



**RIVERDALE CITY PLANNING COMMISSION AGENDA
CIVIC CENTER - 4600 S. WEBER RIVER DR.
TUESDAY – FEBRUARY 8, 2022**

6:00 p.m. – Planning Commission Work Session Meeting (Council Chambers)

The purpose of the work session is to review maps, plans, paperwork, etc. No motions or decisions will be considered during this session, which is open to the public.

Planning Commission Work Session Items -Planning Commission Training to be determined

6:30 p.m. – Planning Commission Meeting (Council Chambers)

A. Welcome & Roll Call

B. Public Comment

This is an opportunity to address the Planning Commission regarding your concerns or ideas. Please try to limit your comments to three minutes. No action will be taken during public comment.

C. Presentations and Reports

D. Consent Items

1. Consideration of Meeting Minutes from:
January 25, 2022 Work Session
January 25, 2022 Regular Meeting
2. Recognition of Suzette DeMar for her service as a Planning Commissioner.

E. Action Items

1. Consideration of Conditional Use Permit request for Billboard Sign Alterations for Sign located approximately 3450 South Parker Drive, as requested by Reagan Outdoor Advertising.
2. Consideration to forward a recommendation to the City Council of a proposed Subdivision Amendment for Riverdale Joann Subdivision, property located approximately 4868 South and 4978 South 1050 West, Riverdale Utah 84405, as requested by The Lodge Properties, LLC and AWA Engineering Group.
3. Consideration to forward a recommendation to the City Council of a proposed Small Subdivision for Riverdale Shopko Subdivision, property located approximately 4054 South and 4060 South Riverdale Road, Riverdale Utah 84405, as requested by The Chasebrook Company.
4.
 - a. Consideration to untangle the discussion and considerations regarding proposed Development Agreement Amendment and associated language, as submitted by Bach Land and Development, LLC.
 - b. Consideration to forward a recommendation to the City Council regarding proposed Development Agreement Amendment and associated language, as submitted by Bach Land and Development, LLC.

All items presented by: Michael Eggett, Community Development

F. Comments

1. Planning Commission
2. City Staff

G. Adjournment

In compliance with the Americans with Disabilities Act, persons in need of special accommodation should contact the City Offices (801) 394-5541 at least 48 hours in advance of the meeting.

Certificate of Posting

The undersigned, duly appointed City Recorder, does hereby certify that the above notice and agenda was posted within the Riverdale City limits on this 4th day of February, 2022 at the following locations: 1) Riverdale City Hall Noticing Board 2) the City website at <http://www.riverdalecity.com/> 3) the Public Notice Website: <http://www.utah.gov/pmn/index.html> and 4) A copy was also provided to the Standard-Examiner.

Michelle Marigoni
Riverdale City Recorder

Minutes of the **Regular Session** of the Riverdale City **Planning Commission** held Tuesday, January 25, 2021, at 6:30 p.m., at the Civic Center, 4600 S Weber River Dr., Riverdale City, Weber County, Utah.

Present:

Commissioners:	Amy Ann Spiers, Chairman Robert Wingfield, Commissioner Blair Jones, Commissioner Wanda Ney, Commissioner Rikard Hermann, Commissioner (6:45)
City Employees:	Mike Eggett, Community Development Michelle Marigoni, City Recorder
Excused:	Suzette DeMar, Commissioner Kent Anderson, Commissioner

A. Welcome & Roll Call

The Planning Commission Meeting began at 6:38 p.m. Chairman Spiers welcomed everyone to the meeting and stated for the record that members of the Planning Commission were present except for Commissioner Anderson, and Commissioner DeMar, and that Commissioner Hermann would be late.

B. Public Comment

Chairman Spiers asked if there were any public comments. There was no public comment.

C. Presentations and Reports

Chairman Spiers turned the time over to Mr. Eggett, who announced the new Councilmember was Karina Merrill, new Planning Commissioner would be Kathy Eskelson, and that Steve Brooks would be the City Administrator for at least the next year.

Mr. Eggett briefly gave updates on upcoming projects, to include:

- Two 2-lot subdivisions for February 8th meeting.
- Maverik's building permit is ready to go.
- The new business park final site plan will be on the February 22 PC meeting.
- The AFCU new building site plan will be on the February 22 PC meeting.
- Rezones for both the Motor Vu and the property on Ritter Drive are on the agenda for February 1, 2022.

D. Consent Items

There were no consent items on this meeting's agenda.

E. Action Items

- 1. a. Public hearing to receive and consider comments regarding proposed Development Agreement language, as submitted by Bach Land and Development, LLC.**

Mr. Jones moved to open the public hearing. Mr. Wingfield seconded the motion, and the public hearing was opened. Chairman Spiers noted there was no public present, and there was no public comment.

Mr. Jones moved to close the public hearing. Mrs. Ney seconded the motion, and the public hearing was closed.

b. Consideration to forward a recommendation to the City Council regarding proposed Development Agreement and associated language, as submitted by Bach Land and Development, LLC.

Mr. Eggett explained Brandon Ames was present representing Bach Land and Development, and that the Planning Commission can discuss the agreement further during this meeting. Mr. Eggett went over the executive summary and comments from city staff. He noted this agreement was from the previous owners from 2007 and it was being updated. He then deferred to the Planning Commission for questions.

Mrs. Spiers questioned if the property was 93 acres or 69 acres.

Brandon Ames addressed Commissioners and thanked them for their time. He explained the total area was 93 acres, but they are conveying 24 acres to Riverdale City. A total of 69 acres is to be developed. He

noted this was the way it was written in the original agreement and had not been changed. Mr. Eggett clarified the property had already been dedicated to the city in 2007. Mrs. Spiers expressed that, for clarity, the 93-acre total should not be included in the agreement language.

Mr. Eggett mentioned there also needed to be a better legal description, establishing boundaries for this zone.

Commissioner Ney said the section addressing the purchase of water rights needs to be clarified to say the developer is providing the water shares and not purchasing them from Riverdale City.

Mr. Ames said the developers are open to any verbiage, though this part had already been changed once. Mr. Eggett another meeting be scheduled to address verbiage, as Mr. Brooks should be present for those decisions to be made.

Mr. Ames explained the need for the 10-year extension. He described issues with loans and financing, and that the extension would only be used if necessary. Mr. Hermann inquired about this, asking if it wouldn't be a simple request after 15 years in that case. Mr. Eggett suggested including language to allow for a request of an extension after the initial 15 years, or language to allow for administrative review prior to triggering the extension. Mr. Jones reminded the Commission this would be up to the City Council and attorney.

Commissioner Ney said history is factoring into this discussion, as it has already been 15 years, and nothing has happened. She mentioned a lot can change in another 15 or 25 years.

Mr. Ames explained they are highly motivated to build/develop as fast as possible and would hope to have it completed in 15, but that there is no way to know. He also mentioned the intent of the language regarding water shares is to show they will cooperate. Mr. Eggett explained this means the city will cooperate with the developer but will not assist with acquiring the shares. Mr. Ames said they have been working on getting the water, as the project cannot move forward without it.

There was further discussion on wording regarding city property and wetlands.

MOTION: Commissioner Jones moved to table this item for two weeks to allow the city staff to work on wording, as well as to vote on it with more Planning Commissioners present.

SECOND: Commissioner Ney seconded the motion.

ROLL CALL VOTE: All Councilmembers voted in favor. Item tabled for a future agenda.

F. Comments

There were no additional comments from the Planning Commission or City Staff.

G. Adjournment

As there was no further business to discuss, the Mr. Jones moved to adjourn. This was seconded by Mr. Wingfield. The Planning Commission meeting adjourned at 7:22 p.m.

Amy Ann Spiers
Planning Commission Chair

Michelle Marigoni
City Recorder

Date Approved: _____

Minutes of the **Work Session** of the Riverdale City **Planning Commission** held Tuesday, January 25, 2021, at 6:00 p.m., at the Civic Center, 4600 S Weber River Dr., Riverdale City, Weber County, Utah.

Present:

Commissioners:	Amy Ann Spiers, Chairman Robert Wingfield, Commissioner Blair Jones, Commissioner Wanda Ney, Commissioner
City Employees:	Mike Eggett, Community Development Michelle Marigoni, City Recorder
Excused:	Rikard Hermann, Commissioner Suzette DeMar, Commissioner Kent Anderson, Commissioner

A. Welcome & Roll Call

The Planning Commission Work Session began at 6:09 p.m. Chairman Spiers welcomed everyone to the meeting and stated for the record that members of the Planning Commission were present except for Commissioner Hermann, Commissioner Anderson, and Commissioner DeMar.

B. Public Comment

Chairman Spiers asked if there were any public comments. No one knew of any public comment.

C. Presentations and Reports

Mrs. Spiers turned the time over to Mr. Eggett, who informed Commissioners there may be a short training today if time allows. He announced that Commissioner DeMar was being released from the Planning Commission with appreciation, and that new member Kathy Eskelson would be taking her place. This would be made official on February 1 at City Council meeting.

Mr. Eggett also gave updates on upcoming projects, to include:

- Two 2-lot subdivisions for February 8th meeting.
- Maverik's building permit is ready to go.
- The new business park final site plan will be on the February 22 PC meeting.
- The AFCU new building site plan will be on the February 22 PC meeting.

Mrs. Spiers asked if officers are still directing traffic at Raising Cane's. Mr. Eggett informed her their assignment had ended and they were no longer posted there.

D. Consent Items

There were no consent items on this meeting's agenda.

E. Action Items

1. **a. Public hearing to receive and consider comments regarding proposed Development Agreement language, as submitted by Bach Land and Development, LLC.**

b. Consideration to forward a recommendation to the City Council regarding proposed Development Agreement and associated language, as submitted by Bach Land and Development, LLC.

Mr. Eggett went over the executive summary and explained the items in the packet. He noted the Agreement may need a better legal description, but that he would need to check with the attorney. He also explained the reason for the Development Agreement is that the MU (mixed use) zone currently does not allow apartments, and that this agreement would allow apartments on this property only rather than changing the entire code for the zone.

Mr. Jones had a question about previously passed rezone and rentals. Mr. Eggett explained the difference between R-1-10 and R-1-4 zones. Mr. Jones expressed worries about a whole development of rentals. Commissioner Ney questioned whether the developer or the city is providing water shares. Mr. Eggett answered the developer must bring the shares.

There was further discussion regarding the language in the agreement and the options for the Planning Commission in tonight's meeting.

F. Comments

Planning Commission Work Session, January 25, 2021

There were no additional comments from the Planning Commission or City Staff.

G. Adjournment

As there was no further business to discuss, the Planning Commission Work Session meeting adjourned at 6:31 pm.

Amy Ann Spiers
Planning Commission Chair

Michelle Marigoni
City Recorder

Date Approved: _____

**RIVERDALE CITY
PLANNING COMMISSION AGENDA
February 8, 2022**

AGENDA ITEM: E1

SUBJECT:	Consideration of Conditional Use Permit request for Billboard Sign Alterations for Sign located approximately 3450 South Parker Drive, as requested by Reagan Outdoor Advertising
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PRESENTER:	Mike Eggett, Community Development
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INFORMATION:	<ul style="list-style-type: none">a. ROA Advertise Sign Modify Cond Use Exec Summ – PC – [20220208]b. Dept Staff Reports – PC ROA Advert Sign Modify Cond Use [20220201]c. Conditional Use Permit App – [20220104]d. Reagan Sign Alt_Riverdale_Packet
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[BACK TO AGENDA](#)



Planning Commission Executive Summary

For the Commission meeting on: 2-8-2022

Petitioner: Reagan Outdoor Advertising
Represented by Guy Larson

Summary of Proposed Action

Reagan Outdoor Advertising, as represented by Guy Larson, have filed for a conditional use permit to operate a modify/alter an existing off premises advertising sign (billboard sign) located at approximately 3450 South Parker Drive. This property is located in a Agricultural (A-1) zone on property owned by Donald & Nadiene Cummins Trust. Within Title 10, Chapter 16, Section 7 of the City Codes, it states that "Any enlargement, modification, upgrade, or conversion of an existing off premises advertising sign shall require approval as a conditional use". Therefore, this request is before the Planning Commission as the decision-making body for these types of conditional use requests. This review requirement allows the Commission to look at any outstanding health, safety, and welfare concerns that may exist in association with this proposed modification to noted existing off premises advertising sign.

Following the presentation and discussion of the proposal, the Planning Commission may make a motion to approve the conditional use request, approve with required conditions or improvements to the plan (as tied to City Code 10-19), or not approve the conditional use permit request for a proposed modification of an existing off premises advertising sign at this location, with sufficient findings of fact to support the decision.

Title 10 Ordinance Guidelines (Code Reference)

This Conditional Use Permit request is regulated under City Code 10-16 "Sign Regulations" and 10-19 "Conditional Uses".

As noted by the attached letter in the packet, "per Utah State Code 72-7-510.5, the height of an outdoor advertising sign may be adjusted due to a noise abatement or safety measure, grade change, construction, directional sign, highway widening or aesthetic improvements made by an agency of this state, along an interstate or federal aid primary highway." As seen in the provided pictures, there is a noise abatement wall in place along Interstate 15 that appears to obstruct visibility to the off premises advertising sign identified with this request and this request is, therefore, validated by this Utah State Code guidance.

City staff has discussed this request, along with relevant staff concerns (if any were necessary to discuss), with Mr. Larson regarding this request for a conditional use permit at this location. No items of concern and/or discussion have been identified in the department staff report for this request. The applicant has also provided supporting documentation for this modification proposal.

The criteria for issuing a Conditional Use Permit approval is as follows (additionally, for more information regarding this zone please defer to City Code 10-10A):

10-19-5: BASIS FOR REVIEW OF CONDITIONAL USE PERMIT:

The planning commission shall review a conditional use permit with evidence presented to establish that:

A. A conditional use shall be approved if reasonable conditions are proposed or can be imposed to mitigate the

reasonably anticipated detrimental effects of the proposed use in accordance with applicable standards.

- B. If the reasonably anticipated detrimental effects of a proposed conditional use cannot be substantially mitigated by the proposal or the imposition of reasonable conditions to achieve compliance with applicable standards, the conditional use may be denied.
- C. The proposed use of the particular location is necessary or desirable to provide a service or facility which will contribute to the general well-being of the community; and
- D. Such use will not, under the circumstances of the particular case and the conditions imposed, be detrimental to the health, safety and general welfare of persons nor injurious to property or improvements in the community, but will be compatible with and complementary to the existing surrounding uses, buildings and structures when considering traffic generation, parking, building design and location, landscaping and signs; and
- E. The proposed use conforms to the goals, policies and conditions specified in this chapter for such use; and
- F. That the proposed use conforms to the goals, policies and governing principles and land use of the master plan for the city; and
- G. The proposed use will not lead to the deterioration of the environment, or ecology of the general area, nor will it produce conditions or emit pollutants of such a type or of such a quantity so as to detrimentally affect, to any appreciable degree, public or private property, including the operation of existing uses thereon, in the immediate vicinity or the community or area as a whole. (Ord. 665, 8-19-2008)

Staff would encourage the Planning Commission to review this matter, including concerns noted herein, and then discuss these matters with the petitioner. Staff would then recommend that the Planning Commission act accordingly to make a motion to approve the conditional use request, approve with required conditions or improvements to the plan (as tied to City Code 10-19), or not approve the conditional use permit request for a proposed modification of an existing off premises advertising sign at this location, with sufficient findings of fact to support the decision.

General Plan Guidance (Section Reference)

The General Plan has this area listed for Planned Manufacturing uses.

Legal Comments – City Attorney

Steve Brooks, Attorney

Administrative Comments – City Administrator

Steve Brooks, City Administrator

DEPARTMENTAL STAFF REPORTS – 2/1/2022

From: Shawn Douglas

Sent:

To: Mike Eggett

Subject:

No comments were provided on this matter.

Shawn Douglas

Riverdale City Public Works

801-394-5541 ext 1217

Sdouglas@Riverdalecity.com

From: Scott Brenkman

Sent: Tue 2/1/2022 2:22 PM

To: Mike Eggett

Subject: RE: Conditional Use Permit Review - Reagan Billboard Sign Alteration Request

I don't have concerns with this.

Chief Scott Brenkman

Riverdale Police Department

4580 S. Weber River Dr.

Riverdale, UT 84405

(801)394-6616

sbrenkman@riverdalecity.com

From: Jared Sholly

Sent: Tue 2/1/2022 2:13 PM

To: Mike Eggett

Subject: RE: Conditional Use Permit Review - Reagan Billboard Sign Alteration Request

I don't have no concerns.

Jared Sholly

Fire Chief

Riverdale City Fire Department

Office 801-394-7481

Cell 801-628-6562

From: Randy Koger

Sent: Tue 2/1/2022 4:17 PM

To: Mike Eggett

Cc: Jared Sholly

Subject: RE: Conditional Use Permit Review - Reagan Billboard Sign Alteration Request

I have no additional recommendations.

A handwritten signature in black ink that reads "Randy S. Koger". The signature is written in a cursive, flowing style.

Fire Marshal/ Code Enforcement Officer/Emergency Manager

Riverdale City

801-436-1241



**Riverdale
City**

Community Development
4600 So. Weber River Drive
Riverdale, Utah 84405
Acct #10-36-9000

CONDITIONAL USE PERMIT

APPLICATION

DATE 1/3/2022
ADDRESS OF SITE 3490 PARKER DR, RIVERDALE CITY
APPLICANT'S NAME Reagan Outdoor Advertising
ADDRESS 1775 NORTH WARM SPRINGS ROAD SLC
PHONE NUMBER 801-521-1775

NOTE: Plans: Detailed location, site and building plans shall accompany the completed application forms provided by the city. For structures in existence, only a location plan need be provided.



SITE PLAN RECEIVED



BUILDING PLANS RECEIVED

Present Zoning of the Property: A-1 Present Use of the Property: STORAGE UNITS
Acreage of the Property: .06 Width of Property on the Street: _____
Proposed Conditional Use of Property: SAME USE

SIGNED: _____

DATE: 1/3/2022

I authorize Guy Lawson
relating to this application.

to act as my representative in all matters

LEASEHOLD INTEREST

OWNER

Guy Lawson
AGENT AS AUTHORIZED BY OWNER

PLANNING COMMISSION SCHEDULED TO HEAR THIS APPLICATION FOR CONDITIONAL USE ON:

DATE: 2/8/2022

DECISION OF COMMISSION: _____

SIGNATURE OF CHAIRPERSON: _____

DATE: _____

PLANNING COMMISSION PUBLIC HEARING:

DATE: _____

DECISION OF COMMISSION: _____

SIGNATURE OF CHAIRPERSON: _____

DATE: _____

Fee \$75.00

Date Paid: 1/20/22

Receipt No. 164950889PT



Riverdale City
4600 South Weber River Drive
Riverdale, UT 84405
(801) 394-5541

XBP Confirmation Number: 113731616

Transaction detail for payment to Riverdale City.			Date: 01/20/2022 - 11:54:53 AM MT
Transaction Number: 164950889PT VisaXXXX-XXXX-XXXX-9060 Status: Successful			
Account #	Item	Quantity	Item Amount
10369000	Sign Permit	1	\$75.00
Notes: 3490 PARKER DR			

TOTAL: \$75.00

Billing Information
FRITCH
, 84405

Transaction taken by: Admin acummings



I-15

Veterans Memorial Hwy

Parker Dr

Property Line

Parcel: 051430034
Owner: DONALD & NADIENE CUMMINS TRUST
Property Address: 3490 Parker Dr, Ogden, UT 84405

Parker Drive Trailhead

Google Earth



SIGN PERMIT APPLICATION RIVERDALE CITY

DATE: 11/29/21 DATE WORK STARTS: _____ PERMIT NO: _____

SITE ADDRESS: 3490 Parker Dr, Riverdale ZONE: A-1

NAME OF BUSINESS: Reagan Outdoor Alu.

SIGN CONTRACTOR (NAME & ADDRESS): Reagan 1775 Warm Springs Rd

CONTACT NAME: Guy Larson

E-Mail Address: Guy@ReaganUSA.com

PHONE: 801.301.4083 STATE LICENSE NO. 252213-SSS1

TYPE OF SIGN (explain if repair, addition, move, face change, etc.)

Increase height. Current sign is 73' tall, 12' are needed to be fully visible. OAH 85'

TYPE OF CONSTRUCTION: rebuild

COMMENTS: _____

CONTRACTOR'S SIGNATURE: 

VALUATION: \$ _____

BUILDING FEE: \$ _____

DATE PAID: _____

STATE 1%: \$ _____

RECEIPT #: _____

TOTAL: \$ _____

APPROVED BY: _____





*For Illustration Purposes Only, Not To Scale

Contractor



1775 N Warm Springs Road
Salt Lake City, UT 84116

1/3/2022

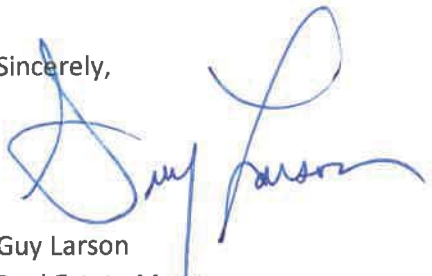
Mike Eggett
4600 South Weber Drive
Riverdale, Utah 84405

Dear Riverdale City,

Pursuant to Utah Code Ann. §72-7-510.5, the height of an outdoor advertising sign may be adjusted due to a noise abatement or safety measure, grade change, construction, directional sign, highway widening or aesthetic improvements made by an agency of this state, along and interstate or federal aid primary highway. R.O.A. General, LLC., ("ROA") submits herewith an application to increase the height of that certain Sign structure located at 3490 Parker Drive, for the reason that the Utah Department of Transportation has caused the sign structure to become obstructed due to the erection of a noise abatement, directional signs and or grade change along the I-15 corridor in Riverdale City. Although not required by §72-7-510.5, ROA has included herewith photographs taken of the obstructed sign structure. The photographs indicate which lane of travel and which direction they were taken from for your ease of use. Based on our projections the necessary height increase to restore visibility to the sign structure is 12 feet to a total height of 85 feet.

If you have any questions, please do not hesitate to call Guy Larson at (801)521-1775

Sincerely,

A handwritten signature in blue ink, appearing to read "Guy Larson", with a large, stylized initial "G" and "L".

Guy Larson
Real Estate Manager
Office: (801) 521-1775
Mobile: (801) 301-4083

RIVERDALE CITY
PLANNING COMMISSION AGENDA
February 8, 2022

AGENDA ITEM: E2

SUBJECT:	Consideration to forward a recommendation to the City Council of a proposed Subdivision Amendment for Riverdale Joann Subdivision, property located approximately 4868 South and 4978 South 1050 West, Riverdale Utah 84405, as requested by The Lodge Properties, LLC and AWA Engineering Group.	
PRESENTER:	Mike Eggett, Community Development	
INFORMATION:	<ul style="list-style-type: none">a.b.c.d.e.f.g.	<ul style="list-style-type: none">Exec Summ Riverdale Joann Amend Sub – PC [20220208]Riverdale Joann Amend Small Sub Plan PC Review – 20220120Dept Staff Reports – PC Riverdale Joann Amend Sub Plat [20220202]Joann Subdiv – City Engineer Review #1 – 3 February 2022Joann Subdiv App – 20220121Riverdale Joann Sub Prelim SignedRiverdale Joann Sub Final Signed

[BACK TO AGENDA](#)



Planning Commission Executive Summary

For the Commission meeting on: 2-8-2022

Petitioner: Anderson Wahlen & Associates, Inc./The
Lodge Properties, LLC
Represented by Jake Tate

Summary of Proposed Action

The Lodge Properties, LLC, as represented by AWA/Jake Tate, have applied for an amended small subdivision plat review and approval for the Riverdale Joann Subdivision proposal located at approximately 4868 South and 4978 South 1050 West in a Retail/Commercial Park Overlay (RCP) zone. The proposed amended small subdivision plan is before the Planning Commission for final review and approval of the proposed plat amendment. The small subdivision is affecting approximately 4.996 acres of property. A public hearing is not required for review of this proposed subdivision. Following the presentation and discussion of the final amended plat proposal, the Planning Commission may make a motion to provide approval of the amended plat and recommend City Council approval, approval with additional requirements and criteria, or not approve the amended plat and then recommend no support for the final approval of the proposed Riverdale Joann Subdivision plat with the appropriate findings of fact. Should this proposal receive final approval, the proposed amended plat would be updated and sent to the City Council for Final Plat approval consideration.

Title 10 Ordinance Guidelines (Code Reference)

This Commercial Amended Small Subdivision Plan review is regulated under City Code 10-21 "Subdivisions" (specifically 10-21-12 for Small Subdivisions) and is affected by City Codes 10-10A "Regional Commercial (C-3) Zone", 10-13B "Retail/Commercial Park Overlay (RCP) Zone, 10-14 "Regulations Applicable to All Zones", 10-15 "Parking, Loading Space; Vehicle Traffic and Access", and 10-25 "Development in All Zones".

The petitioner's properties are currently listed in the County Records under the ownership of Lodge Properties, LLC 90% and Biadi, LLC 10%. These properties are currently partially developed with one large building (Joann's) and the remainder partially undeveloped with the intent to divide the parcel into two lots (one for the existing business location and the other lot for the currently undeveloped parcel).

Attached with this executive summary is a supplementary document addressing items on the Preliminary Site Plan application and as directed by 10-21 of the City Code. Also attached, following this executive summary, are comments from the contracted City Engineer, Public Works Department, Fire Department, and Police Department. The Planning Commission should discuss these summaries and any noted Planning Commission and/or staff concerns.

Staff encourages the Planning Commission to review this matter, including concerns outlined herein, and then discuss with the petitioner concerns associated with this application. Staff would then recommend that the Planning Commission make a motion to provide approval of the amended plat and recommend City Council approval, approval with additional requirements and criteria, or not approve the amended plat and then recommend no support for the final approval of the proposed Riverdale Joann Subdivision plat with the appropriate findings of fact.

General Plan Guidance (Section Reference)

The General Plan use for this property is currently set as “Planned Commercial - High” and this proposed subdivision complies with this land use designation.

Legal Comments – City Attorney

Steve Brooks, Attorney

Administrative Comments – City Administrator

Steve Brooks, City Administrator



Subdivision Amendment Review – “Riverdale Joann Subdivision”, 4868 South and 4978 South 1050 West

Completed by Michelle Marigoni on 1/20/2022

Recommendation: City staff recommends that the Planning Commission examine and review this proposed small subdivision review. Items of consideration or note have been highlighted in yellow for potential discussion purposes. City staff recommends that the Planning Commission act accordingly to approve the subdivision amendment proposal, approve the subdivision amendment plat with additional comments or concerns to be addressed by the developer, or not approve the subdivision amendment plat proposal for the Riverdale Joann Subdivision project.

Date Plan Submitted to City: (Must be at least two weeks prior to Planning Commission meeting)	January 21, 2022
Date Application Submitted to City:	January 21, 2022
Date Fee Paid:	Paid on January 21, 2022 (see application and receipt for details)
Subdivision/Site Plan – Requirements	Departmental Review Comments
COVER SHEET	Not applicable
PLAT SHEET	Provided
<u>Title Block</u>	
Project name and address	Project name shown and addresses shown
Property Owner’s name, address, and phone number	The Lodge Properties, LLC, 1914 East 9400 South #107, Sandy, Utah 84093
Developer’s name, address, and phone number	The Lodge Properties, LLC, 1914 East 9400 South #107, Sandy, Utah 84093
Approving Agency’s name and address	Riverdale City, 4600 So. Weber River Drive, Riverdale, Utah 84405
Consulting Engineer’s name, address, and phone number	Anderson Wahlen & Associates, 2010 North Redwood Road, Salt Lake City, Utah 84116, 801-521-8529
Consulting Engineer’s stamp, signature, and license expiration date	Anderson Wahlen & Associates, 2010 North Redwood Road, Salt Lake City, Utah 84116, 801-521-8529; engineer’s stamp and signature not needed

Licensed Land Surveyor's name, address, phone number, signature, and seal	Anderson Wahlen & Associates, 2010 North Redwood Road, Salt Lake City, Utah 84116, 801-521-8529; surveyor's seal shown and signature provided as required
Date	January 2022
Sheet number and total sheets	2 total sheet – preliminary and final plats
Names of approving agents with titles, stamps, signatures, and license expiration dates	Names of approving agents, titles shown; <u>may need to include utility company blocks where requested/required</u>
Names of approving departments (Attorney, Planning Commission, Mayor, Engineer)	Shown on plat
<u>Layout</u>	
Street Names	Shown – 1050 West and River Park Drive
Layouts of lots with lot numbers	2 lots shown, addresses shown on plat
Bearings and distances for all property lines and section ties	Shown, defer to City Engineer review
Boundary and Legal description	Shown, defer to City Engineer review
Adjacent tract ownership and tax identification numbers	Tract ownership names and tax ID shown
Scale (minimum 1"=50')	Yes, scale is shown as 1" = 80'
North arrow	Yes
Owner's dedication certificate for subdivision (Notary Acknowledgement)	Yes, shown
Landscaping (location and type with area calculations)	No landscaping plan shown nor required for this existing subdivision due to no change to site plans
Location of exterior lighting devices, signs, and outdoor advertising	<u>Exterior lighting devices (street lights) not shown;</u> no anticipated subdivision signage locations
Location of underground tanks, dumpsters, etc	<u>No underground tanks shown for this site;</u> no need to identify dumpsters for this subdivision
<u>Additional Information</u>	
Benchmark	Shown, defer to City Engineer review
Basis of bearings	Shown, defer to City Engineer review
Legend	Yes, shown
Existing easements, structures, and utility lines: Approval to cross, use, or relocate	Existing easements identified and shown; existing structures on site shown (on preliminary); existing utility lines shown; <u>unsure of approvals provided to cross, use, relocate</u>
PLAN AND PROFILE SHEETS	Not applicable

<i>DETAILED DRAWINGS</i>	Not applicable
<i>ADDITIONAL INFORMATION</i>	
Soils report	No Geotech anticipated to be provided. Clearly, in the event any new buildings were to be built, the developer would need to provide an updated Geotechnical Report to building official for the future building permits.
Water right transfer documentation	Applicant needs to discuss with Public Works whether or not water transfer is required; defer to PW Director
Three large full set of plan drawings (24x36), one full set of plan drawings (11x17 sized), and one digital full set copy of plan drawings	Yes, provided as requested
Corp of Engineers approval (if required)	Not applicable or required
Zoning compliance	Yes, Retail/Commercial Park Overlay (RCP) Zone meets intended uses for subdivision
RDA compliance (if applicable)	Not applicable in this matter
Use compliance	Yes, subdivision request complies with RCP zoning requirements and standards as directed by development agreement
Engineering comments and letter of approval recommendation	City Engineer, Public Works, Building Official, Fire Dept, and Police Dept comments provided
Traffic study	Not applicable unless requested by City or PC
All Planning Commission and City Staff conditions for approval have been met	<u>Currently consideration of Amended Subdivision Plat submission being reviewed for approval by Planning Commission</u>

DEPARTMENTAL STAFF REPORTS – 1/26/2022 to 2/2/2022

From: Shawn Douglas
Sent: Wed 2/2/2022 12:56 PM
To: Mike Eggett
Subject: Joann's

Mike,

I have no further concerns with this subdivision. Thanks

Shawn Douglas

Riverdale City Public Works
801-394-5541 ext 1217
Sdouglas@Riverdalecity.com

From: Scott Brenkman
Sent: Wed 1/26/2022 9:15 AM
To: Mike Eggett
Subject: RE: Comments needed for Joann Subdivision Amendment

I don't have any concerns.

Chief Scott Brenkman
Riverdale Police Department
4580 S. Weber River Dr.
Riverdale, UT 84405
(801)394-6616
sbrenkman@riverdalecity.com

From: Jared Sholly
Sent: Wed 1/26/2022 10:49 AM
To: Mike Eggett
Subject: RE: Comments needed for Joann Subdivision Amendment

I don't have any further recommendations.

Jared Sholly
Fire Chief
Riverdale City Fire Department
Office 801-394-7481
Cell 801-628-6562

From: Randy Koger
Sent: Wed 1/26/2022 9:17 AM
To: Mike Eggett
Cc: Jared Sholly
Subject: RE: Comments needed for Joann Subdivision Amendment

I have no additional recommendations.

Comments made during this review are advisory and do not prevent the necessity of conforming with requirements which might have been overlooked in the review process. Ultimate responsibility for compliance rest with the owner.

A handwritten signature in black ink that reads "Randy S. Koger". The signature is written in a cursive, flowing style.

Fire Marshal/ Code Enforcement Officer/Emergency Manager
Riverdale City
801-436-1241

3 February 2022

Riverdale City
4600 South Weber River Drive
Riverdale, Utah 84405

Attn: Mike Eggett
Proj: **Riverdale Joann Subdivision**
Subj: Plat Review #1

Dear Mike,

I have reviewed the above referenced subdivision plat drawing and submit the following comments for consideration prior to approval.

1. The developer's engineer will need to submit an **"Electronic Copy"** of the Plat, upon approval and acceptance by the City. The electronic media format documents (.dwg files) need to be submitted to the Public Works for record keeping.
2. The Plat should indicate in the title that the Plat is a "Commercial Subdivision".
3. The existing agreements noted on the plat, should be shown and/or indicated on the plat. The plat should indicate and provide for vehicle cross-access in the parking lot area and utility cross-usage for all buildings and owners in the shopping center.
4. Under the Owner's signature line, the name of the person signing the Plat needs to be printed and his/her title.

If you have any questions, feel free to contact me at our office.

Sincerely,
CEC, Civil Engineering Consultants, PLLC.



R. Todd Freeman, S.E., P.E.
City Engineer

Cc. Shawn Douglas, Riverdale City Public Work Director
Jeff Woody, Riverdale City Building Official and Inspector



Riverdale City

Community Development
4600 So. Weber River Drive
Riverdale, Utah 84405
Acct #10-34-1500

RIVERDALE CITY PLANNING COMMISSION APPLICATION FOR COMMERCIAL SUBDIVISION SITE PLAN APPROVAL

CASE NO: 2022-01 DATE SUBMITTED: 1-21-2022

APPLICANT'S NAME: Jake Tate

BUSINESS ADDRESS: 2010 North Redwood Road, Salt Lake City, UT

BUSINESS PHONE: 801-410-8505

ADDRESS OF SITE: 4868 & 4978 South 1050 West, Riverdale UT

APPLICANT'S INTEREST: Owners Authorized Agent

Application is hereby made to the Riverdale City Planning Commission requesting that a
(Amending 1 Lot into 2) 217,656 s.f.
commercial subdivision consisting of 2 lots be approved on 4.996 a.c. of
(number of lots) (sq. ft./acreage)
property in the GC Commercial zone in accordance with the attached site plan.

Jake Tate
Signature of Applicant

James Spauld
Signature of Property Owner

I authorize Anderson Wahlen & Associates - Jake Tate to act as my representative in all matters relating to this application.

James Spauld
Signature of Property Owner

NOTE: A fee will be charged at the time the site plan is submitted for review - \$200 per lot/unit

Fee: \$ 400.00 Date paid: 1/21/2022

Planning Commission set public hearing: Yes ☐ No ☒ Date of Public Hearing: N/A

Planning Commission scheduled to hear this application for site plan approval on:

Date: 2-8-22 Decision of Commission: _____

City Council scheduled to hear this application for site plan approval on:

Date: _____ Decision of Council: _____



Riverdale City
4600 South Weber River Drive
Riverdale, UT 84405
(801) 394-5541

XBP Confirmation Number: 113824685

Transaction detail for payment to Riverdale City.		Date: 01/21/2022 - 3:05:55 PM MT	
Transaction Number: 165042451PT VisaXXXX-XXXX-XXXX-6543 Status: Successful			
Account #	Item	Quantity	Item Amount
10341500	Zoning ampamp Subdiv. Fee	1	\$400.00
Notes: 4868 &4978 S 1050 WEST			

TOTAL: \$400.00

Billing Information

AARON AIZAD
, 84405

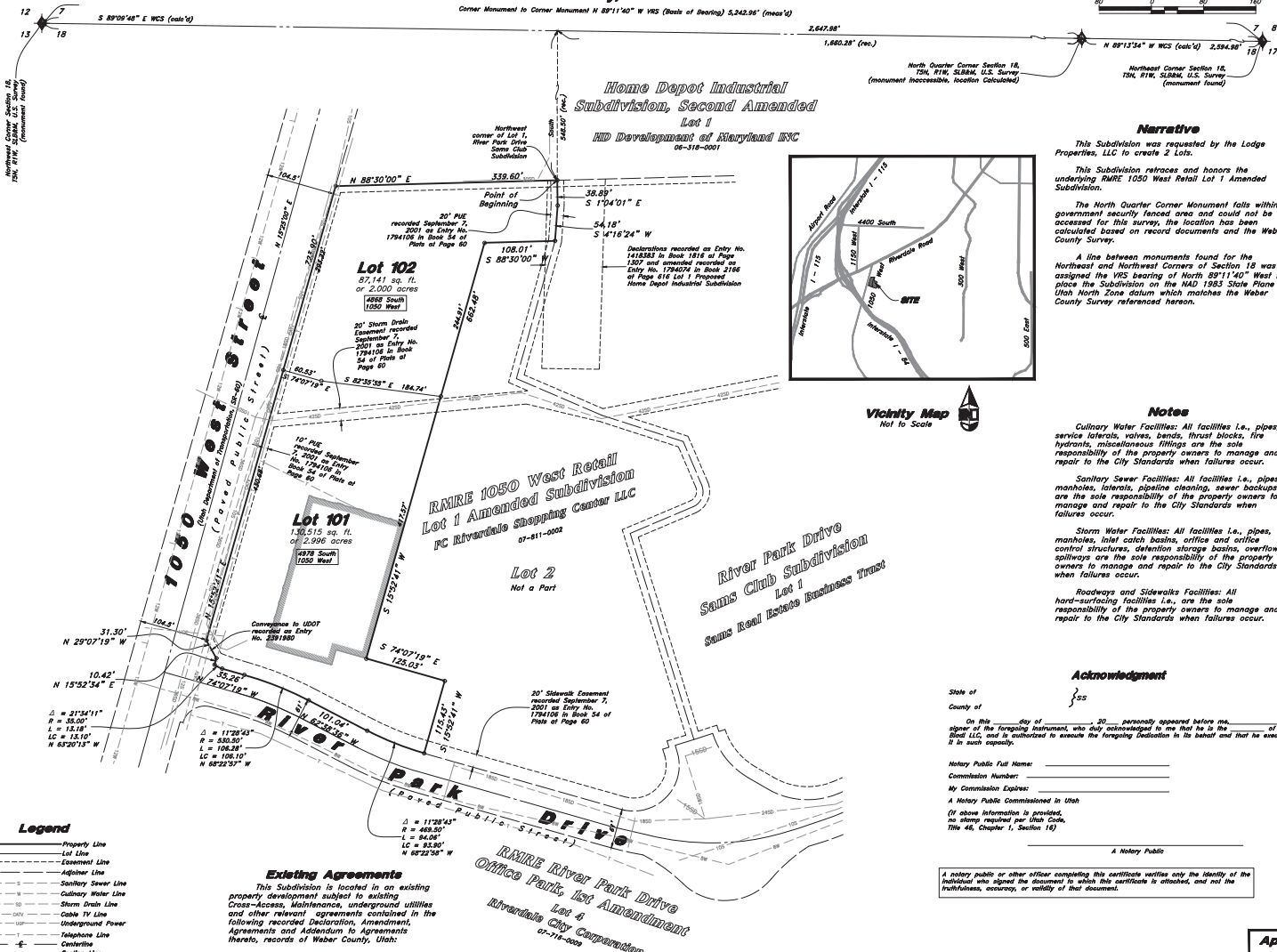
Transaction taken by: Admin cjacobsen

Preliminary Riverdale Joann Subdivision

Amending Lot 1 RMRE 1050 West Retail Lot 1 Amended Subdivision, being a part of the Northwest Quarter of Section 18, Township 5 North, Range 1 West, Salt Lake Base and Meridian, U.S. Survey, Riverdale City, Weber County, Utah

January, 2022

Corner Monument to Corner Monument N 89°11'40" W VCS (Scale of Bearing) 5,342.96' (meas'd)



Legend

- Property Line
- Lot Line
- Easement Line
- Right-of-Way Line
- Sanitary Sewer Line
- Culinary Water Line
- Storm Drain Line
- Cable TV Line
- Underground Power
- Telephone Line
- Sanitary Line
- Monument
- Shed Address
- Existing Building
- Water County Survey
- Set 5/8" rebar with plastic cap or nail with cross tag stamped "ANA"

Existing Agreements

This Subdivision is located in an existing property development subject to existing Cross-Access, Maintenance, underground utilities and other relevant agreements contained in the following recorded Declaration, Amendment, Agreements and Addendum to Agreements thereto, records of Weber County, Utah:

- Entry No. 1794066 in Book 2166 of Page 533
- Entry No. 1794076 in Book 2166 of Page 632
- Entry No. 1794078 in Book 2166 of Page 641
- Entry No. 1794113 in Book 2166 of Page 640
- Entry No. 1418553 Book 39 Page 71
- Entry No. 1794074 Book 2166 of Page 616
- Entry No. 1794069 B 2166 P 585
- Entry No. 2677754
- Entry No. 2970558
- Entry No. 2113305
- Entry No. 2982400

ANA
ANDERSON WAHLIN & ASSOCIATES
2010 North Redwood Road, Salt Lake City, Utah 84116
801.521-8528 - ana@andersonwahl.com

Riverdale City Planning Commission

Approved by the Riverdale City Planning Commission on the _____ Day of _____, 20__.

Chair, Riverdale City Planning Commission

Riverdale City Engineer

I hereby certify that the Office of the City Engineer has examined the foregoing plat and in our opinion the information conveyed hereon, complies with the Public Works Standards and Specifications of Riverdale City.

Signed this _____ Day of _____, 20__.

Riverdale City Engineer

Riverdale City Approval

This is to certify that this plat and dedication of this plat were duly approved and accepted by the City Council of Riverdale City, Utah this _____ Day of _____, 20__.

Riverdale City Mayor

Riverdale City Attorney

Approved by the Riverdale City Attorney on the _____ Day of _____, 20__.

Riverdale City Attorney

Approving Agency
Riverdale City
4600 S. River Drive
Riverdale, UT 84405

Owner/Developer
The Lodge Properties, LLC
1914 East 9400 South #107
Sandy, Utah 84093

Weber County Recorder
ENTRY NO. _____ FEE PAID _____
RECORDED _____ FILED FOR RECORD AND _____
IN BOOK _____ OF OFFICIAL _____
RECORDS, PAGE _____, RECORDED _____
FOR _____
WEBER COUNTY RECORDER
BY: _____ DEPUTY

Surveyor's Certificate

I, Ken B. Hawkes, do hereby certify that I am a Professional Land Surveyor, and that I hold License No. 8707113 in accordance with Title 36, Chapter 22, Professional Engineers and Professional Land Surveyors Licensing Act of the State of Utah. I further certify that by the authority of the Owners, I have made a survey of RMRE 1050 West Retail Lot 1 Amended Subdivision in Weber County, Utah described in the plat in accordance with Section 17-23-17 and have verified all measurements; and have placed monuments as represented on this plat, and have subdivided said tract of land into 2 lots and easements hereafter to be known as Riverdale Joann Subdivision

and that the same has been correctly surveyed and monumented on the ground as shown on this plat. I further certify that all lots meet the area, frontage, and width requirements as shown on this plat.

Description

All of Lot 1, RMRE 1050 West Retail Lot 1 Amended Subdivision, according to the Official Plat thereof on file and recorded December 17, 2020 as Entry No. 3110794 in Book 98 of Plats of Page 55 of Official Records in the Office of the Weber County Recorder, located in the Northwest Quarter of Section 18, Township 5 North, Range 1 West, Salt Lake Base and Meridian, U.S. Survey, Riverdale City, Weber County, Utah, being more particularly described metes and bounds as follows:

Beginning at the Northwest Corner of Lot 1, River Park Drive Sams Club Subdivision recorded as Entry No. 1794104 in Book 54 of Page 58, Official Records of Weber County, said point is described of record as being located 1860.28 feet North 89°09'48" West along the Section line and 545.50 feet South from the North Quarter Corner of said Section 18; and running thence along the Westerly line of said Lot 1 the following two courses: South 1°04'01" East 38.89 feet; and South 4°16'24" West 54.18 feet to a Northeastly corner of Lot 2 of said RMRE 1050 West Retail Lot 1 Amended Subdivision; thence along the Northernly and Southeastly lines of said RMRE 1050 West Retail Lot 1 Amended Subdivision the following four courses: South 82°30'00" West 108.01 feet; South 1°52'41" West 682.48 feet; South 74°07'19" East 125.03 feet; and South 1°52'41" West 115.43 feet to a point of curvature on the Northernly Line of River Park Drive; thence along said Northernly line the following four courses: Northwestly along the arc of a 459.50 foot radius curve to the right a distance of 94.06 feet (Central Angle equals 11°28'43" and Long Chord bears North 68°22'56" West 93.90 feet) to a point of tangency; North 62°58'36" West 101.04 feet to a point of curvature; Northwestly along the arc of a 550.50 foot radius curve to the left a distance of 106.28 feet (Central Angle equals 11°28'43" and Long Chord bears North 68°22'56" West 106.10 feet) to a point of tangency; North 74°07'19" West 35.26 feet to a point of curvature; Northwestly along the arc of a 550.50 foot radius curve to the right a distance of 13.18 feet (Central Angle equals 21°34'11" and Long Chord bears North 62°20'13" West 13.10 feet) to the point of intersection with conveyance to Utah Department of Transportation; thence along said conveyance the following two courses: North 1°52'54" East 10.42 feet to a point described of record as being located 74.38 feet perpendicularly distant Easterly from Engineers Station 55+43.37 on the Centerline of SR-60, known as Project No. SR-180(06); and North 2°07'19" West 31.30 feet to a point on the Southeastly Line of 1050 West Street, said point being described of record as being located 52.25 feet perpendicularly distant Easterly from the Centerline of said Project opposite Engineers Station 55+43.49; thence North 1°52'41" East 723.90 feet along said Southeastly line; thence North 88°50'00" East 339.60 feet to said Northwest Corner of Lot 1 of the River Park Drive Sams Club Subdivision and the Point of Beginning.

Contains 217,858 sq. ft.
Or 4.997 acres
2 Lots

Signed this 9th day of December, 2021.
8707113
License No. _____
Ken B. Hawkes

Owner's Dedication

Know all men by these presents that we, the undersigned owners of the herein described tract of land, have sold and dedicated the same to the City of Riverdale, Utah, as shown on this plat and name said plat Riverdale Joann Subdivision.

In witness whereof I have hereunto set my hand this _____ Day of _____, AD, 20__.

The Lodge Properties, LLC
Block, LLC

by: _____
for: _____

Acknowledgment

On this _____ day of _____, 20__, personally appeared before me, _____, the signer of the foregoing instrument, who duly acknowledged to me that he is the _____ of _____, and is authorized to execute the foregoing Dedication in its behalf and that he executed it in such capacity.

Notary Public Full Name: _____
Commission Number: _____
My Commission Expires: _____
A Notary Public Commissioned in Utah
(If above information is provided, no stamp required per Utah Code, Title 46, Chapter 1, Section 16)

A Notary Public

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

**RIVERDALE CITY
PLANNING COMMISSION AGENDA
February 8, 2022**

AGENDA ITEM: E3

SUBJECT:	Consideration to forward a recommendation to the City Council of a proposed Small Subdivision, for Riverdale Shopko Subdivision, property located approximately 4054 South and 4060 South Riverdale Road, Riverdale Utah 84405, as requested by The Chasebrook Company	
PRESENTER:	Mike Eggett, Community Development	
INFORMATION:	<ul style="list-style-type: none">a.b.c.d.e.f.	<ul style="list-style-type: none">Exec Summ Riverdale Shopko Small Sub – PC [20220208]Shopko Small Sub Plan PC Review – 20220203Dept Staff Reports – PC Riverdale Shopko Sub Plat [20220126]Shopko Subdiv – City Eng Review #1 – 3 February 2022Shopko Subdiv App – 20220121Riv Shopko Subdivision Plat 20220120

[BACK TO AGENDA](#)



Planning Commission Executive Summary

For the Commission meeting on: 2-8-2022

Petitioner: The Chasebrook Company
Represented by Jay Larsen/Thom Williamsen

Summary of Proposed Action

The Chasebrook Company, as represented by Jay Larsen, have applied for a small subdivision plat review and approval for the Riverdale Shopko Subdivision proposal located at approximately 4054 South and 4060 South Riverdale Road in a Regional Commercial (C-3) zone. The proposed amended small subdivision plan is before the Planning Commission for final review and approval of the proposed plat amendment. The small subdivision is affecting approximately 9.6 acres of property. A public hearing is not required for review of this proposed subdivision. Following the presentation and discussion of the final small subdivision plat proposal, the Planning Commission may make a motion to provide approval of the small subdivision plat and recommend City Council approval, approval with additional requirements and criteria, or not approve the small subdivision plat and then recommend no support for the final approval of the proposed Riverdale Shopko Subdivision plat with the appropriate findings of fact. Should this proposal receive final approval, the proposed small subdivision plat would be updated and sent to the City Council for Final Plat approval consideration.

Title 10 Ordinance Guidelines (Code Reference)

This Commercial Small Subdivision Plan review is regulated under City Code 10-21 "Subdivisions" (specifically 10-21-12 for Small Subdivisions) and is affected by City Codes 10-10A "Regional Commercial (C-3) Zone", 10-14 "Regulations Applicable to All Zones", 10-15 "Parking, Loading Space; Vehicle Traffic and Access", and 10-25 "Development in All Zones".

The petitioner's properties are currently listed in the County Records under the ownership of Williamsen Riverdale, LLC. These properties are currently partially developed with one large building (ShopKo) and the remainder parking lot area with the intent to divide the parcel into two lots (one for the existing business location and the other lot for a large open area of existing parking).

Attached with this executive summary is a supplementary document addressing items on the Preliminary Site Plan application and as directed by 10-21 of the City Code. Also attached, following this executive summary, are comments from the contracted City Engineer, Public Works Department, Fire Department, and Police Department. The Planning Commission should discuss these summaries and any noted Planning Commission and/or staff concerns.

Staff encourages the Planning Commission to review this matter, including concerns outlined herein, and then discuss with the petitioner concerns associated with this application. Staff would then recommend that the Planning Commission make a motion to provide approval of the small subdivision plat and recommend City Council approval, approval with additional requirements and criteria, or not approve the small subdivision plat and then recommend no support for the final approval of the proposed Riverdale Shopko Subdivision plat with the appropriate findings of fact.

General Plan Guidance (Section Reference)

The General Plan use for this property is currently set as “Planned Commercial - High” and this proposed subdivision complies with this land use designation.

Legal Comments – City Attorney

Steve Brooks, Attorney

Administrative Comments – City Administrator

Steve Brooks, City Administrator



Small Subdivision Review – “Riverdale Shopko Subdivision”, 4054 South and 4060 South Riverdale Road

Completed by Michelle Marigoni on 2/3/2022

Recommendation: City staff recommends that the Planning Commission examine and review this proposed small subdivision review. Items of consideration or note have been highlighted in yellow for potential discussion purposes. City staff recommends that the Planning Commission act accordingly to approve the small subdivision proposal, approve the small subdivision plat with additional comments or concerns to be addressed by the developer, or not approve the small subdivision plat proposal for the Riverdale Shopko Subdivision project.

Date Plan Submitted to City: (Must be at least two weeks prior to Planning Commission meeting)	January 20, 2022
Date Application Submitted to City:	January 20, 2022
Date Fee Paid:	Paid on January 21, 2022 (see application and receipt for details)
Subdivision/Site Plan – Requirements	Departmental Review Comments
COVER SHEET	Not applicable
PLAT SHEET	Provided
<u>Title Block</u>	
Project name and address	Project name and addresses shown, 4054 South and 4060 South Riverdale Road
Property Owner’s name, address, and phone number	The Chasebrook Company attn: Jay Larsen No further info provided - not shown on plan
Developer’s name, address, and phone number	The Chasebrook Company attn: Jay Larsen No further info provided - not shown on plan
Approving Agency’s name and address	Riverdale City, 4600 So. Weber River Drive, Riverdale, Utah 84405
Consulting Engineer’s name, address, and phone number	McNeil Engineering 8610 South Sandy Parkway, Suite 200 Sandy, Utah 84070 801.255.7700
Consulting Engineer’s stamp, signature, and license expiration date	McNeil Engineering 8610 South Sandy Parkway, Suite 200 Sandy, Utah 84070 801.255.7700; engineer’s stamp and signature not needed

Licensed Land Surveyor's name, address, phone number, signature, and seal	McNeil Engineering – David B. Draper 8610 South Sandy Parkway, Suite 200 Sandy, Utah 84070 801.255.7700, Surveyor's seal shown and signature provided as required
Date	January 2022
Sheet number and total sheets	2 total sheet – preliminary and final plats
Names of approving agents with titles, stamps, signatures, and license expiration dates	Names of approving agents, titles shown; <u>may need to include utility company blocks where requested/required</u>
Names of approving departments (Attorney, Planning Commission, Mayor, Engineer)	Shown on plat
<u>Layout</u>	
Street Names	Shown – Riverdale Road and Washington Terrace Road: This is not the correct name of this road, it needs to re-labeled as 300 West
Layouts of lots with lot numbers	2 lots shown, addresses shown on plat
Bearings and distances for all property lines and section ties	Shown, defer to City Engineer review
Boundary and Legal description	Shown, defer to City Engineer review
Adjacent tract ownership and tax identification numbers	Tract ownership names and tax ID shown
Scale (minimum 1"=50')	Yes, scale is shown as 1" = 60'
North arrow	Yes
Owner's dedication certificate for subdivision (Notary Acknowledgement)	Yes, shown
Landscaping (location and type with area calculations)	No landscaping plan shown nor required for this existing subdivision due to no change to site plans
Location of exterior lighting devices, signs, and outdoor advertising	<u>Exterior lighting devices (street lights) not shown;</u> no anticipated subdivision signage locations
Location of underground tanks, dumpsters, etc	<u>No underground tanks shown for this site;</u> no need to identify dumpsters for this subdivision
<u>Additional Information</u>	
Benchmark	Shown, defer to City Engineer review
Basis of bearings	Shown, defer to City Engineer review
Legend	Yes, shown
Existing easements, structures, and utility lines: Approval to cross, use, or relocate	Existing easements identified and shown; existing structures on site shown (on preliminary); <u>existing utility lines not shown;</u> <u>unsure of approvals provided to cross, use, relocate</u>

<i>PLAN AND PROFILE SHEETS</i>	Not applicable
<i>DETAILED DRAWINGS</i>	Not applicable
<i>ADDITIONAL INFORMATION</i>	
Soils report	No Geotech anticipated to be provided. Clearly, in the event any new buildings were to be built, the developer would need to provide an updated Geotechnical Report to building official for the future building permits.
Water right transfer documentation	Applicant needs to discuss with Public Works whether or not water transfer is required; defer to PW Director
Three large full set of plan drawings (24x36), one full set of plan drawings (11x17 sized), and one digital full set copy of plan drawings	Yes, provided as requested
Corp of Engineers approval (if required)	Not applicable or required
Zoning compliance	Yes, Planned Commercial – High, C-3 Zone meets intended uses for subdivision
RDA compliance (if applicable)	Not applicable in this matter
Use compliance	Yes, subdivision request complies with C-3 zoning requirements and standards
Engineering comments and letter of approval recommendation	City Engineer, Public Works, Building Official, Fire Dept, and Police Dept comments provided
Traffic study	Not applicable unless requested by City or PC
All Planning Commission and City Staff conditions for approval have been met	<u>Currently consideration of Small Subdivision Plat submission being reviewed for approval by Planning Commission</u>

DEPARTMENTAL STAFF REPORTS – 1/26/2022

From: Shawn Douglas
Sent: Wed 1/26/2022 9:41 AM
To: Mike Eggett
Subject: RE: Comments needed for ShopKo Subdivision

Mike,

I have no concerns with this subdivision. Thanks

Shawn Douglas

Riverdale City Public Works
801-394-5541 ext 1217
Sdouglas@Riverdalecity.com

From: Scott Brenkman
Sent: Wed 1/26/2022 9:46 AM
To: Mike Eggett
Subject: RE: Comments needed for ShopKo Subdivision

I don't have any concerns.

Chief Scott Brenkman
Riverdale Police Department
4580 S. Weber River Dr.
Riverdale, UT 84405
(801)394-6616
sbrenkman@riverdalecity.com

From: Jared Sholly
Sent:
To: Mike Eggett
Subject:

No comments provided.

Jared Sholly
Fire Chief
Riverdale City Fire Department
Office 801-394-7481
Cell 801-628-6562

From: Randy Koger
Sent: Wed 1/26/2022 10:43 AM
To: Mike Eggett
Cc: Jared Sholly
Subject: RE: Comments needed for ShopKo Subdivision

I have no additional recommendations.

Comments made during this review are advisory and do not prevent the necessity of conforming with requirements which might have been overlooked in the review process. Ultimate responsibility for compliance rest with the owner.

A handwritten signature in black ink that reads "Randy S. Koger". The signature is written in a cursive, flowing style.

Fire Marshal/ Code Enforcement Officer/Emergency Manager
Riverdale City
801-436-1241

3 February 2022

Riverdale City
4600 South Weber River Drive
Riverdale, Utah 84405

Attn: Mike Eggett
Proj: **Riverdale Shopko Subdivision**
Subj: Plat Review #1

Dear Mike,

I have reviewed the above referenced subdivision plat drawing and submit the following comments for consideration prior to approval.

General Comments

1. The developer's engineer will need to submit an **"Electronic Copy"** of the Plat, upon approval and acceptance by the City. The electronic media format documents (.dwg files) need to be submitted to the Public Works for record keeping.
2. The Plat should indicate in the title that the Plat is a "Commercial Subdivision".
3. A Narrative is needed on the final plat.
4. The boundary description closure was 0.089' and needs to close within 0.01.
5. There needs to be cross access easements for the lots such that the entrances (two) off Riverdale Road are not limited or vacated. There may be existing cross access easements, but they will need to be identified.
6. There are existing utilities (sewer, water, and stormwater) which may or will cross both proposed lots. An easement and access and usage agreement between all users of the facilities needs to be developed.
7. The approval signature block needs the language for the "Riverdale City Engineer" approval/compliance signature block shall be written to match the following:

I hereby certify that the "Office of the City Engineer" has examined the foregoing Plat and in our opinion the information conveyed herewith, complies with the Public Works Standards and Specifications of Riverdale City.


8. The following written text will need to be added to the Plat. All Onsite "Utilities and Facilities" – On Private Property:

- Culinary Water Facilities: All facilities i.e., pipes, service laterals, valves, bends, thrust blocks, fire hydrants, miscellaneous fittings are the sole responsibility of the property owners to manage and repair to the City Standards when failures occur.
- Sanitary Sewer Facilities: All facilities i.e., pipes, manholes, laterals, pipeline cleaning, sewer backups are the sole responsibility of the property owners to manage and repair to the City Standards when failures occur.
- Storm Water Facilities: All facilities i.e., pipes, manholes, inlet catch basins, orifice and orifice control structures, detention storage basins, overflow spillways are the sole responsibility of the property owners to manage and repair to the City Standards when failures occur.
- Roadways and Sidewalks Facilities: All hard surfacing facilities i.e., are the sole responsibility of the property owners to manage and repair to the City Standards when failures occur.

9. Under the Owner's signature line, the name of the person(s) signing the Plat needs to be printed and his/her title.

If you have any questions, feel free to contact me at our office.

Sincerely,
CEC, Civil Engineering Consultants, PLLC.



R. Todd Freeman, S.E., P.E.
City Engineer

Cc. Shawn Douglas, Riverdale City Public Work Director
Jeff Woody, Riverdale City Building Official and Inspector



Riverdale City

Community Development
4600 So. Weber River Drive
Riverdale, Utah 84405
Acct #10-34-1500

**RIVERDALE CITY PLANNING COMMISSION
APPLICATION FOR COMMERCIAL SUBDIVISION SITE PLAN APPROVAL**

CASE NO: 2022-02 DATE SUBMITTED: 1-20-2022

APPLICANT'S NAME: Jay Larsen

BUSINESS ADDRESS: 154 E. Myrtle Ave Suite 303, Murray UT 84107

BUSINESS PHONE: 801-364-2602

ADDRESS OF SITE: 4060 South River

APPLICANT'S INTEREST: Owners Agent

Application is hereby made to the Riverdale City Planning Commission requesting that a

commercial subdivision consisting of 2 lots be approved on 9.6 of
(number of lots) (sq. ft./acreage)

property in the C-3 zone in accordance with the attached site plan.

Jay Larsen
Signature of Applicant

Shirley Miller
Signature of Property Owner

I authorize Jay Larsen
matters relating to this application.

Shirley Miller to act as my representative in all
Signature of Property Owner

NOTE: A fee will be charged at the time the site plan is submitted for review - \$200 per lot/unit

Fee: \$ 400.00

Date paid: 1/21/2022

Planning Commission set public hearing: Yes ☐ No ☒ Date of Public Hearing: N/A

Planning Commission scheduled to hear this application for site plan approval on:

Date: 2-8-22 Decision of Commission: _____

City Council scheduled to hear this application for site plan approval on:

Date: _____ Decision of Council: _____

RIVERDALE CITY CORPORATION
4600 SOUTH WEBER RIVER DRIVE
RIVERDALE UT 84405

394-5541

Receipt No: 15.548045

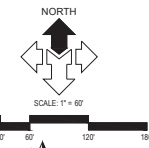
Jan 21, 2022

Jay Larsen

Previous Balance:	.00
MISCELLANEOUS - SITE PLAN 4060 SOUTH 10-34-1500 ZONING & SUB. FEES	400.00
<hr/>	
Total:	400.00
<hr/>	
CHECK	Check No: 9244
Total Applied:	400.00
<hr/>	
Change Tendered:	.00
<hr/>	

01/21/2022 3:50 PM

LOCATED IN THE NORTHWEST QUARTER OF SECTION 8,
TOWNSHIP 5 NORTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN
RIVERDALE CITY, WEBER COUNTY, UTAH



I, DAVID B. DRAPER DO HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD LICENSE NO. 68615992, AS PRESCRIBED UNDER THE LAWS OF THE STATE OF UTAH. I FURTHER CERTIFY THAT BY AUTHORITY OF THE OWNERS, I HAVE MADE A SURVEY OF THE TRACT OF LAND SHOWN ON THIS PLAT AND DESCRIBED BELOW, AND HAVE SUBDIVIDED SAID TRACT OF LAND INTO LOTS AND STREETS HEREAFTER TO BE KNOWN AS:

AND THAT THE SAME HAS BEEN CORRECTLY SURVEYED AND STAKED ON THE GROUND AS SHOWN ON THIS PLAT.

[illegible]

KNOW ALL MEN BY THESE PRESENTS THAT _____, THE _____ UNDERSIGNED OWNER() OF THE ABOVE DESCRIBED TRACT OF LAND, HAVING CAUSED SAME TO BE SUBDIVIDED INTO LOTS, STREETS AND EASEMENTS TO BE HEREAFTER KNOWN AS THE:

DO HEREBY DEDICATE FOR PERPETUAL USE OF THE PUBLIC, ALL PARCELS OF LAND SHOWN ON THIS PLAT AS INTENDED FOR PUBLIC USE. IN WITNESS WHEREBY _____ HAVE HEREUNTO SET _____ THIS _____ DAY OF _____ A.D., 20____.

STATE OF UTAH
COUNTY OF SALT LAKE } s.s.
ON THE _____ DAY OF _____ A.D. 20____ PERSONALLY APPEARED BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC IN AND FOR SAID
COUNTY OF SALT LAKE IN SAID STATE OF UTAH, _____ WHO AFTER BEING DULY SWORN, ACKNOWLEDGED TO ME THAT
HE OR SHE IS THE _____ OF SAID CORPORATION AND THAT _____ SIGNED THE CHARTER OF INCORPORATION FULLY AND VOLUNTARILY FOR
AND IN BEHALF OF SAID CORPORATION FOR THE PURPOSES THEREIN MENTIONED; AND THAT SAID CORPORATION EXECUTED THE SAME.

MY COMMISSION EXPIRES: _____

NOTARY PUBLIC
RESIDING IN SALT LAKE COUNTY

ENTRy NO. _____ FILED PAID _____ FILED FOR RECORD AND RECORDED
 _____ AT _____ IN BOOK _____ OF OFFICIAL RECORDS, PAGE
 _____ RECORDED FOR _____

 WEBER COUNTY RECORDER
 BY: _____
 _____ DEPUTY

**RIVERDALE CITY
PLANNING COMMISSION AGENDA
February 8, 2022**

AGENDA ITEM: E4

SUBJECT:	a. Consideration to untable the discussion and considerations regarding proposed Development Agreement Amendment and associated language, as submitted by Bach Land and Development, LLC. b. Consideration to forward a recommendation to the City Council regarding proposed Development Agreement Amendment and associated language, as submitted by Bach Land and Development, LLC.	
PRESENTER:	Mike Eggett, Community Development	
INFORMATION:	a.	Exec Summ Bach Homes Amend Dev Agree – PC [20220208]
	b.	2022.02.03 – Riverdale – First Amendment to Develop Agreement Update (Bach Combined Redline)
	c.	2022.02.03 – Riverdale – First Amendment to Develop Agree Update (Clean)
	d.	Ex. A Bach Homes-Riverdale ALTA (incl Legal Description)
	e.	Unity Dev Agree - 20070220

[BACK TO AGENDA](#)



Planning Commission Executive Summary

For the Commission meeting on: 2-8-2022

Petitioner: Bach Homes Development
As represented by Shaun Athey/Brandon Ames

Summary of Proposed Action

The petitioners of this agenda item, Bach Homes Development Group, have submitted a development agreement amendment proposal to the City for our review and consideration. Early last year, the State Legislature passed House Bill 409 which requires that development agreement proposals with the City go through a public hearing review process before being approved, if the development agreement has any land use ramifications or impacts that involve requested alterations to current City Codes (per Utah State Code 10-9a-530). This development agreement proposal does have a few requested alterations to current City Codes that are specific to the proposed project area and, therefore, this matter is before the Planning Commission to hold a public hearing and thereafter discuss and review the development agreement.

The Planning Commission held a public hearing on this during the meeting on January 11, 2022. No public comments were provided during the meeting. At the conclusion of the public hearing, the Commission discussed the development agreement amendment language proposal. Following review and discussion of the language and the amended development agreement proposal, the Planning Commission approved a motion to table the matter to allow the petitioner more time to work through the concerns with the development agreement language. The areas of concern have been discussed with Steve Brooks, Shawn Douglas, and me and have now been further refined in order to come back before the Commission with a request to untable the matter and consider a recommendation to the City Council regarding this amended development agreement proposal.

Bach Homes Development is continuing to work with Riverdale City staff (including the City Attorney and Public Works Director) to establish a development agreement document reflecting policies, procedures, and direction to participants with Bach Homes Development and Riverdale City. The development agreement document provided in the Commission packet is the resultant product of the conversations and efforts put forward by all participating individuals with this effort.

Bach Homes Development Group is represented by Shaun Athey and Brandon Ames, with Anthony Bake participating as their legal counsel in this matter.

Before moving forward to review this matter, the Planning Commission will need to determine if the documentation is ready to be untabled for further discussion and consideration.

Following the discussion of the development agreement proposal, the Planning Commission may make a motion to recommend City Council approval of the proposed development agreement (specifically the proposed land use alterations in the agreement), recommend approval with suggested amendments, table the matter to a later date to allow for further discussions and revisions between the parties, or not recommend approval of the proposed development agreement with the appropriate findings of facts. If a recommendation was provided to the Council, then this matter would advance for final approval consideration by the City Council.

Suggested Code revisions are regulated under Utah State Code 10-9a-530. The proposed development agreement documentation has been provided in your packet for review and commentary.

The City Attorney has also reviewed the proposed development agreement and has discussed his concerns with the Bach Homes Development team. Further, the City Attorney has provided further feedback regarding the most recent version of this agreement, and changes have been made to the redline version of the agreement as found within the packet.

Staff would encourage the Planning Commission to discuss this matter and then provide a motion to recommend City Council approval of the proposed development agreement (specifically the proposed land use alterations in the agreement), recommend approval with suggested amendments, table the matter to a later date to allow for further discussions and revisions between the parties, or not recommend approval of the proposed development agreement with the appropriate findings of facts.

General Plan Guidance (Section Reference)

There is no General Plan Guidance for this request.

Legal Comments – City Attorney

Steve Brooks, Attorney

Administrative Comments – City Administrator

Steve Brooks, Acting City
Administrator

AMENDMENT NO. 1
TO
DEVELOPMENT AGREEMENT
RIVERDALE CITY, UTAH

This AMENDMENT NO. 1 TO DEVELOPMENT AGREEMENT (this “**Amendment**”) is made effective as of _____, 2021, by and between RIVERDALE CITY, a municipality and political subdivision of the State of Utah, by and through its City Council (the “**City**”); and BACH LAND AND DEVELOPMENT, LLC, a Utah limited liability company (“**Developer**”).

RECITALS:

A. The City and Unity Enterprises, LLC (“**Unity Enterprises**”) previously entered into that certain Development Agreement approved by the City as of February 20, 2007 as Riverdale City Resolution No. 2007-6 (the “**Development Agreement**”). The Development Agreement sets forth certain terms for the development of a mixed use project consisting of a combination of single-family residential dwellings, townhouses and/or condominiums, and apartments and apartment building amenities, on approximately ~~93-69~~ acres of real property located in Riverdale City, Weber County, Utah (the “**Property**”), more specifically detailed in Exhibit A. Capitalized terms used in this Amendment and not defined in this Amendment shall have the meanings given to such terms in the Development Agreement.

~~B. Pursuant to the Development Agreement, Unity Enterprises previously conveyed approximately 24 acres of the Property to the City, resulting in a reduction in the Property to approximately 69 acres.~~

~~B.~~ Eagle’s Landing Apartments, L.L.C., a Utah limited liability (such entity, and its assigns, is referred to herein as “**Owner**”) acquired the Property for investment purposes.

~~D.C.~~ The current zoning for the Property is Mixed Use (“**MU**”).

~~E.D.~~ Developer intends to develop the Property as a residential development consisting of apartment buildings, townhomes, and single-family residences.

E. Developer and the City desire to amend the Development Agreement to allow for the development of the Property pursuant to the terms and conditions set forth herein.

AGREEMENT:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. Recitals. The recitals set forth above are hereby incorporated by reference as part of this Amendment.

2. Amendments. The Development Agreement is amended as follows:

2.1. The term “**Developer**” means Bach Land and Development, LLC, a Utah limited liability company.

2.2. The term “**Property**” means the approximately 69 acres owned by Owner. Exhibit A of the Development Agreement describing the Property is hereby deleted in its entirety with the Exhibit A attached hereto inserted in lieu thereof.

2.3. The term “**Project**” means the development of the Property as proposed by Developer.

2.4. Section 5.1 of the Development Agreement is amended to add the following language:

“Additionally, Developer shall have the right to construct and develop apartments, apartment buildings, and apartment complex amenities within this Project, in accordance with all applicable Mixed Use (MU) zoning requirements and subject to the compliance with the terms and conditions of this Agreement and any other applicable ordinance or regulation of the City, State, or Federal government.”

2.5. Section 7 of the Development Agreement is amended to add the following additional language:

“The Concept Plan for the Project is attached hereto. The parties hereby agree that the overall density for the Project is 13 per acre, for an aggregate number of 897 residential units for the Project (“**Overall Density**”). The Project will permit the residential ratio of density use on the property to be increased in a targeted format on said lot as long as the minimum lot area density requirement is still adhered to in all cases. This will allow for a single phase of the Project to exceed the permitted general density per acre for the MU zone; *provided, however*, in no event may the aggregate residential units for the Project exceed the Overall Density for the Project. After receiving approval from the City Council Planning Commission subdivision and site plan process, the City hereby grants fully vested entitlements and rights to develop the Property in accordance with the terms and conditions of this Agreement and the MU zoning designations for the Property.

2.6. Section 9.1 of the Development Agreement is modified to the extent necessary to provide that the term of the Development Agreement will continue for a period of fifteen (15) years from the Effective Date of this Amendment, Thereafter, provided that Developer shall have the option to extend the term for an additional ten (10) years if (a) the Developer has substantially complied with the terms of the Development Agreement ~~have been substantially complied with by Developer~~, and (b) the Developer is proceeding with reasonable diligence in the development of the Project as contemplated under this Amendment, and then upon City Council approval.

2.7. A new Section 10 is hereby added to the Development Agreement, titled Project Water. The language in this section shall be as follows:

(a) In connection with the Project, the City hereby agrees to cooperate in good faith with Developer to assist Developer in (i) purchasing water rights for the benefit of the Project, as required under Title 8 of the current City Code. The amount of water will be determined by the City Code, Title 8, Chapter 6. Such water rights required for the Project are referred to herein as the “**Project Water**”; (ii) work in connection with the Developer to obtain approval for the necessary connection points and diversion points for the Project Water; and (iii) provide for the water storage if the City has available capacity or allow the Developer to provide the required storage and infrastructure capacity.

2.8. Exhibit B of the Development Agreement regarding the Project area is hereby deleted in its entirety with the Exhibit B (“Concept Plan”) attached hereto inserted in lieu thereof. The Concept Plan shall include the road constructed by Developer in compliance with the City’s approved road cross-section within the City’s right of way, connecting the existing roundabout to the bridge for the new development.

2.9. Exhibit F of the Development Agreement regarding Wetland and Aquatic Resources Delineation is hereby deleted in its entirety with the Exhibit F (“Aquatic Resources Delineation”) attached hereto inserted in lieu thereof.

3. Assignment. The City hereby approves of the assignment of Developer’s rights under the Development Agreement from Unity Enterprises to Bach Land and Development, LLC.

4. Upsizing. The City reserves the right to request the upsizing of the utility lines for the Project in order to accommodate future growth or additional development by the City or third parties, provided, that the City or certain third parties will be required to pay the incremental cost increase for such upsizing.

5. City’s Representation on Land Adjacent to the Property. The City represents that the approximate 40-acre piece of City Property located adjacent to the Project has been designated as a site for a future City park and will not be used for any multi-family residential development until 2032. The City agrees that during the term of this Agreement, any future agreement for the sale or exchange of any portion of the land to a residential or commercial developer (“Purchaser”) will include a clause requiring Purchaser reimburse Developer through an “Improvement Reimbursement Agreement” to cover fifty percent (50%) of the total cost of the bridge, road, and infrastructure (“Bridge Project”) constructed by Developer. Developer acknowledges and understands that City shall bear no cost for the Bridge Project or the reimbursement discussed in this Section 6. Costs to be provided by Developer upon written request.

6. Ratification. As modified and supplemented by this Amendment, the Agreement is ratified and confirmed and shall continue in full force and effect.

7. Counterparts. This Amendment may be executed in any number of counterparts, each of which will be an original but all of which will constitute one and the same instrument. Signature and acknowledgement pages may be detached from individual counterparts and attached to a single or multiple original(s) in order to form a single or multiple original(s) of this document. Any signature on any counterpart of this Amendment delivered by “pdf” or other electronic means shall be deemed to be an original signature for all purposes and shall fully bind the party whose signature appears on such counterpart.

[signatures on following page]

IN WITNESS WHEREOF, this Amendment is effective as of the date and year first above written.

DEVELOPER:

Bach Land and Development, LLC, a Utah limited liability company

Name: _____

Title: _____

CITY:

Riverdale City, a municipality and political subdivision of the State of Utah

By: _____

Mayor: _____

STATE OF UTAH)
) ss.
County of _____)

The foregoing instrument was acknowledged before me this ____ day of _____, 2021,
by _____, the Mayor of Riverdale City, on behalf of such city.

Notary Public

STATE OF UTAH)
) ss.
County of Salt Lake)

The foregoing instrument was acknowledged before me this ____ day of ____, 2021, by _____, the manager of Bach Land and Development, LLC, on behalf of such company.

Notary Public

EXHIBIT A

Legal Description

EXHIBIT B

Concept Plan

EXHIBIT F

Aquatic Resources Delineation

AMENDMENT NO. 1
TO
DEVELOPMENT AGREEMENT
RIVERDALE CITY, UTAH

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RECITALS:

A. The City and Unity Enterprises, LLC (“**Unity Enterprises**”) previously entered into that certain Development Agreement approved by the City as of February 20, 2007 as Riverdale City Resolution No. 2007-6 (the “**Development Agreement**”). The Development Agreement sets forth certain terms for the development of a mixed use project consisting of a combination of single-family residential dwellings, townhouses and/or condominiums, and apartments and apartment building amenities, on approximately 69 acres of real property located in Riverdale City, Weber County, Utah (the “**Property**”), more specifically detailed in Exhibit A. Capitalized terms used in this Amendment and not defined in this Amendment shall have the meanings given to such terms in the Development Agreement.

B. Eagle’s Landing Apartments, L.L.C., a Utah limited liability (such entity, and its assigns, is referred to herein as “**Owner**”) acquired the Property for investment purposes.

C. The current zoning for the Property is Mixed Use (“**MU**”).

D. Developer intends to develop the Property as a residential development consisting of apartment buildings, townhomes, and single-family residences.

E. Developer and the City desire to amend the Development Agreement to allow for the development of the Property pursuant to the terms and conditions set forth herein.

AGREEMENT:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. Recitals. The recitals set forth above are hereby incorporated by reference as part of this Amendment.

2. Amendments. The Development Agreement is amended as follows:

2.1. The term “**Developer**” means Bach Land and Development, LLC, a Utah limited liability company.

2.2. The term “**Property**” means the approximately 69 acres owned by Owner. Exhibit A of the Development Agreement describing the Property is hereby deleted in its entirety with the Exhibit A attached hereto inserted in lieu thereof.

2.3. The term “**Project**” means the development of the Property as proposed by Developer.

2.4. Section 5.1 of the Development Agreement is amended to add the following language:

“Additionally, Developer shall have the right to construct and develop apartments, apartment buildings, and apartment complex amenities within this Project, in accordance with all applicable Mixed Use (MU) zoning requirements and subject to the compliance with the terms and conditions of this Agreement and any other applicable ordinance or regulation of the City, State, or Federal government.”

2.5. Section 7 of the Development Agreement is amended to add the following additional language:

“The Concept Plan for the Project is attached hereto. The parties hereby agree that the overall density for the Project is 13 per acre, for an aggregate number of 897 residential units for the Project (“**Overall Density**”). The Project will permit the residential ratio of density use on the property to be increased in a targeted format on said lot as long as the minimum lot area density requirement is still adhered to in all cases. This will allow for a single phase of the Project to exceed the permitted general density per acre for the MU zone; *provided, however*, in no event may the aggregate residential units for the Project exceed the Overall Density for the Project. After receiving approval from the City Council , the City hereby grants fully vested entitlements and rights to develop the Property in accordance with the terms and conditions of this Agreement and the MU zoning designations for the Property.

2.6. Section 9.1 of the Development Agreement is modified to the extent necessary to provide that the term of the Development Agreement will continue for a period of fifteen (15) years from the Effective Date of this Amendment. Thereafter, Developer shall have the option to extend the term for an additional ten (10) years if (a) the Developer has substantially complied with the terms of the Development Agreement, and (b) the Developer is proceeding with reasonable diligence in the development of the Project as contemplated under this Amendment, and then upon City Council approval.

2.7. A new Section 10 is hereby added to the Development Agreement, titled Project Water. The language in this section shall be as follows:

(a) In connection with the Project, the City hereby agrees to cooperate in good faith with Developer to assist Developer in (i) purchasing water rights for the benefit of

the Project, as required under Title 8 of the current City Code. The amount of water will be determined by the City Code, Title 8, Chapter 6. Such water rights required for the Project are referred to herein as the “**Project Water**”; (ii) work in connection with the Developer to obtain approval for the necessary connection points and diversion points for the Project Water; and (iii) provide for the water storage if the City has available capacity or allow the Developer to provide the required storage and infrastructure capacity.

2.8. Exhibit B of the Development Agreement regarding the Project area is hereby deleted in its entirety with the Exhibit B (“**Concept Plan**”) attached hereto inserted in lieu thereof. The Concept Plan shall include the road constructed by Developer in compliance with the City’s approved road cross-section within the City’s right of way, connecting the existing roundabout to the bridge for the new development.

2.9. Exhibit F of the Development Agreement regarding Wetland and Aquatic Resources Delineation is hereby deleted in its entirety with the Exhibit F (“**Aquatic Resources Delineation**”) attached hereto inserted in lieu thereof.

3. Assignment. The City hereby approves of the assignment of Developer’s rights under the Development Agreement from Unity Enterprises to Bach Land and Development, LLC.

4. Upsizing. The City reserves the right to request the upsizing of the utility lines for the Project in order to accommodate future growth or additional development by the City or third parties, provided, that the City or certain third parties will be required to pay the incremental cost increase for such upsizing.

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6. Ratification. As modified and supplemented by this Amendment, the Agreement is ratified and confirmed and shall continue in full force and effect.

7. Counterparts. This Amendment may be executed in any number of counterparts, each of which will be an original but all of which will constitute one and the same instrument. Signature and acknowledgement pages may be detached from individual counterparts and attached to a single or multiple original(s) in order to form a single or multiple original(s) of this document. Any signature on any counterpart of this Amendment delivered by “pdf” or other

electronic means shall be deemed to be an original signature for all purposes and shall fully bind the party whose signature appears on such counterpart.

[signatures on following page]

IN WITNESS WHEREOF, this Amendment is effective as of the date and year first above written.

DEVELOPER:

Bach Land and Development, LLC, a Utah limited liability company

Name: _____

Title: _____

CITY:

Riverdale City, a municipality and political subdivision of the State of Utah

By: _____

Mayor: _____

STATE OF UTAH)
) ss.
County of _____)

The foregoing instrument was acknowledged before me this ____ day of _____, 2021,
by _____, the Mayor of Riverdale City, on behalf of such city.

Notary Public

STATE OF UTAH)
) ss.
County of Salt Lake)

The foregoing instrument was acknowledged before me this ____ day of ____, 2021, by _____, the manager of Bach Land and Development, LLC, on behalf of such company.

Notary Public

EXHIBIT A

Legal Description

EXHIBIT B

Concept Plan

EXHIBIT F

Aquatic Resources Delineation

Title Information

This survey was completed using Title Report File No. 269386 dated December 11, 2019 from Western Land Title Insurance Company issued by Meridian Title Company.

The following survey related items circled (Solid) from Schedule B - Part II of the title report are plotted on the survey:

The following survey related items circled (Dashed) from Schedule B - Part II of the title report blanket off or a portion of this site but contain nothing to plot:

The following survey related items not circled from Schedule B - Part II of the title report could not be plotted:

13. Pipeline Easement of undisclosed width including its terms, covenants and provisions as disclosed by Instrument; To: Utah Power & Light Company Recorded; August 19, 1953 in Book 424 at Page 202 of Official Records.

14. The terms, covenants and conditions of that certain Judgment and Decree; In favor of: The Weber Canal Water Company, a Utah corporation Recorded; January 12, 1956 as Entry No. 249491 in Book 502 of Page 464 of Official Record blankets this site except parcel 4 along with more land.

15. An Easement including its terms, covenants and provisions as disclosed by Instrument; To: Washington Terrace Purpose; a twenty foot permanent sewer easement Recorded; November 7, 1985 as Entry No. 952508 in Book 1479 at Page 468 of Official Records.

16. The terms, covenants and conditions of that certain Land Use Easement; Recorded; August 9, 1995 as Entry No. 1357688 in Book 1767 at Page 84 of Official Records blankets parcel 6.

17. An Easement including its terms, covenants and provisions as disclosed by Instrument; To: Department of Community and Economic Development Recorded; December 29, 2000 as Entry No. 1744536 in Book 2108 at Page 1724 of Official Records.

18. An Easement including its terms, covenants and provisions as disclosed by Instrument; To: PacifiCorp, an Oregon corporation Purpose: an easement for a right of way 50 feet in width, and 515-60 feet in length, more or less, for the construction, reconstruction, operation, maintenance, repair, replacement, enlargement, and removal of electric power transmission, distribution and communication lines and all necessary and desirable accessories and appurtenances thereto, including without limitation; supporting towers, poles, props, guys and anchor, including guys and anchors outside of the right of way; wires, fibers, cables and other conductors and conduits therefor, and pads, transformers, switches, vaults and cabinets, along the general course Recorded; November 15, 2003 as Entry No. 1994600 in Book 1479 at Page 468 of Official Records contains a release of a portion of an existing easement which is not depicted.

19. The terms, covenants and conditions of that certain Easement Deed by Court Order in Settlement of Landowner Action; Recorded; October 29, 2013 as Entry No. 2661998 of Official Records 20 ft. wide easement not specifically described along grantees side of the railroad for utilities.

20. The terms, covenants and conditions of that certain Easement Deed by Court Order in Settlement of Landowner Action; Recorded; October 30, 2013 as Entry No. 2662268 of Official Records court order easement of undisclosed size and location along railroad for utilities.

Notes

The location and/or elevation of existing utilities shown on these plans is based on records of the various utility companies and, where possible, measurements taken in the field. No underground explorations were performed.

According to ALTA standards, the surveyor cannot certify a survey based upon an interpretation. The surveyor is not authorized to interpret zoning codes, nor can the surveyor determine whether certain improvements are zoning or actually benefiting the property.

Pertaining to ALTA requirement No. 6: No zoning information was supplied for review, information provided was found on the Riverside City Zoning Website. <http://www.riverdalecity.com>

ALTA requirements do not mention trees or vegetation. The Surveyor has shown significant observation of trees under Table A Item Number 8. Trees from Adjoining Parcels may canopy over the property which may not show on this survey.

Pertaining to ALTA requirement No. 8: There were no observed areas of substantial refuse on the site.

Pertaining to ALTA requirement No. 9: There are no parking stalls on this site.

Benchmark

USGS Brass Cap Monument B-370
along the railroad East of the site
Elevation = 4389.16 feet NAD 83(1986)
Observed June 4, 2019

Additional Documents

A. Warranty Deed to Utah Power Company recorded November 13, 1912 in Book 66 at Page 672 of Official Records and Warranty Deed to Utah Power Company recorded February 6, 1913 in Book 71 at Page 203 of Official Records. Documents contain descriptions that plot southerly off this site but contain language creating a perpetual easement over the existing canal in Section 18 along with other Sections. Canal is shown hereon.

B. Easement document recorded February 13, 1914 in Book II at Page 677 of Official Records. The rights to erect and maintain electrical facilities in the Southeast quarter of the Southeast Quarter of Section 18 and the Northeast quarter of the Southeast Quarter of Section 18 are conveyed to Utah Power Company.

C. Pole Line Easement to Utah Power Company recorded August 19, 1953 as Entry No. 200253 in Book 424 at Page 200 of Official Records. Described line is shown hereon.

D. Easement document recorded August 19, 1953 as Entry No. 208254 in Book 424 at Page 201 of Official Records. An easement and Right-of-way over and across a roadway crossing the Southwest quarter of the Northeast Quarter of Section 18 and the Southeast Quarter of Section 18 along with more land is conveyed to Utah Power Company. The exact roadway location is not disclosed, but could potentially be referring to the access road along the existing railroad right-of-way which would match the provided partial sections.

E. Pole Line Easement to Utah Power Company recorded April 3, 1954 as Entry No. 217381 in Book 440 at Page 515 of Official Records. Described lines are shown hereon. Two of the described lines appear to be released by Exception No. 18 of this survey.

F. Pole Line Easement to Utah Power Company recorded April 3, 1954 as Entry No. 17381 in Book 440 at Page 518 of Official Records. Document contains an ambiguous description that has been corrected and does not close. Plots somewhat close to the power lines running along the West line of Parcel 7 of this survey. Not shown due to the ambiguity of the description.

G. Pole Line Easement to Utah Power Company recorded May 17, 1956 as Entry No. 256231 in Book 513 of Page 530 of Official Records. Described line shown hereon.

H. Water Line Easement to Riverdale City recorded December 4, 1957 in Book 565 at Page 405 of Official Records and Resolution recorded December 4, 1957 in Book No. 265399 in Book 565 of Page 410 of Official Records. Approximate location of water line crossing railroad shown hereon. Effect on subject property is unclear.

I. Sewer Line Easement to Washington Terrace City recorded December 26, 1964 in Book 783 of Page 261 of Official Records. Description contains a bad tie but fits along the North line of Parcel 4 of this survey and is shown hereon.

J. Warranty Deed to Wilson Family recorded July 25, 1972 as Entry No. 575253 in Book 989 at Page 687 of Official Records. Describes Parcel 3 of this survey and reserves undisclosed right-of-ways to the Grantees.

K. Pipeline Easement to Riverdale City recorded May 23, 1975 as Entry No. 615939 in Book 1054 at Page 460 of Official Records. 10' Pipeline easement shown hereon.

L. Perpetual Easement contained in Special Warranty Deed recorded May 26, 1976 as Entry No. 740520 in Book 1244 at Page 729 of Official Records. Document not provided for review.

M. Agreement between Board of Water Resources and the State of Utah recorded March 11, 1980 as Entry No. 905357 in Book 1347 at Page 691 of Official Records and Notice of Satisfaction of Contract and Reconveyance of Property and Easement recorded April 2, 2012 as Entry No. 2569847 of Official Records. The Board of water resources conveyed to the State of Utah all easements and Rights-of-way in Section 18 along with rights in other Sections.

N. Quitclaim Deed in favor of Riverdale City recorded March 18, 1996 as Entry No. 1393764 in Book 1796 at Page 1464 of Official Records. The canal company quitclaims to Riverdale City rights to canal, laterals and facilities in Section 18 along with more land.

O. Warranty Deed in favor of Rocky Mountain Real Estate recorded December 30, 1996 as Entry No. 1447631 in Book 1841 at Page 1903 of Official Records. Parcel 7 of this survey is conveyed along with a perpetual easement that is Parcel 84 of this survey and a non-exclusive perpetual easement that is Parcels 7A, 7B & 8B of this survey.

P. Order of Immediate Occupancy recorded January 30, 1997 as Entry No. 1432887 in Book 1845 at Page 2836 of Official Records. Contains land use restrictions over a large area of land which affects Parcels 1, 2, 3, 6, 7, 8 and 9 of this survey.

Flood Plain Data

This property lies within Flood Zone AE, X (shaded), X (not shaded) as designated on FEMA Flood Insurance Rate Map for Weber County, Riverdale City and Incorporated Areas Map Number 45057C04367 dated 2 June, 2015 Flood Zone AE is defined as "Special flood hazard areas subject to inundation by the 1% annual chance flood" Flood Zone X (shading) is defined as "Areas of .2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood" and Flood Zone X (no shading) is defined as "Areas determined to be outside the 0.2% annual chance floodplain."

Zoning Information

= MU (Mixed Use)

Zone Building Setback Requirements Commercial

Front yard
Back yard
Side yard

Height Restrictions
Lot Coverage

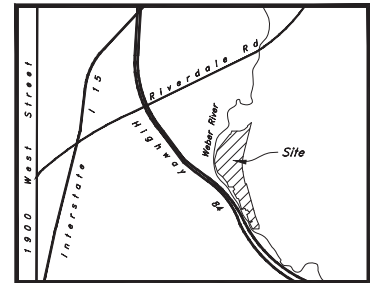
= 50', except if planning commission deems a different setback is necessary
= none (interior), except if planning commission deems a different setback is necessary
= 20' (corner), except if planning commission deems a different setback is necessary
= None, except if planning commission deems a height restriction is necessary
= Not over 45 percent of the lot area by buildings or accessory buildings

Building Setback Requirements Residential

Front yard
Back yard
Side yard

Height Restrictions
Density Restrictions
Lot Area
Lot Width

= 30 feet from front property line
= 30 feet from rear property line
= 10 feet minimum for each side except 20 feet minimum for side fronting on a street
= None
= No more than 13 dwelling units per acre including townhouses and condominiums
= Single-family or two-family dwelling a minimum of 12,000 square feet
= Each lot shall have a minimum width of 100 feet, which includes single-family, two-family, townhouses and condominiums



Narrative

This Survey was requested by Bach Investments, LLC prerequisite to development of this property.

This Survey retraces and honors a previous 2014 Survey by NYS Engineering

Field data was collected on WRS, NAD 83 to place the survey on State Plane Datum which matches the Weber County Survey Base. This survey can be retraced using the Weber County Survey bearing of South 89°11'40" East between the Northwest and Northeast Corner Monuments for Section 18.

No Property Corners were placed with this Survey.

As Surveyed Description

Located in Sections 18 and 19, Township 5 North, Range 1 West, Salt Lake Base and Meridian, Weber County, State of Utah being more particularly described as follows:

Beginning at a point on the Westerly Line of the Union Pacific Railroad Company Right-of-Way, said point being South 0°42'58" West 1677.31 feet along Section Line and West 1666.98 feet from the Northeast Corner of Section 18, Township 5 North, Range 1 West, Salt Lake Base and Meridian and running thence along said Union Pacific Company Right-of-Way Line the following ten (10) courses: 1.) South 1°35'01" West 982.41 feet; 2.) thence South 14°11'31" West 168.98 feet; 3.) thence along a curve to the left with a radius of 3670.17 feet a distance of 455.01 feet (Chord bears South 11°11'30" West 454.74 feet); 4.) thence along a curve to the left with a radius of 1273.21 feet a distance of 455.01 feet (Chord bears South 02°27'25" East 452.59 feet); 5.) thence along a curve to the left with a radius of 3670.17 feet a distance of 507.75 feet (Chord bears South 1°05'21" East 507.34 feet); 6.) thence North 74°04'00" East 50.00 feet; 7.) thence South 15°38'03" East 224.66 feet; 8.) thence South 15°38'03" East 928.59 feet; 9.) thence along a curve to the left with a radius of 5000.00 feet a distance of 382.27 feet (Chord bears South 16°54'19" East 382.01 feet); 10.) thence South 22°50'10" East 250.00 feet, more or less, to the intersection of said Union Pacific Company Right-of-Way and the South Line of said Section 18; thence leaving said Right-of-Way South 45.80 feet; thence West 262.00 feet; thence North 26°55'28" West 281.91 feet; thence North 70°10'01" East 125.64 feet; thence North 22°50'20" West 37.59 feet; thence North 15°38'03" West 6.97 feet; thence South 74°21'50" West 130.00 feet; thence North 15°38'10" West 304.74 feet; thence North 57°33'19" East 135.80 feet; thence North 15°38'10" West 33.12 feet; thence along a 25.00 foot radius curve to the left a distance of 42.33 feet (Chord bears North 64°08'15" West 119.84 feet); thence North 15°38'10" West 84.12 feet; thence South 75°17'31" West 150.02 feet; thence North 15°38'10" West 457.57 feet; thence North 80°27'58" West 72.10 feet; thence North 28°31'29" West 348.77 feet; thence North 50°08'57" East 96.81 feet; thence along a 230.00 foot radius non-tangent curve to the right a distance of 114.71 feet (Chord bears North 25°43'50" West 113.53 feet); thence South 82°30'52" West 197.02 feet; thence North 12°48'45" West 187.55 feet; thence North 38°08'35" West 177.08 feet; thence North 37°29'44" West 109.54 feet; thence North 51°58'37" West 151.01 feet; thence North 45°53'42" West 99.95 feet; thence North 46°24'46" West 33.40 feet; thence North 1°15'34" West 126.65 feet; thence North 00°36'30" West 184.93 feet; thence North 16°01'56" East 406.51 feet; thence North 35°35'59" East 818.03 feet; thence North 89°59'38" East 25.78 feet; thence along a 805.76 foot radius non-tangent curve to the right a distance of 135.42 feet (Chord bears North 31°26'26" East 138.25 feet); thence East 341.70 feet; thence North 69°30'00" East 180.84 feet; thence North 49°30'00" East 182.88 feet; thence North 01°00'00" West 38.94 feet; thence North 50°45'00" East 202.75 feet, more or less, to the point of beginning.

Contains: 3,025,057 sq. ft.
or 69.446 acres,
more or less, (as described)

Certification

To Bach Investments, LLC, Unity Enterprises, LLC, Western Land Title Insurance Company and Meridian Title Company:

This is to certify that this map or plot and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 4, 5, 6, 7(a), 7(c), 8, 9 and 11 of Table A thereof. The field work was completed on 10 June 2019.

Date:

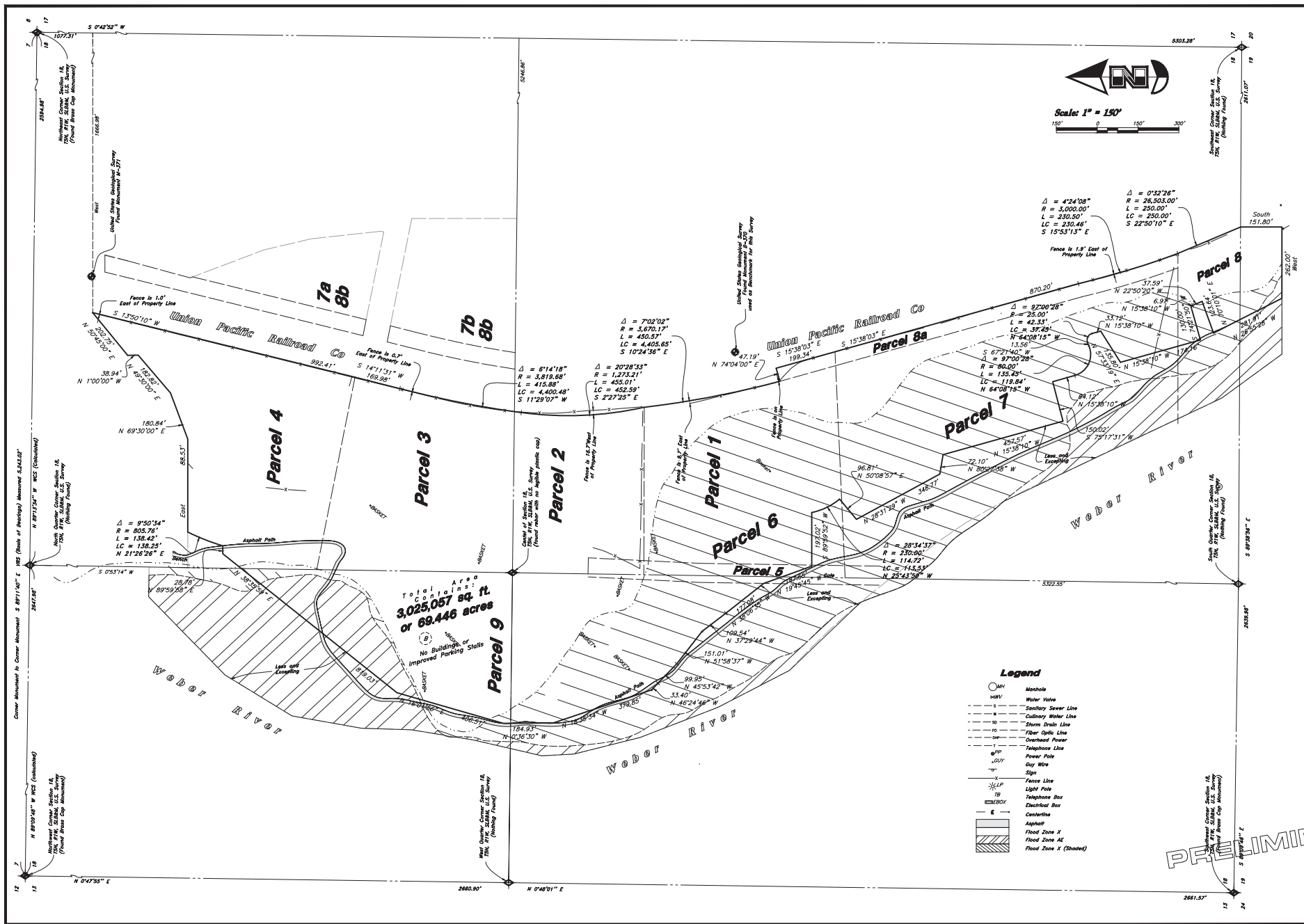


3 Jun, 2019

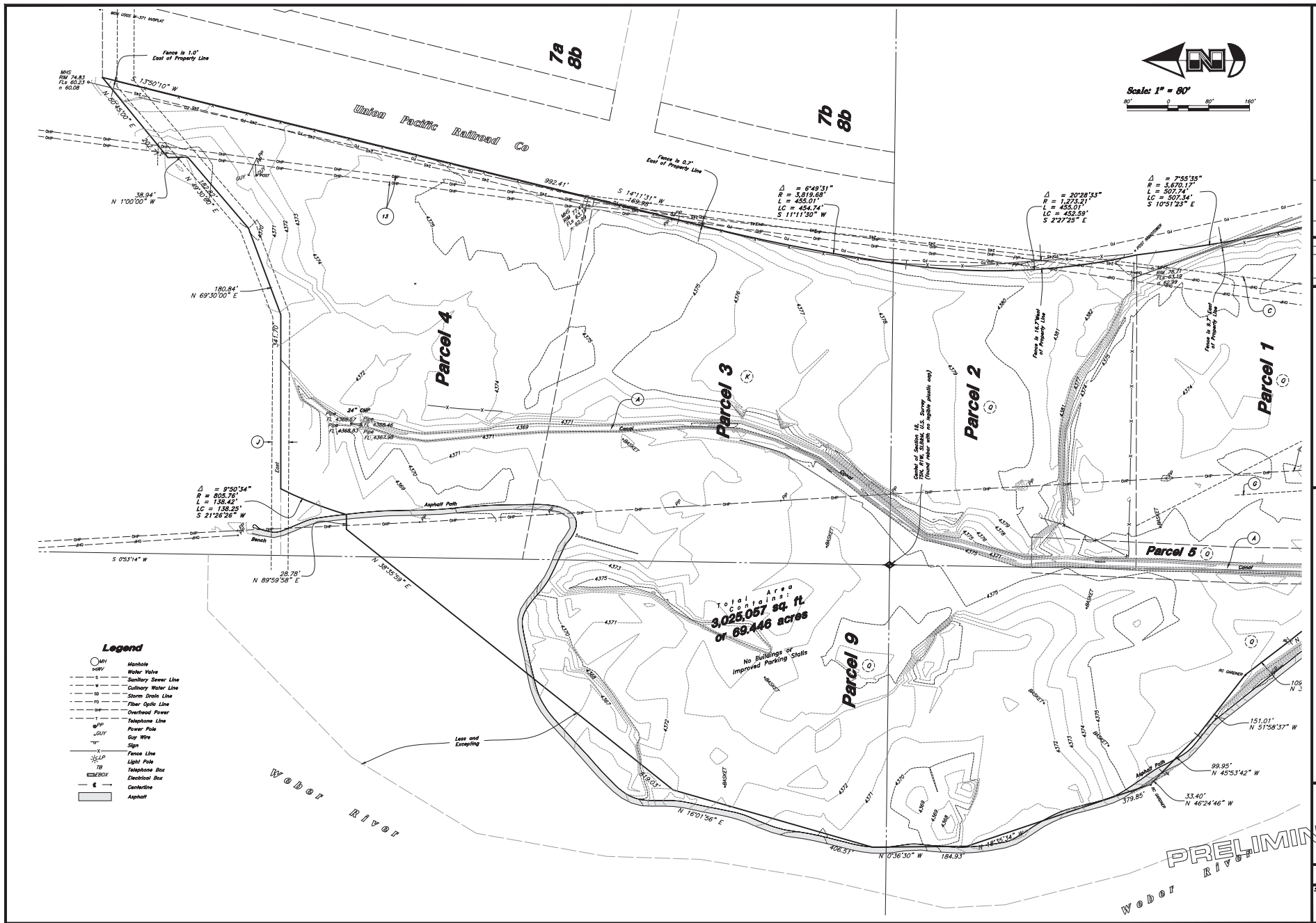
SHEET NO.

1

of 3



ALTA / NSPS Land Title Survey Bach Homes Riverdale 5100 South 700 West Riverdale, Weber County, Utah A Part of Section 16, T2N, R7W, S24M, U.S. Survey		DESIGNED BY: BGP DRAFTED BY: LJC CLIENT NAME: Bach Homes 19-0056
ANDERSON WAHLEN & ASSOCIATES 2010 North Main Street, Suite 100, Salt Lake City, Utah 84116 801.521.8529 • andersonwahlensurvey.com		SHEET NO. 3 OF 3



DESIGNED BY: BGP	DATE: 12-05-09
DRAWN BY: LAC	REV: 1
CLIENT NAME: Bach Homes	
ALTA / NSPS Land Title Survey Bach Homes Riverdale 5100 South 700 West Riverdale, Weber County, Utah A Part of Section 16, 20N, 11W, 36SW, U.S. Survey	
3 Jun, 2019 SHEET NO. 4 of 5	



RESOLUTION NO. 2007-6

**A RESOLUTION AUTHORIZING EXECUTION OF A DEVELOPER'S
AGREEMENT BETWEEN RIVERDALE CITY
AND UNITY ENTERPRISES, LLC**

WHEREAS, UNITY ENTERPRISES, LLC has proposed development of approximately 70 acres of land commonly referred to as the Unity Enterprises Project, located at approximately 5100 So. Weber River Drive or south of the city-owned property which lies directly south from the city offices and centered between the railroad tracks and the Weber River, all of which is within Riverdale City, and construction of improvements therein; and

WHEREAS, UNITY ENTERPRISES, LLC and Riverdale City desire to specify terms and conditions under which the development shall proceed and to specify standards which the development must meet;

NOW THEREFORE, BE IT HEREBY RESOLVED by the City Council of the City of Riverdale that the Mayor, with the attestation of the City Recorder is hereby empowered to execute a Developers Agreement between Riverdale City and UNITY ENTERPRISES, LLC in the form and containing the terms as annexed hereto as Exhibit "A".

This resolution shall take effect immediately upon its adoption.

PASSED D ADOPTED this 20th day of February, 2007.


Bruce Burrows, Mayor

Attest:


Marilyn Hansen, City Recorder



**DEVELOPMENT AGREEMENT
FOR THE UNITY ENTERPRISES PROJECT
RIVERDALE CITY, UTAH**

This Development Agreement is entered into as of this _____ day of _____, 2007, by and between **Unity Enterprises, LLC**, a _____, as the owner and developer ("Developer") of a project known as the "Unity Enterprises Project" (the "Project"), and **Riverdale City**, a municipality and political subdivision of the State of Utah, by and through its City Council (the "City"). Developer and the City are sometimes individually referred to herein as a "Party" or collectively as the "Parties."

RECITALS:

A. Developer is the owner of approximately 93 acres of real property located in Riverdale City, Weber County, Utah, as more particularly described in Exhibit A, which is attached hereto and incorporated herein by this reference (the "Property") on which it proposes the development of a mixed use project consisting of a combination of single-family residential dwellings, townhouses and/or condos, neighborhood retail, commercial, office/warehouse, and open space known as the "Unity Enterprises Project," all as more fully described below.

B. Developer is willing to design and develop the Project in a manner that is in harmony with and intended to promote the long-range policies, goals and objectives of the City's general plan, zoning and development regulations, as more fully set forth below.

C. The City, acting pursuant to its authority under Utah Code Annotated, § 10-9a-101, *et seq.*, and in furtherance of its land use policies, goals, objectives, ordinances, resolutions, and regulations has made certain determinations with respect to the proposed Project, and, in the exercise of its legislative discretion, has elected to approve this Development Agreement.

NOW, THEREFORE, in consideration of the mutual covenants, conditions and terms as more fully set forth below, Developer and the City hereby agree as follows:

1. **Recitals.** The recitals set forth above are hereby incorporated by reference as part of this Agreement.

2. **Conditions Precedent to this Agreement.**

2.1 Approval of zoning. As a condition precedent to the obligations of the parties hereunder, this Agreement is contingent upon and will only become effective at such time, and in the event, that the Riverdale City Council, in the independent exercise of its legislative discretion, elects to approve the rezoning of the property on which development is proposed as part of the Project ("Project Area") as designated on Exhibit B hereto to the Mixed Use ("MU") zoning district of the City, following all necessary public hearings required for the approval of such rezoning and this Agreement. This Agreement is not intended to and does not bind the City Council in the independent exercise of its legislative discretion with respect to the proposed rezoning of the Property.

3. Conditions of Approval.

3.1 Completion of traffic study. As a condition of approval of any initial phase or development component of the Project, Developer shall cause to be prepared and presented to the City a traffic study at Developer's sole cost and expense, addressing and evaluating the appropriate location for all roads providing primary and secondary access to the Project including, but not limited to, the location of a bridge crossing over the Weber River. The traffic study shall include consultation and coordination with other interested third parties including, but not limited to, the Army Corps of Engineers, the Utah State Engineer, and the Federal Emergency Management Agency ("FEMA"). Once completed the Traffic study will be attached hereto and incorporated as a part of this agreement and labeled as Exhibit E.

3.2 Extension of Weber River Drive and other transportation improvements. As an integral part of this Agreement, Developer agrees to participate in the construction costs of a connecting road and water line which will extend the existing Weber River Drive across Riverdale City property to the property line of the Project. The Developer agrees to split these construction improvement costs, back of curb to back of curb on the connecting road along with the associated water line, on an equal basis with the City, with each party being responsible for fifty percent (50%) of those costs. After review and approval of the traffic study by Riverdale City, it shall be the responsibility of the Developer to fund all other transportation improvements in addition to the extension of Weber River Drive which are necessary in order to provide adequate access for the Project as recommended by the traffic study at Developer's sole cost and expense.

3.3 Wetlands study and delineation. As a condition of approval of any initial phase or development component of the Project, Developer shall arrange for the preparation of the engineering plans, associated wetlands study, and reasonable mitigation plans for wetlands located on the Property within the Project, at Developer's sole cost and expense, including seeking approval for the same from the United States Army Corps of Engineers and any other governmental body required to review and approve such a study. The parties shall cooperate in providing all necessary information to be submitted to the Army Corps of Engineers and other governmental entities, as required. Once completed the Wetlands study will be attached hereto and incorporated as a part of this agreement and labeled as Exhibit F.

3.4 Other offsite utilities and improvements. As an integral part of this Agreement, Developer agrees to participate in the construction of the Weber River Drive offsite utilities and improvements, as referenced in 3.2 above and as tentatively illustrated on Exhibit G attached. These improvements consist of a connecting road and water line both of approximately 1,900 lineal feet, which will extend the existing Weber River Drive across Riverdale City property to the property line of the Project.

4. **Property Exchange Providing Open Space and Trails.**

4.1 Open space. As an integral part of this Agreement, Developer voluntarily agrees to donate, dedicate, and convey to the City, at no cost to the City, a minimum of 23.2 acres of the Property as generally depicted on Exhibit C as "Open Space." The conveyance of the Open Space to the City will be accomplished through a special warranty deed as a condition of the approval of the first phase of the Project.

4.2 Trails. As an integral part of this Agreement, Developer voluntarily agrees to donate, dedicate, and convey to the City, at no cost to the City, for recreational use by members of the public, the right-of-way for "Trails" as generally depicted on Exhibit C. The parties further acknowledge and agree some flexibility shall be allowed to shift the final alignment of the Trails to conform to the final design of the Project and that conveyance of the right-of-way for the Trails to the City shall be accomplished by special warranty deed as a condition of the approval of

the first phase of the Project. Other than the obligation to convey the right-of-way for the Trails, the Developer shall not be required to participate in the construction costs to develop the Trails or any other facilities or improvements within the area delineated on the attached Exhibit C as the "River Parkway." The cost for improvement of the trails shall be the sole responsibility of the City.

4.3 Conveyance of City Parcel and Vacation of Easement.

As an integral part of the consideration for this Agreement, the City agrees, if not accomplished previously under a separate agreement, to convey to Developer by quit-claim deed the approximately two (2) acres of the Weber Canal property located within the Project, and to vacate the associated easement, as more fully depicted on Exhibit D (the "City Parcel") at the time of the conveyance of the Open space and Trails.

5. Vested Rights and Reserved Legislative Powers.

5.1 Vested rights. Developer shall have the vested right to develop and construct the Project in accordance with the mixed use ("MU") zoning designation after approval by the City Council, subject to compliance with the terms and conditions of this Agreement and any other applicable ordinances and regulations of the City, State or Federal government.

5.2 Reserved legislative powers. Nothing in this Agreement shall limit the City's future exercise of its police power in enacting generally applicable land use laws after the date of this Agreement. Notwithstanding the retained power of the City to enact such legislation under the police powers, such legislation shall only be applied to modify the vested rights of Developer under this Agreement based upon policies, facts and circumstances meeting the compelling, countervailing public interest exception to the vested rights doctrine in the State of Utah. Any such proposed change affecting the vested rights of the Project shall be of general application to all development activity in the City; and, unless the City declares an emergency, Developer shall be entitled to prior written notice and an opportunity to be heard with respect to the proposed change and its applicability to the Project under the compelling, countervailing public policy exception to the vested rights doctrine.

6. Requirement of Compliance with All Other Applicable City Regulations Governing Development Approval. Developer expressly acknowledges and agrees that it shall be necessary to comply with all of the other applicable requirements of Riverdale City for approval of preliminary and final subdivision plats, commercial site plans, building permits, and any other

development aspects of the Project, including the payment of fees and compliance with the City's design and construction standards, and nothing in this Agreement shall be deemed to relieve Developer from the obligation to comply with all such applicable laws and requirements of the City. In the event of a conflict between the provisions of other City regulations and this Agreement, the more specific provisions of this Agreement shall govern.

7. **Phasing.** Developer may develop and construct the Project in phases as market conditions dictate, as long as each phase provides for a logical extension of the road system, infrastructure and other utilities necessary to service the Project, as approved by the City, in compliance with the terms and conditions of this Agreement and all other applicable ordinances and regulations of the City.

8. **Successors and Assigns.**

8.1 **Binding effect.** This Agreement shall be binding upon the City and Developer, as well as on the successors and assigns of Developer in the ownership and development of any portion of the Project.

8.2 **Assignment and transfer of development rights and obligations.** Neither this Agreement nor any of the provisions, terms or conditions hereof can be assigned to any other party, individual or entity without assigning the rights as well as the responsibilities under this Agreement and without the prior written consent of the City, which consent shall not be unreasonably withheld. The review by and approval of the City is intended to verify the ability of the proposed transferee or assignee to assume all of the obligations of the Developer under the terms of this Agreement with respect to the applicable portion of the Property or Project. Any such request for assignment may be made by letter addressed to Riverdale City and the prior written consent of the City may also be evidenced by letter from the City to Developer. This restriction on assignment is not intended to prohibit or impede the sale of parcels of fully or partially improved or unimproved land by Developer prior to construction of building improvement on the parcels, so long as the Developer retains all rights and responsibilities under this Agreement.

9. **General Terms and Conditions.**

9.1 **Term of Agreement.** The term of this Agreement shall be for a period of fifteen (15) years following the date of its adoption by the City Council unless the Agreement is earlier terminated or its term modified by written amendment to this Agreement.

9.2 **Agreement to run with the land.** The legal description of the Property contained within the Project boundaries is attached and

specifically described in Exhibit A. No additional property may be added to this description for the purposes of this Agreement except by written amendment to this Agreement executed and approved by the parties hereto. This Agreement shall be recorded in the office of the Weber County Recorder against the Property and is intended to and shall be deemed to run with the land, and shall be binding on all successors in the ownership of any portion of the Property. The benefits of this Agreement shall ensure to successors-in-interest and/or subsequent owners only if the Agreement is assigned in accordance with the terms of this Agreement as set forth herein.

9.3 Construction of Agreement. This Agreement shall be construed so as to effectuate the public purpose of implementing long-range planning objectives, obtaining public benefits, and protecting any compelling countervailing public interest while providing reasonable assurances of continuing vested development rights.

9.4 State and federal law. The parties agree, intend and understand that the obligations imposed by this Agreement are only such as are consistent with state and federal law. The parties further agree that if any provision of this Agreement becomes, in its performance, inconsistent with state or federal law or is declared invalid, this Agreement shall be deemed amended to the extent necessary to make it consistent with state or federal law, as the case may be, and the balance of this Agreement shall remain in full force and effect.

9.5 Relationship of parties and no third-party rights. This Agreement does not create any joint venture, partnership, undertaking, or business arrangement between the parties hereto nor any rights or benefits to third parties.

9.6 Laws of general applicability. Where this Agreement refers to laws of general applicability to the project, this Agreement shall be deemed to refer to other laws of Riverdale City.

9.7 Integration. This Agreement contains the entire agreement between the parties with respect to the subject matter hereof and integrates all prior conversations, discussions or understandings of whatever kind or nature and may only be modified by a subsequent writing duly executed and approved by the parties hereto.

9.8 Applicable law. This Agreement is entered into under and pursuant to and is to be construed and enforceable in accordance with the laws of the State of Utah.

DATED as of the day and year first written above.


UNITY ENTERPRISES, LLC

By _____

Managing Member

RIVERDALE CITY

Attest:

 By 
Riverdale City Recorder Corporate Mayor Burrows


130230.1

LIST OF EXHIBITS

- Exhibit A: Legal description of Property
- Exhibit B: Project area
- Exhibit C: Open space and trails
- Exhibit D: City parcel
- Exhibit E: Traffic Study
- Exhibit F: Wetland Study
- Exhibit G: Other offsite Utilities and Improvements

**MILLER ASSOCIATES, INC.**

Professional Land Surveyors and Engineers
 3225 W. California Ave. Suite 101
 Salt Lake City, UT 84104

Phone: 801-975-1083
 Fax: 801-975-1081
 www.millerassoc.net

OVERALL BOUNDARY DESCRIPTION:

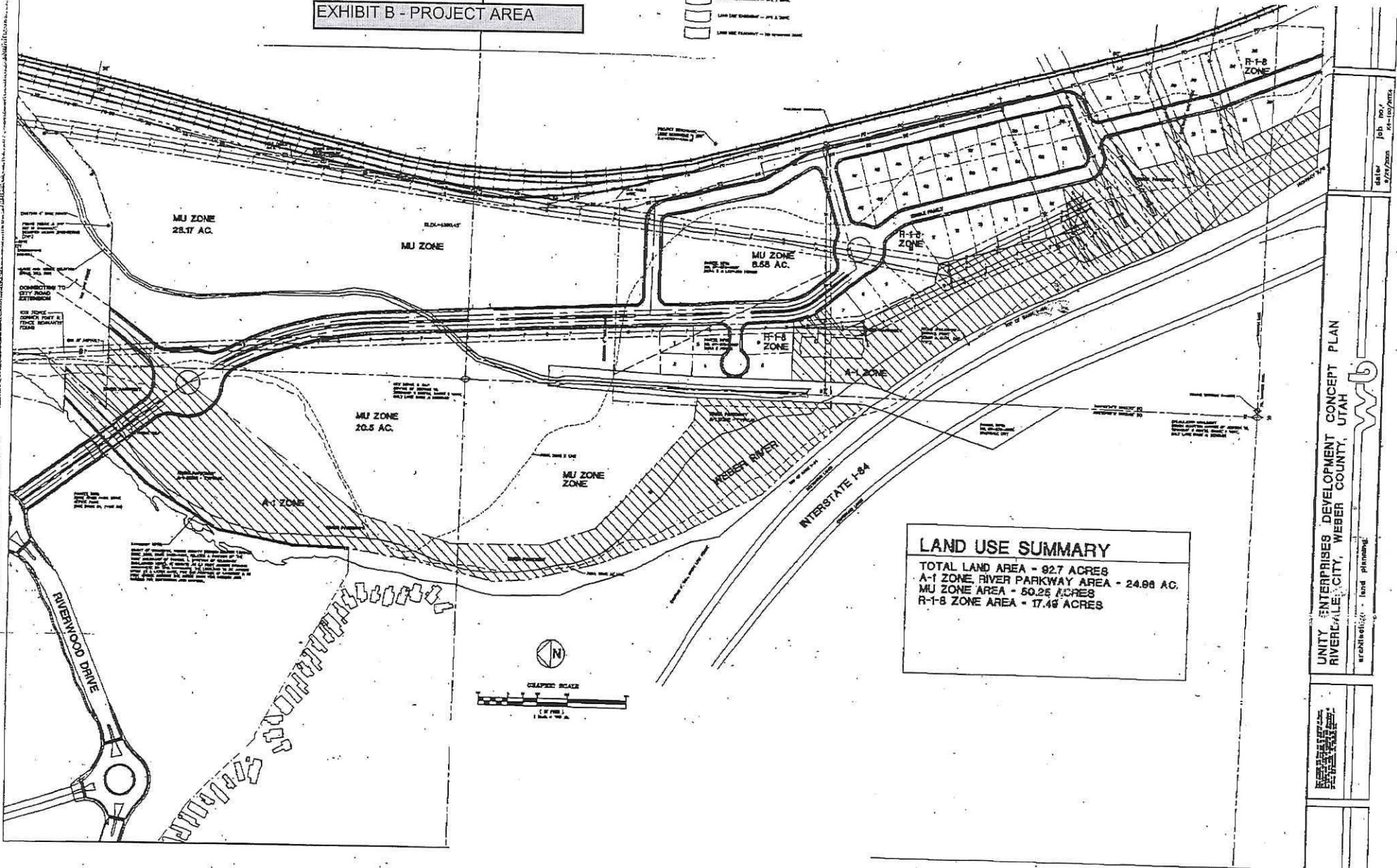
LOCATED IN SECTIONS 18, AND 19 TOWNSHIP 5 NORTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN, WEBER COUNTY, STATE OF UTAH BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE WESTERLY LINE OF THE UNION PACIFIC RAILROAD COMPANY RIGHT-OF-WAY, SAID POINT BEING SOUTH 00°42'38" WEST 1077.31 FEET ALONG SECTION LINE AND WEST 1666.98 FEET FROM THE NORTHEAST CORNER OF SECTION 18, TOWNSHIP 5 NORTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN AND RUNNING THENCE ALONG SAID UNION PACIFIC COMPANY RIGHT-OF-WAY LINE THE FOLLOWING TEN (10) COURSES; 1.) SOUTH 13°50'10" WEST 992.41 FEET; 2.) THENCE SOUTH 14°11'31" WEST 169.98 FEET; 3.) THENCE ALONG A CURVE TO THE LEFT WITH A RADIUS OF 3819.68 FEET A DISTANCE OF 455.01 FEET (CHORD BEARS SOUTH 11°11'30" WEST 454.74 FEET); 4.) THENCE ALONG A CURVE TO THE LEFT WITH A RADIUS OF 1273.21 FEET A DISTANCE OF 455.01 FEET (CHORD BEARS SOUTH 02°27'25" EAST 452.59 FEET); 5.) THENCE ALONG A CURVE TO THE LEFT WITH A RADIUS OF 3670.17 FEET A DISTANCE OF 507.75 FEET (CHORD BEARS SOUTH 10°51'23" EAST 507.34 FEET); 6.) THENCE NORTH 74°04'00" EAST 50.00 FEET; 7.) THENCE SOUTH 15°38'03" EAST 224.66 FEET; 8.) THENCE SOUTH 15°38'03" EAST 928.59 FEET; 9.) THENCE ALONG A CURVE TO THE LEFT WITH A RADIUS OF 3000.00 FEET A DISTANCE OF 382.27 FEET (CHORD BEARS SOUTH 16°54'17" EAST 382.01 FEET); 10.) THENCE SOUTH 22°50'10" EAST 250.00 FEET, MORE OR LESS, TO THE INTERSECTION OF SAID UNION PACIFIC COMPANY RIGHT-OF-WAY AND THE SOUTH LINE OF SAID SECTION 18; THENCE LEAVING SAID RIGHT-OF-WAY SOUTH 151.80 FEET; THENCE WEST 466.97 FEET, MORE OR LESS, TO THE NORTHEASTERLY RIGHT-OF-WAY LINE OF THE INTERSTATE 84 HIGHWAY; THENCE ALONG SAID RIGHT-OF-WAY LINE THE FOLLOWING SIX (6) COURSES; 1.) NORTH 36°11'11" WEST 273.65 FEET; 2.) THENCE NORTH 25°07'35" WEST 178.20; 3.) THENCE NORTH 24°49'32" WEST 185.71 FEET; 4.) THENCE NORTH 25°42'32" WEST 278.27 FEET; 5.) THENCE ALONG A CURVE TO THE LEFT WITH A RADIUS OF 2864.93 FEET A DISTANCE OF 404.86 FEET (CHORD BEARS NORTH 27°03'27" WEST 404.52 FEET); 6.) THENCE ALONG A CURVE TO THE LEFT WITH A RADIUS OF 2934.31 FEET A DISTANCE OF 305.22 FEET (CHORD BEARS NORTH 36°20'54" WEST 305.08 FEET); THENCE LEAVING SAID RIGHT-OF-WAY NORTH 17°03'03" EAST 74.84 FEET; THENCE NORTH 00°53'03" EAST 660.00 FEET; THENCE NORTH 02°50'03" EAST 410.00 FEET; THENCE NORTH 89°06'57" WEST 70.00 FEET; THENCE SOUTH 02°50'03" WEST 410.00 FEET; THENCE SOUTH 00°53'03" WEST 660.38 FEET; THENCE WEST 6.79 FEET, MORE OR LESS, TO THE NORTHEASTERLY RIGHT-OF-WAY LINE OF THE INTERSTATE 84 HIGHWAY; THENCE ALONG SAID RIGHT-OF-WAY LINE BEING A CURVE TO THE LEFT WITH A RADIUS OF 2930.79 FEET A DISTANCE OF 450.50 FEET (CHORD BEARS NORTH 42°54'19" WEST 450.06 FEET), MORE OR LESS, TO THE CENTERLINE OF THE WEBER RIVER; THENCE ALONG SAID CENTERLINE OF THE WEBER RIVER THE FOLLOWING TEN (10) COURSES; 1.) THENCE NORTH 27°19'13" WEST 295.67 FEET; 2.) THENCE NORTH 21°08'35" WEST 306.53 FEET; 3.) THENCE NORTH 14°08'12" WEST 251.18 FEET; 4.) THENCE NORTH 02°59'07" WEST 117.99 FEET; 5.) NORTH 13°00'24" EAST 257.91 FEET; 6.) THENCE NORTH 09°16'16" EAST 231.56 FEET; 7.) THENCE NORTH 01°47'44" EAST 182.55 FEET; 8.) THENCE NORTH 10°02'36" EAST 259.75 FEET; 9.) THENCE NORTH 31°26'04" EAST 287.76 FEET; 10.) THENCE NORTH 45°41'02" EAST 402.05 FEET; THENCE LEAVING SAID RIGHT-OF-WAY LINE SOUTH 89°09'48" EAST 109.26 FEET, MORE OR LESS, TO THE EAST LINE OF THE WEST HALF OF SAID SECTION 18; THENCE ALONG SAID EAST LINE, SOUTH 00°53'03" WEST 141.99 FEET; THENCE LEAVING SAID EAST LINE, EAST 472.16 FEET; THENCE NORTH 69°30'00" EAST 180.84 FEET; THENCE NORTH 49°30'00" EAST 182.82 FEET; THENCE NORTH 01°00'00" WEST 38.94 FEET; THENCE NORTH 50°45'00" EAST 202.75 FEET, MORE OR LESS, TO THE POINT OF BEGINNING.

CONTAINS: 4,037,021 SQ. FT., OR 92.677 ACRES, MORE OR LESS, (AS DESCRIBED)

EXHIBIT B - PROJECT AREA

- LAND USE ZONING - MU & R-1
- LAND USE ZONING - MU & R-1
- LAND USE ZONING - MU & R-1



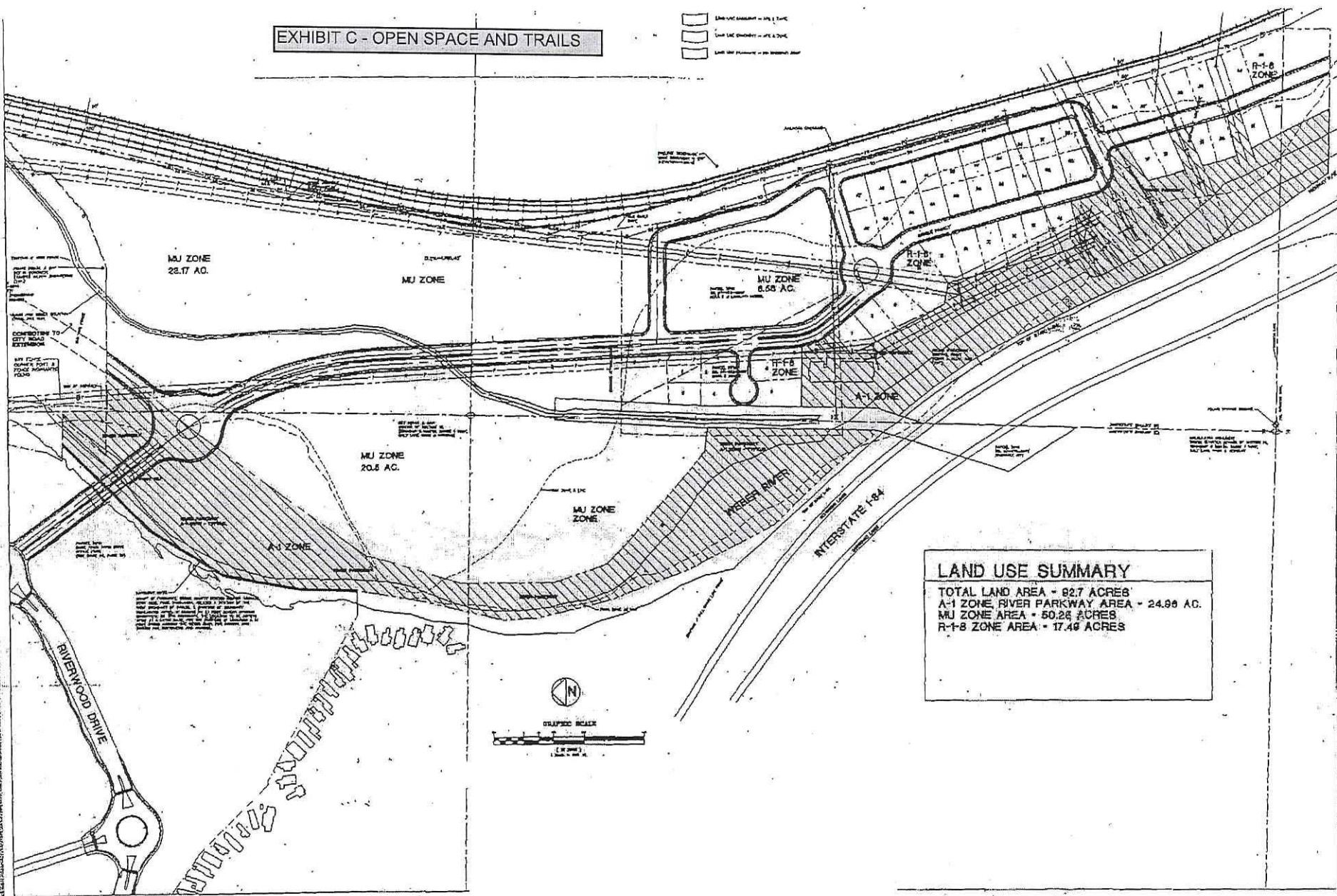
UNITY ENTERPRISES DEVELOPMENT CONCEPT PLAN
RIVERDALE, CITY, WEBER COUNTY, UTAH

architect - land planning

date job no.
7/27/2000 10-1017000

EXHIBIT C - OPEN SPACE AND TRAILS

- Land use boundary - 1/4" & 1/2" scale
- Land use boundary - 1/4" & 1/2" scale
- Land use boundary - 1/4" & 1/2" scale



UNITY ENTERPRISES DEVELOPMENT CONCEPT PLAN
RIVERDALE CITY, WEBER COUNTY, UTAH

architectural - land planning

DATE: 1/10/2000
JOB NO: 1007883

Exhibit C

[illegible]

TRAFFIC STUDY

UNITY
AT
RIVERDALE CITY, UTAH

NOVEMBER 2006

Prepared by:
Thomas R. Birch, PE

MILLER ASSOCIATES, INC.
SUITE 101
3225 WEST CALIFORNIA AVENUE
SALT LAKE CITY, UTAH 84104
PHONE: (801) 975-1083
FAX: (801) 975-1081

UNITY AT RIVERDALE, UTAH TRAFFIC ANALYSIS

EXECUTIVE SUMMARY:

The Unity at Riverdale is a proposed mixed use subdivision development, to be located in Riverdale City in Weber County, Utah. The project is located on the easterly side of the Weber River between the Weber River and the railroad tracks and south of the Riverdale City Civic Center Building.

The purpose of this study is to estimate the project's impact upon the adjacent streets, primarily River Park Drive that includes the intersections of:

River Park Drive/1050 West (State Road 61)
River Park Drive/Driveway (driveway to adjacent property's parking.)
River Park Drive/900 West
700 West/4600 South

The project's impact was determined by comparing intersection Level of Service (LOS) before and after estimated project traffic is added to the intersections.

The presently proposed subdivision includes 92.7 acres consisting of:

24.96 acres of River Parkway Area, Zone A-1
50.25 acres of commercial, Zone C-3
17.49 acres of residential, Zone R-1-8

Traffic generated by the proposed development will have some impact on the adjacent roadways. The following recommendations are made to mitigate project traffic impacts.

1. That any required signing, pavement markings, or other traffic control improvements comply with the Manual of Uniform Traffic Control Devices, Utah Department of Transportation requirements and the City of Riverdale
2. That separate left turn lanes, through lanes and right turn lanes be signed at street side and marked on the pavement with lane lines and arrows at the intersections of 700 West/4600 South and 1050 West/River Park Drive to define the use of the available space and facilitate traffic movement. These pavement markings should include the private driveways on the west side of these intersections.
3. That access be provided by a new bridge across the Weber River and a new street that will connect to River Park Drive probably at the River Park Drive/900 West intersection.
4. That additional access be provided by connecting to 4600 South via the street that serves the Riverdale Civic Center Building.

INTRODUCTION

Study Area

The proposed 92.7-acre subdivision is located on the easterly side of the Weber River in Riverdale City in Weber County, Utah, between the Weber River and the railroad tracks and south of the Riverdale Civic Center. The location of the project site is shown in Figure 1. The site is currently undeveloped and in a natural condition. Adjacent development is commercial. The present vehicle access to the site is by 4600 South past the Riverdale Civic Center. Motorized vehicles are presently prohibited from the site.

In the vicinity of the site, River Park Drive is presently a two-lane facility (one lane in each direction). The 700 West Street is sort of an extension of River Park Drive. The intersection of 1050 West/River Park Drive and the intersection of 700 West/4600 South are controlled by a stop sign. The intersection of River Park Drive/900 West and River Park Drive/Driveway are presently 3 way roundabout intersections with yield sign control.

PURPOSE

The purpose of this study is to consider the project's impact on the nearby street network, primarily the intersections on River Park Drive. This will be done primarily by a comparison of the peak 15 minute Level of Service (LOS) of present vehicle counts at existing intersections and the peak 15 minute Level of Service (LOS) after estimated project traffic (vehicles) are added to the intersections. A new street from the project will connect to River Park Road at the roundabout intersection of 900 West. It is also proposed to connect to 4600 South by utilizing the street that goes by the Riverdale City Civic Center Building.

TRAFFIC COUNTS

To determine existing traffic volumes, a person with a counting board device did manual vehicle through and turning movement counts on weekdays from 7-9 am and from 4-6 pm. These are usually the hours of weekday peak traffic volumes. The manual counts were done at the following intersections:

- River Park Drive/1050 West (State Road 61) (Stop sign control)
- River Park Drive/Driveway (adjacent property's parking.) (A roundabout)
- River Park Drive/900 West (A roundabout)
- 700 West/4600 South (Stop sign control)

Figure 2 shows the result of these counts at each intersection. Copies of all the traffic counts are in the Appendix.

TRIP DISTRIBUTION

Distribution of the project-generated traffic was estimated by observing the existing traffic patterns and the possible locations and opportunities where the generated traffic would travel. The estimated directions and percentage distribution of project-generated traffic are shown in Figure 3.

TRIP GENERATION

Trip Generation rates were based upon information taken from the fifth edition of the Institute of Transportation Engineers book Trip Generation.

The Average Daily Traffic is the total number of vehicles that exit and enter the project area in a 24-hour weekday.

The Average Daily Traffic (24 hour weekday traffic) was estimated to be:

Land Use	Acres	Trips	Enter	Exit
River Park	24.96	336	168	168
Residential	17.49	540	270	270
Commercial	50.25 (business park and residential PUD)			
Business Park	25.12	3988	1994	1994
Residential PUD	25.12	1162	581	581
Totals	92.70	6,026	3,013	3,013

This total daily weekday traffic is an indication of the total traffic generated by the project, but the LOS calculations are done on a peak hour and peak 15 minutes in that hour. The theory is that if the street network can accommodate the peak time traffic, then it can accommodate traffic for the rest of the day. The estimated peak hour volumes from the TRIP GENERATION book are:

Land Use	Acres	7-9am Trips		4-6pm Trips	
		Enter	Exit	Enter	Exit
River Park	24.96	9	8	48	138
Residential	17.49	12	34	41	22
Commercial	50.25 (business park and residential PUD)				
Business Park	25.125	414	67	106	377
Residential PUD	25.125	24	72	61	33
	92.70	459	181	256	570

Figure 4 shows the estimated traffic and the distribution over the intersections that might be generated by the proposed development. Figure 5 shows the addition of the project generated traffic volumes to the existing to obtain the final estimated traffic volumes at project build-out.

TRAFFIC CAPACITY AND LEVEL OF SERVICE (LOS)

The intersections on River Park Drive were analyzed for capacity and Level of Service (LOS) using the plus version of the Highway Capacity Software (HCS+). This is an updated and improved version of this software. The software was programmed at the University of Florida with research grants from the federal government and does capacity analysis and LOS calculations of intersections and is used throughout the nation. The calculations that it performs are based on criteria in the Highway Capacity Manual that has evolved over several years of research and use. The HCS+ software and the manual are a "work in progress"

The result of capacity analysis is a "Level of Service" (LOS) for the intersection. "Level of Service" is a qualitative measure (based on quantitative numbers) of traffic operating conditions whereby a letter grade "A" through "F" that correspond to progressively worsening traffic operation at an intersection. "A" is the best LOS and "F" is the worst and is representative of gridlock conditions. An example of LOS from the HCS+ software criteria for unsignalized intersections related to seconds of delay at the intersection is:

- LOS A less than 10 seconds of delay per vehicle
- LOS B between 10 and 15 seconds of delay per vehicle
- LOS C between 15 and 25 seconds of delay per vehicle
- LOS D between 25 and 35 seconds of delay per vehicle
- LOS E between 35 and 50 seconds of delay per vehicle
- LOS F over 50 seconds of delay per vehicle

The LOS for roundabout intersections is defined by a volume (v) to capacity (c) ratio or v/c. A v/c ratio of 1.00 would approximate a LOS of "F". The software prepares an upper and lower v/c ratio because the exact LOS of roundabouts is still under some research. The lower the v/c ratio the better the LOS. A v/c ratio of 0.01 would be LOS of "A".

COMPARISONS AND CONCLUSIONS

A comparison of the LOS without and with the project traffic volumes is shown in Figure 6a and 6b for AM traffic and Figure 7a and 7b for PM traffic. The existing AM traffic was fairly light and the existing intersections are functioning well during the peak AM hour at a LOS of "A" or "B". The AM peak hour with the estimated project volumes will still function well but at a slightly lower LOS of "C" or better.

The existing PM peak hour traffic includes more vehicles than during the existing AM peak hour but the existing intersections are functioning well during the existing PM peak hour with a LOS of "C" or better. The PM peak hour with the estimated project volumes will function well with a LOS of C or better except for the left turn from River Park Drive to southbound on 1050 West that may

operate for a short time during the peak hour with a level of service E with vehicle delays between 35 and 50 seconds.

Traffic volumes at project build-out may or may not equal the volumes estimated in this report. The development could be monitored through the design phases of the project to estimate more accurately the project impact and resulting LOS on existing intersections.

SUMMARY AND RECOMMENDATIONS

Traffic generated by the proposed development will have some impact on the adjacent roadways. The following recommendations are made to mitigate project traffic impacts.

1. That any required signing, pavement markings, or other traffic control improvements comply with the Manual of Uniform Traffic Control Devices, Utah Department of Transportation requirements and the City of Riverdale
2. That separate left turn lanes, through lanes and right turn lanes be signed at street side and marked on the pavement with lane lines and arrows at the intersections of 700 West/4600 South and 1050 West/River Park Drive to define the use of the available space and facilitate traffic movement. These pavement markings should include the private driveways on the west side of these intersections.
3. That access be provided by a new bridge across the Weber River and a new street that will connect to River Park Drive probably at the River Park Drive/900 West intersection. A project of this size needs more than one access.
4. That additional access be provided by connecting to 4600 South via the street that serves the Riverdale Civic Center Building.

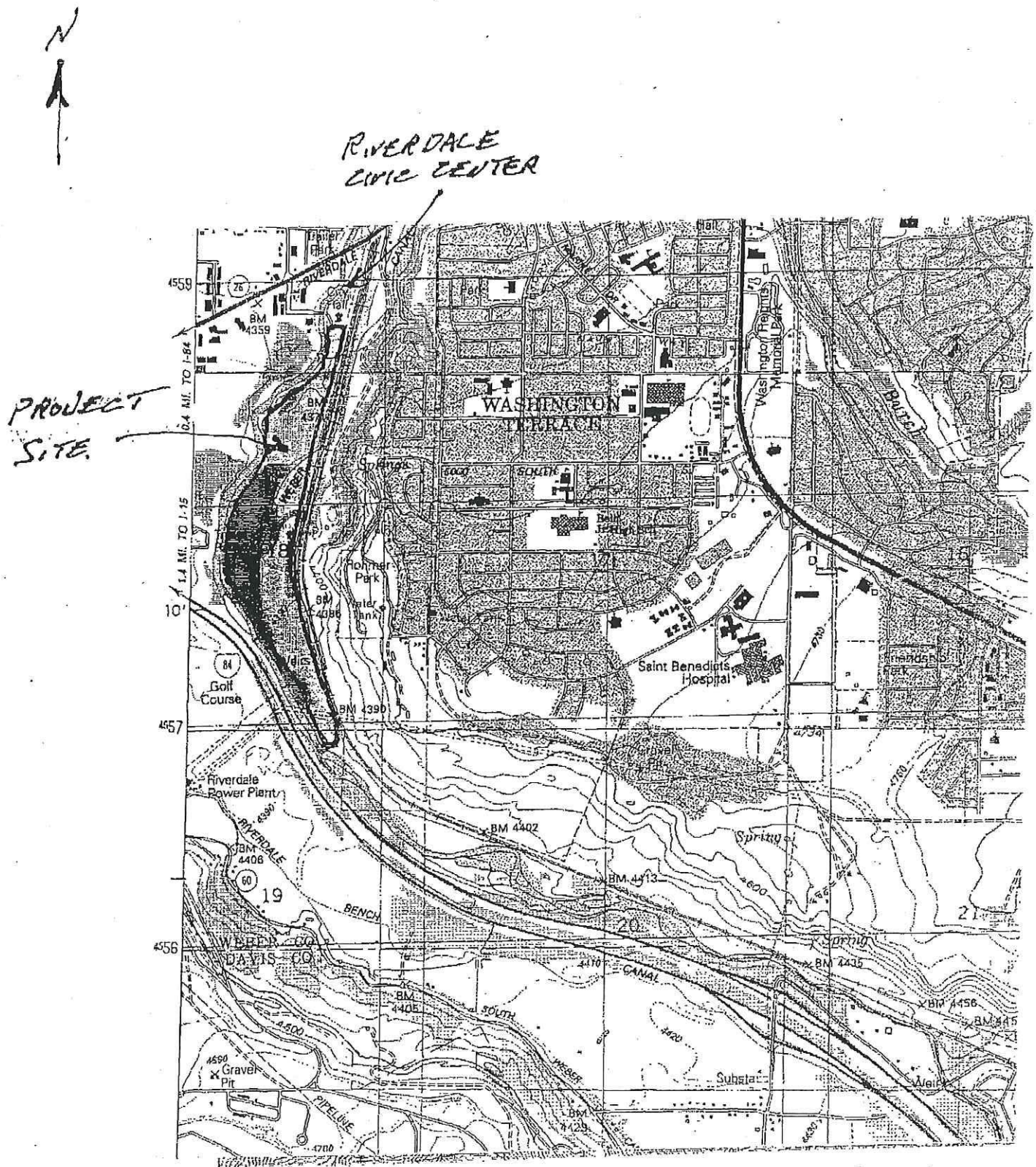
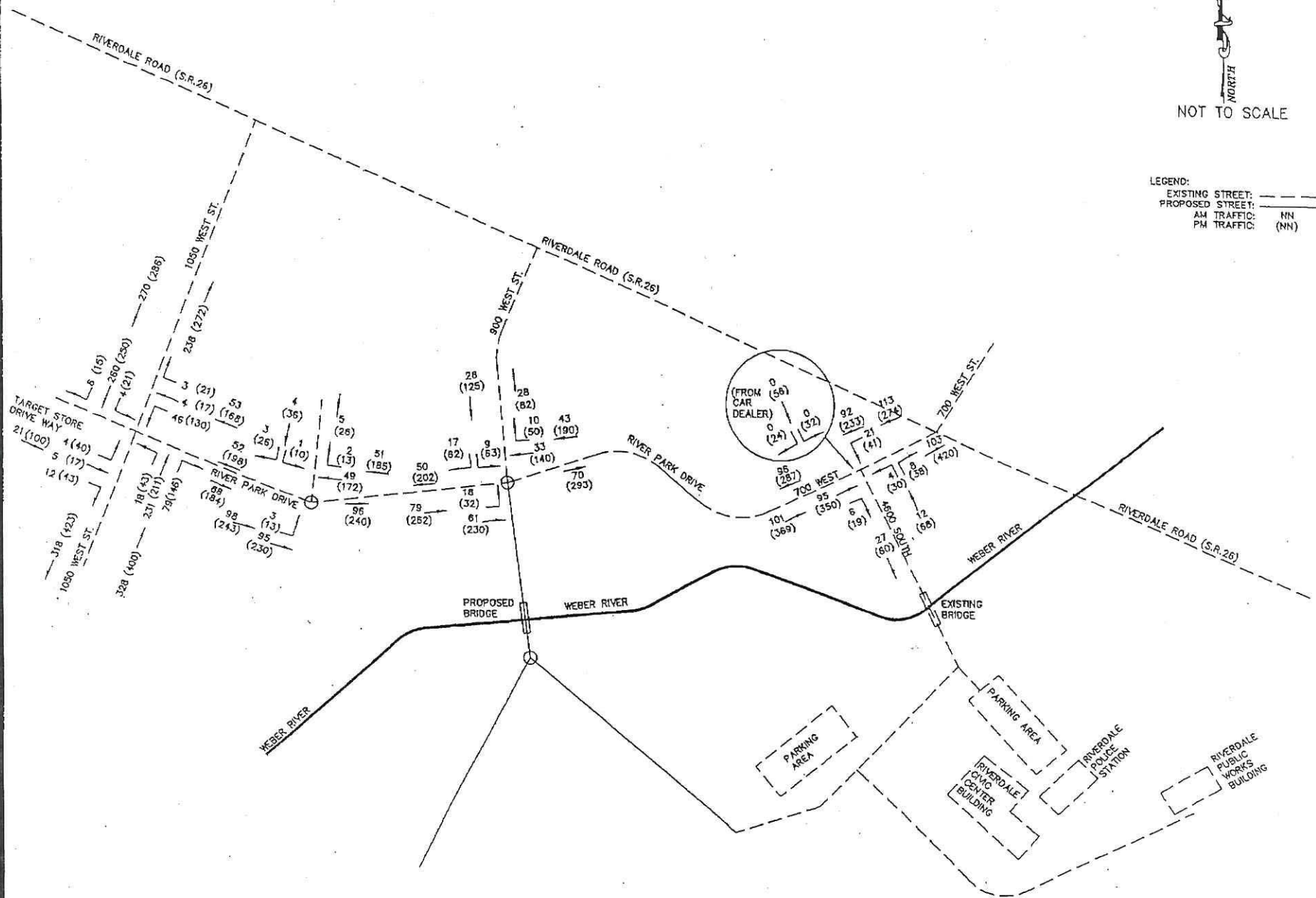


FIGURE 1



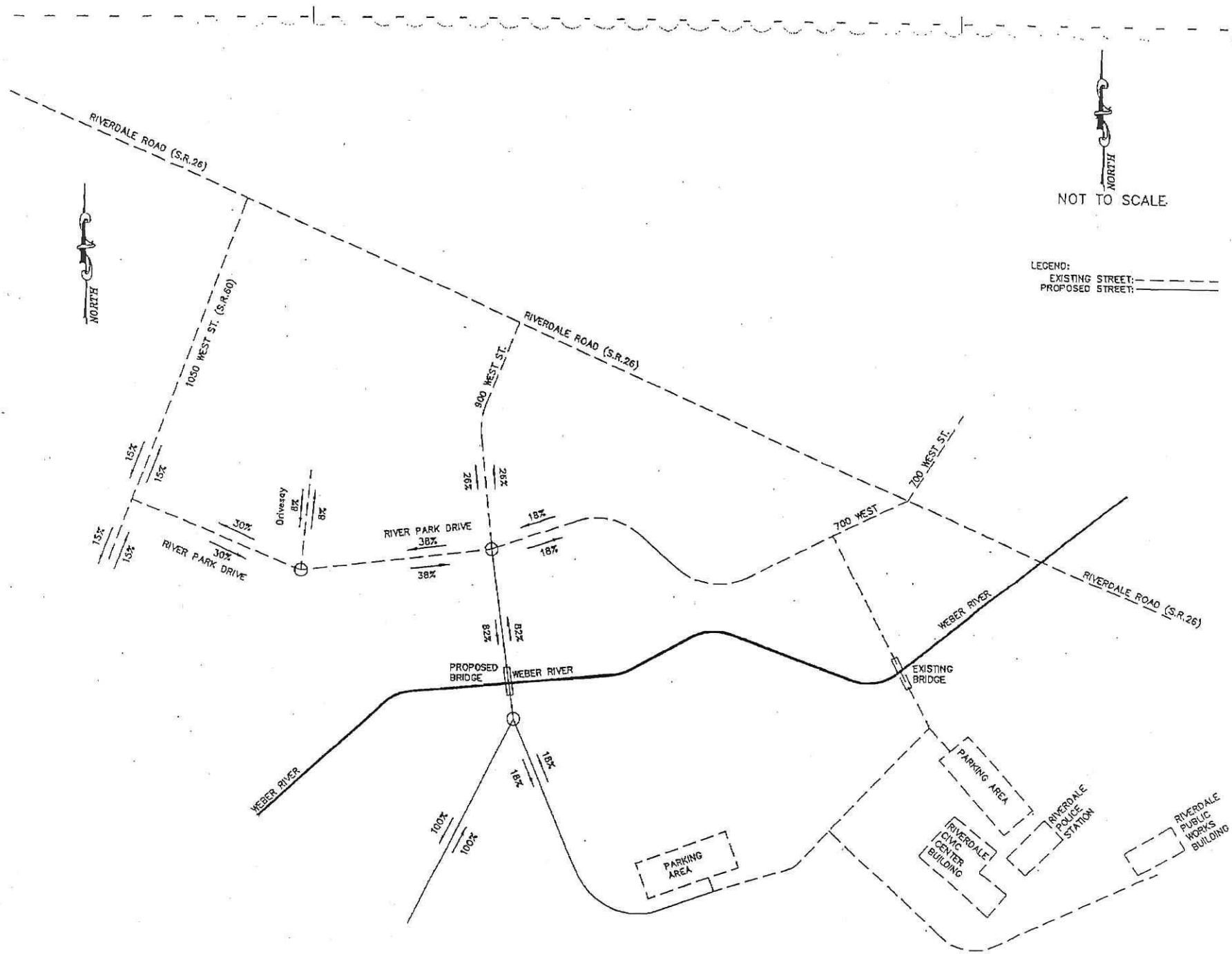


FIGURE 3 ESTIMATED PROJECT TRAFFIC DISTRIBUTION

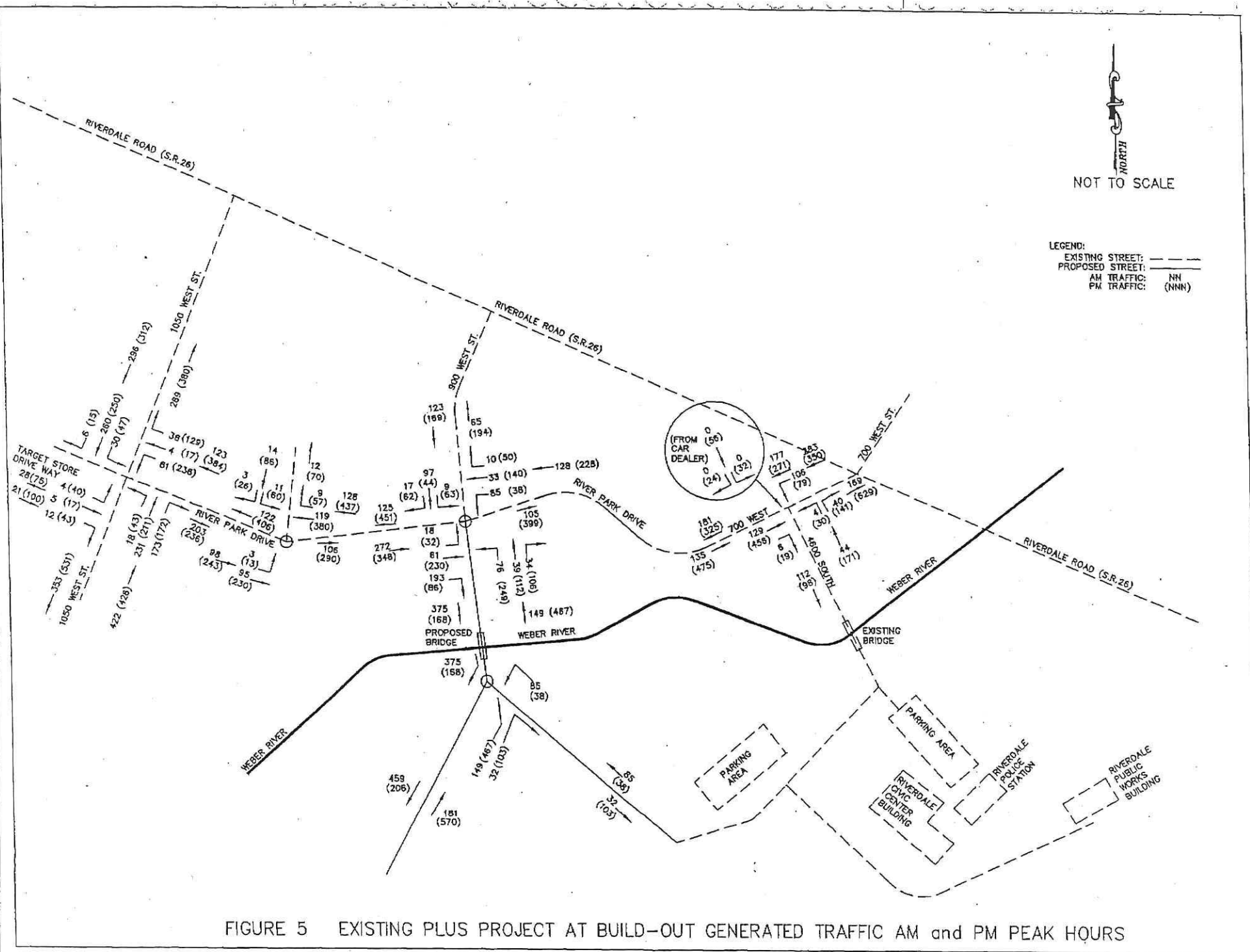


FIGURE 5 EXISTING PLUS PROJECT AT BUILD-OUT GENERATED TRAFFIC AM and PM PEAK HOURS

UN SIGNALIZED														
INTERSECTION LEVEL OF SERVICE														
AM PEAK														
LEGEND														
NB= NORTHBOUND TRAFFIC					L=LEFT TURNING TRAFFIC					A,B,C,D,E,F,= LEVEL OF SERVICE (LOS)				
SB= SOUTHBOUND TRAFFIC					T=THROUGH TRAFFIC					v = volume of vehicles on facility				
WB= WESTBOUND TRAFFIC					R=RIGHT TURNING TRAFFIC					CAPACITY = MAXIMUM VEHICLES FACILITY CAN				
EB= EASTBOUND TRAFFIC					NT=NO TRAFFIC					CARRY				
c=capacity														
AM PEAK														
AM PEAK														
WITH PROJECT														
INTERSECTION														
NB SB WB EB NB SB WB EB														
L L L T R L T R L L T R L T R														
700 W & 4600 S A A B B A B B A A A B B A B B A														
RIVER PARK DRIVE & 1050 WEST (S.R.60) A A B B A B B A A A C B A C C A														

					ROUNDAABOUT ANALYSIS				
					CAPACITY AND v/c RATIO			AM PEAK	(continued)
	LEGEND								
	NB= NORTHBOUND TRAFFIC				L=LEFT TURNING TRAFFIC	A,B,C,D,E,F,= LEVEL OF SERVICE (LOS)			
	SB= SOUTHBOUND TRAFFIC				T=THROUGH TRAFFIC	v=volume (number of vehicles)			
	WB= WESTBOUND TRAFFIC				R=RIGHT TURNING TRAFFIC	CAPACITY = MAXIMUM VEHICLES FACILITY CAN			
	EB= EASTBOUND TRAFFIC				NT=NO TRAFFIC			CARRY	
								c=capacity	
		AM PEAK HOUR EXISTING				AM PEAK HOUR WITH PROJECT			
	NB	SB	WB	EB		NB	SB	WB	EB
INTERSECTION									
900 WEST AND SUBDIVISION STREET									
		CAPACITY				CAPACITY			
Upper Bound	NT	NT	NT	NT		1381	1301	1230	1029
Lower Bound	NT	NT	NT	NT		1158	1158	1021	840
		v/c ratio				v/c ratio			
Upper Bound	NT	NT	NT	NT		0.14	0.27	0.07	NT
Lower Bound	NT	NT	NT	NT		0.16	0.33	0.09	NT

FIGURE 6b

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APPENDIX

CAPACITY AND LEVEL OF SERVICE CALCULATIONS
TRAFFIC COUNTS AND TRAFFIC COUNT SUMMARIES

HCS+: Unsignalized Intersections Release 5.21

TWO-WAY STOP CONTROL SUMMARY

Analyst: TRB
 Agency/Co.: MILLER ASSOCIATES
 Date Performed: 12/19/2006
 Analysis Time Period: AM PEAK HOUR EXISTING
 Intersection: RIVER PARK DRIVE/1050 WEST
 Jurisdiction: RIVERDALE CITY - UDOT
 Units: U. S. Customary
 Analysis Year: NOV. 2006
 Project ID: UNITY IN RIVERDALE
 East/West Street: RIVER PARK DRIVE
 North/South Street: 1050 WEST
 Intersection Orientation: NS

Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Northbound			Southbound		
		1 L	2 T	3 R	4 L	5 T	6 R
Volume		18	231	79	4	260	6
Peak-Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR		18	231	79	4	260	6
Percent Heavy Vehicles		1	--	--	1	--	--
Median Type/Storage		Undivided			/		
RT Channelized?		No			No		
Lanes		1	1	1	1	1	1
Configuration		L	T	R	L	T	R
Upstream Signal?		No			No		
Minor Street:	Approach Movement	Westbound			Eastbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		46	4	3	4	5	12
Peak Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR		46	4	3	4	5	12
Percent Heavy Vehicles		1	1	1	1	1	1
Percent Grade (%)		2			2		
Flared Approach: Exists?/Storage		/			/		
Lanes		1	1	1	1	1	1
Configuration		L	T	R	L	T	R

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
			7 L	8 T	9 R	10 L	11 T	12 R
Movement	1	4	7	8	9	10	11	12
Lane Config	L	L	L	T	R	L	T	R
v (vph)	18	4	46	4	3	4	5	12
C(m) (vph)	1304	1256	432	441	811	418	401	781
v/c	0.01	0.00	0.11	0.01	0.00	0.01	0.01	0.02
95% queue length	0.04	0.01	0.35	0.03	0.01	0.03	0.04	0.05
Control Delay	7.8	7.9	14.3	13.2	9.5	13.7	14.1	9.7
LOS	A	A	B	B	A	B	B	A
Approach Delay				14.0			11.5	
Approach LOS				B			B	

TWO-WAY STOP CONTROL SUMMARY

Analyst: TRB
 Agency/Co.: MILLER ASSOCIATES
 Date Performed: 1/3/2007
 Analysis Time Period: AM PEAK HOUR WITH PROJECT
 Intersection: RIVER PARK DRIVE/1050 WEST
 Jurisdiction: RIVERDALE CITY, UDOT
 Units: U. S. Customary
 Analysis Year: NOV. 2006
 Project ID: UNITY IN RIVERDALE, UTAH
 East/West Street: RIVER PARK DRIVE
 North/South Street: 1050 WEST
 Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Northbound			Southbound		
		1 L	2 T	3 R	4 L	5 T	6 R
Volume		18	231	173	30	260	6
Peak-Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR		18	231	173	30	260	6
Percent Heavy Vehicles		1	--	--	1	--	--
Median Type/Storage		Undivided			/		
RT Channelized?		No			No		
Lanes		1	1	1	1	1	1
Configuration		L	T	R	L	T	R
Upstream Signal?		No			No		

Minor Street:	Approach Movement	Westbound			Eastbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		81	4	38	4	5	12
Peak Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR		81	4	38	4	5	12
Percent Heavy Vehicles		1	1	1	1	1	1
Percent Grade (%)		2			2		
Flared Approach: Exists?/Storage		/			/		
Lanes		1	1	1	1	1	1
Configuration		L	T	R	L	T	R

Delay, Queue Length, and Level of Service

Approach Movement	NB	SB	Westbound			Eastbound		
			7 L	8 T	9 R	10 L	11 T	12 R
Lane Config	L	L	L	T	R	L	T	R
v (vph)	18	30	81	4	38	4	5	12
C(m) (vph)	1304	1160	392	403	811	328	323	781
v/c	0.01	0.03	0.21	0.01	0.05	0.01	0.02	0.02
95% queue length	0.04	0.08	0.77	0.03	0.15	0.04	0.05	0.05
Control Delay	7.8	8.2	16.6	14.0	9.7	16.1	16.3	9.7
LOS	A	A	C	B	A	C	C	A
Approach Delay				14.3			12.5	
Approach LOS				B			B	

TWO-WAY STOP CONTROL SUMMARY

Analyst: TRB
 Agency/Co.: MILLER ASSOCIATES
 Date Performed: 1/4/2007
 Analysis Time Period: PM PEAK HOUR
 Intersection: RIVER PARK DRIVE/1050 WEST
 Jurisdiction: RIVERDALE CITY - UDOT
 Units: U. S. Customary
 Analysis Year: NOV. 2006
 Project ID: UNITY IN RIVERDALE, UTAH
 East/West Street: RIVER PARK DRIVE
 North/South Street: 1050 WEST
 Intersection Orientation: NS

Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Northbound			Southbound		
		1 L	2 T	3 R	4 L	5 T	6 R
Volume		43	211	146	21	250	15
Peak-Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR		43	211	146	21	250	15
Percent Heavy Vehicles		0	--	--	0	--	--
Median Type/Storage		Undivided			/		
RT Channelized?		No			No		
Lanes		1	1	1	1	1	1
Configuration		L	T	R	L	T	R
Upstream Signal?		No			No		
Minor Street:	Approach Movement	Westbound			Eastbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		130	17	21	40	17	43
Peak Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR		130	17	21	40	17	43
Percent Heavy Vehicles		0	0	0	0	0	0
Percent Grade (%)		1			1		
Flared Approach: Exists?/Storage		/			/		
Lanes		1	1	1	1	1	1
Configuration		L	T	R	L	T	R

Delay, Queue Length, and Level of Service

Approach Movement	NB	SB	Westbound			Eastbound		
			7 L	8 T	9 R	10 L	11 T	12 R
Lane Config	L	L	L	T	R	L	T	R
v (vph)	43	21	130	17	21	40	17	43
C(m) (vph)	1311	1213	349	394	834	333	332	794
v/c	0.03	0.02	0.37	0.04	0.03	0.12	0.05	0.05
95% queue length	0.10	0.05	1.68	0.13	0.08	0.41	0.16	0.17
Control Delay	7.8	8.0	21.3	14.5	9.4	17.3	16.4	9.8
LOS	A	A	C	B	A	C	C	A
Approach Delay			19.1			13.9		
Approach LOS			C			B		

TWO-WAY STOP CONTROL SUMMARY

Analyst: TRB
 Agency/Co.: MILLER ASSOCIATES
 Date Performed: 1/4/2007
 Analysis Time Period: PM PEAK HOUR WITH PROJECT
 Intersection: RIVER PARK DRIVE/1050 WEST
 Jurisdiction: RIVERDALE CITY - UDOT
 Units: U. S. Customary
 Analysis Year: NOV. 2006
 Project ID: UNITY IN RIVERDALE, UTAH
 East/West Street: RIVER PARK DRIVE
 North/South Street: 1050 WEST
 Intersection Orientation: NS

Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach	Northbound			Southbound		
	Movement	1	2	3	4	5	6
		L	T	R	L	T	R
Volume		43	211	172	47	250	15
Peak-Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR		43	211	172	47	250	15
Percent Heavy Vehicles		1	--	--	1	--	--
Median Type/Storage		Undivided			/		
RT Channelized?		No			No		
Lanes		1	1	1	1	1	1
Configuration		L	T	R	L	T	R
Upstream Signal?		No			No		

Minor Street:	Approach	Westbound			Eastbound		
	Movement	7	8	9	10	11	12
		L	T	R	L	T	R
Volume		238	17	129	40	17	43
Peak Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR		238	17	129	40	17	43
Percent Heavy Vehicles		1	1	1	1	1	1
Percent Grade (%)		1			1		
Flared Approach: Exists?/Storage		/			/		
Lanes		1	1	1	1	1	1
Configuration		L	T	R	L	T	R

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config	L	L	L	T	R	L	T	R
v (vph)	43	47	238	17	129	40	17	43
C(m) (vph)	1305	1181	314	358	832	234	292	791
v/c	0.03	0.04	0.76	0.05	0.16	0.17	0.06	0.05
95% queue length	0.10	0.12	5.82	0.15	0.55	0.60	0.18	0.17
Control Delay	7.9	8.2	44.9	15.6	10.1	23.5	18.1	9.8
LOS	A	A	E	C	B	C	C	A
Approach Delay				31.9			16.7	
Approach LOS				D			C	

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TRB

MILLER ASSOCIATES

3225 WEST CALIFORNIA AVE.

SUITE 101

SALT LAKE CITY, UTAH 84104

Phone: (801) 975-1083

Fax:

E-Mail:

 ROUNABOUT ANALYSIS

Analyst: TRB
 Agency/Co.: MILLER ASSOCIATES
 Date Performed: 12/11/2006
 Analysis Time Period: AM PEAK EXISTING
 Intersection: RIVER PARK DRIVE/DRIVEWAY
 Jurisdiction: RIVERDALE CITY, UTAH
 Units: U. S. Customary
 Analysis Year: NOV. 2006
 Project ID: UNITY IN RIVERDALE, UTAH
 East/West Street: RIVER PARK DRIVE
 North/South Street: DRIVEWAY

 Volumes and Adjustment

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	3	95	1	1	49	2	1	1	1	1	1	3
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flow Rate	3	95	1	1	49	2	1	1	1	1	1	3

	Eastbound	Westbound	Northbound	Southbound
Approach Flow Rate	99	52	3	5
Conflicting Circulating Flow	3	5	99	51

 Critical Gap and Follow-up Time

Critical Gap (sec):				
Upper bound	4.10	4.10	4.10	4.10
Lower bound	4.60	4.60	4.60	4.60
Follow-up Time (sec):				
Upper bound	2.60	2.60	2.60	2.60
Lower bound	3.10	3.10	3.10	3.10

 Results: Capacity and v/c Ratio

Capacity (Eq. 10-124):				
Upper bound	1381	1379	1281	1330
Lower bound	1158	1156	1067	1112
v/c Ratio:				
Upper bound	0.07	0.04	0.00	0.00
Lower bound	0.09	0.04	0.00	0.00

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TRB
 MILLER ASSOCIATES
 3225 WEST CALIFORNIA AVE.
 SUITE 101
 SALT LAKE CITY, UTAH 84104
 Phone: (801) 975-1083
 E-Mail:

Fax:

 ROUNDABOUT ANALYSIS

Analyst: TRB
 Agency/Co.: MILLER ASSOCIATES
 Date Performed: 1/4/2007
 Analysis Time Period: AM PEAK HOUR WITH PROJECT
 Intersection: RIVER PARK DR IVE/DRIVEWAY
 Jurisdiction: RIVERDALE CITY
 Units: U. S. Customary
 Analysis Year: NOV. 2006
 Project ID: UNITY IN RIVERDALE, UTAH
 East/West Street: RIVER PARK DRIVE
 North/South Street: DRIVEWAY

 Volumes and Adjustment

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	3	95	1	1	119	9	1	1	1	11	1	3
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flow Rate	3	95	1	1	119	9	1	1	1	11	1	3

	Eastbound	Westbound	Northbound	Southbound
Approach Flow Rate	99	129	3	15
Conflicting Circulating Flow	13	5	109	121

 Critical Gap and Follow-up Time

Critical Gap (sec):				
Upper bound	4.10	4.10	4.10	4.10
Lower bound	4.60	4.60	4.60	4.60
Follow-up Time (sec):				
Upper bound	2.60	2.60	2.60	2.60
Lower bound	3.10	3.10	3.10	3.10

 Results: Capacity and v/c Ratio

Capacity (Eq. 10-124):				
Upper bound	1370	1379	1271	1259
Lower bound	1148	1156	1058	1047
v/c Ratio:				
Upper bound	0.07	0.09	0.00	0.01
Lower bound	0.09	0.11	0.00	0.01

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TRB

MILLER ASSOCIATES

3225 WEST CALIFORNIA AVE.

SUITE 101

SALT LAKE CITY, UTAH 84104

Phone: (801) 975-1083

Fax:

E-Mail:

 ROUNABOUT ANALYSIS

Analyst: TRB
 Agency/Co.: MILLER ASSOCIATES
 Date Performed: 12/15/2006
 Analysis Time Period: PM EXISTING
 Intersection: RIVER PARK DRIVE/DRIVEWAY
 Jurisdiction: RIVERDALE CITY, UTAH
 Units: U. S. Customary
 Analysis Year: NOV. 2006
 Project ID: UNITY IN RIVERDALE
 East/West Street: RIVER PARK DRIVE
 North/South Street: DRIVEWAY

 Volumes and Adjustment

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	13	230	1	1	172	13	1	1	1	10	1	26
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flow Rate	13	230	1	1	172	13	1	1	1	10	1	26

	Eastbound	Westbound	Northbound	Southbound
Approach Flow Rate	244	186	3	37
Conflicting Circulating Flow	12	15	253	174

 Critical Gap and Follow-up Time

Critical Gap (sec):				
Upper bound	4.10	4.10	4.10	4.10
Lower bound	4.60	4.60	4.60	4.60
Follow-up Time (sec):				
Upper bound	2.60	2.60	2.60	2.60
Lower bound	3.10	3.10	3.10	3.10

 Results: Capacity and v/c Ratio

Capacity (Eq. 10-124):				
Upper bound	1371	1368	1135	1208
Lower bound	1149	1146	935	1001
v/c Ratio:				
Upper bound	0.18	0.14	0.00	0.03
Lower bound	0.21	0.16	0.00	0.04

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TRB
 MILLER ASSOCIATES
 3225 WEST CALIFORNIA AVE.
 SUITE 101
 SALT LAKE CITY, UTAH 84104
 Phone: (801) 975-1083
 E-Mail:

Fax:

 ROUNDABOUT ANALYSIS

Analyst: TRB
 Agency/Co.: MILLER ASSOCIATES
 Date Performed: 1/4/2007
 Analysis Time Period: PM PEAK HOUR WITH PROJECT
 Intersection: RIVER PARK DRIVE/DRIVEWAY
 Jurisdiction: RIVERDALE CITY
 Units: U. S. Customary
 Analysis Year: NOV. 2006
 Project ID: UNITY IN RIVERDALE, UTAH
 East/West Street: RIVER PARK DRIVE
 North/South Street: DRIVEWAY 13

 Volumes and Adjustment

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	13	230	1	1	380	57	1	1	1	63	1	62
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flow Rate	13	230	1	1	380	57	1	1	1	63	1	62

	Eastbound	Westbound	Northbound	Southbound
Approach Flow Rate	244	438	3	126
Conflicting Circulating Flow	65	15	306	382

 Critical Gap and Follow-up Time

Critical Gap (sec):				
Upper bound	4.10	4.10	4.10	4.10
Lower bound	4.60	4.60	4.60	4.60
Follow-up Time (sec):				
Upper bound	2.60	2.60	2.60	2.60
Lower bound	3.10	3.10	3.10	3.10

 Results: Capacity and v/c Ratio

Capacity (Eq. 10-124):				
Upper bound	1316	1368	1089	1025
Lower bound	1098	1146	893	836
v/c Ratio:				
Upper bound	0.19	0.32	0.00	0.12
Lower bound	0.22	0.38	0.00	0.15

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TRB
 MILLER ASSOCIATES
 3225 WEST CALIFORNIA AVE.
 SUITE 101
 SALT LAKE CITY, UTAH 84104
 Phone: (801) 975-1083
 E-Mail:

Fax:

 ROUNDABOUT ANALYSIS

Analyst: TRB
 Agency/Co.: MILLER ASSOCIATES
 Date Performed: 12/11/2006
 Analysis Time Period: AM PEAK EXISTING
 Intersection: RIVER PARK DRIVE/900 WEST
 Jurisdiction: RIVERDALE CITY
 Units: U. S. Customary
 Analysis Year: NOV. 2006
 Project ID: UNITY IN RIVERDALE, UTAH
 East/West Street: RIVER PARK DRIVE
 North/South Street: 900 WEST

 Volumes and Adjustment

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	18	61	1	1	33	10	1	1	1	9	1	17
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flow Rate	18	61	1	1	33	10	1	1	1	9	1	17

	Eastbound	Westbound	Northbound	Southbound
Approach Flow Rate	80	44	3	27
Conflicting Circulating Flow	11	20	88	35

 Critical Gap and Follow-up Time

Critical Gap (sec):				
Upper bound	4.10	4.10	4.10	4.10
Lower bound	4.60	4.60	4.60	4.60
Follow-up Time (sec):				
Upper bound	2.60	2.60	2.60	2.60
Lower bound	3.10	3.10	3.10	3.10

 Results: Capacity and v/c Ratio

Capacity (Eq. 10-124):				
Upper bound	1372	1363	1292	1347
Lower bound	1150	1141	1077	1127
v/c Ratio:				
Upper bound	0.06	0.03	0.00	0.02
Lower bound	0.07	0.04	0.00	0.02

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TRB
 MILLER ASSOCIATES
 3225 WEST CALIFORNIA AVE.
 SUITE 101
 SALT LAKE CITY, UTAH 84104
 Phone: (801) 975-1083
 E-Mail:

Fax:

 ROUNDBOUT ANALYSIS

Analyst: TRB
 Agency/Co.: MILLER ASSOCIATES
 Date Performed: 1/4/2007
 Analysis Time Period: AM PEAK HOUR WITH PROJECT
 Intersection: RIVER PARK DRIVE/900 WEST
 Jurisdiction: RIVERDALE CITY
 Units: U. S. Customary
 Analysis Year: NOV. 2006
 Project ID: UNITY IN RIVERDALE, UTAH
 East/West Street: RIVER PARK DRIVE
 North/South Street: 900 WEST

 Volumes and Adjustment

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	18	61	193	85	33	10	76	39	34	9	97	17
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flow Rate	18	61	193	85	33	10	76	39	34	9	97	17

	Eastbound	Westbound	Northbound	Southbound
Approach Flow Rate	272	128	149	123
Conflicting Circulating Flow	191	133	88	194

 Critical Gap and Follow-up Time

Critical Gap (sec):				
Upper bound	4.10	4.10	4.10	4.10
Lower bound	4.60	4.60	4.60	4.60
Follow-up Time (sec):				
Upper bound	2.60	2.60	2.60	2.60
Lower bound	3.10	3.10	3.10	3.10

 Results: Capacity and v/c Ratio

Capacity (Eq. 10-124):				
Upper bound	1192	1248	1292	1189
Lower bound	986	1036	1077	984
v/c Ratio:				
Upper bound	0.23	0.10	0.12	0.10
Lower bound	0.28	0.12	0.14	0.13

Phone:
E-Mail:

Fax:

ROUNDAABOUT ANALYSIS

Analyst: TRB
Agency/Co.: MILLER ASSOCIATES
Date Performed: 12/5/2006
Analysis Time Period: PM PEAK HOUR
Intersection: RIVER PARK DRIVE / 900 WEST
Jurisdiction: RIVERDALE CITY, UTAH
Units: U. S. Customary
Analysis Year: NOV. 2006
Project ID: UNITY IN RIVERDALE
East/West Street: RIVER PARK DRIVE
North/South Street: 900 WEST

Volumes and Adjustment

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	32	230	1	1	140	50	1	1	1	63	1	62
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flow Rate	32	230	1	1	140	50	1	1	1	63	1	62

	Eastbound	Westbound	Northbound	Southbound
Approach Flow Rate	263	191	3	126
Conflicting Circulating Flow	65	34	325	142

Critical Gap and Follow-up Time

Critical Gap (sec):				
Upper bound	4.10	4.10	4.10	4.10
Lower bound	4.60	4.60	4.60	4.60
Follow-up Time (sec):				
Upper bound	2.60	2.60	2.60	2.60
Lower bound	3.10	3.10	3.10	3.10

Results: Capacity and v/c Ratio

Capacity (Eq. 10-124):				
Upper bound	1316	1348	1072	1239
Lower bound	1098	1128	878	1029
v/c Ratio:				
Upper bound	0.20	0.14	0.00	0.10
Lower bound	0.24	0.17	0.00	0.12

HCS+: Unsignalized Intersections Release 5.21

TRB

MILLER ASSOCIATES

3225 WEST CALIFORNIA AVE.

SUITE 101

SALT LAKE CITY, UTAH 84104

Phone: (801) 975-1083

Fax:

E-Mail:

 ROUNABOUT ANALYSIS

Analyst: TRB
 Agency/Co.: MILLER ASSOCIATES
 Date Performed: 1/4/2007
 Analysis Time Period: PM PEAK HOUR WITH PROJECT
 Intersection: RIVER PARK DRIVE/900 WEST
 Jurisdiction: RIVER DALE CITY
 Units: U. S. Customary
 Analysis Year: NOV. 2006
 Project ID: UNITY IN RIVERDALE, UTAH
 East/West Street: RIVER PARK DRIVE
 North/South Street: 900 WEST

 Volumes and Adjustment

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	32	230	86	38	140	50	249	112	106	63	44	62
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flow Rate	32	230	86	38	140	50	249	112	106	63	44	62

	Eastbound	Westbound	Northbound	Southbound
Approach Flow Rate	348	228	467	169
Conflicting Circulating Flow	145	393	325	427

 Critical Gap and Follow-up Time

Critical Gap (sec):				
Upper bound	4.10	4.10	4.10	4.10
Lower bound	4.60	4.60	4.60	4.60
Follow-up Time (sec):				
Upper bound	2.60	2.60	2.60	2.60
Lower bound	3.10	3.10	3.10	3.10

 Results: Capacity and v/c Ratio

Capacity (Eq. 10-124):				
Upper bound	1236	1016	1072	989
Lower bound	1026	828	878	804
v/c Ratio:				
Upper bound	0.28	0.22	0.44	0.17
Lower bound	0.34	0.28	0.53	0.21

TWO-WAY STOP CONTROL SUMMARY

Analyst: TRB
 Agency/Co.: MILLER ASSOCIATES
 Date Performed: 12/11/2006
 Analysis Time Period: AM EXISTING
 Intersection: 700 WEST/4600 SOUTH
 Jurisdiction: RIVERDALE CITY
 Units: U. S. Customary
 Analysis Year: NOV. 2006
 Project ID: UNITY IN RIVERDALE, UTAH
 East/West Street: 4600 SOUTH
 North/South Street: 700 WEST
 Intersection Orientation: NS

Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Northbound			Southbound		
		1 L	2 T	3 R	4 L	5 T	6 R
Volume		1	95	6	21	233	1
Peak-Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR		1	95	6	21	233	1
Percent Heavy Vehicles		1	--	--	1	--	--
Median Type/Storage		Undivided			/		
RT Channelized?		No			No		
Lanes		1	1	1	1	1	1
Configuration		L	T	R	L	T	R
Upstream Signal?		No			No		
Minor Street:	Approach Movement	Westbound			Eastbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		4	1	8	1	1	1
Peak Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR		4	1	8	1	1	1
Percent Heavy Vehicles		1	1	1	1	1	1
Percent Grade (%)		0			0		
Flared Approach: Exists?/Storage		/			/		
Lanes		1	1	1	1	1	1
Configuration		L	T	R	L	T	R

Delay, Queue Length, and Level of Service

Approach Movement	NB	SB	Westbound			Eastbound		
			7 L	8 T	9 R	10 L	11 T	12 R
Lane Config	L	L	L	T	R	L	T	R
v (vph)	1	21	4	1	8	1	1	1
C(m) (vph)	1339	1498	578	551	964	568	547	809
v/c	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00
95% queue length	0.00	0.04	0.02	0.01	0.03	0.01	0.01	0.00
Control Delay	7.7	7.4	11.3	11.5	8.8	11.3	11.6	9.5
LOS	A	A	B	B	A	B	B	A
Approach Delay				9.8			10.8	
Approach LOS				A			B	

TWO-WAY STOP CONTROL SUMMARY

Analyst: TRB
 Agency/Co.: MILLER ASSOCIATES
 Date Performed: 1/3/2007
 Analysis Time Period: AM PEAK HOUR WITH PROJECT
 Intersection: 700 WEST/4600 SOUTH
 Jurisdiction: RIVERDALE, UTAH
 Units: U. S. Customary
 Analysis Year: NOV. 2006
 Project ID: UNITY RIVERDALE, UTAH
 East/West Street: 4600 SOUTH
 North/South Street: 700 WEST
 Intersection Orientation: NS

Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Northbound			Southbound		
		1 L	2 T	3 R	4 L	5 T	6 R
Volume		1	129	6	106	177	1
Peak-Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR		1	129	6	106	177	1
Percent Heavy Vehicles		1	--	--	1	--	--
Median Type/Storage		Undivided			/		
RT Channelized?		No			No		
Lanes		1	1	1	1	1	1
Configuration		L	T	R	L	T	R
Upstream Signal?		No			No		

Minor Street:	Approach Movement	Westbound			Eastbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		4	1	40	1	1	1
Peak Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR		4	1	40	1	1	1
Percent Heavy Vehicles		1	0	0	1	0	0
Percent Grade (%)		0			0		
Flared Approach: Exists?/Storage		/			/		
Lanes		1	1	1	1	1	1
Configuration		L	T	R	L	T	R

Delay, Queue Length, and Level of Service

Approach Movement	NB SB		Westbound			Eastbound		
	1	4	7	8	9	10	11	12
Lane Config	L	L	L	T	R	L	T	R
v (vph)	1	106	4	1	40	1	1	1
C(m) (vph)	1404	1456	440	429	926	407	426	871
v/c	0.00	0.07	0.01	0.00	0.04	0.00	0.00	0.00
95% queue length	0.00	0.24	0.03	0.01	0.14	0.01	0.01	0.00
Control Delay	7.6	7.7	13.3	13.4	9.1	13.9	13.5	9.1
LOS	A	A	B	B	A	B	B	A
Approach Delay				9.5			12.2	
Approach LOS				A			B	

TWO-WAY STOP CONTROL SUMMARY

Analyst: TRB
 Agency/Co.: MILLER ASSOCIATES
 Date Performed: 12/19/2006
 Analysis Time Period: PM PEAK HOUR EXISTING
 Intersection: 700 WEST/4600 SOUTH
 Jurisdiction: RIVERDALE CITY, UTAH
 Units: U. S. Customary
 Analysis Year: NOV. 2006
 Project ID: UNITY AT RIVERDALE
 East/West Street: 4600 SOUTH
 North/South Street: 700 WEST
 Intersection Orientation: NS

Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Northbound			Southbound		
		1 L	2 T	3 R	4 L	5 T	6 R
Volume		1	350	19	41	233	1
Peak-Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR		1	350	19	41	233	1
Percent Heavy Vehicles		1	--	--	1	--	--
Median Type/Storage		Undivided			/		
RT Channelized?		No			No		
Lanes		1	1	1	1	1	1
Configuration		L	T	R	L	T	R
Upstream Signal?		No			No		

Minor Street:	Approach Movement	Westbound			Eastbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		30	1	38	32	1	24
Peak Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR		30	1	38	32	1	24
Percent Heavy Vehicles		1	1	1	1	1	1
Percent Grade (%)		2			2		
Flared Approach: Exists?/Storage		/			/		
Lanes		1	1	1	1	1	1
Configuration		L	T	R	L	T	R

Delay, Queue Length, and Level of Service

Approach Movement	NB	SB	Westbound			Eastbound		
	1	4	7	8	9	10	11	12
Lane Config	L	L	L	T	R	L	T	R
v (vph)	1	41	30	1	38	32	1	24
C(m) (vph)	1339	1195	345	367	696	328	358	808
v/c	0.00	0.03	0.09	0.00	0.05	0.10	0.00	0.03
95% queue length	0.00	0.11	0.28	0.01	0.17	0.32	0.01	0.09
Control Delay	7.7	8.1	16.4	14.8	10.5	17.2	15.1	9.6
LOS	A	A	C	B	B	C	C	A
Approach Delay				13.1			13.9	
Approach LOS				B			B	

TWO-WAY STOP CONTROL SUMMARY

Analyst: TRB
 Agency/Co.: MILLER ASSOCIATES
 Date Performed: 1/3/2007
 Analysis Time Period: PM PEAK HOUR WITH PROJECT
 Intersection: 700 WEST/4600 SOUTH
 Jurisdiction: RIVERDALE CITY, UTAH
 Units: U. S. Customary
 Analysis Year: NOV. 2006
 Project ID: UNITY IN RIVERDALE, UTAH
 East/West Street: 4600 SOUTH
 North/South Street: 700 WEST
 Intersection Orientation: NS

Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Northbound			Southbound		
		1 L	2 T	3 R	4 L	5 T	6 R
Volume		1	456	19	79	271	1
Peak-Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR		1	456	19	79	271	1
Percent Heavy Vehicles		1	--	--	1	--	--
Median Type/Storage		Undivided			/		
RT Channelized?		No			No		
Lanes		1	1	1	1	1	1
Configuration		L	T	R	L	T	R
Upstream Signal?		No			No		

Minor Street:	Approach Movement	Westbound			Eastbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		30	1	141	32	1	24
Peak Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR		30	1	141	32	1	24
Percent Heavy Vehicles		1	1	1	1	1	1
Percent Grade (%)		2			2		
Flared Approach: Exists?/Storage		/			/		
Lanes		1	1	1	1	1	1
Configuration		L	T	R	L	T	R

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
			7 L	8 T	9 R	10 L	11 T	12 R
Movement	1	4	L	T	R	L	T	R
Lane Config	L	L	L	T	R	L	T	R
v (vph)	1	79	30	1	141	32	1	24
C(m) (vph)	1297	1092	237	263	606	169	257	770
v/c	0.00	0.07	0.13	0.00	0.23	0.19	0.00	0.03
95% queue length	0.00	0.23	0.43	0.01	0.90	0.67	0.01	0.10
Control Delay	7.8	8.6	22.4	18.7	12.7	31.2	19.1	9.8
LOS	A	A	C	C	B	D	C	A
Approach Delay				14.5			22.0	
Approach LOS				B			C	

HCS+: Unsignalized Intersections Release 5.21

TRB

MILLER ASSOCIATES

3225 WEST CALIFORNIA AVE.

SUITE 101

SALT LAKE CITY, UTAH 84104

Phone: (801) 975-1083

Fax:

E-Mail:

ROUNDBOUT ANALYSIS

Analyst: TRB
 Agency/Co.: MILLER ASSOCIATES
 Date Performed: 1/4/2007
 Analysis Time Period: AM PEAK WITH PROJECT
 Intersection: 900 WEST/SUBDIVISION ST.
 Jurisdiction: RIVERDALE CITY
 Units: U. S. Customary
 Analysis Year: NOV. 2006
 Project ID: UNITY IN RIVERDALE, UTAH
 East/West Street: SUBDIVISION STREET
 North/South Street: 900 WEST

Volumes and Adjustment

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	1	1	1	1	1	85	1	149	32	1	375	1
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flow Rate	1	1	1	1	1	85	1	149	32	1	375	1

	Eastbound	Westbound	Northbound	Southbound
Approach Flow Rate	3	87	182	377
Conflicting Circulating Flow	377	151	3	3

Critical Gap and Follow-up Time

Critical Gap (sec):				
Upper bound	4.10	4.10	4.10	4.10
Lower bound	4.60	4.60	4.60	4.60
Follow-up Time (sec):				
Upper bound	2.60	2.60	2.60	2.60
Lower bound	3.10	3.10	3.10	3.10

Results: Capacity and v/c Ratio

Capacity (Eq. 10-124):				
Upper bound	1029	1230	1381	1381
Lower bound	840	1021	1158	1158
v/c Ratio:				
Upper bound	0.00	0.07	0.13	0.27
Lower bound	0.00	0.09	0.16	0.33

HCS+: Unsignalized Intersections Release 5.21

TRB

MILLER ASSOCIATES

3225 WEST CALIFORNIA AVE.

SUITE 101

SALT LAKE CITY, UTAH 84104

Phone: (801) 975-1083

Fax:

E-Mail:

 ROUNDBABOUT ANALYSIS

Analyst: T RB
 Agency/Co.: MILLER ASSOCIATES
 Date Performed: 1/4/2007
 Analysis Time Period: PM PEAK WITH PROJECT
 Intersection: 900 WEST/SUBDIVISION STREET
 Jurisdiction: RIVERDALE CITY
 Units: U. S. Customary
 Analysis Year: NOV. 2006
 Project ID: UNITY IN RIVERDALE, UTAH
 East/West Street: SUBDIVISION STREET
 North/South Street: 900 WEST

 Volumes and Adjustment

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	1	1	1	38	1	1	1	467	103	1	168	1
PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flow Rate	1	1	1	38	1	1	1	467	103	1	168	1

	Eastbound	Westbound	Northbound	Southbound
Approach Flow Rate	3	40	571	170
Conflicting Circulating Flow	207	469	3	40

 Critical Gap and Follow-up Time

Critical Gap (sec):				
Upper bound	4.10	4.10	4.10	4.10
Lower bound	4.60	4.60	4.60	4.60
Follow-up Time (sec):				
Upper bound	2.60	2.60	2.60	2.60
Lower bound	3.10	3.10	3.10	3.10

 Results: Capacity and v/c Ratio

Capacity (Eq. 10-124):				
Upper bound	1177	956	1381	1342
Lower bound	973	775	1158	1122
v/c Ratio:				
Upper bound	0.00	0.04	0.41	0.13
Lower bound	0.00	0.05	0.49	0.15

RIVERDALE CITY, UTAH

INTERSECTION OF 700 WEST AND 4600 SOUTH

4-6 pm TUESDAY 21 NOVEMBER 2006															
FROM EAST				FROM NORTH				FROM SOUTH				FROM WEST			
TIME	NB	PEAK	LT	PEAK	LT	PEAK	THRU	PEAK	NB	PEAK	EB	PEAK	SB	PEAK	NB
RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT
START	START	START	START	START	START	START	START	START	START	START	START	START	START	START	START
4:00	6	6	1	6	6	37	37	72	72	12	6	6	3	3	7
4:15	14	8	4	3	10	4	85	48	147	75	10	10	5	2	12
4:30	20	6	11	77	18	87	144	59	244	977	18	2	6	1	16
4:45	25	5	20	9	27	9	197	53	323	79	19	1	14	87	22
5:00	38	13	28	8	38	115	253	58	406	83	20	1	21	7	42
5:15	51	13	34	6	51	132	314	59	497	91	26	6	24	3	46
5:30	58	7	36	2	54	3	365	51	571	74	27	1	30	6	50
5:45	59	1	37	1	62	8	430	65	651	80	34	7	36	6	52
6:00															
		38		30		41	233		350		19			24	32
		68				274			369					56	
TRAFFIC COUNT SUMMARY															
RIVERDALE CITY, UTAH															
INTERSECTION OF 700 WEST AND 4600 SOUTH															
TUESDAY 28 NOV. 2006 7-9 AM															
FROM EAST				FROM NORTH				FROM SOUTH				FROM WEST DRIVEWAY			
TIME	NB	PEAK	LT	PEAK	EB	PEAK	THRU	PEAK	NB	PEAK	EB	PEAK	SB	PEAK	NB
RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT
START	START	START	START	START	START	START	START	START	START	START	START	START	START	START	START
7:00	1	1	2	2	4	4	14	14	5	5	1	1	1	1	1
7:15	2	1	2	0	5	1	30	16	18	13	2	1	2	2	2
7:30	2	0	2	0	6	1	40	10	35	17	4	0	4	4	4
7:45	3	1	3	1	9	3	57	17	50	15	4	0	5	5	5
8:00	3	0	4	17	14	57	82	257	69	197	6	2	6	6	6
8:15	6	3	5	17	18	4	101	19	97	28	8	2	8	8	8
8:30	8	2	6	15	25	7	127	26	119	22	8	0	10	10	10
8:45	11	3	7	15	30	5	149	22	145	28	10	2	12	12	12
9:00															
		8		4		21	113	92		95	101	6			

Tuesday, 31 Nov. 2003

	FROM EAST		FROM NORTH			FROM WEST	SOUTH	
	NE	SE	EB	SB		NB	EB	WB
4:00	START	50						
4:15	6	1	6	37		72	6	
4:30	14	4	10	85		147	16	
4:45	20	11	18	144		144	18	
5:00	25	20	27	197		323	19	
5:15	38	28	28	255		406	10	
5:30	51	54	51	314		497	16	
5:45	58	56	54	365	25	571	17	
6:00	59	37	62	430	25	657	14	21
						FROM WEST (DRIVEWAY)		
						WEST BOUND		
						SB	NB	
						3	7	
						5	12	
						6	16	
						14	22	
						21	42	
						24	46	
						30	50	
						36	52	

4600 SOUTH		1700 WEST		Thursday 28 Nov. 2000	
RIVERDALE CITY					
7-9 AM					
FROM NB	TO SOUTH	FROM EB	TO NORTH	FROM SR	TO EAST
THRU	RT	LT	THRU	LT	RT
7:00	START				
7:15	5	1	4	14	2
7:30	18	2	5	30	2
7:45	35	4	6	40	2
8:00	50	4	9	57	3
8:15	69	6	14	82	4
8:30	97	8	18	101	5
8:45	119	8	25	127	6
9:00	145	10	30	149	7

TRAFFIC SURVEY

RIVERDALE CITY, UTAH

INTERSECTION OF RIVER PARK DRIVE AND 900 WEST (A ROUNDABOUT INTERSECTION)

4-6 pm THURSDAY 16 Nov. 2006

FROM WEST				FROM EAST				FROM NORTH							
TIME	EB	START	PEAK HOUR	NB	START	PEAK HOUR	WB	START	PEAK HOUR	EB	START	PEAK HOUR	NB	START	PEAK HOUR
4:00	34	34		7	7		22	22		8	8		13	13	
4:15	79	45		12	5		54	32		23	15		25	12	63
4:30	140	61		22	10	32	80	26		35	12		43	18	25
4:45	212	72	230	32	10		112	32		42	7	50	63	20	44
5:00	256	44		35	3		132	20		58	16		73	10	58
5:15	309	53		40	5		171	39	140	67	9		84	11	87
5:30	356	47		51	11		212	41		77	10		105	21	93
5:45	391	35		54	3		252	40		88	11		113	8	98
6:00	T			262						190					5
TRAFFIC COUNT SUMMARY, RIVERDALE CITY, UTAH												125			
INTERSECTION OF RIVER PARK DRIVE AND 900 WEST ST.															
7-9 am TUESDAY 21 Nov. 2006															
FROM WEST				FROM EAST				FROM NORTH							
TIME	EB	START	PEAK HOUR	NB	START	PEAK HOUR	WB	START	PEAK HOUR	EB	START	PEAK HOUR	NB	START	PEAK HOUR
7:00	6	4		0	0		2	2		0	0		2	2	
7:15	7	3		2	2		4	2		0	0		2	0	4
7:30	12	11		2	0		5	1		1	1		2	0	3
7:45	31	13		3	1		10	5		3	2		3	1	5
8:00	43	12		4	1		14	4		3	0	7	5	2	2
8:15	57	14	61	9	5	18	23	9	33	6	3	10	8	3	6
8:30	69	12		17	8		31	8		8	3		9	1	3
8:45	92	23		21	4		43	12		13	5		12	3	2
												26			

62

17

	FROM WEST		FROM EAST		FROM NORTH	
	E.B	NR	WR	NR	ER	WB
4:00	↓	↘	↑	↗	↙	↘
4:15	34	7	22	8	13	7
4:30	79	12	54	23	25	25
4:45	140	22	80	35	43	44
5:00	212	32	112	32	13	58
5:15	256	35	132	58	73	60
5:30	300	40	171	67	84	87
5:45	356	51	212	77	105	93
6:00	391	54	252	88	113	98

TRAFFIC COUNT

900 WEST & RIVER PARK DR

at RIVER PLACE

Tuesday 2/10/14 2pm

FROM NORTH		FROM EAST		FROM WEST		
EB	WB	EB	WB	WB	EB	
5	4	0	2	0	4	7:00
2	7	0	4	2	7	7:15
2	9	1	5	2	18	7:30
3	14	3	10	3	31	7:45
5	17	3	14	4	43	8:00
8	23	6	23	9	57	8:15
9	26	8	31	17	69	8:30
12	28	13	43	21	92	8:45
						9:00

7. RIVERPARK DRIVE SOUTH SIDE
 RIVERDALE CITY, UTAH
 INTERSECTION OF RIVERPARK DRIVE AND SAM'S CLUB ACCESS
 (BETWEEN 900 WEST & 1050 W.)

WEDNESDAY 29 NOVEMBER 2006
 11-6 PM

PM	FROM WEST	FROM EAST			FROM WEST	FROM EAST				FROM WEST	FROM EAST			
TIME	WB	PEAK	NB	PEAK	WB	PEAK	NB	PEAK		WB	PEAK	NB	PEAK	
	THRU	HOVR	RT	HOVR	THRU	HOVR	LT	HOVR		RT	HOVR	LT	HOVR	
4:00	START													
4:15	51	51	5	5	63	63	3	3		2	2	1	1	
4:30	81	30	7	2	90	33	4	1		2	0	1	0	
4:45	121	40	11	4	159	63	4	0		8	6	2	1	
5:00	153	32	13	2	222	63	6	2		14	6	5	3	
5:15	206	53	15	2	277	53	6	0		22	8	7	2	
5:30	247	41	17	2	326	49	9	3		28	6	11	4	
5:45	279	32	20	3	363	37	11	2		31	3	12	1	
6:00	325	46	23	3	391	28	17	8		35	4	13	1	
		172		13		230		13			26		10	
			185				243					36		

FRIDAY 1 DEC 2006
 7-9 AM

	FROM WEST	FROM EAST			FROM WEST	FROM EAST				FROM WEST	FROM EAST			
TIME	WB	PEAK	NB	PEAK	WB	PEAK	NB	PEAK		WB	PEAK	NB	PEAK	
	THRU	HOVR	RT	HOVR	THRU	HOVR	LT	HOVR		RT	HOVR	LT	HOVR	
7:00	START													
7:15	1	1	0	0	4	4	0	0		0	0	0	0	
7:30	8	7	0	0	10	6	0	0		0	0	0	0	
7:45	16	8	0	0	19	9	0	0		0	0	0	0	
8:00	27	11	1	1	31	12	0	0		1	1	1	1	
8:15	40	13	1	0	46	15	0	0		2	1	1	0	
8:30	50	10	1	0	76	30	2	2		3	1	1	0	
8:45	65	15	2	1	104	28	3	1		3	0	1	0	
9:00	73	8	2	0	126	22	3	0		3	0	1	0	
		49		2		95		3			3		1	
			51				78					4		

Traffic count Riverdale City
 Intersection of Riverdale Drive and access to Davis' cliff
 Nov. 29 Nov. 2006 4-6 pm

	FROM EAST	NB	FROM WEST	NB	FROM NORTH	WB
TIME	WB	RT	THRU	LT	RT	LT
4:00	start	start	start	start	start	start
4:15	51	5	63	3	2	1
4:30	81	7	96	4	2	1
4:45	121	11	159	4	8	2
5:00	153	13	222	6	14	5
5:15	200	15	277	6	22	7
5:30	247	17	326	9	28	11
5:45	279	20	363	14	51	12
6:00	325	23	391	19	35	13

TRAFFIC COUNT
 RIVERDALE - CITY
 Intersection of Riverdale Drive and 1050 West
 7-9 am

	FROM EAST	WB	NB	FROM SOUTH	NB	WB
TIME	LT	THRU	RT	RT	THRU	LT
7:00	start					
7:15	4	0	0	11	24	6
7:30	31	0	0	76	58	11
7:45	14	0	0	21	88	1
8:00	19	2	2	34	133	3
8:15	34	3	2	49	184	8
8:30	44	3	3	70	253	13
8:45	57	4	3	91	347	17
9:00	65	4	3	113	359	21
7:00	FROM WEST	WB	NB	FROM NORTH	NB	WB
7:15	0	0	0	0	14	0
7:30	1	35	1	2	8	1
7:45	1	52	1	3	0	0
8:00	1	153	1	6	0	0
8:15	1	273	5	10	0	5
8:30	5	219	2	12	5	1
8:45	6			15	5	6
9:00	7	341	2			

TRAFFIC COUNT

TRAFFIC COUNT
RIVERDALE ROAD and SAM'S CLUB ENTRANCE
FRIDAY 1 DE 2006 7-9 am (ONEWAY)

FROM EAST			FROM WEST		FROM NORTH	
WB	NB		EB	WB	EB	
THRU	AT		THRU	LT	PT	LT
7=00						
7=15	1	0	4	0	0	0
7=30	8	0	10	0	0	0
7=45	16	0	19	0	0	0
8=00	27	1	31	0	1	1
8=15	40	1	46	0	2	1
8=30	50	1	76	2	3	1
8=45	165	1	104	3	3	1
9=00	73	-2	126	3	3	1

Tuesday 28 Nov. C

TUESDAY 28 NOV. 2006

FROM NORTH

17	
100	

TRAFFIC COUNTS
RIVERDALE CITY, UTAH
INTERSECTION OF RIVER PARK DRIVE AND 1050 WEST (SR 60) THURSDAY 30 NOV. 2006

7-9 AM THURSDAY 30 NOV. 2006

FROM EAST								FROM WEST (TARGET STATE DRIVEWAY)							
AM	SB	PEAK		WB	PEAK	NB	PEAK	SB	PEAK	EB	PEAK	NB	PEAK		
TIME	LT	THRU	Hour	THRU	Hour	RT	Hour	RT	Hour	THRU	Hour	LT	Hour		
7:00	START														
7:15	4	4		0	0	0	0	0	0	1	1	0	0		
7:30	12	8		0	0	0	0	2	2	0	0	1	1		
7:45	14	2		0	0	0	0	2	0	0	0	3	2		
8:00	19	5		2	2	2	2	3	1	0	0	4	1		
8:15	34	15		3	1	2	0	6	3	0	0	4	0		
8:30	44	10		3	0	3	1	10	4	0	0	5	1		
8:45	58	14		4	1	3	0	12	2	5	5	5	0		
9:00	65	7		4	0	3	0	15	3	5	0	6	1		
		46			4		3		12		5		4		
					53						21				
FROM SOUTH								FROM NORTH							
TIME	EB	PEAK		NB	PEAK	WB	PEAK	WB	PEAK	SB	PEAK	EB	PEAK		
	RT	Hour		THRU	Hour	LT	Hour	RT	Hour	THRU	Hour	LT	Hour		
7:00	START														
7:15	11	11		24	24	0	0	0	0	0	0	1	1		
7:30	16	5		58	34	1	1	1	1	35	35	1	0		
7:45	21	5		88	30	1	0	1	0	69	24	1	0		
8:00	34	13		133	45	3	2	1	0	92	33	1	0		
8:15	49	15		184	51	8	3	1	0	163	61	5	4		
8:30	70	21		253	69	13	3	5	4	275	122	5	0		
8:45	91	21		319	66	17	4	6	1	319	44	5	0		
9:00	163	22		357	38	21	4	7	1	341	22	5	0		
		79			231		18		6		260		4		
					328						270				

Traffic Count Riverdale City
 Intersection of Riverdale Drive and Avenue 1050 West
 Nov. 29 Nov. 2006 4-6 pm

	FROM EAST		FROM WEST		FROM NORTH	
	WB	RT	EB	NB	WB	EB
TIME	WB	RT	THRU	LT	RT	LT
4:00	start	start	start	start	start	start
4:15	51	5	63	3	2	1
4:30	81	7	96	4	2	1
4:45	121	11	159	4	8	2
5:00	153	13	222	6	14	5
5:15	200	15	277	6	22	7
5:30	247	17	326	9	28	11
5:45	279	20	363	14	36	12
6:00	325	23	391	19	35	13

TRAFFIC COUNT

RIVERDALE - CITY
 Intersection of Riverdale Drive and 1050 West
 7-9 am 30 Nov. 2006

	FROM EAST			FROM SOUTH		
	SB	WB	NB	EB	NB	WB
TIME	LT	THRU	RT	RT	THRU	LT
7:00	start					
7:15	4	0	0	11	24	6
7:30	31	0	0	16	58	11
7:45	14	0	0	21	88	1
8:00	19	2	2	34	133	3
8:15	34	3	2	49	184	8
8:30	44	3	3	70	253	13
8:45	53	4	3	91	319	17
9:00	65	4	3	113	350	21
7:00	FROM SOUTH	FROM EAST	FROM WEST	FROM NORTH	FROM EAST	FROM WEST
7:15	0	0	0	0	14	0
7:30	1	35	1	2	8	3
7:45	1	52	1	3	50	4
8:00	1	153	1	6	50	5
8:15	5	275	5	10	0	5
8:30	6	319	2	12	5	5
8:45	7	341	2	15	5	6

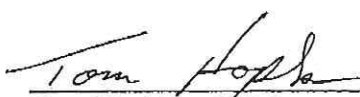
EXHIBIT F - WETLAND STUDY

WETLAND DELINEATION
Riverdale Weber River Parkway
Approximately 1300 4600 South Weber River Drive
Riverdale, Utah


January 9, 2007

Prepared For:
Unity Enterprises
1218 West 4365 South
Salt Lake City, Utah 84123

Prepared By:


Tom Hopkins, CEM
Manager, Natural Resource Services

Reviewed By:


Amy Findley
Wetland Specialist

IHI Environmental
640 Wilmington Avenue
Salt Lake City, Utah 84106
Phone: (801) 466-2223
Fax: (801) 466-9616

EXECUTIVE SUMMARY

A wetland delineation was conducted on a parcel of property, approximately 92.7 acres in size, located at approximately 4600 South Weber River Drive, Riverdale, Utah (Section 18, T. 5N, R. 1W). The purpose of this assessment was to verify the previously delineated wetlands on the property as defined by Section 404 of the Clean Water Act (CWA). A wetland delineation of the subject property and additional properties was performed and accepted the U.S. Army Corps of Engineers on July 18, 2001 (200150257)

The subject property contains approximately 1.112 acres of jurisdictional wetlands

The delineation was conducted according to the guidelines and procedures outlined in the US Army Corps of Engineers' Wetlands Delineation Manual (Technical Report Y-87-1).

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2.0 SITE DESCRIPTION	1
3.0 METHODS.....	2
4.0 FIELD SURVEY RESULTS	3
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4.3 Hydrology	5
5.0 CONCLUSIONS.....	5
REFERENCES.....	6

FIGURES

Figure 1: Site Direction
Figure 2: Topographic Map
Figure 3: Site Map with Aerial
Figure 4: National Wetlands Map
Figure 5: Soil Survey Map

APPENDICES

Appendix 1: Figures
Appendix 2: Field Data Forms
Appendix 3: Soil Survey
Appendix 4: Site Photographs

1.0 INTRODUCTION

A wetland delineation was conducted on a parcel of property, approximately 92.7 acres in size, located at approximately 4600 South Weber River Drive in Riverdale, Utah (Section 18, T. 5N, R. 1W). The purpose of this assessment was to update a previous wetland delineation that was performed on the subject property and other properties located in the Riverdale Weber River Parkway in July 2001. (200150257)

The U.S. Army Corps of Engineers (ACOE) and EPA define wetlands as areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Generally, saturated soil conditions are further described as saturated to the surface for at least two weeks during the normal growing season.

The wetland delineation was performed at the request of Unity Enterprises, 1218 West 4365 South, Salt Lake City, Utah 84123.

2.0 SITE DESCRIPTION

The subject property consists of approximately 92.7 acres and is located within the city limits of Riverdale, Utah (**Figure 1**). The subject property is undeveloped and borders the Weber River on the west and is part of the Riverdale City Weber River trail system. The east property boundary is the Union Pacific Railroad main line. The subject property is a mixture of riparian habitat that includes mature cottonwood stands along with willow communities and other shrub/scrub species. The site's understory consists of a variety of grasses including inland salt grass and Kentucky bluegrass.

A portion of the project is used for public recreation purposes and includes a Frisbee golf course and various trails. There is an abandoned irrigation canal that transects a portion of the property. This canal is not being used and has been abandoned for many years.

One small wetland polygon (PEMB) was identified on the National Wetlands Inventory Map (Figure 4).

Access to the subject property is as follows:

- North on Interstate 15 (I-15) to exit 342, West Riverdale Road.
- East on West Riverdale Road approximately 1.5 miles to 700 West.
- South on 700 West approximately 0.1 miles to 4600 South
- East on 4600 South.
- Following 4600 South, which turns into South Weber River Drive approximately 0.3 miles to the public parking area.
- Leave the public parking area and take the paved river trail to the south until it ends. The subject property begins at the end of the pavement, follows the river southerly and extends to the east to the railroad tracks.

Site directions are presented as **Figure 1**. A topographic map is presented as **Figure 2** and an aerial photograph is presented as **Figure 3**.

The subject property is owned by Unity Enterprises, 1218 West 4365 South, Salt Lake City, Utah 84123

The phone number for Unity Enterprises representative Rick Thomas is (801) 209-1648 (Cell) or 801-323-2312 (Office).

3.0 METHODS

This delineation was conducted according to the guidelines and procedures outlined in the US Army Corps of Engineers' Wetlands Delineation Manual (Technical Report Y-87-1).

Using this method, upland areas are differentiated from wetland areas based on three parameters: vegetation, soils, and hydrologic features. At each data point, all of these parameters must exhibit wetland characteristics for that point to be within the wetland boundary. Dominant vegetation species at each data point were identified by visual estimation of coverage. Generally, any species with 20% cover or greater was considered a dominant species. However, the Wetland Delineation Manual specifies that for areas where only one layer of vegetation is present, five dominant species should be identified for each data point. Therefore, if five dominant species were not present at 20% cover, species with less cover were also noted, but not generally counted as dominants.

Soils were removed at each data point, to a depth of 20 inches where possible. Soil moisture, texture, and color were observed, and any observations of organic content, mottles or gleyed soils were noted. Soils were moistened and compared to the Munsell Color Charts (Macbeth, 1990) for determination of value, chroma, and hue.

Hydrologic features were noted for each data point based primarily on depth to groundwater, surface water, soil moisture, and field observations, indicating hydrologic characteristics, such as water marks and drift lines. Irrigation, seasonal influences, recent precipitation events, annual and long-term precipitation data, and historical information were also considered where available. As specified in the Wetlands Delineation Manual, information collected from each data point was recorded on data forms presented in **Appendix 2**.

4.0 FIELD SURVEY RESULTS

Complete documentation of vegetation, soils and hydrology is provided for 4 data points.

4.1 Vegetation

The dominant plant species in the area of investigation is cottonwoods, willows, dogwood, box elder, teasel, reed canary grass and Woods rose. In addition, there are communities of cattail, various rushes, and sedges. Kentucky bluegrass and inland salt grass were observed on the subject property.

Due to the lateness of the season, where the plants are either dead or dormant, many of the plants could not be specifically identified.

Tables 1 and 2 summarize the dominant vegetation.

Table 1
Dominant Wetland Species

Scientific Name	Common Name	Indicator Status
<i>Populus sp</i>	Cottonwood	FAC
<i>Acer negundo</i>	Boxelder	FACW
<i>Phalaris aruninacea</i>	Reed Canary Grass	OBL
<i>Salix sp</i>	Willow	FAC-OBL
<i>Typha latifolia</i>	Common Cattail	OBL
<i>Carex sp</i>	Sedges	OBL
<i>Juncus sp</i>	Rush	OBL
<i>Cornus sp</i>	Dogwood	FACW

Table 2
Dominant Non-wetland or Upland Vegetation

Scientific Name	Common Name	Indicator Status
<i>Solanum sp</i>	Nightshade	NI-FACU
<i>Bromus sp</i>	Brome grass	FACU
<i>Taraxum sp</i>	Dandelion	FACU
<i>Agropyron sp</i>	Bunch grass	NI-FACU

4.2 Soils

Several soils were identified in the study area. The soils consisted of Cobbly alluvial land (Co), Francis loamy fine sand (FcC), Steed fine sandy loam (SbA), Steed sandy loam (ScA), Sunset loam (SkA & SkB), Sunset loam, gravelly substratum (SnA). (Soil Survey, Davis-Weber Area, Utah, U.S. Dept. of Agriculture, 1968). A soil survey is presented in Appendix 3. Field observations were consistent with the soil descriptions in the published soil survey. The Steed series soil is listed on the National Hydric Soils list but there is some confusion in that some interpretation records indicate that this soil is not hydric while other records indicate it is. None of the other soil series are listed on the hydric soils list.

4.3 Hydrology

Hydrologic conditions were assessed based on observations at the time of the delineation. Groundwater was not encountered in any of the data points.

5.0 CONCLUSIONS

The subject property contains approximately 1.112 acres of jurisdictional wetlands.

REFERENCES

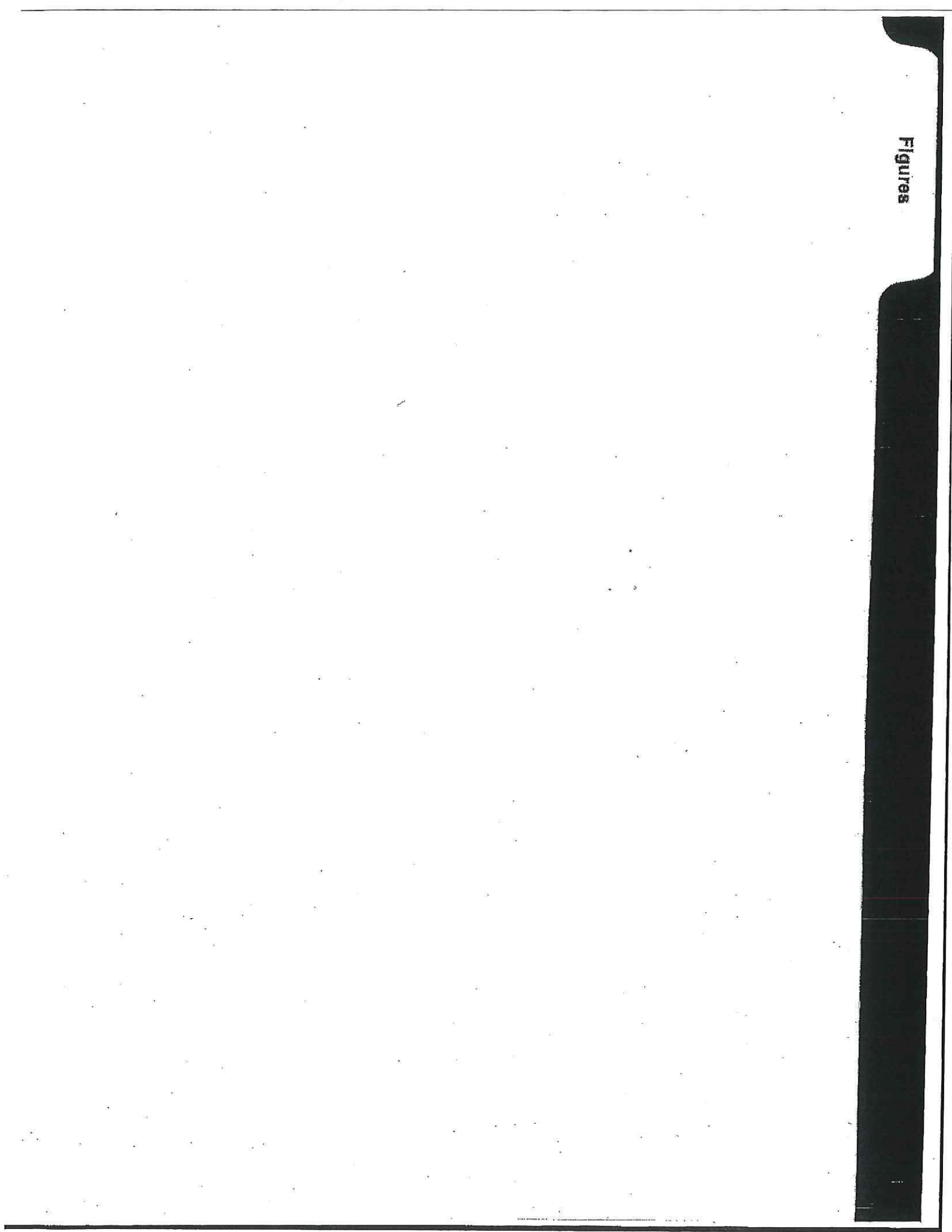
Entranco 2001. *Waters of the United States Identification and Wetland Delineation for Riverdale Weber River Parkway, Riverdale, Utah.*

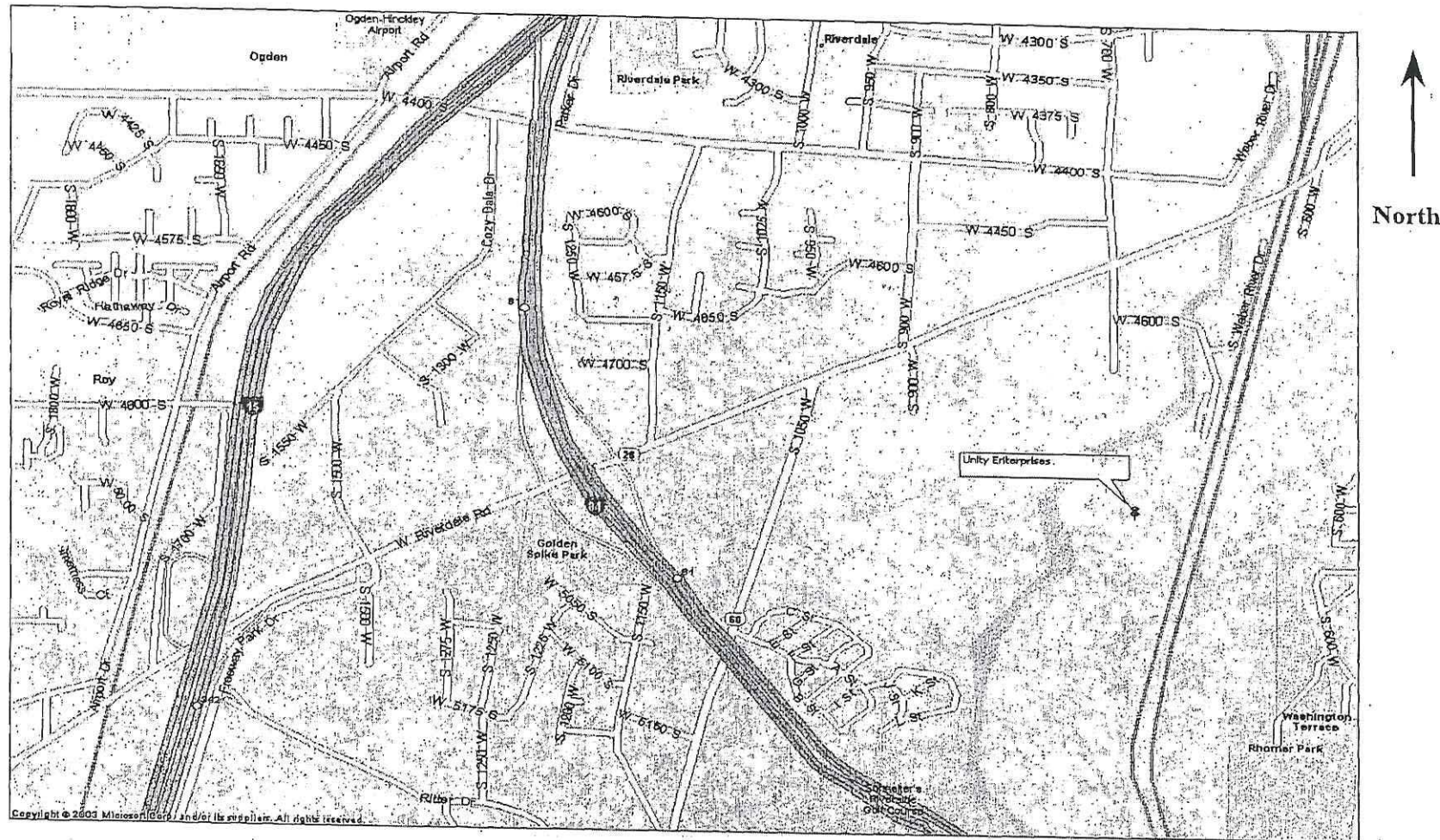
Environmental Laboratory, 1987. *Corps of Engineers' Wetlands Delineation Manual, Technical Report Y-87-1.* US Army Engineer Waterways Experiment Station, Vicksburg, MS.

Macbeth, 1990. *Munsell Soil Color Charts.* Division of Kollmorgen Instruments Corp., PO Box 230, Newburg, NY 12551-0230.

National Technical Information Service, 1988. National List of Plant Species That Occur in Wetlands: Intermountain (Region 8) Biological Report 88 (26.8).

United States Department of Agriculture, Soil Conservation Service, 1968. *Soil Survey, Davis-Weber Area, Utah.*





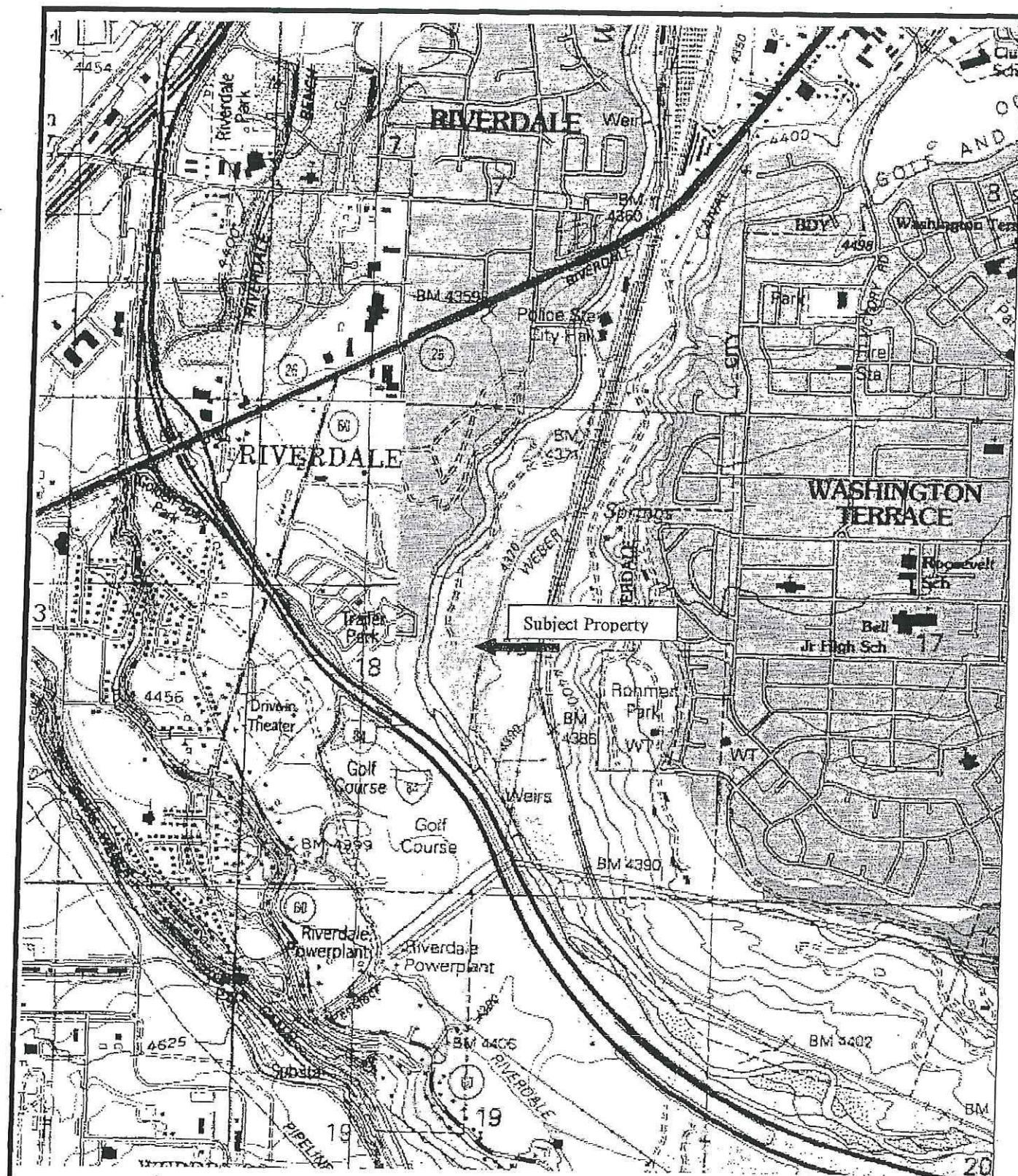
North

III
ENVIRONMENTAL
640 East Wilmington Avenue
Salt Lake City, Utah 84106
(801) 466-2223

Unity Enterprises
Riverdale, Utah
07N-8003

Figure 1

General Location Map



IHI

ENVIRONMENTAL
640 East Wilmington Avenue
Salt Lake City, Utah 84106
(801) 466-2223

Unity Enterprises
Riverdale, Utah
07N-8003

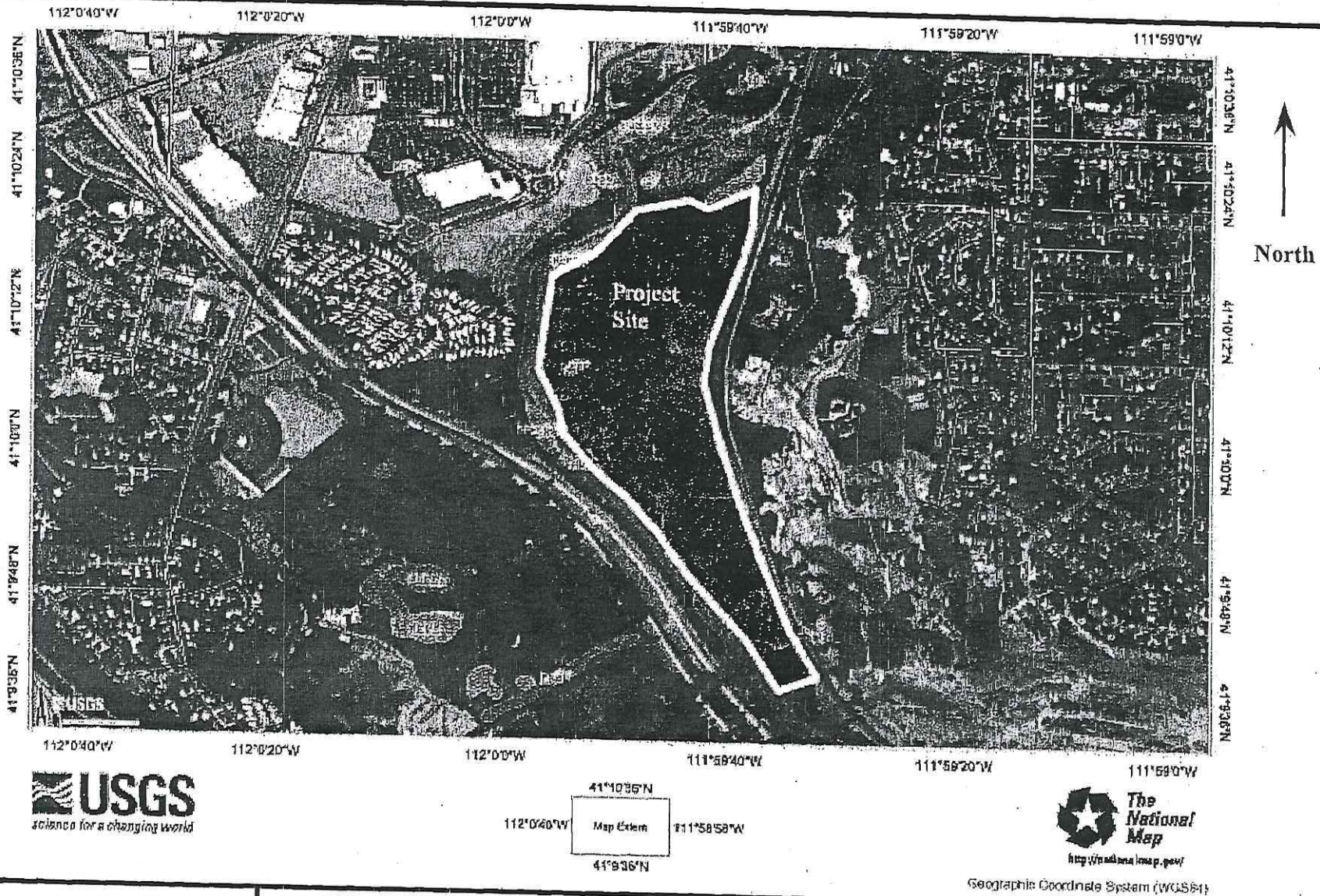
USGS Topographic Map
Scale: 1" = 2000'

Ogden Quadrangle
Utah

Figure 2
Topographic
Map



Figure 3: Site Diagram



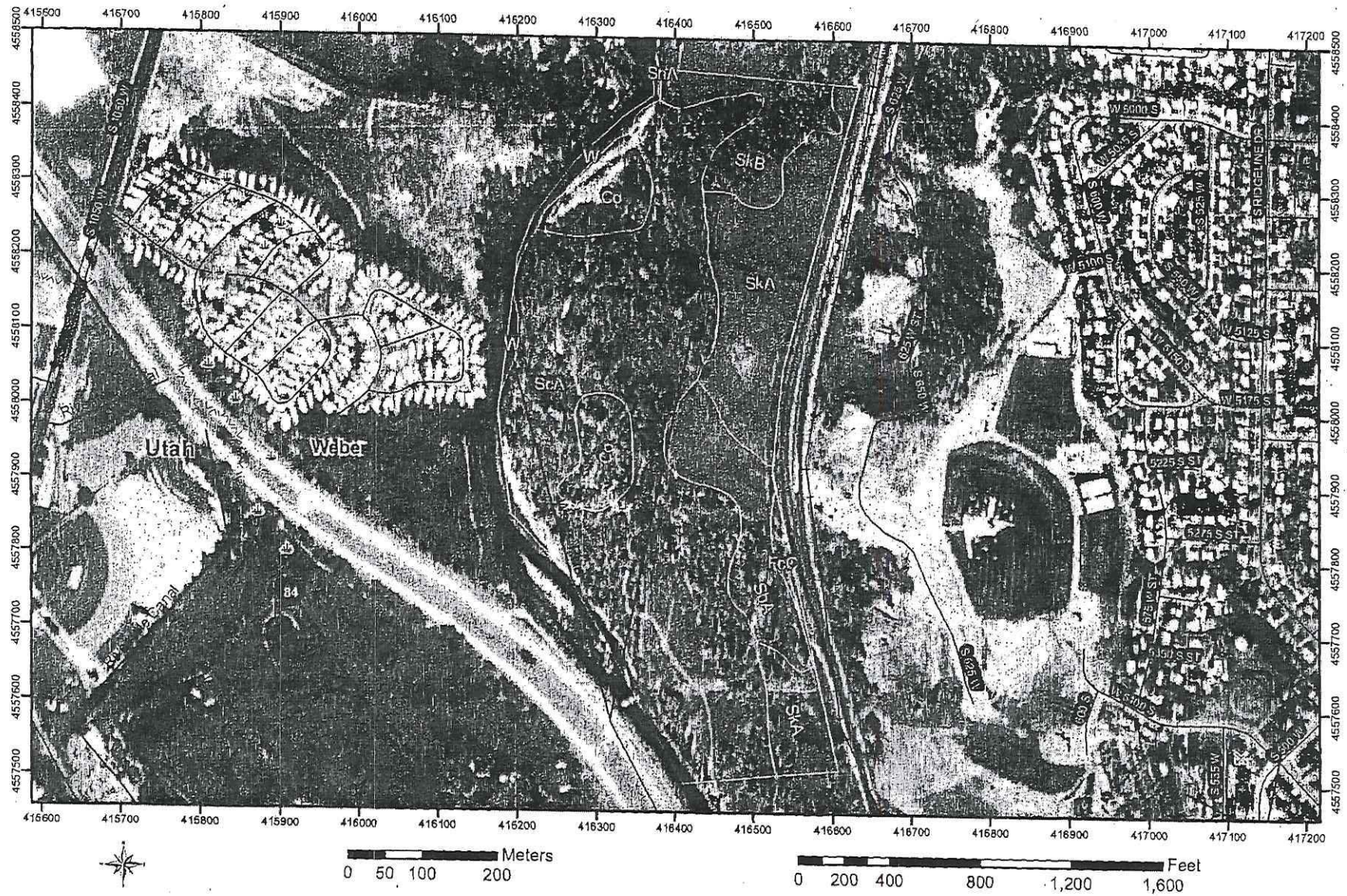
IHI
ENVIRONMENTAL
640 East Wilmington Avenue
Salt Lake City, Utah 84106
(801) 466-2223

Unity Enterprises
Riverdale, Utah
07N-8003

Figure 4

National Wetlands Inventory Map

SOIL SURVEY OF DAVIS-WEBER AREA, UTAH



Map Unit Legend Summary

Davis-Weber Area, Utah

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Co	Cobbly alluvial land	6.1	7.8
FcC	Francis loamy fine sand, 3 to 6 percent slopes	0.6	0.8
SbA	Steed fine sandy loam, 0 to 1 percent slopes	6.5	8.4
ScA	Steed sandy loam, 0 to 1 percent slopes, channeled	43.3	55.9
SkA	Sunset loam, 0 to 1 percent slopes	14.2	18.4
SkB	Sunset loam, 1 to 3 percent slopes	5.3	6.9
SnA	Sunset loam, gravelly substratum, 0 to 1 percent slopes	0.0	0.0
W	Water	1.4	1.8

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Riverdale-Weber River Park</u>	Date: <u>12/1/2006</u>
Applicant/Owner: <u>Unity Enterprises</u>	County: <u>Weber</u>
Investigator: <u>Tom Hopkins</u>	State: <u>Utah</u>

Do normal circumstances exist on the site? <u>Yes</u> <u>No</u> Is the site significantly disturbed (Atypical Situation)? Is the area a potential problem area? (If needed, explain on reverse)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;">Yes</td><td style="text-align: center;">No</td></tr> <tr><td style="text-align: center;">X</td><td style="text-align: center;"></td></tr> <tr><td style="text-align: center;"></td><td style="text-align: center;">X</td></tr> <tr><td style="text-align: center;"></td><td style="text-align: center;">X</td></tr> </table>	Yes	No	X			X		X	Community ID: _____ Transect ID: _____ Plot ID: <u>TP-1</u>
Yes	No									
X										
	X									
	X									

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <i>Phalaris arundinacea</i>	Veg	OBL	9. _____		
2. <i>Cornus stolonifera</i>	Veg	FACW	10. _____		
3. <i>Salix sp</i>	Veg	OBL	11. _____		
4. <i>Populus sp</i>	Tree	FAC	12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percentage of dominant species that are OBL, FACW, or FAC (excluding FAC-). 4/4=100%

Remarks:
 Vegetation at this point is in a former oxbow to the Weber River.

HYDROLOGY

<p>Recorded Data (Describe in remarks):</p> <p>_____ Stream, Lake, or Tide Gauge</p> <p>_____ Aerial Photographs</p> <p>_____ Other</p> <p><u>X</u> No recorded data available.</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>_____ Inundated</p> <p><u>X</u> Saturated in upper 12 inches</p> <p>_____ Water marks</p> <p>_____ Drift lines</p> <p>_____ Sediment deposits</p> <p>_____ Drainage patterns in wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>_____ Oxidized root channels in upper 12 inches</p> <p>_____ Water-Stained leaves</p> <p>_____ Local soil survey data</p> <p>_____ FAC-Neutral test</p> <p><u>X</u> Other (explain in remarks)</p>
<p>Field Observations:</p> <p>Depth of surface water (in.): <u>> 20 in.</u></p> <p>Depth to free water in pit (in.): <u>NA</u></p> <p>Depth to saturated soil (in.): <u>2 in.</u></p>	
<p>Remarks: Former oxbow to Weber River as well as portions of the oxbow are inundated.</p>	

SOILS

Map Unit Name (Series and Phase): <u>Steed</u>		Drainage Class: <u>Well to Moderately Drained</u>	
Taxonomy (Subgroup): _____		Field Observations Confirm mapped type? <u>Yes</u>	

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, etc.
0" - 8"	A	10YR 2/2	None	None	Silt-Loam
8" - 20"	B	10YR 2/2	None	None	Loamy Clay

Hydric Soil Indicators:

<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors <input type="checkbox"/> Concretions	<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer of Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (explain in remarks)
---	--

Remarks:

Channel of former oxbow,
Inundated areas to north of data point
Soil extremely moist but not saturated.

WETLAND DETERMINATION

	Yes	No	
Hydrophytic Vegetation Present?	X		Is this sampling point within a wetland? Yes
Wetland Hydrology Present?	X		
Hydric Soils Present?	X		
Remarks:			

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Riverdale-Weber River Park</u> Applicant/Owner: <u>Unity Enterprises</u> Investigator: <u>Tom Hopkins</u>	Date: <u>12/4/2006</u> County: <u>Weber</u> State: <u>Utah</u>								
Do normal circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential problem area? (If needed, explain on reverse)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Yes</td> <td style="width: 50%; text-align: center;">No</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Community ID: _____ Transect ID: _____ Plot ID: <u>TP-2</u>	Yes	No	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Yes	No								
<input checked="" type="checkbox"/>	<input type="checkbox"/>								
<input type="checkbox"/>	<input checked="" type="checkbox"/>								
<input type="checkbox"/>	<input checked="" type="checkbox"/>								

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Phalaris arundinacea</u>	<u>Veg</u>	<u>OBL</u>	9. _____	_____	_____
2. <u>Agropyron sp</u>	<u>Veg</u>	<u>FACW</u>	10. _____	_____	_____
3. <u>Salix sp</u>	<u>Veg</u>	<u>OBL</u>	11. _____	_____	_____
4. <u>Juncus b</u>	<u>Veg</u>	<u>FAC</u>	12. _____	_____	_____
5. <u>Rumex crispis</u>	<u>Veg</u>	<u>FAC+</u>	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percentage of dominant species that are OBL, FACW, or FAC (excluding FAC-). 4/5=80%

Remarks:
Vegetation at this point is in a depression that appears to be a former oxbow to the Weber River.

HYDROLOGY

<p>Recorded Data (Describe in remarks):</p> <p>_____ Stream, Lake, or Tide Gauge</p> <p>_____ Arial Photographs</p> <p>_____ Other</p> <p><u>X</u> No recorded data available.</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>_____ Inundated</p> <p><u>X</u> Saturated in upper 12 inches</p> <p>_____ Water marks</p> <p>_____ Drift lines</p> <p>_____ Sediment deposits</p> <p>_____ Drainage patterns in wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>_____ Oxidized root channels in upper 12 inches</p> <p>_____ Water-Stained leaves</p> <p>_____ Local soil survey data</p> <p>_____ FAC-Neutral test</p> <p><u>X</u> Other (explain in remarks)</p>
<p>Field Observations:</p> <p>Depth of surface water (in.): <u>> 20 In.</u></p> <p>Depth to free water in pit (in.): <u>NA</u></p> <p>Depth to saturated soil (in.): <u>2 In.</u></p>	<p>Remarks:</p> <p>Former oxbow to Weber River.</p>

SOILS

Map Unit Name
(Series and Phase): Steed Drainage Class: Well to Moderately Drained
Taxonomy
(Subgroup): _____ Field Observations
Confirm mapped type? Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, etc.
0" - 20"	A	10YR 2/1	None	None	Silt-Loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic Content in Surface Layer of Sandy Soils |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input type="checkbox"/> Aquic Moisture Regime | <input checked="" type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |
| <input type="checkbox"/> Concretions | |

Remarks:

Channel of former oxbow.
Uniform to depth with roots to 10 inches.
No root mat present.

WETLAND DETERMINATION

	Yes	No		
Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is this sampling point within a wetland?	<u>Yes</u>
Wetland Hydrology Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Hydric Soils Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Riverdale-Weber River Park</u>	Date: <u>12/4/2006</u>
Applicant/Owner: <u>Unity Enterprises</u>	County: <u>Weber</u>
Investigator: <u>Tom Hopkins</u>	State: <u>Utah</u>

Do normal circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Is the area a potential problem area? (If needed, explain on reverse)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;">Yes</td><td style="text-align: center;">No</td></tr> <tr><td style="text-align: center;">X</td><td style="text-align: center;"></td></tr> <tr><td style="text-align: center;"></td><td style="text-align: center;">X</td></tr> <tr><td style="text-align: center;"></td><td style="text-align: center;">X</td></tr> </table>	Yes	No	X			X		X	Community ID: _____ Transect ID: _____ Plot ID: <u>TP-3</u>
Yes	No									
X										
	X									
	X									

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Poa sp</u>	<u>Veg</u>	<u>FACU</u>	9. _____	_____	_____
2. <u>Agropyron sp</u>	<u>Veg</u>	<u>FACW</u>	10. _____	_____	_____
3. <u>Bromus sp</u>	<u>Veg</u>	<u>FACU</u>	11. _____	_____	_____
4. <u>Solanum sp</u>	<u>Veg</u>	<u>NI-FACU</u>	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percentage of dominant species that are OBL, FACW, or FAC (excluding FAC-). 1/4=25%

Remarks:
Short, sparse vegetation along the edge of a former oxbow.

HYDROLOGY

<p>Recorded Data (Describe in remarks):</p> <p>_____ Stream, Lake, or Tide Gauge</p> <p>_____ Arial Photographs</p> <p>_____ Other</p> <p><u>X</u> No recorded data available.</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>_____ Inundated</p> <p>_____ Saturated in upper 12 inches</p> <p>_____ Water marks</p> <p>_____ Drift lines</p> <p>_____ Sediment deposits</p> <p>_____ Drainage patterns in wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>_____ Oxidized root channels in upper 12 inches</p> <p>_____ Water-Stained leaves</p> <p>_____ Local soil survey data</p> <p>_____ FAC-Neutral test</p> <p>_____ Other (explain in remarks)</p>
<p>Field Observations:</p> <p>Depth of surface water (in.): <u>> 20 in.</u></p> <p>Depth to free water in pit (in.): <u>NA</u></p> <p>Depth to saturated soil (in.): <u>>20 in.</u></p>	
<p>Remarks: <u>Sandy/gravelly substrate</u></p>	

SOILS

Map Unit Name (Series and Phase): <u>Cobbly Alluvial</u>		Drainage Class: <u>Excessive</u>	
Taxonomy (Subgroup): _____		Field Observations Confirm mapped type? <u>Yes</u>	

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, etc.
0" - 4"	A	10YR 4/2	None	None	Sandy-loam
4" - 20"	B	NA	NA	NA	Sand/gravel

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer of Sandy Soils
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)
<input type="checkbox"/> Concretions	

Remarks:

Data point in a gravel deposit along upper edge of former oxbow. Soil in the upper 4 inches supports plant growth but below 4 inches the soils are excessively to hold water.

WETLAND DETERMINATION

	Yes	No	Is this sampling point within a wetland? <div style="text-align: right; font-weight: bold;">NO</div>
Hydrophytic Vegetation Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Wetland Hydrology Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Hydric Soils Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Remarks:

Soil Survey

improved pasture, corn, small grains, sugarbeets, and truck crops. (Chance soil is in capability unit IIIw-2 and Wet Meadow range site; Ironton soil is in capability unit IIw-4 and Semiwet Meadow range site)

Cobbly Alluvial Land

Cobbly alluvial land (Co) consists dominantly of cobbles, pebbles, and stones that have been deposited by streams. It occurs mainly along the Weber River and is subject to overflow. The coarse fragments consist of many kinds of rocks, but they are dominantly sandstone, limestone, and quartzite. Natural drainage is excessive, and the available water capacity is very low. The hazard of erosion is slight.

Most areas of this land have very limited use for pasture. Vegetation consists mostly of cottonwood and boxelder trees and an understory of willows, cheatgrass brome, and annual weeds. (Capability unit VIIw-1; not suited to range)

Croy Series

The Croy series consists of somewhat poorly drained soils that are moderately affected by salts and alkali. These soils are moderately deep over an indurated pan. They are nearly level soils and are in slight depressions on low lake terraces. They formed in alluvium and mixed lake sediments. Elevations range from about 4,225 to 4,350 feet above sea level.

The surface layer is dark grayish-brown, very friable loam 2 to 4 inches thick. The subsoil is dark-brown to brown, friable or firm fine sand, sandy loam, loam, sandy clay loam, or silty clay loam that has prismatic or subangular blocky structure. The indurated pan occurs at an average depth of about 35 inches and is 3 to 40 inches thick.

Croy soils commonly are near the Warm Springs, Leland, and Airport soils. The native vegetation consisted of saltgrass, alkali sacaton, scattered greasewood, and foxtail barley.

All the acreage of Croy soils is used as range.

Croy loam (Cr).—This soil occurs in slight depressions on low lake terraces or in drainageways in the southwestern part of Weber County, north and east of Hooper. It is in long, comparatively narrow areas, where it occurs with Leland, Airport, and Warm Springs soils. Slopes range from 0 to 2 percent.

A representative profile:

- 0 to 4 inches, dark grayish-brown loam; friable; platy structure; moderately calcareous; moderately alkaline.
- 4 to 18 inches, dark-brown sandy clay loam; firm, prismatic and subangular blocky structure; moderately calcareous; strongly alkaline.
- 18 to 32 inches, dark-brown or very dark grayish-brown sandy loam and fine sand; friable; weak subangular blocky structure or single grain; moderately calcareous; very strongly alkaline.
- 32 to 35 inches +, dark-gray indurated hardpan; moderately calcareous.

The surface layer ranges from about 2 to 4 inches in thickness. The subsoil ranges from sandy clay loam to loam or silty clay loam. The substratum below a depth of 18 to 20 inches ranges from fine sandy loam to silty clay loam. Depth to the hardpan ranges from 25 to 42

inches but is generally between 30 and 36 inches. Thickness of the hardpan ranges from 3 to 40 inches. In places there are two or more thin layers of hardpan that are separated by lenses of fine sandy loam or silt loam. This soil is moderately affected by salts and alkali. The water table fluctuates seasonally, but it is generally between depths of 30 and 48 inches.

Included with this soil in mapping were small areas of fine sandy loam and some areas of silty clay loam that are without a hardpan and are moderately to strongly affected by alkali.

This soil is somewhat poorly drained. Permeability is slow to moderate above the hardpan and very slow in the hardpan. This soil holds about 1.8 inches of available water per foot above the hardpan, or a total of about 3.5 to 5 inches of available water. Roots seldom penetrate the hardpan. Natural fertility is low. Runoff is slow, and the hazard of erosion is slight.

All of this soil is used as range. It is suited to irrigated improved pasture, where it is drained and reclaimed from damage by salts and alkali. (Capability unit VIw-1; Alkali Bottom range site)

Cudahy Series

The Cudahy series consists of poorly drained soils that are moderately deep over a lime-cemented pan. These soils are in nearly level depressions on low lake terraces. They formed in mixed, medium-textured sediments. Elevations range from about 4,220 to 4,450 feet above sea level.

The surface layer is black or very dark gray, friable silt loam 10 to 24 inches thick. The subsoil above the lime-cemented pan is gray, firm silt loam or light silty clay loam. The pan occurs at an average depth of about 26 inches.

Cudahy soils are commonly near the Ironton, Roshe Springs, and Logan soils. The vegetation consists mainly of saltgrass, Kentucky bluegrass, wiregrass, and sedges.

Cudahy soils are used for pasture or native hay and for irrigated crops.

Cudahy silt loam, 0 to 3 percent slopes (CuA).—This soil occurs in small, irregularly shaped, widely separated areas on low lake terraces. Slopes generally are less than 1 percent. The main areas of this soil are about one-half mile west of Woods Cross.

A representative profile:

- 0 to 16 inches, black or very dark gray silt loam; friable; granular structure; strongly calcareous; moderately alkaline.
- 16 to 23 inches, gray silt loam; firm; subangular blocky structure; strongly calcareous; moderately alkaline.
- 23 to 44 inches, gray, indurated, lime-cemented hardpan; strongly calcareous; moderately alkaline.
- 44 to 60 inches, gray silty clay loam; firm; massive; distinct mottles; strongly calcareous; moderately alkaline.

The surface layer ranges from about 10 to 24 inches in thickness. Depth to the hardpan and to the water table ranges from about 20 to 40 inches.

Included with this soil in mapping were small areas that have a hardpan nearer the surface than this soil and areas that are moderately affected by salts and alkali. Also included were small areas of medium-textured and moderately fine textured, poorly drained soils without a hardpan.

and the salts and alkali removed, it can be used for irrigated improved pasture and an occasional crop of small grain. (Capability unit IVw-3; Salt Meadow range site)

Francis Series

The Francis series consists of deep, well-drained to somewhat excessively drained, nearly level to steep, sandy soils. These soils are on high lake terraces, mainly near the base of the Wasatch Mountains. They formed in sandy, windblown deposits. Elevations range from about 4,300 to 5,200 feet above sea level.

The surface layer is dark grayish-brown, friable loamy fine sand 5 to 16 inches thick. The subsoil extends to a depth of about 18 to 30 inches and consists of dark-brown, loose loamy fine sand. The substratum is dark-brown fine sand.

Francis soils are commonly near the Preston and Kidman soils and, in a few places, are near the Timpanogos and Kilburn soils. The native vegetation is mainly sand dropseed, Indian ricegrass, brushy Gambel oak, and sagebrush.

Francis soils are used for irrigated farming, mainly for orchard fruits, and for dryfarming, range, and community developments.

Francis loamy fine sand, 0 to 3 percent slopes (FcB).—This soil is smooth or gently undulating. It occurs on lake terraces, mainly in small areas near areas of Kilburn and Kidman soils.

A representative profile:

- 0 to 13 inches, dark grayish-brown loamy fine sand; friable; granular structure; noncalcareous; mildly alkaline.
- 13 to 23 inches, dark-brown loamy fine sand; very friable; massive; noncalcareous; moderately alkaline.
- 23 to 73 inches, dark-brown fine sand; loose; single grain; noncalcareous; mildly alkaline.

The surface layer ranges from about 8 to 16 inches in thickness. In places the substratum is weakly calcareous.

Included with this soil in mapping were small areas of fine sandy loam and areas of other Francis soils.

This soil absorbs moisture readily, is somewhat excessively drained, and is rapidly permeable. It holds about 0.75 inch of available water per foot of soil, or about 3.75 to 4 inches to a depth of 5 feet. Roots penetrate to a depth of 60 inches or more. Runoff is slow. Water erosion is only a slight hazard, but the hazard of soil blowing is high. Natural fertility is moderately low. This soil is friable and easy to work.

About 55 percent of this soil is cultivated and used for irrigated crops. The main irrigated crops are cherries, apricots, and peaches, crops that are well suited. Also well suited is irrigated improved pasture. About 20 percent of this soil is used for community developments. Efficient use of irrigation water and the control of soil blowing are the main concerns of management. (Capability unit IIIs-2; Upland Sand range site)

Francis loamy fine sand, 3 to 6 percent slopes (FcC).—This soil developed in sandy, windblown deposits on gently undulating high lake terraces. It is more sloping than Francis loamy fine sand, 0 to 3 percent slopes, and is moderately susceptible to water erosion. The surface

layer ranges from about 7 to 14 inches in thickness. In some places a small amount of fine gravel occurs throughout the profile, and in other places a gravelly substratum is below a depth of 36 inches.

Included with this soil in the mapping were small areas that have slopes of more than 6 percent, areas of sandy loam, and a few small areas of gravelly sandy loam. Also included is a small area that has an overwash of loam 5 to 6 inches thick.

Runoff is slow to medium, and the hazard of erosion by water is commonly moderate. The hazard of soil blowing is high.

This soil is used for dryland farming, for irrigated farming, and for range. It is well suited to, and is used mainly for, small grains, alfalfa, cherries, apricots, peaches, and improved pasture. (Capability unit IIIs-3; Upland Sand range site)

Francis loamy fine sand, 6 to 10 percent slopes (FcD).—This soil is on strongly sloping lake terraces where it occurs with Kilburn and Preston soils. Except for stronger slopes, it is similar to Francis loamy fine sand, 0 to 3 percent slopes. The surface layer is about 6 to 12 inches thick. In places, the substratum is weakly calcareous. Water erosion is a moderate to high hazard.

Included with this soil in mapping were a few small areas of loamy fine sand that have horizons of carbonate accumulation and some areas of gravelly sandy loam.

This soil is used for irrigated farming, for dryfarming, and as range. Cultivated areas are suited to cherries, peaches, apricots, and irrigated improved pasture. Applying irrigation water by sprinklers lessens the risk of erosion and permits efficient use of the water. (Capability unit IVs-2; Upland Sand range site)

Francis loamy fine sand, 10 to 20 percent slopes, eroded (FcE).—This soil is on high lake terraces, mainly in association with the Preston, Kilburn, and Timpanogos soils. It is similar to Francis loamy fine sand, 0 to 3 percent slopes, but is steeper and more eroded. The surface layer ranges from 5 to 10 inches in thickness. In places, some fine gravel occurs throughout the profile.

Included with this soil in mapping were a few small areas of fine sand and areas of loamy very fine sand to light sandy loam. Also included were areas of gravelly sandy loam that have slopes of less than 10 percent and some that are only slightly eroded.

Runoff is commonly medium, and the hazard of erosion is high.

This soil is used mainly as range and watersheds, but a small acreage is cultivated. This soil is suited to cherries, apricots, peaches, and irrigated improved pasture. Sprinkler irrigation is a good method of applying water because it lessens the risk of erosion and insures efficient use of irrigation water. (Capability unit IVs-3; Upland Sand range site)

Francis loamy fine sand, 20 to 30 percent slopes, eroded (FcF).—This inextensive soil occurs on high terrace escarpments in the northeastern part of Davis County. Except for erosion and steep slopes, this soil is similar to Francis loamy fine sand, 0 to 3 percent slopes. The surface layer ranges from 5 to 9 inches in thickness.

Included with this soil in mapping were small areas that have slopes of less than 20 percent and small areas of fine sand.

A representative profile:

- 0 to 4 inches, light brownish-gray silty clay loam; very firm; moderately calcareous; very strongly alkaline.
- 4 to 9 inches, light olive-gray silty clay loam; firm; massive; moderately calcareous; very strongly alkaline.
- 9 to 20 inches, light olive-gray silty clay loam; firm; massive; moderately calcareous; strongly alkaline.
- 20 to 32 inches, light olive-gray silt loam; firm; massive; moderately calcareous; strongly alkaline.
- 32 to 60 inches, pinkish-gray to light brownish-gray silty clay loam; firm; massive; moderately calcareous; strongly alkaline.

A salt crust commonly is on the surface of this soil, and there is a high content of salts throughout the profile. Texture of the substratum ranges from loamy fine sand to clay. The water table generally is at or near the surface.

Included with this soil in the mapping were some small areas of silt loam.

This soil is poorly drained or very poorly drained and is very slowly permeable. In most places the soil is saturated with water, but, because of the high content of salts, little water is available to plants. Runoff is slow to ponded, and erosion is not a hazard.

This soil is unsuited to crops or as range. Most areas are barren. (Capability unit VIIIw-1; not suited to range)

Steed Series

The Steed series consists of well drained and moderately well drained, nearly level or gently undulating soils on flood plains along the Weber River. These soils are gravelly in places. They formed in moderately coarse textured mixed alluvium. Elevations range from 4,300 to 4,600 feet above sea level.

The surface layer is very dark grayish-brown to dark-brown, friable fine sandy loam or gravelly fine sandy loam 4 to 10 inches thick. The subsoil is brown, friable gravelly fine sandy loam or gravelly loamy fine sand. The substratum is very gravelly and cobbly coarse sand.

Steed soils are near the Sunset and Martini soils and Cobbly alluvial land. The native vegetation is mainly cottonwood, boxelder, and willow trees and sagebrush and cheatgrass brome.

Steed soils are used mainly as range, but some areas have been cleared and are used for irrigated crops.

Steed fine sandy loam, 0 to 1 percent slopes (SbA).—This slightly undulating soil occurs mainly on the higher parts of the flood plain along the Weber River.

A representative profile:

- 0 to 9 inches, very dark grayish-brown to dark-brown fine sandy loam; very friable; granular structure; moderately calcareous; mildly alkaline.
- 9 to 13 inches, brown loamy fine sand; very friable; massive; moderately calcareous; moderately alkaline.
- 13 to 17 inches, brown gravelly loamy fine sand; loose; single grain; slightly calcareous; moderately alkaline.
- 17 inches +, brown very gravelly and cobbly coarse sand; loose; single grain; slightly calcareous; moderately alkaline.

The surface layer ranges from 6 to 10 inches in thickness. In places the subsoil is mottled.

Included with this soil in the mapping were a few small, narrow areas of gravelly fine sandy loam. Also

included were some areas of loamy fine sand and of light loam.

This soil is mainly well drained and is moderately permeable. It holds about 1.5 inches of available water per foot of soil in the surface layer and about 0.5 inch in the subsoil, or about 4 inches to a depth of 5 feet. Roots penetrate deeply. Natural fertility is moderate. Runoff is slow, but there is a slight hazard of soil blowing if the surface is bare early in spring. This soil is generally in good tilth, is easy to work, and can be cultivated within a wide range of moisture content.

This soil is used mainly for irrigated crops, for which it is well suited. Alfalfa, corn, small grains, tomatoes, and potatoes are the main crops. Fertilizer is needed for favorable yields, and irrigation should be frequent and light. (Capability unit IIIs-1; not used for range)

Steed fine sandy loam, 0 to 1 percent slopes, channeled (ScA).—This soil occurs on flood plains adjacent to or near the channel of the Weber River. This soil is dissected by many old stream channels 2 to 3 feet deep; otherwise, it is similar to Steed fine sandy loam, 0 to 1 percent slopes.

Included with this soil in the mapping were small areas of gravelly soils and other areas of deep sandy soils.

Most areas of this soil have a cover consisting of cottonwoods, boxelders, willows, rose bushes, and bunch grasses. Cultivation is limited by the need for clearing and land leveling, but these improvements are costly. Land leveling is difficult because of the large content of pebbles and cobbles and the large amount of soil material needed to fill the channels.

This soil is used mainly as range. Where it is cleared and leveled, it is suited to irrigated crops. (Capability unit IIIs-1; Upland Stony Loam range site)

Steed gravelly fine sandy loam, 0 to 2 percent slopes (ScA).—This soil is on nearly level to very gently sloping flood plains of the Weber and Ogden Rivers. Except that it is gravelly throughout the profile, this soil is similar to Steed fine sandy loam, 0 to 1 percent slopes. The surface layer ranges from about 5 to 8 inches in thickness. The available water capacity is about 3 to 3.5 inches to a depth of 5 feet. This gravelly soil is moderately difficult to till.

Included with this soil in the mapping were some areas of Cobbly alluvial land.

This soil is used as range, for irrigated crops, and for industrial developments. Use for industrial developments is increasing. This soil is well suited to alfalfa, small grains, and tomatoes. It is also well suited to irrigated improved pasture. Most needed on this droughty soil is management that provides efficient use of irrigation water. (Capability unit IVs-1; Upland Stony Loam range site)

Steed gravelly fine sandy loam, 0 to 2 percent slopes, channeled (SeA).—This soil occurs on the flood plain near the channel of the Weber River. It is dissected by many old stream channels that are mainly 2 to 3 feet deep. Except for these channels, this soil is similar to Steed gravelly fine sandy loam, 0 to 2 percent slopes. Most areas have a cover of cottonwoods, boxelders, willows, rose bushes, and bunch grasses. Cultivation is limited by the need for clearing and land leveling, but these

improvements are costly. Land leveling is difficult because of the large content of pebbles and cobbles, and the large amount of soil material needed to fill the channels.

This soil is used mainly as range. Where it is cleared and leveled, it is well suited to irrigated improved pasture. (Capability unit IVs-1; Upland Stony Loam range site)

Sterling Series

The Sterling series consists of somewhat excessively drained, gravelly, cobbly, or stony, medium-textured soils. These soils are on sloping to steep alluvial fans at the base of the Wasatch Mountains. They formed in local alluvium and colluvium that were derived dominantly from weathered limestone but partly from quartzite. Elevations range from 4,450 to 5,000 feet above sea level.

The surface layer is very dark brown or very dark grayish-brown, friable gravelly, stony, or cobbly loam about 10 to 16 inches thick. The subsoil is brown or dark-brown, firm very cobbly or very stony loam that is moderately high in lime. The subsoil overlies very cobbly sandy loam.

Sterling soils are commonly near the Ridd, Parleys, and Pleasant View soils. The native vegetation is mainly sagebrush, brushy Gambel oak, cheatgrass brome, western wheatgrass, sand dropseed, and three-awn.

The steeper Sterling soils are used as range; those not so steep are used for irrigated orchards.

Sterling cobbly loam, 8 to 20 percent slopes (SgE).—This soil occurs mainly in the vicinity of North Ogden on ridges and alluvial fans. Slopes are dominantly west and southwest facing.

A representative profile:

- 0 to 16 inches, very dark brown cobbly loam; friable; platy and subangular blocky structure; mildly alkaline.
- 16 to 22 inches, brown or dark-brown very cobbly loam; friable; subangular blocky structure; strongly calcareous; moderately alkaline.
- 22 to 48 inches +, brown very cobbly sandy loam; friable; massive; strongly calcareous; moderately alkaline.

The surface layer ranges from about 13 to 16 inches in thickness. By volume, pebbles and cobbles make up 30 to 50 percent of the surface layer.

Included with this soil in the mapping were some areas that have a stony surface layer, small areas of gravelly loam, and small areas of cobbly sandy loam.

This soil is somewhat excessively drained and is rapidly or very rapidly permeable. It holds about 1 inch of available water per foot of soil in the upper 18 to 20 inches and about 0.5 to 0.7 inch per foot below that depth, or about 3.5 inches to a depth of 5 feet. Roots penetrate to a depth of more than 48 inches. Natural fertility is moderately low. Runoff is slow to medium and depends on the degree of slope and the kind and amount of vegetation. The hazard of erosion is moderate. Tillage of this cobbly soil is difficult.

This soil is used dominantly as range or watersheds. About 30 percent is cultivated. Most of the cultivated acreage is used for cherry, peach, and apricot orchards, a moderately good use. Sprinkler irrigation permits the most efficient use of water and is less likely to cause

erosion than other methods. (Capability unit IVs-3; Upland Stony Loam range site)

Sterling gravelly loam, 6 to 10 percent slopes (SfD).—This soil occurs on strongly sloping alluvial fans in the vicinity of North Ogden. Except that it is gravelly instead of cobbly, this soil is similar to Sterling cobbly loam, 8 to 20 percent slopes. Also, it is in a slightly lower position and is less sloping in most places than that soil. The surface layer ranges from about 12 to 16 inches in thickness.

Included with this soil in the mapping were small areas of cobbly loam.

This soil holds about 0.7 to 1 inch of available water per foot of soil, or about 3.5 to 4 inches to a depth of 5 feet. Runoff is medium, and the hazard of erosion is moderate.

Most of this soil is used for cherry, peach, and apricot orchards. It is well suited to orchards and to irrigated improved pasture. Sprinkler irrigation permits the most efficient use of water and is less likely to cause erosion than other methods. (Capability unit IVs-2; Upland Stony Loam range site)

Sterling very rocky loam, 6 to 50 percent slopes, eroded (ShF2).—This soil occurs on sloping to steep alluvial and colluvial fans on the foot slopes of mountains in the vicinity of North Ogden. It is at slightly higher elevations than Sterling cobbly loam, 8 to 20 percent slopes, and is more eroded. This soil has a stony surface layer and is somewhat more cobbly and stony throughout than that soil. This mapping unit consists of about 85 percent stony loam and about 15 percent Rock outcrop.

Included with this soil in the mapping were areas that are covered by boulders 10 feet or more in diameter. These areas are dominantly on the steeper slopes. Also included were areas of Rock outcrop. These areas make up about 15 percent of the mapping unit.

This soil is somewhat excessively drained and has very rapid permeability. Roots penetrate to an average depth of about 30 inches. Runoff is medium to rapid, and the hazard of erosion is high.

All of this soil is used as range and watersheds. It is not suited to cultivated crops. (Capability unit VIIs-1; Upland Stony Loam range site)

Sunset Series

The Sunset series consists of deep, nearly level, moderately well drained and somewhat poorly drained soils. These medium-textured soils are on flood plains and low terraces along rivers. They formed in medium-textured mixed alluvium. Elevations range from 4,220 to 4,800 feet above sea level.

The surface layer is very dark grayish-brown, friable loam 8 to 24 inches thick. The subsoil and substratum are friable loam, but they become lighter in color with increasing depth. The substratum is highly stratified in places, and the texture ranges from loam to gravelly loamy sand.

Sunset soils are near the Steed, Martini, and Kirkham soils. The native vegetation is bunch grasses, rose bushes, sagebrush, and cheatgrass brome.

The Sunset soils are used mainly for irrigated crops, but unimproved areas are used as range.

Sunset loam, 0 to 1 percent slopes (SkA).—This soil is on smooth to very gently undulating flood plains and low river terraces. It occurs near the Weber River, mainly with Martini fine sandy loam and Steed fine sandy loam.

A representative profile:

- 0 to 18 inches, very dark grayish-brown loam; friable; granular structure; moderately calcareous; mildly alkaline.
- 18 to 32 inches, dark-brown loam; very friable; moderately calcareous; moderately alkaline.
- 32 to 68 inches, dark-brown loam; very friable; moderately calcareous; mildly to moderately alkaline.

The surface layer ranges from about 15 to 24 inches in thickness. The substratum is commonly stratified loam to sandy loam. Unless it is drained, this soil is saturated within 40 inches of the surface during most of the growing season. Much of the acreage has been drained. In drained areas the water table is below a depth of 40 inches, but distinct mottles occur between a depth of 20 and 40 inches. Some areas of this soil are moderately affected by salts and alkali.

Included with this soil in the mapping were a few small areas of loam that have a gravelly substratum and a few very narrow areas of gravelly sandy loam.

This soil is somewhat poorly drained and is moderately permeable. It holds about 2 inches of available water per foot of soil, or about 10 inches to a depth of 5 feet. Roots penetrate deeply. Natural fertility is high. Runoff is slow, and the hazard of erosion is slight. This soil generally is in good tilth, and tillage is easy.

This soil is used mainly for irrigated crops, but some areas are used as range. The principal crops are alfalfa, small grains, corn, and sugarbeets. This soil is well suited to irrigation and to many kinds of crops. Land leveling so that irrigation water can be distributed evenly is the most needed management, but drainage is required in some areas. (Capability unit IIw-3; Semiwet Meadow range site)

Sunset loam, 1 to 3 percent slopes (SkB).—This soil is on gently sloping river terraces adjacent to the steep escarpments of lake terraces. It is also in narrow drainageways of intermittent streams that have cut into the lake terraces. This soil is similar to Sunset loam, 0 to 1 percent slopes, but it is slightly more sloping.

Included with this soil in the mapping were small areas of Sunset loam that have slopes of less than 1 percent.

Runoff is slow, and the hazard of erosion is slight.

This soil is used mainly for irrigated crops of alfalfa, small grains, corn, and sugarbeets. More careful irrigation is required on this soil than on Sunset loam, 0 to 1 percent slopes, so that water is evenly distributed without causing erosion. (Capability unit IIw-4; Semiwet Meadow range site)

Sunset loam, gravelly substratum, 0 to 1 percent slopes (SnA).—This soil is on nearly level river flood plains near the Weber River. It is similar to Sunset loam, 0 to 1 percent slopes, but has a gravelly sandy loam substratum at a depth ranging from 25 to 36 inches.

Included with this soil in the mapping were small areas of Sunset loam, 0 to 1 percent slopes.

This soil holds about 5.5 to 6 inches of available water to a depth of 5 feet, but the gravelly substratum holds only about 0.5 inch per foot.

This soil is used for irrigated crops of alfalfa, small grains, corn, and sugarbeets. Yields are somewhat lower than those on Sunset loam, 0 to 1 percent slopes. This soil is well suited to irrigation and to many kinds of crops. Land leveling so that irrigation water can be distributed evenly is the most needed management, but drainage is needed in some areas. (Capability unit IIs-2; Semiwet Meadow range site)

Sunset loam, strongly alkali, 0 to 1 percent slopes (SmA).—This soil is on lower, nearly level parts of river flood plains, mainly near Warren in Weber County. Except that it is strongly affected by salts and alkali, this soil is similar to Sunset loam, 0 to 1 percent slopes. The surface layer is 8 to 11 inches thick. Permeability is slow.

Included with this soil in the mapping were small areas of other Sunset soils and of silty clay loam.

This soil is used for irrigated crops and as range. Where it is drained and reclaimed from damage by salts and alkali, this soil is well suited to cultivation. Small grains, corn, sugarbeets, and alfalfa are the main crops, but yields are generally low. (Capability unit IIIw-6; Alkali Bottom range site)

Syracuse Series

The Syracuse series consists of deep, somewhat poorly drained, nearly level to gently sloping soils. These soils formed in coarse-textured lake sediments that have been reworked by wind. Elevations range from 4,220 to 4,600 feet above sea level.

The surface layer is very dark grayish-brown, loose to very friable loamy fine sand 6 to 12 inches thick. The subsoil is light brownish-gray or dark grayish-brown, loose loamy fine sand or sandy loam. The substratum is light-gray or very pale brown, loose loamy fine sand or sandy loam.

Syracuse soils are commonly near the Warm Springs and Ford soils. The native vegetation is mainly saltgrass and fourwing saltbush.

Syracuse soils are drained and used extensively for irrigated crops. Undrained areas are used as range.

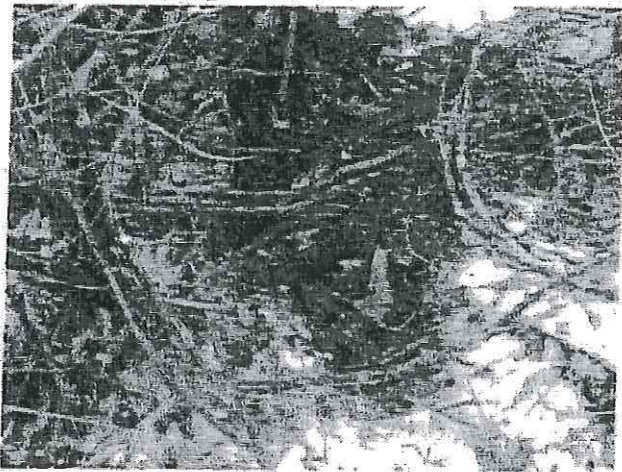
Syracuse loamy fine sand (So).—This soil is on slightly undulating low lake terraces in the western part of the survey area. It is widely distributed and occurs mainly with Warm Springs soils. Slopes generally are slightly less than 1 percent, but in places they are as much as 2 percent.

A representative profile:

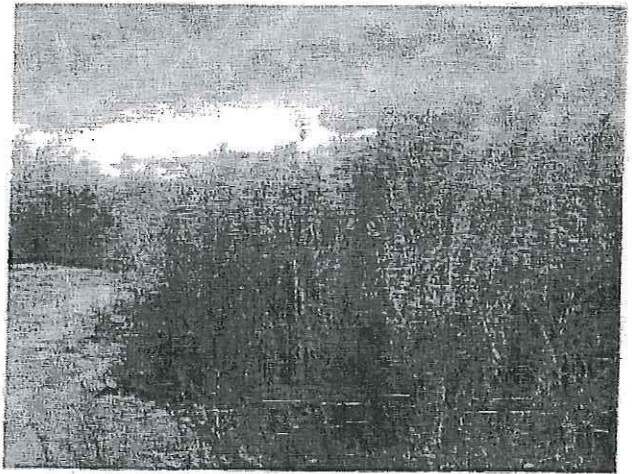
- 0 to 11 inches, very dark grayish-brown loamy fine sand; loose; granular; noncalcareous; moderately alkaline.
- 11 to 21 inches, dark grayish-brown sandy loam or loamy fine sand; loose or very friable; slightly calcareous; moderately alkaline.
- 21 to 30 inches, light brownish-gray sandy loam; loose to very friable; moderately calcareous; strongly alkaline.
- 30 to 60 inches, light-gray sandy loam; loose; strongly calcareous; very strongly alkaline.

The surface layer ranges from 9 to 12 inches in thickness. The effect of salts and alkali is mainly slight to moderate.

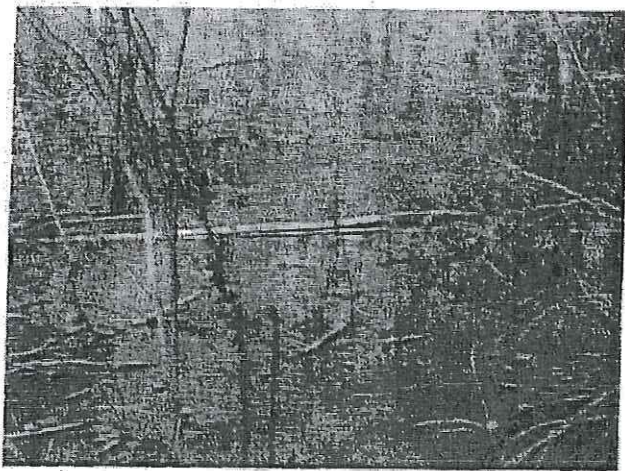
Photographs



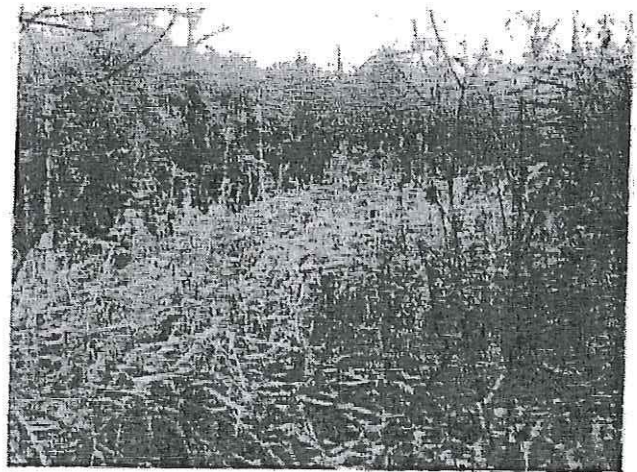
Photograph 1
TP-1. Middle of former oxbow at south end.



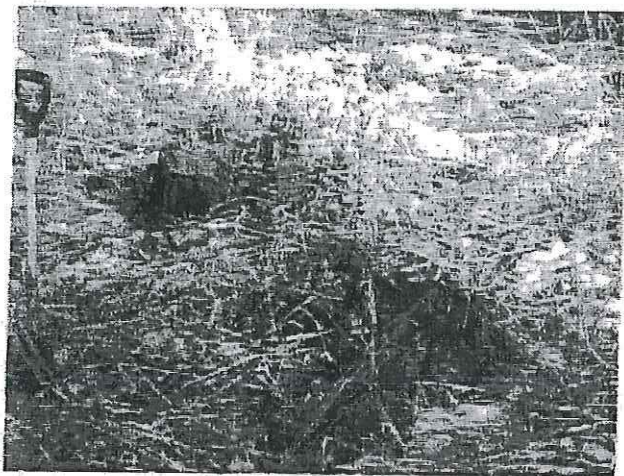
Photograph 2
View of vegetation in vicinity of TP-1



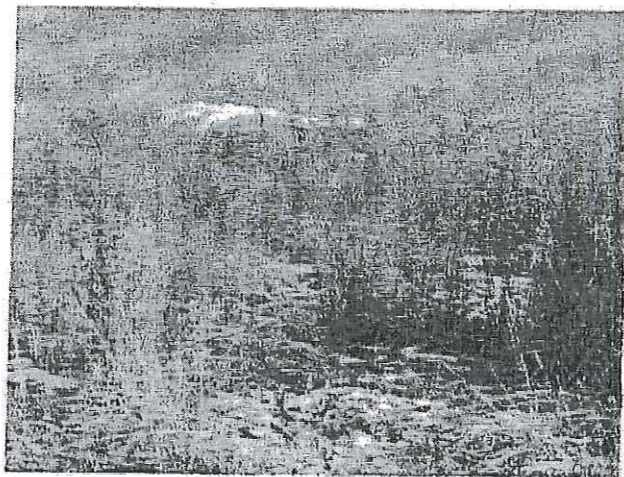
Photograph 3
Standing water in former oxbow



Photograph 4
Side channel entering oxbow from east. This is the confluence area.



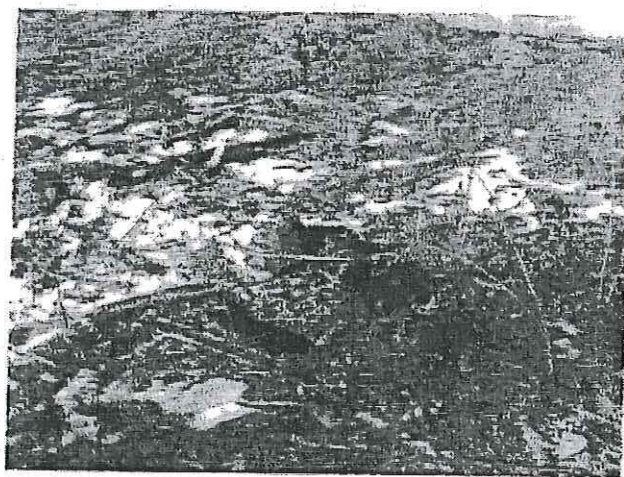
Photograph 5
TP-2. Middle of depression in former oxbow



Photograph 6
Vicinity of TP-2



Photograph 7
TP-3.



Photograph 8
Vicinity of TP-3.

EXHIBIT G - OTHER OFFSITE UTILITIES AND IMPROVEMENTS

