



# REIMANN INDUSTRIAL CENTER MASTER PLAN



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## Section 1. Introduction

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### 1.1. Background

The Port of Pasco recently acquired nearly 300 acres of property from a local farming operation. The Reimann Industrial Center (RIC) area is located outside of the current City of Pasco Urban Growth Area (UGA). At this time, the City of Pasco has requested to expand the UGA that will include the lower half of this area. The intention of the Port of Pasco (The Port) is to improve and market the site for medium and large industrial land uses.

The Reimann Industrial Center (RIC) Master Plan area has been envisioned as a major processing center for the community and is anticipated to provide employment and business opportunities for the region as development occurs over the next 10-20 years. The area consists of industrial, manufacturing, and agricultural related land uses. At this time, most of the current development has occurred to the south.

As the Tri-City region grows, there is a need to attract industrial developers that will help offset the projected decline in Hanford jobs. It is intended that the RIC will help provide the necessary land base to provide larger industrial sites. Sites of this marketability have not been readily available for development throughout the Pacific Northwest until now. If development of this area occurs, the number of jobs will greatly increase.

### 1.2. Purpose of the Plan

The Port of Pasco has initiated the Reimann Industrial Center Master Plan to assess on-site infrastructure needs, evaluate the development layout options, and provide some guidelines for future development. This Master Plan looks at the opportunities and challenges associated with developing the site. The Master Plan identifies a long-term vision of the RIC with flexible plan implementation approaches that respect market conditions and interests within the Plan's anticipated build out period. The area is anticipated to continue to develop as another major processing center in Pasco. A vicinity map is shown in Figure 1.

### 1.3. Planning Process

The Port envisions the area as an active and vital employment and economic center, attracting new development, reinvestment and employment. As part of the planning process the project team met with key stakeholders, including the City of Pasco, Department of Ecology, Washington State Department of Transportation (WSDOT), and TriDEC to solicit input on the Master Plan. Through these meetings, current issues and concerns were identified and recommendations for the Plan were established.

### 1.4. Existing Property Description

The land being evaluated for the Reimann Industrial Center Master Plan consists of one parcel located in Franklin County: 124680039 (297.79 acres). It is situated north of the City of Pasco as shown in Figure 1. The property is located west of Highway 395 and south of Vineyard Drive.

Figure 1. Regional Map



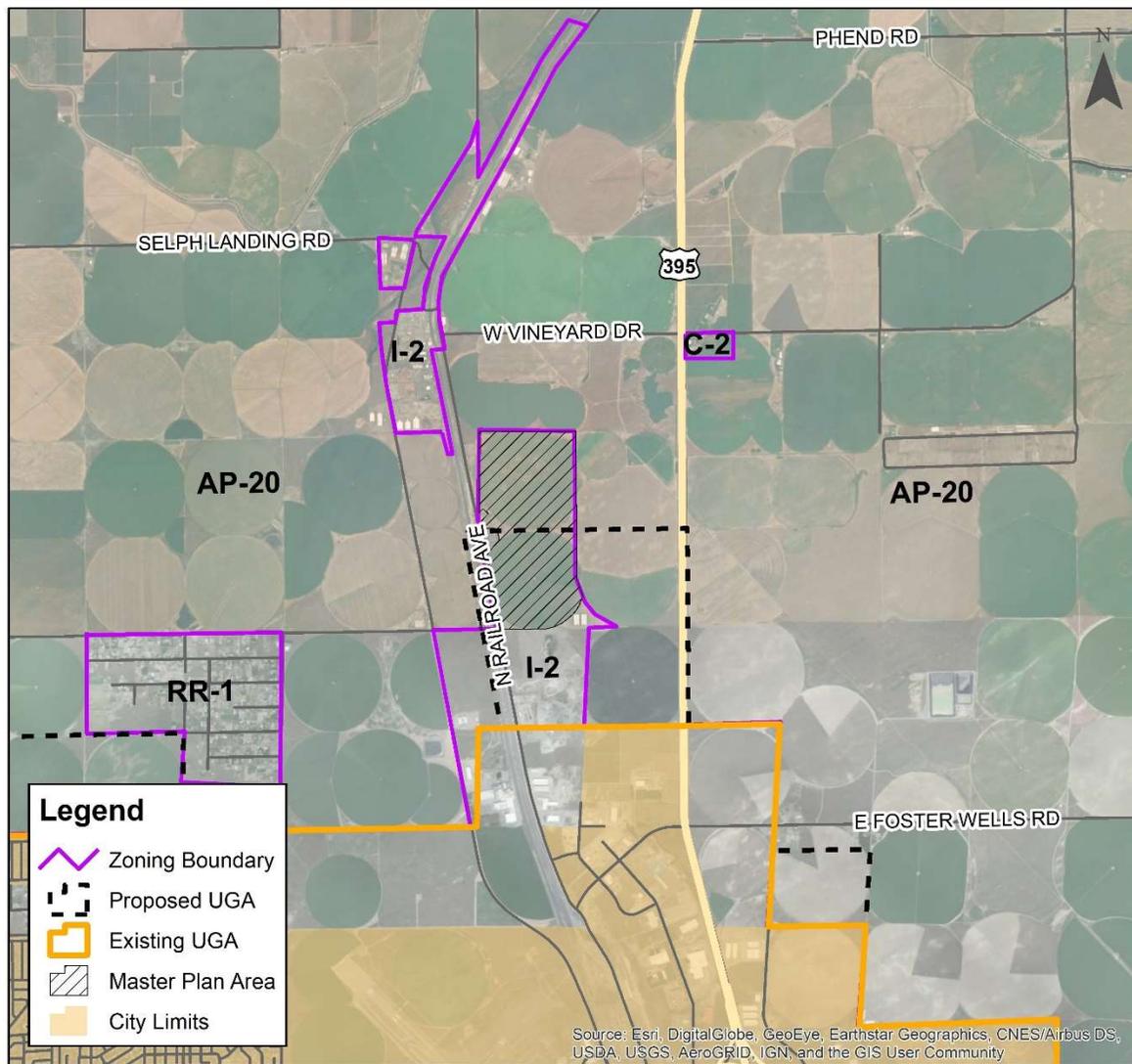
With the growing population of the City of Pasco over the last 20 years, the City has proposed a 4,800-acre expansion to the existing Urban Growth Area as part of the 2018 Comprehensive Plan Update process. As a result, three (3) alternatives (No Change, Alternative #2 – proposing a UGA increase of approximately 4,800 acres, and Alternative #3 – reducing the originally proposed UGA expansion from approximately 4,800 acres to approximately 3,488 acres) were created along with a Land Capacity Analysis, Capital Facilities Plan for the UGA and a Comprehensive Plan, and Draft EIS. The UGA request was significantly amended since the original application. In December of 2020, The City of Pasco presented at a Franklin County Planning Commission Non-Action Hearing to adopt Alternative #3 as its preferred alternate.

The City of Pasco has submitted an Urban Growth Area (UGA) Expansion Request that proposes to bisect the subject property, which would include the southern portion only. This UGA Expansion Request is currently being reviewed by Franklin County Planning Commission for approval. This must receive County approval to become final. Although, this UGA Expansion does not include the entirety of the subject parcel, this study assumed the entire parcel would

eventually be annexed into the City and our land use and infrastructure analysis was based on provided City services to the entire site. Because the buildout of the RIC is 10+ years, it is anticipated that future UGA expansion will be needed to incorporate the entire site. This will need to be through either an annual comprehensive plan amendment process as requested by the Port or via a future overall comprehensive plan update process conducted by the City, similar to the process the City is completing now.

The land is currently zoned I-2 (General Industrial Zone) within Franklin County. The future land use designation will be determined at the time of annexation. The surrounding area consists of primarily Agricultural Production Zone (AP-20), as shown below. The properties to the south, also to be included in the proposed UGA are likewise zoned I-2. Figure 2 shows the existing and proposed UGA and existing County Zoning designations.

Figure 2. Vicinity Map

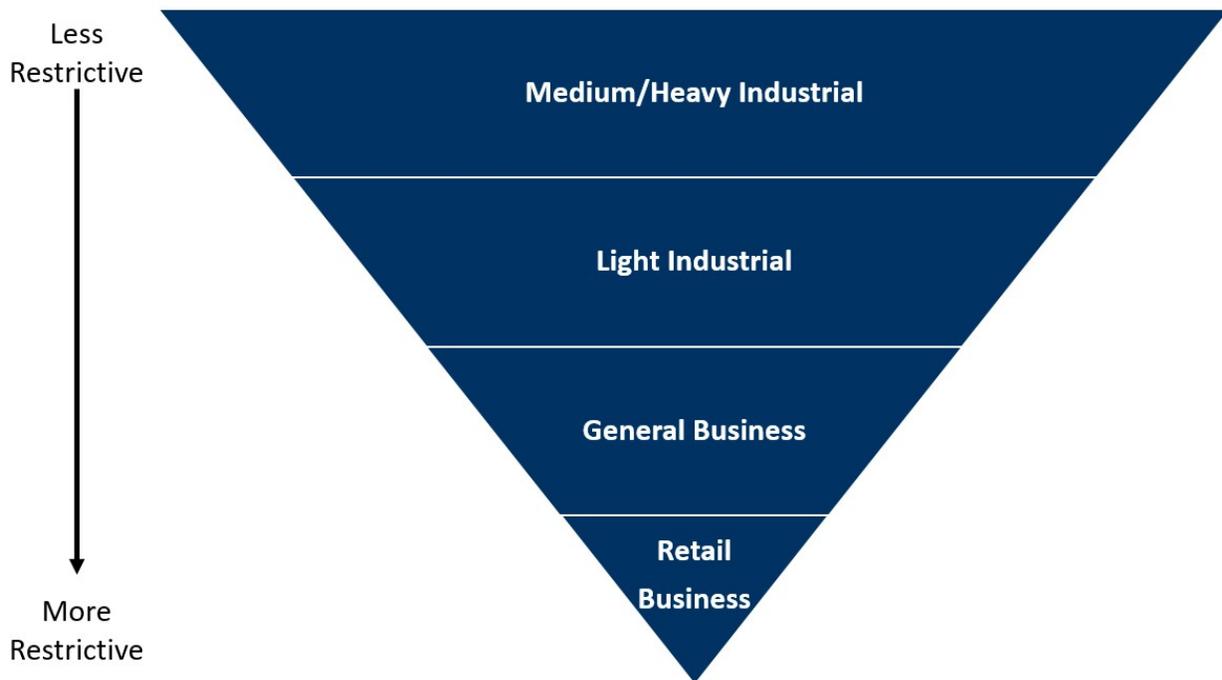


The annexation process for the City of Pasco follows Chapter 34A.14 RCW (Revised Code of Washington). The area to be annexed shall be determined that the best interests and general welfare of the city would be served by the annexation. The proposal is then submitted for annexation and later approved or denied by the legislative body. The County Annexation Review Board shall either approve, approve with conditions, or deny the proposal. Once approved, an ordinance providing for annexation is filled and deemed complete.

If the UGA expansion is approved, the northern half of the property will remain within county limits, zoned as I-2 (General Industrial Zone). The I-2 general industrial zone is established to preserve areas for industrial and related uses. The southern half of the property will be included within the City as industrially zoned land and follow the City of Pasco Municipal Code. When planning the development for a property with different zoning regulations, it is important to note the similarities and differences.

The City of Pasco and Franklin County implement a nesting doll technique in their zoning code that generally allows the more restrictive districts to be permitted in the less restrictive districts. See Figure 3. Nesting Dolls Zoning Technique below for a visual representation of the Nesting Dolls Zoning Technique.

*Figure 3. Nesting Dolls Zoning Technique*



### 1.5. Land Use and Zoning

South of the subject property is the Pasco Processing Industrial Park, which includes industrial and commercial developments on 10-25-acre sites. It is intended the future development would

include industrial and manufacturing uses as allowed in the City of Pasco Industrial Zone designation. Authorized uses for the master planned area are found in Table 1 below.

*Table 1. City of Pasco and Franklin County Outright Permitted Uses*

Permitted Uses	City	County
All uses permitted in the C-3 zoning district	X	X
Landscape gardening and storage area for equipment and materials		X
Processing (industrial or manufacturing plants) of agricultural products that are not produced or grown on-site	X*	X
Building material storage yard	X	X
Trucking, express and storage yards	X	X
Contractor's plant or storage yards	X	X
Electrical central power station		X
Laboratories, experimental	X	X
Automotive assembly and repair	X	X
Creamery, bottling, ice manufacture and cold storage plant	X	X
Blacksmith, welding or other metal shops, excluding punch presses over twenty (20) tons rated capacity, drop hammers, and the like	X	X
The manufacturing, compounding, processing, packaging of cosmetics, pharmacology and food products, except fish and meat products, and the reducing and refining of fats and oils	X	X
Printing plant	X	X
Parking lots within five hundred (500) feet of a C-2 district boundary, provided such lots are paved and the development complies with the landscape and fencing requirements of the C-1 district	X	X
Junk yards, automobile wrecking yards, scrap iron, scrap paper, or rag storage, sorting or bailing shall be permitted, provided	X	X
Winery/distillery/brewery		X
Kennels	X	

Source: Franklin County Municipal Code Chapter 17.54.020

City of Pasco Municipal Code Chapter 25.120.020

\* Chapter 25.120.020 (1) Permitted uses (Pasco Code) states, "All uses not otherwise prohibited by law, but no residential buildings shall be permitted"

#### 1.6. Environmental

A Cultural Resource Survey was conducted on the property by GRAM Northwest, LLC in July 2019. The study is included in Appendix A of this report.

#### 1.7. Current Land Uses

The property area has two existing uses that have been identified. They include a farming lease and a cell tower lease.

The farming lease is between the Port of Pasco and Balcolm and Moe, Inc. which covers the project area. Refer to Appendix B for the lease terms and conditions.

A portion of the site has a cell tower lease The lease area is 100-ft by 100-ft and has an Azimuth Easement for access and maintenance. The cell lease has a 5-year automated renewal that ends on March 4, 2032. Refer to Exhibit B in Appendix C for general location of this cell tower.

## Section 2. Stakeholder Involvement

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Stakeholder involvement process for this master plan included a project overview letter and stakeholder interviews. The letter (see Appendix D) described the project background, opportunities, tasks, and provided project contacts, Gemma Puddy (J-U-B) and Gary Ballew (Port of Pasco), through which to give feedback and ask questions. Three versions of letters were created to address the key audiences (see the complete Stakeholder List in Appendix E), 1) partnering and regulatory agencies, such as Century Link and Franklin County, 2) industry businesses, such as Lamb Weston and Twin City Foods, and 3) property owners adjacent to the future industrial park. The letters were mailed out on June 16, 2020 and were emailed out on June 17, 2020. Additionally, Gary Ballew emailed three staff from the Colville Tribe with the overview letter the week of July 13, 2020.

The stakeholder interviews were conducted as part of the economic analysis. The interviewees, process and findings are described in the following section.

## Section 3. Economic Analysis

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An Economic Analysis for the Master Plan was conducted by The Metts Group. The following is a summary of the results.

Pasco is the major service center for the ever-expanding agricultural industrial region of the Columbia Basin and is the multi-modal hub of southeastern Washington with flourishing industrial development along key transportation nodes including rail, air, barge, truck and pipelines. As a result, its proximity makes it a highly desirable location for companies to locate ease of access to major metropolitan areas such as Portland, Seattle and Spokane.

Telephone interviews with TRIDEC, Reeser's Fine Foods, Volm Companies, Tippet Company, Pioneer Packaging, and Old Dominion Freight Lines were conducted by the Metts Group to identify industry need in the region to better determine site needs. Others were called but could not be reached. Of those interviewed, users are looking for larger properties to house their expanding businesses for refrigerated storage and dry warehousing.

This region has built its local supply chain and economy around the successes of agribusiness, particularly food processing manufacturing. The industries identified in the Economic Analysis report (see Appendix F) support the agribusiness cluster, fill many supply chain gaps foreseen in the region, and has the workforce to support it—all of which would further local economic diversification efforts.

However, there is an abundance of competing sites with low absorption rates in the area. There are over 500+ acres of industrial land for sale around the Tri-Cities region, according to LoopNet and various real estate sources. This includes the 439 acres situated in the current Heritage Industrial Center. Over the past three years, approximately 524 acres of industrial land has been sold within the area, of which 430 acres were absorbed in 2019 alone. Based on past trends (excluding the anomaly in 2019), it appears that roughly 45 acres of industrial land is absorbed each year, on average. Industry experts claim there is an abundance of undeveloped industrial land within the region to be absorbed, indicating roughly a 5-7-year absorption rate. The RIC, however, is in a prime location with its proximity to key transportation systems compared to other competing sites.

The Economic Analysis further estimated potential job impacts provided full buildout of the industrial park. Multipliers make any project look profitable as the numbers accentuate even the smallest of growth. Without looking at the indirect and induced job creation, however, you cannot see the big picture and the impact realized. The concept is real and is more palatable when you can compare it to similar areas or projects. Conservative approaches were used throughout the analysis. It is recommended that the Port track the metrics set forth, and required by CERB, to determine if the desired outcomes are achieved and to help guide future development projects.

Roughly 2,299 jobs are estimated to be directly created at full build out of the subject site and another 1,027 jobs created in other industries, for a total of 3,326 jobs. The median wage for proposed jobs in the identified agribusiness cluster is \$20.96 per hour in Franklin County and \$27.96 per hour for the aforementioned target industries, 13% and 51%, respectively, higher than the CERB median hourly wage of \$18.51 for Franklin County. The proposed businesses and uses are estimated to generate over \$129 million in earnings each year after full buildout. These earnings are circulated throughout the economy significantly benefit and contribute to the overall economic health of the community. Additionally, the potential for Franklin County's labor force to grow by 6.1% would bode well for the region. Industrial growth will lead to job creation which will create more households and an increase of flow of earnings to circulate around the community but, ultimately, increasing tax revenues and the overall tax base—bettering the community as a whole —equating to roughly \$56 million each year, directly. Approximately \$9.5 million in state tax revenue is estimated to be generated each year and nearly \$1.3 million to County revenue sources, \$4.7 million to local jurisdictions, with the remainder going to federal coffers.

## Section 4. Existing Conditions

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This section discusses existing facilities, owned by public entities, and provides information about the service provider, along with the location and capacity of the existing facilities.

### 4.1. Transportation

#### Streets

There is no existing roadway network internal to the proposed RIC. Only Railroad Avenue, running north-south along the western side of the proposed RIC. Roadways that will provide service to the proposed RIC are described below and shown in Figure 4.

- **Railroad Avenue** is a north-south 2-lane Minor Arterial roadway from East Foster Wells Road to the Pasco north city limits but is a Major Collector roadway north of the city limits and south of East Foster Wells Road. This is a 50 MPH with roadside ditches.
- **Vineyard Drive** is a 2-lane Rural Minor Collector roadway that runs east-west to the north of the subject property. This is a 55 MPH county road with no curb, gutter or sidewalk and roadside ditches. It provides a connection across the railroad tracks that parallel Railroad Avenue to agricultural production lands and is the first crossing of the railroad tracks north of I-182.
- **Foster Wells Road** is a 2-lane Minor Arterial roadway that runs east-west to the south of the subject property. This is a 50 MPH county road also with roadside ditches.
- **US 395** is a north-south 4-lane divided expressway with limited access. North of I-182 it has a grade separated interchange at Kartchner Street and at-grade intersections at East Foster Wells Road and Vineyard Drive. North of East Foster Wells Road US 395 changes speed limit from 60 MPH to 70 MPH northbound and to 60 MPH southbound. The Washington State Department of Transportation during the summer of 2020, at the intersections of East Foster Wells Road and Vineyard Drive, provided lengthy right turn and left turn deceleration lanes for both northbound and southbound traffic. It also added acceleration lanes for both left and right turns for eastbound and westbound turning traffic which enhances safety at the intersection and also adds capacity to allow turning vehicles to make a two-stage turn while waiting in the median.
- **Kartchner Street** is a major collector between the two freeway ramps of US 395

Existing traffic control and lane configurations at intersections are shown in Figure 4.

#### Traffic Volumes

Intersection turning movement volumes were collected in July 2020 at nine intersections during the PM peak period. The PM peak hour generally occurs from 4:00 – 5:00 PM. The PM peak hour traffic volumes are shown for seven of the intersections in Figure 4. (traffic volumes at the other two intersections were used to estimate trip generation for the proposed Mater Plan and will be discussed later.) The volumes at US 395 were compared to historical volumes and, although

collected during COVID-19 travel restrictions, are felt to be a fair representation of traffic conditions in general.

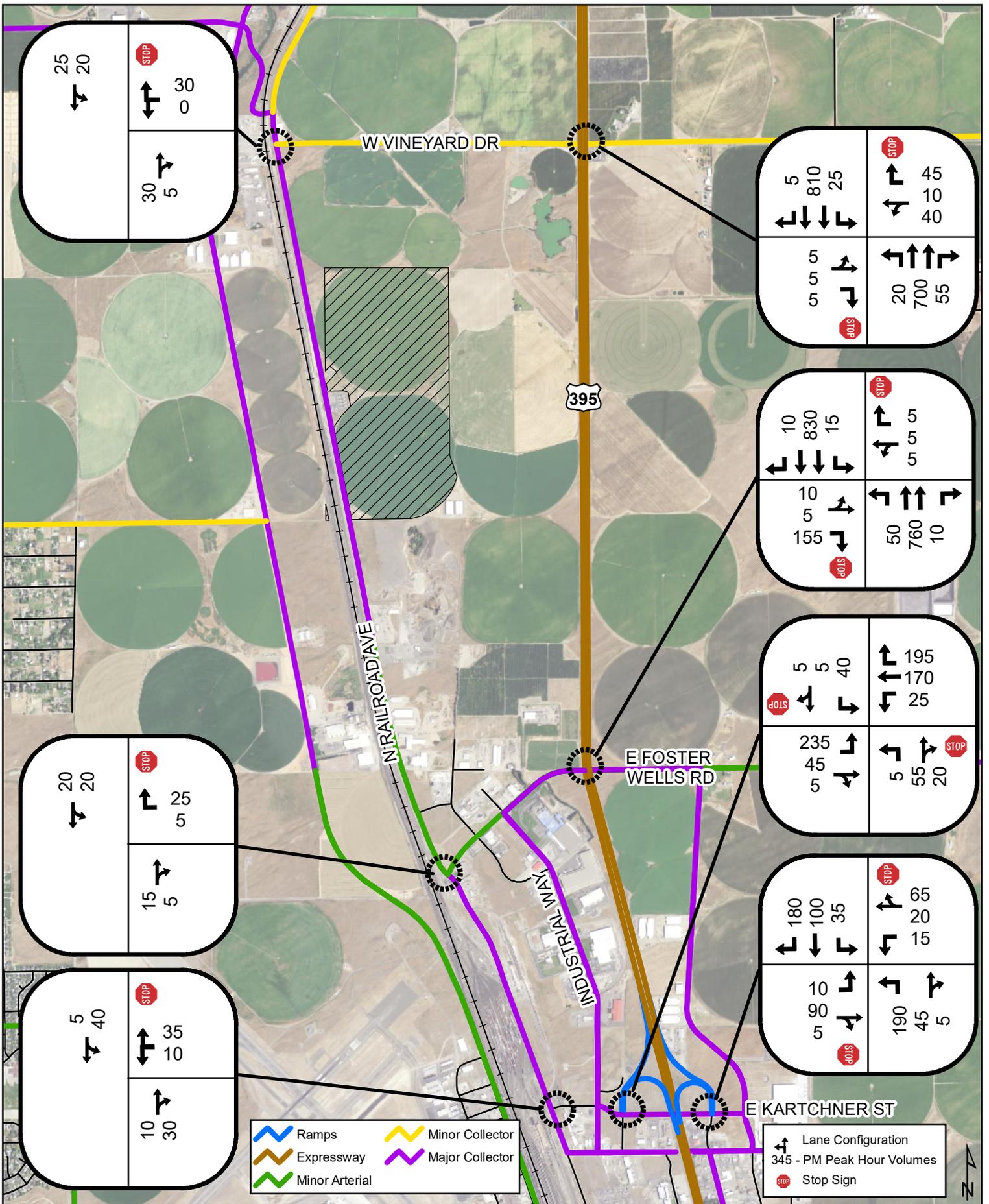
### Traffic Operations

The analysis of Level-of-Service (LOS) is a means of quantitatively describing the quality of operational conditions of a roadway segment or intersection and the perception by motorists and passengers. Service levels are identified by letter designation, A – F, with LOS “A” representing the best operating conditions and LOS “F” the worst. Each LOS represents a range of operating conditions and one or more measures of effectiveness (MOE’s) are used to quantify the LOS of a roadway element. For intersections the MOE used is average control delay (seconds) per vehicle. While there are several methodologies for estimating the LOS of intersections, the most commonly used is presented in the Highway Capacity Manual and is the methodology used in this study (HCM 2017). The Highway Capacity Manual LOS criteria for signalized and unsignalized intersections are summarized in Table 2.

The signalized method is based on the capacity available to service the various movements at a signalized intersection based on the amount of green time provided for each movement, the impacts of any conflicting movements, etc. For unsignalized intersections delay is based on the availability of gaps in the major street traffic flow to allow minor street movements to occur. Delay results in driver frustration and anxiety, loss of time, unnecessary fuel consumption, and contributes to pollution. The minimum acceptable Level of Service for the City of Pasco and the Tri-Cities Metropolitan Area as adopted by the Benton Franklin Council of Governments is LOS D.

An evaluation of existing traffic operations was performed for the PM peak hour using the Highway Capacity Software for unsignalized intersections. Table 3 shows the results of the analysis and delay for overall average intersection delay as well as the worst approach for each intersection. The capacity analysis worksheets are included in Appendix G.

As shown in Table 3, all study intersections currently function with acceptable Levels of Service except the intersection of Kartchner Street at the SB US 395 ramps. The southbound stop-controlled leg of the intersection currently experiences delay due to the high amount of traffic turning left from eastbound Kartchner Street as well as the westbound right turning traffic that loops around and heads south on US 395. Although not ideal, converting the intersection to a 4-way stop would reduce the delay for the southbound approach to acceptable levels of service. This would however cause all of the Kartchner Street traffic to stop (creating gaps for the southbound traffic to cross) whereas today they do not.



EXISTING PM PEAK HOUR TRAFFIC VOLUMES

FIGURE 4

PORT OF PASCO REIMANN INDUSTRIAL PARK TRAFFIC IMPACT ANALYSIS

Table 2. Level of Service Criteria For Intersections

Level of Service (LOS)	Average Control Delay (seconds per vehicle)	
	Signalized Intersections	Unsignalized Intersections
A	< 10	< 10
B	>10 – 20	>10 – 15
C	>20 – 35	>15 – 25
D	>35 – 55	>25 – 35
E	>55 – 80	>35 – 50
F	>80	>50

Source: Highway Capacity Manual 6<sup>th</sup> Edition, Transportation Research Board, National Research Council, Washington D.C., 2017.

Table 3. Summary of 2020 PM Peak Hour Delay (sec) and Level of Service

Intersection	Existing
Vineyard/Railroad	WB--8.9/A
Vineyard/US 395	EB--16.5/C
Foster Wells/Railroad	WB--8.8/A
Foster Wells/US 395	WB--16.1/C
Kartchner/Railroad	WB--9.2/A
Kartchner/SB Ramps/Rainier	SB--62.9/F
	EB--12.8/B (1)
Kartchner/ NB Ramps/Commercial	NB--25.1/D

LEGEND

8.9/A - Delay and Level of Service for worst approach using existing lane configurations

12.8/B (1) - Delay and Level of Service with modifications listed below

NB = northbound, SB = southbound, WB = westbound, EB = eastbound

Notes:

(1) Assumes conversion to All-Way Stop Control.

Rail

Currently there is no rail service to the property. A Burlington Northern Santa Fe (BNSF) rail line is located west of the project area directly across N. Railroad Avenue. This BNSF rail line services existing industrial properties south of the project area. Refer to Figure 4 vicinity map showing existing rail line location.

4.2. Sanitary Sewer Service

Currently there is no sewer service in the RIC area.

### *Wastewater Treatment Plant*

The City of Pasco maintains and operates a wastewater treatment plant located in the southeast corner of the City. The sanitary sewer treatment generally consists of the following items:

- Headworks (screening and grit removal)
- Primary clarifier
- Biological Trickling Filter
- Intermediate Clarifier
- Secondary Clarifier
- DAF Thickener with Return Activated Sludge
- UV Disinfection

After treatment water is released into the Wallula Basin of the Columbia River.

The 2014 Sewer Plan identified the following wastewater treatment plant capacity limits:

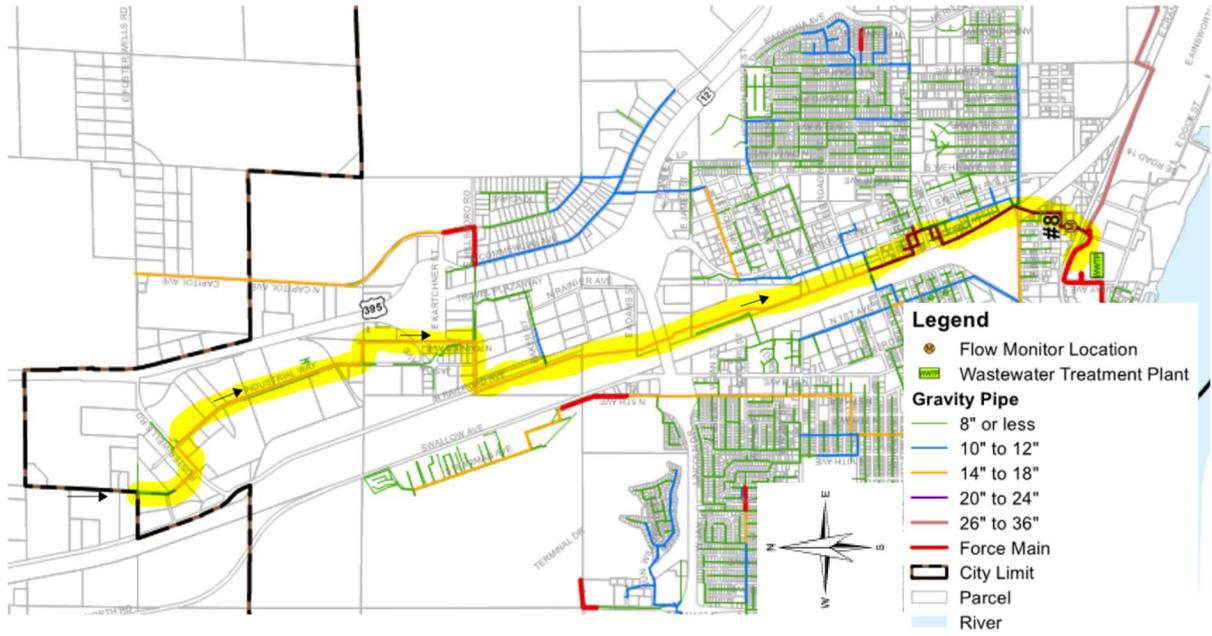
*Table 4. Wastewater Treatment Plant Capacity Limits*

<b>Load</b>	<b>Units</b>	<b>Annual Average</b>
Flow	MGD	6.5
BOD	lb/day	14,960
	mg/L	276
TSS	lb/day	15,775
	mg/L	291

### Collection System

The Port of Pasco Industrial area is in the “Hillsboro Interceptor” drainage basin. This area generally drains south by gravity to the “Maitland” Lift Station. Figure 5, below shows the drainage route. The “Maitland” lift station (shown as #8 in Figure 5) then pumps the wastewater to the City of Pasco Wastewater Treatment Plant. The existing drainage path has pipe sizes ranging from 8-inch to 24-inch.

Figure 5. Existing Sanitary Sewer Drainage



Modified from City of Pasco 2014 Sewer Plan Figure 3-1.

The closest connection point to the City of Pasco’s sanitary sewer collection system is the 8-inch pipe located at the corner of Burlington St. and Tippet Rd.

The Maitland Lift Station serves the entire east side of the City and has a pumping capacity of 4,850 gpm. The 2014 Sewer Plan identified that the existing pumps are oversized for the existing flow conditions, yet the total pumping capacity is undersized for the projected future demands. The Lift Station has recently been upgraded with another smaller pump to help regulate the existing demands, and to meet the projected future demands.

#### 4.3. Industrial Wastewater

Currently there is no industrial wastewater service in the RIC area.

##### Process Water Reuse Facility

The City of Pasco maintains and operates an industrial process wastewater treatment plant located approximately two miles east of the study area. Figure 6 depicts the location of this facility. The Process Water Reuse Facility (PWRF) collects industrial process wastewater from several food processing plants in the vicinity. The industrial process water is partially treated and then irrigated onto approximately 2,000 acres of farmland for further treatment and disposal. The PWRF’s Facility Plan, written in 2019, has a phased development plan for adding new users onto the PWRF. There are five phases which are:

- Phase 1 (2018) – Existing processors plus Simplot,
- Phase 2 (2020) – Phase 1 plus Grimmway plus 30% growth at Reser’s,
- Phase 3 (2026) – Phase 2 plus Lamb Weston,

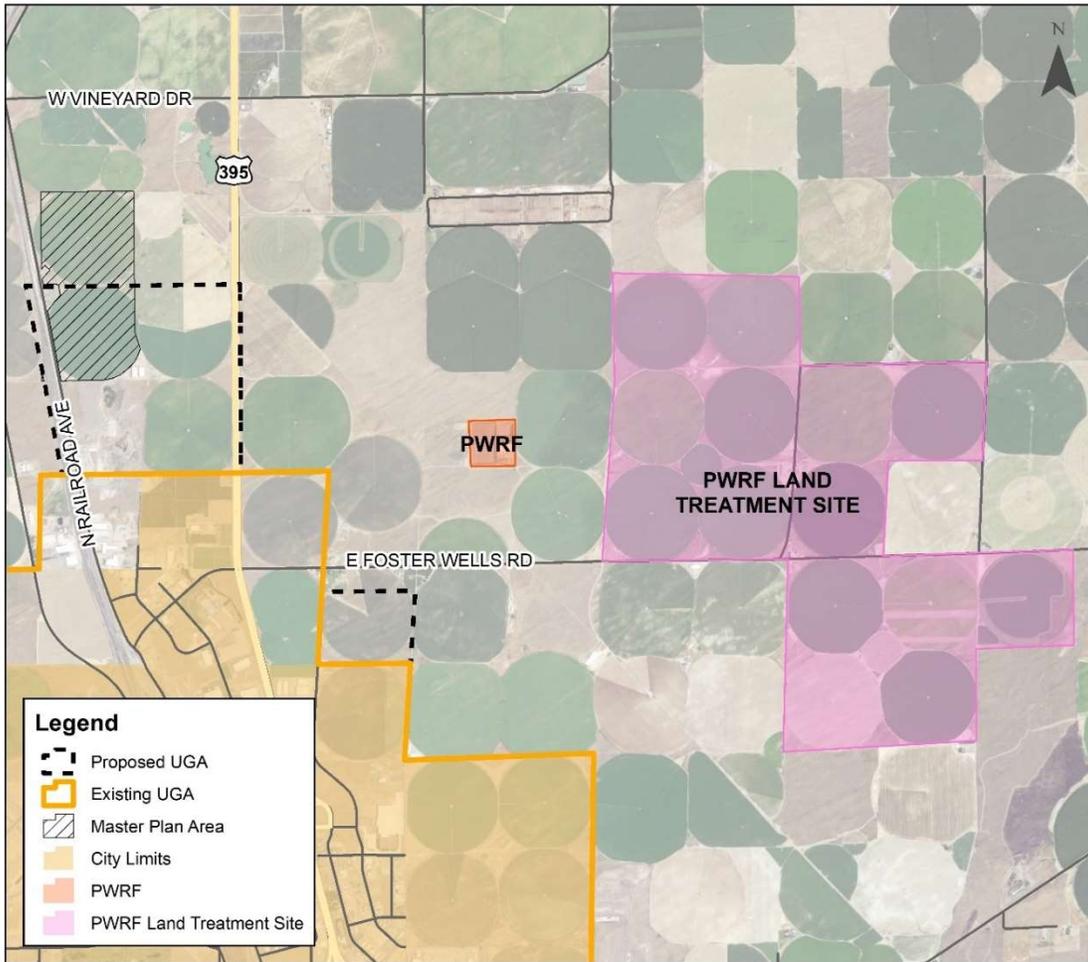
- Phase 4 (2030) – Phase 3 plus one 2.5 mgd year-round new processor; and
- Phase 5 (2040) – Phase 4 plus one 2.5 mgd year-round new processor.

In August 2020, Steve Worley (City Public Works Director) gave a presentation to City council that summarized a Value Engineering Study done by RH2 on the PWRF. The PWRF is currently at maximum capacity and is undergoing evaluation to expand capacity. Therefore, the phases shown in the 2019 facility plan are no longer valid. It is anticipated that there will be excess capacity at some point in the future; however, the timing and quantity of available capacity has not yet been determined by the City. If the City can make adjustments to the PWRF, it will be possible to incorporate the RIC sooner than the phases shown in the 2019 PWRF Facility Plan. The City is working on PWRF treatment options now. These options are currently:

- 1) Low Rate Anaerobic Digester (LRAD), or
- 2) Dissolved Air flotation (DAF) + Fine Bubble Air Diffuser (Biolac) System, or
- 3) Increase Land Treatment System, or
- 4) Inrigro Wastewater Treatment + Biogas Plant.

Whatever options is shown, the Port should stay in contact with the City in order to design for the anticipated flows and loads from the RIC facility, as presented in this report. Moreover, a willingness to help pay for capital improvements at the PWRF could have an impact on the phasing schedule.

Figure 6. PWRF Location



#### 4.4. Potable Water Service

##### Source Capacity

The City of Pasco owns and operates two water treatment plants that pull water from the Columbia River. These are the Butterfield Water Treatment Plant and the West Pasco Water Treatment Plant. These have a reported combined capacity of 32.8 MGD.

Ground elevations in the RIC fall within the City's water system Pressure Zone 3. Sources of water to Pressure Zone 3 are three booster pump stations (Broadmoor, Road 36, and Riverview Heights). Table 5 below shows the horsepower and capacity of the pump stations (from Table 1-4 of the 2019 Water System Plan).

Table 5. Pump Stations Horsepower and Capacity

Name	Pump No.	HP	Capacity (gpm)
Riverview Heights Booster Station	1	125	2,600
	2	125	2,650
	3	75	1,460
	4	75	1,440
	5	150	1,625
Broadmoor Blvd. Booster Station	1	100	1,500
	2	100	1,500
	3	150	3,500
Burden/Road 36 Booster Station	1	150	3,000
	2	150	3,000

Storage Capacity

The existing storage capacity of the elevated Road 68 tank is 2.5 MG. The 2018 Comprehensive Plan Update shows that pressure zone 3 needs 5.76 MG of additional storage. These storage volumes take into account fire flow protection for the entire water system pressure zone. Locations for the future storage tanks have been identified in the Water System Plan and none are within the RIC. Once the RIC is connected to the City’s water system, no additional fire flow storage volume is required at the RIC site.

Distribution System

Water is distributed throughout the City’s water system via a network of pipes, pump stations, and storage reservoirs. The industrial property is in the City’s Pressure Zone 3, which has a hydraulic grade line (HGL) of 660 ft (set by the Road 68 Water Storage Tank).

The 2019 Comprehensive Plan Update assumed a future demand of 3.1 MGD at the Reimann Industrial Center. The Water System Plan indicates future industrial demand were estimated at 0.6 MGD for year 2022, 1.0 MGD for year 2027 and 3.1 MGD for year 2036 (see Section 6.5 of the Water System Plan). The 2019 Comprehensive Plan shows a 16-inch and 12-inch pipes being extended to the Port’s Industrial property location (see Figure 7).



Williams has an existing interstate natural gas main line running across the property in a southwest/northeast direction across the northern half of the project area. The Williams main line is located in a 75-ft wide utility easement. The line is 20-inches in diameter and runs at an operating pressure of 811 psi.

Cascade Natural Gas (CNG) has an existing 8-inch high pressure main line running southeast/northwest across the lower half of the project area. This utility is located in a 50-ft utility easement. The line is 8-inches in diameter and runs at an operating pressure of 300 psi.

#### Telecommunications

In regard to landline telecommunication service, the RIC area is located in Century Links Communication's service area. There is existing Century Link copper wiring along the eastern portion of N. Railroad Avenue. Service coverage for cellular telecommunication is expected to be available in the RIC area as nearby urban areas receive cellular service. Internet service to the RIC area would be limited to wireless internet service providers (ISPs) until a fiber optic network connection could be extended to the area. Century Link has existing fiber optic service located at the intersection of E. Foster Wells and N. Railroad Avenue.

Franklin County PUD has existing fiber cables that run along N. Railroad Avenue. There is a 24 core fiber cable running north up to the Pasco Combustion Turbine facility and a 48 core fiber cable north of the project area.

There is an existing cell tower located on the western middle portion of the site. The cell tower is in a lease area that is 100-ft by 100-ft and includes an Azimuth Easement for access and maintenance. The cell lease has a 5-year automated renewal that end on March 4, 2032. Refer to Exhibit B in Appendix C for general location of the cell tower.

#### Irrigation

The project area has two existing farm circles that utilize irrigation water from on-site wells. The northern farm circle is irrigated from an existing well that is located at the southwest corner of the northern farm circle. This well is referred to as Well #1 (U71). The southern farm circle has an existing on-site well located near the center pivot and is generally referred to as Well #2 (U72). These two wells have a combined water right of 2,430 gallons per minute or 1,078 acre-ft per year. The water rights are transferable to areas in the McNary-John Day Pool. The transfer of water rights shall be per RCW 90.03.380. The two wells also include electrical pumps that provide pressurized irrigation to the farm circles.

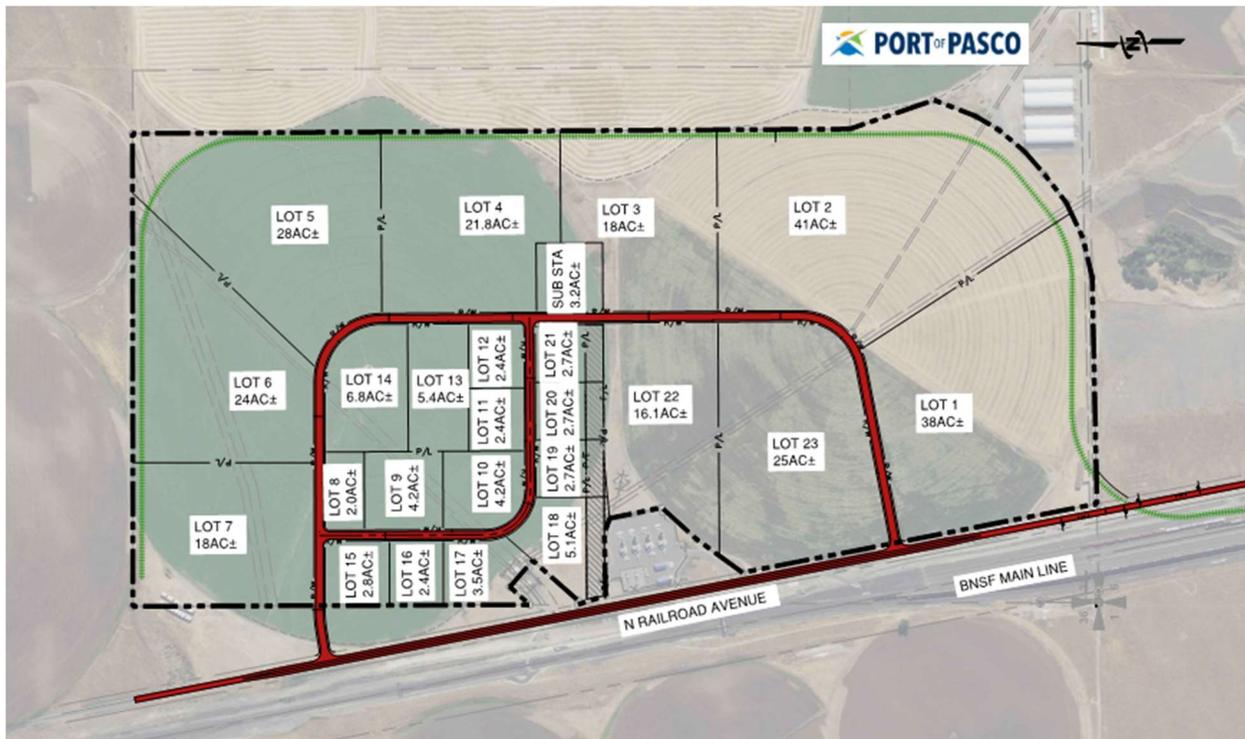
## Section 5. Parcel Conceptual Layout

The intent of the RIC is to accommodate medium and large industrial users. Parcel sizes considered should be between approximately 3 and 40 acres. Several options were prepared and discussed with partners in the development of this Master Plan. Rail access to the larger lots is a key component that also drove the lot and internal roadway configuration. Concepts showed variations in lot sizes and in providing access to the parcels as well. Ultimately, a combination of the alternatives was selected as the preferred conceptual layout and is shown in Figure 8. Refer to Exhibit A located in Appendix C for further details.

This option provides the Port of Pasco the opportunity to create flexibility in the size of the lots they are marketing to multiple users along with rail access to the larger lots. If desired, the configuration allows multiple lots to be combined to serve an even larger user as well. With a cluster of smaller lot sizes, this creates the need for an internal roadway.

A transportation network that supports the industrial lots is discussed in the following section. The parcel layout shown is conceptual and can be modified as necessary. Parcels will need to be created through the platting process in the City of Pasco and Franklin County.

Figure 8. Preferred Lot Layout



## Section 6. Transportation Facilities

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### 6.1. Planned Internal Roadway Network

The internal RIC roadways are planned to match the existing Port of Pasco's Industrial Park that is located to the south of the RIC area in the Pasco Processing Center. The proposed roadway cross section includes a 42-ft wide paved roadway, concrete curb and gutters, streetlights and no sidewalks. Refer to Exhibits G and H located in Appendix C for general roadway locations and cross-sections.

The internal RIC roadway totals approximately 8,070 lineal feet of roadway. The estimated roadway improvement costs for roadway grading, pavement, curb and gutter, streetlights and storm drainage systems is noted in Section 9.

The RIC N. Railroad Avenue roadway property frontage is approximately 3,800 lineal feet. The proposed roadway cross section is 42-ft in width with only curb and gutter along the easterly frontage with no streetlights. The estimated roadway improvement costs for N. Railroad Avenue frontage improvements that would include roadway grading, pavement, curb and gutter (east side only) and storm drainage systems is noted in Section 9.

The remaining portion of N. Railroad Avenue that doesn't front along the RIC project area is shown on Exhibit G and H. The roadway improvement length is approximately 9,400 lineal feet. The proposed roadway cross section is generally 30-ft in width with no curb and gutter. The estimated roadway improvement costs that would include roadway grading, pavement, and drainage swales on either side of the road is noted in Section 9.

### 6.2. Rail

As previously mentioned, there is an existing BNSF rail line located on the west side of N. Railroad Avenue. A rail spur is proposed to run from the south end of the RIC to the north end of the RIC along the easterly property line. Total length of the spur from the BNSF line to the end of the spur is approximately 9,300 lineal feet. A new switch would be required at the BNSF line along with an automated roadway crossing across N. Railroad Avenue. Refer to Exhibit A and G in Appendix C for the proposed general rail alignment. The rail spur will require a maintenance road that parallels the spur alignment. To accommodate the proposed rail spur along the southern RIC property, a triangular portion of property outside of the RIC must be acquired and/or must be established with an easement to accommodate the proposed rail spur alignment. The Bureau of Reclamation is the apparent land owner of the triangular piece of ground. The estimated cost to install the rail spur improvements from the BNSF mainline, across N. Railroad Avenue and then to the northerly end of the RIC is noted in Section 9.

The BNSF has been notified about the proposed project area and have had no initial concerns about the proposed connection point and overall alignment of the spur. BNSF will require specific rail volumes, traffic types and service frequencies once specific uses have been identified. Further

coordination with BNSF will be required to obtain the appropriate agreements and permits for connection to their mainline.

### 6.3. Off Site Roadway Evaluation

There are three basic steps to determining future conditions with respect to traffic operations: 1) determine background growth rate to estimate traffic volumes without the proposed development, 2) trip generation and trip distribution for new trips to the roadway network and 3) capacity analysis of the forecast traffic volumes.

Research was performed for historical traffic volumes to determine a growth rate to assign for background. The historical growth on US 395 has been 2% per year for the past 20 years. This growth rate is considered very strong for a long-range forecast (as the compounding creates nearly a 50% increase in traffic) and often would be considered unsustainable when considering high volume roadways. Nevertheless, this growth rate was used to represent a conservatively high 20-year forecast. The traffic volumes shown in Figure 4 were increased by 2% per year to year 2040 and are shown in Figure 9.

Capacity analysis of the 2040 No Build traffic volumes shown in Figure 9 was performed, using the existing lane configuration and traffic control at study intersections with the results summarized in Table 6. Detailed capacity analysis worksheets are included in Appendix G.

*Table 6. Summary of 2040 No-Build PM Peak Hour Delay (sec) and Level of Service*

Intersection	Existing	2040 No-Build
Vineyard/Railroad	WB--8.9/A	WB--9.1/A
Vineyard/US 395	EB--16.5/C	WB--43.4/E
	--	EB--30/D (2)
Foster Wells/Railroad	WB--8.8/A	WB--8.9/A
Foster Wells/US 395	WB--16.1/C	WB--35.2/E
	--	WB--37.9/E (3)
Kartchner/Railroad	WB--9.2/A	WB--9.6/A
Kartchner/SB Ramps/Rainier	SB--62.9/F	SB>999/F
	EB--12.8/B (1)	EB--34.3/D (1)
Kartchner/ NB Ramps/Commercial	NB--25.1/D	NB--267.4/F
	EB--12.8/B (1)	EB--277/C (1)

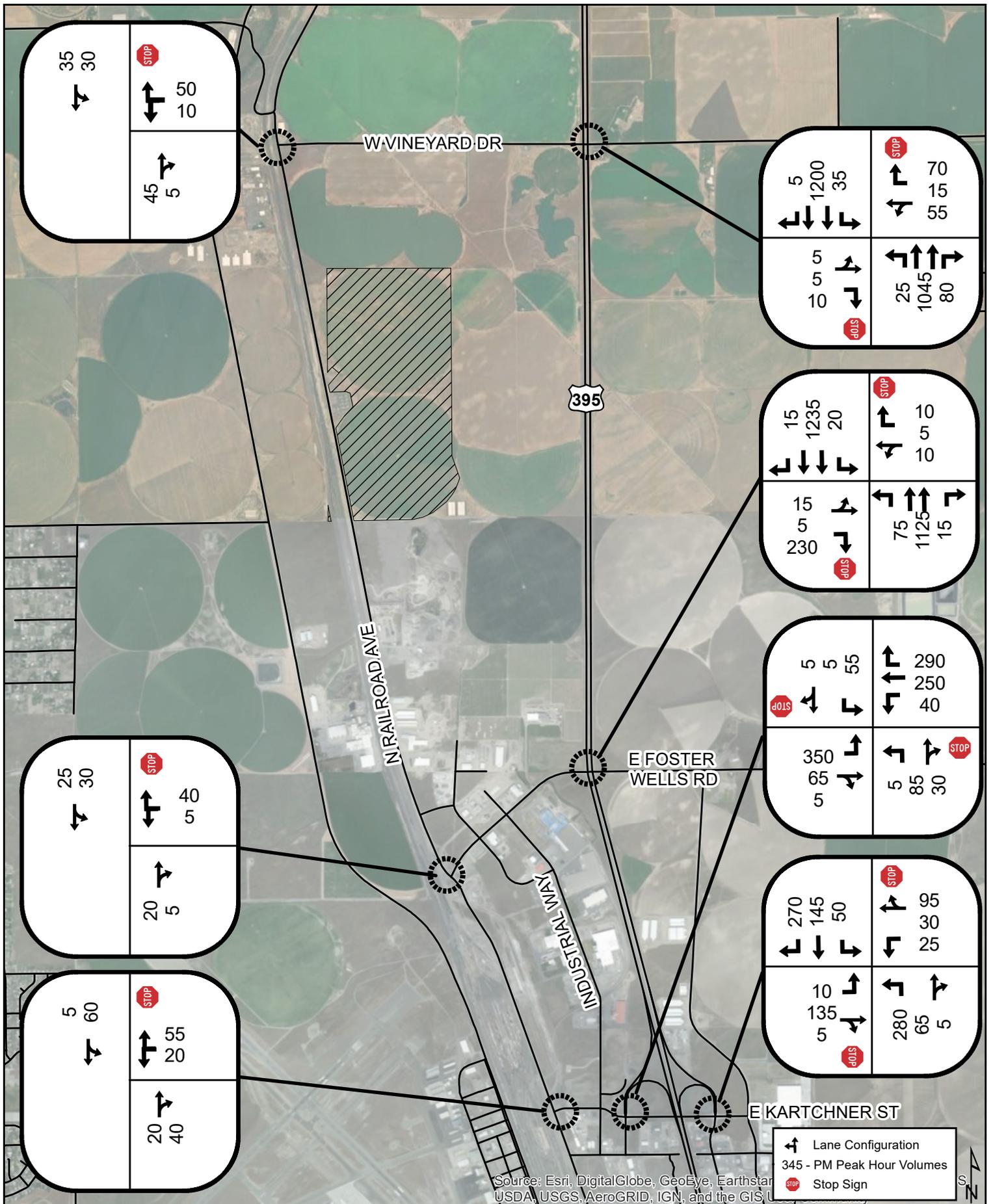
**LEGEND**

60.8/E Delay and Level of Service for worst approach using existing lane configurations  
 30.5/C (1) Delay and Level of Service with modifications listed below

NB = northbound, SB = southbound, WB = westbound, EB = eastbound

Notes:

- (1) Assumes conversion to All-Way Stop Control.
- (2) Assumes exclusive WB left turn lane.



As shown in Table 6, by year 2040 without the project, background growth will cause both of the intersections on US 395 as well as both of the US 395 ramp terminals at Kartchner Street will fall below acceptable Levels of Service. At US 395/Vineyard an exclusive westbound left turn lane will reduce delay enough for that intersection to achieve acceptable LOS. However, at the US 395/East Foster Wells intersection exclusive left and right turn lanes for both westbound and eastbound traffic will still not achieve acceptable LOS, although it is within a few seconds of the LOS D threshold. The side street traffic volumes however are not high enough to warrant installation of a traffic signal, nor is the Washington State Department of Transportation likely to allow a traffic signal on this expressway facility. At the US 395 ramp terminals for northbound and southbound traffic at Kartchner Street, as in the existing conditions analysis for the southbound ramps, conversion to all-way stop control will reduce the delay for the southbound approach, and for the Commercial Avenue approach at the northbound ramp's intersection.

To estimate the new trips that could be associated with the proposed 300-acre development, a comparison with the Port of Pasco Processing Center and the Foster Wells Business Park was performed. The Processing Center is 250 acres and the Business Park is 50 acres. Neither of these sites is completely built out, but most properties are sold, which is what has prompted the Port of Pasco to begin the process of seeking additional land for similar development. Existing traffic volumes at the intersections of Industrial Way at Kartchner Street and East Foster Wells Road indicate that there are 285 outbound and 180 inbound trips during the PM peak hour to the area that accommodates the Processing Center and Business Park. Approximately 40 acres of the RIC site will be used for roadway right-of way, leaving 260 acres for development. There are approximately 185 acres of the existing Business Park that are developed. Accordingly, for the purposes of this analysis it was assumed that the new site would generate 40% more trips than those currently being generated by the Processing Center and Business Park, to account for the undeveloped parcels and the unoccupied buildings. This would amount to 400 outbound trips and 250 inbound trips during the PM peak hour, with 20% of the total being trucks.

To assign these trips to the roadway network existing traffic volumes were examined and the following general percentages were used:

- 20% to/from the north on US 395
- 60% to/from the South on US 395
- 3% to/from the north on Railroad Avenue
- 3% to/from the east on Vineyard Drive
- 1% to/from the east on East Foster Wells Road
- 5% to/from the east on Kartchner Street
- 6% to/from the south on Commercial Avenue
- 2% to/from the south on Railroad Avenue

It should be noted that due to forecast congestion and the ability to access US 395 at various locations, along with the sheer total volume of additional trips generated, some adjustments to

how traffic will access US 395 were made, rather than taking the shortest path. For example, it would be very challenging during peak times for trucks to make a left turn from either Vineyard Drive or Foster Wells Road to go north on US 395. Therefore, northbound trucks were assumed to go south on Railroad Avenue to Kartchner Street then east to the northbound ramps and then turn left. Also, the 60% of traffic assumed to go south on US 395 was spread out to three access points, with 10% of the 60% (6% of the total) going the extra distance to go north to Vineyard Drive to then make a right turn to go south on US 395. The remaining southbound vehicles were split equally between East Foster Wells Road and the southbound ramps on Kartchner Street. These percentages are shown at study intersections in Figure 10.

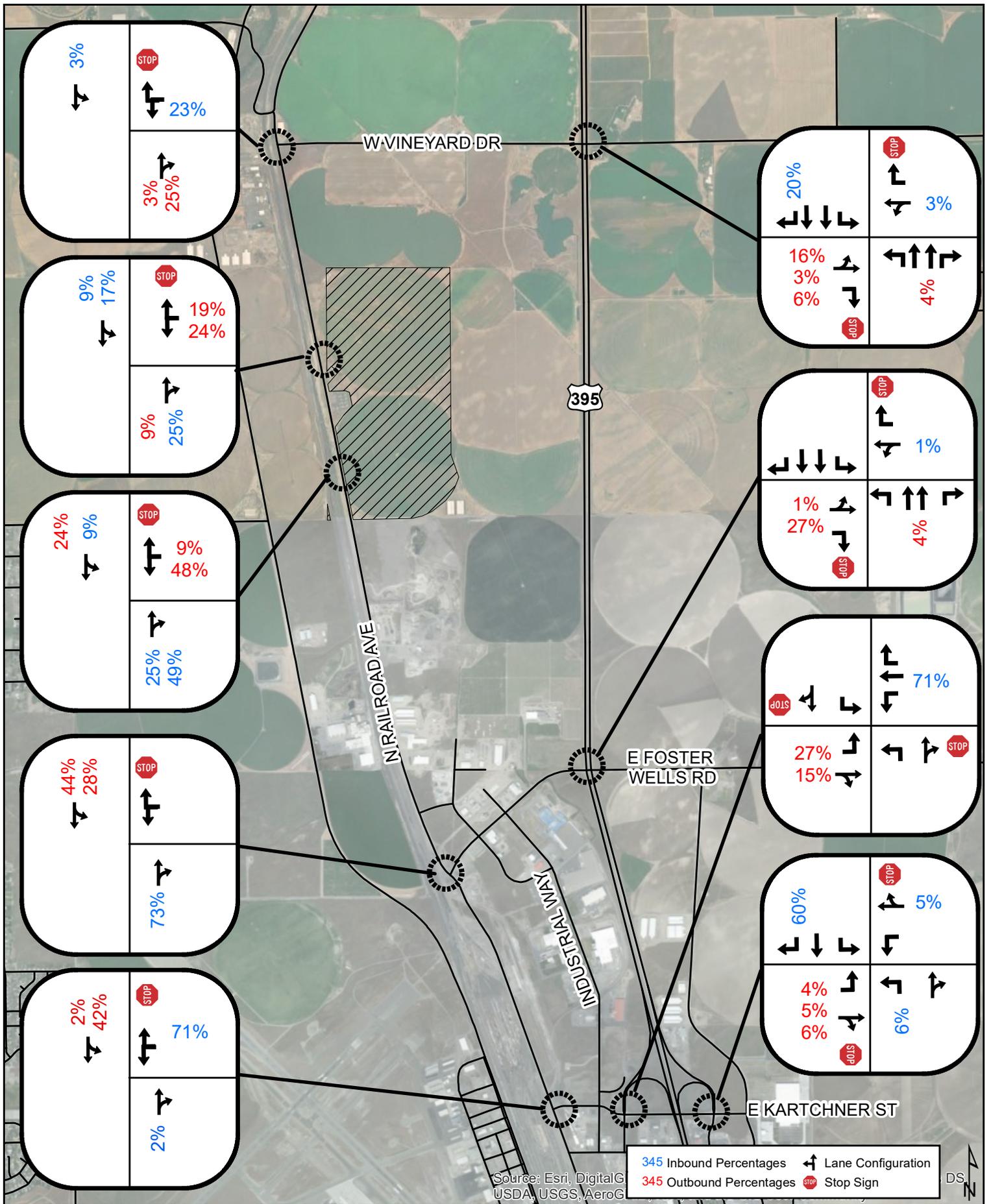
The percentages of new trips shown in Figure 10 were calculated as additional traffic volumes that are shown in Figure 11. Traffic volumes shown in Figure 11 as new trips were added to the 2040 No-Build traffic volumes shown in Figure 9 earlier to arrive at the total 2040 Build Scenario traffic volumes shown in Figure 12.

Capacity analysis of the 2040 Build scenario traffic volumes shown in Figure 12 was performed, using the existing lane configuration and traffic control at study intersections with the results summarized in Table 7. Detailed capacity analysis worksheets are included in Appendix G.

As anticipated the intersections on US 395 will fall below acceptable LOS during the PM peak hour, primarily a result of growth in through trips on US 395. Even adding exclusive left turn and right turn lanes for both the eastbound and westbound approaches will not achieve acceptable LOS, in fact, even though there are only 10 westbound left turns from East Foster Wells Road to go south on US 395, the analysis indicates that delay will be so high that a value is not provided. For the eastbound approach, with 15 left turns the LOS is D. As mentioned, a traffic signal is not likely to be allowed on this expressway facility. The only other options to achieve acceptable LOS would be:

- create an additional interchange, most likely at East Foster Wells Road, which has been discussed and shown in plans previously, this improvement could cost \$30 - \$40 million.
- close the median and restrict side-street left turns and through movements.
- construct a frontage road along the east side to allow traffic to access US 395 at the existing interchange at Kartchner Street. Capitol Street currently exists north from Kartchner Street to East Foster Wells Road

At the two intersections of Kartchner Street at the northbound and southbound ramp terminals for US 395, conversion to All-Way Stop Control with the current lane configurations will no longer provide acceptable LOS as it will for the No-Build Scenario. Multiple alternative mitigation options were evaluated for each intersection, given that All Way Stop Control may not be ideal even in the short term, and are explained below. Since this is a planning level study, many assumptions have been made on trip generation and distribution, timing, etc. More detailed analysis should be performed when more specific information is available through development proposals.



Source: Esri, DigitalG  
USDA, USGS, AeroG

345 Inbound Percentages ↵ Lane Configuration  
345 Outbound Percentages STOP Stop Sign

DS  
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