Hearing Examiner Kennewick Hearing Examiner Agenda
September 8, 2025 at 6:00 PM
City Hall Council Chambers – 210 W. 6th Ave and Virtual - Link

If you are unable to attend in person and wish to comment, please visit our Hearing Examiner webpage.

The public can also submit comments by either filling out an online form at https://www.go2kennewick.com/FormCenter/Planning-Dept-Forms-9/Hearing-Examiner-Public-Hearing-Comments-137 or by mail to Attn: Melinda Didier, Hearing Examiner Recorder, PO Box 6108, Kennewick, WA 99336. **Comments and Zoom registrations must be received no later than 4:00 p.m. the last business day before the hearing.**

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1. **CALL TO ORDER**
2. **PROCEDURAL INFORMATION**
3. **PUBLIC HEARING**
   a. A. Preliminary Plat/Planned Residential Development (SUB-2025-0004), “Canyon View Estates” proposing 53 single-family lots, 3 open space tracts, and 2 tracts for future multi-family development on 29.5 acres generally located SE of US-HWY 395 and Ridgeline Drive interchange (Parcel No. 1-2189-100-0002-000). The site is currently zoned Residential, Low Density (RL). The applicant is Robert McLeod, Knutzen Engineering, 5401 Ridgeline Drive, Suite 160, Kennewick, WA 99338. Property owner is Chad Bagley, Canyon View Estates, LLC, 1418 E. Saint Helens Street, Pasco, WA 99301.
4. **CONCLUSION**

Procedure for Participation

- Please register and sign in to Zoom if you wish to receive a copy of the decision when it is issued and if you plan to give testimony virtually.
- When recognized by the Examiner, state your name, address and whether you are representing only yourself or others.
- All remarks, comments, and questions should be addressed to the Hearing Examiner and not to the audience or parties. You may offer written comments or other items (such as photographs) to the Hearing Examiner as an exhibit for the permanent record.
    - Please provide at least three copies of each item submitted: one copy for the Hearing Examiner, one for the Official Record, and one for Staff).
    - During an Appeal Hearing, if the appellant and the applicant are different parties, then a fourth copy of all documentation is requested.

COMMUNITY PLANNING DEPARTMENT

STAFF REPORT AND RECOMMENDATION TO THE HEARING EXAMINER

FILE NO: SUB-2025-0004

Staff Report Date:	August 25, 2025
Public Hearing Date and Location:	September 8, 2025
Report Prepared By:	Steve Donovan, Planning Manager
Report Reviewed By:	Matt Halitsky, Senior Planner
Summary Recommendation:	The City of Kennewick RECOMMENDS that Preliminary Plat SUB-2025-0004 be APPROVED with conditions.
Summary of Proposal:	A Preliminary Plat/Planned Residential Development consisting of 53 single-family lots, 3 open space tracts and two tracts for future multi-family development on 29.5 acres.
Proposal Location:	The proposal is generally located SE of the US 395 and Ridgeline Drive Interchange. Parcel No. 1-2189-100-0002-000.
Legal Description:	See Exhibit 2
Property Owner:	Canyon View Estates, LLC c/o Chad Bagley 1418 E Saint Helens Street Pasco, WA 99301
Applicant:	Knutzen Engineering Attn: Robert McLeod 5401 Ridgeline Drive, Suite 160 Kennewick, WA 99338
Engineer:	Same as Above

Approval Criteria:

1. Comprehensive Plan – Land Use
2. KMC Title 18 – Zoning
3. KMC Title 17 – Subdivisions
4. KMC Section 5.56 – Public Works Construction Standards
5. Washington State Environmental Policy Act

Preliminary Plat Key Application Processing Dates:

Pre-Application/Feasibility Meeting	N/A
Application Submittal	June 9, 2025

Determination of Completeness Issued	June 16, 2025
Notice of Application	June 17, 2025
Property Posting Sign	June 17, 2025
City Department Review Meeting	N/A
SEPA Threshold Determination Issued	January 9, 2025
SEPA Appeal Period Ends	January 23, 2025
Date of Published Notice of Public Hearing	August 24, 2025
Date of Posting Hearing Notice On-Site	August 22, 2025
Date of Mailed Notice of Public Hearing	August 22, 2025

Exhibits:

1. Staff Report
2. Legal Description
3. Preliminary Plat Drawing
4. Traffic Impact Analysis
5. SEPA Determination
6. Planned Residential Development (PRD-2024-001) Decision
7. Notice of Public Hearing Affidavit and Mailing List
8. Public Works Comments
9. Traffic Engineering Division Comments
10. Kennewick Irrigation District Comments
11. Benton Clean Air Agency Comments
12. Benton Public Utility District Comments
13. Washington State Department of Transportation Comments
14. Bonneville Power Administration Comments
15. Williams Comments
16. Kennewick School District Comments
17. Access and Utility Easement Agreement
18. Proposed Development Phasing Plan

Staff Analysis of Proposal & Discussion:

Preliminary Plat:

The proposed Preliminary Plat, SUB-2025-0004, is a request to subdivide 29.51 acres into 53 lots and 5 tracts. The applicant is proposing to develop the subdivision in two phases.

The Hearing Examiner approved Planned Residential Development PRD-2024-0001, on March 18, 2025. The proposed preliminary plat is subject to the conditions of PRD-2024-0001.

A Preliminary Plat is the first step in subdivision process for subdivisions with more than nine (9) lots and is an approval for overall lot layout and compliance with land use regulations. A Final Plat is required for preliminary plats and is the last phase in the subdivision process and must be recorded prior to the creation of individual lots.

Proposed plats are subject to the processing requirements of KMC 17.10 – Platting and the design requirements of KMC 17.20 – Design and Construction. Final plat approval is based on the Preliminary Plat conditions of approval. A civil permit with a detailed review of street, utility and stormwater construction standards, and street and utility construction or bonding for incomplete work is required prior the final plat approval.

Property History:

The property was annexed and zoned Residential, Low (RL) in September 2014 by adopting Ordinance 5567. The Hearing Examiner approved the Planned Residential Development on March 18, 2025.

Density/Lot Size:

A 5 percent density bonus, resulting in eight additional lots, was approved for Planned Residential Development PRD-2024-0001.

The smallest lot size proposed is 7,500 square feet, the largest lot size is 19,502 square feet and the average lot size is 9,682 square feet.

Additionally, the plat has 258,773 square feet of open-space.

Setbacks:

The applicant has not proposed any deviations from the required setbacks. The RL Zone has the following setback requirements:

- Front: 15-feet
- Garage: 20-feet
- Side: 5-feet
- Rear: 15-feet

Traffic:

The City's traffic engineer has reviewed the applicant's Traffic Impact Analysis. Specific conditions of approval for road construction requirements and traffic impact fees have been submitted by the Traffic Engineering Division, see Exhibit 9.

Storm Water:

Residential sub-divisions must meet the standards in the Storm Water Management Manual for Eastern Washington (SMMEW) and COK Standard Specification Section 5-9, see Exhibit 8.

Streets & Utilities:

The developer will be required to construct the proposed roads, sidewalks, streetlights, storm drainage, and designate sidewalk and utility easements all in conformance with the latest City of Kennewick (COK) Standard Specifications and details, see Exhibit 8.

Pursuant to KMC 17.20.010(2)(c)(i) the development is required to have a second city standard street. The applicant has proposed a second access street to connect to Bofer Canyon Road across to properties to south, see Exhibit 3. The applicant secured access across the two properties to the south via the attached Access and Utility Easement Agreement, see Exhibit 17. The proposed second access road bisects both City Limits and Unincorporated Benton County.

The second access road to Bofer Canyon Road must meet Secondary Emergency Vehicle Access standards prior to final plat approval of Phase 1. Prior to final plat approval of Phase 2, the second access road must be constructed to applicable City of Kennewick and Benton County Road Standards.

Critical Areas:

The site has areas designated as erosion hazard areas, slopes greater than 15% and classified as a Fish and Wildlife Habit Conservation Area pursuant to KMC

18.63.010. Additionally, the site is identified as Benton County Shrub Steppe within the Washington Department of Fish and Wildlife's (WDFW) Priority Habitat and Species Program.

The applicant submitted a critical area report for the previous Planned Residential Development, PRD-2024-0001 and has made a cash deposit to the Benton-Franklin Conservation District to help pay for approved off-site mitigation. The applicant is still responsible to complete 5 acres of enhanced on-site mitigation, as described in the mitigation planning instructions contained in the critical area report.

Grading:

Grading of the site will be permitted once the Civil Plans are approved or a Grading Permit is approved.

Parks:

The proposed development is subject KMC Chapter 3.90, which establishes a park impact fee. The proposed development is within Service Area 2 and is subject to the park impact fees listed in KMC 3.90.160 for Single and Multi-Family Units. Park impact fees are due prior to issuance of the Certificate of Occupancy.

Common Area Maintenance:

A maintenance agreement for common open space, tracts, private streets, and shared driveways will be required to be approved by the City Attorney and recorded against the property. Per KMC 18.45.100, a Homeowner's/Property Owner Association are required for maintenance and management of open space, tracts, common areas, and private roads.

Schools:

The Kennewick School District provided a comment letter stating that the development is within the bussing zones of Sagecrest Elementary, Chinook Middle School and Southridge High School. Additionally, the letter states that the Kennewick School District has the capacity to add students at all levels at the three schools, see Exhibit 16.

Kennewick Irrigation District:

The proposed development is outside the boundary of the Kennewick Irrigation District (KID), but the plat is above the Division IV Main Canal. The district does have concerns of an embankment breach and does request a copy of the plats storm water plan, see Exhibit 10.

Bonneville Power Administration:

The Bonneville Power Administration (BPA) will need to approve activities that take place within the easement. An existing BPA transmission line runs through the northern third of the site, see Exhibit 14.

Williams

A Williams natural gas right-of-way is on the site. Williams requests the submittal of more detailed development plans prior to starting construction, see Exhibit 15.

Surrounding Property:

All lands surrounding the site are vacant. To the west is in Unincorporated Benton County. To the north, properties are zoned Commercial, Community (CC) and Residential, Medium (RM). The property to the east is zoned Residential, Low (RL). The property to the south is zoned RL and is in Unincorporated Benton County.

Provisions for Public Health, Safety, and Welfare:

It is Staff's opinion that appropriate provisions have been made for the following: public health, safety, and general welfare, for open spaces, drainage ways, streets or roads, alleys, public sidewalks, utility easements and other public ways, transit stops, potable water supplies, sanitary wastes, parks and recreation areas, playgrounds, schools and school grounds, and the proposed subdivision has considered all other relevant facts and other planning features that assure safe walking conditions for students who walk to and from school.

Comprehensive Plan:

Staff is of the opinion that this request is consistent with and generally conforms to the City's Comprehensive Plan, and it will implement, goals and policies of the Comprehensive Plan. Particularly the following:

CRITICAL AREAS AND SHORELINE GOALS + POLICIES:

GOAL 1: *"Protect the public and personal property from the effects of landslides, steep slope failures, erosion or flooding."*
POLICY 1: *"Continue to classify, designate and protect geologically hazardous areas in the critical areas ordinance."*
GOAL 2: *"Protect the unique environment of the critical areas and shoreline."*
POLICY 1: *"Protect critical areas and the shoreline using the Critical Areas Ordinance and the Shoreline Master Plan."*
POLICY 2: *"Use Best Available Science (BAS) to protect critical areas and shorelines and their environmental functions."*
POLICY 3: *"Preserve and protect anadromous fish, and threatened, endangered and candidate species as identified by federal and state agencies."*
GOAL 3: *"Regulate or mitigate activities in or adjacent to critical areas or the shoreline to avoid adverse environmental impacts."*

Staff Comment: Future development will be subject to the recommendations of the submitted critical areas report and KMC Chapter 18.62 – Critical Areas – Geologically Hazardous Areas and Chapter 18.63 – Critical Areas – Fish and Wildlife Habitat Conservation Areas.

RESIDENTIAL GOALS + POLICIES:

RESIDENTIAL GOAL 1: *"Provide for attractive, walkable, and well-designed neighborhoods, with differing densities and compatible with neighboring areas."*
Staff Comment: The proposed Preliminary Plat/Planned Residential Development has open space and walking paths for the residents to use. Additionally, multi-family and single-family residential is proposed.
RESIDENTIAL GOAL 2: *"Provide appropriate public facilities supporting residential areas."*
POLICY 1: *"Ensure provision of parks, schools, drainage, transit, water, sanitation, infrastructure, and pedestrian in new residential developments."*

Staff Comment: The proposed development will be connected to City water and sewer utilities.

RESIDENTIAL GOAL 3: *"Promote a variety of residential densities with a minimum density target of 3 units per acre as averaged throughout the urban area."*
POLICY 1: *"Establish and implement maximum densities in the City's residential zoning categories."*

Staff Comment: The proposed development has a 5% higher density pursuant to the requirements of the Planned Residential Development Regulations.

HOUSING GOALS + POLICIES:

GOAL 1: *"Support and develop a variety of housing types and densities to meet the diverse needs of the population."*

Staff Comment: The development will consist of multi-family housing and standard single-family residences. Both of these housing types have the potential to meet the needs of the City's population.

The City of Kennewick hereby RECOMMENDS the following conditions of approval for Preliminary Plat SUB-2025-0004:

1. Comply with City of Kennewick regulatory controls, policies and codes, including the Single-family Residential and Multi-Family Design Standards.
2. All fees required by the City shall be paid prior to the approval of the final plat.
3. The subdivision shall be in conformance with the Preliminary Plat Drawing shown in Exhibit 3.
4. Execute a written agreement to the satisfaction of the City Attorney, which will allow the City to make arrangements for maintenance of the common areas, open spaces, private roads, access driveways, and landscaped areas should the Homeowner's Association fail or refuse to maintain these areas. The agreement must be recorded with the final plat.
5. Comply with the Public Works Memorandum dated June 23, 2025 (Exhibit 8).
6. Comply with Traffic Engineering Division Memorandum dated July 1, 2025 (Exhibit 9).
7. Comply with Kennewick Irrigation District Letter dated June 19, 2025 (Exhibit 10).
8. Comply with the Benton Clean Air Agency Comments, dated June 17, 2025 (Exhibit 11).
9. Comply with the Benton Public Utility District Comments, date June 17 and July 28, 2025 (Exhibit 12).
10. Comply with the Bonneville Power Administration Comments, dated July 2, 2025 (Exhibit 14).
11. Comply with the Williams Comments, dated June 18, 2025 (Exhibit 15).
12. Comply with the Hearing Examiner Decision for the Canyon View Estates Planned Residential Development (PRD-2024-0001), dated March 18, 2025 (Exhibit 6).
13. The second access road to Bofer Canyon Road must meet Secondary Emergency Vehicle Access standards prior to final plat approval of Phase 1. Prior to final plat approval of Phase 2, the second access road must be constructed to applicable City of Kennewick and Benton County Road Standards.
14. Complete on-site critical area improvements prior to final plat approval of the first phase.
15. Provide dust control method(s) such as hydro seeding for all areas of the site that are disturbed.
16. The plat is subject to applicable requirements of KMC Chapter 3.90 – Impact Fees for Parks, Open Space, and Recreation Facilities.

17. Provide a landscaping plan for the internal streets and tracts/open space. Bonding for incomplete landscaping in common areas shall be required prior to Final Plat Approval.
18. Pursuant to KMC 17.10.070, Preliminary Plat SUB-2025-0004 expires 5 years from the approval date, the City can grant an extension, the extension must be applied for prior to the preliminary plat expiration.

SUBDIVISION GUARANTEE
EXHIBIT "A"
LEGAL DESCRIPTION

Exhibit 2

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Order Number: 2633240 **Guarantee No.:** G-6329-13254

Parcel 1 of Survey 5488, recorded in Book 1 of Surveys, Page 5488, filed under Benton County Auditor's File No. 2021-019551, located in the North half of the Northeast quarter of Section 21, Township 8 North, Range 29 East, W.M., Benton County, Washington, described more particularly as follows:

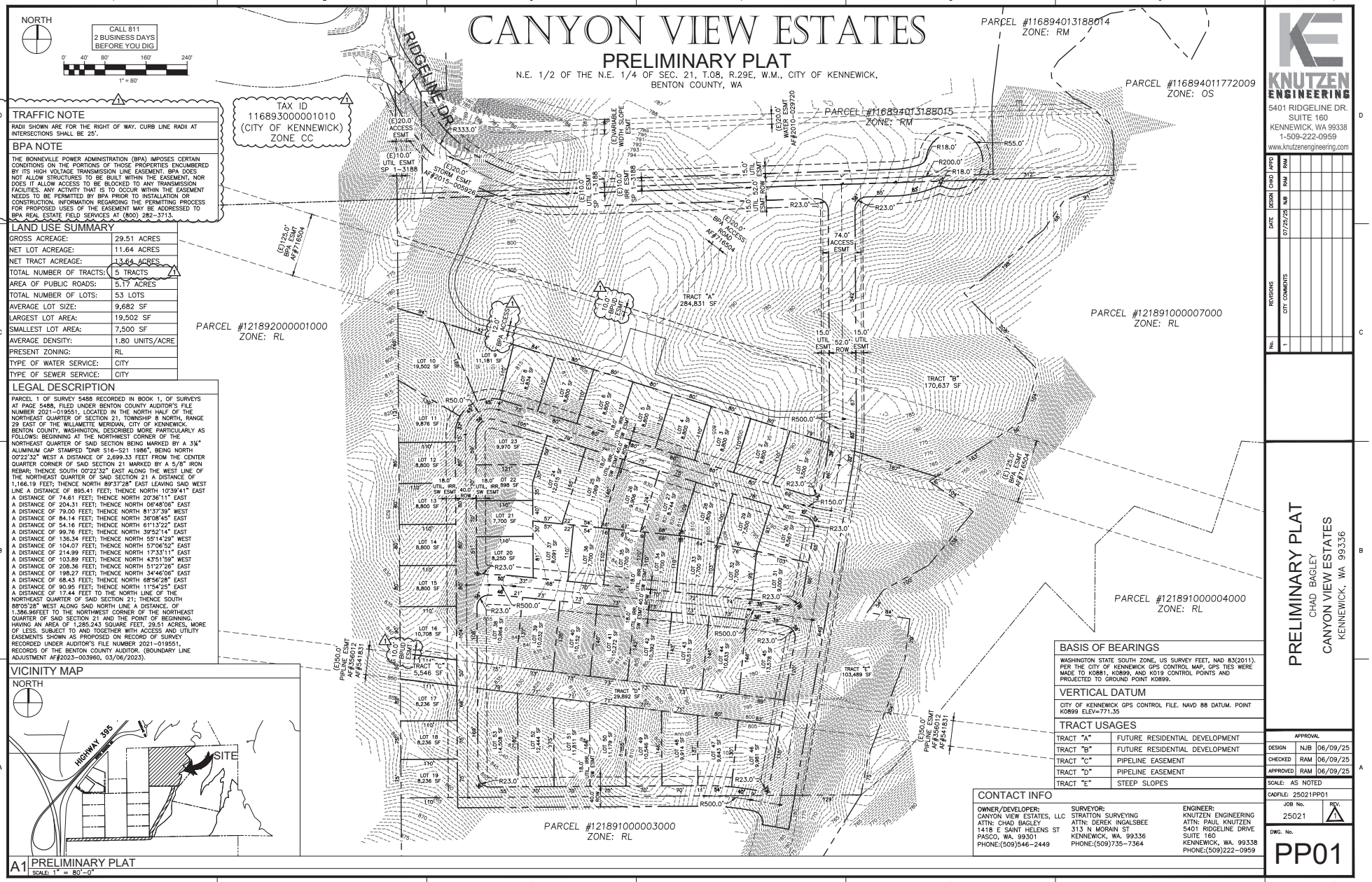
Beginning at the Northwest corner of the Northeast quarter of said section being marked by a 3 1/4 aluminum cap stamped "DNR S16-5211986", being North 00°22'32" West a distance of 2,699.33 feet from the center quarter corner of said Section 21 marked by a 5/8" iron rebar;
Thence South 00°22'32" East along the West line of the Northeast quarter of said Section 21 a distance of 1,166.19 feet;
Thence North 89°37'28" East leaving said West line a distance of 895.41 feet;
Thence North 10°39'41" East a distance of 74.61 feet;
Thence North 20°36'11" East a distance of 204.31 feet;
Thence North 06°48'06" East a distance of 79.00 feet;
Thence North 81°37'39" West a distance of 84.14 feet;
Thence North 36°08'45" East a distance of 54.16 feet;
Thence North 61°13'22" East a distance of 99.76 feet;
Thence North 39°52'14" East a distance of 136.34 feet;
Thence North 55°14'29" West a distance of 104.07 feet;
Thence North 57°06'52" East a distance of 214.99 feet;
Thence North 17°33'11" East a distance of 103.89 feet;
Thence North 43°51'59" West a distance of 208.36 feet;
Thence North 51°27'26" East a distance of 198.27 feet;
Thence North 34°46'06" East a distance of 68.43 feet;
Thence North 68°56'28" East a distance of 90.95 feet;
Thence North 11°54'25" East a distance of 17.44 feet to the North line of the Northeast quarter of said Section 21;
Thence South 88°05'28" West along said North line a distance of 1,386.96 feet to the Northwest corner of the Northeast quarter of said Section 21 and the point of beginning.

Situate in the County of Benton, State of Washington.

CANYON VIEW ESTATES

PRELIMINARY PLAT

N.E. 1/2 OF THE N.E. 1/4 OF SEC. 21, T.08, R.29E, W.M., CITY OF KENNEWICK, BENTON COUNTY, WA



TRAFFIC NOTE

RADII SHOWN ARE FOR THE RIGHT OF WAY. CURB LINE RADII AT INTERSECTIONS SHALL BE 25'.

BPA NOTE

THE BONNEVILLE POWER ADMINISTRATION (BPA) IMPOSES CERTAIN CONDITIONS ON THE PORTIONS OF THOSE PROPERTIES ENCUMBERED BY ITS HIGH VOLTAGE TRANSMISSION LINE EASEMENT. BPA DOES NOT ALLOW STRUCTURES TO BE BUILT WITHIN THE EASEMENT, NOR DOES IT ALLOW ACCESS TO BE BLOCKED TO ANY TRANSMISSION FACILITIES. ANY ACTIVITY THAT IS TO OCCUR WITHIN THE EASEMENT NEEDS TO BE PERMITTED BY BPA PRIOR TO INSTALLATION OR CONSTRUCTION. INFORMATION REGARDING THE PERMITTING PROCESS FOR PROPOSED USES OF THE EASEMENT MAY BE ADDRESSED TO BPA REAL ESTATE FIELD SERVICES AT (800) 282-3713.

LAND USE SUMMARY

GROSS ACREAGE:	29.51 ACRES
NET LOT ACREAGE:	11.64 ACRES
NET TRACT ACREAGE:	13.64 ACRES
TOTAL NUMBER OF TRACTS:	5 TRACTS
AREA OF PUBLIC ROADS:	5.17 ACRES
TOTAL NUMBER OF LOTS:	53 LOTS
AVERAGE LOT SIZE:	9,682 SF
LARGEST LOT AREA:	19,502 SF
SMALLEST LOT AREA:	7,500 SF
AVERAGE DENSITY:	1.80 UNITS/ACRE
PRESENT ZONING:	RL
TYPE OF WATER SERVICE:	CITY
TYPE OF SEWER SERVICE:	CITY

LEGAL DESCRIPTION

PARCEL 1 OF SURVEY 5488 RECORDED IN BOOK 1, OF SURVEYS AT PAGE 5488, FILED UNDER BENTON COUNTY AUDITOR'S FILE NUMBER 2021-019551, LOCATED IN THE NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 21, TOWNSHIP 8 NORTH, RANGE 29 EAST OF THE WILLAMETTE MERIDIAN, CITY OF KENNEWICK, BENTON COUNTY, WASHINGTON, DESCRIBED MORE PARTICULARLY AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION BEING MARKED BY A 3¼" ALUMINUM CAP STAMPED "DNR S16-S21 1986", BEING NORTH 00°22'32" WEST A DISTANCE OF 2,699.33 FEET FROM THE CENTER QUARTER CORNER OF SAID SECTION 21 MARKED BY A 5/8" IRON REBAR; THENCE SOUTH 00°22'32" EAST ALONG THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 21 A DISTANCE OF 1,166.19 FEET; THENCE NORTH 89°37'28" EAST LEAVING SAID WEST LINE A DISTANCE OF 895.41 FEET; THENCE NORTH 10°39'41" EAST A DISTANCE OF 74.61 FEET; THENCE NORTH 20°36'11" EAST A DISTANCE OF 204.31 FEET; THENCE NORTH 28°48'06" EAST A DISTANCE OF 79.00 FEET; THENCE NORTH 81°37'39" WEST A DISTANCE OF 84.14 FEET; THENCE NORTH 36°08'45" EAST A DISTANCE OF 54.16 FEET; THENCE NORTH 61°13'22" EAST A DISTANCE OF 99.76 FEET; THENCE NORTH 39°52'14" EAST A DISTANCE OF 136.34 FEET; THENCE NORTH 55°14'29" WEST A DISTANCE OF 104.07 FEET; THENCE NORTH 57°06'52" EAST A DISTANCE OF 214.99 FEET; THENCE NORTH 73°33'11" EAST A DISTANCE OF 103.89 FEET; THENCE NORTH 43°51'59" WEST A DISTANCE OF 208.36 FEET; THENCE NORTH 51°27'26" EAST A DISTANCE OF 198.27 FEET; THENCE NORTH 54°46'06" EAST A DISTANCE OF 68.43 FEET; THENCE NORTH 68°56'28" EAST A DISTANCE OF 90.95 FEET; THENCE NORTH 11°54'25" EAST A DISTANCE OF 17.44 FEET TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 21; THENCE SOUTH 88°05'28" WEST ALONG SAID NORTH LINE A DISTANCE, OF 1,386.09FEET TO THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION 21 AND THE POINT OF BEGINNING. HAVING AN AREA OF 1,285,243 SQUARE FEET, 29.51 ACRES, MORE OF LESS. SUBJECT TO AND TOGETHER WITH ACCESS AND UTILITY EASEMENTS SHOWN AS PROPOSED ON RECORD OF SURVEY RECORDED UNDER AUDITOR'S FILE NUMBER 2021-019551, RECORDS OF THE BENTON COUNTY AUDITOR. (BOUNDARY LINE ADJUSTMENT AF#2023-003960, 03/06/2023).

VICINITY MAP

BASIS OF BEARINGS

WASHINGTON STATE SOUTH ZONE, US SURVEY FEET, NAD 83(2011). PER THE CITY OF KENNEWICK GPS CONTROL MAP, GPS TIES WERE MADE TO K0881, K0899, AND K019 CONTROL POINTS AND PROJECTED TO GROUND POINT K0899.

VERTICAL DATUM

CITY OF KENNEWICK GPS CONTROL FILE. NAVD 88 DATUM. POINT K0899 ELEV=771.35

TRACT USAGES

TRACT "A"	FUTURE RESIDENTIAL DEVELOPMENT
TRACT "B"	FUTURE RESIDENTIAL DEVELOPMENT
TRACT "C"	PIPELINE EASEMENT
TRACT "D"	PIPELINE EASEMENT
TRACT "E"	STEEP SLOPES

CONTACT INFO

OWNER/DEVELOPER:
CANYON VIEW ESTATES, LLC
ATTN: CHAD BAGLEY
1418 E SAINT HELENS ST
PASCO, WA. 99301
PHONE:(509)546-2449

SURVEYOR:
STRATTON SURVEYING
ATTN: DEREK INGALSBEE
313 N MORAIN ST
KENNEWICK, WA. 99336
PHONE:(509)735-7364

ENGINEER:
KNUTZEN ENGINEERING
ATTN: PAUL KNUTZEN
5401 RIDGELINE DRIVE
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KENNEWICK, WA. 99338
PHONE:(509)222-0959

KNUTZEN ENGINEERING
5401 RIDGELINE DR.
SUITE 160
KENNEWICK, WA 99338
1-509-222-0959
www.knutzenengineering.com

No.	REVISIONS	DATE	DESIGN	CHKD	APPD
1	CITY COMMENTS	07/25/25	NJB	RAM	RAM

PRELIMINARY PLAT
CHAD BAGLEY
CANYON VIEW ESTATES
KENNEWICK, WA 99336

APPROVAL		
DESIGN	NJB	06/09/25
CHECKED	RAM	06/09/25
APPROVED	RAM	06/09/25

SCALE: AS NOTED
CADFILE: 25021PP01
JOB No. 25021 REV. 1
DWG. No. PP01

A1 PRELIMINARY PLAT
SCALE: 1" = 80'-0"

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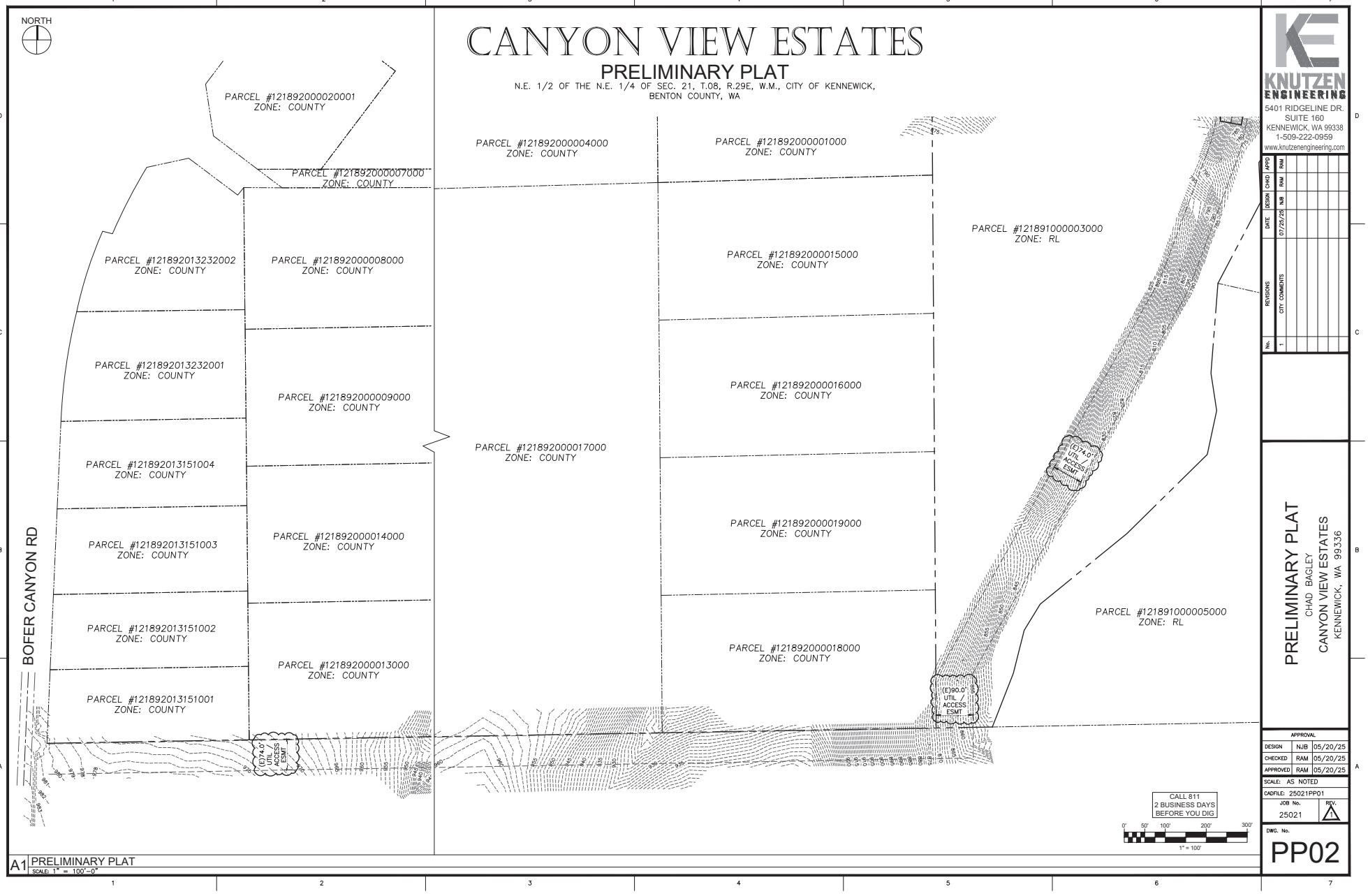

KNUTZEN ENGINEERING
5401 RIDGELINE DR.
SUITE 160
KENNEWICK, WA 99338
1-509-222-0959
www.knutzenengineering.com

No.	REVISIONS	DATE	DESIGN	CHKD	APPD
1	CITY COMMENTS	07/25/25	NJB	RAM	RAM

PRELIMINARY PLAT
CHAD BAGLEY
CANYON VIEW ESTATES
KENNEWICK, WA 99336

APPROVAL		
DESIGN	NJB	05/20/25
CHECKED	RAM	05/20/25
APPROVED	RAM	05/20/25

SCALE: AS NOTED
CADFILE: 25021PP01
JOB No. 25021
REV. 1
DWG. No. PP02

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September 25, 2024

Kevin Biersner, PE, Assistant Traffic Engineer
City of Kennewick
PO Box 6108
Kennewick, Washington 99336

Via email: kevin.biersner@ci.kennewick.wa.us

Regarding: Traffic Impact Analysis
Canyon View Estates
Parcel ID 121891000002000
Kennewick, Washington
PBS Project 78195.000, Phase 002B

Dear Mr. Biersner:

This traffic impact analysis (TIA) letter supports the proposed Canyon View Estates project in Kennewick, Washington, for its Planned Residential Development application to the City of Kennewick (City). This letter addresses the City's TIA requirements and presents the findings of the project's traffic impacts on the site vicinity.

PROJECT DESCRIPTION

The proposed Canyon View Estates project is a planned residential development (PRD) proposed on Benton County (County) parcel 121891000002000, which spans approximately 29.5 acres in the northeast quarter of Section 21, Township 8 North, Range 29 East, of the Willamette Meridian. The site is currently undeveloped. The development will occur in two areas: the northern portion will include 126 units of multi-family housing, and the southern portion will include 53 units of single-family housing.

To connect the project to the transportation network, Ridgeline Drive will be extended southeast from S Bofer Canyon Road, and a new north-south minor arterial roadway, currently labeled Street 1, will be constructed south of Ridgeline Drive. All local access is proposed along Street 1: the four driveways accessing the multi-family housing portion and the three local access roadways accessing the single-family housing portion will intersect Street 1. In addition, the southern end of Street 1 will be connected to S Bofer Canyon Road as a gravel road across parcel 121891000003000; this gravel road will be gated and will be for emergency access only.

The project construction is assumed to be completed in a single phase by 2025. See Figure 1 for a vicinity map and Figures 2 and 3 for preliminary site plans.

The studied intersections for this TIA are as follows:

1. Plaza Way / Ridgeline Drive
2. US Highway 395 (US 395) / Hildebrand Boulevard
3. Southridge Boulevard / Ridgeline Drive
4. Southridge Boulevard / Hildebrand Boulevard
5. S Zintel Way / Hildebrand Boulevard

This letter includes analysis of existing conditions, future background conditions based on a 2.0% annual growth rate and in-process projects, and future conditions with the project trips. The TIA scope of work is based on the City of Kennewick's Level 3 traffic impact analysis (TIA) guidelines[1] and the scoping correspondence emails between PBS and City staff.

EXISTING CONDITIONS

The existing site and roadway conditions in the study area were documented to inform the analysis.

Existing Site Conditions

The site is zoned Residential – Low Density (RL). There are no overlay districts. The Comprehensive Plan[2] future land use is defined as Low-Density Residential. The site is inside the City of Kennewick limits and the Kennewick urban growth area. The site, which is identified with parcel number 121891000002000 on County records, comprises approximately 29.5 acres. See Figure 1 for the vicinity map.

Existing Roadway Conditions

The existing roadway providing access to the site is Ridgeline Drive. Data were gathered on this and other roadways in the study area to inform operations analysis of the existing roadway system. The pertinent information regarding the study area roadways is tabulated in Table 1.

Table 1. Existing Roadway Information

Roadway Name	Segment	Classification[3]	Speed Limit (mph)	Lane Configuration		
				Travel Lanes	Sidewalks	Bike Lanes
Ridgeline Drive	West of Southridge Boulevard	Collector	30	3	Partial	Yes
	East of Southridge Boulevard	Minor Arterial	35	2 to 4	Partial	Yes
US Highway 395 (US 395)	All	Expressway	55	4 to 5	No	No
Hildebrand Boulevard	West of US 395	Principal Arterial	35	5	Yes	Yes
	East of US 395	Minor Arterial	25	3 to 4	Yes	Yes
Southridge Boulevard	North of Ridgeline Drive	Minor Arterial	40	3	Partial	Yes
	South of Ridgeline Drive	Collector	45	3	Yes	Yes
Zintel Way	All	Local Road	25*	3	Partial	Yes

mph: miles per hour
* Assumed

The lane configurations and traffic controls at the studied intersections are presented on Figure 4.

[1] City of Kennewick. (May 8, 2014). "Development Traffic Impact Analysis Criteria."
[2] City of Kennewick. (undated). *Together We Are One Kennewick, 2021-2041*. Accessed September 23, 2024, at https://www.go2kennewick.com/DocumentCenter/View/9723/Comprehensive-Plan-Together-we-are-One-Kennewick.
[3] Transpo Group, for City of Kennewick. (June 2018). City of Kennewick *2040 Transportation System Plan* (TSP). Accessed September 23, 2024, at https://www.go2kennewick.com/DocumentCenter/View/780/Transportation-System-Plan-PDF?bidId=.

Existing Traffic Volumes
Turning movement counts were gathered for the weekday PM (4:00 to 6:00 pm) peak period by All Traffic Data (ATD) in July 2024 at the following intersections:

1. Plaza Way / Ridgeline Drive
2. US 395 / Hildebrand Boulevard
3. Southridge Boulevard / Ridgeline Drive
4. Southridge Boulevard / Hildebrand Boulevard
5. S Zintel Way / Hildebrand Boulevard

Figure 5 shows the existing peak hour volumes based on these counts. Copies of the count data are provided in Appendix A.

FUTURE CONDITIONS

The future site and roadway conditions in the study area were documented to inform the analysis.

Future Roadway Conditions
The City's current Transportation Improvement Plan[4] identifies two planned improvements within the study area:

- Zintel Way/Ridgeline Drive/Bofer Canyon (TIP Map ID 21 / TSP ID N-4): Construct the remaining Zintel Way as a three-lane urban street. The improvement is expected to be driven by private development alongside the roadway. Construction is anticipated to be complete by the end of 2030.
- Southridge & Ridgeline Intersection Roundabout (TIP Map ID 24): Expand the existing roundabout to a two-lane roundabout. Construction is anticipated to be complete by the end of 2030.

Consistent with the TIA scoping correspondence with the City, this TIA anticipates S Zintel Way will be functionally complete for vehicular travel between Ridgeline Drive and Hildebrand Boulevard prior to the buildout of the Canyon View Estates PRD. The expanded roundabout at the Southridge / Hildebrand Boulevard intersection, however, is not assumed to be complete for the site buildout.

Future Traffic Volumes
Background growth is a generic increase in traffic volumes that is not attributable to specific developments. For this TIA, a linear yearly background growth rate of 2% was applied to all peak hour movement volumes between public roadways at the studied intersections.

In-process projects are specific developments that are approved but not fully occupied at the time the count data is collected. City staff identified the following in-process project that will add trips to the studied intersections: Zintel Way Apartments, a 195-unit multi-family apartment complex. The in-process project is assumed to be completed before the Canyon View Estates project. Figure 6 summarizes the in-process volumes for the studied intersections. Copies of the in-process project trip information are provided in Appendix B.

Figure 7 shows the 2025 Without Project volumes, which represent the sum of the count data, the background growth volumes, and the in-process project trips.

[4] City of Kennewick. (Adopted June 5, 2024). *Six-Year Transportation Improvement Plan (TIP) – 2025 to 2030*.

Proposed Trip Generation

The number of trips generated by the Canyon View Estates PRD is based on the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*,[5] specifically land use codes 210 (Single-Family Detached Housing) and 220 (Multifamily Housing, Low-Rise). The trip generation calculation results are summarized in Table 1, and the calculation details are provided in Appendix C. The site trips are presented for the average weekday and for the weekday PM peak hour between 4:00 pm and 6:00 pm.

Table 2. ITE Weekday Trip Generation—Canyon View Estates PRD

Land Use (ITE Code)	Single-Family Detached Housing (210)	Multi-Family Housing (Low-Rise) (220)	New Trip Totals
Independent Variable	Dwelling Units	Dwelling Units	
Size	53	126	
Average Daily Trips (ADT)	563	883	1,446
Peak Hour Trips	**PM**	**PM**	**PM**
Entering	34	47	81
Exiting	21	28	49
Total	55	75	130

As shown in Table 2, the Canyon View Estates PRD is anticipated to generate 1,446 new vehicle trips during a typical weekday, including 130 during the PM peak hour.

Proposed Trip Distribution and Assignment

The proposed distribution of primary trips is based on a review of the roadway network, land uses within the study area, the Benton-Franklin Council of Governments (BFCOG) trip distribution model, and engineering judgment. All vehicle trips are assigned to travel through the S Zintel Way—US 395 Northbound Ramps / Ridgeline Drive intersection. Beyond that roundabout, trips will distribute to and from Ridgeline Drive, US 395, or S Zintel Way. The proposed trip distribution and assignment of the project's new trips are shown in Figure 8.

Figure 9 shows the project's 2025 With Project volumes, or the sum of the 2025 Without Project volumes and the proposed site trips.

INTERSECTION OPERATIONS ANALYSIS

Measures of Effectiveness

Traffic operations are assessed in terms of level of service (LOS), a concept developed by transportation engineers to qualify the level of operation of intersections and roadways. As defined in the *Highway Capacity Manual* (HCM),[6] LOS measures are classified in grades "A" through "F," indicating a range of operation, with LOS "A" signifying the best level of operation, i.e., full freedom of movement, and LOS "F" representing the worst level, i.e., operational failure. The HCM defines LOS thresholds based on the average delay, expressed as seconds per

[5] Institute of Transportation Engineers. (2021). *Trip Generation Manual*, 11th Edition. Accessed September 23, 2024, via the ITETripGen Web-Based App at https://www.itetripgen.org/Query.
[6] Transportation Research Board, National Research Council. (2016). *Highway Capacity Manual*, 6th Edition.

vehicle (sec/veh). The LOS can be calculated for each intersection lane group, for a multilane approach, or for an intersection as a whole.

The volume-to-capacity (v/c) ratio quantifies the portion of the theoretical capacity consumed by traffic demand volume. A v/c ratio of zero (0.00) indicates all the capacity is available and represents full freedom of movement. A v/c ratio of one (1.00) indicates all the capacity is consumed and represents operational failure. The v/c ratio can be calculated for each intersection lane group or for an intersection as a whole, with the latter calculation aggregating the v/c ratios of the intersection's critical lane groups.

Operation Standards

The City applies the following LOS standards during the weekday PM peak hour as the minimum acceptable operations for all arterials and collectors, as noted in the City's TSP, Chapter 4.5.2:

- LOS D for major approaches at signalized intersections and roundabouts
- LOS E for all minor street approaches at unsignalized intersections or driveways
- LOS F may be acceptable at unsignalized intersections or driveways under certain conditions; however, none applies to this TIA.

The Washington State Department of Transportation (WSDOT) has jurisdiction over US 395, its ramps, and its intersections. Within urban areas of Benton County, for highways of statewide significance (HSS) such as US 395, LOS D is the adopted minimum operational standard for peak hours.[7]

Analysis Methodology

The project's traffic impacts were estimated to determine the changes in traffic conditions. To make these determinations, the following assumptions and inputs were employed:

- The peak hour factor (PHF) for each intersection, as calculated from the count data, was applied for the baseline 2024 analysis scenario and the future 2025 conditions.
- A minimum heavy vehicle percentage (HV%) of 2% was assumed for each movement for all analysis scenarios. The HV% calculated from the count data was applied if it was greater than 2%.
- The LOS, delay, and v/c ratio for the studied intersections were calculated with different tools depending on the control type:
    - Trafficware's Synchro software, Version 11, was used to evaluate signalized intersections based on HCM methodologies and the WSDOT traffic analysis guidelines.[8,9]
    - Akcelik and Associates' Sidra Intersection software, Version 9.1, was used to evaluate roundabout intersections based on the WSDOT Sidra analysis guidelines.[10]
- Intersection results report the overall intersection LOS, overall intersection delay, and the critical lane group v/c ratio (the highest lane group v/c ratio).

[7] Washington State Department of Transportation. (January 1, 2010). *Level of Service Standards for Washington State Highways*.
[8] Washington State Department of Transportation. (February 2019). *WSDOT Traffic Analysis Guide*.
[9] Washington State Department of Transportation. (August 2018). *WSDOT Synchro & SimTraffic Protocol*.
[10] Washington State Department of Transportation. (March 2021). *WSDOT Sidra Policy Settings*.

Level of Service Analysis

The following tables summarize the LOS reports for the studied intersections. All LOS reports are included in Appendix D.

Table 3 describes the LOS for each studied intersection for the 2024 Existing Conditions volumes during the weekday PM peak hour.

Table 3. Estimated 2024 Level of Service for Existing Conditions at Studied Intersections

Int. #	Intersection	Traffic Control	PM Peak Hour		
			LOS	***Delay (sec/veh)***	***v/c****
1	Plaza Way / Ridgeline Drive	Roundabout	A	2.0	0.07
2	US 395 / Hildebrand Boulevard	Signal	C	23.2	0.83
3	Southridge Boulevard / Ridgeline Drive	Roundabout	A	3.1	0.08
4	Southridge Boulevard / Hildebrand Boulevard	Signal	B	19.6	0.72
5	S Zintel Way / Hildebrand Boulevard	Roundabout	A	2.4	0.22

* The reported v/c ratio represents the lane group with the highest v/c ratio.

As shown in Table 3, all studied intersections currently operate at an acceptable LOS during the weekday PM peak hour.

Table 4 describes the LOS for each studied intersection for the 2025 Without Project volumes during the weekday PM peak hour.

Table 4. Estimated 2025 Level of Service for Future Without Project at Studied Intersections

Int. #	Intersection	Traffic Control	PM Peak Hour		
			LOS	***Delay (sec/veh)***	***v/c****
1	Plaza Way / Ridgeline Drive	Roundabout	A	2.4	0.10
2	US 395 / Hildebrand Boulevard	Signal	C	30.3	0.75
3	Southridge Boulevard / Ridgeline Drive	Roundabout	A	3.1	0.09
4	Southridge Boulevard / Hildebrand Boulevard	Signal	B	14.1	0.56
5	S Zintel Way / Hildebrand Boulevard	Roundabout	A	2.6	0.22

* The reported v/c ratio represents the lane group with the highest v/c ratio.

As shown in Table 4, all studied intersections will operate at an acceptable LOS in the 2025 Without Project scenario during the weekday PM peak hour.

Table 5 describes the LOS for each studied intersection for the 2025 volumes with the project trips during the weekday PM peak hour.

Table 5. Estimated 2025 Level of Service for Future With Project at Studied Intersections

Int. #	Intersection	Traffic Control	PM Peak Hour		
			LOS	*Delay (sec/veh)*	*v/c**
1	Plaza Way / Ridgeline Drive	Roundabout	A	3.5	0.08
2	US 395 / Hildebrand Boulevard	Signal	C	30.1	0.75
3	Southridge Boulevard / Ridgeline Drive	Roundabout	A	3.1	0.09
4	Southridge Boulevard / Hildebrand Boulevard	Signal	B	14.1	0.46
5	S Zintel Way / Hildebrand Boulevard	Roundabout	A	2.6	0.23

* The reported v/c ratio represents the lane group with the highest v/c ratio.

As shown in Table 5, all studied intersections will operate at an acceptable LOS in the 2025 With Project scenario during the weekday PM peak hour.

Queuing Analysis

Queuing analysis was performed to evaluate queue storage adequacy at the studied intersections. Simulated 95th percentile queues were estimated using Trafficware's SimTraffic software (Version 11). Available storage was measured on publicly available aerial imagery and was rounded to the nearest 5 feet. Queue demand was rounded to the nearest 25 feet, the average headway of a queued vehicle.

Table 6 summarizes the queuing analysis results for the weekday PM peak hour. Results are provided for each signalized, stop-controlled, or yield-controlled lane, and each lane is described by the intersection movements allowed. Data output sheets from all queuing calculations are included in Appendix E.

Table 6. PM Peak Hour Intersection Queuing Analysis

Int. #	Intersection	Approach	Movements	Available Storage (Feet)	95th Percentile Queue (Feet)		
					2024 Existing	*2025 Without Project*	*2025 With Project*
1	Plaza Way / Ridgeline Drive	EB	U/L/T	625	25	25	25
			R	150	25	25	25
		WB	U/L/T	1,000+	25	25	50
			R	150	25	25	75
		NB	L/T	425	25	25	25
			R	180	25	25	25
		SB	U/L	1000+	25	25	25
			T/R	150	25	25	25
2	US 395 / Hildebrand Boulevard	EB	L	350	75	100	125
			L	350	100	100	125
			T	575	125	125	150

Int. #	Intersection	Approach	Movements	Available Storage (Feet)	95th Percentile Queue (Feet)		
					2024 Existing	*2025 Without Project*	*2025 With Project*
			T	575	75	75	125
			R	200	50	50	50
		WB	L	260	25	25	50
			L	260	50	50	75
			T	550	75	75	125
			T/R	550	100	100	150
			R	250	75	75	100
		NB	L	350	50	50	50
			L	350	75	75	125
			T	575	250	250	250
			T	575	250	250	225
			T/R	575	200	225	175
		SB	L	300	100	100	125
			L	300	50	75	125
			T	1000+	200	175	175
			T	1000+	200	200	200
			R	260	50	25	50
3	Southridge Boulevard / Ridgeline Drive	EB	L/T/R	800	25	25	25
		WB	U/L/T/R	625	25	25	25
		NB	L/T	725	25	25	25
			R	75	25	25	25
		SB	L/T/R	825	25	25	25
4	Southridge Boulevard / Hildebrand Boulevard	EB	L	250	100	100	100
			T	625	50	75	75
			T/R	625	25	50	25
		WB	L	175	25	25	25
			T	550	75	75	75
			TR	550	100	100	125
		NB	L	150	75	75	50
			T	900	125	150	100
			R	100	50	50	50

Int. #	Intersection	Approach	Movements	Available Storage (Feet)	95th Percentile Queue (Feet)		
					2024 Existing	*2025 Without Project*	*2025 With Project*
		SB	L	150	200	225	125
			T	725	125	200	100
			R	150	75	125	75
5	S Zintel Way / Hildebrand Boulevard	EB	U/L/T/R	500	75	75	125
			R	225	25	25	25
		WB	U/L/T	115	50	50	50
			T/R	500	25	25	25
		NB	U/L	165	25	25	25
			L/T/R	525	25	25	25
		SB	L/T/R	225	50	50	50
			R	165	25	25	25

EB: eastbound; WB: westbound; NB: northbound; SB: southbound; U: U-turn; L: left turn; T: through; R: right turn.

As shown in Table 6, queues will not exceed the available storage for any movement or approach at the studied intersections through the 2025 With Project conditions.

SAFETY EVALUATION

Collision Analysis

Collision data from the study area were obtained from WSDOT for the five-year period spanning from January 2019 through December 2023. Copies of the collision data are provided in Appendix F. This analysis assumes that a collision rate less than 1.00 collision per million entering vehicles (MEV) is typically considered to be within acceptable parameters. A collision rate above 1.00 per MEV is worthy of further examination.

To calculate the collision rate, the PM peak hour total entering volumes from the existing turning movement counts were multiplied by 10 to provide an approximation of the average daily trips. Detailed calculations of collision rates are provided in Appendix F. Table 7 presents the results of the collision analysis.

Table 7. Collision Analysis for Studied intersections (January 2019 through December 2023)

Int. #	Intersection	Collisions by Type			Total Collisions	Collison Rate per MEV
		Angle	*Fixed-Object*	*Rear-End*		
1	Plaza Way / Ridgeline Drive	0	2	0	2	0.40
2	US Route 395 (US 395) / Hildebrand Boulevard	2	1	15	18	0.41
3	Southridge Boulevard / Ridgeline Drive	0	0	0	0	N/A
4	Southridge Boulevard / Hildebrand Boulevard	4	5	7	16	0.76

Int. #	Intersection	Collisions by Type			Total Collisions	Collison Rate per MEV
		Angle	*Fixed-Object*	*Rear-End*		
5	Hildebrand Boulevard / Zintel Way	2	0	1	3	0.26

N/A: not applicable

As shown in Table 7, the calculated collision rates all fall below 1.00 per MEV. However, the Southridge Boulevard / Hildebrand Boulevard intersection shows a slightly elevated collision rate due to a higher number of fixed-object collisions than typically seen at signalized intersections, though these incidents have not resulted in significant injuries. Consequently, further study at this intersection is not necessary. Additionally, the remaining studied intersections also exhibit no serious injuries, leading to the conclusion that no further study is necessary.

Pedestrian, Bicycle, and Transit Facilities

The existing sidewalks and bike lanes along Ridgeline Drive end just northwest of the intersection with S Bofer Canyon Road. The new roadways being planned with the site development should include sidewalks, pedestrian crossings, and bike lanes aligned with the existing facilities at the location where Ridgeline Drive currently ends, ensuring pedestrian and bicycle access and connectivity. Although bike lanes are readily available between the site and nearby destinations, there are sidewalk gaps west and north of the Plaza Way / Ridgeline Drive intersection. For the new development, it is essential to design and construct facilities compliant with the Americans with Disabilities Act's (ADA) pedestrian accessibility standards.

Ben Franklin Transit provides public transit services within the study area. The closest bus stop, located near Plaza Way and the Trios Southridge Hospital main entrance, is approximately 0.8 miles north of the site and is served by bus route 47 Kennewick / 27th Avenue, which travels among Three Rivers Transit Center, the Southridge area, and the Dayton Transfer Point on 30-minute headways Monday through Saturday. The sidewalk gaps between the Plaza Way / Ridgeline Drive intersection and the Trios Southridge Hospital frontage, however, may limit transit's utility until those fronting properties develop. The closest transit center (Three Rivers Transit Center) is approximately six miles north of the site.

Sight Distance at Site Access Locations

The site development proposes driveways and local access intersections along the proposed Street 1 south of Ridgeline Drive. Sight distance evaluations are not possible where the accessed roadways do not exist, so this section simply provides recommendations.

Design and construct the proposed access points—driveways to the multifamily portion and local access roadway intersections to the single-family portion—for intersection sight distance (ISD) considerations in accordance with the City's *Code of Ordinances,*[11] Chapter 13.12.

CONCLUSIONS

This section summarizes the findings and recommendations of this TIA that are detailed in the above narrative.

[11] City of Kennewick. (Updated on September 3, 2024). *Code of Ordinances*. Accessed September 23, 2024, at https://library.municode.com/wa/kennewick/codes/code_of_ordinances.

Findings

The Canyon View Estates PRD site development is anticipated to generate 1,446 new vehicle trips during a typical weekday, including 130 during the PM peak hour. All these trips will travel through and distribute from the S Zintel Way—US 395 Northbound Ramps / Ridgeline Drive intersection.

The studied intersections will operate with acceptable LOS and queuing through the site buildout conditions. There are no collision rates or trends in the 2019–2023 collision history meriting further evaluation.

Although bicycle travel is readily available throughout the study area, and pedestrian facilities are available along Ridgeline Drive where the site improvements will begin, sidewalk gaps west and north of the Plaza Way / Ridgeline Drive intersection will limit the connectivity and utility of pedestrian and transit travel modes.

Recommendations

PBS recommends the following in relation to the Canyon View Estates PRD:

- Assure that all driveways, sidewalks, crosswalks, and curb ramps constructed or modified with the project comply with the current ADA accessibility guidelines.
- Include sidewalks, pedestrian crossings, and bike lanes along the new roadways being planned. Align and connect these facilities with the existing facilities at the Ridgeline Drive / S Bofer Canyon Road intersection.
- Design and construct the proposed access points for ISD considerations in accordance with the City's Code of Ordinances, Chapter 13.12.

CLOSING

Please feel free to contact me at 360.567.2123 or David.Holt@pbsusa.com with any questions or comments.

Sincerely,

David Holt

David Holt, PE
Traffic Engineer

cc: Bryan Bailey, John Manix, Jason Mattox, Peter Reich, Scott Shumaker, Moe Taha, Rebecca Wahlstrom (PBS)

Attachments: Figures
Appendix A. Traffic Counts
Appendix B. In-Process Project Trips
Appendix C. ITE Trip Generation
Appendix D. Level of Service Reports
Appendix E. Queuing Reports
Appendix F. Collision Data and Rate Calculations

MT:DH,JM:tl

Digitally signed by David Holt
Date: 2024.09.25 03:40:35-07'00'

DAVID ANTHONY HOLT
STATE OF WASHINGTON
46043
REGISTERED
PROFESSIONAL ENGINEER

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Figures

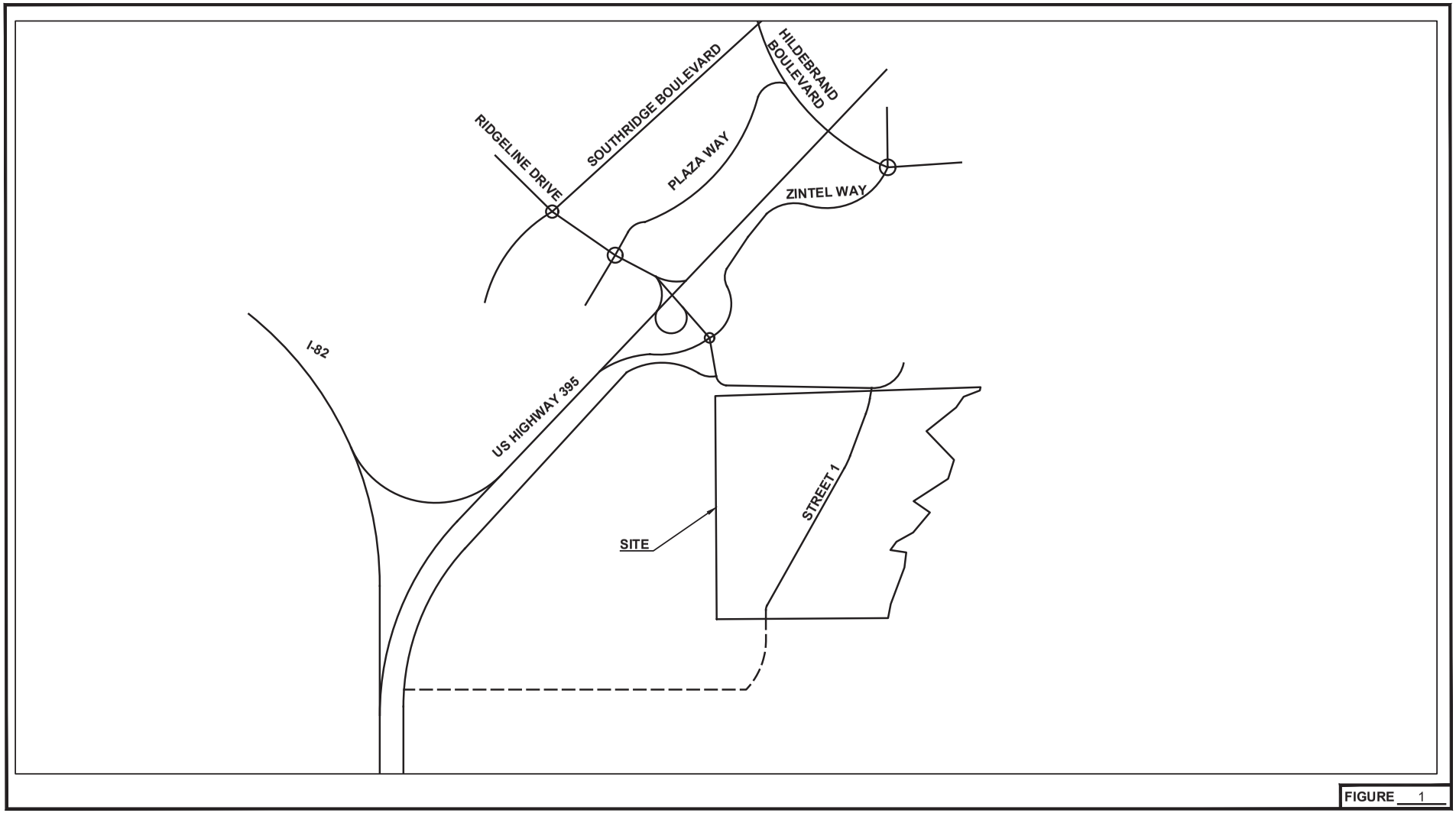


FIGURE 1

Vicinity Map

Canyon View Estates

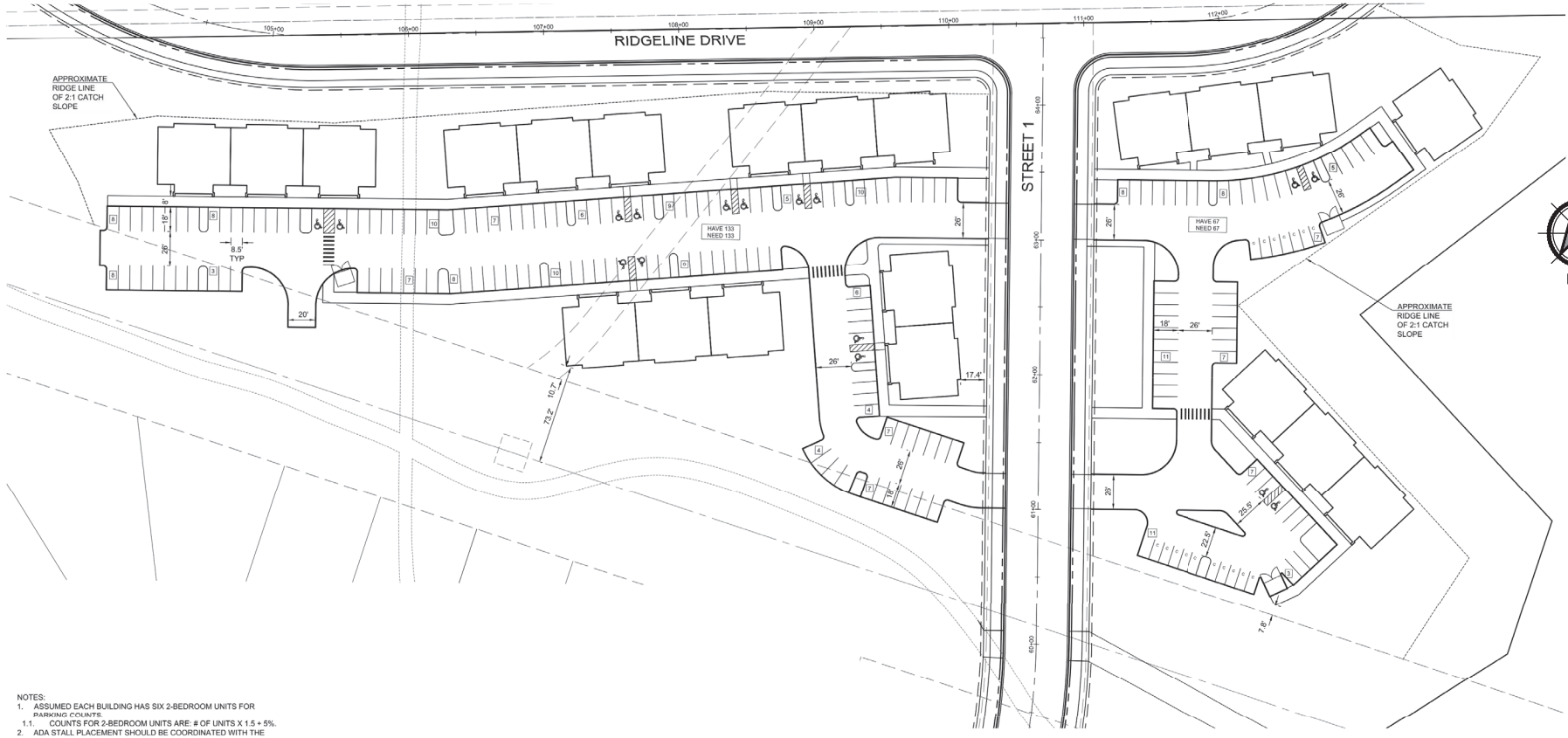
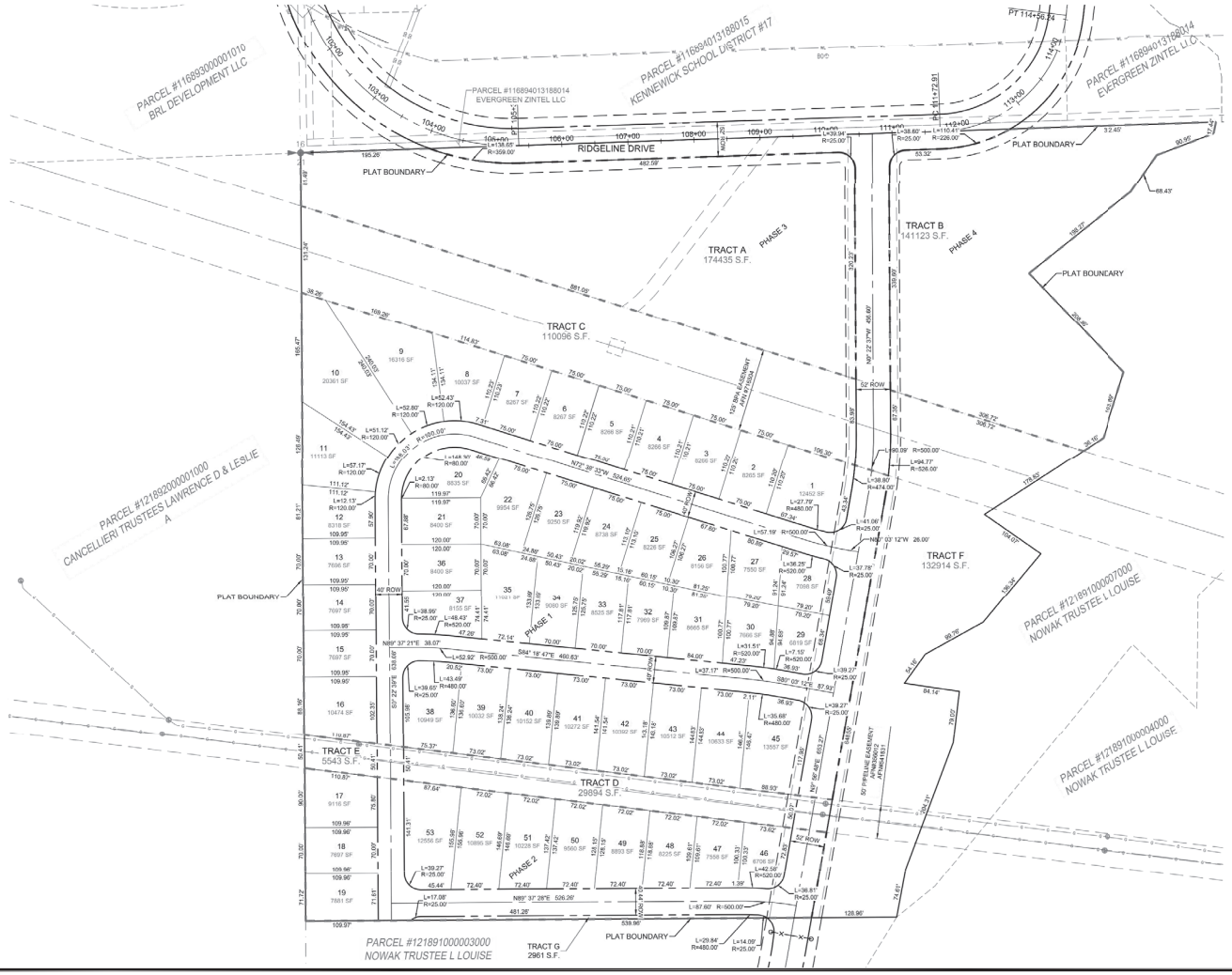


FIGURE 2

Northern Portion Site Plan

Canyon View Estates



Southern Portion Site Plan

Canyon View Estates

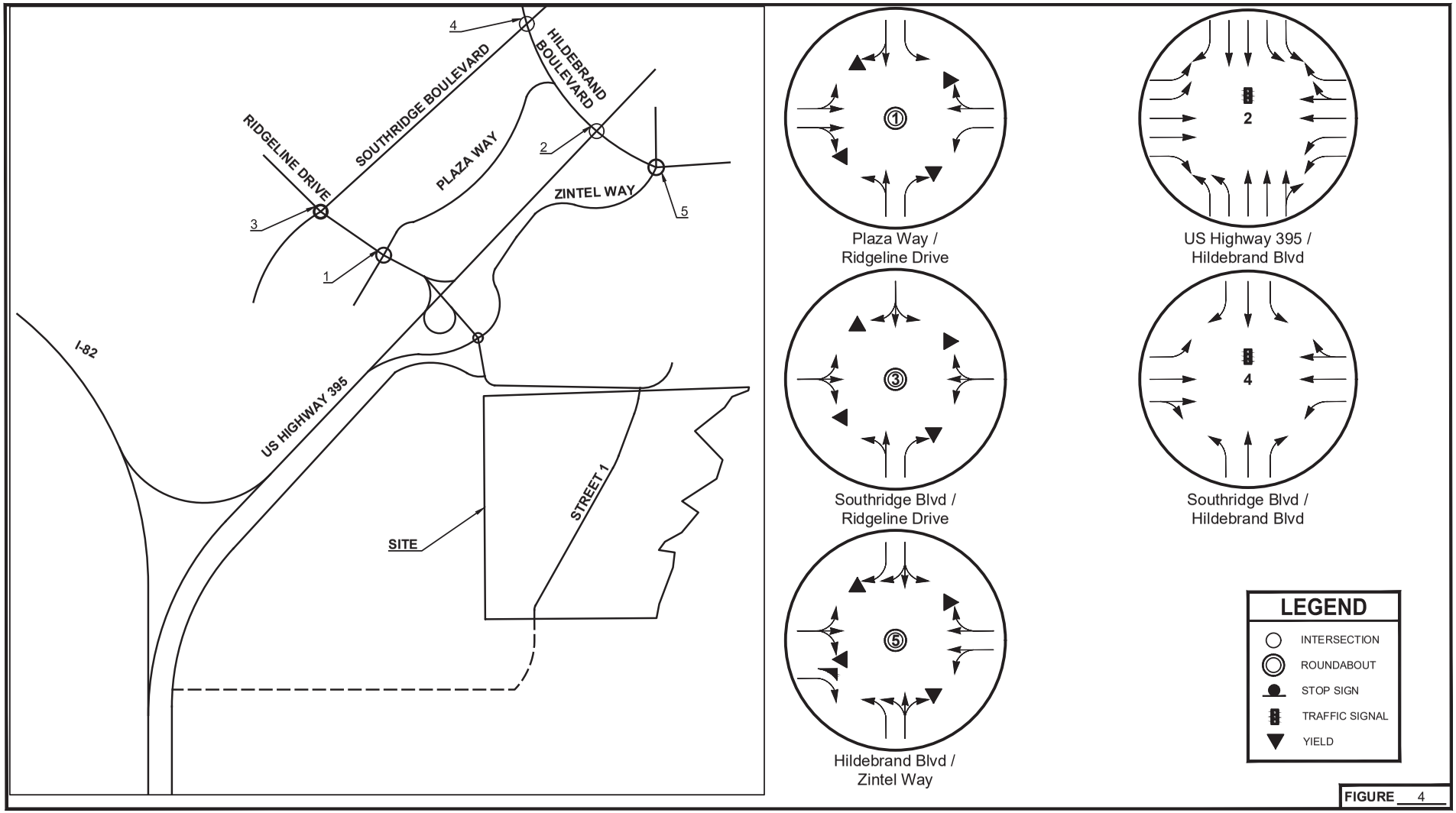
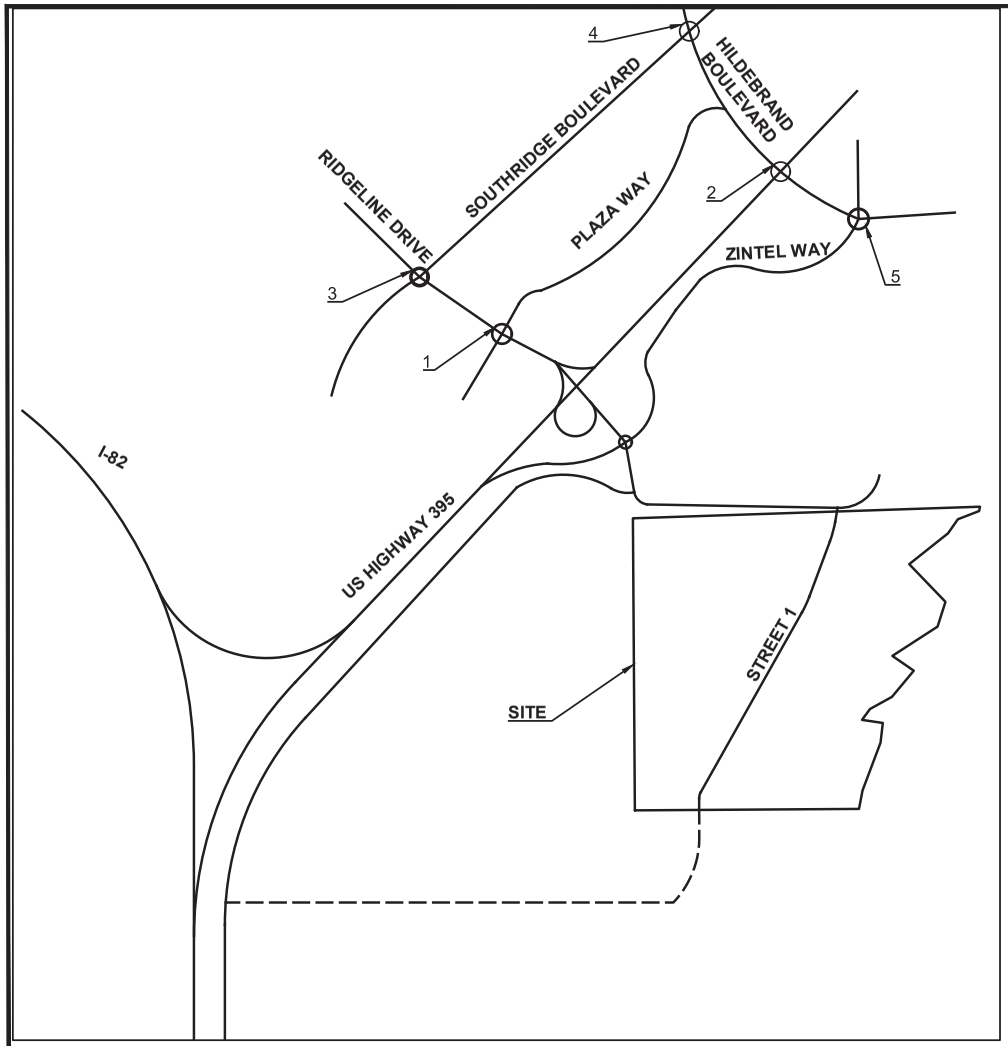
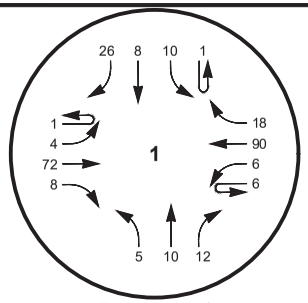


FIGURE 4

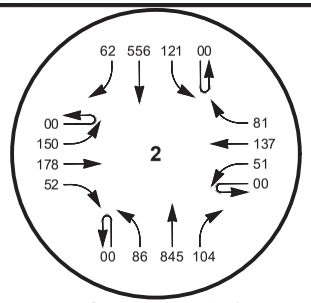
Existing Lane Configurations and Traffic Controls

Canyon View Estates

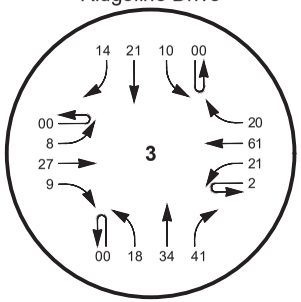




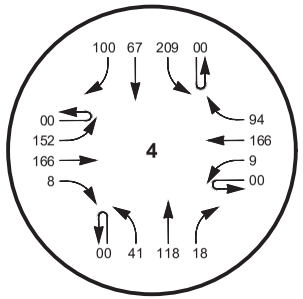
Plaza Way /
Ridgeline Drive



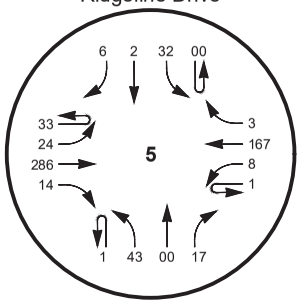
US Highway 395 /
Hildebrand Blvd



Southridge Blvd /
Ridgeline Drive



Southridge Blvd /
Hildebrand Blvd



Hildebrand Blvd /
Zintel Way

LEGEND

○ INTERSECTION

XXX PM PEAK HOUR

FIGURE 5

2024 Existing Volumes

Canyon View Estates

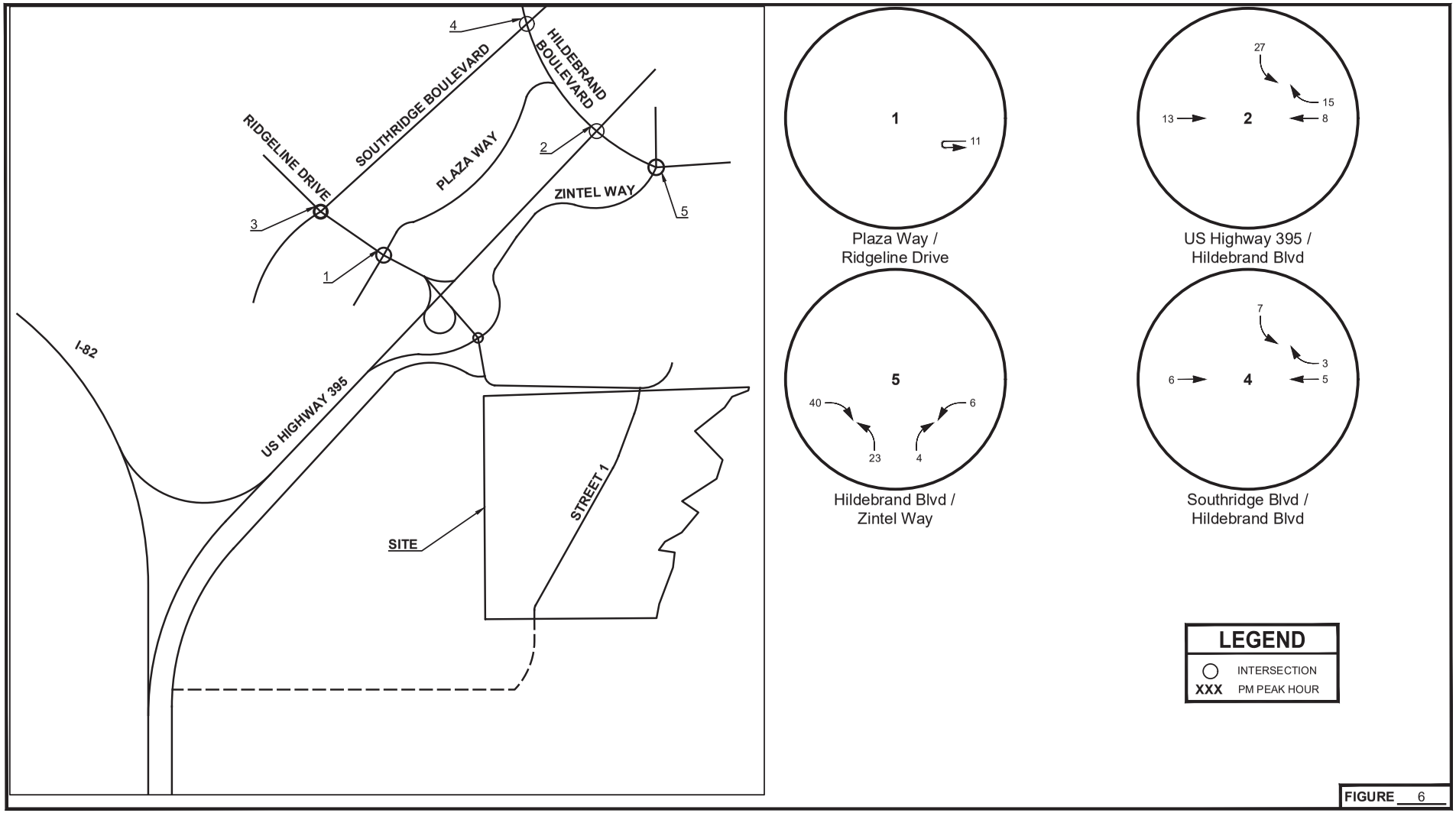
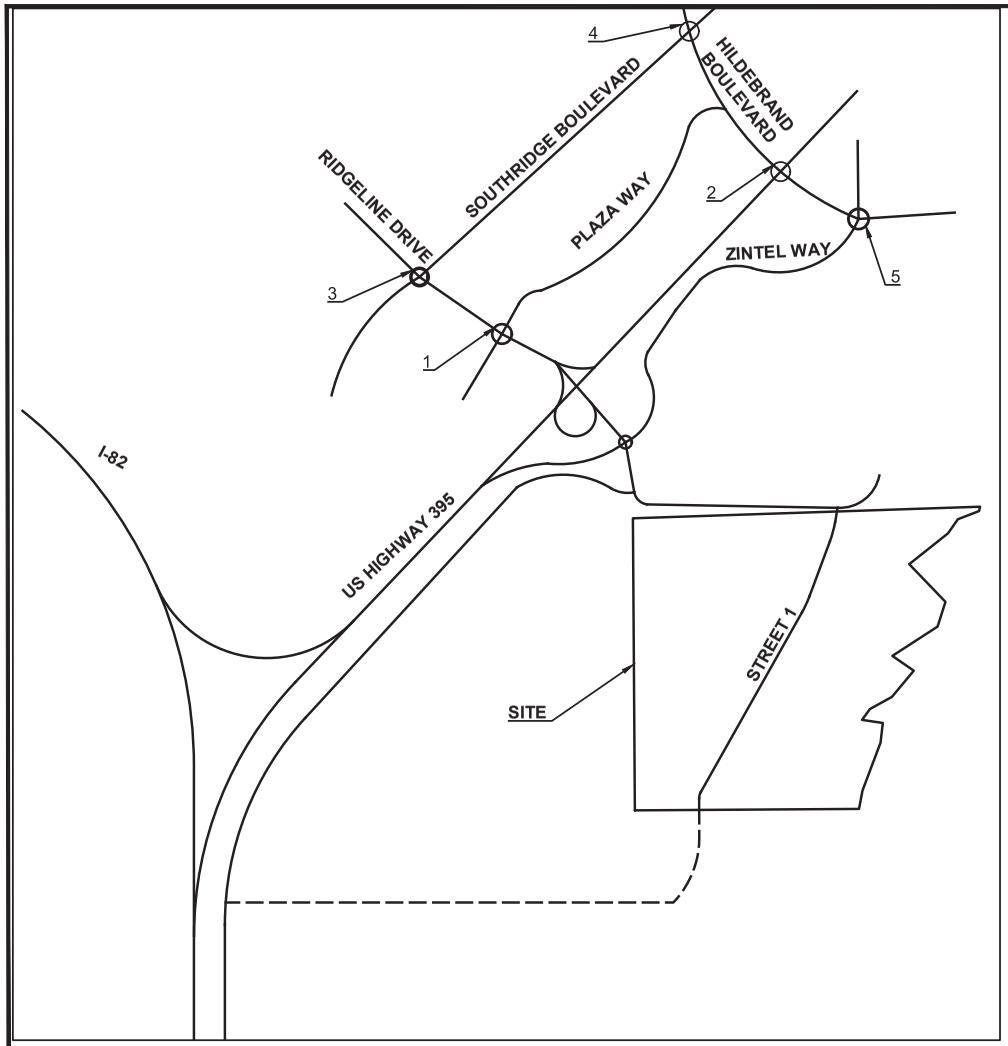
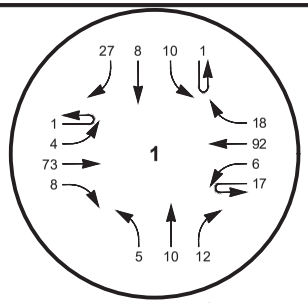


FIGURE 6

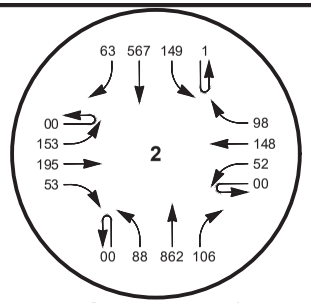
In-Process Project Volumes

Canyon View Estates

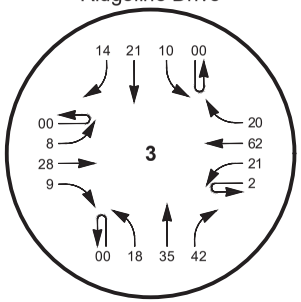




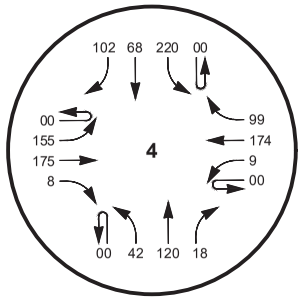
Plaza Way /
Ridgeline Drive



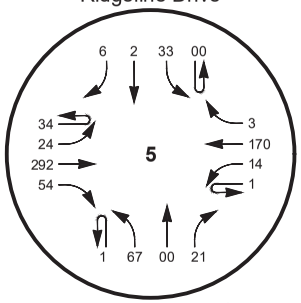
US Highway 395 /
Hildebrand Blvd



Southridge Blvd /
Ridgeline Drive



Southridge Blvd /
Hildebrand Blvd



Hildebrand Blvd /
Zintel Way

LEGEND

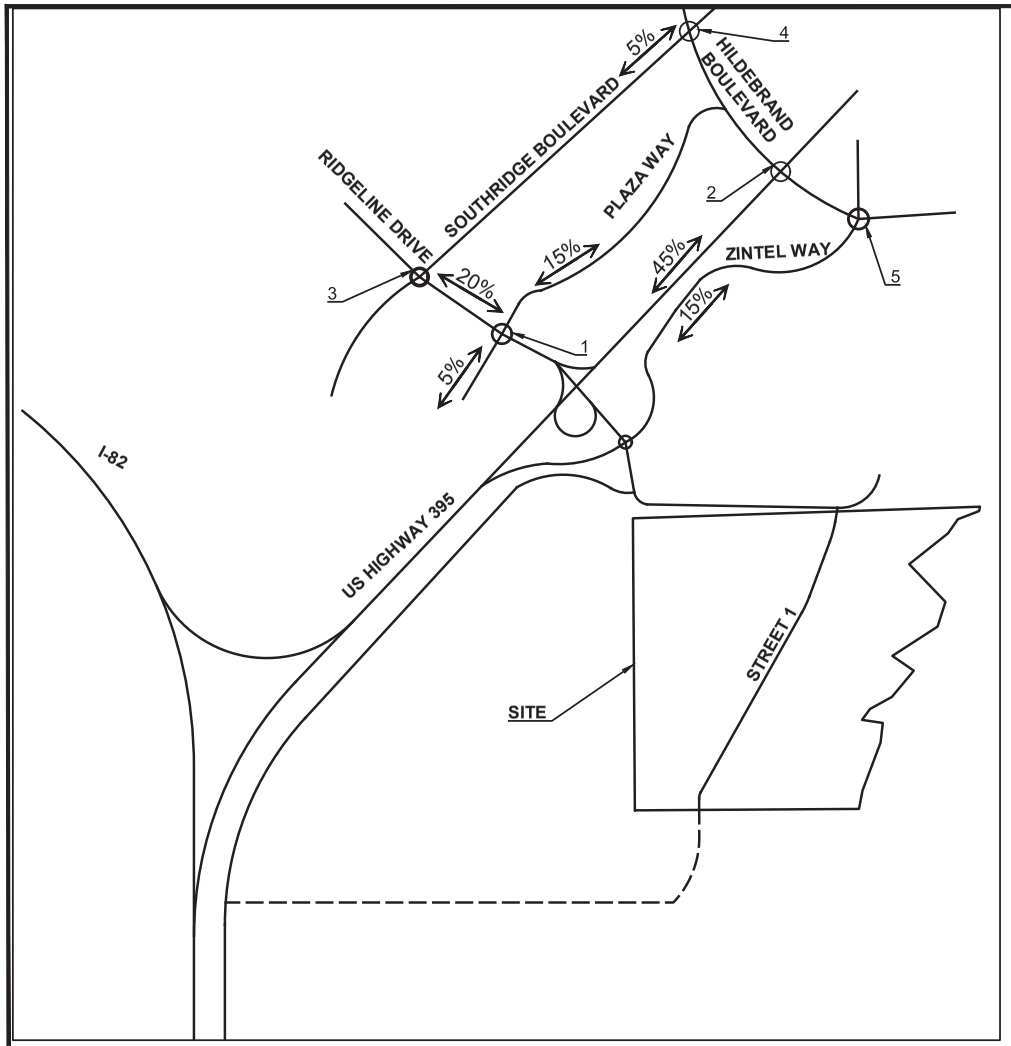
○ INTERSECTION

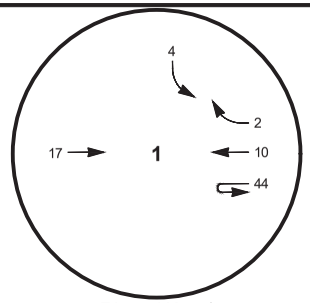
XXX PM PEAK HOUR

FIGURE 7

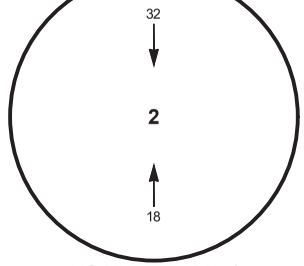
2025 Without Project Volumes

Canyon View Estates

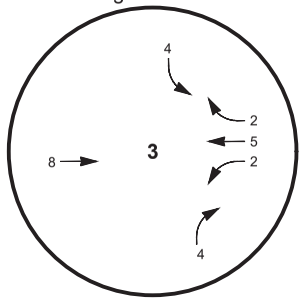




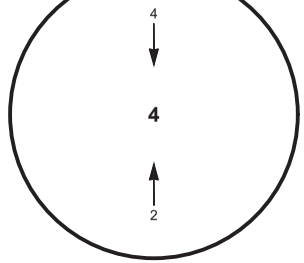
Plaza Way /
Ridgeline Drive



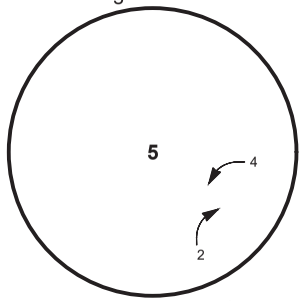
US Highway 395 /
Hildebrand Blvd



Southridge Blvd /
Ridgeline Drive



Southridge Blvd /
Hildebrand Blvd

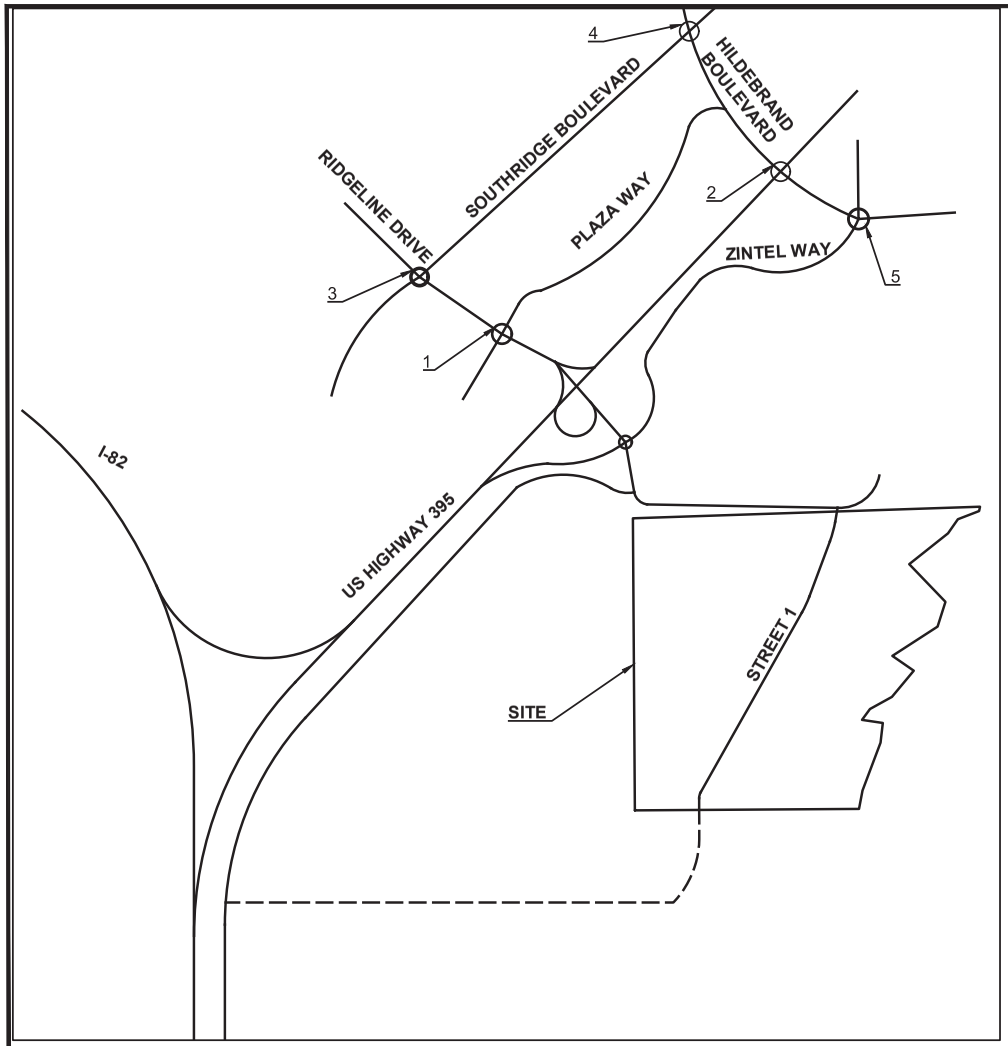


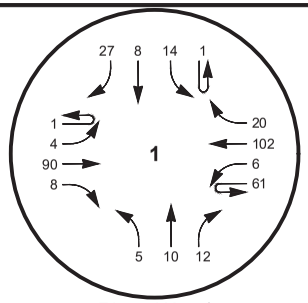
Hildebrand Blvd /
Zintel Way

FIGURE 8

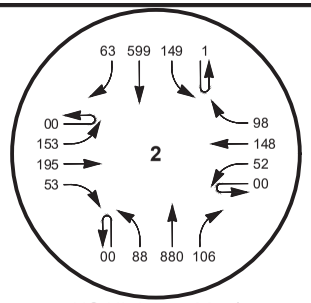
Trip Assignment & Distribution

Canyon View Estates

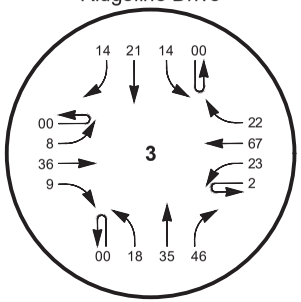




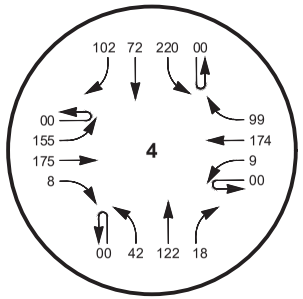
Plaza Way /
Ridgeline Drive



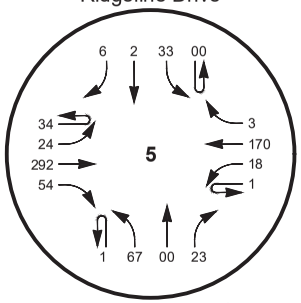
US Highway 395 /
Hildebrand Blvd



Southridge Blvd /
Ridgeline Drive



Southridge Blvd /
Hildebrand Blvd



Hildebrand Blvd /
Zintel Way

LEGEND

○ INTERSECTION

XXX PM PEAK HOUR

FIGURE 9

2025 With Project Volumes

Canyon View Estates

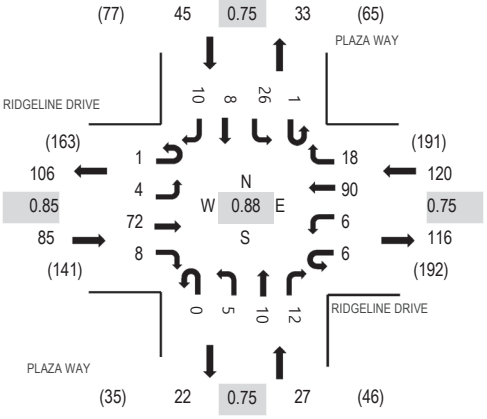
Appendix A
Traffic Counts

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

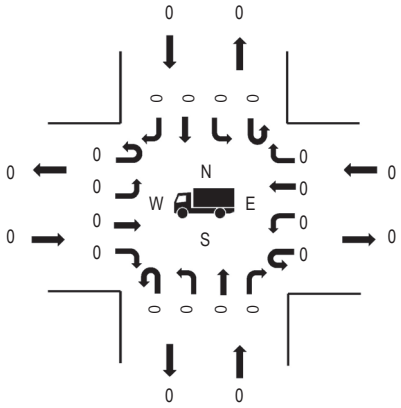
Location: 1 PLAZA WAY & RIDGELINE DRIVE PM
Date: Tuesday, July 23, 2024
Peak Hour: 04:25 PM - 05:25 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour

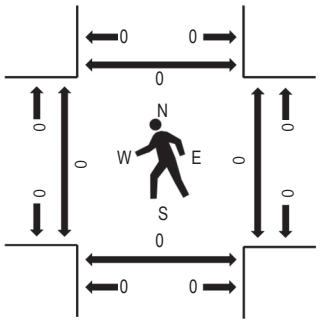
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.85
WB	0.0%	0.75
NB	0.0%	0.75
SB	0.0%	0.75
All	0.0%	0.88

Traffic Counts - Motorized Vehicles

Interval Start Time	RIDGELINE DRIVE Eastbound				RIDGELINE DRIVE Westbound				PLAZA WAY Northbound				PLAZA WAY Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	0	3	0	1	1	5	1	0	0	0	2	0	1	1	0	15	239
4:05 PM	0	0	6	0	0	0	2	0	0	0	0	1	0	4	0	0	13	244
4:10 PM	0	1	2	1	0	0	3	2	0	0	0	1	0	1	2	0	13	257
4:15 PM	0	3	3	1	2	0	2	0	0	1	0	0	0	1	0	0	13	259
4:20 PM	0	0	5	0	0	1	3	3	0	0	0	0	0	0	1	1	14	274
4:25 PM	1	0	7	2	2	0	6	1	0	0	0	1	0	3	0	3	26	277
4:30 PM	0	0	9	2	1	0	7	5	0	2	1	1	0	4	1	1	34	266
4:35 PM	0	0	3	0	0	2	1	2	0	0	1	1	0	2	1	0	13	251
4:40 PM	0	0	7	0	0	0	10	0	0	0	1	0	0	1	0	0	19	254
4:45 PM	0	2	8	2	0	0	9	4	0	1	0	1	1	0	1	1	30	245
4:50 PM	0	0	3	1	0	0	6	2	0	1	1	0	0	4	1	2	21	236
4:55 PM	0	0	6	0	2	0	17	0	0	0	1	0	0	2	0	0	28	232
5:00 PM	0	0	7	0	1	0	8	0	0	0	1	2	0	1	0	0	20	216
5:05 PM	0	1	10	0	0	1	7	1	0	0	0	2	0	3	0	1	26	
5:10 PM	0	0	2	1	0	0	5	1	0	1	1	1	0	1	1	1	15	
5:15 PM	0	0	9	0	0	1	8	1	0	0	1	3	0	3	1	1	28	
5:20 PM	0	1	1	0	0	2	6	1	0	0	2	0	0	2	2	0	17	
5:25 PM	0	1	1	0	0	0	4	1	0	1	0	3	0	2	0	2	15	
5:30 PM	0	0	5	1	0	0	7	1	0	0	1	1	0	1	1	1	19	
5:35 PM	0	1	1	0	0	0	7	1	0	0	1	0	0	2	1	2	16	
5:40 PM	0	0	6	0	0	0	2	2	0	0	0	0	0	0	0	0	10	
5:45 PM	0	1	5	0	1	1	6	2	0	0	2	0	0	2	0	1	21	
5:50 PM	0	2	4	0	0	0	2	2	0	0	1	3	0	2	0	1	17	
5:55 PM	0	0	3	0	0	1	2	3	0	1	0	0	0	1	0	1	12	
Count Total	1	13	116	11	10	10	135	36	0	8	15	23	1	43	14	19	455	
Peak Hour	1	4	72	8	6	6	90	18	0	5	10	12	1	26	8	10	277	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

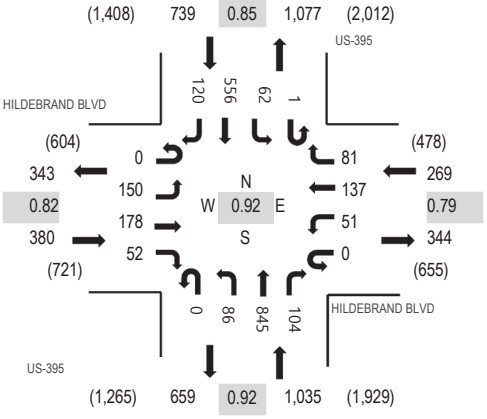
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	0	0	0	0	4:20 PM	0	0	1	0	1	4:20 PM	0	0	0	0	0
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	1	0	1	4:45 PM	0	0	0	0	0
4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	0	0	0	5:05 PM	1	0	0	1	2	5:05 PM	0	0	0	0	0
5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	0	0	0	0	0	Count Total	1	0	2	1	4	Count Total	0	0	0	0	0
Peak Hour	0	0	0	0	0	Peak Hour	1	0	1	1	3	Peak Hour	0	0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

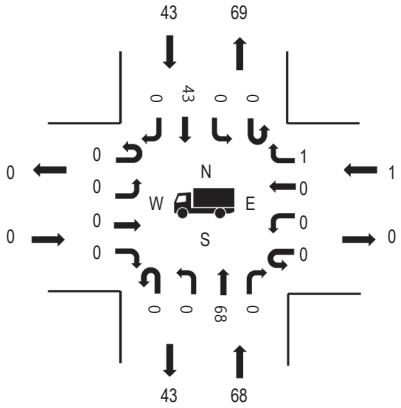
Location: 2 US-395 & HILDEBRAND BLVD PM
Date: Tuesday, July 23, 2024
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour

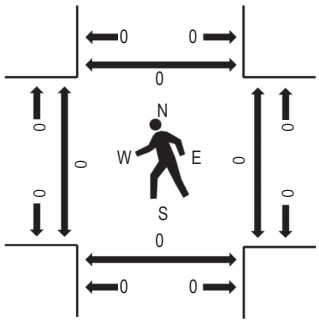
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.82
WB	0.4%	0.79
NB	6.6%	0.92
SB	5.8%	0.85
All	4.6%	0.92

Traffic Counts - Motorized Vehicles

Interval Start Time	HILDEBRAND BLVD Eastbound				HILDEBRAND BLVD Westbound				US-395 Northbound				US-395 Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	9	6	1	0	6	15	5	0	5	61	6	0	4	39	8	165	2,307
4:05 PM	0	14	19	6	0	1	7	5	0	3	61	3	0	6	51	7	183	2,306
4:10 PM	0	9	9	7	0	2	7	10	0	2	75	7	0	3	45	8	184	2,347
4:15 PM	0	10	21	1	0	3	9	7	0	7	54	6	0	5	44	10	177	2,379
4:20 PM	0	9	15	3	0	1	5	6	0	8	68	15	0	7	49	13	199	2,368
4:25 PM	0	19	9	5	0	7	7	5	0	3	75	6	0	2	25	6	169	2,399
4:30 PM	0	5	10	3	0	2	13	6	0	11	80	7	1	10	43	4	195	2,423
4:35 PM	0	11	13	6	0	4	8	8	0	0	77	7	0	3	53	9	199	2,406
4:40 PM	0	10	16	0	0	4	14	12	0	6	44	13	0	7	39	9	174	2,356
4:45 PM	0	20	7	5	0	3	9	9	0	7	84	9	0	3	52	16	224	2,350
4:50 PM	0	8	20	3	0	5	21	8	0	6	69	8	0	5	37	8	198	2,306
4:55 PM	0	13	13	4	0	4	2	3	0	13	80	12	0	7	74	15	240	2,294
5:00 PM	0	20	14	1	0	6	6	3	0	8	60	4	0	1	31	10	164	2,229
5:05 PM	0	10	15	6	0	3	22	7	0	11	74	12	0	7	50	7	224	
5:10 PM	0	8	10	8	0	3	13	8	0	8	86	12	0	5	43	12	216	
5:15 PM	0	19	17	9	0	7	6	6	0	6	47	6	0	7	29	7	166	
5:20 PM	0	9	17	2	0	5	10	4	0	4	92	9	0	4	59	15	230	
5:25 PM	0	17	26	5	0	5	13	7	0	6	52	5	0	3	46	8	193	
5:30 PM	0	8	22	5	0	6	10	2	0	7	46	16	0	3	47	6	178	
5:35 PM	0	10	4	3	0	4	5	0	0	7	48	11	0	6	45	6	149	
5:40 PM	0	9	17	2	0	7	10	8	0	6	52	10	0	10	30	7	168	
5:45 PM	0	10	12	3	1	4	7	9	0	3	70	2	0	4	43	12	180	
5:50 PM	0	15	18	6	0	1	10	3	0	6	66	5	0	6	41	9	186	
5:55 PM	0	4	10	11	0	5	6	3	0	2	70	2	0	3	47	12	175	
Count Total	0	276	340	105	1	98	235	144	0	145	1,591	193	1	121	1,062	224	4,536	
Peak Hour	0	150	178	52	0	51	137	81	0	86	845	104	1	62	556	120	2,423	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	7	0	4	11	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	5	0	3	8	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	5	0	12	17	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	4	0	3	7	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	8	0	4	12	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	7	0	3	10	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	9	0	3	12	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	12	0	4	16	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	1	0	4	5	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	5	0	6	11	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	3	0	4	7	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	4	0	2	6	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	7	0	5	12	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	5	0	3	8	5:05 PM	0	0	1	0	1	5:05 PM	0	0	0	0	0
5:10 PM	0	8	1	1	10	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	3	0	3	6	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	7	0	4	11	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	4	0	4	8	5:25 PM	2	0	0	0	2	5:25 PM	0	0	0	0	0
5:30 PM	0	4	0	1	5	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	7	0	8	15	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	4	0	2	6	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	6	0	4	10	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	6	0	5	11	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	9	0	4	13	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	0	140	1	96	237	Count Total	2	0	1	0	3	Count Total	0	0	0	0	0
Peak Hour	0	68	1	43	112	Peak Hour	2	0	1	0	3	Peak Hour	0	0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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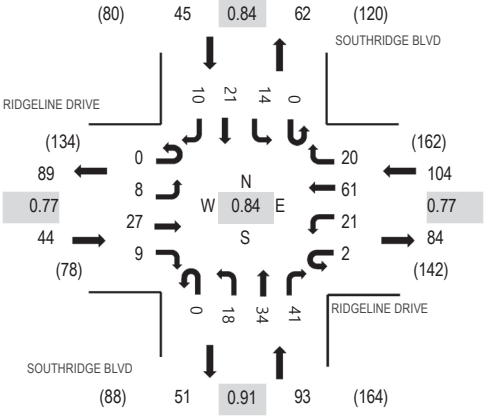
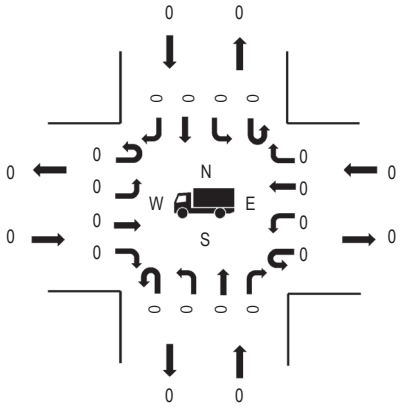
Location: 3 SOUTHRIDGE BLVD & RIDGELINE DRIVE PM
Date: Tuesday, July 23, 2024
Peak Hour: 04:20 PM - 05:20 PM
Peak 15-Minutes: 04:50 PM - 05:05 PM

Peak Hour

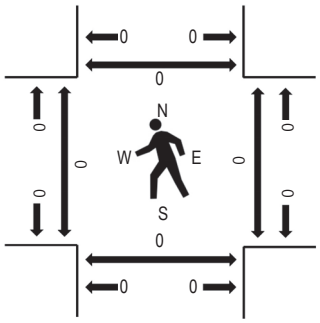
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.77
WB	0.0%	0.77
NB	0.0%	0.91
SB	0.0%	0.84
All	0.0%	0.84

Traffic Counts - Motorized Vehicles

Interval Start Time	RIDGELINE DRIVE Eastbound				RIDGELINE DRIVE Westbound				SOUTHRIDGE BLVD Northbound				SOUTHRIDGE BLVD Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	0	1	0	0	2	1	0	0	4	5	2	1	2	1	0	19	259
4:05 PM	0	1	1	0	0	1	1	1	0	3	2	0	0	3	0	2	15	273
4:10 PM	0	1	3	0	0	1	2	1	0	1	4	6	0	1	5	2	27	280
4:15 PM	0	0	1	0	0	1	1	1	0	0	7	1	0	0	1	0	13	277
4:20 PM	0	0	1	2	1	2	4	2	0	0	0	4	0	2	1	1	20	286
4:25 PM	0	1	5	0	1	2	5	2	0	3	4	4	0	0	0	0	27	284
4:30 PM	0	0	1	0	0	0	1	0	0	4	0	4	0	1	0	2	13	276
4:35 PM	0	1	0	0	0	3	8	0	0	0	2	5	0	0	2	0	21	281
4:40 PM	0	1	1	0	0	1	5	3	0	0	2	8	0	5	1	0	27	272
4:45 PM	0	1	1	2	0	1	4	5	0	0	5	1	0	0	4	1	25	266
4:50 PM	0	1	4	2	0	5	10	1	0	0	2	3	0	0	1	1	30	253
4:55 PM	0	0	3	0	0	3	4	2	0	0	3	3	0	1	2	1	22	234
5:00 PM	0	1	3	2	0	1	6	1	0	4	3	5	0	3	3	1	33	225
5:05 PM	0	1	4	0	0	0	4	2	0	3	2	2	0	0	4	0	22	
5:10 PM	0	1	2	1	0	3	7	0	0	0	5	2	0	1	1	1	24	
5:15 PM	0	0	2	0	0	0	3	2	0	4	6	0	0	1	2	2	22	
5:20 PM	0	1	2	4	0	1	3	2	0	0	3	2	0	0	0	0	18	
5:25 PM	0	0	1	0	0	4	5	1	0	0	4	2	0	1	1	0	19	
5:30 PM	0	1	2	1	0	4	2	2	0	0	3	1	0	0	0	2	18	
5:35 PM	0	1	2	0	0	0	0	1	0	0	4	3	0	0	0	1	12	
5:40 PM	0	1	2	0	0	2	5	1	0	0	3	2	0	3	0	2	21	
5:45 PM	0	0	3	1	0	1	1	1	0	0	2	2	0	0	0	1	12	
5:50 PM	0	0	1	0	0	1	3	1	0	0	0	1	0	1	2	1	11	
5:55 PM	0	1	2	0	0	2	2	0	0	0	1	3	0	1	1	0	13	
Count Total	0	15	48	15	2	41	87	32	0	26	72	66	1	26	32	21	484	
Peak Hour	0	8	27	9	2	21	61	20	0	18	34	41	0	14	21	10	286	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	1	0	1	4:15 PM	0	0	0	0	0
4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	0	0	0	0	4:40 PM	0	0	1	0	1	4:40 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	1	0	1	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	0	0	1	0	1	Count Total	0	0	2	0	2	Count Total	0	0	0	0	0
Peak Hour	0	0	0	0	0	Peak Hour	0	0	1	0	1	Peak Hour	0	0	0	0	0

ALL TRAFFIC DATA SERVICES
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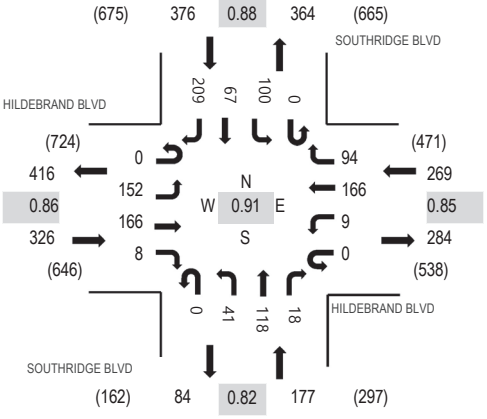
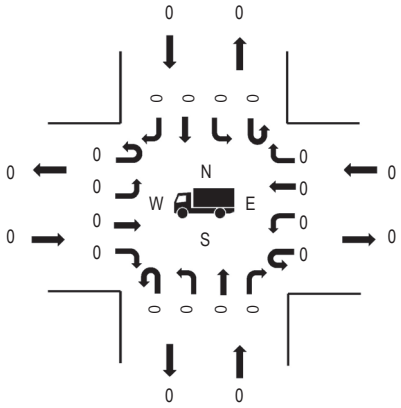
Location: 4 SOUTHRIDGE BLVD & HILDEBRAND BLVD PM
Date: Tuesday, July 23, 2024
Peak Hour: 04:35 PM - 05:35 PM
Peak 15-Minutes: 05:10 PM - 05:25 PM

Peak Hour

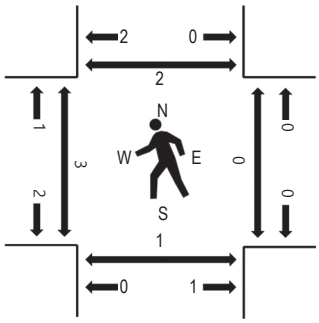
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.86
WB	0.0%	0.85
NB	0.0%	0.82
SB	0.0%	0.88
All	0.0%	0.91

Traffic Counts - Motorized Vehicles

Interval Start Time	HILDEBRAND BLVD Eastbound				HILDEBRAND BLVD Westbound				SOUTHRIDGE BLVD Northbound				SOUTHRIDGE BLVD Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	14	15	0	0	3	10	6	0	4	8	1	0	6	9	12	88	1,017
4:05 PM	0	14	12	1	0	0	7	6	0	2	8	0	0	6	4	18	78	1,028
4:10 PM	0	19	14	1	0	1	6	7	0	3	3	0	0	6	6	12	78	1,053
4:15 PM	0	4	12	1	0	0	11	10	0	0	9	0	0	5	7	15	74	1,082
4:20 PM	0	7	20	0	0	1	8	6	0	4	8	1	0	8	2	10	75	1,095
4:25 PM	0	14	21	0	0	0	8	6	0	1	7	0	0	8	8	10	83	1,143
4:30 PM	0	6	14	1	0	1	20	6	0	3	8	2	0	3	5	14	83	1,145
4:35 PM	0	14	12	0	0	0	7	6	0	4	3	1	0	3	3	19	72	1,148
4:40 PM	0	14	16	1	0	0	13	10	0	4	15	0	0	6	5	14	98	1,146
4:45 PM	0	10	10	1	0	0	15	7	0	4	8	1	0	8	8	11	83	1,131
4:50 PM	0	10	17	2	0	3	20	11	0	3	14	2	0	10	10	11	113	1,130
4:55 PM	0	14	15	0	0	1	11	5	0	3	10	2	0	6	4	21	92	1,088
5:00 PM	0	12	14	0	0	1	11	11	0	2	9	3	0	8	3	25	99	1,072
5:05 PM	0	13	6	1	0	1	19	12	0	5	8	1	0	9	12	16	103	
5:10 PM	0	15	15	0	0	2	14	9	0	4	11	5	0	6	6	20	107	
5:15 PM	0	19	16	0	0	0	10	4	0	4	10	0	0	6	4	14	87	
5:20 PM	0	10	20	2	0	1	16	9	0	1	17	3	0	15	5	24	123	
5:25 PM	0	13	14	0	0	0	13	4	0	2	8	0	0	14	3	14	85	
5:30 PM	0	8	11	1	0	0	17	6	0	5	5	0	0	9	4	20	86	
5:35 PM	0	7	9	1	0	0	12	3	0	1	9	0	0	5	4	19	70	
5:40 PM	0	16	14	0	0	0	9	11	0	3	9	1	0	4	3	13	83	
5:45 PM	0	18	14	0	0	1	11	4	0	1	8	1	0	6	6	12	82	
5:50 PM	0	10	17	0	0	0	5	7	0	0	3	0	0	9	4	16	71	
5:55 PM	0	10	13	1	0	2	10	4	0	4	6	2	0	5	5	14	76	
Count Total	0	291	341	14	0	18	283	170	0	67	204	26	0	171	130	374	2,089	
Peak Hour	0	152	166	8	0	9	166	94	0	41	118	18	0	100	67	209	1,148	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	0	0	4:00 PM	0	1	0	0	1	4:00 PM	0	0	0	0	0
4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	1	0	0	2	3
5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	1	1	0	0	2
5:20 PM	0	0	0	0	0	5:20 PM	2	0	0	0	2	5:20 PM	1	0	0	0	1
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	4	0	0	0	4
5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	0	0	0	0	0	Count Total	2	1	0	0	3	Count Total	7	1	0	2	10
Peak Hour	0	0	0	0	0	Peak Hour	2	0	0	0	2	Peak Hour	3	1	0	2	6

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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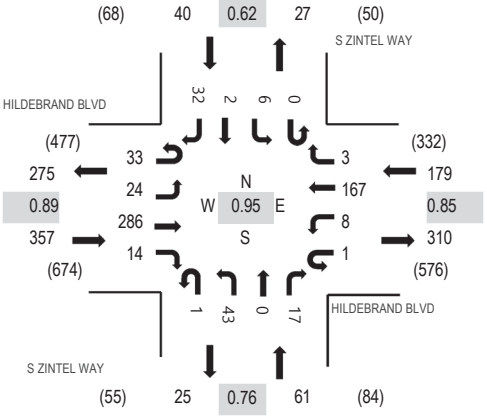
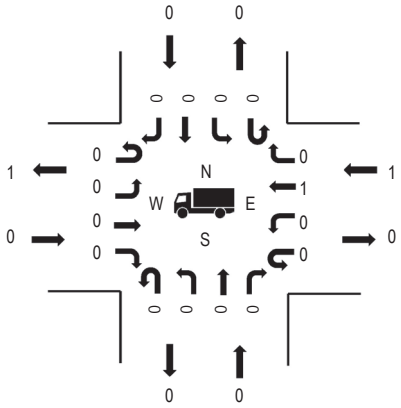
Location: 5 S ZINTEL WAY & HILDEBRAND BLVD PM
Date: Tuesday, July 23, 2024
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:40 PM - 04:55 PM

Peak Hour

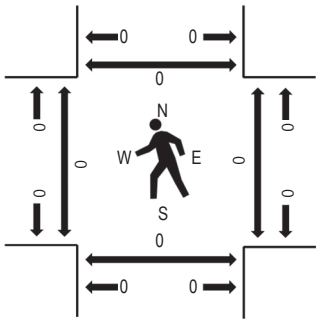
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.89
WB	0.6%	0.85
NB	0.0%	0.76
SB	0.0%	0.62
All	0.2%	0.95

Traffic Counts - Motorized Vehicles

Interval Start Time	HILDEBRAND BLVD Eastbound				HILDEBRAND BLVD Westbound				S ZINTEL WAY Northbound				S ZINTEL WAY Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	1	1	13	1	0	2	13	0	0	1	0	0	0	0	0	4	36	581
4:05 PM	4	1	18	0	0	2	6	0	0	3	0	1	0	1	1	0	37	588
4:10 PM	9	0	20	1	0	4	8	0	0	1	0	0	0	0	0	2	45	609
4:15 PM	3	5	26	2	0	2	12	0	0	2	0	0	0	0	0	0	52	617
4:20 PM	2	1	28	1	0	2	12	0	0	3	0	0	0	1	0	4	54	609
4:25 PM	0	1	22	2	0	0	8	2	0	0	1	0	0	0	0	2	38	614
4:30 PM	2	1	17	1	0	1	17	0	0	3	0	3	0	0	1	6	52	637
4:35 PM	1	0	22	1	1	0	14	0	1	2	0	3	0	0	0	5	50	636
4:40 PM	4	5	21	1	0	1	13	0	0	2	0	1	0	3	0	2	53	620
4:45 PM	6	1	17	0	0	0	14	0	0	5	0	2	0	1	0	3	49	626
4:50 PM	2	3	31	0	0	0	23	0	0	2	0	0	0	0	1	3	65	619
4:55 PM	1	2	27	0	0	3	11	2	0	2	0	1	0	0	0	1	50	600
5:00 PM	4	2	21	1	0	0	13	0	0	2	0	0	0	0	0	0	43	577
5:05 PM	5	3	19	1	0	0	18	0	0	5	0	2	0	0	0	5	58	
5:10 PM	3	0	29	0	0	0	11	0	0	5	0	1	0	2	0	2	53	
5:15 PM	2	5	21	3	0	0	6	0	0	4	0	3	0	0	0	0	44	
5:20 PM	2	0	26	3	0	2	17	0	0	4	0	1	0	0	0	4	59	
5:25 PM	1	2	35	3	0	1	10	1	0	7	0	0	0	0	0	1	61	
5:30 PM	0	1	28	1	0	0	15	0	0	4	0	0	0	0	0	2	51	
5:35 PM	0	0	20	1	0	1	8	0	1	1	0	0	0	1	0	1	34	
5:40 PM	3	3	28	1	0	1	18	0	0	1	0	1	0	0	0	3	59	
5:45 PM	2	1	17	2	0	0	14	0	0	1	0	1	0	0	0	4	42	
5:50 PM	2	2	27	1	0	0	13	0	0	0	0	0	0	0	0	1	46	
5:55 PM	0	3	12	0	0	1	8	1	0	0	0	1	0	0	0	1	27	
Count Total	59	43	545	27	1	23	302	6	2	60	1	21	0	9	3	56	1,158	
Peak Hour	33	24	286	14	1	8	167	3	1	43	0	17	0	6	2	32	637	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0	5:00 PM	0	0	2	0	2	5:00 PM	0	0	0	0	0
5:05 PM	0	0	1	0	1	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	0	0	0	0	5:10 PM	0	1	0	0	1	5:10 PM	0	0	0	0	0
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5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0	5:25 PM	2	0	0	0	2	5:25 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	0	0	1	0	1	Count Total	2	1	2	0	5	Count Total	0	0	0	0	0
Peak Hour	0	0	1	0	1	Peak Hour	2	1	2	0	5	Peak Hour	0	0	0	0	0

Appendix B
In-Process Project Trips

July 6, 2022

Jim Stephens, Executive Managing Director of Acquisitions and Development
Evergreen Housing Development Group LLC
PO Box 2487
Seattle, Washington 98124

Via email: jim@evergreenhd.com

Regarding: Trip Generation and Distribution Letter
Zintel Way Apartments
Tax Parcels 1-1689-401-3188-014
Kennewick, Washington
PBS Project 71969.000

Dear Mr. Stephens:

This trip generation and distribution letter has been prepared for the Zintel Way Apartments project to determine possible traffic impacts, as directed in the City of Kennewick (City) *Development Traffic Impact Analysis Criteria* document.

PROJECT DESCRIPTION

The proposed project is located on Zintel Way northeast of the intersection with Ridgeline Drive. The development will occupy tax parcel 1-1689-401-3188-014. This site is currently designated as "Residential, Medium Density" per the city's zoning map. See Figure 1 for the vicinity map and Figure 2 for the site plan.

Evergreen Housing Development Group provided a current site plan for the project showing the proposed location of the building on the site. The project proposes to construct a 195-unit multi-family apartment complex. The existing land is undeveloped. The project is proposed to be constructed in one phase.

Parking and Site Circulation

Kennewick Municipal Code 18.36.060 states that one-bedroom and studio multi-family housing should provide one parking space per dwelling unit plus five percent of the total, and that two-bedroom multi-family housing should provide one and a half parking spaces per dwelling unit plus five percent of the total. Zintel Way Apartments includes 114 one-bedroom or studio units and 81 two-bedroom apartments, requiring a total of 247 parking spaces. The proposed site plan provides 255 parking spaces. The proposed site plan includes two access points to the site, both on Zintel Way to the north of Ridgeline Drive. No other driveways or intersections are within 300 feet of both proposed driveways.

TRIP GENERATION AND DISTRIBUTION

Proposed Trip Generation

The Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 11th Edition, was used to estimate the number of net new trips from the proposed project to construct the 195-unit multi-family apartment complex.

Based on the project description, Multifamily Housing Low-Rise (ITE land use code 220) was used for the proposed apartments. The ITE average trip rates were applied, and the independent variable was the number of dwelling units. Table 1 presents the trip generation estimates. Detailed trip generation calculations are attached. No reductions were applied related to transit or other alternative transportation modes.

Table 1. Net New Trip Generation for Zintel Way Apartments Development

Land Use (ITE Code)	Multifamily Housing (Low-Rise) (220)	
Independent Variable	Dwelling Units	
Size	195	
Average Daily Trips (ADT)	1325	
Peak Hour Trips	**AM Peak Hour**	**PM Peak Hour**
In	20	66
Out	63	38
Total Trips	83	104

Findings: The low-rise multifamily apartments are anticipated to generate 1325 trips during the average weekday, including 83 trips during the AM peak hour and 104 during the PM peak hour.

Proposed Trip Distribution

The proposed distribution of net new trips is based on a review of the land uses within the study area, on the distribution of existing traffic patterns, and on engineering judgment. The proposed distribution pattern, which was agreed upon with city staff during traffic impacts analysis scoping discussions, is as follows:

- 30% to and from south of the site
  - 20% to and from I-82, west of US 395
  - 10% to and from I-82, east of US 395
- 70% to and from north of the site
  - 20% to and from Hildebrand Boulevard, west of US 395
  - 10% to and from W Canyon Lakes Drive, north of Hildebrand Boulevard
  - 40% to and from US 395, north of Hildebrand Boulevard

The distribution pattern above represents an external distribution of the proposed multifamily apartments trips entering and exiting the study area. The trip distribution of the net new trips at the multifamily apartments are shown on Figure 1.

SIGHT PLAN REVIEW

Sight Distance

The proposed site access driveways do not currently exist, but the existing terrain does not appear to restrict sight distance at the proposed driveways. The area characteristics suggest that adequate sight distances should be achievable through design and construction. All proposed site accesses should be designed in accordance with

Chapter 9.5.3 of the American Association of State Highway and Transportation Officials (AASHTO) policy,[1] based on the accessed roadways' respective posted speeds. Based on the unposted 25 miles per hour speed on Zintel Way, the proposed accesses must have at least 280 feet of intersection sight distance (ISD) to meet the AASHTO recommendations.

Findings

The following conclusions are based on the Trip Generation and Distribution Letter associated with the proposed Zintel Way Apartments.

- The proposed low rise multifamily apartments are anticipated to generate 1325 trips during the average weekday, including 83 trips during the AM peak hour and 104 during the PM peak hour.
- The trip distribution pattern for the proposed multi-tenant building is as follows:
    - 30% to and from south of the site
        - 20% to and from I-82, west of US 395
        - 10% to and from I-82, east of US 395
    - 70% to and from north of the site
        - 20% to and from Hildebrand Boulevard, west of US 395
        - 10% to and from W Canyon Lakes Drive, north of Hildebrand Boulevard
        - 40% to and from US 395, north of Hildebrand Boulevard
- Adequate sight distance should be achievable through design and construction, and all proposed site access should be designed to meet AASHTO recommendations.
- Based on City guidelines and consultation with the City Transportation Manager, no additional analysis is required.

Please feel free to contact me at 360.567.2117 or john.manix@pbsusa.com with any questions or comments.

Sincerely,

John Manix, PE
Senior Traffic Engineer

JOHN ANDREW MANIX
STATE OF WASHINGTON
37225
REGISTERED
PROFESSIONAL ENGINEER

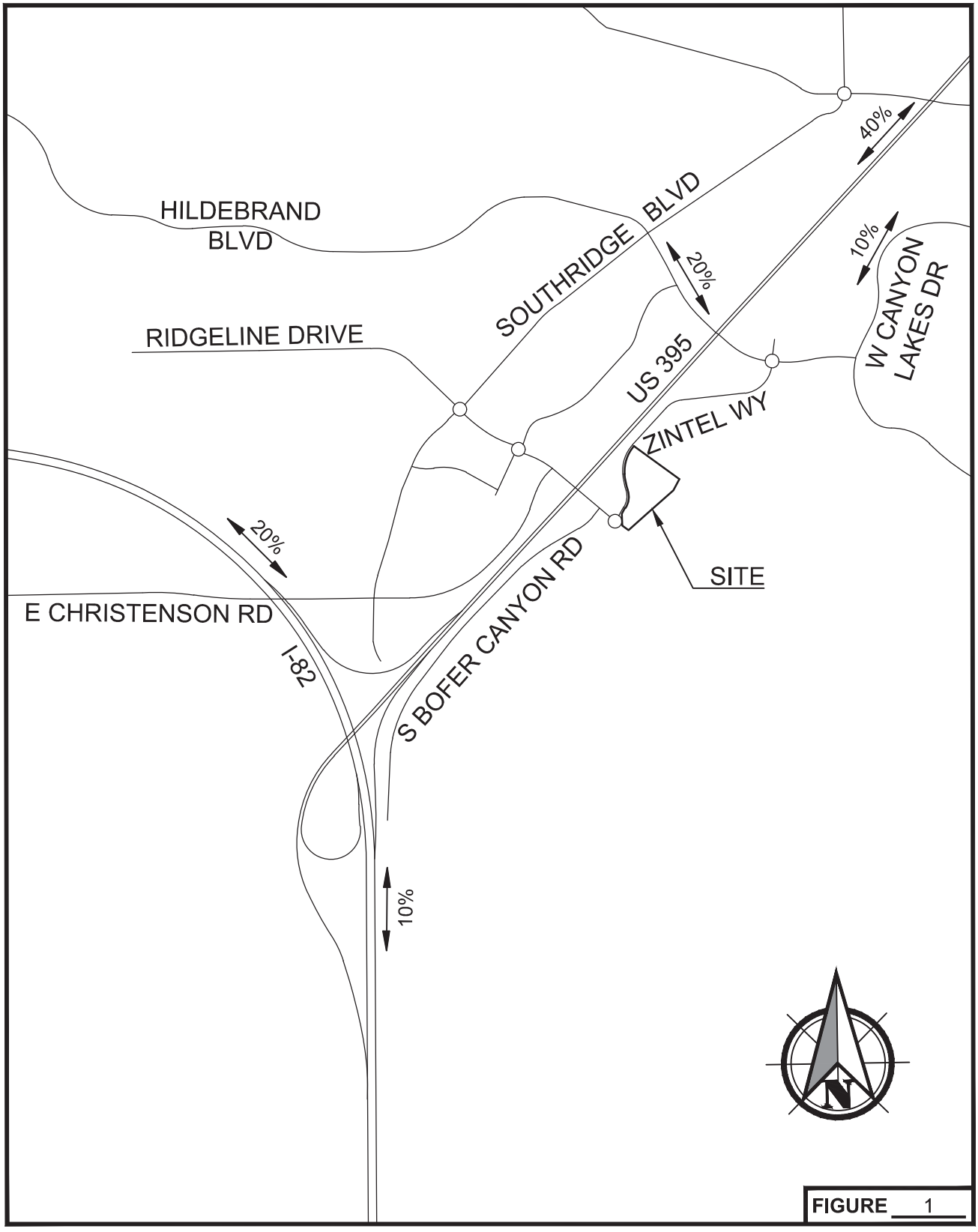
John A Manix
2022.07.08
15:27:23-07'00'

Attachments: Figure 1. Vicinity Map and Trip Distribution
Figure 2. Site Plan
Trip Generation Calculations

ASW:JAM:tl

[1] American Association of State Highway and Transportation Officials (AASHTO). (2018). *A Policy on the Geometric Design of Highways and Streets*, 7th Edition.

FIGURES



Vicinity Map and Trip Distribution

Zintel Way Apartments

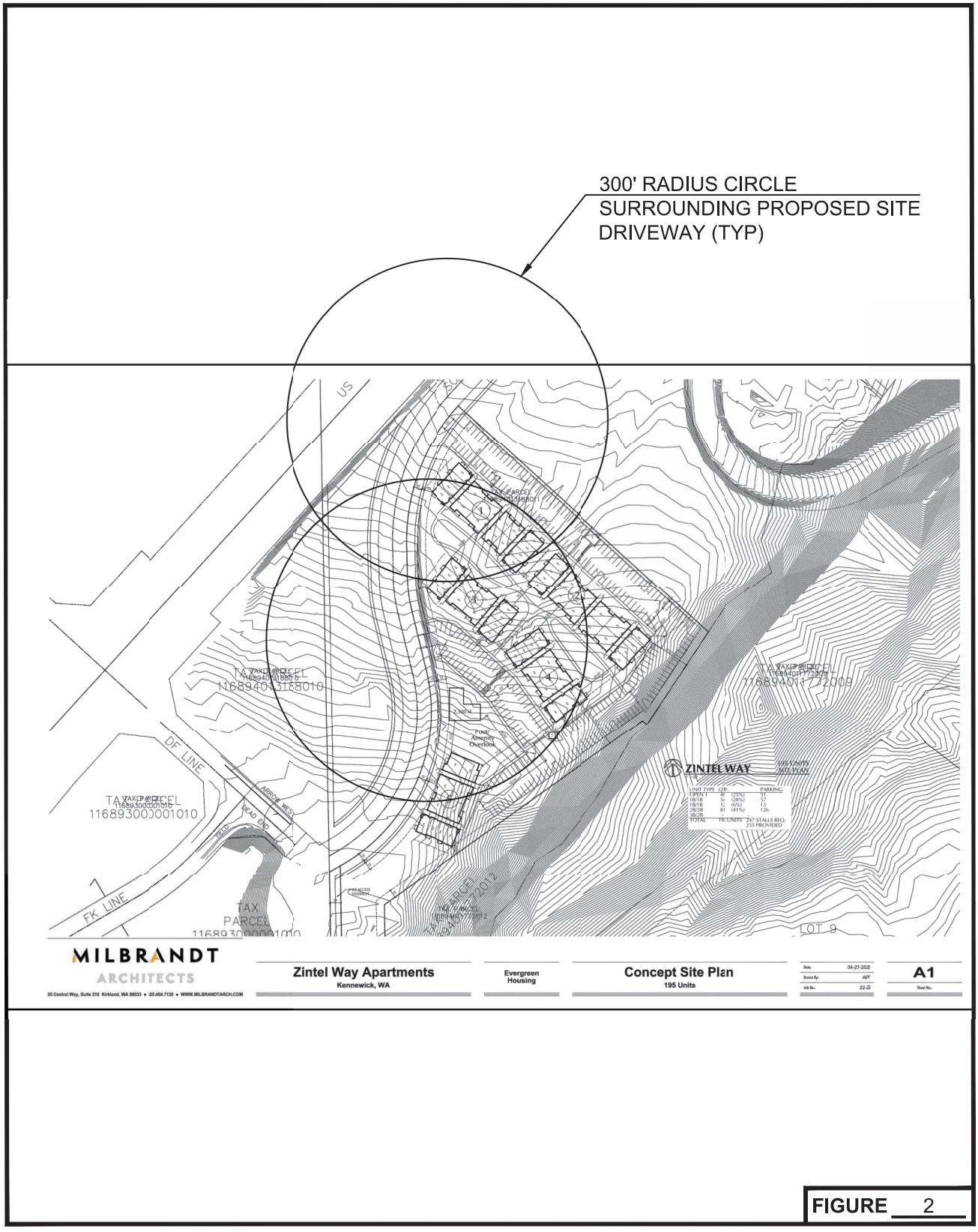


FIGURE 2

Site Plan

Zintel Way Apartments

Exhibit 4

TRIP GENERATION CALCULATIONS

Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

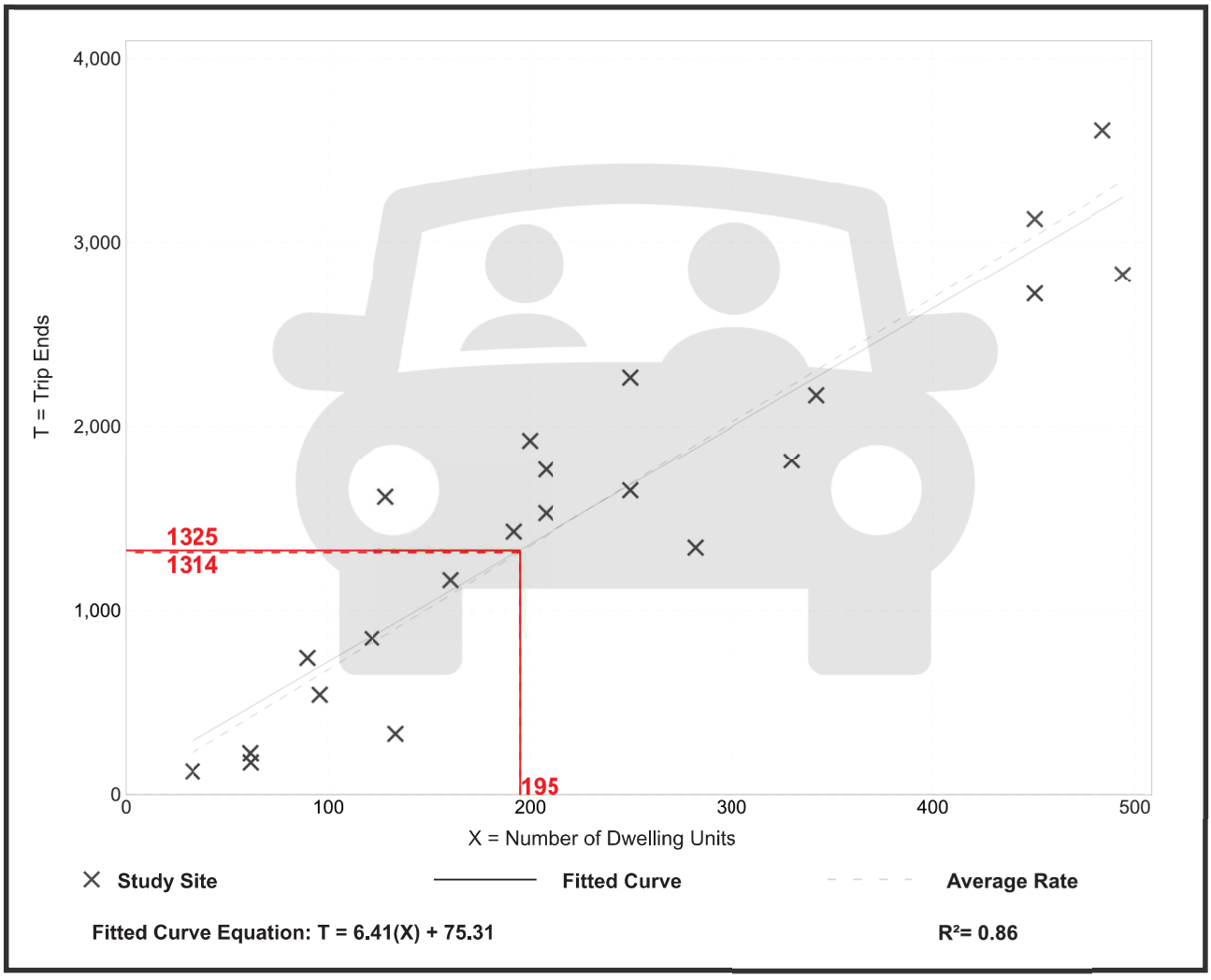
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 22
Avg. Num. of Dwelling Units: 229
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.74	2.46 - 12.50	1.79

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

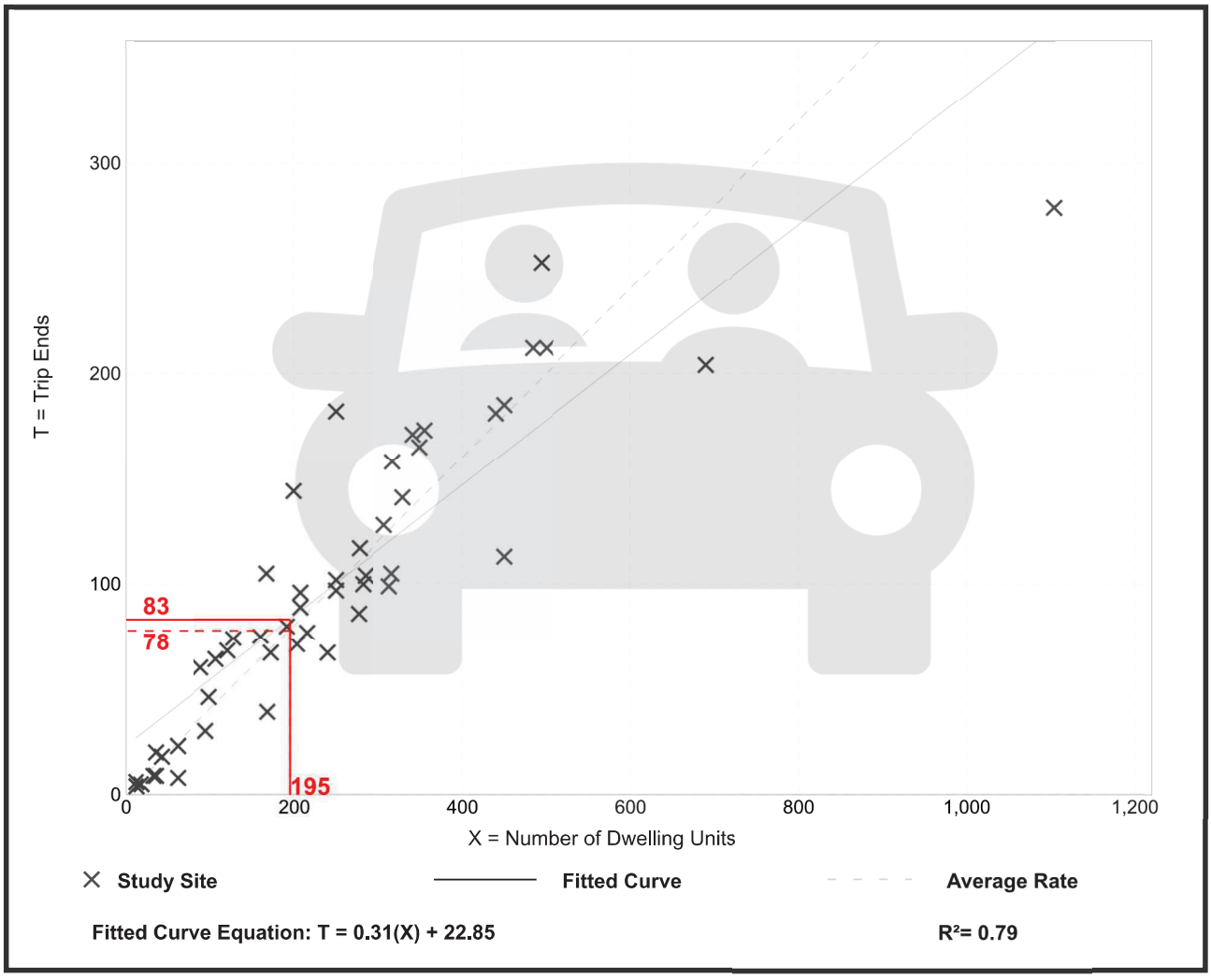
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

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: 49
Avg. Num. of Dwelling Units: 249
Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

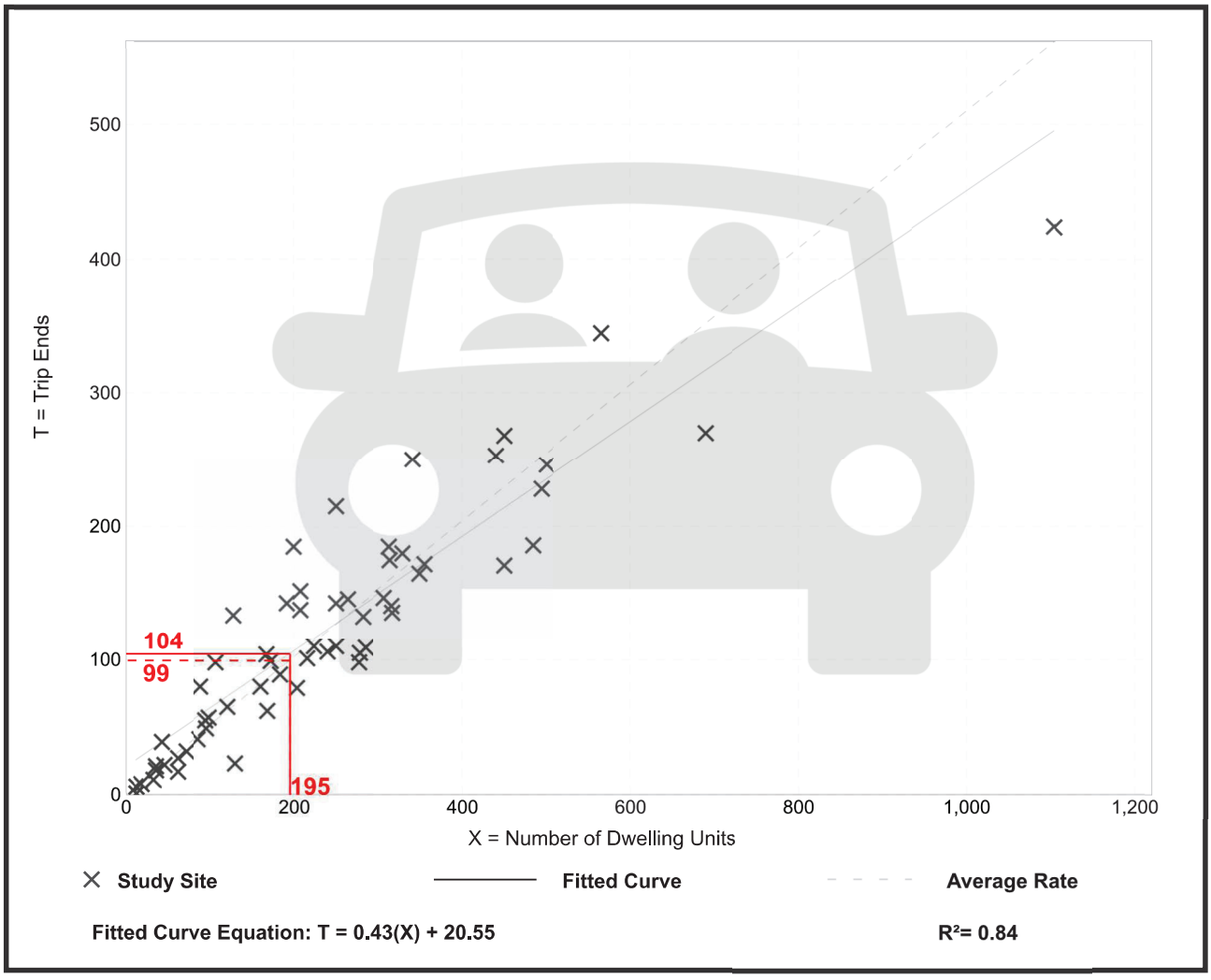
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

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: 59
Avg. Num. of Dwelling Units: 241
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Appendix C
ITE Trip Generation

Query | Filter

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
210

LAND USE GROUP:
(200-299) Residential

LAND USE :
210 - Single-Family Detached Housing

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

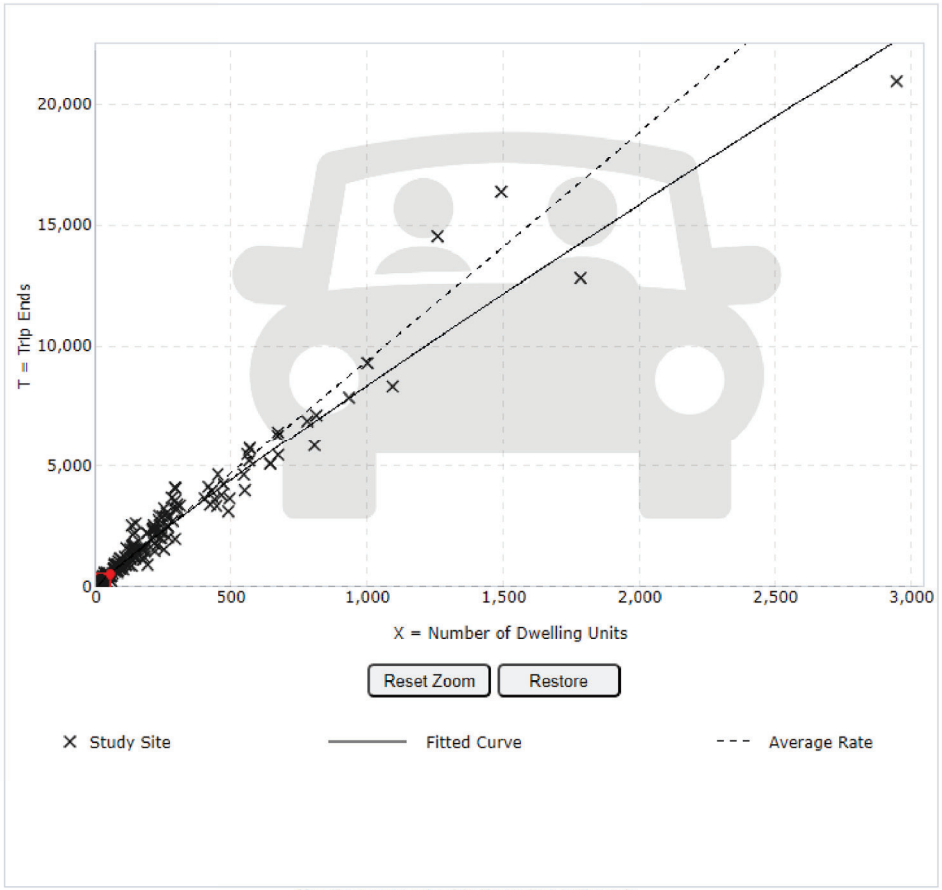
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
53 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Single-Family Detached Housing (210) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
174

Avg. Num. of Dwelling Units:
246

Average Rate:
9.43

Range of Rates:
4.45 - 22.61

Standard Deviation:
2.13

Fitted Curve Equation:
Ln(T) = 0.92 Ln(X) + 2.68

R^2:
0.95

Directional Distribution:
50% entering, 50% exiting

Calculated Trip Ends:
Average Rate: 500 (Total), 250 (Entry), 250 (Exit)
Fitted Curve: 563 (Total), 281 (Entry), 282 (Exit)

Query | Filter

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
210

LAND USE GROUP:
(200-299) Residential

LAND USE :
210 - Single-Family Detached Housing

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

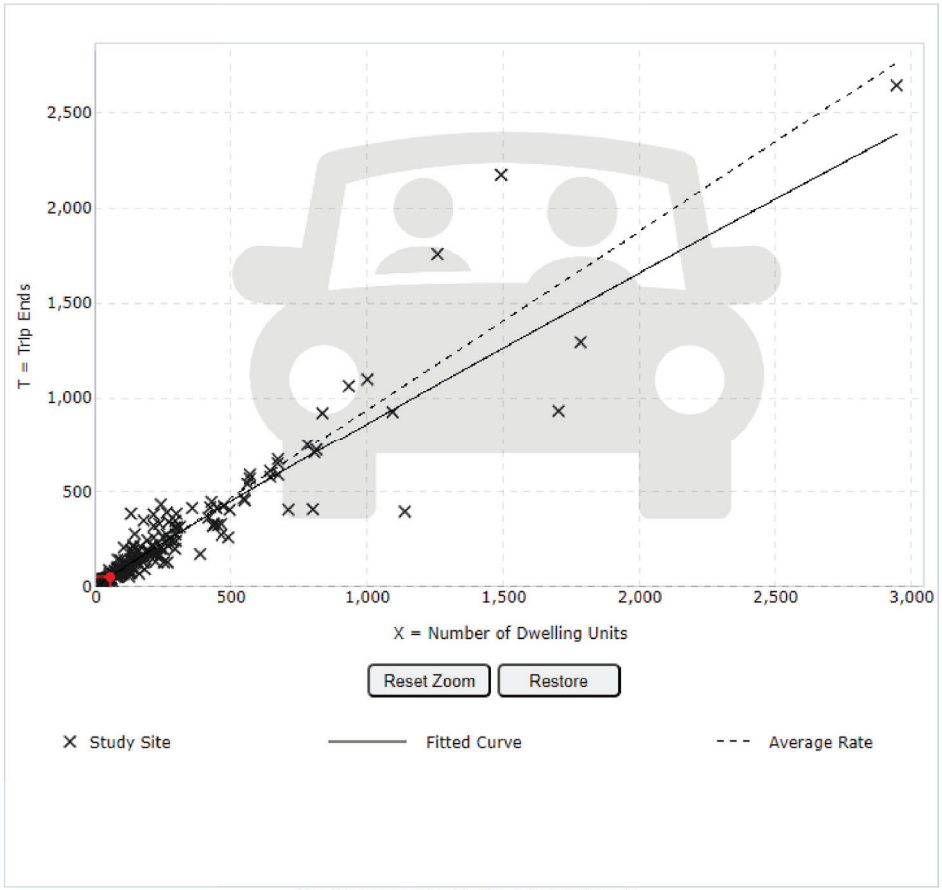
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
53 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Single-Family Detached Housing (210) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
208

Avg. Num. of Dwelling Units:
248

Average Rate:
0.94

Range of Rates:
0.35 - 2.98

Standard Deviation:
0.31

Fitted Curve Equation:
Ln(T) = 0.94 Ln(X) + 0.27

R^2:
0.92

Directional Distribution:
63% entering, 37% exiting

Calculated Trip Ends:
Average Rate: 50 (Total), 31 (Entry), 19 (Exit)
Fitted Curve: 55 (Total), 34 (Entry), 21 (Exit)

Query | Filter

DATA SOURCE: Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE: 220

LAND USE GROUP: (200-299) Residential

LAND USE : 220 - Multifamily Housing (Low-Rise)

LAND USE SUBCATEGORY: Not Close to Rail Transit

SETTING/LOCATION: General Urban/Suburban

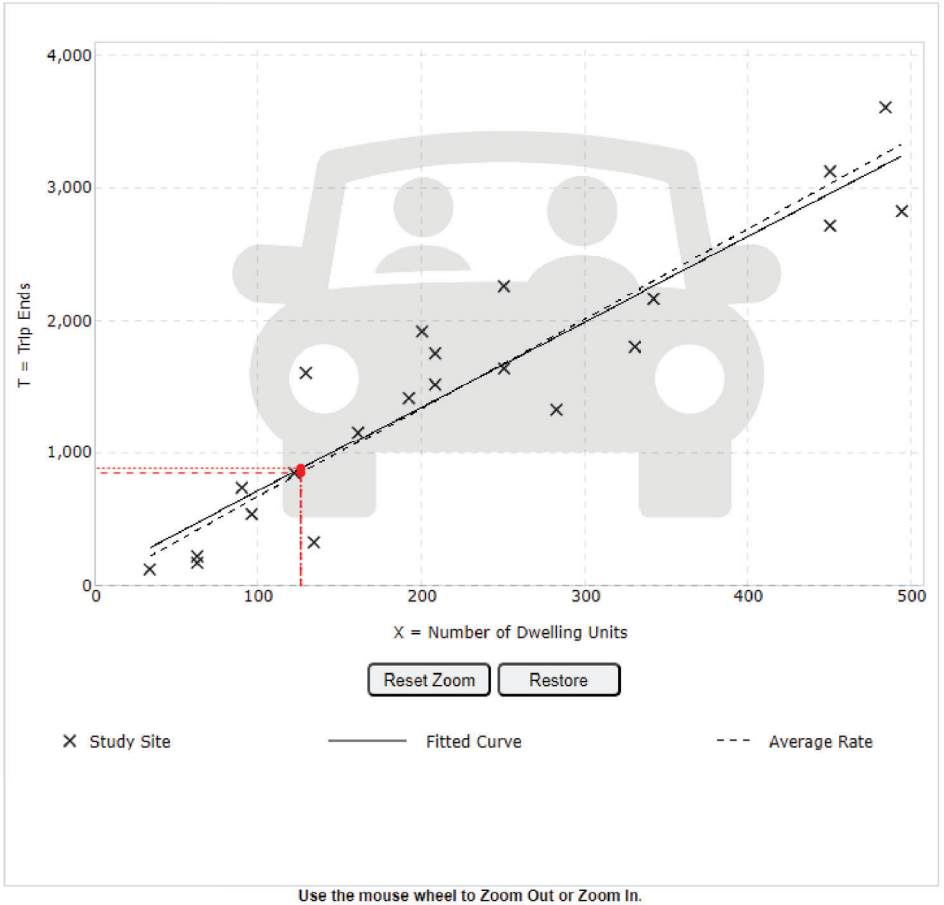
INDEPENDENT VARIABLE (IV): Dwelling Units

TIME PERIOD: Weekday

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 126 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Multifamily Housing (Low-Rise) - Not Close to Rail Transit (220) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
22

Avg. Num. of Dwelling Units:
229

Average Rate:
6.74

Range of Rates:
2.46 - 12.50

Standard Deviation:
1.79

Fitted Curve Equation:
T = 6.41(X) + 75.31

R^2:
0.86

Directional Distribution:
50% entering, 50% exiting

Calculated Trip Ends:
Average Rate: 849 (Total), 425 (Entry), 424 (Exit)
Fitted Curve: 883 (Total), 441 (Entry), 442 (Exit)

Query | Filter

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
220

LAND USE GROUP:
(200-299) Residential

LAND USE :
220 - Multifamily Housing (Low-Rise)

LAND USE SUBCATEGORY:
Not Close to Rail Transit

SETTING/LOCATION:
General Urban/Suburban

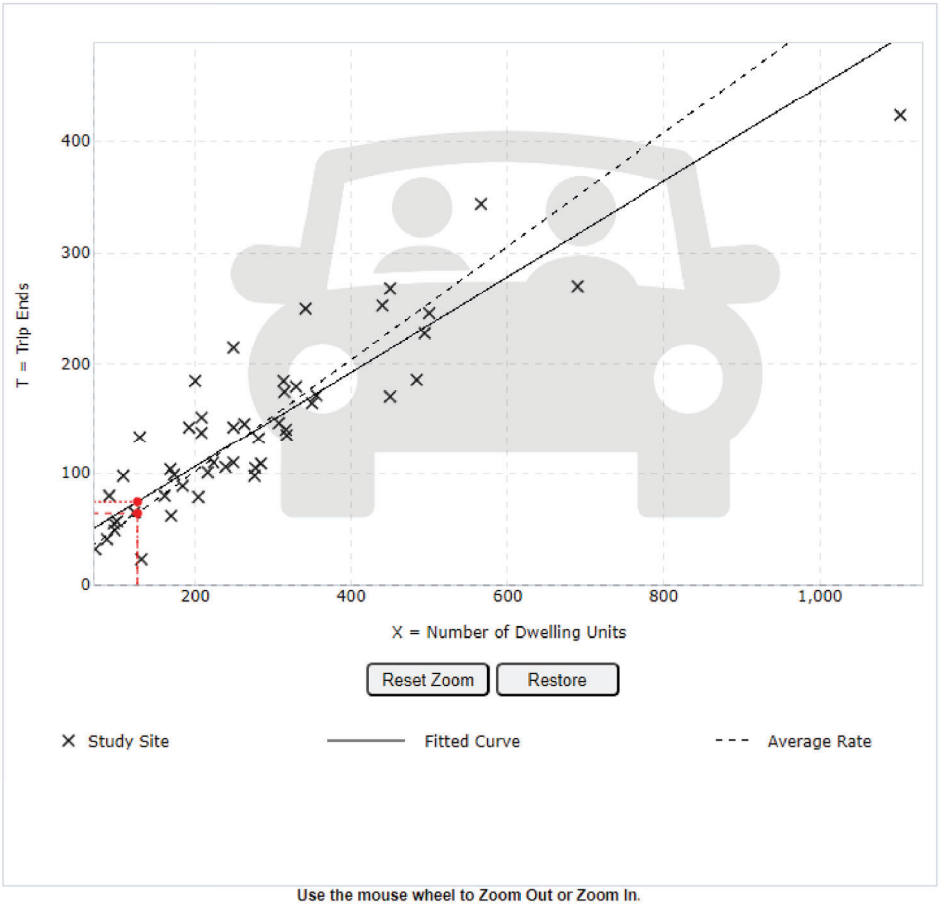
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
126 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Multifamily Housing (Low-Rise) - Not Close to Rail Transit (220) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
59

Avg. Num. of Dwelling Units:
241

Average Rate:
0.51

Range of Rates:
0.08 - 1.04

Standard Deviation:
0.15

Fitted Curve Equation:
T = 0.43(X) + 20.55

R^2:
0.84

Directional Distribution:
63% entering, 37% exiting

Calculated Trip Ends:
Average Rate: 64 (Total), 40 (Entry), 24 (Exit)
Fitted Curve: 75 (Total), 47 (Entry), 28 (Exit)

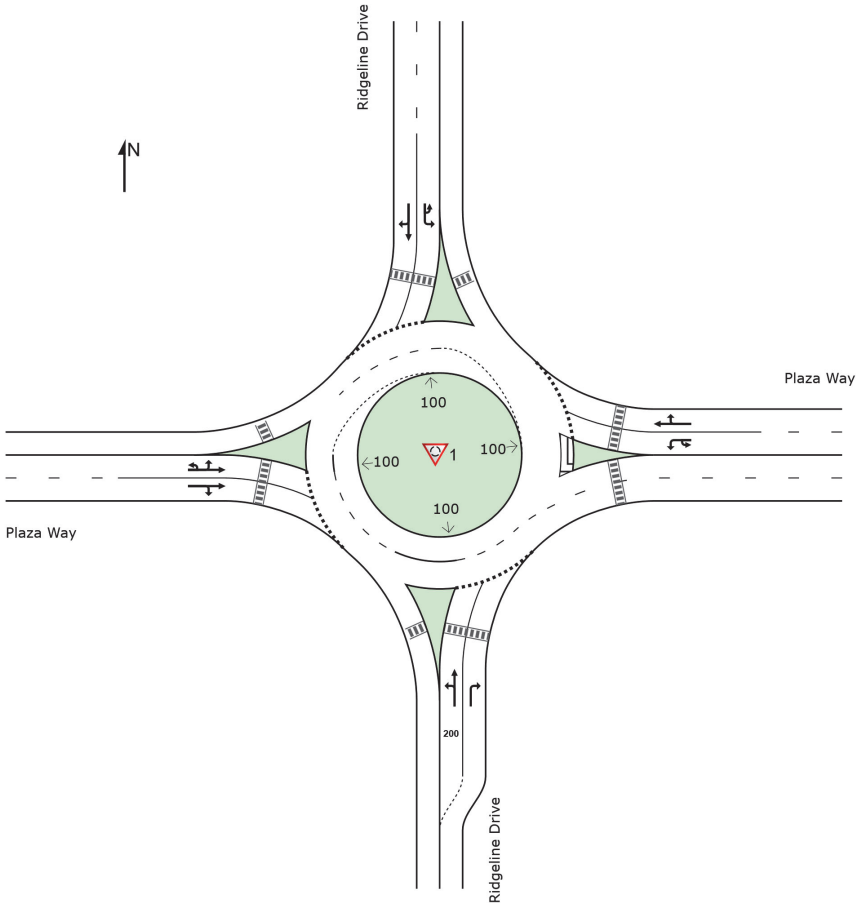
Appendix D
Level of Service Reports

SITE LAYOUT

Site: 1 [Plaza Way & Ridgeline Drive (Site Folder: 2024 Existing PM)]

2024 Existing Conditions - Weekday PM Peak Hour
Site Category: Existing Design
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 1 [Plaza Way & Ridgeline Drive (Site Folder: 2024 Existing PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.5.224

2024 Existing Conditions - Weekday PM Peak Hour
Site Category: Existing Design
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Ridgeline Drive															
5	L2	All MCs	4	2.0	4	2.0	0.057	8.7	LOS A	0.2	5.3	0.10	0.31	0.10	24.9
2	T1	All MCs	80	2.0	80	2.0	0.057	2.8	LOS A	0.2	5.3	0.10	0.31	0.10	30.4
12	R2	All MCs	9	2.0	9	2.0	0.009	3.4	LOS A	0.0	0.8	0.12	0.39	0.12	24.7
Approach			93	2.0	93	2.0	0.057	3.1	LOS A	0.2	5.3	0.10	0.32	0.10	29.4
East: Plaza Way															
3u	U	All MCs	1	0.0	1	0.0	0.006	12.7	LOS B	0.0	0.6	0.23	0.51	0.23	26.8
3	L2	All MCs	6	2.0	6	2.0	0.006	5.7	LOS A	0.0	0.6	0.23	0.51	0.23	23.3
8	T1	All MCs	11	2.0	11	2.0	0.015	0.3	LOS A	0.1	1.7	0.20	0.14	0.20	24.2
18	R2	All MCs	13	2.0	13	2.0	0.015	1.3	LOS A	0.1	1.7	0.20	0.14	0.20	26.9
Approach			31	1.9	31	1.9	0.015	2.1	LOS A	0.1	1.7	0.21	0.22	0.21	25.3
North: Ridgeline Drive															
1u	U	All MCs	7	0.0	7	0.0	0.013	12.4	LOS B	0.0	1.1	0.09	0.64	0.09	28.3
1	L2	All MCs	7	2.0	7	2.0	0.013	8.7	LOS A	0.0	1.1	0.09	0.64	0.09	24.7
6	T1	All MCs	100	2.0	100	2.0	0.081	3.1	LOS A	0.3	7.7	0.08	0.33	0.08	30.2
16	R2	All MCs	20	2.0	20	2.0	0.081	3.3	LOS A	0.3	7.7	0.08	0.33	0.08	27.6
Approach			133	1.9	133	1.9	0.081	3.9	LOS A	0.3	7.7	0.08	0.36	0.08	29.1
West: Plaza Way															
7u	U	All MCs	1	0.0	1	0.0	0.017	12.6	LOS B	0.1	1.5	0.20	0.38	0.20	18.9
7	L2	All MCs	11	0.2	11	0.2	0.017	5.6	LOS A	0.1	1.5	0.20	0.38	0.20	25.7
4	T1	All MCs	9	2.0	9	2.0	0.017	0.7	LOS A	0.1	1.5	0.20	0.38	0.20	23.3
14	R2	All MCs	29	2.0	29	2.0	0.021	1.8	LOS A	0.1	1.8	0.19	0.27	0.19	24.3

Approach	50	1.6	50	1.6	0.021	2.7	LOS A	0.1	1.8	0.19	0.32	0.19	24.2
All Vehicles	308	1.9	308	1.9	0.081	3.3	LOS A	0.3	7.7	0.12	0.33	0.12	27.8

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: L:\Projects\78000\78195\78195-000\Traffic\Documents\LOS\SIDRA\78195 - All RAB.sip9

HCM 6th Signalized Intersection Summary
2: US-395 & Hildebrand Blvd

08/02/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	178	52	51	137	81	86	845	104	121	556	62
Future Volume (veh/h)	150	178	52	51	137	81	86	845	104	121	556	62
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	1796	1870	1870	1811	1870
Adj Flow Rate, veh/h	163	193	57	55	162	79	93	918	113	132	604	67
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	7	2	2	6	2
Cap, veh/h	314	677	302	211	594	252	267	1117	137	300	901	415
Arrive On Green	0.09	0.19	0.19	0.06	0.16	0.16	0.08	0.25	0.25	0.09	0.26	0.26
Sat Flow, veh/h	3456	3554	1585	3563	3741	1585	3456	4425	543	3456	3441	1585
Grp Volume(v), veh/h	163	193	57	55	162	79	93	677	354	132	604	67
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1870	1585	1728	1635	1699	1728	1721	1585
Q Serve(g_s), s	2.8	2.9	1.9	0.9	2.4	2.7	1.6	12.1	12.2	2.2	9.7	2.0
Cycle Q Clear(g_c), s	2.8	2.9	1.9	0.9	2.4	2.7	1.6	12.1	12.2	2.2	9.7	2.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.32	1.00		1.00
Lane Grp Cap(c), veh/h	314	677	302	211	594	252	267	825	429	300	901	415
V/C Ratio(X)	0.52	0.29	0.19	0.26	0.27	0.31	0.35	0.82	0.83	0.44	0.67	0.16
Avail Cap(c_a), veh/h	1003	2292	1022	345	2232	946	334	2161	1123	334	1942	895
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.9	21.5	21.1	27.9	22.9	23.1	27.1	21.9	21.9	26.9	20.5	17.6
Incr Delay (d2), s/veh	0.5	1.1	1.4	0.2	1.1	3.2	0.3	0.8	1.6	0.4	0.3	0.1
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(50%),veh/ln	1.1	1.2	0.8	0.4	1.1	1.2	0.6	4.4	4.6	0.9	3.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.4	22.5	22.5	28.1	24.1	26.3	27.4	22.7	23.4	27.3	20.8	17.7
LnGrp LOS	C	C	C	C	C	C	C	C	C	C	C	B
Approach Vol, veh/h		413			296			1124			803	
Approach Delay, s/veh		24.4			25.4			23.3			21.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	23.1	9.2	17.3	11.8	23.7	11.1	15.3
Change Period (Y+Rc), s	7.0	7.5	5.5	5.5	7.0	7.5	5.5	5.5
Max Green Setting (Gmax), s	6.0	41.0	6.0	40.0	6.0	35.0	18.0	37.0
Max Q Clear Time (g_c+I1), s	4.2	14.2	2.9	4.9	3.6	11.7	4.8	4.7
Green Ext Time (p_c), s	0.0	1.5	0.0	5.7	0.0	0.9	0.0	5.1

Intersection Summary	
HCM 6th Ctrl Delay	23.2
HCM 6th LOS	C

Notes

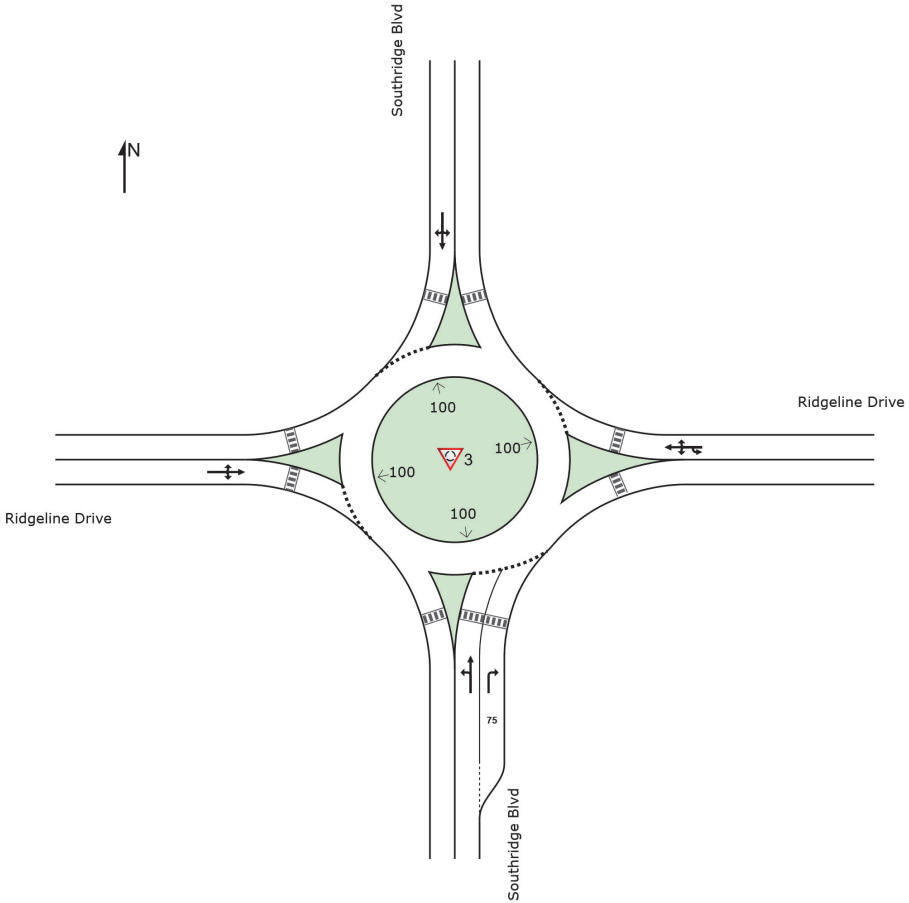
User approved volume balancing among the lanes for turning movement.

SITE LAYOUT

Site: 3 [Southridge Blvd & Ridgeline Drive (Site Folder: 2024 Existing PM)]

2024 Existing Conditions - Weekday PM Peak Hour
Site Category: Existing Design
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 3 [Southridge Blvd & Ridgeline Drive (Site Folder: 2024 Existing PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.5.224

2024 Existing Conditions - Weekday PM Peak Hour
Site Category: Existing Design
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Southridge Blvd															
3	L2	All MCs	20	2.0	20	2.0	0.035	5.5	LOS A	0.1	3.7	0.13	0.23	0.13	25.8
8	T1	All MCs	38	2.0	38	2.0	0.035	0.2	LOS A	0.1	3.7	0.13	0.23	0.13	23.9
18	R2	All MCs	46	2.0	46	2.0	0.032	1.5	LOS A	0.1	3.4	0.14	0.25	0.14	25.8
Approach			103	2.0	103	2.0	0.035	1.8	LOS A	0.1	3.7	0.14	0.24	0.14	25.0
East: Ridgeline Drive															
1u	U	All MCs	2	0.0	2	0.0	0.084	12.4	LOS B	0.4	9.2	0.17	0.42	0.17	17.9
1	L2	All MCs	23	2.0	23	2.0	0.084	8.8	LOS A	0.4	9.2	0.17	0.42	0.17	25.1
6	T1	All MCs	68	2.0	68	2.0	0.084	2.9	LOS A	0.4	9.2	0.17	0.42	0.17	29.6
16	R2	All MCs	22	2.0	22	2.0	0.084	3.3	LOS A	0.4	9.2	0.17	0.42	0.17	25.4
Approach			116	2.0	116	2.0	0.084	4.3	LOS A	0.4	9.2	0.17	0.42	0.17	27.4
North: Southridge Blvd															
7	L2	All MCs	11	2.0	11	2.0	0.038	5.7	LOS A	0.2	4.0	0.22	0.24	0.22	25.0
4	T1	All MCs	23	2.0	23	2.0	0.038	0.5	LOS A	0.2	4.0	0.22	0.24	0.22	23.8
14	R2	All MCs	16	2.0	16	2.0	0.038	1.5	LOS A	0.2	4.0	0.22	0.24	0.22	26.3
Approach			50	2.0	50	2.0	0.038	1.9	LOS A	0.2	4.0	0.22	0.24	0.22	24.8
West: Ridgeline Drive															
5	L2	All MCs	9	2.0	9	2.0	0.036	8.7	LOS A	0.1	3.7	0.16	0.40	0.16	26.0
2	T1	All MCs	30	2.0	30	2.0	0.036	2.9	LOS A	0.1	3.7	0.16	0.40	0.16	29.7
12	R2	All MCs	10	2.0	10	2.0	0.036	3.2	LOS A	0.1	3.7	0.16	0.40	0.16	26.3
Approach			49	2.0	49	2.0	0.036	4.0	LOS A	0.1	3.7	0.16	0.40	0.16	28.1
All Vehicles			318	2.0	318	2.0	0.084	3.1	LOS A	0.4	9.2	0.17	0.33	0.17	26.1

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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HCM 6th Signalized Intersection Summary
4: Southridge Blvd & Hildebrand Blvd

08/02/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	209	67	100	41	118	18	152	166	8	9	166	94
Future Volume (veh/h)	209	67	100	41	118	18	152	166	8	9	166	94
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	227	73	109	45	128	20	165	180	9	10	180	102
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	795	937	836	733	1463	224	279	379	360	251	252	337
Arrive On Green	0.08	0.53	0.53	0.02	0.47	0.47	0.08	0.20	0.20	0.01	0.13	0.13
Sat Flow, veh/h	1781	1777	1585	1781	3088	473	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	227	73	109	45	73	75	165	180	9	10	180	102
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1785	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.8	1.5	2.6	0.9	1.7	1.7	5.6	6.3	0.3	0.3	6.8	4.0
Cycle Q Clear(g_c), s	4.8	1.5	2.6	0.9	1.7	1.7	5.6	6.3	0.3	0.3	6.8	4.0
Prop In Lane	1.00		1.00	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	795	937	836	733	841	845	279	379	360	251	252	337
V/C Ratio(X)	0.29	0.08	0.13	0.06	0.09	0.09	0.59	0.47	0.02	0.04	0.72	0.30
Avail Cap(c_a), veh/h	795	937	836	769	841	845	279	581	531	373	607	638
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	0.98	0.98	0.98	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.5	8.6	8.9	7.7	10.7	10.7	26.2	26.0	22.2	23.5	30.7	24.5
Incr Delay (d2), s/veh	0.2	0.2	0.3	0.0	0.2	0.2	3.3	0.9	0.0	0.1	3.8	0.5
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(50%),veh/ln	1.7	0.6	0.9	0.3	0.6	0.7	2.7	2.8	0.1	0.1	3.2	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.7	8.8	9.2	7.7	10.9	10.9	29.5	27.0	22.3	23.5	34.4	25.0
LnGrp LOS	A	A	A	A	B	B	C	C	C	C	C	C
Approach Vol, veh/h		409			193			354			292	
Approach Delay, s/veh		8.9			10.2			28.0			30.8	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	40.0	4.5	20.0	5.5	44.0	9.5	15.0
Change Period (Y+Rc), s	* 3.7	* 5	* 3.9	5.0	* 3.7	* 5	* 3.9	5.0
Max Green Setting (Gmax), s	* 5.8	* 21	* 5.6	23.0	* 3.3	* 21	* 5.6	24.0
Max Q Clear Time (g_c+I1), s	6.8	3.7	2.3	8.3	2.9	4.6	7.6	8.8
Green Ext Time (p_c), s	0.0	0.7	0.0	0.8	0.0	0.9	0.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	19.6
HCM 6th LOS	B

Notes

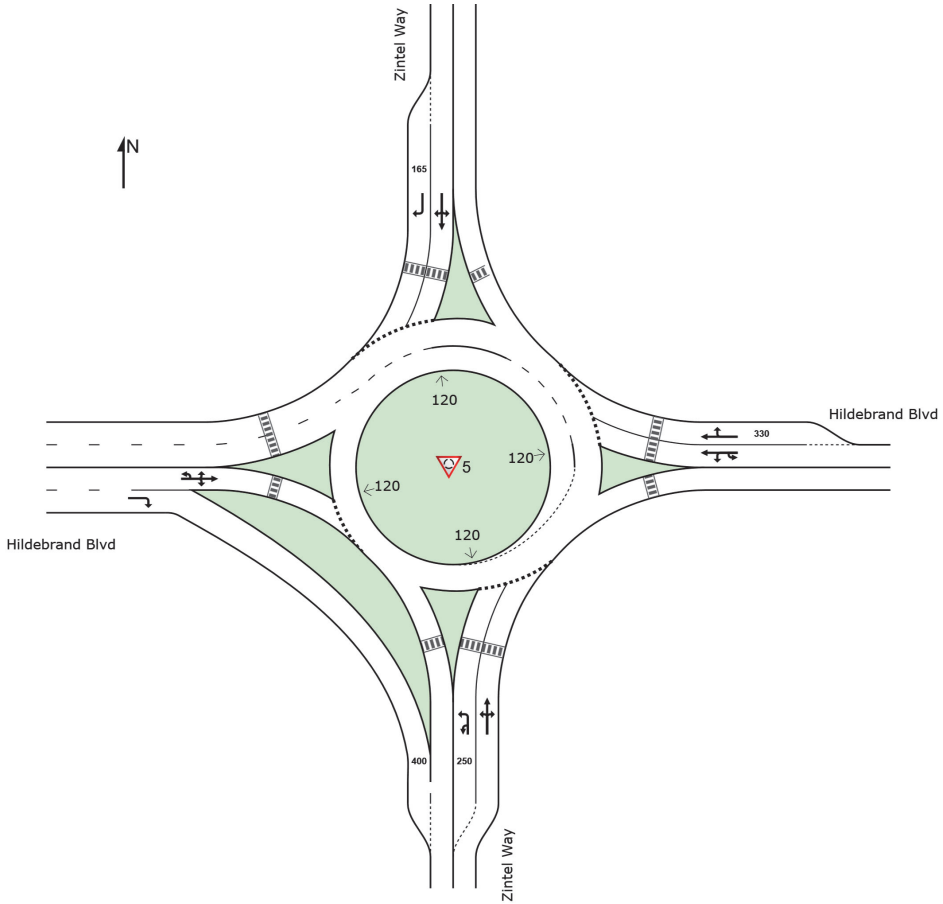
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

SITE LAYOUT

Site: 5 [Zintel Way & Hildebrand Blvd (Site Folder: 2024 Existing PM)]

2024 Existing Conditions - Weekday PM Peak Hour
Site Category: Existing Design
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 5 [Zintel Way & Hildebrand Blvd (Site Folder: 2024 Existing PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.5.224

2024 Existing Conditions - Weekday PM Peak Hour
Site Category: Existing Design
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Zintel Way															
5u	U	All MCs	1	0.0	1	0.0	0.027	14.2	LOS B	0.1	3.4	0.47	0.62	0.47	25.2
5	L2	All MCs	48	2.0	48	2.0	0.027	10.1	LOS B	0.1	3.6	0.46	0.59	0.46	22.7
2	T1	All MCs	1	2.0	1	2.0	0.027	3.6	LOS A	0.1	3.6	0.45	0.54	0.45	11.7
12	R2	All MCs	19	2.0	19	2.0	0.027	4.0	LOS A	0.1	3.6	0.45	0.54	0.45	24.2
Approach			69	2.0	69	2.0	0.027	8.4	LOS A	0.1	3.6	0.46	0.58	0.46	23.0
East: Hildebrand Blvd															
3u	U	All MCs	1	0.0	1	0.0	0.073	12.9	LOS B	0.3	6.9	0.20	0.11	0.20	28.4
3	L2	All MCs	9	2.0	9	2.0	0.073	5.4	LOS A	0.3	6.9	0.20	0.11	0.20	25.5
8	T1	All MCs	186	2.0	186	2.0	0.073	0.3	LOS A	0.3	6.9	0.20	0.08	0.20	24.3
18	R2	All MCs	3	2.0	3	2.0	0.073	1.3	LOS A	0.3	6.9	0.19	0.05	0.19	24.6
Approach			199	2.0	199	2.0	0.073	0.6	LOS A	0.3	6.9	0.20	0.08	0.20	24.4
North: Zintel Way															
1	L2	All MCs	36	2.0	36	2.0	0.028	8.8	LOS A	0.1	2.5	0.29	0.61	0.29	22.2
6	T1	All MCs	2	2.0	2	2.0	0.028	2.7	LOS A	0.1	2.5	0.29	0.61	0.29	24.1
16	R2	All MCs	7	2.0	7	2.0	0.008	3.8	LOS A	0.0	0.6	0.33	0.45	0.33	23.1
Approach			44	2.0	44	2.0	0.028	7.7	LOS A	0.1	2.5	0.29	0.58	0.29	22.4
West: Hildebrand Blvd															
7u	U	All MCs	36	0.0	36	0.0	0.219	12.8	LOS B	1.2	30.7	0.16	0.14	0.16	13.4
7	L2	All MCs	27	0.2	27	0.2	0.219	5.2	LOS A	1.2	30.7	0.16	0.14	0.16	10.9
4	T1	All MCs	318	2.0	318	2.0	0.219	0.2	LOS A	1.2	30.7	0.16	0.14	0.16	24.3
14	R2	All MCs	16	2.0	16	2.0	0.009	0.3	LOS A	0.0	0.0	0.00	0.06	0.00	24.8

Approach	396	1.7	396	1.7	0.219	1.6	LOS A	1.2	30.7	0.16	0.13	0.16	22.1
All Vehicles	708	1.8	708	1.8	0.219	2.4	LOS A	1.2	30.7	0.21	0.19	0.21	22.8

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: L:\Projects\78000\78195\78195-000\Traffic\Documents\LOS\SIDRA\78195 - All RAB.sip9

MOVEMENT SUMMARY

Site: 1 [Plaza Way & Ridgeline Drive (Site Folder: 2025 Without Project PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.5.224

2025 Without Project Conditions - Weekday PM Peak Hour
Site Category: Future Conditions 1
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Ridgeline Drive															
5	L2	All MCs	4	2.0	4	2.0	0.057	8.7	LOS A	0.2	5.3	0.10	0.31	0.10	24.9
2	T1	All MCs	80	2.0	80	2.0	0.057	2.8	LOS A	0.2	5.3	0.10	0.31	0.10	30.4
12	R2	All MCs	9	2.0	9	2.0	0.009	3.4	LOS A	0.0	0.8	0.12	0.39	0.12	24.7
Approach			93	2.0	93	2.0	0.057	3.1	LOS A	0.2	5.3	0.10	0.32	0.10	29.4
East: Plaza Way															
3u	U	All MCs	1	0.0	1	0.0	0.006	12.7	LOS B	0.0	0.6	0.23	0.51	0.23	26.8
3	L2	All MCs	6	2.0	6	2.0	0.006	5.7	LOS A	0.0	0.6	0.23	0.51	0.23	23.3
8	T1	All MCs	11	2.0	11	2.0	0.015	0.3	LOS A	0.1	1.7	0.20	0.14	0.20	24.2
18	R2	All MCs	13	2.0	13	2.0	0.015	1.3	LOS A	0.1	1.7	0.20	0.14	0.20	26.9
Approach			31	1.9	31	1.9	0.015	2.1	LOS A	0.1	1.7	0.21	0.22	0.21	25.3
North: Ridgeline Drive															
1u	U	All MCs	7	0.0	7	0.0	0.013	12.4	LOS B	0.0	1.1	0.09	0.64	0.09	28.3
1	L2	All MCs	7	2.0	7	2.0	0.013	8.7	LOS A	0.0	1.1	0.09	0.64	0.09	24.7
6	T1	All MCs	100	2.0	100	2.0	0.081	3.1	LOS A	0.3	7.7	0.08	0.33	0.08	30.2
16	R2	All MCs	20	2.0	20	2.0	0.081	3.3	LOS A	0.3	7.7	0.08	0.33	0.08	27.6
Approach			133	1.9	133	1.9	0.081	3.9	LOS A	0.3	7.7	0.08	0.36	0.08	29.1
West: Plaza Way															
7u	U	All MCs	1	0.0	1	0.0	0.017	12.6	LOS B	0.1	1.5	0.20	0.38	0.20	18.9
7	L2	All MCs	11	0.2	11	0.2	0.017	5.6	LOS A	0.1	1.5	0.20	0.38	0.20	25.7
4	T1	All MCs	9	2.0	9	2.0	0.017	0.7	LOS A	0.1	1.5	0.20	0.38	0.20	23.3
14	R2	All MCs	29	2.0	29	2.0	0.021	1.8	LOS A	0.1	1.8	0.19	0.27	0.19	24.3

Approach	50	1.6	50	1.6	0.021	2.7	LOS A	0.1	1.8	0.19	0.32	0.19	24.2
All Vehicles	308	1.9	308	1.9	0.081	3.3	LOS A	0.3	7.7	0.12	0.33	0.12	27.8

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: L:\Projects\78000\78195\78195-000\Traffic\Documents\LOS\SIDRA\78195 - All RAB.sip9

HCM 6th Signalized Intersection Summary
2: US-395 & Hildebrand Blvd

09/24/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	153	195	53	52	148	98	88	862	106	1	148	567
Future Volume (veh/h)	153	195	53	52	148	98	88	862	106	1	148	567
Initial Q (Qb), veh	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	
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
Work Zone On Approach		No			No			No				No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1796	1870		1870	1811
Adj Flow Rate, veh/h	166	212	58	57	188	89	96	937	115		161	616
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	7	2		2	6
Cap, veh/h	221	358	160	148	294	125	161	2607	319		217	2083
Arrive On Green	0.06	0.10	0.10	0.04	0.08	0.08	0.05	0.59	0.59		0.06	0.61
Sat Flow, veh/h	3456	3554	1585	3563	3741	1585	3456	4426	542		3456	3441
Grp Volume(v), veh/h	166	212	58	57	188	89	96	691	361		161	616
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1870	1585	1728	1635	1699		1728	1721
Q Serve(g_s), s	5.9	7.1	4.2	1.9	6.0	6.8	3.4	13.7	13.7		5.7	10.7
Cycle Q Clear(g_c), s	5.9	7.1	4.2	1.9	6.0	6.8	3.4	13.7	13.7		5.7	10.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.32		1.00	
Lane Grp Cap(c), veh/h	221	358	160	148	294	125	161	1926	1001		217	2083
V/C Ratio(X)	0.75	0.59	0.36	0.38	0.64	0.71	0.60	0.36	0.36		0.74	0.30
Avail Cap(c_a), veh/h	265	673	300	273	709	300	362	1926	1001		362	2083
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
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	57.1	53.3	52.0	57.9	55.4	55.8	58.0	13.3	13.3		57.1	11.8
Incr Delay (d2), s/veh	9.8	1.1	1.0	1.2	1.7	5.6	2.6	0.5	1.0		3.7	0.4
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
%ile BackOfQ(50%),veh/ln	2.8	3.2	1.7	0.9	2.9	2.9	1.5	4.6	4.9		2.5	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.8	54.4	53.0	59.1	57.2	61.3	60.6	13.8	14.3		60.8	12.1
LnGrp LOS	E	D	D	E	E	E	E	B	B		E	B
Approach Vol, veh/h		436			334			1148				845
Approach Delay, s/veh		59.0			58.6			17.9				21.2
Approach LOS		E			E			B				C

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	80.5	10.7	18.0	12.8	82.6	13.4	15.2
Change Period (Y+Rc), s	7.0	7.5	5.5	5.5	7.0	7.5	5.5	5.5
Max Green Setting (Gmax), s	13.0	52.5	9.5	23.5	13.0	52.5	9.5	23.5
Max Q Clear Time (g_c+I1), s	7.7	15.7	3.9	9.1	5.4	12.7	7.9	8.8
Green Ext Time (p_c), s	0.2	10.7	0.0	1.0	0.1	6.3	0.1	0.9

Intersection Summary	
HCM 6th Ctrl Delay	30.3
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
2: US-395 & Hildebrand Blvd

09/24/2024

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	63
Future Volume (veh/h)	63
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	68
Peak Hour Factor	0.92
Percent Heavy Veh, %	2
Cap, veh/h	959
Arrive On Green	0.61
Sat Flow, veh/h	1585
Grp Volume(v), veh/h	68
Grp Sat Flow(s),veh/h/ln	1585
Q Serve(g_s), s	2.2
Cycle Q Clear(g_c), s	2.2
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	959
V/C Ratio(X)	0.07
Avail Cap(c_a), veh/h	959
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	10.1
Incr Delay (d2), s/veh	0.1
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.8
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	10.2
LnGrp LOS	B
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

MOVEMENT SUMMARY

Site: 3 [Southridge Blvd & Ridgeline Drive (Site Folder: 2025 Without Project PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.5.224

2025 Without Project Conditions - Weekday PM Peak Hour
Site Category: Future Conditions 1
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Southridge Blvd															
3	L2	All MCs	20	2.0	20	2.0	0.035	5.5	LOS A	0.1	3.7	0.13	0.23	0.13	25.8
8	T1	All MCs	38	2.0	38	2.0	0.035	0.2	LOS A	0.1	3.7	0.13	0.23	0.13	23.9
18	R2	All MCs	46	2.0	46	2.0	0.032	1.5	LOS A	0.1	3.4	0.14	0.25	0.14	25.8
Approach			103	2.0	103	2.0	0.035	1.8	LOS A	0.1	3.7	0.14	0.24	0.14	25.0
East: Ridgeline Drive															
1u	U	All MCs	2	0.0	2	0.0	0.084	12.4	LOS B	0.4	9.2	0.17	0.42	0.17	17.9
1	L2	All MCs	23	2.0	23	2.0	0.084	8.8	LOS A	0.4	9.2	0.17	0.42	0.17	25.1
6	T1	All MCs	68	2.0	68	2.0	0.084	2.9	LOS A	0.4	9.2	0.17	0.42	0.17	29.6
16	R2	All MCs	22	2.0	22	2.0	0.084	3.3	LOS A	0.4	9.2	0.17	0.42	0.17	25.4
Approach			116	2.0	116	2.0	0.084	4.3	LOS A	0.4	9.2	0.17	0.42	0.17	27.4
North: Southridge Blvd															
7	L2	All MCs	11	2.0	11	2.0	0.038	5.7	LOS A	0.2	4.0	0.22	0.24	0.22	25.0
4	T1	All MCs	23	2.0	23	2.0	0.038	0.5	LOS A	0.2	4.0	0.22	0.24	0.22	23.8
14	R2	All MCs	16	2.0	16	2.0	0.038	1.5	LOS A	0.2	4.0	0.22	0.24	0.22	26.3
Approach			50	2.0	50	2.0	0.038	1.9	LOS A	0.2	4.0	0.22	0.24	0.22	24.8
West: Ridgeline Drive															
5	L2	All MCs	9	2.0	9	2.0	0.036	8.7	LOS A	0.1	3.7	0.16	0.40	0.16	26.0
2	T1	All MCs	30	2.0	30	2.0	0.036	2.9	LOS A	0.1	3.7	0.16	0.40	0.16	29.7
12	R2	All MCs	10	2.0	10	2.0	0.036	3.2	LOS A	0.1	3.7	0.16	0.40	0.16	26.3
Approach			49	2.0	49	2.0	0.036	4.0	LOS A	0.1	3.7	0.16	0.40	0.16	28.1
All Vehicles			318	2.0	318	2.0	0.084	3.1	LOS A	0.4	9.2	0.17	0.33	0.17	26.1

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: PBS ENGINEERING AND ENVIRONMENTAL INC. | Licence: PLUS / 1PC | Processed: Tuesday, September 24, 2024 2:45:54 PM
Project: L:\Projects\78000\78195\78195-000\Traffic\Documents\LOS\SIDRA\78195 - All RAB.sip9

HCM 6th Signalized Intersection Summary
4: Hildebrand Blvd & Southridge Blvd

09/24/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	182	8	9	177	96	42	120	18	213	68	102
Future Volume (veh/h)	155	182	8	9	177	96	42	120	18	213	68	102
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		0.99	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	170	200	9	10	195	105	46	132	20	234	75	112
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	493	1024	46	486	447	230	471	236	211	496	437	538
Arrive On Green	0.11	0.30	0.30	0.01	0.20	0.20	0.03	0.13	0.13	0.14	0.23	0.23
Sat Flow, veh/h	1781	3464	155	1781	2266	1168	1781	1870	1574	1781	1870	1579
Grp Volume(v), veh/h	170	102	107	10	151	149	46	132	20	234	75	112
Grp Sat Flow(s),veh/h/ln	1781	1777	1842	1781	1777	1657	1781	1870	1574	1781	1870	1579
Q Serve(g_s), s	3.0	1.7	1.8	0.2	3.0	3.2	0.8	2.7	0.5	4.5	1.3	2.0
Cycle Q Clear(g_c), s	3.0	1.7	1.8	0.2	3.0	3.2	0.8	2.7	0.5	4.5	1.3	2.0
Prop In Lane	1.00		0.08	1.00		0.70	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	493	525	544	486	350	327	471	236	211	496	437	538
V/C Ratio(X)	0.34	0.19	0.20	0.02	0.43	0.46	0.10	0.56	0.09	0.47	0.17	0.21
Avail Cap(c_a), veh/h	558	918	951	617	918	856	663	1058	903	496	1104	1100
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.1	10.7	10.7	10.0	14.3	14.4	11.3	16.7	15.4	12.8	12.4	9.5
Incr Delay (d2), s/veh	0.9	0.4	0.4	0.0	1.8	2.1	0.2	4.4	0.4	1.5	0.4	0.4
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(50%),veh/ln	1.0	0.6	0.6	0.0	1.1	1.1	0.3	1.2	0.2	1.5	0.5	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.9	11.1	11.1	10.0	16.1	16.5	11.5	21.1	15.9	14.3	12.8	9.9
LnGrp LOS	B	B	B	A	B	B	B	C	B	B	B	A
Approach Vol, veh/h		379			310			198			421	
Approach Delay, s/veh		11.5			16.1			18.4			12.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	13.0	9.5	10.1	4.0	17.0	5.1	14.5
Change Period (Y+Rc), s	* 3.7	* 5	* 3.9	5.0	* 3.7	* 5	* 3.9	5.0
Max Green Setting (Gmax), s	* 5.8	* 21	* 5.6	23.0	* 3.3	* 21	* 5.6	24.0
Max Q Clear Time (g_c+I1), s	5.0	5.2	6.5	4.7	2.2	3.8	2.8	4.0
Green Ext Time (p_c), s	0.1	2.6	0.0	1.2	0.0	1.7	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

MOVEMENT SUMMARY

Site: 5 [Zintel Way & Hildebrand Blvd (Site Folder: 2025 Without Project PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.5.224

2025 Without Project Conditions - Weekday PM Peak Hour
Site Category: Future Conditions 1
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Zintel Way															
5u	U	All MCs	1	0.0	1	0.0	0.027	14.2	LOS B	0.1	3.4	0.47	0.62	0.47	25.2
5	L2	All MCs	48	2.0	48	2.0	0.027	10.1	LOS B	0.1	3.6	0.46	0.59	0.46	22.7
2	T1	All MCs	1	2.0	1	2.0	0.027	3.6	LOS A	0.1	3.6	0.45	0.54	0.45	11.7
12	R2	All MCs	19	2.0	19	2.0	0.027	4.0	LOS A	0.1	3.6	0.45	0.54	0.45	24.2
Approach			69	2.0	69	2.0	0.027	8.4	LOS A	0.1	3.6	0.46	0.58	0.46	23.0
East: Hildebrand Blvd															
3u	U	All MCs	1	0.0	1	0.0	0.073	12.9	LOS B	0.3	6.9	0.20	0.11	0.20	28.4
3	L2	All MCs	9	2.0	9	2.0	0.073	5.4	LOS A	0.3	6.9	0.20	0.11	0.20	25.5
8	T1	All MCs	186	2.0	186	2.0	0.073	0.3	LOS A	0.3	6.9	0.20	0.08	0.20	24.3
18	R2	All MCs	3	2.0	3	2.0	0.073	1.3	LOS A	0.3	6.9	0.19	0.05	0.19	24.6
Approach			199	2.0	199	2.0	0.073	0.6	LOS A	0.3	6.9	0.20	0.08	0.20	24.4
North: Zintel Way															
1	L2	All MCs	36	2.0	36	2.0	0.028	8.8	LOS A	0.1	2.5	0.29	0.61	0.29	22.2
6	T1	All MCs	2	2.0	2	2.0	0.028	2.7	LOS A	0.1	2.5	0.29	0.61	0.29	24.1
16	R2	All MCs	7	2.0	7	2.0	0.008	3.8	LOS A	0.0	0.6	0.33	0.45	0.33	23.1
Approach			44	2.0	44	2.0	0.028	7.7	LOS A	0.1	2.5	0.29	0.58	0.29	22.4
West: Hildebrand Blvd															
7u	U	All MCs	36	0.0	36	0.0	0.219	12.8	LOS B	1.2	30.7	0.16	0.14	0.16	13.4
7	L2	All MCs	27	0.2	27	0.2	0.219	5.2	LOS A	1.2	30.7	0.16	0.14	0.16	10.9
4	T1	All MCs	318	2.0	318	2.0	0.219	0.2	LOS A	1.2	30.7	0.16	0.14	0.16	24.3
14	R2	All MCs	16	2.0	16	2.0	0.009	0.3	LOS A	0.0	0.0	0.00	0.06	0.00	24.8

Approach	396	1.7	396	1.7	0.219	1.6	LOS A	1.2	30.7	0.16	0.13	0.16	22.1
All Vehicles	708	1.8	708	1.8	0.219	2.4	LOS A	1.2	30.7	0.21	0.19	0.21	22.8

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 1 [Plaza Way & Ridgeline Drive (Site Folder: 2025 With Project PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.5.224

2025 With Project Conditions - Weekday PM Peak Hour
Site Category: Future Conditions 2
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Plaza Way															
5	L2	All MCs	6	2.0	6	2.0	0.012	9.0	LOS A	0.0	1.1	0.23	0.45	0.23	23.4
2	T1	All MCs	11	2.0	11	2.0	0.012	3.1	LOS A	0.0	1.1	0.23	0.45	0.23	28.5
12	R2	All MCs	13	2.0	13	2.0	0.011	3.8	LOS A	0.0	0.9	0.25	0.42	0.25	24.4
Approach			30	2.0	30	2.0	0.012	4.5	LOS A	0.0	1.1	0.24	0.44	0.24	25.6
East: Ridgeline Drive															
3u	U	All MCs	66	0.0	66	0.0	0.051	12.4	LOS B	0.2	5.9	0.10	0.65	0.10	29.8
3	L2	All MCs	7	2.0	7	2.0	0.051	5.4	LOS A	0.2	5.9	0.10	0.65	0.10	26.8
8	T1	All MCs	113	2.0	113	2.0	0.080	0.1	LOS A	0.4	9.6	0.09	0.04	0.09	24.6
18	R2	All MCs	22	2.0	22	2.0	0.080	1.1	LOS A	0.4	9.6	0.09	0.04	0.09	27.3
Approach			209	1.4	209	1.4	0.080	4.3	LOS A	0.4	9.6	0.09	0.25	0.09	26.8
North: Plaza Way															
1u	U	All MCs	1	0.0	1	0.0	0.016	12.9	LOS B	0.1	1.3	0.26	0.61	0.26	27.9
1	L2	All MCs	16	2.0	16	2.0	0.016	9.2	LOS A	0.1	1.3	0.26	0.61	0.26	24.4
6	T1	All MCs	9	2.0	9	2.0	0.029	3.5	LOS A	0.1	2.5	0.24	0.42	0.24	29.3
16	R2	All MCs	30	2.0	30	2.0	0.029	3.7	LOS A	0.1	2.5	0.24	0.42	0.24	26.9
Approach			56	2.0	56	2.0	0.029	5.4	LOS A	0.1	2.5	0.24	0.47	0.24	26.2
West: Ridgeline Drive															
7u	U	All MCs	1	0.0	1	0.0	0.042	12.5	LOS B	0.1	3.7	0.18	0.15	0.18	19.5
7	L2	All MCs	4	2.0	4	2.0	0.042	5.6	LOS A	0.1	3.7	0.18	0.15	0.18	26.8
4	T1	All MCs	100	2.0	100	2.0	0.042	0.6	LOS A	0.1	3.8	0.17	0.13	0.17	24.2
14	R2	All MCs	9	2.0	9	2.0	0.042	1.7	LOS A	0.1	3.8	0.17	0.12	0.17	25.0

Approach	114	2.0	114	2.0	0.042	1.0	LOS A	0.1	3.8	0.17	0.13	0.17	24.3
All Vehicles	408	1.7	408	1.7	0.080	3.5	LOS A	0.4	9.6	0.15	0.26	0.15	26.0

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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HCM 6th Signalized Intersection Summary
2: US-395 & Hildebrand Blvd

09/23/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	153	195	53	52	148	98	88	880	106	1	149	599
Future Volume (veh/h)	153	195	53	52	148	98	88	880	106	1	149	599
Initial Q (Qb), veh	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	
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
Work Zone On Approach		No			No			No				No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1796	1870		1870	1811
Adj Flow Rate, veh/h	166	212	58	57	188	89	96	957	115		162	651
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	7	2		2	6
Cap, veh/h	221	358	160	148	294	125	161	2613	313		218	2083
Arrive On Green	0.06	0.10	0.10	0.04	0.08	0.08	0.05	0.59	0.59		0.06	0.61
Sat Flow, veh/h	3456	3554	1585	3563	3741	1585	3456	4438	532		3456	3441
Grp Volume(v), veh/h	166	212	58	57	188	89	96	704	368		162	651
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1870	1585	1728	1635	1701		1728	1721
Q Serve(g_s), s	5.9	7.1	4.2	1.9	6.0	6.8	3.4	14.0	14.1		5.7	11.4
Cycle Q Clear(g_c), s	5.9	7.1	4.2	1.9	6.0	6.8	3.4	14.0	14.1		5.7	11.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.31		1.00	
Lane Grp Cap(c), veh/h	221	358	160	148	294	125	161	1925	1001		218	2083
V/C Ratio(X)	0.75	0.59	0.36	0.38	0.64	0.71	0.60	0.37	0.37		0.74	0.31
Avail Cap(c_a), veh/h	265	673	300	273	709	300	362	1925	1001		362	2083
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
Upstream Filter(I)	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	57.1	53.3	52.0	57.9	55.4	55.8	58.0	13.4	13.4		57.1	11.9
Incr Delay (d2), s/veh	9.7	1.1	1.0	1.2	1.7	5.6	2.6	0.5	1.0		3.7	0.4
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
%ile BackOfQ(50%),veh/ln	2.8	3.2	1.7	0.9	2.9	2.9	1.5	4.7	5.1		2.5	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.7	54.4	53.0	59.1	57.2	61.3	60.6	13.9	14.4		60.8	12.3
LnGrp LOS	E	D	D	E	E	E	E	B	B		E	B
Approach Vol, veh/h		436			334			1168				881
Approach Delay, s/veh		58.9			58.6			17.9				21.1
Approach LOS		E			E			B				C

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	80.5	10.7	18.0	12.8	82.6	13.4	15.2
Change Period (Y+Rc), s	7.0	7.5	5.5	5.5	7.0	7.5	5.5	5.5
Max Green Setting (Gmax), s	13.0	52.5	9.5	23.5	13.0	52.5	9.5	23.5
Max Q Clear Time (g_c+I1), s	7.7	16.1	3.9	9.1	5.4	13.4	7.9	8.8
Green Ext Time (p_c), s	0.2	10.9	0.0	1.0	0.1	6.7	0.1	0.9

Intersection Summary	
HCM 6th Ctrl Delay	30.1
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
2: US-395 & Hildebrand Blvd

09/23/2024

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	63
Future Volume (veh/h)	63
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	68
Peak Hour Factor	0.92
Percent Heavy Veh, %	2
Cap, veh/h	959
Arrive On Green	0.61
Sat Flow, veh/h	1585
Grp Volume(v), veh/h	68
Grp Sat Flow(s),veh/h/ln	1585
Q Serve(g_s), s	2.2
Cycle Q Clear(g_c), s	2.2
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	959
V/C Ratio(X)	0.07
Avail Cap(c_a), veh/h	959
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	10.1
Incr Delay (d2), s/veh	0.1
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.8
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	10.2
LnGrp LOS	B
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

MOVEMENT SUMMARY

Site: 3 [Southridge Blvd & Ridgeline Drive (Site Folder: 2025 With Project PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.5.224

2025 With Project Conditions - Weekday PM Peak Hour
Site Category: Future Conditions 2
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Southridge Blvd															
3	L2	All MCs	20	2.0	20	2.0	0.036	5.5	LOS A	0.2	3.9	0.15	0.23	0.15	25.8
8	T1	All MCs	39	2.0	39	2.0	0.036	0.2	LOS A	0.2	3.9	0.15	0.23	0.15	23.8
18	R2	All MCs	51	2.0	51	2.0	0.036	1.6	LOS A	0.2	3.8	0.16	0.25	0.16	25.7
Approach			110	2.0	110	2.0	0.036	1.8	LOS A	0.2	3.9	0.16	0.24	0.16	25.0
East: Ridgeline Drive															
1u	U	All MCs	2	0.0	2	0.0	0.093	12.4	LOS B	0.4	10.3	0.18	0.41	0.18	17.9
1	L2	All MCs	26	2.0	26	2.0	0.093	8.8	LOS A	0.4	10.3	0.18	0.41	0.18	25.1
6	T1	All MCs	74	2.0	74	2.0	0.093	2.9	LOS A	0.4	10.3	0.18	0.41	0.18	29.6
16	R2	All MCs	24	2.0	24	2.0	0.093	3.3	LOS A	0.4	10.3	0.18	0.41	0.18	25.4
Approach			127	2.0	127	2.0	0.093	4.3	LOS A	0.4	10.3	0.18	0.41	0.18	27.4
North: Southridge Blvd															
7	L2	All MCs	16	2.0	16	2.0	0.041	5.8	LOS A	0.2	4.4	0.23	0.28	0.23	24.8
4	T1	All MCs	23	2.0	23	2.0	0.041	0.5	LOS A	0.2	4.4	0.23	0.28	0.23	23.7
14	R2	All MCs	16	2.0	16	2.0	0.041	1.5	LOS A	0.2	4.4	0.23	0.28	0.23	26.1
Approach			54	2.0	54	2.0	0.041	2.3	LOS A	0.2	4.4	0.23	0.28	0.23	24.6
West: Ridgeline Drive															
5	L2	All MCs	9	2.0	9	2.0	0.043	8.8	LOS A	0.2	4.6	0.17	0.38	0.17	26.1
2	T1	All MCs	40	2.0	40	2.0	0.043	2.9	LOS A	0.2	4.6	0.17	0.38	0.17	29.8
12	R2	All MCs	10	2.0	10	2.0	0.043	3.3	LOS A	0.2	4.6	0.17	0.38	0.17	26.4
Approach			59	2.0	59	2.0	0.043	3.8	LOS A	0.2	4.6	0.17	0.38	0.17	28.4
All Vehicles			350	2.0	350	2.0	0.093	3.1	LOS A	0.4	10.3	0.18	0.33	0.18	26.2

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: L:\Projects\78000\78195\78195-000\Traffic\Documents\LOS\SIDRA\78195 - All RAB.sip9

HCM 6th Signalized Intersection Summary
4: Hildebrand Blvd & Southridge Blvd

09/23/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	175	8	9	174	99	42	122	18	220	72	102
Future Volume (veh/h)	155	175	8	9	174	99	42	122	18	220	72	102
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		0.99	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	170	192	9	10	191	109	46	134	20	242	79	112
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	493	1022	48	490	437	238	469	239	213	495	440	540
Arrive On Green	0.11	0.30	0.30	0.01	0.20	0.20	0.03	0.13	0.13	0.14	0.24	0.24
Sat Flow, veh/h	1781	3456	161	1781	2218	1208	1781	1870	1574	1781	1870	1579
Grp Volume(v), veh/h	170	98	103	10	151	149	46	134	20	242	79	112
Grp Sat Flow(s),veh/h/ln	1781	1777	1841	1781	1777	1649	1781	1870	1574	1781	1870	1579
Q Serve(g_s), s	3.0	1.7	1.7	0.2	3.0	3.2	0.8	2.7	0.5	4.7	1.4	2.1
Cycle Q Clear(g_c), s	3.0	1.7	1.7	0.2	3.0	3.2	0.8	2.7	0.5	4.7	1.4	2.1
Prop In Lane	1.00		0.09	1.00		0.73	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	493	525	544	490	350	325	469	239	213	495	440	540
V/C Ratio(X)	0.35	0.19	0.19	0.02	0.43	0.46	0.10	0.56	0.09	0.49	0.18	0.21
Avail Cap(c_a), veh/h	557	915	948	620	915	849	661	1055	900	495	1101	1098
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.1	10.7	10.7	10.0	14.4	14.4	11.3	16.7	15.4	12.9	12.5	9.5
Incr Delay (d2), s/veh	0.9	0.4	0.4	0.0	1.8	2.1	0.2	4.4	0.4	1.6	0.4	0.4
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(50%),veh/ln	1.0	0.5	0.6	0.1	1.1	1.1	0.3	1.2	0.2	1.6	0.5	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.0	11.1	11.1	10.0	16.2	16.6	11.5	21.1	15.8	14.5	12.9	9.9
LnGrp LOS	B	B	B	B	B	B	B	C	B	B	B	A
Approach Vol, veh/h		371			310			200			433	
Approach Delay, s/veh		11.5			16.2			18.4			13.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	13.0	9.5	10.2	4.0	17.1	5.1	14.6
Change Period (Y+Rc), s	* 3.7	* 5	* 3.9	5.0	* 3.7	* 5	* 3.9	5.0
Max Green Setting (Gmax), s	* 5.8	* 21	* 5.6	23.0	* 3.3	* 21	* 5.6	24.0
Max Q Clear Time (g_c+I1), s	5.0	5.2	6.7	4.7	2.2	3.7	2.8	4.1
Green Ext Time (p_c), s	0.1	2.6	0.0	1.2	0.0	1.6	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

MOVEMENT SUMMARY

Site: 5 [Zintel Way & Hildebrand Blvd (Site Folder: 2025 With Project PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.5.224

2025 With Project Conditions - Weekday PM Peak Hour
Site Category: Future Conditions 2
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Zintel Way															
5u	U	All MCs	1	0.0	1	0.0	0.041	14.2	LOS B	0.2	5.1	0.48	0.64	0.48	25.1
5	L2	All MCs	74	2.0	74	2.0	0.041	10.2	LOS B	0.2	5.5	0.47	0.61	0.47	22.7
2	T1	All MCs	1	2.0	1	2.0	0.041	3.6	LOS A	0.2	5.5	0.46	0.57	0.46	11.7
12	R2	All MCs	26	2.0	26	2.0	0.041	4.1	LOS A	0.2	5.5	0.46	0.57	0.46	24.1
Approach			102	2.0	102	2.0	0.041	8.6	LOS A	0.2	5.5	0.47	0.60	0.47	23.0
East: Hildebrand Blvd															
3u	U	All MCs	1	0.0	1	0.0	0.079	13.0	LOS B	0.3	7.6	0.23	0.18	0.23	28.1
3	L2	All MCs	20	2.0	20	2.0	0.079	5.5	LOS A	0.3	7.6	0.23	0.18	0.23	25.2
8	T1	All MCs	189	2.0	189	2.0	0.079	0.4	LOS A	0.3	7.7	0.23	0.11	0.23	24.1
18	R2	All MCs	3	2.0	3	2.0	0.079	1.4	LOS A	0.3	7.7	0.22	0.06	0.22	24.5
Approach			213	2.0	213	2.0	0.079	0.9	LOS A	0.3	7.7	0.23	0.11	0.23	24.3
North: Zintel Way															
1	L2	All MCs	37	2.0	37	2.0	0.030	8.8	LOS A	0.1	2.6	0.31	0.62	0.31	22.2
6	T1	All MCs	2	2.0	2	2.0	0.030	2.7	LOS A	0.1	2.6	0.31	0.62	0.31	24.0
16	R2	All MCs	7	2.0	7	2.0	0.008	3.9	LOS A	0.0	0.7	0.35	0.46	0.35	23.0
Approach			46	2.0	46	2.0	0.030	7.8	LOS A	0.1	2.6	0.31	0.59	0.31	22.3
West: Hildebrand Blvd															
7u	U	All MCs	37	0.0	37	0.0	0.225	12.8	LOS B	1.2	31.4	0.18	0.14	0.18	13.4
7	L2	All MCs	27	0.2	27	0.2	0.225	5.2	LOS A	1.2	31.4	0.18	0.14	0.18	10.9
4	T1	All MCs	324	2.0	324	2.0	0.225	0.2	LOS A	1.2	31.4	0.18	0.14	0.18	24.2
14	R2	All MCs	60	2.0	60	2.0	0.037	0.3	LOS A	0.0	0.0	0.00	0.06	0.00	24.8

Approach	448	1.7	448	1.7	0.225	1.6	LOS A	1.2	31.4	0.16	0.13	0.16	22.2
All Vehicles	809	1.8	809	1.8	0.225	2.6	LOS A	1.2	31.4	0.22	0.21	0.22	22.9

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: PBS ENGINEERING AND ENVIRONMENTAL INC. | Licence: PLUS / 1PC | Processed: Tuesday, September 24, 2024 2:45:57 PM
Project: L:\Projects\78000\78195\78195-000\Traffic\Documents\LOS\SIDRA\78195 - All RAB.sip9

Appendix E
Queuing Reports

Queuing and Blocking Report
Weekday PM Peak Hour - 2024 Existing Volumes

08/06/2024

Intersection: 1: Plaza Way & Ridgeline Drive

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	ULT	R	ULT	R	LT	R	UL	TR
Maximum Queue (ft)	27	9	32	3	12	18	12	36
Average Queue (ft)	2	0	2	0	1	1	1	3
95th Queue (ft)	13	5	14	3	7	9	7	19
Link Distance (ft)	531	531	514		446			1620
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)				150		180	150	
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 2: US-395 & Hildebrand Blvd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	T	TR	R	L	L
Maximum Queue (ft)	86	98	127	89	63	26	49	83	93	62	45	84
Average Queue (ft)	34	53	59	20	22	4	19	31	41	21	10	34
95th Queue (ft)	72	88	106	59	50	17	43	64	76	51	33	68
Link Distance (ft)			1276	1276				478	478			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	350	350			200	260	260			250	350	350
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 2: US-395 & Hildebrand Blvd

Movement	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	T	TR	L	L	T	T	R
Maximum Queue (ft)	280	277	232	97	63	211	230	48
Average Queue (ft)	158	150	111	46	15	104	116	5
95th Queue (ft)	236	232	198	88	44	181	193	26
Link Distance (ft)	1557	1557	1557			2562	2562	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)				300	300			260
Storage Blk Time (%)	0						0	
Queuing Penalty (veh)	0						0	

Queuing and Blocking Report
Weekday PM Peak Hour - 2024 Existing Volumes

08/06/2024

Intersection: 3: Southridge Blvd & Ridgeline Drive

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	ULTR	LT	R	LTR
Maximum Queue (ft)	17	38	31	17	34
Average Queue (ft)	1	5	2	1	3
95th Queue (ft)	8	24	15	8	19
Link Distance (ft)	1443	531	1307		2683
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				75	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 4: Southridge Blvd & Hildebrand Blvd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	R	L	T	R
Maximum Queue (ft)	103	70	36	24	71	108	84	142	40	223	177	69
Average Queue (ft)	38	19	5	3	22	45	29	72	12	113	44	30
95th Queue (ft)	83	49	23	17	56	90	66	123	37	193	115	54
Link Distance (ft)		950	950		1276	1276		2683			728	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250			175			150		100	150		150
Storage Blk Time (%)							0	4		7	0	
Queuing Penalty (veh)							0	2		12	0	

Intersection: 5: Zintel Way & Hildebrand Blvd

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	ULTR	R	ULT	TR	UL	LTR	LTR	R
Maximum Queue (ft)	73	9	38	27	30	25	39	3
Average Queue (ft)	17	0	7	2	3	1	6	0
95th Queue (ft)	58	9	29	14	17	12	27	4
Link Distance (ft)	478	478	816	816		996	307	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)					250			165
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 15

Queuing and Blocking Report
Weekday PM Peak Hour - 2025 Without Project Volumes

08/06/2024

Intersection: 1: Plaza Way & Ridgeline Drive

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	ULT	R	ULT	R	LT	R	UL	TR
Maximum Queue (ft)	30	3	25	12	26	20	21	32
Average Queue (ft)	2	0	1	1	1	1	1	3
95th Queue (ft)	16	3	12	7	11	10	9	20
Link Distance (ft)	531	531	514		446	446	1619	1619
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)				150				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 2: US-395 & Hildebrand Blvd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	T	TR	R	L	L
Maximum Queue (ft)	91	109	127	74	67	24	46	86	100	64	47	85
Average Queue (ft)	38	56	59	23	21	4	17	34	45	20	10	36
95th Queue (ft)	76	91	106	58	49	16	40	68	83	51	32	69
Link Distance (ft)			1276	1276				478	478			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	350	350			200	260	260			250	350	350
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 2: US-395 & Hildebrand Blvd

Movement	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	T	TR	UL	L	T	T	R
Maximum Queue (ft)	270	257	222	115	86	203	233	46
Average Queue (ft)	162	153	117	54	23	102	115	5
95th Queue (ft)	237	233	206	98	61	171	192	24
Link Distance (ft)	1557	1557	1557			2562	2562	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)				300	300			260
Storage Blk Time (%)	0						0	
Queuing Penalty (veh)	0						0	

Intersection: 3: Southridge Blvd & Ridgeline Drive

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	ULTR	LT	R	LTR
Maximum Queue (ft)	32	36	34	31	39
Average Queue (ft)	2	4	2	2	2
95th Queue (ft)	16	21	16	13	18
Link Distance (ft)	1443	531	1307		2683
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				75	
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Intersection: 4: Southridge Blvd & Hildebrand Blvd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	R	L	T	R
Maximum Queue (ft)	100	81	53	20	72	127	76	141	42	226	232	120
Average Queue (ft)	39	20	6	3	24	47	27	73	12	121	55	36
95th Queue (ft)	81	55	28	16	59	97	63	126	38	209	180	108
Link Distance (ft)		950	950		1276	1276		2683			728	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250			175			150		100	150		150
Storage Blk Time (%)								4		12	0	
Queuing Penalty (veh)								2		20	1	

Intersection: 5: Zintel Way & Hildebrand Blvd

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	ULTR	R	ULT	TR	UL	LTR	LTR
Maximum Queue (ft)	88	20	41	32	30	32	50
Average Queue (ft)	19	1	9	3	2	2	10
95th Queue (ft)	64	12	32	17	15	17	36
Link Distance (ft)	478	478	816	816		996	307
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)					250		
Storage Blk Time (%)							
Queuing Penalty (veh)							

Network Summary

Network wide Queuing Penalty: 23

Queuing and Blocking Report
Weekday PM Peak Hour - 2025 With Project Volumes

09/23/2024

Intersection: 1: Plaza Way & Ridgeline Drive

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	ULT	TR	UL	TR	LT	R	UL	TR
Maximum Queue (ft)	6	12	49	68	23	11	22	41
Average Queue (ft)	0	0	28	36	2	1	1	3
95th Queue (ft)	7	6	46	56	15	7	11	21
Link Distance (ft)		616	554	554		487	1662	1662
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	525				200			
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 2: US-395 & Hildebrand Blvd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	T	TR	R	L	L
Maximum Queue (ft)	123	139	162	138	64	56	78	120	147	122	91	121
Average Queue (ft)	54	72	86	45	21	13	35	58	74	27	16	57
95th Queue (ft)	103	119	144	103	49	41	69	106	126	79	50	104
Link Distance (ft)			1271	1271				533	533			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	230	230			200	185	185			280	240	240
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 2: US-395 & Hildebrand Blvd

Movement	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	T	TR	UL	L	T	T	R
Maximum Queue (ft)	266	247	193	131	148	174	198	39
Average Queue (ft)	161	137	67	71	56	95	106	10
95th Queue (ft)	239	223	157	120	114	154	177	29
Link Distance (ft)	1558	1558	1558			793	793	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)				300	300			270
Storage Blk Time (%)	1						0	
Queuing Penalty (veh)	1						0	

Intersection: 3: Southridge Blvd & Ridgeline Drive

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	ULTR	LT	R	LTR
Maximum Queue (ft)	28	24	25	18	43
Average Queue (ft)	2	3	3	1	4
95th Queue (ft)	16	15	16	11	22
Link Distance (ft)	1500	616	1355		2731
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				75	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 4: Hildebrand Blvd & Southridge Blvd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	R	L	T	R
Maximum Queue (ft)	95	65	37	30	89	130	57	116	30	144	101	68
Average Queue (ft)	41	20	6	4	27	49	21	57	10	71	40	29
95th Queue (ft)	80	51	22	18	66	102	49	98	31	125	80	54
Link Distance (ft)		950	950		1271	1271		2731			728	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250			175			145		90	145		145
Storage Blk Time (%)								2		1	0	
Queuing Penalty (veh)								1		1	0	

Intersection: 5: Zintel Way & Hildebrand Blvd

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	ULT	R	ULT	TR	UL	LTR	LTR	R
Maximum Queue (ft)	175	37	40	29	25	24	41	11
Average Queue (ft)	31	1	9	3	4	2	9	0
95th Queue (ft)	105	16	33	17	18	13	32	6
Link Distance (ft)	533	533	847			430	337	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)				330	250			165
Storage Blk Time (%)								
Queuing Penalty (veh)								

Appendix F
Collision Data and Rate Calculations

Exhibit 4

OFFICER REPORTED CRASHES THAT OCCURRED ON ALL ROADS IN Kennewick

01/01/2019 - 12/31/2023

Under 23 U.S. Code § 148 and 23 U.S. Code § 407, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

JURISDICTION	COUNTY	CITY	PRIMARY TRAFFICWAY	BLOCK NUMBER	INTERSECTING TRAFFICWAY	DIST FROM REF POINT	MI or FT	DIR FROM REF POINT	REFERENCE POINT NAME	MILEPOST	SR ONLY HISTORY/ SUSPENSE	REPORT NUMBER	DATE	TIME	MOST SEVERE INJURY TYPE	# INJ	# VEH	VEHICLE 1 TYPE	VEHICLE 2 TYPE
City Street	Benton	Kennewick	PLAZA WAY		RIDGELINE DR						No	EC95783	10/16/2022	07:37	No Apparent Injury	0	1	Pickup,Panel Truck or Vanette under 10,000 lb	
City Street	Benton	Kennewick	RIDGELINE DR		PLAZA WAY						No	EB52839	07/02/2021	12:51	No Apparent Injury	0	1	Pickup,Panel Truck or Vanette under 10,000 lb	
State Route	Benton	Kennewick	395							14.21	No	E944518	43664	16:17	Possible Injury	4	3	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Benton	Kennewick	395							14.21	No	E955403	43707	06:51	Suspected Minor Injury	1	2	Passenger Car	Passenger Car
State Route	Benton	Kennewick	395							14.22	No	EB50869	44398	14:28	Suspected Minor Injury	1	2	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Benton	Kennewick	395							14.22	No	EC18159	44599	07:51	No Apparent Injury	0	2	Pickup,Panel Truck or Vanette under 10,000 lb	Truck (Flatbad,Van,etc)
State Route	Benton	Kennewick	395							14.22	No	EA19800	43891	20:27	No Apparent Injury	0	2	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car
State Route	Benton	Kennewick	395							14.22	No	EA86287	44163	15:41	No Apparent Injury	0	3	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car
State Route	Benton	Kennewick	395							14.22	No	EA58418	44066	12:08	No Apparent Injury	0	2	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Benton	Kennewick	395							14.22	No	EA35057	43970	09:54	No Apparent Injury	0	2	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Benton	Kennewick	395							14.22	No	EB29566	44326	10:50	Possible Injury	1	2	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Benton	Kennewick	395							14.22	No	EA76849	44135	15:34	Possible Injury	2	2	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Benton	Kennewick	395							14.23	No	E914813	43582	12:54	Possible Injury	1	2	Passenger Car	Passenger Car
State Route	Benton	Kennewick	395							14.23	No	E984816	43789	17:11	No Apparent Injury	0	2	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car
State Route	Benton	Kennewick	395							14.23	No	E936346	43630	15:57	No Apparent Injury	0	2	School Bus	Passenger Car
State Route	Benton	Kennewick	395							14.23	No	EA71202	44114	08:46	No Apparent Injury	0	2	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Benton	Kennewick	395							14.23	No	E997702	43824	22:43	Possible Injury	1	2	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Benton	Kennewick	395							14.23	No	ED09008	44894	12:13	No Apparent Injury	0	2	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Benton	Kennewick	395							14.23	No	EC77116	44795	18:37	Suspected Minor Injury	1	2	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Benton	Kennewick	395							14.24	No	EA15047	43871	16:00	No Apparent Injury	0	2	Truck & Trailer	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Benton	Kennewick	395							14.26	No	E978104	43762	06:15	No Apparent Injury	0	2	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb
City Street	Benton	Kennewick	SOUTHRIDGE BLVD	3000		0	M	NE	W HILDEBRAND BLVD		No	E893824	02/07/2019	07:41	Possible Injury	1	2	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car
City Street	Benton	Kennewick	SOUTHRIDGE BLVD	3300		0	M	SW	W HILDEBRAND BLVD		No	ED17183	12/08/2022	10:54	Possible Injury	3	2	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
City Street	Benton	Kennewick	SOUTHRIDGE BLVD	3000		0	M	NE	W HILDEBRAND BLVD		No	E998854	12/28/2019	17:26	No Apparent Injury	0	2	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
City Street	Benton	Kennewick	SOUTHRIDGE BLVD	3200		185	F	SW	W HILDEBRAND BLVD		No	EB04916	02/04/2021	12:51	Possible Injury	1	3	Passenger Car	Passenger Car
City Street	Benton	Kennewick	SOUTHRIDGE BLVD	3100		317.	F	NE	W HILDEBRAND BLVD		No	E902049	03/13/2019	14:52	No Apparent Injury	0	2	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
City Street	Benton	Kennewick	SOUTHRIDGE BLVD	3100		94	F	NE	W HILDEBRAND BLVD		No	EC01077	12/10/2021	17:01	Possible Injury	1	2	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
City Street	Benton	Kennewick	SOUTHRIDGE BLVD	3300		0.13	M	SW	W HILDEBRAND BLVD		No	EB47858	05/12/2021	11:04	No Apparent Injury	0	2	Truck (Flatbad,Van,etc)	Passenger Car
City Street	Benton	Kennewick	SOUTHRIDGE BLVD	3100		175	F	NE	W HILDEBRAND BLVD		No	E930504	06/11/2019	14:37	No Apparent Injury	0	2	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car
City Street	Benton	Kennewick	SOUTHRIDGE BLVD	0	W HILDEBRAND BLVD						No	E892625	02/04/2019	10:53	No Apparent Injury	0	1	Passenger Car	
City Street	Benton	Kennewick	SOUTHRIDGE BLVD	0	W HILDEBRAND BLVD						No	E961895	09/19/2019	19:35	No Apparent Injury	0	2	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb
City Street	Benton	Kennewick	SOUTHRIDGE BLVD	0	W HILDEBRAND BLVD						No	E995901	12/20/2019	07:26	Possible Injury	1	2	Not Stated	Passenger Car
City Street	Benton	Kennewick	SOUTHRIDGE BLVD	0	W HILDEBRAND BLVD						No	EA14157	02/11/2020	07:57	No Apparent Injury	0	2	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
City Street	Benton	Kennewick	SOUTHRIDGE BLVD	3200		125	F	SW	W HILDEBRAND BLVD		No	ED70273	06/02/2023	14:39	No Apparent Injury	0	3	Passenger Car	Passenger Car
City Street	Benton	Kennewick	SOUTHRIDGE BLVD	3100		100	F	NE	W HILDEBRAND BLVD		No	EE39086	09/08/2023	07:30	No Apparent Injury	0	2	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
City Street	Benton	Kennewick	W HILDEBRAND BLVD	5265	SOUTHRIDGE BLVD						No	EC38305	04/15/2022	15:45	No Apparent Injury	0	2	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb
City Street	Benton	Kennewick	W HILDEBRAND BLVD	5265	SOUTHRIDGE BLVD						No	EC66099	05/30/2022	22:20	No Apparent Injury	0	2	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car
City Street	Benton	Kennewick	W HILDEBRAND BLVD	4100	S ZINTEL WAY						No	EA70073	10/03/2020	10:18	No Apparent Injury	0	2	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb
City Street	Benton	Kennewick	W HILDEBRAND BLVD		S ZINTEL WAY						No	E916394	05/01/2019	09:39	No Apparent Injury	0	2	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
City Street	Benton	Kennewick	W HILDEBRAND BLVD		S ZINTEL WAY						No	EB69663	09/17/2021	20:45	No Apparent Injury	0	2	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car

REPORT NUMBER	JUNCTION RELATIONSHIP	WEATHER	ROADWAY SURFACE CONDITION	LIGHTING CONDITION	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION	VEHICLE 2 ACTION	VEHICLE 1 COMPASS DIRECTION FROM	VEHICLE 1 COMPASS DIRECTION TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	FIRST IMPACT LOCATION (City, County & Misc Trafficways - 2010 forward)	PLANE SOUTH - X 2010 - FORWARD	PLANE SOUTH - Y 2010 - FORWARD
EC95783	Circulating Roundabout	Clear	Dry	Daylight	Metal Sign Post	Negotiating a Curve		South	North			Overcorrecting / Oversteering			Other Location (City/County/Misc. Trafficway)	1971013.23	309392.17
EB52839	Exiting Roundabout	Clear	Dry	Daylight	Street Light Pole or Base	Going Straight Ahead		East	West						Past the Outside Shoulder of Primary Trafficway	1971001.56	309457.76
E944518	Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	South	North	Vehicle Stopped	Vehicle Stopped	Inattention	Unknown Distraction		Lane 1 Increasing Milepost	1973181.3	310603.23
E955403	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead	Slowing	South	North	South	North	Inattention			Lane 2 Increasing Milepost	1973188.4	310607.07
EB50869	At Intersection and Related	Clear	Dry	Daylight	From same direction - one right turn - one straight	Making Right Turn	Going Straight Ahead	West	South	West	East	Improper Turn/Merge			Lane 1 Decreasing Milepost	1973196.1	310691.91
EC18159	At Intersection and Related	Clear	Dry	Daylight	Same direction -- both turning right -- both moving -- sideswipe	Making Right Turn	Making Right Turn	West	South	West	South			Operating Defective Equipment	Intersecting Road Decreasing Milepost	1973190.4	310685.92
EA19800	At Intersection and Related	Clear	Dry	Dark-Street Lights On	From same direction - both going straight - both moving - rear-end	Going Straight Ahead	Starting in Traffic Lane	North	South	North	South	Eating or Drinking	Follow Too Closely		Lane 1 Decreasing Milepost	1973200.6	310696.86
EA86287	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	North	South	East	West	Disregard Traffic Sign and Signals			Lane 2 Decreasing Milepost	1973200.6	310696.86
EA58418	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	North	South	North	Vehicle Stopped	Apparently Asleep or Fatigued			Lane 1 Decreasing Milepost	1973200.6	310696.86
EA35057	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	South	North	West	East	Disregard Traffic Sign and Signals			Lane 2 Increasing Milepost	1973216.7	310642.02
EB29566	At Intersection and Related	Clear	Dry	Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead	Slowing	West	North	West	North	Exceeding Reas. Safe Speed			Lane 1 Decreasing Milepost	1973209.6	310703.28
EA76849	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	South	North	South	Vehicle Stopped	Operating Handheld Cell Phone			Lane 2 Increasing Milepost	1973231.3	310660.49
E914813	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	North	South	North	Vehicle Stopped	Inattention			Lane 1 Decreasing Milepost	1973227	310726.51
E984816	At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	Same direction -- both turning right -- both moving -- sideswipe	Making Right Turn	Making Right Turn	East	North	East	North	Improper Turn/Merge	Inattention		Intersecting Road Increasing Milepost	1973266.3	310688.44
E936346	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - all others	Backing	Stopped at Signal or Stop Sign	East	Vehicle Ba	East	Vehicle Stopped	Improper Backing			Intersecting Road Increasing Milepost	1973261.1	310686.83
EA71202	At Intersection and Related	Raining	Wet	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	South	North	South	Vehicle Stopped	Exceeding Reas. Safe Speed			Lane 1 Increasing Milepost	1973250.2	310675.87
E997702	At Intersection and Related	Overcast	Dry	Dark-Street Lights On	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	South	North	South	Vehicle Stopped	Inattention	Apparently Fatigued		Lane 2 Increasing Milepost	1973245.8	310673.83
ED09008	At Intersection and Related	Overcast	Dry	Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead	Slowing	East	West	East	West	Follow Too Closely			Intersecting Road Increasing Milepost	1973284.4	310615.86
EC77116	At Intersection and Related	Clear	Dry	Daylight	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	West	North	East	West	Did Not Grant RW to Vehicle		Did Not Grant RW to Vehicle	Lane 2 Decreasing Milepost	1973224.2	310714.36
EA15047	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Starting in Traffic Lane	Stopped at Signal or Stop Sign	North	South	Vehicle Stopped	Vehicle Stopped	Other Contributing Circ Not Listed			Lane 3 Decreasing Milepost	1973261.3	310771.12
E978104	Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped for Traffic	North	South	North	South	Follow Too Closely			Lane 3 Decreasing Milepost	1973335.4	310853.21
E893824	Not at Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead	Slowing	North	South	North	South	Follow Too Closely			Lane of Primary Trafficway	1973013.54	312206.91
ED17183	Not at Intersection and Not Related	Clear	Ice	Daylight	One car leaving parked position	Merging (Entering Traffic)	Going Straight Ahead	Vehicle Sto	West	East	West	Improper Turn/Merge			Lane of Primary Trafficway	1972017.21	311490.83
E998854	Driveway Related but Not at Driveway	Overcast	Dry	Dark-Street Lights On	From same direction - both going straight - both moving - rear-end	Going Straight Ahead	Changing Lanes	North	South	North	South	Follow Too Closely			Lane of Primary Trafficway	1973094.56	312261.7
EB04916	Intersection Related but Not at Intersection	Clear	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Slowing	Stopped for Traffic	South	North	South	Vehicle Stopped	Follow Too Closely			Lane of Primary Trafficway	1972266.72	311684.18
E902049	Not at Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	North	South	North	Vehicle Stopped	Follow Too Closely			Lane of Primary Trafficway	1972708.6	312000.69
EC01077	Not at Intersection and Not Related	Overcast	Dry	Dark-Street Lights On	From same direction - both going straight - both moving - rear-end	Overtaking and Passing	Going Straight Ahead	South	North	South	North	Improper Passing			Lane of Primary Trafficway	1972524.08	311874.85
EB47858	At Driveway	Clear	Dry	Daylight	Same direction -- both turning right -- both moving -- sideswipe	Making Right Turn	Making Right Turn	East	North	East	North	Did Not Grant RW to Vehicle			Lane of Primary Trafficway	1971886.19	311387.74
E930504	Not at Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead	Slowing	South	North	South	North	Follow Too Closely			Lane of Primary Trafficway	1972590.98	311920.79
E892625	At Intersection and Related	Snowing	Snow/Slush	Daylight	Linear Curb	Making Right Turn		South	East			Exceeding Reas. Safe Speed			Intersecting Trafficway	1972427.55	311805.64
E961895	At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	From opposite direction - one left turn - one straight	Going Straight Ahead	Making Left Turn	South	North	North	East	Light Violation: No Lights/Fail to Dim			Lane of Primary Trafficway	1972414.38	311796.1
E995901	At Intersection and Related	Overcast	Wet	Dawn	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	East	South	West	East	Did Not Grant RW to Vehicle			Lane of Primary Trafficway	1972414.38	311796.12
EA14157	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	East	West	North	South	Disregard Traffic Sign and Signals			Lane of Primary Trafficway	1972414.38	311796.12
ED70273	Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped for Traffic	South	North	South	North	Did Not Grant RW to Vehicle	Follow Too Closely		Lane of Primary Trafficway	1972314.12	311720.63
EE39086	Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Starting in Traffic Lane	Stopped for Traffic	North	South	North	Vehicle Stopped	Other Distractions	Follow Too Closely		Lane of Primary Trafficway	1972494.73	311854.
EC38305	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	East	West	Vehicle Stopped	Vehicle Stopped	Operating Hands-Free Cell Phone	Follow Too Closely		Lane of Primary Trafficway	1972414.11	311795.26
EC66099	At Intersection and Related	Clear	Dry	Dark-Street Lights On	From same direction - one right turn - one straight	Making Right Turn	Going Straight Ahead	North	West	North	South	Improper Turn/Merge			Lane of Primary Trafficway	1972414.11	311795.26
EA70073	Entering Roundabout	Clear	Dry	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	East	West	South	West	Distractions Outside Vehicle			Lane of Primary Trafficway	1973910.5	310398.
E916394	Entering Roundabout	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - sideswipe	Going Straight Ahead	Making Left Turn	East	West	West	North	Did Not Grant RW to Vehicle			Lane of Primary Trafficway	1973885.85	310442.38
EB69663	Entering Roundabout	Clear	Dry	Dark-Street Lights Off	Entering at angle	Going Straight Ahead	Going Straight Ahead	West	East	North	South	Disregard Traffic Sign and Signals			Lane of Primary Trafficway	1973780.33	310331.09

Intersection: Plaza Way / Ridgeline Drive Date 9/24/2024

Average Daily cars passing Through intersection

PM Peak Hour	NB	270
Movement Counts	SB	450
	EB	850
	WB	1,200
	ADT	2,770
Millions of Entering Vehicles for a five-year period =		**5.06**

Collision Rate

Number of Collisions =	2
Number of years =	5
Collision Rate =	**0.40**

Collision Rate Goal: Less than 1.0 per MEV

ADT = 2024 PM Count X 10
PM Peak Hour = Approx. 10% of ADT
MEV = Million Entering Vehicles

Intersection: US Route 395 (US-395) / Hildebrand Boulevard Date 9/24/2024

Average Daily cars passing Through intersection

PM Peak Hour	NB	10,350
Movement Counts	SB	7,390
	EB	3,800
	WB	2,690
	ADT	24,230
Millions of Entering Vehicles for a five year period =		**44.22**

Collision Rate

Number of Collisions =	18
Number of years =	5
Collision Rate =	**0.41**

Collision Rate Goal: Less than 1.0 per MEV

ADT = 2024 PM Count X 10
PM Peak Hour = Approx. 10% of ADT
MEV = Million Entering Vehicles

Intersection: Southridge Boulevard / Ridgeline Drive Date 9/24/2024

Average Daily cars passing Through intersection

PM Peak Hour	NB	930
Movement Counts	SB	450
	EB	440
	WB	1,040
	ADT	2,860
Millions of Entering Vehicles for a five year period =		**5.22**

Collision Rate

Number of Collisions =	0
Number of years =	5
Collision Rate =	**0.00**

Collision Rate Goal: Less than 1.0 per MEV

ADT = 2024 PM Count X 10
PM Peak Hour = Approx. 10% of ADT
MEV = Million Entering Vehicles

4. Southridge Boulevard / Hildebrand Boulevard

Intersection: Southridge Boulevard / Hildebrand Boulevard Date 9/24/2024

Average Daily cars passing Through intersection

PM Peak Hour	NB	1,770
Movement Counts	SB	3,760
	EB	3,260
	WB	2,690
	ADT	11,480
Millions of Entering Vehicles for a five year period =		**20.95**

Collision Rate

Number of Collisions =	16
Number of years =	5
Collision Rate =	**0.76**

Collision Rate Goal: Less than 1.0 per MEV

ADT = 2024 PM Count X 10
PM Peak Hour = Approx. 10% of ADT
MEV = Million Entering Vehicles

Intersection:	Hildebrand Boulevard / Zintel Way	Date	9/24/2024

Average Daily cars passing Through intersection

PM Peak Hour	NB	610
Movement Counts	SB	400
	EB	3,570
	WB	1,790
	ADT	6,370
Millions of Entering Vehicles for a five year period =		**11.63**

Collision Rate

Number of Collisions =	3
Number of years =	5
Collision Rate =	**0.26**

Collision Rate Goal: Less than 1.0 per MEV

ADT = 2024 PM Count X 10
PM Peak Hour = Approx. 10% of ADT
MEV = Million Entering Vehicles

CITY OF KENNEWICK
DETERMINATION OF NON-SIGNIFICANCE

FILE/PROJECT NUMBER: ED-2024-0025

DESCRIPTION OF PROPOSAL: A Planned Residential Development and Preliminary Plat consisting of 53 single-family lots, 3 open space tracts, 21 multi-family structures (126 units) and a community building.

PROPONENT: PBS Engineering, c/o Scott Shumaker, 400 Bradley Boulevard, Suite 106, Richland, WA 99352

LOCATION OF PROPOSAL, INCLUDING STREET ADDRESS, IF ANY: Located in the north half of the northeast quarter of Section 21, Township 8 North, Range 29 East of the Willamette Meridian, Parcel No.1-2189-100-0002-000. East of the Ridgeline Road US 395 Interchange.

LEAD AGENCY: City of Kennewick

DETERMINATION: The City of Kennewick has determined that this proposal does not have a probable significant adverse impact on the environment. An Environmental Impact Statement (EIS) will not be required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the City. This information is available to the public on request. Application for other required permits may require further review under SEPA procedures.

_X_ There is no comment period for this DNS.
___ This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS.
___ This DNS is issued under 197-11-340(2); the City will not act on this proposal for fifteen days from the date below. Comments must be submitted by _____. After the review period has elapsed, all comments received will be evaluated and the DNS will be retained, modified, or withdrawn as required by SEPA regulations.

RESPONSIBLE OFFICIAL: Anthony Muai, AICP
POSITION/TITLE: Planning Director
ADDRESS: 210 W 6th Ave., P.O. Box 6108, Kennewick, WA 99336
PHONE: (509) 585-4386

___ Changes, modifications and/or additions to the checklist have been made on the attached Environmental Checklist Review.

This DNS is subject to the attached conditions:
_X_ No conditions.
___ See attached condition(s).

Date: January 9, 2025 Signature: _____

****

Appeal: An appeal of this determination must be submitted to the Community Planning Department within fourteen (14) calendar days after the date issued (1/09/25), no later than **4:30 p.m. on January 23, 2025**. This appeal must be written and make specific factual objections to the City's threshold determination. Appeals shall be conducted in conformance with Section 4.12.090(9) of the Kennewick Municipal Code and the required fees pursuant to the City's adopted Fee Schedule shall be paid at time of appeal submittal.

Copies of this DNS were mailed to:

Dept. of Ecology
WA Dept. of Fish & Wildlife
WSDOT
Yakama Nation
CTUIR
ED-2024-0025 File

CITY OF KENNEWICK HEARING EXAMINER

IN THE MATTER OF **PRD-2024-0001** **Canyon View Estates**	))))))	**FINDINGS OF FACT, CONCLUSIONS OF LAW, CONDITIONS OF APPROVAL AND DECISION**

THIS MATTER having come on for hearing in front of the City of Kennewick Hearing Examiner on March 10, 2025, the Hearing Examiner having taken evidence hereby submits the following Findings of Fact, Conclusions of Law, and Decision and Conditions of Approval as follows:

I. FINDINGS OF FACT

1. This was an application for a Planned Residential Development consisting of 53 single-family lots, 3 open space tracts, one lot with 21 multi-family structures (126 units) and a community building on 29.5 acres.

2. The proposal is generally located SE of the US 395 and Ridgeline Drive Interchange. Parcel Nos. 1-2189-100-0002-000.

3. Legal Description: See Exhibit 2

4. The property owner is Canyon View Estates, LLC c/o Chad Bagley 1418 E Saint Helens Street Pasco, WA 99301

5. The applicant is PBS Engineering and Environmental Attn: Scott Shumaker 400 Bradley Boulevard, Suite 106 Richland, WA 99352

6. Engineer: See Finding of Fact #5.

7. Approval Criteria:

7.1. Comprehensive Plan – Land Use

7.2. KMC Title 18 – Zoning

7.3. KMC Title 17 – Subdivisions

7.4. KMC Section 5.56 – Public Works Construction Standards

7.5. Washington State Environmental Policy Act

8. Preliminary Plat Key Application Processing Dates:

8.1. Pre-Application/Feasibility Meeting: N/A

8.2. Application Submittal:	September 25, 2024
8.3. Determination of Completeness Issued:	October 3, 2024
8.4. Notice of Application:	October 3, 2024
8.5. Property Posting Sign:	October 3, 2024
8.6. City Department Review Meeting:	January 8, 2025
8.7. SEPA Threshold Determination Issued:	January 9, 2025
8.8. SEPA Appeal Period Ends:	January 23, 2025
8.9. Date of Published Notice of Public Hearing:	February 16, 2025
8.10. Date of Posting Hearing Notice On-Site:	February 21, 2025
8.11. Date of Mailed Notice of Public Hearing:	February 20, 2025
8.12. Public Hearing Date:	March 10, 2025

9. **Hearing Examiner Findings**:

9.1. Planned Residential Development:

9.1.1. Planned Residential Development Permit, PRD-2024-0001, has a single-family residential component and a multi-family component to it. No deviations were requested from the development regulations. The applicant has requested a 5 percent density bonus, resulting in eight additional lots.

9.1.2. Approval of the Planned Residential Development is required prior to approval of the Preliminary Plat Application due to requesting multi-family housing in a single-family zoning district.

9.1.3. The purpose of Planned Residential Developments (KMC 18.45) is to encourage imaginative design and the creation of permanent open space by permitting greater flexibility in zoning requirements than generally permitted by Kennewick's development standards. The specific setback, lot size, height limits, and other dimensional requirements can be waived if the Development Standards listed in KMC 18.45.050 and the Open Space Standards in KMC 18.45.060 are met.

9.2. Preliminary Plat:

9.2.1. A preliminary plat has not been formally submitted. The conceptual drawing consists of 54 lots and a 6.6-acre open space area

9.3. Property History:

9.3.1. The property was annexed and zoned Residential, Low (RL) in September 2014 by adopting Ordinance 5567.

9.4. Density/Lot Size:

9.4.1. Per the Table of Residential Development Standards (KMC 18.12.010 A.2) there is no maximum density for the RL Zone, only a minimum lot size of 7,500 SF. The PRD development standards in KMC 18.45.050(4) allow a 20 percent density increase. The applicant is proposing a 5 percent density increase, which is 8 units. The allowed number of units is 171, and the applicant has proposed 179.

9.5. Setbacks:

9.5.1. No setback deviations were requested. The following standard setbacks for the Residential, Low (RL) will be applicable to the project:

9.5.1.1. Front: 15-feet

9.5.1.2. Garage: 20-feet

9.5.1.3. Side: 5-feet

9.5.1.4. Rear: 15-feet

9.6. Traffic:

9.6.1. The City's traffic engineer has reviewed the applicant's Traffic Impact Analysis. Specific conditions of approval for road construction requirements and traffic impact fees have been submitted by the Traffic Engineering Division (see Exhibit 14).

9.7. Storm Water:

9.7.1. The development is subject to the storm water requirements in City of Kennewick Standard Specification Section 5-9 and Storm Water Management Manual for Eastern Washington (SMMEW), (see Exhibit 13).

9.8. Streets & Utilities:

9.8.1. The developer will be required to provide construction of public roads, sidewalks, streetlights, storm drainage, and designate sidewalk and utility easements all in conformance with the latest City of Kennewick (COK) Standard Specifications and details, (see Exhibit 13).

9.9. Critical Areas:

9.9.1. The site has areas designated as erosion hazard areas and slopes greater than 15%. The applicant submitted a Geotechnical Engineering Report, the development is subject to the recommendations of that report, (see Exhibit 8).

9.9.2. The project site is classified as a Fish and Wildlife Habit Conservation Area pursuant to KMC 18.63.010. Additionally, it is identified as Benton County Shrub Steppe within the Washington Department of Fish and Wildlife's (WDFW) Priority Habitat and Species Program. WDFW recommends that a 2:1 mitigation ration be applied to lands that are converted from Shrub Steppe Habitat, (see Exhibit 15).

9.9.3. The applicant submitted a critical area report for the proposal. The report states that the site contains 29.5 acres of shrub-steppe, (see Exhibit 7). Off-site mitigation will be required for 24.5 acres of the site. The remaining 5 acres will be enhanced on-site and subject to the mitigation planning instructions contained the critical area report. Mitigation for shrub-steppe conversion must be approved prior to disturbing the designated area.

9.10. Grading:

9.10.1. Grading will be reviewed once a Preliminary Plat Application is submitted and/or prior to ground work starts.

9.11. Parks:

9.11.1. No City parks are proposed. The Preliminary Plat Application will be subject to Park Impact Fees.

9.12. Common Area Maintenance:

9.12.1. The applicant is proposing 6.6 acres of open space, which is 22.3% of the site. The applicant has submitted a landscaping plan for the development's proposed open space, that is not subject to the shrub steppe enhancement plan in the critical area report. A maintenance agreement for common open space, private streets, and shared driveways will be required to be approved by the City Attorney and recorded against the property. Per KMC 18.45.100, a Homeowner's/Property Owner Association are required for maintenance and management of open space.

9.13. Schools:

9.13.1. The Kennewick School District will provide comments once the preliminary plat is submitted.

9.14. Kennewick Irrigation District:

9.14.1. The proposed development is outside the boundary of the Kennewick Irrigation District (KID) Boundary, the district has reviewed the project and submitted comments, (see Exhibit 18).

9.15. Bonneville Power Administration:

9.15.1. An existing transmission line runs across the northern third of the site. The Bonneville Power Administration (BPA) requires that land use application be submitted, addition to acquiring a land use application, (see Exhibit 16).

9.16. Williams:

9.16.1. Williams will require an encroachment permit for the proposed development in its gas line easement, (see Exhibit 17).

9.17. Surrounding Property:

9.17.1. All adjacent properties to the site are vacant and undeveloped. The properties to the north, east and south are zoned either Residential, Medium or Residential, Low. The property to the west are in unincorporated Benton County. Residential development has been proposed directly to the north, but no construction has started. The Hearing Examiner finds that the proposed Planned Residential Development will be harmonious with the surrounding properties.

9.18. Comprehensive Plan:

9.18.1. The Hearing Examiner Finds that this request is consistent with and generally conforms to the City's Comprehensive Plan, and it will implement the following, goals and policies of the Comprehensive Plan:

9.18.1.1. **CRITICAL AREAS AND SHORELINE GOALS + POLICIES**:

9.18.1.1.1. **GOAL 1**: "Protect the public and personal property from the effects of landslides, steep slope failures, erosion or flooding."

9.18.1.1.2. **POLICY 1**: "Continue to classify, designate and protect geologically hazardous areas in the critical areas ordinance."

9.18.1.1.3. **GOAL 2**: "Protect the unique environment of the critical areas and shoreline."

9.18.1.1.4. **POLICY 1**: "Protect critical areas and the shoreline using the Critical Areas Ordinance and the Shoreline Master Plan."

9.18.1.1.5. **POLICY 2**: "Use Best Available Science (BAS) to protect critical areas and shorelines and their environmental functions."

9.18.1.1.6. **POLICY 3**: "Preserve and protect anadromous fish, and threatened, endangered and candidate species as identified by federal and state agencies."

9.18.1.1.7. **GOAL 3**: "Regulate or mitigate activities in or adjacent to critical areas or the shoreline to avoid adverse environmental impacts."

9.18.1.1.8. **Hearing Examiner Finding**: Future development will be subject to the recommendations of the submitted critical areas report and KMC Chapter 18.62 – Critical Areas – Geologically Hazardous Areas and Chapter 18.63 – Critical Areas – Fish and Wildlife Habitat Conservation Areas.

9.18.1.2. **RESIDENTIAL GOALS + POLICIES**:

9.18.1.2.1. **RESIDENTIAL GOAL 1**: "Provide for attractive, walkable, and well-designed neighborhoods, with differing densities and compatible with neighboring areas."

9.18.1.2.2. **Hearing Examiner Finding**: The proposed Planned Residential Development has open space and walking paths for the residents to use. Additionally, multi-family and single-family residential is proposed.

9.18.1.2.3. **RESIDENTIAL GOAL 2**: "Provide appropriate public facilities supporting residential areas."

9.18.1.2.4. **RESIDENTIAL GOAL 3**: "Promote a variety of residential densities with a minimum density target of 3 units per acre as averaged throughout the urban area."

9.18.1.2.5. **POLICY 1**: "Establish and implement maximum densities in the City's residential zoning categories."

9.18.1.2.6. **Hearing Examiner Finding**: The proposed development has a 5% higher density pursuant to the requirements of the Planned Residential Development Regulations.

9.18.1.3. **HOUSING GOALS + POLICIES**:

9.18.1.3.1. **GOAL 1**: "Support and develop a variety of housing types and densities to meet the diverse needs of the population."

9.18.1.3.2. **Hearing Examiner Finding**: The development will consist of multi-family housing and standard single-family residences. Both types of housing have the potential to provide needed housing for of the City's population.

10. An open record public hearing after due legal notice was held on March 10, 2025.

11. The following exhibits were entered into the record at the hearing:

11.1. Ex. 1 Staff Report

11.2. Ex. 2 Legal Description

11.3. Ex. 3 PRD Plan for Canyon View Estates

11.4. Ex. 4 Development Schedule

11.5. Ex. 5 Phasing and Open Space Diagram for Canyon View Estates

11.6. Ex. 6 Landscape Plan for Canyon View Estates

11.7. Ex. 7 Critical Areas Report and Mitigation Options

11.8. Ex. 8 Geotechnical Engineering Study

11.9. Ex. 9 Traffic Impact Analysis

11.10. Ex. 10 Applicant's Response to comments

11.11. Ex. 11 SEPA Determination

11.12. Ex. 12 Notice of Public Hearing Affidavit, Mailing List and Notice

11.13. Ex. 13 Public Works Memorandum

11.14. Ex. 14 Traffic Engineering Division Memorandum

11.15. Ex. 15 State of Washington Department of Fish and Wildlife

11.16. Ex. 16 Bonneville Power Administration

11.17. Ex. 17 Williams

11.18. Ex. 18 Kennewick Irrigation District

11.19. Ex. 19 Washington State Department of Transportation

11.20. Ex. 20 Benton Clean Air Agency

12. Appearing and testifying at the hearing on behalf of the applicant was Scott Shumaker. Mr. Shumaker testified that he was the agent authorized to appear and speak on behalf of the applicant and property owner. Mr. Shumaker indicated that in his review of the Staff Report, Exhibit 4 had the old phasing plan and the new phasing plan is set forth in Exhibit 5. He had no objection to any of the remainder of the Staff Report. Mr. Shumaker also testified that he had reviewed the proposed Conditions of Approval and that the applicant had no objection to any Conditions of Approval.

13. No member of the public testified at the hearing.

14. Any Conclusion of Law that is more correctly a Finding of Fact is hereby incorporated as such by this reference.

II. CONCLUSIONS OF LAW

1. The Hearing Examiner has been granted the authority to render this decision.

2. As conditioned, this project is consistent with the Kennewick Comprehensive Plan and the Kennewick Municipal Code.

3. Any Finding of Fact that is more correctly a Conclusion of Law is hereby incorporated as such by this reference.

III. DECISION

Based on the above Findings of Fact and Conclusions of Law, the Hearing Examiner **APPROVES** the application for the PUD 2024-0001 Subject to the following Conditions of Approval.

IV. CONDITION OF APPROVAL

1. Comply with City of Kennewick regulatory controls, policies and codes, including the Single-family Residential and Multi-Family Design Standards.
2. All fees required by the City shall be paid prior to the approval of the final plat.
3. The future preliminary plat shall match the PRD Plan for Canyon View Estates, (Exhibit 3).

4. Comply with the Public Works memorandum dated October 3, 2024 (Exhibit 13).
5. Comply with Traffic Engineering Division Conditions dated October 15, 2024 (Exhibit 14).
6. Comply with Kennewick Irrigation District letter dated December 18, 2024 (Exhibit 18).
7. Comply with the Bonneville Power Administration Comments, dated October 4, 2024 (Exhibit 16).
8. Comply with the State of Washington Department of Fish and Wildlife Comments, dated December 20, 2024 (Exhibit 15).
9. Comply with Williams Comments, dated December 19, 2024 (Exhibit 17).
10. Comply with the Washington State Department of Transportation Comments, dated October 17, 2024 (Exhibit 19).
11. Comply with the Benton Clean Air Agency Comments, dated December 16, 2024 (Exhibit 20).
12. Comply with the proposed critical area mitigation in the Critical Areas Report dated 12/4/24 and the comments from the WDFW dated 12/20/24. The applicant shall provide 5 acres of onsite enhanced mitigation. Off-site mitigation shall be calculated at a 2:1 mitigation ratio. A $3,500 per acre cash deposit, payable to the Benton and Franklin Conservation Districts, shall be required as a replacement for physical mitigation completed by the applicant. The size and location of all proposed mitigation must be reviewed by the City prior to earthwork being done in the designated shrub-steppe critical areas. The City, WDFW and the applicant must approve any proposed alternative critical area mitigation protection plans.
13. Each phase shall have its corresponding pedestrian paths and open space completed at the time of that phase's final plat approval.
14. The Ridgeline Drive, Street 1 and open space landscaping shall be planted as shown on the proposed landscape plan.
15. Pursuant to KMC 18.45.080(2) & (3), the PRD expires 7 years from the date of approval from the Hearing Examiner. Requests for extensions must be in writing and received by the Community Planning Department prior to expiration of the PRD approval.

Dated this 18 day of March, 2025.

CITY OF KENNEWICK HEARING EXAMINER

Andrew L. Kottkamp

Absent a timely appeal, this Decision is final[1]

[1] **4.02.140: - Appeal of Final Decisions.** The Planning Director, or any interested party affected by the Examiner's written final decision, may appeal the decision to the Benton County Superior Court within 21 days. (Ord. 5321 Sec. 1, 2010)

NOTICE OF MAILING

I, Steve Donovan **, on** 8/22 **, 20** 25

mailed 8 **copies of** Notice of Public Hearing

for SUB-2025-0004

to surrounding properties within 300 feet

as shown on the attached list.

Signature

37
BRL DDEVELOPMENT
PO BOX 7287
KENNEWICK, WA 99336

37
NOWAK TRUSTEE L LOUISE
C/O MICHAEL NOWAK
1914 FLOWER DRIVE
PALM BEACH GARDEN, FL 33410

37
LUND TRUSTEE LLOYD
300 COLUMBIA POINTDR, UNIT G-128
RICHLAND, WA 99352

37
EVERGREEN ZINTEL, LLC
66 S HANFORD ST, STE 300
SEATTLE, WA 98134

37
SIDIBE AISSATA
101103 E SIDIBE PR SE
KENNEWICK, WA 99337

37
CANYON VIEW ESTATES, LLC
1418 E SAINT HELENS ST
PASCO, WA 99301

37
KENNEWICK SCHOOL DISTRICT #17
1000 W 4TH AVENUE
KENNEWICK, WA 99336

37
DRESS TRUSTEE GEORGE W
845 N COLUMBIA CENTER BLVD
KENNEWICK, WA 99336

NOTICE OF PUBLIC HEARING – SEPTEMBER 8, 2025, 6:00 P.M.

Proposal: A 29.5-acre, 53 lot and 3 tract Preliminary Plat/Planned Residential Development. The project will consist of single-family and multi-family residences. The project is generally located SE of the Ridgeline Drive and US 395 interchange. The site is zoned Residential, Low (RL). The file number is SUB-2025-0004. **PLAT MAP ON BACK**

Open Record Hearing: The City of Kennewick Hearing Examiner will conduct an open record hearing at **6:00 p.m. on September 8, 2025 at 210 W 6th Avenue, City Hall Council Chambers**. The meeting will be conducted in a hybrid format, which allows in person or virtual participation. To participate in the meeting virtually, use the link found at www.go2kennewick.com/244/Hearing-Examiner.

Environmental Documents and/or Studies Applicable to this Proposal: Determination of Non-significance, ED-2024-0025, was issued on January 9, 2025.

Determination of Completeness: The application was determined complete on June 16, 2025 for processing.

Project Permits Associated with this Proposal: Civil

Preliminary Determination of Regulations Used for Project Mitigation: Title 18 (Zoning), Title 17 (Subdivision), Title 4 (Administrative Procedures) of the Kennewick Municipal Code and the land use policies contained in the Kennewick Comprehensive Plan.

Estimated Date of Decision: Within 10 business days of the Hearing Date of September 8 10, 2025.

To Receive Notification of the Decision: Contact the Development Services Division at 210 W. 6th Avenue, Kennewick, WA 99336 or via telephone at (509) 585-4280.

Appeal: Any person aggrieved by the decision of the Kennewick Hearing Examiner on this proposal may appeal to the Superior Court of Benton County within twenty-one (21) days of the date of decision.

Steve Donovan, Planning Manager

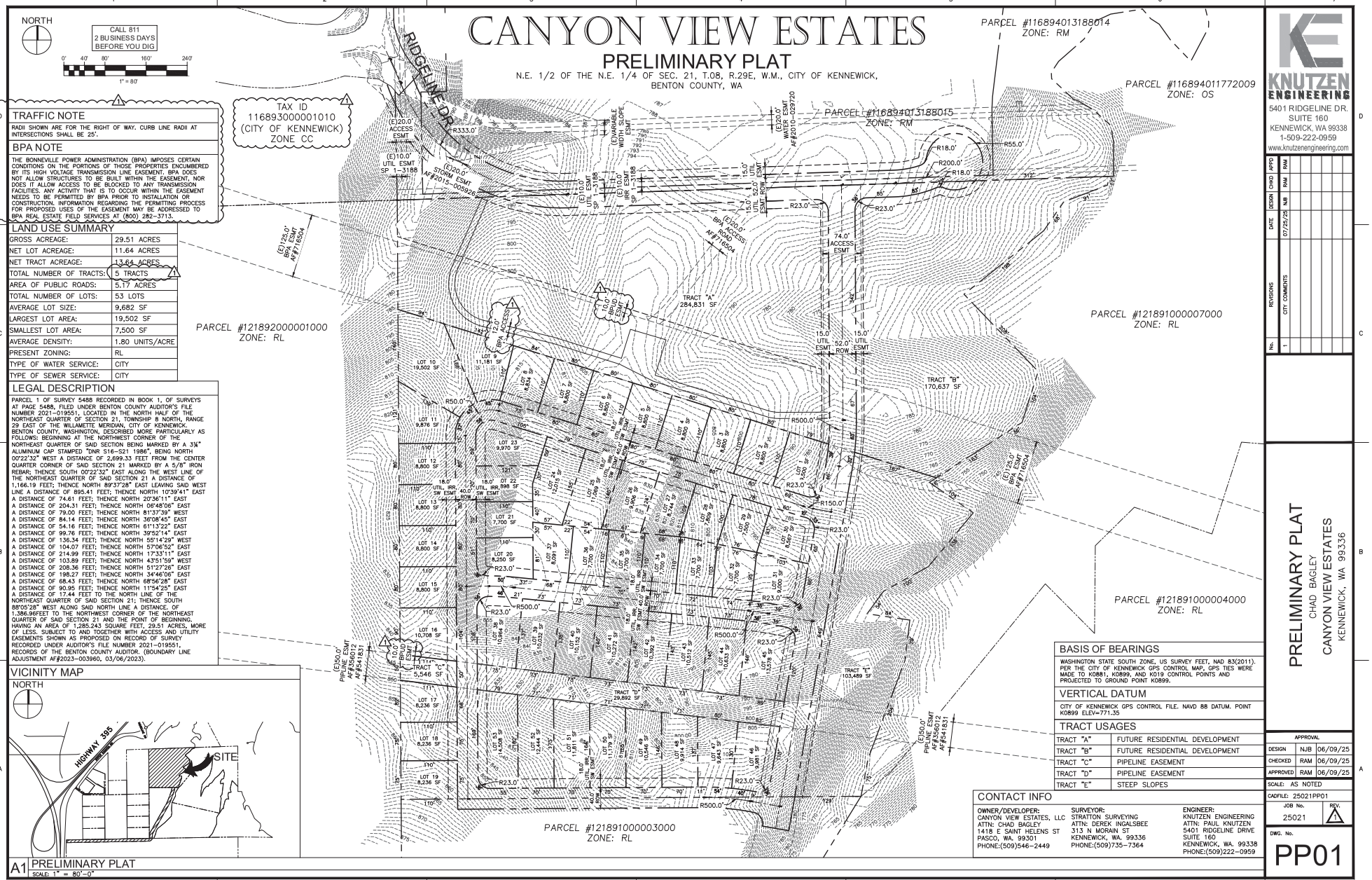
The City of Kennewick welcomes full participation in public meetings by all citizens. No qualified individual with a disability shall be excluded or denied the benefit of participating in such meetings. If you wish to use auxiliary aids or require assistance to comment at this public meeting, please contact Steve Donovan at (509) 585-4361 or through the Washington Relay Service Center TTY by dialing 711, at least ten days prior to the date of the meeting to make arrangements for special needs.

210 W. 6th Avenue / PO Box 6108, Kennewick, WA 99336

CANYON VIEW ESTATES

PRELIMINARY PLAT

N.E. 1/2 OF THE N.E. 1/4 OF SEC. 21, T.08, R.29E, W.M., CITY OF KENNEWICK, BENTON COUNTY, WA



TRAFFIC NOTE

RADII SHOWN ARE FOR THE RIGHT OF WAY. CURB LINE RADII AT INTERSECTIONS SHALL BE 25'.

BPA NOTE

THE BONNEVILLE POWER ADMINISTRATION (BPA) IMPOSES CERTAIN CONDITIONS ON THE PORTIONS OF THOSE PROPERTIES ENCUMBERED BY ITS HIGH VOLTAGE TRANSMISSION LINE EASEMENT. BPA DOES NOT ALLOW STRUCTURES TO BE BUILT WITHIN THE EASEMENT, NOR DOES IT ALLOW ACCESS TO BE BLOCKED TO ANY TRANSMISSION FACILITIES. ANY ACTIVITY THAT IS TO OCCUR WITHIN THE EASEMENT NEEDS TO BE PERMITTED BY BPA PRIOR TO INSTALLATION OR CONSTRUCTION. INFORMATION REGARDING THE PERMITTING PROCESS FOR PROPOSED USES OF THE EASEMENT MAY BE ADDRESSED TO BPA REAL ESTATE FIELD SERVICES AT (800) 282-3713.

TAX ID
116893000001010
(CITY OF KENNEWICK)
ZONE CC

LAND USE SUMMARY

GROSS ACREAGE:	29.51 ACRES
NET LOT ACREAGE:	11.64 ACRES
NET TRACT ACREAGE:	13.64 ACRES
TOTAL NUMBER OF TRACTS:	5 TRACTS
AREA OF PUBLIC ROADS:	5.17 ACRES
TOTAL NUMBER OF LOTS:	53 LOTS
AVERAGE LOT SIZE:	9,682 SF
LARGEST LOT AREA:	19,502 SF
SMALLEST LOT AREA:	7,500 SF
AVERAGE DENSITY:	1.80 UNITS/ACRE
PRESENT ZONING:	RL
TYPE OF WATER SERVICE:	CITY
TYPE OF SEWER SERVICE:	CITY

LEGAL DESCRIPTION

PARCEL 1 OF SURVEY 5488 RECORDED IN BOOK 1, OF SURVEYS AT PAGE 5488, FILED UNDER BENTON COUNTY AUDITOR'S FILE NUMBER 2021-019551, LOCATED IN THE NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 21, TOWNSHIP 8 NORTH, RANGE 29 EAST OF THE WILLAMETTE MERIDIAN, CITY OF KENNEWICK, BENTON COUNTY, WASHINGTON, DESCRIBED MORE PARTICULARLY AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION BEING MARKED BY A 3¼" ALUMINUM CAP STAMPED "DNR S16-S21 1986", BEING NORTH 00°22'32" WEST A DISTANCE OF 2,699.33 FEET FROM THE CENTER QUARTER CORNER OF SAID SECTION 21 MARKED BY A 5/8" IRON REBAR; THENCE SOUTH 00°22'32" EAST ALONG THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 21 A DISTANCE OF 1,166.19 FEET; THENCE NORTH 89°37'28" EAST LEAVING SAID WEST LINE A DISTANCE OF 895.41 FEET; THENCE NORTH 10°39'41" EAST A DISTANCE OF 74.61 FEET; THENCE NORTH 20°36'11" EAST A DISTANCE OF 204.31 FEET; THENCE NORTH 17°48'06" EAST A DISTANCE OF 79.00 FEET; THENCE NORTH 81°37'39" WEST A DISTANCE OF 84.14 FEET; THENCE NORTH 36°08'45" EAST A DISTANCE OF 54.16 FEET; THENCE NORTH 61°13'22" EAST A DISTANCE OF 99.76 FEET; THENCE NORTH 39°52'14" EAST A DISTANCE OF 136.34 FEET; THENCE NORTH 55°14'29" WEST A DISTANCE OF 104.07 FEET; THENCE NORTH 57°06'52" EAST A DISTANCE OF 214.99 FEET; THENCE NORTH 73°33'11" EAST A DISTANCE OF 103.89 FEET; THENCE NORTH 43°51'59" WEST A DISTANCE OF 208.36 FEET; THENCE NORTH 51°27'26" EAST A DISTANCE OF 198.27 FEET; THENCE NORTH 14°46'06" EAST A DISTANCE OF 68.43 FEET; THENCE NORTH 68°56'28" EAST A DISTANCE OF 90.95 FEET; THENCE NORTH 11°54'25" EAST A DISTANCE OF 17.44 FEET TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 21; THENCE SOUTH 88°05'28" WEST ALONG SAID NORTH LINE A DISTANCE, OF 1,386.09FEET TO THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION 21 AND THE POINT OF BEGINNING. HAVING AN AREA OF 1,285,243 SQUARE FEET, 29.51 ACRES, MORE OF LESS. SUBJECT TO AND TOGETHER WITH ACCESS AND UTILITY EASEMENTS SHOWN AS PROPOSED ON RECORD OF SURVEY RECORDED UNDER AUDITOR'S FILE NUMBER 2021-019551, RECORDS OF THE BENTON COUNTY AUDITOR. (BOUNDARY LINE ADJUSTMENT AF#2023-003960, 03/06/2023).

VICINITY MAP

BASIS OF BEARINGS

WASHINGTON STATE SOUTH ZONE, US SURVEY FEET, NAD 83(2011). PER THE CITY OF KENNEWICK GPS CONTROL MAP, GPS TIES WERE MADE TO K0881, K0899, AND K019 CONTROL POINTS AND PROJECTED TO GROUND POINT K0899.

VERTICAL DATUM

CITY OF KENNEWICK GPS CONTROL FILE. NAVD 88 DATUM. POINT K0899 ELEV=771.35

TRACT USAGES

TRACT "A"	FUTURE RESIDENTIAL DEVELOPMENT
TRACT "B"	FUTURE RESIDENTIAL DEVELOPMENT
TRACT "C"	PIPELINE EASEMENT
TRACT "D"	PIPELINE EASEMENT
TRACT "E"	STEEP SLOPES

CONTACT INFO

OWNER/DEVELOPER:
CANYON VIEW ESTATES, LLC
ATTN: CHAD BAGLEY
1418 E SAINT HELENS ST
PASCO, WA. 99301
PHONE:(509)546-2449

SURVEYOR:
STRATTON SURVEYING
ATTN: DEREK INGALSBEE
313 N MORAIN ST
KENNEWICK, WA. 99336
PHONE:(509)735-7364

ENGINEER:
KNUTZEN ENGINEERING
ATTN: PAUL KNUTZEN
5401 RIDGELINE DRIVE
SUITE 160
KENNEWICK, WA. 99338
PHONE:(509)222-0959

KNUTZEN ENGINEERING
5401 RIDGELINE DR.
SUITE 160
KENNEWICK, WA 99338
1-509-222-0959
www.knutzenengineering.com

No.	REVISIONS	DATE	DESIGN	CHKD	APPD
1	CITY COMMENTS	07/25/25	NJB	RAM	RAM

PRELIMINARY PLAT
CHAD BAGLEY
CANYON VIEW ESTATES
KENNEWICK, WA 99336

APPROVAL		
DESIGN	NJB	06/09/25
CHECKED	RAM	06/09/25
APPROVED	RAM	06/09/25

SCALE: AS NOTED
CADFILE: 25021PP01
JOB No. 25021 REV. 1
DWG. No. PP01

A1 PRELIMINARY PLAT
SCALE: 1" = 80'-0"

\2025\25021-Canyon View Estates\DWG\25021PP01.dwg - Jul 25,2025 - 02:15pm - rmc

MEMORANDUM

PUBLIC WORKS DEPARTMENT

To: Steve Donovan, Planning Manager

From: Kristin Stowe, Development Review Supervisor

Date: June 23, 2025

Re: Public Works Utility Comments

Project: SUB-2025-0004 – Canyon View Estates

1. Civil plans shall show any proposed phasing for construction and the type of building use and number of floors.
2. Developer will be required to provide construction of public/private roads, sidewalks, streetlights, storm drainage, and designate sidewalk and utility easements, all in conformance with the latest City of Kennewick (COK) Standard Specifications and Details.
3. Sidewalks shall be widened an additional 18-inches when adjoining a wall, or fence, per COK Detail 2-9, Sheet 9 of 10(6).
4. The maximum street grade per KMC 5.56.275 is 12%. Show grades on the street centerline profile.
5. Coordinate the extension of Ridgeline Dr with the Kennewick School District (KSD).
6. Permanent structures shall not be located over COK utilities, or within any easement.
7. Provide water and sanitary sewer services for each proposed lot or dwelling per Kennewick Municipal Code KMC 14.13.020, 14.22.020(1), KMC 17.13.095(1), KMC 17.12.055 and fire flow as required by the Fire Department.
8. Water and sewer services to be constructed per City of Kennewick (COK) Detail 3-6.
9. There is an existing 16-inch water main (Zone 5) located north of the property in future Ridgeline Dr. See COK Record Drawings E-3076 and E-3190.
10. There is an existing 16-inch water main (Zone 4) stubbed past the intersection of Bofer Canyon Rd and Ridgeline Dr. See COK Record Drawing E-3190.
11. Both Zone 4 and Zone 5 water may need to be extended to serve the development depending on finished floor elevations.
12. Maximum static water pressure not to exceed 100 psi.
13. The Developer shall provide and install one metered water service for each proposed dwelling or lot at their own expense per COK Standard Detail 3-6. The meter shall be placed as close to the main line as possible (not in a driveway or parking area) per KMC 14.12.080.
14. Contractor will be required to install the meter box and tail pipe when they install the water service to the building/parcel. The City will provide the meter box and tail pipe when requested.
15. All proposed water main extensions must conform to the adopted City master plan, as amended and must conform to an overall program for a grid system, with provisions made for extensions of looping for circulation where at all possible per KMC 14.10.030.

PUBLIC WORKS DEPARTMENT
1010 S. Chemical Drive * PO Box 6108* Kennewick, WA 99336-0108
509-585-4419 * 509-585-4451 Fax

16. Looping may be required based on hydraulic need to support maximum required fire flow at minimum residuals (per NFPA), as well as ensure sufficient turn over for water quality. If the applicant can demonstrate required fire flow is met, and water quality turnover is achieved, looping may not be required.
17. Provide backflow prevention assemblies on the building side of the water meter per KMC 15.41.70. Contact Cross-Connect Specialist Bob Plucker at (509) 585-4307 with any questions.
18. The developer shall provide a complete water main system serving the development, increasing the water line size, as needed, to meet all pressure requirements as defined within the WAC 246-290-230 (MD, PH, & MD + FF) and fire flow required by the Fire Department. **Provide a Comprehensive Water Plan for the Subdivision meeting KMC 14.10.010.** Comprehensive Plan can be submitted with the preliminary civil plan review. Comprehensive water plan and hydraulic report needs to be approved by the City for the entire plat prior to approval of Phase 1 construction plans.
19. Provide water lines and hydrants as required by Fire Department to meet fire protection.
20. Fire Line connections shall be designed per COK Standard Drawing 4-25 when required by the Building Official and the Fire Department.
21. Hydraulic modeling may be required based on fire flow requirements.
22. Provide a “fire flow requirement” signature block on the master utility. Fire flow block will call out the type of construction material for the building, the required fire flow and duration based on that type of construction, a fire sprinkler indication, any reduction in fire flow as allowed by the IFC, and the net required fire flow remaining.
23. City potable water is not available for irrigation purposes unless special permission is given by the Public Works Director. Contact the Kennewick Irrigation District in order to provide irrigation water to irrigate the parcels. Extension of irrigation lines will be at the developer’s expense.
24. There is an existing 15-inch dry sewer line located in Ridgeline Dr which is not currently connected to the system. See COK Record Drawing E-3190.
25. A sewer mainline shall be extended across S Zintel Way connecting to the existing dry line and extended across the frontage of the property to be developed with this project. The sewer extension is required to be a 15-inch line with replacement of the existing 12-inch stub at sewer manhole 16894MH0040. The sewer profile and depth shall match the previous design done by COK. Contact Senior Design Engineer, Ryan Durham at Ryan.Durham@ci.kennewick.wa.us with any questions regarding the existing sewer design.
26. Sanitary sewer extension will be required at Developer expense. **Provide a Sewer Comprehensive Plan with for the subdivision meeting KMC 12.22.040.** Comprehensive Plan can be submitted with the preliminary civil plan review. Comprehensive sewer plan will need to be approved by the City for the entire plat prior to approval of Phase 1 construction drawings.
27. 6-inch diameter or larger private sewer laterals or service lines are required for commercial and multi-tenant buildings and shall connect to the public sewer mainline at a City standard manhole, per COK Standard Specification 3-4.01. 6-inch private sewer service lines may serve a multi-tenant building or collect flows from multiple 4-inch service lines serving separate dwellings.
28. All required infrastructure must be substantially completed prior to final plat approval per KMC 17.13.095(2).
29. Provide easements centered over all City of Kennewick water, sewer, and storm mainlines located outside of the right-of- way. Easement width shall be 15-feet wide centered on the utility, or 20-feet for two utilities, or 25-feet for three utilities. 7.5-feet of clearance shall be maintained from the easement edge to the utility. These easements must extend over new water mains up to the meter and five feet beyond hydrant runs.

30. **Provide a Comprehensive Stormwater plan for the subdivision per KMC 14.28.045, City Standard Specifications Section 5-9 and Storm Management Manual of Eastern Washington (SMMEW).** Design must include erosion control and conveyance of the upstream storm flow through the site as well as overflows at low points and the effect on downstream capacity. Contact Martin Nelson at (509) 585-4306 with any questions.
31. Infiltration tests are required at the location and depth of the planned infiltration structures along with a soils log to 5 feet below that point. Surface infiltration is the preferred method (ponds). All underground infiltration structures must be designed and installed to meet the Washington State Underground Injection Control (UIC) Rule. Provide an assessment of the design against the UIC pretreatment requirements. Provide UIC registration numbers on the plans prior seeking the City's signature.
32. All drywells or infiltration structures serving the public right of way shall be installed behind the curb and gutter, and may not be installed under the street pavement.
33. All plans showing existing utilities shall call out the Record Drawing set number that installed the utilities. All plans need to clearly identify the size and type of water/sewer utility that is being proposed or connected to (i.e. "Existing 8-inch Water" or similar). Label private lines "Private".
34. As part of all development construction plans, there shall be a separate schematic drawing which at a minimum, shows the power source(s), wiring diagram street light pole spacing and street permanent signing per COK Standard Specifications 6-1 and 6-2 and 7-10. Combine Signing, Striping, and Illumination Plans onto the same drawing with other elements left off.
35. Any off site tracts, easements or agreements required for the project shall be submitted with the civil plans for review. Before a permit can be issued for the project, the easements or agreements shall be recorded at Benton County and a copy shall be provided to Public Works. The Auditor File Number shall be added to the Record Drawings before seeking City signature.
36. Civil Plans will need to include a signature line for Bonneville Power Administration and Williams Gas Company for approval of work in easements.
37. Civil Plans will also need to include a signature line for Benton County for approval of project located outside of City limits in the County.
38. This project requires a separate DPW permit. You may apply for this by submitting the information below for Civil Plan Review through the City of Kennewick's Citizen Self Service Portal:
    a. PDF copy of the Application for Civil Review and Storm Calculations.
    b. One full size (24"x36") PDF copy of the construction plans.
39. Construct all projects using current City Survey Data. After project completion, Record Drawings showing improvements made on the property will be required prior to acceptance of the construction permit(s). For detailed information on Kennewick Survey Data and Record Drawings go to COK website at https://www.go2kennewick.com/314/Civil-Plan-Review.

MEMORANDUM

Traffic Engineering Division

To: Steve Donovan, Planning Manager

From: Kevin Biersner, Assistant Traffic Engineer

Date: July 1, 2025

Re: Traffic Engineering Comments for 4501 S Zintel Way

Project: SUB-2025-0004

Project Description

Extending Ridgeline Drive east from S Bofer Canyon Road and building a new street south off of the new ridgeline drive extension. A 53 single family development and multi-family is proposed along with the roads

KMC 13.16 Transportation Impact Fees

1. The Transportation Impact Fee (TIF) is a one-time charge for direct impacts caused by the traffic generated from the proposed development and used to pay for transportation projects needed to address said impacts. The TIF amendment on June 5 2018 (effective June 14 2018) created Traffic Impact Fee Districts, which allows fees be remitted to projects congruent with the area where the impact is realized.
2. The estimated TIF for Single Family housing for District 1 is $1,675.08 per unit. The estimate TIF is $88,779.247. The TIF for the multi-family cannot be estimated at this time.
3. The final TIF fee assessed at the time of building permit issuance, (or in shell structures, at the tenant improvement application), is due prior to Certificate of Occupancy issuance.

Traffic Operations

1. Trip generation and distribution letter has been submitted and approved.
2. Coordinate with the Kennewick School district on their planned entrance.
3. Future entrances to multi-family need to be determined.
4. A portion of Ridgeline Drive is located on others property. You will need to work with them to dedicate Right-of-Way for the road.

Traffic Engineering Division
1010 E. Chemical Drive * PO Box 6108 * Kennewick, WA 99336
Kevin Biersner – 509-585-4524

Right of Way and Easement

1. Ridgeline Drive and Street 1 will be classified as Minor Arterials. See City of Kennewick Std. Dwg. 2-4 for more details.
2. Ridgeline Drive and Street 1 will have 52’ for Right-of-Way dedicated.
3. Ridgeline Drive and Street 1 will need to provide a 15’ sidewalk, utility and irrigations easement.
4. Proposed streets in development will be classified as Residential. See City of Kennewick std. dwg 2-1.
5. Residential streets will need to dedicate 40’ of Right-of-Way.
6. Residential streets will need to provide a 18’ sidewalk, utility and irrigations easement.
7. Please note that per KMC 17.20.010(2)(a), streets greater than 1,200 feet in continuous uninterrupted length will need traffic calming measure.
8. Please note that per KMC 17.20.010(3)(b),streets greater than 600 feet in continuous uninterrupted length will need mid-block pedestrian crosswalks with shoulder mounted signs for the street.
9. Please note that the proposed street network is required to meet KMC 5.56.275(1)’s minimum centerline radius of 200'

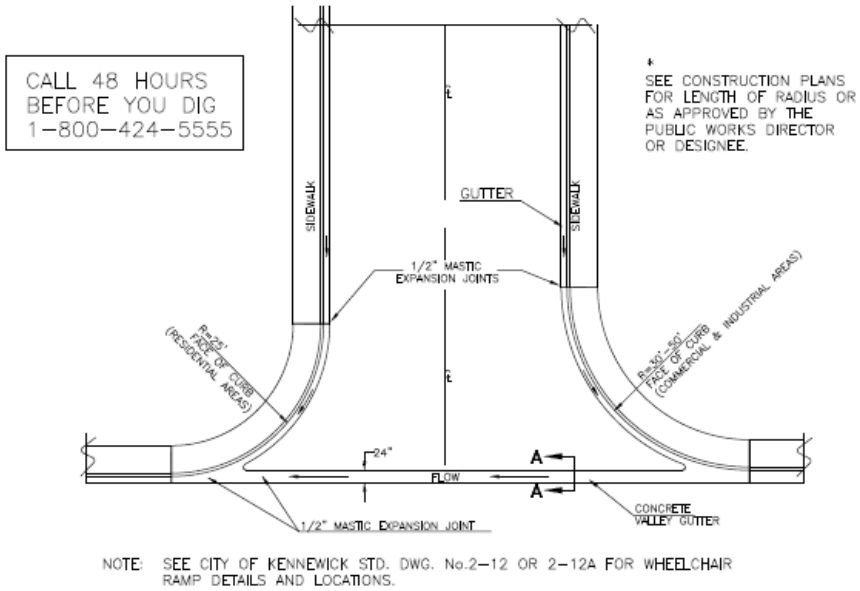
5.56.275: - Street Radii and Grade.

(1) Local Streets: Unless otherwise approved by the Deputy Director of Public Works, local streets shall be constructed with centerline radii which meet the following standards. On minor loop streets and cul-de-sac streets, where the street makes a 90-degree plus or minus five-degree turn, the minimum centerline radius shall be 50 feet. On all other minor loop street and cul-de-sac street curves, the minimum centerline radius shall be 150 feet. On all local through streets, other than minor loop streets, as determined by the Deputy Director of Public Works, the minimum centerline radius shall be 200. Unless otherwise approved by the Deputy Director of Public Works, the maximum grade on local streets shall be 12 percent.

(2) Collector and Arterial Streets: All collector and arterial streets shall be constructed with centerline radii and super elevations designed in conformance with the latest AASHTO Edition of "A Policy on Geometric Design of Highways and Streets". Unless otherwise approved by the Deputy Director of Public Works, the maximum grade on collector and arterial streets shall be eight percent.

(Ord. 5655 Sec. 15, 2016; Ord. 5203 Sec. 14, 2007; Ord. 3486 Sec. 3, 1993)

10. Please refer to KMC Standard Drawing No. 2-9 for intersection design guidelines.



11. Please provide plan/profile for the proposed street network. Refer to the table below for the design rate of vertical curvature, K, values for vertical curves at the proposed roadway design speed. Please note that public roadway's maximum longitudinal slope is 12% or 8% depending on classification. Ridgeline Drive has a maximum slope of 6%.

Table 3-36. Design Controls for Sag Vertical Curves

Metric				U.S. Customary			
Design Speed (km/h)	Stopping Sight Distance (m)	Rate of Vertical Curvature, K[a]		Design Speed (mph)	Stopping Sight Distance (ft)	Rate of Vertical Curvature, K[a]	
		Calculated	Design			Calculated	Design
20	20	2.1	3	15	80	9.4	10
30	35	5.1	6	20	115	16.5	17
40	50	8.5	9	25	155	25.5	26
50	65	12.2	13	30	200	36.4	37
60	85	17.3	18	35	250	49.0	49
70	105	22.6	23	40	305	63.4	64
80	130	29.4	30	45	360	78.1	79
90	160	37.6	38	50	425	95.7	96
100	185	44.6	45	55	495	114.9	115
110	220	54.4	55	60	570	135.7	136
120	250	62.8	63	65	645	156.5	157
130	285	72.7	73	70	730	180.3	181
				75	820	205.6	206
				80	910	231.0	231

[a] Rate of vertical curvature, K, is the length of curve (m) per percent algebraic difference intersecting grades (A), K = L/A.

Table 3-34. Design Controls for Crest Vertical Curves Based on Stopping Sight Distance

Metric				U.S. Customary			
Design Speed (km/h)	Stopping Sight Distance (m)	Rate of Vertical Curvature, K[a]		Design Speed (mph)	Stopping Sight Distance (ft)	Rate of Vertical Curvature, K[a]	
		Calculated	Design			Calculated	Design
20	20	0.6	1	15	80	3.0	3
30	35	1.9	2	20	115	6.1	7
40	50	3.8	4	25	155	11.1	12
50	65	6.4	7	30	200	18.5	19
60	85	11.0	11	35	250	29.0	29
70	105	16.8	17	40	305	43.1	44
80	130	25.7	26	45	360	60.1	61
90	160	38.9	39	50	425	83.7	84
100	185	52.0	52	55	495	113.5	114
110	220	73.6	74	60	570	150.6	151
120	250	95.0	95	65	645	192.8	193
130	285	123.4	124	70	730	246.9	247
				75	820	311.6	312
				80	910	383.7	384

[a] Rate of vertical curvature, K, is the length of curve per percent algebraic difference in intersecting grades (A), K = L/A.

12. Please note that KMC 17.20.010(2)(l) require minimum separations between proposed intersections.
13. Please note that street intersection sightline setback triangles, per KMC 13.12.020(5), with no view obstruction between 36 inches and 90 inches above the roadway surface are required for both sides of the intersection, except as allowed in Section 13.12.020(6).

American Disability Act (ADA) Compliance

1. All proposed pedestrian facilities within the public right of way and easement, including but not limited to pedestrian route's private to public connection, driveways, sidewalks, curb ramps, etc., shall be ADA compliant to maintain Pedestrian Accessibility Route (PAR) accessibility, continuity and connectivity.

Street Lighting

1. Street lights will need to be designed and installed per City of Kennewick Standard Drawings 6-1 and 6-2 on Ridgeline Drive, Street 1 and residential streets. Ridgeline Drive and Street 1 are classified as a Minor Arterial. Residential streets will be classified as residential.

2. The civil plans will need to include roadway lighting plan sheet. Please note that per CoK Standard Specifications 6-1.02, the roadway lighting plan needs to include call-outs for the power source, meter locations, junction boxes, conduits and conduits.

2015 South Ely Street
Kennewick, WA 99337
Phone 509-586-9111
FAX 509-586-7663
www.kid.org

June 19, 2025

Steve Donovan, AICP, Planning Manager
City of Kennewick - Development Services Division
PO Box 6108
Kennewick, WA 99336

Subject: SUB-2025-0004-Canyon View Estates Preliminary Plat

Dear Mr. Donovan:

The Kennewick Irrigation District (KID) has reviewed a preliminary plat application submitted by Chad Bagley of Canyon View Estates, LLC for the Preliminary Plat of Canyon View Estates. This project is generally located southeast of the SR 395, Ridgeline Interchange in Kennewick, WA. The parcel number is 121891000002000.

1. The subject property is located outside of KID's boundaries.
2. The development lies above KID's Division IV Main Canal. Without adequate mitigation, increased runoff resulting from the proposed residential development increases the likelihood of a canal embankment breach requiring significant repairs to portions of the canal. Should a canal embankment breach occur near this development, there is additional potential for the public safety to be at risk without additional drainage measures or reinforcement. To mitigate these risks, KID will require:
    a. Stormwater systems for the project shall be designed to retain, at minimum, a 100-year storm event above the Division IV Main Canal and minimize the introduction of water into the soils up-gradient of the canal. Please provide KID with a map of the flow path of stormwater leaving the site. Depending on the path, KID review and approval of all stormwater plans is required prior to final plat approval.

If you have any questions regarding these comments, please contact me at the address/phone number listed below.

Sincerely,

Daniel Tissell, P.E.
Engineering Manager

cc: LB\correspondence\File: 21-8-29
Applicant via mail – Canyon View Estates LLC, 1418 E St. Helens Street, Pasco WA, 99301

BENTON CLEAN AIR AGENCY

June 17, 2025

Re: SUB-2025-0004

Steve Donovan, AICP
Community Planning
PO Box 6108
Kennewick, WA 99336

Applicant/Proponent: Knutzen Engineering
Attn:
5401 Ridgeline Dr, Ste. 160
Kennewick, WA 99338

Dear Mr. Donovan:

It has come to our attention that you are reviewing a proposal for the above named applicant in which a parcel or parcels will be disturbed for development. Because these activities may cause possible fugitive dust emissions, we would like to take this opportunity to provide information to ensure that the applicant takes reasonable steps to control the dust from his/her project.

The Benton Clean Air Agency (BCAA) requires the applicant submit a Proof of Contact: Soil Destabilization Notification for this project prior to any excavation/construction taking place. This will insure that the proponent has the ability and resources to control fugitive dust emissions that may be created as a result of construction activities. This will also inform them of the regulations and requirements of the BCAA. Additionally, a written dust control plan must be developed and maintained for all soil destabilization projects, and must be readily available upon request by the BCAA. Part of this plan is submitting the name of at least one person for the project so that the BCAA has a point of contact should we receive any dust complaints from the project. The Soil Destabilization Notification form can be found and submitted on our website, www.bentoncleanair.org.

Thank you for the opportunity to comment on this proposal. If you have any questions, or would like further information on this subject, please contact us at (509) 783-1304.

Sincerely,

Deon Steichen

Deon Steichen
Inspector

From: Angela Richman
To: Steve Donovan
Subject: RE: [E] SUB-2025-0004_742733 Canyon View Estates
Date: Tuesday, June 17, 2025 9:50:36 AM
Attachments: image001.png
image002.png
image003.png

Steve,

BPUD requests a 10' utility easement to be added to the south property line of Lot #16 to extend primary power to the adjacent lot west.

Discussions have been initiated with the Engineering firm and the developer to request a 10' easement for BPUD on the north side of the existing 125' BPA easement to allow for a feeder tie from the east to improve reliability to this and future growth.

Thank you,

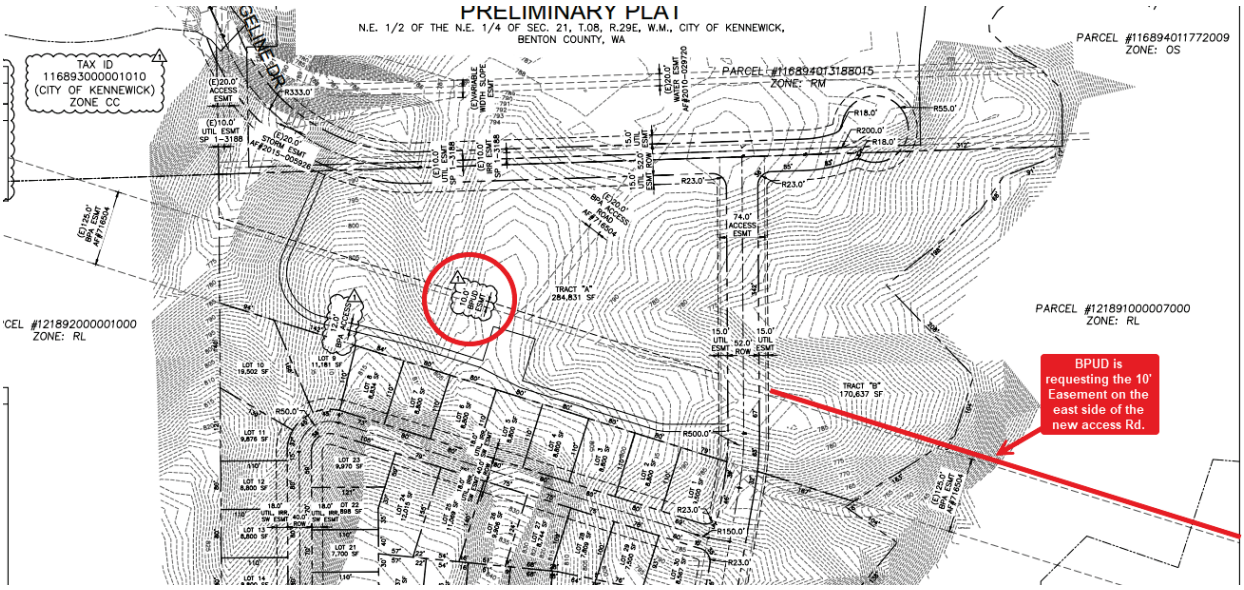
Angela Richman
Distribution Design Tech II
Benton PUD
Email: richmana@bentonpud.org
Main # (509)582-2175
Direct # (509)582-1219
My Hours Mon-Thur 6:30am-5pm
Benton PUD offices closed on Fridays

From: Steve Donovan <Steve.Donovan@ci.kennewick.wa.us>
Sent: Tuesday, June 17, 2025 8:05 AM
To: Ashley M. Morton <AshleyMorton@ctuir.org>; Ben Franklin Transit - Kevin Sliger <ksliger@bft.org>; Benton Clean Air Authority - Rob Rodger <rob.rodger@bentoncleanair.org>; Benton Clean Air Authority - Tyler Thompson <tyler.thompson@bentoncleanair.org>; Benton Clean Air John Lyle <john.lyle@bentoncleanair.org>; Benton County Assessor - Segregations <Segregations@co.benton.wa.us>; Benton Franklin Health Dept. - Erin Hockaday <erint@bfhd.wa.gov>; Benton Franklin Health Dept.- Jack Howard <Jack.howard@bfhd.wa.gov>; engservice <engservice@bentonpud.org>; Jeff Vosahlo <vosahloj@bentonpud.org>; Chad Brooks <brooksc@bentonpud.org>; Evan Edwards <EDWARDSE@bentonpud.org>; Shanna Everson <eversons@bentonpud.org>; Tina Glines <glinest@bentonpud.org>; BPA - Deborah Rodgers <dxrodgers@bpa.gov>; BPA - Nicole Commings <NMCummings@bpa.gov>; BPA- Angela Castle <ACCastle@BPA.gov>; Angela Richman <richmana@bentonpud.org>; Cascade Gas James Thomas <james.thomas@cngc.com>; Cascade Natural Gas <roger.johnson@cngc.com>; Casey Barney <Casey_Barney@Yakama.com>; Charter - Junior Campos <junior.campos@charter.com>; Columbia

From: Angela Richman
To: Steve Donovan
Subject: RE: [E] SUB-2025-0004
Date: Monday, July 28, 2025 7:38:21 AM
Attachments: image003.png
image004.png
image001.png

Steve,

Please see changes requested by BPUD:



Thank you,
Angela

From: Steve Donovan <Steve.Donovan@ci.kennewick.wa.us>
Sent: Monday, July 28, 2025 7:17 AM
To: 'dxrodgers@bpa.gov' <dxrodgers@bpa.gov>; Angela Richman <richmana@bentonpud.org>; 'Daniel Tissell' <DTissell@kid.org>; 'Gregory.Ashley@williams.com' <Gregory.Ashley@williams.com>
Subject: [E] SUB-2025-0004

[EXTERNAL EMAIL]

Attached is a revised version of the Canyon View Estates.

The comment period starts today and ends on 8/12/25 at 4:30 pm.

Let me know if you have any questions.

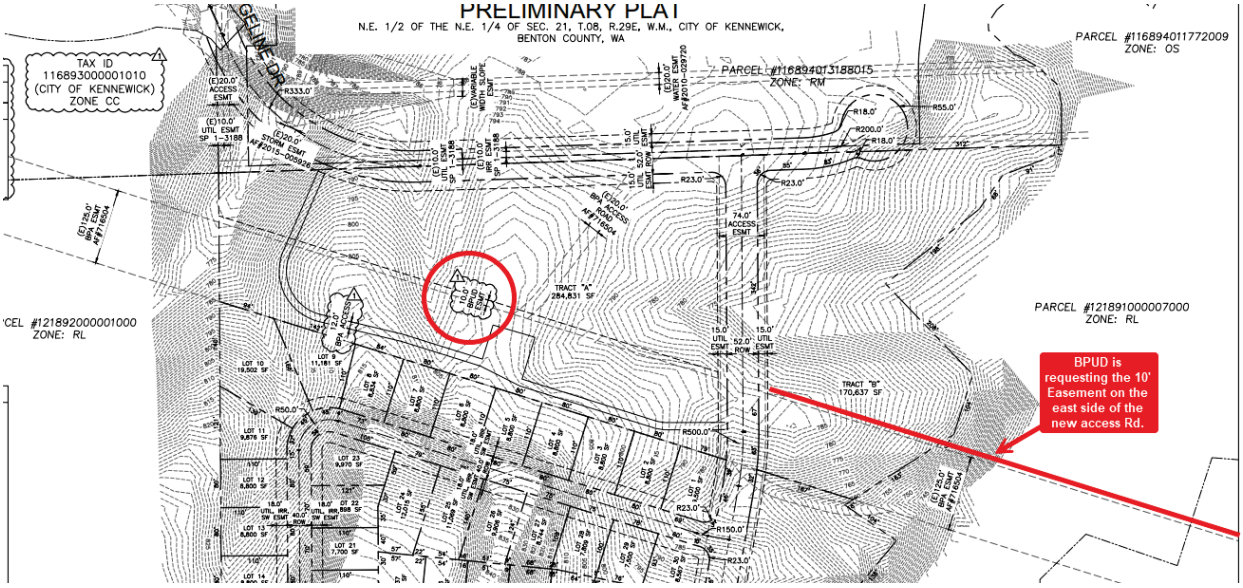
Steve

Steve Donovan, AICP
City of Kennewick
Community Planning/Planning Manager
O: 509.585.4361
Steve.Donovan@ci.kennewick.wa.us

From: Angela Richman
To: Steve Donovan
Subject: RE: [E] SUB-2025-0004
Date: Monday, July 28, 2025 7:38:21 AM
Attachments: image003.png
image004.png
image001.png

Steve,

Please see changes requested by BPUD:



Thank you,
Angela

From: Steve Donovan <Steve.Donovan@ci.kennewick.wa.us>
Sent: Monday, July 28, 2025 7:17 AM
To: 'dxrodgers@bpa.gov' <dxrodgers@bpa.gov>; Angela Richman <richmana@bentonpud.org>; 'Daniel Tissell' <DTissell@kid.org>; 'Gregory.Ashley@williams.com' <Gregory.Ashley@williams.com>
Subject: [E] SUB-2025-0004

[EXTERNAL EMAIL]

Attached is a revised version of the Canyon View Estates.

The comment period starts today and ends on 8/12/25 at 4:30 pm.

Let me know if you have any questions.

Steve

Steve Donovan, AICP
City of Kennewick
Community Planning/Planning Manager
O: 509.585.4361
Steve.Donovan@ci.kennewick.wa.us

Washington State Department of Transportation

South Central Region
2809 Rudkin Road
Union Gap, WA 98903-1648
509-577-1600 / FAX: 509-577-1603
TTY: 1-800-833-6388
www.wsdot.wa.gov

July 2, 2025

City of Kennewick Development Services
P.O. Box 6108
Kennewick, WA 99336

Attention: Steve Donovan, AICP

Subject: SUB-2025-0004, Canyon View Estates
US 395 milepost 13.76 Rt, Ridgeline Dr vicinity

We have reviewed the proposed project and have the following comments.

- The subject property is in the vicinity to U.S. Highway 395 (US 395), a fully controlled limited access facility with a posted speed limit of 55 miles per hour. WSDOT has acquired all access rights to the highway. Direct access to US 395 or within WSDOT's limited access control boundary is prohibited.

- Any outdoor advertising or motorist signing considered for this project will need to comply with state criteria. The applicant should contact Tanya Joblonski of the WSDOT Headquarters Traffic Office for specifics. She can be reached at (360) 705-7294.

- Any proposed lighting should be directed down towards the site and away from US 395.

Thank you for the opportunity to review and comment on this proposal. If you have any questions regarding our comments, please contact me at (509) 577-1635.

Sincerely,

Digitally signed by Jacob Prilucik
Date: 2025.07.02 13:01:27-07'00'

Jacob Prilucik
Development Services Manager

JJP: mnk

cc: SR 395, File #2025_005

From: Rodgers,Deborah (CONTR) - TERR-TRI CITIES RMHQ
To: Steve Donovan
Cc: Kinch,James L (BPA) - TERR-BELL-1
Subject: RE: SUB-2025-0004
Date: Wednesday, July 2, 2025 4:00:34 PM
Attachments: image001.png
image003.png

Dear Mr. Donovan:

The Bonneville Power Administration (BPA) has reviewed SUB-2025-0004 and its relationship to the BPA McNary-Badger Canon No. 1 and Franklin-Badger Canyon No. 1, 125-foot-wide transmission line easement that this plat impacts. BPA does have some concerns with the activity that may occur within the Canyon View Estates Subdivision and the proposed lot numbers one through ten, that are intended for residential use.

BPA easements are taken with certain restrictions on the underlying land. In order to maintain operation and safety criteria, all activities planned within the BPA easement need to be approved by BPA prior to their occurrence. Activities that block maintenance crews (such as the installation of fences) or safety concerns (such as buildings, public roads, driveways, utilities, small structures) need to be addressed prior to construction in order to avoid later modification, at the landowner's or developer's expense.

In order to avoid problems in this location and to notify prospective landowners, BPA requests that the language be included on the plat map:

The Bonneville Power Administration (BPA) imposes certain conditions on the portions of those properties encumbered by its high voltage transmission line easement. BPA does not allow structures to be built within the easement, nor does it allow access to be blocked to any transmission facilities. Any activity that is to occur within the easement needs to be permitted by BPA prior to installation or construction. Information regarding the permitting process for proposed uses of the easement may be addressed to BPA Real Estate Field Services at (800) 282-3713.

Whether or not this property is subdivided and/or this plat approved, the owner will need to submit a land use application, the associated $250 application fee and acquire a Land Use Agreement from BPA for any portion of the owner's development plans that lie within BPA's easement.

If you have any questions regarding this request or need additional information, please feel free to contact BPA Realty Specialist, Luke Kinch by email or by telephoning him directly at (509) 468-3095.

Sincerely,

Deborah Rodgers
BONNEVILLE POWER ADMINISTRATION

From: Ashley, Greg
To: Steve Donovan
Cc: Encroachments; Smull, Eric; Cockrum, Braden
Subject: Re: SUB-2025-0004
Date: Wednesday, June 18, 2025 12:24:32 PM
Attachments: image003.png
Outlook-valq5lw5.png
Outlook-r2cmornn.png
Outlook-my4uu0jd.png
Outlook-c3ek0bpd.png
Outlook-35vnlzyj.png
Outlook-w1lakqvw.png
Outlook-bi00lnoh.png
Outlook-0ft0j0hm.png

Hi Steve,

Thank you for continuing to include us on this distribution list.

While our ROW is represented correctly, we will need to see more detailed plans from the developer with utilities, road elevations, etc. before we are able to sign off. Additionally, they will need to work through our encroachment process to gain final approval before construction begins.

Please let me know if you have any questions or concerns. Feel free to pass my contact information along to the developer if you'd like so they can work through these elements with us.

Thanks,
Greg

Williams
Greg Ashley| Land Rep | Williams
Cell: 509-217-7437 | 1022 E. Hawthorne Rd., Spokane, WA 99218

From: Steve Donovan <Steve.Donovan@ci.kennewick.wa.us>
Sent: Tuesday, June 17, 2025 8:05 AM
To: Ashley M. Morton <AshleyMorton@ctuir.org>; Ben Franklin Transit - Kevin Sliger <ksliger@bft.org>; Benton Clean Air Authority - Rob Rodger <rob.rodger@bentoncleanair.org>; Benton Clean Air Authority - Tyler Thompson <tyler.thompson@bentoncleanair.org>; Benton Clean Air John Lyle <john.lyle@bentoncleanair.org>; Benton County Assessor - Segregations <Segregations@co.benton.wa.us>; Benton Franklin Health Dept. - Erin Hockaday

KENNEWICK SCHOOL DISTRICT

RYAN JONES ▪ CAPITAL PROJECTS MANAGER
5501 W. METALINE AVE. ▪ KENNEWICK, WA 99336
P: (509) 222-6810 ▪ F: (509) 222-5057
RYAN.JONES@KSD.ORG ▪ WWW.KSD.ORG

Exhibit 16

August 22, 2025

Steve Donovan, AICP
City of Kennewick
Community Planning/Planning Manager

Re: Canyon View Estates, Preliminary Plat

Mr. Donovan,

This memo is in regard to your request for the Kennewick School District #17 to submit comments for the following:

Parcel #1-2189-100-0002-000 Canyon View Estates, located in Kennewick, Wa.

The boundary schools for this development are Sagecrest Elementary (Bussing Zone), Chinook Middle School (Bussing Zone) and Southridge High School (Bussing Zone).

The Kennewick School District has a Ten-Year Plan in place that forecasts future growth. It is impossible to know exactly where pockets of growth may occur, but the District works closely with the City of Kennewick and Benton County to make sure that we own property near projected areas of growth. Having property near potential growth areas allows us to add schools where the students are living, and to avoid additional bussing or redistricting of our boundaries. We do occasionally have to redistrict to keep our schools within our preferred enrollment numbers.

The Kennewick School District has the capacity to add students at all levels and at the three schools mentioned in this letter. Forecasted growth in additional boundary areas of the Kennewick School District makes it difficult to know if any redistricting could result because of this proposed development.

Residential development has had a significant impact on public utility capacity (i.e. City of Kennewick, Kennewick Irrigation District, etc.), roads, and traffic. The impact on utility and road infrastructure directly and indirectly affects our schools and students. The District expects the level of current utility capacity to District facilities to be maintained. We request the city to ensure that developers are contributing toward utility infrastructure development and upgrades, safe walking routes, safe crosswalks, including flashing beacons, etc. Given likelihood of this development having students of all ages, and that it falls in the bussing zone for all three schools, the Kennewick School District would like to request that considerations are made for school bus access and pick-up/drop-off zones.

Sincerely,

Ryan Jones

2023-008450 EAS
05/04/2023 10:00:26 AM Pages: 9 Fee: $211.50
Stewart Title Co
Benton County, Benton County Auditor's Office

Exhibit 17

RECORDING REQUESTED BY
AND WHEN RECORDED RETURN TO:

Witherspoon Brajcich McPhee, PLLC
601 W. Main Avenue, Suite 1400
Spokane, WA 99201
Attn: Robert J. Burnett

Stewart Title

EXCISE TAX NOT REQUIRED
BENTON CO EXCISE TAX DEPT
BY _____ DEPUTY
05/04/23 Exempt

Grantor:	MICHAEL A. NOWAK AS SUCCESSOR TRUSTEE OF THE L. LOUISE NOWAK REVOCABLE TRUST, DATED MARCH 13, 2009, AND ANY AMENDMENTS THERETO
Grantee:	CANYON VIEW ESTATES, LLC, A WASHINGTON LIMITED LIABILITY COMPANY
Abbreviated Legal:	A PORTION OF THAT PARCEL OF LAND BEING THE NORTHEAST QUARTER OF SECTION 21, AND THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 8 NORTH, RANGE 29 EAST, W.M. BENTON COUNTY, WASHINGTON
Assessor's Tax Parcel #:	~~1-2189-100-0001-000~~ 1-2189-100-0003-000
Other Reference Nos.:	N/A

ACCESS AND UTILITY EASEMENT AGREEMENT

THIS ACCESS AND UTILITY EASEMENT AGREEMENT (this "**Agreement**") is made and entered into as of May 2nd, 2023, by and between MICHAEL A. NOWAK AS SUCCESSOR TRUSTEE OF THE L. LOUISE NOWAK REVOCABLE TRUST, DATED MARCH 13, 2009, AND ANY AMENDMENTS THERETO ("**Grantor**") and CANYON VIEW ESTATES, LLC, A WASHINGTON LIMITED LIABILITY COMPANY("**Grantee**"). The definition of Grantee shall include the subsidiaries, agents, contractors, and affiliates of Grantee.

RECITALS

A. Grantor owns certain real property located in Section 21 of Township 08 North, Range 29 East, W.M., Benton County, Washington, known as Parcel 2 on the Record of Survey for Plat Exemption and described in Exhibit A attached hereto ("**Grantor's Property**").

B. Grantee owns certain real property located in Section 21 of Township 08 North, Range 29 East, W.M., Benton County, Washington, known as Parcel 1 on the Record of Survey and described in Exhibit B attached hereto ("**Grantee's Property**").

C. Grantor is willing to grant Grantee a perpetual, non-exclusive appurtenant access and utility easement over and across certain portions of Grantor's Property on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants of Grantor and Grantee (individually, a "**Party**," and collectively, the "**Parties**") set forth in this Agreement, and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties, intending to be legally bound, agree as follows:

1. **Recitals**. The recital set forth above are hereby incorporated herein by reference.

2. **Access.** Grantor does hereby grant and convey to Grantee a perpetual, non-exclusive easement (the "**Access and Utility Easement**") subject to the terms and conditions set forth below. The easement area of the Access Easement shall be that portion of the Grantor's Property described and depicted in Exhibit C ("**Easement Area**").

3. **Purpose.** The purpose of granting the Access and Utility Easement is for ingress and egress to, over, across, upon, under and through the Grantor's Property for vehicular and utility access and connectivity to any public or private road constructed on or adjacent to the Grantor's Property including any roadways reflected on any plat or site plan affecting Grantor's Property .

4. **Maintenance.** Until such time as the Easement Area is dedicated for public use, Grantee and/or an agent of Grantee shall be solely responsible, at Grantee's sole cost and expense, for any required maintenance and/or repairs of the Easement Area. Grantee and/or an agent of Grantee shall be responsible for the action of maintaining the Easement Area in a condition as good as its present condition. Notwithstanding the foregoing, each Party shall be responsible for any damage to the Easement Area, beyond ordinary wear and tear, that is caused by the respective party or the party's tenants, invitees, agents, employees, successors, and assigns.

5. **Indemnification.** Until such time as the Easement Area becomes a public thoroughfare, only Grantee and Grantee's agents will utilize the Easement Area.. Grantee shall defend, indemnify and hold Grantor harmless from and against all demands, civil actions, claims, liabilities, damages, judgments, losses or expenses (including attorney fees, costs, and disbursements) arising from or relating to their use of the Easement Area.

6. **Nature of Easement.** This Access and Utility Easement, and the rights granted herein, shall run with the land and shall be appurtenant to, and for the benefit of, the Grantee Property. Any conveyance of title to the Grantor Property or the Grantee Property will include a conveyance of the rights and obligations granted in this Agreement, regardless of whether this Agreement is specifically identified in the instrument of conveyance.

7. **Successors and Assigns Bound**. The easements, rights, and obligations created hereunder shall be binding upon Grantor and Grantee, their heirs, beneficiaries, and successors in interest, and shall run with the Grantor Property and Grantee Property. The provisions of this Access and Utility Easement are enforceable in law or equity by Grantor or Grantee. Grantor reserves the right to grant to third parties any of such reserved rights, as long as such use does not unreasonably interfere with Grantee's permitted uses of the Easement.

8. **Amendment.** This Agreement may only be amended by written instrument executed by the then current owners of the Grantor Property and the Grantee Property.

9. **Severability.** If any provision of this Agreement shall be invalid or unenforceable in any respect for any reason, the validity and enforceability of any such provision in any other respect and of the remaining provisions of this Agreement shall not in any way be impaired.

10. **Compliance with Law.** Each Party shall comply with all applicable federal, State and local laws with respect to the rights granted herein. This Agreement shall be subject to the law of the State of Washington.

11. **Authorities of Parties and Signatories.** Each person signing this Agreement represents and warrants that they are duly authorized and has legal capacity to execute and deliver this Agreement. Each Party represents and warrants that the execution and delivery of the Agreement and the performance of such Party's obligations hereunder have been duly authorized and that the Agreement is a valid and legal agreement binding on such Party and enforceable in accordance with its terms.

12. **Recording.** This Agreement shall be recorded.

13. **Merger**. This Agreement embodies the entire agreement of the Parties. There are no promises, terms, conditions or obligations other than those contained herein. This Agreement shall supersede all prior communications, representations or agreements, either oral or written, between the Parties.

14. **Effective Date**. This Agreement is effective on the date that the last Party executes and delivers this Agreement to the other Party.

[*Signature on Following Page*]

Exhibit 17

To evidence the Parties' agreement to this Access and Utility Easement, each party has executed and delivered it on the date indicated under that party's signature below.

GRANTOR:

Michael A. Nowak as Successor Trustee of the L. Louise Nowak Revocable Trust, dated March 13, 2009, and any amendments thereto

By: _____
Michael A. Nowak, Successor Trustee

GRANTEE:

Canyon View Estates, LLC, a Washington limited liability company

By: _____
Chad Bagley, Managing Member

STATE OF FLORIDA)
: ss.
County of Palm ~~Springs~~ Benton)

I certify that Michael A. Nowak appeared personally before me and that I know or have satisfactory evidence that he signed this instrument as the Successor Trustee of the L. Louise Nowak Revocable Trust, dated March 13, 2009, and any amendments thereto, and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in the instrument.

DATED this 2ND day of May, 2023.

_____
NOTARY PUBLIC FOR
My Commission Expires:

DONALD P. DUFRESNE
Notary Public - State of Florida
Commission # HH 305420
My Comm. Expires Nov 14, 2026
Bonded through National Notary Assn.

STATE OF ~~FLORIDA~~ Washington)
: ss.
County of ~~Palm Springs~~ Benton)

I certify that Chad Bagley appeared personally before me and that I know or have satisfactory evidence that he signed this instrument as the Managing Member of Canyon View Estates, LLC, a Washington limited liability company, and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in the instrument. for CDB Properties, LLC, a Washington limited liability company, as member of

DATED this 3 day of May, 2023.

Notary Public
State of Washington
JENNIFER KAY LOPEZ
License Number 3450
MY COMMISSION EXPIRES
OCTOBER 29, 2025

_____
NOTARY PUBLIC FOR Washington
My Commission Expires: 10/29/2025

EXHIBIT A

GRANTOR'S PROPERTY

PARCEL 2 OF SURVEY 5488 RECORDED IN BOOK 1, OF SURVEYS AT PAGE 5488, FILED UNDER BENTON COUNTY AUDITOR'S FILE NUMBER 2021-019551, LOCATED THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 21, TOWNSHIP 8 NORTH, RANGE 29 EAST OF THE WILLAMETTE MERIDIAN, CITY OF KENNEWICK, BENTON COUNTY, WASHINGTON, DESCRIBED MORE PARTICULARLY AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION BEING MARKED BY A 3 ¼" ALUMINUM CAP STAMPED "DNR S16-S21 1986", BEING NORTH 00°22'32" WEST A DISTANCE OF 2,699.33 FEET FROM THE CENTER QUARTER CORNER OF SAID SECTION 21 MARKED BY A 5/8" IRON REBAR; THENCE SOUTH 00°22'32" EAST ALONG THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 21 A DISTANCE OF 1,166.19 FEET TO THE TRUE POINT OF BEGINNING;

THENCE NORTH 89°37'28" EAST LEAVING SAID WEST LINE A DISTANCE OF 895.41 FEET; THENCE SOUTH 31°35'00" WEST A DISTANCE OF 186.66 FEET; THENCE SOUTH 02°42'30" EAST A DISTANCE OF 95.95 FEET; THENCE SOUTH 27°41'45" WEST A DISTANCE OF 224.70 FEET; THENCE SOUTH 04°26'20" WEST A DISTANCE OF 219.81 FEET; THENCE SOUTH 08°39'15" EAST A DISTANCE OF 92.49 FEET; THENCE SOUTH 12°04'15" WEST A DISTANCE OF 109.35 FEET; THENCE SOUTH 45°26'26" WEST A DISTANCE OF 275.62 FEET; THENCE SOUTH 50°52'47" WEST A DISTANCE OF 272.73 FEET; THENCE SOUTH 31°25'19" WEST A DISTANCE OF 74.76 FEET; THENCE SOUTH 14°10'20" WEST A DISTANCE OF 108.60 FEET; THENCE SOUTH 21°21'33" WEST A DISTANCE OF 140.33 FEET TO THE SOUTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 21; THENCE SOUTH 89°00'04" WEST ALONG SAID SOUTH LINE A DISTANCE OF 137.09 FEET TO THE CENTER QUARTER CORNER OF SAID SECTION 21 MARKED BY A 5/8" IRON REBAR; THENCE NORTH 00°22'32" WEST ALONG THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 21 A DISTANCE OF 1,533.14 FEET TO THE POINT OF BEGINNING.

HAVING AN AREA OF 872,261 SQUARE FEET, 20.02 ACRES, MORE OR LESS.

SUBJECT TO AND TOGETHER WITH ACCESS AND UTILITY EASEMENTS SHOWN AS PROPOSED ON RECORD OF SURVEY RECORDED UNDER AUDITOR'S FILE NUMBER 2021-019551, RECORDS OF THE BENTON COUNTY AUDITOR.

EXHIBIT B

GRANTEE'S PROPERTY

PARCEL 1 OF SURVEY 5488 RECORDED IN BOOK 1, OF SURVEYS AT PAGE 5488, FILED UNDER BENTON COUNTY AUDITOR'S FILE NUMBER 2021-019551, LOCATED IN THE NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 21, TOWNSHIP 8 NORTH, RANGE 29 EAST OF THE WILLAMETTE MERIDIAN, CITY OF KENNEWICK, BENTON COUNTY, WASHINGTON, DESCRIBED MORE PARTICULARLY AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION BEING MARKED BY A 3 ¼" ALUMINUM CAP STAMPED "DNR S16-S21 1986", BEING NORTH 00°22'32" WEST A DISTANCE OF 2,699.33 FEET FROM THE CENTER QUARTER CORNER OF SAID SECTION 21 MARKED BY A 5/8" IRON REBAR; THENCE SOUTH 00°22'32" EAST ALONG THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 21 A DISTANCE OF 1,166.19 FEET; THENCE NORTH 89°37'28" EAST LEAVING SAID WEST LINE A DISTANCE OF 895.41 FEET; THENCE NORTH 10°39'41" EAST A DISTANCE OF 74.61 FEET; THENCE NORTH 20°36'11" EAST A DISTANCE OF 204.31 FEET; THENCE NORTH 06°48'06" EAST A DISTANCE OF 79.00 FEET; THENCE NORTH 81°37'39" WEST A DISTANCE OF 84.14 FEET; THENCE NORTH 36°08'45" EAST A DISTANCE OF 54.16 FEET; THENCE NORTH 61°13'22" EAST A DISTANCE OF 99.76 FEET; THENCE NORTH 39°52'14" EAST A DISTANCE OF 136.34 FEET; THENCE NORTH 55°14'29" WEST A DISTANCE OF 104.07 FEET; THENCE NORTH 57°06'52" EAST A DISTANCE OF 214.99 FEET; THENCE NORTH 17°33'11" EAST A DISTANCE OF 103.89 FEET; THENCE NORTH 43°51'59" WEST A DISTANCE OF 208.36 FEET; THENCE NORTH 51°27'26" EAST A DISTANCE OF 198.27 FEET; THENCE NORTH 34°46'06" EAST A DISTANCE OF 68.43 FEET; THENCE NORTH 68°56'28" EAST A DISTANCE OF 90.95 FEET; THENCE NORTH 11°54'25" EAST A DISTANCE OF 17.44 FEET TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 21; THENCE SOUTH 88°05'28" WEST ALONG SAID NORTH LINE A DISTANCE OF 1,386.96 FEET TO THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION 21 AND THE POINT OF BEGINNING.

HAVING AN AREA OF 1,285,243 SQUARE FEET, 29.51 ACRES, MORE OF LESS.

SUBJECT TO AND TOGETHER WITH ACCESS AND UTILITY EASEMENTS SHOWN AS PROPOSED ON RECORD OF SURVEY RECORDED UNDER AUDITOR'S FILE NUMBER 2021-019551, RECORDS OF THE BENTON COUNTY AUDITOR.

EXHIBIT C

EASEMENT AREA

A VARIABLE WIDTH STRIP OF LAND SITUATED IN THE WEST HALF OF THE NORTHEAST QUARTER, THE NORTH HALF OF THE SOUTHWEST QUARTER AND THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 21, TOWNSHIP 8 NORTH, RANGE 29 EAST OF THE WILLAMETTE MERIDIAN, CITY OF KENNEWICK, BENTON COUNTY, WASHINGTON. THIS VARIABLE WIDTH EASEMENT IS DEFINED BY THE FOLLOWING DESCRIBED CENTERLINE AND THE WIDTH THEREFROM;

COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 21, MARKED BY A 3-1/4 INCH DEPARTMENT OF NATURAL RESOURCES ALUMINUM CAP; THENCE SOUTH 00°22'32" EAST ALONG THE WEST LINE OF SAID NORTHEAST QUARTER A DISTANCE OF 1,166.19 FEET TO THE NORTHWEST CORNER OF PARCEL 2 OF SURVEY 5488 FOR PLAT EXEMPTION, RECORDED IN VOLUME 1 OF SURVEYS AT PAGE 5488, FILED UNDER AUDITOR'S FILE NUMBER 2021-019551; THENCE NORTH 89°37'28" EAST ALONG THE NORTH LINE OF SAID PARCEL 2 A DISTANCE OF 740.10 FEET TO THE TRUE POINT OF BEGINNING FOR THIS CENTERLINE DESCRIPTION;

THENCE ALONG A 74.00 FOOT WIDE PORTION OF THIS EASEMENT, LYING 37.00 FEET, MEASURED PERPENDICULARLY, ON EACH SIDE OF THIS CENTERLINE THE FOLLOWING COURSES;

THENCE SOUTH 09°56'51" WEST A DISTANCE OF 62.52 FEET TO A POINT OF CURVATURE WITH A TANGENT CURVE TURNING TO THE RIGHT, HAVING A RADIUS OF 500.00 FEET; THENCE ALONG SAID CURVE, HAVING AN ARC LENGTH OF 91.34 FEET, WITH A DELTA ANGLE OF 10°28'03", A CHORD BEARING OF SOUTH 15°10'52" WEST, AND A CHORD LENGTH OF 91.22 FEET;
THENCE SOUTH 20°24'54" WEST A DISTANCE OF 289.19 FEET TO A POINT OF CURVATURE WITH A TANGENT CURVE TURNING TO THE RIGHT, HAVING A RADIUS OF 500.00 FEET; THENCE ALONG SAID CURVE, HAVING AN ARC LENGTH OF 78.39 FEET, WITH A DELTA ANGLE OF 08°59'00", A CHORD BEARING OF SOUTH 24°54'24" WEST, AND A CHORD LENGTH OF 78.31 FEET;
THENCE SOUTH 29°23'53" WEST A DISTANCE OF 1,053.89 FEET TO A LINE BEING A 45.00 FOOT OFFSET TO THE EAST OF THE WEST LINE OF SAID PARCEL 2 AND THE END OF SAID 74.00 FOOT WIDE PORTION;
THENCE SOUTH 00°22'32" EAST ALONG SAID OFFSET LINE AND BEING A 90.00 FOOT WIDE PORTION OF THIS EASEMENT, LYING 45.00 FEET, MEASURED PERPENDICULARLY, ON EACH SIDE OF THIS CENTERLINE A DISTANCE OF 164.32 FEET TO A LINE BEING A 37.00 FOOT OFFSET TO THE SOUTH OF THE NORTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 21 AND BEING THE END OF SAID 90.00 FOOT WIDE PORTION;
THENCE SOUTH 89°00'04" WEST ALONG SAID OFFSET LINE AND BEING A 74.00 FOOT WIDE PORTION OF THIS EASEMENT, LYING 37.00 FEET, MEASURED PERPENDICULARLY, ON EACH SIDE OF THIS CENTERLINE A DISTANCE OF 44.59 FEET;
THENCE SOUTH 88°58'40" WEST CONTINUING ALONG A LINE PARALLEL TO AND 37.00 FEET SOUTH OF THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 21 A DISTANCE OF 2,504.62 FEET TO THE EASTERLY RIGHT OF WAY MARGIN FOR SOUTH BOFER CANYON ROAD AND THE TERMINUS OF THIS DESCRIPTION.

EASEMENT SIDE LINES FOR THE 74.00 FOOT WIDE PORTIONS OF THIS EASEMENT ARE TO BE SHORTENED OR LENGTHENED AS NEEDED TO TERMINATE AT SAID NORTHERLY LINE OF PARCEL 2 AND SAID EASTERLY RIGHT OF WAY MARGIN OF SOUTH BOFER CANYON ROAD.

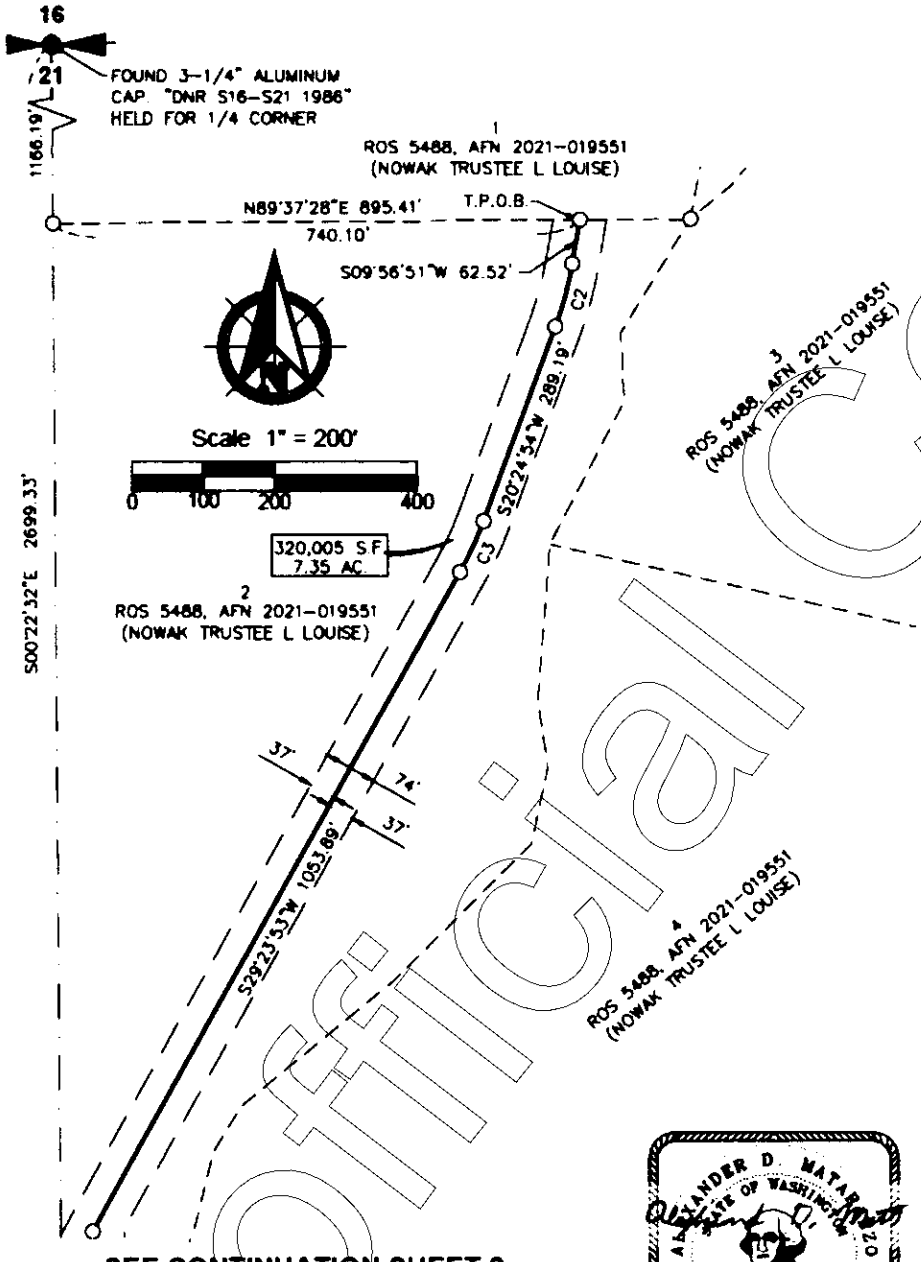
AT THE ANGLE POINT, BEING THE TRANSITION FROM THE 74.00 FOOT WIDTH TO THE 90.00 FOOT WIDTH AND THE ANGLE POINT, BEING THE TRANSITION FROM THE 90.00 FOOT WIDTH TO THE 74.00 FOOT WIDTH, THE SIDELINES OF THE 90.00 FOOT WIDE PORTION SHALL HOLD AND THE SIDELINES OF THE 74.00 FOOT PORTION ARE TO BE SHORTENED OR LENGTHENED AS NEEDED TO TERMINATE AT THE SIDELINES OF SAID 90.00 FOOT PORTIONS.

HAVING AN AREA OF 320,005 SQUARE FEET, 7.35 ACRES, MORE OR LESS.

SUBJECT TO EASEMENTS, RESERVATIONS, COVENANTS, AND RESTRICTIONS OF RECORD.

Exhibit 17

LOCATED IN THE W 1/2 OF THE NE 1/4, N 1/2 OF THE SW 1/4 AND THE NW 1/4 OF THE SE 1/4 OF SECTION 21, TOWNSHIP 08 NORTH, RANGE 29 EAST OF THE WILLAMETTE MERIDIAN, CITY OF KENNEWICK, BENTON COUNTY, WASHINGTON



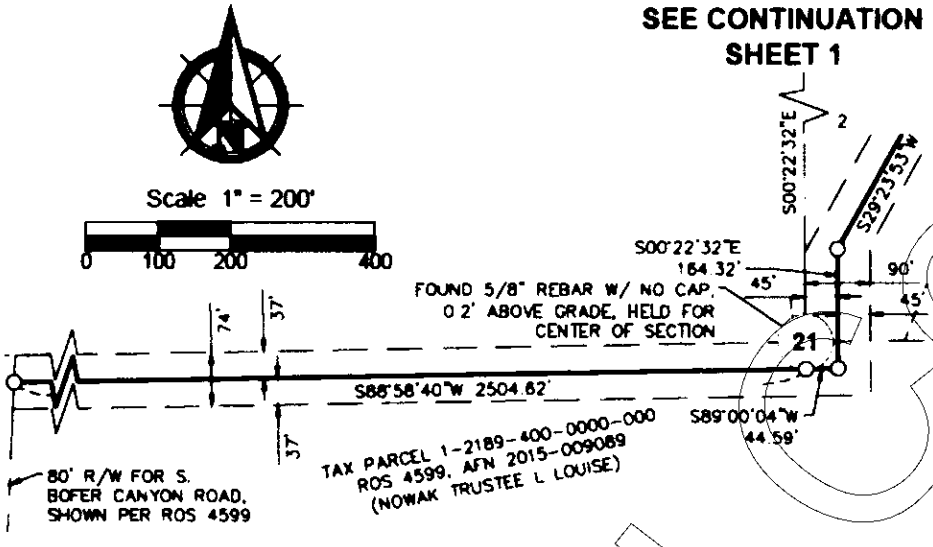
SEE CONTINUATION SHEET 2

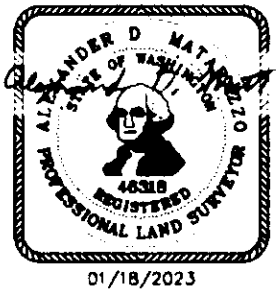
NOTE: THIS MAP DOES NOT REPRESENT A BOUNDARY SURVEY OF THE SUBJECT PARCELS AND SHOULD NOT BE RELIED UPON AS SUCH.

TPOB = TRUE POINT OF BEGINNING

ALEXANDER D. MATARAZZO
STATE OF WASHINGTON
46318
REGISTERED
PROFESSIONAL LAND SURVEYOR

Exhibit 17



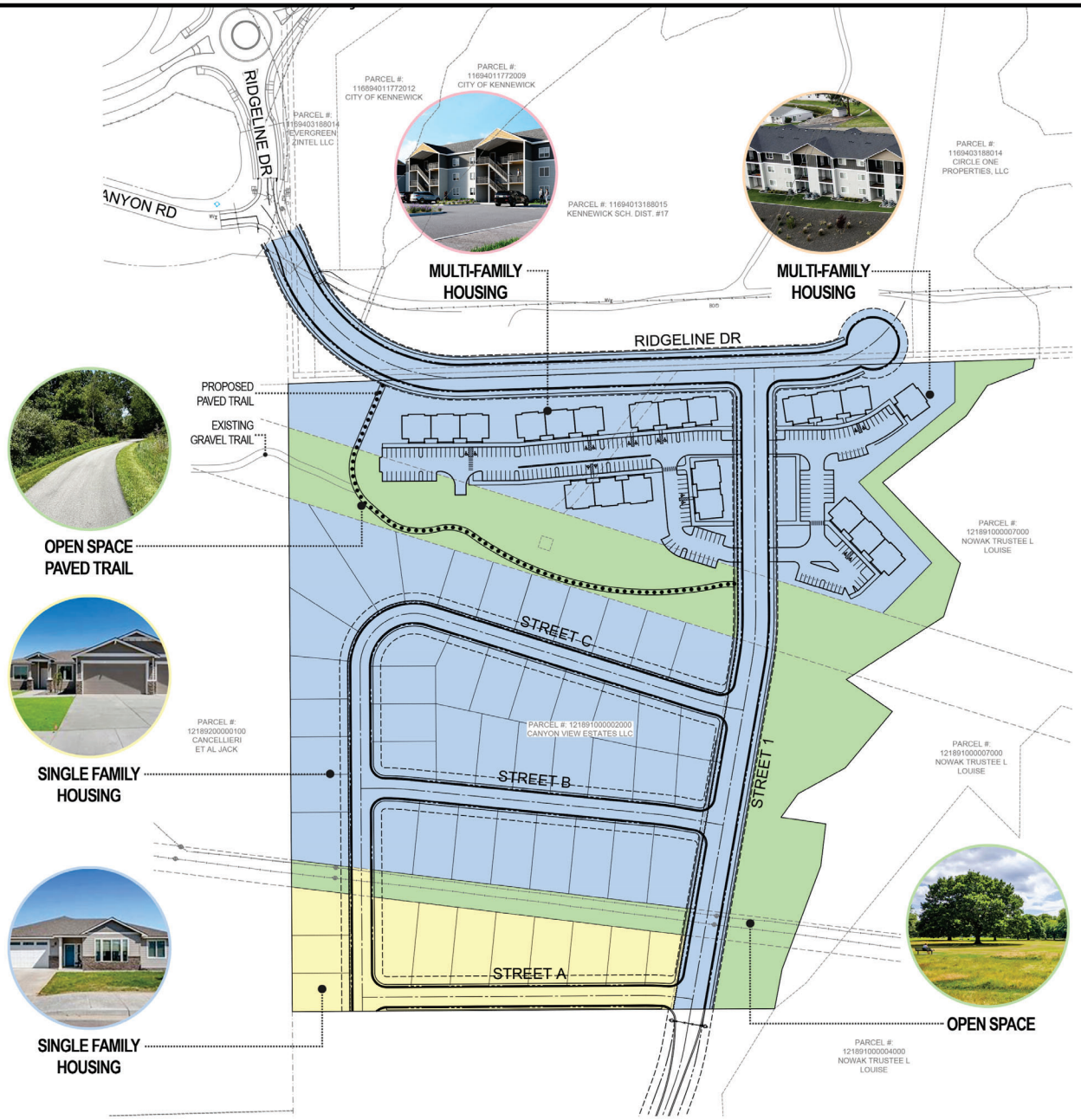


NOTE: THIS MAP DOES NOT REPRESENT A BOUNDARY SURVEY OF THE SUBJECT PARCELS AND SHOULD NOT BE RELIED UPON AS SUCH.

TPOB = TRUE POINT OF BEGINNING

01/18/2023

Exhibit 18



APPROXIMATE DEVELOPMENT SCHEDULE

PHASE 1 2025 - 2028

PHASE 2 2029+

LEGEND

- PHASE 1 - 935,000 SF
- PHASE 2 - 133,250 SF
- OPEN SPACE- 287,000 SF
- PROPOSED PAVED TRAIL

Scale 1" = 100'

0 50 100 200

PRD PLAN

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Vancouver, WA 98683
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PBS

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CANYON VIEW ESTATES

A SITE LOCATED IN THE CITY OF KENNEWICK, WASHINGTON

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SHEET	1 OF 1

Full Size Sheet Format Is 22x34; If Printed Size Is Not 22x34, Then This Sheet Format Has Been Modified & Indicated Drawing Scale Is Not Accurate.

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