THIS AGENDA IS SUBJECT TO CHANGE WITH MINIMUM 24-HOURS NOTICE

SPECIAL CITY COUNCIL AGENDA

Wednesday, November 19, 2014

NOTICE IS HEREBY GIVEN that the Herriman City Council shall assemble for a Meeting in the City Council Chambers, located at 13011 South Pioneer Street (6000 West), Herriman, Utah.

5:00 PM - WORK MEETING: *(Front Conference Room)*

COUNCIL BUSINESS

A. Review of this evening's agenda
B. Administrative Reports
   1. City Council Retreat agenda discussion – Brett Wood, City Manager
   2. 2015 Mayor Pro Tempore discussion – Brett Wood, City Manager
   3. Planning Update – Bryn McCarty, City Planner
   4. Engineering Update – Blake Thomas, City Engineer
   5. Discussion pertaining to Gina Road – Bryn McCarty, City Planner
   6. Discussion regarding Open Space and Trails – Brett Wood, City Manager
   7. Other Updates
C. Adjournment

7:00 PM - GENERAL MEETING:

1. CALL TO ORDER
   A. Invocation and Pledge
   B. Approval of the Minutes — October 29, 2014
   C. Mayor's Comments
   D. Council Recognitions
2. PUBLIC COMMENT: *Audience members may bring any item to the Mayor and Council's attention. Comments will be limited to two or three minutes. State Law prohibits the Council from acting on items that do not appear on the agenda.*
3. CONSENT AGENDA
   A. Consideration of a resolution to appoint a member of the governing board of trustees of the South Salt Lake Valley Mosquito Abatement District – John Brems, City Attorney
4. REPORTS, PRESENTATIONS AND APPOINTMENTS
   A. Consideration of a resolution appointing a City Treasurer as provided by Herriman City Code §1-7-3(A) – Jackie Nostrom, City Recorder
5. PUBLIC HEARING AGENDA
   A. Public Hearing and consideration of a resolution approving an amendment to the Herriman City 2014-2015 fiscal year budget – Alan Rae, Finance Director
6. DISCUSSION AND ACTION ITEMS
   A. Discussion and consideration of a resolution adopting the Bylaws of the Herriman City Youth Council – Jackie Nostrom, City Recorder

B. Discussion and consideration of a resolution encouraging partnership with the State of Utah to address transportation funding – Blake Thomas, City Engineer

C. Consideration to approve an amendment to the Storm Drain Master Plan – Blake Thomas, City Engineer

D. Consideration to approve an amendment to the Storm Drain Impact Fee Facilities Plan - Blake Thomas, City Engineer

E. Consideration to approve an amendment to the Storm Drain Impact Fee Analysis – Blake Thomas, City Engineer

F. Discussion and consideration of an Ordinance to rezone 12200 South 5250 West from R-2-10 Residential) to MU-2 (Mixed Use) (File No. 13Z14) – Bryn McCarty, City Planner

G. *(Continued from October 22, 2014)* Discussion and consideration of an Ordinance to rezone 5350 West Anthem Park Blvd from R-2-10 (Medium Density Residential) to R-M (Multi-Family Residential) (File No. 12Z14) – Bryn McCarty, City Planner

7. MAYOR AND COUNCIL COMMENTS

8. CALENDAR

A. Meetings

- November 20 - Planning Commission meeting; 7:00 p.m.
- December 4 - Planning Commission meeting; 7:00 p.m.
- December 10 – City Council Work Meeting 5:00 p.m.; City Council Meeting 7:00 p.m.

B. Events

- November 27 – Thanksgiving Day; City Offices Closed
- November 28 – Thanksgiving Holiday; City Offices Closed
- December 8 – Holiday Sing A Long

9. ADJOURNMENT

10. RECOMMENCE TO WORK MEETING (IF NEEDED)

11. CLOSED SESSION (IF NEEDED)

A. *The Herriman City Council may convene in a closed session to discuss the character, professional competence, or physical or mental health of an individual, pending or reasonable imminent litigation, and the purchase, exchange, or lease of real property, as provided by Utah Code Annotated §52-4-205*

12. SOCIAL GATHERING

A. Social Gathering will take place at McDonald's 5108 West 13400 South, Herriman, UT

In accordance with the Americans with Disabilities Act, Herriman City will make reasonable accommodation for participation in the meeting. To request assistance, contact Herriman City at (801) 446-5323. Please Provide at least 48 hours advance notice of the meeting

ELECTRONIC PARTICIPATION

Members of the City Council may participate electronically via Telephone, Skype, or other electronic means during this meeting.

CITIZEN COMMENT POLICY AND PROCEDURE

During each regular Council meeting there will be a citizen comment time. The purpose of this time is to allow citizen's access to the Council. Citizens requesting to address the Council will be asked to complete a written comment form and present it to Jackie Nostrom, City Recorder. In general, the chair will allow an individual two minutes to address the Council. A spokesperson, recognized as representing a group in attendance, may be allowed up to five minutes. At the conclusion of the citizen comment time, the chair may direct staff to assist the citizen on the issue presented; direct the citizen to the proper administrative department(s); or take no action. This policy also applies to all public hearings. Citizens may also submit written requests (outlining their issue) for an item to be considered at a future council meeting. The chair may place the item on the agenda under citizen comments; direct staff to assist the citizen; direct the citizen to the proper administrative departments; or take no action.

Certificate of Posting

I, Jackie Nostrom, the duly appointed, qualified, and acting City Recorder of Herriman City, Utah, do hereby certify that the above and foregoing is a full, true and correct copy of the agenda; it was emailed to at least one newspaper of general circulation within the geographic jurisdiction of the public body. The agenda was also posted at the principal office of the public body. Also posted on the Utah State Public Notice Website http://www.utah.gov/pmn/index.html and on Herriman City's website at www.herriman.org

Posted and Dated this 14th day of November 2014

Jackie Nostrom, CMC
City Recorder

SPECIAL CITY COUNCIL MINUTES

Wednesday, October 29, 2014
Awaiting Formal Approval

The following are the minutes of the Special City Council Meeting of the Herriman City Council. The meeting was held on **Wednesday, October 29, 2014 at 5:00 p.m.** in the Herriman City Community Center Council Chambers, 13011 South Pioneer Street (6000 West), Herriman, Utah. Adequate notice of this meeting, as required by law, was posted in the Community Center, on the City's website, and delivered to members of the Council, media, and interested citizens.

Presiding:	Mayor Carmen Freeman
Council Members Present:	Mike Day, Craig B. Tischner and Coralee Wessman-Moser
Staff Present:	Brett geo. Wood, City Manager Gordon M. Haight II, Assistant City Manager Tami Moody, Director of Administration & Communications Jackie Nostrom, City Recorder John Brems, City Attorney Alan Rae, Finance Director Danie Bills, Events Manager Blake Thomas, City Engineer Dwayne Anjewierden, Chief of Police Clint Smith, Unified Fire Authority Chief Justun Edwards, Water Director Cathryn Nelson, Chief Building Official Sandra Llewellyn, Planning Coordinator Destiny Skinner, Administrative Technician
Excused:	Councilmember Matt Robinson

5:00 PM - WORK MEETING: *(Front Conference Room)*

5:03:26 PM COUNCIL BUSINESS

Mayor Freeman called the meeting to order.

A. Review of this evening's agenda
B. Administrative Reports

1. 5:03:43 PM **Discussion pertaining to Message Board Communication** – Destiny Skinner, Administrative Technician

Administrative Technician Destiny Skinner offered an update of the message board communication. She presented a layout of different options for the two signs, and introduced Yesco Representative Jeff Krantz to answer any questions. Representative Krantz thanked the Council for the opportunity to present, and explained the differences between the options. He noted that the quote includes footings, rock wainscot, and a double-sided electronic message board.

Councilmember Craig B. Tischner asked if the City would have to change the current ordinance for compliance. Assistant City Manager Gordon Haight responded that state code exempts traffic signs from adhering to city sign ordinances. Councilmember Mike Day questioned the durability of the screen from graffiti. Representative Krantz explained that the screens are covered with a xylon coating that paint will not adhere. He suggested to have the City's property damage insurance cover the signs, and explained that the modules could be replaced if damaged.

Mayor Freeman asked about the monthly electrical cost to run the signs. City Manager Brett Wood responded that the cost would be minimal because of the efficient LED lighting. Councilmember Day asked if the bid included an electrical connection to the sign location. City Manager Wood indicated that there already is power at the first location; however, a second location has yet to be determined. He explained that power would have to be supplied, and that was not included in the proposal. Mayor Freeman asked if businesses could utilize the signs for advertising purposes. City Manager Wood explained that the City has a strict communication policy that would be followed which doesn't allow for business advertisements.

Councilmember Day asked for staff recommendation. City Manager Wood recommended option two with the 20mm resolution. Councilmember Tischner asked if the majority of the cost is in the screens. This was verified. Mayor Freeman expressed his concern that these communication boards could be negatively perceived. City Manager Wood explained the purpose of having the signs is to promote public awareness and enhance communication. Administrative Services Technician Skinner added that the signs are a tool; not just a welcoming sign. Councilmember Day agreed.

Councilmember Tischner asked if other companies had been given the opportunity to provide a proposal. This was confirmed. Assistant City Manager Haight asked for direction from the Council. Finance Director Alan Rae added that an approved budget amendment granted $130,000 for the signs, and that another budget amendment would have to be presented. Councilmember Coralee Wessman-Moser indicated that she felt comfortable with the recommendation from staff. Councilmember Tischner expressed his concern with the cost. City Manager Wood explained the direction that was received in August from the Council. Councilmember Moser added that urgent issues arise and information needs to be communicated to the public immediately. Councilmember Day stated that he was in favor of signage, and suggested that if they are used properly, the public would look favorably upon the investment. Mayor Freeman noted that the signs would be a powerful communicator to the residents.

2. 5:40:06 PM **Deer Mitigation Update** – Justun Edwards, Water Director

Water Director Justun Edwards offered a brief update of the deer management options, and explained that a portion of the plan had been removed. He informed the Council that the deer sterilization program that the Humane Society endorsed was denied by the State of

Utah. Director Edwards mentioned that a meeting was conducted with people interested in participating in the mitigation program. The program is considered to be in a holding period until the formal plan can be approved with the Regional Advisory Council (RAC) and the Certificate of Registration (COR) next spring. Mayor Freeman asked if this information had been communicated properly to the public. Director of Administration and Communications responded that information had been provided regarding the mitigation on the Agricultural Lands; however, no further information will be available until spring after the plan has been reviewed by the RAC and COR. Director Edwards added that the agricultural hunt is not administered by the City, and that the land owners are protecting crops.

3. 5:49:13 PM **City Manager Updates** – Brett Wood, City Manager

Mayor Freeman informed the Council that a retreat has been scheduled for January 9, 2015 and January 10, 2015. He suggested that a four hour meeting be conducted on both days, and schedule discussion items as necessary. Councilmember Moser suggested that staff prioritize discussions, and if additional time is available, could accommodate Council consensus concerns. She suggested implementing an agenda for the retreat. Councilmember Day recommended meeting longer on the Saturday to minimize the number of budget discussion work sessions. Councilmember Tischner agreed, and recommended a six hour block on the Saturday. The Council agreed.

Councilmember Tischner questioned about the form of government topic. City Manager Wood asked the Council if they were comfortable with the type of government that is in place based on the size of the City. Councilmember Day indicated that he liked to have a voting Mayor, and recommended leaving the current form of government. The Council agreed.

4. 5:59:23 PM **Other Updates**

Mayor Freeman informed the Council that the Utah Leagues of Cities and Towns are promoting transportation funding and have requested each city to approve a resolution supporting a sales tax increase. He indicated that the resolution would be presented on the November 19, 2014 agenda. Councilmember Moser recommended a public hearing to be conducted prior to the adoption.

C. 6:06:40 PM **Adjournment**

COUNCILMEMBER MOSER MOVED TO ADJOURN THE WORK MEETING. COUNCILMEMBER DAY SECONDED THE MOTION, AND ALL VOTED AYE.

6:00 PM - General Meeting:

1. 6:12:13 PM **CALL TO ORDER**

Mayor Freeman called the meeting to order and welcomed everyone in attendance. He excused Councilmember Matt Robinson.

A. 6:12:39 PM **Invocation and Pledge**

Ms. Karlie Halcom offered the invocation. Ms. Amy Halcom led the audience in the pledge of allegiance

B. 6:14:05 PM **Approval of the Minutes** October 22, 2014

COUNCILMEMBER MOSER MOVED TO APPROVE THE MINUTES OF OCTOBER 22, 2014 AS WRITTEN. COUNCILMEMBER DAY SECONDED THE MOTION, AND ALL PRESENT VOTED AYE.

C. 6:14:30 PM **Mayor's Comments**
Mayor Freeman thanked those who attended Halloween Hi-Jinx and the Arts Council for hosting the event.

D. **Council Recognitions**
There were no recognitions.

2. 6:14:48 PM **PUBLIC COMMENT**
Amy Halcom, 4671 Etonboro Drive, suggested having a crosswalk installed at the intersection of Rosecrest Road and Highfield Drive for the safety of neighborhood children and Providence Hall students.

Chief of Police Dwayne Anjewierden indicated that discussions have been conducted regarding that intersection, and expressed his desire for a quick resolution. City Manager Wood commended the United Police Department for their presence at the intersection while solutions for the issue are discussed.

3. **DISCUSSION AND ACTION ITEMS**

A. 6:22:26 PM **Discussion and consideration of a resolution expressing support of the Salt Lake Valley Law Enforcement Service Area 2015 tentative budget and the Law Enforcement Service Plan** – Dwayne Anjewierden, Chief of Police
Salt Lake Valley Law Enforcement Service Area (SLVLESA) Administrator Kerri Nakamura offered a brief synopsis of the 2015 tentative budget, and was happy to report that no tax increase would be implemented this year. She provided with a quick review of the adopted budget for the Unified Police Department (UPD) and SLVLESA. Administrator Nakamura informed the Council that a tax increase will be inevitable, and suggested that it may be delayed until 2016 or 2017. She asked if the Council had any questions.

Councilmember Day indicated that the presented budget appears to have an additional employee at the Millcreek Precinct. Administrator Nakamura responded that with the annexation, four positions were transferred at the boards' request. She explained the history of the transfer which gave a new position to Riverton and Herriman and three positions to Holladay. Councilmember Day confirmed that the overall increase to the budget is 3.2%. Administrator Nakamura verified the increase. Chief of Police Anjewierden added that the officers allocated to Holladay will be fully funded by their city. Mayor Freeman indicated that the City of Holladay is a member of the UPD, but not SLVLESA. This was verified. Councilmember Tischner asked about the possibility of Holladay becoming a member of SLVLESA. Administrator Nakamura responded that they have been approached, but no commitment has been offered.

Councilmember Tischner asked about the 2.75% merit increase. Chief Anjewierden responded that the increase is a step increase, and noted that all of the officers are not eligible. Administrator Nakamura interjected that the average increase will be 2.25%, and that the average salary has decreased over the last year.

Mayor Freeman commended the leadership in the UPD and SLVLESA, and thanked Administrator Nakamura for her report.

COUNCILMEMBER DAY MOVED TO APPROVE THE **RESOLUTION NO. 14.29** TO ACKNOWLEDGE RECEIPT AND APPROVAL OF THE 2015 TENTATIVE BUDGET OF THE SALT LAKE VALLEY LAW ENFORCEMENT SERVICE AREA AND THE LAW ENFORCEMENT SERVICE PLAN FOR THE AREAS WITHIN THE SALT LAKE VALLEY LAW ENFORCEMENT SERVICE AREA. COUNCILMEMBER TISCHNER SECONDED THE MOTION.

The vote is recorded as follows:

Councilmember Mike Day	Aye
Councilmember Matt Robinson	ABSENT
Councilmember Craig B. Tischner	Aye
Councilmember Coralee Wessman-Moser	Aye
Mayor Carmen Freeman	Aye

The motion passed unanimously with Councilmember Robinson being absent.

4. MAYOR AND COUNCIL COMMENTS

5. CALENDAR
   A. Meetings
      - November 6 – Planning Commission 7:00 p.m.
      - ~~November 12 – City Council Work Meeting 5:00 p.m.; City Council Meeting 7:00 p.m.~~ Cancelled
      - November 19 – Special City Council Work Meeting 5:00 p.m.; Special City Council Meeting 7:00 p.m.

   B. Events
      - October 31 – Halloween
      - November 4 – Election Day
      - November 11 – Veterans Day; City Offices Closed

6. 6:45:42 PM ADJOURNMENT
   COUNCILMEMBER MOSER MOVED TO ADJOURN THE CITY COUNCIL MEETING. COUNCILMEMBER TISCHNER SECONDED THE MOTION, AND ALL VOTED AYE.

7. RECOMMENCE TO WORK MEETING (IF NEEDED)

8. CLOSED SESSION (IF NEEDED)
   A. *The Herriman City Council may convene in a closed session to discuss the character, professional competence, or physical or mental health of an individual, pending or reasonable imminent litigation, and the purchase, exchange, or lease of real property, as provided by Utah Code Annotated §52-4-205*
   There was no closed session.

9. SOCIAL GATHERING (No Action will be taken on any items)
   A. Social Gathering will take place at McDonald's 5108 West 13400 South, Herriman, UT

This document constitutes the official minutes for the Special Herriman City Council Meeting held on Wednesday, October 29, 2014

I, Jackie Nostrom, do hereby certify that I am the duly appointed, qualified, and acting City Recorder for Herriman City, of Salt Lake County, State of Utah. I do hereby certify that the foregoing minutes represent a true and accurate, and complete record of this meeting held on Wednesday, October 29, 2014.

Jackie Nostrom, City Recorder

Signage System For .... CITY OF HERRIMAN

Presented By

YESCO

Salt Lake Region

Salt Lake Office
1605 South Gramercy Road
Salt Lake City, UT 84104
801-487-8481

Version:

DSGN 48418R3

OPTION 1 1 D/F PYLON DISPLAY WITHMESSAGE CENTER SCALE: ½" = 1'-0"

QUANTITY: 1 MANUFACTURE & INSTALL

YESCO
DESIGN
1605 South Gramercy Rd.
Salt Lake City, UT 84104
801.487.8481

www.yesco.com

Revisions

No.	Date / Description
R1	date
R2	date 9-2-2014 INCREASED HEIGHT OF DISPLAY
R3	10-16-2014 CHANGED LOGO AND ADDED OPTION

Approval

Client Sign / Date

Landlord Sign / Date

Project Info.

12600 SO. @ BANGERTER
HERRIMAN, UT.

Acct. Exec: JEFF KRANTZ

Designer: CHRISTIAN

Date: 7.2.2014

CITY OF HERRIMAN
48418R2

scale: as noted

ART 1.0

File Name:

OPTION 2 1 D/F PYLON DISPLAY WITHMESSAGE CENTER SCALE: 3/8" = 1'-0"
QUANTITY: 1 MANUFACTURE & INSTALL

YESCO
DESIGN
1605 South Gramercy Rd.
Salt Lake City, UT 84104
801.487.8481
www.yesco.com

Revisions

No.	Date / Description
R2	9-2-2014 INCREASED HEIGHT OF DISPLAY
R3	10-16-2014 CHANGED LOGO AND ADDED OPTION

Approval

Client Sign / Date

Landlord Sign / Date

Project Info.

12600 SO. @ BANGERTER
HERRIMAN, UT.

Acct. Exec: JEFF KRANTZ
Designer: CHRISTIAN

Date: 7.2.2014

CITY OF HERRIMAN
48418R2

scale: as noted

ART 1.0

File Name:


KEARNS OQUIRRH PARK
FITNESS CENTER
FRIDAY
NIGHT FLICKS
5624 COUGAR LANE

HANSEN


SPORTS MALL
TODAY'S HOURS
5:00PM - 11:00PM
THE POINT AFTER
A PRIVATE CLUB
Lunch & Dinner - Fine Food & Beverages
Mirage Day Spa
2

Traffic Readability Assessment

YESCO

Introduction

Young Electric Sign Company, YESCO has been in business over ninety-four (94) years. We have over eighty (80) office locations, service branches, and franchise locations across both the United States and Canada. As the world's largest custom sign manufacture, YESCO possesses the experience, plant capacity, infrastructure and sound business practices that separate us from the competition

YESCO enjoys a rich tradition of delivering both complex and large scale projects around the world. Over 1,200 employees, including a professional staff of award winning designers and in-house structural engineers, licensed in 11 states.

Our goal and objective, approaching the two Gateway signs for Herriman City is to provide safe and effective communication.

This analysis represents the expertise of our organization, as well as the variable considered to bring about a recommendation for height, area, and technology. Our recommendation is detailed in the following pages. We recommend a minimum height of 20' with 75 square feet of active electronic graphic area.

Proposed Pylons

Variables used to determine display size and location

1) Traffic speeds

As drivers and passengers approach both displays at 45 MPH, they will be traveling at 66 feet per second (FPS).

To provide a safe and effective viewing window we will need 5 to 10 seconds of a viewing opportunity. This would provide multiple opportunities to safely read an un-obstructed message for safe and effective use and communication of the electronic units. The viewing window length will need to be 5 x 66' to 10 x 66' (330 feet to 660 feet)

2) Readable distance of words and graphics

There are a number of variables that affect the readable distance factor. Often these variables are controlled by registered trademarks, especially font style and colors.

- The readability is largely affected by font styles:

  Serif vs. **San-Serif**, **Condensed**, **Extended**, or *Script*

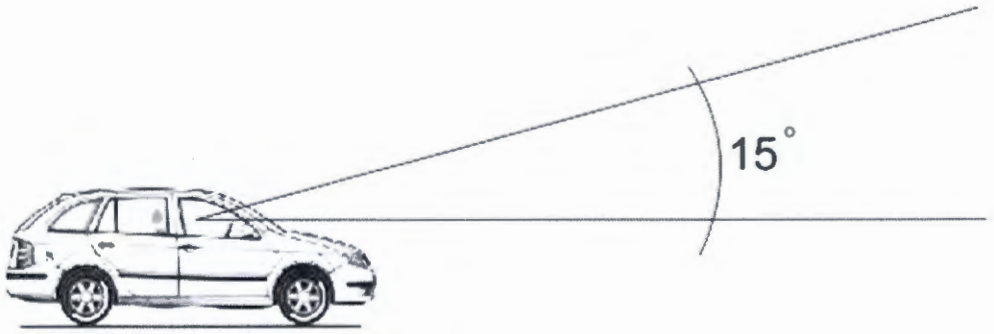
- Colors will help or hurt the contrasting value of **font color** and background color and help or hurt the readability of the message.
- As a standard the readable distance for a message is between 25' to 50' per inch of copy height. The range is derived from the National Eye Institute (NEI) Standards of Visual Acuity; as well as industry assessments of contrasting values, and font legibility.

Sign message assessment of the main pylon sign at the medical center:

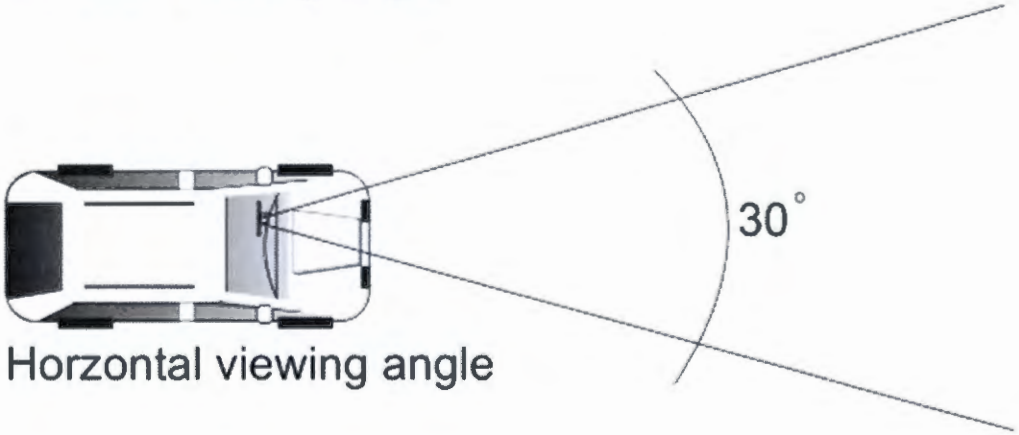
Wording / Graphic	Height	Font	Contrast	Readability	Readable Distance
"Herriman"	10.5"	Serif	Medium	1"=25'	262'
"City"	4"	Serif	Medium	1"=30'	100'
"HALLOWEEN"	14"	Serif	high	1"=40'	700
"CONCERT"	12"	Variable	High	1"=50'	600

3) Viewing angles for drivers and passengers

National studies show that there are 1.7 occupants per vehicle. In order for advertising to be safe and effective it must be placed inside a 15 degree vertical window and a 30 degree horizontal window.

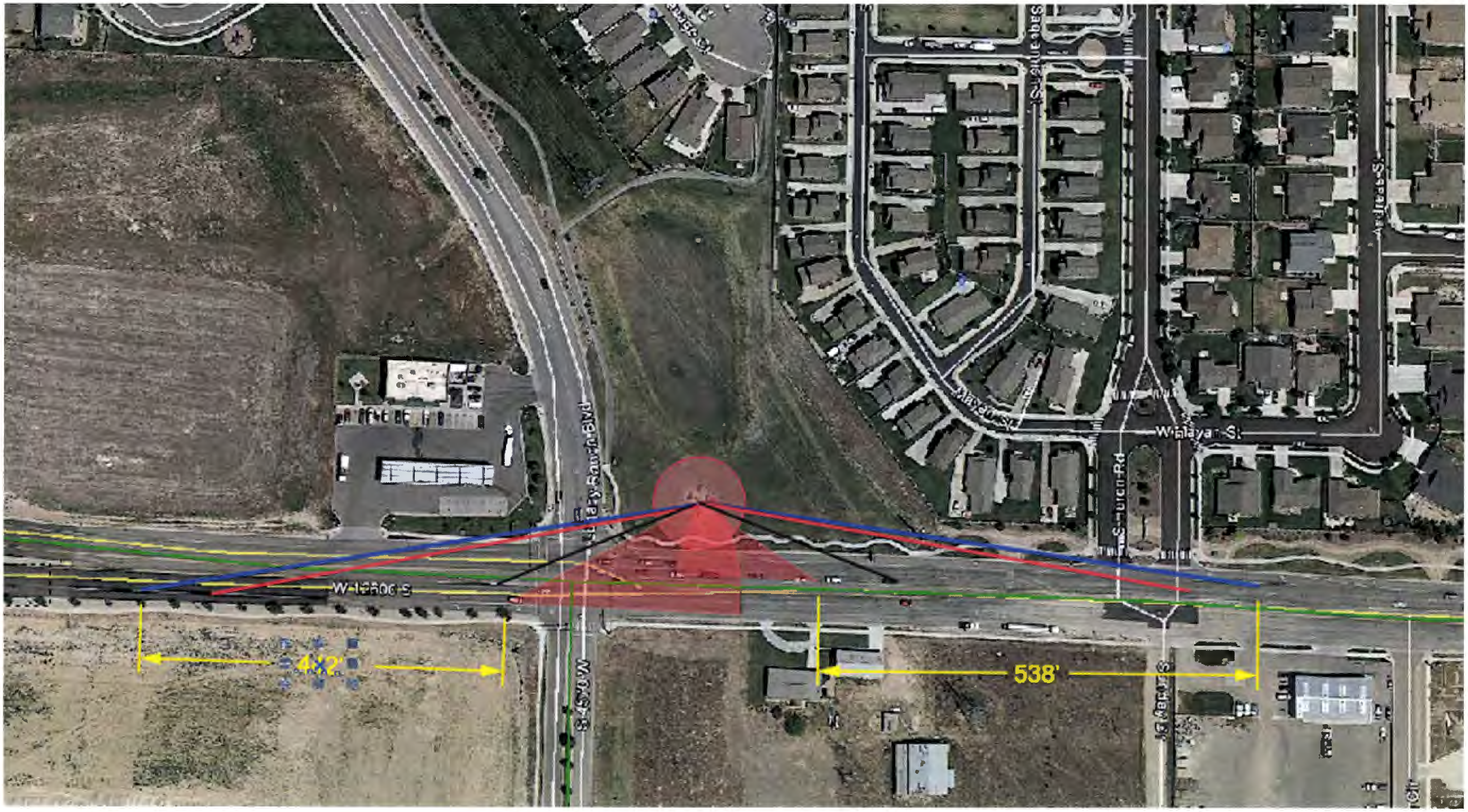


Vertical viewing angle



Horzontal viewing angle

The site assessment shows horizontal 30 degree viewing windows to determine the angle at which the sign will horizontally move outside of that optimal viewing angle for safe operation of a vehicle. The round red circle represents the point at which the vertical height leaves the 15 degree field of view.


538'


442'
535'

October 22, 2014

YESCO LLC
1605 South Gramercy Road
Salt Lake City, UT 84104

Proposal

Submitted To:

City of Herriman
13011 South Pioneer Street
Herriman, UT 84096
Attn: Destiny Skinner

Job Site Location:

City of Herriman
12600 South Bangerter Hwy
Herriman, UT 84096

Manufacture and install two (2) double face freestanding signs with illuminated "Herriman" copy and logo.

YESCO to provide and install four (4) full color LED's complete with host PC, PrismView software and on-line training.

All colors, sizes and specifications as per YESCO Design 48418R2.

NOTE: Customer to provide primary power and a static IP address to the sign locations. YESCO will provide concrete pads and rockwork. A Verizon cradlepoint and monthly fee will be additional (if applicable).

Option 1

16'6-3/4" high with 16mm 64 x 144 LED.

$110,140.00

Option 2

20'2" high with 20mm 88 x 176 LED.

$162,705.00

Option 3

20'2" high with 16mm 112 x 224 LED.

$202,333.00

Permit(s) to be billed additionally at cost (if required).

Jeff Krantz
Custom Account Executive
801-550-7305
jkrantz@yesco.com

Proposal is valid for 15 days. Prices quoted do not include electrical run to display and lighting controls, unless otherwise stated.

HERRIMAN CITY URBAN DEER CONTROL PLAN

Introduction

The presence of mule deer (meaning wild mule deer and referred to as deer herein) within the city limits of Herriman ("City") has increased significantly in the last 10 years. While the deer are a beautiful presence of nature, they are also a danger to human safety and destructive to public and private property. Development patterns within the City include parks, open space and trails which are a great benefit to our residents. These open space elements have also created favorable habitat for deer by providing food, water, and shelter.

With the amount of open space within the City it is anticipated that deer population will increase. This upsurge in the deer population increases associated dangers to human safety and destruction to public and private property.

To maintain public safety and protect public and private property, the City Council has determined that steps must be taken to reduce the number of deer within the city limits. In doing so, the City is considering the lethal removal of the deer using archery equipment to manage the deer population.

Purpose of Plan

Herriman City's Urban Deer Control Plan is intended to maintain a balance between the number of deer within the City and the negative impact they create for the residents. These negative impacts include auto/deer accidents, damage to private and public property, public safety, and the health of the deer herds. The City has determined that new management controls are needed.

Goals

- Improve safety on roads and highways by reducing the number of deer crossing roads and highways.
- Significantly reduce deer numbers within the City to numbers closer to pre development levels.
- Promote safe and cost effective deer removal, as a public service to the local community.
- Reduce private and public property damage caused by deer.

Deer Removal Method

Lethal removal of the deer using archery equipment

Bowhunter Selection Process

The City will select a small group of trained experienced bow hunters to participate in the program. Prior to being certified as an "urban bow hunting specialist," each proposed hunter selected by the City must demonstrate that they understand the applicable rules and pass a shooting proficiency test. Once that is completed, the City will certify the hunter as an "urban bow hunting specialist."

Urban Bow Hunter Specialist Participation Requirements

1. Maintain appropriate appearance and conduct and always be considerate of others.
2. Never drink alcohol or use drugs before or while hunting.
3. Only hunt in areas pre-approved by the City Program Coordinator.
4. Make sure no other bowhunter is already scheduled to hunt the area you are planning to hunt.
5. Obtain prior-written approval to hunt on private land. Respect landowners and their property.
6. Know and abide by all state, county and city hunting regulations. Be familiar with the requirements and obligations of the Herriman Urban Deer Control Plan.
7. Before hunting, know where you can take a safe shot and where you may not.
8. Be certified as an urban bow hunting specialist by the City, have valid written authorization and an urban deer control permit issued by City.
9. Only hunt from a blind/stand approved by the Herriman City Program Coordinator. Always wear a certified safety harness when hunting from a stand. Only high downward angling shots are allowed for maximum effectiveness and safety, and guaranteed arrow recovery.
10. Install your blind/stand to provide safe shot distance for area which you are hunting.
11. Baiting is only permitted to achieve a closer shot.
12. Take only responsible shots at deer that are relaxed and not on alert. Don't shoot unless you're certain that your arrow will strike the vitals and produce a quick and ethical kill.
13. Razor sharp broad heads are mandatory.
14. Only hunt with arrows that have a unique fletching and crest pattern that have been pre-approved by the Herriman City Program Coordinator.
15. Retrieve all arrows and arrow parts.
16. Once the deer is struck, do not trail until you're certain it has expired. It is the specialists' responsibility to ensure that no animal will travel very far after being hit.
17. Do not trespass on private property to retrieve a deer without permission. Contact the Herriman City Program Coordinator prior to seeking permission to initiate "retrieval trespass only". The local conservation officer and/or police may be of assistance when retrieval trespass cannot be obtained.
18. Deer hit or killed, and not retrieved must be reported to the Herriman City Program Coordinator.
19. Maximum shot distance for each blind/stand will be determined by Herriman City Program Coordinator.
20. Must have verification of completion of the State of Utah hunter education program.
21. Must be 18 years of age or older.
22. Properly tag the deer immediately upon recovery. Promptly notify the Herriman City Program Coordinator of all kills and submit the Deer Control Harvest Survey to the City for their records.
23. Avoid confrontations with neighbors and others.

24. Keep a low profile. You will be under the microscope, so be as inconspicuous as possible. When walking to and from your hunting area, try to minimize the appearance that you are hunting.
25. All evidence of the deer must be removed from the property. Field dress the deer at another permissible site.
26. Be discreet when removing a deer from the property. You must cover the deer with a plastic tarp while it's being removed keep it out of sight as much as possible. You may wish to use an alternate, less conspicuous route when removing a deer. Think about removal before you hunt.
27. Stay in your assigned area during the hunt. Do not take shortcuts across ground where you do not have permission to trespass.
28. Don't invite friends to hunt with you. Certification is for you and you only and is not transferrable.
29. Avoid confrontations, no matter the circumstances. Utah has a hunter harassment law that protects you while engaged in legal hunting pursuits but it is best not to argue with an antagonist. You may wish to report harassment to local authorities if confrontations continue.
30. The object of the program is to help control deer numbers inside the City limits. Specialists can only accomplish this goal by shooting deer. If a buck is inadvertently harvested, the antlers must be surrendered to the City for temporary storage until DWR can collect them.
31. The hunter is allowed to keep the animal if desired. Donations of venison are also encouraged. If the hunter does not desire to keep or donate the animal, then the hunter will take the animal to a game processor as designated by the City.

Specialists who are selected and qualified to participate in this program play a vital role in managing the ever-growing deer population. Specialist must, however, maintain safe, ethical hunting practices and be fully responsible for their actions if they're to be recognized as the best option for controlling deer. Mistakes and/or irresponsible behavior could jeopardize the program.

Hunter Identification Process

Cards will be issued by the City to all certified urban bow hunting specialists.

City of Herriman, Utah
Urban Deer Control Permit

0044

2014

DATE ISSUED:

DESCRIPTION: Urban Deer Control - Either Sex

AREA: Incorporated Boundaries of Herriman, Utah – Salt Lake County

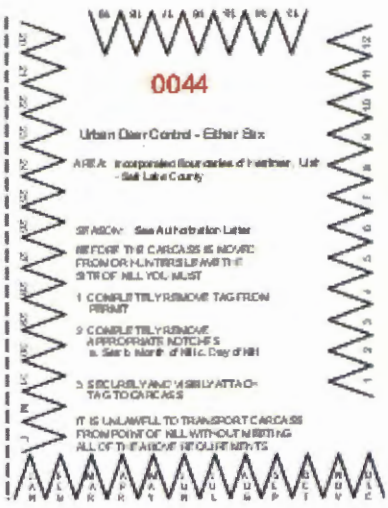
SEASON: See Authorization Letter

PHONE:
DOB:
WT:
HT:
EYE:
HAIR:
GENDER:

Name:
Address:
City, State, Zip:

Permit Holder Signature

This permit does not authorize you to trespass on private property.



City of Herriman, Utah
Urban Deer Harvest Survey

Please complete and return to the city upon successful harvest.

0044

Date of Harvest:

Location of Harvest:

Name:
Address:
City, State, Zip:

DOB:
PHONE:

Sex:

City of Herriman, Utah
Urban Deer Control Permit

2014

Name:
Address:
City, State, Zip:

DOB:
PHONE:

0044

Possible Retreat Items

Main Topics

> Budget

Budget Process Vision,Process
Finance Plan 5,10,15,20 year Options,
Taxes
Funding
Bonding
CAFR,PAFR Audit Recommendations

> Top Five

> Communications

WEB
Face Book
News letter
Spyder Text Tools
Educational
Twitter
Additions

> Benefits Study

> Form of Goverment

Secondary Topics

> Historical Area Defined

> Water (Secondary,)

Conservation

A policy to provide water to all residents.

> Economics

S T A F F R E P O R T

DATE: November 13, 2014

TO: The Honorable Mayor and City Council

FROM: Jackie Nostrom, City Recorder

SUBJECT: **Appointing a member to the Board of Trustees of the South Salt Lake Valley Mosquito Abatement District**

RECOMMENDATION:

Motion to approve Resolution No. _____ of the City Council appointing Carmen Freeman as a member of the Board of Trustees of the South Salt Lake Valley Mosquito Abatement District

BACKGROUND:

Mr. Lynn Crane resigned from the Board of Trustees of the South Salt Lake Valley Mosquito Abatement District leaving a vacancy.

DISCUSSION:

It is proposed that Mayor Carmen Freeman be appointed as a member of the board as provided by Utah Code Ann. §17B-1-304(6).

ALTERNATIVES:

Appoint another qualified individual to the Board of Trustees of the South Salt Valley Mosquito Abatement District.

FISCAL IMPACT:

There is no fiscal impact to the City.

Jackie Nostrom
City Recorder

HERRIMAN, UTAH
RESOLUTION NO. 14.___

A RESOLUTION OF THE CITY COUNCIL APPOINTING CARMEN FREEMAN AS A MEMBER OF THE BOARD OF TRUSTEES OF THE SOUTH SALT LAKE VALLEY MOSQUITO ABATEMENT DISTRICT

WHEREAS, the Herriman City Council ("Council") met in a regular session on November 19, 2014, to consider, among other things, appointing Carmen Freeman as a member of the Board of Trustees of the South Salt Lake Valley Mosquito Abatement District ("Board"); and

WHEREAS, there is a vacancy on the Board and the Council is the appointing authority with respect to such vacancy; and

WHEREAS, the Council desires to appoint Carmen Freeman as a member of the Board; and

WHEREAS, Utah Code Ann. § 17B-1-304(6) provides, among other things, that the appointing authority need not comply with the notice and appointment process set forth in Utah Code Ann. § 17B-1-304(2) and (3) if the appointing authority appoints one of its own member to the Board; and

WHEREAS, Carmen Freeman is a registered voter and is a members of the appointing authority as contemplated by the referenced statutes; and

WHEREAS, the Council determines that it is in the best interest of the inhabitants of Herriman to appoint Carmen Freeman as a member of the Board.

NOW, THEREFORE, BE IT RESOLVED that Carmen Freeman be appointed as a member of the Board of Trustees of the South Salt Lake Valley Mosquito Abatement District.

This Resolution, assigned no. 14.__, shall take effect immediately on passage and acceptance as provided herein.

PASSED AND APPROVED this 19th day of November, 2014.

HERRIMAN CITY

By: _____
Mayor Carmen Freeman

ATTEST:

_____
Jackie Nostrom, Recorder

S T A F F R E P O R T

DATE: November 13, 2014

TO: The Honorable Mayor and City Council

FROM: Jackie Nostrom, City Recorder

SUBJECT: **Appointing a City Treasurer**

RECOMMENDATION:

Motion to approve Resolution No. _____ to appoint a City Treasurer.

BACKGROUND:

Herriman City Code §1-7-3(A) requires that the Mayor, with the advice and consent of the City Council, shall appoint a qualified person to the office of the City Treasurer.

DISCUSSION:

Herriman City solicited qualified individuals to apply and interview for the position of City Treasurer. After an extensive interview process, an individual has been selected to fulfill the office of the City Treasurer.

FISCAL IMPACT:

This position has already been budgeted.

Jackie Nostrom
City Recorder

13011 S. Pioneer Street • Herriman, Utah 84096
(801) 446-5323 office • (801) 446-5324 fax • Herriman.org

HERRIMAN, UTAH
RESOLUTION NO. 14.__

A RESOLUTION APPOINTING A CITY TREASURER

WHEREAS, the Herriman City Council ("*Council*") met in regular session on November 19, 2014 to consider, among other things, appointing a City Treasurer, and

WHEREAS, UTAH CODE ANN. § 10-3-916 provides that the mayor shall appoint with the advise and consent of Council a qualified person to the offices of City Treasurer; and

WHEREAS, the Mayor hereby nominates _____ as the City Treasurer; and

WHEREAS, the Council has given advise for such appointments and hereby consents to such appointments; and

WHEREAS, after careful consideration the Council hereby determines that it is in the best interest of the health, safety and welfare of the citizens of Herriman to consent to the appointments of _____ as the City Treasurer; and

NOW, THEREFORE, BE IT RESOLVED by the Council that_____ be appointed as the City Treasurer.

This Resolution shall take effect immediately on passage and acceptance as provided herein.

PASSED AND APPROVED by the Council of Herriman, Utah this 19th day of November, 2014.

HERRIMAN CITY COUNCIL

_____
Carmen Freeman, **Chairman**

ATTEST:

_____
Jackie Nostrom, City Recorder

S T A F F R E P O R T

DATE: November 13, 2014

TO: The Honorable Mayor and City Council

FROM: The City Youth Council

SUBJECT: The Youth Council's Constitutional Documents

RECOMMENDATION:

To adopt the new Constitutional Documents (which include the Charter and the list of Offices and Responsibilities) and give the Youth Council power to act as stated therein.

Also, to invalidate the former Charter of the Youth Council.

BACKGROUND:

The Youth Council has been unhappy with the current bylaws, created five years ago at the creation of the Youth Council. We felt that our charter could give more guidance as to the function of the Youth Council and its offices. We worked on a new charter in October 2013, and created a committee for that purpose in Spring 2014. The committee has worked diligently, and has presented and discussed the proposed Constitutional Documents with the Youth Council as a Whole. The proposed Constitutional Documents consist of the proposed Charter and the proposed Offices and Responsibilities documents.

DISCUSSION:

The Youth Council's Constitution Committee decided to exclude possible activities and a recruitment calendar from the Constitutional Documents, as we desire the ability to adapt these functions of the Council at will. We included a statement of the purposes of the Youth Council as we see them, to give a framework for potential activities to be planned around.

ALTERNATIVES:

1. Disapprove wholly – declare the Youth Council unable to create its own Constitutional Documents
2. Disapprove – discard the proposed Constitutional Documents and request that the Youth Council reinvent the Documents (with suggestions for improvement)
3. Disapprove partially – suggest revisions to the Youth Council and request the Youth Council to present the revised Constitutional Documents at a later date

FISCAL IMPACT:

There is no fiscal impact to the City.

Herriman Youth City Council

HERRIMAN, UTAH
RESOLUTION NO. 14.

A RESOLUTION OF THE HERRIMAN CITY COUNCIL APPROVING THE HERRIMAN CITY YOUTH COUNCIL OFFICES AND RESPONSIBILITIES AND CHARTER

WHEREAS, the Herriman City Council ("*Council*") met in regular session on November 19, 2014, to consider, among other things, adopting the Herriman City Youth Council Offices and Responsibilities, and the Herriman City Youth Council Charter; and

WHEREAS, the Council finds that it is in the best interest of the citizens of the Herriman to adopt the Herriman City Youth Offices and Responsibilities, and the Herriman City Youth Council Charter.

NOW, THEREFORE, **BE IT RESOLVED** by the Council that the Herriman City Youth Council Offices and Responsibilities, and the Herriman City Youth Council Charter shall be as attached.

PASSED AND APPROVED by the Council of Herriman, Utah, this 19th day of November 2014.

HERRIMAN

_____
Mayor Carmen Freeman

ATTEST:

_____
Jackie Nostrom, City Recorder

Herriman City Youth Council

Offices and Responsibilities

Unapproved: Draft

All members of the Council

are required to attend and participate in Youth Council meetings unless granted a leave of absence by the Youth Council Advisor(s). They should also volunteer for roles within the council, carry out assignments from the council, propose applicable action to the council, uphold the purpose of the Youth Council, and serve the community of Herriman. Members should attend at least three City Council meetings and three Planning Commission meetings per term. They are also welcome to attend County Youth Council meetings and city court sessions.

Members of the council may request the formation of a committee as needed

Voting Officials

- Be a voting member of the council

Mayor

- Call an executive meeting annually, as outlined in article 4
- Conduct all general youth council meetings
- Help make agendas for general meetings
- Make assignments, incl. the filling of positions of absent members
- Form committees as needed, and appoint heads of such committees*
- In general meetings of the Council, shall vote only in a tie
- Serve as a member of the Committee on Funds
- Attend city council meetings at least one every two months to report actions, decisions, and needs of the city youth council to the city council, and to properly plan and coordinate with the City Council

Vice Mayor

- Assist the mayor
- Fill in for the mayor in his or her absence

Manager

- Make agendas for general meetings
- Publish an agenda for each general meeting one week before the meeting is held
- Keep record of all assignments made within the council
- Plan and carry out appropriate leadership training

- Serve as a member of the Committee on Funds

Recorder

- Provide input to the Manager concerning the making of agendas for general meetings
- Record attendance at general meetings of the youth council
- Keep a record of attendance of council members to general meetings, committee meetings**, service projects, and city-sponsored events
- Record minutes of each general meeting
- Arrange and compile a set of minutes of the general meetings of the youth council
- Periodically present minutes to the group for approval
- Publish unapproved minutes to the council at least 1 week before the following general meeting of the council
- Submit approved minutes to the PIO for publication

Intercouncil Officer

- Serve as a delegate to the County Youth Council, and attend the majority of County Council meetings
- Report to the City Youth Council on County Youth Council action following each County Youth Council meeting
- Coordinate joint efforts with other Youth Councils, with permission from Voting Members of the Council

Public Information Officer

- Write and publish articles regularly (at least quarterly) about the youth council and its activities, coordinating with the City Public Information Officer
- Advertise events planned by the Council and its Committees
- Manage the disclosure of information from the Youth Council and its Committees to the public, including approved minutes

Events Manager

- Schedule tours of public works facilities, fire stations, police stations, etc. as requested by the the council
- Act as liaison between the City Events Manager and the Youth Council to coordinate volunteers for city events
- Serve as a member of the Committee on Funds
- Record attendance of YC members at city events, and report attendance to the Recorder
- Act as chairperson for the Committee on Service and Events

Committee on Service and Events

- May contain as many members as is seen fit by the Events Manager, Youth Mayor, and Youth Manager.
- Act under the authority of the Events Manager
- Plan and execute youth-centered city events
- Plan and carry out service projects in our community
- Recommend and carry out safety measures to be taken for each event and activity

Attorney

- Ensure all actions of the Youth Council are in harmony with applicable laws, statutes, and policies
- Lead recruitment efforts as chairman of the Committee on Recruitment and Application
- Recommend to the Youth Mayor all contributing members of the Council for another term

Treasurer

- Advise the Council on the spending of funds
- Report to the Council on the state of Council funds at least once every two months, and when called upon
- Report annually to the City Council on the accruement and spending of Youth Council funds
- Request monetary allotment from the City Council as appropriate
- Assume responsibility for the actions of The Committee on Funds (serve as chairman)

Committee on Funds

- Act under the authority of the Treasurer
- Composed of the Mayor, Manager, Treasurer, and Events Manager
- Plan and execute appropriate fundraising efforts
- Write grants
- Perform additional duties related to gaining funds required to achieve the goals of the Council
- Organize a budget annually for the Youth Council, and see that it is followed

Youth Council Advisor(s)

- Be physically responsible for Youth Council funds
- Have the final say in how Youth Council funds are earned and spent
- Invite guests to the general meetings of the Youth Council who can add to council discussion and aid professional growth

Herriman City Mayor

- Taking into account recommendations from the Youth Mayor and City Council, appoint Herriman youth to the Youth Council

*Committees shall generally consist of 3-8 members of the council, not including the chairperson of the committee. Larger committees may be organized with the consent of the committee chair and the youth manager.
**Chairmen of committees shall take attendance at each committee meeting and report it to the Youth Recorder

Herriman City Youth Council Charter

Unapproved: Draft

We, the Youth Council of Herriman, in order to provide a voice in the city government, to establish a leadership education, to create leadership opportunities for the youth of the city, and to exhibit civic responsibility, do ordain and establish this constitution for the Youth Council of Herriman City.

Article 1: Composition

Every youth who has completed the application process, studied this constitution, and has been sworn in as a Member of the Herriman City Youth Council shall be considered a member of the Youth Council and shall have one vote in the Executive meeting of the Youth Council.

Officers of the council may be elected from the body of the council in the Executive meeting, and are expected to serve in the capacities of a member of the council in addition to their duties of officership.

One or more adult advisors may be appointed to assist the council in its efforts. Adult advisors should have experience in government or politics sufficient to effectively guide and support the youth council.

Article 2: Voting

A majority of the Voting Council shall constitute a quorum to do business within the Youth Council.
A majority vote of those council members who are present shall be sufficient to do business.

Article 3: Action

The Youth Council shall have power to plan and execute any appropriate activity that would assist in the attainment of the purpose of the Youth Council.

Article 4: Executive Meeting

Annually, the Youth Mayor shall call an executive meeting.
In the executive meeting, all officers shall be released from their term of office.
The Youth Mayor shall be elected
The Youth Mayor shall recommend a member of the council to be the mayor pro tem
The council, not including the youth mayor, shall vote on the mayor's recommendation
If the council shall by majority vote elect the recommended member to be the mayor pro tem, the meeting shall continue and each of the other offices shall be filled by majority election by the present youth council.

Article 5: Oath of Office

All members of the youth council shall take an oath of office at the beginning of each term in office.

Article 6: Release from Office

If an officer does not fulfill his or her duties, the Youth Council Advisor(s) may present the member to the City Council for official release from office.

Any member of the council wishing to resign from his or her position as a member of the council shall submit a written resignation to the Recorder and Youth Council Advisor(s) at least 21 days before his or her cessation of duty. The resigning officer may cancel his or her resignation until the seventh day before his cessation of duty.

Resignation does not disqualify members from serving future term(s).

An member of the Youth Council who ceases to be a member for any reason shall automatically be removed from their office within the Youth Council, and shall not continue therein.

Article 7: Terms of Office

The City Council shall appoint members of the youth council, and members of the youth council shall be sworn in at a public City Council meeting.

A term of service on the Youth Council shall be one year.

Youth Council members shall hold their seats until the expiration of their term, at which time they must seek reappointment.

Youth Council Elect shall be mentored by Youth Council members during the council elect phase between appointment and swearing in.

S T A F F R E P O R T

DATE: **November 12, 2014**

TO: The Honorable Mayor and City Council

FROM: Blake Thomas

SUBJECT: **Public Hearing and consideration of a resolution encouraging partnership with the State of Utah to address transportation funding**

RECOMMENDATION:

Motion to Approve Resolution No. _____ to encourage partnership with the State of Utah to address Transportation Funding.

BACKGROUND:

The city has annually received B&C road funds to fund road maintenance but the funding is not keeping up with maintenance costs. The current motor fuel tax of 24.5 cents per gallon of fuel was implemented in 1997 and has not been adjusted for inflation since it was implemented. Additionally, vehicles are becoming more fuel efficient. As a result municipalities across the state are using general funds to supplement the shortage for road maintenance. City officials and other decision makers across the state are reviewing options for funding mechanisms to bridge the gap in maintenance costs and allow general fund to be spent on other items such as police and fire services.

DISCUSSION:

Issues with population growth, rising construction costs, reduced buying power, and decreasing air quality are being addressed with the proposed bill.

ALTERNATIVES:

- Implementation of a ¼ cent local option statewide sales tax
- Study and increase the motor fuel tax accordingly with an index to the tax so that it could be increased/decreased to adjust with the inflation rate

FISCAL IMPACT:

This is simply a resolution to proclaim the council's support of the ¼ cent local option sales tax and the study of the motor fuel tax. Any decision would not necessarily have and fiscal impact on the City's budget.

HERRIMAN CITY

RESOLUTION NO. 14- _____

A RESOLUTION OF THE CITY COUNCIL ENCOURAGING PARTNERSHIP WITH THE STATE OF UTAH TO ADDRESS TRANSPORTATION FUNDING.

WHEREAS, the Herriman City Council ("Council") met in regular meeting on November 19, 2014, to consider, among other things, adopting a resolution encouraging partnership with the State of Utah to Address Transportation Funding; and

WHEREAS, the creation and maintenance of transportation infrastructure is a core responsibility of state and local government; and

WHEREAS, a safe and efficient transportation system creates the foundation for economic growth and improved quality of life; and

WHEREAS, Utah's population is expected to grow by 60% by 2040, and Herriman's population is expected to grow by 195% by 2040; and

WHEREAS, improving transportation in Utah and enhancing transit will help local and State budgets and lead to improved air quality and public health outcomes; and

WHEREAS, research from the Utah Department of Transportation indicates that road maintenance efforts save cities from road rehabilitation that costs six times as much as maintenance, and saves cities from road reconstruction that costs ten times as much as maintenance, and

WHEREAS, the current transportation funding model is inefficient and outdated and the Council respectfully request that the State work with the City and other local governments to reevaluate transportation funding.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL AS FOLLOWS:

SECTION 1. Sales Tax for Transportation. The Council supports proposals which meet local transportation needs while providing for future growth. Herriman is using general fund monies to pay for transportation needs putting other municipal needs at risk. The Council supports studying a transportation funding option which would allow for the statewide implementation of a quarter cent ($0.0025) local option sales tax to be used for transportation.

SECTION 2. Motor Fuel Taxation. The Council supports studying motor fuel taxes. Motor fuel taxes provide most of the transportation dollars for State and local governments through a revenue sharing formula known as "B and C" road funding. However, motor fuel taxes are not equitably borne by road transportation users with the advent of more gasoline efficient vehicles, electric and hybrid vehicles, and other fuel-saving technologies. Additionally, since the motor fuel tax has not been adjusted since 1997 and is not indexed, the purchasing power of the

current funding is grossly inadequate. The Council respectfully requests the Utah Legislature to carefully examine this issue as they are solely responsible for the administration of these taxes.

SECTION 3. Investment in Transit. The Council supports continued investment in public transit as outlined in Utah's Unified Transportation Plan. Public transit can help relieve traffic and improve air quality. As most public transit also involves a degree of walking it can be a factor in improving public health as well.

SECTION 4. Expanded Transportation Options. The Council supports the expansion of the uses for which transportation funding can be spent to reflect the individual needs and discretion of local governments. Local governments are formed by local residents and empowered to solve local issues including transportation. Transportation, air quality, and public health can be enhanced when alternative methods of transportation are considered and included as eligible for transportation funding. Examples of items that should be included in an enhanced definition of transportation include trails, transit, bicycle lanes, sidewalks, safety equipment, signage, sidewalks, landscaping, lighting, and other needs.

SECTION 5. Coordinating Efforts. The Council directs City staff to work with State elected officials, the Utah Transportation Coalition, and the Utah League of Cities and Towns in developing solutions for transportation funding.

SECTION 6. Distribution of this Resolution. A copy of this Resolution shall be sent to the Governor of Utah, the President of the Utah State Senate, the Speaker of the Utah House of Representatives, Senator Aaron Osmond, Senator Daniel Thatcher, Representative Dan McCay, Representative John Knotwell, Representative Susan Duckworth, Mayor Ben McAdams, Adam Trupp, the Executive Director of the Utah Association of Counties, Ken Bullock, the Executive Director of the Utah League of Cities and Towns, Carlos Braceras, the Executive Director of the Utah Department of Transportation, H. David Burton, the Chairman of the Board of Trustees of the Utah Transit Authority, and any other City staff determines appropriate.

SECTION 7. Effective Date. This Resolution shall become effective immediately upon passage.

HERRIMAN CITY COUNCIL

By _____
Carmen Freeman, Mayor

ATTEST:

_____
Jackie Nostrom, City Recorder

S T A F F R E P O R T

DATE: **November 12, 2014**

TO: The Honorable Mayor and City Council

FROM: Blake Thomas

SUBJECT: **Consideration to approve an Amendment to the Storm Drain Master Plan**

RECOMMENDATION:

Motion to Approve Ordinance No. _____ to adopt an amendment to the Storm Drain Master Plan.

BACKGROUND:

The Storm Drain Master Plan was updated after the Midas Creek Annexation to consider the new area in the city. Herriman City Retained Bowen Collins and Associates to develop Storm Drain Master Plan with recommended improvements.

DISCUSSION:

The drainage areas that contribute runoff to both Midas and Copper Creek are prone to overland sheet flow during the summer and early fall, and have a high potential to flood areas that are being developed. The area west of Herriman is largely dry farm land. Sometimes those farms are allowed to be idle for an extended period of time without any vegetation, which greatly increases storm water runoff potential. The top soils in the area contain a lot of clays and fine sands that have a high runoff potential. Property bordering farmland on the west side of Herriman has had problems with flooding from runoff. Due to the flooding potential, development along the western edge of Herriman should be protected from shallow flooding.

Midas Creek ends immediately upstream of 6000 West, and in order to meet National Flood Insurance Program criteria a Letter of Map Revision will need to be submitted to FEMA that extends the detailed floodplain study upstream of 6000 West prior to development. As development in the area discharges storm water runoff into Midas Creek, the channel will flow more regularly, which may increase erosion potential. To protect the channel from potential erosion, it is recommended that Midas Creek be armored as development occurs. To prevent development from being damaged by flood and crossing hazards associated with Midas Creek, structures shall be set back an appropriate distance to the top of the Midas Creek bank. Salt Lake County requires that 20’ be provided on one side of Midas Creek and 5’ on the other side, and Herriman should follow that standard.

Copper Creek currently discharges into the storm drain system at 6000 West and Herriman Parkway. The Herriman Storm Drain Master Plan indicates that the 60-inch storm drain pipe in Herriman Parkway has capacity for storm water runoff in existing conditions, but not for projected full build-out conditions. The pipe collects runoff water from Copper Creek, Butterfield Creek, and from western portions of Herriman City. To avoid exceeding capacity, Copper Creek will need to be routed into Midas Creek near 6400 West.

FISCAL IMPACT:

There is no fiscal impact to the City.

Herriman, Utah
Ordinance No. 14-

AN ORDINANCE OF THE HERRIMAN CITY COUNCIL ADOPTING AN AMENDMENT TO THE STORM DRAIN MASTER PLAN

WHEREAS, the Herriman City Council ("Council") met in regular session on November 19, 2014, to consider, among other things, adopting an amendment to the storm drain master plan; and

WHEREAS, UTAH CODE ANN. § 10-9a-401 provides that a city must enact a master plan establishing guidelines for the present and future needs of the municipality; and growth and development of all or any part of the land within the municipality; and

WHEREAS, UTAH CODE ANN. § 10-9a-403 provides that a proposed master plan shall include, at a minimum, with the accompanying maps, charts, and descriptive and explanatory matter, the Planning Commission's recommendations for a land use element, a transportation and traffic circulation element, and an estimate of the need for the development of additional moderate income housing within the City; and

WHEREAS, UTAH CODE ANN. § 10-9a-403 provides that the Planning Commission prepare and recommend to the Council the proposed master plan along with elements for land use, transportation, water, storm drainage, parks and trails, and moderate income housing; and

WHEREAS, UTAH CODE ANN. § 10-9a-403 provides that the plan may include areas outside the boundaries of the municipality if, in the planning commission's judgment, those areas are related to the planning of the municipality's territory; and

WHEREAS, before preparing or amending the Storm Drain Master Plan, Herriman provided written notice of its intent to prepare or amend the Storm Drain Master Plan, and the notice was posted on the Utah Public Notice Website; and

WHEREAS, UTAH CODE ANN. § 10-9a-403 provides that the Planning Commission hold a public hearing and provide notice as requested by UTAH CODE ANN. § 10-9a-204 at the public hearing; and

WHEREAS, notice of the Planning Commission public hearing on the Amended Storm Drain Master Plan was published in *The Salt Lake Tribune* and *Deseret News* and posted on the City website on August 4, 2014; and

WHEREAS, notice of the Planning Commission public hearing on the Amended Storm Drain Master Plan was published on the Utah Public Notice Website on August 4, 2014 and

WHEREAS, the Planning Commission held a public hearing on August 7, 2014, at approximately 7:00 p.m. regarding the Amended Storm Drain Master Plan; and

WHEREAS, the Planning Commission recommended approval of the Amended Storm Drain Master Plan in a meeting held on August 7, 2014, at 7:00 p.m.; and

WHEREAS, pursuant to City of Herriman Ordinance, the City Council must hold a public meeting allowing public input at said public meeting; and

WHEREAS, the City Council held such a public meeting on October 22, 2014 in the City Council Chambers; and

WHEREAS, the Council finds that it is in the best interest of the citizens of Herriman to adopt the Amended Storm Drain Master Plan which was recommended by the Planning Commission for approval; and

NOW, THEREFORE, be it ordained by the Council that the Amended Storm Drain Master Plan be adopted, a copy of which is set forth in exhibit "A" to this Ordinance.

PASSED AND APPROVED this 19th day of November, 2014.

By:_____
Carmen Freeman, Mayor

ATTEST:

_____
Jackie Nostrom
City Recorder

Bowen Collins & Associates, Inc.
CONSULTING ENGINEERS

TECHNICAL MEMORANDUM

TO: Herriman City Engineer, Blake Thomas P.E.
13011 S. Pioneer Street
Herriman, UT 84096

Draft

FROM: Craig Bagley P.E., and Kameron Ballentine P.E.
Bowen Collins and Associates
154 East 14000 South
Draper, UT 84020

DATE: May 15, 2014

SUBJECT: Storm Drain Improvements for Annexed Section of Herriman

INTRODUCTION

On July 1, 2014, Herriman City plans to annex approximately 300 acres of unincorporated Salt Lake County (annexation area) west of the City's current Northwest boundary. To prepare for the annexation, Herriman City retained Bowen Collins and Associates (BC&A) to develop a Storm Drain Master Plan with recommended improvements and to update to the Impact Fee Facilities Plan (IFFP) to include storm drain projects for the annexation area so Herriman can collect the appropriate impact fees. The purpose of this memorandum is to append the existing 2012 Herriman Storm Drain Master Plan (Herriman SDMP) to include the annexation area.

GENERAL CONDITIONS

Copper Creek and Midas Creek both run through the annexation area that is currently undeveloped farmland. Figure 1 shows the creeks and the proposed annexation area.

The drainage areas that contribute runoff to both Midas and Copper Creek are prone to overland sheet flow during the summer and early fall, and have a high potential to flood areas that are being developed. The area west of Herriman is largely dry farmed. Sometimes those farms are allowed to be idle for a year or more without any vegetation (fallow farm land), which greatly increases storm water runoff potential. Furthermore, the top soils in the area contain a lot of clays and fines and have a high runoff potential. Historically, property bordering farmland on the west side of Herriman has had problems with flooding from runoff generated on fallow farm land. Because of the flooding potential, development along the western edge of Herriman (including the annexation area) should be protected from shallow flooding.

South Jordan

Herriman City

Salt Lake County
Unincorporated Area

Annexation
Area

11800 South

11800 South

Bacchus Hwy

6400 West

6000 West

Midas Creek

Midas Creek

Historic Copper Creek

No Defined Copper
Creek Channel

Butterfield Creek

Pond at 6400 West Has Historically Been
The Dicharge Point For Copper Creek

Pond at
6400 West

Intake Structure for Copper Creek

60" Storm Drain Pipe

Herriman Parkway

Freedom Hill Way

Hill Stone Dr

Barn Rd

Plow Ln

Bale Dr

Cow Dr

Bull St

Musk Deer Ln

Freedom Park Dr

Anthem Park Blvd

Herriman High

Herriman Cemetery

Silver Sky Dr

1300

100 W

Legend

- Municipal Boundary
- Existing Creek
- Copper Creek Pond
- Annexation Area

Existing Storm Drain Inventory

- Manhole/Catch Basin
- Pipe

NORTH:

NORTH

SCALE:

0 1,000 Feet

ANNEXATION AREA

HERRIMAN
STORM DRAIN
MASTER PLAN UPDATE

Bowen Collins & Associates, Inc.
CONSULTING ENGINEERS

FIGURE NO.
1

Midas Creek

The section of Midas Creek between Bacchus Highway and Mountain View Corridor is an earth-lined, ephemeral stream that only flows in response to a significant storm event. In addition to its natural drainage area, it also receives storm drain runoff for the northern part of Herriman. Previous studies have indicated that Midas Creek has a limited capacity to receive storm water runoff from Herriman.

Copper Creek

Copper Creek is an ephemeral stream that has largely been farmed over. It does not have a clearly defined channel in some areas between Bacchus Highway and 6000 West. The majority of the runoff in Copper Creek currently is collected in the Herriman storm drain system at the Herriman Parkway and 6000 West and is conveyed to Midas Creek just upstream of the Mountain View Corridor.

Copper Creek actively flows during major storm events. Storm water is conveyed through the fallow farm fields along the historic Copper Creek drainage. Because of the high runoff potential and the potential flood hazard, runoff in the Copper Creek drainage needs to be properly managed to prevent flooding of future development in the annexation area.

STORM DRAIN MODEL

The storm drain computer model that was developed as part of the Herriman SDMP was expanded to include the area that will be annexed. Because there is no development in the annexation area, only the future conditions model was modified with the build-out conditions. Model parameters for the annexation area were developed using the same methodologies as those used in developing the Herriman SDMP. The design storm was not altered for this analysis.

GENERAL STORM DRAIN RECOMMENDATIONS

This section discusses general recommendations associated with this study. The recommendations presented in this section are development driven, and only serve future development. The improvements are considered project improvements, because they would only serve one or two developments and are not eligible to be paid for using impact fees.

Detention Requirements

The Herriman SDMP and City Ordinance requires that post-development storm water discharges into Midas Creek be limited to a maximum of 0.2 cfs/ac during the 100-year storm. To account for runoff from major streets that typically is not routed through local detention facilities, it is recommended that development be required to detain to a maximum of 0.15 cfs/ac. Based on discussions with the City and to be consistent with the Herriman SDMP, all detention facilities in the annexation area will be considered project improvements rather than system improvements.

They will have to be constructed on the property after an appropriate planning and design process.

Midas Creek

The following recommendations are associated with Midas Creek within the Herriman Municipal Boundary and annexation area.

LOMR - The mapped FEMA floodplain associated with Midas Creek ends immediately upstream of 6000 West. To meet National Flood Insurance Program (NFIP) criteria a Letter of Map Revision (LOMR) will need to be submitted to FEMA that extends the detailed floodplain study upstream of 6000 West, prior to development. It is recommended that the LOMR cover from 6000 West to Bacchus Highway.

Armor Midas Creek - Midas Creek is an earth-lined channel that only flows a few times a year. As development in the area discharges storm water runoff into Midas Creek, the channel will flow more regularly, which may increase erosion potential. To protect the channel from potential erosion, it is recommended that Midas Creek be armored as development occurs. A study will need to be completed by the developers and reviewed by the City that estimates the velocity in Midas Creek and that approximates channel armor size. Data from the LOMR could be used by the developer to size the armoring.

Set-Back Distance and Easements – To prevent development from being damaged by flood and crossing hazards associated with Midas Creek, it is recommended that all structures be set back an appropriate distance to the top of the Midas Creek bank. Herriman City should also require that maintenance easements along the channel be granted by developers along both sides of the creek.

Copper Creek

The following recommendations are associated with Copper Creek in the annexation area.

Move the Point of Discharge **–** As state previously, Copper Creek currently discharges into the storm drain system at 6000 West and Herriman Parkway. The Herriman SDMP indicates that the 60-inch storm drain pipe in Herriman Parkway has capacity for storm water runoff in existing conditions, but not for projected full build-out conditions. The 60-inch pipe in Herriman Parkway collects runoff from Copper Creek, Butterfield Creek, and from western portions of Herriman City. To avoid exceeding the capacity of the 60-inch pipe in Herriman Parkway, Copper Creek will need to be routed into Midas Creek near 6000 West.

Based on analyses performed as part of Salt Lake County's Southwest Creek and Canal Study, the Midas Creek channel and culvert at 6000 West have capacity for 1,000 cfs. With the additional flow from Copper Creek, the estimated peak design flow in Midas Creek at 6000 West would be 805 cfs.

Channelize or Enclose Copper Creek **–** Copper Creek is not a clearly defined channel. It will need to be channelized or enclosed prior to development of the annexation area to facilitate safe management of runoff in the area. A preliminary design report, including an alignment study should be completed prior to construction of the recommended facility. For Master Planning purposes, an alignment and channel slope were assumed for cost estimating purposes.

LOMR **-** The current-effective FEMA flood zone designation associated with the reach of Copper Creek in the annexation area is an approximate floodplain (A Zone). NFIP requirements indicate that if a proposed development that is at least 5 acres or 50 units adjoins an A Zone floodplain, then the floodplain map needs to be revised to include Base Flood Elevations (BFEs). To meet this requirement, it is recommended that a LOMR be submitted to FEMA to revise the A Zone floodplain prior to developing the annexation area.

Midas and Copper Creek Coordination

Midas Creek and Copper Creek are Salt Lake County facilities. Any channel armoring, channelization, new storm drain outfalls, or other construction activities on either creek will need to be reviewed and permitted by the County. Both Creeks are also waters of the State of Utah, and construction activities will need to be permitted by the State of Utah.

Developer Requirements

The annexation area has a high potential of experiencing shallow flooding from runoff generated on the farm land west of the City (see General Conditions Discussion). Prior to development it is recommended that developers complete a hydrology study for city review to estimate the peak runoff that could be generated from a 100-year design storm for upstream drainage areas. The hydrology study will need to conservatively assume that the farm fields to the west of the development are fallow and free from vegetation. Diversion dikes and channels to manage runoff should be constructed by developers to protect new homes from flooding.

South Jordan

Herriman City will need to coordinate with South Jordan City to ensure that a pipeline or ditch is constructed that will collect storm water runoff from the area north of 11800 South in South Jordan.

RECOMMENDED SYSTEM IMPROVEMENTS

This section identifies the recommended storm drain system improvements needed to meet Herriman's required level of service for the annexation area. For a more detailed discussion of how the cost estimates were developed or Herriman's required level of service, see the Herriman SDMP. Figure 2 shows the recommended system improvements for the annexation area. The recommended system improvements identified in Table 1 and shown in Figure 2 are all eligible to be paid with impact fees as there are no existing facilities or deficiencies in the undeveloped area. Herriman's IFFP has also been updated with the recommended improvements identified in this Storm Drain Master Plan.

Only Collects Runoff From the South Half of the Road. South Jordan (who owns the North Half of the Road) Will Need To Install There Own Pipe to Collect Storm Water Runoff.

Existing Berm and Channel to Protect Development in South Jordan.

Coordinate with South Jordan to Ensure a Pipeline or Drainage Ditch is Constructed to Prevent Runoff From Crossing 11800 South

Small Debris Basin that collects runoff and overflows into 11800 South at 6000 West during major storm events. Coordinate with South Jordan to ensure a pipeline or other flood control means are constructed.

Bacchus Hwy

11800 S

11800 South

7.5 cfs
P 28

7.5 cfs
P 29

11800 South

Developer to Complete Hydrology Study and to Construct Berm and Channel to Protect Development from Flooding

17 cfs
P 30

8 cfs
P 32

17.5 cfs
P 31

6400 West

6000 West

Midas Creek

Park: Open Space

Intercept Copper Creek in Open Channel and Discharge into Midas Creek

350 cfs

350 cfs Represents Runoff from Copper Creek Drainage with 100-year Storm on Fallow Farmland

Re-Establish Historic Copper Creek By Constructing an Open Channel or by Piping Copper Creek

27.4 cfs
P 33

Herriman Parkway

Historic Copper Creek

Developer to Complete Hydrology Study and to Construct Berm and Channel to Protect Development from Flooding

Construct Berm to Protect Development from Flooding

Construct Collection Box on Existing 48" Storm Drain Pipe to Collect Storm Water Runoff From Farm Fields

Butterfield Creek

Legend

- Proposed Berm and Channel
- Proposed New Open Channel

Proposed Storm Drain Pipe

Size (in)

- 18
- 24
- 36
- Existing Creek

Subbasin In Annexation Area

- Subbasin Boundary
- Detain to 0.15 cfs/ac
- Discharge Point of Proposed Development

Contours

- Minor (1 ft)
- Major (5 ft)

Existing Storm Drain Inventory

- Manhole/Catch Basin
- Pipe

Pipe/Channel Key

XX cfs — Design Flow

P/OC XX — Identifier

Pipe/Channel (See Legend or Cost Estimate For Sizing)

NORTH:

NORTH

SCALE:

0 1,000 Feet

RECOMMENDED IMPROVEMENTS

HERRIMAN

STORM DRAIN MASTER PLAN UPDATE

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FIGURE NO.

2

Storm Drain Trunklines

Table 1 summarizes the recommended trunkline improvements for the annexation area. The costs summarized in Table 1 are planning-level costs that include construction, engineering, administration, legal fees, manholes and catch basins.

Table 1
Storm Drain Trunkline Improvements

Project ID	Total Length (ft)	Diameters (in)	Cost
P 28[1]	1,340	18	$219,643
P 29[1]	1,880	18	$296,488
P 30	1,190	24	$196,976
P 31	900	24	$158,405
P 32	890	18	$139,231
P 33	1,270	36	$297,760
Total	**-**	**-**	**$1,308,000**

[1] The recommended pipe in 11800 South that only collects storm water runoff from the south half of the road (which is maintained by Herriman). South Jordan (which maintains the north half of the road) will need to collect their storm water runoff into their own pipe.

Storm Drain Channels

The only recommended channel project that is a system improvement will be the Copper Creek channel re-routing. The conceptual cost estimate for channelizing Copper Creek is presented in Table 2.

Table 2
Recommended Channel Improvements

Channel ID	Improved Channel Length (ft)[1]	Assumed Bottom Width (ft)	Assumed Channel Depth (ft)[2]	Cost
Copper Creek	4,830	7	6	$1,012,000

[1] Total Length if Copper Creek Discharges into Midas Creek at 6400 West

[2] Channel Depth includes 1 foot of freeboard

OTHER MASTER PLAN RECOMMENDATIONS

The hydrologic and hydraulic models developed as part of the this SDMP are based on data obtained during field surveys, aerial photos, topography from AGRC, and information provided to Herriman City from potential developers.

The master plan process is used to develop general storm drain pipe sizes, locations, and construction cost estimates. The estimated flow and pipe diameters were developed from computer models that should be refined with detailed analyses and data as it becomes available during the development process. This master plan is developed based on common assumptions and uniform design criteria to ensure uniformity in the recommended improvements and the cost estimate. This master plan does not include details such as exact alignment, slope, depth and capacity of the pipe; exact location of the future storm drain facilities; utility conflicts; permitting requirements; economic climate; inflation costs; means and methods of construction; etc. During the design phase of the recommended improvements, a detailed hydrologic and hydraulic analysis should be performed to identify the final pipe sizes, flow rates, and slopes of the proposed storm drain pipes. A pre-design report that documents the pipe sizes, flow rates, models results, detailed cost estimate, and addresses other pertinent design questions should also be prepared prior to design and construction to refine the general recommendations made in the master plan documents.

S T A F F R E P O R T

DATE: **November 12, 2014**

TO: The Honorable Mayor and City Council

FROM: Blake Thomas

SUBJECT: **Consideration to approve an Amendment to the Storm Drain Impact Fee Facilities Plan**

RECOMMENDATION:

Motion to Approve Ordinance No. _____ adopting the 2014 Storm Drain Impact Fee Facility Plan.

BACKGROUND:

The Storm Drain Impact Fee Facilities Plan was updated after the Midas Creek Annexation to include this new area of the city.

DISCUSSION:

The improvements outlined in the IFFP will handle the drainage for the development that will take place in the annexation area. As this area develops, Herriman City's flooding risk will be reduced in areas that have historically been prone to flooding. The improvements identified are eligible to be funded by Storm Drain Impact Fees.

FISCAL IMPACT:

There is no fiscal impact to the City.

Herriman, Utah
Ordinance No. 14-__

AN ORDINANCE ADOPTING THE 2014 STORM DRAIN IMPACT FEE FACILITY PLAN

WHEREAS, the Herriman City Council ("Council") met in regular meeting on November 19, 2014, to consider, among other things, adopting the 2014 Storm Drain Impact Fee Facility Plan ("Storm Drain Plan"); and

WHEREAS, before preparing or amending the Storm Drain Plan, Herriman provided written notice of its intent to prepare or amend the Storm Drain Plan, and the notice was posted on the Utah Public Notice Website created pursuant to Utah Code Ann. § 63F-1-701; and

WHEREAS, on or about _____, the written notice of the public hearing was mailed to each affected entity; and

WHEREAS, on or about August 4, 2014, notice of the public hearing was posted on Herriman's official website; and

WHEREAS, on or about August 4, 2014 notice of the public hearing was published in the *Desert News* and *Salt Lake Tribune*; and

WHEREAS, on or about October 10, 2014 notice of the public hearing was published on the Utah Public Notice Website created pursuant to Utah Code Ann. § 63F-1-701

WHEREAS, on or about October 10, 2014, notice of the public hearing and/or public meeting was posted on Herriman's official website; and

WHEREAS, on or about October 10, 2014, a copy of the Storm Drain Plan, together with a summary designed to be understood by a lay person, was made available to the public; and

WHEREAS, on or about October 10, 2014, a copy of the Storm Drain Plan and summary was placed in the Herriman Public Library; and.

WHEREAS, on or about October 22, 2014, a public hearing was held to hear public comments on the Storm Drain Plan; and

WHEREAS, the Council finds that the Storm drain Plan contains all the necessary statutory elements for an impact fee facility plan and that all notices and hearings have been given and held; and

WHEREAS, the Council finds that it is in the best interest of the inhabitants of Herriman to adopt the Storm Drain Plan.

NOW, THEREFORE, BE IT ORDAINED by the Council that the Storm Drain Plan be adopted.

PASSED AND APPROVED this 19th day of November, 2014.

HERRIMAN CITY

By:_____
Carmen Freeman, Mayor

ATTEST:

_____
Jackie Nostrom, City Recorder

IMPACT FEE FACILITIES PLAN

Recommended storm drain system improvements are identified in Herriman's 2012 Storm Drain Master Plan report (SDMP report) and the Technical Memorandum that was prepared in May 2014 that appended the SDMP report. Information from those sources and the associated analysis were used to identify recommended improvements that qualify to be used in the calculation of impact fees as outlined the Utah Code Ann. § 11-36a-101 *Et Seq.* The purpose of this Impact Fee Facilities Plan (IFFP) is to define future projects that are eligible for impact fees, develop cost allocations for those projects related to impact fees, and estimate the value of available capacity in the existing storm drain system facilities that are eligible for reimbursement through impact fees.

EXISTING LEVEL OF SERVICE

The SDMP report defines the existing level of service for Herriman's Storm Drain System. The level of service is also presented below.

Storm Drain Pipelines

Storm drain pipelines are not allowed to surcharge to within two feet from the ground surface during the 10 percent annual chance (10-year) design storm event. Storm drain pipelines are also not to be smaller than 18 inches in diameter. It is important to note that roadways become the major storm water conveyance facility during storms that are larger than the 10-year design event.

Open Channels

Open channels should have at least two feet of free board during the 1 percent annual chance (100-year) design storm event. Open channels should also have protective lining. If velocities are less than 4 ft per second (ft/s), the channel may be grass lined. However, if the peak velocity in a channel is over 4 ft/s, then grass will not be sufficient to protect the channel from erosion damage and armoring will be required.

Detention Basins

Detention facilities need to have capacity for the 100-year storm, with at least one foot of freeboard, and have an emergency overflow that directs water away from private property.

It is important to note that not all of the existing facilities in the storm drain system meet the existing level of service. Those deficient storm drain facilities will be remedied over the next 6 years, and will be paid for independent of the impact fees.

PROPOSED LEVEL OF SERVICE

The Utah Code Ann. § 11-36a-302 (1)(a)(i)(ii) defines the need for a proposed level of service. The proposed level of service the storm drain system is the same as the existing level of service.

TYPES OF RECOMMENDED IMPROVEMENTS

The recommended improvements identified in the SDMP report included only major storm drain facilities (system improvements). Local storm drain facilities (project improvements), typically associated with development projects, are not included in the SDMP report nor are they eligible for impact fees. The SDMP report defines system improvements and project improvements for Herriman's Storm Drain System. The definition of system improvements and project improvements is presented below.

- **Major Conveyance Facilities** – Major storm drain conveyance facilities (system improvements) include pipelines or major channels that typically service multiple developments. Local facilities (project improvements) include smaller storm drain conveyance facilities that typically only serve one development and are used to convey storm water runoff from the 100-year design storm to the major conveyance facilities.
- **Regional Detention Facilities –** Development is required to provide local detention facilities (project improvements) to attenuate peak storm water discharges to the limits stated in the SDMP report. A major regional detention facility (system improvement) will attenuate peak runoff from the 100-year design storm to levels that can be safely conveyed through existing downstream facilities.

SERVICE AREAS

Herriman has been divided into three storm drain service areas: West Herriman, South Herriman, and the Towne Center. Figure 1 shows the boundaries for each service area. A brief description of each is provided below.

- **West Herriman** – This service area contains most of the existing development in Herriman City and thus it contains most of the existing storm drain infrastructure. The West Herriman service area has a storm drain detention requirement of 0.2 cfs/ac and is separate from the other service areas.

- **South Herriman** – This area is currently mostly undeveloped and has a separate storm drain detention requirement of 0.02 to 0.05 cfs/ac (see Chapter 6 of the 2012 Storm Drain Master Plan).

- **Towne Center –** The Towne Center is a 373 acre development on the central east side of Herriman. The Towne Center has a separate master plan and has a separate storm drain system.

DEMAND ANALYSIS

The SDMP report identifies the recommended capital facility projects needed to provide the desired level of storm drain service to various parts of the City at projected full build-out conditions. Most of those projects will be constructed in phases as development occurs. Tables 1 and 2 list capital facility projects identified in the SDMP report that

should be constructed within the next 6 years to meet the needs of anticipated development. Demands placed upon existing storm drain facilities by future development were determined using the process outlined below. Each of the steps were developed as part of the SDMP report and associated analyses. A detailed description of the steps outlined below can be found in the SDMP report. It is important to note that a demand analysis for the Towne Center was not completed with this IFFP, nor was it completed with the SDMP report.

1. **Existing Capacity** – The capacities in existing storm drain pipelines were estimated using Manning's equation, pipe size, and slope data provided by the City (See Chapters 3 and 4 of the SDMP report).
2. **Existing Flow** – The peak flow rates for existing development conditions were estimated using a hydrologic computer model (See Chapters 3 and 4 of the SDMP report).
3. **Existing Deficiencies** – Existing system capacity deficiencies in the storm drain system were identified using the defined level of service, peak flow estimates from the hydrologic computer model, and the estimated capacities for existing system facilities. Identified deficiencies were verified by City staff (see Chapter 5 of the SDMP report).
4. **Future Flow** - The peak flow rates for the design storm based on projected full build-out conditions were estimated using a hydrologic computer model (See Chapter 3 and 4 of the SDMP report).
5. **Future Demand** - Future demands on the storm drain system were identified using the defined level of service, peak flow estimates from the hydrologic computer model and the estimated capacities for existing system facilities. (see Chapters 5, 6 and 7 of the SDMP report).
6. **Recommended Improvements** – Needed storm drain projects were identified to meet demands associated with future development (See Chapter 7 of the SDMP report).

The steps listed above define the "demands placed upon [the] existing public facilities by new development activity; and the proposed means by which the local political subdivision will meet those demands" (Utah Code Ann. § 11-36a-302 (1)(a)(iv)(v)).

ALLOCATED PROJECT COSTS ASSOCIATED WITH NEW DEVELOPMENT

Results from the demand analysis were used to define the proportions of project costs that are needed to serve future development. Two examples of the cost allocation methodology used in this IFFP are presented below:

- **Example 1: Existing Pipeline Undersized for Existing Development:** If the estimated peak flow for existing development conditions in an existing pipeline is 14 cfs, and the existing pipeline has a capacity of 10 cfs, and the estimated future peak flow is 20 cfs, then the existing pipeline will need to be replaced. If the existing pipeline is replaced with a new pipeline that has 20 cfs capacity, then 60 percent of the pipeline replacement cost will be allocated to future growth and 40

percent to existing users.

- **Example 2: No Existing Storm Drain Infrastructure for Existing Development:** An area currently has low impact development (streets without curb and gutter, catch basins, storm drain piping, etc.). As the area continues to develop, the streets will be expanded and storm drain infrastructure will be installed. The estimated peak flow for existing development conditions is 10 cfs, and the estimated future design flow is 40 cfs. In this scenario, 75 percent of the storm drain improvement costs will be allocated to future growth and 25 percent to existing users.

Table 1 shows the recommended cost allocations for recommended capital facility projects that should be constructed in the next 6 years in the West Herriman and South Herriman service areas. The table does not include bond costs related to paying for impact fee eligible improvements.

The recommended improvements from the SDMP report are found in Appendix A. It is also important to remember that recommended improvements summarized in Table 1 are system improvements, and do not include any project improvements. As summarized in Table 1, the total cost that can be allocated to impact fees (not including applicable bond costs) is approximately $9.4 million in West Herriman and South Herriman. The $9.4 million will be allocated to its respective service area in the Impact Fee Analysis.

Based on data provided by the Momentum Development Group, the estimated total cost to construct the recommended Towne Center storm drain infrastructure is $2,985,839. The construction cost that can be attributed to future development is $1,461,082 for the Towne Center storm drain infrastructure.

REVENUE SOURCES

Several revenue sources that were considered to pay for the system improvements. Those revenue sources are grants, borrowing, impact fees, and the general fund.

EXCESS CAPACITY

WEST AND SOUTH HERRIMAN

In an effort to assist in the development of the Impact Fee Analysis, the percentage of the monetary value of the excess capacity of the existing storm drain system that is eligible for reimbursement through impact fees was identified. In this report, the term “excess” capacity will be used interchangeably with available capacity. Available capacity or excess capacity is defined as the capacity in an existing storm drain pipeline that is available to convey the design flows from anticipated future development. To identify the value of the excess capacity, design flow rates for existing and future conditions were compared. The analysis included storm drain piping as a representation of the storm drain system. A summary of the results of this analysis are contained in the Appendix B of this report.

The calculations associated with the value of excess capacity were completed for West Herriman service areas. The limited existing storm drain facilities in South Herriman are project improvements and are not eligible for reimbursement through excess capacity impact fees. The method used to estimate the percentage of the monetary value of the excess capacity of the storm drain system that is eligible for reimbursement through impact fees for West Herriman is presented below:

- **Estimate Capacities of Existing Pipelines –** The capacities in existing storm drain pipelines were estimated using Manning's equation, pipe size, and slope data provided by the City.
- **Estimate Peak Flow Rate –** The design flow in each modeled pipeline was estimated using the computer hydraulic/hydrology model (See Chapters 3 and 4 of the SDMP report) for existing and future development conditions.
- **Eliminate Facilities without Available Capacity –** The projected future design flow was compared against the pipeline's existing capacity. Where the estimated projected future design flow exceeded the existing capacity of the pipeline, the available capacity was assumed to be zero, because the pipeline will need to be replaced. This corresponds to those facilities with deficiencies that are identified in the capital facilities plan (see Chapter 7 of the SDMP report). By assigning an available capacity value of zero, this eliminated double counting those facilities eligible for impact fees.
- **Calculate Percent of Available Capacity in Existing Pipelines –** Where the projected future design flow was less than the existing capacity of the pipeline, the percent of available capacity was calculated by dividing the existing flow rate by the projected future design flow and subtracting the result from one then multiplying by one hundred to convert to a percentage. It is important to note that because the existing pipelines used in this calculation were constructed to convey the projected future design flow, the projected future design flow was used as the capacity of the existing pipeline.
- **Calculate Cost Weighted Average for System –** Each pipeline in the storm drain system has a different monetary value. The value of excess capacity will also vary between pipelines (e.g. 20% excess capacity in a 36-inch, 4000 foot pipeline will be worth much more than 20% excess capacity in an 18-inch, 300 foot pipeline). To account for variations in facility costs, the replacement cost was incorporated into the calculation. The replacement cost for the each modeled pipeline was multiplied by the percent of available capacity, than summed over the system as a whole. For a summary of the detailed analysis, see Appendix B. It should be emphasized that replacement value was used for cost weighting only. In the final calculation of the impact fee, only the actual value of facilities will be used.

Based on the method described above, the percentage of the monetary value of the excess capacity of the West Herriman service area existing storm drain system that is eligible for reimbursement through impact fees is 20.4 percent.

TOWNE CENTER

The Towne Center service area contains 373 acres. According to information provided by the Momentum Development Group, about half of the storm drain system in the Towne Center has been constructed and provides service to approximately 190 acres. One hundred and one acres of the service area have been platted and have previously paid storm drain impact fees in the Towne Center. Therefore, the existing storm drain system has 47 percent available capacity to serve 89 acres of future development. The 47 percent available capacity in the existing Towne Center storm drain system is eligible to be reimbursed through impact fees, imposed in the Towne Center.

IMPACT FEE FACILITIES PLAN CERTIFICATION

The analysis contained in this report has been prepared based on growth and system information provided by the City of Herriman. Based on the data and growth assumptions provided and assuming the City follows the improvement plan outlined in this report, BC&A certifies that, to the best of our knowledge and in accordance with Utah Code Ann. § 11-36a-306, this impact fee facilities plan:

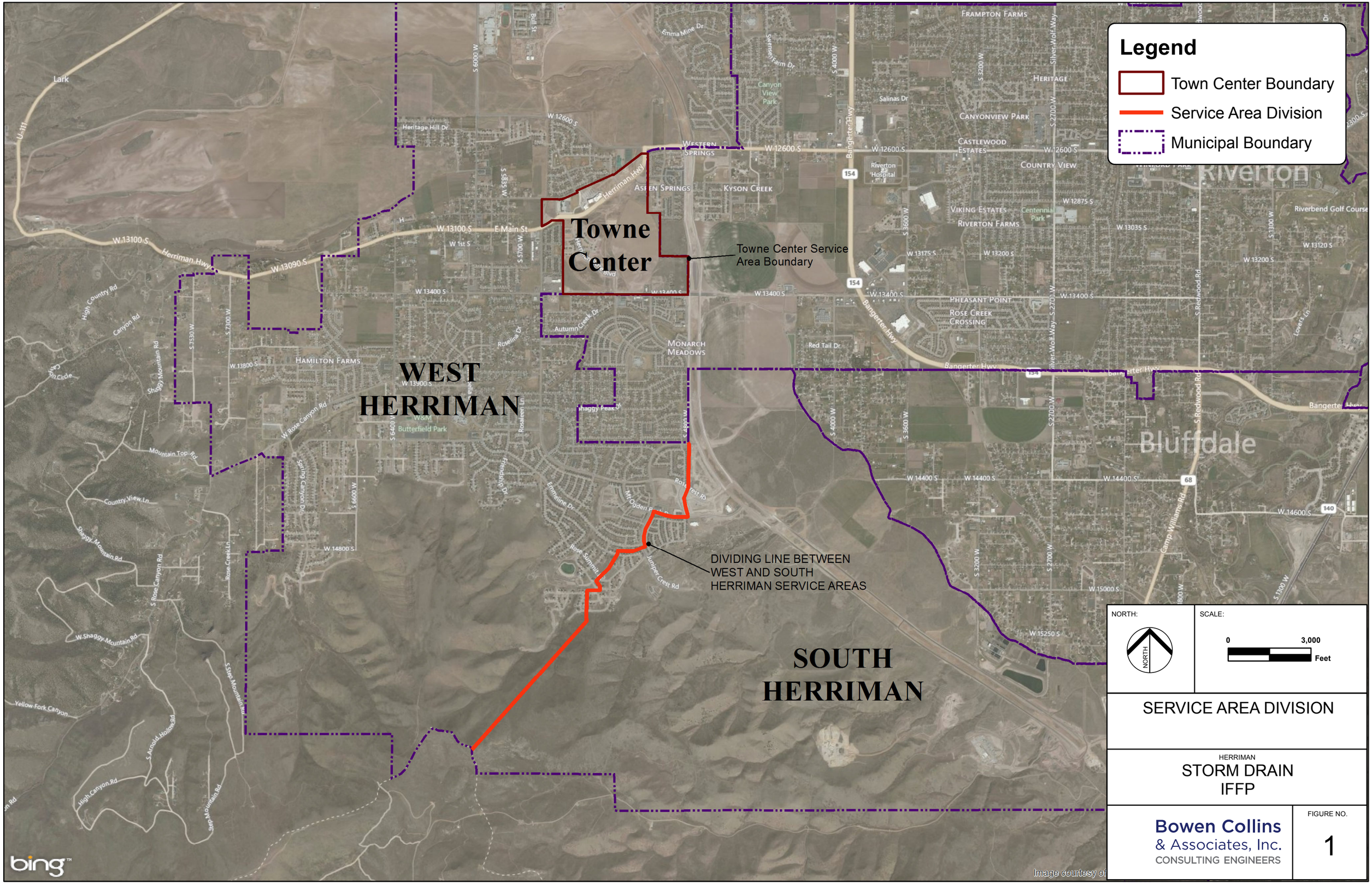
1. Includes only the costs for qualifying public facilities that are:
    a. allowed under the Impact Fees Act; and
    b. actually incurred; or
    c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. Does not include:
    a. costs for operation or maintenance of public facilities;
    b. costs for qualifying public facilities that will raise the level of service for the facilities through impact fees, above the level of service that is supported by existing residents;
    c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and
3. Complies in each and every other relevant respect with the Impact Fees Act.

Table 1
Impact Fee Facilities Plan – Project Costs that can be Allocated to Projected Development For FY 2013-2018

Project Identifier[1]	Construction Year	Total Estimated Cost	Total Estimated Cost By Year	Existing Capacity (cfs or Ac-ft)	Existing Flow or Volume (cfs or Ac-ft)	Future Flow or Volume (cfs or Ac-ft)	Percentage of Cost Attributable to:		Cost Attributable to:	
							Existing Deficiency[2]	Future Development	Existing Deficiency[2]	Future Development
OC 17	2014	$828,385	$2,093,914	-	2.0	86.0	2%	98%	$19,265	$809,120
P 15		$305,216		-	7.9	11.0	72%	28%	$219,201	$86,015
P 17		$354,858		-	0.4	4.0	10%	90%	$35,486	$319,373
OC 19		$605,455		-	27.1	130.0	21%	79%	$126,383	$479,071
P 21	2015	$335,829	$3,409,418	-	15.7	32.4	49%	51%	$163,110	$172,720
P 8		$666,021		-	12.0	14.1	38%	62%	$256,301	$409,720
P 1		$359,785		-	27.6	44.9	61%	39%	$221,159	$138,625
OC 18		$427,246		-	25.1	41.0	61%	39%	$261,937	$165,309
P 22		$608,514		-	18.1	47.0	38%	62%	$234,171	$374,343
Copper Creek		$1,012,023		-	0	220	0%	100%	-	$1,012,023
P 23	2016	$346,562	$4,172,771	-	38.6	79.4	49%	51%	$168,323	$178,240
P 3		$26,526		4.3	70.1	79.5	83%	17%	$21,939	$4,587
DB 5		$697,400		3.5	5.2	7.3	23%	77%	$159,542	$537,858
P 7		$1,198,750		-	118.0	182.0	65%	35%	$777,212	$421,539
P 24		$596,546		-	6.1	15.8	38%	62%	$229,565	$366,981
P 25		$435,475		-	6.2	16.2	38%	62%	$167,581	$267,894
P 28		$219,643		-	0	7.5	0%	100%	-	$219,643
P 29		$296,488		-	0	7.5	0%	100%	-	$296,488
P 30		$196,976		-	0	17	0%	100%	-	$196,976
P 31		$158,405		-	0	17.5	0%	100%	-	$158,405

Project Identifier[1]	Construction Year	Total Estimated Cost	Total Estimated Cost By Year	Existing Capacity (cfs or Ac-ft)	Existing Flow or Volume (cfs or Ac-ft)	Future Flow or Volume (cfs or Ac-ft)	Percentage of Cost Attributable to:		Cost Attributable to:	
							Existing Deficiency[2]	Future Development	Existing Deficiency[2]	Future Development
P 27	2017	$307,594	$3,393,150	-	9.1	23.7	38%	62%	$118,369	$189,224
DB 1		$370,600		2.0	2.6	3.0	20%	80%	$75,780	$294,820
P 2		$37,118		3.5	26.0	41.6	54%	46%	$20,076	$17,042
P 5		$1,276,292		-	102.9	110.0	94%	6%	$1,193,913	$82,379
OC 7		$501,762		-	2.0	40.0	5%	95%	$25,088	$476,674
P 26		$462,793		-	4.7	12.1	38%	62%	$178,094	$284,699
P 32		$139,231		-	0	7.5	0%	100%	-	$139,231
P 33		$297,760		-	0	7.5	0%	100%	-	$297,760
OC 5	2018	$447,271	$447,271	-	0.0	36.0	0%	100%	-	$447,271
P 18	2019	$304,821	$2,118,221	-	78.5	90.0	87%	13%	$265,905	$38,915
DB 2		$1,813,400		-	7.9	11.0	72%	28%	$1,302,351	$511,049
Totals		**$15,634,745**	**$15,634,745**	**-**	**-**	**-**	**34%**	**66%**	**$6,240,751**	**$9,393,994**

[1] See Figures 7-1 and 7-2 in Appendix A for Project Location.
[2] Existing Deficiencies will not be paid for using impact fees.



NORTH:

SCALE: 0 3,000 Feet

SERVICE AREA DIVISION

HERRIMAN
STORM DRAIN
IFFP

Bowen Collins & Associates, Inc.
CONSULTING ENGINEERS

FIGURE NO.
1

APPENDIX A
HERRIMAN STORM DRAIN MASTER PLAN
RECOMMENDED SYSTEM IMPROVEMENTS

RECOMMENDED PIPELINE IMPROVEMENTS

Figures A-1 and A-2 shows the location of recommended pipeline improvements that are needed to meet future growth in Herriman. Table A-1 summarizes the cost of the proposed improvements in 2012 dollars.

Table A-1
Storm Drain Trunkline Improvements

Project ID	Total Length (ft)	Range of Diameters (in)	Cost (2012 Dollars)
P 1	1,182	36	$ 359,785
P 2	131	42	$ 37,118
P 3	108	36	$ 26,526
P 4	1,104	48	$ 357,199
P 5	3,553	42-48	$ 1,276,292
P 6	3,088	36	$ 716,837
P 7	3,654	48	$ 1,198,750
P 8	3,338	30	$ 666,021
P 9	2,805	18	$ 447,678
P 10	548	24	$ 92,301
P 11	1,882	18	$ 296,716
P 12	2,103	18	$ 336,515
P 13	909	36	$ 214,590
P 14	1,186	24	$ 196,819
P 15	1,797	24	$ 305,216
P 16	649	18	$ 102,628
P 17	2,069	24	$ 354,858
P 18	1,303	36	$ 304,821
P 19	1,460	42	$ 404,377
P 20	1,093	24	$ 184,255
P 21	1,094	36	$ 335,829
P 22	2,415	36-42	$ 608,514
P 23	956	42	$ 346,562
P 24	2,499	24	$ 596,546
P 25	1,604	30	$ 435,475
P 26	2,514	18	$ 462,793
P 27	1,165	30	$ 307,594
Total	**-**	**-**	**$10,973,000**

OPEN CHANNEL IMPROVEMENTS

Figures A-1 and A-2 shows the location of recommended open channel improvements that are needed to meet future growth in Herriman on facilities that are not under the jurisdiction of Salt Lake County. Table A-2 lists the recommended local open channel improvements in Herriman.

Salt Lake County's SWCC study indicates that channel improvements need to be completed in Butterfield Creek within Herriman City limits prior to development. The location of the improvements are shown on Figure A-1. It is recommended that development does not occur along Butterfield Creek until those improvements are completed or the County gives approval for development. The improvements along Butterfield Creek will not be included on Herriman's CIP.

Table A-2
Natural Channel Improvements

Channel ID	Total Length (ft)	Assumed Bottom Width (ft)	Assumed Channel Depth (ft)	Cost (2012 Dollars)
OC 1	2005	3	4	$268,929
OC 2	2158	3	4	$289,580
OC 3	1657	3	4	$222,262
OC 4	2069	3	4	$277,581
OC 5	2735	3	5	$447,271
OC 6	2406	3	4	$322,858
OC 7	3068	3	5	$501,762
OC 8	4364	3	4	$585,482
OC 9	2859	3	4	$383,504
OC 10	1804	3	4	$242,027
OC 11	2023	3	4	$271,348
OC 12	544	3	4	$73,017
OC 13	633	3	4	$84,929
OC 14	677	3	4	$90,818
OC 15	1343	3	4	$180,117
OC 16	3879	3	4	$520,364
OC 17	3811	5	6	$828,385
OC 18	3185	3	4	$427,246
OC 19	2339	10	6	$605,455
OC 20	1433	3	4	$192,310
OC 21	3058	3	5	$562,583
Total	**-**	**-**	**-**	**$7,377,827**

DETENTION BASIN IMPROVEMENTS

Figures A-1 and A-2 shows the location of recommended detention basin improvements that are needed to meet future growth in Herriman. Table A-3 lists the recommended detention volumes and costs for detention facilities in Herriman.

Table A-3
Required Capacity at Detention Basins

Detention Basin	Future Required Volume (acre-feet)	Cost (2012 Dollars)
DB 1	3.0	$ 370,600
DB 2	11.0	$ 1,813,400
DB 3	23.9	$ 3,945,800
DB 4	3.4	$ 358,600
DB 5	7.3	$ 697,400
Total	**-**	**$ 7,185,800**

Legend

- Municipality Boundary
- Existing Storm Drain Pipe
- Major Creek and Canal
- Detention Basin Improvement

Piping Improvement

Size (inches)

- 18
- 24
- 30
- 36
- 42
- 48
- 54

South Jordan

Midas Creek

P 7
182 cfs

P 8
13 cfs

P 4
64 cfs

P 6
40 cfs

DB 3

DB 4

DB 5

Development Driven
Channel Improvements*

Butterfield Creek

Western Springs

Aspen Springs

Kyson Creek

Riverton

Riverton Hospital

W 12600 S

W 13100 S

E Main St

W 1st S

W 13400 S

P 5
110 cfs

Rose Creek

Autumn Creek Dr

Monarch Meadows

Red Tail Dr

Herriman

P 22
47 cfs

P 23
79.4 cfs

P 21
32.4 cfs

P 25
16.2 cfs

P 24
15.8 cfs

P 26
12.1 cfs

P 27
23.7 cfs

W 13760 S

Tracy Loop Rd

P 3
70 cfs

DB 1

P 1
45 cfs

Butterfield

P 2
45 cfs

Bluffdale

W 14600 S

W 14800 S

Pipe/Channel Key

P/OC XX — Identifier
XX cfs — Design Flow
Pipe/Channel (See Legend or Cost Estimate For Sizing)

* Channel Improvements Will Need To Be Completed Prior To Development Along Butterfield Creek. Development Will Need To Be Coordinated With Salt Lake County.

NORTH:

SCALE: 0 — 2,000 Feet

RECOMMENDED CAPITAL FACILITY PROJECTS
WEST HERRIMAN

HERRIMAN
STORM DRAIN MASTER PLAN

Bowen Collins & Associates, Inc.
CONSULTING ENGINEERS

FIGURE NO.
A-1

Legend

- Municipal Boundary
- Subbasin

Recommended Improvement

Pipe (inches)

- 18
- 24
- 30
- 36
- 42
- 48
- 54
- Detention Basin Improvement
- CFP Separation Marker
- Channel Improvements

Existing Facilities

- Existing Storm Drain Pipe
- Existing Major Creek or Canal

Herriman

Riverton

Bluffdale

Herriman

Provo Reservoir Canal

Bangerter Hwy

Utah Lake Distributing Canal

Rose Creek

Red Tail Dr

Kyson Creek

Monarch Meadows

Riverton Hospital

Castlewood Estates

Canyonview Park

Riverton Farms

Viking Estates

Pleasant Point

Rose Creek Crossing

Canyon Hill Ct

Country Classic Dr

Boulden Blvd

Vera Ln

Statehood Dr

Aspen Ave

Oak Point Dr

Silverpoint Way

Camp Williams Rd

DB 5

DB 2

P 18 90 cfs

P 15 35 cfs

P 17 4 cfs

P 16 4 cfs

P 14 18 cfs

P 13 1 cfs

P 12 10 cfs

P 11 8 cfs

P 10 18 cfs

P 9 4 cfs

P 19 170 cfs

P 20 27 cfs

OC 1 2 cfs

OC 2 4 cfs

OC 3 12 cfs

OC 4 22 cfs

OC 5 33 cfs

OC 6 4 cfs

OC 7 40 cfs

OC 8 15 cfs

OC 8 18 cfs

OC 9 3 cfs

OC 10 10 cfs

OC 11 3 cfs

OC 15 22 cfs

OC 16 45 cfs

OC 17 86 cfs

OC 18 41 cfs

OC 19 130 cfs

OC 20 25 cfs

OC 21 176 cfs

NORTH:

SCALE: 0 2,000 Feet

RECOMMENDED CAPITAL FACILITY PROJECTS SOUTH HERRIMAN

HERRIMAN

STORM DRAIN MASTER PLAN

Bowen Collins & Associates, Inc.
CONSULTING ENGINEERS

FIGURE NO.

A-2

Pipe/Channel Key

P/OC XX — Identifier

XX cfs — Design Flow

Pipe/Channel (See Legend or Cost Estimate For Sizing)

APPENDIX B
AVAILABLE CAPACITY CALCULATIONS

FacilityID	Pipe Size (in)	Pipe Length (ft)	Existing Flow (cfs)	Future Flow (cfs)	Replacement Cost (2012 $)	Design Flows Expressed as % of Pipe Capacity		Estimated Replacement Cost Allocation (Based on Design Flow)	
						Existing	Future	Existing Users Allocation	Future Allocation
486	24	39	10.71	11.09	$ 3,933	97%	3%	$ 3,798.07	$ 134.76
487	24	301	10.71	11.09	$ 30,090	97%	3%	$ 29,058.52	$ 1,031.02
488	24	399	10.71	11.09	$ 39,851	97%	3%	$ 38,485.71	$ 1,365.51
489	24	110	10.71	11.09	$ 11,050	97%	3%	$ 10,671.26	$ 378.63
493	18	251	6.02	6.54	$ 22,585	92%	8%	$ 20,789.21	$ 1,795.75
494	18	5	6.02	6.54	$ 421	92%	8%	$ 387.13	$ 33.44
748	24	124	10.72	11.09	$ 12,364	97%	3%	$ 11,951.96	$ 412.52
789	18	234	6.02	6.54	$ 21,096	92%	8%	$ 19,418.75	$ 1,677.37
790	18	31	6.02	6.54	$ 2,817	92%	8%	$ 2,592.84	$ 223.97
791	18	352	6.02	6.54	$ 31,660	92%	8%	$ 29,143.13	$ 2,517.35
792	18	160	6.02	6.54	$ 14,386	92%	8%	$ 13,242.37	$ 1,143.86
793	18	79	12.06	6.54	$ 7,096	92%	8%	$ 6,531.97	$ 564.22
794	18	178	12.06	6.54	$ 15,976	92%	8%	$ 14,705.53	$ 1,270.25
795	24	245	12.06	6.54	$ 24,471	92%	8%	$ 22,525.43	$ 1,945.72
796	24	26	12.06	6.57	$ 2,608	92%	8%	$ 2,400.62	$ 207.36
1610	36	60	44.39	63.11	$ 8,653	70%	30%	$ 6,086.34	$ 2,566.71
1611	36	138	44.39	63.12	$ 20,008	70%	30%	$ 14,070.97	$ 5,937.13
1613	36	94	44.39	63.04	$ 13,603	70%	30%	$ 9,578.37	$ 4,024.25
1614	36	38	44.4	63.04	$ 5,535	70%	30%	$ 3,898.39	$ 1,636.62
1621	36	239	44.39	63.11	$ 34,586	70%	30%	$ 24,326.86	$ 10,259.04
1624	36	62	44.39	63.11	$ 8,990	70%	30%	$ 6,323.11	$ 2,666.56
1625	36	97	44.39	63.11	$ 14,057	70%	30%	$ 9,887.50	$ 4,169.72
1640	36	64	4.93	30.1	$ 9,291	16%	84%	$ 1,521.79	$ 7,769.47
1641	36	110	4.93	30.1	$ 15,903	16%	84%	$ 2,604.74	$ 13,298.42
1646	36	308	4.93	92.67	$ 44,629	5%	95%	$ 2,374.24	$ 42,254.78
1647	36	310	4.93	30.1	$ 44,974	16%	84%	$ 7,366.12	$ 37,607.58
1649	36	361	44.4	63.11	$ 52,324	70%	30%	$ 36,811.48	$ 15,512.22
1651	36	306	44.4	63.11	$ 44,339	70%	30%	$ 31,193.87	$ 13,144.98
1653	36	326	44.4	63.11	$ 47,341	70%	30%	$ 33,305.84	$ 14,034.96
1654	36	189	44.39	63.11	$ 27,361	70%	30%	$ 19,244.70	$ 8,115.81
1656	36	95	44.39	63.11	$ 13,728	70%	30%	$ 9,656.17	$ 4,072.17
1733	18	88	6.02	6.55	$ 7,954	92%	8%	$ 7,310.27	$ 643.59
1968	36	36	4.93	30.1	$ 5,210	16%	84%	$ 853.27	$ 4,356.33
1969	36	325	4.93	30.1	$ 47,170	16%	84%	$ 7,725.80	$ 39,443.90
1970	36	175	4.93	30.1	$ 25,369	16%	84%	$ 4,155.14	$ 21,213.99
1971	36	172	4.93	30.1	$ 24,888	16%	84%	$ 4,076.27	$ 20,811.32
1972	36	35	4.93	30.1	$ 5,105	16%	84%	$ 836.09	$ 4,268.64
1973	36	201	4.93	30.1	$ 29,207	16%	84%	$ 4,783.66	$ 24,422.88
1974	36	166	4.93	30.1	$ 24,128	16%	84%	$ 3,951.90	$ 20,176.33
1975	36	75	4.93	30.1	$ 10,864	16%	84%	$ 1,779.33	$ 9,084.33
2015	36	67	44.4	60.14	$ 9,769	74%	26%	$ 7,212.28	$ 2,556.79
2019	36	73	4.93	30.1	$ 10,555	16%	84%	$ 1,728.75	$ 8,826.10
2020	36	19	4.93	30.1	$ 2,714	16%	84%	$ 444.53	$ 2,269.56
2021	36	206	4.93	30.1	$ 29,839	16%	84%	$ 4,887.18	$ 24,951.38
2023	36	29	4.94	30.1	$ 4,270	16%	84%	$ 700.84	$ 3,569.48
2030	18	188	4.93	30.1	$ 16,925	16%	84%	$ 2,772.06	$ 14,152.68
2102	30	36	10.71	11.09	$ 4,288	97%	3%	$ 4,141.25	$ 146.94
2103	18	68	10.71	11.09	$ 6,123	97%	3%	$ 5,913.40	$ 209.81
2447	30	258	27.65	44.87	$ 30,915	62%	38%	$ 19,050.29	$ 11,864.23
2454	30	92	30.6	52.96	$ 11,072	58%	42%	$ 6,397.19	$ 4,674.54
2455	36	130	30.61	52.95	$ 18,891	58%	42%	$ 10,920.93	$ 7,970.39
2456	30	105	30.6	52.96	$ 12,592	58%	42%	$ 7,275.70	$ 5,316.49
2457	30	79	30.6	52.95	$ 9,440	58%	42%	$ 5,455.22	$ 3,984.45
2631	24	233	158.97	6.54	$ 23,274	92%	8%	$ 21,423.53	$ 1,850.54
2732	18	23	4.93	30.1	$ 2,030	16%	84%	$ 332.52	$ 1,697.67
2733	18	220	4.93	30.1	$ 19,761	16%	84%	$ 3,236.56	$ 16,524.19
2739	30	18	27.65	44.87	$ 2,150	62%	38%	$ 1,324.95	$ 825.16
2753	18	78	6.02	6.55	$ 7,055	92%	8%	$ 6,484.46	$ 570.89
2795	30	387	30.6	52.96	$ 46,389	58%	42%	$ 26,803.55	$ 19,585.86

FacilityID	Pipe Size (in)	Pipe Length (ft)	Existing Flow (cfs)	Future Flow (cfs)	Replacement Cost (2012 $)	Design Flows Expressed as % of Pipe Capacity		Estimated Replacement Cost Allocation (Based on Design Flow)	
						Existing	Future	Existing Users Allocation	Future Allocation
2801	24	261	10	10	$ 26,073	100%	0%	$ 26,073.33	$ -
2807	18	47	2.44	15.01	$ 4,259	16%	84%	$ 692.38	$ 3,566.92
2816	18	342	2.44	15	$ 30,787	16%	84%	$ 5,008.03	$ 25,779.06
2817	30	273	2.44	15.03	$ 32,721	16%	84%	$ 5,311.92	$ 27,408.66
2818	24	31	2.44	15	$ 3,117	16%	84%	$ 507.08	$ 2,610.20
2820	30	256	2.44	15	$ 30,698	16%	84%	$ 4,993.54	$ 25,704.43
2822	36	58	2.44	15	$ 8,408	16%	84%	$ 1,367.68	$ 7,040.21
2830	36	406	30.6	52.95	$ 58,802	58%	42%	$ 33,982.17	$ 24,820.31
2831	36	261	30.6	52.96	$ 37,901	58%	42%	$ 21,899.03	$ 16,002.04
3004	30	87	2.44	15	$ 10,496	16%	84%	$ 1,707.38	$ 8,788.80
3149	36	432	27.61	44.86	$ 62,679	62%	38%	$ 38,577.09	$ 24,101.95
489	24	53	10	10	$ 5,312	100%	0%	$ 5,311.80	$ -
1	24	78	11.96	12.38	$ 7,804	97%	3%	$ 7,539.44	$ 264.76
2	24	504	11.96	12.38	$ 50,440	97%	3%	$ 48,728.81	$ 1,711.21
4	24	182	11.96	12.38	$ 18,215	97%	3%	$ 17,597.09	$ 617.96
5	24	161	11.96	12.38	$ 16,143	97%	3%	$ 15,595.29	$ 547.66
7	24	22	11.96	12.38	$ 2,222	97%	3%	$ 2,146.42	$ 75.38
9	24	40	11.96	12.38	$ 4,015	97%	3%	$ 3,878.40	$ 136.20
15	24	60	21.02	21.35	$ 5,976	97%	3%	$ 5,772.78	$ 202.72
16	24	62	11.96	12.38	$ 6,165	97%	3%	$ 5,955.45	$ 209.14
30	36	35	17.93	18.1	$ 5,066	99%	1%	$ 5,018.13	$ 47.58
37	36	308	55.91	55.98	$ 44,594	100%	0%	$ 44,537.75	$ 55.76
98	36	196	55.84	65.21	$ 28,384	86%	14%	$ 24,305.72	$ 4,078.52
164	36	176	35.38	49.6	$ 25,459	100%	0%	$ 25,458.60	$ -
165	36	171	24.96	39.43	$ 24,774	100%	0%	$ 24,773.75	$ -
177	30	182	17.93	18.1	$ 21,852	99%	1%	$ 21,646.59	$ 205.24
178	30	111	17.93	18.1	$ 13,273	99%	1%	$ 13,147.96	$ 124.66
179	30	187	17.93	18.1	$ 22,464	99%	1%	$ 22,252.90	$ 210.99
180	30	281	17.93	18.1	$ 33,750	99%	1%	$ 33,432.97	$ 316.99
183	30	41	17.93	18.1	$ 4,884	99%	1%	$ 4,838.61	$ 45.88
184	30	160	17.93	18.1	$ 19,155	99%	1%	$ 18,975.44	$ 179.91
185	30	201	17.93	18.1	$ 24,147	99%	1%	$ 23,920.28	$ 226.80
186	30	148	17.93	18.1	$ 17,773	99%	1%	$ 17,606.17	$ 166.93
189	30	243	17.93	18.1	$ 29,203	99%	1%	$ 28,929.07	$ 274.29
190	30	50	17.93	18.1	$ 5,985	99%	1%	$ 5,928.36	$ 56.21
192	30	412	17.93	18.1	$ 49,466	99%	1%	$ 49,001.19	$ 464.60
212	18	44	24.96	29.43	$ 3,956	85%	15%	$ 3,355.10	$ 600.85
218	30	98	24.96	29.43	$ 11,817	85%	15%	$ 10,022.19	$ 1,794.84
219	30	86	24.96	29.43	$ 10,263	85%	15%	$ 8,703.95	$ 1,558.76
220	30	442	24.96	29.43	$ 53,001	85%	15%	$ 44,951.14	$ 8,050.14
221	30	83	24.96	29.43	$ 9,987	85%	15%	$ 8,470.27	$ 1,516.91
222	30	308	24.96	29.43	$ 36,979	85%	15%	$ 31,362.16	$ 5,616.54
223	30	30	24.95	29.43	$ 3,558	85%	15%	$ 3,016.76	$ 541.69
224	36	60	24.95	39.43	$ 8,669	63%	37%	$ 5,485.67	$ 3,183.67
239	30	133	24.04	28.81	$ 15,922	83%	17%	$ 13,285.84	$ 2,636.17
292	36	39	35.38	49.6	$ 5,658	71%	29%	$ 4,036.20	$ 1,622.24
350	36	238	35.39	49.6	$ 34,453	71%	29%	$ 24,582.33	$ 9,870.44
366	24	31	0	0	$ 3,074	100%	0%	$ 3,074.31	$ -
367	24	296	0	0	$ 29,585	100%	0%	$ 29,584.52	$ -
441	36	275	0	0	$ 39,930	100%	0%	$ 39,930.36	$ -
442	36	412	0	0	$ 59,799	100%	0%	$ 59,798.95	$ -
444	18	7	0	0	$ 589	100%	0%	$ 588.58	$ -
445	30	319	0	0	$ 38,333	100%	0%	$ 38,332.89	$ -
448	15	279	0	0	$ 22,328	100%	0%	$ 22,328.41	$ -
453	24	57	0	0	$ 5,663	100%	0%	$ 5,663.19	$ -
454	24	76	0	0	$ 7,637	100%	0%	$ 7,636.94	$ -
455	36	394	56.46	55.98	$ 57,119	100%	0%	$ 57,118.52	$ -
458	24	300	7.45	7.77	$ 29,993	96%	4%	$ 28,757.36	$ 1,235.22
463	24	59	0	0	$ 5,874	100%	0%	$ 5,874.28	$ -

FacilityID	Pipe Size (in)	Pipe Length (ft)	Existing Flow (cfs)	Future Flow (cfs)	Replacement Cost (2012 $)	Design Flows Expressed as % of Pipe Capacity		Estimated Replacement Cost Allocation (Based on Design Flow)	
						Existing	Future	Existing Users Allocation	Future Allocation
464	24	162	0	0	$ 16,153	100%	0%	$ 16,152.82	$ -
465	24	63	0	0	$ 6,296	100%	0%	$ 6,295.68	$ -
466	24	29	0	0	$ 2,925	100%	0%	$ 2,924.63	$ -
467	24	63	0	0	$ 6,348	100%	0%	$ 6,347.90	$ -
468	24	394	0	0	$ 39,398	100%	0%	$ 39,397.59	$ -
502	36	28	22.38	23.15	$ 4,118	97%	3%	$ 3,981.21	$ 136.98
525	24	262	7.45	7.77	$ 26,189	96%	4%	$ 25,110.55	$ 1,078.57
555	36	401	55.92	55.98	$ 58,109	100%	0%	$ 58,046.96	$ 62.28
556	36	394	55.91	55.98	$ 57,108	100%	0%	$ 57,036.49	$ 71.41
558	36	171	55.91	55.98	$ 24,732	100%	0%	$ 24,700.76	$ 30.93
559	36	300	55.91	55.98	$ 43,460	100%	0%	$ 43,405.34	$ 54.34
560	36	264	55.91	55.98	$ 38,223	100%	0%	$ 38,174.84	$ 47.80
564	36	1086	55.91	55.98	$ 157,454	100%	0%	$ 157,256.66	$ 196.89
565	36	698	55.91	55.98	$ 101,195	100%	0%	$ 101,068.88	$ 126.54
566	36	22	55.91	55.98	$ 3,134	100%	0%	$ 3,130.40	$ 3.92
567	36	256	55.91	55.98	$ 37,062	100%	0%	$ 37,016.14	$ 46.34
568	36	70	55.91	55.98	$ 10,204	100%	0%	$ 10,190.98	$ 12.76
569	36	474	55.91	55.98	$ 68,767	100%	0%	$ 68,681.26	$ 85.99
570	36	83	55.91	55.99	$ 12,041	100%	0%	$ 12,023.72	$ 17.20
571	36	318	55.91	55.98	$ 46,141	100%	0%	$ 46,083.72	$ 57.70
572	36	163	55.91	55.98	$ 23,615	100%	0%	$ 23,585.44	$ 29.53
573	36	349	55.91	55.98	$ 50,614	100%	0%	$ 50,550.57	$ 63.29
574	36	40	55.92	55.98	$ 5,761	100%	0%	$ 5,755.23	$ 6.18
575	36	327	55.92	55.99	$ 47,366	100%	0%	$ 47,307.25	$ 59.22
576	36	399	55.98	56.06	$ 57,820	100%	0%	$ 57,737.14	$ 82.51
577	36	399	56	56.06	$ 57,845	100%	0%	$ 57,783.02	$ 61.91
578	36	404	56	56.06	$ 58,524	100%	0%	$ 58,461.42	$ 62.64
598	30	89	17.49	22.22	$ 10,732	79%	21%	$ 8,447.69	$ 2,284.60
601	24	507	0	0	$ 50,673	100%	0%	$ 50,672.95	$ -
626	18	238	0	0	$ 21,428	100%	0%	$ 21,428.11	$ -
627	15	63	0	0	$ 5,036	100%	0%	$ 5,035.59	$ -
728	42	412	36.46	23.15	$ 74,244	97%	3%	$ 71,774.07	$ 2,469.44
740	21	189	5.19	5.22	$ 17,962	99%	1%	$ 17,858.43	$ 103.23
772	30	48	23.63	23.65	$ 5,715	100%	0%	$ 5,710.48	$ 4.83
900	15	17	4.46	4.6	$ 1,326	97%	3%	$ 1,286.10	$ 40.37
902	18	40	4.46	4.6	$ 3,562	97%	3%	$ 3,453.93	$ 108.42
904	30	224	4.45	4.6	$ 26,822	97%	3%	$ 25,947.74	$ 874.64
907	30	65	4.45	4.6	$ 7,814	97%	3%	$ 7,559.43	$ 254.81
908	30	111	4.45	4.6	$ 13,314	97%	3%	$ 12,879.82	$ 434.15
909	30	36	4.44	4.6	$ 4,281	97%	3%	$ 4,132.37	$ 148.91
912	36	67	4.44	4.6	$ 9,652	97%	3%	$ 9,316.30	$ 335.72
924	30	83	4.44	4.6	$ 9,978	97%	3%	$ 9,630.86	$ 347.06
925	24	77	4.44	4.6	$ 7,657	97%	3%	$ 7,391.06	$ 266.34
926	24	129	4.44	4.6	$ 12,891	97%	3%	$ 12,442.91	$ 448.39
933	24	283	4.41	4.6	$ 28,335	96%	4%	$ 27,164.87	$ 1,170.37
934	36	216	0	11.08	$ 31,248	100%	0%	$ 31,247.75	$ -
935	36	175	0	11.08	$ 25,418	100%	0%	$ 25,418.43	$ -
936	36	152	0	11.08	$ 22,088	100%	0%	$ 22,088.38	$ -
939	36	65	0	11.08	$ 9,409	100%	0%	$ 9,409.15	$ -
955	30	89	4.41	15.62	$ 10,734	28%	72%	$ 3,030.45	$ 7,703.25
956	30	40	4.41	15.62	$ 4,812	28%	72%	$ 1,358.57	$ 3,453.42
959	30	231	4.4	15.62	$ 27,720	28%	72%	$ 7,808.43	$ 19,911.50
962	30	202	4.39	15.62	$ 24,244	28%	72%	$ 6,813.67	$ 17,429.95
963	30	172	58.5	58.52	$ 20,616	100%	0%	$ 20,609.36	$ 7.05
966	30	139	56	56.06	$ 16,697	100%	0%	$ 16,679.47	$ 17.87
967	30	459	56	56.06	$ 55,021	100%	0%	$ 54,961.85	$ 58.89
974	18	198	10	0	$ 17,859	100%	0%	$ 17,858.52	$ -
975	18	33	10	0	$ 3,014	100%	0%	$ 3,013.60	$ -
989	21	221	0	0	$ 20,995	100%	0%	$ 20,995.33	$ -

FacilityID	Pipe Size (in)	Pipe Length (ft)	Existing Flow (cfs)	Future Flow (cfs)	Replacement Cost (2012 $)	Design Flows Expressed as % of Pipe Capacity		Estimated Replacement Cost Allocation (Based on Design Flow)	
						Existing	Future	Existing Users Allocation	Future Allocation
990	21	96	0	0	$ 9,082	100%	0%	$ 9,081.96	$ -
991	18	209	0	0	$ 18,806	100%	0%	$ 18,805.73	$ -
1002	36	330	0.18	1.61	$ 47,902	11%	89%	$ 5,355.55	$ 42,546.83
1134	24	307	5.19	5.22	$ 30,668	99%	1%	$ 30,491.46	$ 176.25
1136	24	76	5.19	5.22	$ 7,633	99%	1%	$ 7,589.50	$ 43.87
1137	24	137	5.19	5.22	$ 13,709	99%	1%	$ 13,630.43	$ 78.79
1155	36	319	5.19	5.22	$ 46,185	99%	1%	$ 45,919.32	$ 265.43
1184	24	50	5.19	5.22	$ 5,032	99%	1%	$ 5,002.60	$ 28.92
1186	36	81	5.19	5.22	$ 11,809	99%	1%	$ 11,741.00	$ 67.87
1460	48	264	7.42	11.97	$ 56,754	62%	38%	$ 35,180.80	$ 21,573.13
1489	30	177	0	11.08	$ 21,290	100%	0%	$ 21,289.84	$ -
1490	30	392	0	11.08	$ 47,021	100%	0%	$ 47,020.58	$ -
1735	24	103	112.16	3.25	$ 10,337	100%	0%	$ 10,337.20	$ -
1736	24	106	111.69	3.24	$ 10,623	100%	0%	$ 10,622.89	$ -
1738	24	90	82.28	1.77	$ 8,984	100%	0%	$ 8,983.77	$ -
1739	24	31	835.99	0.52	$ 3,052	100%	0%	$ 3,052.08	$ -
1775	18	26	27.02	0	$ 2,360	100%	0%	$ 2,360.03	$ -
1776	24	227	44.28	0	$ 22,694	100%	0%	$ 22,694.01	$ -
1902	30	294	52.49	0	$ 35,269	100%	0%	$ 35,268.75	$ -
1910	24	181	0	0	$ 18,145	100%	0%	$ 18,145.08	$ -
2189	12	33	10	0	$ 2,296	100%	0%	$ 2,296.31	$ -
2227	36	35	0.18	1.62	$ 5,110	11%	89%	$ 567.73	$ 4,541.86
2228	36	34	0.18	1.62	$ 4,946	11%	89%	$ 549.56	$ 4,396.46
2229	36	222	0.18	1.61	$ 32,238	11%	89%	$ 3,604.26	$ 28,633.84
2273	36	28	7.74	12.28	$ 4,014	63%	37%	$ 2,529.87	$ 1,483.93
2275	36	33	7.74	12.28	$ 4,726	63%	37%	$ 2,978.78	$ 1,747.24
2276	36	25	7.74	12.28	$ 3,680	63%	37%	$ 2,319.31	$ 1,360.42
2367	36	92	32.29	32.33	$ 13,305	100%	0%	$ 13,288.85	$ 16.46
2368	30	83	23.63	23.65	$ 9,918	100%	0%	$ 9,909.33	$ 8.39
2394	18	156	2.86	4.55	$ 14,028	63%	37%	$ 8,817.63	$ 5,210.42
2515	27	10	56.02	56.08	$ 1,075	100%	0%	$ 1,073.72	$ 1.15
2523	42	131	7.46	11.98	$ 23,658	62%	38%	$ 14,732.09	$ 8,926.14
2535	18	13	10	0	$ 1,190	100%	0%	$ 1,189.54	$ -
2540	18	93	10	0	$ 8,380	100%	0%	$ 8,380.43	$ -
2552	12	790	4.48	4.6	$ 55,309	97%	3%	$ 53,866.55	$ 1,442.85
2572	36	101	10	0	$ 14,672	100%	0%	$ 14,654.05	$ 18.35
2590	36	372	55.83	65.21	$ 53,922	86%	14%	$ 46,165.79	$ 7,756.32
2607	24	336	23.55	7.57	$ 33,598	100%	0%	$ 33,597.80	$ -
2608	24	294	23.55	7.57	$ 29,401	100%	0%	$ 29,400.59	$ -
2613	30	30	31.96	28.53	$ 3,557	100%	0%	$ 3,556.86	$ -
2614	30	49	31.96	28.53	$ 5,887	100%	0%	$ 5,886.90	$ -
2621	18	17	6.92	10.25	$ 1,539	100%	0%	$ 1,539.02	$ -
2623	24	288	23.55	7.57	$ 28,794	100%	0%	$ 28,793.82	$ -
2624	18	9	16.57	10.27	$ 803	100%	0%	$ 803.11	$ -
2649	30	88	19.3	22.52	$ 10,602	86%	14%	$ 9,085.99	$ 1,515.90
2666	48	278	60.27	76.7	$ 59,863	79%	21%	$ 47,039.77	$ 12,823.35
2673	60	841	60.29	76.7	$ 239,822	79%	21%	$ 188,512.02	$ 51,310.04
2674	48	100	60.28	76.7	$ 21,443	79%	21%	$ 16,852.65	$ 4,590.59
2675	48	80	60.28	76.7	$ 17,146	79%	21%	$ 13,474.98	$ 3,670.52
2676	48	164	60.28	76.7	$ 35,291	79%	21%	$ 27,736.05	$ 7,555.17
2677	48	269	60.28	76.7	$ 57,915	79%	21%	$ 45,516.63	$ 12,398.52
2678	48	294	60.28	76.7	$ 63,220	79%	21%	$ 49,685.90	$ 13,534.21
2679	48	43	60.28	76.7	$ 9,346	79%	21%	$ 7,345.28	$ 2,000.82
2680	48	249	60.28	76.7	$ 53,609	79%	21%	$ 42,132.27	$ 11,476.64
2711	60	544	79.29	191.7	$ 155,157	41%	59%	$ 64,175.15	$ 90,981.58
2717	27	94	23.63	23.65	$ 10,377	100%	0%	$ 10,368.32	$ 8.78
2728	21	29	7.45	7.77	$ 2,731	96%	4%	$ 2,618.80	$ 112.49
2751	15	69	24.96	29.43	$ 5,516	85%	15%	$ 4,678.27	$ 837.81
2756	21	25	7.45	7.77	$ 2,414	96%	4%	$ 2,314.34	$ 99.41

FacilityID	Pipe Size (in)	Pipe Length (ft)	Existing Flow (cfs)	Future Flow (cfs)	Replacement Cost (2012 $)	Design Flows Expressed as % of Pipe Capacity		Estimated Replacement Cost Allocation (Based on Design Flow)	
						Existing	Future	Existing Users Allocation	Future Allocation
2799	42	67	121.94	18.67	$ 11,990	71%	29%	$ 8,512.99	$ 3,477.14
2837	48	70	157.82	18.67	$ 14,958	71%	29%	$ 10,619.90	$ 4,337.70
2838	48	1035	13.26	18.68	$ 222,529	71%	29%	$ 157,961.99	$ 64,566.67
2870	48	365	13.26	18.69	$ 78,368	71%	29%	$ 55,599.57	$ 22,768.15
2874	48	40	8.36	8.36	$ 8,703	100%	0%	$ 8,703.08	$ -
2902	18	217	16.67	0	$ 19,503	100%	0%	$ 19,503.34	$ -
2905	18	25	14.77	0	$ 2,219	100%	0%	$ 2,218.90	$ -
2906	18	349	14.77	0	$ 31,368	100%	0%	$ 31,367.92	$ -
2907	21	306	14.73	0	$ 29,029	100%	0%	$ 29,028.80	$ -
2910	21	124	14.73	0	$ 11,805	100%	0%	$ 11,805.16	$ -
2912	21	135	14.73	0	$ 12,804	100%	0%	$ 12,803.83	$ -
2913	24	415	14.73	0	$ 41,474	100%	0%	$ 41,473.75	$ -
2915	27	351	14.73	0	$ 38,645	100%	0%	$ 38,645.44	$ -
2917	27	328	10	0	$ 36,108	100%	0%	$ 36,108.33	$ -
2919	27	330	14.74	0	$ 36,251	100%	0%	$ 36,251.47	$ -
2921	27	55	14.86	1.17	$ 5,997	100%	0%	$ 5,997.11	$ -
2922	18	36	6.16	10.24	$ 3,258	60%	40%	$ 1,959.79	$ 1,298.04
2923	36	243	51.45	13.04	$ 35,296	100%	0%	$ 35,296.48	$ -
2925	36	297	51.45	13.04	$ 43,108	100%	0%	$ 43,108.18	$ -
2926	42	49	51.29	13.04	$ 8,811	100%	0%	$ 8,811.11	$ -
2928	48	284	50.86	13.04	$ 61,105	100%	0%	$ 61,105.04	$ -
2929	48	91	70.04	13.04	$ 19,644	100%	0%	$ 19,644.17	$ -
2931	48	194	93.46	13.04	$ 41,779	100%	0%	$ 41,778.69	$ -
2932	30	232	45.72	13.04	$ 27,872	100%	0%	$ 27,872.14	$ -
2935	30	65	36.9	13.04	$ 7,771	100%	0%	$ 7,770.75	$ -
2936	30	263	10	0	$ 31,512	100%	0%	$ 31,512.06	$ -
2939	30	37	36.44	13.04	$ 4,462	100%	0%	$ 4,461.66	$ -
2940	30	93	36.44	13.04	$ 11,206	100%	0%	$ 11,206.33	$ -
2945	18	341	6.16	10.24	$ 30,711	60%	40%	$ 18,474.61	$ 12,236.43
2952	30	334	36.44	0	$ 40,130	100%	0%	$ 40,129.75	$ -
2953	30	352	36.44	0	$ 42,286	100%	0%	$ 42,286.42	$ -
2954	30	349	36.44	0	$ 41,875	100%	0%	$ 41,875.17	$ -
2955	30	319	43.43	0	$ 38,265	100%	0%	$ 38,265.22	$ -
2977	18	115	19.87	0.01	$ 10,333	100%	0%	$ 10,332.51	$ -
2978	18	38	19.87	0	$ 3,398	100%	0%	$ 3,397.87	$ -
3040	60	504	79.29	191.7	$ 143,691	41%	59%	$ 59,432.92	$ 84,258.48
3094	60	19	10	0	$ 5,375	79%	21%	$ 4,245.96	$ 1,128.67
3095	60	191	60.28	76.7	$ 54,336	79%	21%	$ 42,704.03	$ 11,632.39
3330	60	486	79.29	191.7	$ 138,369	41%	59%	$ 57,231.36	$ 81,137.31
3331	60	302	79.29	191.7	$ 86,162	41%	59%	$ 35,637.81	$ 50,523.98
3332	60	129	79.29	191.7	$ 36,818	41%	59%	$ 15,228.63	$ 21,589.73
3333	60	541	60.28	76.7	$ 154,114	79%	21%	$ 121,121.22	$ 32,992.87
				Total	$ 7,293,510	-	-	$ 5,806,043	$ 1,487,466
				Value of Excess Capacity (Expressed As Percent)				**79.6%**	**20.4%**

S T A F F R E P O R T

DATE: **November 12, 2014**

TO: The Honorable Mayor and City Council

FROM: Blake Thomas

SUBJECT: **Consideration to approve an Amendment to the Storm Drain Impact Fee Analysis**

RECOMMENDATION:

Motion to Approve Ordinance No. _____ adopting the Storm Drain Impact Fee Analysis.

BACKGROUND:

The Storm Drain Impact Fee Analysis was updated after the Midas Creek Annexation to include this new area of the city.

DISCUSSION:

There are thee service areas for the provision of Storm Water services in Herriman. This amendment only impacts one of the areas. The City requires that all development detain water in order to equalize the runoff rate throughout the City to a standard that is set at .2cfs per acre for all properties within the area. Storm water impact fees are charged on an acreage basis.

ALTERNATIVES:

The development agreement with SLR caps the impact fee that can be charged within the annexation area. Either adopt proposed increase, previous fee outlined, or other fee that would be adequate to meet the development needs of the City.

FISCAL IMPACT:

A new Storm Drain Impact fee will need to be adopted.

Herriman, Utah
Ordinance No. 14-__

AN ORDINANCE ADOPTING THE STORM DRAIN IMPACT FEE ANANYSIS

WHEREAS, the Herriman City Council ("Council") met in regular meeting on November 19, 2014, to consider, among other things, adopting the Storm Drain Impact Fee Analysis ("Strom Drain Analysis"); and

WHEREAS, before preparing or contracting to prepare the Storm Drain Analysis, the City posted notice of its intent to prepare or contract to prepare Storm Drain Analysis on the Utah Public Notice Website created pursuant to Utah Code Ann. § 63F-1-701; and

WHEREAS, on or about _____, the written notice of the public hearing was mailed to each affected entity; and

WHEREAS, on or about August 4, 2014, notice of the public hearing was posted on Herriman's official website; and

WHEREAS, on or about August 4, 2014 notice of the public hearing was published in the *Desert News* and *Salt Lake Tribune*; and

WHEREAS, on or about October 10, 2014 notice of the public hearing was published on the Utah Public Notice Website created pursuant to Utah Code Ann. § 63F-1-701

WHEREAS, on or about October 10, 2014, notice of the public hearing and/or public meeting was posted on Herriman's official website; and

WHEREAS, on or about October 10, 2014 a copy of the Storm Drain Analysis and summary was made available to the public; and

WHEREAS, on or about January 28, 2014 notice of Herriman's intent to enact or modify a storm drain impact fee was posted on the Utah Public Notice Website created pursuant to Utah Code Ann. § 63F-1-701; and

WHEREAS, on or about October 10, 2014 a copy of the Storm Drain Analysis and summary was posted on Herriman's official website; and

WHEREAS, on or about October 10, 2014 a copy of the Storm Drain Analysis and summary was placed in the Herriman Public Library; and.

WHEREAS, on or about October 22, 2014, a public hearing was held to hear public comments on the Storm Drain Analysis; and

WHEREAS, the Council finds that the Storm drain Analysis contains all the necessary statutory elements for an impact fee analysis and that all notices and hearings have been given and held; and

WHEREAS, the Council finds that it is in the best interest of the inhabitants of Herriman to adopt the Storm Drain Analysis.

NOW, THEREFORE, BE IT ORDAINED by the Council that the Strom Drain Analysis be adopted.

PASSED AND APPROVED this 19th day of November, 2014.

HERRIMAN CITY

By:_____
Carmen Freeman, Mayor

ATTEST:

_____
Jackie Nostrom, City Recorder

Herriman City

Storm Water Impact Fee Analysis

ZIONS BANK PUBLIC FINANCE

September 2014

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SUMMARY OF IMPACT FEE ANALYSIS

BACKGROUND INFORMATION

Herriman City ("the City") retained Bowen Collins & Associates to prepare an Impact Fee Facilities Plan (IFFP) for storm water, and retained Zions Bank Public Finance to prepare this Impact Fee Analysis (IFA) for the calculation of appropriate storm water impact fees. This IFA relies on the information provided in the IFFP regarding current system capacity and future storm water capital facility needs, cost and timing.

Service Areas. There are three geographic service areas for the provision of storm water services in Herriman. These service areas are shown on the map in Appendix A and are referred to as Service Area #1 - West Herriman; Service Area #2 - South Herriman; and Service Area #3 - Herriman Towne Center.

Service Area #1 (West Herriman) contains most of the existing development and storm drain infrastructure in the City. Service Area #2 (South Herriman) is currently mostly undeveloped and Service Area #3 (Towne Center) is a 373-acre development on the central east side of Herriman with a separate master plan and storm drain system.

Demand Units. The City requires that all development detain water in order to equalize the runoff rate throughout the City to a standard that is set at 0.2 cfs per acre for all properties within Service Area #1 ("West Herriman") and for 0.02 to 0.05 cfs per acre for all properties within Service Area #2 ("South Herriman"). Therefore, because the *rate* of flow is controlled, the demand unit for storm water capital facilities is the same for all development types and is calculated based on the development of "acres." Storm water impact fees are charged, at platting, on an acreage basis.

IMPACT ON CONSUMPTION OF EXISTING CAPACITY

Utah Code 11-36a-304(1)(a)

According to the IFFP, the existing storm water system improvements in Service Area #1 are currently at 79.6 percent of capacity, leaving 20.4 percent of capacity remaining for future development.[1] Service Area #2 has only minor storm water project improvements which are not eligible to be paid for with impact fees. There are no system storm drain capital facilities and no excess capacity is available to serve the needs of development. Significant excess capacity (47 percent) exists in Service Area #3 – the Towne Center.[2] The value of the excess capacity, which benefits the entire storm water system, rather than one particular geographic location, has been apportioned among all future users.

IMPACT ON SYSTEM IMPROVEMENTS BY ANTICIPATED NEW DEVELOPMENT

Utah Code 11-36a-304(1)(b)

[1] Bowen & Collins, Impact Fee Facilities Plan for Storm Water, June 2013, p.5.
[2] Bowen & Collins, Impact Fee Facilities Plan for Storm Water, June 2013, p.5.

The City has determined to maintain its current level of storm water service. Therefore, additional storm water improvements will be required in order to maintain the established storm water level of service. The new facilities needed that have been identified by the City's engineers total $5,546,934 for Service Area #1 and $3,332,797 for Service Area #2.

System improvements associated with Service Area #3 (Herriman Towne Center) were provided by the Momentum Development Group and total $2,985,839.

Proportionate Share Analysis and Impact Fee Calculation

Utah Code 11-36a-304(1)(d) and (e) and (2)(a) and (b)

Service Area #1. Because the storm water system has excess capacity, the City proposes to require future residents to buy-in to the existing storm water system, as well as to contribute their fair share to the new storm water facilities needed for new development. These costs, along with allowable consultant costs, are summarized below, resulting in a total maximum impact fee of $3,489.79 per acre in Service Area #1.

Table 1: Per Acre Impact Fee Calculation – Service Area #1

	Amount
Excess Capacity Buy-In Cost:	
Storm Water System Actual Cost	$10,833,337.59
Excess Capacity	20.4%
Value of Excess Capacity	$2,210,000.87
Total Acres Served by Excess Capacity	2,278
Value of Excess Capacity per Acre	$969.99
New Construction Costs:	
Impact Fee Eligible System Improvements	$5,546,934
Acres Served by Construction of New System Improvements (undeveloped acres to buildout)	2,278
Cost per Acre	$2,434.60
Consultant Costs:	
Consultant Costs	$30,795
Acres Served by Consultant Costs (acres developed over next 6 years)	200
Consultant Costs per Acre	$153.98
Fee Summary	
Buy-In Cost per Acre	$969.99
New System Improvements Cost per Acre	$2,434.60
Consultant Fees	$153.98
Fund Balance Credit	-$68.76
IMPACT FEE COST PER ACRE	**$3,489.79**

Service Area #2. Service Area #2 currently only has storm water improvements designed as project improvements. There are no system storm water improvements and no excess capacity in the system that is eligible to be considered for impact fees. New construction costs of $3,332,797, along with allowable consultant costs, are summarized below, resulting in a total maximum impact fee of $1,337.48 per acre in Service Area #2.

TABLE 2: PER ACRE IMPACT FEE CALCULATION – SERVICE AREA #2

	Amount
New Construction Costs:	
Impact Fee Eligible System Improvements	$3,332,797
Acres Served by Construction of New System Improvements (undeveloped acres to buildout)	2,729
Cost per Acre	$1,221.25
Consultant Costs:	
Consultant Costs	$23,245
Acres Served by Consultant Costs (acres developed over next 6 years)	200
Consultant Costs per Acre	$116.23
Fee Summary	
Buy-In Cost per Acre	$0.00
New System Improvements Cost per Acre	$1,221.25
Consultant Fees	$116.23
Fund Balance Credit	-$0.00
IMPACT FEE PER ACRE	**$1,337.48**

Service Area #3. Because the storm water system has excess capacity, the City proposes to require future residents to buy-in to the existing storm water system, as well as to contribute their fair share to the new storm water facilities needed for new development. These costs, along with allowable consultant costs, are summarized below, resulting in a total maximum impact fee of $8,041.32 per acre in Service Area #3.

TABLE 3: PER ACRE IMPACT FEE CALCULATION – SERVICE AREA #3

	Amount
Excess Capacity Buy-In Cost:	
Storm Water System Historic Value	$1,524,757
Excess Capacity	47%
Value of Excess Capacity	$716,636
Total Acres Served by Excess Capacity	272
Value of Excess Capacity per Acre	$2,634.69
New Construction Costs:	
Impact Fee Eligible System Improvements	$1,461,082
Acres Served by Construction of New System Improvements (undeveloped acres to buildout)	272
Cost per Acre	$5,371.63
Consultant Costs:	
Consultant Costs	$3,500
Acres Served by Consultant Costs (acres developed over next 6 years)	100
Consultant Costs per Acre	$35.00
Fee Summary	

	Amount
Buy-In Cost per Acre	$2,634.69
New System Improvements Cost per Acre	$5,371.63
Consultant Fees	$35.00
Fund Balance Credit	$0.00
IMPACT FEE PER ACRE	**$8,041.32**

Manner of Financing for Public Facilities

For Service Area #3, the impact fees collected will not be sufficient to cover all of the costs of the storm drain system. This is due to the fact that the 101 acres already platted did not pay an impact fee that would sufficiently cover their fair share of the system. The total amount collected from the 101 acres is $370,164. The development of the additional 272 acres will generate $2,187,238, if each acre pays the calculated maximum fee of $8,041.23. These two amounts, added together, total $2,557,402, which is $428,437 less than the $2,985,839 needed to cover all costs. The difference of $428,437 will be made up through other sources. It is anticipated that the repayment source will include, but not be limited to, tax increment as generated by the Community Development Area (CDA) for the Herriman Towne Center.

Table 4: Calculation of Anticipated Shortfall of Impact Fees – Service Area #3

	Fee
Fees to be Collected	$2,187,238
Amount Previously Collected	$370,164
Total Amount Collected	$2,557,402
Amount Needed for all System Improvements	$2,985,839
Shortfall	**$428,437**

UTAH CODE LEGAL REQUIREMENTS

Utah law requires that communities prepare an Impact Fee Analysis (IFA) based on the information presented in the Impact Fee Facilities Plan (IFFP) before enacting an impact fee. Utah law also requires that communities give notice of their intent to prepare and adopt an IFA. This IFA follows all legal requirements as outlined below. Herriman City has retained Zions Bank Public Finance (ZBPF) to prepare this Impact Fee Analysis in accordance with legal requirements.

NOTICE OF INTENT TO PREPARE IMPACT FEE ANALYSIS

A local political subdivision must provide written notice of its intent to prepare an IFA before preparing the Analysis (Utah Code 11-36a-503(1)). This notice must be posted on the Utah Public Notice website. The City has complied with this noticing requirement for the IFA by posting notice on January 28, 2014. A copy of the notice is included in Appendix C.

PREPARATION OF IMPACT FEE ANALYSIS

Utah Code requires that "each local political subdivision… intending to impose an impact fee shall prepare a written analysis of each impact fee" (Utah Code 11-36a-303).

Section 11-36a-304 of the Utah Code outlines the requirements of an impact fee analysis which is required to identify the following:

(a) identify the anticipated impact on or consumption of any existing capacity of a public facility by the anticipated development activity;
(b) identify the anticipated impact on system improvements required by the anticipated development activity to maintain the established level of service for each public facility;
(c) demonstrate how anticipated impacts are reasonably related to the anticipated development activity;
(d) estimate the proportionate share of:
    (i) The costs for existing capacity that will be recouped; and
    (ii) The costs of impacts on system improvement that are reasonably related to the new development activity; and
(e) based on the requirements of this chapter, identify how the impact fee was calculated.

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

(a) the cost of each existing public facility that has excess capacity to serve the anticipated development resulting from the new development activity;
(b) the cost of system improvements for each public facility;
(c) other than impact fees, the manner of financing for each public facility such as user charges, special assessments, bonded indebtedness, general taxes, or federal grants;

(d) the relative extent to which development activity will contribute to financing the excess capacity of and system improvements for each existing public facility, by means such as user charges, special assessments, or payment from the proceeds of general taxes;
(e) the relative extent to which development activity will contribute to the cost of existing public facilities and system improvements in the future;
(f) the extent to which the development activity is entitled to a credit against impact fees because the development activity will dedicate system improvements or public facilities that will offset the demand for system improvements, inside or outside the proposed development;
(g) extraordinary costs, if any in servicing the newly developed properties; and
(h) the time-price differential inherent in fair comparisons of amounts paid at different times.

Calculating Impact Fees

Utah Code states that for purposes of calculating an impact fee, a local political subdivision or private entity may include:

(a) the construction contract price;
(b) the cost of acquiring land, improvements, materials, and fixtures;
(c) the cost for planning, surveying, and engineering fees for services provided for and directly related to the construction of the system improvements; and
(d) for political subdivision, debt service charges, if the political subdivision might use impact fees as a revenue stream to pay the principal and interest on bonds, notes or other obligations issued to finance the costs of the system improvements.

Additionally, the Code states that each political subdivision or private entity shall base impact fee amounts on realistic estimates and the assumptions underlying those estimates shall be disclosed in the impact fee analysis.

Certification of Impact Fee Analysis

Utah Code states that an impact fee facilities plan shall include a written certification from the person or entity that prepares the impact fee facilities plan. This certification is included as part of this Impact Fees Analysis.

Impact Fee Enactment

Utah Code states that a local political subdivision or private entity wishing to impose impact fees shall pass an impact fee enactment in accordance with Section 11-36a-402. Additionally, an impact fee imposed by an impact fee enactment may not exceed the highest fee justified by the impact fee analysts. An impact fee enactment may not take effect until 90 days after the day on which the impact fee enactment is approved.

CONSUMPTION OF EXISTING CAPACITY, IMPACT ON SYSTEM IMPROVEMENTS AND HOW IMPACTS ARE RELATED TO ANTICIPATED DEVELOPMENT ACTIVITY

Utah Code 11-36a-304(1)(a),(b) and (c)

GROWTH IN DEMAND

Herriman City requires that all development detain water in order to equalize the runoff rate throughout the City to a standard that is set at 0.2 cfs per acre for all properties within service area #1 ("West Herriman") and for 0.02 to 0.05 cfs per acre for all properties within service area #2 ("South Herriman"). Service areas #1 and #2 have separate storm drain systems. Service Area #3 (Towne Center) has a separate master plan and also has a separate storm drain system.

The City estimates that it currently has 2,278 unplatted and undeveloped acres in Service Area #1 (West Herriman); 2,729 unplatted and undeveloped acres in Service Area #2 (South Herriman); and 272 unplatted and undeveloped acres in Service Area #3 (Towne Center).[3]

Growth in developed acres will generate demand for storm water facilities. Table 5 shows the projected growth in the City through 2023 – the next ten years.

TABLE 5: PROJECTED GROWTH THROUGH 2022

Year	New Acres Developed	Cumulative New Acres of Development
Service Area 1 – West Herriman		
2014	33.33	33.33
2015	33.33	66.67
2016	33.33	100.00
2017	33.33	133.33
2018	33.33	166.67
2019	33.33	200.00
2020	33.33	233.33
2021	33.33	266.67
2022	33.33	300.00
2023	33.33	333.33
Service Area 2 – South Herriman		
2014	33.33	33.33
2015	33.33	66.67
2016	33.33	100.00
2017	33.33	133.33
2018	33.33	166.67
2019	33.33	200.00
2020	33.33	233.33
2021	33.33	266.67
2022	33.33	300.00
2023	33.33	333.33
Service Area 3 – Towne Center		
2014	16.67	16.67
2015	16.67	33.33

[3] Meeting with Herriman City, July 10, 2014.

Year	New Acres Developed	Cumulative New Acres of Development
2016	16.67	50.00
2017	16.67	66.67
2018	16.67	83.33
2019	16.67	100.00
2020	16.67	116.67
2021	16.67	133.33
2022	16.67	150.00
2023	16.67	166.67

Consumption of Existing Capacity by Anticipated New Development

Service Area #1. According to Bowen, Collins & Associates, the City's storm water engineers, the existing storm water system improvements in Service Area #1 are currently at 79.6 percent of capacity, leaving 20.4 percent of capacity remaining for future development.[4] However, because the excess capacity is scattered throughout the system, the actual amount of excess capacity for a particular geographic location varies widely. Therefore, the existing excess capacity is considered to be shared equally among the remaining 2,278 acres remaining to be developed in Service Area #1. Therefore a portion, but not all, of the excess capacity will be consumed within the next six to ten years.

TABLE 6: SERVICE AREA #1 – CONSUMPTION OF EXCESS CAPACITY

Year	Developable Acres Remaining	Percent of Capacity Remaining	Buy-In Amount Remaining
2014	2,278	20.4%	$2,210,001
2015	2,245	20.1%	$2,177,668
2016	2,212	19.8%	$2,145,335
2017	2,178	19.5%	$2,113,002
2018	2,145	19.2%	$2,080,669
2019	2,112	18.9%	$2,048,336
2020	2,078	18.6%	$2,016,003
2021	2,045	18.3%	$1,983,670
2022	2,012	18.0%	$1,951,337
2023	1,978	17.7%	$1,919,005

Service Area #2. Service Area #2 is currently mostly undeveloped. There are no existing storm drain capital facilities that have excess capacity that are eligible to be reimbursed through impact fees.

Service Area #3. Service Area #3 is estimated by the engineers to be at 53 percent of capacity, leaving 47 percent of the system with excess capacity. This is based on information provided in the Storm Drain Impact Fee Facilities Plan as follows:

[4] Bowen & Collins, Impact Fee Facilities Plan for Stormwater, June 2014 update, p. 5.

The Towne Center service area contains 373 acres. According to information provided by the Momentum Development Group, about half of the storm drain system in the Towne Center have been constructed and provide service to approximately 190 acres. One hundred and one acres of the service area have been platted and have previously paid storm drain impact fees in the Towne Center. Therefore, the existing storm drain system has 47 percent available capacity to serve 89 acres of future development. The 47 percent available capacity in the existing Towne Center storm drain system is eligible to be reimbursed through impact fees, imposed in the Towne Center.[5]

Impact on System Improvements by Anticipated New Development

The City has determined to maintain its current level of storm water service. Therefore, additional storm water improvements will be required in order to maintain the established storm water level of service. The new facilities needed have been identified by the City's engineers for Service Area #1 and Service Area #2.

TABLE 7: NEW SYSTEM IMPROVEMENTS NECESSITATED BY NEW DEVELOPMENT – SERVICE AREA #1

Project #	Year	Total Cost	% to New Development	Cost Attributable to New Development
P21	2015	$335,829	51%	$172,720
P8	2015	$666,021	62%	$409,720
P1	2015	$359,785	39%	$138,625
P22	2015	$608,514	62%	$374,343
Copper Creek Structures	2015	$200,000	100%	$200,000
P23	2016	$346,562	51%	$178,240
P3	2016	$26,526	17%	$4,587
DB5	2016	$697,400	77%	$537,858
P7	2016	$1,198,750	35%	$421,539
P24	2016	$596,546	62%	$366,981
P25	2016	$435,475	62%	$267,894
P28	2016	$219,643	100%	$219,643
P29	2016	$296,488	100%	$296,488
P30	2016	$196,976	100%	$196,976
P31	2016	$158,405	100%	$158,405
P27	2017	$307,594	62%	$189,224
DB1	2017	$370,600	80%	$294,820
P2	2017	$37,118	46%	$17,042
P5	2017	$1,276,292	6%	$82,379
P26	2017	$462,793	62%	$284,699
P32	2017	$139,231	100%	$139,231

[5] Bowen & Collins, Impact Fee Facilities Plan for Stormwater, June 2014 update, p.5.

Project #	Year	Total Cost	% to New Development	Cost Attributable to New Development
P33	2017	$595,520	100%	$595,520
TOTAL		**$9,532,068**		**$5,546,934**

TABLE 8: NEW SYSTEM IMPROVEMENTS NECESSITATED BY NEW DEVELOPMENT – SERVICE AREA #2

Project #	Year	Total Cost	% to New Development	Cost Attributable to New Development
OC17	2014	$828,385	98%	$809,120
P15	2014	$305,216	28%	$86,015
P17	2014	$354,858	90%	$319,373
OC19	2014	$605,455	79%	$479,071
OC18	2015	$427,246	39%	$165,309
OC7	2017	$501,762	95%	$476,674
OC5	2018	$447,271	100%	$447,271
P18	2019	$304,821	13%	$38,915
DB2	2019	$1,813,400	28%	$511,049
TOTAL		**$5,588,414**		**$3,332,797**

System improvements associated with the Herriman Towne Center were provided by the Momentum Development Group.

TABLE 9: NEW SYSTEM IMPROVEMENTS NECESSITATED BY NEW DEVELOPMENT – SERVICE AREA #3

Geographic Area	System Costs
Midas Creek	
Plat A	$824,724
Rose Creek	
Plat C Ph 1	$103,311
Plat C Ph 2	$200,146
Plat D Ph 1	$90,756
Plat D Ph 2	$262,820
Plat E Ph 1	$43,000
Expenditures to Date	**$1,524,757**
Remaining System Costs	**$1,461,082**
Total System Costs	**$2,985,839**

Relation of Anticipated Development Activity to Impacts on Existing Capacity and System Improvements

The demand placed on existing storm water improvements by new development activity is attributed to the increased developed acres related to both residential and nonresidential growth. Platted acreage, the first step in the development process, is expected to increase by 200 acres in Service Area #1 over the next six years. Developed acreage in Service Area #2 is also expected to increase by 200 acres over the next six years. Developed acreage in Service Area #3 is expected to increase by 100 acres over the next six years.

PROPORTIONATE SHARE ANALYSIS

Utah Code 11-36a-304(1)(d)(i) and (ii)

COSTS FOR EXISTING CAPACITY

Service Area #1. Because the existing storm water system in Service Area #1 has excess capacity, the City proposes to require future residents to buy-in to the existing storm water system in order to achieve an equitable allocation to the costs borne in the past and to be borne in the future, in comparison to the benefits already received and yet to be received. The total historical cost for storm water improvements paid for by the City is $10,833,337.59. Detailed listings of the storm water system costs are included in Appendix B. Table 10 shows that the value of the excess capacity is based on 20.4 percent of the actual cost, or $2,210,000.87.

The excess capacity will benefit all of new development and, therefore, the cost has been distributed over all future developed acres. Future developable acres, excluding open space, are estimated at 2,278 acres.

TABLE 10: PER ACRE BUY-IN COST FOR EXISTING CAPACITY – SERVICE AREA #1

	Amount
Storm Water System Historic Value	$10,833,337.59
Excess Capacity	20.4%
Value of Excess Capacity	$2,210,000.87
Total Acres Served by Excess Capacity	2,278
Value of Excess Capacity per Acre	$969.99

Service Area #2. There is no excess capacity in the storm drain system in Service Area #2 that is eligible for impact fees, as all improvements are project (not system) improvements.

Service Area #3. Because the water system in Service Area #3 has excess capacity, the City proposes to require future residents to buy-in to the existing storm water system in order to achieve an equitable allocation to the costs borne in the past and to be borne in the future, in comparison to the benefits already received and yet to be received. The total historical cost for system storm water improvements is $2,985,839. Detailed listings of the storm water system costs are included in Table 9. Table 11 shows that the value of the excess capacity is based on 47 percent of the historic cost of $1,524,757, or $716,636. This excess capacity was designed for Service Area #3.

The excess capacity will benefit all of new development in Service Area #3 and, therefore, the cost has been distributed over all unplatted acres. Future acres to be platted are estimated at 272 acres.

TABLE 11: PER ACRE BUY-IN COST FOR EXISTING CAPACITY – SERVICE AREA #3

	Amount
Storm Water System Historic Value	$1,524,757
Excess Capacity	47%
Value of Excess Capacity	$716,636
Total Acres Served by Excess Capacity	272
Value of Excess Capacity per Acre	$2,634.69

Costs of System Improvements Related to New Development Activity

The City intends to maintain its existing level of service for storm water services through adding the improvements shown in Tables 12, 13 and 14. In addition, engineering and consultant fees are considered a legitimate cost in calculating impact fees. These costs are also summarized below.

Service Area #1. Total impact-fee eligible costs for new construction are $5,546,934 in Service Area #1. These facilities are designed to serve all of the 2,278 undeveloped acres in Service Area #1, resulting in a cost per acre of $2,434.60. Consultant costs are estimated at $30,795 in order to prepare the engineering plans, impact fee facility plans and impact fee analysis that were necessary in order to calculate defensible impact fees. The engineering and consultant studies are considered to serve development over the next six years. Therefore, the average consultant cost per acre is calculated by dividing the total cost of $30,795 by the 200 acres expected to develop in the next six years, resulting in a cost per acre of $153.98.

Table 12: Per Acre Cost for System Improvements – Service Area #1

	Amount
New Construction Costs:	
Impact Fee Eligible System Improvements	$5,546,934
Acres Served by Construction of New System Improvements (undeveloped acres to buildout)	2,278
Cost per Acre	$2,434.60
Consultant Costs:	
Consultant Costs	$30,795
Acres Served by Consultant Costs (acres developed over next 6 years)	200
Consultant Costs per Acre	$153.98

Service Area #2. Total impact-fee eligible costs for new construction are $3,332,797 in Service Area #2. These facilities are designed to serve all of the 2,729 undeveloped acres in Service Area #2, resulting in a cost per acre of $1,221.25. Consultant costs are estimated at $27,095 in order to prepare the engineering plans, impact fee facility plans and impact fee analysis that were necessary in order to calculate defensible impact fees. The engineering and consultant studies are considered to serve development over the next six years. Therefore the average consultant cost per acre is calculated by dividing the total cost of $23,245 by the 200 acres expected to develop in the next six years, resulting in a cost per acre of $116.23.

Table 13: Per Acre Cost for System Improvements – Service Area #2

	Amount
New Construction Costs:	
Impact Fee Eligible System Improvements	$3,332,797
Acres Served by Construction of New System Improvements (undeveloped acres to buildout)	2,729
Cost per Acre	$1,221.25
Consultant Costs:	
Consultant Costs	$23,245

	Amount
Acres Served by Consultant Costs (acres developed over next 6 years)	200
Consultant Costs per Acre	$116.23

Service Area #3. Total impact-fee eligible costs for new construction are $1,461,082 in Service Area #3. These facilities are designed to serve all of the 272 unplatted and undeveloped acres in Service Area #3, resulting in a cost per acre of $5,371.63. Consultant costs are estimated at $3,500 in order to prepare the impact fee analysis that was necessary in order to calculate defensible impact fees. The consultant studies are considered to serve development over the next six years. Therefore the average consultant cost per acre is calculated by dividing the total cost of $3,500 by the 100 acres expected to develop in the next six years, resulting in a cost per acre of $35.00.

TABLE 14: PER ACRE COST FOR SYSTEM IMPROVEMENTS – SERVICE AREA #3

	Amount
New Construction Costs:	
Impact Fee Eligible System Improvements	$1,461,082
Acres Served by Construction of New System Improvements (undeveloped acres to buildout)	272
Cost per Acre	$5,371.63
Consultant Costs:	
Consultant Costs	$3,500
Acres Served by Consultant Costs (acres developed over next 6 years)	100
Consultant Costs per Acre	$35.00

Impact Fee Calculation

Service Area #1. For Service Area #1, buy-in costs of $969.99, plus new system costs of $2,434.60 per acre, plus consultant costs of $153.98 per acre, less an outstanding fund balance of $156,672 that will benefit all of new development by defraying costs for the new facilities,[6] result in total maximum impact fees per acre of $3,489.79 in Service Area #1.

TABLE 15: SERVICE AREA #1 – PROPORTIONATE SHARE IMPACT FEE CALCULATION

	Fee
Buy-In Cost per Acre	$969.99
New System Improvements Cost per Acre	$2,434.60
Consultant Fees	$153.98
Fund Balance Credit	-$68.76
Cost per Acre	**$3,489.79**

[6] The reduced amount per acre, due to the fund balance, is calculated by dividing the $156,672 fund balance by the 2,272 future acres to be developed.

Service Area #2. Service Area #2 has no existing excess capacity and no fund balance. Therefore, the impact fee is derived solely from the new construction cost per acre of $1,221.25, plus the consultant cost per acre of $116.23, resulting in a total maximum impact fee of $1,337.48.

TABLE 16: SERVICE AREA #2 – PROPORTIONATE SHARE IMPACT FEE CALCULATION

	Fee
Buy-In Cost per Acre	$0.00
New System Improvements Cost per Acre	$1,221.25
Consultant Fees	$116.23
Fund Balance Credit	-$0.00
Cost per Acre	**$1,337.48**

Service Area #3. For Service Area #3, buy-in costs of $2,634.69, plus new system costs of $5,371.63 per acre, plus consultant costs of $35.00 per acre, result in total maximum impact fees per acre of $8,041.32 in Service Area #3.

TABLE 17: SERVICE AREA #3 – PROPORTIONATE SHARE IMPACT FEE CALCULATION

	Fee
Buy-In Cost per Acre	$2,634.69
New System Improvements Cost per Acre	$5,371.63
Consultant Fees	$35.00
Fund Balance Credit	$0.00
Cost per Acre	**$8,041.32**

MANNER OF FINANCING, CREDITS, ETC.

Utah Code 11-36a-304(2)(c),(d),(e),(f),(g), and (h)

MANNER OF FINANCING

An impact fee is a one-time fee that is implemented by a local government on new development to help fund and pay for all or a portion of the costs of public facilities that are needed to serve new development. These fees are usually implemented to help reduce the economic burden on local jurisdictions that are trying to deal with population growth within the area. As a matter of policy and legislative discretion, a City may choose to have new development pay the full cost of its share of new public facilities if the facilities would not be needed except to service new development. However, local governments may use other sources of revenue to pay for the new facilities required to service new development and use impact fees to recover the cost difference between the total cost and the other sources of revenue. Additionally, impact fees allow new growth to share in the cost of existing facilities that have excess capacity.

Additional storm water system improvements beyond those funded through impact fees that are desired to maintain this "higher" level of service will be paid for by the community through other revenue sources such as user charges, special assessments, general obligation bonds, general taxes, etc.

IMPACT FEE CREDITS

The Impact Fees Act requires credits to be given for future payments on outstanding debt for facilities identified in the IFFP so that there is no double-charging for fees. Credits may also be given to developers who have constructed or directly funded items that are included in the IFFP or donated to the City in lieu of impact fees, including the dedication of land for system improvements. This situation does not apply to developer exactions or improvements required to offset density or as a condition for development. Any item for which a developer receives credit must be included in the IFFP and must be agreed upon with the City before construction begins.

In the situation that a developer chooses to construct facilities found in the IFFP in lieu of impact fees, the arrangement must be made through the developer and the City.

The standard impact fee can also be decreased to respond to unusual circumstances in specific cases in order to ensure that impact fees are imposed fairly. In certain cases, a developer may submit studies and data that clearly show a need for adjustment.

At the discretion of the City, impact fees may be modified for low-income housing, although alternate sources of funding for the storm water facilities must be identified.

EXTRAORDINARY COSTS AND TIME PRICE DIFFERENTIAL

It is not anticipated that there will be any extraordinary costs in servicing newly-developed storm water properties. To account for the time-price differential inherent in fair comparisons of amounts paid at different times, historical costs have been used to compute buy-in costs to public facilities with excess capacity and current costs have been used to compute impacts on system

improvements required by anticipated development activity to maintain the established level of service for each public facility.[7]

CERTIFICATION

Zions Bank Public Finance certifies that the attached impact fee analysis:

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

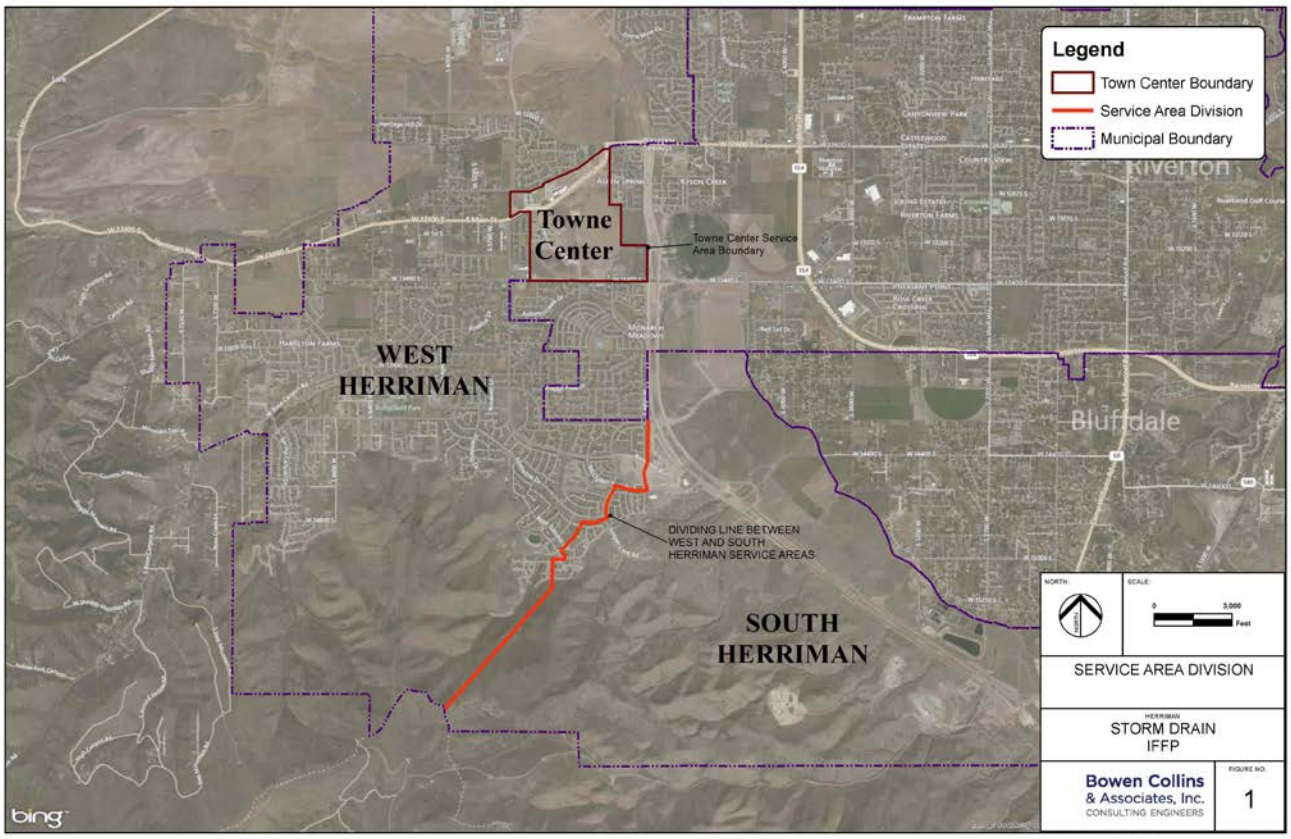
2. Does not include:
    a. costs of operation and maintenance of public facilities;
    b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;
    c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement.

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

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

[7] Since the time span covered by this analysis is only six years and inflation rates are low, current costs have been used to calculate impact fees for storm water system improvements.

APPENDIX A – MAP OF SERVICE AREAS



APPENDIX B – EXISTING STORM WATER IMPROVEMENTS AND VALUES

Property Description	Date in Service	Book Cost	% System	System Cost
STORM DRAIN - 14020 S 5775 W	12/07/00	31,781.00	100%	31,781.00
STORM DRAIN - 14300 S 5270 W	1/13/01	118,455.00	100%	118,455.00
STORM DRAIN - 14000 S 5700 W	7/05/01	172,578.45	100%	172,578.45
STORM DRAIN - 14000 S 5935 W	7/17/01	159,627.35	100%	159,627.35
STORM DRAIN - 14185 S 5450 W	10/03/01	192,685.60	0%	-
STORM DRAIN - 13650 S 6000 W	10/15/01	46,704.45	100%	46,704.45
STORM DRAIN - 14400 S 5200 W	5/02/02	414,520.00	100%	414,520.00
STORM DRAIN - 13540 S 5600 W	7/06/02	47,210.00	100%	47,210.00
STORM DRAIN - 13900 S 5250 W	9/13/02	96,240.00	0%	-
STORM DRAIN - 14325 S 4880 W	9/20/02	192,850.00	0%	-
STORM DRAIN - 14000 S 5600 W	11/07/02	189,649.40	100%	189,649.40
STORM DRAIN - 5600 W 12885 S	11/12/02	248,419.50	100%	248,419.50
STORM DRAIN - 13400 S 5800 W	2/27/03	125,614.00	100%	125,614.00
STORM DRAIN - 13400 S 5800 W	3/19/03	3,018.00	100%	3,018.00
STORM DRAIN - 14135 S 5800 W	4/03/03	245,555.00	100%	245,555.00
STORM DRAIN - 14135 S 5800 W	6/17/03	192,560.00	100%	192,560.00
STORM DRAIN - 6400 W 13768 S	7/01/03	19,596.00	100%	19,596.00
STORM DRAIN - 13162 S 5600 W	7/01/03	1,756.00	100%	1,756.00
STORM DRAIN - 6400 W 13400 S	8/01/03	281,735.10	100%	281,735.10
STORM DRAIN - 13790 S 6630 W	9/30/03	122,085.50	100%	122,085.50
STORM DRAIN - 13100 S 6320 W	10/02/03	38,696.00	100%	38,696.00
STORM DRAIN - 13900 S 5400 W	12/03/03	75,673.00	0%	-
STORM DRAIN - 14300 S 5900 W	1/13/04	294,339.62	26%	76,528.30
STORM DRAIN - 13400 S 5800 W	1/13/04	32,338.00	100%	32,338.00
STORM DRAIN - 13400 S 5800 W	1/13/04	61,268.00	100%	61,268.00
STORM DRAIN - 13810 S 6670 W	2/10/04	105,915.00	100%	105,915.00
STORM DRAIN - 14600 S 5500 W	2/12/04	310,788.50	26%	80,805.01
STORM DRAIN - 12610 S 5480 W	2/18/04	142,207.00	100%	142,207.00
STORM DRAIN - 13200 S 5600 W	5/20/04	325,781.50	100%	325,781.50
STORM DRAIN - 14600 S 5500 W	6/11/04	74,760.00	26%	19,437.60
STORM DRAIN - 13620 S 6941 W	6/30/04	61,110.60	100%	61,110.60
STORM DRAIN - 13620 S 6941 W	6/30/04	54,326.40	100%	54,326.40
STORM DRAIN - 13620 S 6941 W	6/30/04	214,390.00	100%	214,390.00
FLOOD DRAINAGE PROJECTS 2003	6/30/04	305,491.45	100%	305,491.45
Storm Drain Project 13400 S	4/30/05	137,639.69	100%	137,639.69
Storm Drain - 13900 S 6100 W	6/15/05	75,185.00	100%	75,185.00
Storm Drain - 14700 S 5300 W	12/09/04	361,550.00	100%	361,550.00

Property Description	Date in Service	Book Cost	% System	System Cost
Storm Drain - 12600 S 4600 W	8/10/04	136,135.09	100%	136,135.09
Storm Drain - 12600 S 4600 W	8/26/04	58,210.00	100%	58,210.00
Storm Drain - 14400 S 5050 W	8/31/04	177,177.00	0%	-
Storm Drain - 4675 W 12460 S	6/15/05	38,790.00	0%	-
Storm Drain - 14600 S 5500 W	7/16/04	214,436.50	100%	214,436.50
Storm Drain - 13790 S 6630 W	9/30/04	122,085.50	100%	122,085.50
Storm Drain - 13400 S 6400 W	9/30/04	14,300.00	100%	14,300.00
Storm Drain - 12610 S 5480 W	8/04/04	90,368.00	100%	90,368.00
Drainage Swale - 14700 S 5300 W	12/09/04	2,400.00	100%	2,400.00
Valve Collars - 14700 S 5300 W	12/09/04	5,600.00	0%	-
Herriman Ward Building - 13381 S 6000 W	7/18/05	1,000.00	0%	-
Herriman Heights	8/03/05	348,990.00	61%	212,883.90
Heritage Place Phase 2	8/08/05	20,287.00	18%	3,651.66
Rosecrest Plat P	9/15/05	334,740.00	26%	87,032.40
Jiffy Lube 13255 S 5600 W	10/14/05	7,576.00	0%	-
Rosecrest Plat Q	11/29/05	302,648.00	26%	78,688.48
Utah Central Credit Union 13218 S 5600 W	11/29/05	7,280.00	0%	-
Legacy Ranch Plat F	12/23/05	3,742.00	47%	1,758.74
Heritage Place Phase 3	1/03/06	6,530.00	18%	1,175.40
Cove at Herriman Springs Phase 2	1/23/06	300,555.00	18%	54,099.90
Cove at Herriman Springs Phase 3	1/23/06	252,010.00	18%	45,361.80
Legacy Ranch Boulevard	3/08/06	31,570.00	47%	14,837.90
Legacy Ranch Plat C	3/08/06	30,112.00	47%	14,152.64
Towns at Legacy Ranch 7	3/09/06	18,802.44	47%	8,837.15
Towns at Legacy Ranch 3	3/09/06	7,374.00	47%	3,465.78
Towns at Legacy Ranch 2	3/09/06	5,596.00	47%	2,630.12
Towns at Legacy Ranch 11	3/09/06	14,506.07	47%	6,817.85
Towns at Legacy Ranch 1	3/09/06	51,666.00	47%	24,283.02
Checker 13225 S 5600 W	6/07/06	12,640.00	0%	-
Maverick 464 W 12600 S	6/07/06	8,250.00	0%	-
Horizon Ridge	6/13/06	75,185.00	2%	1,503.70
In-House Engineering and Costs	6/30/06	19,609.01	100%	19,609.01
Rosecrest Plat R	7/31/06	372,380.00	26%	96,818.80
Storm Drain Camera	9/05/07	118,704.00	100%	118,704.00
Boulders at Rosecrest	10/03/06	2,200.00	26%	572.00
Cove at Herriman Springs Phase 2	12/20/06	300,555.00	18%	54,099.90
Cove at Herriman Springs Phase 3	12/20/06	252,010.00	18%	45,361.80
Cove at Herriman Springs Phase 4A	10/20/06	36,040.00	18%	6,487.20

Property Description	Date in Service	Book Cost	% System	System Cost
Cove at Herriman Springs Phase 4B	10/20/06	23,700.00	18%	4,266.00
Cove at Herriman Springs Phase 4C	12/20/06	43,000.00	18%	7,740.00
Cove at Herriman Springs Phase 4D	12/20/06	22,420.00	18%	4,035.60
Hamilton Farms Phase 3	4/13/07	121,784.30	43%	52,367.25
Hamilton Farms Phase 4A	4/13/07	214,390.00	43%	92,187.70
Hamilton Farms Phase 4B	4/13/07	54,326.40	43%	23,360.35
Legacy Ranch Plat C	6/05/07	30,112.00	47%	14,152.64
Overlook Phase 1	8/31/06	53,520.00	30%	16,056.00
Overlook Phase II	4/19/07	81,155.00	30%	24,346.50
Rose Canyon Professional Plaza	4/30/07	8,315.00	0%	-
Rose Creek storm drains	6/20/07	2,082,792.24	52%	1,083,051.96
Rosalina Detention	1/31/07	498,156.29	100%	498,156.29
Mirabella Detention	11/07/06	409,665.30	100%	409,665.30
Storm Drains - Copper Creek	6/30/07	35,000.00	24%	8,400.00
Storm Drains - Maverick Station	7/18/06	15,926.25	0%	-
Jordan Credit Union	7/11/06	12,250.00	0%	-
Storm Drain-Cove at Herriman Spring Phase 1	6/30/08	602,874.00	18%	108,517.32
Storm Drains-Herriman Plaza Phase 1	6/30/08	96,525.00	57%	55,019.25
Storm Drains-Indian Hollow Subdivision	6/30/08	65,730.00	5%	3,286.50
Storm Drains-LDS Church	6/30/08	1,000.00	0%	-
Storm Drains-LDS Church Hamilton Farms	6/30/08	2,000.00	0%	-
Storm Drains-Mountain American Credit Union	6/30/08	29,701.40	0%	-
Storm Drains-Utah Central Credit Union	6/30/08	7,280.00	0%	-
Storm Drains-Valley View Estates Phase 2	6/30/08	177,171.60	61%	108,074.68
3" Honda Trash Pump	3/07/08	1,304.00	0%	-
3" Honda Trash Pump	3/07/08	1,304.00	0%	-
3" Honda Trash Pump	3/07/08	1,304.00	0%	-
4" Honda Trash Pump	3/07/08	1,845.00	0%	-
2" Honda Trash Pump	3/07/08	1,104.00	0%	-
3" Honda Trash Pump	3/07/08	1,304.00	0%	-
Rosecreek Storm Drain Project	6/30/08	203,786.62	52%	105,969.04
Storm Drain Impr - Barney Sub No. 2	6/30/09	22,100.00	50%	11,050.00
Storm Drain Imp - Cove @ H.S. Ph 4	6/30/09	96,050.00	18%	17,289.00
Storm Drain Imp - Cove @ H.S. Ph 4B	6/30/09	23,700.00	18%	4,266.00
Storm Draim Imp - Indian Hollow Sub	6/30/09	65,730.00	5%	3,286.50
Storm Drain Imp - Jordan C.U.	6/30/09	12,250.00	0%	-
Storm Drain Imp - Rosecrest Plat T	6/30/09	489,770.00	26%	127,340.20
Storm Drain Imp - Rosecrest Plat U	6/30/09	175,520.00	26%	45,635.20

Property Description	Date in Service	Book Cost	% System	System Cost
Storm Drain Imp - Shoshone Hills Ph 1	6/30/09	174,565.00	42%	73,317.30
Storm Drain Imp - Umbria Estates	6/30/09	105,901.00	67%	70,953.67
Storm Drain Imp - Sunset Meadows	6/30/09	60,445.00	14%	8,462.30
Butterfield/Main St. Storm Drain	8/01/08	671,528.00	100%	671,528.00
Copper Creek Storm drain	5/10/09	395,348.00	24%	94,883.52
Mt. Ogden Peak Extension	6/30/10	30,593.00	100%	30,593.00
Rosecrest Pl M2-Village Ph 3	6/30/10	381,930.00	26%	99,301.80
Ft. Herr Estates	6/30/10	102,200.00	0%	-
Church-14550 S. Junipercrest	6/30/10	1,000.00	0%	-
Church-12737 S 6000 W	6/30/10	55,600.00	0%	-
Ivie Farms	6/30/10	105,288.00	0%	-
Ft. Herriman Cove Ph 1	6/30/10	137,811.00	53%	73,039.83
Church-14300 S 6400 W	6/30/10	6,150.00	0%	-
Church-7079 W Rose Canyon	6/30/10	4,500.00	0%	-
Veranda Court	6/30/10	14,830.00	0%	-
Hamilton Farms Ph 3	6/30/10	121,784.00	43%	52,367.12
Hamilton Farms PUD Ph 4A	6/30/10	214,390.00	43%	92,187.70
Hamilton Farms PUD Ph 4B	6/30/10	54,326.00	43%	23,360.18
Hamilton Farms PUD Ph 4C	6/30/10	61,111.00	43%	26,277.73
Cove @ Herriman Springs Ph 5A	6/30/10	54,747.00	18%	9,854.46
Cove @ Herriman Springs Ph 5B	6/30/10	55,770.00	18%	10,038.60
Hollister Place - Pool	6/30/10	29,800.00	0%	-
Lafayette Estates	6/30/10	440,708.00	0%	-
Lookout Ridge Estates	6/30/10	523,674.00	14%	73,314.36
Copper Creek St Dr Improvements	2/16/11	18,817.00	24%	4,516.08
13400 S 5600 W St Dr Tie-In	12/21/10	8,218.00	100%	8,218.00
Copper Creek St Dr Inlet - 6000 W	11/23/10	5,300.00	100%	5,300.00
Farmgate/Timbergate Improvements	1/15/11	50,940.00	0%	-
Beacon Hill St Drain - 14200 S.	5/06/11	13,945.00	50%	6,972.50
Engineering-12600 S St Dr/Copper Creek	6/05/11	4,059.00	100%	4,059.00
Storm Drain Imp-Cove @ H.S. Ph 5C	11/02/10	55,300.00	26%	14,378.00
Storm Drain Imp-Cove @ H.S. Ph 5D	11/02/10	85,900.00	26%	22,334.00
Storm Drain Imp-Cove @ H.S. Ph C1	12/01/10	41,000.00	26%	10,660.00
Storm Drain Imp-Silver Bowl Est Ph 1	12/07/10	23,002.00	0%	-
Storm Drain Imp-Valley View Est Ph 3	2/16/11	262,987.00	61%	160,422.07
Storm Drain Imp-Valley View Ph 4	3/16/11	168,420.00	61%	102,736.20
Storm Drain Imp-Valley View Ph 5	4/22/11	135,178.00	61%	82,458.58
Black Hawk ES PH 1	11/01/11	122,684.00	20%	24,536.80
Desert Creek ES PH 1	8/18/11	138,654.00	52%	72,100.08

Property Description	Date in Service	Book Cost	% System	System Cost
Desert Creek ES PH 2	8/16/11	44,894.00	52%	23,344.88
Herriman Highlands	12/29/11	28,820.00	0%	-
HTC Plat B PH 1	4/24/12	46,810.40	0%	-
		20,220,953.52		**$10,833,337.59**

APPENDIX C - NOTICE OF INTENT TO PREPARE A COMPREHENSIVE AMENDMENT TO THE STORM WATER IMPACT FEE ANALYSIS

Notice of Preparation of Storm Water, Drainage, and Flood Control Facilities Impact Fee Facilities Plan and Analysis

January 28, 2014

Notice is hereby given that Herriman intends to prepare and/or contract for the preparation of an Impact Fee Facilities Plan and analysis for Storm Water, Drainage, and Flood Control Facilities. Those receiving this Notice are invited to provide information to be considered in adopting the analysis. For information about the analysis or proposed Impact Fee, please contact Blake Thomas at 13011 S Pioneer St, Herriman, Utah 84096, e-mail engineering@herriman.org. Any information provided should be provided in writing.

HERRIMAN CITY

{00103087.DOC /}

STAFF REPORT

DATE: November 12, 2014

TO: The Honorable Mayor and City Council

FROM: Bryn McCarty, City Planner

SUBJECT: **Rezone from R-2-10 to MU-2 (File Number 13Z14)**

RECOMMENDATION:

A Motion to approve Ordinance No. _____ a rezone for the property located at 12200 South 5250 West from R-2-10 (Medium Density Residential) to MU-2 (Mixed Use)

BACKGROUND:

This is part of the Anthem Development. It has always been planned as Commercial.

The item was heard by the Planning Commission and the Planning Commission recommended approval on November 6, 2014.

DISCUSSION:

Planning Commission recommended approval from R-2-10 to MU-2 with a zoning condition that the overall density on the Anthem Development remain at 7 units per acre. Any density used on this parcel will be deducted from the overall Anthem Development.

FISCAL IMPACT:

There is no fiscal impact to the City.

Herriman, Utah
Ordinance No. 14-xx

Rezone 12200 S 5250 W from R-2-10 (Medium Density Residential) to MU-2 (Mixed Use) (File No. 13Z14)

WHEREAS, the City of Herriman, pursuant to state law, may enact a land use ordinance establishing regulations for land use and development; and

WHEREAS, pursuant to City of Herriman Ordinance, the Planning Commission shall hold a public hearing and provide reasonable notice at least 10 days prior to said public hearing to prepare and recommend to the City Council the proposed land use ordinance map changes; and

WHEREAS, notice of the Planning Commission public hearing on the land use ordinance map change was sent on October 24, 2014, noticing of the November 6, 2014, public hearing at 7:00 p.m.; and

WHEREAS, the Planning Commission recommended approval of the land use ordinance map change in the meeting held on November 6, 2014, at 7:00 p.m. in the Community Center; and

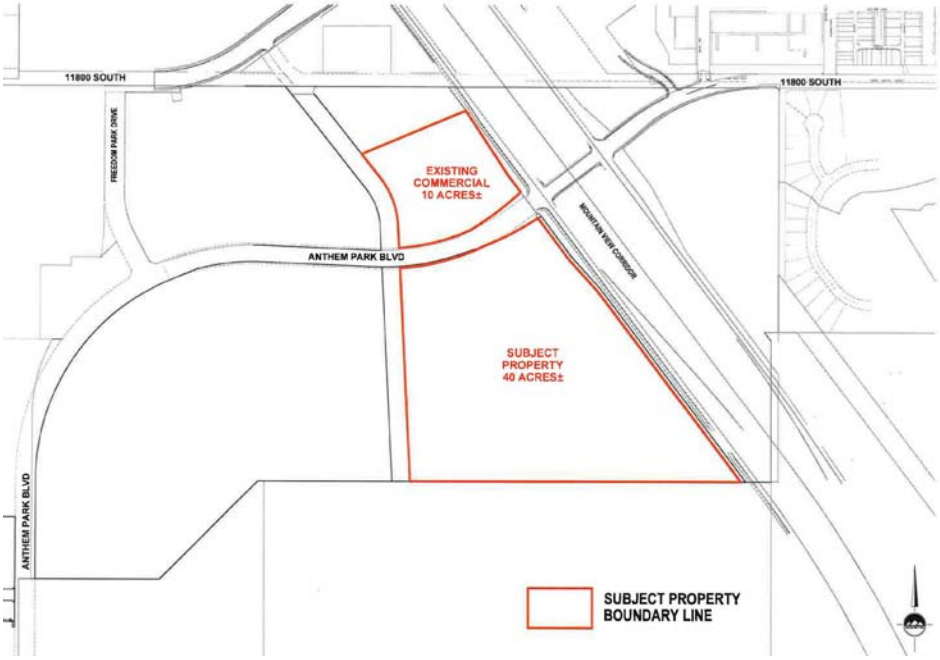
WHEREAS, pursuant to City of Herriman Ordinance, the City Council must hold a public meeting allowing public input at said public meeting; and

WHEREAS, the City Council public meeting on November 19, 2014, was held at 7:00 p.m. in the Community Center; and

WHEREAS, the City Council finds that it is in the best interest of the citizens of Herriman to adopt the land use ordinance map change as recommended by the Planning Commission;

NOW THEREFORE, be it ordained by the Herriman City Council that the following legally described area be adopted as a map change from R-2-10 to MU-2 with a zoning condition that the overall density on the Anthem Development remain at 7 units per acre. Any density used on this parcel will be deducted from the overall Anthem Development (13Z14):

Legal Description



PASSED AND APPROVED this 19th day of November, 2014.

HERRIMAN CITY COUNCIL

By:_____
Carmen Freeman, Mayor

ATTEST:

_____
Jackie Nostrom, City Recorder

Land Use Application

Address or location of site (No Post Office Box #) 12200 S. 5250 W.

Size of Parcel 40± ACRES

What is Requested (explain in detail)?
REZONE TO C-Z COMMERCIAL / GATEWAY COMMERCIAL.

If applicable, square footage of proposed building(s) or addition (all stories combined).

If the request is residential, how many and what type of units (apartment, condo, etc).

Property Owner's Name LAST HOLDOUT LLC.

Mailing Address ON FILE.

Telephone Cell Number E-mail

Applicant ANTHEM UTAH. LLC

Mailing Address 6150 S. REDWOOD RD. STE 150 TAYLORSVILLE UT 84123.

Telephone 801-889-9977 Cell Number E-mail KIRK@PROJECTUTAH.COM.

Subject to Purchase or Lease: _____ or Present Owner of Property: _____

Yes I am the authorized agent or owner of the subject property: X

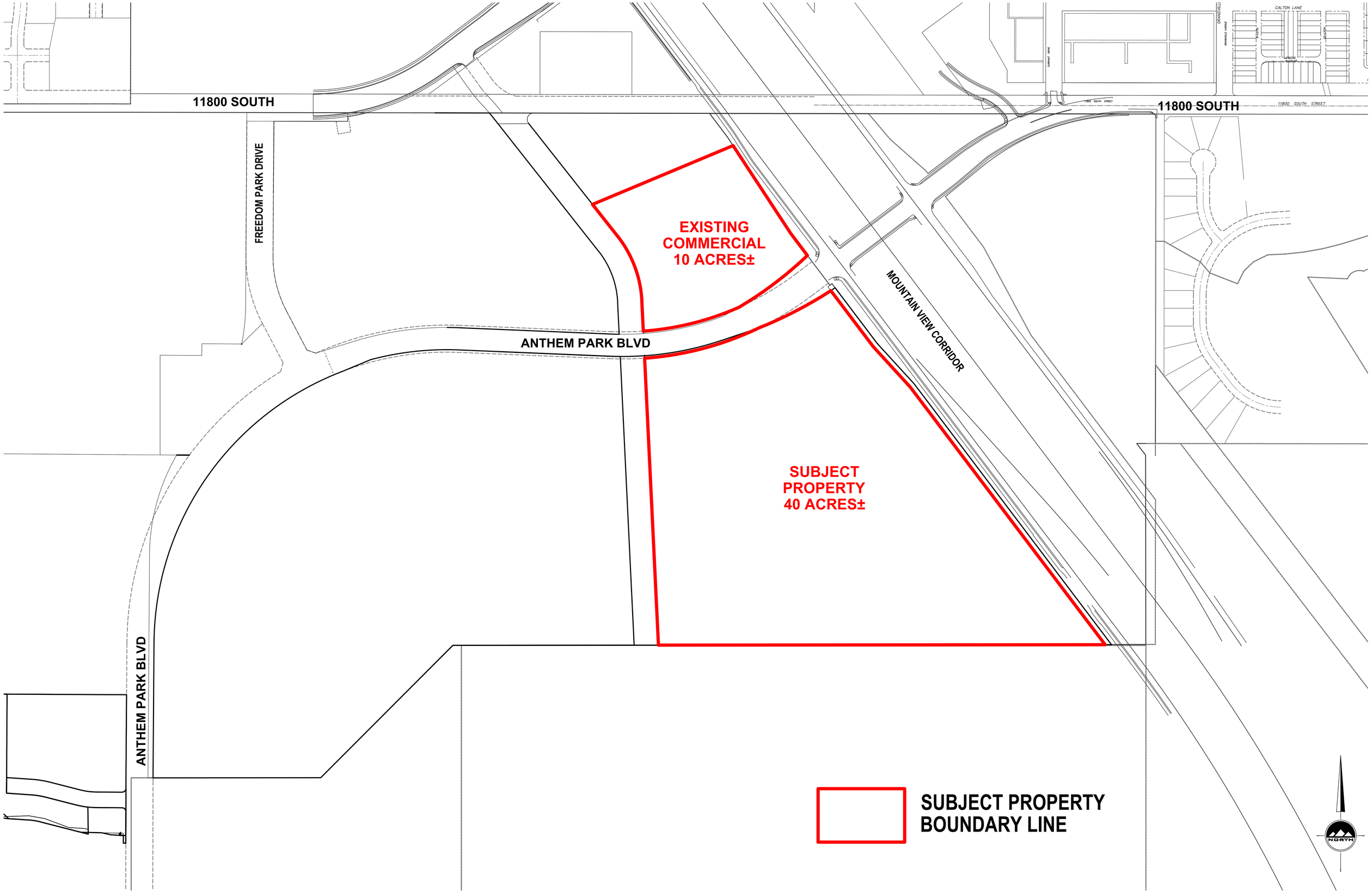
Current Use of Subject Property FARM.

Proposed Development Name ANTHEM STATION.

For Herriman Use Only

Check Number _____ Date of Submittal _____ File Number _____

Filing Fee _____ Receipt Number _____ Accepted by _____


11800 SOUTH
11800 SOUTH
11800 SOUTH STREET
11800 SOUTH STREET
CALTON LANE
GRANDVILLE AVENUE
CURRANT DRIVE
FREEDOM PARK DRIVE
EXISTING
COMMERCIAL
10 ACRES±
ANTHEM PARK BLVD
MOUNTAIN VIEW CORRIDOR
SUBJECT
PROPERTY
40 ACRES±
ANTHEM PARK BLVD
SUBJECT PROPERTY
BOUNDARY LINE
NORTH

STAFF REPORT

DATE: November 12, 2014

TO: The Honorable Mayor and City Council

FROM: Bryn McCarty; City Planner

SUBJECT: Rezone from R-2-10 to R-M (File Number 12Z14)

RECOMMENDATION:

Planning Commission recommended approval from R-2-10 to R-M with a zoning condition that the density not be over 7 units per acre over the entire project.

BACKGROUND:

This is part of the Anthem PUD. The ordinance changed several months ago to require apartments in a PUD to rezone to R-M. High Density has always been shown as part of their plan in anticipation of the future transit line.

A public hearing was held and the Planning Commission recommended approval on September 18, 2014.

FISCAL IMPACT:

None.

Herriman, Utah
Ordinance No. 14-

Rezone 5350 West Anthem Park Blvd from R-2-10 (Medium Density Residential) to R-M (Multi-Family Residential) (File No. 12Z14)

WHEREAS, the City of Herriman, pursuant to state law, may enact a land use ordinance establishing regulations for land use and development; and

WHEREAS, pursuant to City of Herriman Ordinance, the Planning Commission shall hold a public hearing and provide reasonable notice at least 10 days prior to said public hearing to prepare and recommend to the City Council the proposed land use ordinance map changes; and

WHEREAS, notice of the Planning Commission public hearing on the land use ordinance map change was sent on September 8, 2014, noticing of the September 18, 2014, public hearing at 7:00 p.m.; and

WHEREAS, the Planning Commission recommended approval of the land use ordinance map change in the meeting held on September 18, 2014, at 7:00 p.m. in the Community Center; and

WHEREAS, pursuant to City of Herriman Ordinance, the City Council must hold a public meeting allowing public input at said public meeting; and

WHEREAS, the City Council public meeting on October 8, 2014, was held at 7:00 p.m. in the Community Center; and

WHEREAS, the City Council finds that it is in the best interest of the citizens of Herriman to adopt the land use ordinance map change as recommended by the Planning Commission;

NOW THEREFORE, be it ordained by the Herriman City Council that the following legally described area be adopted as a map change from R-2-10 to RM with a zoning condition that the number of units not exceed XXX on the zoning map of the City (12Z14):

Legal Description

Beginning at a on the Southerly Right-of-Way Line of Anthem Park Boulevard, said point also being South 89°53'31" East 1,392.26 feet along the Section Line and South 983.14 feet from the Northwest Corner of Section 25, Township 3 South, Range 2 West, Salt Lake Base and Meridian; and running thence South 87°36'30" East 483.66 feet along the Southerly Right-of-Way Line of said Anthem Park Boulevard; thence Southeasterly 43.57 feet along the arc of a 1,241.06 foot radius curve to the left (center bears North 02°23'30" East and the chord bears South 88°36'50" East 43.56 feet with a central angle of 02°00'41") along the Southerly Right-of-Way Line of said Anthem Park Boulevard;

thence South 02°45'37" East 1,114.38 feet;

thence South 89°56'43" West 529.87 feet;

thence North 02°45'50" West 1,012.21 feet;
thence North 07°53'03" West 24.38 feet;
thence North 00°54'10" East 99.66 feet to the point of beginning.

Contains 595,397 Square Feet or 13.668 Acres

PASSED AND APPROVED this 19th day of November, 2014.

HERRIMAN CITY COUNCIL

By:_____
Carmen Freeman, Mayor

ATTEST:

_____
Jackie Nostrom, City Recorder

HERRIMAN
CITY

September 9, 2013

Anthem Development
6150 S Redwood Road
Taylorsville, UT 84123

Re: File Number 12C13

Dear Doug Young:

The Herriman Planning Commission at their regular meeting on September 5, 2013 granted preliminary approval to your Planned Unit Development of single family detached and attached units on property located at 12000 S 5600 W. The approval was subject to the following conditions.

1. CC&R's/Design Guidelines to be reviewed and approved by Planning Commission. These should include building materials, house square footage, landscaping requirements, fencing, and a requirement for alternating similar house plans.
2. Receive and agree to the recommendations from other agencies, including UFA.
3. Maximum density of 5.18 units per acre as submitted.
4. Overall number of units approved at 698. If the acreage of the project changes the PC will determine if the overall density should be modified.
5. A 40 foot right-of-way for the transit corridor is to be preserved through the project for future use. Any portion of the transit corridor adjacent to improved roads shall be landscaped and deeded to the City. The landscaping may be xeroscaping.
6. Construct a 6 foot precast wall that meets City Standards along all collector and arterial roads, including Herriman Parkway, 5600 West, 6000 West, and Anthem Park Boulevard. The remainder of the fencing will be reviewed and approved with each phase.
7. Submit detailed phasing plan for staff review and approval. This should include the phasing of road construction and trail connections.
8. Setbacks to be reviewed and approved with each phase.
9. Coordinate with other utilities at the time of road improvements in order to minimize future road cuts.
10. Detailed plan on transit line alignment to be reviewed and approved by UTA.
11. Submit detailed plans on amenities and locations: trail design, parks and amenities; including materials and cross sections to Engineering and Parks Department for approval.
    Also provide detailed landscaping on creek and drainage/open space areas next to the trail system.

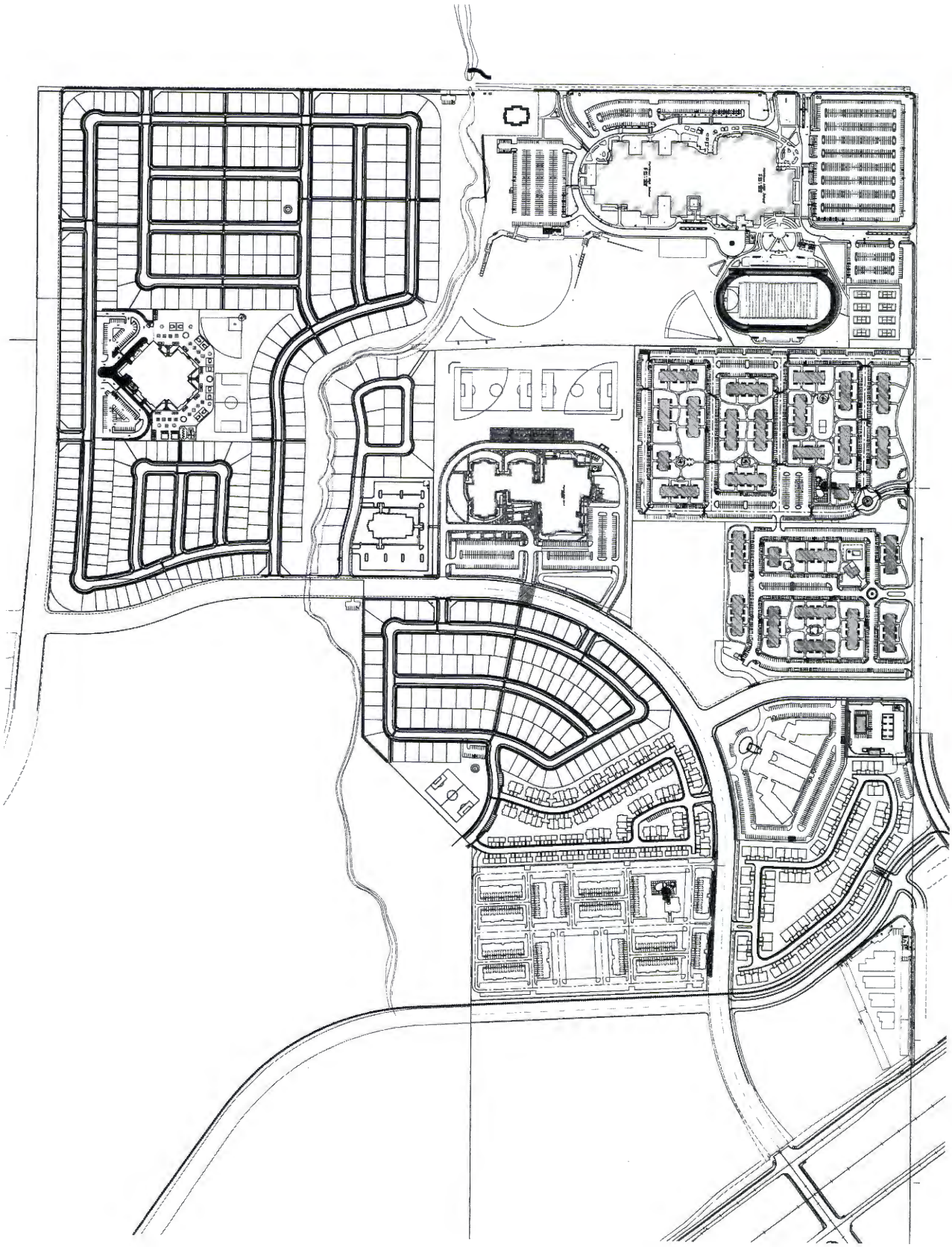
12. All of the open space along the trails shall have a combination of maintained landscape elements, which shall take into account erosion and flood control.
13. At least 20% of the planned unit development must be preserved as permanent open space and one half of the permanent open space required must be maintained in one contiguous parcel. Open space that is un-buildable, because of among other things, slope, wetlands, flood drainage, or contamination, may only be counted at 50% of the actual acreage to satisfy the applicable open space requirements. The High School in Phase 1 is allowed to count as 10% of the required open space. Before any final approvals are granted, those figures and locations must be shown.
14. The trail along the drainage should be at least 20 feet wide with an 8 foot hard surface trail.
15. Sidewalk connections should be at least 20 feet wide with a 5 foot sidewalk.
16. A homeowner's association should be established for the entire project.
17. Trails need to meet AASHTO standards.
18. Lighting plan to be submitted to engineering for review and approval. If the developer wants to use a different street light, then they need to have a new street light standard reviewed and approved by the engineering department.
19. Coordinate street furniture, tables, benches, etc with Engineering.
20. A development agreement for the entire project shall be reviewed and approved by the City Council.

A Planned Unit Development conditional use approval expires 24 months from the date the Planning Commission approval is given if the applicant does not obtain a building permit and commence construction.

If you have any questions please contact the Planning Department during regular business hours.

Sincerely,

Bryn McCarty, AICP
Planning Supervisor
planning@herriman.org



Land Use Application

Address or location of site (No Post Office Box #) 12200 S. 5250 W.

Size of Parcel 40± ACRES

What is Requested (explain in detail)?
REZONE TO C-Z COMMERCIAL / GATEWAY COMMERCIAL.

If applicable, square footage of proposed building(s) or addition (all stories combined).

If the request is residential, how many and what type of units (apartment, condo, etc).

Property Owner's Name LAST HOLDOUT LLC.

Mailing Address ON FILE.

Telephone Cell Number E-mail

Applicant ANTHEM UTAH. LLC

Mailing Address 6150 S. REDWOOD RD. STE 150 TAYLORSVILLE UT 84123.

Telephone 801-889-9977 Cell Number E-mail KIRK@PROJECTUTAH.COM.

Subject to Purchase or Lease: _____ or Present Owner of Property: _____

Yes I am the authorized agent or owner of the subject property: X

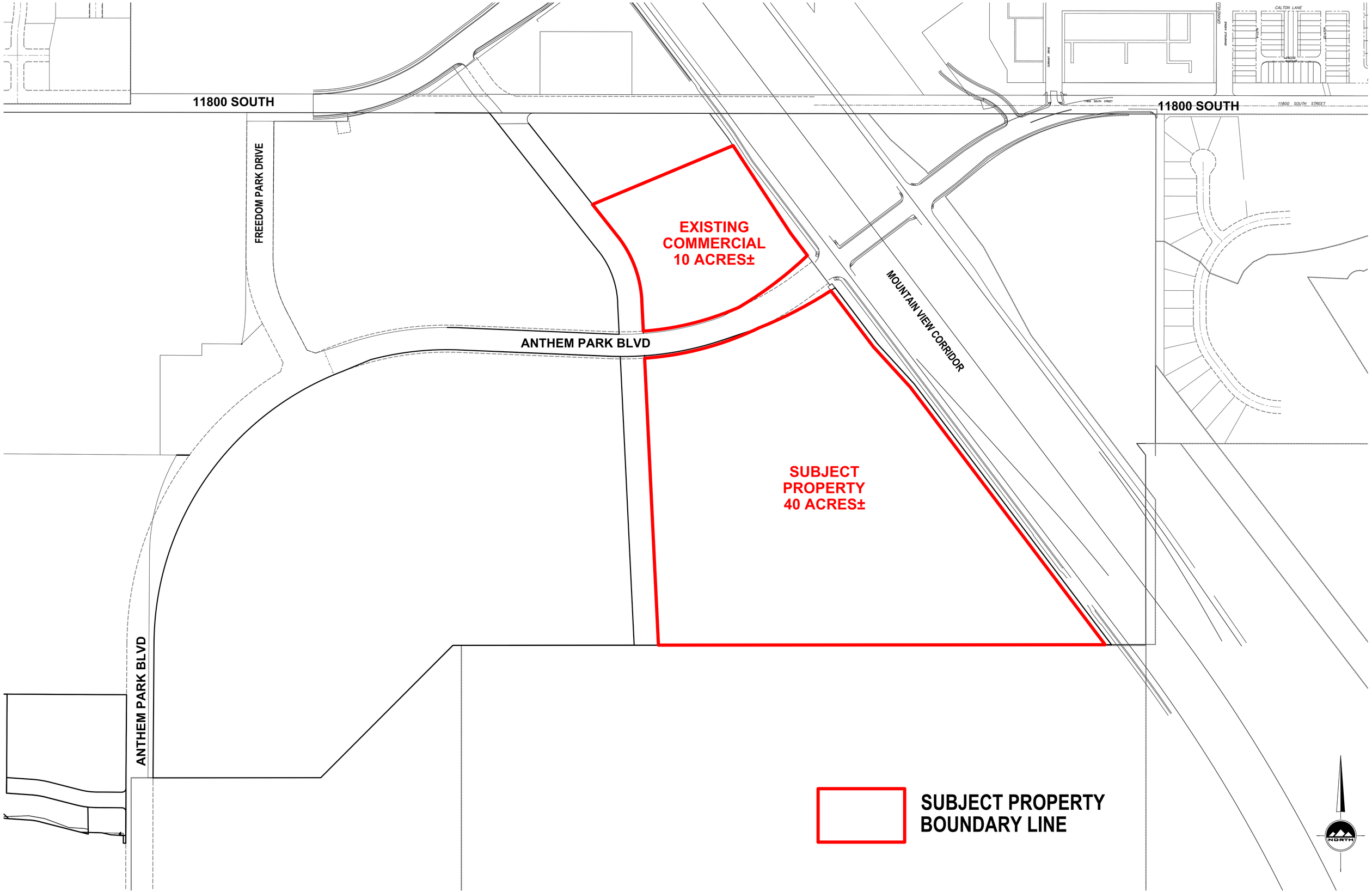
Current Use of Subject Property FARM.

Proposed Development Name ANTHEM STATION.

For Herriman Use Only

Check Number _____ Date of Submittal _____ File Number _____

Filing Fee _____ Receipt Number _____ Accepted by _____


11800 SOUTH
11800 SOUTH
11800 SOUTH STREET
11800 SOUTH STREET
CALTON LANE
GRANDVILLE AVENUE
CURRANT DRIVE
FREEDOM PARK DRIVE
EXISTING
COMMERCIAL
10 ACRES±
ANTHEM PARK BLVD
MOUNTAIN VIEW CORRIDOR
SUBJECT
PROPERTY
40 ACRES±
ANTHEM PARK BLVD
SUBJECT PROPERTY
BOUNDARY LINE
NORTH

MILLER DEVELOPMENT COMPANY

P 801.281.5757 F 801.281.5773 | millerdev.com | P.O. Box 571218 Salt Lake City, Utah 84157

Mayor Freeman and City Council
Herriman City
13011 South Pioneer Street
Herriman, Utah 84096

RE: Sage Gate at Anthem Apartments Unit Count

Dear Mayor Freeman and City Council:

As you are aware, we have sought approval for a 422 unit premiere apartment community in the Anthem development. The apartment project has received a unanimous positive recommendation from the planning commission to the city council. It was indicated by city leaders and staff that the project was required to go through a rezoning procedure with the city council, well after we have begun architectural and engineering construction drawings (it came as quite a shock).

The purpose of this letter is to explain why any change to the unit mix or the unit count, at this late date, would be very detrimental as the project has been intensively reviewed and approved and is slated to be funded immediately by the lender.

- The lending institution is excited and ready to lend $41M closing this month; any signification change would be to start the financing element over.
- Architecture and engineering is complete and would be delayed by several months.
- Change to the unit mix or unit count disrupts the financial proformas that have been reviewed, approved, and underwritten by the lender.
- Due to the time frame to reduce the unit count, the locked in interest rate will be at risk.
- The unit count is determined by the unit mix and specific market analysis.
- This project meets or exceeds the multifamily ordinances and standards of Herriman City.
- The reduction of units will affect the project's financial sustainability and longevity.

We are excited for this superior Class A project in this outstanding location, and are looking forward to the approval from the City of Herriman.

Sincerely,

Jay M. Minnick
President/CEO

Request for 12Z14 - Meeting Date 9/24/2014

The applicant is requesting approval to rezone from R-2-10 to R-M.

Site

The parcel is located at approximately 5350 W Anthem Park Blvd and contains 13.69 acres.

Zoning

The site is zoned R-2-10.

General Plan

The general plan shows that the site is in the medium density residential designation requiring a density of 4.6 - 8 units per acre. It is also adjacent to the future transit station.

Background

This is part of the Anthem PUD. The ordinance changed several months ago to require apartments in a PUD to rezone to R-M. High Density has always been shown as part of their plan in anticipation of the future transit line.

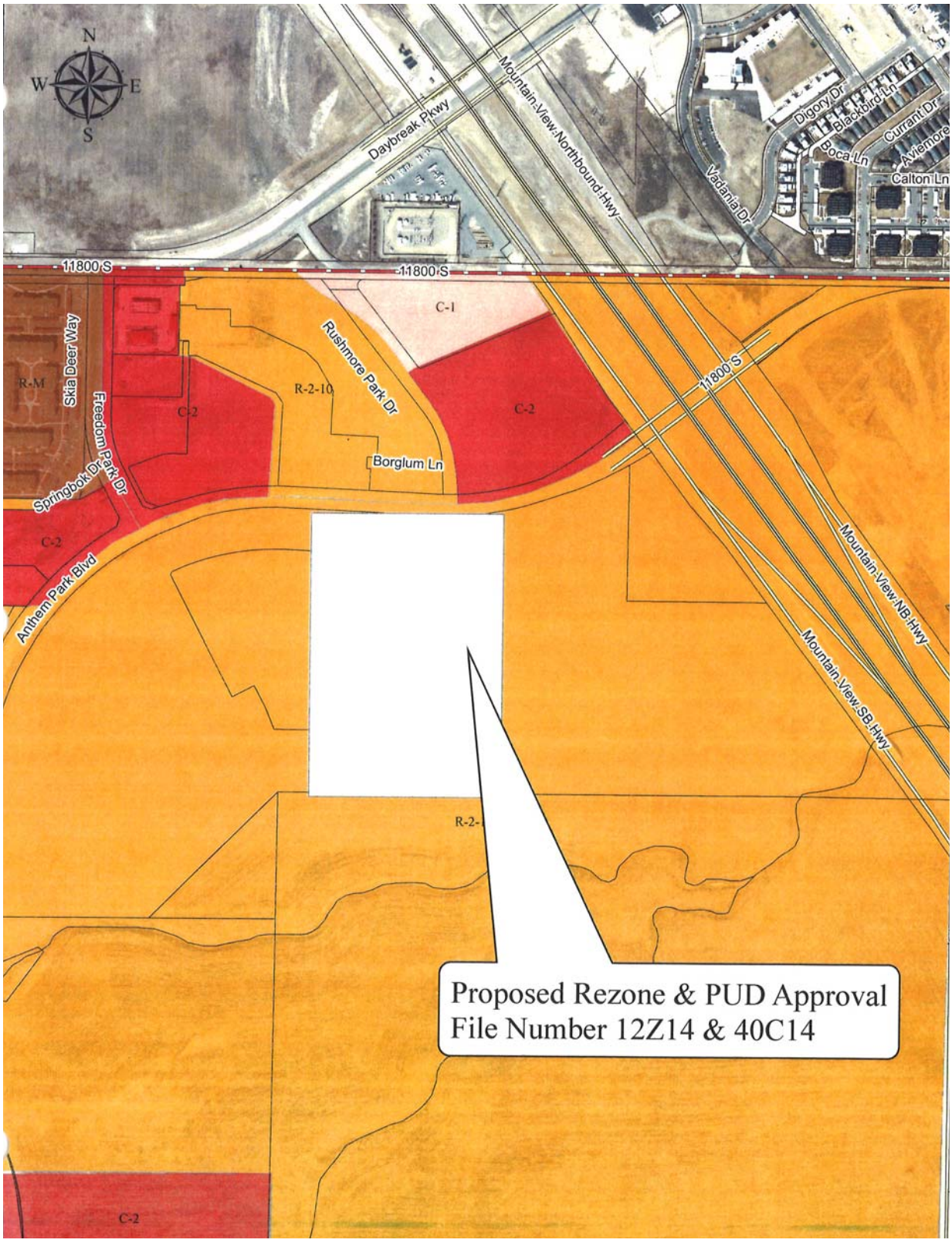
Issues

The Anthem PUD has been approved for 7 units per acre. Although the apartments are being rezoned to R-M, they still need to be within the 7 units per acre over the entire project.

The developer has also submitted an application for final PUD approval for 422 apartments on the property.

Recommendation

The Planning Commission recommends approval of the rezone from R-2-10 to R-M, with the density remaining at 7 units per acre over the entire Anthem project.


N
W
E
S
Daybreak Pkwy
Mountain View Northbound Hwy
Digory Dr
Blackbird Ln
Currant Dr
Boca Ln
Aviemore
Calton Ln
Vadania Dr
11800 S
11800 S
C-1
Rushmore Park Dr
R-M
Ski a Deer Way
Freedom Park Dr
C-2
R-2-10
C-2
11800 S
Borglum Ln
Springbok Dr
C-2
Anthem Park Blvd
Mountain View NB Hwy
Mountain View SB Hwy
R-2-
Proposed Rezone & PUD Approval
File Number 12Z14 & 40C14
C-2