General Manager**

Stewart Cox  
SPX Transformer Solutions, Inc.  
TEL 480-861-9351  
FAX 480-907-2242  
[stewart.cox@spx.com](mailto:stewart.cox@spx.com)



## QUOTE SUMMARY .....

|                           |  |
|---------------------------|--|
| <b>Item Number</b>        | 10   |
| <b>Price Per Unit</b>     | <b>\$614,820.00 EA</b>   |
| <b>Quantity</b>           | 1  |
| <b>Rating Information</b> | 20/26.67/33.33//37.33 MVA, ONAN/ONAF/ONAF, 3 Phase, 60 Hz., 55/65 Degree C rise, 46.0 kV DELTA To 12.47 kV GRDY  |
| <b>Shipment Lead Time</b> | <b>18-22 weeks</b> after receipt of an accepted written purchase order in our office, subject to plant loading at the time of receipt of order.<br><br>If required, alternate shipment may be available. Please consult the Channel Partner, Application Engineer or Territory General Manager identified in the CONTACT INFORMATION shown in this quotation.  |
| <b>Payment Terms</b>      | Quoted Prices do <u>not</u> include sales, use, excise or any other taxes. Any taxes imposed shall be the responsibility of customer and will be invoiced accordingly.<br><br>Firm Pricing<br>Payment terms, subject to credit approval, are:<br>30% to be invoiced with Order Acknowledgment (Due Net 30 days from date of invoice)<br>30% to be invoiced when released to Manufacturing (Due Net 30 days from date of invoice)<br>30% to be invoiced at time of shipment (Due Net 30 days from date of invoice)<br>10% to be invoiced upon shipment of the transformer (Due Net 30 days from date of delivery) |



## ADDERS

|  |                       |
|--|-----------------------|
| Short Circuit Testing  | \$425,740.00 per unit |
| SPX Transformer Solutions Field Assembly, Vacuum Fill and Test | \$18,250.00 per unit  |
| SPX Transformer Solutions Offloading Transformer to Pad        | \$24,295.00 per unit  |



## DRAWINGS

Approval drawings will be provided within **12 weeks** after receipt and acceptance of a written purchase order in our office.



## OIL

Oil is included in the quoted transformer price. If oil is shipped separately, pricing includes shipment/delivery of the oil within sixty (60) days of shipment of the transformer. After that date, customer will be invoiced for any cost exceeding **\$5.75/gallon**.



## PRICE POLICY

The above quoted prices are for shipment shown, subject to the following conditions:

- Factory acceptance of a written purchase order or contract, within the validity period of this quotation.
- For orders requiring drawing approval, a release to immediately proceed with production must be returned to SPX Waukesha within 7 days after drawing submittal to maintain scheduled date(s).
- There will be a 1-½% charge per month of the unpaid balance beginning 15 days after the due date of invoice. The amount charged shall not be in excess of the applicable usurious rate.



## SHIPMENT

The above quoted transformer will be shipped **Oil filled by Truck to your Specified Site**, providing no unusual circumstances unknown to SPX Waukesha are present, such as no existing roads, impassable conditions, extreme grade or anything else which would prevent SPX Waukesha from delivering to the transformer site.



## FIELD SERVICE

**SPX Field Supervision is included** in the quoted transformer price. If service has not been performed within ninety (90) days after shipment of the transformer, customer may be responsible for any increase in SPX Waukesha Service Field Service rates.

If Field Service is included, or offered as an adder to the Net Price, details of the services to be provided are included as an attachment to this quotation.



## TERMS & CONDITIONS

The Alliance Agreement between Waukesha Eclectic System and SUVPS date January 26,2009, shall apply to any order placed against this quotation.

SPX Transformer Solutions reserves the right to correct clerical and administrative errors in this quotation, and other related documents.



## WARRANTY

The above transformer is quoted with the **SPX Transformer Solutions' Five Year Power Transformer Warranty** in lieu of all others specified, expressed or implied. To qualify for the SPX Waukesha Five Year Warranty, a SPX Waukesha Service representative **must be** present at the time the transformer is dressed out, and both the primary and secondary must be protected from surges with arresters mounted on the transformer tank. A System Coordination Study may be presented by the customer and reviewed by Waukesha to determine if a waiver of the lightning arrester requirement is available

In addition to the above, full compliance to the SPX Waukesha Instruction Manual is required to validate the warranty. A complete Instruction Manual is provided in the control box of every SPX Waukesha Power Transformer.



## COMMERCIAL NOTES, COMMENTS & EXCEPTIONS

1. The SPX Transformer Solutions Warranty requires that suitable Lightning Arresters be mounted on the transformer tank and connected to all windings (phase connections) whenever the transformer is energized. Failure to provide these Lightning Arresters (are included in the above quoted price) will nullify the Five Year Warranty.
2. Customer requested Adders shall be added to the transformer price and they shall be payable in accordance with agreed upon payment terms unless otherwise stated by SPX Transformer Solutions in writing.
3. SPX Waukesha takes exception to Part F. General Terms and Conditions, to the extent it addresses commercial terms for orders placed against this quotation. The Alliance Agreement between Waukesha Eclectic System and SUVPS date January 26,2009, shall apply to any order placed against this quotation



## TECHNICAL NOTES, COMMENTS & EXCEPTIONS

1. Non-conformances and defects will be dealt with per the provisions of the applicable SPX Waukesha warranty.
2. **Woodhouse Substation Spec-2.8** - Dissolved Gas in Oil Tests. The expected amount of dissolved gasses to be generated during the dielectric tests of Items 10 and 20 are as follows:
  - 2.1 Carbon Dioxide < 250 ppm
  - 2.2 Carbon Monoxide < 25 ppm
  - 2.3 Hydrogen < 20 ppm
  - 2.4 Methane < 2 ppm
  - 2.5 Ethane < 2 ppm
  - 2.6 Ethylene <1 ppm
  - 2.7 Acetylene None

These values represent maximum generated gasses per test.

  - 2.8 Example: Final (gas ppm's after specific test) – Initial (gas ppm's prior to specific test) = Maximum generated gasses (gas ppm change for specific test).
  - 2.9 Heat runs performed at different ratings take place immediately one after the other so the gases potentially generated during one heat run rating may not be present in the initial DGA sample for that heat run; but, it may show up in the subsequent DGA sample of the next heat run. Due to this SPX will meet the gas limits for each gas as a sum of the gas limits for all required heat runs, including the overload of up to 1.25 pu, not to exceed the sum of limits allowed for each progressive heat run test.
3. **Woodhouse Substation Spec-2.9** - SPX Transformer Solutions uses inhibited mineral oil meeting ANSI / ASTM D-3487 in its transformers. Oil is purchased only from approved sources and for each approved source, oil has been tested and proven to meet the ANSI / ASTM D-3487 values. Ergon Refining Hyvolt-II **inhibited** Type-II mineral oil with less than 2 PPM PCB content. Specification and MSDS are attached to proposal. Oil meeting other specific customer requirements may be available upon request.
4. **Woodhouse Substation Spec-3.3.3** - The above quoted transformer will be designed and built to comply with IEEE Standard 693 for Moderate Seismic withstand. If a certified Seismic Analysis Report is required, add to the above quoted price an additional \$10,600.00 per transformer design.
5. **Woodhouse Substation Spec-3.4J** – Lowest sound level for quoted transformer would be 67/69/70 dB.
6. **Woodhouse Substation Spec-3.5.1** - For system voltages less than or equal to 69 kV, guaranteed bushing C2 P.F. levels are less than or equal to 1.26%.

7. **Woodhouse Substation Spec-3.6.10** - The Dynamic Ratings T3-6100 is being provided with the device manufacturer's factory default settings. No programming will be supplied by SPX Transformer Solutions, Inc. If programming is required, please consult Application Engineer listed for adder.
8. **Woodhouse Substation Spec-3.6.11** - All the interconnecting wiring will be cross-linked TEFZEL flame resistant, self-extinguishing type, which has a higher temperature rating than SIS types.
9. **Woodhouse Substation Spec-3.10** - The above quoted unit is designed with an inert gas oil preservation system.
10. **Woodhouse Substation Spec-3.12.1** - Control cabinet will be painted gray with a white black plate.
11. **Woodhouse Substation Spec-3.12.2** - The quoted price includes the new Positive Temperature Coefficient (PTC) technology cabinet heater that maintains the enclosure at a temperature slightly higher than the outside ambient temperature at all times without the use of controls, such as switches or thermostats.
12. **Woodhouse Substation Spec-3.13** - The quoted price includes the standard SPX Waukesha paint finish system. The paint finish on tank will comply with C57.12.28 paint requirements while the cooling radiators will be unpainted and constructed of hot-dipped, galvanized steel. Reference attachment *Transformer Paint Systems* for additional clarification.
13. **Woodhouse Substation Spec-3.13 E** - SPX Waukesha provides unpainted galvanized radiators for all its transformers. Compared to conventional painted radiators, galvanized units provide superior protection against rust and corrosion, reducing transformer maintenance time while extending radiator life.

### LOSS GUARANTEE

In accordance with ANSI Standard C57.12.00-2006 Section 5.9, No-load (core) loss guarantee on the enclosed performance specification(s) is based on the standard reference temperature of 20°C. Load (winding) loss guarantee is at the standard reference temperature of 85°C on 65°C rise rated transformers (or 75°C on 55/65°C rise rated transformers).

SPX Waukesha tests no-load and load losses with less than 1.0% measurement error. These measurement errors are determined by a calibration system that is traceable to the National Institute of Standards and Technology (formerly the National Bureau of Standards) using methods described in NIST's Technical Note 1204.

### AWARD OF CONTRACT

In the event that the transformer contract is awarded to SPX Transformer Solutions, please provide the following text on the purchase order to help expedite order processing: **Unit(s) will be Designed, Manufactured, Tested, Shipped, Sold and Invoiced in accordance with SPX Transformer Solutions' Quotation 70003557, dated 8/9/2013.**

### 30 DAYS VALIDITY

Due to the rapid change in the cost of commodities required to manufacture power transformers, this proposal will remain in effect for 30 days, unless changed in the interim by written notice. Extensions to the 30-day validity will be considered, as required, to facilitate the order process.

Sincerely,  
SPX Transformer Solutions, Inc.

Ana Martinez  
Application Engineer

# Enclosures

*(latest version(s) in effect at the time of the request)*

Performance Specification

SPX Waukesha Five Year Power Transformer Warranty

SPX Field Supervision

Assembly & Testing: Oil Filled Units

Cancellation/Delay Policy

Transformer Storage Policy

Request for Storage Form

Transformer Oil Specification

Transformer Paint Systems

Paint Systems Test Results

Short Circuit Testing

SPX Service Solutions

SPX/Waukesha UZD

Load Tap Changer Filtration Systems

Envirotemp™ FR3™ Dielectric Fluid (FR3 Fluid)

## Performance Specification

FOR: 271 SPANISH FORK POWER & LIGHT

Quotation No: 70003557

Item No: 000010

Project Name: Woodhouse Substation

### TRANSFORMER RATINGS

| Phase          | 3       | Cooling Class | HV Volts |    | XV Volts |       | YV Volts |       | ZV (TV) Volts |    |
|----------------|---------|---------------|----------|----|----------|-------|----------|-------|---------------|----|
| Frequency      | 60      |               | 46,000   | -- | 12,470   | --    | --       | --    | --            | -- |
| Temp Rise °C   | 55 / 65 |               | Delta    | -- | GrdY     | --    | --       | --    | --            | -- |
| Insulating Oil |         | ONAN          | 20.00    | /  | 22.40    | 20.00 | /        | 22.40 | --            | -- |
|                |         | ONAF          | 26.67    | /  | 29.87    | 26.67 | /        | 29.87 | --            | -- |
|                |         | ONAF          | 33.33    | /  | 37.33    | 33.33 | /        | 37.33 | --            | -- |

### ADDITIONAL TAP VOLTAGES

| Terminal | Style | Taps or KV  |           | Capacity |
|----------|-------|-------------|-----------|----------|
| HV       | DETC  | + 2 / - 2   | @ 2.500 % | FULL     |
| XV       | UZD   | + 16 / - 16 | @ 0.625 % | REDUCED  |

### PERCENT IMPEDANCE VOLTS

| %    | Windings | At MVA |
|------|----------|--------|
| 8.10 | H-X      | 20.0   |
| --   | H-Y      | --     |
| --   | X-Y      | --     |

### AUXILIARY LOSSES AND SOUND LEVEL

| MVA   | Class | Cooling | Sound Level dB |
|-------|-------|---------|----------------|
| 20.00 | ONAN  | --      | 70             |
| 26.67 | ONAF  | 2,100   | 72             |
| 33.33 | ONAF  | 4,200   | 73             |

The above values for cooling loss do not include ancillary equipment (heaters, control devices, etc.) losses of 2,000 watts

### INSULATION LEVELS (KV)

| Terminal        | Winding | Bushing |
|-----------------|---------|---------|
| HV Line         | 250     | -- 250  |
| HV Neutral      | --      | --      |
| XV Line         | 110     | -- 150  |
| XV Neutral      | 110     | 150     |
| YV Line         | --      | --      |
| YV Neutral      | --      | --      |
| ZV (TV) Line    | --      | --      |
| ZV (TV) Neutral | --      | --      |

### PERFORMANCE BASED ON A LOADING OF

|                 |        |         |       |     |
|-----------------|--------|---------|-------|-----|
| HV Winding      | 46,000 | Volts @ | 20.00 | MVA |
| XV Winding      | 12,470 | Volts @ | 20.00 | MVA |
| YV Winding      | --     | Volts @ | --    | MVA |
| ZV (TV) Winding | --     | Volts @ | --    | MVA |

### EFFICIENCIES Base MVA (ONAN) = 100%

| Load    | 100%  | 75%   | 50%   | 25%   |
|---------|-------|-------|-------|-------|
| Percent | 99.53 | 99.62 | 99.68 | 99.66 |

### REGULATION

| Power Factor | Percent Regulation |
|--------------|--------------------|
| 1.0          | 0.73               |
| 0.9          | 4.14               |
| 0.8          | 5.36               |

### PERFORMANCE DATA No Load Temp: 20 °C/ Load Loss Temp: 75 °C

| Exciting Current (Percent) and Loss (Watts) |                     |              |           |            |
|---|---------------------|--------------|-----------|------------|
| Excitation                                  | Exciting Current(%) | No Load Loss | Load Loss | Total Loss |
| 100%  | .500                | 12,100       | 81,500    | 93,600     |

### MECHANICAL DATA - Not for Construction

Dimensions are in inches & weights are in pounds (approx.values)

| Outline Drawing Number: | Shipping: Filled by Truck |           |          |  |
|-------------------------|---------------------------|-----------|----------|--|
|                         | Base                      | Assembled | Shipping | Weight (lbs)                           |
| Height (A)              | --                        | 144       | 125      | Core and Coils 50,144                  |
| Width (B)               | 143                       | 259       | 181      | Tank and Fittings 34,398               |
| Depth (C)               | 69                        | 178       | 100      | Liquid (3,817 gallons) 28,658          |
| Height Over Cover (D)   | --                        | 125       | 125      | Total Weight 113,200                   |
|                         |                           |           |          | Shipping Weight, Heaviest Piece 93,355 |

**SECTION 1.0**  
**POWER TRANSFORMER – PROPOSAL DATA SHEETS**  
**for**  
**SPANISH FORK CITY ELECTRIC DIVISION**

**1.1 PRICING**

**BID DATA**

1.1.1 Base Bid:

Total firm price to furnish and deliver F.O.B. jobsite, Spanish Fork, Utah, one (1) 138 x 46 -12.47Y/7.2 kV, power transformer complete with specified accessories, and LTC-related equipment as described in SECTION 3 of these specifications.

(Delivery by Truck) \$           N/A           \*

(Delivery by Rail) \$           N/A           \*

OR

Total firm price to furnish and deliver F.O.B. jobsite, Spanish Fork, Utah, one (1) 46 -12.47Y/7.2 kV, power transformer complete with specified accessories, and LTC-related equipment as described in SECTION 3 of these specifications. (Use these specifications without the 138 kV information and only use the 46 kV information.)

(Delivery by Truck) \$         614,820.00         \*

(Delivery by Rail) \$           N/A           \*

1.1.2 Delivery Date:

Can *Contractor* meet specified delivery?  
 (Approximately 40 weeks ARO based upon award of contract within two (2) weeks of bid opening.)\*

          N/A            
 (yes, no)\*

If not, *Contractor* shall enter the earliest guaranteed delivery date of equipment to its final destination.

        18 - 22 weeks ARO          
 (Mo)(Day)(Year)\*

1.1.3 Do prices quoted in 1.1.1 above include all freight prepaid and allowed to job site for any oil to be shipped separately as specified?

          Yes            
 (yes, no)\*

1.1.4 Transformer Loss Evaluation Per Section 2.12.3 of Specification:

\$         264,588.00         \*

1.1.5 Warranty Period:

a. Standard warranty period

        60 months          
 (months)\*

b. Additional cost for 3 yr. % for 3 yr.

\*\$/%           N/A          

c. 5 yr. extended warranty % for 5 yr.

\*\$/%           N/A



**PROPOSAL DATA SHEETS (cont)**

**1.3 DRAWINGS:**

Will *Contractor* meet delivery dates as listed below for drawings? (Based on Contract award date within two (2) weeks of bid opening).

1.3.1 Approval Drawings:

A. Outline Drawings:

Requested Date: **2 weeks ARO**

\_\_\_\_\_  
No  
(Mo)(Day)(Yr)  
\_\_\_\_\_  
12 weeks ARO \*  
(Mo)(Day)(Yr)

If no, Guaranteed Date:

B. All drawings except outline drawings:

Requested Date: **5 weeks ARO**

\_\_\_\_\_  
No  
(Mo)(Day)(Yr)  
\_\_\_\_\_  
12 weeks ARO \*  
(Mo)(Day)(Yr)

If no, Guaranteed Date:

1.3.2 Certified Construction Drawings:

Requested Date: **10 weeks ARO**

\_\_\_\_\_  
No  
(Mo)(Day)(Yr)  
\_\_\_\_\_  
ARO \*  
(Mo)(Day)(Yr)

If no, Guaranteed Date:

1.3.3 As-Built Drawings and Instruction Manuals:

Requested Date: **24 weeks ARO**

\_\_\_\_\_  
Yes  
(Mo)(Day)(Yr)  
\_\_\_\_\_  
-  
(Mo)(Day)(Yr)

If no, Guaranteed Date:

**1.4 DATA**

1.4.1 Name of *Contractor* and location of facility:

\_\_\_\_\_  
SPX Transformer Solutions, Inc  
\_\_\_\_\_  
Waukesha, WI  
\_\_\_\_\_

1.4.2 Type of transformer design  
(Core or Shell; if core form, state number of legs):

\_\_\_\_\_  
Core, 3 legs  
\_\_\_\_\_

1.4.3 Concise description of core and winding design(s)  
(i.e., rectangular, circular, strip wound, disc, etc.)

\_\_\_\_\_  
HV - Disk  
LV - Helical  
\_\_\_\_\_

1.4.4 Winding material

\_\_\_\_\_  
Cooper  
\_\_\_\_\_

1.4.5 Shipping weight of largest piece (max):

\_\_\_\_\_  
93,355  
Lbs  
\_\_\_\_\_

1.4.6 Weight of transformer complete:

\_\_\_\_\_  
113,200  
Lbs  
\_\_\_\_\_

**PROPOSAL DATA SHEETS (cont)**

|  |                  |                      |
|--|------------------|----------------------|
| 1.4.7 Weight of core and coil assembly:  |                  | 50,144               |
|  |                  | Lbs                  |
| 1.4.8 Weight of oil:   |                  | 28,658               |
|  |                  | Lbs                  |
| 1.4.9 Quantity of oil:   |                  | 3,817                |
|  |                  | Gal                  |
| 1.4.10 Weight of case:   |                  | 34,398               |
|  |                  | Lbs                  |
| 1.4.11 Type of oil preservation system:  |                  | Inert Gas            |
| 1.4.12 Quantity of oil to be shipped separately,   |                  | Make up oil -800 gal |
| If any, and means of shipment (tank truck, drum, or other):                                  |                  | Gal                  |
|  |                  | Drum                 |
| 1.4.13 Height over cover:  |                  | 125                  |
|  |                  | Inches               |
| 1.4.14 Height over top-mounted H.V. bushings:  |                  | 144                  |
|  |                  | Inches               |
| 1.4.15 Height over top-mounted L.V. bushings: inches   |                  | Later                |
|  |                  | Inches               |
| 1.4.16 Width, including radiators:   | Width w/radiator | 259                  |
| and width of base:   | Base width       | 143                  |
|  |                  | Inches               |
| 1.4.17 Depth, including radiators: (LV side to HV side)                                      | Depth w/radiator | 178                  |
| and depth of base:   | Base Depth       | 69                   |
|  |                  | Inches               |
| 1.4.18 Shipping height:  |                  | 125                  |
|  |                  | Inches               |
| 1.4.19 Current rating of high voltage bushings:  |                  | 1200 amps            |
| 1.4.20 Manufacturer and catalog number of high voltage bushings:                             |                  | PCORE                |
|  |                  | Mfg                  |
|  |                  | B88913-70 or equal   |
|  |                  | Cat. No.             |
| 1.4.21 Diameter/threads per inch/length of high voltage bushing studs:                       |                  | Later                |
|  |                  | In / TPI / In*       |
| 1.4.22 Current rating of low voltage bushings:   |                  | 2000 amps            |
|  |                  | Amps                 |
| 1.4.23 Manufacturer and catalog number of low voltage bushings:                              |                  | PCORE                |
|  |                  | Mfg                  |
|  |                  | B89223-70 or equal   |
|  |                  | Cat. No.             |
| 1.4.24 Diameter/threads per inch/length of low voltage bushing studs;<br>or NEMA 4-hole pad: |                  | Later                |
|  |                  | In / TPI / In*       |
| 1.4.25 Current rating of neutral bushing:  |                  | 2000 amps            |
|  |                  | Amps                 |

**PROPOSAL DATA SHEETS (cont)**

|   |   |
|---|---|
| 1.4.26 Manufacturer and catalog number of neutral bushing:  | <u>PCORE</u><br>Mfg<br>B89223-70 or equal<br>Cat. No. |
| 1.4.27 Manufacturer and catalog number of:<br>Station Class 84/29 kV MCOV surge arresters (138 kV Bushing):   | <u>N/A</u><br>Mfg / Cat. No.                          |
| Station Class 29 kV MCOV surge arresters (46 kV Bushing)  | <u>Ohio Brass / 219529 or equal</u><br>Mfg / Cat. No. |
| Station Class 7.65 kV MCOV surge arresters  | <u>Ohio Brass / 219508 or equal</u><br>Mfg / Cat. No. |
| 1.4.28 Diameter/threads per inch/length of neutral bushing:   | <u>Later</u><br>In / TPI / In*                        |
| 1.4.29 Impedance (guaranteed),<br>Ref Section 3.4.2 H-X (12 MVA base) $\pm$ 7.5% Tolerance:   | +j <u>8.10</u> $\pm$ 7.5%*                            |
| 1.4.30 Maximum Regulation<br>(H-winding to X-winding at 12 MVA and rated voltage),<br>( assume no tertiary load):   |   |
| A. Unity power factor:  | <u>0.73</u> %*  |
| B. .95 power factor lag:  | <u>Later</u> %*                                       |
| C. .90 power factor lag:  | <u>4.14</u> %*  |
| D. .80 power factor lag:  | <u>5.36</u> %*  |
| 1.4.31 Inrush RMS magnetizing current<br>on basis of worst case with residual<br>magnetism (times rated current -estimated):  | <u>Later</u>  |
| 1.4.32 Exciting current at 100% rated voltage:  | <u>0.50</u><br>Amps                                   |
| 1.4.33 Exciting current at 110% rated voltage:  | <u>1.00</u><br>Amps                                   |
| 1.4.34 Maximum no-load loss at rated voltage ( <del>corrected to 85°C</del> ):  | <u>12.10</u><br>kW*                                   |
| 1.4.35 Maximum no-load loss at 110% rated voltage ( <del>corrected to 85°C</del> ):   | <u>17.4 not guarantee</u><br>kW*                      |
| 1.4.36 Maximum auxiliary loss:  | <u>6.20</u><br>kW*                                    |
| 1.4.37 Maximum total loss including no-load loss,<br>load loss for <del>65°C</del> rise and auxiliary losses<br>at ratings listed below (loss corrected to <del>85°C</del> ): | <u>252.0</u><br>kW*                                   |
| A. For 20 MVA, rated voltage, (class OA):   | <u>93.60</u><br>kW*                                   |

**PROPOSAL DATA SHEETS (cont)**

B. For 20 MVA, LTC in full boost position, (class ONAN): Later  
kW\*

C. For 22.67 MVA, LTC in full buck position, (class OA/FA/FA):  
Later  
kW\*

D. For 33.33 MVA, rated voltage, (class ONAN/ONAF/ONAF):  
252.0 kW @ 33.33  
kW\*

1.4.38 Maximum auxiliary loads including fans:

120 VAC service Later kW, if @ 120V

240 VAC service Later kW, if @ 240V

1.4.39 Audible sound level

A. Audible sound level limit for this transformer design  
and rating per NEMA TR-1, 1980: (or later) 67/69/70 dB  
Decibels\*

B. Guaranteed maximum audible sound level for *Contractor's*  
design as proposed in Item 1.1.1: 70/72/73 dB  
Decibels\*

C. Cost adder for reduced audible sound level of 67 dB \$ Included

1.4.40 Load Tap Changer

A. Type (resistance, reactance, vacuum)

Manufacturer: Resistance - SPX/ Waukesha

Model: UZD

B. Standard recommended contact maintenance service interval in  
number of operations: 100,000  
(operations)

C. Contact and LTC components design life: 500,000  
(operations)

D. LTC Controller

Manufacturer: BECKWITH

Model: 2001C or latest version

E. LTC Self-Contained Oil Filtration System

Manufacturer: \_\_\_\_\_

Model: Integrated System

F. Paralleling control equipment type: (if applicable)

N/A

## Five Year Power Transformer Warranty

SPX Transformer Solutions, Inc., hereafter referred to as SPX Waukesha, warrants to the original purchaser that the complete transformer, together with all parts included in the original purchase (the "Transformer"), has been designed in accordance with the specifications of the original purchaser and that the Transformer will be free from defects in material and workmanship under normal use and service for a period of five (5) years from the date of arrival of the Transformer at its destination from the factory. SPX Waukesha's liability under this warranty does not extend to defects caused by vandalism, improper installation, improper maintenance, alterations by purchaser, purchaser-furnished materials, or improper operation. For this warranty to be valid, SPX Waukesha requires that all windings be protected from surges with arresters mounted on the transformer tank. Any other location must be approved by SPX Waukesha.

**A Customer Service Representative must be present during field assembly, vacuum filling (if required) and inspection of the installation prior to energization. In the event that the Transformer is relocated, a Customer Service Representative must be present during field re-assembly, vacuum-filling (if required) and inspection of the re-installation prior to re-energization.**

**Purchaser forfeits the provisions of the Five Year Warranty if either of these service requirements is not followed.**

If any part is found to contain defects in material and/or workmanship during the five year warranty period, SPX Waukesha's liability and Purchaser's remedies under this warranty shall be limited solely to repair or replacement, at SPX Waukesha's option, of the defective part. Decision on the method and extent of repairs rests solely with SPX Waukesha. Purchaser shall give SPX Waukesha prompt written notice of any claim hereunder. SPX Waukesha shall be given a reasonable opportunity to investigate all claims, and no parts may be returned to SPX Waukesha without authorization and instructions from the Customer Service Department.

During the first year, this warranty covers any freight within the 48 contiguous states by common carrier in full. This warranty also covers the cost of removal from the site and reinstallation after repair, subject to a limit of 10% of the original selling price. Costs of moving structures or associated equipment are excluded. During the last four years, transportation, moving and reinstallation costs are excluded from this warranty.

Under no circumstances will SPX Waukesha be responsible for damage in excess of the sale price to Purchaser for the goods and/or services for which damages are claimed.

THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SPX WAUKESHA SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR EXPENSES OF ANY KIND, INCLUDING LOSS OF PROFITS.

In the event a performance bond is provided as part of the contract to which this warranty applies, the Surety's liability shall be limited to one (1) year from the date of delivery of the Transformer. The remaining four (4) year warranty period is solely the obligation of SPX Waukesha.

## SPX / Waukesha Field Supervision

### Supervision

Waukesha Service personnel shall provide assistance to customer during the installation of the transformer and verifying proper assembly to facilitate activation of the applicable warranty.

The minimum requirements for warranty validation are the following:

- Waukesha Service person shall perform internal inspection of transformer and witness the installation and connection of bushing connections.
  - Waukesha Service personnel shall complete field installation checklist
  - Customer shall provide vacuum filling records where applicable.
  - Customer shall perform electrical acceptance tests and provide copies of test results to Waukesha Electric Systems. As specified in WES Pre-operational Testing Instruction Booklet 2012, the minimum acceptance tests include:
    - Core Insulation Resistance (Megger)
    - Winding Insulation Resistance
    - Transformer Turn Ratio
    - Insulation Power Factor of bushings and windings (Doble)
    - Oil General Chemistry Tests – Dielectric Strength, Power Factor, and Moisture Content
  
  - Pricing is based upon a single mobilization to jobsite during standard work hours.
- When requested assistance lasts longer than 5 days, requires overtime assistance, or multiple mobilizations to the site, the extra work shall be billed in accordance with the field service engineer rates designated in the WES Field Service
-

# Assembly & Testing: Oil-Filled Units

*applicable for transformers < 60 MVA based rating and < 230kV*

If included in the quoted price or selected as an “adder” as outlined in the proposal, Waukesha® Service crews and equipment will perform the transformer installation once the transformer has been placed on the pad. The assembly and testing work will be composed of the following:

## ASSEMBLY

- Drain and store in SPX Waukesha-supplied storage tanks any oil required to access bottom terminations of bushings
- Install, connect and tape, as necessary, all bushings
- Hang and brace radiators and/or fans
- Mount oil preservation system, if required
- Mount lightning arresters, if required
- Mount control cabinet, if required
- Mount any miscellaneous items removed for shipment
- Hang any conduit removed for shipment; pull and terminate associated wiring



## OIL FILLING

- Add top off oil in accordance with SPX Transformer Solutions’ Instruction Leaflet Document No. 2011

## TESTING

As specified in SPX Transformer Solutions’ Pre-operational Testing Instruction Booklet No. 2012, the minimum acceptance tests include the following:

- Bushing power factor and capacitance
- Core megger
- Transformer turns ratio
- Insulation power factor
- Insulation resistance
- Functional check of unit control cabinet
- Oil test after filling
  1. Moisture content
  2. Power factor
  3. Dielectric strength
  4. Flash and fire point (FR3™ units only)

*See next page for Scope Clarifications.*



## SCOPE CLARIFICATIONS

For all transformer installations, the following apply:

- Purchaser shall be responsible for switching, lock out and grounding of any equipment necessary to establish safe work area.
- Purchaser shall provide suitable, free, clear, unlimited and compacted access route, roads and area around work location for access of service equipment.
- Purchaser shall connect all external protection, control and relay wiring, as required.
- Purchaser shall connect all external bushing terminations or bus work, as required.
- Purchaser shall assemble any deluge systems, as required.
- SPX Waukesha will compile all crating and waste material in designated area; however, purchaser shall be responsible for disposal of solid wastes.
- Purchaser shall provide drum and dispose of all waste, flush and scrap oil generated in execution of work.
- Purchaser shall provide communication and sanitation facilities.
- No provisions have been included for secondary oil containment as may be required for compliance to local site SPCC programs.
- No provisions have been included for Union Labor requirements.
- Any site specific or customer required access and/or safety training is not included in pricing and would be billed at applicable field service rates.
- If Envirotemp™ FR3™ is included in this quotation, acceptance test results of FR3 fluid will differ from the typical values of transformers filled with mineral oil. Insulation power factor values are expected to increase and insulation resistance values are expected to decrease when compared to test values with mineral oil insulation system.
- If Envirotemp™ FR3™ is included in this quotation, Purchaser shall be responsible for disposal of all totes/drums utilized for make-up and flush oil that is generated during course of project. SPX Waukesha can arrange for disposal upon request at additional cost.



Should additional requirements, tests and/or processing procedures apply, please contact SPX Transformer Solutions' Service group for pricing at 800.758.4384.

## Cancellation / Delay Policy

1. Cancellation of an order will be accepted after the purchaser has given written notice. If the cancellation occurs during the period from the date of order entry to twelve (12) weeks after order acknowledgement, the cancellation charges will be the actual work hours expended on the job performed at a rate of \$250 per hour or a minimum of five percent (5%) of the purchase price, whichever is greater.
2. If the cancellation occurs after approval drawings have been issued by SPX Waukesha, the termination charge will be thirty percent (30%) of the purchase price.
3. Notwithstanding items 1 and 2 above, if the order is cancelled twenty six (26) weeks or less prior to shipment, the cancellation charge shall be one hundred percent (100%) of the purchase price.
4. If the order is suspended or shipment is delayed twenty six (26) weeks or less prior to the scheduled ship date, the equipment will be completed, invoiced, and stored at the customer's expense in accordance with the terms of SPX Waukesha's Storage Policy and Customer shall issue the required storage documentation.
5. If a request to delay shipment changes the scheduled ship date, a mutually agreed upon adjustment to the base price may be necessary.

# Transformer Storage Policy

Purchaser - Company Name

SPX Waukesha Order / Transformer Unit No.

**SPX Transformer Solutions, Inc.** has limited facilities for storing new transformers and any related equipment (collectively the "Transformer") in the event that the customer cannot accept delivery upon completion of manufacture. The facilities are intended only for short-term outdoor storage. Therefore, increased rates apply for storage exceeding three months.

- 1) In order to comply with SPX Corporation's company-wide accounting policy for bill-and-hold transactions, **SPX Transformer Solutions must receive from the customer a signed Request for Storage, per the attached form, submitted on the customer's letterhead, prior to placing any equipment into storage.** Notification to SPX Transformer Solutions is defined as receipt of the signed Request for Storage at our offices.
- 2) The Request for Storage must state that title and risk of ownership of the Transformer transfer to the customer at the time the Transformer is placed into storage. The warranty period for any Transformer placed in storage starts upon arrival at the destination or six months after completion of manufacture, whichever occurs first.
- 3) Storage by SPX Transformer Solutions is contingent upon the availability of storage space at the facility. SPX Transformer Solutions may require the customer to accept shipment from storage after 3 months in storage, upon 30 days prior notice.
- 4) The charge to move the Transformer into and out of storage is **\$4,000 in / \$4,000 out.**
- 5) Storage periods greater than 30 days will result in monthly storage fees. One-half percent of the Transformer price shall be charged for each month, or portion of a month, of storage. The minimum charge for storage shall be **\$1,500 per month**. After three months in storage, the monthly rate increases to one percent of the Transformer price (**\$3,000 per month minimum**). The Request for Storage also grants SPX Transformer Solutions a security interest in the Transformer to secure payment of the purchase price and storage fees.
- 6) The Transformer will be invoiced to the customer when the Transformer is placed into storage. Storage fees will also be invoiced to the customer on a monthly basis.
- 7) Terms of payment are Net 30 Days from date of invoice.
- 8) For storage periods greater than 90 days, the delivery charges are subject to review at the time of shipment from storage. If there are any increases in freight or rigging rates or oil-filling costs from the time the equipment is invoiced to the time it is actually shipped out of storage, customer will be invoiced and required to pay the additional costs.
- 9) SPX Transformer Solutions requests four weeks advance notification for shipping out of storage to ensure that shipping preparations are completed in time to meet the designated ship date. If the anticipated date for removing a Transformer from storage changes, the customer shall request in writing that SPX Transformer Solutions grant an extension to the new anticipated removal date and provide the reasons for requesting an extension.



# Request for Storage

(this request must be submitted on purchaser's letterhead)

\_\_\_\_\_  
*Purchaser - Company Name*

\_\_\_\_\_  
*Purchaser Address*

\_\_\_\_\_  
*Purchaser Address*

-----  
Date: \_\_\_\_\_

CHECK APPLICABLE MANUFACTURING/STORAGE LOCATION:

**SPX Transformer Solutions, Inc.**  
400 S. Prairie Ave.  
Waukesha, WI 53186

**SPX Transformer Solutions, Inc.**  
2701 US Highway 117 South  
Goldsboro, NC 27530

ATTN: \_\_\_\_\_  
*Sales Operations*

REF: **Purchase Order No.** \_\_\_\_\_

SPX Waukesha Order / Transformer Unit No. \_\_\_\_\_

**[Insert Customer name]**, located in **[insert customer location]** is not ready to use power transformer purchased on the above referenced purchase order and, therefore, requests that SPX Transformer Solutions, Inc. store the transformer at its location.

Please bill and store the transformer for us as of **[insert date, 20\_\_]**. We accept title and risks of ownership of the listed transformer as of the related invoice date and normal payment terms begin on that date. We expect shipment will be required by **[insert anticipated shipment date]**.

We have received the SPX Transformer Solutions Storage Policy and agree to the terms of the policy. Please invoice us for the applicable storage fees on a monthly basis.

Sincerely yours,

\_\_\_\_\_  
*Signature*

\_\_\_\_\_  
*Type or Print Name*

\_\_\_\_\_  
*Title*

**Goldsboro, NC 800.758.4384 | Waukesha, WI 800.835.2732 | [www.spxtransformersolutions.com](http://www.spxtransformersolutions.com)**

TC03-608B

# Transformer Oil Specification

(as received from refiner)

SPX Waukesha's standard is **inhibited mineral oil with 0.3% DBPC (oxidation inhibitor)**. Oil meeting other specific customer requirements may be available upon request.

Oil is purchased only from approved domestic sources, and for each approved source, oil has been tested and proven to meet the following specification values:

| KEY PROPERTIES  | ASTM TEST METHOD    | ANSI / ASTM D-3487 LIMITS |
|---|---------------------|---------------------------|
| <b>Physical Properties</b>  |                     |                           |
| Color   | D1500               | 0.5 max                   |
| Flash point, °C   | D92                 | 145 min                   |
| Interfacial tension @ 25°C<br>(dynes/centimeter)                        | D971                | 40 min                    |
| Pour point, °C  | D97                 | -40 max                   |
| Specific gravity @ 15°C/15°C  | D1298               | 0.91 max                  |
| Viscosity, SSU/cSt @  | D88 / D445          |                           |
| 100°C   |                     | 36 / 3.0 max              |
| 40°C  |                     | 66 / 12.0 max             |
| 0°C   |                     | 350 / 76.0 max            |
| Polychlorinated Biphenyls<br>(PCBs) ppm                                 | D-4059              | Not Detectable            |
| Visual appearance   | D1524               | Clear and Bright          |
| <b>Chemical Properties</b>  |                     |                           |
| Aniline point, °C   | D611                | 63–84                     |
| Approved antioxidant content,<br>wt %                                   | D2668, D1473        | 0.30 max                  |
| Corrosive sulfur<br><sup>1</sup> Test to be run for 48 hours @<br>150°C | D1275B <sup>1</sup> | Non-Corrosive             |
| Moisture, ppm   | D1315, D1533        | 35 max*                   |
| Neutralization number, mg<br>KOH/g of oil                               | D974                | 0.03 max                  |
| Oxidation stability Method A<br>(acid / sludge test)                    | D2440               |                           |
| 72 hours<br>sludge, wt %  |                     | 0.10 max                  |
| Neutralization value, mg KOH/g  |                     | 0.30 max                  |
| 164 hours<br>sludge, wt %   |                     | 0.20 max                  |
| Neutralization value, mg KOH/g  |                     | 0.40 max                  |

\*35 ppm max as received from refiner; SPX Waukesha dehumidifies to lower value for installation in transformer.

Continued on next page.

| KEY PROPERTIES   | ASTM TEST METHOD             | ANSI/ASTM D-3487 LIMITS        |
|--|------------------------------|--------------------------------|
| <b>Electrical Properties</b>   |                              |                                |
| Dielectric breakdown voltage at 60 hertz<br>Disc electrodes, kV<br>VDE electrodes, kV<br>@ 0.040-in. gap or<br>@ 0.080-in. gap | D877<br><br>D1816*<br>D1816* | 30 min<br><br>28 min<br>56 min |
| Dielectric breakdown voltage 25°C impulse conditions, kV<br>Needle (negative)-to-sphere (grounded)<br>@ 1-in gap               | D3300                        | 145 min                        |
| Power factor at 60 hertz, % at:<br>25°C<br>100°C   | D924<br>D924                 | 0.05 max<br>0.30 max           |
| Gassing Tendency @ 80°C (µL/min)   | D-2300 B                     | + 30 max                       |

\*D1816 only applies to new oil that has been filtered, dehumidified and degassified.

Oil shall be PCB-free to existing current law. Properties as listed are only attainable on new oil as received from the refinery. It is expected that oil contained in equipment as received from the manufacturer when properly sampled from such equipment usually exhibits characteristics slightly different from those obtained from new oil, which has not been in contact with apparatus constructional materials. In such cases, the oil should be evaluated per IEEE C57.106 (most recent release) for acceptance and maintenance of insulating oil in equipment.

**IN-PLANT QUALITY CONTROL**

In addition to extensive testing by an independent testing laboratory to determine approved sources of supply, SPX Waukesha performs acceptance tests on each shipment of oil received.

SPX Waukesha receives oil at its plants in dedicated tank cars and trucks. Upon arrival, acceptance testing is performed before the oil is unloaded into a SPX Waukesha storage tank. Prior to filling a transformer, oil is degassified and dehumidified, passed through Fullers earth and refiltered at various points in the process.

# Transformer Paint Systems

SPX Transformer Solutions, Inc. (SPX Waukesha) provides as standard a coating system that exceeds the requirements of ANSI C57.12.28, "Enclosure Integrity—Above-Ground Pad-Mounted Enclosures" Specification (the specification for pad mounted equipment). The coating system consists of an epoxy primer with a polyurethane topcoat. This process has been both lab tested and field evaluated.

The coating system processes used for the transformer are as follows:

## SUBSTRATE

Hot rolled low alloy steel.

## SURFACE PREPARATION

The performance of a coating system is highly dependent upon the condition of the surface to which the coating is applied. All sharp edges, scale, weld spatter and surface irregularities shall be removed by shot blasting, hand grinding, sanding or other appropriate manufacturing procedures.

Shot blasted per SSPC-SP6 (Commercial Blast Cleaning) then detergent washed with an iron phosphate conversion coating and a non-chrome seal.

-or-

Blast to SSPC-SP10 (near white) condition and apply paint within 24 hours.

## COATING PROCEDURE

Interior of tank and tank cover are coated using a white, two-part, oil-resistant epoxy enamel. The exterior surfaces are first painted using a two-part epoxy primer then top coated using a two-part urethane enamel. All coating materials are applied using plural component equipment that automatically measures and mixes the paint systems to eliminate operator error. The coatings are then force cured to produce a uniform cured coating.

## COATING RESULT

Interior coating compatible with transformer oil per ASTM 3455; 3 mil exterior coating capable of meeting ANSI C57.12.28

The two-component coatings used for painted surfaces have a high crosslink density and an exceptional barrier property characteristic. Two-component systems develop full corrosion resistance at a 2 mil total film thickness (primer and topcoat); in fact, the mechanical properties of any organic coating will deteriorate as the thickness approaches 5 mils. For these reasons, the SPX Waukesha paint system exhibits optimal performance at a nominal 3 mil thickness (range 3–5 mils).

**NOTE:** Radiators are purchased from an outside supplier and are hot dip galvanized or painted to meet the customer's specification.

*See next page for paint system test results.*

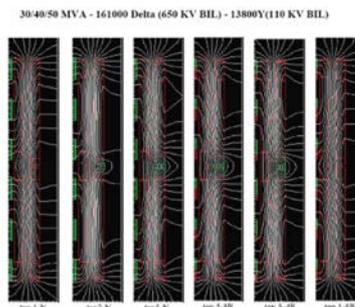
**EXTERIOR PAINT SYSTEM PERFORMANCE**

| TEST            | ASTM TEST METHOD  | RESULTS                             |
|-----------------|-------------------|-------------------------------------|
| Adhesion        | D-3359-B          | No Removal                          |
| Salt Spray      | B-117             | 1500 Hrs, 1/32" Loss of Adhesion    |
| Humidity        | D2247             | 1000 Hrs @ 40°C; No Blisters        |
| Impact          | D-2794            | 160 in/lbs., No Chipping            |
| U-V Resistance  | G-53              | 500 Hrs, Less than 15% Gloss Change |
| Taber Abrasion  | D-4060            | More than 3,000 Cycles @ 3 Mils     |
| Oil Resistance  | 72 Hrs @ 100°C    | No Effect                           |
| Thermal Aging   | 1,000 Hrs @ 120°C | No Effect                           |
| Pencil Hardness | D-3363            | 2-H After 2 Weeks                   |
| VOCs            | D-2369            | 3.5 #/gal.                          |

# Short Circuit Testing

## DESIGN

All SPX Waukesha transformers are designed with state-of-the-art tools and manufactured in our factories per strict quality assurance plans to ensure survival through even the worst-case faults. To start, worst-case fault currents are determined assuming infinite bus supply (zero system impedance) for single line to ground as well as three phase faults at the transformer terminals. Using this fault current, all designs are analyzed with detailed stress calculations for worst case combinations of tap positions (LTC and DETC) for all known failure modes. These stresses are then compared to known strengths for each of the failure modes and must have acceptable design margins as set by SPX Waukesha.



## MANUFACTURING

All windings are manufactured with rectangular, electrolytic-grade copper conductor or epoxy-bonded, continuously transposed cable (CTC). Radial spacers are locked to strips fastened to the winding cylinders. These radial spacers and other support blocks in the pressure column are manufactured from high density, pre-compressed pressboard or laminated wood. Other specialized components—angle/cap rings, coil collars and static ring insulation—are manufactured from molded grade, soft pressboard as required.



*Fully Distributed Regulating Voltage Winding*

After the windings are completed, they are thoroughly dried using hot air. After removal from the dryout chamber, coils are hydraulically pressed successively using a predetermined force then pressed again using the clamping force they will experience when fully assembled. When required, radial spacers are adjusted to achieve the required design height, maintaining the design’s “electrical center” of the windings for ampere-turn balance, stray flux and axial force mitigation.

The coils are clamped in place by first applying a precise, hydraulic force which compresses the windings to the design height as verified in the coil sizing operation (as described in the paragraph above). In this condition, the coils are fastened in place to maintain a compressive force as specified by SPX Waukesha engineering. Verifying exact clamping pressure and winding height in this manner helps guarantee a finished product that conforms to what was designed in engineering.

The entire clamping technique and underlying scientific principles on which it is based are major contributors to the outstanding SPX Waukesha service record.

*See next page for a list of transformers tested for short-circuit at high power laboratories.*

**SPX WAUKESHA SHORT CIRCUIT TEST LIST:**

| MVA RATING   | HV RATING         | LV RATING           | MANUFACTURING PLANT LOCATION |
|--------------|-------------------|---------------------|------------------------------|
| 0.833        | 67 kV Delta       | 12.47 kV Wye        | Wisconsin                    |
| 5 / 6.25     | 24.4 kV Delta     | 4.16 kV Wye         | Wisconsin                    |
| 5 / 6.25     | 26.4 kV Delta     | 4.16 kV Wye         | Wisconsin                    |
| 5 / 6.25     | 59.58 kV Wye      | 10.66 kV Wye        | Wisconsin                    |
| 5 / 6.25     | 67 kV Delta       | 12.47 kV Wye        | Wisconsin                    |
| 7.5 / 9.375  | 69 kV Delta       | 12.47 kV Wye        | Wisconsin                    |
| 7.5 / 9.375  | 138 x 69 kV Delta | 26.4 X 13.2 kV Wye  | Wisconsin                    |
| 12 / 16 / 20 | 66 kV Delta       | 14.4 kV Wye         | Wisconsin                    |
| 15 / 20      | 67 kV Delta       | 12.47 kV Wye        | Wisconsin                    |
| 15 / 20 / 25 | 69 kV Delta       | 12.47 kV Wye        | Wisconsin                    |
| 1.0          | 12.47 kV Delta    | 4.8 kV Wye          | North Carolina               |
| 3.75         | 23 kV Delta       | 4.8 kV Wye          | North Carolina               |
| 5.0          | 34.4 kV Delta     | 12.47 kV Delta      | North Carolina               |
| 5.0          | 69 kV Delta       | 12.47 kV Delta      | North Carolina               |
| 7.5          | 23 kV Delta       | 12.47 kV Wye        | North Carolina               |
| 7.5          | 115 kV Delta      | 13.2 kV Wye         | North Carolina               |
| 10.0         | 43.8 kV Delta     | 24.9 X 12.47 kV Wye | North Carolina               |
| 5 / 6.2      | 34.5 kV Delta     | 12.47 kV Wye        | California                   |
| 15 / 20      | 67 kV Delta       | 12.5 kV Wye         | California                   |
| 15 / 20      | 67 kV Delta       | 12.5 kV Wye         | California                   |
| 15 / 20 / 25 | 120 kV Delta      | 13.2 kV Wye         | California                   |
| 15 / 20 / 25 | 120 kV Delta      | 13.2 kV Wye         | California                   |
| 18           | 39.5 kV Delta     | 4.8 kV Delta        | California                   |
| 30           | 230 kV Delta      | 55.2 kV Delta       | California                   |



*Helical Winding with CTC*

*Continuous  
Disk  
Winding  
with  
Copper  
Magnet  
Wire*





# Transformer Service Solutions to 765kV

AVAILABLE FOR ALL MANUFACTURERS' UNITS

The Waukesha® Service team focuses on maintaining performance quality, reliability and life of transformers and load tap changers throughout your electric power system — whether manufactured by SPX Waukesha or other suppliers. Our mission is simple: to keep your transformers up and running with responsive and cost-effective service and maintenance support 24 / 7 / 365.



## TRANSFORMER INSTALLATION & LOGISTICS

- Heavy Hauling
- Rigging
- Assembly
- Oil Filling
- Acceptance Testing
- Relocation



## TRANSFORMER TESTING SERVICES

- Insulation Resistance
- Power Factor
- Transformer Turns Ratio
- Winding Resistance
- CT Testing
- Leakage Reactance
- Winding Excitation & Alarm Checks
- Gauge Calibration
- Sweep Frequency Response Analysis
- Dissolved Gas Analysis & General Chemistry Test
- Materials Analysis

## TRANSFORMER MAINTENANCE

- Inspections
- Component Addition & Replacement
- Regasketing
- Leak Repairs
- Life Extension
- Oil Preservation
- System Upgrades
- Control Upgrades
- Retrofits

## TRANSFORMER OIL PROCESSING

- Field Dry Out
- Vacuum Filling
- Hot Oil Processing
- Cryogenic Drying (Cold Traps)
- Fullers Earth Reclamation
- On-Line Dehumidification
- Natural Ester Retrofills

## SPARE PARTS

- Bushings / Arresters
- Cooling Equipment
- Gauges / Controls
- Gaskets
- Transformer Health Products®
- LTC Parts

## TRAINING SERVICES

- LTC Training
- Maintenance Training
- Testing Training
- Print Reading
- Oil Processing Training

## LTC MAINTENANCE

- All Manufacturers
- Inspections
- Overhauls
- Upgrade Kits
- Filtration Installation
- Core Replacement
- Vacuum Retrofits

## ENGINEERING SERVICES

- Condition Assessment Studies
- Life Assessment Studies
- Thermal Uprate Studies
- Component Retrofits
- Failure Analysis
- Feasibility Studies
- Technical Supervision



Contact us for additional information or quotation on our extensive range of services:

CALL 800-758-4384 | VISIT [www.waukeshaservice.com](http://www.waukeshaservice.com)

Emergency Service Available 24/7/365: 888-365-24X7



2701 US HWY 117 SOUTH | GOLDSBORO, NC 27530-0915



# Waukesha® UZD®

THE SERVICE-PROVEN LOAD TAP CHANGER!

With more than 6,500 units installed, Waukesha's UZD Load Tap Changers boast an excellent field performance record. Design improvements made in the 1990s reduced the already low failure rate to one of the lowest in our industry, reduced maintenance costs and increased maintenance intervals. When compared to the cost of downtime, out-of-service operation and costly repairs, the UZD LTC system is a cost-effective way to keep your transformer operating as smoothly as the day it was installed!

A load tap changer, regardless of manufacturer, is a complex engineered device with numerous moving parts requiring precise engineering, correct material selection and controlled manufacturing to operate reliably for a long period of time.

In many cases, the true reliability of a load tap changer becomes evident only when a transformer has been in service for several years and the load tap changer accumulates 100,000 plus mechanical operations.

Since the UZD's initial introduction in 1970, it has accumulated in excess of 110,000 YEARS of operational service and an estimated 550 MILLION switching operations. Ongoing continuous improvement programs, in coordination with our customers, resulted in several design enhancements that help increase overall operational life as well as virtually eliminate a need to perform maintenance inside the oil compartment.



## KEY ADVANTAGES OF THE WAUKESHA® UZD® LOAD TAP CHANGER



### Re-Engineered Reversing Switch and Current Collector ("Bow-tie") System

Since the re-engineered reversing switch and current collector system were introduced in 1997, no known failures due to coking have occurred.

### Silver-Plated Copper Contacts with Tungsten Copper Inserts

Stationary contacts for long life and low temperature rise.

### Resistive Bridging

High-speed operation results in extremely low contact wear and manageable levels of arcing by-products. For optimal results, we recommend applying an oil filtration system.

### LTC and Series Transformer System

For applications with greater than 600 ampere current ratings, a series transformer is recommended to allow for an optimal volts/turn design of the main transformer windings, even step regulation and smaller leads while facilitating a reduction in current through the LTC contacts for less contact wear and longer life; a power-class series transformer design is recommended for high reliability.

### Spring Drive Mechanism

Stored energy system delivers split-second operation for minimum arcing time; in addition, each tap change is uniform and unaffected by possible auxiliary voltage fluctuations.

## OTHER NOTABLE FEATURES OF THE WAUKESHA® UZD® LTC

### Single Set of Spare Contact Parts

Due to the design flexibility of the series transformer, we utilize a single model LTC across a wide range of transformer voltage and power ratings.

### Easy to Maintain with Few Moving Parts

A single collector arm incorporates both the arcing contacts and tap selector contacts which reduces linkages, wear points and potential maintenance.

## RECOMMENDED ACCESSORIES

Clean, dry oil increases dielectric strength, thereby reducing arcing time. The accessories below help keep carbon particles, metal particles and moisture out of tap changer oil:

### OF2 Oil Filtration System

Designed to remove carbon and metallic particles produced during normal LTC operation. The system includes an adjustable timer for customized configuration and a 1/2 HP, fully enclosed, continuous run rated, auto-thermal resetting motor.



Another feature of the OF2 is a tilt-out, tool-free filter replacement system which allows the filter cartridge to be changed without disconnecting oil lines or reversing the pump—dirty oil stays in the filter while LTC compartment oil stays clean. Additionally, our OF2 ships standard with a unique, high-efficiency, depth-type filter that offers long element life and provides the capability to filter more efficiently than pleated-type models. The system is also adaptable to a variety of industry standard filters. Other features include low flow and high pressure alarms, anti-condensation cabinet heater and remote system shut down relay.

### ARDB2 Auto-Recharging Dehydrating Breather

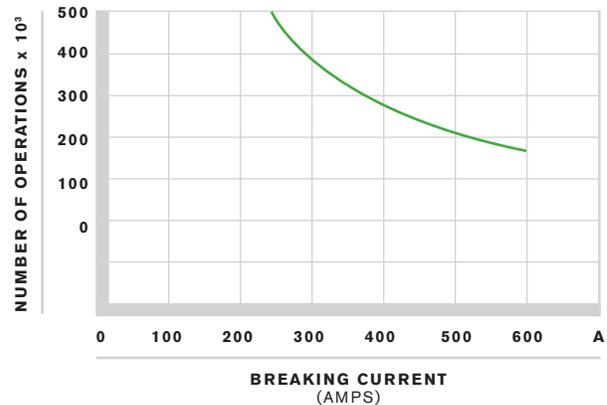
Automatic recharging of silica gel maintains peak drying performance and reduces maintenance costs by eliminating the need for periodic replacement/disposal of saturated silica gel.



## CONTACT LIFE

Predicted contact life of the selector switches' fixed and moving contacts is shown below. Since most transformers are not consistently operated at maximum nameplate rating, some tap changes will be made at lower currents. These lower currents allow for less contact erosion due to arcing, so contact life may be longer than what is illustrated on this curve.

### PREDICTED CONTACT LIFE WITH BREAKING CURRENTS



## WAUKESHA® UZD® LOAD TAP CHANGER

System Designed for High Reliability and Low Total Operating Costs

- Economical LTC solution to total transformer cost
- Well accepted in the US market
- Now available for sale to transformer manufacturers

Contact us for more information. To download an order form, technical manual, field maintenance manual and/or technical paper, visit our website.

CALL 800-338-5526

VISIT [www.waukeshacomponents.com](http://www.waukeshacomponents.com)

**WAUKESHA®**

9011 GOVERNORS ROW | DALLAS, TX 75247-3709

## 2ND GENERATION

# Load Tap Changer Oil Filtration Systems

REDUCE OIL-RELATED MAINTENANCE COSTS AND IMPROVE RELIABILITY

Our second generation oil filtration systems are designed to be installed on most LTC models to remove carbon and metallic particles produced during normal LTC operation, keeping oil in peak condition with minimal maintenance.

For flexible operation, the system includes an adjustable timer which allows customers to configure the system to their specifications — daily, every other day, weekly or every other week in intervals of two, four, eight and 24 hours. Since filter replacement does not require pump reversal OR any disconnection of oil lines, the dirty oil stays in the filter while system oil stays clean and in peak condition (a convenient filter canister drain valve is included).

## 2ND GENERATION OIL FILTRATION SYSTEM: OF2 Easier to Install and Maintain

Our standard OF2 system's design allows for easy installation and is equipped with a swing-out filter canister that makes filter replacements a quicker task.

## Unique High-Efficiency Filter Design with Tilt-Out Easy Filter Change System

Our depth-type filter uses a flow path parallel with the center tube instead of the conventional outside-to-inside flow. This flow path forces oil through a greater depth of filter material for more efficient filtration. See back side for more information on this unique filter design and photo to the right demonstrating easy filter change-out process.



## Minimum Turbulence in Reservoir

Pump maintains a flow rate of 1.0 GPM to minimize turbulence in the tank.

## Filter Adapter Kit Available for Alternate Style Manufacturer Cartridges

## More Economical

High efficiency filter reduces LTC mechanical wear which can minimize equipment failure and downtime. Economical purchase price combined with less frequent filter replacement can save you money.\*

\* Actual filter life varies depending on transformer loading and frequency of LTC operations and tap changer model.



Customizable 2nd Generation Oil Filtration System: OF2

Customer Configurable

SEE BACK SIDE FOR PART NUMBER CONFIGURATION TOOL.

## CUSTOMIZE YOUR OWN SYSTEM

The OF2 oil filtration system has been designed to meet the filtration demands of higher oil volume load tap changers while providing customization flexibility to meet individual customer specifications. The system is adaptable to a variety of industry standard filters and always ships complete with the following:

- 1/2 HP, fully enclosed, continuous run rated, auto-thermal, resetting motor
- High performance depth filter
- 5+ gallon leak-catch sump with sump alarm
- Low flow alarm
- High pressure alarm
- Anti-condensation cabinet heater
- Tilt-out, tool-free filter change system
- Visual flow indicator which can be monitored without opening the cabinet
- 0–160 psi, oil-filled pressure gage
- Customer selectable run-time and interval timer
- Run-time bypass switch
- Remote system shut down relay
- Heavy duty circuit breaker on incoming power
- 120 VAC operation

## OPTIONAL FEATURES

- 240 VAC Operation
- Alternate Filter Selection
- Additional 4–20 mA Flow Transmitter
- Additional 4–20 mA Pressure Transmitter
- Filter Canister Heater System
- LTC Entrance Tube with or without Hose
- Stainless Steel Cabinet

Particle/Moisture removal performance is dependent on make/model of customer-specified oil filter cartridge.

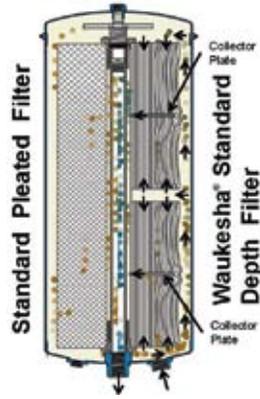
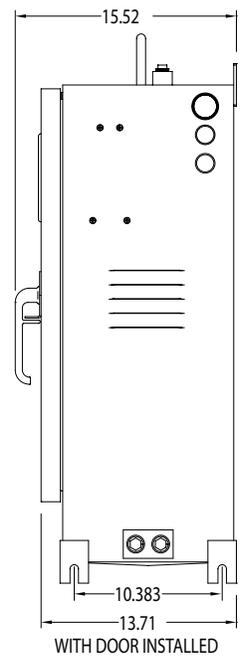
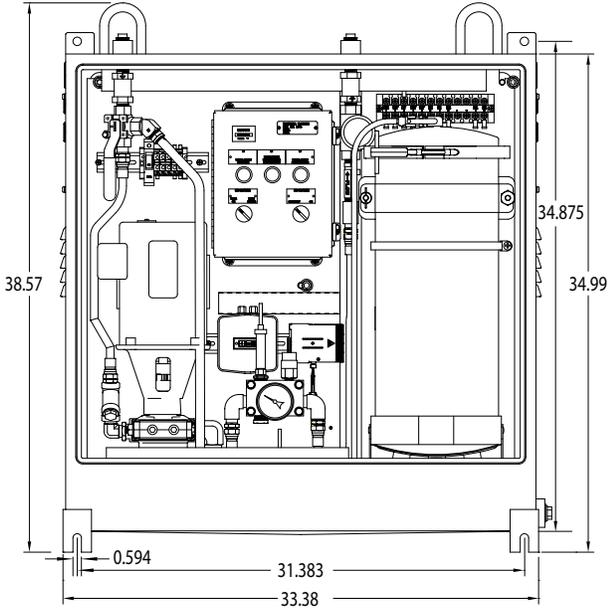
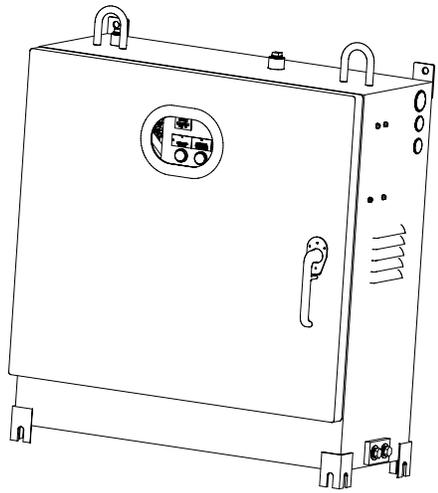
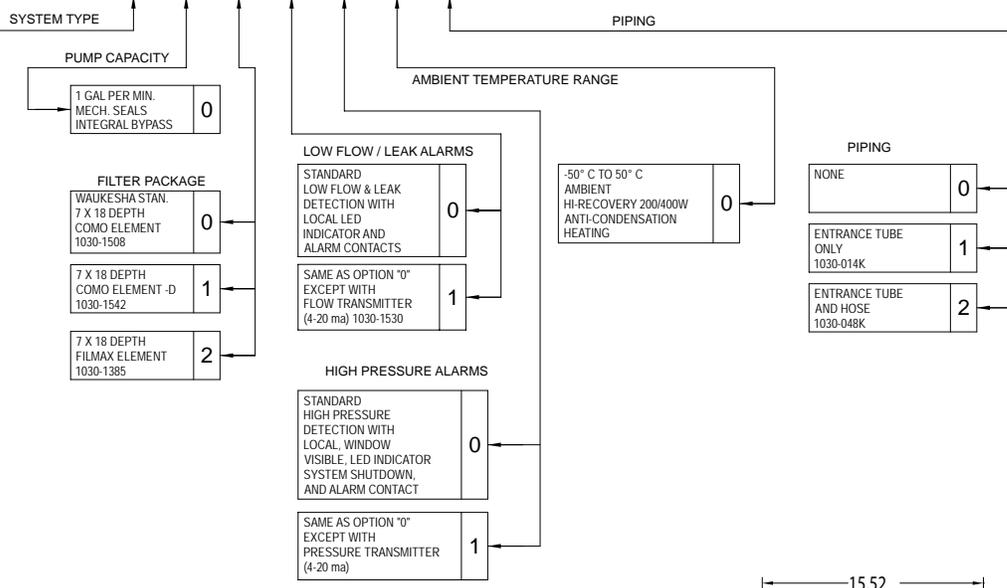
With the appropriate filter installed, the OF2 system can remove dissolved water, extremely fine carbon and metallic particles to maintain peak performance of LTC oil, extend the life of your equipment and lengthen the period between maintenance intervals.

# Build Your Own Part Number Using Configuration Below

Oil Filtration Systems

OF2-XXXXXX

- A** STANDARD SYSTEM (120VAC) STEEL NEMA 3R CAB 1/2 HP MOTOR 5 GAL LEAK SUMP OIL LEAK DETECTION TILT OUT FILTER CANISTER VISUAL FLOW INDICATOR 0-100 PSI, OIL FILLED, GAGE RUN INTERVAL TIMER RUN-TIME BYPASS SWITCH RUN-TIME METER REMOTE SHUTDOWN AUTO RESTART WITH POWER FAILURE (1030-1393 CAB.)
- B** SAME AS OPTION "A" EXCEPT WITH STAINLESS STEEL CAB (1030-1656 CAB.)
- C** SAME AS OPTION "A" EXCEPT FOR 240VAC OPERATION 240VAC - 120VAC TRANSFORMER CONVERSION WIRING
- D** SAME AS OPTION "A" EXCEPT WITH STAINLESS STEEL CAB & 240VAC OPERATION 240VAC - 120VAC TRANSFORMER CONVERSION WIRING



**WAUKESHA® STANDARD FILTER OFFERS LONG FILTER ELEMENT LIFE**  
 SPX Transformer Solutions' depth-type filter element (in Standard OF2 System) features a unique fluid flow path: fluid runs parallel with the center tube (axial flow) rather than the conventional outside-to-inside flow (radial flow) of most pleated-type filters. The depth of fluid flow is optimized and provides the capability to filter more efficiently than pleated-type filters. Filter media is constructed as four rolls of filter paper. Oil flows between the layers of media until it reaches one of two collector plates. The collector plates route oil to the center of the element where it is discharged out of the element. The depth filter media has a much greater resistance to flow from outside to center (radial flow) than it does between the layers (axial flow) of filter material. Integrity of the filter element is maintained even as it accumulates contaminants and the Delta-p (pressure across the filter) goes up. Hydraulic pressure of the fluid compressing the layers of media together prevents a channel from forming that could allow oil to pass through the element unfiltered.

**REMOVES BOTH DIRT AND MOISTURE**

- Filter material is dried cellulose fiber
- Optional -D filter can decrease water to under 5 PPM with multiple passes
- Micron rating: 1.0
- Rated for particles as well as free and emulsified water
- Total water holding capacity: 0.5 kg
- Beta X rating: >25 at 3 microns
- High rate of absorption enables oil to be reduced from 200 to less than 25 PPM in one pass using the optional -D filter element



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VISIT [www.waukeshacomponents.com](http://www.waukeshacomponents.com)

# QUESTIONS AND SOME ANSWERS: Envirotemp™ FR3™ Dielectric Fluid (FR3 Fluid)

What maximum top oil temperature rise, average winding temperature rise and hottest spot winding temperature rise can I expect for a Waukesha transformer containing FR3 fluid?

Waukesha is offering a design with FR3 fluid that limits the temperature rise to 65°C, the same as you have specified for mineral oil. We are also offering a transformer designed for mineral oil but filled with FR3 fluid. The transformer will run hotter with FR3 than with mineral oil and may likely exceed the 65°C temperature rise limit. However, according to laboratory data by Cooper Power Systems, the cellulose insulation will age more slowly in FR3 fluid than in mineral oil so the insulation will likely last longer when operating in FR3 fluid than it would if operating in mineral oil.

Are the FR3 fluid designs I am evaluating designed for 65°C rise with mineral oil or 65°C rise with FR3 fluid?

Waukesha offers both. Because of the higher viscosity of natural ester fluids, more cooling needs to be added to achieve a 65°C rise with FR3 fluid. This cooling could be in the form of more cooling fans, more radiators or larger cooling ducts in the windings or some of each. Our sophisticated temperature calculating computer programs look at all 3 of these cooling options to give an optimized design.

Waukesha has retrofilled many transformers with FR3 fluid and does not recommend derating the transformers. We have also shipped new transformers from our factory that were designed with mineral oil and field filled them with FR3 fluid, without derating or changing the warranty. These mineral oil designs will operate at somewhat higher temperatures than they would if filled with mineral oil. However, the cellulose aging rate is much slower with natural ester fluids and so the insulation should last longer in the FR3 fluid at a higher temperature than it would if in mineral oil at the lower temperature.

Waukesha gives you the option of temperature rise.

Does Waukesha Electric Systems have a temperature rise program capable of accurately calculating the temperature of a transformer using a fluid other than mineral oil?

Waukesha has a program that starts with the fundamentals of thermodynamics and heat transfer wherein we can change the characteristics of the fluid. It was/is common in our industry to have a large database of heatrun test results against which are run multiple linear regression analysis to develop empirical formula for calculating temperature rise of new designs. This is a reasonable approach as long as the new design is similar to the ones in the database. If something is changed, like the characteristics of this dielectric coolant, then this method doesn't work.

Raj Ahuja and Bob Del Vecchio of Waukesha Electric authored a paper presented at the CIGRE meeting in 2007 titled "Comparison of the Thermal Performance of FR3, a Natural Ester Based Coolant, with Transformer Oil". This paper describes in more detail, the factors taken into account in temperature calculations in transformers. A copy is available upon request.

Has Waukesha done temperature rise tests with FR3 fluid to verify the accuracy of their thermal calculation program?

Waukesha has done this. The results thus far are shown in the paper referenced in the previous answer.

Does the use of FR3 fluid change the transformer warranty?

Waukesha Electric offers the same Five or One Year Warranty regardless if filled with mineral oil or FR3 fluid. Waukesha does require that we do the assembly and fluid filling in order to get this warranty. The rationale is that this is a new fluid and we have spent a significant amount of time on handling procedures and crew training. We don't want our customers to be disappointed with a potential mishap.



### How many transformers has Waukesha filled with FR3 fluid?

To date, Waukesha has built 26 new transformers filled with FR3 fluid and retrofilled 31 transformers with FR3 fluid. The retrofills were of several different manufacturers and all different ages.

### How do you minimize the residual mineral oil content in the FR3 fluid?

Waukesha has written internal procedures on filling units with FR3 fluid. These procedures were drafted specifically to reduce residual mineral oil content and also to minimize/eliminate any cross contamination of FR3 into the mineral oil system and also any mineral oil into the FR3 system. The residual mineral oil content is controlled by a combination of drip time, fluid removal, flushing and filter changes. Following Waukesha's internal procedures, we estimate the residual mineral oil content in new or retrofilled transformers to be typically less than 5%. As long as there is less than 7.5% residual mineral oil content in the FR3 fluid, the 360°C fire point of the FR3 will be preserved.

Although the fire point of FR3 fluid remains unchanged with residual mineral oil content of up to 7.5%, the flash point does change. Determining the flash point of a sample of fluid taken after filling with FR3 can be used to determine the residual mineral oil content. Refer to Cooper Power Systems document located on the Waukesha Electric website (see "Where can I find more information on FR3 fluids" on opposite page) "Envirotemp FR3 Fluid Testing Guide" Section R900-20-12, Reference Document, July 2004, page 6, Figure 3 titled "Flash and fire points versus mineral oil content." Knowing the flash point of the sample and using this graph will lead to a good estimate of residual mineral oil content.

### Can Dissolved Gas Analysis be used with natural ester fluids?

Yes. This very useful diagnostic tool for assessing the condition of mineral oil filled transformers is also a useful tool for natural ester dielectric fluid filled transformers. The key gas analysis as described in ANSI C57.104 is still valid for use with natural ester dielectric fluid filled transformers. For example a DGA showing acetylene is still indicative of a high-energy discharge and likely to be a problem that should be investigated further. There are different gas ratios used to help distinguish among different possible causes of gas generation. Unfortunately, these ratios are not calibrated for natural ester dielectric fluid filled transformers and should not be used.

EPRI has a project wherein they received funding from utilities to conduct tests to find the gas generation rates of the various gasses so that the gas ratio methods of analysis could be recalibrated for natural ester fluids. Upon completion of these tests, it is EPRI's intention to supply this information, free of charge, to the IEEE Transformers Committee for use in developing a natural ester fluid gas guide. Both Waukesha and Cooper are involved in the EPRI project by participating in monthly conferences and by providing expert advice. Cooper recommends that a modified Duval Triangle can be used to interpret the DGA results in FR3 fluid.

### What about cold starts of transformers filled with FR3 fluid?

According to data from NOAA, almost nowhere in the lower 48 states gets cold enough for long enough for this to be an issue. There is a presentation available upon request that gives all the details of this. Also, EPRI has an ongoing project wherein they will have testing conducted to better understand this issue. Upon completion of these tests, it is EPRI's intention to supply this information, free of charge, to the IEEE Transformers Committee for use in developing cold start guidance.

To date, there have not been any reported issues related to cold starts of distribution or power class transformers of which Waukesha is aware. Both Waukesha and Cooper are conducting research in this area to further understand if there are any issues related to cold start.

### Can natural ester fluids be used in load tap changers?

Not yet. Waukesha Electric has two concerns with natural ester fluids in free breathing LTCs. The first is polymerization of the fluid from exposure to oxygen. This can be overcome by installing a Waukesha Nitrogen generator that produces N2 on site and bleeds a small amount continuously across the gas space in the LTC. This removes the arcing gases produced and also excludes oxygen from the fluid. The second concern is the physical movement of the contacts through a more viscous fluid and it's effects of timing. Waukesha has conducted timing tests using mineral oil, natural ester fluid and synthetic ester fluid (Envirotemp 200 by Cooper Power Systems). These tests confirmed previous test results showing acceptable timing in mineral oil down to -40°C. Tests in FR3 fluid were good down to about -15°C at which temperature the FR3 fluid started to gel but it took quite a while (2 days in -70°C ambient with oil pump running). Our solution is to heat the LTC oil so the fluid stays above -10°C so that the fluid never starts to gel. It is likely these solutions will be retrofitable on Waukesha® UZD® Load Tap Changers. Reinhausen has issued a statement that they should be contacted for any fluid application other than mineral and would advise on a one-on-one basis.

[www.WaukeshaElectric.com](http://www.WaukeshaElectric.com)

### Is oil containment still required with FR3 fluid?

Probably. There are so many bodies that might have jurisdiction in this matter it is not easy to give a universal answer. There are locations where you wouldn't want several thousand gallons of any fluid running around so some form of containment is likely. However, that being said, it is also possible that if there is a spill, that the remediation activities and associated costs might be significantly less with FR3 fluid than with mineral oil or any other less biodegradable fluid.

### Are any of the typical test values going to be different with a transformer filled with FR3 fluid?

Yes. The insulation dissipation factor (power factor) will likely be higher by as much as 50% or more but this will depend on how much time has elapsed after filling with FR3 fluid. Assuming the paper insulation had mineral oil in it to start, and then filled with FR3 fluid, it will take some thermocycling to heat the mineral oil in the paper which expands into the FR3 fluid and then FR3 fluid is pulled into the cellulose when it cools. This thermocycling will eventually equalize the uniformity of the fluids.

Also the winding resistance to ground will be lower by as much as an order of magnitude.

Neither of these differences is either good or bad, they are just different than mineral oil. It is just the nature of a different material. Available upon request is an IEEE paper written and presented by Steve Moore at the 2005 IEEE show in Dallas, TX, titled "Some Considerations for New and Refill Applications of Natural Ester Dielectric Fluids in Medium and Large Power Transformers".

### How does the carbon footprint of natural ester fluid compare to mineral oil?

The carbon footprint of natural ester fluid is MUCH LESS than that of mineral oil. In fact, according to calculations made by NIST (National Institute of Standards and Technology) using their BEES (Building for Environmental and Economic Sustainability) calculator, natural esters have less than 2% of the carbon footprint that mineral oil has. This can be an easy step for utilities trying to find ways to reduce their carbon footprint.

### Where can I find more information on FR3 fluids?

On the Waukesha Electric Systems website. Go to [www.WaukeshaElectric.com](http://www.WaukeshaElectric.com). Roll your cursor over the top tool bar's TOOL/RESOURCES tab and a drop down menu will appear. Click on the top link: Waukesha Library. Then scroll down to the bottom of the page for Envirotemp FR3 Natural Ester Fluid documents. There are numerous documents here with significant information for a basic understanding of natural ester fluids.

### How does the price of FR3 fluid compare to mineral oil?

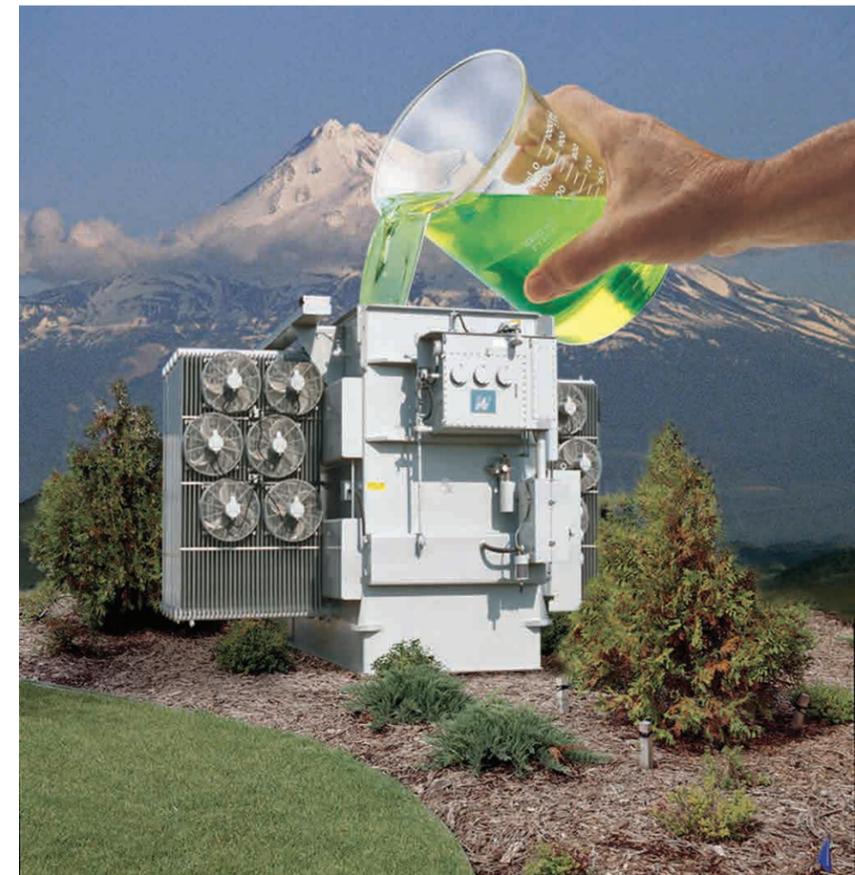
Presently FR3 fluid is a few dollars more per gallon than mineral oil for the initial purchase price. There are significant benefits to natural ester fluids that make it attractive even at a higher price. As the price of mineral oil and commodity seed oil (soybean oil) continue to fluctuate (go up), this difference in price may vary over the coming years.

### Will all my transformer suppliers offer a transformer filled with natural ester fluid?

That depends on who you allow to bid on your transformer requirements – Waukesha Electric does. There are other suppliers that may or may not offer it. Please refer to questions above in order make a fair comparison of various natural ester fluid-filled transformer offers.



800.835.2732



## How much research and development has Waukesha Electric Systems done with FR3 fluid?

Quite a lot. Several years ago we started with basic material compatibility testing. Many materials used in distribution transformers are also used in power transformers and these materials were tested for compatibility. There are some materials that are used in power transformers that are not used in distribution transformers and these additional materials were tested by Waukesha to ensure compatibility. All were found to be OK. Waukesha also performed power frequency, impulse and partial discharge testing with FR3. In 2007 and 2008, Waukesha tested its UZD<sup>®</sup> Load Tap Changer's performance in FR3 fluid. Additional testing is planned for 2009 including cold temperature investigations.

## Does FR3 fluid contain corrosive sulfur?

Not that can be determined. Cooper has tested their FR3 fluid at higher temperatures and for longer times than are specified in ASTM D1275-06 Method B test for corrosive sulfur and none could be detected.

## SUGGESTIONS FOR SPECIFICATION WORDING

- The transformer shall be designed for 65°C temperature rise with FR3 fluid. The manufacturer shall demonstrate the capability of his thermal calculation program to estimate temperature rise with FR3 fluid and if acceptable, will provide calculated temperature rises with FR3 fluid.
- The transformer shall be designed for 65°C temperature rise with FR3 fluid. Transformer shall have heat run test performed with FR3 fluid.
- The transformer shall be designed for 65°C temperature rise with mineral oil but filled with FR3 fluid. The manufacturer shall demonstrate the capability of his thermal calculation program to estimate temperature rise with FR3 fluid and if acceptable, will provide calculated temperature rises with FR3 fluid.
- The transformer shall be designed for 65°C temperature rise with mineral oil but filled with FR3 fluid. Transformer shall have heat run test performed with FR3 fluid.
- For transformers containing natural ester fluids, the oil preservation system shall be a positive pressure nitrogen system so that oxygen is excluded from the gas space in the transformer OR
- For transformers containing natural ester fluids, the oil preservation system shall be a positive pressure nitrogen generator system so that oxygen is excluded from the gas space in the transformer OR
- For transformers containing natural ester fluids, the oil preservation system shall be a conservator system with a bladder so that oxygen is excluded from contact with the FR3 fluid.

NOTE: All mention above of "65°C temperature rise" means 65°C top oil and average winding temperature rise and 80°C hottest spot winding temperature rise.



**A N S P X B R A N D**

Waukesha Electric Systems, Inc.  
Corporate Headquarters/Transformer Manufacturing  
400 S. Prairie Avenue • Waukesha, WI 53186  
Tel 800-835-2732 • Fax 262-521-0196

Waukesha Electric Systems, Inc.  
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[www.WaukeshaElectric.com](http://www.WaukeshaElectric.com)



# Memo

To: Mayor and City Council  
From: Chris Thompson P.E., Public Works Director/City Engineer  
Date: August 13, 2013  
Re: 2012 Planning Program Annual Self-Assessment Report

---

## Staff Report

Each year we prepare a self-assessment report for the state. This report needs to be approved by resolution by the City Council. This report shows that our system is in really good condition. The only substances that seem to be getting close to our permit limits are CL2 and NH3. We have just awarded the contract to update our clarifier. The new gates that will be installed as part of this project will allow us to more thoroughly clean out the sludge at the bottom of the contact chamber and should significantly decrease the amount of these substances in our effluent.

We recommend that the City Council approve this ordinance to accept the 2012 Planning Program Annual Self-Assessment Report.

Attached: report



# RESOLUTION No. 13-07

## ROLL CALL

| VOTING   | YES | NO |
|--|-----|----|
| <b>G. WAYNE ANDERSEN</b><br><i>Mayor (votes only in case of tie)</i> |     |    |
| <b>ROD DART</b><br><i>Council member</i>                             |     |    |
| <b>RICHARD M. DAVIS</b><br><i>Council member</i>                     |     |    |
| <b>BRANDON B. GORDON</b><br><i>Council member</i>                    |     |    |
| <b>STEVE LEIFSON</b><br><i>Council member</i>                        |     |    |
| <b>KEIR A. SCUBES</b><br><i>Council member</i>                       |     |    |

I MOVE this resolution be adopted:

I SECOND the foregoing motion:

## RESOLUTION No. 13-07

### A RESOLUTION APPROVING THE MUNICIPAL WASTEWATER PLANNING PROGRAM

RESOLVED that Spanish Fork City informs the Water Quality Board the following actions were taken by the City Council:

1. Reviewed the attached Municipal Wastewater Planning Program Report for 2012.
2. Have taken all appropriate actions necessary to maintain effluent requirements contained in the UPDES Permit (If Applicable).

DATED this 20th day of August, 2013.

\_\_\_\_\_  
G. WAYNE ANDERSEN, Mayor

\_\_\_\_\_  
KENT R. CLARK, Recorder



State of Utah

GARY R. HERBERT  
Governor

GREG BELL  
Lieutenant Governor

Department of  
Environmental Quality

Amanda Smith  
Executive Director

DIVISION OF WATER QUALITY  
Walter L. Baker, P.E.  
Director

Mr. Chris Thompson  
Spanish Fork  
P.O. Box 358  
Spanish Fork, Utah 84660

Subject: Municipal Wastewater Planning Program Annual Report for 2012

Dear Mr. Thompson;

After a year's hiatus Division of Water Quality has re-implemented the Municipal Wastewater Planning Program to meet the reporting requirements of the new Utah Sanitary Sewer Management Program. Additionally this program is to allow The State of Utah to identify and solve potential problems before they become serious and costly. In order to do this, we need to know the current condition of your wastewater facilities.

There are three major benefits to returning these forms:

1. Meets the REQUIRED reporting under Utah Sanitary Sewer Management Program
2. Completing these forms give your community additional points on the Utah Wastewater Project Priority List/System. The Priority List is used to allocate funds under the wastewater grant and loan programs.
3. Operator(s) completing these forms will be given operational continuing educational units (CEUs) for each form returned.

If you need assistance on completing these forms, please email me at [pkrauth@utah.gov](mailto:pkrauth@utah.gov).

Sincerely,

Paul Krauth, P.E.  
Outreach Coordinator  
Division of Water Quality

# STATE OF UTAH

## *MUNICIPAL WASTEWATER PLANNING PROGRAM*

### SELF-ASSESSMENT REPORT

FOR

SPANISH FORK

2012



Resolution Number \_\_\_\_\_

**MUNICIPAL WASTEWATER PLANNING PROGRAM RESOLUTION**

RESOLVED that **SPANISH FORK** informs the Water Quality Board the following actions were taken by the **CITY COUNCIL**

1. Reviewed the attached Municipal Wastewater Planning Program Report for 2012.
2. Have taken all appropriate actions necessary to maintain effluent requirements contained in the UPDES Permit (If Applicable)

Passed by a (majority) (unanimous) vote on

\_\_\_\_\_  
(date)

\_\_\_\_\_  
Mayor/Chairman

\_\_\_\_\_  
Attest:

\_\_\_\_\_  
Recorder/Clerk

# Municipal Wastewater Planning Program (MWPP) Financial Evaluation Section

Owner Name: *SPANISH FORK*

Name and Title of Contact Person:

*Chris Thompson, P.E.*  
*Public Works Director / City Engineer*

Phone: *(801) 804-4556*

E-mail: *cthompson@spanishfork.org*

**PLEASE SUBMIT TO STATE BY: September 1, 2013**

Mail to: MWPP - Department of Environmental Quality  
c/o Paul Krauth, P.E.  
Division of Water Quality  
195 North 1950 West  
P.O. Box 144870  
Salt Lake City, Utah 84114-4870  
Phone : (801) 536-4346

*NOTE: This questionnaire has been compiled for your benefit by a state sponsored task force comprised of representatives of local government and service districts. It is designed to assist you in making an evaluation of your wastewater system and financial planning. Please answer questions as accurately as possible to give you the best evaluation of your facility. If you need assistance please call, Emily Cantón. Utah Division of Water Quality: (801) 536-4342.*

I. Definitions: The following terms and definitions may help you complete the worksheets and questionnaire:

**User Charge (UC)** - A fee established for one or more class(es) of users of the wastewater treatment facilities that generate revenues to pay for costs of the system.

**Operation and Maintenance Expense** - Expenditures incurred for materials, labor, utilities, and other items necessary for managing and maintaining the facility to achieve or maintain the capacity and performance for which it was designed and constructed.

**Repair and Replacement Cost** - Expenditures incurred during the useful life of the treatment works for obtaining and installing equipment, accessories, and/or appurtenances necessary to maintain the existing capacity and the performance for which the facility was designed and constructed.

**Capital Needs** - Cost to construct, upgrade or improve the facility.

**Capital Improvement Reserve Account** - A reserve established to accumulate funds for construction and/or replacement of treatment facilities, collection lines or other capital improvement needs.

**Reserve for Debt Service** - A reserve for bond repayment as may be defined in accordance with terms of a bond indenture.

**Current Debt Service** - Interest and principal costs for debt payable this year.

**Repair and Replacement Sinking Fund** - A fund to accumulate funds for repairs and maintenance to fixed assets not normally included in operation expenses and for replacement costs (defined above).

## Part I: OPERATION AND MAINTENANCE

Complete the following table:

| Question  | Points Earned                    | Total    |
|---|----------------------------------|----------|
| Are revenues sufficient to cover operation, maintenance, and repair & replacement (OM&R) costs <u>at this time</u> ?                          | YES = 0 points<br>NO = 25 points | YES<br>0 |
| Are the projected revenues sufficient to cover operation, maintenance, and repair & replacement (OM&R) costs for the <u>next five years</u> ? | YES = 0 points<br>NO = 25 points | YES<br>0 |
| Does the facility have sufficient staff to ensure proper O&M?   | YES = 0 points<br>NO = 25 points | YES<br>0 |
| Has a dedicated sinking fund been established to provide for repair & replacement costs?  | YES = 0 points<br>NO = 25 points | YES<br>0 |
| Is the repair & replacement sinking fund adequate to meet anticipated needs?  | YES = 0 points<br>NO = 25 points | YES<br>0 |
| <b>TOTAL PART I =</b>   |                                  | 0        |

## Part II: CAPITAL IMPROVEMENTS

Complete the following table:

| Question   | Points Earned                    | Total    |
|--|----------------------------------|----------|
| Are present revenues collected sufficient to cover all costs and provide funding for capital improvements?                   | YES = 0 points<br>NO = 25 points | YES<br>0 |
| Are projected funding sources sufficient to cover all projected capital improvement costs for the <u>next five years</u> ?   | YES = 0 points<br>NO = 25 points | YES<br>0 |
| Are projected funding sources sufficient to cover all projected capital improvement costs for the <u>next ten years</u> ?    | YES = 0 points<br>NO = 25 points | YES<br>0 |
| Are projected funding sources sufficient to cover all projected capital improvement costs for the <u>next twenty years</u> ? | YES = 0 points<br>NO = 25 points | YES<br>0 |
| Has a dedicated sinking fund been established to provide for future capital improvements?                                    | YES = 0 points<br>NO = 25 points | NO<br>25 |
| <b>TOTAL PART II =</b>   |                                  | 25       |

**Part III: GENERAL QUESTIONS**

Complete the following table:

| Question   | Points Earned                    | Total    |
|--|----------------------------------|----------|
| Is the wastewater treatment fund a separate enterprise fund/account or district? | YES = 0 points<br>NO = 25 points | YES<br>0 |
| Are you collecting 95% or more of your sewer billings?                           | YES = 0 points<br>NO = 25 points | YES<br>0 |
| Is there a review, at least annually, of user fees?                              | YES = 0 points<br>NO = 25 points | YES<br>0 |
| Are bond reserve requirements being met if applicable?                           | YES = 0 points<br>NO = 25 points | YES<br>0 |
| <b>TOTAL PART III =</b>  |                                  | <b>0</b> |

**Part IV: PROJECTED NEEDS**

Estimate as best you can the following:

| Cost of projected capital improvements (in thousands) | 2014    | 2015    | 2016    | 2017    | 2018    |
|---|---------|---------|---------|---------|---------|
|   | 766,000 | 783,000 | 802,000 | 820,000 | 839,000 |

**Point Summation**

Fill in the values from Parts I through III in the blanks provided in column 1. Add the numbers to determine the MWPP point total that reflects your present financial position for meeting your wastewater needs.

| Part  | Points |
|-------|--------|
| I     | 0      |
| II    | 25     |
| III   | 0      |
| Total | 25     |

# Municipal Wastewater Planning Program (MWPP) Collection System Section

Owner Name: SPANISH FORK

Name and Title of Contact Person:

James Chappel  
Waste water Collections Mgr.

Phone:

801.804.4454

E-mail:

jchappel@spanishfork.org

PLEASE SUBMIT TO STATE BY: September 1, 2013

Mail to: MWPP - Department of Environmental Quality  
c/o Paul Krauth, P.E.  
Division of Water Quality  
195 North 1950 West  
P.O. Box 144870  
Salt Lake City, Utah 84114-4870  
Phone : (801) 536-4346

Form completed by

James Chappel

**Part I: SYSTEM AGE**

A. What year was your collection system first constructed (approximately)?

Year 1935

B. What is the oldest part of your present system?

Oldest part 75 years

**Part II: BYPASSES**

A. Please complete the following table:

| Question  | Number | Points Earned   | Total Points |
|---|--------|---|--------------|
| How many days last year was there a bypass, overflow or basement flooding by untreated wastewater in the system due to rain or snowmelt?              | 0      | 0 times = 0 points<br>1 time = 5 points<br>2 times = 10 points<br>3 times = 15 points<br>4 times = 20 points<br>5 or more = 25 points | 0            |
| How many days last year was there a bypass, overflow or basement flooding by untreated wastewater due to equipment failure? (except plugged laterals) | 2      | 0 times = 0 points<br>1 time = 5 points<br>2 times = 10 points<br>3 times = 15 points<br>4 times = 20 points<br>5 or more = 25 points | 10           |
| <b>TOTAL PART II =</b>  |        |   | 10           |

B. Please specify whether the bypass(es) was caused a contract or tributary communities, etc.

N/A

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**Part III: NEW DEVELOPMENT**

A. Please complete the following table:

| Question  | Points Earned                    | Total Points |
|---|----------------------------------|--------------|
| Has an industry (or other development) moved into the community or expanded production in the past two years, such that either flow or wastewater loadings to the sewerage system were significantly increased (10 - 20%)?      | No = 0 points<br>Yes = 10 points | 0            |
| Are there any major new developments (industrial, commercial, or residential) anticipated in the next 2- 3 years, such that either flow or BOD <sub>5</sub> loadings to the sewerage system could significantly increase (25%)? | No = 0 points<br>Yes = 10 points | 0            |
| <b>TOTAL PART III =</b>   |                                  | 0            |

B. Approximate number of new residential sewer connections in the last year

168 ~~1000~~ ~~1000~~ 1000 new residential connections

C. Approximate number of new commercial/industrial connections in the last year

13 ~~1000~~ 1000 new commercial/industrial connections

D. Approximate number of new population serviced in the last year

622 ~~1000~~ 1000 new people served

**Part IV: OPERATOR CERTIFICATION**

A. How many collection system operators are currently employed by your facility?

8 collection system operators employed

B. What is/are the name(s) of your DRC operator(s)?

Chris Thompson / James Chappel  
ED Roberts  
Don Stone man

C. You are required to have the collection DRC operator(s) certified at **Grade III**

What is the current grade of the DRC operator(s)? III

D. State of Utah Administrative Rules require all operators considered to be in DRC to be appropriately certified. List all the operators in your system by their certification class.

|                |          |
|----------------|----------|
| Not Certified  | _____    |
| Small Lagoons  | _____    |
| Collection I   | <u>2</u> |
| Collection II  | <u>2</u> |
| Collection III | <u>3</u> |
| Collection IV  | <u>1</u> |

E. Please complete the following table:

| Question   | Points Earned                                   | Total Points |
|--|---|--------------|
| Is/are your DRC operator(s) currently certified at the appropriate grade for this facility? (see C)  | Yes = 0 points<br>No = 50 points                | 0            |
| How many continuing education units has each of the DRC operator(s) completed over the last 3 years? | 3 or more = 0 points<br>less than 3 = 10 points | 0            |
| <b>TOTAL PART IV =</b>   |   | 0            |

**Part V: FACILITY MAINTENANCE**

A. Please complete the following table:

| Question  | Points Earned                    | Total Points |
|---|----------------------------------|--------------|
| Do you follow an annual preventative maintenance program? | Yes = 0 points<br>No = 30 points | 0            |
| Is it written?  | Yes = 0 points<br>No = 20 points | 0            |
| Do you have a written emergency response plan?            | Yes = 0 points<br>No = 20 points | 0            |
| Do you have an updated operations and maintenance manual  | Yes = 0 points<br>No = 20 points | 0            |
| Do you have a written safety plan?                        | Yes = 0 points<br>No = 20 points | 0            |
| <b>TOTAL PART V =</b>                                     |                                  | 0            |

**Part VI: SUBJECTIVE EVALUATION**

*This section should be with the system operators.*

A. Describe the physical condition of the sewer collection system: (lift stations, etc. included)

*Lift Station are in good condition with  
Backup generators and SCADA Systems in place  
Collection lines are cleaned, lined or replaced yearly.  
We have been working on infiltration problems*

B. What sewerage system improvements does the community have under consideration for the next 10 years?

*Working on I&I problems. Replace old sewer mains  
with new, We are also slip lining alot of lines.*

Part VI: SUBJECTIVE EVALUATION (cont.)

C. Explain what problems, other than plugging have you experienced over the last year  
We have had Grease problems in our lift Stations. We  
Are currently adding degreaser Solutions to Solve the  
problems

D. Is your community presently involved in formal planning for system expansion/upgrading? If so explain.  
We have a ten year plan for replacement and  
rehabilitation of Sewer mains. Long term plans  
involved an regional waste water Treatment plant.

E. How many times in the last calendar year was there sewage in basements at any point in the collection system for any reason, except for plugging of the lateral connections?

There were 2 total basements with sewage in them in 2012.

How many different times different did flooding occur? 1

F. Does the municipality/district pay for the continuing education expenses of operators?

ALWAYS  SOMETIMES \_\_\_\_\_ NO \_\_\_\_\_

If they do, what percentage is paid?

approximately 100 %

G. Is there a written policy regarding continuing education and training for wastewater operators?

YES \_\_\_\_\_ NO

Just follow State guidelines.



## POINT SUMMATION

Fill in the values from Parts II through V in the blanks provided in column 1. Add the numbers to determine the MWPP point total that your wastewater facility has generated for the past twelve months.

| Part  | Points |
|-------|--------|
| II    | 10     |
| III   | 0      |
| IV    | 0      |
| V     | 0      |
| Total | 10     |

# Municipal Wastewater Planning Program (MWPP) Mechanical Plant Section

Owner Name: *SPANISH FORK*

Name and Title of Contact Person:

*Dennis R Sorensen*  
*WWTP Manager*

Phone: *801-804-4466*

E-mail: *dsorensen@spanishfork.org*

PLEASE SUBMIT TO STATE BY: September 1, 2013

Mail to: MWPP - Department of Environmental Quality  
c/o Paul Krauth, P.E.  
Division of Water Quality  
195 North 1950 West  
P.O. Box 144870  
Salt Lake City, Utah 84114-4870  
Phone : (801) 536-4346

Form completed by

*Dennis R Sorensen*

**Part I: INFLUENT INFORMATION**

A. Please update (if needed) the average design flow and average design BOD<sub>5</sub> and TSS loading for your facility.

|                            | Average Design Flow (MGD) | Average Design BOD <sub>5</sub> Loading (lbs/day) | Average Design TSS Loading (lbs/day) |
|----------------------------|---------------------------|---|--------------------------------------|
| Design Criteria            | 6 MGD                     | 9007  | 9007                                 |
| 90% of the Design Criteria | 5.4 MGD                   | 8106  | 8106                                 |

B. Please list the average monthly flows in millions of gallons per day (MGD) and BOD<sub>5</sub> and TSS loadings in milligrams per liter (mg/L) **received** at your facility during 2012. (Calculate the BOD<sub>5</sub> and TSS loadings in pounds per day (lbs/day)).

| Month     | (1)<br>Average Monthly Flow (MGD) | (2)<br>Average Monthly BOD <sub>5</sub> Concentration (mg/L) | (3)<br>Average BOD <sub>5</sub> Loading (lbs/day) 1 | (4)<br>Average Monthly TSS Concentration (mg/L) | (5)<br>Average TSS Loading (lbs/day) 2 |
|-----------|-----------------------------------|--|---|---|--|
| January   | 3.8                               | 190  | 6021  | 167   | 5293                                   |
| February  | 4.1                               | 178  | 6087  | 198   | 6770                                   |
| March     | 4.                                | 174  | 5805  | 190   | 6338                                   |
| April     | 3.9                               | 206  | 6700  | 231   | 7514                                   |
| May       | 4.2                               | 177  | 6200  | 191   | 6690                                   |
| June      | 4.                                | 134  | 4470  | 163   | 5438                                   |
| July      | 4.3                               | 115  | 4124  | 168   | 6025                                   |
| August    | 4.4                               | 132  | 4844  | 159   | 5835                                   |
| September | 4.3                               | 140  | 5021  | 171   | 6132                                   |
| October   | 4.                                | 187  | 6238  | 224   | 7473                                   |
| November  | 4.2                               | 186  | 6515  | 197   | 6901                                   |
| December  | 4.2                               | 210  | 7356  | 189   | 6620                                   |
| Average   | 4.1                               | 169  | 5782  | 187   | 6419                                   |

1 BOD<sub>5</sub> Loading (3) = Average Monthly Flow (1) x Average Monthly BOD<sub>5</sub> Concentration (2) x 8.34  
 2 TSS Loading (5) = Average Monthly Flow (1) x Average Monthly TSS Concentration (4) x 8.34

**Part I. INFLUENT INFORMATION (cont.)**

C. Refer to the information in A & B to determine a point value for your facility. Please enter the points for each question in the blank provided.

| Question   | Number | Points Earned   | Total Points |
|--|--------|---|--------------|
| How many times did the average monthly flow (Part B., Column 1) to the wastewater facility exceed 90% of design flow?                            |        | 0 = 0 points<br>1 - 2 = 10 points<br>3 - 4 = 20 points<br>5 or more = 30 points   | 0            |
| How many times did the average monthly flow (Part B., Column 1) to the wastewater facility exceed the design flow?                               |        | 0 = 0 points<br>1 - 2 = 20 points<br>3 - 4 = 40 points<br>5 or more = 60 points   | 0            |
| How many times did the average monthly BOD <sub>5</sub> loading (Part B., Column 3) to the wastewater facility exceed 90% of the design loading? |        | 0-1 = 0 points<br>1 - 2 = 10 points<br>3 - 4 = 20 points<br>5 or more = 30 points | 0            |
| How many times did the average monthly BOD <sub>5</sub> loading (Part B., Column 3) to the wastewater facility exceed the design loading?        |        | 0 = 0 points<br>1 - 2 = 20 points<br>3 - 5 = 40 points<br>5 or more = 60 points   | 0            |
| <b>TOTAL PART I =</b>  |        |   | 0            |

**Part II: EFFLUENT INFORMATION**

A. Please list the average monthly BOD<sub>5</sub>, TSS, Ammonia (NH<sub>3</sub>), monthly maximum Cl<sub>2</sub>, minimum monthly DO, and 30-day geometric averages for Fecal and Total Coliform, or E-Coli produced by your facility during 2012.

| Month     | (1)<br>BOD <sub>5</sub><br>(mg/L) | (2)<br>TSS<br>(mg/L) | (3)<br>Fecal<br>Coliform<br>(#/100 mL) | (4)<br>Total<br>Coliform<br>(#/100 mL) | (5)<br>E-Coli | (6)<br>Cl <sub>2</sub><br>(mg/L) | (7)<br>DO<br>(mg/L) | (8)<br>NH <sub>3</sub><br>(mg/L) |
|-----------|-----------------------------------|----------------------|--|--|---------------|----------------------------------|---------------------|----------------------------------|
|           | Whole Numbers Only                |                      |  |  |               | One Decimal Place Only           |                     |                                  |
| January   | 8                                 | 9                    |  |  | 5             | 2                                | 4.5                 | 14                               |
| February  | 9                                 | 6                    |  |  | 10            | 2                                | 4.5                 | 14                               |
| March     | 11                                | 6                    |  |  | 10            | 1.9                              | 4.2                 | 12                               |
| April     | 10                                | 9                    |  |  | 13            | 1.7                              | 4.5                 | 13                               |
| May       | 9                                 | 10                   |  |  | 6             | 1.9                              | 4.2                 | 9.6                              |
| June      | 9                                 | 9                    |  |  | 14            | 1.9                              | 4.2                 | 5.5                              |
| July      | 10                                | 8                    |  |  | 5             | 1.8                              | 4                   | 7.2                              |
| August    | 10                                | 7                    |  |  | 5             | 1.9                              | 4                   | 6.7                              |
| September | 8                                 | 6                    |  |  | 9             | 1.9                              | 4.3                 | 8.2                              |
| October   | 9                                 | 6                    |  |  | 6             | 1.8                              | 4                   | 9.4                              |
| November  | 10                                | 8                    |  |  | 6             | 1.4                              | 4                   | 8.7                              |
| December  | 9                                 | 9                    |  |  | 7             | 1.5                              | 4.5                 | 13.5                             |
| Average   | 9.3                               | 7.8                  |  |  | 7             | 1.8                              | 4.3                 | 10.2                             |

B. Please list the monthly average permit limits for the facility in the blanks below.

|                         | BOD <sub>5</sub> (CBOD <sub>5</sub> )<br>(mg/L) | maximum<br>Cl <sub>2</sub><br>(mg/L) | NH <sub>3</sub><br>(mg/L) | minimum<br>DO<br>(mg/L) |
|-------------------------|---|--------------------------------------|---------------------------|-------------------------|
| Monthly Permit Limit    | 25  | 2                                    | 18                        | 4                       |
| 80% of the Permit Limit | 20  | 1.6                                  | 14                        | 3.2                     |

Part II: EFFLUENT INFORMATION (cont.)

C. Refer to the information in A & B and your operating reports to determine a point values for your facility.

| Question   | Number | Points Earned   | Total Points |
|--|--------|---|--------------|
| How many months did the effluent BOD <sub>5</sub> (CBOD <sub>5</sub> ) exceed 80% of monthly permit limit? |        | 0 - 1 = 0 points<br>2 = 5 points<br>3 = 10 points<br>4 = 15 points<br>5 or more = 20 points | 0            |
| How many months did the effluent BOD <sub>5</sub> (CBOD <sub>5</sub> ) exceed the monthly permit limits?   |        | 0 = 0 points<br>1 - 2 = 10 points<br>3 or more = 20 points                                  | 0            |
| How many months did the effluent TSS exceed 20 mg/L?   |        | 0 - 1 = 0 points<br>2 = 5 points<br>3 = 10 points<br>4 = 15 points<br>5 or more = 20 points | 0            |
| How many months did the effluent TSS exceed 25 mg/L?   |        | 0 = 0 points<br>1 - 2 = 10 points<br>3 or more = 20 points                                  | 0            |
| How many times did the Cl <sub>2</sub> exceed permit limit?  |        | 0 = 0 points<br>1 - 2 = 15 points<br>3 or more = 30 points                                  | 30           |
| How many times did the NH <sub>3</sub> exceed permit limits?   |        | 0 = 0 points<br>1 - 2 = 15 points<br>3 or more = 30 points                                  | 0            |
| How many times did the DO not meet permit limit?   |        | 0 = 0 points<br>1 - 2 = 15 points<br>3 or more = 30 points                                  | 0            |
| How many months did the 30-day fecal coliform exceed 200 #/100 mL?   |        | 0 = 0 points<br>1 - 2 = 10 points<br>3 or more = 20 points                                  | N/A          |
| How many months did the 30-day total coliform exceed 2,000 #/100 mL?                                       |        | 0 = 0 points<br>1 - 2 = 10 points<br>3 or more = 20 points                                  | N/A          |
| How many months did the 30-day E-coli exceed 126 #/100 mL?   |        | 0 = 0 points<br>1 - 2 = 20 points<br>3 or more = 40 points                                  | 0            |
| <b>TOTAL PART II =</b>   |        |   | <b>30</b>    |

**Part III: FACILITY AGE**

In what year were the following process units constructed or underwent a major upgrade?  
To determine a point score subtract the construction or upgrade year from 2012.

Points = Age = Present Year - Construction or Upgrade Year.

Enter the calculated age below.

If the point total exceeds 20 points, enter only 20 points.

| Unit Process                                  | Current Year | Construction or Last Upgrade Year | Age = Points |
|---|--------------|-----------------------------------|--------------|
| Headworks                                     | 2012         | 2001                              | 11           |
| Primary Treatment                             | 2012         | 2008                              | 4            |
| Secondary Treatment                           | 2012         | 2008                              | 4            |
| Solids Handling                               | 2012         | 2009                              | 3            |
| Disinfection                                  | 2012         | 1998                              | 14           |
| <b>TOTAL PART III (not greater than 20) =</b> |              |                                   | <b>20</b>    |

**Part IV: BYPASSES**

Please complete the following table:

| Question  | Number | Points Earned  | Total Points |
|---|--------|--|--------------|
| How many days in the past year was there a bypass or overflow of untreated wastewater due to high flows?        | 0      | 0 = 0 points<br>1 = 5 points<br>2 = 10 points<br>3 = 15 points<br>4 = 20 points<br>5 or more = 25 points | 0            |
| How many days in the last year was there a bypass or overflow of untreated wastewater due to equipment failure? | 0      | 0 = 0 points<br>1 = 5 points<br>2 = 10 points<br>3 = 15 points<br>4 = 20 points<br>5 or more = 25 points | 0            |
| <b>TOTAL PART IV =</b>  |        |  | <b>0</b>     |

**Part V: SOLIDS HANDLING**

A. Please complete the following table:

| Current Disposal Method<br>(check all that apply) | Points Earned  | Total Points |
|---|--|--------------|
| Landfill  | Class B = 0 points<br>< Class B = 50 points  | 0            |
| Land Application                                  | Site Life<br>0 - 5 years = 20 points<br>5 - 10 years = 10 points<br>10+ years = 0 points | 0            |
| Give Away/Distribution and Marketing              | Class A = 10 points<br>Class B = 20 points   | N/A          |
| <b>TOTAL PART V =</b>                             |  | 0            |

**Part VI: NEW DEVELOPMENT**

A. Please complete the following table:

| Question  | Points Earned                    | Total Points |
|---|----------------------------------|--------------|
| Has an industry (or other development) moved into the community or expanded production in the past two years, such that either flow or wastewater loadings to the sewerage system were significantly increased (10 - 20%)?      | No = 0 points<br>Yes = 10 points | 0            |
| Are there any major new developments (industrial, commercial, or residential) anticipated in the next 2- 3 years, such that either flow or BOD <sub>5</sub> loadings to the sewerage system could significantly increase (25%)? | No = 0 points<br>Yes = 10 points | 0            |
| Have you experienced any upset due to septage haulers?  | No = 0 points<br>Yes = 10 points | 0            |
| <b>TOTAL PART VI =</b>  |                                  | 0            |

Part VI: NEW DEVELOPMENT (cont.)

B. Approximate number of new residential sewer connections in the last year

168 ~~124~~ new residential connections

C. Approximate number of new commercial/industrial connections in the last year

13 ~~115~~ new commercial/industrial connections

D. Approximate number of new population serviced in the last year

622 ~~108~~ new people served

Part VII: OPERATOR CERTIFICATION

A. How many operators are currently employed by your facility?

3 operator(s) employed

B. What is/are the name(s) of your DRC operator(s)?

Dennis R Sorensen

Ben Winn

Boyer Jackson

\_\_\_\_\_

C. You are required to have the treatment DRC operator(s) certified at GRADE III.

What is the current grade of the DRC operator(s)? IV

D. State of Utah Administrative Rules Require that all operators considered to be in DRC to be appropriately certified. List all the operators in your system by their certification class.

Not Certified 1

Treatment I \_\_\_\_\_

Treatment II \_\_\_\_\_

Treatment III \_\_\_\_\_

Treatment IV 2

**Part VII: OPERATOR CERTIFICATION (cont.)**

E. Please complete the following table:

| Question   | Points Earned                                   | Total Points |
|--|---|--------------|
| Is/are your DRC operator(s) currently certified at the appropriate grade for this facility? (see C)  | Yes = 0 points<br>No = 50 points                | 0            |
| How many continuing education units has each of the DRC operator(s) completed over the last 3 years? | 3 or more = 0 points<br>less than 3 = 10 points | 0            |
| <b>TOTAL PART VII =</b>  |   | 0            |

**Part VIII: FACILITY MAINTENANCE**

A. Please complete the following table:

| Question  | Points Earned                    | Total Points |
|---|----------------------------------|--------------|
| Do you follow an annual preventative maintenance program? | Yes = 0 points<br>No = 30 points | 0            |
| Is it written?  | Yes = 0 points<br>No = 20 points | 0            |
| Do you have a written emergency response plan?            | Yes = 0 points<br>No = 20 points | 0            |
| Do you have an updated operations and maintenance manual  | Yes = 0 points<br>No = 20 points | 0            |
| Do you have a written safety plan?                        | Yes = 0 points<br>No = 20 points | 0            |
| <b>TOTAL PART VIII =</b>                                  |                                  | 0            |

Part IX: SUBJECTIVE EVALUATION

This section should be completed with the facility operators.

A. Do you consider your wastewater facility to be in good physical and structural condition?

YES  NO

If NOT, why?

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B. What improvements do you think the plant will need in the next 5 years?

*U V disinfection, possibly nutrient removal*

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C. Where there any backups into basements at any point in the collection system in 2012.

YES  NO

Why? (do not include backups due to clogged laterals)

*Collection Blockage*

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D. Does the municipality/district pay for the continuing education expenses of operators?

ALWAYS  SOMETIMES  NO

If so, what percentage do they pay?

approximately 100 %



## POINT SUMMATION

Fill in the values from Parts I through VIII in the blanks provided in column 1. Add the numbers to determine the MWPP point total that your wastewater facility has generated for the past twelve months.

| Part  | Points |
|-------|--------|
| I     | 0      |
| II    | 30     |
| III   | 20     |
| IV    | 0      |
| V     | 0      |
| VI    | 0      |
| VII   | 0      |
| VIII  | 0      |
| Total | 50     |



# Memo

To: Mayor and City Council  
From: Chris Thompson, Public Works Director/City Engineer  
Date: August 6, 2013  
Re: River Trail Debris and Tree Removal Project, Utah County Interlocal Agreement

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## Staff Report

The city has received a 75% grant from NRCS to remove debris and invasive trees along the Spanish Fork River. The bids to perform this work came in well under budget so change orders were proposed to extend the project. Much of the area this project would be extended in is in the county.

This agreement with Utah County is for them to pay the 25% match for the county areas we are proposing to extend the project. We recommend that the City Council approve this agreement for Utah County to pay the \$26,550 match for the extension of this grant project

Attached: agreement



**INTERLOCAL COOPERATION AGREEMENT BETWEEN  
UTAH COUNTY AND SPANISH FORK CITY FOR FLOOD CONTROL  
AND CLEANING OF THE SPANISH FORK RIVER**

THIS IS AN INTERLOCAL COOPERATION AGREEMENT ( “Agreement”), made and entered into by and between Utah County, a political subdivision of the State of Utah, and Spanish Fork City, a Utah municipality and political subdivision of the State of Utah.

WITNESSETH:

**WHEREAS**, pursuant to the provisions of the Interlocal Cooperation Act (“Act”), Title 11, Chapter 13, Utah Code Annotated, 1953 as amended, public agencies, including political subdivisions of the State of Utah as therein defined, are authorized to enter into written agreements with one another for joint or cooperative action; and

**WHEREAS**, pursuant to the Act, the parties desire to work together through joint and cooperative action that will benefit the residents of both Utah County and Spanish Fork City.

**WHEREAS**, all of the parties to this Agreement are public agencies as defined in the Act.

**WHEREAS**, Utah County and Spanish Fork City desire to take flood control measures and make cleaning efforts in and around portions of the Spanish Fork River; and

**WHEREAS**, it is to the mutual benefit of both Utah County and Spanish Fork City to enter into an agreement providing for the parties’ joint efforts to take flood control measures and make cleaning efforts in and around portions of the Spanish Fork River.,

**NOW, THEREFORE**, the parties do mutually agree, pursuant to the terms and provisions of the Act, as follows:

**Section 1. EFFECTIVE DATE; DURATION**

This Agreement shall become effective and shall enter into force, within the meaning of the

Act, upon the submission of this Agreement to, and the approval and execution thereof by Resolution of the governing bodies of each of the parties to this Agreement. The term of this Agreement shall be from the effective date hereof until the work contemplated herein is complete, but is no longer than 1 year from the date of this Agreement. This Agreement shall not become effective until it has been reviewed and approved as to form and compatibility with the laws of the State of Utah by the Utah County Attorney's Office and the attorney for Spanish Fork City. Prior to becoming effective, this Agreement shall be filed with the person who keeps the records of each of the parties hereto.

## **Section 2. ADMINISTRATION OF AGREEMENT**

The parties to this Agreement do not contemplate nor intend to establish a separate legal entity under the terms of this Agreement. The parties hereto agree that, pursuant to Section 11-13-207, Utah Code Annotated, 1953 as amended, the Utah County Public Works Director, shall act as the administrator responsible for the administration of this Agreement. The parties further agree that this Agreement does not anticipate nor provide for any organizational changes in the parties. The administrator agrees to keep all books and records in such form and manner as the Utah County Clerk/Auditor shall specify and further agrees that said books shall be open for examination by the parties hereto at all reasonable times. The parties agree that they will not acquire, hold nor dispose of real or personal property pursuant to this Agreement during this joint undertaking.

## **Section 3. PURPOSES**

This Agreement has been established and entered into between the parties for the purpose of taking flood control measures and making cleaning efforts in and around portions of the Spanish Fork River that lie in the unincorporated area of Utah County, as directed by the Utah County Public Works Department.

**Section 4. PARTIES RESPONSIBILITIES**

Utah County agrees to pay Spanish Fork City \$26,550.

Spanish Fork City agrees to provide the services, including equipment and manpower, to perform flood control measures and clean portions of the Spanish Fork River in the unincorporated part of Utah County, as directed by the Utah County Public Works Department, and more particularly described as the area of the Spanish Fork River between Cold Springs and Interstate 15. It is anticipated that Spanish Fork City will use funds from the National Resources Conservation Services Emergency Watershed Protection Program grant in addition to the amount paid by Utah County to perform \$100,000 worth of services on the said portion of the Spanish Fork River.

The work contemplated herein is a one-time cleaning/control project and is anticipated to be completed within one (1) year after this agreement is effective.

**Section 5. METHOD OF TERMINATION**

This Agreement will automatically terminate at the end of its term herein, pursuant to the provisions of paragraph one (1) of this Agreement. Prior to the automatic termination at the end of the term of this Agreement, any party to this Agreement may terminate the Agreement sixty (60) days after providing written notice of termination to the other parties. The Parties of this Agreement agree to bring current, prior to termination, any financial obligation contained herein.

**Section 6. INDEMNIFICATION**

The parties to this Agreement are political subdivisions of the State of Utah. The parties agree to indemnify and hold harmless the other for damages, claims, suits, and actions arising out of a negligent error or omission of its own officials or employees in connection with this Agreement. It is expressly agreed between the parties that the obligation to indemnify is limited to the dollar amounts set forth in the Governmental Immunity Act, Section 63G-7-604.

**Section 7. FILING OF INTERLOCAL COOPERATION AGREEMENT**

Executed copies of this Agreement shall be placed on file in the office of the County Clerk/Auditor of Utah County and with the official keeper of records of Spanish Fork City, and shall remain on file for public inspection during the term of this Agreement.

**Section 8. ADOPTION REQUIREMENTS**

This Agreement shall be (a) approved by Resolution of the governing body of each of the parties, (b) executed by a duly authorized official of each of the parties (c) submitted to and approved by an Authorized Attorney of each of the parties, as required by Section 11-13-202.5, Utah Code Annotated, 1953 as amended, and (d) filed in the official records of each party.

**Section 9. AMENDMENTS.**

This Agreement may not be amended, changed, modified or altered except by an instrument in writing which shall be (a) approved by Resolution of the governing body of each of the parties, (b) executed by a duly authorized official of each of the parties, (c) submitted to and approved by an Authorized Attorney of each of the parties, as required by Section 11-13-205.5, Utah Code Annotated, 1953 as amended, and (d) filed in the official records of each party.

**Section 10. SEVERABILITY**

If any term or provision of the Agreement or the application thereof shall to any extent be invalid or unenforceable, the remainder of this Agreement, or the application of such term or provision to circumstances other than those with respect to which it is invalid or unenforceable, shall not be affected thereby, and shall be enforced to the extent permitted by law. To the extent permitted by applicable law, the parties hereby waive any provision of law which would render any of the terms of this Agreement unenforceable.

**Section 11. NO PRESUMPTION**

Should any provision of this Agreement require judicial interpretation, the Court interpreting or construing the same shall not apply a presumption that the terms hereof shall be more strictly construed against the party, by reason of the rule of construction that a document is to be construed more strictly against the person who himself or through his agents prepared the same, it being acknowledged that each of the parties have participated in the preparation hereof.

**Section 12. HEADINGS**

Headings herein are for convenience of reference only and shall not be considered any interpretation of the Agreement.

**Section 13. BINDING AGREEMENT**

This Agreement shall be binding upon the heirs, successors, administrators, and assigns of each of the parties hereto.

**Section 14. NOTICES**

All notices, demands and other communications required or permitted to be given hereunder shall be in writing and shall be deemed to have been properly given if delivered by hand or by certified mail, return receipt requested, postage paid, to the parties at their addresses listed below:

Spanish Fork, Attention Chris Thompson, P.E. 40 S. Main St., Spanish Fork, UT 84660

Utah County, Attention Richard Nielson, P.E. 2855 S. State St., Provo, UT 84606

**Section 15. ASSIGNMENT**

The parties to this Agreement shall not assign this Agreement, or any part hereof, without the prior written consent of all other parties to this Agreement. No assignment shall relieve the original parties from any liability hereunder.

**Section 16. GOVERNING LAW**

All questions with respect to the construction of this Agreement, and the rights and liability

of the parties hereto, shall be governed by the laws of the State of Utah.

**UTAH COUNTY**

Authorized by Resolution No. 2013-\_\_\_\_, authorized and passed on the \_\_\_\_ day of \_\_\_\_\_ 2013.

BOARD OF COUNTY COMMISSIONERS  
UTAH COUNTY, UTAH

By: \_\_\_\_\_  
DOUG WITNEY, Chairman

ATTEST: BRYAN E. THOMPSON  
Utah County Clerk/Auditor

By: \_\_\_\_\_  
Deputy

APPROVED AS TO FORM AND COMPATIBILITY  
WITH THE LAWS OF THE STATE OF UTAH:  
TIMOTHY L. TAYLOR, Utah County Attorney

By: \_\_\_\_\_  
Deputy County Attorney

**SPANISH FORK CITY**

Authorized by Resolution No. \_\_\_\_\_ , authorized and passed on the \_\_\_\_\_ day of  
\_\_\_\_\_ 2013.

\_\_\_\_\_  
G. Wayne Andersen, Mayor  
Spanish Fork City

ATTEST:

\_\_\_\_\_  
Kent R. Clark  
Spanish Fork City Recorder

APPROVED AS TO FORM AND COMPATIBILITY  
WITH THE LAWS OF THE STATE OF UTAH  
S. Junior Baker, Spanish Fork City Attorney

By: \_\_\_\_\_

# RESOLUTION 13-08

## ROLL CALL

| VOTING  | YES | NO |
|---|-----|----|
| <b>G. WAYNE ANDERSEN</b><br>Mayor (votes only in case of tie) |     |    |
| <b>RODNEY DART</b><br>City Council member                     |     |    |
| <b>RICHARD M. DAVIS</b><br>City Council member                |     |    |
| <b>BRANDON B. GORDON</b><br>City Council member               |     |    |
| <b>STEVE LEIFSON</b><br>City Council member                   |     |    |
| <b>KEIR A. SCUBES</b><br>City Council member                  |     |    |

I MOVE this resolution be adopted:

I SECOND the foregoing motion:

## RESOLUTION No. 13-08

### RESOLUTION OF THE SPANISH FORK CITY COUNCIL APPROVING AN INTERLOCAL AGREEMENT WITH UTAH COUNTY TO PROVIDE FLOOD CONTROL ALONG THE SPANISH FORK RIVER AND AUTHORIZING THE MAYOR TO EXECUTE THE AGREEMENT

WHEREAS, Spanish Fork City owns and maintains a trail system along the Spanish Fork River, both within city limits and in unincorporated Utah County adjacent to city limits; and

WHEREAS, Utah County has the maintenance obligation for the Spanish Fork River as set forth in State law; and

WHEREAS, Spanish Fork City is able to obtain a national grant for river maintenance to protect its trail system; and

WHEREAS, Utah County desires to have Spanish Fork City perform a portion of its river maintenance work, since it has the benefit of grant monies; and

WHEREAS, Utah County and Spanish Fork City propose to accomplish their objectives through the use of an interlocal agreement, as provided in State law;

NOW, THEREFORE, be it resolved by the Spanish Fork City Council as follows:

1. Spanish Fork City hereby approves the interlocal agreement with Utah County, as attached hereto, for partial river maintenance on the Spanish Fork River, and hereby authorizes the mayor of Spanish Fork City to execute the same.
2. This Resolution shall become effective upon adoption by Spanish Fork City and Utah County.

DATED this 20<sup>th</sup> day of August, 2013.

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G. WAYNE ANDERSEN, Mayor

Attest:

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Kent R. Clark, City Recorder