



CITY OF KENNEWICK HEARING EXAMINER
James M. Driscoll, Hearing Examiner

AGENDA

**MONDAY, OCTOBER 11, 2021
5:00 P.M.**

**CITY OF KENNEWICK – ONLINE VIRTUAL MEETING
210 W. 6TH AVE, KENNEWICK, WA 99336**

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.
- 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 (3) 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.

I. CALL TO ORDER

II. PROCEDURAL INFORMATION

III. PUBLIC HEARING

- A. Preliminary Plat (PP No. 21-03/PLN-2021-02726), "Washington Meadows" proposing to subdivide 4.2 acres into 18 lots. The site is generally located at 2109 S. Washington Street. The site is currently zoned Residential, Low Density (RL), the Comprehensive Plan designation is Low Density Residential. The applicant and property owner is Darrell Bussell, DDB, LLC, 6103 Balsam Court, West Richland, WA, 99352.
- B. Preliminary Plat (PP No. 21-02/PLN-2021-01979), "Crimson Hills" proposing to subdivide 14.76 acres into 138 lots. The site is generally located at 9757 W. Clearwater Avenue. The site is currently zoned Residential, Medium Density (RM), the Comprehensive Plan designation is Medium Density Residential. The applicant is Nathan Machiela, Knutzen Engineering, 5401 Ridgeline Drive, Suite 160, Kennewick, WA 99338. The property owner is Tom Solbrack, 2555 W Hwy 24, Othello, WA 99334.

IV. ADJOURN



COMMUNITY PLANNING DEPARTMENT
STAFF REPORT AND RECOMMENDATION TO
THE HEARING EXAMINER

FILE NO: PP 21-03 / PLN-2021-02726

Staff Report Date:	26 August 2021
Public Hearing Date and Location:	11 October 2021, Virtual Hearing
Report Prepared By:	Matt Halitsky, AICP, Planner
Report Reviewed By:	Anthony Muai, AICP, Planning Director
Summary Recommendation:	The City of Kennewick RECOMMENDS APPROVAL with conditions of Preliminary Plat 21-03.
Summary of Proposal:	A Preliminary Plat proposed to subdivide 4.2 acres into 18 lots.
Proposal Location:	2109 S Washington Street Parcel Number 1-0780-300-0022-000
Legal Description:	The southwest quarter of Government Lot 3, Section 7, Township 8 North, Range 30 East, W.M., Records of Benton County, Washington. Except the north 85 feet of the west 256.20 feet thereof and except the south 298.30 feet thereof, and also except the west 30 feet thereof conveyed to Benton County for road by instrument recorded under Auditor's File No. 383171.
Property Owner(s):	DDB, LLC 6103 Balsam Court West Richland, Washington 99352
Applicant:	DDB, LLC 6103 Balsam Court West Richland, Washington 99352
Engineer:	Harms Engineering, Inc. 1632 W Sylvester Pasco, Washington 99301

Surveyor: Permit Surveying, Inc.
2245 Robertson Dr
Richland, Washington 99354

Approval Criteria:

1. Comprehensive Plan – Land Use
2. Kennewick Municipal Code (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	28 July 2021
Determination of Completeness Issued	28 July 2021
Notice of Application	3 August 2021
Property Posting Sign	23 September 2021
City Department Review Meeting	N/A
SEPA Threshold Determination Issued	N/A
SEPA Appeal Period Ends	N/A
Date of Published Notice of Public Hearing	26 September 2021
Date of Mailed Notice of Public Hearing	23 September 2021

Exhibits:

1. Staff Report
2. Application
3. Notice of Public Hearing, 300-ft. mailing list and mailing affidavit
4. Preliminary Plat
5. Draft Grading Plan 7/27/2021
6. Harms Engineering Utility Plan and Engineering Profile 8/24/2021
7. Memorandum – Public Works Department 8/16/2021
8. Traffic Engineering Division comments 8/17/2021
9. CTUIR comments 8/12/2021
10. Columbia Irrigation District comments 8/13/2021
11. Department of Ecology comments 8/16/2021
12. Ziply comments 8/17/2021
13. Bonneville Power Administration comments 8/19/2021
14. Benton Public Utility District comments 8/20/2021
15. Kennewick School District comments 10/1/2021

Staff Analysis of Proposal & Discussion:

The proposed Preliminary Plat (PP 21-03) is a request for the subdivision of 4.2-acres into 18 lots. The project is generally located at 2109 S Washington Street. The subject property currently consists of a single-family home with an accessory structure. The plat is proposed as Washington Meadows.

The site has a Comprehensive Plan Land-Use Designation of Low Density Residential and is zoned Residential, Low (RL).

A Preliminary Plat (KMC 17.10) is the first step in a 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 to create lots for preliminary plats and is the last phase in the subdivision process, and must be recorded prior to the creation of individual lots. 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. Additionally, the City of Kennewick's Residential Design Standards apply to this project.

Property History:

The City of Kennewick annexed the site and zoned it Agricultural on 1 December 2009 via Ordinance 5282. On 20 November 2018, the City adopted Ordinance 5761, which established the RS zone for the site as part of an area-wide rezone. On 23 April 2021, City Council changed the zone again (Ordinance 5909) from RS to RL at the request of the applicant / owner.

Density/Lot Size:

Per the Table of Residential Development Standards (KMC 18.12.010 A.2), the RL zoning district has a minimum lot size requirement of 7,500 square feet.

The proposed development has a minimum residential lot area of 7,500 square feet, a maximum residential lot area of 10,534 square feet, with an overall lot average of 7,985 square feet.

Staff Comment: The preliminary plat as proposed meets the Residential Development Standards contained in KMC 18.12.010(A.2), and is subject to the Residential Design Standards, Single-Family.

Traffic:

In Exhibit 8, the Traffic Engineering Division provided comments on the proposal.

Storm Water:

Storm water design, construction and post construction must meet the requirements of KMC Section 14.28.045 and COK Standard Specification 5-8.

Streets & Utilities:

Proposed public roads, water services and sewer services must be constructed to applicable City of Kennewick Standard Specifications and Drawings. In Exhibit 7, the Public Works Department addresses water and sewer requirements.

Parks:

The proposed development is in Service Area 1. Pursuant to KMC 3.90, the Park Impact Fee for Service Area 1 is \$920 per Single-Family Unit. The impact fee is due and payable prior issuing the certificate of occupancy by the City.

Critical Areas:

There do not appear to be any mapped critical areas within the subject property.

Schools:

The boundary schools for the proposed development are Washington Elementary (Walking Zone), Horse Heaven Hills Middle School (Bussing Zone) and Kennewick High School (Walking Zone).

Per a letter from the Kennewick School District (Exhibit 15) dated 1 October 2021, the District has the capacity to add students at all levels and at all three schools referenced above.

Surrounding Property:

Properties to the immediate north and south of the subject property are zoned Residential, Suburban. While across S Washington Street to the west is Washington Elementary School, zoned Open Space (OS), the neighborhoods to the north and south of the school are zoned Residential, Medium (RM). County land outside of the city limits is to the east.

Staff Comment: In staff's opinion, the proposed Preliminary Plat is consistent with the existing mix of residential neighborhoods within the area and is congruous with the existing uses on the adjacent properties. Development of the site is subject to the Residential Design Standards.

Provisions for Public Health, Safety, and Welfare:

The proposed development will be constructed to City of Kennewick Residential Design Standards and the applicable requirement of the Kennewick Municipal Code.

Staff Comment: In staff's opinion, appropriate provisions have been made for, but are not limited to, the 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:

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

Staff Comment: The proposed Preliminary Plat is consistent with the Comprehensive Plan Land Use and complies with development standards for the Residential, Low (RL) zoning district. The applicant intends to develop a single-family residential neighborhood.

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

POLICY1: "Ensure provision of parks, schools, drainage, transit, water, sanitation, infrastructure and pedestrian in new residential developments."

POLICY 2: "Encourage irrigation service throughout residential areas, when available, to support and maintain healthy landscaping."

POLICY 3: “Deny residential developments if concurrency is not met for transportation, water, and sewer, or appropriately condition.”

Staff Comment: The proposed development will be constructed with the required infrastructure improvements that meet applicable standards.

RESIDENTIAL GOAL 3: “Promote a variety of residential densities with a minimum density target of 3 units per acre as averaged throughout the urban areas.”

POLICY 2: “Residential Low Density: Place lands constrained by sensitive areas, those intended to provide transition to the rural area, or those appropriate for larger lot housing within the Residential Low Density land use designation to allow for a range of lifestyles.”

Staff Comment: As proposed, the development meets Goal 3 and Policy 2 by providing a transition from the more dense neighborhoods to the west and the larger, rural parcels to the east.

The City of Kennewick hereby RECOMMENDS that Preliminary Plat 21-03 be APPROVED with the following conditions:

1. Comply with City of Kennewick regulatory controls, policies and codes, including the Residential Design Standards – Single-Family Residential.
2. A 10-foot landscaping strip consisting of ground cover and street trees every 40 feet is required along S Washington Street.
3. A landscape plan must be submitted for approval of all common areas, open spaces and rights-of-way not left in a natural state, listing the number, location, and species of trees, sizes of plant material, and ground cover prior to final plat approval. Street trees shall be placed at 40-foot intervals and within five feet of the back of sidewalk for curb tight sidewalks. The landscape plan shall be prepared by a licensed landscape architect or licensed landscape installer drawn to a legible scale.
4. Provide a bond or cash deposit for incomplete sidewalks and applicable landscaping prior to final plat approval. Trees for the individual residential lots shall be planted prior to receiving certificate of occupancy for each new home.
5. Any fencing along S Washington Street must satisfy the arterial street fencing requirements of the Residential Design Standards, with a minimum two-foot wide masonry column at least every 50-feet.
6. All fees required by the City shall be paid prior to approval of the final plat.
7. All development of the plat shall be in conformance and consistent with the plat drawing which was admitted as Exhibit 4.
8. The Building Department requires a geo-tech report stating the bearing capacity of the soil for each structure. The study can be either a mass report for all building sites submitted with the final plat or individual reports for each lot, required prior to the approval of the footing inspection, as they are built out.
9. Comply with the Memorandum – Public Works Department. Exhibit 7
10. Comply with the Traffic Engineering Division comments. Exhibit 8
11. At the request of the Confederated Tribes of the Umatilla Indian Reservation, an inadvertent discovery plan shall be in place prior to any demolition or ground disturbing activities. Exhibit 9
12. Comply with the applicable requirements of Columbia Irrigation District comments. Exhibit 10

13. Comply with Department of Ecology comments. Exhibit 11
14. Comply with the email submitted by the Benton Public Utility District. Exhibit 14
15. Provide dust control method(s) such as hydro seeding for all areas of the site that are disturbed.
16. The applicant and/or all of its successors must execute a written agreement to the satisfaction of the City Attorney, which will allow the City to establish enforceable arrangements for maintenance of any common areas, open spaces, private roads and common landscape areas, should the Homeowner's Association fail or refuse to maintain these areas.
17. The Preliminary Plat (PP 21-03) expires 5 years from the approval date. The City may grant an extension, but any extension application must be applied for before the approved preliminary plat expires.



Department only

PP _____ - _____ / PLN- _____ - _____ Fee \$ _____

Preliminary Plat ApplicationDate: 07/27/21 Name Of Plat Washington MeadowsArea Of Plat: 4.2 acres Zoning: RL #/Lots: 18Min. Lot Size: 7,500 Average Lot Size: 7,985Proposed Land Use: Residential Single FamilyGeneral Location: 2109 S Washington StParent Parcel Numbers: 107803000022000Applicant Name: DDB, LLC - Darrell BussellAddress: 6103 Balsam CourtCity, State, Zip: W Richland, WA 99352Phone Number: 509-378-7569 E-mail darrell@ddbllc.netOwner's Name: same

Address: _____

City, State, Zip: _____

Phone Number: _____ E-mail _____

Surveyor's Name: Permit Surveying, INC - Ashley GarzaAddress: 2245 Robertson DrCity, State, Zip: Richland, WA 99354Phone Number: 509-901-8753 E-mail agarza3605@gmail.comEngineer's Name: Harms Engineering, Inc - Christy BatayolaAddress: 1632 W Sylvester StCity, State, Zip: Pasco, WA 99301Phone Number: 509-547-2679 E-mail christine@harmsengineering.com

Plat Will Be Served By: (Check Those Which Apply)

Telephone Co:	Verizon	☒	Other	_____
Water System:	Well	☐	Private	☐ City ☒
Sewer System:	Septic	☐	City	☒
Natural Gas:	Yes	☒	No	☐
Cable Tv:	Yes	☒	No	☐

Irrigation District: Columbia Irrigation District Power: PUD Benton PUD

I certify that the information given above is true and complete to the best of my knowledge.

SIGNATURE OF APPLICANT:


Darrell Bussell (Jul 28, 2021 08:27 PDT)

This preliminary plat is being submitted with my consent.

SIGNATURE OF OWNER:


Darrell Bussell (Jul 28, 2021 08:27 PDT)

Received by: _____ Date: _____ Fee paid: _____

SEPA Checklist

ESA Supplement

Ownership Report

Date Received Stamp

Washington Meadows Preliminary Plat Application
DDB, LLC
6103 Balsam Court
W Richland, WA 99352
509-378-7569
darrell@ddbllc.net

REQUEST FOR DESIGN STANDARD WAIVER

We are requesting a design standard waiver from a portion of the Standard Specification Dwg. NO. 2-1 SHEET 3 OF 4 CUL-DE-SAC on a proposed Preliminary Plat to be located at 2109 S Washington St.

Our request is to allow a reduction from the 18 ft. sidewalk, utility, irrigation easement to a 10 ft. sidewalk and utility easement at the northern portion of the cul-de-sac bulb on lots 7 and 8 as shown on the attached drawing. The standard easement of 18 ft. has been provided to lots 7 and 8 and then reduced to a width of 10 ft. around the bulb due to the proximity to the property line. We have also provided adequate area needed for the additional 18 inches required due to sidewalk placement adjacent to fencing.

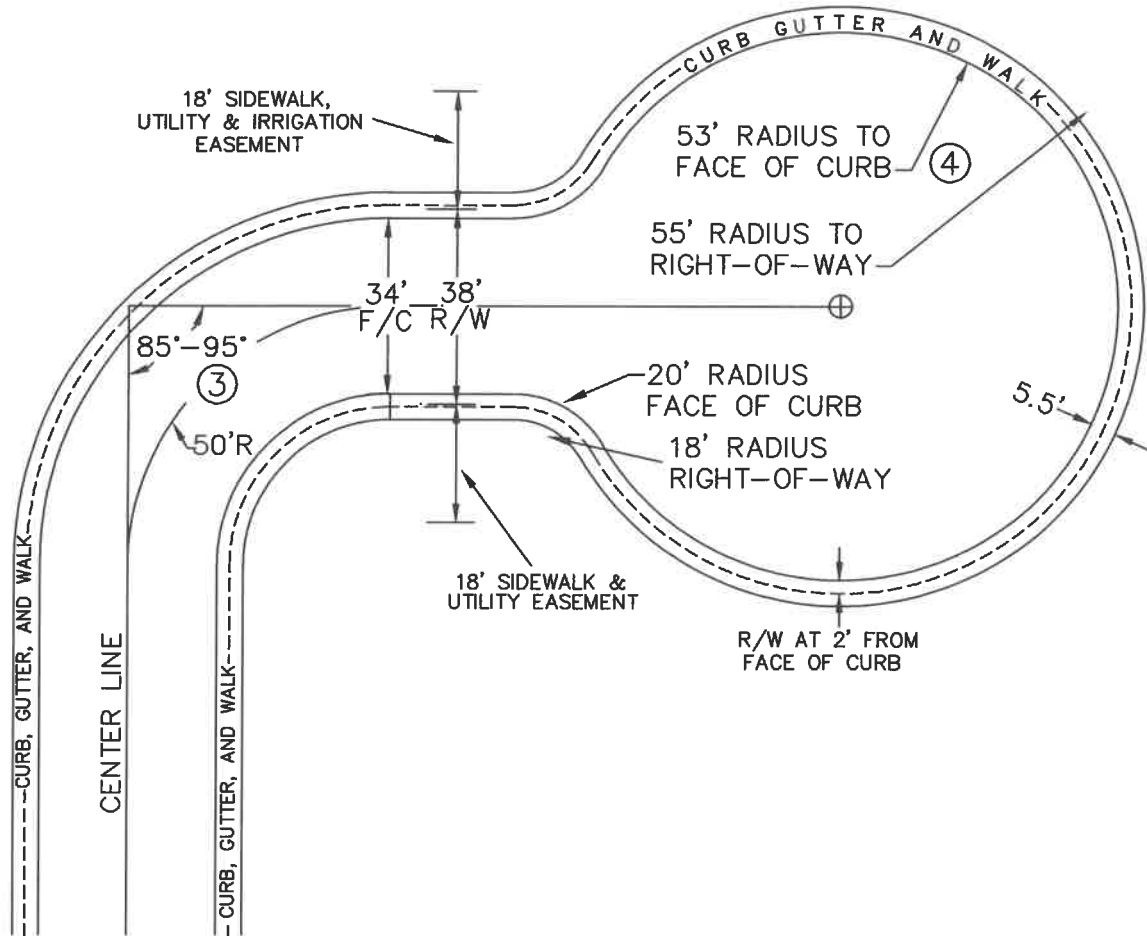
We have discussed this proposal with outside utility agencies and have found them agreeable.

If you have any questions please contact our Engineer, Christine Batayola, Harms Engineering, Inc at 509-547-2679 or christine@harmsengineering.com.

Thank you,

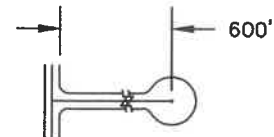

Darrell Bussell (Jul 28, 2021 08:29 PDT)

Darrell Bussell
DDB, LLC
509-378-7569
darrell@ddbllc.net



NOTES:

- ① SEE SHEET 1 OR 2 FOR TYPICAL SECTION.
- ② FOR COMMERCIAL STREETS, SEE STANDARD DWG 2-3 FOR MINIMUM ACCESS STREET TYPICAL SECTION AND WIDTH, OR DWG 2-4 WHEN WB50 OR GREATER TRUCK USAGE CAN BE ANTICIPATED.
- ③ ON CUL-DE-SAC STREETS, WHERE THE STREET MAKES A 90° (PLUS OR MINUS 5°) TURN, THE MINIMUM CENTERLINE RADIUS SHALL BE 50'. ON ALL OTHER CUL-DE-SAC STREET CURVES, THE MINIMUM CENTERLINE RADIUS SHALL BE 150'. THE MAXIMUM GRADE SHALL NOT EXCEED 12% UNLESS APPROVED BY THE PUBLIC WORKS DIRECTOR OR DESIGNEE.
- ④ WHERE THE LENGTH FROM THE EXTENDED MAIN STREET CURB TO END OF CUL-DE-SAC BULB IS LESS THAN 150 FEET, THE BULB CURB RADIUS MAY BE REDUCED TO 45 FEET AND R/W RADIUS TO 47 FEET.
- ⑤ THE MAXIMUM CUL-DE-SAC LENGTH IS 600 FEET MEASURED AS SHOWN HERE.



CUL-DE-SAC

CITY OF KENNEWICK
ENGINEERING DEPARTMENT

DATE 12/93
DWN CJD
REV 9/17
CHK BWB
SCALE NTS

DWG. NO.

2-1

SHEET 3 OF 4



NOTICE OF PUBLIC HEARING – October 11, 2021, 5:00 P.M.

Proposal: Darrell Bussell, DDB, LLC, submitted a preliminary plat application to subdivide 4.2-acres into 18 lots, located at 2109 S Washington St. The Comprehensive Plan Designation for the site is Low Density Residential. The site is zoned Residential, Suburban (RS) and is subject to the Residential Design Standards. The file number is PP 21-03 / PLN-2021-02726.

Open Record Hearing: The City of Kennewick Hearing Examiner will conduct an open record hearing at **5:00 p.m. on October 11, 2021**. In response to the COVID-19 emergency, testimony will be taken online. To participate in the meeting, use the link found at www.go2kennewick.com/244/Hearing-Examiner.

Submitting Written Comments

- The City asks all members of the public that would like to comment regarding the Public Hearing to fill out an online form at <https://www.go2kennewick.com/244/Hearing-Examiner> no later than 5:00 p.m. on Friday, October 8th to be included in the Hearing Examiner packet for the record.
- Interested parties may also submit written comments to P.O. Box 6108, Kennewick, WA 99336; or e-mail matt.halitsky@ci.kennewick.wa.us no later than 5:00 p.m. on Friday, October 1st to be included in the Hearing Examiner packet for the record. Comments received after that date will be presented at the hearing.

Commenting at the Meeting

- If you wish to comment during the Public Hearing, please register at <https://www.go2kennewick.com/244/Hearing-Examiner>. Registrations must be received by 4:00 p.m. on Monday, October 11th.

Determination of Completeness: The application was determined complete on July 28, 2021 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 October 11, 2021.

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.

Matthew Halitsky, Planner

The City of Kennewick welcomes full participation in public meetings by all citizens and does not discriminate on the basis of disability, pursuant to the requirements of the American with Disabilities Act of 1990, pub. L 101-336. 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 the City of Kennewick, Matt Halitsky, Development Services Department at (509) 585-4361 or TDD (509) 585-4425 or through the Washington Relay Service Center TTY at #711 at least ten days prior to the date of the meeting to make arrangements for special needs.



NOTIFICATION OF MAILING

I, Matt Halitsky, on Sept. 23, 2021

Mailed 22 copies of Notice of Public Hearing w/ plat map
for PP 21-03

to property owners per list provided.

as shown on the attached list.

M. Halitsky
Signature

Exhibit 3

37
DDB, LLC
6103 BALSAM CT
W RICHLAND, WA 99353

37
RILEY JAMES MICHAEL & LINDA
29 E 23RD AVE
KENNEWICK, WA 99337

37
ELLISON HOWARD E & BEVERLY K
33 E 23RD AVE
KENNEWICK, WA 99337

37
GRIFFITH C COLLINS & VERONICA R
GEIGER-GRIFFITH
2001 S WASHINGTON ST
KENNEWICK, WA 99337

37
MEISE MARVIN S
2222 S BEECH ST
KENNEWICK, WA 99337

37
MAGER WILLIAM M & M PEGGY A
2004 S BEECH ST
KENNEWICK, WA 99337

37
LANE BRIAN E & PENNY L
2103 S BEECH ST
KENNEWICK, WA 99337

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

37

37

37
BARTHOLOMEW JEFFREY W &
KATHERINE
2103 S WASHINGTON ST
KENNEWICK, WA 99337

37
GRIFFITH C COLLINS & VERONICA R
GEIGER-GRIFFITH
2001 S WASHINGTON ST
KENNEWICK, WA 99337

37
LLAMAS JOSE A & VICTORINA
2207 S WASHINGTON ST
KENNEWICK, WA 99337

37
REISCH DANIEL R & BRENDA
2213 S WASHINGTON ST
KENNEWICK, WA 99337

37
RAYMOND KENNETH E & TERESA M
PO BOX 4
BURBANK, WA 99323

37
THOM CHARRLEE P
199 E 23RD AVE
KENNEWICK, WA 99337

37
STRONG NORMA
229 E 23RD
KENNEWICK, WA 99336

37

37

37

37
MENDOZA MARIO & MONICA
2205 S WASHINGTON ST
KENNEWICK, WA 99337

37
BARGER JACK W & LAURIE A
105 E 23RD AVE
KENNEWICK, WA 99337

37
GRIFFITH DOUGLAS E
2017 S WASHINGTON ST
KENNEWICK, WA 99337

37
RIVES JR HANNAH & DONALD
2100 S BEECH STREET
KENNEWICK, WA 99337

37
YOUNG KATHI RENE'
112 W 21ST AVE
KENNEWICK, WA 99337

37
MAGELSEN WILLIAM A & LINDA M
45205 S FREMONT RD
KENNEWICK, WA 99337

37
Knutzen Engineering
c/o Nathan Machiela
5401 Ridgeline Dr, Ste 160
Kennewick, WA 99338

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37

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DESCRIPTION
THE SOUTHWEST QUARTER OF CONGRESSION LOT 2, SECTION 2, TOWNSHIP 4 NORTH, RANGE 30 EAST, N.W. 1/4, RECORDS OF BENTON COUNTY, WASHINGTON. EXCEPT THE NORTH 85 FEET OF THE WEST 25.00 FEET THEREOF AND EXCEPT THE SOUTH 280.30 FEET THEREOF, AND ALSO EXCEPT THE WEST 30.00 FEET THEREOF, CONVEYED TO BENTON COUNTY FOR ROAD BY INSTRUMENT RECORDED UNDER RECORDER'S FILE NO. 385171.

DATE OF SURVEY/INSTRUMENTS USED: APRIL 17 2003

- [illegible]

PROPERTY NOTES
1. OWNER: BOB LEE

1. CURRENT AND NEW
2. PROPERTY ADDRESS: 2109 S WASHINGTON ST KENNESAW, WA 98148
3. PARCEL NO. 107803000022000
4. PARCEL PAVED AREA 4.2 ACRES

ENGINEER:

CHRISTY BATTOLA, PE
MARLUS ENGINEERING
1832 W. Sylvester St., Pasco, WA 99301
(509) 347-2879

OWNER/DEVELOPER
PARFECT PROJECTS

DOH LLC
0103 BALSAM CT
WEST ROCHESTER, WA 99363
DAVID@DOHLLC.COM

<https://doi.org/10.1016/j.jmb.2017.05.007>

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GRAPHIC SCALE
0 15' 30' 60'

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SURVEYORS CERTIFICATION
I, ASHLEY D. GARZA, A REGISTERED LAND SURVEYOR, CERTIFY THAT THE PLAN AS SHOWN HEREON ACCURATELY REPRESENTS THE ACTUAL FIELD SURVEY OF THE LAND DESCRIBED.

CORNERS AND DIMENSIONS ARE CORRECT. PLANT IS STAKED ON THE GROUND AS

PRELIMINARY

ADJUTANT GENERAL

ACRILEX U.S. VERSION
CERTIFICATE NO. 54534

TECHNICAL

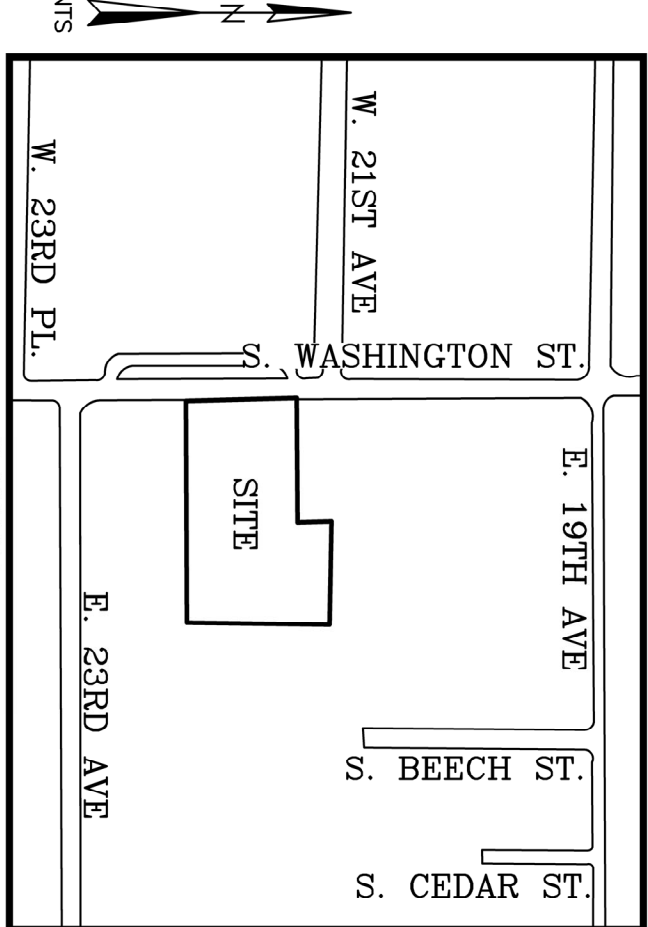
**LENNI
SURVEYING
INC**

...

DDB, LLC
PRELIMINARY PLAT AT 2102 WASHINGTON S

PRELIMINARY PLAT OF WASHINGTON MEADOWS

PORTION OF N.W. 1/4 OF THE S.W. 1/4, SECTION 7,
TOWNSHIP 8 NORTH, RANGE 30 EAST, WILLAMETTE MERIDIAN,
CITY OF KENNEWICK, BENTON COUNTY, WASHINGTON
FEA 21 - PLN-2021 -



DESCRIPTION
THE SOUTHWEST QUARTER OF GOVERNMENT LOT 3, SECTION 7, TOWNSHIP 8 NORTH, RANGE 30 EAST W.M., RECORDS OF BENTON COUNTY, WASHINGTON, EXCEPT THE NORTH 85 FEET OF THE WEST 30.00 FEET THEREOF, AND THE WEST 30.00 FEET THEREOF CONVERTED TO BENTON COUNTY FOR ROAD BY INSTRUMENT RECORDED UNDER AUDITOR'S FILE NO. 383174.

SURVEYORS NOTES

1. DATE OF SURVEY/MONUMENTS VISITED: APRIL 13, 2021.
2. BASIS OF BEARING: NAD83(11) WASHINGTON STATE PLANE COORDINATE SYSTEM SOUTH ZONE.
3. DISTANCES OF MEASURE: (1) SURVEY SET-OUT DISTANCES, MULTIPLE GROUND DISTANCES BY A COMBINED SCALE FACTOR OF 1.000018329 TO ADHERE GROUND DISTANCES. REFERENCE SURVEY AND LOT AREAS ARE GROUND DISTANCES. MULTIPLE GROUND DISTANCES BY A COMBINED SCALE FACTOR OF 0.999981671 TO ADHERE SURVEYED GRID DISTANCES.
4. EQUIPMENT/PROCEDURES: TOPCON GRAVITY, RTK METHOD. LINEAR CLOSURES MET OR EXCEED STANDARDS CONTAINED IN WAC 332-130-090.
5. FOUND AS NOTED.
6. SET 5/8" REPAIR & CAP STAMPED "PERMIT 54534".
7. SET 25" BRASS CAP IN MONUMENT CASE "54534".
8. CALCULATED POINT, NOT FOUND OR SET.
9. [R1] REFERENCE SURVEY: RECORD OF SURVEY NO. 5073, AUDITOR'S FILE NO. 2018-029359.
10. CONTOURS: 1' CONTOURS DERIVED FROM GROUND SURVEY WITH AN ACCURACY OF 1/10TH THE CONTOUR INTERVALS.
11. THE PURPOSE OF THIS SURVEY IS FOR A PRELIMINARY PLAT APPLICATION. A BOUNDARY SURVEY WAS CONDUCTED AS PART OF THIS PRELIMINARY PLAT.
12. VERTICAL DATUM: NAD83 CITY OF KENNEWICK DATUM.

PROPERTY NOTES

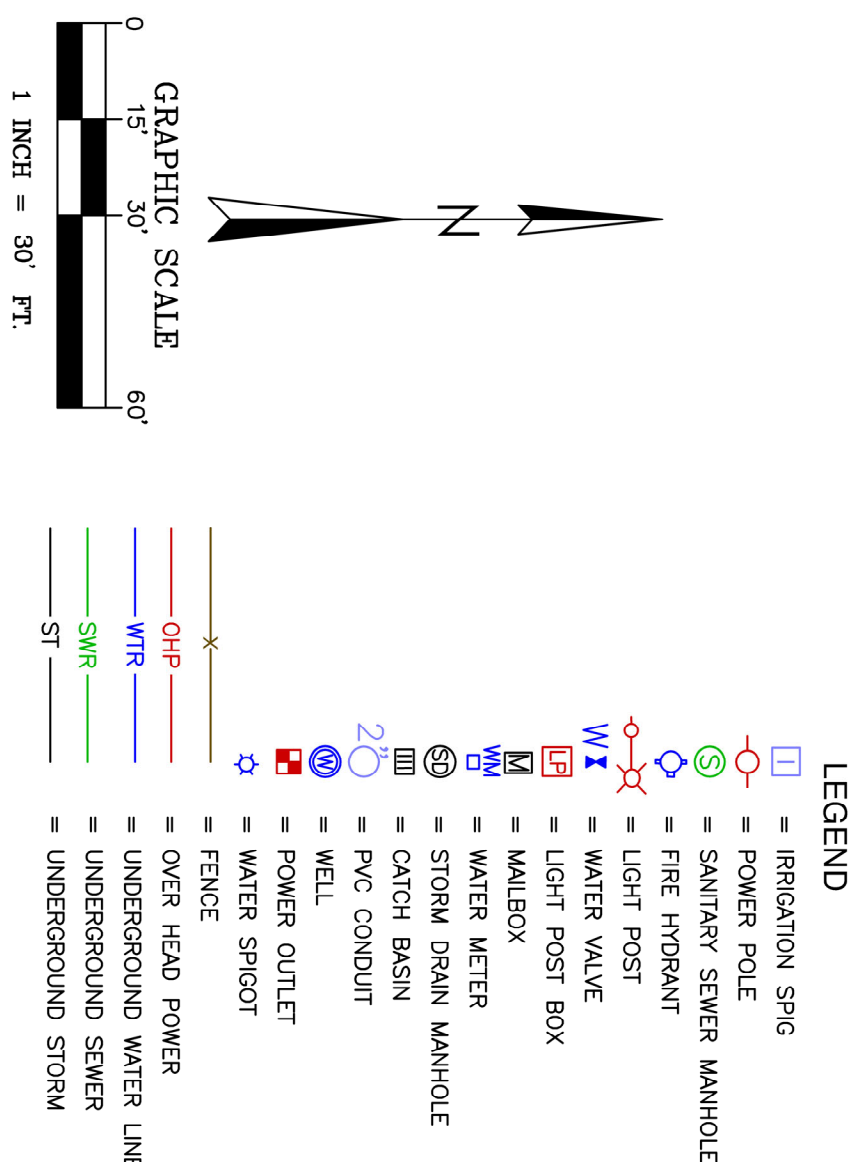
1. OWNER: DOB LLC
2. PROPERTY ADDRESS: 2109 S WASHINGTON ST KENNEWICK, WA
3. PARCEL # 1078030000228000
4. PARENT PARCEL AREA: 4.2 ACRES

ENGINEER:

CHRISTY BAYAROLA, PE
HARRIS ENGINEERING
1632 S W SYCAMORE ST, PSEASO, WA 98301
(360) 547-2679

OWNER/DEVELOPER:

DARRELL BUSSELL
8103 BALSAM CT
WEST RICHLAND, WA 99353
DARBUSSELL@GMAIL.COM



SURVEYORS CERTIFICATION

I, ASHLEY D. GARZA, A REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT THE PLAT AS SHOWN HEREON IS BASED ON AN ACTUAL FIELD SURVEY OF THE LAND DESCRIBED AND THAT ALL PLAT IS STAKED ON THE GROUND AS INDICATED HEREON.

PRELIMINARY

ASHLEY D. GARZA
CERTIFICATE NO. 546534



PERMIT SURVEYING INC
2245 Robertson Drive
Kennewick, WA 98534
OFFICE 509-371-2123
CHECKED BY: ADG
FAX 509-371-0899

DDB, LLC
PRELIMINARY PLAT AT 2109 WASHINGTON ST. KENNEWICK, WASHINGTON

PROJECT NO. 21027
DRAWN BY: SDA
07/27/2021
SHEET 1 OF 1

From: [Christy Batayola](#)
To: [Sorin Juster](#); [Martin Nelson](#)
Cc: [Joe Seet](#); [Michelle Dellinger](#); [Ashley Garza \(agarza3605@gmail.com\)](#); [Mike Clark](#); [Darrell Bussell](#); [Matt Halitsky](#)
Subject: Washington Meadows - Utility Layout (HEI 21-076)
Date: Tuesday, August 24, 2021 9:45:32 AM
Attachments: [image002.jpg](#)
[21-076 Washington Meadows E 22nd PL Profile 20210824.pdf](#)
[21-076 Washington Meadows Overall Utility Plan 20210824.pdf](#)

Sorin,

Per our conversation, attached is the overall utility plan that shows how we propose to route the utilities for the Washington Meadows subdivision. A full 18' wide easement for sidewalk, irrigation, and utilities is not needed around the bulb of the cul-de-sac.

You had also asked for a fire truck turning exhibit in the comments on the preliminary plat. We can get that to you, but we aren't sure it's necessary. The cul-de-sac meets or exceeds the dimensions shown on COK Std. Dwg. 2-1 sheet 3 of 4. Let me know if the attached exhibit which includes dimensions is sufficient or if you still need a fire truck turning exhibit.

Please note the attached plan does not yet include the curb ramps at the corners and street light location.

Martin,

We are unable to get gravity sewer to the east side of the proposed development due to the sewer main invert elevation on Washington St. (374.5) and the elevations on the east side of the property (372), refer to preliminary E 22nd PI profile. Therefore, we would like to provide a private low pressure sewer system for the east side of the development. The attached utility layout shows the proposed routing for that along with the location of a 5' private sewer easement that would be recorded separately. This is similar to what we had to do for the Zintel Creek Estates project.

Could you please verify that this will be acceptable? Let me know if you need anything else.

Christy Batayola, PE

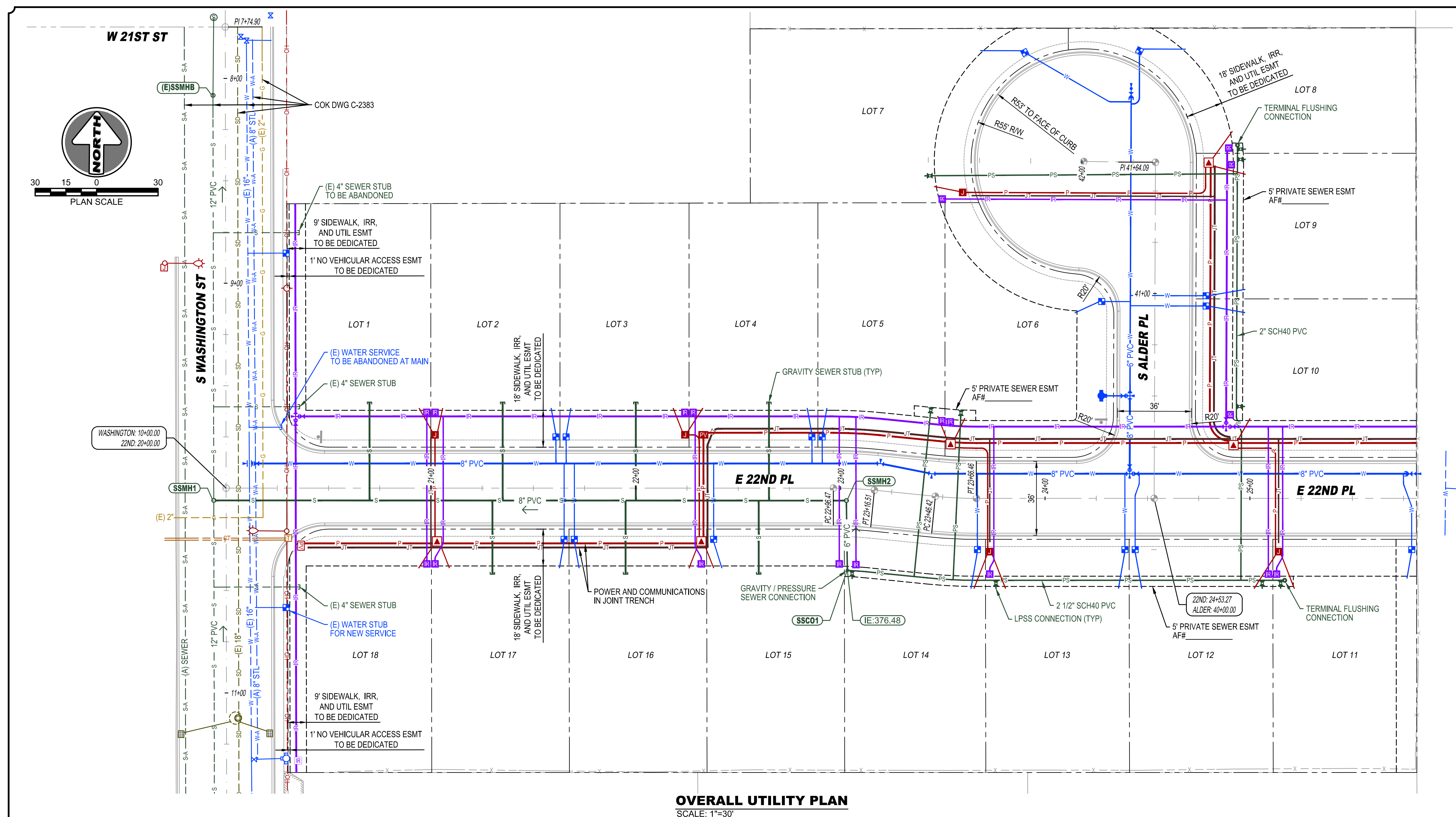
President



1632 W Sylvester Street, Pasco WA 99301 | (o) 509.547.2679 (m) 509.308.0805 | HarmsEngineering.com

Confidentiality Statement:

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CITY / COUNTY PROJECT REFERENCE NUMBER

CITY OF KENNEWICK PUBLIC WORKS

SIGNATURE / DATE

EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND MAY BE INCOMPLETE. CONTRACTOR TO VERIFY LOCATIONS WITH UTILITY COMPANIES AND/OR PRIVATE UTILITY LOCATOR PRIOR TO TRENCHING

CALL 2 BUSINESS DAYS BEFORE YOU DIG: 811

Drawing Name

name
**WASHINGTON MEADOWS SUBDIVISION
OVERALL UTILITY PLAN**

Client/Project Information

DDB LLC
DARRELL BUSSELL (509) 378-7569
 6103 BALSOM CT. WEST RICHLAND, WA 99353
 2900 S WASHINGTON ST, KENNEWICK, WA. 99336

UTUS DALSOIMCT.V
COPYRIGHT © 2021 HARMS ENGINEERING, INC. ALL RIGHTS RESERVED

Blank Engineers Stamp

Date _____ ANSI D

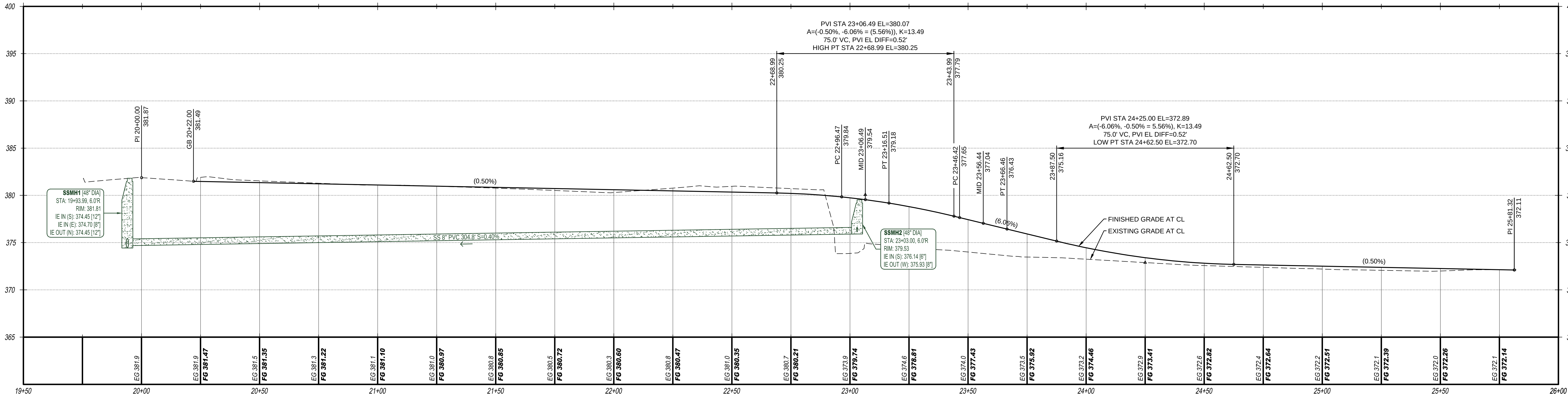
Project Number

21-076
Sheet Number
C2.0



HARMS
ENGINEERING INC.

ENGINEERING, INC.
 1632 W Sylvester Street, Pasco WA 99301 | 509.547.2679 | HarmsEngineering.com
 Designed By: C. BATAVOLA & B. ANDERSON
 Drawn By: THUNT
 File Name: P-1027146 Washington Meadows D1
 P-1027147-076 | 1009 LLC Washington Meadows Subdivision
 P-1027148-076
 P-1027149-076
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 P-10273



PROFILE VIEW NAME: PV - 22ND
ALIGNMENT USED: 22ND
STATION RANGE: 19+50.00 TO 26+00.00
ELEVATION RANGE: 365.00 TO 400.00
H SCALE: 1"=20' V SCALE: 1"=5' VERT EXAG: 4.0



MEMORANDUM

PUBLIC WORKS DEPARTMENT

To: Matt Halitsky, Planner

From: Kristin Stowe, Engineering Technician

Date: August 16, 2021

Re: DPW Development Comments

Project: PP No. 21-03 / PLN-2021-02726

1. Washington St. paving was accepted in January of 2019, it is under a five-year moratorium, and Developer will be required to pave 50-FT longitudinal from proposed street cuts to extend water or sewer and the full width of the street.
2. Label the topographic elevation lines on the preliminary plat per KMC 17.10.030 (1)(I). This site appears to have a significant drop in elevation on the east end, which will require a significant amount of fill to allow for the installation of the gravity sewer main as required by KMC 17.10.030(6).
3. There is an existing 16-inch waterline in the right of way in S Washington St installed by Record Drawing C-2383_09. There are also three 1-inch water services installed with the Washington St reconstruction per property owner request for future lots.
4. Provide water and sanitary sewer services for each proposed Lot per Kennewick Municipal Code 17.13.095(1). Construct water and sewer services City of Kennewick (COK) Detail 3-6.
5. Make provisions for the proposed water services serving the new lots; location shall be outside existing and future driveway approaches, provide easement when required.
6. When a property is developed that has an existing water service(s) stubbed, and development will not utilize the existing service or stub, the developer contractor shall expose the water main and remove the abandoned corporation stop and install a plug, or remove the abandoned valve and install a blind flange, per COK Standard Specs 4-3.01.
7. There are three existing 4-inch sanitary sewer services stubbed to property line draining into a 12-inch sewer main in Washington St installed by Record Drawing C-2383_09.
8. Each residential lot requires its own 4" connection to the city sewer system.
9. All plans showing existing water/sewer utilities shall call out the Record Drawing set number that installed such utilities. All shall clearly identify the size and type of water/sewer utility that is being proposed or connected to (i.e. "Existing 8-inch Water").
10. Bonding for water and sewer services will not be an option from Public Works.
11. Provide Storm Calculations to retain and dispose of a 25-year 24-hour storm following the Storm Water Management Manual for Eastern Washington (SMMEW) and Section 5-8. Infiltration tests required at the location and depth of the planned infiltration structures with a soils log to 5 feet below that point.
12. If the Developer plans to use underground infiltration, they must also demonstrate that the 100-year design storm can be retained on site.

PUBLIC WORKS DEPARTMENT

1010 S. Chemical Drive * PO Box 6108 * Kennewick, WA 99336-0108

509-585-4419 * 509-585-4451 Fax

13. Design and construct all underground infiltration structures 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.
14. In order to determine if other permits are required, visit the Washington State Office of Regulatory Innovation and Assistance website, <https://apps.oria.wa.gov/opas/>
15. This site requires a separate DPW Permit for civil plan reviews with the following:
 - a. PDF copy of the Application for Civil Review and Storm Calculations to retain the storm water from parking lot on site.
 - b. One full size (24"x36") PDF copy of the construction plans.
 - c. After project completion, Record Drawings showing improvements made on the property will be required prior to acceptance of the construction permit(s).
16. Kennewick Survey Data Requirements for construction plans and as built drawings:
 - a. Construct all projects using current City Survey Data.
 - b. For detailed information on Kennewick Survey Data and Record Drawings go to COK website @ <https://www.go2kennewick.com/314/Civil-Plan-Review>.

PUBLIC WORKS DEPARTMENT

1010 S. Chemical Drive * PO Box 6108 * Kennewick, WA 99336-0108

509-585-4419 * 509-585-4451 Fax



MEMORANDUM

Traffic Engineering Division

To: Matt Halitsky, Planner
From: Joe Seet, Assistant Traffic Engineer
Date: August 17, 2021
Re: Traffic Engineering Comments for 2109 S Washington Street 18 lot subdivision
Project: PP 21-03/PLN-2021-02726

Project Description

18 lot subdivision on 4.2 acres.

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 2021 District 3 TIF is \$1,043/Dwelling Unit 1 for Single-Family Detached Housing. Estimated TIF is \$16,688 for 17 proposed lots with credit for the existing single-family dwelling.

Right of Way and Easement

1. Record 9' public sidewalk, utility and irrigation easement along the proposed development's frontages on E. Washington St.
2. Record 18' public sidewalk, utility and irrigation easement around the proposed cul-de-sac at the end of proposed Road B.
3. The proposed cul-de-sac layout does not appear to meet the operational intent of the City' standard cul-de-sac layout. Provide an Auto-turn analysis for the proposed cul-de-sac layout.

4. KMC 17.20.010(4)(d) – Lots shall not have direct driveway access onto arterial or collector streets unless approved by the Traffic Engineer. Record 1' No Vehicular Access Easement for the parcel along E. Washington St.

From: Ashley Morton
Sent: Thu, 12 Aug 2021 22:52:12 +0000
To: Matt Halitsky
Cc: Hanson, Sydney (DAHP)
Subject: RE: City of Kennewick PP 21-03 / PLN-2021-02726

Okay, thanks Matt. At this time CTUIR does not have concerns. We recommend there be an inadvertent discovery plan in place during the removal of structures/infrastructure.

On a related question, why do the number of lots exempt this preliminary plat from SEPA?

Thanks,
Ashley

Ashley M. Morton, M.A., RPA
Archaeologist II
Cultural Resources Protection Program
Confederated Tribes of the Umatilla Indian Reservation
46411 Timíne Way, Pendleton, OR 97801
Direct Line/Fax: (541) 429-7214
Main Office: (541) 276-3447
AshleyMorton@ctuir.org



From: Matt Halitsky [mailto:Matt.Halitsky@ci.kennewick.wa.us]
Sent: Thursday, August 12, 2021 3:01 PM
To: Ashley Morton
Cc: Hanson, Sydney (DAHP)
Subject: RE: City of Kennewick PP 21-03 / PLN-2021-02726

EXTERNAL EMAIL: Please use caution when clicking links or opening attachments.

Hi Ashley

According to the County Assessor, both the double-wide and the pole building were added in 1991. This particular preliminary plat is exempt from SEPA due to the number of lots.

Let me know if you have any additional questions.

Matt H.

From: Ashley Morton <AshleyMorton@ctuir.org>
Sent: Thursday, August 12, 2021 2:52 PM
To: Matt Halitsky <Matt.Halitsky@ci.kennewick.wa.us>
Cc: Hanson, Sydney (DAHP) <Sydney.Hanson@dahp.wa.gov>
Subject: RE: City of Kennewick PP 21-03 / PLN-2021-02726

Hello Matt,

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Cultural Resources Protection Program (CRPP) has reviewed the SEPA materials for the proposed Washington Heights Plat. It states that all existing structures and infrastructure will be removed. Could you please provide additional information regarding the age of structures?

Thank you.

Sincerely,

Ashley

Ashley M. Morton, M.A., RPA

Archaeologist II

Cultural Resources Protection Program

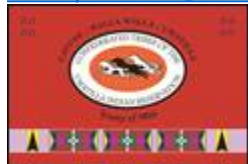
Confederated Tribes of the Umatilla Indian Reservation

46411 Timine Way, Pendleton, OR 97801

Direct Line/Fax: (541) 429-7214

Main Office: (541) 276-3447

AshleyMorton@ctuir.org



From: Matt Halitsky [<mailto:Matt.Halitsky@ci.kennewick.wa.us>]
Sent: Thursday, August 12, 2021 11:55 AM
To: Ashley Morton <AshleyMorton@ctuir.org>; Ben Franklin Transit - Bill Barlow <bbarlow@bft.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 Franklin Health Dept - Rick Dawson <rickd@bfhd.wa.gov>; Benton PUD - engineering services <engservice@bentonpud.org>; Benton PUD - Jeff Vosahlo <vosahloj@bentonpud.org>; Benton PUD Chad Brooks <brooksc@bentonpud.org>; Benton PUD Mike Irving <irvingm@bentonpud.org>; Benton PUD Shanna Everson <eversons@bentonpud.org>; Benton PUD Tina Glines <glinest@bentonpud.org>; BPA - Deborah Rodgers <dxrodders@bpa.gov>; BPA - Joe Cottrell <jecottrell@bpa.gov>; BPA - Mike Deklyen <mjdeklyen@bpa.gov>; Cascade Gas James Thomas <james.thomas@cngc.com>; Cascade Natural Gas - Sara Pineda <sara.pineda@cngc.com>; Casey Barney <Casey_Barney@Yakama.com>; Charter Communications - Robert Early <robert.early@charter.com>; Columbia Irrigation District <cid@columbiairrigation.com>; Department of Ecology SEPA UNIT <sepaunit@ecy.wa.gov>; Dept of Archaeology and Historic Preservation (sepa@dahp.wa.gov) <sepa@dahp.wa.gov>; Dept of Fish & Wildlife <harvepjh@dfw.wa.gov>; Dept of Fish & Wildlife - Michael Ritter <michael.ritter@dfw.wa.gov>; Dept of Natural Resources SEPA Center <sepacenter@dnr.wa.gov>; Dustin Fisk - Kennewick School

District (dustin.fisk@ksd.org) <dustin.fisk@ksd.org>; Greg Wendt (Greg.Wendt@co.benton.wa.us) <Greg.Wendt@co.benton.wa.us>; Jessica Lally <Jessica_Lally@Yakama.com>; Kennewick School District; Brandon Potts <brandon.potts@ksd.org>; KID Development <development@kid.org>; Kyle McCauley <Kyle.McCauley@cngc.com>; Michelle Cooke <Michelle.Cooke@co.benton.wa.us>; Mike Stevens - (mstevens@ci.richland.wa.us) <mstevens@ci.richland.wa.us>; Noah Oliver <Noah_Oliver@Yakama.com>; Shane O'Neill <soneill@ci.richland.wa.us>; US Army Corps of Engineers <CENWW-RE@usace.army.mil>; Williams Pipeline - Audie Neuson <audie.neuson@williams.com>; WSDOT <scplanning@wsdot.wa.gov>; Yakama Nation - Thalia Sachtleban <enviroreview@yakama.com>; Ziplly Fiber Christy Ross <christy.ross@ziply.com>
Subject: City of Kennewick PP 21-03 / PLN-2021-02726

EXTERNAL EMAIL: Please use caution when clicking links or opening attachments.

Hello

The City of Kennewick wishes to inform you of an application for a Preliminary Plat:

Project Description: A Preliminary Plat for an 18 lot subdivision on 4.2 acres located at 2109 S Washington Street. Zoning is Residential, Low (RL).

Please review the attached files relative to your agency's applicable regulations and submit any comments on or before **18 August 2021**. Comments may be submitted via e-mail to matt.halitsky@ci.kennewick.wa.us or mailed to: Development Services Division, PO Box 6108, Kennewick, WA 99336.

Thank you.



Matthew Halitsky, AICP

Planner

Community Planning Department

City of Kennewick

O: 509.585.4416 | F: 509.585.4442

matt.halitsky@ci.kennewick.wa.us



The opinions expressed by the author are his or her own and are not necessarily those of the Confederated Tribes of the Umatilla Indian Reservation. The information, contents and attachments in this email are Confidential and Private.

The opinions expressed by the author are his or her own and are not necessarily those of the Confederated Tribes of the Umatilla Indian Reservation. The information, contents and attachments in this email are Confidential and Private.



Short Plat Requirements
Columbia Irrigation District

The following items must be completed prior to approval from the CID:

1. All Short Platting Fees must be paid in full.
2. All Irrigation Assessments must be paid in full.
3. Follow the District's *Standard Specifications* for installing pipe and services.
4. Submit a copy of the short plat and the irrigation plan for approval. The plat and irrigation plan must be approved by CID prior to any excavation or starting the project. The irrigation plan shall include:
 - A. Location and size of the irrigation easements
 - B. Location of new services
 - C. Show pipe and valve size
5. Install pipe and services per the approved irrigation plan by a licensed and bonded contractor.
6. Prior to covering the installed pipe and services, call the District for an inspection and final approval.
7. ***If applicable the developer will be responsible for payment of any CID engineering cost associated with the project.***



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
1250 West Alder Street • Union Gap, Washington 98903-0009 • (509) 575-2490

August 16, 2021

Matt Halitsky
Kennewick Development Services
PO Box 6108
Kennewick, WA 99336

Re: PLN-2021-02726

Dear Matt Halitsky:

Thank you for the opportunity to comment on the Notice of Application for the Washington Meadow preliminary plat, proposed by Darrell Bussell. The Department of Ecology (Ecology) has reviewed the application and has the following comments.

TOXICS CLEAN-UP

Thank you for the opportunity to comment on your proposed project.

Historical aerial photos indicate your project is located on property that was occupied by orchard during the time period when lead arsenate was applied as a pesticide, often resulting in shallow soil contamination from lead and/or arsenic. Before proceeding, your project is required to conduct soil sampling under the Model Toxics Control Act (Chapter 173-340 WAC).

If sampling indicates elevated levels of lead and arsenic, cleanup will be required prior to occupancy. The Department of Ecology plans to use Model Remedies for lead and arsenic pesticide contamination in historical orchards of Central Washington. A Focus Sheet on the Model Remedies can be found at

<https://apps.ecology.wa.gov/publications/documents/2109007.pdf>

Compliance with a Model Remedy ensures your project meets the minimum standards of the Model Toxics Control Act, and if implemented as described, your property will be successfully cleaned up to Washington State standards.

Ecology can provide free initial sampling as well as free technical assistance for your project.

Please contact **Jeff Newschwander**, Project Manager, at (509) 388-5223, for further information or to schedule your initial sampling.

Matt Halitsky
August 16, 2021
Page 2

WATER QUALITY

Project with Potential to Discharge Off-Site

If your project anticipates disturbing ground with the potential for stormwater discharge off-site, the NPDES Construction Stormwater General Permit is recommended. This permit requires that the SEPA checklist fully disclose anticipated activities including building, road construction and utility placements. Obtaining a permit may take 38-60 days.

The permit requires that a Stormwater Pollution Prevention Plan (Erosion Sediment Control Plan) shall be prepared and implemented for all permitted construction sites. These control measures must be able to prevent soil from being carried into surface water and storm drains by stormwater runoff. Permit coverage and erosion control measures must be in place prior to any clearing, grading, or construction.

In the event that an unpermitted Stormwater discharge does occur off-site, it is a violation of Chapter 90.48 RCW, Water Pollution Control and is subject to enforcement action.

More information on the stormwater program may be found on Ecology's stormwater website at: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/>. Please submit an application or contact **Lloyd Stevens, Jr.** at the Dept. of Ecology, (509) 574-3991 or email lloyd.stevensjr@ecy.wa.gov, with questions about this permit.

Sincerely,



Gwen Clear
Environmental Review Coordinator
Central Regional Office
(509) 575-2012
crosepa@ecy.wa.gov

202104404

From: Gonzalez, Homero
Sent: Tue, 17 Aug 2021 15:13:19 +0000
To: Matt Halitsky
Subject: City of Kennewick PP 21-03 / PLN-2021-02726
Attachments: 2109 ZIPLY FACIL.pdf

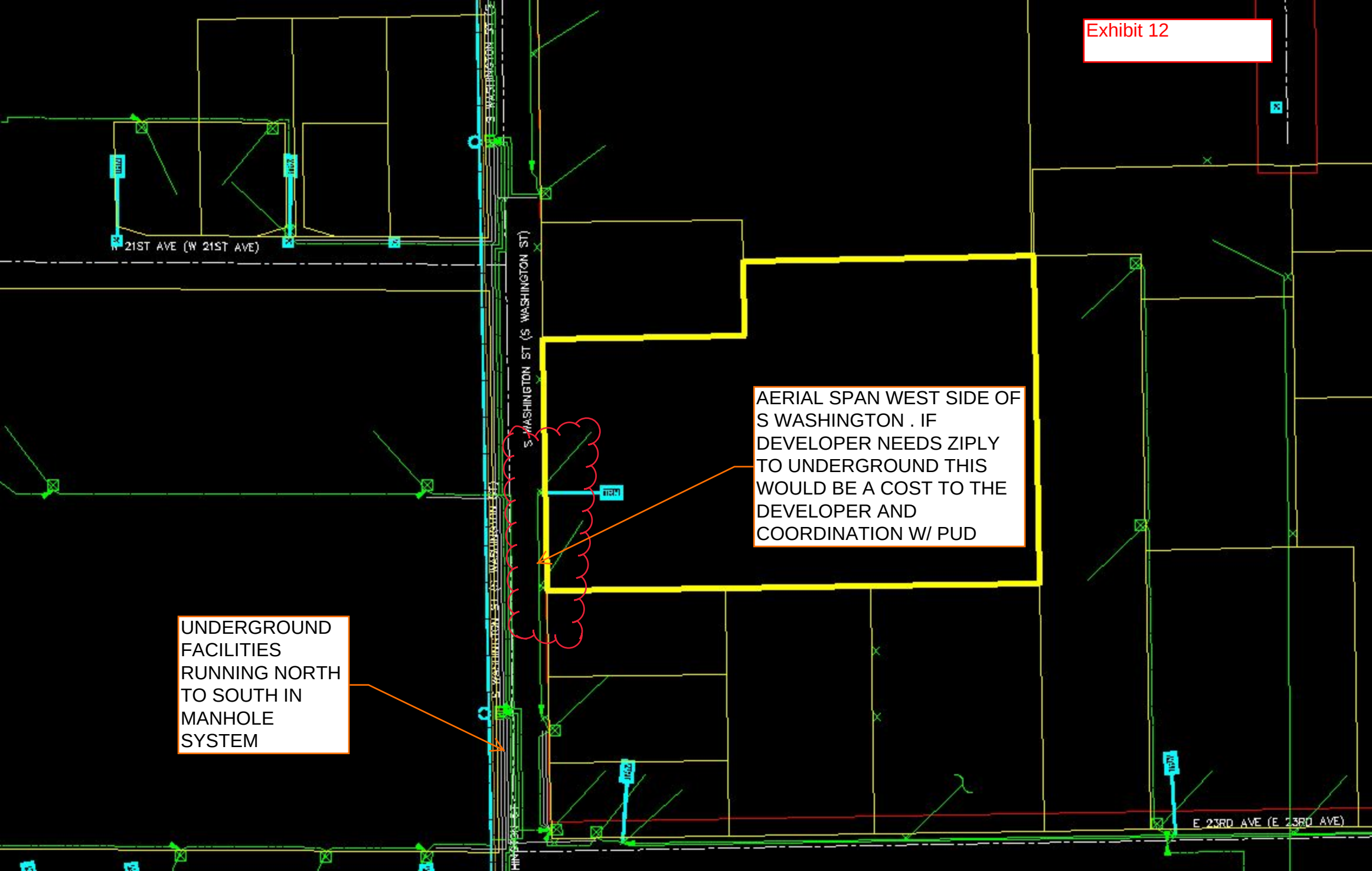
Good morning Matt,

I have attached notes for this new subdivision. It shows Zply has an aerial section near the proposed road entrance on the power poles. The rest of Zply's facilities are all underground in the manhole system running along S Washington St.

Thank you,

Homero Gonzalez
OSP Engineer
Zply Fiber
Office 509-736-3734
homero.gonzalez@zply.com





AERIAL SPAN WEST SIDE OF
S WASHINGTON . IF
DEVELOPER NEEDS ZIPLY
TO UNDERGROUND THIS
WOULD BE A COST TO THE
DEVELOPER AND
COORDINATION W/ PUD

UNDERGROUND
FACILITIES
RUNNING NORTH
TO SOUTH IN
MANHOLE
SYSTEM



Department of Energy

Bonneville Power Administration
2211 North Commercial Avenue
Pasco, WA 99301

TRANSMISSION SERVICES

August 19, 2021

In reply refer to: City of Kennewick PP 21-03 / PLN-2021-02726
Located within a Portion of Section 7, Township 8 North,
Range 30 East, W.M., Benton County, Washington

Matthew Halitsky, AICP
Planner, Community Planning Dept.
City of Kennewick
PO Box 6108
Kennewick, WA 99336

Dear Matthew:

Bonneville Power Administration (BPA) has had the opportunity to review City of Kennewick PP 21-03 / PLN-2021-02726. The proposal is for an 18 lot subdivision on 4.2 acres. The property is located at 2109 S. Washington Street in Kennewick, WA.

In researching our records, we have found that this proposal will not directly impact BPA facilities approximately 246 feet north of the subject property. BPA does not have any objections to the approval of this request at this time.

Thank you for the opportunity to review this application. If you have any questions regarding this request or need additional information, please feel free to contact me. I can be reached at (509) 544-4747 or by email at dxroders@bpa.gov.

Sincerely,

A handwritten signature in blue ink that reads "Joseph E. Cottrell II".

Joseph E. Cottrell II
BPA Field Realty Specialist

From: Chad Brooks
Sent: Fri, 20 Aug 2021 21:23:20 +0000
To: Matt Halitsky
Subject: RE: [E] City of Kennewick PP 21-03 / PLN-2021-02726
Attachments: RE: [E] Washington Meadows - Utility easement at north end of cul-de-sac (HEI 21-076)

Developer needs to provide Benton PUD with CAD file so we can put lots into BPUD map and be able to design. Benton PUD will require minimum 10 foot easement on East side of lot 11. Already discussed this with Harms Engineering. Email attached.

Chad Brooks
 Distribution Design Tech I
 Benton PUD
 Email: brooksc@bentonpud.org
 Main # (509)582-2175
 Direct # (509)582-1233



From: Matt Halitsky
Sent: Thursday, August 12, 2021 11:55 AM
To: Ashley M. Morton ; Ben Franklin Transit - Bill Barlow ; Ben Franklin Transit - Kevin Sliger ; Benton Clean Air Authority - Rob Rodger ; Benton Clean Air Authority - Tyler Thompson ; Benton Clean Air John Lyle ; Benton Franklin Health Dept - Rick Dawson ; EngService ; Jeff Vosahlo ; Chad Brooks ; Mike Irving ; Shanna Everson ; Tina Glines ; BPA - Deborah Rodgers ; BPA - Joe Cottrell ; BPA - Mike Deklyen ; Cascade Gas James Thomas ; Cascade Natural Gas - Sara Pineda ; Casey Barney ; Charter Communications - Robert Early ; Columbia Irrigation District ; Department of Ecology SEPA UNIT ; Dept of Archaeology and Historic Preservation (sepa@dahp.wa.gov) ; Dept of Fish & Wildlife ; Dept of Fish & Wildlife - Michael Ritter ; Dept of Natural Resources SEPA Center ; Dustin Fisk - Kennewick School District (dustin.fisk@ksd.org) ; Greg Wendt (Greg.Wendt@co.benton.wa.us) ; Jessica Lally ; Kennewick School District; Brandon Potts ; KID Development ; Kyle McCauley ; Michelle Cooke ; Mike Stevens - (mstevens@ci.richland.wa.us) ; Noah Oliver ; Shane O'Neill ; US Army Corps of Engineers ; Williams Pipeline - Audie Neuson ; WSDOT ; Yakama Nation - Thalia Sachtleban ; Ziplly Fiber Christy Ross
Subject: [E] City of Kennewick PP 21-03 / PLN-2021-02726

Hello

The City of Kennewick wishes to inform you of an application for a Preliminary Plat:

Project Description: A Preliminary Plat for an 18 lot subdivision on 4.2 acres located at 2109 S Washington Street. Zoning is Residential, Low (RL).



Ryan Jones • *Capital Projects Manager*
5501 W. Metaline • Kennewick, WA 99336
P: (509) 222-6810 • F: (509) 222-5057
Ryan.Jones@ksd.org • www.ksd.org

October 01, 2021

Matthew Halitsky
Community Planning Department
City of Kennewick
210 W. 6th Ave.
Kennewick, WA 99336

Matthew,

This memo is written in regards to your request for the Kennewick School District #17 to address capacity and boundary questions in regards to the Washington Hills Subdivision (2109 S. Washington Street) preliminary platt application. The school district was asked to identify the boundary schools for this development and state if each of the schools were within walking zones or received bussing. The boundary schools for this development are Washington Elementary (Walking Zone), Horse Heaven Hills Middle School (Bussing Zone) and Kennewick 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. That being said, 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.

Sincerely,

Ryan Jones



COMMUNITY PLANNING DEPARTMENT
STAFF REPORT AND RECOMMENDATION TO
THE HEARING EXAMINER

FILE NO: PP 21-02 / PLN-2021-01979

Staff Report Date:	23 September 2021
Public Hearing Date and Location:	11 October 2021, Virtual Hearing
Report Prepared By:	Matt Halitsky, AICP, Planner
Report Reviewed By:	Steve Donovan, AICP, Senior Planner
Summary Recommendation:	The City of Kennewick RECOMMENDS APPROVAL with conditions of Preliminary Plat 21-02.
Summary of Proposal:	A Preliminary Plat proposed to subdivide 14.76 acres into 138 lots.
Proposal Location:	9757 W Clearwater Ave Parcel Numbers 1-0188-4BP-5063-015, 1-0188-400-0001-017, 1-1288-100-0006-002, 1-1288-100-0005-004
Legal Description:	See Exhibit 2
Property Owner(s):	Tom Solbrack 2555 W Hwy 24 Othello, Washington 99334
Applicant:	Knutzen Engineering 5401 Ridgeline Drive, Suite 160 Kennewick, Washington 99338
Engineer:	Knutzen Engineering 5401 Ridgeline Drive, Suite 160 Kennewick, Washington 99338
Surveyor:	Derek Ingalsbe Stratton Surveying 313 N Morain Street Kennewick, Washington 99336

Approval Criteria:

1. Comprehensive Plan – Land Use
2. Kennewick Municipal Code (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	24 March 2021
Application Submittal	4 June 2021
Determination of Completeness Issued	7 June 2021
Notice of Application	8 June 2021
Property Posting Sign	8 June 2021
City Department Review Meeting	N/A
SEPA Threshold Determination Issued	25 August 2021
SEPA Appeal Period Ends	8 September 2021
Date of Published Notice of Public Hearing	26 September 2021
Date of Mailed Notice of Public Hearing	23 September 2021

Exhibits:

1. Staff Report
2. Legal Descriptions
3. Application
4. Mitigated Determination of Non-Significance
5. Notice of Public Hearing, 300-ft. mailing list and mailing affidavit
6. Preliminary Plat 7/20/2021
7. Draft Grading Plan 6/4/2021
8. Traffic Study 6/4/2021, Right-turn Study 7/15/2021, Revised Traffic Study 8/4/2021
9. Memorandum – Fire Department 6/15/2021
10. Memorandum – Public Works Department 6/23/2021
11. Revised Traffic Engineering Division comments 8/24/2021
12. Initial Traffic Engineering Division Comments 6/23/2021
13. Department of Archaeology and Historic Preservation comments 6/22/2021
14. Benton Clean Air Agency comments 6/23//2021
15. Confederated Tribes of the Umatilla Indian Reservation comments 7/27//2021
16. Washington Department of Transportation comments 8/5/2021
17. Kennewick School District comments 9/28//2021

Staff Analysis of Proposal & Discussion:

The proposed Preliminary Plat (PP 21-02) is a request for the subdivision of 14.76-acres into 138 lots. The project is generally located at 9757 W Clearwater Avenue, however the subdivision will access W 10th Avenue. The subject property is currently vacant. The plat is proposed as Crimson Hills.

The site has a Comprehensive Plan Land Use Designation of Medium Density Residential and is zoned Residential, Medium (RM).

A Preliminary Plat (KMC 17.10) is the first step in a 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 to create lots for preliminary plats and is the last phase in the subdivision process, and must be recorded prior to the creation of individual lots. 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. Additionally, the City of Kennewick's Residential Design Standards apply to this project.

Property History:

The City of Kennewick annexed the site and zoned it Commercial, Community (CC) on 7 May 2002 via Ordinance 4040. On 19 February 2021, the City adopted Ordinance 5898, which changed the land use designation from Commercial to Medium Density Residential. Subsequently, on 4 June 2021, City Council changed the zone (Ordinance 5914) from Commercial Community to Residential, Medium Density.

Density/Lot Size:

Per the Table of Residential Development Standards (KMC 18.12.010 A.2), the RM zoning district has a minimum lot size requirement of 4,000 square feet and 1,800 square feet for a townhouse/duplex.

The proposed development has a minimum residential lot area of 3,360 square feet, a maximum residential lot area of 8,370 square feet, with an overall lot average of 3,875 square feet.

Staff Comment: The preliminary plat as proposed meets the Residential Development Standards contained in KMC 18.12.010(A.2), and is subject to the Residential Design Standards, Single-Family.

Traffic:

In Exhibits 11 and 12, the Traffic Engineering Division provided comments on the proposal.

Storm Water:

Storm water design, construction and post construction must meet the requirements of KMC Section 14.28.045 and COK Standard Specification 5-8.

Streets & Utilities:

Proposed public roads, water services and sewer services must be constructed to applicable City of Kennewick Standard Specifications and Drawings. In Exhibit 10, the Public Works Department addresses water and sewer requirements.

Parks:

The proposed development is in Service Area 1. Pursuant to KMC 3.90, the Park Impact Fee for Service Area 1 is \$920 per Single-Family Unit. The impact fee is due and payable prior issuing the certificate of occupancy by the City.

Critical Areas:

There do not appear to be any mapped critical areas within the subject property.

In an email dated 27 July 2021, the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) indicated the subject property is located in an area known for its cultural and religious significance to the Tribe. As such, a cultural resource survey was recommended prior to any ground disturbing activities in order to ascertain whether cultural resources may be present on the property.

On 25 August 2021, a Mitigated Determination of Non-Significance was issued relative to the associated Environmental Determination (ED 21-26) with this project. That determination included as a condition of approval the applicant contract with a qualified consultant to complete the aforementioned cultural resources survey. Results of the survey will be shared with the City, CTUIR, and the Washington Department of Archaeology and Historic Preservation (DAHP). If cultural material is encountered during the course of the survey, additional consultation with these agencies will be required to determine steps forward.

Schools:

The boundary schools for the proposed development are Amon Creek Elementary (Bussing Zone), Desert Hills Middle School (Bussing Zone) and Kamiakin High School (Bussing Zone).

Per a letter from the Kennewick School District (Exhibit 17) dated 28 September 2021, the District has the capacity to add students at all levels and at all three schools referenced above.

Surrounding Property:

Properties to the immediate north of the subject property are zoned Commercial, Community (CC), while those to the south are located outside of the city limits within the County. To the east, a residential subdivision zoned Residential Mobile Home (RMH) is immediately adjacent to the subject property, with Residential, Medium (RM) beyond. To the west is the Calvary Chapel Church and School, zoned Business Park (BP).

Staff Comment: In staff's opinion, the proposed Preliminary Plat is consistent with the existing mix of residential neighborhoods and supportive commercial developments within the area and is congruous with the existing uses on the adjacent properties. Development of the site is subject to the Residential Design Standards.

Provisions for Public Health, Safety, and Welfare:

The proposed development will be constructed to City of Kennewick Residential Design Standards and the applicable requirement of the Kennewick Municipal Code.

Pursuant to KMC 17.20.010(3), pedestrian connections between streets are required for blocks longer than 600-feet. The applicant has requested an alternative design providing for a pedestrian connection at the northwest corner of the development to the commercial development along W Clearwater Avenue. After internal discussions within the department, the Planning Director supports this alternative

Staff Comment: In staff's opinion, appropriate provisions have been made for, but are not limited to, the 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:

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

Staff Comment: The proposed Preliminary Plat is consistent with the Comprehensive Plan Land Use and complies with development standards for the Residential, Medium (RM) zoning district. The applicant intends to develop the neighborhood with townhome lots providing pedestrian access to the amenities along W Clearwater Avenue.

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."

POLICY 2: "Encourage irrigation service throughout residential areas, when available, to support and maintain healthy landscaping."

POLICY 3: "Deny residential developments if concurrency is not met for transportation, water, and sewer, or appropriately condition."

Staff Comment: The proposed development will be constructed with the required infrastructure improvements that meet applicable standards.

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

POLICY 3: "Residential Medium Density: Place areas that can support high-quality, compact urban development with access to urban services, transit, and infrastructure, whether through new development or through infill."

Staff Comment: As proposed, the development meets Goal 3 and Policy 3 by providing townhome lots in an area supported by urban services and diversifies the housing stock in the area.

The City of Kennewick hereby RECOMMENDS that Preliminary Plat 21-02 be APPROVED with the following conditions:

1. Comply with City of Kennewick regulatory controls, policies and codes, including the Residential Design Standards – Single-Family Residential.
2. A 10-foot landscaping strip consisting of ground cover and street trees every 40 feet is required along W 10th Avenue.
3. A landscape plan must be submitted for approval of all common areas, open spaces and rights-of-way not left in a natural state, listing the number, location, and species of trees, sizes of plant material, and ground cover prior to final plat approval. Street trees shall be placed at 40-foot intervals and within five feet of the back of sidewalk for curb tight sidewalks. The landscape plan shall be prepared by a licensed landscape architect or licensed landscape installer drawn to a legible scale.
4. Provide a bond or cash deposit for incomplete sidewalks and applicable landscaping prior to final plat approval. Trees for the individual residential lots shall be planted prior to receiving certificate of occupancy for each new home.

EXHIBIT 1

5. Any fencing along W 10th Avenue must satisfy the arterial street fencing requirements of the Residential Design Standards, with a minimum two-foot wide masonry column at least every 50-feet.
6. All fees required by the City shall be paid prior to approval of the final plat.
7. All development of the plat shall be in conformance and consistent with the plat drawing which was admitted as Exhibit 6.
8. The Building Department requires a geo-tech report stating the bearing capacity of the soil for each structure. The study can be either a mass report for all building sites submitted with the final plat or individual reports for each lot, required prior to the approval of the footing inspection, as they are built out.
9. Comply with the Memorandum – Public Works Department. Exhibit 10
10. Comply with the Traffic Engineering Division comments. Exhibits 11 and 12
11. Comply with Department of Archaeology and Historic Preservation and CTUIR comments. Exhibits 13 and 15
12. Comply with the Benton Clean Air Agency comments. Exhibit 14
13. Provide dust control method(s) such as hydro seeding for all areas of the site that are disturbed.
14. The applicant and/or all of its successors must execute a written agreement to the satisfaction of the City Attorney, which will allow the City to establish enforceable arrangements for maintenance of any common areas, open spaces, private roads and common landscape areas, should the Homeowner's Association fail or refuse to maintain these areas.
15. The Preliminary Plat (PP 21-02) expires 5 years from the approval date. The City may grant an extension, but any extension application must be applied for before the approved preliminary plat expires.

Parcel 1-0188-4BP-5063-015

SECTION 1, TOWNSHIP 8 NORTH, RANGE 28 EAST, QUARTER SE: BINDING SITE PLAN #5063, LOT 15. RECORDED IN VOLUME 1 OF SURVEYS AT PAGE 5063, RECORDS OF BENTON COUNTY, WASHINGTON. ALSO KNOWN AS, A PARCEL OF LAND LOCATED IN THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER AND THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 1 OF TOWNSHIP 8 NORTH IN RANGE 28 EAST, W.M., CITY OF KENNEWICK, COUNTY OF BENTON, WASHINGTON, DESCRIBED MORE PARTICULARLY AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 1; THENCE NORTH $00^{\circ}47'18''$ WEST ALONG THE EAST LINE OF SAID NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 1 A DISTANCE OF 778.49 FEET TO A POINT ON THE SOUTH RIGHT OF WAY LINE OF WEST CLEARWATER AVENUE; THENCE ALONG SAID SOUTH RIGHT OF WAY LINE BY THE FOLLOWING COURSES: SOUTH $61^{\circ}32'17''$ WEST A DISTANCE OF 560.92 FEET; THENCE WITH A CURVE TO THE RIGHT, HAVING AN ARC LENGTH OF 108.91 FEET, A RADIUS OF 4240.00 FEET, WITH A CHORD BEARING OF SOUTH $62^{\circ}16'26''$ WEST AND A CHORD LENGTH OF 108.91 FEET; THENCE SOUTH $26^{\circ}59'25''$ EAST A DISTANCE OF 6.00 FEET; THENCE WITH A CURVE TO THE RIGHT WITH AN ARC LENGTH OF 440.84 FEET, A RADIUS OF 4246.00 FEET, A CHORD BEARING OF SOUTH $65^{\circ}59'03''$ WEST, AND A CHORD LENGTH OF 440.64 FEET; THENCE NORTH $21^{\circ}02'30''$ WEST A DISTANCE OF 6.00 FEET; THENCE WITH A CURVE TO THE RIGHT WITH AN ARC LENGTH OF 272.39 FEET, A RADIUS OF 4240.00 FEET A CHORD BEARING OF SOUTH $70^{\circ}47'56''$ WEST AND A CHORD DISTANCE OF 272.35 FEET; THENCE SOUTH $72^{\circ}38'21''$ WEST A DISTANCE OF 172.10 FEET, THENCE CONTINUING SOUTH $72^{\circ}38'21''$ WEST A DISTANCE OF 386.68 FEET TO THE TRUE POINT OF BEGINNING; THENCE SOUTH $17^{\circ}21'39''$ EAST A DISTANCE OF 324.60 FEET TO THE NORTHWEST CORNER OF LOT 8 IN BLOCK 1 OF BRIDGEWATER ESTATES PHASE ONE AS SHOWN ON THE PLAT THEREOF RECORDED IN VOLUME 15 OF BENTON COUNTY PLATS AT PAGE 278; THENCE SOUTH $03^{\circ}51'45''$ EAST ALONG THE WEST LINE OF BRIDGEWATER ESTATES PHASE ONE AND THE SOUTHERLY EXTENSION THEREOF A DISTANCE OF 1146.51 FEET TO A POINT ON THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 1; THENCE SOUTH $86^{\circ}07'44''$ WEST ALONG THE SOUTH LINE OF SAID SOUTHEAST QUARTER OF SECTION 1 A DISTANCE OF 885.21 FEET TO THE SOUTHEAST CORNER OF THAT PARCEL SHOWN ON THAT BINDING SITE PLAN RECORDED IN VOLUME 1 OF BENTON COUNTY SURVEYS AT PAGE 3126; THENCE NORTH $03^{\circ}51'06''$ WEST ALONG THE EAST LINE OF SAID BINDING SITE PLAN A DISTANCE OF 250.30 FEET TO THE NORTHEAST CORNER THEREOF; THENCE NORTH $86^{\circ}08'22''$ EAST ALONG THE SOUTH LINE OF THAT PARCEL SHOWN IN THAT BINDING SITE PLAN RECORDED IN VOLUME 1 OF BENTON COUNTY SURVEYS AT PAGE 3762, AND THE EASTERLY EXTENSION THEREOF, A DISTANCE OF 489.15 FEET; THENCE NORTH $03^{\circ}51'59''$ WEST A DISTANCE OF 799.56 FEET; TO THE NORTHEAST CORNER OF THAT 13.56 ACRE PARCEL SHOWN ON THE BINDING SITE PLAN RECORDED IN VOLUME 1 OF BENTON

COUNTY SURVEYS AT PAGE 3762; THENCE ALONG THE NORTH LINE OF SAID BINDING SITE PLAT WITH A CURVE TURNING TO THE LEFT WITH AN ARC LENGTH OF 109.37 FEET, WITH A RADIUS OF 2035.00 FEET, WITH A CHORD BEARING OF SOUTH 68°52'52" WEST, WITH A CHORD LENGTH OF 109.36 FEET, TO THE SOUTHEAST CORNER OF THAT BINDING SITE PLAN RECORDED IN VOLUME 1 OF BENTON COUNTY SURVEYS AT PAGE 3616; THENCE NORTH 32°54'17" WEST ALONG THE EAST LINE OF SAID BINDING SITE PLAN RECORDED IN VOLUME 1 AT PAGE 3616 A DISTANCE OF 329.37 FEET TO THE NORTHEAST CORNER THEREOF, BEING A POINT ON THE SOUTHERLY RIGHT OF WAY LINE OF WEST CLEARWATER AVENUE; THENCE ALONG SAID RIGHT OF WAY LINE WITH A CURVE TURNING TO THE RIGHT WITH AN ARC LENGTH OF 276.09 FEET, WITH A RADIUS OF 2360.00 FEET, WITH A CHORD BEARING OF NORTH 69°17'16" EAST, WITH A CHORD LENGTH OF 275.94 FEET; THENCE NORTH 72°38'21" EAST ALONG SAID RIGHT OF WAY LINE A DISTANCE OF 329.64 FEET TO THE TRUE POINT OF BEGINNING. (BOUNDARY LINE ADJUSTMENT PER AF#2018-026507, 09/06/2018)

Parcel 1-0188-400-0001-017

THAT PORTION OF THE SOUTH HALF OF SECTION 1, TOWNSHIP 8 NORTH, RANGE 28 EAST, W.M. KENNEWICK, BENTON COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS; COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 1; THENCE NORTH 86° 07' 47" EAST ALONG THE SOUTH LINE OF SAID SECTION 1 FOR 654.83 FEET; THENCE NORTH 03° 52' 13" WEST FOR 250.21 FEET TO THE TRUE POINT OF BEGINNING; THENCE NORTH 03° 52' 13" WEST FOR 799.57 FEET TO INTERSECT A 2035.00 FOOT RADIUS CURVE CONCAVE TO THE SOUTHEAST (THE RADIUS POINT BEARS SOUTH 19° 34' 36" EAST); THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE TO THE LEFT THROUGH A CENTRAL ANGLE OF 02° 21' 15" FOR AN ARC DISTANCE OF 83.61 FEET; THENCE SOUTH 03° 52' 13" EAST FOR 775.28 FEET; THENCE NORTH 86° 08' 08" EAST FOR 80.00 FEET TO THE TRUE POINT OF BEGINNING. (SWD AF#2004-024031, 7/06/2004)

Parcel 1-1288-100-0006-002

THAT PORTION OF THE WEST HALF OF THE NORTHWEST QUARTER OF THE NORTH- EAST QUARTER OF SECTION 12, TOWNSHIP 8 NORTH, RANGE 28, LYING NORTHER- LY OF BADGER ROAD, EXCEPT ANY PORTION LYING EASTERLY OF CLODFELTER ROAD. (QCD AUD FEE #95-6418 3/24/95)

Parcel 1-1288-100-0005-004

SECTION 12 TOWNSHIP 8 NORTH RANGE 28 EAST: PORTION DEFINED AS FOLLOWS THAT PORTION OF THE EAST HALF OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 12 LYING NORTHERLY OF THE NORTHERLY LINE OF BADGER ROAD AS SAID ROAD IS PRESENTLY LOCATED RECORDS OF BENTON COUNTY WASHINGTON (SWD 11/16/94) SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD LESS THAT PORTION LYING WITHIN THE FOLLOWING DESCRIBED LEGAL: COMMENCING AT THE SOUTHEAST CORNER OF SECTION 1, TOWNSHIP 8 NORTH, RANGE 28 EAST, W.M. ALSO BEING THE NORTHEAST CORNER OF SAID SECTION 12: THENCE SOUTH 86 DEGREES 07 MINUTES 47 SECONDS WEST ALONG THE LINE

COMMON TO SAID SECTIONS 1 AND 12, FOR 397.03 FEET TO THE CENTERLINE OF THE KENNEWICK IRRIGATION DISTRICT AMON WASTEWAY AND THE TRUE POINT OF BEGINNING: THENCE SOUTH 86 DEGREES 07 MINUTES 47 SECONDS WEST ALONG SAID COMMON LINE, FOR 96.73 FEET: THENCE NORTH 03 DEGREES 52 MINUTES 13 SECONDS WEST FOR 200.00 FEET: THENCE SOUTH 86 DEGREES 07 MINUTES 47 SECONDS WEST FOR 171.42 FEET: THENCE SOUTH 21 DEGREES 00 MINUTES 47 SECONDS WEST FOR 220.47 FEET TO THE LINE COMMON TO SAID SECTIONS 1 AND 12: THENCE SOUTH 86 DEGREES 07 MINUTES 47 SECONDS WEST ALONG SAID COMMON LINE, FOR 587.39 FEET TO THE NORTHEAST CORNER OF THE WEST HALF OF THE NORTHEAST QUARTER OF SAID SECTION 12: THENCE SOUTH 00 DEGREES 39 MINUTES 15 SECONDS EAST, ALONG THE EAST LINE OF SAID WEST HALF OF THE NORTHEAST QUARTER FOR 133.10 FEET TO THE NORTHERLY RIGHT OF WAY MARGIN OF BADGER ROAD: THENCE NORTH 83 DEGREES 52 MINUTES 13 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY MARGIN, FOR 291.71 FEET: THENCE NORTH 03 DEGREES 52 MINUTES 13 SECONDS WEST FOR 82.24 FEET TO THE LINE COMMON TO SAID SECTIONS 1 AND 12: THENCE NORTH 03 DEGREES 52 MINUTES 13 SECONDS WEST FOR 1146.36 FEET: THENCE NORTH 72 DEGREES 38 MINUTES 15 SECONDS EAST FOR 559.64 FEET TO THE POINT OF CURVATURE WITH A 4565.00 FOOT RADIUS CURVE CONCAVE TO THE NORTHWEST THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 11 DEGREES 06 MINUTE 10 SECONDS, FOR AN ARC DISTANCE OF 884.61 FEET TO THE POINT OF TANGENCY: THENCE NORTH 61 DEGREES 32 MINUTES 05 SECONDS EAST FOR 71.70 FEET TO THE CENTERLINE OF SAID AMON WASTEWAY: THENCE SOUTH 15 DEGREES 46 MINUTES 42 SECONDS WEST, ALONG SAID CENTERLINE, FOR 536.02 FEET TO THE POINT OF CURVATURE WITH A 286.48 FOOT RADIUS CURVE CONCAVE TO THE SOUTHEAST THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 43 DEGREES 30 MINUTES 35 SECONDS FOR AN ARC DISTANCE OF 217.55 FEET TO THE POINT OF TANGENCY: THENCE SOUTH 27 DEGREES 43 MINUTES 53 SECONDS EAST, ALONG SAID CENTERLINE, FOR 255.80 FEET TO THE POINT OF CURVATURE WITH A 286.48 FOOT RADIUS CURVE CONCAVE TO THE SOUTHWEST: THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 41 DEGREES 51 MINUTES 45 SECONDS, FOR AN ARC DISTANCE OF 209.31 FEET TO THE POINT OF TANGENCY: THENCE SOUTH 14 DEGREES 07 MINUTES 52 SECONDS WEST ALONG SAID CENTERLINE, FOR 361.20 FEET: THENCE SOUTH 14 DEGREES 04 MINUTES 22 SECONDS WEST, ALONG SAID CENTERLINE, FOR 100.97 FEET TO THE TRUE POINT OF BEGINNING. (6/12/98 AF#1998-016461) SECTION 12 TOWNSHIP 8 NORTH RANGE 28 EAST: THAT PORTION LYING WITHIN THE FOLLOWING DESCRIBED LEGAL: COMMENCING AT THE SOUTHEAST CORNER OF SECTION 1, TOWNSHIP 8 NORTH, RANGE 28 EAST, W.M. ALSO BEING THE NORTHEAST CORNER OF SAID SECTION 12: THENCE SOUTH 86 DEGREES 07 MINUTES 47 SECONDS WEST ALONG THE LINE COMMON TO SAID SECTIONS 1 AND 12, FOR 397.03 FEET TO THE CENTERLINE OF THE KENNEWICK IRRIGATION DISTRICT AMON WASTEWAY AND THE TRUE POINT OF BEGINNING: THENCE SOUTH 86 DEGREES 07 MINUTES 47 SECONDS WEST ALONG SAID COMMON LINE, FOR 96.73 FEET: THENCE NORTH 03 DEGREES 52 MINUTES 13 SECONDS WEST FOR 200.00 FEET: THENCE SOUTH 86 DEGREES 07 MINUTES 47 SECONDS WEST FOR 171.42 FEET: THENCE SOUTH

21 DEGREES 00 MINUTES 47 SECONDS WEST FOR 220.47 FEET TO THE LINE COMMON TO SAID SECTIONS 1 AND 12: THENCE SOUTH 86 DEGREES 07 MINUTES 47 SECONDS WEST ALONG SAID COMMON LINE, FOR 587.39 FEET TO THE NORTHEAST CORNER OF THE WEST HALF OF THE NORTHEAST QUARTER OF SAID SECTION 12: THENCE SOUTH 00 DEGREES 39 MINUTES 15 SECONDS EAST, ALONG THE EAST LINE OF SAID WEST HALF OF THE NORTHEAST QUARTER FOR 133.10 FEET TO THE NORTHERLY RIGHT OF WAY MARGIN OF BADGER ROAD: THENCE NORTH 83 DEGREES 52 MINUTES 13 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY MARGIN, FOR 291.71 FEET: THENCE NORTH 03 DEGREES 52 MINUTES 13 SECONDS WEST FOR 82.24 FEET TO THE LINE COMMON TO SAID SECTIONS 1 AND 12: THENCE NORTH 03 DEGREES 52 MINUTES 13 SECONDS WEST FOR 1146.36 FEET: THENCE NORTH 72 DEGREES 38 MINUTES 15 SECONDS EAST FOR 559.64 FEET TO THE POINT OF CURVATURE WITH A 4565.00 FOOT RADIUS CURVE CONCAVE TO THE NORTHWEST THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 11 DEGREES 06 MINUTE 10 SECONDS, FOR AN ARC DISTANCE OF 884.61 FEET TO THE POINT OF TANGENCY: THENCE NORTH 61 DEGREES 32 MINUTES 05 SECONDS EAST FOR 71.70 FEET TO THE CENTERLINE OF SAID AMON WASTEWAY: THENCE SOUTH 15 DEGREES 46 MINUTES 42 SECONDS WEST, ALONG SAID CENTERLINE, FOR 536.02 FEET TO THE POINT OF CURVATURE WITH A 286.48 FOOT RADIUS CURVE CONCAVE TO THE SOUTHEAST THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 43 DEGREES 30 MINUTES 35 SECONDS FOR AN ARC DISTANCE OF 217.55 FEET TO THE POINT OF TANGENCY: THENCE SOUTH 27 DEGREES 43 MINUTES 53 SECONDS EAST, ALONG SAID CENTERLINE, FOR 255.80 FEET TO THE POINT OF CURVATURE WITH A 286.48 FOOT RADIUS CURVE CONCAVE TO THE SOUTHWEST: THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 41 DEGREES 51 MINUTES 45 SECONDS, FOR AN ARC DISTANCE OF 209.31 FEET TO THE POINT OF TANGENCY: THENCE SOUTH 14 DEGREES 07 MINUTES 52 SECONDS WEST ALONG SAID CENTERLINE, FOR 361.20 FEET: THENCE SOUTH 14 DEGREES 04 MINUTES 22 SECONDS WEST, ALONG SAID CENTERLINE, FOR 100.97 FEET TO THE TRUE POINT OF BEGINNING. (6/12/98 AF#1998-016461)



Department only

PP _____ - _____ / PLN- _____ - _____ Fee \$ _____

Preliminary Plat ApplicationDate: 03/01/2021 Name Of Plat Crimson HillsArea Of Plat: 14.76 Acres Zoning: RM #/Lots: 138Min. Lot Size: 3360 SF Average Lot Size: 3875 SFProposed Land Use: Medium Density Residential HousingGeneral Location: 9757 W Clearwater, Kennewick, WA 99336Parent Parcel Numbers: 101884BP5063015, 101884000001017, 112881000006002, 112881000005004Applicant Name: Nathan Machiela (Knutzen Engineering)Address: 5401 Ridgeline Dr Suite 160City, State, Zip: Kennewick, WA 99338Phone Number: 509-222-0959 E-mail nathan@knutzenengineering.comOwner's Name: Tom SolbrackAddress: 2555 W Hwy 24City, State, Zip: Othello, WA 99334Phone Number: 509-989-0209 E-mail canyonc1@yahoo.comSurveyor's Name: Derek Ingalsbe (Stratton Surveying)Address: 313 North Morain StCity, State, Zip: Kennewick, WA 99336Phone Number: 509-735-7364 E-mail derek@strattonsurvey.comEngineer's Name: Nathan Machiela (Knutzen Engineering)Address: 5401 Ridgeline Dr Suite 160City, State, Zip: Kennewick, WA 99338Phone Number: 509-222-0959 E-mail nathan@knutzenengineering.com

Plat Will Be Served By: (Check Those Which Apply)

Telephone Co: Verizon ☐ Other To be determinedWater System: Well ☐ Private ☐ City ☒Sewer System: Septic ☐ City ☒Natural Gas: Yes ☒ No ☐Cable Tv: Yes ☒ No ☐Irrigation District: None Power: PUD Yes

I certify that the information given above is true and complete to the best of my knowledge.

SIGNATURE OF APPLICANT: 

This preliminary plat is being submitted with my consent.

SIGNATURE OF OWNER: Tom Solbrach

Received by: _____ Date: _____ Fee paid: _____

SEPA Checklist

ESA Supplement

Ownership Report

Date Received Stamp



Community Planning Department

210 West 6th Avenue

Kennewick, WA 99336

Phone: (509) 585-4280

cedinfo@ci.kennewick.wa.us

DETERMINATION OF NON-SIGNIFICANCE

FILE/PROJECT NUMBER: ED 21-26 / PLN-2021-01980 & PP 21-02 / PLN-2021-01979

DESCRIPTION OF PROPOSAL: Preliminary plat for 138 lots on 14.76 acres.

PROPONENT: Nathan Machiela, Knutzen Engineering

LOCATION OF PROPOSAL, INCLUDING STREET ADDRESS, IF ANY: 9757 W Clearwater, Kennewick, WA.

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.

- ☒ 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 8 September 2021. 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: Steve Donovan, AICP

POSITION/TITLE: Senior Planner

ADDRESS: 210 W 6th Ave., P.O. Box 6108, Kennewick, WA 99336

PHONE: (509) 585-4463

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

This DNS is subject to the following condition:

Prior to any ground disturbing activities, a cultural resources survey, to include subsurface testing, shall be conducted on the subject property with the results shared with the Confederated Tribes of the Umatilla Indian Reservation, the Washington Department of Archaeology and Historic Preservation, and the City of Kennewick. Further consultation with these, and possibly other organizations shall be required if cultural material is discovered through the course of the survey.

Date: 25 August 2021

Signature: _____

Appeal: An appeal of this determination must be submitted to the Community Planning Department within fourteen (14) calendar days after the date issued. 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 emailed to Benton Clean Air Authority, Confederated Tribes of Umatilla Indian Reservation, Department of Ecology SEPA Register, Department of Fish & Wildlife, Department of Natural Resources, Washington State Department of Transportation.

THANK YOU for your legal submission!

Your legal has been submitted for publication. Below is a confirmation of your legal placement. You will also receive an email confirmation.

ORDER DETAILS**Order Number:**

IPL0042414

Order Status:

Submitted

Classification:

Legals & Public Notices

Package:

TRI - Legal Ads

Final Cost:

271.56

Payment Type:

Account Billed

User ID:

IPL0024908

ACCOUNT INFORMATION

CITY OF KENNEWICK/LEGALS IP

PO BOX 6108

KENNEWICK, WA 99336

509-585-4200

ap@ci.kennewick.wa.us

CITY OF KENNEWICK/LEGALS

TRANSACTION REPORT**Date**

September 22, 2021 6:21:46 PM EDT

Amount:

271.56

SCHEDULE FOR AD NUMBER IPL00424140

September 26, 2021

Tri-City Herald

PREVIEW FOR AD NUMBER IPL00424140**NOTICE OF PUBLIC HEARING – October 11, 2021, 5:00 P.M.**

Proposal: Knutzen Engineering submitted a preliminary plat application to subdivide 14.76-acres into 138 lots, located at 9757 W Clearwater Ave. The Comprehensive Plan Designation for the site is Medium Density Residential. The site is zoned Residential, Medium Density (RM) and is subject to the Residential Design Standards. The file number is PP 21-02 / PLN-2021-01979.

Open Record Hearing: The City of Kennewick Hearing Examiner will conduct an open record hearing at **5:00 p.m. on October 11, 2021**. In response to the COVID-19 emergency, testimony will be taken online. To participate in the meeting, use the link found at www.go2kennewick.com/244/Hearing-Examiner.

Submitting Written Comments

- The City asks all members of the public that would like to comment regarding the Public Hearing to fill out an online form at <https://www.go2kennewick.com/244/Hearing-Examiner> no later than 5:00 p.m. on Friday, October 8th to be included in the Hearing Examiner packet for the record.
- Interested parties may also submit written comments to P.O. Box 6108, Kennewick, WA 99336; or e-mail matt.halitsky@ci.kennewick.wa.us no later than 5:00 p.m. on Friday, October 1st to be included in the Hearing Examiner packet for the record. Comments received after that date will be presented at the hearing.

Commenting at the Meeting

- If you wish to comment during the Public Hearing, please register at <https://www.go2kennewick.com/244/Hearing-Examiner>. Registrations must be received by 4:00 p.m. on Monday, October 11th.

Environmental Documents and/or Studies Applicable to this Proposal: A Determination of Non-significance, ED 21-26 / PLN-2021-01980 was issued on August 25, 2021.

Determination of Completeness: The application was determined complete on June 4, 2021 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 October 11, 2021.

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.

Matthew Halitsky, Planner

The City of Kennewick welcomes full participation in public meetings by all citizens and does not discriminate on the basis of disability, pursuant to the requirements of the American with Disabilities Act of 1990, pub. L 101-336. 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 the City of Kennewick, Matt Halitsky, Development Services Department at (509) 585-4361 or TDD (509) 585-4425 or through the Washington Relay Service Center TTY at #711 at least ten days prior to the date of the meeting to make arrangements for special needs.

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

W00000000

Publication Dates

[<< Click here to print a printer friendly version >>](#)



NOTIFICATION OF MAILING

I, Matt Havitsky, on Sept. 23, 20 21

Mailed 60 copies of Notice of Public Hearing w/ plat map
for PP 21-02

to property owners per list provided,

as shown on the attached list.

M. Havitsky
Signature

37
CALVARY CHAPEL OF TRI-CITIES
10611 W CLEARWATER AVE
KENNEWICK, WA 99338

37
JENNIFER N BULL
9502 W 5TH PL
KENNEWICK, WA 99336

37
DANIEL & SHERRY DENGATE
2527 S IRVING ST
KENNEWICK, WA 99338

37
THIHA MAUNG & SUKVIPAT
SOMRUDEE
313 WELLSIAN WAY
RICHLAND, WA 99352

37
KHMEES KORA
313 WELLSIAN WAY
RICHLAND, WA 99352

37
DODD DEVELOPMENT CO INC
1126 BRIDLE DR
RICHLAND, WA 99352

37
MICHELLE J CRUMBY
810 S YOLO ST
KENNEWICK, WA 99336

37
BRANDEN S DESPAIN
906 YOLO ST
KENNEWICK, WA 99336

37
BARBARA ANN SNEDIGAR
506 WYOMING ST
KENNEWICK, WA 99336

37
AUNG
313 WELLSIAN WAY
RICHLAND, WA 99352

37
PRO MADE CONSTRUCTION
6159 W DESCHUTES AVE STE 509
KENNEWICK, WA 99336

37
MATTHEW A CLAYBROOK
9508 5TH PL
KENNEWICK, WA 99336

37
MICHAEL D & LORAYNE R KILGORE
502 S YOLO ST
KENNEWICK, WA 99336

37
ANTHONY D MILEWSKI
602 S YOLO ST
KENNEWICK, WA 99336

37
MEILANI A BURROWS & CASEY R
ENGELHARD
700 S YOLO ST
KENNEWICK, WA 99336

37
JAROD S & CAROLYN R FRANKLIN
800 YOLO ST
KENNEWICK, WA 99336

37
DIXON3 PROPERTIES LLC
PO BOX 1777
BATTLEGROUND, WA 98604

37
DIXON3 PROPERTIES LLC
PO BOX 1777
BATTLEGORUND, WA 98604

37
CARMEN MARTINEZ
512 WYOMING STREET
KENNEWICK, WA 99336

37
JANE ROBISON
612 WYOMING STREET
KENNEWICK, WA 99336

37
LINDA M MEARNES
9424 W 5TH PL
KENNEWICK, WA 99336

37
JEREMY C JANSKY
9514 W 5TH PL
KENNEWICK, WA 99336

37
ISIDRO ZAVALA GARCIA
313 WELLSIAN WAY
RICHLAND, WA 99352

37
FIMIANA MOSESOVA
313 WELLSIAN WAY
RICHLAND, WA 99352

37
HEATHER K CRARY HUNZEKER
706 YOLO ST
KENNEWICK, WA 99336

37
PHYLLIS SMITH
806 YOLO ST
KENNEWICK, WA 99336

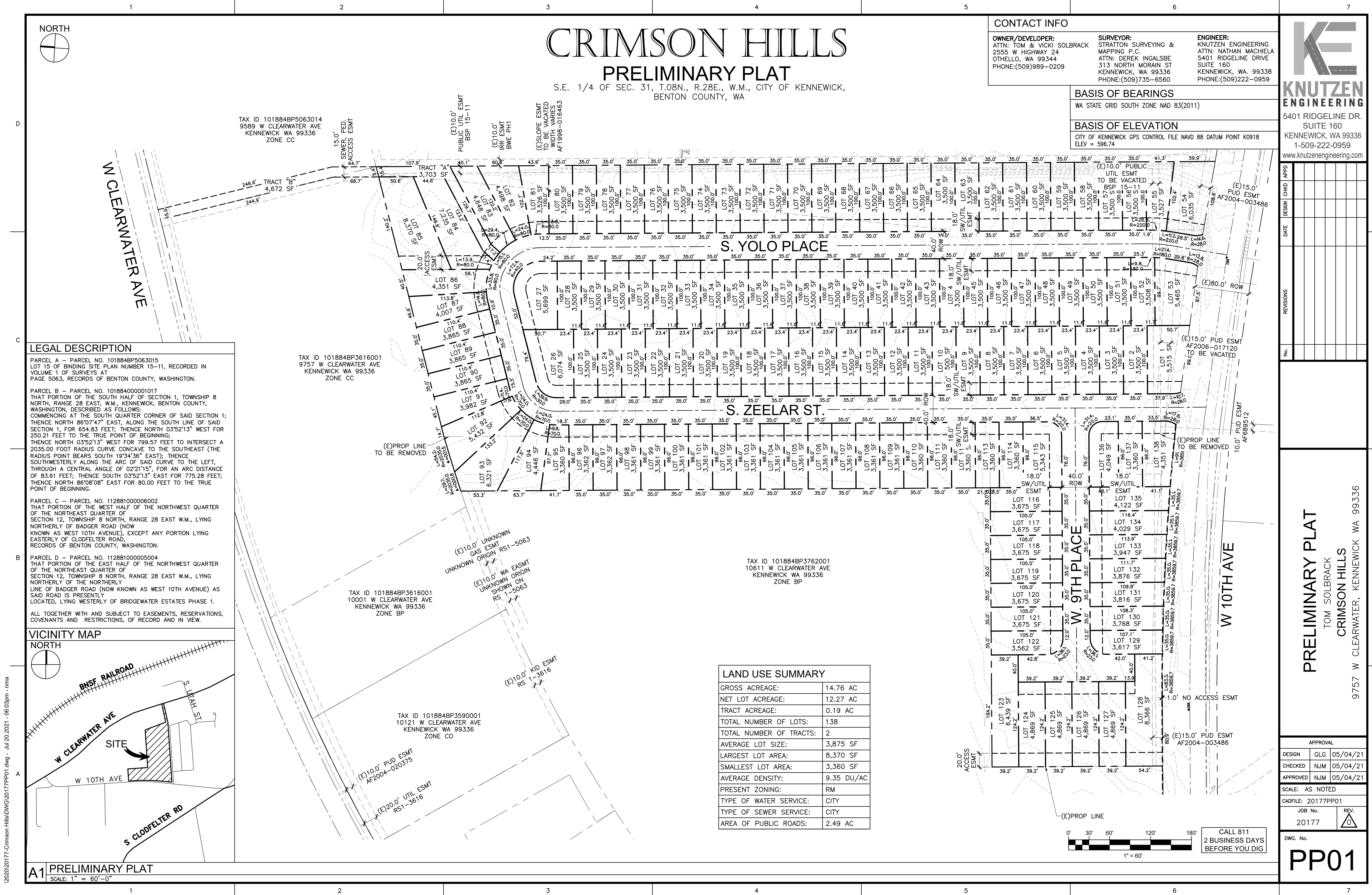
37
MARK R BAUDER
605 SUMMIT ST
RICHLAND, WA 99352

37
REBECCA SMITH-HICKEY
500 S WYOMING ST
KENNEWICK, WA 99336

37
KENNETH V WALTERS
600 S WYOMING ST
KENNEWICK, WA 99336

37
KYLE J & TAYLOR A MILLER
607 S YOLO STREET
KENNEWICK, WA 99336

37 ROBERT G & KARYN R ELLENBERGER 601 S YOLO ST KENNEWICK, WA 99336	37 GUY & SHIRLEY RICHARDS 509 S YOLO ST KENNEWICK, WA 99336	37 PSALM 121 LLC 28104 S 959 PR SE KENNEWICK, WA 99338
37 CHARLES & KARLA CALYBROOK 404 E 700 S RIVER HEIGHTS, UT 84321	37 TODD A VENDERHOOGT 707 S YOLO ST KENNEWICK, WA 99336	37 SHARON R VORPAGEL 713 S YOLO ST KENNEWICK, WA 99336
37 JOHNSON MELODY J PETERS 803 S YOLO ST KENNEWICK, WA 99336	37 TERRY L TURLEY 809 S YOLO ST KENNEWICK, WA 99336	37 BRENDA L NORDHAUS 9512 W 9TH PL KENNEWICK, WA 99336
37 JAMES A CASTLEBERRY 905 S YOLO ST KENNEWICK, WA 99336	37 SANTIAGO BRIDGEWATER ESTATES HOMEOWNERS ASSOC. PO BOX 11927 SANTA ANA, CA 92711	37 JON & JULIE WADDOUNS 1218 S WILLOWS PR KENNEWICK, WA 99338
37 BRENDA R EWING 774 S WYOMING ST KENNEWICK, WA 99336	37 RYAN S KELLEY 750 WYOMING ST KENNEWICK, WA 99336	37 SARAH E GIRARD 724 WYOMING ST KENNEWICK, WA 99336
37 GABRIELLE E & SHERI E REAB 702 S WYOMING STREET KENNEWICK, WA 99336	37 ASHLEY KENNEY 9505 W 9TH PLACE KENNEWICK, WA 99336	37 DAVID W & ELENA VANDYKE 9511 W 9TH PL KENNEWICK, WA 99336
37 AMANDA A STRAWICK 6061 SELPH LANDING RD PASCO, WA 99301	37 JOSEPH GREEN, ET AL 838 WYOMING STREET KENNEWICK, WA 99336	37 SUSAN C SCHWARTZ 874 S WYOMING ST KENNEWICK, WA 99336
37 NATHAN G & TRISHELL M MARPLE 856 S WYOMING STREET KENNEWICK, WA 99336	37 SCOTT & DENISE A HOWELL 6804 FRANKLIN COURT PASCO, WA 99301	37 HOME BUILDERS ASSOCIATION OF TRICITIES 10001 W CLEARWATER AVE KENNEWICK, WA 99336
37 CLA HOLDINGS LLC 2137 KIMBERLY CIR EUGENE, OR 97405	37 TOM & VICKI L SOLBRACK 2555 W HWY 24 OTHELLO, WA 99344	37 3M INVESTMENTS LLC PO BOX 7204 KENNEWICK, WA 99336
37 JULIA A STEFFLER 10005 W 10TH AVE KENNEWICK, WA 99336	37 AUSTIN J & JENNIFER C REGIMBAL 917 S YOLO ST KENNEWICK, WA 99336	37 CROSKREY PROPERTIES LLC 1915 SHERIDAN PLACE RICHLAND, WA 99352



PRELIMINARY PLAT
TOM SOLBRACK
CRIMSON HILLS

9757 W CLEARWATER, KENNEWICK WA 99336

APPROVAL		
DESIGN	GLG	05/04/21
CHECKED	NJM	05/04/21
APPROVED	NUM	05/04/21

SCALE: AS NOTED

CADFILE: 20177PP01

JOB No.	REV.
20177	0

DWG. No.

PP01

CRIMSON HILLS

PRELIMINARY PLAT
S.E. 1/4 OF SEC. 31, T.08N., R.28E., W.M., CITY OF KENNEWICK,
BENTON COUNTY, WA

CONTACT INFO

OWNER/DEVELOPER:
ATTN: TOM & VICKI SOLBRACK
2555 W HIGHWAY 24
OTHELLO, WA 99344
PHONE:(509)989-0209

SURVEYOR:
STRATTON SURVEYING &
MAPPING P.C.
ATTN: DEREK INGALSBE
313 NORTH MORAIN ST
KENNEWICK, WA 99336
PHONE:(509)735-6560

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

BASIS OF BEARINGS

WA STATE GRID SOUTH ZONE NAD 83(2011)

BASIS OF ELEVATION

CITY OF KENNEWICK GPS CONTROL FILE NAVD 88 DATUM POINT K0918
ELEV = 596.74

LAND USE SUMMARY

GROSS ACREAGE:	14.24 AC
NET LOT ACREAGE:	12.22 AC
NET TRACT ACREAGE:	0.03 AC
TOTAL NUMBER OF LOTS:	141
AVERAGE LOT SIZE:	3774 SF
LARGEST LOT AREA:	7597 SF
SMALLEST LOT AREA:	3154 SF
AVERAGE DENSITY:	9.90
PRESENT ZONING:	RM
TYPE OF WATER SERVICE:	CITY
TYPE OF SEWER SERVICE:	CITY
AREA OF PUBLIC ROADS:	2.57 AC

LEGAL DESCRIPTION

PARCEL A – PARCEL NO. 101884BP5063015
LOT 15 OF BINDING SITE PLAN NUMBER 15-11,
RECORDED IN VOLUME 1 OF SURVEYS AT
PAGE 5063, RECORDS OF BENTON COUNTY,
WASHINGTON.

PARCEL B – PARCEL NO. 101884000001017
THAT PORTION OF THE SOUTH HALF OF SECTION 1,
TOWNSHIP 8 NORTH, RANGE 28 EAST, W.M.,
KENNEWICK, BENTON COUNTY, WASHINGTON, DESCRIBED
AS FOLLOWS:
COMMENCING AT THE SOUTH QUARTER CORNER OF
SAID SECTION 1; THENCE NORTH 86°07'47" EAST,
ALONG THE SOUTH LINE OF SAID SECTION 1, FOR
654.83 FEET; THENCE NORTH 03°52'13" WEST FOR
250.21 FEET TO THE TRUE POINT OF BEGINNING;
THENCE NORTH 03°52'13" WEST FOR 799.57 FEET TO
INTERSECT A 2035.00 FOOT RADIUS CURVE CONCAVE
TO THE SOUTHEAST (THE RADIUS POINT BEARS SOUTH
19°34'36" EAST); THENCE SOUTHWESTERLY ALONG THE
ARC OF SAID CURVE TO THE LEFT, THROUGH A
CENTRAL ANGLE OF 02°21'15", FOR AN ARC DISTANCE
OF 83.61 FEET; THENCE SOUTH 03°52'13" EAST FOR
775.28 FEET; THENCE NORTH 86°08'08" EAST FOR
80.00 FEET TO THE TRUE POINT OF BEGINNING.

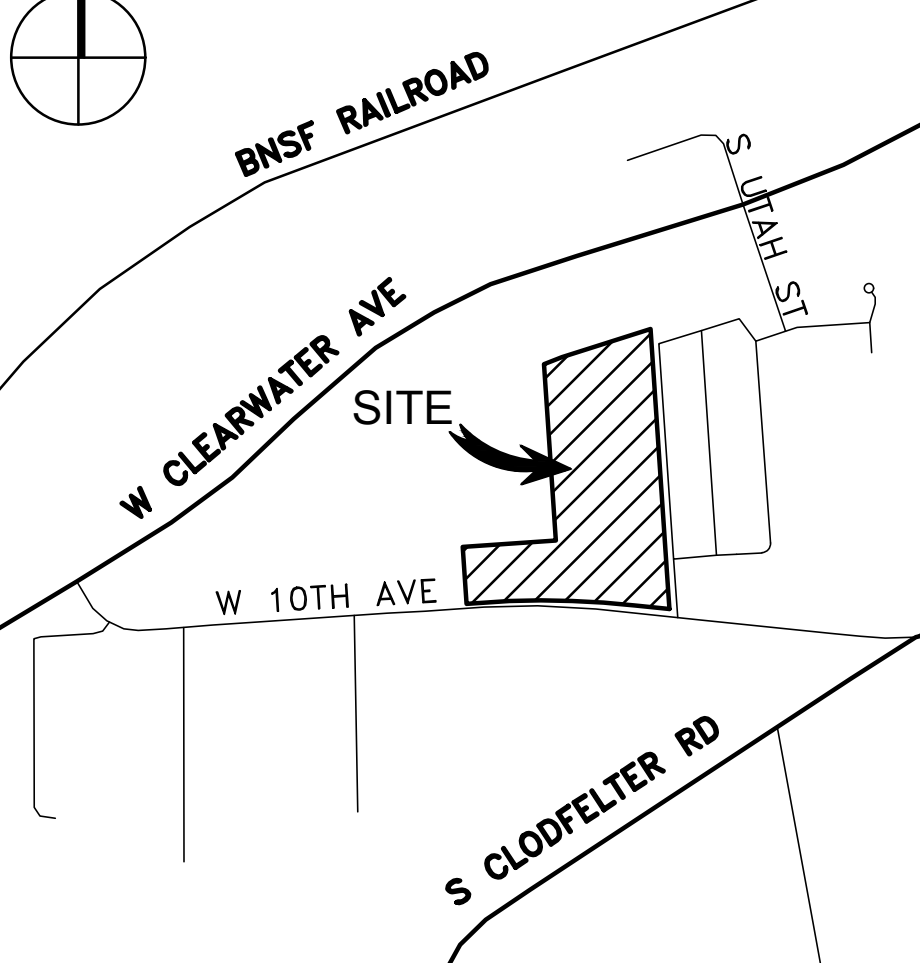
PARCEL C – PARCEL NO. 112881000006002
THAT PORTION OF THE WEST HALF OF THE NORTHWEST
QUARTER OF THE NORTHEAST QUARTER OF
SECTION 12, TOWNSHIP 8 NORTH, RANGE 28 EAST
W.M., LYING NORTHERLY OF BADGER ROAD (NOW
KNOWN AS WEST 10TH AVENUE), EXCEPT ANY PORTION
LYING EASTERLY OF CLODFELTER ROAD,
RECORDS OF BENTON COUNTY, WASHINGTON.

PARCEL D – PARCEL NO. 112881000005004
THAT PORTION OF THE EAST HALF OF THE NORTHWEST
QUARTER OF THE NORTHEAST QUARTER OF
SECTION 12, TOWNSHIP 8 NORTH, RANGE 28 EAST
W.M., LYING NORTHERLY OF THE NORTHERLY
LINE OF BADGER ROAD (NOW KNOWN AS WEST 10TH
AVENUE) AS SAID ROAD IS PRESENTLY
LOCATED, LYING WESTERLY OF BRIDGEWATER ESTATES
PHASE 1.

ALL TOGETHER WITH AND SUBJECT TO EASEMENTS,
RESERVATIONS, COVENANTS AND RESTRICTIONS, OF
RECORD AND IN VIEW.

VICINITY MAP

NORTH



**KNUTZEN
ENGINEERING**

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

DESIGN	CHKD	APPD
DATE		
REVISIONS		
No.		

PRELIMINARY PLAT

TOM SOLBRACK
CRIMSON HILLS
9757 W CLEARWATER, KENNEWICK WA 99336

APPROVAL		
DESIGN	GLG	05/04/21
CHECKED	NJM	05/04/21
APPROVED	NJM	05/04/21

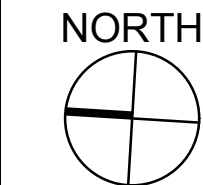
SCALE: AS NOTED

CADFILE: 20177PP01

JOB No.
20177

DWG. No.

PP01



TAX ID 101884BP5063014
9589 W CLEARWATER AVE
KENNEWICK WA 99336
ZONE CC

TAX ID 101884BP3616001
9757 W CLEARWATER AVE
KENNEWICK WA 99336
ZONE CC

TAX ID 101884BP3616001
10001 W CLEARWATER AVE
KENNEWICK WA 99336
ZONE BP

W CLEARWATER AVE

PRELIMINARY PLAT

SCALE: 1" = 60'-0"

KMC 17.20.010(2)(a) – Streets greater than 1,200 feet in continuous uninterrupted length will need traffic calming measure. Provide adequate right of way for traffic calming device.

Per KMC 17.20.010(3)(b), streets greater than 600 feet in continuous uninterrupted length will need a marked mid-block pedestrian crossing for the street

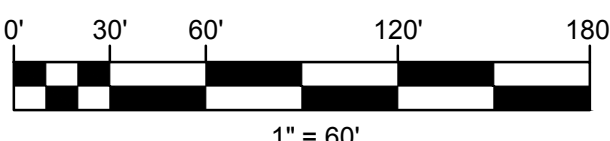
TAX ID 101884BP3762001
10611 W CLEARWATER AVE
KENNEWICK WA 99336
ZONE BP

Please note that the face of curb radius is 25' minimum. Provide civil drawing showing that the 25' minimum radius can be constructed.

W 10TH AVE

Provide radius information

CALL 811
2 BUSINESS DAYS
BEFORE YOU DIG





August 4, 2021

Sorin Juster, PE, PTOE – Transportation Manager
City of Kennewick, Public Works Department
PO Box 6108
Kennewick, Washington 99336-0108

Via email: Sorin.Juster@ci.kennewick.wa.us

Regarding: Trip Accounting Update
Clearwater Commercial Binding Site Plan, Lot 16A (Crimson Hills)
9757 W Clearwater Avenue
Kennewick, Washington
PBS Project 71662.000

Dear Mr. Juster:

This trip accounting letter is an updated version to the trip accounting letter dated June 4, 2021, that was submitted to the City of Kennewick (City). The June 4, 2021, letter was updated to include turn lane analysis at the proposed accesses on 10th Avenue per City's request. This trip accounting letter estimates the number of trips generated by the proposed Crimson Hills subdivision on Lot 16A of the Clearwater Commercial Binding Site Plan (BSP) development and analyzes the two site accesses for the need of any turn lanes.

This letter supports the condition of approval for the Crimson Hills Preliminary Plat application to the City, and it documents the status of the vested trips for the overall Clearwater Commercial BSP development.

The Crimson Hills development proposes 138 dwelling units of townhome duplex units on Lot 16A of the Clearwater Commercial BSP development. See Figure 1 for site plan and vicinity map for the Crimson Hills development. The Clearwater Commercial BSP trip accounting is based on the February 17, 2016, "Clearwater Commercial Binding Site Plan" traffic impact analysis report by the former HDJ Design Group (now PBS). This trip accounting subtracts the Crimson Hills trips from the total project trips.

TRIP GENERATION FOR CRIMSON HILLS

Trip generation estimates for the proposed Crimson Hills subdivision are based on multifamily housing" (Low-Rise), land use code 220, from the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition (2017). The average daily trips (ADT), weekday AM peak hour trips, and weekday PM peak hour trips are noted in Table 1. Detailed trip generation calculations are attached.

Table 1. Trip Generation for Crimson Hills Subdivision

Land Use (ITE Code)	Multifamily Housing (Low-Rise)		
Independent Variable	Dwelling Units		
Size	138		
Peak Hour Trips	ADT	AM	PM
Entering	501	15	50
Exiting	501	50	29
Total (Unadjusted)	1002	65	79

At full build-out, the Crimson Hills project is anticipated to generate 1,002 average daily weekday trips, including 65 new vehicle trips during the AM peak hour, and 79 new trips during the PM peak hour, which will be subtracted from the original trip allocation in the trip accounting below.

CLEARWATER COMMERCIAL BINDING SITE PLAN TRIP ACCOUNTING

The original land use assumption on Lot 16A of the Clearwater Commercial BSP was a 111,460 square foot medical dental office building. The Crimson Hills development proposes 138 dwelling units of multi-family housing on Lot 16A. Table 2 provides accounting for available trips remaining on Lot 16A of the Clearwater Commercial BSP. The original site plan and land use assumptions are attached along with detailed trip generation calculations of the original land use assumption.

Table 2. Lot 16A of Clearwater Commercial Binding Site Plan Trip Accounting

Trip Accounting Element (Applicable Document Date)	Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
		Total	In	Out	Total	In	Out
Original Land Use Assumption on Lot 16A: Medical Dental Office Building (February 18, 2016)	4,027	276	218	58	415	112	303
Currently Proposed on Lot 16A: Crimson Hills Subdivision (July 12, 2021)	<i>(1002)</i>	<i>(65)</i>	<i>(15)</i>	<i>(50)</i>	<i>(79)</i>	<i>(50)</i>	<i>(29)</i>
Net New Trips Available on Lot 16A	3025	211	203	8	336	62	274

Note: negative values are shown italicized in parentheses.

Following the development of Crimson Hills subdivision, Lot 16A of the Clearwater Commercial BSP will have 3,025 daily trips, 211 AM peak hour trips, and 336 PM peak hour trips remaining available.

Table 3 provides an accounting for available trips remaining for the Clearwater Commercial BSP. Detailed trip generation calculations of the overall original Clearwater Commercial BSP are attached.

Table 3. Overall Clearwater Commercial Binding Site Plan Trip Accounting

Trip Accounting Element (Applicable Document Date)	Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
		Total	In	Out	Total	In	Out
Original Clearwater Commercial Binding Site Plan Trip Vesting (February 18, 2016)	37,569	3,734	2,116	1,618	1,903	771	1,132
Currently Proposed on Lot 16A: Crimson Hills Subdivision (July 12, 2021)	(1002)	(65)	(15)	(50)	(79)	(50)	(29)
Remaining Available Trips	36,567	3,669	2101	1,568	1,824	721	1,103

Note: negative values are shown italicized in parentheses.

Following the development of Crimson Hills subdivision, the Clearwater Commercial BSP will have 36,567 daily trips, 3,669 AM peak hour trips, and 1,824 PM peak hour trips remaining available for future development on other lots.

TRIP DISTRIBUTION FOR CRIMSON HILLS

The proposed trip distribution of new trips from Crimson Hills is based on the City's direction. The proposed trip distribution pattern is as follows:

- 60% to and from the west of the proposed development, along 10th Avenue
- 40% to and from the east of the proposed development, along 10th Avenue

The distribution pattern above represents an external distribution of Crimson Hills project trips entering and exiting the study area. The distribution and assignment of the primary trips generated by the Crimson Hills project are shown on Figure 2.

The internal distribution was estimated using the location of dwelling units and proximity to the proposed site accesses. See Figure 3 for internal distribution methodology.

LEFT- AND RIGHT-TURN LANE WARRANTS

The criteria for left- or right-turn lane according to the City of Kennewick's administrative code (KAC 13-46-050(1)) is as follows:

Any commercial, industrial or high density residential access with projected traffic volume of more than 1,000 vehicles per day and/or if the entering turning movement(s) exceeds 50 per hour during a typical peak traffic period, then the access must normally be designed with a separate right-turn deceleration and/or left-turn deceleration lane(s) to allow an entering passenger design vehicle turning speed of 15 mph (20 km/h) to help reduce interference with through street traffic.

The access to the site is divided up between two intersections with none meeting the 1,000 vehicles per day and/or 50 vehicles entering per hour criteria for left- or right-turn lanes based on the volume of traffic from the Crimson Hills development. See Figure 2 for right-turn and left-turn volumes into Crimson Hills Development.

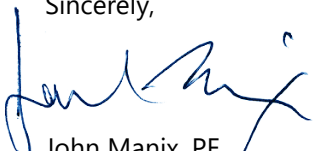
Sorin Juster
Crimson Hills Trip Accounting Update
August 4, 2021
Page 4 of 4

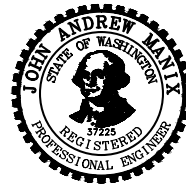
Based on the minor arterial roadway classification on W 10th Avenue, a two-way left-turn lane (TWLTL) along the frontage was evaluated. With the closely spaced intersections and driveways, a TWLTL is recommended from the future alignment of W 10th Avenue to S Yolo Street.

CLOSING

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

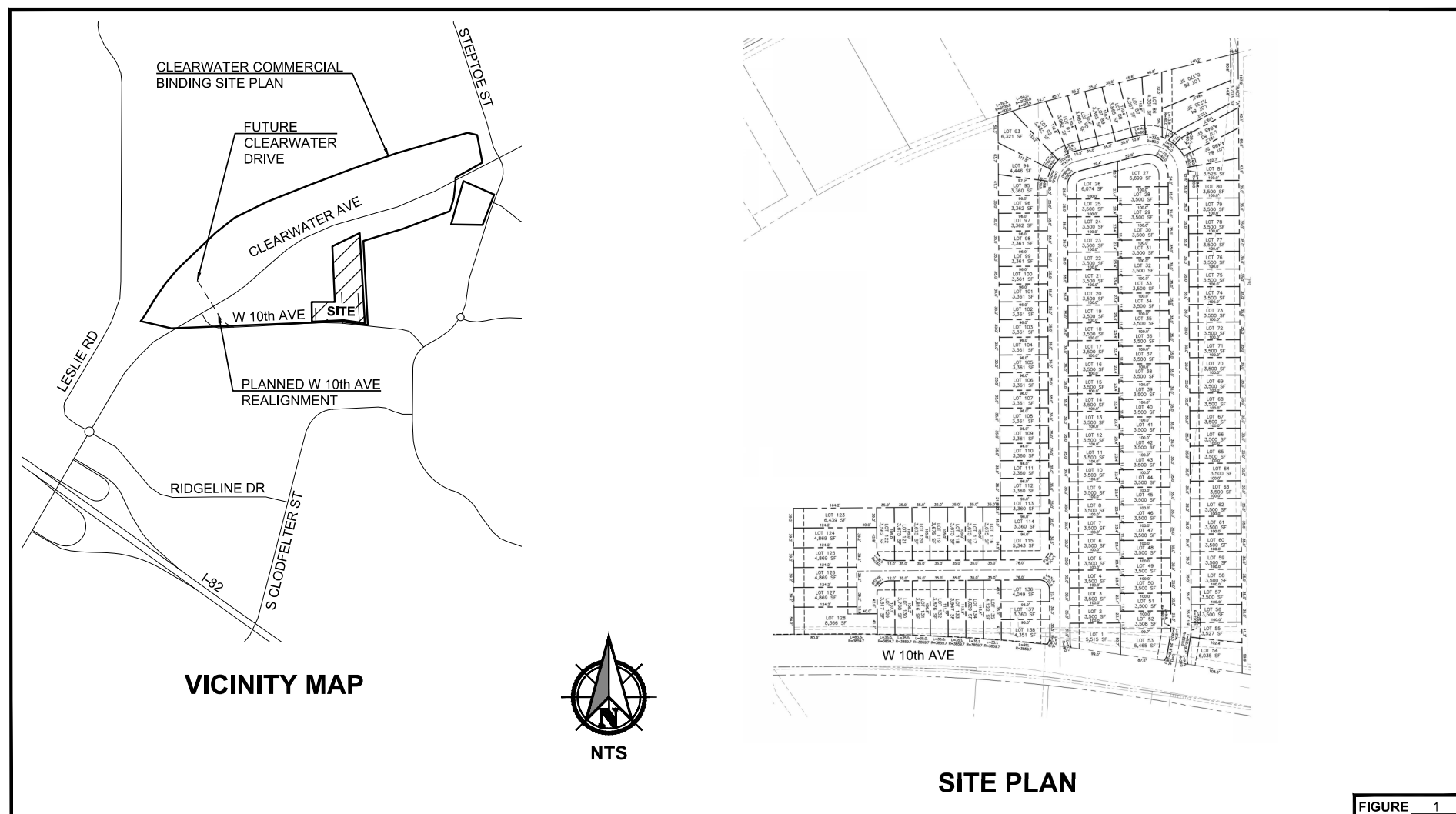
Sincerely,


John Manix, PE
Senior Traffic Engineer

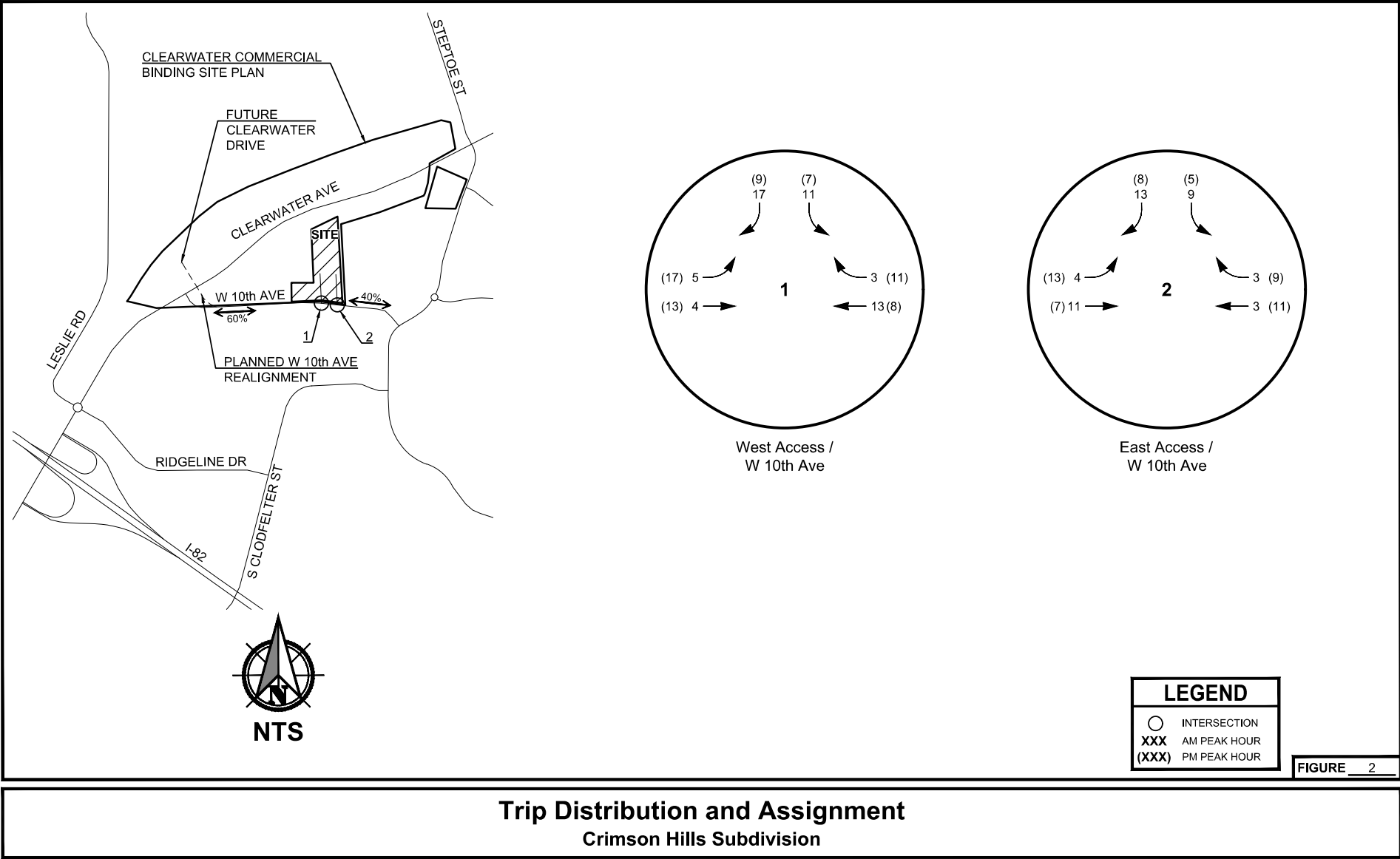


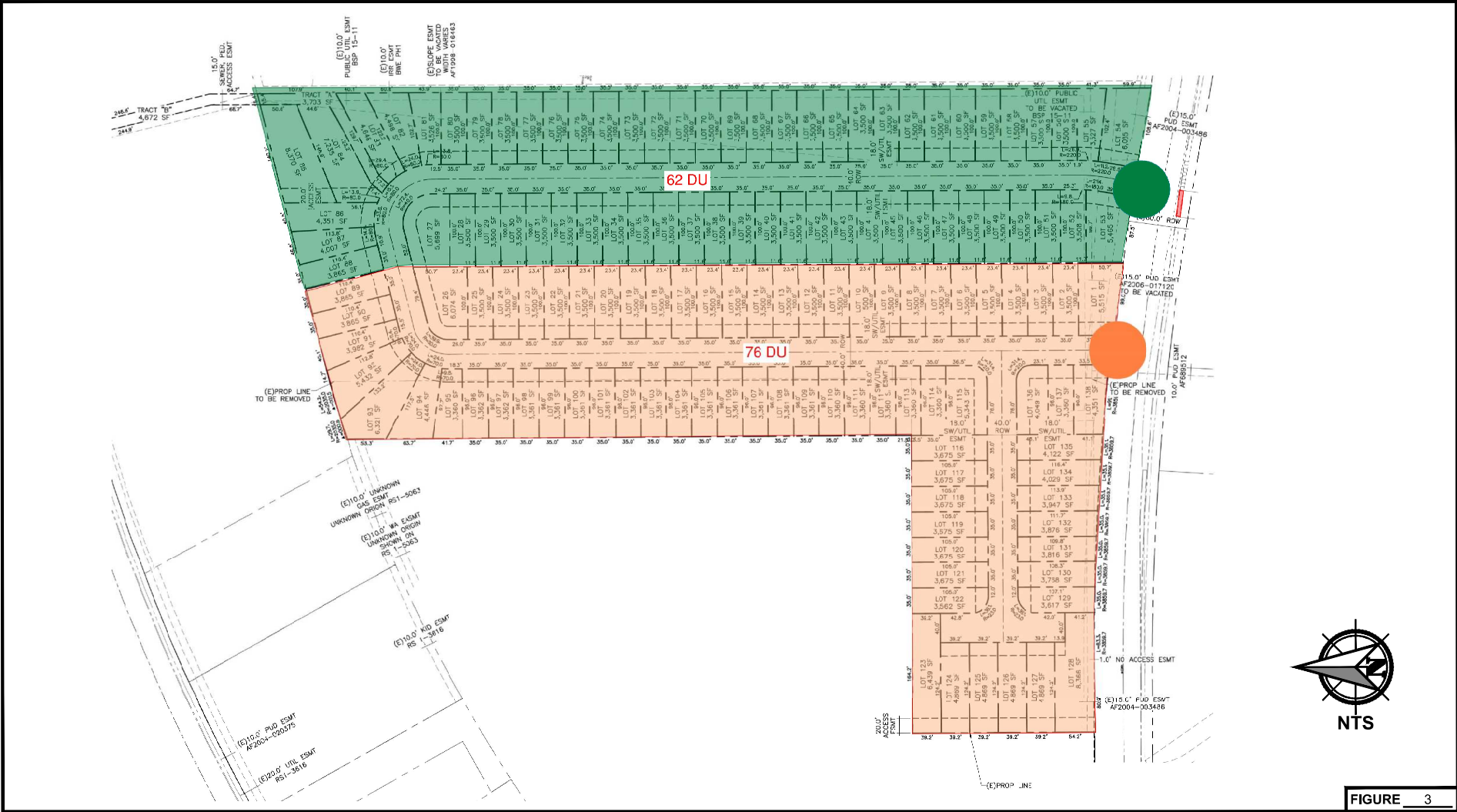
Attachments: Figure 1 Vicinity map and site plan
Figure 2 Trip distribution and assignment
Figure 3 Internal Trip Distribution
Crimson Hills Trip generation calculations
Clearwater Commercial Binding Site Plan
Clearwater Commercial BSP Land Use Assumptions
Clearwater Commercial BSP Lot 16A Trip generation calculations
Overall Clearwater Commercial BSP Trip generation calculations

BJ:JAM:mo



Vicinity Map and Site Plan
Crimson Hills Subdivision





Internal Trip Distribution
Crimson Hills Subdivision

Trip Generation Summary

Alternative: Alternative 1

Phase:

Open Date: 7/26/2021

Project: Crimson Hills

Analysis Date: 7/26/2021

ITE	Land Use	Weekday Average Daily Trips				Weekday AM Peak Hour of Adjacent Street Traffic				Weekday PM Peak Hour of Adjacent Street Traffic			
		*	Enter	Exit	Total	*	Enter	Exit	Total	*	Enter	Exit	Total
220	LOW-RISE 1		501	501	1002		15	50	65		50	29	79
	138 Dwelling Units												
Unadjusted Volume			501	501	1002		15	50	65		50	29	79
Internal Capture Trips			0	0	0		0	0	0		0	0	0
Pass-By Trips			0	0	0		0	0	0		0	0	0
Volume Added to Adjacent Streets			501	501	1002		15	50	65		50	29	79

Total Weekday Average Daily Trips Internal Capture = 0 Percent

Total Weekday AM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

Total Weekday PM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

* - Custom rate used for selected time period.

Source: Institute of Transportation Engineers, Trip Generation Manual 10th Edition

TRIP GENERATION 10, TRAFFICWARE, LLC

Detailed Land Use Data
 For 138 Dwelling Units of LOW-RISE 1
 (220) Multifamily Housing (Low-Rise)

Project: Crimson Hills

Open Date: 7/26/2021
 Analysis Date: 7/26/2021

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Trip Generation Manual 10th Edition	1002	0	7.32	4.45	10.97	1.31	168	50	50	True	$T = 7.56(X) - 40.86$	0.96
Weekday AM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 10th Edition	65	0	0.46	0.18	0.74	0.12	199	23	77	True	$\ln(T) = 0.95 \ln(X) - 0.51$	0.9
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 10th Edition	79	0	0.56	0.18	1.25	0.16	187	63	37	True	$\ln(T) = 0.89 \ln(X) - 0.02$	0.86

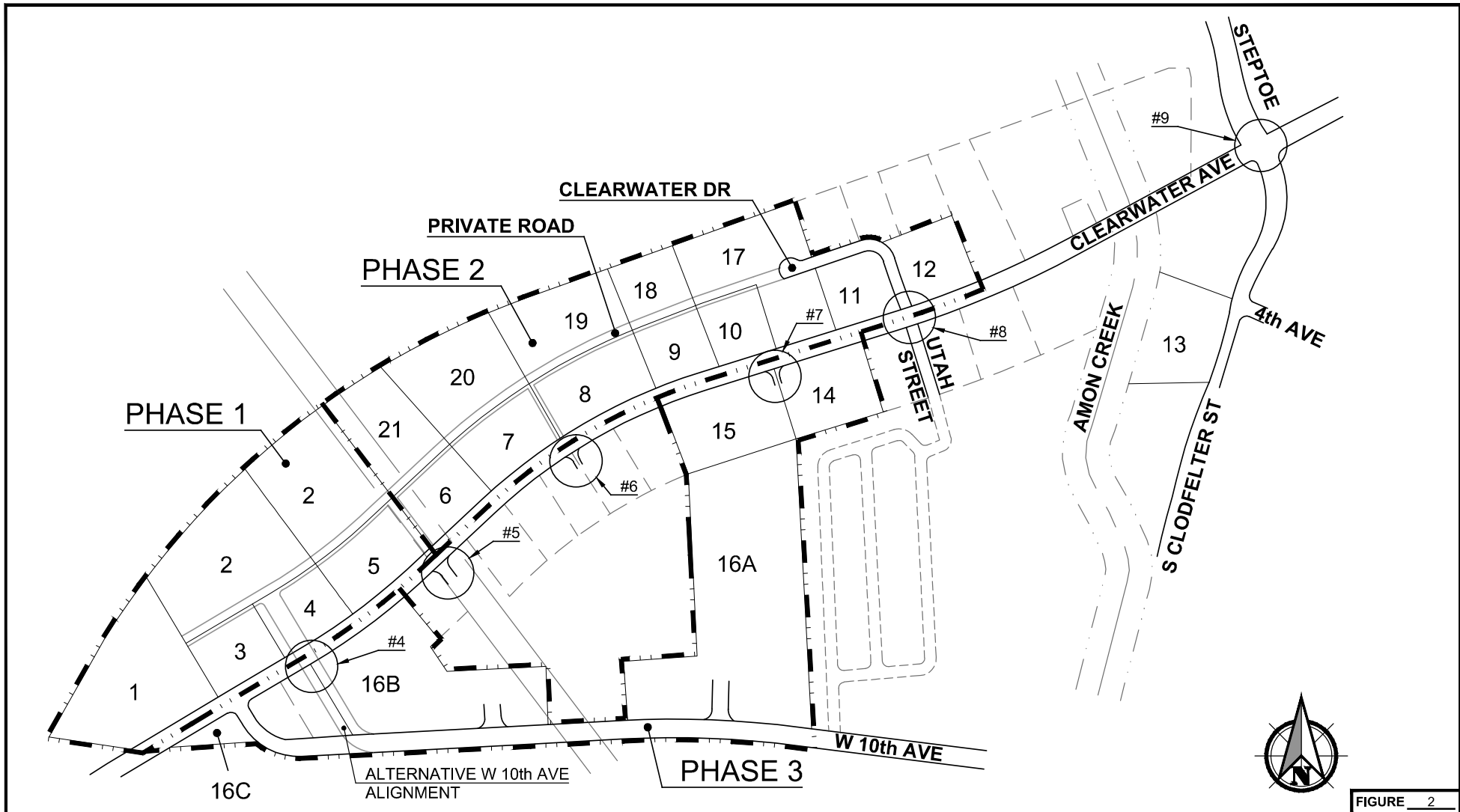


FIGURE 2



8115 Burden Blvd, Suite E
 Phoenix, AZ 85031-0903
 506/847-8119
 303/985-3488
 506/847-8120 fax
 Internet: www.hdjg.com

Site Plan

Clearwater Commercial Binding Site Plan

Clearwater Commercial Binding Site Plan - Trip Generation

Land use assumption for reasonable best and highest land use.

Lot #	Lot SF	Assumed Building SF	% applied	Assumed use
1,2,3 and 4	725,620	145,124	20%	Big Box
2	223,323	40,198	18%	Grocery
5	119,549	21,519	18%	Retail
6	93,380	14,941	16%	Fast Food
7	107,711	19,388	18%	Retail
8	137,852	24,813	18%	Retail
9	84,554	13,529	16%	Retail
10	86,675	13,868	16%	Retail
11	72,143	11,543	16%	Fast Food
12	86,871	13,899	16%	Fast Food
13	84,646	13,543	16%	Office
14	125,513	22,592	18%	Restaurant
15	182,579	32,864	18%	Retail
16A	557,276	111,455	20%	MOB
16B	348,963	62,813	18%	MOB
16C	26,020	4,163	16%	MOB
17	147,623	26,572	18%	Office
18	82,405	13,185	16%	Office
19	163,184	29,373	18%	Office
20	187,790	33,802	18%	Office
21	149,099	26,838	18%	Office

ITE Trip Generation

Trip Generation Based on Weighted Average Rates

HDJ Design Group

General			
Land Use Code	Medical Dental Office Bldg (sf)		
Independent Variable	1,000 Sq Ft		
Size (X)		111.46	
Land Use Code		720	

Date: 10/22/2015 Analyst: Sharar Project: Clearwater Commercial

	In	Out	Total
Average Weekday	2,014	2,014	4,027
New Trips	2,014	2,014	4,027
Weekday AM Peak	218	58	276
New Trips	218	58	276
Weekday PM peak	112	303	415
New Trips	112	303	415

Per Trip Generation Manual, 9th Edition for 111,455 sq building - Lot 16A

Analysis Period	Weekday		
Average Rate	Rate		Trips
	36.13		4027
Entering / Exiting			
% Entering	50%		2014
% Exiting	50%		2014
New Trips			
% internal	0		
% pass by	0		
		In	Out
Total Trips		2014	2014
Internal Trips		0	0
Passby Trips	0	0	0
New Trips		2014	2014

Analysis Period	Weekday AM Peak for adjacent streets		
Average Rate	Rate		Trips
	2.48		276
Entering / Exiting			
% Entering	79%		218
% Exiting	21%		58
New Trips			
% internal	0		
% pass by	0		
		In	Out
Total Trips		218	58
Internal Trips		0	0
Passby Trips		0	0
New Trips		218	58

Analysis Period	Weekday PM peak for adjacent streets		
Average Rate	Rate		Trips
	3.72		415
Entering / Exiting			
% Entering	27%		112
% Exiting	73%		303
New Trips			
% internal	0		
% pass by	0		
		In	Out
Total Trips		112	303
Internal Trips		0	0
Passby Trips		0	0
New Trips		112	303

Clearwater Commercial Binding Site Plan - Trip Generation

Trip Generation by land

Lot #	Lot SF	Percent Lot covered	Building SF	Assumed use	Land Use Code	ADT	AM Peak	PM Peak	PM Peak Trips in	PM Peak Trips out	Internal Capture		Pass-by			Net Total	
											Internal Capture reduction of 22% - In	Internal Capture reduction of 22% - Out	ITE Percent reduction in PM due to Pass-by Trips	PM Pass-by entering	PM Pass-by exiting	Net PM In	Net PM out
1,2,3 and 4	725,620	0.2	145,124	Big Box	862	4,457	216	338	166	172	129	134	48%	62	64	67	70
2	223,323	0.18	40,198	Grocery	850	4,110	137	381	194	187	151	146	36%	54	53	97	93
5	119,549	0.18	21,519	Retail	826	954	147	58	26	33	20	26				20	26
6	93,380	0.16	14,941	Fast Food	934	739	679	489	254	235	198	183	50%	99	92	99	92
7	107,711	0.18	19,388	Retail	826	859	133	53	23	29	18	23				18	23
8	137,852	0.18	24,813	Retail	826	1,100	170	67	30	38	23	30				23	30
9	84,554	0.16	13,529	Retail	826	600	93	37	16	21	12	16				12	16
10	86,675	0.16	13,868	Retail	826	615	95	38	17	21	13	16				13	16
11	72,143	0.16	11,543	Fast Food	934	5,725	524	377	196	181	153	141	50%	76	71	76	71
12	86,871	0.16	13,899	Fast Food	934	6,896	631	455	236	218	184	170	50%	92	85	92	85
13	84,646	0.16	13,543	Office	710	149	21	20	3	17						3	17
14	125,512	0.18	22,592	Restaurant	921	2,022	18	169	112	56	88	44	44%	50	25	38	19
15	182,579	0.18	32,864	Retail	826	1,456	225	89	39	50	30	39				30	39
16A	557,276	0.2	111,455	MOB	720	4,027	276	415	112	303	87	236				87	236
16B	348,963	0.18	62,813	MOB	720	2,269	156	234	63	171						63	171
16C	26,020	0.16	4,163	MOB	720	150	10	15	4	11						4	11
17	147,623	0.18	26,572	Office	710	293	41	40	7	33	5	26				5	26
18	82,405	0.16	13,185	Office	710	145	21	20	3	16	2	12				2	12
19	163,184	0.18	29,373	Office	710	324	46	44	7	36	5	28				5	28
20	187,790	0.18	33,802	Office	710	373	53	50	9	33	7	26				7	26
21	149,099	0.18	26,838	Office	710	296	42	40	7	33	5	26				5	26
			696,024			37,569	3,734	3,429	1,525	1,894						771	1,132

Net Total Trips

1,903



July 15, 2021

Sorin Juster, PE, PTOE, Transportation Manager
 City of Kennewick, Public Works Department
 PO Box 6108
 Kennewick, Washington 99336-0108

Via email: Sorin.Juster@ci.kennewick.wa.us

Regarding: Right-Turn Lane Evaluation
 Traffic Signal Design
 Intersection of 10th Avenue and Clearwater Avenue
 Kennewick, Washington
 PBS Project 71662.000

Dear Mr. Juster:

This letter provides the right-turn lane evaluation requested in our May 25, 2021, teleconference meeting. The evaluation results inform the intersection design and traffic signal layout at the realigned 10th Avenue / Clearwater Avenue intersection that is required as part of the Clearwater Commercial Development Agreement.¹

PROJECT DESCRIPTION

10th Avenue will be realigned to intersect Clearwater Avenue approximately 630 feet northeast of its current intersection. In the near term, the minor street approach (10th Avenue) will remain stop-controlled. When the Clearwater Commercial site generates at least 150 exiting trips through a new fourth approach to the intersection,² or when the traffic signal warrants are met,³ whichever occurs first, then the new intersection will be signalized. This project was previously contemplated:

- As project 112A within the Safe Clearwater Access Management Plan;⁴
- As projects 4.1.2 and 4.1.3 within the Clearwater Commercial Development Agreement; and
- As part of project 1 within the City of Kennewick's (City) 2021–2026 Transportation Improvement Plan (TIP).⁵

The preliminary intersection layout is attached for reference.

Both the eastbound and westbound approaches of Clearwater Avenue will provide separate lanes for left- and right-turning vehicles, preserving two lanes exclusively for through traffic.

¹ Kennewick City Clerk. (December 19, 2017). *Development Agreement for Clearwater Commercial Binding Site Plan, 2017-037197 AGR*.

² Per section 4.3.1 of the Clearwater Commercial Development Agreement.

³ Per correspondence with City staff.

⁴ Transpo Group and MacKay Sposito. (September 2014). *Safe Clearwater Access Management Plan – Leslie Road to US 395*.

⁵ City of Kennewick. (no date). *Transportation Improvement Plan 2021–2026*.

Both the future private road access (herein referred to as Clearwater Drive) and the realigned and widened 10th Avenue approach will provide a left-turn lane refuge; the focus of this evaluation is whether right-turn lane refuges are merited on either approach.

RIGHT-TURN LANE CRITERIA

Based on our meeting, three published resources are to be referenced for right-turn lane criteria: the Kennewick Administrative Code (KAC),⁶ the American Association of State Highway and Transportation Officials (AASHTO) policy,⁷ and the Washington State Department of Transportation (WSDOT) *Design Manual*.⁸

City of Kennewick

KAC 13-46-040 (Applicability) indicates, in part:

The guidelines set forth in this chapter will apply to all arterial and collector streets, and to all commercial, industrial and high density residential zoned areas obtaining access from arterial, collector or local streets.

KAC 13-46-050 (Performance Standards) indicates, in part:

The following performance standards shall normally be adhered to when designing, installing or modifying any direct access driveway:

(1) Any commercial, industrial or high density residential access with projected traffic volume of more than 1,000 vehicles per day and/or if the entering turning movement(s) exceeds 50 per hour during a typical peak traffic period, then the access must normally be designed with a separate right-turn deceleration and/or left-turn deceleration lane(s) to allow an entering passenger design vehicle turning speed of 15 mph (20 km/h) to help reduce interference with through street traffic.

Taken together, and given the volumes anticipated for the Clearwater Commercial development, these two citations clearly require that turn lanes be provided for traffic entering the development from both westbound Clearwater Avenue (making a right turn) and eastbound Clearwater Avenue (making a left turn). As noted previously, both these turn lanes are included in the intersection design.

The 10th Avenue and Clearwater Drive approaches will be either stop-controlled (in the near term) or signalized (in the long term). The Clearwater Drive approach will serve trips exiting the development, not entering. The 10th Avenue approach will serve some entering trips, yet these will be traveling straight across the intersection, not turning. Therefore, these KAC citations and their numerical thresholds do not apply to the 10th Avenue or Clearwater Drive approaches.

Even if the 50-vehicle threshold were applied, none of the volume sets evaluated later in this letter noted more than 45 northbound right-turning vehicles. Although the southbound approach clearly has more than 50 vehicles turning right in each volume set, Clearwater Drive is a low-speed private roadway for local commercial traffic where a right-turn lane would have little benefit.

⁶ City of Kennewick Public Works Department. (no date). *Kennewick Administrative Code* (KAC), Chapter 13-46.

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

⁸ Washington State Department of Transportation (WSDOT). (September 2020). *WSDOT Design Manual M 22-01.19*.

Notably, the KAC 13-46-050 citation indicates that the purpose of providing turn lanes is to reduce interference with through street traffic, and the northbound and southbound through movements are among the lowest-volume movements at the intersection, again demonstrating the negligible benefit of adding right-turn lanes.

American Association of State Highway and Transportation Officials

The AASHTO policy does not provide clear criteria or conditions for installation of turn lanes; however, it does include the following citations.

Chapter 6.3.5

Designing for peak flows of motorized travel may compromise the usability of the intersection for other transportation modes throughout the day.

Chapter 9.1

(Intersection) design criteria should be selected that will result in a balanced and cost-effective design that provides anticipated efficient operations and low crash frequencies, and considers the needs of all user groups. Design criteria should also meet mobility, environmental, scenic, aesthetic, cultural, natural resource, and community needs to the extent practicable.

These two AASHTO citations recommend balancing the intersection design for the benefit of all users and all travel modes. For example, although exclusive turn lanes at an intersection can benefit the vehicular mode, they increase the curb-to-curb distance across the intersection, which increases the crossing time and exposure for pedestrians and bicyclists to vehicular conflicts. For this reason, implementation of turn lanes must be considered carefully in light of all other users' mobility and safety.

Chapter 9.7.1

Warrants for the use of auxiliary lanes cannot be stated definitely. Many factors should be considered, such as speeds, traffic volumes, percentage of trucks, capacity, type of roadway, effects on pedestrian [sic] and bicyclists, availability of right-of-way, service provided, and the arrangement and frequency of intersections. Observations and considerable experience with auxiliary lanes have led to the following general conclusions:

- *Auxiliary lanes are warranted on high-speed and on high-volume highways where a change in speed is needed for vehicles entering or leaving the through-traffic lanes.*

Taken together, the AASHTO guidelines do not present a compelling reason to provide right-turn lanes on the 10th Avenue or Clearwater Drive approaches.

- A right-turn lane on either approach would not significantly benefit the operational level of service (LOS) at the intersection, as demonstrated in the Operational Analysis section (later in this letter).
- Neither approach is a high-speed facility. Drivers on both roadways will be approaching a controlled intersection where stopping is likely (with a signal) or required (with a stop sign).
 - Clearwater Drive will function as a private commercial street with low speeds and multiple accesses. Its speed limit will likely be set at or below 25 miles per hour (mph).

- Although 10th Avenue has a 40-mph posted speed, westbound vehicles approaching the signal will have traversed the new horizontal realignment curve with a 300-foot radius; following AASHTO Table 3-13, this radius might allow for speeds of 30 to 35 mph exiting the curve.
- Drivers approaching on 10th Avenue and wishing to turn right likely will slow to 15 or 20 mph, while those wishing to travel straight into Clearwater Drive will be entering a private commercial street with a speed limit likely set at or below 25 mph.
- Providing right-turn lanes would
 - Increase exposure for cyclists and pedestrians to vehicular conflicts.
 - Increase the stormwater runoff from impervious surfaces.
- Truck traffic is likely to be light on both 10th Avenue and Clearwater Drive as neither is designated as a freight route in the City's Transportation System Plan.⁹ It is likely that any trucks on these roadways will be making local deliveries to the adjacent residential or commercial uses.

Washington State Department of Transportation

The WSDOT *Design Manual* provides ample guidance for right-turn lanes on uncontrolled roadways at unsignalized (two-way stop-controlled) intersections in Chapter 1310.03(3). Little guidance is given regarding right-turn lanes at signalized intersections, however, with the following exception:

Chapter 1310.03(3), Right-Turn Lanes

For signalized intersections, use a traffic signal analysis to determine whether a right-turn lane is needed and what the length is.

The Operational Analysis section (later in this letter) indicates that right-turn lanes are not needed on either 10th Avenue or Clearwater Drive to provide adequate intersection operations.

TRAFFIC VOLUMES

These evaluations focus on the weekday PM peak hour conditions when traffic volumes are typically highest. All the volumes described below are provided graphically within the attached Figure 1, PBS Traffic Volumes.

This section describes one approach to developing future year volumes. The Other Traffic Volumes section (later in this letter) describes additional approaches to estimate future year volumes based on other sources or studies.

Current Volumes

Turning movement count data were collected by PBS Engineering and Environmental Inc. (PBS) staff at the 10th Avenue / Clearwater Avenue intersection on Wednesday, May 26, 2021, from 4:00 pm to 6:00 pm. The data report is attached for reference. During the PM peak hour (4:45 pm to 5:45 pm), the total entering volume was 1,481 vehicles, including 2 northbound right turns.

These counted volumes were adjusted for COVID-19 pandemic conditions. The adjustment was based on recent data and study at the Clearwater Avenue / Badger Road / Leslie Road / Ridgeline Drive intersection, where February 2021 volumes were approximately 14% lower than would typically have been anticipated based on applying 2% background growth to September 2018 data. The calculations for the 14% adjustment are attached.

⁹ Transpo Group. (2018). *City of Kennewick 2040 Transportation System Plan*, Figure 2-7.

Following the COVID-19 adjustment, the total entering volume was 1,723 during the weekday PM peak hour, including 2 northbound right turns.

Background Growth

Generic background growth at 2% per year (linear) was applied to the May 2021 turning movement count data to forecast growth into 2040, the present horizon year. This calculation adds 655 vehicles to the intersection during the PM peak hour, including 1 northbound right turn.

Current Pipeline Trips and Development Potential

Trips generated by development projects that are approved but not yet fully occupied are termed pipeline trips (also sometimes known as in-process trips). Relevant projects were requested from both the City of Kennewick and the City of Richland, and two pipeline projects were identified.

- A small office / manufacturing facility on Reata Road in Richland, estimated to generate 1 eastbound through trip on Clearwater Avenue during the PM peak hour.
- The Dove Ridge subdivision on 10th Avenue in Benton County (see attached map), estimated to generate 2 northbound right turns (plus 15 trips among other movements) at the Clearwater Avenue / 10th Avenue intersection during the PM peak hour.¹⁰ This is based on trip generation calculations from the Institute of Transportation Engineers (ITE), the general distribution pattern for BFCG transportation analysis zone (TAZ) 29, and engineering judgment. The ITE calculations and the BFCG TAZ 29 map are attached for reference.

Additionally, PBS was requested to estimate the potential traffic that could be generated by other properties along 10th Avenue between Clearwater Avenue and Clodfelter Road. This exercise assumes that undeveloped properties will develop and that currently developed land will redevelop to denser uses. The properties included in this evaluation are those along the western portion of the road segment; those properties along the eastern portion¹¹ are deemed unlikely to add northbound right turns to the Clearwater Avenue / 10th Avenue intersection since the route through the Clodfelter Road / Bob Olson Parkway / 10th Avenue roundabout is shorter and of equal or shorter travel time.

The evaluated properties along the western segment of 10th Avenue are:

- Undeveloped land north of 10th Avenue: all these are addressed within the Clearwater Commercial Binding Site Plan (BSP), for which the trips are addressed within the HDJ Analysis.
- Approximately 46 acres of land south of 10th Avenue currently zoned Urban Growth Area Residential (UGAR) by Benton County, with 27 existing single-family residential lots accessed via Sandlewood, Tranquility, and Willow private roads. See the attached map for reference.

¹⁰ This is based on the approved final plat of 56 lots. Although several, if not all, of the single-family homes are built and occupied, this analysis assumes they are all unoccupied for a conservative estimate.

¹¹ Such as the Bridgewater Estates subdivision along S Yolo Street, plus properties along the south side of 10th Avenue outside the city limits that are zoned Light Industrial and General Commercial by Benton County.

- Given a minimum lot size of 7,500 square feet,¹² it is estimated this area could support collective subdivision into 160 single-family lots.¹³ This represents a net increase of 133 lots.
- Applying the ITE *Trip Generation* equations for 133 single-family detached dwelling units, the subdivision could generate 134 PM peak hour trips. The trip generation calculations are attached.
- The trips were distributed following the general distribution pattern for BFCG TAZ 29 and engineering judgment. The results show 5 exiting trips are estimated to turn right from northbound 10th Avenue to eastbound Clearwater Avenue. An additional 35 trips would make other movements at the intersection.

In total, the pipeline and potential development trips are estimated to add 58 trips to the intersection during the weekday PM peak hour, including 7 northbound right turns.

Clearwater Commercial Binding Site Plan Trips

Traffic generated by the Clearwater Commercial Binding Site Plan (BSP) was addressed in a 2016 study by HDJ Design Group,¹⁴ a firm that is now part of PBS. The study is hereafter referred to as the HDJ Analysis. Figure 6 and Figure 7 of the HDJ Analysis provide, respectively, the pass-by and primary trip assignments for all phases of the Clearwater Commercial BSP. Together, at full build-out, they are estimated to add 1,255 net new trips to the 10th Avenue / Clearwater Avenue intersection during the weekday PM peak hour, including 14 northbound right turns and 165 southbound right turns.

Future Volumes

The 2040 PM peak hour volumes at the 10th Avenue / Clearwater Avenue intersection are estimated as the sum of the above components, which are summarized in the following table. The table includes columns for the northbound right turn (NB RT) from 10th Avenue onto eastbound Clearwater Avenue and for the southbound right turn (SB RT) from Clearwater Drive onto westbound Clearwater Avenue.

Table 1. 2040 Weekday PM Peak Hour Traffic Volumes

Traffic Volume Input	Total Entering Trips	NB RT Movements	SB RT Movements
Turning movement counts collected in May 2021	1,481	2	n/a
COVID-19 adjustment	242	0	n/a
Background growth at 2% per year for 19 years	655	1	n/a
Pipeline trips and development potential	58	7	n/a
Clearwater Commercial BSP trips	1,255	14	165
Total Volume (2040 Project Conditions)	3,449	24	165

In total, 3,449 vehicles would be expected to enter the 10th Avenue / Clearwater Avenue intersection during the 2040 weekday PM peak hour, including 24 northbound right turns and 165 southbound right turns.

¹² Benton County Code 11.07.080(a).

¹³ Such a redevelopment is deemed unlikely to occur considering the lands were platted at least once already to yield the 27 current lots that presently are controlled by 24 different owners. Nonetheless, the full potential redevelopment is included in this analysis.

¹⁴ HDJ Design Group (subsequently changed to PBS Engineering and Environmental Inc.). February 17, 2016. *Transportation Impact Analysis for Clearwater Commercial Binding Site Plan*.

OTHER TRAFFIC VOLUMES

Additional data sources were accessed to evaluate alternative means of estimating 2040 volumes: the 2016 HDJ Analysis, the 2014 Safe Clearwater Plan, and the current BFCG travel-demand models.

Volumes in HDJ Analysis

As shown on Figure 11 of the HDJ Analysis (attached), which significantly informed the Clearwater Commercial Development Agreement, the forecast 2036 conditions estimated 2,996 vehicles entering the 10th Avenue / Clearwater Avenue intersection during the PM peak hour. These included 17 vehicles turning northbound right from 10th Avenue onto eastbound Clearwater Avenue and 161 vehicles turning southbound right from Clearwater Drive onto westbound Clearwater Avenue. These 2036 volumes were estimated based upon the sum of several components: traffic counts (collected in November 2015), four in-process projects, background growth at 2% per year, and the Clearwater Commercial BSP trips (presented on Figures 6 and 7, also attached).

Volumes in the Safe Clearwater Plan

The Safe Clearwater Plan evaluated future 2035 PM peak hour volumes at several intersections along the Clearwater Avenue corridor. The volumes evaluated at the 10th Avenue intersection were provided by Transpo Group and are attached for reference. The volumes show a total entering volume of 1,930 vehicles.

When the Clearwater Commercial BSP trips (as presented in Figure 6 and Figure 7 of the HDJ Analysis) are added to the Safe Clearwater Plan volumes, then the total entering volume is 3,185 vehicles. This includes 34 vehicles turning northbound right from 10th Avenue onto eastbound Clearwater Avenue and 165 vehicles turning southbound right from Clearwater Drive onto westbound Clearwater Avenue. These volumes also are presented on the attached traffic volume Figure 2, Transpo Group Traffic Volumes from Safe Clearwater Plan.

Model Forecast Volumes – Intersection

The BFCG travel-demand model provides an estimate of the future traffic volumes forecast at the 10th Avenue / Clearwater Avenue intersection. The model output is attached. During the weekday PM peak hour in 2040, the model shows 1,539 vehicles entering the intersection. These volumes were post-processed and calibrated following the Iterative Procedure—Directional Method provided in Chapter 6.4 of the National Cooperative Highway Research Program Report 765,¹⁵ using the COVID-adjusted 2021 counts as the reference point, to show 2,350 entering vehicles. The calibration calculations are attached for reference.

When the Clearwater Commercial BSP trips (as presented in Figure 6 and Figure 7 of the HDJ Analysis) are added to the calibrated model volumes, then the total entering volume is 3,605 vehicles. This includes 18 vehicles turning northbound right from 10th Avenue onto eastbound Clearwater Avenue and 165 vehicles turning southbound right from Clearwater Drive onto westbound Clearwater Avenue. These volumes are presented on the attached traffic volume Figure 3, Benton-Franklin Council of Governments (BFCG) Traffic Volumes.

Model Forecast Volumes – Select Link

The BFCG travel-demand model provides an estimate of the future traffic volumes forecast on the segment (or link) of westbound 10th Avenue at its approach to Clearwater Avenue.¹⁶ The model output is attached for

¹⁵ National Cooperative Highway Research Program (NCHRP). (2014). *Report 765: Analytical Travel Forecasting Approaches for Project-Level Planning and Design*.

¹⁶ As westbound 10th Avenue curves to intersect Clearwater Avenue, this link represents the northbound approach at their intersection.

reference. During the two-hour period spanning 4:00 pm to 6:00 pm on a typical weekday in 2040, 268 vehicles are shown on the link, of which:

- 202 are shown to turn left and travel west on Clearwater Avenue.
- 67 are shown to turn right and travel east on Clearwater Avenue.¹⁷
 - Of those 67 right turns, 20 enter TAZ 703.¹⁸
 - The model oversimplifies access configurations to TAZs. The 20 right turns that enter TAZ 703 will have the option to access individual sites via roadways or accesses connected directly to 10th Avenue, such as the configuration currently in place for the Calvary Chapel site. Figure 2 of the HDJ Analysis indicates two access points along 10th Avenue, one each to serve lots 16A and 16B.

Given these volumes and characteristics, it is unlikely that 50 vehicles would turn right from northbound 10th Avenue during the two-hour evaluation period. Consequently, it is even less likely that 50 vehicles would make the movement during any single PM peak hour. For example, the 20 right turns destined for TAZ 703 are subtracted from the 67 for a two-hour total of 47 right turns. If two-thirds (as a conservative estimate) of these 47 right turns occurred during the PM peak hour, that would yield 31 northbound right turns during the PM peak hour at the 10th Avenue / Clearwater Avenue intersection.

VOLUME COMPARISONS

The sections above present five different approaches to calculating future PM peak hour volumes at the 10th Avenue / Clearwater Avenue intersection. Each of these volume sets is summarized as follows:

- 2040 PBS Volumes: based on May 2021 count data, a COVID adjustment, background growth, current pipeline trips, and development potential trips.
- 2036 HDJ Volumes (as presented in Figure 11 of the HDJ Analysis): based on November 2015 count data, four in-process projects, and background growth.
- 2035 Transpo Volumes (as evaluated in the Safe Clearwater Plan): provided by Transpo Group.
- 2040 BFCG Volumes: based on calibrated BFCG travel-demand model outputs.
- 2040 BFCG Select Link Volumes: based on unadjusted BFCG travel-demand model outputs for westbound 10th Avenue approaching Clearwater Avenue.¹⁹

These volume sets can all represent conditions without the Clearwater Commercial development, or the “without project” volumes. The Clearwater Commercial BSP trips (as presented in Figure 6 and Figure 7 of the HDJ Analysis) can be added to each volume set to generate the “with project” volumes. Table 2 presents a comparison of the volume sets.

¹⁷ The model tracks decimal vehicles, yet rounds for reporting, leading to minor discrepancies such as $202 + 67 = 268$. These are less important than the overall trends and the relative patterns.

¹⁸ TAZ 703 lies along the north side of 10th Avenue and the southeast side of Clearwater Avenue, extending east to the Bridgewater Estates subdivision (the properties along S Yolo Street and W 5th Place) and S Utah Street. It encompasses the Calvary Chapel site, the commercial parcels adjoining it, and the vacant land that lies within the Clearwater Commercial BSP, Phase 3. See the attached map for reference.

¹⁹ These volumes are only for one approach to the intersection; therefore, they do not address volumes for the entire intersection. Only the first four volume sets present full intersection-level volumes.

Table 2. Future Year PM Peak Hour Volume Comparisons

Volume Set	Without Project			With Project		
	Total Entering Trips	NB RT Movements	SB RT Movements	Total Entering Trips	NB RT Movements	SB RT Movements
2040 PBS Volumes	2,194	10	n/a	3,449	24	165
2036 HDJ Volumes	2,548	9	n/a	2,996	17	161
2035 Transpo Volumes	1,930	20	n/a	3,185	34	165
2040 BFCG Volumes	2,350	4	n/a	3,605	18	165
2040 BFCG Select Link Volumes	n/a	31	n/a	n/a	45	165

In all cases, fewer than 50 vehicles are expected to make the northbound right-turn movement, whether without or with the Clearwater Commercial BSP trips added.

OPERATIONAL ANALYSIS

Intersection Volumes Analysis

The four intersection-level volume sets are evaluated for intersection operational performance without right-turn lanes. All analyses are run based on similar inputs:

- Identical cycle lengths (130 seconds)
- Phase splits optimized by the Synchro software
- Protected-only left-turn phasing (the most restrictive available)²⁰
- No right-turn-on-red reductions (for a conservative and consistent analysis)
- Permitted-only right turns; no overlap phases (for a conservative analysis)
- Uniform peak hour factor (PHF) of 0.95
- Uniform heavy vehicle percentages of 2% on all movements

Table 3 summarizes the results, and the Synchro reports are attached for reference.

²⁰ It is expected the City will determine whether permitted-protected phasing may be appropriate on any of the approaches as part of preparing the overall signal timing plan.

Table 3. Operations Results at 10th Avenue / Clearwater Avenue Intersection Without Right-Turn Lanes

Volume Set	Overall Intersection			Northbound TH-RT Lane				Southbound TH-RT Lane			
	LOS	Delay	v/c	LOS	Delay	v/c	Queue	LOS	Delay	v/c	Queue
2040 PBS Volumes	D	41.9	0.91 (NBL)	D	36.1	0.13	57	E	63.7	0.88	234
2036 HDJ Volumes	C	32.7	0.88 (NBL)	C	34.9	0.20	67	D	45.2	0.82	112
2035 Transpo Volumes	D	43.5	0.93 (NBL)	C	32.8	0.14	57	E	62.7	0.85	234
2040 BFCG Volumes	D	48.2	0.98 (NBL)	D	37.4	0.12	55	E	63.7	0.88	234

The TH-RT lanes are the shared lanes from which through and right-turn movements are made.

Delays are reported in seconds per vehicle.

For the overall intersection, the reported volume-to-capacity (v/c) ratio is the highest v/c ratio among all the intersection's lane groups. (NBL refers to the northbound left-turn lane.) For the individual TH-RT lanes, the reported v/c ratio is the ratio for the noted lane.

Queues reported are the 95th percentile queues in feet.

As shown in Table 3, the conceptual signal layout, without northbound or southbound right-turn lanes, can operate at LOS D or better during the weekday PM peak hour regardless of the volume calculation method. In no case is a shared through-right lane compromised by delay, capacity, or queuing. In all cases, the conservative assumptions applied for uniformity and consistency may be modified as the City develops the timing plan to improve these performance results. Examples would include optimizing the signal cycle length, allowing permitted-protected left turns, including right turns on red in the analysis, or allowing right-turn overlap phases where right-turn lanes are provided.

Sensitivity Analysis

To test for the point at which northbound and southbound right-turn lanes would provide a benefit to the intersection LOS, a sensitivity analysis was prepared. Each scenario tests the four intersection-level volume sets to identify how many right-turn movements (either northbound or southbound) would be required before the intersection LOS degraded to E. This was done to test the WSDOT *Design Manual* criteria for a right-turn lane.

All the same assumptions used in the intersection volumes analysis were applied; only the right-turn volumes on one or the other approach were changed. The following table presents the sensitivity analysis findings.

Table 4. Sensitivity Analysis

Volume Set	Northbound Right Turn		Southbound Right Turn	
	Forecast Volume	Intersection Degrades to LOS E When NB RT Volume Is...	Forecast Volume	Intersection Degrades to LOS E When SB RT Volume Is...
2040 PBS Volumes	24	405	165	285
2036 HDJ Volumes	17	375	161	365
2035 Transpo Volumes	34	440	165	255
2040 BFCG Volumes	18	340	165	220

The results of the sensitivity analysis demonstrate that right-turning volumes would need to be significantly higher than forecast by any of the four methods before the overall intersection LOS would degrade from D to E. At such volumes, a right-turn lane might be needed to maintain adequate intersection operations. However, since the

forecast volumes are significantly lower than these volume thresholds, northbound and southbound right-turn lanes are not necessary for intersection operations.

SIGNAL WARRANT EVALUATION

The *Manual on Uniform Traffic Control Devices* (MUTCD)²¹ offers methods for evaluating the merits for a traffic signal installation based on several criteria. The peak hour traffic volumes criteria, Warrant 3, are applied to the four intersection-level volume sets using MUTCD Figure 4C-3. The data plots are attached for reference. In all cases, Clearwater Avenue is treated the major street, and all approaches (both major and minor) are assumed to have two or more lanes. No right-turn movements from the minor approaches are discounted.

Each of the charts plots two points: one plots the higher of the two minor approach volumes, in accordance with MUTCD guidance, and the other plots the lower-volume minor approach for reference. In all cases the southbound Clearwater Drive volumes are higher than the northbound 10th Avenue volumes. The plots demonstrate that, with full build-out of the Clearwater Commercial BSP, the intersection volumes will meet the MUTCD peak hour warrant criteria for a traffic signal, regardless of which volume set or minor approach is used.

DEVELOPMENT AGREEMENT

The following citation is taken from the Clearwater Commercial Development Agreement:

4.1 "Project improvements" shall consist of infrastructure and mitigation features, including, but not limited to, traffic lights, roundabouts, or street re-alignment or other infrastructure improvements. Developer shall provide, consistent with HDJ's Analysis, the following:

- 4.1.1 Installation of Traffic Light between Lots 9 and 10;*
- 4.1.2 Realignment of 10th Ave.;*
- 4.1.3 Installation of Traffic Light, 10th Ave.*

The mitigated lane configuration recommended in the HDJ Analysis is attached for reference; it included no right-turn lanes on either the 10th Avenue or the Clearwater Drive approaches. Therefore, an intersection layout that also does not include these right-turn lanes meets the intent of the development agreement because it is "consistent with HDJ's analysis."

FINDINGS

The future forecast volumes indicate that

- The 10th Avenue right-turn movement to eastbound Clearwater Avenue will see relatively light volumes.
- The Clearwater Drive right-turn movement to westbound Clearwater Avenue will see relatively high volumes.

The operational analysis finds that the signalized intersection, without northbound or southbound right-turn lanes, can operate at LOS D or better during the future year peak hour. Shared through-right lanes on the northbound and southbound approaches will not be compromised by delay, capacity, or queuing.

The sensitivity analysis finds that northbound and southbound right-turn volumes would need to be significantly higher than forecast by any of the four volume sets before right-turn lanes could be shown to benefit the overall intersection LOS.

²¹ Federal Highway Administration. (2009 with 2012 Supplements). *Manual on Uniform Traffic Control Devices*, Section 4C.01.

The signal warrant evaluation finds that all four volume sets will meet the MUTCD peak hour warrant criteria for a traffic signal installation, regardless of which volume set or minor approach is used.

Evaluation of the future forecast volumes according to the available right-turn lane criteria finds that

- The 10th Avenue right-turn movement to eastbound Clearwater Avenue has neither adequate volume nor any operational concerns to merit a right-turn lane.
- The Clearwater Drive right-turn movement to westbound Clearwater Avenue has no operational concerns and has adequate volume yet is not in a condition to benefit from addition of a right-turn lane.

Evaluation of the approach roadway conditions indicates that neither 10th Avenue nor Clearwater Drive is a high-speed facility that would merit consideration for a right-turn lane.

Review of the adopted development agreement finds that northbound and southbound right-turn lanes were not recommended in the HDJ Analysis that informed the agreement. The proposed lane configuration is consistent with the agreement.

RECOMMENDATIONS

Design and construct the signalized 10th Avenue / Clearwater Avenue intersection with a single shared through-right lane on the northbound (10th Avenue) and southbound (Clearwater Drive) approaches. Additionally, provide an exclusive left-turn lane on all approaches, and provide an exclusive right-turn lane on the eastbound and westbound Clearwater Avenue approaches. This configuration is reasonable according to the evaluated criteria, will provide adequate operational characteristics, and will be consistent with the Development Agreement.

CLOSING

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

Sincerely,



David Holt, PE
Project Traffic Engineer

cc: Joe Seet – City of Kennewick
Nathan Machiela – Knutzen Engineering
Tom Solbrack
Bhauvesh Jaya, John Manix – PBS Engineering and Environmental Inc.

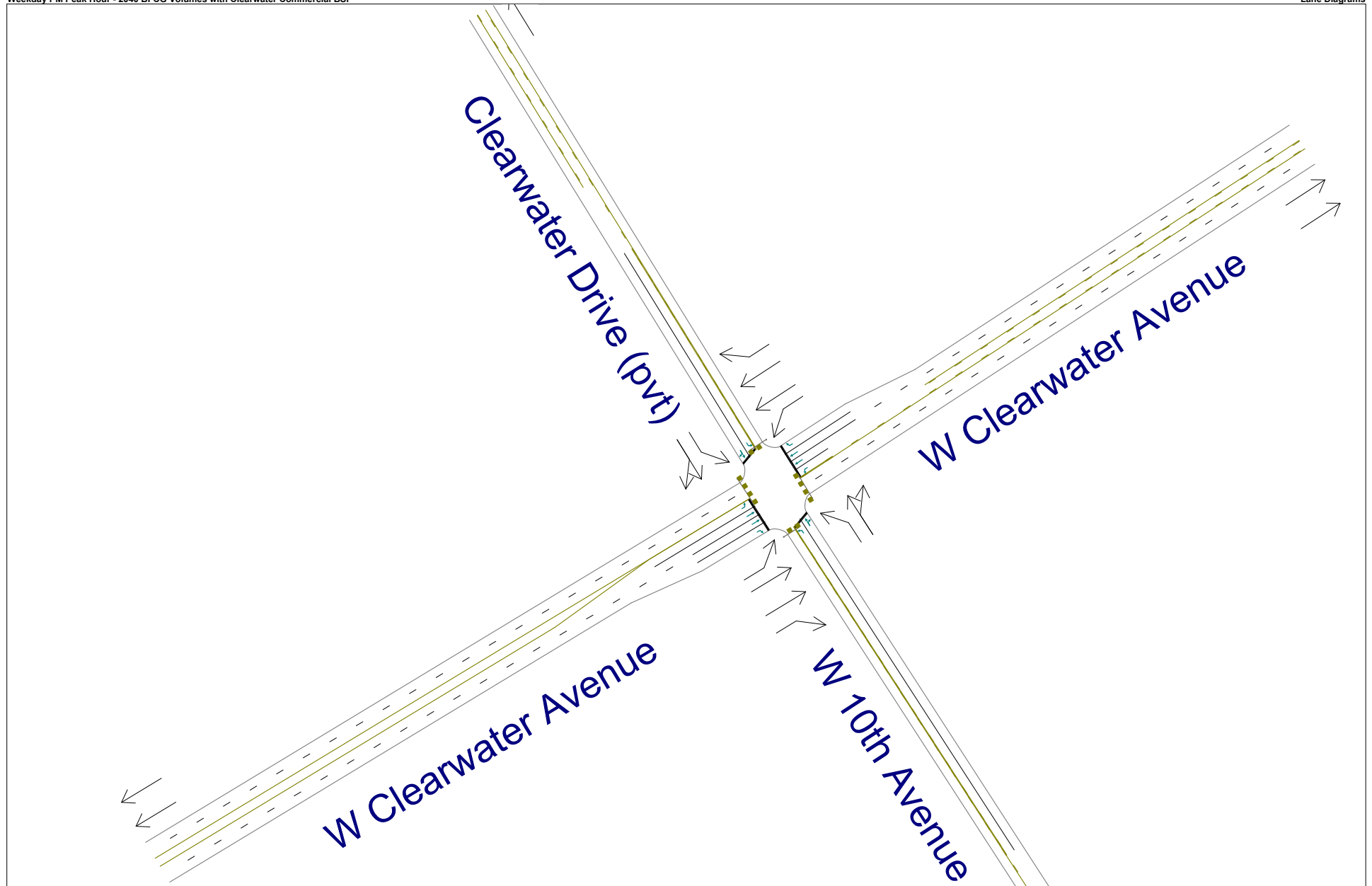


Attachments: Preliminary Intersection Layout
Traffic Volume Figures
2021 Traffic Count Data Report
COVID Adjustment Calculations
Dove Ridge Subdivision Map and Trip Generation Calculations
BFCG TAZ 29 Trip Distribution Map
UGAR Area Map and Trip Generation Calculations
Figures 6 & 7 (Clearwater Commercial BSP trips) from the HDJ Analysis
Figure 11 (2036 PM Peak Volumes With Phases 2 & 3) from the HDJ Analysis
Volumes from Safe Clearwater Plan (provided by Transpo Group)
BFCG Travel-Demand Model Output: 2040 PM Peak Hour Volumes
BFCG Link Volumes Calibration Calculations
BFCG Travel-Demand Model Output: Select Link Analysis
BFCG TAZ Map
Synchro Reports
Signal Warrant Evaluation Charts
MITIG8 Report for 2036 PM Peak Volumes With Phases 2 & 3 Scenario from the HDJ Analysis,
showing the assumed lane configuration

DAH:JAM:mo

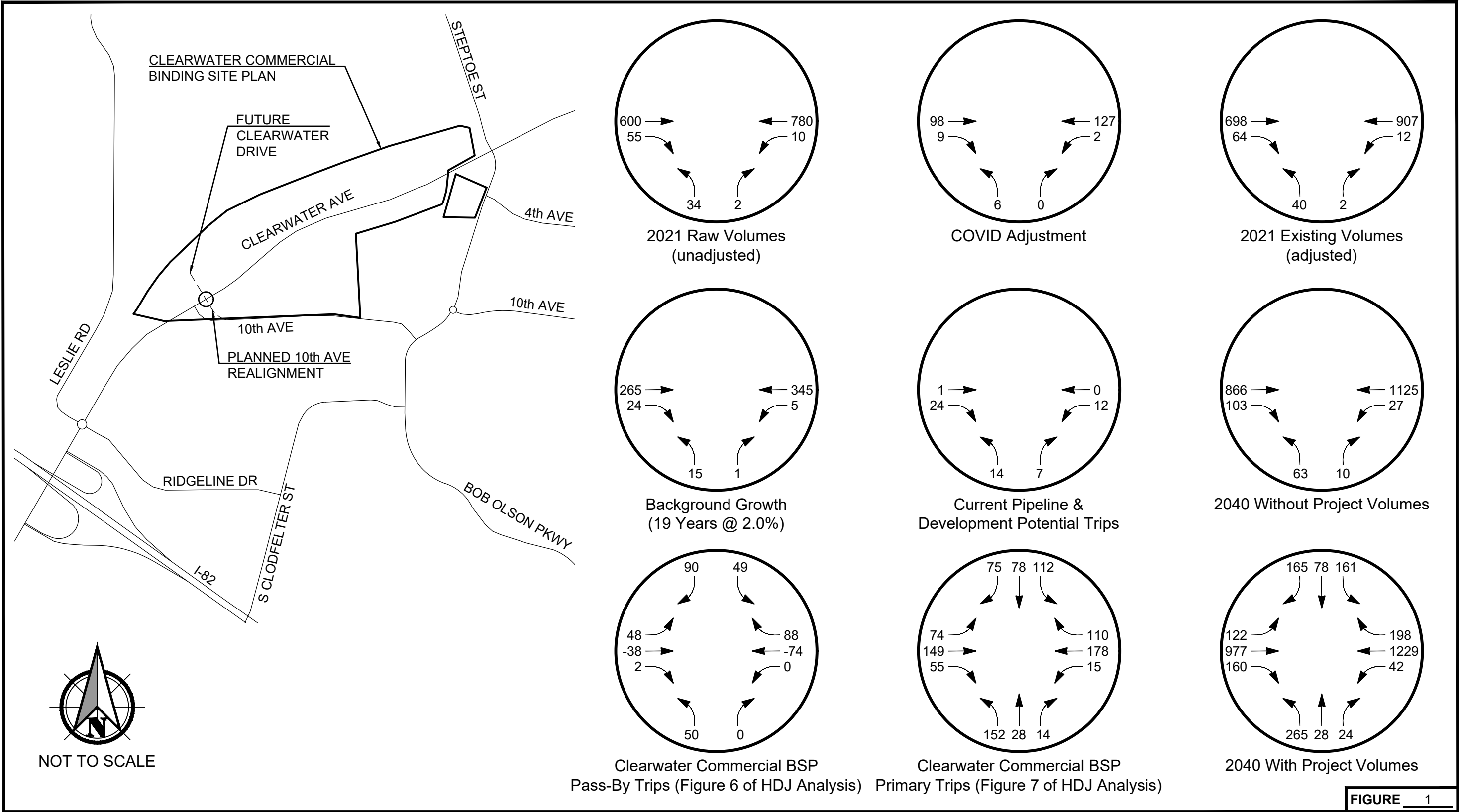
Map - Clearwater Avenue / 10th Avenue Traffic Signal - PBS Project No. 71662
 Weekday PM Peak Hour - 2040 BFCG Volumes with Clearwater Commercial BSP

Lane Diagrams



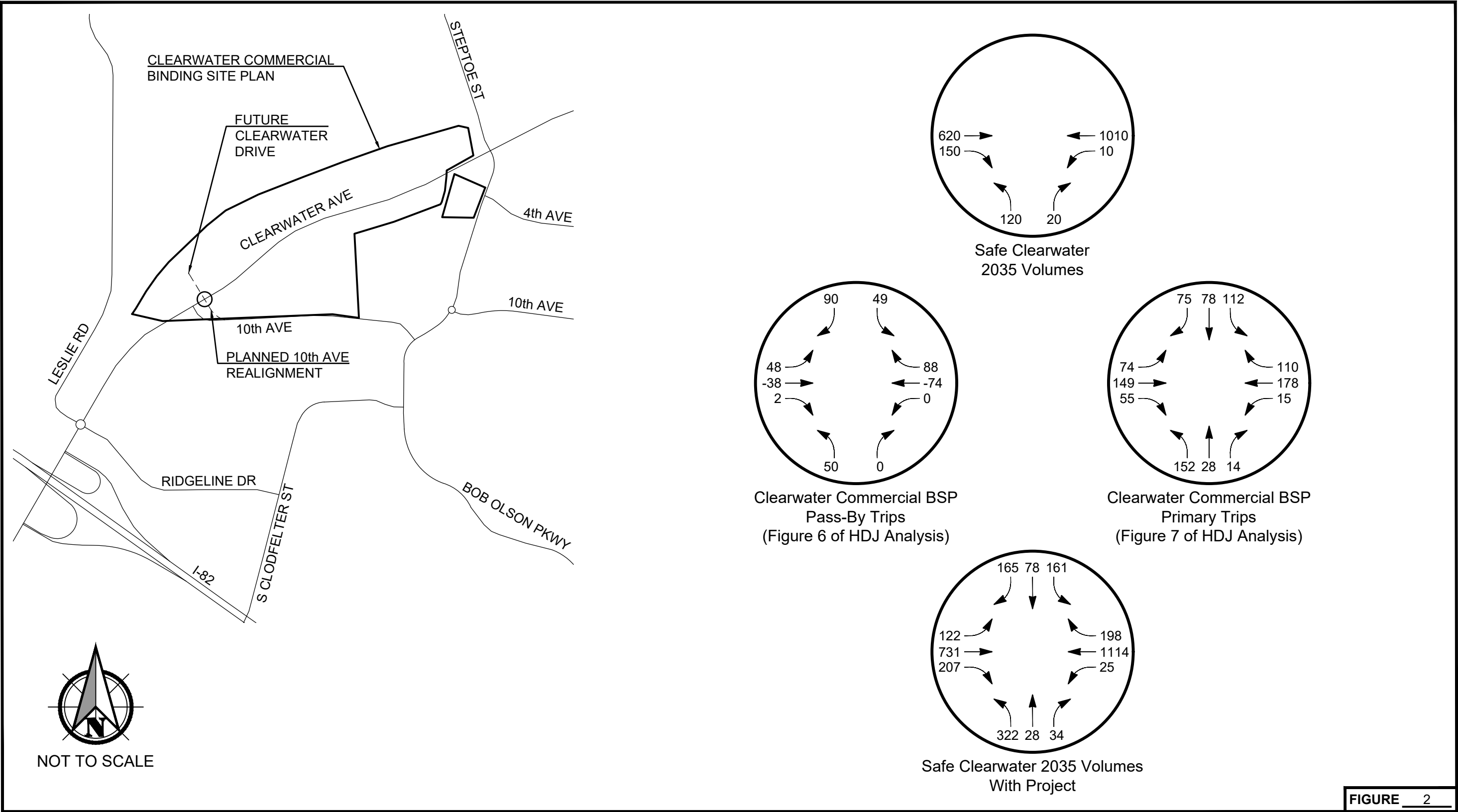
Clearwater Avenue / 10th Avenue Traffic Signal - PBS Project No. 71662
 Weekday PM Peak Hour - 2040 BFCG Volumes with Clearwater Commercial BSP

07/12/2021

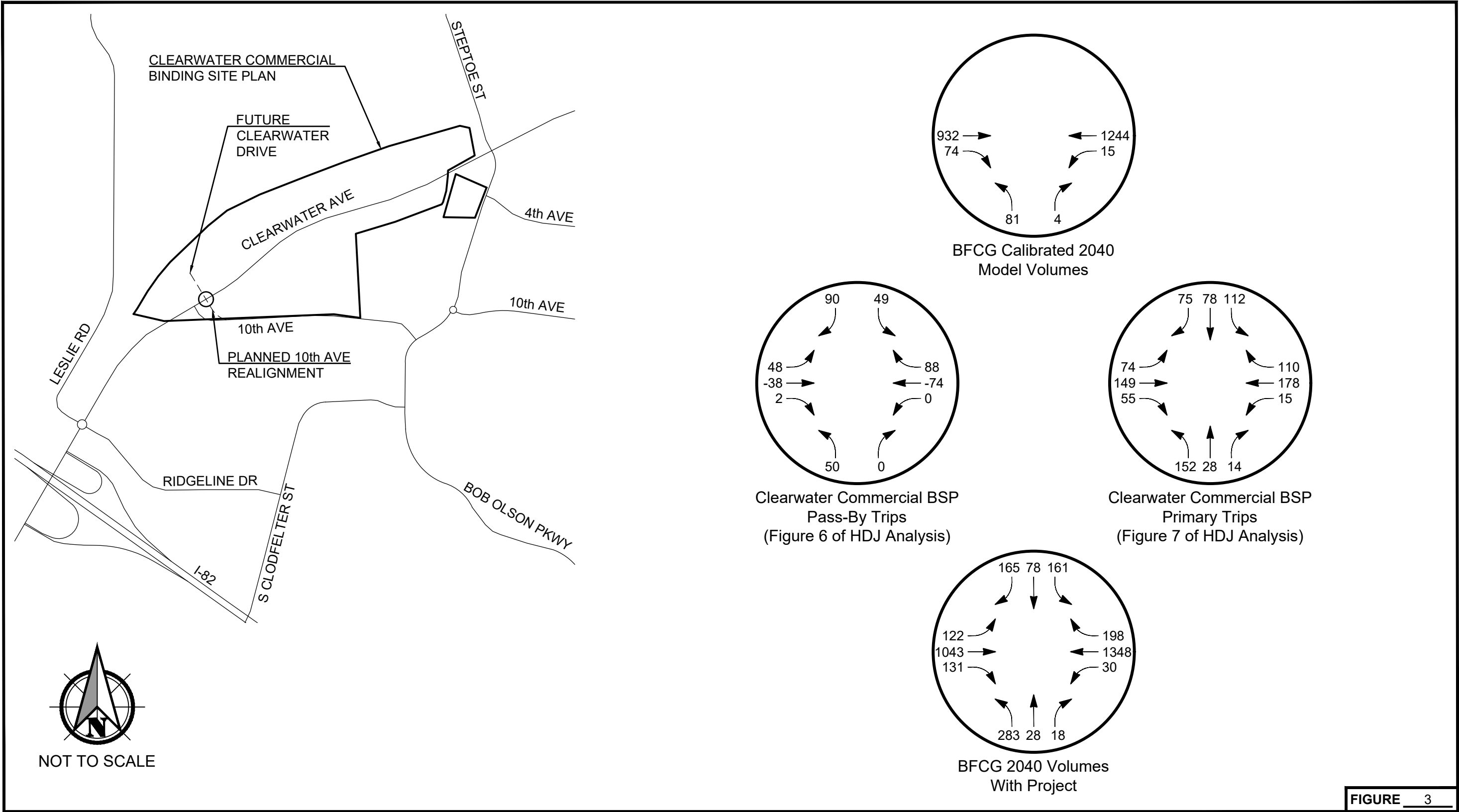


PBS Traffic Volumes

Right-Turn Lane Evaluation - Intersection of 10th Avenue and Clearwater Avenue



Transpo Group Traffic Volumes from Safe Clearwater Plan
Right-Turn Lane Evaluation - Intersection of 10th Avenue and Clearwater Avenue



Benton-Franklin Council of Governments (BFCG) Traffic Volumes
Right-Turn Lane Evaluation - Intersection of 10th Avenue and Clearwater Avenue

Turn Count Summary

PBS Engineering and Environmental
400 Bradley Boulevard, Suite 106
Richland, Washington, 99352
(509) 942-1600

Location: W 10th Ave at W Clearwater Ave, Richland, WA
 GPS Coordinates: Lat=46.201042, Lon=-119.259231
 Date: 5/26/2021
 Day of week: Wednesday
 Weather: Sunny
 Analyst: Paige Price

Total Vehicle Traffic				W Clearwater Avenue			W 10th Avenue			W Clearwater Avenue			Interval	Hourly
Interval	Southbound			Westbound			Northbound			Eastbound				
starts	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total	Total
16:00				2	129		3		0		113	11	258	
16:15				3	162		7		3		165	4	344	
16:30				4	153		6		1		160	11	335	
16:45				2	165		9		1		146	9	332	1,269
17:00				3	212		9		0		164	17	405	1,416
17:15				2	213		7		1		151	16	390	1,462
17:30				3	190		9		0		139	13	354	1,481
17:45				2	130		6		1		140	8	287	1,436
16:45 - 17:45				10	780		34		2		600	55	1,481	Peak Hour

Peak Hour Factor (PHF): 0.91

PM	Historical Volumes					Background Growth					Sun Market Ridgeline Volumes					Adjusted Historical Volumes					Recent Volumes					If Historical Volumes Had Grown at 2.0%									
	With Data Date					1 yrs @ 2.0% 2.0%					Enter 91 Exit 92					With Data Date					With Data Date					1.35 yrs @ 2.0% 2.7%									
Clearwater Avenue / Leslie Road -- Ridgeline Drive																																			

Avg

-15%

-14%

Med

-14%

-14%

WtdAvg

-14%

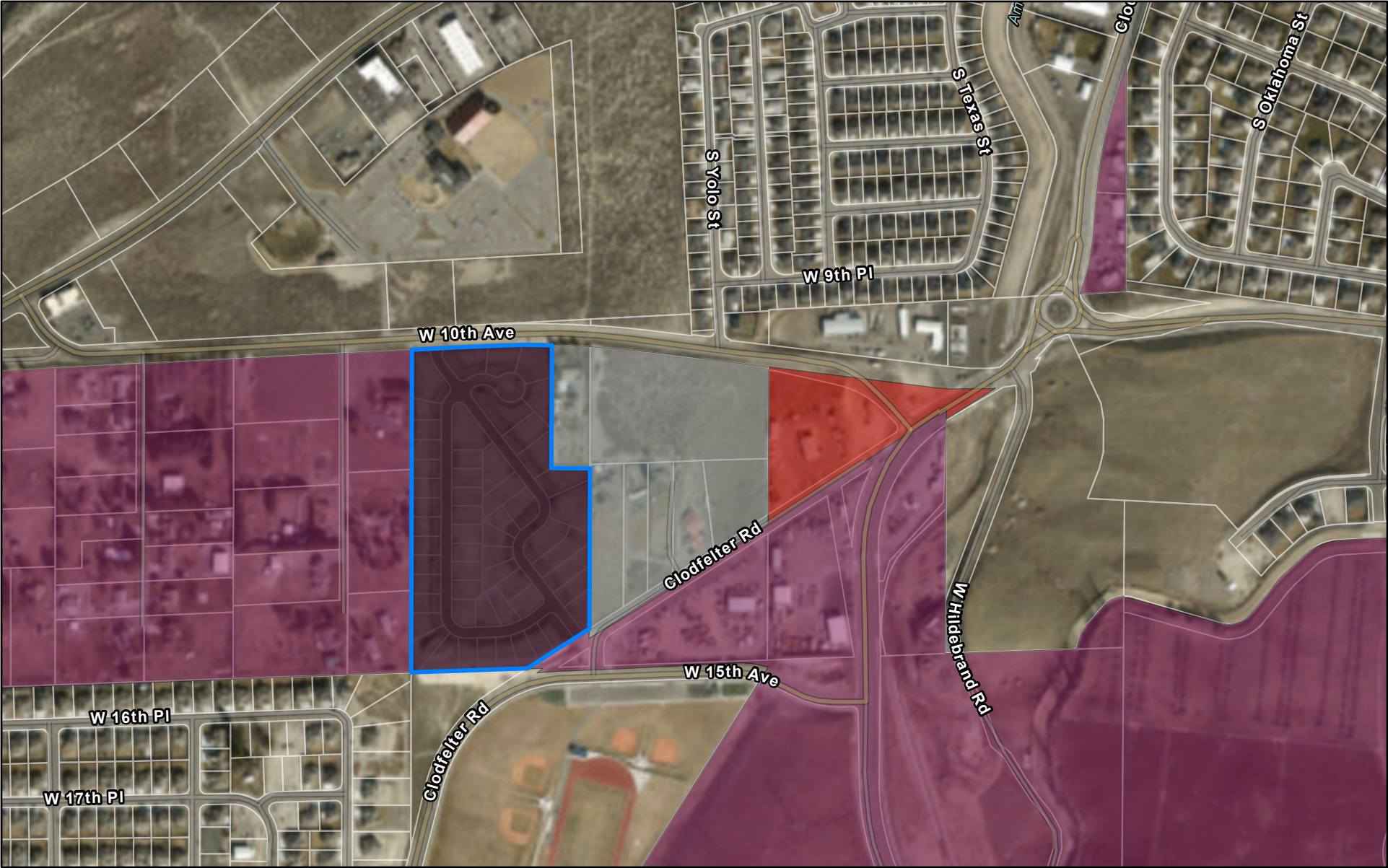
Overall

Excluding High & Low

-14%

2021 Raw Volumes (unbalanced)				
Either grow historical volumes by 2.0%...				
...OR increase recent data by 14%				
	274	454	45	
1 u				0 u
165				44
147		2,395		141
189				153
u 5				u 1
1	197	460	119	

Dove Ridge Subdivision - 56 Lots



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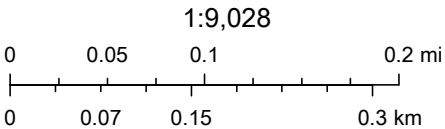
Zoning

UGAR

GENERAL COMMERCIAL

Parcels and Assess

LIGHT INDUSTRIAL



Esri Community Maps Contributors, City of Kennewick, PascoGIS, State of

Benton County, WA

Detailed Land Use Data
 For 56 Dwelling Units of SFHOUSE 1
 (210) Single-Family Detached Housing

Project: Dove Ridge Subdivision

Open Date: 6/23/2021
 Analysis Date: 6/23/2021

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Trip Generation Manual 10th Edition	610	0	9.44	4.81	19.39	2.1	264	50	50	True	$\ln(T) = 0.92 \ln(X) + 2.71$	0.95
Weekday AM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 10th Edition	45	0	0.74	0.33	2.27	0.27	219	25	75	True	$T = 0.71(X) + 4.8$	0.89
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 10th Edition	58	0	0.99	0.44	2.98	0.31	242	63	37	True	$\ln(T) = 0.96 \ln(X) + 0.2$	0.92

Trip Generation Summary

Alternative: Alternative 1

Phase:

Open Date: 6/23/2021

Project: Dove Ridge Subdivision

Analysis Date: 6/23/2021

ITE	Land Use	Weekday Average Daily Trips				Weekday AM Peak Hour of Adjacent Street Traffic				Weekday PM Peak Hour of Adjacent Street Traffic			
		*	Enter	Exit	Total	*	Enter	Exit	Total	*	Enter	Exit	Total
210	SFHOUSE 1		305	305	610		11	34	45		37	21	58
	56 Dwelling Units												
Unadjusted Volume			305	305	610		11	34	45		37	21	58
Internal Capture Trips			0	0	0		0	0	0		0	0	0
Pass-By Trips			0	0	0		0	0	0		0	0	0
Volume Added to Adjacent Streets			305	305	610		11	34	45		37	21	58

Total Weekday Average Daily Trips Internal Capture = 0 Percent

Total Weekday AM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

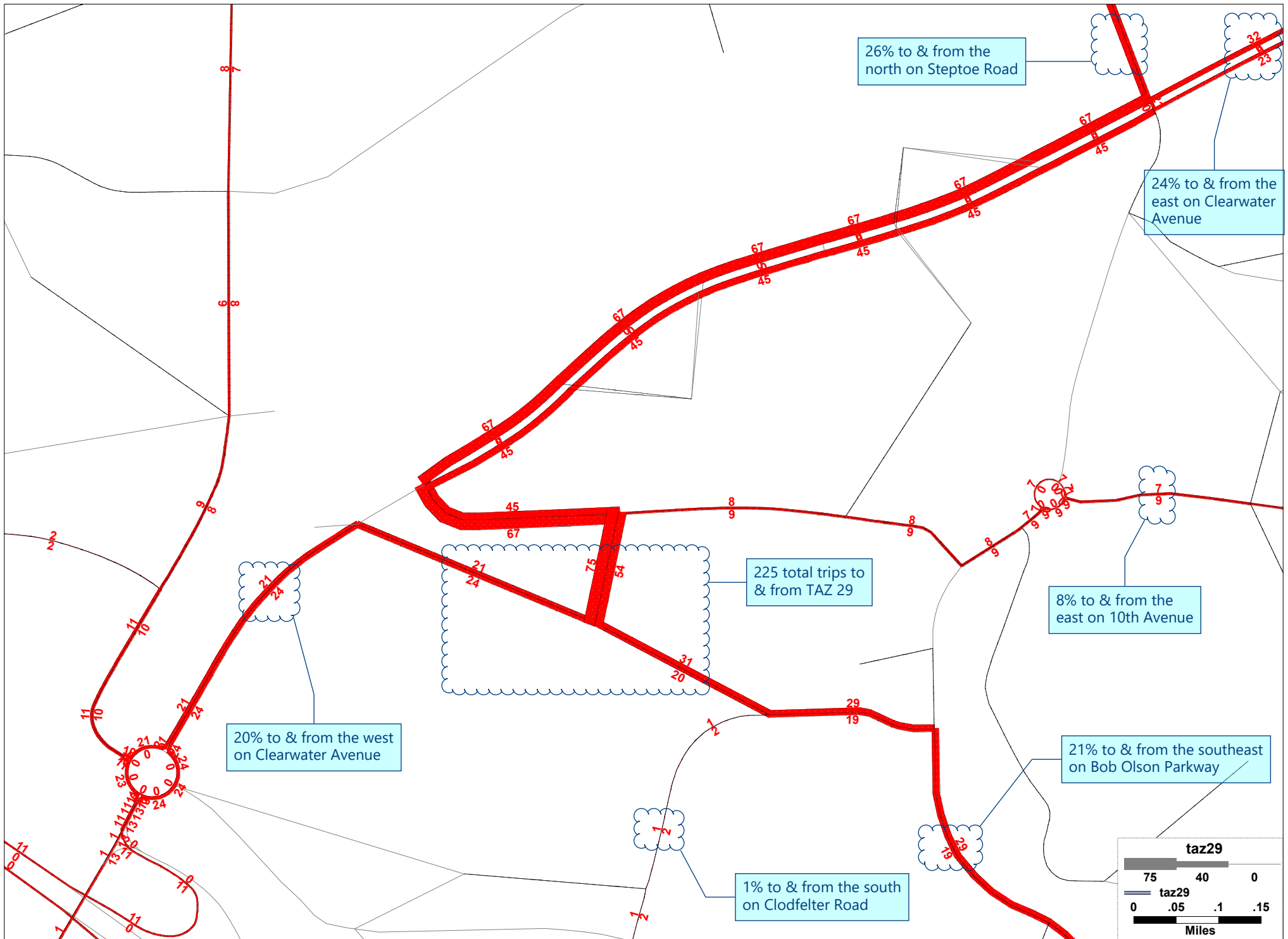
Total Weekday PM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

* - Custom rate used for selected time period.

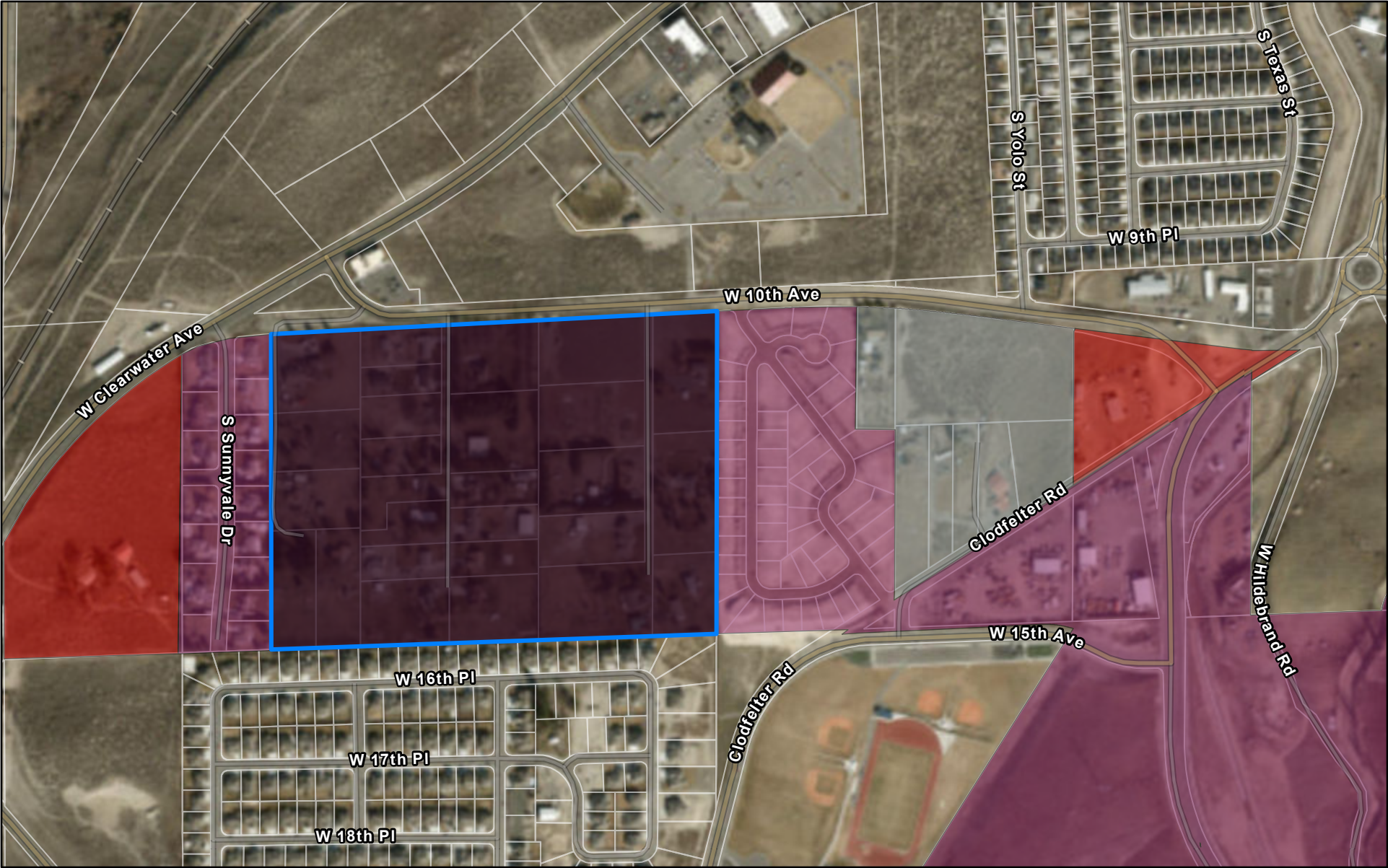
Source: Institute of Transportation Engineers, Trip Generation Manual 10th Edition

TRIP GENERATION 10, TRAFFICWARE, LLC

Exhibit 8



UGAR Properties (Approx. 46 acres)



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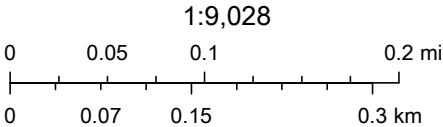
Zoning

GENERAL COMMERCIAL

LIGHT INDUSTRIAL

UGAR

Parcels and Assess



Esri Community Maps Contributors, City of Kennewick, PascoGIS, State of

Benton County, WA

Benton County WA, Pasco GIS, Maxar | Esri Community Maps Contributors, City of Kennewick, PascoGIS, State of Oregon GEO, WA State Parks GIS, BuildingFootprintUSA, Esri Canada, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, Bureau

Detailed Land Use Data
 For 133 Dwelling Units of SFHOUSE 1
 (210) Single-Family Detached Housing

Project: Potential UGAR Redevelopment

Open Date: 6/24/2021
 Analysis Date: 6/24/2021

<u>Day / Period</u>	<u>Total Trips</u>	<u>Pass-By Trips</u>	<u>Avg Rate</u>	<u>Min Rate</u>	<u>Max Rate</u>	<u>Std Dev</u>	<u>Avg Size</u>	<u>% Enter</u>	<u>% Exit</u>	<u>Use Eq.</u>	<u>Equation</u>	<u>R2</u>
Weekday Average Daily Trips Source : Trip Generation Manual 10th Edition	1352	0	9.44	4.81	19.39	2.1	264	50	50	True	$\ln(T) = 0.92 \ln(X) + 2.71$	0.95
Weekday AM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 10th Edition	99	0	0.74	0.33	2.27	0.27	219	25	75	True	$T = 0.71(X) + 4.8$	0.89
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 10th Edition	134	0	0.99	0.44	2.98	0.31	242	63	37	True	$\ln(T) = 0.96 \ln(X) + 0.2$	0.92

Trip Generation Summary

Alternative: Alternative 1

Phase:

Open Date: 6/24/2021

Project: Potential UGAR Redevelopment

Analysis Date: 6/24/2021

ITE	Land Use	Weekday Average Daily Trips				Weekday AM Peak Hour of Adjacent Street Traffic				Weekday PM Peak Hour of Adjacent Street Traffic			
		*	Enter	Exit	Total	*	Enter	Exit	Total	*	Enter	Exit	Total
210	SFHOUSE 1		676	676	1352		25	74	99		84	50	134
	133 Dwelling Units												
Unadjusted Volume			676	676	1352		25	74	99		84	50	134
Internal Capture Trips			0	0	0		0	0	0		0	0	0
Pass-By Trips			0	0	0		0	0	0		0	0	0
Volume Added to Adjacent Streets			676	676	1352		25	74	99		84	50	134

Total Weekday Average Daily Trips Internal Capture = 0 Percent

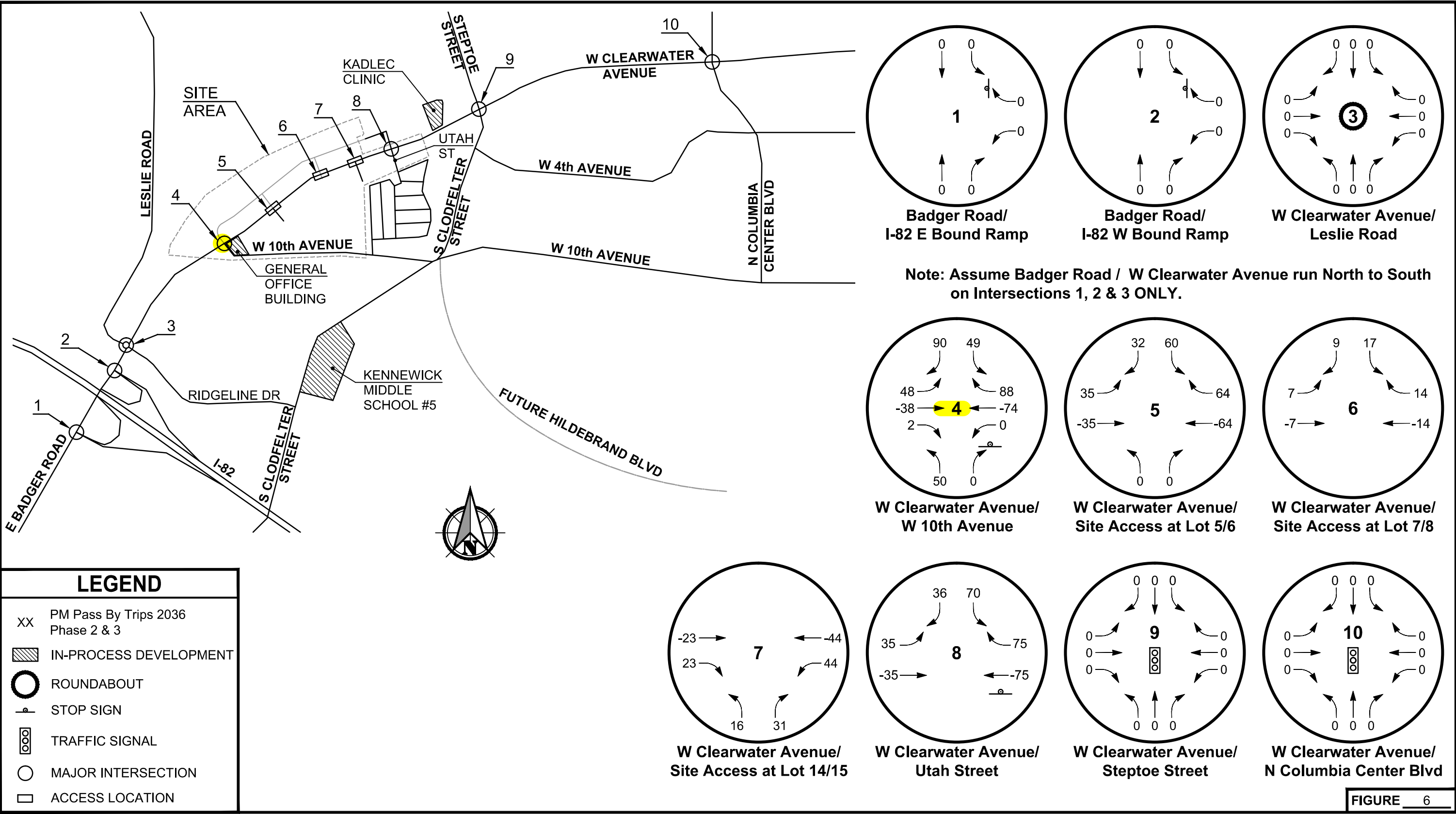
Total Weekday AM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

Total Weekday PM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

* - Custom rate used for selected time period.

Source: Institute of Transportation Engineers, Trip Generation Manual 10th Edition

TRIP GENERATION 10, TRAFFICWARE, LLC

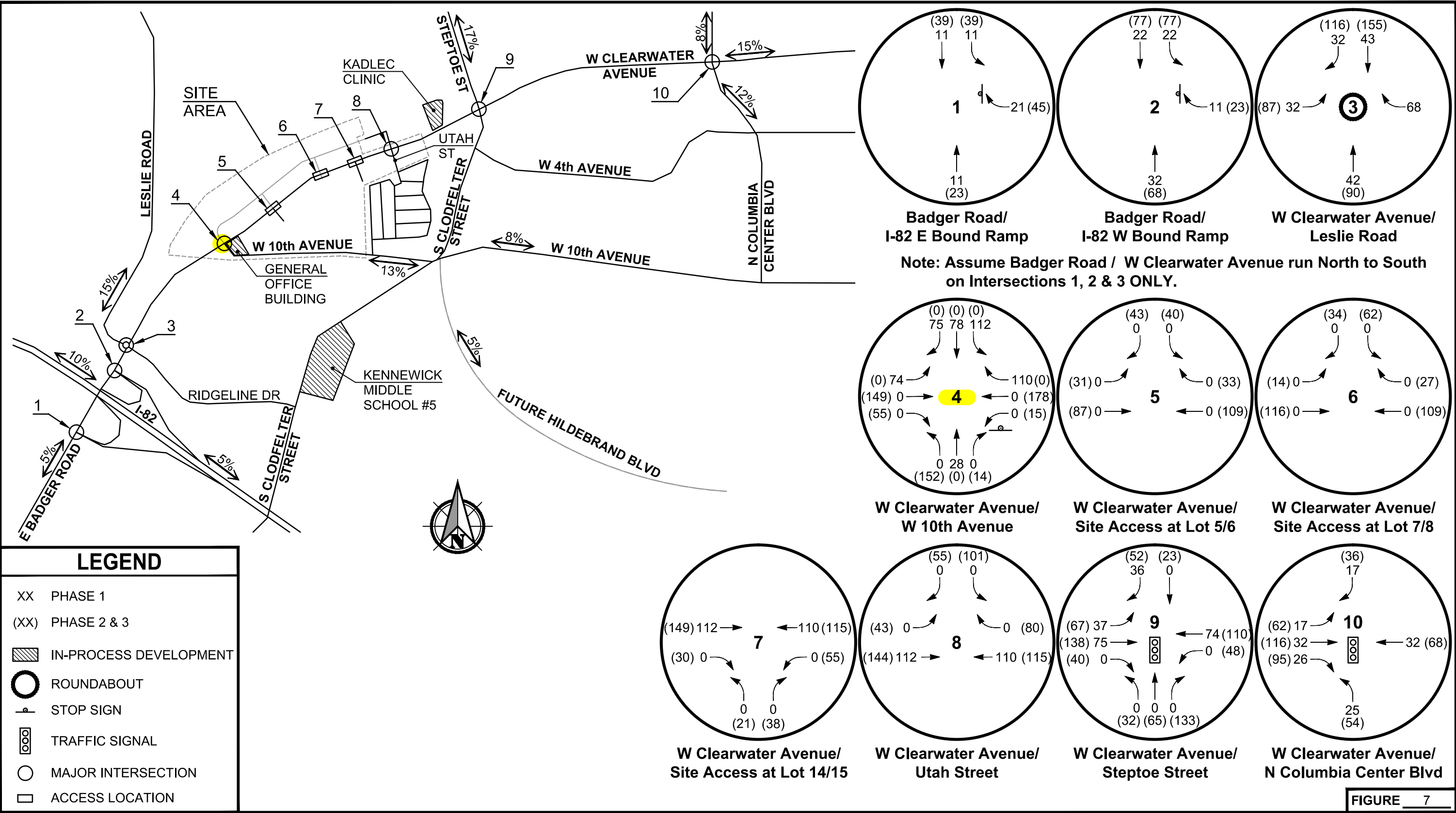


HDI
DESIGN GROUP
engineers | landscape architects | planners | surveyors

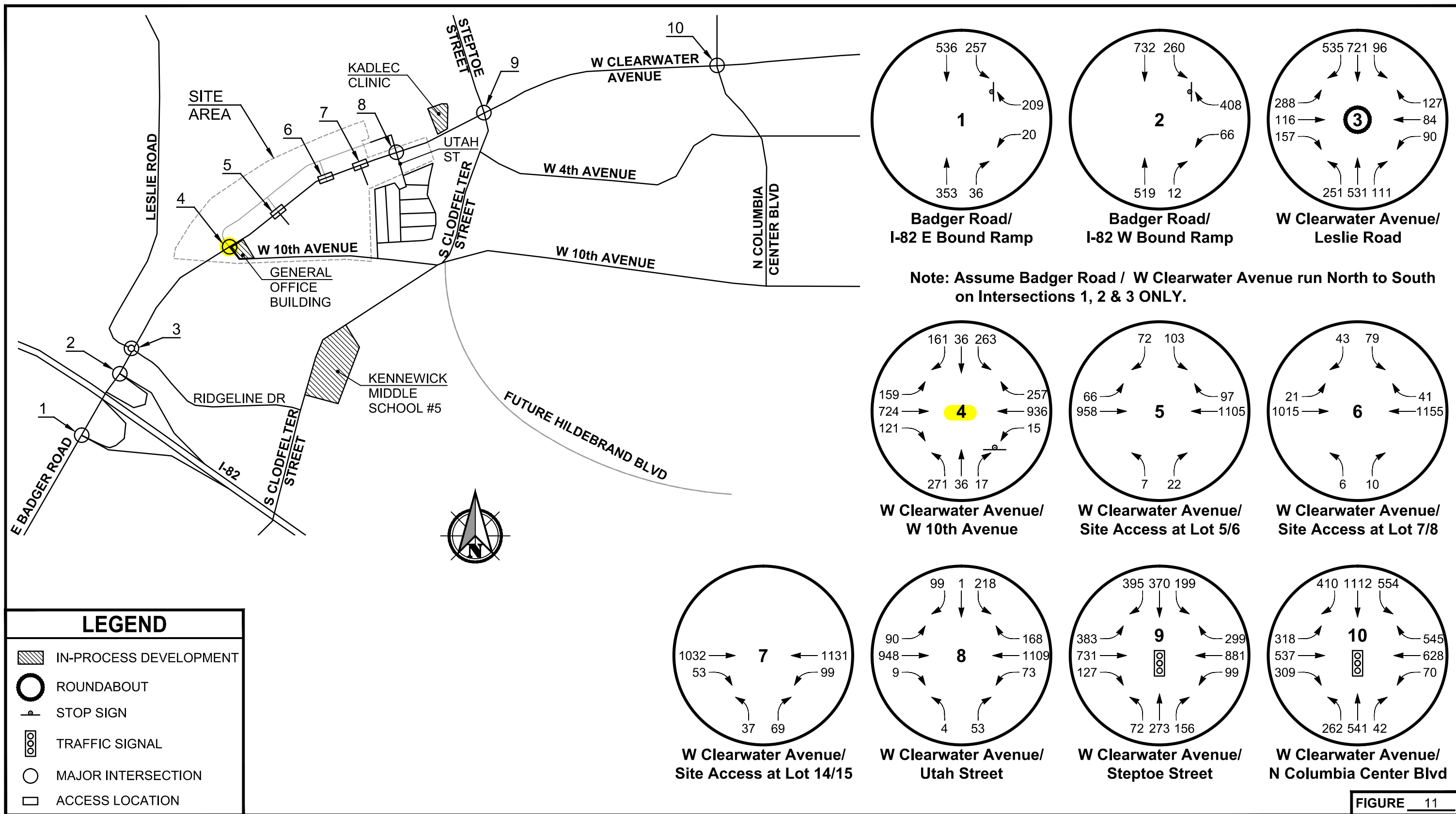
6115 Burden Blvd, Suite E
Pasco, WA 99301-8930
509/547-5119
360/695-3488
509/547-5129 fax
Internet: www.hdig.com

PM Peak Hour Pass-by Trips

Clearwater Commercial Binding Site Plan



Site Generated PM Trips and Distribution
Clearwater Commercial Binding Site Plan



HDJ
 DESIGN GROUP
 6115 Burden Blvd, Suite E
 Pasco, WA 99301-8930
 509/547-5119
 360/695-3488
 509/547-5129 fax
 Internet: www.hdjdg.com

2036 PM Peak Volumes With Phase 2 & 3
Clearwater Commercial Binding Site Plan

From: Jon Pascal <jon.pascal@transpogroup.com>
Sent: Friday, May 14, 2021 1:33 PM
To: David Holt
Cc: Brent Turley
Subject: RE: Clearwater

David,

The access management project begun assuming a signal would be needed at some point in the future, particularly with development of the north leg. Our recollection is that the City wanted to preserve ROW for a 4 to 5 lane cross-section on the north and south legs, and let any development proposal figure out what ultimately is needed. Hope that helps.

 **Jon Pascal PE, PTOE | Principal**
 425-896-5230  206-890-3868

From: David Holt <David.Holt@pbsusa.com>
Sent: Friday, May 14, 2021 10:28 AM
To: Jon Pascal <jon.pascal@transpogroup.com>
Cc: Brent Turley <brent.turley@transpogroup.com>
Subject: RE: Clearwater

Good morning, Jon,

Thank you for these numbers, and so quickly! Two follow-up questions arise.

The signal design concept in the access management plan shows a north leg to the intersection—presumably the access to the commercial development for which PBS is working—and both this north leg and the south leg (10th) have exclusive right-turn lanes.

1. Were no volumes evaluated on the north leg?
2. With such low NB (20) and SB (0) right-turn volumes, do you know why right-turn lanes were presented in the design concept?

Happy Friday,

David Holt, PE | Project Traffic Engineer | PBS Vancouver | 360.567.2123 (direct)

From: Jon Pascal <jon.pascal@transpogroup.com>
Sent: Friday, May 14, 2021 7:49 AM
To: David Holt <David.Holt@pbsusa.com>
Cc: Brent Turley <brent.turley@transpogroup.com>
Subject: Clearwater

David,

Below are the traffic forecasts for the Clearwater/10th Avenue intersection.

Future 2035

	0				0	
1,130	0	0	0	0	0	
	0	1,930			0	1,020
	620				1,010	
770	150				10	
	0	120	0	20	0	640
	160	140				

Existing 2012

	0				0	
505	0	0	0	0	0	
	0	895			0	475
	320				465	
370	50				10	
	0	40	0	10	0	330
	60	50				

Jon Pascal PE, PTOE | Principal

☎ 425-896-5230 📠 206-890-3868 📠 425-821-3665

@ jon.pascal@transpogroup.com

transpogroup 



TG01

David Holt just submitted your form: Contact
on [Transpo Group](#)

Message Details:

Name: David Holt

Email: david.holt@pbsusa.com

Phone: 360-695-3488

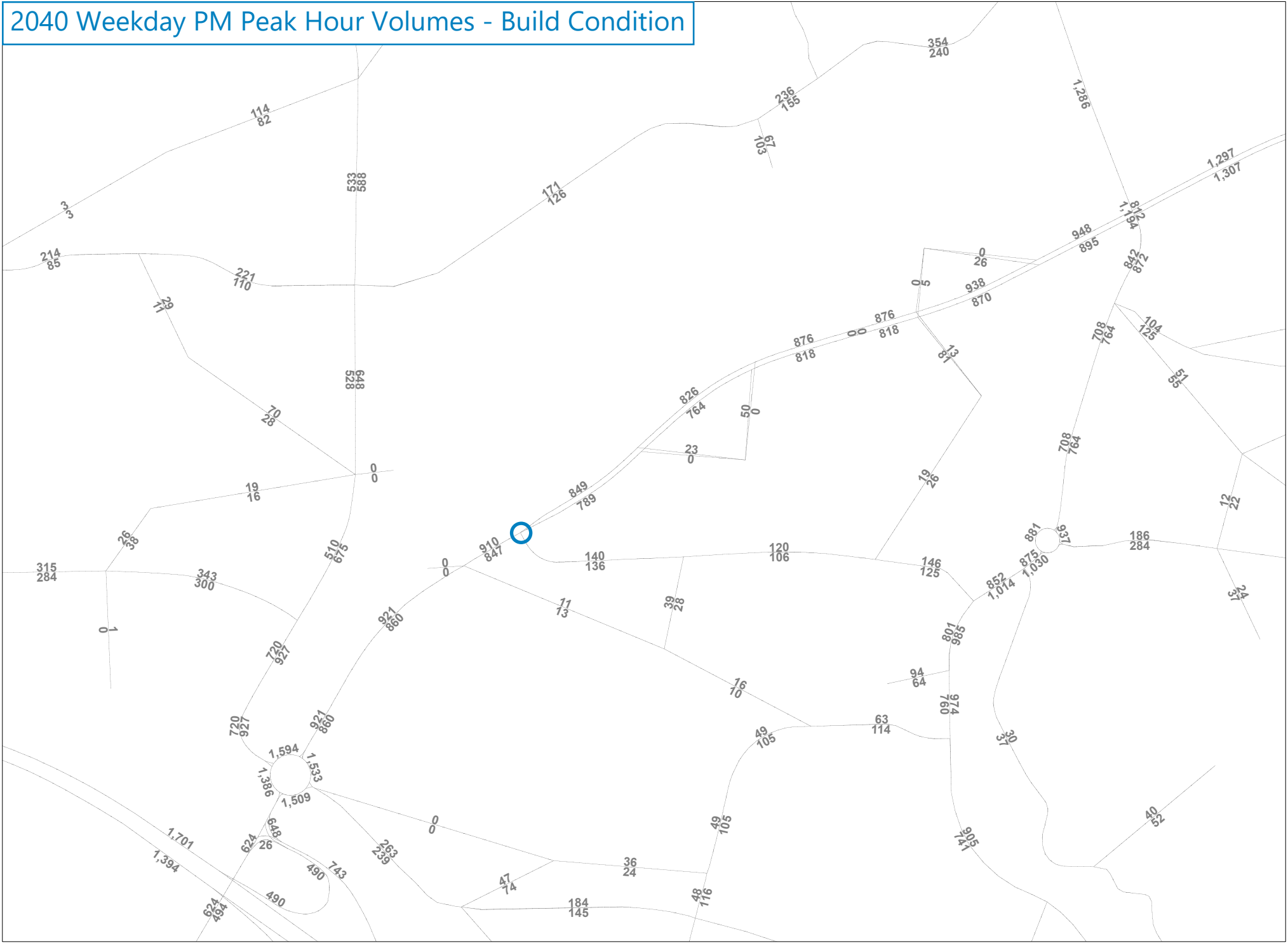
Subject: Clearwater/10th Traffic Volumes

Message: Hello, this message is for Brent Turley and Jon Pascal. Your names appear on the City of Kennewick's 2014 Clearwater Avenue Access Management Plan. We at PBS are designing a traffic signal for the realigned 10th Avenue intersection, and we're interested to compare our future intersection volume forecasts to yours. Would you mind sharing those? Kind regards, David Holt, PE Project Traffic Engineer PBS Engineering and Environmental

If you think this submission is spam, [report it as spam](#).

To edit your email settings, go to your Inbox on desktop.

2040 Weekday PM Peak Hour Volumes - Build Condition



2015 Model Year - PM Peak Hour

Leg	N		S		E		W	
Direction	NB	SB	NB	SB	EB	WB	EB	WB
			84	116	448	402	526	448

2040 Model Year - PM Peak Hour

Leg	N		S		E		W	
Direction	NB	SB	NB	SB	EB	WB	EB	WB
			140	136	789	849	847	910

2040 and 2015 Difference

			56	20	341	447	321	462
--	--	--	----	----	-----	-----	-----	-----

Yearly model growth (linear)

			2.7%	0.7%	3.0%	4.4%	2.4%	4.1%
--	--	--	------	------	------	------	------	------

"2021 Model Year" - PM Peak Hour (Interpolated)

Leg	N		S		E		W	
Direction	NB	SB	NB	SB	EB	WB	EB	WB
			97	121	530	509	603	559

2021 Total Traffic Forecast - PM Peak Hour (based on 2021 counts + 14% COVID-19 adjustment)

Leg	N		S		E		W	
Direction	NB	SB	NB	SB	EB	WB	EB	WB
			42	76	700	919	762	947

Remaining Adjustment from "2021 Model Year" to 2040 Model Year

			43	15	259	340	244	351
--	--	--	----	----	-----	-----	-----	-----

Adjusted 2040 Design Year Volumes - PM Peak Hour

Leg	N		S		E		W	
Direction	NB	SB	NB	SB	EB	WB	EB	WB
			85	91	959	1,259	1,006	1,298

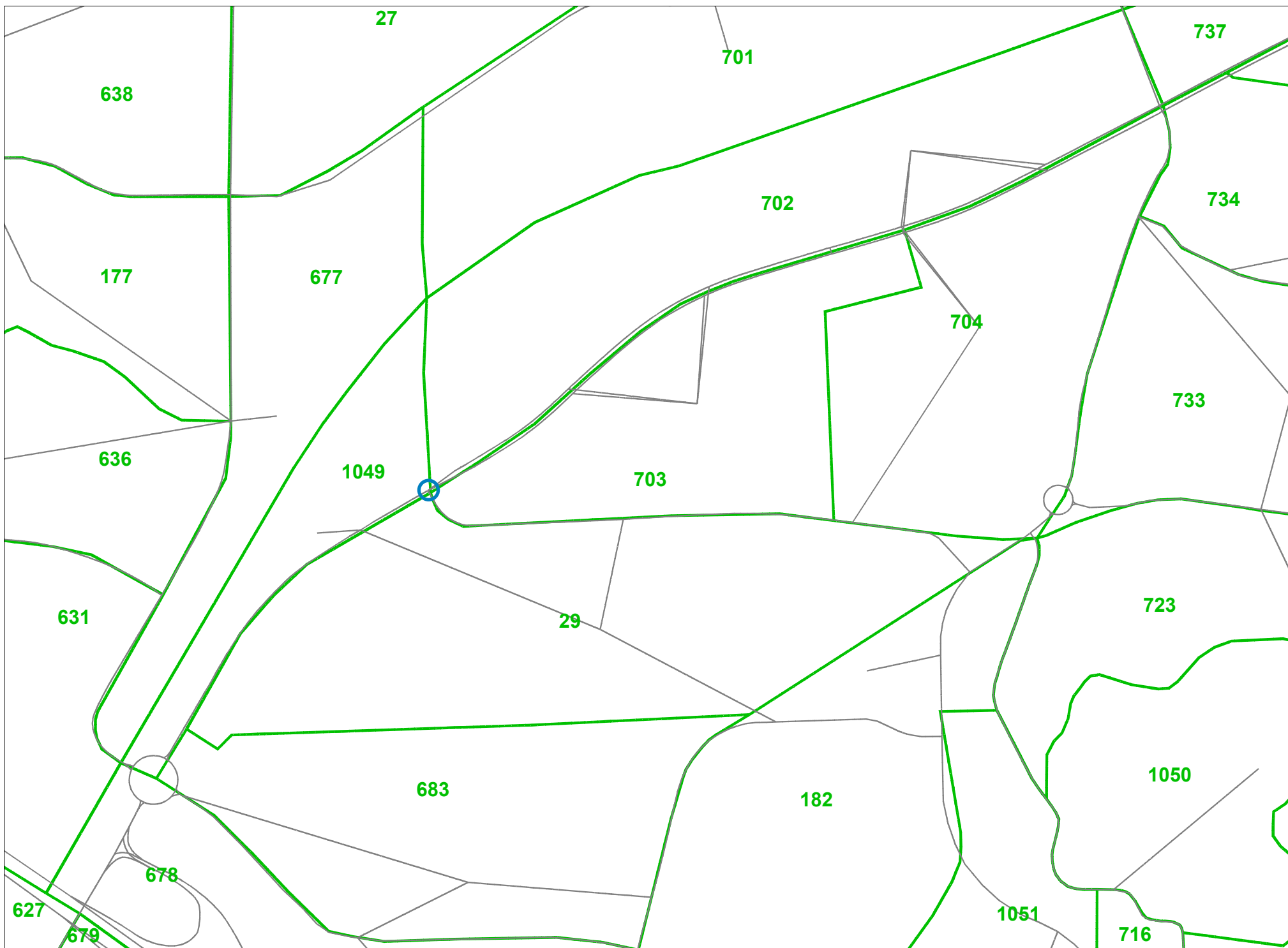
Exhibit 8

[illegible]

2040 Weekday PM Peak Two-Hour Volumes - Build Condition

Select Link Analysis for Westbound 10th Avenue

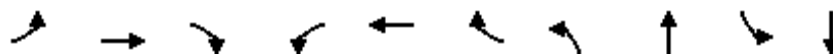




Queues

1: W 10th Avenue & W Clearwater Avenue

07/02/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	128	1028	168	44	1294	208	279	54	169	256
v/c Ratio	0.81	0.64	0.22	0.39	0.90	0.30	0.88	0.17	0.51	0.79
Control Delay	90.1	28.8	10.8	66.5	42.5	14.0	77.4	26.9	53.9	51.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.1	28.8	10.8	66.5	42.5	14.0	77.4	26.9	53.9	51.0
Queue Length 50th (ft)	100	326	32	33	476	53	216	19	127	139
Queue Length 95th (ft)	#230	456	86	77	#691	122	#419	57	212	234
Internal Link Dist (ft)		4094			3565			2613		2463
Turn Bay Length (ft)	150		100	50		100				
Base Capacity (vph)	158	1607	772	128	1538	742	316	433	370	456
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.64	0.22	0.34	0.84	0.28	0.88	0.12	0.46	0.56

Intersection Summary

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

Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary1: W 10th Avenue & W Clearwater Avenue

07/02/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	977	160	42	1229	198	265	28	24	161	78	165
Future Volume (veh/h)	122	977	160	42	1229	198	265	28	24	161	78	165
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	128	1028	168	44	1294	208	279	29	25	169	82	174
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	1627	726	57	1435	640	305	217	187	199	93	198
Arrive On Green	0.09	0.46	0.46	0.03	0.40	0.40	0.17	0.23	0.23	0.11	0.17	0.17
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	927	799	1781	534	1133
Grp Volume(v), veh/h	128	1028	168	44	1294	208	279	0	54	169	0	256
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1726	1781	0	1666
Q Serve(g_s), s	8.4	26.2	7.6	2.9	40.6	10.7	18.3	0.0	2.9	11.1	0.0	17.8
Cycle Q Clear(g_c), s	8.4	26.2	7.6	2.9	40.6	10.7	18.3	0.0	2.9	11.1	0.0	17.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.46	1.00		0.68
Lane Grp Cap(c), veh/h	154	1627	726	57	1435	640	305	0	404	199	0	291
V/C Ratio(X)	0.83	0.63	0.23	0.77	0.90	0.33	0.91	0.00	0.13	0.85	0.00	0.88
Avail Cap(c_a), veh/h	157	1627	726	127	1524	680	315	0	406	315	0	392
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.5	24.6	19.6	57.1	33.2	24.3	48.4	0.0	36.0	51.8	0.0	47.9
Incr Delay (d2), s/veh	29.6	0.8	0.2	18.9	7.5	0.3	29.4	0.0	0.1	11.9	0.0	15.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	10.5	2.8	1.6	17.9	4.0	10.4	0.0	1.2	5.6	0.0	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.1	25.4	19.7	76.0	40.8	24.6	77.9	0.0	36.1	63.7	0.0	63.7
LnGrp LOS	F	C	B	E	D	C	E	A	D	E	A	E
Approach Vol, veh/h	1324			1546			333			425		
Approach Delay, s/veh	30.3			39.6			71.1			63.7		
Approach LOS	C			D			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.3	59.5	25.4	25.8	14.8	53.0	18.3	32.9				
Change Period (Y+Rc), s	4.5	5.0	5.0	5.0	4.5	5.0	5.0	5.0				
Max Green Setting (Gmax), s	8.5	53.0	21.0	28.0	10.5	51.0	21.0	28.0				
Max Q Clear Time (g_c+I1), s	4.9	28.2	20.3	19.8	10.4	42.6	13.1	4.9				
Green Ext Time (p_c), s	0.0	8.0	0.1	1.0	0.0	5.4	0.3	0.2				
Intersection Summary												
HCM 6th Ctrl Delay	41.9											
HCM 6th LOS	D											

Queues

1: W 10th Avenue & W Clearwater Avenue

07/02/2021

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	167	762	127	16	985	271	285	56	277	207
v/c Ratio	0.68	0.43	0.15	0.16	0.78	0.42	0.76	0.30	0.66	0.70
Control Delay	59.6	18.5	6.4	56.4	35.3	15.2	53.4	38.4	47.3	27.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.6	18.5	6.4	56.4	35.3	15.2	53.4	38.4	47.3	27.0
Queue Length 50th (ft)	109	148	9	11	309	65	182	25	177	33
Queue Length 95th (ft)	#225	273	50	36	437	151	#333	67	#318	112
Internal Link Dist (ft)	4094			3565			2613			2463
Turn Bay Length (ft)	150		100	50		100				
Base Capacity (vph)	277	1910	899	98	1506	750	448	515	449	576
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.40	0.14	0.16	0.65	0.36	0.64	0.11	0.62	0.36

Intersection Summary

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

Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary1: W 10th Avenue & W Clearwater Avenue

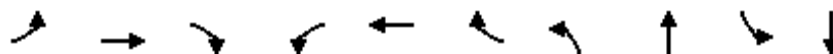
07/02/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	724	121	15	936	257	271	36	17	263	36	161
Future Volume (veh/h)	159	724	121	15	936	257	271	36	17	263	36	161
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	167	762	127	16	985	271	285	38	18	277	38	169
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	202	1559	695	32	1221	545	325	191	91	317	46	207
Arrive On Green	0.11	0.44	0.44	0.02	0.34	0.34	0.18	0.16	0.16	0.18	0.16	0.16
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1200	568	1781	299	1331
Grp Volume(v), veh/h	167	762	127	16	985	271	285	0	56	277	0	207
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1768	1781	0	1631
Q Serve(g_s), s	8.7	14.5	4.6	0.8	23.9	12.8	14.8	0.0	2.6	14.3	0.0	11.6
Cycle Q Clear(g_c), s	8.7	14.5	4.6	0.8	23.9	12.8	14.8	0.0	2.6	14.3	0.0	11.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.32	1.00		0.82
Lane Grp Cap(c), veh/h	202	1559	695	32	1221	545	325	0	282	317	0	253
V/C Ratio(X)	0.83	0.49	0.18	0.50	0.81	0.50	0.88	0.00	0.20	0.87	0.00	0.82
Avail Cap(c_a), veh/h	291	1950	870	103	1575	702	470	0	522	470	0	482
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.1	19.0	16.2	46.1	28.2	24.6	37.7	0.0	34.6	37.9	0.0	38.7
Incr Delay (d2), s/veh	12.3	0.2	0.1	11.3	2.5	0.7	12.4	0.0	0.3	11.5	0.0	6.4
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	4.3	5.5	1.6	0.5	9.8	4.7	7.3	0.0	1.1	7.2	0.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.4	19.2	16.4	57.4	30.7	25.3	50.2	0.0	34.9	49.4	0.0	45.2
LnGrp LOS	D	B	B	E	C	C	D	A	C	D	A	D
Approach Vol, veh/h	1056			1272			341			484		
Approach Delay, s/veh	24.3			29.9			47.7			47.6		
Approach LOS	C			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.2	46.6	22.3	19.7	15.2	37.6	21.9	20.1				
Change Period (Y+Rc), s	4.5	5.0	5.0	5.0	4.5	5.0	5.0	5.0				
Max Green Setting (Gmax), s	5.5	52.0	25.0	28.0	15.5	42.0	25.0	28.0				
Max Q Clear Time (g_c+I1), s	2.8	16.5	16.8	13.6	10.7	25.9	16.3	4.6				
Green Ext Time (p_c), s	0.0	5.9	0.5	1.1	0.2	6.7	0.6	0.2				
Intersection Summary												
HCM 6th Ctrl Delay	32.7											
HCM 6th LOS	C											

Queues

1: W 10th Avenue & W Clearwater Avenue

07/02/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	128	769	218	26	1173	208	339	65	169	256
v/c Ratio	0.81	0.48	0.28	0.31	0.89	0.31	0.89	0.17	0.50	0.79
Control Delay	90.2	25.8	11.5	68.6	45.3	11.8	72.5	21.1	53.5	51.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.2	25.8	11.5	68.6	45.3	11.8	72.5	21.1	53.5	51.0
Queue Length 50th (ft)	100	229	45	20	441	37	259	18	127	139
Queue Length 95th (ft)	#230	326	112	54	#641	104	#474	57	212	234
Internal Link Dist (ft)	4094				3565		2613		2463	
Turn Bay Length (ft)	150	100		50	100					
Base Capacity (vph)	158	1598	782	83	1388	702	392	506	377	456
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.48	0.28	0.31	0.85	0.30	0.86	0.13	0.45	0.56

Intersection Summary

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

Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary1: W 10th Avenue & W Clearwater Avenue

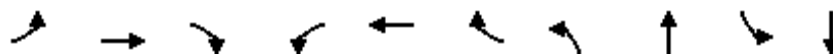
07/02/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	731	207	25	1114	198	322	28	34	161	78	165
Future Volume (veh/h)	122	731	207	25	1114	198	322	28	34	161	78	165
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	128	769	218	26	1173	208	339	29	36	169	82	174
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	1525	680	43	1305	582	366	204	253	199	93	198
Arrive On Green	0.09	0.43	0.43	0.02	0.37	0.37	0.21	0.27	0.27	0.11	0.18	0.18
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	759	942	1781	534	1133
Grp Volume(v), veh/h	128	769	218	26	1173	208	339	0	65	169	0	256
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1701	1781	0	1666
Q Serve(g_s), s	8.3	18.5	10.7	1.7	36.7	11.2	22.0	0.0	3.4	11.0	0.0	17.6
Cycle Q Clear(g_c), s	8.3	18.5	10.7	1.7	36.7	11.2	22.0	0.0	3.4	11.0	0.0	17.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.55	1.00		0.68
Lane Grp Cap(c), veh/h	154	1525	680	43	1305	582	366	0	457	199	0	292
V/C Ratio(X)	0.83	0.50	0.32	0.60	0.90	0.36	0.93	0.00	0.14	0.85	0.00	0.88
Avail Cap(c_a), veh/h	159	1540	687	83	1389	620	394	0	477	318	0	397
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	52.9	24.5	22.2	56.8	35.2	27.1	45.9	0.0	32.7	51.3	0.0	47.3
Incr Delay (d2), s/veh	29.0	0.3	0.3	12.6	7.9	0.4	26.6	0.0	0.1	11.4	0.0	15.3
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	4.9	7.5	3.9	0.9	16.4	4.2	12.2	0.0	1.4	5.6	0.0	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.9	24.7	22.5	69.4	43.1	27.5	72.5	0.0	32.8	62.7	0.0	62.7
LnGrp LOS	F	C	C	E	D	C	E	A	C	E	A	E
Approach Vol, veh/h		1115			1407			404			425	
Approach Delay, s/veh		30.8			41.3			66.1			62.7	
Approach LOS		C			D			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.4	55.5	29.2	25.6	14.7	48.2	18.2	36.6				
Change Period (Y+Rc), s	4.5	5.0	5.0	5.0	4.5	5.0	5.0	5.0				
Max Green Setting (Gmax), s	5.5	51.0	26.0	28.0	10.5	46.0	21.0	33.0				
Max Q Clear Time (g_c+I1), s	3.7	20.5	24.0	19.6	10.3	38.7	13.0	5.4				
Green Ext Time (p_c), s	0.0	6.2	0.2	1.0	0.0	4.5	0.3	0.3				
Intersection Summary												
HCM 6th Ctrl Delay			43.5									
HCM 6th LOS			D									

Queues

1: W 10th Avenue & W Clearwater Avenue

07/02/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	128	1098	138	32	1419	208	298	48	169	256
v/c Ratio	0.84	0.64	0.17	0.30	0.95	0.29	0.97	0.15	0.53	0.80
Control Delay	94.7	27.6	8.4	63.7	48.6	13.9	94.7	29.2	55.0	52.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	94.7	27.6	8.4	63.7	48.6	13.9	94.7	29.2	55.0	52.3
Queue Length 50th (ft)	100	354	18	24	552	53	234	19	127	139
Queue Length 95th (ft)	#230	500	64	61	#807	122	#454	55	212	234
Internal Link Dist (ft)		4094			3565			2613		2463
Turn Bay Length (ft)	150		100	50		100				
Base Capacity (vph)	153	1719	818	124	1495	724	307	421	356	445
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.64	0.17	0.26	0.95	0.29	0.97	0.11	0.47	0.58

Intersection Summary

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

Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary1: W 10th Avenue & W Clearwater Avenue

07/02/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 						 	
Traffic Volume (veh/h)	122	1043	131	30	1348	198	283	28	18	161	78	165
Future Volume (veh/h)	122	1043	131	30	1348	198	283	28	18	161	78	165
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	128	1098	138	32	1419	208	298	29	19	169	82	174
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	1673	746	48	1466	654	304	246	161	198	93	197
Arrive On Green	0.09	0.47	0.47	0.03	0.41	0.41	0.17	0.23	0.23	0.11	0.17	0.17
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1055	691	1781	534	1133
Grp Volume(v), veh/h	128	1098	138	32	1419	208	298	0	48	169	0	256
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1746	1781	0	1666
Q Serve(g_s), s	8.7	29.2	6.2	2.2	48.1	10.9	20.5	0.0	2.7	11.5	0.0	18.5
Cycle Q Clear(g_c), s	8.7	29.2	6.2	2.2	48.1	10.9	20.5	0.0	2.7	11.5	0.0	18.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.40	1.00		0.68
Lane Grp Cap(c), veh/h	152	1673	746	48	1466	654	304	0	407	198	0	289
V/C Ratio(X)	0.84	0.66	0.18	0.67	0.97	0.32	0.98	0.00	0.12	0.85	0.00	0.88
Avail Cap(c_a), veh/h	152	1673	746	123	1471	656	304	0	407	304	0	379
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.6	25.0	18.9	59.4	35.4	24.5	50.9	0.0	37.3	53.8	0.0	49.7
Incr Delay (d2), s/veh	32.9	0.9	0.1	14.6	16.4	0.3	46.5	0.0	0.1	13.4	0.0	17.6
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	5.2	11.8	2.3	1.2	22.9	4.1	12.9	0.0	1.1	5.9	0.0	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.4	25.9	19.0	74.1	51.8	24.8	97.5	0.0	37.4	67.2	0.0	67.3
LnGrp LOS	F	C	B	E	D	C	F	A	D	E	A	E
Approach Vol, veh/h		1364			1659			346			425	
Approach Delay, s/veh		31.1			48.8			89.1			67.3	
Approach LOS		C			D			F			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.8	63.0	26.0	26.4	15.0	55.8	18.7	33.7				
Change Period (Y+Rc), s	4.5	5.0	5.0	5.0	4.5	5.0	5.0	5.0				
Max Green Setting (Gmax), s	8.5	53.0	21.0	28.0	10.5	51.0	21.0	28.0				
Max Q Clear Time (g_c+I1), s	4.2	31.2	22.5	20.5	10.7	50.1	13.5	4.7				
Green Ext Time (p_c), s	0.0	8.1	0.0	0.9	0.0	0.7	0.3	0.2				
Intersection Summary												
HCM 6th Ctrl Delay			48.2									
HCM 6th LOS			D									

Future Year Conditions
 10th Avenue / Clearwater Avenue
 Traffic Signal Design - Project 71662.000
 2040 PBS Volumes

Figure 4C-3. Warrant 3, Peak Hour

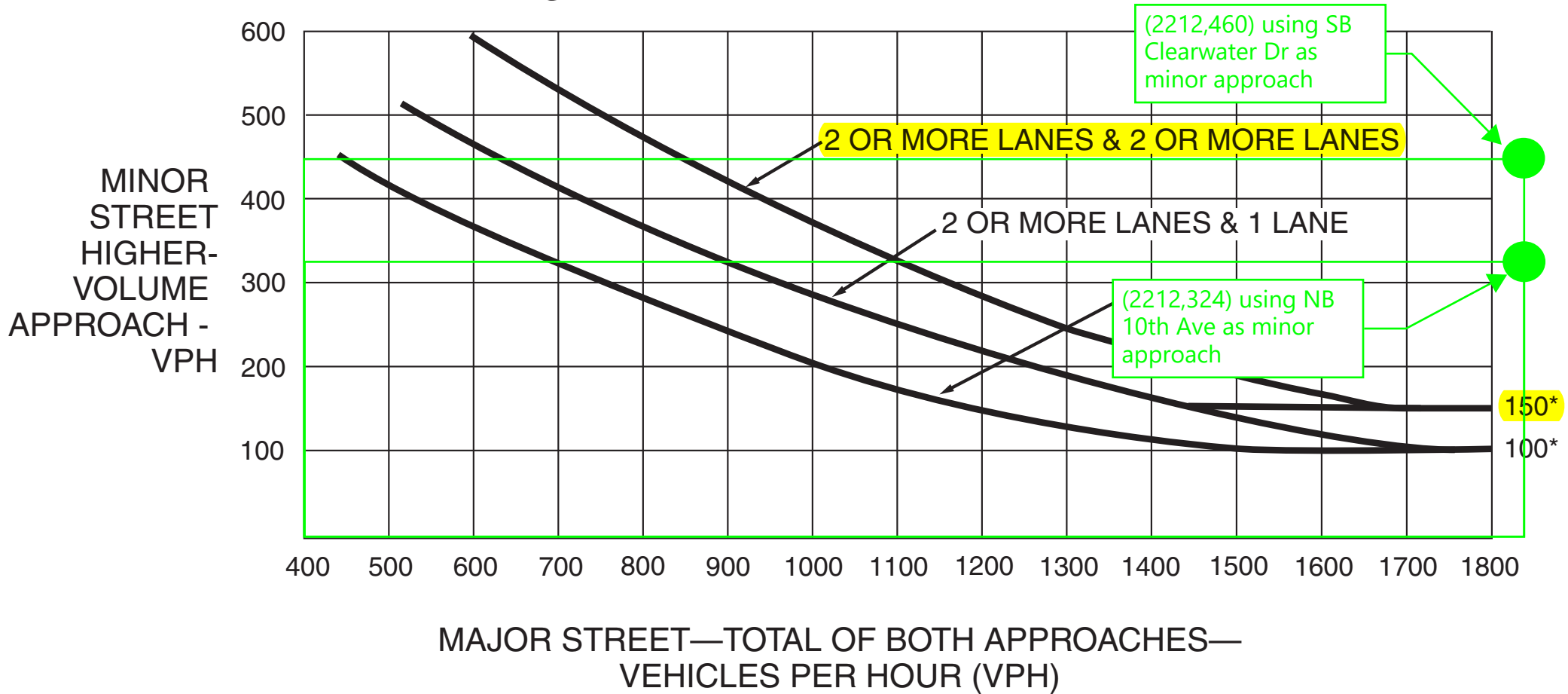


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

● - Met
 ● - Did not meet

Future Year Conditions
 10th Avenue / Clearwater Avenue
 Traffic Signal Design - Project 71662.000
 2036 HDJ Volumes

Figure 4C-3. Warrant 3, Peak Hour

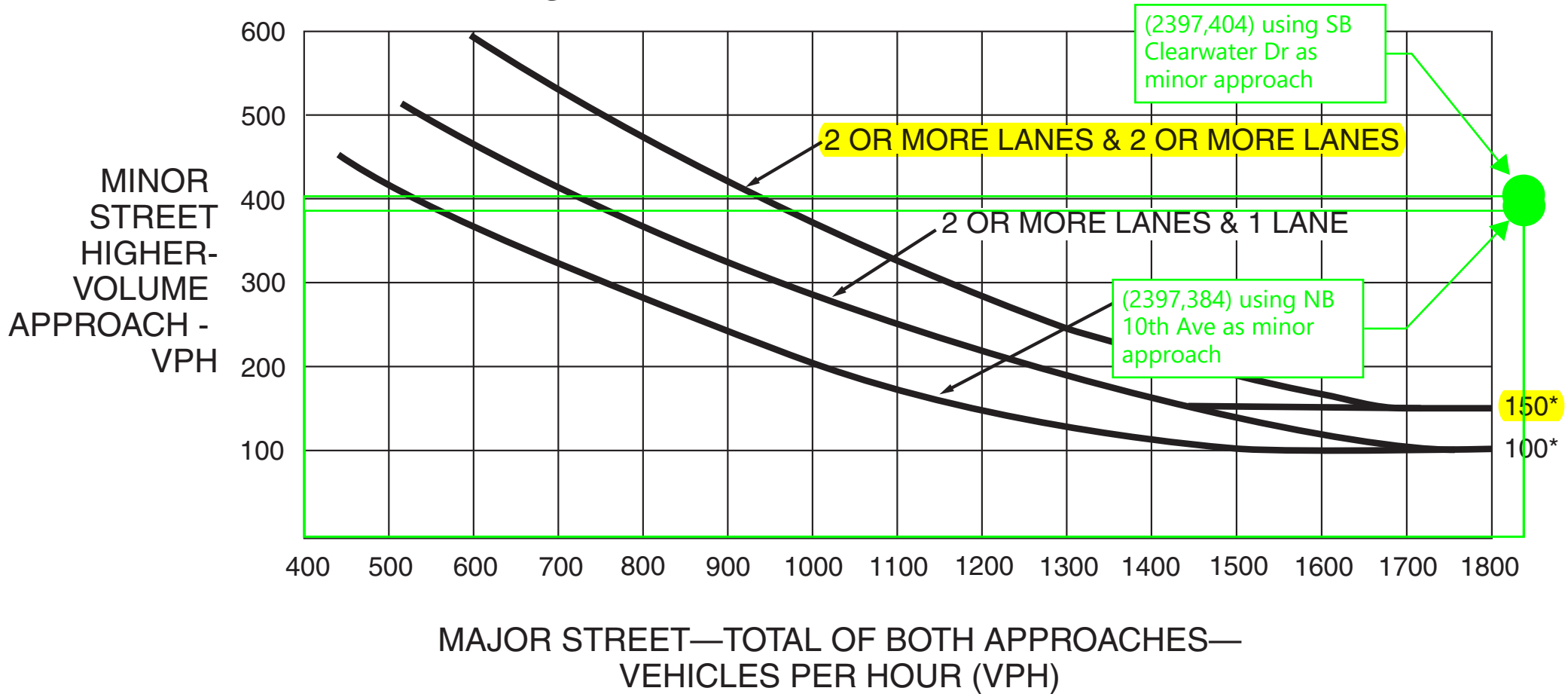


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

● - Met
 ● - Did not meet

Future Year Conditions
10th Avenue / Clearwater Avenue
Traffic Signal Design - Project 71662.000
2035 Transpo Volumes

Figure 4C-3. Warrant 3, Peak Hour

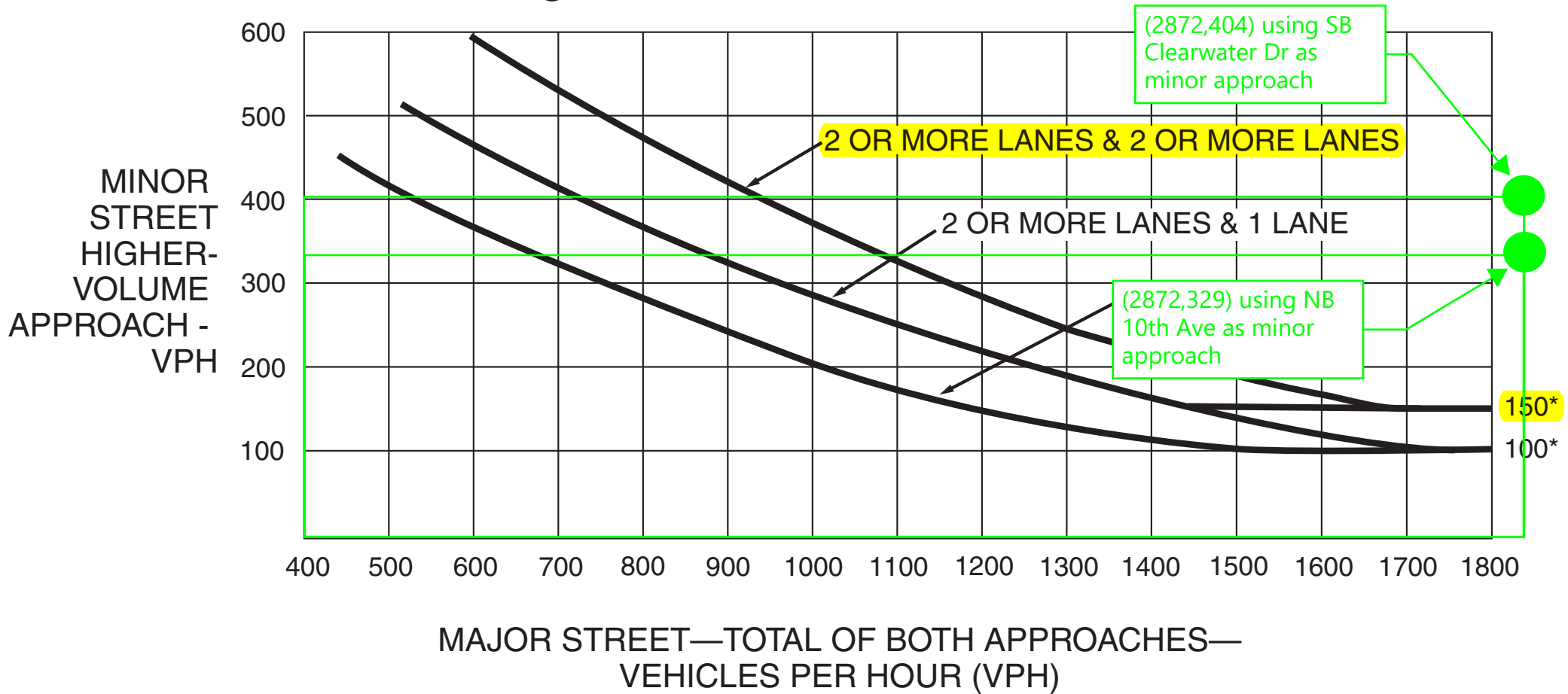


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

● - Met
● - Did not meet

Future Year Conditions
 10th Avenue / Clearwater Avenue
 Traffic Signal Design - Project 71662.000
 2040 BFCG Volumes

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

● - Met
 ● - Did not meet

2036 Future with Phases 2 & 3 (volumes on Figure 11)

MITIG8 - 2036 Future with PMon Feb 15, 2016 16:52:13

Page 1-1

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #4 W 10th Ave/ Clearwater Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.681
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 19.8
 Optimal Cycle: 58 Level Of Service: B

Street Name: W 10th Ave Clearwater Blvd

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	0	1	0	1	1	1	1

Volume Module: >> Count Date: 1 Jan 2021 << PM Peak Hour

Base Vol:	106	28	7	202	28	124	122	472	56	3	614	198
Growth Adj:	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Initial Bse:	138	36	9	263	36	161	159	614	73	4	798	257
Added Vol:	133	0	8	0	0	0	0	110	48	11	138	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	271	36	17	263	36	161	159	724	121	15	936	257
User 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
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	291	39	18	282	39	173	171	778	130	16	1007	277
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	291	39	18	282	39	173	171	778	130	16	1007	277
PCE 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
MLF 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
FinalVolume:	291	39	18	282	39	173	171	778	130	16	1007	277

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.51	0.95	0.95	0.69	0.88	0.88	0.95	0.93	0.93	0.95	0.92	0.92
Lanes:	1.00	0.68	0.32	1.00	0.18	0.82	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	975	1231	578	1311	307	1361	1805	3534	1767	1805	3494	1747

Capacity Analysis Module:

Vol/Sat:	0.30	0.03	0.03	0.22	0.13	0.13	0.09	0.22	0.07	0.01	0.29	0.16
Crit Moves:	****						****				****	
Green/Cycle:	0.44	0.44	0.44	0.44	0.44	0.44	0.56	0.54	0.54	0.44	0.42	0.42
Volume/Cap:	0.68	0.07	0.07	0.49	0.29	0.29	0.49	0.41	0.14	0.05	0.68	0.37
Uniform Del:	22.5	16.3	16.3	20.1	18.1	18.1	14.9	13.6	11.4	15.6	23.4	19.8
IncrementDel:	4.5	0.0	0.0	0.7	0.2	0.2	1.1	0.1	0.0	0.1	1.0	0.1
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	26.9	16.3	16.3	20.8	18.3	18.3	15.9	13.7	11.4	15.7	24.4	19.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.9	16.3	16.3	20.8	18.3	18.3	15.9	13.7	11.4	15.7	24.4	19.9
LOS by Move:	C	B	B	C	B	B	B	B	B	B	C	B
HCM2kAvgQ:	8	1	1	7	4	4	4	7	2	0	14	6



June 4, 2021

Sorin Juster, PE, PTOE – Transportation Manager
City of Kennewick, Public Works Department
PO Box 6108
Kennewick, Washington 99336-0108

Via email: Sorin.Juster@ci.kennewick.wa.us

Regarding: Trip Accounting Update
Clearwater Commercial Binding Site Plan, Lot 16A (Crimson Hills)
Kennewick, Washington
PBS Project 71662.000

Dear Mr. Juster:

This trip accounting letter is an updated version of the trip accounting letter dated March 12, 2021, that was submitted to the City of Kennewick (City). The letter was updated because the Crimson Hill subdivision site plan was revised to all have smaller lots which increased the lot count to 141. This trip accounting letter estimates the number of trips generated by the proposed Crimson Hills subdivision on Lot 16A of the Clearwater Commercial Binding Site Plan (BSP) development.

This letter supports the condition of approval for the Crimson Hills Preliminary Plat application to the City, and it documents the status of the vested trips for the overall Clearwater Commercial BSP development.

The Crimson Hills development proposes 141 dwelling units of single-family housing on Lot 16A of the Clearwater Commercial BSP development. The combined site plan and vicinity map for the Crimson Hills developments is attached for reference. The Clearwater Commercial BSP trip accounting is based on the February 17, 2016, "Clearwater Commercial Binding Site Plan" traffic impact analysis report by the former HDJ Design Group (now PBS). This trip accounting subtracts the Crimson Hills trips from the total project trips.

TRIP GENERATION FOR CRIMSON HILLS

Trip generation estimates for the proposed Crimson Hills subdivision are based on "Single-Family Detached Housing," land use code 210, from the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition (2017). The average daily trips (ADT), weekday AM peak hour trips, and weekday PM peak hour trips are noted in Table 1. Detailed trip generation calculations are attached.

Table 1. Trip Generation for Crimson Hills Subdivision

Land Use (ITE Code)	Single-Family Detached Housing (210)		
Independent Variable	Dwelling Units		
Size	141		
Peak Hour Trips	ADT	AM	PM
Entering	713	26	89
Exiting	713	79	52
Total (Unadjusted)	1426	105	141

At full build-out, the Crimson Hills project is anticipated to generate 1,426 average daily weekday trips, including 105 new vehicle trips during the AM peak hour, and 141 new trips during the PM peak hour, which will be subtracted from the original trip allocation in the trip accounting below.

CLEARWATER COMMERCIAL BINDING SITE PLAN TRIP ACCOUNTING

The original land use assumption on Lot 16A of the Clearwater Commercial BSP was a 111,460 square foot medical dental office building. The Crimson Hills development proposes 141 dwelling units of single-family housing on Lot 16A. Table 2 provides accounting for available trips remaining on Lot 16A of the Clearwater Commercial BSP. The original site plan and land use assumptions are attached along with detailed trip generation calculations of the original land use assumption.

Table 2. Lot 16A of Clearwater Commercial Binding Site Plan Trip Accounting

Trip Accounting Element (Applicable Document Date)	Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
		Total	In	Out	Total	In	Out
Original Land Use Assumption on Lot 16A: Medical Dental Office Building (February 18, 2016)	4,027	276	218	58	415	112	303
Currently Proposed on Lot 16A: Crimson Hills Subdivision (June 4, 2021)	(1,426)	(105)	(26)	(79)	(141)	(89)	(52)
Net New Trips Available on Lot 16A	2,601	171	192	-21	274	23	251

Note: negative values are shown italicized in parentheses.

Following the development of Crimson Hills subdivision, Lot 16A of the Clearwater Commercial BSP will have 2,601 daily trips, 171 AM peak hour trips, and 274 PM peak hour trips remaining available.

Table 3 provides an accounting for available trips remaining for the Clearwater Commercial BSP. Detailed trip generation calculations of the overall original Clearwater Commercial BSP are attached.

Table 3. Overall Clearwater Commercial Binding Site Plan Trip Accounting

Trip Accounting Element (Applicable Document Date)	Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
		Total	In	Out	Total	In	Out
Original Clearwater Commercial Binding Site Plan Trip Vesting (February 18, 2016)	37,569	3,734	2,116	1,618	1,903	771	1,132
Currently Proposed on Lot 16A: Crimson Hills Subdivision (June 4, 2021)	(1,426)	(105)	(26)	(79)	(141)	(89)	(52)
Remaining Available Trips	36,143	3,629	2,090	1,539	1,762	682	1,080

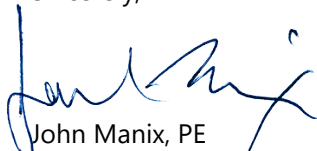
Note: negative values are shown italicized in parentheses.

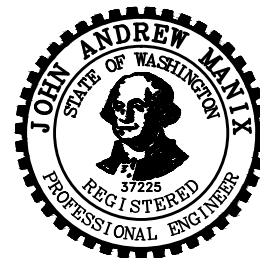
Following the development of Crimson Hills subdivision, the Clearwater Commercial BSP will have 36,143 daily trips, 3,629 AM peak hour trips, and 1,762 PM peak hour trips remaining available for future development on other lots.

CLOSING

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



Attachments: Crimson Hills Site Plan and Vicinity Map
 Crimson Hills Trip generation calculations
 Clearwater Commercial Binding Site Plan
 Clearwater Commercial BSP Land Use Assumptions
 Clearwater Commercial BSP Lot 16A Trip generation calculations
 Overall Clearwater Commercial BSP Trip generation calculations

BJ:JAM:mo

CRIMSON HILLS

PRELIMINARY PLAT
S.E. 1/4 OF SEC. 31, T.08N., R.28E., W.M., CITY OF KENNEWICK,
BENTON COUNTY, WA

CONTACT INFO

OWNER/DEVELOPER:
ATTN: TOM & VICKI SOLBRACK
2555 W HIGHWAY 24
OTHELLO, WA 99344
PHONE:(509)989-0209

SURVEYOR:
STRATTON SURVEYING &
MAPPING P.C.
ATTN: DEREK INGALSBE
313 NORTH MORAIN ST
KENNEWICK, WA 99336
PHONE:(509)735-6560

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

BASIS OF BEARINGS

WA STATE GRID SOUTH ZONE NAD 83(2011)

BASIS OF ELEVATION

CITY OF KENNEWICK GPS CONTROL FILE NAVD 88 DATUM POINT K0918
ELEV = 596.74

LAND USE SUMMARY

GROSS ACREAGE:	14.24 AC
NET LOT ACREAGE:	12.22 AC
NET TRACT ACREAGE:	0.03 AC
TOTAL NUMBER OF LOTS:	141
AVERAGE LOT SIZE:	3774 SF
LARGEST LOT AREA:	7597 SF
SMALLEST LOT AREA:	3154 SF
AVERAGE DENSITY:	9.90
PRESENT ZONING:	RM
TYPE OF WATER SERVICE:	CITY
TYPE OF SEWER SERVICE:	CITY
AREA OF PUBLIC ROADS:	2.57 AC

LEGAL DESCRIPTION

PARCEL A - PARCEL NO. 101884BP5063015
LOT 15 OF BINDING SITE PLAN NUMBER 15-11,
RECORDED IN VOLUME 1 OF SURVEYS AT
PAGE 5063, RECORDS OF BENTON COUNTY,
WASHINGTON.

PARCEL B - PARCEL NO. 101884000001017
THAT PORTION OF THE SOUTH HALF OF SECTION 1,
TOWNSHIP 8 NORTH, RANGE 28 EAST, W.M.,
KENNEWICK, BENTON COUNTY, WASHINGTON, DESCRIBED
AS FOLLOWS:
COMMENCING AT THE SOUTH QUARTER CORNER OF
SAID SECTION 1; THENCE NORTH 86°07'47" EAST,
ALONG THE SOUTH LINE OF SAID SECTION 1, FOR
654.83 FEET; THENCE NORTH 03°52'13" WEST FOR
250.21 FEET TO THE TRUE POINT OF BEGINNING;
THENCE NORTH 03°52'13" WEST FOR 799.57 FEET TO
INTERSECT A 2035.00 FOOT RADIUS CURVE CONCAVE
TO THE SOUTHEAST (THE RADIUS POINT BEARS SOUTH
19°34'36" EAST); THENCE SOUTHWESTERLY ALONG THE
ARC OF SAID CURVE TO THE LEFT, THROUGH A
CENTRAL ANGLE OF 02°21'15", FOR AN ARC DISTANCE
OF 83.61 FEET; THENCE SOUTH 03°52'13" EAST FOR
775.28 FEET; THENCE NORTH 86°08'08" EAST FOR
80.00 FEET TO THE TRUE POINT OF BEGINNING.

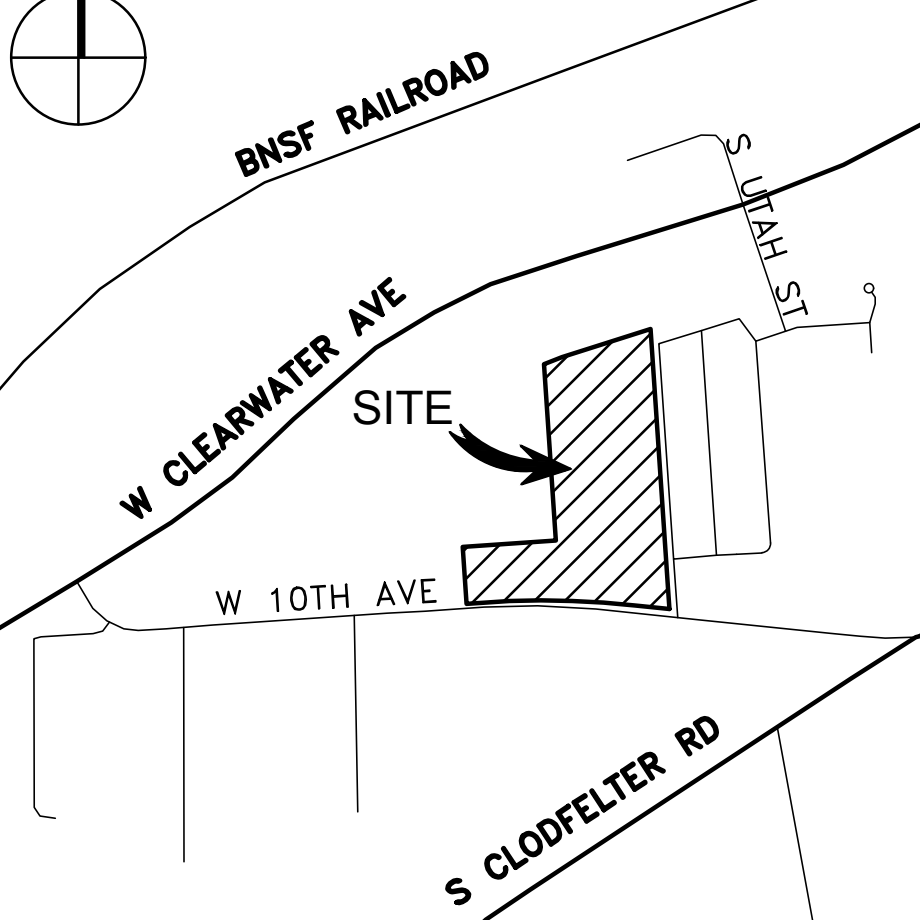
PARCEL C - PARCEL NO. 112881000006002
THAT PORTION OF THE WEST HALF OF THE NORTHWEST
QUARTER OF THE NORTHEAST QUARTER OF
SECTION 12, TOWNSHIP 8 NORTH, RANGE 28 EAST
W.M., LYING NORTHERLY OF BADGER ROAD (NOW
KNOWN AS WEST 10TH AVENUE), EXCEPT ANY PORTION
LYING EASTERLY OF CLODFELTER ROAD,
RECORDS OF BENTON COUNTY, WASHINGTON.

PARCEL D - PARCEL NO. 112881000005004
THAT PORTION OF THE EAST HALF OF THE NORTHWEST
QUARTER OF THE NORTHEAST QUARTER OF
SECTION 12, TOWNSHIP 8 NORTH, RANGE 28 EAST
W.M., LYING NORTHERLY OF THE NORTHERLY
LINE OF BADGER ROAD (NOW KNOWN AS WEST 10TH
AVENUE) AS SAID ROAD IS PRESENTLY
LOCATED, LYING WESTERLY OF BRIDGEWATER ESTATES
PHASE 1.

ALL TOGETHER WITH AND SUBJECT TO EASEMENTS,
RESERVATIONS, COVENANTS AND RESTRICTIONS, OF
RECORD AND IN VIEW.

VICINITY MAP

NORTH



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

DESIGN	CHKD	APPD
DATE		
REVISIONS		
No.		

PRELIMINARY PLAT

TOM SOLBRACK

CRIMSON HILLS

9757 W CLEARWATER, KENNEWICK WA 99336

APPROVAL		
DESIGN	GLG	05/04/21
CHECKED	NJM	05/04/21
APPROVED	NJM	05/04/21

SCALE: AS NOTED

CADFILE: 20177PP01

JOB No.
20177

DWG. No.

PP01



TAX ID 101884BP5063014
9589 W CLEARWATER AVE
KENNEWICK WA 99336
ZONE CC

TAX ID 101884BP3616001
9757 W CLEARWATER AVE
KENNEWICK WA 99336
ZONE CC

TAX ID 101884BP3616001
10001 W CLEARWATER AVE
KENNEWICK WA 99336
ZONE BP

TAX ID 101884BP3762001
10611 W CLEARWATER AVE
KENNEWICK WA 99336
ZONE BP

TAX ID 101884BP3590001
10121 W CLEARWATER AVE
KENNEWICK WA 99336
ZONE CO

PRELIMINARY PLAT

SCALE: 1" = 60'-0"

Detailed Land Use Data
 For 141 Dwelling Units of SFHOUSE 1
 (210) Single-Family Detached Housing

Project: Crimson Hills

Open Date: 6/3/2021
 Analysis Date: 6/3/2021

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips Source : Trip Generation Manual 10th Edition	1426	0	9.44	4.81	19.39	2.1	264	50	50	True	$\ln(T) = 0.92 \ln(X) + 2.71$	0.95
Weekday AM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 10th Edition	105	0	0.74	0.33	2.27	0.27	219	25	75	True	$T = 0.71(X) + 4.8$	0.89
Weekday PM Peak Hour of Adjacent Street Traffic Source : Trip Generation Manual 10th Edition	141	0	0.99	0.44	2.98	0.31	242	63	37	True	$\ln(T) = 0.96 \ln(X) + 0.2$	0.92

Trip Generation Summary

Alternative: Alternative 1

Phase:

Open Date: 6/3/2021

Project: Crimson Hills

Analysis Date: 6/3/2021

ITE	Land Use	Weekday Average Daily Trips				Weekday AM Peak Hour of Adjacent Street Traffic				Weekday PM Peak Hour of Adjacent Street Traffic			
		*	Enter	Exit	Total	*	Enter	Exit	Total	*	Enter	Exit	Total
210	SFHOUSE 1		713	713	1426		26	79	105		89	52	141
	141 Dwelling Units												
Unadjusted Volume			713	713	1426		26	79	105		89	52	141
Internal Capture Trips			0	0	0		0	0	0		0	0	0
Pass-By Trips			0	0	0		0	0	0		0	0	0
Volume Added to Adjacent Streets			713	713	1426		26	79	105		89	52	141

Total Weekday Average Daily Trips Internal Capture = 0 Percent

Total Weekday AM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

Total Weekday PM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

* - Custom rate used for selected time period.

Source: Institute of Transportation Engineers, Trip Generation Manual 10th Edition

TRIP GENERATION 10, TRAFFICWARE, LLC

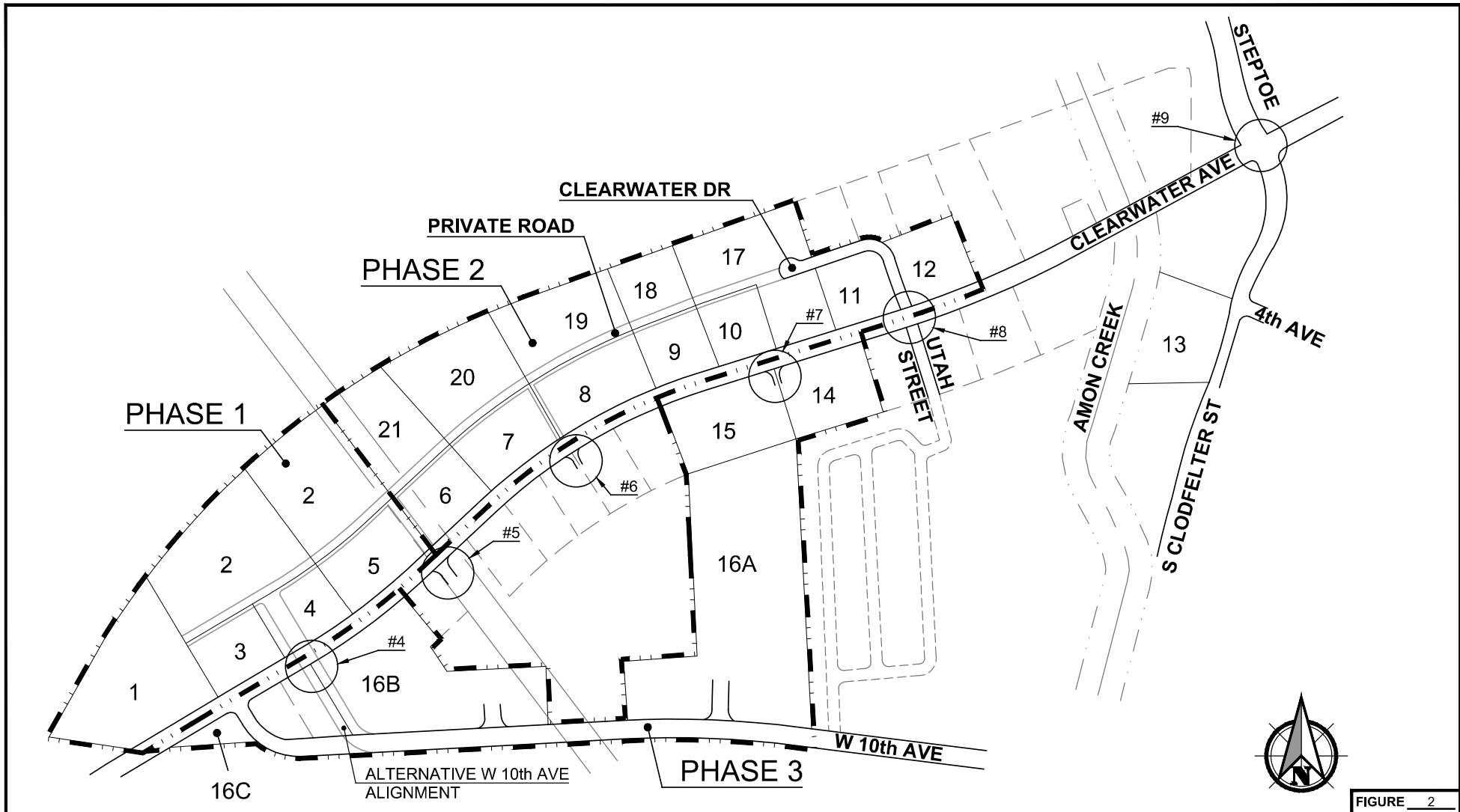


FIGURE 2



8115 Burden Blvd, Suite E
 Puyallup, WA 98003-4993
 509/847-8119
 360/895-3488
 509/847-8120 fax
 Internet: www.hdig.com

Site Plan

Clearwater Commercial Binding Site Plan

Clearwater Commercial Binding Site Plan - Trip Generation

Land use assumption for reasonable best and highest land use.

Lot #	Lot SF	Assumed Building SF	% applied	Assumed use
1,2,3 and 4	725,620	145,124	20%	Big Box
2	223,323	40,198	18%	Grocery
5	119,549	21,519	18%	Retail
6	93,380	14,941	16%	Fast Food
7	107,711	19,388	18%	Retail
8	137,852	24,813	18%	Retail
9	84,554	13,529	16%	Retail
10	86,675	13,868	16%	Retail
11	72,143	11,543	16%	Fast Food
12	86,871	13,899	16%	Fast Food
13	84,646	13,543	16%	Office
14	125,513	22,592	18%	Restaurant
15	182,579	32,864	18%	Retail
16A	557,276	111,455	20%	MOB
16B	348,963	62,813	18%	MOB
16C	26,020	4,163	16%	MOB
17	147,623	26,572	18%	Office
18	82,405	13,185	16%	Office
19	163,184	29,373	18%	Office
20	187,790	33,802	18%	Office
21	149,099	26,838	18%	Office

ITE Trip Generation

Trip Generation Based on Weighted Average Rates

HDJ Design Group

General			
Land Use Code	Medical Dental Office Bldg (sf)		
Independent Variable	1,000 Sq Ft		
Size (X)		111.46	
Land Use Code		720	

Date: 10/22/2015 Analyst: Sharar Project: Clearwater Commercial

	In	Out	Total
Average Weekday	2,014	2,014	4,027
New Trips	2,014	2,014	4,027
Weekday AM Peak	218	58	276
New Trips	218	58	276
Weekday PM peak	112	303	415
New Trips	112	303	415

Per Trip Generation Manual, 9th Edition for 111,455 sq building - Lot 16A

Analysis Period	Weekday		
Average Rate	Rate		Trips
	36.13		4027
Entering / Exiting			
% Entering	50%		2014
% Exiting	50%		2014
New Trips			
% internal	0		
% pass by	0		
		In	Out
Total Trips		2014	2014
Internal Trips		0	0
Passby Trips	0	0	0
New Trips		2014	2014

Analysis Period	Weekday AM Peak for adjacent streets		
Average Rate	Rate		Trips
	2.48		276
Entering / Exiting			
% Entering	79%		218
% Exiting	21%		58
New Trips			
% internal	0		
% pass by	0		
		In	Out
Total Trips		218	58
Internal Trips		0	0
Passby Trips		0	0
New Trips		218	58

Analysis Period	Weekday PM peak for adjacent streets		
Average Rate	Rate		Trips
	3.72		415
Entering / Exiting			
% Entering	27%		112
% Exiting	73%		303
New Trips			
% internal	0		
% pass by	0		
		In	Out
Total Trips		112	303
Internal Trips		0	0
Passby Trips		0	0
New Trips		112	303

Clearwater Commercial Binding Site Plan - Trip Generation

Trip Generation by land

Lot #	Lot SF	Percent Lot covered	Building SF	Assumed use	Land Use Code	ADT	AM Peak	PM Peak	PM Peak Trips in	PM Peak Trips out	Internal Capture		Pass-by			Net Total	
											Internal Capture reduction of 22% - In	Internal Capture reduction of 22% - Out	ITE Percent reduction in PM due to Pass-by Trips	PM Pass-by entering	PM Pass-by exiting	Net PM In	Net PM out
1,2,3 and 4	725,620	0.2	145,124	Big Box	862	4,457	216	338	166	172	129	134	48%	62	64	67	70
2	223,323	0.18	40,198	Grocery	850	4,110	137	381	194	187	151	146	36%	54	53	97	93
5	119,549	0.18	21,519	Retail	826	954	147	58	26	33	20	26				20	26
6	93,380	0.16	14,941	Fast Food	934	739	679	489	254	235	198	183	50%	99	92	99	92
7	107,711	0.18	19,388	Retail	826	859	133	53	23	29	18	23				18	23
8	137,852	0.18	24,813	Retail	826	1,100	170	67	30	38	23	30				23	30
9	84,554	0.16	13,529	Retail	826	600	93	37	16	21	12	16				12	16
10	86,675	0.16	13,868	Retail	826	615	95	38	17	21	13	16				13	16
11	72,143	0.16	11,543	Fast Food	934	5,725	524	377	196	181	153	141	50%	76	71	76	71
12	86,871	0.16	13,899	Fast Food	934	6,896	631	455	236	218	184	170	50%	92	85	92	85
13	84,646	0.16	13,543	Office	710	149	21	20	3	17						3	17
14	125,513	0.18	22,592	Restaurant	931	2,032	18	169	113	56	88	44	44%	50	25	38	19
15	182,579	0.18	32,864	Retail	826	1,456	225	89	39	50	30	39				30	39
16A	557,276	0.2	111,455	MOB	720	4,027	276	415	112	303	87	236				87	236
16B	348,963	0.18	62,813	MOB	720	2,269	156	234	63	171						63	171
16C	26,020	0.16	4,163	MOB	720	150	10	15	4	11						4	11
17	147,623	0.18	26,572	Office	710	293	41	40	7	33	5	26				5	26
18	82,405	0.16	13,185	Office	710	145	21	20	3	16	2	12				2	12
19	163,184	0.18	29,373	Office	710	324	46	44	7	36	5	28				5	28
20	187,790	0.18	33,802	Office	710	373	53	50	9	33	7	26				7	26
21	149,099	0.18	26,838	Office	710	296	42	40	7	33	5	26				5	26
			696,024			37,569	3,734	3,429	1,525	1,894						771	1,132

Net Total Trips

1,903



MEMORANDUM

Fire Department

To: Matt Halitsky, Planning
 From: Brian Ellis, Deputy Fire Marshal
 Date: June 15, 2021
 Re: 141 lot subdivision on 14.76 acres located at 9757 W Clearwater Ave
 Project: PLN-2021-01979 / PP 21-02

1. All fire apparatus access lanes with less than twenty foot (20') width shall have "No Parking Fire Lane" signs installed at seventy five (75') foot intervals, per City of Kennewick Standards. STD DWG 7-5.
2. In accordance with City of Kennewick Engineering standards, fire hydrants shall be installed at all intersections and shall be spaced an average of 500' along the street. Final placement of hydrants to be approved by FD during civil submittal.
3. Site Plan when submitted should clearly show the following for fire review.
 - a. Location of all existing Fire Hydrants.
 - b. Location of Proposed Fire Hydrants, if required.
 - c. Height of proposed structures.
 - d. Square Footage of proposed structures.
 - e. Width of Roadways, Drives, Access routes.
 - f. Turning radius at all corners for Emergency Vehicles, 24' inside and 44' outside.
4. Civil Plan when submitted should clearly show the following for fire review.
 - a. Fire Flow Block for each proposed structure.
 - b. Existing Fire Hydrants.
 - c. Proposed Fire Hydrants, if required.
 - d. Fire Line, PIV, and FDC location, if applicable.
 - e. Turning Radius at corners for Emergency Vehicles, 24' inside and 44' outside.
 - f. Outline of proposed Structure, which includes square footage and height.
 - g. Outline of drives, access points and paths.
5. Traffic calming devices in the roadway to be approved by Fire Department in conjunction with Traffic Department.

6. Address Monuments shall be installed in areas where the proposed homes are accessed by dead end paths. (IE. Lot 84 and Lot 85).
7. Additional No Parking-Fire Lane signage may be required depending on information supplied.
8. Installation of Residential (13D) Fire Sprinklers is encouraged and recommended.

Brian Ellis

Captain/Deputy Fire Marshal



Memorandum Public Works

Leading the Way

To: Matt Halitsky, Planner
 From: Martin Nelson, Utility Engineer *MN*
 Date: June 23, 2021
 Re: Public Works Consolidated Comments
 Project: Pre Plat No. PP 21-02 / PLN-2021-01979

1. Per AGR 2017-03197 and AMD 2018-014731 First Amendment to Developer Agreement, Section 5.4, and Developer shall provide for the design and construction of all improvements for all lots in the Binding Site Plan fronting on W 10th Ave. from Clearwater to the eastern property line of the parcel.
2. Submit design drawings for review and approval to construct the north half of W 10th Ave with the required infrastructure in conjunction with the proposed plat. These improvements include but are not limited to water, sewer, storm streetlights, streets, sidewalks and other requirements.
3. Install utilities on City right of way. When the City of Kennewick (COK) Public Works Department grants approval for an exception, dedication of minimum 15-ft tract will be required. Paved access over the utility within the tract will also require. An easement across private property not permitted.
4. Provide a water comprehensive plan for review and approval before submitting construction drawings for review per KMC 14.10.030.
5. Provide a sanitary sewer comprehensive plan for review and approval before submitting construction drawings for review per KMC 14.22.040.
6. Provide a stormwater comprehensive plan for review per KMC 14.28.045.
7. Include pipe sizes and water zones on proposed water mains and pipe sizes on sewer and storm mains on the comprehensive plans at full subdivision build out for review.
8. Existing 16-inch DI is existing to the west end of Dove Ridge constructed with record drawing G2063. Preferred waterline connection to 10th Ave to existing 16" DI WL.
9. Provide a water and sewer service to each proposed lot prior to final plat approval per KMC 17.10.080.
10. Developer to install a water services to serve the premises with the water meter as close to the water main as possible per Kennewick Municipal Code (KMC) 14.12.080. Townhomes water meters not allowed on driveway approaches.
11. Developer will be required to loop all water mains to maintain water quality.
12. Below is the City's stance/ preference on where water & sewer should be located:
13. Routing of wet utilities to be placed in City rights-of-way.

PUBLIC WORKS

Martin Nelson
Utility Engineer

June 23, 2021
Page 2 of 2

14. Routing between homes shall be avoided. Case-by-case exceptions will be reviewed.
15. If approval for an exception is granted by COK DPW, a dedicated tract will be required. Paved access over the utility within the tract will also be required.
16. An easements across private property will no longer be permitted to cover water and sewer mainlines. These utilities will have to be placed in public right of way or dedicated tracks where approved by the public works director.
17. There is an 8-inch sanitary sewer main proposed for construction with Summit Storage connecting to Yolo St. Verify invert for proposed sewer to serve proposed Plat.
18. Each residential lot requires its own 4" connection to the city sewer system.
19. All plans showing existing water/sewer utilities shall call out the Record Drawing set number that installed such utilities. All shall clearly identify the size and type of water/sewer utility that is being proposed or connected to (i.e. "Existing 8-inch Water").
20. Provide Storm Calculations to retain and dispose of a 25-year 24-hour storm following the Storm Water Management Manual for Eastern Washington (SMMEW) and Section 5-8. Infiltration tests required at the location and depth of the planned infiltration structures with a soils log to 5 feet below that point.
21. if you plan to use underground infiltration, you must also demonstrate that the 100 year design storm can be retained on site.
22. Design and construct all underground infiltration structures 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.
23. In order to determine if other permits are required, visit the Washington State Office of Regulatory Innovation and Assistance website, <https://apps.oria.wa.gov/opas/>
24. This site requires a separate DPW Permit for civil plan reviews with the following:
 - a. PDF copy of the Application for Civil Review and Storm Calculations to retain the stormwater from parking lot on site.
 - b. One full size (24"x36") PDF copy of the construction plans.
 - c. After project completion, Record Drawings showing improvements made on the property will be required prior to acceptance of the construction permit(s).
25. Kennewick Survey Data Requirements for construction plans and as built drawings:
 - a. Construct all projects using current City Survey Data.
 - b. For detailed information on Kennewick Survey Data and Record Drawings go to COK website @ <https://www.go2kennewick.com/314/Civil-Plan-Review>.
 - c. For easement vacation forms follow the link to the COK website: <https://www.go2kennewick.com/DocumentCenter/View/9212/Vacation-of-Easement>

PUBLIC WORKS

1010 E. Chemical Drive * PO Box 6108 * Kennewick, WA 99336
(509) 585-4419 * Fax (509) 585-4451

From: [Sorin Juster](#)
To: [Joe Seet](#)
Subject: FW: Crimson Hills Traffic Generation Letter - August 2, 2021 approval
Date: Thursday, August 12, 2021 8:56:34 AM
Attachments: [image001.png](#)
[image004.gif](#)
[image005.gif](#)
[image006.gif](#)
[Crimson-Hills_Trip-Accounting-Letter_Updated-Turn-Lane-Analysis2021-08-04.pdf](#)
[image003.png](#)
[image007.png](#)
[image009.png](#)
[image011.png](#)
[image013.png](#)
[image015.png](#)

Joe, please post on On Base as approved .

Thanks



Sorin Juster, P.E., P.T.O.E.
Transportation Manager
Public Works Department

P.O. Box 6108

Kennewick, WA 99336-0108

O: 509.585.4400 | C: 509.572.0907

sorin.juster@ci.kennewick.wa.us



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 The City of Kennewick is committed to transparency in government and we will
 provide our customers the fullest assistance possible when they request access to
 public records. Individuals wishing to obtain public records shall submit their requests
 in accordance with the City's Public Records Policy which is available by visiting [this link](#).

From: John A. Manix

Sent: Thursday, August 5, 2021 7:36 AM

To: Sorin Juster

Cc: Bhauvesh Jaya

Subject: RE: Crimson Hills Traffic Generation Letter - August 2, 2021 approval

Sorin: The typo is corrected.

John Manix, PE | Senior Traffic Engineer | PBS Vancouver | 360.607.1854 (cell)

From: Sorin Juster <Sorin.Juster@ci.kennewick.wa.us>

Sent: Wednesday, August 4, 2021 10:32 AM

To: John A. Manix <John.Manix@pbsusa.com>

Cc: Bhauvesh Jaya <Bhauvesh.Jaya@pbsusa.com>; Nathan Machiela
 <nathan@knutzenengineering.com>; David Holt <David.Holt@pbsusa.com>; Joe Seet
 <Joe.Seet@ci.kennewick.wa.us>

Subject: RE: Crimson Hills Traffic Generation Letter - August 2, 2021 approval

Hi John, there is a minor project description error in the cover letter. Please see attached.

The next step is to revise the previously submitted right-turn analysis at Clearwater and 10th street intersection, to reflect this updated distribution.

Thanks



Sorin Juster, P.E., P.T.O.E.
Transportation Manager
Public Works Department
 P.O. Box 6108
 Kennewick, WA 99336-0108
 O: 509.585.4400 | C: 509.572.0907

sorin.juster@ci.kennewick.wa.us



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From: John A. Manix <John.Manix@pbsusa.com>

Sent: Monday, August 2, 2021 3:18 PM

To: Sorin Juster <Sorin.Juster@ci.kennewick.wa.us>

Cc: Bhauvesh Jaya <Bhauvesh.Jaya@pbsusa.com>; Nathan Machiela <nathan@knutzenengineering.com>; David Holt <David.Holt@pbsusa.com>

Subject: FW: Crimson Hills Traffic Generation Letter - August 2, 2021 approval

Sorin: I don't agree with your comments below but we have made the revisions based on your directions.

John Manix, PE | Senior Traffic Engineer | PBS Vancouver | 360.607.1854 (cell)

From: Bhauvesh Jaya <Bhauvesh.Jaya@pbsusa.com>

Sent: Monday, August 2, 2021 3:02 PM

To: John A. Manix <John.Manix@pbsusa.com>

Subject: RE: Crimson Hills Traffic Generation Letter - Review and Sign

John,

Here is the updated trip generation letter: \\pbsenv.lan\\L\\Projects\\71000\\71662\\71662-000\\Traffic\\Correspondence\\Outgoing\\2021-08-02_Updated-Trip-Accounting-Letter\\Crimson-Hills_Trip-Accounting-Letter_Updated-Turn-Lane-Analysis2021-08-02.pdf

Thank you,

Bhauvesh Jaya | Civil Engineer Staff | PBS Vancouver | 360.213.0229 (direct) | 541.745.8989 (mobile)

From: Sorin Juster <Sorin.Juster@ci.kennewick.wa.us>

Sent: Friday, July 30, 2021 1:18 PM

To: John A. Manix <John.Manix@pbsusa.com>

Cc: Nathan Machiela <nathan@knutzenengineering.com>; Bhauvesh Jaya <Bhauvesh.Jaya@pbsusa.com>; David Holt <David.Holt@pbsusa.com>; Joe Seet <Joe.Seet@ci.kennewick.wa.us>

Subject: RE: Crimson Hills Traffic Generation Letter - July 30, 2021 update

John, Bob Olson volumes can't be added to Steptoe and 10th Ave in this weighted distribution. Bob Olson is the continuation of Steptoe and using Steptoe is the conservative option. 10th Ave is moving traffic to one of the two options.

Both Clearwater and Steptoe are the dominant arterials that will funnel traffic to and from this development and that is being conservative since if you want use Steptoe northbound it is shorter to take Clearwater to Steptoe.

Thus the distribution is reversed 60% to the west and 40% to the east and that again is conservative. This is the only distribution COK will accept.

Thanks



Sorin Juster, P.E., P.T.O.E.

Transportation Manager

Public Works Department

P.O. Box 6108

Kennewick, WA 99336-0108

O: 509.585.4400 | C: 509.572.0907

sorin.juster@ci.kennewick.wa.us



This communication (and any reply) is subject to the Public Records Act, RCW 42.56. The City of Kennewick is committed to transparency in government and we will provide our customers the fullest assistance possible when they request access to public records. Individuals wishing to obtain public records shall submit their requests in accordance with the City's Public Records Policy which is available by visiting [this link](#).

From: John A. Manix <John.Manix@pbsusa.com>

Sent: Friday, July 30, 2021 11:47 AM

To: Sorin Juster <Sorin.Juster@ci.kennewick.wa.us>

Cc: Nathan Machiela <nathan@knutzenengineering.com>; Bhauvesh Jaya <Bhauvesh.Jaya@pbsusa.com>; David Holt <David.Holt@pbsusa.com>

Subject: FW: Crimson Hills Traffic Generation Letter - July 30, 2021 update

Sorin: Thank you for the quick review of our report. We have added more detail to our explanation to east-west distribution from the site. It is based on the Benton Franklin Council of Government transportation model but I would agree it needed more details. For more details on the trip distribution, see the highlighted text in the letter on page 3, and the detailed breakdown of the trip distribution using the model on pdf page 14.

As suggested, we reviewed the traffic volume map and find it does not significantly conflict with our distribution for east-west distribution of trips. The attached copy of the City's 2018 Traffic Volume Map shows the approximate volumes east and west of the site:

15,000 on Clearwater

10,000 on Steptoe

5,500 on 10th Ave

6,500 on Bob Olsen Parkway

37,000 total

15,000/37,000 X 100 = 40% to the west

22,000/37,000 X 100 = 60% to the east

All trip distribution processes are approximate and require a fair amount of engineering judgement. In this case, we stand behind our distribution as technically correct.

John Manix, PE | Senior Traffic Engineer | PBS Vancouver | 360.607.1854 (cell)

From: Sorin Juster <Sorin.Juster@ci.kennewick.wa.us>

Sent: Thursday, July 29, 2021 1:53 PM

To: John A. Manix <John.Manix@pbsusa.com>

Cc: Nathan Machiela <nathan@knutzenengineering.com>; Joe Seet <Joe.Seet@ci.kennewick.wa.us>

Subject: RE: Crimson Hills Traffic Generation Letter - July 28, 2021update

Hi John, attached is the COK response to the updated letter submitted on 7/28/2021.

Please revise according to comments and resubmit.

Thanks!



Sorin Juster, P.E., P.T.O.E.

Transportation Manager

Public Works Department

P.O. Box 6108

Kennewick, WA 99336-0108

O: 509.585.4400 | C: 509.572.0907

sorin.juster@ci.kennewick.wa.us



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From: John A. Manix <John.Manix@pbsusa.com>

Sent: Wednesday, July 28, 2021 2:16 PM

To: Sorin Juster <Sorin.Juster@ci.kennewick.wa.us>

Cc: Nathan Machiela <nathan@knutzenengineering.com>; Joe Seet <Joe.Seet@ci.kennewick.wa.us>

Subject: RE: Crimson Hills Traffic Generation Letter - July 28, 2021update

Sorin: Attached is the latest draft of the Crimson Hills trip generation/accounting letter. The development has changed that includes:

- Two access intersections from three in the past
- The land use changed from single family homes (ITE code 210) to low rise multi-family (ITE code 220)
- We used the Benton-Franklin Council of Government model data for east-west trip distribution.

Let me know if you have any questions or comments.

Thanks

John Manix, PE | Senior Traffic Engineer | PBS Vancouver | 360.607.1854 (cell)

From: Sorin Juster <Sorin.Juster@ci.kennewick.wa.us>

Sent: Wednesday, July 21, 2021 4:15 PM

To: John A. Manix <John.Manix@pbsusa.com>

Subject: RE: Crimson Hills Traffic Generation Letter of June 4 2021

John, I attached my comments to your trip generation and assignment letter.
Please address the comments so that we can complete the review of the subsequent study submitted for the right turn at 10th & Clearwater.

Thanks



Sorin Juster, P.E., P.T.O.E.
Transportation Manager
Public Works Department
P.O. Box 6108
Kennewick, WA 99336-0108
O: 509.585.4400 | C: 509.572.0907

sorin.juster@ci.kennewick.wa.us



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From: John A. Manix <John.Manix@pbsusa.com>

Sent: Thursday, June 24, 2021 12:50 PM

To: Sorin Juster <Sorin.Juster@ci.kennewick.wa.us>

Subject: RE: Crimson Hills Traffic Generation Letter of June 4 2021

Sorin: I believe there is a misunderstanding. I would agree you spend a great deal of time with us and I really appreciate your availability but the attached memo meets what we agreed to in our email exchange. See the attached email. John

John Manix, PE | Senior Traffic Engineer | PBS Vancouver | 360.607.1854 (cell)

From: Sorin Juster <Sorin.Juster@ci.kennewick.wa.us>

Sent: Wednesday, June 23, 2021 4:06 PM

To: John A. Manix <John.Manix@pbsusa.com>

Cc: Sorin Juster <Sorin.Juster@ci.kennewick.wa.us>; Joe Seet <Joe.Seet@ci.kennewick.wa.us>

Subject: Crimson Hills Traffic Generation Letter of June 4 2021

Hi John, the letter you posted on June 4, 2021 is completely inadequate. I spent a great deal of time with you and your team discussing the scope of the traffic impact study. You need to either provide a totally new study or amend the original study. Before you do any more work on this project please provide a written scope for approval to make sure you understand what I am talking about. Please let me know if you have additional questions.

Thanks



Sorin Juster, P.E., P.T.O.E.
Transportation Manager
Public Works Department
P.O. Box 6108
Kennewick, WA 99336-0108
O: 509.585.4400 | C: 509.572.0907

sorin.juster@ci.kennewick.wa.us



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MEMORANDUM

Traffic Engineering Division

To: Steve Donovan, Planner
From: Joe Seet, Assistant Traffic Engineer
Date: June 23, 2021
Re: Traffic Engineering Comments for 9757 W Clearwater Ave. 141 Duplex Lot Subdivision
Project: PP 21-02/PLN-2021-01979

Project Description

Preliminary Plat for 141-lot subdivision on 14.76 acres located at 9757 W Clearwater Ave.

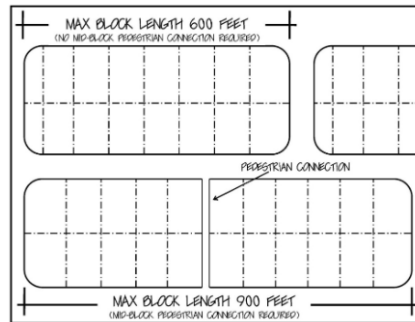
KMC 13.16 Transportation Impact Fees

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 2020 TIF is \$787/dwelling unit based on a land use of Multi-Family. The proposed 141-lot subdivision is in District 1. Estimated TIF is \$110,967.

Traffic Operations

1. Please note that the June 4, 2021 Traffic Letter submitted is inadequate based on the scope discussed with the applicant. Please provide either a new Traffic Impact Analysis or an addendum that amends the December 14, 2015 Clearwater Commercial Binding Site Plan Traffic Impact Analysis based on the proposed modifications to the land use. The addendum should also address the June 18, 2021 WSDOT's comments.
2. Per KMC 17.20.010(2)(a) – Streets greater than 1,200 feet in continuous uninterrupted length will need traffic calming measure. Provide adequate right of way for traffic calming device.

3. Per KMC 17.20.010(3)(b), streets greater than 600 feet in continuous uninterrupted length will need a marked mid-block pedestrian crossing for the street. The proposed interior street will require an average of 1 mid-block pedestrian crossing for every 600 feet in continuous uninterrupted length.



Right of Way and Easement

1. Record 1' No Access Easement along W. 10th Ave. (except for identified or proposed roadway intersections)



Allyson Brooks Ph.D., Director
State Historic Preservation Officer

June 22, 2021

Matthew Halitsky
Planner
City of Kennewick
210 W 6th Ave
Kennewick, WA 99336

In future correspondence please refer to:

Project Tracking Code: 2021-06-03707

Property: City of Kennewick_Crimson Hills Subdivision (ED 21-26 / PLN-2021-01980)

Re: Survey Requested

Dear Matthew Halitsky:

Thank you for contacting the Washington State Historic Preservation Officer (SHPO) and Department of Archaeology and Historic Preservation (DAHP) and providing documentation regarding the above referenced project. Our statewide predictive model indicates that there is a moderate probability of encountering cultural resources within the proposed project area. Further, the scale of the proposed ground disturbing actions would destroy any archaeological resources present. Identification during construction is not a recommended detection method because inadvertent discoveries often result in costly construction delays and damage to the resource. Therefore, we recommend a professional archaeological survey of the project area be conducted prior to ground disturbing activities. We also recommend consultation with the concerned Tribes' cultural committees and staff regarding cultural resource issues.

These comments are based on the information available at the time of this review and on behalf of the SHPO in conformance with Washington State law. Should additional information become available, our assessment may be revised.

Thank you for the opportunity to comment on this project and we look forward to receiving the survey report. Please ensure that the DAHP Project Number (a.k.a. Project Tracking Code) is shared with any hired cultural resource consultants and is attached to any communications or submitted reports. Should you have any questions, please feel free to contact me.

Sincerely,

Sydney Hanson
Transportation Archaeologist
(360) 280-7563
Sydney.Hanson@dahp.wa.gov





BENTON CLEAN AIR AGENCY

June 23, 2021

Re: ED-21-26

City of Kennewick
Matthew Halitsky
PO Box 6108
Kennewick, WA 99336

Applicant/Proponent:
Knutzen Engineering
Attn: Nathan Machiela
5401 Ridgeline Dr
Kennewick, WA 99338

Dear Mr. Halitsky:

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 construction. 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,

John Lyle
Inspector

From: Ashley Morton
Sent: Tue, 27 Jul 2021 17:40:43 +0000
To: Matt Halitsky
Cc: Hanson, Sydney (DAHP)
Subject: RE: City of Kennewick PP 21-02 / PLN-2021-01979; ED 21-26 / PLN-2021-01980

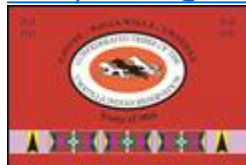
Good Morning Matt,

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Cultural Resources Protection Program (CRPP) has reviewed the materials provided for the Crimson Hill Preliminary plat. As it is noted in the SEPA that a cultural resources survey will be conducted, we look forward to reviewing the report when it is submitted to the City. Given that the project area is within a known area of religious and cultural significance to the CTUIR, known as Piyuušmaamí Puštáy 'hills of the snakes' and there is a likelihood that cultural resources may be encountered based on the proposed level of ground disturbance, we recommend subsurface testing as part of the survey effort.

CTUIR CRPP appreciates the opportunity.

Sincerely,
 Ashley

Ashley M. Morton, M.A., RPA
 Archaeologist II
 Cultural Resources Protection Program
 Confederated Tribes of the Umatilla Indian Reservation
 46411 Timine Way, Pendleton, OR 97801
 Direct Line/Fax: (541) 429-7214
 Main Office: (541) 276-3447
AshleyMorton@ctuir.org



From: Matt Halitsky [mailto:Matt.Halitsky@ci.kennewick.wa.us]
Sent: Thursday, July 22, 2021 12:32 PM
To: Florinda Paez ; George Kelty ; Ashley Morton ; BC Planning - Greg Wendt ; BC Planning - Michelle Cooke ; Benton Clean Air John Lyle ; Bill Barlow ; Casey Barney ; City of Richland - Mike Stevens ; City of Richland - Shane O'Neill ; Dept of Archaeology and Historic Preservation (sepa@dahp.wa.gov) ; Dept of Fish & Wildlife ; Dept of Fish and Wildlife Michael Ritter ; Dept of Natural Resources SEPA Center ; Jessica Lally ; Kevin Sliger (Benton Franklin Transit) ; Noah Oliver ; Rob Rodger Clean Air Authority ; SEPA Register ; Tyler Thompson Benton Clean Air Authority ; Williams N.W. Pipeline ; WSDOT ; Yakama Nation Environmental Review
Subject: City of Kennewick PP 21-02 / PLN-2021-01979; ED 21-26 / PLN-2021-01980



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

August 5, 2021

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

Attn: Matt Halitsky, AICP – Planner

RE: PP 21-02/PLN 2021-01979; ED 21-26/PLN 2021-01980
I-82, Exit 109 vicinity (Badger Road)

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

The subject property is near the Interstate 82 (I-82) Exit 109 interchange. I-82 is a fully controlled limited access facility and a Highway of Statewide Significance (HSS). We are not opposed to the proposed project; however, we are concerned with the cumulative impact development in this area is having on the interchange and the state highway system.

The applicant indicates 801 trips per day will be generated by this proposal. According to the 10th Edition of the ITE Trip Generation Manual (Land Use 220), 138 townhouses may generate up to 1,010 trips per day with 92 trips occurring during the PM peak hour. WSDOT anticipates up to half of these trips may utilize the I-82 Exit 109 interchange and further impact the westbound ramp terminal, which is currently operating at Level of Service (LOS) F. In order to mitigate this project's impacts to I-82, we recommend the city assess a pro-rata share contribution from the proponent for the planned improvements at this interchange. If the proponent or city disagree with our recommendation, the city should require a traffic impact analysis (TIA) be performed by a licensed traffic engineer, at the proponent's expense, and submitted to the city and WSDOT for review and comment. Mitigation to offset the impacts for this proposal, as well as implementation strategies, must be identified in the TIA.

Thank you for the opportunity to review and comment on this proposal. If you have any questions regarding this letter, please contact Jacob Prilucik at (509) 225-0637.

Sincerely,

A handwritten signature in black ink that reads 'Paul Gonseth'.

Paul Gonseth, P.E.
Region Planning Engineer

PG: jjp
cc: SR 82, File #2021_010



Ryan Jones • *Capital Projects Manager*
5501 W. Metaline • Kennewick, WA 99336
P: (509) 222-6810 • F: (509) 222-5057
Ryan.Jones@ksd.org • www.ksd.org

September 28, 2021

Matthew Halitsky
Community Planning Department
City of Kennewick
210 W. 6th Ave.
Kennewick, WA 99336

Matthew,

This memo is written in regards to your request for the Kennewick School District #17 to address capacity and boundary questions in regards to the Crimson Hills Subdivision preliminary platt application. The school district was asked to identify the boundary schools for this development and state if each of the schools were within walking zones or received bussing. The boundary schools for this development are Amon Creek Elementary (Bussing Zone), Desert Hills Middle School (Bussing Zone) and Kamiakin 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. That being said, 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.

Sincerely,

Ryan Jones