



HIGHLAND CITY

HIGHLAND CITY PLANNING COMMISSION AGENDA

Tuesday, February 22, 2022

Highland City Council Chambers, 5400 West Civic Center Drive, Highland Utah 84003

VIRTUAL PARTICIPATION



YouTube Live: <http://bit.ly/HC-youtube>



Email comments prior to meeting: planningcommission@highlandcity.org

7:00 PM REGULAR SESSION

Call to Order – Jerry Abbott, Chair

Invocation – Commissioner Tyler Standifird

Pledge of Allegiance – Commissioner Christopher Howden

1. SWEARING IN NEW PLANNING COMMISSIONERS

Stephannie Cottle, City Recorder, will issue the Oath of Office to three new Planning Commissioners: Tracy Hill, Jay Roundy, and Trent Thayn.

2. UNSCHEDULED PUBLIC APPEARANCES

Please limit comments to three minutes per person. Please state your name.

3. TRAINING: GENERAL PLAN

City Attorney Rob Patterson will provide training on the contents, purpose, and process for creating and amending a General Plan.

4. CONSENT ITEMS

Items on the consent agenda are of a routine nature or have been previously studied by the Planning Commission. They are intended to be acted upon in one motion. Commissioners may pull items from consent if they would like them considered separately.

a. **Approval of Meeting Minutes** *Administrative*

Regular Planning Commission Meeting – January 25, 2022

5. **PUBLIC HEARING: GENERAL PLAN AMENDMENT – TRANSPORTATION MASTER PLAN** *Legislative*

The Planning Commission will hold a public hearing to consider a request by City Staff the Transportation Element of the General Plan to update 4800 West from three lane major collector to a five-lane arterial. The Planning Commission will take appropriate action.

6. ARCHITECTURAL APPROVAL – BANK OF AMERICA Administrative

The Planning Commission will consider a request by Judy Yam on behalf of MNG Highland I LLC, for architectural approval for a remodel of a retail building located at approximately 5384 W 11000 N. The Planning Commission will take appropriate action.

7. PLANNING COMMISSION AND STAFF COMMUNICATION ITEMS

The Planning Commission may discuss and receive updates on City events, projects, and issues from the Planning Commissioners and city staff. Topics discussed will be informational only. No final action will be taken on communication items.

a. Grading/Retaining Walls

b. Defining Setbacks

c. Xeriscaping

d. Future Meetings

- March 1, City Council Meeting 7:00 pm, City Hall
- March 15, City Council Meeting, 7:00 pm, City Hall
- March 22, Planning Commission Meeting, 7:00 pm, City Hall
- March 29, City Council Meeting, 7:00 pm, City Hall

Legislative: An action of a legislative body to adopt laws or policies.

Administrative: An action reviewing an application for compliance with adopted laws and policies.

ADJOURNMENT

In accordance with Americans with Disabilities Act, Highland City will make reasonable accommodations to participate in the meeting. Requests for assistance can be made by contacting the City Recorder at (801) 772-4505 at least three days in advance of the meeting.

ELECTRONIC PARTICIPATION

Members of the Planning Commission may participate electronically via telephone, Skype, or other electronic means during this meeting.

CERTIFICATE OF POSTING

I, Kellie Smith, the Planning Coordinator, certify that the foregoing agenda was posted at the principal office of the public body, at the Lone Peak Fire Station and Lone Peak Police Station, on the Utah State website (<http://pmn.utah.gov>), and on Highland City's website (www.highlandcity.org).

Please note the order of agenda items are subject to change in order to accommodate the needs of the Planning Commission, staff and the public.

Posted and dated this agenda 17th day of February, 2022.

Kellie Smith, Planning Coordinator

THE PUBLIC IS INVITED TO PARTICIPATE IN ALL PLANNING COMMISSION MEETINGS.



HIGHLAND CITY

HIGHLAND CITY PLANNING COMMISSION MINUTES

Tuesday, January 25, 2022

Highland City Council Chambers, 5400 West Civic Center Drive, Highland Utah
84003

Waiting formal approval

VIRTUAL PARTICIPATION



YouTube Live: <http://bit.ly/HC-youtube>

planningcommission@highlandcity.org

7:05 PM REGULAR SESSION

Call to Order – Jerry Abbott, Chair

Invocation – Commissioner Audrey Moore

Pledge of Allegiance – Commissioner Mino Morgese

The meeting was called to order by Planning Commission Chair Jerry Abbott as a regular session at 7:05 PM. The meeting agenda was posted on the *Utah State Public Meeting Website* at least 24 hours prior to the meeting. The prayer was offered by Commissioner Christopher Howden and those in attendance were led in the Pledge of Allegiance by Commissioner Mino Morgese.

PRESIDING: Commissioner Jerry Abbott

COMMISSIONERS

PRESENT: Jerry Abbott, Christopher Howden, Audrey Moore, Mino Morgese, Claude Jones, Sherry Carruth (electronically)

CITY STAFF PRESENT: City Administrator/Community Development Director Nathan Crane, City Attorney Rob Patterson, City Planner and GIS Specialist Kellie Smith, Planning Commission Secretary Heather White

OTHERS PRESENT: Joe Ham with MNG Highland Development LLC, Charlie Taylor and Joel Warden with Yesco Sign Company, Resident Doug Cortney

Mayor Ostler recognized and thanked Commissioner Carruth and Commissioner Morgese for their service on the Planning Commission.

1
2 **1. UNSCHEDULED PUBLIC APPEARANCES**

3 Please limit comments to three minutes per person. Please state your name.

4
5 None was offered.
6
7

8 **2. CONSENT ITEMS**

9 Items on the consent agenda are of a routine nature or have been previously
10 studied by the Planning Commission. They are intended to be acted upon in one
11 motion. Commissioners may pull items from consent if they would like them
12 considered separately.
13

14 **a. Approval of Meeting Minutes** *Administrative*

15 Regular Planning Commission Meeting – November 16, 2021
16

17 *Commissioner Morgese MOVED to approve the minutes for the November 16, 2021 Planning*
18 *Commission meeting. Commissioner Howden SECONDED the motion. All present were in favor.*
19 *None were opposed. The motion carried.*
20
21

22 **3. PUBLIC HEARING: TEXT AMENDMENT - FREESTANDING**
23 **SIGNS** *Legislative*

24 The Planning Commission will hold a public hearing to consider a request by
25 Joe Ham to amend Sections 3-707 and 3-710 of the Development Code relating
26 to commercial freestanding signs. The Planning Commission will take
27 appropriate action.
28

29 Ms. Smith explained that the commercial freestanding sign section in the Development Code
30 applied to the C-1, CR, and Town Center Zones and that there was currently one commercial
31 freestanding sign in Highland located in the C-1 Zone. She explained that the tenants in the
32 Highland Marketplace wanted to make sure they had signage on the road. She reviewed the
33 proposed changes and showed examples of how the changes would look in Highland compared
34 to existing signs. She compared the maximum height of signs in neighboring cities. She reviewed
35 the amendments to the list of materials and lighting that could be used. She reviewed proposed
36 changes to the landscaping requirements. Ms. Smith reviewed part of the Economic Element
37 section in the General Plan.
38

39 The Planning Commissioners discussed the current options for commercial signs and what was
40 permitted on the Marketplace property. Commissioner Morgese asked why it was necessary to
41 increase the maximum height of signs. Applicant Joe Ham explained that they had nothing to do
42 with the current monument signs and that the signs only advertised the businesses in the
43 buildings immediately in front of the signs. The development was looking for a large anchor
44 tenet to draw traffic to the back of the property. They have not been able to find a large tenet for
45 various reasons. They concluded to build a series of smaller business retail buildings behind

1 what was already there, but they would have no exposure. He said each potential tenet had asked
2 that they have exposure on Alpine Highway (SR-74) and Timpanogos Highway (SR-92). Mr.
3 Ham explained that they intended to remove the Little Ceasar's sign and put the taller sign in the
4 same location with enough panels for other tenets. He pointed out that there was a tremendous
5 depth to the property, and he needed a way to identify the tenets without having an identifiable
6 large store. Mr. Ham explained that a sign consultant considered the speed of the road, and a 40-
7 ft sign would provide the needed exposure. He mentioned that he was not proposing a 40-ft sign
8 on Alpine Highway. He talked about the area where the taller sign would go and said that the
9 building was 35 ft. He did not think anyone would notice the height difference.

10
11 Commissioner Abbott was concerned that the sign would look out of place. He pointed out that
12 other retailers and businesses would be able to do taller signs in other areas. He agreed that there
13 needed to be a way to let people know what was in the area. He said the commission wanted
14 commercial areas to grow and restaurant to come to the city but didn't think the road was large
15 enough to warrant a 40-ft sign. Commissioner Moore added that there was a stop sign on the
16 road and that drivers would not be speeding by.

17
18 Charlie Taylor with YESCO Sign Company said they wanted to make sure that each tenet had
19 visibility. He said it needed to be high enough for each tenet to have adequate representation and
20 it would be a benefit for the bottom clearance to be higher than a monument sign. He said a sign
21 would be near the ingress and egress of the development and they wanted the public to be able to
22 negotiate into the property without last minute lane changes.

23
24 Mr. Ham pointed out that they needed space for 22 tenets and that none of them were on the
25 current sign. He said it was the first time he saw research regarding the other cities and said they
26 could find a way to do the sign if it was 35 feet. He said tenets would not come if they did not
27 think they had representation. Signs would go up as the buildings were constructed. He pointed
28 out that the building across the street was 35 feet tall with a sign on the wall. He thought that the
29 height difference would not be noticeable from the perspective of someone looking up.

30
31 Ms. Smith mentioned that the maximum height for buildings in the Town Center Zone was 45
32 feet. She said no building was currently at the maximum height, but they potentially could be.

33
34 Commissioner Abbott opened the public hearing at 7:45 PM and called for public comment.

35
36 Resident Doug Courtney thought the analysis in the agenda packet was incomplete. He thought it
37 omitted an important policy from the section of the General Plan. He read, "provide design
38 criteria for commercial areas, which provide for a distinctive place-making character for
39 Highland City and enhance the natural and residential environment." He also said it overlooked
40 the community design element section of the General Plan which included the goal to maintain
41 and enhance the scenic backdrop to the north and east. He also mentioned a policy to ensure that
42 all development policies, codes, and regulations address the need to preserve the scenic backdrop
43 where feasible. He read Section 3-701 of the Development Code. Mr. Courtney said he objected
44 to damaging Highland's scenic backdrops with a 40-ft internally illuminated sign and requested a
45 20-ft sign. He objected to damaging residential environments by allowing large commercial
46 signs closer to residential zones than currently permitted. He objected to confusing intersections

1 with large internally illuminated signs placed significantly closer than now permitted. He was in
2 favor of the proposed amendments to materials, landscaping, and a small increase in height.

3
4 Commissioner Abbott asked for additional public comment. Hearing none, he closed the public
5 hearing at 7:48 PM.

6
7 Commissioner Howden said that as much as he understood and was sympathetic to the
8 economics of the situation, he was quite strongly opposed to anything other than a maximum
9 height of 18 feet. He was in favor of the landscaping changes and impartial to the width. He
10 wasn't sure that signs were necessary because most people would use phones to find places they
11 needed/wanted to go to.

12
13 Commissioner Moore appreciated that the sign was not backlit throughout and liked the
14 suggested changes for lettering by city staff. She agreed with Commissioner Howden regarding
15 the height. She thought it would become the visual focus of the community center instead of the
16 mountainous backdrop. She didn't think the higher sign would be beneficial because of the
17 narrowing portion of the road, the stop sign, the proximity of the sign to the road, and the fact
18 that it was a pedestrian center. She didn't think it would have the same impact as a lower sign.
19 She understood the need for all tenets to be represented and suggested using two columns.

20
21 Commissioner Morgese was open to the idea of increasing the height of the sign to a maximum
22 of 25 ft on SR-92 although he thought 40 ft was too high.

23
24 Commissioner Carruth left the meeting at 7:55 PM due to technical issues with Zoom.

25
26 The Planning Commissioners discussed options with restricting signs on certain roads and
27 considered maximum height restrictions. They talked about other signs and businesses in the
28 area.

29
30 Commissioner Abbott asked about the specifications of the sign. Joel Warden with YESCO Sign
31 Company explained that the picture should have read "as per engineering requirements". He said
32 the five feet would allow for the appropriate inner post and footing to protect the wind load, so
33 the sign was structurally safe. Mr. Taylor added that the size also allowed even illumination
34 throughout the sign. Mr. Ham explained that the post would get smaller if the sign was smaller.
35 He thought the back illumination looked cleaner but said he could go with requirements in the
36 current code.

37
38 After discussing, the Commissioners were unanimously in favor of the proposed amendment to
39 lighting and landscaping. They agreed that the proposed height of 40 ft was too high. They
40 discussed current restrictions, the proposed amendments, and possible locations. Commissioner
41 Abbott asked why the applicant proposed amendments to possible locations of the sign. Mr.
42 Warden explained that the measurements were based on the location of the closest residents. He
43 said they would not have been compliant if they put the sign where it needed to be based on the
44 location of residents across the street. It was determined that the current 150-ft restriction must
45 have only considered adjacent residential areas on the same side of the street. It was mentioned
46 that the sign would be black from midnight to 6:00 AM.

Mr. Ham preferred to have a recommendation by the Planning Commission, then present something smaller to the Council based on the current discussion. He was hoping the Council would approve something higher than 20 ft. He said their project was not comparable to anything else in the city because of the depth and how they had to plan the development.

Commissioner Abbott called for a motion.

Commissioner Jones MOVED to deny the requested text amendment due to concerns with the proposed height and depth of the signs as well as the 7-ft stone base. The commissioners were in favor of a 3-ft stone base. They were in favor of the proposed lighting and letter style, and landscaping changes.

Mr. Warden explained that the stone base height did not need to be seven feet if the height of the sign was shorter.

Commissioner Howden SECONDED the motion.

The vote was recorded as follows:

Commissioner Jerry Abbott	Yes
Commissioner Sherry Carruth	Absent
Commissioner Christopher Howden	Yes
Commissioner Claude Jones	Yes
Commissioner Audrey Moore	Yes
Commissioner Mino Morgese	Yes
Commissioner Tyler Standifird	Absent

Commissioner Howden felt strongly about a 20-ft maximum height. He preferred to keep current location restrictions in place.

Commissioner Moore was open to a 25-ft maximum height and asked that the stone base be changed to three feet.

Commissioner Morgese agreed with Commissioner Moore.

Commissioner Abbott preferred a maximum height of 20 feet. He voiced concerns with the location of the sign relating to residents across the street.

Motion carried 5:0

4. ARCHITECTURAL REVIEW: HIGHLAND MARKETPLACE

Administrative

The Planning Commission will consider a request by Joe Ham, representing MNG Highland Development LLC, for approval of the architecture of (3)

1 buildings in the Highland Marketplace. The Planning Commission will take
2 appropriate action.

3
4 Ms. Smith reviewed the background of the development. She explained that the City Council
5 recently approved a minor site plan amendment. She showed renderings and reviewed details of
6 Buildings A, B, and C.

7
8 Mr. Ham mentioned that the rendering for Building B was a little different. He said the spaces
9 between the stone columns were filled in and back doors would blend in with the same paint
10 color. He said signs might be added to the back of the buildings.

11
12 *Commissioner Morgese MOVED that the Planning Commission accept the findings and*
13 *recommend approval of the proposed architectural plans for Building A, Building B, and*
14 *Building C in Highland Marketplace subject to the two following stipulations recommended by*
15 *staff:*

- 16 1. *All signage shall require a separate permit and meet the requirements of the*
17 *Development Code.*
18 2. *The roofline shall be adjusted to meet the requirements in the Development Code.*
19

20 *Commissioner Jones SECONDED the motion.*

21
22 *The vote was recorded as follows:*

23	
24	<i>Commissioner Jerry Abbott</i>
25	<i>Commissioner Sherry Carruth</i>
26	<i>Commissioner Christopher Howden</i>
27	<i>Commissioner Claude Jones</i>
28	<i>Commissioner Audrey Moore</i>
29	<i>Commissioner Mino Morgese</i>
30	<i>Commissioner Tyler Standifird</i>
31	

<i>Yes</i>
<i>Absent</i>
<i>Yes</i>
<i>Yes</i>
<i>Yes</i>
<i>Yes</i>
<i>Yes</i>
<i>Absent</i>

32 *Motion carried 5:0*
33
34

35 **5. TRAINING: GRAMA and OPMA**

36 City Attorney Rob Patterson will provide training on GRAMA (Government
37 Records Access Management Act) and OPMA (Open & Public Meetings Act).
38

39 Mr. Patterson presented training for OPMA. He reviewed the rules for holding public meetings,
40 electronic messages, and reasons to hold a closed meeting. He advised to not send text messages
41 to other commissioners during public meetings. Mr. Patterson presented training for GRAMA.
42 He talked about records and documents that were subject to request by the public.
43
44

1 **6. PLANNING COMMISSION AND STAFF COMMUNICATION**
2 **ITEMS**

3 The Planning Commission may discuss and receive updates on City events,
4 projects, and issues from the Planning Commissioners and city staff. Topics
5 discussed will be informational only. No final action will be taken on
6 communication items.
7

8 Ms. Smith mentioned that two Planning Commission seats would be filled at the next meeting.
9

10
11 **ADJOURNMENT**

12 *Commissioner Howden MOVED to adjourn the regular meeting. Commissioner Moore*
13 *SECONDED the motion. All present were in favor. The motion carried unanimously.*
14

15 The meeting adjourned at 9:02 PM.
16
17
18
19
20
21

22 I, Heather White, Planning Commission Secretary, hereby certify that the foregoing minutes represent a true,
23 accurate and complete record of the meeting held on January 25, 2022. The document constitutes the official
24 minutes for the Highland City Planning Commission Meeting.
25

26 /s/Heather White
27 Planning Commission Secretary



PLANNING COMMISSION AGENDA REPORT ITEM #5

DATE: February 22, 2022
TO: Planning Commission
FROM: Kellie Smith
Planner & GIS Analyst
SUBJECT: **PUBLIC HEARING/ORDINANCE:** General Plan Amendment –
Transportation Element of the General Plan *Legislative*
TYPE: **LEGISLATIVE:** The Planning Commission is acting in their capacity as a
legislative body to make recommendations to the City Council regarding
amendments to the General Plan as outlined in Section 10-9a-404 of
State Code.

PURPOSE:

The Planning Commission will hold a public hearing to consider a request by City Staff to amend the Transportation Element of the General Plan to update 4800 West from three lane major collector to a five lane arterial. The Planning Commission will take appropriate action.

BACKGROUND:

The Highland City General Plan was adopted in 2008 and included a Transportation Element. State law requires each city to have a section of their general plan that addresses transportation and traffic circulation and identifies major transportation options and connections. Utah Code § 10-9a-403(2)(a)(ii). State law also provides, “After the legislative body has adopted a general plan, no street, park, or other public way, ground, place, or space, no publicly owned building or structure, and no public utility, whether publicly or privately owned, may be constructed or authorized until and unless it conforms to the current general plan.” Utah Code § 10-9a-406.

In January 2022, Mountainland Association of Governments (MAG), Utah Department of Transportation (UDOT), Alpine City, Highland City, and Lehi City commissioned a study “to evaluate traffic operations and connectivity for the eastern portion of State Route 92 (Timpanogos Highway)”.

The study concluded that “there will be a need to widen one of the two primary roads into Alpine (5300 West or 4800 West/Canyon Crest Road). The study team determined that the widening should be done on 4800 West/Canyon Crest Road due to slightly higher future volume projections and better regional connectivity.” The recommendation from the study is to widen 4800 W to include two northbound and southbound through lanes.

SUMMARY OF THE REQUEST:

1. The proposed General Plan amendment is to amend the Recommended Transportation Network Map to change 4800 W, north of S.R. 92, from a three-lane major collector to a proposed five lane arterial.

ANALYSIS:

- The proposed road designations in the General Plan were identified based on traffic volumes in 2008 and the projected volumes at that time. North of S.R. 92, 4800 W was designated as a 3-Lane Major Collector with no proposal to widen in the future. The future condition that was identified in the General Plan in 2008 has changed. This new study completed in January 2022 shows higher traffic volumes and larger queues.
- Section 10-9a-401 of the State Code states:
“...Each municipality shall prepare and adopt a comprehensive, long-range general plan for:
 - a. present and future needs of the municipality; and
 - b. growth and development of all or any part of the land within the municipality.”

The proposed general plan amendment updates the general plan to plan for “present and future needs” of Highland.

- According to the study, “4800 West/Canyon Crest Road was chosen as the best candidate for widening as it had slightly higher future demand and connected directly to North County Boulevard (S.R. 129) which is a regional facility that provides good access to I-15.”
- A Three-Lane Major Collector in the General Plan has a right of way width of 74 feet, 50 feet being asphalt. A Five-Lane Arterial has a right of way width of 106 feet, 82 feet of asphalt. See Attachment #3 for relevant cross-sections.

CITIZEN PARTICIPATION:

Notice of the public hearing was published in the Daily Herald on February 5th, 2022 and posted on the state and city websites on February 3rd, 2021. On February 3rd, a notice of intent was mailed to affected entities including public utility facilities (Rocky Mountain Power, Comcast, Dominion, etc.), Utah County, neighboring cities, and the Alpine School District. Notices were also sent to the residents that live on 4800 W north of Timpanogos Hwy.

Staff has received several calls and emails requesting more information. No formal

opposition letters have been received.

FINDINGS:

The proposed General Plan amendment appears to meet the following findings:

- It is consistent with the goals and policies found in the *Transportation* element of the General Plan and City code.

RECOMMENDATION AND PROPOSED MOTION:

Staff recommends the Planning Commission hold a public hearing and recommend **APPROVAL** of the proposed General Plan amendment.

I move that the Planning Commission accept the findings and recommend **APPROVAL** of the proposed amendment the Transportation Element of the General Plan to update 4800 West from three lane major collector to a five-lane arterial.

ALTERNATIVE MOTION:

I move that the Planning Commission recommend **DENIAL** of the proposed General Plan amendment based on the following findings: (The Commission will need to draft appropriate findings).

FISCAL IMPACT:

This action will not have a financial impact on this fiscal year's budget expenditures.

ATTACHMENTS:

1. Ordinance
2. S.R. 92 Access & Circulation Study – Only includes pages relevant to 4800 W
3. General Plan – Street Cross-sections

**AN ORDINANCE OF THE HIGHLAND CITY COUNCIL AMENDING THE
TRANSPORTATION MASTER PLAN IN THE HIGHLAND CITY GENERAL PLAN AS
SHOWN IN FILENAME (GP-22-01).**

WHEREAS, all due and proper notices of public hearings and public meetings on this Ordinance held before the Highland City Planning Commission (the “Commission”) and the Highland City Council (the “City Council”) were given in the time, form, substance and manner provided by Utah Code Section 10-9a-205; and

WHEREAS, the Commission held public hearing on this Ordinance on February 22, 2022; and

WHEREAS, the City Council held a public meeting on this Ordinance on March 1, 2022.

NOW, THEREFORE, BE IT ORDAINED BY THE Highland City Council as follows:

SECTION 1. That the Highland City General Plan is hereby amended as shown on “Exhibit A”, attached and incorporated herein by reference.

SECTION 2. That the Mayor, the City Administrator, and the City Recorder are hereby authorized and directed to execute all documents and take all steps necessary to carry out the purpose of this Ordinance.

SECTION 3. This Ordinance shall take effect immediately after posting.

SECTION 4. If any provision of this Ordinance is for any reason held by any court of competent jurisdiction to be unenforceable, such provision or portion hereof shall be deemed separate, distinct, and independent of all other provision and such holding shall not affect the validity of the remaining portions of this Ordinance.

PASSED AND ADOPTED by the Highland City Council, March 1, 2022.

HIGHLAND CITY, UTAH

Rodney W. Mann, Mayor

ATTEST:

Stephannie Cottle, City Recorder

COUNCIL MEMBER	YES	NO
Timothy A. Ball	☐	☐
Brittney P. Bills	☐	☐
Kurt Ostler	☐	☐
Kim Rodela	☐	☐
Scott L. Smith	☐	☐

EXHIBIT A

MAP 3-2

**RECOMMENDED
TRANSPORTATION
NETWORK**

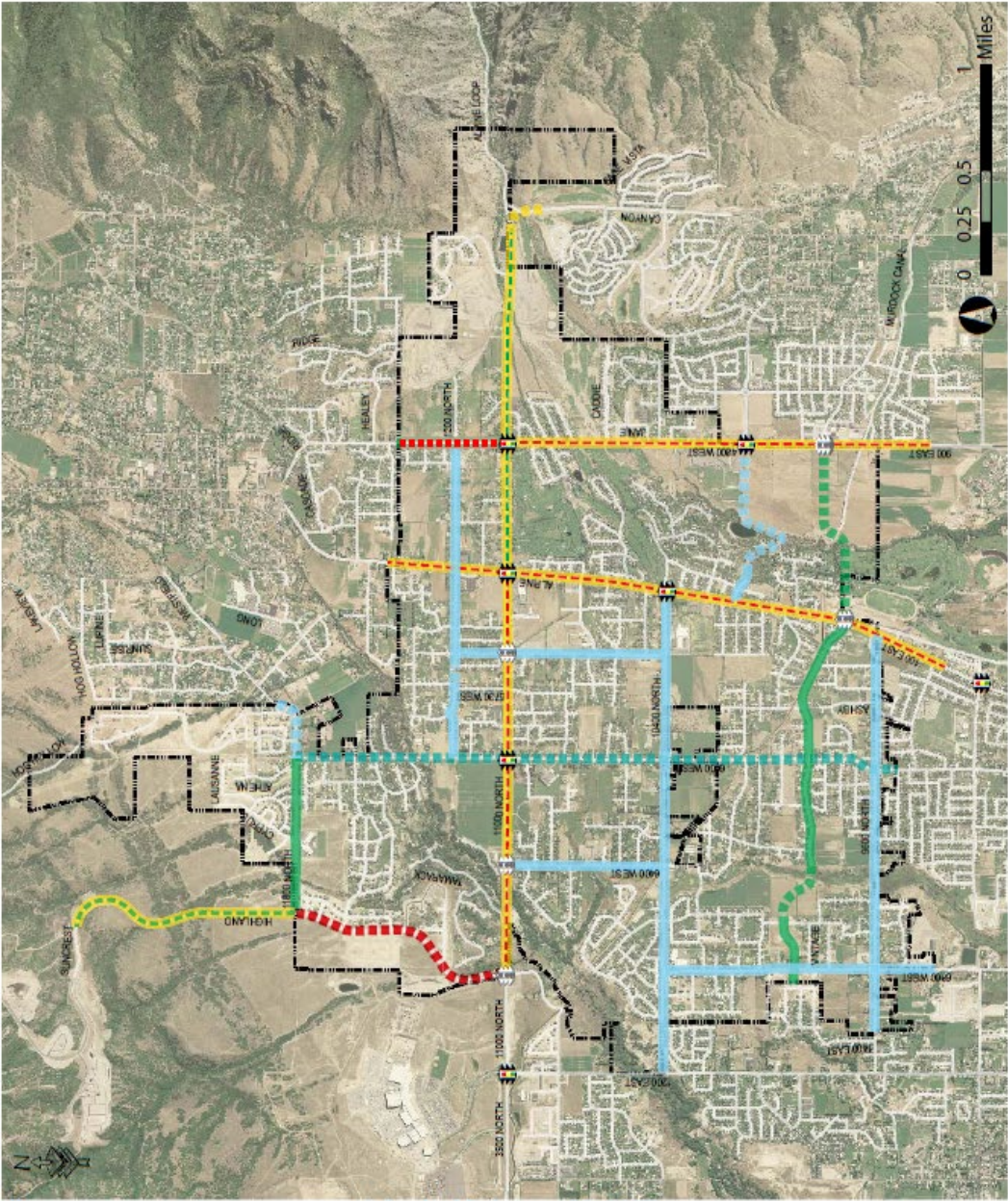
- 5-Lane Arterial - Constructed
- 5-Lane Arterial - Proposed
- 3-Lane Major Collector - Constructed
- 3-Lane Major Collector - Proposed
- 3-Lane Minor Collector - Proposed
- 2-Lane Residential Collector - Constructed
- 2-Lane Residential Collector - Proposed
- Other Jurisdiction (State, County, Municipal)
- Highland City
- Existing Signals
- Planned Signals

Highland City
General Plan Update

LANDMARK
DESIGN



Adopted February 19, 2008



S.R. 92 Access & Circulation Study

January 2022



MAG

Expert Resources. Enriching Lives.





S.R. 92 Access & Circulation Study

prepared by
Avenue Consultants
January 6, 2022



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1 SUMMARY OF FINDINGS

The Utah Department of Transportation, Mountainland Association of Governments, and the cities of Lehi, Highland, and Alpine joined commissioned a study to evaluate traffic operations and connectivity for the eastern portion of State Route 92 (Timpanogos Highway). The study considered major intersection from Lehi Center Street to Canyon Road. Several off-corridor locations were evaluated where existing streets could be extended or connected to improve the overall street network connectivity in the area. The *Utah Street Connectivity Guide* describes how good street connectivity provides benefits to mobility, transportation choices, emergency services, safety, and the economy.

Three specific locations were evaluated for increased street connectivity. From a traffic volume perspective, they generally reduced projected future volumes on S.R. 92 by a few percentage points and would result in slightly better operational performance on the corridor. However, even with relatively minor traffic performance benefits, the connections should still be seriously considered due to the other benefits that good street connectivity can provide.

Currently, traffic on the S.R. 92 generally operates well with minor exceptions at 5300 West (S.R. 74) and Canyon Road. A traffic signal at Canyon Road will fix the issues there and should be able to accommodate future demand as well. A recent study found that a signal is warranted at Canyon Road. By 2050 the major intersections from Highland Boulevard to North County Boulevard are all projected to operate at LOS E or F if no modifications are made. Three travel lanes in each direction will be needed on S.R. 92 from the Commuter Lanes on the west through the 5300 West intersection on the east to meet the anticipated traffic demands. The geometric intersection improvements identified for each intersection are:

- **Highland Boulevard** – Dual westbound left turn lanes, which would require some widening on the south side of the intersection to accommodate two receiving lanes.
- **6000 West** – Three eastbound and westbound through lanes and exclusive northbound and southbound right turn lanes. The analysis shows that exclusive right turn lanes would not be needed to achieve LOS D, but they would be valuable for safety and driver comfort and should still be considered.
- **6400 West** – Three eastbound and westbound through lanes.
- **5300 West (S.R. 74)** – Three eastbound and westbound through lanes and dual eastbound left turn lanes or two northbound and southbound through lanes and dual eastbound left turn lanes.
- **4800 West/North County Boulevard (S.R. 129)** – Two northbound and southbound through lanes.

A need was also identified for widening one the main access roads to Alpine. 4800 West/Canyon Crest Road was selected as the preferred roadway due to slightly higher future volumes and better regional connectivity since it connects to North County Boulevard, which provides good access to I-15.

Concept designs and cost estimates were prepared for improvement options selected by the study team for the 6000 West, 5300 West, and the 4800 West/Canyon Crest Road widening, which includes improvements to the S.R. 92 intersection. A phasing analysis was not completed, but since the 5300 West intersection already operates at LOS E, it would be the location with the highest priority. The concept design for 5300 West is quite robust with additional through lanes on all four legs and dual eastbound left turn lanes. Those improvements could also be phased which would lower the initial cost but would result in additional projects at that same intersection in the future when more improvements are needed.

2 INTRODUCTION

In collaboration with Utah Department of Transportation (UDOT), Mountainland Association of Governments (MAG), Lehi City, Highland City, and Alpine City, an access and circulation study was conducted for the eastern portion of S.R. 92 (Timpanogos Highway). The study primarily considered major intersections from Lehi Center Street to Canyon Road. Several roadway connectivity options were evaluated to understand how they would affect traffic patterns and support the roadway grid network. Concept designs and cost estimates were prepared for roadway widening projects at three separate intersections. **Figure 1** shows the study area.

3 ANALYSIS METHODOLOGY

The analyses performed for this study used the jointly owned and maintained Wasatch Front Regional Council (WFRC)/Mountainland Associated of Governments (MAG) travel demand model and the Synchro traffic operations analysis software. This section describes how each of these tools were used.

3.1 Travel Demand Modeling

The WFRC/MAG travel demand model (TDM) is a tool used to predict future travel and traffic volumes for the Wasatch Front area. WFRC and MAG are the Metropolitan Planning Organizations for the Wasatch Front and are responsible for coordinating transportation planning in the region. MAG is responsible for Utah County and WFRC for Weber, Davis, and Salt Lake Counties. Version 8.3.1 of the travel demand model was used for this study.

The travel demand model has two primary inputs: land use data and transportation system data. The land use data consists of residential and employment data for the entire region. This data is prepared in geographic blocks called Traffic Analysis Zones (TAZs). The travel model inputs are prepared for a base year, which in this case was 2019, and for a future year, which in this case was 2050. These projections are used by the MPOs to develop the Regional Transportation Plan (RTP), which is the plan for the development of the future transportation system. The RTP includes a list of projects that are planned to meet future transportation needs over a 20+ year horizon. The future land use projections for the study area were reviewed with representatives from each city to ensure that the RTP projections still conformed with city plans. **Appendix A** contains figures showing the assumed study area population and employment growth.

Using the land use and transportation system inputs, the travel model predicts how many trips will be generated in the region, where those trips are going, the mode by which they will be made, and the transportation facilities that will be used to get there.

MODEL CALIBRATION

A segment-by-segment comparison was made between model volumes and observed traffic volumes. Daily volume data was obtained from UDOT for the study area, including published *Traffic on Utah Highways* volumes and volumes from UDOT's Automated Traffic Signal Performances Measures (ATSPM) system. A review of the initial base year travel demand model results showed that the model was low on most roads in the study area, including S.R. 92, 5300 West (S.R. 74), North County Boulevard (S.R. 129), and Canyon Road. Testing showed that free-flow speed adjustments were not sufficient to bring the model volumes up to the observed target volumes. Therefore, adjustments were made to the trip generation rates in the study area to increase the number of vehicles on the roadway network and bring the model volumes closer to their target values.

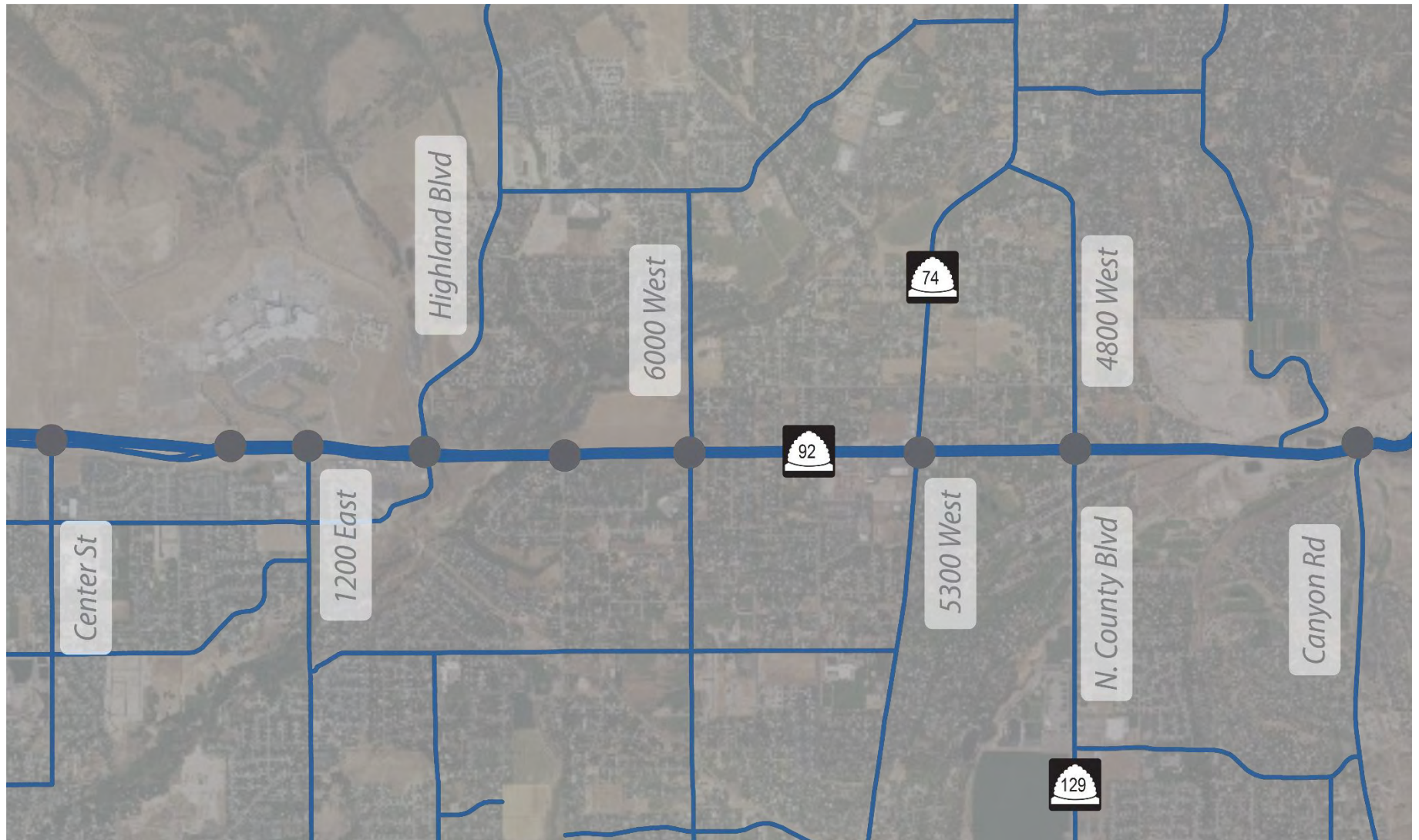


Figure 1: Study Area

3.2 Traffic Operations Analysis

The Synchro software was used to evaluate traffic operations. Synchro is a deterministic signal timing and traffic analysis tool that was selected for this study because it allows for the evaluation of individual intersections based on *Highway Capacity Manual* (HCM) guidelines.

Existing Traffic Volumes

To prepare the Synchro model, initial existing traffic volumes were collected on Tuesday, August 4, 2020. Due on construction on the east end of the corridor, supplemental traffic volumes were collected where the construction had taken place on Tuesday, September 1, 2020. Intersection turning movement counts were collected between 7:00 AM and 9:00 AM and between 4:00 PM and 6:00 PM at:

- Timpanogos Highway (S.R. 92) & Lehi Center Street
- Timpanogos Highway (S.R. 92) & Micron Delivery Access
- Timpanogos Highway (S.R. 92) & 1200 East
- Timpanogos Highway (S.R. 92) & Highland Boulevard
- Timpanogos Highway (S.R. 92) & 6400 West
- Timpanogos Highway (S.R. 92) & 6000 West
- Timpanogos Highway (S.R. 92) & Alpine Highway (S.R. 74)
- Timpanogos Highway (S.R. 92) & North County Boulevard (S.R. 129)
- Timpanogos Highway (S.R. 92) & Canyon Road
- Timpanogos Highway Commuter Lane (S.R. 92) & Center Street Offramps
- Timpanogos Highway Commuter Lane (S.R. 92) & WB Highland Drive Onramp
- Timpanogos Highway Commuter Lane (S.R. 92) & 1200 East Ramps

Generally, the peak hours were determined to be from 7:15 AM to 8:15 AM for the AM peak and 5:00 PM to 6:00 PM for the PM peak. Due to the coronavirus pandemic, 2020 traffic volumes were lower than normal conditions, particularly during the peak hours. ATSPM data was used to compare 2019 traffic volumes to 2020 from which volume adjustment factors were developed for the S.R. 92 corridor. The AM peak hour volumes were increased by an average of 27% and the PM peak hour volumes by an average of 12%. The adjusted volumes were then balanced along the corridor to ensure that the volume leaving one intersection was the same as the volume arriving at the next intersection. **Appendix B** contains a figure showing the adjusted and balance estimated 2020 peak hour intersection volumes.

Existing Signal Timing

Existing traffic signal timing data were obtained from the UDOT Traffic Operations Center and entered into the Synchro models. The intersections were modeled based on existing conditions, including the number of lanes, exclusive turn lanes, storage lengths and movement volumes. The study area was modeled as a network; however, the analysis was completed for each intersection independently.

Future Traffic Volumes

Estimated AM and PM peak hour volumes were developed for 2050 using principles described in the National Highway Cooperative Research Program (NCHRP) Report 255 document. The 2050 peak hour intersection volumes were developed from the existing adjusted and balanced peak hour traffic volumes. The WFRC/MAG travel demand model was run for the base year (2019) and for the future year (2050) and the difference between these models was used to estimate the traffic increase for the inbound and outbound direction for each intersection leg. The turning movement volumes were then balanced to ensure the correct number of inbound and outbound vehicles on each leg of the intersection. The 2050 future volumes are found in **Appendix B**.

3.3 Measures of Effectiveness

Measures of Effectiveness (MOE) are used to evaluate the analysis objectives and compare the results of the various concepts. They quantify the results of the analysis and is often expressed as levels on how well the concept will perform.

For each Synchro analysis, the intersection results were calculated by Synchro following the procedures and equations described in the 2010 HCM. Two key measures of effectiveness were extracted from the Synchro models. The first was average delay per vehicle for the overall intersection and for each turning movement, which was used to determine level of service (LOS), as described in the HCM. LOS describes the operating performance of an intersection or roadway, is measured quantitatively, and is reported on a scale from A to F, with A representing the best performance and F the worst. For signalized intersections, the overall intersection LOS is most commonly reported, while for unsignalized intersections, LOS is most commonly reported based for the approach with the highest delay. **Table 1** provides a brief explanation for each LOS and the associated average delay per vehicle for unsignalized and signalized intersections.

Table 1. Intersection Level of Service Criteria

LOS	Description	2050 PM Peak Hour	
		Unsignalized	Signalized
A	Free Flow Operations / Insignificant Delay	$0 \leq 10$	$0 \leq 10$
B	Smooth Operations / Short Delays	$>10.0 \text{ and } \leq 15.0$	$> 10 \text{ and } \leq 20$
C	Stable Operations / Acceptable Delays	$>15.0 \text{ and } \leq 25.0$	$> 20 \text{ and } \leq 35$
D	Approaching Unstable Operations / Tolerable Delays	$>25.0 \text{ and } \leq 35.0$	$> 35 \text{ and } \leq 55$
E	Unstable Operations / Significant Delays Begin	$>35.0 \text{ and } \leq 50.0$	$> 55 \text{ and } \leq 80$
F	Very Poor Operations / Excessive Delays Occur	> 50.0	> 80

Source: *Highway Capacity Manual 2010*, Transportation Research Board National Research Council, Washington D.C

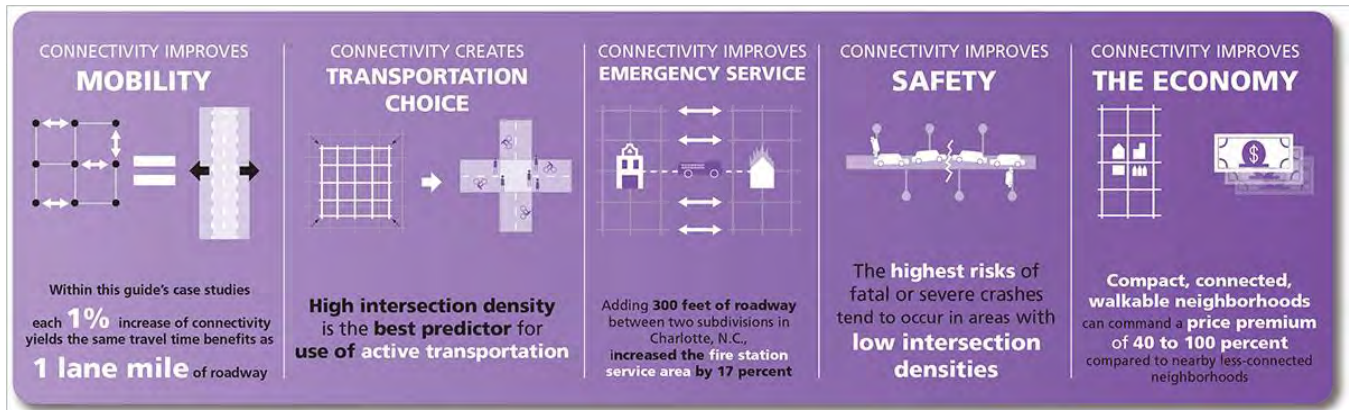
The second key measure of effectiveness extracted from Synchro was the estimated 95th percentile queue length for each turning movement at the study intersections. This represents the vehicle queue length that would only be exceeded five percent of the time during the analysis period. It helps identify issues such as queuing between intersections and queues that exceed their available storage.

4 STREET CONNECTIVITY

The 2019-2050 MAG RTP identifies roadway connectivity and building out the grid network as essential for accommodating long-term travel in the region. Several locations in the study area but on the S.R. 92 corridor were identified where roads could be built to increase connectivity. This section briefly describes the benefits of connectivity and describes the identified locations within the study area.

4.1 Connectivity Benefits

In 2017, the major transportation agencies on the Wasatch Front published the *Utah Street Connectivity Guide*. This document makes the case for connectivity, provides tools for connectivity, and provides a design guide and case studies. The guide clearly illustrates that street connectivity is an important principle that can provide numerous benefits to a community. **Figure 2** is an infographic from the guide that summarizes the benefits of street connectivity.



Source: *Utah Street Connectivity Guide*, March 2017, page 4

Figure 2: Street Connectivity Benefits

As shown in the figure, good street connectivity provides benefits to mobility, transportation choices, emergency services, safety, and the economy. A subsequent UDOT research project performed by the University of Utah states that, "improving street connectivity at a neighborhood level could be considered as a viable community development strategy to mitigate congestion on major arteries without compromising road safety."¹

¹ Street Network Connectivity, Traffic Congestion, and Traffic Safety, Utah Department of Transportation, September 2020

5.1 Existing Conditions

The estimated delay and LOS for all the study intersections are shown below in **Table 3**. Detailed LOS results can be found in **Appendix C**.

Table 3. Existing Intersection Level of Service / Delay Results

Location	2020 AM Peak Hour		2020 PM Peak Hour	
	Worst Approach ²	AM LOS / Delay ¹	Worst Approach ²	PM LOS / Delay ¹
S.R. 92 & Center Street	-	B / 18	-	B / 19
S.R. 92 & Micron Delivery Entrance	SB	C / 22	SB	C / 18
S.R. 92 & 1200 East	-	C / 23	-	C / 26
S.R. 92 & Highland Boulevard	-	B / 14	-	C / 24
S.R. 92 & 6400 West	-	A / 6	-	B / 11
S.R. 92 & 6000 West	-	C / 33	-	D / 49
S.R. 92 & 5600 West	NB	F / >100	NB	F / >100
S.R. 92 & 5300 West (S.R. 74)	-	D / 40	-	E / 65
S.R. 92 & North County Boulevard (S.R. 129)	-	D / 41	-	D / 36
S.R. 92 & Canyon Road	NB	D / 25	NB	F / >100
1. Average delay reported in seconds/vehicle 2. Worst approach delay is reported for unsignalized intersections NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound				

During the AM peak hour, all the signalized intersections operate at LOS D or better; however, there are individual movements at LOS E and F. During the PM peak hour, the signalized intersections except for 5300 West operate at LOS D or better. The intersection 5300 West operates at LOS E with 65 seconds of delay per vehicle and half of the turning movements at LOS E or F. The unsignalized intersections at 5600 West and Canyon Road operate at LOS F with over 100 seconds of delay per vehicle for vehicles on the northbound approach. Traffic signal warrant studies have recently been performed for each of those intersections. The Canyon Road intersection met the warrant criteria while the 5600 West intersection did not. Although the delay is high at 5600 West, the volumes on 5600 West are low, so the overall impact of the high delay is quite low.

5.2 Future 2050 Conditions

This section reports the intersection delay and LOS for each of the intersections within the study area for the future 2050 conditions. By 2050, AM peak hour volumes for the S.R. 92 study area intersections are anticipated to increase by 30-35 percent compared to existing and the PM peak hour volumes by 24-29 percent. Detailed volume information can be found in **Appendix B**.

The No Build results are reported for each intersection followed by the results of the various improvement scenarios that were considered. Generally speaking, the S.R. 92 corridor volumes are projected to increase enough that widening to three travel lanes in each direction would be required for the corridor to operate at an acceptable LOS. Certain intersections also include other improvements such as dual left turn lanes. Intersections that are not reported in this section but are within the study area are not anticipated to need additional intersection improvements beyond their existing configuration. This is based on the assumption that Canyon Road would be signalized. All the results presented in this section assume that the study area connections

5.2.5 North County Boulevard (S.R. 129)

The North County Boulevard (S.R. 129) intersection LOS for the PM peak hour for the 2050 with connections scenario is shown in **Figure 11**. Without any intersection improvements, 6000 West is expected to perform at LOS E with 68 seconds of delay per vehicle. By adding a second northbound and southbound through lane, the intersection is expected to perform at LOS D with 36 seconds of delay per vehicle. Another viable solution is to have dual southbound left turn lanes. Under this improvement, the intersection is expected to perform at LOS D with 44 seconds of delay per vehicle.

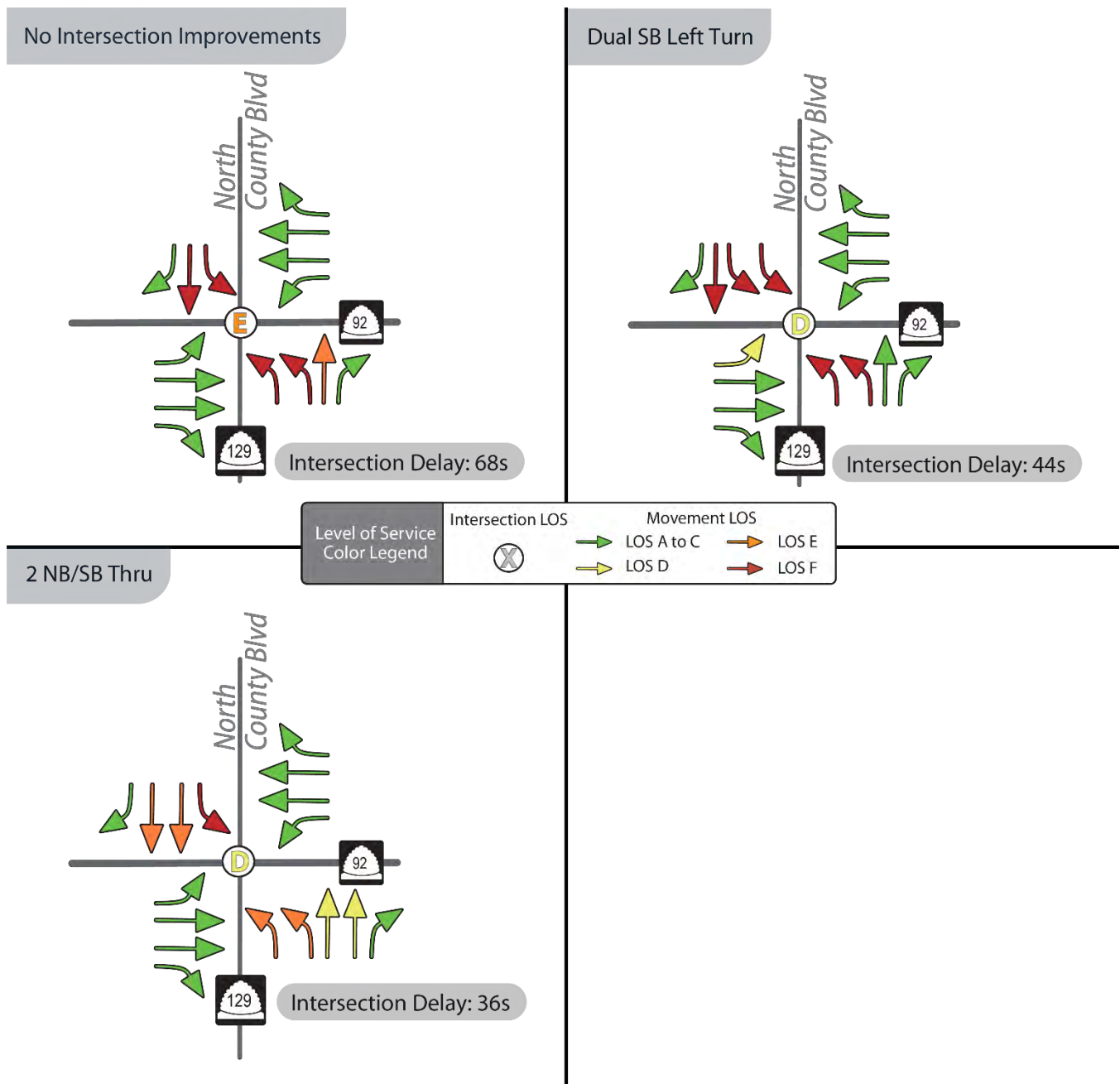


Figure 11: North County Boulevard (S.R. 129) Intersection LOS

7.3 4800 West/Canyon Crest Road

As mentioned, concept designs for the widening of 4800 West/Canyon Crest Road can be found in **Appendix D**. The concept design for S.R. 92 & North County Boulevard (S.R. 129) intersection is shown in **Figure 14**. The concept includes two northbound and southbound through lanes.

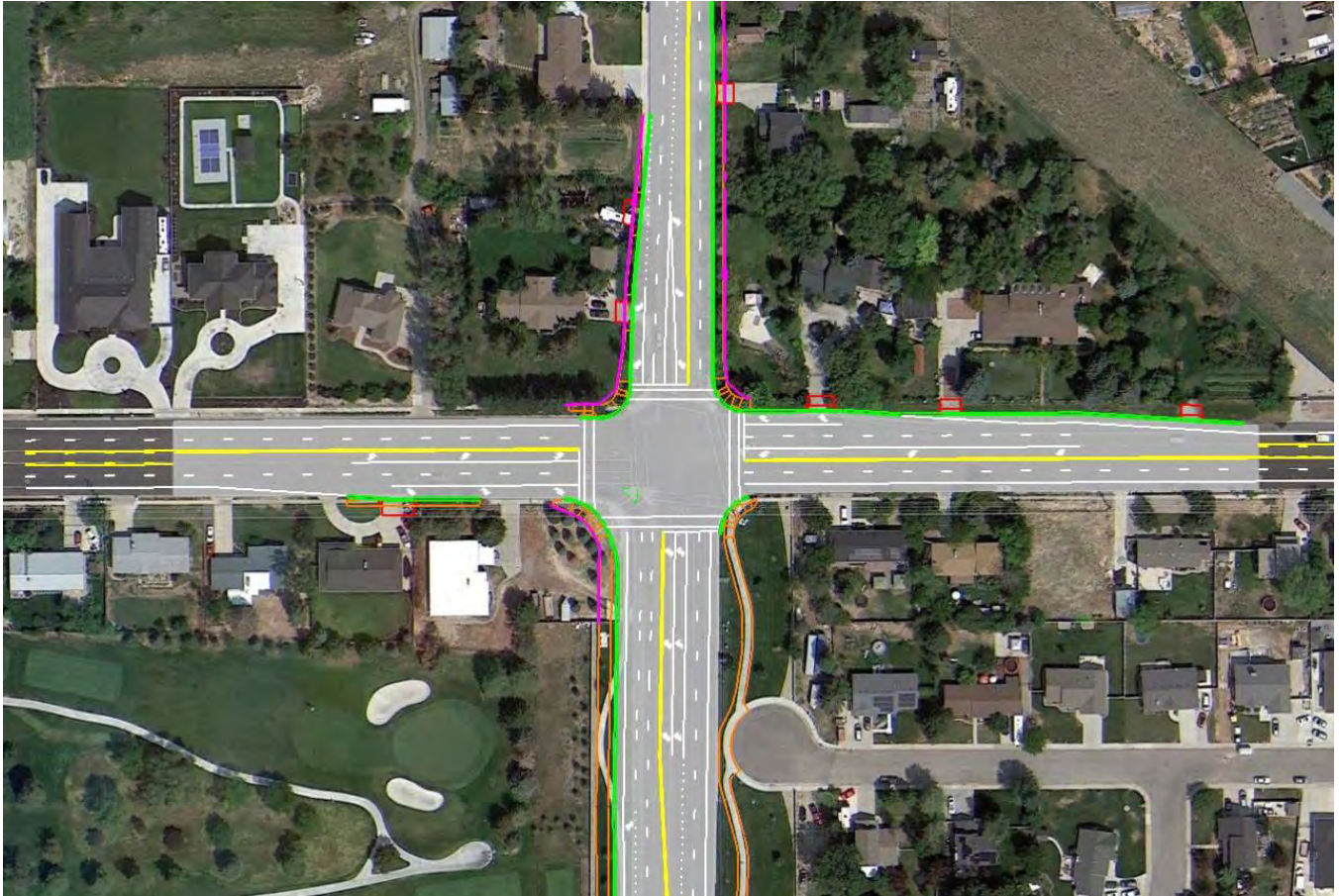


Figure 14: North County Boulevard (S.R. 129) Intersection Concept Design

Due to the size of the corridor and the cost to build the whole thing at once, the corridor was divided into three phases so that the widening could occur incrementally in a more financially feasible manner. The three phases and their estimated costs are shown in **Table 4**.

Table 4. 4800 West/Canyon Crest Road Phase Limits and Cost Estimates

Phase	Limits	Cost (2021 dollars)	Cost (2025 dollars)
1	Country Club Drive to Healey Boulevard	\$7,605,000	\$8,944,000
2	Healey Boulevard to Ridge Drive	\$3,622,000	\$4,259,000
3	Ridge Drive to Main Street	\$2,753,000	\$3,236,000

8 CONCLUSIONS

Per the *Utah Street Connectivity Guide* good street connectivity provides benefits to mobility, transportation choices, emergency services, safety, and the economy. Four potential connection options were identified to increase the street connectivity in Lehi, Highland and Alpine. The four connections at 11800 North, Long Drive,

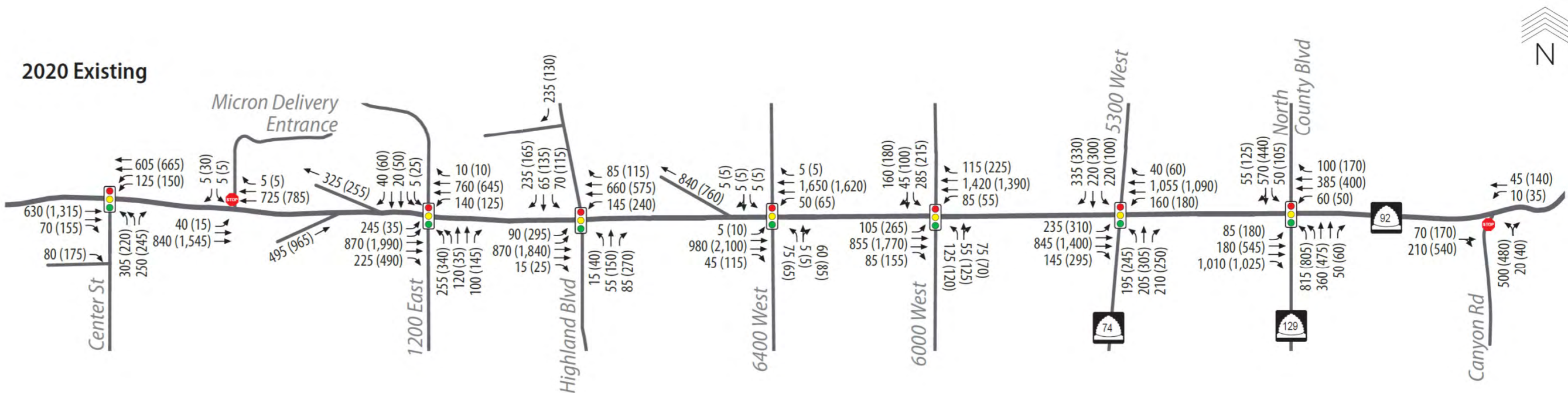
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Ranch Drive, and High Bench Road would generally result in a minor decrease to future traffic volumes on S.R. 92 throughout the study area and a corresponding decrease in intersection delay. Even though the delay reduction would be relatively minor, the connections should still be seriously considered due to the other benefits that good street connectivity can provide.

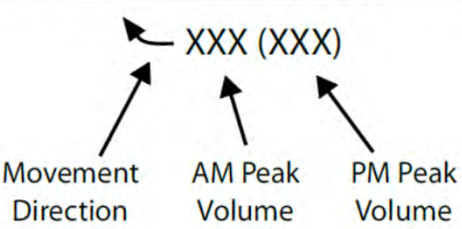
Specific S.R. 92 intersection analyses were performed for 2050 future conditions with connections. Generally, the improvements required for the intersections to operate at acceptable LOS is widening S.R. 92 to three through lanes in the eastbound and westbound directions from the Express Lanes on the west through the 5300 West intersection on the east. Some intersections would also require additional left turn lanes or exclusive right turn lanes. With these improvements, each intersection would operate at LOS D or better within the study area. Because the 5300 West intersection currently operates at LOS E, it would have the highest priority for improvement. The improvements there could be phased, which would reduce the initial cost but would require additional work at the same location in the future. Concept designs and cost estimates for intersection improvements at 6000 West and 5300 West were prepared.

The study also determined there will be a need to widen one of the two primary road into Alpine (5300 West or 4800 West/Canyon Crest Road). The study team determined that the widening should be done on 4800 West/Canyon Crest Road due to slightly higher future volume projections and better regional connectivity. To make funding more manageable, the widening was divided into three phases. Concept designs and cost estimates were prepared for each phase of the widening.

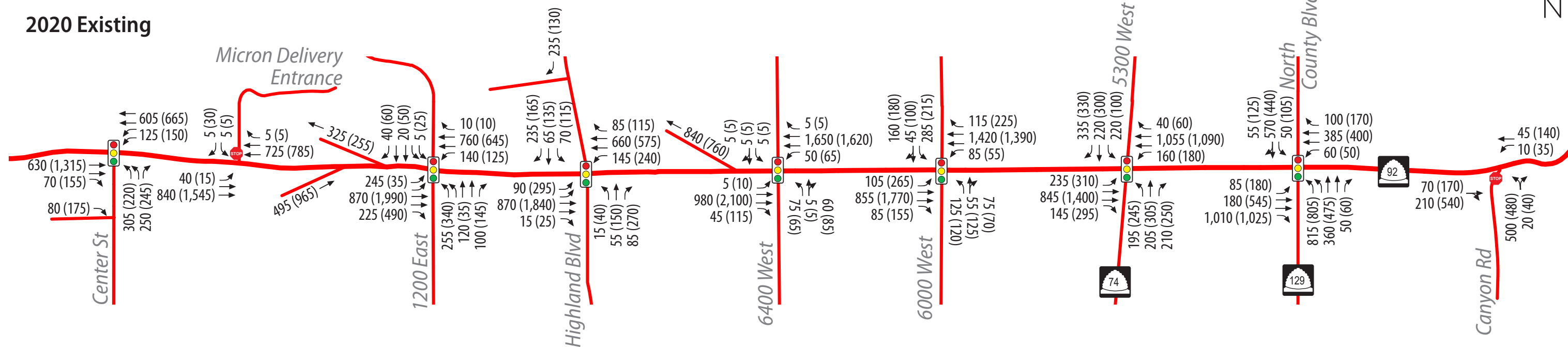
2020 Existing



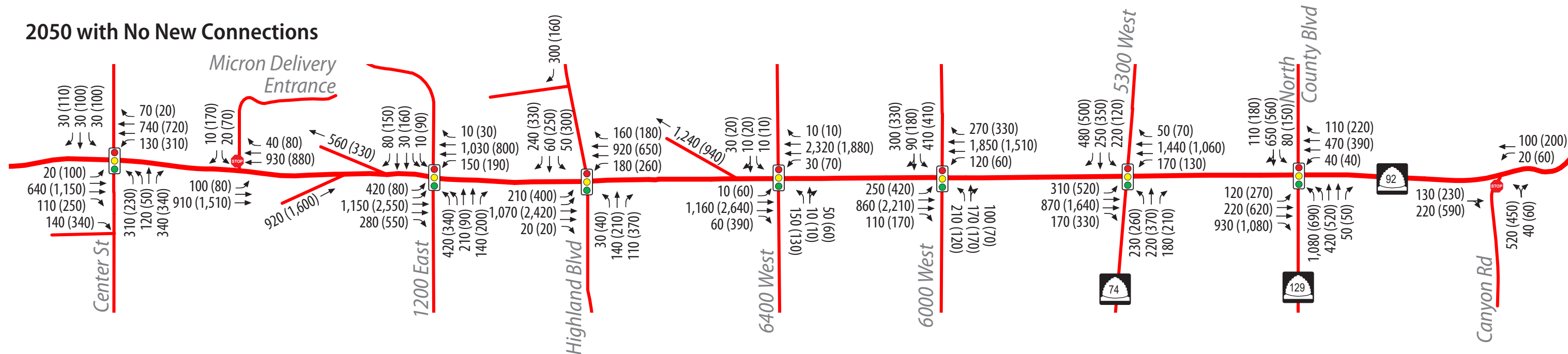
Volume Legend



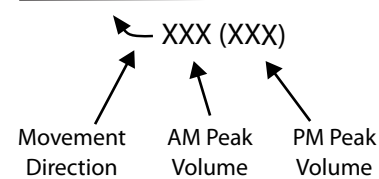
2020 Existing



2050 with No New Connections



Volume Legend



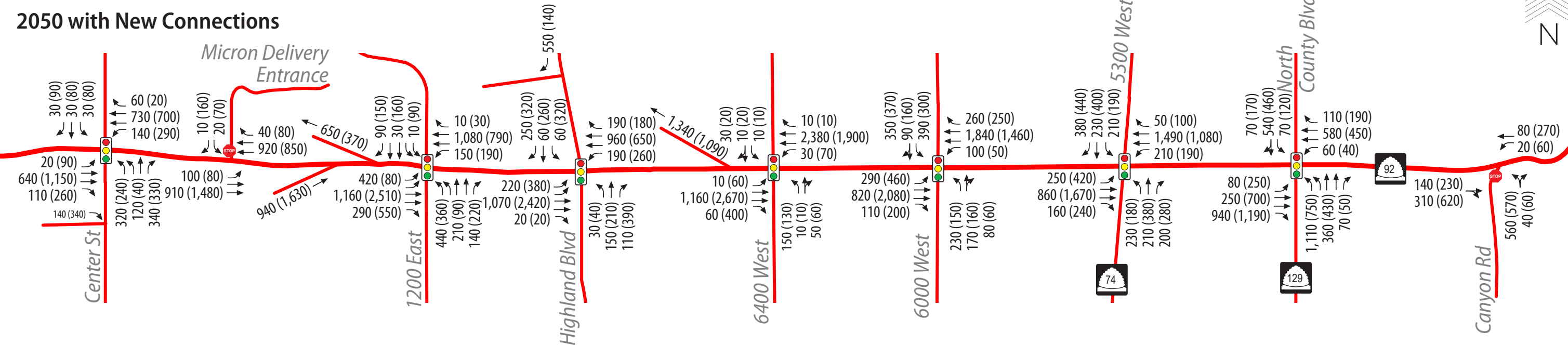
2020 Existing volumes based on 2020 traffic counts adjusted to reflect pre-pandemic conditions

Weekday Peak Hour Volumes

SR-92 North Regional Traffic Study

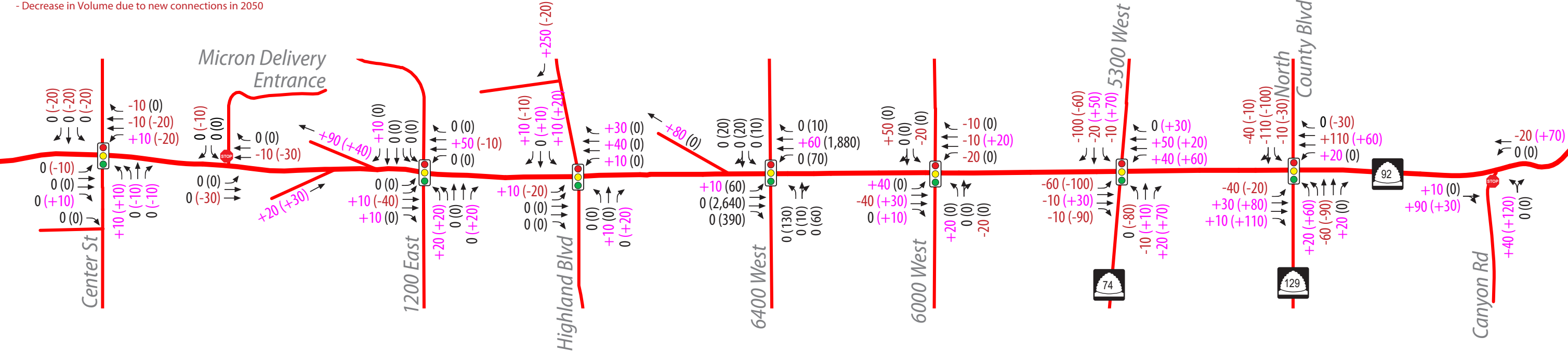
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2050 with New Connections

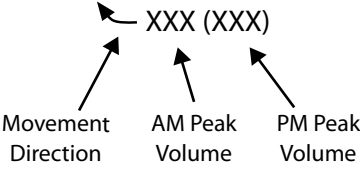


Change in Volumes Due to New Connections

+ Increase in Volume due to new connections in 2050
- Decrease in Volume due to new connections in 2050



Volume Legend



Weekday Peak Hour Volumes

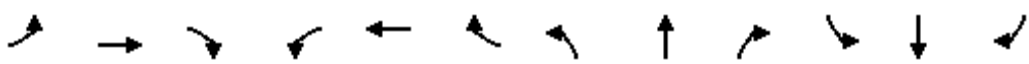
SR-92 North Regional Traffic Study

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Timings

109: 4800 West & SR-92

04/15/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	545	1025	50	400	170	805	475	60	105	440	125
Future Volume (vph)	180	545	1025	50	400	170	805	475	60	105	440	125
Turn Type	Perm	NA	Free	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		Free	2		2			4			8
Detector Phase	6	6		2	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	25.0	25.0		24.8	24.8	24.8	10.8	24.3	24.3	10.2	24.6	24.6
Total Split (s)	40.0	40.0		40.0	40.0	40.0	40.0	35.0	35.0	20.0	45.0	45.0
Total Split (%)	32.0%	32.0%		32.0%	32.0%	32.0%	32.0%	28.0%	28.0%	16.0%	36.0%	36.0%
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	4.0	4.8	4.8	3.2	4.1	4.1
All-Red Time (s)	2.0	2.0		1.8	1.8	1.8	1.8	1.5	1.5	2.0	2.5	2.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0		6.8	6.8	6.8	5.8	6.3	6.3	5.2	6.6	6.6
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max		Max	Max	Max	None	None	None	None	None	None
Act Effect Green (s)	33.2	33.2	118.3	33.4	33.4	33.4	31.7	56.0	56.0	10.5	33.8	33.8
Actuated g/C Ratio	0.28	0.28	1.00	0.28	0.28	0.28	0.27	0.47	0.47	0.09	0.29	0.29
v/c Ratio	0.90	0.60	0.70	0.36	0.43	0.32	0.95	0.59	0.08	0.73	0.90	0.25
Control Delay	84.3	41.0	2.6	45.2	37.7	6.6	62.9	26.2	2.9	79.6	61.8	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	84.3	41.0	2.6	45.2	37.7	6.6	62.9	26.2	2.9	79.6	61.8	7.1
LOS	F	D	A	D	D	A	E	C	A	E	E	A
Approach Delay		23.0			29.8			47.2			54.4	
Approach LOS		C			C			D			D	

Intersection Summary

Cycle Length: 125

Actuated Cycle Length: 118.3

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 36.2

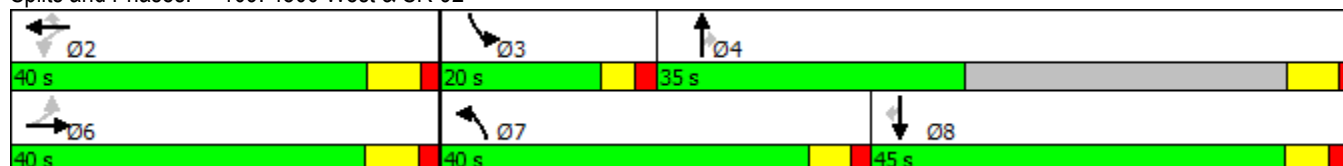
Intersection LOS: D

Intersection Capacity Utilization 91.4%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 109: 4800 West & SR-92



Lanes, Volumes, Timings
109: 4800 West & SR-92

04/19/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	270	620	1080	40	390	220	690	520	50	150	560	180
Future Volume (vph)	270	620	1080	40	390	220	690	520	50	150	560	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		250	150		130	250		275	150		530
Storage Lanes	1		1	1		2	1		1	1		1
Taper Length (ft)	75			75			75			30		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	1863	1583	1770	1863	1583
Flt Permitted	0.464			0.311			0.950			0.950		
Satd. Flow (perm)	864	3539	1583	579	3539	1583	3433	1863	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			690			239			67			196
Link Speed (mph)		45			45			45			35	
Link Distance (ft)		3245			900			1430			1106	
Travel Time (s)		49.2			13.6			21.7			21.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	293	674	1174	43	424	239	750	565	54	163	609	196
Shared Lane Traffic (%)												
Lane Group Flow (vph)	293	674	1174	43	424	239	750	565	54	163	609	196
Turn Type	Perm	NA	Free	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		Free	2		2			4			8
Detector Phase	6	6		2	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	25.0	25.0		24.8	24.8	24.8	10.8	24.3	24.3	10.2	24.6	24.6
Total Split (s)	72.0	72.0		72.0	72.0	72.0	31.0	58.0	58.0	20.0	47.0	47.0
Total Split (%)	48.0%	48.0%		48.0%	48.0%	48.0%	20.7%	38.7%	38.7%	13.3%	31.3%	31.3%
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	4.0	4.8	4.8	3.2	4.1	4.1
All-Red Time (s)	2.0	2.0		1.8	1.8	1.8	1.8	1.5	1.5	2.0	2.5	2.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0		6.8	6.8	6.8	5.8	6.3	6.3	5.2	6.6	6.6
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	None	None	None	None	None
Act Effect Green (s)	65.0	65.0	150.0	65.2	65.2	65.2	25.2	52.0	52.0	14.5	40.4	40.4

Lanes, Volumes, Timings
109: 4800 West & SR-92

04/19/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.43	0.43	1.00	0.43	0.43	0.43	0.17	0.35	0.35	0.10	0.27	0.27
v/c Ratio	0.78	0.44	0.74	0.17	0.28	0.29	1.30	0.88	0.09	0.95	1.22	0.34
Control Delay	25.8	16.3	13.5	33.2	33.3	10.0	195.8	61.9	5.0	123.6	159.9	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.8	16.3	13.5	33.2	33.3	10.0	195.8	61.9	5.0	123.6	159.9	7.0
LOS	C	B	B	C	C	A	F	E	A	F	F	A
Approach Delay	16.1			25.4			133.0			122.8		
Approach LOS	B			C			F			F		

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 130 (87%), Referenced to phase 2:WBTL and 6:EBTL, Start of 1st Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.30

Intersection Signal Delay: 68.2

Intersection LOS: E

Intersection Capacity Utilization 96.7%

ICU Level of Service F

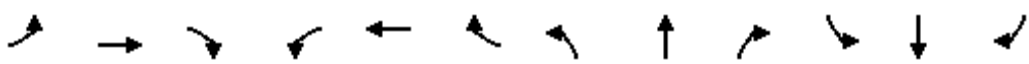
Analysis Period (min) 15

Splits and Phases: 109: 4800 West & SR-92

 Ø2 (R)	 Ø3	 Ø4
72 s	20 s	58 s
 Ø6 (R)	 Ø7	 Ø8
72 s	31 s	47 s

Lanes, Volumes, Timings
109: 4800 West & SR-92

04/26/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	250	700	1190	40	450	190	750	430	50	120	460	170
Future Volume (vph)	250	700	1190	40	450	190	750	430	50	120	460	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)	0%			0%			0%			0%		
Storage Length (ft)	150		250	150		500	250		275	150		530
Storage Lanes	1		0	1		1	2		1	2		1
Taper Length (ft)	75			75			75			30		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor												
Frt	0.850			0.850			0.850			0.850		
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	1863	1583	3433	1863	1583
Flt Permitted	0.399			0.234			0.950			0.950		
Satd. Flow (perm)	743	3539	1583	436	3539	1583	3433	1863	1583	3433	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			709			207			67			132
Link Speed (mph)		45			45			45			35	
Link Distance (ft)		3245			900			1430			1106	
Travel Time (s)		49.2			13.6			21.7			21.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	272	761	1293	43	489	207	815	467	54	130	500	185
Shared Lane Traffic (%)												
Lane Group Flow (vph)	272	761	1293	43	489	207	815	467	54	130	500	185
Turn Type	Perm	NA	Free	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		Free	2		2			4			8
Detector Phase	6	6		2	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	38.0	38.0		33.8	33.8	33.8	10.8	33.3	33.3	10.2	33.6	33.6
Total Split (s)	63.0	63.0		63.0	63.0	63.0	41.0	71.0	71.0	16.0	46.0	46.0
Total Split (%)	42.0%	42.0%		42.0%	42.0%	42.0%	27.3%	47.3%	47.3%	10.7%	30.7%	30.7%
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	4.0	4.8	4.8	3.2	4.1	4.1
All-Red Time (s)	2.0	2.0		1.8	1.8	1.8	1.8	1.5	1.5	2.0	2.5	2.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0		6.8	6.8	6.8	5.8	6.3	6.3	5.2	6.6	6.6
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	None	None	None	None	None
Act Effect Green (s)	56.0	56.0	150.0	56.2	56.2	56.2	35.2	67.0	67.0	8.5	39.4	39.4

Lanes, Volumes, Timings
109: 4800 West & SR-92

04/26/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.37	0.37	1.00	0.37	0.37	0.37	0.23	0.45	0.45	0.06	0.26	0.26
v/c Ratio	0.98	0.58	0.82	0.26	0.37	0.29	1.01	0.56	0.07	0.67	1.02	0.36
Control Delay	53.8	17.2	21.6	31.9	28.5	7.3	90.9	34.3	3.7	85.8	100.0	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.8	17.2	21.6	31.9	28.5	7.3	90.9	34.3	3.7	85.8	100.0	16.0
LOS	D	B	C	C	C	A	F	C	A	F	F	B
Approach Delay	23.9			22.8			67.6			78.7		
Approach LOS	C			C			E			E		

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of 1st Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 43.5

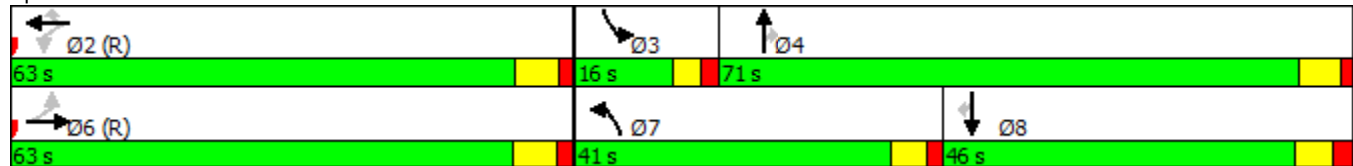
Intersection LOS: D

Intersection Capacity Utilization 95.1%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 109: 4800 West & SR-92



Queues

109: 4800 West & SR-92

04/26/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	272	761	1293	43	489	207	815	467	54	130	500	185
v/c Ratio	0.98	0.58	0.82	0.26	0.37	0.29	1.01	0.56	0.07	0.67	1.02	0.36
Control Delay	53.8	17.2	21.6	31.9	28.5	7.3	90.9	34.3	3.7	85.8	100.0	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.8	17.2	21.6	31.9	28.5	7.3	90.9	34.3	3.7	85.8	100.0	16.0
Queue Length 50th (ft)	250	181	1212	26	156	43	~422	334	0	65	~518	40
Queue Length 95th (ft)	m#307	m193	m1265	60	208	71	#562	460	20	101	#745	110
Internal Link Dist (ft)		3165			820			1350			1026	
Turn Bay Length (ft)	150		250	150		500	250		275	150		530
Base Capacity (vph)	277	1321	1583	163	1325	722	805	831	743	247	489	513
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.58	0.82	0.26	0.37	0.29	1.01	0.56	0.07	0.53	1.02	0.36

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
109: 4800 West & SR-92

04/26/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 		 	 			 	
Traffic Volume (vph)	250	700	1190	40	450	190	750	430	50	120	460	170
Future Volume (vph)	250	700	1190	40	450	190	750	430	50	120	460	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		250	150		500	250		275	150		530
Storage Lanes	1		0	1		1	2		1	1		1
Taper Length (ft)	75			75			75			30		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.425			0.275			0.950			0.950		
Satd. Flow (perm)	792	3539	1583	512	3539	1583	3433	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			792			207			67			160
Link Speed (mph)		45			45			45			35	
Link Distance (ft)		3245			900			1430			1106	
Travel Time (s)		49.2			13.6			21.7			21.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	272	761	1293	43	489	207	815	467	54	130	500	185
Shared Lane Traffic (%)												
Lane Group Flow (vph)	272	761	1293	43	489	207	815	467	54	130	500	185
Turn Type	Perm	NA	Free	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		Free	2		2			4			8
Detector Phase	6	6		2	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	38.0	38.0		33.8	33.8	33.8	10.8	33.3	33.3	10.2	33.6	33.6
Total Split (s)	70.0	70.0		70.0	70.0	70.0	46.0	55.0	55.0	25.0	34.0	34.0
Total Split (%)	46.7%	46.7%		46.7%	46.7%	46.7%	30.7%	36.7%	36.7%	16.7%	22.7%	22.7%
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	4.0	4.8	4.8	3.2	4.1	4.1
All-Red Time (s)	2.0	2.0		1.8	1.8	1.8	1.8	1.5	1.5	2.0	2.5	2.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0		6.8	6.8	6.8	5.8	6.3	6.3	5.2	6.6	6.6
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	None	None	None	None	None
Act Effect Green (s)	67.8	67.8	150.0	68.0	68.0	68.0	37.7	49.7	49.7	14.0	25.2	25.2

Lanes, Volumes, Timings
109: 4800 West & SR-92

04/26/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.45	0.45	1.00	0.45	0.45	0.45	0.25	0.33	0.33	0.09	0.17	0.17
v/c Ratio	0.76	0.48	0.82	0.19	0.31	0.25	0.95	0.40	0.09	0.79	0.84	0.46
Control Delay	22.5	14.1	17.0	23.3	21.7	6.7	74.9	39.7	5.3	96.7	74.0	15.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.5	14.1	17.0	23.3	21.7	6.7	74.9	39.7	5.3	96.7	74.0	15.1
LOS	C	B	B	C	C	A	E	D	A	F	E	B
Approach Delay	16.7			17.6			59.8			64.2		
Approach LOS	B			B			E			E		

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of 1st Green

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 35.3

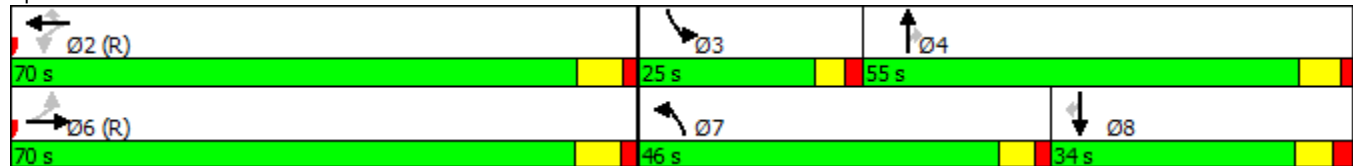
Intersection LOS: D

Intersection Capacity Utilization 83.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 109: 4800 West & SR-92



Queues

109: 4800 West & SR-92

04/26/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	272	761	1293	43	489	207	815	467	54	130	500	185
v/c Ratio	0.76	0.48	0.82	0.19	0.31	0.25	0.95	0.40	0.09	0.79	0.84	0.46
Control Delay	22.5	14.1	17.0	23.3	21.7	6.7	74.9	39.7	5.3	96.7	74.0	15.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.5	14.1	17.0	23.3	21.7	6.7	74.9	39.7	5.3	96.7	74.0	15.1
Queue Length 50th (ft)	193	180	1148	24	148	43	400	178	0	127	249	21
Queue Length 95th (ft)	m186	m175	m935	49	180	71	#503	240	24	194	315	95
Internal Link Dist (ft)		3165			820			1350			1026	
Turn Bay Length (ft)	150		250	150		500	250		275	150		530
Base Capacity (vph)	357	1598	1583	231	1603	830	920	1190	577	233	646	419
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.48	0.82	0.19	0.31	0.25	0.89	0.39	0.09	0.56	0.77	0.44

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



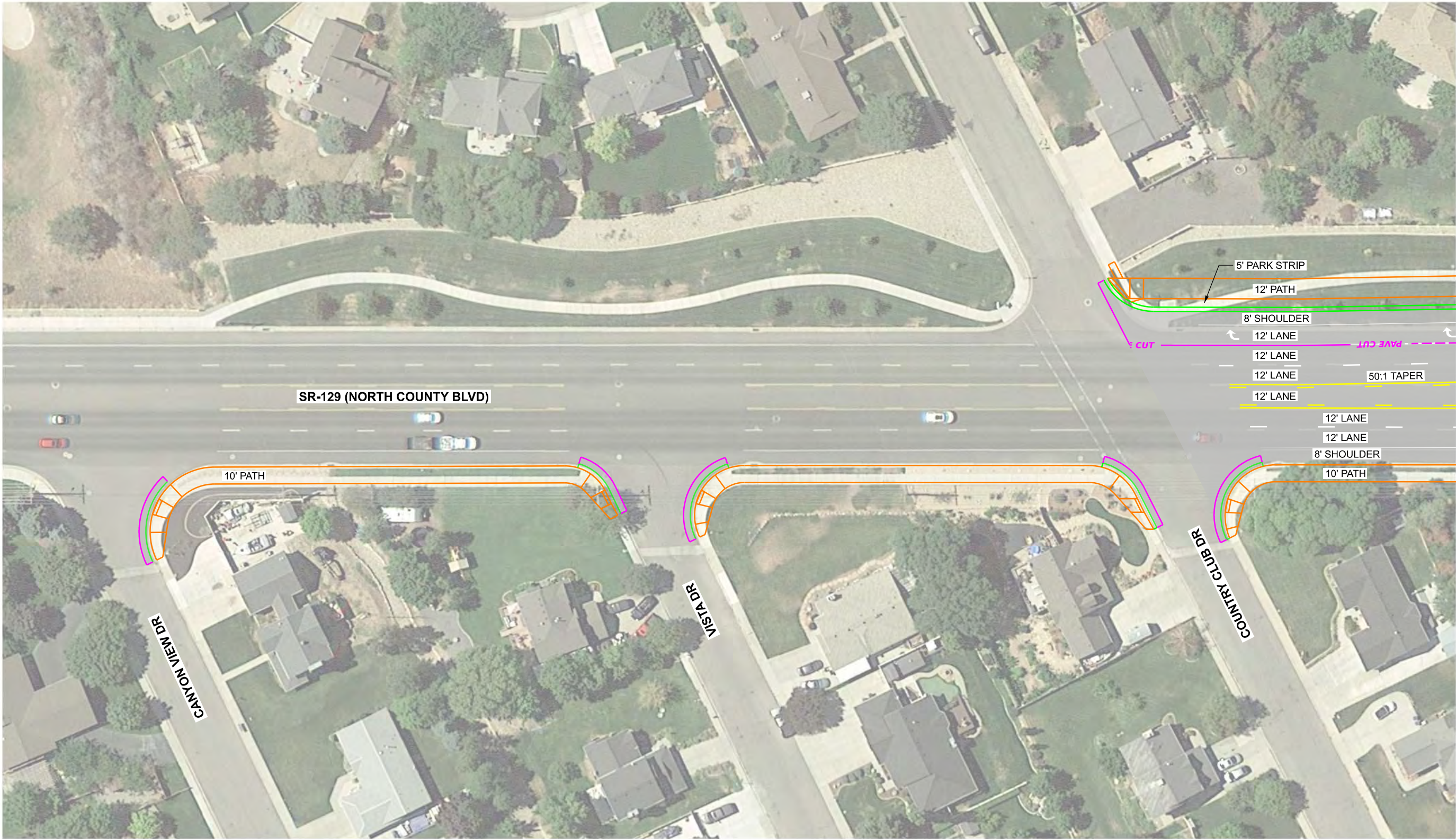
Appendix D

4800 West/Canyon Crest Road Concept Design



1/7/2022 20-045 RD-01.dgn

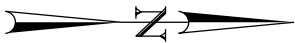
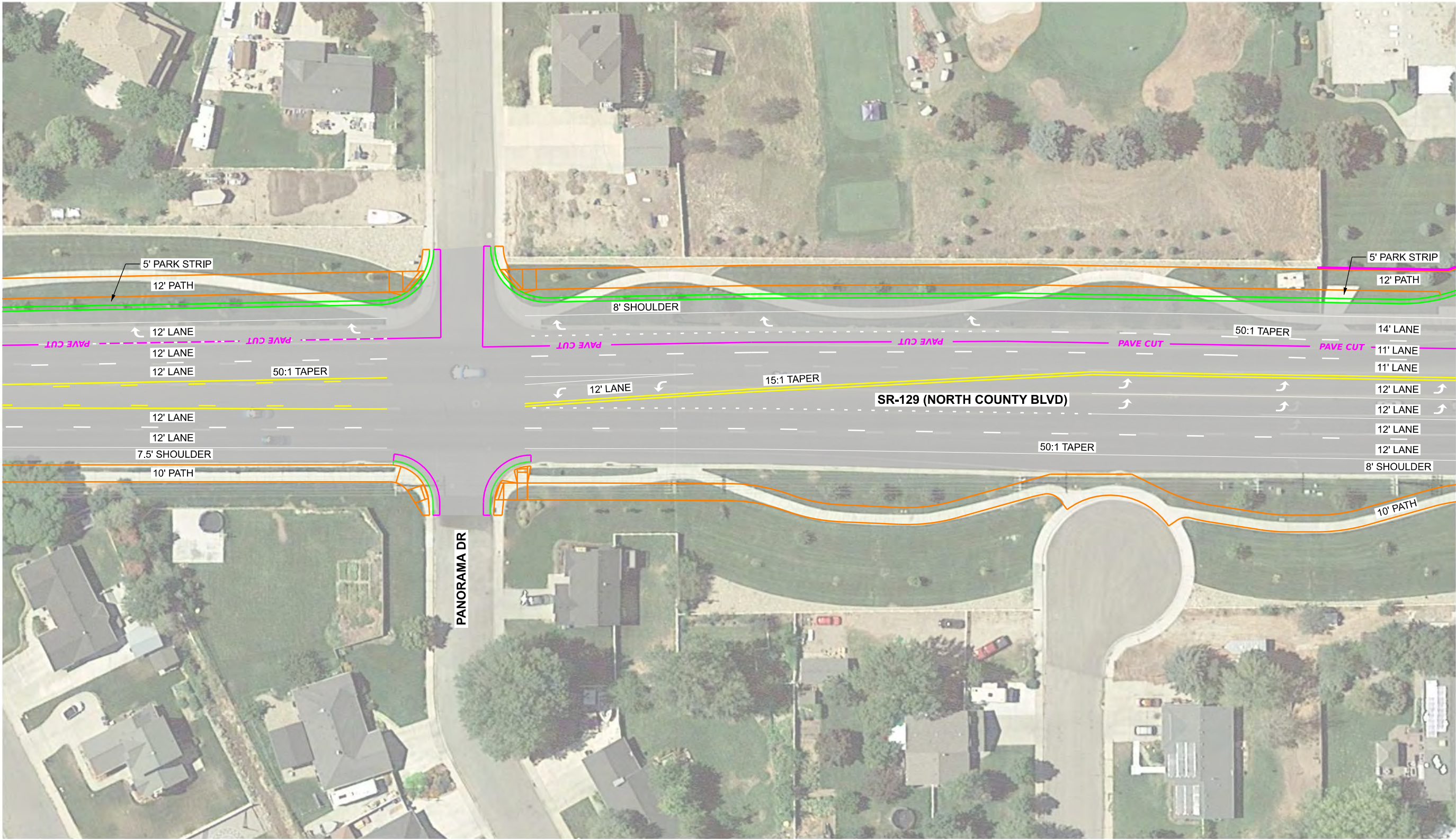
PRELIMINARY
NOT FOR CONSTRUCTION
1/7/2022



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PROJECT		SR-92 ACCESS AND CIRCULATION STUDY															
PROJECT NUMBER		S-0092(39)1		PIN		16992		APPROVED		DRAWN BY							
ROADWAY - PHASE 1						PROFESSIONAL ENGINEER		DATE		QC CHECKED BY							
										NO.		DATE		APPROVED BY		REMARKS	

1/7/2022 20-045 RD-02.dgn

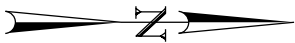
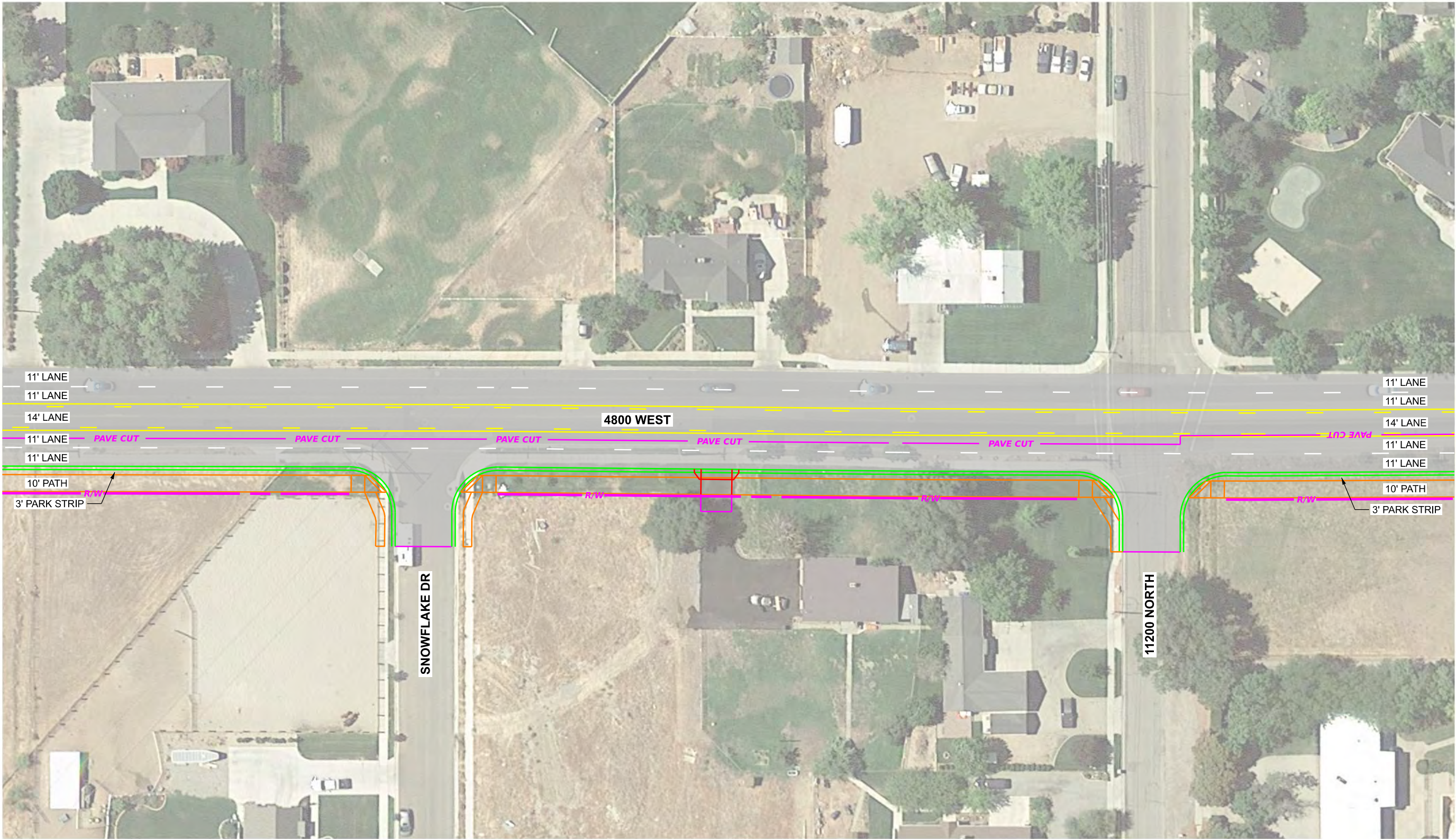
PRELIMINARY
NOT FOR CONSTRUCTION
1/7/2022



SHEET NO. RD-02		PROJECT		SR-92 ACCESS AND CIRCULATION STUDY		UTAH DEPARTMENT OF TRANSPORTATION				REVISIONS					
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				PIN		16992		APPROVED				DRAWN BY			
												QC CHECKED BY			
								PROFESSIONAL ENGINEER				DATE			
												APPROVED BY			
												NO.			
												REMARKS			

1/7/2022 20-045 RD-04.dgn

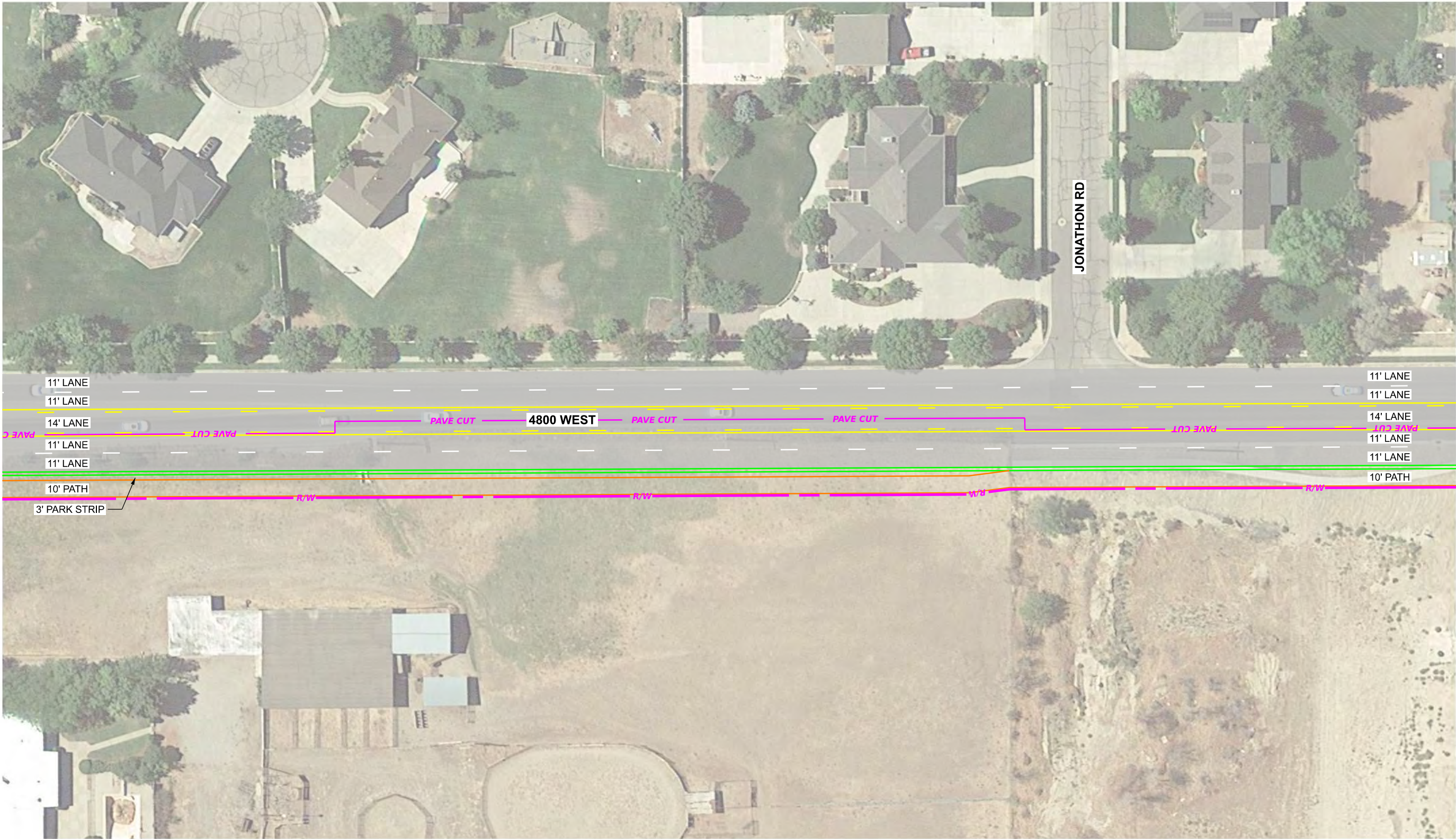
PRELIMINARY
NOT FOR CONSTRUCTION
1/7/2022



PROJECT		SR-92 ACCESS AND CIRCULATION STUDY		UTAH DEPARTMENT OF TRANSPORTATION				REVISIONS			
PROJECT NUMBER		S-0092(39)1		PIN		16992		AVENUE CONSULTANTS			
								APPROVED			
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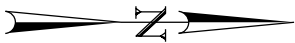
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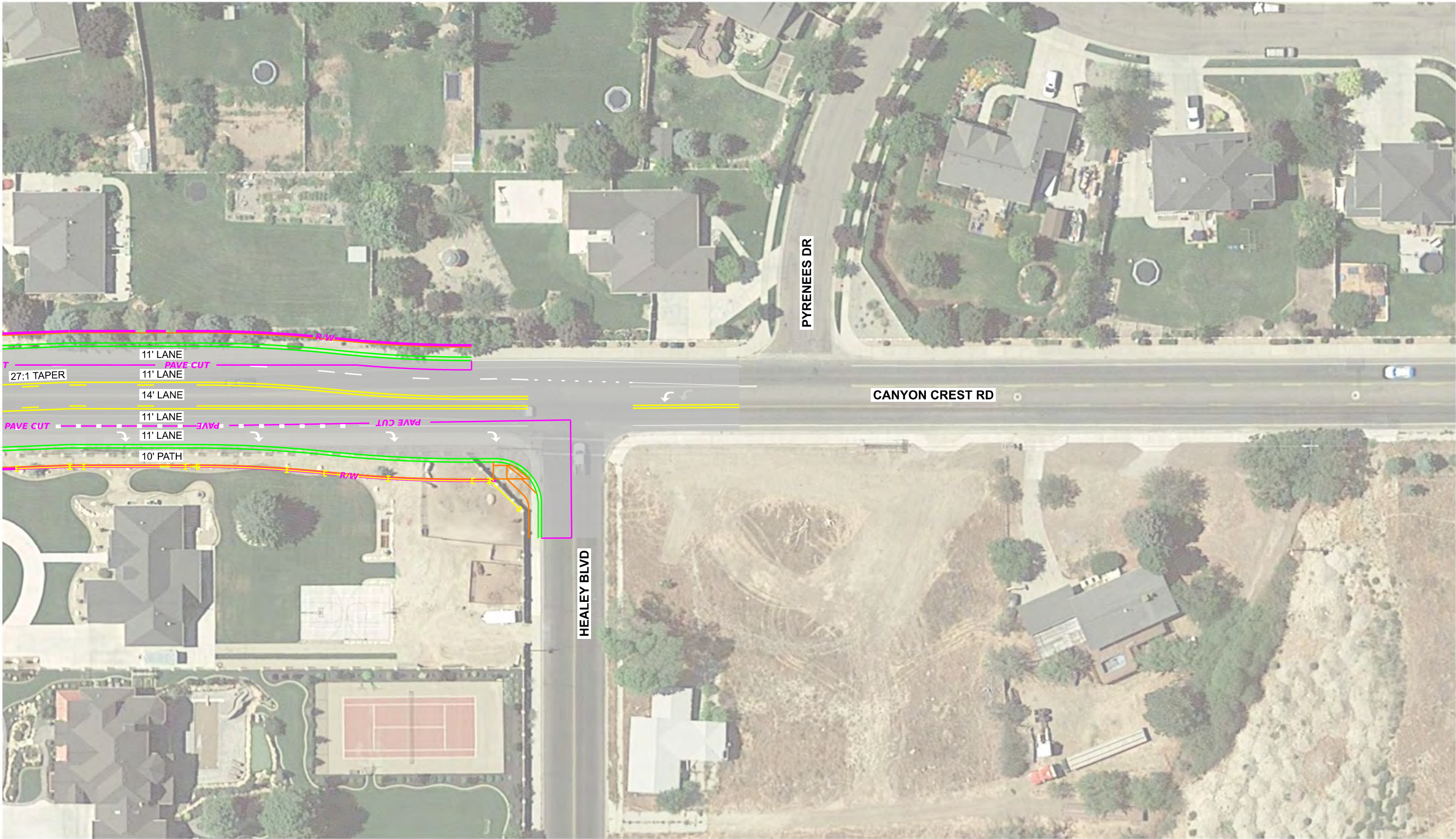
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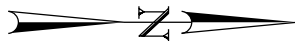
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1/7/2022



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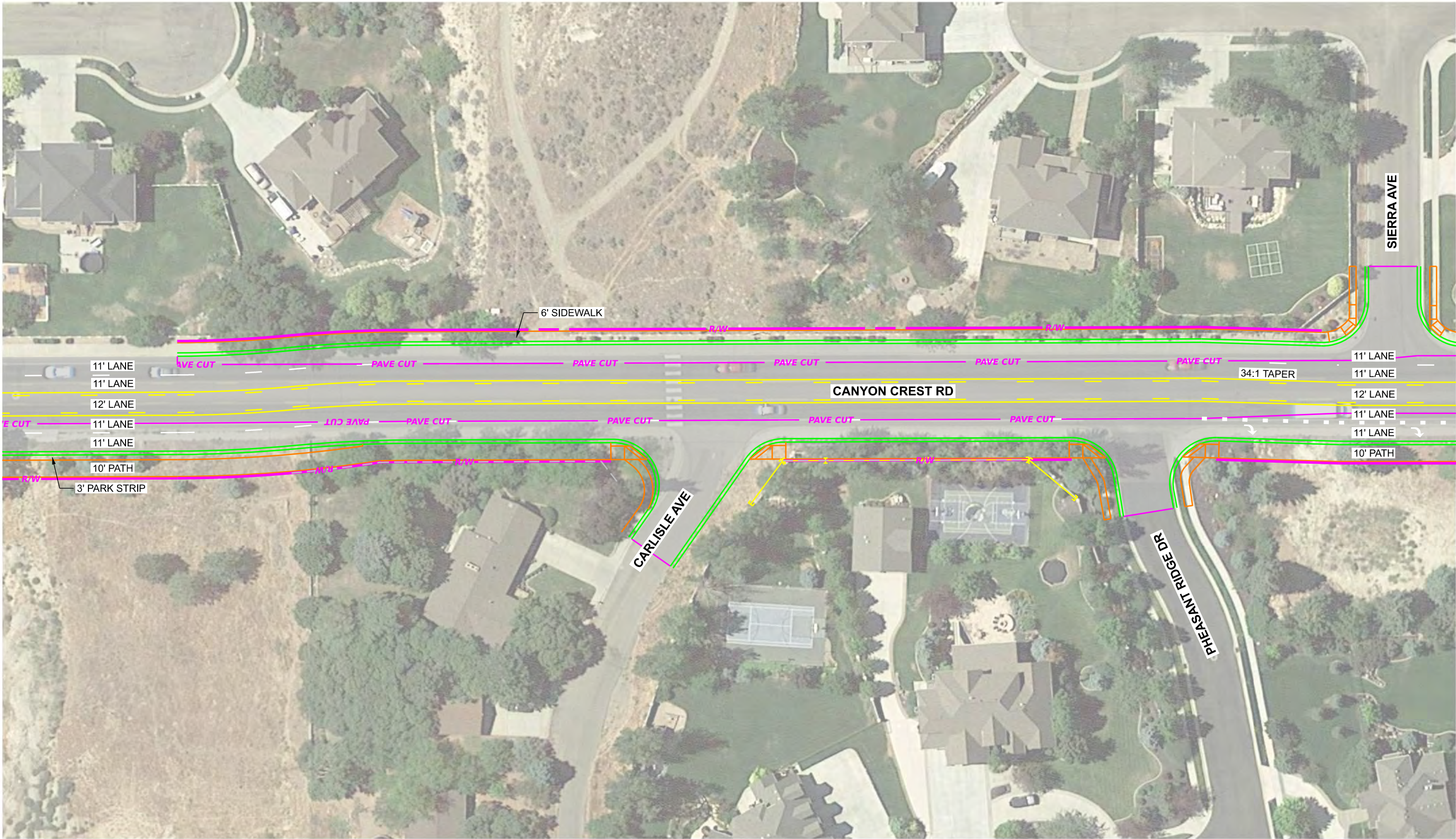
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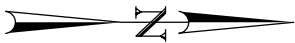
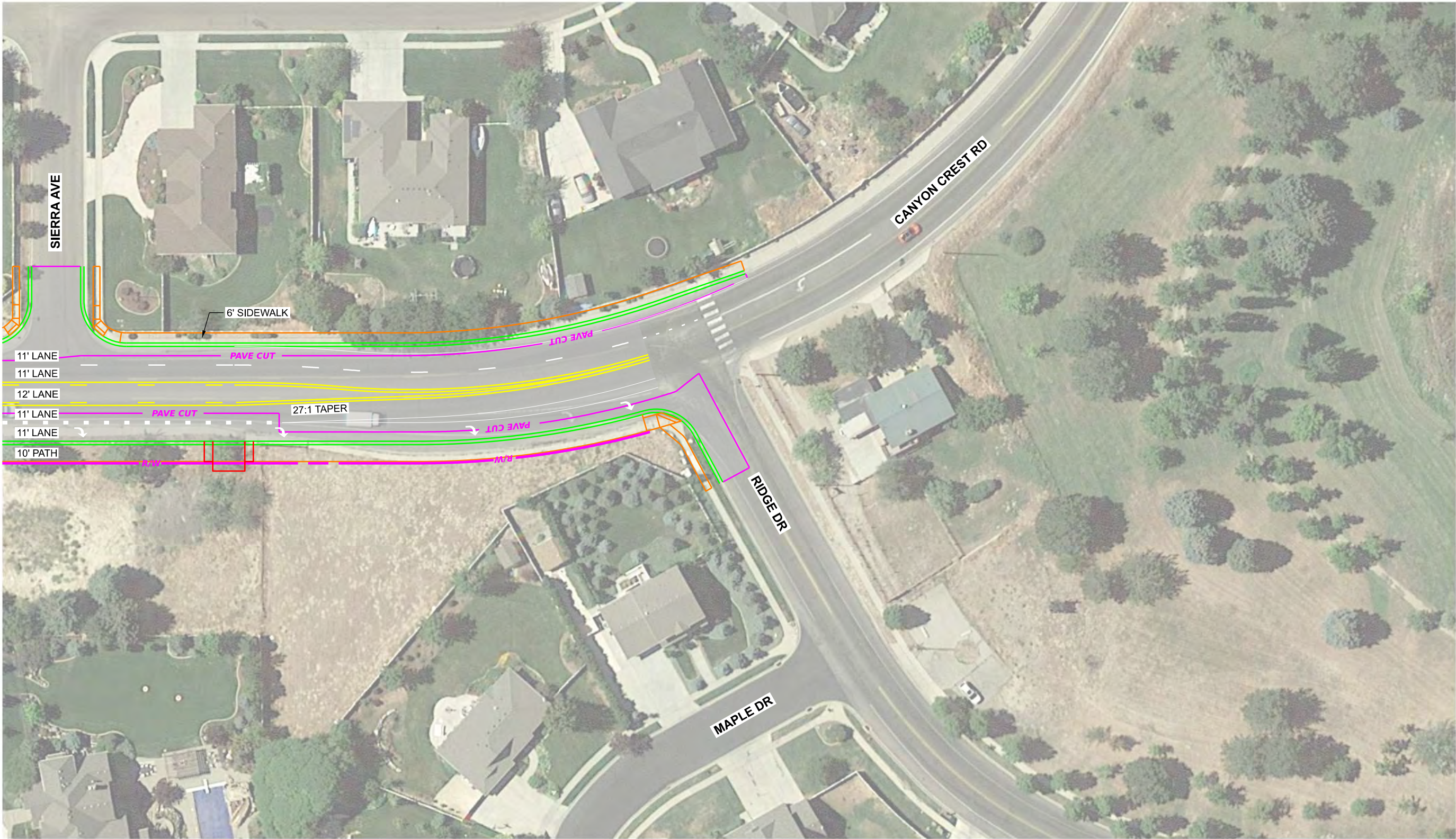
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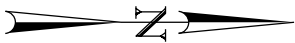
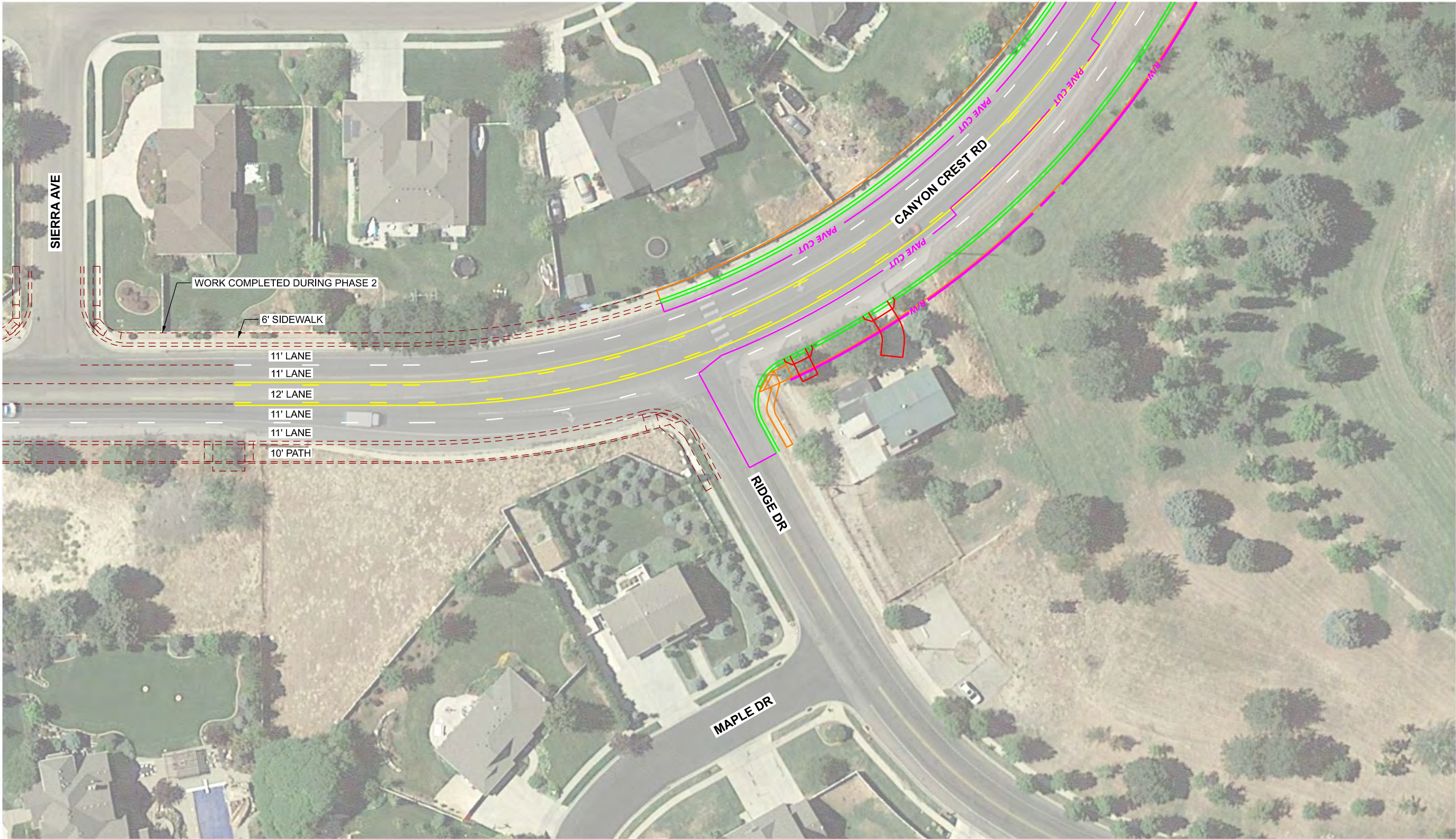
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NOT FOR CONSTRUCTION
1/7/2022



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1/7/2022 20-045 RD-09 - Phase 3.dgn

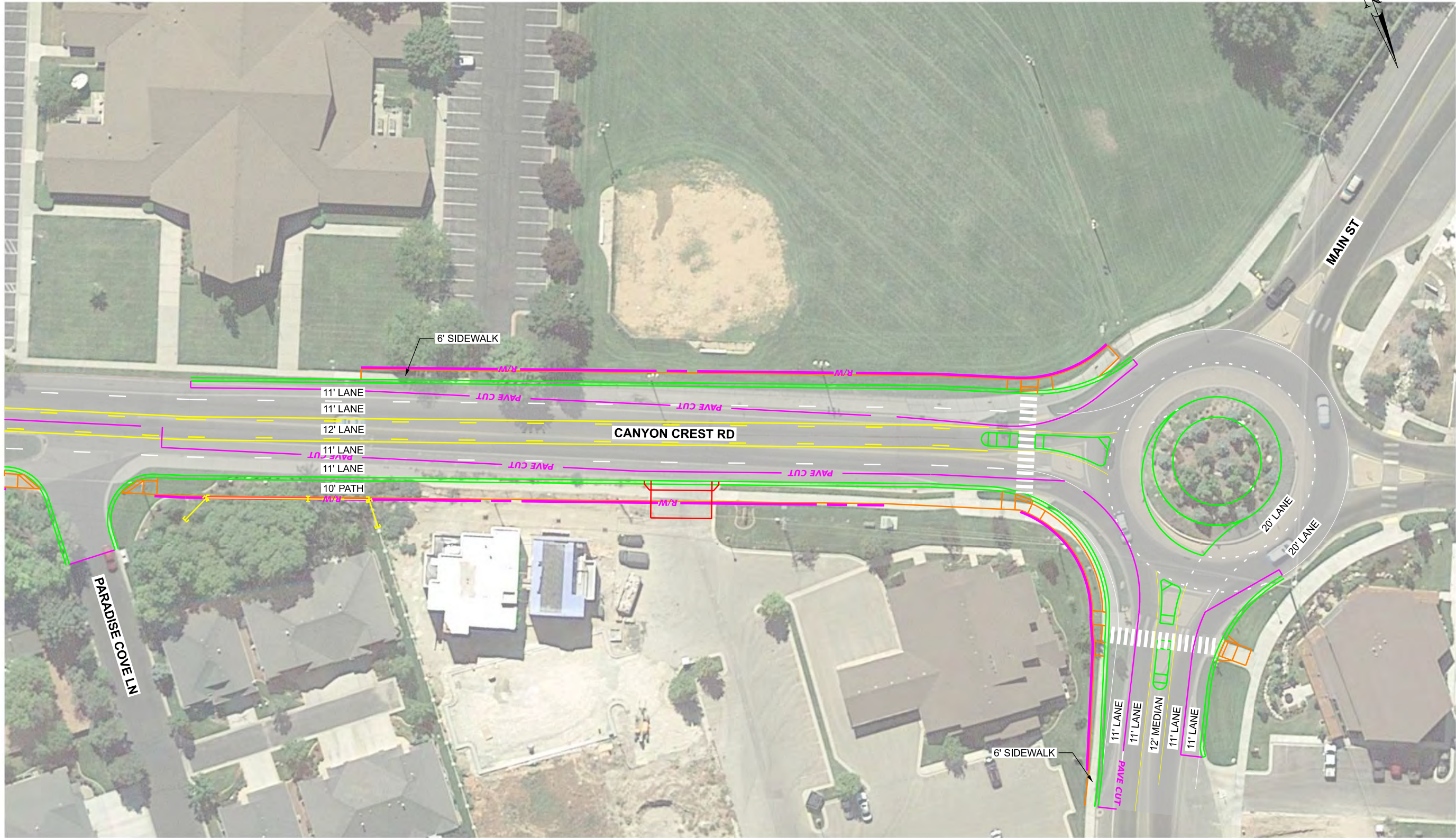
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PRELIMINARY
NOT FOR CONSTRUCTION
1/7/2022



SHEET NO.		RD-11		UTAH DEPARTMENT OF TRANSPORTATION AVENUE CONSULTANTS		APPROVED		DRAWN BY		REVISIONS													
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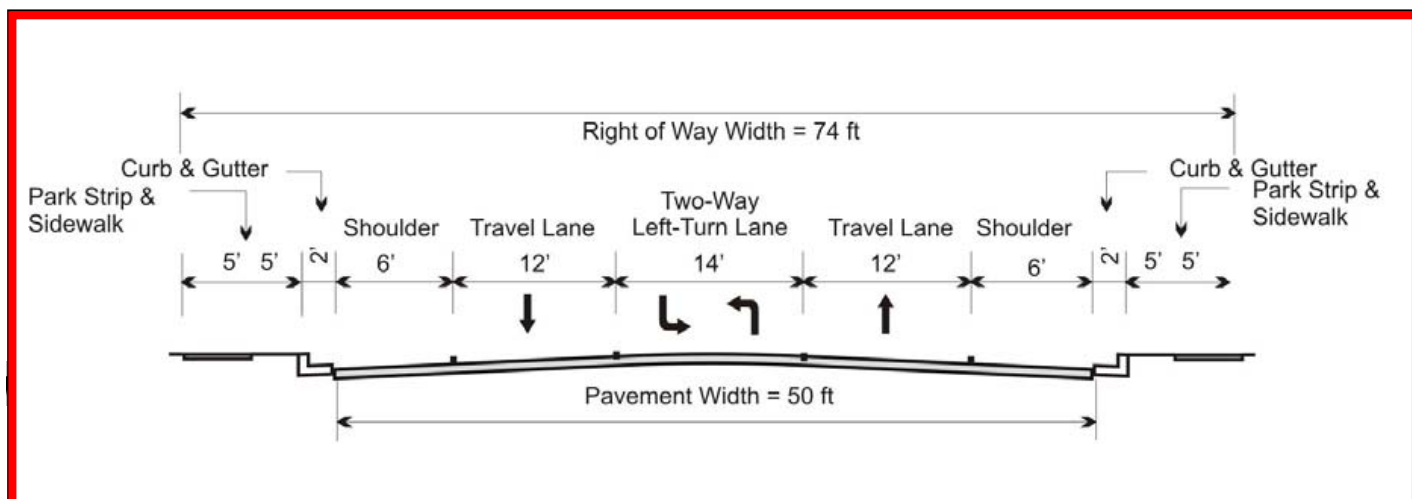


Figure 3-13. Three-lane Major Collector Street Cross-section, Between Intersections

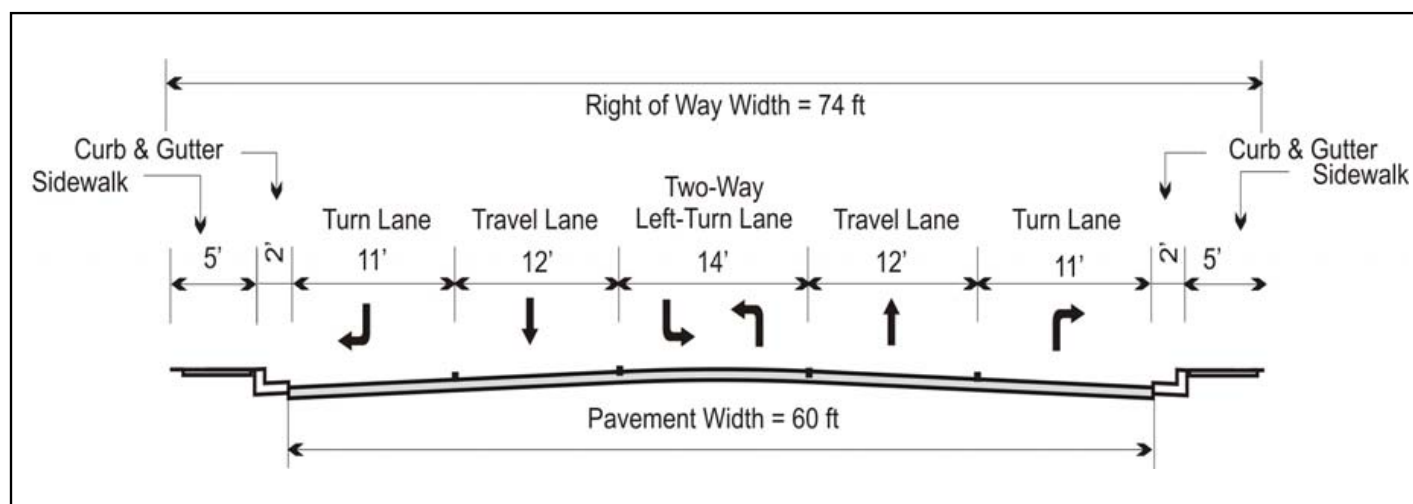


Figure 3-14. Three-lane Major Collector Street Cross-section, At Intersections

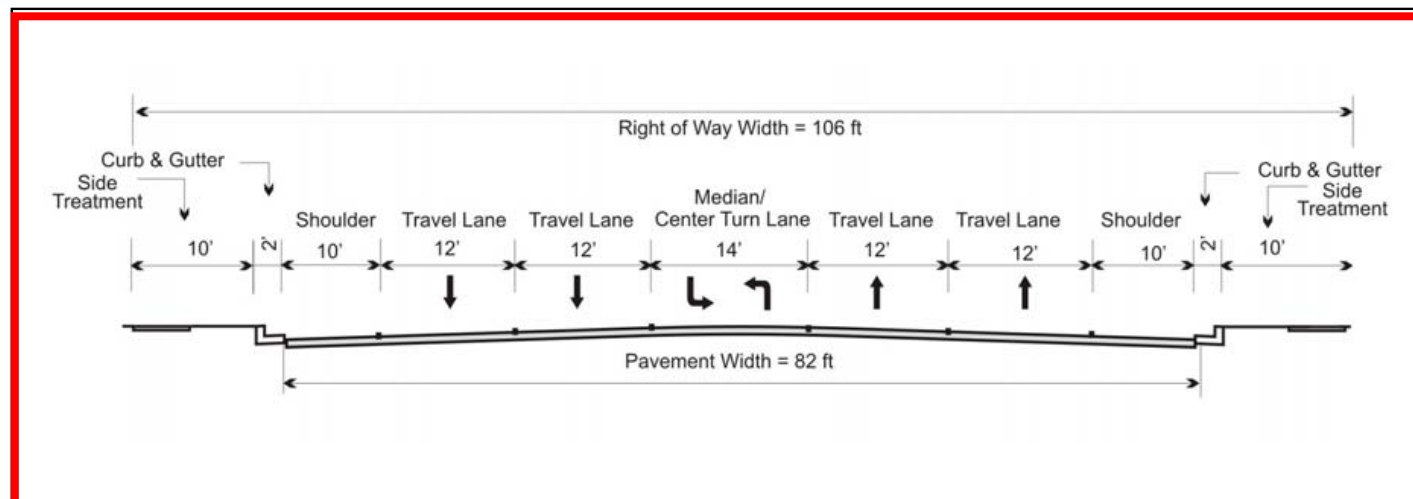


Figure 3-15. Five-lane Arterial Cross-section, Between Intersections

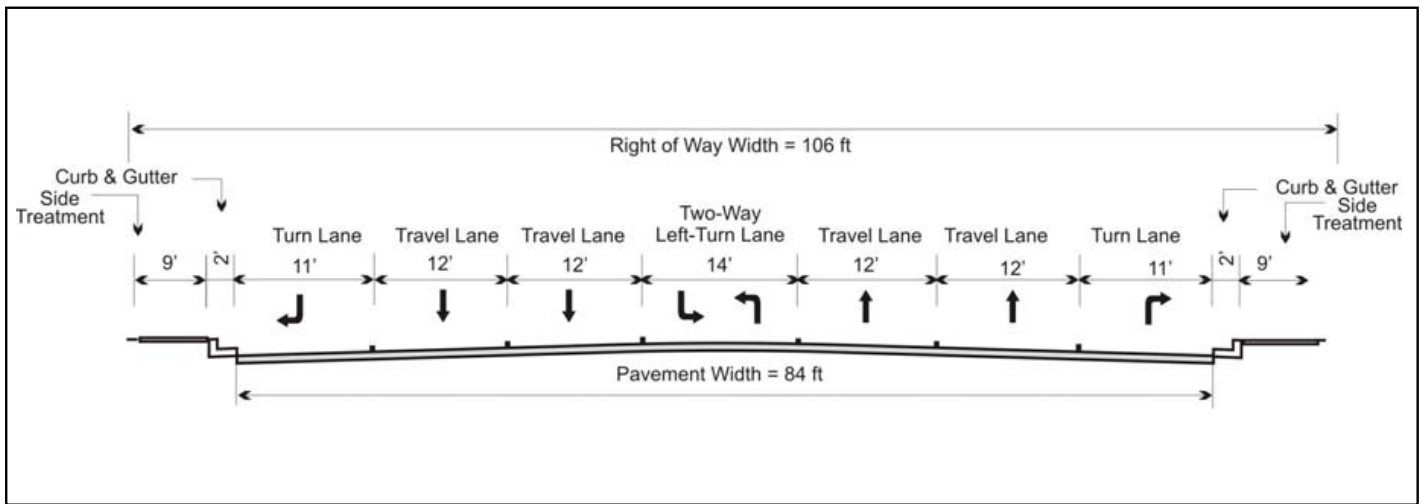


Figure 3-16. Five-lane Arterial Cross-section, At Intersections

Parkway Detail

Highland City has developed a Parkway Landscape Detail that is intended to provide major roads in Highland City with a side treatment that is attractive and functional for pedestrians and other roadway users. Roads on which Highland City has implemented or is planning to implement the Parkway Landscape Detail include:

- ♦ SR-92*
- ♦ SR-74*
- ♦ 11800 North
- ♦ 10400 North
- ♦ 4800 West*
- ♦ Highland Boulevard
- ♦ Beacon Hill Boulevard

**Except where the Streetscape Enhancement is recommended.*

See Element 7 – Community Design, for more details.

The specifics of the Parkway Landscape Detail easement are shown in Figure 3-17.



*The Parkway
Detail along the
Alpine Highway
(SR-74)*



PLANNING COMMISSION AGENDA

REPORT ITEM #6

DATE: February 22, 2022
TO: Planning Commission
FROM: Kellie Smith
Planner/GIS Analyst
SUBJECT: **ARCHITECTURAL APPROVAL:** Bank of America
TYPE: **ADMINISTRATIVE:** The Planning Commission and City Council review the proposed architectural plans to assure compliance with the Commercial Retail Architectural Design Standards and the applicable Development Agreement. Architectural review is an administrative process.

PURPOSE:

The Planning Commission will consider a request by Judy Yam on behalf of MNG Highland I LLC, for architectural approval for a remodel of a retail building located at approximately 5384 W 11000 N. The Planning Commission will take appropriate action.

BACKGROUND:

A Development Agreement for the Highland Marketplace subdivision was entered into on April 24, 2007. This agreement outlines architecture, landscaping, lighting, and signage of Highland Marketplace. The development agreement established an architectural theme for the site (see Attachment #2).

The proposed architectural plan is for a 2,748-square foot retail building located at approximately 5384 W 11000 N. The property is designated as Mixed Use on the General Plan Land Use Map and the site is zoned Commercial Retail (CR).

In the CR Zone, the City Council is the approval body for an architectural plan, after receiving a recommendation from the Planning Commission. Consideration of the architectural elevations is limited to compliance with existing development standards and regulations found in Article 4.35 of the Development Code and the applicable development agreement.

SUMMARY OF THE REQUEST:

1. The applicant is requesting site plan and architectural plan approval for a 2,748-square foot retail building. The remodel adds approximately 415 square feet to the existing building.

2. The architectural plan includes a color theme of greys, white, and brown. The materials being proposed are metal with 3 different finishes, and painted stucco (material board attached).
3. No changes are being proposed to vehicular access, the drive-thru, parking, or hours of operation.

CITIZEN PARTICIPATION:

Notification of an architectural plan application is not required. Appropriate notifications for Planning Commission as a public meeting were posted.

ANALYSIS:

Development Code

- The site is located in the Commercial Retail Zone; therefore, the architectural proposals must meet the architectural design standards outlined in Section 3-4370 of the Development Code.
- Materials and roof design of the building are consistent with Section 3-4370 of the Development Code.
- The Development Code states, “The design shall include a majority of architectural elements which are commonly found in other commercial areas in Highland (ex: columns, lentils window treatments w/ high percentage of fenestration, portico/arbor/arcade, architectural roofing material, quoins, building materials (earth-tone colors, brick, rock, trim).” In order to be compliant with this requirement, staff is recommending that the arctic white satin finish be updated to an earth tone.
- Banks or credit units are a permitted use in the CR zone as long as they do not exceed 10% of the total area of the master planned commercial center. The commercial lot on which the bank is placed is approximately 3% of the total area.
- With the increase in square footage, the number of existing parking stalls on the lot exceeds the requirement of at least four (4) parking spaces per 1,000 square feet of Interior Floor Area.

Development Agreement

- The proposed elevations do not appear to be consistent with the theme outlined in the Development Agreement. The Development Agreement states, “The signage...lighting...and the architectural themes set forth...are hereby approved by the City for the Property and shall be followed and maintained in a consistent manner.” Since this theme is more modern than what is reflected in the Development Agreement, review by the Planning Commission and City Council is

needed.

FINDINGS:

With the recommended stipulations, the proposed architectural elevations appear to meet the following findings:

- It is consistent with the Highland City Development Code.
- It is compatible with existing and future development within the CR Zone.

RECOMMENDATION:

Staff recommends that the Planning Commission recommend **APPROVAL** of the architectural elevations subject to the following stipulations:

1. Development of the site shall comply with the building elevations dated February 1, 2022 except as modified by these stipulations.
2. All signage shall require a separate permit and meet the requirements of the Development Code.
3. Final civil engineering plans shall be reviewed and approved by the City Engineer. The site shall meet all requirements of the City Engineer.
4. The arctic white satin finish be changed to an earth tone.

PROPOSED MOTION:

I move that the Planning Commission accept the findings and recommend **APPROVAL** of the proposed architectural elevations subject to the four (4) stipulations recommended by the Staff.

ALTERNATIVE MOTION:

I move that the Planning Commission recommend **DENIAL** of the architectural elevations based on the following findings (The Commission will need to draft appropriate findings).

ATTACHMENTS:

1. Vicinity Map
2. Project Narrative
3. Building Elevations
4. Material Board

ATTACHMENT #1:



Bank of America
5348 W 11000 N
Highland, UT 84003

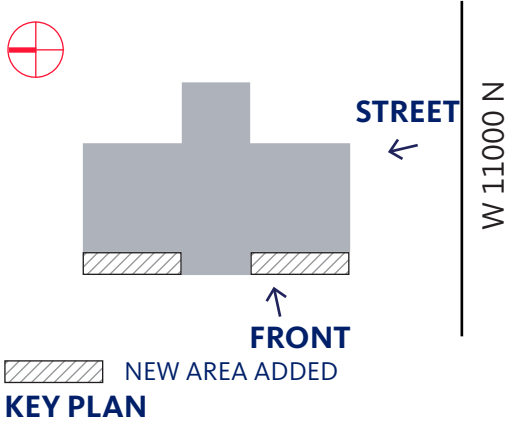
Project Narrative:

- A Change of Use from an existing restaurant Taco Time with drive-thru to a Bank of America banking center with drive-thru.
- The Taco Time building is in the CR Zone. A bank is a *permitted* use in the CR Zone.
- The existing Bldg sf is 2,333 + 415 sf building addition – Total 2,748 sf for the Bank of America building.
- Parking: 4/1000 sf of the Bldg area. $2,748 \text{ sf} / 250 = 13$ parking stalls required. 19 parking stalls provided within the parcel. See sheet C-100.
- The scope including exterior and interior TI.
- A minor modification to the existing drive-thru lane – Remove a **PORTION** of the existing curb and replace with new curb to widen a **PORTION** of existing drive-thru by 9”.

Judy Yam
Applicant

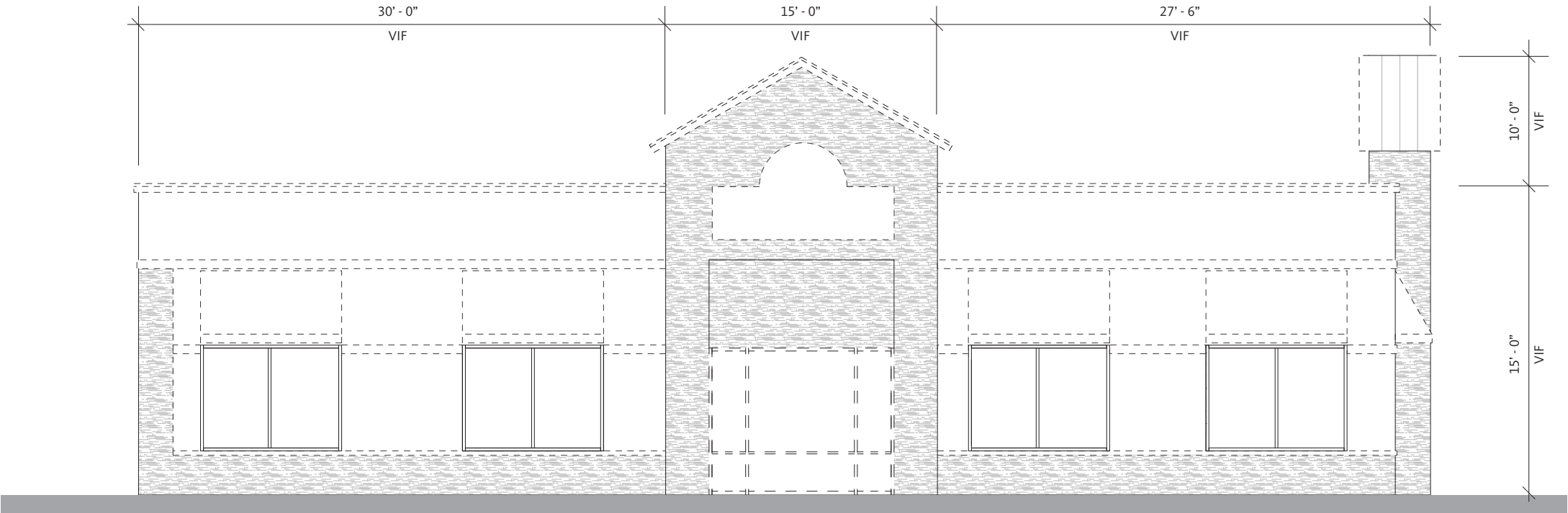
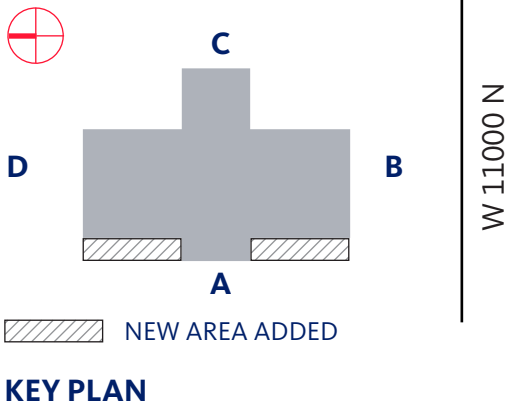
PROPOSED DESIGN

- FULL REFORMULATION OF THE FACADE: NEW FINISHES THROUGHOUT, NEW CANOPY AND BRANDING;
- PRESERVATION OF EXISTING WINDOW GLAZINGS AND DOORS - SMALL ADJUSTMENTS ON SPECIFIC AREAS AS REQUIRED TO ACCOMMODATE NEW INTERIOR LAYOUT.



PROPOSED SCOPE

- 1 NEW FACADE METAL SYSTEM (EPS-3)
- 2 NEW FACADE METAL SYSTEM (EPS-5)
- 3 NEW STUCCO AND PAINT (EXPT-17)
- 4 NEW CANOPY WITH FACADE METAL SYSTEM (EPS-2)
- 5 NEW SIGNAGE
- 6 GLASS DOOR ENTRY WITH NEW STORE FRONT WINDOW GLAZING
- 7 NEW WINDOW GLAZING
- 8 NEW PARAPET WALL WITH SUPPORT BRACING
- 9 NEW PORTION OF EXTERIOR ADDED AREA
- 10 PAINT EXISTING ROOF TO MATCH NEW PAINT (EPS-2)



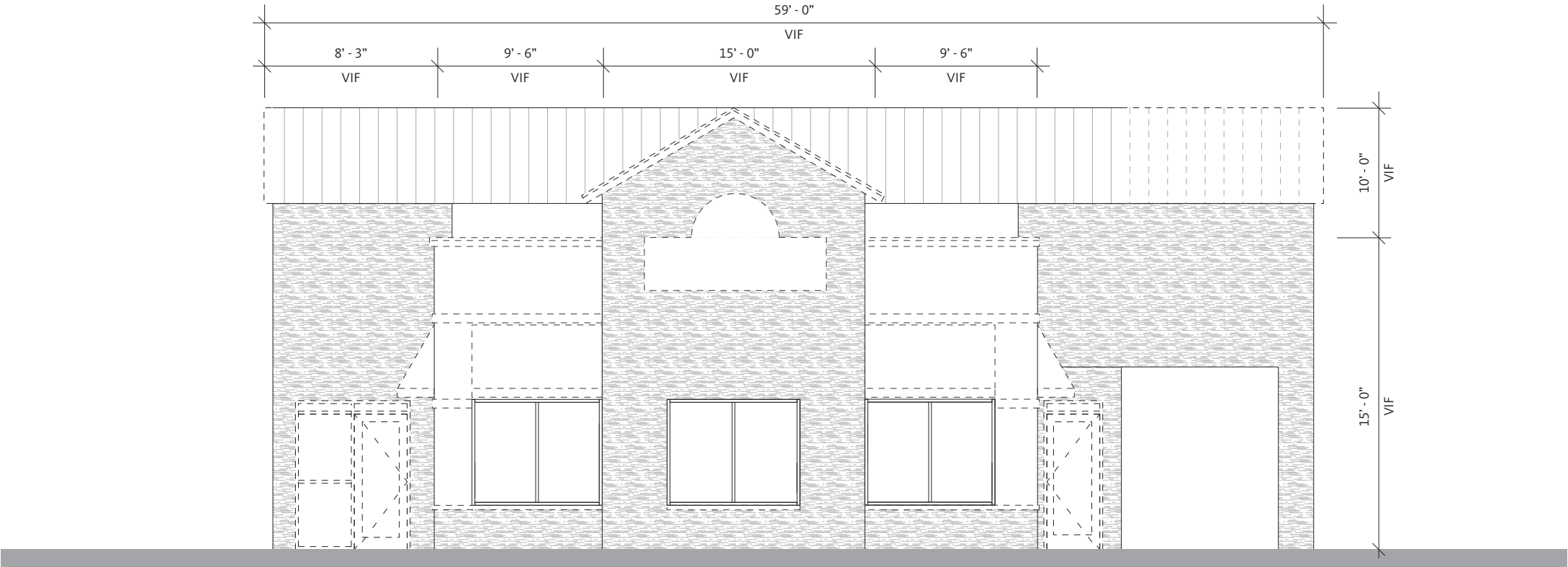
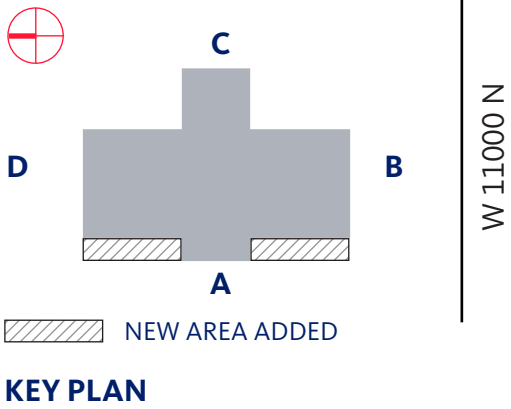
ELEVATION A - DEMO



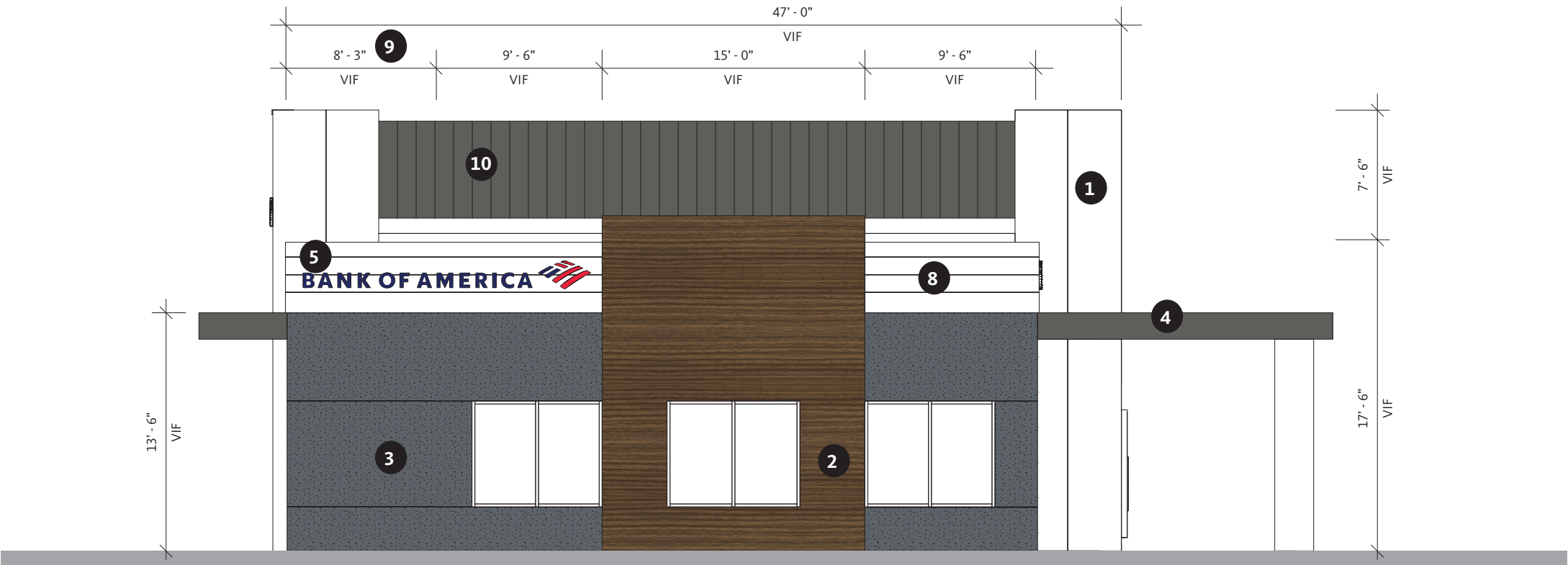
ELEVATION A - PROPOSED

PROPOSED SCOPE

- 1 NEW FACADE METAL SYSTEM (EPS-3)
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- 3 NEW STUCCO AND PAINT (EXPT-17)
- 4 NEW CANOPY WITH FACADE METAL SYSTEM (EPS-2)
- 5 NEW SIGNAGE
- 6 GLASS DOOR ENTRY WITH NEW STORE FRONT WINDOW GLAZING
- 7 NEW WINDOW GLAZING
- 8 NEW PARAPET WALL WITH SUPPORT BRACING
- 9 NEW PORTION OF EXTERIOR ADDED AREA
- 10 PAINT EXISTING ROOF TO MATCH NEW PAINT (EPS-2)



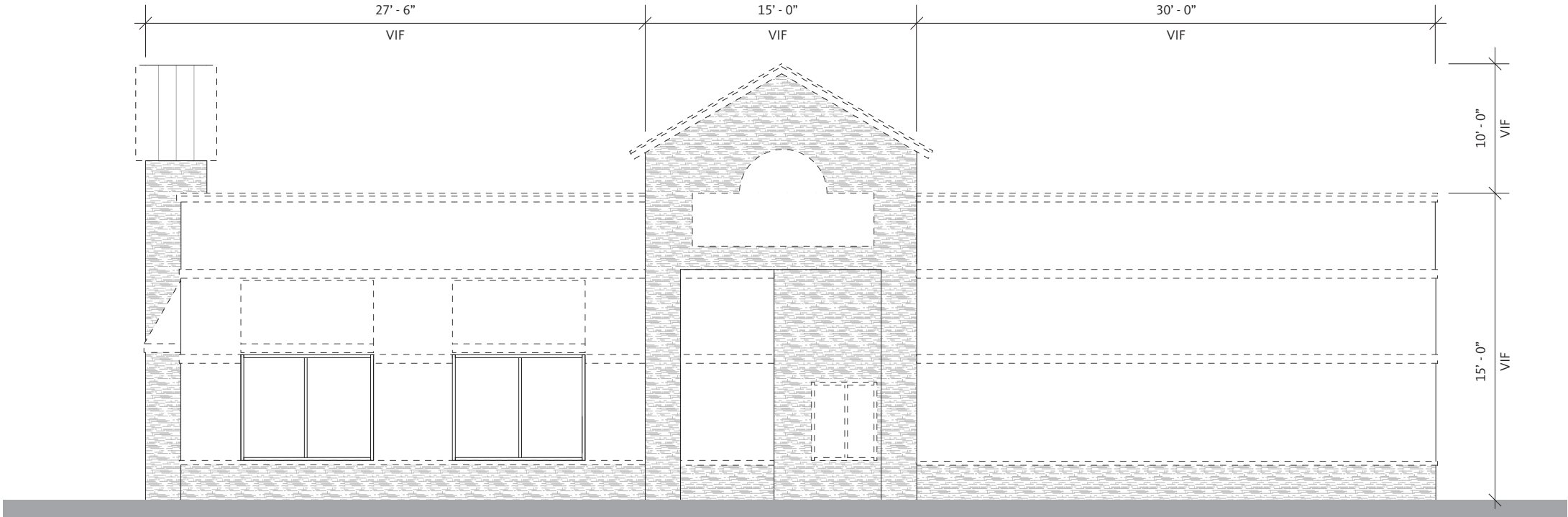
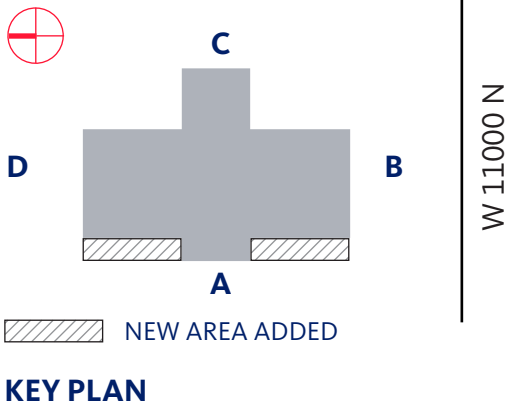
ELEVATION B - DEMO



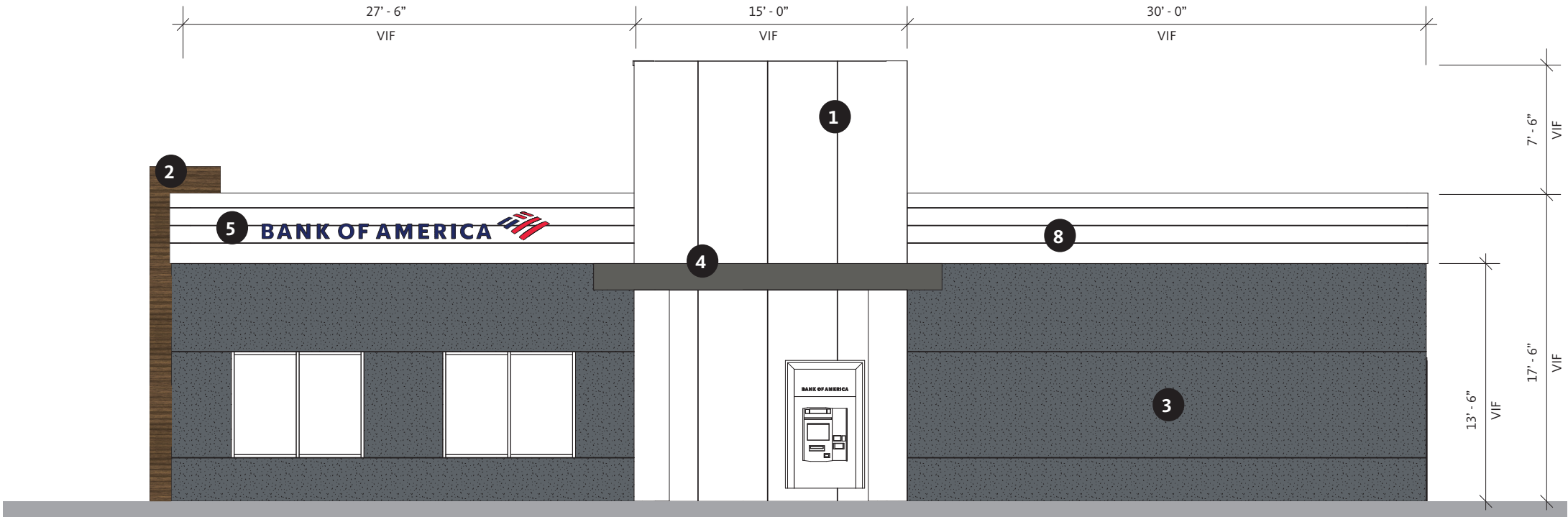
ELEVATION B - PROPOSED

PROPOSED SCOPE

- 1 NEW FACADE METAL SYSTEM (EPS-3)
- 2 NEW FACADE METAL SYSTEM (EPS-5)
- 3 NEW STUCCO AND PAINT (EXPT-17)
- 4 NEW CANOPY WITH FACADE METAL SYSTEM (EPS-2)
- 5 NEW SIGNAGE
- 6 GLASS DOOR ENTRY WITH NEW STORE FRONT WINDOW GLAZING
- 7 NEW WINDOW GLAZING
- 8 NEW PARAPET WALL WITH SUPPORT BRACING
- 9 NEW PORTION OF EXTERIOR ADDED AREA
- 10 PAINT EXISTING ROOF TO MATCH NEW PAINT (EPS-2)



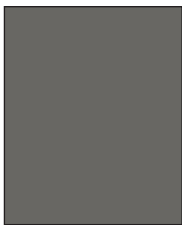
ELEVATION C - DEMO



ELEVATION C - PROPOSED

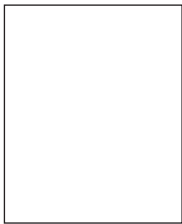
PROPOSED FINISHES

EXTERIOR METAL SYSTEM



FINISH | **EPS-2**

MFR: Citadel
Color: Anchor Gray
Finish: Satin



FINISH | **EPS-3**

MFR: Citadel
Color: Arctic White
Finish: Satin



FINISH | **EPS-5**

MFR: Pure + Freeform
Color: Roma Noce
Finish: Satin

EXTERIOR PAINT



FINISH | **EXPT-17**

MFR: Benjamin Moore
Color: Charcoal Slate
Finish: Flat