

MEMO

Date: December 15, 2021

To: Robb MacDonald, Engineering Department
T.J. Frans, Engineering Department
Alan Perry, Fire Marshal
Chris Bryant, Building Department
Dave Wright, Police Department
Dave Marston, Mapping Department
Angie Hopf, Mapping Department
Anna Turner, Mapping Department
Vallivue School District
Caldwell School District
Pioneer Irrigation District
Compass Idaho
Caldwell Transportation
Brown Bus Company
Canyon Highway District #4
Idaho Transportation Department
Valley Regional Transit
Canyon County Development Services
Idaho Power
Intermountain Gas
Manager
USPS Caldwell
Hamilton Michaelson & Hilty LLP

From: Jerome Mapp, Director Planning & Zoning
Caldwell P & Z Department

RE: **SUP21-000016 Canyon Village Apartments**

Please review the attached application and information and provide us with your written input. We request that you e-mail any comments as soon as possible but no later than **Friday, January 14, 2022.**

E-mail: **P&Z@cityofcaldwell.org**

Case Number SUP21-000016: A request by the Canyon Village Multifamily LLC for Special Use Permit for **Canyon Village Apartments**. The 316-unit apartment complex is located on 15.44 acres in a C-3 (Service Commercial) zone. There will be 144 one-bedroom units, 144 two bedroom units, 24 three bedroom units and 4 carriage units. The property is designated "Commercial & Service" in the 2040 Comprehensive Plan and is located approximately 900 feet from the intersection of E Homedale Road and Caldwell Boulevard.

This case is scheduled to be presented before the **Caldwell Hearing Examiner on Tuesday, January 25, 2022 at 7:00 pm.**

We will assume that you have no objections, concerns or comments if you do not reply to this request within the requested timeframe. If you have any questions, you may contact me at 208-455-4662.



CITY OF *Caldwell, Idaho*

Planning &
Zoning
Hearing
Review
Application

Type of Review Requested

- ☐ Annexation/Deannexation
☐ Appeal/Amendment
☐ Comprehensive Plan Map Change
☐ Design Review
☐ Ordinance Amendment
☐ Rezone
☒ Special Use Permit
☐ Subdivision- Preliminary Plat
☐ Subdivision- Final Plat
☐ Subdivision- Short Plat
☐ Time Extension
☐ Variance
☐ Other _____

STAFF USE ONLY:

File Number(s): SuP21-000016

Project Name: Canyon Village Apts.

Date Filed: _____ Date Complete: _____

Related Files: _____

Subject Property Information

Address: 6804 CLEVELAND BLVD CALDWELL, ID 83605

Parcel
Number(s): R3089900000

Subdivision: _____ Block: _____ Lot: _____ Acreage: 15.44

Zoning: _____

Prior Use of the Property: Agricultural Field

Proposed Use of the Property:

This project will be a 316 unit Class-A apartment building with 144 one bedroom units, 144 two bedroom units, 24 three bedroom units and 4 carriage units. The project has been designed to offer spacious open floor plans, stainless steel appliances, full size washer & dryer, granite countertops, walk-in closets, luxury plank flooring and high tech safety measures to provide the safest environment possible for all residents. The project will include a resort style pool, clubhouse with a state-of-the-art gym and community room for family parties and social events. To provide outdoor exercise opportunities, a walking path along Moses Drain (seen on site plan) and outdoor weatherproof workout stations will be added to keep our residents healthy and fit, with multiple options with which to do so. We have also added 48 private garages located within 6 individual buildings spread across the project for easy access to residents and to provide additional storage for those in need of such.

Applicant Information

Applicant Name: Abbey Stover

Phone: _____

Address: 950 W Bannock Street

City: Boise

State: ID

Zip: 83702

Email: abbey.stover@kimley-horn.com

Cell: _____

Owner Name: CANYON VILLAGE MULTIFAMILY LLC

Phone: _____

Address: 15436 N FLORIDA AVE STE 200
TAMPA, FL 33613

City: TAMPA

State: FL

Zip: 33613

Email: _____

Cell: _____

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

DeBartolo Development

Address: 4401 W Kennedy Blvd

City: Tampa

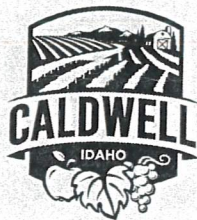
State: FL

Zip: 33609

Email: efranklin@debartolodevelopment.com

Cell: _____

AJ



CITY OF
Caldwell, Idaho

Planning & Zoning

SPECIAL-USE PERMIT

Project Name: <u>Canyon Village Apartments</u>	File #: _____
Applicant/Agent: <u>Brendon McDougald / Kinley Horn and Associates, Inc</u>	

Applicant (v)	Please provide the following REQUIRED documentation:	Staff (v)
✓	Completed & signed Hearing Review Master Application	
✓	Narrative fully describing the proposed use/request	
✓	Recorded warranty deed for the subject property	
✓	Signed Property Owner Acknowledgement (if applicable)	
✓	Vicinity map, showing the location of the subject property	
✓	Site Plan The following are suggested items that may be shown on the site plan:	
✓	• Property boundaries of the site	
✓	• Existing buildings on the site	
✓	• Parking stalls and drive aisles	
✓	• Sidewalks or pathways (proposed and existing)	
✓	• Fencing (proposed and existing)	
✓	Floor Plan	
✓	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: _____

Received by: _____

Proposed Hearing Date: _____

Hearing Body: _____

AJ

Authorization

Print Applicant Name: Abbey Stover

Applicant Signature: _____ Date: 10/28/2021

621 Cleveland Boulevard • Caldwell, Idaho 83605 • Phone: (208) 455-3021 • www.cityofcaldwell.com/PlanningZoning

AI

Project: Canyon Village Apartments
Address: 6804 Cleveland Blvd, Nampa ID
Date: 10-05-21
Re: Special Use Permit Application

DeBartolo Development, LLC is pleased to present Canyon Village Apartments for consideration of a special use permit for the purpose of developing apartments, to better serve Caldwell's immense population growth as of recent. Canyon Village Apartments represents an approximately 15.4 acre parcel located near the intersection of Cleveland Blvd and Homedale Road. The property is separated from Cleveland Blvd by an approximately 7.3 acre parcel which will be developed as a commercial property, to help build the commercial corridor along Cleveland Blvd, as requested by the city. This project will be entitled and developed under a separate project, but has been considered throughout design of this apartment project.

This project will include 316-unit Class-A apartment building with 144 one bedroom units, 144 two bedroom units, 24 three bedroom units and 4 carriage units. The apartments have been designed to offer spacious open floor plans, stainless steel appliances, full size washer & dryers, granite countertops, walk-in closets, luxury plank flooring and high-tech safety measures to provide the safest environment possible for all residents. The project will include a resort style pool, clubhouse with a state-of-the-art gym and community room for family parties and social events. To provide outdoor exercise opportunities, a walking path along Moses Drain (seen on site plan), a dog park, and outdoor weatherproof workout stations will be provided as fitness options for the residents. There are 48 private garages located within 6 individual buildings spread across the project for easy access to residents and to provide additional storage as needed. The carriage units will each include a 2-car garage. The site has a total of 487 surface parking stalls and 56 garage stalls, which equates to approximately 1.72 parking stalls per unit. The density of the project will be 20.4 dwelling units per acre and the site is generously landscaped with over 35% of open space.

The Property is located just one-mile from Interstate Highway 84 ("I-84"), which is traversed by 139,000 vehicles daily affording direct connectivity to Downtown Boise through the burgeoning Nampa and Meridian submarkets approximately 20 miles from the subject Site. As a city, Caldwell has seen unprecedented growth over the last five years, raising its population by over a tenth. Despite this flood of individuals into the area, Caldwell has seen very few new apartment units come online, while absorption of units has resided around 200 units per year for the city proper, far outpacing the growth of residential development. Because of this, many individuals likely have chosen to live in other cities or in unincorporated Canyon County, shifting that opportunity away from the city. Canyon Village Apartments will introduce 300+ high-income residents into the city who will help neighboring retail and businesses as they shop at locally owned stores, service their cars with locally owned businesses and use local medical professionals for their healthcare needs. We are humbled and pleased to present this additional economic driver and tax revenue opportunity to the City by means of a special use permit for multifamily use for our current C-3 zoning designation.

Sincerely Yours-

Brandon McDougald, P.E.

Kimley-Horn & Associates, Inc.

950 W Bannock St. # 1100 Boise, Idaho 83702

Office: 208-918-0100 Email: Brandon.mcdougald@kimley-horn.com

CANYON VILLAGE

PRELIMINARY SITE PLAN

Kimley»H«

900 W. Bankview Street Suite 1100 Boise, ID 83702 Tel. No. (208) 333-1100

DATE	DESCRIPTION
------	-------------

GENERAL NOTES

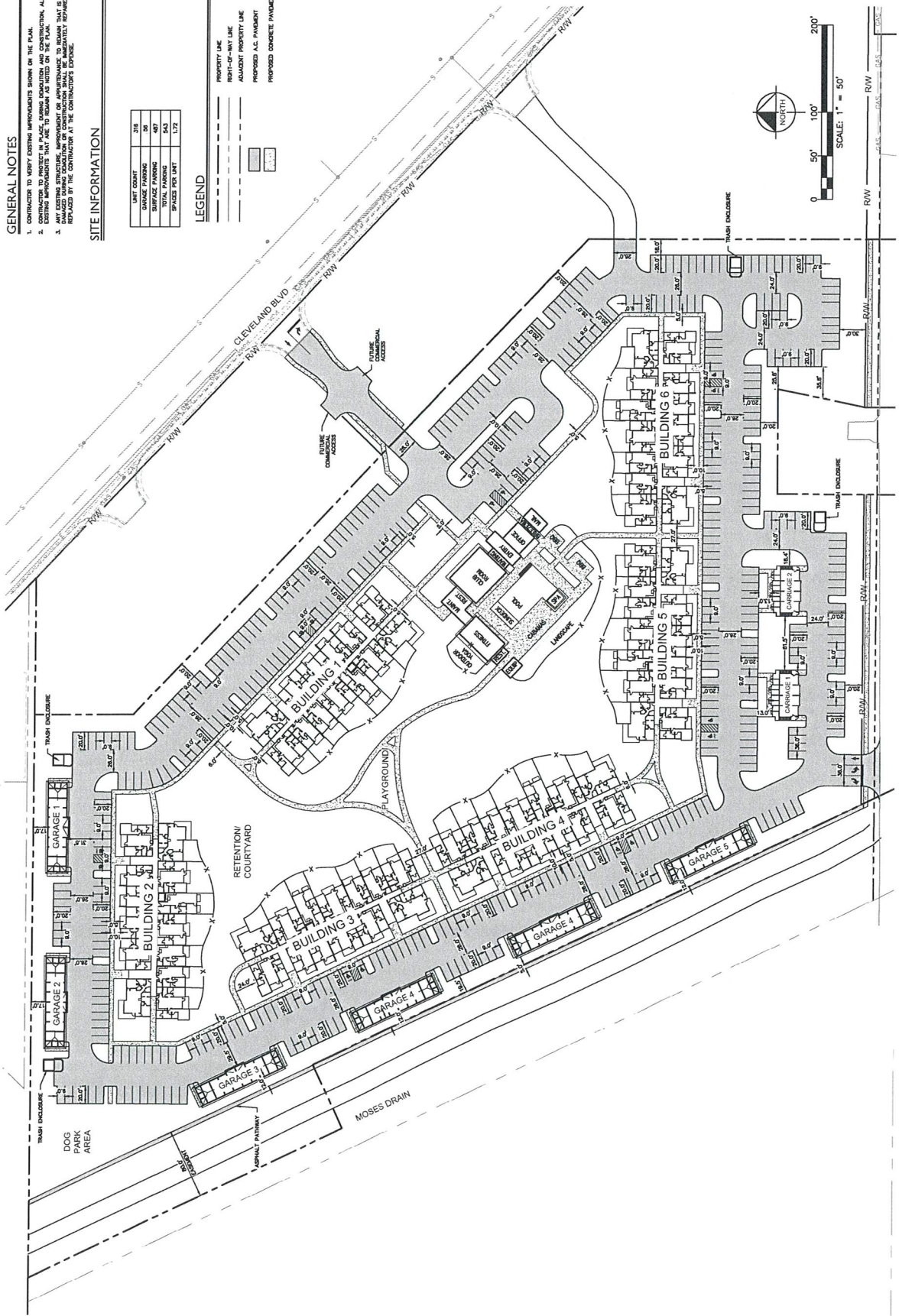
1. CONTRACTOR TO VERIFY EXISTING IMPROVEMENTS SHOWN ON THE PLAN.
2. CONTRACTOR TO PROTECT IN PLACE, DURING DEMOLITION AND CONSTRUCTION, ALL EXISTING IMPROVEMENTS THAT ARE, TO REMAIN AS NOTED ON THE PLAN.
3. ANY EXISTING STRUCTURE, IMPROVEMENT OR APPURTENANCE TO REMAIN THAT IS DAMAGED DURING DEMOLITION OR CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED OR REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

ADDITIONAL INFORMATION

UNIT COUNT	316
GARAGE PARKING	56
SURFACE PARKING	467
TOTAL PARKING	543
SPACES PER UNIT	1.72

LEGEND

PROPERTY LINE	---	
RIGHT-OF-WAY LINE	----	
ADJACENT PROPERTY LINE	----	
PROPOSED A.C. PAVEMENT	=====	AC
PROPOSED CONCRETE PAVEMENT	=====	CONC

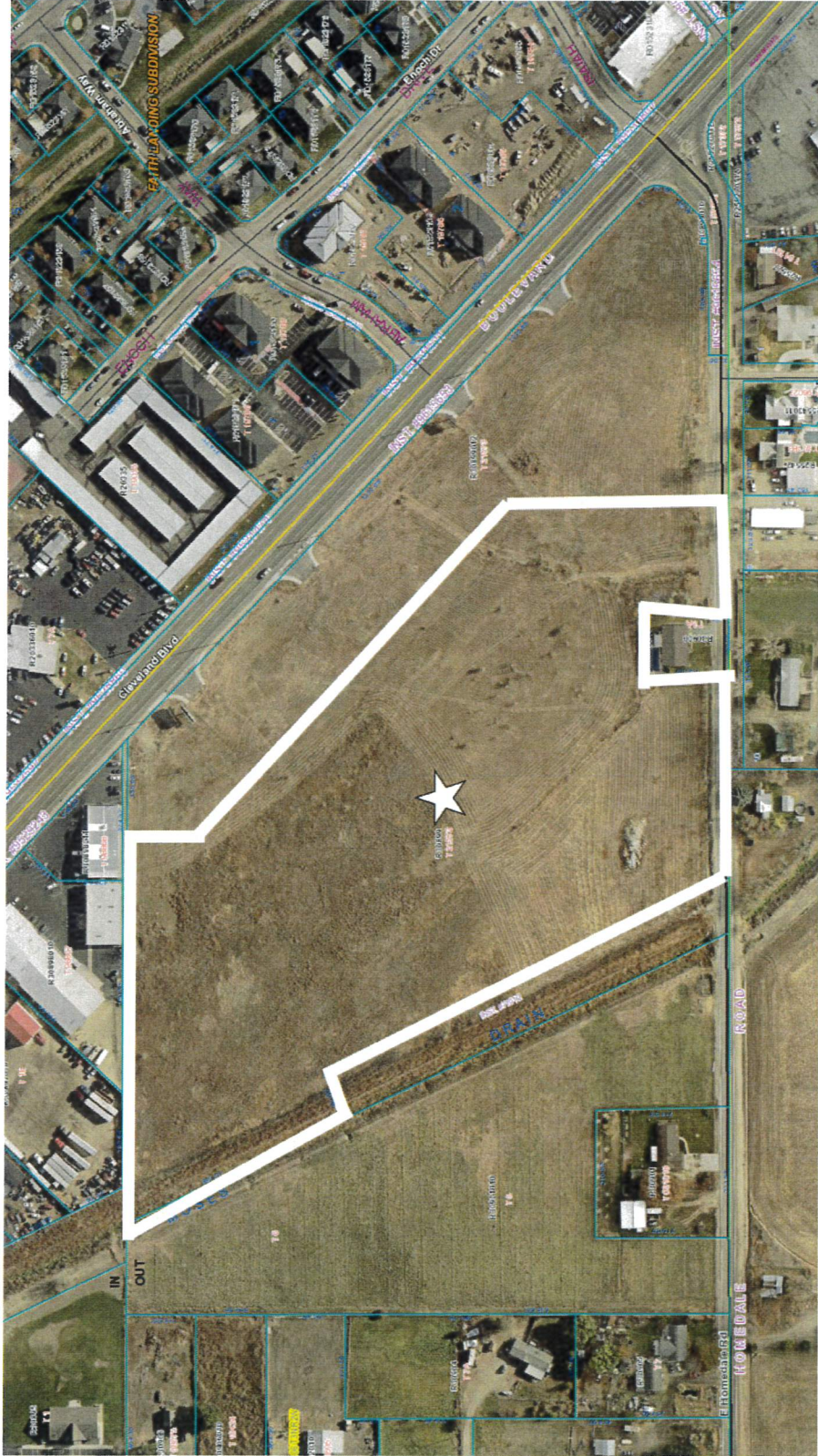


CAUTION: NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE UTILITY LOCATION SERVICE AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES UNLESS OTHERWISE NOTED. UNKNOWLEDGEOUS RELOCATION OF UTILITIES SHALL BE AT THE CONTRACTOR'S RISK.

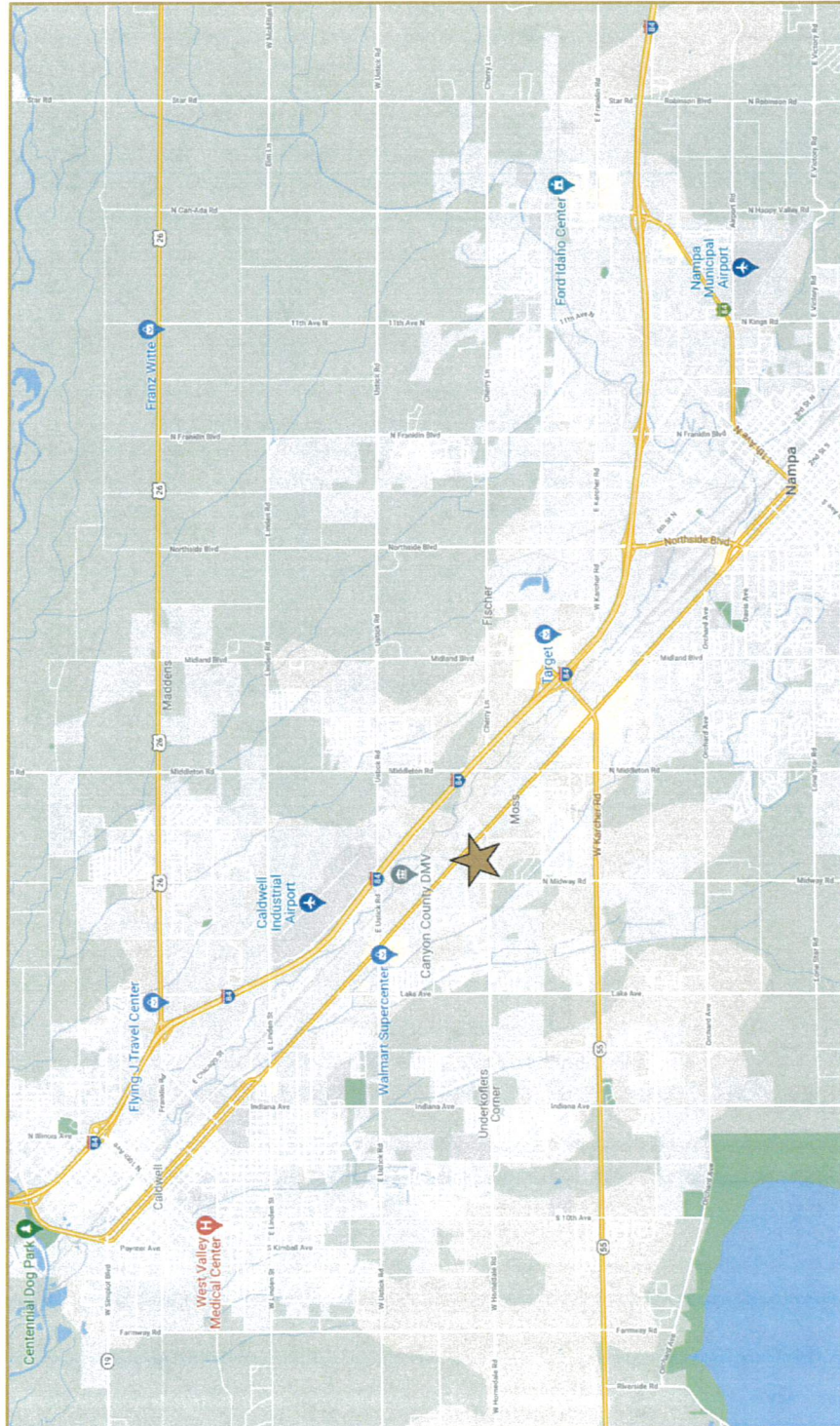


PROPERTY MAP



Project: Canyon Village Apartments
Address: 6804 Cleveland Blvd, Nampa ID
Date: 9-08-21
Re: Special Use Permit Application

LOCATION 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: 2:00 pm

End Time of Neighborhood Meeting: 3:30 pm

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

	<u>PRINTED NAME</u>	<u>ADDRESS, CITY, STATE, ZIP</u>
1.	<u>Maayle Estee</u>	<u>5503 E Homestead Rd 208 454-1515</u>
2.	<u>Emily Franklin</u>	<u>4401 W Kennedy Blvd Tampa, FL</u>
3.	<u>STEVE SHAW</u>	<u>4401 W. KENNEDY BLVD. TAMPA, FL</u>
4.	<u>Brandon McDougall</u>	<u>950 W Bonhock Boise, ID</u>
5.		
6.		
7.		
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12.		
13.		
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16.		
17.		
18.		
19.		

45

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: 316 unit apartment development

Date of Round Table meeting: April 22, 2021

Notice sent to neighbors on: Sept. 9, 2021

Date & time of the neighborhood meeting: Sept. 19, 2021

Location of the neighborhood meeting: Caldwell Public Library located at 1010 Dearborn Street,
Caldwell, ID

Developer/Applicant:

Name: Brandon McDougald Kimley Horn + Associates, Inc.

Address, City, State, Zip: 950 W Bonnick St., Ste 1100, Boise ID 83702

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 9/9/2021



Order Number: 21423097

2021-055055	
RECORDED	
08/05/2021 03:26 PM	
CHRIS YAMAMOTO	
CANYON COUNTY RECORDER	
Pgs=4 HCRETAL	\$15.00
TYPE: DEED	
TITLEONE BOISE	
ELECTRONICALLY RECORDED	

Warranty Deed

For value received,

Colorado River 500, LLC, a California limited liability company

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

Canyon Village Multifamily, LLC, a Florida limited liability company

whose current address is 15436 N. Florida Avenue Suite 200 Tampa, FL 33613

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

See Exhibit A, attached hereto and incorporated herein.

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 of recorded (provided, however, nothing contained herein shall be deemed to reimpose same) and, 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.

Remainder of page intentionally left blank.

AB



Order Number: 21423097

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Remainder of page intentionally left blank.

Dated: August 3, 2021

Colorado River 500, LLC

By


Joseph A. Swain, Manager

State of _____, County of _____, ss.

On this ____ day of _____ 2021, before me, the undersigned, a Notary Public in and for said State, personally appeared Joseph Swain known or identified to me to be a Manager of the limited liability company that executed the within instrument and acknowledged to me that he executed the same for and on behalf of said limited liability company and that such limited liability company executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Notary Public

Residing In: _____

My Commission Expires: _____

See Attached

CALIFORNIA ACKNOWLEDGMENT

CIVIL CODE § 1189

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

State of California

County of Orange

On 8/4/21 before me, E. Bridget Gould, Notary Public
Date Here Insert Name and Title of the Officer

personally appeared Joseph A. Swain
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence 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 in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Place Notary Seal and/or Stamp Above

Signature E. Bridget Gould
Signature of Notary Public

OPTIONAL

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: Warranty Deed

Document Date: 8/4/21 Number of Pages: 4 of 4

Signer(s) Other Than Named Above: N/A

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____	Signer's Name: _____
<input type="checkbox"/> Corporate Officer – Title(s): _____	<input type="checkbox"/> Corporate Officer – Title(s): _____
<input type="checkbox"/> Partner – <input type="checkbox"/> Limited <input type="checkbox"/> General	<input type="checkbox"/> Partner – <input type="checkbox"/> Limited <input type="checkbox"/> General
<input type="checkbox"/> Individual <input type="checkbox"/> Attorney in Fact	<input type="checkbox"/> Individual <input type="checkbox"/> Attorney in Fact
<input type="checkbox"/> Trustee <input type="checkbox"/> Guardian or Conservator	<input type="checkbox"/> Trustee <input type="checkbox"/> Guardian or Conservator
<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____
Signer is Representing: _____	Signer is Representing: _____

Alb

EXHIBIT A
LEGAL DESCRIPTION OF THE PREMISES

Parcel I:

A parcel of land as shown on Record of Survey Instrument No. 2021-052101 situate in Government Lot 7 and the Southeast quarter of the Southwest quarter of Section 6, Township 3 North, Range 2 West, Boise Meridian, Canyon County, Idaho being a portion of Grantors' parcels (granted under Warranty Deed Instrument No. 2020-071088) more particularly described as follows:

Commencing at the South quarter corner of Section 6 monumented by a found 5/8 inch rebar as shown on Corner Record Instrument No. 200464612 from which the Southwest corner bears North 89°37'53" West, 2613.76 feet monumented by a found brass cap as shown on Corner Record Instrument No. 2019-018955; thence North 89°37'53" West, 864.27 feet to the Point of Beginning; thence continuing North 89°37'53" West, 192.76 feet to a found 5/8 inch bar with cap PLS 7612; thence North 00°22'17" East, 40.00 feet; thence North 11°40'57" East, 101.98 feet to a found 5/8 inch bar with cap PLS 3627; thence North 89°37'43" West, 120.00 feet to a found 5/8 inch bar with cap PLS 3627; thence South 00°22'17" West, 140.00 feet to a found 5/8 inch bar with cap PLS 7612; thence North 89°37'53" West, 154.70 feet to the West 1/16 corner monumented by a found 5/8 inch bar with cap PLS 7612; thence continuing North 89°37'53" West, 181.39 feet to the Easterly boundary of the Moses Drain monumented by a found 5/8 inch bar with cap PLS 7612; thence along said boundary North 25°16'11" West, 743.05 feet to a found 5/8 inch bar with cap PLS 7612; thence South 64°43'49" West, 80.00 feet to the control line of the Moses Drain; thence along said line North 25°16'11" West, 400.01 feet; thence South 89°37'53" East, 643.27 feet to a set 5/8 inch bar with cap PLS 8575; thence South 00°00'00" East, 114.07 feet to a set 5/8 inch bar with cap PLS 8575; thence South 46°15'28" East, 755.58 feet to a set 5/8 inch bar with cap PLS 8575; thence South 00°00'00" East, 362.94 feet to the Point of Beginning.

 TRAFFIC IMPACT STUDY

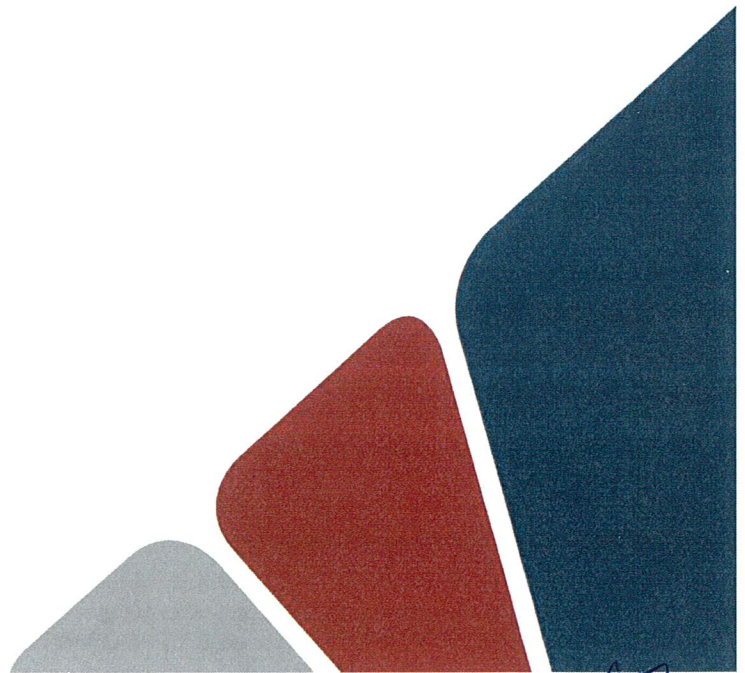
CANYON VILLAGE MULTIFAMILY RESIDENTIAL DEVELOPMENT

CALDWELL, IDAHO

Prepared for:
City of Caldwell
411 Blaine Street
Caldwell, Idaho 83605

Prepared by:
Kimley»Horn

October 2021
0935080145
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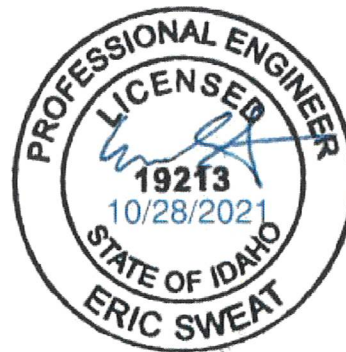
TRAFFIC IMPACT STUDY

FOR

CANYON VILLAGE MULTIFAMILY RESIDENTIAL DEVELOPMENT

Prepared for:

City of Caldwell
411 Blaine Street
Caldwell, Idaho 83605



Prepared by:

Kimley-Horn and Associates, Inc.
950 Bannock Street
Suite 1100
Boise, Idaho 83702
208-297-2885

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

© October 2021
0935080145

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1. EXECUTIVE SUMMARY

1.1. Project Description

The proposed Canyon Village multifamily residential development is located near the northwest corner of the Homedale Road and Cleveland Boulevard intersection in the City of Caldwell, Canyon County, Idaho. The project is anticipated to be completed in 2023 and consist of 316 multifamily mid-rise residential units. Access to the site will be provided via one right-in/right-out movement access on Cleveland Boulevard and one full access movement on Homedale Road. The location of the Canyon Village multifamily residential development site, study area intersections, and project driveway locations are shown in **Figure ES-1**.

1.2. Findings and Recommendations

1.2.1. Project Trip Generation

The Canyon Village residential development is estimated to generate 1,720 daily trips on a typical weekday, with 114 trips occurring in the AM peak hour and 139 trips occurring in the PM peak hour on a typical weekday.

1.2.2. Analysis Findings and Potential Traffic Mitigations

A summary of the Level of Service (LOS) results for study area intersections are presented in **Table ES-1**. Analysis findings and mitigations are presented in **Table ES-2**.

Table ES-1 – LOS Results

Operational Analysis Results - LOS (Delay) ¹						
Intersection						
Number			1	2	A ²	B ²
Name			Cleveland Blvd / Homedale Rd	Midway Rd / Homedale Rd	Cleveland Blvd / Driveway A	Homedale Rd / Driveway B
Control			Signal	TWSC	TWSC	TWSC
Analysis Scenario	2021 Existing	AM	B (13.9)	B (13.0) EB	-	-
		PM	B (13.2)	C (17.2) WB	-	-
	2023 Background	AM	B (13.4)	B (12.7) EB	-	-
		PM	B (13.1)	C (17.0) WB	-	-
	2023 Background Plus Project	AM	B (17.3)	B (12.9) EB	B (11.8) EB	A (9.7) SB
		PM	B (16.7)	C (17.7) WB	B (12.3) EB	B (10.2) SB
Notes: 1. LOS and delay are shown for overall intersection for signalized, roundabout, and all-way stop intersections and the worst movement for all other intersections. Delay is shown in seconds per vehicle. 2. Denotes a Project Driveway						

Table ES-2 – Findings and Mitigations

2021 Existing Conditions	
Findings	<ul style="list-style-type: none"> A total of 50 crashes were recorded at study intersections in the most recent five-year period where crash data is available. The 50 crashes resulted in 20 injury crashes (40%), 30 property damage only crashes (67%), and 0 fatal crashes (0%). Cleveland Boulevard / Homedale Road <ul style="list-style-type: none"> The eastbound approach operates at LOS E in the AM and PM peak hour. The volume to capacity ratio for the movement is under 0.90 The westbound approach operates at LOS E in the AM and PM peak hour. The volume to capacity ratio for the movement is under 0.90. The other study area intersections operate at acceptable LOS
2023 Background Conditions	
Planned Improvements	<ul style="list-style-type: none"> ITD and the City of Caldwell do not have any current or future project in the vicinity of the development.
Findings	<ul style="list-style-type: none"> Cleveland Boulevard / Homedale Road <ul style="list-style-type: none"> The eastbound approach operates at LOS E in the AM and PM peak hour. The volume to capacity ratio for the movement is under 0.90 The westbound approach operates at LOS E in the AM and PM peak hour. The volume to capacity ratio for the movement is under 0.90. The other study area intersections operate at acceptable LOS
2023 Plus Project Conditions	
Findings	<ul style="list-style-type: none"> Cleveland Boulevard / Homedale Road <ul style="list-style-type: none"> The eastbound approach operates at LOS E in the AM and PM peak hour. The volume to capacity ratio for the movement is under 0.90 The westbound approach operates at LOS E in the AM and PM peak hour. The volume to capacity ratio for the movement is under 0.90. The other study area intersections operate at acceptable LOS
Potential Mitigations	<ul style="list-style-type: none"> Cleveland Boulevard / Homedale Road <ul style="list-style-type: none"> The development adds only 19 left-turning vehicles to the eastbound approach in the AM peak hour and 12 in the PM peak hour. Minor stop-controlled movements at major intersections typically experience delays during peak hours. The intersection movement is already failing in the existing and background scenarios without the addition of project site trips, therefore the addition of 19 vehicles for the proposed development does not cause major additional operational issues. No mitigation improvements are recommended for this intersection. Midway Road / Homedale Road <ul style="list-style-type: none"> The development adds only 5 left-turning vehicles to the eastbound approach in the AM peak hour and 3 in the PM peak hour No mitigation improvements are recommended for this intersection.
Turn Lane Analyses	<ul style="list-style-type: none"> The Midway Road / Homedale Road intersection does not warrant additional northbound or southbound right-turn or left-turn lanes based on 2021 existing, 2023 background, or 2023 background plus project traffic volumes. A southbound right-turn lane on Cleveland Boulevard into Driveway A is not warranted based on future 2023 background plus project traffic volumes An eastbound left-turn or westbound right-turn lane on Homedale Road into Driveway B is not warranted based on future 2023 background plus project traffic volumes



Image Source: Nearmap US, INC.

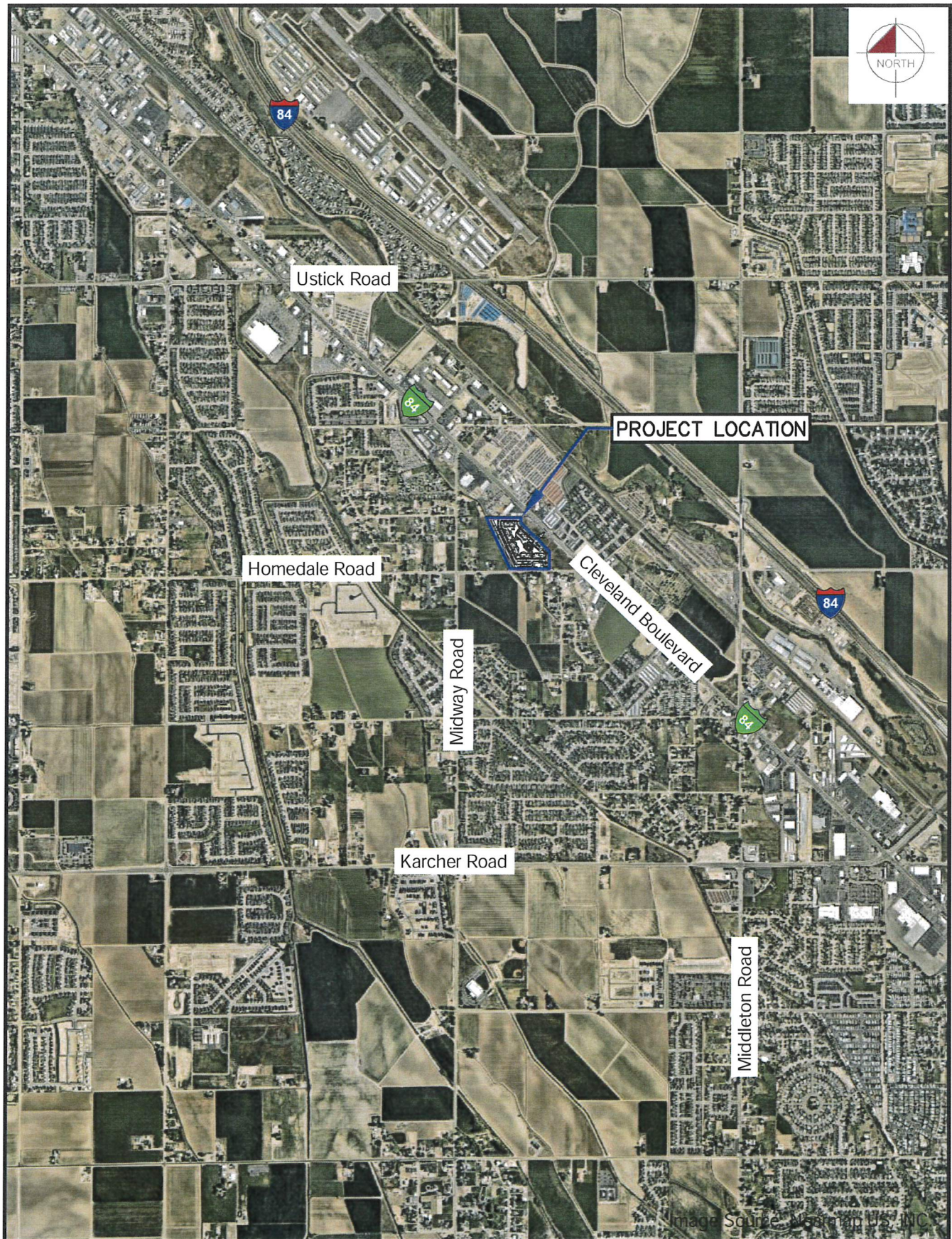
2. INTRODUCTION

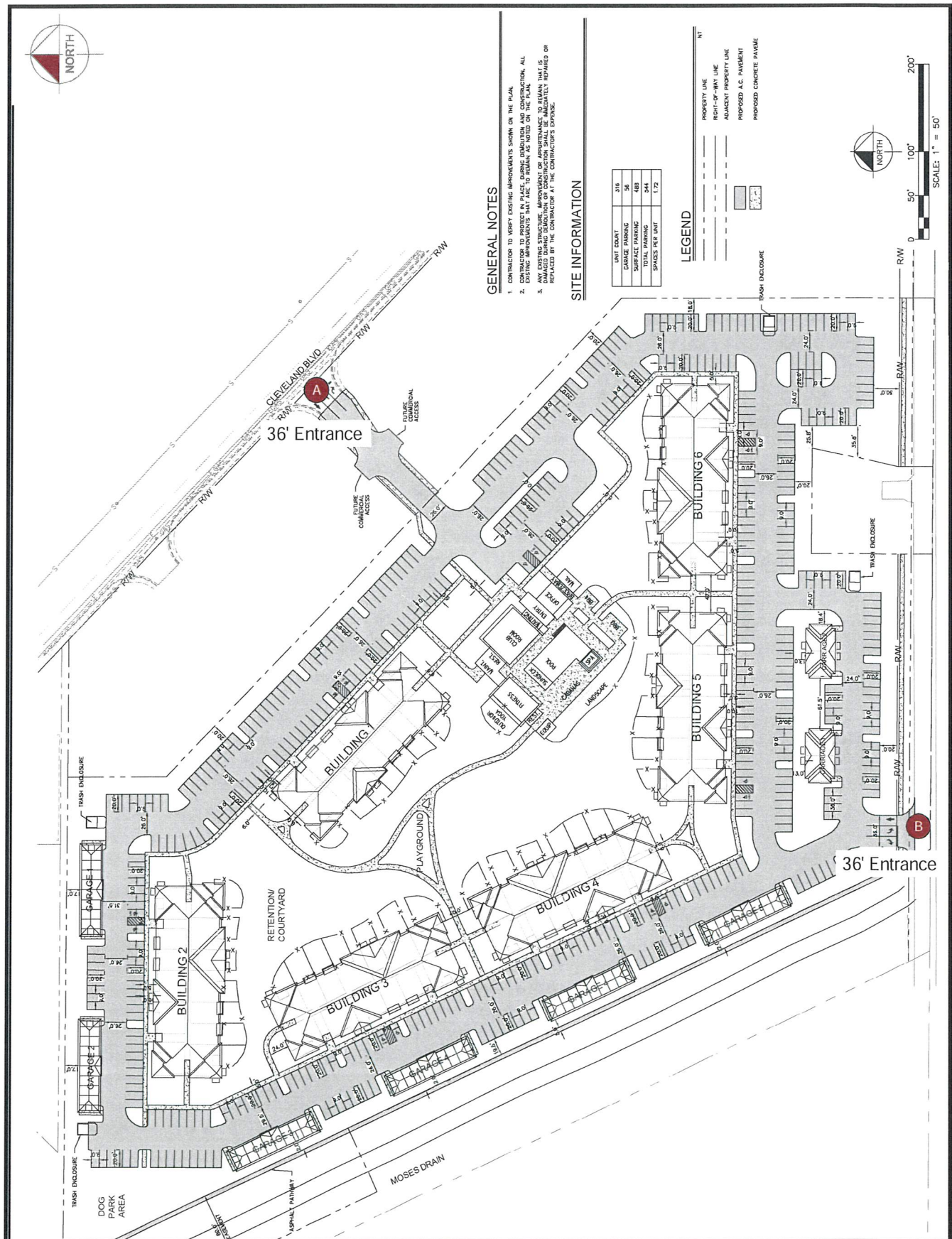
Kimley-Horn and Associates, Inc. has been retained by the City of Caldwell to prepare a Traffic Impact Study (TIS) for a proposed multifamily residential development, near the northwest corner of the Homedale Road and Cleveland Boulevard intersection in Caldwell, Idaho. The proposed development is expected to be annexed into the City of Caldwell. The location of the Canyon Village multifamily residential development within the City of Caldwell is shown in **Figure 1**.

The proposed Canyon Village multifamily residential development includes 316 multifamily mid-rise residential units. The project is anticipated to be completed in 2023. A conceptual site plan of the development is shown in **Figure 2**. Access to the site will be provided via one right-in/right-out movement access on Cleveland Boulevard and one full access movement on Homedale Road. The access on Cleveland Boulevard will utilize an existing curb cut. The developer's site plan is also provided as **Appendix A**.

The purpose of this TIS is to identify trip generation characteristics of the proposed development, evaluate traffic related impacts on the adjacent street system, and recommend mitigation measures to identified impacts.

The scope of this study was determined through coordination and a scoping memorandum with the City of Caldwell and was prepared in accordance with City of Caldwell requirements.





3. EXISTING CONDITIONS

This section of the report details existing conditions adjacent to the project site.

3.1. Study Area Intersections

Scoping discussions with the City of Caldwell identified the following two intersections for analysis:

1. Cleveland Boulevard / Homedale Road
2. Homedale Road / Midway Road

In addition to the two study area intersections, the following project driveway intersections are also analyzed:

- A. Driveway A / Cleveland Boulevard
- B. Driveway B / Homedale Road

A copy of the TIS scoping memorandum is included as **Appendix B**.

3.2. Existing Land Uses

The site is currently undeveloped land. The site is zoned C3 (service commercial). To the east of the site is more vacant land that is also zoned as C3 and to the west is residential (R1 low density residential) land uses. Land to the north is C3 commercial land use and land to the south is residential.

3.3. Existing Lane Configurations and Control

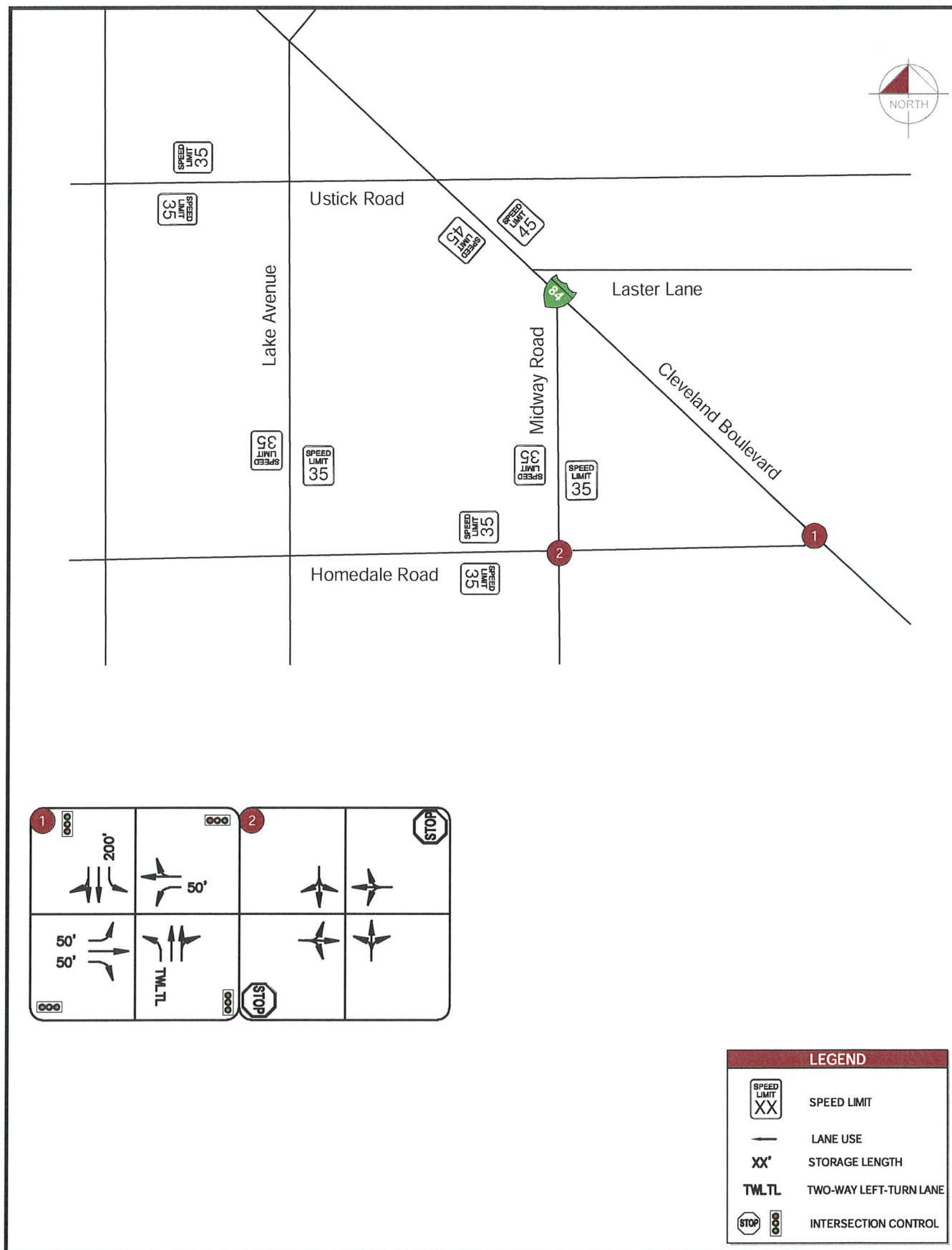
Regional access to the Canyon Village multifamily residential development will be provided by I-84. Primary access to the development will be provided by Cleveland Boulevard (I-84 Business), Homedale Road, and Midway Road. Direct access will be provided by Driveway A on Cleveland Boulevard and Driveway B on Homedale Road.

Cleveland Boulevard (I-84 Business) is a city-maintained roadway with two lanes in each direction separated by a two-way left-turn lane (TWLTL). The roadway is classified as a Principal Arterial in the Canyon County and City of Caldwell Functional Street Classification maps. The posted speed limit is 45 mph in the study area.

Homedale Road is a city-maintained roadway with one lane in each direction. The roadway is classified as a Minor Arterial in the Canyon County and City of Caldwell Functional Street Classification maps. The posted speed limit is 35 mph in the study area.

Midway Road is a city-maintained roadway with one lane in each direction. The roadway is classified as a Collector in the Canyon County and City of Caldwell Functional Street Classification maps. The posted speed limit is 35 mph in the study area.

Existing speed limits, lane configurations, and traffic control at the time of this study are illustrated in **Figure 3**.

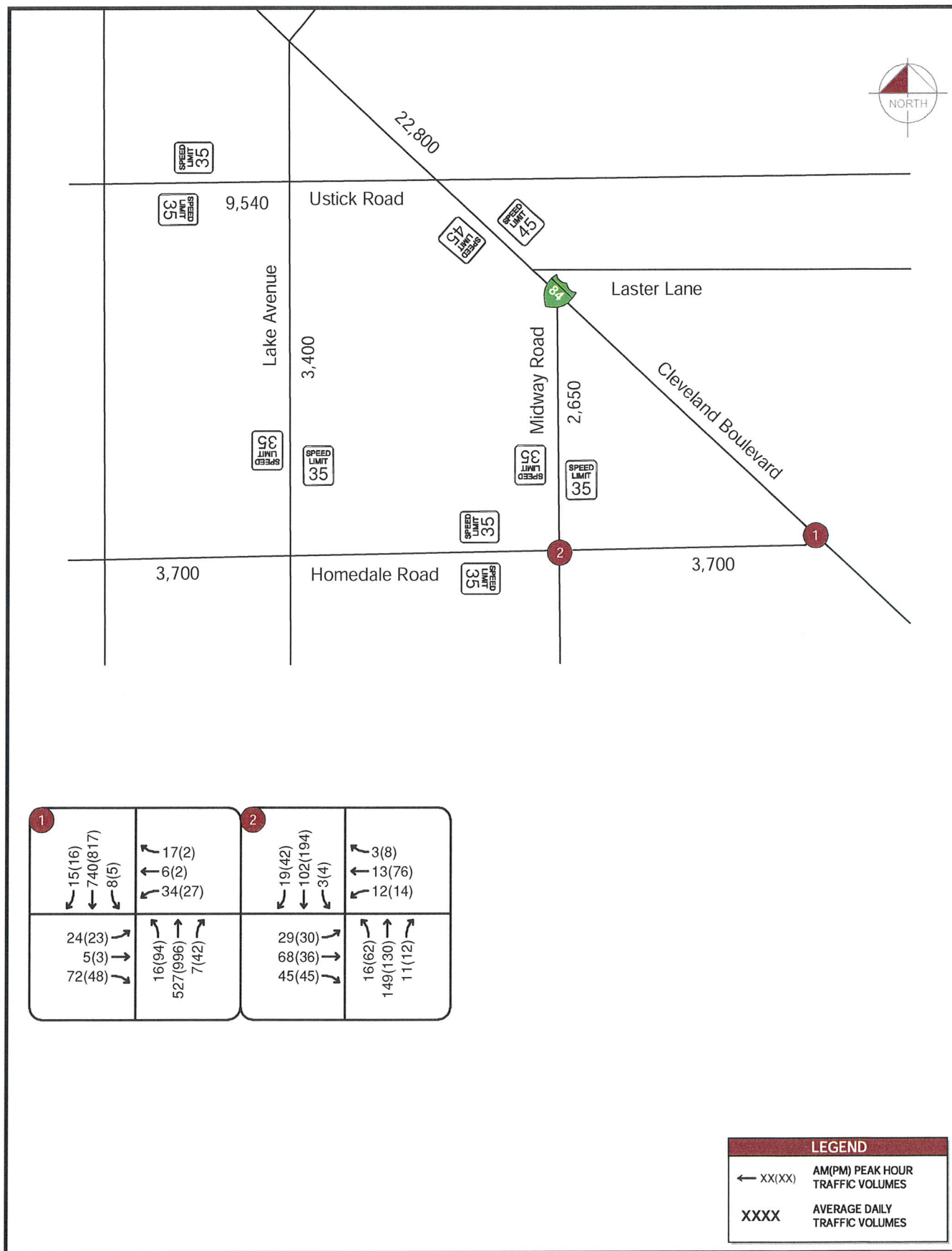


3.4. Existing Traffic Volumes

Existing AM (7:00-9:00) and PM (4:00-6:00) peak period turning movement count data was field collected for the following intersections on Thursday, February 2, 2021:

- Cleveland Boulevard / Homedale Road
- Homedale Road / Midway Road

A summary of the existing traffic data at the study area intersections is shown in **Figure 4**. The field counted data sheets are provided in **Appendix C**.



3.5. Crash Data Analysis

Crash data was obtained for the two existing study intersections from the Local Highway Technical Assistance Council (LHTAC) website (<http://gis.lhtac.org/safety/>) for the most recent five-year period (2015 – 2019) for which crash data was available. The available crash data was filtered for intersection related crashes only. Intersection crashes include those that occurred on both the major and minor streets of study intersections during the five-year analysis period. Crash data for the study intersections is summarized in **Table 1** based on crash severity and in **Table 2** based on crash type.

Table 1 – Crash Data by Severity

Int.	Intersection Name	Total Crashes	Crash Severity					
			Property Damage Only		Injury		Fatal	
			#	%	#	%	#	%
1	Cleveland Boulevard / Homedale Road	12	7	58%	5	42%	0	0%
2	Homedale Road / Midway Road	38	23	61%	15	39%	0	0%
Total		50	30	60%	20	40%	0	0%

Table 2 – Crash Data by Type

Int. Num.	Intersection Name	Total Crashes	Crash Type									
			Angle		Rear-End		Sideswipe		Head-on		Other	
			#	%	#	%	#	%	#	%	#	%
1	Cleveland Boulevard / Homedale Road	12	4	33%	8	77%	0	0%	0	0%	0	0%
2	Homedale Road / Midway Road	38	32	84%	0	0%	2	5%	1	3%	3	8%
Total		50	38	76%	8	16%	2	4%	1	2%	3	6%

A total of 50 crashes were recorded at the study intersections in the most recent five-year period where crash data is available. The 50 crashes resulted in 20 injury crashes (40%), 30 property damage only crashes (60%), and 0 fatal crashes (0%). The 50 crashes resulted in 38 angle crashes (76%), 8 rear-end crashes (16%), 2 sideswipe crashes (4%), 1 head-on on crashes (2%), and 3 other crashes (6%).

There is a high percentage of east and west approach failure to yield type crashes at the Homedale Road and Midway Road intersection. The east and west approaches have lighted stop signs. The City may consider increasing stop sign visibility with the addition of flashing LED stop sign lighting and/or advance yield pavement markings.

4. FUTURE CONDITIONS

This section summarizes conditions that are expected in the future 2023 background and 2023 buildout (background plus project) conditions.

4.1. Proposed Development

The proposed Canyon Village multifamily residential development includes 316 multifamily mid-rise residential units. The project is anticipated to be completed in 2023. Access to the site will be provided via one right-in/right-out movement access on Cleveland Boulevard and one full access movement on Homedale Road.

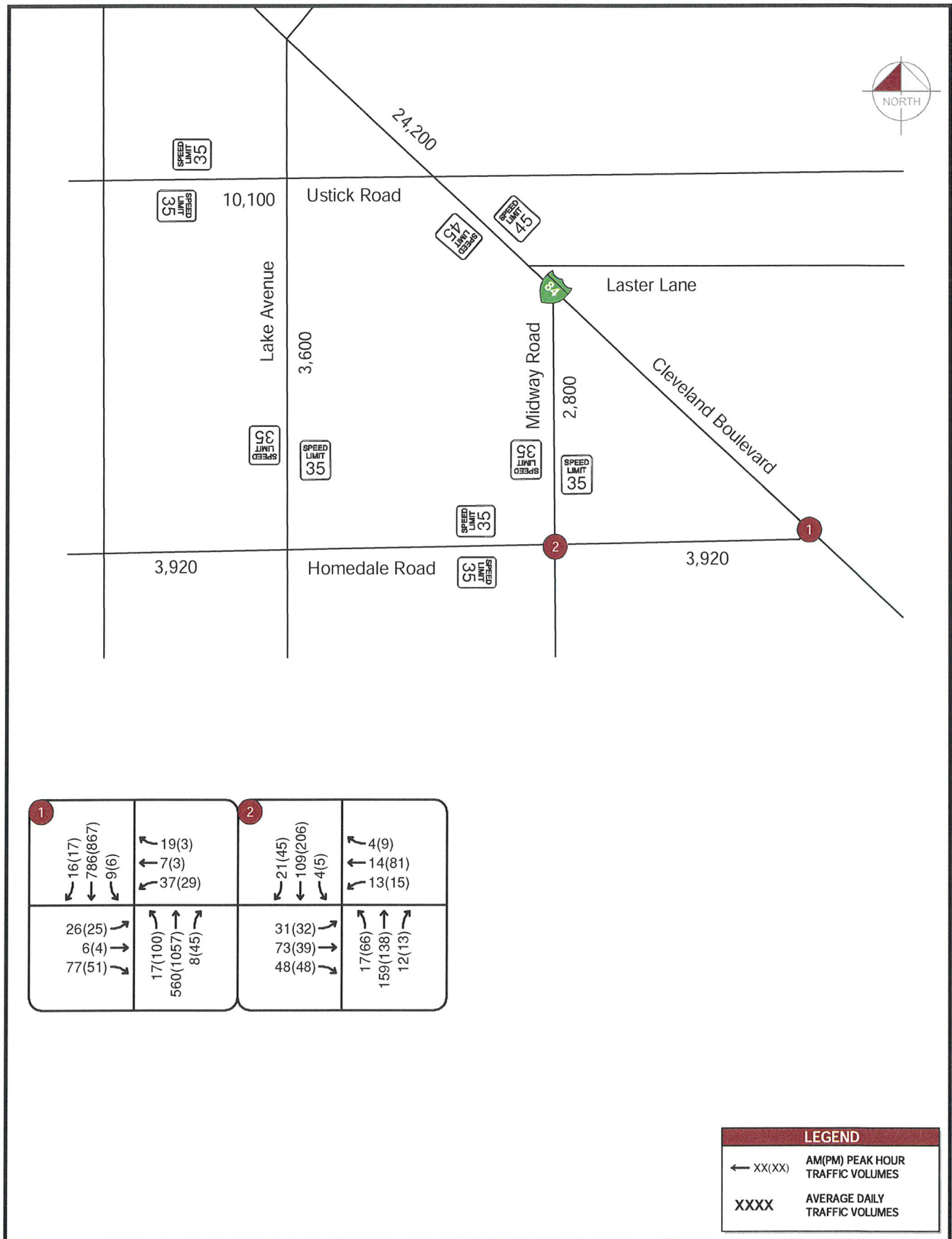
4.2. Planned Improvements

Idaho Transportation Department (ITD) and the City of Caldwell do not have any current or future projects in the vicinity of the development.

4.3. Background Traffic Volumes

To determine the impact of project traffic, the first step is to estimate future baseline traffic volumes on roadways in the vicinity of proposed development site. 2023 background traffic volumes were forecasted by observing historic traffic volumes recorded by ITD automated traffic recorder 161 located south of the study area. Traffic recorded at ATR 161 indicated a 2.81% average growth rate per year from 2012 to 2019. Therefore, a 3% annual growth rate was applied to existing traffic volumes at study area intersections to estimate future traffic volumes.

The 2023 background traffic volumes at the study area intersections are illustrated in **Figure 5**.



4.4. Project Trip Generation

The Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 10th Edition* was used to estimate the number of new trips that are anticipated to be generated by the Canyon Village multifamily residential development. The ITE *Trip Generation Manual* is a widely accepted reference that contains a compilation of trip generation studies completed at sites throughout the country.

Daily and peak hour trips, shown in **Table 3**, were calculated using applicable regression equations/rates from the ITE *Trip Generation Manual*. The ITE *Trip Generation Manual* information is provided in **Appendix D**.

Table 3 – Project Trip Generation

Land Use Type	ITE Land Use Code	Quantity	Units	Daily Total	AM Peak			PM Peak		
					In	Out	Total	In	Out	Total
Multifamily Housing (Mid-Rise) Apartments	221	316	Dwelling Units	1,720	30	84	114	85	54	139

Build-out of the proposed development is estimated to generate 1,720 daily trips, with 114 trips occurring in the AM peak hour and 139 trips occurring in the PM peak hour on a typical weekday.

4.5. Project Trip Distribution

Project trip directional distribution quantifies the percentage of site-generated traffic that approaches and departs the site from a given direction.

Distribution estimates consider study area street network characteristics, existing traffic patterns based on annual average daily traffic (AADT), expected street network, and access to regional facilities.

AADT data was retrieved from a combination of the ITD AADT Application and the COMPASS interactive Regional Traffic Volume Map.

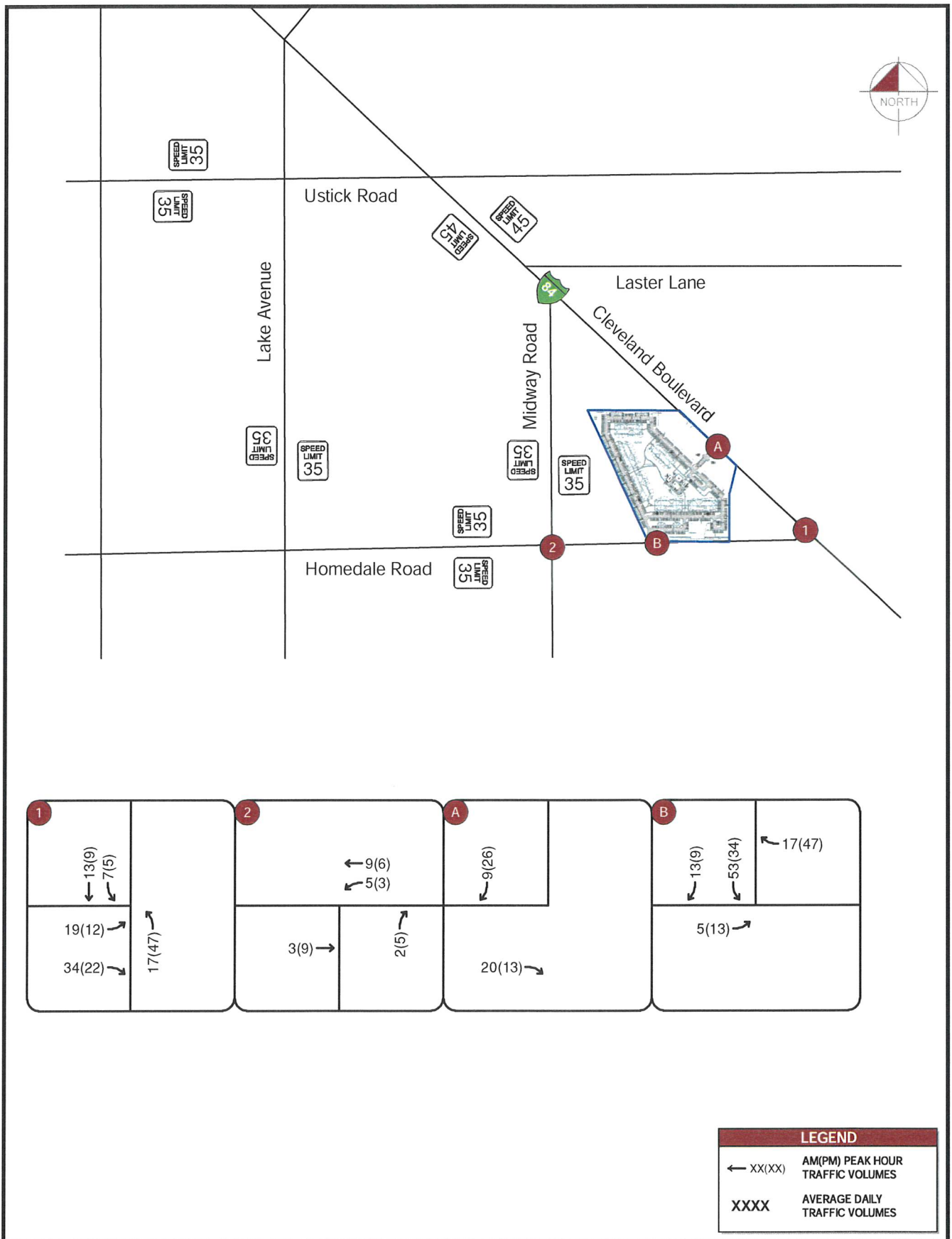
Figure 6 shows the project trip distribution to the study area as coordinated with the City in scoping discussions.

4.6. Project Trip Assignment

Trips generated by the proposed development were assigned to the roadway network based on the trip distribution and likely travel patterns to and from the project site.

Trips were assigned using the lane geometry and intersection control shown in **Figure 3**. Project trip assignment is illustrated in **Figure 7**.

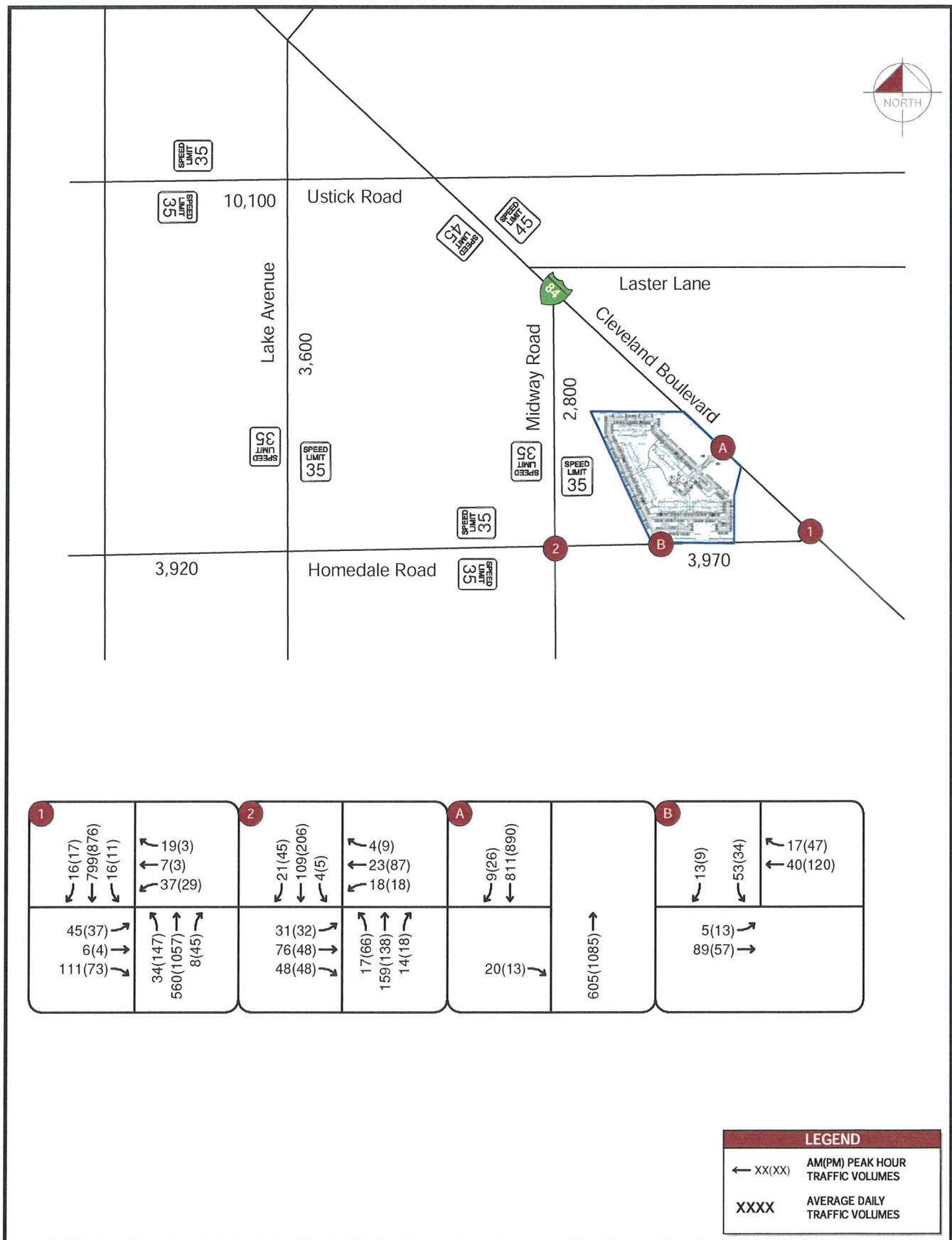


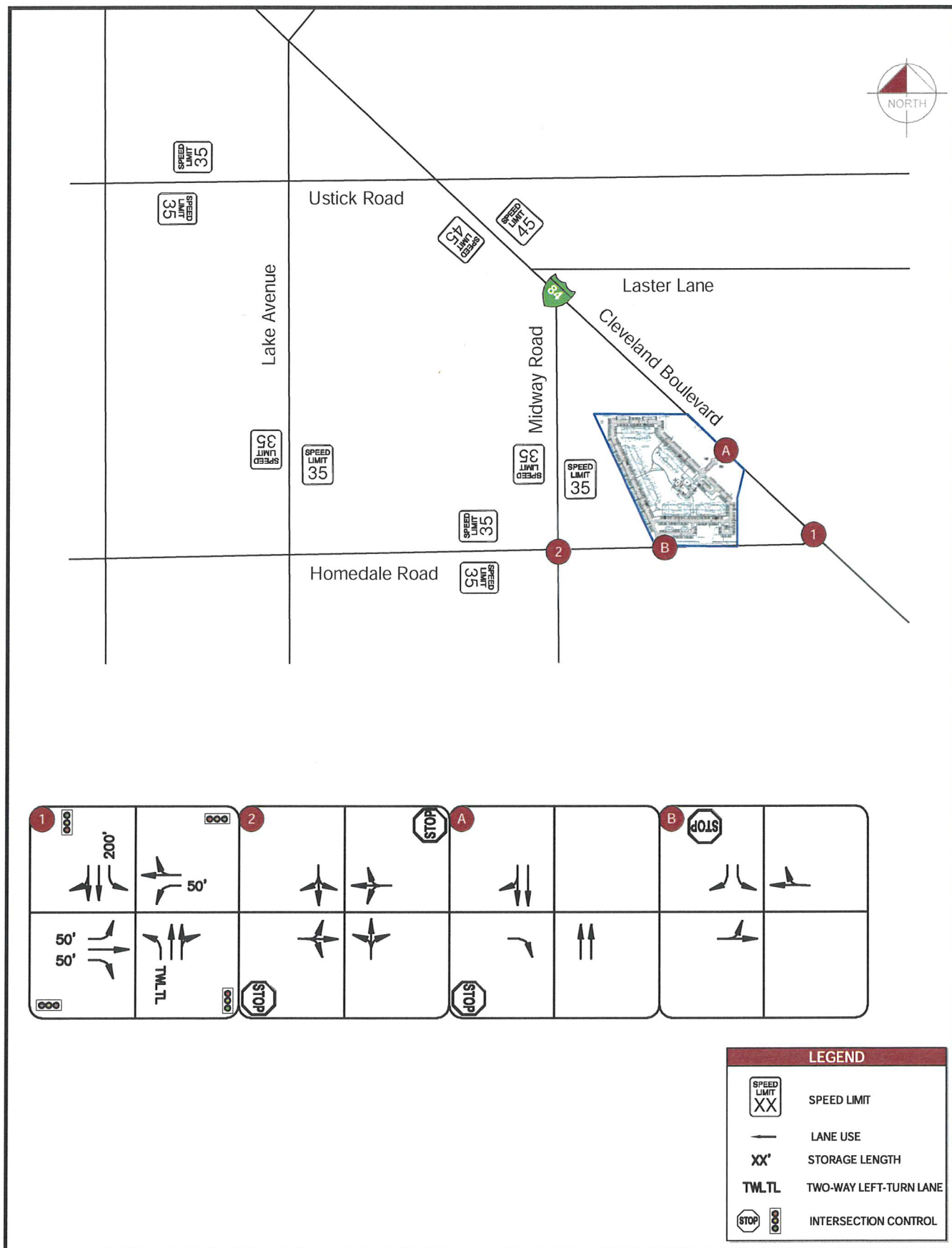


4.7. 2023 Background Plus Project Traffic Volumes

The project trip assignment (**Figure 7**) was added to 2023 background traffic volumes (**Figure 5**) to calculate 2023 background plus project traffic volumes for study area intersections.

The 2023 background plus project peak hour traffic volumes are illustrated in **Figure 8**. Expected 2023 lane configurations are shown in **Figure 9**.





5. ANALYSIS

Traffic scenarios analyzed in this study include:

- 2021 Existing
- 2023 Background
- 2023 Background Plus Project

Each scenario's AM and PM peak hour are analyzed in this section.

5.1. Analysis Methodology

Study area intersections were analyzed based on average total delay for signalized and unsignalized intersections as presented in the Transportation Research Board's *Highway Capacity Manual, 6th Edition* (HCM 6).

Under the unsignalized analysis, the level of service (LOS) for a two-way stop-controlled (TWSC) intersection is determined by the computed or measured control delay and is defined for each minor movement. LOS for a two-way stop-controlled intersection is not defined for the intersection as a whole. LOS for a signalized intersection, four-way stop controlled intersections, or a roundabout is defined for the intersection as a whole. **Table 4** shows the definition of LOS for intersections.

Table 4 – Level of Service Definitions

Level of Service	Signalized Intersection Average Total Delay (sec/veh)	Unsignalized Intersection Average Total Delay (sec/veh)
A	≤10	10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	>80	>50

Definitions provided from the Highway Capacity Manual, 6th Edition, Transportation Research Board.

Synchro 10 Analysis and Optimization Software was used to analyze the study area intersections for LOS and total delay. This analysis was performed in accordance with methodologies stated in the *Article 10, Section 10-10-01* of the City of Caldwell code.

5.2. Operational Analysis

Analysis of existing conditions is based on the lane geometry and intersection control shown in **Figure 3**. All background and plus project analyses are based on the lane geometry and intersection control shown in **Figure 9**.

Synchro reports for operational analyses for each scenario are provided in **Appendix E**.

5.2.1. 2021 Existing Operational Analysis

Operational analysis results for the 2021 existing AM and PM peak hours are shown in **Table 5** and **Table 6**. Study area intersections overall operate with an acceptable LOS in both AM and PM peak hours. The following individual intersection movements/approaches operate at LOS E or F:

- Cleveland Boulevard and Homedale Road
 - The eastbound approach operates at LOS E in the AM and PM peak hours. The volume to capacity ratio for the movement is under 0.90.
 - The westbound approach operates at LOS E in the AM and PM peak hours. The volume to capacity ratio for the movement is under 0.90.

Table 5 - 2021 Existing AM LOS Analysis

Intersection	Eastbound Approach				Westbound Approach				Northbound Approach				Southbound Approach				Intersection Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
1. Cleveland Blvd / Homedale Rd (Signalized Control)																	
LOS	E	D	E	E	E	A	D	E	E	A	A	A	E	A	A	B	
Average Delay (s/veh)	65.8	47.5	59.5	60.4	69.0	0.0	48.3	60.5	65.6	5.9	5.9	7.7	70.7	6.9	6.9	13.9	
V/C Ratio	0.630	0.040	0.760	-	0.730	0.000	0.220	-	0.540	0.250	0.250	-	0.460	0.320	0.320	-	
2. Homedale Rd / Midway Rd (Two-Way Stop Control)																	
LOS	B				B				A				A				-
Average Delay (s/veh)	13.0				12.8				7.5				7.6				-
V/C Ratio	0.293				0.101				0.014				0.002				-

Table 6 - 2021 Existing PM LOS Analysis

Intersection	Eastbound Approach				Westbound Approach				Northbound Approach				Southbound Approach				Intersection Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
1. Cleveland Blvd / Homedale Rd (Signalized Control)																	
LOS	E	D	E	E	E	A	D	E	E	A	A	B	F	A	A	A	B
Average Delay (s/veh)	71.4	53.9	66.7	67.6	71.6	0.0	53.9	69.6	65.1	5.9	5.9	10.8	83.7	8.1	8.1	8.5	13.2
V/C Ratio	0.640	0.040	0.720	-	0.650	0.000	0.040	-	0.800	0.420	0.420	-	0.440	0.350	0.350	-	-
2. Homedale Rd / Midway Rd (Two-Way Stop Control)																	
LOS	C				C				A				A				-
Average Delay (s/veh)	15.1				17.2				7.9				7.5				-
V/C Ratio	0.263				0.329				0.050				0.003				-

5.2.2. 2023 Background Operational Analysis

Operational analysis results for the future 2023 background AM and PM peak hours are shown in **Table 7** and **Table 8**. Study area intersections overall operate with an acceptable LOS in both peak hours. The following individual intersection movements/approaches operate at LOS E or F:

- Cleveland Blvd and Homedale Road
 - The eastbound approach operates at LOS E in the AM and PM peak hours. The volume to capacity ratio for the movement is under 0.90.
 - The westbound approach operates at LOS E in the AM and PM peak hours. The volume to capacity ration for the movement is under 0.90.

Table 7 – 2023 Background AM LOS Analysis

Intersection	Eastbound Approach				Westbound Approach				Northbound Approach				Southbound Approach				Intersection Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
1. Cleveland Blvd / Homedale Rd (Signalized Control)																	
LOS	E	D	E	E	E	A	D	E	E	A	A	A	E	A	A	A	B
Average Delay (s/veh)	66.5	48.8	60.6	61.4	69.4	0.0	49.6	61.2	66.7	5.6	5.6	7.4	70.6	6.7	6.7	7.4	13.4
V/C Ratio	0.610	0.050	0.750	-	0.720	0.000	0.220	-	0.540	0.240	0.240	-	0.470	0.340	0.340	-	-
2. Homedale Rd / Midway Rd (Two-Way Stop Control)																	
LOS	B				B				A				A				-
Average Delay (s/veh)	12.7				12.4				7.5				7.6				-
V/C Ratio	0.265				0.066				0.013				0.003				-

Table 8 – 2023 Background PM LOS Analysis

Intersection	Eastbound Approach				Westbound Approach				Northbound Approach				Southbound Approach				Intersection Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
1. Cleveland Blvd / Homedale Rd (Signalized Control)																	
LOS	E	D	E	E	E	A	D	E	E	A	A	B	F	A	A	B	
Average Delay (s/veh)	70.9	54.2	66.8	67.5	71.7	0.0	54.2	68.9	64.5	6.1	6.1	10.9	80.6	8.4	8.4	13.1	
V/C Ratio	0.620	0.040	0.710	-	0.660	0.000	0.070	-	0.800	0.440	0.440	-	0.450	0.370	0.370	-	
2. Homedale Rd / Midway Rd (Two-Way Stop Control)																	
LOS	C				C				A				A				-
Average Delay (s/veh)	15.5				17.0				7.9				7.5				-
V/C Ratio	0.278				0.280				0.054				0.004				-

5.2.3. 2023 Background Plus Project Operational Analysis

Operational analysis results for the 2023 background plus project AM and PM peak hours are shown in **Table 9** and **Table 10**. Study area intersections overall operate with an acceptable LOS in both peak hours. The following individual intersection movements/approaches operate at LOS E or F:

- Cleveland Blvd and Homedale Road
 - The eastbound approach operates at LOS E in the AM and PM peak hours. The volume to capacity ratio for the movement is under 0.90.
 - The westbound approach operates at LOS E in the AM and PM peak hours. The volume to capacity ratio for the movement is under 0.90.

Table 9 – 2023 Background plus Project AM LOS Analysis

Intersection	Eastbound Approach					Westbound Approach					Northbound Approach					Southbound Approach					Intersection Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total					
1. Cleveland Blvd / Homedale Rd (Signalized Control)																					
LOS	E	D	E	E	E	A	D	E	E	E	A	A	B	E	A	A	A	B			
Average Delay (s/veh)	73.1	47.9	61.4	64.2	72.4	0.0	49.6	63.0	71.2	6.9	5.8	10.5	69.1	8.4	8.3	9.5	17.3				
V/C Ratio	0.770	0.040	0.810	-	0.730	0.000	0.190	-	0.700	0.250	0.250	-	0.530	0.360	0.360	-	-				
2. Homedale Rd / Midway Rd (Two-Way Stop Control)																					
LOS	B					B					A					A					-
Average Delay (s/veh)	12.9					12.7					7.5					7.6					-
V/C Ratio	0.273					0.097					0.013					0.003					-
A. Cleveland Blvd / Access Driveway A (Two-Way Stop Control)																					
LOS	B					-					-					-					-
Average Delay (s/veh)	11.8					-					-					-					-
V/C Ratio	0.040					-					-					-					-
B. Homedale Rd / Access Driveway B (Two-Way Stop Control)																					
LOS	A					-					-					A					-
Average Delay (s/veh)	7.3					-					-					9.7					-
V/C Ratio	0.004					-					-					0.072					-

Table 10 – 2023 Background plus Project PM LOS Analysis

Intersection	Eastbound Approach					Westbound Approach					Northbound Approach					Southbound Approach					Intersection Total	
	L	T	R	Total		L	T	R	Total		L	T	R	Total		L	T	R	Total			
1. Cleveland Blvd / Homedale Rd (Signalized Control)																						
LOS	E	D	E	E	E	A	D	E	E	E	A	A	B	E	B	B	B	B	B			
Average Delay (s/veh)	77.4	53.6	66.9	69.9	73.7	0.0	54.2	70.6	63.4	7.1	7.1	7.1	13.7	74.7	11.1	11.1	11.1	11.9	16.7			
V/C Ratio	0.750	0.030	0.760	-	0.660	0.000	0.060	-	0.850	0.450	0.450	0.450	-	0.490	0.400	0.400	0.400	-	-			
2. Homedale Rd / Midway Rd (Two-Way Stop Control)																						
LOS	C					C					A					A					-	
Average Delay (s/veh)	16.1					17.7					7.9					7.6					-	
V/C Ratio	0.306					0.309					0.054					0.004					-	
A. Cleveland Blvd / Access Driveway A (Two-Way Stop Control)																						
LOS	B					-					-					-					-	
Average Delay (s/veh)	12.3					-					-					-					-	
V/C Ratio	0.028					-					-					-					-	
B. Homedale Rd / Access Driveway B (Two-Way Stop Control)																						
LOS	A					-					-					B					-	
Average Delay (s/veh)	7.6					-					-					10.2					-	
V/C Ratio	0.010					-					-					0.052					-	

5.3. Turn Lane Warrant Analyses

Turn lane warrant analyses were conducted consistent with National Highway Cooperative Research Program (NCHRP) *Report 457* and American Association of State Highway and Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Streets, 7th Edition* (2018).

Appendix F contains the figures used in the turn lane analyses and results. **Appendix G** contains the figures used in the right lane analyses and results.

5.3.1. Midway Road and Homedale Road Turn Lane Analysis

A northbound right-turn lane or northbound left-turn lane on Midway Road onto Homedale Road is not warranted based on 2021 existing, 2023 background, or 2023 background plus project traffic volumes. Similarly, a southbound right-turn lane or southbound left-turn lane on Midway Road onto Homedale Road is not warranted based on 2021 existing, 2023 background, or 2023 background plus project traffic volumes.

5.3.2. Driveway A Turn Lane Analysis

A southbound right-turn lane on Cleveland Boulevard into Driveway A is not warranted based on future 2023 background plus project traffic volumes.

5.3.3. Driveway B Turn Lane Analysis

An eastbound left-turn lane on Homedale Road into Driveway B is not warranted based on future 2023 background plus project traffic volumes. A westbound right-turn lane on Homedale Road into Driveway B is also not warranted based on future 2023 background plus project traffic volumes.

6. POTENTIAL TRAFFIC MITIGATIONS

This section describes potential traffic mitigations and mitigation analyses results for potential improvements that may address poor delay and LOS for study area intersections and movements.

6.1. Mitigated Improvement Analysis

6.1.1. Cleveland Boulevard / Homedale Road

In the 2021 Existing, 2023 Background, and 2023 Background plus Project scenarios, the eastbound and westbound approaches at the Cleveland Boulevard / Homedale Road intersection operate at LOS E with a V/C ratio below 0.90. The proposed project adds only 19 left-turning vehicles (approximately 1 car every 3 minutes) to the eastbound approach in the AM peak hour and 12 in the PM peak hour. The proposed project does not add any vehicle traffic to the westbound approach.

Minor stop-controlled movements at major intersections typically experience delays during peak hours. The intersection movement is already failing in the existing and background scenarios, therefore the addition of 19 vehicles from the proposed development does not cause major additional operational issues. No mitigation improvements are recommended for this intersection.

6.1.2. Midway Road / Homedale Road

The Midway Road and Homedale Road intersection is expected to operate at acceptable level of service in the 2021 Existing, 2023 Background, and 2023 Background plus Project scenarios. The proposed project adds only five (5) left-turning vehicles to the westbound approaches in the AM peak hour and three vehicles (3) in the PM peak hour. No mitigation improvements are recommended for this intersection.

6.2. Recommendations

Right- or left-turn lanes are not warranted for Access Driveway A or Access Driveway B based on anticipated future 2023 background plus project traffic volumes. The driveways operate at acceptable LOS with minimal delay without installation of the left-turn or right-turn lanes.

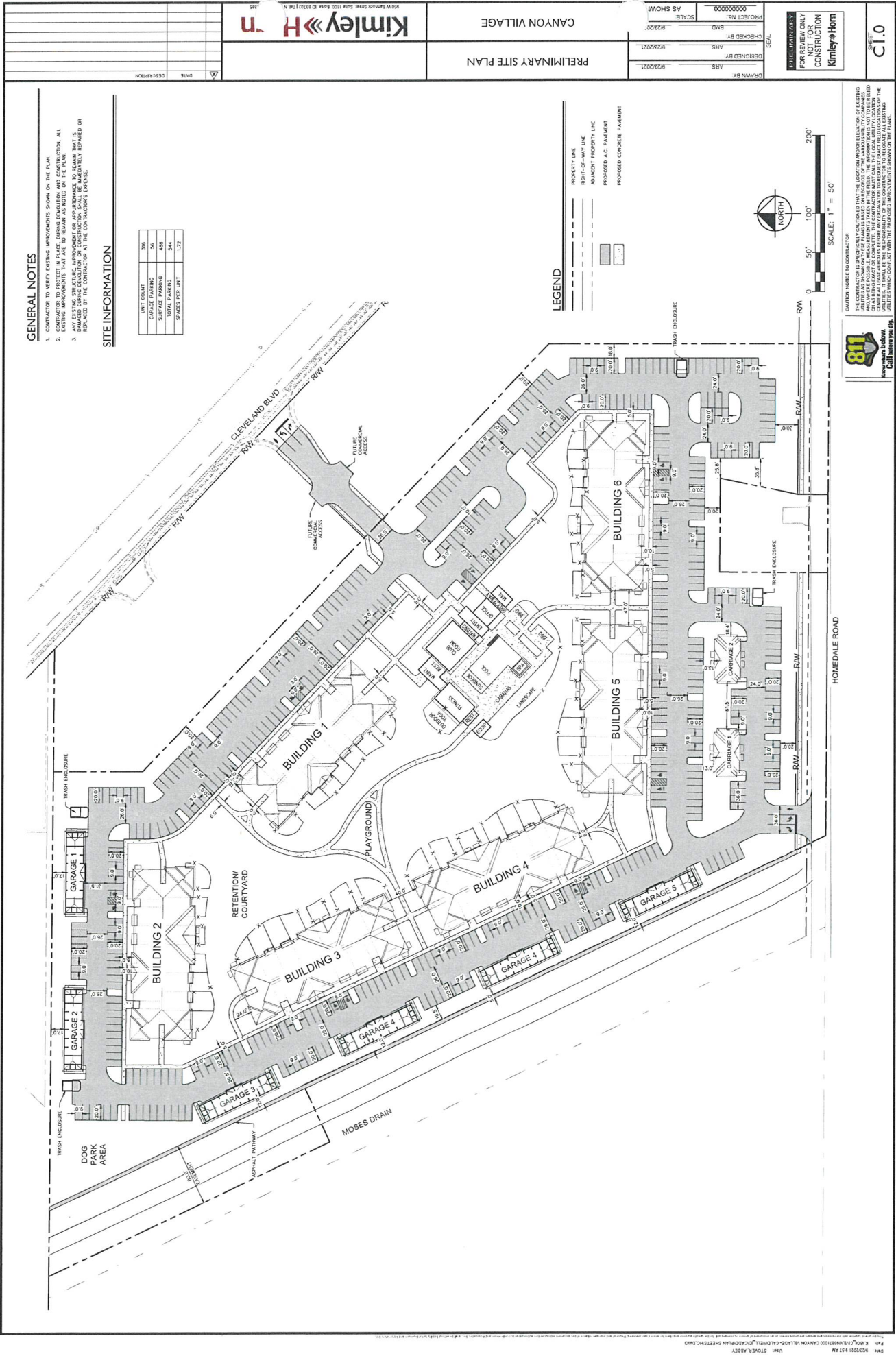
No additional improvements are recommended for study area intersections. The intersections are operating at acceptable LOS conditions in 2021 Existing, 2023 Background, and 2023 Background plus Project scenarios. The addition of project traffic has minimal effect on current or projected future traffic operations.

The following items are recommended for the internal roadway network of the proposed development:

- All internal project access locations are recommended to be constructed in accordance with City of Caldwell standards.
- Any roadway improvement recommended to be constructed in accordance with the owning agencies' standards, potentially ITD, Canyon Highway District, or the City of Caldwell.

APPENDIX A

SITE PLAN



CAUTION: NOTICE TO CONTRACTOR
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES SHOWN ON THIS PLAN ARE BASED ON RECORD DRAWINGS AND FIELD SURVEY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. ANY UTILITIES NOT SHOWN ON THIS PLAN SHALL BE LOCATED BY THE CONTRACTOR AT HIS OWN RISK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL UTILITIES THAT ARE NOT TO BE REMOVED OR DELETED. ANY UTILITIES THAT ARE TO BE REMOVED OR DELETED SHALL BE REMOVED OR DELETED PRIOR TO CONSTRUCTION. ANY UTILITIES THAT ARE TO BE REMOVED OR DELETED SHALL BE REMOVED OR DELETED PRIOR TO CONSTRUCTION.



DATE: 02/20/2021
PROJECT NO.: 000000000
SCALE: AS SHOWN
CHECKED BY: AJS
DESIGNED BY: AJS
DRAWN BY: AJS
PROJECT NAME: CANYON VILLAGE
SHEET: C1.0
KIMLEY-HORN
FOR REVIEW ONLY
NOT FOR CONSTRUCTION

APPENDIX B
TRAFFIC IMPACT STUDY SCOPING MEMORANDUM



MEMORANDUM

To: Robb MacDonald, P.E.
City Engineer, City of Caldwell

From: Eric Sweat, P.E.
Kimley-Horn and Associates, Inc.

Date: October 13, 2021

Subject: TIS Scope for Canyon Village Residential Development in Caldwell, Idaho

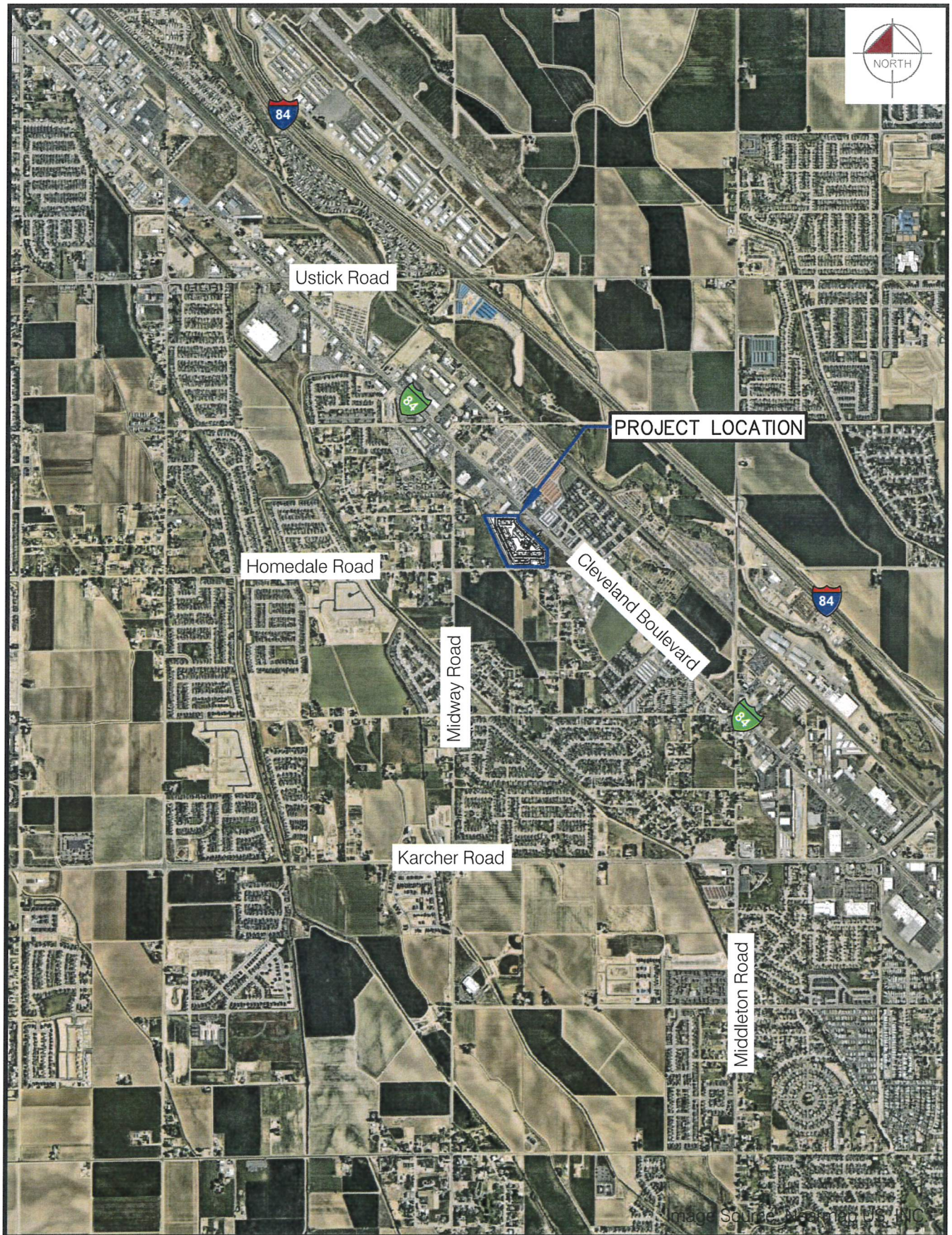
This memorandum documents the scope and summarizes assumptions for a traffic impact study (TIS) for a proposed residential development, located near the northwest corner of the Homedale Road / Cleveland Boulevard intersection in Caldwell, Idaho. This memorandum was developed based on input from the City of Caldwell. The proposed development location is shown in **Figure 1**.

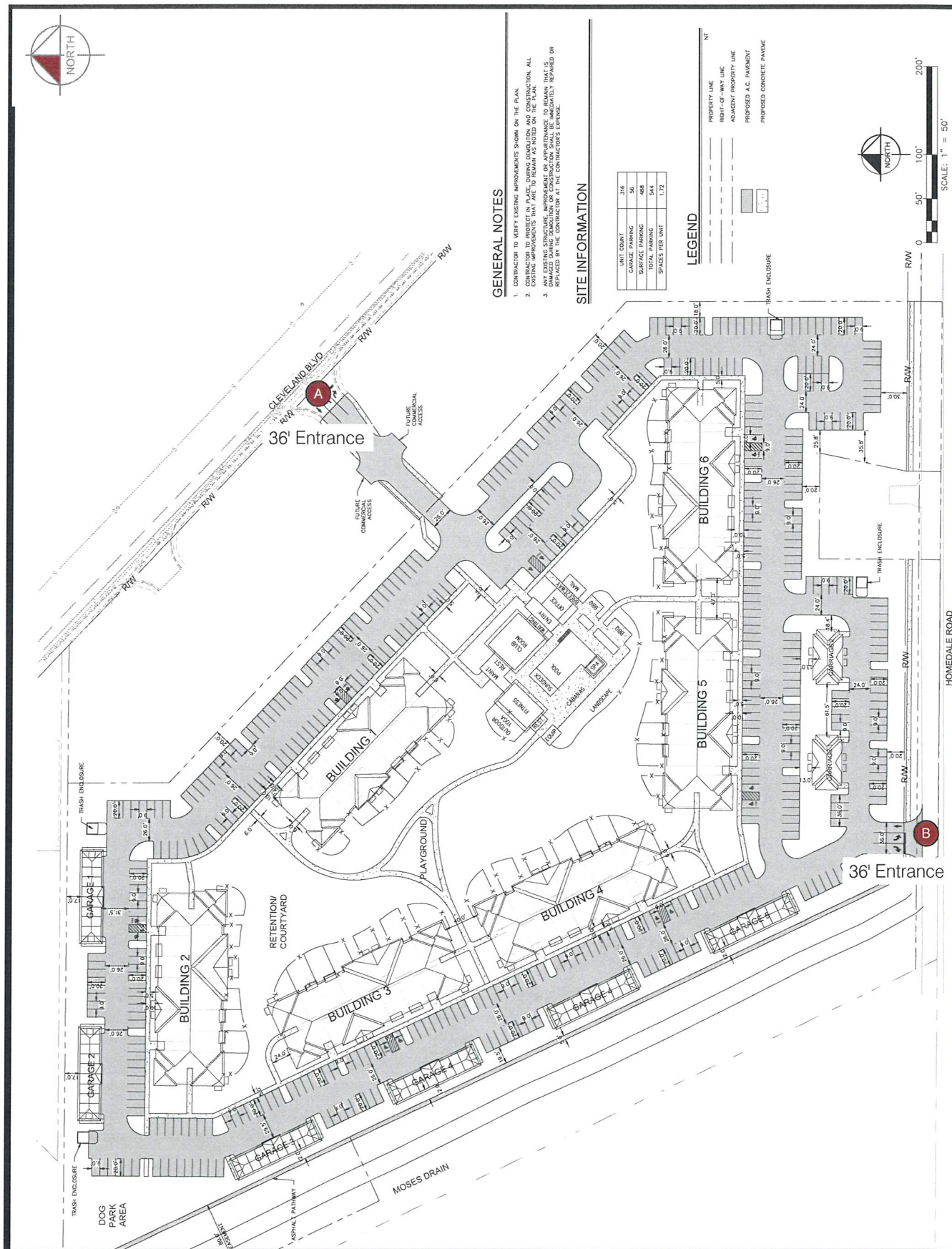
Development Information

The site is currently vacant. The site is zoned C2 (service commercial). To the east of the site is more vacant land that is also zoned as C2 and to the west is residential land uses. Land to the north is commercial land use and land to the south is residential.

The proposed development includes 316 apartment (multifamily mid-rise) residential units. Access to the site will be provided via two full-movement accesses, one on Cleveland Boulevard and one on Homedale Road. The conceptual site plan for the development is shown in **Figure 2**.

The planned completion year for the development is 2023.





Trip Generation

The Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition, was used to obtain daily and peak hour trip generation equations or rates and inbound-outbound percentages, which were then used to estimate the number of daily and peak hour trips that can be attributed to the proposed development. The process outlined in the ITE *Trip Generation Handbook*, 3rd Edition, was used to determine whether average rates or equations should be used in calculating each land use's trip generation.

The trip generation characteristics of the site are summarized in **Table 1**. Summaries of ITE trip generation calculations are included in **Attachment A**.

Table 1 – Trip Generation

Land Use Type	ITE Land Use Code	Dwelling Units	Daily Total	AM Peak			PM Peak		
				In	Out	Total	In	Out	Total
Multifamily Housing (Mid-Rise) Apartments	221	316	1,720	30	84	114	85	54	139

The proposed development is expected to generate 1,720 daily trips, with 114 trips occurring in the AM peak hour and 139 trips occurring in the PM peak hour.

Trip Distribution

The distribution of site generated trips onto the roadway system is based on the proposed access locations, surrounding street network, average daily traffic values from the Idaho Transportation Department (ITD) database, and discussion with the City of Caldwell. Trip distribution for the site is shown in **Figure 3**.



Analysis Scenarios and Study Assumptions

- Intersections for evaluation (also presented in **Figure 4**):
 - Cleveland Boulevard / Homedale Road
 - Midway Road / Homedale Road
 - Cleveland Boulevard / Access A
 - Homedale Road / Access B
- No roadway segments volumes are being collected for evaluation
- Analysis scenarios:
 - 2021 Existing Conditions
 - 2023 Background Conditions (includes applying annual growth rates, but no new site-generated trips from the proposed development)
 - 2023 Plus Project Conditions (includes 2023 background traffic volumes plus new site-generated trips from the proposed development)
- Annual growth rates were calculated from traffic data as recorded by ITD automated traffic recorder 161 located south of the study area. Traffic recorded at ATR 161 indicates a 2.81% average growth rate per year from 2012 to 2019.
 - 3.0% annual growth rate to be used in estimating future traffic volumes.
- Time periods for evaluation:
 - Weekday AM Peak Hour (7:00-9:00 AM)
 - Weekday PM Peak Hour (4:00-6:00 PM)
- Crash data for the most recent 5 years available will be reported from the Local Highway Technical Assistance Council (LHTAC) website (<http://gis.lhtac.org/safety/>).
- Traffic data collection assumptions:
 - Study area intersection turning movement counts to be collected for AM (7:00-9:00) and PM (4:00-6:00) peak periods
 - No seasonal or COVID adjustment to be applied to collected counts.
 - No 24-hour counts to be collected for this study.



Study Area Intersections:

1. Cleveland Boulevard /Homedale Road
2. Homedale Road/Midway Road
- A. Driveway A/Cleveland Boulevard
- B. Driveway B/Homedale Road

Analysis Tools and Operating Standards

The study area intersections will be evaluated following the *Highway Capacity Manual 6th Edition* (HCM 6) methodology by using Synchro 11 analysis software. Where HCM 6 is unable to produce intended level of service (LOS) or volume-to-capacity (v/c) ratios, previous editions of the HCM or Synchro outputs may be utilized. Analyses will be performed in accordance with *Article 10, Section 10-10-01* of the City of Caldwell code.

ITD owned intersection will be held to ITD District 3 guidelines which require LOS D or better for overall intersection operations a maximum v/c ratio of 0.90 for each movement or lane group and the overall intersection.

Background Developments

We request the City of Caldwell provide the traffic studies for any approved in-process developments that should be included as background traffic in this analysis.

Background Roadway Improvement Projects

ITD and the City of Caldwell do not have any current or future projects in the vicinity of the development.

Next Steps

We request the City of Caldwell review this scoping memorandum and provide a response to the proposed full TIS assumptions.

Please contact Eric Sweat at 385-831-2008 or eric.sweat@kimley-horn.com if you have any questions or comments on the information presented in this scoping memorandum.

The proposed TIS assumptions and any comments received to this memorandum will be incorporated into the traffic impact study submitted to the City of Caldwell (and/or ITD and Canyon County Highway District 4) for the proposed development.

Attachments

Attachment A – ITE Trip Generation Information

APPENDIX C

TRAFFIC COUNT DATA

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: NV50017
Intersection: Caldwell Blvd / Homedale Rd
City, State: Caldwell, Idaho
Control: Signalized

File Name : Caldwell Blvd & Homedale Rd
Site Code : 00000000
Start Date : 2/25/2021
Page No : 1

Groups Printed- General Traffic

Start Time	Caldwell Boulevard From Northwest					Isaiah Way From Northeast					Caldwell Boulevard From Southeast					Homedale Road From West					Int. Total
	Hard Right	Thru	Left	Peds	App. Total	Right	Hard Right	Left	Peds	App. Total	Right	Thru	Hard Left	Peds	App. Total	Hard Right	Hard Left	Hard Left	Peds	App. Total	
07:00 AM	0	113	1	0	114	3	1	21	0	25	3	84	5	0	92	26	1	10	0	37	268
07:15 AM	4	176	1	0	181	6	0	7	0	13	1	111	7	0	119	15	0	5	0	20	333
07:30 AM	4	205	1	0	210	3	1	8	0	12	1	163	5	0	169	24	1	8	0	33	424
07:45 AM	3	173	3	0	179	5	4	9	0	18	3	143	3	0	149	21	4	6	0	31	377
Total	11	667	6	0	684	17	6	45	0	68	8	501	20	0	529	86	6	29	0	121	1402
08:00 AM	4	186	3	0	193	3	1	10	0	14	2	110	1	0	113	12	0	5	0	17	337
08:15 AM	2	147	0	0	149	1	0	7	0	8	3	134	2	0	139	13	0	5	0	18	314
08:30 AM	4	196	2	0	202	1	0	6	0	7	5	149	6	0	160	22	1	2	0	25	394
08:45 AM	1	133	1	0	135	0	1	6	0	7	4	173	4	0	181	13	0	4	0	17	340
Total	11	662	6	0	679	5	2	29	0	36	14	566	13	0	593	60	1	16	0	77	1385

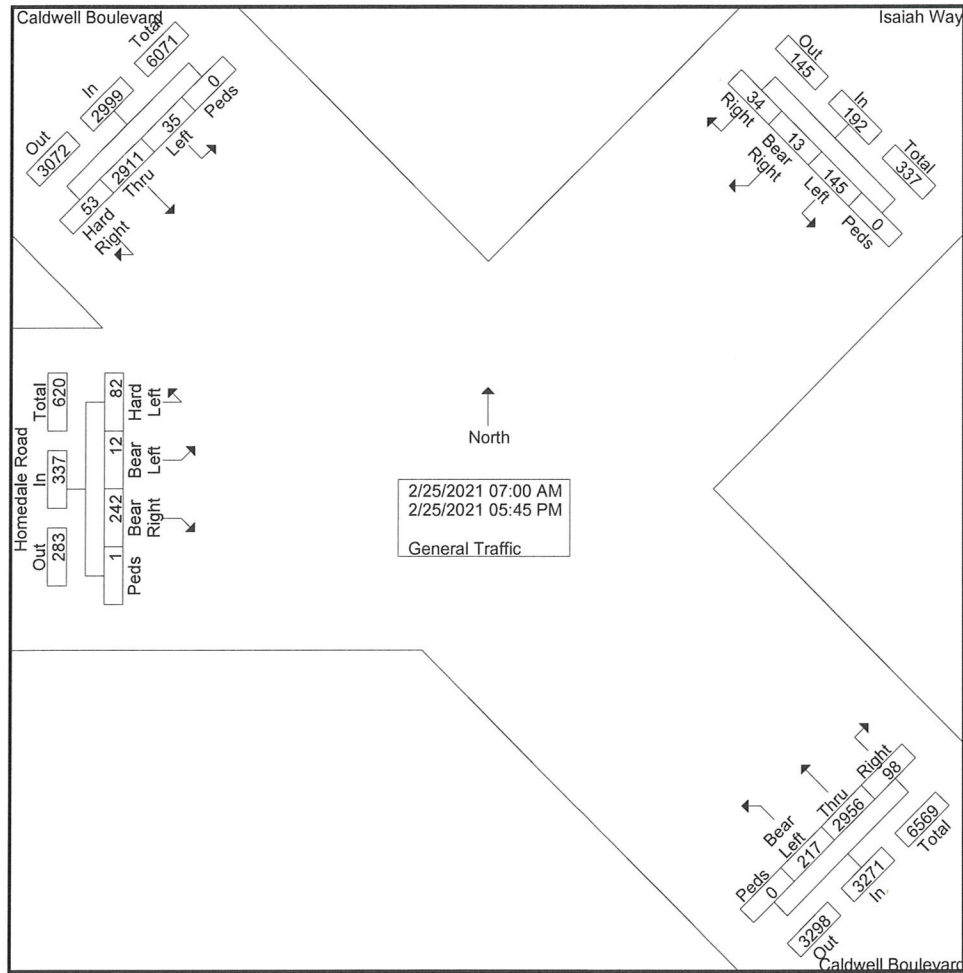
04:00 PM	2	190	7	0	199	1	1	14	0	16	6	213	21	0	240	15	0	5	0	20	475
04:15 PM	5	201	3	0	209	4	2	13	0	19	6	216	20	0	242	11	1	4	0	16	486
04:30 PM	2	188	2	0	192	2	0	7	0	9	16	260	17	0	293	10	0	8	0	18	512
04:45 PM	4	201	0	0	205	0	1	8	0	9	10	222	23	0	255	11	2	5	0	18	487
Total	13	780	12	0	805	7	4	42	0	53	38	911	81	0	1030	47	3	22	0	72	1960
05:00 PM	5	213	2	0	220	0	1	8	0	9	5	272	37	0	314	10	0	4	0	14	557
05:15 PM	5	215	1	0	221	0	0	4	0	4	11	242	17	0	270	17	1	6	0	24	519
05:30 PM	4	178	4	0	186	3	0	9	0	12	12	240	22	0	274	10	0	4	1	15	487
05:45 PM	4	196	4	0	204	2	0	8	0	10	10	224	27	0	261	12	1	1	0	14	489
Total	18	802	11	0	831	5	1	29	0	35	38	978	103	0	1119	49	2	15	1	67	2052
Grand Total	53	2911	35	0	2999	34	13	145	0	192	98	2956	217	0	3271	242	12	82	1	337	6799
Apprch %	1.8	97.1	1.2	0		17.7	6.8	75.5	0		3	90.4	6.6	0		71.8	3.6	24.3	0.3		
Total %	0.8	42.8	0.5	0	44.1	0.5	0.2	2.1	0	2.8	1.4	43.5	3.2	0	48.1	3.6	0.2	1.2	0	5	

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: NV50017
Intersection: Caldwell Blvd / Homedale Rd
City, State: Caldwell, Idaho
Control: Signalized

File Name : Caldwell Blvd & Homedale Rd
Site Code : 00000000
Start Date : 2/25/2021
Page No : 2



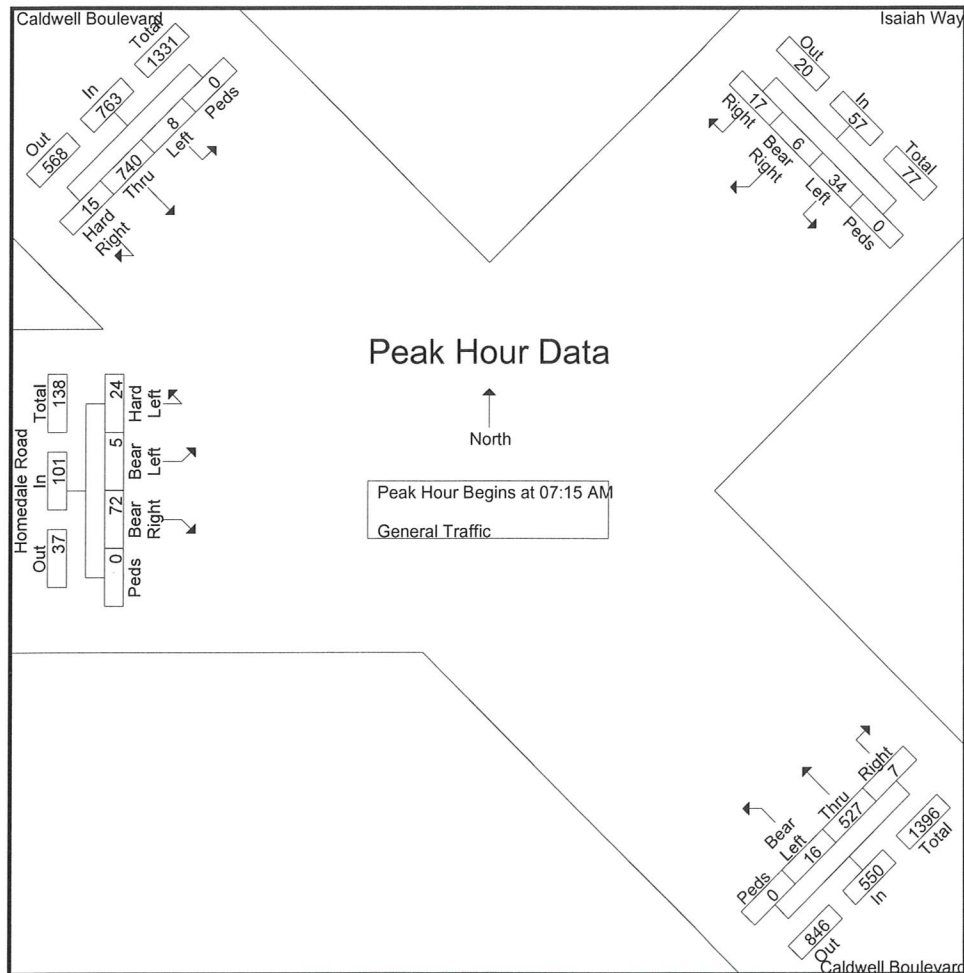
L2 Data Collection

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Idaho (208) 860-7554 Utah (801) 413-2993

Study: NV50017
Intersection: Caldwell Blvd / Homedale Rd
City, State: Caldwell, Idaho
Control: Signalized

File Name : Caldwell Blvd & Homedale Rd
Site Code : 00000000
Start Date : 2/25/2021
Page No : 3

	Caldwell Boulevard From Northwest					Isaiah Way From Northeast					Caldwell Boulevard From Southeast					Homedale Road From West					
Start Time	Hard Right	Thru	Left	Peds	App. Total	Right	Bear Right	Left	Peds	App. Total	Right	Thru	Bear Left	Peds	App. Total	Bear Right	Bear Left	Hard Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	4	176	1	0	181	6	0	7	0	13	1	111	7	0	119	15	0	5	0	20	333
07:30 AM	4	205	1	0	210	3	1	8	0	12	1	163	5	0	169	24	1	8	0	33	424
07:45 AM	3	173	3	0	179	5	4	9	0	18	3	143	3	0	149	21	4	6	0	31	377
08:00 AM	4	186	3	0	193	3	1	10	0	14	2	110	1	0	113	12	0	5	0	17	337
Total Volume	15	740	8	0	763	17	6	34	0	57	7	527	16	0	550	72	5	24	0	101	1471
% App. Total	2	97	1	0		29.8	10.5	59.6	0		1.3	95.8	2.9	0		71.3	5	23.8	0		
PHF	.938	.902	.667	.000	.908	.708	.375	.850	.000	.792	.583	.808	.571	.000	.814	.750	.313	.750	.000	.765	.867



L2 Data Collection

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Idaho (208) 860-7554 Utah (801) 413-2993

Study: NV50017
Intersection: Caldwell Blvd / Homedale Rd
City, State: Caldwell, Idaho
Control: Signalized

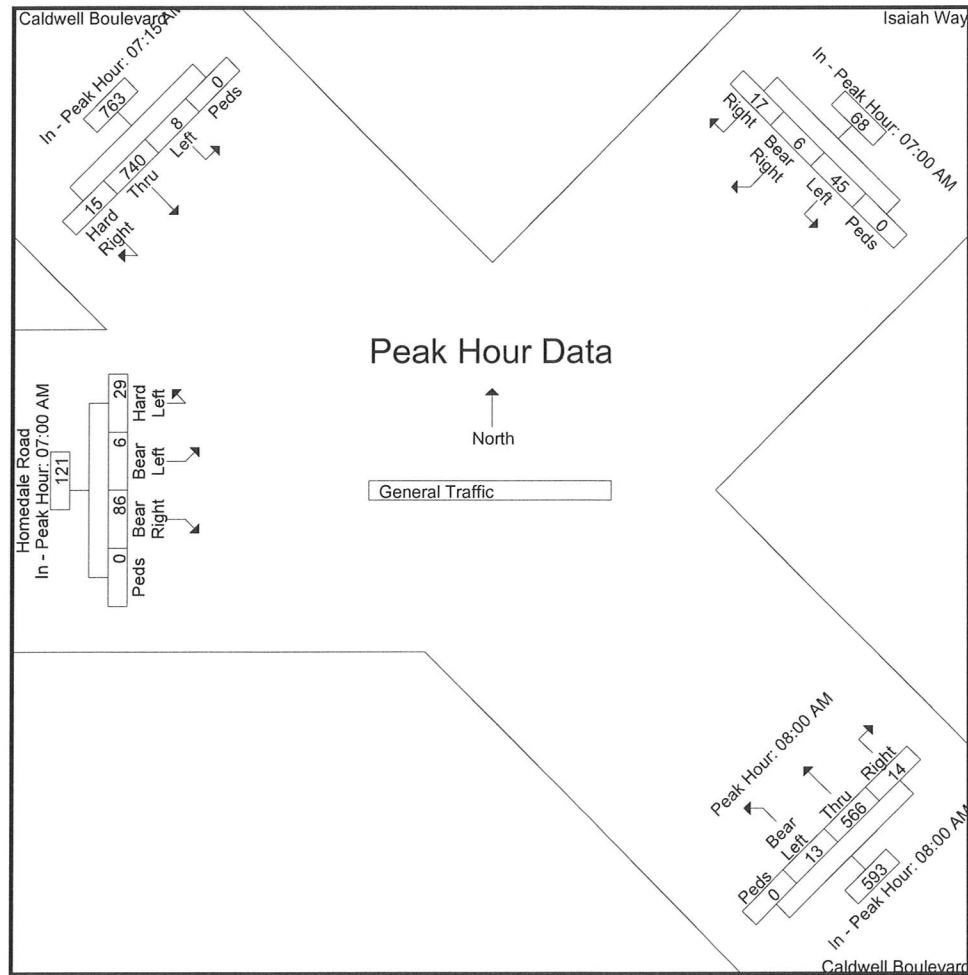
File Name : Caldwell Blvd & Homedale Rd
Site Code : 00000000
Start Date : 2/25/2021
Page No : 4

	Caldwell Boulevard From Northwest					Isaiah Way From Northeast					Caldwell Boulevard From Southeast					Homedale Road From West					
Start Time	Hard Right	Thru	Left	Peds	App. Total	Right	Bear Right	Left	Peds	App. Total	Right	Thru	Bear Left	Peds	App. Total	Bear Right	Bear Left	Hard Left	Peds	App. Total	Int. Total

Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM					07:00 AM					08:00 AM					07:00 AM				
+0 mins.	4	176	1	0	181	3	1	21	0	25	2	110	1	0	113	26	1	10	0	37
+15 mins.	4	205	1	0	210	6	0	7	0	13	3	134	2	0	139	15	0	5	0	20
+30 mins.	3	173	3	0	179	3	1	8	0	12	5	149	6	0	160	24	1	8	0	33
+45 mins.	4	186	3	0	193	5	4	9	0	18	4	173	4	0	181	21	4	6	0	31
Total Volume	15	740	8	0	763	17	6	45	0	68	14	566	13	0	593	86	6	29	0	121
% App. Total	2	97	1	0		25	8.8	66.2	0		2.4	95.4	2.2	0		71.1	5	24	0	
PHF	.938	.902	.667	.000	.908	.708	.375	.536	.000	.680	.700	.818	.542	.000	.819	.827	.375	.725	.000	.818



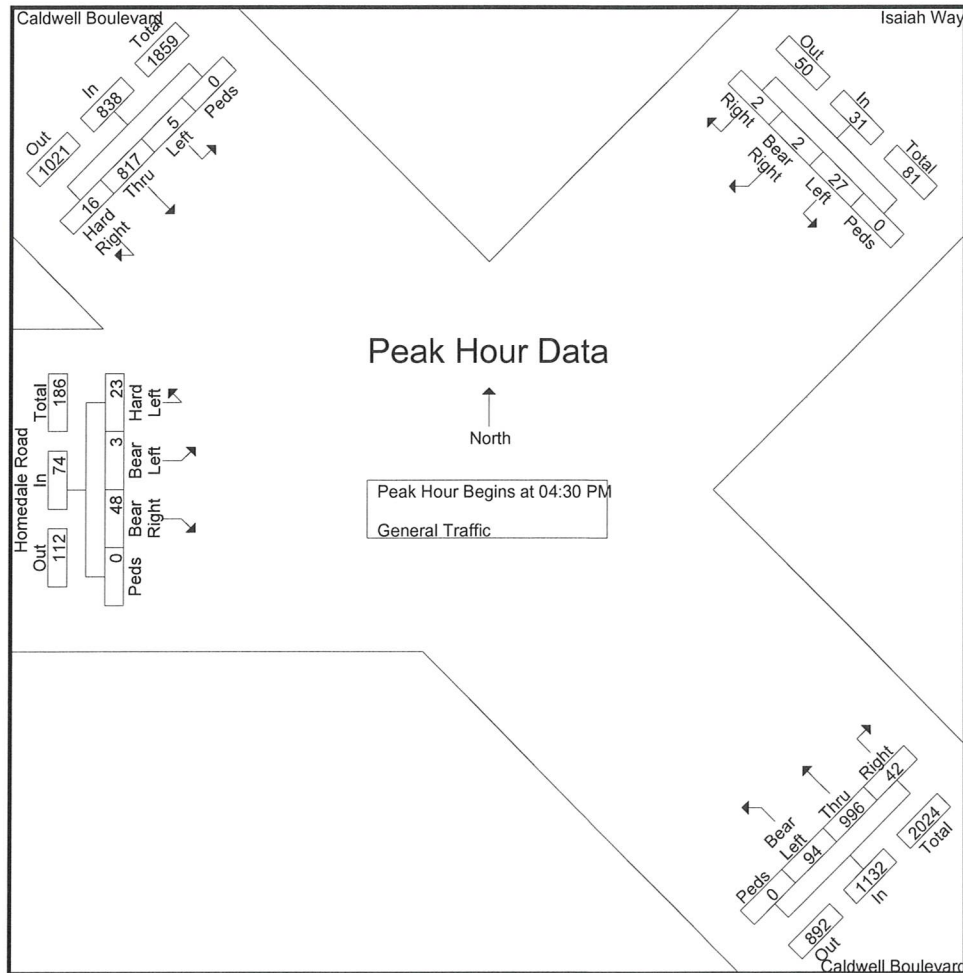
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: NV50017
Intersection: Caldwell Blvd / Homedale Rd
City, State: Caldwell, Idaho
Control: Signalized

File Name : Caldwell Blvd & Homedale Rd
Site Code : 00000000
Start Date : 2/25/2021
Page No : 5

	Caldwell Boulevard From Northwest					Isaiah Way From Northeast					Caldwell Boulevard From Southeast					Homedale Road From West					
Start Time	Hard Right	Thru	Left	Peds	App. Total	Right	Bear Right	Left	Peds	App. Total	Right	Thru	Bear Left	Peds	App. Total	Bear Right	Bear Left	Hard Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	2	188	2	0	192	2	0	7	0	9	16	260	17	0	293	10	0	8	0	18	512
04:45 PM	4	201	0	0	205	0	1	8	0	9	10	222	23	0	255	11	2	5	0	18	487
05:00 PM	5	213	2	0	220	0	1	8	0	9	5	272	37	0	314	10	0	4	0	14	557
05:15 PM	5	215	1	0	221	0	0	4	0	4	11	242	17	0	270	17	1	6	0	24	519
Total Volume	16	817	5	0	838	2	2	27	0	31	42	996	94	0	1132	48	3	23	0	74	2075
% App. Total	1.9	97.5	0.6	0		6.5	6.5	87.1	0		3.7	88	8.3	0		64.9	4.1	31.1	0		
PHF	.800	.950	.625	.000	.948	.250	.500	.844	.000	.861	.656	.915	.635	.000	.901	.706	.375	.719	.000	.771	.931



L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: NV50017
Intersection: Caldwell Blvd / Homedale Rd
City, State: Caldwell, Idaho
Control: Signalized

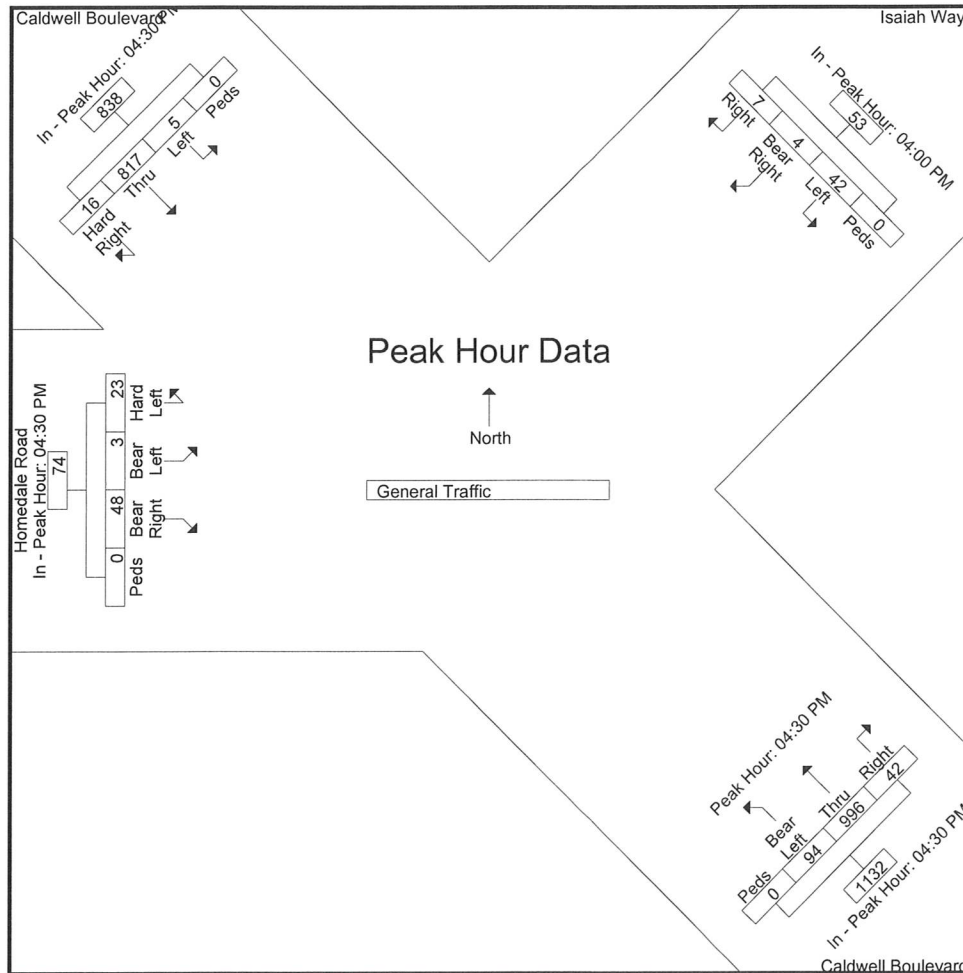
File Name : Caldwell Blvd & Homedale Rd
Site Code : 00000000
Start Date : 2/25/2021
Page No : 6

	Caldwell Boulevard From Northwest					Isaiah Way From Northeast					Caldwell Boulevard From Southeast					Homedale Road From West					
Start Time	Hard Right	Thru	Left	Peds	App. Total	Right	Bear Right	Left	Peds	App. Total	Right	Thru	Bear Left	Peds	App. Total	Bear Right	Bear Left	Hard Left	Peds	App. Total	Int. Total

Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM					04:00 PM					04:30 PM					04:30 PM				
+0 mins.	2	188	2	0	192	1	1	14	0	16	16	260	17	0	293	10	0	8	0	18
+15 mins.	4	201	0	0	205	4	2	13	0	19	10	222	23	0	255	11	2	5	0	18
+30 mins.	5	213	2	0	220	2	0	7	0	9	5	272	37	0	314	10	0	4	0	14
+45 mins.	5	215	1	0	221	0	1	8	0	9	11	242	17	0	270	17	1	6	0	24
Total Volume	16	817	5	0	838	7	4	42	0	53	42	996	94	0	1132	48	3	23	0	74
% App. Total	1.9	97.5	0.6	0		13.2	7.5	79.2	0		3.7	88	8.3	0		64.9	4.1	31.1	0	
PHF	.800	.950	.625	.000	.948	.438	.500	.750	.000	.697	.656	.915	.635	.000	.901	.706	.375	.719	.000	.771



L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: NV50017
Intersection: Caldwell Blvd / Homedale Rd
City, State: Caldwell, Idaho
Control: Signalized

File Name : Caldwell Blvd & Homedale Rd
Site Code : 00000000
Start Date : 2/25/2021
Page No : 7

Image 1



L2 Data Collection

L2DataCollection.com

Idaho (208) 860-7554 Utah (801) 413-2993

Study: NV50017

Intersection: Homedale Rd / Midway Rd

City, State: Caldwell, Idaho

Control: Stop Sign

File Name : Homedale Rd & Midway Rd

Site Code : 00000000

Start Date : 2/25/2021

Page No : 1

Groups Printed- General Traffic

Start Time	Midway Road From North					Homedale Road From East					Midway Road From South					Homedale Road From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:00 AM	3	12	0	0	15	0	8	0	0	8	4	29	3	0	36	4	20	18	0	42	101
07:15 AM	2	23	1	0	26	1	5	1	0	7	2	34	5	0	41	9	16	9	0	34	108
07:30 AM	4	28	1	0	33	1	5	7	0	13	3	38	1	0	42	22	18	7	0	47	135
07:45 AM	4	28	0	0	32	1	3	2	0	6	5	44	5	0	54	7	19	7	0	33	125
Total	13	91	2	0	106	3	21	10	0	34	14	145	14	0	173	42	73	41	0	156	469
08:00 AM	9	23	1	0	33	0	0	2	0	2	1	33	5	0	39	7	15	6	0	28	102
08:15 AM	3	25	0	0	28	0	1	3	0	4	4	31	5	0	40	13	10	2	0	25	97
08:30 AM	5	24	2	0	31	2	3	2	0	7	6	27	5	0	38	3	9	5	0	17	93
08:45 AM	2	9	0	0	11	1	1	0	0	2	5	37	2	0	44	7	6	5	0	18	75
Total	19	81	3	0	103	3	5	7	0	15	16	128	17	0	161	30	40	18	0	88	367

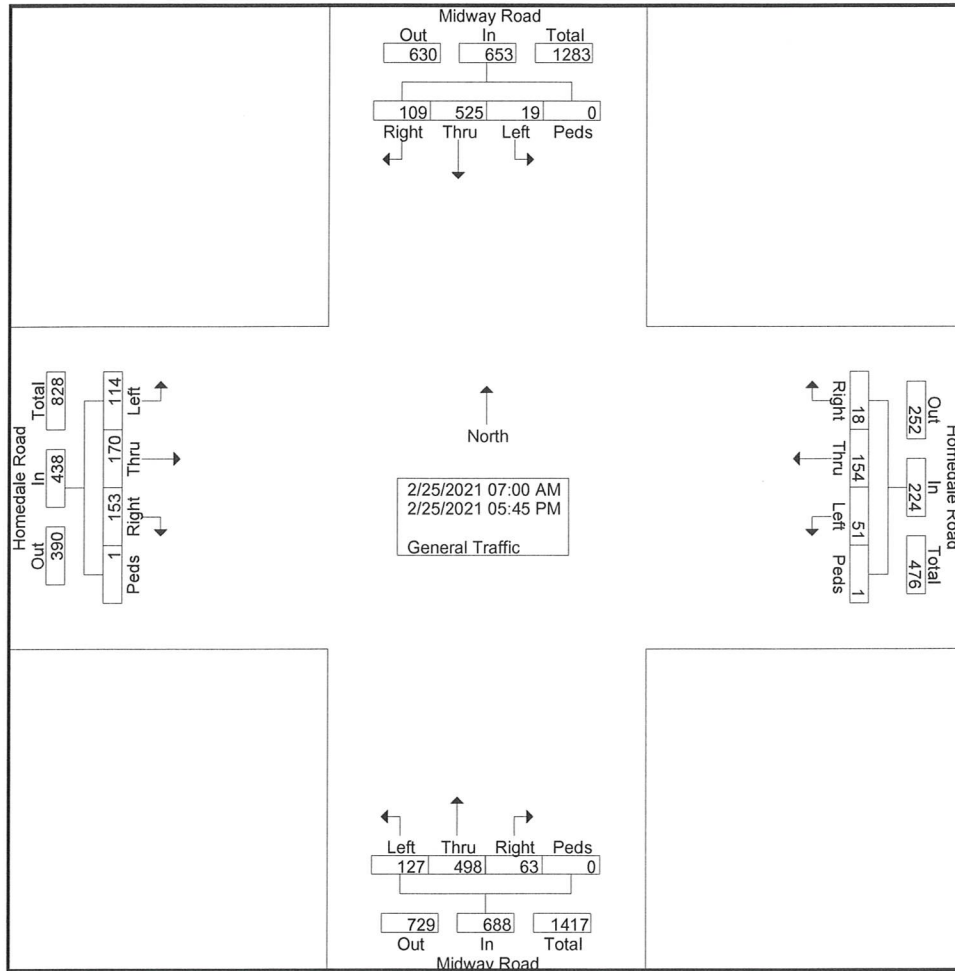
04:00 PM	2	44	2	0	48	1	16	3	1	21	6	17	11	0	34	7	5	4	0	16	119
04:15 PM	10	37	2	0	49	0	12	9	0	21	5	28	6	0	39	10	5	10	0	25	134
04:30 PM	10	45	5	0	60	2	9	1	0	12	3	27	6	0	36	8	4	7	1	20	128
04:45 PM	13	33	1	0	47	1	15	7	0	23	7	23	11	0	41	11	7	4	0	22	133
Total	35	159	10	0	204	4	52	20	1	77	21	95	34	0	150	36	21	25	1	83	514
05:00 PM	12	49	0	0	61	1	28	7	0	36	1	37	16	0	54	16	9	7	0	32	183
05:15 PM	11	50	1	0	62	2	11	2	0	15	5	34	15	0	54	10	14	6	0	30	161
05:30 PM	9	47	1	0	57	2	19	4	0	25	3	28	13	0	44	10	6	6	0	22	148
05:45 PM	10	48	2	0	60	3	18	1	0	22	3	31	18	0	52	9	7	11	0	27	161
Total	42	194	4	0	240	8	76	14	0	98	12	130	62	0	204	45	36	30	0	111	653
Grand Total	109	525	19	0	653	18	154	51	1	224	63	498	127	0	688	153	170	114	1	438	2003
Apprch %	16.7	80.4	2.9	0		8	68.8	22.8	0.4		9.2	72.4	18.5	0		34.9	38.8	26	0.2		
Total %	5.4	26.2	0.9	0	32.6	0.9	7.7	2.5	0	11.2	3.1	24.9	6.3	0	34.3	7.6	8.5	5.7	0	21.9	

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: NV50017
Intersection: Homedale Rd / Midway Rd
City, State: Caldwell, Idaho
Control: Stop Sign

File Name : Homedale Rd & Midway Rd
Site Code : 00000000
Start Date : 2/25/2021
Page No : 2



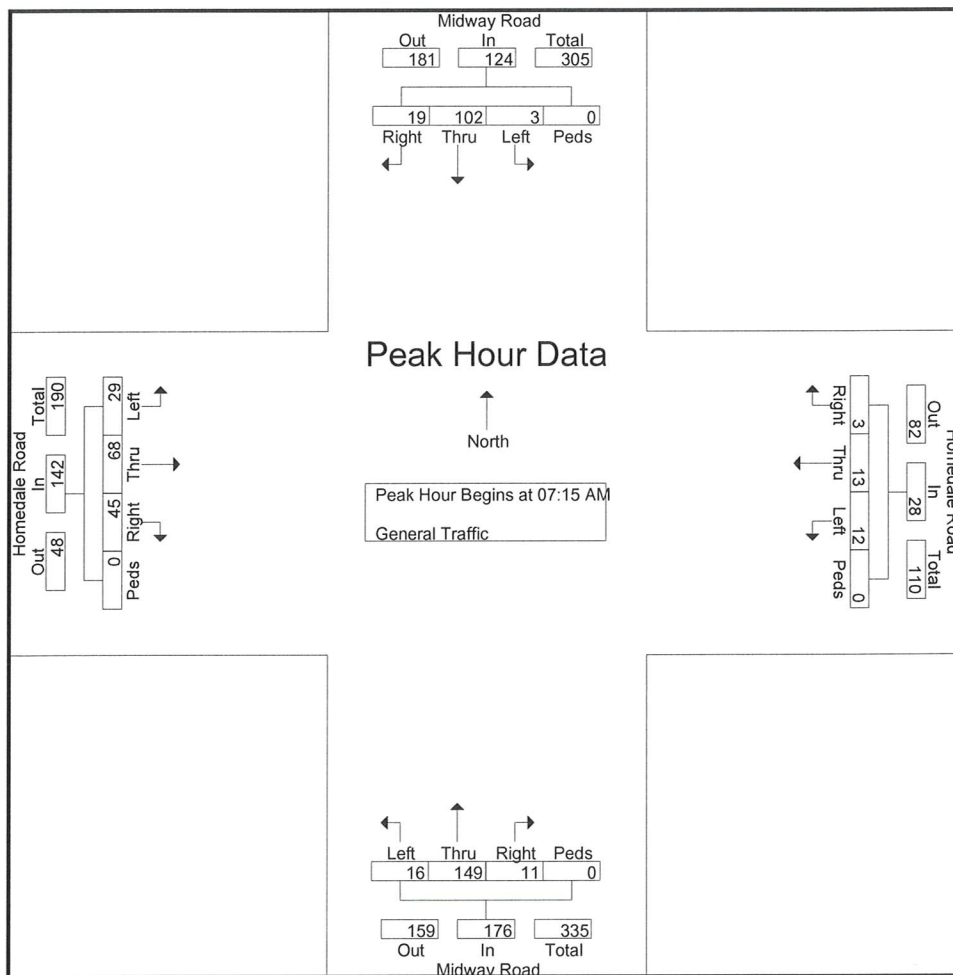
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: NV50017
Intersection: Homedale Rd / Midway Rd
City, State: Caldwell, Idaho
Control: Stop Sign

File Name : Homedale Rd & Midway Rd
Site Code : 00000000
Start Date : 2/25/2021
Page No : 3

	Midway Road From North					Homedale Road From East					Midway Road From South					Homedale Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	2	23	1	0	26	1	5	1	0	7	2	34	5	0	41	9	16	9	0	34	108
07:30 AM	4	28	1	0	33	1	5	7	0	13	3	38	1	0	42	22	18	7	0	47	135
07:45 AM	4	28	0	0	32	1	3	2	0	6	5	44	5	0	54	7	19	7	0	33	125
08:00 AM	9	23	1	0	33	0	0	2	0	2	1	33	5	0	39	7	15	6	0	28	102
Total Volume	19	102	3	0	124	3	13	12	0	28	11	149	16	0	176	45	68	29	0	142	470
% App. Total	15.3	82.3	2.4	0		10.7	46.4	42.9	0		6.2	84.7	9.1	0		31.7	47.9	20.4	0		
PHF	.528	.911	.750	.000	.939	.750	.650	.429	.000	.538	.550	.847	.800	.000	.815	.511	.895	.806	.000	.755	.870



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Study: NV50017
Intersection: Homedale Rd / Midway Rd
City, State: Caldwell, Idaho
Control: Stop Sign

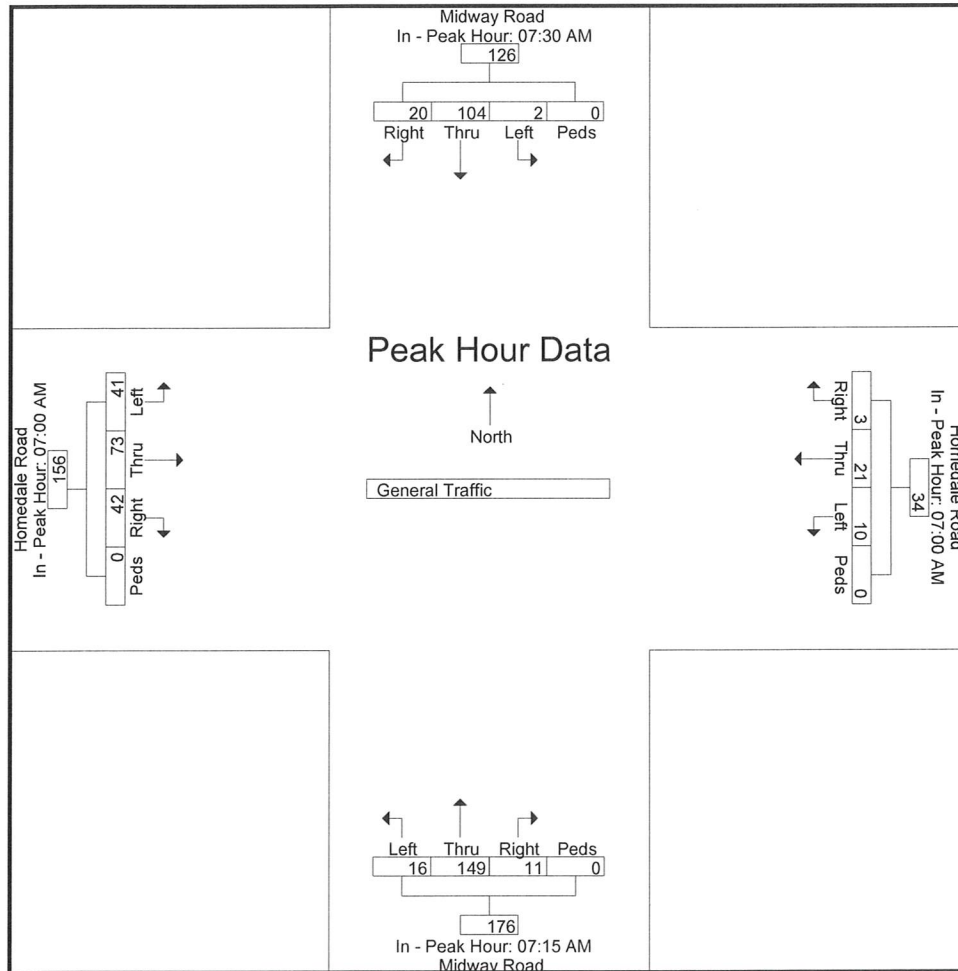
File Name : Homedale Rd & Midway Rd
Site Code : 00000000
Start Date : 2/25/2021
Page No : 4

	Midway Road From North					Homedale Road From East					Midway Road From South					Homedale Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total

Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM					07:00 AM					07:15 AM					07:00 AM				
+0 mins.	4	28	1	0	33	0	8	0	0	8	2	34	5	0	41	4	20	18	0	42
+15 mins.	4	28	0	0	32	1	5	1	0	7	3	38	1	0	42	9	16	9	0	34
+30 mins.	9	23	1	0	33	1	5	7	0	13	5	44	5	0	54	22	18	7	0	47
+45 mins.	3	25	0	0	28	1	3	2	0	6	1	33	5	0	39	7	19	7	0	33
Total Volume	20	104	2	0	126	3	21	10	0	34	11	149	16	0	176	42	73	41	0	156
% App. Total	15.9	82.5	1.6	0		8.8	61.8	29.4	0		6.2	84.7	9.1	0		26.9	46.8	26.3	0	
PHF	.556	.929	.500	.000	.955	.750	.656	.357	.000	.654	.550	.847	.800	.000	.815	.477	.913	.569	.000	.830



L2 Data Collection

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Study: NV50017

Intersection: Homedale Rd / Midway Rd

City, State: Caldwell, Idaho

Control: Stop Sign

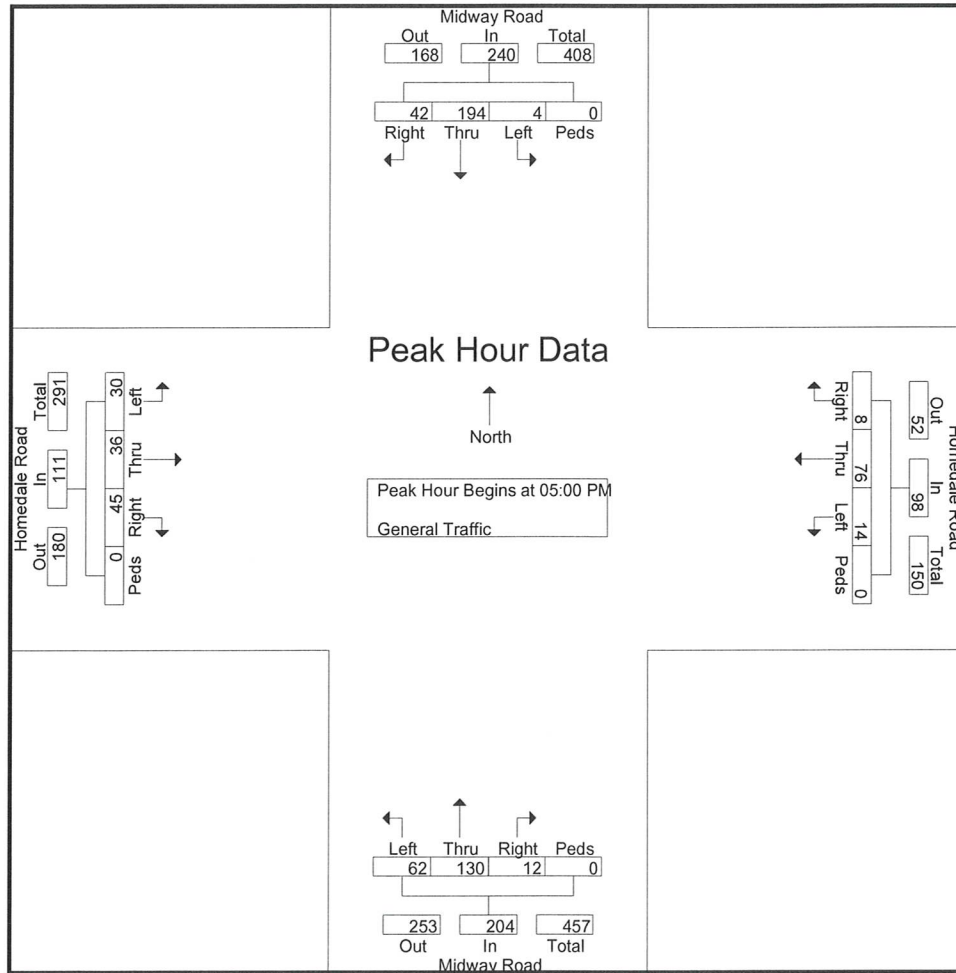
File Name : Homedale Rd & Midway Rd

Site Code : 00000000

Start Date : 2/25/2021

Page No : 5

	Midway Road From North					Homedale Road From East					Midway Road From South					Homedale Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	12	49	0	0	61	1	28	7	0	36	1	37	16	0	54	16	9	7	0	32	183
05:15 PM	11	50	1	0	62	2	11	2	0	15	5	34	15	0	54	10	14	6	0	30	161
05:30 PM	9	47	1	0	57	2	19	4	0	25	3	28	13	0	44	10	6	6	0	22	148
05:45 PM	10	48	2	0	60	3	18	1	0	22	3	31	18	0	52	9	7	11	0	27	161
Total Volume	42	194	4	0	240	8	76	14	0	98	12	130	62	0	204	45	36	30	0	111	653
% App. Total	17.5	80.8	1.7	0		8.2	77.6	14.3	0		5.9	63.7	30.4	0		40.5	32.4	27	0		
PHF	.875	.970	.500	.000	.968	.667	.679	.500	.000	.681	.600	.878	.861	.000	.944	.703	.643	.682	.000	.867	.892



L2 Data Collection

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Study: NV50017
Intersection: Homedale Rd / Midway Rd
City, State: Caldwell, Idaho
Control: Stop Sign

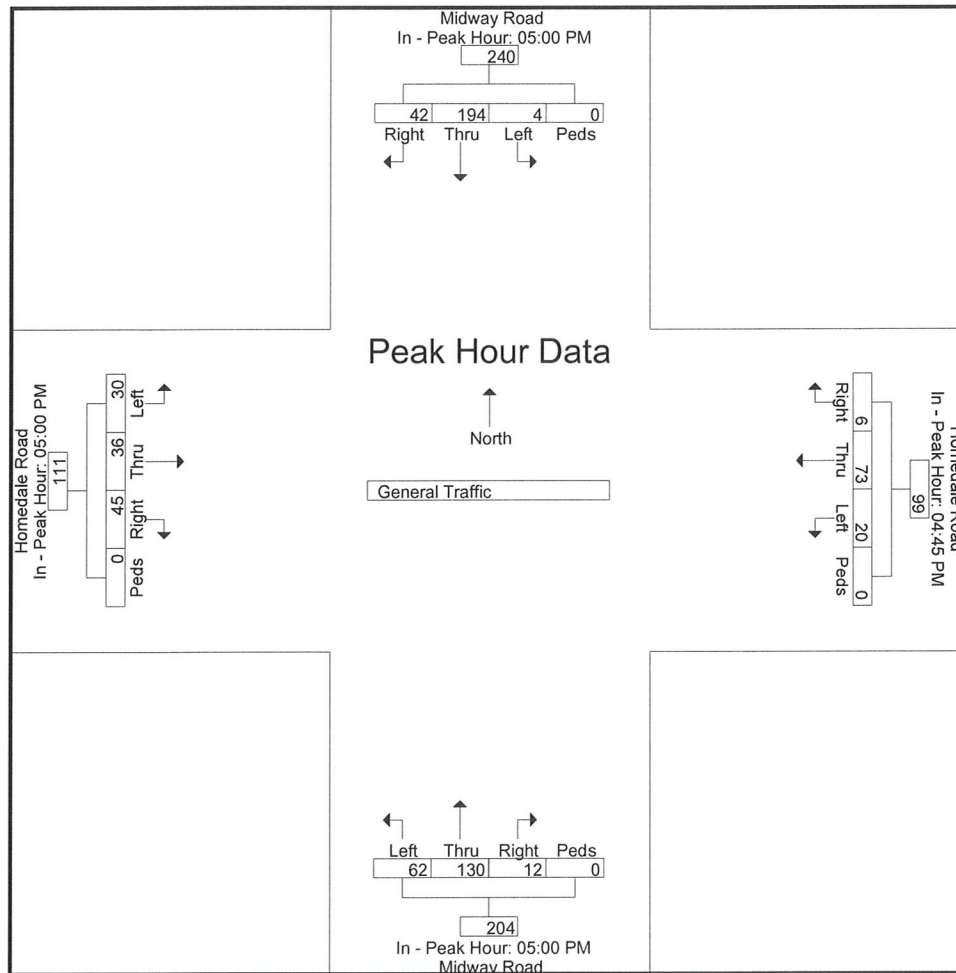
File Name : Homedale Rd & Midway Rd
Site Code : 00000000
Start Date : 2/25/2021
Page No : 6

	Midway Road From North					Homedale Road From East					Midway Road From South					Homedale Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total

Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM					04:45 PM					05:00 PM					05:00 PM				
+0 mins.	12	49	0	0	61	1	15	7	0	23	1	37	16	0	54	16	9	7	0	32
+15 mins.	11	50	1	0	62	1	28	7	0	36	5	34	15	0	54	10	14	6	0	30
+30 mins.	9	47	1	0	57	2	11	2	0	15	3	28	13	0	44	10	6	6	0	22
+45 mins.	10	48	2	0	60	2	19	4	0	25	3	31	18	0	52	9	7	11	0	27
Total Volume	42	194	4	0	240	6	73	20	0	99	12	130	62	0	204	45	36	30	0	111
% App. Total	17.5	80.8	1.7	0		6.1	73.7	20.2	0		5.9	63.7	30.4	0		40.5	32.4	27	0	
PHF	.875	.970	.500	.000	.968	.750	.652	.714	.000	.688	.600	.878	.861	.000	.944	.703	.643	.682	.000	.867



L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: NV50017
Intersection: Homedale Rd / Midway Rd
City, State: Caldwell, Idaho
Control: Stop Sign

File Name : Homedale Rd & Midway Rd
Site Code : 00000000
Start Date : 2/25/2021
Page No : 7

Image 1



APPENDIX D
ITE TRIP GENERATION INFORMATION

Multifamily Housing (Mid-Rise) (221)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

**Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.**

Setting/Location: General Urban/Suburban

Number of Studies: 53

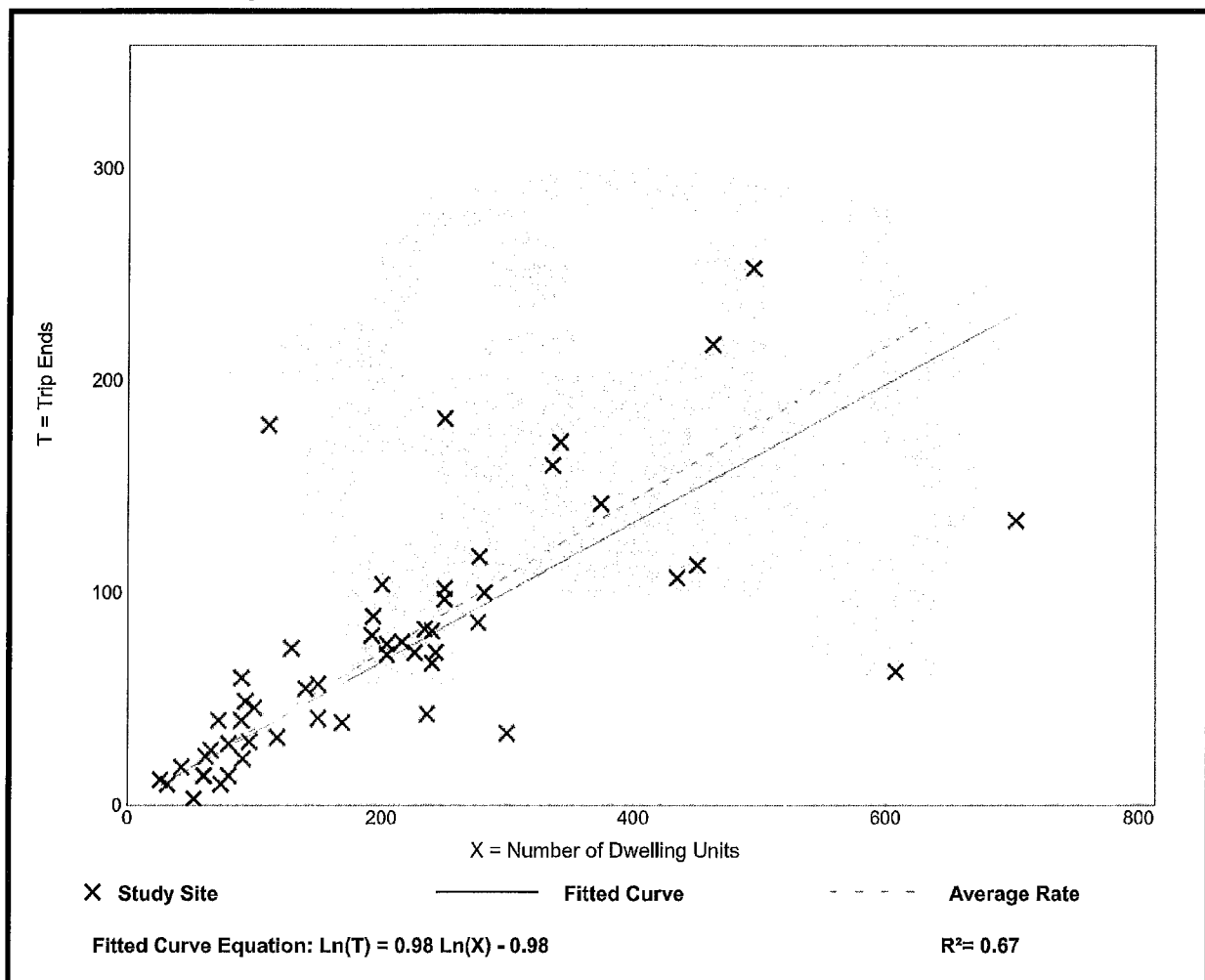
Avg. Num. of Dwelling Units: 207

Directional Distribution: 26% entering, 74% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.36	0.06 - 1.61	0.19

Data Plot and Equation



Trip Gen Manual, 10th Ed + Supplement • Institute of Transportation Engineers

Multifamily Housing (Mid-Rise) (221)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

**Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.**

Setting/Location: General Urban/Suburban

Number of Studies: 60

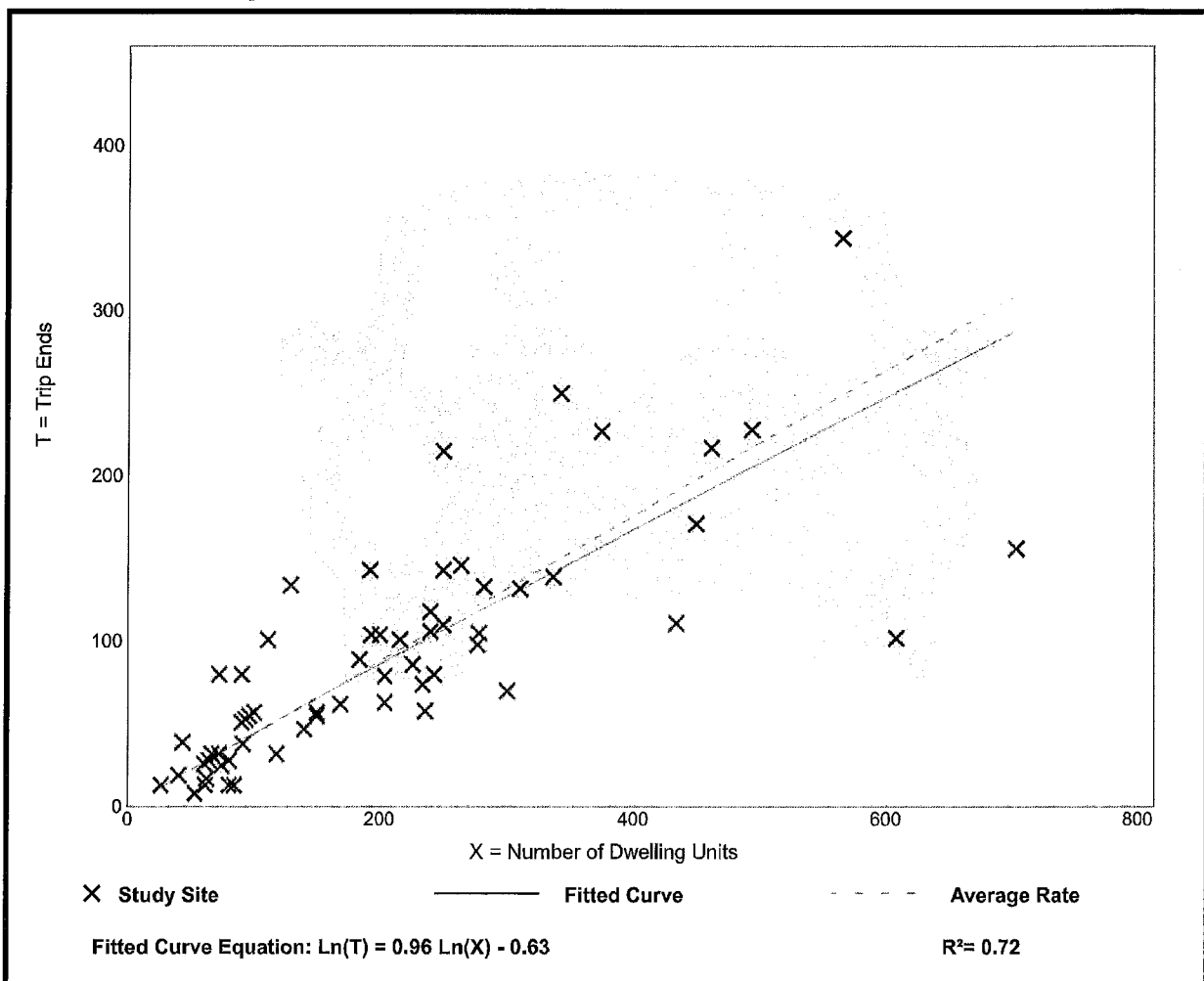
Avg. Num. of Dwelling Units: 208

Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.44	0.15 - 1.11	0.19

Data Plot and Equation



Trip Gen Manual, 10th Ed + Supplement • Institute of Transportation Engineers

Multifamily Housing (Mid-Rise) (221)

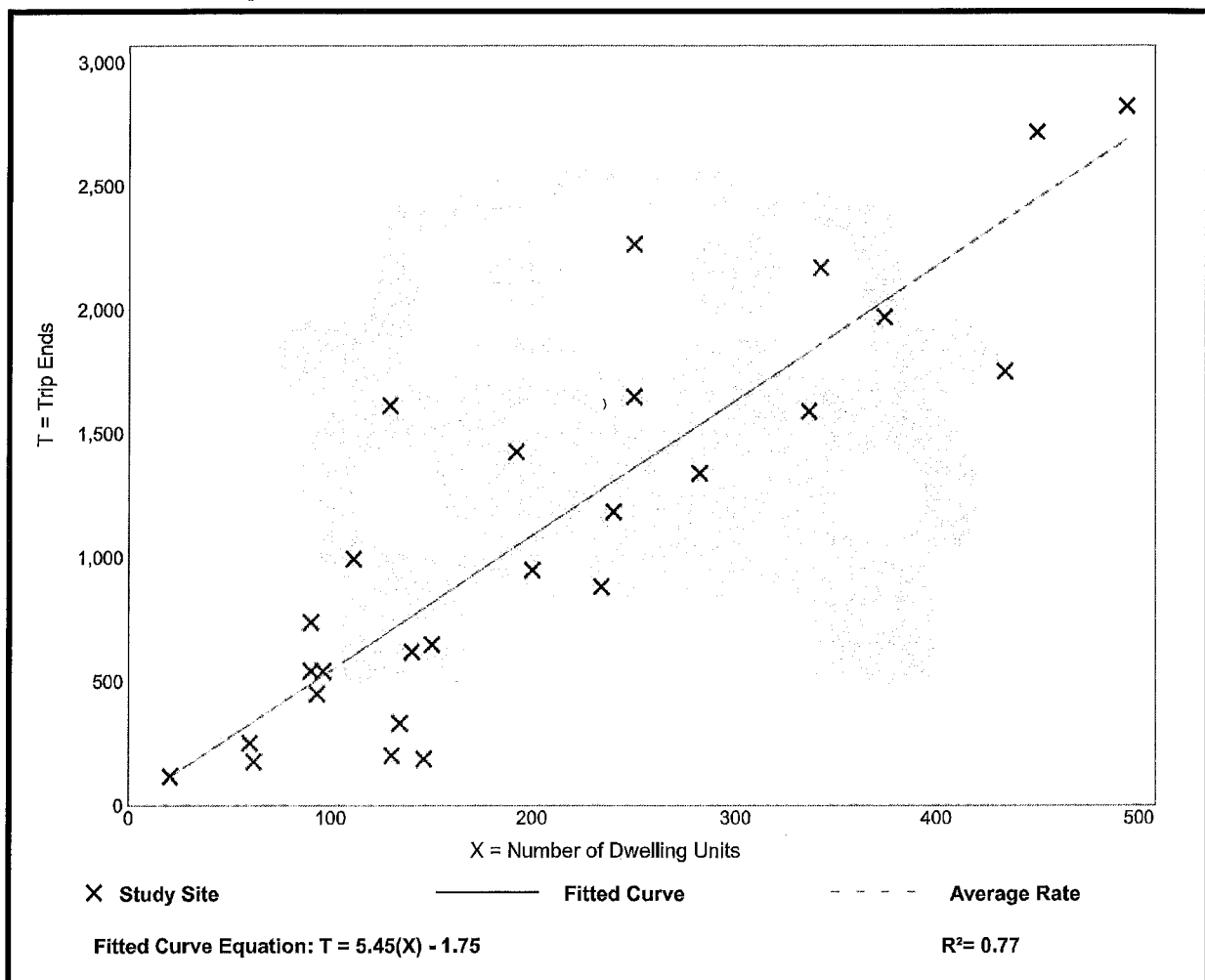
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 27
Avg. Num. of Dwelling Units: 205
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
5.44	1.27 - 12.50	2.03

Data Plot and Equation



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APPENDIX E
SYNCHRO REPORTS FOR OPERATIONAL ANALYSES

Existing Analysis

HCM 6th Signalized Intersection Summary
1: Cleveland Boulevard & Homedale Road/Isaiah Way

10/27/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	5	72	34	6	17	16	527	7	8	740	15
Future Volume (veh/h)	24	5	72	34	6	17	16	527	7	8	740	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	6	94	43	8	22	20	651	9	9	813	16
Peak Hour Factor	0.77	0.77	0.77	0.79	0.79	0.79	0.81	0.81	0.81	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	49	146	123	59	37	101	37	2570	36	19	2517	50
Arrive On Green	0.03	0.08	0.08	0.03	0.08	0.08	0.02	0.72	0.72	0.01	0.71	0.71
Sat Flow, veh/h	1781	1870	1585	1781	441	1212	1781	3589	50	1781	3564	70
Grp Volume(v), veh/h	31	6	94	43	0	30	20	322	338	9	405	424
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1652	1781	1777	1861	1781	1777	1858
Q Serve(g_s), s	1.9	0.3	6.5	2.7	0.0	1.9	1.2	7.0	7.0	0.6	9.6	9.6
Cycle Q Clear(g_c), s	1.9	0.3	6.5	2.7	0.0	1.9	1.2	7.0	7.0	0.6	9.6	9.6
Prop In Lane	1.00		1.00	1.00		0.73	1.00		0.03	1.00		0.04
Lane Grp Cap(c), veh/h	49	146	123	59	0	137	37	1272	1333	19	1255	1312
V/C Ratio(X)	0.63	0.04	0.76	0.73	0.00	0.22	0.54	0.25	0.25	0.46	0.32	0.32
Avail Cap(c_a), veh/h	201	463	393	265	0	469	185	1272	1333	136	1255	1312
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.4	47.4	50.2	53.2	0.0	47.5	53.8	5.5	5.5	54.6	6.2	6.2
Incr Delay (d2), s/veh	12.4	0.1	9.3	15.8	0.0	0.8	11.8	0.5	0.5	16.2	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.8	0.3	5.1	2.6	0.0	1.4	1.2	4.0	4.2	0.6	5.6	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.8	47.5	59.5	69.0	0.0	48.3	65.6	5.9	5.9	70.7	6.9	6.9
LnGrp LOS	E	D	E	E	A	D	E	A	A	E	A	A
Approach Vol, veh/h	131			73			680			838		
Approach Delay, s/veh	60.4			60.5			7.7			7.6		
Approach LOS	E			E			A			A		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.7	84.0	8.2	13.1	6.8	82.9	7.6	13.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	8.5	79.5	16.5	27.5	11.5	76.5	12.5	31.5				
Max Q Clear Time (g_c+11), s	2.6	9.0	4.7	8.5	3.2	11.6	3.9	3.9				
Green Ext Time (p_c), s	0.0	4.0	0.0	0.2	0.0	5.4	0.0	0.1				
Intersection Summary												
HCM 6th Ctrl Delay	13.9											
HCM 6th LOS	B											

HCM 6th TWSC
2: Midway Road & Homedale Road

10/27/2021

Intersection												
Int Delay, s/veh	5.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	68	45	12	13	3	16	149	11	3	102	19
Future Vol, veh/h	29	68	45	12	13	3	16	149	11	3	102	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	54	54	54	81	81	81	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	89	59	22	24	6	20	184	14	3	109	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	371	363	119	430	366	191	129	0	0	198	0	0
Stage 1	125	125	-	231	231	-	-	-	-	-	-	-
Stage 2	246	238	-	199	135	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	586	565	933	535	562	851	1457	-	-	1375	-	-
Stage 1	879	792	-	772	713	-	-	-	-	-	-	-
Stage 2	758	708	-	803	785	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	556	555	933	433	552	851	1457	-	-	1375	-	-
Mov Cap-2 Maneuver	556	555	-	433	552	-	-	-	-	-	-	-
Stage 1	866	790	-	760	702	-	-	-	-	-	-	-
Stage 2	716	697	-	666	783	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	13		12.8		0.7		0.2	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBREBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1457	-	-	637	511	1375	-
HCM Lane V/C Ratio	0.014	-	-	0.293	0.101	0.002	-
HCM Control Delay (s)	7.5	0	-	13	12.8	7.6	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	1.2	0.3	0	-

HCM 6th Signalized Intersection Summary
1: Cleveland Boulevard & Homedale Road/Isaiah Way

10/27/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	3	48	27	2	2	94	996	42	5	817	16
Future Volume (veh/h)	23	3	48	27	2	2	94	996	42	5	817	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	30	4	62	31	2	2	104	1107	47	5	860	17
Peak Hour Factor	0.77	0.77	0.77	0.86	0.86	0.86	0.90	0.90	0.90	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	47	101	86	48	47	47	131	2649	112	11	2479	49
Arrive On Green	0.03	0.05	0.05	0.03	0.05	0.05	0.07	0.76	0.76	0.01	0.70	0.70
Sat Flow, veh/h	1781	1870	1585	1781	858	858	1781	3473	147	1781	3564	70
Grp Volume(v), veh/h	30	4	62	31	0	4	104	566	588	5	429	448
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1716	1781	1777	1844	1781	1777	1858
Q Serve(g_s), s	2.0	0.2	4.6	2.1	0.0	0.3	6.9	13.3	13.3	0.3	11.6	11.6
Cycle Q Clear(g_c), s	2.0	0.2	4.6	2.1	0.0	0.3	6.9	13.3	13.3	0.3	11.6	11.6
Prop In Lane	1.00		1.00	1.00		0.50	1.00		0.08	1.00		0.04
Lane Grp Cap(c), veh/h	47	101	86	48	0	94	131	1355	1406	11	1236	1292
V/C Ratio(X)	0.64	0.04	0.72	0.65	0.00	0.04	0.80	0.42	0.42	0.44	0.35	0.35
Avail Cap(c_a), veh/h	156	351	297	156	0	322	364	1355	1406	111	1236	1292
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	53.8	55.9	57.8	0.0	53.7	54.7	5.0	5.0	59.4	7.3	7.3
Incr Delay (d2), s/veh	13.6	0.2	10.8	13.8	0.0	0.2	10.4	1.0	0.9	24.3	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	0.2	3.8	2.0	0.0	0.2	6.1	7.2	7.4	0.4	7.2	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.4	53.9	66.7	71.6	0.0	53.9	65.1	5.9	5.9	83.7	8.1	8.1
LnGrp LOS	E	D	E	E	A	D	E	A	A	F	A	A
Approach Vol, veh/h		96			35			1258			882	
Approach Delay, s/veh		67.6			69.6			10.8			8.5	
Approach LOS		E			E			B			A	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.3	96.0	7.7	11.0	13.3	88.0	7.7	11.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	7.5	91.5	10.5	22.5	24.5	74.5	10.5	22.5				
Max Q Clear Time (g_c+I1), s	2.3	15.3	4.1	6.6	8.9	13.6	4.0	2.3				
Green Ext Time (p_c), s	0.0	8.9	0.0	0.1	0.2	5.8	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			13.2									
HCM 6th LOS			B									

HCM 6th TWSC
2: Midway Road & Homedale Road

10/27/2021

Intersection												
Int Delay, s/veh	6.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	36	45	14	76	8	62	130	12	4	194	42
Future Vol, veh/h	30	36	45	14	76	8	62	130	12	4	194	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	68	68	68	94	94	94	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	41	52	21	112	12	66	138	13	4	200	43

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	569	513	222	553	528	145	243	0	0	151	0	0
Stage 1	230	230	-	277	277	-	-	-	-	-	-	-
Stage 2	339	283	-	276	251	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	433	465	818	444	456	902	1323	-	-	1430	-	-
Stage 1	773	714	-	729	681	-	-	-	-	-	-	-
Stage 2	676	677	-	730	699	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	327	438	818	369	430	902	1323	-	-	1430	-	-
Mov Cap-2 Maneuver	327	438	-	369	430	-	-	-	-	-	-	-
Stage 1	730	712	-	689	644	-	-	-	-	-	-	-
Stage 2	521	640	-	642	697	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	15.1		17.2		2.4		0.1	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1323	-	-	485	438	1430	-	-
HCM Lane V/C Ratio	0.05	-	-	0.263	0.329	0.003	-	-
HCM Control Delay (s)	7.9	0	-	15.1	17.2	7.5	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	1	1.4	0	-	-

2023 Background Analysis

HCM 6th Signalized Intersection Summary
1: Cleveland Boulevard & Homedale Road/Isaiah Way

10/27/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	6	77	37	7	19	17	560	8	9	786	16
Future Volume (veh/h)	26	6	77	37	7	19	17	560	8	9	786	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	7	86	41	8	21	19	622	9	10	864	18
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	47	135	115	57	36	93	35	2596	38	21	2548	53
Arrive On Green	0.03	0.07	0.07	0.03	0.08	0.08	0.02	0.72	0.72	0.01	0.72	0.72
Sat Flow, veh/h	1781	1870	1585	1781	456	1198	1781	3586	52	1781	3560	74
Grp Volume(v), veh/h	29	7	86	41	0	29	19	308	323	10	431	451
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1655	1781	1777	1861	1781	1777	1857
Q Serve(g_s), s	1.8	0.4	6.0	2.6	0.0	1.9	1.2	6.5	6.5	0.6	10.3	10.3
Cycle Q Clear(g_c), s	1.8	0.4	6.0	2.6	0.0	1.9	1.2	6.5	6.5	0.6	10.3	10.3
Prop In Lane	1.00		1.00	1.00		0.72	1.00		0.03	1.00		0.04
Lane Grp Cap(c), veh/h	47	135	115	57	0	129	35	1286	1347	21	1272	1329
V/C Ratio(X)	0.61	0.05	0.75	0.72	0.00	0.22	0.54	0.24	0.24	0.47	0.34	0.34
Avail Cap(c_a), veh/h	198	440	373	245	0	434	166	1286	1347	134	1272	1329
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.2	48.6	51.2	54.0	0.0	48.7	54.7	5.2	5.2	55.3	6.0	6.0
Incr Delay (d2), s/veh	12.3	0.2	9.4	15.4	0.0	0.9	12.0	0.4	0.4	15.3	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.7	0.3	4.8	2.5	0.0	1.4	1.1	3.7	3.9	0.7	5.9	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.5	48.8	60.6	69.4	0.0	49.6	66.7	5.6	5.6	70.6	6.7	6.7
LnGrp LOS	E	D	E	E	A	D	E	A	A	E	A	A
Approach Vol, veh/h	122			70			650			892		
Approach Delay, s/veh	61.4			61.2			7.4			7.4		
Approach LOS	E			E			A			A		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.8	86.0	8.1	12.6	6.7	85.1	7.5	13.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	8.5	81.5	15.5	26.5	10.5	79.5	12.5	29.5				
Max Q Clear Time (g_c+l1), s	2.6	8.5	4.6	8.0	3.2	12.3	3.8	3.9				
Green Ext Time (p_c), s	0.0	3.8	0.0	0.2	0.0	5.9	0.0	0.1				
Intersection Summary												
HCM 6th Ctrl Delay	13.4											
HCM 6th LOS	B											

HCM 6th TWSC
2: Midway Road & Homedale Road

10/27/2021

Intersection												
Int Delay, s/veh	5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	73	48	13	14	4	17	159	12	4	109	21
Future Vol, veh/h	31	73	48	13	14	4	17	159	12	4	109	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	81	53	14	16	4	19	177	13	4	116	22

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	367	363	127	424	368	184	138	0	0	190	0	0
Stage 1	135	135	-	222	222	-	-	-	-	-	-	-
Stage 2	232	228	-	202	146	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	589	565	923	540	561	858	1446	-	-	1384	-	-
Stage 1	868	785	-	780	720	-	-	-	-	-	-	-
Stage 2	771	715	-	800	776	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	565	555	923	446	551	858	1446	-	-	1384	-	-
Mov Cap-2 Maneuver	565	555	-	446	551	-	-	-	-	-	-	-
Stage 1	855	783	-	768	709	-	-	-	-	-	-	-
Stage 2	739	704	-	674	774	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.7	12.4	0.7	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1446	-	-	638	523	1384	-	-
HCM Lane V/C Ratio	0.013	-	-	0.265	0.066	0.003	-	-
HCM Control Delay (s)	7.5	0	-	12.7	12.4	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.1	0.2	0	-	-

HCM 6th Signalized Intersection Summary
1: Cleveland Boulevard & Homedale Road/Isaiah Way

10/27/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	4	51	29	3	3	100	1057	45	6	867	17
Future Volume (veh/h)	25	4	51	29	3	3	100	1057	45	6	867	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	4	57	32	3	3	111	1174	50	6	913	18
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	95	81	49	45	45	139	2653	113	13	2473	49
Arrive On Green	0.03	0.05	0.05	0.03	0.05	0.05	0.08	0.76	0.76	0.01	0.69	0.69
Sat Flow, veh/h	1781	1870	1585	1781	858	858	1781	3473	148	1781	3564	70
Grp Volume(v), veh/h	28	4	57	32	0	6	111	600	624	6	455	476
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1716	1781	1777	1844	1781	1777	1858
Q Serve(g_s), s	1.9	0.2	4.2	2.1	0.0	0.4	7.3	14.4	14.4	0.4	12.6	12.6
Cycle Q Clear(g_c), s	1.9	0.2	4.2	2.1	0.0	0.4	7.3	14.4	14.4	0.4	12.6	12.6
Prop In Lane	1.00		1.00	1.00		0.50	1.00		0.08	1.00		0.04
Lane Grp Cap(c), veh/h	45	95	81	49	0	91	139	1357	1409	13	1233	1289
V/C Ratio(X)	0.62	0.04	0.71	0.66	0.00	0.07	0.80	0.44	0.44	0.45	0.37	0.37
Avail Cap(c_a), veh/h	156	351	298	156	0	322	379	1357	1409	112	1233	1289
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.8	54.1	56.0	57.7	0.0	53.9	54.3	5.0	5.0	59.2	7.5	7.5
Incr Delay (d2), s/veh	13.1	0.2	10.8	14.0	0.0	0.3	10.2	1.0	1.0	21.4	0.9	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.8	0.2	3.5	2.1	0.0	0.3	6.5	7.7	7.9	0.5	7.8	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.9	54.2	66.8	71.7	0.0	54.2	64.5	6.1	6.1	80.6	8.4	8.4
LnGrp LOS	E	D	E	E	A	D	E	A	A	F	A	A
Approach Vol, veh/h	89			38			1335			937		
Approach Delay, s/veh	67.5			68.9			10.9			8.8		
Approach LOS	E			E			B			A		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.4	96.0	7.8	10.6	13.8	87.6	7.5	10.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	7.5	91.5	10.5	22.5	25.5	73.5	10.5	22.5				
Max Q Clear Time (g_c+l1), s	2.4	16.4	4.1	6.2	9.3	14.6	3.9	2.4				
Green Ext Time (p_c), s	0.0	9.9	0.0	0.1	0.2	6.3	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay	13.1											
HCM 6th LOS	B											

HCM 6th TWSC
2: Midway Road & Homedale Road

10/27/2021

Intersection												
Int Delay, s/veh	6.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	39	48	15	81	9	66	138	13	5	206	45
Future Vol, veh/h	32	39	48	15	81	9	66	138	13	5	206	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	94	94	94	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	43	53	17	90	10	70	147	14	5	212	46

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	589	546	235	587	562	154	258	0	0	161	0	0
Stage 1	245	245	-	294	294	-	-	-	-	-	-	-
Stage 2	344	301	-	293	268	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	420	445	804	421	436	892	1307	-	-	1418	-	-
Stage 1	759	703	-	714	670	-	-	-	-	-	-	-
Stage 2	671	665	-	715	687	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	329	417	804	345	409	892	1307	-	-	1418	-	-
Mov Cap-2 Maneuver	329	417	-	345	409	-	-	-	-	-	-	-
Stage 1	714	700	-	672	630	-	-	-	-	-	-	-
Stage 2	535	626	-	624	684	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.5	17	2.4	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1307	-	-	475	417	1418	-	-
HCM Lane V/C Ratio	0.054	-	-	0.278	0.28	0.004	-	-
HCM Control Delay (s)	7.9	0	-	15.5	17	7.5	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	1.1	1.1	0	-	-

2023 Background Plus Project Analysis

HCM 6th Signalized Intersection Summary
1: Cleveland Boulevard & Homedale Road/Isaiah Way

10/27/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	4	73	29	3	3	147	1057	45	11	876	17
Future Volume (veh/h)	37	4	73	29	3	3	147	1057	45	11	876	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	41	4	81	32	3	3	163	1174	50	12	922	18
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	55	126	106	48	54	54	193	2589	110	24	2321	45
Arrive On Green	0.03	0.07	0.07	0.03	0.06	0.06	0.11	0.75	0.75	0.01	0.65	0.65
Sat Flow, veh/h	1781	1870	1585	1781	858	858	1781	3473	148	1781	3565	70
Grp Volume(v), veh/h	41	4	81	32	0	6	163	600	624	12	460	480
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1716	1781	1777	1844	1781	1777	1858
Q Serve(g_s), s	2.8	0.2	6.2	2.2	0.0	0.4	11.0	15.9	16.0	0.8	14.9	14.9
Cycle Q Clear(g_c), s	2.8	0.2	6.2	2.2	0.0	0.4	11.0	15.9	16.0	0.8	14.9	14.9
Prop In Lane	1.00		1.00	1.00		0.50	1.00		0.08	1.00		0.04
Lane Grp Cap(c), veh/h	55	126	106	48	0	109	193	1325	1374	24	1157	1209
V/C Ratio(X)	0.75	0.03	0.76	0.66	0.00	0.06	0.85	0.45	0.45	0.49	0.40	0.40
Avail Cap(c_a), veh/h	152	343	291	152	0	315	370	1325	1374	109	1157	1209
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.0	53.5	56.3	59.2	0.0	54.0	53.7	6.0	6.0	60.1	10.1	10.1
Incr Delay (d2), s/veh	18.4	0.1	10.6	14.5	0.0	0.2	9.7	1.1	1.1	14.6	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	0.2	5.0	2.1	0.0	0.3	9.1	8.7	9.0	0.8	9.3	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.4	53.6	66.9	73.7	0.0	54.2	63.4	7.1	7.1	74.7	11.1	11.1
LnGrp LOS	E	D	E	E	A	D	E	A	A	E	B	B
Approach Vol, veh/h	126		38				1387		952			
Approach Delay, s/veh	69.9		70.6				13.7		11.9			
Approach LOS	E		E				B		B			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.2	96.0	7.8	12.7	17.8	84.4	8.3	12.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	7.5	91.5	10.5	22.5	25.5	73.5	10.5	22.5				
Max Q Clear Time (g_c+1), s	2.8	18.0	4.2	8.2	13.0	16.9	4.8	2.4				
Green Ext Time (p_c), s	0.0	9.9	0.0	0.2	0.3	6.4	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			16.7									
HCM 6th LOS			B									

HCM 6th TWSC
2: Midway Road & Homedale Road

10/27/2021

Intersection												
Int Delay, s/veh	6.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	48	48	18	87	9	66	138	18	5	206	45
Future Vol, veh/h	32	48	48	18	87	9	66	138	18	5	206	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	94	94	94	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	53	53	20	97	10	70	147	19	5	212	46

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	595	551	235	595	565	157	258	0	0	166	0	0
Stage 1	245	245	-	297	297	-	-	-	-	-	-	-
Stage 2	350	306	-	298	268	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	416	442	804	416	434	889	1307	-	-	1412	-	-
Stage 1	759	703	-	712	668	-	-	-	-	-	-	-
Stage 2	666	662	-	711	687	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	321	414	804	334	407	889	1307	-	-	1412	-	-
Mov Cap-2 Maneuver	321	414	-	334	407	-	-	-	-	-	-	-
Stage 1	714	700	-	670	629	-	-	-	-	-	-	-
Stage 2	524	623	-	611	684	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	16.1			17.7			2.4			0.1		
HCM LOS	C			C								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1307	-	-	465	410	1412	-	-
HCM Lane V/C Ratio	0.054	-	-	0.306	0.309	0.004	-	-
HCM Control Delay (s)	7.9	0	-	16.1	17.7	7.6	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	1.3	1.3	0	-	-

HCM 6th TWSC
3: Cleveland Boulevard & Access Drive A

10/27/2021

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	13	0	1085	890	26
Future Vol, veh/h	0	13	0	1085	890	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	14	0	1206	989	29

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	509	1018
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	4.14
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	2.22
Pot Cap-1 Maneuver	0	509	677
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	509	677
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	677	-	509	-	-
HCM Lane V/C Ratio	-	-	0.028	-	-
HCM Control Delay (s)	0	-	12.3	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection

Int Delay, s/veh 1.9

Movement EBL EBT WBT WBR SBL SBR**Lane Configurations**

Traffic Vol, veh/h 13 57 120 47 34 9

Future Vol, veh/h 13 57 120 47 34 9

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Free Free Free Free Stop Stop

RT Channelized - None - None - None

Storage Length - - - - 0 0

Veh in Median Storage, # - 0 0 - 0 -

Grade, % - 0 0 - 0 -

Peak Hour Factor 90 90 90 90 90 90

Heavy Vehicles, % 2 2 2 2 2 2

Mvmt Flow 14 63 133 52 38 10

Major/Minor Major1 Major2 Minor2

Conflicting Flow All 185 0 - 0 250 159

Stage 1 - - - - 159 -

Stage 2 - - - - 91 -

Critical Hdwy 4.12 - - - 6.42 6.22

Critical Hdwy Stg 1 - - - - 5.42 -

Critical Hdwy Stg 2 - - - - 5.42 -

Follow-up Hdwy 2.218 - - - 3.518 3.318

Pot Cap-1 Maneuver 1390 - - - 739 886

Stage 1 - - - - 870 -

Stage 2 - - - - 933 -

Platoon blocked, % - - - -

Mov Cap-1 Maneuver 1390 - - - 732 886

Mov Cap-2 Maneuver - - - - 732 -

Stage 1 - - - - 861 -

Stage 2 - - - - 933 -

Approach EB WB SB

HCM Control Delay, s 1.4 0 10

HCM LOS B

Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1 SBLn2

Capacity (veh/h) 1390 - - - 732 886

HCM Lane V/C Ratio 0.01 - - - 0.052 0.011

HCM Control Delay (s) 7.6 0 - - 10.2 9.1

HCM Lane LOS A A - - B A

HCM 95th %tile Q(veh) 0 - - - 0.2 0

HCM 6th Signalized Intersection Summary
1: Cleveland Boulevard & Homedale Road/Isaiah Way

10/27/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	6	111	37	7	19	34	560	8	16	799	16
Future Volume (veh/h)	45	6	111	37	7	19	34	560	8	16	799	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	50	7	123	41	8	21	38	622	9	18	878	18
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	179	152	56	42	109	54	2508	36	34	2449	50
Arrive On Green	0.04	0.10	0.10	0.03	0.09	0.09	0.03	0.70	0.70	0.02	0.69	0.69
Sat Flow, veh/h	1781	1870	1585	1781	456	1198	1781	3586	52	1781	3561	73
Grp Volume(v), veh/h	50	7	123	41	0	29	38	308	323	18	438	458
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1655	1781	1777	1861	1781	1777	1857
Q Serve(g_s), s	3.2	0.4	8.9	2.7	0.0	1.9	2.5	7.4	7.4	1.2	11.9	11.9
Cycle Q Clear(g_c), s	3.2	0.4	8.9	2.7	0.0	1.9	2.5	7.4	7.4	1.2	11.9	11.9
Prop In Lane	1.00		1.00	1.00		0.72	1.00		0.03	1.00		0.04
Lane Grp Cap(c), veh/h	65	179	152	56	0	151	54	1243	1301	34	1222	1278
V/C Ratio(X)	0.77	0.04	0.81	0.73	0.00	0.19	0.70	0.25	0.25	0.53	0.36	0.36
Avail Cap(c_a), veh/h	191	425	360	237	0	419	160	1243	1301	130	1222	1278
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.7	47.8	51.7	55.9	0.0	49.0	56.0	6.4	6.4	56.7	7.5	7.5
Incr Delay (d2), s/veh	17.4	0.1	9.8	16.5	0.0	0.6	15.2	0.5	0.5	12.4	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.2	0.3	7.0	2.6	0.0	1.4	2.4	4.4	4.6	1.1	7.3	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.1	47.9	61.4	72.4	0.0	49.6	71.2	6.9	6.8	69.1	8.4	8.3
LnGrp LOS	E	D	E	E	A	D	E	A	A	E	A	A
Approach Vol, veh/h	180			70			669			914		
Approach Delay, s/veh	64.2			63.0			10.5			9.5		
Approach LOS	E			E			B			A		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.7	86.0	8.2	15.7	8.0	84.7	8.7	15.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	8.5	81.5	15.5	26.5	10.5	79.5	12.5	29.5				
Max Q Clear Time (g_c+l1), s	3.2	9.4	4.7	10.9	4.5	13.9	5.2	3.9				
Green Ext Time (p_c), s	0.0	3.8	0.0	0.3	0.0	6.0	0.0	0.1				
Intersection Summary												
HCM 6th Ctrl Delay	17.3											
HCM 6th LOS	B											

HCM 6th TWSC
2: Midway Road & Homedale Road

10/27/2021

Intersection												
Int Delay, s/veh	5.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	76	48	18	23	4	17	159	14	4	109	21
Future Vol, veh/h	31	76	48	18	23	4	17	159	14	4	109	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	84	53	20	26	4	19	177	16	4	116	22

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	373	366	127	427	369	185	138	0	0	193	0	0
Stage 1	135	135	-	223	223	-	-	-	-	-	-	-
Stage 2	238	231	-	204	146	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	584	562	923	538	560	857	1446	-	-	1380	-	-
Stage 1	868	785	-	780	719	-	-	-	-	-	-	-
Stage 2	765	713	-	798	776	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	552	552	923	442	550	857	1446	-	-	1380	-	-
Mov Cap-2 Maneuver	552	552	-	442	550	-	-	-	-	-	-	-
Stage 1	855	783	-	768	708	-	-	-	-	-	-	-
Stage 2	723	702	-	669	774	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	12.9		12.7		0.7		0.2	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1446	-	-	630	516	1380	-	-
HCM Lane V/C Ratio	0.013	-	-	0.273	0.097	0.003	-	-
HCM Control Delay (s)	7.5	0	-	12.9	12.7	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.1	0.3	0	-	-

HCM 6th TWSC
3: Cleveland Boulevard & Access Drive A

10/27/2021

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	20	0	605	811	9
Future Vol, veh/h	0	20	0	605	811	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	22	0	672	901	10

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	456	911
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	4.14
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	2.22
Pot Cap-1 Maneuver	0	551	743
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	551	743
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	743	-	551	-	-
HCM Lane V/C Ratio	-	-	0.04	-	-
HCM Control Delay (s)	0	-	11.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 6th TWSC
4: Homedale Road & Access Drive B

10/27/2021

Intersection

Int Delay, s/veh 3.1

Movement EBL EBT WBT WBR SBL SBR

Lane Configurations

Traffic Vol, veh/h 5 89 40 17 53 13

Future Vol, veh/h 5 89 40 17 53 13

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Free Free Free Free Stop Stop

RT Channelized - None - None - None

Storage Length - - - - 0 0

Veh in Median Storage, # - 0 0 - 0 -

Grade, % - 0 0 - 0 -

Peak Hour Factor 90 90 90 90 90 90

Heavy Vehicles, % 2 2 2 2 2 2

Mvmt Flow 6 99 44 19 59 14

Major/Minor Major1 Major2 Minor2

Conflicting Flow All 63 0 - 0 165 54

Stage 1 - - - - 54 -

Stage 2 - - - - 111 -

Critical Hdwy 4.12 - - - 6.42 6.22

Critical Hdwy Stg 1 - - - - 5.42 -

Critical Hdwy Stg 2 - - - - 5.42 -

Follow-up Hdwy 2.218 - - - 3.518 3.318

Pot Cap-1 Maneuver 1540 - - - 826 1013

Stage 1 - - - - 969 -

Stage 2 - - - - 914 -

Platoon blocked, % - - - -

Mov Cap-1 Maneuver 1540 - - - 823 1013

Mov Cap-2 Maneuver - - - - 823 -

Stage 1 - - - - 965 -

Stage 2 - - - - 914 -

Approach EB WB SB

HCM Control Delay, s 0.4 0 9.5

HCM LOS A

Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1 SBLn2

Capacity (veh/h) 1540 - - - 823 1013

HCM Lane V/C Ratio 0.004 - - - 0.072 0.014

HCM Control Delay (s) 7.3 0 - - 9.7 8.6

HCM Lane LOS A A - - A A

HCM 95th %tile Q(veh) 0 - - - 0.2 0

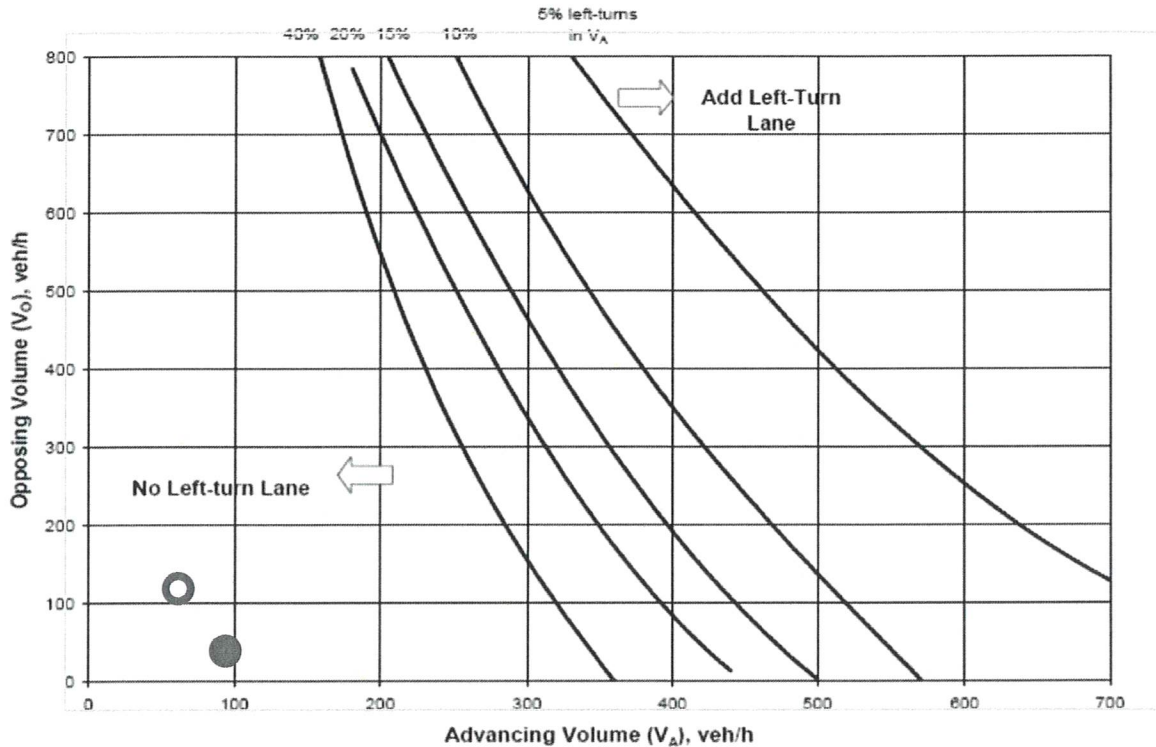
APPENDIX F
LEFT-TURN LANE WARRANT FIGURES

Left-Turn Lane Analysis - Two-Lane Roadway ≤ 40 mph

Major Road: Homedale Road
 Minor Road: Access Drive B
 Direction: Eastbound

Left Turns AM(PM)
 Existing 0(0) %
 Background 0(0) %
 Plus Project 6(23) %

Figure 1 – Left-Turn Lane Guidelines for Two-Lane Roads less than or equal to 40 mph



		AM	PM
Result <h1 style="margin: 0;">Not Warranted</h1>	2021 Existing	●	○
	2023 Background	●	○
	2023 Plus Project	●	○
Needed Data: 1. Opposing Volume (veh/hr) - V _O - The opposing volume is to include only the right-turn and through movements in the opposite direction of the left turning vehicle. 2. Advancing Volume (veh/hr) - V _A - The advancing volume is to include the right-turn, left-turn and through movements in the same direction as the left turning vehicle. 3. Operating Speed (mph) - The greatest of anticipated operating speed, measured 85th percentile speed or posted speed. 4. Percentage of left turns in V _A		●	○
		●	○

Left-turn lane is not needed for left turn volume less than 10 vph. However, criteria other than volume, such as crash experience, may be used to justify a left-turn lane.

The appropriate trend line is identified on the basis of the percentage of left-turns in the advancing volume, rounded up to the nearest percentage trend line. If the advancing and opposing volume combination intersects above or to the right of this trend line, a left-turn lane is appropriate.

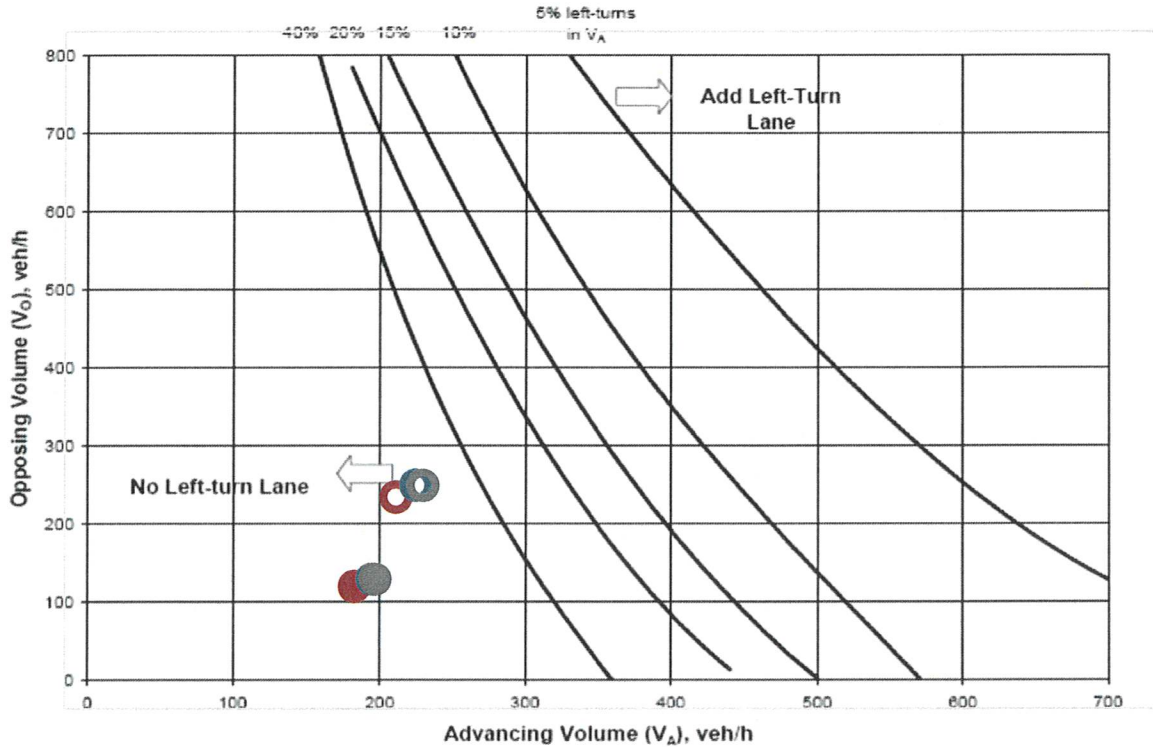
Source: NCHRP Report 279 and 457

Left-Turn Lane Analysis - Two-Lane Roadway ≤ 40 mph

Major Road: Midway Road
 Minor Road: Homedale Road
 Direction: Northbound

Left Turns AM(PM)
 Existing 9(30) %
 Background 9(30) %
 Plus Project 9(30) %

Figure 1 – Left-Turn Lane Guidelines for Two-Lane Roads less than or equal to 40 mph



Result

Not Warranted

2021 Existing

AM

PM



2023 Background



2023 Plus Project



Needed Data:

1. Opposing Volume (veh/hr) - VO - The opposing volume is to include only the right-turn and through movements in the opposite direction of the left turning vehicle.
2. Advancing Volume (veh/hr) - VA - The advancing volume is to include the right-turn, left-turn and through movements in the same direction as the left turning vehicle.
3. Operating Speed (mph) - The greatest of anticipated operating speed, measured 85th percentile speed or posted speed.
4. Percentage of left turns in VA

Left-turn lane is not needed for left turn volume less than 10 vph. However, criteria other than volume, such as crash experience, may be used to justify a left-turn lane.

The appropriate trend line is identified on the basis of the percentage of left-turns in the advancing volume, rounded up to the nearest percentage trend line. If the advancing and opposing volume combination intersects above or to the right of this trend line, a left-turn lane is appropriate.

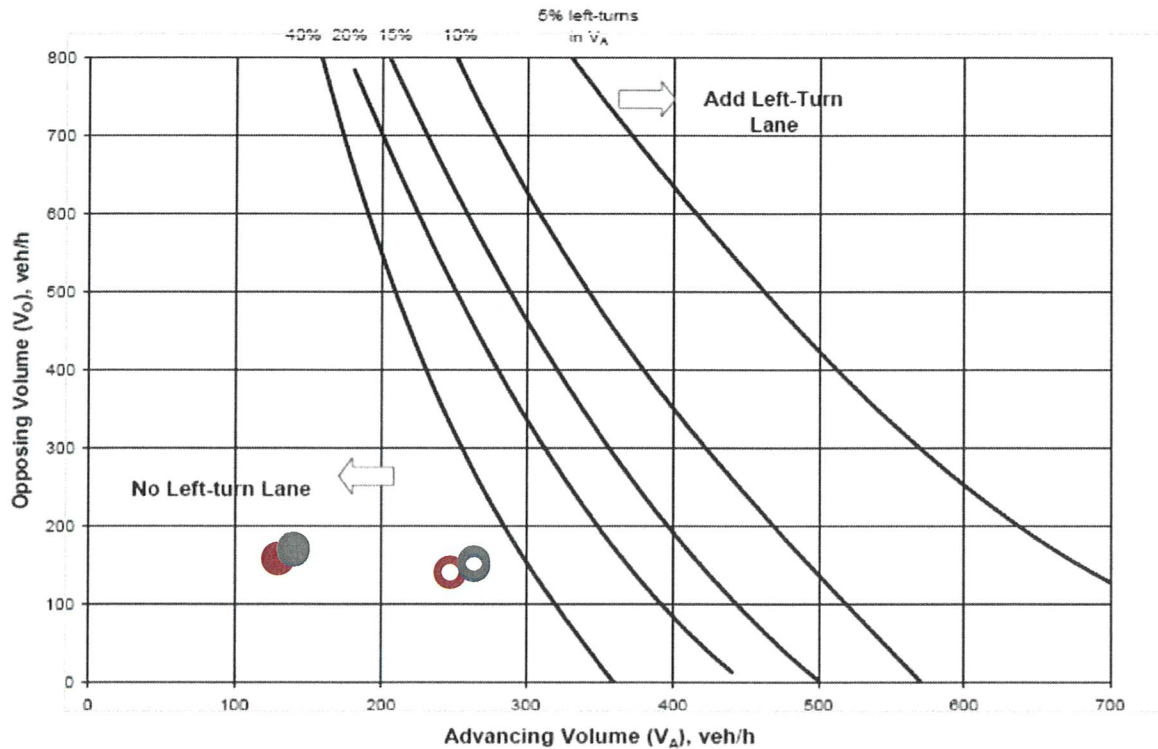
Source: NCHRP Report 279 and 457

Left-Turn Lane Analysis - Two-Lane Roadway ≤ 40 mph

Major Road: Midway Road
 Minor Road: Homedale Road
 Direction: Southbound

Left Turns AM(PM)
 Existing 3(2) %
 Background 3(2) %
 Plus Project 3(2) %

Figure 1 – Left-Turn Lane Guidelines for Two-Lane Roads less than or equal to 40 mph



Result

Not Warranted

2021 Existing

AM

PM



2023 Background



2023 Plus Project



Needed Data:

1. Opposing Volume (veh/hr) - V_O - The opposing volume is to include only the right-turn and through movements in the opposite direction of the left turning vehicle.
2. Advancing Volume (veh/hr) - V_A - The advancing volume is to include the right-turn, left-turn and through movements in the same direction as the left turning vehicle.
3. Operating Speed (mph) - The greatest of anticipated operating speed, measured 85th percentile speed or posted speed.
4. Percentage of left turns in V_A

Left-turn lane is not needed for left turn volume less than 10 vph. However, criteria other than volume, such as crash experience, may be used to justify a left-turn lane.

The appropriate trend line is identified on the basis of the percentage of left-turns in the advancing volume, rounded up to the nearest percentage trend line. If the advancing and opposing volume combination intersects above or to the right of this trend line, a left-turn lane is appropriate.

Source: NCHRP Report 279 and 457

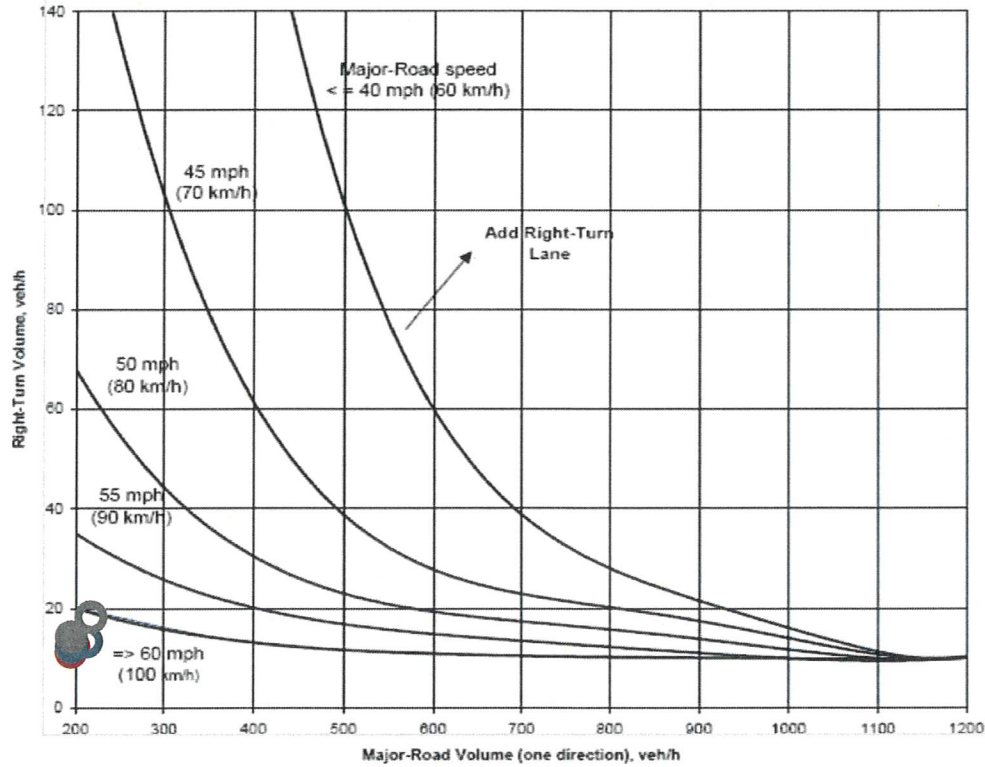
APPENDIX G
RIGHT-TURN LANE WARRANT FIGURES

Right-Turn Lane Analysis - Two-Lane Roadway

Major Road: Midway Road
 Minor Road: Homedale Road
 Direction: Northbound

Speed: 35 mph

Figure 6 – Right-Turn Lane Guidelines for Two-Lane Roadways



Result

Not Warranted

2021 Existing

AM

PM



2023 Background



2023 Plus Project



Needed Data:

1. Advancing Volume (veh/hr) - The advancing volume is to include the right-turn, left-turn and through movements in the same direction as the right-turning vehicle.
2. Right-Turning Volume (veh/hr) - The right-turning volume is the number of advancing vehicles turning right.
3. Operating Speed (mph) - The greatest of anticipated operating speed, measured 85th percentile speed or posted speed.

Note: Right-turn lane is not needed for right-turn volume less than 10 vph. However, criteria other than volume, e.g. crash experience, may be used to justify a right-turn lane.

If the combination of major road approach volume and right-turn volume intersects above or to the right of the speed trend line corresponding to the major road operating speed, then a right-turn lane is appropriate.

Source: NCHRP Report 279 and 457

Right-Turn Lane Analysis - Two-Lane Roadway

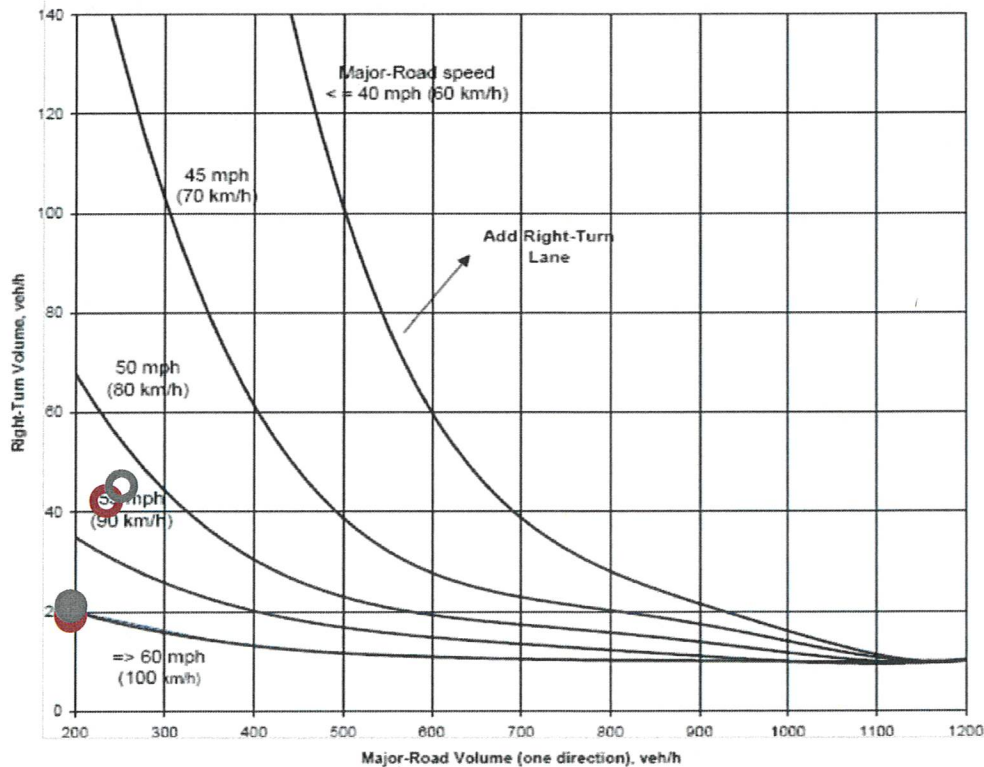
Major Road: Midway Road

Speed: 35 mph

Minor Road: Homedale Road

Direction: Southbound

Figure 6 – Right-Turn Lane Guidelines for Two-Lane Roadways



Result

Not Warranted

2021 Existing

AM

PM



2023 Background



2023 Plus Project



Needed Data:

1. Advancing Volume (veh/hr) - The advancing volume is to include the right-turn, left-turn and through movements in the same direction as the right-turning vehicle.
2. Right-Turning Volume (veh/hr) - The right-turning volume is the number of advancing vehicles turning right.
3. Operating Speed (mph) - The greatest of anticipated operating speed, measured 85th percentile speed or posted speed.

Note: Right-turn lane is not needed for right-turn volume less than 10 vph. However, criteria other than volume, e.g. crash experience, may be used to justify a right-turn lane.

If the combination of major road approach volume and right-turn volume intersects above or to the right of the speed trend line corresponding to the major road operating speed, then a right-turn lane is appropriate.

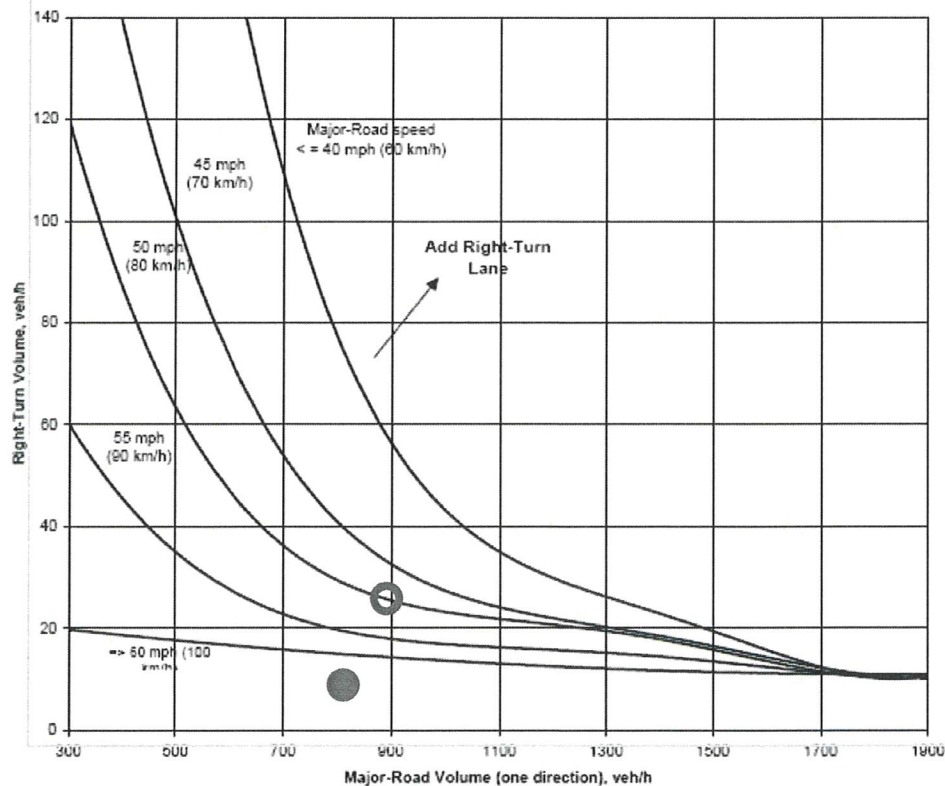
Source: NCHRP Report 279 and 457

ACHD Right-Turn Lane Analysis - Four-Lane Roadway

Major Road: Cleveland Boulevard
 Minor Road: Driveway A
 Direction: Southbound

Speed: 45 mph

Figure 7 – Right-Turn Lane Guidelines for Four-Lane Roadways



Not Warranted

Needed Data:

1. Advancing Volume (veh/hr) - The advancing volume is to include the right-turn, left-turn and through movements in the same direction as the right-turning vehicle.
2. Right-Turning Volume (veh/hr) - The right-turning volume is the number of advancing vehicles turning right.
3. Operating Speed (mph) - The greatest of anticipated operating speed, measured 85th percentile speed or posted speed.

Note: Right-turn lane is not needed for right-turn volume less than 10 vph. However, criteria other than volume, e.g. crash experience, may be used to justify a right-turn lane.

If the combination of major road approach volume and right-turn volume intersects above or to the right of the speed trend line corresponding to the major road operating speed, then a right-turn lane is appropriate.

Source: NCHRP Report 279 and 457

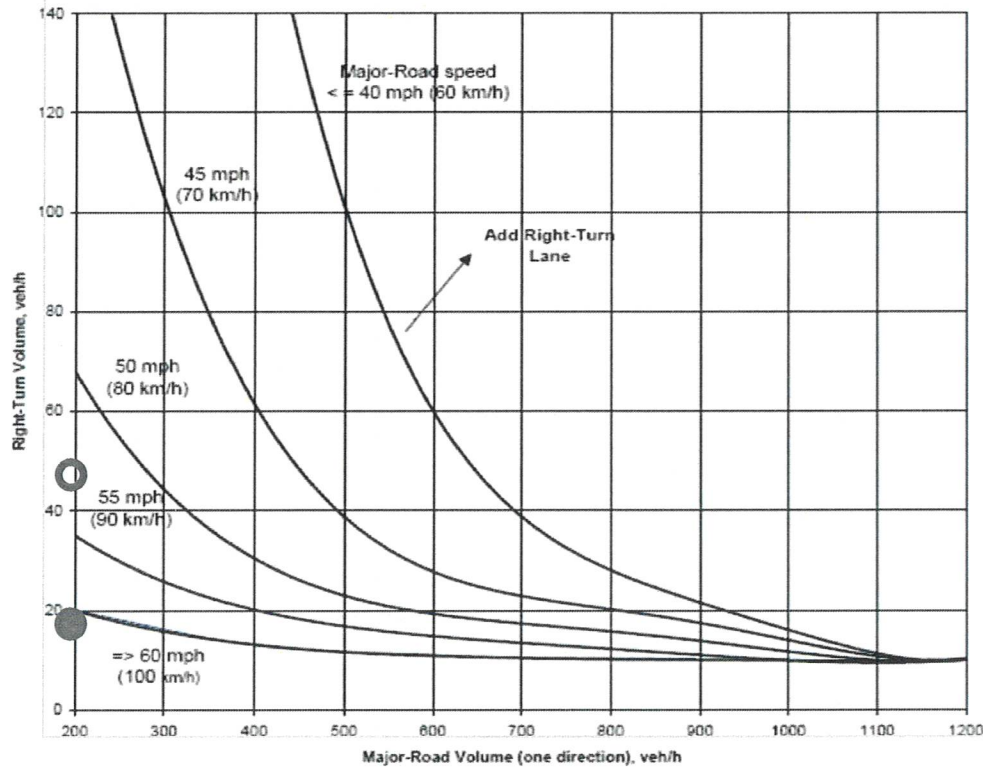
	AM	PM
2021 Existing	●	○
2023 Background	●	○
2023 Plus Project	●	○
	●	○
	●	○

Right-Turn Lane Analysis - Two-Lane Roadway

Major Road: Homedale Road
 Minor Road: Access Drive B
 Direction: Westbound

Speed: 35 mph

Figure 6 – Right-Turn Lane Guidelines for Two-Lane Roadways



Result

Not Warranted

2021 Existing

AM

PM



2023 Background



2023 Plus Project



Needed Data:

1. Advancing Volume (veh/hr) - The advancing volume is to include the right-turn, left-turn and through movements in the same direction as the right-turning vehicle.

2. Right-Turning Volume (veh/hr) - The right-turning volume is the number of advancing vehicles turning right.

3. Operating Speed (mph) - The greatest of anticipated operating speed, measured 85th percentile speed or posted speed.

Note: Right-turn lane is not needed for right-turn volume less than 10 vph. However, criteria other than volume, e.g. crash experience, may be used to justify a right-turn lane.

If the combination of major road approach volume and right-turn volume intersects above or to the right of the speed trend line corresponding to the major road operating speed, then a right-turn lane is appropriate.

Source: NCHRP Report 279 and 457

Property Owner Acknowledgement

I, James D. Palermo, the Executive Vice President of Canyon Village Multifamily, LLC, a Florida limited liability company, the record owner for real property addressed as 6904 Cleveland Boulevard, Caldwell, ID 83607, am aware of, in agreement with, and give my permission to Brandon McDougald to submit the accompanying application(s) pertaining to that property.

1. The record owner agrees 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.
2. The record owner hereby grants permission to City of Caldwell staff to enter the subject property for the purpose of site inspections(s) related to processing said applications(s).

Dated this 13th day of September, 2021

Canyon Village Multifamily, LLC,
a Florida limited liability company

By: 

James D. Palermo

Its: Executive Vice President

CERTIFICATE OF VERIFICATION

STATE OF FLORIDA)
) ss.
County of Hillsborough)

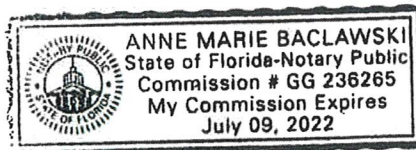
I, Anne Marie Baclawski, a Notary Public, do hereby certify that on this 13th day of September, 2021, personally appeared before me James D. Palermo, the Executive Vice President of Canyon Village Multifamily, LLC, a Florida limited liability company, known or identified to me to be the person whose name is subscribed to the foregoing instrument, who, being by me first duly sworn, declared that he signed the foregoing document, and that the statements therein contained are true.

Anne Marie Baclawski

NOTARY PUBLIC FOR FLORIDA

Residing at Tampa, Florida

My Commissions Expires: July 9, 2022



169

Cynthia Brogdon

From: Cynthia Brogdon
Sent: Thursday, April 29, 2021 3:49 PM
To: 'jbreckon@breckonld.com'
Subject: Round Table Minutes 4/22/2021
Attachments: 6804 Cleveland Blvd(Canyon Village Apartments) R3089901100 4-22-2021.pdf

Jon,

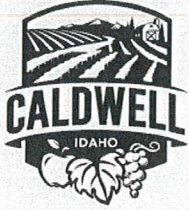
Enclosed you will find the minutes from the Roundtable meeting on 4/22/2021.

Let me know if you have any questions.

Thanks,



Planning and Zoning Department
Cynthia Brogdon
Administrative Assistant
cbrogdon@cityofcaldwell.org
Office: (208) 455-4664



CITY OF
Caldwell, Idaho

Round Table Meeting Form

Date: 4/22/2021 10:00am

Project Name: Canyon Village Apartments

The intent of the roundtable meeting is to provide information in regards to city code, policies, and procedures. It does not constitute approvals of a site plan, access points, street sections, variances or waivers of policy, etc. Additional requirements may become apparent upon review of an application.

Site Address: 6804 Cleveland Blvd and 5715 E. Homedale Road, Caldwell, ID Parcel #: R3089901100, R3089900000, R3089901200, R3090000000

☐ Applicant ☐ Architect ☐ Engineer ☐ Other:

Name: Jon Breckon

Email Address:

Phone #:

☐ Applicant ☐ Architect ☐ Engineer ☐ Other:

Name: Jeff Holt

Email Address:

Phone #:

☐ Applicant ☐ Architect ☐ Engineer ☐ Other:

Name: Mary Wall

Email Address:

Phone #:

☐ Applicant ☐ Architect ☐ Engineer ☐ Other:

Name: Joe Swain

Email Address:

Phone #:

City Staff Present

☐ Deb R. ☐ Robb M. ☐ Chris B. ☐ Alan P. ☐ Lisa R. ☐ Jerome M. ☐ Steve / Steven

Proposal Description

332 unit apartment complex and 4 commercial parcels. 3 Stories, 1 potential 4 story.

A10

PLANNING & ZONING DEPARTMENT

Project Name: Canyon Village Apartments

☐ **NO REQUIREMENTS**Type of Application (check all that apply)

☐ Annexation ☐ Rezone ☒ Special-Use Permit ☐ Planned Unit Dev. ☐ Preliminary Plat
☐ Simple Lot Split ☐ Variance ☐ Ordinance Amend. ☐ ☐

Zoning:

Current: Service Commercial

Proposed:

Comp Plan:

Current:

Proposed: Commercial & Service

City Limits:☒ Yes☐ NoOverlay, Districts & Corridors:☐ APO-1 ☐ Historic District☐ APO-2 ☐ Indian Creek CorridorGeneral Site Information

of existing buildings: Total sq. ft.: Buildings to be torn down? ☐ Yes ☐ No
New construction: ☐ Yes ☐ No Total new sq. ft.: Addition: ☐ Yes ☐ No Total addition sq. ft.:

ParkingParking required: ☒ Yes ☐ No Minimum # spaces: Maximum # spaces:Parking Lot Landscaping Required? ☒ Yes ☐ No Bicycle Parking Required? ☒ Yes ☐ No

See City Zoning Code 10-02-05 and 10-07-09 for additional parking/parking lot requirements.

Street Landscape Buffers☐ Not Required

Street #1: Cleveland(Principal Arterial Width: 25ft.

Street #3:

Width:

Street #2: Homedale(Minor Arterial) Width: 20ft.

Street #4:

Width:

Buffers between differing land uses: ☒ Yes ☐ No

Width: 15ft.

Landscaping required: ☒ Yes ☐ NoPathways required? ☒ Yes ☐ No☐ Major Pathway☐ Minor PathwaySignageNew signage? ☐ Yes ☐ No Sign permit required? ☐ Yes ☐ No See City Zoning Code 10-02-06 and 10-07-04(15).Minimum Setbacks

Front: Rear: Internal Side: Street Side:

Minimum Lot Dimensions:

Width: Depth: Frontage:

Additional Information

Gated communities will be discussed within staff and Jerome will get back on that item. The need for a SUP is due to this parcel being designated as a commercial property and council is concerned that a lot of the commercial properties were being eaten up by multi-family development, and we're losing out commercial uses. So as part of you SPU permit, you are going to have to convince the hearing examiner and plan zoning commission, as well as the city council that this is important and that you're not going to be interchange the commercial uses because you have a compatible commercial use right next door of this project. Justify why this should be apartments. We require a design review. We have design review guidelines. As well as a SUP permit we want to see a detailed site plan. You have to meet the R-3 zoning classifications in regards to units/acre. These will be under one property owner. Besides the clubhouse and pool, they will try to put in a dog park, maybe outdoor fitness equipment. They will install bike racks through out the community per/code. If they put parking shelters in then utilities must be outside of those parking shelters. Cannot build over utilities. Exterior lighting directed into the site. Addressing must be prominent to be seen. USPS Kiosk central location near the clubhouse for the entire site. Internal roads will have to be named for emergency services purposes. Angie Hopf can walk you through the road naming process. The Moses drain that runs along the west side is slated for a minor pathway. It is part of the 2024 Bike and pedestrian master plan along Moses drain will have a minor pathway that this project will need to install that pathway. Neighborhood meeting must be held. Neighbors within 300'. Notices must be sent 10 days before you conduct the meeting. Drainage areas within the project do not qualify as "open space". They will relocate their garbage dumpsters to different locations as needed. Cleveland Blvd is a principle artery, so landscape buffer is 25' and Homdale is a minor so the landscape buffer is 20'. And those buffers do not qualify toward the 10% qualifying space. This parcel has 5 lots on it and will need to be sub divided. You will need to apply for the division within the PZ zoning process and it would need to be approved by the City Council.

AID

BUILDING DEPARTMENT☐ **NO REQUIREMENTS**

Project Name: Canyon Village Apartments

Applications Required

- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> New Construction/Addition | <input type="checkbox"/> Change of Use/Occupancy | <input checked="" type="checkbox"/> Electrical Permit |
| <input checked="" type="checkbox"/> Plumbing Permit | <input checked="" type="checkbox"/> Mechanical Permit | <input checked="" type="checkbox"/> Sign Permit |
| <input type="checkbox"/> Demolition Permit | <input checked="" type="checkbox"/> Fence Permit TBD | <input checked="" type="checkbox"/> Other: TBD |

ADA Requirements☐ N/A

- | | | |
|---|---|--|
| <input checked="" type="checkbox"/> Entrances | <input checked="" type="checkbox"/> Ramps | <input checked="" type="checkbox"/> Bathrooms |
| <input checked="" type="checkbox"/> Doorways | <input checked="" type="checkbox"/> Door Hardware | <input checked="" type="checkbox"/> Accessible Route to Public Way |

Building Separation Requirements: ☒ Yes ☐ No Plans prepared by State of Idaho licensed architect: ☒ Yes ☐ No

Current Building Occupancy Classification: Vacant

Proposed Building Occupancy Classification: R-2/A-3

Will the proposed use require: ☐ Underground grease interceptor ☐ Under-the-sink grease trap ☐ N/APlumbing Information☐ N/A

Water Pipe Sizing: Yes

Drain Sizing: Yes

Treated Building Drainage: ☐ Yes ☐ No

When these items are field reviewed, typically the job is already installed and corrections may involve stopping the project from cover and possible removal of pipe and/or fixtures and days in waiting to hear back from the design professional.

Additional Information

3-3 Story Building and 1 potentially being a 4-story elevator bldg. Fire Separation distance between bldgs. Where you won't need to build exterior fire walls. Most of this is R-2 occupancy. 6 bldgs with garage, clubhouse and pool will be A-3 Occupant groups. Every Bldg will have to be accessible. On your overall site plan note your location of your A units. The Bldg with the elevator. Every Unit in there including the second and third floor will be required to be a B unit minimum. The other bldgs. Second and third floors are not required to be accessible by singular exception in chapter 11 in the building code. But the ground floor is. Your parking should reflect where the location of your units are. "A unit" means a fully accessible residential unit. "B unit" alterable to a B unit upon need, it has to be prepared to become an accessible unit. While an A unit is required to meet all of the requirements of the ICCA117 2009 standards in chapter 11 of the building code. In the B units you do not need to put the grab bars in, you just have to have the backing in place for them. A "B" unit can have a parallel approach to the bathroom. This is 30" X 48". So where it's parallel it would be 48", so the center of the lavatory has to be a minimum of 2' from the side wall. The site plan is required as part of the permit application. A phase approach is advisable. I will not issue a temporary on a residential bldg. But can issue a C of O on each individual bldg. as it's completed. Will give permission for furniture in the club house prior to C of O, but with communication and conjunction with the fire people. The pool will require a barrier around it. A demolition permit will be required for the building that currently exists on the proposed property. We allow the fence for the pool to integrate with the clubhouse as long as the access controlled doors from the clubhouse.

TBD: Fence Permit, Other, Underground grease interceptor, treated building drainage.

Building Permit Process

1. Complete the appropriate Building Department application.
2. Submit completed application to the Building Department with two (2) COMPLETE SETS OF PLANS.
3. Two (2) complete sets of plans shall be submitted along with the building permit application. The two sets of plans shall have the wet stamp of the architects and/or engineers that prepared the plans. A complete package shall include but not be limited to architectural, structural, plumbing, mechanical and electrical plans. Please include additional documentation such as structural calculations, specification books and energy compliance forms to help speed up the plan review process. The complete package shall also include all storm water calculations and detailed civil plans as prepared and stamped by a civil engineer. The complete package shall also include a landscaping plan, along with the landscaping plan application, that has been stamped by a licensed landscaped architect.
4. Application is processed through the Building Department and distributed to Planning and Zoning, Engineering and Fire for review and approval. The Building Department does not review the application until P&Z, Engineering and Fire have reviewed and approved the application. PLEASE NOTE: Most of the time revisions to the plans are necessary before approval is received from any department.
5. Once the Building Department receives the approved application from P&Z, Engineering and Fire, it performs its review and issues a plan review letter that typically asks for revisions before a permit may be issued.
6. Once the revisions have been re-submitted to the Building Department, as a complete packaged set in all 4 sets, and the revisions have been reviewed and approved, the Building Department will issue a permit.
7. Applicant will receive a phone call letting him/her know the permit is ready to pick up, along with the amount of the fees, which are payable at the time of picking up the permit.

Certificate of Occupancy (C of O) Process

1. Inspections must be requested by the applicant. The applicant is responsible for calling to schedule inspections.
2. No temporary or permanent C of O or certificate of completion shall be issued until all inspections have been requested, conducted and passed.
3. If an inspection is not passed the first time, the applicant is responsible for completing the items necessary to pass a re-inspection and is also responsible for calling to schedule a re-inspection.
4. On shell buildings, a C of O (either temporary or permanent) will not be issued for any tenant improvement until the certificate of completion has been issued for the shell.
5. **THE BUILDING MAY NOT BE OCCUPIED IN ANY WAY, FASHION OR FORM UNTIL A TEMPORARY OR PERMANENT C OF O HAS BEEN ISSUED. THIS INCLUDES OCCUPATION FOR ANY STAFF TRAININGS AS WELL AS MOVING IN ANY EQUIPMENT, FURNITURE, ETC. IT INCLUDES ANYONE OCCUPYING THE BUILDING EXCEPT CONSTRUCTION PERSONNEL.**
6. A permanent C of O is not issued until every single item required from all 4 departments has been completed, inspected and approved.

Commercial Permit Guide Packet Provided to Applicant(s): ☐ Yes ☐ No

AID

Project Name: Canyon Village Apartments

☐ NO REQUIREMENTS

AID

ENGINEERING DEPARTMENT

Project Name: Canyon Village Apartments

☐ NO REQUIREMENTSRight-of-Way Dedications☐ N/A

Street #1: Cleveland Blvd.	ROW required? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Feet from centerline: Turn Lane?
Street #2: Homedale	ROW required? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Feet from centerline: 40
Street #3:	ROW required? <input type="checkbox"/> Yes <input type="checkbox"/> No	Feet from centerline:
Street #4:	ROW required? <input type="checkbox"/> Yes <input type="checkbox"/> No	Feet from centerline:

No encroachments allowed within the public right-of-way.

Approaches

of existing: Location(s):

of proposed: Location(s):

Street Improvements:☐ N/A

Curb/gutter installation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Sidewalk installation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Street asphalt widening: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Alley improvements: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Storm water requirements:☒ Yes, per City Manual ☐ Not RequiredIrrigation requirements:☒ Yes, per City Standards ☐ Not RequiredExisting sewer/water facilities running through property: ☐ Yes ☐ No Encroachments in easements: ☐ Yes ☐ No

Closest sewer:

Size of sewer line:

Sewer extension required: ☒ Yes ☐ No

Size of required sewer line:

Closest water:

Size of water line:

Water extension required: ☒ Yes ☐ No

Size of required water line:

Traffic Impact Study: ☒ Yes ☐ NoUsage Fees: **Yes**Flood Plain: ☐ Yes ☒ NoFloodway: ☐ Yes ☒ NoAdditional Information

Possible Turn lane BWD.

Site plan looks like your going to remove an access point. Cleveland is now owned by the City of Caldwell and they have jurisdiction of that road on access. A Traffic impact study will be required for this site. It would be good if you included the commercial properties on the corner in that impact study or else you will need to do another impact study when you develop the commercial property on the corner. Doing 1 impact study for both will let us see what the traffic loads are going to be. With the amount of units on your site it looks like you may potentially be required to put in a couple of right hand turn lanes off the Blvd. An impact study will outline that what is required. Engineer will research to see if and when a traffic impact study was done for this project. Any traffic impact study would need to come from a City of Caldwell approved consultant list and the developer is obligated to choose a consultant from this list. Once the consultant has been selected the city will contract with the engineer or the consultant to do the study and the developer is basically reimbursing the city for that cost. Private lanes through the site, so water and sewer will need to be routed through the site. All water and sewer need to be in easements dedicated to the city. All water and sewer need to be built to city standards. Once they are inspected and approved, the city receives dedication of those water and sewer main lines and easements. And the city operates and maintains those main lines. Service lines are still private, and those are not in easements. Each bldg is required to have a separate water and sewer line. No 2 buildings may share a service line. 1 meter per building. Easements for both water and sewer together are 30' wide. No structures or carports may encroach into the easement. Site must contain all storm or run off. The city has a storm run off manual(found on the city web page under the engineering dept) that calculates the volume of water run off that needs to be maintained and how and if it can be discharged. Irrigation is also required to be constructed as pressure irrigation. And must be in accordance with Caldwell Irrigation District standards.(found on the city web page under the engineering dept) . Fire lines, hydrants, fire suppression will come off of your potable water line. Irrigation is a separate system. Even though interior roads are private they must be built to pavement design standards. Can be based off a Geotech report. You will need to have some kind of sidewalks and continuity through the site. Your trash enclosure probably cannot be at that location as we don't want to block or queue traffic back onto the road. Mitigation is determined on Trip traffic during peak traffic hours. ROW dedication is required. If a right hand turn lane is needed then additional ROW would be required which is typically 12'. Homedale rd. has a 40' half street ROW. Curb, gutter and sidewalk would be required on Homedale rd as part of the development. If you submit a civil set which shows the entire internal road network and that gets approved. You will be obligated to construct that entire set. You can't come back later and say that you only want to build half of it. You will have to do the whole set unless you want to go back and do a new plan review to split it out. The frontage road improvements are required when the on-site site work is done. That would be part of the same submittal. The only way that it would be deferred is if you came in and submitted a set of plans that only included maybe the north half of the site as a phase I. Then we wouldn't require the Homedale improvements at that time. As soon as you do any work on the south side of the site the Homedale improvements are required at that time. Internal roads are to be minimum 26' curb face to curb face, and outside of potential parking. End of parking stall to curb face. What is the parking stall length and width is to be 9' X 20'. There is no code designation for compact parking at this time.

Addressing related to any new development and/or re-development of a site is subject to change in accordance with City Code.
Addressing should be verified with Mapping Dept. prior to incurring any expense related to marketing materials, letterhead, etc.

AID



Hamilton, Michaelson & Hilty, LLP

Attorneys at Law

CARL D. HAMILTON*
TERRY MICHAELSON*
*Retired

MARK HILTY
AARON L. SEABLE
MAREN C. ERICSON
DOUGLAS L. WATERMAN

Non-Binding Memo of Opinion

To whom it may concern, this letter is a non-binding memo of opinion concerning the ability to pursue a preliminary plat modification for parcels nos. R3089901100, R3089900000, and R3089901200, within the limits of the City of Caldwell, Canyon County, Idaho. The foregoing parcels are zoned C-3 (Service Commercial).

Attached hereto as Exhibit A is a preliminary plat, which in my understanding was previously approved by the City of Caldwell. Said plat has certain lots designated as commercial, certain lots designated as multifamily residential, and certain lots designated as "Future Development To Be Determined."

There is presently a moratorium in place in the City of Caldwell prohibiting certain development applications within the City. Excepted from that moratorium are applications for which related applications or licenses have already been requested from, filed with, or issued by the City.

In the C-3 zone, multifamily residential construction requires a special use permit, per Caldwell City Code § 10-02-02, which must be sought pursuant to Caldwell City Code §10-03-04.

It is presently my opinion that an application could be filed to amend the previously approved preliminary plat. Said application would be related to the prior submission of the previously approved preliminary plat. If so related, said application for amendment should not fall within the current development moratorium.

Following any approval of any amended preliminary plat, which I cannot guarantee in any way, a special use permit must be obtained prior to the construction of any multi-family development. It is presently my opinion that the special use permit application is also likely exempted from the application of the development moratorium by virtue of the prior approval of the preliminary plat for the Property. The special use permit procedure itself also is subject to review by the planning and zoning commission, and I can make no guarantee about the outcome of such an application.

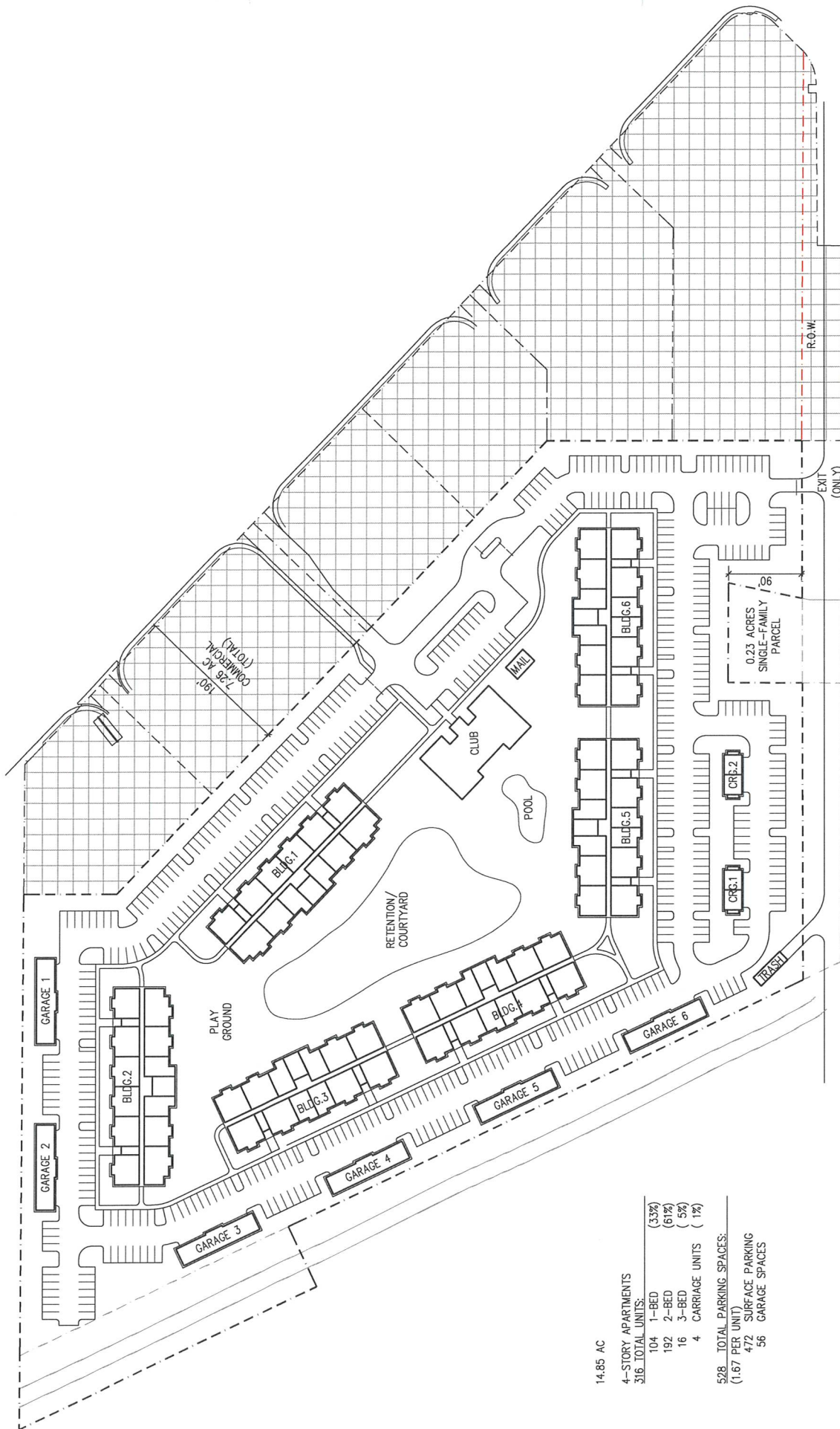
This letter is not intended to induce any particular action by any individual or entity, nor shall it be relied upon for any particular purpose, nor is it a guarantee or warranty concerning any fact or law.

HAMILTON, MICHAELSON & HILTY, LLP


DOUGLAS WATERMAN

06/30/2021

11



14.85 AC

4-STORY APARTMENTS

316 TOTAL UNITS:

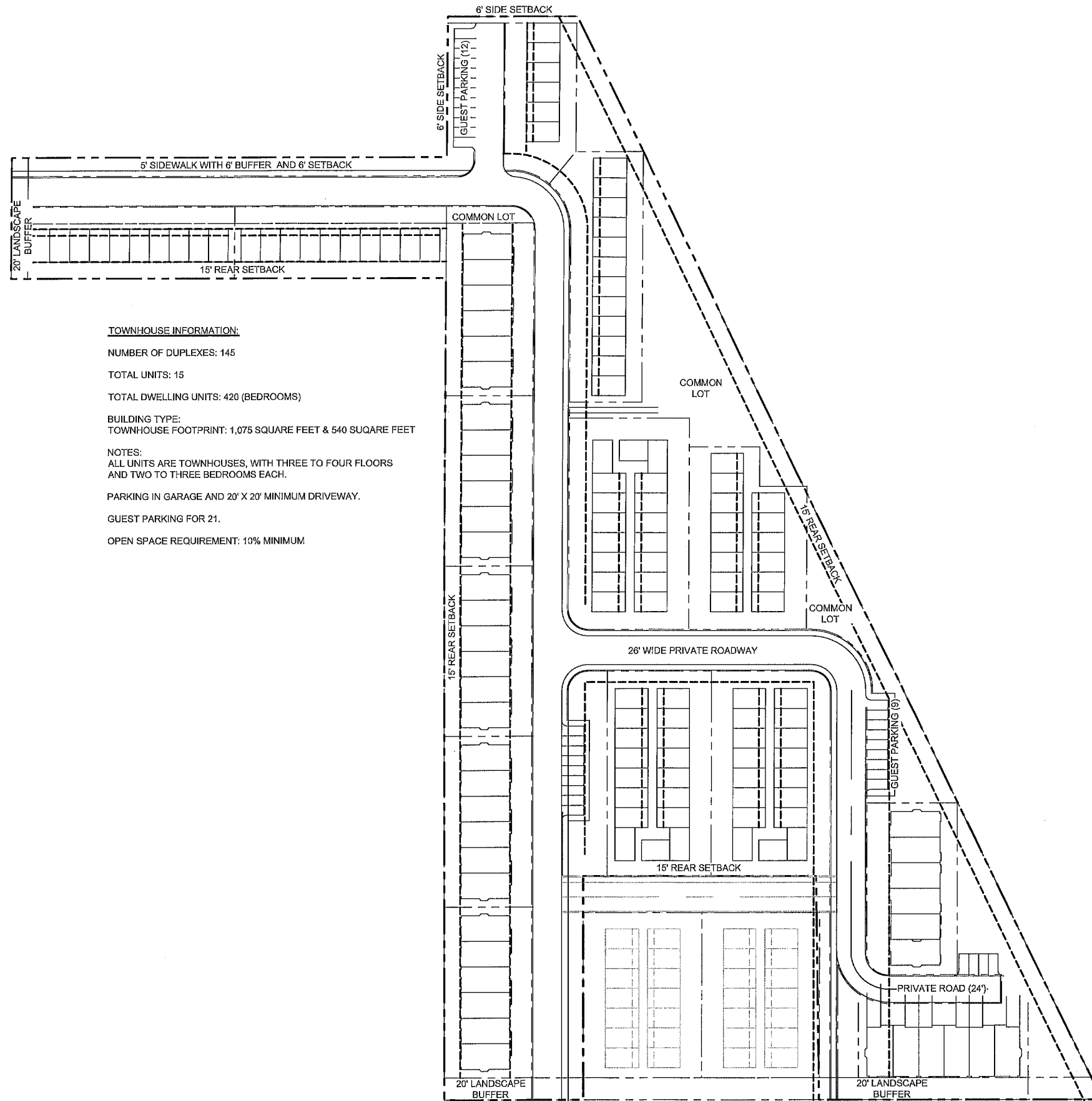
104	1-BED	(33%)
192	2-BED	(61%)
16	3-BED	(5%)
4	CARRIAGE UNITS	(1%)

528 TOTAL PARKING SPACES:

(1:67 PER UNIT)

472 SURFACE PARKING

56 GARAGE SPACES



TOWNHOUSE INFORMATION:

NUMBER OF DUPLEXES: 145

TOTAL UNITS: 15

TOTAL DWELLING UNITS: 420 (BEDROOMS)

BUILDING TYPE:

TOWNHOUSE FOOTPRINT: 1,075 SQUARE FEET & 540 SQUARE FEET

NOTES:

ALL UNITS ARE TOWNHOUSES, WITH THREE TO FOUR FLOORS
AND TWO TO THREE BEDROOMS EACH.

PARKING IN GARAGE AND 20' X 20' MINIMUM DRIVEWAY.

GUEST PARKING FOR 21.

OPEN SPACE REQUIREMENT: 10% MINIMUM



CALDWELL TOWNHOUSES

50 0 50 100 150
SCALE: 1" = 50'-0"

Design of the
Project.
Traffic Study

Map
Elevations
Site Plan

14.85 AC

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