



# CITY OF Caldwell, Idaho

Planning & Zoning

## HEARING REVIEW APPLICATION

### Type of Review Requested (check all that apply)

- Annexation
- Appeal/Amendment
- Comprehensive Plan Map Change
- De-Annexation
- Ordinance Amendment
- Rezone
- Special Use Permit
- Subdivision- Preliminary Plat
- Subdivision- Final Plat
- Subdivision- Short Plat
- Time Extension
- Variance
- Other Planned Unit Development

#### STAFF USE ONLY:

File number(s): PUP-18-01  
Carbor

Project name: \_\_\_\_\_

Date filed: 6-6-18 Date complete: \_\_\_\_\_

Related files: \_\_\_\_\_

### Subject Property Information

Address: 18037 Midland Blvd Parcel Number(s): R3434300000 , R3434301000

Subdivision: Not Platted Block: \_\_\_\_\_ Lot: \_\_\_\_\_ Acreage: 101.08 Zoning: R-1

Prior Use of the Property: Agriculture

Proposed Use of the Property: Residential PUD

### Applicant Information:

Applicant Name: Brighton Development Inc. Phone: 208.378.4000

Address: 12601 W. Explorer Dr. #200 City: Boise State: ID Zip: 83713

Email: \_\_\_\_\_ Cell: \_\_\_\_\_

Owner Name: Midland Farm LLC Phone: \_\_\_\_\_

Address: 18037 Midland Blvd City: Nampa State: ID Zip: \_\_\_\_\_

Email: \_\_\_\_\_ Cell: \_\_\_\_\_

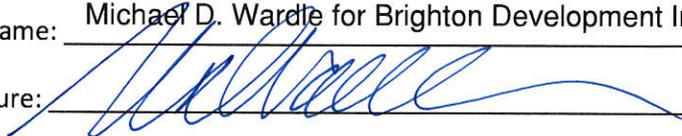
Agent Name: (e.g., architect, engineer, developer, representative) Michael D. Wardle

Address: 12601 W. Explorer Dr. #200 City: Boise State: ID Zip: 83713

Email: mwardle@brightoncorp.com Cell: 208.863.6150

### Authorization

Print applicant name: Michael D. Wardle for Brighton Development Inc.

Applicant Signature:  Date: 6/6/2018

AI



CITY OF  
*Caldwell, Idaho*

Planning & Zoning

SUBDIVISION- PRELIMINARY PLAT

|                                                              |                          |
|--------------------------------------------------------------|--------------------------|
| Project Name: Arbor Subdivision                              | File #: <u>PUD-18-01</u> |
| Applicant/Agent: Brighton Development Inc/ Michael D. Wardle |                          |

| Applicant (v) | Description                                                                          | Staff (v) |
|---------------|--------------------------------------------------------------------------------------|-----------|
| ✓             | Completed & signed Hearing Review Master Application                                 |           |
| ✓             | Narrative fully describing the proposed use/request                                  |           |
| ✓             | Recorded warranty deed for the subject property                                      |           |
| ✓             | Preliminary Plat – Submitted in 8 ½ x 11 paper format AND in electronic format (PDF) |           |
| ✓             | Landscape Plan– Submitted in 8 ½ x 11 paper format AND in electronic format (PDF)    |           |
| ✓             | Vicinity map – Submitted in 8 ½ x 11 paper format AND in electronic format (PDF)     |           |
| ✓             | Traffic Study – Submitted in 8 ½ x 11 paper format AND in electronic format (PDF)    |           |
| ✓             | Neighborhood Meeting sign-in sheet                                                   |           |
| ✓             | Fee                                                                                  |           |

Total # Lots

Residential: 475 Commercial: 1 Industrial: \_\_\_\_\_ Common: 42

Phased Project:  Yes  No If "yes", Phase #: 9 proposed Total Acreage: 101.08  
phases

Min. Lot Size (excluding common lots): 2,700 Max. Lot Size (excluding common lots): 9,228 sf

Avg. Lot Size (excluding common lots): 5,113 sf % Useable Open Space: 15.4%

List all types of useable open space: micropath corridors, open space areas, City of Caldwell master plan path, tot lot, pools

**STAFF USE ONLY:**

Date Application Received: 6-6-18

Received by: LC

Proposed Hearing Date: 7/10/18

Hearing Body: HE

AI



CITY OF *Caldwell, Idaho*

Planning & Zoning

PUD DETAILS FORM

|                                                              |                         |
|--------------------------------------------------------------|-------------------------|
| Project Name: Arbor Subdivision                              | File #: <u>PUD-18-0</u> |
| Applicant/Agent: Brighton Development Inc/ Michael D. Wardle |                         |

**Planned Unit Development (PUD) Information**

Total Acreage: 101.08 Zoning: R-1 Phased Project:  Yes  No If yes, # of phases: 9

List all proposed uses: Residential Lots, and (1) commercial lot

If residential is proposed: Total # of dwelling units: 475 Proposed Density: 4.8 11

List all types of proposed housing units: detached single family, attached single family, rear garage units

**PUD Required Details**

PUD must be consistent with one or more of the following. Mark all that apply and provide a detailed explanation.

Offers a maximum choice of living environments by allowing a variety of housing and building types  
A variety of housing types are proposed within the project including: traditional single family detached homes and single family attached homes. Attached homes will be constructed in the form of paired and alley-loaded product

Promotes mixed use projects which are functionally integrated within the development and provides services to the primary use  
There is a proposed commercial lot within the development, that is consistent with the City of Caldwell Comprehensive Plan

Provides a layout which preserves and property utilizes natural topography and geologic features, trees, scenic vistas or other vegetation  
The development incorporates the topography and contours of the Noble Drain and Idaho Power Transmission line, to create a extensive pathway system.

Subject property is constrained or otherwise limited by some obstacle, feature, geometry, condition, or easement that interferes with applying standard development processes  
Idaho Power easement runs diagonally through the development

Encourages infill development that contributes a compatible design to the existing neighborhood  
N/A

AI

PUD's shall incorporate imaginative or unique concepts, innovations and designs. List in detail those elements:

Unique road section design with detached sidewalks and 8' planter strip allowing for street trees. Interconnected 5' internal pathway system that encourages walk-ability within the project, and 8' public pathway along the Noble Drain.

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All lots developed for residential purposes shall have frontage on a public roadway. Check here indicating this project meets this requirement. **Requesting a deviation, see attached narrative for specific details**

All PUD's shall have the following features:

- Five-foot paved micro pathways connecting residential to nonresidential area, open space common lots, recreational facilities, major pathways and school bus pick up locations (sidewalks may substitute)
- Eight-foot wide paved major pathway with a 5-foot wide landscape buffer on either side that meanders through the property. Please indicate the lot and block numbers of the major pathway
- Usable open space of at least 10% of the gross area
- Varying bermed street landscape buffers of a 2:1 to 3:1 ratio
- 4 or more of the following amenities shall be provided: baseball/softball field; basketball court; boat dock/river access; buildings to LEED standards; community center; daycare center; detached sidewalks; energy-star certified housing; enhanced paving and design features; fishing pond; golf course; gym/health club; land provided for a public facility; playground/tot lot; rear entry garages; residential buildings constructed with fire sprinkler systems; roundabout intersections as approved by the city engineer; skateboard park; swimming pool; tennis court; other suitable amenities or public benefits deemed worthy by city council

1. Two (2) Community Pools
2. Tot Lot
3. Energy Star Certified Housing
4. Enhanced Road Design features which create more open space and tree lined streets

List all proposed deviations from height, lot line setback, and lot dimension schedule as listed in current City Code

Deviates to the dimensional standards for height, lot line setback, and lot dimensions have been requested. See attached narrative and preliminary plat cover sheet data table for specific details.

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Projects that are classified as infill may have all or portions of amenity requirements waived. To be considered infill, the subject property must meet the following criteria:

- Parcel under 20 acres
- Parcel located within a largely developed area (minimum 50% of land within 300 feet of subject property developed)
- Municipal services are readily available



CITY OF  
*Caldwell, Idaho*

Planning & Zoning

PLANNED-UNIT DEVELOPMENT

|                                                              |                   |
|--------------------------------------------------------------|-------------------|
| Project Name: Arbor Subdivision                              | File #: PUD-18-04 |
| Applicant/Agent: Brighton Development Inc/ Michael D. Wardle |                   |

| Applicant (v) | Description                                                                                                                                                                                                                                    | Staff (v) |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| ✓             | Completed & signed Hearing Review Master Application                                                                                                                                                                                           |           |
| ✓             | PUD Details Form                                                                                                                                                                                                                               |           |
| ✓             | Narrative fully describing the proposed use/request                                                                                                                                                                                            |           |
| ✓             | Recorded warranty deed for the subject property                                                                                                                                                                                                |           |
| ✓             | Detailed Site Plan                                                                                                                                                                                                                             |           |
| ✓             | Preliminary Plat (if applicable)                                                                                                                                                                                                               |           |
| ✓             | Signed Property Owner Acknowledgement (if applicable)                                                                                                                                                                                          |           |
| ✓             | Vicinity map, showing the location of the subject property                                                                                                                                                                                     |           |
| ✓             | Traffic Study (if applicable)                                                                                                                                                                                                                  |           |
| ✓             | Landscape Plan (if applicable)                                                                                                                                                                                                                 |           |
| ✓             | Neighborhood Meeting sign-in sheet                                                                                                                                                                                                             |           |
| ✓             | All of the above items shall be submitted in 8 ½ x 11 paper format AND in electronic format (preferably PDF or Word) on either a jump drive or CD. Please be aware the jump drive or CD will become part of the file and will not be returned. |           |
| ✓             | Fee                                                                                                                                                                                                                                            |           |

**STAFF USE ONLY:**

Date Application Received: 6-6-18

Received by: [Signature]

Proposed Hearing Date: 7-10-18

Hearing Body: HE

AI



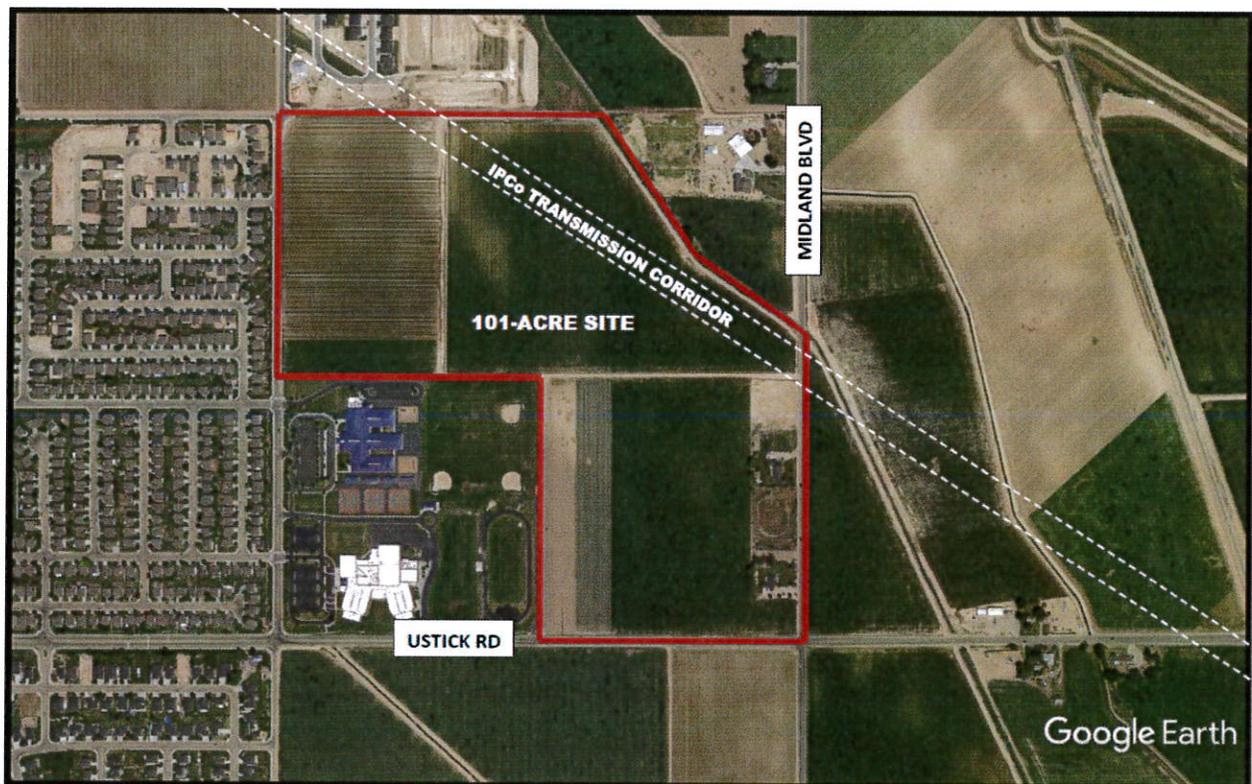
June 6, 2018

Jarom Wagoner, AICP – Senior Planner  
City of Caldwell Planning Department  
621 Cleveland Boulevard  
Caldwell, ID 83605

***Re: Arbor Subdivision – Planned Unit Development & Preliminary Plat Applications***

Dear Mr. Wagoner,

Enclosed are Planned Unit Development and Preliminary Plat applications for **Arbor Subdivision**, a 475-lot residential project with one non-residential parcel, 42 landscaped common lots and 9 common-lot driveways on 101 acres located at the northwest corner of Ustick Road and Midland Boulevard as depicted below.



## THE PROJECT – ARBOR SUBDIVISION



### PROJECT FEATURES

*Arbor Subdivision* proposes a diverse range of lot and housing types:

- 397 Detached dwellings on lots ranging from 3600 to 8900 s.f.
- 78 Attached (*paired*) dwellings on lots typically ranging from 2700 to 4200 s.f.
- Of the 475 lots noted above, 136 are alley-loaded
- In addition, there is one (1) commercial lot on approximately 1.34 acres

### PLANNED UNIT DEVELOPMENT

The City of Caldwell's Planned Unit Development process encourages projects that provide a maximum choice of living environments by allowing a variety of housing and building types, and promotes a mix of uses, which are functionally integrated within the development (*See Exhibits C, D and E*).

#### DENSITY

The PUD process allows up to six (6) dwelling units per acre within the R-1 zone. As proposed, the overall density of *Arbor Subdivision* is 4.7 d.u./acre—or 4.76 d.u./ acre, less the commercial parcel.

## COMMERCIAL

A 1.34-acre parcel (*1.3% of the project*) fronting Midland Boulevard, between the project entrance and the Noble Drain, is designated commercial—the only proposed non-residential use. It is anticipated that this commercial property will develop as office or retail. The proposal conforms to Zoning Ordinance Section 10-03-07-C, which states, “*No more than thirty percent (30%) of the total net area shall be devoted to a use or uses not permitted.*”

## AMENITIES AND OPEN SPACE

Required as a part of the PUD in the City of Caldwell are a variety of amenities with at least 10% open space. *Arbor Subdivision* provides both. Proposed open space is approximately 15.6 acres (*15.4%*). These open spaces provide a variety of amenities including (*See Exhibit A, for detailed breakdown and location of these amenities*):

- Five foot (5') wide concrete pathways connecting the residential areas to all non-residential areas, open space corridors, recreational facilities, major public pathway, and school bus pick up locations.
- Eight foot (8') wide asphalt or concrete paved public pathway is proposed along the Noble Drain, in accordance with the City of Caldwell 2040 Bicycle and Pedestrian Master Plan.
- Two (2) community pools. The first of the two will be constructed in **Phase 1A**; the second will be constructed in a later phase at a location to be determined.
- Two (2) tot lots with playground equipment—each near a community pool.
- Micro-pathway connections to the adjacent schools.
- Energy Star certified housing.
- Rear-entry garages on 136 lots, or 28.6% of the 475 residential home sites.

## PHASING

The conceptual phasing plan submitted with the application (*Exhibit B*) reflects project build-out in nine (9) phases. While it is Brighton’s intent to follow the phasing plan, future market conditions and lot absorption rates will affect how the project is ultimately phased and constructed.

## **PROPOSED PUD MODIFICATIONS**

### ROAD SECTION

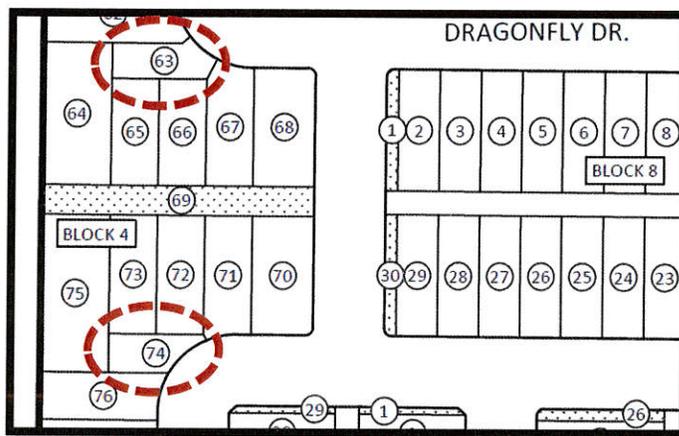
Unique to *Arbor Subdivision* is a “*new*” street standard (*Exhibits F and G*). The street consists of a 60’ right-of-way, with 5’ detached sidewalks, 8’ planter strips, and 33’ back of curb-to-back of curb paved section. This allows for parking on both sides of the street. Included in this application, in Exhibit E, are examples of this street section that has been the street/fire

agency-approved standard in all of Brighton’s Ada County projects. The 8’ planter strip allows for street trees and creates a safer, more open and pedestrian-friendly environment.

COMMON DRIVES

**PUD Standard: 10-03-07-3M–Access:** All lots developed for residential purposes shall have frontage along a public roadway.

**Proposed Deviation:** While the vast majority (95%) of the 475 single-family residential lots front public streets, the proposed layout includes nine (9) common drives (*typical’s below*) that provide access and “frontage” for 25 lots. These common driveways are proposed as an efficient solution to the challenging “corner” areas of the layout. The driveways will be common lots encumbered by ingress/egress easements owned by the **Arbor Subdivision** HOA.



LOT SIZE/SETBACKS

**R-1 Standard: 10-02-03 Table 2 – Height, Lot Line Setback and Lot Dimension Schedule**

| Zoning District | Max Height | Front Yard | Rear Yard | Interior Side Yard | Street Side Yard | Interior Min. Lot Area | Corner Min. Lot Area | Min. Lot Frontage |
|-----------------|------------|------------|-----------|--------------------|------------------|------------------------|----------------------|-------------------|
| R-1             | 25         | 20         | 20        | 6                  | 15               | 8,000                  | 9,500                | 50                |

**Proposed Deviation from the R-1 Standard:** As allowed through the PUD process, we request modification of the height, lot line setback, and lot dimension schedule for R-1 Zoning found in 10-02-03 Table 2 cited above. The proposed changes are noted in the Preliminary Plat Data table on Preliminary Plat Sheet PP1.0.

COMMON PARKING LOTS

**PUD Standard: 10-03-07-L-1(B) - Lots forty-five feet (45’) in width and smaller shall provide one additional space per every four (4) residential units in a common parking lot located in close proximity to the residential structures in which it serves.**

**Proposed Deviation:** The southern portion of the PUD is designed with alley-loaded and paired housing. The 136 rear-entry garage lots eliminate driveway interruptions, allowing for

a significant amount of on-street “*guest*” parking. Additionally, each of those lots has, at a minimum, a two-car garage. This design provides sufficient additional parking to off-set the need for common parking lots.

We look forward to presenting *Arbor Subdivision* to the Hearing Examiner and to the City Council—and for the opportunity to build it. Please let us know if you have questions or require additional information.

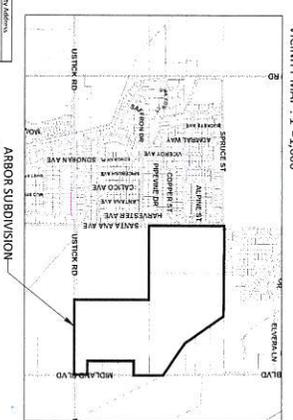
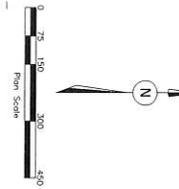
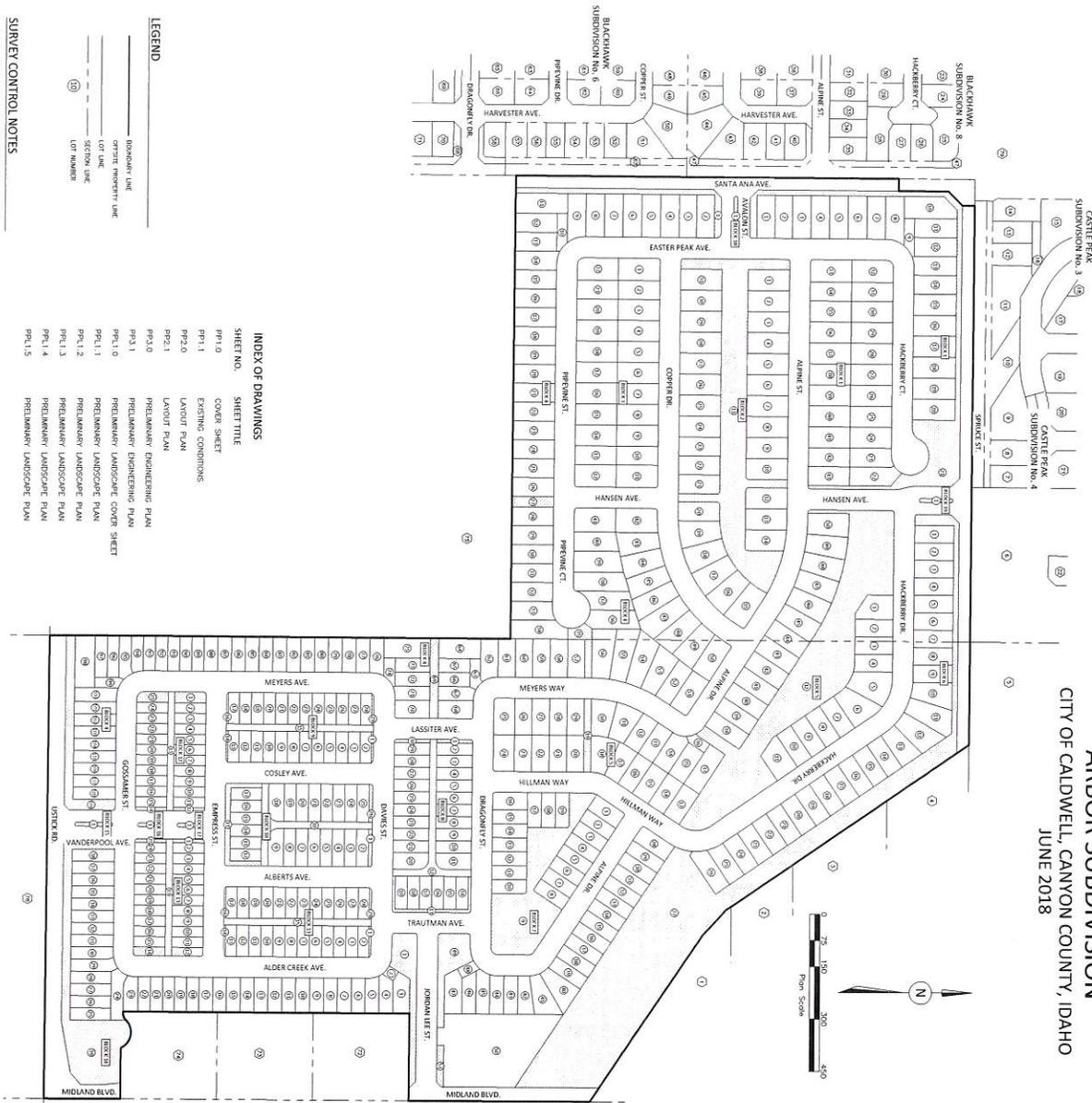
*For Brighton Development, Inc.,*



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**Michael D. Wardle**  
Director of Planning

# PRELIMINARY PLAT SHOWING ARBOR SUBDIVISION CITY OF CALDWELL, CANYON COUNTY, IDAHO JUNE 2018



### INDEX OF DRAWINGS

| SHEET NO. | SHEET TITLE                       |
|-----------|-----------------------------------|
| PP1.0     | COVER SHEET                       |
| PP2.0     | EXISTING CONDITIONS               |
| PP2.1     | LOT PLAN                          |
| PP2.2     | LOT PLAN                          |
| PP3.0     | PRELIMINARY ENGINEERING PLAN      |
| PP3.1     | PRELIMINARY ENGINEERING PLAN      |
| PP4.0     | PRELIMINARY LANDSCAPE COVER SHEET |
| PP4.1     | PRELIMINARY LANDSCAPE PLAN        |
| PP4.2     | PRELIMINARY LANDSCAPE PLAN        |
| PP4.3     | PRELIMINARY LANDSCAPE PLAN        |
| PP4.4     | PRELIMINARY LANDSCAPE PLAN        |
| PP4.5     | PRELIMINARY LANDSCAPE PLAN        |

### LEGEND

|  |                       |
|--|-----------------------|
|  | BOUNDARY LINE         |
|  | OWNER'S PROPERTY LINE |
|  | LOT LINE              |
|  | SECTION LINE          |
|  | LOT NUMBER            |

### SURVEY CONTROL NOTES

1. ALL SURVEY DATA IS BASED ON THE INDIAN STATE PLAT SURVEY DATA (CROSS REF. 1750) AND SPOTCHECK SURVEY DATA.

### PRELIMINARY NOT FOR CONSTRUCTION

| NO. | REVISIONS | DATE |
|-----|-----------|------|
|     |           |      |

**ARBOR SUBDIVISION  
COVER SHEET  
Caldwell, Idaho**

**km ENGINEERING**  
KIMBERLY M. KIMMEL, P.E.  
15860  
15849  
SHEET 1005  
PP1.0

A3











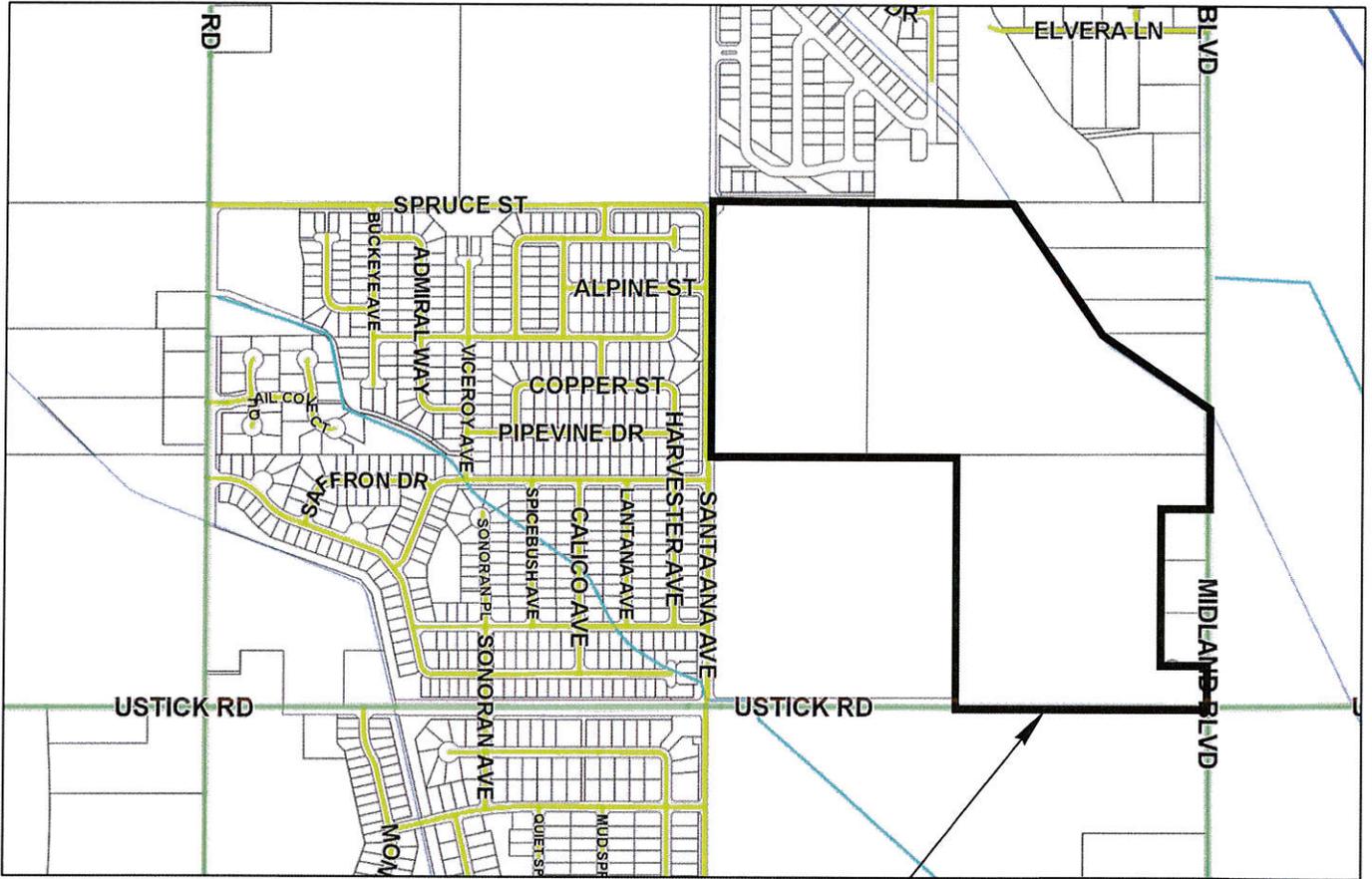


# ARBOR

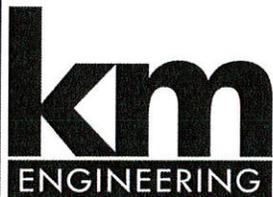
◆ BRIGHTON

AE

VICINITY MAP : 1"=1,000'



ARBOR SUBDIVISION  
PRE-PLAT BOUNDARY



ENGINEERS . SURVEYORS . PLANNERS

9233 WEST STATE STREET  
BOISE, IDAHO 83714  
PHONE (208) 639-6939  
FAX (208) 639-6930

DATE: 6/6/18

PROJECT: 18-049

SHEET:  
1 OF 1

ARBOR SUBDIVISION  
CALDWELL, IDAHO

VICINITY MAP

**NEIGHBORHOOD MEETING FORM**  
City of Caldwell Planning and Zoning Department  
621 E. Cleveland Blvd., Caldwell, ID 83605  
Phone: (208) 455-3021

Start Time of Neighborhood Meeting: 6:30 pm

End Time of Neighborhood Meeting: 7:15 pm

Those in attendance please print your name and address. If no one attended, Applicant please write across this form "No one attended."

PRINTED NAME

ADDRESS, CITY, STATE, ZIP

1. Kameron Nauahi 12601 W. Explorer Dr. Boise, ID 83713
2. Deanna Sandqvist 18210 Harvester AVE Nampa ID
3. Don Sandqvist 18210 Harvester AVE Nampa ID
4. Glenn Jordan 18147 Royal way Nampa ID
5. Rex Burch 18423 Avalon Pl Nampa, ID
6. Mark Means 18165 Midland Blvd, Nampa, Id 83687
7. Katlin " " " " " "
8. Tom Stewart 10540 Avalon St. Nampa ID
9. Brent Loosli 18318 Menverant Av Nampa, Id
10. Sheri Burke 18449 Viceroy Pl Nampa 83687
11. Arline + Dana Devlin 22026 Rio Vista Caldwell, ID 83607
12. David L Palgymann 5001 FIFESHIRE PL N BOISE ID 83713
13. Josh + Stacy Wilhelmsen 18037 Midland Blvd Nampa ID 83687
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_
17. \_\_\_\_\_
18. \_\_\_\_\_
19. \_\_\_\_\_

- 20. \_\_\_\_\_
- 21. \_\_\_\_\_
- 22. \_\_\_\_\_
- 23. \_\_\_\_\_
- 24. \_\_\_\_\_
- 25. \_\_\_\_\_

**Neighborhood Meeting Certification:**

Applicants shall conduct a neighborhood meeting for the following: special use permit applications; variance applications; annexation applications; planned unit development applications; preliminary plat applications that will be submitted in conjunction with an annexation, rezone or planned unit development application; and, rezone applications as per City of Caldwell Zoning Ordinance Section 10-03-12.

Description of the proposed project: ARBOR - A RESIDENTIAL PLUD

Date of Round Table meeting: APRIL 19, 2018

Notice sent to neighbors on: MAY 10, 2018

Date & time of the neighborhood meeting: MAY 23, 2018 / 6:30-7:15 PM

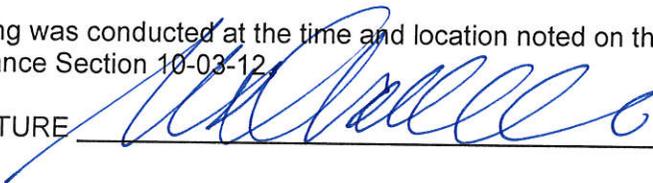
Location of the neighborhood meeting: SAGE VALLEY MIDDLE SCHOOL

**Developer/Applicant:**

Name: BRIGHTON DEVELOPMENT

Address, City, State, Zip: 12601 W. EXPLORER #200, BOISE, ID 83713

I certify that a neighborhood meeting was conducted at the time and location noted on this form and in accord with City of Caldwell Zoning Ordinance Section 10-03-12.

DEVELOPER/APPLICANT SIGNATURE  DATE 6.4.18

# Property Owner Acknowledgement

I, Midland Farm LLC, David L. Palfreyman, Manager, 5001 Fifeshire Place North, \_\_\_\_\_  
(Name) (Address)

Boise \_\_\_\_\_ Idaho 83713  
(City) (State)

being first duly sworn upon, oath, depose and say:

1. That I am the record owner, or authorized designee of the record owner of property located at

NW Corner of Ustick and Midland Road, Caldwell, Idaho

(Address)

and I grant my permission to:

Michael D. Wardle on behalf of  
Brighton Corporation, 12601 W. Explorer Drive, Ste 200  
(Name) (Address)

Boise \_\_\_\_\_ Idaho  
(City) (State)

to submit the accompanying application(s) pertaining to that property.

2. I agree to indemnify, defend and hold the City of Caldwell and its employees harmless from any claim or liability resulting from any dispute as to the statement(s) contained herein or as to the ownership of the property which is the subject of the application.

3. I hereby grant permission to City of Caldwell staff to enter the subject property for the purpose of site inspection(s) related to processing said application(s).

Dated this 17<sup>th</sup> day of May, 2018

[Signature]  
(Signature)  
Midland Farm LLC



**2012008529**  
RECORDED  
**2012 Mar 5 PM 3 04**  
CHRIS YAMAMOTO  
CANYON CNTY RECORDER  
BY M. Brown  
Requestor TitleOne Boise  
Type DEED  
Fee \$18.00  
ELECTRONICALLY RECORDED BY SIMPLIFILE

Order Number: 12202657

## Warranty Deed

For value received,

**Bingham Family Alaska, LLC, an Alaska limited liability company**

the grantor, does hereby grant, bargain, sell, and convey unto

**Midland Farm, LLC, an Idaho Limited Liability Company**

whose current address is 5001 Fifeshire Place NorthBoise, ID 83713

the grantee, the following described premises, in Canyon County, Idaho, to wit:

Parcel I:

A parcel of land being a portion of the North half of the Southeast quarter of Section 32, Township 4 North, Range 2 West, Boise Meridian, Canyon County, Idaho, being more particularly described as follows:

Commencing at the Southeast corner of said Section 32; thence  
North 00°01'11" West 1328.09 feet along the Easterly section line of said Section 32 to a point, said point being the Real Point of Beginning; thence  
North 89°50'31" West 1808.32 feet to a point; thence  
North 00°25'08" East 1328.01 feet to a point; thence  
South 89°50'40" East 769.21 feet along the centerline of Mason Creek to a point; thence  
South 34°24' East 846.33 feet along the centerline of Mason Creek to a point; thence  
South 47°03' East 99.00 feet along the centerline of Mason Creek to a point; thence  
South 56°04' East 577.00 feet along the centerline of Mason Creek to a point on the Easterly section line of said Section 32; thence  
South 00°01'11" East 243.00 feet along said section line to a point, the Real Point of Beginning.

TOGETHER WITH AND SUBJECT TO a road right-of-way along the East side, a creek easement along the Northeast side, a 60.00 foot wide access easement running parallel to the entire South side and a transmission line easement running Northwesterly across the middle of the above described parcel and any other existing easements or rights-of-way.

Parcel II:

The Southeast quarter of the Southeast quarter, Section 32, Township 4 North, Range 2 West, Boise Meridian, Canyon County, Idaho.

EXCEPTING THEREFROM a parcel of land located in the Southeast quarter of the Southeast quarter of Section 32, Township 4 North, Range 2 West, Boise Meridian, Canyon County, Idaho, described as follows:

Commencing at the Southeast corner of said Section 32, marked by a 5/8 inch rebar found in the intersection of Ustick Road and Midland Road; thence  
North 00°01'11" West 220.00 feet along the East line of said Section 32 (centerline of said Midland Road) to a 1/2 inch rebar at the Point of Beginning; thence  
North 89°50'21" West 250.00 feet to a 1/2 inch rebar; thence  
North 00°01'11" West 277.00 feet along a line parallel with and 250.00 feet Westerly of said East section line to a 1/2 inch rebar; thence  
South 89°50'21" East 250.00 feet to a PK nail in said East section line (centerline of said Midland Road, said corner also marked by a 1/2 inch rebar witness corner set 25.00 feet Westerly); thence  
South 00°01'11" East 277.00 feet along said East section line (centerline) to the Point of Beginning.

SUBJECT TO the right of way for Midland Road along the East line of said parcel and to utility, irrigation and drainage easements along the South, West and North lines and along the West line of said Midland Road right of way.

Alp

ALSO EXCEPTING THEREFROM a parcel of land located in the Southeast quarter of the Southeast quarter of Section 32, Township 4 North, Range 2 West, Boise Meridian, Canyon County, Idaho, described as follows:

Commencing at the Southeast corner of said Section 32, marked by a 5/8 inch rebar found in the intersection of Ustick Road and Midland Road; thence  
North 00°01'11" West 497.00 feet along the East line of said Section 32 (centerline of said Midland Road) to a PK nail set at the Point of Beginning, said corner also marked by a 1/2 inch rebar witness corner set 25.00 feet Westerly of said corner; thence  
North 89°50'21" West 250.00 feet to a 1/2 inch rebar; thence  
North 00°01'11" West 277.00 feet along a line parallel with and 250.00 feet Westerly of said East section line to a 1/2 inch rebar; thence  
South 89°50'21" East 250.00 feet to a PK nail in said East section line (centerline of said Midland Road, said corner also marked by a 1/2 inch rebar witness corner set 25.00 feet Westerly); thence  
South 00°01'11" East 277.00 feet along said East section line (centerline) to the Point of Beginning.

SUBJECT TO the right of way for Midland Road along the East line of said parcel and to utility, irrigation and drainage easements along the South, West and North lines and along the West line of said Midland Road right of way.

ALSO EXCEPTING THEREFROM a parcel of land located in the Southeast quarter of the Southeast quarter of Section 32, Township 4 North, Range 2 West, Boise Meridian, Canyon County, Idaho, described as follows:

Commencing at the Southeast corner of said Section 32, marked by a 5/8 inch rebar found in the intersection of Ustick Road and Midland Road; thence  
North 00°01'11" West 774.00 feet along the East line of said Section 32 (centerline of said Midland Road) to a PK nail set at the Point of Beginning, said corner also marked by a 1/2 inch rebar witness corner set 25.00 feet Westerly of said corner; thence  
North 89°50'21" West 250.00 feet to a 1/2 inch rebar; thence  
North 00°01'11" West 277.00 feet along a line parallel with and 250.00 feet Westerly of said East section line to a 1/2 inch rebar; thence  
South 89°50'21" East 250.00 feet to a PK nail in said East section line (centerline of said Midland Road, said corner also marked by a 1/2 inch rebar witness corner set 25.00 feet Westerly); thence  
South 00°01'11" East 277.00 feet along said East section line (centerline) to the Point of Beginning.

SUBJECT TO the right of way for Midland Road along the East line of said parcel and to utility, irrigation and drainage easements along the South, West and North lines and along the West line of said Midland Road right of way.

Parcel III:

Being a portion of the Northwest quarter of the Southeast quarter of Section 32, Township 4 North, Range 2 West, Boise Meridian, Canyon County, Idaho, being more particularly described as follows:

Commencing at the Southeast corner of said Section 32; thence  
North 00°01'11" West 1328.09 feet along the Easterly section line of said Section 32 to a point; thence  
North 89°50'31" West 1808.32 feet to a point, said point being the Real Point of Beginning; thence continuing  
North 89°50'31" West 843.00 feet to a point, the Sixteenth corner; thence  
North 00°09'36" East 1327.96 feet to a point, the center quarter corner; thence  
South 89°50'40" East 849.00 feet to a point; thence  
South 00°25'08" West 1328.01 feet to a point, the Real Point of Beginning.

INCLUDING a transmission line easement in the Northeasterly corner and any other existing easements of rights-of-way.

TOGETHER WITH a 60.00 foot wide Ingress/Egress Easement described as follows:

Commencing at the Southeast corner of said Section 32; thence  
North 00°01'11" West 1328.09 feet along the Easterly section line of said Section 32 to a point, said point being the Real Point of Beginning; thence  
North 89°50'31" West 1808.32 feet to a point; thence  
North 00°25'08" East 60.00 feet to a point; thence  
South 89°50'31" East 1807.86 feet to a point on the Easterly section line of said Section 32; thence  
South 00°01'11" West 60.00 feet along said section line to a point, the Real Point of Beginning.

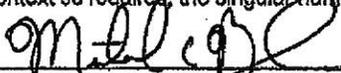
Parcel IV:

AG

Description for Culdesac Right of Way Jordan Meadows, LLC

Commencing at the Southeast corner of the Southeast quarter of Section 32, Township 4 North, Range 2 West, Boise Meridian, Canyon County, Idaho; thence North 00°22'46" West 220.00 feet along the East line of said Southeast quarter to a point; thence South 89°48'04" West 145.91 feet to a point on the proposed Northerly right of way of Cascade Court, the Real Point of Beginning of this description; thence continuing South 89°48'04" West 104.09 feet to a point; thence North 00°22'46" West 6.00 feet to a point on the proposed Northerly right of way of Cascade Court, along said proposed right of way as follows: North 89°48'04" East 8.26 feet to a point of curvature, along a curve to the left 16.30 feet, said curve having a radius of 20.00 feet, a central angle of 46°42'29", tangents of 8.64 feet, and a chord which bears North 66°26'49" East 15.86 feet to a point of reverse curvature, thence along a curve to the right 98.52 feet, said curve having a radius of 50.00 feet, a central angle of 110°36'21", tangents of 72.22 feet, and a chord which bears South 81°36'15" East 82.22 feet to the Real Point of Beginning of this description.

To have and to hold the said premises, with their appurtenances unto the said Grantee, its heirs and assigns forever. And the said Grantor does hereby covenant to and with the said Grantee, that Grantor is the owner in fee simple of said premises; that they are free from all encumbrances except those to which this conveyance is expressly made subject and those made, suffered or done by the Grantee; and subject to all existing patent reservations, easements, right(s) of way, protective covenants, zoning ordinances, and applicable building codes, laws and regulations, general taxes and assessments, including irrigation and utility assessments (if any) for the current year, which are not due and payable, and that Grantor will warrant and defend the same from all lawful claims whatsoever. Whenever the context so requires, the singular number includes the plural.

  
Bingham Family Alaska, LLC  
by: Allen Bingham, member  
Michael Bingham

State of Utah, County of Utah, ss.

On this 1st day of March in the year of 2012, before me, the undersigned, a Notary Public in and for said State, personally appeared ~~Allen Bingham~~ Michael Bingham a member of Bingham Family Alaska, LLC, an Alaska limited liability company known or identified to me to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same.

  
Notary Public  
My Commission Expires: 3/24/2015  
(seal)





June 6, 2018  
Project No.: 18-049  
Arbor Subdivision  
Legal Description

A parcel of land being a portion of the Southeast 1/4 of Section 32, Township 4 North, Range 2 West, Boise Meridian, Canyon County, Idaho and being more particularly described as follows:

Commencing at a found brass cap marking the southeast corner of said Section 32, which bears N89°37'36"W a distance of 2,655.47 feet from a found brass cap marking the southeast corner of said Section 32;

Thence following the southerly line of said Southeast 1/4, S89°37'36"E a distance of 1,327.54 feet to a found 5/8-inch rebar marking the E 1/16 corner of said Section 32 and Section 5 (T.3N., R.2W.) and being the **POINT OF BEGINNING**.

Thence leaving said southerly line and following the easterly line of the Southeast 1/4 of the Southeast 1/4 of said Section 32, N00°17'20"E a distance of 1,327.84 feet to a found 5/8-inch rebar marking the SE 1/16 corner of said Section 32;

Thence leaving said easterly line and following the southerly line of the Northwest 1/4 of the Southeast 1/4 of said Section 32, N89°37'46"W a distance of 1,325.64 feet to the CS 1/16 corner of said Section 32;

Thence leaving said southerly line and following the westerly line of said Northwest 1/4 of the Southeast 1/4, N00°22'14"E a distance of 1,107.74 feet;

Thence leaving said westerly line, S89°37'46"E a distance of 35.00 feet;

Thence N00°22'14"E a distance of 145.18 feet;

Thence N45°21'47"E a distance of 56.58 feet;

Thence N00°22'14"E a distance of 35.00 feet to the northerly line of said Northwest 1/4 of the Southeast 1/4;

Thence following said northerly line, S89°38'19"E a distance of 1,248.75 feet to the CE 1/16 corner of said Section 32;

Thence leaving said northerly line and following the northerly line of the Northeast 1/4 of the Southeast 1/4 of said Section 32, S89°37'32"E a distance of 294.39 feet to a point on the centerline of Mason Creek and said point being witnessed by a found 5/8-inch rebar which bears N89°37'32"W a distance of 66.69 feet from said point;

Thence leaving said northerly line and following said centerline the following courses:

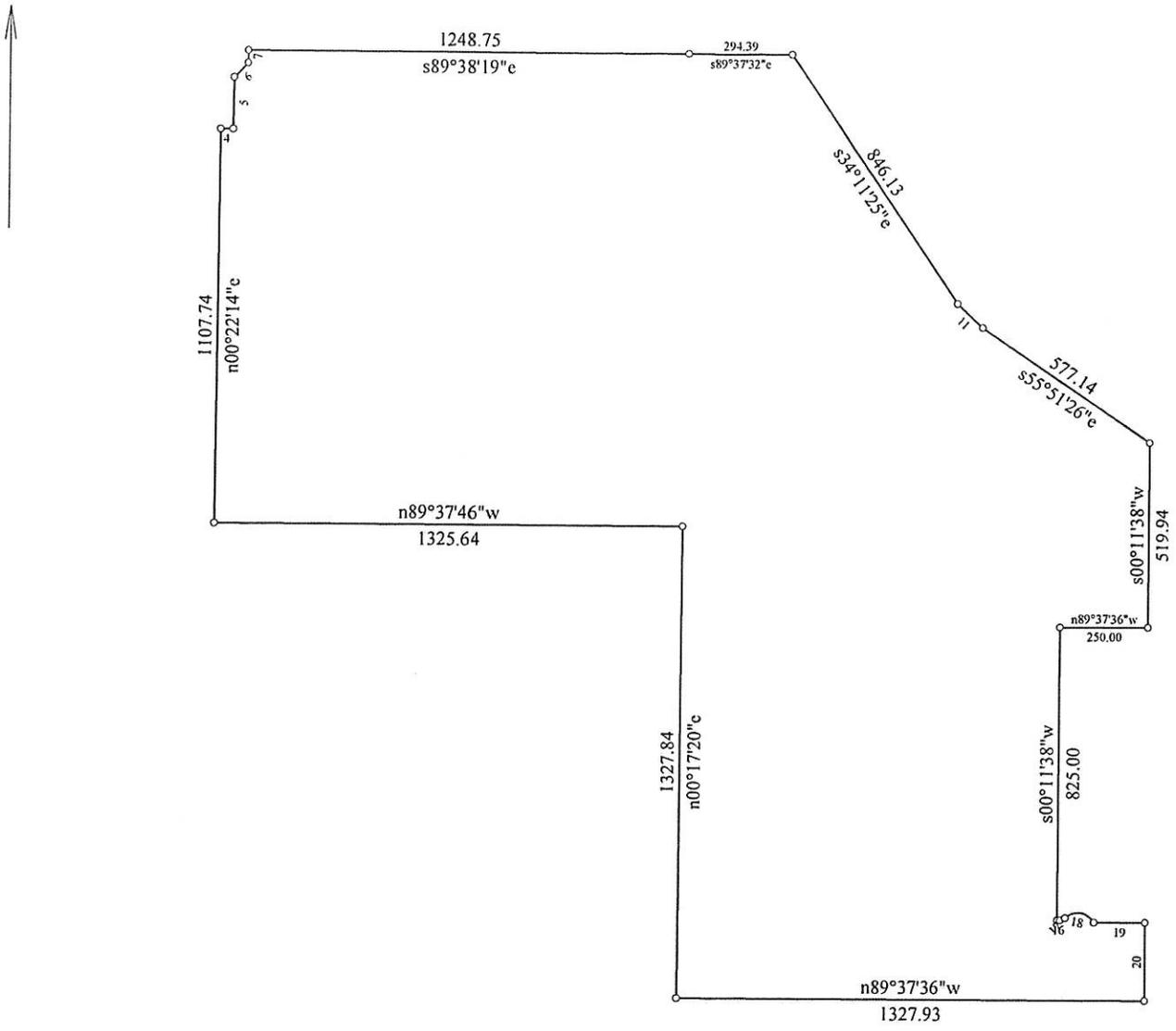
1. S34°11'25"E a distance of 846.13 feet;
2. S46°47'44"E a distance of 99.20 feet;
3. S55°51'26"E a distance of 577.14 feet to the easterly line of said Southeast 1/4;

Thence leaving said centerline and following said easterly line, S00°11'38"W a distance of 519.94 feet;

Thence leaving said easterly line, N89°37'36"W a distance of 250.00 feet to a found 1/2-inch rebar;  
Thence S00°11'38"W a distance of 825.00 feet;  
Thence S89°37'36"E a distance of 8.26 feet;  
Thence 16.31 feet along the arc of a circular curve to the left, said curve having a radius of 20.00 feet, a delta angle of 46°42'30", a chord bearing of N67°01'09"E and a chord distance of 15.86 feet;  
Thence 96.52 feet along the arc of a reverse curve to the right, said curve having a radius of 50.00 feet, a delta angle of 110°36'21", a chord bearing of S81°01'56"E and a chord distance of 82.22 feet;  
Thence S89°37'36"E a distance of 145.90 feet to the easterly line of said Southeast 1/4;  
Thence following said easterly line, S00°11'38"W a distance of 220.00 feet to said brass cap marking the Southeast corner of Section 32;  
Thence leaving said easterly line and following the southerly line of said Southeast 1/4, N89°37'36"W a distance of 1,327.93 feet to the **POINT OF BEGINNING**.

Said parcel contains a total of 101.066 acres, more or less, and is subject to all existing easements and/or rights-of-way of record or implied.





|                                                                                                                     |                      |                                                              |
|---------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------------------------------|
| Title: Arbor Subdivision                                                                                            |                      | Date: 06-06-2018                                             |
| Scale: 1 inch = 500 feet                                                                                            | File:                |                                                              |
| Tract 1: 101.066 Acres: 4402450 Sq Feet: Closure = s67.2015w 0.01 Feet: Precision >1/999999: Perimeter = 10508 Feet |                      |                                                              |
| 001=n00.1720e 1327.84                                                                                               | 009=s89.3732e 294.39 | 017: Lt, R=20.00, Delta=46.4230<br>Bng=n67.0109e, Chd=15.86  |
| 002=n89.3746w 1325.64                                                                                               | 010=s34.1125e 846.13 | 018: Rt, R=50.00, Delta=110.3621<br>Bng=s81.0156e, Chd=82.22 |
| 003=n00.2214e 1107.74                                                                                               | 011=s46.4744e 99.20  | 019=s89.3736e 145.90                                         |
| 004=s89.3746e 35.00                                                                                                 | 012=s55.5126e 577.14 | 020=s00.1138w 220.00                                         |
| 005=n00.2214e 145.18                                                                                                | 013=s00.1138w 519.94 | 021=n89.3736w 1327.93                                        |
| 006=n45.2147e 56.58                                                                                                 | 014=n89.3736w 250.00 |                                                              |
| 007=n00.2214e 35.00                                                                                                 | 015=s00.1138w 825.00 |                                                              |
| 008=s89.3819e 1248.75                                                                                               | 016=s89.3736e 8.26   |                                                              |

# Traffic Impact Study - DRAFT

## Arbor Subdivision

Caldwell, Idaho



Prepared For:

**Brighton Corporation**  
**12601 W. Explorer, Suite 200**  
**Boise, ID 83713**

**June 1, 2018**

**Thompson**  **Engineers**  
*Traffic and Civil* *Inc.*

181 East 50<sup>th</sup> St  
Garden City, ID 83714  
(208) 484-4410

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## EXECUTIVE SUMMARY

Thompson Engineers, Inc. has been retained to prepare a traffic impact study (TIS) for the proposed Arbor Subdivision located north of Ustick Road between Midland Boulevard and Santa Ana Avenue in Caldwell, Idaho, as shown in **Figure 1**. The scope of this report was determined through coordination with the City of Caldwell with inputs from Canyon Highway District No. 4 (CHD4).

The TIS evaluates the potential traffic impacts resulting from background traffic growth, offsite developments in the area, and the proposed development, as well as identifies improvements to mitigate the impacts. **Table 1** summarizes the proposed mitigations.

For this study, the background traffic includes expected traffic growth and off-site traffic generated by the proposed Adam's Ridge Subdivision, Wagon Wheel Subdivision, and Harland Subdivision.

### 1.0 Proposed Development

- 1.1 At full build-out, Arbor Subdivision is estimated to include 475 residential dwelling units and 15,000 square feet of office use. The expected full build-out year is 2025 but may change depending on the market conditions.
- 1.2 Based on the ITE Trip Generation Manual 10<sup>th</sup> Edition, Arbor Subdivision is estimated to generate approximately 4,727 trips per day, 381 trips during the AM peak hour, and 508 trips during the PM peak hour.
  - The development is not expected to retain a significant amount of internal capture trips within the site based on ITE methodologies. No trip reduction for internal capture trips was assumed in the analysis.
  - The development is not expected to pass-by trips based on ITE pass-by rates. No pass-by trips were assumed in the analysis.
  - All trips generated by the development were assumed to be made by personal or commercial vehicles. Some trips are expected to be by walking or bicycle with two existing schools within walking distance of the site.
  - The estimated site traffic distribution patterns are:
    - 10% north of the site
    - 15% west of the site
    - 15% east of the site
    - 60% south of the site

**Table 1 – Proposed Intersection Improvements Summary**

| Intersection |                             | 2017 Existing Traffic                     | 2025 Build-Out Year                         |                                             | 2030 Horizon Year                                   |                                   |
|--------------|-----------------------------|-------------------------------------------|---------------------------------------------|---------------------------------------------|-----------------------------------------------------|-----------------------------------|
|              |                             |                                           | Background Traffic                          | Total Traffic                               | Background Traffic                                  | Total Traffic                     |
| ①            | Midland Blvd and Linden Rd  | None                                      | None                                        | Single-lane roundabout or signal            | Single-lane roundabout or signal                    | None beyond roundabout or signal  |
| ②            | Middleton Rd and Spruce St  | SB left-turn lane                         | None beyond SB left-turn lane               | NB right-turn lane                          | NB right-turn lane                                  | None beyond turn lanes            |
| ③            | Santa Ana Ave And Spruce St | None                                      | None                                        | None                                        | None                                                | None                              |
| ④            | Middleton Rd and Ustick Rd  | Modified single-lane roundabout           | None beyond modified single-lane roundabout | None beyond modified single-lane roundabout | Expand to multi-lane roundabout                     | None beyond multi-lane roundabout |
| ⑤            | Santa Ana Ave and Ustick Rd | Modified single-lane roundabout or signal | None beyond roundabout or signal            | None beyond roundabout or signal            | None beyond roundabout or signal                    | None beyond roundabout or signal  |
| ⑥            | Midland Blvd and Ustick Rd  | Modified single-lane roundabout           | Expand to multi-lane roundabout             | None beyond multi-lane roundabout           | None beyond multi-lane roundabout                   | None beyond multi-lane roundabout |
| ⑦            | Midland Blvd and Cherry Ln  | None                                      | None                                        | None                                        | None                                                | None                              |
| ⑧            | N Access and Spruce St      | NA                                        | NA                                          | None                                        | NA                                                  | None                              |
| ⑨            | W Access and Santa Ana Ave  | NA                                        | NA                                          | None                                        | NA                                                  | None                              |
| ⑩            | E Access and Midland Blvd   | NA                                        | NA                                          | NB left-turn lane                           | NA                                                  | None beyond turn lane             |
| ⑪            | S Access and Ustick Rd      | NA                                        | NA                                          | EB left-turn lane<br>WB right-turn lane     | NA                                                  | None beyond turn lanes            |
| ⑫            | Laster Ln and Midland Blvd  | NA                                        | NA                                          | NA                                          | Stop-controlled on Laster Ln with NB left-turn lane | None                              |

## 2.0 Proposed Access

2.1 Arbor Subdivision is proposing full-movement accesses on Spruce Street, Santa Ana Avenue, Midland Boulevard, and Ustick Road:

■ North access on Spruce Street extension

- The development is planning to extend Spruce Street along the site frontage for site access.
- The proposed access on Spruce Street extension is located approximately 920 feet west of Santa Ana Avenue.
- With minimal traffic expected on Spruce Street extension, the proposed access is not expected to require turn lanes and is expected to meet minimum operational thresholds.

■ West access on Santa Ana Avenue

- Located approximately 250 feet south of Alpine Street
- Is not expected to require turn lanes
- Expected to meet minimum operational thresholds as a stop-controlled intersection

■ East access on Midland Boulevard

- Located approximately 1,100 feet north of Ustick Road, which is outside the influence area of the Midland Boulevard and Ustick Road roundabout
- Requires northbound left-turn lane based on NCHRP 457 guidelines
- Expected to meet minimum operational thresholds as a stop-controlled intersection

■ South access on Ustick Road:

- Located approximately 790 feet west of Midland Boulevard, which is outside the influence area of the Midland Boulevard and Ustick Road roundabout
- Requires westbound right-turn lane and eastbound left-turn lane
- Expected to meet minimum operational thresholds as a stop-controlled intersection

## 3.0 Improvements Needed to Mitigate 2017/2018 Existing Traffic

3.1 Three study area intersections exceed minimum operational thresholds with 2017/2018 existing traffic conditions analyzed with the existing intersection control and lane configurations. The intersections and improvements needed to mitigate 2017/2018 existing traffic are:

■ Middleton Road and Ustick Road intersection

- Modified single-lane roundabout

■ Santa Ana Avenue and Ustick Road intersection – two options

- Modified single-lane roundabout
- Signal

■ Midland Boulevard and Ustick Road intersection

- Modified single-lane roundabout

3.2 One study area intersection needs turn lane based on NCHRP 457 guidelines:

■ Middleton Road and Spruce Street

- Southbound left-turn lane

#### **4.0 Improvements Needed to Mitigate 2025 Build-Out Year Background Traffic**

- 4.1. One study area intersection is expected to exceed minimum operational thresholds with 2025 background traffic conditions analyzed with the existing intersection control and lane configurations or with the preceding improvements needed to mitigate 2017/2018 existing traffic. The intersection and improvements needed to mitigate the 2025 background traffic impacts are:
  - Midland Boulevard and Ustick Road intersection
    - Expand to multi-lane roundabout
- 4.2. None of the study area intersections are expected to require additional turn lanes based on NCHRP 457 guidelines.

#### **5.0 Improvements Needed to Mitigate 2025 Build-Out Year Total Traffic**

- 5.1 One study area intersection is expected to exceed minimum operational thresholds with 2025 total traffic conditions analyzed with the existing intersection control and lane configurations for with the preceding improvements identified above for 2017/2018 existing traffic and 2025 background traffic. The intersection and improvements needed to mitigate the 2025 total traffic impacts are:
  - Midland Boulevard and Linden Road intersection – two options
    - Single-lane roundabout
    - Signal with left-turn lanes on all approaches
- 5.2 One study area intersection is expected need turn lane based on NCHRP 457 guidelines:
  - Middleton Road and Spruce Street intersection
    - Northbound right-turn lane

#### **6.0 Improvements Needed to Mitigate 2030 Horizon Year Background Traffic**

- 6.1 Two study area intersections are expected to exceed minimum operational thresholds with 2030 background traffic conditions analyzed with the existing intersection control and lane configurations or with the preceding improvements identified above for 2017/2018 existing traffic and 2025 background traffic. The intersections and improvements needed to mitigate the 2030 background traffic impacts are:
  - Midland Boulevard and Linden Road intersection – two options
    - Single-lane roundabout
    - Signal with left-turn lane on all approaches
- 6.2 Two study area intersections are expected to need turn lane based on NCHRP 457 guidelines:
  - Middleton Road and Spruce Street intersection
    - Northbound right-turn lane
  - Laster Lane and Midland Boulevard intersection
    - Northbound left-turn lane
- 6.3 None of the study area intersections are expected to require additional turn lanes based on NCHRP 457 guidelines.

## **7.0 Improvements Needed to Mitigate 2030 Horizon Year Total Traffic**

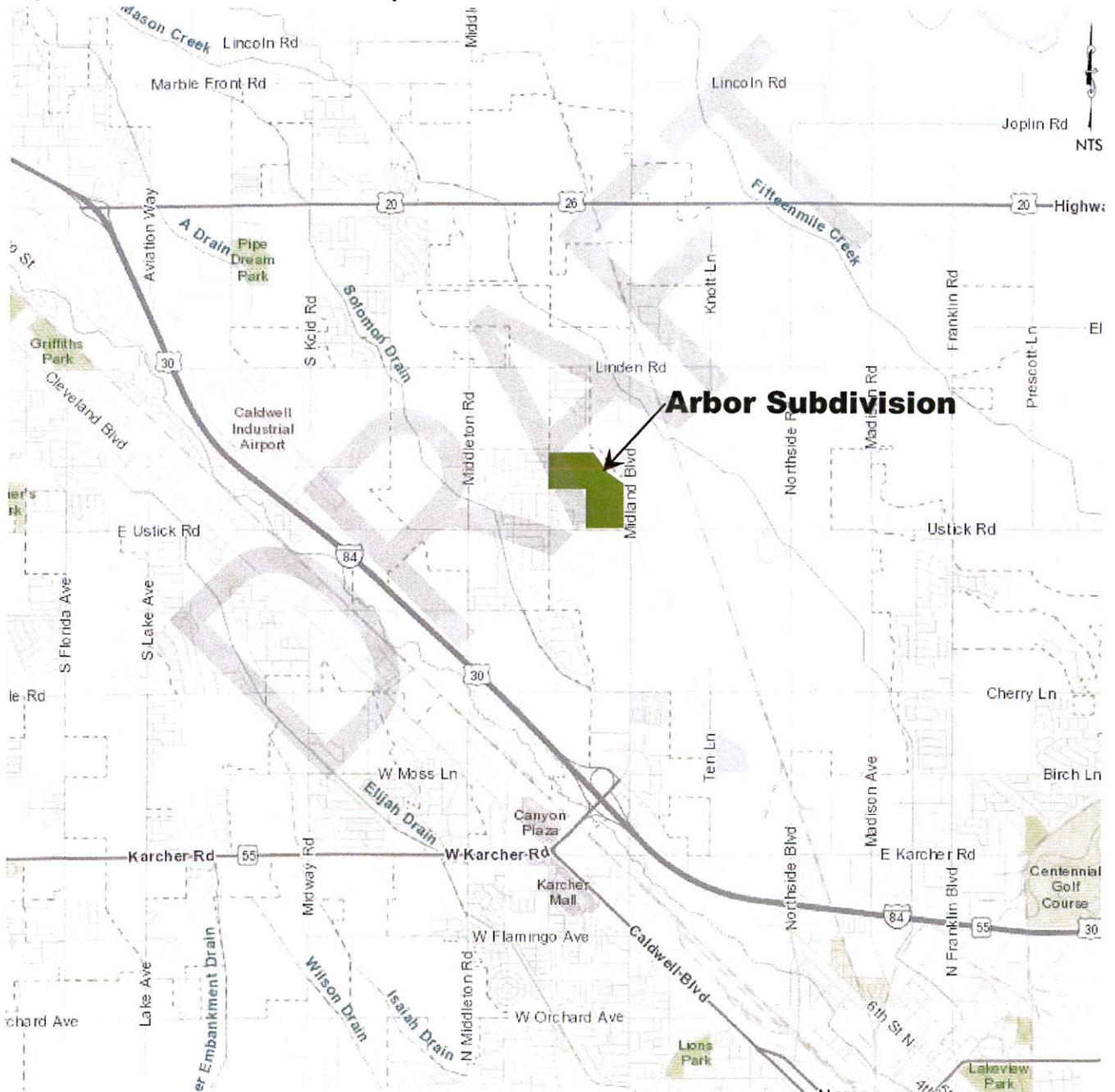
- 7.1 All study area intersections are expected to meet minimum operational thresholds with 2030 total traffic conditions analyzed with the existing intersection control and lane configurations for with the preceding improvements identified above. As a result, no additional improvements beyond the preceding improvements are needed to mitigate 2030 total traffic.
- 7.2 None of the study area intersections are expected to require additional turn lanes based on NCHRP 457 guidelines.

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# 1.0 INTRODUCTION

Thompson Engineers, Inc. has been retained to prepare a traffic impact study for the proposed Arbor Subdivision development located north of Ustick Road between Midland Boulevard and Santa Ana Avenue in Caldwell, Idaho. **Figure 1.1** shows the site location and its vicinity. The TIS evaluates the potential traffic impacts resulting from background traffic growth, offsite developments in the area, and proposed development, and identify improvements to mitigate the impacts.

**Figure 1.1 – Site Location and Vicinity**



### 1.1 Proposed Development

Arbor Subdivision is a proposed mixed-use development estimated to contain 475 residential dwelling units and 15,000 square feet of office space. **Figure 1.2** shows the preliminary site development plan with the proposed access locations. The expected build-out year is 2025, but may change depending on the market conditions.

Figure 1.2 – Preliminary Site Plan



## 1.2 Study Approach

The study area intersections are located within jurisdictions of the City of Caldwell, CHD4, City of Nampa, and Nampa Highway District No. 1 (NHD1). The study area, specific parameters, and requirements for the study were verified with the City of Caldwell's staff with inputs from CHD4.

## 1.3 Study Area

The following study area intersections were identified for collecting peak hour turning movement counts and traffic impact analysis:

1. Midland Boulevard and Linden Road
2. Middleton Road and Spruce Street
3. Santa Ana Avenue and Spruce Street
4. Middleton Road and Ustick Road
5. Santa Ana Avenue and Ustick Road
6. Midland Boulevard and Ustick Road
7. Midland Boulevard and Cherry Lane
8. All proposed site access points

## 1.4 Study Period

The analysis periods will be weekday AM and PM peak hours of operation of the transportation system. The analysis years are:

- 2017/2018 existing traffic
- 2025 build-out year background traffic (without Laster Lane connection to Midland Boulevard)
- 2025 build-out year total traffic (without Laster Lane connection to Midland Boulevard)
- 2030 horizon year background traffic (with Laster Lane connection to Midland Boulevard)
- 2030 horizon year total traffic (with Laster Lane connection to Midland Boulevard)

## 1.5 Analysis Methods and Performance Measure Thresholds

Intersection capacity analysis was performed using Synchro 10 (10.1.2.20), which utilizes the 2010 Highway Capacity Manual methodologies. For roundabouts, the HCM 2016 methodologies were used which reflect the latest research on roundabout capacity. All parameters used in the analysis were based on existing data when available or Synchro default values, when not available. The level of service for the intersection is based on the average delay of vehicles traveling through the intersection. For this study, the minimum acceptable level of service is LOS D, which is consistent with the CHD4 minimum operational thresholds for suburban roadways and intersections, and also consistent with City of Nampa thresholds.

## 2.0 EXISTING CONDITIONS

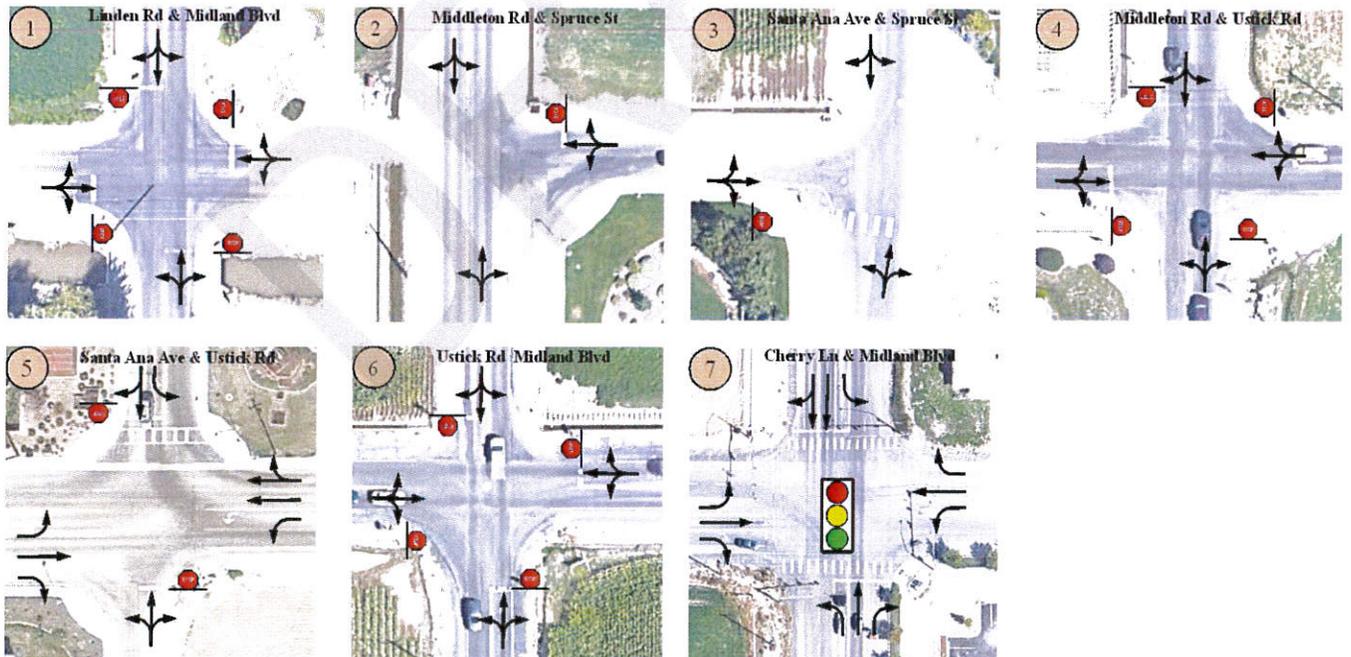
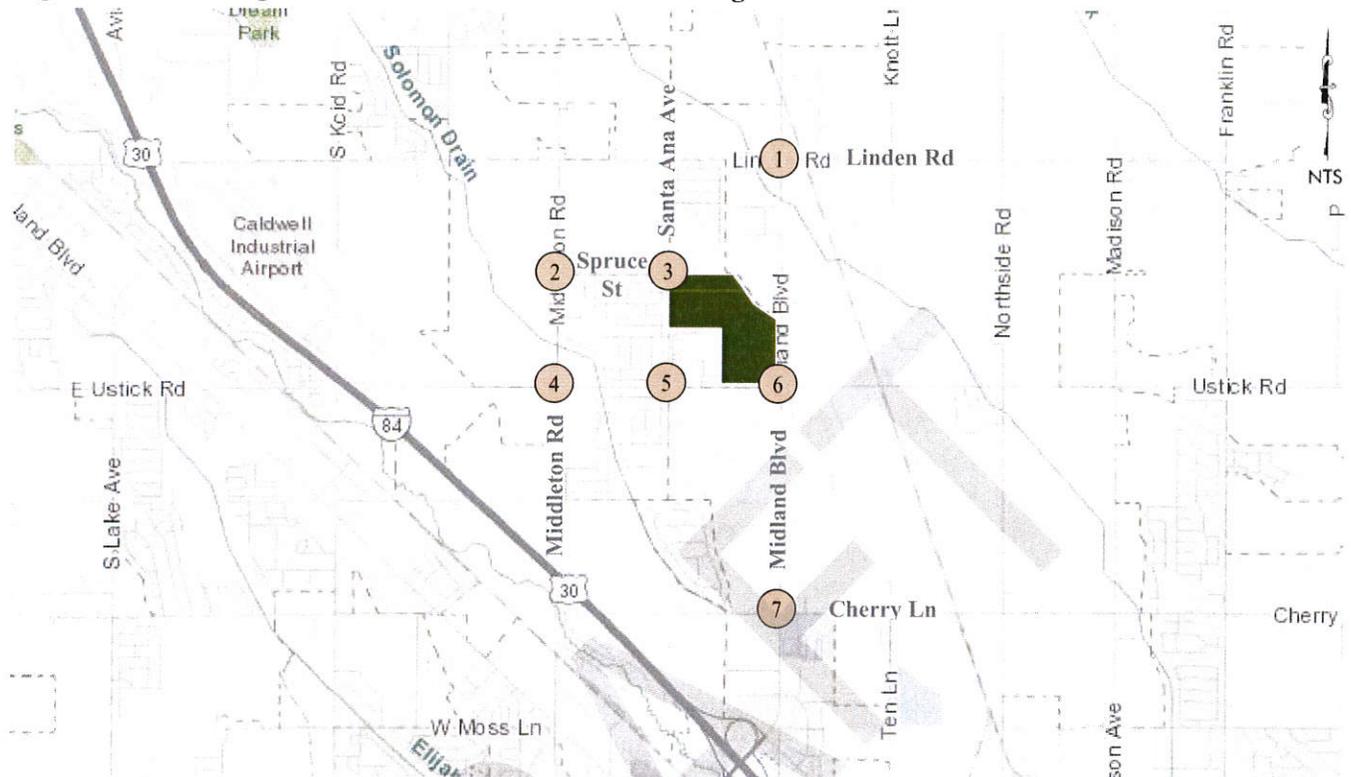
### 2.1 Roadway Network, Intersection Control and Lane Configuration

Table 2.1 summarizes the study area roadway characteristics. The roadway functional classification is based on the COMPASS 2040 Functional Classification Map. Figure 2.1 summarizes the study area intersection control and lane configuration.

**Table 2.1 – Existing Roadway Characteristics**

| Roadway       | Functional Classification         | Number of Lanes | Posted Speed Limit(mph)    | Pedestrian Facilities                          |
|---------------|-----------------------------------|-----------------|----------------------------|------------------------------------------------|
| Middleton Rd  | Principal Arterial                | 2               | 50                         | • Partial sidewalks                            |
| Santa Ana Ave | (Not Classified) Collector Street | 2               | No posted speed limit sign | • Partial sidewalks                            |
| Midland Blvd  | Principal Arterial                | 2-5             | 45                         | • Partial sidewalks<br>• Partial bicycle lanes |
| Linden Rd     | Principal Arterial                | 2               | 50                         | • Partial sidewalks                            |
| Spruce St     | (Not Classified) Collector Street | 2               | No posted speed limit sign | • Partial sidewalks                            |
| Ustick Rd     | Principal Arterial                | 2               | 50                         | • Partial sidewalks                            |
| Cherry Ln     | Principal Arterial                | 2               | 45                         | • Partial sidewalks                            |

**Figure 2.1 – Existing Intersection Control and Lane Configuration**



## 2.2 Existing Traffic Volumes

Weekday AM and PM peak hour traffic counts were obtained at the study intersections between December 2017 and May 2018. The peak hour intersection turning movement counts were collected on a weekday for a 2-hour period at 15-minute intervals between 7:00 and 9:00 during the AM peak travel period hour and between 4:00 and 6:00 during the PM peak travel period. Existing turning movement counts are included in the appendix. **Figure 2.2** and **Figure 2.3** summarize the existing peak hour traffic volumes.

## 8.4 School Routes

Two existing schools are located in the vicinity of the site: Desert Springs Elementary School and Sage Valley Middle School. Ustick Road has sidewalks on both sides of the road west of Santa Ana Avenue and along the school frontages. Santa Ana Avenue has sidewalks on both sides north of Ustick Road and along the developed frontages south of Ustick Road. There are unsignalized pedestrian crosswalks on Santa Ana Avenue along the school frontages. There is one pedestrian signal on Ustick Road located approximately 600 feet west of Santa Ana Avenue. There are also school signing and pavement markings on the adjacent roadways. These existing pedestrian facilities provide a connected school routes as well as crossing opportunities between the existing developments in the area and school sites.

**Figure 2.2 – 2017/2018 Existing AM Peak Hour Traffic**

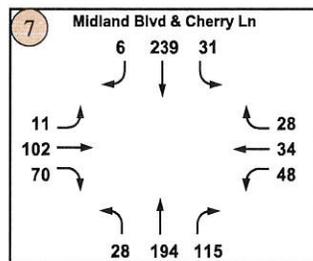
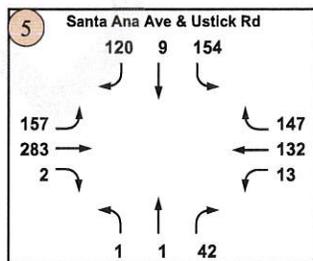
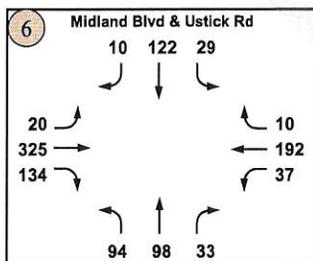
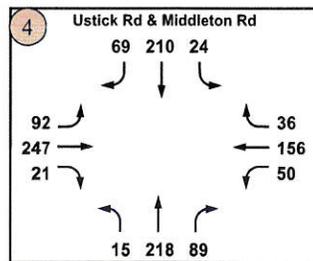
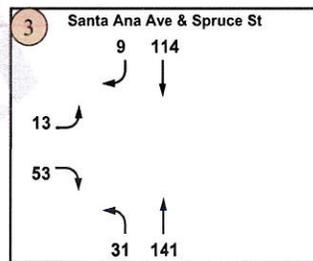
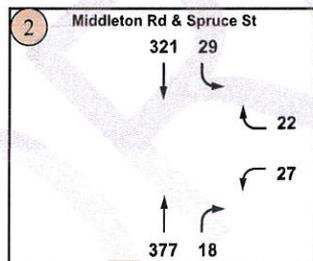
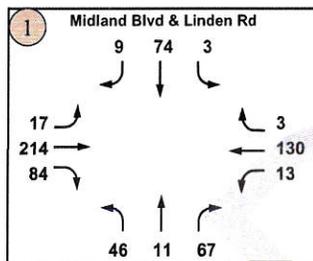
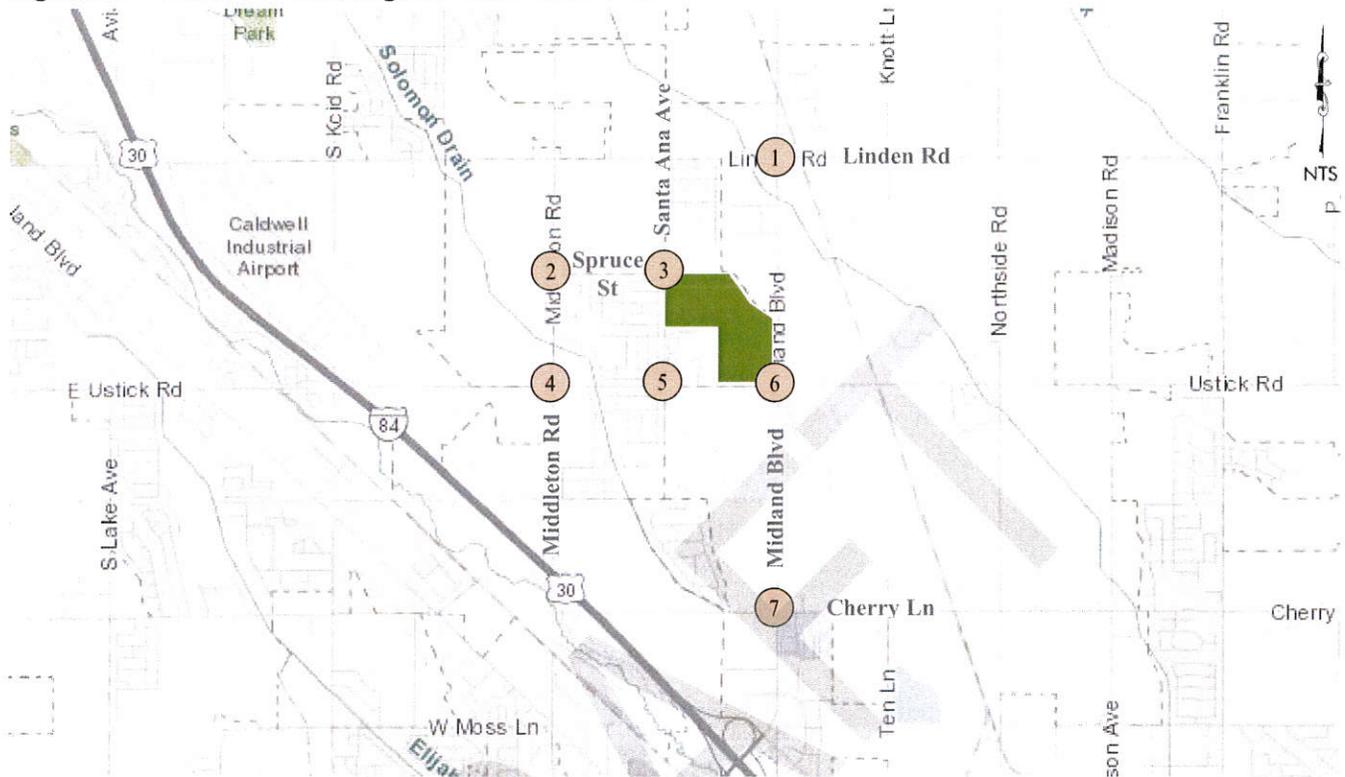
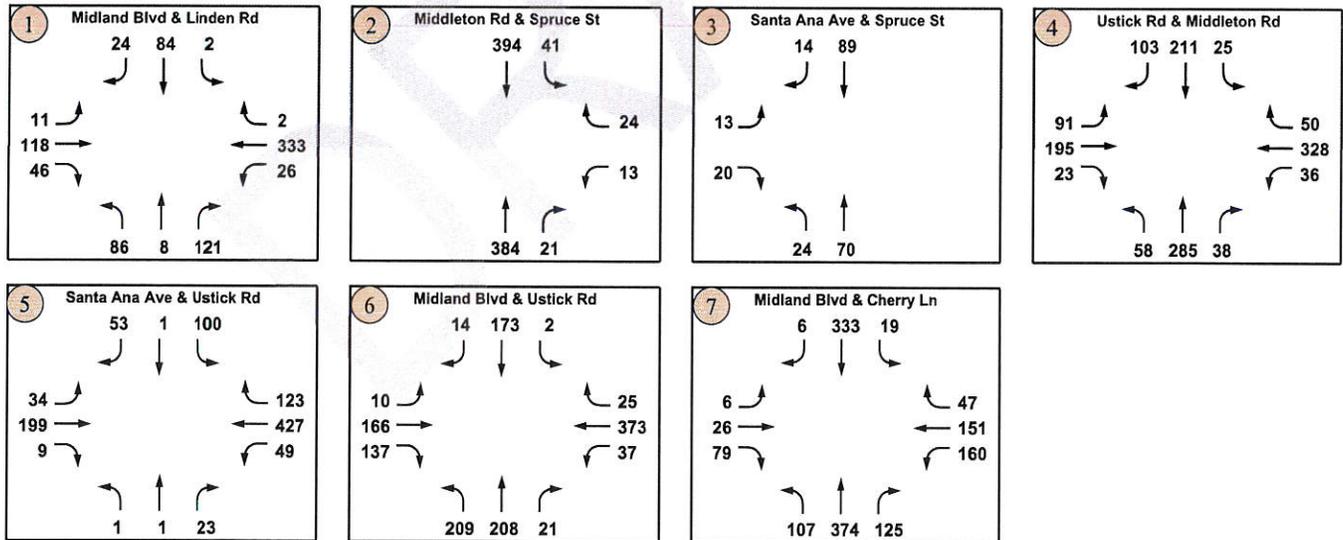
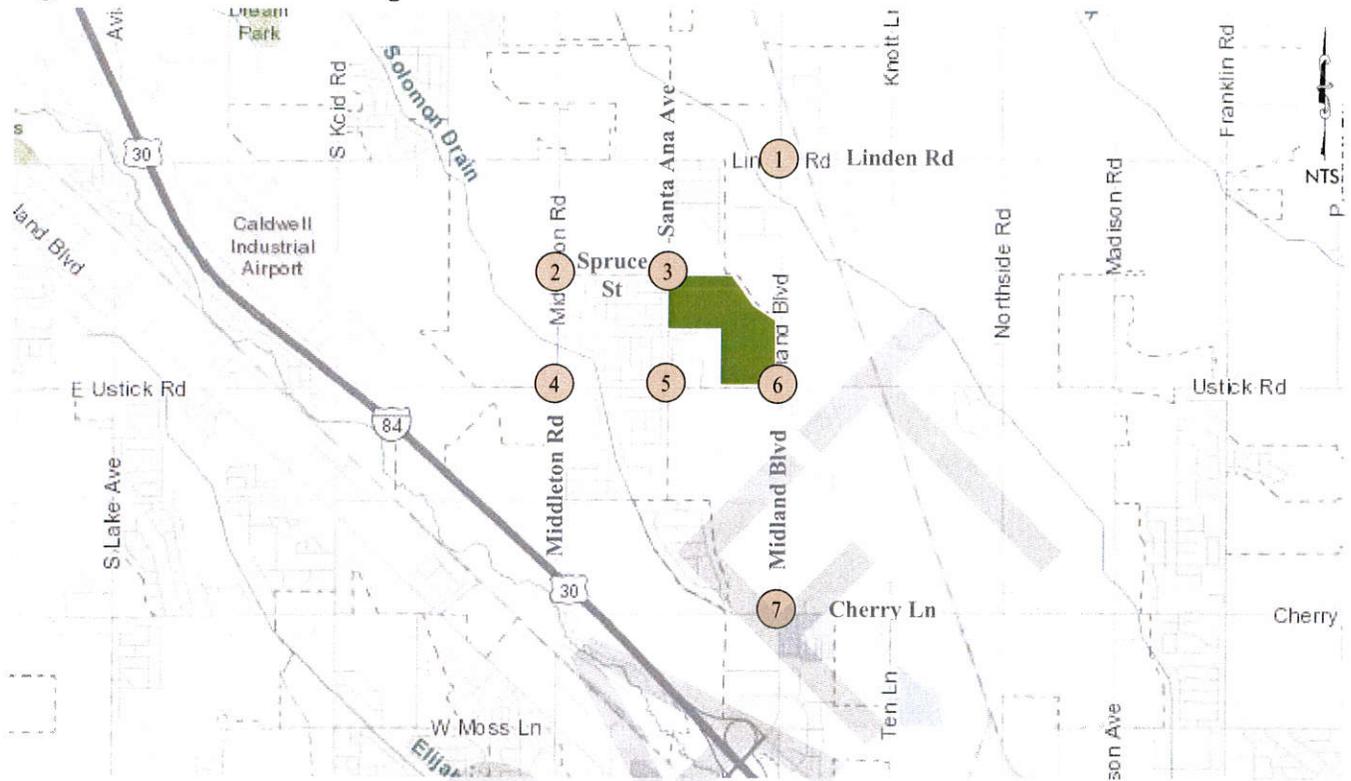


Figure 2.3 – 2017/2018 Existing PM Peak Hour Traffic



## 2.3 Intersection Crash Data

The most current five-year crash data (2012-2016) was obtained from the Local Highway Technical Assistance Council (LHTAC) website (<http://gis.lhtac.org/safety/>). **Table 2.2** summarizes the crash data statistics for the study area intersections. Three study area intersections have crash rates exceeding the base crash rates. All other study area intersections have crash rates below the base crash rates.

**Table 2.2 – Intersection Crash Data (2012-2016)**

| Intersection                         | Total Crashes            | Crash Severity       |        |       | Base <sup>1</sup> Crash Rate (ACC/MV) | Existing Crash Rate (ACC/MV) |
|--------------------------------------|--------------------------|----------------------|--------|-------|---------------------------------------|------------------------------|
|                                      |                          | Property Damage Only | Injury | Fatal |                                       |                              |
| ① Midland Boulevard and Linden Road  | 12                       | 7                    | 5      | 0     | 1.30 (Type 5)                         | <b>1.51</b>                  |
| ② Middleton Road And Spruce Street   | 4                        | 2                    | 2      | 0     | 0.58 (Type 6)                         | 0.26                         |
| ③ Santa Ana Avenue and Spruce Street | <i>No Report Crashes</i> |                      |        |       |                                       |                              |
| ④ Middleton Road and Ustick Road     | 26                       | 9                    | 5      | 21    | 0.58 (Type 6)                         | <b>0.80</b>                  |
| ⑤ Santa Ana Avenue and Ustick Road   | 10                       | 8                    | 2      | 0     | 0.58 (Type 33)                        | 0.58                         |
| ⑥ Midland Boulevard And Ustick Road  | 16                       | 9                    | 7      | 0     | 0.58 (Type 6)                         | <b>0.66</b>                  |
| ⑦ Midland Boulevard And Cherry Lane  | 9                        | 3                    | 6      | 0     | 0.58 (Type 33)                        | 0.41                         |

<sup>1</sup>Based on similar roadway type, width, and volume.

## 2.4 Intersection Level of Service

To determine the existing traffic impacts, the study area intersections were analyzed with the existing intersection control and lane configuration and 2017/2018 existing peak hour traffic. Copies of the analysis reports are included in the appendix. **Table 2.3** summarizes the intersection capacity analysis results. All study area intersections meet ITD or ACHD minimum operational thresholds, with the exception of three intersections:

- Middleton Road and Ustick Road intersection
- Santa Ana Avenue and Ustick Road intersection
- Midland Boulevard and Ustick Road intersection

**Table 2.3 – Intersection Level of Service – 2017/2018 Existing Traffic**

| Intersection |                                    | Control                | MOEs                     | AM Peak Hour        | PM Peak Hour   |
|--------------|------------------------------------|------------------------|--------------------------|---------------------|----------------|
| ①            | Midland Boulevard and Linden Road  | All-Way Stop           | Intersection LOS         | B                   | B              |
|              |                                    |                        | Intersection Delay (s/v) | 11                  | 13             |
|              |                                    |                        | Worst Lane Group LOS     | B (EB)              | B (WB)         |
| ②            | Middleton Road And Spruce Street   | Stop (Spruce)          | LOS (WB)                 | B                   | B              |
|              |                                    |                        | Delay (s/v) (WB)         | 15                  | 14             |
|              |                                    |                        | Worst Lane Group LOS     | B (WB)              | B (WB)         |
| ③            | Santa Ana Avenue and Spruce Street | Stop (Spruce)          | LOS (EB)                 | A                   | B              |
|              |                                    |                        | Delay (s/v) (EB)         | 10                  | 10             |
|              |                                    |                        | Worst Lane Group LOS     | A (EB)              | B              |
| ④            | Middleton Road and Ustick Road     | All-Way Stop           | Intersection LOS         | <b>E</b>            | <b>F</b>       |
|              |                                    |                        | Intersection Delay (s/v) | 37                  | <b>&gt; 50</b> |
|              |                                    |                        | Worst Lane Group LOS     | <b>E (EB)</b>       | <b>F (WB)</b>  |
| ⑤            | Santa Ana Avenue and Ustick Road   | 2-Way Stop (Santa Ana) | LOS (NB / SB)            | B / <b>F</b>        | B / <b>E</b>   |
|              |                                    |                        | Delay (s/v) (NB / SB)    | 11 / <b>&gt; 50</b> | 10 / 37        |
|              |                                    |                        | Worst Lane Group LOS     | <b>F (SBL)</b>      | <b>E (SBL)</b> |
| ⑥            | Midland Boulevard and Ustick Road  | All-Way Stop           | Intersection LOS         | C                   | <b>F</b>       |
|              |                                    |                        | Intersection Delay (s/v) | 20                  | <b>&gt;50</b>  |
|              |                                    |                        | Worst Lane Group LOS     | D (EB)              | <b>F (NB)</b>  |
| ⑦            | Midland Boulevard and Cherry Lane  | Signal                 | Intersection LOS         | C                   | C              |
|              |                                    |                        | Intersection Delay (s/v) | 28                  | 26             |
|              |                                    |                        | Worst Lane Group LOS     | D (SBL)             | D (SBL)        |

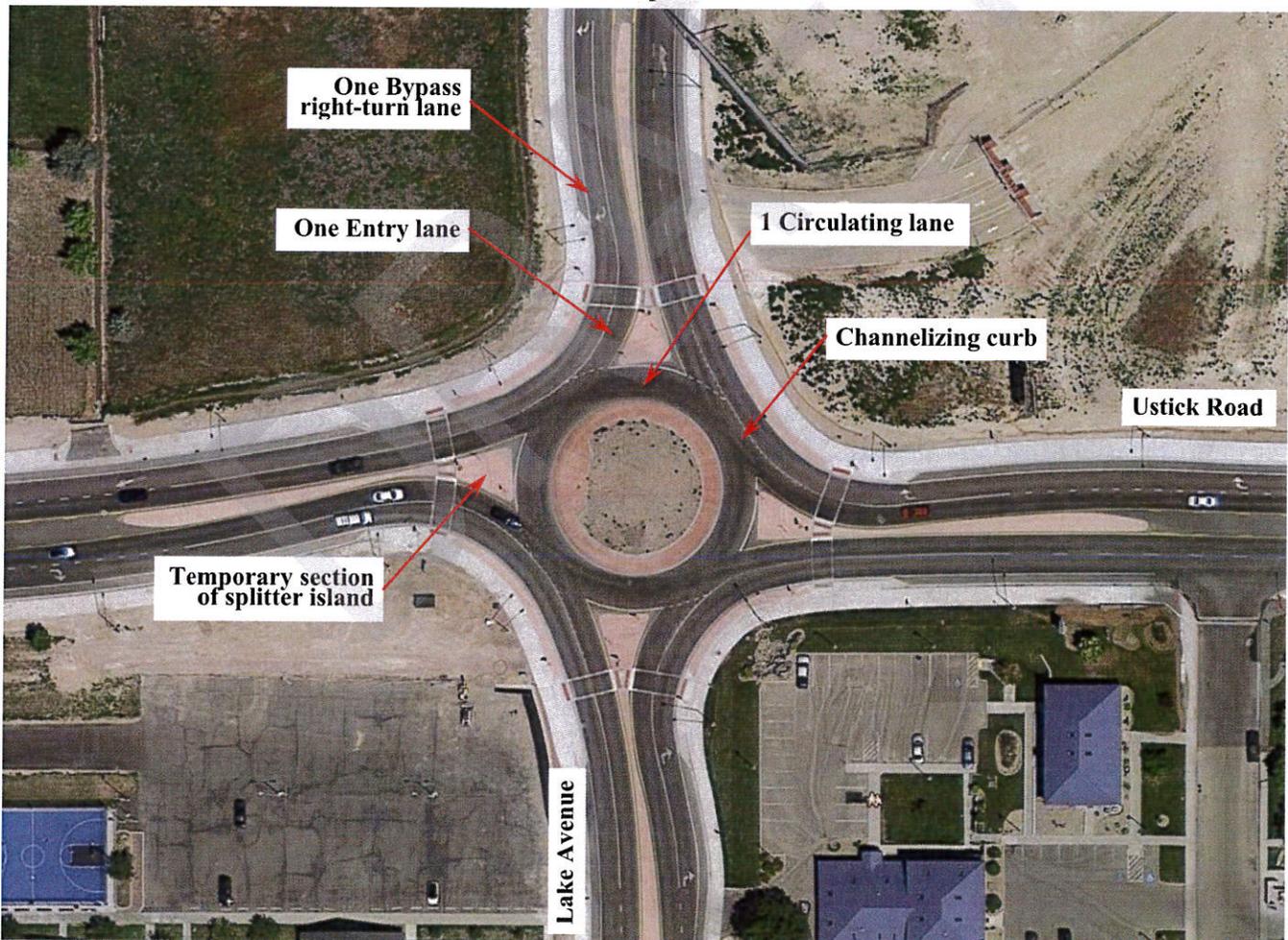
## 2.5 Mitigation

The proposed intersection improvements discussed below are expected to mitigate 2017/2018 existing traffic to meet the minimum operational thresholds. Turn lane analysis was evaluated at unsignalized intersections using NCHRP 457 guidelines. **Table 2.6** summarizes the analysis results for the proposed mitigation.

### Middleton Road and Ustick Road Intersection

The City of Caldwell is planning to reconstruct the Middleton Road and Ustick Road intersection as a multi-lane roundabout in the year 2021. Intersection control evaluation and design has been completed for the intersection improvement. As a result, a roundabout is proposed to mitigate 2017 existing traffic. For operational and safety effectiveness, the roundabout should be initially constructed as a modified single-lane roundabout within the ultimate multi-lane footprints in the interim years. This will allow the roundabout to be readily expandable to a multi-lane roundabout when traffic demand warrants. An existing example of a modified single-lane roundabout is the recently constructed Ustick Road and Lake Avenue roundabout. It has one by-pass right-turn lane and one shared lane for through and left-turn movements on all approaches.

**Figure 2.4 – Modified Single-Lane Roundabout Example**



#### Santa Ana Avenue and Ustick Road Intersection

Currently, there are no plans to improve the Santa Ana Avenue and Ustick Road intersection. However, the Santa Ana Avenue and Ustick Road intersection is exceeding minimum operational thresholds during the peak hours. As a result, two mitigation options are proposed to mitigate 2017 existing traffic at the Santa Ana Avenue and Ustick Road intersection:

- Traffic signal
  - Utilize existing lane configuration
  - A traffic signal would have minimum impact on the intersection footprints and will not require major road widening.
  - There are planned roundabouts on Ustick Road within one-half mile east and west of the intersection. A traffic signal may not be appropriate with the adjacent roundabouts on Ustick Road.
- Roundabout
  - A modified single-lane roundabout with one shared lane on the northbound and southbound approaches, and one bypass right-turn lane and one shared lane for through and left-turn movements on the eastbound and westbound approaches.
  - A roundabout would be appropriate on Ustick Road roundabout corridor.
  - With the existing schools, a roundabout would be an optimal intersection control.
  - A roundabout will require roadway widening and may require additional right-of-way.

#### Midland Boulevard and Ustick Road Intersection

The City of Caldwell along with CHD4, City of Nampa, and NHD1 is planning to reconstruct the Midland Boulevard and Ustick Road intersection as a multi-lane roundabout. The intersection improvement is currently under design. As a result, a roundabout is proposed to mitigate 2017 existing traffic. As discussed above, the roundabout should be initially constructed as a modified single-lane roundabout within the ultimate multi-lane footprints for the interim years and expanded to a multi-lane roundabout when traffic demand warrants.

#### Middleton Road and Spruce Street Intersection

The Middleton Road and Spruce Street intersection currently meets minimum operational thresholds. However based on NCHRP 457 turn-lane guidelines, the following turn lane is warranted:

- Southbound left-turn lane

**Table 2.4 – Intersection Level of Service – 2017/2018 Existing Traffic Mitigation**

| Intersection |                                   | Mitigation                      | MOEs                     | AM Peak Hour | PM Peak Hour |
|--------------|-----------------------------------|---------------------------------|--------------------------|--------------|--------------|
| 2            | Middleton Road And Spruce Street  | Southbound Left-Turn Lane       | LOS (WB)                 | B            | B            |
|              |                                   |                                 | Delay (s/v) (WB)         | 12           | 13           |
|              |                                   |                                 | Worst Lane Group LOS     | B (WB)       | B (WB)       |
| 4            | Middleton Road and Ustick Road    | Modified Single-Lane Roundabout | Intersection LOS         | A            | A            |
|              |                                   |                                 | Intersection Delay (s/v) | 6            | 7            |
|              |                                   |                                 | Worst Lane Group LOS     | A (EBLT)     | A (WBLT)     |
| 5            | Santa Ana Avenue and Ustick Road  | Modified Single-Lane Roundabout | Intersection LOS         | A            | A            |
|              |                                   |                                 | Intersection Delay (s/v) | 6            | 5            |
|              |                                   |                                 | Worst Lane Group LOS     | A (EBLT)     | A (SBLT)     |
|              |                                   | Signal                          | Intersection LOS         | A            | A            |
|              |                                   |                                 | Intersection Delay (s/v) | 7            | 6            |
|              |                                   |                                 | Worst Lane Group LOS     | A (SBTR)     | A (SBTR)     |
| 6            | Midland Boulevard and Ustick Road | Modified Single-Lane Roundabout | Intersection LOS         | A            | A            |
|              |                                   |                                 | Intersection Delay (s/v) | 5            | 7            |
|              |                                   |                                 | Worst Lane Group LOS     | A (EBLT)     | B (WBLT)     |

## 3.0 2025 BUILD-OUT YEAR BACKGROUND TRAFFIC CONDITIONS

### 3.1 Roadway Network

The study area roadways and intersections are expected to remain the same as the existing conditions with the exception of the intersection improvements needed to mitigate 2017/2018 existing traffic as discussed in the previous section. There are also planned improvements for the study area roadways and intersections summarize in **Table 3.1**. These improvements were considered as mitigation options for 2025 background traffic when necessary.

The Adam’s Ridge Subdivision, if approved, is expected to widen and improve Laster Lane along their site frontages. The development is not planning to extend Laster Lane to Midland Boulevard because they don’t own the right-of-way to construct this connection. However, the Laster Lane connection to Midland Boulevard could be constructed sooner if the parcel to the south is developed. For 2025 conditions, Laster Lane is assumed to not be extended to Midland Boulevard.

**Table 3.1 – Planned Improvements Within the Study Area**

| Identified Improvements (Year)                                                                                                                                                                                                                         | Agency and Transportation Plan                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>Ustick Road</b> <ul style="list-style-type: none"> <li>Widen from 2 to 5 lanes from Midland Blvd to McDermott Rd (2020)</li> <li>Widen from 5 to 6 lanes from Midland Blvd to McDermott Rd (2035)</li> </ul>                                        | City of Nampa<br>Citywide Transportation Plan |
| <b>Midland Boulevard</b> <ul style="list-style-type: none"> <li>Widen from 2 to 5 lanes from Marketplace Blvd to Cherry Ln (2015)</li> <li>Widen from 2 to 5 lanes from Cherry Ln to Ustick Rd (2015)</li> </ul>                                       | City of Nampa<br>Citywide Transportation Plan |
| <b>Cherry Lane</b> <ul style="list-style-type: none"> <li>Reconstruct/ widen from 2 to 5 lanes from Midland Boulevard to Franklin Road (2015)</li> <li>Culd-du-sac Cherry Ln at Middleton Rd; connect Laster Ln to Midland Blvd (2010-2019)</li> </ul> | City of Nampa<br>Citywide Transportation Plan |
| <b>Northside Boulevard</b> <ul style="list-style-type: none"> <li>Widen from 2 to 3 lanes from Karcher Rd to Ustick Rd (2025)</li> </ul>                                                                                                               | City of Nampa<br>Citywide Transportation Plan |
| <b>Middleton Road</b> <ul style="list-style-type: none"> <li>Widen from 2 to 3 lanes from Lake Lowell Ave to I-84 (2035)</li> </ul>                                                                                                                    | City of Nampa<br>Citywide Transportation Plan |
| <b>Midland Blvd and Cherry Lane Intersection (2015)</b> <ul style="list-style-type: none"> <li>Add lanes</li> </ul>                                                                                                                                    | City of Nampa<br>Citywide Transportation Plan |
| <b>Ustick Road and Northside Boulevard Intersection (2020)</b> <ul style="list-style-type: none"> <li>Add signal and turn lanes</li> </ul>                                                                                                             | City of Nampa<br>Citywide Transportation Plan |
| <b>Ustick Road and Midland Boulevard Intersection (2020)</b> <ul style="list-style-type: none"> <li>Add signal and turn lanes</li> </ul>                                                                                                               | City of Nampa<br>Citywide Transportation Plan |
| <b>Ustick Road and Midland Boulevard Intersection (TBD)</b> <ul style="list-style-type: none"> <li>Improve the intersection as a multi-lane roundabout</li> </ul>                                                                                      | City of Caldwell, CHD4,<br>Nampa, NHD1        |
| <b>Ustick Road and Middleton Road Intersection (2021)</b> <ul style="list-style-type: none"> <li>Improve the intersection as a multi-lane roundabout</li> </ul>                                                                                        | City of Caldwell<br>Comprehensive Plan        |

### 3.2 Background Traffic

Future background traffic was estimated by extrapolating the 2017/2018 existing traffic counts by the following annual growth rates:

- 4.0% per year on Ustick Road and Linden Road
- 2.0% per year on Middleton Road, Midland Boulevard, Spruce Street, Santa Ana Avenue, and Cherry Lane

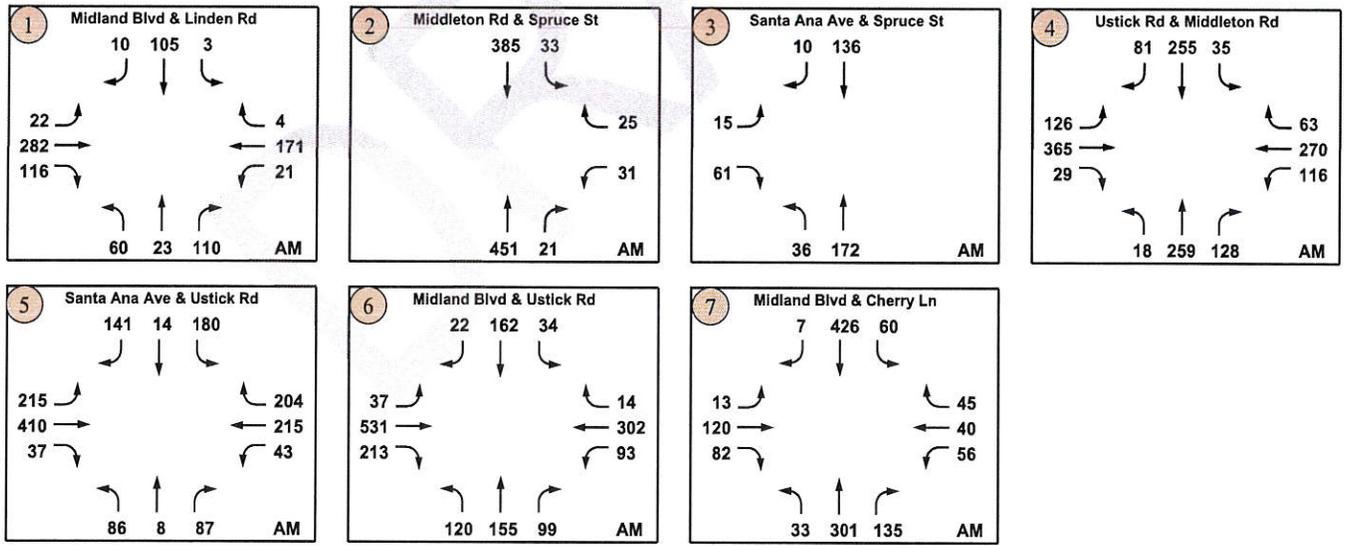
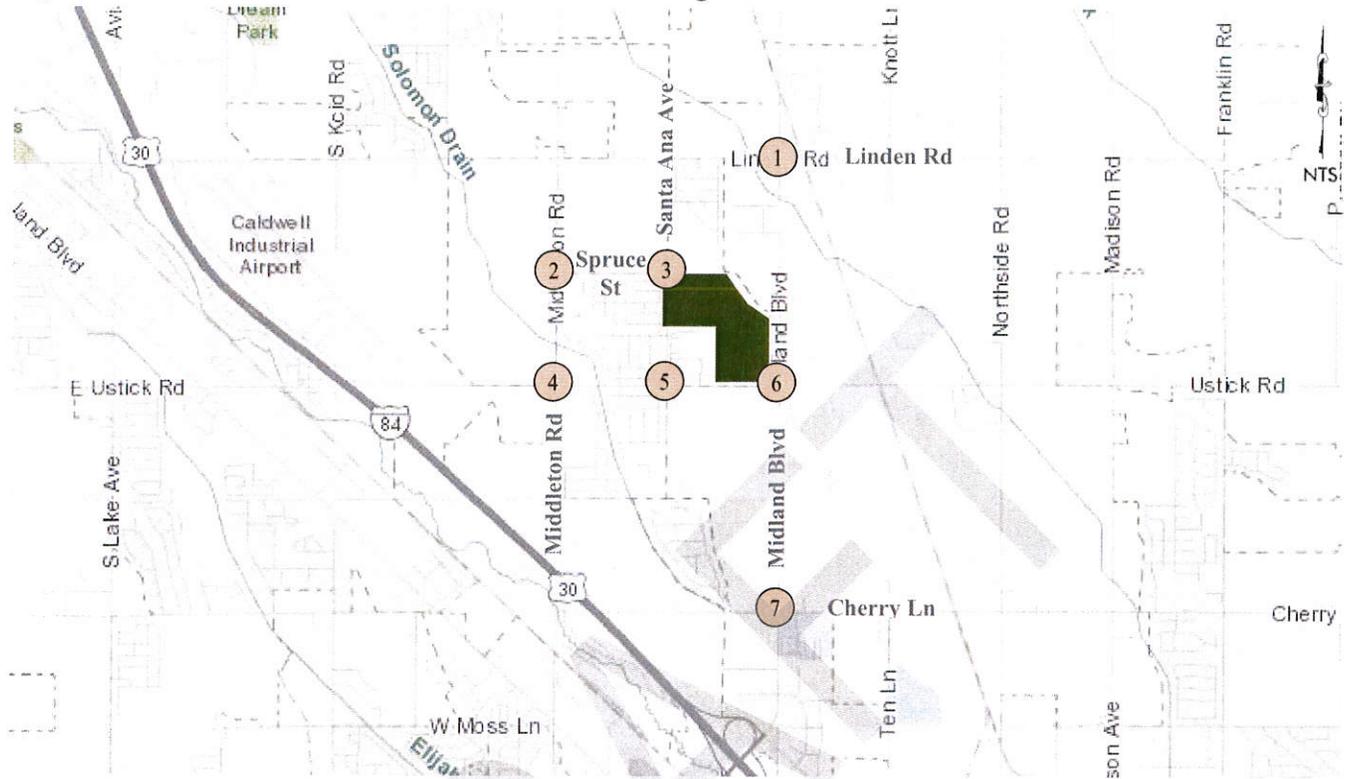
These growth rates are based on historical traffic counts on these roadways, COMPASS forecasts, and our review of other traffic studies in the area. **Figure 3.1** and **Figure 3.2** summarize the 2025 build-out year peak hour background traffic.

### 3.3 Off-Site Development Traffic

In addition to the traffic growth, traffic generated by three proposed off-site developments located in the vicinity of the site was also included in the background traffic:

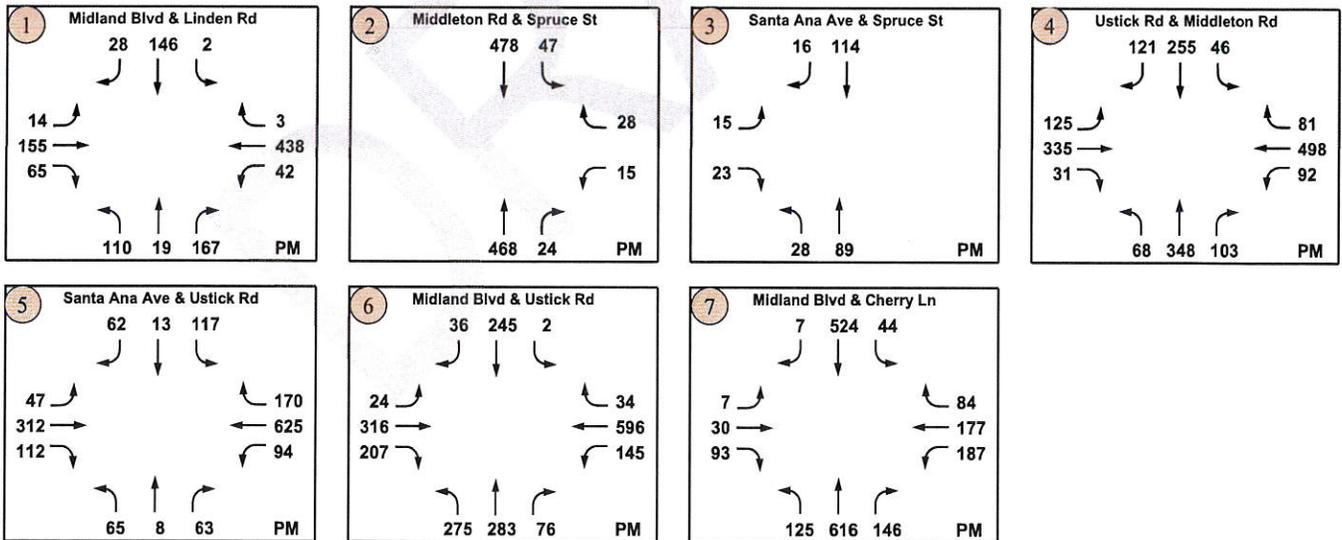
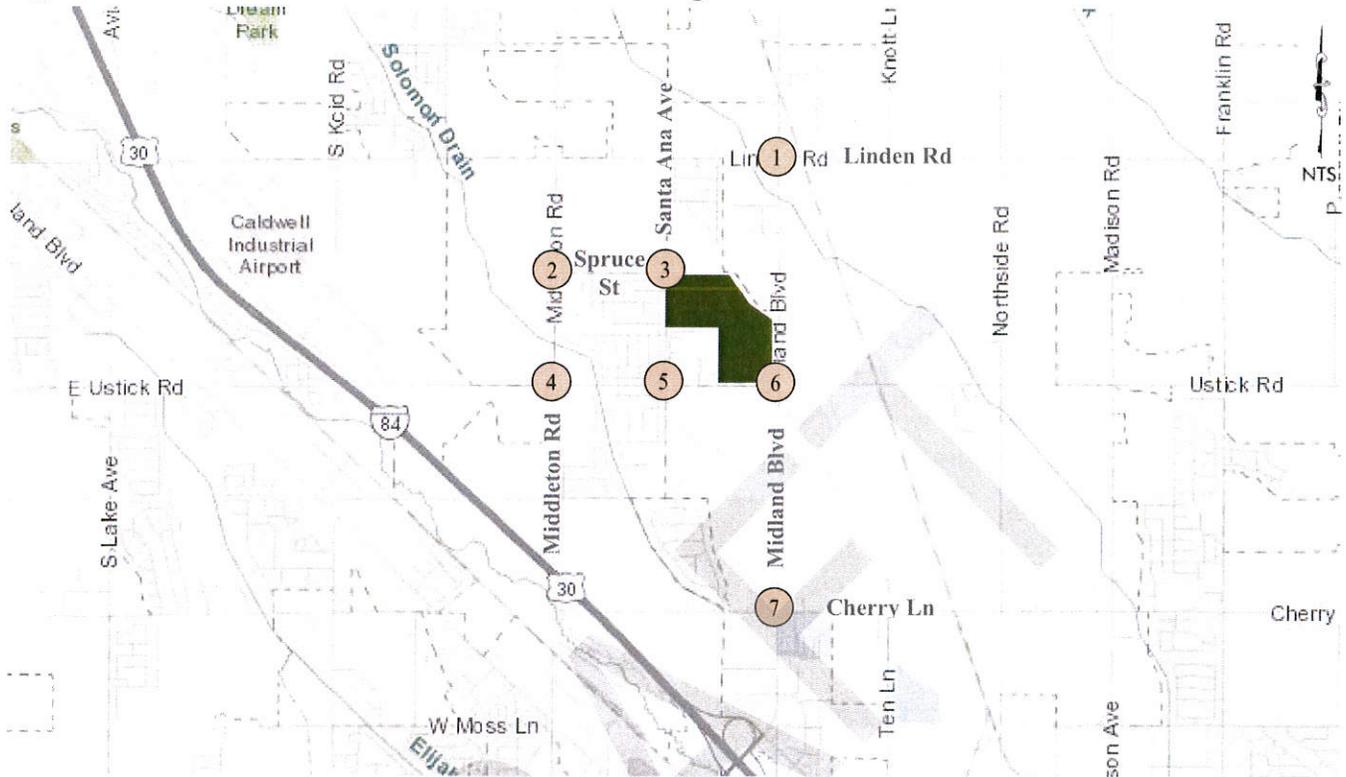
- Adam's Ridge Subdivision located south of Ustick Road south of the site
- Wagon Wheel Subdivision located west of Middleton Road between US 20-26 and Linden Road
- Hartland Subdivision located in the northeast quadrant of Ustick Road and Northside Boulevard intersection

**Figure 3.1 – 2025 Build-Out Year AM Peak Hour Background Traffic**



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**Figure 3.2 – 2025 Build-Out Year PM Peak Hour Background Traffic**



### 3.4 Intersection Level of Service

To determine the 2025 background traffic impacts, the study area intersections were analyzed with the existing intersection control and lane configuration or with the preceding improvements needed to mitigate 2018 existing traffic. Copies of the analysis reports are included in the appendix. **Table 3.2** summarizes the intersection capacity analysis results. One study area intersection is expected to exceed minimum operational thresholds and will require improvements to mitigate 2025 background traffic:

- Midland Boulevard and Ustick Road intersection

**Table 3.2 – Intersection Level of Service – 2025 Build-Out Year Background Traffic**

| Intersection |                                    | Control                         | MOEs                     | AM Peak Hour | PM Peak Hour    |
|--------------|------------------------------------|---------------------------------|--------------------------|--------------|-----------------|
| ①            | Midland Boulevard and Linden Road  | All-way Stop                    | Intersection LOS         | B            | D               |
|              |                                    |                                 | Intersection Delay (s/v) | 15           | 28              |
|              |                                    |                                 | Worst Lane Group LOS     | C (EB)       | E (WB)          |
| ②            | Middleton Road And Spruce Street   | Stop (Spruce)                   | LOS (WB)                 | B            | B               |
|              |                                    |                                 | Delay (s/v) (WB)         | 14           | 14              |
|              |                                    |                                 | Worst Lane Group LOS     | B (WB)       | B (WB)          |
| ③            | Santa Ana Avenue and Spruce Street | Stop (Spruce)                   | LOS (EB)                 | A            | B               |
|              |                                    |                                 | Delay (s/v) (EB)         | 10           | 11              |
|              |                                    |                                 | Worst Lane Group LOS     | A (EB)       | B (EB)          |
| ④            | Middleton Road and Ustick Road     | Modified Single-Lane Roundabout | Intersection LOS         | A            | B               |
|              |                                    |                                 | Intersection Delay (s/v) | 10           | 13              |
|              |                                    |                                 | Worst Lane Group LOS     | B (EBLT)     | C (WBLT)        |
| ⑤            | Santa Ana Avenue and Ustick Road   | Modified Single-Lane Roundabout | Intersection LOS         | A            | A               |
|              |                                    |                                 | Intersection Delay (s/v) | 9            | 8               |
|              |                                    |                                 | Worst Lane Group LOS     | B (EBLT)     | B (WBLT)        |
|              |                                    | Signal                          | Intersection LOS         | B            | A               |
|              |                                    |                                 | Intersection Delay (s/v) | 11           | 7               |
|              |                                    |                                 | Worst Lane Group LOS     | B (NB)       | B (NB)          |
| ⑥            | Midland Boulevard and Ustick Road  | Modified Single-Lane Roundabout | Intersection LOS         | A            | D               |
|              |                                    |                                 | Intersection Delay (s/v) | 8            | 32              |
|              |                                    |                                 | Worst Lane Group LOS     | B (EBLT)     | <b>F (WBLT)</b> |
| ⑦            | Midland Boulevard and Cherry Lane  | Signal                          | Intersection LOS         | C            | C               |
|              |                                    |                                 | Intersection Delay (s/v) | 28           | 26              |
|              |                                    |                                 | Worst Lane Group LOS     | D (SBL)      | D (SBL)         |

### 3.5 Mitigation

One study area intersection is expected to exceed minimum operational thresholds with 2025 background traffic. The proposed intersection improvements discussed below are expected to mitigate 2025 background traffic to meet minimum operational thresholds. Turn lane analysis was evaluated at unsignalized intersections using NCHRP 457 guidelines. **Table 3.3** summarizes the analysis results for the proposed mitigations.

#### Midland Boulevard and Ustick Road Intersection

The Midland Boulevard and Ustick Road intersection is expected to exceed minimum operational thresholds as a modified single-lane roundabout with 2025 background traffic. To meet 2025 background traffic demand, the roundabout should be expanded to a multi-lane roundabout by removing the channelizing curb and modifying sections of the splitter islands. With these modifications, the roundabout will have two entry lanes and two exit lanes on all approaches.

None of the study area intersections are expected to warrant turn lanes.

**Table 3.3 – Intersection Level of Service – 2025 Build-Out Year Background Traffic Mitigation**

| Intersection |                                   | Mitigation            | MOEs                     | AM Peak Hour | PM Peak Hour |
|--------------|-----------------------------------|-----------------------|--------------------------|--------------|--------------|
| 6            | Midland Boulevard and Ustick Road | Multi-Lane Roundabout | Intersection LOS         | A            | A            |
|              |                                   |                       | Intersection Delay (s/v) | 7            | 9            |
|              |                                   |                       | Worst Lane Group LOS     | A (EBLT)     | B (WBLT)     |

## 4.0 2025 BUILD-OUT YEAR TOTAL TRAFFIC CONDITIONS

### 4.1 Roadway Network Improvements

The 2025 roadway network within the study area is expected to remain the same as existing with the exception for the improvements needed to mitigate 2017/2018 existing traffic and 2025 background traffic as discussed in the previous sections. Arbor Subdivision is planning to extend Spruce Street from Santa Ana Avenue along the site frontage for access, and does not connect to Midland Boulevard.

### 4.2 Site Traffic

#### 4.2.1 Trip Generation

Site trip generation is estimated using the procedures recommended in the latest edition of the Trip Generation Manual (10<sup>th</sup> edition), published by the Institute of Transportation Engineers. The site trip generation is obtained by applying the trip generation rates obtained from the manual for the proposed land uses within the 2025 development. **Table 4.1** summarizes the site trip generation. The proposed 2025 development is estimated to generate approximately 4,727 trips per day, 381 trips during the AM peak hour and 508 trips during the PM peak hour.

**Table 4.1 – 2025 Site Trip Generation Summary**

| Land Use                                | ITE Code | Size | Unit | Trip Rate per Unit | Total Trips  | Internal Capture Trips | Pass-by Trips | Primary Trips |          |              |     |              |
|-----------------------------------------|----------|------|------|--------------------|--------------|------------------------|---------------|---------------|----------|--------------|-----|--------------|
|                                         |          |      |      |                    |              |                        |               | Total         | Entering | Exiting      |     |              |
| <b>Weekday Daily (vpd)</b>              |          |      |      |                    |              |                        |               |               |          |              |     |              |
| Single-Family Residential               | 210      | 475  | DU   | 9.44               | 4,484        | --                     | --            | 4,484         | 50%      | 2,242        | 50% | 2,242        |
| Office                                  | 712      | 15   | TSF  | 16.19              | 243          | --                     | --            | 243           | 50%      | 121          | 50% | 121          |
| <b>Weekday Daily Total Trips</b>        |          |      |      |                    | <b>4,727</b> | --                     | --            | <b>4,727</b>  |          | <b>2,363</b> |     | <b>2,363</b> |
| <b>Weekday AM Peak Hour (vph)</b>       |          |      |      |                    |              |                        |               |               |          |              |     |              |
| Single-Family Residential               | 210      | 475  | DU   | 0.74               | 352          | --                     | --            | 352           | 25%      | 88           | 75% | 264          |
| Office                                  | 712      | 15   | TSF  | 1.92               | 29           | --                     | --            | 29            | 83%      | 24           | 17% | 5            |
| <b>Weekdy AM Peak Hour Total Trips</b>  |          |      |      |                    | <b>381</b>   | --                     | --            | <b>381</b>    |          | <b>112</b>   |     | <b>269</b>   |
| <b>Weekday PM Peak Hour (vph)</b>       |          |      |      |                    |              |                        |               |               |          |              |     |              |
| Single-Family Residential               | 210      | 475  | DU   | 0.99               | 471          | --                     | --            | 471           | 63%      | 297          | 37% | 174          |
| Office                                  | 712      | 15   | TSF  | 2.45               | 37           | --                     | --            | 37            | 32%      | 12           | 68% | 25           |
| <b>Weekday PM Peak Hour Total Trips</b> |          |      |      |                    | <b>508</b>   | --                     | --            | <b>508</b>    |          | <b>309</b>   |     | <b>199</b>   |

#### 4.2.2 Trip Capture

Based on the proposed land uses, the development is not expected to retain a significant amount of the trips within the site. No reduction for internal capture trips was assumed in the traffic analysis.

#### 4.2.3 Pass-by Trips

Based on the proposed land uses, the development is not expected to attract pass-by trips. No pass-by trips were assumed in the traffic analysis.

### 4.2.4 Modal Split

With two existing schools within walking distance of the development, some walking or bicycle trips are expected. For the traffic analysis purposes, all trips generated by the development were assumed to be made by personal and commercial vehicles.

### 4.2.5 Trip Distribution and Assignment

Site traffic was distributed and assigned to the external roadway system based on the current travel patterns, site layout and the general location of the site within the area. Traffic forecasts from the COMPASS models were also considered. **Figure 4.1** summarizes the expected site traffic distribution patterns. **Figure 4.2** and **Figure 4.3** summarize the estimated 2025 peak hour site traffic with the proposed access as shown in concept site plan.

## 4.3 Total Traffic

The 2025 site traffic is then added to the 2025 background traffic as determined above to obtain the 2025 total traffic. **Figure 4.4** and **Figure 4.5** summarize the estimated 2025 weekday peak hour total traffic at each intersection.

**Figure 4.1 – Site Traffic Distribution Patterns**

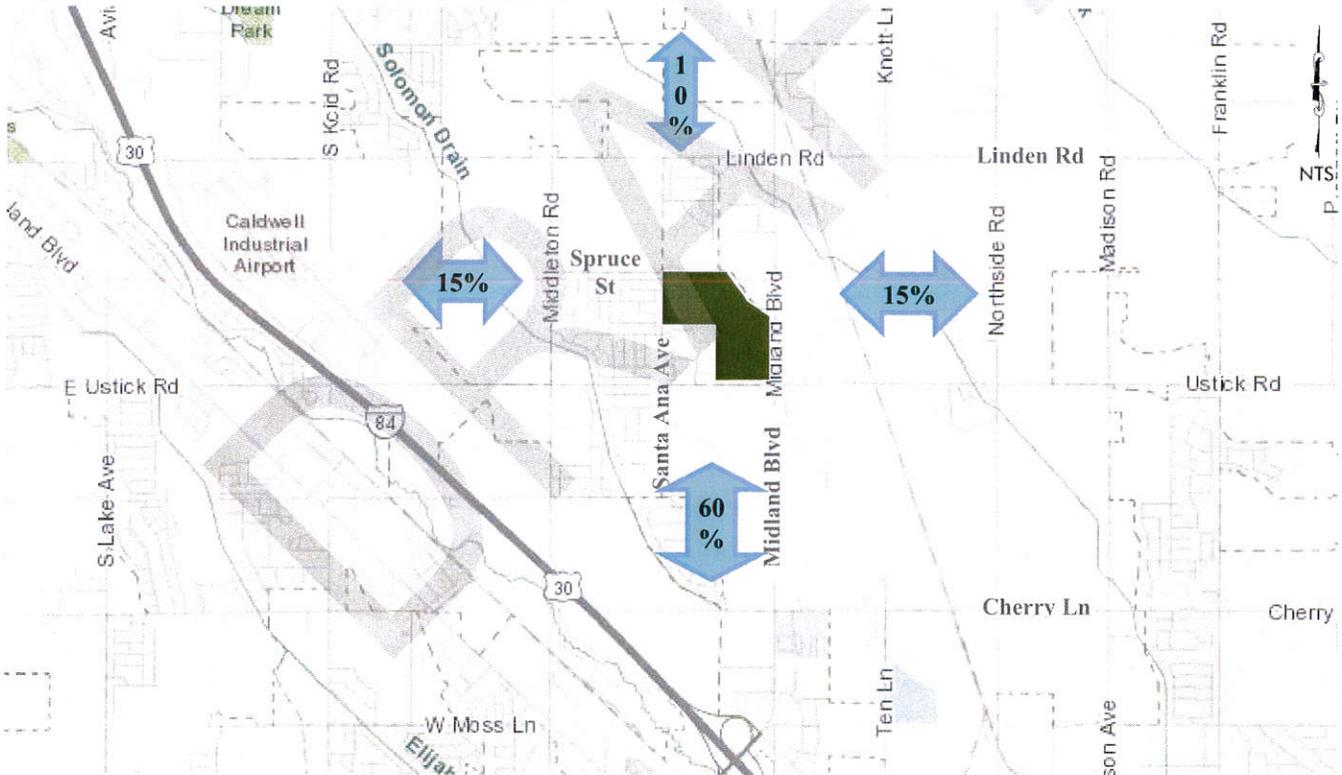


Figure 4.2 – 2025 AM Peak Hour Site Traffic

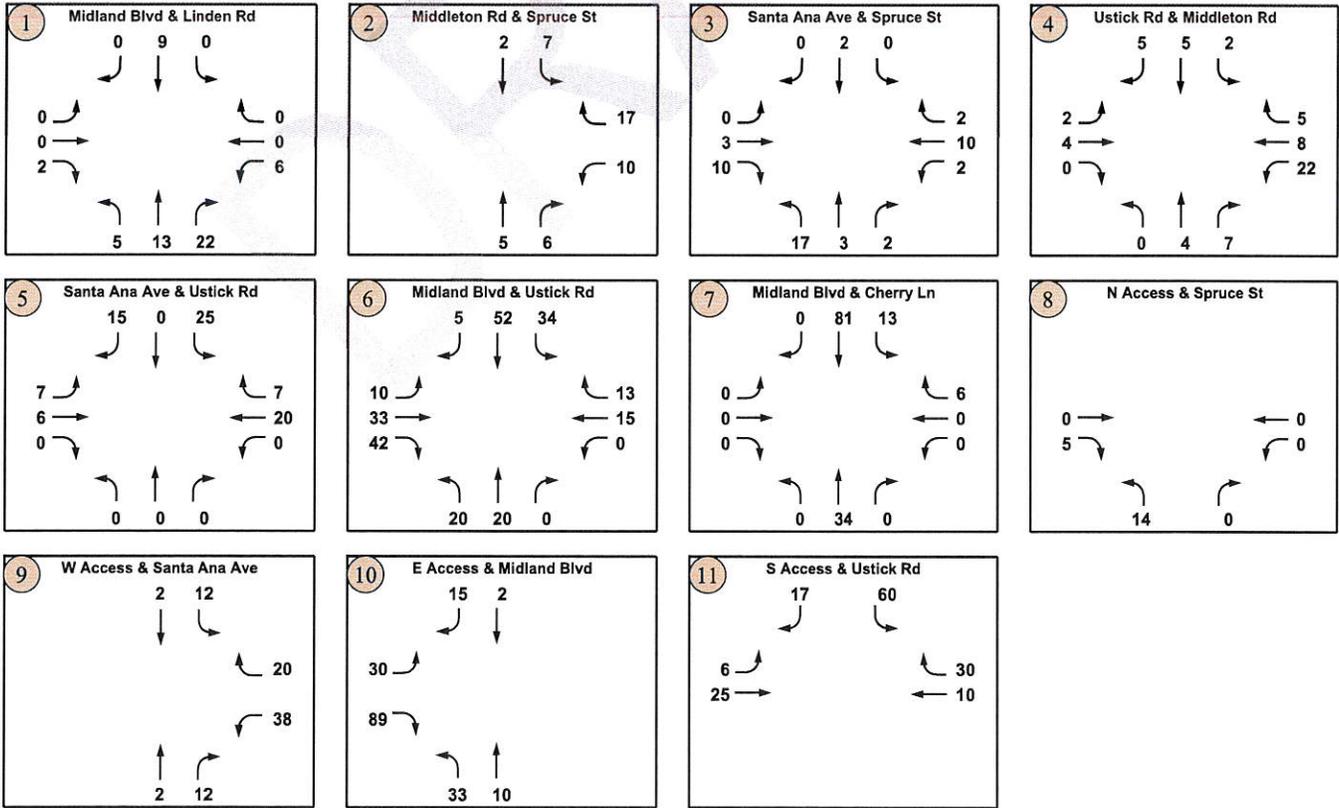
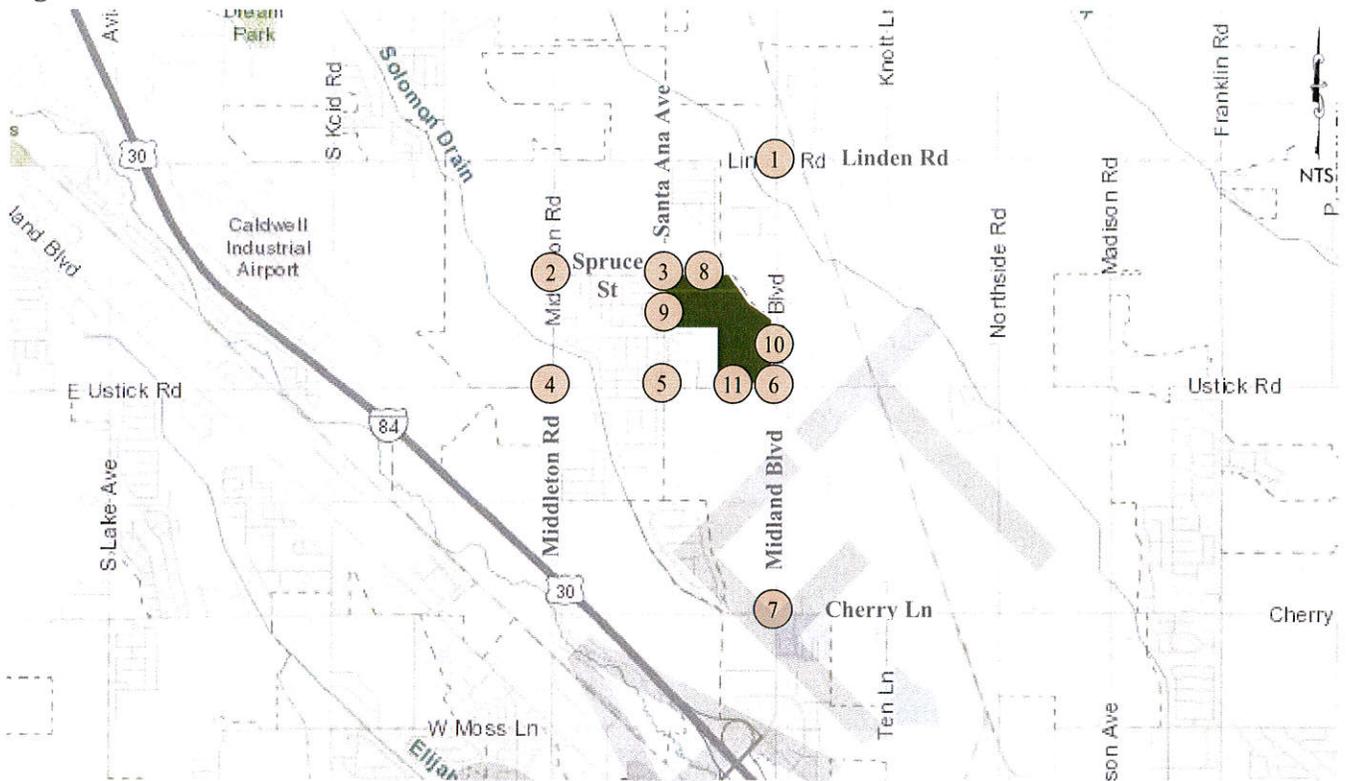


Figure 4.3 – 2025 PM Peak Hour Site Traffic

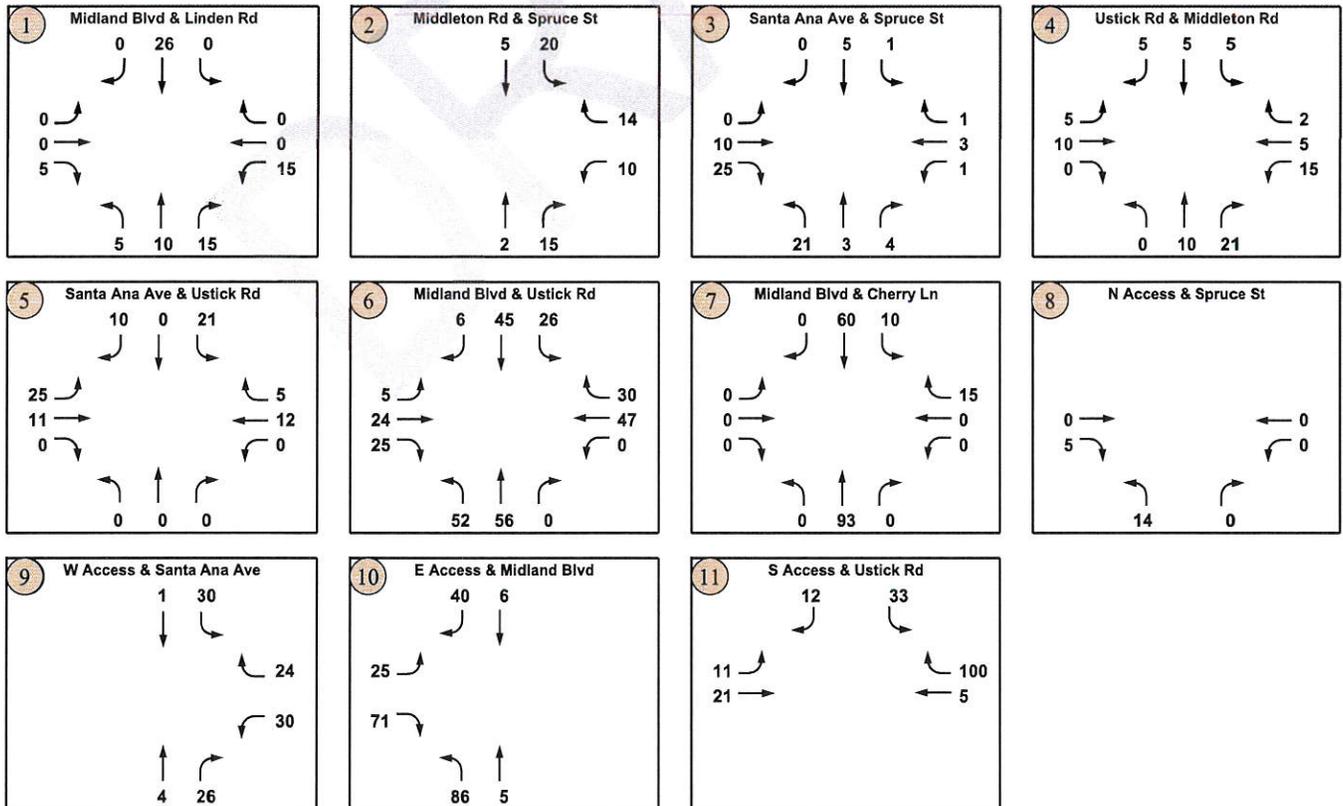
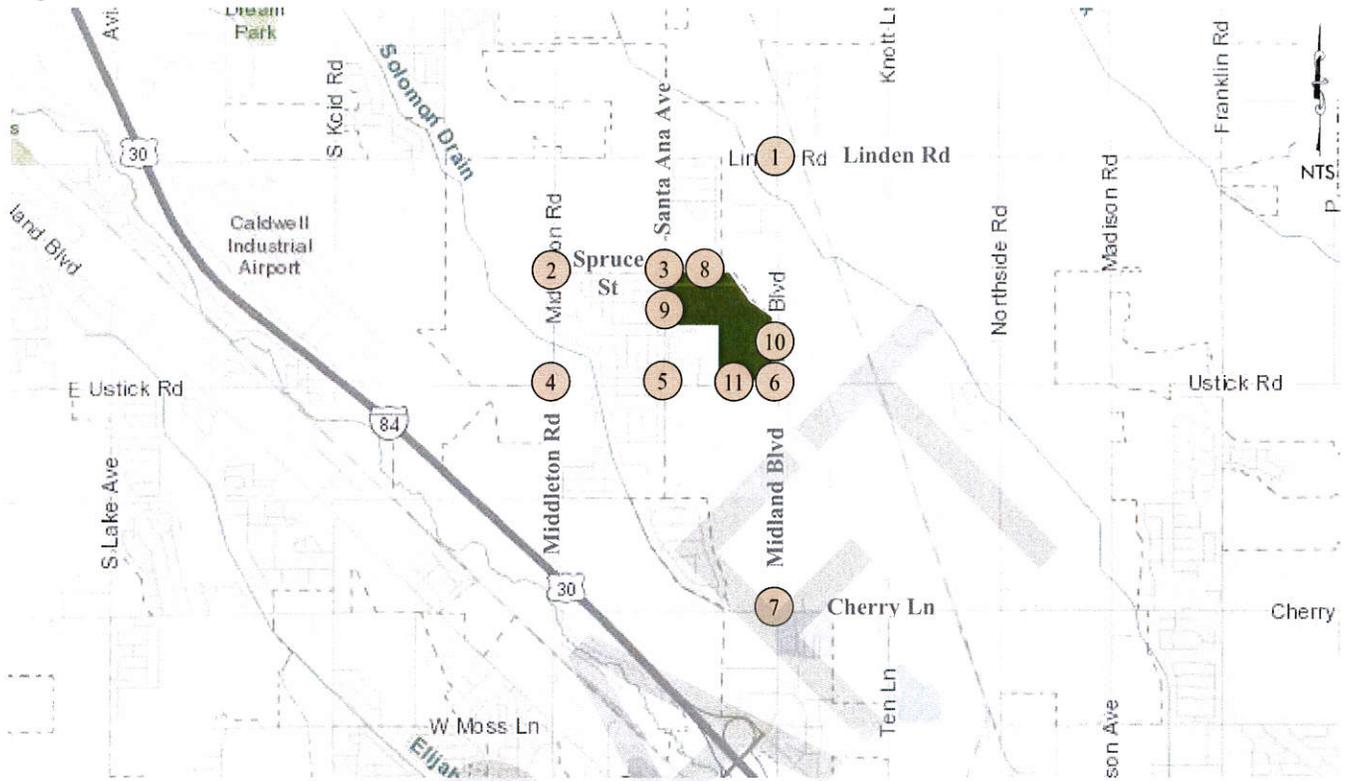
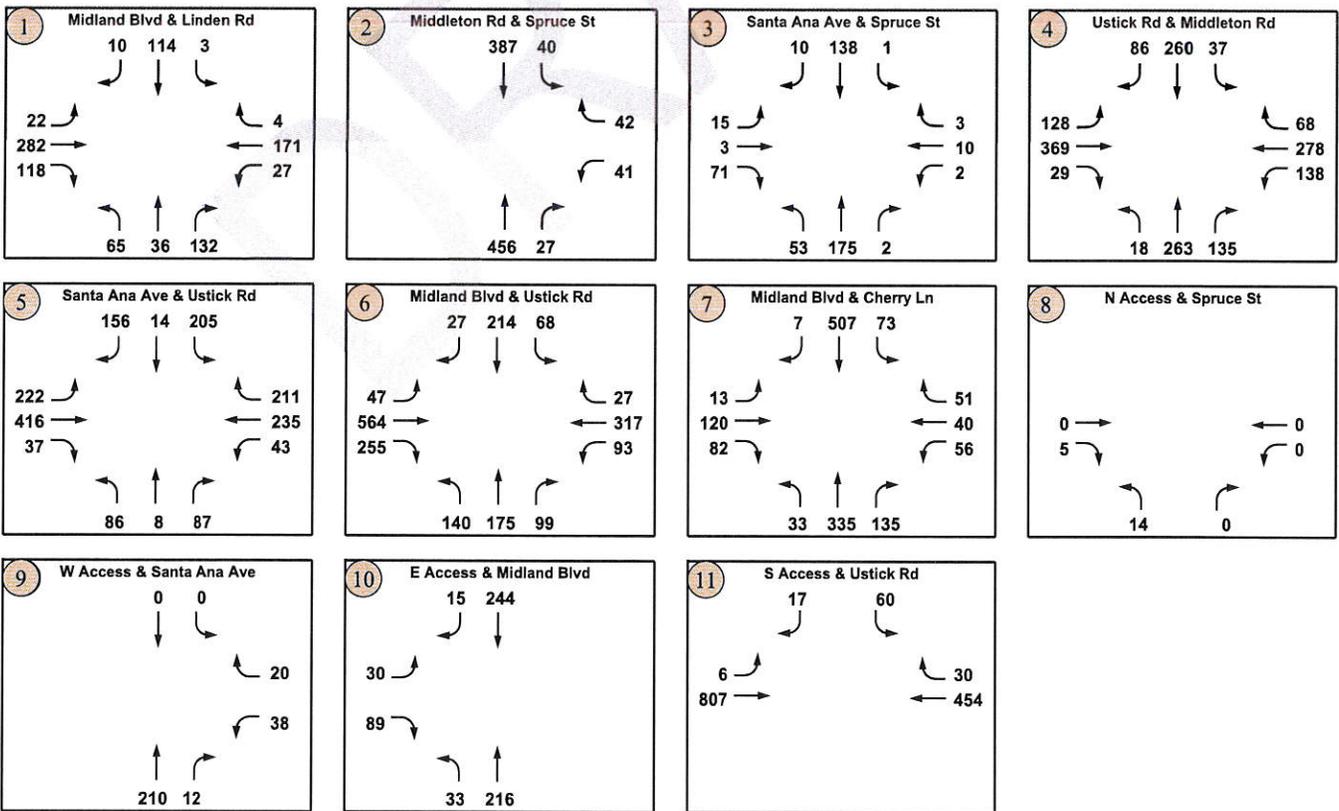
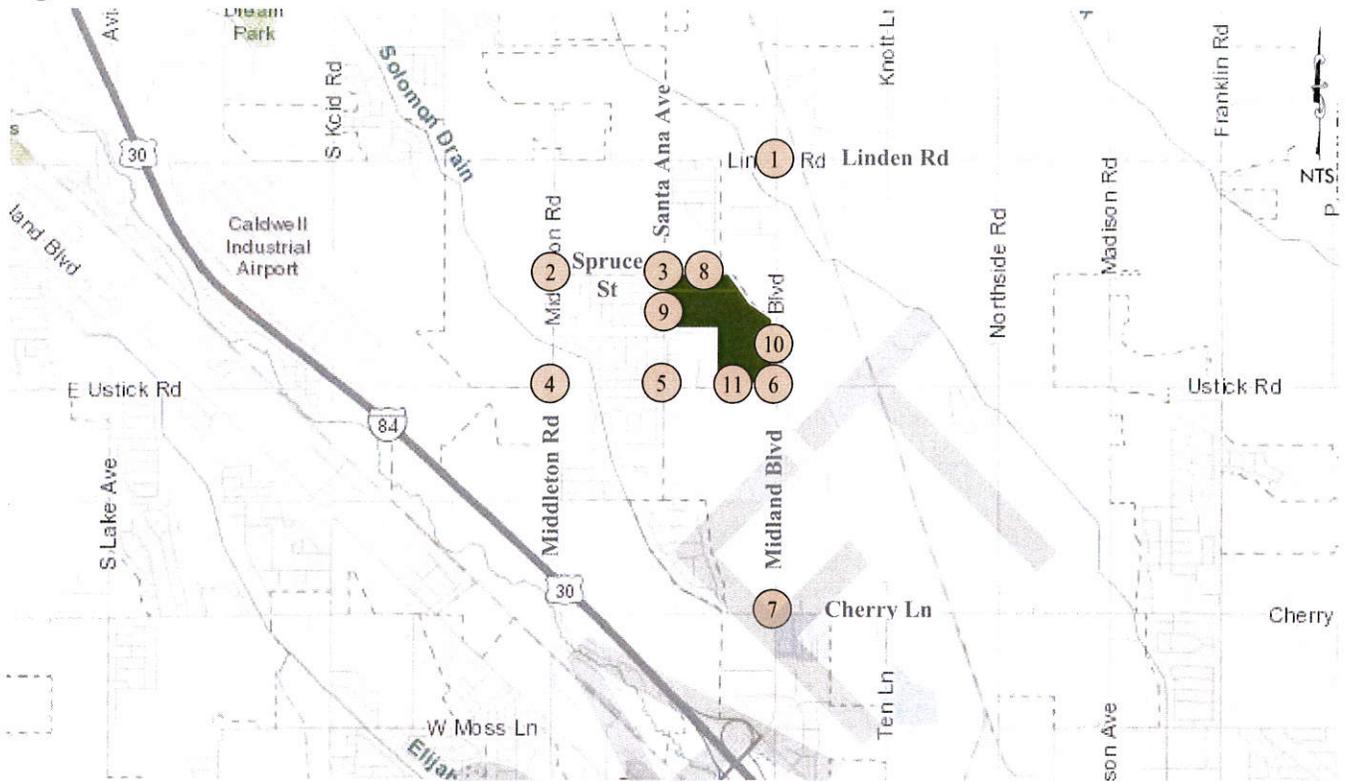
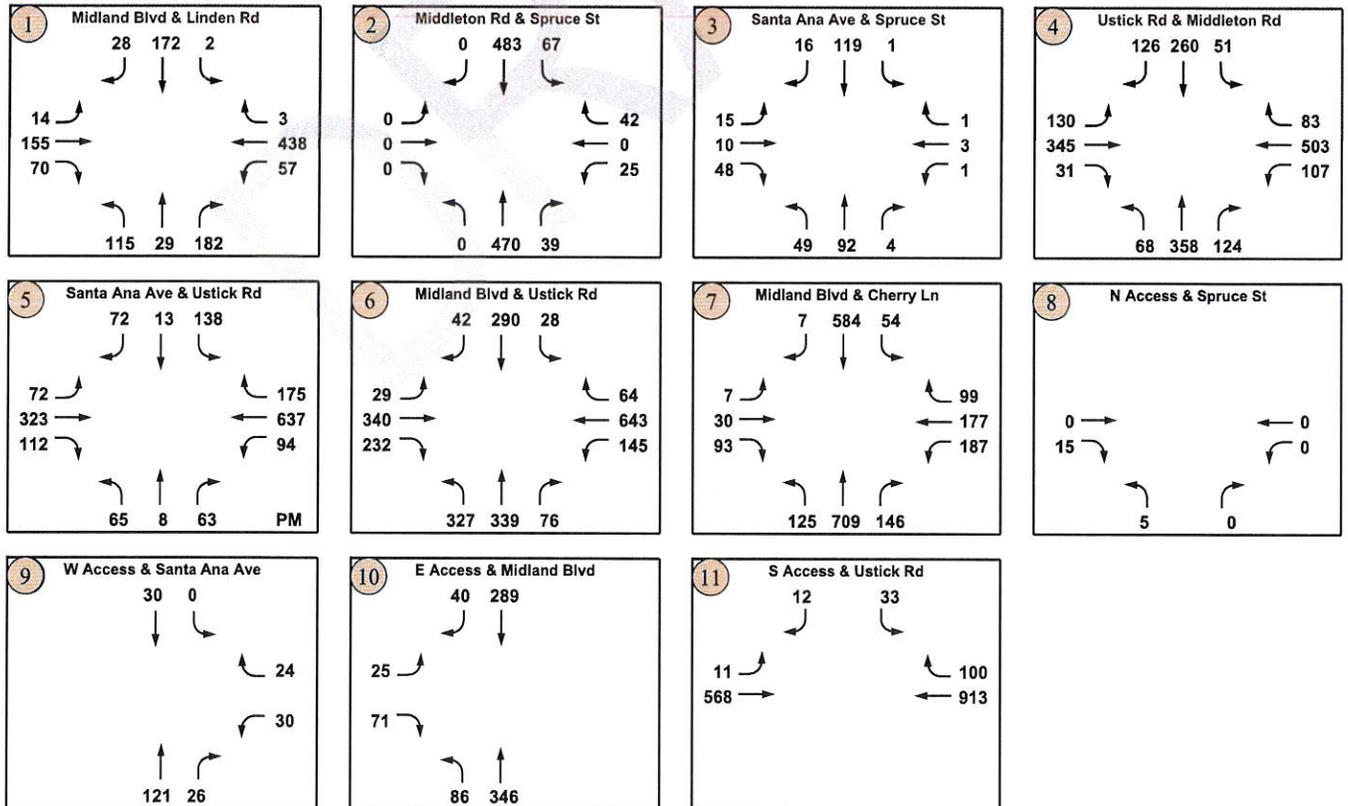
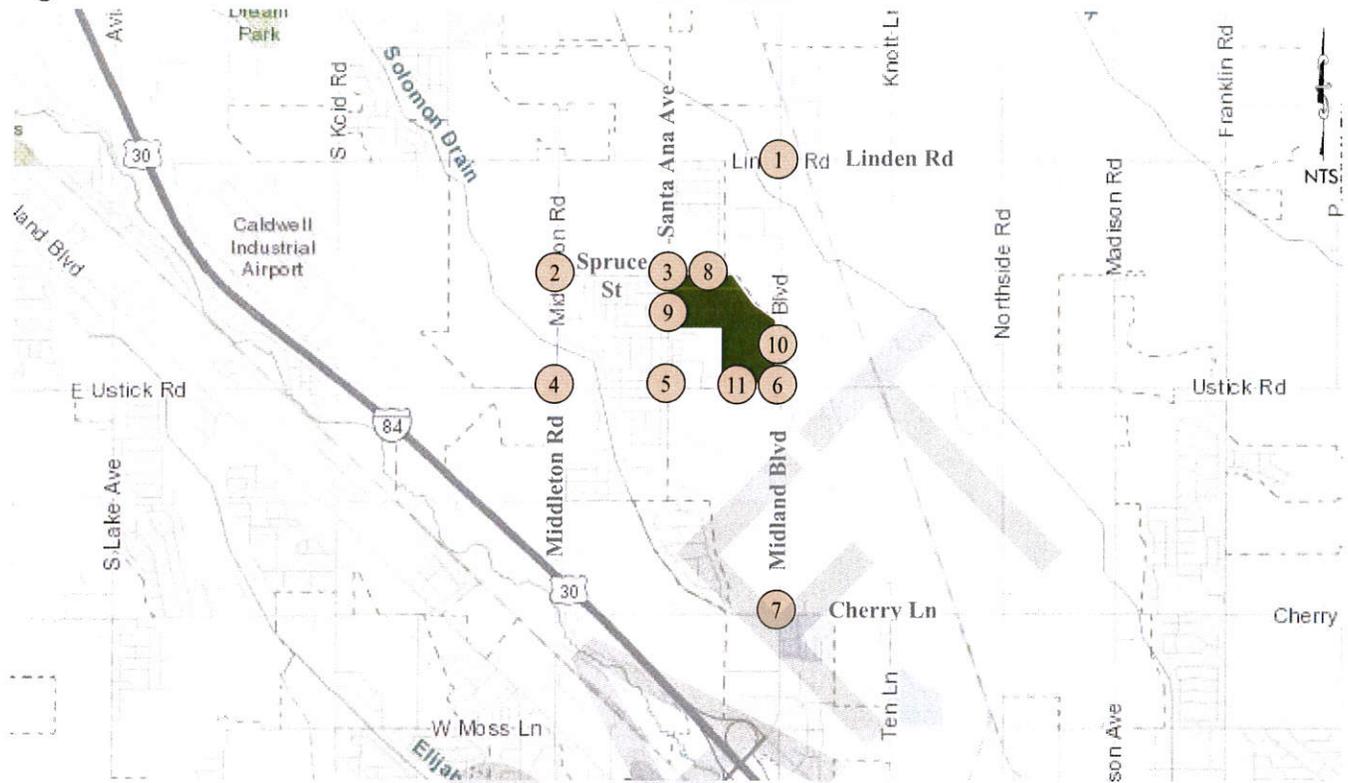


Figure 4.4 – 2025 Build-Out Year AM Peak Hour Total Traffic



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Figure 4.5 – 2025 Build-Out Year PM Peak Hour Total Traffic



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#### 4.4 Intersection Level of Service

To determine the 2025 total traffic impacts, the study area intersections were analyzed with the existing intersection control and lane configuration or with the preceding improvements needed to mitigate 2017/2018 existing traffic and 2025 background traffic. Copies of the analysis reports are included in the appendix. **Table 4.3** summarizes the intersection capacity analysis results. One study area intersection is expected to exceed minimum operational thresholds and will require improvements to mitigate 2025 total traffic:

- Midland Boulevard and Linden Road intersection

#### 4.5 Mitigation

One study area intersection is expected to exceed minimum operational thresholds with 2025 total traffic. The proposed intersection improvements discussed below are expected to mitigate 2025 total traffic to meet minimum operational thresholds. Turn lane analysis was evaluated at unsignalized intersections using NCHRP 457 guidelines. **Table 4.3** summarizes the analysis results for the proposed mitigations.

##### Midland Boulevard and Linden Road Intersection

There are no plans to improve the Midland Boulevard and Linden Road intersection. However, the intersection is expected to exceed minimum operational thresholds as an all-way stop with 2025 total traffic. As a result, two mitigation options are proposed to mitigate 2025 total traffic at the Midland Boulevard and Linden Road intersection:

- Single-lane roundabout
- Signal with left-turn lanes on all approaches

Both of these mitigation options are expected to mitigate 2025 total traffic to meet minimum operational thresholds. However, there is an existing irrigation canal at the intersection crossing the south and west legs, which may restrict the mitigation options. These mitigation options should be further evaluated to determine the preferred option in terms of costs, operational and safety benefits, right-of-way impact, and cost/benefit ratio as well as other factors.

##### Middleton Road and Spruce Street Intersection

The Middleton Road and Spruce Street intersection is expected to meet minimum operational thresholds with 2025 total traffic. However based on NCHRP 457 turn-lane guidelines, the following turn lane is warranted:

- Northbound right-turn lane

**Table 4.2 – Intersection Level of Service – 2025 Build-Out Year Total Traffic**

| Intersection |                                    | Control                         | MOEs                     | AM Peak Hour | PM Peak Hour  |
|--------------|------------------------------------|---------------------------------|--------------------------|--------------|---------------|
| ①            | Midland Boulevard and Linden Road  | All-way Stop                    | Intersection LOS         | C            | <b>E</b>      |
|              |                                    |                                 | Intersection Delay (s/v) | 17           | <b>38</b>     |
|              |                                    |                                 | Worst Lane Group LOS     | C (EB)       | <b>F (WB)</b> |
| ②            | Middleton Road And Spruce Street   | Stop (Spruce)                   | LOS (WB)                 | B            | C             |
|              |                                    |                                 | Delay (s/v) (WB)         | 15           | 16            |
|              |                                    |                                 | Worst Lane Group LOS     | B (WB)       | C (WB)        |
| ③            | Santa Ana Avenue and Spruce Street | Two-way Stop (Spruce)           | LOS (EB / WB)            | B / B        | B / B         |
|              |                                    |                                 | Delay (s/v) (EB / WB)    | 11 / 12      | 12 / 13       |
|              |                                    |                                 | Worst Lane Group LOS     | B (WB)       | B(WB)         |
| ④            | Middleton Road and Ustick Road     | Modified Single-Lane Roundabout | Intersection LOS         | B            | B             |
|              |                                    |                                 | Intersection Delay (s/v) | 11           | 14            |
|              |                                    |                                 | Worst Lane Group LOS     | C (EBLT)     | D (WBLT)      |
| ⑤            | Santa Ana Avenue and Ustick Road   | Modified Single-Lane Roundabout | Intersection LOS         | B            | B             |
|              |                                    |                                 | Intersection Delay (s/v) | 12           | 10            |
|              |                                    |                                 | Worst Lane Group LOS     | C (EBLT)     | B (SB)        |
|              |                                    | Traffic Signal                  | Intersection LOS         | B            | A             |
|              |                                    |                                 | Intersection Delay (s/v) | 13           | 7             |
|              |                                    |                                 | Worst Lane Group LOS     | B (SBL)      | B (NB)        |
| ⑥            | Midland Boulevard and Ustick Road  | Multi-Lane Roundabout           | Intersection LOS         | A            | B             |
|              |                                    |                                 | Intersection Delay (s/v) | 8            | 12            |
|              |                                    |                                 | Worst Lane Group LOS     | A (EBLT)     | C (WBLT)      |
| ⑦            | Midland Boulevard and Cherry Lane  | Signal                          | Intersection LOS         | C            | C             |
|              |                                    |                                 | Intersection Delay (s/v) | 25           | 22            |
|              |                                    |                                 | Worst Lane Group LOS     | D (SBL)      | D (SBL)       |

**Table 4.3 – Intersection Level of Service – 2025 Build-Out Year Total Traffic Mitigation**

| Intersection |                                   | Mitigation             | MOEs                     | AM Peak Hour | PM Peak Hour |
|--------------|-----------------------------------|------------------------|--------------------------|--------------|--------------|
| ①            | Midland Boulevard and Linden Road | Single-Lane Roundabout | Intersection LOS         | A            | A            |
|              |                                   |                        | Intersection Delay (s/v) | 7            | 8            |
|              |                                   |                        | Worst Lane Group LOS     | A (EB)       | B (WB)       |
|              |                                   | Signal                 | LOS (WB)                 | A            | A            |
|              |                                   |                        | Delay (s/v) (WB)         | 8            | 9            |
|              |                                   |                        | Worst Lane Group LOS     | B (NBL)      | B (NBL)      |
| ②            | Middleton Rd and Spruce St        | NB right-turn lane     | LOS (WB)                 | B            | C            |
|              |                                   |                        | Delay (s/v) (WB)         | 14           | 15           |
|              |                                   |                        | Worst Lane Group LOS     | B (WB)       | C (WB)       |

### 4.6 Site Access and Circulation

The development is proposing site access on Santa Ana Avenue, Midland Boulevard, Ustick Road, and extending Spruce Street along the site frontage as shown in **Figure 4.6**.

Turn lane warrants were evaluated at the proposed site access intersections using guidelines from the NCHRP 457. See the appendix for turn lane warrant worksheets. The following turn lanes are needed:

- East Access on Midland Boulevard
  - Northbound left-turn lane
- South Access on Ustick Road
  - Eastbound left-turn lane
  - Westbound right-turn lane

**Table 4.4** summarizes the proposed site access intersections operations. All proposed site access intersections are expected to operate at LOS C or better with a with 2025 total traffic.

### 4.7 School Crossing

The site is located next to two existing schools – Sage Valley Middle School and Desert Springs Elementary School. The development is planning to construct sidewalks on Santa Ana Avenue and Ustick Road along the site frontages. This will provide connected sidewalks from the site to the schools. The development is also providing multi-use paths from the site to the school boundaries. Schoolchildren walking from the site to the existing schools will not be crossing any roadways.

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Figure 4.6 – Proposed Site Access Locations



**Table 4.4 – Site Access Intersection Level of Service – 2025 Build-Out Year Total Traffic**

| Intersection |                            | Control         | MOEs                 | AM Peak Hour | PM Peak Hour |
|--------------|----------------------------|-----------------|----------------------|--------------|--------------|
| 8            | N Access and Spruce St     | Stop (N Access) | LOS (NB)             | A            | A            |
|              |                            |                 | Delay (s/v) (NB)     | 9            | 9            |
|              |                            |                 | Worst Lane Group LOS | A (NB)       | A (NB)       |
| 9            | W Access And Santa Ana Ave | Stop (W Access) | LOS (WB)             | B            | B            |
|              |                            |                 | Delay (s/v) (WB)     | 12           | 11           |
|              |                            |                 | Worst Lane Group LOS | B (WB)       | B (WB)       |
| 10           | E Access and Midland Blvd  | Stop (E Access) | LOS (EB)             | B            | B            |
|              |                            |                 | Delay (s/v) (EB)     | 11           | 12           |
|              |                            |                 | Worst Lane Group LOS | B (EB)       | B (EB)       |
| 11           | S Access and Ustick Road   | Stop (S Access) | LOS (SB)             | C            | C            |
|              |                            |                 | Delay (s/v) (SB)     | 16           | 20           |
|              |                            |                 | Worst Lane Group LOS | C (SB)       | C (SB)       |

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## 5.0 2030 HORIZON YEAR BACKGROUND TRAFFIC CONDITIONS

2030 horizon year analysis evaluated the long-term impacts beyond the build-out year with and without the proposed development.

### 5.1 Roadway Network

The study area roadways and intersections are expected to remain the same as the existing conditions with the exception of the intersection improvements needed to mitigate 2017/2018 existing traffic and 2025 background traffic as discussed in the previous sections. There are also planned improvements for the study area roadways and intersections as summarized in **Table 3.1** in the previous section. These improvements were considered as mitigation options for 2030 background traffic if necessary.

For 2030 conditions, Laster Lane is assumed to be extended to Midland Boulevard. With a multi-lane roundabout at the Midland Boulevard and Ustick Road intersection, Midland Boulevard is expected to be widened to five lanes from Cherry Lane to Ustick Road, which is a planned project in the City of Nampa transportation plan.

### 5.2 Background Traffic

Future background traffic was estimated by extrapolating the 2017/2018 existing traffic counts by the following annual growth rates:

- 4.0% per year on Ustick Road and Linden Road
- 2.0% per year on Middleton Road, Midland Boulevard, Spruce Street, Santa Ana Avenue, and Cherry Lane

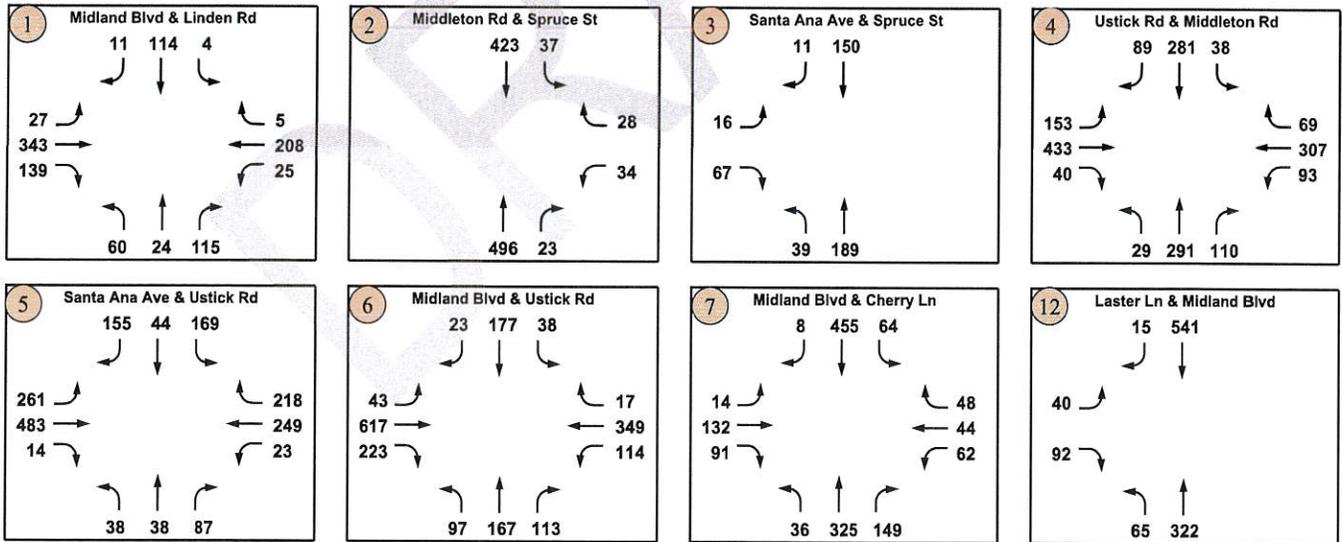
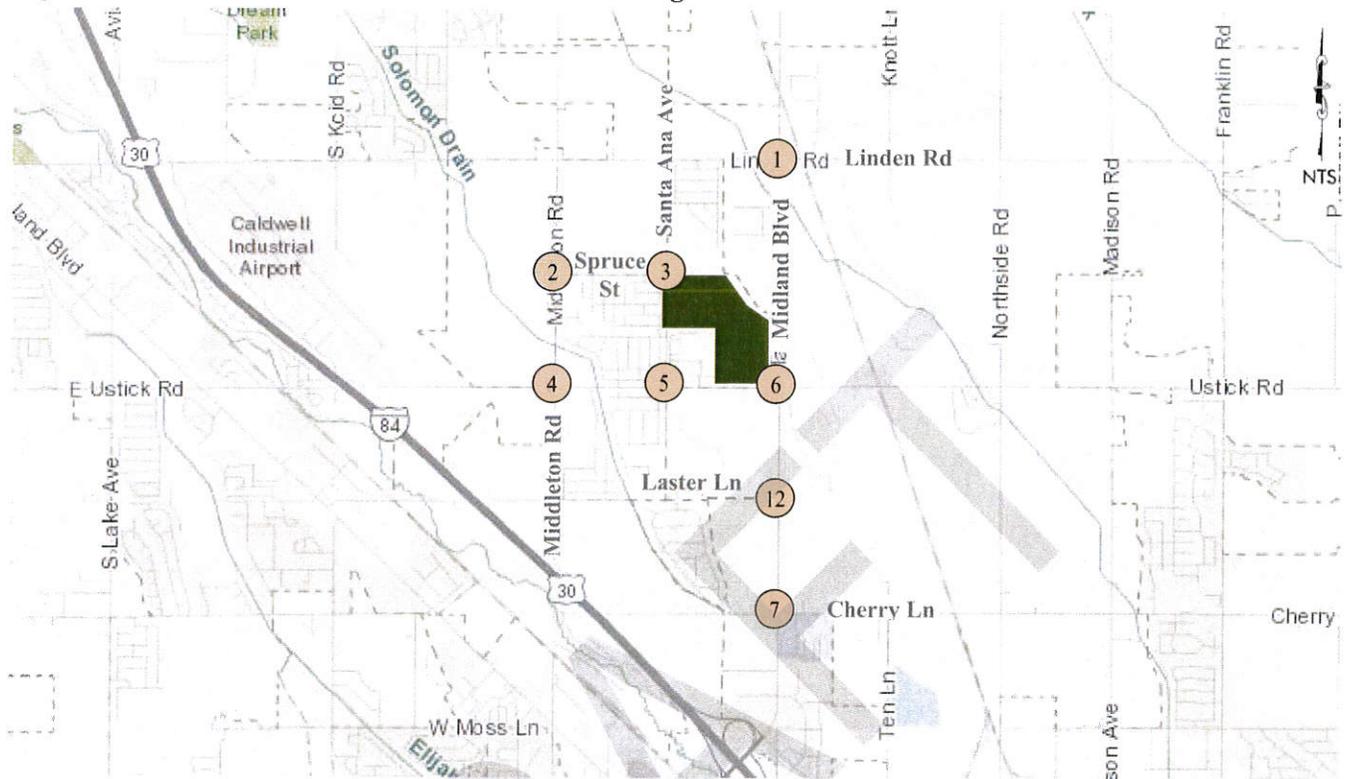
These growth rates are based on historical traffic counts on these roadways, COMPASS forecasts, and our review of other traffic studies in the area. **Figure 5.1** and **Figure 5.2** summarize the 2030 horizon year peak hour background traffic.

### 5.3 Off-Site Development Traffic

In addition to the traffic growth, traffic generated by three proposed off-site developments located in the vicinity of the site was also included in the background traffic:

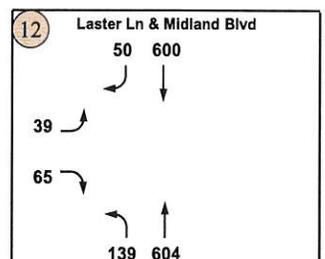
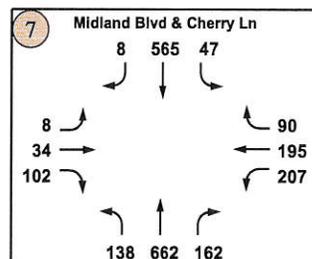
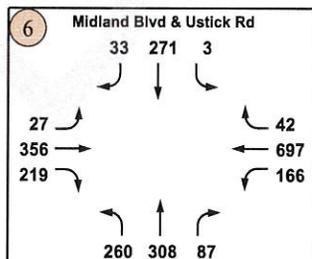
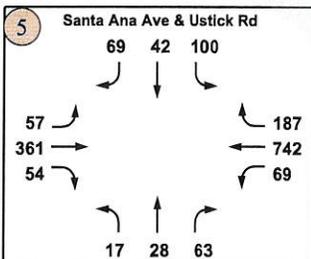
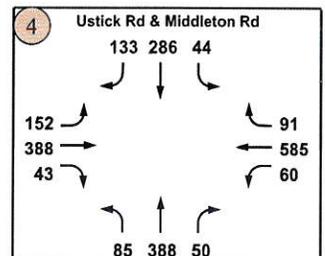
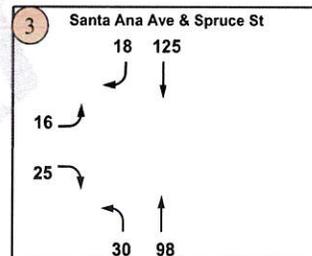
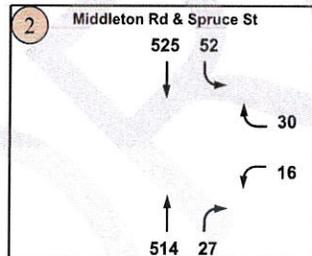
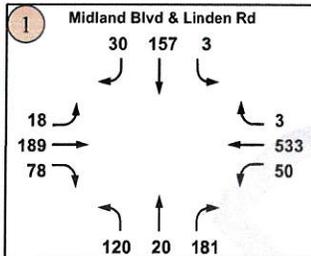
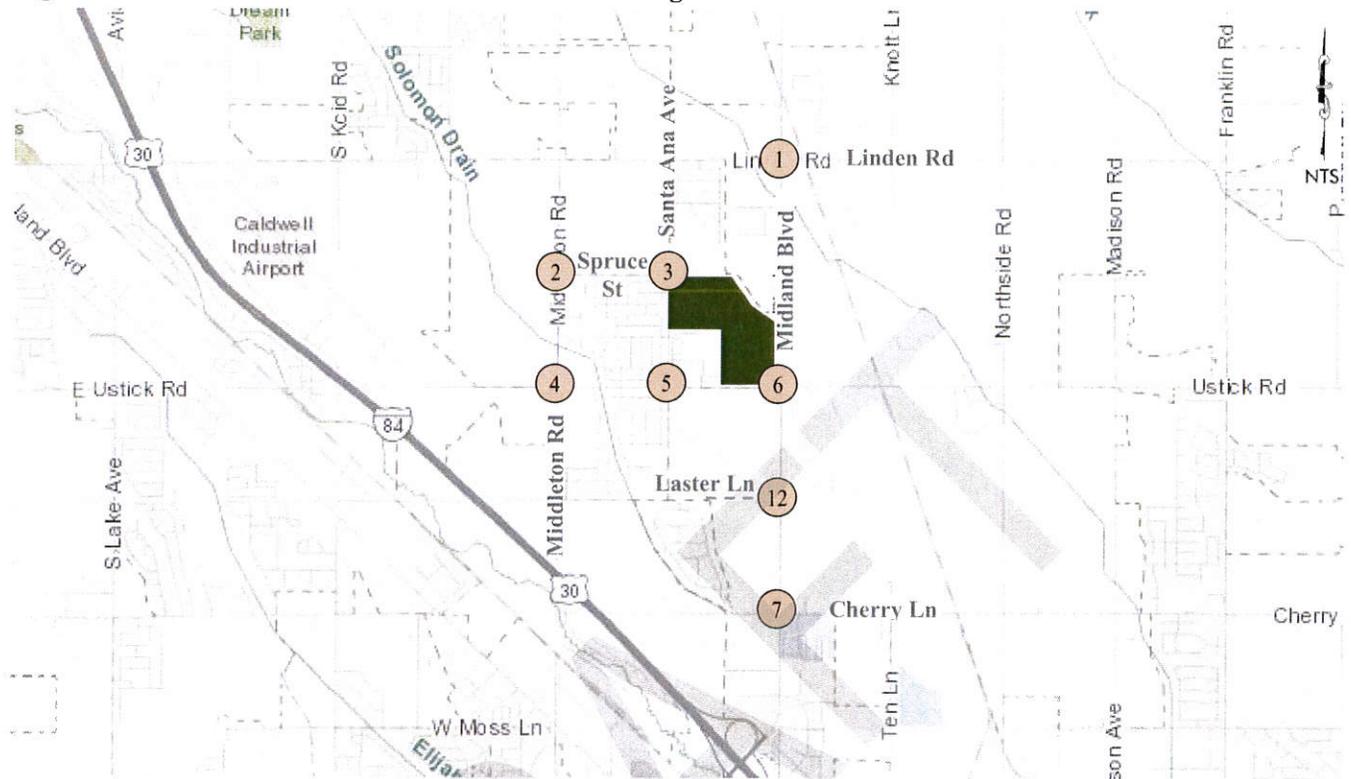
- Adam's Ridge Subdivision located south of Ustick Road south of the site
- Wagon Wheel Subdivision located west of Middleton Road between US 20-26 and Linden Road
- Hartland Subdivision located in the northeast quadrant of Ustick Road and Northside Boulevard intersection

**Figure 5.1 – 2030 Horizon Year AM Peak Hour Background Traffic**



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**Figure 5.2 – 2030 Horizon Year PM Peak Hour Background Traffic**



## 5.4 Intersection Level of Service

To determine the 2030 background traffic impacts, the study area intersections were analyzed with the existing intersection control and lane configuration or with the preceding improvements needed to mitigate 2018 existing traffic and 2025 background traffic. Copies of the analysis reports are included in the appendix. **Table 3.2** summarizes the intersection capacity analysis results. Two study area intersections are expected to exceed minimum operational thresholds and will require improvements to mitigate 2030 background traffic:

- Midland Boulevard and Linden Road intersection
- Middleton Road and Ustick Road intersection

## 5.5 Mitigation

Two study area intersections are expected to exceed minimum operational thresholds with 2030 background traffic. The proposed intersection improvements discussed below are expected to mitigate 2030 background traffic to meet minimum operational thresholds. Turn lane analysis was evaluated at unsignalized intersections using NCHRP 457 guidelines. **Table 3.3** summarizes the analysis results for the proposed mitigations.

### Midland Boulevard and Linden Intersection

The Midland Boulevard and Linden Road intersection is expected to exceed minimum operational thresholds as an all-way stop with 2030 background traffic. Two mitigation options are proposed to mitigate 2030 background traffic:

- Single-lane roundabout
- Signal with left-turn lanes on all approaches

As discussed in the previous section, there is an existing irrigation canal located adjacent to the intersection; thus, the proposed mitigation options should be further evaluated with multiple criteria to determine the prefer option.

### Middleton Road and Ustick Road Intersection

The Middleton Road and Ustick Road intersection is expected to exceed minimum operational thresholds as a modified single-lane roundabout with 2030 background traffic. To meet the 2030 background traffic demand, the roundabout should be expanded to a multi-lane roundabout by removing the channelizing curb and modifying sections of the splitter islands. With these modifications, the roundabout will have two entry lanes and two exit lanes on all approaches.

### Middleton Road and Spruce Street Intersection

The Middleton Road and Spruce Street intersection is expected to meet minimum operational thresholds with 2030 background traffic. However, based on NCHRP 457 turn-lane guidelines, the following turn lane is warranted:

- Northbound right-turn lane

The Santa Ana Avenue and Ustick Road intersection is expected to meet minimum operational thresholds as a modified single-lane roundabout. However with multi-lane roundabouts at the intersections of Middleton Road and Midland Boulevard on Ustick Road, the Santa Ana Avenue and Ustick Road roundabout will also need to be expanded to have two entry and exit lanes on the Ustick Road approaches for lanes to balance.

**Table 5.1 – Intersection Level of Service – 2030 Horizon Year Background Traffic**

| Intersection |                                               | Control                         | MOEs                     | AM Peak Hour | PM Peak Hour    |
|--------------|-----------------------------------------------|---------------------------------|--------------------------|--------------|-----------------|
| ①            | Midland Boulevard and Linden Road             | All-way Stop                    | Intersection LOS         | C            | <b>F</b>        |
|              |                                               |                                 | Intersection Delay (s/v) | 25           | <b>65</b>       |
|              |                                               |                                 | Worst Lane Group LOS     | E (EB)       | <b>F (WB)</b>   |
| ②            | Middleton Road and Spruce Street              | Stop (Spruce)                   | LOS (WB)                 | B            | C               |
|              |                                               |                                 | Delay (s/v) (WB)         | 15           | 15              |
|              |                                               |                                 | Worst Lane Group LOS     | B (WB)       | C (WB)          |
| ③            | Santa Ana Avenue and Spruce Street            | Stop (Spruce)                   | LOS (EB)                 | B            | B               |
|              |                                               |                                 | Delay (s/v) (EB)         | 10           | 11              |
|              |                                               |                                 | Worst Lane Group LOS     | B (EB)       | B (EB)          |
| ④            | Middleton Road and Ustick Road                | Modified Single-Lane Roundabout | Intersection LOS         | B            | C               |
|              |                                               |                                 | Intersection Delay (s/v) | 13           | 20              |
|              |                                               |                                 | Worst Lane Group LOS     | B (NBLT)     | <b>E (WBLT)</b> |
| ⑤            | Santa Ana Avenue and Ustick Road <sup>1</sup> | Modified Single-Lane Roundabout | Intersection LOS         | B            | A               |
|              |                                               |                                 | Intersection Delay (s/v) | 11           | 10              |
|              |                                               |                                 | Worst Lane Group LOS     | C (EBLT)     | B (WBLT)        |
| ⑥            | Midland Boulevard and Ustick Road             | Multi-Lane Roundabout           | Intersection LOS         | A            | B               |
|              |                                               |                                 | Intersection Delay (s/v) | 8            | 12              |
|              |                                               |                                 | Worst Lane Group LOS     | A (EBLT)     | B (WBLT)        |
| ⑦            | Midland Boulevard and Cherry Lane             | Signal                          | Intersection LOS         | C            | C               |
|              |                                               |                                 | Intersection Delay (s/v) | 27           | 23              |
|              |                                               |                                 | Worst Lane Group LOS     | D (SBL)      | D (SBL)         |
| ⑫            | Laster Ln and Midland Boulevard               | Stop (Laster)                   | LOS (EB)                 | B            | C               |
|              |                                               |                                 | Delay (s/v) (EB)         | 14           | 19              |
|              |                                               |                                 | Worst Lane Group LOS     | B (EB)       | C (EB)          |

<sup>1</sup> LOS B or better with signal

**Table 5.2 – Intersection Level of Service – 2030 Horizon Year Background Traffic Mitigation**

| Intersection |                                   | Mitigation             | MOEs                     | AM Peak Hour | PM Peak Hour |
|--------------|-----------------------------------|------------------------|--------------------------|--------------|--------------|
| ①            | Midland Boulevard and Linden Road | Single-Lane Roundabout | Intersection LOS         | A            | A            |
|              |                                   |                        | Intersection Delay (s/v) | 7            | 10           |
|              |                                   |                        | Worst Lane Group LOS     | A (EB)       | B (WB)       |
|              |                                   | Signal                 | Intersection LOS         | A            | A            |
|              |                                   |                        | Intersection Delay (s/v) | 8            | 10           |
|              |                                   |                        | Worst Lane Group LOS     | B (NBL)      | B (NBL)      |
| ②            | Middleton Road and Spruce Street  | NB right-turn lane     | LOS (WB)                 | B            | C            |
|              |                                   |                        | Delay (s/v) (WB)         | 15           | 15           |
|              |                                   |                        | Worst Lane Group LOS     | B (WB)       | C(WB)        |
| ④            | Middleton Road and Ustick Road    | Multi-lane roundabout  | Intersection LOS         | A            | A            |
|              |                                   |                        | Intersection Delay (s/v) | 8            | 9            |
|              |                                   |                        | Worst Lane Group LOS     | A (NBLT)     | B (WBLT)     |

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## 6.0 2030 HORIZON YEAR TOTAL TRAFFIC CONDITIONS

### 6.1 Roadway Network Improvements

The 2030 roadway network within the study area is expected to remain the same as existing with the exception for the improvements needed to mitigate 2017/2018 existing traffic and 2025 and 2030 background traffic as discussed in the previous sections. Arbor Subdivision is planning to extend Spruce Street from Santa Ana Avenue along the site frontage for access, but will not connect it to Midland Boulevard.

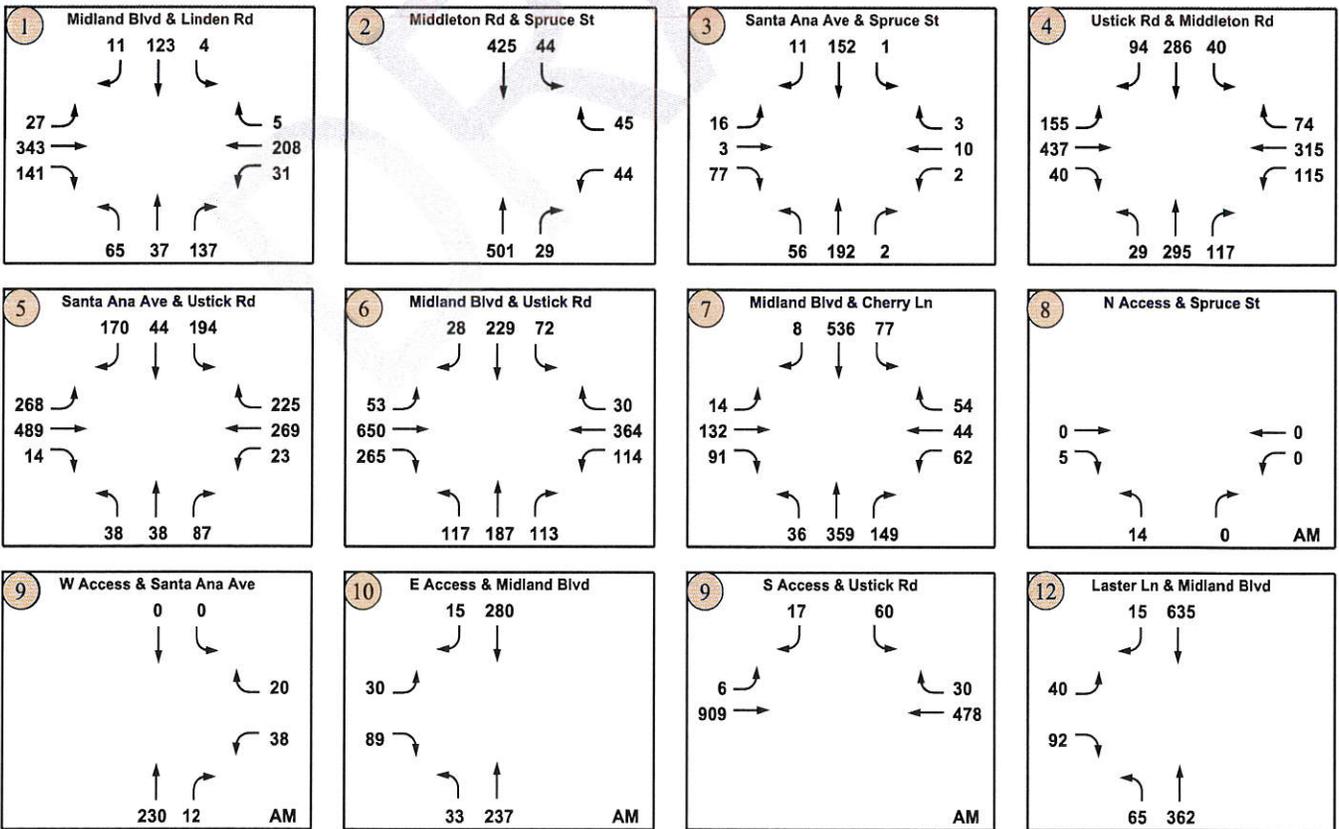
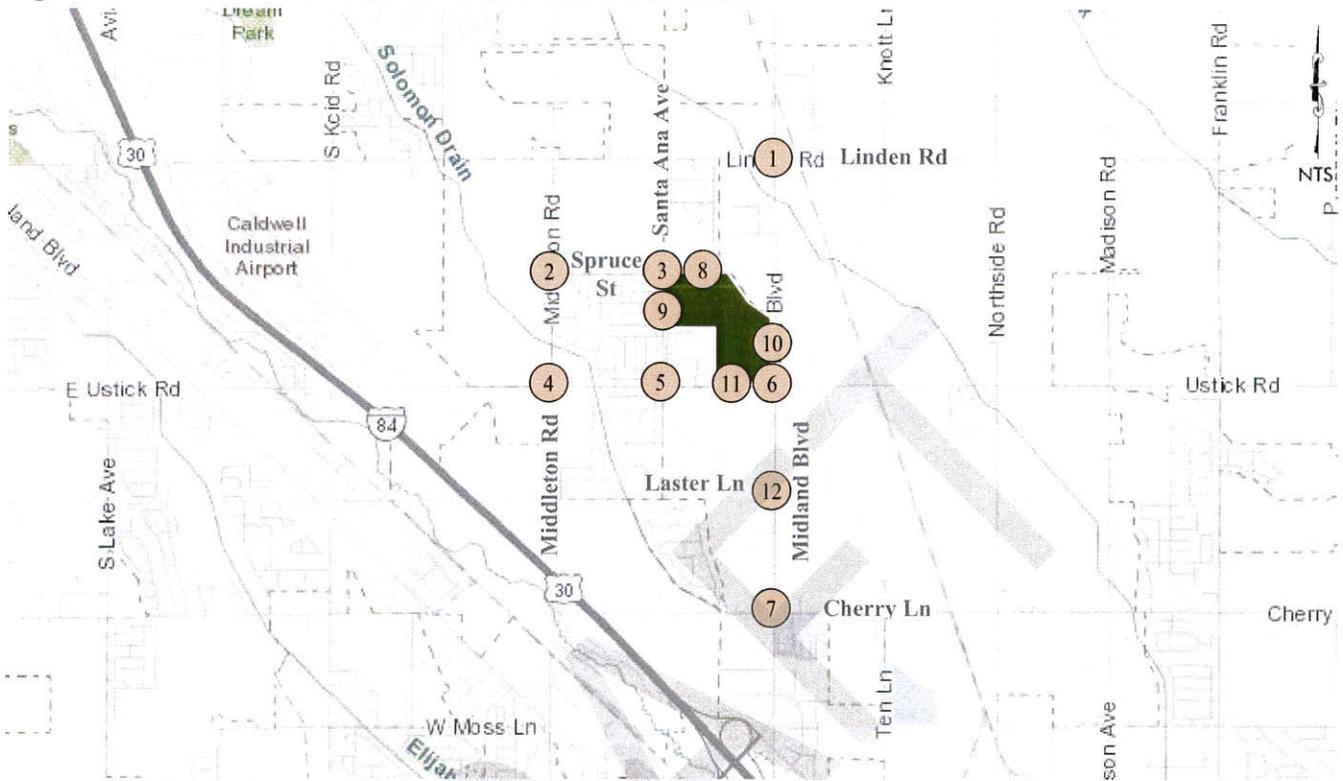
### 6.2 Site Traffic

Site traffic is estimated as discussed in Section 4.2 above and summarized in **Figure 4.2** and **Figure 4.3**. The proposed Laster Lane extension to Midland Boulevard is not expected to change the site traffic distribution patterns or route.

### 6.3 Total Traffic

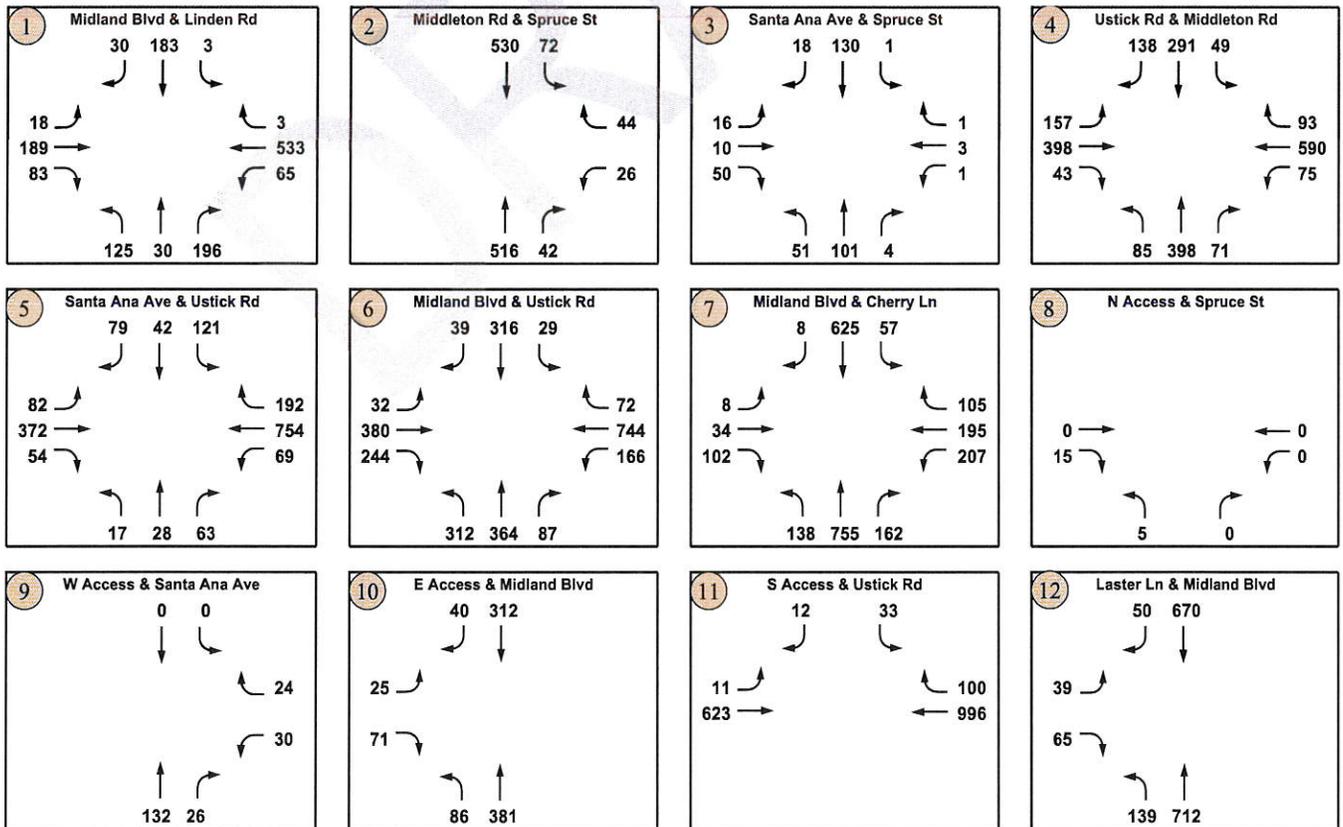
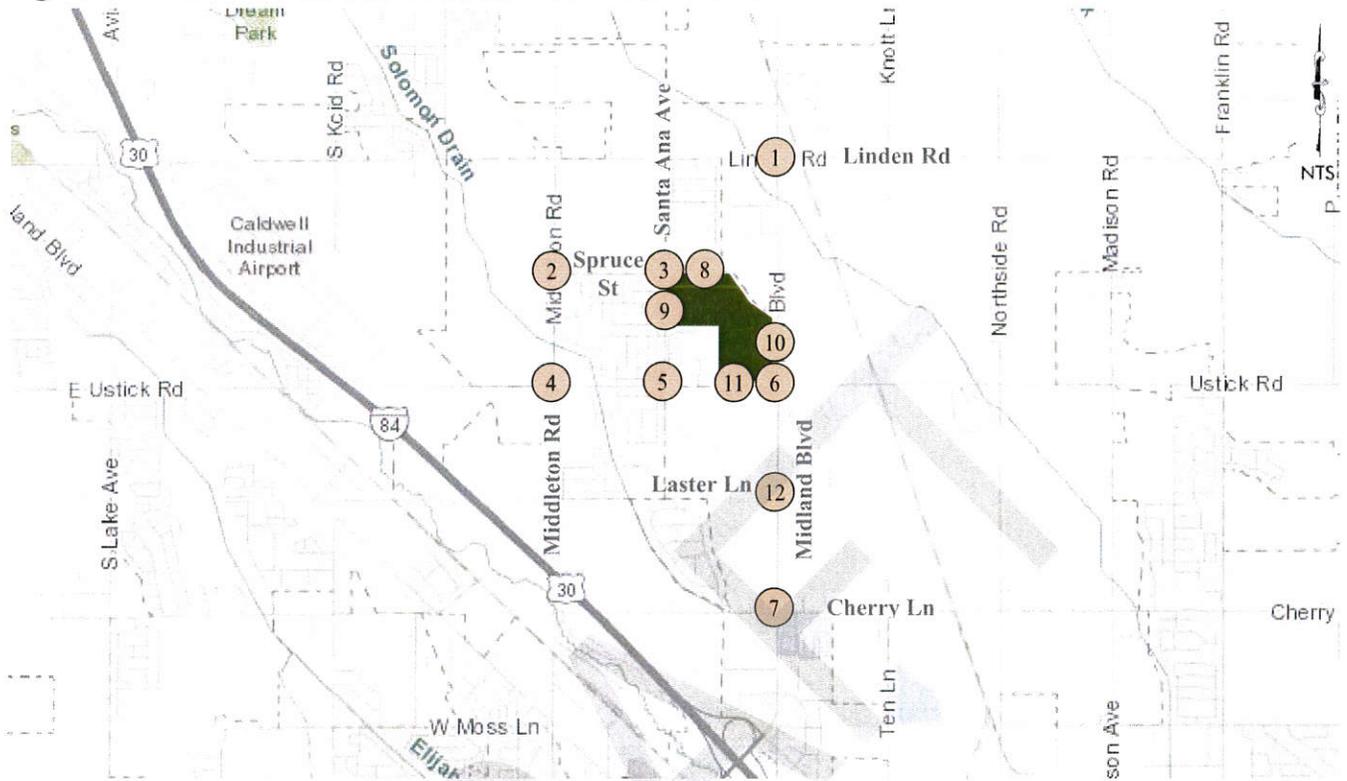
The 2025 site traffic is then added to the 2030 background traffic as determined above to obtain the 2030 total traffic. **Figure 6.1** and **Figure 6.2** summarize the estimated 2030 peak hour total traffic at each intersection.

**Figure 6.1 – 2030 Horizon Year AM Peak Hour Total Traffic**



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Figure 6.2 – 2030 Horizon Year PM Peak Hour Total Traffic



## 6.4 Intersection Level of Service

To determine the 2030 total traffic impacts, the study area intersections were analyzed with the existing intersection control and lane configuration or with the preceding improvements needed to mitigate 2017/2018 existing traffic and 2025 and 2030 background traffic. Copies of the analysis reports are included in the appendix. **Table 4.3** summarizes the intersection capacity analysis results. All study area intersections are expected to meet minimum operational thresholds.

**Table 6.1 – Intersection Level of Service – 2030 Horizon Year Total Traffic**

| Intersection |                                               | Control                        | MOEs                     | AM Peak Hour | PM Peak Hour |
|--------------|-----------------------------------------------|--------------------------------|--------------------------|--------------|--------------|
| ①            | Midland Boulevard and Linden Road             | Single-Lane Roundabout         | Intersection LOS         | A            |              |
|              |                                               |                                | Intersection Delay (s/v) | 8            | 38           |
|              |                                               |                                | Worst Lane Group LOS     | A (EB)       | F (WB)       |
|              |                                               | Signal                         | Intersection LOS         | A            | B            |
|              |                                               |                                | Intersection Delay (s/v) | 8            | 10           |
|              |                                               |                                | Worst Lane Group LOS     | B (NBL)      | B (NBL)      |
| ②            | Middleton Road And Spruce Street              | Stop (Spruce)                  | LOS (WB)                 | C            | C            |
|              |                                               |                                | Delay (s/v) (WB)         | 16           | 17           |
|              |                                               |                                | Worst Lane Group LOS     | C (WB)       | C (WB)       |
| ③            | Santa Ana Avenue and Spruce Street            | Two-Way Stop (Spruce)          | LOS (EB / WB)            | B / B        | D / D        |
|              |                                               |                                | Delay (s/v) (EB / WB)    | 11 / 13      | 31 / 26      |
|              |                                               |                                | Worst Lane Group LOS     | B (WB)       | B(WB)        |
| ④            | Middleton Road and Ustick Road                | Multi-Lane Roundabout          | Intersection LOS         | A            | A            |
|              |                                               |                                | Intersection Delay (s/v) | 8            | 10           |
|              |                                               |                                | Worst Lane Group LOS     | A (NBLT)     | B (WBLT)     |
| ⑤            | Santa Ana Avenue and Ustick Road <sup>1</sup> | Modified Multi-Lane Roundabout | Intersection LOS         | A            | B            |
|              |                                               |                                | Intersection Delay (s/v) | 8            | 10           |
|              |                                               |                                | Worst Lane Group LOS     | B (NBLT)     | B (SB)       |
|              |                                               | Traffic Signal                 | Intersection LOS         | B            | A            |
|              |                                               |                                | Intersection Delay (s/v) | 14           | 8            |
|              |                                               |                                | Worst Lane Group LOS     | B (WBTR)     | B (SBL)      |

**Table 6.1 – Intersection Level of Service – 2030 Horizon Year Total Traffic (Continued)**

| Intersection |                                   | Control               | MOEs                     | AM Peak Hour | PM Peak Hour |
|--------------|-----------------------------------|-----------------------|--------------------------|--------------|--------------|
| 6            | Midland Boulevard and Ustick Road | Multi-Lane Roundabout | Intersection LOS         | A            | B            |
|              |                                   |                       | Intersection Delay (s/v) | 9            | 15           |
|              |                                   |                       | Worst Lane Group LOS     | B (EBLT)     | C (WBLT)     |
| 7            | Midland Boulevard and Cherry Lane | Signal                | Intersection LOS         | C            | C            |
|              |                                   |                       | Intersection Delay (s/v) | 23           | 22           |
|              |                                   |                       | Worst Lane Group LOS     | D (SBL)      | D (SBL)      |
| 8            | N Access and Spruce St            | Stop (N Access)       | LOS (NB)                 | A            | A            |
|              |                                   |                       | Delay (s/v) (NB)         | 9            | 9            |
|              |                                   |                       | Worst Lane Group LOS     | A (NB)       | A (NB)       |
| 9            | W Access And Santa Ana Ave        | Stop (W Access)       | LOS (WB)                 | B            | B            |
|              |                                   |                       | Delay (s/v) (WB)         | 12           | 11           |
|              |                                   |                       | Worst Lane Group LOS     | B (WB)       | B (WB)       |
| 10           | E Access and Midland Blvd         | Stop (E Access)       | LOS (EB)                 | B            | B            |
|              |                                   |                       | Delay (s/v) (EB)         | 12           | 13           |
|              |                                   |                       | Worst Lane Group LOS     | B (EB)       | B (EB)       |
| 11           | S Access and Ustick Road          | Stop (S Access)       | LOS (SB)                 | C            | C            |
|              |                                   |                       | Delay (s/v) (SB)         | 17           | 23           |
|              |                                   |                       | Worst Lane Group LOS     | C (SB)       | C (SB)       |
| 12           | Laster Ln and Midland Boulevard   | Stop (Laster)         | LOS (EB)                 | C            | C            |
|              |                                   |                       | Delay (s/v) (EB)         | 16           | 22           |
|              |                                   |                       | Worst Lane Group LOS     | C (EB)       | C (EB)       |

### 6.5 Mitigation

All study area intersections are expected to meet minimum operational thresholds with 2030 total traffic. As a result, no additional improvements beyond the preceding improvements discussed in the previous sections are needed to mitigate 2030 total traffic.

## APPENDIX A: SCOPE

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## APPENDIX B: TRAFFIC COUNTS

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## APPENDIX C: COMPASS FORECASTS

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## APPENDIX D: 2017/2018 SYNCHRO REPORTS

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## APPENDIX E: 2025 SYNCHRO REPORTS

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## APPENDIX F: 2030 SYNCHRO REPORTS

DRAFT

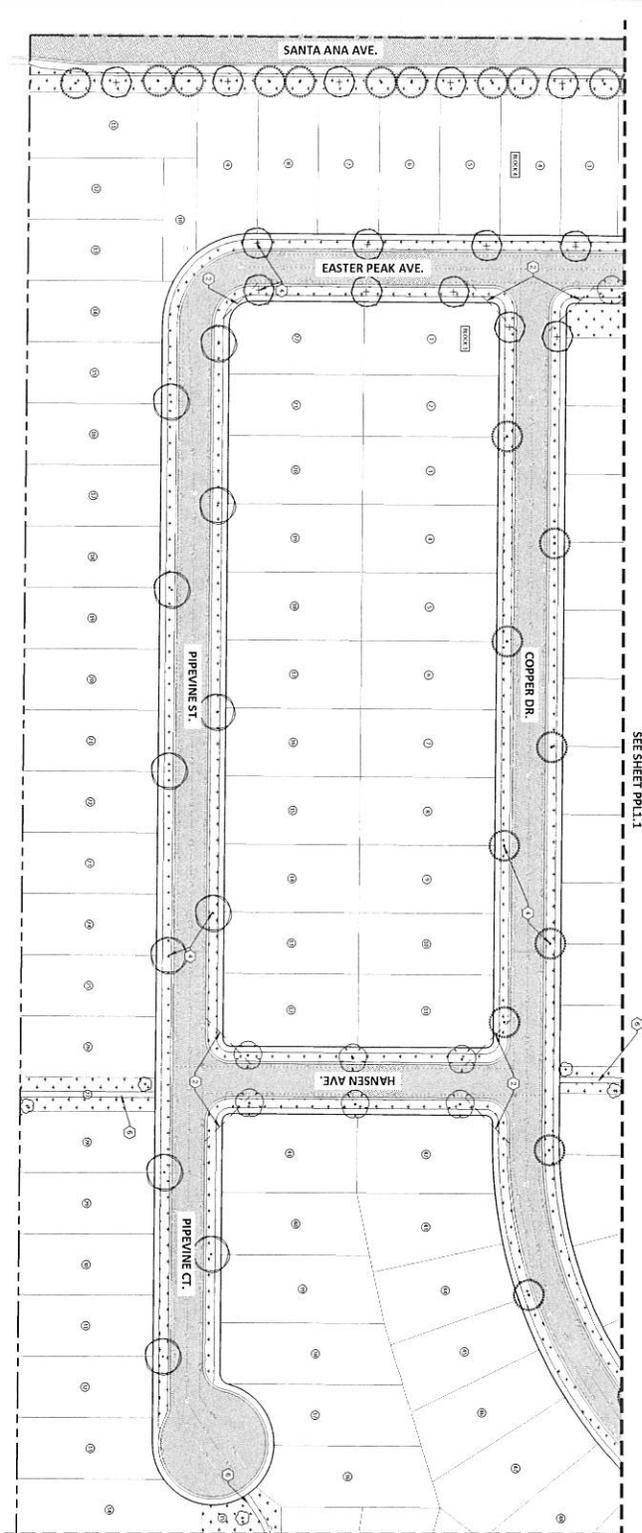
## APPENDIX G: TURN-LANE WARRANTS WORKSHEETS

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SEE SHEET PPL1.1

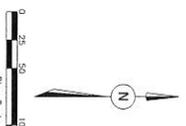
SEE SHEET PPL1.4

### PLANT SCHEDULE

| EXCISES: 11533 | ISODICAL LINE | SIZE      | APPROX. QUANTITY |
|----------------|---------------|-----------|------------------|
| 1              | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 2              | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 3              | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 4              | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 5              | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 6              | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 7              | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 8              | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 9              | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 10             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 11             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 12             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 13             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 14             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 15             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 16             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 17             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 18             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 19             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 20             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 21             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 22             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 23             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 24             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 25             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 26             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 27             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 28             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 29             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 30             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 31             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 32             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 33             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 34             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 35             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 36             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 37             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 38             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 39             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 40             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 41             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 42             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 43             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 44             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 45             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 46             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 47             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 48             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 49             | 2" OAK 8/80   | 4' x 3.5' | 20               |
| 50             | 2" OAK 8/80   | 4' x 3.5' | 20               |

**KEY NOTES (TYPICAL)**

1. INSTALL 3" (MIN) TREE BARS, WITH 3" SPACING, AT EACH TREE LOCATED IN THIS PLAN.
2. 2" OAK 8/80 TRUNKS, 4' TALL, TO BE PLANTED WITHIN A 2' CLEARANCE FROM THE CURB. TRUNKS SHALL BE PLANTED WITHIN A 2' CLEARANCE FROM THE CURB. TRUNKS SHALL BE 2" FROM THE ADJACENT STREET DRIVE.
3. 3" WALKER PATHWAY.
4. TREES PLANTED IN PARK STRIPS TO BE CHECKED IN SHOP.
5. POOL SEE ARCHITECTURE.
6. 5" MICRO PAVEMENT.



PRELIMINARY NOT FOR CONSTRUCTION

**ARBOR SUBDIVISION**  
**PRELIMINARY LANDSCAPE PLAN**  
 CALDWELL, IDAHO

REVISIONS

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
|     |      |             |
|     |      |             |
|     |      |             |
|     |      |             |
|     |      |             |

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 TEL: 208-333-9999 FAX: 208-333-9990

DATE: 10/20/2024  
 SHEET NO.: PPL1.3

AS





# ARBOR

## AMENITIES PLAN



### AMENITIES LEGEND

1. Community Pool and Tot Lot (Phase 1A)
2. Green Space Corridor and 5' Pathway
3. 8' paved pathway along Noble Drive, per City of Caldwell master pathway plan
4. Interconnecting 5' pathways
5. Micro-path (5') connection to school
6. Anticipated location of 2<sup>nd</sup> Community Pool and Tot Lot Roundabout Buffer
7. Micro-path (5') connection to pool/tot lot
8. Micro-path (5') connection to pool/tot lot

# ARBOR

## PHASING PLAN

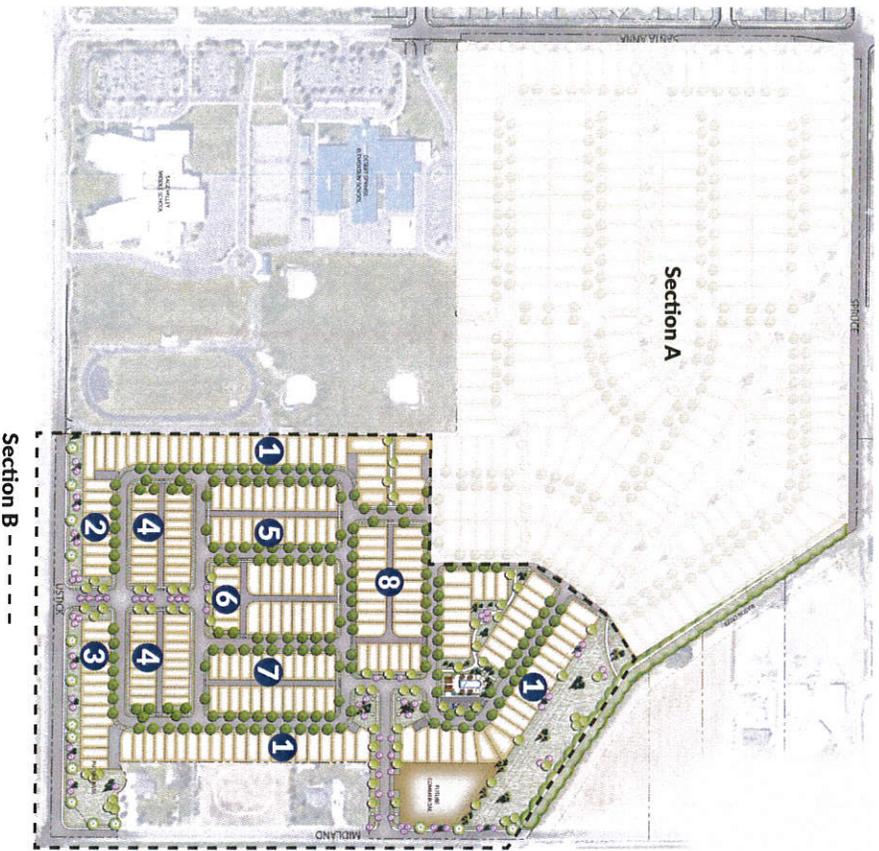


EXHIBIT B

# ARBOR



# ARBOR



# BRIGHTON COMMUNITIES

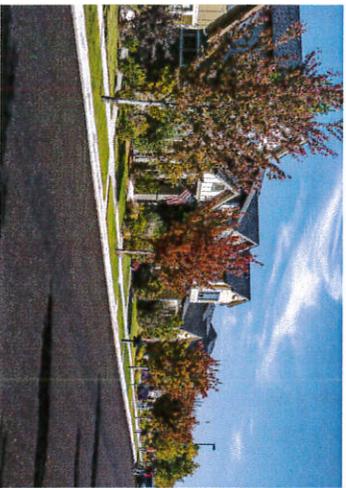
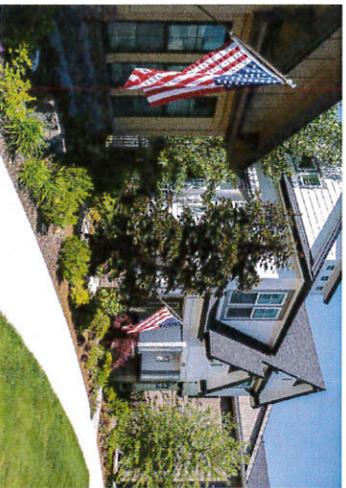
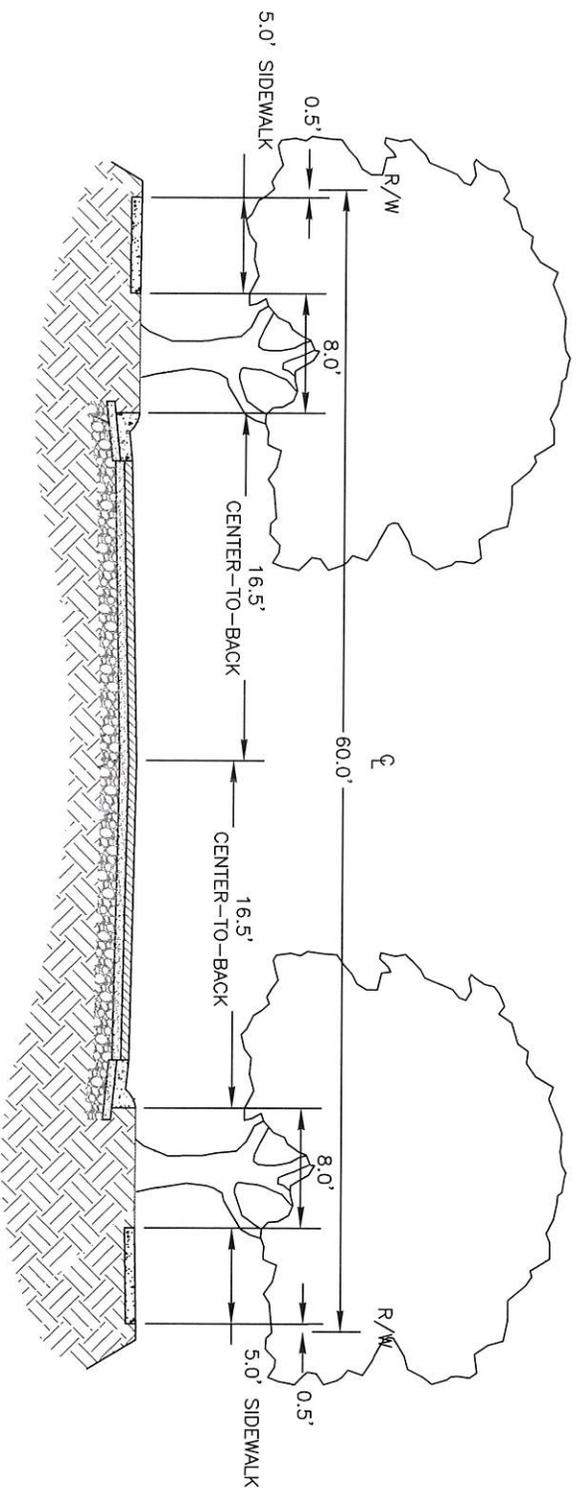


EXHIBIT E

◆ BRIGHTON

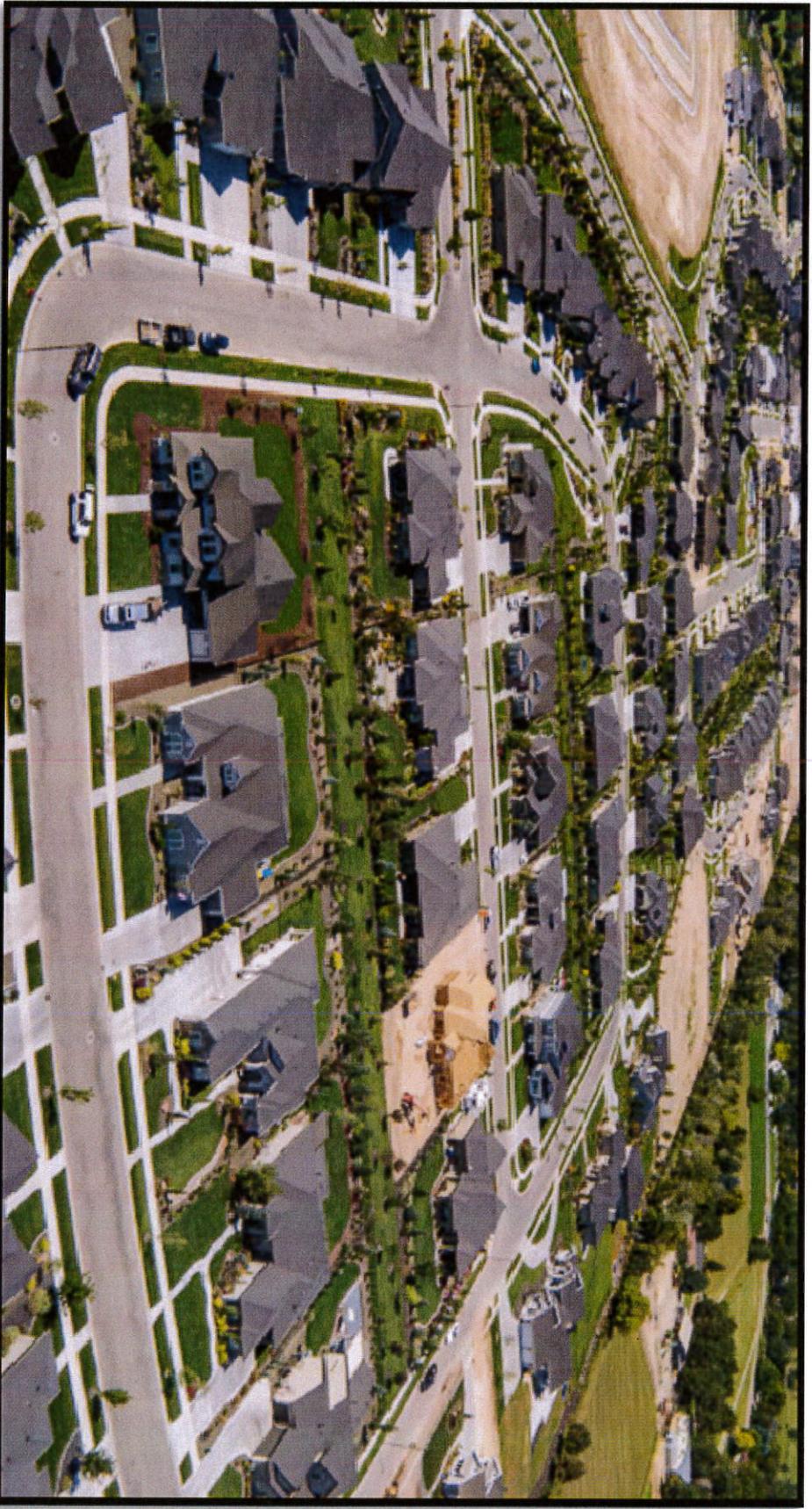
# BRIGHTON COMMUNITIES



TYPICAL INTERNAL LOCAL ROAD SECTION

SCALE: NTS

# BRIGHTON COMMUNITIES



TYPICAL 60' ROW ROAD SECTION WITH 8' PLANTER STRIP AND 5' DETACHED SIDEWALK

EXHIBIT G